

GOVERNMENT OF INDIA
METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW

ANNUAL SUMMARY FOR 1932

PART E.

SEISMIC RECORDS.

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Published by Authority of the Government of India

UNDER THE DIRECTION OF

S. K. BANERJI, D.Sc.

Offg. Director General of Observatories.



Geophysics Division,
Dept. of Scientific & Industrial Research,
LIBRARY

SEISMOLOGICAL OBSERVATORY

PUBLISHED BY MANAGER OF PUBLICATIONS, DELHI
PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, NEW DELHI
1934

Price Rs. 5 As. 10 or 9s. 3d.

List of Agents from whom Government of India Publications are available.

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THE HIGH COMMISSIONER FOR INDIA, INDIA HOUSE, ALDWYCH, LONDON, W. C. 2.

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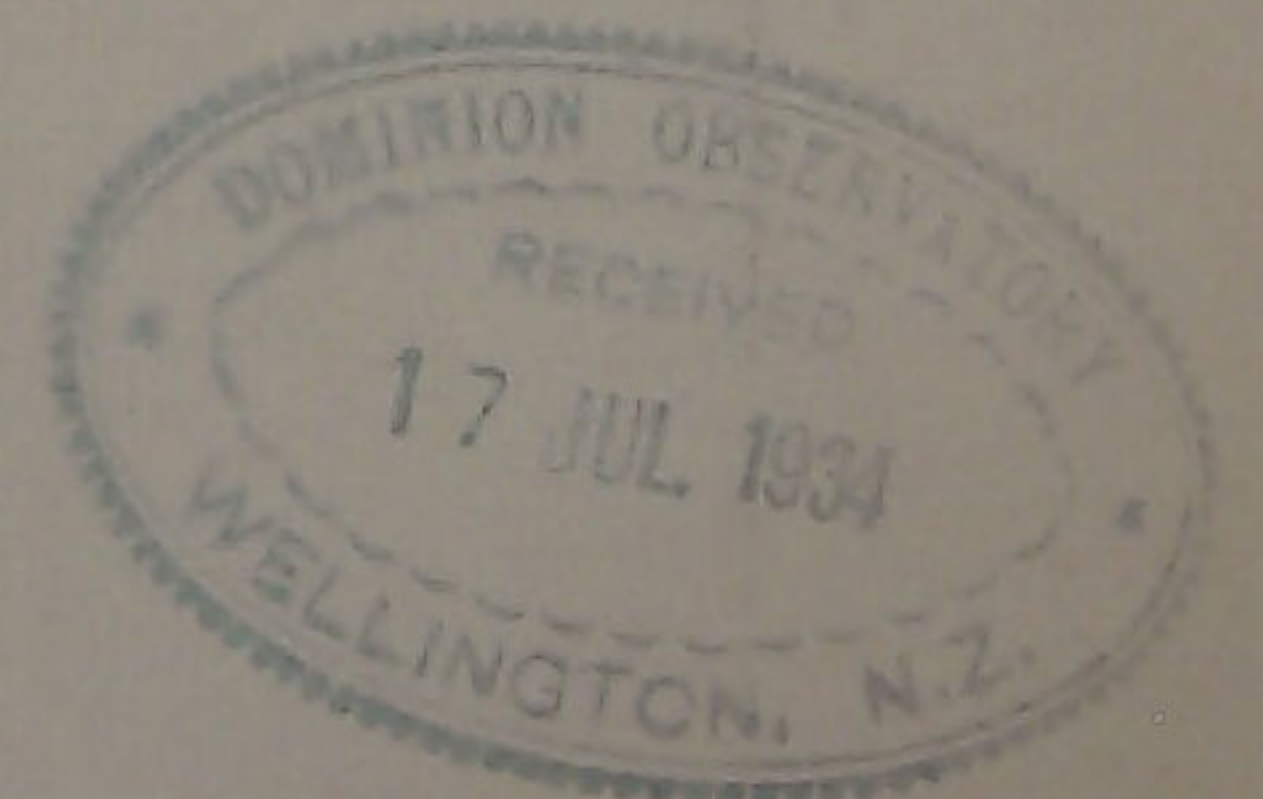
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ANNUAL SUMMARY, 1932.

PART E.

SEISMIC RECORDS.

STATION—AGRA.

$\phi = 27^{\circ} 8' 15'' N$; $\lambda = 78^{\circ} 0' 45'' E$; $h = 163$ metres. *Subsoil*—Indo-Gangetic Alluvium.

Apparatus.—One Omori-Ewing Horizontal Pendulum Seismograph giving A_N (Mass 50 Kg.).

One Milne-Shaw Seismograph giving A_E . (Damping ratio 20 : 1).

TABLE E 1.

			V	To			
Omori— A_N			28.0	29.4			
Milne-Shaw— A_E			250	12	From 1st January 1932 to 8th January 1932.		
			630	12	From 15th January 1932 to 12th April 1932.		
			773	12	From 14th April 1932 to 22nd August 1932.		
			783	12	From 25th August 1932 to 31st December 1932.		

Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLITUDE (μ)		Remarks.	
				A_N	A_E						A_N	A_E						A_N	A_E		
1932.		H. M. S.					1932.		H. M. S.					1932.		H. M. S.					
Jan. 3rd	A_E P	7 54 9*	...	...	...	Slight shock.	Jan. 24th	A_E P	8 44 37	...	...	...	Slight shock.	Feb. 3rd	A_E P	6 37 5	...	...	...	Distant moderate shock.
	S	7 57 42*	...	...	...			Fe	9 4 37	...	...	...			eS	6 50 35	...	...	...
	Le	7 59 27*	...	...	...			A_N eP	8 44 39	...	...	...	Do.		Le	7 30 48	...	...	...
	M	8 2 45*	15	...	13		„ 24th	Se	8 45 52	...	...	...			M	7 37 35	21	...	14	
	F	8 37 12*	...	...	...			Le	8 46 17	...	...	...			Fe	9 0 9	...	...	...
„ 4th	A_N e	11 54 48*	...	...	...	Do.		Fe	8 54 57	...	...	...		„ 3rd	A_N e	6 37 16	...	...	...	Slight shock.
	eS	11 56 10*	...	...	...			A_E iP	13 53 30	...	...	...	Moderate shock.	„ 5th	A_E iP	13 47 19	...	...	...	Do.
	Fe	12 18 35*	...	...	...		„ 29th	Fe	17 29 12	...	...	...			S	13 50 15	...	...	...
„ 5th	A_N Pe	5 29 11*	...	...	...	Do.		A_N P	13 53 45	...	...	...	Do.	„ 5th	A_N eP	13 47 28	...	...	...	Do.
	Se	5 31 47*	...	...	...		„ 29th	iS	14 3 40	...	...	...			S	13 50 15	...	...	...
	Le	5 32 42*	...	...	...			Fe	17 20 58	...	...	...		„ 5th	Le	13 51 27	...	...	...
	Fe	5 40 15*	...	...	...		„ 30th	A_E P	3 17 12	...	...	...	Slight shock.	„ 6th	A_E e	5 49 58	...	...	...	Do.
„ 9th	A_N P	10 33 25*	...	...	...	Do.		Si	3 27 20	...	...	...			F	6 23 23	...	...	...
	Si	10 42 59*	...	...	...			eF	4 48 36	...	...	...		„ 11th	A_E P	11 54 16	...	...	...	Do.
	eL	10 57 25*	...	...	...		„ 31st	A_E e	12 16 58	...	...	...	Do.	„ 11th	F	12 51 44	...	...	...
	Fe	12 21 13*	...	...	...			F	12 42 48	...	...	...		„ 12th	A_E iP	1 3 45	...	...	...	Moderate shock.
„ 13th	A_E P	16 38 30*	...	...	...	Do.		A_E S	16 23 41	...	...	...	Do.	„ 12th	S	1 8 14	...	...	...
	Se	16 45 45*	...	...	...		„ 31st	Fe	17 32 42	...	...	...		„ 12th	A_N eP	1 3 50	...	...	...	Do.
	L	16 55 37*	...	...	...			A_E e	21 46 45	...	...	...	Feeble shock.		S	1 8 20	...	...	...
	F	17 45 30*	...	...	...		„ 31st	Fe	22 10 41	...	...	...		„ 12th	Le	1 11 2	...	...	...
„ 24th	A_E P	3 57 27	...	...	...	Do.		F	22 10 41	...	...	...			F	Lost while changing drum.				
	Si	4 8 29	...	...	...													
	L	4 31 3	...	...	...													
„ 24th	A_N e	4 8 25	...	...	...	Do.	„ 31st	A_E e	21 46 45	...	...	...	Feeble shock.		S	1 8 20	...	...	...
	Fe	5 34 8	...	...	...			F	22 10 41	...	...	...			Le	1 11 2	...	...	...

* Uncertain by ± 30 seconds. Time interval between phases of the same record is, however, accurate.

TABLE E 1—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.		H. M. S.					1932.		H. M. S.					
Feb. 14th	A _E e	20 33 11	...	...	...	Feeble shock.	Mar. 4th	A _N P	23 22 31	...	...	...	Slight shock.	Mar. 18th	A _E P	5 24 44	...	...	...	Slight shock.
	F	20 47 58	...	...	...			S	23 23 48	...	...	...			Sl	5 31 27	...	...	...
" 14th	A _E P	23 21 55	...	...	...	Moderate shock.		Ll	23 24 37	...	...	...			eL	5 37 27	...	...	...
	S	23 28 38	...	...	...			F	23 56 4	...	...	...			F	7 6 42	...	...	...
	L	23 34 56	...	...	...		" 6th	A _E 1P	0 20 50*	...	...	...	Do.	" 10th	A _E P	11 10 20	...	...	...	Do.
	F	Lost in shifting time.						F	1 1 5*	...	...	...			S	11 18 53	...	...	...
" 14th	A _N P	23 22 12	...	...	...	Slight shock.	" 6th	A _E P	21 47 17*	...	...	...	Do.	" 19th	A _E P	23 21 50	...	...	...	Very feeble shock.
	S	23 28 50	...	...	...			IS	21 50 51*	...	...	...			eS	43 30 54	...	...	...
" 15th	Le	23 34 48	...	...	...			L	21 52 41*	...	...	...		" 20th	Fe	0 56 17	...	...	...
	F	0 18 50	...	...	...			Fe	22 25 28*	...	...	...		" 24th	A _E 1P	16 11 14	...	...	...	Slight shock.
" 15th	A _E e	9 49 10	...	...	...	Feeble shock.	" 7th	A _E e	2 52 56*	...	...	...	Very feeble shock.	" 24th	Fe	17 55 27	...	...	...
	F	10 9 48	...	...	...			eL	2 55 24*	...	...	...		" 24th	A _N P	16 11 21	...	...	...	Do.
" 16th	A _E eP	14 7 48	...	...	...	Slight shock.	" 8th	A _E e	3 22 52*	...	...	...	Slight shock.	" 25th	A _E P	4 31 45	...	...	...	Do.
	Se	14 17 12	...	...	...			S	3 32 58*	...	...	...		" 25th	Fe	5 4 22	...	...	...
	F	16 22 59	...	...	...			F	Mixed up with the next shock.					" 25th	A _N P	4 31 48	...	...	...	Do.
" 21st	A _E e	12 50 31	...	...	...	Feeble shock	" 8th	A _E P	4 40 58*	...	...	...	Do.	" 26th	A _E P	0 7 3	...	...	...	Shock of great intensity.
	F	Mixed up with the next shock.						S	4 50 40*	...	...	...		" 26th	S	0 17 13	...	...	...
" 21st	A _E e	13 26 47	...	...	...	Slight shock	" 8th	Le	5 9 57*	...	...	...		" 26th	Le	4 34 4	...	...	...
	L	13 33 56	...	...	...			F	5 58 46*	...	...	...		" 26th	Fe	4 46 57	...	...	...
	M	13 36 33	17	...	10		" 8th	A _E e	18 18 56*	...	...	...	Feeble shock.	" 26th	A _E P	0 7 3	...	...	...
	F	Mixed up with the next shock					" 14th	A _E e	23 2 11	...	...	...	Slight shock.	" 26th	S	0 17 13	...	...	...
" 21st	A _E e	14 21 30	...	...	...	Tremors.	" 14th	F	20 24 39*	...	...	...		" 26th	L	0 36 36	...	...	...
	F	14 37 9	...	...	...		" 15th	A _E P	4 42 48	...	...	...	Do.	" 26th	F	3 35 2	...	...	...
" 23rd	A _E P	0 33 0	...	...	...	Distant moderate shock.	" 15th	eS	4 51 24	...	...	...		" 26th	A _N e	0 10 47	...	...	...	Moderate shock.
	Sl	0 42 24	...	...	...			Fe	6 27 15	...	...	...		" 26th	M	0 49 44	24	105	...	
	Ll	0 59 8	...	...	...		" 15th	A _E e	6 40 47	...	...	...	Feeble shock.	" 26th	F	2 44 15	...	...	...
	M	1 2 15	25	...	33		" 15th	eF	7 4 32	...	...	...		" 26th	A _E P	7 14 34	...	...	...	Slight shock.
" 23rd	A _N P	0 33 3	...	...	...	Slight shock.	" 15th	A _E e	7 55 35	...	...	...	Tremors.	" 26th	S	7 19 21	...	...	...
	S	0 42 32	...	...	...			eF	7 4 32	...	...	...		" 26th	L	7 22 41	...	...	...
	Le	0 59 16	...	...	...		" 15th	A _E P	10 23 42	...	...	...	Slight shock.	" 26th	F	8 14 59	...	...	...
	F	Lost while changing drum.					" 15th	e	8 28 43	...	...	...		" 26th	A _N e	7 14 37	...	...	...	Feeble shock.
" 23rd	A _E e	20 24 20	...	...	...	Do.	" 15th	A _E e	7 55 35	...	...	...	Tremors.	" 26th	eF	8 3 13	...	...	...
	S	20 34 33	...	...	...			F	8 28 43	...	...	...		" 26th	A _E 1P	10 2 5	...	...	...	Moderate shock.
	Le	20 54 17	...	...	...		" 15th	S	10 28 30	...	...	...	Slight shock.	" 26th	F	13 13 25	...	...	...
	F	21 50 41	...	...	...			eL	10 33 14	...	...	...		" 26th	A _N Pe	10 2 7	...	...	...	Do.
" 29th	A _E Pe	22 59 6	...	...	...	Tremors.	" 15th	M	10 35 58	12	...	4		" 26th	Sl	10 10 6	...	...	...
	Fe	23 8 3	...	...	...			Fe	11 1 15	...	...	...		" 26th	Le	10 22 0	...	...	...
Mar. 4th	A _E 1P	23 28 31	...	...	...	Slight shock.	" 16th	A _E e	6 18 50	...	...	...	Tremors.	" 26th	M	10 28 27	...	39	...	
" 5th	A _E Fe	0 15 12	...	...	...			F	6 24 31	...	...	...		" 26th	F	11 29 4	...	...	...

