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Director General of Observatories



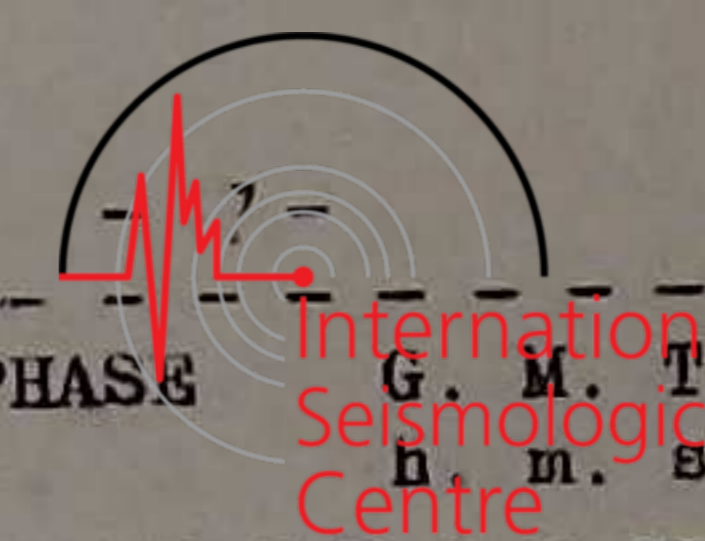
List of Seismograph Stations with their Instruments and Constants

Station	Latitude	Longitude	Height a. s. l. (Metres)	Lithographic foundation	Instrument	Compt	Period in secs	Static Magnifi- cation	Damping ratio	Paper speed mm/min
Agra					Columbia Long Period	E	To = 15 Tg = 100			15
					- do -	N	To = 15 Tg = 185			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	15
					Milne-Shaw	E	12	250	20:1	15
					Wood-Anderson	E	0.8	950	h = 0.8	60
					Wood-Anderson	N	0.8	1000	h = 0.8	50
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	26.50°N	87.10°E	161	Sand Stone	Milne-Shaw	E	12	250	20:1	15
					Wood-Anderson	N	1	1000	30:1	50
					Benioff	Z	To = 0 Tg = 0.45 secs	Critical		60
					Wenner-Accelerograph	ZNE	-	-	-	-
Colombo	06.54°N	79.52°E	7	Beach Sand	Milne-Shaw	E	12	250	20:1	-
Dehra Dun	30.10°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	536	Granite	Milne-Shaw	E	12	250	20:1	8
					Milne-Shaw	N	12	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	-	Milne-Shaw	E	10	250	20:1	8
New Delhi	28.35°N	77.12°E	207	Massive Quartzite	Sprengnether	E	To = Tg = 7.2 secs	Critical		30
Poona	18.32°N	73.51°E	560	Deccan Trap	Sprengnether	Z	To = Tg = 1.5	Critical		30
					Wood-Anderson	E	4	1000	20:1	15
Port Blair	11.49°N	92.43°E	-	-	Milne-Shaw	N	12	280	20:1	8
					Wood-Anderson	N	2	1000	20:1	30
					Wood-Anderson	E	0.8	1000	55:1	30
Sehore					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	980	Critical	30
					Wood-Anderson	N	0.8	1000	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 = 18			50
					Sprengnether	E	To = Tg = 6.3	Critical		30
					Wenner Accelerograph	ZNE	-	-	-	-
					Wood-Anderson	E	0.8	970	h = 0.8	60
					Wood-Anderson	E	0.8	1000	h = 0.8	30
					Wood-Anderson	N	2	1000	20:1	30
Tocklai	28.45°N	94.45°E		Alluvium	Wood-Anderson	E	0.8	970	h = 0.8	60
Visianagram	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. h. m. s.	△ km.	REMARKS.
				December, 1961.		
01	Shillong	Z	iP	03 15 15		Slight, distant rarefaction.
01	Shillong	Z	i	03 58 26		Slight, distant.
01	Shillong	Z	eP	04 01 03		Slight, distant.
01	Shillong	Z	e	07 05 15		Slight, distant.
01	Bombay	E	e	07 42 35		Slight.
			e	55 13		
		NE	M	08 15 -		
01	Shillong	Z	iP	07 44 02		Slight, distant.
	Chatra	Z	eP	07 44 14		Slight, distant.
01	Shillong	Z	iP	08 05 23		Slight, distant, compression.
01	Shillong	Z	iP	09 24 48		Slight, distant, compression.
01	Shillong	Z	e	10 47 38		Slight, distant.
			e	48 59		
01	Shillong	Z	i	11 37 53		Slight, near.
			i	11 38 49		
01	Shillong	Z	e	13 58 09		Slight, distant.
	Chatra	Z	iP	13 58 38		Slight, distant, compression.
01	Chatra	Z	iP	14 13 39	160	Slight, - compression.
			S	14 00		
	Shillong	Z	i	14 14 44		Slight, distant.
01	Shillong	Z	eP	15 05 07		Slight, distant.
01	Shillong	Z	eP	20 25 53		Slight, distant.
	Chatra	Z	iP	20 26 23		Slight, distant, rarefaction.
01	Shillong	Z	e	20 32 22		Tremor, distant.
01	Shillong	Z	iP	20 33 48		Slight, local.
01	Shillong	Z	iP	20 35 02		Slight, near.
01	Chatra	Z	eP	20 47 36		Slight, distant, compression.
01	Epc: 26.5° N, 124.9° E East China Sea. h = 206 Km. -H = 21 h 13 m 04.1 s (USCGS)					

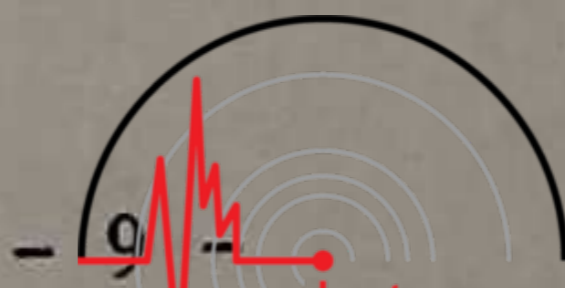
DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
<u>December, 1961.</u>						
01	Tocklai	E	eP	21 18 38		Slight, distant.
	Shillong	Z ZE	iP pP SP	21 18 52 19 38 20 05	3230	Moderate, Initial ground movement towards West and compression.
		Z ZE	PcP iS sS SSS	21 52 23 26 24 52 25 20 26 00		
	Chatra	ZNE NE	iP sP PP PPP S PcS e e SSS M	21 19 27 20 32 20 48 21 16 24 34 25 55 26 19 26 32 27 39 30 09	3780	Slight, Initial ground movement towards West and compression.
	Calcutta	EN	iP e iS e	21 19 29 20 47 24 33 25 51	3720	Moderate.
	Bokaro	NE E	iP PP PP iS sS i e SS e M	21 19 44 20 30 21 07 25 00 26 25 26 45 27 03 27 28 28 30 31 19	3920	Moderate, Initial ground movement towards South and West.
	Sehore	E	eP e	21 20 11 21 39		Slight..
	Visakhapatnam	NE E	iP c iS SS	21 20 18 21 44 26 05 29 15	4430	Moderate, first ground movement towards North and East.
	Dehra Dun	NE N	eP PP iS SS e M	21 20 34 22 13 26 27 29 22 31 07 33 50	4520	Slight.
	New Delhi	EZ	iP pP sP PP i i	21 20 40 21 28 21 52 22 33 23 23 25 59	4630	Moderate. Compression. Initial ground movement towards West.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
<u>December, 1961.</u>						
01	New Delhi	ENZ	iS sS SS i i	21 26 39 28 03 29 53 31 15 34 38		
	Madras	E	iP pP PP e PPP iS PS PPS sS LQ LR	21 20 55 21 43 22 48 23 23 23 31 27 10 27 16 27 23 28 39 30 22 32 16	4900	Moderate. Initial ground movement towards East.
	Hyderabad	EN E EN E	iP pP PP PPP S SS SSS LR M	21 20 55 23 19 22 40 23 19 27 06 29 22 30 20 32 02 35 01	4830	Moderate, first ground movement towards South and West.
		N	M	35 02		Period=9secs. Gr.dis = 3 μ . Period = 9 secs. Gr.dis = 4 μ .
	Poona	Z N	iP e e iS e e e M	21 21 21 23 54 26 49 28 00 28 06 31 00 31 45 37 37	5330	Moderate.
	Bombay	NE	eP pP PP PPP eS sS SS SSS	21 21 28 22 17 23 29 24 09 28 09 29 37 31 54 33 05	5340	Slight.
01	Kodaikanal	E	e	21 27 49		Tremor.
01	Chatra	Z ZNE	iP S	22 02 01 02 24	190	Rarefaction, slight.
01	Shillong	Z	eP	22 02 10		Slight, near.
02	Shillong	Z	eP	00 47 00		Slight, near.



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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.
December, 1961.							December, 1961.						
02	Shillong	Z	eP	01 06 00		Slight, near.	02	Shillong	Z	iP	21 17 18		Slight, near, rarefaction.
02	Shillong	Z	i i	07 28 50 29 02		Slight, near.	02	Shillong	Z	iP	22 12 31		Slight, distant, compression.
02	Shillong	Z	e	10 52 49		Tremor, distant.	02	Shillong	Z	iP	22 37 19		Feeble, near.
02	Shillong	Z	e	11 10 50		Slight, distant.	03	Shillong	Z	iP	00 19 21		Slight, near, compression.
02	Shillong	Z	iP iS	11 35 50 37 12	180	Moderate. Initial ground movement towards West and Rarefaction.	03	Chatra	Z	iP	01 23 15		Slight, near, compression.
	Tocklai	Z	eP eS	11 37 05 37 35	260	Slight.	03	Shillong	Z	e	04 15 23		Slight, distant.
	Chatra	ZN	eP pP PPP Pg LQ S SS SSS	11 37 22 37 30 37 36 37 40 38 13 38 25 38 35 38 46	600	Slight, rarefaction.	03	Shillong	Z	e	04 15 45		Slight, distant.
	Bokaro	E	e	11 39 18		Slight, near.	03	Shillong	Z	e	07 40 24		Slight, distant.
02	New Delhi	Z	iP	12 50 04		Slight, compression.	03	Shillong	Z	e	07 43 53		Slight, distant, rarefaction.
	Poona	Z	iP	12 50 20		Slight.	03	Shillong	Z	iP	08 46 09		Slight, distant, rarefaction.
	Chatra	Z	iP	12 51 02		Slight, distant compression.	03	Chatra	Z	eP	08 46 48		Slight, distant.
	Bokaro	E	iP	12 51 06		Slight, distant.	03	Poona	Z	iP	08 48 40		Tremor.
	Shillong	Z	iP	12 51 28		Slight, distant.	03	Shillong	Z	iP e	08 52 47 56 39		Slight, distant, rarefaction.
02	Shillong	Z	e	14 18 31		Slight, distant.	03	New Delhi	Z	iP	09 02 59		Slight, rarefaction.
02	Shillong	Z	e	15 03 37		Slight, distant.	03	Epc:- 41.4° N, 75.0° E Kirghiz S.S.R. h = 25 Km. - H = 09 h 32 m 23.1 s (USCGS).					
02	Shillong	Z	e	16 51 05		Tremor, distant.	03	New Delhi	Z	iP iS	09 35 30 37 45	1310	Slight, rarefaction.
02	Shillong	Z	e	17 05 31		Slight, distant.	03	Shillong	Z	eP	09 37 10		Slight, distant. Compression.
02	Shillong	Z	iP	17 08 09		Slight, distant, compression.	03	Dehra Dun	NE	e	09 37 17		Tremor.
02	Shillong	Z	e	18 47 25		Tremor, distant.	03	Shillong	Z	e	11 45 43		Slight, distant.
02	Shillong	Z	i	18 58 40		Slight, near.	03	Epc:- 5.7° S, 113.8° E Java Sea. h = 633 Km. - H = 12 h 09 m 18.7 s (USCGS).					
02	Shillong	Z	iP	19 30 58		Slight, distant, rarefaction.	03	Shillong	Z	iP S	12 15 49 22 14	4760	Slight, distant, compression.
02	Shillong	Z	eP	19 42 29		Slight, distant, compression.	03	Shillong	Z	eS	12 21 34		Slight, distant.
02	New Delhi	Z	iP iS	20 24 55 25 30	310	Slight, rarefaction.	03	Shillong	Z	e	16 01 23		Slight, distant.
							03	Shillong	Z	e	16 26 36		Slight, distant.



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03	Shillong	Z	iP	16 26 38		Slight, distant, rarefaction.
	New Delhi	Z	eP	16 27 43		Slight, rarefaction
	Pocna	Z	iP	16 27 49		Tremor.
03	Shillong	Z	iP iS	16 58 40 59 11	280	Slight, rarefaction
03	New Delhi	Z	iP	18 38 03		Slight, compression
	Shillong	Z	iP	18 39 48		Slight, distant, compression.
	Dehra Dun	NE	e	18 44 08		Feeble.
03	Shillong	Z	iP	20 01 59		Slight, distant, rarefaction.
	Chatra	NE	eP i i	20 02 23 08 11 11 37		Slight, distant.
	Bokaro	E	i	20 02 43		Tremor.
	New Delhi	EZ	iP i e i i	20 03 10 04 31 07 37 07 47 12 18		Slight. Initial ground movement towards East and rarefaction.
03	Shillong	Z	iS	20 04 07		Slight, local, P not recorded.
03	Poona	Z	iP	20 04 12		Tremor.
03	Shillong	Z	eP	20 07 09		Slight, distant.
03	Bokaro	E	e	20 12 05		Tremor.
	Dehra Dun	NE	e	20 12 08		Tremor.
	Shillong	Z	e	20 12 12		Slight, distant.
03	Shillong	Z	iP eS	20 26 15 26 34	160	Slight.
03	Shillong	Z	e	21 01 17		Slight, distant.
03	New Delhi	Z	iP iS	22 51 35 52 28	500	Slight, compression.
	Shillong	Z	e	22 52 43		Slight, distant.
04	Shillong	Z	e	00 14 11		Slight, distant.

