GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

SEISMOLOGICAL BULLETIN

January—March, 1945

CONTENTS

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SEISMOLOGICAL BULLETIN
January—March, 1945.
INTRODUCTION

Till the end of 1937, the seismic data from the observatories of the India Meteorological Department were being published annually as Part D of the Annual Summary of the India Weather Review. Since 1938, the data are being published in the present series of the Quarterly Seismological Bulletin. With the kind co-operation of the Surveyor General of India, the Director of the Nizamiah Observatory, Hyderabad, and of the Superintendent, Colombo Observatory, it has been possible to incorporate in the bulletin, the data of their respective observatories, viz., Dehra Dun Hyderabad and Colombo. The instumental seismological data and the non-instrumental voluntary observations are collected and edited at the Meteorological Office, Poona.

TABLE 1

List of Seismograph Stations.

Station.	Latitude.	Longitude.	Height above M. S.L.	Lithologic Foundation.	Officer-in-charge of Observatory.
New Delhi	28°35′N.	77°12′E	207 meters . .	Massive Quartzites .	Superintending Meteorologist.
Bombay.	18°54′N.	12°49′E.	6 meters . . .	Deccan Trap .	Director.
Clacutta	22°32′N.	88°20′E.	(1) 7 meters. . . (2) 6 meters . .	Alluvium .	Meteorologist.
Colombo	60°54′N.	19°52′E.	7 meters . . .	Beach-Sand resting on gneiss probably decomposed.	Superintendent.
Dehra Dun	30°19′N.	78°03′E	682 meters . . .	Gravel	Director, War Research, Survey of India.
Hyderabad	17°26′N	28°27′E.	528 meters . . .	Granite.	Director.
Kodaikadal	10°14′N.	77°28′E.	2343 meters . .	Rock.	Director.

(1) Milne Shaw (2) Omori-Ewing.

TABLE (2)

The instruments and their constants

Station.	Component.	Type of instrument.	Mass	Period.	Static magnification.	Damping Ratio.	Remarks.
				Secs.			Kg.
New Delhi . . .	E	Omori-Ewing	45	32	30	..	
	N	Milne-Shaw	0·47	12	250	20:1	
Bombay	N	Milne-Shaw	0·45	12	250	10:1	
	E	Milne-Shaw	0·45	12	350	15:1	
Calcutta	N	Milne-Shaw.	0·45	12	250	20 : 1	
	N	Omori-Ewing	50	15	32	..	
	E	Omori-Ewing	50	21	30	..	
Colombo	E	Milne-Shaw	0·45	12	250	20 : 1	
Dehra Dun . . .	N	Omori	50	30	12	..	
Hyderabad	N	Milne-Shaw.	0·45	12	250	20 : 1	
	E	Milne-Shaw.	0·45	12	250	20 : 1	
Kodaikanal . . .	E	Milne-shaw.	0·45	10	250	20 : 1	

UPPER AIR OFFICE, NEW DELHI.

January, 1945.

Date.	Compt.	Phase.	G.M.T.	Per	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
January 1	N	eP	01 32 32	..	..	8460	Slight.
		IS	42 18	..	..	..	
		SS	47 05	..	..	..	
		M	02 02 04	..	..	..	
		F	39..	..	..	..	
,, 1	E	eP	13 38 21	..	..	..	Slight. Near.
	N	eP	38 24	..	..	..	
		e	38 52	..	..	..	
	E	I	39 45	..	..	..	
	N	i	39 49	..	..	..	
		F	14 00 ..	..	..	..	
,, 1	N.E.	eP	15 18 04	..	..	..	Slight. Near.
	N	e	18 44	..	..	..	
	E	e	18 54	..	..	..	
	N	i	19 04	..	..	..	
		i	19 28	..	..	..	
		F	38 ..	..	..	..	
,, 2	N	e	01 41 21	..	..	..	Slight. Distant.
		e	02 05 59	..	..	..	Surface waves.
		F	03 11 ..	..	..	..	
,, 2	N	e	02 11 57	..	..	..	Slight. Near.
		iS	13 16	..	..	..	
		F	Lost in the coda of the preceding shock.				
,, 3	N	eP	14 11 12	..	..	750	Slight.
		Pe	11 30	..	..	..	
		$\overline{P}$	12 46	..	..	..	
		iS	12 28	..	..	..	
		$\overline{S}$	13 01	..	..	..	
		F	20 ..	..	..	..	
,, 4	E	e	05 22 50	..	..	..	Slight. Near.
	N	is	23 06	..	..	..	
	N	i	23 44	..	..	..	
	N,E	i	24 14	..	..	..	
	N	F	48 ..	..	..	..	
,, 4	N	i	10 40 35	..	..	..	Slight. Distant.
		F	11 01 ..	..	..	..	Surface waves.
,, 6	N	i	20 13 36	..	..	..	Slight. Distant.
		i	17 02	..	..	..	
		F	30 ..	..	..	..	
,, 8	N	e	22 41 27	..	..	..	Slight. Distant.
		F	23 22 ..	..	..	..	
,, 9	N	i	21 44 21	..	..	..	Slight. Distant.
		e	57 17	..	..	..	
		F	22 20 ..	..	..	..	
Jan. 11	N	e	02 07 45	..	..	..	Slight.
		iS	11 20	..	..	..	
		SS	11 52	..	..	..	
		M	41 32	..	..	..	
		F	03 01 ..	..	..	..	
12	N	iP	18 47 32	..	..	5540	Moderate.
	E	iP	47 33	..	..	..	
		PP	49 27	..	..	..	
	N	iS	54 42	..	..	..	
	E	iS	54 44	..	..	..	
	N	PS	54 52	..	..	..	
		i	58 42	..	..	..	
	E	i	58 43	..	..	..	
	N	M	19 04 47	..	..	..	
	E	M	05 29	..	..	..	
	N	Mn	06 43	24	269	..	
	E	Mn	10 36	22	187	..	
	N	F	21 01 ..	..	..	..	
,, 13	N	e	08 81 54	..	..	..	Slight.
			37 22	..	..	..	
		M	45 38	..	..	..	
		F	09 40 ..	..	..	..	
,, 13	N	i	12 15 47	..	..	..	Slight. Distant.
		(SS)	17 10	..	..	..	
		F	13 11 ..	..	..	..	
,, 15	N	e	05 40 10	..	..	..	Slight. Distant.
		e	47 51	..	..	..	Surface waves
		F	06 08 ..	..	..	..	
,, 16	N	iPS	13 52 51	..	..	..	Slight.
		ISSS	57 42	..	..	..	
		L	58 51	..	..	..	
		M	14 03 01	..	..	..	
		F	15 01 ..	..	..	..	
,, 17	N	iS	15 18 59	..	..	..	Slight.
		F	16 07 ..	..	..	..	
,, 24	N	e	01 12 50	..	..	..	Slight. Distant. Surface waves.
,, 28	N	e	21 15 51	..	..	..	Feeble. Distant.
		F	40 ..	..	..	..	
,, 29	N	eP	21 09 37	..	..	5430	Slight.
		iS	16 40	..	..	..	
		PS	17 04	..	..	..	
		SSS	21 03	..	..	..	
		L	24.25	..	..	..	
		M	27 55	..	..	..	
		F	22 32 ..	..	..	..	

UPPER AIR OFFICE, NEW DELHI.

February, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Feb. 1	N	i	11 01 31	..	..	..	Slight. Very distant. Surface waves.
		i	36 24	..	..	..	
		F	12 23 ..	..	..	..	
,, 1	N	i	12 38 46	..	..	..	Slight. Very distant. Surface waves.
		e	13 18 40	..	..	..	
		F	14 31 ..	..	..	..	
,, 1	N	eP	19 57 49	..	..	2500	Slight.
		L	20 03 55	..	..	..	
		M	05 55	..	..	..	
		F	23 ..	..	..	..	
,, 2	N	i	20 22 48	..	..	..	Slight. Near.
		i	24 27	..	..	..	
		F	29 ..	..	..	..	
,, 8	N	eP	18 07 27	..	..	250	Slight.
		iS	07 57	..	..	..	
		F	13 ..	..	..	..	
,, 10	N	iP	05 07 12	..	..	5800	Moderate.
	E	iP	07 13	..	..	..	
	N	PP	09 12	..	..	..	
	E	i	09 45	..	..	..	
	N	iS	14 37	..	..	..	
	E	iS	14 39	..	..	..	
	N	ScS	17 06	..	..	..	
	E	ScS	17 15	..	..	..	
	N	SS	17 44	..	..	..	
		SSS	18 58	..	..	..	
	E	i	19 10	..	..	..	
		L	24 ..	..	..	..	
	N	M	27 32	..	..	..	
	E	M	27 46		..	..	
	N	Mn	31 52	15	75	..	
	E	Mn	35 17	17	173	..	
	N	F	08 28 ..	..	..	..	
1945			h. m. s.	Sec.	μ	Km.	
Feb. 11	N	e	21 17 05	..	..	..	Slight, Distant.
		e	25 16	..	..	..	Surface waves
		F	46 ..	..	..	..	
,, 13	N	e	12 17 23	..	..	..	Slight, Distant.
		F	42 ..	..	..	..	
,, 16	N	e	11 11 25	..	..	..	Slight Near
		i	11 40	..	..	..	
		F	20 ..	..	..	..	
,, 18	N	eP	10 17 24	..	..	6080	Slight.
		iS	25 04	..	..	..	
		SS	28 40	..	..	..	
		L	33 02	..	..	..	
		M	37 11	..	..	..	
		F	11 53 ..	..	..	..	
,, 25	N	e	02 02 15	..	..	..	Slight. Distant.
		F	Lost in microseisms.				Surface waves.
,, 26-27	N	e	22 24 43	..	..	..	Slight.
	N	(PP)	26 42	..	..	..	
	N	PPP	27 42	..	..	..	
	N	iS	32 16	..	..	..	
	N,E	PS	32 44	..	..	..	
	N	i	33 40	..	..	..	
	N	SS	36 03	..	..	..	
	N	SSS	37 46	..	..	..	
	N	L	41 12	..	..	..	
	N	M	45 30	..	..	..	
,, 27	N	F	00 41 ..	..	..	..	
,, 28	N	e	17 36 59	..	..	..	Slight. Distant.
		F	56 ..	..	..	..	Surface waves.
,, 28	N	i	23 22 39	..	..	..	Slight.
		i	25 24	..	..	..	
		F	59 ..	..	..	..	

March, 1945.

Mar. 1	N	e	04 54 37	..	..	..	Slight, Probably near.
		i	56 26	..	..	..	Surface waves,
		e	58 08	..	..	..	
		F	05 16 ..	..	..	..	
,, 2	N	i	10 56 19	..	..	..	Slight.
		M	11 00 21	..	..	..	
			2 ..	..	..		
Mar. 10	N	e	01 12 41	..	..	..	Slight. Distant.
		F	50 ..	..	..	..	
,, 11-12	N	e	21 47 26	..	..	..	Slight.
		iS	54 51	..	..	..	
		PS	55 04	..	..	..	
		ScS	56 59	..	..	..	
		SS	58 42	..	..	..	

UPPER AIR OFFICE, NEW DELHI.

March, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks
			h. m. s.	Sec.	μ	Km.	
1945 Mar. 11-12		M	22 07 40	..	..	..	
		F	00 46 ..	..	..	..	Slight. Distant.
,, 12	N	e	01 48 58	..	..	..	
		i	50 28	..	..	..	
		M	54 11	..	..	..	
		F	03 20 ..	..	..	..	Slight. Very Distant.
,, 18	N	e	00 20 11	..	..	..	
			30 13	..	..	..	
		e	01 03 53	..	..	..	
		F	02 23 ..	..	..	..	Slight. Distant.
,, 18	N	e	08 29 34	..	..	..	
		F	54 ..	..	..	..	
,, 18	N	i	19 17 39	..	..	..	Slight. Distant.
		e	41 11	..	..	..	
		F	20 06 ..	..	..	..	
,, 20	N	ePP	08 07 12	..	..	3540	Slight.
		e	08 09	..	..	..	
		i	12 23	..	..	..	
		SS	14 09	..	..	..	
		L	16 13	..	..	..	
		ScS	17 47	..	..	..	
		M	19 23	..	..	..	
1945 Mar. 20		F	09 17 ..	..	..	..	Slight. Distant.
,, 20	N	e	18 47 40	..	..	..	
		F	19 46 ..	..	..	..	Slight. Distant.
,, 20	N	e	22 07 37	..	..	..	
		F	35 ..	..	..	..	Slight. Distant. Surface waves.
,, 23	N	e	23 30 49	..	..	..	
		F	Lost in the succeeding shock				
,, 23-24	N	ePP	23 33 12	..	..	..	Moderate.
		iSKS	39 22	..	..	..	
		PS	42 42	..	..	..	
		iSS	48 32	..	..	..	
		SSS	52 35	..	..	..	
		M	00 04 44	..	..	..	
		F	02 30 ..	..	..	..	
,, 31	N	ePP	22 15 06	..	..	5630	Slight.
		IS	20 32	..	..	..	
		PS	21 02	..	..	..	
		SS	23 38	..	..	..	
		M	32 07	..	..	..	
		F	23 18 ..	..	..	..	

S. K. PRAMANIK,

Superintending Meteorologist.

UPPER AIR OFFICE,

NEW DELHI.

COLABA OBSERVATORY, BOMBAY.

January, 1954.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Jan. 1—11	E	No record					casing of seismo-graph under re-pairs.
		from	00 00 ..	..	..	..	
		to	17 14 ..	..	..	..	
,, 1	N	(L)	13 44 40	..	..	..	Slight.
	N	Mn	47 44	6	3	..	
	N	F	Lost in microseisms.				
,, 1	N	(L)	15 24 19	..	..	..	Slight.
	N	Mn	26 28	7	3	..	
	N	F	Lost in microseisms.				
,, 2	N	L	02 18 24	..	..	..	Feeble.
	N	Mn	20 ..	..	..	..	
,, 3	N	i	14 18 02	..	..	..	Feeble, Near.
	N	i	18 09	..	..	..	
	N	i	18 22	..	..	..	
	N	F	25 ..	..	..	..	
	N						
4	N	eP	05 24 25	..	..	1,680	Slight. 31° N. 82° :7 E., Tibt. 0-05h. 20m. 53s.
	N	S	27 12	..	..	..	
	N	SSS	27 38	..	..	..	
	N	L	28 31	..	..	..	
	N	Mn	32 32	7	3	..	
	N	F	50 ..	..	..	..	
,, 4	N	L	10 45 09	..	..	..	Surface waves.
	N	F	11 00 ..	..	..	..	
-6	N	Record lost					
		from	23	..	..	..	
		to	09 02 ..	..	..	..	
6	N	Record lost					
		from	06 19 ..	..	..	..	
		to	11 30 ..	..	..	..	
9	N	e	21 43 57	..	..	..	Feeble.
	N	e	44 25	..	..	..	
	N	e	46 20	..	..	..	
	N	F	50 ..	..	..	..	
,, 11	N	iP	02 07 29	..	..	2,420	Slight. 30° N., 52° E., Iran 0-02h. 02m. 38s.
	N	i	07 42	..	..	..	
	N	PPP	08 02	..	..	..	
	N	iS	11 23	..	..	..	
	N	SSS	12 05	..	..	..	
	N	F	35 ..	..	..	..	
,, 12	N	eP	18 48 24	..	..	6,590	Moderate. 31° 7N. 137° 9E., near Japan.
	E	eP	48 27	..	..	..	
	E	i	48 30	..	..	..	0-18h. 38m. 24S. Epc : 34° N., 139° E 0-18h. 38° 6s (U. S. C. G. S.)
	N	i	48 31	..	..	..	
1945 Jan. 12	N, E	PP	50 40	..	..	..	
	N, E	PPP	52 04	..	..	..	
	E	S	56 28	..	..	..	
	N	SP	56 36	..	..	..	
	N	PPS	56 52	..	..	..	
	N, E	i(ScS)	58 21	..	..	..	
	E	SS	19 00 14	..	..	..	
	E	M1	12 54	15	29	..	
	N	Mn	16 54	15	34	..	
	E	M2	17 27	13	28	..	
	N, E	F	20 40	..	..	..	
,, 13	N	e	08 22 46	..	..	..	Slight.
	N	e	23 29	..	..	..	
	N	e	29 59	..	..	..	
	N	i	31 02	..	..	..	
	E	i	31 04	..	..	..	
	E	Mn	42 ..	..	..	..	
	N	Mn	46 ..	..	..	..	
	N, E	F	09 20 ..	..	..	..	
,, 13	E	eP	12 06 21	..	..	5890	Slight. 8° N. 127 E., near Mindanao, Philippine Islands. 0-11h. 57m. 06s.
	N	eP	06 22	..	..	..	
	E	PP	08 19	..	..	..	
	N	iS	13 48	..	..	..	
	E	eS	13 51	..	..	..	
	E	i	14 22	..	..	..	
	N, E	ScS	16 07	..	..	..	
	E	i	17 53	..	..	..	
	E	Mn	32 ..	..	..	..	
	N, E	F	13 10 ..	..	..	..	
,, 14	E	e	06 53 ..	..	..	..	Feeble, near.
	N	e	53 13	..	..	..	
	N, E	Mn	55 ..	..	..	..	
	N, E	F	07 00 ..	..	..	..	
,, 15	E	Mn	05 50 ..	..	..	..	Surface waves.
	E	F	06 10 ..	..	..	..	
,, 15	N	i(P)	17 25 48	..	..	(2,200)	Feeble.
	E	e	26 ..	..	..	..	
	N	i	26 20	..	..	..	
	E	i(S)	29 24	..	..	..	
	N	i	29 41	..	..	..	
	E	i	30 08	..	..	..	
	N, E	F	50 ..	..	..	..	
,, 16	N	eP	13 46 39	..	..	6,410	Slight, 35° N., 136° 5E Japan.
	E	eP	46 40	..	..	..	0-13h. 36 m. 5s.

COLABA OBSERVATORY, BOMBAY.

January, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Jan. 16	E	iPS	13 54 41	..	..	..	
	N	ePS	54 43	..	..	..	
	E	ScS	56 31	..	..	..	
	E	SS	58 38	..	..	..	
	E	Mn	14 15 40	14	5	..	
	N.E.	F	35 ..	..	..	..	
17—18	N	Record lost					
		from	05 41 ..	..	..	..	
		to	01 26 ..	..	..	..	
,, 17	E	eP	15 10 54	..	..	6,020	Slight. Epc: In the region of Flores Sea.
	E	iS	18 27	..	..	..	
	E	L	26 ..	..	..	..	
	E	M	32 ..	..	..	..	
	E	F	16 00 ..	..	..	..	
18	E	Mn	22 26 ..	..	..	..	Surface waves.
	E	F	35 ..	..	..	..	
,, 19—20	N	Record lost					
		from	13 45 ..	..	..	..	
		to	01 38 ..	..	..	..	
,, 21—22	N	Record lost					
		from	01 17 ..	..	..	..	
		to	01 35 ..	..	..	..	
25	N	e	00 54 59	..	..	..	Slight. Distant.
	E	i					
	N, E	L	01 16 ..	..	..	..	
	N, E	F Lost	while changing chart.				
1945			h. m. s.	Sec.	μ	Km.	
Jan. 25	N	e	02 37 04	..	..	..	Feeble.
	E	i	37 05	..	..	..	
	N	Mn	39 ..	..	..	..	
	N, E	F	41 ..	..	..	..	
,, 25	N, E	i	06 10 40	..	..	..	Feeble.
	N, E	i	18 28	..	..	..	
	E	e	21 03	..	..	..	
	N	e	21 04	..	..	..	
	N, E	F	30 ..	..	..	..	
,, 27	N	e	19 14 22	..	..	..	Slight.
	E	e	14 30	..	..	..	
	E	e	16 26	..	..	..	
	N	i	22 02	..	..	..	
	E	e	22 06	..	..	..	
	E	e	25 43	..	..	..	
	E	Mn	40 ..	..	..	..	
	N, E	F	20 00 ..	..	..	..	
,, 29	E	eP	21 09 54	..	..	5,750	Slight, 5°.5N., 125°.E., Mindanao 0- 21h 00m. 48s.
	N	eP	09 57	..	..	..	
	E	PP	11 57	..	..	..	
	E	(PPP)	13 06	..	..	..	
	E	iS	17 12	..	..	..	
	N	S	17 16	..	..	..	
	E	i	19 27	..	..	..	
	N, E	SS	20 57	..	..	..	
	N	Mn	36 31	18	15	..	
	N, E	F	55 ..	..	..	..	

February, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1 45 Feb.	E	e	10 53 16	..	..	..	Slight. Distant. Roughly 22°S., 170°E. 0-10h. 35·6m. (Pasadena).
	E.	i	54 04	..	..	..	
	E	e	11 00 35	..	..	..	
	N, E	e	01 05	..	..	..	
	E	e	08 55	..	..	..	
	E	Mn	34 ..	..	..	..	
	N	Mn	39 ..	..	..	..	
	N, E	F	12 20 ..	..	..	..	
,, 1	E	e	12 31 21	..	..	..	Slight, distant. Probably from the same source as the preceding shock (Pasadena).
	N	e	32 08	..	..	..	
	E	e	32 09	..	..	..	
	E	e	38 22	..	..	..	
	N	e	38 31	..	..	..	
	E	i	46 38	..	..	..	
	E	e	50 18	..	..	..	
	E	Mn	13 12 ..	..	..	..	
	N	Mn	16 ..	..	..	..	
	N, E	F	14 45 ..	..	..	..	
1945			h. m. s.	Sec.	μ	Km.	
Feb. 1	N	iP	19 58 30	..	..	2,745	Feeble. o = 19h. 53m. 11s.
	E	eP-					
	E	S	20 02 47	..	..	..	
	E	Mn	08 ..	..	..	..	
	N	Mn	10 ..	..	..	..	
	N, E	F	20 ..	..	..	..	
,, 2	E	e	12 55 08	..	..	..	Feeble.
	E	M	59 ..	..	..	..	
	E	F	13 10 ..	..	..	..	
	E	i	05 10 ..	..	..	..	Feeble.
	N	e	10 01	..	..	..	
	E	i	17 29	..	..	..	
	N	i	17 32	..	..	..	
	E	Mn	32 ..	..	..	..	
	N, E	F	45 ..	..	..	..	

COLABA OBSERVATORY, BOMBAY.

February, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Feb. 6	E	eP	15 24 07	..	..	..	Feeble, near.
	N	eP	24 08	..	..	..	
	E	e	27 45	..	..	..	
	N	e	27 53	..	..	..	
	E	e	28 07	..	..	..	
	E	e	28 28	..	..	..	
	N	e	28 30	..	..	..	
	N	Mn	31 ..	..	..	..	
	E	Mn	34 ..	..	..	..	
	N, E	F	40 ..	..	..	..	
,, 7	N	e	16 22 24	..	..	..	Feeble
	N	e	25 06	..	..	..	
	N	Mn	28 ..	..	..	..	
	E	Mn	29 ..	..	..	..	
	N, E	F	35 ..	..	..	..	
,, 8	E	e	14 13 24	..	..	..	Feeble. Near 22°S., 170°E. (Pasadena).
	E	e	17 20	..	..	..	
	E	e	27 09	..	..	..	
	E	Mn	57 ..	..	..	..	
	E	F	15 30 ..	..	..	..	
,, 10	E	iP	05 08 13	..	..	6,955	Moderate. 40°·5N., 142° 4E., near Japan 0=04h. 57m. 52s. Epc: 41°.5N 142°.0E. 0=04h. 57·9m. (U.S.C.G.S.).
	N	iP	08 14	..	..	..	
	N	PeP	08 46	..	..	..	
	E	PcP	08 48	..	..	..	
	N	PP	10 28	..	..	..	
	E	PP	10 33	..	..	..	
	N, E	PPP	12 00	..	..	..	
	N	eS	16 36	..	..	..	
	E	iS	16 37	..	..	..	
	N	SP	16 50	..	..	..	
	E	SP	16 53	..	..	..	
	N	SS	20 42	..	..	..	
	E	SS	20 43	..	..	..	
	E	Mn	37 17	15	51	..	
	N	Mn	37 18	15	46	..	
	N, E	F	08 30 ..	..	..	..	
,, 11	E	Record lost from	09 07 ...	..	..	..	
		to	12 51 ..	..	..	..	
,, 11	E	e	21 18 29	..	..	..	Slight.
	E	Mn	32 ..	..	..	..	
	E	F	50 ..	..	..	..	
,, 16	E	e	11 53 17	..	..	..	Slight.
	E	Mn	12 21 ..	..	..	..	
	E	F	50 ..	..	..	..	
,, 16	N	i	11 11 06	..	..	..	Feeble, deep.
	N	i	12 35	..	..	..	Near ?
	E	e	15 02	..	..	..	
1945			h. m. s.	Sec.	μ	Km.	
Feb. 16	N	i	15 04	..	..	..	
	N, E	F	25 ..	..	..	..	
,, 18	E	eP	10 18 30	..	..	7,010	Slight. Near 35°N., 145°E, 0=10h. 08-m. 03s. Epc. Near 42°N., 142°E 0=10h. 08. m (Pasadena).
	N	iP	18 34	..	..	..	
	N	PcP	19 04	..	..	..	
	E	PP	20 42	..	..	..	
	N	PP	20 46	..	..	..	
	N	eS	26 57	..	..	..	
	N	SP	27 04	..	..	..	
	E	SP	27 05	..	..	..	
	N, E	SPP	27 21	..	..	..	
	N	SS	31 ..	..	..	..	
	E	SS	31 04	..	..	..	
	N	Mn	46 24	15	7	..	
	E	Mn	48 52	17	20	..	
	N, E	F	12 10 ..	..	..	..	
,, 18	E	e	13 32 41	..	..	..	Slight
	E	e	41 21	..	..	..	
	E	Mn	14 19 ..	..	..	..	
	E	F	45 ..	..	..	..	
	E	Record lost from	22 05	..	..	..	
,, 23—24		to	05 24 ..	..	..	..	
,, 25	N	e	02 02 02	..	..	..	Feeble.
	N	e	05 11	..	..	..	
	N	e	06 11	..	..	..	
	N	F	15 ..	..	..	..	
,, 25—26	E	Record lost from	03 01 ..	..	..	..	
		to	01 35 ..	..	..	..	
,, 26	N,E	P	22 25 06	..	..	7,225	Slight. 26°No, 143)
	E	i	25 21	..	..	..	·5E., Bonin Islands 0=22h. 14m. 27s. Epc. 27°N., 142° E., 0=22h. 14m 27s. (Pasadena).
	N	i	25 22	..	..	..	
	N	PP	27 39	..	..	..	
	E	S	33 48	..	..	..	
	N	SP	33 59	..	..	..	
	N	SPP	34 08	..	..	..	
	N	i	35 28	..	..	..	
	N	SS	38 15	..	..	..	
	E	Mn	49 ..	..	..	..	
	N	Mn	50 ..	..	..	..	
	N, E	F	23 40 ..	..	..	..	
Feb. 28—Mar. 1.	E	Record lost from	01 32 ..	..	..	..	
		to	01 19 ..	..	..	..	
,, 28	N	e	22 24 51	..	..	..	Slight.
	N	e	29 25	..	..	..	
	N	M	29 52	..	..	..	
	N	F	50 ..	..	..	..	

COLABA OBSERVATORY, BOMBAY.

March, 1945.

Date.	compt.	Phase.	G.M.T.	Per	Amp	Δ	Remarks.
			h. m. s.	Sec.	μ.	Km.	
1945 Mar. 1	E	Record lost from	00 00 ..	..	..	..	
		to	03 11 ..	..	..	..	
,, 1	N	e	04 56 12	..	..	..	Feeble.
	N	1	58 40	..	..	..	
	N	1	59 04	..	..	..	
	N	F	Lost in the following shock.				
,, 1	N	e	05 05 33	..	..	..	Feeble.
	N	F	15 ..	..	..	..	
,, 2	N	eP	10 47 15	..	..	4,545	Slight: Epicentral region, Asia Minor. o=10h. 39m. 34s.
	N	PP	48 58	..	..	..	
	N	S	53 24	..	..	..	
	N	SS	56 20	..	..	..	
	N	Mn	11 05	..	..	..	
	N	F	30 ..	..	..	..	
,, 2	N	i	19 51 59	..	..	..	
	N	e	53 02	..	..	..	
	N	e	55 08	..	..	..	
	N	i	20 00 05	..	..	..	
	N	e	03 12	..	..	..	
	N	F	20 ..	..	..	..	
,, 7	N	e	00 36 12	..	..	..	Feeble.
	N	e	39 01	..	..	..	
	N	Mn	41 ..	..	..	..	
	N	F	50 ..	..	..	..	
,, 7-9	E	Record lost from	19 08 ..	..	..	..	
		to	01 49 ..	..	..	..	
,, 10	E	i	00 52 11	..	..	..	Slight, distant.
	E	i	54 22	..	..	..	
	E	i	55 41	..	..	..	
	N	e	58 08	..	..	..	
	E	1	01 00 07	..	..	..	
	N	i	01 56	..	..	..	
	E	e	04 21	..	..	..	
	N, E	F	Lost while changing chart.				
,, 11-12	E	Record lost from	15 15 ..	..	..	..	
		t	03 09 ..	..	..	..	
,, 11	N	eP	17 51 19	..	..	6,680	Slight. Epc: Banda Sea. o=17h. 45m. 07s. h=600 km.
	N	i	54 49	..	..	..	
	N	PP	56 33	..	..	..	
	N	PPP	58 07	..	..	..	
	N	sS	18 01 47	..	..	..	
	N	SPP	02 17	..	..	..	
	N	i	02 35	..	..	..	
	N	SS	05 14	..	..	..	
	N	F	30 ..	..	..	..	
1945 Mar. 11	N	P	21 48 15	..	..	7,090	Slight. 35°.5 N. 143°.5 E. near Japan. o=01h. 37 m. 44s.
	N	i	48 27	..	..	..	
	N	PP	50 40	..	..	..	
	N	S	56 46	..	..	..	
	N	SP	57 03	..	..	..	
	N	Mn	22 15 04	15	4	..	
	N	F	23 15 ..	..	..	..	
,, 12	N	Record lost from	01 15 ..	..	..	..	
		to	04 26 ..	..	..	..	
,, 12-13	E	Record lost from	14 15 ..	..	..	..	
		to	01 44 ..	..	..	..	
,, 18	N	ePKP	00 17 25	..	..	16,450	Slight. 3°N., 81°.5W. o=17d. 23h. 67 m. 54s.
	E	ePKP	17 29	..	..	..	
	N	iPP	21 06	..	..	..	
	E	iPP	21 07	..	..	..	
	N	i	21 25	..	..	..	
	E	i	21 29	..	..	..	
	N	e	22 46	..	..	..	
	N	Mn	01 27 ..	..	..	..	
	N, E	F	02 09 ..	..	..	..	
,, 18	N	eP	08 09 40	..	..	4,945	Slight C=08h. 01m. 31s.
	E	iP	09 41	..	..	..	
	E	PP	11 26	..	..	..	
	E	S	16 14	..	..	..	
	N	PS	16 27	..	..	..	
	E	PPS	16 39	..	..	..	
	N	SSS	20 21	..	..	..	
	N	Mn	25 ..	..	..	..	
	E	Mn	26 ..	..	..	..	
	N, E	F	50 ..	..	..	..	
,, 18	N	SKKS	19 18 40	..	..	..	Feeble. distant Roughly 57°N., 167°W. o-18h. 54·7m. (Pasadena).
	E	SKKS	18 41	..	..	..	
	N	L	46 ..	..	..	..	
	N	Mn	56 ..	..	..	..	
	N	F	20 10 ..	..	..	..	
,, 18	E	P	22 36 10	..	..	5,970	Slight. 3°·5N., 125°·7E., near Celebes. o=22h. 26m. 49s.
	N	P	36 12	..	..	..	
	N	S	43 39	..	..	..	
	E	S	43 40	..	..	..	
	N	Mn	23 03 ..	..	..	..	
	N	F	15 ..	..	..	..	
,, 20	E	iP	03 06 01	..	..	4,170	Slight. 36°.5N., 35°.5E., near Adana, Turkey o=07h. 58m. 50s. Epc: Region of 37°N., 35°E. Damage in Turkey (Pasadena).
	N	iP	06 02	..	..	..	
	E	i	06 21	..	..	..	
	E	i	07 24	..	..	..	

