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List of Seismograph Stations with their Instruments and Constants

STATION	LATITUDE	LONGITUDE	HEIGHT a. s. l. (Metres)	LITHOGRAPHIC FOUNDATION	INSTRUMENT	COMPT.	PERIOD IN SECS	STATIC MAGNI- FICATION	DAMPING RATIO	PAPER SPEED mm/min.
BOMBAY	18°54'N	72°49'E	5	Deccan Trap	Milne-Shaw	N	12	350	13:1	15
					Milne-Shaw	E	12	350	23:1	8
					Sprengnether	E	To = Tg = 7 secs		30	
BOKARO	23°50'N	85°48'E	-	Rock	Milne-Shaw	N	12	250	20:1	16
					Milne-Shaw	E	12	250	20:1	16
					Wood-Anderson	E	0.8	950	h = 0.8	60
					Wood-Anderson	N	0.8	1000	h = 0.8	60
CALCUTTA	22°32'N	88°22'E	(1) 7(Milne-Shaw) (2) 6(Omori-Ewing)	Alluvium	Milne-Shaw	E	12	250	20:1	8
					Wood-Anderson	N	2	870	Critical	30
					Omori-Ewing	N	16	32	-	25.4
					Omori-Ewing	E	21	30	-	25.4
CHATRA	26°50'N	87°10'E	161	Sand Stone	Milne-Shaw	E	12	250	20:1	16
					Wood-Anderson	N	1	1000	30:1	30
					Benioff	Z	To = 0.72 Tg = 0.45 secs.		Critical	
COLOMBO	06°54'N	79°52'E	7	Beach Sand	Wenner-Accelerograph ZNE		-	-	-	-
					Milne-Shaw	E	12	250	20:1	-
DEHRA DUN	30°19'N	78°02'E	682	Gravel	Wood-Anderson	N	0.8	950	Critical	60
					Wood-Anderson	E	0.8	850	Critical	60
					Milne-Shaw	N	12	250	20:1	8
					Milne-Shaw	E	12	250	20:1	8
HYDERABAD	17°26'N	74°27'E	535	Granite	Milne-Shaw	E	12	250	20:1	8
					Milne-Shaw	N	12	250	20:1	8
KOLAIKANAL	10°14'N	77°28'E	2345	Rock	Milne-Shaw	E	10	250	20:1	8
MADRAS	13°00'N	80°11'E	15	-	Sprengnether	E	To=Tg=72 secs		Critical	30
NEW DELHI	28°35'N	77°12'E	207	Massive Quartzite						
POONA	18°32'N	73°51'E	560	Deccan Trap	Sprengnether	Z	To=Tg=1.6		Critical	30
					Wood-Anderson	E	4	1000	20:1	15
					Milne-Shaw	N	12	280	20:1	8
PORT BLAIR	11°49'N	92°43'E	-	-	Wood-Anderson	N	2	1000	20:1	30
					Wood-Anderson	E	0.8	1000	66:1	30
					Milne-Shaw	N	12	350	20:1	8
SHILLONG	25°34'N	91°53'E	1600	Quartzite Sand Stone (Shillong Quartzite)	Wood-Anderson	N	0.8	1000	h = 0 h = 0.8	30
					Wood-Anderson	E	0.8	1000	h = 0.8	30
					Milne-Shaw	N	12	250	20:1	8
					Benioff	Z	To = 1.0 Tg = 0.18		60	
					Sprengnether	E	To = Tg = 5.5		Critical	30
					Wenner Accelerograph ZNE		-	-	-	-
TOCKLAI	28°45'N	94°45'E	-	Alluvium	Wood-Anderson	E	0.8	970	h = 0.8	60
VIZIANAGRAM	18°07'N	83°27'E	-	-	Wood-Anderson	E	0.8	1000	h = 0.8	30
					Wood-Anderson	N	2	1000	20:1	30

DATE	STATION	COMPT	PHASE	G. M. T.			REMARKS
				h	m	s	
May 1961.							
01	Shillong	Z	iP	00	39	46	Slight, distant.
		E	e		42	17	Rarefaction.
01	Shillong	Z	iP	00	50	04	Slight, distant.
							Rarefaction.
01	Poona	Z	iP	01	42	28	Tremor. Rarefaction.
01	Chatra	Z	iP	01	43	11	Feeble, distant.
01	Bokaro	NE	iP	07	19	20	Slight, Tremor.
01	Bokaro	NE	eP	09	01	23	Slight, Tremor.
01	Shillong	Z	iP	11	14	00	Slight, distant.
							Rarefaction.
01	Shillong	Z	iP	17	09	23	Slight, distant.
							Compression.
01	Shillong	Z	eP	20	19	14	Slight, distant.
01	Shillong	Z	iP	21	01	53	Slight, near.
							Compression.
01	Shillong	Z	iP	22	22	07	Slight, distant.
							Compression.
02	Shillong	Z	iP	06	53	23	Slight, distant.
							Rarefaction.
02	Bokaro	NE	eP	08	44	12	Slight near.
02	Shillong	Z	iP	09	27	46	Slight, near.
02	Shillong	Z	iP	10	06	27	Slight, distant.
							Compression.
02	Shillong	Z	iP	11	26	55	Slight, distant.
							Compression.
02	Shillong	Z	iP	17	33	00	Slight local.
02	Chatra	Z	iPg	18	35	25	110 Mild.
			Sg		35	38	
02	Epc:- 27.8°S, 176.5°W. Kermadec Islands Region.						
	-H= 22h 44m 44.3s (USCGS)						
	Mag: 6 $\frac{3}{4}$ (Pas), 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (Berk), 6 $\frac{1}{4}$ (Pal).						
	-h= 4.7 km.						
	Shillong	ZE	iP	22	58	37	11220 Rarefaction.
		E	iSKS	23	09	16	
			PS		11	55	
			PPS		12	47	
			SS		17	20	
	Bokaro	NE	e	23	02	18	
			e		03	25	
			i		09	39	
			i		12	51	
			e		18	51	
			e		23	15	
	Poona	Z	e	23	02	54	
		N	iS		14	12	
	Bombay	E	e	23	02	55	13050
			ePKP		03	35	
			e		04	29	

