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List of Seismograph Stations with their Instruments and Constants

STATION	LATITUDE	LONGITUDE	HEIGHT a. s. l. (Metres)	LITHOGRAPHIC FOUNDATION	INSTRUMENT	COMPT.	PERIOD IN SECS	STATIC MAGNI- FICATION	DAMPING RATIO	PAPER SPEED mm/min.
BOMBAY	18°54'N	72°49'E	6	Deccan Trap	Milne-Shaw Milne-Shaw Sprengnether	N E E	12 12 To = Tg = 7 secs	350 350	13:1 23:1	16 8 30
BOKARO	23°50'N	85°48'E	-	Rock	Milne-Shaw Milne-Shaw Wood-Anderson Wood-Anderson	N E E N	12 12 0.8 0.8	250 250 950 1000	20:1 20:1 h = 0.8 h = 0.8	16 16 60 60
CALCUTTA	22°32'N	88°22'E	(1) 7 (2) 6	(Milne-Shaw) (Omori-Ewing) Alluvium	Milne-Shaw Wood-Anderson Omori-Ewing Omori-Ewing	E N N E	12 2 16 21	250 870 32 30	20:1 Critical -	8 30 25.4 25.4
CHATRA	26°50'N	87°10'E	161	Sand Stone	Milne-Shaw Wood-Anderson Benioff Wenner-Accelerograph	E N Z ZNE	12 1 To = 0.72 Tg = 0.45 secs.	250 1000	20:1 30:1 Critical	16 60 60 -
COLOMBO	06°54'N	79°52'E	7	Beach Sand	Milne-Shaw	E	12	250	20:1	-
DEHRA DUN	30°19'N	78°02'E	682	Gravel	Wood-Anderson Wood-Anderson Milne-Shaw Milne-Shaw	N E N E	0.8 0.8 12 12	950 850 250 250	Critical Critical 20:1 20:1	60 60 8 8
HYDERABAD	17°26'N	78°27'E	535	Granite	Milne-Shaw Milne-Shaw	E N	12 12	250 250	20:1 20:1	8 8
KODAIKANAL	10°14'N	77°28'E	2346	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 Wood-Anderson Milne-Shaw	Z E N	To=Tg=1.6 4 12	Critical 1000 280	Critical 20:1 20:1	30 16 8
PORT BLAIR	11°49'N	92°43'E	-	-	Wood-Anderson Wood-Anderson Milne-Shaw	N E N	2 0.8 12	1000 1000 350	20:1 66:1 20:1	30 30 8
SHILLONG	25°34'N	91°53'E	1600	Quartzite Sand Stone (Shillong Quartzite)	Wood-Anderson Wood-Anderson Milne-Shaw Benioff Sprengnether Wenner Accelerograph	N E N Z E ZNE	0.8 0.8 12 To = 1.0 Tg = 0.18 To = Tg = 5.5 -	1000 1000 250 -	h = 0 h = 0.8 h = 0.8 20:1 Critical Critical	30 30 8 60 30 -
TOCKLAI	28°45'N	94°45'E	-	Alluvium	Wood-Anderson	E	0.8	970	h = 0.8	60
VIZIANAGRAM	18°07'N	83°27'E	-	-	Wood-Anderson Wood-Anderson	E N	0.8 2	1000 1000	h = 0.8 20:1	30 30

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
01	Shillong	Z	iP	08 18 05		Slight, distant. Rarefaction.
01	Shillong	Z	e	11 26 52		Slight, near.
01	Epc:- 40°N, 78°E China -H= 15h 18m 20s (Shillong). 39.6°N, 77.7°E -H= 15h 18m 22.8s -h= 21km Mag: 6 (Pal) 6 ³ / ₄ (Shillong).					
	Dehra Dun	NE N	eP PP PPP P* Pg iS SS LR SSS Sg, M	15 20 45	1020	
	Chatra	ZNE NE	iP PP PPP LQ S SSS LR M M	15 21 56	1690	Compression.
	Sehore	N NE	M M eP PP PPP iS SS SSS LR M	15 22 17	1800	Period= 11 sec. Gr.dis= 277 μ
	Bokaro	NE E	iP PP PPP i S SSS M	15 22 24		Initial ground movement North & West.
	Shillong	Z NE E	iP i PP iS SS SSS M	15 22 38	2040	Compression.
	Tocklai	E	eP PP PPP iS LQ SS SSS LR	15 22 49	2230	

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
01	Calcutta	E	iP	15 22 53	2280	Period= 11 sec., Gr. dis= 177 μ
			eS	26 38		
			M	31 31		
	Bombay	NE	eP	15 23 13	2450	Period= 8 sec., Gr. dis= 78 μ Period= 8 sec., Gr. dis= 122 μ Rarefaction.
		N	PP	23 33		
		NE	PPP	23 45		
		N	e	24 55		
		NE	PcP	27 00		
			iS	27 12		
		N	SSS	27 47		
			LR	28 12		
		E	M	32 45		
		N	M	32 53		
	Poona	ZNE	iP	15 23 17	2600	Rarefaction.
		N	PP	23 52		
			PcP	26 43		
			i	27 27		
			LQ	27 59		
			LR	29 09		
			M	31 06		
	Vizianagram	EN	iP	15 23 20	2550	Initial ground motion South
		N	PP	23 38		
			PPP	23 41		
			iS	27 27		
			LQ	27 45		
			SS	28 25		
			SSS	28 32		
			LR	28 46		
	Hyderabad	NE	iP	15 23 26	2610	Period= 9 sec, Gr. dis= 68 μ Period= 8 sec., Gr. dis= 73 μ
			PP	24 10		
			PPP	24 32		
		N	PcP	26 35		
		NE	iS	27 38		
		N	LQ	28 11		
			SS	28 25		
			SSS	29 08		
		NE	LR	29 43		
		E	M	31 01		
		N	M	31 38		
	Madras	E	iP	15 24 08	3050	Initial ground motion East.
			PP	24 55		
			PPP	25 07		
			iS	28 48		
			i	29 27		
			LQ	29 52		
			SS	30 05		
			SSS	30 22		
			LR	31 11		
			i	32 05		
			M	33 20		
	Kodaikanal	E	eP	15 24 29	3180	Period= 10 sec., Gr. dis.= 21
			iS	29 17		
			SS	30 47		
			SSS	31 14		
			LR	32 14		
			M	34 44		



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
01	Port Blair	E	iP	15 24 47	3500	
			PP	25 54		
			PPP	26 01		
			PcP	27 47		
			iS	29 56		
			M	36 40		
	Colombo	N	P	15 25 03	3790	
			S	30 29		
			SS	32 03		
			L	36 17		
			M	36 49		
01	Shillong	Z	iP	15 57 58		Slight, near, Compression.
01	Shillong	Z	eP	21 32 08		Slight, distant.
02	Shillong	Z	e	02 39 49		Slight, near.
			i	40 18		
02	Shillong	Z	e	02 50 26		Slight, near.
02	Shillong	Z	e	03 49 50		Slight, near.
02	Shillong	Z	iPg	08 13 12		Slight, local
02	Shillong	Z	iP	13 06 21		Slight, distant. Compression.
02	Chatra	Z	eP	13 33 12		Feeble, distant.
02	Shillong	Z	ePg	14 00 02	130	Slight.
			iSg	00 17		
02	Shillong	Z	eP	16 53 15		Slight, distant.
02	Shillong	Z	iP	17 26 16		Slight, distant. Compression.
02	Shillong	Z	iP	18 55 49		Slight, distant. Compression.
03	Chatra	Z	iP	01 21 29		Very feeble. Rarefaction.
03	Shillong	Z	iP	01 29 47		Slight, distant. Compression.
03	Shillong	Z	eP	05 30 57		Slight, near.
03	Shillong	Z	e	07 13 49		
03	Tocklai	E	i	10 11 34		Slight, near.
			i	11 50		
	Shillong	Z	iP	10 11 43	210	Slight, Rarefaction.
		E	iS	12 08		
			Sg	12 14		
	Chatra	Z	iP	10 12 43	750	Feeble.
			eS	14 01		
03	Shillong	Z	ePg	10 57 59	120	Slight.
			iSg	58 12		
03	Shillong	Z	ePg	15 14 43	130	Slight.
			iS	14 59		
03	Shillong	Z	eP	16 41 43		Slight, distant.
03	Shillong	Z	iP	16 46 41	130	Slight. Rarefaction.
			iS	46 58		
04	Dehra Dun	NE	e	01 20 15		Feeble
			i	21 59		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
04	Shillong	Z	eP	01 22 12		Slight, distant.
04	Poona	Z	iP	01 22 50		Slight.
04	Bokaro	E	iP	01 25 17		Slight, distant.
		N	eP	28 40		
		NE	e			
04	Bombay	E	e	01 26 50		Slight.
			e	29 02		
		N	e	29 28		
04	Dehra Dun	NE	e	01 28 24		Feeble.
			i	30 10		
04	Madras	E	eP	01 28 54		Slight.
			e	32 26		
04	Shillong	Z	eP	01 30 22		Slight, distant.
04	Dehra Dun	NE	e	04 07 40		Tremor.
04	Dehra Dun	NE	e	05 39 08		Feeble.
04	Shillong	Z	iP	07 45 00		Slight, distant. Compression.
04	Chatra	Z	eP	07 45 38	740	Feeble, Compression.
			e	45 47		
04	Epc:- 40.5°N, 76.5°E Tien Shan area. -H= 09h, 46m 35s (Shillong). 40.1°N, 77.8°E -H= 09h 46m 36s (USCGS) -h= 16 km.					
	Dehra Dun	NE	eP	09 48 56	1060	Moderate.
		N	PPP	49 17		
			Pg	49 44		
			iS	50 45		
			SS	50 56		
			LR	51 01		
			SSS	51 07		
			Sg, M	51 43		
	Chatra	Z	eP	09 50 11	1720	Moderate.
		NE	eP	09 50 12		
		ZN	i	09 50 17		
			e	09 50 23		
		NE	e	09 51 20		
		E	e	52 48		
		N	e	52 54		
		E	e	52 55		
		N	e	52 57		
		Z	e	52 59		
			iS	53 04		
		E	e	53 20		
		N	i	55 19		
		E	i	55 17		
		NE	M	09 57 00		Period= 9sec., Gr. dis= 90 p
	Shillong	Z	iP	09 50 54	2070	Moderate, Compression.
		E	PPP	51 20		
			iS	54 19		
		N	SS	54 36		
			SSS	54 48		
		E	LR	55 16		
			M	56 18		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
April 1961 (contd)						
04	Calcutta	N	eP	09 51 13	2220	Moderate.
			iS	54 53		
	Poona	Z	iP	09 51 30	2410	Moderate.
		N	PP	51 59		
			iS	55 27		
			SS	56 06		
			•LR	56 48		
			M	58 32		
	Bombay	NE	eP	09 51 30	2520	Slight.
			PP	51 55		
			e	55 24		
			iS	55 35		
			SS	56 20		
			LR	57 14		
		E	M	59 14		Period= 13 sec., Gr. dis= 57 p
		N	M	10 00 14		Period= 15sec., Gr. dis= 56 p
	Vizianagram	N	eP	09 51 40	2500	Slight.
			PP	51 55		
			iS	55 43		
			LQ	55 54		
			SS	56 03		
			SSS	56 41		
			LR	56 53		
	Hyderabad	N	iP	09 51 41		
		NE	PP	52 24		
		N	LQ	56 20		
		NE	SS	56 48		
			SSS	57 20		
		N	LR	58 20		
		E	M	58 48		Period= 11 sec. Gr. dis= 64 p
		N	M	59 24		Period= 15sec., Gr. dis= 107 p
	Madras	EE	eP	09 52 24	3030	Moderate.
			PP	53 10		
			PPP	53 21		
			PcP	55 43		
			iS	57 03		
			i	57 34		
			SS	58 14		
			SSS	58 35		
			LR	59 18		
			i	10 00 38		
			M	01 13		
	Port Blair	E	iP	09 53 02	3450	Slight.
			iS	58 07		
			M	10 03 41		
	Kodaikanal	E	e	09 53 49		
			i	58 04		
			e	59 49		
			i	10 00 19		
			LR	01 19		
			M	03 49		Period= 70 sec., Gr. dis= 43 p
	Colombo	N	e	09 58 39		
			e	10 01 00		
			e	04 02		
			M	05 05		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	Δ km.	REMARKS
April 1961 (contd)						
04	Shillong	Z	eP	10 45 35		Slight, distant.
04	Chatra	Z	eP	10 46 08		Feeble, distant.
04	Shillong	Z	iP	12 06 16		Slight, distant. Compression.
04	Chatra	Z	eP	13 51 33		Feeble, distant.
04	Dehra Dun	NE	e	13 52 04		Tremor.
04	Chatra	Z	eP	15 36 35		Feeble, distant.
04	Chatra	Z	P S	16 06 43 07 02	150	Mild.
05	Shillong	Z	eP	00 45 38		Slight, distant.
05	Shillong	Z	eP	02 22 45		Slight, near.
05	Shillong	Z	ePg iSg	04 05 18 05 32	120	Slight.
05	Dehra Dun	NE	e	04 31 59		Tremor.
05	Shillong	Z	iP	04 48 06		Slight, distant. Rarefaction.
05	Shillong	N	M	05 01 00		Period= 15 sec., Gr. dis= 1 μ
05	Dehra Dun		e i	06 34 16 36 11		Feeble.
05	Epc:- 39.7°N, 78.1°E Sinkiang Province, China. -H= 06h 47m 07.4s (USCGS) -h= 79 km.					
	Dehra Dun	NE	e i	06 49 27 51 13		Feeble.
	Chatra	Z	eP eS	06 50 40 53 30	1690	Feeble
	Shillong	Z E N	eP eS i Mn	06 51 21 54 51 57 55 06 59 00	2120	Slight. Period= 7 sec., Gr. dis= 1 μ
	Poona	Z	eP	06 52 00		
	Bombay	NE	e e	06 56 01 58 31		Slight.
	Hyderabad	E	M	06 56 57		Period= 6 sec., Gr. dis= 2 μ
	Madras	E	e e e	06 57 37 58 21 07 01 52		Slight.
05	Dehra Dun	NE	e	07 36 31		Tremor
	Shillong	Z	eP	07 36 44		Slight, distant.
05	Dehra Dun	NE	e	08 36 40		Tremor.
	Shillong	Z	eP	08 36 49		Slight, distant.
05	Dehra Dun	NE	e i	09 50 22 51 52		Feeble.
	Chatra	Z	iP	09 52 02		Feeble, distant. Rarefaction.