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<u>December, 1961.</u>						
04	Chatra	Z	eP e	00 44 15 45 35		Feeble, distant.
	Shillong	Z	e	00 44 26		Slight, distant.
	Dehra Dun	NE	e	00 44 27		Tremor.
	Bokaro	E	e	00 47 15		Probably M waves.
04	Shillong	Z	e	01 00 49		Slight, distant.
04	Shillong	Z	e	04 38 23		Slight, distant.
04	Epc:- 5.2° S, 151.6° E New Britain. h = 59 Km. - H = 05 h 33 m 18.5 s (USCGS).					
	Shillong	Z	iP	05 44 00		Slight, distant, compression.
	New Delhi	Z	eP	05 45 18		Slight, distant, compression.
04	Shillong	Z	e	08 29 21		Slight, distant.
	New Delhi	Z	iP i	08 20 35 30 40		Slight, compression.
04	Kodaikanal	E	e e	11 48 58 51 22		Slight.
04	Shillong	Z	eP	12 38 56		Slight, distant, rarefaction.
	Chatra	Z	eP	12 39 16		Slight, distant.
	New Delhi	ZNE	eP	12 40 41		Slight, compression.
04	Epc:- 33.2° N, 95.3° E Tibet. h = 45 Km. - H = 12 h 38 m 11.9 s (USCGS).					
	Tocklai	E	eP e	12 39 51 41 34		Moderate.
	Shillong	ZE	eP iS	12 40 10 41 37	830	Moderate. Initial ground movement toward East and rarefaction
	Chatra	ZNE NE N	iP PP PPP LQ S SS SSS LR M Mn Mn	12 40 31 40 44 40 51 42 18 42 22 42 41 42 51 43 00 44 15 49 - 50 -	1080	Slight, rarefaction. Period=8sec, Gr. dis.=33) Period=8sec, Gr. dis.=26)

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<u>December, 1961.</u>						
04	Bokaro	E	iP PP PPP S SS Sg/M	12 41 08 41 18 41 25 43 25 43 42 44 56	1340	Slight. Initial ground movement towards East.
	Calcutta	EN	eP iS M	12 41 09 43 24 45 44	1320	Moderate.
	Dehra Dun	Z	eP PP PPP iS SS SSS LR M	12 41 45 42 00 42 12 44 30 44 42 44 55 45 07 46 28	1630	Slight.
	New Delhi	ZNE E ZNE E ZNE E	iP i PP PPP i i iS SS	12 41 58 42 00 42 13 42 23 43 20 44 34 44 56 45 16	1780	Moderate, first ground movement towards South, West and compression.
	Sehore	NE E NE E N	iP i PP PPP eS SS SSS M	12 42 30 42 39 42 54 45 56 46 28 46 39 48 33	2080	Slight.
	Visakhapatnam	NE	iP iS	18 42 31 46 08	2190	Moderate. Initial ground movement towards North and East.
	Port Blair	N	iP iS	12 43 08 47 07	2450	Slight.
	Hyderabad	NE E NE N E N E	iP PP iS SS e LR LR M M	12 43 09 43 43 47 10 47 41 48 34 49 04 49 14 49 40 49 52	2470	Moderate. Initial ground movement towards North and East
						Period=11sec, Gr. dis=18 Period=13sec, Gr. dis=18



STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
<u>December, 1961.</u>					
Poona	Z N	iP PP iS LQ SS SSS LR PcS M ScS	12 43 27 43 52 47 45 48 09 48 30 48 40 49 20 50 34 51 25 53 14	2710	Moderate.
Madras	E	iP i e PP iS LQ LR M	12 43 30 43 52 44 02 44 17 47 57 48 53 49 50 51 48	2860	Moderate. Initial ground movement towards East.
Bombay	NE N E	eP eS M M	12 43 31 47 56 51 49 53 30	2830	Moderate. Period=9sec, Gr. dis=29 p. Period=11sec, Gr. dis=29 p.
Shillong	Z	eP	13 02 52		Slight, distant.
Shillong	Z	e	13 27 07		Slight, distant.
Shillong	Z	e	13 32 29		Slight, distant.
Shillong	Z	eP	13 50 54		Slight, near.
Chatra	Z	eP eS	13 53 05 54 02	530	Slight.
Shillong	Z	e	15 50 51		Tremor, distant.
New Delhi	Z	iP	16 18 14		Slight, rarefaction.
New Delhi	Z	iP i	16 37 03 38 42		Slight, compression.
Chatra	Z	eP	19 15 35		Slight.
Shillong	Z	iP i	20 26 09 26 13		Slight, near. Rarefaction.
Shillong	Z	e	21 34 01		Slight, distant.
New Delhi	Z	iP	22 06 45		Slight, compression.
Shillong	Z	eP	22 39 57		Slight, distant.
Shillong	Z	e	23 25 15		Tremor, near.
Shillong	Z	eP	23 52 15		Slight, distant.



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h. m. s. km.

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05	Shillong	Z	iP	00 00 44		Slight, distant, compression.
05	Shillong	Z	iP iS	01 09 07 09 21	1000	Slight, rarefaction.
05	Shillong	Z	iP	03 26 32		Slight, near, rarefaction.
05	New Delhi	Z	iP	07 03 51		Slight, rarefaction.
Epc:- 50.8° S, 139.8° E South West of Tasmania. h = 64 Km. -H= 13 h 01 m 04.7 s (USCGS)						
0	Visakhapatnam	NE E NE	eP e e	13 13 38 17 07 24 02		Moderate.
	Madras	E	e e e e eS e	13 13 51 14 05 16 47 18 30 23 41 25 43		Slight.
	Shillong	ZNE	eP iS i i	13 13 51 24 30 24 44 25 11	9690	Slight. Initial ground movement towards East.
	Poona	Z N	eP e eS PS PPS	13 14 02 24 32 24 58 25 11 25 35	10110	Moderate.
	Chatra	Z N NE	eP e e eS e	14 14 03 24 17 24 37 24 59 25 23 26 19	10110	Slight.
	Bokaro	NE	eP	13 14 06		Slight, distant.
	Calcutta	E	e i	13 14 20 24 18		Slight.
	Bombay	NE E NE	e e e e e e e e e M M	13 14 31 18 31 21 30 24 58 26 09 27 05 27 48 28 29 48 27 53 12		Moderate.
Period=20sec, Gr. dis=3 μ . Period=17sec, Gr. dis=9 μ .						

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
	New Delhi	Z	eP	13 14 32		Slight.
	Dehra Dun	NE	e e	13 17 51 25 11		Slight, phases not identifiable.
	Port Blair	N	e	13 22 15		Slight.
	Hyderabad	NE	e e	13 24 16 35 22		Period=24sec, Gr. dis=18 μ . Period=27sec, Gr. dis=16 μ .
		N	M	41 13		
		E	M	42 01		
	Kodaikanal	E	e	13 25 50		Tremor.
5	Shillong	Z	eP	13 14 49		Slight, near.
5	Shillong	Z	iPg iSg	14 49 49 50 32	360	Slight.
5	Shillong	Z	eP	14 53 54		Slight, distant.
5	Chatra	Z	eP	16 09 03		Slight, near.
5	Chatra	Z	eP	18 17 18		Slight, near.
06	New Delhi	Z	iP	02 25 24		Slight, rarefaction.
06	Epc:- 13.7° N, 93.6° E Andaman Islands. h = 53 Km. - H= 05 h 48 m 39.3 s (USCGS). 13.0° E - H = 05 h 48 m 35 s (SHILLONG). Felt at Baratang (Andaman Island).					
	Port Blair	N	iP iS	05 49 13 49 31	140	Slight.
	Calcutta	NE	eP iS	05 51 02 52 54	1090	Moderate.
	Visakhapatnam	NE E	iP PP PPP i iS SS	05 51 08 51 17 51 23 52 56 53 10 53 23	1190	Moderate. Initial ground movement towards South and East.
	Shillong	Z	iP eS SS SSS	05 51 27 53 41 53 51 54 20	1310	Slight. Initial ground movement towards North and compression.
	Bokaro	E	iP PP PPP i iS SS M	05 51 35 51 44 51 50 53 45 53 56 54 07 55 10	1390	Moderate.

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December, 1961.						
06	Madras	E	iP PP PPP e LQ iS SS LR M	05 51 39 51 50 51 55 52 07 53 46 53 58 54 13 54 24 55 26	1370	Moderate. Initial ground movement towards East.
	Tocklai	E	eP	05 51 58		Slight, distant.
	Kodaikanal	E	eP i LR M	05 52 01 55 43 57 22 59 04		Moderate. Initial ground movement towards West. Period=15sec, Gr. dis=
	Chatra	ZN	eP e e e	05 52 01 52 16 52 26 55 04 55 21		Slight.
	Hyderabad	NE	eP eS LR LR M M	05 52 07 54 39 55 57 56 27 58 57 58 59	1500	Moderate.
	Sehore	NE	iP PP PPP eS SS SSS LR M	05 52 51 53 06 53 24 56 06 56 27 56 45 57 09 59 23	1960	Slight.
	Poona	Z N	iP PP iS LQ SS SSS LR M PcS ScS	05 53 04 53 22 56 35 56 42 56 58 57 15 57 33 59 09 06 01 05 04 37	2130	Moderate.
	Bombay	NE N E NE E	iP e PPP e eS i SS	05 53 16 53 34 53 57 54 20 57 07 57 14 57 51	2340	Moderate.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
	Bombay	NE N E N E	SSS LR LR M M	05 57 58 58 27 58 58 07 47 10 14		Period=13sec, Gr. dis=11 μ. Period=11sec, Gr. dis=10 μ.
	New Delhi	ZNE	iP i PP PPP PcP iS i LQ SS SSS LR M	05 53 27 53 40 53 55 54 04 57 18 57 27 57 41 57 50 58 06 58 21 58 33 06 00 43	2460	Moderate. Initial ground movement towards West and compression.
	Dehra Dun	Z N	e PP PPP iS SS SSS LR M	05 53 33 53 53 54 04 57 27 58 00 58 17 59 01 06 00 44		Slight.
06	Shillong	Z	e	08 58 42		Slight, distant.
06	Bombay	NE	e e	13 56 37 14 06 57		Slight.
06	Kodaikanal	E	e	14 34 28		Tremor.
06	Shillong	Z	iP iS	15 33 34 34 11	330	Slight, compression.
	Chatra	Z	iP S	15 34 29 35 54	820	Slight, rarefaction.
06	Chatra	Z	eP	15 48 47		Slight, distant.
06	Epc:- 49.4° N, 155.2° E Kurile Islands. h = 22 Km. - H = 16 h 39 m 31.5 s (USCGS). Mag:- 6-6 $\frac{1}{4}$ (Pas), 6 $\frac{1}{4}$ (Berk).					
	Shillong	ZNE NE	iP iS i	16 48 58 56 29 59 09	5920	Initial ground movement towards South, West and compression.
	Chatra	Z	eP PPP iS i Mn	16 49 13 52 41 57 07 59 22 17 13/14-	6330	Period=22sec, Gr. dis=57 μ.



DATE STATION COMPT PHASE G. M. T. Δ REMARKS.
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DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
06	Calcutta	NE	iP e iS PPS	16 49 28 51 25 57 28 58 03	6440	
	Bokaro	NE E	iP iS PPS i LQ	16 49 36 57 39 58 09 59 47 17 04 40	6500	Slight. Initial ground movement towards South and West.
	Dehra Dun	NE N	M Mn	12 45 17 00		Period=17sec, Gr.
	New Delhi	ZNE E ZNE NE	eP PP e eS SS SSS M	16 49 39 51 49 53 23 57 41 17 01 56 04 02 12 07	6480	Slight.
	Visakhapatnam	NE E NE E	iP PcP e e iS i	16 49 52 50 02 52 56 53 52 58 04 59 50	6660	Moderate. Initial ground movement towards South, West and compression.
	Hyderabad	NE E NE N NE	iP PP PcS S PS PPS SKS ₁ e SS LR M M	16 50 37 53 16 55 08 59 37 17 00 00 00 19 00 40 00 58 03 42 11 14 16 19 17 13	7570	Initial ground movement towards South and West.
	Madras	E	iP PcP PP eS PS PPS e	16 50 48 51 07 53 21 17 00 01 00 29 00 43 01 12	7830	Initial ground movement towards West.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
	Poona	Z N	iP PcS e iS e PS LQ	16 50 50 51 14 53 18 17 00 03 00 13 00 36 08 48	7830	
	Bombay	NE	iP PP e iS PS PPS i e M	16 50 51 53 33 55 34 17 00 05 00 27 00 59 01 19 05 17 25 00	7860	Period=17sec, Gr. dis=23 μ .
	Kodaikanal	E	e	17 00 28		Tremor.
06	Shillong	Z	iP	19 31 38		Slight, near, compression.
07	New Delhi	Z	iP	04 29 53		Slight, rarefaction
07	Shillong	Z	e i	08 00 22 00 29		Slight, distant
	Chatra	Z	eP	08 00 55		Slight, distant
	New Delhi	Z	iP i i	08 02 08 02 09 02 15		Slight, rarefaction
07	New Delhi	Z	iP	09 03 32		Slight, rarefaction
07	Shillong	Z	e	13 00 34		Slight, distant
07	Shillong	Z	iP iS	19 04 40 04 57	130	Slight
07	Chatra	Z	iP S	20 45 58 46 17	150	Slight, compression
	Shillong	Z	eP	20 46 33		Slight, distant
07	New Delhi	Z	iP	22 18 33		Slight, rarefaction
08	Shillong	Z	iP iS	00 55 40 55 56	120	Slight, initial ground movement towards North, West and rarefaction.
08	Shillong	Z	iP	03 09 05		Slight, distant rarefaction
	New Delhi	Z	iP i i	03 11 22 11 26 11 31		Slight, rarefaction



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
December, 1961.						
08	Shillong	Z	e	03 32 43		Slight, dist
08	Shillong	Z	eP	06 16 43		Slight, dist
	Chatra	Z	iP	06 17 16		Slight, dist
	New Delhi	Z	iP	06 18 16		Slight, dist compression
	Poona	Z	iP	06 18 16		Slight, raref
08	Shillong	Z	eP	07 15 59		Tremor.
08	Shillong	Z	e	08 02 54		Slight, dist
08	Kodaikanal	E	e	09 30 24		Slight, dist
08	Epc: 1.8 S, 139.4° E Near north coast of New Guinea. h = 55 Km. -H= 09 h 36 m 24.9 s (USCGS).					
	Shillong	Z	iP	09 45 41		Slight, dist compression.
	Madras	E	e	09 46 31		Slight.
	Dehra Dun	NE	e	09 47 11		Slight.
	New Delhi	Z	e	56 04		Slight.
	Poona	Z	iP	09 47 14		Slight, compres
	Bombay	E	iP	09 47 17		Tremor.
		NE	eP	09 47 24	7610	Slight.
			eS	56 26		
08	Epc:- 30.5° N, 86.7° E Tibet. h= 45 Km. -H = 10 h 19 m 54.4 s (USCGS).					
	Epc:- 31.5° N, 87.0° E. -H= 10 h 19 m 45 s (SHILLONG) Mag:- 5.8					
	Chatra	Z	iP	10 20 57	490	Compression.
		N	PP	21 04		
			P*	21 05		
			PPP	21 10		
			Pg	21 15		
			LQ	21 36		
			S	21 49		
			eSS	21 59		
			SSS	22 09		
	Shillong	ZNE	iP	10 21 29	750	Rarefaction.
			PPP	21 58		
			i	22 19		
		NE	iS	22 48		
			SS	23 04		
			SSS	23 12		

STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
December, 1961.					
Bokaro	NE	iP	10 21 39	780	Initial ground movement towards North and East.
		PPP	21 54		
		LQ	22 51		
		S	23 00		
		SSS	23 19		
		M	23 40		
Dehra Dun	NE	eP	10 21 49	900	
		PP	22 07		
		LQ	23 11		
		iS	23 22		
		SS	23 39		
		M	24 17		Period = 6.7 sec.
Tocklai	E	eP	10 21 57		Distant.
Calcutta	NE	e	10 21 59		
		iS	23 30		
New Delhi	ZNE	iP	10 22 04	950	Initial ground motion towards South and compression.
	E	i	22 43		
	ZNE	iS	23 43		
	E	i	25 15		
Visakhapatnam	N	iP	10 23 04	1510	Slight. Initial ground movement towards North.
		iS	25 37		
		SS	25 53		
		SSS	26 07		
Poona	E	eP	10 23 54	2000	Moderate.
	N	eS	27 13		
		SS	27 32		
		LR	28 19		
		M	29 41		
		PcS	32 08		
Bombay	E	e	10 23 57		Slight.
	NE	iS	27 04		
	E	M	33 38		Period=7sec.Gr.dis=6 μ.
	N	M	33 45		Period=7sec.Gr.dis=3 μ.
Madras	E	eP	10 24 17	2130	Slight.
		PP	24 34		
		PPP	24 42		
		e	27 29		
		iS	27 48		
		LQ	27 52		
		SS	27 09		
		SSS	28 22		
		LR	28 42		
		M	30 15		
Sehore	NE	i	10 24 49		
		i	26 22		
Hyderabad	N	M	10 29 19		Period=12sec,Gr.dis=13 μ.
	E	M	29 24		Period=12sec,Gr.dis=13 μ.
08 New Delhi	Z	iP	13 08 50	950	Slight, compression.
		iS	10 29		



