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International  
Seismological  
Centre

# SEISMOLOGICAL BULLETIN

DEC 1954

GOVERNMENT OF INDIA  
METEOROLOGICAL DEPARTMENT

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SHRI. P. R. KRISHNA RAO  
DIRECTOR GENERAL OF OBSERVATORIES

List of Seismograph Stations with their Instruments and Constants :



Station	Latitude	Longitude	Height (a.s.l.) (Metres)	Lithographic foundation	Instrument	Component	Period in sec	Static magnification	Damping ratio	Paper speed mm/min					
Dokaro	23.47	85.53		Rock	Press-Ewing	Z	To 15 Tg 100			15					
					-do-	N-S	To 15 Tg 100			15					
					-do-	E-W	To 15 Tg .94			15					
					Sprengnether	E-W	To Tg .73	5000	Critical	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 for 1 Galvanometer					
Calcutta	22.32	88.20	(1) 7 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 .70	1000	Critical	30					
Chatra	26.50	87.10	161 Sand Stone		Benioff	Z	To 0.72 Tg 0.45			50					
					Wood Anderson	N	0.8	1000	20:1	30					
					-do-	E	0.8	1000	20:1	30					
					Milne-Shaw	M	12.0	250	20:1	16					
De Ihi	28.41	77.12	207 Massive Quartzite		Sprengnether	E	To Tg .76	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					
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					
Goa	15.29	73.49	Laterite		Sprengnether	Z	To Tg 1.5			30					
					-do-	E	To Tg 1.4	5000	-do-	30					
					-do-	N	To Tg 1.5	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 (IP)	Z	To 15.0 Tg 100	1500 for	Critical	30					
Madras	13.00	80.11	15		-do-	N	do do	1500 TE-15	-do-	30					
					-do-	E	do do	1500 sec	-do-	30					
					-do-	E	do do	1500 sec	-do-	30					
					Milne Shaw	E-W	To 12.0	250	20:1	8					
Poona	18.32	75.51	560 Deccan Trap		Sprengnether	Z	To Tg 7.5		Critical	30					
					Port Blair	11.40	92.43		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						
Sehore	23.10	77.05			-do-	N	do do	1500 TE-15	-do-	15					
					-do-	E	do do	1500 sec	-do-	15					
					Milne Shaw	E-W	To 12.0	250	20:1	8					
					Shillong	25.34	91.53	1600 Quartzite Sand Stone (Shillong Quartzite)		Benioff(S.P)	Z	To 1.0 Tg 0.75	200000 for	Critical	60
-do-	N	do do	200000 TE-1	-do-						60					
-do-	E	do do	200000 sec	-do-						60					
Press-Ewing(LP)	Z	To 15 Tg 100	3000 for	-do-						30					
Tocklai	26.45	94.46	Alluvium		-do-	N	do do	3000 TE-15	-do-	30					
					-do-	E	do do	3000 sec	-do-	30					
					Sprengnether	E	To 5.7 Tg 25.7	3600	Critical	30					
					Milne-Shaw	N	To 12.0	250	20:1	8					
Visakhapatnam	17.43	83.18			Wanner Accelerograph	Z,N,E	To 0.1	Nearly 50	10:1	600					
					Wood Anderson	E-W	0.8	1000	Critical	60					
					Sprengnether	E	To Tg 7.0	5000	Critical	30					
					Wood Anderson	E	To 2.0	960	-do-	30					
					-do-	N	To 0.8	960	-do-	30					
					Electromagnetic (SP)	Z	To Tg 1.65	6000	-do-	60					

DATE	STN	PHASE	H.	M.	S.	DATE	STN	PHASE	H.	M.	S.	
						December, 1964						
01	SHL	eP	05	06	16	01	SHL	iPn	19	46	39	
01	NDI	eP	07	49	48		i		46	46		
	CHA	iP	07	50	15		Sg		47	10		
	SHL	eP	07	50	26 R	02	SHL	iPg	05	28	27 R	
01	NDI	eP	08	26	31 RNW		Sg		28	36		
01	NDI	eP	08	53	17	02	SHL	iP	05	44	08 C	
01	KOD	iP	11	19	03 CN		Epc: - 29.5°N, 81.3°E Nepal					
01	Epc: - 10.6°N, 93.4°E Andaman Islands region.						H = 08h 21m 43.3s					
	h about 33 km (R)						h about 23 km					
	Mag: 47 (CGS) (USCGS)						Mag: 5.1 (CGS) (USCGS)					
	H = 11h 5m 21s						DDI	iP	08	22	31 RNE	330
	h about 33 km (R)						PP		22	36		
	Mag: 47 (CGS) (USCGS)						PPP		22	44		
01	VIS	iP	11	48	18 C	1230	iS		23	08		
	iPP		48	26			SS		23	23		
	PPP		48	34			SSS		23	37		
	iS		50	24			NDI	iPn	08	22	39 CSW	360
	SS		50	38			iSn		23	19		
	SHL	iP	11	48	53	1540	CHA	iP	08	23	16	680
	iS		51	29			eS		24	28		
01	TOC	eP	11	49	09	1740	eSS		24	53		
	eS		52	08			BOK	eP	08	23	31	
	BOK	e	11	49	11		iSSS		25	26		
	KOD	iP	11	49	11 RE		SEH	iP	08	23	33	810
	CHA	eP	11	49	25	1880	iPPP		24	50		
	iS		52	33			i		24	53		
	P00	iP	11	50	00		iS		24	57		
	NDI	eP	11	50	31	2780	iSS		25	10		
	eS		54	53			iSSS		25	21		
	MDR	iPg	11	48	35	70	i		25	30		
	iSg		48	43			i		25	36		
01	MDR	Pg	11	50	49	20	SHL	iP	08	24	12 RNW	1130
	Sg		50	52			iS		26	06		
01	SHL	iP	13	19	10		M		28	05		
01	CAL	iP	14	12	54		P00	iP	08	24	41 C	
01	SHL	iP	15	11	39 R		i		26	50		
	BOK	iP	15	12	24		VIS	iP	08	24	41 C	1390
	CHA	iP	15	12	28 C	900	iPP		24	49		
	eS		14	01			iPPP		24	57		
01	TOC	eP	15	13	53		iS		27	01		
	e		14	12			iSS		27	12		
01	NDI	eP	15	14	20	1790	CAL	iP	08	25	58	
	eS		14	23			i		26	56		
	eS		17	19			KOD	iP	08	26	11 RNE	2060
	VIS	eP	15	14	42		iS		29	37		
01	P00	eP	15	18	08		BOM	eS	08	27	06	
01	KOD	iPg	15	18	08 CN	70	MDR	eS	08	28	22	
	iSg		18	27			SHL	iP	09	44	28	280
							Sg		45	07		
							SHL	iP	10	20	10 R	
							KOD	iP	10	21	05 R	
							NDI	eP	10	41	37	
							i		42	04		

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02	NDI	iP	12 34 28	CE	
	CHA	eP	12 35 58		
	SHL	iP	12 36 41		
02	CHA	i	13 22 41		
02	SHL	iP	13 30 19	CSW	
	CHA	iP	13 30 29	C	
	NDI	iP	13 30 41	CSE	
02	CHA	e	15 38 49		
02	SHL	iP	16 05 34		
02	SHL	iPg	16 27 18		100
		iSg	27 19		
02	SHL	iP	16 33 35		
02	SHL	iP	22 11 52	C	
02	NDI	iP	22 12 54		
02	BOK	eP	22 41 12		
		i	41 49		
02	SHL	eP	22 41 35		
02	VIS	eP	22 43 05		
03	NDI	iPg	03 05 32.0	R	80
		iSg	05 41.0		
03	Epc:- 15.0°S, 66.8°E, Mid Indian Rise. H = 03h 50m 01.2s h about 46 km. Mag: 6.1 (CGS) (USCGS) Epc:- 14.5°S, 66.0°E, - H = 03h 49m. 55s. (C.S.O.Shillong)				
	KOD	iP	03 55 42	S	2980
		iS	04 00 16		
	MDR	iP	03 56 14	W	3550
		pP	56 36		
		PP	57 26		
		iS	04 01 16		
		sS	02 00		
		SS	03 13		
		LQ	05 21		
		SSS	03 43		
		LR	04 50		
		M	07 32		
	P00	eP	03 56 40		3880
	HYD	iP	03 56 43		
		iS	04 02 13		
		M	08 42		
	BOM	iP	03 56 45		3880
		e	56 52		
		PP	58 05		
		PPP	58 20		
		e	58 37		
		PcP	59 16		
		iS	04 02 16		
		e	03 07		
		i	03 20		
03	BOM	SSS	04 04 56		
		LR	05 26		
		ScS	07 04		
		M	13 18		
	VIS	iP	03 57 03	R	
	PBA	iP	03 57 09	R	4260
		iPP	58 30		
		iS	04 03 01		
		i	07 14		
	NDI	eP	03 58 09		
	CAL	iP	03 58 12		4700
		iS	04 04 34		
		i	05 28		
	DDI	eP	03 58 24		5290
		iS	04 05 17		
	CHA	eP	03 58 25		
	SHL	iP	03 58 31	RSW	5330
		PP	04 00 21		
		PPP	01 08		
		iS	05 25		
		M	11 58		
03	BOK	iP	07 57 04		
03	SHL	iPg	07 59 16	C	100
		Sg	59 28		
03	NDI	iPn	08 03 40	RNE	250
		iSn	04 09		
03	CHA	iP	08 04 08		
03	P00	eP	08 05 29		
03	BOK	iP	08 28 30		
03	Epc:- 29°N, 81.5°E in West Nepal. H = 09h 25m 38s. (New Delhi).				
03	DDI	ePn	09 26 23		
		e	26 51		
	NDI	ePn	09 26 29		330
		iPg	26 38		
		iSn	27 07		
		iSg	29 19		
	CHA	eP	09 27 03		
	SHL	iP	09 27 59		
	P00	iP	09 28 31		
	CAL	i	09 30 47		
03	KOD	eP	09 35 30		
03	NDI	eP	10 25 47	CN	950
		eS	27 25		
03	CHA	iP	11 33 57		570
		iS	34 57		
	SHL	iP	11 34 12	C	
	BOK	eP	11 34 39		
	CAL	eP	11 36 40		
	P00	eP	11 37 01		
	KOD	iP	11 37 56	RNE	

