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International
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The Seismological Bulletin of Pakistan is a quarterly publication containing data o Seismological Stations of Pakistan.

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of

PAKISTAN

Pakistan Meteorological Services, Geophysical Centre, Quetta.

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Particulars of Stations and Instruments

(*a*) Stations

Station	Symbol	Latitude	Longitude	Height(a.s.l.)	Ground
Quetta	Qt	30° 11′ N	66° 57′ E	1721 meters	Cretaceous Limestone
Lahore	Lh	31° 33′ N	74° 20′ E	210 ,,	Alluvium
Karachi	Kr	24° 50′ N	67° 02′ E	30 ,,	Alluvium
Chittagong	Ch	22° 21′ N	91° 49′ E	35 ,,	Alluvium
Warsak	Wr	34° 09′ N	71° 25′ E	343 ,,	River Terrace

(b) Instruments

Instruments	Components	Period Sec To	Period Sec Tg	Damping	Max. Magnification
Quetta					
Sprengnether	Z	1·9	1·9	Critical	5,500
,,	N	15·8	15·8	,,	15,000
Benioff	Z	1·0	0·77	,,	2,00,000
,,	N	1·0	0·76	,,	2,00,000
,,	E	1·0	0·77	,,	2,00,000

(*contd.*)

Instruments	Components	Period Sec To	Period Sec Tg	Damping	Max. Magnification
Sprengnether	Z	30·1	100·0	Critical	3,000
,,	N	30·3	100·0	,,	3,000
,,	E	30·2	100·0	,,	3,000
Willmore	Z	1·0	0·25	—	—
Sprengnether	E	1·0	6·0	—	—
Pen recorder					
Lahore					
Sprengnether	Z	1·8	1·8	Critical	4,900
,,	N	1·7	1·7	,,	4,200
,,	E	1.6	1.6	,,	4,100
Benioff	Z	1·0	0·75	,,	6,250
,,	N	1·0	0·75	,,	6,250
,,	E	1·0	0·75	,,	6,250
Sprengnether	Z	30·0	100·0	,,	750
,,	N	30·0	100·0	,,	750
,,	E	30·0	100·0	,,	750
Karachi					
Sprengnether	Z	1·8	1·8	Critical	5,890
,,	N	1·8	1·8	,,	4,700
,,	E	1·4	1·4	,,	4,700
Chittagong					
Sprengnether	Z	1·7	1·7	Critical	5,200
,,	N	1·8	1·8	,,	5,700
,,	E	1·5	1·5	,,	3,600
Warsak					
Sprengnether	Z	1·95	1·95	Critical	8,000
,,	N	1·8	1·8	,,	4,000

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* indicates long period seismographs

c=compression, d=dilatation, X=unidentified phase

Mu=Actual ground motion of the indicated phase in microns

Sec=Period of the indicated phase in seconds

(Pas), (Berk), (Up), (Ki), (Pal), stand for seismological observatories Pasadena (U.S.A.), Berkeley (U.S.A.), Uppsala (Sweden), Kiruna (Sweden), & Palisade (U.S.A.) respectively

All times are in Greenwich Mean Time.

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Date	Station	Phase	h	m	s
1	Lh	ePZ	12	30	03
	Wr	ePZ			17·1
	Qt	ePZ			32·2
		epPZ		31	17·0
		USCGS H 12 17 38·6			
		6·8 S 155·9 E			
		Solomon Islands			
		depth about 165 km			
1	Lh	ePZ	13	58	29
	Wr	ePZ			44·2
	Qt	ePZ		59	12·9
		USCGS H 13 48 06·5			
		20·8 N 144·6 E			
		Mariana Islands			
		depth about 43 km			
	Qt	ePZ	14	52	11·5
		USCGS H 14 43 06·0			
		3·4 N 122·9 E			
		Celebes Sea			
		depth about 590 km			
1	Qt	ePKPZ	16	46	22·5
		USCGS H 16 27 38·1			
		20·0 S 175·4 W			
		Tonga Islands			
		depth about 130 km			
1	Qt	ePZ	19	29	37·2
		e(S)		32	12·0
	Wr	ePZ		30	06·6
1	Lh	ePZ	19	47	17
	Qt	ePZ			10 ±
	Wr	ePZ			35·6
		USCGS H 19 35 55·1			
		40·2 S 81·3 E			
		Indian Ocean			
		depth about 33 km			
	Ch	ePZ	23	51	24
		ePcPZ			29
		epPZ			41
		esPZ			49
		ePPZ			54 44
		eSN	00	01	35
		eScSE			48
	Lh	ePZ	23	51	22
		epPZ			36
		iSN*	00	01	28
	Wr	iPZ	23	51	14·0c
	Qt	ePZ			41·2
		epPZ*			57·0
		esPZ*		52	04·0
		ePPZ*		55	01·0
		ePPPZ*		56	50·2
		eSKSN*	00	02	02·0
		eSN*			12·0
		eScSN*			19·0
		esSN*			34·0
		ePSN*		03	16·2
		Mu Sec			
		MH 6·1 20			
		△ = 86°·0			
		USCGS H 23 39 05·6			
		56·6 N 157·7 W			
		Alaska Peninsula			
		depth about 50 km			
		Mag : 6½ (Pas), 5¾ (Pal),			
		6·1 (Qt)			
2	Wr	ePKPZ	01	35	34·7
	Qt	ePKPZ			43 ±
		USCGS H 01 15 50·0			
		4·6 S 105·9 W			
		1700 km south of			
		Galapagos Islands			
		depth about 33 km			
2	Qt	ePZ	09	36	52·9
		USCGS H 09 24 34·0			
		4·6S 144·8 E			
		North East			
		New Guinea			
		depth about 51 km			

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Date	Station	Phase	h	m	s
2	Ch	ePZ	15	04	58
		epPZ	05	05	08
		ePPZ		06	53
		eSE		12	05
	Lh	ePZ		07	01
	Wr	ePZ			22·3
	Qt	ePZ			38·0
		epPZ			47·0
		esPZ			50·0
		ePcPZ			58·0
		ePPZ		10	14·0
		ePPPZ*		12	06·0
		eSN*		17	10·5
		eSSN*		21	49·2
		USCGS H 14 56 05·4			
		4·1 S 135·2 E			
		Near south coast of			
		western New Guinea			
		depth about 33 km			
2	Qt	ePZ	16	12	57·1
2	Qt	ePKPZ	16	15	39·0
	Wr	ePKPZ			43·8
	Lh	ePKPZ			52 ±
		USCGS H 15 55 47·9			
		52·9 S 118·2 W			
		South Pacific Ocean			
		depth about 33 km			
2	Qt	ePZ	17	42	43·2
2	Lh	ePZ	18	10	35
	Wr	ePZ			55·6
	Qt	ePZ		11	10·7
		epPZ			18·5
		USCGS H 17 59 38·8			
		4·3 S 135·2 E			
		Near south coast of			
		New Guinea			
		depth about 33 km			
2	Qt	ePZ	20	59	09·2
3	Ch	ePZ	03	11	55
		epPZ		12	05
		ePPZ		13	14
	Lh	ePZ			38
	Wr	ePZ			53.0
	Qt	ePZ		14	25·8c
		epPZ			36·5
		ePcPZ		15	30·5
		ePPZ		16	28·3
		eSE		21	53·0
		USCGS H 03 05 03·5			
		29·7 N 130·1 E			
		Ryukyu Island			
		depth about 33 km			
3	Qt	ePZ	05	15	55·7
3	Qt	ePZ	08	06	56·1
	Wr	ePZ		07	27·8
3	Qt	ePZ	08	21	03·5
3	Ch	ePZ	09	50	17
		epPZ			42
		ePPZ		52	42
	Lh	ePZ		51	58
		epPZ		52	13
	Qt	ePZ			29·5
		epPZ			42·5
		ePPZ		55	52·5
		eSKSE*	10	02	56·2
		eSE*		03	07·0
		eScSE*			20·0
		ePSE*		04	10·0
		USCGS H 09 39 46·8			
		5·3 S 151·5 E			
		New Britain			
		Felt Rabaul			
		depth about 74 km			
		Mag: 5¼ (Pal)			
3	Lh	ePZ	14	09	15

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Date	Station	Phase	h	m	s	
	Qt	ePZ			35·2	
		USCGS H 13 56 34·5				
		Solomon Islands				
		Felt Boku				
		depth about 91 km				
3	Qt	ePZ	19	10	17·3	
3	Qt	ePZ	19	26	14·0	
		USCGS H 19 12 49·8				
		5·9 S 155·0 E				
		Solomon Islands				
		depth about 99 km				
4	Qt	ePZ	00	37	10·8c	
		ePPZ*		41	00·0	
		eSE*		48	25·2	
		USCGS H 00 23 55·1				
		1·2 N 27·7 W				
		1500 km south of				
		Cape Verede Islands				
		depth about 33 km				
4	Qt	ePZ	01	40	11·9	
		e(S)E		41	49·2	
4	Lh	ePZ	05	52	23·0	
	Wr	ePZ			35·4	
	Qt	ePZ		53	08·0	
		epPZ			17·8	
		USCGS H 05 42 35·3				
		29·7 N 142·2 E				
		Bonin Islands region				
		depth about 33 km				
4	Qt	ePZ	08	58	17·6	
		USCGS H 08 47 25·2				
		46·3 N 154·3 E				
		Kurile Islands				
		depth about 33 km				
4	Ch	ePZ	09	02	44	±
		USCGS H 08 50 13·4				
		18·8 S 169·5 E				
		New Hebrides Islands				
		depth about 243 km				

Date	Station	Phase	h	m	s	
4	Lh	ePZ	12	28	59	
	Wr	ePZ		29	13·8	
	Qt	ePZ			27·6	
		eSN*		40	13·0	
		USCGS H 12 16 38·0				
		4·7 S 154·0 E				
		Solomon Islands region				
		Felt Rabaul				
		depth about 69 km				
4	Qt	ePZ	23	48	48·2	
5	Lh	ePZ	00	00	23	
	Qt	ePZ		01	01·7	
		USCGS H 23 50 09·1				
		46·5 N 153·7 E				
		Kurile Islands				
		depth about 33 km				
5	Lh	ePZ	00	29	55	c
		ePpZ		30	04	
	Wr	epPZ			16·8	
	Qt	iPZ			34·6c	
		epPZ			42·0	
		esPZ			49·5	
		USCGS H 00 20 11·6				
		3·2 N 127·0 E				
		Halmahera region				
		depth about 33 km				
5	Qt	ePZ	03	43	36·9	
		eXZ		44	18·7	
5	Ch	ePZ	07	14	54	
	Lh	ePZ		15	36	
	Qt	ePZ		16	12·5	
		epPZ			24·0	
		USCGS H 07 05 22·3				
		46·8 N 153·7 E				
		Kurile Islands				
		depth about 33 km				
5	Wr	iPZ	10	34	33·6	
		eSZ		35	05·8	
	Qt	ePZ			45·0	
		eSN		37	14·0	

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Date	Station	Phase	h	m	s
5	Ch	ePZ	13	17	21
		ePcPZ			25
		epPZ			30
		esPZ			35
		eSKSN		27	40
		eSN			47
		USCGS H 13 04 48·1			
		17·8 S 167·9 E			
		New Hebrides Islands			
		depth about 33 km			
5	Ch	ePZ	13	24	59
		epPZ		25	09
		esPZ			13
		ePPZ		26	46
		eSN		31	37
		esSN			50
	Lh	ePZ		27	07
		ePcPZ			41
		eSN*		35	30
	Wr	ePZ		27	29·8
	Qt	ePZ			39·4
		ePcPZ		28	04·0
		ePPZ		30	11·5
		eSE*		36	32·5
		eScSN*		37	34·0
		eSSN*		41	04·5
		Mu Sec			
		MH 4·4 20			
		△ = 67°·8			
		USCGS H 13 16 43·0			
		10·0 S 124·0 E			
		Timor			
		depth about 33 km			
		Mag: 5·9 (Qt)			
5	Qt	ePZ	15	15	45·0
		USCGS H 15 05 00			
		43.0 N 152.6 E			
		Kurile Islands region			
		depth about 33 km			
5	Qt	ePZ	15	20	14.7
5	Qt	iPKPZ	18	01	52.3d
		ePKPZ		02	00
	Ch	ePKPZ		03	08
		USCGS H 17 43 35.1			
		7.0 S 72.1 W			
		Western Brazil			
		depth about 544 km			
6	Lh	ePZ	03	28	07
		epPZ			40
	Wr	ePZ			24.3
	Qt	ePZ			48 ±
		USCGS H 03 18 56.6			
		6.0 N 125.3 E			
		Near coast of Mindanao			
		Philippine Islands			
		depth about 143 km			
6	Qt	ePKPZ	06	36	50.5
		USCGS H 06 17 28.0			
		1.8 S 80.7 W			
		Near coast of Ecuador			
		depth about 51 km			
6	Lh	ePZ	07	40	07
	Qt	ePZ			45.0c
		epPZ			55.5
		USCGS H 07 29 54.3			
		46.8 N 153.6 E			
		Kurile Islands			
		depth about 33km			
6	Qt	ePZ	15	37	33.9
		epPZ		38	04.5
		USCGS H 15 24 48.2			
		4.9 S 153.8 E			
		Solomon Islands region			
		depth about 131 km			
6	Qt	PZ	18	32	45.4
6	Ch	ePZ	19	55	09
		epPZ			15
		ePPZ		56	53
		eSE	20	01	36

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Date	Station	Phase	h	m	s
	Lh	ePZ	19	57	17
		ePPZ		59	35
	Wr	iPZ		57	40.9
	Qt	iPZ			50.8c
		epPZ			57.2
		ePcPZ		58	14.9
		eSE		06	31.0
		USCGS H 19 46 58.8			
		8.9 S 123.8 E			
		Near Flores			
		depth about 33 km			
6	Ch	ePZ	21	30	42
	Lh	ePZ		31	17
		ePcPZ			59
		eSN*		39	43
	Wr	ePZ		31	18.3
	Qt	ePZ			54.4d
		epPZ		32	01.0
		ePcP			21.5
		ePPZ		34	31.2
		eSN*		40	54.0
		Mu Sec			
		MH 1.7 20			
		△ = 68°.9			
		USCGS H 21 20 56.5			
		47.4 N 155.9 E			
		Kurile Islands			
		depth about 33 km			
		Mag : 5.7 (Qt)			
7	Ch	ePZ	06	35	42
		ePcP		36	05
		ePPZ		38	18
		eSN		44	35
	Qt	ePZ		37	46.2
		USCGS H 06 24 49.2			
		6.4 S 154.7 E			
		Solomon Islands region			
		Felt Boku			
		depth about 80 km			

Date	Station	Phase	h	m	s
7	Ch	ePZ	11	55	52
		epPZ		56	05
		esPZ			11
		ePPZ		57	29
		ePcPZ			59
		eSN	12	01	52
	Lh	ePZ	11	58	10
		epPZ			21
		eSN*	12	06	03
		eScSE *		07	35
	Wr	ePZ	11	58	32.3
	Qt	iPZ			47.7c
		epPZ			58.5
		esPZ		59	10.0
		ePcPZ			26.5
		ePPZ	12	01	15.2
		eSE*		07	14.2
		eScSE		08	40.5
		Mu Sec			
		MH 2.7 20			
		△ = 62°.9			
		USCGS H 11 48 22.7			
		0.6 N 126.7 E			
		Halmahera region			
		depth about 42 km			
		Mag : $5\frac{1}{2} - 5\frac{3}{4}$ (Pal),			
		5.7 (Qt)			
8	Wr	ePZ	01	33	41.6
	Lh	ePZ			57
		eSN		35	41
	Qt	ePZ		34	52.0
		eSN		37	19.0
	Ch	ePZ		36	34
		eSN		40	24
		H 01 31 46.0			
		40.0 N 77.7 E			
		Sinkiang Province			
		China			

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Date	Station	Phase	h m s
		depth about 33 km	
		USCGS H 01 31 47.4	
		39.9 N 77.9 E	
		Sinkiang Province	
		China	
		depth about 33 km	
8	Wr	iPZ	07 41 01.6c
		iSZ	32.8
	Qt	ePZ	42 05.7
		eSE	43 27.6
		H 07 40 20.0	
		Hindukush region	
8	Ch	ePZ	15 53 25
		epPZ	54 02
		ePPZ	53
		eSN	58 46
	Lh	ePZ	55 04
		epPZ	40
	Wr	ePZ	16.8
	Qt	iPZ	52.2c
		epPZ	56 30.5
		esPZ	43.5
		ePcPZ	57.2
		USCGS H 15 46 45.5	
		31.2 N 130.2 E	
		Near south coast of	
		Kyushu, Japan	
		depth about 177 km	
8	Qt	ePKPZ	20 08 57.2
		USCGS H 19 50 04.9	
		17.0 S 171.8 W	
		Samoa Islands region	
		depth about 33 km	
9	Qt	ePKP	02 21 31.4
		USCGS H 02 02 38.5	
		28.9 S 177.4 W	
		Kermadec Islands	
		depth about 71 km	
9	Ch	ePZ	03 22 06
		epPZ	52
		ePcPZ	23 21
		ePPZ	24 10
		eSN	29 01
	Lh	ePZ	23 47
	Wr	ePZ	24 00.2
		ePZ	26.7c
	Qt	USCGS H 03 13 26.4	
		18.6 N 145.4 E	
		Mariana Islands	
		depth about 192 km	
9	Qt	ePZ	06 45 06.1
9	Ch	ePZ	07 01 46
	Qt	ePZ	04 23.4
		USCGS H 06 53 38	
		10.3 S 124.0 E	
		Timor region	
		depth about 33 km	
9	Qt	ePZ	07 55 27.0
9	Qt	ePZ	18 31 20.9
		epPZ	31.5
		ePcPZ	32 44.4
		ePPZ	33 11.2
		eSE*	38 19.0
	Lh	ePZ	32 03
	Wr	ePZ	05.7
	Ch	ePZ	33 22
		USCGS H 18 22 33.4	
		3.3 S 29.4 E	
		Republic of the	
		Congo	
		depth about 33 km	
9	Qt	ePZ	21 26 42.9
		USCGS H 21 16 07.7	
		4.3 S 128.5 E	
		Banda Sea	
		depth about 174 km	

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Date	Station	Phase	h	m	s
9	Qt	ePZ	23	04	25.4
10	Wr	iPZ	06	47	49.1c
		iSZ		48	22.0
	Qt	ePZ			48.2
		eSE		50	07.6
		H 06 47 05.0			
		Hindukush region			
		USCGS H 06 47 04.0			
		36.7 N 70.8 E			
		Hindukush			
		depth about 193 km			
10	Wr	ePZ	18	15	19.1
	Qt	ePZ		16	26.1
		eSE		18	31.5
10	Lh	ePZ	19	05	41
	Qt	ePZ		06	21.3
		ePcP			35.5
		USCGS H 18 54 46.1			
		13.1 N 6.5 E			
		Mariana Islands			
		depth about 33 km			
10	Lh	ePZ	20	21	07
		epPZ			56
	Qt	ePZ			38.4
		epPZ		22	24.0
		USCGS H 20 13 05.9			
		4.2 S 104.6 E			
		Sumatra			
		depth about 211 km			
10	Qt	ePZ	21	00	49.3
11	Ch	ePZ	01	11	23
		epPZ			28
		ePPZ			38
		sSN		14	29
	Lh	ePZ		12	31
		epPZ			40
	Wr	ePZ			48.2
	Qt	ePZ		13	31.9

Date	Station	Phase	h	m	s
		epPZ			42.0
		ePPZ		14	26.2
		ePPPZ			35.5
		eSE*		18	24.0
		USCGS H 01 07 28.0			
		37.7 N 101.6 E			
		Tsinghai Province, China			
		depth about 33 km			
11	Wr	iPZ	11	42	11.1d
		iSZ			34.0
	Lh	ePZ			53
		eSZ		43	51
	Qt	ePZ			12.2
		eSN		44	24.8
		Mu Sec			
		PZ 0.01 0.5			
		△ = 6°.2			
		H 11 41 39.0			
		35.7 N 71.0 E			
		Hindukush			
		depth about 150 km			
		USCGS H 11 41 40.0			
		35.7 N 70.7 E			
		Hindukush			
		depth about 127 km			
		Mag: 4.7 (Qt)			
11	Qt	ePKPZ	12	31	57.5
		ePPZ		35	38.5
		ePPPZ*		38	50.0
		eSKSPZ*		45	36.0
		ePPSZ*		48	26.0
		eSSE*		54	40.0
		eSSPZ*		55	32.0
	Wr	ePKPZ		32	04.2
	Lh	ePKPZ			05
	Ch	ePKPZ			09
		ePPZ		36	07
		USCGS H 12 12 16.2			
		45.0 S 75.7 W			

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Date	Station	Phase	h	m	s
		Near coast of southern Chile			
		depth about 33 km			
11	Qt	ePKPZ	14	55	21.7
	Ch	ePKPZ			47
		USCGS H 14 36 11.0			
		12.6 N 88.2 W			
		Off coast of El Salvador			
		depth about 33 km			
11	Lh	ePKPZ	17	24	02
	Qt	ePKPZ			15.7d
		epPKPZ			51.0
		USCGS H 17 05 42.3			
		29.4 S 178.6 W			
		Kermadec Islands			
		depth about 225 km			
12	Qt	ePZ	00	09	18.0
		eSN		10	39.5
12	Qt	ePKPE	03	59	36.0
	Ch	ePKPZ	04	00	13
		USCGS H 03 40 34.8			
		4.8 N 76.7 W			
		Northern Colombia			
		depth about 102 km			
12	Qt	ePE	04	28	35.0
		USCGS H 04 19 27.8			
		15.1 N 120.5 E			
		Luzon, Philippine Islands			
		depth about 93 km			
12	Wr	iPZ	06	20	58.4
		iSZ		21	29.2
	Lh	ePZ			43
		eSN		22	48
	Qt	ePE		21	49.8
		eSE		22	58.9
	Ch	ePZ		25	20
		epPZ			46

Dates	Station	Phase	h	m	s
		ePPZ		26	01
		eSE		29	25
		H 06 20 19.0			
		35.7 N 69.7 E			
		Hindukush			
		depth about 125 km			
		USCGS H 06 20 13.6			
		36.1 N 69.6 E			
		Hindukush			
		depth about 97 km			
12	Qt	ePE	08	24	38.9
		e(S)E		25	43.5
	Wr	ePZ			07.4
	Lh	ePZ			48
12	Ch	ePZ	09	20	45
		epPZ		21	19
		esPZ			34
		ePPZ		22	31
		ePcPZ			36
		eSE		27	07
		esSE		28	04
	Qt	ePE		23	36.8
		USCGS H 09 13 04.2			
		1.8 N 129.3 E			
		Halmahera region			
		depth about 112 km			
12	Qt	ePE	11	18	51
	Wr	ePZ		19	19
12	Ch	ePZ	23	28	44
		ePPZ	30	08	
		ePPPZ		27	
	Lh	ePZ	31	05	
	Wr	ePZ			27.0
	Qt	ePE			46.8
		epPE	32	03.0	
		USCGS H 23 21 52.1			
		7.1 N 125.2 E			
		Mindanao, Philippine Islands			
		depth about 84 km			

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Date	Station	Phase	h	m	s	
13	Lh	ePZ	08	20	30	±
	Wr	ePZ			54.2	
	Qt	ePZ		03	08.0	
		USCGS H 07 53 04.6				
		2.1 N 125.4 E				
		Northern Celebes region				
		depth about 144 km				
13	Qt	ePKPZ	17	39	38.1	
	Wr	ePKPZ			50.3	
	Lh	ePKPZ			56	
		USCGS H 17 20 19.2				
		32.0 S 68.7 W				
		San Juan Province				
		Argentina				
		depth about 133 km				
14	Wr	iPZ	06	26	57.8	
		iSN		27	31.1	
	Lh	ePZ			35	
		eSE		28	39	
	Qt	ePZ		27	59.6	
		eSN		29	21.8	
		H 06 26 13.0				
		36.6 N 71.5 E				
		Hindukush				
		depth about 200 km				
4	Ch	ePZ	11	32	33	
		ePcPZ			37	
		epPZ			43	
		ePPZ		36	02	
		eSKSE		42	58	
		USCGS H 11 19 47.5				
		21.2 S 169.3 E				
		Loyalty Islands				
		depth about 33 km				
	Qt	ePZ	12	45	59.8	
	Qt	ePZ	18	40	07.8	
		epPZ			39.0	
		esPZ			49.0	

Date	Station	Phase	h	m	s	
		ePPZ		41	30.9	
		ePcP		42	37.5	
	Wr	ePZ		40	18.8	
	Lh	ePZ			45	
		epPZ		41	09	
		USCGS H 18 33 25.3				
		45.7 N 26.6 E				
		Romania				
		depth about 132 km				
15	Wr	ePZ	01	42	13.4	
	Qt	ePZ			28.7	
		epPZ			39.5	
		ePPZ		44	06.0	
		USCGS H 01 32 20.2				
		68.9 N 17.1 W				
		Denmark Strait				
		depth about 33 km				
15	Ch	ePZ	02	41	44	
		epPZ			54	
		iPcPZ		42	59	
		eSE		49	01	
	Lh	ePZ		43	31	
	Wr	ePZ			45.8	
	Qt	ePZ		44	10.9	
		epPZ			19.5	
		esP Z			26.0	
		ePcPZ			32.0	
		ePPZ		46	57.0	
		eSN		53	37.2	
		eScSN		54	15.0	
		USCGS H 02 32 39.9				
		13.4 N 145.3 E				
		Mariana Islands				
		depth about 33 km				
15	Qt	ePZ	05	33	15.4	
		epPZ			23.5	
	Ch	ePZ		35	00	±
		USCGS H 05 23 10.4				

International Seismological Centre

Date	Station	Phase	h	m	s
		69.0 N 16.6 W			
		Jan Mayen Islands region			
15	Qt	ePKPZ	06	52	05.0
		epPKPZ			14.0
		USCGS H 06 32 29.5			
		37.4 S 73.4 W			
		Near coast of			
		Central Chile			
		depth about 42 km			
15	Qt	ePZ	08	16	35.1
		eSN		18	30.0
15	Ch	ePZ	09	59	38
		ePcPZ			49
		USCGS H 09 47 42.9			
		10.6 S 164.9 E			
		Solomon Islands region			
		depth about 89 km			
15	Ch	ePZ	12	26	32
		esPZ			43
		ePPZ			47
		eSN		29	47
	Lh	ePZ		27	38
	Wr	ePZ			53.4
	Qt	ePZ		28	37.6
		ePPZ		29	36.0
		USCGS H 12 22 29.9			
		36.7 N 102.1 E			
		Tsinghai, China			
		depth about 33 km			
15	Qt	ePZ	14	25	37 ±
15	Ch	ePZ	13	14	46
		USCGS H 13 08 57.2			
		24.9 N 122.0 E			
		Near coast of Formosa			
		depth about 47 km			
15	Qt	ePZ	15	11	12.8
		eSE		16	41.0
	Wr	ePZ		11	32.3
	Ch	ePZ		14	13
		ePcPZ		15	00
		eSN		22	14
		USCGS H 15 04 15.0			
		36.0 N 23.9 E			
		Mediterranean Sea			
		depth about 81 km			
15	Qt	ePZ	17	50	03.6
15	Qt	ePKPZ	17	57	31.1
		iXZ			42.5
		USCGS H 17 39 19.2			
		17.1 S 179.6 W			
		Fiji Islands			
		depth about 267 km			
15	Wr	iPZ	19	12	29.0
		eSZ		13	34.6
	Lh	eSZ		12	48
		eSE		14	08
	Qt	ePZ		13	38.3
		esPZ		14	12.5
		eSN		15	39.5
		Mu Sec			
		PZ 0.01 1.0			
		$\Delta = 11°.0$			
	Ch	ePZ	19	15	49 ±
		H 19 11 09			
		38.2 N 75.8 E			
		Northern India			
		depth about 153 km			
		Mag : 4.0 (Qt)			
15	Ch	ePZ	19	39	13 ±
	Lh	ePKPZ		44	16
	Wr	ePKPZ			23.0
	Qt	ePKPZ			31.0
		epPKPZ		45	27.5
		ePPZ		46	14.5
		USCGS H 19 26 34.3			
		20.5 S 177.9 W			
		Fiji Islands			
		depth about 496 km			

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Date	Station	Phase	h	m	s
15	Qt	ePZ	19	54	35.0
	Lh	ePZ			54
15	Qt	ePZ	22	31	25.8
		ePPZ		35	25.0
		eSKSE*		42	10.0
		eSE*			40.0
		eSSE*		49	42.0
		Mu Sec			
		MH 3.1 20			
		△ = 98°.3			
		USCGS H 22 17 50.9			
		31.3 S 13.4 W			
		South Atlantic Ocean			
		depth about 33 km			
		Mag : 6.0 (Qt)			
16	Qt	ePZ	00	03	33.8
16	Wr	ePZ	01	52	31.4
	Qt	ePZ		53	09.2
		eSE		55	19.5
16	Ch	ePZ	04	52	13
		ePPZ			27
		ePPPZ			34
		iSE		54	35
	Qt	iPZ		55	38.3c
		ePPZ		56	40.0
		eSSE	05	02	18.0
		USCGS H 04 49 11.9			
		9.7 N 93.9 E			
		Nicobar Islands			
		depth about 70 km			
16	Ch	ePZ	05	56	13
		epPZ			23
		ePcPZ			32
		ePPZ		58	53
		ePPPZ	06	00	38
		eSE		05	30
	Lh	ePZ	05	56	32
		ePcPZ			45
	Qt	iPZ			57 00.1c
		ePcPZ			07.5
		esPZ			16.0
		ePPZ	06	00	00.0
		USCGS H 05 44 52.3			
		51.3 N 179.9 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 38 km			
16	Qt	ePZ	12	07	26 ±
		USCGS H 12 02 21.7			
		41.1 N 41.9 E			
		North Eastern Turkey			
		depth about 33 km			
16	Qt	ePZ	12	44	04.2
		USCGS H 12 32 37.6			
		1300 km Southwest of			
		Iceland			
		depth about 33 km			
16	Wr	ePZ	15	30	54.0
	Lh	ePZ		31	35
		iSN		32	40
	Qt	ePZ		31	48.1
		eSN		33	00
		Mu Sec			
		PZ 0.01 0.5			
		△ = 6°.7			
		H 15 30 15			
		36.0 N 70.5 E			
		Hindukush			
		depth about 220 km			
		USCGS H 15 30 10.0			
		36.3 N 70.3 E			
		Hindukush			
		depth about 234 km			
		Mag : 4.3 (Qt)			
16	Lh	ePZ	19	24	42
		iSNE		25	13
	Qt	ePZ			50.7

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Date	Station	Phase	h	m	s
16	Wr	ePZ	20	32	05.6
		eSZ			45.8
	Lh	ePZ			50
		eSZ		33	49
	Qt	iPZ			12.8c
		eSE		34	33.8
		Mu Sec			
		PZ 0.01 0.5			
		△ = 7°.1			
		H 20 31 29.0			
		36.3 N 71.1E			
		Hindukush			
		depth about 140 km			
		Mag : 4.3 (Qt)			
16	Ch	ePZ	21	15	53
		epPZ		16	20
		ePPZ		17	31
		ePcPZ		18	02
		eSE		21	43
		esSN		22	33
	Lh	ePZ		18	03
	Qt	iPZ		18	33.5d
		epPN			54.0
		esPN		19	07.0
		ePcPZ			23.2
		ePPZ		20	43.2
		ePPPZ		22	05.0
		eSE		26	38.2
		esSN		27	23.5
		eScSN		28	22.2
		USCGS H 21 08 38.8			
		11.1 S 111.6 E			
		South of Java			
		depth about 94 km			
17	Qt	ePZ	04	02	33.2
		USCGS H 03 52 42.2			
		52.3 N 152.5 E			
		Sea of Okhotsk			
		depth about 454 km			
17	Ch	ePZ	06	02	35
		ePPZ		03	37
		esP			49
		eSN		07	09
	Wr	ePZ		05	19.6c
		iPZ			44.7c
		iXZ			59.2
		epPZ		06	28.5
		esPZ			54.5
		epPZ		07	30.5
		USCGS H 05 56 54.8			
		14.0 N 120.6 E			
		Luzon, Philippine Islands			
		depth about 207 km			
17	Ch	iPZ	20	47	20d
		eSE		52	12
	Lh	ePZ		49	17 d
		eSE		55	44
	Wr	iPZ		49	34 d
	Qt	iPZ		50	07.5d
		epPZ			43.5
		esPZ		51	02.5
		ePcPZ			20.5
		ePPZ		52	05.0
		ePPPZ		53	04.5
		iSN		57	18.7
		iScSN*		59	48.0
		eSES	21	00	55.5
		USCGS H 20 41 14.8			
		26.6 N 125.2 E			
		Ryukyu Islands			
		depth about 144 km			
17	Lh	ePZ	21	33	29
	Wr	ePZ			51.4
	Qt	ePZ		34	16.1
18	Lh	ePZ	03	20	31
	Wr	ePZ			40.8
	Qt	ePZ		21	15 ±
		eSN		28	41.5

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Date	Station	Phase	h	m	s
		eScSN		30	20.5
		USCGS H 03 12 05.7			
		33.1 N 135.8 E			
		South of Honshu			
		Japan			
		depth about 425 km			
18	Qt	ePZ	05	06	03.7
		eSN		07	17.4
18	Qt	ePKP	06	01	16.9
		USCGS H 05 42 31.6			
		14.9 S 167.6 E			
		New Hebrides Islands			
		region			
		depth about 33 km			
18	Qt	ePZ	07	21	03.0
18	Qt	ePZ	12	44	40.4
		USCGS H 12 33 50.5			
		46.5 N 154.2 E			
		Kurile Islands region			
		depth about 33 km			
19	Wr	iPZ	02	36	30.9d
	Lh	ePZ			55
	Qt	ePZ		37	40.4
		esPN			52.5
		eSN		39	41.5
		Mu Sec			
		PZ 0.05 0.8			
		$\triangle = 10°.9$			
		USCGS H 02 35 06.8			
		38.8 N 74.8 E			
		Sinkiang Province			
		China			
		depth about 33 km			
		Mag : 5.3 (Qt)			
19	Qt	ePZ	07	32	30.8
		eXZ			46.2
20	Qt	ePZ	03	00	54.5
20	Ch	ePZ	09	08	03
	Qt	ePZ			30.1c
		ePcPZ			34.5
		epPZ			39.2
		USCGS H 08 56 06.2			
		51.9 N 173.2 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 33 km			
20	Qt	ePZ	14	50	53.1
21	Qt	ePZ	01	32	47.7
21	Qt	ePKPZ	04	35	05.4
		eXZ			38.0
	Wr	ePZ			17.8
		USCGS H 04 15 50.2			
		34.3 S 69.7 W			
		Mendoza Province			
		Argentina			
		depth about 183 km			
21	Wr	ePZ	10	46	53.9
	Qt	ePZ		47	11.0
		ePcPZ			27.0
		esPN			36.5
		USCGS H 10 35 39.0			
		3.0 S 136.2 E			
		Western New Guinea			
		depth about 57 km			
21	Qt	ePZ	19	05	20.6
		eSN		06	48.5
21	Wr	iPZ	21	03	16.1d
		iSZ			54.5
	Lh	ePZ			58
		eSN		05	03
	Qt	ePZ		04	18.6
		eSN		05	40.7
		Mu Sec			
		PZ 0.01 0.5			
		$\triangle = 7°.7$			

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Date	Station	Phase	h	m	s	
		H 21 02 28.0				
		37.1 N 70.8 E				
		Hindukush				
		depth about 170 km				
		Mag: 4.3 (Qt)				
22	Qt	ePZ	04	11	20	±
22	Ch	ePZ	04	57	30	
		ePPZ			38	
		isPZ			42	
		iSN		59	16	
		eSSN			26	
	Lh	ePZ		58	18	
	Wr	ePZ			50.0	
	Qt	ePZ		59	40.0	
		epPN			50.0	
		ePPZ			53.5	
		eSN	05	03	09.0	
		H 04 55 16.0				
		31.4 N 89.9 E				
		Tibet				
		depth about 40 km				
		USCGS H 04 55 16.4				
		31.5 N 89.3 E				
		Tibet				
		depth about 33 km				
22	Q:	ePZ	16	22	31.0	
		USCGS H 16 11 42.1				
		48.4 N 155.2 E				
		Kurile Islands				
		depth about 50 km				
22	Lh	ePZ	23	20	59	
	Qt	ePZ		21	31.6	
		USCGS H 23 09 06.0				
		6.5 S 146.6 E				
		Eastern New Guinea				
		depth about 97 km				
23	Qt	ePZ	04	50	12	±
		USCGS H 04 39 23.3				
		48.9 N 156.0 E				
		Kurile Islands				
		depth about 50 km				
24	Ch	ePZ	09	35	27	
		esPZ			55	
		iSE		40	18	
		esSN		42	45	
	Lh	ePZ		37	38	d
	Wr	iPZ		38	03.3	d
	Qt	iPZ			10.5	d
		eXZ			21.5	
		ePcPZ			58.0	
		epPZ		39	45.5	
		ePPZ		40	32.2	
		esPZ			39.3	
		eSE		45	20.4	
		eScSE		47	06.5	
		Mu Sec				
		PZ 0.1 1.2				
		△ = 57°.8				
		USCGS H 09 29 11.6				
		6·0 S 112.6 E				
		Java Sea				
		depth about 493 km				
		Mag: 5.0 (Qt)				
24	Qt	ePKPZ	12	27	54	±
		USCGS H 12 09 01.2				
		15.2 S 173.6 W				
		Tonga Islands region				
		depth about 33 km				
24	Qt	ePZ	15	44	26.7	
		esPZ			59.5	
		eSE*		46	10.0	
		eSSN*			16.0	
		Mu Sec				
		PZ 0·05 1·0				
		△ = 8°·8				
	Wr	ePZ		45	29.9	
	Lh	ePZ			48	

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Date	Station	Phase	h	m	s
		H 15 42 15·0			
		28·4 N 56·6 E			
		Southern Iran			
		depth about 80 km			
		USCGS H 15 42 23.5			
		28.6 N 56.4 E			
		Southern Iran			
		depth about 100 km			
		Mag: 5.2 (Qt)			
24	Ch	ePZ	20	29	46
		iSE		30	35
	Lh	ePZ		32	59
	Wr	ePZ		33	32·3
	Qt	ePZ		34	01·2
		epPZ			12·0
		H 20 28 41			
		25.6 N 95.1 E			
		Burma-India border			
		depth about 33 km			
24	Ch	ePZ	22	34	35
		epPZ			55
		ePPZ		36	03
		ePPPZ			25
		ePcPZ			54
		eSE		40	13
		esSE			51
	Lh	ePZ		36	52
		epPZ		37	11
		eSN*		44	30
		eScSN*		46	38
	Wr	ePZ		37	00·8
	Qt	ePZ			34·7c
		epPZ		38	00·0
		esPZ			11·0
		ePPZ		39	52·5
		ePPPZ		41	26·5
		eSE*		45	42·0
		esSE*		46	33·0
		eScSE*		47	16·0
		eSSE*		49	43·0
		eSSSE*		52	32·0
		Mu Sec			
		MH 3·4 20			
		△ = 60°.8			
		USCGS H 22 27 32·5			
		8·0 N 126·8 E			
		Off east coast of Mindanao			
		depth about 192 km			
		Mag: 5·8 (Qt)			
24	Lh	ePZ	22	53	37
	Qt	cPZ		54	17±
		USCGS H 22 44 16·5			
		8.0 N 126.6 E			
		Near east coast of			
		Mindanao, Philippine			
		Islands			
		depth about 44 km			
24	Lh	ePZ	23	31	36
	Qt	ePZ		32	06·8
		USCGS H 23 22 16.2			
		7.7 N 126.0 E			
		Near east coast of			
		Mindanao, Philippine			
		Islands			
		depth about 150 km			
24	Qt	ePZ	23	59	16·9
25	Qt	ePZ	09	07	47·5
25	Ch	iPZ	12	58	03 c
		epPZ			49
		esPZ		59	15
		ePcPZ			27
		ePPZ			58
		ePPPZ	13	00	58
		eSE		04	44
	Lh	ePZ	12	59	42
		epPZ	13	00	21
	Wr	iPZ	12	59	55·8

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Date	Station	Phase	h	m	s
	Qt	iPZ	13	00	24·0
		ePcPZ			47·5
		ePPZ		03	00·0
		eSN		09	10·0
		Mu Sec			
		PZ 0·1 1·1			
		△ = 68°·5			
		USCGS H 12 49 42·0			
		21·8 N 143·8 E			
		Mariana Islands region			
		depth about 190 km			
		Mag: 5·6 (Qt)			
25	Qt	ePZ	13	13	53·5
		epPZ		14	03·5
		USCGS H 13 01 53·3			
		51·4 N 178·1 E			
		Rat Islands, Aleutian Islands			
		depth about 33 km			
25	Qt	ePKPZ	20	40	21·5
		USCGS H 20 21 31·6			
		19·0 S 173·3 W			
		Tonga Islands			
		depth about 129 km			
26	Qt	ePZ	00	35	31·5
26	Wr	ePZ	16	45	03·4
	Qt	ePZ		46	10·5
26	Wr	ePZ	19	18	30·4
		iSZ		19	23·6
	Lh	ePZ		21	±
	Qt	ePZ		14	±
		e(S)N		20	37·0
27	Ch	iPZ	01	13	32 d
		epPZ			54
		ePPZ		14	49
		ePPPZ		15	06
		iSE		18	53
		esSN		19	26
	Lh	ePZ		15	25
		eSN*		22	15
	Wr	iPZ		15	41·6
	Qt	iPZ		16	14·5
		epPZ			30·2
		esPZ			44·0
		ePcPZ		17	18·5
		ePPZ		18	20·5
		eSN		23	49·5
		Mu Sec			
		PZ 0·1 0·1			
		△ = 54°.0			
		USCGS H 01 06 55·4			
		25·6 N 128·3 E			
		Ryukyu Islands			
		depth about 61 km			
		Mag: 5·7(Qt)			
27	Qt	ePZ	11	59	59·5
		ePPZ	12	03	18·5
		USCGS H 11 47 35·3			
		59·4 N 153·4 W			
		Gulf of Alaska			
		depth about 94 km			
27	Wr	ePZ	15	46	53·0
	Qt	ePZ		47	25·2
		ePcPZ		48	35·5
		USCGS H 15 38 15·7			
		26·2 N 127·9 E			
		Ryukyu Islands			
		depth about 109 km			
27	Ch	ePZ	18	56	50
		epPZ		57	14
		ePcPZ			24
	Lh	ePZ		58	30
	Wr	ePZ			44·9
	Qr	ePZ		59	00·0
		epPZ			17·0
		eSN	19	09	29·5

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Date	Station	Phase	h	m	s
		USCGS H 18 46 14·6			
		5·2 S 152·3 E			
		New Britain			
		Felt Rabaul			
		depth about 72 km			
27	Qt	iPZ	19	39	20·2d
		ePPZ*			35·0
		ePPPZ*			48·0
		iSN		42	36·2
		Mu Sec			
		PZ 0.27 1·5			
		△ = 17°·8			
	Wr	ePZ	19	39	27·8
	Lh	ePZ		40	05
		epPZ			16
		ePPZ			28
		eSN*		44	03
		esSN*			11
	Ch	ePZ		42	47
		epPZ			57
		epPZ		44	25
		iSN		48	50
		eScSN		52	49
		USCGS H 19 35 14·3			
		41·2 N 49·8 E			
		Caspian Sea, near Azer-			
		baijan, S. S. R.			
		depth about 33 km			
		Mag : 5½–5¾(Pal),			
		5·3 (Qt)			
27	Qt	ePZ	21	24	52·7
		eXZ		25	06·5
28	Qt	ePZ	00	33	50·7
28	Qt	ePZ	02	31	29·7
		eXZ			35·5
	Wr	ePZ			33·8
28	Ch	ePZ	04	14	12
	Lh	ePZ		15	07
	Wr	ePZ			09·6
	Qt	ePZ			46·5
		ePcPZ		16	26·5
		epPZ		17	59·0
		USCGS H 04 05 30·9			
		43·5 N 144·6 E			
		Near south coast of			
		Hokkaido, Japan			
		depth about 37 km			
28	Wr	iPZ	09	42	44·9
		iSZ		43	24·0
	Lh	ePZ			25
		eSZ		44	29
	Qt	ePZ		43	38.4d
		esPZ		44	26.3
		eSN			54.9
		Mu Sec			
		PZ 0.02 0.5			
		△ = 6°.8			
		H 09 41 57.0			
		36.3 N 70.5 E			
		Hindukush			
		depth about 200 km			
		Mag: 4.7(Qt)			
28	Ch	ePZ	12	22	40
		ipPZ			50
		esPZ			54
		ePcPZ		23	25
		ePPZ		24	58
		ePPPZ		26	30
		eSE		31	01
		esSN			17
		eScSN		32	25
		ePKPPKPZ		51	59
	Lh	ePZ		24	22
		epPZ			33
		eSN*		34	21
	Wr	ePZ		24	38.0
	Qt	ePZ			55.3
		ePcPZ			58.2

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Date	Station	Phase	h	m	s
		epPZ		25	06.0
		esPZ			08.5
		ePPZ		28	16.5
		ePPPZ		30	14.5
		eSKSN		35	17.0
		eSN			25.0
		eScSE			29.0
		USCGS H 12 12 19.8			
		2.6 S 149.9 E			
		New Britain			
		depth about 33 km			
		Mag : 6½(Pas)			
28	Wr	iPZ	13	13	00.3c
	Ch	iPZ			04 c
		iPcPZ			10
		ipPZ			14
		isPZ			18
		ePPZ	16	14	
		eSE	23	09	
		eSKS			16
		eScSE			26
	Lh	ePZ	13	06	c
		epPZ			17
		esPZ			23
		ePPZ	16	14	
		eSN*	23	16	
		esSZ			30
	Qt	iPZ	13	28.5c	
		ePPZ	16	48.5	
		ePPPZ	18	45.5	
		eSKSN	23	54.8	
		eSN	24	00.0	
		eSSE	29	39.0	
		Mu Sec			
	PZ	0.3 1.2			
	PH	0.2 1.2			
	MH	32.1 20.0			
		△ = 85°.9			
		USCGS H 13 00 50.7			
		54.7 N 161.6 W			
		Alaska Peninsula			
		depth about 33 km			
		Mag : 6-6½(Pas),6.6 (Qt)			
28	Qt	ePKPZ	14	08	16.0
		USCGS H 13 50 28.3			
		19.7 S 178.1 W			
		Fiji Islands			
		depth about 587 km			
28	Qt	ePZ	16	26	17.8
		eXZ			26.5
28	Qt	iPZ	18	26	09.7d
		eSE*			17.0
	Wr	ePZ		27	19.8
29	Qt	ePZ	07	35	13.9d
		ePPZ		36	52.5
	Ch	ePZ			16 c
	Lh	ePZ			29
		USCGS H 07 27 17.9			
		12.7 S 66.1 E			
		Indian Ocean southwest			
		of Chagos Islands			
		depth about 33 km			
29	Qt	ePZ	07	38	33.7
		USCGS H 07 25 48.4			
		4.7 S 153.5 E			
		New Britain region			
		depth about 126 km			
29	Ch	iPZ	09	30	44 c
		epPZ		31	19
		ePcpZ			36
		ePPZ	32	55	
		iSE	38	24	
		eScSE	40	18	
	Lh	iPZ	31	15	
		epPZ			51
		ePcPZ			58
	Qt	iPZ			51.9

Date	Station	Phase	h	m	s
		epPZ	32	20.5	
		esPZ		37.0	
		ePPZ	34	21.0	
		iXZ		46.0	
		ePPPZ	35	57.9	
		eSE*	40	23.0	
		esSE*	41	13.0	
		eScSE		32.5	
		Mu Sec			
		PZ 0.1 1.0			
		△ = 66°.0			
		USCGS H 09 21 14.3			
		49.7 N 154.9 E			
		Kurile Islands			
		depth about 126 km			
		Mag: 5.9(Qt)			
29	Wr	ePZ	14	57	43.7
	Qt	ePZ		58	35.0
		eSE	15	00	10.0
29	Qt	ePKPZ	20	52	54.2
		epPKPZ		53	17.5
		ePPZ		56	12.5
	Wr	ePKPZ		52	55.5
	Lh	ePKPZ		53	02
		epPKPZ			24
	Ch	ePKPZ			26
		epPKP			49
		USCGS H 20 33 27.0			
		21.5 S 68.6 W			
		Chile, Bolivia border			
		depth about 73 km			
29	Ch	ePZ	21	16	39
		epPZ		17	18
		esPZ			36
		ePcPZ			52
		ePPZ		18	37
	Lh	ePZ			27
		epPZ			58
		esPZ		19	16

Date	Station	Phase	h	m	s
	Wr	iPZ	18	42.8	
	Qt	iPZ	19	09.5c	
		ePcPZ		29.4	
		epPZ		40.5	
		esPZ		47.5	
		ePPZ	21	44.5	
		ePPPZ	23	29.4	
		eSN	28	19.0	
		USCGS H 21 07 57.7			
		12.9 N 143.2 E			
		Mariana Islands			
		depth about 144 km			
29	Qt	ePZ	23	02	54.5
		USCGS H 22 50 22.7			
		52.7 N 168.4 W			
		Fox Islands, Aleutian			
		depth about 33 km			
30	Qt	ePZ	02	02	45.9
30	Wr	iPZ	02	56	58.0
		iSZ		57	25.7
		ePZ		58	02.5
		eSN		59	21.0
		H 02 56 21.5			
		Hindukush region			
30	Wr	ePZ	04	52	06.1
	Ch	ePZ		52	11 c
		ePcPZ		18	
	Lh	ePZ		13	
	Qt	iPZ		35.4c	
		ePcPZ		38.5	
		epPZ		43.0	
		esPZ		49.3	
		ePPZ	55	54.5	
		USCGS H 04 39 56.3			
		54.8 N 161.6 W			
		Alaska Peninsula			
		depth about 33 km			
30	Qt	ePZ*	10	25	10.0
		ePKPZ		28	48.5

