



GOVERNMENT OF INDIA
METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW

ANNUAL SUMMARY FOR 1930

PART E.
SEISMIC RECORDS.

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UNDER THE DIRECTION OF

C. W. B. NORMAND, M.A., D.Sc.

Director General of Observatories

CALCUTTA: GOVERNMENT OF INDIA
CENTRAL PUBLICATION BRANCH
1931

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ANNUAL SUMMARY, 1930.



PART E. SEISMIC RECORDS.

STATION—AGRA.

$\varphi=27^{\circ} 10' N$; $\lambda=78^{\circ} 05' E$; $h=169$ m. *Subsoil*—Indo-Gangetic Alluvium.

Apparatus.—Two Omori-Ewing Horizontal Pendulum Seismographs.

(Masses 50 kg.)

TABLE E 1.

						V	To	E	$\frac{r}{To^3}$						
AN	22.5	21	1		From 1st January 1930 to 26th January 1930. From 27th January 1930 to 31st December 1930. From 1st January 1930 to 26th January 1930. From 27th January 1930 to 27th April 1930. From 28th April 1930 to 22nd July 1930. From 23rd July 1930 to 31st December 1930.					
						26.9	21	1							
AE	.	.	.	.	.	27.8	27	1		
						27.4	29	1							
						24.9	29	1							
						30	30	1							

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.
1930.		H. M. S.		AN. AE.		1930.		H. M. S.		AN. AE.		1930.		H. M. S.		AN. AE.	
Jan. 5th	AE. P	1 29 33	..	..	Distant shock.	Feb. 2nd	AN. Pl	15 8 35	..	..	Slight distant shock.	Feb. 23rd	AN. e	18 27 45	..	..	Slight shock.
	S	1 39 8	..	..			Sl	15 18 13	..	..			Se	18 34 40	..	..
	Fe	2 11 13	..	..			L	15 37 8	..	..			Le	18 44 32	..	..
							M	15 44 25	21	40			Fe	19 10 30	..	..
" 5th	AN. e	1 29 38	..	..	Do.	" 8th	AE. P	6 30 6	..	..	Slight shock	" 24th	AE. P	20 59 54	..	..	Do.
	eS	1 39 8	..	..			S	6 34 9	..	..			S	21 6 24	..	..
" 25th	AN. eP	1 46 54	..	..	Feeble shock.		L	6 36 24	..	..			F	21 22 4	..	..
	F	2 49 37	..	..		" 8th	M	6 36 44	..	..			AN. P	21 0 4	..	..	Do.
" 25th	AE. P	10 32 40	..	..	Slight shock.	" 14th	AN. P	6 29 54	..	..	Do.	" 24th	S	21 6 14	..	..
	S	10 33 30	..	..			L	6 36 24	..	..			F	21 39 43	..	..
	L	10 34 1	..	..		" 14th	M	6 36 44	16	24		Mar. 1st	AE. P	5 40 6	..	..	Do.
	Me	10 35 6	..	..			AN. Pl	18 45 53	..	..	Do.		Sl	5 41 46	..	..
	F	10 52 48	..	..			Sl	18 52 28	..	..			L	5 42 26	..	..
" 25th	AN. P	10 32 43	..	..	Do.	" 14th	F	19 25 3	..	..		" 1st	F	5 49 36	..	..
	S	10 33 53	..	..			AN. Pl	18 45 53	..	..	Do.	" 6th	AN. Pl	5 39 58	..	..	Do.
	L	10 34 18	..	..			Sl	18 52 29	..	..			Sl	5 41 29	..	..
	M	10 34 38	10	22			Le	19 0 23	..	..			L	5 42 13	..	..
	F	11 50 38	..	..			F	19 28 38	..	..			M	5 42 36	..	..
Feb. 2nd	AE. P	15 8 40	..	..	Slight distant shock.	" 23rd	AE. P	18 27 53	..	..	Do.	" 6th	AE. e	15 49 41	..	..	Feeble shock.
	S	15 18 15	..	..			S	18 34 50	..	..			F	10 58 41	..	..
	F	16 0 10	..	..			Fe	19 22 25	..	..					..	..

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.	
				AN.	AE.						AN.	AE.						AN.	AE.		
1930.		H. M. S.					1930.	H. M. S.					1930.	H. M. S.							
Mar. 9th	AE. e	8 57 12	..	..	..	Feeble shock.	Mar. 30th	AN. Pe	15 31 21	..	..	..	Distant slight shock.	Apl. 28th	AN. eP	18 38 13	..	..	..	Moderate shock.
	eS	9 3 17	..	..	..			S	15 33 6	..	..	..			S	18 41 23	..	..	..
	Fe	9 41 7	..	..	..			Le	15 51 11	..	..	..			L	18 43 38	..	..	..
.. 9th	AN. e	8 58 32	..	..	..	Do.		M	15 59 11	20	..	..			M	18 44 33	17	149	..	
	eS	9 2 50	..	..	..			F	16 24 21	..	..	..			F	19 21 8	..	..	..
	F	9 41 2	..	..	..		Apl. 10th	AN. P	14 20 44	..	..	..	Moderate shock.	May 1st	AE. P	1 6 10	..	..	..	Distant slight shock.
.. 10th	AE. Pe	16 35 2	..	..	..	Do.		Se	14 30 49	..	..	..			S	1 13 45	..	..	..
	F	17 2 47	..	..	..			L	14 31 34	..	..	..			Me	1 31 25	..	..	..
.. 12th	AE. e	15 34 45	..	..	..	Slight shock		M	14 32 4	15	93	..			F	1 41 25	..	..	..
	S	15 38 35	..	..	..			F	15 12 9	..	..	..		.. 1st	AN. eP	1 6 10	..	..	..	Do.
	L	15 40 30	..	..	..			.. 21st	AE. e	12 8 52	..	..	..		Se	1 13 40	..	..	..
	F	15 48 0	..	..	..			F	13 45 47	..	..	..	Feeble shock.	M	1 31 10	..	..	..
.. 13th	AN. S	15 37 50	..	..	..	Do.		.. 21st	AN. e	12 9 30	..	..	..	Do.	Fe	1 45 5	..	..	..
	L	15 40 25	..	..	..			F	13 51 47	..	..	..		.. 5th	AN. eP	13 48 20	..	..	..	Very severe shock.
	M	15 42 40	..	..	..			.. 23rd	AE. P	21 58 15	..	..	..	Distant slight shock.	IS	13 52 9	14	..	..	301
	F	15 40 30	..	..	..			.. 23rd	S	22 6 20	..	..	..		IL	13 58 39	22	..	..	331
.. 15th	AN. e	7 1 18	Feeble shock.	.. 23rd	M	22 22 50	15	18.	M	?	?	?	1285	Motion of recording pen restricted at intervals due to side-stops for about 13 minutes.
.. 26th	AE. P	7 21 28	..	..	..	Distant moderate shock.	.. 26th	F	22 46 25	..	..	..		.. 5th	AN.	Driving clock out of order.	..	..	..
	S	7 29 28	..	..	..			.. 23rd	AN.	Pen came off at 21 hrs. 46 mts. G.M.T.				.. 5th	AN.	Driving clock out of order.	..	..	..
	L	7 41 23 26th	AE. P	16 29 34	Distant moderate shock.	.. 6th	AE. P	22 38 15	Severe shock.
	M	7 48 58	22	..	104				S	16 39 4	..	..	..		IS	22 43 25	19	..	..
	F	9 1 33	..	..	..				L	16 50 29	..	..	..		IL	22 48 0	35	..	..
.. 26th	AN. P	7 20 58	Do.		.. 26th	M	17 5 24	20	37	M	?	?	1265	Motion of recording pen restricted at intervals due to side-stops for about 7 minutes.
	S	7 28 58	11	72	..				Fe	17 50 11 8th	AE. e	15 32 58	Slight shock.
	Le	7 42 23	..	..	..				AN. P	16 29 29	..	..	..	Do.	S	15 44 13	..	..	..
	M	7 51 38	17	111	..				L	16 59 4	..	..	..		L	15 46 58	..	..	..
.. 20th	AE. Pe	11 40 56	..	..	..	Distant slight shock.	.. 26th	M	17 4 59	20	74	..			M	15 54 3	..	..	..
	S	11 50 1	..	..	..				F	17 44 54	..	..	..		F	16 23 18	..	..	..
	F	12 22 46 26th	AN. e	19 11 28	Slight shock.	.. 8th	AN.	Driving clock out of order.	
.. 26th	AN. Pe	11 41 26	Do.			Se	19 12 43 11th	AE. Pe	11 29 33	Do.
	S	11 49 26	..	..	..				F	19 19 28	..	..	..		S	11 30 13	..	..	..
	eL	12 1 51	..	..	..				AN. P	18 38 3	..	..	..	Moderate shock.	L	11 30 38	..	..	..
	F	12 23 11	..	..	..			.. 28th	S	18 41 38	..	..	..		F	11 43 58	..	..	..
.. 30th	AE. P	15 30 36	..	..	..	Do	.. 28th	L	18 44 8	..	..	..		.. 11th	AN.	Driving clock out of order.	..	..	..
	S	15 39 16	..	..	..				M	18 45 53	18	..	..	40.	..	..	..	..	..
	Le	15 51 10	..	..	..				F	19 26 8	..	..	..		..	..	..	..	..
	Me	15 58 17	25	..	..				..	..	..	..		..	..	..	..	..	..
	F	16 24 51	..	..	..				..	..	..	..		..	..	..	..	..	..

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.			
				AN.	AE.						AN.	AE.						AN.	AE.				
1930.		H. M. S.					1930.		H. M. S.					1930.		H. M. S.							
May 11th	AE. P S L M F	22 37 45 22 41 40 22 44 40 22 46 45 23 13 0 19 30	Slight shock.	June 11th	AE. S Fe	1 0 43 1 10 43 2 8 7	July 3rd	AE. S L M F	0 20 58 0 22 53 0 24 13 0 24 48 Lost in changing 3 161	After shock of slight intensity.			
" 11th	AN.	Driving clock out of order.					" 11th	AN. Fe	1 0 30 2 56 58											
" 14th	AE. eS M F	19 50 58 19 54 28 20 0 8 20 25 17	Do.	" 19th	AN. eP eS M Fe	13 16 41 13 23 53 13 37 55 14 46 18	" 3rd	AN. P S L M F	0 20 57 0 22 59 0 24 19 0 24 45 Lost in changing 3 149	Do.			
" 14th	AN. eS	19 50 55 19 54 15	Do.							" 7th	AE. F	23 18 50				
" 14th	eL M F	19 56 5 19 58 27 20 23 58	.. 19 ..	.. 21 ..	.. .. ..		" 25th	AE. P S L F	0 50 27 0 51 17 0 51 42 1 2 2	.. .. .. ..	.. .. .. ..	.. .. .. ..	" 8th	AE. S eL F	4 34 49 4 36 29 5 6 29	.. .. .. ..	.. .. .. ..	.. .. .. ..	Slight shock.
" 19th	AE. e F	15 14 48 15 43 53	.. ..	.. ..	.. ..	Do.							" 8th	AE. P S L F	9 45 8 9 47 3 9 48 13 10 19 48	.. .. .. ..	.. .. .. ..	.. .. .. ..	Slight shock.
" 19th	AN. Pe M F	15 14 40 15 30 11 15 51 45	.. 14 ..	.. .. ..	.. .. ..	Do.	" 25th	AN. e S L F	0 50 28 0 50 59 0 51 33 1 5 28	.. .. .. ..	.. .. .. ..	.. .. .. ..	" 8th	AN. S F	9 47 31 10 23 11	.. ..	.. ..	.. ..	Do.
" 20th	AE. Pe Se L M F	11 27 13 11 37 32 11 55 52 12 1 2 12 20 47	.. .. .. 20 ..	.. .. .. 17 ..	.. .. .. .. ..	Distant slight shock.	" 25th	AN. P F	22 40 18 23 50 8	.. ..	.. ..	.. ..	" 11th	AE. P S L F	7 9 21 7 11 56 7 13 16 7 43 46	.. .. .. ..	.. .. .. ..	.. .. .. ..	Do.
" 20th	AN	Driving clock stopped.					July 2nd	AE. IP	21 5 40											Severe shock in West Assam.
June 4th	AE. e F	7 32 31 7 56 51	.. ..	.. ..	.. ..	Slight shock.							" 11th	AN. P S L F	7 9 29 7 11 57 7 13 9 7 40 53	.. .. .. ..	.. .. .. ..	.. .. .. ..	Do.
" 4th	AN. ep eS eF M Fe	7 32 48 7 36 48 7 39 26 7 42 58 8 22 29	.. .. .. 13 ..	.. .. .. .. ..	.. .. .. .. ..	Do.							" 13th	AE. Pe S Le F	14 1 47 14 4 32 14 5 57 14 22 47	.. .. .. ..	.. .. .. ..	.. .. .. ..	Do.
" 4th	AE. eP S F	9 54 35 10 2 25 10 35 51	.. .. ..	.. .. ..	.. .. ..	Distant slight shock.	" 2nd	AN. P S L M	21 5 45 21 7 45 21 8 47 ?	.. .. .. ?	.. .. .. ?	.. .. .. ?	" 13th	AN. Pe S L F	14 1 52 14 4 37 14 5 47 14 25 22	.. .. .. ..	.. .. .. ..	.. .. .. ..	Do.
" 4th	AN. P S eL M F	9 54 37 10 2 18 10 12 6 10 17 1 11 12 57 14	Do.							" 13th									Motion of recording pen restricted due to side-stops for about 1 minute.	