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03	DDI	i	11 38 04		
03	SHL	iP	13 40 18	R	
	CHA	iP	13 40 53	C	
03	SHL	eP	15 25 43		
03	SHL	iP/Pg	17 24 55	CW	170
		Sg	25 16		
03	SHL	eP	18 17 15		
03	SHL	ePg	19 23 20		110
		Sg	23 33		
03	SHL	iP	21 12 06	R	
03	NDI	eP	22 37 10		
	CHA	eP	22 38 36		
	SHL	eP	22 39 13	C	
03	NDI	eP	23 03 22		
04	SHL	iP	01 29 28		280
		iSg	30 07		
04	CHA	iPn	03 28 59		170
		iSn	29 19		
04	SHL	eP	04 19 13		
04	SHL	iP	04 54 21	R	
04	NDI	eP	05 34 45	CS	990
		e	36 27		
04	NDI	eP	07 14 21		
04	NDI	eP	07 53 41		
04	SHL	iP	07 54 22	C	
04	SHL	eP	15 59 25		
04	BOK	eP	15 59 55		
	MDR	eP	16 00 11		8000
		eS	09 32		
		PS	10 01		
		PPS	10 15		
		LQ	18 52		
		LR	22 19		
		M	28 21		
	NDI	eP	16 00 43	CW	8800
		e	00 50		
		eS	10 43		
	P00	eP	16 00 47		
04	SHL	iP	21 22 15	NW	
04	NDI	eP	21 23 33	RNE	
04	SHL	iPg	23 39 24	C	110
		Sg	39 37		
05	NDI	e	07 11 55		
05	SHL	iPn	08 08 04		170
		iSn	08 26		
05	SHL	iP	08 38 16	C	
05	SHL	eP	09 34 50		
05	P00	eP	11 05 03		
05	NDI	eP	17 28 14	CSE	870
		iS	29 44		
05	SHL	ePn	18 10 25	R	200
		Sg	10 52		
05	CHA	eP	18 10 36		
05	SHL	iP	18 17 20	C	
05	SHL	iP	20 02 26	C	
05	NDI	eP	20 02 37		
05	SHL	iP	21 15 58		210
		Sg	16 27		
05	SHL	iP	21 51 52		250
		Sg	52 25		
05	SHL	iP	22 41 33	C	
	CHA	eP	22 41 47		
05	KOD	iP	22 43 43	C	
05	SHL	iP	23 11 05	R	
	CHA	iP	23 11 32	R	
	NDI	eP	23 12 26		
05	NDI	eP	23 58 46		610
		eS	59 21		
	CHA	eP	23 58 47		1750
		i	59 55		
		iS	00 01 43		
	SHL	iP	23 59 47	R	
06	SHL	iP	00 01 29	R	
06	NDI	eP	00 02 11		
06	P00	iP	00 03 10		
	KOD	iP	00 03 37	R	
06	SHL	iP	00 05 49	R	
	CHA	iP	00 06 01	R	
	P00	iP	00 07 32		
	KOD	iP	00 07 58	R	
06	NDI	eP	00 11 25		
		e	11 58		
06	NDI	iP	05 35 05	C	
06	P00	eP	03 38 03		
06	SHL	iP	04 36 30	C	
06	KOD	iP	04 37 35	C	
06	NDI	eP	05 38 00		
06	SHL	iP	05 12 53	C	
06	NDI	eP	05 14 25	RW	
06	NDI	eP	05 58 59		

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06	SHL	iP	08 15 49	C	
06	CHA	eP	14 17 29		330
		iS	18 06		
06	DDI	iPn	16 12 20		170
		iSo	12 40		
	NDI	iPn	16 12 54	RN	260
		P*	12 42		
		iSo	13 08.7		
		S*	13 15.6		
	CHA	eP	16 14 18		960
		eS	15 57		
06	P00	eP	16 14 57		
06	SHL	eP	16 15 14		
06	KOD	eP	2 09	CNE	
06	SHL	iP	18 45	R	
07	SHL	iP	05 45 27	C	
07	KOD	P	03 47 11	C	
07	P00	P	03 47 45		
07	Epc		5.4°S, 151.3°E		
			New Britain region		
			H = 08h 58m 43.8s		
			h about 54 km		
			Mag: $5\frac{1}{2}$ (BRK), 6(PAL), 5.8(CGS)		
			(USCGS)		
	SHL	iP	09 09 22	CNW	7190
		PcP	58		
		PP	12 04		
		PcS	13 48		
		S	18 02		
		Ss	19 00		
		SS	22 09		
		i	23 44		
		SSS	25 40		
		LQ	27 09		
		M	30 28		
	BOK	iP	09 09 49		
	CHA	iP	09 09 50	C	
	VIS	P	09 09 59	C	
07	CAL	eP	09 10 09		7750
		eS	19 18		
	MDR	eP	09 10 11		7920
		ePPP	14 44		
		eS	19 25		
		eSS	24 37		
	KOD	iP	09 10 21	C	
	DDI	iP	09 10 44		
	P00	iP	09 10 45		
	BOM	P	09 10 55		8890
		e	10 56		
		eS	20 53		
		ePs	21 34		
07	SHL	eP	09 37 40		
07	NDI	e	09 37 43		
07	SHL	iPn	15 40 12		170
		i	40 20		
		Sg	40 33		
		i	40 48		
07	SHL	iP	15 53 19	RSE	
	NDI	eP	15 54 41		
	P00	iP	15 54 45		
07	NDI	eP	16 15 18		
07	SHL	iP	18 39 49	C	
07	SHL	iP	19 12 28		
07	P00	eP	19 12 33		
07	SHL	eP	19 19 38		270
		iSg	20 16		
07	SHL	iP	19 40 00		
07	SHL	eP/Pg	20 43 30		140
		iSg	43 47		
07	NDI	eP	21 01 14		
		i	01 27		
07	SHL	iP	21 23 37	R	
07	SHL	eP	22 04 53		240
		iSg	05 27		
07	SHL	eP	23 10 29		240
		iSg	11 03		
08	SHL	iP	00 55 41	R	
		i	56 52		
08	SHL	iPn	01 37 08	C	260
		Sg	37 45		
08	NDI	iP	03 36 19		970
		eS	38 00		
08	NDI	eP	04 14 50		
		e	14 53		
08	NDI	eP	04 18 12		
		e	18 15		
		e	18 18		
08	KOD	iP	04 46 51	C	
08	NDI	iP	04 48 55		960
		eS	50 34		
08	NDI	eP	06 51 50	RNW	920
		eS	53 25		
08	SHL	iP	06 54 33	C	
08	SHL	iP	08 07 32	R	
08	KOD	iP	08 08 32	RSE	
08	NDI	eP	09 35 00		
08	SHL	eP	10 31 15		
08	NDI	eP	14 04 34		



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08	PBA	iP	15 38 50		145
		iS	39 08		
08	Epc		34.7°N, 139.2°E,		
			Near South Coast of Honshu,		
			Japan.		
			- H = 17h 49m 46.3s		
			h about 31 km		
			Mag: = 5.2 (UCGS) (USCGS)		
08	TOC	eP	17 57 17		
	SHL	eP	17 57 34		4600
		PcP	59 10		
		PP	59 34		
	PPP		18 00 02		
		iS	03 50		
		PS	04 14		
		SS	06 56		
		LQ	08 18		
		LR	10 44		
		M	13 03		
	BOK	eP	17 58 24	R	5298
		eS	18 05 20		
		SS	08 32		
		SSS	08 52		
	CHA	eP	17 58 29		
		e	18 04 37		
	DDI	eP	17 58 49		5640
		eS	06 05		
	NDI	eP	17 58 58	R	5780
		iS	18 06 21		
		Mn			
	VIS	iP	17 59 00	R	
	MDR	eP	17 59 40		6390
		eS	18 07 37		
		PS	07 43		
		PPS	07 48		
	P00	iP	17 59 40		
	BOM	eP	17 59 54		6450
		PcP	18 00 33		
		eS	08 10		
		PS	08 30		
		PPS	08 38		
		e	09 16		
	KOD	iP	18 00 00	CW	
08	KOD	iP	18 08 20	SE	
08	SHL	iP	23 07 44	C	
09	SHL	iP	06 50 57	C	
09	NDI	eP	06 52 04	RNE	
09	KOD	iP	07 03 21.5	C	
09	SHL	iPn	08 23 26	C	280
		iSg	24 06		
09	NDI	eP	09 30 22		
09	KOD	iP	11 02 22	CNW	
09	Epc		27.5°S, 63.2°W,		
			Santiago del Estero Province,		
			Argentina.		
			- H = 13h 35m 42.4s		
			h about 586 km (R)		
			Mag: 5-5.4(BRK), 6.4(PAL)		
			5.9 (CGS). (USCGS)		
	P00	PKP	13 53 56		
	KOD	PKP	13 53 59	CN	15110
		PP	13 56 47		
	BOM	PKP	13 54 06		15550
		ePP	57 12		
	MDR	PKP	13 54 09		
	NDI	iPKP	13 54 16	RSW	
	CHA	iPKP	13 54 29	R	17450
		ePP	58 49		
	BOK	PKP	13 54 29	RW	
	SHL	iPKP	13 54 34	R	17670
			58 55		
	CAL	PKP	13 54 39		
		i	55 09		
	DDI	e	13 56 20		
09	SHL	iPg	17 02 12	CNE	90
		iSg	02 22		
	KOD	iP	17 03 36	RS	
	NDI	eP	17 03 41	R	
09	CHA	iP	18 38 13	C	
	SHL	iP	18 38 42	CSE	
09	NDI	ePg	18 48 15.5		60
		iSg	48 24.5		
09	CHA	iP	19 15 52	C	
09	SHL	iP	19 16 22	CSE	
09	CHA	iP	19 31 47	R	
09	SHL	iP	22 59 14	CW	
09	SHL	iP	23 53 24	CNW	140
		Pg	53 26		
		Sg	53 42		
10	SHL	ePg	01 08 37		90
		P*	08 39		
		iSg	08 47		
10	KOD	iP	06 48 57.2	RSW	
10	NDI	ePg	12 07 32.7		40
		iSg	07 37.5		