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Date	Station	Phase	h	m	s
		ePPZ*		30	02.5
		eSKSE*		35	45.0
		ePSE*		39	42.0
		Mu Sec			
		MH 33.3 20			
		△ = 117°.0			
	Lh	ePKPZ	10	28	57
		epPKPZ		29	15
		ePPZ*		30	40
		eSKSPN*		40	32
		eSSN		47	23
	Ch	ePKPZ		29	03
		ePPZ		30	54
		USCGS H 10 10 04.1			
		55.6 S 28.3 W			
		Sandwich Islands region			
		depth about 33 km			
		Mag : 6½ (Pas), 6.7(Qt)			
30	Lh	ePZ	10	35	17
		eSN		36	21
	Wr	ePZ			07.1
	Qt	ePZ			45.0
		eSE		38	57.4
		Mu Sec			
		PZ 0.01 0.5			
		H 10 33 55.0			
		30.2 N 81.0 E			
		Nepal			
		depth about 50 km			
		USCGS H 10 33 59.1			
		29.7 N 80.5 E			
		India, Nepal border			
		depth about 57 km			
		Mag : 5.1(Qt)			
30	Qt	ePZ	15	56	7.0
		eXZ			26.5
30	Ch	ePZ	17	42	11
		iSE		43	02
	Wr	ePZ		45	04.4
	Qt	ePZ			27.9
		epPZ			38.5
		eSE		48	56.5
		eSSN		49	35.5
		H 17 41 05.0			
		23.6 N 87.2 E			
		West Bangal, India			
		depth about 15 km			
30	Qt	ePZ	20	19	46.5
		eXZ			53.0
31	Qt	ePZ	03	23	15.5
		USCGS H 03 09 58.3			
		63.5 N 149.4 W			
		Central Alaska			
		depth about 56 km			
31	Ch	ePZ	05	13	11 c
		epPZ			20
		ePPZ		14	19
		ePcPZ		16	01
		eSE		18	20
		eScS		23	36
	Lh	ePZ		15	02
		eSN *		21	44
	Wr	ePZ		15	16.7
	Qt	ePZ			52.5
		epPZ		16	02.5
		esPZ			08.5
		ePcPZ		17	00.0
		ePPZ*			57.0
		ePPPZ*		19	03.5
		eSN*		23	17.6
		eSSE*		26	40.5
		Mu Sec			
		MH 28.2 20			
		△ = 52°.9			
		USCGS H 05 06 46.0			
		27.9 N 126.3 E			
		Ryukyu Islands			
		depth about 33 km			
		Mag : 6.3(Qt)			

Date	Station	Phase	h	m	s
31	Qt	ePZ	09	54	32.0
31	Qt	ePZ	11	40	08.0
		epPZ			19.5
		epPZ			19.5
		USCGS H 11 27 30.5			
		54.7 N 161.7 W			
		Alaska Peninsula			
		depth about 33 km			
31	Qt	ePZ	12	03	17.0
31	Qt	ePZ	15	14	17.0
		epPZ			25.2
	Wr	ePZ			38.5
		USCGS H 15 07 00.4			
		35.8 N 21.9 E			
		Ionian Sea, West Crete			
		depth about 33 km			
31	Qt	ePKPZ	16	40	04 ±
		USCGS H 16 21 52.8			
		21.5 S 178.1 W			
		Fiji Islands			
		depth about 373 km			
31	Qt	ePZ	17	00	34.9
31	Qt	iPZ	17	10	09.5d
		epPZ			19.2
		ePPZ			25.0
		ePPPZ			38.5
		eSN	13	29	29.2
		eSSN			53.5
		Mu Sec			
		PZ 0.06 1.0			
		△ = 17°.7			
	Wr	ePZ	17	10	18.2
	Lh	ePZ			54 d
		esPZ		11	08
	Ch	iPZ		13	37 d
		epPZ			46
		esPZ			51
		ePPZ		15	14
		USCGS H 17 06 04.4			
		41.4 N 50.2 E			
		Turkmen, S.S.R.			
		depth about 33 km			
		Mag: 4.8(Qt)			
31	Qt	iPZ	18	56	31.5
		epPZ			44.2
		USCGS H 18 44 00.2			
		52.7 N 168.7 W			
		Fox Islands, Aleutian			
		Islands			
		depth about 33 km			
31	Qt	ePZ	19	21	43.0
		USCGS H 19 10 22.6			
		54.2 N 167.5 E			
		Bering Sea			
		depth about 33 km			

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Date	Phase	h m s
	QUETTA	
1	ePZ	01 16 50.2
2	ePZ	11 49 48.3
2	ePZ	15 28 47.2
	eXE	30 04.0
2	ePZ	17 51 35.5
3	ePZ	06 33 24.5
3	ePZ	18 21 17.0
3	eXZ	20 30 46 ±
4	ePZ	01 40 11.9
4	ePZ	01 54 03.5
4	ePZ	02 31 21.1
4	ePZ	05 23 18.6
	eSNE	44.7
4	ePZ	08 58 17.6
4	ePZ	10 07 50.4
	eXNE	08 17.1
4	ePZ	12 52 46.7
	eSNE	51.5
4	ePZ	20 05 35.0
4	ePZ	22 38 17.6
5	eXZ	06 39 47.0
5	eXZ	07 28 48.8
5	ePZ	20 10 55.0
5	ePnZ	21 26 22.5
	ePgZE	28.4
	eSnZNE	41.8
	eSgNE	44.7
7	ePZ	02 13 41.3
2	ePZ	03 27 29.1
	e(S)N	29 00.0
7	ePZ	21 39 55.2
7	ePZ	21 46 53 ±
	e(S)	47 48.0
7	ePZ	23 39 07
	eS	40 25.0
8	ePZ	02 58 11.1
8	ePZ	06 42 59.9
	eXZNE	43 18.8
8	ePZ	17 28 32.1
8	ePZ	18 12 40.1
8	ePZ	19 42 35.5
8	ePZ	23 56 10.0
9	ePZ	10 27 11.5
9	ePZ	10 58 42.0
	eSN	59 00.8
9	ePZ	20 59 21.0
	eSN	43.5
10	ePZ	00 02 10 ±
10	ePZ	16 14 55.4
10	ePZ	21 38 03.0
	eSE	50.0
11	ePZ	02 42 30.7
	e(S)E	43 52.5
11	ePZ	21 52 45.6
	e(S)E	53 54.0
11	ePgZ	23 38 03.8
	eSgNE	06.5
12	ePZ	01 44 23.3
	e(S)E	45 20.0
12	ePE	08 24 38.9
12	ePE	14 13 53.0
12	ePE	15 42 49.9
	e(S)E	43 24.0
12	ePE	16 14 34.3
12	ePE	16 39 57.8
12	ePE	19 01 24.9
12	ePE	23 16 49.0
	e(S)E	17 48.5
12	ePE	23 17 48.4
	eXE	58 49.7
14	ePZ	01 47 39.1
14	ePZ	16 00 16.0
15	ePgZ	14 09 30.2
	eSgNE	31.5
15	ePZ	17 42 31.1
15	ePZ	17 50 03.6
16	ePZ	18 26 40.5

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Date	Phase	h m s
16	ePZ	19 44 45.8
	eSNE	46.9
16	ePZ	19 57 32.8
	eSNE	33.3
17	ePgZ	07 02 23.5
	eSgNE	35.3
17	ePZ	12 09 48.5
17	eXZ	17 47 13.0
17	ePgZ	18 31 37.8
	eSgNE	39.8
18	eXZ	01 37 18.0
18	ePZ	13 59 47.4
18	ePZ	16 54 41.4
18	ePZ	20 11 11.6
	eSNE	39.0
18	ePZ	23 12 07.4
18	ePgZ	23 47 43.0
	eSgNE	45.0
19	ePZ	20 23 04.9
19	ePZ	21 57 01.8
19	ePZ	23 11 14.8
	eSE	12 53.5
20	ePZ	00 51 12.8
20	ePZ	01 47 29.8
20	ePZ	04 40 04.9
	eSNE	30.2
20	ePZ	09 30 16.6
	eSN	37.5
20	ePgZ	10 50 35.2
	eSgNE	37.1
20	eXZ	16 53 21.7
20	eXZ	22 31 32.4
20	ePZ	22 44 50.1
	eSNE	46 11.9
20	ePZ	23 19 01.2
21	eXZ	00 16 25.4
21	ePZ	00 39 44.2
	eSNE	53.1
21	ePZ	05 24 55.7
	eXNE	25 19.2
21	ePZ	08 51 17.5
	eSNE	43.5
21	eXZ	15 59 35.5
21	ePZ	16 21 45.7
22	ePZ	00 17 50.0
22	eXZ	14 28 54.5
22	ePZ	17 21 30.5
	eXNE	50.3
	ePZ	21 57 37 ±
	eXN	59 18.5
22	eXZ	23 18 23.0
23	ePZ	09 35 34.0
23	ePZ	10 36 16.5
	eSNE	37.5
23	ePZ	14 55 08.2
23	ePZ	17 10 37.0
	eSN	11 25.5
23	ePZ	23 03 11.9
	eSNE	24·3
24	ePZ	00 18 00·2
24	ePZ	22 54 20·5
25	ePZ	12 35 39·4
25	ePZ	13 28 25·0
25	ePZ	16 16 07·5
26	ePZ	10 04 40·6
	eXNE	05 08·0
26	ePZ	18 47 22·0
	eSNE	48 50·0
26	ePgZ	18 57 11·0
	eSgNE	24·5
26	ePgZ	19 40 20·0
	eSgNE	34·0
26	ePZ	18 47 22·0
	eSNE	48 50·0
26	ePgZ	18 57 11·0
	eSgNE	24·5
26	ePgZ	19 40 20·0
	eSgNE	34·0

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Date	Phase	h	m	s
26	ePZ	21	05	27·5
27	ePZ	10	41	13·0
	eSNE			24·9
27	ePZ	20	11	26·7
	eXZ		14	13
27	ePZ	20	14	13·3
27	ePZ	21	14	31·7
27	ePgZ	21	57	43·9
	eSgNE			46·7
27	ePgZ	21	58	33·7
	eSgNE			35·8
27	ePZ	22	51	27·9
	eSNE			43·7
28	ePZ	01	36	55·2
	eXZ		40	03·7
28	e(P)Z	02	14	38·2
	eSNE		15	51·7
28	ePZ	11	34	37·4
	eSNE			53·2
28	ePgZ	16	07	39·0
	eSgNE			51·7
28	ePZ	17	22	56·7
28	ePZ	19	08	59·6
	ePgZ	01	32	42·6
	eSgNE			47·3
29	ePZ	05	19	07·0
29	ePZ	08	11	47·5
29	ePZ	12	13	16·8
	eSNE			34·3
29	ePZ	20	49	05·0
30	ePZ	00	31	08·5
	eSNE			39·8
30	ePZ	09	14	59·0
30	ePZ	09	24	03·5
30	eXZ	10	24	57·5
30	ePZ	16	49	07·5
	eSNE			32·2
31	ePZ	01	53	18·0
	eSE		54	50
31	ePZ	15	48	42·0
	eSNE			58·0
31	iPZ	21	14	04·9c
	eSN*E*			42·0
31	ePZ	22	26	54·5
	WARSAK			
2	ePZ	00	38	01·3
2	ePZ	06	53	31·6
2	iPZ	11	18	24·2
	eSZ		19	20·5
2	iPZ	11	24	35·6
	iSZ		25	11·0
2	ePZ	11	48	41·8
2	ePZ	17	35	44·8
3	ePZ	09	50	58·2
4	ePZ	04	43	55·3
	eSZ		44	28·4
4	ePZ	10	16	05·6
	eSZ			31·2
6	ePZ	07	01	48·3
6	ePZ	18	17	59·5
	iSZ		18	24·7
7	ePZ	03	35	52·6
7	ePgZ	10	42	45·9
	eSgZ		43	00·5
7	ePZ	21	46	14·4
7	iPZ	23	38	03·9
8	ePZ	01	47	12·8
	eSZ			42·5
8	iPZ	18	11	38·0
	iSZ		12	17·2
9	ePZ	10	28	03·3
9	ePZ	20	43	16·4
9	ePZ	23	56	26·6
	eSZ		57	02·9
10	ePZ	16	13	54·2
	iSZ		14	23·9
10	ePZ	21	38	02·1
	eSZ			40·7
11	ePZ	22	58	57·2
12	ePZ	01	44	31·2

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Date	Phase	h	m	s
12	ePZ	10	18	45·1
	eSZ		19	17·7
12	ePZ	23	16	45·3
13	ePZ	06	44	39·5
14	ePZ	09	30	33·8
	eSZ			57·0
14	ePZ	09	46	13·1
	eSZ			58·4
14	ePZ	13	00	25·7
16	eSZ	19	25	51·6
16	ePZ	21	26	28·0
17	iPZ	11	27	18·5
	iSZ			45·7
18	ePZ	13	59	43·0
18	ePgZ	14	57	18·7
19	ePZ	18	10	00·2
19	ePZ	18	52	41·2
19	ePZ	21	52	22·1
	eSZ			51.8
20	ePZ	13	32	41·5
20	ePZ	13	49	34·2
	eSZ		50	19·4
21	ePZ	12	27	03·4
21	ePZ	15	58	47·1
	iSZ		59	33·3
21	ePZ	16	20	54·7
	iSZ		21	45·6
21	ePZ	18	47	53·2
	eSZ		48	38·7
22	ePZ	13	26	50·3
22	ePZ	14	27	57·2
	eSZ		28	35·4
22	ePZ	23	08	05·4
	iSZ			29.8
25	ePZ	05	12	14.6
	iSZ			41.5
25	ePZ	12	35	41.7
25	ePZ	19	01	29.3
	eSZ			56.9
26	ePZ	06	56	12.6

Date	Phase	h	m	s
26	ePZ	13	20	21.4
	iSZ			49.5
26	ePZ	18	46	16.8
	eSZ			53.0
27	ePZ	02	59	44.4
	eSZ	03	00	14.0
28	ePZ	02	12	51.0
28	ePZ	02	31	33.8
28	ePZ	13	32	35.3
	ePZ	19	08	31.6
	iSZ			57.5
28	ePZ	23	27	59.2
29	ePZ	06	35	45.6
29	ePZ	16	51	48.2
	eSZ		52	18.0
30	iPZ	21	18	42.8c
30	ePZ	09	15	01.2
30	ePZ	09	21	51.3
	eSZ		22	25.3
30	ePZ	10	28	58.4
	eSZ		30	46.3
31	ePZ	06	43	05.5
	eSZ			46.8
31	ePZ	14	32	54.0
31	ePZ	23	43	52.9
	eSZ		44	25.5
	LAHORE			
3	ePZ	16	43	58
	eXZ		44	29
3	eXZ	19	25	41
4	eXZ	00	41	42
4	ePZ	00	43	36
4	eXZ	00	46	23
	eXZ			50
4	eXZ	01	08	54
4	ePZ	23	29	04
5	eXZ	18	01	54
6	ePZ	03	28	07c
	eXZ			33
	eXZ			40

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Date	Phase	h	m	s	
7	eXZ	07	27	14	
7	ePZ	13	57	23	
8	eXZ	07	43	08	
10	eXZ	06	49	21	
	e(S)Z			29	
10	e(P)Z	18	15	23	
	eXZ			38	
10	ePZ	21	39	05	
11	eXE	05	40	07	
11	eXZ	21	01	49	
12	ePZ	08	25	48	
12	e(P)Z	09	22	58	
	eXZ		23	08	
12	e(P)Z	12	23	01	
12	ePE	23	17	19	±
	eXZ			41	
	eSZ			47	
	eXN			54	
15	eXZ	22	34	57	
16	ePZ	15	28	39	c
	eXZ		29	15	
18	e(P)Z	14	00	37	
24	eXZ	01	24	02	
26	eXZ	16	47	10	
26	eXZ	22	36	29	
26	eXZ	23	00	12	
26	eXZ	23	39	26	
28	eXZ	18	27	14	
	eXZ			54	
	eXNE		28	17	
28	ePZ	19	08	49	±
	eXZ		09	03	
	e(S)Z			24	
30	eXZ	17	45	24	
31	e(P)Z	17	00	41	
	CHITTAGONG				
1	ePZ	14	32	21	
	eSE			47	
1	eXZ	14	51	03	
1	eXE	19	46	38	
2	e(P)ZNE	21	33	37	
4	eXZ	09	02	44	±
6	eXNE	11	37	36	
6	eXZ	14	48	07	
7	ePZ	19	32	08	
	ePcPZ			14	
	eSE		42	39	
7	ePZE	21	47	06	
8	ePZE	13	32	38	
	eSNE			45	
9	ePZE	02	22	04	
9	ePZE	19	23	58	
10	eZXN	06	52	51	
10	ePN	19	41	47	
11	eXNE	17	49	34	
	eSNE		09	14	
11	ePNE	23	36	32	
12	ePNE	01	04	18	
12	eXZ	04	27	07	
12	eXN	08	59	11	
13	eXE	13	01	04	
13	eXE	14	15	44	
14	e(P)Z	18	43	00	
15	eXZ	01	44	02	
16	eXZ	02	05	06	
16	eXZN	03	36	51	
16	eXZ	04	14	50	
	iPZNE	23	55	05	d
	iSZNE			17	
17	eXE	03	08	04	
17	eXZ	04	54	54	
17	ePnNE	16	41	30	
	eP*ZNE			34	
	ePgNE			46	
	iXE			50	
	iSnNE		42	07	
	eS*E			13	
	iSgNE			18	

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Date	Phase	h	m	s	
18	ePZ	01	32	54	±
	iSZNE		33	14	
19	ePZNE	21	58	44	d
	iSNE		59	07	
21	eXZE	04	35	17	
21	eXZ	10	45	51	
22	eXZ	23	50	52	
23	ePZ	04	49	18	
24	eXZ	22	51	20	
25	iPZNE	07	39	36	c
	iSZNE			50	
25	eXZ	09	07	19	
25	ePZE	20	27	33	
26	eXE	00	05	24	
26	eXE	01	10	34	
26	ePZ	01	43	16	
26	ePZE	10	48	47	
27	eXZ	19	25	48	
28	eXZ	02	33	03	
28	ePZE	05	19	00	
28	ePE	11	49	35	
30	ePZ	09	48	21	
	eXZ			49 05	
30	iSNE	10	39	07	
31	ePZN	10	59	50	

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Date	Station	Phase	h	m	s
1	Qt	ePZ	10	27	41·4
		espZ			56·0
		USCGS 10 16 34·1			
		3·0 S 131·0 E			
		Ceram region			
		depth about 33 km			
1	Kr	iPZ	12	28	24 d
		eSZ		29	40
	Qt	ePZ		28	32·1
		eSN		29	53·0
		Mu Sec			
		PZ 0·1 0·5			
		△ = 7°·2			
		Mag: 5·3 (Qt)			
1	Qt	ePZ	22	03	01·4
2	Qt	ePZ	08	01	14·1
		iXZ			18·5
		epPZ			29·5
		USCGS H 07 50 45·4			
		9·2 S 120·2 E			
		Sumba Strait			
		depth about 50 km			
2	Qt	ePKPZ	12	07	11·5
		USCGS H 11 48 20·0			
		19·7 S 174·6 W			
		Tonga Islands			
		depth about 77 km			
2	Ch	ePZ	16	48	52 ±
	Qt	ePZ		51	51·6
		epPZ		52	04·3
		USCGS H 16 43 00·0			
		20·1 N 121·7 E			
		Batan Islands			
		depth about 33 km			
2	Qt	ePZ	18	13	21.5
		epPZ			33·0
		USCGS H 18 01 13			
		51·3 N 179·1 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 33 km			

Date	Station	Phase	h	m	s
2	Wr	ePZ	19	46	34·0
		eSZ		47	06·3
	Qt	ePZ			34·5
		eSN		48	56·0
		H 19 45 50·0			
		Hindukush region			
2	Qt	ePZ	21	44	45·5
2	Qt	ePZ	23	24	44·5
3	Qt	ePKPZ	02	05	58·2
		USCGS H 01 48 00·5			
		23·9 S 179·7 W			
		Fiji Islands region			
		depth about 500 km			
3	Wr	ePZ	18	19	07·6
		eSN			47·9
	Qt	ePZ		20	13·7
		eSN		21	45·5
4	Wr	ePZ	01	29	27·8
	Qt	ePZ			44·5
		ePcPZ			48·5
		ePPZ		33	10·0
		eSE		40	21·0
		USCGS H 01 17 03·1			
		6·3 S 149·1 E			
		New Britian			
		depth about 36 km			
4	Qt	ePZ	05	17	11·1
		ePPZ			19·0
		esPZ			24·2
		ePPZ			28·6
		eSE		19	17·2
		eSSE			30·5
		Mu Sec			
		PZ 0·02 0·8			
		△ = 11°·3			
	Kr	ePZ		17	11·1
		eSE		19	17·3

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Date	Station	Phase	h	m	s
	Wr	ePZ	18	13	8
		H 05 14 29·0			
		28·0 N 53·9 E			
		Southern Iran			
		depth about 33 km			
		USCGSH 05 14 25·6			
		27·3 N 54·2 E			
		Southern Iran			
		Felt Lar and Bastak			
		depth about 34 km			
		Mag: 5·0 (Qt.)			
4	Qt	ePZ	07	20	50·1
		ePPZ			57·0
		ePPZ	21	04	2
		ePPPZ			07·1
		eSN	22	54	4
		eSSN	23	09	
		Mu Sec			
		PZ 0·05 1·0			
		Δ = 11°·1			
	Kr	ePZ	20	52	1
	Wr	ePZ	21	53	0
		H 07 18 10·7			
		28·0 N 54·2 E			
		Southern Iran			
		USCGS H 07 18 06·9			
		27·7 N 54·6 E			
		Southern Iran			
		Felt Lar and Bastak			
		depth about 33 km			
		Mag: 5·2 (Qt)			
4	Lh	ePZ	16	23	28
	Wr	ePZ			46·9
	Qt	ePZ	24	19	5
		epPZ			30·3
		ePcPZ	25	35	5
		USCGS H 16 15 22·9			
		26·1 N 124·1 E			
		Ryukyu Islands region			
		depth about 33 km			

Date	Station	Phase	h	m	s
4	Wr	iPZ	23	21	14·6
		iSZ			49·1
	Lh	ePZ			54
		eSN	22	56	
	Qt	iPZ			18.9d
		eSN	23	40.4	
		Mu Sec			
		PZ 0.05 0.8			
		Δ = 7°.3			
		H 23 20 33.0			
		36.3 N 71.7 E			
		Hindukush			
		depth about 200 km			
		Mag: 4.8 (Qt)			
4	Ch	ePZ	23	30	42
		epPZ		31	08
		ePcPN			37
		ePPN	32	50	
		eSN	38	25	
		eScSN	40	15	
	Lh	iPZ	31	18	c
		ePcPZ	32	00	
		eSN*	39	29	
	Wr	iPZ	31	20.0	
	Qt	iPZ			55.9c
		epPZ	32	16.0	
		ePcPZ			24.4
		esPZ			26.5
		iXZ	34	17.0	
		ePPZ			25.5
		ePPPZ		36	05.5
		eSN	40	44.2	
		eScSN	41	49.0	
		Mu Sec			
		PZ 0.1 1.0			
		Δ = 67°.0			
	Kr	ePZ	23	32	21.5
		USCGS H 23 21 09.0			
		48.5 N 154.9 E			

Date	Station	Phase	h	m	s
		Kurile Islands			
		depth about 85 km			
		Mag : 5.8 (Qt)			
5	Qt	ePZ	01	57	51.0
		epPZ		58	29.5
		esPZ			45.2
		USCGS H 01 47 49.8			
		0.0 123.8 E			
		Celebes region			
		depth about 164 km			
5	Wr	ePZ	05	14	55.0
	Qt	ePZ		15	22.0
		esPZ			33.5
		USCGS H 05 04 03.4			
		19.2 N 147.1 E			
		Mariana Islands region			
		depth about 33 km			
	Qt	ePZ	12	20	56.0
		epPZ			11.5
		USCGS H 12 08 20.6			
		53.7 N 165.4 W			
		Fox Islands			
		Aleutian Islands			
		depth about 33 km			
5	Qt	ePKPZ	19	48	24.0
		USCGS H 19 29 30.0			
		31.9 S 179.0 W			
		Kermadec Islands			
		depth about 68 km			
5	Kr	ePKPZ	20	58	55.0c
	Qt	iPKPZ		59	00.3c
		epPKPZ	21	00	10.5
		iXZ			36.0
		ePPZ*		02	26.0
		eXZ		05	30.5
		ePPPZ			47.5
		eSKSN*		06	15.0
		iXE*		09	16.5
		iXE*		12	42.0
		ePPSE*		15	21.0
		Mu Sec			
		MH 22.4 20			
		Δ = 148°.0			
	Wr	ePKPZ	20	59	05.5
	Lh	ePKPZ			08 c
		epPKPZ			16
		eSKSZ*	21	06	15
	Ch	ePKPZ	20	59	17
		USCGS H 20 39 21.6			
		38.4 S 73.4 W			
		Near coast of Central Chile			
		depth about 41 km			
		Mag : 6¼-6½ (Pas), 6½ (Berk),			
		5¾-6 (Pal), 6.6(Qt)			
6	Kr	ePKPZ	01	41	05.0
	Qt	iPKPZ			08.1d
		epPKPZ			19.5
		eXZ*		44	25.0
		ePPZ*			42.5
		eSKSN*		48	22.0
		ePKKPN*		50	12 0
		eSKKSE*		51	24.0
		ePPSE*		57	28.0
		eSSN*	02	03	34 0
		eSSSE*		09	18.0
		Mu Sec			
		MH 2.8 20.0			
		Δ = 148°.0			
	Wr	ePKPZ	01	41	10.2
	Lh	ePKPZ			21 ±
	Ch	ePKPZ			27
		USCGS H 01 21 29.0			
		38.4 S 73.6 W			
		Near coast of Central Chile			
		depth about 33 km			
		Mag : 5¼-5½ (Pal),			
		6.0 (Qt)			

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Date	Station	Phase	h m s
6	Ch	ePZ	02 03 18
		eSE	09 11
	Wr	ePZ	05 48.3
	Qt	ePZ	59.1
		epPZ	07 07 0
		eSN	14 13.2
		USCGS H 01 55 59.2	
		7.9 S 119.9 E	
		Flores Sea	
		depth about 306 km	
6	Qt	ePZ	05 53 40.9
		epPZ	54 02.0
		USCGS H 05 41 23	
		5.3 S 14.5 E	
		Near northeast coast	
		of New Guinea	
		depth about 90 km	
6	Qt	ePKPZ	06 11 49.5
		H 05 53 53.9	
		18.1 S 177.6W	
		Fiji Islands region	
		depth about 500 km	
6	Ch	ePZ	10 30 26
		ePcPZ	31 13
		eSN	38 30
	Wr	ePZ	32 25.9
	Qt	ePZ	48.0
		ePcPZ	52.7
		ePPZ	35 55.5
		eSE	43 07.5
		USCGS H 10 20 25.5	
		3.5 S 146.0 E	
		Bismarck Sea	
		depth about 33 km	
5	Ch	ePZ	15 47 16.5d
		iSE	47.0
	Wr	ePZ	51 09.1
	Qt	ePZ	39.1
		epPZ	47.5
		esPZ	53.5
		ePPZ	52 06.5
		eSE	55 44.5
		esSE	56 02.5
		eSSE	27.5
		H 15 46 35.0	
		25.7 N 93.2 E	
		Assam, India	
		depth about 33 km	
6	Qt	ePZ	17 45 58 ±
		USCGS H 17 35 45.8	
		0.0 124.1 E	
		Molucca Sea	
		depth about 110 km	
		Mag : 4.2 (CGS)	
6	Ch	ePZ	18 27 38
		epPZ	47
		esPZ	52
		ePcPZ	28 16
		ePPZ	30 00
		ePPPZ	31 31
	Wr	ePZ	27 48.2
	Lh	ePZ	53
	Qt	iPZ	28 25 c
		epPZ	35.0
		esPZ	38.5
		ePcPZ	47.5
		ePPZ	31 01.5
		eSE*	37 34.0
		Mu Sec	
		MH 3.4 20	
		$\Delta = 70°.7$	
		USCGS H 18 17 10.9	
		55.6 N 166.1 E	
		Komandorskie Islands	
		region	
		depth about 33 km	
		Mag : 5.9 (Qt)	

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Date	Station	Phase	h	m	s
6	Qt	ePKPZ	22	02	57.9
		iXZ		03	18.0
	Wr	ePKPZ			06.3
	Lh	ePKPZ			11
		USCGS H 21 43 16.3			
		28.2 S 67.4 W			
		La Rioja Province			
		Argentina			
		depth about 19 km			
7	Qt	ePKPZ	01	41	30.2
		USCGS H 01 23 41.7			
		17.7 S 178.7 W			
		Fiji Islands region			
		depth about 559 km			
		Mag : 4.3 (CGS)			
7	Qt	ePZ	02	17	00 ±
		USCGS H 02 06 36.0			
		8.2 S 119.4 E			
		Sumbawa			
		depth about 51 km			
7	Wr	iPZ	12	13	14.0
		iSZ			45.6
	Lh	ePZ			55
		eSZ		14	58
	Qt	ePZ			13.3
		eSE		15	30.2
		Mu Sec			
		PZ 0.01 0.5			
		△ = 6°.9			
		H 12 12 33.0			
		36.3 N 70.9 E			
		Hindukush			
		depth about 220 km			
		USCGS H 12 12 31.4			
		36.4 N 70.8 E			
		Hindukush			
		depth about 214 km			
		Mag: 3.7 (CGS), 4.3 (Qt)			

Date	Station	Phase	h	m	s
7	Qt	ePZ	16	49	18.7
		esPZ			33.0
		ePPZ			40.0
		iXE		51	08.0
		iXE			35.0
		eSN*		52	24.0
		eSSN*		53	18.0
		Mu Sec			
		PZ 0.03 1.0			
		△ = 20°.1			
	Wr	ePZ		50	13.8
		USCGS H 16 44 45.3			
		14.4 N 53.3 E			
		Gulf of Aden			
		depth about 33 km			
		Mag : 4.6 (Qt)			
7	Qt	ePZ	17	03	11.0
7	Qt	ePKPZ	17	27	16.8
		USCGS H 17 08 18			
		26.5 S 176.6 W			
		Kermadec Islands			
		region			
		depth about 33 km			
		Mag : 4.8 (CGS)			
7	Qt	ePZ	17	45	44
		USCGS H 17 36 52·8			
		14·7 N 119·6 E			
		Off west coast of central			
		Luzon, Philippine Islands			
		depth about 151 km			
		Mag : 4·5 (CGS)			
8	Qt	ePZ	06	05	47·
		esPZ			56·
		eSE		07	39·
		Mu Sec			
		PZ 0·01 1·0			
		△ = 10°·0			
		USCGS H 06 03 09·9			
		26·6 N 55·2 E			
		Persian Gulf			

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Date	Station	Phase	h	m	s	
		depth about 33 km				
		Mag: 4·1 (CGS), 4·5(Qt)				
8	Qt	ePZ	07	15	43·0	
		eSE		17	36·0	
	Wr	ePZ		16	51·2	
8	Qt	ePZ	22	41	16	±
		epPZ			25·5	
		USCGS H 22 30 27·6				
		46·7 N 153·6 E				
		Kurile Islands				
		depth about 56 km				
		Mag: 4·2 (CGS)				
9	Qt	ePZ	04	03	00·0	
		ePcPZ			45·5	
		USCGS H 03 53 06				
		36·4 N 137·9 E				
		Central Honshu, Japan				
		depth about 33 km				
		Mag: 4·4 (CGS)				
9	Wr	ePZ	08	11	30·1	
	Lh	ePZ			34	
	Qt	iPZ		12	03·7c	
		ePcPZ			07·5	
		esPZ			17·0	
		ePPZ		15	03·5	
		Mu Sec				
		PZ 0·1 1·0				
		Δ = 80°·5				
		USCGS H 07 59 52.9				
		51·2 N 179·8 W				
		Andreonof Islands				
		Aleutian Islands				
		depth about 33 km				
		Mag: 4·5 (CGS),				
		5·0 (Qt)				
9	Wr	ePZ	16	08	38·6	
	Qt	ePZ		09	11·5	
		eXZ			32·5	
		eXZ			58·5	
9	Lh	ePZ	16	16	05	
	Wr	ePZ			09·2	
	Qt	ePZ			46·4	
		epPZ			56·5	
		esPZ		16	03·5	
		ePPZ		18	13·5	
		USCGS H 16.05 03·0				
		43·7 N 150·6 E				
		Kurile Islands region				
		depth about 33 km				
		Mag: 4·8 (CGS)				
9	Qt	ePZ	17	24	05·4	
	Wr	ePZ			21·2	
9	Qt	ePZ	20	51	47·5	
		USCGS H 20 40 20				
		44·5 N 27·9 W				
		Azores Islands region				
		depth about 33 km				
10	Wr	ePZ	03	00	51·5	
		eSZ		01	24·2	
	Qt	ePZ			56·1	
		eSN		03	17·5	
		H 03 00 10·5				
		Hindukush region				
10	Wr	ePZ	06	54	49·9	
	Qt	ePZ		55	38·8	
		ePPZ		57	05·0	
		USCGS H 06 48 31·2				
		52·0 N 108·1 E				
		Lake Baikal region				
		depth about 27 km				
10	Qt	iPZ	12	10	48·5c	
		esPZ		11	08·5	
		USCGS H 12 00 42·2				
		42·4 N 142·1 E				
		Near south coast of				
		Hokkaido, Japan				
		depth about 54 km				
		Mag: 4·3 (CGS)				

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Date	Station	Phase	h	m	s
10	Qt	ePZ	13	39	51·5
10	Qt	ePZ	15	16	48·8
		epPZ		17	00·0
		USCGS H 15 05 25·3			
		53·5 N 33·4 W			
		North Atlantic Ocean			
		depth about 41 km			
		Mag: 4·9 (CGS)			
10	Wr	ePZ	16	23	33·6
		iSZ		24	00·5
	Qt	ePZ			23·8
		eSN		25	31·5
10	Qt	ePZ	16	47	39·8
		USCGS H 16 36 11·0			
		44·6 N 28·1 W			
		Azores Islands region			
		depth about 33 km			
10	Wr	iPZ	17	47	47·0
		iSZ		48	16·1
	Lh	ePZ			29
		eSN		49	27
	Qt	ePZ		48	52·8
		eSN		50	12·4
		H 17 47 11.0			
		36·2 N 71·2 E			
		Hindukush			
		depth about 100 km			
10	Lh	ePZ	21	45	34 d
		epPZ			50
		eSZ		53	24
	Wr	ePZ		45	39·2
	Qt	iPZ		46	15·5d
		epPZ			30·7
		ePcPZ			59·0
		ePPZ		48	36·2
		eSN		54	43·2
		USCGS H 21 35 48·7			
		44·6 N 147·8 E			

Date	Station	Phase	h	m	s
		Kurile Islands region			
		depth about 67 km			
		Mag: 5·0 (CGS)			
10	Qt	ePZ	23	31	18·3
		USCGS H 23 21 01·0			
		4·1 N 126·3 E			
		Celebes Sea depth			
		about 40 km			
		Mag: 4·3 (CGS)			
11	Wr	ePZ	06	23	23·5
	Qt	ePZ			26·8
11	Qt	ePZ	15	19	26·0
		eXN		24	14·5
11	Qt	ePZ	21	29	37·4
		eXZ			48·0
12	Qt	ePZ	00	35	24·2
		epPZ			31·5
		USCGS H 00 26 19			
		17·7 N 127·3 E			
		Near west coast of			
		Luzon, Philippine Islands			
		depth about 33 km			
		Mag: 4·5 (CGS)			
12	Qt	ePZ	11	43	32·5
12	Qt	ePZ	13	51	54·7
		eXZ		52	23·5
12	Qt	ePZ	17	24	36·2
12	Lh	ePZ	17	55	51
	Qt	iPZ		56	23·5
		epPZ			50·0
		USCGS H 17 43 59·2			
		6·7 S 147·1 E			
		Near north coast of New			
		Guinea			
		depth about 120 km			
		Mag: 4·8 (CGS)			
12	Qt	ePKPZ	23	25	15·6
		epPKPZ		26	29·5
		ePPZ			46·5

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Date	Station	Phase	h	m	s	
		USCGS H 23 07 28·9				
		17·8 S 178·6 W				
		Fiji Islands				
		depth about 583 km				
		Mag: 5·5 (CGS)				
13	Qt	iPKPZ	00	41	59·0	
		iXZ		42	08·2	
		iXZ		45	23·2	
		USCGS H 00 22 51·3				
		13·4 N 91·0 W				
		Near south coast of				
		Guatemala				
		depth about 116 km				
		Mag : 5·0 (CGS)				
13	Qt	iPZ	01	39	02·5	d
		epPZ			12·6	
		ePPZ			17·2	
		ePPPZ			28·5	
		eSE*		42	32·0	
		Mu Sec				
		PZ 0·02 0·8				
		Δ = 19°·1				
	Lh	ePZ		39	50	
	Wr	ePZ			57·8	
		USCGS H 01 34 40·4				
		13·0 N 57·9 E				
		Arabian Sea				
		depth about 33 km				
		Mag: 4·5 (Qt)				
13	Qt	ePZ	03	08	47·2	
		USCGS H 03 06 38·1				
		27·6 N 55·1 E				
		Southern Iran				
		depth about 33 km				
		Mag: 3·9 (CGS)				
13	Ch	iPZ	08	55	53	c
		isPZ		56	07	
		iPPZ			42	
		iPPPZ			53	
		iPcPZ			59	07
		iSE	09	00	34	
		isSE			50	
	Lh	iPZ	08	57	57	c
		isPZ			58	12
		ePPZ			59	38
		eScSZ	09	07	57	
	Wr	iPZ	08	59	16·0	
	Qt	iPZ			49·7	a
		eSN	09	05	53·0	
		Mu Sec				
		PZ 0·5 1·0				
		Δ = 49°·3				
		USCGS H 08 50 02·2				
		24·5 N 121·8 E				
		Northern Formosa				
		depth about 33 km				
		Mag: 7½ (Pas), 7½(Berk),				
		7¼ (Pal), 6·6(Qt)				
13	Ch	ePZ	09	36	24	c
		ipPZ			31	
		isPZ			42	
		ePPZ		37	12	
		ePPPZ			25	
		eSE		41	04	
		esSE			20	
	Lh	ePZ		38	28	
	Qt	ePZ		39	20	
		USCGS H 09 30 34·6				
		24·8 N 121·7 E				
		Northern Formosa				
		depth about 33 km				
		Mag : 5·4 (CGS)				
13	Ch	ePZ	18	25	36	
		epPZ			43	
		esPZ			47	
		ePcPZ			51	
		ePPZ		28	26	
		ePPPZ		30	12	

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Date	Station	Phase	h	m	s
		eSN		35	11
		eScSE			41
	Lh	ePZ		27	01
		esPPZ			14
		eSN*		38	02
		eSSN*			44.03
	Qt	ePZ		27	31.4
		epPZ			41.5
		esPZ			46.5
		ePPZ		31	34.5
		ePPPZ		33	39.0
		eSKSN*		38	09.0
		eSN*			55.0
		eSSN*		45	36.0
		Mu Sec			
		MH 8.5 20			
		Δ = 98°.7			
		USCGS H 18 13 55.1			
		9.9 S 160.8 E			
		Solomon Islands			
		depth about 29 km			
		Mag: 6½(Pas), 5.8(CGS),			
		6.3 (Qt).			
13	Lh	ePZ	19	10	00
	Qt	ePZ			52.8
		epPZ		11	02.0
		ePcPZ		12	16.2
		USCGS H 19 02 06.7			
		24.6 N 122.1 E			
		Northern Formosa			
		depth about 33 km			
		Mag: 5.0 (CGS)			
13	Qt	ePZ	20	00	12.6
		esPZ			24.5
		ePPZ			32.5
		ePPPZ			41.5
		eSE		03	52.0
		Mu Sec			
		PZ 0.02 1.0			
		Δ = 20°.4			
	Lh	ePZ		00	59
		ePPZ		01	37
		USCGS H 19 55 36.0			
		11.6 N 57.7 E			
		Socotra region			
		depth about 33 km			
		Mag : 4.4 (Qt)			
14	Lh	ePZ	07	14	58 c
		ePcPZ		15	31
		epPZ			43
		ePPZ		17	26
		eSE*		23	21
		esSN*		24	34
	Kr	ePZ		15	13 ±
	Wr	iPZ			19.0
	Qt	ePZ			32.4
		epPZ		16	14.0
		ePPZ		17	54.0
		ePcSE*		20	05.0
		eSN*		24	22.0
		eScSN*		25	31.0
		ePKPPKPZ		43	31.5
		Mu Sec			
		MH 11.6 20			
		Δ = 68°.5			
		USCGS H 07 04 40.8			
		7.2 S 128.2 E			
		Banda Sea			
		depth about 179 km			
		Mag : 6.2 (Qt)			
14	Qt	ePZ	07	30	14.4
14	Qt	ePZ	12	22	33 ±
14	Qt	ePZ	13	26	52.5
		epPZ		27	04.0
		esPZ			07.0
	Lh	ePZ			32 ±
		USCGS H 13 18 56.4			
		44.5 N 15.5 E			
		Near coast of Yugoslavia			

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Date	Station	Phase	h m s
		depth about 36 km	
		Mag : 5.4 (CGS)	
14	Qt	ePZ	14 19 59.0
		USCGS H 14 09 29.8	
		45.2 N 148.6 E	
		Kurile Islands	
		depth about 97 km	
		Mag : 5.1 (CGS)	
14	Qt	ePZ	14 56 21.1
14	Wr	ePZ	19 51 44.5
	Qt	ePZ	52 36.6
		eSN	53 58.9
14	Ch	ePZ	22 17 46
		epPZ	18 13
		esPZ	26
		ePcPZ	33
		ePPZ	19 59
		iSN	25 44
		iScSN	27 22
	Lh	ePZ	19 34
		ePcPZ	42
		epPZ	58
		eSN*	29 12
		eScSZ	33
	Wr	ePZ	19 51.8
	Qt	ePZ	20 08.2
		ePcPZ	14.5
		epPZ	34.0
		esPZ	47.0
		ePPZ	23 16.5
		eXZ	24 04.5
		ePPPZ*	25 12.0
		eSN	30 16.0
		eSKSE	22.5
		eScSN	34.5
		esSN	56.0
		ePSN	31 23.0
		eSSE*	35 32.0

Date	Station	Phase	h m s
		Mu Sec	
		PZ 0.1 0.5	
		△ = 82°.0	
		USCGS H 22 07 54.3	
		5.0 S 144.6 E	
		Eastern New Guinea	
		depth about 80 km	
		Mag : 6½(Pas), 6 (Pal),	
		6.0(CGS), 6.3 (Qt)	
14	Lh	ePZ	22 52 37 ±
	Wr	ePZ	57.4
	Qt	iPZ	53 14.1d
		epPZ	25.7
		esPZ	29.5
		USCGS H 22 41 51.1	
		3.1 S 134.3 E	
		Western New Guinea	
		depth about 49 km	
		Mag. 4.1 (CGS)	
15	Qt	ePKPZ	01 07 46.7
		epPKPZ	57.7
		USCGS H 00 48 51 59	
		33.2 S 179.2 W	
		Kermadec Islands	
		depth about 42 km	
		Mag: 5.3 (CGS)	
15	Ch	ePZ	05 52 49
		ePcPZ	53
		epPZ	53 01
		USCGS H 05 39 57.2	
		22.0 S 170.5E	
		New Hebrides Islands	
		depth about 33 km	
15	Qt	ePZ	09 07 58.0
		eXZ	08 20.0
15	Ch	ePZ	16 33 51 ±
		eSN	37 39
	Wr	ePZ	36 33.0
	Qt	ePE	36 ±

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Date	Station	Phase	h	m	s
		USCGS H 16 29 19.0			
		4.3 N 96.3 E			
		Sumatra			
		depth about 33 km			
		Mag: 5.7 (CGS)			
15	Qt	ePE	16	50	19.2
		eSE			55.0
	Kr	ePZ			40.0
	Wr	ePZ		51	40.9
		H 16 49 31.3			
		28.5 N 63.5 E			
		West Pakistan, Afghanistan border			
		depth about 33 km			
16	Qt	ePZ	05	54	26.9
		epPZ			50.0
		esPZ		55	09.5
		USCGS H 05 44 27.5			
		5.7 N 126.5 E			
		South of Mindanao			
		Philippine Islands			
		depth about 133 km			
		Mag : 4.3 (CGS)			
16	Ch	ePZ	08	38	19
		eSN		43	29
	Qt	ePZ		41	27.0
		ePcPZ		42	15.5
		USCGS H 08 31 51.1			
		9.7 N 122.5 E			
		Negros, Philippine Islands			
		depth about 28 km			
16	Ch	iPZ	10	52	59 c
		epPZ		54	39
		ePPZ			46
		ePcPZ		55	03
		eSN		58	12
	Qt	iPZ		55	42.0c
		iXZ			52.5
		epPZ			57 06.5
		ePPZ		58	08.5
		ePPPZ		59	46.5
		eSE	11	03	12.5
		iXE			24.0
		eScSE			04 31.0
		USCGS H 10 46 22.0			
		7.0 S 117.3 E			
		Flores Sea			
		depth about 561 km			
		Mag: 4.6 (CGS)			
16	Wr	ePZ	12	20	15.5
		iSN			46.0
	Lh	iPZ			58 c
		iSN		22	00
	Qt	iPZ		21	11.0d
		eSN		22	26.1
		Mu Sec			
		PZ 0.33 1.0			
		$\Delta = 6°.7$			
	Kr	iPE			14.7
		eSE		24	16.1
	Ch	ePZ			22
		epPZ		25	06
		ePPZ			09
		ePPPZ			19
		eSN		28	15
		H 12 19 34.0			
		36.3 N 70.3 E			
		Hindukush			
		depth about 180 km			
		USCGS H 12 19 31.1			
		36.5 N 70.5 E			
		Hindukush			
		depth about 216 km			
		Mag: 5.2 (CGS), 5.5 (Qt)			
16	Qt	ePZ	23	49	21.0
		epPZ			38.0
		USCGS H 23 37 07.6			

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Date	Station	Phase	h m s
		5.0 S 144.5 E	
		Northeast New Guinea	
		depth about 82 km	
		Mag : 4.6 (CGS)	
17	Qt	ePZ	01 16 37.5
17	Ch	ePZ	02 37 34
	Lh	ePZ	39 38
	Wr	ePZ	58.4
	Qt	ePZ	40 30.7c
		epPZ	40.0
		epcPZ	41 50.5
		USCGS H 02 31 40.8	
		24.1 N 122.5 E	
		Ryukyu Islands	
		depth about 33 km	
		Mag : 4.6 (CGS)	
17	Wr	iPZ	05 39 02.3
		iSZ	33.4
	Lh	ePZ	44 d
		iSZ	40 46
	Qt	iPZ	39 59.0d
		eSE	41 16.8
		Mu Sec	
		PZ 0.02 0.5	
		$\Delta = 6°.9$	
		ePZ	43 10
		epPZ	49
		ePPZ	56
		eSN	47 06
		H 05 38 19·0	
		36·4 N 70·3 E	
		Hindukush depth about 160 km	
		USCGS H 05 38 17·1	
		36·9 N 70·3 E	
		Hindukush	
		depth about 174 km	
		Mag : 4·7(CGS),4·6(Qt)	
7	Qt	iPZ	07 05 39·0d
		epPZ	46·5
		USCGS H 06 53 20·3	
		4·8 S 144·2 E	
		Northeast New Guinea	
		depth about 33 km	
		Mag : 5·7 (CGS)	
17	Qt	ePZ	08 34 04·4
		epPZ	15·5
		ePPZ	45·5
		USCGS H 08 28 24·9	
		42·1 N 37·2 E	
		Black Sea	
		depth about 33 km	
		Mag : 4·8 (CGS)	
17	Qt	ePZ	14 02 09·0
17	Qt	ePZ	22 05 50·1
18	Qt	ePZ	05 44 05·5
18	Qt	ePZ	07 17 13·8
		epPZ	21·5
		esPZ	30·5
		ePPZ	19 08·2
		USCGS H 07 08 29	
		25·3 N 121·8 E	
		Near north coast of	
		Formosa	
		depth about 33 km	
18	Wr	iPZ	14 26 02·5 c
		iSZ	34·1
	Lh	ePZ	43
		esPZ	27 32
		iSE	41
	Qt	iPZ	00.5 c
		eSN	28 17·0
		Mu Sec	
		PZ 0·4 0.8	
		$\Delta = 6°·7$	
	Ch	ePZ	30 08
		epPZ	50
		iPPZ	56
		iSN	34 02

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Date	Station	Phase	h m s
		H 14 25 22·5	
		36·0 N 71·0 E	
		Hindukush depth	
		about 200 km	
		USCGS H 14 25 18·9	
		36·4 N 70·9 E	
		Hindukush	
		depth about 225 km	
		Mag: 4·9 (CGS),5·7(Qt)	
18	Qt	ePZ	15 50 31±
		USCGS H 15 40 07·7	
		1·5 N 125·8 E	
		Celebes region	
		depth about 41 km	
		Mag : 4·3 (CGS)	
18	Qt	ePZ	18 35 11·5
		USCGS H 18 24 05·5	
		58·2 N 32·4 W	
		North Atlantic Ocean	
		depth about 33 km	
		Mag : 4·6 (CGS)	
18	Lh	ePZ	22 02 42
	Qt	iPZ	03 28·3d
		USCGS H 21 53 57·6	
		33·7 N 137·7 E	
		Near south coast of	
		Honshu, Japan	
		depth about 317 km	
		Mag : 4·1 (CGS)	
19	Qt	ePZ	01 01 53·8
		epPZ	02 12·2
		USCGS H 00 54 38·4	
		3·8 N 96·1 E	
		Off west coast of Sumatra	
		depth about 87 km	
19	Lh	ePZ	12 22 17
	Qt	ePZ	23 00·4
		epPZ	08·0
		ePcPZ	40·0
		ePPZ	25 18·5
		USCGS H 12 12 47·5	
		41·1 N 142·8 E	
		Hokkaido, Japan	
		depth about 32 km	
		Mag : 4·2 (CGS)	
19	Qt	ePZ	15 38 48·2
		USCGS H 15 28 20·1	
		6·2 S 128·1 E	
		Banda Sea	
		depth about 370 km	
		Mag : 5·3 (CGS)	
19	Qt	ePKPZ	16 58 00·.
		epPKPZ	09·.
		USCGS H 16 39 15·1	
		55·3 S 28·8 W	
		Sandwich Islands region	
		depth about 33 km	
19	Qt	ePZ	18 44 15·
19	Qt	ePZ	22 37 09·
		epPZ	19·
		esPZ	25·
		USCGS H 22 28 14	
		24·0 N 122·9 E	
		Off east coast of Formosa	
		depth about 33 km	
		Mag : 4·7 (CGS)	
19	Qt	ePZ	23 17 10
20	Qt	ePZ	02 25 43
20	Qt	ePZ	04 13 34
		epPZ	46
		USCGS H 04 03 03·6	
		7·0 S 121·2 E	
		Flores Sea	
		depth about 33 km	
20	Qt	ePZ	07 54 23
		epPZ	36
		USCGS H 07 41 22·1	
		6·3 S 154·0 E	

Date	Station	Phase	h	m	s
		Solomon Islands region			
		depth about 37 km			
		Mag : 5·1 (CGS)			
20	Ch	ePZ	08	56	53
		epPZ		57	02
		ePPZ	09	00	26
		eSKSE		07	25
		eSE			47
		USCGS H 08 44 00·9			
		22·3 S 170·5 E			
		Loyalty Islands region			
		depth about 33 km			
20	Qt	ePZ	14	44	08·3
		epPZ			16·2
		esPZ			22·0
		USCGS H 14 32 07 ·7			
		51·9 N 177·9 E			
		Rat Islands, Aleutian Islands			
		depth about 33 km			
		Mag : 4·7 (CGS)			
20	Lh	ePZ	16	54	47
	Qt	ePZ		55	32.1d
		esPZ		56	21·3
		USCGS H 16 45 51·0			
		38·8 N 139·0 E			
		Off west coast of Honshu			
		Japan			
		depth about 157 km			
20	Qt	ePKPZ	17	27	25·1
		epPKPZ			35·5
		eXZ*	31	13	·0
		eXE*	50	40	·0
	Lh	ePKPZ	27	35	
		USCGS H 17 07 32			
		45·7 S 78·7 W			
		Off west coast of			
		southern Chile			
		depth about 33 km			
		Mag : 4·6 (CGS)			

Date	Station	Phase	h	m	s
20	Ch	ePZ	19	46	21
		epPZ			29
		esPZ			35
		ePPZ		47	06
		ePPPZ			18
		eSE		51	00
		esS			18
	Lh	ePZ		48	23 ±
	Wr	ePZ			42·1
	Qt	ePZ		49	15·1
		ePcPZ		50	40·0
		ePPZ		51	05·5
		USCGS H 19 40 30·9			
		24·6 N 122·1 E			
		Near northeast coast of			
		Formosa			
		depth about 33 km			
		Mag : 4·7 (CGS)			
21	Qt	ePZ	02	43	28·6d
		epPZ		44	09·5
		USCGS H 02 33 35·9			
		33·4 N 139·2 E			
		South of Honshu, Japan			
		depth about 168 km			
		Mag : 4·4 (CGS)			
21	Qt	ePZ	07	15	28·0
21	Qt	ePZ	07	59	36·2
		USCGS H 07 49 28·8			
		42·3 N 142·5 E			
		Near south coast of			
		Hokkaido, Japan			
		depth about 33 km			
		Mag : 4·5 (CGS)			
21	Qt	ePZ	09	23	32·5
		ePPZ		24	43·5
		ePPPZ			53·2
		eSE*		28	42.5
		Mu Sec			
		MH 2·2 20			

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Date	Station	Phase	h	m	s
		△ = 32°·2			
		Mag : 5·2 (Qt)			
21	Qt	ePZ	12	35	04·7
21	Ch	ePZ	12	56	14
	Wr	ePZ		58	02·2
	Qt	ePZ			48·3
		eXZ		59	12·0
21	Wr	ePZ	13	12	00·8
	Qt	ePZ			22·7c
		ePcPZ			36·5
		USCGS H 13 01 06·5			
		17·9 N 146·5 E			
		Mariana Islands region			
		depth about 88 km			
		Mag : 4·4 (CGS)			
21	Qt	ePKPZ	13	35	02·2
		USCGS H 13 16 05·6			
		20·6 S 175·1 W			
		Tonga Islands region			
		depth about 33 km			
		Mag : 5·2 (CGS)			
21	Qt	ePKPZ	14	47	28·7c
		epPKPZ			39·3
		USCGS H 14 28 29			
		20·5 S 173·9 W			
		Tonga Islands region			
		deph about 29 km			
		Mag : 5·0 (CGS)			
21	Qt	ePZ	15	48	04·2
21	Qt	ePnZ	15	48	50·3
		eP*Z			59·4
		ePgZ		49	18·5
		eSN			42·2
		eS*N			52·5
		eSgN		50	07·0
		Mu Sec			
PZ		0·03 0·4			
		△ = 4°·5			
	Wr	ePZ			06·0
		H 15 47 42.7			
		Baluchistan Region			
		West Pakistan			
		Mag : 3.2 (Qt)			
21	Qt	iPZ	17	22	01.6c
		epPZ			10.0
		esPZ			13.7
		ePPZ		23	35.5
		ePPPZ			55.2
		ePcPZ		24	16.5
		eSN*		28	03.2
		eSSN*		30	50.5
		eScSE*		32	08.0
		Mu Sec			
PZ		0.1 1.0			
		△ = 39°.2			
	Wr	ePZ		22	25.3
	Lh	ePZ			48
		eSN*		29	28
		eScSN*		32	47
	Ch	iPZ		24	59 c
		epPZ		25	08
		esPZ			13
		ePcPE			39
		ePPZ		27	21
		ePPPZ		28	50
		eSE		33	23
		esSE			40
		USCGS H 17 14 35.7			
		32.7 N 20.9 E			
		Near coast of Libya			
		depth about 33 km			
		Mag : 5.0$_e$(CGS), 5.4(Qt)			
21	Qt	ePZ	18	40	30.
		epPZ			39.
		esPZ			44.
		eXZ			55.
		ePPZ		42	09.

