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GOVERNMENT OF INDIA
METEOROLOGICAL DEPARTMENT

SEISMOLOGICAL BULLETIN

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Director General of Observatories


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.		
Agra					Columbia	E	To=15	Tg=100		15		
					Long Period	N	To=15	Tg=95		15		
					do	Z	To=15	Tg=70		15		
Bombay	18°54'N	72°40'E	6	Deccan Trap	Milne-Shaw	N	12	350	13:1	16		
					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)	Milne-Shaw	E	12	250	20:1	8		
					(2) 6	(Omori-Ewing)	Wood-Anderson	N	2	870	Critical	30
					Alluvium	Omori-Ewing	N	16	32		25.4	
						Omori-Ewing	E	21	30		25.4	
Chatra	25°50'N	87°10'E	151	Sand Stone	Milne-Shaw	E	12	250	20:1	15		
					Wood-Anderson	N	1	1000	30:1	60		
					Benioff	Z	To=0	Tg=0.45	Critical	50		
					Wenner-Accelerograph	ZNE						
Colombo	05°54'N	70°52'E	7	Beach Sand	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°25'N	78°27'E	535	Granite	Milne-Shaw	E	12	250	20:1	8		
					Milne-Shaw	N	12	250	20:1	8		
					Milne-Shaw	E	10	250	20:1	8		
Kodaikanal	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		
Fort Blair	11°49'N	92°43'E			Wood-Anderson	E	4	1000	20:1	16		
					Milne-Shaw	N	12	280	20:1	8		
					Wood-Anderson	N	2	1000	20:1	30		
					Wood-Anderson	E	0.8	1000	65:1	30		
Sehore					Milne-Shaw	N	12	350	20:1	8		
					Wood-Anderson	N	0.8	980	Critical	30		
					Wood-Anderson	N	0.8	1000	h=0	h=0.8	30	
Shillong	25°34'N	91°53'E	1500	Quartzite Sand stone (Shillong Quartzite)	Wood-Anderson	E	0.8	1000	h=0.8	30		
					Wood-Anderson	N	0.8	1000	h=0.8	30		
					Milne-Shaw	N	12	250	20:1	8		
					Benioff	Z	To=1.0	Tg=0.18		60		
Tocklai	28°45'N	94°45'E		Alluvium	Sprengnether	E	To=Tg=6.3		Critical	30		
					Wenner Accelerograph	ZNE						
					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	0.8	1000	h=0.8	30		
					Wood-Anderson	N	2	1000	20:1	30		



DATE	STATION	COMPT.	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
November, 1961.						
01	Shillong	Z	iP	00 07 27		Slight, distant. Compression.
01	Shillong	Z	iP	00 19 49		Slight, near. Rarefaction.
01	Shillong	Z	e	00 39 11		
01	Shillong	Z	iP	00 42 25		Slight, distant. Compression.
01	Shillong	Z	eP	10 09 20		Very slight, near.
01	Shillong	Z	eP Sg	13 26 39 26 55	130	Slight, local.
01	Chatra	Z ZN	iPg Sg	13 43 13 43 25	110	Rarefaction, very feeble.
01	Shillong	Z	iP	15 08 18		Slight, distant.
01	Shillong	Z	eP	16 52 39		Very slight, near.
01	Shillong	Z	eP	20 40 52		Very slight, near.
01	Shillong	Z	iP	22 16 04		Slight, distant.
01	Shillong	Z	eP	23 42 49		Very slight, near.
02	Shillong	Z	iP	05 58 59		Slight, tremor. Rarefaction.
02	New Delhi	Z	iP i i i	07 01 46		Slight, Compression.
				02 09		
				03 18		
				04 15		
	Dehra Dun	Z	e	07 03 17		Feeble.
	Chatra	Z	eP S	07 03 33 06 33	1800	Very feeble.
	Shillong	Z	iP	07 04 27		Slight, distant. Compression.
	Bombay	E	e	07 08 21		Near and feeble.
	Visakhapatnam	E EN EN	e e i e	07 08 55		Slight.
				09 04		
				10 44		
				10 51		
02	Shillong	Z	iP	10 48 13		Slight, distant. Rarefaction.
02	Shillong	Z	eP	11 39 50		Slight, local.

DATE	STATION	COMPT.	PHASE	G. M. T. h. m. s.	Δ km	REMARKS
<u>November, 1961.</u>						
02	Shillong	Z	iP	15 45 29		Slight, distant. Compression.
	Chatra	Z	eP	15 46 52		Feeble, distant.
02	Shillong	Z	iP	16 18 28		Slight, distant. Rarefaction.
02	Shillong	Z	iP	18 28 06		Slight, near. Compression.
02	Shillong	Z	iP	22 23 47		Slight, slight, Rarefaction.
02	New Delhi	Z	iP	23 34 17		Slight, Rarefaction.
02	Epc:- 54.5°N, 162.3°W, Alaska Peninsula. - h = 40 Km. - H = 23h 35m 50.7s (USCGS).					
	Shillong	Z	iP	23 47 50		Slight, distant. Rarefaction.
	Chatra	Z	iP	23 48 00		Feeble, distant. Rarefaction.
	New Delhi	Z	iP	23 48 16		
03	Shillong	Z	eP	02 03 03		Slight, near.
03	New Delhi	Z	iP	02 21 04		Slight, Compression.
03	Epc:- 13.4°S, 167.8°E, - H = 04h 04m 04.7s -h = 25 Km. (USCGS).					
	Shillong	Z	iP	04 16 21		Slight, tremor. Compression.
03	Shillong	Z	iP	05 20 33		Slight, distant. Rarefaction.
	Chatra	Z	iP	05 21 06		Feeble, distant. Compression.
	New Delhi	Z	eP	05 22 04		Slight, Rarefaction.
05	Shillong	Z	iP	08 10 14		Slight, distant. Rarefaction.
03	Chatra	Z	iP i	08 27 04 27 13		Compression, near analysis uncertain.
03	Shillong	Z	iP	10 27 16		Slight, distant. Compression.
03	Shillong	Z	eP	13 51 50		Slight, local.
03	Shillong	Z	iP	15 32 52		Slight, distant. Compression.



DATE	STATION	COMPT.	PHASE	G. M. T. h. m. s.	Δ km	REMARKS
<u>November, 1961.</u>						
03	Shillong	Z	eP	16 22 40		Slight, near.
03	Shillong	Z	iP	16 50 29		Slight, distant. Rarefaction.
	New Delhi	Z	iP	16 52 03		Slight, Rarefaction.
03	New Delhi	Z	iP	17 06 55		Tremor, Compression.
03	Shillong	Z	iP	17 10 44		Slight, distant. Compression.
	Chatra	Z	iP	17 10 57		Feeble, distant. Compression.
03	Shillong	Z	iP	20 47 02		Slight, distant. Rarefaction.
03	Shillong	Z	iP	21 06 59		Slight, near. Compression.
03	Chatra	Z	eP	21 09 23		Feeble, distant.
03	Epc:- 22.5°S, 170.2°E, Loyalty Islands region. -H = 22h 15m 46.1s, - h = 91 Km. (USCGS)					
	Shillong	Z	iP	22 28 38		Slight, distant. Compression.
03	Epc:- 5.1°S, 131.2°E, Bauda Sea. - h = 63 Km. - H = 22h 24m 44.3s (USCGS).					
	Shillong	Z	iP	22 33 29		Slight, distant. Compression.
	Chatra	Z	iP	22 34 02		Feeble, distant. Compression.
	New Delhi	Z	iP	22 35 13		Tremor, Compression.
04	Epc:- 2.9°S, 137.2°E, Near North Coast of New Guinea. - h = 51 Km. - H = 03h 04m 21.2s (USCGS).					
	Shillong	Z	iP	03 13 29		Slight, distant. Compression.
	Chatra	Z	iP	03 14 03		Feeble, distant. Compression, other phases not clear.
	Poona	Z	iP	03 15 04		Tremor, Compression.
04	Shillong	Z	iP	03 47 57		Slight, distant. Rarefaction.
04	Madras	E	e e	06 14 20 19 57		Presumably surface waves.
04	Shillong	Z	eP	06 55 41		Slight, distant.

DATE	STATION	COMPT.	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
<u>November, 1961</u>						
04	Shillong	Z	iP	07 17 53		Slight, distant. Compression.
04	Epc: - 32.1°N, 92.2°E, Eastern Tibet. - h = 25 Km. - H = 13h 05m 03.3s (USCGS).					
	Shillong	Z	iP	13 06 47	760	Slight.
		E	iS	08 06		
			M	08 40		
	Chatra	Z	eP	13 06 51	830	Slight.
		ZNE	PPP	07 14		
		Z	eS	08 17		
		ZNE	SSS	08 48		
		Z	SS	08 28		
		ZN	e	08 53		
		ZNE	SSS	08 59		
	Tocklai	E	iP	13 07 00		Slight.
			i	08 12		
			i	09 09		
			i	09 22		
	Bokaro	NE	eP	13 07 32		Slight, other phase not well developed.
			i	10 30		
	Dehra Dun	NE	e	13 08 10		Feeble.
			e	11 18		
			e	11 48		
	Calcutta	E	e	13 09 24		Slight.
			e	10 31		
	Hyderabad	E	eP	13 09 33	2200	Slight.
			S	13 11		
			LR	14 39		
			M	15 39		Period = 13 secs., Gr. dis = 6 u
	Poona	Z	iP	13 04 53	2470	Slight.
			iS	13 54		
			M, PcS	17 13		
	Bombay	NE	eP	13 10 00	2460	Slight.
		E	PP	10 34		
		NE	eS	14 00		
		N	M	18 40		Period = 10 secs., Gr. dis = 3 u Pd = 7secs. Gr. dis = 1
		E	M	20 13		
	Madras	E	eP	13 10 07	2630	Slight.
			e	14 05		
			eS	14 20		
			LR	15 18		
			M	17 08		
	Visakhapatnam	E	e	13 12 12		Slight.
			i	13 43		
			i	14 02		



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<u>November, 1961.</u>						
04	Port Blair	E	e	13 13 44		Slight.
(Contd.)	Kodaikanal	E	e	13 18 31		Tremor.
04	Poona	Z	eP	13 34 27		Tremor, Compression.
04	Shillong	Z	eP	13 37 28		Slight, distant.
04	Shillong	Z	iP	15 32 57		Slight, local. Compression.
04	Madras	E	e	16 35 30		Surface waves.
04	Chatra	Z	iP	18 06 48	100	Very mild.
			Sg	07 00		
			S*	07 01		
			Sn	07 03		
	Shillong	Z	eP	18 07 33		Slight, distant.
04	Shillong	Z	iP	18 28 47		Slight, distant. Rarefaction.
	Chatra	Z	eP	18 28 55		Feeble, distant. Other phases not clear.
	New Delhi	Z	iP	18 29 17		Slight, Rarefaction.
			i	29 18		
			i	29 30		
04	Shillong	Z	eP	18 35 27		Slight, distant.
04	Shillong	Z	iP	21 35 01		Slight, distant. Compression.
04	Shillong	Z	eP	21 45 06		Slight, distant.
04	Chatra	Z	eP	23 01 03		Very mild.
			e	01 24		
	Shillong	Z	eP	23 02 21		
04	Shillong	Z	iP	23 18 52		Slight, distant. Rarefaction.
05	Shillong	Z	iP	01 32 18		Slight, distant. Compression.
05	Shillong	Z	eP	02 37 57		Slight, near.
05	Shillong	Z	iP	03 49 49		Slight, distant. Rarefaction.
	New Delhi	Z	iP	03 51 34		Slight, Compression.
05	Shillong	Z	iP	04 10 46		Slight, distant. Compression.