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Epc:- 40.4°N, 138.9°E  
 Eastern Sea of Japan  
 - H = 15h 11m 05.5s.  
 h about 33 km. (R)  
 Mag:- 6.4-7 (BRK), 6 (PAL)  
 Mag:- 6.0 (CGS) (USCGS)

TOC eP 15 18 37

SHL iP 15 18 53  
 iPP 20 33  
 iSS 28 11

CHA eP 15 19 19  
 iS 25 50  
 SS 28 58  
 i 29 12  
 SSS 29 48  
 Mn 15 30

CAL iP 15 19 31  
 iSS 21 24  
 iS 26 10

BOK iP 15 19 37  
 PcP 21 30  
 iPS 26 26  
 LQ 29 58  
 SSS 30 41

PBA iP 15 19 55  
 eS 27 10  
 SS 31 02  
 M 39 43

DDI eP 15 19 59  
 iS 27 06  
 iSS 31 05

NDI eP 15 20 07  
 PP 22 00  
 iS 27 20  
 ScS 30 02  
 SS 30 51  
 LR 35 10

HYD eP 15 20 50  
 iS 28 36  
 PS 28 57  
 SS 32 30  
 SSS 34 30  
 LR 38 00  
 M 42 51

MDR eP 15 20 58  
 PcP 21 53  
 PP 23 04  
 eS 28 51  
 PS 29 00  
 PPS 29 11  
 ScS 30 49  
 SS 32 41  
 LQ 35 01  
 LR 37 38  
 M 42 25

P00 eP 15 21 05

BOM iP 15 21 11  
 PcP 21 50

10 BOM PPP 15 24 54  
 iS 29 21  
 PS 29 34  
 PPS 29 49  
 SS 33 24  
 SSS 35 44  
 e 39 13  
 M 48 45  
 M 50 44

KOD iP 15 12 23 SW 6800  
 iS 29 42

10 VIS eP 15 43 21 5970  
 iS 50 54

11 PBA iPg 03 29 18 R 100  
 iSg 29 30

11 PBA iP 04 16 46

11 P00 eP 05 30 41

11 NDI iP 05 30 45 CE

11 NDI ePg 05 54 10 RNE 50  
 iSg 54 15.5

11 NDI eP 12 52 49

11 CHA eP 16 10 37

11 CHA iP 16 11 28 C

NDI iP 16 12 23

P00 eP 16 13 20

11 MDR e 16 33 06  
 LQ 34 05  
 M 37 12

CHA eP 16 35 24

SHL iP 16 35 38 C

11 SHL iP 18 08 19 R 110  
 Sg 08 30

11 SHL iP 20 49 51 170  
 Sg 50 11

11 SHL iP 22 51 48 CNW  
 Sg 08 30

CHA iP 22 52 20 C

P00 eP 22 53 12

11 NDI iP 22 53 18 CSE

11 NDI eP 23 01 33

11 SHL iPg 23 34 19 C 20  
 Sg 34 22

12 PBA iP 03 14 11

12 NDI iP 07 08 42 RW

12 SHL iP 07 10 40 C

12 Epc:- 6.9°S, 150.6°E  
 New Britain region.  
 - H = 07h 20m 00.0s.  
 h about 33 km (R)  
 Felt : Mag. 5.9 (CGS) (USCGS)

SHL iP 07 30 43 RE 7290  
 iS 39 28

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CHA iP 07 31 10

BOK eP 07 31 12

MDR eP 07 31 31  
 e 36 35  
 eS 40 54

KOD iP 07 31 42 RE

DDI eP 07 32 02

NDI iP 07 32 03 RSE

P00 eP 07 32 05

BOM eP 07 32 14

12 SHL iP 08 38 28 R

12 KOD iP 0 13 18 R

12 MDR e 10 17 54

12 SHL iP 10 21 58 C

12 NDI eP 10 22 27 RNE

12 SHL iP 10 34 27 CNW 120  
 Sg 34 40

12 TOC iP 10 35 13  
 i 35 26

12 SHL eP 11 33 41 230  
 Sg 34 14

12 NDI eP 13 20 12

12 SHL iP 15 42 47 R

12 SHL iPg 18 42 38 RSE 70  
 Sg 42 45

12 SHL iPn 19 03 22 R 240  
 iSn 03 52  
 Sg 03 56

12 NDI iPg 19 16 54 0 20  
 iSg 16 56.4

12 SHL iPg 20 13 29 R 20  
 Sg 13 31

12 SHL iP 22 48 46 C 110  
 Sg 48 58

12 SHL iP 23 18 02

12 NDI eP 23 19 23

12 KOD eP 23 59 15

13 NDI eP 00 43 47 C

13 SHL iP 00 44 51 RNE

CHA iP 00 44 56 R

DDI iP 00 44 57

NDI iP 00 45 07 NE

P00 eP 00 46 01

13 MDR e 01 19 48

13 KOD iP 04 12 30 RN

13 SHL iP 06 49 24 R

13 SHL iP 10 29 24 C

13 SHL eP 10 38 45

13 Epc:- 20.1°N, 122.0°E  
 Philippine Islands region.  
 - H = 13h 15m 49.8s.  
 h about 33 km (R)  
 Mag: 4.8 (CGS) (USCGS)

SHL iP 13 21 44 R 3210  
 PP 22 40  
 PcP 24 50  
 iS 26 34  
 LQ 28 06  
 LR 29 10  
 M 33 42

CAL iP 13 22 24 3550  
 iS 27 36

CHA eP 13 22 25 3640  
 eS 27 42

BOK iP 13 22 31  
 i 28 14

VIS eP 13 22 59  
 MDR eP 13 23 40 4640  
 P 25 14  
 eS 29 58  
 LR 35 48  
 M 39 16

DDI eP 13 23 31  
 NDI eP 13 23 35

KOD iP 13 23 56 CW  
 P00 P 13 24 05

BOM eP 13 24 19  
 HYD e 13 33 15

13 KOD iP 13 30 29 2150  
 iS 34 00

13 SHL iP 14 00 58  
 13 SHL iP 14 35 12 CSW

13 NDI iP 14 36 11 CNE  
 13 SHL iP 17 00 08 CNW

CHA iP 17 00 43  
 13 SHL iP 17 14 28 240  
 iSg 15 02

13 CHA eP 17 53 02 160  
 iS 53 21

13 NDI iPg 18 18 49 E 70  
 iSg 18 57

13 SHL iPg 22 09 05 CE 80  
 Sg 19 14

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14	NDI	eP	00 04 42		
14	KOD	iP	02 12 21	R	
14	MDR	eP	02 13 30		8280
	PPP		16 27		
	eS		18 13		
	PPS		23 05		
	e		23 54		
	SS		24 43		
	LQ		27 46		
	LR		35 04		
	M		36 54		
			43 45		
14	KOD	iP	02 23 24	NW	4460
	iS		29 31		
14	NDI	eP	03 39 01		
14	SHL	iP	03 39 51	R	
14	SHL	iP	04 50 47		
14	SHL	iP	06 59 50		
14	NDI	eP	11 07 16		
14	SHL	eP	11 08 49	R	
14	NDI	iP	16 02 04	RE	
14	P00	iP	16 02 50		
14	TOC	e	19 07 50		
	i		08 14		
14	SHL	iPn	19 08 18		410
	iPg		08 32		
	iSn		09 03		
15	NDI	ePn	01 49 27		400
	eSn		50 11		
15	NDI	eP	03 59 26		
15	SHL	iP	05 14 01	C	
15	KOD	iP	05 15 11	RNE	
15	NDI	eP	05 15 41	C	
15	P00	iP	05 15 43		
15	NDI	eP	07 54 35	C	
15	NDI	eP	08 08 38	C	
15	SHL	eP	08 43 39	CSW	
15	SHL	eP	12 32 36		
	i		36 14		
15	NDI	iP	12 32 36	C	
15	P00	eP	12 32 46		
15	KOD	iPn	12 33 09	RNE	420
	eSn		23 55		
15	SHL	iP	15 12 40	CSW	
15	CHA	eP	15 13 01		
15	DDI	iP	15 13 30		
	NDI	iP	15 13 41	RNE	
15	VIS	eIP	17 33 00	C	
	e		33 37		
15	CHA	iP	17 40 04	R	
15	SHL	iP	18 34 21	C	
15	NDI	iPg	19 09 32.0	CSE 70	
	iSg		09 40.6		
	DDI	ePn	19 09 58		230
	eSn		10 25		
	CHA	eP	19 11 41		
	e		12 30		
	P00	eP	19 13 42		
	KOD	iP	19 18 47	E	
15	CHA	iP	21 12 07		
	SHL	iP	21 12 37	RSE	
15	SHL	iP	22 45 50	R	
	CHA	iP	22 46 02		
16	SHL	iP	00 24 02	R	
	CHA	eP	00 25 05		470
	eS		25 55		
16	SHL	iP	02 55 14		190
	iPg		55 18		
	iSg		55 40		
16	P00	eP	03 04 12		
16	SHL	iP	03 18 24	C	
16	NDI	ePn	03 19 46		400
	eSn		20 30		
16	Epc:- 6.0°N, 125.3°E, Mindanao, Philippine Islands - H = 03h 55m 17.4s h about 121 km. Mag: 5.6 (CGS) Felt Davao				
	SHL	iP	04 02 22	C	4010
	iS		08 02		
	VIS	eP	04 03 07		4630
	e		03 25		
	ePPP		05 21		
	eS		09 25		
	MDR	eP	04 03 24		4900
	iS		09 58		
	NDI	eP	04 04 07		
	BOK	e	04 04 09		