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
02	Bombay	E	ePKS	23 06 54		
			i	10 19		
		NE	PS	14 22		
		E	PPS	15 43		
			i	16 34		
			eSS	21 14		
			M	55 00		Period= 19 sec., Gr. dis= 8 μ
		N	M	59 01		Period= 18 sec. Gr. dis= 6 μ
	Dehra Dun	NE	e	23 03 04		
			e	04 48		
			e	10 26		
			e	14 27		
	Colombo	E	e	23 03 20		
			e	09 41		
			e	18 36		
			e	39 21		
			M	44 26		Amp= 1.6 mm.
	Madras	E	e	23 03 33		
			e	09 47		
			e	12 54		
	Calcutta	E	e	23 09 22		Slight.
	Chatra	Z	e	23 09 46		Distant.
	Kodaikanal	E	ei	23 09 55		
			e	14 10		
			i	21 46		
			e	38 46		
			e	43 34		
			M	52 01		Period= 18 sec., Gr. dis= 20 μ
	Hyderabad	N	e	23 10 09		
			M	43 00		Period= 15 sec. Gr. dis= 11 μ
03	Shillong	Z	eP	04 26 14		Slight, distant.
03	Shillong	Z	eP	06 30 00		Slight, local
			i	30 35		
03	Shillong	Z	eP	07 06 59		Slight, near.
			i	07 31		
03	Chatra	Z	iP	13 16 46		Feeble, distant. Rarefaction.
03	Bokaro	NE	eP	13 40 00		Slight, Tremor.
03	Shillong	Z	iP	14 51 55		Slight local.
03	Shillong	Z	eP	17 57 34		Slight distant.
03	Shillong	Z	eP	19 12 36		Slight distant.
03	Shillong	Z	iP	19 56 51		Slight distant. Compression.
03	Shillong	Z	iP	20 12 02		Slight distant. Rarefaction.
03	Shillong	Z	iP	20 55 06		Slight distant. Rarefaction.
03	Port Blair	E	e	22 58 12		Slight.
			i	23 09 50		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
03	Tocklai	E	e	23 10 43		Slight distant.
	Shillong	Z	eP	23 10 59		Slight distant.
	Chatra	Z	iP	23 12 01		Feeble distant.
04	Shillong	Z	eP	04 17 54		Slight near.
04	Chatra	Z	iPg Sg	04 52 35 52 47	100	Feeble.
04	Shillong	Z	eP	05 07 44		Slight near.
04	Shillong	Z	iP	05 12 09		Slight distant. Rarefaction.
	Tocklai	E	eP	05 12 53		Slight distant.
	Chatra	Z	iP	05 14 11	930	Feeble.
		NE	i	15 47		
	Calcutta	E	e	05 17 42		Slight.
X 04	Tocklai	E	eP	07 06 05		Slight distant.
X 04	Shillong	Z	eP	07 07 19		Slight distant.
04	Bokaro	NE	eP	07 46 29		Slight Tremor.
04	Shillong	Z	eP	09 36 58		Slight distant.
04	Chatra	Z	iP	09 37 59		Feeble distant.
04	Bokaro	NE	eP	10 27 08		Slight near.
04	Shillong	Z	iPg iSg	11 18 36 18 53	140	Slight local.
04	Shillong	Z	iP	15 28 59		Slight distant. Compression.
04	Shillong	Z	iP	17 54 01		Slight distant. Rarefaction.
04	Shillong	Z	e	17 54 08		Slight local.
04	Tocklai	E	eP	23 36 45		Slight distant.
05	Shillong	Z	iPg iSg	07 42 15 42 31	130	Slight local.
05	Shillong	Z	iP	07 53 10		Slight near. Compression.
05	Shillong	Z	eP	08 03 53		Slight distant.
05	Shillong	Z	iP	11 54 06		Slight distant. Rarefaction.
05	Shillong	Z	eP	12 08 47		Slight distant.
05	Madras	E	eP	13 51 34		Slight.
			e	14 05 26		
			e	09 19		
			e	11 31		
05	Bombay	E	e	13 58 18		Slight distant.
			e	14 08 55		
			e	10 11		
			e	14 32		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
May 1961 . . . (contd)						
05	Colombo		e	14 08 20		
			e	16 54		
05	Shillong	Z	iP	14 36 59		Slight distant. Rarefaction.
05	Shillong	Z	eP	14 51 33		Slight near.
05	Shillong	Z	eP	15 21 50		Slight distant.
05	Shillong	Z	iP	15 36 53		Slight distant. Rarefaction.
05	Shillong	Z	eP	17 01 01		Slight distant.
05	Shillong	Z	iP	17 52 58		Slight distant Compression.
05	Shillong	Z	eP	18 49 45		Slight distant.
05	Dehra Dun	NE	e	19 33 25		Feeble.
			e	35 18		
			e	36 34		
	Chatra	Z	eP	19 34 32		Feeble distant.
	Shillong	Z	iP	19 35 06		Slight distant. Compression.
06	Shillong	Z	eP	00 06 25		Slight near.
06	Hyderabad	E	eP	00 37 36	8590	Slight.
			eS	47 26		
			PS	47 45		
			LR	01 01 28		
			M	05 45		Period= 24 secs. Gr. dis= 11 μ
06	Chatra	Z	iPn	06 01 23	180	Feeble.
			Sg	01 44		
06	Bokaro	NE	eP	07 48 23		Slight Tremor.
06	Shillong	Z	e	11 19 57		Slight near.
06	Shillong	Z	iP	16 15 32		Slight distant. Compression.
06	Shillong	Z	eP	16 28 25		Slight distant.
06	Shillong	Z	iP	19 07 37		Slight distant. Compression.
06	Shillong	Z	iP	21 08 00		Slight distant. Rarefaction.
06	Chatra	Z	iP	21 08 51	1270	Feeble.
			iS	11 02		
06	Shillong	Z	iP	21 23 50		Slight distant. Compression.
06	Epc:- 49.5°N, 176.5°W. Andrean of Islands, Aleutian Islands. -H= 22h 25m 05.5s (USCGS). -h= 20 km.					
	Shillong	Z	iP	22 36 31		Slight distant. Rarefaction.
	Madras	E	e	22 38 39	9780	Slight.
			PP	41 14		
			e	42 54		
			e	47 47		
			SKS	48 23		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
May 1961 . . . (contd)						
06	Epc:- 6.3°N, 126.3°E Near Coast of Mindanao Philippine Islands. -H= 22h 32m 49.7s (USCGS). -h= 110 km.					
	Shillong	Z	iP	22 40 03		Feeble distant.
	Chatra	Z	iP	22 40 44		Feeble distant.
	Dehra Dun	NEZ	eP	22 41 38	5670	Feeble.
		NE	eS	48 55		
	Bombay	E	e	22 42 06		Slight.
			e	49 29		
06	Shillong	Z	iP	22 26 02		Slight distant. Compression.
06	Madras	E	e	23 37 03		Slight.
06	Bombay	EN	e	23 37 50		Slight.
07	Epc:- 6.1°S, 154.4°E. Solomon Islands Region. -H= 00h 25m 40.8s (USCGS) -h= 123 km Mag. $6\frac{1}{2}$ - $6\frac{3}{4}$ (Pas).					
	Shillong	Z	iP	00 36 35	7610	
			iS	45 32		
			e	45 51		
			PS	46 10		
			SS	49 58		
			SSS	53 10		
			LQ	54 36		
			LR	57 51		
			M	01 03 58		
	Chatra	ZNE	iP	00 37 05	8260	
		NE	iS	46 27		
	Colombo	E	P	00 37 18	8350	
			S	46 57		
	Bokaro	NE	iP	00 37 18	8150	Initial ground motion towards West.
			PcP	37 31		
			PP	40 07		
			S	46 47		
			ScS	47 05		
			PPS	47 33		
			SS	51 31		
			SSS	54 43		
			LQ	56 50		
			LR	01 00 45		
			M	07 37		
	Madras	E	iP	00 37 20	8450	
			iS	47 03		
			e	47 22		
			SKS	47 37		
			PS	47 47		
			e	51 35		
	Dehra Dun	NEZ	eP	00 37 51	8930	
		N	PP	40 58		
			eS	47 57		
			SS	53 08		
			SSS	56 35		
			LQ	59 05		
			LR	01 03 13		
			M	10 00		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 (contd)						
07	Poona	Z	iP	00 37 58	9110	Initial ground motion towards West and Compression.
		N	iS	48 12		
			PPS	49 27		
			SS	53 45		
			M	01 11 22		
	Bombay	NE	eP	00 38 03	9220	
			eS	48 22		
		E	PPS	49 42		
			e	54 23		
07	Shillong	Z	iP	01 07 57		Slight distant. Compression.
07	Epc:- 8.6°S, 111.4°E. Near Coast of Java. -H= 04h 32m 14.5s (USCGS). -h= 113 km.					
	Tocklai	E	eP	04 37 49		Feeble distant.
	Madras	E	iP	04 39 20	4110	Slight.
			PPP	41 06		
			iS	45 06		
			e	45 29		
			M	52 16		
	Shillong	ZE	iP	04 39 32	4250	Slight Compression.
		E	iS	45 27		
	Chatra	Z	iP	04 40 01		Feeble distant.
		NE	e	49 59		
	Poona	Z	iP	04 40 28	4940	Slight.
		N	iS	47 04		
	Bombay	E	eP	04 40 35	5090	Slight.
		NE	eS	47 19		
		E	PPS	47 42		
	Dehra Dun	NEZ	e	04 51 34		Slight.
		N	eS	48 05		
			SS	51 20		
			e	52 17		
			M	57 31		
07	Shillong	Z	iP	07 03 19		Slight local.
			i	03 27		
07	Shillong	Z	iP	07 05 14		Slight distant. Compression.
07	Epc:- 5.8°N, 126.8°E. Off coast of Mindanao, P.I. -H= 10h 22m 43.7s (USCGS). -h= 89 km.					
	Tocklai	E	iP	10 28 11		Slight distant. Initial Ground movement towards East.
	Shillong	ZE	iP	10 30 03	4242	Slight. Rarefaction.
		E	iS	35 59		
	Chatra	ZNE	iP	10 30 40	4630	Feeble
		NE	i	31 03		
			iS	36 58		
			SSS	40 37		
			i	41 10		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS	
May 1961 (contd)							