DATE STATION COMPT PHASE G. M. T. Δ REMARKS.
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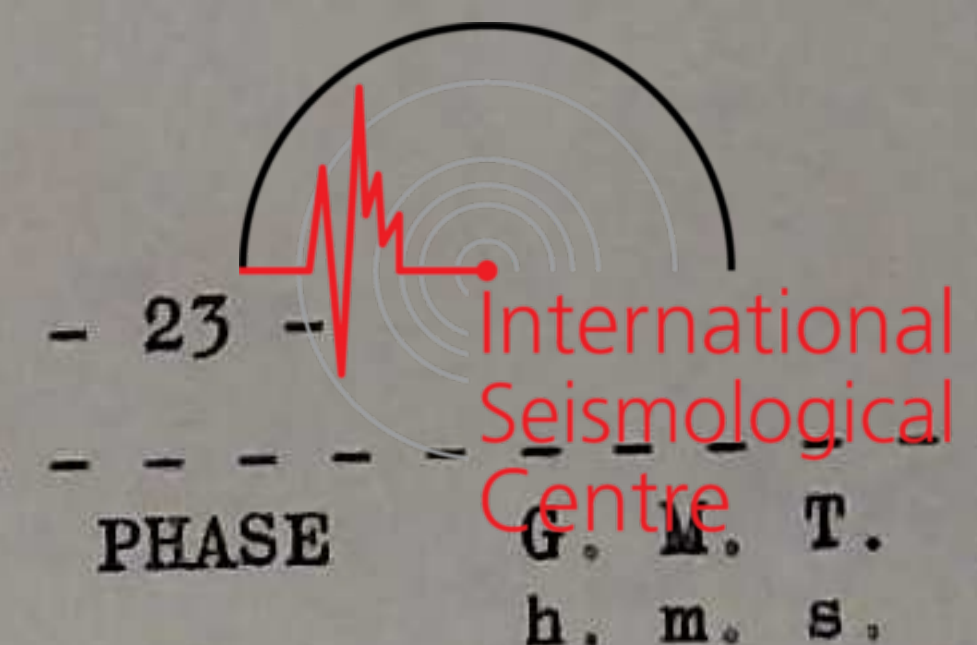
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DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
08	Chatra	Z	iP e	13 10 23 13 20		Slight, compression.
08	Shillong	Z	iP e	14 00 24 00 56		Slight, near.
08	Shillong	Z	iP	15 20 53		Slight, distant, rarefaction.
	Chatra	Z	iP	15 21 21		Slight, distant, rarefaction.
	New Delhi	Z	iP i	15 22 03 22 13		Slight, rarefaction.
08	Shillong	Z	eP	16 22 46		Slight, distant.
08	Shillong	Z	e	18 08 06		Slight, distant.
08	Shillong	Z	iP	18 45 44		Slight, near, compression.
08	Shillong	Z	e	22 47 11		Tremor, distant.
09	New Delhi	Z	iPg iSg	00 45 35 45 47	100	Slight, rarefaction.
<p>09 EPC:- 56.3°N, 153.9° W Kodiak Islands Alaska Region. h = 31 Km. -H= 02 h 15 m 22.0 s (USCGS). Mag:- 5$\frac{1}{2}$-5$\frac{3}{4}$ (Berk), 5$\frac{1}{2}$ (Pal).</p>						
	Shillong	Z	eP	02 27 37		Distant.
	Chatra	Z	iP	02 27 37		Distant.
	Chatra	Z NE	iP eS	02 27 47 38 08	9260	Compression.
	New Delhi	Z	iP	02 27 59		Compression.
	Dehra Dun	NE	e e	02 32 02 38 13		
	Bombay	NE	e e e e	02 32 41 39 29 41 34 46 23 54 33		
	Calcutta	E	e	02 38 29		Slight.
	Hyderabad	E	M	03 09 52		Period= 16 secs. Gr. dis = 12 μ .
	Kodaikanal	E	e	03 10 10		Tremor.
09	Bombay	NE	e	04 18 42		Slight.

STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
New Delhi	Z	iP i	04 18 44 18 50		Slight, compression.
Poona	Z	iP	04 18 47		Slight.
Shillong	Z	eP	04 18 57		Slight, distant, compression.
Chatra	Z	iP S	04 27 05 27 23	140	Slight, compression.
Shillong	Z	i	04 28 23		Slight, near.
Port Blair	N	iP iS	04 36 50 37 08	140	Slight.
Shillong	Z	iP	06 39 56		Slight, near, rarefaction.
Chatra	Z	iP	06 40 25		Slight, distant, rarefaction.
9 Visakhapatnam	NE	iPg iSg	06 41 14 41 19	50	Slight. Initial ground movement towards North and East.
9 Shillong	Z	e	06 42 37		Slight, distant.
9 New Delhi	Z	iP	07 11 35		Slight, rarefaction.
9 Shillong	Z	eP i i	07 41 04 41 07 41 30		Slight, near.
09 Bokaro	NE	iP	07 50 32		Slight, tremor.
09 Tocklai	E	iPg iSg	08 34 07 34 25	150	Slight.
Shillong	Z	iP iS	08 34 15 34 45	270	Slight, compression.
Chatra	Z N	iP PP PPP P* Pg LQ S LR SS S*(SSS) Sg(M)	08 35 17 35 24 35 30 35 31 35 47 36 22 36 33 36 41 36 44 36 54 37 12	720	Slight, compression.
Bokaro	NE	iP i	08 35 34 36 57		Slight, near.



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09	New Delhi	Z	iP iS	08 37 14 40 03	1680	Slight, raref.	
09	Bokaro	NE	iP	08 59 41		Slight, tremor	
09	Shillong	Z	e	10 25 00		Slight, distant	
	New Delhi	Z	iP	10 26 28		Slight, raref.	
09	Shillong	Z	e	10 51 26		Slight, distant	
09	Port Blair	N	iPg iSg	11 09 40 09 46	50	Slight.	
09	Epc:- 43.7° S, 75.2° W Near coast of Southern Chile. h= 34 Km. -H= 11 h 18 m 08.9 s (USCGS). Mag:- 6 $\frac{3}{4}$ (Pas), 6 $\frac{1}{2}$ (Berk), 5 $\frac{3}{4}$ -6 (Pal).						
	Port Blair	N	i	11 36 10			
	Kodaikanal	E	e	11 36 55		Tremor.	
	Poona	Z	iPKP1	11 37 39	15750		
			PP	40 44			
			PKS1	41 04			
			PKS2	41 27			
			PPP	44 00			
			PKKP1	46 49			
			SKKS1	47 26			
			SKKKS	48 01			
			PKKS1	50 29			
			SKSP	50 55			
			PS	51 19			
			SKS2	54 06			
			eSS	59 19			
			SSP	59 49			
			SSP(2)	12 13 05			
			LQ	17 33			
			LR	24 20			
			M	36 01			
	Madras	E	ePKP	11 37 42	15720		
			e	38 04			
			PP	40 49			
			PKS	41 25			
			PS	51 07			
			SS	59 25			
			LR	12 25 24			
	Bombay	NE	ePKP	11 37 42	15850		
		E	i	38 04			
		NE	PP	40 44			
		E	PKS2	41 44			
		N	e	43 01			
		NE	PS	51 11			
			SS	59 29			
			SSP	12 00 00			
			SSS	05 09			
		E	M	39 29			
		N	M	43 05			

Period=20sec, Gr. dis
Period=20sec, Gr. dis

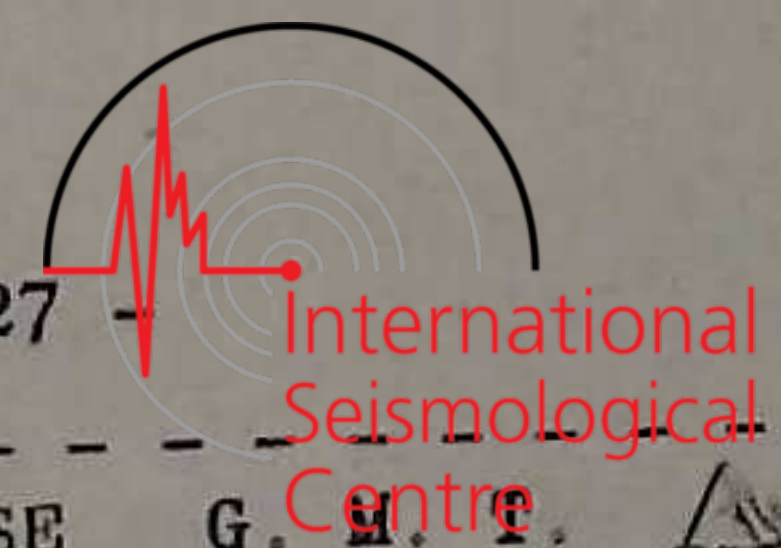
	Hyderabad	E	PKP1 PP PKS1 SKS e PS PPS SS SSS LQ M	11 37 47 41 09 41 47 45 17 51 28 51 53 53 43 12 00 06 05 25 19 25 36 13	16110	Period=20sec. Gr. dis = 19 μ .
	New Delhi	ZNE Z ZNE	ePKP i e	11 37 59 38 01 41 59		Compression.
	Visakhapatnam	NE	iPKP e e e	11 38 00 38 19 38 30 41 35		Moderate. Initial ground movement towards East.
	Shillong	ZNE N	iPKP1 PKP2 PP PPP SKKS1 PPS SSP Mn	11 38 03 38 37 42 23 46 14 52 41 55 47 12 05 41 47 -	17660	Compression. Period = 19 secs., Gr. dis = 11 μ .
	Chatra	Z ZN N E	ePKP1 PKP2 PP Mn Mn	11 38 03 38 46 42 19 12 47/48- 47/48-	17780	Period = 20 secs. Gr. dis 8 μ . Period = 20 secs. Gr. dis = 12 μ .
	Calcutta	E	e e e e e	11 38 04 38 42 39 30 42 09 49 30 12 01 51		
	Dehra Dun	NE	e i i i i	11 38 19 43 05 48 59 51 58 57 08		
09	Shillong	Z	e	13 27 55		Tremor, distant.
09	Shillong	Z	e	16 32 09		Slight, distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
<u>December, 1961.</u>						
09	Shillong	Z	iP	16 42 57		Slight, distant compression.
	Chatra	Z	iP	16 43 25		Slight, distant compression.
			i	45 41		
	New Delhi	Z	iP	16 44 19		Slight, rarefaction.
09	Shillong	Z	iP	19 30 46	90	Slight, rarefaction.
			iS	30 58		
09	Shillong	Z	e	20 02 15		Slight, distant.
	Chatra	Z	eP	20 02 36		Slight, distant.
	Chatra	Z	eP	20 06 56		Slight, distant.
	New Delhi	Z	iP	20 07 11		Slight, compression.
09	New Delhi	Z	iP	20 17 11		Slight, rarefaction.
	Chatra	Z	e	20 18 37		Slight, distant.
	Shillong	Z	e	20 18 49		Slight, distant.
09	Shillong	Z	e	21 04 06		Tremor, distant.
	Chatra	Z	e	21 35 13		Slight, distant.
09	Shillong	Z	iP	22 02 10	110	Slight, compression.
			iS	02 25		
09	Shillong	Z	e	22 04 56		Slight, distant.
09	Shillong	Z	e	22 49 27		Slight, distant.
10	Shillong	Z	e	00 33 29		Slight, distant.
10	Shillong	Z	e	00 44 41		Tremor, near.
10	Shillong	Z	eP iSg	02 38 30 38 39	80	Local.
10	New Delhi	Z	iP	08 47 04		Slight, rarefaction.
	Shillong	Z	iP	08 48 49		Slight, distant, rarefaction.
10	Shillong	Z	e	17 14 35		Slight, distant.
10	Shillong	Z	iP	17 22 37		Slight, local.
10	Shillong	Z	iP	18 07 54		Slight, local.
10	Shillong	Z	iP	19 16 28		Slight, local.



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STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
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Shillong	Z	e i	20 24 30 25 04		Slight, near.
Shillong	Z	e	21 20 44		Slight, distant.
Shillong	Z	e	21 58 22		Slight, distant.
New Delhi	Z	iP	23 21 08		Slight, rarefaction.
New Delhi	Z	iP	00 53 42		Slight, rarefaction.
Shillong	Z	e	00 55 58		Slight, distant.
Shillong	Z	eP	02 17 25		Slight, near.
Shillong	Z	eP iS	07 13 00 13 36	320	Slight.
Epc:- 23° N, 93.4° E Lushai Hills-Burma border. - H = 09 h 52 m 22 s (SHILLONG).					
23.4° N, 94.8° E Burma. h= 86 Km. - H = 09 h 52 m 16.3 s (USCGS).					
Shillong	ZNE NE	iP iS	09 53 08 53 43	310	Compression.
Tocklai	E	eP iS	09 53 14 53 59	410	
Chatra	Z N	iP PPP Pg LQ S LR SS	09 54 05 54 17 54 35 55 10 55 23 55 29 55 31	740	Compression.
Bokaro	NE	iP LQ S SS e SSS M	09 54 11 55 27 55 35 55 45 55 54 56 00 56 20	810	
Calcutta	E	e	09 54 41		
Visakhapatnam	E	iP iS SSS	09 55 05 57 03 57 18	1150	Initial ground movement towards East.
New Delhi	Z	iP PP iS	09 56 04 56 16 58 53	1680	
Madras	E	iP eS	09 56 12 59 08	1750	Initial ground movement towards West.



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DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
11	Poona	Z	eP	09 56 44	2110	
			PP	57 01		
			PPP	57 11		
			iS	10 00 13		
			LQ	00 20		
			SS	00 41		
			SSS	00 55		
			LR	01 14		
			M	02 45		
	Dehra Dun	NE	e	09 58 46		
	Bombay	NE	e	10 00 33		
			e	03 11		
11	Shillong	Z	ePg	11 05 11	90	Slight.
			iSg	05 21		
11	Chatra	Z	eP	14 51 07		Slight, near.
	New Delhi	Z	iP	17 01 26		Slight, compression
11	Chatra	Z	iP	17 02 30		Slight, distant, compression.
	Shillong	Z	iP	17 03 01		Slight, distant, compression.
11	Shillong	Z	eP	17 12 37		Slight, near.
11	Shillong	Z	eP	17 13 19		Slight, distant.
11	Chatra	Z	eP	17 15 55		Slight, near.
12	Shillong	Z	eP	04 03 27		Slight, distant.
	Chatra	Z	eP	04 03 55		Slight, distant.
12	Bombay	NE	e	04 13 05		Slight.
			e	17 01		
12	New Delhi	Z	iP	05 26 51	970	Slight, compression.
			iS	28 31		
	Chatra	Z	iP	05 28 15		Slight, distant, compression.
12	Port Blair	N	iPg	06 17 06	50	Slight.
			iSg	17 11		
12	Shillong	Z	iPg	06 38 58	50	Slight.
			iSg	39 05		
12	Shillong	Z	iP	17 18 05		Slight, near, compression.
	Chatra	Z	e	17 18 54		Slight, near.