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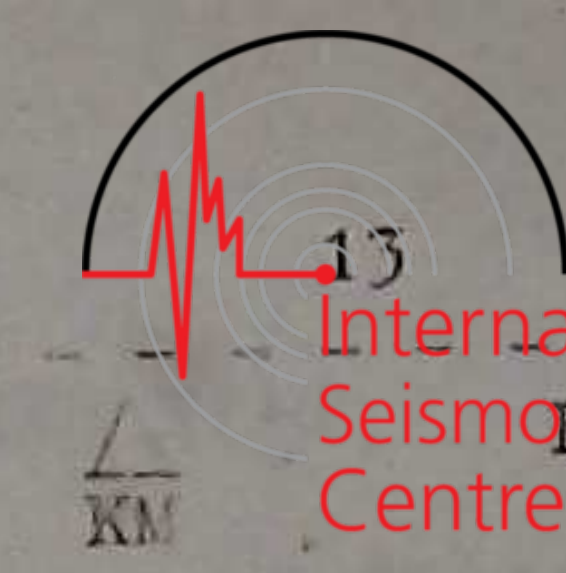
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16	KOD	iP	04 03 43	CNE	
16	CHA	eP	15 24 41		
16	CHA	eP	17 07 09		150
	eS		07 27		
16	SHL	iP	17 31 16	CNW	
16	SHL	iP	18 32 34	C	
	CHA	eP	18 33 13		
16	NDI	iPg	18 45 07	RN	80
	iSg		45 16.1		
16	SHL	iP	19 34 32	RNE	
16	CHA	iP	19 35 08	C	
16	NDI	i	19 36 21	RW	
16	P00	iP	19 37 00		
16	KOD	eP	19 37 00	CW	
16	SHL	iPg	20 18 19	C	110
	i		18 26		
	Sg		18 32		
16	CHA	eP	22 53 17		90
	iSg		53 27		
16	SHL	iPg	23 17 12	RNW	90
	Sg		17 22		
17	SHL	iP	01 16 44	CNW	
17	SHL	iP	04 11 32	R	
17	NDI	eP	04 12 32	RE	
	e		13 27		
17	CHA	eP	05 27 53	C	
	DDI	iP	05 28 23	C	
	NDI	iP	05 28 33	CSW	6420
	iS		36 32		
	Mn		-		
	VIS	eP	05 28 55	C	
	e		29 13		
17	SHL	iP	06 22 34	C	
	P00	eP	06 23 23		
17	P00	eP	06 28 22		
17	SHL	eP	06 45 47	R	
	NDI	eP	06 47 11		
17	SHL	iP	08 13 39	R	250
	Sg		14 16		
	CHA	eP	08 14 39		710
	eS		15 53		
17	SHL	eP	01 17 31		850
	iS		19 00		
17	P00	iP	14 18 54.5		
17	SHL	iP	14 30 32	C	250
	iPg		30 40		
	iSg		31 08		
	CHA	eP	14 30 37		290
	iSg		31 10		
17	CHA	iP	18 01 59		
17	PBA	iP	18 26 08		
17	Epc:- 31.6°N, 138.0°E South of Honshu, Japan. - H = 18h. 48m 02.4s. h about 376 km. Mag: 4.9 (CGS) (USCGS)				
17	SHL	iP	18 55 09	RNE	3890
	iPP		57 03		
	iS		19 00 15		
	CHA	iP	18 55 39	R	
	NDI	iP	18 56 36	RNE	
	P00	iP	18 57 22.3		
17	NDI	eP	21 53 58		
17	Epc:- 51.4°N, 177.9°W. Andrean of Islands, Aleutian Islands - H = 23h 44m 46.2s. h about 57 km. Mag: 5.5 (CGS) (USCGS).				
17	SHL	iP	23 55 57	CSW	7810
	iS		00 05 09		
	CHA	iP	23 56 10	C	8050
	eS		05 34		
	NDI	eP	23 56 32		
	i		56 33		
	VIS	iP	23 57 01	C	
	P00	iP	23 57 22.5		
18	P00	eP	00 40 07		
18	NDI	eP	01 40 13		
18	P00	eP	01 50 00		
18	SHL	ePg	03 22 32		70
	iSg		22 40		
18	P00	iP	06 15 35		
18	SHL	iP	11 04 42	R	
18	VIS	eP	11 44 07	R	3120
	eS		48 52		
	e		49 26		
	SS		50 14		
	SSS		50 27		

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18	SHL	eP	14 01 29	C	270	19	NDI	eP	23 36 02		
		Sg	02 08			20	Epc:- 29.5°N, 81.0°E Nepal. - H = 03h 31m 36.0s h about 35 km (R) Mag: 5.2 (CGS) (USCGS) Mag: 5.0 (Delhi).				
18	PBA	iP	19 23 08			DDI	ePn	05 32 22		280	
18	SHL	iP	19 52 54	R	170	PP		32 26			
		iSg	53 14			PPP		32 32			
18	SHL	iP	22 26 52	R		iSn		32 53			
19	P00	eP	02 24 14			SS		33 01			
	NDI	eP	02 26 47			SSS		33 21			
19	SHL	iPg	02 40 52	C	70	NDI	iPn	03 32 29	RNE	360	
		Sg	41 00			P*		32 34			
19	NDI	iP	03 49 07	CSE	950	Pg		32 41			
		iS	50 45			Sn		33 09			
	SHL	eP	03 51 37			Sg		33 23			
	P00	eP	03 54 15			CHA	iP	03 33 05		620	
19	NDI	iP	05 09 18	C		eS		34 13			
		i	09 31			BOK	eP	03 33 27		760	
		i	09 34			iS		34 47			
19	NDI	eP	05 13 50			BOM	eP	03 33 56		1100	
		e	13 52			eS		35 49			
19	NDI	eP	05 28 43			M		39 46			
		e	28 48			M		40 20			
19	NDI	eP	05 31 32			VIS	eP	03 34 23		1200	
19	SHL	iP	07 59 05	C		PPP		34 40			
19	NDI	e	08 19 05			iS		36 26			
19	SHL	iP	11 04 42	R		P00	iP	03 34 29		1320	
19	NDI	ePg	11 13 53	RN	80	iP		36 45			
		iSg	14 02			CAL	eS	03 35 36			
19	CHA	eP	11 42 18			MDR	eP	03 35 17		1740	
	BOK	eP	11 43 21			eS		38 12			
	MDR	e	11 51 26			SS		38 29			
	KOD	eP	11 52 25	N		LR/SSS		38 33			
19	CAL	iP	11 45 28		330	M		39 34			
		iS	46 04			20	SHL	eP	08 14 09		
19	SHL	iP	15 43 03			20	P00	eP	09 04 19		
19	NDI	iPg	17 35 59.2	CSE	40	20	SHL	iPg	12 29 42	R	70
		iSg	36 03.6					iSg	29 50		
19	SHL	iP	18 25 35	R		20	SHL	iP	13 38 56	CSW	
	CHA	iP	18 26 03			CHA	iP	13 40 22	C		
	P00	iP	18 26 24			NDI	iP	13 41 13	CNW		
	NDI	eP	18 26 57			P00	eP	13 42 06			
19	CHA	iPg	19 02 23	C	110	20	SHL	iPg	20 35 23	C	70
		eSg	02 37					iSg	35 31		
19	SHL	iPg	19 39 17		100	20	NDI	eP	21 07 37		330
		Sg	39 29					i	07 38		
	CHA	eP	19 40 47					eS	08 14		
19	CHA	eP	23 02 12		720	20	SHL	iP	22 52 42		210
		iS	03 28					Sg	53 11		
						20	NDI	iP	23 00 43	CN	