*Uncertain by ± 30 seconds. Time interval between phases of the same record is, however, accurate.

TABLE E 1—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.		
				A _N	A _E						A _N	A _E						A _N	A _E			
1932.		H. M. S.					1932.	H. M. S.						1932.		H. M. S.						
July 20th	A _E e	20 28 12	...	...	...	Tremors.	Sept. 11th	A _E e	14 17 31*	...	...	...	Slight shock.	Oct. 20th	A _E P	11 11 54	...	...	...	...	Slight shock.
	eF	21 27 32	...	...	...			F	15 9 59*	...	...	...			F	12 42 54	...	...	...	...
" 30th	A _E e	12 30 25	Do.	" 23rd	A _N P	14 31 7	Do.	" 30th	A _E P	20 59 32	Do.
	Fe	13 2 17	...	...	...			S	Uncertain.	...	...	...			L	21 28 46	...	...	...	...
Aug. 1st	A _E e	3 30 41	Do.		eL	14 37 59		Nov. 9th	A _E P	18 33 15	Do.
	F	3 45 15	...	...	...			F	15 26 52	...	...	...			F	19 8 5	...	...	...	...
" 2nd	A _E e	4 35 48	Very feeble shock.	" 26th	A _E IP	19 29 0	Moderate shock.	" 9th	A _N Pe	18 33 27	Do.
	F	5 13 36	...	...	...			eF	22 57 6	...	...	...			Fe	19 6 40	...	...	...	...
" 12th	A _E PI	3 36 32	Distant moderate shock.	" 26th	A _N eP	19 29 42	Do.	" 13th	A _E P	4 55 16	Moderate shock.
	SI	3 40 36	...	...	...			SI	19 36 30	...	...	...			eF	6 20 59	...	...	...	...
	Le	4 6 26	...	...	...			L	19 44 59	...	...	...			A _N PI	4 55 1 6	...	...	...	...	Do.
	M	4 18 10	...	...	...			M	19 49 19	18	118	...			SI	5 1 49	...	...	...	...
" 14th	A _E IP	4 43 14	Shock of great intensity.	" 20th	A _E P	4 5 45	Slight shock.	" 13th	eL	5 10 29	
	F	Probably mixed up with the next shock.					" 20th	F	5 38 51	...	...	...			Fe	7 0 6	...	...	...	...
" 14th	A _N P	4 43 18	Do.	" 29th	A _E P	17 56 38	Do.	" 26th	A _E e	4 33 18	Slight shock.
	S	4 45 57	...	...	...			S	18 4 54	...	...	...			eF	6 2 32	...	...	...	...
	M	4 48 53	...	718(?)	...		Oct. 2nd	A _E P	3 18 49	Moderate shock.	" 29th	A _E Pe	11 31 2	Distant moderate shock.
	eF	6 36 56	...	...	...			M	4 19 41	...	...	...			S	11 45 2	...	...	...	...
" 14th	A _E P	7 14 24	...	...	...	Slight shock.	" 2nd	F	5 48 43	...	...	...			L	12 23 34	...	...	...	...
	eF	7 43 25		" 2nd	A _N e	3 26 55	Slight shock.	" 30th	A _N e	16 59 1	Tremors.
" 14th	A _N e	7 14 32	...	...	...	Very feeble shock.	" 9th	F	4 54 2	...	...	...			F	17 7 53	...	...	...	...
	F	7 36 33		" 9th	A _E e	12 57 21	Feeble shock.	Dec. 4th	A _E P	18 19 55	Shock of great intensity.
" 14th	A _E P	12 41 28	Slight shock.	" 16th	A _E e	12 20 38	Slight shock.	" 4th	A _N P	8 19 56	Do.
	Fe	13 37 39	...	...	...			Le	12 49 43	...	...	...			S	8 26 55	...	...	...	...
" 14th	A _N e	12 41 45	...	...	...	Very feeble shock.	" 16th	F	15 17 4	...	...	...			L	8 35 52	...	...	...	...
	F	13 2 56		" 16th	A _N e	12 20 39	Do.	" 11th	M	8 41 25	26	455	
" 16th	A _E e	21 58 18	Tremors.	" 18th	M	13 2 27	21	80	...		" 11th	A _E P	4 31 10*	Slight shock.
	F	22 10 59		" 18th	F	13 41 23		" 15th	A _E Pe	19 41 14*	Do.
" 21st	A _E e	4 23 11	Do.	" 23rd	A _E e	4 18 30	Tremors.	" 15th	L	19 58 44*	
	Fe	5 9 49		" 23rd	F	4 59 30		" 21st	M	20 1 38*	
Sept. 3rd	A _E e	12 8 21	Slight shock.	" 28th	A _E P	21 35 24	Slight shock.	" 21st	A _E P	6 29 54*	Shock of great intensity.
	F	13 35 11	...	...	...			Le	21 50 30	...	...	...			Se	6 41 16*	...	...	...	...
" 8th	A _N e	7 33 21	Do.	" 28th	A _E e	11 20 46	Tremors.	" 21st	Le	7 5 27*	
	F	7 52 12	...	...	...			F	12 0 44	...	...	...			F	9 36 52*	...	...	...	...

* Uncertain by ± 30 seconds. Time interval between phases of the same record is, however, accurate.

TABLE E 1—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.	H. M. S.						1932.	H. M. S.						
Dec. 21st	A _N e	6 38 56*	Moderate shock.	Dec. 25th	A _N iP	2 8 37*	Shock of very great intensity.	Dec. 26th	A _E e	8 12 3*	Feeble shock.
	F	9 12 23*			Sl	2 12 24*			Fe	8 33 23*	
„ 24th	A _E S	4 23 10*	Slight shock.		L	2 14 51*		„ 26th	A _E e	9 9 25*	Do.
	L	4 25 30*	...	...	...			M	? ?	7893	...	Motion of recording pen restricted due to s i d e-stops for about 12 minutes.		Le	9 12 42*	...	...	...	...
	F	5 2 34*	...	...	...									M	9 14 12*	...	...	...	...
„ 24th	A _E Pe	5 15 57*	...	...	...	Do.								F	9 26 22*	...	...	...	...
	eS	5 18 54*		„ 25th	A _E e	6 12 39*	Feeble shock.	„ 26th	A _E e	21 21 55*	Do.
	L	5 20 34*	...	...	...			F	6 43 39*	...	...	...			F	21 56 14*	...	...	...	...
„ 24th	A _E P	6 41 43*	Do.		A _E e	8 3 41*		„ 26th	A _E e	21 26 3*	Do.
	F	Uncertain.	...	...	...		„ 25th	e	8 3 41*	...	...	...	Do.		F	21 48 23*	...	...	...	...
„ 25th	A _E iP	2 8 41*	Shock of very great intensity	„ 25th	A _E e	8 34 24*		„ 31st	A _E P	6 42 6*	Slight shock.
	F	6 6 9*	...	...	...			F	12 30 28*	...	...	...	Do.		S	6 50 56*	...	...	...	...
								F	13 4 25*	...	...	...			Le	7 6 10*	...	...	...	...

* Uncertain by ± 30 seconds. Time interval between phases of the same record is, however, accurate.

G. CHATTERJEE,

Meteorologist-in-charge, Upper Air Observatory, Agra.

E_s

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.	H. M. S.					1932.	H. M. S.							
Jan. 31st	A _N P	4 47 35	Feeble shock.	Feb. 3rd	A _E P	6 25 43	Feb. 11th	A _N P	11 47 35	Feeble shock.
	S	4 57 51			S	6 38 40		S	11 52 38	
	F	6 21 0			L	7 12 16		F	Mixed up with next shock.						
" 31st	A _E P	4 47 35	Do.	" 3rd	A _N e	12 19 0	" 11th	A _E P	11 47 35	Do.
	S	4 57 51			f	13 4 0		S	11 52 38	
	F	6 21 0			A _E e	12 19 0		F	Mixed up with next shock.						
" 31st	A _N Pe	12 7 14	Do.	" 3rd	A _E e	12 19 0	" 11th	A _N Pe	12 1 43	
	F	13 3 0	...	...	...			f	13 13 0	...	...	...		S	12 6 43	...	...	...	...	Do.
" 31st	A _E Pe	12 7 14	Do.	" 4th	A _N P	6 27 57	" 11th	A _E Pe	12 1 43	
	F	13 3 0	...	...	...			F	7 32 0	...	...	...		S	12 6 43	...	...	...	...	Feeble shock.
" 31st	A _N P	16 14 5	Do.	" 4th	A _E P	6 27 57	" 11th	L	12 10 13	
	S	16 24 5	...	...	...			F	7 15 0	...	...	...		F	13 5 0	...	...	...	...	Do.
	F	17 49 0			A _N P	21 21 7	" 12th	A _N P	1 2 15	
" 31st	A _E P	16 14 5	Do.	" 4th	S	21 24 10	" 12th	S	1 5 37	
	S	16 24 5	...	...	...			L	21 25 58	...	...	...		L	1 7 58	...	...	...	...
	F	17 49 0	...	...	...			M	21 31 5	8	2	...		M	1 10 14	14	2	...	...
" 31st	A _N P	20 4 5	Do.	" 4th	A _E P	21 21 7	" 12th	A _E P	1 2 15	
	F	20 49 0	...	...	...			S	21 24 10	...	...	...	" 12th	S	1 5 37	...	...	...	...
" 31st	A _E P	20 4 5	Do.	" 4th	L	21 25 58	" 12th	L	1 7 58	
	F	20 49 0	...	...	...			M	21 29 27	8	...	2		M	1 8 42	15	...	28	...	
" 31st	A _N P	21 41 52	Do.	" 5th	A _E P	21 21 7	" 12th	A _E P	1 2 15	
	S	21 45 16	...	...	...			S	21 24 10	...	...	...	" 12th	S	1 5 37	...	...	...	...
	L	21 46 54	...	...	...			L	21 25 58	...	...	...	" 12th	L	1 7 58	...	...	...	...
" 31st	A _E P	21 41 52	...	...	...	Do.	" 5th	M	21 29 27	8	...	2	" 12th	M	1 8 42	15	...	28	...	
	S	21 45 16	...	...	...			F	22 3 0	...	...	...	" 12th	F	3 13 0	...	...	...	...
	L	21 46 54	...	...	...			A _N P	13 48 35	...	...	...	" 13th	A _N e	19 33 0	...	...	...	...	Tremors.
" 31st	A _E P	21 41 52	...	...	...	Do.	" 5th	S	13 52 55	...	...	...	" 13th	f	20 12 0	...	...	...	...
	S	21 45 16	...	...	...			L	13 56 16	...	...	...	" 13th	A _E e	19 33 0	...	...	...	...	Do.
	L	21 46 54	...	...	...			M	13 56 25	7	9	...	" 13th	f	20 12 0	...	...	...	...
Feb. 1st	A _N P	7 44 41		" 5th	A _E P	13 48 35	" 14th	A _N P	2 43 57	Very feeble shock.
	S	7 49 46	...	...	...			S	13 52 55	...	...	...	" 14th	F	3 7 0	...	...	...	...
	L	7 54 7	...	...	...			L	13 56 16	...	...	...	" 14th	A _E P	2 43 57	...	...	...	...	Do.
" 1st	A _E P	7 44 41	Do.	" 6th	A _N P	5 43 37	" 14th	F	3 7 0	
	S	7 49 46	...	...	...			F	6 29 0	...	...	...	" 14th	A _N P	12 15 43	...	...	...	...	Feeble shock.
	L	7 54 7	...	...	...			A _E P	5 43 37	...	...	...	" 14th	F	13 15 0	...	...	...	...
" 3rd	A _N P	6 25 43	...	...	...		" 6th	F	6 31 0	...	...	...	" 14th	A _E P	12 15 43	...	...	...	...	Do.
	S	6 38 40	...	...	...			A _N P	2 23 47	...	...	...	" 14th	F	13 15 0	...	...	...	...
	L	7 12 16	...	...	...			F	2 44 0	...	...	...	" 14th	A _N P	15 37 43	...	...	...	...	Do.
" 3rd	A _E P	6 25 43		" 9th	A _E P	2 23 47	" 14th	F	15 45 0	
	S	6 38 40	...	...	...			F	2 48 0	...	...	...	" 14th	F	15 45 0	...	...	...	...

