8 epic. hm SHY

SEISMOLOGICAL BULLETIN

GOVERMENT OF INDIA

METEOROLOGICAL DEPARTMENT

PUBLISHED UNDER THE DIRECTION OF
SHRI. P. R. KRISHNA RAO
DIRECTOR GENERAL OF OBSERVATORIES

List of Seismograph Stations with their Instruments and Constants :

Station	Latitude °N	Longitude °E	Height (a.s.l.) (Metres)	Lithographic foundation	Instrument	Component	Period in secs	Static magnification	Damping ratio	Chart speed mm/min
Bokaro	23.47	85.53		Rock	Press-Ewing	Z	To=1.5 Tg=100			15
					-do-	N-S	To=1.5 Tg=100			15
					-do-	E-W	To=1.5 Tg=104			15
					-do-	N-S	To=Tg=3.3	5000	Critical	30
					Sprengnether	E-W	To=Tg=3.3	940	Critical	30
					Wood-Anderson	N-S	0.8 sec	950	-do-	30
					-do-	E-W	0.8 sec			30
Bombay	18.54	72.49		Deccan Trap	Milne-Shaw	N	12	250	20:1	8
					-do-	E	12	250	20:1	8
					Sprengnether	E	7.3	5000	Critical	30
					Benioff	Z				30 f Ga me
										60 f
Calcutta	22.32	88.20	(1) 7 Milne-Shaw (2) 6 Omori Ewing	Alluvium	Milne-Shaw	E	12.0	250	20:1	8
					Omori-Ewing	E	19.0	30		25.4
					-do-	N	16.0	32		25.4
					Sprengnether	N	To=Tg=7.0	1000	Critical	30
Chatra	26.50	87.10	161	Sand Stone	Benioff	Z	To=0.72 Tg=0.45			30
					Wood-Anderson	N	0.8	1000	20:1	30
					-do	E	0.8	1000	20:1	30
					Milne-Shaw	N	12.0	250	20:1	16
					-do-	E	12.0	250	20:1	16
					Wanner Accelerograph	Z,N,E	To=0.1 sec	50	10:1	600
Delhi	28.41	77.12	207	Massive Quartzite	Sprengnether	E	To=Tg=7.6	5000	Critical	30
					Wood Anderson	E	To=0.8	1000	-do-	30
					-do-	N	To=0.8	1000	-do-	30
					Milne-Shaw	N	To=12.0	250	20:1	8
					Benioff (S.P.)	Z	To=1.0 Tg=0.76	50000 for	Critical	60
					-do	N	To=1.0 Tg=0.76	50000 TE=1 sec	-do-	60
					-do	E	To=1.0 Tg=0.77	50000	-do-	60
					Sprengnether (LP)	Z	To=15 Tg=100	1500 for	-do-	15
					-do	N	-do- -do-	1500 TE=15	-do-	15
					-do-	E	-do- -do-	1500 sec	-do-	15
Dehra Dun	30.19	78.03	682	Gravel	Wilson-Lemison	Z	To=Tg=1.3			60
					Wood-Anderson	N	To=0.8	970	Critical	30
					-do-	E	To=0.8	1000	-do-	30
					Milne-Shaw	N	To=12.0	250	20:1	8
					Sprengnether	Z	To=15 Tg=100	1500 for TE=15 sec	Critical	30
Goa	15.29	73.49		Laterite	Sprengnether	Z	To=Tg=1.5		Critical	30
					do	E	To=Tg=7.4	5000	-do-	30
					do	N	To=Tg=7.5	5000	-do-	30
Hyderabad	17.26	78.27	536	Granite	Milne-Shaw	E	To=12	243.5	20:1	8
					-do-	N	To=12	250.2	20:1	8
Kodaikanal	10.14	77.28	2345	Rock	Benioff(S.P)	Z	To=1.0 Tg=0.75	100000 for	Critical	60
					-do-	N	To=1.0 Tg=0.75	100000 TE=1	-do-	60
					-do-	E	To=1.0 Tg=0.75	100000 sec	-do-	60
					Sprengnether (LP)	Z	To=15.0 Tg=100	1500 for	Critical	30
					-do	N	-do- -do-	1500 TE=15	-do-	30
					-do-	E	-do- -do-	1500 sec	-do-	30
					Milne-Shaw	E-W	To=12.0	250	20:1	8
Madras	13.00	80.11	15	-	Sprengnether	Z	To=Tg=7.5	-	Critical	30
Poona	18.32	75.51	560	Deccan Trap	Benioff(S.P)	Z	To=1.0 Tg=0.75	50000 for	Critical	60
					-do-	N	-do- -do-	50000 TE=1	-do-	60
					-do-	E	-do- -do-	50000 sec	-do-	60
					Sprengnether(LP)	Z	To=15.0 Tg=100	3000 for	Critical	15
					-do-	N	-do- -do-	1500 TE=15	-do-	15
					-do-	E	-do- -do-	1500 sec	-do-	15
Port Blair	11.40	92.43		-	Milne-Shaw	Z	12.0	250	20:1	
					Wood-Anderson	N	2.0	890	30:1	8
					-do-	E	0.8	810	70:1	30
					Benioff	Z	To=1.0 Tg=1.6	-	-	30
Sehore	23.10	77.05		-	Wood-Anderson	N	0.8	860	Critical	
					-do-	E	0.8	950	-do-	
Shillong	25.34	91.53	1600	Quartzite	Benioff(S.P)	Z	To=1.0 Tg=0.75	200000 for	Critical	
				Sand Stone (Shillong Quartzite)	-do-	N	-do- -do-	200000 TE=1	-do-	
					-do-	E	-do- -do-	200000 sec	-do-	
					Press-Ewing(LP)	Z	To=15 Tg=100	3000 for	-do-	
					-do-	N	-do- -do-	3000 TE=15	-do-	
					-do-	E	-do- -do-	3000 sec	-do-	
					Sprengnether	E	To=5.7 Tg=5.7	3600	Critical	
					Milne-Shaw	N	To=12.0	250	20:1	
					Wanner Accelerograph	Z,N,E	To=0.1	Nearly 50	10:1	6
Tocklai	26.45	94.46		Alluvium	Wood-Anderson	E-W	0.8	1000	Critical	
Visakhapatnam	17.43	83.18		-	Sprengnether	E	To=Tg=7.0	5000	Critical	
					Wood-Anderson	E	To=2.0	960	-do-	
					-do	N	To=0.8	960	-do-	
					Electromagnetic(SP)	Z	To=Tg=1.65	6000	-do-	

DATE	STN	PHASE	G h	M m	T s	Δ km
01	NDI	eP	02	06	44	NEC
01	SHL	iP	03	55	43	C
01	DDI	i	04	10	23	
01	SHL	iP	06	17	18	NWC
	CHA	eP	03	17	40	
01	BOK	i	08	12	30	
01	SHL	eP	08	56	49	
01	BOK	i	09	24	32	
	NDI	iP	09	24	48	C
01	SHL	eP	11	27	33	
01	NDI	iP	11	31	44	NR
01	CHA	e	12	27	29	
01	SHL	iP	15	57	29	C
01	NDI	iP	17	53	23	WR
01	SHL	iP	18	39	51	CNW
	CHA	iP	18	40	13	R
01	DDI	iP	18	40	48	
01	NDI	iP	18	40	56	NEC
		i		41	11	
01	NDI	iP	19	57	27	SC 970
		eS		59	07	
01	SHL	eP	20	33	30	110
		iSg		33	41	
01	NDI	iP	21	45	03	R
02	NDI	eP	03	37	23	NWR 1020
		i		37	28	
		eS		39	08	
	DDI	eP	03	37	37	
02	SHL	eP	04	34	21	
02	SHL	iP	06	58	21	R
02	SHL	iP	07	16	19	C
	CHA	e	07	17	15	
02	SHL	iP	08	28	33	R
02	CHA	e	08	41	05	
02	SHL	iP	14	04	35	C 440
		eS		05	28	
02	CHA	iP	14	04	41	R 220
		iS		05	07	
02	SHL	iP	14	11	02	R
02	SHL	iP	14	24	02	R
	CHA	iP	14	24	43	C
02	SHL	iP	16	21	50	RE
	DDI	iP	16	21	58	C
	CHA	iP	16	21	54	C
	NDI	eP	16	22	01	C
02	SHL	iP	16	42	08	C
	CHA	e	16	42	12	
	PBA	e	16	46	07	
02	CHA	iP	17	07	23	C 140
		Pg		07	24	
		iS		07	41	
		Sg		07	44	
02	SHL	iP	17	15	30	C
02	SHL	iPg	18	03	42	C 70
		Sg		03	49	
02	PBA	iPg	20	31	59	30
		iSg		32	03	
02	CHA	eP	22	12	37	
03	HYD	iP	02	49	10	E 2240
		eS		57	31	
		Lr		58	13	
		M		59	49	
03	NDI	e	02	49	15	

(03) *Epc. 25.9°N, 95.8°E. in Northern Burma. H = 02h 49m 14.9s(USCGS) - h about 100 km. Mag. 5.5 SD 0.4 (CGS). Epc. 26°N, 95°E. in Naga Hills H = 02h 49m 15s (CSO, Shillong)*

(3)

	TOC	eP	02	49	45	
	SHL	iP	02	50	09	RNE
		i		50	17	

DATE	STN	PHASE	G h	M m	T s		Δ km
03	SHL	i	02	50	38		
Contd.		i		50	44		
	CAL	iP	02	51	02	E	800
		iS		52	25		
	CHA	iP	02	51	06	SWR	790
		iS		52	28		
	BOK	iP	02	51	25	NER	810
		~~i~~		~~51~~	~~55~~		
		iS		52	59		
		SS		53	10		
		SSS		53	10		
		~~M~~		~~53~~	~~50~~		
	PBA	eP	02	52	41		1600
		iS		55	22		
	DDI	iP	02	52	57	C	1650
		~~eP~~		52	57		
		PP		53	09		
		PPP		53	13		
		~~Lq~~		~~55~~	~~33~~		
		~~S~~		55	44		
		SS		56	00		
		SSS		56	12		
		~~Lr~~		~~56~~	~~19~~		
		~~S'~~		~~56~~	~~45~~		
		~~M~~		~~57~~	~~31~~		
	NDI	iP	02	53	02	SWR	1700
		iS		55	53		
3	SEH	iP	02	53	09		1830
		~~Lq~~		~~53~~	~~05~~		
		iS		56	12		
		SSS		56	41		
		~~Lr~~		~~57~~	~~00~~		
		M		58	10		
	MDR	iP	02	53	48	W	2120
		PP		53	54		
		PPP		54	02		
		~~e~~		~~53~~	~~59~~		
		iS		57	08		
		~~Lq~~		~~57~~	~~13~~		
		SS		57	27		
		SSS		57	42		
		~~Lr~~		~~58~~	~~10~~		
	POO	eP	02	53	58	NER	2270
		iS		57	43		
	BOM	iP	02	54	07		2450
		~~i~~		~~54~~	~~48~~		
		iS		58	06		
		~~Lq~~		~~58~~	~~40~~		
	KOD	eP	02	54	21		2500
		iS		58	24		
		~~i~~		~~59~~	~~03~~		
03	NDI	iP	10	07	38		

DATE	STN	PHASE	G h	M m	T s		Δ km
03	CHA	iP	12	22	55	R	110
		iSg		23	07		
03	SHL	iP	14	16	03	C	
03	DDI	e	14	16	09		
	CHA	e	14	13	17		
03	DDI	eP	19	56	46		
		e		58	28		
	NDI	iPn	19	56	57	NWR	320
		iSn		57	38		
	CHA	iP	19	58	30	C	
03	CHA	e	20	21	25		
03	NDI	iP	22	39	35	NWR	950
		iS		41	13		
04	NDI	iP	01	47	54	R	1180
		iS		49	55		
04	CHA	i	01	48	45		
04	CHA	eP	02	30	48		90
		eS		31	00		

04 *Epc. 36.4°N, 69.3°E in Hindukush*
H = 02h 57m 07.6s. h about 33 km (USCGS). Mag 4.9 (CGS).