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20	NDI	eP	23 15 57			22	P00	eP	01 02 15		
21	SHL	iP	00 05 08			22	P00	eP	01 43 18		
21	DDI	iP	01 00 50	800		22	NDI	eP	02 09 57		
		iS	02 13			22	CHA	iP	04 30 11	C	
	NDI	iP	01 01 08	RN	880	22	Epc:- 28.2°N, 57.0°E. Southern Iran. - H = 04h 36m 34.7s. h about 42 km. Mag: 5.5 (CGS) (USCGS)				
		iS	02 39				Epc:- 28.0°N, 57.0°E. - H = 04h 36m 30s. (C.S.O. Shillong) Mag: 5.8 (Delhi)				
	SHL	eP	01 02 09	R		BOM	iP	04 40 34		1930	
	P00	eP	01 02 15			PP		40 46			
21	NDI	iP	04 40 33	CS		PPP		40 54			
21	SHL	iP	07 39 46	C		iS		43 47			
	CHA	eP	07 40 14			SSS		44 15			
	NDI	eP	07 41 03			M		51 15			
	P00	eP	07 41 07			NDI	iP	04 40 40	CE	2050	
21	NDI	eP	08 16 44			PP		40 57			
21	NDI	iP	14 13 21	C		PPP		41 07			
21	NDI	iP	14 41 04			S		44 07			
		e	41 06			LQ		44 15			
21	SHL	iP	17 48 43	R		SS		44 29			
	CHA	iP	17 48 49	R		SSS		44 42			
	NDI	eP	17 48 54	R		LR		45 13			
21	SHL	iP	18 43 53	C		M		44 44			
	CHA	i	18 43 57			P00	iP	04 40 44	RNW	2100	
	NDI	eP	18 44 05	CW		eS		44 12			
21	NDI	iPg	19 11 22.8	RNW	80	DDI	iP	04 40 51	RN	2110	
		iSg	11 31.7			PP		41 01			
21	SHL	iP	19 29 55	R		PPP		41 20			
	CHA	iP	19 30 35			i		41 51			
21	NDI	eP	20 28 30			LS, LQ		44 20			
21	NDI	iP	20 56 43	CSW	950	SS		44 35			
		iS	58 21			SSS		44 51			
21	CHA	eP	20 58 18			LR		45 12			
	SHL	iP	20 59 01	C		SEH	iP	04 40 54		2160	
21	SHL	eP	21 28 21			PP		41 10			
21	SHL	iP	21 40 27			PPP		41 20			
	CHA	iP	21 40 56	R		iS		44 28			
21	NDI	eP	21 41 48	R	1270	HYD	eP	04 41 36		2550	
		iS	43 57					iS		45 40	
21	KOD	iP	21 42 57	CSW		M		50 19			
22	NDI	eP	00 43 19	R		BOK	eP	04 42 10	CE	2900	
	KOD	iP	00 43 25	CSW		PPP		43 02			
		i	45 47			iS		46 40			
	CHA	iP	00 43 33			LQ		47 33			
	SHL	iP	00 43 37	R		SSS		47 58			
						LR		48 58			
						VIS	eP	04 42 12	R	3000	
							iPPP	42 32			
							eS	46 45			

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CHA	iP	04 42 15	R	3210	22	SHL	iP	21 45 32	C	
	eS	46 53			22	P00	iP	21 46 57		
KOD	iP	04 42 16	CSE	3000	23	SHL	iPg	00 15 03	100	
	iS	46 48					iSg	15 15		
MDR	eP	04 42 17		2950	23	VIS	eP	01 13 20	2530	
	PP	43 00					iPPP	14 02		
	PPP	43 19					i	14 08		
	iS	46 46					iS	17 10		
	LQ	47 35					iSSS	18 15		
	SS	51								
	SSS	48 07			23	P00	eP	01 39 04		
	LR	48 53			23	SHL	iP	07 44 39	NW	
	M	50 52				NDI	iP	07 46 11	CNW	
CAL	iP	04 42 37			23	SHL	iP	09 28 22	R	
	iPcP	45 55								
	iSS	48 53			23	SHL	eP	10 19 27	160	
SHL	iP	04 42 52	C	3400		Sg	19 48			
	PP	43 56			23	SHL	eP	11 00 31		
	PPP	44 13			23	CHA	iPg	14 22 02	R	150
	PcP	46 06					iSg	22 19		
	S	47 54			23	NDI	iPg	15 33 08.8	CNE 80	
	SS	49 32					iSg	33 14.8		
	ScS	52 52			23	CHA	eP	15 45 33	470	
	M	54 36				eS	46 24			
PBA	eP	04 43 53		4030	23	NDI	iP	15 46 30	RNW	
	iS	49 34			23	CHA	eP	17 00 27		
22	NDI	iP	08 19 56	C	23	SHL	iP	17 01 03	C	
	ePPP	20 28			23	SHL	iP	17 54 49	R	
P00	eP	08 20 05				CHA	eP	19 55 22		
SHL	eP	08 20 10		2070		NDI	eP	19 56 16		
	iS	23 31			24	Epc:- 36.2°N, 70.9°E Hindukush region. - H = 01h 08m 37.7s h about 158 km. Felt Peshawar and Reasalpur Mag: 5.6 (CGS) (USCGS). Epc: 37.0°N, 70.5°E - H = 01h 08m 30s. h = 100 km. Mag: 5.9 (Delhi) (C.S.O. Shillong)				
22	SHL	iPn	08 43 54	CW	210	DDI	iP	01 10 35	CS	900
	iSg	44 23					PP	10 41		
22	SHL	iP	11 46 00	R			PPP	10 48		
22	SHL	iP	12 10 44	R			LQ	11 50		
22	NDI	iPg	16 13 38.8	CNE 80			iS	12 05		
	iSg	13 47.8					SS	12 13		
22	TOC	eP	16 16 51				SSS	12 28		
	i	17 24					M	12 57		
22	SHL	iP	16 17 08	C		NDI	iP	01 10 49	R	960
	i	18 16					PP	10 59		
22	CHA	eP	16 18 08	930			PPP	11 06		
	iS	19 44					iS	12 25		
22	SHL	iPg	17 25 02	70		SEH	iP	01 11 50		1550
	Sg	25 10					i			
22	CHA	eP	18 29 34							
22	SHL	iP	18 34 56	C						
	CHA	eP	18 35 32							
	TOC	eP	18 35 39							
	i	35 57								
	NDI	eP	18 36 41							
22	SHL	eP	19 36 15	290						
	iSg	36 50								

DATE STN PHASE H. M. S.

DATE STN PHASE H. M. S.

December, 1964

24	SEH	LQ	01 14 15		24	CHA	iP	19 31 01	R	
		iS	14 21			P00	eP	19 31 21		
		i	14 25			NDI	eP	19 31 57	R	
		SS	14 49		24	SHL	iP	20 01 41	C	
		LR	14 58			NDI	eP	20 02 10		
		M	16 03		24	SHL	iP	20 29 22	240	
	CHA	iP	01 12 25	C	1790		iPg	29 29		
		iS	15 19				iSg	29 56		
	BOM	eP	01 12 33	1930		CHA	eP	20 29 25	270	
		PP	12 48				iSg	29 58		
		PPP	12 58		24	CHA	iP	20 55 42	R	240
		e	13 03			eS	56 10			
		eS	15 40		24	NDI	iP	22 46 08		
		SS	16 00		25	SHL	iP/Pg	00 08 53	120	
		SSS	16 10				Sg	09 07		
	P00	iP	01 12 37	RN	25	SHL	iP	01 15 30	R	
		SS	16 01		25	NDI	iP	17 17 16		
	BOK	iP	01 12 38	CSE	1910	25	NDI	iP	05 09 11	RN
		eS	15 43				i	09 20		
		SSS	16 10		25	PBA	ePg	08 00 57	35	
		LR	16 30			eSg	01 07			
	HYD	eP	01 13 01	2320	25	SHL	iP	08 13 46		
		i	13 38		25	P00	eP	09 08 01		
		iS	16 41			NDI	iP	09 08 12	C	
		LR	17 26				i	08 23		
		M	18 56		25	SHL	iPg	10 16 18	R	30
	SHL	iP	01 13 10	2320			iSg	16 22		
		PP	13 52		25	SHL	eP	10 40 37		
		iS	16 50		25	CHA	eP	11 32 22		
	CAL	eP	01 13 11	2220		NDI	eP	11 32 37		
		iS	16 48			SHL	iP	11 33 02	R	
24	NDI	eP	01 10 46	RN	24	P00	eP	11 37 50		
		i	10 47		25	SHL	eP	13 58 25		
24	SHL	iP	02 45 20			NDI	eP	13 59 56		
24	CHA	eP	06 15 06	720	24	DDI	eP	16 26 19		
		iS	16 21			NDI	iP	16 26 31	CSE	
24	SHL	iP	06 36 30	R	150		CHA	iP	16 28 03	C
		PP	37				SHL	iP	16 28 47	
		Sg	50		25	Epc:- 34.8°N, 139.3°E New South Coast of Honshu, Japan. Slight damage on Oshima, felt at Tokyo. Mag: 5.1 (CGS) - H = 17h 01m 32.2s. h about 33 km. (R) (USCGS)				
24	NDI	eP	06 43 19			25	SHL	iP	17 09 19	R
24	NDI	eP	08 31 11	970			CHA	eP	17 09 47	
		iS	32 52							
24	NDI	iP	18 45 45							
24	PBA	eP	18 56 00							
	SHL	iP	18 56 28	CNW	7240					
		iS	19 05 11							
	CHA	eP	18 56 55							
	VIS	iP	18 57 04	RW						
	DDI	iP	18 57 43	C						
	P00	iP	18 57 51							
24	SHL	iP	19 30 35	C	2440					
		iS	34 34							





DATE STN PHASE H. M. S.

DATE STN PHASE H. M. S.