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Date	Station	Phase	h	m	s
		ePPPZ			27.0
		eXZ		43	40.0
	Lh	ePZ		41	18
	Ch	ePZ		43	29 c
		USCGS H 18 33 06.8			
		32.9 N 21.1 E			
		Near coast of Libya			
		depth about 33 km			
		Mag : 4.5 (CGS)			
21	Qt	ePZ	20	34	10.2c
		epPZ			17.7
		eXZ			24.2
		eXZ			29.0
		ePPZ		35	42.7
		ePPPZ		36	03.5
		ePcPZ			17.0
	Lh	ePZ		34	56 c
	Ch	ePZ		37	08
		epPZ			15
		USCGS H 20 26 43.8			
		32.6 N 21.0 E			
		Near coast of Libya			
		depth about 33 km			
		Mag : 4.4 (CGS)			
22	Ch	ePZ	01	34	00
		ePPZ			07
		ePPPZ			14
		iSE		35	12
	Lh	ePZ			17
		eSN		37	29
	Wr	ePZ		35	59.6
	Qt	ePZ		36	39.7
		esPZ			54.0
		eSN*		39	50.0
		eSSN*		40	15.7
		Mu Sec			
		PZ 0.02 0.8			
		$\triangle$ = 18°.4			
		H 01 32 28.0			
		27.8 N 88.3 E			
		Nepal, Tibet border			
		USCGS H 01 32 25.4			
		27.5 N 87.7 E			
		Nepal, Tibet border region			
		depth about 33 km			
		Mag : 4.3 (CGS),4.3(Qt)			
22	Qt	ePZ	02	54	46.0
		epPZ			54.5
		USCGS H 02 47 21.6			
		32.9 N 21.1 E			
		Near coast of Libya			
		depth about 33 km			
22	Wr	ePZ	07	19	32.6
	Lh	ePZ			51
		epPZ		20	00
		eSN*		27	31
	Qt	ePZ		20	03.8
		epPZ			11.8
		ePcPZ			50.5
		ePPZ		22	08.5
		ePPPZ		23	22.0
		eSE*		28	54.0
		Mu Sec			
		MH 8.2 20.0			
		$\triangle$ = 56°.0			
	Ch	ePZ		20	53
		epPZ		21	03
		ePcPZ			31
		ePPZ		23	11
		eSE		29	19
		USCGS H 07 10 28.0			
		85.0 N 98.9 E			
		North Polar region			
		depth about 33 km			
		Mag : 5.0(CGS),5.8(Qt)			
22	Qt	ePZ	07	32	53.0
	Ch	ePZ		33	42

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Date	Station	Phase	h m s
		USCGS H 07 23 14	
		84.7 N 104.3 E	
		North Polar region	
		depth about 33 km	
		Mag : 4.8 (CGS)	
22	Qt	ePKPZ	08 16 46.2
		USCGS H 07 58 57.0	
		17.8 S 178.8 W	
		Fiji Islands region	
		depth about 550 km	
		Mag : 5.0 (CGS)	
22	Qt	ePKPZ	11 24 27.2
		USCGS H 11 05 42.0	
		30.3 S 178.6 W	
		Kermadec Islands	
		depth about 113 km	
		Mag : 5.1 (CGS)	
22	Qt	ePZ	14 20 16.0
		epPZ	22.5
		esPZ	31.2
		eSE*	26 16.0
	Wr	ePZ	20 27.1
	Ch	ePZ	23 10
		eSN	31 25
		USCGS H 14 12 54.4	
		40.6 N 20.5 E	
		Albania, Greece border	
		depth about 33 km	
22	Qt	ePZ	16 16 44.4
23	Qt	ePKPZ	07 22 19 ±
		USCGS H 07 02 37.9	
		44.8 S 76.1 W	
		Near coast of southern	
		Chile depth about 33 km	
		Mag : 4.9 (CGS)	
23	Qt	ePZ	14 34 06.3
23	Qt	ePZ	17 19 27.3
23	Ch	ePZ	17 22 41
	Wr	ePZ	23 13.5
	Lh	ePZ	14
	Qt	ePZ	48.5
		ePcPZ	24 15.5
		esPZ	18.5
		USCGS H 17 12 47.4	
		49.4 N 158.6 E	
		Kurile Islands region	
		depth about 50 km	
		Mag : 4.4 (CGS)	
23	Qt	ePZ	19 42 39.0
		iXZ	47.5
		eXZ	43 20.7
		e(S)N	44 40.2
		eXN	45.0
24	Qt	ePKPZ	05 57 29 ±
		epPKPZ	38.6
	Lh	ePKPZ	48
		USCGS H 05 38 20.6	
		15.1 S 72.5 W	
		Near coast of	
		southern Peru	
		depth about 105 km	
		Mag: 5.3 (CGS)	
24	Qt	ePKPZ	06 54 04.4
		USCGS H 06 36 11.3	
		19.7 S 177.5 W	
		Fiji Isands region	
		depth about 541 km	
		Mag : 5.0 (CGS)	
24	Wr	ePKPZ	13 53 09.7
	Qt	iPKPZ	13.7c
		eXZ	21.5
		eXZ	27.0
		epPKPZ	40.5
		ePPZ*	55 32.0
		ePKSN	56 54.0
		ePSN*	14 05 44.2
		ePPSN*	07 24.0

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Date	Station	Phase	h m s	
	Lh	ePKPZ	13 53 17	
	Ch	ePKPZ	38	
		USCGS H 13 34 15.7		
		14.6 N 91.4 W		
		Central Gautemala		
		depth about 135 km		
		Mag: 5.7 (CGS)		
24	Qt	ePZ	13 56 28.5	
	Lh	ePZ	34	
24	Qt	ePZ	22 48 17.9	
		epPZ	29.5	
		USCGS H 22 35 00.0		
		26.4 N 44.5 W		
		North Altantic Ocean		
		depth about 33 km		
		Mag: 4.6 (CGS)		
25	Qt	ePZ	00 53 09	±
		USCGS H 00 43 24.3		
		8.7 S 112.6 E		
		Near south coast of Java		
		depth about 106 km		
25	Qt	ePZ	02 48 25.0	
		epPZ	36.0	
		ePcPZ	49 16.5	
		USCGS H 02 38 19		
		7.6 S 112.3 E		
		Near south coast of Java		
		depth about 33 km		
25	Qt	ePZ	04 59 14.5	
		USCGS H 04 49 51.5		
		15.0 N 122.7 E		
		Near east coast of Luzon		
		Philippine Islands		
		depth about 58 km		
25	Qt	ePZ	07 29 46.7	
		USCGS H 07 18 47		
		51.1 N 159.8 E		
		Off coast of Kamchatka		
		depth about 40 km		
25	Qt	ePKPZ	08 27 38.8	
		epPKPZ	47.0	
		eXZ	54.5	
		ePPZ	30 32.5	
	Wr	ePKPZ	27 51.7	
	Lh	ePKPZ	56	
	Ch	ePKPZ	28 15	
		USCGS H 08 08 20.1		
		28.1 S 65.4 W		
		San Luis Province, Argentina		
		depth about 32 km		
		Mag: 5.3 (CGS)		
25	Qt	ePKPZ	09 17 43	±
		USCGS H 08 58 40.8		
		12.2 N 88.2 W		
		Off coast of El Salvador		
		depth about 33 km		
		Mag: 4.2 (CGS)		
25	Ch	ePZ	09 18 21	
	Lh	ePZ	20 11	±
	Wr	cPZ	30.1	
	Qt	ePZ	49.8	
		epPZ	59.2	
		esPZ	21 05.5	
		ePcPZ	47.0	
		USCGS H 09 11 23.7		
		10.4 N 121.8 E		
		Near west coast of Pany		
		Philippine Islands		
		depth about 46 km		
		Mag: 4.5 (CGS)		
25	Ch	ePZ	17 17 03	
		epPZ	12	
		esPZ	17	
		ePPZ	18 07	
		ePPPZ	19	

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Date	Station	Phase	h	m	s	
		eSE	22	03		
	Lh	ePZ	19	05	c	
		epPZ		13		
		ePPZ	20	49		
		eSN*	25	30		
		esSN*		52		
	Wr	ePZ	19	23.2		
	Qt	iPZ		55.6	c	
		epPZ	20	06.2		
		esPZ		10.5		
		ePcPZ	21	14.0		
		ePPZ		30.0		
		ePPPZ	22	51.5		
		eSN*	27	06.1		
		esSN*		27.0		
		eScSN*	29	36.0		

Mu Sec
PZ 0.1 1.2

$\Delta = 50°.1$
USCGS H 17 11 01.7
24.4 E 123.3 E
Near east coast of Formosa
depth about 33 km
Mag: 5.3 (CGS), 5.7 (Qt)

25	Lh	ePZ	19	29	59	
	Qt	ePZ		30	46	±
		eXZ		31	19.5	

USCGS H 19 21 49.6
19.5 N 121.8 E
Off coast of northern Luzon, Philippine Islands
depth about 33 km

25	Lh	ePZ	23	53	36	
		eSN*	00	00	16	
	Qt	iPZ	23	54	24.1	
		epPZ			34.5	
		ePcPZ		55	31.5	
		ePPZ		56	27.5	
		ePPPZ		57	30.2	
		eSN	00	01	48.0	
		esSN		02	04.5	
		eScSE		04	06.5	

USCGS H 23 45 16.8
15.5 N 121.3 E
Central Luzon, Philippine Islands
depth about 33 km
Mag : 4.3 (CGS)

26	Qt	ePZ	02	22	11.5
		epPZ			25.0
		ePcPZ		23	30.5

USCGS H 02 13 20.5
19.3 N 121.0 E
Coast of northern Luzon
depth about 56 km
Mag: 4.3 (CGS)

26	Qt	ePZ	80	03	28.2
		epPZ			50.5

USCGS H 07 52 13.5
12.8 N 144.1 E
Mariana Islands
depth about 98 km

26	Qt	iPZ	15	01	46.5
		eXZ			57.2
26	Wr	ePZ	16	52	53.8
		eSZ		53	26.5
	Qt	ePZ			52.5
		eSN		55	10.5
26	Ch	iPZ	20	24	07 c
		iPcPZ			46
		isPZ		25	13
		iPPZ		26	26
		ePPPZ		27	59
		iSN		32	13
		isSN		33	28
		iScSN			36
		iPKPPKPZ		53	33

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Date	Station	Phase	h m s
	Lh	iPZ	25 54 c
		epPZ	26 39
		eSN*	35 35
		eSKSZ	44
		ePSZ	36 36
	Wr	iPZ	26 08.7c
		eSN	36 06.1
	Qt	iPZ	26 24.5c
		epPN*	27 07.0
		esPN*	35.0
		ePPN*	29 34.0
		eSN*	36 32.5
		eSKSN	38.0
		eScSN	46.5
		eSSN	42 07.9
		Mu Sec	
		PZ 0.6 1.0	
		△ = 84°.5	
		USCGS H 20 14 08.7	
		7.5 S 146.2 E	
		Eastern New Guinea	
		depth about 171 km	
		Mag: 7¼ - 7½ (Pas),	
		7 - 7¼ (Berk), 6¾ - 7	
		(Pal), 7.1(CGS), 6.8(Qt)	
26	Qt	ePZ 21 12 55	±
26	Qt	ePKPZ 23 42 59.1	
		epPKPZ 43 09.5	
	Lh	ePKPZ 08	
		USCGS H 23 23 19.5	
		39.1 S 75.1 W	
		Near coast of southern	
		Chile	
		depth about 33 Km	
		Mag : 4.7 (CGS)	
7	Ch	ePZ 04 40 22	
		epPZ 43	
		ePcPZ 58	
		ePPZ 42 42	
		ePPPZ 44 11	
		eSE 48 48	
		eScSE 50 01	
		ePKPPKPZ 05 09 17	
	Lh	ePZ 04 42 11	
		epPZ 26	
		ePPZ 45 19	
		eSKSN* 52 28	
		eScSZ* 32	
	Wr	ePZ 42 29·7	
	Qt	ePZ 40·0	
		epPZ 54·2	
		esPZ 43 08·5	
		ePPZ 46 00·0	
		ePPPZ 47 55·5	
		eSE* 53 15·0	
		eScSN 30·5	
		esSE 37·2	
		eSSN* 59 12·5	
		eSSSE* 05 02 36·0	
		Mu Sec	
		MH 16·3 20	
		△ = 87°.1	
		USCGS H 04 30 00·8	
		6·0 S 149·4 E	
		New Britain region	
		depth about 52 km	
		Mag: 6½ - 6¾ (Pal),	
		5·2(CGS), 6·4(Qt)	
27	Qt	ePKPZ 11 19 56·7	
		epPKPZ 20 26·5	
		ePPZ 23 01·5	
	Wr	ePKPZ 20 04·8	
		USCGS H 11 00 45·3	
		14·7 S 73·3 W	
		Southern Peru	
		depth about 110 km	
		Mag: 5·4 (CGS)	
27	Wr	ePZ 17 29 05·1	

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Date	Station	Phase	h	m	s
	Qt	ePZ			58·2
		eSN		31	38·5
		Mu Sec			
		PZ 0·01 1·0			
		△ = 9°·1			
		USCGS H	17	28	00·6
		38·1 N 69·6 E			
		Tadzhik, S.S.R.			
		depth about 157 km			
		Mag: 3·9 (CGS), 4·0 (Qt)			
27	Wr	ePZ	18	47	13·8
		eSZ			53·0
	Qt	ePZ		48	16·3
		eSN		49	40·5
		H 18 46 22·0			
		Hindukush region			
27	Qt	ePZ	20	01	03·5
		eXZ			15·5
		eXZ			52·9
		e(S)N		06	55·8
27	Ch	ePZ	20	39	10
	Wr	ePZ		41	04·3
	Qt	ePZ			20·5
		eXZ			28·5
		epPZ			45·5
		esPZ			52·0
		ePPZ		44	50·0
		eSE		52	13·5
		USCGS H 20 28 34·9			
		4·6 S 152·9 E			
		New Britain			
		depth about 100 km			
		Mag: 5·0 (CGS)			
27	Qt	iPZ	21	56	17·3d
		eXZ			28·2
		eXZ			35·5
		eXZ			57·5
		e(S)N*		57	14·0
		eXE			39·5
	Wr	ePZ		56	29·6
	Lh	ePZ			36
27	Qt	ePZ	23	48	57·5
		esPZ		49	11·0

Date	Station	Phase	h	m	s
		USCGS H 23 36 20·4			
		54·8 N 161·6 W			
		Alaska Peninsula			
		depth about 33 km			
		Mag: 5·3 (CGS)			
28	Ch	ePZ	01	39	34
		esPZ			47
		ePcPZ		41	08
		ePPZ			20
		eSN		46	14
	Qt	ePZ		39	36·5
		epPZ			43·5
		esPZ			50·0
		ePPZ*		41	20·0
		eSN		46	19·0
	Lh	ePZ		39	54
	Wr	ePZ		40	08·1
		USCGS H 01 31 13·2			
		16·3 S 66·0 E			
		Indian Ocean			
		depth about 33 km			
28	Qt	ePZ	05	22	23
28	Qt	ePZ	05	56	12·1
28	Qt	ePZ	06	25	18·2
		epPZ			34·2
		esPZ			44·1
		USCGS H 06 15 09·5			
		38·2N 141·7 E			
		Near coast of Honshu			
		Japan			
		depth about 61 km			
28	Wr	ePZ	12	50	38·0
		eSZ		51	08·0
	Qt	ePZ			32·0
		eSN		52	50
		H 12 49 51·3			
		Hindukush region			
28	Wr	ePZ	13	08	39
	Qt	ePZ			41
		eXZ			56
28	Qt	ePZ	19	20	33
		eXZ			41
		e(S)N		22	30

Date	Phase	h	m	s	Date	Phase	h	m	s
	QUETTA					e(S)N	21	37.0	
1	ePZ	10	32	22.1	6	ePgZ	15	17	17.2
	eSNE		33	00.0		eSgNE			18.8
1	ePZ	23	57	47.0	7	ePZ	05	11	25.7
	e(S)N		58	19.4		e(S)NE		12	44.0
2	ePZ	02	23	19.3	7	ePZ	06	15	38.0
2	ePZ	11	35	42.1	8	ePZ	01	42	00.1
2	ePZ	18	35	45.1	8	ePZ	02	08	30.8
	eSN			55.3	8	eXZ	12	50	27.0
3	ePZ	01	25	45.0	8	ePgZ	15	24	45.0
	eSN			38.0		eSgNE			49.7
3	ePZ	03	39	25.5	8	ePZ	17	25	56.8
3	ePZ	11	11	03.1		eSNE		26	24.3
3	ePZ	14	48	49 ±	8	ePZ	19	55	57.0
3	ePZ	16	04	57.0		eSNE		56	15.2
	eSN		06	28.2	8	ePZ	21	06	23.2
3	ePgZ	19	39	56.0		eSNE			57.4
	eSgN			58.1	9	ePZ	01	42	58.1
4	ePZ	00	37	43 ±	9	ePZ	05	56	05.5
	eSN		39	34	10	ePZ	05	10	06.5
4	ePZ	01	46	43.0		eSNE			32.5
	eSNE		47	09.4	10	ePZ	12	39	38.4
4	ePZ	02	26	15.4	10	ePZ	15	35	23
	eSN		27	08.5	10	ePZ	19	40	34.3
4	ePZ	05	39	03.1		eSN		41	02.8
	eSNE			03.6	10	ePZ	20	56	36.0
4	ePZ	16	21	43.0		eSN		57	55.5
	eSNE		22	14.5	10	ePZ	23	31	18.3
4	ePZ	22	24	51.4	11	ePZ	00	41	17.5
4	ePZ	23	29	22.4	11	ePZ	01	57	37.7
5	ePZ	01	17	27		e(S)		59	19.4
5	ePZ	05	07	22.0	11	ePZ	02	54	56.6
5	ePZ	18	17	50.7		eSN		55	23.7
	eSN		18	18.8	11	ePgZ	13	28	02.2
5	ePZ	22	48	16.1		eSgNE			11.0
	eSN			49.8	11	ePZ	15	07	11.8
5	ePZ	00	18	05.0		eSNE			34.3
	eSN			09.6	11	ePZ	15	12	49.7
6	ePZ	00	48	10.0		eSNE		13	06.5
6	ePZ	14	20	58.3	11	ePZ	15	17	50.0

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Date	Phase	h	m	s
12	ePZ	15	22	00.7
12	eXZ	23	33	34.2
13	ePZ	00	25	37.5
13	ePZ	03	38	13.2
13	ePgZ	05	29	25.0
	eSgNE			26.6
13	ePZ	05	58	36.6
	eSE	06	00	02.0
13	ePZ	07	19	29.5
	eSNE		20	05.0
13	ePZ	08	04	57.0
	eSNE		05	15.0
13	ePZ	11	00	29.5
	eSNE			45.0
13	ePZ	11	07	08.5
	eSNE			22.5
13	ePgZ	11	12	31.5
	eSgNE			45.0
13	ePZ	12	26	09.5
13	ePZ	12	53	23
13	ePZ	14	01	02.5
13	ePZ	18	09	19.5
	eSNE			35.0
13	ePZ	23	28	31.4
	eXNE			47.0
14	ePZ	07	43	32.0
14	ePZ	12	22	33
14	ePgZ	13	38	16.6
	eSgNE			28.3
14	ePZ	15	24	38.0
14	ePZ	18	02	02.2
15	ePE	21	44	09.0
	e(S)NE		45	40
16	ePNE	01	47	41.8
	eXNE			59.5
16	ePZ	08	38	03.0
	eSN		39	35.5
16	ePgZ	09	47	44.5
	eSgNE			51.2
17	ePZ	00	49	40.1
	eSNE		50	26.1
17	ePZ	06	47	56.7
	eSNE		48	14.3
17	ePZ	09	11	25.0
	eSE		13	15.5
17	ePZ	11	14	28.5
17	ePZ	12	28	44
	eSE		29	00.0
17	ePZ	13	52	09.3
	e(S)N		53	22
17	ePZ	15	12	56.3
	eSNE		13	13.9
17	ePZ	17	04	08.2
	eSN		05	24.5
17	ePZ	23	40	19.0
18	ePZ	12	18	06.0
18	ePZ	14	22	06·5
18	ePZ	16	04	54·0
19	ePZ	04	52	23
	eSN		53	36·0
19	ePZ	16	32	30·7
	eSNE			51·5
20	ePZ	02	25	43·5
20	e(P)Z	04	08	13·9
	eSNE			34·5
20	ePZ	06	52	18·6
	eSNE			39·8
20	ePZ	11	00	53·6
	eSNE		01	04·8
20	eXZ	12	27	21·6
20	iPZ	16	59	22·0
	eSN			28·7
20	eXZ	19	09	15·4
20	ePZ	20	18	51·6
21	eXZ	11	31	33·0
21	ePZ	17	32	11·2
21	ePZ	20	02	52
21	ePZ	23	15	01·7
	eSNE		16	18·5
22	ePZ	01	26	04·5

International Seismological Centre

Date	Phase	h	m	s	
	eSE			39·3	
22	eXZ	14	52	08·5	
23	ePZ	02	42	54·5	
	eSNE		44	18·5	
23	ePZ	07	42	29·7	
	eXE		43	12·5	
	e(S)NE			23·6	
23	eXZ	08	30	42·5	
23	eXZ	17	17	18·5	
23	ePgZ	19	25	36·4	
23	ePgZ	23	33	12·5	
	eSgNE			21·6	
24	ePZ	14	53	06·5	
	e(S)N			23·0	
24	ePZ	16	29	08	±
	eSZNE		30	52·5	
24	e(P)Z	16	58	18·3	
	eSE		59	04·0	
24	ePgZ	18	22	35·4	
	eSgNE			44·1	
24	e(P)Z	19	22	54·3	
24	eXZ	20	13	56·3	
	ePZ		14	26·3	
	eSNE		15	46·1	
25	e(P)Z	06	26	35·3	
	eSNE		27	45·7	
25	eXZ	14	40	30·5	
25	eXZ	14	55	11·8	
25	e(P)Z	16	08	59·3	
	eSNE		09	28·4	
25	ePgZ	17	00	34·3	
	eSgZNE			36·8	
25	eXZ	18	47	44·8	
25	eXZ	18	59	16·5	
25	ePZ	19	30	46	±
26	ePZ	07	05	22·7	
	eSNE			38·5	
26	ePZ	10	26	18·4	
26	e(S)ZNE	12	06	05·3	
26	ePZ	15	01	46·5	
26	ePgZ	16	42	20·5	
	eSgNE			32·2	
26	ePZ	16	44	21·0	
	eSNE		45	41·5	
26	eP Z	21	09	11·5	
26	eXZ	21	50	26·7	
26	ePZ	21	52	43·3	
	iSNE		53	14·8	
27	ePZ	02	09	44·1	
	e(S)E		10	54·5	
27	ePZ	02	48	29·5	
	eSNE			55·1	
27	ePZ	02	54	12·5	
	e(S)E			29·0	
	e(S)N			31·5	
	e(S)		55	37·0	
27	ePZ	10	43	48·4	
	eSZNE		45	37·5	
27	ePZ	13	30	42·2	
	eXN		31	17·5	
27	ePZ	18	15	40	
	e(S)N		17	44	
28	ePZ	05	13	43·1	
28	ePgZ	10	46	06·7	
	iSgNE			08·5	
28	eXZ	18	00	14·5	
28	ePgZ	22	44	23·4	
	eSgNE			37·3	
	WARSAK				
1	ePZ	10	32	15·2	
	eSZ			45·6	
1	ePZ	11	16	20·7	
1	ePZ	15	20	41.5	
	eSZ		21	15·7	
1	ePZ	16	51	04·3	
1	ePZ	23	58	17·1	
2	ePZ	05	10	11·2	
2	ePZ	05	52	58·8	
3	ePZ	04	37	45·1	
3	ePZ	04	44	11·5	

International Seismological Centre

Date	Phase	h	m	s
3	iPZ	13	12	04·5
3	ePZ	16	03	50·7
	eSZ		04	31·0
3	ePZ	21	02	38·5
4	ePZ	00	36	47·0
4	ePZ	02	26	25·5
4	ePZ	11	19	16·0
	eSZ			46·2
6	ePZ	06	45	07·6
	eSZ			32·1
6	ePgZ	10	50	34·6
	eSgZ			50·2
6	ePZ	11	12	35·6
8	ePZ	01	39	53.8
	eSZ		40	31·0
8	ePZ	04	44	50.6
8	ePZ	08	31	48·2
8	ePZ	10	28	56.2
	eSZ		29	24.4
9	ePZ	05	58	54·3
	eSZ		59	16·9
10	ePZ	09	13	50·5
	eSZ		14	36·7
11	ePZ	01	56	36·4
11	ePZ	06	40	19·2
11	ePZ	17	31	28·2
	eSZ			54·7
12	ePZ	08	54	03.4
	eSZ			36.6
12	ePZ	23	32	54.0
	eSZ		33	33.2
13	iPZ	05	57	48.8c
	iSZ		58	27.1
13	ePZ	18	07	11.2
14	ePZ	07	43	38.8
14	ePZ	12	25	20.4
14	ePZ	18	59	13.2
15	ePZ	21	42	57.0
	iSZ		44	01.2
16	iPZ	08	36	14.4
	iSZ			38.1
16	ePZ	10	57	26.7
16	ePZ	18	49	52.6
16	ePZ	22	28	06.0
17	ePZ	09	10	25.2
17	ePZ	17	03	12.8
	eSZ			45.5
18	ePZ	12	17	42.8
	eSZ		18	10.9
19	ePZ	04	51	19.8
	eSZ			49.5
19	ePZ	08	33	14.0
	eSZ		34	09.1
21	ePZ	11	14	43.3
	eSZ		15	10.0
21	ePZ	15	46	57.5
	eSZ		47	36.5
21	ePgZ	23	14	31.0
	eSgZ			38.6
23	ePZ	02	14	51.8
	eSZ		15	27.3
23	ePZ	21	29	17.2
24	ePZ	00	29	31.4
24	ePZ	02	37	53.7
24	ePZ	16	13	41.8
	eSZ		14	25.3
24	ePZ	20	13	45.4
25	ePZ	06	26	02.2
25	ePZ	23	54	09.1
26	ePZ	02	34	34.6
	eSZ			58.6
26	ePZ	21	13	54.4
26	ePZ	22	381	.0
28	ePZ	13	31	22.8
28	ePZ	17	42	39.1

LAHORE

2	eXZ	05	29	08
3	ePZ	18	20	48
3	eXZ	19	58	26

International Seismological Centre

Date	Phase	h	m	s	
	eXZ		59	11	
4	eXZ	01	29	14	
4	eXZ	07	22	15	
4	eXZ	16	19	02	
5	e(P)Z	05	14	41	
6	eXZ	15	56	31	
7	eXZ	16	50	14	
7	ePZ	17	00	21	±
	eSZ			45	
10	ePZ	16	25	22	
11	ePZ	01	56	41	±
	e(S)Z		57	23	
	eXNE			28	
	eXN*E*			42	
12	iXZ	09	20	31	
13	ePZ	09	52	45	
15	ePZ	16	36	02	
	epPZ			15	
	esPZ			21	
15	eXZ	16	52	15	
17	eXZ	20	20	33	
18	eXZ	15	25	27	
21	eXZ	15	48	39	
	eXN*		52	07	
	eXN*		55	30	
24	eXN	16	30	17	
	eSN			28	
26	e(P)Z	20	52	28	
	eXZ			55	
	eXZ		53	41	

KARACHI

2	eXZ	13	53	51	
4	ePZ	23	03	52.0	
	eSE		04	09	
7	eXZ	16	48	36	±
13	eXZ	18	27	27	
	e(S)E		31	34	
13	ePZ	19	59	18.1	
	eXZ			33.0	

Date	Phase	h	m	s	
13	eXZ	20	14	20.0	
	eSE			45.7	
14	eXZ	07	43	48.0	
14	eXE	22	20	10.0	
17	ePZ	13	51	35.2	±
	eSZ		52	03.8	

CHITTAGONG

1	ePgZ	17	15	33.5	
	eSgZNE			36.0	
1	eXE	22	36	04	
1	eXE	23	10	35	
2	ePgZ	14	48	22	±
	eSgE			34	
2	ePgZ	15	09	15	
2	eXZ	18	14	32	
3	eXZE	00	07	10	
3	eXE	03	29	29	
3	eXE	12	42	40	
4	eXZ	01	07	26	
6	eXZN	10	59	16	
7	ePZ	02	14	16	
14	ePE	01	05	31	±
	iSNE		06	00	
15	eXN	15	44	00	
15	eXZ	18	48	59	
16	ePZN	11	51	22	
16	ePZ	12	22	40	
17	eXZ	04	10	11	
17	eXZN	10	49	44	
18	ePZN	10	57	39	
	iSN		58	11	
18	eXZ	18	35	44	
19	eXN	12	12	11	
19	eXN	22	25	16	
19	eXN	23	14	32	
20	ePZ	05	09	56	
20	eXZ	13	06	17	
20	ePZE	16	37	11	
21	eXNE	02	51	03	

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Date	Phase	h	m	s		Date	Phase	h	m	s	
21	eXE	04	09	02		22	eXE	18	05	00	
21	eXE	04	15	27		25	eXZ	04	56	20	
21	eXNE	07	14	52		26	eXZ	16	49	54	
21	eXZ	08	03	15		27	ePZ	19	57	22	±
21	eXE	09	22	10			iSNE		59	09	
21	eXZ	13	10	43		27	eXZ	23	48	33	
21	eXZ	15	53	04		28	eXE	06	29	48	
21	ePZ	18	43	29	c	28	eXNE	19	20	05	
	eXZ			34							

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International Seismological Centre

Date	Station	Phase	h	m	s
1	Qt	ePZ	01	41	20.7c
1	Qt	ePnZ	03	22	02.1
		ePN*			19.0
		ePgN			41.0
		eSN		23	33.5
		eSN*			59.5
		eSgN		24	30.4
		Mu Sec			
	PZ	0.03 0.8			
	△ = 8°.0				
	Wr	ePZ		22	23.1
	USCGS H	03 20 02.4			
	35.7 N	59.5 E			
	Northern Iran				
	depth about 33 km				
	Mag: 4.8 (CGS), 5.0 (Qt)				
1	Qt	ePZ	04	46	55.7
1	Qt	ePZ	07	16	09.6
1	Lh	ePZ	10	55	23
		epPZ			39
		eSN	11	03	05
	Wr	ePZ	10	55	29.8
	Qt	ePZ		56	06.5
		eXZ			14.2
		epPZ			20.6
		esPZ			28.3
		ePcPZ			47.5
		ePPZ		58	23.0
		eSN	11	04	18.0
		esSN			45.2
	USCGS H	10 45 55.7			
	41.2 N	142.9 E			
	South of Hokkaido				
	Japan				
	depth about 41 km				
	Mag: 5.0 (CGS)				
1	Wr	ePZ	11	57	57.7
	Lh	ePZ		58	09
		ePPZ			19
	Qt	ePZ		59	09.9
		esPZ			22.0
		ePPZ			24.0
		ePPPZ			30.5
		eSE	12	02	07.3
		Mu Sec			
	PZ	0.01 0.8			
	△ = 16°.1				
	USCGS H	11 55 22.5			
	41.9 N	80.8 E			
	Sinkiang Province				
	China				
	depth about 33 km				
1	Qt	ePZ	12	27	47.0
		e(S)N		29	37.0
1	Qt	ePZ	14	42	21.4
	USCGS H	14 32 20			
	42.2 N	141.2 E			
	Near south of Hokkaido				
	Japan				
	depth about 33 km				
	Mag: 4.5 (CGS)				
1	Qt	ePZ	23	14	27.4
		epPZ			38.3
	USCGS H	23 03 30.7			
	22.9 N	144.2 E			
	Volcano Islands region				
	depth about 33 km				
	Mag : 4.4 (CGS)				
2	Qt	ePZ	00	32	47.3d
		ePcPZ			54.2
		ePPZ		33	06.5
	USCGS H	00 20 32.3			
	5.1 S	144.3 E			
	North eastern New Guinea				
	depth about 69 km				
	Mag : 5.0 (CGS)				

International Seismological Centre

Date	Station	Phase	h	m	s
2	Wr	ePZ	01	45	48.5
	Qt	ePZ		46	01.5
		ePPZ			15.5
		USCGS H 01 34 40.9			
		6.5 S 131.4 E			
		Banda Sea			
		depth about 33 km			
		Mag : 4.4 (CGS)			
2	Ch	iPnZ	02	46	02
		iSnE			22
	Wr	ePZ		50	20.6
	Qt	ePZ			44.0
		epPZ			51.2
		esPZ			58.0
		ePPZ		51	10.5
		ePPPZ			24.0
		eSN		54	55.2
		H 02 45 35.0			
		24.4 N 92.7 E			
		East Pakistan-India border			
		depth about 20 km			
		USCGS H 02 45 37.1			
		23.8 N 92.2 E			
		East Pakistan-India border			
		depth about 36 km			
		Mag : 4.2 (CGS)			
2	Qt	ePZ	04	29	42.3
		e(S)N		30	19.7
2	Qt	ePZ	05	50	43.1
		ePcPZ			55.5
		USCGS H 05 39 07.4			
		1.8 S 143.6 E			
		North of New Guinea			
		depth about 129 km			
		Mag : 5.3 (CGS)			
2	Wr	ePZ	09	35	58.3
	Lh	ePZ		36	06
	Qt	ePZ			43.7
		epPZ			54.0
		eSN*		45	33.0
		Mu Sec			
		MH 2.4 20			
		$\triangle$ = 66°.9			
		depth about 33 km			
		Mag.: 5.2 (Qt)			
2	Qt	ePZ	09	49	19.0
2	Qt	ePZ	11	22	50.6
		esPZ		23	03.7
		USCGS H 11 12 01.3			
		46.0 N 153.0 E			
		Kurile Islands region			
		depth about 33 km			
2	Ch	ePZ	16	13	42
	Qt	ePZ		16	44.6
		epPZ		17	05.2
		USCGS H 16 06 56.3			
		10.1 N 126.1 E			
		Mindanao, Philippine Islands			
		depth about 92 km			
		Mag : 4.0 (CGS)			
2	Qt	ePZ	22	01	40.7
		USCGS H 21 50 34.9			
		7.1 S 128.5 E			
		Banda Sea			
		depth about 47 km			
		Mag : 4.0 (CGS)			
2	Qt	ePKPZ	22	35	05.0
		USCGS H 22 16 35.4			
		17.1 S 175.0 W			
		Tonga Islands			
		depth about 240 km			
		Mag : 5.1 (CGS)			
3	Wr	ePZ	01	48	57.6
		iSZ		49	31.0
	Lh	ePZ			33
		esPZ		50	21

Date	Station	Phase	h	m	s
		eSN		33	
	Qt	iPZ		49	56.4 d
		iSN		50	28.9
		Mu Sec			
		PZ 0.02 0.5			
		△ = 7°.1			
		H 01 48 04.0			
		36.5 N 71.2 E			
		Hindukush region			
		depth about 225 km			
		USCGS H 01 48 09.4			
		36.7 N 71.4 E			
		Hindukush			
		depth about 209 km			
		Mag : 4.3 (CGS), 4.6 (Qt)			
3	Wr	ePZ	17	05	41.3
	Lh	ePZ		06	22 c
		esPZ		07	09
		eSE			23
	Qt	iPZ		06	45.5
		iSN		08	06.4
		Mu Sec			
		PZ 0.02 0.5			
		△ = 7°.3			
	Ch	ePZ		09	45
		H 17 05 01.0			
		36.5 N 71.2 E			
		Hindukush			
		depth about 160 km			
		USCGS H 17 05 03.7			
		36.4 N 71.3 E			
		Hindukush			
		depth about 156 km			
		Mag : 4.6 (CGS)			
3	Qt	ePZ	18	42	20.8
		USCGS H 18 36 14.3			
		0.3 N 67.1 E			
		Maldive Islands region			
		depth about 33 km			

Date	Station	Phase	h	m	s
3	Ch	ePZ	23	06	46
		eSE		12	23
	Lh	ePZ		08	16 d
		eSN*		15	07
	Qt	iPZ		09	01.3 d
		iXZ		12	52.9
		eSN		16	30.5
		USCGS H 22 59 44.9			
		30.7 N 136.9 E			
		South of Honshu			
		depth about 491 km			
4	Wr	ePZ	07	51	18.7
	Lh	ePZ			40
	Qt	ePZ			42.8
		epPZ			49.5
		esPZ			55.0
		ePcPZ		52	35.0
		ePPZ		53	55.5
		ePPPZ		55	21.8
		eSN*		59	35.0
		Mu Sec			
		MH 3.7 20			
		△ = 57°.5			
	Ch	ePZ		52	52
		epPZ		53	03
		ePcPZ			17
		ePPZ		55	23
		ePPPZ		57	03
		USCGS H 07 41 51.0			
		82.9 N 7.7 W			
		North Pole region			
		depth about 33 km			
		Mag : 5.0 (CGS), 5.7 (Qt)			
4	Ch	ePZ	13	44	30 d
		epPZ			41
		esPZ			44
	Lh	ePZ		46	34 d
		ePPZ		48	16
		eSN*		52	54

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Dtate	Station	Phase	h	m	s	
	Wr	ePZ		46	55.2	
	Qt	ePZ		47	25.3	
		epPZ			34.5	
		esPZ			39.5	
		ePcPZ		48	52.5	
		ePPZ		49	18.5	
		epPPZ			30.0	
		ePPPZ		50	13.5	
		eSE		54	25.0	
		esSE			44.0	
		eSSE		57	26.2	
		eSSSN		59	14.5	

	Mu	Sec
PZ	0.5	2.2
MH	31.2	20.0

△ = 49°.0

USCGS H 13 38 41.0
24.2 N 121.7 E
Formosa
depth about 33 km
Mag : 4.8 (CGS), 6.2 (Qt)

4	Qt	ePZ	14	55	57.7	
		eXN		58	00.0	
4	Qt	ePZ	15	17	10.5	d
		epPZ			20.5	
		ePPZ			29.2	
		ePcPZ		19	38.0	
		eSE		22	45.5	
	Wr	ePZ		17	33.9	
	Lh	ePZ			58	
	Ch	ePZ		20	15	
		esPZ			29	

USCGS H 15 10 19·2
35·2 N 25·4 E
Crete
depth about 42 km
Mag : 4·8 (CGS)

4	Lh	ePZ	16	00	46	
	Qt	ePZ		01	23·0	

Date	Station	Phase	h	m	s	
		eSN		02	38·5	
4	Qt	ePKPZ	16	02	32·5	
		ePKSE		06	11·7	
	Lh	ePKPZ		02	38	
		ePPZ*		05	55	
	Ch	ePKPZ		03	02	±

H 15 43 04·0
4·5 S 81·6 W
Off coast of northern Peru
depth about 33 km
Mag : 5·4 (CGS)

4	Qt	ePKPZ	18	51	18·2	
		ePKSN		54	27·5	
	Lh	ePKPZ		51	33	±

USCGS H 18 31 51·9
15·7 S 75·3 W
Near coast of
southern Peru
depth about 45 km
Mag : 4·9 (CGS)

4	Qt	ePZ	22	05	04·4	
5	Lh	ePZ	02	36	36	
	Wr	ePZ			23·5	
	Qt	ePZ		38	01·3	
		esPZ			13·2	
		eSN		40	16·6	

H 02 35 07·0
29·6 N 81·2 E
Nepal
depth about 33 km
USCGS H 02 35 07·8
29·2 N 81·2 E
Nepal
depth about 33 km

5	Qt	ePKPZ	07	24	23·5	
		epPKPZ			31·8	
		ePKSZ		28	05·0	
	Wr	ePKPZ		24	34·7	
	Lh	ePKPZ			36	

Date	Station	Phase	h	m	s
	Ch	ePKPZ		25	02
		USCGS H 07 05 01·7			
		4·5 S 81·5 W			
		Off coast of northern Peru			
		depth about 31 km			
		Mag : 5·6 (CGS)			
5	Qt	ePZ	08	50	44·5
5	Ch	ePZ	13	15	23
	Qt	ePZ		17	37·7
		USCGS H 13 07 57			
		27·0 N 140·0 E			
		Bonin Islands region			
		depth about 504 km			
		Mag : 3·8 (CGS)			
6	Ch	ePZ	04	44	51
	Wr	ePZ		46	46·9
	Qt	ePZ		47	20·7
		epPZ			31·5
		USCGS H 04 37 44·5			
		28·9 N 132·2 E			
		Ryukyu Islands			
		depth about 55 km			
		Mag : 4·4 (CGS)			
6	Qt	ePZ	07	06	44·0
		epPZ			51·5
		USCGS H 06 55 44·3			
		53·8 N 161·2 E			
		Near east coast of			
		Kamchatka			
		depth about 33 km			
		Mag : 4·1 (CGS)			
6	Wr	ePZ	08	35	22·0
	Lh	ePZ			48
		eSN		36	21
	Qt	ePZ			32
		iSN		37	40·2

	Mu	Sec
PZ	0·01	0·8

$\Delta = 6°·0$

Date	Station	Phase	h	m	s
		34·0 N 72·5 E			
		Near Mardan, West Pakistan			
		depth about 33 km			
		USCGS H 08 35 03·7			
		33·8 N 72·6 E			
		West Pakistan			
		depth about 33 km			
		Mag : 4·3 (CGS), 4·5 (Qt)			
6	Qt	ePZ	18	15	46·2
		eXZ			58·2
6	Qt	ePZ	18	57	04·7
		eXZ			09·2
6	Qt	ePZ	20	03	17·0
		USCGS H 19 50 07·5			
		9·8 S 155·2 E			
		Solomon Islands region			
		depth about 33 km			
		Mag : 5·1 (CGS)			
6	Lh	ePZ	23	32	24
	Qt	ePZ		33	07·7
		USCGS H 23 23 03.1			
		37·0 N 140·8 E			
		Near east coast of central			
		Honshu, Japan			
		depth about 71 km			
		Mag : 4·1 (CGS)			
7	Qt	ePZ	02	01	40·2
		epPZ			47·5
		USCGS H 01 50 29·6			
		3·9 S 131·1 E			
		Ceram			
		depth about 33 km			
7	Ch	ePKPZ	05	41	56
	Lh	ePKPZ		42	08
	Wr	ePKPZ			08·4
	Qt	ePKPZ			11·1
		epPKPZ			23·5
		ePKP2Z		43	55·0
		ePPZ		47	44·5