COLABA OBSERVATORY, BOMBAY.

March, 1945.

Date.	Compt.	Phase.	M.G.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Mar. 20	N	i	07 26	..	..	..	
	N	PP	07 31	..	..	..	
	E	PP	07 33	..	..	..	
	E	eS	11 48	..	..	..	
	N	iS	11 54	..	..	..	
	E	i	14 57	..	..	..	
	N	ScS	16 18	..	..	..	
	N	L	19 ..	..	..	..	
	E	L	19 15	..	..	..	
	N	Mn	22 34	19	8	..	
	E	Mn	24 23	15	5	..	
	N, E	F	09 10	..	..	..	
,, 23-34	N	ePP	23 32 24	..	..	11,560	Moderate, 62°S 160°E,. South of Tasmania. o 23h. 14. 10s.
	N	PPP	34 39	..	..	..	
	E	i	35 09	..	..	..	
	N	SKS	38 49	..	..	..	
	E	SKS	38 51	..	..	..	
	N, E	iSP	41 32	2	..	..	
	N, E	PPS	42 24	..	..	..	
	N, E	SS	47 14	..	..	..	
	E	G?	56 54	..	..	..	
	N	L	00 02 17	..	..	..	
	E	M1	02 02	22	31		
	N	M1	08 12	19	50	..	
	E	M2	10 29	16	14	..	
	N	M2	12 58	16	31	..	
	N, E	F	Lost.				
,, 24-25	N	Record-					
		lost from	01 15 ..	..	..	..	
		to	04 11 ..	..	..	..	
,, 24-25	E	Record					
		lost from	01 28 ..	..	..	..	
		to	04 24 ..	..	.	..	
,, 26	N	e	00 20 ..	..	..	..	Surface waves.
	N	F	30 ..	..	..	..	
,, 26	N	e	00 39 24	..	..	..	Feeble.
	N	e	39 56	..	..	..	

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Mar. 26	N	F	50 ..	..	..	..	
28	N	eP	13 15	..	..	8,335	Feeble 5° S., 146°E. near Papua. o 13h. 03m. 20s.
	N	eS	24 34	..	..	..	
	N	PS	25 14	..	..	..	
	N	PPS	25 37	..	..	..	
	N	F	14 30 ..	..	..	..	
,, 29-30	E	Record lost from	13 47 ..	..	..	..	
		to	01 31	..	..	..	
,, 30-31	E	Record lost from	11 16 ..	..	..	..	
		to	02 43..	..	..	..	
,, 31	N	eP	06 54 37	..	..	5,860	Slight.
	E	iP					
	E	i	54 49	..	..	..	
	N, E	(PP)	56 39	..	..	..	
	E	i	56 49	..	..	..	
	N	e	58 15	..	..	..	
	E	i	58 17	..	..	..	
	N, E	(S)	07 02 01	..	..	..	
	N	i	02 30	..	..	..	
	E	i	02 32	..	..	..	
	N	i	06 15	..	..	..	
	E	i	06 21	..	..	..	
	E	Mn	15 ..	..	..	..	
	N	Mn	16 11	14	5	..	
	N, E	F	45 ..	..	..	..	
31-Apr. 1	E	Record lost from	13 15 ..	..	..	..	
		to	00 00 ..	..	..	..	
,, 31	N	e	22 14 24	..	..	..	Slight.
	N	e	15 29	..	..	..	
	N	e	19 35	..	..	..	
	N	e	20 58	..	..	..	
	N	Mn	30 ..	..	..	..	
	N	F	50 ..	..	..	..	

COLABA OBSERVATORY,
BOMBAY.

S. R. SAVUR,
Director.

ALIPORE OBSERVATORY, CALCUTTA.

January, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945 Jan. 1	N	eS	01 43 37	..	..	..	Feeble.
		F	Lost in microseisms.				
,, 1	N	e(S)	13 40 48	..	..	..	Slight.
		i	41 42	..	..	..	
		i	42 07	..	..	..	
		Mn	44 14	..	..	..	
		F	Lost in microseisms.				
,, 1	N	e(S)	15 20 22	..	..	..	Slight.
		i	21 16	..	..	..	
		i	21 42	..	..	..	
		Mn	23 48	..	..	..	
		F	Lost in microseisms.				
,, 2	N	e	02 15 08	..	..	..	Feeble.
		F	Lost in microseisms.				
,, 3	N	e	14 14 26	..	..	:	Slight, near.
		F	21 ..	..	..	..	
,, 4	N	eP	05 23 16	..	..	1090	Slight.
		iS	25 06	..	..	..	
		F	Lost due to congestion of lines.				
,, 4	N	e	10 37 09	..	..	..	Feeble.
		F	11 05 ..	..	..	..	
,, 6	N	e	00 27 34	..	..	..	Feeble.
		F	Lost while changing chart.				
,, 9	N	e	21 38 19	..	..	..	Slight, distant.
		F	22 24 ..	..	..	..	
,, 11	N	e	02 09 34	..	..	..	Slight.
		iS	14 31	..	..	..	
		i	15 24	..	..	..	
		i	20 25	..	..	..	
		F	Lost in microseisms.				
,, 12	N	iP	18 46 43	..	..	4620	Moderate. First movement-North.
		iPP	48 15	..	..	..	
		iPPP	48 43	..	..	..	
		iS	53 07	..	..	..	
		iSSS	56 37	..	..	..	
		L	59 25	..	..	..	
		M	19 02 35	..	..	..	
1945 Jan. 12	N	Mn	06 45	16	222	..	
		F	Lost in microseisms.				
,, 13	N	e	08 23 28	..	..	..	Slight, distant.
		Mn	52 45	..	..	..	
		F	Lost in microseisms.				
,, 13	N	eP	12 04 34	..	..	4360	Slight.
		eS	10 32	..	..	..	
		F	Lost in microseisms.				
,, 14	N	e	06 49 36	..	..	..	Feeble.
		F	Lost in microseisms.				
,, 14	N	e	13 08 20	..	..	..	Feeble.
		F	Lost in microseisms.				
,, 15	N	e	05 43 38	..	..	..	Feeble.
		F	Lost in microseisms.				
,, 15	N	e	17 32 55	..	..	..	Feeble.
		F	Lost in microseisms.				
,, 16	N	eP	13 45 28	..	..	..	Slight Absolute times uncertain.
		iS	51 55	..	..	..	
		iSSS	55 49	..	..	..	
		M	14 02 29	..	..	..	
		Mn	05 59	15	43	..	
		F	Lost in microseisms.				
,, 17	N	e	15 12 21	..	..	..	Slight.
		iS	16 08	..	..	..	
		Mn	36 54	..	..	..	
		F	16 09 ..	..	..	..	
,, 21	N	e	05 10 39	..	..	..	Feeble.
		e	15 07	..	..	..	
		F	Lost.				
,, 26	N	e	21 21 51	..	..	..	Slight, distant.
		F	Lost				
,, 27	N	e	19 14 07	..	..	..	Slight, distant.
		e	19 ..	..	..	..	
		F	Lost.				
,, 29	N	e	21 08 13	..	..	..	Slight.
		eS	13 55	..	..	..	
		eSS	16 10	..	..	..	
		F	Lost				

February, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945 Feb. 1	N	e	10 49 16	..	..	..	Slight, distant.
		e	11 00 16	..	..	..	
		F	Lost in microseisms				
Feb. 6	N	e	15 21 43	..	..	..	Slight, near.
		i	23 14	..	..	..	
		F	42 ..	..	..	..	

ALIPORE OBSERVATORY, CALCUTTA.

February, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Feb. 7	N	e	16 15 15	..	..	..	Slight. near.
		F	35 ..	..	..	..	
,, 10	N	IP	05 08 37	..	..	5,335	Moderate. First movement South. Surface waves poor
		iPcP	08 10	.	..	..	
		IPP	08 22	..	..	..	
		IS	13 34	..	..	..	
		ISS	16 47	..	..	..	
		F	Lost in microseisms				
Feb. 11	N	e	21 13 21	..	..	..	Feeble.
		F	48 ..	..	..	..	
,, 16	N	i	11 15 56	..	..	..	Slight, near.
		F	29 ..	..	..	..	
,, 18	N	eP	10 16 56	..	..	..	Slight.
		ePP	18 44	..	..	..	
		ePPP	19 32	..	..	..	
		iS	24 05	..	..	..	
1945							
Feb. 18		ScS	25 50	..	..	..	
		iSS	27 25	..	..	..	
		iSSS	28 42	..	..	..	
		L	31 33	..	..	..	
		M	36 05	..	..	..	
		F	Lost in microseisms.				
,, 25	N	e	01 51 40	..	..	..	Feeble.
		F	02 16 ..	..	..	..	
,, 26	N	eP	22 23 41	..	..	5445	Slight. Absolute times uncertain.
		ePP	25 29	...	..	..	
		IS	30 50	..	..	..	
		ScS	33 35	..	..	..	
		iSS	34 09	..	..	..	
		ISSS	35 30	..	..	..	
		F	Lost in microseisms.				
,, 28	N	e	23 20 33	..	..	..	Slight, near.
		F	53 ..	..	..	..	

March, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945							
Mar. 1	N	e	04 49 58	..	..	..	Slight, near.
		F	05 12 ..	..	..	..	
,, 2	N	e	10 55 43	..	..	..	Slight, distant.
		Mn	11 03 56	..	..	..	
		F	55 ..	..	..	..	Slight.
,, 11	N	e	17 53 06	..	..	..	
		i	59 14	..	..	..	
		F	18 40 ..	..	..	..	
,, 11	N	eP	24 45 44	..	..	5100	Slight.
		ePPP	49 04	..	..	..	
		iS	53 34	..	..	..	
		ISS	56 38	..	..	..	
		ISSS	57 54	..	..	..	
		eL	22 00 34	..	..	..	
		M	05 16	..	..	..	
		Mn	13 04	..	..	..	
		F	Lost.				
,, 18	N	e	00 17 45	..	..	..	Slight, distant.
		F	Lost while changing chart.				
1945							
Mar. 18	N	e	08 21 21	..	..	..	Slight.
		F	Lost in microseisms.				
,, 18	N	S	22 40 25	..	..	..	Slight.
		F	23 20 ..	..	..	..	
,, 20	N	ePP	08 08 15	..	..	..	Slight.
		iS	14 21	..	..	..	
		F	Lost in microseisms.				
,, 23-24	N	SKS	23 38 41	..	..	11020	Slight.
		iPS	40 52	..	..	..	
		iPPS	41 44	..	..	..	
		iSS	46 24	..	..	..	
		eL	00 01 59	..	..	..	
		M	10 24	..	..	..	
		F	Lost while changing chart				
,, 31	N	e	06 54 10	..	..	..	Slight, near.
		i	59 15	..	..	..	
		F	Lost in microseisms.				
,, 31	N	e	22 16 33	..	..	..	Feeble.
		F	Lost in microseisms.				

METEOROLOGICAL OFFICE,
ALIPORE, CALCUTTA.

K. N. RAO,
Meteorologist.

COLOMBO OBSERVATORY, CEYLON.

January, 1945.

Date,	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Jan. 1-2	E	Record					
		lost from	12 49 ..		..	..	
		to	00 27 ..	..	..	..	
" 2-3	E	Record					
		lost from	16 57 ..	..	..	..	
		to	00 34 ..	..	..	..	
" 12	E	P	18 48 05	..	..	..	Absolute times uncertain.
		S	56 08	..	..	..	
		L	19 10 ..	..	..	..	
		Mn	14 30	..	0·8	..	
		F	20 15 ..	..	..	..	
" 13	E	eS	08 28 ..	..	..	..	
		Mn	40 ..	..	∠0·5	..	
		F	09 20 ..	..	..	..	
" 13	E	P	12 05 35	..	..	..	
		S	12 20	..	..	..	
		Mn	28 ..	..	..	..	
		F	45 ..	..	..	..	
" 16	E	e	14 06 ..	..	..	..	
		F	35 ..	..	..	..	
1945			h. m. s.	Sec.	μ	Km.	
Jan. 00-17	E	P	15 09 24	..	..	..	
		S	16 00	..	..	..	
		Mn	32 30	..	∠0·5		
		F	58 ..	..	..	..	
" 21-22	E	Record					
		lost from	10 42 ..	..	..	..	
		to	00 17 ..	..	..	..	
" 22	E	e	08 16 ..	..	..	..	
		F	09 58 ..	..	..	..	
" 24-25	E	Record lost from	22 02 ..	..	..	..	
		to	00 32 ..	..	..	..	
" 25	E	eP	01 10 ..	..	..	..	
		Mn	25 03	..	∠0·5	..	
		F	Lost in the following shock.				
" 25	E	P	01 39 ..	..	..	..	
		F	Lost due to congestion of lines.				
" 25-26	E	Record					
		lost from	06 30 ..	..	..	..	
		to	04 30 ..	..	..	..	
" 29-30	E	Record					
		lost from	11	..	..	..	
		to	00 22 ..	..	..	..	
" 30-31	E	Record lost intermittently for about 15 hours					

February, 1945.

Date,	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
Feb. 1	E	e	11 20 ..	..	..	..	
		F	50 ..	..	..	..	
" 1	E	P	12 27 ..	..	..	..	
		S	37(30)	..	..	..	
		L	58 ..	..	..	..	
		Mn	13 05 (30)	..	∠0·5	..	
		F	40 ..	..	..	..	
" 5-6	E	Reocrd					
		lost from	06 02 ..	..	..	..	
		to	00 33 ..	..	..	..	
		lost from	23 02 ..	..	..	..	
		to	00 24 ..	..	..	..	
" 8	E	Record					
		lost from	00 21 ..	..	..	..	
		to	05 ..	..	..	..	
" 8	E	e	14 10 ..	..	..	..	
		F	15 10 ..	..	..	..	
Feb. 10	E	P	05 08 30	..	..	..	
		S	17 07	..	..	..	
		L	37 ..	..	..	..	
		Mn	40 21	..	..	45	
		F	08 20 ..	..	..	..	
" 12-14	E	Record					
		lost from	16 12 ..	..	..	..	
		to	00 16 ..	..	..	..	
" 16-17	E	Record					
		lost from	12 07 ..	..	..	..	
		tp	00 09 ..	..	..	..	
" 17-18	E	Record					
		lost from	02 00 ..	..	..	..	
		to	00 22 ..	..	..	..	
" 18-19	E	Record					
		lost from	06 12 ..	..	..	..	
		to	00 13 ..	..	..	..	

COLOMBO OBSERVATORY, CEYLON.

February, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km	
Feb. 21-22	E	Record lost from	10 04 ..	..	..	..	
		to	00 32 ..	..	..	..	
" 25-26	E	Record lost from	12 55 ..	..	..	..	
		to	00 30 ..	..	..	..	
Feb. 26	E	P	22 24 57	..	..	..	
		S	33 28	..	..	..	
		Mn	55 52	..	<0·5	..	
		F	23 50 ..	..	..	..	
" 28	E	Record lost from	08 36 ..	..	..	..	
		to	00 25 ..	..	..	..	

March, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945							
Mar. 1-2	E	Record lost from	18 01 ..	..	..	..	
		to	00 28 ..	..	..	..	
" 2	E	P	10 49 03	..	..	..	
		S	.. 56 26	..	..	..	
		L	11 12 15	..	..	..	
		Mn	17 ..	..	0·5	..	
		F	50 ..	..		..	
" 8-9	E	Record lost from	22 14 ..	..	..	..	
		to	00 17 ..	..	..	..	
" 10	E	P	00 52 (30)	..	..	..	
		Mn	(01) (16)..	..	0·5	..	
		F	45 ..	..	..	..	
" 11	E	P	17 53 16	..		..	
		i	.. 55 14	..	..	..	
		F	18 40 ..	..	..	..	
" 11	E	P	21 48 29	..	..	..	
		S	.. 57 14	..	..	..	
		M	22 22 (30)	..	0·5	..	
		F	Lost.				
" 11-12	E	Reocrd lost from	22 40 ..	..	..	..	
		to	00 32 ..	..	..	..	
" 18	E	i	00 30 ..	..	..	..	
		Mn	01 19(30)	..	0·5	..	
		F	02 00	..	..	..	
Mar. 18	E	P	22 35 12	..	..	..	
		S	.. 42 52	..	..	..	
		F	23 10	..		..	
" 20	E	P	08 08 ..	..	..	..	
		Mn	32 ..	..	0·5	..	
		F	lost due to congestion of lires.				
" 23-24	E	e	23 27 38	..	..	..	
		SKS	.. 37 43	..	..	..	
		L	54 38	..	..	..	
		Mn	.. 57 43	..	0·6	—	
		F	02 09 ..	..	..	..	
" 24-25	E	Record lost from	22 25 ..	..	..	..	
		to	00 27 ..	..	..	..	
" 25-26	E	Record lost from	08	..	..	..	
		to	00 22 ..	..	..	..	
" 31	E	P	06 53 40	..	..	..	
		Mn	07 11 22	..	<0·5	..	
		F	.. 30 ..	..	..	..	
" 31	E	P	22 15 32	..	..	..	Phases following P lost.
		F lost.					
31-Apr. 1	E	Record lost from	22 38 ..	..	..	..	
		L to	00 24 ..	..	..	..	

COLOMBO OBSERVATORY,
CEYLON.

D.T.E. DASSANAYAKE,
Superintendent.

HAIG OBSERVATORY, SURVEY OF INDIA, DEHRADUN.

Date.	Comp.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
January, 1945.							
1945			h. m. s.	Sec.	On trace in inch	K.m.	
Jan. 9	N	iP	00 36 04	..	..	..	Slight Local
		F	36	..	..	..	Felt, at Chakrata.
.. 11	N	e	02 13 50	..	..	..	
		F	47	..	..	..	
1945 Jan. 12	N	e?	18-54 02	..	..	..	
		e	58 03	..	..	..	
		e L?	19 03 13	..	..	..	
		M	05 03	..	..	..	
		M	06 38	..	..	..	
		F	40 ..	..	..	..	
February, 1945.							
Feb. 10	N	eP	05 06 41	..	..	5745	
		e(PP?)	08 38	..	..	..	
		iS	14 03	..	..	..	
		e(SS?)	18 03	..	..	..	
		e	23 33	..	..	..	
		e(L?)	24 03	..	..	..	
Feb. 10		e(M?.)	28 03	..	..	..	
		M	30 23	..	..	..	
		F	06 15 ..	..	..	..	
" 18	N	e	10 24 47	..	..	..	
		L	37 28	..	..	..	
		M	41 12	..	..	..	
		F	11 06 ..	..	..	..	

March, 1945.

No shocks were recorded during 1945.

DEHRA DUN.

J. de GRAAFF HUNTER,
C.I.E., Sc.D., F.R. S.,
Director, War Research, Survey of India.

NIZAMIAH OBSERVATORY, HYDERABAD, DECCAN.

January, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Jan. 1	N	eP	13 41 21	..	..	1820	
	N, E	S	44 20	..	..	..	
	N	L	45 36	..	..	..	
	E	M	46 32	7	2	..	
	N	M	47 00	6	2	..	
,, 1	N	S	15 24 01	..	..	..	
	E	M	25 46	7	3	..	
	N	M	26 45	6	2	..	
,, 3	N	M	14 18 14	9	2	..	
,, 4	N	P	05 24 12	..	..	..	
		iSS	27 16	..	..	..	
		L	28 36	..	..	..	
		M	29 48	6	3	..	
	E	M	30 20	8	3	..	
,, 4	N	eP	10 37 06	..	..	2560	
		eS	41 09	..	..	..	
		L	43 31	..	..	..	
		M	45 34	8	2	..	
,, 12	N	P	18 47 55	..	..	6140	
		PcP	49 02	..	..	..	
		S	55 39	..	..	..	
		PS	55 53	..	..	..	
1945			h. m. s.	Sec.	μ	Km.	
Jan. 12		ScS	57 47	..	..	..	
		SS	59 33	..	..	..	
		L	19 05 32	..	..	..	
		M	08 08	91	71	..	
,, 13	N	S	08 29 38	..	..	..	
		M	41 48	16	10	..	
,, 13	N	S	12 12 35	..	..	..	
		M	32 28	9	2	..	
,, 15	N	M	05 51 43	16	3	..	
,, 15	N	eP	17 26 44	..	..	3000	
		eS	31 20	..	..	..	
		M	38 05	9	2	..	
,, 16	N	P	13 46 11	..	..	5970	
		PS	53 49		..	..	
		SS	57 28	..	..	..	
		L	14 03 21	..	..	..	
		M	08 29	15	8	..	
,, 29	N	S	21 16 06	..	..	..	
		PS	16 21	..	..	..	
		SS	19 48	..	..	..	
		M	32 21	16	4	..	

February, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
Feb. 10	N	P	05 07 47	..	..	6630	
		PP	09 47	..	..	..	
		PS	15 58	..	..	..	
		i	16 12	..	..	..	
		SS	19 40	..	..	..	
		L	26 37	..	..	..	
		M	31 34	12	3	..	
,, 18	N	P	10 18 06	..	..	6640	
		S	26 18	..	..	..	
		PS	26 28	..	..	..	
		M	43 23	18	4	..	
Feb. 26	N	eP	22 24 35	..	..	6740	
		PcP	25 06	..	..	..	
		eS	32 52	..	..	..	
		PS	33 11	..	..	...	
,, 26	N	ScS	22 34 01	..	..	..	
		SS	37 11	..	..	..	
		M	50 11	16	4	..	
,, 28	N	M	17 39 49	18	4	..	
,, 28	N	P	23 23 50	..	..	2450	
		PP	24 06	..	..	..	
		S	27 45	..	..	..	

March, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
Mr. 2	N	eP	10 47 51	..	..	4960	
		S	54 27	..	..	..	
		PS	54 40	..	..	..	
		M	11 05 21	15	3	..	
,, 20	N	P	08 05 44	..	..	4090	
March. 20		PcP	08 32	..	..	..	
		S	13 04	..	..	..	
		M	26 31	11	2	..	
,, 24	N	M	07 57 37	15	4	..	
,, 29	N	M	23 23 24	8	2	..	

NIZAMIAH OBSERVATORY, HYDERABAD, DECCAN.

March, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.	Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.					h. m. s.	Sec.	μ	K.m.	
Mar. 31	N	eP	06 53 28	..	..	6140		Mar. 31		M	15 23	18	7	..	
		pcP	54 33	..	..	..									
		PP	55 40	..	..	..		,, 31	N	pP	22 16 30	..	..	5090	
		S	07 01 13	..	..	..				S	21 33	..	..	..	
		SS	05 03	..	..	..				M	31 48	12	3	..	
		L	10 52	..	..	..									

NIZAMIAH OBSERVATORY, HYDERABAD,
DECCAN.

AKBAR ALI,
Director.

KODAIKANAL OBSERVATORY, KODAIKANAL

January, 1945.

Date	Compt.	Phase	G.M.T.*	Per.	Amp	Δ	Remarks
1945			h m s	Sec	μ	km.	
Jan. 1	E	e	15 33 34	..	..	..	
		F	47 04	..	..	..	
,, 4	E						A feeble shock about 05h 20m
,, 6	E	e	00 20 50				
		e	26 20	..	..	..	
		F	Lost				
,, 9	E	eP	21 22 40	..	..	4265	Feeble
		es	28 35	..	..	..	
		F	22 22 ..	..	..	..	
,, 11	E	eP	02 11 01	..	..	3510	
		es	16 01	..	..	..	
		F	47 ..	..	..	..	
,, 12	E	iP	18 48 15	..	..	6620	Moderate
		PP	50 25	..	..	..	
		iS	56 20	..	..	..	
		SS	19 00 20	..	..	..	
		L	07 15	..	..	..	
		M	12 15	30	54	..	
		F	21 30 ..	..	..	..	
,, 13	E	eP	08 21 45	..	..	6610	Slight
		P	23 55	..	..	..	
		es	29 55	..	..	..	
		SS	33 35	..	..	..	
		L	39 50	..	..	..	
		M	44 22	9	17	..	
		F	09 43 ..	..	..	..	
,, 13	E	iP	12 06 45	..	..	..	Slight
		e	08 35	..	..	..	
		I	14 13	..	..	..	
		(SS)	17 38	..	..	..	
		L	22 08	..	..	..	
		M	26 18	20	40	..	
1945			h. m. s.	Sec.	μ	Km.	
Jan. 13		F	Lost.				
,, 15	E	eP	17 23 22	..	..	4365	Feeble.
		eS	29 37	..	..	..	
		L	35 27	..	..	..	
		M	39 07	17	16	..	
		F	18 00 ..	..	..	..	
,, 16	E	iP	13 52 10	..	..	6580	Slight.
		PP	54 20	..	..	..	
		PS	14 00 40	..	..	..	
		L	11 40	..	..	..	
		M	17 ..	15	24	..	
		F	53 ..	..	..	..	
,, 17	E	eP	15 20 49	..	..	4855	Slight.
		eS	27 19	..	..	..	
		SS	30 19	..	..	..	
		L	33 59	..	..	..	
		M	37 39	15	24	..	
		F	56 ..	..	..	..	
,, 18	E	e	22 15 24	..	..	..	
		e	20 06	..	..	..	
		F	35 ..	..	..	..	
,, 27	E	e	18 15 02	..	..	..	
		F	53 ..	..	..	..	
,, 29	E	eP	21 08 48	..	..	5200	Feeble.
		PP	10 36	..	..	..	
		iS	15 38	..	..	..	
		SS	19 03	..	..	..	
		L	23 25	..	..	..	
		M	27 35	17	17	..	
		F	52 ..	..	..	..	

*Absolute times uncertain.

February, 1945.

Date	Compt.	Phase	G.M.T.*	Per.	Amp	Δ	Remarks
Feb. 10		iP	05 08 32	..	..	7020	Moderate
		PP	10 52	..	..	..	
		iS	17 04	..	..	..	
		SS	21 04	..	..	..	
		L	28 34	..	..	..	
		M	33 49	15	38	..	
		F	05 54 ..	..	..	..	
,, 18		iP	10 17 16	..	..	7560	Slight
		PP	19 46	..	..	..	
		PS	26 16	..	..	..	
Feb. 18		(SS)	30 36	..	..	..	
		L	39 26	..	..	..	
		M	44 56	20	18	..	
		F	11 22 ..	..	..	..	
,, 26		iP	22 25 02	..	..	7090	Moderate.
		iS	33 37	..	..	..	
		SS	38 07	..	..	..	
		L	45 37	..	..	..	
		M	51 07	7	7	..	
		F	23 47 ..	..	..	..	

*Absolute times uncertain.

KODAIKANAL OBSERVATORY, KODAIKANAL

March, 1945.

Date	Compt.	Phase	G.M.T.	Per.	Amp.	Δ	Remarks
1945			* h. m. s.	Sec.	μ	Km.	
Mar. 10		e	00 50 30	..	..	..	
		F	01 30 ..	..	..	..	
„ 11		1P	17 51 40	..	..	5380	Moderate.
		PP	53 40	..	..	..	
		1S	58 40	..	..	..	
		SS	18 01 50	..	..	..	
		L	06 ..	..	..	..	
		M	10 ..	24	11	..	
		F	32 ..	..	..	..	
„ 11		1P	21 48 00	..	..	6890	Moderate.
		1S	56 25	..	..	..	
		SS	22 00 25	..	..	..	
		L	07 25	..	..	..	
		M	12 15	17	9	..	
		F	23 08 ..	..	..	..	
18		e?	08 16 59	..	..	..	
		F	09 02 ..	..	..	..	
„ 20		eP	08 00 30	..	..	5380	Slight.
		PP	02 30	..	..	..	
1945			* h. m. s.	Sec.	μ	Km.	
Mar. 20		eS	07 40	..	..	..	
		SS	11 30	..	..	..	
		L	15 10	..	..	..	
		M	19 20	12	3	..	
		F	09 18 ..	..	..	..	
„ 23							A moderate shock about 23h. 30 m. G.M.T.
„ 31		eP	06 53 00	..	..	5380	Moderate.
		PP	59 50	..	..	..	
		eS	07 05 00	..	..	..	
		SS	08 10	..	..	..	
		L	12 20	..	..	..	
		M	16 20	30	18	..	
		F	43 ..	..	..	..	
„ 31		eP	22 00 55	..	..	4355	Slight.
		PP	02 25	..	..	..	
		eS	06 55	..	..	..	
		L	12 45	..	..	..	
		M	16 15	..	17	6	
		F	37 ..	..	..	..	

*Absolute times uncertain

KODAIKANAL OBSERVATORY,
KODAIKANAL.

A. L. NARAYAN,
Director.

The following table contains a list of earthquakes reported by voluntary observer vers from various stations.