Km

December, 1964

28 SHL iP 17 15 12 R  
 28 CHA eP 17 15 05  
 SHL iP 17 15 12 R  
 28 P00 eP 17 33 30  
 28 SHL iPg/P18 48 10 130  
 Sg 48 26  
 28 NDI eP 20 46 43  
 28 SHL iP 21 22 44 C  
 29 SHL iP 00 40 16 C  
 29 SHL iP 00 55 44 C  
 NDI eP 00 56 17 R  
 29 SHL iP 01 37 39 C  
 29 SHL iP 01 50 35 CSW  
 NDI eP 01 52 06 R  
 29 SHL eP 03 39 06  
 NDI iP 03 40 13  
 29 NDI iP 05 14 44  
 29 SHL iP 06 46 28 C  
 29 P00 iP 06 47 51.5  
 29 SHL iP 06 50 32 C  
 NDI iP 06 51 06  
 P00 iP 06 51 55  
 29 NDI eP 07.19 25  
 29 SHL iP 08 36 45  
 29 NDI eP 09 57 10  
 29 NDI eP 10 07 35  
 29 SHL iP 10 20 02 C  
 29 P00 iP 10 22 24.5  
 29 KOD eP 11 48 15  
 29 NDI iPg 12 27 44.2 RNW 80  
 iSg 27 53.4  
 29 SHL iP 12 58 35 C  
 29 KOD iP 13 01 05 R  
 29 NDI eP 14 11 48 1030  
 i 11 50  
 iS 13 34  
 CHA eP 14 13 05 1710  
 iS 15 57  
 SHL iP 14 13 49 C  
 KOD iP 14 15 11 R  
 P00 iP 14 17 25  
 29 NDI iP 22 34 24  
 29 SHL iP 23 33 45 R  
 29 CHA iP 23 34 14

30 SHL eP 00 42 32 190  
 i 42 39  
 Sg 42 56  
 30 CHA ePg 07 11 14 110  
 iSg 11 25  
 30 SHL iP 08 24 14  
 30 SHL ePg 08 43 46 80  
 iSg 43 55  
 30 Epc: - 31.3°N, 138.8°E,  
 South of Honshu, Japan.  
 - H = 15h 27m 25.8  
 h about 261 km.  
 Mag: 5.4 (CGS) (USCGS).  
 TOC eP 15 34 36 NE  
 SHL iP 15 34 49 REN 4600  
 pP 35 42  
 sP 36 12  
 PcP 36 34  
 ScP/PcS 40 09  
 iS 40 45  
 sS 42 40  
 SS 44 05  
 ScS 44 20  
 SSS 45 06  
 CHA iP 15 35 20 R  
 iPP 36 56  
 CAL iP 15 35 32  
 BOK iP 15 35 37  
 ipP 36 26  
 MDR eP 15 36 47  
 DDI iP 15 36 10 R  
 NDI iP 15 36 17 RNE 5890  
 eS 43 25  
 P00 iP 15 37 03  
 BOM eP 15 37 10 6720  
 epP 38 06  
 eS 45 06  
 30 KOD iP 15 37 11 RNE 390  
 iS 37 54  
 30 SHL iP 16 57 52 C  
 CHA eP 16 58 16  
 NDI eP 16 59 03  
 30 CHA eP\* 18 12 00 190  
 iS\* 12 22  
 30 CHA eP 18 53 45 90  
 eS 53 58  
 30 SHL iPg 19 21 20 C 50  
 Sg 21 26  
 30 NDI eP 20 13 30  
 30 CHA eP 21 02 00  
 e 03 00

DATE STN PHASE H. M. S.

DATE STN PHASE H. M. S.

KM

December, 1964.

30 SHL eP 21 02 28  
 30 NDI eP 21 03 05  
 30 NDI eP 21 04 50  
 30 SHL iP 22 35 20  
 30 SHL iP 22 45 06 R  
 P00 eP 22 45 23  
 30 DDI eP 23 39 51 1240  
 iS 42 00  
 NDI iP 23 40 00 RNW  
 CHA e 23 41 39  
 31 NDI iP 04 37 10  
 31 DDI eP 08 22 39  
 iSSS 24 38  
 NDI eP 08 22 52 RN 740  
 iS 24 10  
 P00 eP 08 24 55  
 SHL eP 08 25 17  
 KOD iP 08 26 23 R  
 BOK e 08 27 33  
 i 29 29  
 31 BOK eP 09 58 45  
 31 NDI iP 11 20 07 CE  
 31 SHL iP 12 57 37  
 31 NDI iPg 14 25 58.7 RNE 80  
 iSg 26 07.4  
 31 NDI iP 14 27 47  
 31 NDI iP 16 26 02 CSE  
 DDI iP 16 26 03 C  
 P00 iP 16 26 19  
 CHA iP 16 27 11 C  
 KOD iP 16 27 16 CSE  
 SHL iP 16 27 40 CSE  
 31 TOC eP 19 58 55  
 i 59 36  
 SHL iP 19 59 12  
 CHA eP 19 59 48  
 31 SHL iP 22 02 35 R 220  
 Sg 02 55  
 31 CHA eP 22 34 57  
 31 SHL iP 23 24 13 C  
 CHA iP 23 24 43 R  
 KOD iP 23 25 17 RNE  
 NDI eP 23 25 30 C  
 P00 iP 23 25 57

Earthquake Reports (Non Instrumental Reports)

Following is the list of earthquakes that were reported by Voluntary Observers from different stations during the month of December, 1964.

Station	Date in G.M.T.	Time in G.M.T. h. m.	No. of shocks	Duration in secs.	Intensity in R.F.Scale	Remarks
Gangtok	4.12.64	01 30	One	2 secs.	V	
Shillong	21.12.64	00 05	One	3 secs.	V	

MICROSEISMIC TABULATION

DATE	HOUR	K	Mean amplitude in m.m.	Mean period in sec.	Date	HOUR	K	Mean amplitude in m.m.	Mean period in sec.
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Station : Shillong

December, 1964

01	00	3	0.2	4.2	14	00	1	0.4	4.4	
	06	3	0.2	4.4		06	1	0.4	4.2	
	12	3	0.2	4.4		12	1	0.4	4.2	
	18	3	0.3	4.4		18	1	0.4	4.2	
02	00	3	0.3	4.0	15	00	1	0.4	4.2	
	06	3	0.2	4.2		06	...	-	-	
	12	3	0.2	4.0		12	...	-	-	
	18	...	-	-		18	...	-	-	
03	00	...	-	-	16	00	...	-	-	
	06	...	0.3	4.0		06	...	-	-	
	12	3	0.3	4.0		12	0,0	-	-	
	18	3	0.2	4.0		18	0,0	-	-	
04	00	3	0.2	3.9	17	00	3	0.2	4.0	
	06	...	-	-		06	3	0.3	4.0	
	12	...	-	-		12	3	0.3	4.0	
	18	...	-	-		18	3	0.3	4.2	
05	00	...	-	-	18	00	...	-	-	
	06	0,0	-	-		06	...	-	-	
	12	0,0	-	-		12	...	-	-	
	18	0,0	-	-		18	...	-	-	
06	00	0,0	-	-	19	00	3	0.3	4.0	
	06	0,0	-	-		06	...	-	-	
	12	3	0.3	4.2		12	...	-	-	
	18	3	0.3	4.4		18	...	-	-	
07	00	3	0.3	4.4	20	00	...	-	-	
	06	3	0.3	4.4		06	...	-	-	
	12	3	0.2	4.2		12	...	-	-	
	18	3	0.2	4.2		18	...	-	-	
08	00	3	0.3	4.2	21	00	...	-	-	
	06	3	0.2	4.2		06	3	0.3	4.4	
	12	3	0.2	4.2		12	3	0.3	4.4	
	18	...	-	-		18	3	0.3	4.4	
09	00	3	0.3	4.2	22	00	3	0.3	4.4	
	06	3	0.3	4.4		06	3	0.3	4.4	
	12	3	0.2	4.2		12	3	0.3	4.4	
	18	3	0.3	4.2		18	3	0.3	4.4	
10	00	3	0.3	4.2	23	00	3	0.3	4.4	
	06	3	0.2	4.4		06	3	0.3	4.4	
	12	3	0.2	4.2		12	3	0.3	4.4	
	18	3	0.2	4.0		18	3	0.3	4.4	
11	00	...	-	-	25 to 31	No record.				
	06	1	0.3	4.2		Station : Bokaro				
	12	1	0.3	4.4		01	00	3	0.3	5.4
	18	1	0.3	4.4			06	3	0.3	4.8
12	00	1	0.3	4.2			12	3	0.2	5.0
	06	1	0.3	4.2			18	3	0.2	5.0
	12	1	0.3	4.2		02	00	3	0.2	5.2
	18	1	0.3	4.0			06	3	0.2	5.2
13	00	1	0.3	4.0			12	3	0.2	4.4
	06	1	0.4	4.2			18	3	0.2	4.4
	12	1	0.4	4.4		03	00	3	0.3	5.8
	18	1	0.4	4.4			06	3	0.2	4.4
								3	0.3	4.6

International Seismological Centre

DATE	HOUR	K	Mean amplitude in mm.	Mean period in sec.	DATE	HOUR	K	Mean amplitude in mm.	Mean period in sec.
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Station : Bokaro