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.	
		H. M. S.		AN. AE.				H. M. S.		AN. AE.				H. M. S.		AN. AE.		
1930.						1930.						1930.						
July 13th	AE. P S L M F	19 31 38 19 35 38 19 38 48 19 40 18 20 32 38	.. .. .. .. ..	.. .. .. .. ..	Slight shock.	Aug. 23rd	AN. P S L M F	10 58 0 11 1 32 11 5 5 11 6 25 12 13 50	.. .. .. .. ..	.. .. .. .. ..	Moderate shock.	Sept. 1st	AN. P S L M F	17 44 56 17 46 36 17 47 30 17 48 22 18 36 15	.. .. .. .. ..	.. .. .. .. ..	Moderate shock.
" 13th	AN. P S L M F	19 31 41 19 35 32 19 38 41 19 40 0 20 36 43	.. .. .. .. ..	.. .. .. .. ..	Do.	" 24th	AE. P eS L M Fe	10 59 29 11 3 41 11 5 44 11 6 29 11 37 9	.. .. .. .. ..	.. .. .. .. ..	Slight shock.	" 2nd	AE. P S L M F	19 4 55 19 8 5 19 11 40 19 13 35 19 36 5	.. .. .. .. ..	.. .. .. .. ..	Slight shock.
" 22nd	AE	Instrument dismantled for overhauling.				" 24th	AN. eP	10 50 23	Do.	" 2nd	AN. e	19 2 50	Do.
" 22nd	AN. S L F	19 37 29 19 42 44 19 46 54 20 14 24	Do.	" 30th	AE. eP eS L M F	10 20 58 10 22 53 10 23 18 10 23 53 10 33 38	Do.	" 5th	AN. eP S L M F	16 24 55 16 28 50 16 32 40 16 34 10 16 45 10	Do.
Aug. 17th	AE. e	12 34 24	..	..		" 30th	AN. e eS L M F	10 21 13 10 23 8 10 23 53 10 24 48 10 34 48	.. .. .. .. ..	.. .. .. .. ..	Do.	" 5th	AN. Se Fe	16 31 50 16 48 35	..	..	Do.
" 17th	AN. F	13 5 49	..	..		Sept. 1st	AE. P S L M F	5 21 40 5 25 15 5 27 25 5 30 10 5 34 15	.. .. .. .. ..	.. .. .. .. ..	Do.	" 21st-22nd.	AE. P S L M F (?)	23 7 5 23 10 45 23 12 40 23 13 17 0 46 15	.. .. .. .. ..	.. .. .. .. ..	Shock of Great Intensity. Drum taken soon after 0 hour 46 minute G. M. T.
" 20th	AE. eP	21 1 29	..	..	Distant moderate shock.	" 1st	AN. Pe	5 21 10	..	..	Do.	" 21st-22nd.	AN. Pe	23 7 21	..	..	Shock of Great Intensity.
" 20th	AN. Se	21 0 47	..	..	Do.	" 1st	S	5 25 5	..	..		" 21st-22nd.	SI	23 10 40	18	250	
" 20th	L	21 15 12	..	..		Sept. 1st	Me	5 28 25	15	..		" 21st-22nd.	LI	23 12 35	..	..
" 20th	M	21 16 59	20	353		" 1st	F	5 49 20	..	..		" 21st-22nd.	M	23 15 25	15 (?)	1134	Motion restricted on one side due to side-stop.
" 20th	F	22 47 37	..	..		" 1st	AE. P	17 44 57	..	..	Moderate shock.	" 21st-22nd.	F (?)	0 46 0	..	..	Drum taken off soon after 0 h. 46 minute G. M. T.
" 22nd	AE. eP	9 47 54	..	..	Slight shock.	" 1st	SI	17 46 40	..	..		" 21st-22nd.					
" 22nd	L	9 56 29	..	..		" 1st	L	17 47 25	..	..		" 21st-22nd.					
" 22nd	F	10 1 49	..	..		" 1st	M	17 47 50	15	..	..	" 21st-22nd.					
" 22nd	AN. e	9 47 59	..	..	Do.	" 1st	F	18 24 40	..	..		" 21st-22nd.					
" 22nd	S	9 53 14	..	..		" 1st						" 21st-22nd.					
" 22nd	L	9 56 39	..	..		" 1st						" 21st-22nd.					
" 22nd	F	10 1 54	..	..		" 1st						" 21st-22nd.					
" 23rd	AE. IP	10 57 39	8	22	Moderate shock.	" 1st						" 21st-22nd.						
" 23rd	SI	11 1 40	11	23		" 1st						" 21st-22nd.						
" 23rd	L	11 4 50	..	..		" 1st						" 21st-22nd.					
" 23rd	M	11 7 10	17	117		" 1st						" 21st-22nd.						
" 23rd	Fe	11 19 50	..	..		" 1st						" 21st-22nd.					

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)		REMARKS.
				AN.	AE.						AN.	AE.						AN.	AE.	
1930.		H. M. S.					1930.	H. M. S.						1930.		H. M. S.				
S pt. 22nd	AE. P	4 57 46	..	..	..	Slight shock.	Sept. 29th	AE. P	13 31 5	..	..	..	Slight shock.	Oct. 28th	AE. eL	21 39 19	..	..	..	Slight shock.
	S	5 1 11	..	..	..			S	13 32 50	..	..	..			M	21 53 9	17	..	..
	Le	5 3 31	..	..	..			Le	13 34 0	..	..	..			F	22 20 14	..	..	..
	M	5 6 1	13	..	..			M	13 36 5	..	..	..						..	..
	F	5 26 6	..	..	..			F	13 59 25	..	..	..						..	..
" 22nd	AN. S	5 1 6	..	..	..	Do.	" 29th	AN. Pe	13 31 14	..	..	..	Do.	" 28th	AN. P	21 28 44	..	..	..	Do.
	L	5 3 36	..	..	..			S	13 33 3	..	..	..			eS	21 34 39	..	..	..
	F	5 21 49	..	..	..			L	13 34 10	..	..	..			L	21 40 44	..	..	..
								M	13 34 58	15	189	..			M	21 46 9	25	..	..
22nd	AE. P	14 21 15	..	..	..	Do.		F	13 58 15	..	..	..		Nov. 3rd	AN. Pe	18 45 51	..	..	..
	S	14 23 45	..	..	..		" 30th	AE. eP	21 31 40	..	..	..	Do.		AE. P	15 42 9	..	..	..	Do.
	L	14 24 45	..	..	..			S	21 41 0	..	..	..			S	15 45 39	..	..	..
	M	14 26 35	..	..	..			Le	21 56 55	..	..	..			L	15 47 44	..	..	..
	F	15 2 40	..	..	..			F	22 52 0	..	..	..			F	16 15 19	..	..	..
" 22nd	AN. P	14 20 55	..	..	..	Do.	" 30th	AN. e	21 32 20	..	..	..	Do.	" 4th	AN. S	15 45 29	..	..	..	Do.
	S	14 23 40	..	..	..			Se	21 41 0	..	..	..			L	15 47 24	..	..	..
	L	14 25 55	..	..	..			Le	21 54 5	..	..	..			M	15 49 4	..	..	..
	M	14 27 20	15	837	..			F	22 55 30	..	..	..			F	16 11 46	..	..	..
	F	15 24 10	..	..	..		Oct. 8th	AE. F	12 49 30	..	..	..		" 8th	AE. Pi	3 30 2	..	..	..	Do.
" 22nd	AE. e	16 29 21	..	..	..	Do.	" 8th	AN. F	12 55 35	..	..	..			IS	3 36 12	..	..	..
	S	16 30 56	..	..	..									F	4 2 31	..	..	..
	L	16 32 26	..	..	..												
	M	16 33 36	..	..	25		" 9th	AE. eS	21 37 58	..	..	..	Do.	" 8th	AN. Pe	3 30 24	..	..	..	Do.
	F	16 51 40	..	..	..			eL	21 39 23	..	..	..			S	3 36 12	..	..	..
" 22nd	AN. Pe	16 29 41	..	..	..	Do.	" 9th	AN. Le	21 40 3	..	..	..	Do.		M	3 46 37	..	..	..
	S	16 32 26	..	..	..			M	21 40 18	19	37	..			F	3 59 17	..	..	..
	Le	16 35 11	..	..	..			F	22 15 49	..	..	..					
	F	17 1 11	..	..	..									" 9th	AE. P	19 18 15	..	..	..	Distant moderate shock.
" 25th	AE. P	18 37 16	..	..	..	Do.	" 24th	AE. P	20 25 33	..	..	..	Distant Moderate shock.		S	19 26 20	..	..	..
	S	18 40 46	..	..	..			S	20 33 48	..	..	..		L	19 39 10	..	..	..
	L	18 43 1	..	..	..			L	20 47 43	..	..	..		M	19 47 20	22	..	87		
	M	18 45 56	11	..	..			M	20 53 53	20	..	117		F	20 48 20	..	..	..
	F	19 33 36	..	..	..			F	22 5 43	..	..	..		" 9th	AN	Drum Driving clock stopped.				
" 25th	AN. Pe	18 38 2	..	..	..	Do.	" 24th	AN. e	20 24 55	..	..	..	Do.	" 10th	AE. P	13 54 41	..	..	..	Distant slight shock.
	S	18 41 42	..	..	..			S	20 33 52	..	..	..			S	14 3 41	..	..	..
	L	18 43 44	..	..	..			L	20 48 8	..	..	..			L	14 18 11	..	..	..
	M	18 44 12	..	..	..			M	20 50 48	23	111	..			F	14 55 46	..	..	..
	F	19 3 22	..	..	..			F	21 56 53	..	..	..					

TABLE E-1—concl'd.

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.	
				AN.	AE.						AN.	AE.						AN.	AE.		
1930.		H. M. S.					1930.	H. M. S.					1930.		H. M. S.						
Nov. 10th	AN.	13 54 16	..	..	..	Distant slight shock.	Dec. 2nd	AN.	7 3 5	..	..	..	Moderate shock.	Dec. 10th	AE.	10 41 55	..	..	..	Slight shock.	
	S	14 3 11	..	..	..			S	7 7 38	..	..	..			F	11 6 10	..	..	..
	L	14 18 56	..	..	..			L	7 10 33	..	..	..			AN.	10 41 55	..	..	..	Do.	
	M	14 19 48	..	..	..			M	7 11 20	20	177	..			P	10 41 55	..	..	..
	F	15 17 36	..	..	..			F	7 47 50	..	..	..			eS	10 40 35	..	..	..
							" 3rd	AE.	10 39 9	..	..	..	Slight shock.		L	10 50 5	..	..	..
	AE.	19 11 38	..	..	..	Distant shock of Great Intensity.		S	10 42 48	..	..	..			M	10 50 45	20	56	..		
" 25th	P	19 11 38	..	..	..			eL	10 45 28	..	..	..			F	11 10 0	..	..	..
	S	19 19 8	..	..	..		" 3rd	AN	Drum Driving clock stopped.						AE.	8 22 43	..	..	..	Do.	
	L	19 30 3	..	..	..			Pi	18 54 32	..	..	..	Shock of considerable Intensity.	" 10th	AN.	8 20 38	..	..	..	Do.	
	M	19 31 38	25	..	717			Sl	18 58 12	13	..	266		S	8 23 28	..	..	..
	F	21 47 48	..	..	..			JL	19 0 7	35	..	620		L	8 24 58	..	..	..
" 25th	AN.	10 11 18	..	..	..	Do.		M	? ?	..	..	1200	Motion of recording pen restricted at intervals due to side-stops for about 9 minutes.	" 21st	AE.	14 57 50	..	..	..	Do.	
	Sl	10 18 58	..	..	..			F	20 58 12	..	..	..		S	15 3 45	..	..	..
	Ll	19 28 58	..	..	..		" 3rd	AN	Drum Driving clock stopped.					F	15 29 55	..	..	..
	M	19 35 55	15	886	..			AE.	8 8 13	..	..	..		AN.	15 4 10	..	..	..
	F	22 14 54	..	..	..		" 8th	e	8 38 53	..	..	..		F	15 34 40	..	..	..
Dec. 2nd	AE.	7 4 5	Moderate shock.	" 8th	AN.	8 8 53		" 22nd	AN.	4 57 50		
	Pi	7 4 5			F	8 43 19		" 25th	AN.	14 21 20		
	S	7 7 35									F	14 21 20			
	L	7 11 50																
	M	7 12 10	67																
	F	7 55 25																