Port Blair	Z	iPg	17 26 28		Slight.
Shillong	Z	i	17 29 16		Slight, distant.
Epc:- 21.7° N, 146.0° E North Mariana Islands Region. h= 24 Km. -H= 17 h 23 m 04.0 s (USCGS).					
Shillong	Z	e	17 31 45		Slight, distant.
		i	31 55		
Chatra	Z	iP	17 32 26	6000	Slight, distant, compression.
	E	S	40 01		
Dehra Dun	NE	e	17 33 16		Slight.
		e	41 47		
Poona	Z	iP	17 33 59		Tremor.
Bombay	E	eP	17 34 08	7590	Slight.
		eS	43 09		
Port Blair	N	Pg	17 56 00		Slight.
Shillong	Z	e	17 57 49		Tremor, distant.
Chatra	Z	P	18 45 50		Slight.
Port Blair	N	eP	18 49 16	160	Slight.
		eS	49 34		
Shillong	Z	e	18 51 28		Slight, distant.
Chatra	Z	eP	18 52 00		Slight.
		e	54 37		
Shillong	Z	iP	21 24 28		Slight, distant.
Chatra	Z	iP	21 25 08		Slight, distant, compression.
Chatra	Z	eP	21 38 52		Slight, near.
		i	39 10		
Epc:- 43.5° N, 146.2° E Near East cost of Hokkaido, Japan. h= 44 Km. -H= 23 h 06 m 18.4 s (USCGS).					
Shillong	Z	eP	23 14 50		Slight, distant.
Chatra	Z	eP	23 15 11	5440	Slight, compression.
	NE	iS	22 15		
Dehra Dun	NE	e	23 16 03		Slight.
		i	23 22		
Poona	Z	iP	23 16 54		Slight.
Shillong	Z	e	03 19 45		Slight, distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
<u>December, 1961.</u>						
13	Shillong	Z	e	03 24 30		Tremor, distant
13	Shillong	Z	i	08 47 25		Slight, near.
13	Shillong	Z	i	08 47 35		Slight, distant
	New Delhi	Z	iP	08 49 09 49 12 49 19		
13	Chatra	Z	eP eS	11 42 04 42 40	320	Slight.
	New Delhi	Z	iP	11 43 11		Slight, rarefac
	Shillong	Z	eP	11 43 12		Slight, distant
13	Shillong	Z	e	14 18 06		Slight, distant
13	Shillong	Z	e	17 02 34		Slight, distant
13	Chatra	Z	eP	19 54 44		Slight, near.
	Shillong	Z	eP	19 55 49		Slight, near.
13	Shillong	Z	eP	20 06 08		Slight, distant.
	Chatra	Z	eP	20 06 50		Slight, distant.
13	Chatra	Z	iPg iSg S*	20 57 36 57 38 57 48	90	Slight, compression
14	Shillong	Z	e	06 42 53		Slight, distant.
Epc:- 3.1° S, 140.9° E Near north coast of New Guinea. h= 44 Km. -H= 07 h 10 m 23.2 s (USCGS).						
14	Tocklai	E	eP	07 19 55		Slight, distant.
	Shillong	ZE NE	iP iS	07.19 57 27 39	6120	Moderate. Initial ground movement towards West and Compression.
	Chatra	Z NE	eP eS	07 20 29 28 41	6660	Slight, compression
	Bokaro	E	iP iS	07 20 30 28 43	6690	Slight. Initial ground movement towards West.
	Visakhapatnam	E	iP PP eS PS PPS	07 20 39 22 55 28 55 29 08 29 22	6740	Moderate. Initial ground movement towards East.



STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
<u>December, 1961.</u>					
Madras	E	iP PcP iS SKS	07 20 47 21 23 29 13 30 41	6920	Slight. Initial ground movement towards East.
New Delhi	ZNE	iP iS	07 21 26 30 28	7610	Slight. Initial ground movement towards West and compression.
Dehra Dun	NE	eP iS	07 21 29 30 29	7570	Slight.
Poona	Z N	eP iS e PS LQ M	07 21 31 30 38 30 49 31 12 39 16 48 05	7710	Moderate.
Bombay	NE E NE	eP PcP PP eS PPS SS	07 21 35 22 00 24 15 30 47 31 39 35 39	7810	Slight.
Hyderabad	E N	M M	07 29 46 29 49		T=9sec. $\mu = 2$ (EW) T=10sec. $\mu = 4$ (NS)
Chatra	Z	eP	07 38 22		Slight, near.
Poona	Z	eP	07 49 51		Tremor.
Shillong	Z	iP iS	10 15 35 16 02	230	Slight, compression.
New Delhi	Z	iP iS	11 01 55 03 49	1110	Slight, compression.
Dehra Dun	NE	e	11 03 07		Tremor.
Shillong	Z	iP	11 03 58		Slight, distant, rarefaction.
Shillong	Z	e	12 09 37		Slight, distant.
Shillong	Z	iP	12 22 41		Slight, distant.
Chatra	Z	eP	12 23 13		Slight, distant, compression.
Shillong	Z	e	17 02 32		Slight, distant.
Shillong	Z	eP eS	20 51 40 52 16	320	Slight.
Shillong	Z	eP	21 47 49		Slight, near.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
December, 1961.						
15	Shillong	Z	e	00 22 15		Slight, distant.
15	Shillong	Z	e	02 10 30		Slight, distant.
15	Shillong	ZE	iP iS	02 17 35 17 54	150	Slight, near, rarefaction.
	Chatra	Z NE	eP e	02 18 25 19 55		Slight, near.
	New Delhi	Z	iP	02 20 19		Slight, rarefaction.
	Bombay	E NE	e e	02 25 44 27 06		Slight, compression.
15	Shillong	Z	iP iS	02 26 39 26 58	150	Slight.
15	Shillong	Z	iP iS	02 27 12 27 32	160	Slight, compression.
15	Shillong	Z	iP iS	02 43 08 43 28	160	Slight.
15	Shillong	Z	iP	03 07 02		Slight, near.
15	Shillong	Z	iP	03 14 56		Slight, near.
15	Shillong	Z	iP	03 49 51		Slight, near.
15	Shillong	Z	iP	04 09 07		Slight, near.
15	Shillong	Z	iP	04 57 01		Slight, near.
15	Chatra	Z	iP	04 57 23		Slight, near.
15	Shillong	Z	i	05 12 54		Local, slight.
	Chatra	Z	iP	05 12 19		Slight, rarefaction.
	Tocklai	E	iP iS	05 13 01 13 31 13 47	430	Slight, compression.
15	Shillong	Z	eP	05 13 33		Slight, near.
15	Shillong	Z	e	05 50 57		Slight, distant.
15	Shillong	Z	iP	08 59 49		Slight, compression.
15	Shillong	Z	iP iS	11 42 07 42 27	160	Slight.
15	Shillong	Z	eP iS	13 54 32 54 53	160	Slight.
	Chatra	Z	eP	13 55 35		Slight, distant.

STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
December, 1961.					
Kodaikanal	E	e	14 47 30		Tremor.
Shillong	Z	iP	15 13 17		Slight, near, rarefaction.
Chatra	Z	e	15 15 11		Slight, near.
Shillong	Z	iP iS	17 29 19 29 39	160	Slight, rarefaction.
Shillong	Z	iP iS	18 21 41 22 00	150	Slight, compression.
Shillong	Z	eP iS	19 07 02 07 22	160	Slight.
Shillong	Z	eP iS	19 11 38 11 58	160	Slight.
New Delhi	Z	iP e	19 27 07 29 19		Slight, rarefaction.
Chatra	Z	e	19 28 11		Slight, distant.
Bokaro	NE	e	19 29 06		Tremor.
Shillong	Z	e	19 29 36		Slight, distant.
Shillong	Z	eP e	19 43 37 44 48		Slight, distant.
Chatra	Z	eP	19 44 21		Slight, distant.
New Delhi	Z	eP	19 45 27		Slight.
New Delhi	Z	iP	20 19 29		Slight.
Shillong	Z	iP iS	21 27 54 28 13	150	Slight.
Chatra	Z	eP	21 28 43		Slight, distant.
Chatra	Z	eP	22 02 11		Slight, distant, compression.
Chatra	Z	eP	22 12 25		Slight, distant.
Shillong	Z	e	22 12 57		Slight, distant.
New Delhi	Z	eP	23 11 19		Slight.
Shillong	Z	eP	01 44 04		Slight, distant.
New Delhi	Z	iP	01 45 53		Slight, rarefaction.
Shillong	Z	iP iS	06 31 14 31 27	100	Slight.



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DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
16	Chatra	Z N	iP Pg S SS SSS	07 33 34 33 36 33 54 34 05 34 15	160	Slight, compression.
	Shillong	Z	iP	07 33 58		Slight, rarefaction.
	Tocklai	E	eP	07 35 40		Slight, distant.
16	Visakhapatnam	E NE	e i	07 38 24 38 40		Slight, near.
16	Shillong	Z	iP iS	08 23 59 24 18	150	Slight.
16	Shillong	Z	eP iS	09 10 10 10 44	300	Slight.
16	Shillong	Z	iP iS	09 22 01 22 20	150	Slight, rarefaction.
16	Tocklai	E	eP i	10 28 39 28 49		Slight, near.
	Shillong	Z	iP	10 29 11		Slight, near.
16	Shillong	Z	eP	10 36 33		Slight, distant.
16	Shillong	Z	iP	12 39 09		Slight, near.
	Chatra	Z	eP Sg	12 41 20 41 35	130	Slight.
16	Poona	Z	iP	13 21 53		Slight, compression.
16	Shillong	Z	iP	13 25 15		Slight, near, compression.
16	Shillong	Z	eP	13 50 07		Slight, distant.
	Chatra	Z	eP	13 50 22		Slight, distant, compression.
	New Delhi	Z	iP	13 50 54		Slight, compression.
16	Shillong	Z	eP	14 12 27		Slight, near.
16	Chatra	Z	eP	18 52 41		Slight, distant.
16	Chatra	Z	iPg Sg	19 40 59 41 10	100	Slight.
16	New Delhi	Z	iP	21 20 07		Slight, rarefaction.
16	New Delhi	Z	iP	23 27 49		Slight, rarefaction.
17	New Delhi	Z	iP	01 43 08		Slight, rarefaction.
17	Shillong	Z	eP	02 15 23		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
17	Shillong	Z	iP	02 15 32		Slight, near.
17	Shillong	Z	e	02 16 39		Slight, distant.
17	Shillong	Z	iP iSg	03 14 24 14 49	210	Slight.
17	Shillong	Z	eP	03 48 23		Slight, near.
17	Shillong	Z	eP iS	10 31 30 31 44	100	Slight.
17	Shillong	Z	eP iS	16 21 26 21 49	190	Slight.
17	Chatra	Z	iPg PP PPP Sg SS	16 42 48 42 55 43 01 43 05 43 15	130	Slight, rarefaction.
	Shillong	Z	eP	16 43 26		Slight, near.
17	Shillong	Z	e	16 44 32		Slight, distant.
17	Shillong	Z	iP iS	16 45 11 45 24	100	Slight.
	Chatra	Z	e	16 45 55		Slight.
17	Chatra	Z	e	16 46 40		Slight.
17	Shillong	Z	eP i	20 43 34 44 09		Slight, near.
17	Chatra	Z	eP e	21 51 55 52 32		Slight, distant.
	Shillong	Z	eP	21 51 59		Slight, distant.
17	Shillong	Z	eP	22 13 39		Slight, distant.
	Chatra	Z	eP	22 14 11		Slight, distant.
17	Shillong	Z	eP	22 25 35		Slight, distant.
	Chatra	Z	eP	22 25 48		Slight, distant.
17	Shillong	Z	e	22 33 38		Slight, distant.
18	Shillong	Z	iPg iSg	00 43 42 44 02	160	Slight.
	Chatra	Z	iP P* i PPP S S*	00 44 07 44 11 44 14 44 19 44 44 44 49	330	Slight, Rarefaction.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
December, 1961.						
18	Shillong	Z	e	02 24 21		Slight, distant.
18	Shillong	Z	eP	03 09 39		Slight, distant.
18	New Delhi	Z	iP iS	09 23 43 25 24	980	Slight, rarefaction.
18	Shillong	Z	eP	10 25 44		Slight, distant.
18	Shillong	Z	eP iS	10 46 32 46 52	160	Slight.
18	Shillong	Z	eP iS	13 28 43 29 02	150	Slight.
18	Shillong	Z	eP iS	16 03 24 03 43	150	Slight.
18	Epc:- 26.4° N, 96.3° E Burma-India Border, h = 85 Km. - H = 16 h 42 m 21.6 s (USCGS).					
	Tocklai	E	eP iS	16 42 58 43 20	180	Slight.
	Shillong	ZE	iP iS	16 43 23 44 00	330	Slight.
	Chatra	Z N	iP PP PPP P* Pg iS SS SSS S*	16 44 20 44 27 44 33 44 37 44 55 45 45 45 55 46 06 46 11	820	Slight, rarefaction.
	Bokaro	E NE	eP e iS	16 44 39 46 21 46 24	1020	Slight.
	Calcutta	NE	e i	16 45 13 45 43		Slight.
	Visakhapatnam	NE	iP i i i	16 45 51 48 17 48 35 48 43	1435	Slight. Initial ground movement towards North and West.
	New Delhi	Z	iP i	16 46 18 49 11		Slight, compression.
	Madras	E	iP PP PPP e eS LQ LB	16 46 51 47 07 47 17 47 27 50 21 50 26 50 38	2120	Slight. Initial ground motion towards West.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
18	Poona	Z E	iP i	16 47 11 51 13		Slight, compression.
	Dehra Dun	NE	e	16 48 59		Tremor.
	Bombay	N	e	16 52 50		Slight, near.
19	Shillong	Z	eP iS	01 09 38 10 03	210	Slight.
19	Shillong	Z	iPg Sg	03 35 05 35 14	80	Slight.
19	Shillong	Z	eP	03 48 07		Slight, near.
19	Shillong	Z	eP e	04 39 04 39 38	300	Slight.
19	Shillong	Z	eP Pg Sg	04 43 50 43 55 44 14	170	Slight.
19	Shillong	Z	eP	13 37 49		Near.
19	Shillong	Z	iP	15 48 47		Slight, distant, rarefaction.
19	New Delhi	Z	iP	15 50 33		Slight, rarefaction.
19	Shillong	Z	eP	15 54 42		Slight, distant.
19	Shillong	Z	iP	16 17 41		Slight, distant.
19	Shillong	Z	iP	17 30 07		Slight, distant, rarefaction.
19	Shillong	Z E	iP e	17 35 55 48 12		Slight, distant, compression.
19	New Delhi	Z	iP	17 37 49		Slight, rarefaction.
20	New Delhi	Z	iP	01 52 53		Slight, compression.
20	Shillong	Z	i	03 22 10		Slight, near.
20	Chatra	Z ZN	iP PP PPP P* Pg S	07 41 20 41 27 41 35 41 40 41 59 42 51	870	Slight, rarefaction.
	Shillong	Z	eP	07 41 54		Slight, distant.
	New Delhi	Z	iP	07 42 12		Slight, compression.
	Bokaro	NE	eP	07 42 36		Slight, near.