TABLE E 2—cont.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.	H. M. S.						1932.	H. M. S.						
Feb. 14th	A _E P	15 37 43	Feeble shock.	Feb. 21st	A _N P	12 48 41	Feeble shock.	Feb. 27th	A _N e	21 45 0	Tremors.
	F	15 45 0	...	...	...			F	Mixed up with the next shock.				f	21 59 0	...	...	...	...	...
" 14th	A _N P	20 34 36	Very feeble shock.	" 21st	A _E P	12 48 41	Do.	" 24th	A _E e	21 45 0	Do.
	F	21 7 0	...	...	...			F	Mixed up with the next shock.				f	21 59 0	...	...	...	...	...
" 14th	A _E P	20 34 36	Do.	" 21st	A _N Pe	13 25 7		" 29th	A _N e	22 59 0	Do.
	F	21 7 0	...	...	...			M	18 31 23	14	4	...		f	23 17 0	...	...	...	...
14th	A _N P	23 21 2	...	...	...		" 21st	F	14 34 0	...	...	...		A _E e	22 59 0	...	...	...	...	Do.
	S	23 26 43	...	...	...			A _E Pe	13 25 7	...	...	...		f	23 17 0	...	...	...	...
	L	23 31 54	...	...	...		" 21st	M	18 36 27	12	...	3		A _N P	23 24 42	...	...	...	...
	M	23 36 36	10	5	...			F	14 49 0	...	...	...		S	23 28 5	...	...	...	...
" 15th	F	1 20 0	...	...	...		" 23rd	A _N P	0 32 1	...	...	...		L	23 29 36	...	...	...	...
" 14th	A _E P	23 21 2	...	...	...			S	0 40 55	...	...	...		M	23 30 59	11	24	...	...
	S	23 26 43	...	...	...			L	0 55 41	...	...	...		F	0 16 0	...	...	...	...
	L	23 31 54	...	...	...		" 4th	A _E P	0 55 41	...	...	...		S	23 24 42	...	...	...	...
	M	23 35 45	11	...	9			M	1 5 31	18	3	...		S	23 28 5	...	...	...	...
" 15th	F	1 25 0	...	...	...		" 23rd	F	2 58 0	...	...	...		L	23 29 36	...	...	...	...
" 15th	A _N P	9 49 12	...	...	...	Very feeble shock.		A _E P	0 32 1	...	...	...		M	23 30 12	9	...	16	...	
	F	10 12 0	...	...	...			S	0 40 55	...	...	...		F	0 18 0	...	...	...	...
" 15th	A _E P	9 49 12	...	...	...	Do.	" 23rd	L	0 55 41	...	...	...		A _N e	2 24 0	...	...	...	...	Tremors.
	F	10 12 0	...	...	...			M	0 57 18	24	...	17		f	3 13 0	...	...	...	...
" 16th	A _N P	14 6 39		" 23rd	A _N P	20 21 42	Feeble shock.	" 5th	A _E e	2 24 0	Do.
	S	14 18 56	...	...	...			F	21 52 0	...	...	...		f	3 13 0	...	...	...	...
	L	14 47 11		" 23rd	A _E P	20 21 42	Do.	" 6th	A _N P	0 22 51	
	F	16 4 0	...	...	...			F	21 58 0	...	...	...		S	0 26 34	...	...	...	...
" 16th	A _E P	14 6 39		" 24th	A _N P	21 54 31	Very feeble shock.	" 6th	L	0 28 26	
	S	14 18 56	...	...	...			F	22 21 0	...	...	...		M	0 28 38	6	16	...	...
	L	14 47 11		" 24th	A _E P	21 54 31	Do.	" 6th	F	1 9 0	
	M	14 58 24	21	...	7			F	22 21 0	...	...	...		S	0 26 34	...	...	...	...
" 17th	A _N e	23 34 0	Tremors.	" 26th	A _N e	7 35 0	Tremors.	" 6th	L	0 28 26	
" 18th	f	0 7 0	...	...	...			f	8 21 0	...	...	...		M	0 30 13	11	...	12	...	
" 17th	A _E e	23 34 0	Do.	" 26th	A _E e	7 36 0	Do.	" 6th	F	1 9 0	
" 18th	f	0 7 0	...	...	...			f	8 20 0	...	...	...		A _N P	21 49 5	...	...	...	...
" 18th	A _N P	1 31 36	Very feeble shock.	" 26th	A _N P	11 39 16	Very feeble shock.	" 6th	S	21 53 33	
	F	2 0 0	...	...	...			F	12 19 0	...	...	...		L	21 56 45	...	...	...	...
" 18th	A _E P	1 31 36	Do.	" 26th	A _E P	11 39 16	Do.	" 6th	M	21 59 39	9	...	3	...	
	F	1 58 0	...	...	...			F	12 19 0	...	...	...		F	22 35 0	...	...	...	...

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.	H. M. S.					1932.		H. M. S.						
Mar. 7th	A _N e	2 53 0	...	...	...	Tremors.	Mar. 9th	A _N e	18 11 0	...	...	...	Tremors.	Mar. 15th	A _N Pe	10 24 6	...	...	...	Very feeble shock.
	f	3 14 0	...	...	...			f	18 41 0	...	...	...			F	10 57 0	...	...	...
" 7th	A _E e	2 53 0	...	...	...	Do.	" 9th	A _E e	18 11 0	...	...	...	Do.	" 15th	A _E Pe	10 24 6	...	...	...	Do.
	f	3 14 0	...	...	...			f	18 41 0	...	...	...			F	10 57 0	...	...	...
" 8th	A _N P	3 23 42	...	...	...		" 10th	A _N e	1 10 0	...	...	...	Do.	" 16th	A _N e	20 55 0	...	...	...	Tremors.
	S	3 34 1	...	...	...			f	1 44 0	...	...	...			f	22 9 0	...	...	...
	L	3 54 30	...	...	...		" 10th	A _E e	1 10 0	...	...	...	Do.	" 16th	A _E e	20 55 0	...	...	...	Do.
	F	4 7 0	...	...	...			f	1 44 0	...	...	...			f	22 9 0	...	...	...
" 8th	A _E P	3 23 42	...	...	...		" 10th	A _N Pe	5 39 12	...	...	...	Distant feeble shock.	" 18th	A _N P	5 23 35	...	...	...
	S	3 34 1	...	...	...			F	7 32 0	...	...	...			S	5 29 22	...	...	...
	L	3 54 30	...	...	...		" 10th	A _E Pe	5 39 12	...	...	...	Do.	" 18th	L	5 34 18	...	...	...
	F	4 31 0	...	...	...			F	7 42 0	...	...	...			M	5 39 22	9	3	...	
" 8th	A _N P	4 42 17	...	...	...		" 14th	A _N P	23 2 20	...	...	...		" 18th	A _E P	5 23 35	...	...	...
	S	4 52 38	...	...	...			S	23 5 51	...	...	...			S	5 29 22	...	...	...
	L	5 13 29	...	...	...		" 15th	M	0 56 0	...	...	...		" 19th	F	7 13 0	...	...	...
	M	Movements small.						L	23 7 46	...	...	...			L	5 34 18	...	...	...
	F	6 5 0	...	...	...		" 15th	M	0 56 0	...	...	...		" 19th	M	5 40 45	12	...	5	
" 8th	A _E P	4 42 17	...	...	...		" 14th	A _E P	23 2 20	...	...	...		" 19th	A _N P	11 11 0	...	...	...
	S	4 52 38	...	...	...			S	23 5 51	...	...	...			S	11 20 9	...	...	...
	L	5 13 29	...	...	...		" 15th	M	0 24 46	17	...	2		" 19th	L	11 36 24	...	...	...
	M	5 22 30	23	...	7			F	1 14 0	...	...	...			M	11 39 23	...	17	4	
	F	6 17 0	...	...	...		" 15th	A _N P	4 43 22	...	...	...		" 19th	A _E P	11 11 0	...	...	...
" 8th	A _N P	18 19 0	...	...	...	Distant feeble shock.	" 15th	S	4 52 31	...	...	...	Do.	" 19th	S	11 20 9	...	...	...
	F	19 58 0	...	...	...			L	5 6 39	...	...	...			L	11 36 24	...	...	...
" 8th	A _E P	18 19 0	...	...	...	Do.	" 15th	F	6 20 0	...	...	...		" 19th	M	11 42 44	20	...	5	
	F	19 58 0	...	...	...		" 15th	A _E P	4 43 22	...	...	...		" 19th	F	13 9 0	...	...	...
" 9th	A _N P	1 11 12	...	...	...	Very feeble shock.	" 15th	S	4 52 31	...	...	...		" 19th	A _N e	13 18 0	...	...	...	Tremors.
	F	1 37 0	...	...	...			L	5 6 39	...	...	...			f	14 0 0	...	...	...
" 9th	A _E P	1 11 12	...	...	...	Do.	" 15th	F	6 20 0	...	...	...		" 19th	A _E e	13 18 0	...	...	...	Do.
	F	1 37 0	...	...	...			A _N P	6 45 21	...	...	...		" 19th	f	14 0 0	...	...	...
" 9th	A _N P	9 28 19	...	...	...	Do.	" 15th	F	7 6 0	...	...	...	Feeble shock.	" 19th	A _N P	23 22 17	...	...	...	Distant feeble shock.
	F	9 43 0	...	...	...			A _E P	6 45 21	...	...	...		" 20th	F	0 47 0	...	...	...
" 9th	A _E P	9 28 19	...	...	...	Do.	" 15th	F	7 6 0	...	...	...	Do.	" 19th	A _E P	23 22 17	...	...	...	Do.
	F	9 43 0	...	...	...			A _N e	7 56 0	...	...	...		" 20th	F	0 47 0	...	...	...
" 9th	A _N P	10 25 5	...	...	...	Do.	" 15th	f	8 26 0	...	...	...	Tremors.	" 21st	A _N P	11 32 44	...	...	...	Very feeble shock.
	F	11 1 0	...	...	...			A _E e	7 56 0	...	...	...			F	11 55 0	...	...	...
" 9th	A _E P	10 25 5	...	...	...	Do.	" 15th	f	8 26 0	...	...	...	Do.				...	...	...
	F	11 1 0	...	...	...					...	...	...				...	...	...	...

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ).		Remarks.		
				A _N	A _E						A _N	A _E						A _N	A _E			
1932.		H. M. S.					1932.		H. M. S.					1932.		H. M. S.						
May 12th	A _E Pe	6 17 19	...	...	...	Feeble shock.	May 21st	A _E P	10 29 33	...	...	...		May 26th	A _E Pe	22 41 44	...	...	...	Very feeble shock.
	F	7 12 0			S	10 43 8			F	23 9 0			
.. 14th	A _N P	13 20 37	...	...	...			L	11 19 7	...	...	...		.. 27th	A _N Pe	12 52 35	...	...	...	Do.
	S	13 27 59			M	11 30 34	24	...	29			F	13 8 0			
	L	13 36 7	...	...	...			F	12 58 0	...	...	...		.. 27th	A _E Pe	12 52 35	...	...	...	Do.
	M	13 36 32	25	1009 21st	A _N Pe	21 49 8	Very feeble shock.		F	13 8 0			
	F	18 7 0	...	...	...			F	22 9 0	...	...	...		.. 27th	A _E Pe	12 52 35	...	...	...	Do.
.. 14th	A _E P	13 20 37 21st	A _E Pe	21 49 8	Do.	.. 28th	A _N P	2 30 47			
	S	13 27 59			F	22 7 0			S	2 38 22			
	L	13 36 7			A _N Pe	11 54 45	Very feeble shock.		L	2 49 11			
	M	13 38 55	28	...	1145		.. 22nd	F	12 16 0	...	...	...		M	2 54 29	17	18	...		
	F	18 53 0	...	...	...			F	11 54 45	...	...	...	Do.	F	4 4 0	...	...	...	
.. 17th	A _N Pe	13 5 12	Very feeble shock.	.. 22nd	A _E Pe	11 54 45	Do.	28th	A _E P	2 30 47			
	F	13 50 0	...	...	...			F	12 17 0	...	...	...		S	2 38 22	...	...	...	
.. 17th	A _E Pe	13 5 12	Do.	.. 22nd	A _N Pe	12 22 45	Distant feeble shock.		L	2 49 11			
	F	13 50 0	...	...	...			F	13 26 0	...	...	...		M	2 57 0	17	...	7		
.. 17th	A _N P	13 54 32	...	...	...		.. 22nd	F	12 22 45	...	...	...	Do.	F	4 4 0	...	...	...	
	S	13 55 54	...	...	...			A _E Pe	12 22 45	...	...	...		.. 31st	A _N Pe	15 21 9	...	...	...	Feeble shock.
	L	13 56 29	...	...	...			F	13 30 0	...	...	...		M	15 26 8	9	2	...		
	F	14 9 0	...	...	...		.. 26th	A _N P	5 17 33	...	...	...		F	15 42 0	...	...	...	
.. 17th	A _E P	13 54 32	...	...	...			S	5 21 39	...	...	...		.. 31st	A _E Pe	15 21 9	...	...	...	Do.
	S	13 55 54	...	...	...			L	5 24 20	...	...	...		M	15 25 58	10	...	2		
	L	13 56 29	...	...	...			M	5 25 18	7	6	...		F	15 49 0	...	...	...	
	F	14 10 0	...	...	...		.. 26th	F	6 4 0	...	...	...		June 2nd	A _N Pe	18 58 32	...	...	...	Very feeble shock.
.. 18th	A _N Pe	19 5 43			A _E P	5 17 33			F	19 22 0			
	M	19 33 52	15	7	...			S	5 21 39	...	...	...		.. 2nd	A _E Pe	18 58 32	...	...	...	Do.
	F	20 30 0	...	...	...		.. 26th	L	5 24 29	...	...	...		F	19 22 0	...	...	...	
.. 18th	A _E Pe	19 5 43	...	...	...			M	5 27 9	9	...	4		.. 3rd	A _N e	0 38 0	...	...	...	Tremors.
	M	19 30 39	18	...	7			F	6 3 0 3rd	f	1 5 0			
	F	20 40 0	...	...	...		.. 26th	A _N P	10 23 36	...	...	...		.. 3rd	A _E e	0 38 0	...	...	...	Do.
.. 20th	A _N Pe	19 20 40			S	16 30 22			f	1 12 0			
	M	19 34 56	9	3	...			L	16 39 21 3rd	A _N P	10 56 34			
	F	19 55 0 26th	M	16 41 9	15	46	...			S	11 9 6			
.. 20th	A _E Pe	19 20 40			F	20 0 0 3rd	L	11 36 42			
	M	19 31 7	12	...	8			A _E P	16 23 36			M	12 6 9	23	991	...			
	F	19 54 0 26th	S	16 30 22			F	15 48 0			
.. 21st	A _N P	10 29 33			L	16 39 21 3rd	A _N P	10 56 34		
	S	10 43 8			M	16 40 34	17	...	70			S	11 9 6			
	L	11 19 7 26th	A _N Pe	22 41 44	Very feeble shock.		L	11 36 42			
	M	11 31 34	24	26	...			F	19 58 0	...	...	...		M	12 6 9	23	991	...		
	F	12 56 0	...	...	...			F	23 8 0	...	...	...		F	15 48 0	...	...	...	