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Date	Station	Phase	h	m	s
		Mu Sec			
		MH 14·9 20			
		△ = 178°			
		USCGS H 05 22 01.1			
		27.0 S 113.5 W			
		Approximately 500 km			
		West of Easter Islands			
		depth about 33 km			
		Mag : $6\frac{3}{4}$ (Pas), 5.6 (CGS), 6.4 (Qt)			
7	Qt	ePKPZ	12	36	06.4
		epPKPZ			23.2
		ePPZ		39	42.5
		eSKKSN*		46	35.0
		ePPSE*		52	38.0
		eSSE*		58	56.0
		eSSPZ*		59	29.0
		Mu Sec			
		MH 3.1 20			
		△ = 149°			
Wr		ePKPZ		36	16.3
Lh		ePKPZ			17
Ch		ePKPZ			20
		ePPZ		40	24
		USCGS H 12 16 28.5			
		44.3 S 75.3 W			
		Near coast of Southern Chile			
		depth about 45 km			
		Mag : 5.6 (CGS), 6.1 (Qt)			
7	Ch	ePZ	13	54	18
	Qt	ePZ		55	06.0
		epPZ			13.5
		esPZ			18.5
		ePPZ		58	15.7
		USCGS H 13 43 01.2			
		50.8 N 178.6 E			
		Rat Islands			
		Aleutian Islands			
		depth about 33 km			
		Mag : 4.1 (CGS)			
7	Wr	iPZ	21	50	04.4d
		iSN			33.6
	Lh	iPZ			45 d
		esPE		51	23
		eSN			44
	Qt	iPZ			08.7d
		eSN		52	23.6
		Mu Sec			
		PZ 0.09 0.8			
		△ = 6°.4			
	Ch	ePZ		54	19 d
		ePPZ			59
		iSE		58	18
		H 21 29 32.4			
		35.9 N 71.2 E			
		Hindukush			
		depth about 180 km			
		USCGS H 21 49 32.6			
		36.1 N 71.2 E			
		Hindukush			
		depth about 202 km			
		Mag : 5.3 (Qt)			
7	Qt	ePZ	23	31	15.4
		eXN		33	50.5
8	Qt	ePZ	15	19	28.5
		eSN*		30	48.0
		Mu Sec			
		MH 1.3 20			
		△ = 97°.8			
		USCGS H 15 06 05.3			
		1.1 N 29.9 W			
		Mid Atlantic Ocean			
		depth about 33 km			
		Mag : 5.2 (CGS), 5.7 (Qt)			
9	Qt	ePZ	01	49	20.5
9	Qt	iPZ	02	19	55.8d
		eSN		21	37.3

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Date	Station	Phase	h m s
		Mu Sec	
	PZ	0.16 0.8	
		△ = 9°.0	
	Lh	ePZ	21 07 d
		eSN	23 11
		eSSZ	58
	Wr	ePZ	21 10.0
	Ch	ePZ	23 34
		epPZ	44
		esPZ	48
		ePPZ	24 26
		eSE	28 19
		esSE	34
		H 02 17 45.0	
		22.3 N 62.0 E	
		Arabian Sea	
		depth about 33 km	
		USCGS H 02 17 39.5	
		21.9 N 62.0 E	
		Arabian Sea	
		depth about 33 km	
		Mag: 5.1 (CGS), 5.5 (Qt)	
9	Qt	ePZ	05 07 23.5
9	Qt	ePZ	06 54 23.0
		USCGS H 06 44 28.2	
		46.1 N 141.0 E	
		Kurile Islands region	
		depth about 31 km	
		Mag: 4.8 (CGS)	
9	Qt	iPZ	10 52 41.1d
		iSN	53 09.0
		Mu Sec	
	PZ	0.16 0.5	
		△ = 2°.3	
		dilatatation from	
		northeast	
	Wr	ePZ	53 30.8
		H 10 52 04.9	
		West Pakistan	

Date	Station	Phase	h m s
		Afghanistan border	
		Mag: 3.5 (Qt)	
9	Ch	ePZ	16 33 46
		epPZ	56
		esPZ	34 04
	Lh	ePZ	35 35
	Wr	ePZ	50.9
	Qt	ePZ	36 08.7c
		epPZ	18.5
		esPZ	23.0
		eSE*	46 29.0
		USCGS H 16 23 44.3	
		3.2 S 147.0 E	
		Bismarck Sea	
		depth about 33 km	
		Mag: 4·8 (CGS)	
9	Lh	ePZ	17 05 24
	Qt	ePZ	06 07·4
		epPZ	15·0
		USCGS H 16 56 13	
		6·7 N 123·9	
		Near south coast of	
		Mindanao	
		Philippine Islands	
		depth about 33 km	
9	Qt	ePZ	19 08 13·8
		ePcPZ	19·0
		epPZ	23·8
		esPZ	28·0
		eSE*	18 28·2
		USCGS H 18 55 49·0	
		3·2 S 147·1E	
		New Britain region	
		depth about 33 km	
		Mag: 4·9 (CGS)	
9	Qt	ePZ	21 31 13·5
9	Qt	ePKPZ	23 01 44·5
		USCGS H 22 43 50·5	
		21·5 S 179·0 W	

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Date	Station	Phase	h	m	s	
		Fiji Islands region				
		depth about 529 km				
		Mag. 4·4 (CGS)				
10	Ch	ePZ	01	31	49	c
		ePcPZ			56	
		ipPZ		32	33	
		ePPZ		35	08	
		eSE		42	00	
	Qt	ePKPZ		37	38	±
		USCGS H	01	19	38·1	
		15·2 S	167·2 E			
		New Hebrides Islands				
		depth about 142 km				
		Mag : 4·9: (CGS)				
10	Wr	iPZ	01	38	23·2	c
	Lh	iPZ			30	c
		epPZ			41	
		eSN*		48	51	
	Ch	ePZ		38	35	
		ePcPZ			40	
		epPZ			45	
		esPZ			52	
		ePPZ		41	48	
		ePPPZ		43	47	
		eSE		48	59	
		cScSE		49	07	
	Qt	iPZ		38	50·2	c
		ePcPZ			54·0	
		epPZ			59·9	
		esPZ		39	02·5	
		ePPZ		42	07·5	
		eSKSN		49	08·5	
		eSN			16·5	
		eScSE			30·0	
		Mu Sec				
		PZ 0•1 1·5				
		△ = 85°·3				
		USCGS H	01	26	04·1	
		56·2 N	153·8 W			

Date	Station	Phase	h	m	s	
		Kodiak Islands, Alaska				
		depth about 33 km				
		Mag: 5·1 (CGS), 5·7 (Qt)				
10	Ch	ePZ	02	59	22	d
		epPZ			29	
		isPZ			35	
		ePPZ	03	00	11	
		ePPPZ			24	
		ePcPZ		02	38	
		eSE		04	02	
		esSE			18	
	Lh	ePZ		01	26	d
		epPZ			34	
		eSN*		07	47	
	Wr	iPZ	01	45·3		d
	Qt	iPZ	02	18·5		d
		epPZ			28·2	
		esPZ			32·2	
		ePcPZ	03	38·5		
		ePPZ	04	01·2		
		ePPPZ	05	06·0		
		eXZ	07	44·5		
		cSN	09	25·2		
		csSN			42·5	
		Mu Sec				
		PZ 0·1 1·5				
		△ = 49°·9				
		USCGS H	02	53	33·0	
		24·7 N	122·1 E			
		Near east coast of Formosa				
		depth about 33 km				
		Mag: 4·9 (CGS), 5·3 (Qt)				
10	Qt	ePKPZ	11	11	16·5	
		epPKPZ			29·9	
		ePPZ		14	37·5	
		eXZ		16	46·0	
		ePPPZ		17	47·5	
		eSE*		25	22·5	
		ePPSE*		27	07·0	

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Date	Station	Phase	h	m	s	
		eSSN*		33	20·2	
		eSSPZ*			54·0	
		eSSSN*		38	42·0	
		Mu Sec				
		MH 1·7 20				
		△ = 144°				
	Wr	ePKPZ		11	26·4	
	Lh	ePKPZ			36	
	Ch	ePKPZ			40	
		ePKP2Z		12	32	
		USCGS H 10 51 48·1				
		29·9 S 71·2 W				
		Near coast of central				
		Chile				
		depth about 70 km				
		Mag. 5·5 (CGS), 5·9 (Qt)				
10	Ch	ePZ	11	58	46	±
	Wr	ePZ		59	56·8	
	Qt	ePZ	12	00	31·9	
		epPZ			49·2	
		USCGS H 11 50 26·3				
		34·4 N 141·7 E				
		Near coast of Honshu				
		Japan				
		depth about 60 km				
		Mag: 4·6 (CGS)				
10	Ch	ePZ	13	58	32	c
		epPZ			45	
		esPZ			50	
		ePPZ	14	00	06	
		eSE		04	30	
	Lh	ePZ		00	48	
		eSN*		08	39	
	Wr	ePZ		01	09.8	
	Qt	ePZ			26.5d	
		epPZ			38.0	
		esPZ			45.5	
		ePcPZ		02	07.5	
		ePPZ		03	49.5	
		eSN		09	54.9	
		eScSN		11	20.5	
		USCGS H 13 51 04.3				
		2.4 N 126.6 E				
		Celebes Sea				
		depth about 41 km				
10	Wr	ePZ	21	50	25.5	
		eSZ		51	59.3	
	Qt	ePZ			18.1	
		eSN		53	50.2	
11	Wr	iPZ	05	11	09.6	
		iSZ			39.9	
	Qt	ePZ		12	16.0	
		eSN		13	34.8	
		H 05 10 32.0				
		Hindukush region				
11	Qt	ePZ	07	33	47.7c	
		epPZ			58.5	
		esPZ		34	02.2	
		ePPZ			51.5	
		ePPPZ		35	09.5	
		eXZ			24.2	
		ePcPZ		36	39.2	
		eSN*		38	49.5	
		esSE		39	08.5	
		Mu Sec				
		PZ 0.1 1.4				
		△ = 31°.4				
	Wr	ePZ			34 05.1	
	Lh	ePZ			35	±
		eSN*		40	23	
		USCGS H 07 27 22.0				
		38.1 N 29.3 E				
		Turkey. Felt				
		depth about 33 km				
		Mag: 5.5 (CGS), 5.6 (Qt)				
11	Qt	ePZ	09	53	41.2	
		USCGS H 09 42 51.2				
		0.0 S 130.4 E				

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Date	Station	Phase	h m s
		Halmahera region	
		depth about 33 km	
11	Wr	ePZ	10 28 32.2
		eSZ	29 06.6
	Lh	ePZ	10
		esPZ	55
		eSN	30 10
	Qt	iPZ	29 30.7d
		eSN	30 50.6
		Mu Sec	
		PZ 0.1 0.6	
		△ = 6°.9	
		H 10 27 48.0	
		36.3 N 71.0 E	
		Hindukush	
		depth about 190 km	
		USCGS H 10 27 42.1	
		36.7 N 71.1 E	
		Hindukush	
		depth about 189 km	
		Mag: 4.7 (CGS), 5.2 (Qt)	
11	Qt	ePZ	14 31 17.0
		USCGS H 14 22 08.4	
		31.1 N 138.2 E	
		South of Honshu	
		Japan	
		depth about 396 km	
		Mag: 4.1 (CGS)	
11	Qt	ePZ	18 58 53.0
		ePcPZ	59 07.5
		eSN*	19 08 29.5
	Lh	ePZ	18 59 09
	Wr	ePZ	19.5
		H 18 47 11.0	
		Crozet Islands region	
		Indian Ocean	
11	Qt	ePZ	20 13 59.0
11	Qt	ePZ	23 59 37.5
		eXZ	50.8
12	Qt	ePZ	08 16 47.1
		epPZ	57.7
		ePcPZ	17 12.5
		USCGS H 08 05 49.8	
		53.9 N 160.6 E	
		Kamchatka	
		depth about 33 km	
		Mag: 4.7 (CGS)	
12	Qt	ePZ	12 43 58.0
		USCGS H 12 38 54	
		39.3 N 40.3 E	
		Turkey	
		depth about 70 km	
		Mag: 4.0 (CGS)	
12	Qt	ePZ	15 27 31.2
		USCGS H 15 18 00.0	
		71.7 N 1.4 W	
		Jan Mayen Islands region	
		depth about 33 km	
		Mag: 3.9 (CGS)	
12	Lh	ePZ	20 52 46
	Qt	ePZ	53 15.5
		eXZ	30.3
		epPZ	43.2
		USCGS H 20 40 12.8	
		7.1 S 156.0 E	
		Solomon Islands	
		depth about 97 km	
		Mag: 5.2 (CGS)	
12	Lh	ePZ	23 00 36
	Qt	ePZ	01 40.2
13	Qt	ePZ	01 37 53.0
13	Wr	ePZ	08 20 47.7
		eSZ	21 21.2
	Qt	ePZ	44.8
		eSN	23 01.2
		H 08 20 04.0	
		Hindukush region	

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Date	Station	Phase	h m s
13	Qt	ePZ	11 04 34.2
		epPZ	47.0
		USCGS H 10 54 15.8	
		33.1 N 141.4 E	
		Off coast of southern Honshu Japan	
		depth about 47 km	
		Mag: 4.1 (CGS)	
13	Wr	ePZ	17 28 02.1
		iSZ	34.0
	Lh	ePZ	44
		eSN	29 46
	Qt	ePZ	28 58.7
		eSN	30 13.5
		Mu Sec	
		PZ 0.01 0.5	
		$\triangle$ = 6°.8	
		H 17 27 21.0	
		36.3 N 70.2 E	
		Hindukush	
		depth about 180 km	
		USCGS H 17 27 22.9	
		36.1 N 70.4 E	
		Hindukush	
		depth about 190 km	
		Mag: 4.0 (CGS), 4.3 (Qt)	
13	Qt	ePZ	19 24 19.7
14	Qt	ePZ	01 34 21.0
14	Ch	ePZ	08 05 52
		ePPZ	06 36
		eSN	10 24
		esSE	45
	Lh	epZ	08 10
		eSN*	14 29
	Wr	ePZ	08 32.4
	Qt	iPZ	09 01.2d
		ipPZ	11.5
		isPZ	13.3
		eXZ	10 04.0
		ePcPZ	23.0
		ePPZ	48.0
		eSN	16 05.5
		eSSN*	19 26.2
		Mu Sec	
		MH 3.8 20	
		$\triangle$ = 48°.9	
		USCGS H 08 00 15.6	
		19.0 N 120.4 E	
		Off coast of northern Luzon	
		Philippine Inlands	
		depth about 33 km	
		Mag: 5.0 (CGS), 5.6 (Qt)	
14	Qt	ePZ	17 19 31.9
		eXZ	35.0
14	Qt	ePZ	18 26 07.7
		epPZ	17.2
		USCGS H 18 13 19.1	
		53.0 N 164.9 W	
		Fox Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag: 4.6 (CGS)	
14	Lh	ePZ	18 40 53
	Qt	iPZ	41 30.3c
		epPZ	40.2
		esPZ	42.5
		ePcPZ	54.0
		ePPZ	44 02.5
		USCGS H 18 30 40.6	
		46.5 N 153.4 E	
		Kurile Islands	
		depth about 32 km	
		Mag: 4.7 (CGS)	
14	Qt	ePZ	20 12 21.0

Date	Station	Phase	h	m	s
14	Qt	ePZ	21	15	10.0
14	Qt	ePZ	23	27	42.8
		USCGS H 23 15 23.2			
		5.9 S 144.6 E			
		Eastern New Guinea			
		depth about 33 km			
		Mag: 4.3 (CGS)			
15	Ch	ePZ	00	11	56
		epPZ		13	02
		ePcPZ			27
		ePPZ			48
		ePPPZ		14	51
		eSE		18	21
	Lh	ePZ		14	04
		eSN		22	19
	Wr	ePZ		14	25
	Qr	iPZ			39.4c
		eSN		23	26.2
		USCGS H 00 04 01.3			
		5.0 S 129.6 E			
		Banda Sea			
		depth about 295 km			
		Mag: 4.8 (CGS)			
15	Ch	ePZ	00	22	55
		epPZ		23	27
		ePPZ		24	26
	Lh	ePZ		25	11
	Qt	ePZ			53.9
		eXZ		26	08.0
		epPZ			23.2
		esPZ			30.9
		ePPZ		28	01.5
		ePPPZ		29	33.0
		eSE		33	55.0
		Mu Sec			
		MH 4.7 20			
		△ = 59°.8			
		USCGS H 00 16 01.3			
		8.4 N 126.4 E			

Date	Station	Phase	h	m	s
		Mindanao, Philippine Islands			
		depth about 117 km			
		Mag: 5.0 (CGS), 5.8 (Qt)			
15	Ch	ePZ	10	59	40 d
		epPZ			52
		esPZ			55
		ePPZ	11	00	28
		eSN		04	13
	Wr	ePZ		02	24.8
	Qt	iPZ			51.0d
		epPZ		03	01.0
		esPZ			02.8
		ePcPZ		04	17.5
		ePPZ			45.5
		ePPPZ		05	40.0
		eSN		10	00.0
		USCGS H 10 53 59.8			
		17.5 N 119.8 E			
		Off west coast of Luzon			
		Philippine Islands			
		depth about 33 km			
		Mag: 4.4 (CGS)			
15	Lh	ePZ	18	59	58
	Qt	ePZ	19	00	40.5
		USCGS H 18 50 34.7			
		42.3 N 142.3 E			
		Near south coast of			
		Hokkaido, Japan			
		depth about 33 km			
		Mag : 4.0 (CGS)			
15	Qt	ePZ	22	17	26.4
16	Wr	ePZ	03	39	53.9
	Qt	ePZ		40	27.0
		epPZ			37.0
		esPZ			40.0
		ePPZ			54.3
		ePPPZ		41	04.
		eSN		44	35.0

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Date	Station	Phase	h m s
		USCGS H 03 35 22.5	
		26.1N 92.8 E	
		Assam, India	
		depth about 48 km	
		Mag : 4.5 (CGS)	
16	Ch	ePZ	08 54 26
		ipPZ	33
		ePPZ	56 32
		eSN	09 02 11
		ePKPPKPZ	24 30
	Lh	ePZ	08 55 07
		epPZ	15
		esPZ	20
		iPPZ	57 23
		eSE	09 03 25
		esSE	43
		ePKPPKPZ	24 22
	Wr	ePZ	08 55 08.8
	Qt	iPZ	44.7c
		epPZ	53.5
		ePcPZ	56 12.0
		ePPZ	58 16.5
		ePPPZ	59 55.0
		eSN	09 04 42.5
		ePKPPKPZ	24 08.0
		Mu Sec	
	PZ	0.3 1.0	
		$\Delta = 67°.7$	
	Kr	iPZ	08 56 06.8c
		epPZ	12.3
		esPZ	22.1
		eSE	09 05 20.0
		eSSE	09 52
		USCGS H 08 44 48.3	
		46.5 N 154.7 E	
		Kurile Islands region	
		depth about 26 km	
		Mag: 7 (Pas), 6.2 (CGS), 6.4 (Qt)	
16	Wr	ePZ	10 26 48.2
		iSZ	27 20.4
	Qt	ePZ	48.0
		eSN	29 08.5
		H 10 26 05.0	
		Hindukush	
16	Qt	ePZ	14 42 06.9
16	Wr	iPZ	19 17 21.0c
		iSZ	51.2
	Lh	ePZ	18 04
		eSE	19 04
	Qt	ePZ	18 24.2
		eSN	19 43.5
		Mu Sec	
	PZ	0.01 0.5	
		$\Delta = 7°.1$	
		H 19 16 42.0	
		36.3 N 70.8 E	
		Hindukush	
		depth about 150 km	
		Mag: 4.3 (Qt)	
16	Qt	ePKPZ	21 59 08.5
		USCGS H 21 40 09.0	
		20.7 S 174.6 W	
		Tonga Islands	
		depth about 33 km	
		Mag: 5.0 (CGS)	
16	Lr	ePZ	22 30 09.8
	Lh	ePZ	46
		esPZ	31 09
		eSE	32 15
	Qt	iPZ	31 13.0
		eSE	33 02.5
		Mu Sec	
	PZ	0.01 0.6	
		$\Delta = 9°.7$	
	Ch	ePZ	34 04
		esPZ	39
		eSE	38 07

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Date	Station	Phase	h m s
		H 22 28 53.0	
		38.6 N 71.8 E	
		Tadzhik, S.S.R.	
		depth about 85 km	
		USCGS H 22 28 56.7	
		38.9 N 71.8 E	
		Tadzhik, S.S.R.	
		depth about 73 km	
		Mag: 5.0 (CGS.), 4.9 (Qt):	
17	Qt	ePZ	02 08 26.5
17	Lh	ePZ	08 52 32
	Wr	ePZ	33.2
	Qt	ePZ	53 10.0
		epPZ	20.1
		USCGS H 08 42 12.3	
		46.0 N 155.0 E	
		Kurile Islands region	
		depth about 35 km	
		Mag: 4.7 (CGS)	
17	Qt	ePZ	10 43 25.5
		USCGS H 10 32 19.7	
		37.4 N 78.2 E	
		Indian Ocean	
		depth about 33 km	
17	Qt	ePZ	14 24 40.9
		epPZ	53.5
		ePPN	26 10.2
		USCGS H 14 17 25.9	
		39.5 N 21.5 E	
		Greece	
		depth about 78 km	
		Mag: 4.8 (CGS)	
17	Wr	iPZ	15 34 06.7d
		iSZ	36.9
	Lh	ePZ	48
		eSN	35 48
	Qt	ePZ	07·4
		eSE	36 25·7
		Mu Sec	
		PH 0·02 0·5	
		△ = 7°·0	
		H 15 33 26·0	
		36·1 N 71·0 E	
		Hindukush	
		depth about 200 km	
		Mag: 4·7 (Qt)	
18	Wr	ePZ	00 46 15·3
	Lh	ePZ	47
		eSN	47 56
	Qt	ePZ	29·5
		eXN	42·2
		eSE	49 06·9
		Mu Sec	
		PH 0·01 0·8	
		△ = 9°·1	
		H 00 45 20·0	
		37·1 N 73·5 E	
		Tadzhik, S.S.R.	
		depth about 90 km	
		Mag: 4·3 (Qt)	
18	Qt	ePZ	11 50 06·2
		epPZ	17·7
		USCGS H 11 39 37·4	
		7·6 S 120·2 E	
		Flores Sea	
		depth about 33 km	
18	Qt	ePZ	21 56 26·5d
	Lh	ePZ	42
19	Qt	ePZ	17 25 33·7
		eSE	26 49·9
19	Lh	ePZ	19 17 21
	Qt	ePZ	18 03
		USCGS H 19 08 08·1	
		8·3 N 126·6 E	
		Near east coast of	
		Mindanao, Philippine Islands	

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Date	Station	Phase	h	m	s
		depth about 109 km			
		Mag : 4 ·2 (CGS)			
20	Qt	ePKPZ	05	00	50 ·7
		epPKPZ		03	18 ·2
		USCGS H 04 43 13 ·5			
		19 ·9 S 179 ·1 W			
		Fiji Islands region			
		depth about 680 km			
		Mag: 5 ·2 (CGS)			
20	Qt	ePKPZ	05	03	26 ·2
		epPKPZ		05	52 ·5
		USCGS H 04 45 49 ·5			
		19 ·6 S 179 ·3 W			
		Fiji Islands region			
		depth about 680 km			
		Mag : 5 ·2 (CGS)			
20	Lh	ePZ	07	14	40 ·0
	Wr	ePZ			40 ·0
	Qt	ePZ		15	16 ·0
		ePcPZ			35 ·5
		USCGS H 07 04 18 ·0			
		46 ·4 N 154 ·5 E			
		Kurile Islands region			
		depth about 16 km			
		Mag : 5 ·2 (CGS)			
20	Ch	ePZ	14	44	19
		eSE		46	14
	Lh	ePZ		47	22
		epPZ			34
	Wr	ePZ			53 ·5
	Qt	ePZ	48	00	·2
		epPZ			10 ·0
		esPZ			12 ·1
		ePPZ			54 ·9
		eXN	53	55	·5
		H 14 41 51 ·0			
		11 ·8 N 92 ·8 E			
		Andaman Islands region			
		depth about 33 km			
		H 14 41 48 ·2			
		11 ·9 N 93 ·1 E			
		Andaman Islands region			
		depth about 33 km			
		Mag : 4 ·4 (CGS)			
20	Ch	cPZ	16	48	02
		epPZ			15
		ePcPZ		49	11
	Lh	ePZ		50	02d
		epPZ			13
		ePcPZ			26
		eSN*	59	05	
	Wr	ePZ	50	20	·5
	Qt	ePZ			37 ·2d
		epPZ			47 ·5
		ePcPZ			52 ·5
		esPZ			56 ·0
		ePPZ		53	26 ·9
		ePPPZ		55	08 ·6
		eSN*	17	00	16 ·0
		eSSN*		04	59 ·0
		USCGS H 16 38 55 ·8			
		2 ·4 S 138 ·4 E			
		Western New Guinea			
		depth about 40 km			
		Mag : 5 ·5 (CGS)			
21	Qt	ePZ	00	51	30 ·0
21	Qt	iPZ	04	10	20 ·2c
		epPZ			32 ·6
		eXZ			44 ·5
		ePcPZ	11	07	·5
		ePPZ	12	36	·7
		USCGS H 04 00 11 ·1			
		36 ·5 N 140 ·9 E			
		Near east coast of Honshu			
		Japan			
		depth about 50 km			
		Mag : 5 ·2 (CGS)			

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Date	Station	Phase	h	m	s	
21	Qt	ePZ	23	46	50	±
		USCGS H 23 35 55·4				
		47·0 N 155·6 E				
		Kurile Islands				
		depth about 69 km				
		Mag: 4·9 (CGS)				
22	Lh	ePZ	04	07	03	
	Qt	ePZ			43	
		eXN			54·5	
		USCGS H 03 57 23·8				
		46·0 N 148·4 E				
		Kurile Islands region				
		depth about 115 km				
		Mag: 4·9 (CGS)				
22	Qt	ePZ	19	43	09.0	
23	Wr	ePZ	05	51	34.0	
	Qt	ePZ		52	53.2	
		esPZ		53	02.5	
		ePPZ			12.5	
		eXZ		54	23.5	
		eSE		56	22.5	
		eXE			41.2	
		USCGS H 05 48 34				
		42.3 N 84.3 E				
		Sinkiang Province				
		China				
		depth about 33km				
23	Qt	ePZ	12	12	05.7	
23	Qt	ePZ	21	21	24	
		USCGS H 21 11 26.0				
		10.0 S 113.8 E				
		Near southeast coast				
		of Java				
		depth about 139 km				
		Mag: 4.8 (CGS)				
23	Qt	iPZ	21	34	08.9c	
		epPZ			39.0	
		USCGS H 21 22 59.8				
		2.4S 133.6 E				
		Western New Guinea				
		depth about 130 km				
		Mag : 4.4 (CGS)				
24	Ch	ePZ	02	15	08	
		epPZ			15	
		esPZ			23	
		ePcPZ		17	03	
		eSE		21	27	
		esSE			43	
	Lh	ePZ		17	19	
		ePcPZ		18	08	
		eSN		25	24	
	Wr	ePZ		17	41.9	
		eSN		26	10.0	
	Qt	iPZ		17	49.8d	
		epPN		18	00.2	
		esPN			03.5	
		ePcPZ			20.7	
		ePPZ	20	13	.0	
		ePPPZ	21	47	.5	
		eSN*	26	27	.0	
		eScSE*	27	44	.2	
		eSSN*	30	35	.2	
		ePKPPKPZ	46	38	.5	
		Mu Sec				
		PZ 0.1 1.0				
		△ = 64°.7				
		USCGS H 02 07 12.8				
		9.7 S 120.4 E				
		Sumba Islands region				
		depth about 33 km				
		Mag : $6\frac{1}{4}$ (Pas), 5.4				
		(CGS), 5.8 (Qt)				
24	Ch	ePZ	02	36	32	
		epPZ			57	
		esPZ		37	09	
	Lh	ePZ		36	45	
		ePcpZ			57	
	Qt	ePZ		37	10.3	

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Date	Station	Phase	h m s
		epPZ	22.5
		USCGS H 02 24 49.2	
		51.6 N 173.3 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 55 km	
		Mag : 4.7 (CGS)	
24	Lh	ePZ	09 43 45 ±
	Wr	ePZ	56.6
	Qt	ePZ	44 13.3
		ePcPZ	18.7
		epPZ	24.2
		USCGS H 09 31 50.4	
		3.2 S 146.8 E	
		Bismarck Sea	
		depth about 33 km	
		Mag : 5.0 (CGS)	
24	Ch	ePZ	09 50 11 d
		epPZ	31
		ePPZ	51 34
		eSE	55 41
	Lh	ePZ	52 31 d
	Wr	ePZ	52.3d
	Qt	iPZ	53 13.3
		epPZ	20.5
		esPZ	40.5
		ePcPZ	58.5
		ePPZ	55 23.0
		eSN*	10 01 10.5
		Mu Sec	
		PZ 0.1 1.0	
		△ = 58°.7	
		USCGS H 09 43 20.2	
		9.0 N 125.6 E	
		Mindanao region	
		Philippine Islands	
		depth about 51 km	
		Mag : 5.2 (CGS), 5.6 (Qt)	
24	Wr	iPZ	10 59 39.3c
		iSZ	11 00 13.0
	Qt.	iPZ	36.2c
		eSN	11 01 53.0
		Mu Sec	
		PZ 0.01 0.5	
		△ = 5°.1	
		Hindukush region	
		USCGS H 10 58 55.7	
		36.4 N 70.8 E	
		Hindukush region	
		depth about 222 km	
		Mag : 4.1 (CGS), 4.3 (Qt)	
24	Qt	ePZ	12 47 57.5
		esPZ	48 11.5
		ePPPZ	20.5
		eSN*	51 02.3
		Mu Sec	
		PZ 0.2 1.0	
		△ = 16°.9	
	Kr	ePZ	48 28.0
	Wr	ePZ	29.4
	Lh	ePZ	49 02
		esPZ	17
		ePPZ	28
		eSN*	53 05
	Ch	ePZ	51 42
		H 12 43 59.0	
		34.3 N 47.9 E	
		Western Iran	
		depth about 33 km	
		USCGS H 12 44 03.2	
		34.4 N 47.9 E	
		Western Iran	
		depth about 33 km	
		Mag : 5.2 (CGS)	
24	Ch	ePZ	21 46 50 c
		ePcPZ	47 03
		ipPZ	11
		iSE	56 12

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Date	Station	Phase	h	m	s
		esSE			52
	Wr	ePZ		47	00.4
	Lh	ePZ			05
		epPZ			20
	Qt.	ePZ			32.3c
		epPZ			44.3
		ePcPZ			48.5
		esPZ			52.5
		ePPZN		50	33.0
		ePPPZ		52	18.5
		eSN*		57	34.0
		USCGS H 21 35 24.4			
		51.8 N 178.1 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 57 km			
		Mag : 5.5 (CGS)			
24	Wr	ePZ	22	01	04.4
	Qt	ePZ		02	13.3
		eSN		04	23.0
25	Ch	ePZ	04	01	08 ±
	Qt.	ePZ		04	16.0
		epPZ			23.0
		USCGS H 03 55 01			
		14.0 N 121.9 E			
		Southern Luzon			
		Philippine Islands			
		depth about 33 km			
25	Qt	ePZ	08	17	53.0
		USCGS H 08 08 56.6			
		16.3 N 119.7E			
		Near West coast of			
		Luzon			
		Philippine Islands			
		depth about 36 km			
		Mag : 4.7 (CGS)			
25	Wr	ePZ	13	03	28.7
	Qt	ePZ			37.0

Date	Station	Phase	h	m	s
		epPZ			47.2
		USCGS H 12 53 05			
		10.6 S 120.4 E			
		Near south coast of			
		Sumbawa			
		depth about 33 km			
		Mag : 5.6 (CGS)			
25	Qt	ePKPZ	20	35	35.0
		ePPZ		36	12.0
		ePSN*		45	33.0
		ePPSE		46	46.0
		eSSE*		51	34.0
		eSSSE*		55	37.0
		USCGS H 20 17 03.8			
		56.3 S 149.9 E			
		Macquarie Islands region			
		depth about 39 km			
		Mag : 5.0 (CGS)			
25	Ch	ePZ	22	51	11
		epPZ			20
		esSZ			24
		iPPZ			38
		iPPPZ			48
		eSE		55	07
		esSE			26
	Lh	ePZ		53	26 d
		epPZ			37
		esPN			44
		ePPZ*		54	49
		ePcPZ		55	46
		eSN*		59	08
	Kr	ePZ		53	28.5d
	Qt.	iPZ			55.5d
		epPZ		54	06.5
		esPZ			08.2
		ePPZ		55	22.5
		ePPPZ			57.4
		ePcPZ		56	02.6
		ePcSN		59	49.0

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Date	Station	Phase	h m s
		eSE*	23 00 02.0
		eSSSN*	03 22.0
		eScSE*	04 02.0
		Mu Sec	
		PZ 0.1 1.5	
		△ = 40°.1	
		USCGS H 22 46 16.2	
		0.7 N 96.5 E	
		Off southwest coast of Sumatra	
		depth about 30 km	
		Mag: 5.6 (CGS), 5.3 (Qt)	
26	Wr	ePZ	06 36 20.6
		eSZ	37 05.3
	Qt	ePZ	36 54 ±
		eSE	38 02.1
26	Ch	ePZ	10 01 42
		ePPZ	05 39
		eSE	12 53
	Lh	ePKPZ	07 06 c
		ePPZ	08 28
		ePPPZ	11 06
	Wr	ePKPZ	07 10.2
	Qt	ePKPZ	15.3c
		epPKPZ	29.0
		ePPZ	09 08.5
		ePPPZ	11 37.0
		Mu Sec	
		PPZ 0.1 1.5	
		△ = 125°	
	Kr	ePKPZ	07 15.5
		USCGS H 09 48 14.7	
		29.7 S 117.8 W	
		Kermadec Islands	
		depth about 45 km	
		Mag: $6\frac{3}{4}$–7 (Pas), 7 (Berk), 6.3 (Qt)	
26	Qt	ePKPZ	12 04 58.5
		epPKPZ	05 12.0
		USCGS H 11 46 02.5	
		30.1 S 177.4 W	
		Kermadec Islands region	
		depth about 50 km	
26	Qt	ePKPZ	13 10 34.5
		epPKPZ	47.5
		USCGS H 12 51 39.7	
		29.9 S 177.6 W	
		Kermadec Islands	
		depth about 60 km	
		Mag: 4.9 (CGS)	
26	Qt	ePZ	13 17 33.2
		eSN	45.5
		Mu Sec	
		PZ 0.2 0.5	
		△ = 0°.9	
	Wr	ePZ	18 42.9
		H 13 17 17.0	
		Baluchistan	
		West Pakistan	
		Mag: 3.6 (Qt)	
26	Lh	ePKPZ	13 43 49
	Wr	ePKPZ	52.8
	Qt	ePKPZ	57.0
		ePPZ	55 46.2
		ePKSZ	47 32.0
		ePPPZ	48 21.9
		ePKPZ	43 57.0
		USCGS H 13 25 02.6	
		29.8 S 117.9 W	
		Kermadec Islands	
		depth about 42 km	
		Mag: $7\frac{1}{4}$ (Pas), 5.9 (CGS)	
26	Lh	ePZ	18 34 42
	Qt	ePZ	35 10.5c

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Date	Station	Phase	h	m	s	
		epPZ			24.0	
		USCGS H 18 23 08.3				
		51.3 N 178.8 E				
		Rat Islands				
		Aleutian Islands				
		depth about 50 km				
		Mag: 4.4 (CGS)				
26	Lh	ePZ	19	57	23	c
		epPZ			47	
		esPZ			58	
		ePcPZ		58	21	
		ePPZ		59	32	
	Wr	iPZ		57	17.1	c
	Qt	iPZ		58	03.4	c
		epPZ			27.5	
		ePPZ	20	00	21.5	
		eSE		06	25.0	
		USCGS H 19 47 46.0				
		44.0 N 146.7 E				
		Kurile Islands				
		depth about 110 km				
		Mag: 5.6 (CGS)				
26	Ch	iPZ	21	42	20	d
		ipPZ			26	
		esPZ			30	
		iPPZ		43	56	
		ePPPZ		44	22	
		iSNE		48	27	
	Lh	ePZ		43	38	c
		epPZ			44	
		eSN*		50	53	
		eScSN*		53	20	
	Wr	ePZ		43	48.2	
		eSN		51	10.3	
	Qt	iPZ		44	24.5	c
		epPZ			32.7	
		esPZ			37.5	
		ePcPZ		45	18.0	
		ePPZ		46	32.0	
		ePPPZ		47	48.5	
		eSE*		52	14.5	
		eScSN		54	12.5	
		Mu Sec				
		PZ 0.1 1.2				
		$\Delta = 56°.8$				
	Wr	ePZ		44	42.3	
		eSE		52	55.3	
		USCGS H 21 34 41.1				
		36.0 N 135.7				
		Near east coast of Honshu				
		Japan				
		depth about 33 km				
		Mag: $6\frac{1}{2}$ (Pas), 5.9				
		(CGS), 5.8 (Qt)				
26	Lh	ePZ	22	46	06	
	Qt	ePZ			50.0	
		epPZ		47	08.5	
		USCGS H 22 36 48.0				
		34.0 N 139.8 E				
		Off coast of Honshu				
		Japan				
		depth about 100 km				
		Mag: 4.5 (CGS)				
27	Lh	ePZ	00	02	20	
	Qt	ePZ			53.0	
		USCGS H 23 52 05				
		7.0 S 129.0 E				
		Banda Sea				
		depth about 235 km				
27	Wr	ePZ	03	39	54.0	d
		iSZ		40	30.2	
	Lh	ePZ			30	
		eSN*		41	34	
	Qt	ePZ		40	59.0	
		eSN		42	27.0	
		Mu Sec				
		PZ 0.01 0.7				

Date	Station	Phase	h	m	s
		△=7°.6			
		H 03 39 06.0			
		37.0 N 72.0 E			
		Hindukush region			
		depth about 160 km			
		USCGS H 03 39 04.9			
		37.0 N 71.9 E			
		Hindukush			
		depth about 198 km			
		Mag : 4.2 (Qt)			
27	Qt	ePZ	06	59	07.7
		USCG H 06 49 23.0			
		35.6 N 135.8 E			
		Southern Honshu			
		Japan			
		depth about 33 km			
		Mag : 4.1 (CGS)			
27	Qt	ePZ	13	04	34.5
27	Qt	ePZ	15	15	03.5
27	Qt	ePZ	18	17	05.5
27	Qt	ePZ	21	31	12.7
		USCGS H 21 19 01.2			
		51.4 N 179.1W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 33 km			
27	Qt	ePZ	22	01	39.5
28	Wr	ePZ	00	25	53.2
	Qt	ePZ		26	04.5
		epPZ		08.5	
		esPZ		13.2	
		ePPZ	28	22.6	
		ePPPZ	29	48.5	
		iSN*	34	22.0	
		△ = 61°·5			
	Lh	ePZ	26	16	
		epPZ*		20	
		ePPZ	28	37	
		ePPPZ	30	11	
		eSN*	34	47	
	Kr	ePZ	26	36·5	
		eSE	35	28·0	
	Ch	ePZ	27	51	
		ePPZ	30	54	
		eSE	37	48	
		USCGS H 00 15 47·5			
		66·3 N 19·6 W			
		Iceland			
		depth about 15 km			
		Mag: 7–7¼ (Pas),			
		6½ (Berk), 6·6 (Qt)			
28	Wr	ePZ	00	37	11·1
	Qt	ePZ		22·5	
	Lh	ePZ		34	
28	Qt	ePZ	01	09	54·2
28	Wr	ePZ	03	56	58·3
		eSZ		58	29·0
	Lh	ePZ		57	13
		eSZ		58	54
	Qt	ePZ		10·8	
		eSN	04	00	33·5
		Mu Sec			
		PZ 0·01 0·8			
		△ = 13°·0			
		H 03 55 06·0			
		39·3 N 78·3 E			
		Sinkiang, China			
		depth about 33 km			
28	Qt	ePZ	09	58	00 ±
		USCGS H 09 47 10·5			
		49·0 N 154·9 E			
		Kurile Islands region			
		depth about 53 km			
		Mag: 4·9 (CGS)			

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Date	Station	Phase	h	m	s
28	Lh	ePKPZ	11	31	16 ±
	Wr	ePKPZ			21 ·2
	Qt	ePKPZ			27 ·2c
		epPKPZ			38 ·5
		eXZ		35	07 ·2
		USCGS H 11 12 31 ·3			
		30 ·2 S 117 ·8 W			
		Kermadec Islands			
		depth about 33 km			
28	Qt	iPZ	17	13	04 ·8c
		eSE*			38 ·0
		Mu Sec			
		PZ 0 ·05 0 ·6			
		△ = 2° ·5			
	Wr	ePZ			17 ·8
	Lh	ePZ			26
		esPZ			34
		iSZ		14	13
	Kr	ePZ		13	57 ·3
		H 17 12 23 ·0			
		31 ·2 N 69 ·6 E			
		Baluchistan			
		West Pakistan			
		depth about 33 km			
		USCGS H 17 12 23 ·1			
		30 ·8 N 70 ·0 E			
		West Pakistan			
		depth about 24 km			
		Mag: 3 ·9 (Qt)			
28	Lh	ePKPZ	23	47	57
	Wr	ePKPZ		48	02 ·7
	Qt	ePKPZ			10 ·0
		epPKPZ			23 ·5
		USCGS H 23 29 14 ·6			
		29 ·6 S 177 ·5 W			
		Kermadec Islands			
		depth about 54 km			
		Mag: 5 ·1 (CGS)			
29	Qt	ePZ	09	09	11 ·8
		eXZ			28 ·5
29	Qt	ePZ	13	58	47 ·5
29	Qt	ePZ	18	32	22 ·2
29	Wr	iPZ	20	05	36 ·6d
		iSZ		06	08 ·9
	Lh	iPZ			17 d
		esPZ		07	00
		eSN			21
	Qt	iPZ		06	31 ·4c
		eSZ		07	47 ·1
		Mu Sec			
		PZ 0 ·03 0 ·5			
		△ = 6° ·7			
		H 20 04 54 ·2			
		36 ·3 N 70 ·5 E			
		Hindukush			
		depth about 200 km			
		USCGS H 20 04 51 ·7			
		36 ·5 N 70 ·4 E			
		Hindukush region			
		depth about 200 km			
		Mag: 4 ·2 (CGS),			
		4 ·8 (Qt)			
29	Qt	ePZ	21	35	36 ·4
		USCGS H 21 16 43 ·7			
		30 ·2 S 177 ·7 W			
		Kermadec Islands			
		depth about 60 km			
		Mag: 5 ·0 (CGS)			
30	Ch	iPZ	02	05	54
		epPZ			43
		ePPZ		09	21
		ePPPZ		11	20
		eSKSZ		16	01
		eSE			14
	Qt	ePZ		07	40
		eXZ		08	20 ·

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Date	Station	Phase	h m s
		eXZ	10 51·0
		ePKPZ	11 42·6
		eXZ	12 15·2
		ePPZ	22·5
		eSSN*	27 38·0
		USCGS H 01 53 28·8	
		19·1 S 169·1 E	
		New Hebrides Islands	
		depth about 160 km	
		Mag: 6·1 (CGS)	
0	Qt	iPZ	02 22 48·4d
		iXZ	23 00·5
		eXZ	26 14·7
	Wr	ePZ	23 12.1c
0	Qt	ePZ	07 07 30.1
		epPZ	38.9
		USCGS H 06 54 59.6	
		51.8 N 170.5 W	
		Fox Islands	
		Aleutian Islands	
		depth about 33 km	
	Qt	ePZ	12 15 25.8c
	Ch	iPZ	17 00 56 c
		epPZ	01 08
		ePPZ	02 55
		iSNE	08 08
	Lh	ePZ	01 46
		eSN	09 43
	Wr	iPZ	01 52.3c
	Qt	iPZ	02 27.0c
		epPZ	37.7
		esPZ	43.5
		ePcPZ	51.7
		ePPZ	04 47.8
		ePPPZ	06 13.5
		iSN*	10 58.0
		esSE*	11 16.0
		eScSE*	12 18.0
		eSSN	15 11.5
		ePKPPKPZ	31 23.7
		Mu Sec	
		PZ 0.1 1.0	
		△ = 63°.8	
	Kr	ePZ	02 48.1
		eSE	11 38.0
		USCGS H 16 51 56.6	
		44.2 N 148.0 E	
		Kurile Islands	
		depth about 33 km	
		Mag: 5¼–5½ (Pal),	
		6.3 (CGS), 6.0 (Qt)	
30	Wr	ePZ	17 31 28.3
		eSZ	32 58.4
	Lh	ePZ	31 39
	Qt	ePZ	32 39.7
		esPZ	46.5
		eSN	34 58.5
		H 17 29 53.0	
		39.0 N 76.2 E	
		Sinkiang Province	
		China	
		depth about 33 km	
		USCGS H 17 30 04.7	
		38.6 N 75.8 E	
		Sinkiang Province	
		China	
		depth about 33 km	
		Mag: 4.3 (CGS)	
30	Lh	ePZ	18 53 55
	Wr	ePZ	54 37.3
	Qt	ePZ	55 20.5
		esPZ	34.3
		eSE	57 08.0
		H 18 53 01.5	
		31.4 N 78.6 E	
		Northern India	
		depth about 80 km	

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Date	Station	Phase	h	m	s
31	Qt	ePZ	02	29	33.3
		esSZ			43.5
		eSSN*		31	44.0
		Mu Sec			
		PZ 0.01 1.2			
		△ = 10°.0			
	Wr	ePZ		29	48.5
		USCGS H 02 27 09.2			
		36.9 N 57.7 E			
		North eastern Iran			
		depth about 33 km			
		Mag : 4.6 (CGS), 4.6 (Qt)			
31	Qt	ePKPZ	05	05	25.0
		ePPZ		08	35.0
		ePKSN		09	03.5
		ePSE*		18	53.0
		eSSE*		26	42.0
	Wr	ePKPZ		05	27.4
	Kr	ePKPZ			36.0
	Lh	ePKPZ			40
		epPKPZ			54
	Ch	ePKPZ		06	02
		USCGS H 04 46 00.8			
		6.5 S 81.1 W			
		Near coast of southern Peru			
		depth about 33 km			
		Mag: 5.2 (CGS)			
31	Ch	ePZ	05	44	33
	Lh	ePKPZ		49	34 ±
	Wr	ePKPZ			38.8
	Qt	iPKPZ			45.5c
		epPKPZ		50	04.2
		ePPZ		51	31.5
		USCGS H 05 30 49.3			
		29.9 S 177.7 W			
		Kermadec Islands			
		depth about 48 km			
		Mag: 6¼–6½ (Pas), 5.7 (CGS)			
31	Qt	ePKPZ	06	10	28.5
		epPKPZ			35.7
	Lh	ePKPZ			43
		USCGS H 05 51 00.9			
		10.7 S 78.5 W			
		Near coast of Peru			
		depth about 33 km			
		Mag: 5.0 (CGS)			
31	Ch	ePZ	07	18	07
	Lh	ePZ			19 43
	Wr	ePZ			55.
	Kr	ePZ	20	10.	
	Qt	ePZ			11
		ePcPZ			14
		eXN	21	22	
		eSE	30	36	
		eScSN			43
		USCGS H 07 07 36.3			
		6.1 S 149.0 E			
		New Britain			
		depth about 60 km			
		Mag: 6¼ (Pas), 5.7 (CGS)			
31	Qt	ePKPZ	08	31	3
		USCGS H 08 12 40.5			
		29.7 S 176.9 W			
		Kermadec Islands			
		depth about 60 km			
		Mag: 4.2 (CGS)			
31	Qt	ePKPZ	09	26	1
		USCGS H 09 07 20.1			
		30.1 S 177.7 W			
		Kermadec Islands			
		depth about 48 km			
		Mag: 5.2 (CGS)			

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Date	Station	Phase	h	m	s	
31	Qt	ePZ	15	45	57.5	
		epPZ		46	07.5	
		esPZ			11.5	
		USCGS H 15 33 25.3				
		53.1 N 167.2 W				
		Fox Islands				
		Aleutian Islands				
		depth about 33 km				
		Mag: 4.3 (CGS)				
31	Ch	iPZ	17	33	47	d
		epPZ			58	
		esPZ		34	02	
		epPZ			12	
		ePPPZ			22	
		eSE		37	41	
	Lh	ePZ		36	01	
	Wr	ePZ			32.3	
	Qt	iPZ			32.0d	
		epPZ			42.5	
		ePPZ		38	12.2	
		ePPPZ			33.2	
		ePcPN*		42	18.0	
		eSE*			38.0	
		USCGS H 17 28 52.7				
		0.8 N 96.6 E				
		Nicobar Islands region				
		depth about 33 km				
31	Lh	ePKPZ	19	41	37	d
	Wr	iPKPZ			42.4	d
	Qt	iPKPZ			49.0	d
		epPKPZ		42	02.0	
		ePPZ		43	33.2	
		ePPPZ		46	20.0	
		ePKKPZ		51	32.0	
		ePSN*		53	27.0	
		ePPSE*		55	04.0	
		eSSE*	20	00	24.5	
		USCGS H 19 22 53.3				
		30.0 S 178.0 W				
		Kermadec Islands				
		depth about 50 km				
		Mag: $6\frac{1}{4}$–$6\frac{1}{2}$ (Pas),				
		5.8 (CGS)				

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Date	Phase	h	m	s
	QUETTA			
1	ePE	00	02	00 ±
	eSE		03	21·5
1	e(P)Z	00	12	44·3
	eXZ		13	17·5
1	ePZ	02	45	55·5
1	ePZ	15	30	46·8
	eSNE		31	10·0
1	ePZ	17	38	55·2
1	ePZ	18	38	45·5
1	eXZ	19	27	34·0
1	ePZ	19	49	24·5
	e(Sg)			33·3
	e(Sn)			35·5
1	eXZ	20	41	06·5
	eXE		43	36·6
	eXN		44	07·0
2	ePgZ	13	02	48·0
	eSgNE			56·6
2	e(P)Z	16	31	03·3
2	eXZ	22	20	52·7
	eXZ		23	29·0
3	ePZ	00	12	51·9
	eSNE		13	51·5
3	eXZ	06	04	15·7
3	ePZ	06	19	56·6
	eSE		21	04·7
3	ePZ	06	38	52·4
	eSNE		40	12·5
3	ePZ	06	49	36·5
	eSNE			56·0
3	ePZ	08	39	32·2
	eSNE		40	02·2
3	ePZ	14	08	11·0
3	ePgZ	20	38	23·3
	eSgNE			32·3
3	ePgZ	21	24	23·4
	eSgNE			34·4
4	ePZ	01	12	27·2
	eSN			49·8
	eSN			52·8
4	e(P)Z	06	32	20·2
	eSNE			49·5
4	ePZ	12	32	58·2
	eSNE		33	14·7
4	e(P)Z	12	48	15·9
4	ePZ	13	01	00·7
4	ePZ	16	24	29·4
5	ePgZ	00	53	18·0
	eSgN			33·5
5	ePZ	08	00	20·2
	eSNE		01	53·1
5	ePZ	10	24	29·3
5	ePZ	15	01	19·0d
	eSNE		02	29·3
5	eXZ	16	04	45·0
5	eXZ	19	41	09 ±
5	ePZ	20	39	34·6
	eSNE		40	48·6
	eSE			50·0
6	ePZ	08	01	53·3
6	ePZ	11	26	50·8
	eSNE		28	03·5
6	ePgZ	12	53	04·3
	eSgNE			07·5
6	ePZ	17	59	13·0
	eSE	18	00	39·7
	ePZ	20	14	33·2
	eSN			50·2
	eSE			51·2
6	ePZ	20	33	45·4
	eSNE		34	04·2
6	ePZ	20	39	39·3
	eX(S)N			49·2
	eX(S)N			57·2
7	ePZ	02	03	30·7
	eXE			43·0
	eSNE			49·3
7	ePgZ	17	42	34·0
	iSgNE			35·8