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

December, 1961.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
20	Dehra Dun	NE	e	07 43 29		Tremor.
	Visakhapatnam	E	e	07 46 30		Slight.
			i	47 57		
	Hyderabad	E	M	07 49 05		Period = 12 secs. Gr. dis = 2 μ .
	Bombay	NE	e	07 49 43		
20	Visakhapatnam	NE	ePg	10 12 49	50	Slight.
			eP*	12 51		
			iSg	12 54		
20	Bokaro	NE	iP	11 17 46		Slight, tremor.
20	Epc:- 4.6° N, 75.6° W West Central Columbia. h= 176 Km. -H = 13 h 25 m 34.4 s (USCGS). Mag:- 6 $\frac{3}{4}$ (Pas) 6 (Pal).					
	New Delhi	Z	ePKP	13 44 37		
		E	i	48 21		
			e	48 33		
			e	49 56		
			PS	56 23		
			i	14 06 24		
	Poona	Z	iPKP	13 44 41		
			i	48 09		
	Bombay	NE	ePKP1	13 44 44		
			e	45 21		
		E	e	48 46		
		NE	e	49 06		
		N	e	54 29		
		E	e	14 01 17		
		NE	e	05 55		
			e	07 54		
		N	e	11 22		
		E	e	11 32		
		N	e	29 00		
			M	15 02 03		Period=19 secs. Gr. dis = 4 μ .
	Chatra	Z	iPKP	13 44 50		Distant, rarefaction.
		NE	i	45 31		
			e	14 06 37		
			e	07 37		
	Shillong	Z	iPKP	13 44 56		Distant, rarefaction.
			i	45 44		
	Bokaro	NE	ePKP	13 44 58		Slight.
	Hyderabad	E	e	13 45 02		
			e	45 38		
			e	14 07 01		
			e	37 29		
			M	49 05		Period= 18 secs. Gr. dis = 8 μ .



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

December, 1961.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
20	Visakhapatnam	NE	e	13 46 03		
			e	49 26		
	Tocklai	E	ePKP	13 45 05		Slight, distant.
	Madras	E	ePKP	13 45 07		Distant.
			e	45 21		
			e	46 03		
			e	48 04		
			e	49 05		
			e	14 07 38		
	Port Blair	E	ePKP	13 45 12		Slight.
	Calcutta	E	e	13 45 17		Moderate.
			i	45 55		
			i	07 29		
	Dehra Dun	NE	e	13 45 30		Slight.
			i	49 01		
			i	05 17		
	Kodaikanal	E	e	13 46 01		Tremor.
20	Chatra	Z	eP	18 30 04		Slight, distant.
20	Shillong	Z	eP	18 52 42		Slight, near.
			i	52 52		
			i	19 03 05		
21	Shillong	Z	e	00 00 27		Tremor, distant.
21	Shillong	Z	e	00 26 12		Slight, distant.
21	Shillong	Z	eP	00 51 48		Slight, distant.
21	Chatra	Z	Pn	03 09 57	240	Slight, rarefaction.
			P*	10 01		
			PP	10 05		
			Pg	10 07		
			PPP	10 11		
			LQ	10 18		
			SN	10 25		
	Shillong	Z	eP	03 09 59	250	Slight.
			iS	10 28		
21	Shillong	Z	e	04 44 31		Tremor, distant.
21	Shillong	Z	eP	05 16 22		Slight, distant.
21	Bombay	E	e	05 25 47		Slight, near.
		N	M	27 -		
21	New Delhi	Z	iP	06 32 48		



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
21	Shillong	Z	iP	06 59 11		Slight, near, compression.
	Tocklai	E	eP	07 00 00		Slight, distant.
21	Shillong	Z	e	07 18 01		Slight, distant.
	New Delhi	Z	iP	07 19 35		Slight, rarefaction.
21	Shillong	Z	i	09 00 02		Tremor, distant.
21	Shillong	Z	i	13 39 12		Slight, distant.
	New Delhi	Z	iP	13 40 38		Slight, compression.
21	Shillong	Z	eP iS	16 46 50 46 57	50	Slight.
21	Tocklai	E	eP i	18 17 59 18 21		Slight, near.
	Shillong	Z	iP	18 18 22		Slight, near, compression.
	Chatra	Z	eP PP Pg LQ eS SS Sg	18 19 06 19 11 19 33 20 05 20 17 20 37 21 01	670	Slight.
21	Chatra	Z	iP i	18 51 01 52 16		Slight, rarefaction.
	Shillong	Z	eP	18 51 42		Slight, distant.
	New Delhi	Z	iP	18 52 06		Slight, rarefaction.
	Dehra Dun	NE	e	18 53 19		Tremor.
	Bombay	NE	e	18 59 57		Slight.
21	Shillong	Z	i	23 18 30		Slight, distant.
21	Shillong	Z	iP	23 46 04		Slight, distant, compression.
	Chatra	Z	e	23 46 34		Slight, distant.
22	Bokaro	NE	iP	00 46 54		Slight, near, felt locally.
	Chatra	Z	iP S	00 47 49 48 27	340	Slight, rarefaction.
	Shillong	Z	i	00 49 26		Slight, distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
22	Shillong	Z	e	01 04 41		Slight, distant.
22	Bokaro	NE	i	07 53 30		Tremor.
22	Shillong	Z	iP	10 42 48		Slight, distant, compression.
22	Chatra	Z	eP	15 10 59		Slight, distant.
22	Chatra	Z	e	15 12 37		Slight, near.
22	Chatra	Z	iP	15 54 24		Slight, distant, rarefaction.
22	Shillong	Z	eP	16 01 01		Slight, near.
	Chatra	Z	iP	16 02 03		Slight, distant, rarefaction.
22	Chatra	Z	eP	16 03 10		Slight, near.
22	Shillong	Z	iP	17 42 49		Slight, distant.
22	New Delhi	Z	iP	19 02 31		Slight, rarefaction.
	Chatra	Z	eP	19 03 47		Slight, distant.
22	Shillong	Z	e e e	19 14 08 14 14 14 24		Slight, near.
22	Shillong	Z	i i	20 18 13 18 33		Slight.
22	Shillong	Z	e	22 23 30		Slight, distant.
22	Shillong	Z	eP	22 55 06		Slight, distant, compression.
	Chatra	Z	eP	22 55 38		Slight.
	New Delhi	Z	iP	22 56 32		Slight, rarefaction.
22	Shillong	Z	eP iS	23 26 26 26 45	150	Slight.
22	Tocklai	E	eP	23 41 43		Slight, distant.
	Shillong	Z	eP	23 42 06		Slight, distant.
	Chatra	Z	eP	23 42 58		Slight.
22	Shillong	Z	iP	23 49 25		Slight, distant, rarefaction.
	Chatra	Z	eP	23 50 05		Slight.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
December, 1961.						
23	New Delhi	Z	iP iS	07 57 07 57 32	210	Slight, compression.
23	Bokaro	NE	iP	09 37 31		Slight, tremor.
23	Chatra	Z	iP	12 50 40		Slight, distant, compression.
	New Delhi	Z	iP i	12 51 51 52 00		Slight, rarefaction.
23	Shillong	Z	eP	14 55 42		Slight, distant, compression.
23	Shillong	Z	e	16 31 44		Slight, distant.
23	New Delhi	Z	iP iS	18 11 07 12 44	940	Slight, rarefaction.
	Dehra Dun	NE	e	18 12 18		Tremor.
	Chatra	Z	iP	18 12 43 15 36	1730	Slight, rarefaction.
	Shillong	Z	eP	18 13 31		Slight, distant.
23	Shillong	Z	iP	19 19 11		Slight, distant.
	Chatra	Z	iP	19 19 40		Slight.
	New Delhi	Z	iP	19 20 36		Slight.
23	Shillong	Z	eP	21 10 52		Slight, near.
23	Shillong	Z	eP	22 12 00		Slight, near.
23	Shillong	Z	eP iS	22 36 22 36 57	210	Slight.
23	Port Blair	E	iP	22 39 05		Slight.
	Shillong	Z	e	22 41 12		Slight, distant.
	Chatra	Z	eP	22 41 45		Slight.
	New Delhi	Z	iP e	22 43 12 43 18		Slight, rarefaction.
23	Chatra	Z	Pg Sg	22 44 04 44 14	90	Slight.
23	Tocklai	E	iP i	23 21 17 21 49		Slight, distant.
	Shillong	Z	iP	23 21 41		Slight, distant, rarefaction.
	Chatra	Z	eP	23 22 35		Slight.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS.
December, 1961.						
24	Shillong	Z	e	00 10 38		Slight, distant.
	Port Blair	E	iP	00 11 50		Slight.
24	Shillong	Z	eP	02 49 38		Slight, distant.
	Chatra	Z	eP	02 50 07		Slight, distant.
	Visakhapatnam	E	e e	02 50 14 54 45		
	New Delhi	Z	iP i	02 51 07 51 16		Slight, rarefaction.
	Bombay	E	e e e e	02 54 05 55 45 03 00 54 00 55 01 33		Slight.
24	Shillong	Z	e	03 03 48		Slight, distant.
24	Shillong	Z	i	04 46 11		Slight, distant.
24	Shillong	Z	eP	06 59 06		Slight, distant.
	New Delhi	Z	iP	07 00 13		Slight.
24	Epc:- 29.5° N, 80.9° E Nepal. h= 20 Km. -H = 07 h 13 m 25.4 s (USCGS).					
	28.8° N, 81.5° E Western Nepal. -H= 07 h 13 m 30 s (SHILLONG).					
	Dehra Dun	Z	e	07 14 15		
	New Delhi	ZNE	iP P* PP Pg S Sg	07 14 22 14 26 14 28 14 31 15 01 15 15	350	Initial ground move- ment towards North, East and Rarefaction.
	Chatra	Z N	iP e PP P* PPP Pg LQ S LR SS S* SSS Sg/M	07 15 01 15 03 15 09 15 13 15 15 15 27 15 57 16 08 16 13 16 19 16 26 16 29 16 41	630	Slight, compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
24	Bokaro	NE	iP	07 15 18	780	Slight.
			eS	16 39		
		E	SS	16 51		
			SSS	17 02		
			Sg/M	17 18		
	Calcutta	N	eP	07 15 50	1010	Moderate.
			iS	17 34		
	Shillong	ZE	iP	07 15 57	1090	Moderate. Initial ground motion towards East and compression.
		NE	iS	17 49		
	Visakhapatnam	NE	iP	07 16 20	1230	Moderate. Initial ground motion towards North.
			PP	16 31		
			PPP	16 37		
			iS	18 26		
			SS	18 43		
			SSS	18 54		
			M	19 48		
	Hyderabad	E	iP	07 16 21	1270	Slight, initial ground motion towards East.
			S	18 30		
			LR	20 16		
			M	21 12		Period = 6 secs. Gr. dis = 6 μ.
	Tocklai	E	eP	07 16 26		Slight, distant.
	Poona	Z	iP	07 16 27	1350	Moderate.
		N	PPP	16 49		
		Z	iS	18 44		
		N	LR, SSS	19 14		
			M	20 15		
	Bombay	NE	eP	07 16 29	1410	Slight.
			PP	16 42		
		E	e	17 12		
		NE	LQ	18 44		
			eS	18 53		
			SS	19 09		
		E	SSS	19 22		
		NE	LR	19 43		
		N	M	21 37		
	Madras	E	eP	07 17 17	1740	Moderate.
			PP	17 28		
			PPP	17 39		
			LQ	20 07		
			iS	20 12		
			SS	20 28		
			SSS	20 41		
			LR	20 51		
			M	22 03		
	Hyderabad	E	iP	07 19 56	3450	Slight.
			S	25 02		
			LR	28 00		
			M	30 13		
						Period=6sec. Gr. dis

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
24	Kodaikanal	E	eP	07 21 19		
24	Shillong	Z	e	08 45 38		Slight, distant.
24	Shillong	Z	eP	09 45 45	150	Slight. Initial ground motion towards West and rarefaction.
			iS	46 04		Slight, distant.
	Tocklai	E	eP	09 46 31		
	Chatra	ZN	P	09 46 54	670	Slight.
		N	S	48 04		
24	Shillong	Z	iP	10 10 40	160	Slight.
			iS	11 00		
24	Shillong	Z	eP	10 18 32	150	Slight.
			iS	18 51		
24	Shillong	Z	eP	10 34 17	160	Slight.
			iS	34 37		
24	Shillong	Z	iP	10 55 29	160	Slight.
			iS	55 49		
24	Chatra	Z	iP	12 26 39	630	Slight, rarefaction.
			S	27 45		
24	Dehra Dun	NE	e	12 50 20		Tremor.
24	New Delhi	Z	iP	12 56 17		Slight, compression.
24	Shillong	Z	eP	12 59 25	160	Slight.
			iS	59 45		
24	New Delhi	Z	iP	13 16 08		Slight.
			i	16 36		
24	Poona	Z	eP	13 55 47		Tremor.
24	Shillong	Z	iP	14 04 47		Slight, near.
	Tocklai	E	eP	14 05 01		Slight, near.
24	Shillong	Z	eP	14 13 20	150	Slight.
			eS	13 39		
24	Shillong	Z	e	14 40 44		Slight, distant.
			e	41 02		
			e	41 42		
24	New Delhi	Z	eP	14 45 12		Slight, compression.
	Shillong	Z	iP	14 46 02		Slight, distant, rarefaction.
24	Shillong	Z	iP	15 05 04		Slight, near.
24	New Delhi	Z	iP	15 11 41	950	Slight, rarefaction.
			iS	13 19		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
December, 1961.						
24	Shillong	Z	eP iS	15 43 55 44 15	160	Slight.
24	Hyderabad	E	M	15 55 07		Period = 24 secs. Gr. dis. = 8 U.
24	Shillong	Z	eP eS	16 15 55 16 18	190	Slight.
24	New Delhi	Z	iP	16 32 17		Slight, rarefaction
24	Shillong	Z	iP	16 44 31		Slight, distant, compression.
	New Delhi	Z	iP	16 46 10		Tremor, compression
24	New Delhi	Z	iP	17 09 33		Slight, compression
24	Dehra Dun	NE	e i	17 25 58 26 20		Slight.
	New Delhi	Z	iPg iSg	17 25 59 26 09	90	Slight, rarefaction
	Bokaro	E	e i	17 27 33 28 59		Tremor.
	Shillong	Z	eP e	17 27 35 29 25		Slight, distant.
	Poona	Z	iP i	17 28 03 31 56		Slight.
	Visakhapatnam	NE	e iS	17 30 03 31 23		Slight.
	Bombay	NE	e	17 31 43		Slight.
	Madras	E	e e e	17 31 46 33 31 33 44		Slight.
24	Chatra	Z	iPg Sg	17 47 20 47 28	70	Slight.
24	New Delhi	Z	iP i	18 03 08 03 35		Slight, compression
24	Shillong	Z	e	19 23 30		Slight, distant.
	Chatra	Z	P	19 24 01		Slight.
24	Chatra	Z	P	20 38 23		Slight.
25	Poona	Z	iP	00 02 57		Slight.
	Madras	E	e e	00 02 57 03 19		Slight.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
December, 1961.						
25	New Delhi	Z	iP	00 03 10		Slight, compression.
	Shillong	Z	e	00 03 19		Slight, distant.
25	Shillong	Z	eP	00 35 31		Slight, near.
25	Hyderabad	E	M	01 04 55		Period = 18 secs. Gr. dis. = 6 u.
25	Shillong	Z	iP	02 51 50		Slight, near, compression.
25	Shillong	Z	iP	08 03 38		Slight, near, compression.
25	Epc:- 3.7° S, 127.7° E Ceram. h = 47 Km. - H = 08 h 00 m 59.3 s (USCGS).					
	Shillong	Z NE	iP S	08 09 17 15 58	5030	Slight, rarefaction.
	Tocklai	E	eP	08 09 19		Slight, distant.
	Visakhapatnam	NE	iP PP eS	08 09 43 11 41 16 45	5410	Moderate. Initial ground motion toward North and West.
	Chatra	Z NE	iP eS	08 09 50 16 58	5510	Slight, compression.
	Madras	E	iP PP e i	08 09 53 11 55 13 13 17 33		Moderate. Initial ground motion towards West.
	Poona	Z	iP	08 10 46		Slight, rarefaction.
	New Delhi	Z	iP	08 10 50		Slight, compression.
	Bombay	E NE E	e e e	08 10 52 18 54 30 36		Slight.
	Dehra Dun	NE	e e	08 10 54 18 58		Slight.
25	Shillong	Z	iP	08 21 07		Slight, distant, compression.
	Chatra	Z	e	08 21 41		Slight, distant.
	Poona	Z	iP	08 22 44		Tremor, rarefaction.
	New Delhi	Z	iP	08 22 46		Slight, rarefaction.
25	Bokaro	NE	iP	08 46 04		Slight.
25	Epc:- 3.7° S, 127.7° E Ceram Sea. h = 54 Km. - H = 09 h 09 m 07.4 s (USCGS).					