December, 1964

13	03	12	3	0.3	5.4	17	12	3	0.4	4.8
		18	3	0.3	5.0		18	3	0.4	5.2
04	00	3	0.3	5.2	18	00	...	-	-	
	06	3	0.2	4.0		06	3	0.2	4.0	
	12	3	0.3	5.0		12	3	0.4	6.6	
	18	3	0.3	5.5		18	3	0.6	5.8	
05	00	3	0.2	5.0	19	00	3	0.6	5.2	
	06	3	0.2	5.0		06	3	0.4	5.4	
	12	3	0.2	5.2		12	3	0.7	6.4	
	18	3	0.3	5.6		18	3	0.8	7.4	
06	00	3	0.2	5.2	20	00	3	0.7	7.2	
	06	3	0.3	4.6		06	3	0.5	6.8	
	12	3	0.3	5.2		12	3	0.5	6.4	
	18	3	0.3	5.2		18	3	0.5	6.8	
07	00	3	0.3	5.2	21	00	3	0.5	6.4	
	06	3	0.3	5.8		06	3	0.6	4.8	
	12	3	0.3	5.4		12	3	0.5	4.8	
	18	3	0.3	5.2		18	3	0.5	5.8	
08	00	3	0.3	5.4	22	00	3	0.5	5.6	
	06	3	0.1	6.4		06	3	0.4	4.8	
	12	3	0.2	5.4		12	3	0.6	5.0	
	18	3	0.2	5.2		18	3	0.5	4.6	
09	00	3	0.2	5.0	23	00	3	0.4	5.6	
	06	3	0.2	5.0		06	3	0.4	5.4	
	12	3	0.2	5.0		12	3	0.4	6.4	
	18	3	0.2	5.0		18	3	0.4	5.6	
10	00	3	0.2	4.6	24	00	3	0.3	5.4	
	06	3	0.3	5.0		06	3	0.3	5.8	
	12	3	0.3	5.4		12	3	0.4	7.4	
	18	3	0.3	5.6		18	3	0.4	8.0	
11	00	3	0.3	4.6	25	00	3	0.6	7.2	
	06	3	0.3	5.4		06	3	0.3	5.6	
	12	3	0.4	5.2		12	3	0.3	6.4	
	18	3	0.3	5.2		18	3	0.3	6.4	
12	00	3	0.6	5.6	26	00	3	0.2	4.8	
	06	3	0.5	6.2		06	3	0.2	3.4	
	12	3	0.5	5.8		12	3	0.3	5.6	
	18	3	0.7	6.0		18	3	0.4	5.6	
13	00	3	0.7	6.0	27	00	3	0.2	5.0	
	06	3	0.6	5.6		06	3	0.2	4.8	
	12	3	0.7	5.8		12	3	0.3	6.0	
	18	3	0.7	6.0		18	...	-	-	
14	00	3	0.7	5.6	28	00	3	0.3	6.0	
	06	3	0.5	6.0		06	3	0.3	5.8	
	12	3	0.4	5.6		12	3	0.3	5.0	
	18	3	0.3	5.0		18	...	-	-	
15	00	3	0.2	4.2	29	00	3	0.4	5.4	
	06	...	-	-		06	3	0.2	4.4	
	12	...	-	-		12	3	0.3	6.4	
	18	...	-	-		18	3	0.3	5.2	
16	00	...	-	-	30	00	3	0.3	5.0	
	06	0,0	-	-		06	3	0.2	5.0	
	12	3	0.2	4.4		12	3	0.3	6.0	
	18	3	0.2	3.6		18	3	0.3	4.6	
17	00	0,0	-	-						
	06	...	-	-						

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

December, 1964

31	00	3	0.3	6.0	12	12	1	.8	5.1
	06	3	0.3	5.6		18	1	.6	5.0
	12	3	0.3	5.4	13	00	1	.7	5.1
	18	3	0.3	5.0		06	1	.7	5.5
						12	1	.8	5.7
						18	1	.7	5.2
					14	00	1	.6	5.0
						06	2	.6	4.7
						12	2	.5	5.0
						18	2	.3	4.4
					15	00	2	.4	4.2
						06	2	.4	4.8
						12	2	.4	4.9
						18	2	.3	4.3
					16	00	0,0	-	-
						06	2	.4	5.0
						12	2	.3	4.1
						18	2	.4	4.0
					17	00	0,0	-	-
						06	2	.5	5.1
						12	2	.4	4.6
						18	0,0	-	-
					18	00	0,0	-	-
						06	2	.5	4.5
						12	2	.4	4.5
						18	2	.3	3.7
					19	00	0,0	-	-
						06	2	.5	4.3
						12	2	.6	4.9
						18	2	.4	4.9
					20	00	0,0	-	-
						06	2	.6	5.1
						12	2	.6	4.4
						18	3	.7	4.2
					21	00	3	.7	4.2
						06	3	.7	4.7
						12	3	.7	4.8
						18	3	.8	4.7
					22	00	3	.8	4.6
						06	3	.7	4.5
						12	3	.7	4.8
						18	3	.5	4.8
					23	00	3	.3	3.5
						06	3	.3	3.6
						12	3	.5	3.8
						18	3	.5	4.1
					24	00	3	.3	3.2
						06	3	.4	3.7
						12	3	.3	3.4
						18	3	.3	3.4
					25	00	3	.3	3.1
						06	...	B	-
						12	2	.3	-
						18	2	.2	3.0
									3.3

A Microseisms feeble.

No record due to voltage drop.

Date	Hour	K	Mean amplitude in m.m.	Mean period in secs.	Date	Hour	K	Mean amplitude in m.m.	Mean period in secs.
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Station : Visakhapatnam

December, 1964

26	00	2	.3	3.0	05	00	2	0.3	3.2
	06	...	B	-		06	3	0.3	3.9
	12	2	.4	4.2				0.3	1.5
	18	0,0	-	-		12	3	0.3	3.9
								0.3	2.0
27	00	0,0	-	-		18	3	0.4	3.0
	06	...	B	-				0.3	2.0
	12	2	.5	4.5	06	00	3	0.4	3.1
	18	...	e	-				0.3	2.0
						06	3	0.5	3.0
								0.4	2.0
						12	3	0.5	3.2
						18	3	0.4	3.0
								0.3	2.1
29	00	1	.3	2.8	07	00	3	0.4	3.1
	06	1	.4	3.0				0.3	2.0
	12	1	.2	2.8		06	3	0.3	3.0
	18	1	.2	2.8				0.3	2.1
						12	3	0.3	3.0
						18	3	0.5	3.9
								0.4	3.1
30	00	1	.3	3.0				0.3	2.0
	06	1	.4	3.0		06	3	0.3	3.0
	12	1	.3	3.0				0.3	2.1
	18	1	.3	2.9		12	3	0.3	3.0
						18	3	0.5	4.3
								0.4	3.1
31	00	1	.3	2.8	08	00	3	0.3	3.0
	06	3	.4	3.4				0.4	4.0
	12	3	.3	3.3		06	2	0.4	3.0
	18	3	.4	4.2		12	2	0.3	3.0
						18	-	-	-

e) Earthquake in progress.

Station : Colaba (Bombay)

01	00	3	0.4	3.2	09	00	2	0.4	3.3
			0.4	2.2		06	3	0.4	4.2
	06	3	0.4	3.0				0.3	3.1
			0.3	2.0		12	3	0.3	4.0
	12	-	-	-		18	3	0.3	4.1
	18	3	0.4	3.1				0.3	2.0
			0.3	2.0				0.3	2.0
02	00	3	0.4	3.5	10	00	3	0.3	3.1
			0.3	2.0				0.3	2.0
	06	3	0.4	3.9		06	3	0.5	2.1
			0.3	2.0		12	3	0.3	2.8
	12	2	0.4	3.2		18	3	0.3	2.8
	18	3	0.4	3.1				0.3	2.0
			0.3	2.1				0.3	2.0
03	00	2	0.3	3.3	11	00	3	0.4	2.0
	06	3	0.3	3.1				0.4	3.1
			0.3	2.0		06	3	0.5	2.9
	12	3	0.3	3.0		12	3	0.5	2.0
	18	-	-	-		18	3	0.5	3.1
								0.3	2.2
04	-	-	-	-				0.3	2.2
	06	3	0.3	3.2	12	00	3	0.6	3.6
			0.3	3.9				0.4	2.8
	12		0.3	4.0		06	3	0.7	3.0
	18	2	0.3	3.0				0.4	1.8
			0.3	3.0					





Date	Hour	K	Mean amplitude in micron.	Mean period in secs.	Date	Hour	K	Mean amplitude in micron.	Mean period in secs.
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Station : Port Blair

December, 1964

16	00	3	0.4	3	27	12	1	0.8	7
			0.8	7		18	...	-	-
	06	3	0.4	3	28	00	1	0.8	7
			0.4	7		06	1	0.8	7
	12	3	0.4	3		12	1	0.8	7
			0.4	7		18	...	-	-
	18	3	0.8	3	29	00	3	0.8	3
			0.4	7				0.8	7
17	00	3	0.8	3		06	3	0.8	3
			0.4	7				0.4	7
	06	3	0.8	3		12	3	0.8	3
			0.8	3				0.4	7
	12	3	0.8	3		18	...	-	-
			0.8	3				-	-
18	00	3	0.8	3	30	00	...	-	-
			1.6	3		06	1	0.8	3
	06	3	1.6	3		12	1	0.4	3
			2.0	3		18	1	0.4	3
	12	3	2.0	3				-	-
			2.0	3				-	-
19	00	3	2.0	3	31	00	1	0.4	3
			0.8	3		06	1	0.4	2
	06	3	1.6	3		12	1	0.2	2
			1.2	3		18	1	0.2	2
	12	3	1.2	3				-	-
			0.8	3				-	-
20	00	3	0.8	3				-	-
			1.2	3				-	-
	06	3	1.2	3				-	-
			1.2	3				-	-
	12	3	1.2	3				-	-
			-	-				-	-