	DDI	iP	02	59	27	R	1150
		eP		59	27		
		PP		59	39		
		PPP		59	46		
		~~e~~	~~03~~	~~00~~	~~04~~		
		~~i~~		~~01~~	~~11~~		
		~~Lq~~		~~02~~	~~03~~		
		iS		02	14		
		SS		02	31		
		SSS		02	43		
		~~Lr~~		~~02~~	~~52~~		
		~~M~~		~~04~~	~~06~~		
	CHA	eP	03	01	18		
		i		03	25		
	POO	eP	03	01	41		
	MDR	e	03	07	12		
		e		10	01		
		e		10	26		
		e		11	35		
04	BOK	i	07	42	31		
04	BOK	i	07	56	52		
04	DDI	iP	09	46	59	R	

DATE	STN	PHASE	G h	M m	T s		Δ km
04	DDI	eP	09	46	59		
Contd.		iS		47	18		
	NDI	ePn	09	47	23	SR	350
		i		47	27		
		iSn		48	01		
04	SHL	iP	10	26	00	R	
04	CHA	iP	10	23	31	R	
04	NDI	eP	10	27	23	NWR	
04	SHL	iP	11	27	48	C	
4	CHA	iP	11	28	16	R	
	NDI	eP	11	29	04	R	
04	DDI	eP	11	42	13		
		i		42	18		
		e		42	55		
		e		43	05		
04	NDI	eP	11	42	31	E	
		i		42	39		
		i		43	42		
04	CHA	i	11	42	56		
04	SHL	eP	11	43	50		
04	CHA	eP	13	39	43		130
		eS		40	02		
04	CHA	eP	16	42	49		150
		eS		43	06		
05	NDI	eP	00	17	57	NER	
CHA	CHA	eP	00	19	13		
05	CHA	eP	02	39	56		
	SHL	eP	02	40	18		
05	NDI	eP	04	09	14	WR	
05	DDI	e	04	44	13		
	NDI	eP	04	44	44	NC	
05	SHL	eP/					
		Pg	09	33	13		130
		Sg		33	29		
05	SHL	iP	10	02	57	CS	
05	DDI	iP	10	02	58	C	
	CHA	iP	10	03	02	R	

DATE	STN	PHASE	G h	M m	T s		Δ km
05	NDI	eP	10	03	08	SC	
Contd.		e		06	22		
05	NDI	iP	13	07	29	SWC	
	CHA	iP	13	08	41	R	
	SHL	iP	13	09	12	C	
05	SHL	eP	17	22	02		
05	CHA	iPg	21	22	10	R	70
		iSg		22	18		
05	CHA	iP	22	19	13	C	
05	DDI	iP	22	19	17	C	
05	NDI	iP	22	19	25	SWC	
06	CHA	iP	00	05	19	C	
06	NDI	e	04	04	18		
		e		04	21		
03	DDI	eP	08	07	53		
		~~i~~		~~08~~	~~29~~		
06	NDI	eP	08	08	08	NWR	930
		PP		08	15		
		~~i~~		~~09~~	~~33~~		
		iS		09	48		
06	CHA	iP	08	09	40	R	
		~~i~~		~~12~~	~~36~~		
06	POO	eP	08	10	04		
06	SHL	iP	08	10	22	R	2200
		~~S~~		~~14~~	~~01~~		
06	SEH	iP	08	11	47		
		~~i~~		~~12~~	~~19~~		
		~~i~~		~~12~~	~~41~~		
		~~i~~		~~12~~	~~55~~		
03	NDI	iP	09	17	15	WC	
03	SHL	eP	19	27	44		
06	CHA	i	19	27	50		
		i		28	32		
03	NDI	iPKP1	19	27	58	WR	13780
		iPKP2		29	09		
		iPP		32	59		
06	DDI	e?	19	27	57		
		i?		29	07		
06	MDR	e	19	27	59		
		e		37	24		
		e		42	48		
06	SHL	iPg	19	54	29		40
		Sg		54	34		

DATE	STN	PHASE	G h	M m	T s		Δ km
07	NDI	eP	05	52	04		960
		iS		53	44		
07	*Epc. 3.0°S, 130.3°E. Ceram Region. H = 08h 22m 55.9s. – h about 33 km (USCGS) Mag. 4.8 (CGS).*						
	SHL	iP	08	21	25	C	
	CHA	e	08	32	00		
07	NDI	e	13	53	24		
07	SHL	eP	14	57	27		
07	CHA	eP	14	57	57		
07	DDI	e	14	58	37		
	NDI	eP	14	58	47	WC	
07	CHA	eP	15	40	18		410
		eS		41	08		
		i		41	17		
07	NDI	iP	15	41	06		630
		iS		42	13		
07	CHA	iP	19	18	09	R	140
		iS		18	27		
07	CHA	eP	19	33	48		120
		eS		34	02		
07	NDI	eP	20	30	05		
		i		30	19		
	DDI	e	20	30	06		
		e		30	21		
07	SHL	eP	20	39	36		
		i		39	55		
	CHA	iP	20	40	16	C	
	DDI	iP	20	40	48	R	
	NDI	iP	20	40	56	NER	
07	CHA	eP	21	24	22		170
		eS		24	42		
07	CHA	eP	21	30	44		150
		eS		31	02		
08	DDI	e	04	34	16		
	NDI	eP	04	34	24	NER	
08	SHL	iP	04	48	50	C	

DATE	STN	PHASE	G h	M m	T s		Δ km
08	NDI	eP	08	56	49		920
		iS		58	20		
08	NDI	e	12	34	27		
		e		34	28		
08	SHL	iP	18	07	12	C	
08	CHA	i	18	20	42		
08	CHA	e	18	49	01		
08	SHL	eP	20	24	32		
08	SHL	iP	23	02	06	C	
	CHA	eP	23	02	28		
	DDI	e	23	02	32		
	NDI	eP	23	03	36	R	
09	SHL	iP	02	45	35	C	
09	NDI	e	03	30	43		
09	DDI	e?	05	15	02		
09	NDI	eP	05	15	23	NR	
09	CHA	e	07	23	43		
09	CHA	eP	08	48	30		130
		iSg		48	45		
09	CHA	iPg	11	02	33		150
		iSg		02	51		
09	*Epc. 22°N, 87.6°E. about 100 km South West of Calcutta. H = 12h 33m 25s (CSO, Shillong)*						
	CAL	iPg	12	33	47		90
		iSg		33	58		
	BOK	eP	12	34	21		330
		iS		34	58		
		SSS		35	17		
	SHL	iP	12	34	42	C	600
		i		35	00		
		S		35	45		
		iS*		36	03		
		i		36	23		
	CHA	e	12	35	14		
		i		35	55		
		i		36	09		
		i		36	17		
9	PBA	iP	12	36	02		1140
		eS		37	59		

DATE	STN	PHASE	G h	M m	T s		Δ km
09	MDR	eP	12	36	06		1210
Contd.		PP		36	18		
		eS		38	10		
		SS		38	20		
		~~br~~		~~38~~	~~21~~		
		~~M~~		~~39~~	~~29~~		
	NDI	iP	12	36	13	SER	1210
		~~i~~		~~36~~	~~20~~		
		iS		38	17		
		~~e~~		~~39~~	~~56~~		
	DDI	eP	12	36	20		
		~~i~~		~~39~~	~~28~~		
	SEH	i	12	37	54		
		i		39	39		
		i		38	47		
	POO	e	12	39	00		
09	PBA	iPg	13	23	47		
09	SHL	iP	13	54	21	C	
		i		54	39		
		i		55	16		
09	PBA	e	20	10	20		
10	SHL	iP	00	12	21	C	
10	NDI	i/e	07	02	07		
10	NDI	i	09	07	54		
10	SHL	eP	10	50	46		
10	SHL	iP	17	57	10	NW	
		i		58	49		
		i		59	06		
		i		59	26		
10	CHA	eP	17	57	28		
		~~i~~		~~58~~	~~45~~		
		~~i~~		~~59~~	~~22~~		
	NDI	eP	17	58	56		
	BOK	i	18	01	11		
	CAL	i	18	01	15		
10	SHL	iP	18	20	37		
10	SHL	iP	18	34	49	NW	
	CHA	iP	18	35	19	R	
	NDI	iP	18	36	14	SEC	
10	DDI	eP	18	58	45		

DATE	STN	PHASE	G h	M m	T s		Δ km
10	SHL	iP	19	55	06	NW	
	~~NDI~~	~~iP~~	~~19~~	~~56~~	~~29~~	SWC	
	CHA	iP	19	56	34	R	
	DDI	eP	19	56	36		
10	NDI	iP	20	02	54	SWC	
10	PBA	iPg	20	26	19		100
		iSg		26	31		
10	SHL	iP	22	13	39		
	CHA	iP	22	13	57	R	
10	CAL	e	22	20	47		
10	*Epc. 5.0°N, 127.4°E in Taland Islands Region and Hinatuan, Philipines. Felt. Gen: Santos. H = 22h 18m 44.8s. – h about 146 km. Mag. 5.5 (CGS).*						
	PBA	eP	22	23	23		3890
		~~i~~		~~24~~	~~28~~		
		PPP		25	09		
		~~i~~		~~26~~	~~40~~		
		iS		28	45		
		~~i~~		~~29~~	~~40~~		
		~~i~~		~~33~~	~~35~~		
	SHL	iP	22	24	05	C	4210
		~~i~~		~~24~~	~~25~~		
		PcP		26	18		
		S		29	57		
		~~iS~~		~~30~~	~~23~~		
		~~Lr~~		~~33~~	~~06~~		
		~~M~~		~~33~~	~~00~~		
	CHA	iP	22	24	40	R	4720
		iS		31	03		
		~~i~~		~~34~~	~~29~~		
	BOK	iP	22	24	41	C	4700
		~~i~~		~~33~~	~~45~~		
		iS		31	03		
		~~Lr~~		~~34~~	~~09~~		
	MDR	eP	22	25	07		5210
		pP		25	24		
		sP		25	40		
		PcP		26	31		
		PP		27	09		
		PPP		27	48		
		iS		31	52		
		sS		32	22		
		SS		34	35		
		~~Lq~~		~~36~~	~~17~~		
		~~Lr~~		~~38~~	~~48~~		