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<u>November, 1961.</u>						
05	Shillong	Z	eP	05 34 39		Slight, local.
05	Shillong	Z	iP	06 55 05		Slight, distant. Compression.
05	Shillong	Z	eP	08 29 03		Slight, local.
05	New Delhi	Z	eP	08 46 07		Slight, Rarefacti
05	Shillong	Z	iP	08 47 21		Slight, distant. Compression.
05	Shillong	Z	iP	10 23 56		Slight, distant. Compression.
	Chatra	Z	eP e	10 25 29 27 33		Feeble, distant.
05	Shillong	Z	eP	10 37 39		Slight, local.
05	Epc:- 45.7°N, 147.9°E, Kurile Islands. - h = 142 Km. - H = 10h 36m 39.5s (USCGS).					
	Shillong	Z	iP	10 44 35		Slight, distant. Rarefaction.
	Chatra	ZN	iP	10 45 36		Feeble, Rarefactio
	New Delhi	Z	iP	10 46 17		Slight, Rarefactio
	Poona	Z	iP	10 47 16		Feeble, other phas not clear, initial ground motion towa East and Rarefacti
05	Chatra	Z	iP	12 27 53		Near, other phases not clear.
05	Shillong	Z	eP	12 30 44		Slight, local.
05	Shillong	Z	iP	12 50 20		Slight, distant. Rarefaction.
05	Chatra	Z	eP	13 58 32		Feeble, distant.
05	Shillong	Z	iP	18 14 18		Slight, distant.
05	Shillong	Z	iP	18 14 18		Slight, local.
	Chatra	Z	iP S	18 15 13 16 09	520	Feeble, Compression
05	Dehra Dun	NE	e e	19 33 04 34 22		Feeble.
	New Delhi	Z	iP iS	19 33 03 34 24	720	Slight, Compression

DATE	STATION	COMPT.	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
<u>November, 1961.</u>						
05	Chatra	Z	eP	19 33 33		Feeble, distant.
05	Bombay	E	e	19 38 43		Feeble.
06	New Delhi	Z	eP	05 33 15		Tremor, Compression.
06	Epc:- 13.3°S, 166.0°E, South cruz Islands Region. - h = 210 Km. -H = 05h 28m 39.3s (USCGS).					
	Shillong	ZE E	iP i	05 40 40 50 59		Slight, initial ground motion towards West and Compression.
	Chatra	Z	iP	05 41 02		Feeble, distant. Compression. Other phases not clear.
	Madras	E	eP e e e M	05 41 02 51 42 52 11 52 27 52 54 06 23 42		Slight, distant. phases could not be identified.
	Visakhapatnam	EN	e e eS e	05 41 10 44 50 51 51 53 07		Moderate.
	Bombay	E	eP e PP PPP e eS e	05 41 52 43 14 45 34 48 12 52 30 52 52 53 18 54 52	10790	Slight.
06	Kodaikanal	E	e	06 24 24		Tremor.
06	New Delhi	Z	eP	07 31 27		Tremor, Rarefaction.
06	Epc:- 26.7°N, 91.9°E, Bhutan. - h = 67 Km. - H = 07h 59m 06.2s (USCGS). Felt at Gauhati, Tezpur and Chaparmukh.					
	Shillong	ZE E	iP PP iS SSS	07 59 27 59 33 59 43 08 00 03	120	Slight, Rarefaction.
	Chatra	Z	iP P* PPP LQ S SS SSS Sg	08 00 10 00 23 00 28 00 49 01 00 01 11 01 21 01 22	470	Slight, Rarefaction.



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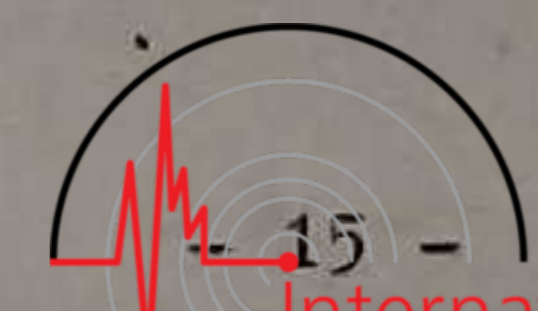
DATE	STATION	COMPT.	PHASE	G. M. T. h. m. s.	△ Km.	REMARKS	DATE	STATION	COMPT.	PHASE	G. M. T. h. m. s.	△ Km.	REMARKS	
November, 1961							November, 1961.							
06	Calcutta	E	e	08 00 19		Slight.	06	Shillong	Z	iP	13 48 19		Slight, distant, compression.	
			e	01 09										
			e	02 11										
	Bokaro	E	eP	08 00 34		Slight, near, phases not developed.	06	Shillong	Z	iP	13 50 26		Slight, distant, compression.	
			i	02 04										
			i	02 17										
	New Delhi	Z	iP	08 02 10		Slight, compression.	06	Chatra	Z	iP	16 12 09		Feeble, near.	
			i	04 27						i	13 23			
	Visakhapatnam	E	e	08 04 01		Slight.				i	13 43			
			e	05 03						e	13 51			
		EN	i	05 16										
	Madras	E	e	08 04 10		Feeble, surface wave		Shillong	Z	iP	16 12 26		Slight, near, compression.	
	Dehra Dun	NE	e	08 04 14		Feeble.	06	Shillong	Z	iP	16 26 26		distant, rarefaction.	
			e	05 57										
	Poona	Z	e	08 06 32		Slight.		Chatra	Z	iP	16 26 52		Feeble, near, rarefaction.	
		E	e	08 39										
	Bombay	E	e	08 07 08		Slight.	06	Shillong	Z	iP	21 32 36		Slight, distant, compression.	
			e	08 40										
06	New Delhi	Z	eP	07 59 37		Slight.	06	Shillong	Z	iP	21 55 52		Slight, near, rarefaction.	
06	Epc:- 36.5° N 73.3° E Hindukush. h = 114 Km. -H = 12 h 29 m 00.5 s (USCGS).							06	Chatra	Z	eP	21 56 52		Feeble, near.
	Dehra Dun	Z	eP	12 30 52	800	Feeble.				i	57 48			
			eS	32 15										
			e	33 08										
	New Delhi	Z	iP	12 31 04	920	Slight, compression.	06	Shillong	Z	eP	23 49 18		Slight, local.	
			iS	32 39										
	Chatra	Z	eP	12 32 28		Feeble, distant.	07	Epc:- 11.6° N 126.1° E Samar, Philippine Islands. h = 47 Km. -H = 01 h 12 m 55.7 s (USCGS).						
		ZN	i	32 36				Shillong	Z	iP	01 19 45		Slight, distant, compression.	
			i	35 21										
	Shillong	Z	eP	12 33 17		Slight, distant.		Chatra	Z	iP	01 20 25		Feeble, distant, compression.	
	Bokaro	E	i	12 35 53		Tremor.								
	Bombay	E	e	12 36 39		Slight.		Visakhapatnam	E	eP	20 42		Slight.	
			e	38 03						e	23 00			
	Poona	E	e	12 36 49		Slight.	07	Bombay	NE	e	02 45 02		Slight, near.	
			e	38 26										
			e	38 41			07	Shillong	Z	iP	04 42 46		Slight, distant, rarefaction.	
	Visakhapatnam	E	eS	12 37 42		Slight.	07	New Delhi	Z	iP	08 44 10		Slight, rarefaction.	
			i	40 16										
	Madras	E	e	12 42 00		Surface waves.	07	Shillong	Z	iP	10 30 39		Slight, distant, rarefaction.	
06	Epc:- 17.5° N 145.3° E Mariana Islands. h = 250 Km. -H = 13 h 34 m 54.8 s (USCGS)							07	Shillong	Z	iP	12 47 50		Slight, near, compression.
	Chatra	Z	iP	13 44 04		Feeble, distant, rarefaction.	07	Chatra	Z	iP	13 14 39		Very feeble, distant.	
	New Delhi	Z	iP	13 45 03		Tremor.								



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<u>November, 1961.</u>						
07	Chatra	Z	e e	14 30 09 30 57		Very feeble, phases not clear.
07	Chatra	Z	eP	17 41 07		Feeble, distant.
07	Shillong	Z	iP	22 21 31		Slight, near compression.
08	New Delhi	EN	eP	02 39 31		Slight, initial ground motion towards West.
08	Shillong	Z	iP	02 55 59		Slight, near, compression.
08	New Delhi	Z	iP i	04 06 31 08 12		Slight, rarefaction.
08	New Delhi	Z	iP	05 26 25		Slight.
08	Shillong	Z	iP	07 35 37		Slight, near, rarefaction.
08	Chatra	Z	iP	18 42 40		Feeble, distant, rarefaction.
	New Delhi	Z	iP	18 43 40		Slight, rarefaction.
08	Shillong	Z	iP	19 18 59		Slight, distant, compression.
	Chatra	Z	eP	19 19 41		Very feeble, distant.
08	Shillong	Z	iP	19 37 44		Slight, distant, compression.
	New Delhi	Z	eP	19 39 20		Slight.
08	Shillong	Z	eP	20 42 05		Slight, near, compression.
	Chatra	Z	eP	20 42 50		Feeble, distant.
09	Shillong	Z	iP	01 22 11		Slight, distant, compression.
09	Epc:- 22.9° S, 67.9° W Northern Chile-Argentine Border. h = 84 Km. - H = 04 h 19 m 42.0 s. Mag:- 6 1/4 (Pas).					
	✓ Poona	Z	iPKP	04 39 13		Rarefaction, other phases not clear.
	✓ New Delhi	Z	ePKP	04 39 18		Compression.
	✓ Shillong	Z	iPKP	04 39 35		Slight, distant, compression.

DATE	STATION	COMPT.	PHASE	G. M. T. h. m. s.	△ Km.	REMARKS.
<u>November, 1961.</u>						
09	Shillong	Z	iP	11 50 09		Slight, distant, rarefaction.
	Chatra	Z	eP	11 50 32		Very feeble, distant.
09	Shillong	Z	eP	12 49 31		Slight, distant.
09	Chatra	Z	eP	13 05 03		Feeble, distant, compression.
09	New Delhi	Z	iP	15 15 28		Slight.
09	Shillong	Z	eP	16 13 06		Slight, distant.
	Chatra	Z	iP	16 14 17		Feeble, distant, rarefaction.
09	New Delhi	Z	iP i	17 08 56 09 48		Slight, compression.
	Dehra Dun	NE	e	17 09 20		Feeble.
	Chatra	Z	e	17 10 33		Feeble.
	Shillong	Z	eP	17 11 29		Slight, distant.
09	Shillong	Z	e	17 51 59		Slight, distant.
09	Shillong	Z	iP	18 43 51		Slight, near.
	Chatra	ZN	iP PP, P* PPP Pg LQ S SS Sg, M	18 44 26 44 33 44 40 44 43 45 06 45 18 45 28 45 37	480	Feeble, compression .
	Visakhapatnam	EN	iP	18 45 15		Slight, near.
	Poona	Z	iP	18 47 15		Tremor, compression.
09	Chatra	Z	iP	18 46 21		Feeble, compression.
09	Shillong	Z	e	19 38 15		Slight, distant.
	New Delhi	Z	eP	19 38 40		Slight.
09	Shillong	Z	eP	19 42 22		Slight, distant.
09	New Delhi	Z	iP	20 34 58		Slight, rarefaction.
09	Chatra	Z	eP	22 42 37		Very Feeble, near.
09	Shillong	Z	eP	23 32 48		Slight, distant.

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10	Poona	Z E	iP eS	02 27 12 27 59	430	Slight, Initial ground movement towards East and compression, Other phases not clear.
	Shillong	Z	iP	02 27 55		Slight, distant, rarefaction.
10	Chatra	Z	eP	07 01 39		Feeble, distant, compression.
10	Shillong	Z	iP	07 39 13		Slight, distant, compression.
10	Shillong	Z	iP	07 51 06		Slight, distant, compression.
	Tocklai	Z	iP	07 51 19		Slight, near.
	Chatra	ZN	iP PP PPP P* LQ S LR SS Sg, M	07 52 02 52 09 52 15 52 19 53 14 53 24 53 33 53 36 54 07	790	Feeble, rarefaction
10	New Delhi	Z	iP	08 19 12		Slight, compression
	Chatra	Z	eP	08 20 40		
	Dehra Dun	NE	e e	08 20 53 22 19		Feeble.
	Shillong	Z	iP	08 21 23		Slight, distant, compression.
	Bombay	NE E	eP e	08 24 51 27 08		
	Visakhapatnam	E	e e e e M	08 25 27 29 02 29 26 29 38 31 32		Slight.
10	Bombay	E NE	eP e	13 57 34 14 01 47		
	Chatra	Z	iP	13 59 45		Feeble, distant, rarefaction.
	Shillong	Z	iP	14 00 18		Slight, distant, compression.
10	Shillong	Z	eP	15 12 36		Slight, distant.



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10	Shillong	Z	eP	15 43 30		Slight, distant.
10	Shillong	Z	iP	15 51 29		Slight, distant, rarefaction.
10	Epc:- 17.5° S, 178.8° W Fiji Islands. h = 586 Km. -H = 18 h 00 m 49.6 s (USCGS).					
	Shillong	Z	iP	18 13 24		Slight, distant, rarefaction.
10	Chatra	Z	e	18 17 59		
10	Chatra	Z	iP S	18 50 18 50 59	370	Feeble, rarefaction.
	Shillong	Z	iP	18 51 18		Slight, distant, rarefaction.
10	New Delhi	Z	iP	20 52 46		Slight, rarefaction.
10	Shillong	Z	iP	23 21 34		Slight, distant, compression.
11	Shillong	Z	iP	00 02 18		Slight, distant, compression.
11	Shillong	Z	iP	03 40 07		Slight, distant, compression.
11	Shillong	Z	iP	04 34 19		Slight, distant, rarefaction.
11	Shillong	Z	iP	04 43 56		Slight, near, compression.
	Chatra	Z	iP	04 44 55		Compression.
11	Chatra	Z	iP e	05 28 34 28 47		Rarefaction.
11	Epc:- 2.3° S, 138.2° E New Guinea. h = 54 Km. - H = 08 h 47 m 33.9 s (USCGS).					
	Shillong	Z	iP	08 56 48		Slight, distant, rarefaction.
11	Shillong	Z	iP	12 46 29		Slight, distant, rarefaction.
11	Chatra	Z	eP e	14 16 41 17 05		Very feeble, near.
11	Shillong	Z	iP	23 02 32		Slight, distant, rarefaction.