DATE	STATION	COMPT	PHASE	G. M. T. h. mm. s.	Δ km.	REMARKS
April 1961 (contd)						
05	Shillong	Z	iP	09 52 44		Slight, distant. Rarefaction.
05	Dehra Dun	NE	e	10 30 18		Tremor
05	Shillong	Z	eP	12 11 55		Slight, distant.
05	Shillong	Z	e	13 33 33		
05	Dehra Dun	NE	e i	18 19 24 21 10		Feeble.
	Shillong	Z	eP e	18 21 22 26 09		Slight, distant.
	Poona	Z	eP	18 21 57		Slight.
	Bokaro	E	eP	18 24 26		Slight.
	Bombay	NE	e e	18 25 57 28 21		Slight.
	Madras	E	e e e	18 28 22 29 18 31 26		Slight
	Hyderabad	E	M	18 29 00		Period= 8sec.Gr.dis=2 μ
05	Shillong	Z	iP	19 13 08		Slight, distant. Compression.
05	Shillong	Z	ePg eSg	21 15 12 15 26	120	Slight.
05	Shillong	Z	iP	21 45 31		Slight, distant. Rarefaction.
05	Shillong	Z	eP	22 06 55		Slight, distant.
05	Shillong	Z	iP iS	23 20 36 21 15	350	Slight.
	Chatra	Z	iP eS	23 21 35 22 59	800	Feeble.
05	Shillong	Z	e i	23 37 24 37 27		Slight, distant.
06	Epc:- 39.6°N 77.8°E Sinkiang Province, China. -H= 01h 33m 46.9s (USCGS)-h= 33 km.					
	Dehra Dun	NE N	eP PP iS SS SSS Sg;M	01 36 05 36 17 37 50 38 00 38 13 38 52	1020	Slight.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961... .. (contd)						
06	Chatra	Z	iP S	01 37 20 40 03	1630	Feeble.
	Bokaro	NE	eP e S SS PcP M ScP	01 37 54 40 48 41 06 41 27 41 42 42 21 43 25 45 41	1920	Slight, Initial ground movement South.
	Bombay	NE E	eP PPP e eS	01 38 37 39 18 40 33 42 31 42 43	2380	Slight.
	Poona	Z N	iP iS LQ LR M	01 38 38 42 45 43 13 44 25 46 19	2550	Moderate, Compression.
	Hyderabad	N	eP eS	01 38 48 42 50	2490	Slight.
	Sehore	NE	e e e e	01 40 31 41 03 42 02 42 23		Slight.
	Shillong	Z	iS	01 41 37		P not recorded.
	Calcutta	E	e e	01 41 57 47 28		Slight.
	Kodaikanal	E	e	01 44 19		Tremor.
	Colombo	N	e e e e	01 45 10 47 05 50 00 51 00		
06	Shillong	Z	iP	03 27 14		Slight, distant Rarefaction.
06	Shillong	Z	e	03 31 13		Slight, distant.
06	Shillong	Z	eP	03 38 00		Slight, distant.
06	Shillong	Z	P e	05 41 39 41 49		Slight, near.
06	Bokaro	NE	eP	10 13 39		Slight, near.
06	Shillong	Z	eP	11 07 22		Slight, distant.
06	Dehra Dun	NE	e i	11 08 06 09 27		Feeble.
06	Shillong	Z	e	13 58 43		Slight, near.
06	Epc:- 2.2°N, 97.2°E Near coast of Sumatra. -H= 14h 05m 0.3s (USCGS) -h= 25 km.					