DATE	STN	PHASE	G h	M m	T s		Δ km
10	SEH	iP	22	25	29		
Contd.		~~i~~		~~26~~	~~02~~		
		~~i~~		~~26~~	~~07~~		
		~~i~~		~~26~~	~~28~~		
	NDI	iP	22	25	46	SEC	5690
		~~i~~		~~26~~	~~06~~		
		iS		32	04		
		PPS		33	14		
		ScS		35	24		
		~~i~~		~~36~~	~~12~~		
		~~e~~		~~37~~	~~20~~		
		SSS		38	14		
		~~i~~		~~39~~	~~40~~		
		~~e~~		~~40~~	~~07~~		
	DDI	iP	22	25	48	C	5690
		~~eP~~		~~25~~	~~48~~		
		~~i~~		~~33~~	~~08~~		
		~~i~~		~~26~~	~~24~~		
		PcP		27	01		
		PP		27	48		
		PPP		28	52		
		PcS		31	01		
		iS		33	06		
		PS		33	14		
		PPS		33	28		
		ScS		35	30		
		SS		36	42		
		~~SSS,Lq~~		~~38~~	~~28~~		
		~~Lr~~		~~40~~	~~58~~		
		~~M~~		~~45~~	~~12~~		
10	POO	eP	22	31	58		
10	KOD	iS	22	32	28	W	
		i		33	11		
10	CHA	e	22	32	19		
10	NDI	i	22	37	30		
		i		37	32		
11	NDI	iP	03	28	27	R	
11	SHL	eP	10	06	47		
11	NDI	iP	10	16	29	CN	
11	NDI	iP	10	37	12	C	
	DDI	eP	10	37	12		
11	NDI	iPg	12	22	52	NR	
		iSg		22	58		
11	SHL	iP	15	03	20		220
		Sg		03	50		

11 Epc. 2°S, 140.8°E. Near North Coast of Western New Guinea. H = 17h 01m 48.5s. - h about 18 km (USCGS).

DATE	STN	PHASE	G h	M m	T s		Δ km
11	SHL	iP	17	11	22	C	6210
Contd.		S		19	09		
	CHA	eP	17	11	50		
	NDI	eP	17	12	50	EC	7520
		eS		21	48		
11	DDI	iP	17	12	50	C	
11	CHA	eP	17	56	38		180
		iSg		56	56		
	SHL	eP	17	56	58		280
		Sg		57	29		
	NDI	iP	17	59	17	C	
	LDI	e?	17	59	29		
11	PBA	Mn	18	05	–		10
11	SHL	iP	18	39	26	NE	
	CHA	iP	18	39	54	R	
	NDI	iP	18	40	52	NEC	
11	NDI	iP	19	08	23	C	
11	NDI	iP	21	46	46	R	
	DDI	eP	21	46	52		
	CHA	iP	21	46	54	R	
	SHL	iP	21	46	58		
12	NDI	iP	05	41	08	R	
12	CHA	iP	07	55	08	C	
12	NDI	iP	08	11	24	SC	
12	NDI	iP	08	56	36	SR	
12	SHL	iP	10	59	38	C	
		i	11	07	20		
	CHA	eP	11	00	12		
	NDI	eP	11	01	07	R	7580
		eS		10	07		
12	SHL	iP	13	02	51	RSE	3740
		iS		08	01		
12	CHA	iP	16	03	30	C	
12	NDI	iP	16	04	39	WR	9240
		e		05	38		
		eS		15	07		

DATE	STN	PHASE	G h	M m	T s		Δ km
12	NDI	iP	18	29	43	C	
12	SHL	iP	19	02	27		
	CHA	iP	19	02	45		
12	SHL	iP	20	17	20		440
		Sg		18	28		
12	CHA	e	20	54	02		
12	SHL	iP	22	58	49		
	CHA	iP	22	59	12	R	
	NDI	iP	23	00	01	SER	
13	NDI	iPg	03	28	44	SER	10
		iSg		28	45.5		
13	NDI	iP	03	31	04	R	
13	CHA	iP	04	30	38	R	
	DDI	eP	04	31	58		
	NDI	iP	04	32	08	R	
13	CHA	e	05	14	26		
	NDI	iP	05	15	22	NER	
	DDI	iP	05	15	24	C	
13	NDI	eP	08	09	09	WC	
	DDI	eP	08	09	10		
13	PBA	iP	08	24	19	R	170
		iS		24	29		
13	SHL	iP	08	27	22	C	
13	BOK	eP	08	27	25		1570
		~~Lq~~		~~29~~	~~57~~		
		iS		30	03		
		SSS		30	29		
		~~Lr~~		~~30~~	~~40~~		
	CHA	iP	08	27	54	C	
13	DDI	iP	08	28	36	R	
		~~i~~		~~33~~	~~43~~		
		i		38	40		
13	NDI	iP	08	28	58	SER	2770
		iS		33	18		
13	POO	eP	08	31	39		
		e		32	25		

DATE	STN	PHASE	G h	M m	T s		Δ km
13	BOM	e	08	32	24		
13	NDI	i	08	37	42		
		i		38	48		
13	CHA	e	08	38	10		
13	NDI	i	12	01	22		
13	SHL	iP	14	11	49	C	
	CHA	e	14	12	17		

13 Epc. 23°N, 94°E. in Burma H = 17h 35m 57.8s. - h about 61 km (USCGS). Mag. 5.8(CGS)

Epc. 23.9°N, 92.3°E. in Lushai Hills. H = 17h 36m 10s(CSO, Shillong)

	SHL	iP	17	33	47	RSE	240
		S		37	15		
		Sg		37	20		
13	TOC	eP	17	33	59		
	CAL	iP	17	37	23		500
		iS		38	16		
13	CHA	iP	17	37	42		720
		iS		38	58		
		i		39	03		
		i		39	19		
		i		39	51		
13	PBA	eP	17	38	48		
		e		40	01		
13	SEH	eP	17	39	30		1610
		~~e~~		~~39~~	~~42~~		
		~~i~~		~~39~~	~~55~~		
		iS		42	18		
13	NDI	eP	17	39	39		1610
		iS		42	21		
13	MDR	iP	17	39	44	E	1650
		PP		39	58		
		PPP		40	06		
		eS		42	21		
		Lr		42	55		
		M		44	09		
	BOM	iP	17	40	35		2110
		e		40	39		
		eS		44	03		
		e		44	06		
		e		44	17		
	HYD	e	17	40	54		
		eS		44	23		
		i		45	54		

DATE	STN	PHASE	G h	M m	T s	Δ km	
13	SHL	iP	20	51	27		
	~~CHA~~	~~e~~	~~20~~	~~51~~	~~48~~		
	~~DDI~~	~~e~~	~~20~~	~~52~~	~~15~~		
	NDI	iP	20	52	25		SWR
14	BOM	iP	00	11	15	3800	
		PP		12	14		
		iS		16	11		
		Lq		17	28		
		SS		17	49		
		M		22	51		
14	SHL	iP	11	01	28	170	
		Sg		01	50		

14 *Epc. 38°N, 38.5°E in South Eastern Turkey. 1 killed, 15 injured, extensive property damage at Malatya and Adiyaman. Fissure about 800 m at Malatya. -h about 8 km (USCGS) H = 12h 15m 31.3s.*

NDI	eP	12	22	07	NWC	3740
	PP		22	30		
	iS		27	36		
	SSS		30	22		
	ScS		32	28		
DDI	iP	12	22	13	C	
	~~eP~~	~~22~~	~~13~~			
	~~e~~	~~27~~	~~42~~			
BOK	i	12	23	17		
CHA	eP	12	23	28		4650
CHA	iS		29	47		
SHL	iP	12	23	59		5180
	iPP		25	52		
	iS		30	48		
	i		34	32		
	i		38	04		
MDR	e	12	25	43		
	e		30	27		
	e		33	42		
	e		41	33		
14 NDI	iP	12	44	40	WC	
14 SHL	iPg	17	03	39		40
	Sg		03	44		
14 SHL	eP	19	04	21		190
	Sg		04	45		
14 SHL	iP	19	33	39	SW	

DATE	STN	PHASE	G h	M m	T s	Δ km	
14	NDI	eP	19	38	10		SER

15 *Epc. 5.4°N, 97°E. in Northern Sumatra. H = 00h 05m 31.1s. -h about 33 km. Mag.5.5(CGS)*
Epc. 5°N, 97.5°E. in Sumatra H = 00h 05m 21s (CSO, Shillong)

PBA	iP	00	07	26		950
	PP		07	31		
	PPP		07	39		
	iS		09	04		
	SSS		09	20		
	M		09	54		
VIS	iP	00	09	43		2090
	iPP		10	00		
	iPPP		10	11		
	iS		13	10		
	iSS		13	37		
	iSSS		13	42		
	iLr		14	17		
MDR	iP	00	09	44	E	2060
	PP		10	06		
	PPP		10	17		
	iS		13	08		
	~~Lq~~	~~13~~	~~42~~			
	SSS		14	15		
	Lr		14	36		
	M		15	36		
KOD	eP	00	10	19		
	PPP		11	00		
	eS		14	15		
	Lq		14	45		
	SS		15	28		
	Lr		16	12		
	PcS		17	12		
	M		17	42		
CAL	iP	00	10	02		2210
	iS		13	40		
	M		16	38		
SHL	iP	00	10	11	RSE	2870
	PP		10	24		
	PPP		10	49		
	iS		14	04		
	Lq		14	22		
	SS		14	37		
	SSS		14	55		
	Lr		15	29		
	M		17	10		
BOK	iP	00	10	18	RSE	2880
	iS		14	12		
	Lq		14	32		
	Lr		15	27		

DATE	STN	PHASE	G h	M m	T s	Δ km	
15 Contd	HYD	iP	00	10	21	W	2490
		iS		14	24		
		Lr		16	02		
		M		17	30		
	TOC	eP	00	10	27		
	CHA	iP	00	10	43	SE	2870
		PP		11	17		
		PPP		11	28		
		~~i~~	~~12~~	~~24~~			
		iS		14	58		
		~~Lq~~	~~15~~	~~32~~			
		SS		15	53		
		SSS		16	06		
		Lr		16	38		
		i		17	46		
		M		18	40		
	POO	iP	00	11	03	NER	3020
		PP		12	00		
		PPP		12	17		
		PcP		14	20		
		iS		15	45		
		Lq		17	00		
		SS		17	15		
		PcS		17	34		
		Lr		18	10		
		M		20	40		
	SEH	eP	00	11	20		3230
		PP		12	30		
		PPP		12	47		
		eS		16	15		
	NDI	iP	00	11	37	NWC	3250
		S		16	20		
		i		16	42		
		Lq		17	58		
		SS		18	06		
		SSS		18	54		
		Lr		19	38		
		M		21	18		
	DDI	iP	00	11	48	C	3370
		eP		11	48		
		PP		12	52		
		PPP		13	09		
		PcP		14	25		
		eS		16	48		
		PcS		18	11		
		Lq		18	23		
		SS		18	38		
		SSS		18	59		
		Lr		20	03		
		ScS		22	02		
		M		22	43		
15 SHL	iP	00	52	30			
15 SHL	iP	01	11	45	SW	830	
	S		13	11			

DATE	STN	PHASE	G h	M m	T s	Δ km	
15	SHL	eP	04	46	10		
		i		46	20		
15	SHL	eP	04	56	33		
15	BOK	iP	09	30	36		
15	NDI	iP	11	02	10	NR	
15	DDI	e	16	07	45		
15	SHL	eP	23	40	30		

16 *Epc. 38.3°N, 139.1°E. Near West Coast of Honshu, Japan. 25 killed, many injured and extensive property damage at Nirgata. 7 foot tsunami along coastal area. - h about 57 km. H = 04h 01m 44.3s (USCGS) Mag. 7¼-7½, 7¼ (Pal), 6.1 (CGS)*
Epc. 40.7°N, 138.7°E. Northern Honshu, Japan. H = 04h 01m 45s (CSO, Shillong)