07	Bokaro	NE	eP	10 30 47	4680	Slight. Initial ground movement West.	
			PPP	32 46			
			iS	37 08			
			e	37 38			
			SSS	40 41			
			i	41 17			
			M	46 06			
	Calcutta	E	eP	10 30 50	4790	Slight.	
			i	39 12			
			i	39 54			
	Madras	E	eP	10 31 07	5090	Slight.	
			i	31 34			
			e	32 09			
			e	32 37			
			e	32 20			
			e	34 16			
			iS	37 51			
			PPS	38 16			
			SS	40 54			
			LQ	41 37			
			e	41 49			
			LR	43 40			
			M	47 40			
	Hyderabad	E	iP	10 31 42	5440		Slight.
			PP	33 39			
			PPP	34 14			
			PcS	37 09			
			e	38 15			
			S	38 46			
			e	41 09			
		N	LR	44 36			
		E	LR	45 15			
			M	48 07			
		N	M	48 32			
	Dehra Dun	ZNE	eP	10 31 48	5670	Slight.	
		N	e	34 30			
			eS	39 05			
			e	42 08			
			LQ	43 20			
			M	49 54			
	Poona	Z	eP	10 31 55	5780	Slight.	
		N	iS	39 18			
			ScS	41 40			
			M	51 57			
	Bombay	NE	eP	10 32 04	5890	Slight.	
			e	32 25			
		E	PcP	33 03			
			e	34 25			
			e	35 32			
		NE	eS	39 33			
			PPS	39 59			
			ScS	41 49			
			e	42 25			
07	Epc:- 35.2°N, 134.5°E. Honshu, Japan. -H= 12h 14m 15.5s (USCGS). -h= 25 km.						
	Shillong	Z	iP	12 21 31			Slight distant. Rarefaction.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
May 1961 . . . (contd)						
07	Chatra	Z	iP	12 22 01		Feeble distant.
	Poona	Z	iP	12 23 53		Tremor. Rarefaction.
07	Shillong	Z	iP	12 27 15		Slight distant. Compression.
07	Shillong	Z	iP	15 01 33		Slight distant. Rarefaction.
07	Shillong	Z	iP	15 51 59		Slight distant. Rarefaction.
07	Dehra Dun	NE	e	15 59 20		Feeble.
07	Shillong	Z	iP	16 53 46		Slight distant. Compression.
07	Shillong	Z	iP	18 07 14		Slight distant. Compression.
07	Shillong	Z	eP	19 05 55		Slight distant.
07	Shillong	Z	iP	22 51 39		Slight distant. Compression.
08	Shillong	Z	iP	08 15 29		Slight distant. Compression.
08	Shillong	Z	iP	08 33 49		Slight distant. Compression.
08	Bokaro	NE	eP	08 58 59		Slight. Tremor.
08	Shillong	Z	eP	13 58 46		Slight near.
08	Shillong	Z	eP	14 36 01		Slight near.
08	Shillong	Z	iP	14 51 45		Slight near. Rarefaction.
08	Chatra	Z	iP	14 52 38	700	Feeble.
			S	53 51		
08	Chatra	Z	iP	16 57 53	200	Slight.
			S	58 17		
08	Shillong	Z	eP	16 58 19		Slight distant.
08	Shillong	Z	eP	17 08 01		Slight near.
08	Shillong	Z	iP	19 10 15		Slight distant. Compression.
08	Poona	Z	iP	19 43 17		Slight. Rarefaction.
08	Shillong	Z	eP	19 43 38		Slight distant.
08	Hyderabad	E	M	20 45 39		Period= 15 sec. Gr. dis= 4 μ
		N	M	45 52		Period= 15 sec. Gr. dis= 4 μ
08	Chatra	Z	iP	21 11 11		Feeble distant.
08	Shillong	Z	iP	22 59 33		Slight distant. Rarefaction.
09	Shillong	Z	eP	07 36 16		Slight near.
09	Shillong	Z	iP	11 17 21		Slight distant.
09	Shillong	Z	eP	17 40 18		Slight near.
09	Shillong	Z	iP	23 35 35		Slight distant. Compression.
10	Shillong	Z	eP	11 00 06		Slight distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
May 1961 . . . (contd)						
10	Shillong	Z	eP	18 33 44		Slight distant.
10	Shillong	Z	eP	18 34 42		Slight near.
11	Shillong	Z	iP	00 03 12		Slight distant. Rarefaction.
11	Shillong	Z	e	00 58 52		Slight near.
	Chatra	Z	iP	00 59 23	1090	Feeble
			i	01 01 15		
	Poona	Z	iP	00 59 52		Tremor.
11	Shillong	Z	eP	04 32 24		Slight near.
11	Shillong	Z	iP	04 40 25		Slight near. Rarefaction.
11	Shillong	Z	iP	06 43 25		Slight near. Compression.
11	Shillong	Z	iP	07 22 00		Slight distant. Rarefaction.
11	Bokaro	NE	eP	07 32 47		Slight Tremor.
11	Epc:- 37.2°S, 73.6°W. Near Coast of Southern Chile. -H= 08h 38m 27.1s (USCGS) -h= 47 km.					
	Bombay	E	e	08 58 04		Slight distant.
			e	09 12 06		
			e	14 11		
			e	20 24		
	Poona	Z	iPKP	08 58 05		Slight.
	Dehra Dun	ZNE	e	08 58 20		Feeble.
		N	e	09 09 08		
	Madras	E	e	08 58 21		Slight.
	Shillong	Z	iPKP	08 58 26		Slight distant. Compression.
11	Bokaro	NE	e	09 17 47		Slight Tremor.
11	Hyderabad	E	M	10 03 33		Period= 17sec. Gr. dis= 5 μ
		N	M	10 05 00		Period= 15 sec. Gr. dis= 6 μ
11	Shillong	Z	iP	13 34 34		Slight distant. Rarefaction.
11	Shillong	Z	iP	13 45 34		Slight distant. Rarefaction.
11	Shillong	Z	iP	13 45 25		Slight distant. Rarefaction.
11	Shillong	Z	iP	16 37 31		Slight near.
			i	37 46		
12	Shillong	Z	eP	00 21 36		Slight distant.
12	Epc:- 0.0°N, 97.9°E. Near Coast of Sumatra. -H= 03h 40m 20.1s (USCGS)- -h= 81 km.					
	Madras	E	eP	03 45 07	2440	Slight.
			PP	45 32		
			PPP	45 49		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
May 1961 . . . (contd)						
12	Madras	E	e	03 46 23		
			i	49 17		
			LQ	49 44		
			e	50 15		
			e	51 05		
			M	52 42		
	Shillong	Z	iP	03 45 50	2830	Slight. Compression.
			i	50 30		
			SS	51 35		
			SSS	51 45		
			e	51 01		
			LR	52 49		
			M	55 11		
	Bokaro	NE	eP	03 45 56	3010	Slight.
			S	50 34		
			i	50 50		
			SS	51 55		
			SSS	52 20		
			LR	53 12		
			M	55 18		
			ScS	56 25		
	Bombay	E	e	03 46 50		Slight
			e	51 42		
			e	53 56		
			e	55 58		
	Dehra Dun	NE	e	03 47 17		Feeble.
			e	53 08		
	Hyderabad	E	M	04 02 02		Period=15sec. Gr. dis= 4 μ
		N	M	02 22		Period=16 sec. Gr. dis= 5 μ
12	Shillong	Z	iP	06 38 15		Slight distant. Compression.
12	Shillong	Z	iP	06 53 34		Slight distant. Compression.
12	Chatra	Z	iP	06 54 09		Feeble distant.
12	Bokaro	NE	eP	07 30 39		Slight Tremor.
12	Shillong	Z	eP	14 43 32		Slight near.
12	Shillong	Z	eP	16 56 18		Slight distant. Compression.
12	Shillong	Z	iP	17 36 07		Slight near. Rarefaction.
12	Shillong	Z	iP	20 11 59		Slight distant. Rarefaction.
13	Shillong	Z	iP	03 19 35		Slight distant. Compression.
13	Bokaro	NE	eP	09 16 47		Slight Tremor.
13	Colombo	E	e	14 31 10		
			e	41 17		
13	Bombay	E	e	14 41 21		Slight distant.
			e	44 23		
			e	49 56		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
May 1961 . . . (contd)						
13	Madras	E	e	14 43 20		Slight.
			e	47 05		
13	Shillong	Z	iP	15 05 38		Slight distant. Rarefaction.
13	Shillong	Z	iP	15 58 17		Slight distant. Compression.
	Chatra	Z	iP	15 58 56		Feeble distant.
	Poona	Z	iP	16 00 17		Tremor.
13	Shillong	Z	iP	19 25 10		Slight distant. Rarefaction.
14	Shillong	Z	iP	03 10 30		Slight near.
	Chatra	Z	iP	03 10 58		Feeble distant. Rarefaction.
14	Shillong	Z	eP	10 56 55		Slight distant.
	Tocklai	E	eP	10 57 36		Slight distant.
14	Chatra	Z	iP	11 35 04	150	Slight.
			S	35 23		
14	Chatra	Z	iP	13 50 59		Feeble distant.
			i	53 20		
15	Shillong	Z	iP	19 24 35		Slight distant. Compression.
	Chatra	Z	iP	19 24 58		Feeble distant.
15	Chatra	ZN	iPg	22 07 12	100	Feeble.
			Sg	07 23		
	Tocklai	E	eP	22 57 43		Slight near.
	Shillong	ZE	iP	22 57 46	250	Slight.
		E	PP	57 43		
			PPP	58 00		
			iS	58 15		
			eS	58 25		
			SSS	58 35		
	Chatra	ZN	iP	22 58 45	720	Feeble.
			PP	58 52		
			PPP	59 01		
			LQ	59 49		
			S	23 00 01		
			LR	00 08		
			SS	00 11		
			SSS	00 21		
			Sg,M	00 41		
16	Shillong	Z	iP	03 43 48		Slight distant.
	Chatra	Z	eP	03 43 59		Feeble distant.
16	Bombay	E	e	17 49 05		Slight.
			e	50 05		
			e	54 30		
			e	57 44		
			e	58 44		
16	Epc:- 30.0°N, 132.0°E Ryjkyu Islands.					
	-H= 21h 45m 24.0s (USCGS)					
	Mag: 5 $\frac{1}{4}$ -5 $\frac{1}{2}$ (Pal)					
	-h= 25 km					