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November, 1961.						
11	Chatra	Z	iP e	23 03 22 05 29		Feeble, distant.
11	Shillong	Z	eP	23 15 01		Slight, distant.
12	Epc:- 0.8°N 29.5°E Congo Region. h = 39 Km. -H= 02 h 15 m 16.7 s (USCGS).					
	Bombay	E	eP PP PS	02 23 42 25 31 30 36 30 44	5250	Slight.
		NE				
	Poona	Z	iP iS	02 23 49 30 44	5270	Other phases not clear.
	New Delhi	Z	iP	02 24 37		Slight, rarefaction.
	Visakhapatnam	E	eP e PPP PS PPS	02 24 48 26 48 28 13 32 38 32 53 33 05	6250	Slight.
	Chatra	Z	iP	02 25 37		Feeble, distant, rarefaction.
12	Madras	E	e	02 41 44		Surface waves.
12	Hyderabad	E	M	02 43 20		Period=18 sec. Gr. dis=9 μ.
12	Calcutta	E	e	02 49 14		Slight.
12	Shillong	Z	eP	08 07 53		Slight, distant.
12	New Delhi	Z	eP	08 12 41		Tremor, compression.
12	Epc:- 16.9°S, 66.9°E Mascarene Islands. h = 34 Km. -H= 08 h 21 m 06.8 s (USCGS).					
	Shillong	Z	iP	08 29 53		Slight, distant, compression.
	Bombay	NE E	e e	08 33 55 38 15		Feeble.
	Kodaikanal	E	e	08 34 16		Tremor.
	Hyderabad	E	M	08 38 16		Period=12 sec. Gr. dis = 4 μ.
12	Shillong	Z	iP	11 57 38		Slight, distant, compression.
12	Shillong	Z	iP	11 58 34		Slight, local.
12	New Delhi	Z	iPg iSg	12 09 48 09 49	90	Slight, compression, local.

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12	Chatra	Z	eP	17 00 25		Feeble, distant, rarefaction.
	New Delhi	Z	e	17 00 58		Slight, distant.
12	Epc:- 0.1°N 126°E Molucca Passage. h = 165 Km. -H = 18 h 38 m 33.7 s (USCGS).					
	Shillong	Z	iP	18 44 55		Slight, distant, compression.
	Chatra	Z	iP	18 45 30		Feeble, distant, rarefaction.
12	Shillong	Z	iP	18 46 09		Slight, distant.
12	Eq. shock felt at Gauhati, Shillong and Chaparmukh.					
	Shillong	ZE E	iP iS	18 50 15 50 23	80	Slight.
	Tocklai	E	eP i	18 50 34 50 57		Slight, near.
	Chatra	Z	iP LQ S SS SSS Sg,M	18 51 07 52 11 52 22 52 32 52 44 53 03	720	Feeble, rarefaction.
13	Shillong	Z	iP	00 35 43		Slight, distant, rarefaction.
13	Shillong	Z	iP	04 41 34		Slight, distant, compression.
13	Calcutta	EN	ePg iSg	06 17 57 18 09	100	Slight, felt at Calcutta.
	Shillong	Z	eP	06 18 48		Slight, near.
	Chatra	Z	eP PP PPP P* Pg LQ S SS SSS Sg,M	06 18 57 19 05 19 12 19 13 19 29 20 04 20 15 20 27 20 37 20 56	740	Feeble.
13	Epc:- 3.8°S, 136.3°E Near North Coast of New Guinea. h = 34 Km. -H = 07 h 39 m 53.0 s.					



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13	Shillong	Z	iP	07 49 04		Slight, distant, compression.
	Chatra	Z	eP	07 49 38		Feeble, distant.
	New Delhi	Z	eP	07 50 35		Slight.
	Poona	Z	iP	07 50 41		Feeble, compression. Other phases not clear.
13	Shillong	Z	iP	08 16 48		Slight, distant, rarefaction.
13	Shillong	Z	eP	09 09 43		Slight, local.
13	Epc:- 35.7°N 70.4°E Hindukush. h = 157 Km. -H= 09 h 12 m 14.6 s (USCGS).					
	New Delhi	Z	iP iS	09 14 21 15 58	930	Slight, rarefaction.
	Dehra Dun	NE	e	09 15 45		Tremor.
	Chatra	Z	eP	09 16 01		Feeble, distant.
13	Chatra	Z	i	11 27 18 27 32		Movements of unknown nature.
13	Shillong	Z	eP	13 30 19		Slight, local.
13	Shillong	Z	iP	16 43 50		Slight, distant, rarefaction.
13	Epc:- 46.8°N 153.9°E Kurile Islands. h = 39 Km. -H= 19 h 38 m 15.5 s (USCGS).					
	Shillong	Z	iP	19 47 33		Slight, distant, compression.
	Chatra	Z	iP	19 47 50		Feeble, distant, compression.
1	Shillong	Z	iP	20 35 42		Slight, distant, compression.
	Chatra	Z	iP	20 36 07		Feeble, distant, rarefaction.
13	Shillong	Z	eP	22 07 04		Slight, distant.
14	Shillong	Z	iP	01 06 01		Slight, distant, rarefaction.
14	Shillong	Z	iP	01 11 46		Slight, distant, compression.
14	Poona	Z	iP	05 02 06		Feeble, compression. Other phases not clear.
14	Shillong	Z	iP	05 02 07		Slight, distant, compression.

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14	Chatra	Z	eP	05 02 11		Very feeble, beginning not clear.
	Hyderabad	E	M	06 02 00		Period= 27 sec. Gr. dis = 14 μ.
14	Shillong	Z	iP	09 52 17		Slight, distant, rarefaction.
14	Shillong	Z	iP	10 10 05		Slight, distant, compression.
14	Chatra	Z	e	10 38 09		Feeble, beginning not clear.
14	Epc:- 5.7°S 104.3°E Near Coast of Sumatra. h = 16 Km. -H= 17 h 14 m 00.1 s (USCGS).					
	Shillong	Z	iP	17 20 39		Slight, distant, compression.
	Visakhapatnam	E	e e i	17 20 42 21 37 25 22		Slight.
	Chatra	Z	iP	17 21 06		Feeble, distant, compression.
	New Delhi	ZNE	iP	17 22 01	4630	Slight, Initial ground motion towards North, West and compression.
14	Chatra	Z	e	17 26 44		Feeble, distant, compression.
14	Chatra	Z	e	17 26 44		Feeble.
14	Dehra Dun	NE	e	17 28 32		Tremor.
14	Shillong	Z	iP	22 35 33		Slight, distant, rarefaction.
15	Shillong	Z	iP	03 51 52		Slight, near, compression.
15	Chatra	Z	eP	03 55 13		Feeble, distant.
15	Shillong	Z	iP	04 11 23		Slight, distant, compression.
15	Epc:- 4.1°S, 105.0°E Sumatra. h = 126 Km. -H = 04 h 22 m 51.9 s (USCGS).					
	Shillong	Z	iP	04 29 24		Slight, near, compression.
	Chatra	Z	iP	04 29 55		Feeble, distant, rarefaction.



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15	New Delhi	Z	iP	04 30 46		Slight, compression.
15	Shillong	Z	iP	05 07 02		Slight, near, rarefaction.
15	Epc:- 43.1° N, 145.1° E Near Coast of Hokkaido. h= 43 Km. -H= 07 h 17 m 12.4 s (USCGS).					
	Tocklai	E	iP i i	07 25 21 25 42 26 50		Slight, distant.
	Shillong	Z	iP iS	07 25 37 32 21	5100	Moderate.
	Chatra	ZNE NE	iP PcP PP PPP PcS eS PS PPS ScS SS LQ SSS. LR M	07 25 59 27 24 27 54 28 42 31 17 32 59 33 07 33 13 35 47 36 19 37 20 37 29 39 24 07 43 -	5370	Moderate, Initial ground movement towards South, West and compression.
	Calcutta	EN	iP eS	07 26 14 33 27	5590	Moderate.
	Bokaro	N	iP i	07 26 19 32 36		Slight, distant. Initial ground motion towards North.
	Dehra Dun	Z N	eP PP PPP iS SS SSS, LQ LR M	07 26 36 28 35 29 52 34 07 37 49 39 35 41 28 46 08	5920	Moderate.
	New Delhi	ENZ NZ ENZ Z NZ ENZ N ENZ NZ ENZ EN ENZ	iP i PcP PP i PPP e i iS PS i ScS SS i SSS i	07 26 46 27 06 27 34 28 48 29 39 30 19 31 43 33 27 34 26 34 40 35 08 36 40 38 00 39 20 40 38 40 54	6090	Great, Initial ground motion towards South West and Compression.

15	Port Blair	N	iP i	07 26 54 34 58		Slight.
	Visakhapatnam	EN	iP iS PPS	07 27 03 34 50 35 10	6210	Moderate, Initial ground movement towards North and East.
	Sehore	NE E NE	iP PP e iS PPS e	07 27 09 29 25 31 10 35 10 35 27 35 37	6470	Moderate.
	Hyderabad	EN	iP PcP PP PPP PcS iS e SS LQ LR M	07 27 25 27 58 29 41 31 11 32 06 35 38 37 59 39 26 42 38 45 32 51 08	6680	Moderate. Period = 23 secs, Gr. dis = 22 μ .
	Madras	E	iP i PcP i PP PPP PcS/ScP eS PS PPS SKS e SS SSS LQ LR M	07 27 37 27 55 28 16 28 28 29 56 31 24 32 13 36 05 36 18 36 29 37 20 37 38 40 05 42 54 43 20 46 34 50 28	6970	Moderate, Initial ground motion towards West.
	Poona	Z N	iP PcP PP PcS iS PS PPS SS SSS	07 27 44 28 15 30 03 32 22 36 15 36 33 36 46 40 22 43 05	7010	Moderate, Initial ground movement towards South, West and compression.
	Bombay	NE N NE	iP PP PPP eS i	07 27 47 30 09 31 54 36 19 37 56	7030	Moderate.

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15	Bombay	N NE N E N	i SS LQ LQ M M	07 38 54 40 45 43 58 44 09 59 49 08 02 47		Period=14sec.Gr. dis Period=13sec.Gr. dis
	Kodaikanal	E	iP e e LQ LR M	07 29 01 35 28 39 07 41 04 43 40 48 00		Moderate, Initial gr motion towards East Period=20sec.Gr. dis
15	Chatra	Z	iP e	12 26 25 26 43		Feeble, distant, rarefaction.
15	Tocklai	E	eP iS	13 54 23 54 57	310	Slight.
	Shillong	ZE E	iP iS	13 54 23 54 59	320	Slight, rarefaction.
	Chatra	ZN	P PP PPP P* Pg LQ S LR SS SSS S* Sg, M	13 55 20 55 27 55 33 55 37 55 55 56 32 56 43 56 53 56 55 57 06 57 10 57 31	800	Feeble, compression.
15	Epc:- 7.2°N 126.8°E Near coast of Mindanao, P.I. h = 187 Km. - H= 14 h 25 m 55.0 s (USCGS).					
	Shillong	Z	iP	14 32 56		Slight, distant. compression.
15	Shillong	Z	iP	17 59 56		Slight, distant, rarefaction.
15	Chatra	Z	eP	18 13 30		Feeble, distant.
	Shillong	Z	iP	18 14 22		Slight, distant, rarefaction.
15	Shillong	Z	iP	18 34 33		Slight, near, compression.
15	Chatra	Z ZN	iP LR S S* SS Sg SSS	19 19 37 20 08 20 16 20 27 20 30 20 34 20 40	350	Feeble, rarefaction.



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15	Shillong	ZE E	iP iS	19 19 50 21 03	700	Slight, rarefaction.
	New Delhi	Z	iP iS	19 21 15 23 08	1100	Slight, rarefaction.
	Visakhapatnam	E	eP e	19 24 03 25 37		Slight.
15	Shillong	Z	iP	21 30 49		Slight, distant
15	Shillong	Z	iP	22 20 42		Slight, distant rarefaction.
15	Shillong	Z	iP	23 57 49		Slight, distant compression.
16	Shillong	Z	iP	00 25 26		Slight, distant compression.
16	Shillong	Z	eP	00 28 53		Slight, distant
16	Shillong	Z	iP	03 27 16		Slight, distant compression.
16	Shillong	Z	iP	08 29 48		Slight, near rarefaction.
16	Shillong	Z	iP	08 38 52		Slight, distant compression.
16	Shillong	Z	iP	13 38 34		Slight, distant rarefaction.
16	Shillong	Z	eP	16 16 56		Slight, distant
16	Bombay	E N	e e e	16 30 38 34 07 37 32		Feeble.
16	Chatra	Z	eP	17 07 32		Feeble.
16	Tocklai	E	iP iS	17 23 39 24 05	220	Slight.
	Shillong	ZE E	iP iS	17 23 44 24 22	340	Slight.
	Chatra	Z	e eP PP PPP Pg LQ S SS SSS Sg, M	17 24 17 24 22 24 30 24 38 24 44 25 04 25 13 25 25 25 34	470	Feeble.