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
25	Shillong	Z	iP	09 17 25		Slight, distant, rarefaction.
	Visakhapatnam	NE	eP e	09 17 52 19 50		Slight. Initial ground motion towards North and West.
	Poona	Z	eP	09 18 46		Tremor.
	New Delhi	Z	iP	09 18 50		Slight, compression.
	Bombay	E NE	e e	09 19 07 27 06		Slight.
25	Shillong	Z	iP	09 22 30		Slight, distant, rarefaction.
	Poona	Z	eP	09 23 46		Tremor.
	New Delhi	Z	iP	09 24 03		Slight, compression.
25	New Delhi	Z	iP	09 31 17		Slight, rarefaction.
25	New Delhi	Z	iP	09 41 14		Slight, rarefaction.
25	Epc:- 26.9° N, 90.1° E Bhutan-India Border. h = 46 Km. -H= 11 h 19 m 11.9 s (USCGS). -H= 11 h 19 m 10.0 s (SHILLONG).					
	Shillong	Z NE	iP iS	11 19 44 20 11	220	Slight, rarefaction.
	Chatra	ZN N	ePn P* PP Pg PPP LR Sn S* SS Sg SSS	11 19 59 20 05 20 07 20 12 20 13 20 38 20 40 20 49 20 51 20 56 21 01	380	Moderate.
	Tocklai	E	eP i i	11 20 07 20 17 20 46		Slight, near.
	Calcutta	NE	eP eS M	11 20 26 21 25 21 39	550	Moderate.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
25	Bokaro	NE	eP PP e e iS SS SSS	11 20 30 20 37 21 15 21 29 21 37 21 55 22 05	630	Slight.
	Visakhapatnam	NE	eP PP eS	11 21 53 22 07 23 51	1150	Slight.
	New Delhi	Z	iP iS	11 21 56 24 02	1230	Slight, compression.
	Madras	E	eP iS M	11 23 07 26 12 28 20	1840	Slight.
	Poona	Z N	eP eS M	11 23 11 26 17 28 30	1860	Slight.
	Dehra Dun	NE	e	11 23 48		Slight.
	Bombay	NE	e e	11 26 54 28 29		Slight.
25	Shillong	Z	iP	12 28 19		Slight, distant, compression.
25	Poona	Z	eP	21 25 45		Tremor.
25	Epc:- 39.4° N, 76.9° E Sinkiang Province China. h = 167 Km. -H= 21 h 51 m 06.9 s (USCGS).					
	New Delhi	Z	iP eS	21 53 34 55 38	1210	Slight, compression.
	Dehra Dun	NE N	e i e M	21 54 08 56 18 56 48 57 46		Slight.
	Chatra	Z	eP eS	21 54 27 57 11	1620	Slight.
	Shillong	Z	iP	21 55 14		Slight, distant, compression.
	Poona	Z	eP	21 58 45		Slight.
	Bombay	NE	e e	21 59 47 22 02 17		Slight.
25	Madras	E	e	22 05 19		Slight.
25	New Delhi	Z	iP	22 25 36		Slight, rarefaction.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
25	Shillong	Z	iP	22 32 14		Slight, distant, compression.
	Chatra	Z	eP	22 32 41		Slight, distant.
	Poona	Z	eP	22 32 45		Tremor.
	New Delhi	Z	iP	22 33 34		Slight, rarefaction.
25	New Delhi	Z	iP	23 44 30		Slight, rarefaction.
25	New Delhi	Z	iP	23 46 12		Slight, rarefaction.
25	Chatra	Z	iP	23 53 44		Slight, distant, rarefaction.
	New Delhi	Z	iP	23 54 41		Slight, rarefaction.
26	Shillong	Z	iP	01 09 46		Slight, distant, compression.
26	Epc:- 5.5° S, 110.7° E Java Sea. h= 566 Km. -H= 04 h 24 m 55.4 s (USCGS).					
	Visakhapatnam	NE E	iP PP e	04 31 11 32 45 34 45	3900	Moderate. Initial ground motion towards South and East.
		NE E	iS SSS	36 07 40 24		
	Madras	E	iP PP e e iS e LQ LR	04 31 11 32 02 32 18 34 36 36 07 36 19 37 30 38 56	3900	Moderate. Initial ground motion towards East.
	Shillong	ZNE	iP pP iS LR	04 31 15 32 55 36 15 42 39	4030	Slight, initial ground movement towards East and rarefaction.
	Bokaro	E	eP iS sS LR M	04 31 31 36 45 39 50 40 08 43 09	4220	Slight.
	Calcutta	E	e i e	04 31 33 36 11 36 31		Slight.
	Chatra	Z	iP i iS e i	04 31 44 33 38 37 07 37 32 40 50	4390	

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.	
December, 1961.							
26	Hyderabad	NE	iP	04 31 53		Slight. Initial ground motion towards South and East. Period=9sec. Gr. dis=4 μ.	
		N	e LR M	35 58 39 50 42 02			
	Poona	Z E N	iP iS e LQ e e M	04 32 14 38 04 38 11 40 36 41 02 42 09 45 24	4860		Moderate.
	Bombay	NE E NE E	iP pP PPP e e e iS i e e sS e e e	04 32 21 34 00 34 22 34 56 36 53 38 17 38 37 40 39 41 17 41 47 42 05 43 53 44 53	4980		Slight.
	New Delhi	ZE Z	iP pP sP	04 32 39 34 19 35 15	5200	Moderate. Initial ground motion towards East and rarefaction.	
		ZE E	iS e e	38 48 39 00 41 33			
	Dehra Dun	Z N	eP pP iS e e SS LR M	04 32 48 34 25 38 59 41 38 42 11 42 34 44 15 47 57	5230	Slight.	
26	New Delhi	Z	iP	06 29 43		Slight, rarefaction.	
	Chatra	Z	eP	06 29 57		Slight, distant.	
	Shillong	ZE	iP	06 30 04		Slight, distant, compression.	
	Bombay	NE E	e e e	06 37 58 38 28 45 53		Slight, distant.	
26	Shillong	Z	iP	06 41 08		Slight, distant, compression.	
	Poona	Z	iP	06 42 07		Tremor, rarefaction.	
	New Delhi	Z	iP i	06 42 32 48 41		Slight, rarefaction.	

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
26	Shillong	ZE	eP	06 46 02		Slight, distant.
26	Hyderabad	E	M	07 46 20		Period = 24 secs. Gr. dis = 10 u.
26	Chatra	N	eP	07 46 56		Slight, distant.
26	Shillong	Z	eP	08 09 41		Slight.
26	Shillong	Z	eP	08 28 10		Slight.
26	Shillong	Z	eP	13 02 03		Slight, distant.
26	Chatra	Z	eP	13 02 07		Slight.
26	Chatra	Z	eP	15 33 20		Slight.
26	Tocklai	E	ePg Sg	17 34 14 34 24	90	Slight.
	Shillong	ZE	iP PP/P*	17 34 44 34 51	530	Moderate, rarefaction.
		Z	PPP Pg LQ S/LR SS/S* SSS/Sg	34 57 35 03 35 25 35 36 35 47 35 58		
	Chatra	Z	e	17 35 39		Slight.
27	New Delhi	Z	iP	02 35 34		Slight, compression.
27	New Delhi	Z	iP	03 11 25		Slight, compression.
27	Shillong	Z	iP Pg S	03 19 52 19 54 20 20	240	Slight, compression.
27	Shillong	ZE	eP S	07 40 44 41 14	250	Slight.
	Chatra	Z ZN	eP eS	07 41 37 42 37	550	Slight.
27	Shillong	Z	iP	10 43 04		Slight, distant, rarefaction.
27	Chatra	Z ZN	ePg Sg S* S	11 33 27 33 39 33 40 33 43	110	Slight.
27	Shillong	Z	eP	11 35 31		Slight, distant.
27	Shillong	Z	ePg Sg	11 48 56 49 00	30	Slight, tremor.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
December, 1961.						
27	Shillong	Z	ePg Sg SS	14 55 25 55 41 55 54	130	Slight.
27	Poona	Z	iP	16 59 19		Tremor, rarefaction.
27	Shillong	Z	iP	19 14 37		Slight, distant, compression.
27	Shillong	Z	iP Sg	20 11 19 11 39	170	Slight, compression.
27	Shillong	Z	iP iS	22 07 36 08 07	280	Slight, rarefaction.
27	Shillong	Z	iP	22 51 56		Slight, distant, compression.
	Chatra	Z	eP i	22 52 02 52 03		Slight, distant.
27	Epc:- 41.2° S, 175.7° E Near Coast of North Island, New Zealand. h = 57 Km. -H= 23 h 48 m 01.3 s (USCGS). Mag:- 6 ³ / ₄ (Pas), 6-6 ¹ / ₄ (Pal).					
	Shillong	Z ZNE NE	iP PP iSKS e	00 01 53 06 13 12 33 12 57	11220	Rarefaction.
	Madras	E	e e e	00 05 09 12 43 15 24		Distant,
	Chatra	Z NE	e i	00 06 15 12 56		
	Calcutta	E	e e e	00 06 23 12 37 12 58		
	Bokaro	NE	e e	00 06 24 12 49		Distant,
	Poona	Z	eP	00 07 09		
28	Bombay	E NE E NE E N	e e e e M M	00 07 10 09 38 13 14 14 10 17 00 49 44 01 02 31		Period = 19 secs. Gr. dis = 11 u. Period = 15 secs. Gr. dis = 3 u.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
28	New Delhi	ZE	eP i i e i e	00 07 28 07 34 13 38 17 16 17 22 18 32		
	Dehra Dun	NE	e i i	00 07 55 13 31 17 32		
	Kodaikanal	E	e	00 11 47		
	Hyderabad	NE	e e	00 12 58 35 20		
		N	M	43 53		Period=24sec. Gr. dis = 26 μ.
		E	M	43 55		Period = 21 sec. Gr. dis. = 10 μ.
28	New Delhi	Z	iP iS	09 11 24 12 58	910	Slight, rarefaction.
	Dehra Dun	NE	e	09 13 16		Slight.
	Bombay	NE	e	09 15 44		Tremor.
28	Dehra Dun	NE	e	14 32 45		Tremor.
	New Delhi	Z	iP	14 32 49		Slight, compression.
28	Chatra	Z	eP	17 29 16		Slight, distant.
	New Delhi	Z	iP	17 30 14		
28	New Delhi	Z	eP	22 07 11		Slight, distant.
29	Chatra	Z NE	iP e	00 07 30 18 53		Slight, distant, rarefaction.
	Shillong	Z	eP	00 08 07		Slight, distant
29	Bombay	NE	e e	00 19 53 20 41		Slight.
29	Shillong	Z	eP iSg	00 44 27 44 43	130	Slight.
29	Shillong	Z	e	02 49 21		Slight, distant.
29	Shillong	Z	e	05 34 47		Slight, distant.
29	Shillong	Z	e	08 08 21		Slight, distant.
	New Delhi	Z	iP	08 09 31		Slight, compression.
29	Shillong	Z	iP	10 11 35		Slight, distant, compression.