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
April 1961... .. (contd)						
06	Port Blair	E	iP i i	14 08 03 10 03 11 03		Slight
	Colombo	N	P S L M	14 09 20 12 40 13 50 17 07	2010	
	Madras	E	eP PP PPP eS LQ M	14 09 33 09 57 10 07 13 23 13 31 16 20	2330	
	Vizianagram	N	iP	14 09 35		Slight, distant. Initial ground movement South.
	Shillong	ZN NE	iP iS	14 10 13 14 31	2710	Slight, compression. Initial ground movement North.
	Hyderabad	N	iP S e e e M	14 10 17 14 58 15 54 16 33 17 15 19 24		Slight. Initial ground movement South.
	Kodaikanal	E	e	14 10 20		Tremor.
	Bokaro	NE	eP i e e e M	14 10 20 14 37 15 38 16 26 17 25 18 22		Slight, distant.
	Chatra	Z N	iP e	14 10 39 14 41		Slight.
	Poona	Z	eP	14 10 54		Slight, other phases not clear.
	Bombay	E E N E	eP eS e e	14 11 05 15 47 15 59 17 58	3080	Slight.
	Dehra Dun	NE	eP eS	14 11 45 17 00	3610	Slight, Phases not clear.
	Vizianagram	N	i	14 13 28		Slight, distant.
	Calcutta	E	e	14 14 01		Slight.
06	Shillong	Z	iP	15 46 19		Slight, distant. Compression.
06	Shillong	Z	iP	16 07 58		Slight, near. Compression.
06	Shillong	Z	iP	17 10 57		Slight, near.
06	Shillong	Z	iP	17 46 08		Slight, distant. Rarefaction.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
06	Epc:- 27.8°N, 56.7°E, Southern Iran. -H= 12h 12m 40.7s (USCGS) -h= 109 km.					
✓	Bombay	NE	eP	18 16 37	2000	Slight.
		N	e	19 00		
		NE	eS	19 59		
✓	Poona	Z	iP	18 16 49		Moderate.
		N	i	20 16		
✓	Dehra Dun	NE	eP	18 17 03	2040	Slight.
		N	iS	20 26		
			SS	20 52		
			M	22 39		
✓	Hyderabad	N	eP	18 17 42	2500	Slight.
			iS	21 45		
			LR	23 25		
			M	25 41		Period= 29 sec., Gr. dis= 3 p
✓	Madras	E	eP	18 18 12	2780	Slight.
			PP	19 00		
			PPP	19 11		
			PcP	21 37		
			e	22 50		
			LQ	23 51		
			LR	25 04		
			M	27 22		
✓	Bokaro	NE	eP	18 18 16	2960	Moderate.
			PP	19 05		
			PPP	19 17		
			S	22 50		
			SSS	24 33		
			LR	25 18		
			M	27 31		
✓	Chatra	Z	iP	18 18 17		
			i	22 52		
✓	Shillong	Z	iP	18 18 56	3550	Slight, Compression
		N	iS	24 07		Other phases not clear.
✓	Colombo	N	P	18 19 14		
			e	23 40		
			L	29 00		
			M	31 18		
✓	Kodaikanal	E	e	18 22 46		Tremor.
✓	Calcutta	E	e	18 23 20		Slight.
			e	30 09		
06	Dehra Dun	NE	e	19 18 05		Tremor.
06	Shillong	Z	eP	19 18 17		Slight, distant.
06	Bombay	E	e	21 28 12		Slight.
06	Dehra Dun	NE	e	21 38 55		Tremor.
06	Epc:- 1.9°N, 96.5°E Near coast of Sumatra. -H= 22h 26m 29.6s (USCGS) -h= 25 km.					
✓	Port Blair	E	e	22 30 18		Slight.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
April 1961 (contd)						
06	Colombo	N	P	22 30 28		
			L	33 46		
			M	36 35		
	Madras	E	iP	22 30 58	2140	
			PP	31 15		
			PPP	31 26		
			eS	34 30		
			LQ	34 30		
			SS	34 53		
			SSS	35 03		
			LR	35 25		
	Hyderabad	N	eP	22 31 39		Slight.
			e	36 03		
	Shillong	Z	iP	22 31 45	2650	Slight. Rarefaction.
		E	iS	35 59		
	Bokaro	NE	iP	22 31 50	2740	Moderate. Initial ground movement South & East.
			PP	32 27		
			PPP	32 39		
			S	36 10		
			LQ	36 58		
			SSS	37 28		
			M	40 10		
	Chatra	Z	iP	22 32 07	2950	Feeble.
		N	i	36 39		
	Poona	Z	iP	22 32 17		Slight. Rarefaction.
	Bombay	NE	eP	22 32 29		Slight.
			e	39 19		
	Dehra Dun	NE	eP	22 33 09	3220	Slight.
		N	eS	38 00		
			SS	39 24		
			M	43 05		
06	Shillong	Z	iP	22 51 23	330	Slight. Rarefaction.
			iS	52 00		
07	Bombay	E	e	02 23 00		Mild
07	Shillong	Z	iP	02 26 04		Slight, distant. Compression.
07	Calcutta	E	e	02 27 38		Slight.
			i	31 30		
07	Chatra	Z	iP	04 16 40	150	Feeble.
			S	16 59		
07	Shillong	Z	eP	04 17 58		Slight, distant.
07	Epc:- 36.2°N, 70.8°E Hindukush Region. -H= 04h 40m 37s (USCGS) -h= 73 km.					
	Dehra Dun	NE	eP	04 42 42	850	Slight.
		N	LQ	43 58		
			iS	44 10		
			SS,LR	44 21		
			SSS	44 32		
			Sg;M	44 59		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
07	Chatra	Z	iP	04 44 20		Feeble
		ZN	e	47 20		
	Bombay	N	eP	04 44 37		Mild
		NE	e	48 26		
	Poona	Z	iP	04 44 43		Tremor. Compression.
	Bokaro	E	eP	04 44 47		Slight, near.
	Shillong	Z	iP	04 45 19		Slight, distant. Compression.
	Madras	E	eP	04 46 00		Feeble.
			e	53 21		
07	Epc:- 36.1°N, 70.7°E. Hindukush Region. -H= 04h 52m 40.0s (USCGS). -h=60 km.					
	Dehra Dun	NE	eP	04 54 50	820	Slight.
		N	LQ	56 04		
			iS	56 15		
			SS,LR	56 26		
			Sg;M	57 03		
	Chatra	Z	iP	04 56 35		Feeble. Compression.
		NZ	e	59 23		
	Shillong	Z	iP	04 57 22		Slight, distant. Compression.
07	Madras	E	e	06 50 10		Slight.
			e	54 10		
			e	55 41		
	Poona	Z	eP	06 50 19		Tremor.
	Bombay	NE	e	06 50 21		Mild.
			e	54 27		
	Shillong	Z	iP	06 52 41		Slight, distant. Compression.
	Kodaikanal	E	e	06 52 50		Tremor.
	Hyderabad	E	M	06 55 00		Period= 8 sec., Gr. dis= 2 p
	Bokaro	NE	e	06 58 27		
07	Bokaro	NE	iP	08 03 49		Slight, near.
07	Shillong	Z	eP	08 45 27		Slight, distant.
07	Madras	E	e	10 11 38		Feeble.
07	Shillong	Z	iP	10 12 25		Slight, distant. Rarefaction.
07	Shillong	Z	iP	10 33 41		Slight, distant. Rarefaction.
07	Shillong	Z	iP	18 42 55		Slight, distant. Compression.
07	Epc:- 57.2°N, 163.3°E. Near East coast of Kamchatka. -H= 19h 54m 51.9s (USCGS). -h= 20 km.					
	Shillong	Z	iP	20 04 53		Slight, distant. Compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
07	Chatra	Z	iP	20 05 03		Feeble, distant. Compression.
	Bokaro	E	eP	20 05 29		Slight.
	Bombay	NE	eP	20 06 30	8350	Mild.
			eS	16 09		
	Poona	Z	eP	20 06 32		Slight.
	Madras	E	eP	20 06 40	8490	Feeble.
			eS	16 25		
07	Epc:- 39.3°N, 73.0°E. Kirghiz-Tadzhik Border -H= 21h 17m 43.8s (USCGS) -h= 44km. Felt at Tashkent.					
	Dehra Dun	NE	eP	21 20 10	1090	Slight.
		N	PPP	20 24		
			iS	22 02		
			SSS	22 13		
			LR	22 20		
			SSS	22 25		
			Sg,M	23 10		
	Chatra	Z	iP	21 21 42		
	Bombay	NE	eP	21 22 26	2170	Mild.
			e	22 35		
			eS	26 02		
	Poona	Z	iP	21 22 27	2320	Slight.
			eS	26 16		
		N	PcS	30 17		
	Shillong	Z	iP	21 22 27	2350	Slight. Compression.
		E	PP	22 49		
			iS	26 18		
			SS	26 51		
			SSS	27 08		
			M	29 13		
	Vizianagram	N	eP	21 22 34		Slight, distant.
			i	27 20		
	Madras	E	iP	21 23 27	3000	
			PP	24 05		
			eS	28 04		
			e	28 48		
			LR	30 06		
			M	31 58		
	Sehore	NE	i	21 24 21		
			i	24 49		
			i	25 09		
			i	26 06		
			i	26 29		
	Bokaro	NE	iP	21 25 28		Slight, near.
	Calcutta	E	e	21 26 21		Slight.
			e	29 49		
	Kodaikanal	E	e	21 30 28		Tremor.
	Colombo	N	e	21 31 07		
			e	35 19		
			e	36 47		
			M	39 47		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
April 1961 (contd)						
07	Hyderabad	E	M	21 33 47		Period= 2 sec., Gr. dis= 3 μ
08	Dehra Dun	NE	e	02 15 59		Tremor.
08	Dehra Dun	NE	e	04 28 34		Tremor.
08	Chatra	Z	iP	04 42 06		Feeble, distant. Rarefaction.
08	Shillong	Z	eP	04 47 30		Slight, near.
08	Shillong	Z	eP	05 07 04		Slight, distant.
08	Shillong	Z	iP	08 02 29		Slight, distant. Compression.
08	Shillong	Z	iP	09 05 38		Slight, distant. Rarefaction.
08	Shillong	Z	iP	11 55 04		Slight, distant. Compression.
08	Shillong	Z	iP	16 12 23		Slight, distant. Compression.
08	Shillong	Z	iP	16 16 59		Slight, distant. Compression.
08	Epc:- 38.2°S, 72.7°W. Chile. -H= 17h 59m 46.7s (USCGS) Mag:- 6½ (Pasadena). -h= 60 km.					
	Port Blair	E	e	18 18 48		
	Colombo	N	P	18 19 16		
			S	40 39		
			L	19 04 34		
			M	22 29		
	Bombay	NE	ePKP1	18 19 20	16590	
		E	PP	22 38		
			e	29 44		
		NE	eSs	41 12		
		E	SSP	42 05		
	Poona	Z	iP	18 19 21		
	Madras	E	iPKP	18 19 23		Compression. Initial ground motion North & East.
			i	19 52		Distant.
			e	24 22		
			e	29 33		
			e	32 52		
			e	41 32		
			e	19 11 58		
	Hyderabad	N	iPKP	18 19 28		Initial ground motion North and East.
			e	29 46		
			e	46 12		
			M	56 09		
	Bokaro	NE	ePKP	18 19 38		
	Chatra	Z	ePKP1	18 19 42	17610	Compression
			ePKP2	20 22		
		NEZ	ePP	23 59		
		NE	eSKKS	30 47		
			SS	43 59		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
April 1961 (contd)						
08	Shillong	Z	iPKP1	18 19 45	17800	Compression.
			PKP2	20 27		
			PP	24 10		
			Mn	20 33 00		Period= 18 secs., Gr. dis= 2 μ
	Dehra Dun	NE	e	18 19 48		Slight.
			i	23 52		
			i	30 40		
			i	33 58		
			i	38 47		
	Calcutta	E	e	18 20 14		Slight.
			e	21 16		
			e	23 59		
			e	30 43		
08	Shillong	Z	iP	19 26 36		Slight, distant. Compression
08	Chatra	Z	eP	19 27 03		Feeble, distant.
08	Dehra Dun	NE	e	21 11 53		Tremor.
08	Epc:- 14.8°N, 145.1°E. Mariana Islands Region. -H= 21h 36m 41.6s (USCGS). -h= 105 km.					
	Shillong	Z	iP	21 45 35	5590	Slight. Rarefaction.
		E	iS	52 48		
			i	53 28		
	Chatra	Z	iP	21 46 08	6050	Feeble.
			eS	53 46		
		NE	e	54 29		
	Bokaro	NE	iP	21 46 14	6430	Slight.
			PP	48 27		
			e	49 39		
			iS	54 41		
	Madras	E	iP	21 47 00	6890	Slight.
			e	51 35		
			eS	55 24		
			e	56 13		
	Dehra Dun	NE	eP	21 47 06	6900	Slight.
			iS	55 31		
	Colombo	E	P	21 47 13		
			M	56 35		
	Poona	Z	iP	21 47 33		Slight, Rarefaction.
	Bombay	E	eP	21 47 39	7450	Slight.
		NE	e	48 13		
		E	eS	56 32		
			PS	57 05		
		NE	PPS	57 19		
	Port Blair	E	i	22 45 36		Slight.
			i	52 48		
09	Shillong	Z	iP	00 38 47		Slight, distant. Rarefaction.
09	Chatra	Z	iP	00 39 13		Very feeble, distant. Compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
09	Shillong	Z	eP iS	05 21 39 21 56	130	Slight.
09	Shillong	Z	iPg iSg	05 57 28 57 43	130	Slight. Rarefaction.
09	Shillong	Z	e	06 28 53		Feeble.
09	Dehra Dun	NE	e e	06 31 28 33 12		
09	Shillong	Z	iP iS	07 57 33 57 56	180	Slight. Compression.
09	Shillong	Z	iP	13 28 04		Slight, distant. Rarefaction.
09	Chatra	Z	iP	13 28 33		Feeble, distant.
09	Shillong	Z	iP	13 32 56		Slight, distant. Rarefaction.
09	Epc:- 24.1°N, 122.2°E. Near coast of Formosa. -H= 15h 35m 05.4s (USCGS) 23°N, 122°E. - -H= 15h 35m 10s (SHILLONG) Mag:- 6½ (Shillong). -h= 13 km					
	Tocklai	E	eP i i i i	15 40 40 42 10 42 58 44 30 46 17		
	Shillong	ZE N E NE E N E	iP i PP iS LQ SS SSS LR M Mn	15 40 55 40 58 41 40 41 55 45 35 46 42 46 53 47 17 48 06 50 24 52 00	3000	Initial ground movement towards West and Compression. Period= 13 sec., Gr. dis=
	Calcutta	E N	iP iS e e	15 41 26 46 17 41 50 46 34	3220	Initial ground movement West.
	Chatra	ZNE NE	iP PP PPP PcP S PcS LQ SS SSS LR ScS M	15 41 34 42 33 42 49 44 33 46 44 48 18 48 29 48 44 48 54 50 01 52 29 15 52 53	3500	Initial ground motion towards North West & Compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
09	Port Blair	E	iP PP i e e	15 41 42 42 55 46 42 47 28 51 19		
	Bokaro	NE	iP PP PPP S ScP SS ScS M Mn	15 41 46 42 58 43 19 47 03 47 47 49 16 51 41 53 41 56 24	3640	Period= 15 sec., Gr. dis= 25 μ
	Dehra Dun	NE N	eP PPP iS SS & LQ SSS LR M	15 42 39 44 44 48 40 51 06 51 42 52 50 56 19	4350	Period= 15 sec., Gr. dis= 29 μ
	Madras	E	iP PP PPP iS SS LQ ScS LR M	15 42 54 44 32 44 57 49 02 51 41 52 20 52 59 54 48 58 15	4480	Initial ground motion West.
	Sehore	NE	eP i i	15 42 55 44 30 49 24		Distant.
	Hyderabad	N	iP PP iS PS SS SSS LR LR M M	15 42 55 44 48 49 09 49 29 52 20 53 07 54 59 55 14 59 11 59 14	4560	Period= 15 secs. Gr. dis= 14 μ Period= 17 secs. Gr. dis= 43 μ
	Colombo	E	P S SSS L M	15 43 17 49 50 53 18 16 00 00 04 23	4890	
	Kodaikanal	EP	iP PP iS SS SSS LR M	15 43 23 45 23 50 05 53 23 54 26 56 20 59 56	5050	Period= 15secs. Gr. dis= 14.3 μ