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November, 1961.						
16	Bokaro	E	eP	17 26 27		Slight, near, other phases not indentifiable.
	Visakhapatnam	E	e e	17 29 02 29 55		Slight.
16	Shillong	Z	eP	18 22 08		Slight, distant.
16	Shillong	Z	iP	22 00 28		Slight, distant rarefaction.
17	Shillong	ZE	iP iS	07 36 52 37 45	500	Slight.
	Chatra	ZN	iP PP PPP P* Pg	07 37 45 37 52 37 57 38 02 38 22	1430	Feeble.
	Chatra	ZN	LQ S SS SSS S* Sg, M	07 39 00 40 11 40 23 40 34 40 39 41 03		
17	Shillong	Z	iP	08 33 52		Slight, near rarefaction.
17	Epc:- 52.4°N 170.7°W Fox Islands. Aleutian Islands. h = 27 Km. -H = 14 h 49 m 03.0 s (USCGS).					
	Shillong	Z	iP	15 00 39		Slight, distant compression.
	Chatra	Z	iP	15 00 50		Feeble, distant compression.
17	Shillong	Z	iP	15 09 19		Slight, distant, compression.
17	Shillong	Z	iP	17 29 04		Slight, distant rarefaction.
17	Shillong	ZN	eP	18 46 08		Slight, distant compression.
17	Shillong	Z	iP	19 17 22		Slight, distant, rarefaction.
17	Shillong	Z	iP	19 58 05		Slight, near rarefaction.
17	Shillong	Z	iP	21 46 56		Slight, distant, compression.



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November, 1961.						
17	Shillong	Z	eP	21 50 12		Slight, distant.
17	Shillong	Z	iP	22 03 54		Slight, near compression.
17	Shillong	Z	iP	22 24 47		Slight, distant, compression.
18	Shillong	Z	iP	01 03 17		Slight, near rarefaction.
18	Epc:- 32.6°N 72.6°E West Pakistan. h = 56 Km. -H = 01 h 43 m 07.7 s (USCGS).					
	New Delhi	Z	iP Pg iS S*	01 44 22 44 40 45 22 45 38	570	Slight, compression.
	Dehra Dun	NE	e iS i	01 44 28 45 23 45 58		Feeble.
	Chatra	Z	eP	01 48 15		Feeble, distant.
18	Bombay	NE E	e e	01 50 16 02 02 23		Feeble.
	Poona	Z	iP	01 50 33		Feeble, compression. Other phases not clear.
18	Eq. shock felt at Lumding.					
	Tocklai	E	iPg iSg	01 51 53 52 07		Local, moderate.
	Chatra	ZN	iP PP PPP P* Pg LQ S SS LR SSS S* Sg, M	01 53 00 53 07 53 15 53 22 53 43 54 27 54 37 54 49 54 50 54 59 55 09 55 32	940	Feeble, Rarefaction.
	Madras	E	e	01 53 43		Slight.
	Shillong	ZE E	iP iS	01 54 59 55 11	70	Slight.
18	Epc:- 0.9°S 126.9°E Halmahera Region. h = 38 Km. -H = 06 h 02 m 34.3 s (USCGS).					



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18	Shillong	Z	eP	06 10 31		Slight, distant.
18	Visakhapatnam	E	eP PP PPP iS	06 11 03 12 50 13 39 17 53	5190	Moderate.
	Madras	E	eP iS	06 11 14 18 14	5370	Slight.
	Poona	Z	iP	06 12 07		Tremor, Rarefaction.
	New Delhi	Z	iP	06 12 11		Slight, compression.
	Bombay	E NE	eP eS	06 12 17 20 04	6210	Slight.
	Dehra Dun	NE	e	06 12 24 19 58		Feeble.
18	Shillong	Z	iP	06 16 11		Slight, distant, compression.
18	Shillong	Z	iP	10 20 13		Slight, near, rarefaction.
18	Shillong	Z	eP	10 32 52		Slight, distant.
18	New Delhi	Z	iP i	10 53 43 54 21		Slight, compression.
	Shillong	Z	iP	10 54 35		Slight, distant, rarefaction.
18	Shillong	Z	iP	11 30 52		Slight, distant, rarefaction.
18	Shillong	Z	eP	14 37 16		Slight, distant.
18	Shillong	Z	iP	16 43 19		Slight, distant, rarefaction.
18	Shillong	Z	iP	17 19 55		Slight, near, rarefaction.
18	Shillong	Z	iP	17 32 51		Slight, distant, compression.
18	Shillong	Z	i	18 07 16		Slight, distant, compression.
18	Shillong	Z	i	18 30 02		Slight, near, compression.
18	Shillong	Z	i	18 34 17		Slight, distant, rarefaction.
18	Shillong	Z	i	18 47 39		Slight, distant, rarefaction.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
18	Shillong	Z	iP	18 58 56		Slight, near, rarefaction.
18	Shillong	Z	iP	19 26 54		Slight, near, compression.
18	Tocklai	E	eP i i	19 58 22 58 44 58 48		Slight, near.
	Shillong	Z	iP	19 58 43		Slight, near rarefaction.
	Chatra	Z ZN	eP PP PPP P* Pg LQ S LR SS S* Sg,M	19 59 26 59 35 59 40 59 43 20 00 01 00 35 00 44 00 54 00 56 01 08 01 28	750	Feeble.
18	Chatra	Z	eP	20 35 01		Feeble, distant.
18	Chatra	Z	eP	20 56 20		Feeble, near.
18	Shillong	Z	iP	21 33 02		Slight, near, compression.
18	Shillong	Z	iP	21 50 36		Slight, tremor, distant.
18	Shillong	Z	iPg iSg	21 55 19 55 27	90	Slight.
18	Shillong	Z	iP	22 08 41		Tremor, near, rarefaction.
18	Tocklai	E	ePg iSg	22 10 17 10 27		Slight.
	Shillong	Z	iP	22 10 40		Slight, near rarefaction.
18	Epc:- 22.7° N 121° E Near Coast of Formosa. h= 60 km. -H= 22 h 09 m 53.4 s (USCGS).					
	Shillong	Z	iP i	22 15 33 20 24		Slight, Initial ground motion towards West and compression
	Chatra	Z ZNE	iP i	22 16 10 19 03		Compression.
	Bokaro	e	iP	22 16 25		Slight, distant, Initial ground motion towards West.



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November, 1961.						
18	Visakhapatnam	E	i i	22 16 56 18 24		Slight, Initial ground movement towards East.
	Dehra Dun	NE	e e	22 17 21 23 17		Slight, other phase not clear.
	New Delhi	EZ	iP i i	22 17 26 17 47 22 53		Slight, Initial ground motion towards South West and compression.
	Madras	E	iP e e	22 17 32 17 53 19 09		Feeble.
	Poona	Z	iP	22 18 04		Feeble, other phase not clear. Initial ground motion towards West and compression.
	Bombay	NE E NE	eP eS e	22 18 11 24 53 25 12	5050	Slight.
18	Chatra	Z	iP	22 46 33		Compression, feeble, distant.
19	Shillong	Z	iP	00 27 36		Slight, near, compression.
19	Shillong	Z	iP	00 46 07		Slight, near, compression.
	Poona	Z	iP	00 47 51		Tremor, compression.
19	Shillong	Z	iP	03 44 52		Slight, distant, compression.
19	Shillong	Z	iP	03 59 09		Slight, near, compression.
19	Chatra	Z	iP	09 15 23		Compression.
19	Shillong	Z	iP	10 23 53		Slight, distant, compression.
19	Shillong	Z	iP	12 36 10		Slight, distant, compression.
19	Shillong	Z	iP	16 06 17		Slight, near, rarefaction.
19	Shillong	Z	eP	17 33 33		Slight, near.
19	Shillong	Z	iP	18 17 09		Slight, near, rarefaction.
19	Shillong	Z	iP	20 30 38		Slight, near.
19	Shillong	Z	iP	20 47 26		Slight, near, compression.

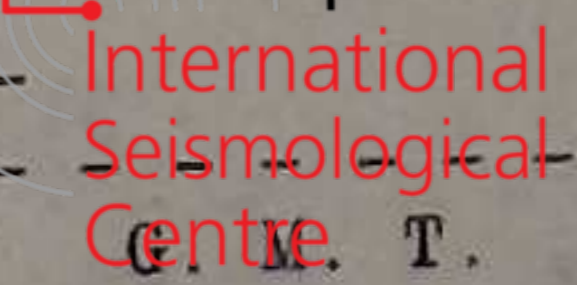
DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
19	Shillong	Z	iP	21 24 22		Slight, distant compression.
19	Shillong	Z	iP	21 49 42		Slight, near, compression.
19	Shillong	Z	eP	22 09 43		Slight, distant.
19	Shillong	Z	iP	22 27 56		Slight, distant, compression.
	Chatra	Z	eP	22 28 54		Feeble, distant.
19	Shillong	Z	iP	23 26 00		Slight, distant, rarefaction.
19	Epc:- 0.8° N, 124.3° E Northern Celebes. h= 157 km. -H= 23 h 21 m 55.5 s (USCGS).					
	Shillong	ZE E	iP iS	23 29 16 35 07	4890	Slight.
	Bokaro	E	iP i i	23 29 47 37 22 39 24		Slight, distant. Initial ground motion towards West.
	Visakhapatnam	E EN	iP PPP e eS i e e	23 29 47 31 55 33 06 36 04 37 26 37 41 37 52	4890	Moderate. Initial ground motion towards East.
	Chatra	ZNE EZ Z EZ	iP i i iS i i	23 29 50 30 36 35 05 36 07 37 29 39 25	4890	Rarefaction, feeble.
	Madras	E	eP sP e PcP PP i PPP e iS sS SS LQ	23 29 57 30 44 31 02 31 27 31 43 32 26 32 42 33 37 36 26 37 42 39 36 40 48	5090	Slight.
	Port Blair	E	e	23 30 22		Slight.
	Poona	Z N	eP i	23 30 54 39 23		Slight, rarefaction.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
19	New Delhi	ENZ	iP pP PcP PPP PcS/ScP iS i SS ScS SS SSS	23 30 54 31 36 31 57 34 01 35 34 38 06 38 46 39 26 40 70 41 26 43 11	5850	Slight, Initial ground motion towards West and compression.
	Dehra Dun	NE N	e PP iS SS SSS LR M	23 30 57 32 56 38 07 41 53 43 36 45 11 49 47		Slight.
	Bombay	NE E NE	eP i e eS e e	23 31 45 32 02 39 11 39 37 40 33 42 07	6590	Slight.
20	Shillong	Z	iP	00 17 43		Slight, distant, rarefaction.
20	Shillong	Z	iP	03 05 18		Slight, near, compression.
20	Shillong	Z	eP	03 22 49		Slight, near.
20	Chatra	Z	iP	04 09 10		Feeble, distant, rarefaction.
	Dehra Dun	NE	eP eS	04 09 16 13 18	2490	Feeble.
	New Delhi	Z	iP	04 09 19		Slight, compression.
	Shillong	Z	iP	04 09 22		Slight, distant, compression.
20	Bombay	E N	e M	04 22 06 27 11		Slight. Period=13sec.Gr.di
	Hyderabad	E	M	04 24 05		Period=12sec.Gr.di
20	Shillong	Z	iP	04 40 34		Slight, distant, compression.
20	Shillong	Z	i	11 19 45		Slight, distant, rarefaction.
20	Epc:- 21.8°S, 169.9°E Loyalty Islands Region. h= 33 Km. -H= 11 h 44 m 19.4 s (USCGS).					