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
16	Shillong	Z	iP	21 52 21	3910	
			PP	53 39		
			PPP	53 56		
			iS	57 54		
			SS	59 56		
			SSS	22 00 32		
			LR	01 43		
	Chatra	Z	eP	21 52 51	4410	
		NE	PP	54 31		
			PPP	54 58		
		Z	i	55 05		
		ZNE	PcP	55 12		
		Z	i	55 18		
		ZNE	eS	58 55		
		NE	SS	22 01 38		
			LQ	01 59		
			SSS	02 07		
			LR	05 38		
		N	Mn	22 12 00		Period= 13 sec. Gr. dis= 15 μ
		E	Mn	22 12 00		Period= 13 sec. Gr. dis= 12 μ
	Calcutta	E	eP	22 53 04	4420	
			e	54 49		
			iS	59 09		
	Bokaro	NE	e	21 53 13		
			i	55 18		
			iS	59 03		
			e	22 00 02		
			e	02 52		
			e	08 18		
			e	12 56		
	Dehra Dun	ZNE	eP	21 53 52	5060	
		N	eS	22 00 32		
			e	03 15		
			LQ	03 53		
			e	04 08		
			M	10 52		
	Madras	E	e	21 54 26		
			e	59 40		
			e	22 04 27		
	Bombay	NE	eP	21 54 55	6000	
			eS	22 02 30		
		E	e	04 43		
	Colombo	E	P	21 55 03		
			e	22 02 19		
			e	12 22		
			M	20 15		
	Hyderabad	N	e	22 01 34		Amp= 0.3 mm.
			M	14 47		
		E	M	14 49		Period= 15 sec. Gr. dis= 6 μ
						Period= 15 sec. Gr. dis= 6 μ
17	Chatra	Z	iP	03 15 13	250	Feeble.
			S	15 42		
17	Shillong	Z	eP	03 15 16		Slight distant.
17	Shillong	Z	eP	03 37 08		Slight distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
May 1961 . . . (contd)						
17	Shillong	Z	iP	04 33 53		Slight distant Rarefaction.
17	Port Blair	E	iPg iSg	07 28 44 28 52	70	Slight
17	Chatra	Z	iP S	08 21 13 21 26	100	Feeble.
17	Bokaro	NE	iP	08 39 55		Slight Tremor.
17	Shillong	Z	iP	08 43 27		Slight distant. Compression.
17	Shillong	Z	iP	09 38 48		Slight near.
17	Chatra	Z	iP i i	09 39 45 39 54 40 24		Feeble near.
17	Chatra	Z	iP	09 54 19		Feeble near.
17	Shillong	Z	eP	12 26 25		Slight distant.
17	Shillong	Z	iP	12 39 31		Slight near.
17	Shillong	Z	iP	14 31 16		Slight distant. Rarefaction.
17	Shillong	Z	eP	16 45 08		Slight distant.
17	Chatra	Z	eP	17 46 57		
17	Epc:- 52.0°N, 173.9°E Near Aleutian Islands. -H= 19h 29m 19.3s (USCGS) Mag:- 6 (Pal), 6½-6½ (Pal). -h= 21 km.					
	Tocklai	E	eP	19 39 57		
	Shillong	Z	iP	19 40 03	7330	Compression
		E	PcP	40 39		
			PP	42 29		
			PPP	44 07		
			PcS, ScP	44 39		
			iS	48 50		
			e	49 05		
			PS	49 15		
			ScS, SKS	49 57		
			SS	53 05		
			SSS	55 55		
			LQ	56 37		
			LR	59 45		
			M	20 05 20		
	Chatra	Z	iP e	19 40 17 49 23	7640	
	Dehra Dun	ZNE	eP	19 40 33	7590	
		N	PP	43 09		
			e	44 56		
			eS	49 34		
			e	54 19		
			e	57 21		
			M	20 08 27		
	Bokaro	NE	iP	19 40 36	8010	Initial ground movement towards South & West.
			PcP	40 46		
			PPP	45 05		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
17	Bokaro	NE	S	19 49 58		
			PS	50 30		
			PPS	50 51		
			SS	54 39		
			M	20 09 38		
	Port Blair	E	iP	19 41 06	8320	
			iS	50 43		
	Hyderabad	NE	iP	19 41 32	8800	
		N	PP	44 31		
		NE	iS	51 33		
		N	PS	52 27		
			SS	56 39		
			SSS	59 54		
			LR	20 07 00		
			M	13 54		Period= 18 sec. Gr. dis= 10 μ
		E	M	14 21		Period= 16sec. Gr. dis= 10 μ
	Madras	E	iP	19 41 41	9240	
			PcP	41 48		
			PP	44 49		
			PPP	46 48		
			iS	52 01		
			ScS	52 12		
			PS	52 55		
			PPS	53 16		
			SS	57 06		
			M	20 15 31		
	Bombay	NE	iP	19 41 41	9200	
			PP	44 46		
			PPP	46 40		
			e	51 52		
			eS	51 59		
		E	ScS	52 14		
			i	52 26		
			PS	52 48		
		NE	SSS	20 01 06		
		N	M	15 43		
		E	M	24 34		Period= 19 sec. Gr. dis= 3 μ Period= 15 sec. Gr. dis= 2 μ
17	Colombo	E	e	19 52 33		
17	Calcutta	E	e	20 42 09		
18	Epc:- 33.3°N, 99.3°E. Sinkiang Province, China. -H= 00h 23m 45.2s (USCGS). -h= 27 km.					
	Shillong	ZE	iP	00 26 14	1150	Slight compression.
		E	PP	26 25		
			PPP	26 33		
			LQ	28 05		
			iS	28 12		
			SS	28 27		
			LB	28 32		
			SSS	28 36		
			M	29 36		
	Tocklai	E	eP	00 26 40		Slight distant.
	Chatra	Z	iP	00 26 45	1320	Feeble.
			iS	29 00		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
18	Dehra Dun	ZNE	e	00 27 59		Feeble.
			e	31 44		
	Calcutta	E	e	00 31 55		Slight.
	Bombay	E	e	00 34 36		Slight.
		NE	e	38 33		
		E	e	39 05		
18	Shillong	Z	iP	01 24 44		Slight near.
18	Dehra Dun	ZNE	e	06 37 39		Feeble.
			e	39 22		
18	Shillong	Z	iP	09 32 11		Slight near. Rarefaction.
18	Shillong	Z	eP	11 14 00		Slight near.
18	Shillong	Z	eP	14 45 13		Slight distant.
18	Shillong	Z	iP	19 40 54		Slight distant.
18	Shillong	Z	iP	19 40 54		Slight distant. Rarefaction.
	Poona	Z	iP	19 41 40	9020	Slight.
		N	eS	51 50		
			ScS	52 02		
			PPS	53 02		
			SS	57 10		
			LQ	20 03 47		
18	Chatra	Z	eP	20 35 50		Feeble distant.
18	Madras	E	eP	20 44 54		Slight.
			e	50 48		
			e	51 50		
18	Shillong	Z	iP	20 45 13		Slight distant. Compression.
19	Shillong	Z	iP	00 27 02		Slight near. Compression.
19	Shillong	Z	iP	00 57 46		Slight distant. Rarefaction.
19	Shillong	Z	iP	08 07 12		Slight distant. Compression.
19	Chatra	Z	iP	08 07 39		Feeble.
			i	07 46		
19	Chatra	Z	i	08 07 48	300	
			S	08 22		
19	Shillong	Z	eP	09 44 59		Slight distant.
19	Epc:- 24.1°N, 125.4°E Ryukyu Islands. -H= 16h 37m 28.9s (USCGS). -h= 71 km.					
	Bombay	NE	e	16 40 10		Slight.
		E	e	45 56		
			e	52 48		
			e	56 33		
	Shillong	Z	iP	16 4320		Slight distant. Rarefaction.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 (contd)						
19	Chatra	Z	iP e	16 44 09 44 17		Feeble.
	Dehra Dun	ZNE N	eP PP iS SS SSS M	16 45 07 46 44 51 16 54 18 54 57 17 00 14	4490	Slight.
	Poona	Z	iP	16 45 50		Tremor. Rarefaction.
	Calcutta	E	e	16 51 18		Slight.
19	Epc:- 38.3°N, 72.6°E Tad hik S.S. R. -H= 21h 30m 16.8s (USCGS). -h= 37 km.					
	Dehra Dun	ZNE N	eP PPP LQ iS SS SSS M	21 32 32 32 47 33 54 34 05 34 18 34 28 34 59		
	Chatra	ZN	iP PP PPP LQ S SS SSS LR M	21 34 07 34 20 34 28 36 59 37 03 37 18 37 30 37 39 39 11	1750	Slight.
	Bokaro	NE	eP i	21 34 30 37 39		Slight near.
	Poona	Z	iP	21 34 45		Slight. Compression.
	Shillong	Z	iP	21 34 55		Slight distant. Compression.
	Bombay	NE E	e e	21 35 32 38 10		Slight.
	Madras	E	e e	21 40 22 41 11		Slight.
20	Dehra Dun	ZNE	e e	02 22 39 24 30		Feeble.
20	Chatra	Z	e	03 23 31		Feeble.
20	Shillong	Z	iP	08 41 34		Slight distant. Compression.
20	Bokaro	NE	eP	09 04 28		Slight. Tremor.
20	Chatra	Z	iP	11 30 09		Feeble distant.
20	Shillong	Z	iP	11 59 14		Slight distant. Compression.
20	Port Blair	E	eP iS	13 36 00 36 20	160	Slight.
20	Shillong	Z	iP	18 02 20		Slight distant. Compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 (contd)						
20	Chatra	Z	eP	20 13 25		Mild near.
20	Chatra	Z	eP	21 21 29		Mild near.
21	Shillong	Z	iP	05 32 43		Slight distant. Rarefaction.
21	Shillong	Z	iP	06 19 19		Slight Tremor. Rarefaction.
21	Shillong	Z	iP	10 01 26		Slight. Rarefaction.
21	Shillong	Z	iP	10 16 00		Slight.
21	Shillong	Z	iP	10 19 43		Rarefaction. Slight distant.
21	Shillong	Z	i	13 31 36		Tremor.
21	Shillong	Z	iP	19 23 23		Slight distant. Rarefaction.
21	Shillong	Z	i	19 28 13		Tremor.
21	Dehra Dun	ZNE	e e e	19 48 32 51 59 54 25		Feeble.
21	Chatra	Z	eP	19 50 00		Feeble distant.
21	Shillong	Z	iP	21 17 42		Slight distant. Rarefaction.
21	Shillong	Z	iP	21 52 22		Slight distant. Compression.
22	Shillong	Z	iP	05 44 17		Slight. Rarefaction.
22	Bokaro	NE	eP	08 00 32		Tremor.
22	Shillong	Z	iP	08 25 59		Slight distant. Rarefaction.
22	Shillong	Z	eP	09 06 41		Slight distant.
22	Port Blair	E	i	09 11 43		Slight.
22	Shillong	Z	eP	09 35 31		Slight distant.
22	Shillong	Z	iP	11 43 07		Slight distant. Compression.
22	Shillong	Z	iP	13 58 27		Slight distant. Rarefaction.
22	Colombo	E	P S L M	14 08 52 18 41 41 15 46 20	8570	
22	Shillong	Z	iP	14 31 46		Slight distant. Compression.
22	Shillong	Z	iP	14 38 01		Slight distant. Rarefaction.
22	Kodaikanal	E	e	14 42 07		Tremor.
22	Chatra	Z	eP	17 49 48		Feeble distant.
	Bombay	E	e e e i	17 51 00 54 33 57 58 18 01 56		Slight.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
May 1961 . . . (contd)						
22	Port Blair	E	i	17 56 21		Slight.
22	Kodaikanal	E	e	17 57 25		Tremor.
	Colombo	E	e	17 57 11		
			e	18 05 50		
			e	25 50		
			e	29 50		
22	Hyderabad	N	M	18 32 57		Period= 18 sec. Gr. dis= 6 μ
22	Shillong	Z	iP	23 12 20		Slight distant. Rarefaction.
23	Shillong	Z	iP	01 12 43		Slight distant. Rarefaction.
23	Epc:- 36.4°N, 28.5°E. Dodecanese Islands. -H= 02h 45m 16s (USCGS) -H= 02h 45m 15s (SHILLONG) Mag: 6¼(Pas), (Pal) -h= 49 km. Moderate property damage in Rhodes area and in South Western Turkey.					
	Dehra Dun	ZNE N	eP PPP eS SS LQ SSS LR M	02 53 03 55 03 59 13 03 01 09 01 25 02 41 03 42 07 19	4510	
	Bombay	NE E NE E N	eP PPP e eS e SSS SSS	02 53 15 55 11 55 49 59 33 59 49 59 56 03 03 12 03 32	4620	
	Poona	Z N	iP iS PPS e SSS LR	02 53 21 59 49 03 00 11 03 17 04 02 05 49	4810	Initial ground movement towards South and Compression.
	Sehore	NE	iP PP PPP PcS iS	02 53 22 55 06 55 42 58 55 59 50	4810	
	Tocklai	E	eP	02 53 55		Distant.
	Hyderabad	N	eP PP PcS iS PPS SS LR M	02 53 55 55 37 59 19 03 00 44 00 58 04 05 06 54 11 31	5170	
Period= 21 sec. Gr. dis= 20 μ						