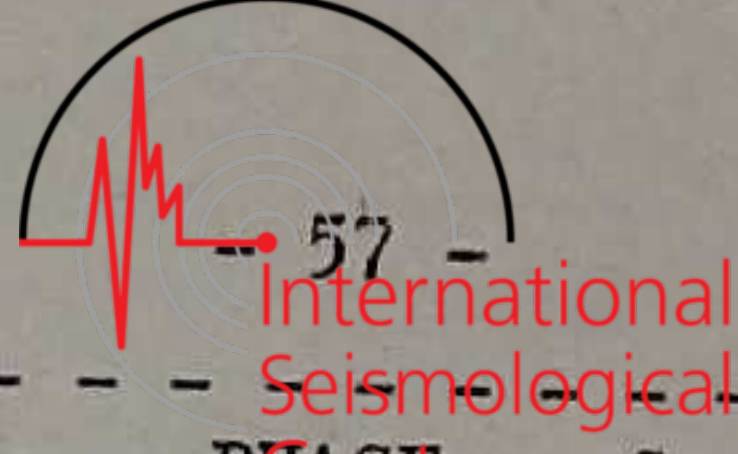
DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
29	Chatra	Z	iP	10 12 02		Slight, distant, compression.
	New Delhi	Z	iP	10 12 51		Slight, compression.
	Poona	Z	iP	10 12 57		Tremor, compression.
29	New Delhi	Z	eP	15 12 41		Slight, compression.
	Shillong	Z	e	15 12 50		Slight, distant.
	Poona	Z	iP	15 12 52		Tremor, rarefaction.
29	New Delhi	Z	iP	15 31 46		Slight, compression.
29	Shillong	Z	e	16 00 37		Slight, distant.
29	Shillong	Z	eP	16 29 43		Slight, near.
29	Shillong	Z	e	19 44 16		Slight, distant.
29	Shillong	Z	e	21 45 30		Slight, distant.
29	Shillong	Z	e	22 13 12		Slight, distant.
30	Shillong	Z	e	00 04 49		Slight, distant.
30	Epc:- 52.3° N, 177.7° E Rat Islands, Aleutian Islands. h = 52 Km. -H= 00 h 39 m 24.1 s (USCGS). Mag:- 6 $\frac{3}{4}$ (Pas), 6 $\frac{1}{4}$ (Berk), 7 (Pal).					
	Shillong	ZNE N NE N	eP PP iS SKS SS SSS LQ LR Mn	00 50 19 52 51 59 17 01 00 15 03 51 06 50 09 54 11 41 16 -	7530	Compression. Period = 17 secs. Gr. dis = 55 μ.
	Dehra Dun	NE N	eP e PPP iS e SSS LQ LR M	00 50 52 53 57 55 22 01 00 13 04 23 08 07 09 07 12 02 17 28	8000	Period = 16 secs. Gr. dis = 23 μ.
	Calcutta	E	eP PP PPP iS e e LQ Mn	00 50 54 53 42 55 18 01 00 15 00 54 04 59 09 50 25 -	8000	Period=15sec. Gr. dis = 54 μ.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
30	Bokaro	NE E NE E NE E	iP PcP PP PPP S PS PPS i SS i SSS LQ LR M	00 50 55 51 07 53 39 55 18 01 00 21 00 52 01 15 02 26 05 08 07 34 08 24 10 29 13 30 17 48	8090	
	New Delhi	ZNE Z ZNE E	eP PcP e iS i SKS PS PPS SS SSS LQ LR	00 50 58 51 06 54 01 01 00 25 00 35 00 46 01 00 01 18 05 28 08 58 10 24 13 22	8110	Compression.
	Port Blair	E	e iS	00 51 50 01 01 16		
	Hyderabad	NE E NE N E	iP iS ScS PS SS SSS LQ LR M M	00 51 51 01 02 01 02 11 02 52 06 52 10 24 13 50 17 38 22 45 22 48	9010	Initial ground motion towards North and East. Period = 15 secs. Gr. dis = 28 μ. Period = 15 sec. Gr. dis = 25 μ.
	Poona	Z N E N	iP PP PPP iS ScS PS PPS SS	00 51 52 55 08 57 05 01 02 13 02 26 03 06 03 21 07 35	9260	
	Bombay	NE N	eP e SKKS eS e PPS M	00 51 55 52 17 01 02 13 02 20 02 55 03 35 26 48	9350	Period = 17 secs. Gr. dis = 56 μ.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
30	Madras	E	iP PcP PP PPP iSKS S e e PPS e e LQ LR M	00 52 06 52 13 55 11 57 07 01 02 22 02 35 02 47 03 14 03 35 07 47 11 15 14 25 18 21 25 12	9440	Moderate. Initial ground motion towards East.
30	Kodaikanal	E	iP e LR M	01 03 02 13 17 28 02 34 47		Initial ground motion towards West.
30	Shillong	Z	e	01 18 42		Slight, distant.
30	New Delhi	Z	iP	04 06 12		Tremor, rarefaction.
30	New Delhi	Z	iP	06 10 21		Slight, rarefaction.
30	Epc:- 39.7° N, 77.7° E Sinkiang Province, China. h = 35 Km. -H= 07 h 08 m 29.1 s (USCGS).					
	Dehra Dun	NE N	eP i eS e SS	07 10 57 12 33 12 44 12 46 12 58	1040	Slight.
	New Delhi	ZNE E ZNE E ZE	eP PP LQ i iS SS LR SSS i M	07 11 13 11 21 13 04 13 11 13 14 13 26 13 30 13 44 13 51 14 33	1180	Moderate.
	Chatra	Z ZNE Z N E	eP PP PPP eS SS S* Mn Mn	07 12 02 12 13 12 21 14 42 14 56 15 38 19 - 19 -	1590	Moderate. Period = 8 secs. Gr. dis = 7 μ. Period = 8 secs. Gr. dis = 11 μ.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
30	Bokaro	E	iP iS SS SSS Lr M	07 12 38 15 56 16 17 16 31 16 45 18 15	1990	Slight. Initial ground motion towards West.
	Shillong	ZE NE E	eP iS SS SSS	07 12 47 16 18 16 41 16 56	2130	Slight.
	Bombay	NE E NE E	eP LQ eS SSS M	07 13 20 17 07 17 23 19 24 22 35	2490	Slight. Period = 7 secs. Gr. dis = 4 μ. Period = 7 sec. Gr. dis = 5 μ.
	Poona	N Z E N E	M iP PcP iS LQ SS SSS LR ScS, M	23 04 07 13 21 17 15 17 28 17 51 18 13 18 22 18 51 20 46	2550	Slight.
	Hyderabad	NE E E LQ LR N M E	eP e e e LQ LR M M	07 13 36 17 33 18 11 18 45 19 39 20 26 20 58 21 30		Moderate. Period = 9 secs. Gr. dis = 5 μ. Period = 9 secs. Gr. dis = 9 μ.
	Visakhapatnam	NE	e iS SS SSS LR M	07 13 37 17 39 18 25 18 45 19 04 20 57		Moderate.
	Sehore	NE E NE E	i e i e e	07 15 14 17 29 17 39 17 48 18 00		Moderate.
	Madras	E	e e e i e	07 16 35 18 33 20 27 22 58 23 33		Moderate.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
30	Kodaikanal	E	e e e M	07 21 02 23 17 23 47 24 38		Period = 10 secs. Gr. dis. = 8 u.
30	Shillong	Z	e	08 41 07		Slight, distant.
30	Shillong	Z	e	09 04 08		Slight, distant.
30	New Delhi	Z	iP	09 44 40		Slight, compression.
30	Chatra	Z	eP	10 15 45		Slight, distant.
30	Shillong	Z	eP	10 25 34		Slight, distant.
30	New Delhi	Z	iP	11 31 37		Tremor, compression.
30	New Delhi	Z	iP	13 03 29		Slight, rarefaction.
30	New Delhi	Z	iP	15 50 37		Tremor, rarefaction.
30	Shillong	Z	e	16 15 10		Slight, distant.
30	Chatra	Z	eP	16 52 59		Slight, distant.
30	New Delhi	Z	iP	16 53 28		Slight, compression.
30	Bombay	E NE	e E	17 04 51 29 -		Slight.
30	Shillong	Z	e	18 14 31		Slight, distant.
30	Shillong	Z	iP	18 25 38		Slight, distant, compression.
	Chatra	Z	iP	18 26 15		Slight, distant, compression.
	New Delhi	Z	iP	18 27 23		Slight, rarefaction.
30	Shillong	Z	e	19 18 50		Slight, distant.
30	Shillong	Z	eP e	19 19 50 19 56		Slight.
30	Shillong	Z	e	21 33 48		Tremor, distant.
30	New Delhi	Z	iP	22 12 05		Tremor, rarefaction.
30	Chatra	Z	eP	22 59 36		Slight, distant.
31	New Delhi	Z	iP	08 57 33		Slight, compression.
31	Epc:- 1.6° N, 127.3° E Halmehra. h= 140 Km. - H = 13 h 46 m 01.8 s (USCGS).					

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS.
December, 1961.						
31	Shillong	Z	iP	13 53 38		Slight, distant, rarefaction.
	Bokaro	E	iP i i	13 54 12 56 03 14 00 45		Slight.
	Chatra	Z NE	eP eS	13 54 14 14 00 48	4900	Slight, rarefaction.
	Visakhapatnam	NE	iP e	13 54 17 55 27		Slight. Initial ground motion towards South and East.
	Madras	E	iP PP iS PS PPS	13 54 30 56 17 14 01 18 01 25 01 32	5150	Slight. Initial ground motion towards East.
	New Delhi	Z	eP	13 55 19		Slight, rarefaction.
	Dehra Dun	NE	e i	13 55 28 14 02 49		Feeble.
31	Shillong	Z	eP	16 14 47		Slight, distant.
	Chatra	Z	eP	16 15 13		Slight, distant.
	New Delhi	Z	iP	16 16 08		Slight, compression.
31	Shillong	Z	eP	18 00 02		Slight, distant.
	Shillong	Z	e i	18 00 05 00 13		Slight, distant, compression.
31	Shillong	Z	e	20 19 01		Slight, distant.
31	Shillong	Z	iP	20 35 50		Slight, distant, rarefaction.

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Earthquake Reports
(Non Instrumental)

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

Place	Date in G.M.T.	Time in G.M.T.	Duration of shocks in secs.	Number of shocks.	Intensity in R.F. scale.	RKS.
Shillong	8	00 58	5	1	IV	
Rupsi (Goalpara)	18	00 35	15	2	V	
Jorhat	18	16 43	3	2	V	
Mukteswar	24	07 18	2	1	V	

Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	
Station : Shillong					December, 1961.					Component: E-W.
01	00	-	-	-	12	00	3	0.3	5.1	
	06	3	0.3	4.8		06	3	0.2	4.6	
	12	3	0.3	4.6		12	3	0.2	4.4	
	18	3	0.3	4.5		18	...	-	-	
02	00	3	0.3	4.5	13	00	0,0	-	-	
	06	3	0.2	4.2		06	3	0.2	4.4	
	12	3	0.3	3.7		12	3	0.2	4.6	
	18	3	0.2	4.5		18	3	0.2	4.7	
03	00	3	0.2	4.5	14	00	3	0.2	4.6	
	06	3	0.3	4.3		06	0,0	-	-	
	12	3	0.3	4.8		12	3	0.3	4.4	
	18	3	0.3	4.4		18	3	0.3	4.8	
04	00	3	0.3	4.9	15	00	3	0.3	5.1	
	06	3	0.4	4.8		06	3	0.2	4.8	
	12	3	0.3	4.8		12	3	0.2	4.8	
	18	3	0.3	4.8		18	3	0.2	4.3	
05	00	...	-	-	16	00	0,0	-	-	
	06	3	0.3	5.4		06	3	0.3	5.1	
	12	3	0.3	4.4		12	3	0.2	4.7	
	18	3	0.3	4.3		18	3	0.2	4.4	
06	00	3	0.3	4.6	17	00	3	0.2	4.7	
	06	...	-	-		06	0,0	-	-	
	12	3	0.5	5.0		12	3	0.2	4.6	
	18	...	-	-		18	3	0.2	4.4	
07	00	3	0.4	4.9	18	00	0,0	-	-	
	06	3	0.4	5.6		06	3	0.2	5.3	
	12	3	0.5	4.9		12	3	0.3	4.8	
	18	3	0.4	4.9		18	3	0.4	5.1	
08	00	3	0.4	4.9	19	00	3	0.4	5.4	
	06	3	0.5	5.2		06	3	0.4	5.6	
	12	3	0.3	5.6		12	3	0.3	4.8	
	18	3	0.5	5.4		18	3	0.3	4.8	
09	00	3	0.5	5.1	20	00	3	0.3	5.1	
	06	3	0.5	5.3		06	3	0.2	4.8	
	12	...	-	-		12	3	0.2	5.0	
	18	3	0.4	5.3		18	3	0.3	4.7	
10	00	3	0.4	5.4	21	00	3	0.3	5.4	
	06	3	0.3	5.0		06	3	0.4	5.4	
	12	3	0.3	5.6		12	3	0.4	4.8	
	18	3	0.3	5.2		18	3	0.4	4.7	
11	00	3	0.3	4.8	22	00	3	0.4	4.8	
	06	3	0.3	5.1		06	3	0.4	5.0	
	12	3	0.2	4.8		12	3	0.4	4.8	
	18	3	0.2	4.9		18	3	0.4	5.1	



Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.
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Station : Shillong					December, 1961.					Component: E-W.				
23	00	3	0.3	5.1	02	00	3	0.6	3.9					
	06	3	0.2	4.7		06	3	0.3	2.0					
	12	3	0.3	4.6		12	3	0.6	3.9					
	18	3	0.4	5.0		18	3	0.3	2.1					
24	00	3	0.3	4.6		12	3	0.7	3.8					
	06	3	0.3	5.1		18	3	0.3	2.0					
	12	3	0.4	4.8				0.7	3.8					
	18	3	0.4	4.8				0.4	2.1					
25	00	3	0.4	5.1	03	00	3	0.7	3.9					
	06	3	0.4	4.4		06	3	0.4	2.2					
	12	3	0.4	4.5		12	3	0.3	1.6					
	18	3	0.4	4.8		18	3	0.7	4.1					
26	00	3	0.4	4.6		12	3	0.5	2.0					
	06	3	0.4	4.3		18	3	0.6	4.0					
	12	3	0.4	4.6				0.3	2.3					
	18	3	0.3	4.8				0.6	4.2					
27	00	3	0.4	4.6	04	00	3	0.5	4.5					
	06	3	0.4	4.3		06	3	0.5	2.3					
	12	3	0.4	4.5		12	3	0.5	4.1					
	18	3	0.4	4.8		18	3	0.3	2.2					
28	00	3	0.4	4.8		12	3	0.5	4.5					
	06	3	0.4	4.8		18	3	0.3	3.0					
	12	3	0.4	5.4				0.5	4.8					
	18	3	0.5	5.1				0.3	2.0					
29	00	3	0.4	4.7	05	00	3	0.5	4.1					
	06	3	0.4	5.2		06	3	0.3	2.2					
	12	3	0.5	5.2		12	3	0.5	4.4					
	18	3	0.4	4.8		18	3	0.3	2.5					
30	00	3	0.4	4.5		12	3	0.5	4.4					
	06	3	0.3	4.6		18	3	0.3	2.5					
	12	3	0.3	4.8				0.5	4.2					
	18	3	0.3	4.4				0.3	2.0					
31	00	3	0.3	4.4	06	00	3	0.5	4.3					
	06	3	0.3	4.6		06	...	0.4	2.3					
	12	3	0.3	4.4		12	1	0.6	3.0					
	18	3	0.3	4.5		18	...	-	-					
						21	1	0.6	3.0					

Station : Bombay (Colaba)					December, 1961.					Component: E-W.				
01	00	3	0.5	4.4	07	00	1	0.5	3.0					
	06	3	0.4	2.3		06	1	0.8	2.8					
	12	3	0.6	4.2		09	1	0.7	2.8					
	18	3	0.3	1.8		12	1	0.7	3.0					
			0.5	4.0		18	3	0.6	3.9					
			0.3	1.7				0.4	2.0					
			0.5	4.1										
			0.3	2.0										

Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.
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Station : Bombay (Colaba)					December, 1961.					Component: E-W.				
08	00	3	0.7	4.7	15	00	3	0.4	5.1					
	06	3	0.7	2.5		06	3	0.4	2.8					
	12	3	0.6	5.0		12	...	0.5	5.2					
	18	3	0.4	2.8		18	3	0.4	3.0					
09	00	3	0.7	5.6		12	...	-	-					
	06	3	0.4	2.7		18	3	0.6	4.9					
	12	3	0.6	5.2				0.4	3.0					
	18	3	0.4	3.0				0.3	1.8					
10	00	...	-	-	16	00	3	0.5	4.6					
	06	3	0.5	4.8		06	...	-	-					
	12	3	0.4	3.0		12	...	-	-					
	18	3	0.5	4.8		18	3	0.5	4.7					
11	00	3	0.5	5.7		12	3	0.3	2.3					
	06	3	0.3	3.0		18	3	0.6	5.5					
	12	...	-	-				0.3	2.7					
	18	3	0.6	5.5				0.3	2.0					
12	00	...	-	-	17	00	3	0.5	5.1					
	06	3	0.5	4.8		06	3	0.5	3.0					
	12	3	0.4	3.0		12	3	0.5	4.8					
	18	3	0.5	4.8		18	3	0.4	3.0					
13	00	3	0.6	5.7		12	3	0.6	5.7					
	06	3	0.3	3.0		18	3	0.3	3.0					
	12	3	0.5	5.1				0.3	3.0					
	18	3	0.5	3.5				0.3	5.0					
14	00	3	0.6	5.1		06	3	0.5	4.6					
	06	3	0.3	2.7		12	3	0.3	3.0					
	12	3	0.4	4.6		18	3	0.5	4.6					
	18	3	0.3	2.5				0.3	3.0					
15	00	3	0.4	5.1		18	3	0.5	5.1					
	06	3	0.3	2.7				0.5	3.5					
	12	3	0.4	4.6				0.5	4.8					
	18	3	0.3	2.5				0.3	3.0					
16	00	3	0.6	5.1		18	3	0.5	4.8					
	06	3	0.3	2.7				0.3	3.0					
	12	3	0.4	4.6				0.3	5.0					
	18	3	0.3	2.5				0.3	2.5					
17	00	3	0.4	5.4		18	3	0.4	5.4					
	06	3	0.3	2.5				0.4	2.5					
	12	3	0.4	4.9				0.4	2.5					
	18	3	0.4	2.5				0.4	2.5					
18	00	3	0.5	5.6		19	00	0.6	5.3					
	06	3	0.3	3.5		06	...	0.3	2.5					
	12	3	0.5	5.2		12	...	-	-					
	18	3	0.4	1.8		18	...	-	-					
19	00	3	0.5	4.7		12	3	0.5	4.7					
	06	3	0.6	4.3		18	3	0.4	2.3					
	12	3	0.6	1.8				0.4	2.3					
	18	3	0.6	4.7				0.6	4.8					
20	00	3	0.5	5.4		19	00	0.6	5.3					
	06	3	0.3	2.3		06	...	0.3	2.5					
	12	3	0.6	4.7		12	...	-	-					
	18	3	0.4	3.0		18	...	-	-					
21	00	3	0.5	5.6		19	06	0.6	5.0					
	06	3	0.5	3.5		12	3	0.6	3.0					
	12	3	0.5	5.2		18	3	0.6	5.4					
	18	3	0.4	1.8				0.4	2.3					
22	00	3	0.5	4.7		20	00	0.6	2.3					
	06	3	0.5	2.3		06	...	-	-					
	12	3	0.3	4.9		12	...	-	-					
	18	3	0.5	1.7		18	...	-	-					
			0.3	2.0				0.4	1.7					

Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.
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Station : Bombay(Colaba)

December, 1961.