Place at which felt	Date	G.M.T. of earth-quake.	Dura-tion.	Inten-sity Rossi-Forel scale.	No.of shocks.	Remakrs
		h. m.	Secs.			
Kabul . .	Feb.13	23 25	2 } 10 }	6	2	
Kabul . .	,, 17	10 58	2	4	1	
British Legation Nepal. .	,, 25	01 49	2	6	1	
Kabul (British Legation) .	Mar 24	19 48	10	7	1	
Gauhati .	,, 25	04 05	1	4	1	

S. P. VENKITESHWARAN,
Meteorologist, Poona.

MGIPND—IS—202 D.G.Obs.—JC. 2237—5-12-60—150

SEISMOLOGICAL BULLETIN

ERRATA FOR JANUARY to MARCH 1945.

Page	Date	Column	Incorrect	correct.
1	-	Latitude	Colombo 60°.54'N	6°.54'N
1	-	Longitude	Tab.1 Bombay-12°49'E	72°49'E
1	-	Longitude	Tab.1 Colombo-19°52'E	79°52'E
1	-	Longitude	Tab.1 Hyderabad-28°27' E	78°27' E
1	-	Mass	Tab.2.Below mass blank	Kg.
1	-	Remarks	" Kg	Blank
3	Mar.2	Phase,Time	Blank 112..	F 1132..
4	Mar.18	Phase	N blank 003013	N1 003013
5	Jan.1-11	Date	1-11	1
5	Jan.3	Compt.	N after NF 1425	To be deteted
5	Jan.16	Remarks.	0=13 h 36	0= 13h 36m 59s.
7	Feb.23-24	Time	22 05	22 05..
8	Mar.18	Remarks	Against distance 4945 C= 08 etc.	0= 08 h etc.
9	-	Time	MGT	G.M.T.
9	Mar.23-24	Remarks	0 23h 14m 10s	0=23h 14m 10s
9	Mar.28	Remarks	0 13h etc.	0= 13h etc.
11	Mar.11	Date & Time	11 NeP244544	12 N eP 004544
12	Jan	Amp	/u	mm
12	Jan.00-17	Date	00-17	17
13	Feb	Amp	/u	mm
13	Mar.31	Amp	Mn.071122/<0.	Mn.071122/<0.5
13	Mar.31) Apl. 1)	Date	L	Delete

Dhar./

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

SEISMOLOGICAL BULLETIN

April—June, 1945

CONTENTS

PUBLISHED UNDER THE DIRECTION OF

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Director General of Observatories

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SEISMOLOGICAL BULLETIN

April-June, 1945

INTRODUCTION

Till the end of 1937, the seismic data from the observatories of the India Meteorological Department were being published annually as Part D of the Annual Summary of the India Weather Review. Since 1938, the data are being published in the present series of the Quarterly Seismological Bulletin. With the kind co-operation of the Surveyor General of India, the Director of the Nizamiah Observatory, Hyderabad, and of the Superintendent, Colombo Observatory, it has been possible to incorporate in the bulletin, the data of their respective observatories, *viz.*, Dehra Dun, Hyderabad and Colombo. The instrumental seismological data and the non-instrumental voluntary observations are collected and edited at the Meteorological Office, Poona.

TABLE 1.

List of Seismograph Stations.

Station	Latitude	Longitude	Height above M. S. L.	Lithologic foundation	Officer-i n-Charge of Observatory
New Delhi	28° 35′N.	77° 12′E.	207 meters.	Massive Quartzites	Superintending Meteorologis*.
Bombay	18° 54′ N.	72° 49′ E.	6 meters	Deccan Trap	Director.
Calcutta	22° 32′ N.	88° 20′ E	(1) 7 meters (2) 6 meters	Alluvium	Director.
Colombo	6° 54′ N.	79° 52′ E.	7 meters	Beach-Sand resting on gneiss probably decomposed	Superintendent.
Dehra Dun	30° 19′ N.	78° 03′ E.	682 meters	Gravel	Director, War Research, Survey of India.
Hyderabad	17° 26′ N.	78° 27′ E.	528 meters	Grenite	Director.
Kodaikanal	10° 14′ N.	77° 28′ E.	2448 meters	Rock	Director.

(1) Mine-Shaw (2) Omori-Ewing.

TABLE 2.

The instruments and their constants.

Station	Component	Type of instrument	Mass	Period	Static magnification	Damping radio	Remarks
			Kg	Secs			
New Delhi	E	Omori-Ewing	45	32	30	..	..
	N	Milne-Shaw	0·47	12	250	20:1	
Bombay	N	Milne-Shaw	0·45	12	250	10:1	
	E	Milne-Shaw	0·45	12	350	15:1*	*For April.
						25·1†	†For May and June.
Calcutta	N	Milne-Shaw	0·45	12	250	20:1	
	N	Omori-Ewing	50	15	32	..	
	E	Omori-Ewing	50	21	30	..	
Colombo	E	Milne-Shaw	0·45	12	250	20:1	
Dehra Dun	N	Omori	50	30	12	..	
Hyderabad	N	Milne-Shaw	0·45	12	250	20:1	
	E	Milne-Shaw	0·45	12	250	20:1	
odaikanal	E	Milne Shaw	0·45	10	250	20:1	

THE OBSERVATORY, NEW DELHI.

April, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.	
Apr 1	N	e	06 04 44	..	..	..	Slight. Very distant.
		F	08 44 ..	..	..	..	Slight. Distant. Surface waves.
,, 4	N	e	01 11 42	..	..	..	
		F	33 ..	..	..	..	
,, 6	N	i	11 03 57	..	..	..	Slight. Distant.
		i	22 16	..	..	..	
		F	48 ..	..	..	..	
.. 7	N	i	02 55 01	..	..	..	Slight. Near.
		i	55 53	..	..	..	
		i	56 02	..	..	..	
		i	56 29	..	..	..	
		F	03 13 ..	..	..	..	
	N	i	21 27 46	..	..	..	Slight-Distant.
		M	45 45	..	..	..	
		F	22 36 ..	..	..	..	
,, 9	N	iP	01 31 30	..	..	5950	Slight
		eS	39 02	..	..	..	
		PS	39 28	..	..	..	
		SSS	44 06	..	..	..	
		M	51 16	..	..	..	
		F	02 40 ..	..	..	..	
	N	iS	16 29 20	..	..	..	Slight. Distant.
		iSS	32 32	..	..	..	
		M	38 09	..	..	..	
		F	17 58 ..	..	..	..	
,, 1	N	e	16 23 47	..	..	..	Slight Distant, Surface waves.
		F	17 10 ..	..	..	..	
,, 4	N	e	18 47 01	..	..	..	Slight. Distant Surface waves.
		F	19 14 ..	..	..	..	
,, 14	N	e	19 52 06	..	..	..	Slight. Distant. Surface waves.
		F	20 24 ..	..	..	..	
,, 15	N	iP	02 45 58	..	..	7160	Moderate. Direction of first motion north
	E	eP	46 00	..	..	..	
	N,E	PcP	46 33	..	..	..	
	N	PP	48 14	..	..	..	
	N,E	iS	54 37	..	..	..	
	N	PS	54 51	..	..	..	
	N,E	PPS	55 08	..	..	..	
	E	i	58 37	..	..	..	
	N	SS	58 49	..	..	..	
	N	SSS	03 00 53	..	..	..	
	E	M	09 30	..	..	..	
	N	M	10 34	..	..	..	
	E	Mn	11 39	21	200	..	
,, 25	N	Mn	03 13 00	18	96	..	
	E		04 41 ..	..	..	..	
	N	F	06 43 ..	..	..	..	

Date.	Compt.	Phase.	G. M. T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	sec	μ.	Km.	
Apr. 15	N	e	20 57 10	..	..	..	Slight. Distant. Surface waves.
		e	21 08 18	..	..	..	
		F	22 05 ..	..	..	..	
,, 18	N	eP	13 15 46	..	..	7600	Slight.
		eS	24 48	..	..	..	
		PS	25 17	..	..	..	
		SS	29 26	..	..	..	
		L	37 07	..	..	..	
		M	42 01	..	..	..	
		F	14 00 ..	..	..	..	
,, 19	N	i	05 52 47	..	..	..	Slight. Very near.
		i	53 13	..	..	..	
		F	56 ..	..	..	..	
,, 19	N	i	13 19 39	..	..	..	Slight.
		i	20 38	..	..	..	
		i	21 51	..	..	..	
		i	27 46	..	..	..	
		PS	31 41	..	..	..	
		L	44 21	..	..	..	
,, 19	N	M	13 52 38	..	..	..	
		F	16 13 ..	..	..	..	
,, 19		iP	17 50 12	..	..	1750	Slight. Direction of first motion—North.
		PP	50 18	..	..	..	
		iS	53 05	..	..	..	
		SS	53 16	..	..	..	
		L	54 39	..	..	..	
		M	55 51	..	..	..	
	E	M	56 01	..	..	..	
	N	Mn	56 16	17	51	..	
		F	18 52 ..	..	..	..	
,, 20-21	N	e	23 01 04	..	..	..	Slight. Very distant.
		F	00 22 ..	..	..	..	
,, 21	N	i	17 36 58	..	..	..	Slight. Very distant.
		i	37 16	..	..	..	
		i	42 50	..	..	..	
		F	19 17 ..	..	..	..	
,, 22	N	i	04 10 22	..	..	..	Slight, Distant.
		e	28 21	..	..	..	
		F	04 45 ..	..	..	..	
,, 22	N	iS	10 55 33	..	..	..	Slight. Distant.
		i	09 26	..	..	..	
		i	10 51	..	..	..	
		F	11 06 ..	..	..	..	
,, 23	N	i	05 24 15	..	..	..	Slight. Distant.
		i	45 33	..	..	..	
		F	07 76 ..	..	..	..	

THE OBSERVATORY, NEW DELHI.

April, 1945.

Date	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks
			h. m. s.	sec.	μ	Km.	
1945 Apr. 23	N	e	10 45 47	..	..	..	Slight. Near.
		i	46 25	..	..	..	
		F	52 ..	..	..	..	
1945 Apr. 29	N	iS	01 37 02	..	..	3410	Slight.
		e	40 12	..	..	..	
		i	42 05	..	..	..	
		F	03 28 ..	..	..	..	

May, 1945.

Date	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks
			h. m. s.	sec.	μ	Km.	
May 1-2	N	e	22 24 17	..	..	..	Slight. Very distent.
		e	23 24 20	..	..	..	
		F	00 02 ..	..	..	..	
,, 7	N	eP	17 25 05	..	..	6520	Slight.
		iS	33 10	..	..	..	
		PS	33 22	..	..	..	
		S S	37 12	..	..	..	
		F	Lost in microseisms				
,, 9	N	iP	03 40 18	..	..	6000	Slight. Depth of focus about 230 kms.
		i	44 11	..	..	..	
		iS	47 34	..	..	..	
		sS	49 07	..	..	..	
		SS	50 32	..	..	..	
		sSS	51 33	..	..	..	
		F	Lost in microseisms				
,, 10	N	e	19 22 15				Slight. Distant Surface waves
		F	Lost in microseisms.				
,, 11	N	i	16 00 20	..	..	..	Slight. Distant.
		i	03 10	..	..	..	
		F	29 ..				
,, 11	N	e	20 26 37	..	..	..	Slight. Distant.
		F	21 21 ..	..	..	..	
,, 11	N	e	22 21 55	..	..	..	Slight. Distant.
		F	49 ..	..	..	..	
,, 16	N	e	19 09 50	..	..	..	Slight. Distant.
		F	20 29 ..	..	..	..	
,, 17	N	e	18 48 16	..	..	..	Slight. Distant.
		F	19 06 ..	..	..	..	
May 19	N	i	05 09 12	..	..	..	Slight. Near. Disturbed by microseisms.
		i	09 24	..	..	..	
		i	09 45	..	..	..	
		i	10 56	..	..	..	
		F	05 32 ..	..	..	..	
		i	15 35 39	..	..	..	Slight. Very distant.
		i	36 17	..	..	..	
		i	45 21	..	..	..	
		F	18 43 ..	..	..	..	
,, 27		e	21 47 21	..	..	..	Slight.
		e	49 10	..	..	..	
		e	54 37	..	..	..	
		M	22 07 37	..	..	..	
		F	50 ..	..	..	..	
May 29	N	i	17 50 12	..	..	..	Slight. Distant.
		i	52 46	..	..	..	
		F	18 36	..	..	..	
,, 31	N	e	18 21 14	..			Feeble.
		e	28 44	..	..	..	
		M	42 19	..	..	..	
		F	19 02 ..	..	..	..	
,, 31	N	e	23 14 18	..	..		Feeble.
		i	24 38	..	..	..	
		i	26 00	..	..	..	
		i	27 48	..	..		
		i	28 25	..	..	..	
		F	Lost while changing the paper.				

June, 1945.

Date	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks
			h. m. s.	sec.	μ	Km.	
June 1	N	i	15 35 47	..	..	..	Slight. Distant. Surface waves.
		e	57 08	..	..	..	
		F	17 01	..	..	..	
,, 3	N	ePP	13 28 31	..	..	14610	Slight.
		PPS	40 21	..	..	..	
		SS	46 03	..	..	..	
		SSS	51 00	..	..	..	
		M	19 51	..	..	..	
		F	15 43	..	..	..	
June 4	N		12 09 48	..	..	420	Great. Direction of first motion south in N component and west in E component.
	E	iP	09 49	..	..	..	
		i	09 58	..	..	..	
		iS	10 33	..	..	..	felt locally.
		F	Lost in the following shock				
,, 5	N	i	02 26 40	..	..	..	Slight. Near.
		i	27 10	..	..	..	
		F	32 ..	..	..	..	

THE OBSERVATORY, NEW DELHI.

June, 1945.

Date.	Compt.	Phse.	G.M.T.	per.	Amp	Δ	Remar
1945			h. m. s.	sec	μ	Km.	
June 6	N	i	00 48 40	..	..		Slight. distant. Surface waves.
		i	01 18 08	..	..	..	
		F	03 54				
7	N	i	02 09 39	..	..	..	Slight. Distant.
		F	03 11 ..	..	..	..	
,, 13—14	N	M	23 59 40	..	..	..	Slight. Distant.
		F	01 21 ..	..	.	..	
,, 17	N	e	14 18 02	..	..	..	Slight. Very distant.
		F	16 47 ..	..	..	..	
,, 18	N	i	12 18 16	..	..	..	Slight. Distant.
		i	19 33	..	..	..	
		i	20 54			..	
		F	35 ..	..	..	..	
,, 20	N	iP	01 34 02	..	..	6610	Slight.
		iS	42 12	..	..	..	
		M	56 04	..	..	..	
		F	02 57 ..	..	..	..	
,, 20	N	iP	17 45 21	..	..	8850	Slight.
		PP	47 43	..	..	..	
		iS	53 44	..	..	..	
		M	18 07 16	..	..	..	
		F	19 57 ..	..	..	..	
,, 22	N	i	09 28 42	..	..	..	
		iS	35 50	..	..	..	
		sS	36 44	..	..	..	
		SS	39 44	..	..	..	
		sSS	40 49	..	..	..	
		i	48 44	..	..	..	
		F	10 44 ..	..	..	..	
,, 22	N	iP	18 02 00	..	..	500	Great Direction of first motion south.
	E	eP	02 01	..	..	..	

Date.	Compt.	Phase.	G M T	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
June 22	N	P*	18 02 09	..	..	..	
		P*	02 19	..	..	..	
	E	iS	02 52	..	.		
		S*	03 04	.	..	..	
			03 17	..	..	..	
		F	19 47 ..	..	..	..	
	N	F	20 46 ..	.	..	..	
23	N	e	21 24 01	..	..	..	Slight Distent
		F	59 ..	..	..	..	
23	N	e	23 42 43	..	..	..	Slight. Near.
		i	40	..	..	..	
		E	52 ..	..	..	..	
25	N	e	16 14 51	..		..	Slight. Distant.
		F	39 ..	..		..	
,, 27	N	e	13 31 34	..	.	..	Moderate.
		SKKS	39 49	..	..	..	
		PS	43 08	..	..	..	
		i	46 07	..		..	
		SS	50 12	..	..	..	
		SSS	55 01	..	..	..	
		L	14 13 41	..	..	..	
		M	22 4 9				
		F	15 48 ..	..	..	..	
,, 27	N	e	19 20 43	..	..	..	Slight. Distant.
		F	41 ..	..	..	..	
,, 28	N	i	04 39 38	..	..	..	Slight. Near.
		F	05 01 ..	..	..	..	
,, 30	N	PP	05 54 00	..	..	..	Slight
		PPP	58 46	..	..	..	
		i	06 03 08	..	..	..	
		e	11 16	..	..	..	
		(SS)	16 07	..	..	..	
		M	45 10	..	..	..	
		F	08 06 ..	..	..	..	

THE OBSERVATORY,

NEW DELHI.

V. V. SOHONI,

Superintending Meteorologist.

COLABA OBSERVATORY, BOMBAY

April, 1945.

1945			h. m. s.	Sec.	μ	Km.	
Apr. 4-6	E	Record lost					
		from	09 30 ..	..	..	..	
		to	03 26 ..	..	..	..	
,, 7	N	e(P)	02 57 31	..	..	(1545)	Feeble, near. Felt at Srinagar.
	N	e(S)	03 00 05	..	..	..	
	N,E	i(SS)	00 24	..	..	..	
	E	Mn	02 ..	..	..	..	
	N	Mn	03 ..	..	..	..	
	N, E	F	15 ..	..	..	..	
,, 7	E	Mn	11 04 ..	..	..	..	Surface waves.
	E		Lost in the following shock				
,,	E	i	11 04 40	..	..	..	Feeble,
	N	e	05 32	..	..	..	
	E	e	05 34	..	..	..	
	N	e	08 38	..	..	..	
	E	i	08 41	..	..	..	
	N, E	F	30 ..	..	..	..	
,, 9	N	Mn	21 25 ..	..	..	..	Surface waves.
	N	F	50 ..	..	..	..	
,, 10	E	iP	01 32 31	..	..	7035	Slight.
	N	iP	32 32	..	..	..	Epc: In the region of Japan.
,, 10	E	eS	01 40 59	..	..	..	O = 01h. 22m. 03s.
	N	eS	41 02	..	..	..	
	E	SP	41 26	..	..	..	
	N	SP	41 28	..	..	..	
	E	SS	45 14	..	..	..	
	N	i	45 28	..	..	..	
	N, E	M	58 21	..	..	..	
	N. E	F	02 40 ..	..	..	..	
,, 10	N, E	iP	16 24 11	..	..	5210	Slight. Near 25°N., 123° E., in the neighbourhood of Formosa.
	E	PP	25 59	..	..	..	
	N	PP	26 02	..	..	..	
	E	eS	30 59	..	..	..	O = 16h. 15m. 42s.
	N	iS	31 02	..	..	..	
	N	eSS	34 26	..	..	..	
	E	iSS					
	E	Mn	43 21	15	3	..	
	N	Mn	43 38	13	6	..	
	N, E	F	17 30	..	..	..	
,, 11	E	Mn	16 27 ..	..	..	..	Surface waves.
	N	Mn	31 ..	..	..	..	
	N, E	F	17 00 ..	..	..	..	
,, 13	N	Record lost					
		from	01 12 ..	..	..	..	
		to	08 04 ..	..	..	..	

1945			h. m. s.	Sec.	μ	Km.	
Apr. 14	N	Mn	18 53 ..	..	..	..	Surface waves.
	N	F	19 15 ..	..	..	..	
,, 14	N	Mn	19 59 ..	..	..	..	Surface waves.
	N	F	20 30 ..	..	..	..	
,, 15	N, E	iP	0° 47 04	..	..	8410	Moderate.
	N, E	iS	56 42	..	..	..	E.pc. 56° N., 164° E.
	N, E	ScS	57 09	..	..	..	O = 02h. 35.2m.(U.S. C.G.S).
	N, E	SPP	57 29	..	..	..	
	N, E	L	03 10 ..	..	..	..	
	N	M1	16 28	19	167	..	
	E	M1	16 53	20	84	..	
	N	M2	18 45	18	250	..	
	E	M2	18 49	15	92	..	
	N, E	F	07 00 ..	..	..	..	
,, 15	E	Mn	21 17 ..	..	..	..	Surface waves.
	N	Mn	19 ..	..	..	..	
	N, F	F	40 ..				
,, 18	N	iP	13 14 49	..	..	6730	Slight.
	N, E	S	23 01	..	..	..	Near 41° S., 85° E.
	N, E	SS	26 59	..	..	..	O = 13h. 04m. 39s,
	E	L	31 30	..	..	..	
	E	Mn	38 ..	15	4	..	
,, 18	N	M1	13 39 19	17	17	..	
	N	M2	41 54	15	13	..	
	N, E	F	15 00 ..	..	..	..	
,, 19	N, E	PP	13 22 24	..	..	11560	Moderate, Near 23½°S., 172° E.
	E	SKS	28 40	..	..	..	
	N	SKS	28 41	..	..	..	O = 13h, 04m. 04s.
	E	SKKS	29 13	..	..	..	
	N	SKKS	29 17	..	..	..	
	E	i	30 16	..	..	..	
	N, E	PS	31 35	..	..	..	
	N	SS	37 02	..	..	..	
	E	SS	37 07	..	..	..	
	N	Mn	14 12 35	17	19	..	
	N, E	F	15 50 ..	..	..	..	
,, 19	N, E	iP	17 52 08	..	..	2790	Slight.
	N	PP	52 4[illegible]	..	..	..	Near 44° N., 52° E.
	N	O-S	56 28	..	..	..	O = 17h. 46m. 45s.
	E	iS					
	N, E	SS	57 [illegible]7	..	..	..	
	E	iL	59 38	..	..	..	
	N	Mn	18 02 25	21	[illegible]	..	
	E	Mn	05 00	11	5	..	
	N, E	F	25 ..	..	..	..	

COLABA OBSERVATORY, BOMBAY.

April, 1945.

Date	Compt.	Phase.	G.M.T.	Per.	Amp	△	Remarks.
1945			h. m. s.	Sec.	μ.	Km.	
Apr. 20-21	E	i	23 01 04	..	..	..	Slight, distant.
	N	e	01 05	..	..	..	
	N,E	e	05 31	..	..	..	
	E	Mn	44 ..	..	..	..	
	N	Mn	49 ..	..	..	..	
	N,E	F	00 20 ..	..	..	..	
,,21-22	E	Record lost					
		from	03 15 ..	..	..	..	
		to	04 23 ..	..	..	..	
,, 22	N,E	eP	04 01 08	..	.	8380	Slight.
	E	lS	10 44	..	..	..	Near 5° S., 147° E. in the neighbourhood of Papua.
	N	eS	10 45	..	..	..	
	N	PS	11 24	..	..	..	O=0 3h. 49m. 20s.
	E	SS	15 37	..	..	..	
	E	L	25 ..	..	..	..	
	E	Mn	27 ..	..	..	..	
	N,E	F	05 15 ..	..	..	..	
,, 22	E	eP	09 59 22	..	..	5225	Slight,
	N	eP	59 26	..	..	..	Near 3° N. 119°. E. Borneo.
	E	iP	59 28	..	..	..	O=09h. 51m. 23s.
	E	PP	10 01 19	..	..	..	h: 290 km.
	E	PPP	02 07	..	..	..	
	N,E	ScP	04 15	..	..	..	
	N,E	S	05 57	..	..	..	
	E	SS	09 21	..	..	..	
	N	SS	09 26	..	..	..	
	N,E	F	50 ..	..	..	..	
,, 23	E	iP	06 34 34	..	..	9045	Slight.
	N	iP	34 35	..	..	..	6½° S., 153°E., Solomon Islands.
	E	ipP	35 12	..	..	..	
	E	sP	35 27	..	..	..	O=06h. 22m. 34s.

Date	Compt.	Phase.	G.M.T.	Per.	Amp.	Km.	Remarks.
1945			h. m. s.	Sec	μ	Km.	
Apr. 23	N	e	06 38 36	..	..	..	
	E	i					
	NE	iS	44 30	..	..	..	
	E	SP	45 23	..	..	..	
	N	SP	45 24	..	..	..	
	E	sS	45 35	..	..	..	
	E	i	51 01	..	..	..	
	N,E	F	07 30 ..	..	..	..	
23	E	e	10 52 05	..	..	..	Feeble, near. Felt at Simla.
	N	e	52 13	..	..	..	
	E	M	53 ..	..	..	..	
,,	N	M	53 15	..	..	..	
	N,E	F	11 00 ..	..	..	..	
,, 24 25	E	Record lost					
		from	03 15 ..	..	..	..	
		to	01 37 ..	..	..	..	
,, 25	E	Mn	03 00 ..	..	..	..	Surface waves.
		F	20 ..	..	..	..	
,, 5-26	E	Record lost					
		from	13 30 ..	..	..	..	
		to	01 28 ..	..	..	..	
,, 29	N	eP	02 31 35	..	..	3270	Slight,
	E	e	32 18	..	..	..	3° N., 98·1°E., Sumatra.
	N	e	32 20	..	..	..	O=02h. 25m.36s
	N	iS	36 23	..	..	..	
	E	iS	36 24	..	..	..	
	E	Mn	38 43½	7	3	..	
	N	Mn	39 35	10	5	..	
	N,E	F	55 ..	..	..	..	
,, 30	N	e	17 16 06	..	..	..	Feeble.
	E	i	16 07	..	..		
	N,E	F	20 ..	..	..	..	

May, 1945.

Date	Compt.	Phase.	G.M.T.	Per.	Amp.	Km.	Remarks.
May 1	N	e	08 30 ..	..	..	..	Surface waves.
	N	Mn	39 ..	..	..	..	
	E	Mn	43 ..	..	..	..	
	N,E	F	09 00 ..	..	..	..	
" 1	N	e	23 28 ..	..	..	..	Surface waves.
	N	Mn	31 ..	..	..	..	
	N	F	45 ..	..	..	..	
,, 6-7	N	Record lost					
		from	01 18 ..	..	..	..	
		to	01 16 ..	..	..	..	
May 7	E	iP					Feeble
	N	eP	17 25 02	..	..	6655	O=17h.14m.57s
	N, E	S	33 10	..	..	..	
	N, E	F	50 ..	..	..	..	
,, 9	E	i	03 42 01	..	..	..	Slight.
	N	e	42 02	..	..	..	
	E	i	42 53	..	..	..	
	N	e	42 54	..	..	..	
	NE	lS	47 30	..	..	..	
	N	i	49 09	..	..	..	
	N,E	i	50 41	..	..	..	
	N,E	F	04 30 ..	..	..	..	

COLABA OBSERVATORY, BOMBAY.

May, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.	
May 10	E	e	19 16 ..	..	..	..	Surface waves.
	N	e	19 ..	..	..	..	
	N	Mn	24 ..	..	..	..	
	E	Mn	25 ..	..	..	..	
	N, E	F	35 ..	..	..	..	
,, 11	N	e	16 03 25	..	..	..	Surface waves.
	N	Mn	11 ..	..	..	..	
	N	F	20 ..	..	..	..	
,, 11	N	e	20 22 51	..	..	..	Feeble.
	N	e	27 46	..	..	..	
	N	Mn	36 ..	..	..	..	
	N	F	50 ..	..	..	..	
,, 11	N	e	22 29 ..	..	..	..	Feeble.
	N	Mn	31 ..	..	..	..	
	N	F	50 ..	..	..	..	
,, 12	E	e	03 52 08	..	..	..	Feeble.
	N	Mn	57 ..	..	..	..	
	E	Mn	58 ..	..	..	..	
	N, E	F	04 10 ..	..	..	..	
,, 12	N, E	e	04 50 ..	..	..	..	Feeble, surface waves.
	N	Mn	52 ..	..	..	..	
	N, E	F	05 00 ..	..	..	..	
,, 16	N	e	19 09 ..	..	..	..	Slight, distant.
	N	Mn	24 ..	..	..	..	
	N	F	20 15 ..	..	..	..	
	N, E	P	05 07 00	..	..	2110	Slight.
,, 19	N, E	PP	07 15	..	..	..	27° N., 91°.7E. Assam. O=05h. 02m. 39s Felt at Dhubri and Silchar.
	N	eS	10 27	..	..	..	
	E	SS	10 50	..	..	..	
	N	SS	10 53	..	..	..	
	N	Mn	12 57	7	21	..	
	E	Mn	13 01	3	9	..	
	N, E	F	30 ..	..	..	..	
,, 19	E	Mn	16 07 ..	..	..	..	Surface waves.
	N	Mn	09 ..	..	..	..	
	N, E	F	50..	..	..	..	
1945			h. m. s.	sec	μ.	Km.	
May 20	N	e	18 11 32	..	..	..	Feeble.
	E	e	11 35	..	..	..	
	E	e	13 12	..	..	..	
	E	i	18 20	..	..	..	
	N	i	18 21	..	..	..	
	N, E	F	30 ..	..	..	..	
,, 22	N, E	e	00 42 33	..	..	..	Feeble.
	N, E	F	01 05 ..	..	..	..	
,, 22	E	i	07 55 00	..	..	..	Feeble.
	N, E	e	58 26	..	..	..	
	N, E	F	08 15	..	..	..	
,, 23-24	N	Record lost from	09 03 ..	..	..	..	
		to	01 33 ..	..	..	..	
,, 23	E	e	13 56 43	..	..	..	Feeble.
	E	e	59 28	..	..	..	
	E	Mn	14 05 ..	..	..	..	
	E	F	30 ..	..	..	..	
,, 27-28	E	Record lost from	15 41 ..	..	..	..	
		to	01 34 ..	..	..	..	
,, 28-29	E	Record lost from	18 01 ..	..	..	..	
		to	01 23 ..	..	..	..	
,, 29	N	e	17 50 53	..	..	..	Feeble.
	N	i	53 08	..	..	..	
	N	i	56 34	..	..	..	
	N	F	18 20 ..	..	..	..	
,, 31	N	i	18 22 10	..	..	..	Feeble.
	E	i	22 11	..	..	..	
	E	e	30 29	..	..	..	
	E	l	31 01	..	..	..	
	E	Mn	50 ..	..	..	..	
	N, E	F	19 10 ..	..	..	..	

June, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
June 1	E	e	15 37 03	..	..	..	Slight, distant.
	N	e	37 04	..	..	..	
	E	Mn	10 09 25	23	6	..	
	E	F	Lost in the following.				
,, 1	E	Mn	16 40	..	..	..	Surface waves.
	E	F	17 00	..	..	..	
June 3	N	e	13 25 08	..	..	..	Slight.
	N	e	28 52	..	..	..	
	N	Mn	14 34 ..	..	..	..	
	N	F	15 00 ..	..	..	..	
,, 4	E	Record lost from	01 11 ..	..	..	..	
		to	17 40..	..	..	..	

COLABA OBSERVATORY, BOMBAY.

June, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.	
June 4	N	iP	12 12 00	..	..	1320	Moderate. 29° N., 81° E., Border of Nepal and the United Provinces.
,, 4	N		12 06	..	..	..	
	N	S	14 13	..	..	..	
	N	L	15 21	..	..	..	
	N	Mn	17 ..	10	>500	..	O = 12h. 09m.11s
	N	F	14 15 ..	..	..	..	Felt at Mnssoorie, Bareilly, Muktesswar, Dehra Dun and Simla.
,, 4	N	e	12 42 10	..	..	..	Feeble. Probably after shock.
	N	e	44 25	..	..	..	
	N	F	Lost in the coda of the preceding shock.				
,, 13	N, E	eP	23 49 35	..	..	2780	Slight.
	N, E	iS	53 55	..	..	..	Near 5° N., 95° E Sumatra.
	E	L	57 04	..	..	..	
	N	L	57 25	..	..	..	O = 23h 44m.12s.
	N, E	Mn	59 ..	..	..	..	
	N, E	F	Lost in microseism				
,, 20	E	iP	17 46 28	..	..	..	Slight.
	E	e	55 29	..	..	..	
	E	F	Lost in microseisms.				
	N	Record lost					
,, 22	N, E	e	09 29 16	..	..	..	Feeble.
	E	i	37 50	..	..	..	
June 14	N	i	22 37 53	..	..	..	
	N, E	F	10 38 ..	..	..	..	
,, 22	N, E	eP	18 04 05	..	..	2090	Moderate,
	N	iS	06 39	..	..	..	32°. N., 76°.05 E near Chamba.
	E	i	06 47	..	..	..	
	E	i	07 28	..	..	..	O = 18h 00m. 48s
	N	i	07 38	..	..	..	Felt at Peshawar, Rawalpindi, Lahore, Simla and at Chamba.
	E	i	07 48	..	..	..	
	E	L	08 17	..	..	..	
	N	L	08 35	..	..	..	
	E	M	09 24	10	109	..	
	N	M	09 42	8	293	..	
	E	F	19 59 ..	..	..	..	
	N	F	20 06 ..	..	..	..	
,, 27	N	e	13 30 19	..	..	..	Surface waves.
	E	e	13 41 38	..	..	..	
	N, E	F	15 20 ..	..	..	..	
,, 28	N	i	04 39 05	..	..	..	Feeble.
	E	i	39 09	..	..	..	
	N, E	F	Lost in microseisms.				
,, 30	E	e	06 34 ..	..	..	..	Surface waves.
	N	F	07 34 ..	..	..	..	
			Pronounced microseisms through out the record.				

COLABA OBSERVATORY,
BOMBAY.

J. M. SIL,
Director.

ALIPORE OBSERVATORY, CALCUTTA.

April, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.	
Apr. 10	N	e	01 30 57	..	..	..	Slight.
		i	38 28	..	..	..	
		F	Lost in microseisms.				
,, 10	N	e(P)	16 21 35	..	..	..	Slight, distant.
		eSSS	29 23	..	..	..	
		e	32 15	..	..	..	
		F	Lost in microseisms.				
,, 15	N	iP	02 45 59	..	..	6865	Moderate. Direction of first movement south.
		iPP	48 19	..	..	..	
		iPPP	49 20	..	..	..	
		iS	54 29	..	..	..	
		PS	54 59	..	..	..	
		iSS	58 46	..	..	..	
		iSSS	03 00 49	..	..	..	
		eL	05 33	..	..	..	
		M	10 27	..	..	..	
		Mn	16 34	15	..	..	
		F	05 28 ..	..	..	..	
,, 18	N	e	13 16 03	..	..	..	Slight distant.
		eS	23 41	..	..	..	
		Mn	40 13	..	..	..	
		F	Lost in microseisms.				
,, 19	N	e	13 17 58	..	..	..	Slight distant.
		iS	28 05	..	..	..	
		F	Lost in microseisms.				
1945			h. m.s.	sec.	μ	Km.	
Apr. 19	N	eP	17 51 54	..	..	..	Slight.
		i	56 17	..	..	..	
		SS	56 45	..	..	..	
		iSSS	57 18	..	..	..	
		L	58 55	..	..	..	
		M	18 01 17	..	..	..	
		F	48 ..	..	..	..	
,, 21	N	e	00 12 08	..	..	..	Slight, near.
		F	28 ..	..	..	..	
,, 22	N	eS	04 08 09	..	..	..	Feeble.
		F	42 ..	..	..	..	
,, 22	N	eP	09 57 42	..	..	..	Slight.
		iS	10 02 49	..	..	..	
		F	40 ..	..	..	..	
,, 23	N	eP	06 33 22	..	..	..	Slight.
		e	38 33	..	..	..	
		F	Lost in microseisms.				
,, 24	N	e	15 32 26	..	..	..	Feeble.
		F	16 22 ..	..	..	..	
,, 29	N	e(PP)	02 30 51	..	..	..	Slight.
		iS	34 13	..	..	..	
		F	03 13 ..	..	..	..	

May, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
May 9	N	e	03 41 00	..	..	..	Slight, deep.
		iS	45 20	..	..	..	
		F	Lost in microseisms.				
,, 19	N	iP	05 03 54	..	..	467	Slight. Felt at Hills long at 11·30 I.S. T. as moderate shock.
May 19	N	iP*	04 04	..	..	..	
		i-	04 14	..	..	..	
		iS	04 44	..	..	..	
		F	33 ..	..	..	..	

June, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
June 4	N	iP	12 11 34	..	..	989	Great. First movement North. Felt—in Northern India.
		iS	13 15	..	..	..	
		$\overline{iS}$	14 16	..	..	..	
		F	Lost in microseisms.				
,, 13	N	iP	23 48 14	..	..	..	Phases masked in microseisms.
		iS	51 20	..	..	..	
		F	Lost in microseisms.				
June 20	N	e	17 45 02	..	..	..	Slight, distant.
		e	52 59	..	..	..	
		F	Lost in microseisms.				
,, 22	N	eP	09 28 55	..	..	5000	Slight, deep.
		iS	35 39	..	..	..	
		F	Lost in microseisms.				

ALIPORE OBSERVATORY, CALCUTTA.

June, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.	Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.		1945			h. m. s.	sec.	μ	Km.	
June 22	N	iP	18 04 41	..	..	1520	Moderate.	June 28	N	i	04 33 10	..	..	..	Slight, near.
		iS	07 23	..	..	..				i	35 26	..	..	..	
		L	08 13	..	..	..				F	Lost in microseisms.				
		M	09 18	..	..	..									
		Mn	16 53	10	228	..									
		F	Lost in microseisms.												

METEOROLOGICAL OFFICE,
ALIPORE, CALCUTTA.

N. K. SUR,
Director.

COLOMBO OBSERVATORY, CEYLON.

April, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	mm.	Km.	
April 1-2	E	Record lost from	08 03 ..	..	..	..	
		to	00 24 ..	..	..	..	
" 4	E	e	01 03 ..	..	..	..	Slight.
		F	16 ..	..	..	..	
" 5-6	E	Record lost from	23 21 ..	..	..	..	
		to	00 32 ..	..	..	..	
" 6-7	E	Record lost from	22 29 ..	..	..	..	
		to	00 30 ..	..	..	..	
" 10-11	E	Record lost from	00 22 ..	..	..	..	
		to	00 22 ..	..	..	..	
11	E	e	16 14 ..	..	..	..	Slight.
		F	35 ..	..	..	..	
12-13	E	Record lost from	22 33 ..	..	..	..	
		to	00 22 ..	..	..	..	
" 15	E	P	02 47 39	..	..	..	
		S	57 44	..	..	..	
		L	03 22	..	..	..	
		M1	24 21	..	..	..	
1945			h. m. s.	sec.	mm.	Km	
April 15	E	M2	29 14	..	1·9	..	
		F	05 00 ..	..	..	..	
" 18	E	P	13 13 19	..	..	.	
		S	20 12	..	..	..	
		Mn	28 32	..	<0·5	..	
		F	14 40 ..	..	..	..	
" 19	E	P	13 17 20	..	..	..	
		SKS	27 51	..	..	..	
		L	56 ..	..	..	..	
		Mn	58 57	..	<0·5	..	
		F	15 00 ..	..	..		
" 19	E	P	17 53 52	..	..	..	
		SS	18 01 56	..	..	..	
		Mn	00 03	..	<0·5	..	
		F	20 ..	..	..	..	
,, 22	E	S	04 09 15	..	..		
		F	30 ..	..	..		
" 22	E	P	09 58 23	..	..	..	
		S	10 04 07	..	..	..	
		Mn	08 (30)	..	<0·5	..	
		F	20 ..	..	..	..	
" 29	E	P	02 29 53	..	..	..	
		S	33 34	..		..	
		F	50 ..	..		..	

May, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
May 5-7	E	Record lost from	02 50 ..	..	..	..	
		to	00 23 ..	..	..	..	
" 9	E	P	03 44 ..	..	..	..	Times approximate.
		S	48 (30)	..	..	..	Lines overlapping.
		Mn	55 (30)	..	0·5	..	
		F	04 30 ..	..	..	..	
" 16	E	P	19 05 17	..	..	..	
		S	09 47	..	..	..	
		Mn	17 ..	..	<0·5	..	
		F	20 03 ..	..	..	..	
May 19	E	P	05 07 39	..	..	..	
		S	11 27	..	..	..	
		F	40 ..	..	..	..	
" 20	E	P	18 10 25	..	..	..	
		S	17 39	..	..	..	
		F	40 ..	..	..	..	
" 20-21	E	Record lost from	22 56 ..	..	..	..	
		to	00 10 ..	..	..	..	
,, 27-28	E	Record lost from	22 18 ..	..	..	..	
		to	00 28 ..	..	..	..	

June, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
June 3	E	e	14 05 ..	..	..	..	Slight
		F	15 03 ..	..	..	..	
Jun 4	E	P	12 14 10	..	..	..	
		S	18 15	..	..	..	

COLOMBO OBSERVATORY, CEYLON

June, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	mm.	Km.	
June	E	L	23 10	..	..	..	
		Mn	23 50	..	8.5	..	
		F	14 10 ..	..	..	..	
" 8-9	E	Record lost from	22 19 ..	..	..	..	
		to	00 25 ..	..	..	..	
" 13-14	E	P	23 47 40	..	..	..	
		L	53 15	..	..	..	
		Mn	53 51	..	1.4	..	
		F	01 05 ..	..	..	..	
" 20	E	e	17 46 ..	..	..	..	Slight
		F	19 00 ..	..	..	..	
1945			h m. s.	sec.	mm.	Km.	
June 22	E	P	18 05 27	..	..	..	
		S	10 55	..	..	..	
		L	14 12	..	..	..	
		Mn	14 52	..	11·0	..	
		F	19 40 ..	..	..	..	
,, 23-24	E	Record lost from	22 56 ..	..	..	..	
		to	00 05 ..	..	..	..	
,, 27	E	P	14 14 00	..	..	..	
		L	36 54	..	..	..	
		Mn	40 24	..	0.5	..	
		F	15 00 ..	..	..	..	

COLOMBO OBSERVATORY,

CEYLON.

D. T. E. DASSANAYAKE,

Superintendent.

HAIG OBSERVATORY, SURVEY OF INDIA, DEHRA DUN.

April, 1945.

1945	Compt.	Phase.	h. m. s.	sec.	On trace in inch	Km.	Remarks.
April. 10	N	e	16 37 18	..	..	..	
		e	40 50	..	..	..	
		F	51 ..	..	..	..	
,, 15	N	eS	02 54 51	..	..	..	
		e	57 26	..	..	..	
		eL	03 08 01	..	..	..	
		M_1	11 01	..	..	..	
		M_2	12 46	..	..	..	
Apr. 15	N	M_3	03 15 21	20	0·75	..	
		M_4	17 31	..	..	..	
		F	55 ..	..	..	..	
,, 17	N	eP	17 49 53	..	..	1355	
		eS	52 08	..	..	..	
		SS	52 38	..	..	..	
		e	53 12	..	..	..	
		L	53 48	..	..	..	
		M	55 12	..	..	..	
		F	18 00 ..	..	..	..	

May, 1945.

No earthquake shocks were recorded during the month of May 1945.

June, 1945.

June 4		An earthquake shock was felt at the station at 12 h. 09 m. G.M.T. There was no record at this time.					
,, 13-14	N	e	23 55 45	..	..	..	
		F	00 23 ..	..	..	..	
June 22	N	iP	18 01 30	..	..	..	
		iS	01 58	..	..	..	
		i	02 16	..		..	
		M_1	02 22	15	0·60	..	
		F	55 ..	..	..	..	

DEHRA DUN.

J. de GRAAFF HUNTER, C.I.E., Sc. D., F.R.S.,

Director, War Research, Survey of India.

NIZAMIAH OBSERVATORY, HYDERABAD, DECCAN.

April, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.	
April 7	N	e	11 07 01	..	..	..	
		e	07 33	..	..	..	
		e	11 00	..	..	..	
		e	11 44	..	..	..	
		e	13 08	..	..	..	
		M	14 15	11	2	..	
,, 10	N	e	16 22 32	..	..	4660	
		eP	23 29	..	..	..	
		S	29 47	..	..	..	
		SS	33 17	..	..	..	
		L	36 44	..	..	..	
		M	40 30	15	10	..	
,, 12	N	M	09 40 32	12	3	..	
,, 13	N	S	14 25 58	..	..	..	
		E	49 16	11	3	..	
,, 15	N	PP	02 49 22	..	..	8190	Lost while changing paper.
		S	56 16	..	..	..	
		PS	56 48	..	..	..	
		SS	03 00 52	..	..	..	
		L	11 34	..	..	..	
		M	14 54	18	42	..	
,, 18	N	P	13 14 33	..	3	6520	
		PP	16 55	..	..	..	
		S	22 38	..	..	..	
		SS	26 26	..	..	..	
		L	32 44	..	..	..	
		M	34 36	18	16	..	
,, 19	N	eP	13 17 54	..	..	10800	
		PP	21 45	..	..	..	
		SKS	23 18	..	..	..	
		S	29 05	..	..	..	
		SS	35 46	..	..	..	
		L	51 36	..	..	..	
		M	55 52	18	9	..	
,, 19	N	(P)	17 52 11	..	..	3160	
		S	55 57	..	..	..	
		SS	57 48	..	..	..	
		M	18 02 31	15	14	..	
April 20	N	M	12 57 43	7	2	..	
	E	M	58 45	6	2	..	
,, 20	N	M	23 00 35	9	2	..	
,, 21	N	M	00 19 51	8	2	..	
,, 21	N	M	18 44 29	16	3	..	
,, 22	N,E	P	04 00 32	..	..	7840	
	E	PcP	01 01	..	..	..	
		PP	03 20	..	..	..	
	N,E	S	09 46	..	..	..	
	E	PS	10 04	..	..	..	
	N	SS	13 57	..	..	..	
		L	22 32	..	..	..	
		M	27 54	15	3	..	
,, 22	N,E	P	09 58 4	..	..	4300	
	N,E	S	10 04 41	..	..	..	
	E	ScS	08 27	..	..	..	
	N	M	13 50	14	3	..	
,, 23	N,E	P	06 34 02	..	..	8020	
	E	i	37 53	..	..	..	
	N	S	43 26	..	..	..	
	E	PS	44 21	..	..	..	
	N	L	58 54	..	..	..	
	E	M	07 04 38	8	2	..	
	N	M	04 38	8	2	..	
,, 29	N,E	P	02 30 46	..	..	2640	
	E	PP	31 23	..	..	..	
,, 29	N,E	S	02 34 55	..	..	..	
	E	SS	35 45	..	..	..	
		L	37 23	..	..	..	
		M	39 35	8	2	..	
		ScS	41 28	..	..	..	
,, 29	N	M	10 10 55	8	2	..	
,, 30	N	M	11 41 21	12	3	..	

May, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
May 1	N	M	08 40 37	14	5	..	
	E	M	40 49	12	3	..	
,, 1	N	S	23 15 00	..	..	..	
		SS	18 35	..	..	..	
		M	26 38	14	4	..	
May 9	E	P	03 41 24	..	..	3360	
	N	P	41 28	..	..	..	
	E	PP	42 19	..	..	..	
	N,E	S	46 23	..	..	..	
	E	SS	47 37	..	..	..	
		M	53 1	8	2	..	

NIZAMIAH OBSERVATORY, HYDERABAD, DECCAN.

May, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ	km.	
May, 12	N	M	03 58 09	16	4	..	
,, 12	N	M	04 51 18	10	2	..	
,, 19	N,E	P	05 06 09	..	..	1420	
	N	PP	06 21	..	..	..	
	N,E	S	08 31	..	..	..	
	N	SS	08 47	..	..	..	
		L	09 28	..	..	..	
		M	10 17	5	7	..	
,, 20	E	PP	18 10 51	..	..	..	
		SS	17 06	..	..	..	
		M	21 12	9	2	..	
,, 22	E	P	00 42 48	..	..	2190	
		eS	46 21	..	..	..	
1945			h. m. s.	sec.	μ	Km.	
May 22	E	SS	00 46 45	..	..	..	
		L	48 07	..	..	..	
		M	50 24	9	2	..	
,, 22	N	ep	07 54 16	..	..	2900	
,,		S	58 45	..	..	..	
		L	08 01 14	..	..	..	
		M	03 44	.8	2	..	
	E	M	03 59	7	2	..	
,, 23	N	M	14 07 11	10	2	..	
	E	M	07 16	9	2	..	
,, 27	E	M	22 14 07	9	2	..	

The seismographs were not in operation from 28th May, to 17th June, 1945.

June, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
1945			The instruments were not in operation up to June 17, 1945.				
June, 20	E	eP	01 34 40	..	..	7470	
		PP	37 11	..	..	..	
		S	43 35	..	..	..	
		M	02 05 14	13	4	..	
,, 20	E	P	17 46 02	..	..	7520	
		PcP	45 21	..	..	..	
		PP	48 32	..	..	..	
		S	55 00	..	..	..	
		ScS	56 01	..	..	..	
		SS	59 26	..	..	..	
		L	18 08 19	..	..	..	
		M	12 39	15	6	..	
June 22	E	eP	09 29 15	..	..	..	
,, 22	E	iP	09 29 21	..	..	6190	
		S	37 08	..	..	..	
		M	51 49	10	3	..	
,, 22	NE	P	18 04 22	..	..	1610	
	E	S	07 02	..	..	..	
	N	M	09 45	7	114	..	
,, 27	E	SKKS	13 38 54	..	..	..	
		SS	48 55	..	..	..	
		M	14 22 07	16	8	..	
,, 28	N,E	S	04 37 05	..	..	..	
	E	M	52 12	8	2	..	

NIZAMIAH OBSERVATORY,
HYDERABAD, DECCAN.

AKBAR ALI,
Director.

KODAIKANAL OBSERVATORY, KODAIKANAL.

April, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ.	Km.	
Apr, 10	E	e(S)	01 41 00	..	..	..	Slight.
		F	02 37 ..	..	..	..	
15	E	iP	02 48 10	..	..	8755	Moderate.
		PP	51 50	..	..	..	
		iS	58 10	..	..	..	
		SS	03 02 53	..	..	..	
		L	13 23	..	..	..	
		Mn	19 23	30	179	..	
		F	05 15 ..	..	..	..	
1945			h. m. s.	sec.	μ	Km.	
Apr, 22	E	e	03 57 41	..	..	..	Times uncertain.
		F	04 51 ..	..	..	..	
,, 23	E	iP	07 33 00	..	..		Slight.
		PP	36 00	..	..		Times uncertain.
		S	42 30	..	..		
		Mn.	45 10	12	4	..	
		F	07 35	..	..	..	

May, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
May, 9	E	iP	03 41 35	..	..	3300	Slight.
		iS	46 30	..	..	..	
		SS	47 50	..	..	..	
		L	50 05	..	..	..	
		Mn	52 45	13	4	..	
		F	04 25 ..	..	..	..	
,, 10	E	e	19 14 33	..	..	..	Feeble.
		F	33 ..	..	..	..	
,, 16	E	e	19 05 42	..	..	..	Distant.
		F	20 09 ..	..	..	..	
,, 19	E	iP	07 27	..	..	2200	Slight.
		S	11 02	..	..	..	
		L	12 42	..	..	..	
May, 19	E	Mn	05 14 12	20	12	..	
		F	41 ..	..	..	..	
,, 19	E	e	16 12 18	..	..	..	Feeble.
		F	17 02 ..	..	..	..	
,, 22	E	e	00 41 29	..	..	..	Feeble.
		F	01 08 ..	..	..	..	
,, 22	E	e	07 40 20	..	..	..	Feeble.
		F	08 29 ..	..	..	..	
,, 25	E	e	20 50 01	..	..	..	Feeble.
		F	21 13 ..	..	..	..	
,, 26	E	e	10 54 09	..	..	..	Feeble.
		F	11 27 ..	..	..	..	

June, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
June, 4	E	iP	12 13 52	..	..	2110	Moderate.
		iS	17 17	..	..	..	
		SS	17 37	..	..	..	
		L	19 32	..	..	..	
		M	21 02	..	..	..	
		F	13 55 ..	..	..	..	
,, 13-14	E	iP	23 48 25	..	..	3065	Moderate.
		PP	49 05	..	..	..	
		iS	53 05	..	..	..	
		SS	54 05	..	..	..	
		L	55 55	..	..	..	
		Mn	58 25	20	12	..	
		F	00 22 ..	..	..	..	
,, 20	E	eP	17 46 40	..	..	8465	Slight.
		PP	49 20	..	..	..	
		eS	56 25	..	..	..	
June, 20	E	SS	18 00 50	..	..	..	
		L	09 30	..	..	..	
		Mn	14 50	20	4	..	
		F	19 03 ..	..	..	..	
,, 22	E	eP	18 04 20	..	..	2255	Moderate.
		iS	08 00	..	..	..	
		SS	09 20	..	..	..	
		L	09 50	..	..	..	
		M	11 00	20	81	..	
		F	19 33 ..	..	..	..	
,, 27	E	e	13 53 00	..	..	..	
		F	Lost.				
,, 30	E	e	06 31 40	..	..	..	
		F	07 23 ..	..	..	..	

SOLAR PHYSICS OBSERVATORY,
KODAIKANAL.

A. L. NARAYAN,
Director.

The following table contains a list of earthquakes reported by voluntary observers from various Stations.

Place at which felt	Date	G.M.T. of earthquake.	Duration	Intensity Rossi Forel scale	Number of shocks.	Remarks.
	1942.	h. m.	sec.			
Srinagar	Apr. 7	02 55	1	4	1	
Simla	,, 23	10 44	1	5	1	
Dhubri	May, 19	05 06	2	5	1	
Silchar	,, 19	05 06	2	5	2	
Drosh	,, 22	20 30	20	5	..	
Didwana	,, 22	19 30	1½	5	1	
Drosh	,, 23	00 50	20	5	..	
Kabul	,, 25	11 20	3	5	1	
Mussoorie	June, 4	12 13	15-20	5	..	
		12 44	seconds	5	2	
Bareilly	,, 4	12 10	0	5	1	
Mukteswar	,, 4	12 05	15	5	2	
		12 40	2	5		
Dehra Dun	,, 4	12 09	30	5	2	
		12 40	5	5		
Simla	,, 4	12 11	3	5	1	
Drosh	,, 8	08 00	5	5	1	
Lahore	,, 8	06 46	2	4	1	
Peshawar	,, 22	18 06	60	4	1	
Rawalpindi	,, 22	18 03	10	5	3	
Lahore	,, 22	18 04	30	5	..	
Simla	,, 22	18 02	3	5	3	
		18 07	2	5		
		18 10	1	5		

S. P. VENKITESHWARAN,
Meteorologist, Poona.

GMGIPND—IS—203 D.G. Obs. J.C.2238—19-12-60—150.

SEISMOLOGICAL BULLETIN.

ERRATA FOR APRIL to JUNE 1945.

Page.	Date	Column.	Incorrect.	Correct.
1	-	Tab.1 Litho.Found.	Grenite	Granite.
1	-	Tab.2 Damp.Ratio	In heading 'Radio'	Ratio.
2	Apr. 1	Remarks.	Light	Slight.
2	Apr. 4	Remarks.	Slight....waves	Should be brought in line with 01 11 42
2	Apr.10	Date	"0	" 10
2	Apr.11	Date	" 1	" 11
2	Apr.14	Date	" 4	" 14
2	Apr.15	Phase	E blank 04 41	EF 04 41
2	Apr.19	Date,Time	"19/M/135238	Blank/M/5238
2	Apr.19	Compt.	Blank/iP/17	N/iP/17
2	Apr.23	Time	Ni poor impression	Ni 063419
3	June.4	Phase	Blank 120948	iP 120948
4	June.22	Phase	- 0317	S 0317
4	June.23	Time	i 234340	Impression poor, correct.
4	June.27	Distance	Blank	4320
4	June.27	Time	M 22h 4m 9s	M 22 m 49 s.
5	Apr.10	Date	Repeated	2nd one to be deteted
5	Apr.15	Time	iP 04704	iP 024704
5	Apr.19	Times	Starting with NE iP 175208	Kindly read: PP5246 eS+iS5628,SS5747, Mn 0300
5	Apr.19	Period,Amp.	1/10, 11/5	11/10, 11/5
5	Apr.19	Remarks	Bad impression	Near 44 N 76 E O= 17h 46m 45s.
7	May.19	Date	Written slightly below.	To be in line.
8	June.22	Date	June 14	June 22
	"	Time	223753	093753

.....2.

Page.	Date	Column.	Incorrect.	Correct.
13	Apr.19	Date	Impression	19
14	Apr.22	Time	P 09584	P 095844
14	May.9	Time	M 531	M 5319
16	June.19	Time	E iP 0727	E iP 050727
17	-	-	Page no.7	17
17	June.4	Duration	Seconds(Mussoorie)	A few seconds.
17	"	"	Blank	15-20.

Dhar./

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

SEISMOLOGICAL BULLETIN

July—September, 1945

CONTENTS

PUBLISHED UNDER THE DIRECTION OF

S. K. BANERJI, O. B. E., D. Sc., F. N. I.

Director General of Observatories

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SEISMOLOGICAL BULLETIN

July—September, 1945

INTRODUCTION

Till the end of 1937, the seismic data from the observatories of the India Meteorological Department were being published annually as Part D of the Annual Summary of the India Weather Review. Since 1938, the data are being published in the present series of the Quarterly Seismological Bulletin. With the kind co-operation of the Surveyor-General of India, the Director of the Nizamiah Observatory, Hyderabad, and of the Superintendent, Colombo Observatory, it has been possible to incorporate in the bulletin, the data of their respective observatories, *viz.*, Dehra Dun, Hyderabad and Colombo. The instrumental seismological data and the non-instrumental voluntary observations are collected and edited at the Meteorological Office, Poona.

TABLE 1

List of Seismograph Stations.

Station	Latitude	Longitude	Height above M.S.L.	Lithologic foundation	Officer-in-charge of Observatory.
New Delhi	28° 35′ N.	77° 12′ E	207 metres	Massive Quartzites	Superintending Meteorologist.
Bombay	18° 54′ N.	72° 49′ E.	6 metres	Deccan Trap	Director
Calcutta	22° 32′ N.	88° 20′ E.	(1) 7 metres (2) 6 metres	Alluvium	Director.
Colombo	6° 54′ N.	79° 52′ E.	7 metres	Beach-Sand resting on gneiss probably decomposed.	Superintendent.
Dehra Dun	30° 19′ N.	78° 03′ E.	682 metres	Gravel	Director, War Reserch, Survey of India.
Hyderabad	17° 26′ N.	78° 27′ E.	528 metres	Granite	Director.
Kodaikanal	10° 14′ N.	77° 28′ E.	2,343 metres	Rock.	Director

(1) Milne-Shaw. (2) Omori-Ewing.

TABLE 2

The instruments and their conditions

Stations	Component	Type of instrument	Mass	Period	Static magnification.	Damping Ratio	Remark
			Kg.	Secs			
New Delhi	E	Omori-Ewing	45	32	30	..	..
	N	Milne-Shaw	0·47	12	250	20 : 1	..
Bombay	N	Milne-Shaw	0·45	12	250	20 : 1	..
	E	Milne-Shaw	0·45	12	350	40 : 1	..
Calcutta	N	Milne-Shaw	0·45	12	250	20 : 1	..
	N	Omori-Ewing	50	15	32	..	..
	E	Omori-Pwing	50	21	30	..	..
Colombo	E	Milne-Shaw	0·45	12	250	20 : 1	..
Dehra Dun	N	Omori	50	30	12	..	..
Hyderabad	N	Milne-Shaw	0·45	12	250	20 : 1	..
	E	Milne-Shaw	0·45	12	250	20 : 1	..
Kodai kanal	E	Milne-Shaw	0·45	10	250	20 : 1	..

THE OBSERVATORY, NEW DELHI.

July, 1945.

Date	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks
1945			h. m. s.	Sec.	μ	Km.	
July 3	N	i	17 22 03	..	..	..	Slight. Distant.
		F	18 19 ..	..	..	..	
,, 15	N.E	iP	05 45 36	..	..	6830	Slight. Depth of focus abut 130 kms.
	N	PcP	.. 46 21	..	..	..	
		i	.. 53 19	..	..	..	
		iS	.. 53 50	..	..	..	
	E	iS	.. 53 51	..	..	..	
	N	i	.. 52 34	..	..	..	
	E	i	.. 54 37	..	..	..	
	N	sS	.. 54 37	..	..	..	
		SS	.. 57 57	..	..	..	
		sSS	.. 58 47	..	..	..	
		SSS	06 00 27	..	..	..	
		SSSS	.. 02 06	..	..	..	
		M	.. 09 58	..	..	..	
	E	F	.. 40 ..	..	..	..	
	N	F	07 09 ..	..	..	..	
,, 21	N	i	01 45 27	..	..	..	Slight, Distant. Surface waves.
		i	.. 51 49	..	..	..	
		F	.. 04 ..	..	..	..	
,, 22	N	eP(?)	10 46 09	..	..	3050	Slight.
	N,E	iS	.. 50 48	..	..	..	
	N	i	.. 51 11	..	..	..	
July 22		L	.. 53 34	..	..	..	
		M	.. 55 46	..	..	..	
	E	M	.. 57 12	..	..	..	
	N	Mn	.. 57 56	20	60	..	
	E	F	11 34 ..	..	..	..	
	N	F	12 31 ..	..	..	..	
,, 23	N	iP(?)	04 01 17	..	..	2470	Moderate. Probable time correction—1 min.
		PP	— 01 42	..	..	..	
		iS	.. 05 13	..	..	..	
		SS	— 05 54	..	..	..	
	E	SS	.. 05 56	..	..	..	
		L	.. 07 04	..	..	..	
	N	L	.. 07 15	..	..	..	
	E	M	.. 09 23	..	..	..	
	N	M	.. 09 35	..	..	..	
	E	Mn	.. 11 00	24	460	..	
	N	Mn	.. 13 42	17	115	..	
	E	F	05 31 ..	..	..	..	
	N	F	06 35 ..	..	..	..	
,, 27	N	i	18 16 31	..	..	..	Feeble, Near.
		i	.. 17 41	..	..	..	
		F	Lost in microseisms.				