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TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)	REMARKS.	
		H. M. S.		AN. AE.				H. M. S.		AN. AE.				H. M. S.		AN. AE.		
1930.						1930.						1930.						
May 8th	P	15 41 45	..	..		May 10th	e	4 2 0	..	..	Tremors.	June 4th	P	10 0 3	..	..
	S	15 46 57	..	..			f	5 19 0	..	..			S	10 7 38	..	..
	L	15 51 17	..	..			P	15 13 10	..	..			L	10 18 43	..	..
	M	15 57 49	12	12			S	15 18 43	..	..			M	10 23 13	11	3	
	F	17 29 0	..	..			L	15 23 23	..	..			F	11 27 0	..	..
" 9th	e	7 8 24	..	..	Distant fee-	" 20th	P	11 27 37	..	..			P	12 1 36	..	..
	M	7 35 22	15	2	ble shock.		S	11 38 3	..	..			S	12 8 59	..	..
	F	7 56 0	..	..			L	11 58 58	..	..			L	12 19 7	..	..
" 11th	P	11 35 35	..	..			M	12 8 26	20	17			M	12 20 28	15	3	
	S	11 37 53	..	..			F	13 57 0	..	..			F	13 53 0	..	..
	L	11 38 59	..	..		" 21st	e	20 53 0	..	..	Tremors.	" 11th	P	1 1 52	..	..
	M	11 39 9	10	6			f	21 13 0	..	..			S	1 11 57	..	..
	F	12 20 0	..	..		" 23rd	e	9 59 40	..	..	Distant fee-		L	1 31 27	..	..
" 12th	P	22 40 4	..	..			M	10 10 5	15	2	ble shock.		M	1 37 17	23	27	
	S	22 43 50	..	..			F	11 7 0	..	..			F	3 43 0	..	..
	L	22 45 59	..	..			P	16 48 8	..	..		" 13th	e	1 17 38	..	..	Distant fee-
	M	22 53 2	10	5			S	16 56 9	..	..			M	1 51 19	15	3	ble shock.
	F	0 4 0	..	..			L	17 8 54	..	..			F	2 38 0	..	..
" 13th	P	0 25 12	..	..			M	17 18 20	12	2		" 15th	e	22 18 0	..	..	Tremors.
	S	0 29 0	..	..			F	17 58 0	..	..			f	23 16 0	..	..
	L	0 31 8	..	..		" 26th	e	15 53 0	..	..	Tremors.	" 17th	Pe	20 26 31	..	..
	M	0 38 32	8	3			f	16 23 0	..	..			S	20 28 6	..	..
	F	1 22 0	..	..		" 27th	e	16 38 0	..	..	Tremors.		L	20 28 43	..	..
" 14th	e	18 56 0	..	..	Tremors.	" 29th	e	17 20 24	..	..	Feeble shock.		M	20 29 38	10	2	
	f	19 19 0	..	..			M	17 35 50	15	4			F	20 35 0	..	..
" 16th	P	19 55 21	..	..		" 31st	P	18 8 32	..	..		" 19th	P	13 16 43	..	..
	S	20 4 9	..	..			S	18 16 49	..	..			S	13 24 58	..	..
	L	20 18 43	..	..			L	18 30 3	..	..			L	13 38 18	..	..
	M	20 20 8	25	6			M	18 36 52	20	4		" 25th	P	0 50 58	..	..
	F	20 59 0	..	..			F	19 35 0	..	..			S	0 52 57	..	..
" 17th	Pe	17 14 33	..	..		June 4th	P	7 34 23	..	..			L	0 53 40	..	..
	M	17 21 27	10	3	Very feeble shock.		S	7 39 28	..	..			M	0 54 32	9	2	
	F	17 44 0	..	..			L	7 43 28	..	..			F	1 9 0	..	..
" 18th	P	0 14 8	..	..			M	7 50 24	18	3		" 19th	e	11 22 36	..	..	Distant fee-
	S	0 23 54	..	..			F	9 14 0	..	..			M	11 46 59	20	5	ble shock.
	L	0 42 49	..	..									F	12 36 0	..	..
	F	1 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.
				AN.	AE.						AN.	AE.						AN.	AE.	
1930. Sept. 21st	P	H. M. S. 23 9 39	..	..	..		1930. Sept. 24th	P	H. M. S. 3 20 19	..	..	..		1930. Sept. 30th	P	H. M. S. 13 10 1	..	..	..	Feeble shock.
	S	23 14 2	..	..	..			S	3 31 48	..	..	..			S	13 14 17	..	..	..
	L	23 17 16	..	..	..			L	3 33 7	..	..	..			L	13 17 12	..	..	..
	M	23 17 44	6	12	..			M	3 35 27	10	3	..			F	13 47 0	..	..	..
.. 22nd	F	1 46 0	..	..	..			F	3 53 0	..	..	..			P	21 32 38	..	..	..
	Pe	1 51 12	..	..	..			P	12 15 21	..	..	..			S	21 42 26	..	..	..
	S	2 0 42	..	..	..			S	12 33 44	..	..	..			L	22 0 58	..	..	..
	L	Lost in shifting time.			..	..		L	12 37 25	..	..	..			M	22 10 49	19	7	..	
	M	2 47 12	18	12	..			M	12 41 1	18	5	..			F	23 32 0	..	..	..
	F	4 44 0	..	..	..			F	13 30 0	..	..	..					
	P	4 59 52	..	..	..			P	14 45 50	..	..	..		Oct. 1st	P	3 1 14	..	..	..	Feeble shock.
	S	5 4 36	..	..	..			S	14 46 50	..	..	..			S	3 8 32	..	..	..
	L	5 8 2	..	..	..			L	14 47 7	..	..	..			L	3 18 14	..	..	..
	M	5 8 14	7	7	..			M	14 47 29	7	2	..			F	3 45 0	..	..	..
	F	5 54 0	..	..	..			F	14 59 0	..	..	..		.. 2nd	P	0 52 32	..	..	..	Do.
	P	7 20 58	..	..	..		.. 25th	P	13 47 20	..	..	..			S	1 1 52	..	..	..
	S	7 24 37	..	..	..			S	13 51 12	..	..	..			L	1 19 16	..	..	..
	L	7 26 54	..	..	..			L	13 53 16	..	..	..			F	1 47 0	..	..	..
	M	7 28 36	8	2	..			M	13 53 55	8	2	..			P	15 38 31	..	..	..
	F	7 50 0	..	..	..			F	14 6 0	..	..	..			S	15 43 7	..	..	..
	P	14 23 49	..	..	..			e	17 15 0	..	..	..	Tremors.		L	15 46 7	..	..	..
	S	14 27 30	..	..	..			f	17 25 0	..	..	..			M	15 50 18	15	4	..	
	L	14 29 41	..	..	..					..	..	..			F	16 18 0	..	..	..
	F	16 0 0	..	..	..			e	18 30 0	..	..	..	Do.	.. 4th	e	19 34 0	..	..	..	Tremors.
	P	16 31 11	..	..	..			f	Lost in following shock.				.. 5th	f	19 56 0	..	..	..
	S	16 34 55	..	..	..			P	18 38 50	..	..	..			P	5 32 0	..	..	..	Very feeble shock.
	L	16 36 58	..	..	..			S	18 43 30	..	..	..		.. 6th	F	5 47 0	..	..	..
	M	16 37 50	6	4	..			L	18 46 47	..	..	..			e	18 13 4	..	..	..	Feeble shock.
	F	17 24 0	..	..	..			M	18 47 2	8	14	..			M	18 16 20	14	3	..	
.. 23rd	P	5 47 15	..	..	..			F	20 18 0	..	..	..			F	18 29 0	..	..	..
	S	5 51 15	..	..	..					..	..	..		.. 7th	P	2 36 47	..	..	..	Do.
	L	5 53 58	..	..	..			e	8 50 0	..	..	..	Tremors.		S	2 41 27	..	..	..
	M	5 54 4	5	2	..		.. 26th	f	9 17 0	..	..	..			Le	2 44 51	..	..	..
	F	6 4 0	..	..	..					..	..	..			F	3 1 0	..	..	..
	P	10 19 23	..	..	..	Feeble shock.	.. 29th	P	10 8 44	..	..	..	Feeble shock.		P	20 58 25	..	..	..	Do.
	S	10 23 7	..	..	..			S	10 11 48	..	..	..			Se	21 2 58	..	..	..
	L	10 25 23	..	..	..			L	10 13 10	..	..	..			Le	21 7 38	..	..	..
	F	10 44 0	..	..	..			F	10 31 0	..	..	..			F	21 32 0	..	..	..
	P	12 14 59	..	..	..			P	13 31 21	..	..	..		.. 8th	P	10 33 26	..	..	..
	S	12 18 40	..	..	..			S	13 34 29	..	..	..			S	10 43 44	..	..	..
	L	12 20 50	..	..	..			L	13 35 55	..	..	..			L	11 3 57	..	..	..
	M	12 23 58	7	2	..			M	13 36 50	8	6	..			M	11 28 56	18	10	..	
	F	12 53 0	..	..	..			F	14 16 0	..	..	..			F	13 9 0	..	..	..