SHL	iP	04	09	27		4610
	PP		11	08		
	PcP		11	27		
	S		15	27		
	Lq		18	08		
	M		23	45		
~~16~~ CHA	iP	04	10	00	NER	5000
	~~i~~	~~11~~	~~54~~			
	~~iS~~	~~16~~	~~39~~			
	SS		19	50		
	Lq		20	42		
	SSS		20	58		
	Lr		22	54		
	M		26	42		
~~16~~ CAL	iP	04	10	14		5140
	~~iS~~		17	01		
PBA	iP	04	10	38	RN	5580
	~~PP~~		12	28		
	PPP		13	24		
	~~iS~~		17	50		
	SS		21	21		
	Lr		24	50		
	M		29	12		
DDI	iP	04	10	43	NEr	5640
	PcP		12	03		
	PP		12	37		
	PPP		13	37		
	PcS		15	59		
	iS		17	59		
	PS		18	07		
	PPS		18	14		
	ScS		20	36		
	SS		21	31		

DATE	STN	PHASE	G h	M m	T s	Δ km	
16	DDI	Lq	04	22	57		
Contd.		SSS		23	01		
		Lr		25	23		
		M		29	35		
	NDI	e	04	10	44	SWC 5640	
		iP		10	49		
		iS		18	05		
		SS		22	08		
		i		22	23		
	VIZ	iP	04	11	01	W 5920	
		iPcP		12	00		
		iPP		12	07		
		iPPP		14	02		
		iS		18	22		
		iPS		18	52		
		iPPS		19	09		
		iSS		22	26		
		iSSS		24	31		
		eLr		27	22		
		eM		30	08		
	SEH	iP	04	11	28	5930	
		eS		18	54		
	MDR	iP	04	11	37	E 6870	
		PcP		12	34		
		PP		13	54		
		PPP		15	01		
		iS		19	33		
		PS		19	45		
		SS		23	14		
	POO	iP	04	11	50	SWC 6510	
		PcP		11	43		
		PP		12	05		
		PPP		14	22		
		PcS		15	48		
		iS		19	54		
		PS		20	06		
		PPS		20	20		
		ScS		21	25		
		SS		23	50		
		SSS		23	16		
		Lq		28	25		
		Lr		29	35		
		M		34	20		
	CHA	iP	04	11	54	6700	
		PcP		12	32		
		PP		14	38		
		e		14	52		
		PcS		15	20		
		e		15	42		
		iS		20	08		
		ScS		21	50		
		e		22	01		
		SS		24	12		
		SSS		27	05		
		Lq		30	00		
		M		37	42		

DATE	STN	PHASE	G h	M m	T s	Δ km	
16	HYD	iP	04	11	59	6190	
Contd.		PcP		12	14		
		PP		14	22		
		PPP		15	37		
		iS		19	45		
		PS		19	56		
		ScS		21	41		
		SS		23	41		
		Lq		25	43		
		M		27	04		
		Lr		28	34		
	KOD	iS	04	12	07	E 7000	
		PcP		12	46		
		PP		14	31		
		i		16	28		
		iS		20	37		
		~~SKS~~		~~21~~	~~58~~		
		SS		24	46		
		M		–	–		
16	NDI	iP	04	26	45	SEC	
	SHL	iP	07	00	54		
	CHA	eP	07	01	20		
	DDI	eP	07	02	08		
	~~NDI~~	~~eP~~	~~07~~	~~02~~	~~11~~		
	POO	eP	07	03	10	C	
	SHL	iP	07	22	46	C	
16	POO	eP	07	23	00	C	
	CHA	eP	07	23	12		
	NDI	iP	07	24	05	SWC	
16	SHL	iP	11	09	33		
	NDI	eP	11	27	05		
	DDI	eP	11	27	05		
16	SHL	eP	11	54	34		
	CHA	iP	17	18	14	C	
	NDI	eP	17	19	11	R	
	CHA	iP	17	34	51	R	
	NDI	i	17	35	39		
	DDI	iP	18	13	58	R	
		i		14	28		
	NDI	Pn	18	13	59	SEC 810	
		P*		14	03		

DATE	STN	PHASE	G h	M m	T s	Δ km	
16	NDI	Pg	18	14	09		
Contd.		Sn		14	35		
		Sg		14	48		
16	CHA	iP	18	14	43	C	
	SHL	iP	18	15	38		
16	DDI	e	21	36	28		
		i		37	03		
17	SHL	iP	00	12	04	230	
		iSg		12	37		
	CHA	i	00	14	27		
17	NDI	iP	06	47	59	ER	
17	NDI	iP	13	46	04	NEC	
17	NDI	eP	15	19	49	C	
17	SHL	iPg	15	59	03	40	
		Sg		59	08		
17	NDI	eP	16	28	24	C	
17	SHL	iP	21	28	40		
17	CHA	i	21	30	59		
18	CHA	iP	03	04	26	70	
		iS		04	35		
18	NDI	iP	04	19	43	NWC	
		i		19	55		
18	DDI	eP	04	19	50		
		i		21	25		
18	CHA	eP	17	00	50	170	
		iS		01	11		
18	SHL	eP	17	01	09	230	
		iSg		01	41		
18	SHL	eP	17	34	22	290	
		Sg		35	03		
18	SHL	iP	17	58	49		
18	SHL	iP	18	11	08		
	CHA	iP	18	11	26	C	
	DDI	iP	18	12	52	R	
		e		20	11		
	EOM	–	18	41	–		
18	POO	iP	20	58	31	R	

DATE	STN	PHASE	G h	M m	T s	Δ km	
18	DDI	e	20	53	48		
		i		54	27		
19	CHA	eP	00	58	50		
19	CHA	i	08	02	20		
19	BOK	iP	08	58	57		
19	NDI	eP	10	14	42	ER	
19	SHL	eP	10	40	12		
	CHA	e	10	40	45		
19	DDI	eP	10	42	00		
		~~i~~		~~42~~	~~10~~		
		~~i~~		~~43~~	~~00~~		
19	DDI	e	12	24	11		
19	NDI	eP	17	04	42	ER	
19	SHL	iP	18	08	17	110	
		iSg		08	30		
	CHA	i	18	04	36		
19	DDI	eP	20	26	30		
	NDI	iP	20	26	49	NR 900	
		iS		28	22		
19	CHA	e	20	30	31		
20	DDI	eP	10	07	41		
20	SHL	eP	17	07	14	C	
	DDI	eP	17	08	19		
20	CHA	iP	18	17	23	C 220	
		iSg		17	53		
21	CHA	iPg	01	14	26	R 140	
		iSg		14	42		
	SHL	eP	01	14	58	420	
		eS		15	43		
21	SHL	iP	01	42	40	C	
	DDI	iP	01	43	19		
	POO	iP	01	44	30	C	
21	SHL	eP	06	58	23		
21	CHA	i	07	01	57		
21	DDI	iP	07	14	29		

DATE	STN	PHASE	G h	M m	T s		Δ km
21	NDI	i	07	14	24		
Contd.		i		14	28		
		i		14	34		
21	SHL	eP	10	12	27		
21	NDI	iP	12	27	57	NWC	
21	NDI	iP	18	21	05	NWR	
21	SHL	iPg	18	28	47	C	20
		iSg		28	49		
21	SHL	eP	18	49	47		230
		iPg		49	52		
		iSg		50	19		
22	NDI	e	00	45	59		
22	NDI	iP	02	29	45	NWC	
22	DDI	e	03	10	59		
22	SHL	iP	03	15	20		
	CHA	e	03	16	05		
22	DDI	i	09	26	19		
22	NDI	iP	14	18	02	SER	
22	SHL	iP	14	21	51	C	220
		Sg		22	21		
22	CHA	eP	14	22	51		760
		iS		24	10		
22	CHA	iPg	17	34	58	C	90
		iSg		35	08		
22	CHA	iP	18	17	20	C	
22	DDI	eP	19	15	35		
		i		17	17		
22	NDI	iP	19	15	54	SER	30
		iS		17	25		
22	SHL	iP	19	18	03	C	
22	SHL	eP	19	25	09		
22	SHL	iP	21	29	34		
	CHA	iP	21	30	18	R	
	NDI	eP	21	31	25		
	DDI	eP	21	31	25		
(22)	DDI	eP	22	08	57		

DATE	STN	PHASE	G h	M m	T s		Δ km
(22)	NDI	eP	22	09	15	R	1220
~~Contd.~~		eS		11	20		

23 *Epc. 43.3°N, 146.1°E. in Kurile Islands. H = 01h 26m 37s. -h about 77 km (USCGS). Mag. 7(Pas), 6¾ -7(Brk), 6¾(Pal), 6.2 (CGS)*
Epc. 44°N, 145.3°E. East Coast of Hokkaido, Japan.
H = 01h 26m 31s (CSO, Shillong).

✓	SHL	iP	01	35	04	CSW	5140
		PP/PcP		36	56		
		S		41	51		
		PS		42	20		
		SS/ScS		44	48		
		Lq		45	40		
	CHA	iP	01	35	28	R	5480
		iS		42	32		
	BOK	iP	01	35	46	CSW	5750
		PP		37	48		
		iS		43	08		
✓	DDI	iP	01	35	59	SWC	5970
		PcP		37	10		
		PP		37	59		
		PPP		39	05		
		PcS		41	09		
		iS		43	32		
		PS		43	42		
		PPS		43	52		
		ScS		45	57		
		SS		47	11		
		SSS;Lq		48	55		
		Lr		51	26		
		M		55	49		
✓	PBA	iP	01	36	08	RN	6120
		i		36	24		
		i		36	46		
		PP		38	17		
		iS		42	50		
		PS		44	03		
		PPS		44	21		
		i		44	31		
		SS		47	58		
		Lr		52	19		
		M		56	31		
✓	NDI	iP	01	36	10	SWC	6120
		i		36	28		
		PP		38	43		
		i		39	59		
		i		40	51		
		iS		43	52		
		PS		44	01		
		PPS		44	12		
		ScS		45	49		
		SS		47	39		

DATE	STN	PHASE	G h	M m	T s		Δ km
23	NDI	i	01	48	17		
Contd.		Lq		50	27		
✓	VIZ	iP	01	36	24	W	
		iPcP		36	58		
		ePP		38	38		
		ePPP		39	52		
		iS		44	22		
		iPS		44	38		
		iPPS		44	48		
		eSS		48	28		
		eSSS		51	09		
	SEH	iP	01	36	38		
		i		38	59		
		PcP		37	38		
		PP		38	40		
		PPP		39	49		
	MDR	iP	01	37	03	E	7000
		e		37	22		
		PcP		37	43		
		PP		39	21		
		PPP		40	45		
		iS		45	33		
		PPS		46	01		
		SKS/ScS		46	48		
		SS		49	31		
		SSS		52	17		
		Lq		53	05		
		Lr		55	46		
	POO	iP	01	37	10	NEC	7020
		PcP		37	51		
		PPP		41	14		
		PcS		41	37		
		iS		45	41		
		PS		45	56		
		PPS		46	07		
		SKS1		46	52		
		SS		49	50		
		SSS		52	35		
		Lq		53	45		
		M	02	02	00		
	BOM	iP	01	37	12		7130
		PcP		37	39		
		PP		39	39		
		PcS		41	39		
		iS		45	49		
		PS		46	14		
		PPS		46	28		
		SKS		46	58		
		e		47	33		
		M	02	01	25		
	KOD	iP	01	37	26		7410
		PPP		42	17		
		iS		46	17		
		PS		46	32		
		PPS		43	47		
		i		47	47		