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
09	Poona	Z	eP	15 43 25	4890	
		N	iS	49 58		
			PPS	50 18		
			SS	53 17		
			LQ	53 52		
			M	59 37		
	Bombay	N	eP	15 43 34	5180	
		E	iP			
		NE	PP	45 23		
		N	eS	50 13		
		NE	PPS	50 33		
			SS	53 22		
			LQ	54 00		
		N	M	16 02 14		Period= 15sec., Gr. dis= 12 μ
		E	M	04 42		Period= 12sec., Gr. dis= 13 μ
09	Shillong	Z	iP	17 27 41		Slight, distant. Compression.
09	Shillong	Z	iP	20 05 24		Slight, distant. Compression.
			i	06 38		
09	Chatra	Z	iP	20 05 56		Very feeble, distant.
09	Chatra	Z	iPg	22 36 18	110	Feeble.
			Sg	36 31		
10	Shillong	Z	iP	07 03 02		Slight, distant. Compression.
10	Bokaro	NE	iP	08 04 45		Slight, near.
10	Shillong	Z	eP	16 49 26	350	Slight.
			eS	50 05		
10	Shillong	Z	eP	17 23 50		Slight, distant.
10	Shillong	Z	iP	19 48 50		Slight, distant. Rarefaction.
11	Shillong	Z	e	00 37 48		Tremor.
	Dehra Dun	NE	e	02 44 53		Feeble.
				46 37		
	Chatra	Z	e	02 45 59		Mild.
	Shillong	Z	eP	02 46 36		Slight.
11	Chatra	Z	eP	10 16 21		Feeble, distant.
11	Shillong	Z	iP	16 24 28		Slight, distant. Compression.
11	Shillong	Z	eP	18 40 25		Slight, distant. Compression.
11	Chatra	Z	eP	18 40 53		Feeble, distant.
11	Shillong	Z	eP	18 45 55		Slight, distant.
11	Chatra	Z	e	21 31 52		Mild, near.
11	Shillong	Z	eP	21 32 36		Slight, near.
11	Chatra	Z	e	23 56 50		Feeble, distant.
11	Shillong	Z	eP	23 57 12		Slight, distant.
12	Shillong	Z	eP	07 54 41		Slight, distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
12	Bokaro	NE	iP	08 25 26		Slight, near.
12	Shillong	Z	iP	09 01 31		Slight, distant. Compression.
12	Chatra	Z	eP	09 02 01		Feeble, distant.
12	Shillong	Z	e	10 18 48		Slight, near.
12	Shillong	Z	iP	15 10 52		Slight, distant. Compression.
12	Shillong	Z	e	17 03 53		Slight, near.
12	Dehra Dun	NE	e	17 16 05		Tremor.
12	Shillong	Z	iP	17 17 30		Slight, distant. Rarefaction.
12	Shillong	Z	iP	17 25 19		Slight, distant. Compression.
	Chatra	Z	iP	17 25 55		Feeble
			e	27 38		
	Madras	E	iP	17 26 01		Slight.
			i	28 28		
			i	32 04		
12	Shillong	Z	iP	17 37 05		Slight, distant. Rarefaction.
12	Chatra	Z	iP	17 37 25		Feeble, distant.
12	Poona	Z	iP	17 39 00		Tremor. Rarefaction.
12	Shillong	Z	iP	18 00 23		Slight, distant. Rarefaction.
12	Chatra	Z	iP	18 00 56		Feeble, distant.
12	Shillong	Z	eP	19 16 40		Slight, distant.
12	Shillong	Z	eP	19 42 31	220	Slight.
			eS	42 57		
12	Shillong	Z	iP	22 39 48		Slight, distant. Compression.
	Chatra	Z	eP	22 39 48		Feeble, distant.
	Poona	Z	iP	22 39 58		Slight, Rarefaction.
12	Shillong	Z	iP	22 43 25		Slight, distant. Compression.
			i	43 35		
			i	55 42		
			i	57 25		
			Mn	23 43 00		Period= 22 secs., Gr. dis= 3 μ
13	Epc:- 22.9°N, 94.7°E. Central Burma. -H= 04h 25m 58.1s (USCGS). -h= 100 km.					
	Shillong	ZE	iP	04 26 53	420	Slight. Rarefaction.
		E	iS	27 39		
			i	28 37		
	Tocklai	E	eP	04 26 55	500	Slight.
			LQ	27 36		
			iS	27 49		
			LR	27 50		
			SSS	28 07		
			Sg/M	28 11		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
13	Chatra	Z	iP eS	04 27 51 29 25	420	Feeble.
	Shillong	Z	iP iS	05 46 48 47 21	300	Slight. Compression.
	Chatra	Z	iP eS	05 47 43 49 00	740	
13	Shillong	Z	eP	09 57 03		Slight, distant.
13	Shillong	Z	eP	10 04 26		Slight, distant.
13	Shillong	Z	eP eS	12 08 00 08 37	330	Slight.
13	Shillong	Z	e	13 42 53		Not clear.
13	Shillong	Z	iP	15 32 16		Slight, distant. Rarefaction.
13	Shillong	Z	iP	15 35 08		Slight, distant. Rarefaction.
13	Epc:- 40.6°N, 78°E. Tien Shan. -H= 16h 34m 30s (Shillong). 40.1°N, 77.8°E -H= 16h 34m 39.1s (USCGS) Mag: 6½ (Shillong). -h= 19 km.					
	Chatra	ZNE NE	iP PP PPP LQ S SS SSS LR	16 38 13 38 25 38 33 40 48 40 53 41 10 41 23 41 31	1590	
		E N	M M	16 44 00 16 47 00		Period= 16 sec., Gr. dis= 30 Period= 9 secs., Gr. dis= 33
	Sehore	NE	iP PP PPP iS SS SSS LR M	16 38 29 38 41 38 48 41 19 41 28 41 41 41 51 43 00	1690	
	Bokaro	NE	iP PP PPP S SS SSS LR M PcS ScS	16 38 40 38 51 39 03 42 02 42 19 42 29 42 48 44 23 46 41 50 10	2030	Initial ground motion North & West.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
13	Shillong	ZNE E N NE N E	iP PP PPP iS SS LR M Mn	16 38 53 39 08 39 13 42 21 42 43 44 16 45 11 16 47 -	2100	Initial ground movement towards North & West & Rarefaction. Period= 13 sec. Gr. dis= 109 μ
	Tocklai	E	eP PP PPP iS LQ SS SSS PcP LR	16 39 05 39 22 39 32 42 39 42 45 43 06 43 14 43 24 43 39	2170	
	Calcutta	E N	iP eS	16 39 09 42 47	2200	Initial ground motion North and West.
	Bombay	NE N NE	eP PP PPP PcP	16 39 25 39 46 40 07 43 15	2450	
		N E NE N E	eS iS LQ SS LR M M	43 25 43 48 44 23 44 48 46 25 48 27		Period= 13 sec. Gr. dis= 22 μ Period= 9 sec. Gr. dis= 83 μ
	Poona	Z N	iP PP PPP PcS iS LQ SS SSS LR M	16 39 29 39 58 40 08 43 21 43 29 43 52 44 11 44 27 44 53 46 44	2460	
	Hyderabad	N	iP PP PPP iS LQ SS SSS LR M M	16 39 40 40 00 40 21 43 41 44 15 44 33 44 55 45 55 46 48 47 10	2470	
	Madras	E	iP PP PPP i PcP iS SS SSS LR i M	16 40 20 41 01 41 17 43 16 43 46 44 58 46 13 46 31 47 21 48 15 49 25	3010	Initial ground motion East.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
13	Kodaikanal	E	e	16 40 23	3330	
			iS	45 41		
			SSS	47 41		
			e	48 11		
			LR	49 14		
			M	15 59		Period= 12 secs., Gr. dis= 3
	Vizianagram	N	iP	16 39 44	2570	Initial ground motion towards East & South.
			PP	40 11		
			PPP	40 22		
			iS	43 49		
			LQ	44 14		
			SS	44 22		
			SSS	44 33		
			LR	45 04		
			M	46 55		
	Port Blair	E	iP	16 41 04	3390	Moderate.
			PPP	42 29		
			iS	46 07		
			SS	47 52		
	Colombo	E	P	16 41 16	3700	
			S	46 36		
			L	51 39		
			M	52 59		
13	Shillong	Z	eP	17 13 39		Slight, distant.
13	Shillong	Z	eP	17 15 15		Slight, distant.
13	Shillong	Z	eP	18 16 35		Slight, distant.
13	Shillong	Z	eP	20 17 37		Slight, distant.
14	Shillong	Z	eP	00 33 36		Slight, near.
14	Shillong	Z	eP	03 15 14		Slight, distant.
14	Bokaro	E	iP	07 56 15		Slight, near.
14	Shillong	Z	eP	09 54 03		Slight, distant.
14	Shillong	Z	iP	11 15 31		Slight, distant. Compression.
14	Chatra	Z	iP	13 44 44	100	Feeble.
			S	44 55		
14	Chatra	Z	iP	14 00 39	100	Feeble.
			S	00 50		
14	Chatra	Z	iP	18 23 21		Feeble, distant.
14	Shillong	Z	iP	18 24 03		Slight, distant. Rarefaction.
14	Shillong	Z	eP	19 04 16		Slight, distant.
14	Dehra Dun	NE	e	20 16 06		Feeble.
			e	17 54		
14	Shillong	Z	eP	20 28 45		Slight, distant.
14	Dehra Dun	NE	e	21 22 54		Feeble.
			e	24 38		
14	Shillong	Z	iP	21 39 57		Slight, near.
		E	i	40 49		
			i	41 27		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
14	Chatra	Z	eP	21 40 46	910	Feeble
			eS	42 24		
14	Shillong	Z	eP	23 03 46		Slight, distant.
14	Dehra Dun	NE	e	23 11 50		Feeble.
			e	13 36		
15	Shillong	Z	iP	00 11 35		Slight, near.
15	Shillong	Z	iP	01 49 29	130	Slight.
			eS	49 46		
15	Dehra Dun	NE	eP	02 57 53	1020	Slight.
		N	eS	59 38		
			SS	59 45		
			LR	59 52		
			SSS	03 00 00		
			S*	00 10		
			Sg,M	00 43		
15	Shillong	Z	eP	02 59 51		Slight, distant.
15	Bokaro	NE	eP	03 02 51		Slight, distant.
15	Shillong	Z	iP	03 03 49		Slight, local Rarefaction.
15	Shillong	Z	iP	06 32 47		Slight, distant. Rarefaction.
15	Shillong	Z	eP	06 36 51	230	Slight.
			eS	37 18		
15	Shillong	Z	eP	09 27 50		Slight, distant.
15	Bokaro	NE	iP	10 10 06		Slight, near.
15	Shillong	Z	eP	10 43 26		Slight, distant.
15	Shillong	Z	eP	11 59 26		Slight, near.
		E	i	12 01 38		
15	Chatra	Z	eP	11 59 29		Feeble, distant.
15	Tocklai	E	e	12 00 02		Slight, Tremor.
15	Dehra Dun	NE	e	12 04 25		Tremor.
15	Chatra	Z	iPg	16 10 49	80	Feeble.
			Sg	10 58		
15	Shillong	Z	eP	16 11 57		Slight, distant.
15	Shillong	Z	eP	17 16 27		Slight, distant.
15	Shillong	Z	eP	17 20 47		Slight, near.
15	Shillong	Z	eP	17 28 52		Slight, distant.
15	Shillong	Z	iP	17 30 37	130	Slight, Rarefaction.
			iS	30 54		
15	Shillong	Z	iP	17 35 39		Slight, distant. Compression.
15	Shillong	Z	eP	21 59 20		Slight, near.
15	Shillong	Z	iP	22 59 42		Slight, distant. Compression.
16	Shillong	Z	eP	03 12 37	190	Slight.
			eS	12 59		
16	Shillong	Z	iP	06 24 37		Slight, distant. Rarefaction.



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DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
16	Chatra	Z	eP	06 24 38		Feeble, distant.
16	Chatra	Z	eP	10 40 19		Feeble, distant.
16	Shillong	Z	iP	11 50 19		Slight, distant. Rarefaction.
16	Chatra	Z	iP	11 50 32		Feeble, distant.
16	Shillong	ZE E	iP iS	12 16 09 24 53	7260	Slight, Rarefaction.
16	Shillong	Z E	iP iS	15 11 10 16 03	3260	Slight. Rarefaction.
16	Shillong	Z	iPg iSg	16 24 43 24 56	160	Slight.
16	Shillong	Z	eP	17 31 31 31 51	170	Slight.
17	Shillong	Z	eP eS	04 33 58 34 28	270	Slight.
17	Shillong	Z	iP	05 16 37		Slight, near.
17	Dehra Dun	NE	e e e	06 34 01 35 46 37 08		Feeble.
17	Shillong	Z	eP	13 41 22		Slight, distant.
17	Shillong	Z E	eP iS	18 15 07 17 39	1500	Slight.
17	Tocklai	E	e	18 15 14		Slight.
17	Shillong	Z	iP	20 54 57		Slight, distant. Rarefaction.
17	Dehra Dun	NE	e e	23 30 52 32 01		Slight.
	Shillong	Z	eP	23 30 56		Slight, distant.
18	Shillong	Z	iP	04 13 31		Slight, distant. Compression.
18	Chatra	Z	eP	14 14 10		Mild near.
18	Shillong	Z	iP	04 23 29		Slight, distant. Rarefaction.
18	Shillong	Z	eP	05 37 25		Slight, local.
18	Shillong	Z	iP	07 17 49		Slight, distant. Compression.
18	Shillong	Z	iP	13 52 58		Slight, distant. Rarefaction.
18	Shillong	Z	eP eSg	15 52 09 52 20		Slight, local.
18	Shillong	Z	eP	15 57 36		Slight, distant.
18	Dehra Dun	NE	e	16 13 21		Feeble.
18	Shillong		e	14 47		
18	Shillong	Z	iP	21 45 57		Slight, distant. Compression.
18	Shillong	Z	iP	22 02 40		Slight, distant. Compression.