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.		H. M. S.					1932.		H. M. S.					
June 22nd	A _E P	13 19 18	...	...	...		July 9th	A _E Pe	13 19 17	...	...	...	Feeble shock.	July 25th	A _N e	8 38 0	...	...	...	Tremors.
	S	13 32 29	...	...	...			F	14 7 0	...	...	...			f	8 55 0	...	...	...
	L	14 7 1	...	...	...			A _N Pe	20 3 55	...	...	...		„ 25th	A _E e	8 38 0	...	...	...	Do.
	M	14 24 11	20	...	21		„ 12th	M	20 51 7	21	22	...			f	8 49 0	...	...	...
	F	16 5 0	...	...	...			F	21 51 0	...	...	...		„ 25th	A _N P	9 34 57	...	...	...
„ 26th	A _N P	19 30 19	...	...	...		„ 12th	A _E Pe	20 3 55	...	...	...			S	9 47 32	...	...	...
	S	19 39 25	...	...	...			M	20 43 41	25	...	17			L	10 18 47	...	...	...
	L	19 55 15	...	...	...			F	21 44 0	...	...	...			M	10 43 22	19	16	...	
	M	20 2 51	16	4	...		„ 15th	A _N e	21 26 0	...	...	...	Tremors.		F	11 55 0	...	...	...
	F	20 31 0	...	...	...			f	21 47 0	...	...	...		„ 25th	A _E P	9 34 57	...	...	...
„ 26th	A _E P	19 30 19	...	...	...		„ 15th	A _E e	21 26 0	...	...	...	Do.		S	9 47 32	...	...	...
	S	19 39 25	...	...	...			f	21 47 0	...	...	...			L	10 18 47	...	...	...
	L	19 55 15	...	...	...		„ 16th	A _N P	21 4 48	...	...	...		„ 27th	A _N P	21 29 53	...	...	...
	M	20 6 17	15	...	3			S	21 9 8	...	...	...			S	21 38 2	...	...	...
	F	20 34 0	...	...	...			L	21 13 9	...	...	...			L	21 49 38	...	...	...
„ 29th	A _N Pe	18 31 8	...	...	...	Feeble shock.		M	21 19 25	14	5	...		„ 27th	F	22 23 0	...	...	...
	F	19 36 0	...	...	...			F	22 28 0	...	...	...			L	21 49 38	...	...	...
„ 29th	A _E Pe	18 31 8	...	...	...	Do.	„ 16th	A _E P	21 4 48	...	...	...			F	22 23 0	...	...	...
	F	19 28 0	...	...	...			S	21 9 8	...	...	...		„ 27th	A _E P	21 29 53	...	...	...
July 2nd	A _N Pe	2 29 44	...	...	...	Very feeble shock.		L	21 13 9	...	...	...			S	21 38 2	...	...	...
	F	3 11 0	...	...	...			M	21 18 11	15	...	8			L	21 49 38	...	...	...
„ 2nd	A _E Pe	2 29 44	...	...	...	Do.	„ 20th	A _N Pe	20 27 55	...	...	...	Feeble shock.	„ 20th	A _N P	21 7 36	...	...	...	Feeble shock.
	F	3 9 0	...	...	...			F	21 31 0	...	...	...			F	21 51 0	...	...	...
„ 5th	A _N P	11 1 13	...	...	...			A _E Pe	20 27 55	...	...	...	Do.	„ 29th	A _E P	21 7 36	...	...	...	Do.
	S	11 5 43	...	...	...		„ 20th	F	21 31 0	...	...	...			F	21 51 0	...	...	...
	L	11 8 55	...	...	...			A _N P	12 50 49	...	...	...		„ 30th	A _N P	12 23 5	...	...	...
	F	11 52 0	...	...	...		„ 21st	S	12 59 38	...	...	...			S	12 29 46	...	...	...
„ 5th	A _E P	11 1 13	...	...	...			L	13 14 12	...	...	...			L	12 37 20	...	...	...
	S	11 5 43	...	...	...			F	13 45 0	...	...	...			F	13 19 0	...	...	...
	L	11 8 55	...	...	...		„ 21st	A _E P	12 50 49	...	...	...		„ 30th	A _E P	12 23 5	...	...	...
	F	11 47 0	...	...	...			S	12 59 38	...	...	...			S	12 29 46	...	...	...
„ 7th	A _N Pe	16 37 55	...	...	...	Distant shock.	„ 21st	L	13 14 12	...	...	...			L	12 37 20	...	...	...
	M	17 39 43	21	14	...			F	13 55 0	...	...	...		„ 30th	F	13 11 0	...	...	...
	F	18 52 0	...	...	...		„ 21st	A _N e	17 20 0	...	...	...	Tremors.	Aug. 1st	A _N P	6 12 1	...	...	...
„ 7th	A _E Pe	16 37 55	...	...	...	Do.		f	18 30 0	...	...	...			S	6 13 45	...	...	...
	M	17 37 30	19	...	10		„ 21st	A _E e	17 20 0	...	...	...	Do.		L	6 14 30	...	...	...
	F	18 32 0	...	...	...			f	18 30 0	...	...	...			F	6 37 0	...	...	...
„ 9th	A _N Pe	13 19 17	...	...	...	Feeble shock.	„ 21st	f	18 30 0	...	...	...					...	...	...
		14 7 0	...	...	...					...	...	...					...	...	...

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.		H. M. S.					1932.		H. M. S.					
Aug. 1st	A _E P	6 12 1	...	...	...		Aug. 14th	A _N P	7 15 36	...	...	...		Aug. 22nd	A _N Pe	11 21 18	...	...	...
	S	6 13 45	...	...	...			S	7 19 37	...	...	...			S	11 27 55	...	...	...
	L	6 14 30	...	...	...			L	7 21 52	...	...	...			L	11 36 11	...	...	...
	F	6 33 0	...	...	...			M	7 22 59	5	5	...			M	11 43 34	12	5	...		
	F	6 33 0	...	...	...			F	7 42 0	...	...	...			F	12 40 0	...	...	...
" 2nd	A _N Pe	4 32 39	...	...	...	Feeble shock.	" 14th	A _E P	7 15 36	...	...	...		" 22nd	A _E Pe	11 21 18	...	...	...
	F	5 29 0	...	...	...			S	7 19 37	...	...	...			S	11 27 55	...	...	...
	L	4 32 39	...	...	...	Do.		L	7 21 52	...	...	...			L	11 36 11	...	...	...
" 2nd	A _E Pe	4 32 39	...	...	...	Do.		M	Movements very small.					M	11 42 44	12	...	6	...		
	F	5 28 0	...	...	...			F	7 44 0	...	...	...			F	12 38 0	...	...	...
	A _N P	10 38 21	...	...	...	Very feeble shock.	" 14th	A _N P	12 36 5	...	...	...	Feeble shock.	" 23rd	A _N e	23 8 0	...	...	...	Tremors.	
	F	17 8 0	...	...	...			M	12 50 25	14	3	...			f	23 16 0	...	...	...
	A _E P	16 38 21	...	...	...	Do.	" 14th	A _E P	12 36 5	...	...	...	Do.	" 23rd	A _E e	23 3 0	...	...	...	Do.	
	F	17 6 0	...	...	...			M	12 46 39	10	...	2			f	23 1 0	...	...	...
	A _N P	8 37 7	...	...	...		" 16th	A _N e	21 59 0	...	...	...	Tremors.	" 24th	A _N P	12 18 53	...	...	...	Feeble shock.	
	S	8 47 37	...	...	...			f	22 17 0	...	...	...			F	13 29 0	...	...	...
	L	4 9 29	...	...	...		" 16th	A _E e	21 59 0	...	...	...	Do.	Sept. 3rd	A _E P	12 18 53	...	...	...	Do.	
	M	4 22 29	20	17	...			f	22 17 0	...	...	...			S	12 9 25	...	...	...
	F	6 12 0	...	...	...		" 17th	A _N e	18 40 0	...	...	...	Do.		L	12 17 47	...	...	...
" 12th	A _E P	8 37 7	...	...	...			f	19 5 0	...	...	...	Do.	" 8th	A _N P	7 29 41	...	...	...
	S	8 47 37	...	...	...		" 17th	A _E e	18 40 0	...	...	...	Do.		S	12 17 47	...	...	...
	L	4 9 29	...	...	...		" 17th	f	19 5 0	...	...	...	Do.	" 8th	L	12 80 50	...	...	...
	M	4 23 15	21	...	18		" 17th	A _E e	18 40 0	...	...	...	Do.	" 8th	M	12 40 21	16	4	...		
	F	6 23 0	...	...	...		" 17th	f	19 5 0	...	...	...	Do.	" 8th	F	13 12 0	...	...	...
" 18th	A _N Pe	21 21 42	...	...	...	Distant feeble shock.	" 19th	A _N e	19 8 0	...	...	...	Do.	" 8th	A _E P	12 9 25	...	...	...
	F	22 50 0	...	...	...		" 19th	f	19 24 0	...	...	...	Do.	" 8th	S	12 17 47	...	...	...
" 18th	A _E Pe	21 21 42	...	...	...	Do.	" 19th	A _E e	19 8 0	...	...	...	Do.	" 8th	L	12 80 50	...	...	...
	F	22 55 0	...	...	...		" 19th	f	19 29 0	...	...	...	Do.	" 8th	M	12 42 0	15	...	4		
" 14th	A _N P	4 44 24	...	...	...		" 21st	A _N P	4 24 3	...	...	...		" 8th	F	13 20 0	...	...	...
	S	4 48 17	...	...	...		" 21st	S	4 30 51	...	...	...		" 8th	S	7 33 16	...	...	...
	L	4 50 37	...	...	...		" 21st	L	4 38 55	...	...	...		" 8th	L	7 35 30	...	...	...
	M	4 50 52	11	157	...		" 21st	M	4 43 7	22	21	...		" 8th	M	7 40 5	9	4	...		
	F	7 11 0	...	...	...		" 21st	F	5 47 0	...	...	...		" 8th	F	8 28 0	...	...	...
" 14th	A _E P	4 44 24	...	...	...		" 21st	A _E P	4 24 3	...	...	...		" 9th	A _N P	7 0 52	...	...	...	Very feeble shock.	
	S	4 48 17	...	...	...		" 21st	S	4 30 51	...	...	...		" 9th	F	8 17 0	...	...	...
	L	4 50 37	...	...	...		" 21st	L	4 38 55	...	...	...		" 9th	M	7 41 7	10	...	3		
	M	4 55 52	11	...	70		" 21st	M	4 48 0	17	...	10		" 9th	F	7 38 0	...	...	...
	F	6 58 0	...	...	...		" 21st	F	5 59 0	...	...	...		" 9th	S	7 38 0	...	...	...

TABLE E 2—contd.

Date.	Phase.	Time G. M. f.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time H. M. S.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.	H. M. S.						1932.	H. M. S.						
Sept. 9th	A _E P	7 0 52	...	...	...	Very feeble shock.	Sept. 20th	A _N P	15 48 35	...	...	...		Sept. 27th	A _E Pe	18 54 56	...	...	...	Very feeble shock.
	F	7 36 0	...	...	...			S	15 52 42	...	...	...			F	19 39 0	...	...	...
„ 9th	A _N P	13 49 55	...	...	...			L	15 55 23	...	...	...		„ 28th	A _N P	17 0 50	...	...	...	Do.
	S	13 57 4	...	...	...			M	16 4 18	11	3	...			F	17 49 0	...	...	...
	L	14 6 52	...	...	...			F	17 9 0	...	...	...		„ 28th	A _E P	17 0 50	...	...	...	Do.
	F	15 30 0	...	...	...		„ 20th	A _E P	15 48 35	...	...	...			F	17 47 0	...	...	...
	AE	Record extremely faint.						S	15 52 42	...	...	...		„ 29th	A _N P	4 5 59	...	...	...
„ 9th	A _N e	17 19 0	...	...	...	Tremors.		L	15 55 23	...	...	...			S	4 12 53	...	...	...
	f	18 34 0	...	...	...		„ 23rd	A _N P	14 31 48	...	...	...		„ 29th	P	4 5 59	...	...	...
	AE	Record extremely faint.						S	14 39 38	...	...	...			L	4 21 36	...	...	...
„ 11th	A _N	Record defective.						M	14 53 31	13	7	...		„ 29th	A _E P	4 5 59	...	...	...
„ 11th	A _E P	14 18 58	...	...	...			F	17 10 0	...	...	...			S	4 12 53	...	...	...
	S	14 23 36	...	...	...		„ 23rd	A _E P	14 31 48	...	...	...		„ 29th	L	4 21 36	...	...	...
	L	14 27 6	...	...	...			S	14 39 38	...	...	...			F	5 23 0	...	...	...
	F	14 54 0	...	...	...			L	14 51 38	...	...	...		„ 29th	A _N Pe	6 46 43	...	...	...	Feeble local shock.
„ 14th	A _N e	9 30 0	...	...	...	Tremors.		M	14 58 59	15	5	...			M	6 49 30	9	2	...	
	f	9 51 0	...	...	...			F	16 49 0	...	...	...			F	7 9 0	...	...	...
„ 14th	A _E e	9 30 0	...	...	...	Do.	„ 25th	A _N Pe	22 49 44	...	...	...	Very feeble shock.	„ 29th	A _E Pe	6 46 43	...	...	...	Do.
	f	9 51 0	...	...	...			F	23 7 0	...	...	...			M	6 49 19	5	1	...	
„ 15th	A _N P	11 22 8	...	...	...		„ 25th	A _E Pe	22 49 44	...	...	...	Do.	„ 29th	A _N e	14 39 0	...	...	...	Feeble tremors.
	S	11 29 15	...	...	...			F	23 7 0	...	...	...			f	15 7 0	...	...	...
	L	11 39 3	...	...	...		„ 26th	A _N P	19 29 19	...	...	...		„ 29th	A _E e	14 39 0	...	...	...	Do.
	M	11 48 56	15	5	...			S	19 36 12	...	...	...			f	15 7 0	...	...	...
	F	12 41 0	...	...	...			L	19 45 9	...	...	...		„ 29th	A _N P	17 57 44	...	...	...
„ 15th	A _E P	11 22 8	...	...	...			M	19 50 55	18	15	...			S	18 6 58	...	...	...
	S	11 29 15	...	...	...		„ 26th	A _E P	19 29 19	...	...	...			L	18 23 21	...	...	...
	L	11 39 3	...	...	...			S	19 36 12	...	...	...			M	18 32 51	15	7	...	
	M	11 51 7	16	...	3			L	19 45 9	...	...	...			F	20 17 0	...	...	...
	F	12 22 0	...	...	...			M	19 50 55	18	15	...		„ 29th	A _E P	17 57 44	...	...	...
„ 15th	A _N P	14 16 9	...	...	...		„ 26th	F	Mixed up with next shock.			...			S	18 6 58	...	...	...
	S	14 24 9	...	...	...			L	19 45 9	...	...	...			L	18 23 21	...	...	...
	L	14 35 16	...	...	...		„ 26th	A _N	Record defective.			...			M	18 31 15	14	3	...	
	M	15 5 28	17	15	...			A _E P	21 35 35	...	...	...	Feeble shock.	„ 30th	A _N Pe	6 20 42	...	...	...	Very feeble shock.
	F	16 45 0	...	...	...			S	21 42 29	...	...	...			F	20 12 0	...	...	...
„ 15th	A _E P	14 16 9	...	...	...		„ 26th	Le	21 50 4	...	...	...			A _N Pe	6 20 42	...	...	...
	S	14 24 9	...	...	...			F	22 53 0	...	...	...			F	6 36 0	...	...	...
	L	14 35 16	...	...	...		„ 27th	A _N Pe	18 54 56	...	...	...	Very feeble shock.	„ 30th	A _E Pe	6 20 42	...	...	...	Do.
	M	14 58 8	18	...	8			F	19 39 0	...	...	...			F	6 36 0	...	...	...
	F	16 32 0	...	...	...					...	...	...				...	...	...	...