DATE	STN	PHASE	G h	M m	T s		Δ km
(23)	PBA	iP	04	32	57		190
		iS		33	20		
		Sg		33	23		
23	SHL	eP	04	35	09		
(23)	DDI	eP	04	37	16		
23	SHL	iP	05	37	27	C	
	CHA	iP	05	37	38	R	
23	SHL	iP	07	07	19	R	
23	SHL	eP	12	59	50		210
		Sg	13	00	19		
23	SHL	iP	19	17	43	C	
23	CHA	iP	19	18	23	R	
		i		20	06		
(23)	NDI	iP	19	19	29	SWR	
	DDI	iP	19	19	30	R	
23	CHA	iP	20	11	07	C	
		i		11	48		
23	SHL	eP	23	25	16		
24	SHL	i	03	59	48		
24	BOK	iP	08	34	22		
24	CHA	iPg	10	33	59		90
		iSg		34	11		
24	SHL	eP	10	35	02		
		i		36	20		
24	SHL	eP	15	10	58		
	CHA	iP	15	11	24	R	
	NDI	iP	15	12	13	R	
24	NDI	eP	16	15	33	R	
24	NDI	iP	19	30	23	SWR	970
		iS		32	02		
24	NDI	iPn	23	35	04	SR	320
		Sn		35	40		
25	SHL	iP	08	14	42	R	360
		Sg		15	36		
25	SHL	iP	10	28	19	C	170
		Sg		28	40		
	CHA	eP	10	28	42		310
		iS		29	17		

DATE	STN	PHASE	G h	M m	T s		Δ km
25	CHA	iP	18	48	03	R	
		i		48	26		
	SHL	eP	18	48	46		
25	CHA	iP	15	38	30		110
		iSg		38	41		
25	SHL	eP	15	34	33		
		i		35	55		
25	SHL	iP	15	44	18	CN	210
		Sg		44	46		
25	BOM	eP	19	50	37		2300
		PP		51	02		
		PPP		51	11		
		eS		54	24		
		SS		55	05		
		SSS		55	16		
		Lr		55	45		
		M	20	01	04		
25	CHA	iP	22	28	41		
26	DDI	e	02	20	49		
		i		22	10		
26	NDI	eP	02	21	08		820
		eS		22	23		
26	CHA	iP	07	59	19	C	160
		iSg		59	38		
26	DDI	e	12	02	21		
		i		02	52		
26	SHL	iP	12	44	27	R	
26	SHL	iP	16	12	55	C	
26	NDI	iP	16	14	25	NC	
26	CHA	eP	22	21	31		910
		eS		22	06		
26	SHL	eP	23	39	51		140
		Sg		40	08		

27 *Epc. 40.4°N, 77.5°E. in Sinkiang Province, China. H = 02h 28m 57.1s - h about 33 km (USCGS). Mag. 5.0 (CGS).*
Epc. 40°N, 75°E. H = 02h 28m 55s -h about 200 km (CSO, Shillong).

✓	DDI	iPn	02	31	22	R	1110
		PP		31	29		
		PPP		31	37		
		P*		31	47		
		Pg		32	13		
		Lq		33	06		

DATE	STN	PHASE	G h	M m	T s		Δ km
27 Contd.	DDI	iSn	02	33	16		
		SS		33	28		
		Lr		33	35		
		SSS		33	39		
		S*		33	53		
		Sg,M		34	22		
✓	NDI	iP	02	31	42	NWR	1250
		iS		33	50		
(27)	CHA	iP	02	32	37	C	1730
		iS		35	31		
	SEH	eP	02	32	05		1380
		eS		35	50		
		~~e~~		~~39~~	~~37~~		
✓	SHL	iP	02	33	19	R	2170
		i		33	51		
		i		34	11		
		iS		36	53		
		M		41	00		
(27)	POO	eP	02	33	59		2510
		eS		38	03		
	MDR	eS?	02	40	08		
		e		41	05		
		e		42	31		
		e		45	05		
27	SHL	iP	12	25	39	C	
	CHA	iPg	12	35	24	C	110
		iSg		35	37		
27	SHL	iP	23	44	22	R	220
		Sg		44	52		
28	SHL	iP	02	52	55	C	470
		S		33	45		
(28)	CHA	iPg	05	52	12		150
		iSg		52	30		

28 *Epc. 1.7°S, 149.6°E. in New Ireland Region. Felt. - h about 7 km. H = 12h 51m 34.6s (USCGS) Mag. 5¾ -6(Brk), 6.4 (CGS).*

(28)	PBA	eP	13	01	35		8580
		PP		02	52		
		eS		09	42		
		SSS		15	59		
✓	SHL	iP	13	01	59		7020
		PcP		02	57		
		PP		04	29		
		PcS/ScP		06	25		
		S		10	20		
		SS		14	50		

DATE	STN	PHASE	G h	M m	T s		Δ km
28 Contd.	SHL	SSS	13	17	50		
		Lr		21	14		
(28)	CHA	eP	13	02	29	C	7550
		iS		11	25		
	BOK	eP	13	02	33	R	
		iS		11	35		
		SS		16	05		
	VIZ	iP	13	02	38	E	7690
		ePPP		07	00		
		iS		11	44		
		ePS		12	08		
		ePPS		12	27		
	MDR	eP	13	02	54		8000
		PcP		03	12		
		iS		12	15		
		PPS		12	55		
		SS		16	51		
		Lr		25	21		
✓	NDI	iP	13	02	21	SEC	8420
		PcP		02	27		
		PP		06	03		
		S		12	02		
		i		12	07		
		i		12	17		
		SkS		12	24		
		PS		13	20		
		PPS		13	52		
		i		14	08		
		SS		17	36		
		SSS		21	20		
		Lq		22	20		
		Lr		27	04		
(28)	DDI	eP	13	02	25		8250
		PcP		02	37		
		PP		06	22		
		PPP		08	03		
		iS		12	59		
		~~SKS1~~		~~12~~	~~13~~		
		ScS		13	30		
		PS		13	37		
		PPS		13	51		
		SS		17	48		
		SSS		21	05		
	PKKP2			22	09		
		Lq		22	20		
	PKKS1			25	48		
		Lr		26	54		
	SKKS2			29	54		
		M		32	20		
(28)	POO	iP	13	03	36	R	
	CAL	i	13	11	08		
28	SHL	iP	15	04	10		
	CHA	i	15	04	32		
	NDI	eP	15	05	12	R	

DATE	STN	PHASE	G h	M m	T s		Δ km
28	NDI	eP	15	21	13	R	
	SHL	eP	13	33	58		210
		iSg		34	28		
28	CHA	i	16	35	14		
28	SHL	iP	18	34	48		
	CHA	iP	18	34	56	C	
	NDI	iP	18	35	12	SWR	
		i		35	24		
28	SHL	eP	19	20	20		
28	CHA	iP	19	21	28	R	
	NDI	iP	19	21	37	SWR	
29	SHL	iP	07	33	32	C	
	CHA	i	07	33	39		
	NDI	eP	07	33	45	SR	
29	CHA	iP	15	43	02	C	
29	NDI	eP	15	44	00	R	
29	NDI	eP	18	00	28		
29	NDI	eP	19	17	11	C	
30	NDI	iP	03	02	00	C	
30	NDI	iP	09	44	46	C	
30	NDI	eP	10	27	46	C	
30	NDI	eP	11	44	11	R	

30 *Epc. 0.8°S, 122.5°E. in Northern Celebes. H = 13h 46m 21.6s. - h about 36 km (USCGS) Mag. 6.3 (CGS).*
Epc. 1°N, 123°E. H = 13h 46m 20s (CSO, Shillong).

	PBA	iP	12	52	48		3520
		PP		54	04		
		iS		57	58		
		SS		59	58		
		Lr	14	01	28		
		M		04	18		
(30)	TOC	eP	13	58	46		4320
		eS		59	45		
	SHL	eP	13	58	49		4330
		PP		55	30		
		PcP		55	58		

DATE	STN	PHASE	G h	M m	T s		Δ km
30 Contd.	SHL	S	13	59	50		
		Lr	14	05	13		
		M		07	48		
	CAL	iP	13	54	06		4450
		PP		55	36		
		iS	14	00	12		
	MDR	iP	13	54	25	E	4950
		PP/PcP		56	10		
		PPP		56	48		
		iS	14	01	01		
		PPS		01	12		
		SS		04	15		
		SSS		05	12		
		Lr		07	09		
		M		09	52		
30	CHA	iP	13	54	25	SER	4740
		iS	14	00	49		
		~~i~~		~~01~~	~~02~~		
		SS		02	49		
		~~Lq~~		~~04~~	~~23~~		
		SSS		04	36		
		Lr		08	17		
		M		09	17		
30	VIS	iP	13	54	28	W	4880
		iPP		56	03		
		iPPP		56	45		
		iS	14	00	58		
		iPS		01	02		
		iPPS		01	08		
		eM		10	45		
	BOK	e	13	54	29	SW	
		iS	14	00	43		
30	KOD	iP	13	54	40	W	5050
		PP		56	28		
		PPP		57	13		
		iS	14	01	22		
		PS		01	31		
		PPS		01	40		
		M		11	31		
	HYD	iP	13	54	53	W	5110
		PP		56	41		
		PPP		57	20		
		eS	14	01	38		
		SS		04	32		
		Lr		08	47		
		M		13	23		
30	SEH	iP	13	55	15		5720
		~~i~~		~~55~~	~~20~~		
		PcP		56	19		
		eS	14	02	35		
		iPS		02	44		

DATE	STN	PHASE	G h	M m	T s		Δ km
30 Contd.	POO	eP	13	55	22		5830
		iS	14	02	30		
		PS		02	40		
		PPS		02	52		
		e		02	20		
		ScS		03	58		
		SS		04	36		
		Lq		05	42		
		SSS		05	55		
		Lr		09	05		
		M		12	–		
	NDI	e	13	55	27	SER	5640
		iP		55	32		
		i		56	04		
		PP		57	38		
		i		58	08		
		e	14	02	30		
		iS		02	48		
		i		02	49		
		PS		03	16		
		PPS		03	30		
		ScS		05	04		
		SS		06	06		
		i		07	21		
		SSS		07	54		
		i		08	40		
		i		09	32		
		Lr		11	12		
		M		14	58		
		Mn		17	–		
	DDI	iP	13	55	35	SER	
		PcP		56	49		
		PP		57	26		
		PPP		58	27		
		PcS	14	00	41		
		iS		02	59		
		PS		03	07		
		PPS		03	18		
		ScS		05	29		
		SS		06	36		
		Lq, SSS		08	13		
		Lr		10	40		
		M		14	59		
	BOM	iP	13	55	37		5780
		PcP		56	28		
		e		57	17		
		PP		57	34		
		e		58	20		
		PPP		58	48		
		iS	14	02	00		
		PS		03	18		
		PPS		03	29		
		ScS		05	25		
		e		06	11		

DATE	STN	PHASE	G h	M m	T s		Δ km
30 Contd.	BOM	SS	14	06	39		
		e		07	28		
		SSS		08	01		
		Lr		10	19		
		M		22	47		
30	SHL	iP	15	56	37	C	
		i		57	34		
30	CHA	iP	15	56	58	R	
30	DDI	iP	15	57	30	C	
		i		58	27		
30	NDI	iP	15	57	29	NEC	
		i		57	52		
30	CHA	iP	15	57	55	C	
	NDI	iP	15	58	35	SWC	
		i		58	48		
30	NDI	iP	16	06	40	NWC	
30	SHL	iP	18	56	16	C	
	CHA	e	18	56	37		
30	DDI	i	18	57	09		

DATE	STN	PHASE	G h	M m	T s		Δ km
30 Contd.	NDI	iP	18	57	18	NER	
	CHA	eP	19	55	29		
	DDI	e?	*19*	56	38		
	NDI	iP	19	56	54	NER	
	CHA	iP	20	13	40	R	
	DDI	iP	20	17	10	R	
	NDI	iP	20	17	20	SEC	
	NDI	e	20	24	31		
	NDI	iP	21	27	22	R	
	NDI	eP	22	07	01	C	
	NDI	eP	22	12	58	R	
30	CHA	iP	22	22	36	C	
	NDI	iP	23	23	29	NWR	
		i		23	52		
	DDI	eP	23	23	42		

The following is the list of earthquake reports that were reported by Voluntary Observers from different stations during the month of June 1964.