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DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
18	Shillong	Z	iP	22 10 11		Slight, distant. Compression.
18	Shillong	Z	eP	22 21 33		Slight, distant.
18	Shillong	Z	iPg iSg	23 30 20 30 34	120	Slight.
19	Shillong	Z	iP	03 51 39		Slight, distant. Compression.
	Dehra Dun	NE N	eP PP PPP Pg iS SS SSS Sg	06 59 10 59 17 59 23 59 39 07 00 26 00 37 00 47 31 06	730	Slight.
	Poona	Z	eP	07 00 28		Slight.
	Bokaro	NE	eP PPP S SS SSS M i	07 01 01 01 21 03 43 04 06 04 20 05 40 07 04	1610	Slight.
	Chatra	Z	iP S	07 01 02 03 51	1680	Feeble.
	Bombay	NE	e e	07 01 27 03 18		Slight.
	Shillong	Z E	iP eP i	07 01 55 05 42		Slight, Compression.
	Madras	E	eP eS LQ SSS LR iLg M	07 01 57 05 40 05 44 06 14 06 37 07 43 08 20	2250	Slight.
	Calcutta	E	e i	07 04 16 07 06		Slight.
	Hyderabad	E	e M	07 04 47 08 01		Period= 9 sec., Gr. dis= 4 μ
	Kodaikanal	E	e	07 06 07		Tremor.
19	Shillong	Z	iP	07 51 46		Slight, distant. Compression.
19	Kodaikanal	E	e	14 22 16		Tremor.
19	Shillong	Z	eP	16 15 31		Slight, distant.
	Shillong	Z E	iP i i i	16 21 12 21 14 23 20 28 08		Slight, distant. Compression.
	Chatra	ZN NE	iP S	16 21 34 28 49	5630	Slight.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
19	Bokaro	E	e i	16 21 51 29 21		Slight.
✓	Dehra Dun	NE	eP iS	16 22 06 29 49	6140	Slight.
✓	Port Blair	E	e e	16 22 18 30 08		Slight.
✓	Poona	Z	eP	16 23 13		Tremor.
✓	Bombay	NE	eP eS	16 23 18 32 03	7290	Slight.
✓	Madras	E	eP e	16 23 24 31 50		Slight.
19	Shillong	Z	ePg eSg	16 33 39 33 51	100	Slight.
19	Dehra Dun	NE	e	17 15 31		Feeble.
19	Shillong	Z	iP	18 04 37		Slight. Compression.
19	Shillong	Z	iP	18 23 52		Slight, distant. Compression.
19	Port Blair	E	e	18 25 00		Slight.
19	✓ Chatra	Z	eP	18 26 08		Feeble, distant.
19	Dehra Dun	NE	e	18 32 48		Slight.
19	Shillong	Z	iPg iSg	19 16 33 16 35	20	Slight.
19	Shillong	Z	eP	19 33 30		Slight, near.
19	Shillong	Z	iP	20 28 45		Slight, distant. Compression.
✓	Chatra	Z	iP	20 29 08		Feeble, distant.
✓	Bokaro	E	i	20 29 24		Slight.
✓	Dehra Dun	NE	eP eS	20 29 39 37 37	6410	Slight.
✓	Poona	Z	iP	20 30 45		Tremor Compression.
✓	Bombay	NE	e	20 30 50		Slight.
✓	Madras	E	e e	20 30 54 39 36		Slight.
19	✓ Shillong	Z	iP	22 16 46		Slight, distant. Compression.
19	✓ Chatra	ZN	iP	22 17 08		Feeble, distant.
19	Shillong	Z	i	22 30 16		Feeble.
19	Dehra Dun	NE	e	22 35 40		Slight, distant. Rarefaction.
20	Shillong	Z	iP	00 23 22		Feeble.
20	Shillong	Z	eP eS	05 16 08 17 01	500	Slight.
20	Dehra Dun	NE	e e	05 58 12 59 53		Feeble.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
20	Dehra Dun	NE	e	06 34 56		Tremor.
20	Shillong	Z	iP iS	08 19 36 19 58	190	Slight, Rarefaction.
20	Shillong	Z	iP	13 30 11		Slight, distant. Compression.
20	Shillong	Z	eP	15 24 34		Slight, distant.
20	Dehra Dun	NE	e i i	16 19 53 21 38 22 57		Feeble.
20	Shillong	Z	iP	18 23 39		Slight, distant. Compression.
20	Shillong	Z	iP	21 50 55		Slight, distant. Rarefaction.
20	Chatra	Z	iP S	22 38 56 39 17	160	Feeble.
21	Shillong	Z	iP	02 48 56		Slight near. Rarefaction.
21	Shillong	Z	iP	02 59 15		Slight, distant. Compression.
21	Dehra Dun	NE	e e	08 50 24 51 38		Feeble.
21	Chatra	Z	iP	15 05 29		Feeble, distant.
21	Chatra	Z	iP	18 55 48		Feeble, distant.
21	Shillong	Z	iP	19 40 00		Slight, distant. Compression.
21	Shillong	Z	eP eS	19 48 42 49 16	310	Slight.
21	Chatra	Z	eP	19 49 07		Feeble, distant.
21	Dehra Dun	NE	e e	20 17 31 28 54		Slight.
21	Shillong	Z	iP eP e	20 20 00 27 28		Slight, distant. Rarefaction.
21	✓ Chatra	Z	iP	20 20 19		Feeble, distant.
✓	Bokaro	E	e i	20 20 50 28 45		Slight.
✓	Poona	Z N	eP iS	21 21 55 31 08	7830	Slight.
✓	Bombay	NE	eP e	20 22 05 31 13		Slight.
✓	Madras	E	e e	20 31 03 58 00		Slight.
21	Shillong	ZE E	iP e	21 38 10 47 58		Slight, distant. Compression.
✓	Chatra	NZ	iP	21 38 23		Feeble, distant.
✓	Bokaro	E	e	21 38 39		Slight, near.
✓	Poona	Z	iP	21 39 35		Tremor, Compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
21	Chatra	Z	iP	22 47 54		Feeble, distant.
21	Shillong	Z	iP	22 48 36		Slight, distant. Rarefaction.
21	Chatra	Z	eP	23 17 24		Feeble, distant.
22	Shillong	Z	eP	00 38 51		Slight, distant.
		E	e	49 14		
22	Bokaro	E	e	00 41 29		Slight, near.
22	Shillong	Z	iP	03 53 58		Slight, distant. Rarefaction.
22	Shillong	Z	eP	10 36 31		Slight, near.
22	Shillong	Z	eP	16 04 19		Slight, distant.
22	Shillong	Z	e	16 18 05		Slight, near.
			e	18 36		
			e	18 57		
22	Shillong	Z	e	18 56 54		Slight, near.
22	Dehra Dun	NE	e	17 03 42		Tremor.
22	Dehra Dun	NE	e	18 46 19		Tremor. Feeble.
22	Dehra	NE	eP	19 07 28	1080	Slight.
			PPP	07 45		
			iS	09 19		
			SS	09 31		
			SSS	09 41		
			Sg,M	10 26		
22	Chatra	Z	eP	19 08 46		Feeble, distant.
	Shillong	Z	iP	19 09 28		Slight, distant.
		E	e	18 21		Rarefaction.
	Poona	Z	eP	19 10 17		Tremor.
	Bokaro	E	e	19 10 28		Slight.
	Madras	E	e	19 10 33		Slight.
			e	15 46		
			e	19 38		
	Bombay	NE	e	19 11 39		Slight.
			e	16 25		
22	Shillong	Z	iP	19 21 28		Slight, distant. Rarefaction.
22	Shillong	Z	ePg	20 06 27	50	Slight.
		E	iSg	06 33		
22	Chatra	Z	eP	20 07 31		Feeble, distant.
22	Tocklai	E	eP	20 07 46		Slight, distant.
22	Shillong	Z	e	20 08 22		Slight, near.
23	Shillong	Z	eP	03 22 14	200	Slight.
			eS	22 38		
23	Tocklai	E	eP	04 44 19	320	Slight.
			LQ	44 43		
			LR	44 51		
			iS	44 55		
			S*	45 02		
			SS	45 07		
			SSS	45 17		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
23	Shillong	Z	eP	04 44 38	530	Slight.
			iS	45 41		
	Chatra	Z	iP	04 45 38	980	Feeble.
			eS	47 19		
23	Epc:- 26.2°N, 129.8°E. Ruykyu Islands. -H= 05h 14m 31.1s (USCGS) -h= 110 km					
	Calcutta	E	e	05 20 42		Slight.
			i	26 35		
			e	36 05		
	Shillong	ZE	iP	05 21 09	3680	Slight, Rarefaction.
		E	PPP	22 36		
		NE	iS	26 31		
		E	LQ	28 30		
			M	32 44		
		N	Mn	05 37 -		Period= 13 sec., Gr. dis= 5 μ
	Chatra	ZNE	iP	05 21 44	4210	Slight.
			PP	23 15		
			PPP	23 40		
			PcP	23 51		
			S	27 36		
			eSS	30 15		
			eLQ	30 27		
			M	05 35 36		
	Port Blair	N	eP	05 21 45	4330	Slight.
			eS	27 45		
	Bokaro	NE	i	05 21 59		Slight.
			i	23 37		
			e	24 55		
			i	27 55		
			i	28 11		
	Dehra Dun	NE	eP	05 22 42	5060	Slight.
		N	PP	24 38		
			PPP	25 03		
			iS	29 24		
			SS	32 38		
			LQ	33 18		
			SSS	33 38		
			M	39 17		
	Hyderabad	E	iP	05 23 05	5380	Slight.
			PP	25 03		
			PcS	28 20		
			iS	30 06		
			PS	30 15		
			SS	33 38		
			LR	37 06		
			LR	37 13		
			M	42 15		Period= 18 sec., Gr. dis= 9 μ
	Madras	E	i	05 23 05		Slight.
			e	25 00		
			e	30 08		
			e	34 03		
	Poona	Z	iP	05 23 33	5800	Slight.
		N	iS	30 57		

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
23	Bombay	NE	eP PcP eS	05 23 40 23 59 31 09	5890	
23	Epc:- 44.6°N, 150.2°E. Kurile Islands. -H= 09h 01m 41.8s (USCGS) Mag. 6 $\frac{1}{4}$ (Pasadena). -h= 44 km.					
	Calcutta	E	eP PcP PP PPP iS	09 10 27 11 33 12 33 14 17 19 02	7110	
	Shillong	ZNE E	iP PcP PP PPP PcS iS PPS ScS SS	09 10 39 11 45 12 36 13 37 15 55 17 51 18 31 20 19 21 25	5580	Initial ground movement towards South, West and Compression.
		NE E	iS PPS ScS SS	17 51 18 31 20 19 21 25		
		E	SSS M	09 22 54 30 09		Period= 13 secs. Gr. dis= 22
		N	Mn	09 34 -		
	Chatra	ZNE	iP PcP PP PPP PcS S PS ScS SS LQ/SSS LR	09 10 59 12 02 12 55 14 02 15 59 18 27 18 38 20 47 21 58 23 46 26 14	5860	
		N	M	09 37 00		Period= 16 Secs. Gr. dis= 28
		E	M	09 39 00		Period= 15 secs. Gr. dis= 40
	Bokaro	NE	iP PcP PP PPP S PPS SS SSS LR M Mn	09 11 19 12 13 13 27 14 45 19 06 19 27 22 51 25 12 27 58 32 58 37 50	6210	Initial ground movement towards South & West.
						Period= 13 sec. Gr. dis= 51
	Dehra Dun	NE N	eP PP iS SS SSS LQ LR M	09 11 30 13 48 19 27 23 54 25 49 26 33 28 48 32 14	6390	
						Period= 19 sec. Gr. dis= 37

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
23	Port Blair	N	iP iS	09 11 43 19 51	6600	
	Hyderabad	EN E	iP PP PcS S SS SSS LR LR M M	09 12 20 14 39 16 48 21 04 25 13 28 09 33 12 33 13 37 13 37 39	7260	Initial ground movement towards South & West.
						Period= 21 secs., Gr. dis= 32 μ Period= 18 secs., Gr. dis= 29 μ
	Madras	E	iP PcP PP PPP PcS iS PS PPS SKS SS SSS LQ LR M	09 12 33 12 59 15 03 16 41 17 03 21 26 21 52 22 00 22 29 25 46 28 50 30 12 34 07 39 25	7440	Initial ground motion towards West.
	Poona	Z	iP PP iS PS PPS SS LQ LR M	09 12 38 15 08 21 30 21 52 22 05 25 55 30 12 33 22 39 05	7430	Initial ground motion towards South, West & Compression.
	Bombay	NE E NE E N	iP PcP PP PPP eS PS SS M M	09 12 45 12 58 15 14 16 50 21 45 22 15 26 05 46 20 46 37	7610	Moderate. Period= 15 sec. Gr. dis= 11 μ Period= 15 sec. Gr. dis= 20 μ
	Kodaikanal	E	iP PP PPP iS SS LQ M	09 12 50 15 26 16 56 21 56 26 38 31 26 40 53	7690	Slight. Initial ground motion towards West.
	Colombo	E	P S L M	09 13 02 22 19 46 29 52 06	7910	
						Period= 18 sec. Gr. dis= 20 μ