TABLE E 2--contd.

Date.	Phase.	Time. G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.	H. M. S.						1932.		H. M. S.					
Oct. 1st	A _N Pe	20 21 2	...	...	...	Feeble shock.	Oct. 13th	A _N Pe	13 58 51	...	...	...	Very feeble shock.	Oct. 23rd	A _E Pe	1 7 2	...	...	...	Feeble Shock.
	F	20 46 0	...	...	...			F	14 14 0	...	...	...			F	2 3 0	...	...	...
" 1st	A _E Pe	20 21 2	...	...	...	Do.]	" 13th	A _E Pe	13 58 51	...	...	...	Do.	" 23rd	A _N Pe	13 42 42	...	...	...	Very feeble shock.
	F	20 46 0	...	...	...			F	14 14 0	...	...	...			F	14 10 0	...	...	...
" 2nd	A _N Pe	3 17 26	...	...	...	Very feeble shock.	" 14th	A _N P	1 59 49	...	...	...	Feeble shock.	" 23rd	A _E Pe	13 42 42	...	...	...	Do.
	F	Mixed up with the next shock.						S	2 2 5	...	...	...			F	14 10 0	...	...	...
" 2nd	A _E Pe	3 17 26	...	...	...	Do.]	" 14th	A _N L	2 2 51	...	...	...		" 23rd	A _N P	21 36 13	...	...	...	Feeble shock.
	F	Mixed up with the next shock.						F	2 16 0	...	...	...			F	22 25 0	...	...	...
" 2nd	A _N Pe	3 27 14	...	...	...		" 14th	A _E P	1 59 49	...	...	...	Do.	" 23rd	A _E P	21 36 13	...	...	...	Do.
	S	3 31 29	...	...	...			S	2 2 5	...	...	...			F	22 25 0	...	...	...
	L	3 34 37	...	...	...			L	2 2 51	...	...	...					...	...	...
	M	3 37 38	16	23	...			F	2 16 0	...	...	...					...	...	...
	F	Mixed up with the next shock.					" 16th	A _N P	12 21 23	...	...	...		" 25th	A _N P	17 20 10	...	...	...	Do.
" 2nd	A _E Pe	3 27 14	...	...	...			S	12 31 55	...	...	...			F	17 57 0	...	...	...
	S	3 31 29	...	...	...			L	12 53 54	...	...	...		" 25th	A _E P	17 20 10	...	...	...	Do.
	L	3 34 37	...	...	...			M	13 8 14	18	18	...			F	17 53 0	...	...	...
	M	3 37 7	11	...	5		" 16th	A _E P	12 21 23	...	...	...		" 27th	A _N P	1 11 11	...	...	...	Very feeble shock.
	F	Mixed up with the next shock.						S	12 31 55	...	...	...			F	1 33 0	...	...	...
" 2nd	A _N Pe	4 11 53	...	...	...		" 17th	L	12 53 54	...	...	...		" 27th	A _E P	1 11 15	...	...	...	Do.
	M	4 30 6	20	10	...			M	13 6 48	18	...	7			F	1 33 0	...	...	...
	F	5 37 0	...	...	...		" 17th	F	14 54 0	...	...	...		" 27th	A _E F	1 11 15	...	...	...	Do.
" 2nd	A _E Pe	4 11 53	...	...	...		" 17th	A _N P	13 38 4	...	...	...	Feeble shock.]	" 27th	F	1 33 0	...	...	...
	M	4 31 23	20	...	6			F	15 2 0	...	...	...		" 27th	A _N Pe	23 42 40	...	...	...	Do.
	F	5 20 0	...	...	...		" 17th	A _E P	13 38 4	...	...	...	Do.	" 28th	F	0 5 0	...	...	...
" 9th	A _N P	12 58 12	...	...	...	Feeble shock.	" 18th	A _N P	4 18 48	...	...	...	Do.	" 27th	A _E Pe	23 42 40	...	...	...	Do.
	F	13 58 0	...	...	...			F	5 6 0	...	...	...		" 28th	F	0 5 0	...	...	...
" 9th	A _E P	12 58 12	...	...	...	Do.	" 18th	A _E P	4 18 48	...	...	...	Do.	" 28th	A _N P	11 18 54	...	...	...	Feeble shock.
	F	13 56 0	...	...	...			F	5 0 0	...	...	...			F	12 2 0	...	...	...
" 11th	A _N P	19 27 52	...	...	...	Very feeble shock.	" 23rd	A _N Pe	0 27 2	...	...	...	Very feeble shock.	" 28th	A _E P	11 18 54	...	...	...	Do.
	F	19 38 0	...	...	...			F	Mixed up with the next shock.					" 28th	F	12 2 0	...	...	...
" 11th	A _E P	19 27 52	...	...	...	Do.	" 23rd	A _E Pe	0 27 2	...	...	...	Do.	" 20th	A _N P	10 7 59	...	...	...	Very feeble shock.
	F	19 38 0	...	...	...			F	Mixed up with the next shock.						F	10 22 0	...	...	...
" 12th	A _N c	20 16 0	...	...	...	Tremors.	" 23rd	A _E Pe	1 7 2	...	...	...	Feeble shock.	" 20th	A _E P	10 7 59	...	...	...	Do.
	f	20 33 0	...	...	...			F	1 51 0	...	...	...			F	10 22 0	...	...	...
" 12th	A _E c	20 16 0	...	...	...	Do.	" 23rd	A _N Pe	1 7 2	...	...	...	Feeble shock.	" 20th	A _E P	10 7 59	...	...	...	Do.
	f	20 33 0	...	...	...			F	1 51 0	...	...	...			F	10 22 0	...	...	...

TABLE E 2—contd.

Date.	Phase.	Time. G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time. G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time. G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.	H. M. S.					1932.	H. M. S.							
Oct. 29th	A _N P	11 13 26	...	...	...		Nov. 9th	A _E	Instrument under adjustment.				Nov. 14th	A _E Pe	21 34 41	...	...	...	Very feeble shock.
	S	11 17 21	...	...	...		„ 10th	A _N Pe	2 12 4	...	...	Very feeble shock.	„ 10th	A _N P	6 29 44	...	...	...	Do.
	L	11 19 59	...	...	...		„ 10th	F	2 35 0	...	...		„ 10th	F	6 55 0	...	...	...
	M	11 21 31	15	47	...		„ 10th	A _E	Instrument under adjustment.				„ 16th	A _E P	6 29 44	...	...	...	Do.
	F	13 32 0	...	...	...		„ 10th	A _N Pe	6 26 45	...	...	Do.	„ 10th	F	6 55 0	...	...	...
„ 29th	A _E P	11 13 26	...	...	...		„ 10th	F	6 38 0	...	...		„ 17th	A _N e	6 26 0	...	...	...	Tremors.
	S	11 17 21	...	...	...		„ 10th	A _E Pe	6 26 45	...	...	Do.	„ 17th	f	8 14 0	...	...	...
	L	11 19 59	...	...	...		„ 10th	F	6 38 0	...	...		„ 17th	A _E e	6 26 0	...	...	...	Do.
	M	11 20 20	10	...	13		„ 10th	A _N Pe	6 26 45	...	...		„ 18th	P	13 55 57	...	...	...
	F	13 20 0	...	...	...		„ 10th	F	6 38 0	...	...		„ 18th	S	14 2 57	...	...	...
„ 30th	A _N P	21 0 22	...	...	...	Distant shock.	„ 10th	A _E Pe	13 12 29	...	...	Do.	„ 18th	L	14 12 7	...	...	...
	M	21 47 8	17	9	...		„ 10th	F	Mixed up with the next shock.				„ 18th	F	15 20 0	...	...	...
	F	23 33 0	...	...	...		„ 10th	A _N Pe	13 25 28	...	...	Feeble shock.	„ 19th	A _N P	21 8 44	...	...	...	Very feeble shock.
„ 30th	A _E P	21 0 22	...	...	...	Do.	„ 10th	A _E Pe	13 12 29	...	...	Do.	„ 19th	F	21 25 0	...	...	...
	M	21 45 39	22	...	5		„ 10th	F	Mixed up with the next shock.				„ 19th	A _E P	21 8 44	...	...	...	Do.
	F	23 9 0	...	...	...		„ 10th	A _N Pe	13 25 28	...	...	Do.	„ 19th	F	21 27 0	...	...	...
Nov. 2nd	A _N P	11 23 40	...	...	...	Do.	„ 10th	F	13 43 0	...	...		„ 20th	A _N Pe	19 19 14	...	...	...	Do.
	F	13 33 0	...	...	...		„ 10th	A _E Pe	13 25 28	...	...		„ 20th	F	19 29 0	...	...	...
„ 2nd	A _E P	11 23 40	...	...	...	Do.	„ 10th	F	13 43 0	...	...		„ 20th	A _E Pe	19 19 14	...	...	...	Do.
	F	13 20 0	...	...	...		„ 13th	A _N P	4 56 25	...	...		„ 20th	F	19 32 0	...	...	...
„ 3rd	A _N P	19 53 45	...	...	...	Feeble shock.	„ 13th	S	5 4 1	...	...		„ 21st	A _N Pe	14 54 34	...	...	...	Do.
	S	20 2 36	...	...	...		„ 13th	L	5 15 12	...	...		„ 21st	F	15 13 0	...	...	...
	F	20 39 0	...	...	...		„ 13th	M	5 16 17	14	10		„ 21st	A _E Pe	14 54 34	...	...	...	Do.
„ 3rd	A _E P	19 53 45	...	...	...	Do.	„ 13th	F	7 1 0	...	...		„ 22nd	A _N P	15 1 11	...	...	...
	S	20 2 36	...	...	...		„ 13th	A _E P	4 56 25	...	...			S	15 9 4	...	...	...
	F	20 37 0	...	...	...		„ 13th	S	5 4 1	...	...			L	15 20 20	...	...	...
„ 6th	A _N Pe	6 51 39	...	...	...	Very feeble shock.	„ 13th	L	5 15 12	...	...			F	16 0 0	...	...	...
	F	7 16 0	...	...	...		„ 13th	M	5 16 26	14	...	9				...	...	...
„ 6th	A _E Pe	6 51 39	...	...	...	Do.	„ 13th	F	7 12 0	...	...					...	...	...
	F	7 16 0	...	...	...		„ 13th	A _N Pe	16 1 21	...	...	Do.				...	...	...
„ 8th	A _N e	1 29 0	...	...	...	Tremors.	„ 13th	F	17 13 0	...	...					...	...	...
	f	1 46 0	...	...	...		„ 13th	A _E Pe	16 1 21	...	...	Do.				...	...	...
„ 8th	A _E c	1 29 0	...	...	...		„ 14th	F	17 13 0	...	...	Very feeble shock.				...	...	...	Do.
	f	1 42 0	...	...	...		„ 14th	A _N P	0 44 42	...	...					...	...	...
„ 9th	A _N P	18 34 43	...	...	...		„ 14th	F	1 13 0	...	...					...	...	...
	S	18 38 13	...	...	...		„ 14th	A _E P	0 44 42	...	...					...	...	...
	L	18 40 14	...	...	...		„ 14th	F	1 11 0	...	...	Do.				...	...	...
	M	18 40 36	7	25	...		„ 14th	A _N Pe	21 34 41	...	...					...	...	...
	F	19 46 0	...	...	...			F	21 55 0	...	...					...	...	...

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.		H. M. S.					1932.		H. M. S.					
Dec. 4th	A _E	10 41 54	...	...	...		Dec. 11th	A _E	4 31 4	...	...	...		Dec. 17th	A _E	9 4 59	...	...	...
	P	10 48 50	...	...	...			P	4 35 19	...	...	...			S	9 8 48	...	...	...
	S	10 58 58	...	...	...			L	4 37 55	...	...	...			L	9 11 24	...	...	...
	L	11 4 40	20	...	11			M	4 43 30	14	...	5			F	9 33 0	...	...	...
	M	12 21 0	...	...	...			F	6 26 0	...	...	...			A _N	7 14 0	...	...	...		Tremor
	F	16 41 44	...	...	...	Distant shock.		A _N	7 41 20	...	...	...			e _N	7 45 0	...	...	...
" 7th	P _N	17 52 58	16	8	...		" 11th	Pe	8 19 0	...	...	...	Feeble shock.		f	7 45 0	...	...	...
	M	19 17 0	...	...	...			F	7 47 20	...	...	...	Do.		A _E	7 15 0	...	...	...		Do.
	F	16 41 44	...	...	...	Do.	" 11th	A _E	8 16 0	...	...	...			e _E	7 46 0	...	...	...
" 7th	P	17 54 13	18	...	9			F	14 47 39	...	...	...	Very feeble shock.		f _i	8 12 0	...	...	...		Tremors.
	M	19 12 0	...	...	...		" 13th	Pe	15 8 0	...	...	...			A _N	7 50 0	...	...	...
	F	15 27 34	...	...	...			F	14 47 36	...	...	...	Do.		e _N	8 13 0	...	...	...
" 8th	A _N	15 36 5	...	...	...		" 13th	A _E	15 3 0	...	...	...			Pe	7 49 0	...	...	...		Do.
	Pe	15 51 42	...	...	...			Pe	0 55 30	...	...	...	Do.		f	8 13 0	...	...	...
	S	15 58 17	12	3	...		" 14th	F	1 13 0	...	...	...			A _N	12 51 23	...	...	...		Very feeble shock.
	Le	16 25 0	...	...	...			A _N	0 55 39	...	...	...			Pe	13 27 0	...	...	...
" 8th	A _E	15 27 34	...	...	...		" 14th	Pe	1 13 0	...	...	...			F	12 51 23	...	...	...
	Pe	15 36 5	...	...	...			F	0 55 39	...	...	...	Do.		A _E	13 25 0	...	...	...		Do.
	S	15 49 13	...	...	...		" 15th	A _E	19 42 3	...	...	...			Pe	22 35 8	...	...	...		Do.
	Le	15 58 19	11	...	1			Pe	19 48 38	...	...	...			F	22 52 0	...	...	...
	M	16 29 0	...	...	...		" 15th	L	10 55 36	...	...	...			A _E	22 35 8	...	...	...		Do.
" 9th	A _N	8 54 41	...	...	...	Distant feeble shock.		M	20 5 11	12	4	...			Pe	22 46 0	...	...	...		Do.
	P	10 26 0	...	...	...			F	20 39 0	...	...	...			A _E	22 35 8	...	...	...		Do.
	F	8 54 41	...	...	...	Do.	" 15th	A _E	19 42 3	...	...	...			F	22 46 0	...	...	...		Do.
" 9th	P	10 31 0	...	...	...			S	19 48 38	...	...	...			A _N	4 51 29	...	...	...
	F	5 15 44	...	...	...	Feeble shock.	" 15th	L	19 55 56	...	...	...			Pe	4 52 59	...	...	...
" 10th	A _N	6 15 0	...	...	...			M	20 7 58	14	...	5			S	4 53 47	...	...	...
	Pe	5 15 44	...	...	...	Do.	" 15th	F	20 40 0	...	...	...			L	4 55 2	7	3	...		
	F	6 14 0	...	...	...			A _N	Loss of record.	...	...	...			M	5 19 0	...	...	...
" 10th	A _E	10 30 0	...	...	...	Tremors.	" 16th	Pe	22 8 41	...	...	...	Very feeble shock.		F	4 51 29	...	...	...
	e	11 51 0	...	...	...			F	22 23 0	...	...	...			P	4 52 59	...	...	...
" 10th	A _E	10 30 0	...	...	...	Do.	" 16th	A _N	7 23 40	...	...	...	Feeble shock.		S	4 53 47	...	...	...
	e	11 53 0	...	...	...			Pe	8 7 0	...	...	...			L	4 54 27	10	...	3		
" 11th	A _N	4 31 4	...	...	...		" 16th	F	7 23 40	...	...	...	Do.		M	5 19 0	...	...	...
	P	4 35 19	...	...	...			A _F	7 59 0	...	...	...			F	5 30 29	...	...	...
	L	4 37 55	...	...	...		" 17th	Pe	9 4 59	...	...	...			P	6 42 6	...	...	...
	M	4 49 30	11	4	...			F	9 8 48	...	...	...			S	7 5 49	...	...	...
	F	6 26 0	...	...	...			L	9 11 24	...	...	...			L	7 17 14	25	26	...		
								F	9 35 0	...	...	...			F	10 2 0	...	...	...