Station	Date	Time GMT h m	No. of shocks	Duration (seconds)	Intensity (R.F. Scale)	Remarks
Shillong	03	02 50	1	3	VI	–
Shillong	03	02 52	1	10	V	–
Mohanbari	03	02 49 & 02 50	2	1&2	V	NNW
Lumding	03	02 50	1	55	V	–
North Lakhimpur	03	02 47	1	3	V	Rattling sound
Begnakhali (Kakdwip, Saugar Saugar Island)	09	12 33	2	9 & 5	V	Booming sound during shock. Upward thrust
Srinagar	12	05 45	1	7	V	–

DATE	HOUR GMT	K	MEAN Aplitude in mm	MEAN Period in sec
Station. Madras				
01	00	2	0.3	3.0
	03	2	0.2	3.1
	06	2	0.2	3.0
	12	3	0.2	3.1
	18	3	0.3	2.9
02	00	2	0.5	3.5
	03	2	0.5	3.0
		2	0.3	2.0
	06	2	0.3	3.0
		2	0.3	2.5
	12	2	0.5	3.0
		2	0.3	2.5
	18	2	0.3	3.0
		2	0.3	2.3
03	00	2	0.5	3.5
	03	3	0.3	3.1
	06	2	0.3	3.0
	12	3	0.3	3.0
	18	2	0.3	3.0
04	00	2	0.3	3.0
	03	2	0.3	3.0
	06	2	0.3	3.0
	12	2	0.3	3.0
	18	3	0.3	3.2
05	00	2	0.3	3.5
	03	2	0.3	3.0
	06	2	0.3	3.0
	12	2	0.3	2.7
	18	2	0.3	3.0
06	00	2	0.3	3.1
	03	2	0.3	2.6
	06	2	0.3	3.2
	12	2	0.3	3.0
	18	2	0.3	3.1
07	00	2	0.3	3.0
		2	0.2	2.1
	03	2	0.3	2.6
	06	2	0.3	3.3
	12	3	0.3	3.3
		3	0.3	2.3
	18	3	0.3	3.7
		2	0.3	2.4
08	00	2	0.3	4.4
		2	0.3	2.3
	03	3	0.5	4.3
		3	0.3	2.5
	06	3	0.3	4.7
		3	0.3	2.4
	12	3	0.7	4.7
		2	0.3	2.3
08	18	2	0.7	5.0
		2	0.3	2.4
09	00	2	0.5	4.6
		2	0.3	2.5
	03	3	0.5	4.7
		3	0.3	2.5
	06	3	0.5	5.0
		2	0.3	2.9
	12	3	0.6	4.2
		2	0.4	2.7
	18	3	0.5	4.6
		2	0.3	2.7
10	00	3	0.8	4.3
		2	0.5	3.0
	03	3	0.6	4.1
		3	0.4	2.6
	06	3	0.7	4.0
		3	0.3	2.5
	12	3	0.7	4.6
		3	0.4	2.7
	18	3	1.0	5.2
		3	0.5	2.9
11	00	3	1.2	5.5
		3	0.4	3.0
	03	3	1.3	4.9
		3	0.5	2.9
		3	0.3	2.0
	06	3	1.2	5.0
		3	0.3	2.9
		3	0.2	1.8
	12	3	1.5	5.0
		3	0.4	2.9
		3	0.3	2.0
	18	3	1.2	5.0
		3	0.3	3.0
		3	0.3	212
12	00	3	1.2	4.9
		3	0.3	2.5
		3	0.3	2.0
	03	3	1.0	4.2
	06	3	1.0	4.2
		3	0.3	2.5
	12	3	1.2	4.5
		3	0.5	2.5
	18	3	1.0	4.5
13	00	3	0.9	4.5
		3	0.3	2.0
	03	2	1.0	5.1
		3	0.3	2.5
	06	3	0.8	4.5
		3	0.3	2.5

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station. Madras				
13	12	3	1.0	4.5
		3	0.3	2.5
	18	3	0.8	4.5
14	00	3	1.0	4.5
	03	3	0.8	4.7
		3	0.3	3.3
	06	3	0.7	4.5
		3	0.3	2.5
	12	3	0.5	4.5
		3	0.3	2.5
	18	3	0.7	4.5
		3	0.3	2.3
15	00	...	Earthquake	
	03	3	0.3	2.5
	06	3	0.3	2.5
	12	3	0.4	2.7
		3	0.1	1.9
	18	3	0.5	2.9
		3	0.2	2.0
16	00	2	0.5	2.5
		2	0.1	1.3
	03	3	0.5	2.8
		3	0.1	1.8
	06	...	Earthquake	
	12	2	0.5	2.6
		3	0.1	1.5
	18	2	0.5	2.9
		2	0.3	2.0
17	00	3	0.3	3.0
		2	0.2	1.6
	03	3	0.6	3.0
		2	0.3	2.0
	06	3	0.7	3.0
		2	0.3	2.0
	12	2	0.7	2.8
		2	0.2	2.0
	18	2	0.7	3.0
		2	0.3	2.5
18	00	2	0.5	3.3
		3	0.2	2.2
	03	3	0.6	4.3
		3	0.7	2.9
	06	3	0.7	4.0
		3	0.3	2.5
	12	3	0.8	4.5
		3	0.3	2.5
	18	3	0.3	4.2
		3	0.3	2.5
19	00	3	0.8	4.2
		3	0.3	2.3
	12	3	0.3	4.5
		3	0.3	2.1
	18	2	0.7	4.2
		2	0.3	2.5
20	00	2	0.7	4.5
		2	0.3	2.5
	03	3	1.0	4.9
		3	0.4	3.0
		3	0.1	2.0
	06	3	0.3	4.5
		3	0.5	3.5
		3	0.3	2.1
	12	3	0.3	4.5
		3	0.3	2.5
		3	0.1	2.0
	18	2	0.7	4.3
		3	0.3	2.5
21	00	3	0.5	4.6
		3	0.3	2.3
	03	3	0.3	4.1
		3	0.3	2.3
	06	3	1.0	4.8
		3	0.3	2.6
	12	3	0.5	4.9
		3	0.3	2.7
	18	3	0.3	4.5
		3	0.3	2.5
22	00	3	0.3	4.9
		3	0.3	2.7
	03	3	0.3	5.0
		3	0.1	2.0
	06	3	0.3	5.0
		3	0.3	2.5
	12	3	1.0	4.9
		3	0.3	2.9
		3	0.1	1.5
	18	3	0.3	5.0
		3	0.5	3.0
		3	0.1	1.5
23	00	3	1.0	5.1
		3	0.3	2.6
	03	3	1.5	5.0
		3	0.3	2.5
	03	2	1.5	5.0
		3	0.3	2.5
	12	1	1.5	5.5
		3	0.3	2.7
	18	1	1.5	5.5
		3	0.3	2.5
24	00	1	1.5	5.5
	03	3	1.0	5.0

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station. Madras				
24	06	1	1.5	5.5
		2	0.4	3.0
	12	3	1.5	5.9
	18	2	1.3	5.3
		3	0.3	3.0
25	00	3	1.1	5.2
		2	0.3	2.9
	03	1	1.2	5.3
		3	0.3	2.5
	06	1	1.8	5.5
		3	0.3	2.5
	12	1	1.8	5.7
		3	0.3	2.9
	18	1	1.5	5.6
		3	0.3	2.3
26	00	1	1.5	5.3
		2	0.4	2.3
	03	3	0.3	3.0
	03	1	1.5	5.3
		3	0.3	3.0
	12	1	1.5	5.0
		3	0.3	2.9
	18	1	1.5	5.7
		3	0.3	2.5
27	00	1	1.7	5.5
		2	0.3	2.6
	03	1	1.5	5.5
		3	0.3	2.5
	06	1	1.5	6.0
		3	0.3	2.5
	12	1	1.9	5.6
		3	0.4	3.0
	18	1	1.5	5.5
		3	0.4	2.5
28	00	1	1.3	5.7
		3	0.3	2.5
	03	1	1.8	6.0
		3	0.3	3.0
	06	1	1.2	5.6
		3	0.5	2.8
	12	1	1.6	5.8
		3	0.3	3.5
	18	1	1.2	5.7
		3	0.4	3.2
29	00	1	1.5	6.0
		3	0.3	2.5
	03	1	1.7	6.0
		3	0.3	3.1
	03	1	2.0	6.0
		3	0.3	3.0
	12	1	1.5	6.0
		3	0.3	3.1

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
29 Contd.	18	1	1.5	6.0
		3	0.3	3.0
30	00	1	1.3	5.5
		3	0.3	3.0
	03	3	1.0	5.3
		3	0.5	2.5
	06	3	1.3	5.5
		3	0.3	2.8
	12	3	1.3	6.0
		2	0.3	2.5
	18	3	1.3	5.8
		3	0.5	3.2
		3	0.3	2.3
Station. Bokaro				
01	00	3	0.3	4.0
	03	3	0.3	4.0
	12	3	0.2	3.6
	18	3	0.2	4.5
02	00	3	0.2	4.6
	03	3	0.2	3.8
	12	3	0.3	4.6
	18	3	0.2	4.0
03	00	3	0.3	5.2
	03	3	0.2	4.0
	12	3	0.2	3.4
	18	3	0.1	3.6
04	00	3	0.2	3.8
	06	3	0.1	3.9
	12	1	0.3	2.6
	18	3	0.2	3.4
05	00	3	0.2	3.4
	03	3	0.2	3.6
	12	3	0.2	3.5
	18	3	0.2	3.6
06	00	3	0.2	4.0
	06	...	–	–
	12	...	–	–
	18	...	–	–
07	00	...	–	–
	06	3	0.3	4.2
	12	3	0.3	4.0
	18	3	0.2	3.6
08	00	3	0.3	4.2
	06	...	–	–
	12	...	–	–
	18	...	–	–