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
23	Shillong	Z	ePg	11 43 37	100	Slight.
		E	iSg	43 49		
23	Shillong	Z	eP	12 26 53		Slight, distant. Compression.
23	Shillong	Z	eP	15 04 19		Slight, distant.
23	Shillong	Z	iP	16 41 12		Slight, distant. Rarefaction.
23	Shillong	Z	iP	16 59 56		Slight, distant. Compression.
	Chatra	Z	iP	17 00 18		Feeble.
		NE	e	17 01 00		
	Bokaro	E	e	17 00 39		Slight.
	Dehra Dun	NE	eP	17 00 47	6410	Slight.
			eS	08 45		
	Madras	E	eP	17 01 29		Slight.
			PcP	01 54		
			PPP	05 38		
			e	10 47		
			e	11 14		
	Poona	Z	eP	17 01 57	750	Slight.
		N	eS	10 53		
	Bombay	N	e	17 02 00		Slight.
		NE	e	10 52		
23	Shillong	Z	eP	18 08 03	390	Slight.
			eS	08 45		
23	Shillong	Z	eP	20 54 45		Slight, distant.
23	Shillong	Z	iP	22 11 33		Slight, distant. Rarefaction.
23	Chatra	Z	iP	22 11 55		Feeble.
24	Bokaro	NE	eP	07 57 52		Slight, near.
24	Shillong	Z	eP	11 32 52		Slight, distant.
24	Dehra Dun	NE	e	11 54 49		Tremor.
24	Shillong	Z	iP	12 36 33		Slight, distant. Compression.
24	Dehra Dun	NE	e	12 45 14		Feeble.
24	Shillong	Z	iP	12 52 42		Slight, distant. Compression.
24	Shillong	Z	ePg	18 55 49	110	Slight.
			eSg	56 03		
24	Shillong	Z	eP	20 33 24		Slight, near.
24	Shillong	Z	iP	21 09 51		Slight, distant. Compression.
24	Shillong	Z	eP	22 44 20	300	Slight.
			eS	44 53		
24	Shillong	Z	iP	23 41 31		Slight, distant. Compression.
25	Shillong	Z	iP	00 23 59		Slight, distant. Compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 . . . (contd)						
25	Chatra	Z	eP	00 26 55		Feeble.
25	Shillong	Z	iP	00 27 23		Slight, distant. Compression.
25	Shillong	Z	iP	00 37 07		Slight, distant. Compression.
25	Dehra Dun	NE	eP	01 26 09	750	Slight.
			eS	27 27		
			SS	27 40		
			SSS	27 50		
			Sg,M	28 09		
	Shillong	ZE	iP	01 26 33		Slight, distant. Compression.
	Bokaro	E	eP	01 27 12		Slight.
	Poona	Z	eP	01 28 34		Slight.
	Bombay	NE	eP	01 28 37	7520	Slight.
			eS	37 37		
	Madras	E	eP	01 28 42		Slight.
	Colombo	E	e	01 38 31		
			e	02 01 19		
			M	09 19		
25	Shillong	Z	iP	02 39 04		Slight, distant. Compression.
25	Chatra	Z	eP	02 40 04		Very feeble, distant.
25	Shillong	Z	eP	03 31 57		Slight, distant.
25	Chatra	Z	e	04 30 11		Feeble.
25	Bokaro	NE	e	08 40 20		Slight, near.
25	Dehra Dun	NE	e	10 58 34		Feeble.
25	Colombo	E	e	11 41 51		
			e	12 09 36		
			M	17 06		
X 25	Shillong	Z	iP	11 44 54		Slight, near.
25	Shillong	Z	eP	14 28 05		Slight, near.
25	Shillong	Z	iP	14 57 14		Slight, distant. Compression.
25	Dehra Dun	NE	e	14 57 29		Feeble.
25	Chatra	Z	e	17 33 07		Mild.
			e	33 08		
25	Chatra	Z	ePg	17 55 37	100	Mild
			eSg	55 48		
25	Dehra Dun	NE	e	18 57 29		Feeble.
			e	57 50		
25	Shillong	Z	eP	20 26 11		Slight, near.
25	Shillong	Z	iP	21 00 57		Slight, distant. Compression.
25	Shillong	Z	iPg	21 26 07	90	Slight.
			iSg	26 15		



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
April 1961 (contd)						
25	Shillong	Z	iP	21 28 49		Slight, distant. Compression.
25	Shillong	Z	eP	22 11 59		Slight, near.
25	Shillong	Z	iP	23 47 13		Slight, distant. Compression.
25	Chatra	Z	iP	23 47 49		Feeble, distant.
26	Shillong	Z	iP	00 47 03		Slight, distant. Compression.
26	Shillong	Z	eP	00 54 49		Slight. Local felt at Shillong.
26	Chatra	Z	iP	00 55 23		Mild. Near. Compression.
26	Shillong	Z	iP	01 52 58		Slight, distant. Compression.
26	Shillong	Z	eP	02 27 46		Slight, distant.
26	Chatra	Z	iP	05 27 05		Feeble, distant.
			i	30 05		
	Bokaro	NE	eP	05 27 20		Slight.
			e	30 28		
			i	31 03		
			i	32 12		
	Poona	Z	iP	05 27 23	2350	Slight. Rarefaction.
			eS	31 14		
	Shillong	Z	iP	05 27 47		Slight, distant. Rarefaction.
	Sehore	NE	e	05 29 05		Feeble.
			e	29 49		
			e	30 25		
	Bombay	NE	e	05 30 40		Feeble.
			e	32 01		
	Madras	E	e	05 33 16		Slight.
			e	36 07		
26	Shillong	Z	iP	06 31 07		Slight, distant. Compression.
26	Shillong	Z	iP	06 45 55		Slight, distant. Compression.
26	Epc:- 43°N, 149.3°E. Kurile Islands. -H= 07h 38m 55s (Shillong). 44.6°N, 149.9°E -H= 07h 38m 54.1s (USCGS). Mag:-6 (Berk). -h= 20 km.					
	Shillong	ZNE	iP	07 47 52	5550	First ground movement towards South, West & Compression.
		N	PP	49 40		
			iS	55 02		
			SS	58 40		
			M	08 06 25		
			Mn	08 11 00		
	Tocklai	E	eP	07 47 52		Period= 13 sec. Gr. dis= 5 μ Slight, distant.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
26	Chatra	ZNE	iP	07 48 14	5420	
		NE	PcP	49 06		
			PP	50 17		
			PPP	51 22		
			PcS	52 49		
			S	55 45		
			PS	55 58		
			PPS	56 09		
			ScS	57 32		
			SS	59 28		
			eSSS	08 01 36		
			LR	04 39		
	Bokaro	NE	iP	07 48 33	6250	Initial ground movement towards South & West.
			PcP	49 26		
			PP	50 46		
			PPP	52 04		
			ScP	53 16		
			S	56 23		
			PPS	56 43		
			SS	08 00 08		
			SSS	02 38		
			M	09 58		
	Hyderabad	N	eP	07 49 38	7190	
			PP	52 05		
			iS	58 19		
			PS	58 30		
			PPS	58 47		
			ScS	59 08		
			LR	08 09 26		
			M	14 36		Period= 13 sec. Gr. dis= 6 μ
	Madras	E	eP	07 49 52	7470	
			PP	52 20		
			iS	58 46		
			PS	59 05		
			PPS	59 14		
			SKS	59 48		
			e	08 06 33		
	Poona	Z	iP	07 49 54	7480	
			PcP	50 08		
			iS	58 49		
			PS	59 19		
			PPS	59 28		
			LQ	08 07 39		
			LR	11 01		
			M	16 29		
	Bombay	NE	eP	07 49 57	7570	Slight.
			eS	58 57		
	Sehore	NE	e	07 50 04		Slight, distant.
			e	50 33		
	Kodaikanal	E	e	07 52 45		Tremor.
26	Shillong	Z	e	08 03 01		Tremor.
26	Shillong	Z	iP	11 44 52		Slight, distant. Compression.
26	Tocklai	E	eP	11 47 07		Slight, near.



DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
26	Shillong	Z E	iP PP PPP iS S* Sg SS SSS	11 47 16 47 24 47 29 47 45 47 49 47 50 47 58 48 08	250	Slight. Rarefaction.
	Chatra	ZNE	iP PP PPP Pg LQ S SS SSS Sg,M	11 48 19 48 26 48 33 48 49 49 23 49 35 49 47 49 58 50 15	730	Slight.
	Bokaro	NE	eP	11 48 33		Slight, near.
	Bombay	NE	e	12 07 57		Slight.
	Madras	E	e e	12 08 54 13 06		Slight.
26	Shillong	Z	iP	12 10 54		Slight, distant. Compression.
26	Shillong	Z	iP	17 00 51		Slight, distant. Rarefaction.
26	Chatra	Z	iP	17 01 28		Feeble, distant.
26	Shillong	Z	iP	19 41 29		Slight, distant. Compression.
26	Chatra	Z	iP	19 41 50		Feeble, distant.
26	Shillong	Z	iP	20 57 39		Slight, distant. Compression.
26	Dehra Dun	NE	e	23 53 32		Feeble.
27	Shillong	Z	e e e	00 15 11 15 23 17 57		Slight, near.
27	Chatra	Z	eP	00 17 11		Feeble, distant.
27	Chatra	Z	eP	00 47 52		Feeble, distant.
27	Dehra Dun	NE	e	00 48 27		Feeble.
27	Madras	E	e	00 59 08		
27	Chatra	Z	iPg iSg	03 26 41 26 49	70	Feeble.
27	Shillong	Z	eP	05 27 46		Slight, near.
27	Calcutta	E	e e	07 48 19 56 04		Slight.
27	Bokaro	NE	eP	08 33 25		Slight, near.
27	Shillong	Z	eP	10 40 00		Slight, near.
27	Shillong	Z		11 17 03		Slight, distant. Rarefaction.
27	Shillong	Z	iP	11 25 07		Slight, distant. Compression.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
April 1961 (contd)						
27	Shillong	Z	iP	17 46 10		Slight, distant. Rarefaction.
27	Shillong	Z	eP	17 58 06		Slight, near.
27	Shillong	Z	iP	18 12 56		Slight, distant. Compression.
27	Shillong	Z	eP	21 13 44		Slight, distant.
28	Shillong	Z	e	06 58 01		Slight, near.
28	Dehra Dun	NE	e e	07 00 53 04 11		Feeble.
28	Chatra	Z	iP	07 03 07		Feeble, distant.
28	Madras	Z	e e	07 27 00 27 08		Feeble.
28	Poona	Z	eP	07 28 32		
28	Bokaro	NE	eP	08 16 57		Slight, near.
28	Poona	Z	eP eS	09 00 07 00 47	370	Slight.
	Bombay	E	eP PP PPP	09 00 07 00 75 00 19	370	Feeble.
		NE	LQ	00 39		
		E	LR	00 43		
		NE	eS	00 47		
	Chatra	Z	eP PP PPP S SS SSS,LR	09 02 14 02 22 02 29 04 22 04 37 04 46	1170	Feeble.
	Madras	E	e LQ eS SS SSS M	09 03 22 04 11 04 22 04 35 04 43 04 57		Slight.
	Dehra Dun	NE	e	09 03 56		Feeble.
	Bokaro	NE	eP	09 04 03		Slight.
	Shillong	Z	e	09 05 57		Slight.
28	Shillong	Z	eP eS	10 03 21 03 49	250	Slight. Rarefaction.
28	Shillong	Z	iP	19 20 16		Slight, distant. Rarefaction.
28	Shillong	Z	iP	20 27 42		Slight, distant. Compression.
28	Shillong	Z	iP	22 21 36		Slight, distant. Compression.
29	Chatra	Z NEZ	iPg Sg	08 43 27 43 36	80	Slight.
29	Shillong	Z	eP eS	08 44 25 45 19	500	Slight.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km.	REMARKS
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April 1961 . . . (contd)

29 Epc:- 71.3°N, 7.4°W. Jan Mayen Island Region.
-H= 09h 09m 09.5s (USCGS).
-h= 14 km.

Dehra Dun	NE	ePKP		09 38 16		Slight.
		i		43 06		
		i		47 37		
Poona	Z	ePKP1		09 39 29		Slight.
		i		40 25		
Bombay	N	ePKP		09 39 32		Slight.
	NE	e		40 25		
		e		49 30		
Chatra	Z	iPKP		09 40 05		Slight.
	NE	e		48 57		
Shillong	Z	iPKP		09 40 19		Moderate. Compression.
	E	e		49 27		
Madras	E	e		09 41 06		Slight.
Bokaro	NE	ePKP		09 45 11		Slight.
		e		45 51		
		e		46 03		
		e		48 31		
		e		49 34		
		e		50 37		
		e		50 51		
		e		51 33		
		e		53 36		

29 Epc:- 41.8°N, 104.5°E. Outer Mongolia.
-H= 10h 45m 39.1s (USCGS).
-h= 25 km.

Shillong	ZE	iP		10 50 06	2200	Slight. Initial ground movement towards East & Compression.
	NE	iS		53 44		
	E	M		56 32		
Chatra	Z	iP		10 50 25	2230	Slight, Rarefaction.
	NE	eS		54 15		
Bokaro	NE	P		10 50 57	3000	Slight.
		PPP		51 48		
		S		55 21		
		SS		56 19		
		SSS		56 31		
		LR		57 14		
		M		59 15		
Dehra Dun	NE	e		10 55 58		Slight.
		i		55 17		
		i		59 10		
29 Chatra	Z	iP		15 42 15		Feeble, distant. Compression.
29 Shillong	Z	iP		18 00 16		Slight, distant. Compression.
29 Chatra	Z	eP		19 55 51		Feeble, distant.
29 Shillong	Z	eP		19 56 33		Slight, distant.
29 Shillong	Z	eP		21 59 56		Slight, near.