Date	Phase	h	m	s
7	ePZ	20	35	47·4
	eSNE		36	05·5
7	ePZ	21	35	30·5
	eSNE		36	02·8
8	eXZ	07	42	28·5
8	ePZ	11	11	25
	eSE		12	49·5
8	eXZ	11	50	58·2
8	ePZ	17	33	38·5
	eSNE		34	09·2
8	ePZ	18	22	18·5
	eSNE			44·5
8	ePZ	21	46	59·5
	eSNE		47	24·6
9	ePZ	00	15	51·8
9	ePgZ	10	04	30·7
	iSgNE			32·3
9	iPZ	10	56	20·4
	iSZNE			45·7
9	ePZ	11	15	56·5
9	ePZ	11	18	06·0
9	eXZ	14	05	07·6
9	ePZ	14	38	36·7
	iPZNE		39	04·0
9	eXZ	16	01	03·2
9	eXZ	20	33	01·1
10	e(P)Z	00	05	28·0
10	ePgZ	00	20	52·3
	eSgNE		21	04·5
10	ePZ	12	00	31·9
10	ePZ	19	07	11·7
11	ePZ	01	13	19·9
	eSNE		15	02·5
11	ePZ	12	30	02·5
11	ePZ	14	56	39·3
	eSNE		58	01·3
11	ePgZ	16	22	10·2
	eSgNE			12·3
11	ePZ	23	19	17·0
12	ePZ	00	05	37·9

Date	Phase	h	m	s
12	ePZ	01	37	51·6
	e(S)N		38	31·2
12	e(P)Z	08	33	35·2
12	ePZ	11	30	12·6
12	ePZ	17	44	00 ±
	eSNE		45	16·5
12	ePZ	17	50	52·6c
	e(S)NE		51	24·0
12	ePZ	21	15	50·2
	eSNE		18	17·2
13	ePZ	02	24	20·2
	eSNE		25	42·5
	e(S)N			47·8
13	ePZ	10	01	20·8
	eSNE			43·2
13	eXZ	12	00	19·2
13	ePZ	14	12	25·8c
	iSN			55·6
	iSE			57·3
13	ePZ	19	02	05.7
	e(S)Z			39.2
13	iPZ	21	07	44.2d
	iSN		08	13
13	ePZ	21	28	43.8
	eXN		29	25.0
13	ePZ	22	57	28.5
	eSNE		58	00.5
14	ePZ	14	29	21.2
	SNE			48.3
14	ePZ	14	36	34.2
	eSNE		37	01.5
14	e(Pg)Z	16	01	15.5
	eSgNE			17.6
14	ePgZ	16	59	18.2
	eSgNE			31.3
14	eXZ	19	59	00.5
14	ePZ	22	10	52.1
	e(S)NE		11	24.7
15	ePZ	00	00	22.8
	eSNE			40.2

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Date	Phase	h m s
15	ePZ	16 17 01.7
15	ePgZ	19 02 59.7
	eSgNE	03 06.9
15	ePgZ	20 59 08.8
	eSgNE	16.9
16	ePZ	00 08 07.4
16	ePZ	01 54 31.6
16	ePZ	02 08 43.1
16	ePZ	05 26 48.8
	e(S)N	28 15.6
17	ePZ	00 56 36.7
17	ePZ	01 55 57.3
	eSE	57 15.4
17	ePZ	03 14 24.9
17	ePZ	06 17 50.0
	e(S)E	18 11.2
17	ePN	09 46 52
17	ePZ	20 32 59.4
18	ePZ	02 33 28.4
	eSN	34 46.9
18	ePZ	06 04 48.4
18	ePZ	08 44 18.3
18	ePZ	10 07 47.0
18	ePZ	11 50 06.2
18	ePZ	18 36 43.4
18	eXZ	21 34 48.1
18	ePZ	21 39 54.2
19	ePZ	00 01 39.8
19	ePZ	02 01 59.8
	eSN	02 47.8
19	ePZ	03 21 59.0
	eSN	23 19.0
19	ePZ	08 11 37.6
	eXE	13 36.5
19	ePZ	10 43 44.2
19	iPZ	13 42 27.2
	iSEN	58.7
19	ePZ	15 02 18.4
	eSN	03 40.9
19	ePZ	16 51 58.4
	eSN	52 30.2
19	ePZ	18 41 23.4
	eSNE	43 11.7
19	ePZ	20 40 35.2
	eXN	53.6
20	ePZ	02 29 27.1
	eXN	47.3
	e(S)E	52
20	e(P)Z	05 11 02.5
20	eXZ	09 31 07.5
20	iXZ	13 08 44.4
20	ePZ	14 19 14.9
20	ePgZ	10 45 45.2
	iSgE	46.5
20	eXZ	23 38 34.8
21	iPZ	04 10 20.2
21	ePgZ	05 37 36.8
	eSgNE	48.5
21	eXE	09 01 13.3
	e(S)N	17.5
21	ePZ	15 52 47.9
21	iPZ	17 55 42.9
	eXE	58 15.7
21	ePZ	18 08 46.7
21	eXZ	18 40 41.1
21	ePZ	19 12 44.1
	e(S)N	13 09.2
21	ePZ	20 52 11.2
21	ePgZ	20 53 03.8
	iSgNE	07.2
21	ePZ	20 56 16
	iSN	57 35.5
21	ePZ	22 34 53.5
	e(S)N	35 19.4
22	ePZ	05 29 29
22	eXZ	05 55 40.5
22	e(P)Z	12 50 25 ±
22	ePgZ	12 56 35.5

Date	Phase	h	m	s
	iSgNE			38.4
23	ePZ	20	37	39.6
23	ePZ	21	16	21.9
24	ePZ	02	46	29.0
	eXZ			40.1
24	ePgZ	10	41	22.0
	eSgNE			32.5
24	ePZ	17	50	16.3
24	ePZ	18	52	54.0
25	ePZ	00	49	11.0
	eSNE			38.2
25	ePZ	04	04	16.0
25	ePgZ	11	44	11.3
	eSNE			13.3
25	ePZ	12	50	52
25	ePZ	16	38	44.8
	e(S)NE		40	04.0
25	ePZ	16	44	24.5
25	ePZ	23	54	45.4
	eSNE		55	10.5
26	ePZ	01	36	28.5
	eSE		37	16.0
	eSN			18.5
26	ePZ	06	55	45.8
	eSN		56	08.4
	eSE			10.0
26	ePZ	15	00	10.0
	e(S)Z			41.0
26	ePZ	16	28	03.7
	eSNE		29	12.5
26	ePZ	18	11	50.2
	eSE		12	02.1
	e(S)N			05.3
27	eXZ	14	00	19.0
27	ePZ	16	23	02.0
27	ePZ	19	58	56.8
	eSZ	20	00	14.5
27	ePZ	21	58	34.3
28	ePZ	00	36	41.6
28	ePZ	02	35	54.3

Date	Phase	h	m	s
	eXZ		36	09.6
28	ePgZ	03	53	15.0
	eSgZ			26.5
28	ePZ	05	80	46.5
	eSNE		09	05.2
28	eXZ	06	47	03.8
28	ePZ	15	21	53.6
28	ePZ	16	02	54.5
28	ePgZ	19	08	51.4
28	e(P)Z	20	03	35.2
28	ePZ	21	18	00.5
	e(S)E		19	52.0
28	ePZ	21	54	54.7
	e(S)NE		57	22.5
29	ePZ	23	48	10.0
29	ePZ	04	31	42.0
	eSN		32	01.5
29	ePZ	10	39	39.7
	eXZNE		40	02.5
	eSNE			35.0
29	ePZ	11	37	32.0
	eSE			54.5
	eSN			55.4
29	ePZ	13	23	16.5
	eSNE			38.6
29	ePZ	15	42	53.9
	eSNE		43	50.0
29	ePZ	22	58	43.1
29	ePZ	22	58	48.8
30	ePZ	00	26	11.8
30	ePZ	05	36	46.2
30	eXZ	11	56	27.0
30	ePZ	15	55	51.7
30	eXZ	16	31	19.5
30	ePZ	21	33	49.5
	eXZ		34	25.3
30	ePZ	22	40	52.3
	eSNE		41	10.5
31	ePZ	00	23	35.5
31	ePZ	00	24	46.5

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Date	Phase	h	m	s
31	ePZ	00	51	14.0
	eSE		52	42.5
	eSN			44.0
31	ePZ	01	01	04.5
	eSN		02	39.0
31	eXZ	02	14	29.5
31	ePZ	06	57	21 ±
31	eXZ	07	45	37.2
31	eXZ	13	55	57.0
31	ePZ	16	59	49.0
31	ePZ	20	10	15.7
	eSNE			53.5
31	ePZ	21	22	19.5
	eSNE		23	41.0
	WARSAK			
1	ePZ	17	38	30.6
2	ePZ	11	31	11.6
2	ePZ	16	29	30.8
2	ePZ	16	34	30.6
3	ePZ	06	37	57.0
3	ePZ	14	06	57.6
3	ePZ	23	15	28.7
5	ePZ	14	05	54.3
5	ePZ	15	00	24.7
	eSZ		01	02.0
5	ePZ	15	47	22.4
	eSZ			51.6
6	ePZ	11	25	53.9
6	ePZ	15	36	37.0
8	ePZ	04	45	43.1
10	iPZ	05	58	39.4
10	ePZ	08	17	31.6
11	ePZ	00	34	04.9
11	ePZ	20	14	53.6
12	ePZ	01	38	21.5
12	ePZ	17	43	00.4
	eSZ			31.1
12	ePZ	21	14	39.1

Date	Phase	h	m	s
12	ePZ	23	01	04.8
13	ePZ	02	23	16.(
	eSZ			49.6
13	ePZ	08	45	54.3
13	ePZ	16	56	40.(
	eSZ		57	09.(
13	ePZ	19	44	32.
14	ePgZ	11	34	38.
	eSgZ			49.
14	ePZ	12	02	49.
14	ePZ	16	40	45.
	eSZ		41	19.
15	ePZ	00	24	00.
	eXZ		25	35.
15	ePZ	06	19	40.
	eSZ		20	14.
16	ePZ	17	59	55.
17	ePZ	15	07	02.
18	ePZ	22	55	26
	eSZ			45
19	ePZ	13	52	17
	eSZ			59
19	ePZ	15	01	13
	eSZ			43
19	ePN	17	24	46
	eSN		25	10
19	ePN	18	40	17
	eSN		41	08
20	ePN	03	49	48
20	ePZ	11	41	46
20	ePN	12	37	15
	eSN			55
21	ePN	06	06	29
21	ePN	07	35	53
	eSN		36	23
21	ePN	14	31	40
	eSN		32	05
21	ePN	20	55	14
	eSN			4:

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Date	Phase	h	m	s
22	ePZ	21	49	38.7
	eSN		50	15.9
23	ePZ	10	10	59.7
25	iPZ	16	37	47.1
	iSZ		38	16.9
27	ePZ	18	57	10.1
	eSZ			51.5
27	ePZ	19	58	03.3
	eSZ			36.6
28	ePZ	02	35	13.4
28	ePZ	09	57	41.5
28	ePZ	21	18	22.5
28	ePZ	21	53	43.8
29	ePgZ	15	41	48.5
	eSgZ			59.5
29	ePZ	22	58	03.8
30	iPZ	10	15	40.6
31	iPZ	00	50	20.2

LAHORE

1	eXN*	03	26	44
1	eXZ	16	39	00
1	e(P)Z	23	13	31
	eXZ			58
5	eXZ	20	02	49
5	eXZ		40	43
9	e(P)Z	11	14	58
	eXZ		15	32
2	eXE	01	39	04
	eXE			19
	eXNZ*E*			26
3	eXZ	08	22	28
5	ePZ	10	28	21
	ePZ	04	08	33 ±
	eiXZ		09	36
	eXZ*	05	55	12
	e(P)Z	21	33	32
	eXZ	11	01	07
	e(S)ZN			20
	e(P)Z	12	13	21

Date	Phase	h	m	s
25	eXN	16	39	31
26	eXZ*	10	03	28
27	e(P)Z	09	24	08
28	ePZ	21	53	59
	eSZ		55	45
29	ePZ	22	57	29
	eXZ		58	01
30	eXZ	02	11	27
30	ePZ	15	20	16

KARACHI

27	ePZ	00	26	36.5
	ePPZ		29	05.0
	ePPPZ		30	37.5
	eSE		35	28.0
27	ePZ	00	37	51.0
	ePPZ		40	25.5

CHITTAGONG

1	eXZ	09	34	54
4	eXNE	00	07	00
4	eXZ	18	51	14
5	eXNE	02	40	55
5	eXZ	19	44	15
6	eXZ	23	33	57
7	ePZ	03	53	15
7	eXN	23	10	14
8	ePnZN	02	32	20 ±
	ePgZN			28
	eXZN			32
	iXZNE			39
	eSnZN			51
	iSnZNE			53
	eSgZNE		33	06
8	ePZNE	02	57	15d
	ePcPZE			19
	epPZE			23
	esPZE			30
	eSZN	03	07	52

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Date	Phase	h	m	s
8	ePZ	03	30	16
8	ePZ	03	37	37
	epPZ			58
8	ePZ	03	45	50
8	ePZE	11	47	06
	eXZ		48	27
	e(S)NE			44
	eXZNE		50	32
	eXZ		51	00
	iXZ		52	01
9	eXZ	06	53	36
9	eXZ	13	19	36
10	eXZ	04	39	12
11	eXZ	14	30	12
12	eXZ	14	59	18
13	eXZ	11	02	26
13	eXZ	17	32	12
14	eXZ	05	14	48
14	eXZ	18	25	36
16	ePZ	06	36	26
	e(S)N			41
	eSZN			47
16	eXNE	23	04	14
	eXN			57
17	eXZNE	02	00	33
17	eXZ	02	59	16
17	eXZ	06	44	47
17	eXZ	08	49	02
17	ePZ	08	51	50
17	eXZ	10	42	33
17	eXZ	13	24	00
19	ePZ	05	59	39
	eSZ			47
19	eXZ	14	54	55
20	e(P)Z	07	13	57
21	e(P)ZE	04	08	20
22	eXE	02	49	18
22	eXNE	06	18	59
22	eXZ	22	41	18
25	e(P)Z	02	51	27
25	ePZ	08	06	52
26	eXZ	13	43	02
26	eXZ	14	47	53
27	eXZ	04	47	23
28	ePZ	02	31	10
	eSNE			33
	iXNE			46
28	eXZ	03	59	58
28	ePZ	15	18	49
	epPZ		19	01
28	eXZ	17	18	16
	eSNE		21	50
29	eXZ	06	14	48
29	eXZ		16	47
31	eXZ	12	34	58

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QUETTA

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The Seismological Bulletin of Pakistan is a quarterly publication containing data of Seismological Stations of Pakistan.

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PAKISTAN

Pakistan Meteorological Services, Geophysical Centre, Quetta.

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Particulars of Stations and Instruments

(*a*) Stations

Station	Symbol	Latitude	Longitude	Height(a.s.l.)	Ground
Quetta	Qt	30° 11′ N	66° 57′ E	1721 meters	Cretaceous Limestone
Lahore	Lh	31° 33′ N	74° 20′ E	210 ”	Alluvium
Karachi	Kr	24° 50′ N	67° 02′ E	30 ”	Alluvium
Chittagong	Ch	22° 21′ N	91° 49′ E	35 ”	Alluvium
Warsak	Wr	34° 09′ N	71° 25′ E	343 ”	River Terrace

(*b*) Instruments

Instruments	Components	Period Sec		Damping	Max. Magnification
		To	Tg		
Quetta					
Sprengnether	Z	1.9	1.9	Critical	5,500
”	N	15.8	15.8	”	15,000
Benioff	Z	1.0	0.77	”	2,00,000
”	N	1.0	0.76	”	2,00,000
”	E	1.0	0.77	”	2,00,000

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Instruments	Components	Period Sec		Damping	Max. Magnification
		To	Tg		
Sprengnether	Z	30.1	100.0	Critical	3,000
,,	N	30.3	100.0	,,	3,000
,,	E	30.2	100.0	,,	3,000
Willmore	Z	1.0	0.25	—	—
Sprengnether	E	1.0	6.0	—	—
Pen recorder					
Lahore					
Sprengnether	Z	1.8	1.8	Critical	4,900
,,	N	1.7	1.7	,,	4,200
,,	E	1.6	1.6	,,	4,100
Benioff	Z	1.0	0.75	,,	6,250
,,	N	1.0	0.75	,,	6,250
,,	E	1.0	0.75	,,	6,250
Sprengnether	Z	30.0	100.0	,,	750
,,	N	30.0	100.0	,,	750
,,	E	30.0	100.0	,,	750
Karachi					
Sprengnether	Z	1.8	1.8	Critical	5,890
,,	N	1.8	1.8	,,	4,700
,,	E	1.4	1.4	,,	4,700
Chittagong					
Sprengnether	Z	1.7	1.7	Critical	5,200
,,	N	1.8	1.8	,,	5,700
,,	E	1.5	1.5	,,	3,600
Warsak					
Sprengnether	Z	1.95	1.95	Critical	8,000
,,	N	1.8	1.8	,,	4,000

* indicates long period seismographs
c=compassion, d=dilatation, X=unidentified phase
Mu=Actual ground motion of the indicated phase in microns
Sec=Period of the indicated phase in seconds.
(Pas), (Berk), (Up), (Ki), (Pal), stand for seismological observatories Pasadena (U.S.A.), Berkeley (U.S.A.), Uppsala (Sweden), Kiruna (Sweden), & Palisade (U.S.A.), respectively
All times are in Green wich Mean Time.

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Date	Station	Phase	h	m	s
1	Qt	ePZ	02	32	36.0
		USCGS H 02 19 56.8			
		6.0 S 149.0 E			
		Near Britain			
		depth about 64 km			
		Mag : 4.8 (CGS)			
1	Ch	ePZ	04	36	46
		ePPZ		38	39
		eSE		43	13
	Lh	ePZ		37	37
	Wr	iPZ		41	d
	Qt	iPZ		38	18.2
		iPcPZ		39	06.0
		iPPZ		40	31.2
		eSNE		46	03.3
	Kr	ePZ		38	39 d
		Mu Sec			
		PZ 0.35 1.2			
		PH 0.19 1.2			
		PPZ 1.3			
		PPH 0.07 1.2			
		△ = 58°.4			
		USCGS H 04 28 44.3			
		44.8 N 141.1 E			
		Off west coast of			
		Hokkaido, Japan			
		depth about 255 km			
		Mag: 5.6 (CGS). (Qt)			
1	Qt	ePKPZ	08	49	34.0
		epPKPZ			40.0
		USCGS H 08 30 34.6			
		29.2 S 176.6 W			
		Kermadec Islands region			
		depth about 38 km			
1	Wr	iPZ	09	23	24
	Lh	ePZ		24	12
		esPZ			38
		iSN*		25	08
		isSN*E*			33
	Qt	iPZ	09	24	15.8d
		isPE*			43.0
		iSN*		25	20.0
		isSE*			42.0
		Mu Sec			
		PZ 0.08 0.5			
		△ = 5°.7			
	Kr	ePZ	09	25	36 ±
		H 09 2253			
		35.3 N 69.8 E			
		Hindukush			
		depth about 100 km			
		USCGS H 09 22 56.8			
		35.4 N 69.8 E			
		Hindukush			
		depth about 100 km			
		Mag: 4.8 (CGS), 5.1(Qt)			
1	Wr	ePZ	16	33	08.7
	Qt	ePZ		34	19.7d
		eSN		36	42.0
		Mu Sec			
		PZ 0.01 0.8			
		△ = 12°.5			
		USCGS H 16 31 28.6			
		39.1 N 77.5 E			
		Sinkiang Province			
		China			
		depth about 203 km			
		Mag: 4.0 (CGS), 3.9(Qt)			
1	Wr	iPZ	18	37	11.3
		iSZ			45.5
	Lh	ePZ			52
	Qt	iPZ		38	11.6d
		iSE		39	29.5
		Mu Sec			
		PZ 0.05 0.8			
		△ = 7°.4			
		H 18 36 20			
		37.0 N 71.8 E			

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Date	Station	Phase	h m s
		Hindukush	
		depth about 200 km	
		USCGS H 18 36 25.7	
		36.5 N 71.4 E	
		Hindukush	
		depth about 244 km	
		Mag : 4.3 (CGS),	
		4.5 (Qt)	
1	Qt	ePZ	19 19 12.5d
1	Qt	ePZ	23 32 32.5d
2	Qt	ePZ	04 17 49.5
		USCGS H 04 06 57.3	
		55.2 N 160.3 E	
		Kamchatka	
		depth about 33 km	
		Mag: 4.9 (CGS)	
2	Qt	ePKPZ	05 02 27.2
		epPKPZ	39.2
		USCGS H 04 43 30.9	
		29.7 S 177.1 W	
		Kermadec Islands	
		depth about 51 km	
2	Qt	ePZ	11 44 25.5 d
		epPZ	41.7
	Wr	ePZ	44
		USCGS H 11 35 51.4	
		5.8 S 105.0 E	
		Sumatra	
		depth about 91 km	
2	Wr	ePZ	13 13 16
	Qt	ePZ	14 17.5
		eSNE	16 29.4
2	Wr	iPZ	16 30 35 d
	Lh	iPZ	40 d
		epPZ	31 21
	Qt	iPZ	04.3
		iPcPZ	14.7
		ipPZ	42.9
		ePPZ	34 15.2
		epPPZ	52.7
		eSN*	41 05.0
		ePPZ	57 20.0
		Mu Sec	
		PZ 0.14 1.2	
		PH 0.07 1.2	
		SH 0.14 1.8	
		$\triangle = 83°.0$	
		USCGS H 16 18 55.6	
		53.2 N 171.7 W	
		Andrean of Islands	
		Aleutian Islands	
		depth about 142 km	
		Mag: $6\frac{1}{4}$–$6\frac{1}{2}$ (Pas),	
		$5\frac{1}{2}$ (Berk), 5.7(CGS),	
		5.8 (Qt)	
3	Wr	ePZ	01 44 36
	Qt	ePZ	45.5c
		USCGS H 01 33 52.8	
		9.2 S 123.9 E	
		Savu Sea	
		depth about 33 km	
3	Qt	ePKPZ	11 40 45.5
		USCGS H 11 21 49.0	
		29.6 S 177.2 W	
		Kermadec Islands region	
		depth about 48 km	
		Mag: 4.4 (CGS)	
3	Qt	ePZ	11 54 35.5
		USCGS H 11 44 56.9	
		8.2 S 112.7 E	
		Java	
		depth about 163 km	
3	Wr	ePZ	12 06 35
	Qt	ePZ	57.0
		USCGS H 11 58 07.2	
		19.1 N 121.4 E	
		Babuyan Islands	
		Philippine Islands	
		depth about 71 km	
		Mag : 4.0 (CGS)	
3	Qt	ePKPZ	15 07 41.0

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Date	Station	Phase	h	m	s
	Wr	ePKPZ			42
	Lh	ePKPZ			45
		USCGS H 14 47 55.5			
		55.4 S 128.2 W			
		South Pacific Ocean			
		depth about 33 km			
		Mag: 5.8 (CGS)			
3	Qt	ePZ	16	07	20.4
		USCGS H 15 54 51.7			
		61.1 N 148.1 W			
		Alaska			
		depth about 78 km			
		Mag: 5.7 (CGS)			
4	Qt	ePZ	13	52	13.5d
		USCGS H 13 43 20			
		21.2 N 119.5 E			
		South of Formosa			
		depth about 19 km			
		Mag: 4.2 (CGS)			
4	Lh	ePZ	21	05	44
	Qt	ePZ		06	24.5
4	Qt	ePZ	21	16	37.5
4	Qt	ePKPZ	22	19	59
		USCGS H 22 01 03.3			
		30.3 S 117.8 W			
		Kermadec Islands region			
		depth about 20 km			
		Mag : 4.3 (CGS)			
5	Lh	ePZ	01	01	21
	Qt	eP	01	02	04.6d
		USCGS H 00 51 54.7			
		38.7 N 142.0 E			
		Off east coast of Honshu			
		Japan			
		depth about 51 km			
5	Qt	ePZ	22	14	17.4
6	Wr	ePZ	11	31	14.1
	Lh	ePZ			25
	Qt	ePZ			41
		iPZ			41.8c
		iPcPZ			45.5
		eScS			42 03.5
	Ch	ePZ			31 42
		Mu Sec			
		PZ 0.08 1.2			
		PH 0.08 1.2			
		△ = 82°.0			
		USCGS H 11 19 23.3			
		63.4 N 149.5 W			
		Central Alaska			
		depth about 39 km			
		Mag: 5.5 (CGS), 5.7(Qt)			
6	Qt	ePZ	12	19	25.5
		ePcPZ			29.3
		epPZ			42.7
		USCGS H 12 07 09.5			
		63.6 N 149.5 W			
		Central Alaska			
		depth about 55 km			
		Mag: 4.5 (CGS)			
6	Qt	ePZ	16	36	07.8
		epPZ			24.5
		USCGS H 16 26 07.1			
		41.6 N 141.7 E			
		Near south coast of			
		Hokkaido, Japan			
		depth about 80 km			
		Mag: 4.7 (CGS)			
6	Lh	ePZ	17	50	40 d
		eSZ		52	01
	Wr	ePZ		51	04.7
	Qt	ePZ		52	04.8c
		epPZ			16.3
		isPZ			22.5
		eSN		54	32.0
	Kr	ePZ		52	33
		Mu Sec			
		PZ 0.09 1.5			

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Date	Station	Phase	h	m	s
		PH 0.09 1.5			
		△ = 13°.3			
		H 17 48 41.8			
		32.8 N 82.4 E			
		Western Tibet			
		depth about 30 km			
		USCGS H 17 48 53.3			
		33.6 N 82.8 E			
		Tibet			
		depth about 33 km			
		Mag: 5.3 (Qt)			
6	Qt	ePKPZ	18	21	13.5
		USCGS H 18 02 30.6			
		32.1 S 178.1 E			
		Kermadec Islands regions			
		depth about 197 km			
		Mag : 4.6 (CGS)			
6	Wr	iP	19	55	11
	Lh	eP		56	24
	Qt	eP			30.5
6	Qt	ePZ	21	48	03.0
		USCGS H 21 35 21.2			
		6.0 S 149.9 E			
		New Britain			
		depth about 49 km			
7	Qt	ePKPZ	04	16	17.0
		USCGS H 03 57 31.6			
		24.5 S 177.0 W			
		Tonga Islands region			
		depth about 114 km			
		Mag: 4.7 (CGS)			
7	Qt	iPZ	08	46	22.2c
		eSE		47	39.0
		Hindukush region			
7	Qt	ePZ	11	13	21.3
		USCCS H 11 03 28			
		70.3 N 13.6 W			
		Jan Mayen Islands region			
		depth about 71 km			
7	Wr	ePZ	11	25	40
	Qt	ePZ			58 d
		USCGS H 11 16 03.8			
		71.5 N 13.0 W			
		Jan Mayen Islands region			
		depth about 33 km			
		Mag: 4.6 (CGS)			
7	Qt	ePZ	13	14	15.4
		USCGS H 13 05 22.6			
		25.0 N 125.1 E			
		Ryukyu Islands region			
		depth about 125 km			
7	Qt	ePZ	15	16	13
7	Lh	ePZ	15	16	10
		esPZ			24
	Wr	ePZ	15	16	25
	Qt	ePZ			58.5
		eSN		24	37.0
		USCGS H 15 07 34.9			
		27.0 W 129.2 E			
		Ryukyu Islands region			
		depth about 33 km			
7	Lh	ePZ	15	39	42 d
	Qt	iP	15	40	06.5d
		iSN		50	12
		Mu Sec			
		PZ 0.03 0.8			
		△ = 83°6			
		USCGS H 15 28 01.8			
		53.7 N 170.1 W			
		Fox Islands			
		Aleutian Islands			
		depth about 202 km			
		Mag: 6.0 (CGS), 5.2 (Qt)			
7	Ch	ePZ	22	42	02
	Lh	iPZ		44	16

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Date	Station	Phase	h	m	s	
		ipPZ		44	33	
		esPZ			48	
		ePPZ		46	08	
		eS		50	52	
		esSZ		51	37	
	Kr	ePZ		44	18	c
	Wr	iPZ		44	43	
	Qt	iPZ			46.1	c
		iSN*		51	44.8	
		ePPZ	23	15	27.5	
		Mu Sec				
	PZ	0.20 1.0				
	PH	0.17 1.0				
		△ = 49°.1				
		USCGS H 22 36 03.4				
		4.9 S 103.2 E				
		Near southwest coast of				
		Sumatra				
		depth about 72 km				
		Mag: 6.1 (CGS), 6.0(Qt)				
8	Lh	iPZ	03	26	06	
	Wr	ePZ			24	
	Qt	ePZ			32.2	d
		eSNE		27	24.5	
		H 03 26 30				
		30.6 N 71.8 E				
		Near Leiah				
		West Pakistan				
		depth about 40 km				
8	Qt	eP	06	36	06.5	
		USCGS H 06 24 50.7				
		5.5 S 130.1 E				
		Banda Sea				
		depth about 33 km				
		Mag: 4.9 (CGS)				
8	Wr	ePZ	06	45	11	
	Qt	ePZ		46	14.8	
		eSNE		48	32.0	
		USCGS H 06 43 21.0				
		41.9 N 72.8 E				
		Kirghizia, S. S. R.				
		depth about 33 km				
		Mag: 4.7 (CGS)				
8	Qt	eP	12	05	54.5	
		USCGS H 11 53 21.3				
		4.2 S 152.2 E				
		New Britain region				
		depth about 158 km				
		Mag: 4.8 (CGS)				
8	Qt	ePZ	14	51	37.0	
	Wr	ePZ			41	
		USCGS H 14 38 27.0				
		27.7 N 44.3 W				
		North Atlantic Ocean				
		depth about 33 km				
		Mag: 5.0 (CGS)				
9	Lh	ePZ	00	06	49	
		eSN*		09	11	
	Wr	ePZ		07	34	
		eSN		10	45	
	Qt	ePZ		07	49	
		eSN		10	56	
		H 00 03 41				
		22.0 N 86.1 E				
		India				
		USCGS H 00 03 35.6				
		22.2 N 85.6 E				
		India				
		depth about 33 km				
9	Wr	ePZ	01	02	45	
		eSZ		03	07	
	Qt	ePZ			46.2	
		eSE		05	04.1	
		H 01 02 10				
		Hindukush region				
9	Qt	ePZ	01	49	06.1	

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Date	Station	Phase	h m s
9	Qt	ePZ	01 52 02.2
		USCGS H 01 39 08.6	
		71.2 N 12.7 W	
		Off east coast of Greenland	
		depth about 20 km	
9	Qt	iPKPZ	02 20 14.0
		USCGS H 02 02 25.1	
		17.7 S 178.7 W	
		Fiji Islands region	
		depth about 538 km	
		Mag: 4.9 (CGS)	
9	Qt	iPZ	10 16 13.0d
9	Qt	iPZ	10 40 51 d
		iSZ	41 23
	Qt	iPZ	54.0
		iSNE	43 14.3
		H 10 40 10	
		Hindukush	
9	Qt	ePZ	10 56 02.5
9	Qt	iPZ	12 39 00.4d
9	Qt	ePZ	12 40 15.5
9	Qt	ePZ	15 06 45.4
		USCGS H 14 54 04.5	
		4.0 S 151.0 E	
		Near New Britain region	
		depth about 33 km	
9	Qt	ePZ	15 47 02.5
		eSE	48 10.0
9	Lh	ePZ	18 50 39 d
		epPZ	54
	Wt	iPZ	51 02 d
	Qt	iPZ	24 d
		ipPZ	38.8
		Mu Sec	
		PZ 0.02 1.0	
		△ = 55.°4	
		USCGS H 18 41 54.2	
		10.5 N 122.6 E	
		Panay, Philipphine Islands	
		depth about 55 km	
		Mag: 4.3 (CGS), 5.0(Qt)	
9	Qt	ePZ	20 39.25.1
	Wr	ePZ	40.22
9	Wr	ePZ	21 36 17
	Qt	ePZ	37 28
		eSN	39 33
10	Wr	ePZ	08 00 09
	Lh	ePZ	54
	Qt	iPZ	01 27.3
		eSN	10 22.5
		Mu Sec	
		PZ 0.03 0.9	
		PH 0.03 0.9	
		MH 4.4 20	
		△ = 67°.9	
		USCGS H 07 50 30.2	
		9.2 S 125.0 E	
		Timor	
		depth about 33 km	
		Mag: 5.2 (CGS), 5.3(Qt)	
10	Lh	ePZ	09 04 17
	Wr	ePZ	59.7
	Qt	ePZ	38.2
		eSE	07 22.0
10	Lh	ePZ	11 50 35
	Wr	ePZ	50
	Qt	iPZ	51 10.8c
		epPZ	38.5
		Mu Sec	
		PZ 0.06 1.0	
		USCGS H 11 39 07.5	
		3.6 N 148.1 W	
		Caroline Islands region	
		depth about 108 km	
		Mag : 4.0 (CGS)	

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Date	Station	Phase	h m s
10	Qt	ePKPZ	18 52 07.5
		ipPKPZ	19.0
		USCGS H 18 32 30.6	
		36.4 S 73.3 W	
		Near coast of Central Chile	
		depth about 40 km	
		Mag: 4.4 (CGS)	
11	Qt	iPZ	09 43 26.7c
		ipPZ	38.3
		eSE	51 48.7
		Mu Sec	
		PZ 0.04 1.0	
		△ = 61°.7	
		USCGS H 09 33 10.1	
		9.9 S 116.2 E	
		South of Sumbawa	
		depth about 33 km	
		Mag: 5.4(Qt)	
11	Qt	ePZ	10 15 31.6
		USCGS H 10 04 36.9	
		46.8 N 155.5 E	
		Kurile Islands region	
		depth about 80 km	
		Mag : 4.6 (CGS)	
11	Qt	iPZ	10 17 21 d
		Mu Sec	
		PZ 0.01 0.9	
11	Qt	ePZ	13 15 04.5
		epPZ	12.6
		USCGS H 13 02 29.9	
		53.8 N 164.8 W	
		Fox Islands	
		Aleutian Islands	
		Mag: 4.3 (CGS)	
11	Qt	ePKPZ	17 04 01.4
		epPKPZ	09.5
		USCGS H 16 45 25.1	
		60.2 S 18.7 W	
		Sandwich Islands region	
		depth about 33 km	
11	Qt	ePZ	22 02 03.0
12	Lh	ePZ	00 42 26
	Wr	ePZ	43 04
	Qt	ePZ	52.5
		iPZ	54.5d
		iSN	45 49.3
	Kr	ePZ	00 44 26
		Mu Sec	
		PZ 0.013 0.5	
		△ = 10°.0	
		H 00 41 25	
		32.5 N 78.2 E	
		India	
		USCGS H 00 41 27.9	
		31.9 N 78.8 E	
		Northern India	
		depth about 33 km	
		Mag: 5.4 (CGS), 5.4(Qt)	
12	Qt	ePZ	08 58 02.0
12	Qt	iPKPZ	09 00 52.3d
		USCGS H 08 41 56.7	
		39.0 S 176.7 E	
		North Islands	
		New Zealand	
		depth about 108 km	
12	Lh	ePZ	13 49 57
	Qt	iPZ	13 50 23.4c
		epPZ	35.7
		Mu Sec	
		PZ 0.01 1.0	
		△ = 82°.4	
		USCGS H 13 38 03.0	
		51.6 N 175.0 W	
		Andreanof Islands	
		Aleutian Islands	

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Date	Station	Phase	h	m	s
		depth about 33 km			
		Mag: 4.2 (CGS), 4.7(Qt)			
12	Qt	ePZ	16	48	30.7
12	Lh	ePZ	19	57	30
		epPZ			37
	Qt	ePZ		57	30.5
		USCGS H 19 47 54.8			
		79.6 N 5.1 E			
		Svalbard region			
		depth about 33 km			
		Mag: 5.3 (CGS)			
12	Qt	ePKPZ	21	07	13.5
		epPKPZ			27.5
		USCGS H 20 48 16.7			
		16.7 S 173.7 W			
		Tonga Islands region			
		depth about 33 km			
		Mag: 5.0 (CGS)			
13	Lh	ePZ	02	33	49
	Wr	iPZ	02	33	56 c
	Qt	iPZ		34	18 c
		Mu Sec			
		PZ 0.01 0.8			
13	Wr	eX	02	39	57
	Qt	iPKPZ		40	11
		epPKPZ			44.5
		ePKSE		43	50.0
	Lh	ePKP		40	14 d
	Kr	ePKPZ			17
		ePKSZ		43	22
		USCGS H 02 20 57.5			
		6.2 S 76.5 W			
		Central Peru			
		depth about 125 km			
		Mag: $6\frac{3}{4}$–7(Pas),			
		6.3 (CGS)			
13	Qt	iPZ	13	55	53.9d
		iSE		57	29.0
13	Lh	ePZ	14	42	18
		epPZ			32
	Wr	iPZ			38 d
	Qt	iPZ			53 d
		ipPZ		43	06 d
		eSZ*		52	15.5
		USCGS H 14 31 21.0			
		3.4 S 135.4 E			
		Near north coast of			
		New Guinea			
		depth about 31 km			
		Mag: 5.6 (CGS)			
13	Wr	iPZ	14	50	10 d
		iSZ			36
	Lh	ePZ			53
		eSNE		51	50
	Qt	iPZ			11.3
		iSE		52	25.0
		Mu Sec			
		PZ 0.02 0.5			
		$\triangle = 6°.6$			
		H 14 49 37			
		36.5 N 71.0 E			
		Hindukush			
		depth about 200 km			
		Mag: 4.6 (Qt)			
13	Wr	ePZ	22	12	27
		iSZ			59
	Qt	ePZ		13	25.5
		iSE		14	45.5
		Mu Sec			
		PZ 0.008 0.5			
		$\triangle = 7°.0$			
		Mag: 3.7(Qt)			
		H 22 11 42			
		Hindukush region			
		depth about 300 km			

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Date	Station	Phase	h	m	s	
14	Qt	ePZ	13	27	11	c
		USCGS H 13 14 21.8				
		5.4 S 154.2 E				
		New Britain				
		depth about 142 km				
		Mag: 5.2 (CGS)				
14	Wr	ePZ	17	40	42	
		eSZ		41	19	
	Qt	iPZ			42.3	c
		eSN		42	58.0	
		Hindukush region				
		depth about 200 km				
14	Qt	ePZ	15	14	28.8	d
15	Qt	ePZ	07	40	35.3	
15	Wr	ePZ	08	48	44	
	Qt	ePZ		49	34.3	
		eSE		51	06.8	
15	Qt	iP	15	12	10.7	d
		USCGS H 15 01 25.8				
		4.0 S 129.0 E				
		Ceram region				
		depth about 148 km				
		Mag: 4.4 (CGS)				
15	Lh	ePZ	20	29	28	d
		esPZ			46	
	Qt	iPZ		30	05	d
		Mu Sec				
		PZ 7.4 1.0				
		USCGS H 20 19 21				
		0.9 S 128.0 E				
		Halmahera region				
		depth about 33 km				
		Mag: 4.5 (CGS)				
15	Lh	ePZ	21	27	01	
	Wr	ePZ		27	33	
	Qt	cP		28	02	
15	Qt	cPKP	23	58	25.5	d
		epPKP			38.5	
		USCGS H 23 39 27.3				
		18.3 S 173.7 W				
		Tonga Islands region				
		depth about 33 km				
		Mag: 5.0 (CGS)				
16	Wr	ePZ	00	25	29	
	Qt	ePZ		26	37.2	±
		eSE		27	59.0	
		H 00 24 51				
		Hindukush region				
16	Ch	P	01	38	13	
	Lh	ePZ		39	26	
		ipPZ			39	
		iPcPZ		40	09	
		ePPZ		41	46	
	Wr	ePZ		39	47	
	Qt	ePZ		40	02	
		iPZ			05.8	c
		iSN*E*		48	51.0	
		Mu Sec				
		PZ 0.11 0.8				
		△ = 65°.6				
		USCGS H 01 29 19.4				
		0.8 S 128.0 E				
		Halmahera region				
		depth about 33 km				
		Mag: 7 (Pas), 6.1(CGS),				
		6.0 (Qt)				
16	Lh	ePZ	02	05	15	
		epPZ			25	
		ePPZ		07	32	
		eSZ		13	30	
		esSZ			48	
	Wr	iPZ		05	41	d
	Qt	ePZ			53.0	
		USCGS H 01 55 10.9				
		0.7 S 128.0 E				

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Date	Station	Phase	h	m	s
		depth about 32 km			
		Halmahera region			
		Mag; 6.0 (CGS)			
16	Lh	ePZ	03	42	30
	Qt	iPZ		43	07.5d
		Mu Sec			
		PZ 0.009 0.8			
		△ = 65°.5			
		USCGS H 03 32 25.4			
		1.1 S 127.9 E			
		Halmahera region			
		depth about 33 km			
		Mag; 4.4 (CGS) 4.7(Qt)			
16	Qt	iPZ	03	57	14.7d
		Mu Sec			
		PZ 0.009 0.8			
		△ = 65°.6			
		USCGS H 03 46 32.5			
		0.9 S 127.8 E			
		Halmahera region			
		depth about 33 km			
		Mag: 4.4 (CGS) 4.7(Qt),			
16	Qt	ePZ	04	08	17.1
16	Qt	ePZ	04	14	49.0
		Mu Sec			
		PZ 0.008 0.8			
		USCGS H 04 04 04.7			
		0.3 S 127.6 E			
		Halmahera region			
		depth about 33 km			
		Mag: 4.7 (Qt)			
16	Wr	ePZ	04	20	42
	Qt	ePZ			56.5d
		USCGS H 04 10 16.3			
		0.8 S 128.9 E			
		Halmahera region			
		depth about 33 km			
16	Qt	ePZ	05	29	16.5
16	Qt	ePZ	05	30	57.5
16	Qt	ePZ	05	41	40.0
16	Qt	ePZ	05	46	55 d
16	Qt	ePZ	08	15	28 d
16	Lh	ePZ	09	20	39
	Wr	ePZ		21	01
	Qt	ePZ			15.5d
		Mu Sec			
		PZ 0.011 0.9			
		△ = 66°.1			
		USCGS H 09 10 29.0			
		0.9 S 128.5 E			
		Halmahera region			
		depth about 33 km			
		Mag : 4.4 (CGS), 4.8 (Qt)			
16	Lh	ePZ	12	13	46
	Wr	iPZ		14	09 d
	Qt	eSE*		23	06.0
		Mu Sec			
		PZ 0.137 1.3			
		△ = 65°.5			
		1.0 S 127.6 E			
		Halmahera region			
		depth about 33 km			
		Mag : 4.7 (CGS), 5.7 (Qt)			
16	Qt	ePZ	15	15	06.3d
16	Qt	iPZ	18	32	33 c
16	Qt	ePZ	18	51	34.8c
		ipPZ			49.7
		eSN*		55	17.0
		Mu Sec			
		PZ 0.019 0.9			
		△ = 19°.9			
	Wr	ePZ	18	52	01
	Lh	ePZ			30
		USCGS H 18 47 08.8			
		35.4 N 44.3 E			

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Date	Station	Phase	h	m	s
		Iraq			
		depth about 104 km			
		Mag : 5.2 (CGS), 4.6 (Qt)			
16	Qt	ePZ	19	12	16.7
16	Qt	ePZ	19	33	35.3
16	Lh	ePZ	20	11	02
	Wr	ePZ			24
	Qt	ePZ			35.7
		Mu Sec			
		PZ 0.006 0.9			
		$\triangle = 66°.6$			
		USCGS H 20 00 47.2			
		1.3 S 128.9 E			
		Halmahera region			
		depth about 33 km			
		Mag : 4.6 (CGS), 4.6 (Qt)			
16	Qt	ePZ	00	06	42.5
17	Qt	ePKPZ	00	29	40 ±
		$ePKP_2Z$		31	09.5
		USCGS H 00 09 34.9			
		34.2 S 106.3 W			
		Easter Islands region			
		depth about 33 km			
		Mag : 4.5 (CGS)			
17	Lh	ePZ	01	20	19 ±
	Wr	ePZ		20	37
	Qt	iPZ			51.3d
		eSE*		29	39.0
		USCGS H 01 10 16.6			
		0.6 S 128.1 E			
		Halmahera region			
		depth about 89 km			
17	Qt	ePKPZ	02	30	10.2
		epPKPZ			24.2
		USCGS H 02 11 26.1			
		19.6 S 178.6 E			
		Fiji Islands			
		depth about 33 km			
		Mag: $6\frac{1}{2}$-$6\frac{3}{4}$ (Pas),			
		6 (Berk), 5.9 (CGS)			
17	Qt	ePZ	04	13	51.5
		USCGS H 04 03 05.9			
		1.0 S 128.3 E			
		Halmahera region			
		depth about 33 km			
		Mag; 4.6 (CGS)			
17	Qt	ePKPZ	08	42	12.2
		iPKPZ			18 d
		USCGS H 08 23 34.0			
		15.7 S 174.1 W			
		Samoa Islands region			
		depth about 124 km			
		Mag: 5.1 (CGS)			
17	Qt	ePZ	10	30	49.7d
		USCGS H 10 20 08			
		1.1 S 128.0 E			
		Halmahera region			
		depth about 33 km			
17	Wr	iPZ	10	45	58 d
		iSZ		46	21
	Lh	ePZ		46	42
	Qt	ePZ			57.0
		iSE		48	12.0
		H 10 45 20			
		36.5 N 71.0 E			
		Hindukush			
		depth about 150 km			
		USCGS H 10 45 21.1			
		36.2 N 70.7 E			
		Hindukush			
		depth about 140 km			
17	Qt	ePZ	17	14	20.5
		epPZ			44.5
		USCGS H 17 03 02.4			
		3.5 S 135.4 E			

International Seismological Centre

Date	Station	Phase	h m s
		Western New Guinea	
		depth about 39 km	
		Mag: 5.5 (CGS)	
17	Qt	ePKPZ	18 43 13.0
		epPKPZ	25.2
		USCGS H 18 24 27.6	
		54.9 S 28.2 W	
		Sandwich Islands	
		depth about 26 km	
		Mag : 5.3 (CGS)	
18	Qt	ePZ	11 32 48.0
18	Lh	ePZ	18 27 30
	Qt	ePZ	28 22.0
18	Qt	ePZ	18 37 46.3c
18	Qt	ePZ	19 52 20.3
18	Qt	ePZ	20 52 49.6
18	Lh	ePZ	22 11 20 d
	Wr	ePZ	41
	Qt	iPZ	56.9d
		USCGS H 22 01 07.7	
		1.3 S 128.8 E	
		Halmahera region	
		depth about 33 km	
		Mag : 4.7 (CGS)	
18	Qt	ePS	22 14 12.0
18	Lh	ePZ	22 20 05
	Wr	ePZ	30
	Qt	ePZ	41 ±
		USCGS H 22 09 56.9	
		1.7 S 128.1 E	
		Halmahera region	
		depth about 63 km	
19	Wr	ePZ	02 54 57.4d
		iSZ	55 27.6
	Qt	iPZ	02 55 55.5d
		iPZ	56 c
		iSE	57 14.7
		H 01 54 14	
		Hindukush region	
19	Wr	ePZ	03 57 54
	Qt	ePZ	58 01.2
		USCGS H 03 47 22.7	
		9.8 S 120.5 E	
		Sumba	
		depth about 33 km	
		Mag: 4.9 (CGS)	
19	Qt	ePZ	06 20 04.7
19	Qt	ePKPZ	06 39 48.5
		USCGS H 06 20 15.3	
		33.1 S 69.2 W	
		Mendoza Province	
		Argentina	
		depth about 87 km	
		Mag : 4.6 (CGS)	
19	Qt	ePZ	07 37 08.0
19	Ch	P	07 38 37
	Lh	ePZ	39 45
		eSN*	43 15
	Wr	iPZ	40 05
	Qt	ePZ	51
		iP!Z	53.2
		iSN*	45 20.0
	Kr	ePZ	41 11.0
		USCGS H 07 35 23.7	
		35.8 N 96.9 E	
		Tsinghai Province	
		China	
		depth about 33 km	
		Mag : 7 (Pas), $6\frac{3}{4}$-7 Berk,	
		6.1 (CGS)	
19	Qt	ePKPN	16 36 29.5
		ePKSN	39 43.3
	Wr	ePKPZ	36 38
	Lh	ePKPZ	38