August, 1945

1945							
Aug. 1-2	E	eP	22 30 54	..	..	4410	Slight.
	N	eP	.. 30 56	..	..	..	
	N,E	iS	.. 36 59	..	..	..	
	N	SS	.. 39 58	..	..	..	
		SSS	.. 40 39	..	..	..	
		L	.. 42 03	..	..	..	
		M	.. 45 02	..	..	..	
		F	00 33 ..	..	..	..	
,, 2	N	e	02 56 18	..	..	..	Slight. Distant.
		F	03 18 ..	..	..	..	
,, 2	N	eP	17 59 46	..	..	4200	Slight.
		PcP	18 01 48	..	..	..	
		eS	.. 05 37	..	..	..	
		M	.. 14 22	..	..	..	
		F	19 50 ..	..	..	..	
,, 2	N	e	20 58 45	..	..	..	Slight. Near.
			21 00 17	..	..	..	
		F	.. 05 ..	..	..	..	
, 2	N	e	21 38 02	..	..	..	Slight, Distant.
		F	.. 27 ..	..	..	..	
, 3	N	e	04 00 07	..	..	..	Slight, Distant.
		F	.. 18 ..	..	..	..	
1945 Aug. 4	N	i	15 04 42	..	..	6720	Slight.
		i	.. 05 25	..	..	..	
		e	.. 06 08	..	..	..	
		e	.. 08 39	..	..	..	
		F	.. 53 ..	..	..	..	
,, 4	N	iP	20 53 55	..	..	510	Slight.
		P•	.. 54 07	..	..	..	
		iS	.. 54 48	..	..	..	
		S	.. 54 58	..	..	..	
		F	21 12 ..	..	..	..	
,, 7	N	i	22 27 04	..	..	..	Slight. Distant. Surface waves.
		i	.. 40 05	..	..	..	
		F	.. 47 ..	..	..	..	
,, 8	N	iP•	09 58 37	..	..	2540	Moderate.
	E	PP	.. 59 00	..	..	..	
	N	PP	.. 59 01	..	..	..	
	E	eS	10 02 37	..	..	..	
	N	iS	.. 02 38	..	..	..	
		SS	.. 03 30	..	..	..	
		M	.. 06 48	..	..	..	
,, 8	E	M	10 07 21	..	..	..	

THE OBSERVATORY, NEW DELHI.

August, 1945

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	Sec.	μ Km.		
1945 Aug. 8		Mn	.. 07 51	20	107 ..		
	N	Mn	.. 09 14	16	49 ..		
	E	F	12 07 ..	..	.. ..		
	N	F	Lost in microseisms.				
" 11	N	e	01 55 37	..	.. ..		Slight. Distant. Surface waves.
		F	Lost in microseisms.				
" 12	N	e	08 52 31	..	.. ..		Slight. Distant.
		e	09 05 28	..	.. ..		
		F	.. 31 ..	..	.. ..		
" 14	E	eP	12 19 15	..	.. 5000		Slight.
	N	eP(?)	.. 19 18	..	.. ..		
	E	eS	.. 25 53	..	.. ..		
	N	iS	.. 25 57	..	.. ..		
	E	e	.. 29 07	..	.. ..		
	N	ScS	.. 29 23	..	.. ..		
		L	.. 32 33	..	.. ..		
		M	.. 36 07	..	.. ..		
	E	M	.. 37 07	..	.. ..		
	N	Mn	.. 38 27	15	30 ..		
	E	F	13 30 ..	..	.. ..		
	N	F	.. 57 ..	..	.. ..		
" 15	N	e	14 35 21	..	.. ..		Slight. Distant.
		e	.. 52 36	..	.. ..		
		F	15 18 ..	..	.. ..		
" 16	N	i	00 02 14	..	.. ..		Slight. Very distant.
		i	.. 03 58	..	.. ..		
		e	.. 43 25	..	.. ..		
		F	01 54 ..	..	.. ..		
" 21	N	i	20 27 01	..	.. 12110		Slight.
		i	.. 27 53	..	.. ..		
		e	.. 35 58	..	.. ..		
		F	22 23 ..	..	.. ..		
1945 Aug. 27	N	i	07 52 35	..	.. ..		Slight. Distant. Probably deep.
		i	.. 53 10	..	.. ..		
		i	.. 54 17	..	.. ..		
		e	08 05 00	..	.. ..		Surface waves.
		F	.. 45 ..	..	.. ..		
" 28	N	ePcP	19 32 21	..	.. 538		Slight.
		i S	.. 37 49	..	.. ..		
		ScS	.. 40 47	..	.. ..		
		M	.. 49 07	..	.. ..		
		F	21 32 ..	..	.. ..		
" 29	N	e	10 36 15	..	.. ..		Moderate. Very distant.
	N, E	PP	.. 40 18	..	.. ..		
	E	e	.. 41 51	..	.. ..		
	N	i	.. 47 26	..	.. ..		
	E	i	.. 50 17	..	.. ..		
	N	i	.. 58 13	..	.. ..		
		e	11 21 06	..	.. ..		Surface waves.
		F	Lost in the following shock.				
" 29	N	e	13 13 03	..	.. ..		Slight. Very distant Surface waves
		F	Lost in the following shock.				
" 29	N	e	14 44 11	..	.. ..		Sligh . Very distant . Surface waves.
		e	.. 57 13	..	.. ..		
		F	Lost in the following shock.				
" 29	N	i	15 22 21	..	.. ..		Slight. Distant. Surface waves.
		i	.. 23 34	..	.. ..		
		e	.. 35 21	..	.. ..		
		F	Lost in the following shock.				
" 29	N	e	16 27 10	..	.. ..		Slight. Very distant. M waves.
		F	17 25 ..	..	.. ..		
" 3	N	e	06 56 50	..	.. ..		Slight . Distant. Surface waves.
		F	07 23 ..	..	.. ..		
Aug 31-Sept 1	N	e	23 36 37	..	.. ..		Slight. Distant.
		e	.. 53 00	..	.. ..		
		F	00 15 ..	..	.. ..		

September, 1945

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	Sec.	μ Km.		
1945 Sep. 1-2	N	e	22 58 47	..	.. ..		Moderate.
		eP'	23 02 58	..	.. ..		
		e	.. 05 32	..	.. ..		
		e	07 32	..	.. ..		
		?	.. 09 14	..	.. ..		
		SKS	.. 10 07	..	.. ..		
		e	.. 10 29	..	.. ..		
		SKKS	.. 11 39	..	.. ..		
		e	.. 18 15	..	.. ..		
		e	.. 22 44	..	.. ..		
1945 Sep. 1-2		e	.. 25 52	..	.. ..		
		M	.. 42 12	..	.. ..		
		F	02 22 ..	..	.. ..		
" 2	N	P?	12 01 57	..	.. ..		Slight ; deep.
		i	.. 02 15	..	.. ..		
		PcP	.. 03 34	..	.. ..		
		iS	.. 07 53	..	.. ..		
" 2	N	sS	12 08 29	..	.. ..		

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September, 1945

Date..	Compt.	Phase.	G.M.T.	Per.		Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Sep. 2		SS	.. 11 21	..	..	...	
		i	.. 11 46	..	..	..	
		F	.. 44 ..	..	..	..	
" 2	N	$\bar{P}$	23 53 35	..	..	90	Slight.
		$\bar{S}$	.. 53 56	..	..	..	
		F	.. 57 ..	..	..	..	
" 4	N	e	17 42 59	..	..	..	Slight. Very distant.
		F	19 24 ..	..	..	..	
" 5	N	i	05 36 30	..	..	..	Slight. Local.
		i	.. 36 50	..	..	..	
" 5	N	iP	22 00 49	..	..	8670	Moderate.
		iS	.. 10 44	..	..	..	
		i	.. 11 44	..	..	..	
		M	.. 33 28	..	..	..	
		F	01 24 ..	..	..	..	
" 6	N	i	01 48 39	..	..	..	Slight. Distant.
		i	.. 49 34	..	..	..	
		F	03 02 ..	..	..	..	
" 6	N	eP	15 01 37	..	..	9000	Slight.
		iS	.. 11 48	..	..	..	
		M	.. 33 51	..	..	..	
		F	16 41 ..	..	..	..	
" 7	N	iP	15 56 19	..	..	4750	Slight. Focal depth about 100 kms.
		pP	.. 56 40	..	..	..	
		iS	16 02 36	..	..	..	
		sS	.. 03 16	..	..	..	
		ScS	.. 05 51	..	..	..	
		F	.. 30 ..	..	..	..	
" 8	N	e	04 26 36	..	..	..	Slight. Distant. Surface waves.
		F	05 11 ..	..	..	..	
" 9	N	iSKS	04 27 15	..	..	..	Slight.
		iSKKS	.. 28 09	..	..	..	
		SS	.. 35 54	..	..	..	
		F	07 16 ..	..	..	..	
" 10	N	e	14 02 56	..	..	..	Slight. Near.
		e	.. 04 00	..	..	..	
		i	.. 05 02	..	..	..	
		F	.. 29 ..	..	..	..	
1945 Sep. 10	N	e	16 13 39	..	..	..	Slight. Near.
		i	.. 14 37	..	..	..	
		F	.. 22 ..	..	..	..	
" 13	N	i	11 40 29	..	..	..	Slight. Very distant.
		e	.. 50 43	..	..	..	
		e	.. 51 35	..	..	..	
		i	.. 54 01	..	..	..	
		F	13 24 ..	..	..	..	
" 14	N	e	02 30 27	..	..	..	Slight. Distant. Surface waves.
		e	03 00 32	..	..	..	
		F	.. 50 ..	..	..	..	
" 18	N	e	22 30 55	..	..	..	Slight. Distant.
		i	.. 50 21	..	..	..	
		i	.. 54 45	..	..	..	
		F	23 24 ..	..	..	..	
" 19	N	e	07 42 36	..	..	..	Slight. Near.
	E	i	.. 43 16	..	..	..	
	N	i	.. 43 19	..	..	..	
		F	08 04 ..	..	..	..	
" 19	E	iP	10 42 18	..	..	440	Moderate.
	N	eP	.. 42 20	..	..	..	
	E	$\bar{P}$	.. 42 33	..	..	..	
	N	$\bar{P}$	.. 42 35	..	..	..	
	E	iS	.. 43 04	..	..	..	
		$\bar{S}$	.. 43 26	..	..	..	
		F	11 21 ..	..	..	..	
	N	F	.. 29 ..	..	..	..	
" 19	N	iS	12 45 06	..	..	..	Slight.
		i	.. 45 36	..	..	..	
		ScS	.. 47 36	..	..	..	
		SS	.. 49 21	..	..	..	
		M	.. 56 40	..	..	..	
		F	13 32 ..	..	..	..	
" 20	N	e	12 27 22	..	..	..	Slight. Local.
		i	.. 27 37	..	..	..	
		i	.. 27 54	..	..	..	
		F	.. 30 ..	..	..	..	
" 22	N		09 23 57	..	..	..	Slight. Distant.
		i(SS)	.. 31 19	..	..	..	
		F	12 05 ..	..	..	..	

THE OBSERVATORY, NEW DELHI.

September, 1945

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.	Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h m s	sec.	μ	Km		1945			h. m. s.	Sec.	μ	Km.	
Sep. 23	N	eP	15 41 26	..	..	3750	Slight	Sep. 28	N	e	22 45 18	..	..	..	Slight. Very distant.
		eS	.. 46 56	..	..	..				F	01 04 ..	..	..	..	
		M	.. 54 23	..	..	..									
		Mn	.. 55 12	16	24	..		,, 29	N	e	06 59 01	..	..	..	Slight. Distant.
		F	17 27 ..	..	..	..				F	07 16 ..	..	..		
,, 23	N	e	22 07 01	..	..	..	Slight. Distant								
		F	.. 47 ..	..	..	..									
,, 24	N	i	12 57 35	..	..	..									
		i	.. 58 12	..	..	..									
		F	13 58 ..	..	..	..									

THE OBSERVATORY,
NEW DELHI.

V. V. SOHONI,
Superintending Meteorologist.

COLABA OBSERVATORY, BOMBAY.

July, 1945

1945	Compt.	Phase.	G.M.T. h. m. s.	Per. sec.	Amp u	Δ Km.	Remarks.
*Jul. 5—6	E	from	05 07 56	..	..	..	
		to	06 01 56	..	..	..	
	N	Record lost from					
		to	05 05 58	..	..	..	
			06 01 40	..	..	..	
,, 15	E	iP		..	..	7535	Slight. 17°oN., 145° E (U.S.C.G.S.) 005h. 35m. 07s. h-150 Km. (O.-J.S.A.)
	N	eP	05 46 07	..	..	..	
	E	i	48 43	..	..	..	
	N	iS	55 00	..	..	..	
	E	iS	55 06	..	..	..	
	N, E	i	56 06	..	..	..	
	E	L?	06 06 03	..	..	..	
	E	F	06 58	..	..	..	
	N	F	Lost in microseisms				
,, 22	N, E	eP	10 45 32	..	..	3280	Moderate. 3°N., 97E northwest coast of Sumatra. O=10h. 39m. 47s.
	E	iS	50 26	..	..	..	
Jul. 22	N	iS	10 50 31	..	..	..	
	E	L	54 01	..	..	..	
,, 22	N	M	10 56 15	18	30	..	
	E	M	57 42	15	9	..	
	N, E	F	Lost in microseisms				
,, 23	E	iP	04 00 38	..	..	2920	Moderate. Probable origin near 5°N., 98°E., off north Sumatra. O=03h. 54·8m., BCIS gives : 3°S. 88E, H=03h. 55·0m.
	N	eP					
	N	iS	05 06	..	..	..	
	E	iS	05 08	..	..	..	
	E	i	05 24	..	..	..	
		L	09 25	..	..	..	
	E	M	11 53	16	33	..	
	E	M	12 08	17	86	..	
	N	F	05 57	..	..	..	
	E						
	N	F	Lost in microseisms				

August, 1945

1945	Compt.	Phase.	G.M.T. h. m. s.	Per. sec.	Amp u	Δ Km.	Remarks.
Aug. 2	E	iP	22 31 37	..	..	5020	
	N	eP°					Moderate. 23·5 N. 122°E., near Formosa Islands. O=22h. 23m. 24s. BCIS gives: 20°N 120°E., H=22h 23·2m.
	N, E	eS	38 17	..	..	..	
	N	L	47 32	..	..	..	
	E	L	48 10	..	..	..	
	N	M	50 55	14	21	..	
	E	M	54 27	16	15	..	
	N, E	F	00 09 ..	..	..	..	
,, 2	E	iP	18 00 21	..	..	5165	Slight. 24·8°N., 120° E., near Formosa Islands. O=17h 52m. 30s.
	N	eP					
	E	iS	07 09	..	..	..	
	N	eS					
	E	L	13 46	..	..	..	
	N	M	19 03	15	9	..	
	E	M	25 09	11	5	..	
	E	F	19 05	..	..	..	
	N	F	14	..	..	..	
,, 3	N	i	03 45 45	..	..	..	
	E	e	49 49				Feeble.
	E	F	04 13	..	..	..	
	N	F	15 ..	..	..	..	
,, 4	N, E	e	14 57 39	..	..	..	Feeble.
	N, E	e	15 05 01	..	..	..	
	E	F	37 ..	..	..	..	
	N	F	41 ..	..	..	..	
,, 4	N	e	20 56	..	..	..	Feeble tremors.
	E	e	21 00	..	..	..	
	E	F	11 ..	..	..	..	
	N	F	13 ..	..	..	..	
Aug. 6	N, E	e	02 28 37	..	..	..	Very feeble.
		F	44 ..	..	..	..	
,, 7	E	i	22 18 13	..	..	..	Feeble.
	E	F	23 09	..	..	..	
	N	e	Record lost at the time				
	N	F	Lost in microseisms				
,, 8	N, E	iP	09 58 19	..	..	2520	Moderate. 10·5°N 92°E, about 15 miles southwest of Port Blair. O=09h. 53m. 40s.
	N, E	iS	10 02 19	..	..	..	
	N	L	04 39	..	..	..	
	E	L	04 44	..	..	..	
	E	M	05 50	19	40	..	
	N	Mn	08 40	14	28	..	
	N, E	F	Lost in microseisms				
,, 9	E	e	21 58 24	..	..	..	Feeble.
	E	F	Lost in microseisms				
	N		Microseisms throughout the record				
,, 14	E	eP	12 20 03	..	..	..	Slight 29·5°N, 120° E, southwest pf Kiushiu Island Japan O=12h 11m; 04s
	N	M	42 33	15	11	..	
	E	M	48 11	12	8	..	
	N, E	F	Lost in microseisms				
,, 16	N, E	e	00 28 51	..	..	..	Slight.
	E	F	01 29	..	..	—	
	N	F	Lost while changing chart				
,, 21	E	e	20 19 06	..	..	..	Feeble.
	N	e	27 06	..	..	..	
	E	F	21 58 ..	..	..	..	
	N	F	Lost in microseisms				

COLABA OBSERVATORY, BOMBAY.

August, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Aug. 27	N, E	i	07 53 58	..	..	..	Feeble.
	N, E	F	08 25 ..	..	..	..	
,, 28	N, E	eP	19 31 19	..	..	..	Slight. 30°·5N. 136°·5 E.
	E	M	57 35	16	8	..	Pacific, south of Japan. O—19h. 21m. 30s. BCIS gives :— 38° N. 145° E. O—19h 21·1 m.
	E	F	21 06 ..	..	..	..	
	N	F	Lost in microseisms.				
1945 Aug 29	E, N	iP, eP	10 36 38	..	..	3655	Moderate. 14°S. 166°E., H=10h 22·6m. (U.S.CGS) 15°·5S.,169°.2E., H=10h. 22m. 34s (J.S.A.).
	E	PP	39 51	..	..	..	
	N, E	SKS	47 07	..	..	..	
	N	L	11 04 31	..	..	..	
	E	L	04 55	..	..	..	
	E	M	30 16	16	13	..	
	N	M	33 47	19	28	..	
	N, E	F	Lost in microseisms				
29	N, E	e	15 20 30	..	..	..	Slight.
	N, E	F	Lost in microseisms.				

September, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945 Sept. 1	N, E	eP'(?)	23 01 29	..	..	..	Moderate. 46°.7S., 165°·7E., O=22h. 44·4m (Wellington) Intensity V in south part of South Island.
	N, E	iSKS	09 03	..	..	..	
	N, E	L	17 46	..	..	..	
w	E	M	40 17	17	8	..	
	N	M	55 36	15	18	..	
	N, E	F	Mixed up with the following shock.				
,, 2	N	e	01 18 06	..	..	..	Slight.
	E	e	19 00	..	..	..	
	N, E	F	Mixed up with the coda of the previous shock.				
,, 2	N, E	eP	12 01 42	..	..	4745	Slight. 34°·0N., 30°OE., 0-11h. 53·9m h-70 km., (U.S.C. G.S.) Felt at Cairo (BCIS)
	N, E	iS	08 05	..	..	..	
	N, E	F	08 51	..	..	..	
,, 5-6	E, N	iP, eP	22 01 02	..	..	9035	Moderate. 5°S., 154°E., H=21h. 48m. 51s. (J.S.A.).
	N, E	iS	11 15	..	..	..	
	E, N	iSS, eSS	17 05	..	..	..	
	N	L	25 06	..	..	..	
	E	L	25 58	..	..	..	
	E	F	01 12 ..	..	..	..	
	N	F	Lost in microseisms.				
,, 6	E	e	01 41 47	..	..	..	Feeble.
	N	e	Lost in shifting time.				
	E	F	02 59	..	..	..	
	N	F	Lost in microseisms.				
,, 6	N, E	eP	15 01 42	..	..	8865	Slight. Probably after shock of the previous one. O=14h. 49m. 30s.
	E	iS	11 47	..	..	..	
	N	eS	11 49	..	..	..	
	E	F	16 15 ..	..	..	..	
	N	F	Lost in microseisms				
,, 7	N, E	i(P)	15 56 52	..	..	..	Slight.
	N, E	i(S)	16 03 35	..	..	..	46°·7N., 27°E., Rumania. H=15h. 48·3m. (BCIS)
	N, E	F	36 ..	..	..	..	
1945 Sept. 8	N	e	03 54 46	..	..	..	Feeble.
	E	e	04 04 25	..	..	..	
	E	F	05 15 ..	..	..	..	
	N	F	Lost in microseisms.				
,, 9	N, E	eP	04 16 32	..	..	..	Slight. 17°S., 169°E. O=04h. 02m., 54s.
	N, E	iS	28 23	..	..	..	
	E	e	28 22	..	..	..	
							J. S. A. gives :— 16°·7S., 167°.1E., H=04h. 02m. 50s h=150
	N	e	28 30	..	..	..	
	E	L	46 48	..	..	..	
	E	F	06 46 ..	..	..	..	
	N	F	Mixed up with microseisms.				
12	E	e	01 09 24	..	..	..	Feeble.
	E	F	45 ..	..	..	..	
	N	Microseisms throughout the record.					
,, 13	E	iP'	11 36 34	..	..	..	Slight, deep. 34°S· 70°W., O=11h. 17·0m. h=90 km. (U.S.C.G.S.) Deep Destructive in Chile (Pasadena).
	E	iP'P	39 57	..	..	..	
	E	i	43 07	..	..	..	
	E	iSKKS	46 40	..	..	..	
	E	ePSKS	50 17	..	..	..	
	E	F	Lost in microseisms.				
	N	Record very faint and time marks failed.					
,, 14	E	e	02 26 ..	..	..	..	Surface waves
	E	F	03 35 ..	..	..	..	
	N	Record extremely faint.					
,, 19	N., E	eP	10 44 27	..	..	1310	Moderate. 30°N., 81° E., Nepal O=10h 41m., 30s.
	N	iS	40 38	..	..	..	
	E	eS	46 58	..	..	..	
	N	L	48 01	..	..	..	
	E	L	48 03	..	..	..	
	E	M	50 09	7	8	..	
	N	M	50 36	7	14	..	
	E	F	11 14 ..	..	..	..	
	N	F	Lost in				

COLABA OBSERVATORY, BOMBAY.

September, 1945.

Date.	Compt.	Phase.	G. M. T.	Per. Sec.	Amp μ	Δ Km.	Remarks.
1945 Sep. 19	E	e	11 44 23	..	..	..	Slight, near.
	N	e	Microseisms throughout the				record.
	E	M	49 37	8	2	..	
	N, E	F	Lost in microseisms.				
,, 19	E	iP	12 38 31	..	..	..	Slight. 41°·2N., 144°·0E. near Hokkaido Islands. O = 12h. 28m. 00s.
	N	e	38 48	..	..	..	
	N, E	iS	47 01	..	..	..	
	N, E	F	Lost in microseisms.				
,, 22	N, E	eP	09 21 56	..	..	8500	Slight. 2°N., 150°E. O-09h 10m 25s
	N, E	eS	31 42	..	..	..	
	N, E	F	Lost in microseisms.				
,, 23	N, E	iP	15 42 45	..	..	..	Slight. 42°·2N., 118° E., China. O = 15h. 34m. 40s.
	E	iS	49 37	..	..	..	
1945 Sep. 23	E	M	16 02 37	14	6	..	
	N, E	F	Lost in microseisms.				
,, 24	E	e	12 04 44	..	..	..	Foebie.
	N, E	i	58 04	..	..	..	
	E	F	13 25 ..	..	..	..	
	N	F	Lost in microseisms.				
,, 28-29	N	e	23 00 ..	..	..	..	Surface waves.
	E	e	14 ..	..	..	..	
	N	F	00 48 ..	..	..	..	
	E	F	53 ..	..	..	..	

COLABA OBSERVATORY,
BOMBAY.

J. M. SIL
Director.

ALIPORE OBSERVATORY, CALCUTTA.

July, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
July 15	N	eP	05 44 34	..	..	..	Phases masked by another shock.
		i	48 20	..	..	..	
		i	51 54	..	..	..	
		i	53 00	..	..	..	
		F	Lost in microseism.				
,, 22	N	e	10 43 13	..	..	..	Slight.
		eS	47 55	..	..	..	
		iSS	49 07	..	..	..	
		eL	50 47	..	..	..	
1945 July. 22		M	h. m. a. 53 12	sec. ..	μ ..	Km. ..	
		F	Lost in microseism.				
,, 23	N	iP	03 59 13	..	..	2120	Slight.
		iS	04 02 48	..	..	..	
		F	Lost in microseisms.				
,, 29	N	e	18 58 32	..	..	..	Slight, near.
		i	59 17	..	..	..	
		F	Lost in microseisms.				

August, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp	Δ	Remarks.
1945 Aug. 1	N	eP	22 29 41	..	..	3380	Slight.
		?	32 54	..	..	..	
		eS?	34 49	..	..	..	
		iSS	36 21	..	..	..	
		L	38 29	..	..	..	
		M	40 57	..	..	..	
		F	Lost in microseisms.				
,, 2	N	eP	17 58 30	..	..	3010	Slight.
		iS	18 03 14	..	..	..	
		eL	07 12	..	..	..	
		M	09 52	..	..	..	
		F	Lost in microseism.				
,, 6	N	e	02 22 10	..	..	..	Slight.
		i	22 35	..	..	..	
		i	23 15	..	..	..	
		i	23 35	..	..	..	
		F	Lost in microseisms.				
,, 8	N	iP	09 56 47	..	..	1380	Moderate. First movement north.
		iPPP	56 55	..	..	..	
		iS	59 15	..	..	..	
		iSS	59 45	..	..	..	
		M	10 01 31	..	..	..	
1945 Aug. 8		Mn	04 50	6	135	..	
		F	Lost in microseisms.				
,, 9	N	e	22 03 58	..	..	..	Slight, distant
		Mn	13 28	..	..	..	
		F	Lost in microseisms.				
,, 26	N	i	03 27 15	..	..	..	Slight, near.
		F	Lost in microseisms.				
,, 27	N	e	07 43 46	..	..	..	Slight, near.
		i	40 49	..	..	..	
		F	Lost in microseisms.				
,, 28	N	e	19 31 53	..	..	..	Slight, distant.
		eL	45 23	..	..	..	
		Mn	53 33	..	..	..	
		F	Lost in microseisms.				
,, 29	N	eP	10 5 45	..	..	3165	Slight.
		i	36 25	..	..	..	
		i	36 50	..	..	..	
		i	40 40	..	..	..	
		e	43 45	..	..	..	
		M	46 10	..	..	..	
		F	Lost in microseisms.				

September, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp	Δ	Remarks.
1945 Sept. 1	N	eP	23 03 56	..	..	..	Slight, distant.
		i	08 28	..	..	..	
		F	Lost while changing chart.				
,, 2	N	i	01 12 20	..	..	..	Slight, near.
		F	01 30 ..	..	..	..	
,, 2	N	e	12 05 24	..	..	..	Slight.
		F	12 34 ..	..	..	..	
1945 Sep. 5	N	e	22 09 34	..	..	..	Slight, distant.
		e	10 17	..	..	..	
		F	Lost in microseisms.				
,, 6	N	e	15 02 20	..	..	..	Slight, distant.
		F	Lost in microseisms.				
,, 13	N	e	11 37 20	..	..	..	Tremor.
		e	41 34	..	..	..	
		F	Lost in microseisms.				

ALIPORE OBSERVATORY, CALCUTTA.

September, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks	Date.	Compt.	Phase.	G.M.T.	Per	Amp	Δ	Remarks.
			h. m. s.	sec.	μ	Km.					h.m. s	sec.	μ	Km.	
1945 Sep. 19	N	eP(?)	10 44 31	..	..	..	Slight.	1945 Sep. 22		i(SS)	30 24	..	..	..	
		iS	45 43	..	..	..				F	Lost in microseisms.				
		F	Lost in microseisms.					,, 24	N	e	15 41 41	..	..	..	Slight, distant.
,, 22	N	e(PP)	09 23 02	..	..	..	Tremor.			e	49 31	..	..	..	
										F	Lost in microseisms				

METEOROLOGICAL OFFICE,
ALIPORE, CALCUTTA.

S. BASU,
Meteorologist.

COLOMBO OBSERVATORY, CEYLON.

July, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	sec.	mm.	Km.	
1945 Jul. 10-11	E	Record lost from	21 05 ..	..	..	..	
		to	00 13 ..	..	..	..	
,, 15	E	P	05 45 49	..	..	..	Surface waves small
		S?	.. 54 23	..	..	..	
		F	06 20 ..	..	..	..	
,, 22	E	IP	10 43 39	..	..	..	
		S?	.. 49 35	..	..	..	
1945 July 22		L	11 03 36	..	..	..	
		M	.. 09 23	..	1·6	..	
		F	.. 40 ..	..	..	..	
,, 23	E	P	03 58 40	..	..	..	
		S]	04 02 04	..	..	..	
		L	.. 04 17	..	..	..	
		M	.. 05 12	..	13·0	..	
		F	05 40 ..	..	..	..	

August, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	sec.	mm.	Km.	
1945 Aug. 1	E	P	22 31 25	..	..	..	
		S	.. 37 55	..		..	
		L	.. 48 ..	..	..	..	
		M	.. 52 10	..	..	..	
		F	23 20 ..	..	..		
,, 2	E	P	17 59 55	..	..	..	
		S	18 06 13	..	..	..	Surface waves small.
		F	.. 50 ..		..	..	
,, 3	E	P	03 44 15	..	..	..	
		M	.. 49 05	..	0·5	..	
		F	04 10 ..	..	..	..	
,, 8	E	iP	09 56 47	..	..	:	
		L	10 00 30	..	..	..	
		M	.. 02 61	..	17·5	..	
		F	.. 37 ..	..	..	..	
,, 14	E	P?	12 19 50	..	..	..	
		S	.. 27 46	..	..	..	
		M	.. 45 55	..	0·5	..	
		F	13 15 ..	..	..	..	
,, 16	E	P	00 26 03	..	..	..	
		S	.. 35 49	..	..	..	
		F	01 27 ..	..	..	..	
1945 Aug 28	E	e	19 50 ..	..	..	..	Slight.
		F	20 30 ..	..	..	..	
,, 29	E	P]	10 35 42	..	..	..	
		S]	.. 46 32	..	..	..	
		L	11 13 03	..	..	..	
		M	.. 20 01	..	2·0	..	
		F	Lost in the following shock				
,, 29	E	e	12 47 ..	..	..	..	Slight.
		F	13 44 ..	..	..	..	
,, 29	E	eP]	15 17 37	..	..	..	
		F	16 50 ..	..	..	..	
, 30-31	E	eP	23 45 ..	..	..	..	
		F	02 00 ..	..	..	..	
Aug 31-Sep. 1	E	P]	23 32 10	..	..	..	
		L	.. 35 30	..	..	..	
		M	.. 36 13	..	0·5	..	
		F	00 50 ..	..	..	..	

September, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	sec.	mm.	Km.	
1945 Sep. 1-2	E	Record lost from	15 28 ..	..	..	..	
		to	04 07 ..	..	..	..	
,, 5-6	E	P	22 00 30	..	..	..	
		S	.. 10 01	..	..	..	
		L	.. 18 25	..	..	..	
		M	.. 20 31	..	0·5	..	
		F	01 00 ..	..	..	..	
,, 6	E	e	01 45 ..	..	..	..	Slight.
		F	02 20 ..	..	..	..	
1945 Sep? 6]	E	P]	15 01 03	..	..	..	
		S]	.. 10 38	..	..	..	
		M	.. 29 30	..	0·5	..	
		F	16 00 ..	..	..	..	
,, 9]	E	P?	04 16 11	..	..	..	
		S	.. 26 31	..	..	..	
		L	.. 51 ..	..	..	..	
		M	.. 53 49	..	0·5	..	
		F	06		..	..	

COLOMBO OBSERVATORY, CEYLON.

September, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h.m.s.	sec.	mm.	k.m.	
Sept. 13	E	PKPi	11 36 32	..	..	..	
		e	.. 39 37	..	..	..	
		F	12 55 ..	..	..	..	
,, 19	E	P	10 45 48	..	..	..	
		F	11 20 ..	..	..	..	
,, 19-20	E	Record lost from	22 42 ..	..	..	..	
		to	00 13 ..	..	..	..	
1945			h. m. s.	sec.	mm.	km.	
Sep. 22	E	S ?	09 26 ..	..	..	..	
		F	10 15 ..	..	..	..	
,, 23	E	S	15 49 59	..	.	..	
		M	16 06 04	..	0·5	..	
		F	.. 30 ..	..	..	..	

COLOMBO OBSERVATORY,
CEYLON.

D. T. E. DASSANAYAKE,
Superintendent.

HAIG OBSERVATORY, SURVEY OF INDIA, DEHRA DUN.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remrks.	Date.	Campt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
							July, 1945.								
1945			h. m. s.	sec.	on trace in inches	Km.		1945 July 22	N	Mn	h. m.s. .. 59 27	sec. ..	on trace in inches.	km. ..	
July 22	N	e	10 51 42	..	..	..				F	12 00 ..	..	..	..	
		i	.. 55 32	..	..	..		" 22	N	Moderate shock at about 05h 00m G.M.T.					Phases lost due to congestion of lines.
		L	.. 57 38	..	..	..									
							August, 1945.								
1945								1945							
Aug. 14	N	e	12 25 18	..	..	..		Aug. 29	N	e	10 38 06	..	..	..	
		eL	.. 35 24	..	..	..				eL	11 29 06	..	..	..	
		M_1	.. 36 54	..	18	0·02				M_1	.. 36 46	24	0·03	..	
		M_1	.. 39 18	..	18	0·02				M_2	.. 40 36	24	0·02	..	
		F	13 00 ..	..	..	..				M^2	.. 43 39	22	0·02	..	
										F	12 15..	..	..	..	
							September, 1945.								
1945								1945							
Sep. 20	N	eP	10 42 21	..	300	..	Local.	Sep. 20		iS	.. 42 42	..	..	..	
		eP	.. 42 30	..	..	..				M_1	.. 42 54	3	0·05	..	
										F	.. 45	..	..	..	

J, de GRAAFF, HUNTER, C.I.E., Sc.D. F.R.S.,

DEHRA DUN.

Director, War Research, Survey of India.

NIZAMIAH OBSERVATORY, HYDERABAD, DECCAN.

July, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
July 3	E	M	17 32 23	15	3	..	
.. 15	E	P	05 45 33	..	..	6980	
		PcP	4 0 09	..	..	..	
		PP	47 52	..	..	..	
		S	54 03	..	..	..	
		PS	54 36	..	..	..	
		ScS	54 58	..	..	..	
		SS	58 23	..	..	..	
		L	06 06 08	..	..	..	
		M	12 16	18	6	..	
1945			h.m.s.	Sec.	μ	Km.	
July 22	E	P	10 44 42	..	..	2390	
		S	48 32	..	..	..	
		SS	49 07	..	..	..	
		M	51 41	17	20	..	
" 23	E	P	03 59 38	..	..	2470	
		PP	59 48	..	..	..	
		PcP	04 03 23	..	..	..	
		S	03 34	..		..	
		SS	04 03	..	..	..	
		M	07 36	17	277	..	

August, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945							
Aug. 1	N	P	22 30 59	..	..	4690	
		eS	37 09	..	..	..	
		S	37 19	..	..	..	
		SS	40 33	..	..	..	
		M	47 54	13	21	..	
.. 2	N	M	08 39 51	15	4	4270	
.. 2	N	eP	17 59 54	..	..	..	
		PP	18 01 33	..	..	..	
		S	05 49	..	..	..	
		ScS	10 12	..	..	..	
		L	11 20	..	..	..	
		M	16 04	11	8	..	
.. 2	N	M	21 51 24	..	12	2	
.. 3	N	P	03 45 46	..	..	2870	
		S	50 12	..	..	..	
		L	53 34	..	..	..	
		M	55 24	9	3	..	
.. 3	N	M	05 50 53	15	4	..	
.. 4	N	eP	15 01 54	..	..	2710	
		PP	02 16	..	..	..	
		S	06 09	..	..	..	
		M	10 19	11	3	..	
.. 4	N	M	21 01 15	11	2	..	
.. 6	N	e	02 27 01	..	..	..	
		e	27 11	..	..	..	
		M	29 55	7	3	..	
.. 7	N	S	22 27 31	..	..	..	
		M	47 05	16	4	..	
.. 8	N	eP	09 57 04		....	1550	
		P	57 09	..	..	..	
		S	59 43	..	..	..	
		SS	59 53	..	..	..	
		M	10 02 53	14	49	..	
1945							
Aug. 9	N	P	22 04 14	..	..	..	
		M	14 42	11	4	..	
" 11	E	M	15 31 25	15	4	..	
" 12	E	M	09 11 24	16	4	..	
	N	M	13 24	15	4	..	
" 12	E	M	15 03 48	16	4	..	
" 14	N	P	12 19 55	..	..	4890	
		PP	21 34	..	..	..	
		S	26 27	..	..	..	
		L	33 46	..	..	..	
		M	38 32	14	23	..	
" 16	N	e	00 22 35	..	..	..	
		e	28 17	..	..	..	
	E	M	38 41	18	9	..	
	N	M	39 40	15	..	8	
" 19	N	M	13 18 54	8	3	..	
21	N	e	20 26 41	..	..	..	P masked by microseisms
		e	27 13	..	..	..	
		M	21 08 13	15	4	..	
" 27	N	eP	07 44 37	..	..	6850	
		S	53 00	..	..	..	
		L	08 05 17	..	..	..	
		M	10 12	15	4	..	
" 28	N	eP	19 30 55	..	..	6000	
		PP	32 45	..	..	..	
" 28	N	S	19 38 31	..	..	..	
		L	48 31	..	..	..	
	E	M	51 41	16	7	..	
	N	M	52 13	16	9	..	
" 29	N	P	10 36 10	..	..	10270	
		S	47 17	..	..	..	

NIZAMIAH OBSERVATORY, HYDERABAD, DECCAN.

August, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Aug. 29							
		M	11 19 43	16	25	..	
,, 29	N	M	13 08 20	18	10	..	
,, 29	N	M	14 52 32	18	7	..	
1945			h. m. s.	Sec.	μ	Km.	
Aug. 29	N	S	15 20 00	..	..	..	
		M	30 07	20	22	..	
,, 29	N	M	16 20 51	18	8	..	
,, 30	N	M	08 35 29	15	4	..	
,, 31	N	M	23 46 27	15	4	..	

September, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945							
Sep. 1—2	N	P	22 58 08	..	..	9510	Δ from SKS—P
	E	PP	23 02 21	..	..	..	
	N	SKS	08 35	..	..	..	
		S	09 35	..	..	..	
		PS	11 06	..	..	..	
	E	SS	16 16	..	..	..	
	N	M	34 15	16	25	..	
		F	02 01	..	..	..	
,, 2	N	P	12 02 30	..	..	5130	
		PP	04 38	..	..	..	
		S	09 16	..	..	..	
		SS	12 53	..	..	..	
		M	20 38	15	3	..	
,, 4	N	M	08 27 34	15	3	..	
,, 4	N	M	18 31 40	15	3	..	
,, 5	N	M	01 56 33	8	2	..	
,, 5	N, E	P	22 00 29	..	..	8450	
	N	PP	03 04	..	..	..	
		S	10 13	..	..	..	
	E	PS	10 51	..	..	..	
	N	SS	15 38	..	..	..	
		L	24 55	..	..	..	
	E	M	29 19	17	9	..	
	N	M	30 47	18	10	..	
,, 6	N	M	01 17 14	10	4	..	
,, 6	E	P	15 01 21	..	..	8220	
	N	PP	03 43	..	..	..	
		S	10 55	..	..	..	
		PS	11 38	..	..	..	
		L	26 42	..	..	..	
	E	M	30 31	18	5	..	
	N	M	31 23	18	5	..	
,, 7	N	M	07 08 57	12	2	..	
,, 7	N	M	16 10 20	10	2	..	
,, 8	N	S	03 57 02	..	..	..	
		M	04 18 46	19	6	..	
,, 9	N	eP(?)	04 16 29	..	..	..	
	E	PP	19 17	..	..	..	
Sep. 9	N	S	26 56	..	..	..	
		PS	27 41	..	..	..	
		M	50 49	12	3	..	
	E	M	52 13	12	3	..	
,, 10	N	P	14 03 03	..	..	2570	
		S	07 07	..	..	..	
		M	12 01	9	2	..	
,, 11	E	M	13 51 16	10	2	..	
	N	M	52 25	11	2	..	
,, 13	N	P'	11 36 49	..	..	16780	
		P''	37 24	..	..	..	
	E	PP	40 28	..	..	..	
		SKKS	47 38	..	..	..	
		SKSP	50 35	..	..	..	
	N	SS	59 59	..	..	..	
	E	M	12 39 08	21	6	..	
,, 14	N	M	03 09 12	18	4	..	
,, 19	N	P(?)	10 43 54	..	..	..	
		eS	46 41	..	..	..	
		SS	47 02	..	..	..	
		M	48 52	8	14	..	
,, 19	N	e	12 37 22	..	..	..	
		PcP	38 15	..	..	..	
		S	46 09	..	..	..	
		L	58 49	..	..	..	
		M	13 08 27	13	3	..	
,, 22	N	S	09 30 46	..	..	..	
		M	46 50	12	2	..	
,, 23	N	P	15 42 22	..	..	4520	
,,		S	48 32	..	..	..	
,,		M	58 15	9	4	..	
,,	E	M	59 49	12	6	..	
,, 24	N	M	00 40 38	8	2	..	
,, 27	E	M	09 12 20	15	4	..	
,, 28	E	M	23 23 12	18	5	..	

NIZAMIAH OBSERVATORY,
HYDERABAD, DECCAN.

AKBAR ALI,
Director.

KODAIKANAL OBSERVATORY, KODAIKANAL.

July, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.	
July 2				..	..	..	One shock recorded near 10h 45m but cannot be read due to faintness of record.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
Jul. 23			h.m.s.	sec.	μ	Km.	
				..	..	..	One shock recorded at about 04h. 03m. but cannot be read due to faintness of record.

August, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945 Aug. 1	E	iP	22 32 37	..	..	4855	Slight.
		PP	34 07	..	..	..	
		PcP	35 07	..	..	..	
		iS	39 07	..	..	..	
		SS	41 47	..	..	..	
		ScS	43 32	..	..	..	
		L	45 12	..	..	..	
		Mn	48 20	17	1·2	..	
		F	23 40	..	..	..	
,, 2	E	eP	17 58 30	..	..	4780	Slight.
		PP	18 00 01	..	..	..	
		PcP	00 51	..	..	..	
		eS	04 55	..	..	..	
		SS	07 26	..	..	..	
		L	10 46	..	..	..	
		Mn	14 13	12	2·6	..	
		F	19 14	..	..	..	
,, 3	E	e	03 47 53	..	..	..	Near.
		i	49 18	..	..	..	
		L	49 48	..	..	..	
		M	50 18	12	6·9	..	
		F	04 05 ..	..	..	..	
,, 8	E	iP	10 00 11	..	..	2520	Moderate Near.
		e	00 43	..	..	..	
		iL	04 11	..	..	..	

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945 Aug. 8		e	04 31	..	..	..	
		e	06 16	..	..	..	
		Mn	08 16	20	120·9	..	
		F	11 33 ..	..	..	..	
14—15	E		Seismograph clock stopped Times and phased could not be determined with certainty.				
,, 27	E	e	07 42 53	..	..	..	Slight.
		F	08 17 03	..	..	..	
,, 29	E	iP	10 33 30	..	..	..	
		PP	36 30	..	..	..	Modertate.
		iSKS	44 00	..	..	..	
		SS	49 10	..	..	..	
		L	11 00 30	..	..	..	
		Mn	07 05	17	52·	..	
Aug. 29	E	e	15 08 40	..	..	..	Slgith.
		e	10 20	..	..	..	
		e	15 40	..	..	..	
		e	18 40	..	..	..	
		e	22 40	..	..	..	
		Mn	26 50	9	3·1	..	
		F	16 43 05	..	..	..	
Aug. 31 Sept. 1	E	e	23 37 28	..	..	..	Slight.
		F	00 00	..	..	..	

September, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945 Sep. 1	E	eP	22 57 07	..	..	..	Moderate
		PP	23 00 44	..	..	..	
		iSKS	07 45	..	..	..	
		S	08 30	..	..	..	
		SS	12 15	..	..	..	
		L	23 59	..	..	..	
		Mn	30 29	30	24·2	..	
		F	01 56 ..	..	..	..	
		eP	12 02 02	..	..	5280	
,, 2	E	PP	03 56	..	..	..	Slight.
		IS	08 56	..	..	..	
		SS	12 12	..	..	..	
		L	16 12	..	..	..	

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945 Sep.		Mn	20 42	24	4·5	..	
		F	33 ..	..	..	..	
5—6	E	iP	21 59 38	..	8355		Moderate.
		PP	22 02 18	..	..	..	
		iS	09 18	..	..	..	
		PS	09 48	..	..	..	
		SS	14 00	..	..	..	
		L	24 30	..	..	..	
,,		Mn	30 30	24	11·4	..	
		F	01 00 ..	..	..	..	
,, 6	E	iP	14 59 39	..	7945		Slight.
		PP	15 02 09	..	..	..	

*Absolute Times uncertain.

..L..L

KODAIKANAL OBSERVATORY, KODAIKANAL.

September, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	sec.	μ	Km.	
1945 Sep. 6							
,,		iS	08 59	..	..	..	
		SS	13 12	..	..	..	
		L	22 52	..	..	..	
		Mn	28 32	24	8·4	..	
		F	16 02 ..	..	..	..	
,, 8	E	e	03 53 39	..	..	..	
		F	04 28 ..	..	..	..	
,, 9	E	e	04 14 31	..	..	..	Moderate.
		e	17 39	..	..	..	
		i	24 54	..	..	..	
		e	25 84	..	..	..	
		e	29 59	..	..	..	
		L	42 17	..	..	..	
		Mn	48 57	12	6·0	..	
		F	06 06 ..	..	..	..	
,, 13	E	e	11 34 29	..	..	..	Slight.
		e	35 29	..	..	..	
		e	40 39	..	..	..	
		e	42 14	..	..	..	
		e	44 44	..	..	..	
		Mn	47 24	15	1·1	..	
		F	13 03 ..	..	..	..	
,, 14	E	F	02 34 16	..	..	..	
			03 25 ..				
1945 Sep. ,, 22	E	eP	09 24 07	..	..	7755	Slight.
		PP	26 37	..	..	..	
		eS	33 17	..	..	..	
		PS	35 42	..	..	..	
		SS	37 52	..	..	..	
		L	47 24	..	..	..	
		Mn	53 00	15	3·8	..	
		F	Not clear.				
,, 23	E	e	15 42 17	..	..	..	Slight.
		e	44 07	..	..	..	
		eS	49 27	..	..	..	
		e	51 49	..	..	..	
		e	53 01	..	..	..	
		L	58 06	..	..	..	
		Mn	16 02 21	20	8·0	..	
,, 24	E	e	00 35 22	..	..	..	
		F	48 ..	..	..	..	
,, 24	E	e	12 59 52	..	..	3555	Feeble shock.
		e	13 05 04	..	..	..	
		L	08 59	..	..	..	
		M	12 19	..	1·6	..	
		F?	27 ..	..	..	..	
28—29	E	e	23 22 17	..	..	..	Tremor
		F	00 01 ..	..	..	..	

* Absolute time uncertain.

SOLAR PHYSICS OBSERVATORY,
KODAIKANAL.

A. L. NARAYAN,
Director.

No earthquake shocks were reported to have been felt at any of the stations in India and the neighbourhood during the period 1st July—30th September 1945.

POONA

C. G. PENDSE,
Special Officer for Seismological Research.

GMGIPND—IS—204 DG Obs. JC.2239) 23-1-61—150

SEISMOLOGICAL BULLETIN.

ERRATA FOR JULY to SEPT 1945.

Page.	Date	Column.	Incorrect.	Correct.
1	-	-	Tab.2,conditions	Constants.
3	Aug.30	Date	3	30
7	Sep. 9	Remarks.	h= 150	h = 150 Kms.
7	Sep.19	Time etc.	Lost in	Please add 'Microseism'
9	Aug.29	Time	eP 10545	eP 103545
11	Aug. 3	Amp.	0.5	<0.5.
12	Sep.23	Amp.	0.5	<0.5
14	Jul.23	Amp.	?	77
14	Aug. 1	Date,Compt, Distance	2, N, 4270	Kindly detete.
14	Aug. 2	Distance	Blank	4270
14	Aug. 3	Date & Comp.	Repetition of 3/N	To be deteted.
14	Aug.16	Amp.	8 written in dist.col	To come in place.
16	Aug.29	Amp.	52	52.4
17	Sep.14	Phase	E blank	Ee.

Dhar./

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

SEISMOLOGICAL BULLETIN

October—December, 1945

CONTENTS

PUBLISHED UNDER THE DIRECTION OF

S. K. BANERJI, O. B. E., D. Sc., F. N. I.

Director General of Observatories

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SEISMOLOGICAL BULLETIN

October—December, 1945.

INTRODUCTION

Till the end of 1937, the seismic data from the observatories of the India Meteorological Department were being published annually as Part D of the Annual Summary of the India Weather Review. Since 1938, the data are being published in the present series of the Quarterly Seismological Bulletin. With the kind co-operation of the Surveyor-General of India, the Director of Nizamiah Observatory, Hyderabad, and of the Superintendent, Colombo Observatory, it has been possible to incorporate in the bulletin, the data of their respective observatories, *viz.*, Dehra Dun, Hyderabad and Colombo. The instrumental seismological data and the non-instrumental voluntary observations are collected and edited at the Meteorological Office, Poona.

TABLE 1

List of Seismograph Stations.

Station.	Latitude.	Longitude.	Height above M.S.L.	Lithologic foundation.	Officer-in-charge of Observatory.
New Delhi	28°35′N.	77°12′E.	207 metres	Massiye Quartzites	Superintending Meteorologist.
Bombay	18°54′N	72°49′E.	6 metres	Deccan Trap	Director.
Calcutta	22°32′N.	88°20′E.	(1) 7 metres (2) 6 metres	Alluvium	Director.
Columbo	6°54′ N.	79°52′E.	7 metres	Beach-Sand resting on gneiss probably decomposed.	Superintendent,
Dehra Dun	30° 19′N.	78°03′E.	682 metres	Gravel	Director, War Research, Survey of India.
Hyderabad	17°26′N.	78°27′E.	521 metres	Granite	Director.
Kodaikanal	10°14′N	77°28′E.	2,343 metres	Rock	Director.

(1) Milne-Shaw (2) Omari-Ewing

TABLE 2

The instruments and their constants.

Stations.	Component	Type of instrument	Mars	Period.	Static magnification.	Damping Ratio.	Remarks.
			Kg.	Secs			
New Delhi	E	Omori-Ewing	45	32	30	..	..
	N	Milne-Shaw	0·47	12	250	20:1	..
Bombay	N	Milne-Shaw	0·45	12	250	20:1	..
	E	Milne-Shaw	0·45	12	350	40:1	..
Calcutta	N	Milne-Shaw	0·45	12	250	20:1	..
	N	Omori-Ewing	50	15	32	..	..
	E	Omori-Ewing	50	21	30	..	..
Colombo	E	Milne-Shaw	0·45	12	250	20:1	..
Dehra Dun	N	Omori	50	30	12	..	..
Hyderabad	N	Milne-Shaw	0·45	12	250	20:1	..
	E	Milne-Shaw	0·45	12	250	20:1	..
Kodaikanal	E	Milne-Shaw	0·45	10	250	20:1	..

THE OBSERVATORY, NEW DELHI.

October, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Oct. 1	N, E	eP	05 18 5	..	..	911	Moderate
	N	i	19 44	..	..	..	
		iS	20 22	..	..	..	
	E	eS	20 23	..	..	..	
	N	S	21 10	..	..	..	
	E	Mn	23 22	13	387	..	
		F	53 ..	..	..	..	
	N	F	06 36 ..	..	..	..	
,, 2	N	M	00 58 59	..	..	..	Slight, distant.
		F	01 56 ..	..	..	..	
,, 4	N	eP	01 42 28	..	..	790	Slight
		eS	43 48	..	..	..	
		S	44 27	..	..	..	
		F	Lost in the following shock.				
,, 4	N	e	01 55 58	..	..	..	Slight, near.
		F	02 18 ..	..	..		
,, 4	N	i	08 52 11	..	..	..	Slight, probably near.
		F	09 06 ..	..	..	..	
,, 6	N	e	09 32 14	..	..	..	Slight, distant.
		i	32 35	..	..	..	
		i	33 17	..	..	..	
		F	10 28 ..	..	..	..	
,, 7	N	e	13 42 56	..	..	..	Slight, very distant.
		e	45 33	..	..	..	
		i	46 21	..	..	..	
		F	15 47 ..	..	..	..	
,, 9	N	iP	14 46 15	..	..	6120	Moderate.
	E	eP	46 15	..	..	..	
	N	PcP	47 09	..	..	..	
		iS	53 58	..	..	..	
	E	i	54 15	..	..	..	
	N	i	54 37	..	..	..	
	E	i	55 57	..	..	..	
	N	ScS	56 02	..	..	..	
		SS	57 47	..	..	..	
		SSS	59 01	..	..	..	
		M	15 10 58	..	..	..	
		F	16 47 ..	..	..	..	
,, 13	N	i	00 50 35	..	..	..	Slight. distant.
		F	01 30 ..	..	..	..	
,, 15	N	eP	21 33 26	..	..	1040	Slight.
		iS	35 09	..	..	..	
		S	36 15	..	..	..	
		F	21 48 ..	..	..	..	
1945 Oct. 16	N	iP	16 12 12	..	..	5780	Moderate. Direction of first motion South.
	E	eP	12 15	..	..	..	
	N	PcP	13 23	..	..	..	
		PP	14 02	..	..	..	
		PPP	15 02	..	..	..	
		PPPP	15 45	..	..	..	
		iS	19 36	..	..	..	
	E	iS	19 37	..	..	..	
	N	i	21 35	..	..	..	
		SS	23 02	..	..	..	
	N, E	SSS	24 34	..	..	..	
	N	L	28 42	..	..	..	
		M	16 33 20	..	..	..	
		F	18 22 ..	..	..	..	
,, 21	N	eP(?)	03 28 15	..	..	4700	Silght. Probable time correction +1 min.
		iS	34 36	..	..	..	
		SS	37 25	..	..	..	
		ScS	38 16	..	..	..	
		SSS	39 04	..	..	..	
		L	40 52	..	..	..	
		M	44 17	..	..	..	
		F	05 19 ..	..	..	..	
,, 21	N	e	06 45 39	..	..	..	Slight, near.
		i	47 07	..	..	..	
,, 21	N	i	06 47 46	..	..	..	
		F	07 06 ..	..	..	..	
,, 24	N	e	01 30 34	..	..	..	Slight, distant.
		e	33 00	..	..	..	
		i	52 04	..	..	..	
		i	54 22	..	..	..	
		F	02 18 ..	..	..	..	
,, 25	N	iP	15 09 24	..	..	6980	Moder
		PcP	09 54	..	..	..	
		PPPP	14 09	..	..	..	
		iP	17 54	..	..	..	
		PS	18 14	..	..	..	
		ScS	18 58	..	..	..	
		SKS	19 20	..	..	..	
		SS	21 05	..	..	..	
		SSSS	25 51	..	..	..	
		L	29 46	..	..	..	
		M	34 53	..	..	..	
		F	17 00 ..	..	..	..	
,, 26	N	eP	14 04 02	..		4250	Slight.
		PP	05 31	..	..	..	
		iS	09 56	..	..	..	
		SS	12 24	..	..	..	

THE OBSERVATORY, NEW DELHI.

October, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h.m. s.	sec.	μ	Km.	
Oct. 26	N	L	14 15 20	..	..	4250	Slight.
		M	18 24	..	..	..	
		F	15 53 ..	..	..		
Oct. 27	N	i	11 46 11	..	..	..	Slight, very distant.
		i	47 08	..	..	..	
		i	48 05	..	..	..	
		i	58 36	..	..	..	
		F	13 29 ..	..	..	..	
,, 28	N	i	00 32 27	..	..	..	Slight distant.
		i	33 59	..	..	..	Middle portion lost .. .. ..

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h.m.s.	sec.	μ	km.	
Oct. 28	N	i	37 31	..	..	..	
		F	01 47	..	..	..	
,, 29	N	e	06 05 13	..	..	..	Slight.
		i	06 07	..	..	..	
		i	06 27	..	..	..	
		F	27 ..	..	..	..	
,, 29	N	e	11 18 30	..	..	..	Slight, very distant.
		i	33 31	..	..	..	
		e	49 47	..	..	..	Surface waves.
		F	12 54 ..	..	..	..	

November, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
Nov. 1	N	i	01 27 49	..	..	..	Slight, distant.
		F	02 50 ..	..	..	..	
2	N	i	01 28 03	..	..	..	Slight, distant.
		F	02 40 ..	..	..	..	
,, 2	N	iP	19 07 53	..	..	6460	Slight.
		PP	10 05	..	6	..	
		iS	15 55	..	..	..	
		PS	16 03	..	..	..	
		SS	19 37	..	..	..	
		F	20 01 ..	..	..	..	
,, 3	N	i	01 10 57	..	..	..	Slight, distant.
		i	21 52	..	..	..	
		F	20 40 ..	..	..	..	
,, 3	N	i	20 31 48	..	..	..	Slight, distant. Surface waves.
		e	58 52	..	..	..	
		F	23 47 ..	..	..	..	
,, 8	N	e	01 03 26	..	..	..	Slight, distant.
		e	13 21	..	..	..	
		F	43 ..	..	..	..	
,, 8	N	i	09 24 15	..	..	..	Slight, distant.
		F	Lost in the following shock.				
,, 8	N	i	10 21 31	..	..	..	Slight, distant.
		i	28 51	..	..	..	
		F	11 15 ..	..	..	..	
,, 9	N	e	20 07 57	..	..	..	Slight, distant.
		F	42 ..	..	..	..	
,, 11	N	e	09 44 04	..	..	..	Slight, distant. Surface waves.
		F	10 23 ..	..	..	..	

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
Nov. 22	N	eP	21 00 16	..	..	5990	Slight.
		iS	07 51	..	..	..	
		ScS	10 04	..	..	..	
		M	23 06	..	..	..	
		F	22 03	..	..	..	
23	N	e	00 36 02	..	..	..	Slight, distant. Surface waves.
		F	48 ..	..	..	..	
23	N	e	13 04 02	..	..	..	Slight, distant. Surface waves.
		e	14 10	..	..	..	
		F	14 40 ..	..	..	..	
,, 26	N	e	05 32 10	..	..	..	Slight, distant.
		i	36 25	..	..	..	
		F	07 04 ..	..	..	..	
27	N	e	05 50 40	..	..	..	Slight, distant.
		e	06 08 07	..	..	..	
		F	31 ..	..	..	..	
,, 27	N	eP	12 33 55	..	..	6420	Slight.
		iS	11 55	..	..	..	
		SS	15 50	..	..	..	
		F	Lost in the following shock.				
,, 27	N	iS	12 41 03	..	..	..	Slight. An aftershock of preceding one.
		F	14 20 ..	..	..	..	
,, 27	N, E	iP	21 59 54	..	..	1680	Very great. Direction first motion — North and West?
	E	i	22 00 06	..	..	..	
		iS	02 40	..	..	..	
		F	01 31 ..	..	..	..	
	N	F	03 06 ..	..	..	..	
28	N	e	03 22 07	..	..	..	Slight, near.
		F	41 ..	..	..	..	

The Milne Shaw Seismograph was dismantled on the 16th and restarted on the 22nd.

THE OBSERVATORY, NEW DELHI.

November, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	sec.	μ	Km.	
1945 Nov. 28	N	e	04 20 11	..	..	..	Slight, near.
		F	32 .	..	..	..	
,, 28	N	i	04 53 41	..	..	..	Slight, near.
		F	05 02 ..	..	..	..	
,, 28	N	e	10 48 15	..	..	..	Slight near.
		e	49 16	..	..	..	
		e	49 35	..	..	..	
		e	49 52	..	..	..	
		F	11 33 ..	..	..	..	
	N	e	19 10 51	..	..	..	Slight.
		i	11 36	..	..	..	
		i	13 49	..	..	..	
		F	55 .	..	..	..	
1945 Nov. 28-29	N	e	23 30 26	..	..	..	Slight, near.
		i	31 07	..	..	..	
		i	31 30	..	..	..	
		i	31 49	..	..	..	
		F	00 02	..	..	..	
,, 29	N	e	02 33 58	..	..	..	Slight, probably near.
		F	54 ..	..	..	..	
,, 30	N	e	11 25 40	..	..	..	Slight, probably near.
		F	40 ..	..	..	..	
30	N	e	12 35 13	..	..	..	Slight.
		F	13 47 ..	..	..	..	
,, 30	N	e	22 18 27	..	..	..	Slight.
		F	52 ..	..	..	..	

December, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	sec.	μ	Km.	
1945 Dec. 1	N	e	13 39 01	..	..	..	Slight, distant.
		F	14 00 ..	..	..	..	
,, 1	N	e	18 51 24	..	..	..	Slight, distant.
		F	19 54 ..	..	..	..	
,, 2	N	e	02 13 34	..	..	..	Sligt, distant. Surface waves.
		F	52 ..	..	..	..	
,, 2	N	e	14 22 08	..	..	..	Slight, distant.
		F	34 ..	..	..	..	
,, 2	N	e	18 46 17	..	..	..	Slight, distant.
		F	19 14 ..	..	..	..	
,, 2	N	e	21 19 07	..	..	..	Slight, distant.
		F	35 ..	..	..	..	
,, 2	N	e	23 12 37	..	..	..	Slight, distant.
		F	56 ..	..	..	..	
,, 2	N	e	01 23 31	..	..	..	Slight, distant.
		F	02 24 ..	..	..	..	
,, 3	N	e	19 52 36	..	..	..	Slight, distant.
		F	20 08 ..	..	..	..	
,, 4	N	e	00 01 56	..	..	..	Slight, distant. Surface waves.
		F	09 ..	..	..	..	
,, 4	N	e	22 07 03	..	..	..	Slight.
		L	08 07	..	..	..	
		M	09 27	..	..	..	
		F	52 ..	..	..	..	
1945 Dec. 5	N	e	01 29 31	..	..	..	Slight, distant.
		F	02 27 ..	..	..	..	
,, 5	N	e	06 29 21	..	..	..	Slight, distant.
		F	44 ..	..	..	..	
,, 5	N	e	08 49 02	..	..	..	Slight, probably near.
		F	09 10 ..	..	..	..	
,, 5	N	i	13 33 05	..	..	..	Slight, probably near.
		F	44 ..	..	..	..	
6	N	i	16 17 13	..	..	..	Slight, distant.
		i	18 36	..	..	..	
		i	19 46	..	..	..	
		F	48 ..	..	..	..	
,, 8	N	eP	01 16 04	..	..	8480	Slight.
		iS	25 50	..	..	..	
		i	27 58	..	..	..	
		SS	30 50	..	..	..	
		L	39 50	..	..	..	
		M	45 58	..	..	..	
		F	04 28 ..	..	..	..	
,, 8	N	e	20 09 28	..	..	..	Slight.
		L	10 3 2	..	..	..	
		M	11 52	..	..	..	
		F	4 2 ..	..	..	..	
10	N	e	07 09 59	..	..	..	Slight, distant.
		F	22 ..	..	..	..	

THE OBSERVATORY, NEW DELHI.

December, 1945.

1945 Date.	Compt.	Phase.	G.M.T. h. m. s.	per. sec.	Amp. μ	Δ Km.	Remarks.
Dec. 10	N	e	14 48 40	..	..	..	Slight, local.
		i	48 49	..	..	..	
,, 10	N	i	14 48 54	..	..	..	
		F	15 06 ..	..	..	..	
	N	i	27 27	..		..	Slight, distant.
		i	29 38	..	..	..	
		F	11 14 ..	..	..	..	
,, 16	N	e	11 58 24	..	..	..	Slight, distant.
		i	12 00 33	..	..	..	
		F	18 ..	..	..	..	
,, 16	N	e	23 30 00	..	..	..	Slight, distant.
		i	31 37	..	..	..	
		F	50 ..	..	..	..	
,, 18	N	eP	03 25 56	..	..	1780	Slight.
		iS	28 51	..	..	..	
		M	31 19	..	..	..	
		F	04 04 ..	..	..	..	

The Milne Shaw seismograph was dismantled on the 18th and again started on the 22nd.

,, 20	E	eP	04 08 13	..	..	6000	Moderate.
		PP	10 12	..	..	..	
		iSS	19 26	..	..	..	
		F	Lost.				
,, 22	N	e	19 39 23	..	..	..	Slight, very distant.
		L	40 27	..	..	..	
		M	41 47	..	..	..	
		F	Lost in microseisms.				
23	N	e	08 35 59	..	..	..	Slight, very distant.
		i	37 40	..	..	..	
		M	09 22 00	..	..	..	
		F	Lost in microseisms				
25	N	M	02 09 21	..	..	..	Slight, distant.
		F	03 21 ..	..	..	..	
25	N	e	08 53 43	..	..	..	Slight, distant.
		i	59 32	..	..	..	
		M	09 02 38	..	..	..	
		F	53 ..	..	..	..	
27	N	e	00 40 35	..	..	..	Slight, probably near
		F	47 ..	..		..	

1945 Date.	Compt.	Phase.	G.M.T. h. m. s.	per. sec.	Amp. μ	Δ Km.	Remarks.
Dec. 27	N	eP	04 53 00	..	..	8520	Moderate.
		iS	05 02 48	..	..	..	
		i	04 55	..	..	..	
		SS	07 54	..	..	..	
		i	08 35	..	..	..	
		L	16 45	..	..	..	
		M	22 42	..	..	..	
		F	08 03 ..	..	..	..	
,, 28-29	N	iP	18 00 49		..	8500	Moderate. Direction of first motion—South.
	E	eP	18 00 49	..	..	..	
	N	PP	03 32	..	..	..	
		PPP	05 17	..	..	..	
	N, E	iS	10 36	..	..	..	
	E	ScS	11 15	..	..	..	
		PPS	11 40	..	..	..	
	N	SS	15 13	..	..	..	
	E	SS	15 25	..	..	..	
	N	i	15 13	..	..	..	
		SSS	18 26	..	..	..	
	E	SSS	19 12	..	..	..	
	N	L	24 04	..	..	..	
		M	29 58	..	..	..	
	E	M	30 53	..	..	..	
	N	Mn	33 25	25	92	..	
	E	F	20 56 ..	..	..	..	
	N	F	00 22 ..	..	..	..	
,, 29	N	e	10 08 42	..	..	..	Slight, Probably an after shock of the Preceding one.
		F	11 07 ..	..	..	..	
,, 29	N	e	13 48 10	..	..	..	Slight, probably an after shock of the earthquake of 18th.
		F	14 40 ..	..	..	..	
,, 29	N	e	14 50 50	..	..	..	Slight, distant
		F	15 15 ..	..	..	..	
,, 30	N	eP	01 00 41	..	..	8510	Slight
		SS	15 11	..	..	..	
		M	29 41	..	..	..	
		F	03 17 ..	..	..	..	
31	N	e	17 48 50	..	..	..	Slight distant.
		i	50 12	..	..	..	
		F	19 07 ..	..	..	..	

THE OBSERVATORY,
NEW DELHI.

V. V. SOHONI,
Superintending Meteorologist.

COLABA OBSERVATORY, BOMBAY.

October, 1945.

Date.	Compt.	Phase.	G.M.T. h.m.s.	per sec.	Amp. μ	Δ Km.	Remarks.
1945 Oct. 1	N,E	eP	05 19	20	..	1580	Moderate 67° 5 E., 30°2 N near Quetta O=05h 16m 49s
	N,E	iS	21 56	..	..	..	
	N,E	L	23 03	..	..	..	
	E	M	27 16	8	34	..	
	N	M	28 41	7	49	..	
	N	F	06 50 ..	..	..	..	
	E	F	07 02 ..	..	..	..	
,, 2	N,E	e	00 53 28	..	..	..	Feeble
	E	F	01 33 ..	..	..	..	
	N	F	37 ..	..	..	..	
,, 4	E	e	01 48 52	..	..	..	Slight
	N	e	Lost while changing chart				
	E	F	02 34 ..	..	..	..	
	N	F	42 ..	..	..	..	
,, 7	N,E	i	13 34 02	..	..	..	Feeble
	N	F	15 29 ..	..	..	..	
	E	F	37 ..	..	..	..	
,, 9	E	iP	14 47 15	..	..	7290	Slight 44°.0N., 146°.8E. H=14h 36m,4±s h—100 kmn (J.S.A.)
	N	eP					
	N,E	iS	56 01	..	..	..	
	N,E	L	15 06 55	..	..	..	
	N	F	16 15 ..	..	..	..	
	E	F	20 ..	..	..	..	
,, 9	N,E	e	22 51 ..	..	..	..	Feeble
	N,E	F	23 02 ..	..	..	..	
,, 16	N	eP	16 12 19	..	..	6445	Slight Deep > 0°,124°E, near Celebes, Islands O-16h 03m 09s
	E	iP					
	E	iPP	14 11	..	..	..	
	N	ePP	19 46	..	..	..	Islands O=16h. 03m. 09s
	N,E	iS	22 01	..	..	..	
	E	iSS	29 05	..	..	..	
	E	L	18 04 ..	..	..	..	
	E	F	Lost in microseisms.				
	N	F					
,, 21	N.E.	iP	03 29 20	..	..	5 020	Slight. In the region 12°.5 N., 120° 5 E. near Mundaro Islans. O=03 h. 21m. 20s.
	N.E.	iS	36 00	..	..	..	
	E	L	42 00	..	..	..	
	N	L	42 16	..	..	..	
	E	M	48 56	1	11	..	
	E	F	05 18 ..	..	..	..	
	N	F	Lost in microseisms.				
,, 21	N,E	e	06 51 05	..	..	..	Feeble, near.
	E	F	07 22 ..	..	..	..	
	N	F	Lost in microseisms.				

Date.	Compt.	Phase.	G.M.T. h. m. s.	sec.	μ	Km.	Remarks.
1945 Oct. 24	E	e	01 32 27	..	..	..	
	N	e	32 33	..	..	..	
	E	F	02 31 ..	..	..	..	
	N	F	39 ..	..	..	..	
,, 25	N.E.	iP	15 10 25	..	..	8265	Moderate. 57·2N., 163·6E. H=14h.58m 50s h-60km. ± (J.S.A.)
	N.E.	iS	20 01	..	..	..	
	E	L	31 24	..	..	..	
	E	M	50 07	13	10	..	
	N	F	18 15 ..	..	..	..	
	E	F	21 ..	..	..	..	
,, 26	NE	eP	14 04 22	..	..	4490	Slight 39°.3 N, 31°.1 E. in Asia Minor O·13b. 56m 47s
	E	S	10 0	..	..	..	
	E	L	17 09	..	..	..	
	E	M	22 05	15	12	..	
	E	F	16 20 ..	..	..	..	
	N	F	Lost in microseisms				
,, 27	NE	e	11 43 44	..	..	..	Distant
	E	F	13 53 ..	..	..	..	
	N	F	Lost in microseisms				
,, 28	N	eP	00 23 24	..	..	3400	Slight
	E	iP					
	N.E.	iS	28 26	..	..	..	
	N	F	02 04 ..	..	..	..	
	E	F	09 ..	..	..	..	
,, 28	N.E.	e	05 51 03	..	..	..	Feeble.
	E	e	06 01 19	..	..	..	
	N	F	07 11 ..	..	..	..	
	E	F	16 ..	..	..	..	
,, 29	N.E.	eP	06 01 30	..	..	2780	Slight.
	N.E.	eS	05 50	..	..	..	
	N	L	08 16	..	..	..	
	N	M	09 38	5	5	..	
	N.E.	F	06 49	..	..	..	
,, 29	N	E	11 12 59	..	..	..	Slight distant.
	E	e	20 44	..	..	..	
	E	F	13 15 ..	..	..	..	
	N	F	19 ..	..	..	..	

November, 1945.

Date.	Compt.	Phase.	G.M.T.				Remarks.
1945 Nov. 2	E	iP	19 07 59	..	..	..	Slight. 1°S., 131°E. O=18h. 58 m. 00s.
	N	eP					
	E	F	20 25 ..	..	..	..	
	N	F	Mixed up with microseisms				
1945 Nov. 3	NE	e	22 32 57	..	..	..	Feeble distant.
	E	F	23 46 ..	..	..	..	
	N	F	Mixed up with microseisms				

COLABA OBSERVATORY, BOMBAY.

November, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h.m.s.	sec.	μ	Km.	
Nov. 8	N, E	e	09 13 ..	..	..	..	Feeble.
	N, E	F	34 ..	..	..	..	
,, 8	N	eP?	09 16 52	..	..	..	Slight, distant. 81° N., 7° W. O = 09h. 05·5m. (U. S. C. G. S.)
	N	eS?	26 16	..	..	..	
	N	F	Mixed up with the next shock.				
	E	Record lost due to failure of light.					80°·9 N., 23° ·8W. H = 09h. 05m. 41s. (J. S. A.) 81·2 N., 15° W. H = 09h. 05m. 34 s. (B.C.I.S.).
,, 8	N	eP?	10 14 11	..	..	..	
	N	eS?	23 29	..	..	..	Slight. 81° N., 7° W. H = 10h. 02·5m. (U. S. C. G. S.)
	N	F	11 18 ..	..	..	..	
	E	Record lost due to failure of light.					80° ·9 N., 23° ·8 W. H = 10h. 02m. 52s. (J. S. A.). After shock of previous one.
,, 11	N E	e	09 33 47	..	..	..	Feeble.
	N, E	e	37 41	..	..	..	
	N	F	10 20 ..	..	..	..	
	E	F	32 ..	..	..	..	
,, 15	N, E	e	12 30 42	..	..	..	
	N, E	F	13 09 ..	..	..	..	
,, 20	N, E	e	06 34 35	..	..	..	Slight.
	E	F	07 17 ..	..	..	..	
	N	F	21 ..	..	..	..	
,, 22	N, E	e(P)	21 00 02	..	..	..	Slight.
	N, E	i (S)	07 31	..	..	..	Near 7° N., 127° E., Off east Mindanao. Island. O = 20h. 51·2m.
	N, E	F	22 09 ..	..	..	..	
,, 23	E	e	13 11 ..	..	..	..	Feeble.
	N	e	15 ..	..	..	..	
	N:	F	40 ..	..	..	..	
	E	F	42 ..	..	..	..	
,, 26	E	i	05 31 38	..	..	..	Feeble.
	N	e					
	N,E	i	36 38	..	..	..	
	N	F	06 33 ..	..	..	..	
	E	F	38 ..	..	..	..	
,, 27	N, E	eP	12 04 10	..	..	..	Slight.
	N, E	e	12 19	..	..	..	
	N, E	L	25 28	..	..	..	
	N, E	F	13 59 ..	..	..	..	

Date.	Compt.	Phase.	G. M. T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	sec.	μ	Kmp.	
Nov. 27	N	eP	21 59 19	..	..	..	Great. 24° ·2 N., 62° ·6E about 75 miles away from Pasni near the Mekran coast. O = 21h. 56m. 40s. Felt in southwest Punjab, Sind, Baluchistan and the southeastern part of Arabia. Sea wave associated with the disturbance swept the Mekran coast and the Arabian sea-board as far as Karwar in the Bombay Province. Damage to life and property due to the sea wave particularly in places surrounding Pasni.
	E	iP	59 20	..	..	..	
	N, E	Other phases cannot be identified.					
,, 28	N, E	eP	03 19 35	..	..	..	Slight. Probably aftershock of the very great Mekran earthquake of 27th.
	E	M	26 21	8	4	..	
	E	F	04 07 ..	..	..	..	
	N	F	10 ..	..	..	..	
,, 28	N, E	e	04 22 ..	..	..		Feeble.
	N, E	F	37 ..	..	..		
,, 28	E	i	08 59 38	..	..		Feeble.
	N	e					
	N	F	09 21 ..	..	..		
	E	F	Lost while changing chart.				
,, 28	N, E	eP	10 51 27	..	..	..	Slight. Probably aftershock of the very great Mekran quake of 27th.
	N, E	F	11 26 ..	..	..	..	
,, 28	N, E	eP	19 13 34	..	..	..	Slight Probably aftershock.
	E	F	48 ..	..	..	..	
	N	F	53 ..	..	..	..	
28-29	N, E	eP	23 33 32	..	..	..	Slight. Probably aftershock.
	E	F	59 ..	..	..	..	
	N	F	00 03 ..	..	..	....	
,, 29	N, E	eP	02 37 26	..	..	..	Feeble. Probably aftershock.
	E	F	03 13 ..	..	..	..	
	N	F	18 ..	..	..	..	
,, 29	N, E	e	10 29 ..	..	..	..	Feeble.
	N, E	F	52 ..	..	..	..	
,, 30	N, E	e	12 18 52	..	..	..	
	E	F	13 23 ..	..	..	..	
	N	F	31 ..	..	..	..	
,, 30	N, E	e	22 16 ..	..	..	..	Feeble.
	E	F	36 ..	..	..	..	
	N	F	43 ..	..	..	..	

COLABA OBSERVATORY, BOMBAY.

December, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	sec	μ	Km.	
1945							
Dec. 1	N,E	e	13 39 ..	..	..	..	Feeble.
	N,E	F	55 ..	..	..	..	
,, 2	N	e	18 43 16	..	..	..	Feeble.
	E	e	46 27	..	..	..	
	E	F	19 11 ..	..	..	..	
	N	F	19 ..	..	..	..	
,, 2	N	e	20 11 42	..	..	..	Feeble.
	E	e	18 34	..	..	..	
	E	F	21 37 ..	..	..	..	
	N	F	47 ..	..	..	..	
,, 2	E	e	23 06 02	..	..	..	Feeble.
	N	i	06 13	..	..	..	
	N,E	F	51 ..	..	..	..	
,, 4	N	e	22 04 27	..	..	..	Slight
	E	e	37 04	..	..	..	
	E	M	14 43	7	4	..	
	N	F	44 ..	..	..	..	
	E	F	47 ..	..	..	..	
,, 5	N	e	06 22 14	..	..	..	Feeble.
	E	e	28 23	..	..	..	
	E	F	50 ..	..	..	..	
	N	F	59 ..	..	..	..	
,, 5	N,E	e	08 44 56	..	..	..	Feeble.
	E	F	09 12 ..	..	..	..	
	N	F	19 ..	..	..	..	
,, 5	N	e	12 21 ..	..	..	..	Very feeble.
	E	e	28 ..	..	..	..	
	N,E	F	45 ..	..	..	..	
,, 5	N	e	13 31 35	..	..	..	Feeble.
	E	e	32 12	..	..	..	
	N,E	F	50 ..	..	..	..	
,, 6	N	e	16 14 37	..	..	..	Slight.
	E	i	15 01	..	..	..	
	N	i	16 31	..	..	..	
	N,E	F	53 ..	..	..	..	
,, 8	N,E	eP	01 16 08	..	..	8800	
	E	iS	26 10	..	..	..	Slight. 4° ·7 S., 151° 2'E. 0-01h. 04m. 12s
	N	eS	39 38	..	..	..	BCIS gives :— 4' S., 151.5 E. 0-01h. 04m. 01s
	N	L	39 43	..	..	..	
	E	L	04 17 ..	..	..	..	
	N,E	F	19 44 ..	..	..	..	
,, 8	E	e	20 01 ..	..	..	..	Very feeble.
	E	F					
	N		Movements mixed with microseisms.				
1945							
Dec. 8	N, E	eP?	20 06 40..	..	..		Slight.
	N, E	eS?	09 30	..	..	..	
	E	L	11 00	..	..	..	
	E	M	12 47	8	2	..	
	E	F	37 ..	..	..	..	
	N	F	40 ..	..	..	..	
,, 10	N, E	e	07 02 20	..	..	..	Feeble.
	N, E	F	30 ..	..	..	..	
,, 10	N.E.	e	14 44 30	..	..	..	Very feeble.
	E	i	48 23	..	..	..	
	N	e					
	N	F	15 12 ..	..	..	..	
	E	F	15 ..	..	..	..	
,, 11	N, E	e	10 24 33	..	..	1510	Slight.
	N, E	e	27 03	..	..	..	
	E	M	32 08	9	6	..	
	N	M	32 14	8	5	..	
	N, E	F	11 20 ..	..	..	..	
,, 16	N	e	11 58 11	..	..	..	Slight.
	E	e	58 22	..	..	..	
	E	F	12 24 ..	..	..	..	
	N	F	26 ..	..	..	..	
,, 16	E	e	23 29 44	..	..	..	Feeble
	N, E	e	31 15	..	..	..	
	E	F	58 ..	..	..	..	
	N	F	59 ..	..	..	..	
,, 18	N, E	eP	03 26 16	..	..	1290	Slight In the region of 19° N., 59. E° O=03h. 22·3
	N, E	eS	28 25	..	..	..	
	N, E	L	29 25	..	..	..	
	N	M	38 07	14	6	..	
	E	M	38 55	10	4	..	
	N	F	04 12 ..	..	..	..	
	E	F	13 ..	..	..	..	
,, 19	N	e	22 26 48	..	..	..	Feeble
	E	e	27 00	..	..	..	
	E	F	55 ..	..	..	..	
	N	F	Mixed up with microseisms				
,, 20	N, E	e	00 20 ..	..	..	..	Feeble
	N	F	52 ..	..	..	..	
	E	F	53 ..	..	..	..	
,, 20	E	iP	04 08 29	..	..	6 155	Mederate. 70·5. N., 126°·5 E. east of Mindanao Islands O=03h. 59m. 20s. BCIS gives :— 7° ·5 N., 127E. H=03h. 59·2m.
	N	eP					
	E	iPP	10 29	..	..	..	
	N	ePP	10 33	..	..	..	
	E	iS	16 14	..	..	..	
	N	iS	16 16	..	..	..	

COLABA OBSERVATORY, BOMBAY.

December, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ	km.	
Dec. 20	E	iSS	20 00	..	..	..	
	N	SS	20 14	..	..	..	
	E	L	25 38	..	..	..	
	N	L	27 00	..	..	..	
	E	M	34 11	20	15	..	
	N	M	38 52	17	8	..	
	E	F	05 56 ..	..	..	..	
	N	F	Mixed up with microseisms.				
,, 22	N, E	e	19 38 30	..	..	..	Feeble.
	E	F	20 03 ..	..	..	..	
	N	F	04 ..	..	..	..	
,, 23	N, E	e	08 37 53	..	..	..	Feeble, distant.
	E	F	10 30 ..	..	..	..	
	N	F	Mixed with microseisms.				
,, 25	N, E	iP	01 38 13	..	..	9035	Slight. 52° N., 173°.7°E near Kiska Islands O=01h 25m 56s
	N, E	iS	48 26	..	..	..	
	E	F	03 19 ..	..	..	..	
	N	F	26 ..	..	..	..	
,, 25	N, E	eP	08 47 28	..	..	233 5	Slight.
	N, E	eS	51 14	..	..	..	
	N, E	L	53 18	..	..	..	
	E	M	57 10	12	3	..	
	N	M	09 01 56	7	3	..	
	E	F	38 ..	..	..	..	
	N	F	10 02 ..	..	..	..	
,, 27	N, E	iP	04 53 18	..	..	8690	Moderate. 6°S., 148°E., Bismark Archhipelago H-04h. 41. 0m. (U.S.C.G.S.).
	N, E	eS	05 03 14	..	..	..	
	E	SS	08 49	..	..	..	
	E	L	19 08	..	..	..	
	E	M	35 19	19	6	..	
	N, E	F	07 38 ..		..	..	

Date.	Compt.	Phase.	G. M. T.	P.	Amp.	Δ	Remarks.
1945			h.m.s.	sec.	μ	Km.	
Dec. 28	E	iP	18 01 01	..	..	8745	Moderate. 6° S., 151° E.- (Provisional). H-17h. 48·8m. (U. S. C. G. S.).
	N	eP					
	E	iS	11 00	..	..	..	
	N	iS	11 09	..	..	..	
	E	SS	16 05	..	..	..	
	N	SS	16 20	..	..	..	
	E	L	28 36	..	..	..	
	N	L	29 25	..	..	..	
	E	M	38 42	20	21	..	
	N	M	48 06	19	27	..	
	N	F	22 05 ..	..	..	..	
	E	F	14 ..	..	..	..	
,, 29	E	i	10 02 55	..	..	..	Feeble.
	N	e					
	N, E	F	52 ..	..	..	..	
,,v 29	E	e	12 39 20	..	..	..	Feeble.
	N	e	49 11	..	..	..	
	E	F	13 26 ..	..	..	..	
	N	F	27 ..	..	..	..	
,, 29	N	e	14 48 49	..	..	..	Feeble.
	E	e	49 39	..	..	..	
	N	F	14 09 ..	..	..	..	
	E	F	16 ..	..	..	..	
,, 30	E	iP	01 00 57	..	..	8980	Slight. Aftershock of the moderate disturbance on 28th. H-00h. 48·6m. (BCIS).
	N	eP	01 00	..	..	..	
	E	iS	11 07	..	..	..	
	N	eS					
	N, E	L	27 40	..	..	..	
	E	F	02 54 ..	..	..	..	
	N	F	03 00 ..	..	..	..	
,, 30	N	e	10 30 17	..	..	..	Very feeble.
	E	i					
	E	F	40 ..	..	..	..	
	N	F	42 ..	..	..	..	
,, 31	E	e	17 38 07	..	..	..	Feeble, distant.
	E	F	18 59 ..	..	..	..	
	N	Record lost due to congestion of lines.					

COLABA OBSERVATORY, BOMBAY.

S. K. CHAKRABARTY

Director.

ALIPORE OBSERVATORY, CALCUTTA.

October, 1945.

Date.	Compt	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.	
Oct. 1	N	eP	05 21 20	..	..	2000	Moderate.
		iS	24 45	..	..	..	
		iSS	25 20	..	..	..	
		F	Lost in microseisms				
,, 5	N	eP	12 34 10	..	..	545	Slight.
		iS	35 08	..	..	..	
		F	12 55 ..	..	..	..	
,, 9	N	e	14 45 40	..	..	..	Slight, distant.
		i	53 06	..	..	..	
		F	15 46 ..	..	..	..	
,, 21	N	i	03 31 02	..	..	..	Phases marked by microseisms.
		i(SS)	34 54	..	..	..	
		F	Lost in microseisms.				
1945 Oct. 24	N	i	01 26 5	..	..	..	Feeble.
		i	31 27	..	..	..	
		e	02 11 ..	..	..	..	
,, 25	N	eP	15 09 20	..	..	6865	Slight.
		iS	17 50	..	..	..	
		iSS	20 10	..	..	..	
		F	16 26 ..	..	..	..	
,, 26	N	e	14 12 43	..	..	..	Slight, distant.
		i	13 05	..	..	..	
		F	Lost in microseisms				
,, 29	N	e	05 59 38	..	..	833	Slight.
		iS	06 01 04	..	..	..	
		F	21 ..	..	..	..	

November, 1945.

Date.	Compt	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
Nov. 27	N	e	12 02 41	..	..	..	Slight, distant.
		i	09 39	..	..	..	
		F	Lost in the following shock.				
,, 27	N	i	21 31 42	..	..	..	Slight, distant.
		i	38 25	..	..	..	
		F	13 12	..	..	..	
,, 27	E	eP	22 02 01	..	..	2445	Very great. Epc. in sea near Karachi.
		i	02 41	..	..	..	
		i	03 02	..	..	..	
		i	03 27	..	..	..	
		iS	06 02	..	..	..	
Nov. 28	N	e	19 16 04	..	..	..	Slight.
		i	18 26	..	..	..	
		i	19 17	..	..	..	
		F	45 ..	..	..	..	
,, 8	N	e	23 35 34	..	..	..	Slight, near.
		i	37 28	..	..	..	
		F	Lost.				
,,	N	e	12 19 46	..	..	..	Slight, distant.
		F	13 13 ..	..	..	..	
,, 30	N	e	22 23 56	..	..	..	Feeble.
		F	44 ..	..	..	..	

December, 1945.

Date.	Compt	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
Dec 4	N	e	22 11 18	..	..	..	Slight, near.
		i	13 38	..	..	..	
		F	38 ..	..	..	..	
,, 6	N	e	15 20 25	..	..	..	Slight, near.
		F	16 43 ..	..	..	..	
,, 7	N	e	20 35 02	..	..	..	Slight, near.
		F	48 ..	..	..	..	
,, 8	N	e	01 19 01	..	..	..	Moderate, distant.
		i	23 20	..	..	..	
		L?	31 19	..	..	..	
		M?	38 05	..	..	..	
		F	Lost.				
Dec 8		e	20 12 50	..	..	..	Slight, near.
		i	16 20	..	..	..	
		F	20 51 ..	..	..	..	
,, 10	N	e	07 08 03	..	..	..	Feeble.
		F	24 ..	..	..	..	
,, 10	N	e	14 39 36	..	..	..	Slight, near
		i	41 29	..	..	..	
		F	15 05 ..	..	..	..	
,, 11	N	e	10 27 28	..	..	..	
		i	29 53	..	..	..	
		i	30 53	..	..	..	
		F	Lost due to congestion of lines.				

ALIPORE OBSERVATORY, CALCUTTA.

December, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km	
Dec 16	N	e	23 35 54	..	..	..	Feeble.
		iS	37 37	..	..	..	
		F	50 ..	..	6	..	
18	N	eP	03 32 32	..	..	1820	Slight.
		iS	35 31	..	..	..	
		i	36 11	..	..	..	
		PcP	37 34	..	..	..	
		F	Lost in microseisms.				
,, 19	N	e	22 33 18	..	..	..	Feeble.
		F	51 ..	..	..	..	
,, 20	N	eP	04 06 46	..	..	4665	Moderate. Deep.
		pP	07 09	..	..	..	
		iS	13 05	..	..	..	
		isS	13 28	..	..		
		SS	15 52	..			
1945			h. m. s.	sec.	μ	Km.	
Dec 20	N	ScS	16 57	..	..	..	
		F	Lost in microseisms.				
,, 22	N	e	19 45 44	..	..	..	Feeble.
		F	20 05 ..	..	..	..	
,, 27	N	e	04 48 52	..	..	..	Slight, distant.
		i	57 38	..	..	..	
		F	Lost in microseisms.				
,, 28	N	eP	17 58 41	..	..	7110	Moderate.
		iS	18 07 44	..	..	..	
		PS	07 49	..	..	..	
		SSS	14 28	..	..	..	
		L	18 41	..	..	..	
		M	25 58	..	..	..	
		F	Lost				
,, 31	N	e	17 45 54	..	..	..	Feeble.
		F	18 45 ..	..	..	..	