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Remarks.	
				A _N	A _E						A _N	A _E						A _N	A _E		
1932.		H. M. S.					1932.	H. M. S.						1932.]		H. M. S.					
Dec. 28th	A _E e	0 46 0	...	...	...	Tremors.	Dec. 28th	A _E e	16 21 0	...	...	...	Tremors.	Dec. 31st	A _E e	1 48 0	...	...	...	Tremors.
	f	1 1 0	...	...	...			f	16 32 0	...	...	...			f	2 3 0	...	...	...
„ 28th	A _N P	8 36 43	...	...	...	Feeble shock.	„ 30th	A _N e	0 32 0	...	...	...	Do.	„ 31st	A _N P	6 41 13	...	...	...
	F	9 3 0	...	...	...			f	0 51 0	...	...	...			S	6 49 30	...	...	...
„ 28th	A _E P	8 36 43	...	...	...	Do.	„ 30th	A _E e	0 32 0	...	...	...	Do.		L	7 1 51	...	...	...
	F	9 6 0	...	...	...			f	0 57 0	...	...	...			M	7 7 9	18	10	...	
„ 28th	A _N P	10 44 47	...	...	...	Do.	„ 30th	A _N P	21 29 35	...	...	...	Feeble shock.	„ 31st	A _E P	6 41 13	...	...	...
	F	11 7 0	...	...	...			F	21 59 9	...	...	...			S	6 49 30	...	...	...
„ 28th	A _E P	10 44 47	...	...	...	Do.	„ 30th	A _E P	21 29 35	...	...	...	Do.		L	7 1 51	...	...	...
	F	11 2 0	...	...	...			F	21 58 0	...	...	...			M	7 7 21	21	...	14	
„ 28th	A _N e	16 21 0	Tremors.	„ 31st	A _N e	1 48 0	Tremors		F	8 35 0		
	f	16 32 0			f	Lost in shifting time.												

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STATION—CALCUTTA (ALIPORE).

$\phi = 22^{\circ} 32' N$; $\lambda = 88^{\circ} 20' E$; $h = 7.1$ metres for Milne Shaw Seismograph. *Subsoil*—Alluvial.
 $h = 6.4$ meters for Omori Seismographs.

Apparatus.—(i) Milne Shaw Seismograph (A_N Instrument).
 (ii) Omori Ewing Seismograph (A_N Instrument).
 (iii) Omori Ewing Seismograph (A_E Instrument).

TABLE E. 3.

						v	To	6	$\frac{1}{To^2}$
Milne Shaw A_N						250	12 Secs.		
Omori A_E						29	29 Secs.		
Omori A_N						29	30 Secs.	20 : 1	

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ) $A_N A_E$	Δ Distance (km.)	Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ) $A_N A_E$	Δ Distance (km.)	Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ) $A_N A_E$	Δ Distance (km.)	Remarks.	
1932.		H. M. S.					1932.		H. M. S.					1932.		H. M. S.					
Jan. 3rd	A_N	Milne Shaw Seismograph.					Jan. 11th	A_E	Omori Ewing (Seismograph.)					Jan. 21st	A_N	Omori Ewing (Seismograph.)					
	P	7 52 32	5	...	1100	Slight shock.		P	9 16 21	4	...	700	Slight shock.		P	13 47 7	Un- cer- tain	...	300	Slight shock.	
	S	7 54 32	6	...	...			S	9 17 40	6	...	...			S	13 47 41	"	...	...
	L	7 55 17	10	...	...			L	9 18 1	8	...	...			L	13 48 3	"	...	...
	F	Uncertain.	...	...	...			F	Uncertain.	...	...	...			F	Uncertain.	...	...	...
" 4th	P	11 56 34	5	...	1600	Do.	" 11th	A_N	Omori Ewing (Seismograph.)					" 23rd	A_N	Milne-Shaw (Seismograph.)					
	S	11 59 13	6	...	...			P	9 16 14	4	...	700			P	17 22 28	5	...	500	Do.
	L	12 0 25	8	...	...			S	9 17 32	6	...	...			S	17 23 24	6	...	...
	F	Uncertain.	...	...	...			L	9 17 53	8	...	...			L	17 23 40	8	...	...
" 5th	P	2 19 42	5	...	14500	Do.	" 18th	A_N	Milne Shaw (Seismograph.)					" 24th	P	3 55 59	4	...	8700	Do.	
	S	2 33 28	6	...	...			P	6 56 41	4	...	700	Slight shock.		S	4 5 59	8	...	...
	L	3 9 28	20	...	...			S	6 57 51	6	...	...			L	4 25 11	18	...	...
	F	4 6 39	...	...	...			L	6 58 11	8	...	...			L	4 25 11	18	...	...
" 5th	P	5 29 46	4	...	450	Do.	" 13th	P	7 15 23	...	...	...			F	6 49 11	...	...	...
	S	5 30 34	6	...	...			P	16 38 15	6	...	7300	Do.	" 26th	P	4 56 35	4	...	400	Do.
	L	5 30 52	8	...	...			S	16 47 1	8	...	...			S	4 57 51	Un- cer- tain.	...	...
	F	5 48 52	...	...	...			L	17 12 7	15	...	...			L	4 58 5	6	...	...
" 6th	P	17 4 11	6	...	4200	Do.	" 18th	P	17 24 37	...	...	...			F	5 20 5	...	...	...
	S	17 10 11	8	...	...			P	20 29 51	7	...	3300	Do.	" 29th	P	13 51 41	6	...	6700	Moderate shock.
	L	17 16 35	20	...	...			S	20 34 48	8	...	...			S	13 59 54	10	...	...
	F	17 36 35	...	...	...			L	20 39 19	15	...	...			L	14 12 27	20	...	...
" 8th	P	5 56 54	5	...	1500	Do.	" 19th	P	21 19 19	...	...	...			M	14 14 27	...	46	...	
	S	5 59 24	6	...	...			S	13 35 38	4	...	450	Do.		F	16 8 42	...	...	...
	L	6 0 29	8	...	...			S	13 36 26	Un- cer- tain.	...	...			P	3 18 51	6	...	5100	Slight shock.
	F	6 27 44	...	...	...			L	13 36 50	7	...	...			S	3 25 46	10	...	...
" 9th	P	10 32 10	4	...	3200	Do.	" 21st	A_E	Omori Ewing (Seismograph.)					" 30th	P	3 33 50	15	...	...
	S	10 37 10	8	...	...			P	13 47 10	Un- cer- tain.	...	300	Do.		F	4 50 52	...	...	...
	L	10 40 52	14	...	...			S	13 47 46	"	...	...			S	7 51 52	5	...	4200	Do.
	M	10 43 59	...	...	...			L	13 48 5	"	...	...			S	7 57 42	6	...	...
	F	12 3 22	...	...	...			L	13 48 5	"	...	...			L	8 4 7	10	...	...
								F	Uncertain.	...	...	...			F	8 24 37	...	...	...

TABLE E 3—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ).	Distance (Km.).	Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ).	Distance (Km.).	Remarks.	Date.	Period (Sec.)	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ).	Distance (Km.).	Remarks.
		H. M. S.		A			1932.	H. M. S.			A			1932.	H. M. S.			A		
		N Milne Shaw Seismograph.					A N Milne Shaw Seismograph.					Milne Shaw Seismograph N Instt.								
1932.							1932.	H. M. S.			A			1932.	H. M. S.			A		
July 3rd	P	4 38 34	Uncertain.	...	1200	Slight shock.	Aug. 14th	P	4 41 39	4	...	550	Very great shock felt at Calcutta.	Sept. 15th	P	14 28 8	6	...	7500	Slight shock.
	S	4 40 36	"	...	"			S	Uncertain	"		S	14 37 2	9	...	"		
	L	4 41 42	8	...	"			L	4 43 1	8	...	"		L	14 53 8	15	...	"		
	F	Uncertain	"			M	4 45 31	...	60	"		cF	16 57 28	"		
" 5th	P	11 1 15	4	...	3500	Do.		eF	7 13 31	"		P	14 30 30	3	...	4200	Moderate shock.	
	S	11 6 35	6	...	"		" 14th	P	7 12 10	4	...	800	Slight shock.		S	14 36 38	6	...	"	
	L	11 11 35	8	...	"			S	7 13 32	6	...	"		L	14 42 23	10	...	"		
	F	Uncertain	"			L	7 14 6	8	...	"		M	Uncertain	"		
" 9th	P	12 27 33	4	...	1000	Do.		F	7 41 32	"		F	15 57 31	"		
	S	12 29 26	6	...	"		" 21st	P	4 21 36	2	...	3500	Do.	" 26th	P	19 30 23	5	...	6200	Do.
	L	12 30 11	8	...	"			S	4 26 54	4	...	"		S	19 38 11	8	...	"		
	F	Uncertain	...	...	"			L	4 31 24	6	...	"		L	19 50 51	12	...	"	
" 9th	P	13 22 23	Uncertain.	...	800	Do.		F	5 9 9	...	...	"		M1	19 55 11	...	38	"	
	S	13 23 46	2	...	"			L	4 31 24	6	...	"		M2	20 0 21	...	44	"		
	L	13 24 9	6	...	"		" 21st	P	18 50 20	2	...	2000	Do.	F	Uncertain	...	...	"
	F	Uncertain	...	...	"			S	18 54 5	4	...	"		P	4 7 16	3	...	6600	Slight shock.
" 9th	P	14 33 34	Uncertain.	...	1100	Do.		L	18 56 20	6	...	"		S	4 15 16	4	...	"		
	S	14 35 4	3	...	"		" 22nd	P	11 20 53	3	...	4300	Do.	EL	4 28 46	6	...	"		
	L	14 35 44	4	...	"			S	11 26 58	5	...	"		F	Uncertain	...	...	"
	F	Uncertain	...	...	"		" 24th	L	11 33 28	7	...	"		P	17 55 46	3	...	6600	Do.
" 21st	P	13 59 18	Uncertain.	...	2600	Do.		eF	12 21 48	...	...	"		S	18 3 46	4	...	"	
	S	14 3 28	7	...	"		" 24th	P	12 19 23	3	...	3700	Do.	L	18 17 16	6	...	"		
	L	14 6 24	8	...	"			S	12 25 8	5	...	"		EF	20 38 31	...	...	"
	F	Uncertain	...	...	"		Sept. 3rd	L	12 30 8	8	...	"		P	3 18 34	5	...	14400	Do.
Aug. 1st	P	6 4 17	2	...	300	Do.		eF	13 8 18	...	...	"		S	3 32 16	8	...	"	
	S	6 4 55	3	...	"			P	12 1 38	3	...	5900	Do.	L	4 12 41	18	...	"		
	L	6 5 13	5	...	"		" 8th	S	12 17 58	4	...	"		EF	5 15 53	...	...	"
	M	6 6 13	...	40	"			L	12 29 44	6	...	"		P	12 59 55	4	...	3400	Do.	
	F	7 8 29	...	...	"		" 9th	F	Uncertain	...	...	"		S	13 5 2	6	...	"	
" 2nd	P	4 29 47	Uncertain.	...	3100	Do.		P	7 37 0	3	...	1800	Do.	L	13 9 10	9	...	"		
	S	4 34 34	4	...	"			S	7 40 5	5	...	"		F	13 41 52	...	...	"
	L	4 38 27	6	...	"		" 9th	L	7 41 28	7	...	"		EP	19 20 38	3	...	1400	Do.	
	F	Uncertain	...	...	"		" 11th	F	8 33 3	...	...	"		S	19 23 16	5	...	"	
" 7th	P	23 27 44	Uncertain.	...	1900	Do.		P	13 47 47	3	...	2600	Do.	L	19 24 9	7	...	"		
	S	23 31 9	"	...	"		" 11th	S	13 51 52	5	...	"		F	Uncertain	...	...	"
	L	23 32 41	6	...	"		" 15th	L	13 54 27	8	...	"		MP	13 56 28	2	...	600	Do.	
	F	Uncertain	...	...	"			F	14 56 27	...	...	"		S	13 57 28	3	...	"	
" 12th	P	3 35 54	4	...	8900	Do.		P	14 18 14	3	...	2600	Do.	L	13 57 46	3	...	"		
	S	3 45 57	6	...	"			S	14 22 19	5	...	"		EF	14 5 21	...	...	"
	L	4 5 48	15	...	"		" 15th	L	14 24 59	7	...	"		P	2 0 1	2	...	600	Do.	
	F	Uncertain	...	...	"			F	Uncertain	...	...	"		S	2 0 54	3	...	"	
								P	11 18 35	5	...	4200	Do.	L	2 1 16	4	...	"		
								S	11 24 35	6	...	"		F	Uncertain	...	...	"
								L	11 30 20	9	...	"								
								F	Uncertain	...	...	"						

TABLE E 3—concl'd.