International Seismological Centre

Date	Station	Phase	h	m	s
		USCGS H 16 17 54.8			
		58.8 S 26.0 W			
		Sandwich Islands region			
20	Lh	ePZ	01	18	11
	Wr	ePZ			32
	Qt	ePN			48.5
		eXN			58.5
		USCGS H 01 07 57.8			
		1.2 S 128.9 E			
		Halmahera region			
		depth about 28 km			
		Mag: 5.1 (CGS)			
20	Qt	ePZ	06	49	47.7
20	Qt	cPZ	07	14	44
		USCGS H 07 03 45.1			
		52.4 N 160.0 E			
		Off coast of Kamchatka			
		depth about 33 km			
		Mag: 4.4 (CGS)			
20	Qt	ePKPZ	17	14	51 d
		USCGS H 16 55 53.6			
		22.3 S 64.8 W			
		Bolivia Argentina border			
		depth about 271 km			
		Mag: 4.2 (CGS)			
20	Wr	ePZ	20	42	39
	Qt	ePZ		43	14.8
		USCGS H 20 32 16.2			
		52.3 N 159.5 E			
		Off coast of Kamchatka			
		depth about 33 km			
		Mag: 5.0 (CGS)			
20	Wr	iPZ	22	45	06 d
		iSZ			34
	Lh	cPZ			47
		cSZ		46	52
		iPZ			09.7d
		H 22 44 23			
		36.5 N 71.0 E			
		Hindukush			
		depth about 200 km			
21	Qt	ePZ	01	13	36.3
21	Wr	iPZ	04	46	36 c
	Qt	ePZ		47	09.2c
		epPZ			19.9
		eSN*		54	12.0
		USCGS H 04 38 21.7			
		24.1 N 122.1 E			
		Near coast of Formosa			
		depth about 33 km			
		Mag: 5·2 (CGS)			
21	Wr	iPZ	06	17	01 d
		iSZ			29
	Qt	iPZ	06	18	04·2 d
		eSE		19	18·0
		Hindukush region			
21	Lh	ePZ	09	25	37
	Wr.	ePZ		25	53·7
	Qt	ePZ		26	26·6
		USCGS H 09 17 05·2			
		26·8 N 128·5			
		Ryukyu Islands region			
		depth about 28 km			
21	Lh	ePZ	10	50	21 ±
	Wr	ePZ		50	37
	Qt	ePZ			53·3
		eSZ	11	01	17·0
		USCGS H 10 38 30·0			
		3·2 S 146·9 E			
		Bismarck Sea			
		depth about 33 km			
		Mag: 6·0 (CGS)			
21	Lh	ePZ	21	28	06
21	Qt	ePZ	21	28	42·3
		epPZ			49·2

International Seismological Centre

Date	Station	Phase	h	m	s	
		USCGS H 21 17 58·5				
		0·9 S 128·1 E				
		Halmahera region				
		depth about 33 km				
		Mag: 4·6 (CGS)				
21	Lh	ePZ	23	27	03	
	Qt	ePZ	23	27	39·5	
		USCGS H 23 16 50·5				
		1·5 S 128·7 E				
		Halmahera region				
		depth about 33 km				
22	Lh	iPZ	00	51	16	c
		iSNE			19·9	
	Wr	iPZ		52	03	c
	Qt	ePZ			41·5	±
		iSN		53	50·2	
		H 00 51 11				
		31·6 N 73·9 E				
		About 10 miles west of				
		Lahore, Pakistan				
		depth about 33 km				
		USCGS H 00 51 09·0				
		31·5 N 74·0 E				
		West Pakistan				
		Felt Lahore				
		depth about 37 km				
		Mag: about 4.0 (Qt)				
		From felt reports				
22	Qt	ePZ	01	59	09	
		USCGS H 01 48 09.0				
		7·0 S 129·2 E				
		Banda Sea				
		depth about 135 km				
		Mag: 5·3 (CGS)				
22	Qt	ePZ	11	45	40	
22	Qt	eXZ	15	45	43	
22	Qt	ePZ	19	33	36	
22	Wr	ePZ	23	57	13	
		iSZ			46	
	Qt	ePZ			07·5	
		iSE		59	25·5	
		H 23 56 30				
		Hindukush region				
23	Wr	iPZ	01	06	12	d
		iSZ			45	
	Qt	ePZ		07	11	
		iSE			28	
		Hindukush region				
23	Qt	ePZ	06	44	51	
23	Ch	eP	09	57	02	
	Lh	eP	10	00	09	
		epPZ			17	
		ePPZ			43	
	Wr	ePZ			35·3	
		eSN		05	06	
	Qt	iPZ		01	06·3	d
		epPZ			19·0	
		eSE*		05	53	
		esSE*		06	20·5	
		USCGS H 09 55 06·8				
		25·7 N 99·5 E				
		Yunnan Province, China				
		depth about 33 km				
		Mag: 5·1 (CGS)				
23	Lh	eP	11	46	04	
	Wr	ePZ			25	
	Qt	ePZ			48·5	
		USCGS H 11 37 03·1				
		12·2 N 125·7 E				
		Samar, Philippine Islands				
		depth about 30 km				
23	Lh	ePZ	19	04	06	=
		USCGS H 18 52 24·4				
		5·1 S 146·1 E				
		Near northeast coast of				
		New Guinea				

International Seismological Centre

Date	Station	Phase	h	m	s	
		depth about 134 km				
23	Wr	iPZ	19	43	32	d
		iSE		44	02	
	Qt	ePZ			37·5	
		iSZ		45	57·2	
		Hindukush region				
23	Lh	iPZ	20	11	56·5	c
		iSE			59·9	
	Wr	ePZ		12	43	
	Qt	e(P)Z		13	25·7	
		eSE		14	30	
		H 20 11 51				
		31·6 N 73·9 E				
		About 10 miles west of Lahore				
		depth about 33 km				
		Felt Lahore				
		Lahore after shocks				
23	Qt	ePZ	23	05	30·7	
	Wr	epZ			36	
24	Lh	ePZ	06	01	49	
	Wr	ePZ		02	10	
	Qt	iPZ			25·5	
		USCGS H 05 51 44·1				
		1·1 S 127·2 E				
		Halmahera region				
		depth about 33 km				
		Mag: 4·8 (CGS)				
24	Ch	ePZ	13	38	55	
	Lh	ePZ		40	30	
		esPZ			46	
	Wr	ePZ		41	01	
	Qt	ePZ			34·2	d
		epPZ			47·0	
		eSN*		49	13·0	
		USCGS H 13 32 12·2				
		27·0 N 128·8 E				
		Ryukyu Islands Region				
		depth about 33 km				
		Mag: 5·1 (CGS)				
24	Wr	iPZ	20	31	46·0	
		iSZ		32	14	
	Lh	ePZ			27	d
		iSNE		33	26	
	Qt	ePZ		32	49·5	d
		iSE		33	06·5	
		H 20 31 12				
		35·9 N 70·9 E				
		Hindukush				
		depth about 100 km				
		USCGS H 20 31 08·9				
		36·3 N 71·4 E				
		Hindukush region				
		depth about 125 km				
24	Qt	ePKPZ	22	00	33	
		epPKPZ		03	12·5	
		USCGS H 21 42 49·0				
		20·8 S 179·1 W				
		Fiji Islands region				
		depth about 603 km				
		Mag: 5·1 (CGS)				
24	Qt	ePZ	23	24	51·5	
				26	33·3	
25	Qt	ePZ	04	38	42·8	
	Wr	ePZ		39	25	
25	Ch	P	08	19	01	
	Wr	iPZ		21	24	d
	Kr	ePZ			48	d
		eSE		28	59	
	Qt	iPZ		21	56·5	d
		ipPZ		24	15·5	
		iSN		29	13·9	
		USCGS H 08 12 57·2				
		4·7 N 122·4 E				

International Seismological Centre

Date	Station	Phase	h	m	s	
		Celebes Sea				
		depth about 610 km				
		Mag: 5·5 (CGS)				
25	Qt	ePZ	16	06	48·8	
25	Kr	ePZ	11	14	14	
	Qt	ePZ	11	15	05·2	
		USCGS H 11 09 29·5				
		4·3 N 62·4 E				
		Maldive Islands region				
		depth about 33 km				
25	Wr	iPZ	12	14	43	d
	Lh	eSN		16	47	
	Qt	ePZ		15	29·8	
		eSE		16	37·5	
		H 12 14 00				
		depth about 33 km				
		35·8 N 69·0 E				
		Hindukush				
		USCGS H 12 14 01·1				
		35·8 N 69·6 E				
		depth about 210 km				
		Hindukush				
25	Ch	P	16	43	59	
	Wr	ePZ		46	31	
	Kr	ePE			32	±
	Qt	iPZ			45.5	d
		eSN		55	38.0	
		USCGS H 10 25 56.2				
		1.3 S 128.7 E				
		Halmahera region				
		depth about 33 km				
		Mag: 5.3 (CGS)				
25	Qt	ePKPZ	18	08	35.3	d
		USCGS H 17 50 25.3				
		21.6 S 178.0 W				
		Fiji Islands region				
		depth about 380 km				
		Mag: 5.0 (CGS)				
25	Wr	iPZ	19	31	27	d
		iSZ			55	
	Qt	iPZ		32	24.7	d
		iSE		33	36	
		H 19 30 52				
		Hindukush region				
		depth about 100 km				
26	Wr	iPZ	00	32	59	d
		iSZ		33	32	
	Qt	ePZ		33	58.5	
		iSE		35	18.5	
		H 00 32 14				
		Hindukush region				
		depth about 60 km				
26	Qt	ePZ	13	25	22	d
26	Qt	ePZ	15	37	59.2	
		epPZ			48.0	
		USCGS H 15 22 51.3				
		64.4 N 148.3 W				
		Central Alaska				
		depth about 139 km				
		Mag: 4.3 (CGS)				
26	Qt	ePKPZ	17	03	25	
		epPKPZ		04	03	
	Lh	ePKPZ		03	36	
		USCGS H 16 44 12				
		18.1 S 69.0 W				
		depth about 110 km				
		Peru Chile border				
		Mag: 4.7 (CGS)				
26	Qt	ePZ	17	06	14.0	
	Wr	ePZ			30	
26	Lh	eP	23	52	59	
	Wr	ePZ		53	19	c
	Qt	ePZ			50.3	
		epPZ		54	02.5	
		USCGS H 23 45 01.2				
		24.1 N 122.5 E				

International Seismological Centre

Date	Station	Phase	h	m	s	
		Off east coast of Formosa				
		depth about 33 km				
		Mag: 4.9 (CGS)				
27	Qt	ePZ	04	05	38.7	
		iSE		06	04.5	
	Wr	ePZ			21	
		H 04 05 06				
27	Ch	ePZ	08	50	53	
		eSN		57	16	
	Lh	ePZ		53	06	
		esPZ			22	
	Wr	ePZ			27	
	Kr	ePZ			40	±
	Qt	iPZ			43.2d	
		eSN*	09	02	30.0	
		USCGS H 08 42 58				
		0.6 S 128.4 E				
		Halmaheraregion				
		depth about 33 km				
		Mag: 4.9 (CGS)				
27	Wr	ePZ	11	19	39	
	Qt	ePZ			55.8	
27	Qt	ePKPZ	19	49	13.6	
	Wr	ePKPZ			25.7	
		USCGS H 19 29 43.7				
		30.3 S 70.3 W				
		Central Chile				
		depth about 59 km				
		Mag: 4.7 (CGS)				
27	Wr	ePZ	21	15	33	
		eSZ		16	01	
	Qt	ePZ	21	16	38.2d	
		iSE		18	00.0	
		H 21 14 55				
		Hindukush region				
		depth about 100 km				
28	Ch	ePZ	01	59	05	
		eSNE	02	05	30	
	Lh	eP	01	18		±
	Wr	ePZ			33	
	Qt	ePZ			53.5d	
		USCGS H 01 51 06.8				
		1.1 S 128.6 E				
		Halmahera region				
		depth about 26 km				
28	Qt	ePZ	04	14	25.5	
		USCGS H 04 05 05.5				
		30.9 N 131.1 E				
		Southern Kyushu				
		Japan				
		depth about 61 km				
28	Wr	ePnZ	04	34	12	
		eSnN		35	06	
	Qt	ePnZ			15.0	
		ePgZ		36	06.0	
		eSnE		37	01.5	
		eSgE		38	05.5	
		H 04 32 59				
28	Qt	ePZ	17	39	07.5	
		USCGS H 17 28 20				
		0.6 S 128.5 E				
		Halmahera				
		depth about 33 km				
28	Qt	ePZ	19	32	50.7	
		eSE		33	08.0	
28	Wr	ePZ	19	50	47	
	Lh	eP		51	28	
		eS		52	27	
	Qt	iPZ!		51	50.7d	
		iSE		53	09.3	
	Kr	ePZ		52	56	±
		H 19 50 16				
		36.5N 71.7 E				
		Hindukush				
		depth about 150 km				
		USCGS H 19 50 11.4				

Major Shocks
International Seismological Centre

Date	Station	Phase	h	m	s	
		36.1 N 71.3 E				
		Hindukush				
		depth about 150 km				
		Mag: 4.8 (CGS)				
29	Qt	eP	05	12	15.5	
		USCGS H 05 03 37.2				
		23.9 N 121.6 E				
		Northern Luzon				
		Philippine Islands				
		depth about 118 km				
		Mag: 4.3 (CGS)				
29	Qt	ePKPZ	15	10	35.2	
		ePSN		21	34.0	
		USCGS H 14 51 52.4				
		63.9 S 159.5 E				
		Balleny Islands region				
		depth about 93 km				
		Mag: 5.9 (CGS)				
29	Wr	iPZ	21	55	45	
	Lh	ePZ			49	c
		ePcPZ		56	02	
		eSN*	22	05	20	
	Qt	iPZ	21	56	18.0	
		eSN*	22	06	15	
	Kr	eP	21	56	46	
		USCGS H 21 44 17.1				
		51.4 N 178.6 E				
		Andreanof Islands				
		Aleutian Islands				
		depth about 60 km				
		Mag: 6 (Pas), 5-5¼ (Berk),				
		6 (Pal), 5.6 (CGS)				
30	Qt	iPZ	00	48	05.5c	
		ipPZ			18.2	
		USCGS H 00 36 03.0				
		51.3 N 178.5 E				
		Andreanof Islands				
		Aleutian Islands				
		depth about 66 km				
		Mag: 4.6 (CGS)				
	Kr	ePZ	01	09	01	
		ePcPZ			38	
		eSE		17	38	
30	Ch	ePZ	01	06	19	
		eSE		12	45	
	Lh	ePZ		08	29c	
		epP			40	
		ePcPZ		09	13	
	Kr	ePZ		09	02	
	Qt	ePZ			05	
		iPZ			06.3c	
		eS		18	00.0	
		USCGS H 00 58 18.3				
		0.7 S 129.0 E				
		Halmahera region				
		depth about 33 km				
		Mag: 6¾ (Pas), 6½ (Pal),				
		5.6 (CGS)				
30	Qt	ePZ	01	38	32	
30	Qt	iPZ	03	30	52	c
		USCGS H 03 18 52.1				
		51.4 N 179.1 E				
		Rat Islands				
		Aleutian Islands				
		depth about 50 km				
		Mag: 4.5 (CGS)				
30	Wr	ePZ	03	37	33	
	Lh	ePZ			38	
	Qt	iPZ		38	06.2	
		USCGS H 03 26 04.2				
		51.2 N 178.6 E				
		Rat Islands				
		Aleutian Islands				
		depth about 50 km				
		Mag: 4.9 (CGS)				

International Seismological Centre

Date	Station	Phase	h	m	s
30	Wr	ePZ	06	50	57
		eSZ		51	46
	Lh	eP			38
	Qt	eP		52	05.6
		eS		53	46.5
30	Lh	ePZ	07	19	27
	Qt	ePZ			56 ±
		USCGS H 07 07 55.9			
		51.6 N 178.4 E			
		Rat Islands			
		Aleutian Islands			
		depth about 64 km			
		Mag: 51.1 (CGS)			
30	Qt	ePZ	09	58	39.0
30	Qt	ePZ	10	10	13.3
	Wr				51
30	Lh	ePZ	10	26	39
	Wr	ePZ		27	05
	Qt	iPZ			19.5c
		eSZN		32	32.5
		USCGS H 10 20 54			
		10.6 N 94.4 E			
		Andaman Islands region			
		depth about 33 km			
30	Qt	ePZ	13	23	31.5
30	Qt	ePZ	13	32	34.5
30	Qt	ePKPZ	19	02	36.1
	Wr	ePKPZ			41
	Lh	ePKP			50
		USCGS H 18 43 14.0			
		8.2 S 79.9 W			
		Near coast of Peru			
		Mag: 4.8 (CGS)			

International Seismological Centre

Date	Phase	h m s
	WARSAK	
3	ePZ	04 49 33.5
	eSZ	50 03.2
3	iPZ	23 57 22.7
	iSZ	49.4
4	ePZ	04 04 48.3
	eSZ	05 18.0
4	ePZ	10 08 15.0
5	ePZ	06 47 46.8
	eSZ	48 23.9
5	ePZ	22 26 33.1
	eSZ	27 00.4
7	ePZ	15 16 25.4
7	ePN	22 51 43.2
	eSN	54 29.0
8	ePZ	06 26 23.8
8	ePZ	07 30 27.3
	eSZ	48.1
8	ePZ	12 54 17.0
	eSZ	47.2
8	ePZ	12 54 17.8
	eSZ	41.0
10	ePZ	14 17 28.0
	eSZ	18 05.6
11	ePZ	13 07 39.0
	eSZ	08 24.2
14	ePZ	08 33 36.6
14	ePZ	11 33 14.8
15	ePZ	18 22 33.5
16	iPZ	22 10 47.5
	iSZ	11 06.0
17	ePZ	02 30 59.8
17	ePZ	20 04 36.0
	iSZ	46 21.1
18	ePZ	14 18 56.1
	eSZ	19 28.6
19	ePZ	10 52 10.3
	eSZ	51.6
20	ePZ	01 18 32.3
21	ePZ	06 31 38.9
	eSZ	32 09.1
22	ePZ	14 43 58.7
22	ePZ	17 05 31.1
23	ePZ	02 57 05.2
23	ePZ	08 04 14.6
	eSZ	49.8
24	ePZ	08 11 22.4
24	ePZ	19 00 40.5
	eSZ	01 04.2
26	ePZ	04 01 51.2
	eSZ	02 21.5
26	ePZ	11 29 38.4
	eSZ	30 02.3
26	ePZ	12 37 42.4
	eSZ	38 53.5
27	iPZ	10 20 51.5
	iSZ	21 23.1
27	ePZ	22 32 08.8
	eSZ	40.1
28	ePZ	02 01 33.2
28	ePZ	10 56 00.8
28	ePZ	14 09 58.9
	eSZ	10 40.6
28	ePZ	18 38 14.2
	eSZ	49.1
29	iPZ	02 06 42.3
	iSZ	07 08.9
30	ePZ	01 38 35.7
	eSZ	39 04.2
30	ePZ	07 16 55.4
	eSZ	17 30.9
30	ePZ	17 51 29.2
	LAHORE	
1	eXZ	16 33 51
1	eXZ	16 35 44
2	e(P)Z	11 44 17

International Seismological Centre

Date	Phase	h	m	s	
2	eXZ	13	12	49	
3	e(P)Z	01	44	13	
3	e(P)Z	11	54	05	
6	eXZ	21	47	32	
7	ePZ	15	16	10	
	esPZ			24	
7	ePZ	15	39	42	d
9	eXZ	15	07	36	
9	eXZ	21	38	24	
10	ePZ	11	50	35	
10	eXZ	14	18	59	
10	eXZ	18	52	23	
10	e(P)Z	10	14	55	
13	eXZ	24	14	03	
14	e(P)Z	19	08	03	
14	e(P)Z	20	46	17	
15	ePKPZ	06	00	13	
	epPKPZ			42	
16	eXZ	00	25	14	
16	e!PZ	01	47	11	d
	epPZ			18	
	ePcPZ			55	
	e(S)Z		55	34	
16	ePZ	05	28	39	
	e!PZ		30	21	
16	ePZ	18	52	30	
19	ePZ	01	39	05	
20	ePKPZ	17	15	00	d
22	eXZ	23	57	55	
	eXZ		58	53	
23	ePZ	02	57	02	
	epPZ			26	
23	ePZ	19	44	13c	
	e(S)Z		45	11	
23	e(P) Z	23	06	23	
24	eXZ	16	08	32	
26	eXZ	15	39	07	
27	eXZ	11	19	17	

Minor Shocks

Date	Phase	h	m	s	
	eXZ	21	17	11	
	iXE			14	
30	eXZ	01	37	55	
30	ePZ	07	16	58	

KARACHI

3	ePgZ	20	51	31.0	
	eSgZ			46.5	
9	eXZ	00	12	20.4	
10	ePZ	08	01	11.5	
13	ePKPZ	02	40	16.8	
	e(PKS)Z		43	26.6	
22	eXZ	00	54	54.0	
	eSE		55	53.1	
27	ePgE	16	38	24.0	
	iSgE			38.8	
28	ePZ	18	16	04.9	
	eSE			30.3	

CHITTAGONG

1	ePZ	09	27	51	
	eSN		31	57	
2	eXZ	11	40	32	
2	ePZ	16	30	31	
5	eXZ	06	55	18	
6	eXZ	02	42	22	
6	eXZ	08	31	12	
6	ePZ	12	19	25	c
7	eXZ	23	16	04	
8	eXZ	06	37	21	
9	ePZ	00	05	00	c
	eSNE		06	04	
11	eXZ	01	28	45	
11	eXZ	03	06	29	
	eSNE	09	21	10	
11	eXZ	10	14	08	
11	eXZ	11	49	23	
11	eXZ	13	14	07	

International Seismological Centre

Date	Phase	h	m	s		Date	Phase	h	m	s
12	iXZ	00	50	38		16	eXZ	05	47	58
12	eXZ	04	25	47		16	ePZ	12	11	34
12	ePZ	13	49	44		16	eXZ	19	00	17
13	iPKPZNE	02	40	45	d	21	eXZ	10	49	11
	ePKP2Z		41	18		22	eXZ	01	58	26
	epPKP2ZE			54		23	eXZ	02	56	56
	ePPZE		44	52		24	eXZ	01	54	35
	ePPPZ		48	19		24	eXZ	20	36	43
14	eXZ	07	35	46		25	eXZ	04	39	54
15	eXZ	07	45	34		25	eXZ	11	16	09
16	ePZ	01	44	58		26	eXZ	23	51	45
16	ePZ	02	03	03		27	ePZ	11	16	58
	eSZE		09	19		28	ePZ	01	59	05
16	ePZ	02	13	45			eSN	02	05	30
16	ePZ	03	40	22		29	eXE	05	09	56
16	ePZ	03	54	24		30	eXZ	03	39	14
16	ePZ	04	18	08		30	ePN	07	19	43
						30	eXN	10	26	15

International Seismological Centre

Date	Station	Phase	h m s
1	Qt	ePZ	01 17 30·2
		USCGS H 01 05 17·7	
		52·4 N 174·5 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 78 km	
		Mag: 5·2 (CGS)	
1	Qt	ePZ	02 32 14
1	Wr	ePZ	08 09 57·8
		eSZ	10 29·5
	Lh	ePZ	36 ±
	Qt	iPZ	56.7d
		iSE	12 15·5
	Ch	ePZ	10 15 47
		ipPZ	16 23
		eSNE	25 58
	Lh	ePZ	17 05
		epPZ	42
		ePPZ	21 21
		epPPZ	56
	Qt	ePZ	17 33·4
		iPKPZ	21 35·2
		iPPZ	58·0
		epPKPZ	22 16·5
		iPKKPZ	32 41·0
		USCGS H 10 03 20·0	
		19·0 S 169·0 E	
		New Hebrides Islands	
		depth about 140 km	
		Mag : 7 (Pas), 6¾—7 (Berk),	
		6·2 (CGS)	
1	Wr	ePZ	19 53 41·1
	Lh	ePZ	54 02
	Qt	ePZ	49·3d
		eSE	56 55·3
		USCGS H 19 52 22·0	
		38·4 N 175·4 E	
		Sinkiang Province, China	
		depth about 145 km	
		Mag: 4·3 (CGS)	
1	Qt	ePZ	20 34 22
		eSE	35 44
2	Qt	iPZ	01 50 13·5e
2	Qt	iPZ	02 00 58·8
		USCGS H 01 58 25·1	
		28·5 N 54·8 E	
		Southern Iran	
		depth about 45 km	
		Mag: 5·8 (CGS)	
2	Qt	ePZ	03 17 35
2	Qt	ePZ	20 39 33·2
3	Qt	ePZ	10 47 43·1
		eSE	50 45·1
	Wr	ePZ	48 36·9
	Lh	ePZ	58
		USCGS H 10 44 28·0	
		30·7 N 51·7 E	
		Iran	
		depth about 25 km	
		Mag: 5·3 (CGS)	
3	Qt	ePZ	11 26 26·1
4	Qt	ePZ	21 07 54·4
5	Wr	ePKPZ	15 36 37·6
	Lh	ePKPZ	42
		USCGS H 15 17 01·9	
		24·7 S 69·5 W	
		Northern Chile	
		depth about 50 km	
		Mag: 5·1 (CGS)	
6	Lh	ePZ	08 47 52 c
		eSN*	55 21
	Wr	iPZ	48 17·8c
		eSZ	56 10·3
	Qt	ePZ	48 43·3
		USCGS H 08 38 33·3	

International Seismological Centre

Date	Station	Phase	h	m	s	
		9·1 S 112·5 E				
		Near south coast of Java				
		depth about 84 km				
		Mag: 5·7 (CGS)				
7	Lh	ePZ	02	19	59	±
	Wr	ePZ		20	06·2	
		USCGS H 02 17 37·4				
		36·7 N 83·1 E				
		Sinkiang Province, China				
		depth about 33 km				
7	Wr	iPZ	03	17	26·2	d
		iSN			59·8	
	Lh	ePZ		18	06	
		eSZ		19	06	±
		USCGS H 03 16 41·4				
		36·6 N 70·8 E				
		Hindukush region				
		depth about 230 km				
		Mag: 4·4 (CGS)				
7	Wr	iPZ	04	51	12·1	
		iSN			30·2	
	Lh	ePZ			56	
		eSNE		52	55	
		H 04 50 38				
		Hindukush region				
7	Qt	ePKPZ	16	42	30·5	
		epPKPZ		43	00·7	
		ePPZ		45	21·0	
	Lh	ePKPZ			40	
		epPKPZ		43	10	
	Wr	ePKPZ		42	51·8	
		USCGS H 16 23 11·2				
		22·0 S 68·6 W				
		Northern Chile				
		depth about 110 km				
		Mag: 5·4 (CGS)				
8	Qt	ePZ	01	11	27·5	
		eSE		14	32·8	
8	Wr	ePZ	09	03	42·4	
		USCGS H 08 50 56·0				
		54·9 N 163·9 W				
		Unimak Islands				
		Aleutian Islands region				
		depth about 89 km				
		Mag: 5·6				
8	Ch	ePZ	10	30	21	
	Lh	ePZ		31	35	
		eSN*		39	14	
	Wr	iPZ		31	43·6	c
	Qt	ePZ		32	19·9	
		USCGS H 10 22 11·2				
		36·6 N 141·0 E				
		Honshu, Japan				
		depth about 53 km				
		Mag: 6·1 (CGS)				
8	Lh	ePZ	14	18	15	±
	Wr	ePZ		19	05	
	Qt	ePZ			15·5	
		eSE		22	29·0	
		USCGS H 14 15 03				
		21·7 N 85·0 E				
		India				
		depth about 33 km				
8	Lh	ePZ	15	33	23	
		epPZ			39	
		eSN*		40	57	
	Wr	ePZ		33	45·6	
	Qt	ePZ		34	03·3	
		ipPZ			20·0	
		eSE		42	15·5	
		USCGS H 15 24 00·3				
		5·3 N 125·7 E				
		Off coast of Mindanao				
		Philippine Islands				

International Seismological Centre

Date	Station	Phase	h m s
		depth about 70 km	
		Mag: 5·6 (CGS)	
9	Qt	ePZ	11 33 58·5
		USCGS H 11 23 29·8	
		31·7 N 142·3 E	
		South of Honshu, Japan	
		depth about 33 km	
		Mag: 3·9 (CGS)	
9	Qt	ePZ	19 00 43·0
9	Qt	ePZ	19 40 54·0
		USCGS H 19 28 02·3	
		52·3 S 27·5 E	
		1000 kms south west of	
		Prince Edward Islands	
		depth about 33 km	
9	Qt	ePZ	20 57 47 d
		USCGS H 20 45 13·8	
		53·9 N 165·2 W	
		Fox Islands	
		Aleutian Islands	
		depth about 33 km	
10	Qt	iPZ	00 21 43·0d
		iSE*	22 21·4
	Wr	ePZ	21 56·7
10	Wr	ePZ	00 30 29·3
		eSZ	31 01·6
	Qt	iPZ	28·5d
		iSE	32 44·2
		H 00 29 51	
		Hindukush region	
10	Qt	ePZ	01 39 55·9d
		eSN*	40 36·0
	Wr	ePZ	14.6
10	Qt	ePZ	11 01 46.7
	Wr	ePZ	02 01.0
		USCGS H 10 57 34.7	
		40.9 N 47.8 E	
		Azerbaijan, S.S.R.	
		depth about 150 km	
10	Qt	ePZ	11 17 02.5c
	Wr	ePZ	36.0
		USCGS H 11 09 41.6	
		8.4 S 67.6 E	
		Indian Ocean	
		depth about 33 km	
		Mag: 5.9 (CGS)	
10	Wr	ePZ	21 36 41.9
	Qt	ePZ	33.3
		eSN	39 00.2
		H 21 35 40	
		Hindukush region	
10	Qt	ePKPZ	22 42 04.5
		ePKSZ*	45 36.6
	Wr	ePKPZ	42 05.1
	Lh	ePKPZ	12
	Ch	ePKPZ	42
		USCGS H 22 22 42.2	
		2.2 S 77.6 W	
		Ecuador	
		depth about 33 km	
		Mag: 6¼ (Pas), 6 (Berk),	
		6 (Pal), 5.7 (CGS)	
10	Qt	ePZ	23 14 17.2
		eSN	15 01.7
	Wr	ePZ	14 42.2
11	Qt	ePZ	13 06 29.5c
11	Qt	ePZ	13 36 57.0
11	Ch	ePZ	17 55 50 ±
	Lh	ePZ	57 38
		esSN*	18 04 18
	Wr	ePZ	17 57 56.9
	Qt	ePZ	58 29.6c
		epPZ	42.2
		eSE*	18 05 24
		Mu Sec	
		PZ 0.01 1.0	
		△ = 47°.4	

International Seismological Centre

Date	Station	Phase	h	m	s
		USCGS H 17 49 43.0			
		24.2 N 122.5 E			
		Off east coast of			
		Formosa			
		depth about 33 km			
		Mag: 4.5 (CGS), 4.9 (Qt)			
12	Lh	ePZ	19	34	21
	Wr	ePZ			36.8
		USCGS H 19 22 30.8			
		3.4 S 146.9 E			
		Bismarck Sea			
		depth about 33 km			
		Mag: 4.9 (CGS)			
12	Wr	iPZ	20	20	50.5d
	Lh	ePZ			59 d
		iPcPZ		21	10
		eSNE		31	14
	Ch	ePZ		21	04 d
		ePPZ		24	18
		iSN		31	22
	Qt	cPZ		21	18.0d
		eSKSE*		31	42.4
		iSE*			51.2
		ePPSE*		33	06.8
		eSSN*		37	21.0
	Kr	ePZ		21	42.0
		eSE		32	41.0
		USCGS H 20 08 43.0			
		57.4 N 153.9 W			
		Kodiak Islands			
		Alaska			
		depth about 80 km			
		Mag: 5.9 (CGS)			
13	Qt	ePZ	09	54	19.8
		USCGS H 09 44 12.6			
		40.4 N 142.1 E			
		Near coast of northern			
		Honshu, Japan			
		depth about 62 km			
		Mag: 4.1 (CGS)			
13	Wr	ePKPZ	13	03	05.2c
	Qt	ePKPZ			10.2
		ePKSN		06	36.0
	Lh	ePKPZ		03	12
	Ch	ePKPZ			32
		USCGS H 12 44 00.7			
		14.5 N 92.9 W			
		Mexico—Guatemala border			
		depth about 60 km			
		Mag: $4\frac{3}{4}$-5 (Berk), $5\frac{1}{4}$-$5\frac{1}{2}$ (Pal),			
		5.6 (CGS)			
13	Wr	ePZ	14	14	18.7
	Qt	ePZ		15	18.0
13	Qt	ePKPZ	18	22	35.0
	Lh	ePKPZ			47
		USCGS H 18 03 04.4			
		20.6 S 70.7 W			
		Near coast of northern Chile			
		depth about 33 km			
13	Qt	ePZ	23	00	48.0
		USCGS H 22 48 10.3			
		6.0 S 150.1 E			
		New Britain region			
		depth about 94 km			
14	Qt	ePKPZ	08	24	16.8
		USCGS H 08 05 30.5			
		10.0 N 62.0 W			
		Near coast of Venezuela			
		depth about 53 km			
14	Qt	ePZ	14	03	32.0
		USCGS H 13 50 40.9			
		57.3 N 154.2 W			
		Kodiak Islands			
		Alaska			
		depth about 37 km			
		Mag: 4.6 (CGS)			

International Seismological Centre

Date	Station	Phase	h m s
14	Wr	ePZ	15 18 54.6
	Qt	ePZ	19 06.8
		epPZ	20 32.0
		USCGS H 15 08 46.1	
		5.6 S 127.8 E	
		Banda Seas	
		depth about 405 km	
		Mag: 5.3 (CGS)	
14	Qt	ePKPZ	18 15 12.7
		USCGS H 17 56 15.1	
		30.2 S 177.7 W	
		Kermadec Islands	
		depth about 33 km	
14	Lh	ePZ	23 27 05
	Qt	ePZ	34.7
		USCGS H 23 14 47.0	
		4.1 S 152.8 E	
		New Britain	
		depth about 58 km	
		Mag: 4.8 (CGS)	
15	Qt	ePKPZ	02 37 41.8
		USCGS H 02 17 53.0	
		45.8 S 74.8 W	
		Near coast of southern Chile	
		depth about 33 km	
15	Ch	ePNE	03 02 04 ±
	Lh	ePZ	04 31
	Qt	iPZ	05 04.0d
		iPcPZ	09.6d
		eSN*	15 24.5
		Mu Sec	
		PZ 0.03 1.1	
		PH 0.02 1.1	
		△ = 83°.2	
		USCGS H 02 52 39.7	
		3.4 S 146.8 E	
		Bismarck Sea	
		depth about 33 km	
		Mag: 5.7 (CGS), 5.5 (Qt)	
15	Wr	ePZ	05 03 16.4
	Qt	ePZ	04 29.3d
		eSNE	06 23.5
15	Wr	ePZ	06 36 53.3
	Lh	ePZ	37 16 d
		eSNE	38 38
	Qt	ePZ	02.2c
		iSE	40 05.8
		USCGS H 06 35 24.8	
		38.5 N 75.5 E	
		Hindukush region	
		depth abut 33 km	
		Mag: 4.4 (CGS)	
15	Qt	ePZ	07 00 00.6
		eSE	02 08.9
15	Qt	ePZ	12 19 47.0d
	Wr	ePZ	51.8
		USCGS H 12 08 08.8	
		38.0 N 26.4 W	
		Azores region	
		depth about 33 km	
		Mag: 5.3 (CGS)	
15	Lh	ePZ	15 40 12
	Wr	ePZ	31·2
	Qt	ePZ	41 03·5
		USCGS H 15 32 11·3	
		24·1 N 122·8 E	
		Off east coast of Formosa	
		depth about 33 km	
		Mag: 5·6 (CGS)	
16	Lh	ePZ	00 04 35·1
		iSZ	38·0
		△ = 0°.2	
		H 00 04 30·7	
		Felt Lahore	
16	Wr	iPZ	03 30 11·4
		iSZ	39·2

International Seismological Centre

Date	Station	Phase	h	m	s
	Lh	eSNE		31	49
	Qt	ePZ			14·6c
		iSE		32	33·8
16	Qt	iPZ	06	33	33·0c
		eSE*		34	03·5
	Wr	ePZ			09·1
	Kr	ePZ			11·7
	Lh	ePZ			23
		iSNE		35	27
16	Qt	ePZ	14	27	32·2
		eSN		29	17·5
16	Ch	ePZ	16	00	12
	Lh	ePZ		02	26
	Wr	ePZ			46·2
	Qt	iPZ		03	03·0c
		eSN*		11	52·0
		USCGS H	15	52	18·4
		0·8 S 128·5 E			
		Halmahera region			
		depth about 50 km			
		Mag: 4·4 (CGS)			
16	Lh	ePZ	16	11	07
	Wr	ePZ			33·6
	Qt	ePZ			49·3d
16	Lh	ePZ	16	28	09
	Wr	ePZ			30·7
	Qt	ePZ			46·7d
		ipPZ			59·3
		USCGS H	16	17	59·8
		1·0 S 128·8 E			
		Halmahera region			
		depth about 33 km			
		Mag: 4·3 (CGS)			
16	Qt	ePKPZ	21	01	29·3
		epPKPZ			38·2
		USCGS H	20	42	33·5
		16·8 N 99·0 W			
		Guerrero, Mexico			
		depth about 33 km			
16	Wr	ePZ	21	39	13·2
		iSZ			42·5
	Lh	eSNE		40	55
	Qt	ePZ			12·6
		eSN		41	30·5
		Hindukush region			
16	Lh	ePZ	22	15	15
		epPZ			29
	Qt	ePZ			56·7
		epPZ		16	13·2
		USCGS H	22	05	53·4
		41·6 N 142·0 E			
		South of Hokkaido, Japan			
		depth about 65 km			
		Mag: 5·0 (CGS)			
17	Wr	iPZ	04	16	41·7c
	Qt	ePZ		17	17·1
		ipPZ			24·3
		eSN		25	54·8
		USCGS H	04	06	36·2
		45·3 N 150·8 E			
		Kurile Islands region			
		depth about 33 km			
		Mag: 5·9 (CGS)			
17	Ch	ePZ	06	15	00 d
		epPZ			21
	Lh	ePZ		17	22 d
		ePcPZ		19	00
	Wr	iPZ		17	45·3d
	Kr	ePZ		18	10·2d
		epPZ			34·2
		ePPZ		20	14·2
	Qt	ePZ			10·8d
		iPcP!		19	28·7

International Seismological Centre

Date	Station	Phase	h	m	s
		eSN		25	18·5
		Mu Sec			
		PZ 0·1 1·0			
		USCGS H 06 09 18·2			
		15·7 N 120·1 E			
		Near west coast of Luzon			
		Philippine Islands			
		depth about 80 km			
		Mag: 5·5 (CGS), 5·7 (Qt)			
17	Qt	iPKPZ	07	51	32·2d
		USCGS H 07 33 17·5			
		31·0 S 179·8 W			
		Kermadec Islands region			
		depth about 358 km			
		Mag: 4·7 (CGS)			
17	Lh	ePZ	12	18	26
		epPZ			43
	Wr	ePZ			32·7
	Qt	iPZ		19	09·8c
		eSN		27	31·5
		USCGS H 12 09 05·6			
		41·7 N 141·9 E			
		South of Hokkaido			
		Japan			
		depth about 47 km			
		Mag: 4·8 (CGS)			
17	Wr	iPZ	16	21	54·4d
		iSZ		22	21·6
	Lh	ePZ			34 ±
	Qt	ePZ			59·5
		iSN		24	22·2
		Hindukush region			
17	Lh	ePZ	17	25	21 ±
	Wr	ePZ			42·8
	Qt	ePZ			57·3c
17	Wr	ePZ	21	08	00·4
	Qt	ePZ			51·9
		eSN		10	38·2

Date	Station	Phase	h	m	s
		Tadzhik, S.S.R.			
17	Lh	ePZ	21	41	01
	Qt	ePZ			37·8
		USCGS H 21 31 12			
		0·8 S 128·8 E			
		Halmahera region			
		depth about 231 km			
		Mag: 4·7 (CGS)			
17	Qt	iPKPZ	22	58	56·d
		USCGS H 22 40 06·7			
		24·4 S 177·2 W			
		Tonga Islands region			
		depth about 70 km			
		Mag: 5·9 (CGS)			
17	Qt	ePZ	23	15	51·5
		epPZ		16	17·8
		USCGS H 23 04 58			
		13·5 N 142·5 E			
		Mariana Islands region			
		depth about 163 km			
		Mag: 4·3 (CGS)			
18	Qt	ePKPZ	05	52	53·8
		ePKSE		56	00·0
	Wr	ePKPZ		53	06·3
	Lh	ePKPZ			10
		ePKSZ		56	42
		USCGS H 05 33 25·0			
		29·6 S 68·5 W			
		Larioja Province			
		Argentina			
		depth about 29 km			
18	Lh	ePZ	12	30	05
		epPZ			23
	Wr	ePZ			29·6
	Qt	ePZ			36·6d
		epPZ			54·5
		ePcSZ		35	23·0
		eSE		38	49·0

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Date	Station	Phase	h	m	s	
		eScSN*		40	26·5	
		eSSE*		42	52·0	
		eSSSE*		45	28·5	
		USCGS H 12 20 31·9				
		8·2 S 115·6 E				
		Bali				
		depth about 39 km				
		Mag: 5·9 (CGS)				
18	Lh	ePZ	13	13	05	±
	Wr	ePZ			32·3	
	Qt	ePZ			37·5	
		eSE*		21	50·0	
		USCGS H 13 03 35·8				
		8·2 S 115·7 E				
		Bali				
		depth about 68 km				
18	Qt	ePZ	16	52	04·0	
		epPZ			20·5	
		USCGS H 16 43 12·3				
		16·0 N 119·5 E				
		Near west coast of Luzon				
		depth about 47 km				
		Mag: 5·0 (CGS)				
18	Lh	ePZ	18	21	43	
		eSZ		22	13	
	Wr	ePZ		21	46.4	
		iSZ		22	16.7	
	Qt	ePZ			48.4	
		eSN		24	12.0	
18	Lh	ePZ	20	26	53	
	Qt	ePZ		27	30.5	
18	Lh	ePZ	23	25	40	±
	Qt	ePZ		26	23.2	
		USCGS H 23 16 16.4				
		41.0 N 142.0 E				
		Off east coast of				
		Honshu, Japan				
		depth about 52 km				
		Mag: 4.7 (CGS)				
18	Qt	iPZ	23	58	07.3d	
		USCGS H 23 47 17.3				
		49.5 N 156.2 E				
		Kurile Islands region				
		depth about 70 km				
		Mag: 5.5 (CGS)				
18	Wr	ePZ	23	59	50.8	
		iSZ	00	00	43.1	
	Lh	ePZ			20	
		eSE		01	28	
	Qt	ePZ			00.3	
		eSE		02	40.0	
19	Kr	ePKPZ	01	22	38.9	
		ePKSE		26	10.2	
	Qt	ePKPZ		22	41.5	
		iPKP$_2$Z			43.5	
		eSKKSE*		33	05.0	
		eSKSPN*		36	30.0	
	Lh	ePKPZ		22	50	
		epPKPZ		23	00	
	Wr	ePPE		26	36	
		ePKPZ		22	51.6	
	Ch	ePKPZ			57	±
		USCGS H 01 03 04.1				
		46.5 S 75.1 W				
		Coast of southern Chile				
		depth about 33 km				
		Mag: 6¼ (Pas), 6.5 (CGS)				
19	Lh	ePZ	04	16	54	
		eSNE		17	20	
	Wr	ePZ			23.3	
19	Lh	ePZ	04	39	52	
		eSNE		40	18	
	Wr	ePZ		40	30.3	
		eSZ		41	28.0	
	Qt	ePZ			30.3	
19	Qt	ePZ	09	57	02.3	
		USCGS H 09 48 26.0				

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Date	Station	Phase	h	m	s
		4.1 S 103.1 E			
		Off coast of Sumatra			
		depth about 96 km			
19	Qt	ePZ	10	08	06.4c
	Wr	ePZ			13.7
		USCGS H 10 00 04.6			
		46.0 N 14.6 E			
		North western Yugoslavia			
		depth about 33 km			
		Mag: 4.9 (CGS)			
19	Qt	ePZ	11	12	53.6d
		USCGS H 11 02 36			
		1.5 N 126.0 E			
		Molucca Passage			
		depth about 106 km			
19	Lh	ePZ	19	31	05
	Wr	ePZ			26.4
	Qt	ePZ			43.5
		eSN		40	38.0
		USCGS H 19 21 22			
		2.3 N 128.6 E			
		Halmahera region			
		depth about 166 km			
		Mag: 4.3 (CGS)			
19	Qt	ePZ	21	49	18.0c
		iPZ			19.6
		ePPZ		53	08.0
		eSKSN*E*		59	56.0
		eSN*	22	00	30.0
		ePPSZ*		01	58.0
	Wr	ePZ		49	23.2
	Lh	ePZ			23 ±
		Mu Sec			
		PZ 0.1 1.2			
		USCGS H 21 35 49.6			
		23.8 N 45.9 W			
		North Atlantic Ocean			
		depth about 33 km			
		Mag: 6½ (Pas), 6¼-6½ (Berk),			
		6.0 (CGS), 5.8 (Qt)			
19	Qt	ePKPZ	23	50	37.2
		epPKPZ		51	13.2
		ePPZ		53	25.0
		ePKSZ		54	01.0
		USCGS H 23 31 25.7			
		17.8 S 69.4 W			
		Peru-Bolivia-Chile			
		border region			
		depth about 148 km			
		Mag: 5.5 (CGS)			
20	Qt	ePZ	09	17	05.3
		USCGS H 09 08 04.1			
		19.1 N 121.3 E			
		Off north coast of Luzan,			
		Philippine Islands			
		depth about 50 km			
		Mag: 4.7 (CGS)			
20	Qt	ePZ	10	21	22.5
		eSE		22	38.5
	Kr	ePZ		21	38.7
	Wr	ePZ			34.4
20	Ch	ePPZ	11	55	55
		eSKSNE	12	02	26
	Lh	ePKPZ	11	56	46
		eSKSE*	12	03	38
		eSKKSE*		05	02
		eSKSPE*		07	51
	Wr	ePKPZ	11	56	51.8
	Qt	iPKPZ			58.2
		ePPZ		58	47.7
		ePKSE	12	00	10.0
		eSKSP		08	34.0
		ePPSN*E*		10	30.0
		USCGS H 11 38 00.9			
		30.7 S 178.3 W			
		Kermadec Islands region			

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Date	Station	Phase	h m s
		depth about 64 km	
		Mag: 6¾-7 (Pas), 6½ (Berk),	
		6.2 (CGS)	
20	Lh	ePZ	13 50 25 ±
	Wr	ePZ	46.7
	Qt	ePZ	51 02.5
20	Wr	ePZ	17 10 11.1
	Lh	ePZ	24
		USCGS H 17 01 40.2	
		72.1 N 126.3 E	
		Yakutsk, U.S.S.R.	
		depth about 33 km	
		Mag: 4.5 (CGS)	
20	Lh	ePZ	21 14 41
	Wr	ePZ	15 03.1
	Qt	ePZ	20.5d
		ipPZ	55.6
		USCGS H 21 04 57	
		2.5 N 128.8 E	
		Halmahera region	
		depth about 148 km	
		Mag: 4.9 (CGS)	
21	Wr	ePZ	08 50 46.0
		iSZ	51 28.3
	Qt	ePZ	39.5
		eSE	52 39.2
21	Qt	ePZ	16 34 28.3
		USCGS H 16 23 28.9	
		51.4 N 159.1 E	
		Off east coast of	
		Kamchatka	
		depth about 33 km	
21	Qt	ePZ	17 20 49.0
		USCGS H 17 10 47.6	
		36.3 N 140.3 E	
		Near east coast of	
		Honshu, Japan	
		depth about 33 km	
		Mag: 4.1 (CGS)	
21	Qt	ePZ	17 44 02.7
		eSKSE	54 44.5
		ePSE	57 05.0
		USCGS H 17 30 15.4	
		11.1 S 163.3 E	
		Solomon Islands region	
		depth about 33 km	
		Mag: 5½-6 (Pal),	
		5.4 (CGS)	
21	Qt	iPKPZ	18 29 00.9d
		USCGS H 18 10 11.7	
		29.5 S 178.1 W	
		Kermadec Islands region	
		depth about 82 km	
22	Ch	ePZ	14 06 22
		eSN	14 06
	Lh	ePZ	06 58
		epPZ	07 05
		eSN*	15 04
		ePSN*E*	32
		eScSN*	16 45
	Wr	ePZ	06 58.8
	Qt	ePZ	07 32.7
		iPZ	35.2
		eSE*	16 16.0
		eScSN	17 27.0
	Kr	ePZ	07 44.0
		USCGS H 13 56 43.0	
		48.6 N 154.7 E	
		Kurile Islands region	
		depth about 22 km	
		Mag: 6½ (Pas), 6 (Berk),	
		6.3 (CGS), 5.8 (Qt)	
22	Wr	iPZ	15 34 47.1d
		iSZ	35 22.4

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Date	Station	Phase	h m s
	Qt	ePZ	46.0
		eSE	37 05.2
		H 15 34 02	
		Hindukush region	
22	Lh	ePZ	15 52 30
		epPZ	44
		eSN*E*	16 00 19
		eSSN*	44
	Kr	ePZ	15 52 43.5
		epPZ	53 00.6
	Wr	iPZ	52 51.8c
		eSZ	16 00 59.1
	Qt	iPZ!	15 53 11.0c
		iSE	16 01 38.0
		Mu Sec	
		PZ 0.1 1.2	
		SH 0.2 3.0	
		USCGS H 15 42 48.6	
		4.3 N 127.9 E	
		Molucca Passage	
		depth about 58 km	
		Mag: 5.0 (CGS), 5.7 (Qt)	
22	Wr	ePZ	16 37 47.8
		USCGS H 16 25 36.8	
		52.2 N 165.3 W	
		Fox Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag: 4.2 (CGS)	
22	Ch	ePZ	22 00 28
	Lh	ePZ	02 37
		epPZ*	04 49
		eSN*E*!	10 19
		eScSN*	12 22
		eSSE*	14 12
	Wr	ePZ	03 01.3
		ePKPPKPZ	32 35.0
	Qt	ePZ	03 07.9
		iPZ	08.5
		eSE*	11 13.0
		iSE*	19.0
		USCGS H 21 53 02.5	
		8.2 S 115.7 E	
		Java Sea	
		depth about 33 km	
		Mag: 5.6 (CGS)	
23	Wr	ePZ	01 01 49.2
	Qt	ePZ	02 05.7
		USCGS H 00 51 40.3	
		1.6 N 126.4 E	
		Molucca Passage	
		depth about 33 km	
		Mag: 4.8 (CGS)	
23	Wr	ePZ	03 49 05.6
		USCGS H 03 35 34.7	
		10.9 S 163.3 E	
		Solomon Islands region	
		depth about 33 km	
		Mag: 5.5 (CGS)	
23	Qt	ePKPZ	03 51 42.8c
		USCGS H 03 33 19.1	
		15.0 S 176.7 W	
		Fiji Islands region	
		depth about 279 km	
		Mag: 5.4 (CGS)	
23	Qt	ePZ	05 40 26.4d
		USCGS H 05 30 18.6	
		7.9 S 115.3 E	
		Java Sea	
		depth about 33 km	
23	Qt	iPZ	07 08 23.2d
23	Qt	ePKPZ	12 16 25.7
		USCGS H 11 56 45.6	
		44.7 S 75.7 W	
		Off coast of southern Chile	