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ)		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ)		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ)		REMARKS.	
				AN.	AE.						A .	AE.						AN.	AE.		
1930.		H. M. S.					1930.	H. M. S.						1930.	H. M. S.						
Oct. 9th	P	21 35 23	..	..	..		Oct. 24th	P	20 26 17	..	..	..		Nov. 3rd	P	18 48 50	..	..	..	Feeble shock.
	S	21 39 46	..	..	..			S	20 34 47	..	..	..			S	18 58 40	..	..	..
	L	21 42 42	..	..	..			L	20 51 13	..	..	..			L	19 16 50	..	..	..
	M	21 43 12	8	4	..			M	20 56 21	10	31	..			F	10 55 0	..	..	..
	F	22 12 0	..	..	..			F	23 57 0	..	..	..		" 4th	P	7 19 23	..	..	..	Very feeble shock.
" 10th	P	0 42 33	..	..	..		" 25th	P	4 23 50	..	..	..			F	7 29 0	..	..	..
	S	0 46 55	..	..	..			S	4 28 44	..	..	..			P	15 43 24	..	..	..
	L	0 50 17	..	..	..			L	4 27 47	..	..	..			S	15 47 56	..	..	..
	M	0 50 47	7	10	..			M	4 27 50	10	2	..			L	15 51 14	..	..	..
	F	1 35 0	..	..	..			F	4 42 0	..	..	..			M	15 51 28	7	11	..	
" 11th	e	3 44 0	..	..	..	Tremors.		P	12 16 10	..	..	..			F	16 38 0	..	..	..
	i	4 6 0	..	..	..			S	12 26 43	..	..	..		" 8th	AN.	3 30 44	..	..	..
" 12th	P	15 11 24	..	..	..	Feeble shock.		Le	12 50 16	..	..	..			P	3 37 8	..	..	..
	S	15 15 22	..	..	..			M	13 1 43	15	4	..			S	3 44 25	..	..	..
	Le	15 17 57	..	..	..			F	13 30 0	..	..	..			L	3 51 44	10	2	..	
	F	15 33 0	..	..	..			e	16 40 0	..	..	..	Tremors.		F	4 21 0	..	..	..
	e	20 4 0	..	..	..	Tremors.		f	17 13 0	..	..	..	Tremors.		AE.	3 30 44	..	..	..
	f	20 22 0	..	..	..			P	17 53 0	..	..	..			P	3 37 8	..	..	..
" 13th	Pe	8 19 5	..	..	..	Feeble shock.		S	18 21 0	..	..	..			S	3 44 25	..	..	..
	F	8 36 0	..	..	..			S	23 40 42	..	..	..			L	3 45 50	8	..	2	
" 15th	P	11 19 24	..	..	..	Do.	" 26th	L	23 45 50	..	..	..		" 9th	AN.	19 18 53	..	..	..
	S	11 22 44	..	..	..			F	23 49 55	..	..	..			P	19 27 9	..	..	..
	L	11 24 19	..	..	..		" 27th	M	23 53 52	20	5	..			S	19 40 33	..	..	..
	F	11 36 0	..	..	..			P	0 13 0	..	..	..			L	19 45 12	24	95	..	
" 16th	e	21 54 0	..	..	..	Tremors.	" 28th	F	23 43 48	10	3	..		" 9th	M	19 45 12	..	..	..
	f	22 25 0	..	..	..			S	0 13 0	..	..	..			F	21 45 0	..	..	..
" 17th	P	9 6 19	..	..	..		" 30th	P	21 30 33	..	..	..		" 9th	AE.	19 18 53	..	..	..
	S	9 19 42	..	..	..			S	21 36 0	..	..	..			P	19 18 53	..	..	..
	L	9 55 42	..	..	..			L	21 36 0	..	..	..			S	19 27 9	..	..	..
	M	10 5 57	20	6	..			M	21 41 12	..	..	..			L	19 40 33	..	..	..
	F	10 51 0	..	..	..			F	21 55 23	20	9	..			M	19 42 28	22	..	66	
" 23rd	e	9 57 0	..	..	..	Tremors.	" 31st	P	22 37 0	..	..	..		" 10th	AN.	13 55 12	..	..	..
	f	10 52 0	..	..	..			S	7 22 49	..	..	..			P	14 4 8	..	..	..
" 24th	Pe	1 13 40	..	..	..	Very feeble shock.		L	7 30 29	..	..	..			S	14 4 8	..	..	..
	F	1 19 0	..	..	..			M	7 42 8	..	..	..			L	14 19 8	..	..	..
	P	10 54 28	..	..	..			F	7 46 4	20	5	..			M	14 24 1	9	3	..	
	S	10 58 33	..	..	..			e	8 9 0	..	..	..			F	16 6 0	..	..	..
	L	11 1 17	..	..	..			M	10 28 31	..	..	..	Feeble distant shock.		AE.	13 55 12	..	..	..
	M	11 2 34	14	5	..			F	11 31 1	20	6	..			P	14 4 8	..	..	..
	F	11 44 0	..	..	..			e	12 54 0	..	..	..			S	14 4 8	..	..	..
								f	13 44 0	..	..	..	Tremors.		L	14 19 8	..	..	..
									13 58 0	..	..	..			M	14 24 40	10	..	8	
										..	..	..			F	16 6 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.
				AN.	AE.						AN.	AE.						AN.	AE.	
1930.		H. M. S.					1930.	H. M. S.						1930.	H. M. S.					
Nov. 28th	AE e	8 56 0	..	..	..	Tremors.	Dec. 3rd	AE P	15 47 19	..	..	..		Dec. 6th	AE P	7 16 19	..	..	..
	f	9 11 0	..	..	..			S	15 51 23	..	..	..			S	7 26 44	..	..	..
.. 30th	AN P	0 43 43	..	..	..			L	15 54 8	..	..	..			L	7 47 49	..	..	..
	S	0 46 35	..	..	..			M	16 1 35	8	..	2			M	8 0 0	21	..	7	
	L	0 47 53	..	..	..			F	16 28 0	..	..	..			F	8 46 0	..	..	..
	M	0 49 48	9	2	..			AN P	16 41 20	..	..	..			AN P	9 26 43	..	..	..	Very feeble shock.
	F	1 7 0	..	..	..			S	16 45 28	..	..	..			F	9 48 0	..	..	..
	AE P	0 43 43	..	..	..			L	16 48 8	..	..	..			AE P	9 26 43	..	..	..	Do.
	S	0 46 35	..	..	..			M	16 53 17	13	10	..			F	9 48 0	..	..	..
	L	0 47 53	..	..	..			F	17 33 0	..	..	..			AN e	22 15 0	..	..	..	Tremors.
	M	0 48 56	8	..	1			AE P	16 41 20	..	..	..			f	22 23 0	..	..	..
	F	1 7 0	..	..	..			S	16 45 28	..	..	..			AE e	22 15 0	..	..	..	Do.
Dec. 1st	AN P	0 23 10	..	..	..			L	16 48 8	..	..	..			f	22 23 0	..	..	..
	S	0 27 16	..	..	..			M	16 55 17	9	..	6			AN P	23 51 16	..	..	..	Feeble shock;
	L	0 30 10	..	..	..			F	17 33 0	..	..	..			S	23 54 40	..	..	..
	M	0 32 21	8	2	..			AN P	18 56 41	..	..	..			L	23 56 10	..	..	..
	F	0 59 0	..	..	..			S	19 0 48	..	..	..			F	0 17 0	..	..	..
	AE P	0 23 10	..	..	..			L	19 3 30	..	..	..			AN P	23 51 16	..	..	..	Do.
	S	0 27 16	..	..	..			M	19 11 1	10	270	..			S	23 54 40	..	..	..
	L	0 30 10	..	..	..			F	23 0 0	..	..	..			L	23 56 10	..	..	..
	M	0 32 19	10	..	2			AE P	18 56 41	..	..	..			F	0 17 0	..	..	..
	F	0 59 0	..	..	..			S	19 0 48	..	..	..			AN e	6 34 40	..	..	..	Distant fee- ble shock.
.. 2nd	AN P	7 6 47	..	..	..			L	19 3 30	..	..	..			M	6 51 50	10	2	..	
	S	7 11 14	..	..	..		.. 4th	AN P	6 23 40	..	..	..			F	7 14 0	..	..	..
	L	7 14 29	..	..	..			S	6 27 48	..	..	..			AE e	6 34 40	..	..	..	Do.
	M	7 15 54	8	30	..			L	6 30 28	..	..	..			M	6 48 10	12	..	2	
	F	8 41 0	..	..	..			M	6 32 31	10	4	..			F	7 14 0	..	..	..
	AE P	7 6 47	..	..	..			F	7 6 0	..	..	..			AN P	8 9 10	..	..	..
	S	7 11 14	..	..	..			AE P	6 23 40	..	..	..			S	8 16 0	..	..	..
	L	7 14 29	..	..	..			S	6 27 48	..	..	..			L	8 24 18	..	..	..
	M	7 20 5	9	..	14			L	6 30 28	..	..	..			M	8 29 16	11	4	..	
	F	8 41 0	..	..	..			M	6 35 12	12	..	3			F	9 16 0	..	..	..
.. 3rd	AN P	15 47 19	..	..	..		.. 6th	AN P	7 16 19	..	..	..			AE P	8 9 10	..	..	..
	S	15 51 23	..	..	..			S	7 26 44	..	..	..			S	8 16 0	..	..	..
	L	15 54 8	..	..	..			L	7 47 49	..	..	..			L	8 24 18	..	..	..
	M	15 59 38	9	3	..			M	8 0 24	18	5	..			M	8 29 14	13	..	4	
	F	16 28 0	..	..	..			F	8 46 0	..	..	..			F	9 16 0	..	..	..

TABLE E 2—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ).		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ).		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ).		REMARKS.
				AN.	AE.						AN.	AE.						AN.	AE.	
1930.		H. M. S.					1930.	H. M. S.					1930.		H. M. S.					
Dec. 8th	AN Pe	17 41 27		Dec. 12th	AN e	6 58 0	Tremors.	Dec. 16th	AN P	8 23 24	Feeble shock.
	S	17 52 29			f	7 11 0			S	8 26 48	
	L	18 15 17			AE e	6 58 0	Do.		L	8 28 47	
	M	18 31 49	19	5	..			f	7 11 0	..	..	..		F	8 46 0	..	..	..
	F	19 48 0	..	..	..									AE P	8 23 24	..	..	..	Do.
	AE Pe	17 41 27			AN P	11 53 7	Feeble local shock.		S	8 26 48	
	S	17 52 29	..	..	..			S	11 54 35	..	..	..		L	8 28 47	..	..	..
	L	18 15 17	..	..	..			L	Lost in hourly break.				F	8 46 0	..	..	..
	M	18 33 55	20	..	4			F	12 3 0	..	..	..		AN e	14 30 0	..	..	..	Tremors.
	F	19 48 0	..	..	..			AE P	11 53 7	..	..	..	Do.	f	14 55 0	..	..	..
" 9th	AN P	0 37 32	..	..	..			S	11 54 35	..	..	..		AE e	14 30 0	..	..	..	Do.
	S	0 41 30	..	..	..			L	Lost in hourly break.				f	14 55 0	..	..	..
	L	0 42 44	..	..	..			F	12 3 0	..	..	..		AN e	3 47 0	..	..	..	Do.
	M	0 43 12	10	2	..			AE P	11 53 7	..	..	..	Do.	f	4 12 0	..	..	..
	F	0 59 0	..	..	..		" 13th	f	3 54 0	..	..	..	Tremors.	AE e	3 47 0	..	..	..	Do.
	AE P	0 37 32	..	..	..			AE e	3 21 0	..	..	..	Do.	f	4 12 0	..	..	..
	S	0 41 30	..	..	..			f	3 54 0	..	..	..		AN e	12 32 0	..	..	..	Do.
	L	0 42 44	..	..	..			AN e	14 31 0	..	..	..	Do.	f	13 16 0	..	..	..
	M	0 45 43	7	..	1			f	15 20 0	..	..	..		AE e	12 32 0	..	..	..	Do.
	F	0 59 0	..	..	..			AE e	14 31 0	..	..	..	Do.	f	13 16 0	..	..	..
" 10th	AN P	10 38 28	..	..	..			f	15 20 0	..	..	..		AN P	14 59 42	..	..	..
	S	10 44 10	..	..	..			AN P	16 33 34	..	..	..		S	15 6 12	..	..	..
	L	10 49 28	..	..	..			S	16 37 46	..	..	..		L	15 13 55	..	..	..
	M	10 54 8	15	4	..			L	16 40 33	..	..	..		M	15 19 17	20	15	..	
	F	11 45 0	..	..	..			M	16 50 33	10	2	..		F	16 13 0	..	..	..
	AE P	10 38 28	..	..	..			F	17 22 0	..	..	..		AE	Loss of record.				
	S	10 44 10	..	..	..			AE P	16 33 34	..	..	..		AN P	0 6 22	..	..	..
	L	10 49 28	..	..	..			S	16 37 46	..	..	..		S	0 15 17	..	..	..
	M	10 54 35	16	..	7			L	16 40 33	..	..	..		L	0 31 42	..	..	..
	F	11 45 0	..	..	..			M	16 43 14	22	..	6		M	0 40 54	14	6	..	
" 12th	AN P	2 58 44	..	..	..			F	17 28 0	..	..	..		F	1 28 0	..	..	..
	S	3 3 16	..	..	..			AE P	16 33 34	..	..	..		AE	Loss of record.				
	L	3 6 40	..	..	..			S	16 37 46	..	..	..		AN P	4 28 4	..	..	..
	M	3 6 45	7	..	..			L	16 40 33	..	..	..		S	4 34 42	..	..	..
	F	3 29 0	..	..	..			M	16 43 14	22	..	6		L	4 42 52	..	..	..
	AE P	2 58 44	..	..	..		" 15th	F	17 28 0	..	..	..	Feeble shock.	M	4 48 47	8	2	..	
	S	3 3 16	..	..	..			AN P	16 13 54	..	..	..	Do.	F	5 21 0	..	..	..
	L	3 6 40	..	..	..			F	16 55 0	..	..	..					
	M	3 11 29	8	..	1			AE P	16 13 54	..	..	..					
	F	3 29 0	..	..	..			F	16 55 0	..	..	..					

TABLE E 2

Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLI- TUDE (μ).		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE (μ).		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLI- TUDE (μ).		REMARKS.	
				AN.	AE.						AN.	AE.						AN.	AE.		
		H. M. S.						H. M. S.							H. M. S.						
1930.							1930.							1930.							
Dec. 22nd	AE P	4 28 4	..	..	..		Dec. 25th	AE P	13 24 13	..	..	..		Dec. 28th	AE Pe	14 39 40	..	..	..	Feeble shock.	
	S	4 34 42	..	..	..			S	13 34 5	..	..	..			S	14 43 29	..	..	..
	L	4 42 52	..	..	..			L	13 53 8	..	..	..			Le	14 45 31	..	..	..
	M	4 48 2	11	..	2			M	14 2 7	22	..	8			F	14 57 0	..	..	..
	F	5 21 0	..	..	..			F	15 1 0	..	..	..		.. 30th	AN P	8 59 29	..	..	..	Do.	
.. 23rd	AN P	21 47 3	..	..	..	Feeble shock.	.. 28th	AN P	14 9 5	..	..	..	Feeble shock.		S	9 2 59	..	..	..
	S	21 56 27	..	..	..			S	14 10 41	..	..	..			L	9 5 7	..	..	..
	L	22 13 29	..	..	..			L	14 11 11	..	..	..			F	9 18 0	..	..	..
	F	22 53 0	..	..	..			F	14 17 0	..	..	..			AE P	8 59 29	..	..	..	Do.	
	AE P	21 47 3	..	..	..	Do.		AE P	14 9 5	..	..	..	Do.	.. 31st	AN e	4 26 0	..	..	..	Tremors.	
	S	21 56 27	..	..	..			S	14 10 41	..	..	..			f	4 35 0	..	..	..
	L	22 13 29	..	..	..			L	14 11 11	..	..	..			AE e	4 26 0	..	..	..	Do.	
	F	22 53 0	..	..	..			F	14 17 0	..	..	..			f	4 35 0	..	..	..
.. 25th	AN P	13 24 13	..	..	..			AN Pe	14 39 49	..	..	..	Do.		AN e	20 36 0	..	..	..	Do.	
	S	13 34 5	..	..	..			S	14 43 29	..	..	..			f	20 50 0	..	..	..
	L	13 53 8	..	..	..			Le	14 45 31	..	..	..			AE e	20 36 0	..	..	..	Do.	
	M	14 1 23	10	7	..			F	14 57 0	..	..	..			f	20 50 0	..	..	..
	F	15 1 0	..	..	..													