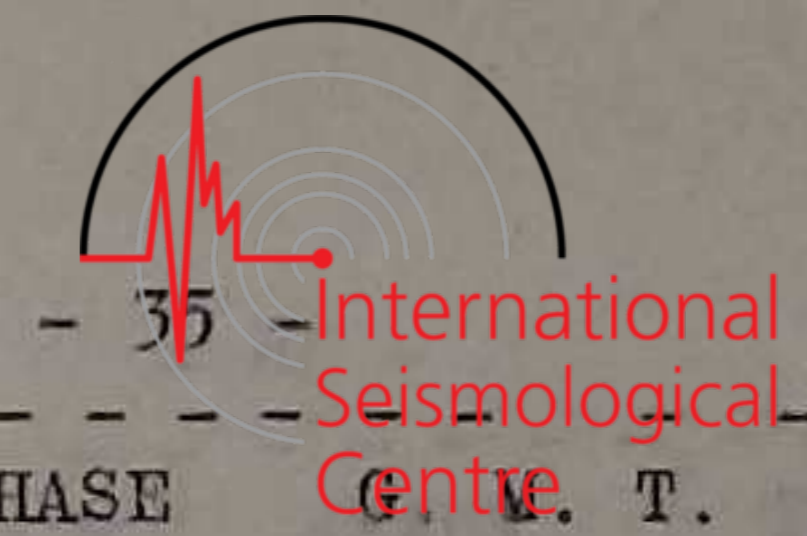


DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
20	Shillong	ZE E	iP i	11 57 15 12 07 46		Slight, distant, rarefaction.
	Visakhapatnam	E	eP PP e iS PS PPS	11 57 21 12 01 05 03 06 08 11 09 31 10 01	9950	Moderate.
	Bombay	E NE N	e e e	12 02 47 09 01 21 11		Slight.
	Bokaro	E	e	12 08 09		Slight, tremor.
	Madras	E	e e	12 08 17 38 12		Slight.
	Hyderabad	E	e M	12 08 35 44 47		Period=15 secs, Gr.dis = 4 μ.
	Dehra Dun	NE	e e	12 08 56 10 08		Feeble.
20	Shillong	Z	iP	12 34 49		Slight, distant, compression.
20	Kodaikanal	E	e	13 08 36		Tremor.
20	Shillong	Z	iP	13 17 02		Slight, distant, compression.
20	Shillong	Z	i	14 55 42		Slight, distant, compression.
20	Shillong	Z	iP	15 23 50		Slight, near, rarefaction.
20	Shillong	Z	iP	15 44 23		Slight, near, compression.
20	Shillong	Z	i	16 37 20		Slight, distant.
20	Shillong	Z	iP	17 47 51		Slight, distant, compression.
20	Epc:- 31.3°N, 40.9°W North Atlantic Ocean. h = 44 Km. -H= 17 h 58 m 17.5 s (USCGS).					
	New Delhi	Z	iP	18 11 34		Slight, rarefaction.
	Dehra Dun	NE	e e	18 11 56 22 31		Feeble.
	Shillong	Z	e	18 12 40		Slight, distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
20	Bombay	NE E	e e e	18 16 04 25 04 25 35		Slight.
	Chatra	Z	eP e	18 16 29 23 05		Feeble, distant.
20	Shillong	Z	iP	18 31 16		Slight, near, rarefaction.
	Tocklai	E	eP iS	18 31 35 32 03	24)	Slight.
	Chatra	Z	iP PP P* PPP Pg LQ S LR SS S* SSS Sg, M	18 32 10 32 16 32 20 32 23 32 31 32 59 33 09 33 13 33 21 33 25 33 31 33 38	560	Feeble, near, rarefaction.
20	New Delhi	Z	iPg iSg	19 11 07 11 15	70	Slight, compression.
20	Shillong	Z	iP	19 18 04		Slight, distant, rarefaction.
20	Shillong	Z	iP	20 18 12		Slight, distant, rarefaction.
20	Shillong	Z	iP	22 21 03		Slight, near, compression.
20	Shillong	Z	iP	22 46 36		Slight, near, rarefaction.
20	Epc:- 28.3°N, 138.9°E South of Honshu, Japan. h = 525 Km. -H= 23 h 07 m 47.5 s (USCGS).					
	Shillong	Z	iP	23 14 51		Slight, distant, rarefaction.
	Chatra	Z	iP	23 15 20		Feeble, distant, rarefaction.
	New Delhi	Z	iP	23 16 22		Slight, rarefaction.
	Poona	Z	iP	23 17 02		Tremor, rarefaction.
20	Shillong	Z	iP	23 45 30		Slight, distant, rarefaction.
21	New Delhi	Z	iP	01 50 51		Slight, rarefaction.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
Epc:- 39.7°N, 69.3°E Tadjik S. S. R. h= 249 Km. -H= 05 h 00 m 25.9 s (USCGS).						
	New Delhi	Z	iP i	05 02 13 04 29		Slight, compression.
	Chatra	Z	e	05 04 33		Very feeble, distant.
	Dehra Dun	NE	e	05 05 10		Tremor.
	Shillong	Z	eP	05 05 15		Slight, distant.
	New Delhi	Z	eP	17 14 20		Tremor, rarefaction.
	Chatra	Z	e	07 14 31		Feeble, distant.
	Shillong	Z	eP	07 14 42		Slight, distant.
	Bombay	E	e e	07 15 55 20 43		Slight.
	Kodaikanal	E	e	07 17 23		Tremor.
	Dehra Dun	NE	e	07 21 19		Feeble.
	Hyderabad	N E	M M	07 22 58 23 49		Period=15sec, Gr. dis= 4 μ. Period= 12 sec. Gr. dis= 4 μ.
	Bokaro	NE	eP	09 36 50		Slight, tremor.
Epc:- 0.9°N, 122.5°E North Celebes. h= 85 Km. - H = 11 h 06 m 38.1 s (USCGS).						
	Shillong	Z	eP	11 13 53		Slight, distant.
	Visakhapatnam	E	iP e	11 14 22 16 06		Slight.
	Chatra	Z	e	11 14 28		Feeble, distant.
	Madras	E	iP eS	11 14 36 21 01	4760	Slight, Initial ground motion towards West.
	Poona	Z	eP	11 15 30		Slight, compression. Other phases not clear.
	New Delhi	Z	iP	11 15 35		Slight, compression.
	Shillong	Z	i	11 19 43		Slight, distant, compression.
	Visakhapatnam	EN	i i	11 20 36 21 13		Slight.
	Chatra	Z	e e	12 44 33 45 11		Mild.



DATE	STATION	COMPT.	PHASE	G. M. T.			REMARKS	STATION	COMPT.	PHASE	G. M. T.			REMARKS
				h.	m.	s.					h.	m.	s.	
<u>November, 1961.</u>														
21	Shillong	Z	eP	12	45	25	Slight, near.	Shillong	Z	iP	12	07	06	Slight, distant, compression.
21	Epc:- 13.4°S, 66.1°E Indian Ocean. h= 25 Km. -H = 18 h 04 m 50.9 s (USCGS).							Epc:- 2.7°N, 84.8°W South Panama. h = 37 Km. - H = 13 h 01 m 40.1 s (USCGS).						
	New Delhi	Z	eP	18	12	56	Tremor, compress	New Delhi	Z	iPKP	13	21	12	Slight, compression.
	Chatra	Z	eP	18	13	09	Feeble, distant.	Chatra	Z	iPKP	13	21	28	Feeble, distant, compression.
	Shillong	Z	iP	18	13	19	Slight, distant, rarefaction.	New Delhi	Z	iP	15	31	00	Slight, rarefaction.
21	Kodaikanal	E	e	18	15	55	Tremor.	Shillong	Z	iP	20	25	21	Slight, distant, rarefaction.
21	Madras	E	e	18	19	20	Slight, surface	Shillong	Z	iP	21	55	50	Slight, distant, compression.
	Dehra Dun	NE	e	18	19	55	Feeble.	Chatra	Z	iP	21	56	27	Feeble, distant, compression.
	Hyderabad	E	M	18	20	23	Period=14sec, Gr.dis= 5 /u.	Shillong	Z	iP	22	15	54	Slight, distant, rarefaction.
		N	M	20	32		Period = 12 sec, Gr.dis = 3 /u.	Epc:- 8.8°S, 110.5°E Near South Coast of Java. h = 188 Km. -H= 22 h 30 m 52.1 s (USCGS).						
21	Shillong	Z	iP	18	49	16	Slight, distant.	Chatra	Z	iP	22	37	26	Feeble, distant, compression.
21	Chatra	Z	eP e	19	04	57 51	Very mild, other phases not clear	Shillong	Z	iP	22	37	58	Slight, distant, compression.
21	Chatra	Z	eP e	19	40	06 50 24	Weak, distant.	New Delhi	Z	iP	22	39	23	Slight, rarefaction.
21	Epc:- 62.6°N, 156.5°W Southern Alaska. h = 154 Km. - H = 20 h 20 m 05.4 s (USCGS).							Chatra	Z	i	22	43	02 43 14	Feeble, compression.
	Chatra	Z	eP e	20	31	52 50 24	Feeble, distant.	Shillong	Z	iP	22	43	50	Slight, distant, rarefaction.
	New Delhi	Z	eP	20	32	03	Slight, rarefacti	New Delhi	Z	iP	22	46	19	Tremor, rarefaction.
21	New Delhi	Z	eP	21	54	03	Tremor, compress	Shillong	Z	iP	22	48	11	Slight, distant, rarefaction.
22	Shillong	Z	iP	02	24	24	Slight, distant, compression.	New Delhi	Z	eP	22	49	15	Slight, rarefaction.
22	Shillong	Z	iP	03	02	49	Slight, distant, compression.	Tocklai	E	eP iS	00	34	33 35 01	Slight.
22	Bokaro	NE	eP	08	17	14	Slight, other not clear.	Chatra	Z	eP PP PPP Pg LQ S	00	35	39 35 47 35 59 36 07 36 36 36 50	Feeble.
22	Chatra	Z	eP	09	11	38	Feeble, near.							
22	Shillong	Z	iP	10	49	04	Slight, distant, rarefaction.							
22	Shillong	Z	iP	11	19	31	Slight, distant, compression.							

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
23	Chatra	Z	LR SS SSS Sg,M	00 36 56 37 00 37 08 37 23		
	New Delhi	Z	eP	00 37 27		Slight, rarefact
23	New Delhi	Z	iP	00 41 33		Tremor, rarefact
23	Shillong	Z	iP	01 23 52		Slight, distant, rarefaction.
23	Shillong	Z	eP	10 55 16		Slight, distant.
23	Shillong	Z	iP	16 42 35		Slight, distant, compression.
23	Shillong	Z	iP	18 55 01		Slight, distant, compression.
23	New Delhi	Z	iP	21 30 57		Slight, rarefact
	Dehra Dun	NE	e	21 35 32		Tremor.
24	Shillong	Z	iP	00 47 08		Slight, distant, rarefaction.
24	Shillong	Z	iP	00 56 10		Slight, near, rarefaction.
24	Shillong	Z	eP	04 11 01		Slight, distant.
24	Shillong	Z	eP	08 04 22		Slight, distant.
24	Shillong	Z	eP	10 37 13		Slight, distant.
24	Shillong	Z	iP	11 04 35		Slight, distant, compression.
24	Shillong	Z	iP	12 01 50		Slight, distant, rarefaction.
24	Shillong	Z	iP	12 08 06		Slight, near, compression.
24	Shillong	Z	iP	13 39 22		Slight, near, rarefaction.
24	Shillong	Z	iP	14 24 07		Slight, distant, rarefaction.
24	Shillong	Z	e	16 15 33		Slight, distant.
24	Shillong	Z	eP	20 04 03		Slight, near, rarefaction.
24	Shillong	Z	e	20 14 10		Slight, distant.

STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.					
Shillong	Z	eP	21 33 46		Slight, near.
Shillong	Z	e	21 38 26		Slight, distant.
Shillong	Z	eP	22 14 12		Slight, distant, rarefaction.
Shillong	Z	e	04 13 50		Slight, distant.
New Delhi	Z	eP	05 23 51		Slight, compression.
Shillong	Z	e	08 11 48		Slight, distant.
Bokaro	NE	eP	09 13 23		Slight, tremor.
Shillong	Z	e	09 41 54		Slight, distant.
Shillong	Z	eP	10 08 26		Slight, distant.
Shillong	Z	eP	10 23 51		Slight, distant.
Shillong	Z	i	10 50 25		Slight, distant, rarefaction.
Shillong	Z	eP	12 01 11		Slight, distant.
Bokaro	NE	eP	12 06 22		Slight, tremor.
Epc:- 6.3°S, 154.8°E Solomon Islands. h = 83 Km. - H = 14 h 11 m 23.2 s (USCGS).					
Shillong	Z	iP	14 22 19		Slight, distant, compression.
Chatra	N	e	14 25 00		Feeble, distant.
Visakhapatnam	EN	eP e e	14 23 03 23 12 32 55		Moderate.
New Delhi	Z EZ E	iP i i	14 23 36 23 52 34 14		Slight, rarefaction.
Poona	Z	iP	14 23 58		Feeble, compression. Other phases not clear.
Bombay	E NE	e e	14 34 10 34 39		Very feeble, near.
Shillong	Z	eP	15 52 10		Slight, distant.
Shillong	Z	eP	16 02 37		Slight, distant.
New Delhi	Z	iP	16 03 40		Slight, rarefaction.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
25	Shillong	Z	iP	16 21 05		Slight, distant, compression.
25	Shillong	Z	i	17 21 54		Slight, distant, rarefaction.
25	Shillong	Z	eP	18 16 56		Slight, distant.
25	Shillong	Z	eP	19 29 49		Slight, distant.
25	Epc:- 36.4° N, 141.4° E Near East Coast of Honshu, Japan. h = 64 Km. -H = 20 h 19 m 50.7 s (USCGS)					
	Shillong	Z	iP	20 27 49		Slight, distant, compression.
	Chatra	N NE	e S	20 28 18 35 14		Feeble.
	Bokaro	NE	eP	20 28 35		Slight, distant, other phases not clear.
	New Delhi	ENZ	iP	20 29 11		Slight. Initial ground motion towards South, West and compression.
	Visakhapatnam	E	eP e	20 29 16 37 14		Moderate.
	Poona	Z	iP	20 30 04		Feeble, compression. Other phases not clear.
	Bombay	E	eP e e	20 30 09 38 51 39 10		Slight.
25	New Delhi	Z	iP	20 38 16		Slight, rarefaction.
	Shillong	Z	eP	20 41 07		Slight, distant.
	Dehra Dun	NE	e	20 41 16		Feeble.
25	Shillong	Z	eP	23 50 39		Slight, distant.
26	Shillong	Z	eP	00 13 17		Slight, near.
26	Shillong	Z	eP	01 00 59		Slight, distant.
26	Dehra Dun	NE	e	06 24 35		Tremor.
26	Bokaro	NE	eP	09 09 59		Slight, tremor.
26	Chatra	Z	iP	09 31 49		Feeble, distant, rarefaction.

STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.					
Tocklai	E	eP	09 37 00		Slight, distant.
Chatra	Z	eP	09 38 06		
Dehra Dun	NE	e	09 45 05		Feeble.
Bombay	E	e	09 4 09		Feeble.
New Delhi	Z	iP	12 02 07		Slight, rarefaction.
Tocklai	E	eP iS	18 38 38 39 42		Slight, distant.
Chatra	Z	eP	19 15 23		Feeble, distant, rarefaction.
Dehra Dun	NE	e	20 46 35		Tremor.
Chatra	Z	eP	00 34 28		Feeble, distant.
Epc:- 31.6° N, 131.1° E Near South Coast of Kyushu, Japan. h = 25 Km. -H = 05 h 57 m 07.6 s (USCGS). Mag: -6 $\frac{1}{2}$ - 6 $\frac{1}{2}$ (Pas).					
Shillong	ZE	iP i	06 04 01 10 19		Slight, rarefaction.
Chatra	ZNE NE E	iP e M	06 04 33 13 21 06 23 -		Feeble, rarefaction. Period = 15 sec. Gr. dis = 14 / u.
Bokaro	NE	eP e	06 04 50 06 30		Slight, distant, other phases not clear.
Dehra Dun	NE	e i i i i	06 05 26 07 35 13 11 18 49 21 21		Slight.
Calcutta	Z	e e e e	06 06 19 10 21 13 54 18 36		Slight.
Poona	Z	eP	06 06 28		Slight, other phases not clear.
Bombay	NE	eP PP PPP eS PS e	06 06 32 08 24 09 54 14 05 14 23 14 39	5970	Slight.
Madras	E	e	06 08 08		Slight.

DATE STATION COMPT PHASE G. M. T. Δ REMARKS.
 h. m. s. km.

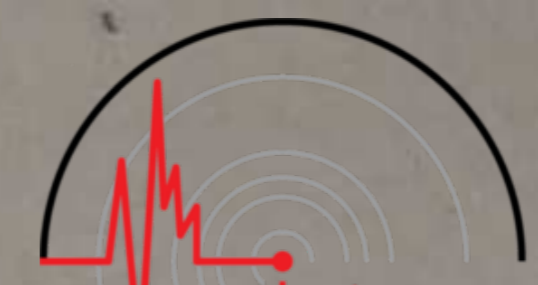
STATION COMPT PHASE G. M. T. Δ REMARKS.
 h. m. s. km.

November, 1961.

November, 1961.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
27	Hyderabad	N	M	06 22 31		Period=27 sec Gr. dis= 12 h Period=21sec. Gr. dis = 9 h
		E	M	22 34		
27	Shillong	Z	eP	06 28 51		Slight, distant
27	Chatra	Z	eP	16 45 00		Feeble, near.
27	Shillong	Z	eP	16 53 19		Slight, distant
27	Epc:- 1.0° S, 126.9° E South of Halmahere. h = 44 Km. - H = 16 h 49 m 44.8 s (USCGS).					
	Shillong	Z	iP	16 57 44		Slight, distant rarefaction.
	Chatra	Z	iP	16 58 18		Feeble, distant compression.
27	Epc:- 0.6° S, 127.1° E Halmahere Region. h = 25 Km. - H = 17 h 10 m 33.3 s (USCGS). Mag:- 6 1/4 - 6 1/2 (Pas).					
	Port Blair	E	e	17 17 48		
			e	19 18		
			e	22 18		
	Shillong	ZE	iP	17 18 37	4780	Compression.
			iS	25 01		
	Calcutta	EN	iP	17 18 52	4920	Initial ground motion towards
			iS	25 27		
	Chatra	ZNE NE	iP	17 19 13	5220	Compression.
			PcP	20 37		
			PP	20 58		
			PPP	21 48		
			PcS	24 26		
			S	26 05		
			ScS	29 03		
			SS	29 26		
			LQ	30 32		
			SSS	30 38		
			LR	32 41		
	Bokaro	NE	iP	17 19 14	5190	
			PP	21 05		
			iS	26 04		
			SS	29 19		
			LQ	30 35		
			M	36 41		
	Madras	E	iP	17 19 25	5570	Initial ground movement towards West.
			e	19 54		
			e	20 06		
			e	20 35		

STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
Madras	E	PP	17 21 16		
		PPP	22 02		
		iS	26 25		
		PS	26 33		
		PPS	26 38		
		e	26 52		
		e	28 09		
		ScS	28 50		
		SS	29 34		
		LQ	31 00		
		LR	33 08		
		M	37 20		
Hyderabad	EN E	iP	17 19 45	5650	Initial ground motion towards North and West.
		PcP	20 57		
		PP	21 48		
		PPP	22 36		
		PcS	24 33		
	EN	iS	27 01		
		PPS	27 24		
		ScS	29 26		
		SS	30 36		
		LQ	32 24		
		LR	34 57		
		M	38 03		Period=13sec. Gr. dis=7 h.
		M	39 04		Period = 15 sec. Gr. dis = 6 h.
Sehore	NE	iP	17 20 09	6010	Other phases not clear.
		eS	27 45		
Poona	Z E N	eP	17 20 16	6180	Compression.
		iS	28 01		
		PS	28 11		
		PPS	28 19		
		ScS	30 01		
		LQ	33 56		
		LR	36 33		
		M	41 08		
New Delhi	ENZ E EN ENZ EN Z EN E EZ Z E Z	iP	17 20 17	6250	Initial ground motion towards North, West and compression.
		i	20 19		
		PcP	21 07		
		PP	22 03		
		i	24 07		
		i	27 59		
		S	28 07		
		PPS	28 35		
		ScS	29 40		
		SS	31 58		
		i	32 50		
		SSS	34 18		
		LR	37 16		



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DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
November, 1964.						
27	Dehra Dun	Z N	eP PP iS SS SSS LR M	17 20 18 22 24 28 07 32 35 33 57 37 19 41 30	6240	
	Bombay	NE E	eP PcP i e e ScP i iS i e SS i LQ	17 20 24 21 06 21 36 23 06 24 10 25 14 26 05 28 15 28 58 29 43 32 02 32 54 34 58	6270	
	Kodaikanal	E	e	17 26 42		Tremor.
27	Shillong	Z	eP	19 22 00		Slight, distant.
27	Shillong	Z	eP	19 42 50		Slight, distant.
27	Shillong	Z	iP	20 35 47		Slight, near, compression.
27	Shillong	Z	iP	21 54 36		Slight, distant, rarefaction.
27	Shillong	Z	iP	21 56 42		Slight, near, compression.
28	Shillong	Z	eP	02 41 01		Slight, distant.
28	Shillong	Z	iP	02 48 21		Slight, distant, rarefaction.
	Chatra	Z	iP	02 48 56		Distant, rarefaction.
28	Bokaro	E	i i i	04 51 50 53 45 54 07		Slight, distant.
28	New Delhi	Z	iP	06 41 00		Slight.
28	New Delhi	Z	iP i	07 10 13 11 53		Slight, rarefaction.
28	Shillong	Z	e	07 44 19		Slight, distant.
28	Shillong	Z	iP	08 02 52		Slight, distant, compression.
	Chatra	Z	i	08 03 12		Feeble.

STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
November, 1961.					
New Delhi	Z	iP	09 06 41		Slight, compression.
Shillong	Z	eP	09 08 16		Slight, distant.
Hyderabad	E	M	09 24 33		Period = 11 sec, Gr. dis = 3 / u .
		M	10 15 12		Period = 24 sec, Gr. dis = 9 / u .
Epc:- 35.7° N, 73.6° E India-Pakistan Border. h = 31 Km. -H= 10 h 14 m 44.5 s (USCGS).					
New Delhi	Z	iP i i i	10 15 06 16 30 17 11 17 37		Slight, compression.
Dehra Dun	NE N	eP i e e M	10 16 08 17 38 17 48 17 58 18 22		Slight.
Shillong	Z	e i	10 17 19 19 02		Slight, distant.
Chatra	Z ZNE	eP eS	10 18 13 20 50	1550	Feeble .
Bombay	NE E	eP PP eS SS LR e	10 18 40 18 57 21 45 21 58 22 36 23 19	1840	Slight.
Poona	Z E	eP i	10 18 41 21 59		Slight, rarefaction. Other phases not clear.
Visakhapatnam	E	e e e e	10 19 20 19 58 23 44 24 55		
Madras	E	e e e e	10 24 21 26 31 26 57 27 29		Slight.
Chatra	Z	iPg Sg	13 11 10 11 57	130	Mild.
Shillong	Z	iP	13 11 47		Slight, near, compression.
Shillong	Z	e	14 27 05		Slight, distant.
Chatra	Z	eP	15 29 11		Feeble, distant.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
<u>November, 1961.</u>						
28	Shillong	Z	iP	16 39 46		Slight, distant, rarefaction.
	Chatra	Z	eP	16 40 27		Feeble, distant.
28	Shillong	Z	iP	16 45 44		Slight, distant, compression.
	New Delhi	Z	eP	16 47 14		Slight.
28	New Delhi	Z	iP	22 16 46		Slight, rarefacti
29	Shillong	Z	i	00 38 06		Slight, near.
29	New Delhi	Z	iP	01 42 29		Slight, rarefacti
29	Shillong	Z	eP	02 58 36		Slight, near.
29	Shillong	Z	e	03 27 27		Slight, distant.
29	Shillong	Z	e	03 58 42		Slight, distant.
29	Shillong	Z	e	04 00 38		Slight, distant.
29	Shillong	Z	eP	05 22 33		Slight, distant.
29	Shillong	Z	iP	05 48 53		Slight, near.
29	Shillong	Z	eP	09 18 49		Slight, near.
29	Shillong	Z	e	09 46 58		Slight, distant.
	Bombay	E	e	09 48 49		Slight.
		N	eS	57 40		
		E	M	10 25 10		Period = 15 sec., Gr. dis = 2 μ.
		E	M	25 32		Period = 15 sec., Gr. dis = 2 μ.
29	Dehra Dun	NE	e	10 01 14		Feeble.
29	Shillong	Z	iP	12 06 54		Slight, near, compression.
29	Chatra	Z	iP	12 22 55		Feeble, distant, rarefaction.
29	Tocklai	E	i	13 51 51		Slight, local.
29	Shillong	Z	eP	15 32 47		Slight, near.
29	New Delhi	Z	eP	16 28 17		Slight, compressio
			i	29 57		
	Shillong	Z	eP	16 30 44		Slight, distant.
29	Shillong	Z	iP	17 19 28		Slight, distant, compression.

STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
<u>November, 1961.</u>					
Shillong	Z	iP	17 40 42		Slight, distant, compression.
Shillong	Z	eP	17 59 38		Slight, distant.
Shillong	Z	i	18 17 18		Slight, distant.
Shillong	Z	iP	19 09 56		Slight, near, rarefaction.
New Delhi	Z	iP	20 20 12		Slight, rarefaction.
		i	20 19		
Shillong	Z	i	21 34 31		Slight, distant.
Shillong	Z	iP	22 08 48		Slight, distant, rarefaction.
Shillong	Z	e	23 45 19		Slight, distant.
Shillong	Z	eP	01 19 34		Slight, distant.
New Delhi	Z	iP	01 20 48		Slight, rarefaction.
Shillong	Z	iP	03 45 01		Slight, distant, compression.
Shillong	Z	eP	07 54 03		Slight, distant.
Shillong	Z	eP	10 09 58		Slight, distant.
Shillong	Z	iP	11 00 17		Slight, distant, compression.
New Delhi	Z	iP	11 31 04		Slight, compression.
Chatra	Z	eP	12 01 18	620	Feeble.
		eS	02 24		
Shillong	Z	iP	12 26 42		Slight, distant, rarefaction.
New Delhi	Z	iP	12 27 51		Tremor, rarefaction.
Shillong	Z	iP	14 00 13		Slight, near, rarefaction.
Shillong	Z	eP	14 27 13		Slight, distant.
Shillong	Z	iP	15 05 36		Slight, distant, compression.
Shillong	Z	eP	15 48 56		Slight, distant.
Shillong	Z	iP	16 55 01		Slight, distant, compression.
Chatra	Z	iP	16 56 24		Feeble, distant, rarefaction.

(Non-Instrumental Reports)

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
November, 1961.						
30	New Delhi	Z	iP	16 56 35		Slight, rarefaction.
30	Shillong	Z	eP	17 50 36		Slight, near.
30	Shillong	Z	e	17 56 00		Slight, distant.
30	Shillong	Z	iP	18 08 24		Slight, distant, compression.
30	Shillong	Z	eP	18 40 03		Slight, distant.
30	Shillong	Z	iP	19 23 15		Slight, near, compression.
30	New Delhi	Z	iP	19 28 08		Slight, rarefaction.
			i	29 54		
	Dehra Dun	NE	e	19 29 27		Tremor.
	Chatra	Z	eP	19 29 51		Feeble, distant.
			e	32 59		
	Shillong	Z	eP	19 30 34		Slight, distant.
30	Shillong	Z	e	20 21 19		Slight, distant.
30	Shillong	Z	iP	21 50 55		Slight, distant, compression.
	Chatra	Z	iP	21 51 29		Feeble, distant, rarefaction.
30	Shillong	Z	iP	22 15 01		Slight, distant, rarefaction.
30	New Delhi	Z	iP	22 53 48		Slight, compression.
30	Shillong	Z	e	23 22 29		Slight, distant.
30	Shillong	Z	e	23 28 06		Slight, distant.

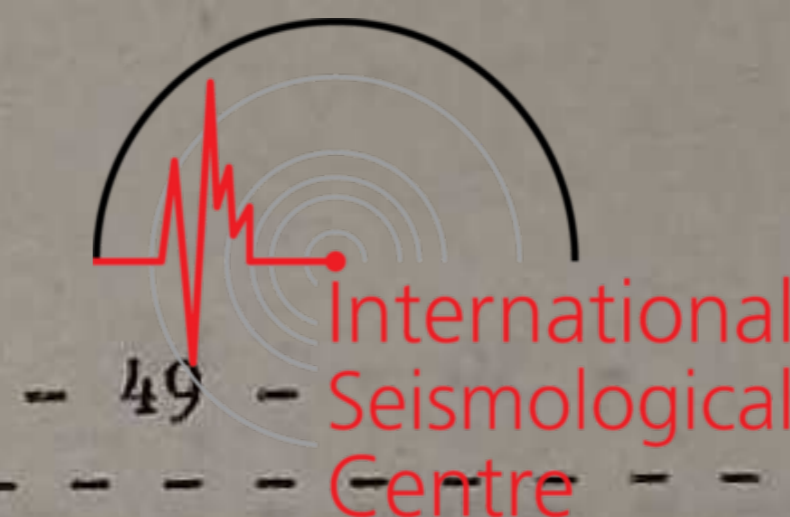
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The following is the list of Earthquakes that were reported by voluntary observers from different stations during the month of November, 1961.

Station	Date in G.M.T.	Time in G.M.T.	No. of shocks in secs.	Duration of shocks in secs.	Intensity in R.F. scale.	Remarks.
Shillong	06	08 00	One	20 secs.	IV	
Shillong	06	08 00	One	1 sec.	IV	
Shillong	12	18 50	One	10 secs.	IV	From East.
Shillong	12	18 51	One	3 secs.	IV	
Shillong	12	18 54	Two	1 sec.	III	
Shillong	15	13 53	One	5 secs.	IV	
Shillong	18	01 50	One	6 secs.	IV	

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MICROSEISMIC TABULATION



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Station : Shillong					November, 1961					Component : E-W.				
Date	Hour	K	Mean amplitude in m.m.	Mean period in sec.	Date	Hour	K	Mean amplitude in m.m.	Mean period in sec.	Date	Hour	K	Mean amplitude in m.m.	Mean period in sec.
01	00	3	0.4	5.1	12	00	1	0.3	5.0	02	18	3	0.6	6.4
	06	...	-	-		06	1	0.3	5.0				0.4	3.5
	12	1	0.3	5.0		12	1	0.2	4.7					
	18	1	0.3	4.7		18	1	0.2	4.8	03	00	3	0.5	5.7
02	00	1	0.3	4.9	13	00	1	0.3	5.1		06	3	0.5	5.1
	06	1	0.3	5.0		06	1	0.4	5.2				0.5	2.5
	12	1	0.3	5.1		12	1	0.3	5.1		12	3	0.6	3.8
	18	1	0.3	4.9		18	1	0.4	5.0				0.4	2.5
03	00	1	0.4	5.2	14	00	1	0.4	5.2		18	3	0.4	4.4
	06	1	0.3	4.6		06	1	0.3	5.2				0.4	2.3
	12	1	0.3	4.7		12	1	0.3	5.0	04	00	3	0.4	3.6
	18	1	0.3	4.9		18	1	0.3	4.8				0.4	2.6
04	00	1	0.2	4.7	15	00	1	0.3	4.9		06	3	0.3	4.0
	06	1	0.2	4.7		06	1	0.3	5.0				0.3	1.8
	12	1	0.2	4.6		12	1	0.3	5.0		12	1	0.5	2.3
	18	1	0.2	4.7		18	1	0.3	5.0		15	1	0.8	1.9
05	00	1	0.2	5.0	16	00	1	0.4	5.3		18	1	0.6	1.8
	06	1	0.2	4.7		06	1	0.4	5.2	05	00	3	0.4	3.6
	12	1	0.3	5.0		12	1	0.4	5.1				0.4	2.1
	18	1	0.2	4.8		18	1	0.4	5.0		06	3	0.5	3.4
06	00	3	0.3	5.0	17	00	1	0.3	4.8				0.5	2.5
	06	...	-	-		06	1	0.3	5.0		09	1	0.5	3.3
	12	3	0.2	4.7		12	3	0.4	5.2		12	1	0.4	3.4
	18	3	0.3	4.9		18	1	0.4	5.2		15	1	0.4	3.7
07	00	3	0.3	5.0	18	00	3	0.3	4.9		18	1	0.5	3.6
	06	3	0.2	4.5		06	...	-	-		21	1	0.5	3.8
	12	3	0.3	4.7		12	1	0.2	4.6	06	00	1	0.4	4.0
	18	3	0.3	4.7		18	1	0.3	5.0		03	1	0.4	3.6
08	00	3	0.3	4.6	19	00	1	0.3	5.0		06	...	-	-
	06	3	0.3	4.8		06	1	0.3	5.1		09	1	0.5	3.7
	12	...	-	-		12	3	0.2	4.8		12	1	0.5	3.9
	18	1	0.3	4.8		18	1	0.3	5.0		15	1	0.5	3.8
09	00	1	0.3	5.0	20	00	...	-	-		18	1	0.5	3.9
	06	...	-	-		06	3	0.3	5.0		21	1	0.5	3.8
	12	1	0.4	5.2		12	...	-	-	07	00	1	0.5	3.9
	18	1	0.3	5.1		18	3	0.3	5.1		03	1	0.4	3.9
10	00	1	0.3	5.0	21	00	3	0.2	4.7		06	1	0.4	4.2
	06	1	0.4	5.2		06	3	0.2	4.5		09	1	0.4	3.5
	12	1	0.4	5.1		12	3	0.2	4.4		12	1	0.5	3.8
	18	1	0.4	5.1		18	3	0.3	4.8		15	1	0.6	3.8
11	00	1	0.3	4.8	22	00	3	0.3	4.8		18	1	0.6	3.7
	06	1	0.3	4.9		06	1	0.3	5.0		21	1	0.5	3.7
	12	1	0.4	5.1		12	1	0.4	5.2				0.5	3.7
	18	1	0.4	5.2		18	1	0.3	5.1	08	00	1	0.5	3.7
											03	1	0.5	4.2
											06	1	0.5	3.9
											09	1	0.5	3.8
											12	3	0.5	4.1
											15	1	0.4	2.5
											18	3	0.5	4.0
													0.5	2.6

Station: Bombay (Colaba).



Date	Hour	K	Mean simple amplitude in m.m.	Mean period in sec.	Date	Hour	K	Mean simple amplitude in m.m.	Mean period in sec.	
Station: Bombay (Colaba) November, 1961. Component: E-W.										
09	00	3	0.5	4.1	16	00	3	0.5	6.3	
			0.3	2.5				0.4	2.5	
	06	2	0.5	4.5		06	3	0.5	5.8	
	12	2	0.4	4.3				0.5	3.0	
	18	2	0.4	4.1		12	3	0.5	5.5	
								0.5	3.0	
10	00	3	0.6	5.1		18	3	0.5	4.6	
			0.4	3.0				0.4	2.7	
	06	3	0.5	5.2						
			0.4	2.7	17	00	3	0.5	3.5	
	12	3	0.4	5.1				0.3	2.7	
			0.5	3.0		06	3	0.4	5.5	
	18	3	0.5	4.5				0.3	2.2	
			0.5	3.2		12	3	0.4	5.7	
								0.4	2.0	
11	00	3	0.5	4.6		18	3	0.4	5.9	
			0.5	3.0				0.3	2.4	
	03	1	0.5	3.4						
	06	1	0.5	3.7	18	00	3	0.4	5.4	
	09	1	0.6	3.7				0.3	2.7	
	12	1	0.5	3.4		06	...	-	-	
	15	1	0.4	3.5		12	...	-	-	
	18	1	0.5	3.6		18	3	0.5	1.7	
	21	1	0.4	3.5				0.3	5.5	
12	00	1	0.4	3.4		19	00	3	0.4	4.6
	03	...	-	-				0.4	2.9	
	06	1	0.5	3.5		06	3	0.4	4.8	
	09	...	-	-				0.3	3.0	
	12	1	0.4	3.5		12	3	0.4	3.9	
	15	1	0.4	3.4				0.4	3.0	
	18	1	0.4	3.2		18	3	0.4	3.5	
	21	1	0.4	3.3				0.3	1.7	
13	00	1	0.5	3.3		20	00	...	-	
	06	3	0.4	5.2			03	1	0.4	3.7
			0.4	3.5			06	1	0.4	4.2
	12	3	0.4	5.1			09	1	0.4	3.8
			0.5	3.0			12	1	0.5	3.8
	18	3	0.5	5.3			15	1	0.5	3.8
			0.4	2.8			18	1	0.5	3.8
							21	1	0.5	4.0
								1	0.5	3.7
14	00	3	0.4	6.6		21	00	1	0.5	3.6
			0.4	2.7			03	1	0.5	3.7
	06	...	-	-			06	1	0.5	3.7
	12	3	0.5	5.8			09	1	0.5	3.8
			0.4	3.0			12	1	0.4	3.6
	18	3	0.5	5.5			15	1	0.5	3.9
			0.3	3.0			18	1	0.5	4.3
							21	1	0.4	4.2
								1	0.5	4.2
15	00	3	0.4	6.8						
			0.3	3.0						
	06	3	0.4	5.6						
			0.3	3.0						
	12	3	0.4	5.9						
			0.4	1.8						
	18	3	0.4	5.7						
			0.3	1.7						