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Date	Station	Phase	h	m	s
		depth about 33 km			
		Mag: 5.1 (CGS)			
23	Qt	ePZ	14	27	38.4d
23	Lh	ePZ	15	21	27
	Kr	ePZ		22	01.7
		epPZ			25.2
		esPZ			38.1
	Qt	iPZ			08.4c
		eSE		30	22.5
		Mu Sec			
		PZ 0.2 1.2			
		PH 0.1 1.2			
		USCGS H 15 12 05.7			
		6.0 N 126.1 E			
		Near east coast of			
		Mindanao			
		Philippine Islands			
		depth about 88 km			
		Mag: 5.5 (CGS), 6.0 (Qt)			
23	Qt	ePZ	16	41	25.1c
23	Lh	ePnZ	17	13	46
		iSnN*E*		14	13
	Wr	ePnZ			13.9
		iSgZ		15	23.5
	Qt	ePnZ			09.2
		iSnE		16	39.8
	Kr	ePnZ		15	49.1
		H 17 13 10			
		33.0 N 76.0 E			
		Kashmir			
23	Qt	ePZ	23	18	00.4d
24	Wr	ePZ	02	55	27.8
		eSZ		56	16.5
	Qt	ePZ		56	26.0
		iSE		57	59.3
		H 02 45 25			
		Hindukush region			
24	Wr	iPZ	12	23	12.9c
		iSZ			44.6
	Qt	ePZ		24	11.7
		eSN		25	30.7
		H 12 22 27			
		Hindukush region			
24	Qt	ePZ	12	45	23.0
24	Qt	ePZ	21	10	31.7c
		USCGS H 21 00 25.1			
		37.1 N 140.8 E			
		Near east coast of			
		Honshu, Japan			
		depth about 52 km			
25	Qt	ePZ	01	44	35.2
		USCGS H 01 35 50.4			
		24.8 N 121.9 E			
		Near coast of Formosa			
		depth about 33 km			
		Mag: 4.7 (CGS)			
25	Qt	ePZ	07	47	04.0
		USCGS H 07 35 03.9			
		51.7 N 179.7 E			
		Rat Islands region			
		Aleutian Islands			
		depth about 83 km			
		Mag: 4.8 (CGS)			
25	Wr	ePZ	08	50	43.3
	Qt	ePZ		51	20.0
		eSN		59	36.2
		USCGS H 08 41 09.6			
		42.7 N 144.3 E			
		Near east coast of			
		Hokkaido, Japan			
		depth about 80 km			
		Mag: 5.4 (CGS)			
25	Qt	ePZ	10	22	43.2c
		USCGS H 10 11 49			
		4.5 S 129.2 E			

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Date	Station	Phase	h	m	s
		Banda Sea			
		depth about 95 km			
		Mag: 4.5 (CGS)			
25	Qt	ePZ	10	28	35.7d
25	Qt	ePKPZ	16	26	40.7
		ipPKPZ			46.4
		ePPZ		27	48.0
		eSKSN*E*		33	32.0
		eSKKSN*E*		34	50.5
		ePSN*E*		37	32.0
	Wr	ePZ		26	51.8
		USCGS H 16 08 00.8			
		56.8 S 25.0 W			
		Sandwich Islands region			
		depth about 29 km			
25	Qt	ePZ	16	54	35.2
		USCGS H 16 45 45.6			
		20.7 N 120.9 E			
		South of Formosa			
		depth about 33 km			
		Mag: 4.5 (CGS)			
25	Wr	ePZ	20	07	09.8
	Qt	ePZ			43.0
		USCGS H 19 57 28.5			
		31.8 N 141.3 E			
		South of Honshu, Japan			
		depth about 111 km			
		Mag: 4.5 (CGS)			
25	Wr	iPZ	20	50	23.0d
		iSZ			53.2
	Lh	ePZ			58 ±
		eSNE		51	56 ±
	Qt	ePZ	20	51	21.2d
		iPZ !			21.7
		eSE		52	40.0

	Mu	Sec
PZ	0.05	0.8
PH	0.02	0.8

Date	Station	Phase	h	m	s
		H 20 49 36			
		Hindukush region			
		Mag: 4.3 (Qt)			
26	Qt	ePKPZ	00	18	54.3
		USCGS H 23 59 55.8			
		19.7 S 174.3 W			
		Tonga Islands			
		depth about 33 km			
		Mag: 5.3 (CGS)			
26	Qt	ePZ	00	55	56.5
		USCGS H 00 42 56.1 ‖			
		6.9 S 155.6 E			
		Solomon Islands			
		depth about 87 km			
		Mag: 5.0 (CGS)			
26	Qt	ePZ	05	03	27.0
		USCGS H 04 52 23.4			
		51.5 N 159.8 E			
		Near east coast of			
		Kamchatka			
		depth about 33 km			
		Mag: 5.3 (CGS)			
24	Qt	ePZ	18	43	52.3
		USCGS H 18 32 48.1			
		22.5 N 144.0 E			
		Volcano Islands region			
		depth about 33 km			
		Mag: 4.7 (CGS)			
26	Qt	ePZ	19	34	08.7d
		USCGS H 19 24 41.8			
		15.0 S 32.2 E			
		Mozambique			
		depth about 33 km			
		Mag: 5.0 (CGS)			
26	Qt	ePZ	21	08	11.7
		USCGS H 21 03 49.2			
		42.3 N 48.6 E			
		Caspian Sea			

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Date	Station	Phase	h	m	s
		Mag : 5.3 (CGS)			
26	Wr	ePZ	23	17	10.3
	Lh	ePZ			14
	Qt	ePZ			45.0d
		iPZ			46.5
		eSN*E*		26	43.0
		USCGS H 23 06 55.0			
		55.2 N 159.9 E			
		Near east coast of			
		Kamchatka			
		depth about 47 km			
		Mag : 5½-5½ (Pal), 5.3 (CGS)			
27	Qt	ePZ	04	09	37.5d
		eSN		18	33.2
		USCGS H 03 58 47.9			
		55.3 N 160.1 E			
		Near east coast of			
		Kamchatka			
		depth about 54 km			
		Mag : 5¼ (Pal), 5.7 (CGS)			
27	Qt	ePZ	06	47	18.5
27	Qt	ePZ	16	31	02.3
		ipPZ			11.0
		USCGS H 16 20 09.6			
		0.6 S 130.1 E			
		Halmahera region			
		depth about 33 km			
		Mag : 5.0 (CGS)			
27	Qt	ePZ	18	57	18.9
		USCGS H 18 45 36			
		1.8 S 139.0 E			
		Near north coast of			
		west Iran			
		depth about 33 km			
28	Qt	iPZ	00	20	52.4d
		USCGS H 00 08 55.7			
		51.7 N 177.7 E			
		Andreanof Islands			
		Aleutian Islands			
		depth about 60 km			
28	Qt	ePZ	10	36	30.5
		USCGS H 10 32 48			
		35.5 N 49.6 E			
		Western Iran			
		depth about 33 km			
28	Wr	ePN	15	18	29.6
		eSN		19	02.9
	Qt	ePZ			26 =
		eSE		20	44.4
		H 15 17 52 g			
		Hindukush region			
28	Lh	ePZ	21	14	06 c
	Qt	iPZ			44.1c
		USCGS H 21 04 10.0			
		47.5 N 152.4 E			
		Kurile Islands region			
		depth about 120 km			
		Mag : 4.9 (CGS)			
28	Qt	ePZ	21	50	07.0
		USCGS H 21 38 49.5			
		12.5 N 142.1 E			
		Mariana Islands region			
		depth about 33 km			
		Mag : 4.5 (CGS)			
28	Lh	ePZ	22	07	46 c
	Qt	iPZ			08 30.7c
		USCGS H 21 58 27.9			
		36.1 N 140.7 E			
		Near east coast of			
		Honshu, Japan			
		depth about 78 km			
		Mag; 4.9 (CGS)			
29	Qt	ePZ	00	50	50.1
		eSE		52	56.1
	Wr	ePN		51	48.6

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Date	Station	Phase	h	m	s
		USCGS H .00 47 50.8			
		28.3 N 52.2 E			
		Western Iran			
		depth about 45 km			
		Mag: 4.8 (CGS)			
29	Qt	iPZ	08	36	51.6d
		eSN*E*		38	06.0
	Kr	ePZ		36	47.3d
		iSE		37	59.8
	Wr	ePZ		38	01.8
	Lh	ePZ			17
		esPZ			35
		eSZ		40	42
		eSSE*		41	02
		Mu Sec			
		PZ 0.17 1.0			
		$\triangle = 6°.5$			
		USCGS H 08 35 02.9			
		27.2 N 59.3 E			
		Southern Iran			
		depth about 33 km			
		Mag : 5.4 (CGS), 5.8 (Qt)			
29	Qt	ePZ	22	48	51.7
30	Qt	iPZ	03	55	45.6c
		USCGS H 03 44 50.7			
		49.9 N 157.3 E			
		Kurile Islands region			
		Mag : 4.8 (CGS)			
30	Wr	ePZ	04	17	15.5
		iSZ			45.1
	Qt	ePZ		18	18.4
		eSE		19	36.0
		H 04 16 34			
		Hindukush region			
30	Qt	iPZ	17	52	07.2d
		USCGS H 17 39 43			
		52.4 N 169.5 W			
		Fox Islands, Aleutian Islands			
		depth about 80 km			
30	Qt	ePKPZ	19	16	37.2
		USCGS H 18 57 53.2			
		59.4 S 26.9 W			
		Sandwich Islands			
		depth about 33 km			
30	Qt	ePZ	20	19	02.0
31	Wr	ePZ	00	38	37.0
		iSZ		39	11.3
	Qt	ePZ			29.2
		eSE		40	47.3
		H 00 37 55			
		Hindukush			
31	Qt	ePKPZ	06	22	32.0
		USCGS H 06 03 34.9			
		15.1 S 173.3 W			
		Tonga Islands region			
		depth about 33 km			
		Mag : 4.8 (CGS)			
31	Qt	ePZ	19	14	36.0
31	Wr	ePN	22	05	48.6
		eSN		06	12.5
	Qt	ePZ			51.5
		eSE		08	09.8
		H 22 05 06			
		Hindukush region			

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Date	Phase	h m s	Date	Phase	h m s
	QUETTA		13	ePZ	13 32 10.2
1	eP	07 36 06		eSN	33 44.2
2	eP	04 47 06.1	14	ePZ	20 27 39.7
2	eP	07 38 40 ±		eSE	28 49.0
3	eP	01 06 43.5	15	ePZ	01 58 41.2
3	eP	02 35 14.6		eSN	59 22.0
	eS	38.2	15	iPZ	02 42 03.5
8	eP	00 43 17	15	ePZ	04 30 28.1c
	eS	51.6		eSN	55.4
8	eP	01 03 36.4	15	ePZ	14 40 53.4
8	eP	17 25 29.4		eSNE	41 33.7
	eS	44.5	15	iPZ	14 49 08.5d
8	iP	21 37 17 c		iSNE	10.5
9	ePZ	02 05 00.0	15	iPZ	19 36 37.1d
	iPgZ	22.5		iSNE	59.7
9	ePZ	09 36 15	16	ePgZ	08 49 42.5
	eSN	31		eSgN	50 01.8
9	ePZ	17 26 08.2	16	ePZ	16 38 59.3
	iS	20.4		iXZ	39 04.0
9	ePZ	12 59 04.0	16	ePgZ	20 22 48.6
	eSN	32.8		iSgE	03.5
10	ePZ	00 34 06.4	17	iPZ	03 47 13.3c
	eSN	39.0	17	ePZ	14 33 25.3
10	ePgZ	06 34 42.5	17	ePZ	21 07 08.0
	eSgN	58.3		iSNE	11.7
10	ePZ	08 47 55.7	17	ePZ	23 08 46.6
	eSE	48 21.2	18	ePZ	00 17 34.0
10	ePgZ	15 18 34.5	18	iPZ	04 16 07.3d
	eSgN	50.5	18	iPZ	04 50 04.0d
10	ePgZ	16 35 32.5		iSN	13.2
	eSgN*	47.0	18	ePZ	07 14 08.2
10	ePZ	21 26 24.0		eSN	30.7
	eSE	46.2	18	eXZ	14 33 53.3
10	eP	23 03 52.5	18	ePZ	15 03 10.3
	eS	04 32.0	18	ePZ	15 48 32.0
12	ePZ	08 21 49.8	18	iPZ	15 58 56.0
	eSZ	22 06.3	18	ePZ	16 22 39.0
13	ePZ	05 53 26.5	18	ePZ	17 09 37.5

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Date	Phase	h m s	
18	ePZ	18 45 57.8	
	eSN	07.5	
19	ePZ	04 18 13.8	
	eSN	59.5	
19	ePZ	05 43 17.5	
	iSE	39.0	
19	ePZ	07 15 42.2	
	eSE	16 14.0	
19	iPZ	09 46 44.5	c
	ipPZ	47 29.2	
19	ePZ	11 51 41.5	
	eSN	52 44.7	
19	ePZ	13 18 37.3	
	eXZ	19 10.5	
19	ePZ	13 27 46.9	
19	ePZ	19 50 00.5	
19	ePZ	20 42 12.7	
	eSE	34.3	
20	ePZ	00 04 50.9	
20	ePZ	00 41 19.8	
20	ePZ	06 41 04.0	
20	iPZ	15 10 50.0	d
21	ePZ	01 15 40.5	
	eSE	17 35.8	
21	ePZ	16 06 04.2	
	eSN	15.9	
21	iPZ	23 06 51.7	c
	eSE	08 13.5	
22	ePZ	17 28 51.5	
	eSN	29 15.5	
23	ePZ	04 01 50.8	d
23	ePZ	23 20 44.6	
24	ePZ	08 12 25.3	
	eSN	31.3	
	eSE	32.0	
24	iPZ	12 57 01.6	d
	iSN	02.7	
24	ePZ	14 47 25.3	

Date	Phase	h m s	
	eSE	56.8	
24	ePZ	15 33 01.8	
	eSE	29.8	
24	iPZ	16 32 51.4	d
	iSZ	58.0	
24	iP!Z	19 30 47.3	d
	iS!N	01.2	
25	iPZ	09 02 08.8	d
	iSNE	20.7	
25	ePZ	20 42 16.3	
	eSE	59.2	
26	ePZ	00 05 30.8	
	eSN	58.8	
26	ePZ	03 24 25.6	
	ePZ	06 04 33.5	
26	eSNE	48.1	
	iPZ	07 52 54.4	c
	iSNE	53 13.0	
26	ePZ	19 42 30.7	
	eSN	43 52.5	
27	ePZ	06 58 03.5	
27	ePZ	12 54 46.7	
	eSE	55 00.2	
27	ePZ	17 32 46.9	
	eS	33 59.2	
28	ePZ	04 54 17.4	
28	ePZ	15 26 40	±
	eSE	27 04.0	
28	ePZ	16 53 35.4	
	eSNE	54 06.2	
28	ePZ	21 45 10	
	eSNE	30	
28	ePN	21 55 20.2	
	eSN	38.7	
29	ePZ	00 33 57.0	
	eSN	34 25.0	
29	ePZ	10 15 50.4	
	eS	16 01.5	

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Date	Phase	h m s
29	ePZ	11 04 05.0
	iPZ	07.2
30	ePZ	00 46 42.4
	eS	47 56.9
30	ePZ	02 29 36.5
	eS	30 10.9
30	ePZ	05 17 35.1
	eS	50.5
30	ePZ	11 38 58.4
	eS	39 14.0
30	ePZ	12 08 05.4
	eS	26.0
31	ePZ	00 58 34.1
	eS	34.3
31	ePZ	03 11 22.0
	eS	34.8
31	ePZ	03 12 19.1
	eS	27.8
31	ePZ	03 13 18.8
	eS	31.6
31	ePZ	11 39 33.6
31	ePZ	18 15 59.0
	eS	31.5
31	ePZ	18 46 08.7
	eS	23.2
31	iPZ	19 44 36.3d
	eS	51.4
31	iPZ	19 56 36.2d
	eS	39.4
	WARSAK	
1	ePZ	10 05 53.0
2	iPZ	03 15 30.9d
	iSZ	58.4
2	ePZ	07 58 49.4
2	ePZ	22 33 22.5
	eSZ	34 10.2
3	ePZ	05 12 21.2
	eSZ	53.1
3	ePZ	07 49 17.2
	eSZ	39.8
3	ePZ	10 31 27.0
	eSZ	59.3
3	ePZ	14 03 32.9
	eSZ	56.5
3	ePZ	15 17 21.1
4	ePZ	04 30 16.4
	eSZ	49.8
4	ePZ	04 59 09.0
	eSZ	38.5
5	ePZ	15 13 06.3
6	ePZ	05 26 09.9
6	ePZ	08 56 10.3
7	ePZ	02 12 10.6
7	ePZ	14 36 15.5
8	ePZ	00 16 09.4
8	ePZ	16 31 24.5
8	ePZ	20 31 46.6
9	ePZ	02 07 16.7
9	ePZ	15 59 33.8
	eSZ	16 00 53.8
9	ePZ	22 01 01.0
	eSN	34.0
9	ePZ	23 58 43.4
	eSZ	59 16.9
10	ePZ	11 10 38.4
10	ePZ	11 44 45.3
10	ePZ	15 44 32.6
11	ePZ	04 20 46.7
11	ePZ	02 38 00.6
12	ePZ	04 08 00.9
12	ePZ	09 00 36.3
12	ePZ	12 27 55.5
12	ePZ	20 47 40.5
13	ePZ	00 23 52.8
	eSZ	24 29.3
13	ePZ	02 48 10.2

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Date	Phase	h m s
	eSZ	43.9
13	ePZ	06 46 22.5
13	ePZ	13 31 50.2
15	ePZ	10 43 24.7
15	ePZ	11 53 28.1
	iSZ	58.3
17	iPgZ	01 38 03.3 c
	iSgZ	14.4
17	ePZ	03 08 32.2
17	ePZ	04 49 53.7
19	ePZ	07 15 23.4
	eSZ	56.0
19	ePZ	12 50 13.0
	iSZ	41.7
20	ePZ	03 29 47.0
	eSZ	30 56.8
22	ePZ	15 00 53.7
22	iPZ	15 02 32.8 d
22	ePZ	22 32 35.0
23	ePZ	04 45 49.0
	eSZ	46 34.9
23	ePZ	11 10 48.8
	eSZ	11 42.4
23	iPZ	13 21 48.2 c
24	ePZ	02 08 41.2
	eSZ	09 16.3
24	ePZ	04 26 22.8
	eSZ	27 10.0
24	ePZ	05 18 32.4
	eSZ	19 02.1
24	ePZ	18 53 58.8
	eSZ	54 20.0
25	ePZ	14 42 02.6
	eSZ	56.3
25	ePZ	21 19 47.1
	iSZ	20 14.6
27	ePN	07 18 14.2
	eSN	50.2
27	ePN	11 33 50.3
	eSN	34 20.0
27	ePN	12 53 45.6
	eSN	54 25.9
30	ePZ	10 43 03.3
31	ePZ	01 51 02.0
	iSE	30.2
31	ePN	07 57 30.7
31	ePN	14 21 30.3

LAHORE

6	e(P)Z	19 38 42
8	eXZ	17 35 28
11	ePZ	08 16 12
	eXZ	23 55
12	ePZ	08 34 36
12	ePZ	20 47 21
	eXZ	44
13	ePZ	00 23 57
	eSZ, NE	24 34
13	ePZ	02 48 18
	eSZ	57
13	eXZ	21 24 36
17	e(PKP)Z	14 30 38
20	eXZ	15 09 21
21	eXZ*	17 35 04
24	eXZ*	02 56 08
	eXZ*	57 03
24	eXN	11 24 55
25	eXZ*	16 28 18
26	eXZ*	05 11 34
26	eXZ	13 03 36
30	eXZ	04 18 12
	eSZ, NE	58
30	eXZ*	07 09 34
31	e(P)Z	22 06 28
	e(S)Z	07 26

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Date	Phase	h	m	s
	CHITTAGONG			
1	ePZ	16	57	30
2	eXZ	22	27	21
2	eXZ	22	49	29
2	eXZ	23	25	57
2	eXZ	23	50	54
3	eXZ	10	52	20
7	eXZ	02	22	58
8	eXZ	09	04	46
8	eXZ	14	18	12
10	eXZ	11	19	41
11	eXN	01	20	10
11	eXN	10	33	00
12	eXZ	03	06	06
12	ePZ	15	29	31
	iSN			56
12	eXZ	16	57	20
12	eXZ	20	47	35
13	ePZ	01	06	46
	iXZN			50
13	eXZ	07	35	32
13	eXZ	14	20	16
15	eXNE	03	24	50
15	eXN	06	44	21
16	ePZ	16	25	57
18	eXZ	23	25	51
18	eXZ	23	57	06
19	iPZ	17	23	52 c
	iSNE		24	07
19	ePKPZ	21	54	47
	eXZ		55	50
20	iSN	00	00	52
	iXZ		01	11
21	eXZ	15	28	29
21	eXZ	17	42	21
22	eXZ	10	29	50
22	eXE	16	38	44
	KARACHI			
3	ePZE	11	26	42.0
	e(S)E			58.0
19	eXZE	21	52	00.0
21	ePZ	07	13	58.0
	e(S)ZE		14	30.1
21	ePgZ	07	31	18.0
	eSnZE			39.5
	eSgZ			51.6

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Date	Station	Phase	h m s
1	Qt	ePZ	00 17 46.2d
1	Qt	ePZ	02 18 23.3d
		USCGS H 02 07 38.2	
		46.7 N 152.4 E	
		Kurile Islands	
		depth about 33 km	
1	Wr	iPZ	10 50 33.4d
		iSZ	59.3
	Lh	ePZ	51 14 d
		iSZ	52 12
	Qt	iPZ	51 38.3d
		eSN*	52 47.0
	Ch	ePZ	54 50 d
		epPZ	55 13
		H 10 49 57	
		36.2 N 71.6 E	
		Hindukush	
		depth about 100 km	
		USCGS H 10 49 54.8	
		36.4 N 71.5 E	
		Hindukush	
		depth about 70 km	
		Mag: 5.3 (CGS)	
1	Qt	ePKPZ	12 49 53.2
		USCGS H 12 30 55.8	
		15.9 S 172.4 W	
		Tonga Islands	
		depth about 33 km	
1	Qt	ePZ	18 30 52.5
		USCGS H 18 24 07.0	
		49.7 N 109.7 E	
		Chita region U.S.S.R.	
		depth about 33 km	
1	Qt	ePZ	19 46 06.0
		USCGS H 19 36 04.4	
		0.1 N 123.1 E	
		Celebes region	
		depth about 145 km	
1	Qt	iPZ	20 17 33.0d
		USCGS H 20 08 34.4	
		14.9 N 119.7 E	
		Off west coast of Luzon	
		Philippine Islands	
		depth about 33 km	
		Mag: 4.8 (CGS)	
1	Qt	iPZ	20 43 44.0d
		USCGS H 20 36 09.5	
		39.0 N 15.0 E	
		Mediterranean Sea	
		depth about 285 km	
		Mag: 4.4 (CGS)	
1	Qt	ePKPZ	21 32 49.1
		USCGS H 21 13 52.7	
		15.2 S 173.5 W	
		Samoa Islands region	
		depth about 33 km	
		Mag: 5.4 (CGS)	
2	Qt	ePZ	07 13 10.0
		USCGS H 07 07 57.9	
		27.8 N 95.6 E	
		Assam, India	
		depth about 143 km	
		Mag: 4.9 (CGS)	
2	Qt	ePZ	09 15 58.5
		eSE	17 40.0
		H 09 13 46	
2	Qt	ePZ	10 13 00.0 c
		iPZ	00.5
		USCGS H 10 00 00.1	
		6.1 S 154.4 E	
		Solomon Islands region	
		depth about 49 km	
		Mag: 5½ - 5¾ (Pal),	
		5.8 (CGS)	
2	Qt	ePZ	18 10 44.5c
		epPZ	54.7

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Date	Station	Phase	h m s
		USCGS H 17 58 08.7	
		53.8 N 163.7 W	
		Alaska Peninsula region	
		depth about 36 km	
		Mag: 4.1 (CGS)	
2	Qt	iPKPZ	22 41 07.7d
		USCGS H 22 22 00.0	
		13.8 N 90.8 W	
		Near coast of Guatemala	
		depth about 68 km	
		Mag: 5.1 (CGS)	
3	Qt	ePZ	07 30 23.8 c
		USCGS H 07 20 07.7	
		40.4 N 143.1 E	
		Off east coast of	
		Honshu, Japan	
		depth about 26 km	
		Mag: 4.5 (CGS)	
3	Lh	ePZ	07 45 10 c
	Qt	iPZ	55.3 c
		eSN*	54 08.5
		USCGS H 07 35 54.3	
		34.2 N 138.7 E	
		Honshu, Japan	
		depth about 43 km	
		Mag: 5.3 (CGS)	
3	Qt	ePKPZ	11 51 03.5
		USCGS H 11 31 48.7	
		5.3 N 72.9 W	
		Columbia	
		depth about 21 km	
		Mag: 5 (Pal),	
		5.0 (CGS)	
3	Wr	ePZ	12 35 56.3
		iSZ	37 20.6
	Qt	ePZ	36 57.8
		eSN	38 49.2
		USCGS H 12 34 42.1	
		39.2 N 70.6 E	
		Tadzhik, S.S.R.	
		depth about 33 km	
		Mag: 4.7 (CGS)	
3	Qt	iPKPZ	19 07 49.2d
		USCGS H 18 48 54.8	
		29.5 S 177.8 W	
		Kermadec Islands region	
		depth about 49 km	
		Mag: 5.5 (CGS)	
3	Qt	ePKPZ	21 48 53.5
		epPKPZ	50 14.3
		USCGS H 21 30 13.3	
		59.5 S 27.7 W	
		Sandwich Islands	
		depth about 45 km	
		Mag: 5.6 (CGS)	
4	Qt	ePZ	00 12 48.0
		epPZ	13 00.2
		USCGS H 00 01 17.7	
		3.4 S 135.6 E	
		Western New Guinea	
		depth about 44 km	
4	Qt	iPKPZ	12 13 07.0d
		USCGS H 11 54 09.1	
		30.5 S 177.8 W	
		Kermadec Islands	
		depth about 33 km	
		Mag: 5.1 (CGS)	
4	Qt	iPKPZ	13 24 54.2
		USCGS H 13 05 56.3	
		30.4 S 177.6 W	
		Kermadec Islands	
		depth about 33 km	
		Mag: 5.2 (CGS)	
4	Qt	ePZ	14 54 55.5d
		USCGS H 14 44 05.2	
		4.8 S 129.9 E	

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Date	Station	Phase	h	m	s
		Banda Sea			
		depth about 188 km			
		Mag: 4.9 (CGS)			
4	Qt	ePZ	16	12	22.0
		USCGS H 16 04 10			
		38.1 N 121.0 E			
		Yellow Sea region			
		depth about 33 km			
4	Lh	ePZ	19	32	27
	Wr	ePZ			40.6
	Qt	ePZ		33	07.7d
		USCGS H 19 21 56.6			
		18.9 N 146.2 E			
		Mariana Islands			
		depth about 110 km			
		Mag: 5.5 (CGS)			
4	Ch	ePZ	21	12	32
		esPZ			52
		ePPZ		14	14
		eSNE		18	46
	Lh	ePZ		14	46 d
		epPZ			54
		esPZ		15	03
		eSZ		22	54
		eSSZ		23	13
	Wr	iPZ		15	07.4d
		esSN		23	53.1
	Kr	ePZ		15	17.2d
	Qt	ePZ			23.0d
		iPZ			23.7d
		ipPZ			32.3
		eSN		24	05.4
		USCGS H 21 04 42.3			
		1.2 S 127.3 E			
		Halmahera region			
		depth about 31 km			
		Mag: 5.2 (CGS)			
4	Qt	ePZ	22	18	56.0
		USCGS H 22 11 31.8			
		39.0 N 20.6 E			
		Greece			
		depth about 33 km			
		Mag: 4.7 (CGS)			
4	Qt	ePZ	23	17	31.2
4	Qt	ePZ	23	34	03.0
5	Qt	ePZ	00	06	03.1
	Wr	ePZ			23.3
		USCGS H 23 55 30.7			
		33.1 S 76.7 E			
		Indian Ocean			
		depth about 33 km			
5	Qt	ePZ	00	37	33.3
5	Qt	ePZ	05	42	51.5
	Wr	ePZ		43	12.6
		USCGS H 05 32 09.2			
		34.6 S 81.5 E			
		Indian Ocean			
		depth about 33 km			
5	Wr	ePZ	09	20	56.1
	Qt	ePZ		22	21.5d
		USCGS H 09 11 49.9			
		31.2 N 142.6 E			
		Southeast of Honshu			
		Japan			
		depth about 33 km			
		Mag: 4.8 (CGS)			
5	Wr	ePZ	11	32	26.7
	Qt	ePZ			43.5c
		USCGS H 11 20 07.3			
		3.6 S 149.6 E			
		Bismarck Sea			
		depth about 33 km			
		Mag: 5.1 (CGS)			
5	Lh	ePZ	22	50	29
		USCGS H 22 41 01.8			

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Date	Station	Phase	h m s
		2.9 S 119.7 E	
		Celebes	
		depth about 63 km	
		Mag: 4.6 (CGS)	
5	Lh	ePZ	23 03 53
	Qt	ePZ	04 29.8
		ePKPPKPZ	34 03.0
		USCGS H 22 54 28.7	
		3.0 S 119.5 E	
		Celebes	
		depth about 75 km	
5	Qt	ePZ	23 55 02.3
		eSE	58 00.0
		H 23 51 15	
6	Lh	ePZ	05 26 52 d
		epPZ	27 02
		ePcPZ	28 49
	Wr	iPZ	27 14.8
	Kr	ePZ	42.9
		epPZ	56.4
	Qt	iPZ !	43.0d
		ipPZ	54.5
		USCGS H 05 18 55.1	
		19.9 N 120.2 E	
		Off north coast of	
		Luzon	
		Philippine Islands	
		depth about 33 km	
		Mag: 5.8 (CGS)	
6	Qt	ePZ	06 16 09.5d
		USCGS H 06 07 22.2	
		20.1 N 120.4 E	
		Off north coast of	
		Luzon	
		Philippine Islands	
		depth about 33 km	
		Mag: 4.7 (CGS)	
6	Lh	ePZ	08 27 30 c
	Qt	iPZ !	28 05.5c
	Wr	ePZ	07.2
		USCGS H 08 21 12.2	
		6.7 N 94.7 E	
		Nicobar Islands region	
		depth about 33 km	
		Mag: 5.5 (CGS)	
6	Qt	ePZ	12 15 15.0
		eSN*	24 21.0
	Wr	ePZ	15 38.0
		USCGS H 12 04 14.3	
		37.8 S 77.9 E	
		1500 km northeast of	
		Kerguelen Islands	
		depth about 33 km	
		Mag: 5.3 (CGS)	
7	Qt	ePZ	08 16 04
7	Qt	iPZ	15 43 41.4c
		iSE	42.9
		Mu Sec	
		PZ 0.20 0.2	
		$\triangle = 0°.15$	
		H 15 43 38	
		Epicentre about 10	
		Miles west-north-west	
		of the observatory	
		Felt Quetta	
		Mag: 3.0 (Qt)	
7	Lh	ePZ	15 58 06 c
		epPZ	15
	Wr	iPZ	28.9c
	Qt	iPZ	56.5c
		ipPZ	59 05.0
		eSE	16 06 14.0
		esSE	36.5
		USCGS H 15 49 57.4	
		19.0 N 121.8 E	

International Seismological Centre

Date	Station	Phase	h	m	s
		Off north coast of Luzon Philippine Islands depth about 33 km Mag: 4.7 (CGS)			
7	Qt	ePKPZ	19	50	05.0
		USCGS H 19 30 35.6 8.5 N 103.1 W Clipperton Islands region depth about 33 km Mag : $5\frac{1}{2}$ - $5\frac{3}{4}$ (Berk), $5\frac{1}{4}$ - $5\frac{1}{2}$ (Pal), 4.9 (CGS)			
7	Qt	ePKPZ	22	50	50.8
		USCGS H 22 31 54.8 15.2 S 173.1 W Samoa Islands region depth about 33 km Mag: 4.6 (CGS)			
7	Qt	ePKPZ	22	56	25.6
		USCGS H 22 37 30.0 15.3 S 173.2 W Samoa Islands region depth about 33 km Mag: 5.0 (CGS)			
8	Qt	ePKPZ	01	20	48.8d
		USCGS H 01 01 51.9 15.1 S 173.0 W Samoa Islands region depth about 33 km Mag: 4.6 (CGS)			
9	Lh	ePZ	03	51	46
		eSN		52	51
	Qt	ePZ			12.5d
		eSN		53	39.0
		Mu Sec			
		PZ 0.01 0.5			
		$\triangle = 7°.7$ H 03 50 22 Hindukush region Mag: 3.9 (Qt)			
9	Qt	ePZ	07	21	33.0
		USCGS H 07 09 28.8 51.0 N 178.8 E Rat Islands Aleutian Islands depth about 70 km Mag: 4.5 (CGS)			
9	Qt	ePZ	07	48	01.5
		eSE		50	00.0
		H 07 45 28			
9	Qt	ePZ	09	12	23.6
		USCGS H 09 02 23.6 6.3 N 126.1 E Mindanao, Philippine Islands depth about 106 km Mag: 4.9 (CGS)			
10	Qt	ePZ	04	16	32.0
		eSN		18	26.5
		H 04 14 05			
10	Qt	ePZ	04	31	09 ±
		ePPZ*		35	30.0
		eSKSN*		41	44.0
		USCGS H 04 16 37.7 55.4 S 146.4 E 800 km west of Macquarie Islands depth about 33 km Mag: $6\frac{1}{4}$ (Pas), $5\frac{3}{4}$ - 6 (Pal) 6.1 (CGS)			
10	Qt	ePZ	06	53	31 ±
		ePPZ		57	57.5
		eSKSN*	07	04	07.0
		USCGS H 06 39 04.0			

International Seismological Centre

Date	Station	Phase	h	m	s
		55.3 S 146.1 E			
		800 km west of			
		Macquarie Islands			
		depth about 18 km			
		Mag : 6¼ - 6½ (Pas),			
		6¼ - 6½ (Pal),			
		6·0 (CGS)			
10	Qt	ePZ	08	06	39·5d
		USCGS H 07 54 28·2			
		51·5 N 178·5 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 33 km			
		Mag: 4·7 (CGS)			
10	Lh	ePZ	10	57	28
		epPZ			39
	Qt	iPZ		58	02·5d
		ipPZ			14·0
		eSN*	11	07	08·4
		USCGS H 10 46 58·1			
		50·9 N 160·2 E			
		Off coast of Kamchatka			
		depth about 33 km			
		Mag: 5·3 (CGS)			
10	Lh	ePZ	12	31	57 c
	Qt	iPZ		32	27·5c
		USCGS H 12 19 56·1			
		4·6 S 152·0 E			
		New Britian			
		depth about 174 km			
		Mag: 5·2 (CGS)			
10	Lh	ePZ	18	52	18
		eSN		53	20
	Qt	ePZ		52	37·2d
		eSN		53	55·7
		Mu Sec			
		PZ 0·03 0·7			
		△ = 7°.0			
		H 18 50 55			
		Hindukush region			
		Mag: 4·2 (Qt)			
11	Qt	ePZ	00	11	31·3
		eSKSE*		22	00·0
		USCGS H 23 58 44·3			
		4·5 S 152·8 E			
		New Britian			
		depth about 69 km			
		Mag: 5·2 (CGS)			
11	Lh	ePZ	03	27	19
		eSN		28	22
	Qt	iPZ		27	30·3c
		eSE		28	46·0
		USCGS H 03 25 40·7			
		37·1 N 70·3 E			
		Hindukush			
		depth about 38 km			
		Mag: 4·3 (CGS)			
11	Qt	ePZ	13	20	46·6
		USCGS H 13 08 31·4			
		63·1 N 151·4 W			
		Central Alaska			
		depth about 31 km			
11	Qt	iPZ	16	21	10·5c
		iSE		22	28·7
		Mu Sec			
		PZ 0·01 0·6			
		△ = 7°.0			
		H 16 19 30			
		Mag: 3·6 (Qt)			
11	Ch	ePZ	18	09	39
		eSN		11	24
	Lh	ePZ		10	00 d
		eSNE		12	02
	Qt	ePZ		11	23·5d
		epPZ			31·5
		iSE		14	38·5

International Seismological Centre

Date	Station	Phase	h	m	s
		Mu Sec			
		PZ 0·04 1·2			
		△ = 17°8			
		H 18 07 19			
		31·2 N 87·5 E			
		Tibet			
		depth about 33 km			
		USCGS H 18 07 24·1			
		30·7 N 86·9 E			
		Tibet			
		depth about 33 km			
		Mag: 4·5 (CGS),			
		4·7 (Qt)			
11	Lh	ePZ	18	36	11 ±
		eSNE		37	30
	Qt	ePZ		36	13·9
		eSE		37	54·2
		USCGS H 18 34 24·4			
		37·7 N 69·4 E			
		Hindukush			
		depth about 200 km			
		Mag: 4·1 (CGS)			
12	Qt	ePZ	03	01	26·9
		epPZ			38·5
		USCGS H 02 50 58·8			
		30·8 N 142·0 E			
		South of Honshu, Japan			
		depth about 33 km			
		Mag: 4·4 (CGS)			
12	Qt	ePZ	11	53	19·7
		eSE		55	31·0
13	Lh	ePZ	10	45	19 c
	Wr	ePZ			39·8c
	Qt	iPZ			53·2c
		eSN		54	52·5
		USCGS H 10 34 52·4			
		6·1 S 130·1 E			
		Banda Sea			
		depth about 190 km			
		Mag: 4·9 (CGS)			
13	Qt	ePKPZ	17	18	40·0
	Lh	ePKPZ			57
		USCGS H 16 59 10·9			
		33·3 S 71·3 W			
		Near coast of central			
		Chile			
		depth about 94 km			
13	Lh	ePZ	17	39	01
	Qt	ePZ			31·0
		USCGS H 17 26 41·1			
		4·6 S 153·2 E			
		New Britian			
		depth about 54 km			
		Mag: 5·0 (CGS)			
13	Lh	ePZ	18	58	15
	Qt	ePZ		59	00·2
		epPZ			12·5
13	Qt	ePZ	22	31	22·2
	Lh	ePZ			38
		USCGS H 22 23 34·3			
		11·7 S 65·0 E			
		Indian Ocean,			
		southwest of Chagos			
		Archipelago			
		depth about 33 km			
14	Wr	ePZ	22	13	40·2
		iSZ		14	05·5
	Qt	ePZ			32·5
		eSE		15	54·0
		H 22 12 52			
		Hindukush region			
15	Qt	ePKPZ	15	50	45·5
	Lh	ePKPZ*			56
		USCGS H 15 30 37·7			
		36·3 S 98·9 W			
		Off coast of central			
		Chile			

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Date	Station	Phase	h	m	s	
		depth about 33 km				
		Mag: 4·9 (CGS)				
16	Lh	ePZ	04	53	14	±
		epPZ			40	
	Qt	ePZ			48·7	
		USCGS H 04 43 49·0				
		42·7 N 142·0 E				
		Hokkaido, Japan				
		depth about 80 km				
		Mag: 4·0 (CGS)				
16	Wr	ePZ	10	18	26·8	
		iSZ			59·0	
	Qt	ePZ		19	21·5	
		iSZ		20	38·6	
		H 10 17 41				
		Hindukush region				
16	Qt	ePZ	14	01	47·7c	
		USCGS H 13 49 00·1				
		4·5 S 153·0 E				
		New Ireland				
		depth about 72 km				
		Mag: 5·7 (CGS)				
17	Qt	ePZ	09	03	42	±
17	Qt	ePZ	11	03	19·2d	
		iPZ			20·0	
		eSE			47·7	
	Wr	iPZ			37·6	
	Lh	ePZ			57	
		iSNE		04	45	
		Mu Sec				
		PZ 0·03 0·6				
		△ = 2°·3				
		H 11 02 42				
		30·7 N 69·6 E				
		Near Mekhtar,				
		West Pakistan				
		depth about 33 km				
		Mag: 3·5 (Qt)				
17	Wr	iPZ	18	44	32·1	
	Lh	ePZ			38	±
		eSN*		55	04	
	Qt	ePZ		44	56·9c	
		ePPZ		48	18·0	
		eSN*		55	26	
		USCGS H 18 32 14·5				
		60·4 N 140·8 W				
		Southwestern Yukon				
		depth about 33 km				
		Mag: 5¼-5½ (Pal),				
		5·1 (CGS)				
17	Qt	ePZ	19	42	08·5	
17	Qt	ePKPZ	20	27	35·2	
		USCGS H 20 08 37·0				
		20·4 S 174·4 W				
		Tonga Islands				
		depth about 33 km				
		Mag: 4·9 (CGS)				
17	Lh	ePZ	23	10	10	c
		epPZ			25	
		esPZ			44	
		ePPZ		11	56	
		eSNE		16	36	
		eScS		20	03	
	Wr	iPZ		10	38·7c	
		iSN		17	28·0	
	Qt	ePZ		10	39·8	
		eSE*		17	29·0	
		USCGS H 23 02 06·6				
		4·1 S 102·2 E				
		Near south coast of				
		Sumatra				
		depth about 73 km				
		Mag: 6·1 (CGS)				
18	Lh	ePZ	04	11	06	
	Wr	iPZ			21·3c	
	Qt	ePZ			54·8	

Major Shocks
International Seismological Centre

Date	Station	Phase	h	m	s
		USCGS H 04 02 31·0			
		29·0 N 129·9 E			
		Ryukyu Islands			
		depth about 33 km			
		Mag: 5·5 (CGS)			
18	Qt	ePZ	05	26	23·5
18	Wr	iPZ	08	38	41·4c
		iSZ		39	13·6
	Qt	iPZ			37·8d
		eSN		40	55·5
		Mu Sec			
		PZ 0·02 0·5			
		△ = 6°·7			
		USCGS H 08 37 58·4			
		36·3 N 70·7 E			
		Hindukush			
		depth about 223 km			
		Mag: 4·4 (CGS),			
		4·5 (Qt)			
18	Qt	ePZ	12	56	15·5d
18	Lh	ePZ	23	23	14 ±
	Wr	ePZ			37
	Qt	ePZ		24	00·2
		USCGS H 23 14 23·9			
		12·6 N 124·2 E			
		Southern Luzon			
		Philippine Islands			
		depth about 16 km			
		Mag: 4·6 (CGS)			
19	Wr	iPZ	04	40	28·0d
		iSZ			55·0
	Qt	ePZ		41	23·7
		eSE		42	49·2
		H 04 39 39			
		Hindukush region			
19	Lh	ePZ	06	38	55
		eSN*E*		39	37
	Wr	iPZ			39·2d

Date	Station	Phase	h	m	s
	Qt	ePZ		40	01·1
		eSE		41	29·0
		H 06 38 03			
		28.7 N 76.5 E			
		India			
		depth about 33 km			
		About 40 miles west of			
		Delhi, Felt Delhi			
19	Lh	iPZ	09	18	34
		eSNE		26	14
		eScSN		28	16
	Wr	iPZ		18	55.0c
		eSN		26	54.8
	Qt	iPZ		19	14.4c
		eSN		27	29.5
		Mu Sec			
		PZ 0.1 0.8			
		△ = 61°.7			
		USCGS H 09 09 04.0			
		4.7 N 126.5 E			
		Talaud Islands region			
		depth about 83 km			
		Mag: 5¼ - 5½ (Pal),			
		6.2 (CGS),			
		6.0 (Q.)			
19	Ch	iPZ	10	48	05.5
	Lh	ePZ		51	21
		eSN*		54	27
	Wr	ePZ		51	55.5
	Qt	iPZ!		52	25.2c
		eSN		55	29.4
		eSN*		56	31.5
	Kr	ePE		52	27.3
		epPE			43.8
		Mu Sec			
		PZ 0.18 1.9			
		△ = 23°.1			
		H 10 47 21			
		25.0 N 92.1 E			

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Date	Station	Phase	h m s
		Assam-India	
		depth about 33 km	
		USCGS H 10 47 24.7	
		25.0 N 92.1 E	
		Assam-India	
		depth about 51 km	
		Mag: 5.6 (CGS),	
		5.7 (Qt)	
		Felt Srimangal, Sylhet,	
		Shillong	
19	Qt	ePZ	18 05 49.0
19	Lh	iPZ	18 34 03 d
		eSNE	43 55
	Wr	iPZ	34 16.3d
	Qt	iPZ!	33.0d
		ePPZ	38 05.0
		eSE	44 37.5
		USCGS H 18 22 09.6	
		3·5 S 153.4 E	
		New Ireland region	
		depth about 279 km	
		Mag: 5.1 (CGS)	
19	Lh	ePZ	23 11 21
	Wr	ePZ	32.9
	Qt	ePZ	12 07.7d
		eSN*	20 34.0
		USCGS H 23 01 51.5	
		31.5 N 140.3 E	
		South of Honshu, Japan	
		depth about 38 km	
		Mag: $5\frac{1}{2}$ (Bks),	
		$5\frac{1}{4}$ (Pal),	
		5.0 (CGS)	
20	Wr	ePZ	01 05 57.0
	Qt	iPZ	06 32.5d
		USCGS H 00 56 04.1	
		36.3 N 144.5E	
		Off east coast of	
		Honshu, Japan	
		depth about 33 km	
		Mag: 5.1 (CGS)	
20	Qt	ePZ	19 57 32.2
		USCGS H 19 47 41.3	
		35.8 N 3.6 W	
		Western Mediterranean	
		depth about 54 km	
		Mag: 4.6 (CGS)	
20	Qt	ePZ	20 10 45.5
20	Lh	ePZ	20 15 25
		eSNE	16 10
	Qt	ePZ	26.7
		eSN	18 00.5
		H 20 14 25	
		India	
20	Wr	ePKPZ	23 05 08.7
	Qt	ePKPZ	15.7
		epPKPZ	28.5
		USCGS H 22 46 18.1	
		27.9 S 176.6 W	
		Kermadec Islands	
		depth about 41 km	
		Mag: 5.2 (CGS)	
20	Qt	ePZ	23 28 03.3
		USCGS H 23 15 33.4	
		52.9 N 168.6 W	
		Fox Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag: 4.1 (CGS)	
21	Qt	ePZ	00 22 30.5
21	Qt	ePZ	00 07 25.2
21	Lh	ePZ	04 27 51
		eSNE	28 31
	Qt	ePZ	48
		eSN	30 19
		H 04 26 54	

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Date	Station	Phase	h m s
21	Wr	iPZ	06 42 08.9
		eSZ	35.2
	Qt	ePZ	43 09.3
		eSN	44 22.0
		Mu Sec	
		PZ 0.01 0.5	
		△ = 6°.5	
		H 06 41 35	
		Hindukush	
		Mag: 4.2 (Qt)	
21	Qt	ePZ	12 40 44.2d
21	Wr	ePZ	13 52 48.8
	Qt	ePZ	53 25.2d
		iPZ	29.0
		esPZ	42.2
		USCGS H 13 44 24.6	
		47.9 N 130.3 E	
		Eastern Manchuria	
		depth about 33 km	
		Mag: 4.9 (CGS)	
21	Qt	iPZ	14 40 29.0d
		USCGS H 14 30 14.8	
		2.7 N 128.6 E	
		Halmahera region	
		depth about 29 km	
21	Ch	ePZ	15 27 10
	Lh	ePZ	30 23
		eSNE	33 17
		eSSE*	38
	Wr	iPZ	31 00.7d
		iSZ	34 35.5
	Qt	iPZ	31 30.0
		eSN	35 36.3
		Mu Sec	
		PZ 0.14 1.1	
		△ = 23°.1	
		H 15 26 25	
		25.0 N 92.1 E	
		Assam	
		depth about 33 km	
		USCGS H 15 26 31.0	
		25.2 N 92.2 E	
		Eastern India	
		depth about 56 km	
		Mag: 5.6 (CGS),	
		5.4 (Qt)	
21	Wr	ePZ	19 26 41.0
	Qt	ePZ	27 30.5
21	Qt	ePKPZ	22 00 58.0
		USCGS H 21 42 01.0	
		29.7 S 177.4 W	
		Kermadec Islands region	
		depth about 43 km	
		Mag: 4.8 (CGS)	
21	Wr	ePN	23 21 15.7
		eSN	49.8
	Qt	iPZ	22 18.0d
		eSN	23 37.0
		Mu Sec	
		PZ 0.01 0.5	
		△ = 7°.0	
		H 23 20 37	
		36.3 N 70.8 E	
		Hindukush	
		Mag: 4.1 (Qt)	
22	Qt	ePZ	04 50 20.0d
		iPZ	21.0
		USCGS H 04 37 21.7	
		6.1 S 154.4 E	
		Solomon Islands region	
		depth about 64 km	
		Mag: 4.9 (CGS)	
22	Qt	ePZ	08 33 07.1
22	Lh	ePZ	16 20 33
	Qt	ePZ	21 04.9
		USCGS H 16 12 14.0	