Date.	Phase.	Time. G. M. T.	Period (Sec.).	AMPLI- TUDE (μ)			Δ Distance (Km.).	Remarks.	Date.	Phase.	Time. G. M. T.	Period (Sec.).	AMPLI- TUDE (μ)			Δ Distance (Km.).	Remarks.							
				A N	A E								A N	A E										
1932.		H. M. S.						1932.		H. M. S.														
				A N Instt.									A N Instt.											
				Milne Shaw Seismograph									Milne Shaw Seismograph											
Dec. 25th	P	12 27 1	3	...	...	3500	Slight shock.	Dec. 25th	P	12 27 1	3	...	...	3500	Slight shock.	Dec. 25th	P	8 29 24	4	...	...	2600	Slight shock.
	S	12 32 22	5	...	...	...			S	12 32 22	5	...	...	...			S	8 33 32	6	...	...	...
	L	12 37 22	7	...	...	...			L	12 37 22	7	...	...	...			L	8 36 9	8	...	...	...
	F	Uncertain	...	...	...	...			F	Uncertain	...	...	...	...			F	Uncertain	...	...	...	...
.. 26th	EP	8 9 45	3	...	...	240	Do.	.. 26th	P	19 48 18	3	...	...	2400	Slight shock.	.. 30th	P	21 30 7	3	...	...	2600	Do.
	S	8 10 7	5	...	...	...			S	19 52 9	5	...	...	...			S	21 34 29	5	...	...	...
	L	8 10 19	Uncertain	...	...	...			L	19 54 25	7	...	...	...			L	21 37 0	7	...	...	...
	F	Uncertain	...	...	...	...			F	Uncertain	...	...	...	...			EF	21 56 40	...	...	...	...
									.. 26th	P	21 15 56	3	2400	Do.	.. 31st	P	6 43 1	4	8000	Do.
									S	21 19 58	5	...	...	...			S	6 52 23	6	...	...	...
									L	21 22 10	7	...	...	...			L	7 9 38	12	...	...	...
									F	Uncertain	...	...	...	...			F	Uncertain	...	...	...	...

S. N. SEN,
Meteorologist,
Calcutta.

STATION—KODAIKANAL.

$\phi=10^{\circ} 13' 50''$; $\lambda=77^{\circ} 28' 00''$; $h=2343m$. *Subsoil—Rock.*

Apparatus.—Milne Shaw Seismograph (E-W) Damping ratio 20 : 1. Installed January 1932.

TABLE E 4.

					V	To	$\frac{V}{To^2}$										
A _E					250	12	0017										
Date.	Phase.	Time G. M. T.	Period (Sec.)	MAX. AMPLITUDE OF RECORD (MM.)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	MAX. AMPLITUDE OF RECORD (MM.)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	MAX. AMPLITUDE OF RECORD (MM.)	REMARKS.
				A _E						A _E						A _E	
1932.		H. M. S.				1932.		H. M. S.				1932.		H. M. S.			
Jan. 17th	eP	8 8 21	...	...	Very feeble shock.	Feb. 23rd	eP	00 30 15?	...	...		Mar. 15th	P Before.	04 52 02?	...	...
	F	8 11 00	...	...			S	00 37 49	...	...			F	05 44 02	...	...	Tremors.
„ 17th	eP	8 37 26	...	...	Feeble shock.		L	00 52 08	...	...		„ 15th	P	06 48 49	...	...
	L	8 41 51	...	...			M	00 55 08	...	3.0			L	06 51 58	...	...
	F	9 11 00	...	...			F	03 09 00	...	...			F	07 03 02	...	...	Feeble shock.
Feb. 5th	Part of record lost and no time marks on what is left.					„ 26th	eP	06 37 13	...	...		„ 18th	eP	05 22 29	...	...
„ 11th	No time marks.	...	...	...	Feeble shock.		S	06 41 28	...	...			S	05 27 09	...	...
„ 12th	No time marks.	...	...	6.0		Mar. 4th	IP	23 20 07	...	...			L	05 29 11	...	...
„ 14th	No time marks.	...	...	...	Feeble shock.		IS	23 24 29	...	...		„ 19th	IP	11 10 47	...	...
„ 14th	No time marks.	...	...	...	Do.		L	23 27 13	...	...			IS	11 19 39	...	...
„ 14th-15th	No time marks.	...	...	8.4	A regular earthquake.		M	23 27 45	...	6.0			L	11 34 12	...	...
„ 16th	eP	14 7 19	...	...			F	?	...	...	F cannot be determined as lines overlap.	„ 24th	eP	16 13 08	...	...
	S	14 16 35	...	...		„ 6th	P	00 21 14	...	...			S	16 16 41	...	...
	eL	14 48 00	...	...			S	00 25 15	...	...			L	16 18 53	...	...
	M	14 52 34	...	1.5			L	00 27 41	...	...			M	16 19 27	...	1.3	
	F	16 17 00	...	...			M	00 29 26	...	0.6			F	16 42 00	...	...
„ 17th	P	23 33 09?	...	...	Very feeble shock.	„ 6th	F	?	...	...	F not traceable as lines overlap.	„ 25th	P	04 34 30	...	...
	F	23 42 00	...	...			P	21 49 20	...	...			L	04 38 26	...	...
„ 21st	P	12 27 54	...	...	Do.		S	21 53 54	...	...			F	04 51 00	...	...	Feeble shock.
	F	12 42 00	...	...		„ 8th	L	22 02 27	...	...			P	?	...	...
„ 21st	P	12 46 15	...	...			F	22 15 00	...	...	Very feeble shock.	„ 26th	S	?	...	...
	S	12 48 21	...	...		„ 8th	P	05 23 00	...	...			L	00 47 39	...	...
	L	12 50 14	...	...			F	06 08 00	...	...	Tremors.		M	00 51 43	...	15.0	P and S lost in traces overlapping.
	M	12 52 36	...	0.75		„ 8th	eP	18 26 00	...	...			F	03 11 00	...	...
	F	?	...	...			L	18 58 15	...	...		„ 26th	P	05 34 11	...	...
„ 21st	P	?	...	...	Overlapping.	„ 10th	F	19 36 00	...	...	Feeble shock.		L	05 59 15	...	...
	S	13 24 48	...	...			eP	5 56 00	...	...			F	06 34 00	...	...	Feeble shock.
	L	13 28 30	...	...		„ 14-15th	L	06 18 15	...	...		„ 26th	P	07 04 11	...	...
	M	13 29 04	...	3.0			F	09 36 00	...	...	Feeble shock.		S	07 12 11	...	...
	F	14 30 00	...	...			eP	23 02 28	...	...			L	07 15 32	...	...
							L	23 57 38	...	...			M	07 16 26	...	3.75	
							F	01 00 00	...	...	Feeble shock.		F	08 19 00	...	...

TABLE E 4—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.).	MAX. AMPLITUDE OF RECORD (MM.).		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.).	MAX. AMPLITUDE OF RECORD (MM.).		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.).	MAX. AMPLITUDE OF RECORD (MM.).		REMARKS.	
				A	E						A	E						A	E		
1932.		H. M. S.					1932.	H. M. S.					1932.	H. M. S.							
Mar. 26th	IP	10 01 30	...	...			May 2nd	P	23 42 00	...	...		June 6th	P	09 36 08	...	...				Tremors.
	S	10 09 00	...	...			3rd	F	00 22 00	...	...			F	10 50 53	...	...				Tremors.
	L	10 18 15	...	...			" 4th	P	08 38 43	...	...		" 8th	P	07 06 53	...	...		
	M	10 22 39	...	4.5			" 4th	F	08 48 58	...	...		" 10th	P	20 30 00	...	...				Tremors.
	F	12 16 00	...	...			" 5th	P	03 32 00?	...	...		" 10th	S	20 32 23	...	...		
" 27th	IP	08 49 04	...	...			" 5th	F	03 55 00	...	...		" 10th	L	20 36 56	...	...		
	IS	08 52 49	...	...			" 6th	P	09 07 15	...	...		" 11th	M	20 37 08	...	1.25				
	L	08 55 45	...	...			" 6th	L	09 13 00	...	...		" 11th	F	21 12 00	...	...		
	F	09 38 00	...	...			" 6th	F	10 06 00	...	...		" 11th	P	08 39 08	...	...				Slight shock.
" 27th	eP	17 08 38	...	...			" 12th	P	06 17 39	...	...		" 11th	S	08 43 23	...	...		
	L	17 14 10	...	...			" 12th	F	06 49 00	...	...		" 11th	L	08 45 23	...	...		
	F	17 53 00	...	...			" 14th	P	05 45 13	...	...		" 11th	M	08 46 38	...	1.5				
" 28th	eP	00 41 31	...	...			" 14th	F	05 54 58	...	...		" 11th	F	09 23 00	...	...		
	S	00 46 15	...	...			" 14th	P	13 19 38	...	...		" 16th	P	01 23 30	...	...		
	L	00 49 12	...	...			" 14th	S	13 26 40	...	...		" 16th	S	01 24 13	...	...		
	M	00 49 39	...	2.75			" 14th	M	13 27 27 13 41 32	...	80.0		" 16th	L	01 27 28	...	...		
	F	03 07 00	...	...			" 18th	F	18 38 57	...	...		" 16th	M	01 27 36	...	5.0				
April 1st	No	time marks.	...	...			" 18th	P	19 04 05	...	...		" 18th	F	02 49 00	...	...		
" 3rd	P	20 57 51	...	...			" 18th	F	20 42 54	...	...		" 18th	P	10 33 23	...	...		
	S	21 07 15	...	...			" 20th	P	18 33 25	...	...		" 18th	S	10 55 40	...	...		
	L	21 33 22	...	...			" 20th	F	19 51 02	...	...		" 18th	L	11 35 00	...	...		
	F	22 17 00	...	...			" 21st	P	10 30 09	...	...		" 18th	M	11 46 56	...	15.5				
" 4th	P	19 24 58	...	...			" 21st	S	10 10 43	...	...		" 18th	F	13 54 00	...	...		
	F	20 26 58	...	...			" 21st	L	11 21 43	...	...		" 18th	P	17 40 23	...	...				Tremors.
" 8th	P	12 47 15	...	...			" 22nd	M	11 38 11 11 50 24	...	3.0		" 18th	F	18 08 00	...	...		
	F	12 30 00	...	...			" 22nd	F	12 32 58	...	...		" 18th	P	21 42 38	...	...				Tremors.
" 22nd	IP	05 04 11	...	...			" 22nd	P	11 54 37	...	...		" 21st	P	23 21 17	...	...		
	IS	05 09 08	...	...			" 22nd	F	13 30 00	...	...		" 21st	F	23 31 02	...	...				Tremors.
	L	05 14 49	...	...			" 26th	P	16 23 00	...	...		" 22nd	P	01 15 15	...	...		
	M	05 17 00	...	1.75			" 26th	S	16 25 00	...	...		" 22nd	F	01 19 00	...	...				Tremors.
	F	06 45 00	...	...			" 26th	L	16 27 17	...	...		" 22nd	P	13 20 00	...	...		
" 29th	P	17 38 21	...	...			" 26th	M	16 33 00	...	12.0		" 22nd	S	13 34 30	...	...		
	F	18 09 00	...	...			" 28th	F	?	...	...		" 22nd	L	14 18 00	...	...		
" 29th	P	18 30 23	...	...			" 28th	P	02 30 45	...	...		" 22nd	M	14 23 26	...	4.0				
	F	19 50 00	...	...			" 28th	S	02 38 17	...	...		" 22nd	F	15 31 00	...	...		
" 30th	P	01 18 24	...	...			" 28th	L	02 50 11	...	...		" 26th	P	20 04 34	...	...				Tremors.
	S	01 29 00	...	...			" 28th	M	02 54 52	...	1.0		" 26th	F	20 30 00	...	...		
	L	01 49 15	...	...			" 30th	F	03 36 00	...	...		July 2nd	P	21 21 21	...	...		
	F	02 26 00	...	...			" 30th	P	10 56 45	...	...		July 2nd	F	21 27 00	...	...				Tremors.
" 30th	P	06 30 08	...	...			June 3rd	S	11 11 38	...	...		" 5th	P	11 07 17	...	...		
	F	06 54 00	...	...			June 3rd	L	11 47 38	...	...		" 5th	F	11 26 58	...	...				Feeble shock.
" 30th	P	09 21 08	...	...			" 30th	P	12 10 15	...	65.0		" 7th	P	17 21 26	...	...		
	F	09 26 00	...	...			" 30th	F	16 04 00	...	...		" 7th	F	18 29 00	...	...				Tremors.
" 30th	P	11 03 23	...	...															
	F	11 29 00	...	...																	Very feeble shock.

TABLE E 4—contd.