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station. *Bokaro*				
09	00	...	–	–
	06	3	0.4	5.0
	12	3	0.4	4.4
	18	2	0.4	4.4
10	00	3	0.4	4.2
	06	1	0.5	5.3
	12	1	0.5	4.4
	18	1	0.9	4.8
11	00	1	0.8	5.2
	06	1	1.0	5.0
	12	1	1.0	5.0
	18	1	1.0	5.4
12	00	1	1.0	4.6
	06	1	1.0	5.0
	12	1	0.5	4.6
	18	1	0.7	5.0
13	00	1	0.5	5.0
	06	2	0.5	4.9
	12	3	0.5	5.4
	18	2	0.9	6.0
14	00	3	0.5	4.6
	03	2	0.4	3.4
	12	2	0.4	3.5
	18	3	0.3	4.4
15	00	3	0.2	4.2
	06	3	0.3	4.0
	12	3	0.3	4.9
	18	3	0.3	5.6
16	00	3	0.2	5.2
	06	...	–	–
	12	...	–	–
	18	3	0.2	4.2
17	00	3	0.2	4.2
	06	3	0.1	3.9
	12	3	0.2	4.0
	18	3	0.2	4.0
18	00	3	0.3	4.2
	06	3	0.3	4.4
	12	3	0.3	4.2
	18	3	0.4	4.6
19	00	3	0.5	5.2
	06	3	0.5	5.0
	12	3	0.5	4.9
	18	3	0.4	4.2
20	00	3	0.4	4.4

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
20	06	...	–	–
	12	...	–	–
	18	...	–	–
21	00	...	–	–
	06	...	–	–
	12	3	0.2	5.0
	18	3	0.2	5.0
22	00	3	0.2	4.8
	06	3	0.5	5.0
	12	3	0.4	4.9
	18	3	0.4	4.7
23	00	...	–	–
	06	3	0.5	5.0
	12	3	0.5	5.3
	18	3	0.8	5.2
24	00	3	0.5	5.2
	03	2	0.3	4.9
	12	2	0.7	4.9
	18	2	0.7	5.1
25	00	2	0.7	5.2
	03	2	0.3	5.3
	12	2	0.9	5.6
	18	2	0.8	5.5
26	00	2	0.9	5.5
	06	2	0.8	5.4
	12	2	0.7	5.1
	18	2	0.7	5.1
27	00	2	0.9	5.3
	06	1	1.2	5.6
	12	1	1.0	5.5
	18	1	0.9	5.6
28	00	1	0.9	6.0
	06	1	0.9	5.4
	12	1	1.4	5.6
	18	1	1.0	5.7
29	00	1	1.1	5.6
	06	...	–	–
	12	...	–	–
	18	...	–	–
30	00	...	–	–
	03	1	0.8	5.4
	12	1	0.9	5.1
	18	1	0.8	5.0

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station. Visakhapatnam				
14	00	–	–	–
	06	3	0.3	3.2
	12	3	0.8	3.2
	18	2	0.9	2.7
15	00	1	1.3	3.6
	06	1	1.3	3.4
	12	2	0.7	2.1
	18	2	0.5	2.6
16	00	2	0.3	2.5
	06	...	Earthquake	
	12	2	0.5	3.2
	18	2	0.5	3.1
17	00	2	0.3	2.9
	03	2	0.5	3.3
	12	2	0.6	4.3
	18	2	0.5	4.0
18	00	2	0.5	4.0
	06	2	0.6	4.3
	12	2	0.5	3.9
	18	2	0.4	3.6
19	00	2	0.5	4.5
	03	2	0.4	3.9
	12	2	0.5	4.4
	18	2	0.4	4.2
20	00	2	0.4	3.7
	06	2	0.4	3.7
	12	2	0.4	4.1
	18	2	0.5	3.7
21	00	2	0.2	3.5
	06	2	0.5	4.2
	12	2	0.4	3.3
	18	2	0.6	4.6
22	00	2	0.3	3.7
	06	2	0.4	3.0
	12	2	0.5	3.6
	18	2	0.4	3.3
23	00	2	0.4	4.5
	06	2	0.4	3.2
	12	2	0.4	3.1
	18	2	0.4	4.2
24	00	2	0.4	3.7
	03	2	0.5	4.5
	12	2	0.4	3.2
	18	2	0.5	3.8
25	00	2	0.3	4.0
	03	2	0.6	4.1
25	12	2	0.6	3.7
	18	2	0.5	3.6
26	00	2	0.4	3.3
	06	2	0.5	4.6
	12	2	0.4	4.1
	18	2	0.5	4.8
27	00	2	0.6	5.1
	06	2	0.6	6.0
	12	2	0.7	5.3
	18	2	0.7	4.5
28	00	2	0.4	4.2
	03	2	0.8	4.9
	12	2	0.7	5.2
	18	2	0.8	5.3
29	00	2	0.5	3.6
	06	2	0.6	4.3
	12	2	0.7	4.9
	18	2	0.5	5.1
30	00	2	0.6	4.3
	06	...	Power failure	
	12	2	0.5	4.3
	18	2	0.5	3.9
Station. Goa Observatory Compt. Vertical.				
12	00	–	–	–
	06	2	0.4	2.0
	12	2	0.4	1.7
	18	2	0.5	1.9
13	00	3	0.4	1.7
	03	3	0.5	1.7
	12	3	0.5	2.0
	18	1	0.5	1.7
14	00	1	0.3	1.7
	03	3	0.5	1.6
	12	1	0.3	2.1
	18	2	0.3	1.7
15	00	1	0.2	1.5
	03	1	0.3	1.6
	12	1	0.3	1.5
	18	3	0.3	1.5
16	00	3	0.3	1.6
	06	....	–	–
	12	3	0.3	1.8
	18	3	0.4	2.0
17	00	3	0.4	1.7

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station. Goa. Compt. Vertical				
17	06	1	0.3	1.8
	12	3	0.3	1.5
	18	3	0.3	1.7
18	00	3	0.3	1.7
	06	3	0.3	1.8
	12	No record.		
Component E – W				
12	00	–	–	–
	06	2	2.0	5.0
	12	2	1.7	4.2
	18	2	1.7	4.5
13	00	3	1.6	4.2
	06	3	1.7	4.7
	12	3	1.7	4.4
	18	1	1.9	4.9
14	00	1	1.5	4.5
	03	3	1.2	4.2
	12	1	1.5	4.5
	18	3	1.6	4.7
15	00	1	1.3	4.7
	06	1	1.4	5.0
	12	1	1.3	4.1
	18	3	0.7	3.8
16	00	3	0.9	3.9
	06	....	–	–
	12	3	0.9	3.6
	18	3	0.9	3.3
17	00	3	0.9	3.1
	06	1	1.0	3.5
	12	3	1.0	3.6
	18	3	1.0	4.1
18	00	3	0.9	3.6
	06	3	1.0	3.6
	12	–	–	–
	18	–	–	–
19	No record			
20	00	3	0.8	3.9
	06	1	1.3	4.6
	12	3	1.0	3.8
	18	1	0.8	4.1
21 to 27	No record.			
28	00	–	–	–
	06	2	2.3	4.9
	12	2	2.4	5.0
	18	2	2.1	4.6
29	00	2	2.4	5.0

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station. Goa. Compt. N – S				
12	00	–	–	–
	06	2	1.6	4.5
	12	2	1.5	3.8
	18	2	1.5	4.4
13	00	3	1.3	4.2
	06	3	1.7	4.8
	12	3	1.9	4.3
	18	1	1.5	4.6
14	00	1	1.5	4.7
	06	3	1.1	3.9
	12	1	1.3	4.2
	18	3	0.9	3.3
15	00	1	1.0	4.1
	06	1	2.1	5.2
	12	1	1.3	4.2
	18	3	0.9	3.3
16	00	3	0.9	3.6
	06	....	–	–
	12	3	0.9	3.7
	18	3	0.7	3.3
17	00	3	0.9	3.0
	03	1	0.9	3.2
	12	3	1.0	3.8
	18	3	1.0	3.4
18	00	3	1.0	3.7
19	No record			
20	00	3	0.8	3.6
	06	1	0.7	4.1
	12	3	0.9	4.1
	18	1	0.9	3.7
28	00	–	–	–
	03	2	1.8	4.7
	12	2	1.9	4.8
	18	2	2.0	4.9
29	00	2	2.0	4.9
	06 to 18	No record		
Station. Bombay (Colaba).				
01	00	1	1.1	3.0
	03	1	1.0	3.0
	06	1	0.9	3.0
	09	1	0.7	3.0
	12	1	0.8	3.0

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station.	*Bombay (Colaba)*			
01	15	1	0.6	3.0
	18	3	0.6	2.8
			0.3	1.5
	21	1	0.7	3.0
02	00	1	0.6	2.8
	03	1	0.9	2.8
	06	1	0.9	2.8
	09	1	0.8	3.0
	12	1	0.6	3.0
	18	3	0.5	2.0
			0.6	2.5
			0.7	3.0
	21	1	0.6	2.9
03	00	1	0.7	2.8
	06	1	0.7	2.9
	09	1	0.6	2.9
	12	1	0.6	2.9
	15	1	0.6	2.9
	18	1	0.6	2.9
	21	1	0.5	2.5
04	00	1	0.6	2.8
	03	1	0.6	3.0
	06	1	0.6	3.0
	09	1	0.6	2.8
	12	1	0.5	2.9
	15	1	0.5	2.9
	18	1	0.5	2.8
05	00	3	0.3	1.9
			0.5	2.8
	06	–	–	–
	12	3	0.4	2.7
			0.2	1.5
	18	3	0.5	2.9
			0.5	6.5
			0.5	3.8
06	00	3	0.4	3.6
			0.3	2.5
			0.2	1.5
	06	–	–	–
	12	3	0.5	3.8
			0.2	1.2
	18	3	0.5	3.7
			0.2	1.2
			0.3	2.0
07	00	3	0.2	1.2
			0.4	3.0
			0.5	4.0
	06	3	0.7	3.7
			0.4	1.5
	12	3	0.7	3.9
			0.4	1.4
	18	3	0.7	4.0
			0.4	2.0

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
08	00	3	0.7	4.0
			0.4	1.5
	03	1	0.7	4.0
	06	1	1.0	4.0
	09	1	1.0	4.0
	12	3	1.0	4.3
			0.3	1.4
	18	3	0.6	1.7
			1.5	5.0
09	00	3	0.4	1.9
			1.0	5.0
	06	–	–	–
	12	–	–	–
	18	1	2.6	4.0
	21	1	2.5	4.0
10	00	1	2.4	4.0
	03	1	2.5	4.0
	12	1	3.0	4.4
	15	1	3.4	4.5
	18	1	4.0	4.5
	21	1	5.3	5.0
11	00	1	2.4	4.0
	03	1	4.0	4.0
	06	1	4.2	4.3
	09	1	4.0	4.4
	12	1	4.0	4.2
	15	1	4.0	4.0
	18	1	3.8	4.2
	21	1	3.5	4.3
12	00	1	3.4	4.3
	03	1	3.0	4.7
	06	1	3.0	4.4
	09	1	3.0	4.4
	15	1	2.5	4.7
	18	1	2.3	4.3
	21	1	2.3	4.5
13	00	1	2.2	4.5
	03	1	2.0	4.5
	06	1	1.9	4.5
	09	1	3.0	4.4
	12	3	1.6	4.0
			0.5	2.0
	15	1	2.5	4.7
	18	3	0.9	1.9
			1.5	4.0
14	00	3	1.2	4.0
			0.8	2.0
	06	3	0.4	2.0
	12	3	1.1	4.0
			0.5	2.0
			1.0	4.0