DATE	STATION	COMPT	PHASE	G. M. T. h. m. s.	△ km	REMARKS
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April 1961 . . . (contd)

29	Shillong	Z	iP	22 19 59	110	Slight, Compression.
			iS	20 14		
29	Shillong	Z	iP	22 48 14		Slight, distant. Compression.
30	Shillong	Z	eP	00 22 21		Slight, distant.
30	Shillong	Z	iPg	07 27 36	100	Slight, Rarefaction.
			iSg	27 48		
30	Poona	Z	iP	07 46 28		Tremor.
30	Shillong	Z	iP	07 46 45		Slight, distant. Compression.
30	Shillong	Z	iP	10 46 56		Slight, distant. Compression.
30	Shillong	Z	iP	11 09 30		Slight, distant. Compression.
30	Epc:- 44.6°N, 149.7°E. Kurile Island. -H= 11h 15m 19.8s (USCGS). -h= 70 km					
	Shillong	ZNE	iP	11 24 12	5670	Slight, First ground movement towards South, West. Compression.
		N	PP	26 04		
			iS	31 29		
			SS	35 19		
			LR	40 00		
			Mn	48 00		
						Period= 13 sec., Gr. dis= 2 p
	Chatra	Z	iP	11 24 32	5920	Feeble.
		N	eS	32 03		
	Bokaro	E	eP	11 24 55		Slight.
			e	28 33		
			i	32 53		
	Dehra Dun	NE	eP	11 25 09	6220	Slight.
			eS	32 57		
	Madras	E	eP	11 26 09	7450	Slight.
			eS	35 02		
			e	59 43		
	Poona	Z	eP	11 26 13		Slight.
	Bombay	E	e	11 26 39		
			e	34 27		
30	Shillong	Z	eP	15 01 58		Slight, distant.
		E	e	12 40		
30	Shillong	Z	iP	18 54 07		Slight, distant. Rarefaction.
30	Shillong	Z	iP	20 20 31		Slight, distant. Rarefaction.
30	Shillong	Z	iP	21 53 42		Slight, distant. Rarefaction.

The following is the list of earthquakes that are reported by voluntary observers from different stations during the month of April 1961:-

Place	Date in GMT.	Time in GMT.	No. of shock	Intensity of F.R. Scale	Duration of shock	REMARKS
Shillong	26.4.61	hr m 00 50	1	III	2 secs.	



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

DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.	DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
STATION: Shillong.					COMPONENT: E-W				
					MONTH: April 1961.				
01	00	...	-	-	13	00	...	-	-
	06	1	0.1	5		06	1	0.1	4
	12	1	0.1	5		12	1	0.1	5
	18	1	0.1	7		18	...	-	-
02	00	1	0.1	7	14	00	1	0.1	5
	06	1	0.1	6		06	1	0.1	5
	12	1	0.1	6		12	0,0	-	-
	18	1	0.1	5		18	1	0.1	5
03	00	0,0	-	-	15	00	1	0.1	4
	06	1	0.1	7		06	1	0.1	5
	12	0,0	-	-		12	...	-	-
	18	1	0.1	6		18	1	0.1	5
04	00	1	0.1	5	16	00	1	0.1	4
	06	1	0.1	6		06	1	0.1	5
	12	0,0	-	-		12	1	0.1	6
	18	1	0.1	7		18	0,0	-	-
05	00	1	0.1	6	17	00	1	0.1	5
	06	1	0.1	5		06	1	0.1	5
	12	0,0	-	-		12	1	0.1	6
	18	0,0	-	-		18	1	0.1	5
06	00	1	0.1	4	18	00	0,0	-	-
	06	1	0.1	5		06	1	0.1	5
	12	1	0.1	6		12	1	0.1	5
	18	1	0.1	5		18	1	0.1	5
07	00	1	0.1	5	19	00	...	-	-
	06	0,0	-	-		06	1	0.1	5
	12	1	0.1	5		12	1	0.1	5
	18	1	0.1	5		18	1	0.1	5
08	00	1	0.1	5	20	00	1	0.1	5
	06	0,0	-	-		06	0,0	-	-
	12	0,0	-	-		12	...	-	-
	18	1	0.1	5		18	1	0.1	5
09	00	1	0.1	5	21	00	...	-	-
	06	1	0.1	6		06	1	0.1	5
	12	1	0.1	5		12	1	0.1	5
	18	1	0.1	5		18	0,0	-	-
10	00	1	0.1	6	22	00	0,0	-	-
	06	1	0.1	5		06	0,0	-	-
	12	1	0.1	5		12	0,0	-	-
	18	1	0.1	5		18	0,0	-	-
11	00	1	0.1	4	23	00	0,0	-	-
	06	...	-	-		06	...	-	-
	12	...	-	-		12	...	-	-
	18	1	0.1	4		18	...	-	-
12	00	...	-	-	24	00	0,0	-	-
	06	1	0.1	5		06	0,0	-	-
	12	1	0.1	5		12	0,0	-	-
	18	1	0.1	5		18	0,0	-	-



II

DATE HOUR K MEAN MEAN
GMT SIMPLE PERIOD
AMPLITUDE IN SECS.
IN m.m.

STATION: Shillong. COMPONENT: E-W Month: April 1961 .. (contd)

DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
25	00	0,0	-	-
	06	0,0	-	-
	12	...	-	-
	18	1	0.1	4
26	00	1	0.1	5
	06	0,0	-	-
	12	...	-	-
	18	1	0.1	6
27	00	1	0.1	5
	06	0,0	-	-
	12	.1	0.1	5
	18	1	0.1	5
28	00	1	0.1	5
	06	1	0.1	5
	12	1	0.1	4
	18	1	0.1	4
29	00	0,0	-	-
	06	1	0.1	5
	12	0,0	-	-
	18	0,0	-	-
30	00	1	0.1	5
	06	1	0.1	5
	12	...	-	-
	18	0,0	-	-

STATION: Bombay (Colaba).

DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
01	00	3	0.4	5.0
			0.4	2.3
	06	3	0.5	5.0
			0.4	2.4
	12	3	0.5	6.3
			0.4	2.4
	18	3	0.5	6.3
			0.3	2.3
02	00	3	0.5	6.4
			0.4	2.6
	06	3	0.5	6.4
			0.3	2.3
	12	3	0.5	6.0
			0.3	2.0
	18	3	0.5	5.4
			0.5	2.4
03	00	3	0.6	6.0
			0.5	2.6
	06	3	0.5	6.1
			0.6	2.7
	12	3	0.5	5.1
			0.4	2.7
	18	3	0.4	5.6
			0.6	2.5
04	00	3	0.5	5.4
			0.5	2.5

III

DATE HOUR K MEAN MEAN
GMT SIMPLE PERIOD
AMPLITUDE IN SECS.
IN m.m.

STATION: Bombay (Colaba).. (contd)

DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
11	00	1	0.8	2.6
	03	1	0.8	2.7
	06	1	0.8	2.9
	09	1	0.5	2.9
	12	1	0.5	2.6
	15	1	0.6	2.5
	18	1	0.6	2.6
	21	1	0.6	2.5
12	00	1	0.6	2.6
	03	3	0.6	2.6
	06	1	0.6	2.6
	09	1	0.7	2.6
	12	1	0.6	3.1
	15	1	0.7	2.9
	18	3	0.6	4.2
			0.6	2.7
13	00	3	0.4	4.3
			0.4	2.5
	06	3	0.6	5.0
			0.5	2.5
	12	3	0.5	4.6
			0.4	2.0
	18	...	-	-
14	00	3	0.5	5.0
			0.4	2.0
	06	3	0.5	5.4
			0.6	2.4
	09	1	0.7	2.5
	12	1	0.8	2.7
	15	1	0.7	2.8
	18	1	0.6	2.6
	21	1	0.6	2.5
15	00	1	0.9	2.6
	03	1	0.7	2.9
	06	1	0.7	2.7
	09	1	0.8	2.7
	12	1	0.7	2.8
	15	1	0.6	2.8
	18	1	0.6	2.7
16	00	3	0.5	5.4
			0.6	2.3
	06	3	0.5	5.3
			0.8	2.6
	12	3	0.5	5.2
			0.4	2.5
	18	3	0.5	5.8
			0.4	2.5
17	00	3	0.5	5.5
			0.5	2.6
	06	3	0.5	5.3
			0.6	2.6
	12	3	0.5	4.5
			0.5	2.9
	18	3	0.5	4.4
			0.4	2.1
18	00	3	0.6	4.6
			0.4	2.2
	06	3	0.6	5.1
			0.4	2.5
	12	3	0.5	4.0
			0.5	2.4
	18	3	0.4	4.4
			0.5	2.2
19	00	3	0.5	4.7
			0.5	2.3
	03	1	0.9	2.7
	06	1	0.8	2.8
	09	1	0.7	2.8
	12	1	0.7	3.0
	15	1	0.7	2.7
	18	3	0.4	4.4
			0.5	2.2
20	00	1	0.8	2.7
	03	1	0.7	2.9
	06	1	1.0	3.0
	09	1	0.8	2.9
	12	1	1.0	3.0
	15	1	0.7	3.0
	18	1	0.8	2.6
	21	1	0.8	2.7
21	00	1	0.7	2.8
	03	1	0.7	2.7
	06	1	0.8	2.8
	09	1	0.7	2.6
	12	1	0.6	2.7
	15	1	0.6	2.7
	18	1	0.5	2.8
	21	1	0.7	2.4
22	00	1	0.9	2.7
	03	1	0.7	2.7
	06	1	0.9	2.9
	09	1	0.9	2.9
	12	1	0.8	2.9
	15	1	0.9	3.0
	18	1	0.7	3.0
	21	1	0.7	2.9
23	00	1	0.6	3.0
	03	1	0.7	2.8
	06	...	-	-
	09	1	0.6	2.8
	12	1	0.6	2.8
	15	1	0.6	2.7
	18	1	0.5	2.9
	21	1	0.6	2.7
24	00	1	0.5	2.8
	03	1	0.5	2.5
	06	1	0.5	2.8
	09	1	0.5	2.6
	12	1	0.4	2.5
	15	1	0.5	2.6
	18	1	0.5	2.6
	21	1	0.5	1.5



DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
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DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
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DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
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DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
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STATION: Bombay(Colaba).. (contd)

MONTH: April 1961 .. (contd)

25	00	1	0.6	1.7	02	00	3	0.2	2.5
	03	1	0.5	2.0			3	0.2	2.0
	06	1	0.5	2.4		03	1	0.2	2.6
	12	3	0.3	4.6			1	0.2	2.0
			0.4	2.3		06	1	0.3	2.7
	18	3	0.3	4.5			1	0.2	2.1
			0.3	2.0		12	1	0.3	2.7
26	00	3	0.4	4.5		18	1	0.3	2.8
			0.4	2.5			1	0.3	2.2
	06	3	0.3	4.5	03	00	1	0.3	2.6
			0.3	2.0		03	1	0.3	2.6
	12	3	0.5	4.1		06	3	0.3	2.6
			0.3	2.0		12	3	0.2	2.5
	18	3	0.4	2.7		18	3	0.2	2.6
			0.3	2.0					
27	00	3	0.5	2.6	04	00	3	0.2	2.5
			0.3	1.7		03	3	0.2	2.6
	03	1	0.7	1.9			3	0.2	2.2
	06	1	0.8	2.1		06	3	0.2	2.5
	09	1	0.6	2.2		12	3	0.2	2.7
	12	1	0.6	2.7		18	3	0.2	2.6
	15	1	0.7	1.9	05	00	3	0.2	2.6
	18	1	0.6	2.0		03	3	0.2	2.6
	21	1	0.5	2.1		06	3	0.2	2.6
28	00	1	0.5	2.1		12	3	0.3	2.7
	03	1	0.5	1.9		18	3	0.3	2.9
	06	1	0.5	2.2	06	00	3	0.2	2.8
	09	1	0.5	2.1		03	3	0.2	2.7
	12	1	0.5	1.9			3	0.5	5.9
	15	1	0.5	2.0		06	3	0.2	2.6
	18	1	0.5	1.9			3	0.4	5.2
	21	1	0.4	2.0		12	3	0.2	2.6
29	00	3	0.3	4.1			3	0.4	5.2
			0.3	1.7		18	3	0.2	2.7
	06	3	0.3	4.2			3	0.5	5.7
			0.3	2.1	07	00	...	-	-
	12	3	0.3	4.1		03	3	0.1	0.9
			0.2	1.8			3	0.5	5.3
	18	3	0.4	4.1		06	3	0.1	1.1
			0.2	1.7			3	0.4	4.9
30	00	3	0.3	4.5		12	3	0.1	1.3
			0.2	1.5		18	3	0.1	1.3
	06	3	0.3	3.7			3	0.3	5.0
			0.3	1.9	08	00	3	0.1	1.5
	12	...	-	-			3	0.3	4.3
	18	3	0.3	4.1		03	3	0.1	1.5
			0.2	1.7			3	0.4	4.5