S. K. BANERJI,
Meteorologist, Bombay.

STATION—CALCUTTA (ALIPORE).

$\phi=22^{\circ} 32' N$; $\lambda=88^{\circ} 20' E$; $h=6.4$ m. *Subsoil—Alluvial.*

Apparatus—Two Omori—Ewing Horizontal Pendulum Seismographs.

TABLE E 3.

						V	To	C	$\frac{1}{To^2}$												
AN	.	.	.	.	.	29	28	1	..											
AE	.	.	.	.	.	29	30	1	..											
Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE. (μ)	Δ Distance (Km.)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE. (μ)	Δ Distance (Km.)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE. (μ)	Δ Distance (Km.)	REMARKS.	
		H. M. S.		AN. AE.					H. M. S.		AN. AE.					H. M. S.		AN. AE.			
1930.							1930.							1930.							
January	..	..	..	..	..	No shock recorded by the Allipore Seismographs.	Mar. 10th	AE. eP	16 35 42	4	..	5264	Slight shock.	Mar. 22nd	AE. P	17 38 16	1	..	1222	Slight shock.
								S	16 42 37	6	..	..			S	17 40 37	2	..	..
Feb. 2nd	AE.	..	..	..	..	Clock Stopped.		F	Uncertain	..	..	..			L	17 41 41	3	..	..
	AN. P	15 21 2	Uncertain	..	3248	Slight shock.	.. 10th	AN. P	16 35 44	5	..	..	Do.		F	Uncertain	..	..	..
	L	15 30 3	5	..	..			S	16 42 37	7	..	..		.. 22nd	AN. P	17 38 8	1	..	..
	F	Uncertain	..	..	..			F	17 11 44	..	..	..			S	17 40 22	4	..	..
5th	AE. P	3 34 4	Uncertain	..	800	Do.	.. 12th	AE.	..	..	..	..	Clock stopped.		L	Uncertain	..	..	..
	L	3 35 43	6	..	..									.. 26th	AE. P	7 20 38	6	..	3680	Moderate shock.
	F	Uncertain	..	..	..		.. 12th	AN. eP	11 47 53	Uncertain	..	806	Slight shock.		S	7 25 41	8	..	..
8th	P	6 32 58	Uncertain	..	2400	Do.		S	11 49 32	4	..	..			L	7 30 44	12	..	..
	S	6 36 52	3	..	..			F	Uncertain	..	..	..			F	Uncertain	..	..	..
	L	6 39 35	6	..	..		.. 12th	eP	15 40 46	Uncertain	..	2800	Do.	.. 26th	AN. P	7 20 44	6	..	..
	F	Uncertain	..	..	..			S	15 45 16	4	..	..			S	7 26 22	8	..	..
5th	AN. P	3 34 17	Uncertain	..	800	Do.		F	16 5 16	..	..	..			L	7 31 4	12	..	..
	L	3 36 4	7	..	..		.. 12th	eP	23 17 8	Uncertain	..	784	Do.		F	8 25 14	..	..	..
	F	Uncertain	..	..	..			S	23 18 28	6	..	..		.. 30th	AE. P	15 27 52	4	..	5600	Slight distant shock.
	eP	6 33 5	Uncertain	..	..	Trace spoiled due to defective beat marks.		F	23 42 26	..	..	..			S	15 35 2	6	..	..
28th	AE.	..	..	..	..	Clock Stopped.	.. 13th	AE.	..	..	..	..	Clock stopped.		L	Uncertain	..	..	..
28th	AN. eP	22 52 21	Uncertain	..	784	Slight shock.	.. 13th	AN. eP	14 17 44	Uncertain	..	896	Slight shock.	.. 30th	AN. P	15 27 58	4	..	..
	L	22 54 21	6	..	..			S	14 19 21	8	..	..			S	15 35 8	6	..	..
	F	23 27 31	..	..	..			F	14 43 29	..	..	..			L	15 52 4	8	..	..
Mar. 1st	AE. eP	5 42 31	Uncertain	..	2688	Do.	.. 16th	AE. P	5 5 13	Uncertain	..	4592	Slight distant shock.	Apl. 2nd	AE. eP	14 39 33	Uncertain	..	1088	Tremors.	
	L	5 49 37	6	..	..			L	5 18 43	13	..	..			F	Uncertain	..	..	..
	F	Uncertain	..	..	..			F	Uncertain	..	..	..		.. 2nd	P	20 3 8	4	..	2128	Slight shock.
5th	AN. eP	5 42 31	Uncertain	..	..		.. 16th	AN. eP	5 5 0	Uncertain	..	..			L	20 8 28	6	..	..
	L	5 49 44	6	..	..			L	5 18 28	12	..	..			F	Uncertain	..	..	..
	F	6 22 26	..	..	..			F	Uncertain	..	..	..					..	..	..

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Δ Distance (Km.)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Δ Distance (Km.)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ)		Δ Distance (Km.)	REMARKS.
				AN.	AE.							AN.	AE.							AN.	AE.		
1930.		H. M. S.						1930.		H. M. S.													
Apl. 2nd	AN. P	14 39 25	4	..	..	..		Apl. 23th	AN. P	18 36 37	5	..	..	..		May 8th	AN. P	15 42 40	3	..	..	..
	L	14 43 25	6	..	..	..			S	18 38 27	7	..	..	..			S	15 48 50	5	..	..	..
	F	Uncertain	..	..	..	..			L	18 40 5	12	..	..	..			L	15 54 53	8	..	..	..
" 2nd	P	20 2 58	4	..	..	..			M	18 42 5	..	1621	..	..			F	16 30 23	..	..	..	..
	L	20 8 32	6	..	..	..			F	19 23 15	..	..	..	..			AE. P	11 38 34	2	..	..	1904	Slight shock.
	F	Uncertain	..	..	..	..		May 1st	P	1 6 16	4	..	..	6400	Distant slight shock.		S	11 41 46	4	..	..	..
" 10th	AE. eP	14 23 35	4	..	..	2400	Slight shock.		S	1 14 15	6	..	..	..			F	Uncertain	..	..	..	..
	S	14 32 11	6	..	..	..			L	1 23 23	14	..	..	..			eP	22 41 50	2	..	..	2352	Do
	L	14 35 31	10	..	..	..			F	1 41 23	..	..	..	..			L	22 48 0	4	..	..	..
	F	15 7 11	..	..	..	..			AN. P	1 6 23	4	..	..	..			F	Uncertain	..	..	..	..
" 10th	P	14 28 22	3	..	..	..		" 1st	S	1 14 5	6	..	..	..			AN. P	11 38 38	2	..	..	..
	S	14 32 3	5	..	..	..			L	1 20 23	Uncertain	..	..	..			S	11 41 50	3	..	..	..
	L	14 35 34	9	..	..	..			F	1 40 23	..	..	..	..			F	Uncertain	..	..	..	..
	F	15 10 3	..	..	..	..			AE. P	13 48 40	Uncertain	..	..	1230	Very great shock Other phases could not be distinguished due to congestion of line.	" 11th	eP	22 41 55	2	..	..	..
" 21st	eP	12 15 54	Uncertain	..	..	9920	Distant slight shock.	" 5th	F	13 48 40	Uncertain	..	..	..			L	22 48 9	4	..	..	..
	L	12 51 10	16	..	..	..			AN.	..	..	..	..	..			F	Uncertain	..	..	..	..
	F	Uncertain	..	..	..	..			AE. P	21 57 55	4	..	..	7224	Distant slight shock.	" 12th	eP	0 32 8	Un. certain	..	..	2332	Slight shock
" 21st	AN.	..	..	..	..	..	No tremor recorded.		L	22 20 51	12	..	..	..			L	0 39 4	..	..	..	..
" 23rd	P	21 57 55	4	..	..	..			F	23 27 21	..	..	..	..			F	Uncertain	..	..	..	..
	L	22 20 51	12	..	..	..		" 5th	AN. P	13 48 51	2	..	..	..			AN. eP	0 32 8	Un. certain	..	..	..
	F	23 27 21	..	..	..	..			S	13 50 49	6	..	..	..			L	0 39 10	..	..	..	..
" 23rd	AN. P	21 57 36	Un. certain	..	..	..			L	13 52 3	14	..	..	..			F	Uncertain	..	..	..	..
	L	22 21 2	"	..	..	..			M	13 54 13	..	3276	..	..			AN. eP	19 53 59	3	..	..	1456	Slight shock.
	F	Uncertain	..	..	..	..			F	16 23 21	..	..	..	..			L	19 57 41	6	..	..	..
" 23th	AE. eP	16 29 31	Un. certain	..	..	8848	Distant slight shock.	" 6th	AE. P	22 42 5	4	..	..	4480	Great shock.	" 14th	P	19 53 59	3	..	..	..
	L	16 58 43	17	..	..	..			S	22 48 10	8	..	..	..			L	19 57 41	6	..	..	..
	F	Uncertain	..	..	..	..			L	22 55 43	34	..	..	..			F	20 20 45	..	..	..	..
" 26th	AN.	..	..	..	..	..	No tremor recorded.		F	Uncertain	..	..	..	..			AN. P	19 54 15	3	..	..	..
" 27th	AE. eP	14 35 24	Un. certain	..	..	8000	Distant slight shock.	" 6th	AN. P	22 42 9	5	..	..	..			L	19 57 43	5	..	..	..
	S	14 45 6	7	..	..	..			S	22 48 17	7	..	..	..			L	20 16 33	..	..	..	..
	L	14 58 24	2)	..	..	..			L	22 55 19	32	..	..	..			AE. eP	15 0 59	3	..	..	2100	
	F	Uncertain	..	..	..	..			F	Uncertain	..	..	..	..			L	15 16 35	7	..	..	..
" 27th	AN.	..	..	..	..	..	No tremor recorded.	" 8th	AE. P	15 42 54	4	..	..	4320	Slight shock.	" 10th	F	15 40 41	..	..	..	..
" 28th	AE. P	18 36 23	5	..	..	1040	Moderate shock.		S	15 40 6	7	..	..	..			AN. eP	15 10 2	3	..	..	..
	S	18 38 18	7	..	..	..			L	15 55 12	11	..	..	..			L	15 16 33	6	..	..	..
	L	18 39 42	14	..	..	..			F	10 45 12	..	..	..	..			F	15 40 40	..	..	..	..
	M	18 41 36	..	..	..	2241					..	..	..						..	..	..	..
	F	19 26 23	..	..	..	..					..	..	..						..	..	..	..

STAT. OF CALCUTTA (ALPORA)

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.	
				AN. AE.	Δ (Km.)						AN. AE.	Δ (Km.)						AN. AE.	Δ (Km.)		
1930.		H. M. S.					1930.	H. M. S.						1930.	H. M. S.						
Sept. 25th	AN. P	18 36 44	2	.. ..	..		Oct. 8th	AN.	.. ..	.. ..	.. ..	No tremor.	Oct. 10th	AN. P	0 39 28	Uncertain	.. ..	.. ..	.. ..
	L	18 39 7	3	.. ..	..									S	0 41 20	2	.. ..	.. ..	.. ..
	F	Uncertain	..	.. ..	..		" 9th	AE. P	21 40 23	2	.. ..	1232	Slight.		L	0 42 28	4	.. ..	.. ..	.. ..
" 29th	AE. P	13 37 9	2	.. ..	896	Slight shock.		L	21 43 30	4	.. ..	..		F	1 14 55	..	.. ..	.. ..	.. ..
	L	13 37 24	4	.. ..	..			F	22 0 48	..	.. ..	..						
	F	14 3 34	..	.. ..	..		" 9th	AN. P	21 40 35	3	.. ..	..		" 15th	AE. P	11 15 11	2	.. ..	960	Slight.	
" 29th	AN. P	13 38 13	2	.. ..	..			L	21 43 32	6	.. ..	..			L	11 17 33	4	.. ..	.. ..	.. ..
	L	13 39 29	5	.. ..	..			F	22 0 0	..	.. ..	..		F	Uncertain	..	.. ..	.. ..	.. ..
	eF	13 59 19	..	.. ..	..		" 10th	AE. P	0 30 15	Uncertain	.. ..	1232	Do.	" 15th	AN. P	11 15 20	2	.. ..	.. ..	Do.	
Oct. 8th	AE. P	10 33 37	3	.. ..	9072	Do.		L	0 42 13	5	.. ..	..			L	11 17 45	3	.. ..	.. ..	.. ..
	S	10 43 50	7	.. ..	..			F	1 15 19	..	.. ..	..			F	11 26 29	..	.. ..	.. ..	.. ..
	L	11 53 58	..	.. ..	..													