REGIONAL METEOROLOGICAL CENTRE,
ALIPORE, CALCUTTA.

S. MULL,
Director.

COLOMBO OBSERVATORY, CEYLON.

October, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	sec.	μ	Km.	
Oct. 1	E	P	05 22 08	..	..	..	
		S	26 39	..	..	..	
		L	30 00	..	..	..	
		Mn	33 10	..	2·5	..	
		F	06 30 ..	..	..	..	
,, 9	E	P	14 47 38	..	..	..	Surface waves poor
		S	56 33	..	..	..	
		F	16 00 ..	..	..	..	
,, 15-16	E	Record lost					
		from	21 32 ..	..	..	..	
		to	00 03 ..	..	..	..	
,, 16	E	P	16 11 06	..	..	..	
		S	17 37	..	..	..	
		L	26 00	..	..	..	
		Mn	28 06	..	2·5	..	
		F	17 20 ..	..	..	..	
,, 21-22	E	Record lost					
		from	.. .. ..	..	..	..	Time uncertain
		to	00 22 ..	..	..	..	
1945			h. m. s.	sec.	μ	Km.	
Oct. 25	E	Record lost					
		from	07 20 ..	..	..	..	
		to	15 48 ..	..	..	..	
,, 26	E	P	14 06 06	..	..	..	
		S	13 38	..	..	..	
		L	27 05	..	..	..	
		Mn	29 50	..	0·5	..	
		F	15 10 ..	..	..	..	
,, 27	E	e	11 44 ..	..	..	..	
		F	12 20 ..	..	..	..	
28-29	E	Record lost					
		from	22 07 ..	..	..	..	
		to	00 17 ..	..	..	..	
,, 29	E	e	12 03 ..	..	..	..	
		F	20 ..	..	..	..	
,, 29-30	E	Record lost					
		from	21 10 ..	..	..	..	
		to	00 25 ..	..	..	..	
,, 30	E	Record lost					
		from	09 46 ..	..	..	..	
		to	14 48 ..	..	..	..	

November, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
Nov. 2	E	e	19 06 ..	..	..	..	
		F	35 ..	..	..	..	
,, 2-3	E	Record lost					
		from	22 45 ..	..	..	..	
		to	00 50 ..	..	..	..	
Nov. 5-6	E	Record lost					
		from	22 04 ..	..	..	..	
		to	00 47 ..	..	..	..	
,, 7-8	E	Record lost					
		from	22	..	..	..	
		to	01 04 ..	..	..	..	
,, 11-12	E	Record lost					
		from	01	..	..	..	
		to	01	..	..	..	Record lost intermittently for 12 hours.
,, 22	E	S	21 04 56	..	..	..	
		Mn	20 28	..	0·5	..	
		F	40 ..	..	..	..	
,, 26-27	E	Record lost					
		from	00 20 ..	..	..	..	
		to	00 43 ..	..	..	..	
Nov. 27	E	P?	12 04 ..	..	..	..	
		Mn	19 57	..	<0·5	..	
		F	40 ..	..	..	..	
,, 27-28	E	P	22 02 07	..	..	..	
		S	07 ..	..	..	..	
		Mn	14 30	..	10	..	
		F	02 20 ..	..	..	..	
,, 28	E	P	10 59 31		..	..	
		Mn	11 02 26	..	0·5	..	
		F	20 ..	..	..	..	
,, 28	E	P	19 18 54	..	..	..	
		S	23 26	..	..	..	
		Mn	26 26	..	0·5	..	
		F	40	..	..	..	
,, 29-30	E	Record lost			..	..	
		from	00 25 ..	..	..	..	
		to	00 50 ..	..	..	..	Record lost intermittently for about 11 hour.
		P	12 17 49	..	..	..	
		S	24 44	..	..	..	
,, 30	E	Mn	41 ..	..	..	..	
		F	55 ..	..	0·5	..	

COLOMBO OBSERVATORY, CEYLON.

December, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	sec.	mm.	Km.	
1945 Dec. 2	E	P	23 04 20	..	..	..	
		S	08 09	..	..	..	
		L	13 ..	..	..	..	
		Mn	14 07	..	0·5	..	
		F	45 ..	..	..	..	
7-8	E	Record lost from	22 33 ..	..	..	..	
		to	.. 00 35	..	..	..	
" 8	E	eP	01 15 (30)	..	..	..	Phases obscured by strong microseisms.
		F	02 30 ..	..	..	..	
" 11	E	e	10 30 ..	..	..	..	Slight.
	F		11 00 ..	..	..	..	
" 11-12	E	Record lost from	23 30 ..	..	..	..	
		to	01 12 ..	..	..	..	
" 14	E	Record lost from	01	..	..	..	Record lost intermittently for about 10 hours.
		to	12	..	..	..	
" 20	E	P	04 07 39	..	..	..	
		S	14 21	..	..	..	
" 20	E	L	04 20 30	..	..	..	
		Mn	24 34	..	0·5	..	
		F	05 05 ..	..	..	..	
1945 Dec. 21-22	E	Record lost from	23 47 ..	..	..	..	
		to	01 01 ..	..	..	..	
" 22-23	E	Record lost from	32 ..	..	..	..	
		to	01 14	..	..	..	
" 24-25	E	Record lost from	23 45 ..	..	..	..	
		to	00 58 ..	..	..	..	
" 25	E	P	01 49 ..	..	..	..	
		F	02 20 ..	..	..	..	
" 25	E	P	08 49 ..	..	..	..	Phases obscured to overlapping lines.
		F	09 20 ..	..	..	..	
" 27	E	P	04 52 (30)	..	..	..	
		F	06 10 ..	..	..	..	
" 28	E	P	18 00 ..	..	..	..	
		S	10 30	..	..	..	
		L	25 ..	..	..	..	
		Mn	32 55	1·4	..	..	
		F	21 20 ..	..	..	..	
" 30	N	P	01 04 07	..	..	..	
		F	40 ..	..	..	..	

COLOMBO OBSERVATORY,
CEYLON.

D. T. E. DASSANAYAKE,
Superintendent.

HAIG OBSERVATORY, SURVEY OF INDIA, DEHRADUN.

October, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks
			h. m. s.	sec.	μ	Km.	
1955							
Oct. 1	N	eP	05 20 59	..	..	1120	Slight.
		eS	22 37	..	..	..	
		eL ?	23 45	..	..	..	
		M	24 44	..	..	..	
		Mn	26 36	12	0·15	..	
		F	40 ..	..	..	..	
1945							
Oct. 16	N	eP	16 12 22	..	..	5000	Slight.
		eS	19 51	..	..	..	
		eL	25 54	15	0·02	..	
		M	26 33	..	..	..	
		F	17 00	..	..	..	
,, 26	N	e	14 12 09	..	..	..	
		e	19 55	..	..	..	
		e	24 19	..	..	..	
			37 ..	..	..		

November, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks
			h. m. s.	sec.	μ	Km.	
1945							
Nov. 27	N	eP	12 07 54	..	..	..	
		Mn	42 28	12	0·01	..	
		F	13 16 ..	..	..	..	
,, 27-28	N	eP	22 00 33	..	..	1445	Very great.
		e	02 09	..	..	..	
		eS	03 45	..	..	..	
		M1	06 51	3	1·50	..	
		M2	24 06	16	1·32	..	
		F	00 58 ..	..	..	..	
1945 Nov. 28	N	e	02 22 57	..	..	..	
		F	30 ..	..	..	..	
,, 28	N	e	09 48 12	..	..	..	
		e	53 39	..	..	..	
		F	57 ..	..	..	..	
,, 28	N	e	18 12 30	..	..	..	
		F	25 ..	..	..	..	
,, 28	N	e	22 30 42	..	..	..	
		F	43 ..	..	..	..	

December, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks
			h. m. s.	sec.	μ	Km.	
1945 Dec. 11	N	e	10 29 30	..	..	..	
		F	40 ..	..	..	..	
1945 Dec. 28	N	e	18 01 02	..	..	..	
		e	09 32	..	..	..	
		e	25 11	..	..	..	
		e	30 19	..	..	..	
		F	19 34 ..	..	..	..	

J. de GRAAFF HUNTER, C.I.E, Sc.D., F.R.S.,

Director, War Research, Survey of India.

DEHRA DUN.

NIZAMIAH OBSERVATORY, HYDERABAD DECCAN.

October, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
			h. m. s.	sec.	μ	Km.	
1945 Oct. 1	N	P	05 20 15	..	..	1930	
	E	P	20 19	..	..	..	
	N	S	23 24	..	..	..	
	E	S	25 26	..	..	..	
	N	SS	24 09	..	..	..	
		L	24 42	..	..	..	
		M	26 40	8	43	..	
,, 4	N	S	01 49 58	..	..	..	
		M	56 22	8	2	..	
,, 9	N	P	14 46 40	..	..	6890	
		PP	49 02	..	..	..	
		S	55 05	..	..	..	
		ScS	56 26	..	..	..	
		L	15 06 07	..	..	..	
		M2	16 18	12	3	..	
,, 16	N	P	16 11 36	..	..	5240	
		PP	13 26	..	..	..	
		S	18 28	..	..	..	
		ScS	21 25	..	..	..	
		SS	21 55	..	..	..	
		L	26 01	..	..	..	
		M	29 32	19	11	..	
,, 21	N,E	P	03 28 43	..	..	4370	
	E	PP	30 26	..	..	..	
	N,E	S	34 44	..	..	..	
	E	L	39 29	..	..	..	
		M	43 14	14	8	..	
	N	M	46 44	10	5	..	
,, 21	N	eP	06 49 34	..	..	2320	
		S	53 19	..	..	..	
	E	M	58 28	8	2	..	
1945 Oct. 24	N	e	01 52 33	..	..	..	
		M	58 01	8	2	..	
,, 25	N,E	P	15 10 12	..	..	8070	
	N	PP	12 42	..	..	..	
		S	19 38	..	..	..	
	E	S	19 41	..	..	..	
	N	PS	20 01	..	..	..	
		SS	24 29	..	..	..	
	E	L	34 51	..	..	..	
		M	40 41	12	7	..	
	N	M	40 47	14	5	..	
,, 26	N	P	14 05 02	..	..	5030	
		PP	06 54	..	..	..	
,, 26	N	S	14 11 43	..	..	..	
		PS	11 53	..	..	..	
	E	SS	15 09	..	..	..	
		L	18 38	..	..	..	
		M	22 49	21	27	..	
	N	M	23 02	18	20	..	
,, 27	N	e	11 43 53	..	..	..	
	E	M	12 11 51	12	3	..	
,, 28	E	M	00 34 18	18	7	..	
,, 29	N	eP	06 00 42	..	..	2380	
		S	04 31	..	..	..	
		M	10 42	8	2	..	
,, 29	N	M	11 59 57	18	4	..	

November, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
			h. m. s.	sec.	μ	Km.	
1945 Nov. 2	N	P	19 07 15	..	..	..	
		S	14 54	..	..	..	
		M	19 05	6	2	..	
,, 3	N	PKP	22 25 43	..	..	13670	
		SKS	32 42	..	..	..	
		SKKS	34 44	..	..	..	
,, 8	N	P	09 16 55	..	..	8170	
		PP	19 42	..	..	..	
		S	26 26	..	..	..	
		PS	26 52	..	..	..	
		M	52 06	14	2	..	
1945 Nov. 11	N	S	09 35 59	..	..	..	
		M	44 53	14	2	..	
,, 15	N	eP	12 30 41	..	..	4270	
	E	PP	32 14	..	..	..	
	N	S	36 36	..	..	..	
	E	S	36 38	..	..	..	
	N	SS	39 16	..	..	..	
		L	42 15	..	..	..	
		M	48 17	14	2	..	
,, 16	E	M	18 58 44	15	3	..	

NIZAMIAH OBSERVATORY, HYDERABAD DECCAN.

November, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
			h. m. s.	Sec.	μ	Km.	
1945 Nov. 20	E	e	06 40 59	..	..	..	
	N	M	49 03	19	8	..	
	E	M	49 08	19	5	..	
,, 20	N	M	12 25 14	14	3	..	
,, 22	N	P	20 59 14	..	..	5370	
		PP	21 00 56	..	..	..	
		S	06 13	..	..	..	
		SS	09 13	..	..	..	
		L	14 06	..	..	..	
		M	17 55	20	9	..	
,, 23	N	M	13 18 18	12	2	..	
,, 26	N	e	05 31 00	..	..	..	
		S(?)	36 09	..	..	..	
		L	46 22	..	..	..	
		M	49 56	11	2	..	
,, 27	N	M	06 12 59	17	4	..	
,, 27	N	eP	12 03 20	..	..	..	
		iP	03 28	..	..	5700	
,, 27	N	PcP	12 04 42	..	..	..	
		PP	05 25	..	..	..	
		S	10 47	..	..	..	
		SS	14 04	..	..	..	
		M	22 48	11	4	..	
,, 27	N	P	12 32 34	..	..	5770	
		PP	34 24	..	..	..	
		S	39 57	..	..	..	
		M	52 22	15	8	..	
,, 27-28	N	P	22 00 32	..	..	920	Great
		(S)	02 05	..	..	..	
		F	02 34	..	..	..	
1945 Nov. 28	N	eP	03 22 48	..	..	920	
		S	24 21	..	..	..	
		L	24 57	..	..	..	
		M	26 33	9	5	..	
,, 28	N	M	04 27 19	8	2	..	
,, 28	N	S	04 58 00	..	..	..	
		M	59 54	9	2	..	
,, 28	N	M	06 40 43	9	2	..	
,, 28	N	M	09 08 48	11	3	..	
,, 28	N	(S)	10 54 10	..	..	..	
		M	55 56	9	7	..	
,, 28	N	P	19 15 44	..	..	1610	
		S	18 23	..	..	..	
		M	20 08	8	10	..	
,, 28	N	M	23 38 00	11	9	..	
,, 29	N	S	02 41 58	..	..	..	
		M	43 39	11	5	..	
,, 29	N	eP	05 26 20	..	..	8800	
		PP	28 47	..	..	..	
		eS	36 22	..	..	..	
		M	57 48	15	3	..	
,, 29	N	M	11 38 50	8	2	..	
,, 30	N	e	11 28 54	..	..	..	
		e	30 39	..	..	..	
		L	31 52	..	..	..	
		M	32 31	8	2	..	
,, 30	N	M	12 41 39	15	4	..	
,, 30	N	P	22 20 11	..	..	1490	
		S	22 39	..	..	..	
		M	24 35	15	3	..	

December, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp	Δ	Remarks.
			h. m. s.	Sec.	μ	Km.	
1945 Dec. 1	N	e	13 43 00	..	..	..	
		M	44 23	8	1	..	
,, 2	N	e	18 50 43	..	..	..	
		M	52 02	14	2	..	
,, 2	N	M	21 26 22	8	1	..	
,, 2	N	eP	23 05 50	..	..	3400	
		eS	10 52	..	..	..	
		SS	12 43	..	..	..	
		L	15 04	..	..	..	
		M	17 04	15	3	..	
1945 Dec. 4	N	S	22 08 44	..	..	..	
		M	13 34	13	6	..	
,, 5	N	eP	06 30 52	..	..	1260	
		eS	32 58	..	..	..	
		L	33 52	..	..	..	
		M	35 03	9	2	..	
,, 5	N	S	08 48 56	..	..	..	
		L	52 01	..	..	..	
		M	53 54	14	3	..	
,, 5	N	M	13 37 10	9	2	..	

NIZAMIAH OBSERVATORY, HYDERABAD DECCAN.

December, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	Sec.	μ	Km.	
Dec. 6	N	(S)	16 18 54	..	..	..	
		M	22 41	12	4	..	
,, 8	N	P	01 15 51	..	..	8070	
		(PcP)	16 57	..	..	..	
		S	25 17	..	..	..	
		PS	25 50	..	..	..	
		L	40 09	..	..	..	
		M	45 45	20	14	..	
,, 8	N	M	20 15 19	12	3	..	
,, 11	N	eP	10 25 35	..	..	2350	Times approximate Hour breaks absent P masked by micro-seisms
		PP	26 18	..	..	..	
		S	29 23	..	..	..	
		M	33 45	11	10	..	
,, 15	N	M	01 24 32	7	2	..	
,, 15	N	M	20 14 05	11	4	..	
,, 16	N	S	12 00 09	..	..	..	
		M	05 24	9	2	..	
,, 16	N	M	23 36 03	11	3	..	
,, 18	N	S	03 30 41	..	..	..	
		M	35 25	11	8	..	
,, 19	N	eP	22 27 37	..	..	2380	P and S marked by microseisms
		eS	31 26	..	..	..	
		L	33 24	..	..	..	
		M	35 01	7	2	..	
,, 20	N	M	00 27 07	16	3	..	
,, 20	N	eP	04 07 46	..	..	5480	P marked by micro-seism.
		S	14 52	..	..	..	
		ScS	17 54	..	..	..	
		L	22 24	..	..	..	
		M	26 42	18	2	..	
		F	05 35 ..	..	..	..	
,, 22	N	M	19 45 12	10	2	..	
1945			h. m. s.	Sec.	μ	Km.	
Dec. 23	N	PKP	08 32 55	..	..	..	
		M	09 39 13	19	5	..	
,, 25	N	P	01 38 02	..	..	8850	
		PP	41 05	..	..	..	
		S	48 06	..	..	..	
		SS	53 33	..	..	..	
		M	02 11 57	12	2	..	
,, 25	N	P	08 47 42	..	..	2180	
		S	51 14	..	..	..	
		M	53 33	9	6	..	
,, 27	N	P	04 52 49	..	..	7970	
		S	05 02 10	..	..	..	
		PS	02 54	..	..	..	
		M	22 54	18	9	..	
,, 28	N	P	18 00 28	..	..	8170	
		S	09 59	..	..	..	
		PS	10 42	..	..	..	
		L	24 21	..	..	..	
		M	30 27	18	29	..	
		F	22 23 ..	..	..	..	
,, 29	N	M	05 45 50	12	3	..	
,, 29	N	M	13 55 54	18	8	..	
,, 30	N	eP	01 00 13	..	..	8360	
		PP	02 54	..	..	..	
		eS	09 53	..	..	..	
		PS	10 33	..	..	..	
		L	24 44	..	..	..	
		M	32 41	20	9	..	
,, 31	N	SKS	17 47 22	..	..	..	
		PS	49 24	..	..	..	
		M	18 15 06	19	6	..	

NIZAMIAH OBSERVATORY.
HYDERABAD, DECCAN.

AKBAR ALI,
Director.

KODAIKANAL OBSERVATORY, KODAIKANAL.

October, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	Sec.	μ	Km.	
1945 Oct. 1	E	iP	05 21 10	..	..	2320	Moderate.
		PP	21 34	..	..	..	
		iS	.. 24 55	..	..	..	
		SS	.. 25 22	..	..	..	
		L	.. 26 57	..	..	..	
		Mn	.. 28 47	..	..	..	
		F	06 28 ..	..	..	..	
,, 4	E	eP	01 49	44	..	2255	Slight
		iS	53 24	..	..	..	
		SS	54 49	..	..	..	
		L	56 14	..	..	..	
		Mn	57 56	7	4	..	
		F	..	..	..	..	
,, 16	E	iP	16 10 20	..	..	5135	Moderate. Probable time correction : + 1 min.
		PcP	11 35	..	..	..	
		PP	12 06	..	..	..	
		iS	17 06	..	..	..	
		ScS	19 24	..	..	..	
		SS	20 20	..	..	..	
		L	25 00	..	..	..	
		M	29 00	24	45	..	
		F	17 35	..	..	..	
,, 21	E	iP	03 29 27	..	..	4855	Moderate.
		PP	31 12	..	..	..	
		iS	35 57	..	..	..	
		SS	38 59	..	..	..	
		L	42 59	..	..	..	
		M	46 44	17	12	..	
		F	04 57 ..	..	..	..	
	E	eP	15 11 44	..	..	8465	Moderate.
		PP	14 34	..	..	..	
1945 Oct. 25	E	eS	.. 21 29	..	..	..	
		pS	.. 22 14	..	..	..	
		SS	.. 26 18	..	..	..	
		L	.. 37 25	..	..	..	
		M	.. 43 29	24	11	..	
		F	16 32 ..	..	..	..	
,, 26	E	eP	14 06 05	..	..	5245	Moderate. Probable time correction. —1 min.
		iS	.. 12 57	..	..	..	
		ScS	.. 15 17	..	..	..	
		SS	.. 16 17	..	..	..	
		L	.. 20 57	..	..	..	
		Mn	.. 24 57	17	10	..	
		F	15 27 ..	..	..	..	
,, 27	E	e	11 44 21	..	..	..	Feeble.
		F	13 04 ..	..	..	..	
,, 28	E	eP	00 26 06	..	..	2810	Slight.
		eS	.. 30 28	..	..	..	
		L	.. 33 14	..	..	..	
		M	.. 35 27	24	9	..	
		F	01 21 ..	..	..	..	
,, 28	E	e	05 51 36	..	..	..	Feeble.
		F	06 39 ..	..	..	..	
,, 29	E	e	05 56 07	..	..	..	Feeble.
		F	06 40 ..	..	..	..	
,, 29	E	e	11 50 35	..	..	..	Slight.
		e	56 20	..	..	..	
		L	12 01 58	..	..	..	
		M	05 08	17	6	..	
		F	22 ..	..	..	..	

November, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h. m. s.	Sec.	μ	Km.	
Nov. 2	E	e	19 06 26	..	..	..	Slight.
		e	06 36	..	..	..	
		e	10 16	..	..	..	
		e	10 48	..	..	..	
		e	12 18	..	..	..	
		F	49 ..	..	..	..	
,, 3	E	e	22 32 39	..	..	..	Distant.
		e	35 09	..	..	..	
		e	41 35	..	..	..	
		L	54 43	..	..	..	
		M	23 00 01	30	9	..	
		F	31 ..	..	..	..	
1945 Nov. 8	E	e	09 38 08	..	..	..	Slight
		F	11 08 ..	..	..	..	
,, 9	E	e	20 09 44	..	..	..	
		F	24 44	..	..	..	
,, 15	E	e	12 31 00	..	..	4410	Slight.
		e	32 33	..	..	..	
		e	37 03	..	..	..	
		e	39 49	..	..	..	
		L	43 07	..	..	..	
		Mn	46 ..	24	7	..	

KODAIKANAL OBSERVATORY, KODAIKANAL.

November, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
1945			h. m. s.	μ	Sec.	Km.	
Nov. 16	E	e	18 52 40	..	..	..	Slight.
		e	19 00 04	..	..	..	
		e	03 34	..	..	..	
		L	08 58	..	..	..	
		Mn	13 17	17	2	..	
		F	28 ..	..	..	..	
,, 20	E	e	06 42 40	..	..	..	Slight.
		e	46 32	..	..	..	
		L	48 36	..	..	..	
		Mn	50 26	15	3	..	
		F	07 22 ..	..	..	..	
,, 20	E	e	12 11 31	..	..	..	Moderate
		F	48 ..	..	..	..	
,, 23	E	e	20 59 22	..	..	..	
		i	21 06 02	..	..	..	
		e	08 50	..	..	..	
		e	09 10	..	..	..	
		L	13 28	..	..	..	
		M	17 24	24	36	..	
		F	22 08 ..	..	..	..	
1945			h. m. s.	Sec.	μ	Km.	
Nov. 26	E	e	05 28 49	..	..	..	Slight
		e	30 49	..	..	..	
		i	36 01	..	..	..	
		e	38 21	..	..	..	
		e	39 31	..	..	..	
		L	44 41	..	..	..	
		Mn	48 46	10	1	..	
		F	06 33 ..	..	..	..	
,, 27	E	iP	12 03 01	..	..	4890	Moderate Probable time correction—1 min.
		pp	04 41	..	..	..	
		eS	09 33	..	..	..	
		SS	12 43	..	..	..	
		L	16 55	..	..	..	
		M	20 47	30	19	..	
		F	Lost due to congestion of lines.				
,, 27	E	e	22 01 15	..	..	..	Very great shock.
		F	.. ..	..	..	..	Record faint.
,, 28	E	e	03 24 15	..	..	..	
		F	48 50	..	..	..	
,, 28	E	e	10 55 34	..	..	..	
		F	11 17 ..	..	..	..	

December, 1945.

Date.	Compt.	Phase.	G. M. T.	Per.	Amp.	Δ	Remarks.
1945							
Dec. 6	E	e	16 15 09	..	.	..	Slight.
		F	16 34				
,, 11	E	eP	10 30 07	..	..	2990	Slight. Probable time correction : —3 mins.
		eS	34 42	..	..	..	
		L	37 47	..	..	..	
		M	40 07	12	2	..	
		F	54 ..	..	..	..	
,, 15	E	e	20 13 09	..	..	..	Tremor.
		F	23 ..	..	..	..	
,, 16	E	e	12 04 56	..	..	..	Tremor.
		F	20 ..	..	..	..	
,, 16	E	e	23 36 32	..	..	..	Tremor.
		F	53 ..	..	..	..	
,, 18	E	eP	03 28 21	..	..	2255	Slight. Probable time correction : —1 min.
		iS	32 01	..	..	..	
		L	34 01	..	..	..	
		Mn	35 51	12	3	..	
		F	04 27 ..	..	..	..	
1945							
Dec. 20	E	iP	04 07 58	..	..	4855	Moderate. Probable time correction —1 min.
		PP	09 38	..	..	..	
		iS	14 28	..	..	..	
		SS	17 23	..	..	..	
		L	21 23	..	..	..	
		M	25 08	30	36	..	
		F	05 24 ..	..	..	..	
,, 22	E	e	19 41 52	..	..	..	Feeble.
		F	20 09 ..	..	..	..	
,, 23	E	e	09 11 33	..	..	..	Feeble.
		F	10 22	..	..	..	
,, 25	E	S?	01 48 49	..	..	..	Phases following S lost.
		F	03 36 ..	..	..	..	
,, 25	E	i	08 49 07	..	..	..	Moderate.
		i	51 07	..	..	..	
		L	51 52	..	..	..	
		M	52 37	12	31	..	
		F	09 21 ..	..	..	..	

KODAIKANAL OBSERVATORY, KODAIKANAL.

December, 1945.

Date.	Compt.	Phase.	G.M.T.	Per.	Amp.	Δ	Remarks.
			h.m.s.	sec.	μ	Km.	
1945							
Dec. 27	E	iP	04 52 45	..	..	8110	Moderate.
		PP	55 25	..	..	..	
		iS	05 02 13	..	..	..	
		SS	06 53	..	..	..	
		L	17 05	..	..	..	
		Mn	22 57	40	33	..	
		F	07 25 ..	..	..	..	
,, 28	E	iP	18 01 18	..	..	8045	Moderate.
		PP	02 57	..	..	..	
		iS	09 43	..	..	..	
		PS	10 13	..	..	..	
		SS	14 21	..	..	..	
		L	24 31	..	..	..	
		M	30 16	20	24	..	
		F	22 02 ..	..	..	..	
1945							
Dec. 29	E	e	05 37 32	..	..	..	Feeble.
		F	06 01 ..	..	..	..	
,, 30	E	iP	01 00 29	..	..	8145	Slight.
		PP	03 09	..	..	..	
		iS	09 59	..	..	..	
		SS	14 47	..	..	..	
		L	25 00	30	9	..	
		M	31 04	30		..	
		F	Lost while changing the chart.				
,, 31	E	eP	19 37 41	..	..	8245	Slight.
		PP	40 26	..	..	..	
		eS	47 16	..	..	..	
		SS	51 56	..	..	..	
		L	20 02 26	..	..	..	
		M	08 21	20	6	..	
		F	51 ..	..	..	..	

SOLAR PHYSICS OBSERVATORY,
KODAIKANAL.

A. L. NARAYAN,
Director.

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

Place at which felt.	Date	G.M.T. of -	Duration	Intensity Rossi-Forel scale	No. of shocks	Remarks
	1945	H M	Secs			
Drosh	Oct 18	23 05	40	4	1	
Drosh	19	23 30	10	4	1	
Drosh	24	09 22	10 & 15	3	2	
Drosh	Nov 6	10 38	20	3	1	
Drosh	17	05 50	30	4	1	
Drosh	19	17 55	45	4	1	
Montgomery	27	21 30	5—10	4	2	
Chitkan	27	21 30	60	5	2	
(Panjgour)		21 33	60			
Quetta	27	21 30	3	5	1	
Sibi	27	21 55	2—3 (Each shock	5	3	
(Baluchistan)						
Pasni	27	21 55	240	10	1	Post and telegraph building was rendered unusable. A tidal wave 30-40 feet high swept inland. Flames appeared to shoot out of the sea. Deep fissures occurred in the ground in several places.
Karachi (Manora)	27	21 59	3—5	6	2	A tidal wave washed inland with great force causing the Keamari stone groyne (Karachi Port Trust) to slip 20-30 feet.
Muscat	27	22 00	10	5	1	The earthquake was followed by a tidal-wave.
Jiwasi	27	22 00	30—5	7	2	
Multan	27	22 13	10	4	3—4	
Dera Ghazi Khan	27	22 15	30	5	3	
Dera Ismail Khan	27	22 16	14	4	3	
Las Bela	27	.. ..	240	7	1	
Chapdara	Dec. 6	04 14	2	3—4	1	
Mount Abu	29	14 20	50	2	1	
Mount Abu	29	21 30	10	2	1	

POONA.

C. G. PENDSE,
Special Officer for Seismological Research.

GMGIPND—IS—205 D.G.Obs.—J.C.2240—27-3-61—150.

SEISMOLOGICAL BULLETIN.

ERRATA FOR OCT to DEC 1945.

Page.	Date	Column.	Incorrect.	Correct.
6	Oct. 9	Remarks	H=14 h 36 m 4±s & h-100 Kms.	H=14h 36m 48s h - 100 Kms.
6	Oct. 21	Amp.	/1/11	/16/11
6	Oct. 26	Remarks.	0.13h 56m 47s.	0=13h 56m 47s.
8	Dec. 11	Phase	e,e	eP, eS.
10	Oct. 21	Remarks.	Marked	Masked
10	Oct. 24	Phase & Time	N blank 01269	Ne 012659
12	Oct.Nov.	Amp.	Sub-head 'u'	'mm'
12	Nov. 22,28,30	Amp.	0.5	<0.5
13	Dec. 2	Amp.	0.5	<0.5
13	Dec. 11	Phase	F at 1100 put in compt. col.	Kindly write in appropriate col.
14	Oct-Dec.	Amp.	Subhead- /u	Inch.
21	-	Time	G.M.T. of-	Add 'earthquake'
21	-	-	- of shocks	'Number' etc.

Dhar./