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
May 1961 . . . (contd)						
23	Chatra	ZNE Z NE ZNE N NE	iP e e iS PPS e	02 54 11 54 39 54 41 03 01 17 01 33 02 11	5480	
	Bokaro	N E N	iP eP PP	02 54 13 56 00 57 06	5570	
		NE N	iS PS PPS M	03 01 25 01 31 01 43 12 58		
	Madras	E	iP i PP PPP PcS, ScP iS PS PPS i ScS SS SSS, LQ e LR M	02 54 26 54 37 56 16 57 30 59 37 03 01 43 01 49 02 00 02 28 04 12 05 05 06 58 08 08 08 54 14 20	5670	Initial ground motion towards West.
	Kodaikanal	E	iP PPP iS e LR M	02 54 30 57 27 03 01 48 06 53 08 57 13 15	5680	Initial ground motion towards West. Period= 17sec. Gr. dis= 12 μ
	Calcutta	E	eP iS	02 54 31 03 01 59	5870	
	Shillong	ZNE N	iP PcP PP PPP PcS iS PS PPS ScS SS SSS LQ LR M	02 54 43 55 43 56 39 57 51 59 47 03 02 18 02 28 02 47 04 28 06 02 07 47 08 02 10 39 15 32	6000	Initial ground motion towards South, East & Compression.
	Port Blair	E	e	03 04 15		
23	Chatra	Z	eP	03 59 44		Feeble distant.
23	Shillong	Z	iP	04 14 50		Slight distant. Rarefaction.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
23	Chatra	Z	e	05 25 29		Feeble distant.
23	Shillong	Z	eP	15 11 52		Slight distant.
23	Shillong	Z	eP	16 20 29		Slight distant.
23	Shillong	Z	eP	16 38 46		Slight distant.
23	Chatra	Z	e	16 39 48		Feeble distant.
23	Shillong	Z	iP	17 02 31		Slight distant. Compression.
23	Chatra	Z	iP	17 03 02		Feeble distant.
24	Shillong	Z	iP	03 50 57		Slight near. Rarefaction.
24	Chatra	Z	iP i	03 57 49 59 16		Feeble.
24	Shillong	Z	e	08 31 46		Slight local.
24	Shillong	Z	iP	11 13 12		Slight distant. Compression.
24	Shillong	Z	eP	15 37 19		Slight distant. Rarefaction.
24	Shillong	Z	iP	16 35 27		Slight distant. Rarefaction.
24	Tocklai	E	eP	16 39 58		Slight distant.
24	Shillong	Z	iP	17 26 31		Slight distant. Compression.
	Chatra	Z	eP	17 27 01		Feeble distant.
24	Dehra Dun	ZNE	e	21 58 19 59 54		Feeble.
	Chatra	Z	iP	22 00 05		Feeble distant.
25	Tocklai	E	eP	01 00 55		Slight distant.
	Shillong	Z	eP	01 01 21		Slight distant.
	Chatra	Z	eP	01 01 35		Feeble distant.
25	Shillong	Z	eP	01 21 03		Slight distant.
25	Shillong	Z	eP	01 38 28		Slight near.
25	Shillong	Z	iP	05 04 16		Slight Tremor. Rarefaction.
25	Chatra	Z	eP S	05 25 46 26 26	360	Feeble.
25	Chatra	Z	eP S	06 54 17 54 46	250	Feeble.
25	Chatra	Z	eP S	07 33 33 34 03	260	Feeble.
25	Chatra	Z	iP S	09 14 07 14 34	230	Slight.
25	Shillong	Z	iP	09 14 09		Slight near. Compression.
25	Shillong	Z	eP	09 26 07		Slight distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
25	Dehra Dun	ZNE NE	eP PP PPP iS SS SSS Sg,M	13 35 47 35 54 36 00 37 30 37 40 37 53 38 31	1000	Slight.
	Chatra	Z	iP i	13 36 59 39 42		Feeble distant.
	Shillong	Z	iP	13 37 42		Slight distant. Compression.
	Bokaro	NE	i	13 40 49		Slight distant.
	Bombay	NE	e e	13 42 21 45 29		Slight.
	Kodaikanal	E	e	13 49 08		Tremor.
25	Shillong	Z	iP	19 17 58		Slight distant. Compression.
25	Shillong	Z	iP	19 39 24		Slight distant. Compression.
26	Shillong	Z	eP	00 05 22		Slight near.
26	Shillong	Z	iP	04 56 48		Slight near.
26	Dehra Dun	ZNE	e i i	05 16 28 17 44 19 29		Feeble.
	Chatra	Z	eP	05 18 17		Feeble distant.
	Shillong	Z	iP	05 19 03		Slight distant. Compression.
26	Shillong	Z	iP	06 19 28		Slight distant. Compression.
26	Shillong	Z	iP	06 38 28		Slight distant. Compression.
26	Shillong	Z	eP	07 35 55		Slight distant.
26	Shillong	Z	iP	08 14 24		Slight distant. Rarefaction.
26	Shillong	Z	iP	09 03 56		Slight distant. Rarefaction.
26	Shillong	Z	eP	13 32 24		Slight near.
	Chatra	Z	iP S	13 32 47 33 43	520	Feeble.
26	Shillong	Z	iP	15 08 41		Slight distant. Compression.
26	Chatra	Z	eP S	15 09 26 10 55	830	Feeble.
26	Shillong	Z	iP	17 46 31		Slight distant. Rarefaction.
26	Shillong	Z	iP	18 27 22		Slight distant. Rarefaction.
26	Shillong	Z	eP	18 47 09		Slight distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 ... (contd)						
26	Shillong	Z	eP	19 16 09		Slight distant.
26	Shillong	Z	iP	22 58 01		Slight distant. Compression.
26	Chatra	Z	iP	22 58 26		Feeble distant.
26	Shillong	Z	eP	23 33 59		Slight near.
27	Shillong	Z	eP	00 15 59		Slight distant.
27	Shillong	Z	iP	01 07 05		Slight Tremor.
27	Shillong	Z	iP	03 08 06		Slight distant. Rarefaction.
27	Shillong	Z	iP	04 05 56		Slight distant. Rarefaction.
27	Epc:- 36.8°N, 70.9°E Hindukush. -H= 05h 14m 43.7s (USCGS) -h= 92 km.					
	Dehra Dun	ZNE N	eP PP PPP S	05 16 54 17 01 17 06 18 34	970	Slight.
	Sehore	NE	eP e e S M	05 18 13 20 35 20 46 21 01 22 06	1670	
	Chatra	Z	iP PP PPP ZNE SS ZN LR M	05 18 41 18 53 19 01 21 46 22 09 22 21 22 35 05 24 00	1840	Feeble.
	Poona	Z	iP i	05 18 43 22 11		Slight.
	Bombay	NE E	eP eS e	05 18 51 22 12 24 19	2020	Slight.
	Shillong	Z E	iP PP iS LQ SS SSS LR	05 19 25 19 38 23 07 23 14 23 36 23 51 24 11	2240	Slight. Compression.
	Bokaro	NE	i	05 22 08		Slight distant.
	Calcutta	E	e	05 22 16		Slight.
27	Shillong	Z	iP	07 15 04		Slight distant. Rarefaction.
27	Shillong	Z	iP	07 26 09		Slight distant. Compression.
	Chatra	Z	iP	07 26 32		Feeble.