[Faint, illegible text and data from the reverse side of the page, likely bleed-through from another table.]

STATION—CALCUTTA (ALIPORE).

$\phi = 22^{\circ} 32' N$; $\lambda = 88^{\circ} 20' E$; $h = 7.1$ m. *Subsoil—Alluvial.*

Apparatus—Milne-Shaw Seismograph. (A N Component).

In the overground Constant temperature room.

Damping ratio 20 : 1.

TABLE E 4.

						V	To	c	$\frac{1}{To^2}$													
AN						250	12															
Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ) AN.	Distance (Km.)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ) AN.	Distance (Km.)	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ) AN.	Distance (Km.)	REMARKS.		
1930.		H. M. S.					1930.		H. M. S.					1930.		H. M. S.						
Oct. 17th	P	21 49 12	4	..	4032	Slight shock.	Oct. 28th	P	21 24 2	3	..	3745	Slight shock.	Nov. 11th	Omori AN P	8 37 14	2	..	3024	Slight shock.		
	L	22 0 45	14			S	21 31 35	6			S	8 41 56	3		Calculations from the Milne-Shaw not possible due to bad congestion of lines. Calculation done from the "Omori."	
	F	22 19 25	..	..	..			L	21 42 37	20	..	..						..	..
" 22nd	P	18 25 17	2	..	4928	Do.		F	22 38 47	..	..	..						..	..
	L	18 39 57	5	..	..		Nov. 3rd	P	16 52 11	1	..	368	Very slight shock.		L	8 45 26	5	..	..	
	F	19 7 37	..	..	..			L	16 53 6	2	..	..						..	..
" 24th	P	1 6 52	2	..	448	Do.		F	16 58 11	..	..	..						..	..
	L	1 7 46	4	..	..		" 3rd	eP	18 56 57	2	..	7616			F	Uncertain	..	..	..
	F	1 12 39	..	..	..		" 3rd	S	19 5 57	3	..	..						..	..
" 24th	P	11 2 22	4	..	5152	Do.		eF	19 39 2	..	..	..			" 13th	eP	23 19 54	Un-certain 7	..	4480	Very slight shock.
	S	11 9 24	6	..	..		" 4th	P	7 16 19	2	..	400				S	23 26 39	..	..	
	L	11 16 24	14	..	..			L	7 17 25	3	..	..				L	23 34 32	10	..	..
	F	11 41 9	..	..	..			F	Uncertain	..	..	..			" 16th	P	3 21 49	2	..	448	Slight shock.
" 24th	P	20 25 9	4	..	6400	Moderate shock.						..			L	22 54	3	..	..	
	S	20 32 40	7	..	..		" 4th	Omori AE P	15 42 39	4	..	800	Slight shock.		F	Uncertain	..	..	..
	L	20 38 20	15	..	..			S	15 43 57	6	..	..	Calculations made from the "Omori" as the clock of the "Milne-Shaw" stopped.	" 17th	P	9 25 19	2	..	2688		
	M ₁	20 38 51	..	72	..						..	..			eS	9 29 9	Un-certain 4	..	..	
	M ₂	20 48 36	..	89	..						..	..			L	9 32 24	..	..	..
	F	23 59 14	..	..	..						..	..			F	Uncertain	..	..	..
" 25th	P	4 4 54	4	..	448	Slight shock.					..	..		" 21st	P	2 20 21	2	..	4640	Do.	
	L	4 5 55	10	..	..			F	16 9 37	..	..	..			L	2 33 56	12	..	..	
	F	4 26 9	..	..	..						..	..			F	Uncertain	..	..	..
" 25th	P	16 48 9	5	..	3696	Do.	" 4th	AN P	15 42 34	4	..	..		" 22nd	P	14 20 19	5	..	11200	Do.	
	L	16 58 35	14	..	..			S	15 43 53	6	..	..			eS	14 32 29	8	..	..	
	F	17 39 9	..	..	..			F	16 9 33	..	..	..			L	14 52 39	21	..	..	
" 25th	P	23 48 19	2	..	3472	Do.	" 8th	P	3 29 9	2	..	3248	Slight shock.		F	15 48 39	..	..	..
	L	25 57 44	10	..	..			S	3 34 9	5	..	..						..	..
	F	Uncertain	..	..	..			L	3 37 56	9	..	..		" 25th	Omori AE P	19 12 9	4	..	5264	Great shock.	
" 27th	P	23 42 19	2	..	5032	Do.		eF	3 57 56	..	..	..			S	19 19 9	6	..	..		Calculations done from the "Omori." Milne-Shaw trace was not available.
	S	23 48 49	5	..	..		" 11th	AE	..	..	..	..	No shock was recorded on AE. Instt.		L	19 27 45	28	..	..	
	L	23 57 4	14	..	..						..	..			M	19 29 55	..	AE. 948	..		
" 28th	F	0 27 4	..	..	..						..	..			eF	20 24 43	..	..	..

STATION KODAKANI

TABLE E 4—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE.	Δ	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE.	Δ	REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE.	Δ	REMARKS.	
				(μ)							(μ)							(μ)			(μ)
				AN.	(Km.)						AN.	(Km.)						AN.	(Km.)		
1930.		H. M. S.					1929.		H. M. S.					1930.		H. M. S.					
Nov. 25th	AN	19 12 0	4	..	..		Dec. 7th	P	16 39 14	2	..	1450	Slight shock.	Dec. 16th	P	8 27 24	3	..	480	Slight shock.
	P	19 18 59	0	..	..			L	16 52 44	7	..	..			L	8 28 27	5	..	..
	S	19 27 39	30	..	..			F	Uncertain	..	..	..			F	Uncertain	..	..	..
	L	19 29 59	..	3276	..		" 7th	P	23 44 53	2	..	448	Do.	" 16th	P	16 5 14	2	..	480	Do.	
	M	20 35 59	..	..	..			L	23 45 57	6	..	..			L	16 6 24	4	..	..
	F	..	..	..	..			F	Uncertain	..	..	..			eF	16 13 24	..	..	..
" 28th	AN	3 21 29	2	..	560	Slight shock.	" 8th	Omori	..	..	..	..	Lines congested.	" 16th	P	19 19 19	3	..	480	Do.
	eL	3 22 47	Uncertain	..	..			AE	..	..	..	..			L	19 20 24	6	..	..
	F	Uncertain	..	..	..		" 8th	AN.	6 31 57	2	..	4256	Slight shock.		eF	19 26 24	..	..	..
" 28th	P	7 24 14	2	..	560	Do.		S	6 37 57	4	..	..	Calculations done from "Omori."	" 20th	P	14 19 31	3	..	2464	Do.
	L	7 25 24	4	..	..			F	Uncertain	..	..	..	Milne-Shaw under adjustment.		L	14 26 1	10	..	..
	eF	7 35 24	..	..	..		" 8th	AE	..	..	..	..	Lines congested.	" 21st	P	14 58 31	6	..	2464	Do.
" 30th	P	0 43 13	2	..	400	Do.	" 8th	AN	8 11 19	2	..	2300	Slight shock.		L	15 5 2	11	..	..
	L	0 44 13	6	..	..			P	8 19 5	6	..	..	From "Omori."		F	16 3 4	..	..	..
	eF	1 7 13	..	..	..			F	Uncertain	..	..	..	Milne-Shaw under adjustment.	" 22nd	P	0 2 4	3	..	6406	Do.
Dec. 1st	P	2 22 49	2	..	448	Slight shock.	" 8th	P	17 41 7	6	..	1200	Slight shock.		L	0 22 34	9	..	..
	L	2 23 54	6	..	..			L	18 22 13	17	..	..			eF	1 23 34	..	..	..
	eF	2 45 54	..	..	..		" 9th	P	0 32 19	3	..	448	Do.	" 22nd	eP	3 27 54	6	..	..	Do.
" 2nd	P	7 3 44	5	..	992	Great shock.		L	0 33 31	7	..	..			eF	3 45 54	..	..	..
	S	7 5 34	7	..	..			eF	1 0 31	..	..	..		" 22nd	P	4 30 59	3	..	2480	Do.
	L	7 6 6	10	..	..		" 12th	Omori	..	..	..	..	Lines badly congested.		L	4 37 14	7	..	..
	M	7 51 2	..	181	..			AE	..	..	..	..		" 23rd	eF	5 20 14	..	..	..
	F	8 18 2		" 12th	AN	2 57 50	Uncertain	Do.	" 23rd	P	5 38 9	2	..	1600	Do.
" 3rd	Omori	..	..	..	..			P	3 0 21	6	..	..	From "Omori."		L	5 42 24	4	..	..
	AE	..	..	..	..		" 12th	L	3 13 41	..	..	..	Milne-Shaw clock stopped.		eF	Uncertain	..	..	..
" 3rd	AN	15 46 19	Uncertain	..	1230	Slight shock.	" 13th	P	16 33 59	Uncertain	..	2123		" 23rd	eP	21 55 7	3	..	4480	Do.	
	L	15 49 33	5	..	..	Calculations done from "Omori."		L	16 39 43	6	..	..		" 24th	L	22 8 5	6	..	..
	F	Uncertain	..	..	..	Milne-Shaw shutter defective.	" 14th	P	17 45 5	6	..	..	Very slight. Other phases not traceable.	" 28th	P	14 2 45	2	..	320	Slight shock.
" 3rd	AE	..	..	..	..	Lines badly congested.	" 15th	P	16 14 39	3	..	2300	Slight shock.		L	14 3 37	4	..	..
" 3rd	AN	16 39 27	2	..	1230	Slight shock.		S	16 19 9	6	..	..		" 28th	P	14 34 35	2	..	320	Do.
	L	16 42 43	7	..	..		" 14th	L	16 22 9	10	..	..			L	14 35 29	6	..	..
	F	17 8 43	..	..	..		" 15th	F	16 46 39	..	..	..			eF	15 4 39	..	..	..
" 3rd	AE	18 54 1	Uncertain	..	480	Great shock.															
	P	18 55 1	22	..	..	Calculations done from "Omori."														
	eL	..	..	..	..												
	F	Uncertain	..	..	..	Milne-Shaw shutter defective.														
" 3rd	AN	18 53 41	Uncertain	..	..														
	P	18 54 47	20	..	..	Do.														
	eL	..	..	..	..												
	F	Uncertain	..	..	..													

STATION—KODAIKANAL.

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

Apparatus—Milne's Horizontal Pendulum Seismograph.

TABLE E 5.

AE		V	To	€	$\frac{r}{To^2}$	Months.
		9.76	15.5	1	3.3	January.
		9.76	15.2	1	3.4	February.
		9.76	15.1	1	3.1	March.
		9.76	15.3	1	3.3	April.
		9.76	15.5	1	3.2	May.
		9.76	16.3	1	3.1	June.
		9.76	18.5	1	2.5	July.
		9.76	18.4	1	2.6	August.
		9.76	18.6	1	2.5	September, October, November.
		9.76	18.7	1	2.6	December.