Date.	Phase.	Time. G. M. T.	Period (Sec.)	MAX. AMPLITUDE OF RECORD (MM.).	REMARKS.	Date.	Phase.	Time. G. M. T.	Period (Sec.)	MAX. AMPLITUDE OF RECORD (MM.).	REMARKS.	Date.	Phase.	Time. G. M. T.	Period (Sec.)	MAX. AMPLITUDE OF RECORD (MM.).	REMARKS.	
				A E						A E						A E		
1932.		H. M. S.				1932.		H. M. S.				1932.		H. M. S.				
July 12th	P	20 23 17?	...	...		Sept. 9th	P	13 48 18	...	...		Oct. 17th	P	13 30 ±	...	...
	S	20 26 28?	...	...			S	13 55 48	...	...			S	...	...	...
	L	20 32 40	...	...			L	14 02 03	...	...			L	...	...	...
	F	21 40 02	...	...	Feeble shock.		F	14 57 03	...	...	Feeble shock.		F	15 30 ±	...	...		No time marks. Feeble shock.
„ 16th	1P	21 07 19	...	...		„ 14th	P	09 30 15	...	...		„ 20th	P	18 31 11	...	...
	S	21 10 05	...	...			F	09 57 00	...	...	Feeble shock.		F	18 54 00	...	...		Tremors.
	L	21 12 25	...	...		„ 15th	P	11 21 11	...	...		„ 22nd	P	23 40 21	...	...
	M	21 13 55	...	2.75			F	12 16 00	...	...	Feeble shock.		F	23 53 02	...	...		Tremors.
	F	21 53 57	...	...		„ 15th	P	14 16 07	...	...		„ 23rd	P	20 36 00	...	...
„ 25th	P	09 43 15	...	...			S	14 27 23	...	...			F	21 28 00	...	...		Tremors.
	S	09 57 10	...	...			L	14 38 49	...	...		„ 28th	P	11 19 50	...	...
	L	10 30 13	...	...			M	14 56 13	...	2.0			F	11 52 58	...	...		Tremors.
	F	11 39 00	...	...	Feeble shock.		F	16 35 00	...	...		„ 29th	P	10 20 ±	...	...
„ 27th	P	21 29 00	...	...		„ 20th	P	15 47 11	...	...			F	10 30 ±	...	...		Tremors. No time marks.
	F	22 08 00	...	...	Tremors.		F	16 23 00	...	...	Feeble shock.	„ 29th	P	11 20 ±	...	...
Aug. 1st	P	06 12 41	...	...		„ 23rd	P	14 32 06	...	...			S	11 25 ±	...	...
	F	06 20 00	...	...	Very feeble shock.		S	14 40 02	...	...			L	11 27 ±	...	...
„ 12th	P	03 41 07	...	...			L	14 48 51	...	...	Feeble shock.		M	11 31 ±	...	5.5		
	F	06 32 00	...	...	Tremors.	„ 26th	P	19 30 21	...	...			F	12 25 ±	...	...		No time marks.
„ 14th	1P	04 44 37	...	...			S	19 38 15	...	...		„ 30th	P	21 00 38	...	...
	S	04 48 34	...	...			L	19 49 11	...	...			S	21 11 12	...	...
	L	?	...	...			M	19 59 45	...	2.75			L	21 36 45	...	...
	M	04 49 58	...	30.0			F	21 33 00	...	...			F	22 22 00	...	...		Feeble shock.
	F	06 52 00	...	...		„ 29th	P	?	...	...		Nov. 2nd	P	11 23 3	...	...
„ 14th	P	12 41 00	...	...			F	05 17 00	...	...	Feeble shock. P lost in changing sheet.		F	13 01 00	...	...		Tremors.
	S	12 45 00	...	...		„ 29th	P	06 52 17	...	...		„ 9th	1P	18 35 00	...	...
	L	12 47 26	...	...			F	06 56 00	...	...	Tremors.		1S	18 38 45	...	...
	F	13 32 00	...	...	Feeble shock.	„ 20th	P	17 58 08	...	...			L	18 40 52	...	...
„ 17th	P	18 37 21	...	...			S	18 07 33	...	...			M	18 41 30	...	2.4		
	F	18 51 00	...	...	Feeble shock.		F	19 14 00	...	...	Feeble shock.		F	19 38 00	...	...
„ 21st	P	04 23 49	...	...		Oct. 2nd	P	03 33 00	...	...		„ 13th	1P	04 56 41	...	...
	S	04 29 28	...	...			S	03 36 54	...	...			1S	04 58 11	...	...
	L	04 41 43	...	...			L	03 38 53	...	...			1L	05 04 30	...	...
	F	05 38 00	...	...	Feeble shock.		M	03 42 19	...	3.5	There were several tre- mors in the sheet from 9h. 50m. 1s. onwards.		M	05 04 36	...	5.25		
„ 21st	P	13 03 11	...	...		„ 2nd	F	?	...	...	Overlapping.	„ 13th	F	06 07 00	...	...
	F	13 12 00	...	...	Tremors.		P	?	...	...			P	1 00 43	...	...
„ 22nd	P	11 28 15	...	...			S	?	...	...			F	17 11 00	...	...		Tremors.
	F	12 10 00	...	...	Feeble shock.		L	04 19 41	...	...		„ 14th	P	00 51 43	...	...
„ 24th	P	12 18 28	...	...			F	05 04 00	...	...	Feeble shock.		F	01 02 00	...	...		Tremors.
	F	13 04 58	...	...	Feeble shock.	„ 16th	P	12 17 ±	...	...		„ 26th	P	04 34 37	...	...
Sepr. 3rd	P	12 18 13	...	...			S	?	...	...			S	04 43 11	...	...
	F	12 55 00	...	...	Feeble shock.		L	?	...	...			F	?	...	...		Feeble shock. Lines got jumbled.
„ 8th	P	07 36 00	...	...			M	?	...	3.5		„ 26th	P	17 52 27	...	...
	F	08 09 00	...	...	Feeble shock.		F	15 20 ±	...	...	No time marks on the sheet.		F	19 05 58	...	...		Tremors.

TABLE E 4—concl'd.

Date.	Phase.	Time. G. M. T.	Period (Sec.).	MAX. AMPLI- TUDE OF RE- CORD (MM.).	REMARKS.	Date.	Phase.	Time. G. M. T.	Period (Sec.).	MAX. AMPLI- TUDE OF RE- CORD (MM.).	REMARKS.	Date.	Phase.	Time. G. M. T.	Period (Sec.).	MAX. AMPLI- TUDE OF RE- CORD (MM.).	REMARKS.	
				A _E						A _E						A _E		
1932.		H. M. S.				1932.		H. M. S.				1932.		H. M. S.				
Nov. 29th	P	02 00 45	...	...		Dec. 11th	IP	04 29 46	...	...		Dec. 25th	P	...	...	...
	F	03 08 00	...	...	Tremors.		IS	04 33 00?	...	...			F	07 53 00	...	...		Feeble shock. Beginning in the previous day's sheet not recorded as the light had burnt off.
" 29th	P	11 30 35	...	...			L	04 34 15	...	...						
	S	11 41 45	...	...			M	04 36 41	...	1.5								
	L	12 18 52	...	...			F	06 39 00	...	...						
	M	12 29 32	...	1.0		" 11th	P	07 40 00	...	...			P	08 55 00	...	...
	F	13 37 00	...	...			F	07 59 00	...	...	Tremors.		F	10 03 00	...	...		Tremors.
" 30th	P	17 06 08	...	...		" 15th	P	19 40 ±	...	...			P	...	...	...		Tremors. Lines over- lapping; time cannot be determined.
	S	17 08 00	...	...			S	...	...	...					
	L	17 09 12	...	...			L	...	...	...					
	F	17 18 00	...	...	Feeble shock.		F	20 40 ±	...	...	Feeble shock. No time marks.		F	...	...	...
Dec. 4th	P	04 24 25	...	...		" 17th	P	08 06 47	...	...			P	21 23 00	...	...
	F	05 41 00	...	...	Tremors.		F	08 50 00	...	...	Feeble shock.		S	?	...	...
" 4th	IP	08 19 25	...	...		" 21st	P	06 28 ±	...	...			L	21 29 47	...	...		Feeble shock.
	IS	08 25 26	...	...			S	06 43 ±	...	...			F	22 05 00	...	...
	IL	08 33 17	...	...			L	07 03 ±	...	...						
	M	08 38 41	...	19.0			M	07 21 ±	...	8.0	Time marks failed for some hours.		P	08 37 28	...	...
	F	11 55 00	...	...			F	09 35 00	...	...			F	09 10 02	...	...		Feeble shock.
" 7th	P	16 42 00	...	...		" 24th	P	05 32 17	...	...				No time marks.	...	...		Tremors.
	S	17 04 26	...	...			F	05 52 02	...	...	Feebleshock.					1.25		Slight shock.
	L	17 36 11	...	...		" 24th	IP	06 47 47	...	...						...
	M	17 52 35	...	1.5			IS	06 56 55	...	...				P	06 40 ±	...	...
	F	18 57 00	...	...			L	07 13 33	...	...				S	06 49 ±	...	...
" 8th	Not possible to measure the times as lines overlap.				Tremors.		F	08 53 02	...	...	Feeble shock.			L	06 58 52	...	...
" 10th	P	03 56 12										M	07 07 21	...	3.0	No time marks for P and S.
	F	04 56 02	Tremors.									F	08 39 00	

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The following table contains a list of earthquakes that were reported by voluntary observers from various stations :—

TABLE E 5.

Place at which felt.	Date.	G.M.T. of earthquake.	Duration.	Intensity (Rossi-Forel scale).	No. of shocks.	REMARKS.	Place at which felt.	Date.	G.M.T. of earthquake.	Duration.	Intensity (Rossi-Forel scale).	No. of shocks.	REMARKS.
	1932.	H. M.	Sec.					1932.	H. M.	Sec.			
Yatung, Tibet . . .	Jan. 11	9 15	60	6	Several tremors.		Dhubri . . .	Aug. 13	19 31	9	6	1	
Cooch Behar (Bengal) .	" 11	9 16	2-3	5	1		Cooch Behar . . .	" 14	4 57	about 10	6	1	
Do.	" 18	14 01	about 2	4	1		Faridpur . . .	" 14	4 40	about 1	7	1	
Gauhati (Assam) . . .	" 19	13 35	30-45	6	Several shocks.		Cherrapunji . . .	" 14	4 40	30	4	2	
Cherrapunji . . .	" 19	13 35	5	5	2		Dhubri . . .	" 14	4 41	165	6	4	
Salonah . . .	" 19	13 42	4-5	4	1		Narayanganj . . .	" 14	4 40	3	4	3	
Cherrapunji . . .	" 21	13 45	2	5	2		Gauhati . . .	" 14	4 40	about 175	} 7	} 4	
Cooch Behar (Bengal) .	" 21	13 51	about 60	6	1		Chittagong . . .	" 14	4 42	about 5			4	2
Gauhati . . .	" 21	13 48	5	6	1		Salonah . . .	" 14	4 30	90-120	8	3	
Dhubri . . .	" 21	13 45	12	6	2		Do. . .	" 14	7 11	about 7	5	1	
Mymensingh . . .	" 21	13 47	1/2	5	1		Khulna . . .	" 14	4 51	1 1/2	4	2	
Dhubri . . .	" 23	16 21	18	6	3		Mymensingh . . .	" 14	4 43	15	6	2	
Gauhati . . .	" 26	4 59	5	6	1		Yatung, Tibet . . .	" 14	4 40	about 5	} 5	} Several tremors.	
Cooch Behar . . .	" 23	17 21	about 15	7	1		Quetta . . .	" 25	22 45	5				1
Gauhati . . .	" 23	17 20	10	6	1		Drosh . . .	Sep. 9	18 30	10	3	...	
Drosh . . .	Feb. 9	2 25	20	6	2		Gauhati . . .	" 10	4 21	2	3	1	
Dhubri . . .	" 14	15 51	15	6	2		Drosh . . .	" 10	19 30	8	3	...	
Drosh . . .	" 14	20 30	60	7	2		Salonah . . .	" 10	4 15	8-10	4	1	
Cherrapunji . . .	Mar. 6	0 18	5	4	2		Drosh . . .	" 11	12 30	40	6	3	
Cooch Behar . . .	" 6	0 43	about 15	4	1		Do. . .	" 11	13 00	20	4	2	
Gauhati . . .	" 6	0 21	about 65	6	2		Dhubri . . .	" 15	14 45	16	7	3	
Salonah . . .	" 6	0 18	3-5	3	1		Cooch Behar . . .	" 15	14 36	about 10	4	1	
Rawalpindi . . .	" 9	1 10	about 10	3	1		Salonah . . .	" 24	23 30	about 5	4	1	
Drosh . . .	" 9	1 10	50	6	1		Yatung, Tibet . . .	Oct. 13	13 55	30	6	...	Several tremors.
Khulna . . .	" 24	15 50	2	3	2		Muktesar (Kumaun) .	" 14	1 54	about 40	4	3	
Gauhati . . .	" 24	16 10	about 50	6	3		Sonamarg . . .	" 29	18 55	25	8	2	
Chittagong . . .	" 24	16 10	about 10	...	2		Rawalpindi . . .	Nov. 6	6 52	about 25	6	1	
Salonah . . .	" 24	16 08	12-15	5	3		Cherrapunji . . .	" 9	18 30	30	3	2	
Faridpur . . .	" 24	16 10	5	5	1		Gauhati . . .	" 9	18 28	60	8	1	
Badarpurghat . . .	" 24	16 07	2-3	5	1								
Mymensingh . . .	" 24	16 09	1	7	1								
Rawalpindi . . .	" 29	9 12	10	5	2								
Yatung, Tibet . . .	May 17	13 50	about 55	6	1	Severeshock and several tremors.							
Dhubri . . .	July 20	7 35	13	5	3								
Cooch Behar . . .	" 20	8 43	...	4	1								
Gauhati . . .	Aug. 1	6 06	about 30	6	3								
Dhubri . . .	" 1	6 06	26	7	2								
Cherrapunji . . .	" 1	6 05	5	4	2		Gauhati . . .	" 10	2 15	} 8	} 2		
Mymensingh . . .	" 1	6 05	1/2	6	1								
Cooch Behar . . .	" 1	6 03	about 50	6	1		Gauhati . . .	" 10	13 19	about 10	6	1	
Do. . .	" 2	{ 6 53 11 05	{ 20 15	6	2		Dhubri . . .	" 10	6 35	50	6	6	Continuous.
Cherrapunji . . .	" 12	9 18	5	4	1		Gauhati . . .	" 11	{ 1 04 8 21	{ 5 sec. each.	6	3	

TABLE E 5—contd.

Place at which felt.	Date.	G.M.T. of earthquake.	Duration.	Intensity (Rossi-Forel scale).	No. of shocks.	REMARKS.	Place at which felt.	Date.	G.M.T. of earthquake.	Duration.	Intensity (Rossi-Forel scale).	No. of shocks.	REMARKS.	
	1932.	H. M.	Sec.					1932.	H. M.	Sec.				
Salonah	Nov. 10	6 33	40-45	} 5	4		Gauhati	Nov. 13	15 21	about 5	6	1	With vibrations.	
		6 35	2-3					Do.	" 19	21 02	8	6		1
		6 45	2-3					Do.	" 20	15 15	5	6		1
		7 08	2-3					Salonah	" 19	21 05	12-15	5		1
		13 18	3-4	4	1	Gauhati	" 20	19 30	about 5	6	1			
Do.	" 11	1 01	2-3	3	1	Do.	" 21	14 47	about 20	6	2			
Gauhati	" 12	20 35	about 5	6	3	Salonah	" 21	14 51	3 or 4	4	1			
Do.	" 14	17 40	about 5	6	1	Angul	" 24	20 20	about 2	5	1			
Peshawar	" 14	21 35	90	5	2	Drosh	Dec. 13	14 50	20	4	2			
Drosh | . . . . .	" 14	17 05	40	5	2	Do.	" 14	1 00	15	6	3			
Do.	" 14	21 25	90	8	8	Salonah	" 20	22 40	about 5-8	4	1			
Salonah	" 14	15 44	2-3	4	1	Mukteswar	" 21	4 49	about 10	5	1			
Srinagar	" 14	21 32	about 3	8	1	Dhubri	" 22	3 55	12	6	2			
Gauhati	" 16	6 22	about 10	6	1	Faridpur	" 26	8 5	about 5	6	2			
Salonah	" 16	6 23	about 12	4	1									

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