STATION: Madras

01	00	3	0.2	2.7
	03	3	0.3	2.7
	06	3	0.3	2.6
	12	3	0.2	2.6
	18	3	0.2	2.6

STATION: Madras (contd)

MONTH: April 1961 .. (contd)

09	00	3	0.2	1.3	14	06	3	0.3	2.9
		3	0.3	4.3			3	0.4	5.1
	03	3	0.1	1.3		12	3	0.3	2.9
		3	0.3	3.4			3	0.5	5.7
		3	0.4	4.6		18	3	0.3	3.2
	06	3	0.1	1.2			3	0.5	6.5
		3	0.3	4.2	15	00	3	0.2	2.9
	12	3	0.3	4.2		03	3	0.3	3.1
	18	3	0.2	2.8			3	0.5	6.7
		3	0.3	4.3		06	3	0.3	3.0
10	00	3	0.1	1.1			3	0.5	7.1
		3	0.3	2.7		12	3	0.3	3.1
		3	0.3	4.1			3	0.6	7.0
	03	3	0.1	1.3		18	3	0.3	3.1
		3	0.3	3.1			3	0.6	7.7
		3	0.3	4.2	16	00	3	0.1	1.3
	06	3	0.2	2.9			3	0.3	3.1
		3	0.3	4.1			3	0.5	7.1
	12	3	0.3	2.7		03	3	0.3	3.0
		3	0.3	4.2			3	0.6	7.3
	18	3	0.3	3.1		06	3	0.3	3.1
		3	0.4	4.3			3	0.5	6.7
11	00	3	0.3	2.9		12	3	0.2	2.2
		3	0.3	2.8			3	0.3	3.1
	03	3	0.4	4.2			3	0.6	6.7
		3	0.3	3.2		18	3	0.1	1.3
	06	3	0.3	3.2			3	0.2	2.8
		3	0.3	4.2			3	0.6	6.7
	12	3	0.4	3.2	17	00	3	0.2	1.3
	18	3	0.4	3.4			3	0.2	2.8
12	00	3	0.3	3.1		03	3	0.2	1.6
		3	0.3	3.0			3	0.4	6.3
	03	3	0.4	4.2		06	3	0.1	1.7
		3	0.3	3.5			3	0.2	2.9
	06	3	0.3	3.5			3	0.4	5.9
		3	0.4	4.3		12	3	0.3	2.9
	18	3	0.1	1.5			3	0.5	5.5
		3	0.3	3.5		18	3	0.2	1.5
		3	0.4	5.3			3	0.3	3.0
							3	0.4	5.4
13	00	3	0.1	1.2	18	00	3	0.2	1.5
		3	0.3	4.3			3	0.2	2.7
	03	3	0.1	1.3		03	3	0.1	1.5
		3	0.5	5.0			3	0.3	2.6
	06	3	0.1	1.2			3	0.5	5.1
		3	0.5	5.6		06	3	0.1	1.5
	12	3	0.1	1.2			3	0.2	2.7
		3	0.3	2.9			3	0.4	5.3
		3	0.5	5.9		12	3	0.3	2.9
	18	...	-	-			3	0.4	5.4
						18	3	0.2	1.8
14	00	3	0.1	1.2			3	0.3	2.8
		3	0.3	2.8			3	0.4	5.1
		3	0.5	5.4					
		3	0.4	1.1					
	03	3	0.1	2.8					
		3	0.3	5.3					
		3	0.4						

DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
STATION: Madras (contd)				
19	00	3	0.2	1.7
	03	3	0.3	2.7
	06	3	0.1	1.3
	12	3	0.3	2.7
	18	3	0.1	1.3
	03	3	0.3	2.6
	06	3	0.3	2.8
	12	3	0.3	2.6
	18	3	0.1	1.7
20	00	3	0.3	2.5
	03	3	0.2	1.3
	06	3	0.2	1.9
	12	3	0.2	2.4
	18	3	0.2	2.1
	03	3	0.3	2.5
	06	3	0.2	2.0
	12	3	0.3	2.7
	18	3	0.3	2.7
21	00	3	0.3	2.6
	03	3	0.2	1.9
	06	3	0.3	2.0
	12	3	0.2	2.6
	18	3	0.3	1.8
	03	3	0.3	2.8
	06	3	0.3	2.8
	12	3	0.3	2.8
	18	3	0.3	2.7
22	00	3	0.2	1.6
	03	3	0.2	2.7
	06	3	0.5	1.5
	12	3	0.2	2.5
	18	3	0.1	1.3
	03	3	0.3	2.5
	06	3	0.2	2.6
	12	3	0.3	2.6
	18	3	0.2	2.6
23	00	3	0.1	1.4
	03	3	0.2	2.5
	06	3	0.2	2.5
	12	3	0.2	2.4
	18	3	0.2	2.6
24	00	3	0.2	2.6
	03	3	0.2	2.8
	06	3	0.3	2.8
	12	3	0.3	2.8
	18	3	0.3	2.8
	03	3	0.4	4.3
25	00	3	0.2	2.1
	03	3	0.3	2.6
	06	3	0.4	4.3
	12	3	0.3	2.9
	18	3	0.4	4.3
	03	3	0.3	2.8
	06	3	0.4	4.4
	12	3	0.4	4.4
	18	3	0.5	4.9

STATION: Bokaro.

DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
01	00	0,0	-	-
	06	0,0	-	-
	12	0,0	-	-
	18	0,0	-	-
02	00	...	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-



DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
STATION: Bokaro (contd)				
03	00	0,0	-	-
	06	0,0	-	-
	12	0,0	-	-
	18	0,0	-	-
04	00	0,0	-	-
	06	...	-	-
	12	...	-	-
	18	...	-	-
05	00	...	-	-
	06	...	-	-
	12	3	0.4	4.0
	18	3	0.4	4.5
06	00	3	0.4	5.0
	06	...	-	-
	12	...	-	-
	18	3	0.5	5.0
07	00	3	0.5	5.5
	06	3	0.4	4.8
	12	3	0.4	5.0
	18	3	0.5	4.8
08	00	...	-	-
	06	...	-	-
	12	3	0.5	5.0
	18	3	0.5	4.2
09	00	3	0.5	4.8
	06	3	0.5	5.0
	12	3	0.5	4.8
	18	3	0.5	4.8
10	00	3	0.4	4.5
	06	...	-	-
	12	...	-	-
	18	3	0.5	4.0
11	00	3	0.5	4.8
	06	0,0	-	-
	12	3	0.3	5.0
	18	3	0.3	4.5
12	00	3	0.3	4.5
	06	3	0.3	4.2
	12	3	0.3	4.3
	18	3	0.3	4.5
13	00	3	0.3	4.5
	06	3	0.4	4.8
	12	3	0.5	5.0
	18	...	-	-
14	00	3	0.3	4.5
	06	3	0.3	4.2
	12	0,0	-	-
	18	0,0	-	-
15	00	0,0	-	-
	06	...	-	-
	12	3	0.4	4.5
	18	0,0	-	-

MONTH: April 1961 .. (contd)

DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
16	00	0,0	-	-
	06	3	0.4	5.0
	12	0,0	-	-
	18	...	-	-
17	00	3	0.4	4.8
	06	3	0.4	5.0
	12	...	-	-
	18	3	0.5	5.0
18	00	3	0.3	4.8
	06	3	0.4	5.0
	12	3	0.4	4.8
	18	3	0.4	4.7
19	00	3	0.5	5.0
	06	...	-	-
	12	3	0.4	4.9
	18	3	0.4	3.2
20	00	3	0.3	3.8
	06	...	-	-
	12	...	-	-
	18	3	0.4	3.8
21	00	3	0.4	4.0
	06	...	-	-
	12	3	0.4	4.5
	18	3	0.3	3.0
22	00	3	0.3	3.2
	06	3	0.3	3.0
	12	3	0.4	4.0
	18	...	-	-
23	00	3	0.3	3.5
	06	...	-	-
	12	3	0.3	3.0
	18	...	-	-
24	00	3	0.3	3.0
	06	3	0.4	5.0
	12	3	0.4	4.0
	18	3	0.5	5.0
25	00	3	0.5	4.8
	06	3	0.4	5.0
	12	3	0.4	5.4
	18	3	0.3	5.0
26	00	3	0.4	5.0
	06	3	0.3	5.1
	12	...	-	-
	18	3	0.4	5.0
27	00	3	0.3	4.8
	06	3	0.4	5.0
	12	3	0.4	5.2
	18	3	0.4	4.8
28	00	3	0.4	4.0
	06	3	0.3	4.0
	12	...	-	-
	18	3	0.4	5.0



D	DATE	HOUR	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.	DATE	HOUR GMT	K	MEAN SIMPLE AMPLITUDE IN m.m.	MEAN PERIOD IN SECS.
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STATION: Bokaro (contd) MONTH: April 1961 .. (contd)

29	00	3	0.4	4.0	11	00	0,0	-	-
	06	3	0.4	4.0		06	...	-	-
	12	3	0.4	4.8		12	...	-	-
	18	3	0.4	5.2		18	...	-	-
30	00	3	0.4	5.0	12	00	...	-	-
	06	3	0.4	5.2		06	...	-	-
	12	...	-	-		12	0,0	-	-
	18	3	0.3	3.0		18	0,0	-	-
					13	00	0,0	-	-
						06	...	-	-
						02	...	-	-
						18	...	-	-
01	00	1	0.4	7.5	14	00	0,0	-	-
	06	...	-	-		06	0..	-	-
	12	1	0.4	7.5		12	0..	-	-
	18	1	0.4	7.5		18	0..	-	-
02	00	1	0.4	7.5	15	00	0..	-	-
	06	1	0.8	7.3		06	...	-	-
	12	1	0.8	7.3		12	...	-	-
	18	1	0.8	7.3		18	...	-	-
03	00	...	-	-	16	00	...	-	-
	06	...	-	-		06	2	1.6	7.3
	12	1	0.8	7.3		12	2	1.6	7.3
	18	1	0.8	7.3		18	2	1.6	7.3
04	00	1	0.4	7.2	17	00	2	1.6	7.3
	06	...	-	-		06	...	-	-
	12	1	0.4	7.3		12	2	1.2	7.3
	18	1	0.4	7.3		18	2	1.2	7.3
05	00	1	0.4	7.3	18	00	2	1.2	7.3
	06	...	-	-		06	...	-	-
	12	...	-	-		12	...	-	-
	18	1	0.8	7.5		18	...	-	-
06	00	1	0.8	7.5	19	00	...	-	-
	06	...	-	-		06	...	-	-
	12	...	-	-		12	...	-	-
	18	1	0.4	7.3		18	...	-	-
07	00	1	0.4	7.5	20	00	...	-	-
	06	...	-	-		06	...	-	-
	12	1	0.4	7.3		12	...	-	-
	18	1	0.4	7.3		18	...	-	-
08	00	1	0.4	7.3	21	00	...	-	-
	06	...	-	-		06	...	-	-
	12	1	0.4	7.3		12	...	-	-
	18	1	0.4	7.3		18	...	-	-
09	00	1	0.4	7.3	22	00	2	1.2	7.3
	06	...	-	-		06	...	-	-
	12	0,0	-	-		12	...	-	-
	18	0,0	-	-		18	3	0.4	7.3
10	00	0,0	-	-	23	00	3	0.4	7.3
	06	...	-	-		06	...	-	-
	12	0,0	-	-		12	...	-	-
	18	0,0	-	-		18	...	-	-