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.
			AE.							AE.						AE.	
1930.		H. M. S.				1930.		H. M. S.				1930.		H. M. S.			
Jan. 5th	eP	1 34 12	..	..		Mar. 9th	eP	..	..	..	No P. T's.	Apl. 21st	eP	12 24 54	..	..
	F	2 27 42	..	..	Widening of line.		eL	9 00 06	..	..			eL	12 45 48	..	..
							M	9 02 00	..	50			M	13 01 54	..	90	
" 5th	eP	19 11 48	..	..	Widening of line.		F	9 26 00	..	..			F	13 40 00	..	..
	F	19 17 54	..	..		" 10th	eP	16 35 24	..	..					
" 12th	eP	11 22 54	..	..	Widening of line.	" 15th	F	16 48 36	..	..	Widening of line.	" 23rd	eP	22 14 54	..	..
	F	11 34 12	..	..			eP	7 11 24	..	..	Widening of line.		F	23 16 30	..	..	Widening of line.
" 25th	eP	1 49 54	..	..	Widening of line.	" 26th	F	7 30 30	..	..		" 26th	eP	16 44 30	..	..
	F	2 14 36	..	..			eP	7 22 54	..	..			eL	17 17 06	..	..
Feb. 7th	eP	16 44 42	..	..			eL	7 42 54	..	..			M	17 20 42	..	80	
	IL	16 49 30	..	..			M	7 50 18	..	380			F	18 03 48	..	..
	M	16 52 24	..	100		" 20th	F	9 09 12	..	..		" 27th	eP	14 42 24	..	..
	F	17 23 54	..	..			eP	11 52 30	..	..	Widening of line.		eL	14 52 06	..	..
" 14th	IP	18 55 06	..	..		" 30th	F	12 22 30	..	..			M	14 59 30	..	40	
	IL	19 12 12	..	..			eP	9 21 12	..	..			F	15 34 48	..	..
	M	19 14 30	..	40		" 30th	eL	9 36 24	..	..					
	F	19 29 30	..	..			M	9 39 36	..	40		" 28th	eP	..	..	..	No P. T's.
" 23rd	eP	18 54 00	..	..	Widening of line.		F	10 14 30	..	..			eL	18 44 42	..	..
	F	19 05 30	..	..		" 30th	eP	15 36 24	..	..			M	18 2 00	..	60	
" 24th	eP	21 05 42	..	..	Widening of line.		eL	15 49 24	..	..			F	19 2 24	..	..
	F	21 23 00	..	..		Apl. 10th	M	15 57 00	..	100		May 1st	eP	1 33 54	..	..	Widening of line.
Mar. 6th	eP	16 01 18	..	..	Widening of line.		F	16 28 24	..	..			F	1 51 00	..	..
	F	17 24 06	..	..			IL	14 40 18	..	..		" 2nd	eP	2 37 36	..	..	Widening of line.
							M	14 41 36	..	40			F	2 50 36	..	..
							F	14 58 12	..	..					

TABLE E 5—contd.

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLI- TUDE. (μ)		REMARKS.		
				AE.							AE.							AE.				
1930.		H. M. S.					1930.		H. M. S.					1930.		H. M. S.						
May 5th	eP	..	..	..	..	No P. T's.	July 3rd	eP	5 37 12	..	..		Aug. 23rd	eP	11 03 24	..	..			
	iL	13 51 24	..	..	..			F	5 42 24	..	..	Widening of line.		iL	11 09 36	..	..			
	M1	14 00 42	..	..	?	Beyond the range of the instrument.	" 7th	eP	14 57 30	..	..			M	11 11 54	..	..	60			
	M2	14 08 06	..	..	..		" 11th	eP	14 57 30	..	..	Widening of line.		F	11 42 54	..	..			
	F	17 58 36		" 13th	eP	7 15 18			" 23rd	eP	15 16 48				
" 6-7th	eP	22 42 54		" 11th	F	7 25 48	Widening of line.		" 24th	eP	9 59 12			Widening of line.	
	iL	22 47 48		" 13th	eP	19 41 18			" 24th	F	10 11 54			Widening of line.	
	M	23 04 18	590	Air tremors.	" 13th	iL	19 45 48			" 24th	eP	11 13 06				
	F	1 55 48		" 13th	M	19 46 18	..	90			" 24th	F	11 18 36			Widening of line.	
" 8th	eP	13 13 30	Widening of line.	" 13th	F	20 40 30			Sept. 1st	eP	5 32 48				
	F	13 40 12		" 13th	eP	14 09 30	Widening of line.		" 1st	F	5 43 30			Widening of line.	
" 8th	eP	15 49 42	Widening of line.	" 14-15th	eP	23 32 06			" 1st	eP	17 56 42				
	F	16 31 42		" 14-15th	eL	24 02 06			" 2nd	F	18 11 48			Widening of line.	
" 10th	eP	7 43 12	Widening of line.	" 17th	M	24 24 42	..	120			" 11th	eP	19 17 24				
	F	9 29 06		" 17th	F	1 04 42			" 11th	F	19 23 36			Widening of line.	
" 11th	eP	22 46 30	Widening of line.	" 17th	eP	14 43 42			" 11th	eP	12 56 24				
	F	23 11 48		" 20th	F	14 49 12	Widening of line.		" 14th	F	13 23 30			Widening of line.	
" 12th	eP	0 33 48	Widening of line.	" 20th	eP	13 44 12			" 14th	eP	0 03 06				
	F	1 01 18		" 22nd	F	13 49 30	Wide ning of line.		" 14th	F	0 29 12			Widening of line.	
" 19th	eP	15 15 00	..	..	..	Widening of line.	" 22nd	eP	..	..	..	No P. T's.	" 14th	eP	3 41 24	..	..			
	F	15 47 48	..	..	..		" 23rd	eL	19 45 30	..	..	Masked by hour mark.	" 21-22nd	F	3 56 36	..	..			Widening of line.	
" 20th	eP	11 37 54	..	..	..		" 23rd	M	19 46 30	..	40		" 21-22nd	eP	23 10 24	..	..			
	eL	12 08 18	..	..	..		" 23rd	F	?	..	..		" 21-22nd	iL	23 14 42	..	..			
	M	12 22 24	..	..	40		" 23rd	eP	0 32 06	..	..		" 22nd	M	23 27 36	..	..	300			
	F	12 40 12	..	..	..		Aug. 17th	F	1 25 30	..	..	Widening of line.	" 22nd	F	0 58 18	..	..			
June 4th	eP	10 08 18	..	..	..	Widening of line.	Aug. 17th	eP	3 04 24	..	..		" 22nd	eP	2 08 42	..	..			
	F	10 40 06	..	..	..		" 17th	iL	3 05 48	..	..		" 22nd	eL	2 27 36	..	..			
" 11th	eP	1 01 18	..	..	..	Widening of line.	" 17th	M	3 09 00	..	110		" 22nd	M	2 35 26	..	..	160			
	F	2 30 48	..	..	..		" 17th	F	3 28 24	..	..		" 24th	F	3 14 24	..	..			
" 19th	eP	13 20 42	..	..	..		" 18th	eP	12 37 12	..	..		" 24th	eP	8 06 42	..	..			
	iL	13 44 54	..	..	..		" 18th	F	13 15 24	..	..	Widening of line.	" 24th	F	8 17 54	..	..			Widening of line.	
	M	13 53 12	..	..	80		" 18th	eP	10 21 30	..	..		" 24th	eP	12 27 18	..	..			
	F	14 46 06	..	..	..		" 18th	eL	10 45 18	..	..		" 24th	eL	12 35 42	..	..			
July 2nd	eP	21 09 42	..	..	..		" 20th	M	10 56 00	..	110		" 25th	M	12 38 06	..	..	80			
	iL	21 12 54	..	..	..		" 20th	F	12 10 36	..	..		" 25th	F	12 52 42	..	..			
	M	21 17 36	..	..	810		" 20th	eP	21 08 12	..	..		" 25th	eP	19 43 42	..	..			
	F	23 13 12	..	..	..		" 20th	iL	21 20 12	..	..		" 25th	iL	20 06 36	..	..			
" 3rd	eP	0 36 00	..	..	..		" 20th	M	21 24 24	..	180		" 25th	M	20 11 30	..	..	50			
	F	0 44 12	..	..	..	Widening of line.	" 20th	F	22 08 12	..	..		" 25th	F	20 28 54	..	..			

TABLE E 5—concl'd.

Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLI- TUDE. (μ)		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLI- TUDE. (μ)		REMARKS.	Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLI- TUDE. (μ)		REMARKS.		
				(μ)	AE.						(μ)	AE.						(μ)	AE.			
1930.		H. M. S.					1930.	H. M. S.						1930.		H. M. S.						
Sept. 29th	eP	13 39 42	..	..		Sheet struck up at 13h. 51m. 8.	Nov. 4th	eP	15 53 18	..	..			Dec. 3rd	iP	18 56 24	..	..		
	F	?	..	..				F	16 07 48	..	..	Widening of line.		iL	19 00 00	..	..			
" 30th	eP	21 41 06	..	..			" 8th	eP	3 35 24	..	..			M	19 09 06	..	..	1600			
	eL	22 04 30	..	..				F	3 58 42	..	..	Widening of line.		F	22 17 30	..	..			
	M	22 07 12	..	50			" 9th	iP	19 18 24	..	..			eP	8 28 30	..	..			
	F	23 23 06	..	..				iL	19 27 48	..	..			F	8 36 06	..	..			Widening of line.	
" 30th & Oct. 1st	eP	23 58 42		Widening of line.		M	19 45 30	..	250			" 8th	eP	18 18 36				
	F	0 07 36	..	..				F	21 12 24	..	..			eL	18 26 24	..	..			
" 2nd	eP	15 46 54	..	..		Widening of line.	" 10th	eP	13 54 06	..	..			M	18 28 24	..	40				
	F	15 57 36	..	..				iL	14 07 24	..	..			F	18 45 18	..	..			
" 8th	eP	10 42 24				M	14 10 12	..	60			" 10th	eP	10 55 48				
	iL	11 12 12	..	..				F	15 32 18	..	..			F	11 06 48	..	..			Widening of line.	
	M	11 18 12	..	80			" 22nd	eP	14 53 00	..	..			" 13th	eP	..	..	..		No P. T's.	
	F	13 26 00	..	..				eL	14 58 24	..	..			eL	16 37 30	..	..			
" 9th	eP	21 44 06	..	..		Widening of line.		M	15 02 24	..	80			M	16 39 54	..	60				
	F	21 53 24	..	..				F	15 29 12	..	..			F	16 48 06	..	..			
" 11th	eP	0 46 00		Widening of line.	" 23rd	eP	2 31 48			" 21st	eP	15 01 00				
	F	1 11 36	..	..				F	2 38 36	..	..	Widening of line.		iL	15 05 12	..	..			
" 17th	eP	9 57 18	..	..		Widening of line.	" 25th	eP	19 16 48	..	..			M	15 06 48	..	50				
	F	10 15 48	..	..				eL	19 31 00	..	..			F	15 29 00	..	..			
" 24th	iP	20 34 42				M	19 47 18	..	410			" 22nd	eP	0 13 24				
	iL	20 50 36	..	..				F	22 18 06	..	..			eL	0 35 42	..	..			
	M	20 54 54	..	250			Dec. 2nd	iP	7 11 30	..	..			M	0 37 48	..	40				
	F	23 25 18	..	..				eL	7 17 00	..	..			F	0 49 42	..	..			
" 25th	eP	12 56 30		Widening of line		M	7 23 42	..	60			" 25th	eP	13 55 24				
	F	13 16 54	..	..				F	7 37 36	..	..			eL	13 56 48	..	..			
" 31st	eP	10 59 54			" 3rd	eP	16 52 24			M	13 59 30	..	40					
	eL	11 17 24				F	16 57 24	Widening of line.		F	14 14 12					
	M	11 22 42	..	90																		
	F	11 44 00																		

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

TABLE E-6.

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.
	1930	H. M.	Sec.					1930	H. M.	Sec.			
Salonah (District Nowgong), Assam.	Jan. 1	15 28	about 5	5	1		Mymensing	July 2	21 15	2	8	about 5	
Gauhati	" 6	23 27	about 10	6	1		Yatung, Tibet	" 2	21 00 21 35 22 04 22 14	1-2 each.	9	several	(4)
Dhubri	" 6	23 25	1	6	1								
Salonah (District Nowgong), Assam.	" 8	12 38	about 4	4	2		Khulna	" 2	21 00	25 or 30	4	6 or 7	
Drosh	" 11	9 58	5	6	1		Monywa	" 2	22 30	about 2	5	1	
Cherrapunji	" 18	21 55	1	5	1		Jalpaiguri	" 2	21 00	60	8	3	24 shocks were felt up to 31-7-31.
Yatung, Tibet	" 24	6 40	4	5	2								
Meshed	Feb. 14	8 18	10	3	1		Cherrapunji	" 2	21 15	120	6	3	
Bushire	" 15	19 07	about 10	5	1		" 3	0 29	2	6	1		
Drosh	Mar. 3	20 55	12	5	1		" 3	6 10	1	2	1		
Bushire	" 15	23 17	about 30	7	1		Gauhati	" 3	11 25 11 35 14 21 15 09 17 33	about 3-5 each.	6	5	
Srinagar, Kashmir	May 11	11 35	2	6	2								
Akyab	" 14	8 36	4	4	3		Salonah	" 3	0 20	3-4	4	small vibrations.	
Gulmarg	June 5	15 27	about 3	8	3		Gauhati	" 3	19 35 23 30				
Jodhpur	" 25	0 50	50	2	1		" 4	2 39 3 14 4 16 4 51	about 3 each.	6	6		
Chittagong	July 2	21 08	about 10	5	2								
Ranchi	" 2	21 10	about 150	7	2		Rangpur	" 3	20 30 22 30 23 30				
Narayanganj	" 2	21 05	about 20	5	about 10		" 4	2 40 2 50 3 45 5 25 6 45	about 4 each.	4	5		
Akyab	" 2	21 10	about 10	5	3								
Salonah (District Nowgong), Assam.	" 2	21 08	120-150	7	2 or 3	(1)							
Bangpur	" 2	21 28	about 240	9	several & continuous.	(2)	Gauhati.	" 4	18 55 19 55 21 22 21 30 21 35 21 42 21 45 21 55	about 8 about 3 about 3 about 3 about 5 about 3 about 3	7	14	
Faridpur	" 2	21 05	about 180	7	1		" 5	1 22 1 30 1 45 2 35 2 39 4 10	about 3 about 3 about 10 about 3 about 3 about 3				
Gauhati	" 2	20 58 21 00 21 05 21 29 1 45	about 240 each about 5	9	In all about 11 shocks.								
	" 3	00 02 01 52 03 15 05 33 05 55	about 5 about 5 about 5 about 5 about 5										
Saugor Island	" 2	21 08	25	5	2								
Berhampur	" 2	21 08	about 90	9	4	(3)	Yatung, Tibet	" 4	11 46	about 2	5	1	
Debri	" 2	21 15	about 30	5	1				21 35	about 1 1/2	5	1	

(1) Slight shocks followed by continuous very severe vibrations.
(2) Sounds like distant thunder of clouds were heard. Most of the buildings of the town have been badly damaged; most of the walls have been ruptured.
(3) Rattling sound heard. Old structures fallen down; 2 men died and 6 persons wounded.
(4) Southern cable wall of hospital and northern cable wall of S. A. S. quarters collapsed. Several cracks in the walls of Military Barracks and S. & T. Godown.