Component: E-W.

22	00	3	0.7	4.7	28	00	3	0.6	4.7
			0.3	2.6				0.4	2.1
	06	3	0.5	4.4		06	3	0.7	5.1
			0.3	2.0				0.5	2.3
	12	3	0.5	4.0		12	3	0.6	5.3
			0.3	2.5				0.7	2.6
	18	3	0.5	4.3		18	3	0.5	4.7
			0.4	1.8				0.5	2.5
23	00	3	0.5	4.1	29	00	3	0.5	5.1
			0.4	1.8				0.4	2.3
	06	3	0.5	4.1		06	3	0.5	5.0
			0.4	2.7				0.4	2.3
	12	3	0.5	4.1		12	3	0.5	4.8
			0.3	2.7				0.5	2.2
	18	2	0.5	4.2		18	3	0.5	4.8
								0.4	2.0
24	00	2	0.5	4.1	30	00	3	0.7	4.5
	06	3	0.5	4.3				0.3	2.0
			0.4	2.0		06	3	0.5	4.5
	12	3	0.5	4.0				0.3	2.5
			0.3	2.0		12	3	0.5	4.5
	18	3	0.7	4.2				0.4	2.5
			0.5	2.3		18	3	0.5	3.0
								0.3	1.7
25	00	3	0.6	4.0	31	00	3	0.5	3.0
			0.5	2.3				0.5	2.0
	06	3	0.7	4.2		03	1	0.7	2.6
			0.6	2.5				1.1	3.0
	12	3	0.7	4.2		06	1	1.1	3.0
			0.4	2.5				1.2	3.0
	18	3	0.5	4.8		09	1	1.2	3.0
			0.5	2.3				1.1	2.8
26	00	...	-	-		12	1	1.1	2.8
	06	3	0.6	4.2		15	1	1.0	3.0
			0.6	2.5		18	1	1.1	3.0
	12	3	0.6	4.3		21	1	1.4	3.0
			0.6	2.5					
	15	1	1.1	2.4					
	18	1	1.1	2.3					
	21	1	0.8	2.0					
27	00	3	0.6	4.4					
			0.5	2.0					
	06	3	0.6	4.4					
			0.5	2.0					
	09	1	0.8	2.5					
	12	1	1.2	2.4					
	15	1	1.0	2.3					
	18	3	0.5	4.6					
			0.7	2.0					

Station : Madras.

01	00	1	0.7	3.5
	03	1	0.6	3.1
	06	1	0.7	3.3
	12	1	0.6	3.3
	18	1	0.7	3.3
02	00	1	0.6	3.3
	03	1	0.7	3.3
	06	1	0.6	3.4
	12	1	0.6	3.3
	18	1	0.6	3.1



Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.
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Station : Madras.

December, 1961.

Component: E-W.

03	00	1	0.5	3.1	12	00	1	0.4	3.0
	03	1	0.5	3.1		03	3	0.3	2.9
	06	1	0.5	3.0		06	3	0.3	2.7
	12	1	0.5	3.1		12	1	0.4	2.8
	18	1	0.5	2.9		18	1	0.4	2.9
04	00	1	0.6	2.9	13	00	1	0.4	2.9
	03	1	0.5	2.9		03	1	0.4	2.8
	06	1	0.4	2.9		06	1	0.5	2.9
	12	1	0.5	2.9		12	1	0.5	2.9
	18	1	0.5	3.1		18	1	0.5	2.9
05	00	1	0.5	2.9	14	00	1	0.5	2.9
	03	1	0.4	2.9		03	1	0.4	2.8
	06	1	0.4	2.8		06	1	0.4	2.8
	12	1	0.5	3.0		12	1	0.4	2.8
	18	1	0.5	3.1		18	1	0.4	2.8
06	00	1	0.5	3.1	15	00	1	0.3	2.7
	03	1	0.6	3.1		03	1	0.4	2.8
	06	...	-	-		06	1	0.4	3.0
	12	1	0.6	3.1		12	1	0.4	2.9
	18	1	0.5	3.0		18	1	0.3	2.9
07	00	1	0.5	2.9	16	00	1	0.4	2.8
	03	1	0.4	3.0		03	1	0.4	2.9
	06	1	0.4	2.9		06	3	0.3	2.8
	12	1	0.4	2.9		12	3	0.4	2.7
	18	3	0.4	2.9		18	3	0.3	2.7
08	00	3	0.3	2.8	17	00	3	0.3	2.8
	03	3	0.4	2.8		03	3	0.3	2.7
	06	3	0.3	2.7		06	3	0.3	2.6
	12	3	0.4	2.7		12	3	0.3	2.7
	18	3	0.4	2.7		18	3	0.3	2.7
09	00	3	0.5	2.7	18	00	3	0.3	2.8
	03	3	0.4	2.8		03	3	0.3	2.8
	06	3	0.5	2.9		06	3	0.2	2.7
	12	...	-	-		12	3	0.2	2.8
	18	1	0.6	3.0		18	3	0.2	2.7
10	00	1	0.6	3.0	19	00	3	0.2	2.8
	03	1	0.5	3.0		03	3	0.2	2.8
	06	1	0.5	3.0		06	3	0.2	2.8
	12	1	0.6	2.9		12	3	0.3	2.7
	18	1	0.5	3.0		18	3	0.3	2.7
11	00	1	0.5	3.0	20	00	3	0.3	2.7
	03	1	0.4	2.9		03	3	0.4	2.8
	06	1	0.4	2.8		06	3	0.4	2.9
	12	1	0.4	2.9		12	3	0.4	2.8
	18	1	0.4	3.0		18	3	0.4	3.0

Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.
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Station: Madras. December, 1961. Component: E-W.

21	00	3	0.4	3.1	28	00	3	0.3	2.9
	03	3	0.1	1.5		03	3	0.4	3.4
		3	0.2	2.6			3	0.4	3.9
		3	0.4	3.6		06	3	0.4	2.8
	06	3	0.2	2.6			3	0.4	3.8
		3	0.4	3.5		12	3	0.1	1.7
	12	3	0.2	2.5			3	0.4	3.7
		3	0.4	3.7		18	3	0.1	1.5
	18	3	0.2	2.5			3	0.5	3.9
		3	0.4	3.7			3	0.2	2.6
							3	0.1	1.3
22	00	3	0.2	2.4	29	00	3	0.4	3.4
		3	0.3	3.4			3	0.2	2.3
	03	3	0.3	3.1		03	3	0.4	3.4
	06	...	-	-			3	0.3	2.5
	12	3	0.3	3.2		06	3	0.3	2.3
		3	0.2	2.5			3	0.4	3.5
	18	3	0.3	3.1		12	3	0.4	3.3
		3	0.3	2.6			3	0.2	2.4
							3	0.1	1.5
23	00	3	0.3	3.1	30	00	3	0.4	3.3
		3	0.2	2.0			3	0.1	1.5
	03	3	0.3	2.9		03	3	0.4	3.5
	06	3	0.3	2.7			3	0.1	1.8
	12	3	0.3	2.7					
	18	3	0.3	3.1		18	3	0.4	3.5
							3	0.1	1.7
24	00	3	0.3	3.2	31	00	3	0.4	3.3
	03	3	0.3	3.0		03	1	0.4	3.3
	06	3	0.2	2.7		06	1	0.5	3.3
	12	3	0.2	2.6		12	1	0.5	3.6
	18	3	0.3	3.1		18	1	0.4	3.2
25	00	3	0.3	3.1					
		3	0.2	1.9					
	03	...	-	-					
	06	3	0.3	2.3					
		3	0.5	3.7					
	12	3	0.4	2.7					
		3	0.4	3.8					
	18	3	0.4	2.7					
		3	0.4	3.7					
26	00	3	0.3	2.7					
	03	3	0.4	2.9					
	06	3	0.3	2.7					
	12	3	0.3	2.8					
	18	3	0.4	2.7					
		3	0.4	3.8					
27	00	3	0.3	2.6					
	03	3	0.3	2.9					
	06	...	-	-					
	12	3	0.3	2.8					
	18	3	0.3	2.8					
		3	0.4	3.6					

Date Hour GMT K Mean single amplitude in micron. Mean period in sec.

Station: Port Blair. December, 1961.

Component: E-W.

No Microseismic Movement



Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.
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Station: Visakhapatnam. December, 1961. Component: E-W.

01	00	2	0.2	2.6	12	00	...	-	-
	06	2	0.3	3.5		06	3	0.4	4.9
	12	2	0.3	3.4		12	3	0.3	4.9
	18	2	0.3	3.2		18	3	0.2	2.1
02	00	2	0.3	3.2	13	00	3	0.1	2.5
	06	2	0.3	3.3		06	3	0.1	2.9
	12	2	0.3	3.6		12	3	0.1	2.8
	18	2	0.2	2.8		18	0,0	-	-
03	00	0,0	-	-	14	00	0,0	-	-
	06	2	0.3	3.9		06	3	0.2	3.0
	12	2	0.3	4.0		12	3	0.2	4.2
	18	2	0.2	2.4		18	3	0.2	2.7
04	00	0,0	-	-	15	00	0,0	-	-
	06	2	0.2	3.0		06	1	0.3	4.7
	12	2	0.3	2.6		12	1	0.3	5.0
	18	2	0.2	2.8		18	1	0.3	4.1
05	00	0,0	-	-	16	00	3	0.1	2.6
	06	...	-	-		06	1	0.2	4.8
	12	3	0.3	3.7		12	1	0.3	4.8
	18	3	0.3	2.7		18	3	0.2	4.6
06	00	3	0.2	3.2	17	00	3	0.2	3.6
	06	...	-	-		06	3	0.3	4.8
	12	3	0.4	4.7		12	3	0.3	5.3
	18	3	0.2	2.9		18	3	0.2	4.4
07	00	0,0	-	-	18	00	0,0	-	-
	06	3	0.3	4.7		06	3	0.3	5.5
	12	...	-	-		12	3	0.4	4.9
	18	...	-	-		18	3	0.3	5.0
08	00	...	-	-	19	00	0,0	-	-
	06	1	0.5	5.4		06	3	0.2	4.8
	12	1	0.6	5.2		12	3	0.3	5.1
	18	1	0.6	5.0		18	3	0.2	4.2
09	00	0,0	-	-	20	00	0,0	-	-
	06	3	0.6	5.1		06	3	0.2	3.2
	12	...	-	-		12	3	0.2	2.6
	18	...	-	-		18	3	0.2	3.0
10	00	...	-	-	21	00	0,0	-	-
	06	3	0.3	3.8		06	3	0.2	4.7
	12	3	0.3	4.5		12	3	0.2	3.8
	18	3	0.3	3.0		18	3	0.2	3.6
11	00	...	-	-	22	00	0,0	-	-
	06	2	0.3	3.2		06	3	0.3	4.0
	12	2	0.3	4.1		12	3	0.2	3.7
	18	2	0.2	2.8		18	0,0	-	-

Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.
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Station : Visakhapatnam.

December, 1961.

Component: E-W.

23	00	0,0	-	-	03	00	0..	-	-
	06	3	0.2	4.6		06	0..	-	-
	12	3	0.2	4.2		12	0..	-	-
	18	0,0	-	-		18	0..	-	-
24	00	0,0	-	-	04	00	0..	-	-
	06	3	0.3	4.6		06	0..	-	-
	12	3	0.2	4.5		12	0..	-	-
	18	3	0.1	2.9		18	0..	-	-
25	00	0,0	-	-	05	00	0..	-	-
	06	3	0.3	4.2		06	0..	-	-
	12	3	0.1	2.8		12	0,0	-	-
						18	0,0	-	-
26	00	0,0	-	-	06	00	0..	-	-
	06	3	0.2	3.2		06	0..	-	-
	12	3	0.3	4.1		12	0..	-	-
	18	3	0.1	2.9		18	0..	-	-
27	00	0,0	-	-	07	00	0..	-	-
	06	3	0.2	4.4		06	0..	-	-
	12	3	0.2	3.8		12	0..	-	-
	18	0,0	-	-		18	0..	-	-
28	00	0,0	-	-	08	00	0..	-	-
	06	3	0.3	4.6		06	0,0	-	-
	12	3	0.2	4.2		12	3	0.3	2.4
	18	0,0	-	-		18	3	0.4	2.6
29	00	0,0	-	-	09	00	0,0	-	-
	06	3	0.4	4.4		06	0,0	-	-
	12	3	0.3	4.5		12	0,0	-	-
	18	0,0	-	-		18	0,0	-	-
30	00	0,0	-	-	10	00	0,0	-	-
	06	3	0.2	4.0		06	0,0	-	-
	12	3	0.2	4.3		12	0,0	-	-
	18	3	0.1	2.9		18	0,0	-	-
31	00	0,0	-	-	11	00	0,0	-	-
	06	3	0.2	4.3		06	0,0	-	-
	12	3	0.2	4.1		12	0,0	-	-
	18	3	0.1	3.2		18	0,0	-	-

Station : Bokaro.

01	00	0..	-	-	12	00	0,0	-	-
	06	0..	-	-		06	0..	-	-
	12	0..	-	-		12	0..	-	-
	18	0..	-	-		18	0..	-	-
02	00	0..	-	-	13	00	0..	-	-
	06	0..	-	-		06	0..	-	-
	12	0..	-	-		12	0..	-	-
	18	0..	-	-		18	0..	-	-



Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.	Date	Hour GMT	K	Mean single amplitude in m.m.	Mean period in sec.
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Station : Bokaro .

December, 1961.

Component: E-W.

14	00	0..	-	-	25	00	0,0	-	-
	06	0..	-	-		06	0,0	-	-
	12	0..	-	-		12	0,0	-	-
	18	0..	-	-		18	0,0	-	-
15	00	0..	-	-	26	00	0,0	-	-
	06	0..	-	-		06	0..	-	-
	12	0..	-	-		12	0..	-	-
	18	0..	-	-		18	0..	-	-
16	00	0..	-	-	27	00	0..	-	-
	06	0..	-	-		06	0..	-	-
	12	0..	-	-		12	0..	-	-
	18	0..	-	-		18	0..	-	-
17	00	0..	-	-	28	00	0..	-	-
	06	0..	-	-		06	0..	-	-
	12	0..	-	-		12	0..	-	-
	18	0..	-	-		18	0..	-	-
18	00	0..	-	-	29	00	0..	-	-
	06	0..	-	-		06	0..	-	-
	12	0..	-	-		12	0..	-	-
	18	0..	-	-		18	0..	-	-
19	00	0..	-	-	30	00	0..	-	-
	06	0,0	-	-		06	0..	-	-
	12	0,0	-	-		12	0..	-	-
	18	0,0	-	-		18	0..	-	-
20	00	0,0	-	-	31	00	0..	-	-
	06	0,0	-	-		06	0..	-	-
	12	0,0	-	-		12	0..	-	-
	18	0,0	-	-		18	0..	-	-
21	00	0,0	-	-					
	06	0,0	-	-					
	12	0,0	-	-					
	18	0,0	-	-					
22	00	0,0	-	-					
	06	0,0	-	-					
	12	0,0	-	-					
	18	0,0	-	-					
23	00	0,0	-	-					
	06	0,0	-	-					
	12	0,0	-	-					
	18	0,0	-	-					
24	00	0..	-	-					
	06	0..	-	-					
	12	0,0	-	-					
	18	0..	-	-					