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DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 ... (contd)						
27	Shillong	Z	iP	10 21 31		Slight distant Rarefaction.
27	Shillong	Z	iP	10 31 07		Slight distant.
27	Epc:- 35.2°N, 70.0°E Hindukush. -H= 10h 37m 39.6s (USCGS). -h= 32 km.					
	Dehra Dun	NE N	eP PP LQ iS SS SSS Sg,M	10 39 47 39 57 41 17 41 25 41 38 41 49 42 23	940	Slight.
	Poona	Z	eP	10 41 36		Slight.
	Chatra	Z	eP i PPP PPP ZN LQ S SS SSS LR M	10 41 37 10 41 41 41 53 42 02 10 44 39 44 40 44 59 45 11 45 23 10 46 00	1830	Feeble.
	Sehore	NE	eP e	10 42 19 44 49		
	Shillong	Z	iP	10 42 27		Slight distant. Rarefaction.
	Bombay	E	e	10 40 31		Feeble.
27	Epc:- 0.8°N, 98.5°E Near Coast of Northern Sumatra, -H= 16h 52m 19.3s (USCGS). -h= 39 km.					
	Port Blair	E	e	16 53 11		Slight.
	Colombo	E	e	16 56 48		
	Shillong	Z E	iP PP PPP iS LQ SS SSS LR	16 57 48 58 23 58 36 17 02 15 03 01 03 17 03 35 04 08	2860	Slight. Compression.
	Bokaro	N E NE	iP eP iS	16 57 53 17 02 29	2990	Slight.
	Chatra	Z	iP	16 58 11		Feeble distant.
	Dehra Dun	ZNE	eP eS	16 59 15 17 04 46	3900	Slight.
	Madras	E	e e	17 01 15 04 36		
	Calcutta	E	e	17 02 46		Slight.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
27	Bombay	NE	e	17 03 40		Slight.
			e	05 54		
	Hyderabad	N	M	17 11 41		Period= 18sec. Gr. dis= 4 μ
		E	M	12 04		
27	Epc:- 1.2°N, 98.4°E Near North West Coast of Sumatra. -H= 17h 26m 32.2s (USCGS). -h= 36 km.					
	Shillong	Z	iP	17 31 59		Slight distant. Compression.
	Tocklai	E	eP	17 32 08		Slight distant.
	Chatra	Z	iP	17 32 24		Feeble distant.
27	Shillong	Z	iP	18 20 12		Slight distant. Rarefaction.
27	Shillong	Z	eP	18 47 35		Slight near.
27	Shillong	Z	iP	20 13 59		Slight distant. Rarefaction.
27	Shillong	Z	iP	22 44 17		Slight distant Rarefaction.
28	Shillong	Z	iP	02 40 23		Slight distant. Compression.
28	Shillong	Z	iP	03 15 25		Slight distant. Rarefaction.
28	Shillong	Z	iP	04 06 19		Slight distant.
	Chatra	Z	iP	04 06 45		Feeble distant.
	Dehra Dun	ZNE	e	04 07 47		Feeble.
			e	14 10		
			e	17 37		
28	Shillong	Z	iP	10 57 24		Slight distant. Compression.
28	Shillong	Z	iP	13 37 29		Slight distant. Rarefaction.
28	Shillong	Z	iP	20 18 54		Slight distant. Rarefaction.
28	Shillong	Z	eP	20 36 38		Slight distant.
28	Shillong	Z	eP	21 51 14		Slight near.
28	Shillong	Z	eP	23 25 18		Slight distant.
29	Shillong	Z	iP	00 01 35		Slight distant. Rarefaction.
29	Shillong	Z	eP	00 34 31		Slight distant.
29	Shillong	Z	iP	06 31 30		Slight near.
29	Shillong	Z	iP	07 32 20		Slight distant. Rarefaction.
29	Poona	Z	iP	07 47 50		Tremor. Compression.
29	Shillong	Z	iP	07 48 16		Slight distant. Compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 . . . (contd)						
29	Shillong	Z	iP	10 37 41		Slight distant. Compression.
29	Madras	E	eP	10 59 38		Slight.
			e	11 05 44		
			e	08 59		
			e	13 48		
29	Dehra Dun	ZNE	e	11 05 58		Feeble
			e	09 01		
29	Hyderabad	E	e	11 06 16		Period= 15 sec. Gr. dis= 4 μ
			M	14 30		
29	Shillong	Z	iP	12 00 03		Slight distant. Rarefaction.
29	Shillong	Z	eP	12 05 11		Slight distant.
29	Shillong	Z	eP	16 27 34		Slight distant.
29	Shillong	Z	iP	16 57 42		Slight distant. Compression.
29	Shillong	Z	iP	17 46 51		Slight distant. Rarefaction.
29	Shillong	Z	iP	17 56 09		Slight distant. Compression.
29	Chatra	Z	eP	18 24 53	480	Feeble.
			iS	25 44		
29	Shillong	Z	eP	19 33 07		Slight distant.
29	Shillong	Z	eP	19 46 41		Slight distant.
29	Shillong	Z	eP	19 57 48		Slight distant.
29	Shillong	Z	iP	20 04 51		Slight near. Rarefaction.
	Chatra	Z	eP	20 04 59	260	Feeble.
			S	05 28		
29	Shillong	Z	eP	21 34 51		Slight distant.
30	Shillong	Z	e	02 52 14		Slight near.
30	Shillong	Z	eP	06 13 10		Slight distant.
30	Bokaro	NE	iP	09 19 21		Slight Tremor.
30	Shillong	Z	eP	11 08 15		Slight.
30	Chatra	Z	iPg	11 41 23		Local, land slide.
		ZN	i	11 41 23		
			iSg	11 41 23		
30	Chatra	ZN	iP	12 38 18	150	Mild local. Initial ground motion towards North & Compression.
		Z	iPg	38 19		
		ZN	iSg	38 36		
			iS	38 37		
			SS	38 41		
	Shillong	Z	eP	12 38 49		Slight distant.
30	Shillong	Z	e	21 16 21		Slight near.
31	Shillong	Z	iP	05 25 08		Slight distant. Compression.
31	Shillong	Z	iP	14 48 40		Slight distant. Rarefaction.