Station : Calcutta

01	00	0..	-	-	01	00	0..	-	-
			-	-		06	0..	-	-
	06	3	1.2	3		12	0..	-	-
			1.2	3		18	0..	-	-
	12	3	1.2	3				-	-
			1.2	3				-	-
	18	3	1.2	3	02 to 09	00 to 18	0..	-	-
			-	-				-	-
21	00	...	-	-	10	10	0..	-	-
			-	-		6	0,0	-	-
	06	3	1.2	3		12	0,0	-	-
			1.2	3		18	0,0	-	-
	12	3	1.2	3				-	-
			1.2	3				-	-
	18	3	0.8	3				-	-
			-	-				-	-
23	00	3	0.8	3	11	00	0,0	-	-
			0.4	3		06	0,0	-	-
	06	3	0.4	3		12	3	0.2	3.8
			0.4	3		18	3	0.2	3.8
	12	3	0.4	3				-	-
			0.4	3				-	-
	18	3	0.4	3				-	-
			-	-				-	-
24	00	3	0.4	3	12	00	3	0.2	3.8
			0.2	7		06	3	0.2	3.8
	06	3	0.2	7		12	3	0.2	3.8
			0.8	7		18	3	0.2	3.8
	12	3	0.8	7				-	-
			0.8	7				-	-
25	00	3	0.8	7	13	00	3	0.4	4.0
			0.8	7		06	3	0.4	4.0
	06	1	0.8	7		12	3	0.4	4.0
			1.2	7		18	3	0.4	4.0
	12	1	1.2	7				-	-
			0.8	7				-	-
	18	1	0.8	7				-	-
			-	-				-	-
26	00	1	0.8	7	14	00	3	0.6	4.0
			0.8	7		06	3	0.4	4.0
	06	1	0.8	7		12	3	0.2	4.0
			0.8	7		18	3	0.2	4.0
	12	1	0.8	7				-	-
			0.8	7				-	-
	18	1	0.8	7				-	-
			-	-				-	-
27	00	1	0.8	7	15	00	3	0.2	4.0
			0.8	7		06	3	0.2	4.0
	06	1	0.8	7		18	3	0.2	4.0
			-	-				-	-

Date	Hour	K	Mean amplitude in sn.m.	Mean period in secs.	Date	Hour	K	Mean amplitude in micron	Mean period in secs.
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Station : Calcutta

December, 1964

16	00 to 18	0,0	-	-	02	00	3	0.2	3.1
			-	-		03	3	0.2	3.1
17	00	0,0	-	-		06	3	0.2	3.0
	06	0,0	-	-		12	3	0.2	3.1
	12	3	0.2	4.0		18	3	0.2	3.1
	18	3	0.2	4.0	03	00	3	0.2	3.1
18	00	3	0.2	4.0		03	3	0.3	3.2
	06	3	0.2	4.0		06	3	0.3	3.3
	12	3	0.2	4.0		12	3	0.3	3.2
	18	3	0.2	4.0		18	3	0.3	3.2
19	00	3	0.2	4.0	04	00	3	0.3	3.2
	06	3	0.2	4.0		03	3	0.3	3.3
	12	3	0.2	4.0		06	3	0.3	3.2
	18	3	0.2	4.0		12	3	0.3	3.2
			-	-		18	3	0.3	3.2
20	00	3	0.2	4.0	05	00	3	0.3	3.2
	06	3	0.2	4.0		03	3	0.3	3.3
	12	3	0.2	4.0		06	3	0.3	3.2
	18	3	0.2	4.0		12	3	0.3	3.2
21	00	3	0.2	4.0		18	3	0.3	3.3
	06	2	0.8	4.2	06	00	3	0.3	3.3
	12	2	0.8	4.2		03	3	0.2	3.2
	18	2	0.8	4.2		06	3	0.2	3.0
22	00	2	0.8	4.2		12	2	0.2	2.9
	06	2	0.6	4.2		18	2	0.2	3.1
	12	2	0.6	4.2	07	00	2	0.2	3.5
	18	2	0.6	4.2		03	2	0.2	3.0
23	00	2	0.4	4.2		06	3	0.2	3.1
	06	2	0.4	4.2		12	3	0.2	3.0
	12	2	0.4	4.2		18	3	0.3	3.0
	18	2	0.4	4.2	08	00	3	0.3	3.2
24	00	3	0.2	4.0		03	3	0.3	3.1
	06	3	0.2	4.0		06	3	0.3	3.0
	12	3	0.2	4.0		12	3	0.3	2.9
	18	3	0.2	4.0		18	3	0.3	3.0
25	00	3	0.2	4.0	09	00	3	0.4	3.0
	06	3	0.2	4.0		03	3	0.3	3.0
	12	3	0.2	4.0		06	3	0.3	3.0
	18	3	0.2	4.0		12	3	0.3	3.0
			-	-		18	3	0.3	3.0
26	00	3	0.2	4.0	10	00	3	0.3	2.9
	06	0,0	-	-		03	3	0.3	3.0
	12	0,0	-	-		06	3	0.3	3.0
	18	0,0	-	-		12	3	0.3	3.0
			-	-		18	3	0.3	3.0
27 to 31	00 to 18	0,0	-	-	11	00	3	0.3	3.0
			-	-		03	2	0.4	3.0
			-	-		06	2	0.4	3.0
			-	-		12	2	0.5	3.0
			-	-		18	2	0.5	3.3

Station : Madras

01	00	3	0.2	3.1	12	00	2	0.5	3.4
	03	3	0.2	3.1		03	2	0.5	3.5
	06	3	0.2	3.1		06	2	0.6	3.5
	12	3	0.2	3.1				-	-
	18	3	0.2	3.1				-	-



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Date	Hour	K	Mean amplitude in m.m.	Mean period in secs.	Date	Hour	K	Mean amplitude in micron	Mean period in secs.
Station : Madras									
December, 1964									
12	12	2	0.5	3.2	21	06	3	0.7	4.5
	18	2	0.5	3.3			3	0.5	5.1
13	00	2	0.5	3.4		09	2	0.9	4.7
	03	2	0.5	3.4			2	0.6	3.2
	06	2	0.6	3.8		12	2	1.0	4.6
	12	2	0.6	4.7			2	0.6	3.1
	18	2	0.7	4.5		15	2	1.2	4.8
14	00	2	0.7	4.3		18	2	0.6	3.1
	03		Earthquake			21	2	0.6	4.6
	06	2	0.6	4.3			1	1.8	4.9
	12	-	0.6	4.0	22	00	1	2.1	4.7
	18	2		4.0		03	1	2.2	4.6
15	00	2	0.5	4.0		06	1	2.5	4.6
	03	2	0.5	3.8		09	1	2.4	4.4
	06	2	0.5	4.0		12	1	2.2	4.5
	12	2	0.4	3.7		15	1	2.0	4.5
	18	2	0.4	3.8		18	1	1.8	4.3
						21	1	1.5	4.0
16	00	2	0.4	3.5	23	00	2	1.3	3.5
	03	2	0.4	3.3		03	2	1.2	3.3
	06	2	0.4	3.1		06	2	1.3	3.1
	12	2	0.5	3.7		09	2	1.2	3.1
	18	2	0.4	3.4		12	2	1.3	3.2
17	00	2	0.4	3.7		15	2	1.3	3.3
	03	2	0.4	3.3		18	2	1.3	3.1
	06	2	0.4	3.4		21	2	1.2	3.3
	12	2	0.4	3.4	24	00	2	1.1	3.3
	18	2	0.4	3.5		03	2	1.0	3.3
18	00	2	0.4	3.4		06	2	0.8	3.2
	03	3	0.4	3.2		09	3	0.9	6.3
	06	3	0.4	3.3			3	0.7	3.4
	12	3	0.4	3.2		12	3	0.9	7.2
	18	3	0.5	3.2			3	0.7	3.1
19	00	3	0.5	3.8		15	3	0.9	7.0
	03	3	0.5	3.7			3	0.5	3.0
	06	3	0.5	4.0		18	3	0.9	7.1
		3	0.5	3.1			3	0.6	3.0
	12	3	0.5	4.2		21	3	1.0	7.1
		3	0.5	3.2			3	0.6	3.0
	18	3	0.5	4.3	25	00	3	0.9	6.8
		3	0.5	3.2			3	0.6	3.0
20	00	3	0.5	4.6		03	3	0.7	6.6
		3	0.5	3.2			3	0.5	3.0
	03	3	0.5	4.1		06	3	0.6	6.5
		3	0.5	3.1			3	0.5	3.0
	06	3	0.5	4.3		12	3	0.5	3.0
		3	0.5	3.3			3	0.5	3.0
	12	2	0.5	3.2		18	3	0.4	4.9
	18	2	0.7	4.5			3	0.5	3.0
		2	0.5	3.2	26	00	3	0.3	4.4
21	00	3	0.7	4.3			3	0.3	2.7
		3	0.6	3.1		03	3	0.3	2.8
	03	3	0.7	4.5		06	3	0.4	4.5
		3	0.5	3.0			3	0.4	3.0
						12	3	0.4	4.5

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Date	Hour	K	Mean amplitude in m.m.	Mean period in secs.	Date	Hour	K	Mean amplitude in m.m.	Mean period in secs.
Station : Madras									
December, 1964									
26	12	3	0.4	3.0	29	03	2	0.5	3.3
	18	3	0.4	5.4		06	2	0.5	3.2
		3	0.3	3.0		12	2	0.5	3.2
27	00	3	0.3	5.4		18	2	0.5	3.1
		3	0.3	2.9	30	00	2	0.5	3.1
	03	3	0.3	5.4		03	2	0.5	3.1
		3	0.3	2.8		06	3	0.5	3.2
	06	2	0.3	2.8			3	0.2	1.9
	12	2	0.4	3.0		12	3	0.5	3.1
	18	2	0.4	3.0			3	0.2	1.9
28	00	3	0.4	3.0		18	3	0.4	3.3
	03	3	0.4	3.2	31	00	3	0.4	3.2
	06	3	0.4	3.1		03	3	0.4	3.1
	12	3	0.4	3.1		06	3	0.4	3.1
	18	3	0.5	3.1		12	3	0.4	3.2
29	00	2	0.5	3.1		18	3	0.4	3.2