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station.	*Bombay (Colaba)*			
14	18	3	0.6	1.8
			1.0	4.0
15	00	3	1.0	4.0
			0.5	1.7
	06	3	0.5	2.0
			1.0	4.0
	12	3	1.1	4.0
			0.5	2.0
			0.6	3.0
	18	3	1.1	4.0
			0.5	2.0
16	00	3	1.1	4.0
			0.5	2.1
	06	–	–	–
	12	3	1.0	4.0
			0.3	1.8
	18	3	0.4	2.1
			1.0	4.0
17	00	3	1.0	4.0
			0.5	2.2
	06	3	0.5	2.0
			1.1	4.0
			0.8	3.0
	12	3	1.3	4.0
			0.5	2.0
	18	3	1.3	4.0
			0.5	2.0
18	00	3	1.2	4.0
			0.5	2.0
	06	3	1.1	4.0
			0.3	2.0
			1.5	4.5
	12	3	1.1	4.0
			1.5	4.8
			0.4	2.0
	18	3	1.4	4.5
			0.5	2.5
19	00	–	–	–
	06	3	1.2	4.0
			0.2	2.0
	12	3	1.3	4.7
			0.2	1.5
	18	3	1.1	5.0
			1.1	4.0
20	00	3	1.1	5.0
			0.2	1.2
	06	3	1.2	4.7
			0.5	3.0
	12	1	1.1	4.8
	15	1	1.0	4.9
	18	1	1.0	4.8
	21	1	1.0	5.0
21	00	1	1.1	5.0
	03	1	1.1	4.8
	06	1	1.0	4.8
	09	1	1.1	5.0
	12	1	1.0	4.8
	15	1	1.1	4.8
	18	1	1.1	5.0
	21	1	1.0	4.7
22	00	1	1.1	4.6
	03	3	1.3	4.7
			0.2	2.0
	12	3	1.4	5.0
			0.2	2.0
	18	3	1.9	4.9
			0.3	2.0
23	00	3	1.5	5.0
			0.3	2.0
	06	3	1.7	5.0
			0.3	1.7
	12	3	1.6	5.0
			0.4	2.0
	18	3	1.6	5.0
			0.4	2.0
24	00	3	1.9	5.3
			0.4	2.0
	03	3	1.9	5.0
			0.3	2.0
	12	3	2.4	5.5
			0.5	2.0
	18	3	3.0	5.5
			0.2	1.7
25	00	3	1.8	2.7
			2.0	5.0
	06	3	2.1	5.0
			0.5	2.1
	12	3	2.1	5.0
			1.0	3.0
	18	3	2.2	5.8
			0.9	2.8
26	00	3	2.3	5.2
			2.0	6.0
			0.4	2.0
	06	3	2.1	5.0
			0.9	2.5
	12	3	2.1	5.4
			0.5	2.0
	18	3	2.2	4.0
			0.2	1.7
27	00	3	2.5	4.9
			1.7	3.1
	06	3	2.4	5.7
			1.9	4.2
			0.7	2.0

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station.	*Bombay (Colaba)*			
27	12	3	3.3	6.0
			1.4	3.0
			0.9	2.0
			2.1	4.0
	18	3	2.8	6.0
			2.5	4.0
			1.0	2.0
28	00	3	2.8	5.0
			1.9	3.0
			1.4	2.0
	06	–	–	–
	12	3	3.0	5.5
			3.2	4.0
			1.0	2.0
	18	3	2.8	6.0
			1.0	2.0
29	00	3	2.7	5.0
			1.8	3.1
	06	3	2.3	4.0
			0.7	2.0
			2.7	5.0
			1.6	3.0
	12	3	2.9	5.0
			0.5	2.0
			2.1	3.0
	18	–	–	–
30	00	–	–	–
	06	3	2.1	3.0
			0.5	2.0
			2.4	4.0
	12	3	2.5	3.0
			1.0	2.0
			2.3	4.0
			3.3	5.0
	18	3	2.2	4.0
			0.8	2.0
			2.3	3.0
			3.0	5.0

Station.	*Shillong*	*Compt.*	*E-W.*	
01	00	3	0.3	4.0
	06	3	0.3	4.0
	12	3	0.3	4.0
	18	3	0.4	4.0
02	00	3	0.4	3.8
	06	3	0.4	4.0
	12	3	0.4	3.8
	18	3	0.4	3.6
03	00	3	0.4	3.4
	06	3	0.3	3.6
	12	3	0.3	3.6
	18	3	0.3	3.8
04	00	3	0.3	3.8
	06	3	0.3	3.8
	12	3	0.4	3.8
	18	3	0.4	3.8
05	00	3	0.4	3.6
	06	3	0.3	3.6
	12	3	0.3	3.8
	18	3	0.3	3.8
06	00	3	0.3	4.0
	06	...	–	–
	12	3	0.3	4.0
	18	3	0.4	4.0
07	00	3	0.4	4.0
	06	1	0.4	4.0
	12	1	0.4	3.8
	18	1	0.4	3.8
08	00	1	0.4	3.8
	06	1	0.4	3.6
	12	1	0.4	3.6
	18	1	0.4	3.8
09	00	1	0.4	3.6
	06	1	0.4	3.6
	12	1	0.4	3.6
	18	3	0.4	3.8
10	00	3	0.4	3.6
	06	3	0.4	3.6
	12	3	0.4	3.8
	18	...	–	–
11	00	3	0.4	3.8
	06	1	0.4	3.6
	12	1	0.4	3.4
	18	1	0.4	3.2
12	00	1	0.4	3.2
	06	1	0.4	3.2
	12	1	0.4	3.0
	18	1	0.4	3.6
13	00	1	0.4	3.8
	06	3	0.4	3.8
	12	3	0.3	3.8
	18	3	0.3	3.8
14	00	3	0.3	3.8
	06	3	0.3	4.0
	12	3	0.3	4.0
	18	3	0.3	4.0
15	00	3	0.3	3.8
	06	3	0.3	3.8
	12	3	0.3	4.0
	18	3	0.3	4.0
16	00	3	0.3	4.2

DATE	HOUR GMT	K	MEAN Amplitude in mm	MEAN Period in sec
Station.	*Shillong*	*Compt.*	*E-W.*	
16	06	...	–	–
	12	3	0.3	4.2
	18	0,0	–	–
17	00	0,0	–	–
	06	0,0	–	–
	12	0,0	–	–
	18	0,0	–	–
18	00	1	0.3	4.0
	06	1	0.3	4.0
	12	1	0.3	4.0
	18	1	0.3	4.0
19	00	1	0.3	4.0
	06	3	0.3	4.0
	12	3	0.3	3.8
	18	3	0.3	3.8
20	00	3	0.3	3.8
	06	3	0.3	3.8
	12	3	0.3	3.8
	18	3	0.3	4.0
21	00	3	0.3	4.0
	06	3	0.3	4.0
	12	3	0.3	4.0
	18	3	0.3	3.8
22	00	3	0.3	4.0
	06	3	0.3	3.8
	12	3	0.3	4.0
	18	3	0.3	3.8
23	00	3	0.3	3.8
	06	3	0.3	4.0
	12	3	0.3	4.2
	18	3	0.3	4.2
24	00	3	0.3	4.2
	06	3	0.3	4.0
	12	3	0.3	4.2
	18	3	0.4	4.0
25	00	1	0.4	4.0
	06	1	0.4	4.0
	12	1	0.4	3.8
	18	1	0.4	3.8
26	00	1	0.4	3.8
	06	1	0.4	3.6
	12	1	0.4	3.8
	18	3	0.4	3.6
27	00	3	0.4	3.8
	06	3	0.4	3.6
	12	3	0.4	3.8
	18	1	0.4	3.6
28	00	1	0.4	3.4
	06	1	0.4	3.2

DATE	HOUR GMT	K	MEAN Amplitude (Micron)	MEAN Period in sec
28	12	1	0.4	3.2
	18	1	0.4	3.4
29	00	1	0.4	3.6
	06	3	0.4	3.9
	12	3	0.4	3.9
	18	3	0.3	4.0
30	00	3	0.4	4.0
	06	3	0.4	3.9
	12	3	0.4	3.8
	18	3	0.4	3.8

Station.	*Port Blair*	*Compt.*	*E-W.*	
01	00	3	0.8	3
	06	3	0.8	3
	12	3	0.8	3
	18	3	0.8	3
02	00	3	0.4	3
	06	3	0.4	3
			0.4	7
	12	3	0.4	3
			0.4	7
	18	3	0.4	3
			0.4	7
03	00	3	0.4	3
			0.4	7
	06	3	0.2	3
			0.4	7
	12	3	0.2	3
			0.8	7
	18	3	0.8	7
04	00	3	0.8	7
	06	3	0.4	7
	12	3	0.8	7
	18	3	0.8	7
05	00	3	0.8	7
	06	3	0.2	3
			0.8	7
	12	3	0.4	3
			1.2	7
	18	3	0.4	3
			0.8	7
06	00	3	0.4	3
			0.8	7
	03	3	0.4	3
			0.8	7
	12	3	0.8	3
	18	3	0.8	3
07	00	3	0.8	3
	06	3	0.8	3
	12	3	0.8	3
	18	3	0.8	3

DATE	HOUR GMT	K	MEAN Amplitude (Micron)	MEAN Period in sec
Station.	*Port Blair*		*Compt. E-W.*	
08	00	3	0.8	3
	06	...	–	–
	12	2	0.8	3
	18	2	0.4	3
09	00	...	–	–
	06	2	0.4	3
	12	3	0.4	3
			0.4	7
	18	3	0.4	3
			0.4	7
10	00	3	0.4	3
			0.4	7
	06	3	0.4	3
			0.8	7
	12	3	0.4	3
			0.8	7
	18	3	0.4	3
			0.8	7
11	00	3	0.2	3
			0.8	7
	06	3	0.2	3
			0.8	7
	12	3	0.2	3
			0.8	7
	18	...	–	–
12	00	3	0.2	3
			0.8	7
	06	3	0.2	3
			0.8	7
	12	3	0.2	3
			0.8	7
	18	3	0.2	3
			0.8	7
13	00	3	0.2	3
			0.8	7
	06	3	0.2	3
			1.2	7
	12	3	0.2	3
			0.8	7
	18	3	0.2	3
			0.8	7
14	00	3	0.2	3
			0.8	7
	06	...	–	–
	12	3	0.4	3
			0.8	7
	18	3	0.4	3
			0.8	7
15	00	3	0.8	3
			0.8	7
	06	3	0.8	3
	12	3	0.8	3
			0.4	7
15	18	3	0.4	3
			0.4	7
16	00	3	0.4	3
	06	...	–	–
	12	3	0.4	3
			1.2	7
	18	3	0.8	3
			1.2	7
17	00	3	0.8	3
			2.0	7
	06	3	0.8	3
			1.6	7
	12	3	0.8	3
			1.6	7
	18	3	0.8	3
			1.6	7
18	00	3	0.8	3
	06	3	0.8	3
	12	3	0.8	3
	18	3	0.8	3
19	00	3	0.8	3
	06	3	0.8	3
	12	3	0.8	3
	18	3	0.8	3
20	00	3	0.8	3
	06	3	0.8	3
	12	3	0.8	3
	18	3	0.8	3
21	00	3	0.8	3
	06	...	–	–
	12	...	–	–
	18	...	–	–
22	00	...	–	–
	06	3	0.4	3
			0.4	7
	12	3	0.4	3
			0.4	7
	18	3	0.4	3
			0.4	7
23	00	3	0.4	3
	06	3	0.8	3
	12	3	0.8	3
	18	3	0.8	3
24	00	3	0.8	3
	06	3	0.8	3
	12	3	0.4	3
	18	3	0.4	3
25	00	3	0.8	3
	03	3	0.4	3
			0.8	7
	12	3	0.8	3
	18	3	0.8	3