M I C R O S E I S M I C T A B U L A T I O N

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
May 1961 (contd)						
31	Chatra	Z	iP	14 48 57		Feeble distant.
31	Shillong	Z	iP	18 33 56		Slight near. Compression.
31	Chatra	Z	eP S	18 34 53 35 45	490	Feeble.
31	Chatra	Z ZN	iP S	19 05 50 06 19	250	Feeble.
31	Shillong	Z	eP	19 05 56		Slight near.
31	Shillong	Z	eP	19 26 39		Slight distant. Compression.
31	Chatra	Z	iP	19 27 07		Feeble distant.

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DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.	DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.
S T A T I O N . Bombay (Colaba) COMPONENT: E-W MONTH: May 1961.									
01	00	3	0.3	4.3	08	00	3	0.7	4.5
	06		0.3	2.0				0.6	2.7
	06	3	0.3	2.2		03	1	1.0	4.6
			0.3	3.7		06	1	1.2	4.4
	12	3	0.3	4.6		09	1	1.3	4.7
			0.3	1.7		12	1	1.7	4.9
	18	3	0.3	4.2		15	1	1.9	4.7
			0.3	1.9		18	1	3.1	5.2
02	00	3	0.3	2.3		21	1	3.1	5.1
			0.3	3.9	09	00	1	1.8	4.6
	06		-	-		03	1	1.8	4.6
	12	3	0.6	6.2		06	1	1.3	5.1
			0.3	2.0		09	1	1.4	5.2
	18	3	0.7	7.0		12	1	1.2	4.9
			0.6	2.3		15	1	1.1	5.0
03	00		-	-		18	1	1.2	4.9
	06	3	0.7	6.7		21	1	1.2	5.0
			0.6	2.5	10	00	1	1.0	4.8
	12	3	0.5	6.1		03	1	0.9	4.7
			0.4	2.4		06	1	0.9	5.0
	18	3	0.7	6.6		09	1	0.7	4.4
			0.4	2.3		12	1	0.7	4.7
04	00	3	0.6	6.3		15	1	0.6	4.5
			0.5	2.5		18	1	0.5	4.6
	06	3	0.7	6.9		21	1	0.6	4.4
			0.6	2.2	11	00	3	0.5	4.3
	12	3	0.6	6.8				0.4	3.0
			0.4	2.1		06	3	0.5	4.3
	18	3	0.6	5.7				0.4	2.5
			0.6	2.1		12	3	0.6	4.3
05	00	3	0.6	6.7				0.5	2.5
			0.5	2.5		18	3	0.7	4.0
	03	1	0.8	2.9				0.4	2.5
	06	1	0.7	2.7	12	00	3	0.5	4.6
	12	3	0.7	5.6				0.3	1.8
			0.8	2.8		06	1	0.5	3.3
	18	3	0.6	6.4		09	1	0.5	3.4
			0.7	2.5		12	1	0.5	3.4
06	00	1	0.6	2.7		15	1	0.6	3.2
	03	1	1.0	2.7		18	1	0.7	3.4
	06	1	0.8	2.7		21	1	0.6	3.3
	09	1	0.7	2.8	13	00	1	0.5	3.1
	12	1	0.7	2.8		03	1	0.5	3.2
	15	1	0.6	2.5		06	1	0.6	3.3
	18	1	0.5	2.4		09	1	0.7	3.3
	21	1	0.6	2.5		12	1	0.6	3.2
07	00	1	0.6	2.6		15	1	0.6	3.2
	03	1	0.6	2.7		18	1	0.5	3.3
	06	1	0.6	2.7	14	00	1	0.5	3.5
	09	1	0.8	2.8		06	3	0.6	3.5
	12	1	0.5	2.7				0.4	2.5
	15	1	0.5	2.7		12	3	0.5	3.5
	18	1	0.6	4.6				0.3	2.3
			0.5	2.8		18	3	0.6	4.0
								0.3	2.3



II

DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.
STATION : Bombay (contd)				
15	00	3	0.5	3.9
	06	3	0.5	3.9
	12	3	0.5	4.2
	18	3	0.5	5.1
16	00	3	0.5	4.7
	06	3	0.5	4.9
	12	3	0.5	4.8
	18	...	-	-
17	00	3	0.5	5.0
	06	3	0.5	4.8
	12	3	0.5	4.4
	18	3	0.5	4.7
18	00	3	0.5	4.8
	06	3	0.6	4.3
	12	3	0.5	3.7
	18	3	0.5	4.0
19	00	1	0.8	2.8
	03	1	0.8	2.9
	06	1	0.9	2.9
	09	1	0.9	3.0
	12	1	0.9	3.0
	15	1	0.8	3.0
	18	1	0.7	3.0
	21	1	0.7	2.9
20	00	1	0.6	2.7
	03	1	0.6	2.9
	06	1	0.7	2.7
	09	1	0.7	2.7
	12	1	0.9	2.8
	15	1	0.9	3.1
	18	1	0.9	3.1
	21	1	1.1	3.1
21	00	1	1.2	3.5
	03	1	1.2	3.4
	06	1	1.3	3.2
	09	1	1.3	3.4
	12	1	1.3	3.4
	15	1	1.2	3.4
	18	1	1.4	3.4
	21	1	1.5	3.5

III

DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.
STATION : Bombay (contd)				
MONTH: May 1961.				
29	00	1	1.6	4.5
	03	1	2.1	4.7
	06	1	2.2	4.6
	09	1	2.9	4.5
	12	1	2.7	4.6
	15	1	2.4	4.6
	18	1	2.4	4.9
	21	1	2.5	4.6
30	00	1	2.7	4.5
	03	1	2.4	4.6
	06	1	2.6	4.5
	09	1	2.7	4.6
	12	1	2.2	4.3
	15	1	2.3	4.4
	18	1	2.1	4.0
	21	1	1.9	4.6
31	00	1	2.0	4.5
	03	1	1.8	4.3
	06	1	1.6	3.8
	09	1	1.9	4.5
	12	1	2.0	4.5
	15	1	1.6	3.9
	18	...	-	-
	21	...	-	-
STATION : Madras COMPONENT: E.W:				
01	00	3	0.4	4.6
	03	3	0.5	4.9
	06	3	0.5	5.1
	12	3	0.4	5.0
	18	3	0.4	5.1
		3	0.4	6.7
02	00	3	0.3	4.6
		3	0.1	1.5
	03	3	0.3	4.7
		3	0.5	6.6
		3	0.1	1.3
	06	3	0.1	1.2
		3	0.3	4.9
		3	0.6	6.9
	12	3	0.1	1.5
		3	0.4	4.5
	18	3	0.1	1.6
		3	0.5	5.1
		3	0.5	6.7
03	00	...	-	-
	03	3	0.1	1.7
		3	0.3	4.6
		3	0.5	6.2
	06	3	0.1	1.7
		3	0.5	4.9
		3	0.5	5.9
	12	3	0.1	1.7
		3	0.5	6.2
	18	3	0.1	1.6
		3	0.4	4.7
		3	0.5	5.9