TABLE E-6—contd.

Place at which felt.	Date.	G. M. T. of earth-quake.	Dura-tion.	Intensity Rossi-Forel scale.	No. of shocks.	REMARKS.	Place at which felt.	Date.	G. M. T. of earth-quake.	Dura-tion.	Intensity Rossi-Forel scale.	No. of shocks.	REMARKS.
	1930	H. M.	Sec.					1930	H. M.	Sec.			
Dhubri	July 4	23 45	3	}	7	3	Gauhati	July 10	18 25	about	5	1	
	" 5	1 52 3 15	7 9				Rangpur	" 10	22 00	about			5	about	0
	" 5	4 00 6 39 8 10	6 4 8	}	7	3	Faridpur	" 11	1 15	each.	4	1	
	" 5	8 40 10 02 11 06	14 10 3				Maymyo	" 9	16 16	about			4	2
	" 5	11 50 12 25 13 38	8 5 6	}	8	3	Monywa	" 9	15 15	about	5	1	
	" 5	21 20 23 10 1 53	22 3 15				Gauhati	July 10	21 45	about			5
Gauhati	" 6	7 13 10 00 10 05 15 20	about 3 each.	}	6	4	Gauhati	" 11	7 12	about	6	4	
	" 6	1 40 6 00 6 38 7 35	3 each				Rangpur	" 12	7 35	about			3	3
Rangpur	" 6	20 52 5 00 10 45	about 2-3 each.	}	6	3	Rangpur	" 12	16 01	about	7	4	
	" 7	11 41 12 49	2 4				Gauhati	" 12	23 40	about			30
	" 7	23 55 4 40 14 08 15 16	10 12 7 14	}	8	4	Rangpur	" 13	1 15	about	7	4	
	" 7	15 59 17 88	about 2 each.				Gauhati	" 13	7 40	about			3
Gauhati	" 7	21 55 23 00	about 15 about 8	}	7	several.	Khaina	" 11	7 00 12 30	4 or 5	4	2 or 3	
	" 8	4 31 9 42	about 15 about 40				Salonah	" 11	7 07	20 about			5	4
Rangpur	" 7	21 50 22 30 23 40 5 05 10 00	about 3 each.	}	4	about 4	Faridpur	" 11	7 05	about	4	1	
	" 7	21 35 5 00	10 6				Rangpur	" 11	18 10	about			16	about
Dhubri	" 7	23 00	1	}	5	1	Gauhati	" 12	13 40	about	4	8	
	" 8	4 30 9 48	1 3				Yatung, Tibet	" 13	5 05	about			7
Mymensingh	" 8	9 43	3 or 4	}	6	1	Rangpur	" 13	14 02	3	5	..	Slight tremors.
	" 8	4 40	about 2				Gauhati	" 13	14 20 18 15 0 10 5 15	about 35 each. about			5 4 4	4
Salonah	" 8	9 43	3 or 4	}	4	..	Gauhati	" 13	23 50	about	6	4	
	" 8	10 32 10 35 15 50	about 5 each.				Dhubri	" 14	0 15	about			5
Yatung, Tibet	" 8	22 20	about 12	}	6	3	Rangpur	" 14	0 22	about	6	4	
	" 9	6 42 7 41	about 5 about 5				Dhubri	" 14	1 19	about			5
Gauhati	" 8	10 32 10 35 15 50	about 5 each.	}	6	3	Dhubri	" 14	14 00	about	7	1	
	" 8	22 20	about 12				Rangpur	" 14	5 10	7 or 8 about			12	6
Rangpur	" 9	13 35 13 45 16 00	about 4 each.	}	3	3	Gauhati	" 15	11 54	12	6	1	
	" 9	17 54 0 09 14 40	6 or 7 6 or 7 6 or 7				Dhubri	" 15	17 40	5			5	1
	" 9	4 40 5 05	5 10	}	6	4	Dhubri	" 15	18 40	15	6	2	
	" 17	4 30 4 45 7 30	25 15 10				Gauhati	" 16	18 50 22 26	5 5			4	1

TABLE E 6—contd.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity Rossi-Foré scale.	No. of shocks.	REMARKS.	Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity Rossi-Foré scale.	No. of shocks.	REMARKS.
	1930	H. M.	Sec.					1930	H. M.	Sec.			
Dhubri	July 18	4 10 5 15	10 12	} 6	2		Rangpur	Aug. 10	6 00	10 or 12	6	1	
Rangpur	" 18	1 00 17 30	5 or 6 10-12	} 4	4		Dhubri	" 10	22 10	10	6	1	
" 19	" 19	0 36	7 or 8	} 5	1		" 11	16 40	6	6	1		
Drosh	" 19	18 05	8	5	1		Gauhati	" 10	22 15	about 15	6	1	
Dhubri	" 20	13 30 19 30	60 40	} 6	2		" 11	21 25	about 5	6	1		
Rangpur	" 19	22 06	8 or 10	} 4	3		Rangpur	" 11	16 00	6 or 7	4	1	
" 20	" 20	13 40 19 15	15 or 16 10 or 12					Dhubri	" 13	23 40	20	6	1
Gauhati	" 20	13 30	6	6	1		" 14	21 30	15	6	1		
" 20	" 20	19 13	about 20	6	1		" 16	20 10	about 15	6	1		
Rangpur	" 21	23 55	5 or 6	4	1		" 18	16 40	12	6	1		
" 22	" 22	21 16 21 22	15 or 16 20 or 22	} 6	2		" 19	6 05	25	6	1		
Gauhati	" 22	11 38	about 4	5	1		" 19	20 20	about 15	6	1		
" 22	" 22	18 20	about 4	5	3		" 20	7 15	about 10	6	1		
" 23	" 23	9 36 17 17	each					" 21	3 50	about 7	6	1	
Dhubri	" 23	11 35	5	5	1		" 24	0 55	about 6	6	1		
Gauhati	" 23	21 00 21 10 21 35	5 5 about 10	} 6	3		" 25	20 00	about 6	6	1		
Rangpur	" 25	0 12	8 or 9	4	1		Zanzibar	" 26	11 58	about 2	6	1	
Dhubri	" 24	19 50 21 30	10 4	5	2		Dhubri	" 27	4 45	about 4	5	1	
" 26	" 26	10 30	12	7	2		" 27	21 10	about 7	6	1		
" 27	" 27	3 30	3	7	1		" 29	18 05	about 2	3	1		
" 28	" 28	6 40 10 33	5 8	6 6	2		Rangpur	" 30	13 15	15-16 about	5	7	
Rangpur	" 27	20 45	10 or 12	5	1		Dhubri	" 30	13 25	25 about	7	1	
Dhubri	" 29	11 18	4	6	1		" 30	19 35	28 about	6	1		
" 30	" 30	1 14	5	6	1		" 30	19 42	10	6	1		
" 31	" 31	16 40	8	6	1		Bushire	Sept. 2	7 58	15	5	1	
" 31	" 31	17 37	7	6	1		Dhubri	" 3	4 04	10	6	1	
" 31	" 31	18 00	4	6	1		" 3	11 20	6	6	1		
Aug. 1	Aug. 1	6 05 12 31	6 7	6 6	1 1		" 4	4 30	about 8	6	1		
Rangpur	" 3	1 50	10 or 12	5	1		" 5	10 18	about 3	7	1		
Dhubri	" 3	1 53	5	6	1		Gulmarg	" 5	9 28	2	7	1	
Gauhati	" 3	1 54	about 5	6	1		Dhubri	" 8	7 10	about 30 about 15	6 6	5	
Dhubri	" 3	20 30	8	8	1		" 8	14 00	about 9	6			
" 3	" 3	23 30	9	8	1		Peshawar	" 11	17 24	25	3	1	
Rangpur	" 4	10 16	5 or 6	4	1		Dhubri	" 12	22 00 23 30	5 8	5 5	1 1	
Gulmarg	" 4	13 41	2	8	2		" 13	16 30	3	5	1		
Dhubri	" 5	10 30	10	6	1		Drosh	" 11	17 15	20	5	1	
Gauhati	" 5	10 15	about 6	6	1		Gulmarg	" 11	16 19	nearly 2	7	1	
Rangpur	" 5	22 26	6 or 7	5	1		Dhubri	" 16	4 30	10	6	1	
Dhubri	" 5	23 30	2	6	1		" 16	18 00	12	6	1		
" 6	" 6	2 30 7 30	1 2	6 6	1 1		" 19	12 35	about 7	6	1		
Dhubri	" 10	7 15	9	6	1		Khulna	" 22	14 22	4 or 5	5	3	
Gauhati	" 10	6 36	about 8	6	2		Rangpur	" 22	14 15	about 12	5	1	

TABLE E-6—concl'd.

Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity Rossi-Foré scale.	No. of shocks.	REMARKS.	Place at which felt.	Date.	G. M. T. of earthquake.	Duration.	Intensity Rossi-Foré scale.	No. of shocks.	REMARKS.
Cherrapunji	Sep. 22	14 15	120 about	5	1		Rangpur	Oct. 24	1 02	6 about	5	5	
Chittagong	" 22	14 23	5 about	3	2		Srinagar	" 30	20 02	2 about	6	1	
Dhubri	" 22	14 12	30	6	1		Dhubri	Nov. 1	8 51	30	7	1	
Myitkyina	" 22	0 08 0 30	20 4	5 5	1 1		Rangpur	" 1	9 06	8—10	3	1	
Salonah	" 22	14 20	25	5	..	series of severe vibrations.	Yatung, Tibet	" 1	10 19	11 about	3	3	
Gauhati	" 22	14 21	about 30	7	..	continuous trembling.	Dhubri	" 3	16 45	5 about	3	1	
Dhubri	" 23	5 34 7 15	13 9	6 6	1 1		" 4	7 11	11	3	1		
Rangpur	" 23	6 30	6—7	3	1		Rangpur	" 3	16 45	7—8	3	1	
Cherrapunji	" 24	14 30	1	2	1		" 4	7 25	5—6	3	1		
Dhubri	" 24	3 12	about 6	7	1		Drosh	" 13	19 40	15	6	2	
Gauhati	" 24	14 40	about 20	7	1		Dhubri	" 19	7 06	10	3	1	
Rangpur	" 24	14 35	6—7	2	1		Drosh	" 27	14 47	7 about	6	1	
Salonah	" 25	14 36	15—20 about	5	1		Maymyo	Dec. 3	19 35	6	5	3	
Gauhati	" 25	13 45	5 about	6	1		Gauhati	" 6	17 30	about 15 about	5 5	1 1	
	Oct. 5	5 26	5	6	1		Angul	" 16	6 35	3	3	1	
Rangpur	" 6	22 06	5	4	6		Cherat	" 16	15 32	3	5	2	
Gauhati	" 8	23 37	about 7	6	1		Peshawar	" 16	15 50	3 about	5	2	
							Angul	" 26	18 00	3	5	1	
							Gauhati	" 28	14 03	about 20	6	1	
							Myitkyina	" 30	9 55	3	5	3	

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