Hour	K	Mean simple amplitude in m.m.	Mean period in sec.	Date	Hour	K	Mean simple amplitude in m.m.	Mean period in sec.	
Station: Bombay (Colaba) November, 1961. Component: E-W.									
00	1	0.4	4.3	28	15	1	0.6	3.5	
06	3	0.5	4.6		18	1	0.5	3.6	
		0.3	2.0		21	1	0.7	3.5	
12	3	0.4	4.4						
		0.3	2.0	29	00	1	0.8	3.6	
18	3	0.3	2.0		03	1	0.7	3.6	
		0.3	2.0		06	1	0.8	3.7	
00	3	0.3	4.7		09	1	0.7	3.6	
		0.3	2.0		12	1	0.7	3.5	
06	3	0.4	4.6		15	1	0.8	3.5	
		0.3	2.1		18	3	0.6	3.7	
12	3	0.4	4.2				0.6	2.0	
		0.4	1.9	30	00	3	0.5	4.0	
15	1	0.5	1.9				0.5	2.3	
18	1	0.5	1.8		06	3	0.5	4.1	
21	1	0.3	1.7				0.5	2.5	
					12	3	0.6	3.8	
00	3	0.4	4.9				0.4	2.5	
		0.3	1.7		18	3	0.6	3.7	
06	1	0.3	4.2				0.5	2.0	
09	1	0.3	4.5						
12	1	0.3	4.7						
15	1	0.5	4.7						
18	1	0.5	4.9						
21	1	0.4	4.8						
Station: Madras.									
00	1	0.3	5.0		01	00	3	0.3	2.7
03	...	-	-			03	3	0.2	2.6
06	1	0.5	5.1			06	3	0.2	2.6
09	1	0.5	4.9			12	3	0.3	2.7
12	3	0.5	5.3			18	3	0.3	2.7
		0.4	3.0						
18	3	0.5	4.9		02	00	3	0.3	2.7
		0.3	3.0			03	1	0.4	2.7
						06	1	0.4	2.8
00	1	0.4	3.1			12	1	0.5	3.0
06	3	0.5	5.3			18	1	0.5	3.0
		0.4	3.0						
12	3	0.5	5.1		03	00	1	0.5	3.1
		0.3	3.0			03	1	0.5	2.9
18	3	0.3	3.0			06	1	0.6	2.9
		0.3	2.0			12	1	0.6	3.0
00	1	0.5	4.0			18	1	0.6	2.9
03	1	0.6	3.7						
06	1	0.6	3.7		04	00	1	0.7	2.9
09	1	0.6	3.6			03	1	0.6	2.8
12	1	0.6	3.5			06	1	0.6	2.8
15	1	0.6	3.7			12	1	0.6	2.8
18	...	-	-			18	1	0.6	2.9
21	1	0.5	3.6						
					05	00	1	0.6	2.8
00	1	0.7	3.5			03	1	0.6	2.9
03	1	0.7	3.6			06	1	0.7	3.0
06	1	0.6	3.8			12	1	0.7	3.0
09	1	0.6	3.7			18	1	0.7	3.0
12	1	0.7	3.5						

Date	Hour	K	Mean simple amplitude in m.m.	Mean period in sec.	Date	Hour	G.M.T.	K	Mean simple amplitude in m.m.	Mean period in sec.	
Station : Madras November, 1961. Component : E-W.											
06	00	1	0.8	3.1	15	00		1	0.5	2.9	
	03	1	0.7	2.9		03		3	0.5	2.8	
	06	1	0.7	3.3		06		3	0.5	2.8	
	12	1	0.8	3.3		12		3	0.5	2.9	
	18	1	0.8	3.6		18		3	0.5	2.9	
07	00	1	0.8	3.6	16	00		3	0.4	2.7	
	03	1	0.8	3.5		03		3	0.4	2.8	
	06	1	0.8	3.7		06		3	0.4	2.7	
	12	1	0.8	3.2		12		3	0.4	2.7	
	18	1	0.7	3.1		18		3	0.4	2.8	
08	00	1	0.7	3.0	17	00		3	0.3	2.8	
	03	1	0.7	3.1		03		3	0.3	2.8	
	06	1	0.7	3.1		06		3	0.3	2.8	
	12	1	0.7	3.5		12		3	0.3	2.9	
	18	1	0.6	3.4		18		3	0.3	2.7	
09	00	1	0.6	3.5	18	00		3	0.3	2.7	
	03	1	0.6	3.2		03		3	0.2	2.7	
	06	3	0.5	3.1		06		3	0.2	2.7	
	12	3	0.5	3.0		12		3	0.3	2.7	
	18	3	0.6	3.2		18		3	0.3	2.7	
10	00	3	0.5	3.1	19	00		3	0.3	2.7	
	03	3	0.6	3.4		03		3	0.4	2.7	
	06	3	0.6	3.1		06		3	0.4	2.7	
	12	1	0.6	3.1		12		3	0.5	2.8	
	18	1	0.6	2.9		18		3	0.5	2.9	
11	00	1	0.7	3.0	20	00		3	0.4	2.7	
	03	1	0.7	3.0		03		3	0.4	2.9	
	06	1	0.7	2.9		06		3	0.4	2.8	
	12	1	0.7	2.9		12		3	0.4	3.0	
	18	1	0.8	3.0		18		3	0.4	2.9	
12	00	1	0.7	3.0	21	00		3	0.4	3.0	
	03	1	0.7	3.0		03		3	0.3	2.8	
	06	1	0.7	3.0		06		3	0.1	1.2	
	12	1	0.6	3.0		12		3	0.3	2.9	
	18	1	0.6	3.0		18		3	0.1	1.3	
13	00	1	0.7	2.9		12		3	0.4	3.0	
	03	1	0.7	2.9		18		3	0.1	1.4	
	06	1	0.6	2.9		18		3	0.3	2.8	
	12	1	0.6	2.9		18		3	0.1	1.5	
	18	1	0.6	2.8	22	00		3	0.3	2.8	
14	00	1	0.6	2.9		03		3	0.1	1.6	
	03	1	0.5	2.9		03		3	0.3	2.9	
	06	1	0.5	2.9		06		3	0.1	1.3	
	12	1	0.5	2.8		12		3	0.2	2.7	
	18	1	0.5	2.7		12		3	0.2	2.0	
						18		3	0.1	1.6	
						18		3	0.2	2.8	
						18		3	0.1	1.2	

Hour	K	Mean simple amplitude in m.m.	Mean period in sec.	Date	Hour	G.M.T.	K	Mean simple amplitude in m.m.	Mean period in sec.
Station: Madras November, 1961. Component : E-W.									
00	3	0.3	2.8						
	3	0.1	1.5						
03	3	0.2	2.7	01	00		2	0.2	2.4
06	3	0.2	2.6		06		2	0.3	2.6
12	3	0.2	2.6		12		2	0.3	2.8
18	1	0.3	2.8		18		2	0.3	3.1
00	1	0.3	2.8	02	00			0.3	2.9
03	1	0.3	2.7		06			0.3	3.2
06	1	0.3	2.6		12			0.3	2.5
12	1	0.4	2.8		18			0.5	2.9
18	1	0.4	2.9	05	00		2	0.4	3.2
00	1	0.4	2.8		06		3	0.5	3.3
03	1	0.4	2.7		12		3	0.4	3.1
06	1	0.4	2.8		18		3	0.4	3.0
12	1	0.4	2.8	04	00		3	0.4	2.8
18	1	0.4	2.8		06		1	0.3	3.0
00	1	0.4	2.9		12		1	0.4	2.9
03	3	0.4	2.9		18		1	0.5	2.9
06	3	0.4	2.9	05	00		...	-	-
12	3	0.4	3.2		06		1	0.3	3.3
18	3	0.4	3.5		12		1	0.5	3.2
00	3	0.4	3.3		18		1	0.7	3.4
03	3	0.5	3.4	06	00		1	0.8	3.5
06	3	0.4	3.3		06		...	-	-
12	3	0.5	3.4		12		1	0.7	3.6
18	3	0.4	3.2		18		1	0.7	3.4
00	1	0.4	2.7	07	00		1	0.5	3.5
03	1	0.5	2.9		06		1	0.4	3.1
06	1	0.6	3.0		12		1	0.4	3.3
12	1	0.6	2.9		18		...	-	-
18	1	0.6	3.0	08	00		...	-	-
00	1	0.6	3.0		06		1	0.6	3.6
03	1	0.7	3.0		12		1	0.5	3.5
06	1	0.7	3.0		18		1	0.5	3.6
09	1	0.6	3.0	09	00		1	0.3	3.6
12	1	0.7	2.9		06		3	0.4	3.4
15	1	0.8	3.0		12		3	0.5	3.7
18	1	0.7	2.9		18		3	0.4	3.4
21	1	0.8	3.2	10	00		3	0.4	3.6
00	1	0.8	3.3		06		3	0.3	3.2
03	3	0.7	3.4		12		3	0.4	3.1
06	3	0.7	3.4		18		3	0.4	3.1
12	3	0.7	3.4						
18	1	0.8	3.5						

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International
Seismological
Centre

Date	Hour G.M.T.	K	Mean simple amplitude in m.m.	Mean period in sec.
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Hour G.M.T.	K	Mean simple amplitude in m.m.	Mean period in sec.	Date	Hour G.M.T.	K	Mean simple amplitude in m.m.	Mean period in sec.
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Station : Visakhapatnam

November, 1961.

Component: E-W.

11	00	3	0.3	3.3
	06	3	0.3	3.1
	12	3	0.3	2.8
	18	3	0.4	3.3
12	00	3	0.4	3.0
	06	3	0.4	3.0
	12	3	0.3	3.2
	18	3	0.3	3.1
13	00	3	0.2	3.2
	06	3	0.2	2.8
	12	3	0.2	2.9
	18	3	0.2	2.7
14	00	3	0.2	2.7
	06	3	0.2	3.1
	12	3	0.2	3.7
	18	3	0.2	2.9
15	00	3	0.1	2.8
	06	3	0.3	3.7
	12	3	0.3	5.0
	18	3	0.4	5.3
16	00	3	0.4	4.5
	06	3	0.3	5.4
	12	3	0.3	4.9
	18	3	0.2	4.0
17	00	3	0.3	4.1
	06	3	0.4	5.3
	12	3	0.5	5.0
	18	3	0.4	5.2
18	00	3	0.3	4.9
	06	3	0.3	4.0
	12	3	0.3	4.2
	18	3	0.2	4.1
19	00	3	0.2	4.1
	06	3	0.2	4.2
	12	3	0.2	3.3
	18	3	0.2	3.3
20	00	3	0.2	3.1
	06	3	0.2	4.1
	12	3	0.2	3.9
	18	3	0.3	3.6
21	00	3	0.2	4.2
	06	3	0.3	7.0
	12	3	0.3	7.8
	18	3	0.3	5.5

on : Port Blair.

November, 1961.

Component: E-W.

22	00	0,0	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-
23	00	...	-	-
	06	3 0.3	4.6	-
	12	3 0.3	4.8	-
	18	3 0.3	4.6	-
24	00	0,0	-	-
	06	3 0.4	4.7	-
	12	3 0.3	5.1	-
	18	0,0	-	-
25	00	0,0	-	-
	06	3 0.3	4.9	-
	12	3 0.3	5.1	-
	18	3 0.2	2.8	-
26	00	0,0	-	-
	06	3 0.3	4.5	-
	12	3 0.3	4.4	-
	18	0,0	-	-
27	00	0,0	-	-
	06	...	-	-
	12	3 0.3	4.4	-
	18	...	-	-
28	00	3 0.3	3.2	-
	06	2 0.3	4.2	-
	12	2 0.2	3.3	-
	18	2 0.2	2.5	-
29	00	2 0.2	2.6	-
	06	2 0.2	2.9	-
	12	2 0.3	3.0	-
	18	2 0.2	2.8	-
30	00	2 0.2	3.1	-
	06	2 0.3	2.9	-
	12	2 0.3	3.0	-
	18	2 0.3	3.2	-
01	00	0,0	-	-
	06	...	-	-
	12	...	-	-
	18	0,0	-	-
02	00	3 0.4	7.5	-
	06	2 0.4	7.5	-
	12	2 0.4	7.5	-
	18	2 0.4	7.5	-

Station: Port Blair.

00	2	0.4	7.5	14	00	0,0	-	-
	06	0,0	-		06	2 0.8	7.5	-
	12	0,0	-		12	2 0.8	7.3	-
	18	0,0	-		18	2 0.8	7.3	-
				15	00	2 0.4	7.2	-
					06	2 0.4	7.2	-
					12	2 0.4	7.2	-
					18	2 0.4	7.5	-
				16	00	2 0.4	7.2	-
					06	...	-	-
					12	...	-	-
					18	...	-	-
				17	00	...	-	-
					06	0..	-	-
					12	0..	-	-
					18	0..	-	-
				18	00	0..	-	-
					06	0..	-	-
					12	0..	-	-
					18	0..	-	-
				19	00	0..	-	-
					06	2 0.4	7.2	-
					12	2 0.4	7.2	-
					18	2 0.4	7.2	-
				20	00	...	-	-
					06	...	-	-
					12	0,0-	-	-
					18	0,0-	-	-
				21	00	0,0	-	-
					06	0..	-	-
					12	0..	-	-
					18	0..	-	-
				22	00	0..	-	-
					06	0..	-	-
					12	0..	-	-
					18	0..	-	-
				23	00	0..	-	-
					06	0..	-	-
					12	0..	-	-
					18	0..	-	-
				24	00	0..	-	-
					06	0..	-	-
					12	0..	-	-
					18	0..	-	-