IV

DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.
MONTH: May 1961 (contd)				
11	00	1	0.8	4.2
		3	0.1	1.9
	03	1	0.7	4.3
		3	0.3	2.3
	06	1	0.5	4.2
		3	0.3	2.6
	12	3	0.4	4.2
		3	0.2	2.7
	18	3	0.4	3.8
		3	0.2	2.6
12	00	3	0.3	3.7
		3	0.3	2.6
		3	0.1	1.1
	03	3	0.3	3.3
		3	0.2	2.4
	06	3	0.2	3.3
		3	0.2	2.3
	12	3	0.2	3.0
	18	3	0.3	3.6
13	00	3	0.3	3.1
	03	3	0.2	2.7
	06	-	-	-
	12	3	0.2	2.8
	18	3	0.2	2.7
14	00	-	-	-
		3	0.3	4.0
		3	0.1	1.5
	06	3	0.3	3.4
		3	0.2	1.6
	12	3	0.2	3.3
		3	0.2	2.1
	18	3	0.3	3.4
		3	0.1	1.8
15	00	3	0.3	3.4
		3	0.1	1.2
	03	3	0.4	4.3
		3	0.1	1.6
		3	0.2	2.6
	06	3	0.3	3.7
		3	0.1	1.4
	12	3	0.4	4.0
		3	0.1	1.5
	18	3	0.3	3.8
		3	0.2	1.9
16	00	3	0.2	3.3
	03	3	0.3	3.7
	06	3	0.3	3.8
	12	3	0.3	3.5
	18	3	0.2	3.3
		3	0.1	1.2
17	00	3	0.2	3.5
		3	0.1	1.3
	03	3	0.3	3.9
		3	0.1	1.8

DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.
MONTH: May 1961 (contd)				
26	12	1	0.8	3.4
		1	0.6	2.5
	18	1	1.1	2.8
27	00	1	1.3	2.9
	03	1	1.4	2.7
	06	1	1.6	2.8
	12	1	1.2	2.7
		1	1.4	3.7
	18	1	1.3	2.8
		1	1.3	3.8
28	00	1	1.2	3.8
	03	1	1.1	4.1
		1	1.0	2.9
	06	1	1.3	4.1
		1	0.9	2.7
	12	1	1.4	4.3
		1	1.1	2.7
	18	1	1.5	4.5
		1	0.9	2.8
29	00	1	1.8	4.5
	03	1	1.9	4.5
	06	1	1.9	4.4
	12	1	2.1	4.4
	18	1	2.0	4.5
30	00	1	2.0	4.5
	03	1	1.9	4.3
	06	1	1.7	4.4
	12	1	1.6	4.5
	18	1	1.5	4.4
31	00	...	-	-
	03	1	1.4	4.3
	06	1	1.3	4.5
	12	2	1.1	4.3
	18	2	1.2	4.4
MONTH: May 1961 (contd)				
S T A T I O N : Madras.. (contd)				
01	00	...	-	-
	06	3	0.3	3.2
	12	...	-	-
	18	3	0.3	3.0
02	00	0,0	-	-
	06	3	0.3	3.0
	12	3	0.3	4.0
	18	3	0.3	4.0
03	00	...	-	-
	06	3	0.3	3.5
	12	3	0.4	4.0
	18	3	0.6	3.4
04	00	3	0.4	3.0
	06	3	0.3	3.0
	12	0,0	-	-
	18	3	0.3	2.8



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DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.
STATION: Bokaro				
18	00	3	0.4	4.0
	06	3	0.4	3.5
	12	3	0.4	3.5
	18	3	0.4	3.8
19	00	3	0.4	3.4
	06	3	0.4	3.2
	12	3	0.4	3.0
	18	3	0.3	3.0
20	00	3	0.3	3.2
	06	3	0.4	3.0
	12	3	0.5	3.0
	18	3	0.6	3.5
21	00	3	0.6	3.8
	06	3	0.6	3.2
	12	3	0.5	3.2
	18	3	0.5	3.2
22	00	3	0.5	3.0
	06	3	0.5	3.0
	12	3	0.6	4.0
	18	...	-	-
23	00	3	0.5	4.2
	06	2	1.2	3.7
	12	2	1.4	3.5
	18	2	1.5	3.7
24	00	2	1.7	4.0
	06	2	1.6	4.0
	12	2	1.2	4.2
	18	3	0.5	3.7
25	00	3	0.4	3.6
	06	3	0.4	3.5
	12	3	0.4	3.7
	18	3	0.3	3.5
26	00	3	0.5	3.5
	06	3	0.3	3.5
	12	3	0.5	3.7
	18	3	0.5	4.0
27	00	3	0.3	4.0
	06	...	-	-
	12	3	0.3	3.5
	18	3	0.3	3.6
28	00	2	0.5	4.0
	06	2	0.7	4.3
	12	2	1.0	4.3
	18	2	1.2	4.5
29	00	2	1.5	4.5
	06	2	1.8	4.5
	12	2	1.7	4.5
	18	2	1.5	4.5
30	00	2	1.3	4.3
	06	2	1.7	4.4
	12	3	1.2	5.0
	18	3	1.1	4.8

COMPONENT: E-W

MONTH: May 1961 ... (contd)

STATION: Port Blair.

DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.
31	00	3	0.6	4.4
	06	...	-	-
	12	3	0.6	4.8
	18	3	0.6	5.0
01	00	...	-	-
	06	1	0.8	7.5
	12	1	0.8	7.5
	18	1	0.8	7.5
02	00	1	0.8	7.5
	06	1	1.2	7.5
	12	1	1.2	7.5
	18	1	1.2	7.5
03	00	1	1.2	7.5
	06	1	1.6	7.5
	12	...	-	-
	18	...	-	-
04	00	...	-	-
	06	1	1.6	7.5
	12	1	1.6	7.5
	18	...	-	-
05	00	...	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-
07	00	...	-	-
	06	1	4.0	5.0
	12	1	3.2	5.0
	18	1	3.2	4.9
08	00	1	3.2	5.0
	06	...	-	-
	12	...	-	-
	18	1	3.2	4.8
09	00	1	3.2	4.8
	06	1	2.8	4.8
	12	1	2.4	4.8
	18	1	2.4	4.8
10	00	1	2.4	4.9
	06	...	-	-
	12	...	-	-
	18	...	-	-
11	00	...	-	-
	06	0,0	-	-
	12	0,0	-	-
	18	0,0	-	-
12	00	0,0	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-

DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SEC.
STATION: Port Blair... (contd)				
13	00	...	-	-
14	06	...	-	-
	12	...	-	-
	18	...	-	-
15	00	...	-	-
	06	0,0	-	-
	12	0,0	-	-
	18	0,0	-	-
16	00	0,0	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-
17	00	...	-	-
	06	0,0	-	-
	12	0,0	-	-
	18	0,0	-	-
18	00	0,0	-	-
19	06	0,0	-	-
20	12	0,0	-	-
	18	0,0	-	-
21	00	0,0	-	-
	06	2	0.4	3.1
	12	2	0.4	3.1
	18	2	0.4	3.1
22	00	2	0.4	3.2
	06	2	0.4	3.2
	12	2	0.4	3.2
	18	2	0.4	3.2
23	00	2	0.4	3.2
	06	...	-	-
	12	2	0.4	3.2
	18	2	0.4	3.2
24	00	2	0.4	3.2
	06	2	0.4	3.2
	12	2	0.4	3.2
	18	2	0.4	3.2
25	00	...	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-
26	00	...	-	-
	06	2	0.8	3.3
	12	2	0.8	3.4
	18	2	0.8	3.3
27	00	...	-	-
	06	2	0.8	3.3
	12	2	0.8	3.3
	18	2	0.8	3.4
28	00	2	0.8	3.3
	06	2	2.0	3.4
	12	2	2.8	3.4
	18	2	2.8	3.4
29	00	2	2.8	3.4
	06	2	3.2	3.5
	12	2	3.2	3.5
	18	...	-	-
30	00	...	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-
31	00	...	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-

MONTH: May 1961... (contd)

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DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.	DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
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STATION: Port Blair (contd)

MONTH: April 1961 .. (contd)

24	00	...	-	-	27	12	...	-	-
	06	...	-	-		18	...	-	-
	12	...	-	-	28	00	...	-	-
	18	...	-	-		06	...	-	-
25	00	...	-	-		12	...	-	-
	06	1	0.4	3.8		18	...	-	-
	12	1	0.4	3.8	29	00	...	-	-
	18	1	0.4	3.8		06	0,0	-	-
26	00	1	0.4	3.8		12	0..	-	-
	06	...	-	-		18	0..	-	-
	12	...	-	-	30	00	0..	-	-
	18	...	-	-		06	...	-	-
27	00	...	-	-		12	...	-	-
	06	...	-	-		18	...	-	-