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Date	Station	Phase	h	m	s
		6.0 S 113.1 E			
		Java Sea			
		depth about 595 km			
		Mag: 5.1 (CGS)			
22	Lh	ePZ	20	59	31
		ePPZ	21	01	10
	Qt	ePZ		00	13.0
		USCGS H 20 51 56.8			
		52.9 N 121.3 E			
		Northwestern Manchuria			
		depth about 33 km			
		Mag: 4.5 (CGS)			
23	Qt	ePKPZ	04	28	28.3d
		USCGS H 03 49 33.9			
		29.6 S 177.9 W			
		Kermadec Islands region			
		depth about 55 km			
		Mag: 5.0 (CGS)			
23	Wr	iPZ	09	05	20.6d
	Qt	ePZ			35.8
		USCGS H 08 53 09.6			
		6.0 S 146.6 E			
		New Guinea			
		depth about 61 km			
		Mag: 5.3 (CGS)			
23	Wr	ePZ	11	01	28.5
	Qt	ePZ			33.7
		USCGS H 10 51 48.8			
		9.0 S 113.1 E			
		Off south coast of Java			
		depth about 157 km			
23	Lh	ePZ	18	37	41
		epPZ			54
	Wr	ePZ			57.2
	Qt	ePZ		38	21.0d
		USCGS H 18 27 11.8			
		12.3 N 140.7 E			
		Mariana Islands region			
		depth about 42 km			
		Mag: 4.9 (CGS)			
23	Qt	ePZ	21	08	27 ±
24	Wr	ePZ	04	38	41.1
	Lh	ePZ			51
		epPZ		39	09
		ePPZ		41	56
		eSN*E*		49	02
		eSSE*		54	20
	Qt	ePZ		39	08.5d
		ePPZ		42	30.2
		eSN		49	30.8
		Mu Sec			
		PZ 0.3 1.5			
		USCGS H 04 26 37.9			
		59.5 N 151.7 W			
		Cook Inlet			
		depth about 52 km			
		Mag: $6\frac{2}{3}$ (Pas),			
		5.7 (CGS),			
		6.2 (Qt)			
24	Qt	ePKPZ	13	36	45 c
		USCGS H 13 18 08.2			
		25.5 S 175.6 W			
		Tonga Islands region			
		depth about 238 km			
		Mag: 4.6 (CGS)			
24	Ch	ePZ	16	29	06
	Wr	ePZ			12.2
	Lh	ePZ			17
	Qt	ePZ			41.0c
		eSE*		40	03.0
		Mu Sec			
		PZ 0.1 1.0			
		△ = 84°.0			
		USCGS H 16 17 15.4			
		52.3 N 171.2 W			
		Fox Islands region			
		Aleutian Islands			

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Date	Station	Phase	h m s
		depth about 33 km	
		Mag: 5.4 (CGS),	
		5.8 (Qt)	
24	Qt	ePZ	16 38 23.7
		USCGS H 16 25 58.6	
		52.4 N 171.2 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 34 km	
		Mag: 4.2 (CGS)	
25	Qt	ePZ	03 47 38.5
		eSE	48 59.0
		Mu Sec	
		PZ 0.02 0.8	
		△ = 7°.0	
		H 03 45 58	
		Mag: 4.4 (Qt)	
25	Qt	ePZ	08 18 07.2
25	Wr	iPZ	13 55 36.1d
		iSZ	45.5
	Qt	ePZ	56 32.0d
		eSN	57 29.1
		H 13 55 17	
		West Pakistan	
25	Lh	ePZ	14 41 06
		ePPZ	43 04
		eSE	48 14
	Wr	ePZ	41 30.6
		eSN	49 03.6
	Qt	ePZ	41 32.4c
		eSE	49 08.0
		USCGS H 14 32 14.3	
		8.4 S 106.5 E	
		Near south coast of Java	
		depth about 78 km	
		Mag: 5.4 (CGS)	
26	Qt	ePZ	00 44 21.5
		eSE	46 41.0
	Wr	ePZ	44 42.2
		H 00 41 21	
26	Qt	ePZ	06 50 06.7c
		iPZ	07.2
		eSE	51 26
		Mu Sec	
		PZ 0.03 0.7	
		△ = 7°.0	
		H 06 48 27	
		Mag: 4.5 (Qt)	
26	Qt	ePZ	08 07 00.0
		USCGS H 07 55 41.4	
		11.5 N 143.0 E	
		Mariana Islands region	
		depth about 48 km	
		Mag: 4.8 (CGS)	
26	Qt	ePZ	08 43 27.3
		USCGS H 08 33 18.7	
		38.9 N 142.0 E	
		Near coast of northern	
		Honshu, Japan	
		depth about 33 km	
		Mag : 4.2 (CGS)	
26	Lh	ePZ	09 51 06 c
	Wr	iPZ	27.4c
	Qt	iPZ	45.9c
		eSE	10 00 09.3
		USCGS H 09 41 31.2	
		4.6 N 126.3 E	
		Off coast of Mindanao	
		Philippine Islands	
		depth about 33 km	
		Mag: 4.9 (CGS)	
6	Qt	ePZ	11 57 19.5
		iPZ	21.9d
		eSE	59 01.5
		H 11 55 07	

International Seismological Centre

Date	Station	Phase	h	m	s
26	Wr	iPZ	14	10	32.3c
		iSN		11	24.1
	Lh	iPZ		10	37 c
		iSNE		11	35
	Qt	iPZ			42.8c
		eSN*		13	32.9
		Mu Sec			
	PZ	0.20 0.7			
		△ = 9°.8			
		H 14 09 18			
		36.0 N 77.0 E			
		Sinkiang Province			
		China			
		depth about 33 km			
		USCGS H 14 09 13.0			
		36.4 N 76.9 E			
		Sinkiang Province,			
		China			
		depth about 33 km			
		Mag: 5.3 (CGS),			
		6.0 (Qt)			
26	Qt	ePZ	17	27	22.3
		USCGS H 17 21 56.6			
		24.2 N 95.2 E			
		Northern Burma			
		depth about 80 km			
		Mag : 5.4 (CGS)			
26	Wr	ePKPZ	18	10	57.4
	Qt	ePKPZ		01	57.4
		esPKPZ		02	14.0
		ePPZ		04	15.5
		ePKSE		05	31.5
		USCGS H 17 42 40.6			
		7.1 N 82.3 W			
		Near south coast of			
		Panama			
		depth about 20 km			
		Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pas),			
		$5\frac{1}{2}$ - $5\frac{3}{4}$ (Pal),			
		6.0 (CGS)			
26	Qt	ePZ	20	52	36 ±
27	Wr	ePZ	07	20	19.6
	Qt	ePZ			44.8
		USCGS H 07 08 01.7			
		60.5 N 140.7 W			
		Yukon Territory			
		depth about 29 km			
		Mag: 4.6 (CGS)			
27	Qt	ePZ	10	44	07.7
27	Qt	ePZ	11	37	32.2
27	Qt	ePZ	11	56	27.3c
		USCGS H 11 46 57.9			
		8.3 S 111.2 E			
		Near coast of Java			
		depth about 180 km			
27	Qt	ePKPZ	12	40	20.6
		USCGS H 12 21 25.1			
		30.1 S 177.7 W			
		Kermadec Islands region			
		depth about 44 km			
		Mag: 4.8 (CGS)			
27	Ch	ePZ	15	34	54
		eSNE		36	27
	Lh	ePZ		38	13
		epPZ			25
		eSNE		42	29
		esSN			45
	Wr	iPZ	38	44	.6
	Qt	iPZ			55.5c
		isPZ	39	10	.2
		eSN*	43	48	.0
		USCGS H 15 32 53.1			
		14.4 N 93.7 E			
		Andaman Islands region			
		depth about 33 km			

International Seismological Centre

Date	Station	Phase	h m s
		Mag: 5.2 (CGS)	
27	Qt	ePZ	16 43 17.0
27	Wr	iPZ	20 14 51.8c
		iSZ	15 25.7
	Lh	ePZ	33
		eSNE	16 37
	Qt	ePZ	15 45.7d
		iSN	17 04.5
		Mu Sec	
		PZ 0.01 0.6	
		△ = 7°.1	
		H 20 14 04	
		36.7 N 70.2 E	
		Hindukush	
		depth about 200 km	
		Mag: 4.0 (Qt)	
28	Ch	ePZ	02 38 27
		epPZ	37
	Qt	ePZ	38.7
	Lh	ePZ	51
	Wr	ePZ	39 05.2
		USCGS H 02 28 51.6	
		27.5 S 66.1 E	
		Indian Ocean	
		depth about 33 km	
		Mag: 6.0 (CGS)	
28	Qt	ePZ	03 08 14.0
		iSE	09 42.0
		Mu Sec	
		PZ 0.01 0.5	
		△ = 7°.5	
		H 203 06 9	
		Mag: 4.2 (Qt)	
28	Ch	ePZ	13 52 36
		epPZ	50
		eSE	56 39 ±
	Lh	ePZ	54 56
		eSNE	14 00 37
	Wr	ePZ	13 55 25.3
	Qt	ePZ	26.0
		epPZ	39.5
		eSN*	14 01 32.0
		USCGS H 13 47 47.7	
		1.3 N 97.4 E	
		Near coast of Sumatra	
		depth about 50 km	
		Mag: 5.0 (CGS)	
28	Qt	ePZ	15 16 38.2
28	Ch	ePZ	22 05 19
		esPZ	45
		eSNE	13 00
	Lh	iPZ	05 50 c
		eSN	14 05
		ePKPPKPZ	35 12
	Wr	iPZ	05 52.0c
		eSN	14 15.1
	Qt	iPZ	06 28.2c
		eSE	15 21
	Kr	ePZ	06 52.3
		epPZ	07 07.2
		Mu Sec	
		PZ 0.2 0.8	
		USCGS H 21 55 38.8	
		46.5 N 153.2 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: $6\frac{3}{4}$ (Pas),	
		6.1 (CGS),	
		6.0 (Qt)	
28	Qt	ePZ	22 26 17.2
		USCGS H 22 15 28.5	
		46.6 N 153.5 E	
		Kurile Islands region	
		depth about 33 km	
		Mag : 4.6 (CGS)	

Major Shocks
International Seismological Centre

Date	Station	Phase	h m s
28	Qt	ePZ	22 32 51.5
		USCGS H 22 22 02	
		46.6 N 153.7 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.5 (CGS)	
28	Qt	ePZ	22 35 52.5
		USCGS H 22 25 04.5	
		46.7 N 153.4 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 5.1 (CGS)	
28	Qt	ePZ	23 00 22.0
		USCGS H 22 49 34.0	
		46.6 N 153.3 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.3 (CGS)	
28	Wr	iPZ	23 07 18.1c
		USCGS H 22 57 03.4	
		46.4 N 153.4 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.8 (CGS)	
28	Qt	ePZ	23 29 08 d
		USCGS H 23 16 56.4	
		4.7 S 144.5 E	
		Near north coast of	
		eastern New Guinea	
		depth about 83 km	
		Mag: 4.8 (CGS)	
29	Lh	ePZ	00 04 09
	Wr	iPZ	10.6c
	Qt	iPZ	46.0c
		eSE	13 40.5
		Mu Sec	
		PZ 0.10 1.2	
		$\triangle = 67°.0$	
		USCGS H 23 53 56.1	
		46.4 N 153.5 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 5.3 (CGS),	
		5.9 (Qt)	
29	Wr	ePZ	02 32 00.6d
	Qt	ePZ	36.0
		USCGS H 02 21 45.8	
		46.2 N 153.5 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.4 (CGS)	
29	Wr	ePZ	04 17 26.4
	Qt	ePZ	18 03.0
		USCGS H 04 07 10.0	
		46.0 N 153.5 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.7 (CGS)	
29	Lh	ePZ	05 49 08 ±
	Wr	ePZ	10.0
	Qt	ePZ	46.0c
		USCGS H 05 38 56.2	
		46.4 N 153.3 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.7 (CGS)	
29	Lh	ePZ	12 54 29 ±
	Wr	ePZ	45.3
	Qt	ePZ	55 10.0c
		eSN	13 04 30.0
		USCGS H 12 43 47.5	
		11.6 N 142.7 E	
		Mariana Islands region	
		depth about 30 km	
		Mag: 5.2 (CGS)	

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Date	Station	Phase	h m s
29	Qt	ePZ	13 15 46.2
		USCGS H 13 04 23.5	
		11.7 N 142.8 E	
		Mariana Islands region	
		depth about 33 km	
		Mag: 4.9 (CGS)	
29	Wr	ePZ	13 24 19.3
	Qt	ePZ	54.8
		USCGS H 13 14 04.2	
		46.4 N 153.7 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.7 (CGS)	
29	Qt	ePZ	18 04 33.0
29	Lh	ePZ	18 52 26
		epPZ	36
	Wr	ePZ	28.8
	Qt	ePZ	53 05.5
		USCGS H 18 42 14.8	
		46.3 N 153.4 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.9 (CGS)	
29	Lh	ePZ	20 26 52
		epPZ	27 02
	Wr	ePZ	26 54.9
	Qt	ePZ	27 30
		USCGS H 20 16 40.6	
		46.3 N 153.5 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.6 (CGS)	
30	Qt	ePZ	00 12 56.2
		USCGS H 00 05 46.7	
		35.4 N 23.7 E	
		Mediterranean Sea	
		depth about 33 km	
		Mag: 4.4 (CGS)	
30	Lh	ePZ	00 52 33 ±
	Qt	ePZ	53 12.0
		USCGS H 00 42 23.1	
		46.5 N 153.4 E	
		Kurile Islands region	
		depth about 33 km	
		Mag: 4.5(CGS)	
30	Qt	ePZ	01 50 28 ±
		USCGS H 01 39 05.4	
		11.8 N 142.5 E	
		Mariana Islands region	
		depth about 33 km	
		Mag: 4.6 (CGS)	
30	Wr	ePZ	04 00 00.0
		iSN	32.6
	Lh	ePZ	42
		iSNE	01 44
	Qt	iPZ	00 55.8d
		iSN	02 12.5
		Mu Sec	
		PZ 0.02 0.5	
		△ = 6°.9	
		H 03 59 17	
		36.3 N 70.8 E	
		Hindukush	
		depth about 200 km	
		USCGS H 03 59 15.4	
		36.5 N 70.5 E	
		Hindukush	
		depth about 200 km	
		Mag: 4.4 (CGS), 4.5 (Qt)	
30	Lh	ePZ	06 53 22
		epPZ	54 02
		eSNE	59 32
	Wr	iPZ	53 50.8c
		eSN	07 00 23.7

International Seismological Centre

Date	Station	Phase	h	m	s	
	Qt	iPZ	06	53	53.7	c
		iSN	07	00	30.0	
		USCGS H 06 45 36.8				
		2.5 S 102.4 E				
		Sumatra				
		depth about 160 km				
		Mag: 5.5 (CGS)				
30	Qt	ePZ	07	44	46.5	d
		eSN		47	40.0	
	Wr	ePZ		45	23.3	
	Lh	ePZ			54	
		H 07 41 05				
		33.2 N 48.5 E				
		Western Iran				
		depth about 33 km				
		USCGS H 07 41 08.2				
		33.3 N 49.1 E				
		Western Iran				
		depth about 40 km				
		Mag : 5.0 (CGS)				
30	Lh	ePZ	22	15	04	c
		epPZ			14	
	Qt	iPZ			41.9	c
		eSN*		24	34.5	
		Mu Sec				
		PZ 0.1 1.2				
		△ = 67°.0				
		USCGS H 22 04 52.8				
		46.5 N 153.3 E				
		Kurile Islands region				
		depth about 33 km				
		Mag : 4.9 (CGS),				
		5.6 (Qt)				

International Seismological Centre

Date	Phase	h	m	s
	QUETTA			
2	iPZ	08	44	02.4c
	iSE			33.3
2	ePZ	20	43	22.2
	eS			41.9
2	eSZ	21	31	26.0
3	ePZ	02	50	45.3d
	eS		52	06.7
3	eXZ	05	16	02.5
3	ePZ	16	51	19
	eSN			20
4	iPZ	05	18	28.4d
	iSE			39.2
4	iPZ	20	24	39.5d
	ePgZ			55.7
5	ePZ	01	34	31.3
	iS			34.6
5	ePZ	19	57	58.9d
5	ePZ	23	34	03.0
6	ePZ	08	34	11.3d
6	ePZ	10	25	58
	eSE		26	25
6	ePZ	12	13	51.7
7	ePZ	02	24	36.0
7	ePZ	08	32	06.7
	eSN			12.6
8	e(P)Z	05	47	00
9	ePZ	00	04	08.3
	eSE			17.4
9	iPZ	09	34	05.8d
	iSN			07.5
10	ePZ	04	34	30.0
10	ePZ	13	34	10.7
	eS			38.3
11	ePZ	14	19	04.2
	eSE			33.5
	eSN			30.5
12	iPZ	01	39	33 c
	iSE		40	17.5
12	ePZ	17	13	46.0
	eS			26.7
12	ePZ	18	47	39.7
	iSE			43.8
12	ePZ	19	02	50
	eSE		03	23.4
12	ePZ	21	01	15.0
	eSE		02	38.2
12	ePZ	22	05	06.7
	eSN			50.0
12	ePZ	22	47	24.5
	eSE			52.2
12	ePZ	22	59	02
	eSE			28.0
12	ePZ	23	06	02.6
	eSN			32.8
13	iPZ	00	19	17.8c
	eSN			42.2
13	ePZ	01	21	11.1
	eSN			37.0
13	ePZ	01	26	06.6
	eSE			31.6
13	ePZ	01	47	54.3
	eSE		48	20.6
13	ePZ	06	03	01.2
	eSN			39.4
13	iPZ	07	08	21.2d
	iSN			41.5
13	ePZ	07	26	39.5
	eSN		28	10.2
13	ePZ	08	48	44.0
	eSE		49	04.4
13	ePZ	18	13	18.7
	eSE			25.0
14	iPZ	01	56	44.4
	eSE			47.5
14	ePZ	08	21	36
	eSN		22	45.1

International Seismological Centre

Date	Phase	h m s	Date	Phase	h m s
14	ePZ	12 51 08.3	19	ePZ	17 48 18.5
	e(S)N	32.0		e(S)E	31.3
14	ePZ	21 37 17.0	19	ePZ	21 25 51.5
	eSE	38 38.7		eSN	26 13.5
14	ePZ	22 59 36.5	19	ePZ	21 22 04.3
	e(S)N	23 01 30.0		eSE	11.2
15	ePZ	01 56 05.5	20	ePZ	02 23 46.2
	eSE	57 21.0	20	ePZ	05 31 49.5
15	ePZ	04 55 51.5	20	ePZ	13 48 09.5
	e(S)E	56 12.3		eSN	20.3
15	ePZ	06 53 47.7	20	ePZ	18 58 15.5
	eSE	54 41.2		eSE	28.5
15	ePZ	14 53 21.5	20	ePZ	20 16 26.7
	eSE	54 13.0		eSN	18 00.5
16	ePZ	12 22 24.8	22	ePZ	03 33 44.5
16	iPZ	13 34 04.4d	22	ePZ	07 02 37.5
	iSE	15.6		eSN	03 21.5
16	ePZ	17 09 45	22	ePZ	07 05 04.6
	eSN	09.2	22	ePZ	14 19 28.5
16	ePZ	18 00 41	22	iPZ	15 13 21.2d
	eSE	51.5		iS	36.5
16	ePZ	23 59 58	23	ePZ	20 02 58.1
17	eSN	00 00 01.5		eSE	03 32.5
17	ePZ	13 44 08	24	ePZ	00 33 00.0
	iSE	11		eSN	15.0
18	ePZ	03 30 48.6	24	ePZ	21 19 06.3
	eSN	31 15.6		eSN	16.1
18	ePZ	10 53 10.5	24	ePZ	23 13 45.8
	eSE	33.7		eSN	14 12.8
18	ePZ	15 02 59.8	26	ePZ	07 36 43
	eSE	03 28.7	26	ePZ	15 40 19.0
18	ePZ	15 08 42.2		eSN	42 02.3
	eSE	09 03.2	27	ePZ	02 16 18.6
18	iPZ	22 17 59.8c		eSN	23.5
	eS	18 22.5	27	ePZ	13 04 43.5
19	ePZ	13 53 41.8		eSE	05 15.0
19	ePZ	17 06 02.4	27	ePZ	14 02 10.0
	eSN	21.7		eSE	35.5
			27	ePZ	18 48 29.2

Minor Shocks
International Seismological Centre

Date	Phase	h	m	s
	eS			45.5
27	ePZ	20	15	45.7d
	eSN		16	36.2
27	ePZ	23	52	12.0
	eSN		53	00
28	ePZ	00	46	35.5
	eSE			55.0
28	ePZ	09	32	45.5
	eSN		33	04.0
28	ePZ	15	30	29.2
	eSN			48.7
28	ePZ	20	23	22.5
	eSE		24	36.5
29	ePZ	09	30	47.3
	eSN		32	12.8
29	ePZ	13	30	23.0
29	iPZ	15	01	31.5c
	iS		02	08.5
29	ePZ	17	25	15.3
	eSE			37.5
29	ePZ	22	23	15.0
	eSN			27.0
30	iPZ	04	30	40.5
30	ePZ	21	56	34.2
	eS		57	07.0
	WARSAK			
1	ePN	01	53	24.7
2	ePZ	17	50	12.8
	eSZ			52.7
3	ePZ	09	29	46.1
3	iPZ	09	45	20.3c
3	ePZ	12	09	15.3
	iSZ		37	21
4	ePZ	03	52	19.0
	eSZ			58.2
4	ePZ	10	28	18.9
6	iPgZ	04	06	34.8d
	iSgZ			45.4
6	ePZ	12	12	47.1
	iSZ		13	22.8
7	ePZ	07	27	41.7
	eSZ		28	13.0
8	ePZ	17	24	54.0
	eSZ		25	25.2
9	ePZ	00	30	17.1
15	ePN	01	54	57.0
	eSN		55	32.6
16	iPgZ	21	15	13.4c
17	ePZ	08	53	38.4
17	iPZ	09	45	13.5d
	iSZ			47.4
17	ePZ	10	22	34.4
18	iPZ	02	54	12.3d
	iSZ			45.0
18	ePZ	18	45	58.2
18	iPZ	23	07	05.8d
	eSZ			34.4
19	ePZ	00	52	03.3
19	ePZ	09	33	43.3
20	ePZ	11	27	34.7
20	ePZ	20	18	03.4
21	ePZ	13	40	21.8
	eSZ		41	06.6
22	ePZ	16	15	24.8
	eSN		16	04.9
22	ePN	21	11	12.0
23	iPZ	00	59	43.1
	iSZ	01	00	19.4
23	ePZ	04	52	29.4
	eSZ		53	17
23	ePZ	06	58	43
	eSZ		59	17.4
23	ePZ	07	06	35
	eSZ		07	21
23	ePZ	09	36	55.1
	eSZ		37	38

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Date	Phase	h	m	s
23	ePZ	11	50	06.3
23	ePZ	17	05	39.6
	eSZ		06	23.9
25	ePZ	01	32	34.3
27	iPZ	05	27	58.0
	eSZ		29	07.4
28	ePZ	20	22	00.2
	eSZ			38.9
29	ePZ	09	29	26.9
	eSZ		30	16.0
29	ePZ	15	01	39.5
	eSZ		02	20.6
30	ePZ	03	41	04.7
30	iPZ	21	15	59.6c
	LAHORE			
3	eXZ	12	36	48
	eXZ		39	01
9	ePZN	13	48	39
	e(S)N		49	05
9	iXN	14	29	19
10	eXN	04	16	55
10	eXZ*	04	35	06
10	e(P)Z*N*	06	56	50
11	eXNE	00	56	32
12	eXZ	01	40	00
12	ePZ	22	05	34
	eXZ		06	11
14	eXZ*N*	14	43	22
15	e(P)NE	21	40	33.5
	eSN			47·5
16	eXE	02	59	40
16	eXZ	10	19	00
	eXZ		20	12
16	eXZ	11	40	53
	eXZ		41	20
16	eXZ*	12	47	20
18	eXZ	08	40	18
	eXZ Z*N*E*			24
18	eXZ*	18	08	41
20	eXZ*	11	07	37
	eXZ*			49
20	eXZ	19	58	05
21	eXZ	19	26	39
21	eXZ	23	22	20
	eXZ		23	30
23	eXZ	21	07	23
24	e(P)Z*	19	04	52
25	eXZ	13	56	14
	eXZZ*E*			24
26	eXZ*	18	04	36
	eXZ			41
27	eXZ*	23	35	15
	eXN*			25
27	ePZ	23	47	54
	CHITTAGONG			
1	eXZ	19	43	39
1	eXZ	20	15	57
1	eXZ	21	21	43
2	eXZE	10	13	26
	eXZE		15	07
2	eXZ	18	11	44
2	eXZ	21	21	49
2	eXZ	22	46	18
3	eXZ	08	02	41
3	eXZ	11	51	36
4	ePZ	11	51	03
4	eXZ	12	07	54
4	eXZ	13	19	24
5	eXZ	09	14	51
5	eXZ	11	32	00
5	eXZ	22	50	00
6	ePZ	05	24	32
	epPZ			42
6	ePZ	06	13	04

Minor Shocks

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Date	Phase	h	m	s	
6	eXZ	12	19	00	
8	eXZ	13	09	52	
9	ePZ	09	09	31	
10	ePZ	10	56	54	
10	ePZ	12	30	17	
12	eXZ	02	58	52	
12	eXZ	17	07	22	
15	eXZ	02	33	10	
15	eXZ	05	16	18	
16	ePZ	13	59	56	±
17	eXZ	10	22	58	
17	eXZ	23	10	14	
18	eXZ	04	09	20	
18	eXZ	23	21	56	
19	ePZ	23	09	58	
20	eXZ	12	09	06	
20	eXZ	23	09	13	
20	ePZ	23	27	17	
21	eXZ	21	57	05	
22	eXZ	16	18	59	
22	eXNE	21	01	21	
24	ePZ	05	56	18	
24	eXZ	07	03	10	
24	eXZ	16	37	48	
24	ePZ	17	04	42	
24	eXN	19	02	53	
25	ePZ	14	38	48	
26	eXZ	14	14	13	
26	eXZNE	17	23	33	
27	ePZ	11	53	28	
27	eXZ	15	32	04	
27	eXZ	23	36	03	
28	ePZ	04	45	59	±
28	eXZ	15	41	17	
28	ePZ	22	25	00	
28	ePZ	22	34	36	
28	ePZ	23	06	34	
	epPZ			46	
29	ePZ	00	03	27	
29	ePZ	05	48	26	
29	eXZ	18	51	57	
30	eXZ	04	04	16	
30	eXZ	05	43	51	
30	ePZ	06	51	44	
	eSNE		56	39	
30	eXZ	07	50	06	
30	ePZ	22	14	22	

KARACHI

2	ePgZ	03	19	36.8	
	eSgE			49.5	
29	e(P)Z	10	24	40.1	
29	eXZ	10	34	45.2	
29	eXZ	10	37	43.2	
30	ePZ	07	51	57.6	
	e(S)Z		52	27.2	

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International Seismological Centre

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The Seismological Bulletin of Pakistan is a quarterly publication containing data of Seismological Stations of Pakistan.

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Pakistan Meteorological Services, Geophysical Centre, Quetta.

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Particulars of Stations and Instruments

(*a*) Stations

Station	Symbol	Latitude	Longitude	Height(a.s.l.)	Ground
Quetta	Qt	30° 11′ N	66° 57′ E	1721 meters	Cretaceous Limestone
Lahore	Lh	31° 33′ N	74° 20′ E	210 ”	Alluvium
Karachi	Kr	24° 50′ N	67° 02′ E	30 ”	Alluvium
Chittagong	Ch	22° 21′ N	91° 49′ E	35 ”	Alluvium
Warsak	Wr	34° 09′ N	71° 25′ E	343 ”	River Terrace

(*b*) Instruments

Instruments	Components	Period (Sec.)		Damping	Max. Magnification
		To	Tg		
Quetta					
Sprengnether	Z	1.9	1.9	Critical	5,500
”	N	15.8	15.8	”	15,000
Benioff	Z	1.0	0.77	”	2,00,000
”	N	1.0	0.76	”	2,00,000
”	E	1.0	0.77	”	2,00,000

Instruments	Components	Period Sec.		Damping	Max. Magnification
		To	Tg		
Sprengnether	Z	30.1	100.0	Critical	3,000
,,	N	30.3	100.0	,,	3,000
,,	E	30.2	100.0	,,	3,000
Willmore	Z	1.0	0.25	—	—
Sprengnether	E	1.0	6.0	—	—
Pen recorder					
Lahore					
Sprengnether	Z	1.8	1.8	Critical	4,900
,,	N	1.7	1.7	,,	4,200
,,	E	1.6	1.6	,,	4,100
Benioff	Z	1.0	0.75	,,	6,250
,,	N	1.0	0.75	,,	6,250
,,	E	1.0	0.75	,,	6,250
Sprengnether	Z	30.0	100.0	,,	750
,,	N	30.0	100.0	,,	750
,,	E	30.0	100.0	,,	750
Karachi					
Sprengnether	Z	1.8	1.8	Critical	5,890
,,	N	1.8	1.8	,,	4,700
,,	E	1.4	1.4	,,	4,700
Chittagong					
Sprengnether	Z	1.7	1.7	Critical	5,200
,,	N	1.8	1.8	,,	5,700
,,	E	1.5	1.5	,,	3,600
Warsak					
Sprengnether	Z	1.95	1.95	Critical	8,000
,,	N	1.8	1.8	,,	4,000

* indicates long period seismographs
c=compassion, d=dilatation, X=unidentified phase
Mu=Actual ground motion of the indicated phase in microns
Sec=Period of the indicated phase in seconds.
(Pas), (Berk), (Up), (Ki), (Pal), stand for seismological observatories Pasadena (U.S.A.), Berkeley (U.S.A.), Uppsala (Sweden), Kiruna (Sweden), & Palisade (U.S.A.), respectively
All times are in Green wich Mean Time.

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Date	Station	Phase	h	m	s	
1	Lh	ePZ	20	27	54	±
	Wr	iPZ		28	22.6	
	Qt	ePZ			23.0	
		epPZ			39.0	
		USCGS H 20 19 40.6				
		4.7 S 103.7 E				
		Off south coast of Sumatra				
		depth about 91 km				
1	Lh	ePZ	21	14	47	
		epPZ			58	
		eSN*		18	14	
		eSSZ			33	
	Wr	ePZ		15	03.1	
	Qt	ePZ			53.5d	
		eSN		20	15.0	
		esSE			31.2	
		Mu Sec				
		PZ 0.03 0.8				
		△ = 25°.0				
		H 21 10 27				
		37.6 N 96.6 E				
		China				
		USCGS H 21 10 28.5				
		37.0 N 96.1 E				
		Tsinghai Province, China				
		depth about 33 km				
		Mag : 5.3 (CGS), 5.1 (Qt)				
1	Lh	ePZ	22	50	06	±
	Wr	ePZ			08.5	
	Qt	ePZ			40.2	
		iPZ			43.2c	
		ipPZ			55.3	
		USCGS H 22 39 57.8				
		46.5 N 153.6 E				
		Kurile Islands				
		depth about 69 km				
		Mag : 4.5 (CGS)				
2	Wr	ePZ	00	18	40.0	
	Lh	ePZ		19	01	±
	Qt	ePZ			53.5d	
		eSN		23	33.0	
		USCGS H 00 15 22.4				
		43.9 N 85.2 E				
		Sinkiang Province, China				
		depth about 39 km				
		Mag : 4.4 (CGS)				
2	Qt	ePZ	01	00	05.4	
2	Qt	ePZ	01	50	22.5	
2	Qt	ePZ	09	56	00.8	
		USCGS H 09 46 35.8				
		7.8 S 109.0 E				
		Java				
		depth about 117 km				
		Mag : 5.1 (CGSO)				
4	Qt	ePZ	01	06	10.7	
		USCGS H 00 55 30.1				
		45.7 N 151.5 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 3.9 (CGS)				
4	Qt	iPZ	07	04	03.5c	
		USCGS H 06 55 16.8				
		24.0 N 122.4 E				
		Near east coast of Formosa				
		depth about 63 km				
		Mag : 4.6 (CGS)				
4	Ch	ePZ	11	11	42	
	Lh	ePKPZ		16	41	
		epPKZ		17	30	
	Wr	ePKPZ		16	46.0	
	Qt	iPKPZ!			52.7d	
		ipPKPZ		17	40.3	
		ePPZ*		18	30.0	
		epPPZ*		19	32.0	
		USCGS H 10 58 13.2				
		26.3 S 177.7 W				
		Tonga Islands region				
		depth about 158 km				
		Mag : 6¾(Pas), 6¾-7(Berk), 6.5 (CGS)				

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Date	Station	Phase	h	m	s
4	Lh	ePZ	21	54	48 d
	Wr	ePZ		55	12.4d
	Qt	iPZ			25.7d
		epPZ			43.7
		USCGS H 21 45 31.1			
		0.5 N 120.6 E			
		Celebes			
		depth about 59 km			
		Mag : 5.9 (CGS)			
4	Qt	ePZ	23	09	15 ±
		iPZ			16.7c
		ePPZ		13	00.0
		USCGS H 22 56 15.7			
		18.5 S 12.6 W			
		St. Helena Islands region			
		depth about 33 km			
		Mag : 5¼-5½(Pal), 5.6 (CGS)			
5	Qt	ePZ	01	25	41.0
5	Qt	ePZ	03	35	15.4
		USCGS H 03 29 36.1			
		50.4 N 90.6 E			
		Outer Mongolia			
		depth about 33 km			
		Mag : 4.5 (CGS)			
5	Qt	ePKPZ	06	07	38.3
		ePKSZ			50.5
	Wr	ePKPZ			42.3
	Lh	ePKPZ			53
		epPKPZ		08	11
		USCGS H 05 48 13.4			
		11.6 S 77.5 W			
		Peru			
		depth about 55 km			
		Mag : 5.8 (CGS)			
5	Wr	ePZ	07	23	36.2
	Qt	ePZ		24	09.8
		eSE		28	10.5
		epPZ			21.1
		Mu Sec			
	PR	0.01 0.7			

Date	Station	Phase	h	m	s
		△ = 22°.5			
		USCGS H 07 19 15.8			
		27.7 N 92.1 E			
		Assam, India			
		depth about 33 km			
		Mag : 4.2 (CGS), 4.3 (Qt)			
5	Wr	ePZ	13	12	28.8
		iSZ		13	23.5
	Lh	ePZ			03
		eSN*		14	11
	Qt	ePZ		13	38.2
		iPZ			40.5
		eSE		15	19.7
		H 13 11 32			
		37.5 N 72.7 E			
		Hindukush			
		depth about 100 km			
		USCGS H 13 11 37.5			
		37.2 N 73.0 E			
		Hindukush			
		depth about 111 km			
		Mag : 5.0 (CGS)			
5	Wr	ePZ	16	28	15.8
		iSZ		29	06.3
	Lh	ePZ		28	43
		eSZ		29	53
	Qt	ePZ			25.0
		eSE		31	03.3
		H 16 27 20			
		37.5 N 72.7 E			
		Hindukush			
		depth about 200 km			
		USCGS H 16 27 27.6			
		36.7 N 73.0 E			
		Hindukush			
		depth about 193 km			
		Mag : 4.3 (CGS)			
5	Qt	ePZ	20	40	47.5
		USCGS H 20 28 51.3			
		3.0 S 141.9 E			

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Date	Station	Phase	h	m	s
		Near north coast of New Guinea			
		depth about 68 km			
		Mag : 4.7 (CGS)			
5	Qt	ePZ	23	52	55.0d
6	Lh	ePZ	01	06	22 ±
	Wr	ePZ	01	06	44.0
	Qt	ePZ		07	24.2
		USCGS H 01 01 28.7			
		30.3 N 99.8 E			
		Sinkiang Province, China			
		depth about 33 km			
		Mag : 4.9 (CGS)			
6	Lh	iPZ	05	35	18 d
		iSZ			45
	Wr	ePZ			53.4
	Qt	ePZ		36	45.5
		eSZ		38	20.2
		H 05 34 43			
		32.7 N 76.5 E			
		Kashmir			
6	Qt	iPZ	13	36	05.5d
		eSN		37	35.0
	Wr	ePZ			14.0
		USCGS H 13 34 04			
		28.0 N 57.6 E			
		Southeastern Iran			
		deptn about 80 km			
6	Qt	iPZ	15	45	44.7
		eSN		47	20
6	Qt	ePZ	18	01	19.0d
		epPZ			31.5
		USCGS H 17 49 54.5			
		11.6 N 142.7 E			
		Mariana Islands region			
		depth about 26 km			
		Mag : 4.6 (CGS)			
6	Qt	ePZ	22	41	47.5
		iPZ			52.0
		USCGS H 22 32 31.7			
		16.3 S 39.7 E			
		Near coast of Mozambique			
		depth about 33 km			
7	Qt	ePZ	00	12	46.5d
	Wr	ePZ		13	03.0
		USCGS H 00 01 13.3			
		42.2 S 84.4 E			
		Indian Ocean			
		depth about 33 km			
		Mag : 5.0 (CGS)			
7	Qt	ePZ	03	03	10.5
7	Qt	ePZ	11	01	58.7d
		iPZ		02	03.0
		USCGS H 10 52 01.4			
		6.2 N 124.5 E			
		Mindanao, Philippine Islands			
		depth about 33 km			
		Mag : 4.6 (CGS)			
7	Qt	ePZ	21	09	53.2
7	Qt	ePZ	21	15	39.5
		iSN*		16	34.0
	Wr	ePZ			23.0
		H 21 14 28			
		West Pakistan			
8	Wr	ePZ	06	49	18.5
		iSZ		50	02.4
	Qt	iPZ			24.5d
		iSE		52	01.3
		H 06 48 19			
		Tadzhik, S.S.R.			
8	Qt	ePZ	09	00	35.7
		eSE		02	30.3
		Mu Sec			
		PZ 0.04 1.0			
		△ = 10°.2			
		USCGS H 08 58 04.8			
		26.7 N 55.7 E			
		Near south coast of Iran			
		depth about 33 km			

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Date	Station	Phase	h m s
		Mag: 4.8 (CGS), 5.3 (Qt)	
8	Qt	ePZ	11 17 43.2
		epPZ	57.8
	Wr	ePZ	18 02.1
		USCGS H 11 05 07.5	
		0.3 N 17.8 W	
		Mid-Atlantic Ocean	
		depth about 33 km	
		Mag : 4.9 (CGS)	
8	Wr	iPZ	15 30 11.3
		iSZ	40.0
	Lh	ePZ	57
		iSNE	32 01
	Qt	iPZ	31 00.8c
		iSN*	32 08.0
		Mu Sec	
		PZ 0.01 0.5	
		△ = 5°.9	
		H 15 29 35	
		35.5 N 69.7 E	
		Hindukush	
		depth about 150 km	
		USCGS H 15 29 33.5	
		35.8 N 69.7 E	
		Hindukush region	
		depth about 131 km	
		Mag : 4.3 (Qt)	
8	Qt	ePZ	16 09 02.9d
		USCGS H 16 02 26.8	
		36.6 N 28.0 E	
		Near south coast of Turkey	
		depth about 30 km	
		Mag : 4.7 (CGS)	
8	Qt	iPZ	18 01 34.0
		epPZ	47.5
		USCGS H 17 49 30.9	
		65.8 N 153.9 W	
		Central Alaska	
		depth about 33 km	
		Mag : 4.8 (CGS)	

Date	Station	Phase	h m s
8	Qt	ePZ	21 04 27.5
9	Qt	iPZ	00 32 53.5d
9	Wr	ePZ	00 42 26.7
		eSZ	43 02.0
	Qt	ePZ	20.5
		eSE	44 25.0
		H 00 41 57	
		Hindukush region	
9	Qt	ePZ	00 49 32.7
9	Qt	ePZ	02 29 58.5
		eSN*	31 00.0
		Mu Sec	
		PZ 0.09 1.0	
		△ = 5°.3	
		Mag : 5.0 (Qt)	
9	Lh	ePZ	03 14 50
	Wr	iPZ	52.4c
	Qt	iPZ	15 28.6c
		USCGS H 03 04 37.4	
		46.3 N 153.7 E	
		Kurile Islands region	
		depth about 33 km	
		Mag : 4.8 (CGS)	
9	Wr	ePZ	04 20 09.8
	Qt	ePZ	38.3
		USCGS H 04 09 28.6	
		22.0 N 145.7 E	
		Volcano Islands region	
		depth about 33 km	
		Mag : 4.7 (CGS)	
9	Qt	ePZ	04 31 02.4
9	Lh	ePZ	06 26 06 d
	Wr	iPZ	29.3d
	Qt	iPZ	43.3d
		USCGS H 06 16 53.0	
		0.8 N 121.5 E	
		Celebes	
		depth about 142 km	
		Mag : 4.9 (CGS)	

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Date	Station	Phase	h	m	s
9	Wr	ePKPZ	09	43	44.7
	Qt	ePKPZ			45.6
		USCGS H 09 24 33.3			
		8.5 N 83.0 W			
		Costa Rica-Panama border			
		depth about 31 km			
		Mag : 5.1 (CGS)			
9	Wr	iPZ	12	32	24.7
		eSZ			58.9
	Qt	ePZ		33	19
		eSE		34	36.8
		H 12 31 39			
		Hindukush region			
9	Lh	iPZ	13	06	34 d
	Wr	ePZ		07	23.4±
	Qt	ePZ		08	03
		eSN		09	17.0
		H 13 06 22			
		32.0 N 74.7 E			
		West Pakistan			
9	Qt	ePZ	14	37	51 ±
9	Qt	ePZ	15	39	09.4
		eSN		41	02.4
		H 15 36 43			
9	Lh	ePZ	17	42	30
	Wr	ePZ			49.1
	Qt	iPZ		43	22 d
		USCGS H 17 34 33.2			
		24.2 N 122.4 E			
		Near east coast of Formosa			
		depth about 33 km			
		Mag : 4.8 (CGS)			
9	Qt	ePKPZ	19	15	38.4
	Wr	iPKPZ			51.0
	Lh	ePKPZ			55
		USCGS H 18 56 12.6			
		29.1 S 68.1 W			
		La Rioja Province, Argentina			
		depth about 33 km			
		Mag : 4.8 (CGS)			

Date	Station	Phase	h	m	s
9	Wr	ePZ	21	26	35.8
		iSZ		27	10.0
	Lh	ePZ			17
		eSNE		28	21
	Qt	ePZ		27	28.3
		eSE		28	43.5
		Mu Sec			
		PZ 0.01 0.6			
		△ = 6°.7			
		H 21 25 51			
		36.2 N 70.3 E			
		Hindukush			
		depth about 200 km			
		Mag : 3.9 (Qt)			
9	Wr	ePZ	21	38	57.3
		iSN		39	23.5
	Lh	ePZ			40
		eSNE		40	38
	Qt	ePZ		39	57.0
		eSE		41	11.1
		H 21 38 23			
		35.7 N 70.9 E			
		Hindukush			
		depth about 150 km			
10	Wr	iPZ	02	12	42.8c
		iSN		13	09.1
	Lh	ePZ			22 c
		iSN*E*		14	18
	Qt	iPZ		13	48.5c
		eSE*		15	06.4
		Mu Sec			
		PZ 0.17 1.0			
		H 02 12 07			
		△ = 6°.9			
		35.9 N 71.5 E			
		Hindukush			
		USCGS H 02 11 58.3			
		36.5 N 71.8 E			
		Hindukush			
		depth about 33 km			
		Mag : 4.9 (CGS), 5.1 (Qt)			

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Date	Station	Phase	h	m	s
10	Lh	ePZ	03	24	53
	Wr	ePZ			55.2
		USCGS H 03 14 41.8			
		46.3 N 153.4 E			
		Kurile Islands region			
		depth about 33 km			
		Mag : 4.8 (CGS)			
10	Lh	ePZ	05	33	08
		esPZ			24
		ePcPZ		34	02
	Wr	ePZ		33	09.7
	Qt	ePZ			45
		eSE*		42	39
		Mu Sec			
		PZ 0.5 1.6			
		△ = 67°.8			
		USCGS H 05 22 57.1			
		46.3 N 152.9 E			
		Kurile Islands region			
		depth about 33 km			
		Mag : 5.6 (CGS), 6.2 (Qt)			
10	Qt	ePZ	08	56	22.4
10	Wr	ePZ	11	42	15.4
		iSZ			51.7
	Qt	ePZ		43	20 ±
		eSE		44	38.4
		H 11 41 40			
		Hindukush region			
10	Wr	ePZ	14	02	32.8
	Qt	ePZ		03	00.0
		eSN		04	18.5
		H 14 01 19			
10	Qt	ePZ	18	25	47
		eSN		27	18.6
		H 18 23 48			
10	Lh	ePZ	20	02	39 d
		epPZ		03	22
	Wr	iPN		02	52.8
	Qt	iPZ		03	20.5d
		USCGS H 19 52 19.4			
		19.2 N 145.2 E			
		Mariana Islands region			
		depth about 171 km			
		Mag : 5.4 (CGS)			
11	Qt	iPZ	08	35	00.0c
		eSE		36	15.3
		Mu Sec			
		PZ 0.01 0.6			
		△ = 6°.4			
		Mag : 4.5 (Qt)			
12	Wr	ePZ	05	47	06.9
		eSZ		54	18.0
	Qt	iPZ		47	09.8d
		USCGS H 05 38 11.2			
		6.1 S 106.2 E			
		Java			
		depth about 133 km			
		Mag : 5.4 (CGS)			
12	Wr	ePZ	06	04	42.2
	Qt	ePZ		05	21.0
		eSN		07	37.5
		Mu Sec			
		PZ 0.01 0.7			
		△ = 12°.3			
		H 06 02 27			
		Mag : 4.7 (Qt)			
12	Wr	ePZ	07	16	45.2
		eSZ		17	16.3
	Qt	ePZ		16	48.5
		H 07 16 06			
		Hindukush			
12	Lh	ePZ	15	38	19
		epPZ			32
	Qt	iPZ			57.2c
		epPZ		39	10.3
		eSN*		47	50.0
		USCGS H 15 28 08.5			
		46.8 N 153.6 E			
		Kurile Islands region			

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Date	Station	Phase	h	m	s
		depth about 33 km			
		Mag : 5-5¼ (Pal), 4.8 (CGS)			
12	Qt	ePKPZ	18	13	53.5c
	Lh	ePKPZ		14	10 ±
		USCGS H 17 54 21.9			
		35.9 S 71.9 W			
		Central Chile			
		depth about 62 km			
12	Qt	iPZ	21	40	53.7d
		eSE		42	39.8
	Lh	ePZ		41	43
		H 21 38 38			
12	Qt	ePZ	23	52	16.1
		epPZ			29.2
		USCGS H 23 42 03			
		33.9 N 140.7 E			
		Off south coast of Honshu			
		Japan			
		depth about 73 km			
		Mag : 4.4 (CGS)			
13	Qt	ePZ	00	04	11.3
		epPZ			30.0
		USCGS H 23 51 16.0			
		5.5 S 153.3 E			
		New Britain			
		depth about 56 km			
		Mag : 5.0 (CGS)			
13	Qt	ePZ	03	18	40.1
13	Qt	ePZ	03	42	08.5
13	Qt	ePZ	08	27	41.2
		esSN		30	32.5
	Wr	ePZ		28	32.3
	Lh	ePZ		29	00 ±
		USCGS H 08 24 24.7			
		29.6 N 51.0 E			
		Near west coast of Iran			
		depth about 44 km			
		Mag : 5.0 (CGS)			
13	Lh	ePZ	14	08	20
	Wr	ePZ			24.5
	Qt	iPZ		09	00.5d
		epPZ			12.3
		USCGS H 13 58 25.7			
		44.3 N 148.8 E			
		Kurile Islands region			
		depth about 33 km			
		Mag : 4.6 (CGS)			
13	Lh	ePZ	14	14	21c
	Wr	ePZ			40.6
	Qt	iPZ		15	12.7c
		epPZ			21.5
		eSN		22	08.5
		USCGS H 14 06 23.7			
		24.3 N 122.3 E			
		Ryukyu Islands			
		depth about 33 km			
		Mag : 4.9 (CGS)			
13	Wr	ePZ	15	19	09.7
		iSZ			38.8
	Qt	ePZ		20	12.5
		eSN		21	33.5
		H 15 18 32			
		Hindukush region			
13	Qt	iPZ	19	10	08.7d
		eSE*		11	20.0
	Lh	ePZ		10	33
		eSN!		11	55
	Wr	ePZ		10	53.5
		eSN		12	40.0
		H 19 08 36			
		24.7 N 70.0 E			
		Sind region, West Pakistan			
		USCGS H 19 08 39.1			
		24.9 N 70.3 E			
		West Pakistan			
		depth about 33 km			
14	Qt	ePKPZ	00	21	22.0
		epPKPZ			33.6
		USCGS H 00 02 22.8			
		30.5 S 177.2 W			

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Date	Station	Phase	h m s
		Kermadec Islands region	
		depth about 33 km	
		Mag : 5.3 (CGS)	
14	Qt	ePKPZ	04 18 10.5
		USCGS H 03 59 12.4	
		30.5 S 177.3 W	
		Kermadec Islands region	
		depth about 50 km	
		Mag : 4.7 (CGS)	
14	Wr	ePKPZ	06 01 09.4
		USCGS H 05 41 43.0	
		10.4 N 62.6 W	
		Off coast of northern Venezuela	
		depth about 24 km	
		Mag : $5\frac{3}{4}$(Berk), $5\frac{3}{4}$-6(Pal), 5.5 (CGS)	
14	Qt	ePZ	07 49 30.0
		eSE	52 23.5
	Wr	ePZ	50 31.6
		USCGS H 07 46 21.4	
		29.5 N 50.8 E	
		Persian Gulf	
		depth about 33 km	
14	Wr	iPN	10 52 18.1c
		iSN	44.2
	Lh	ePZ	53 03
		iSZ	54 03
	Qt	iPZ	53 17.0d
		eSE	54 29.0
		Mu Sec	
		PZ 0.17 0.7	
		$\triangle = 6°.4$	
		H 10 51 44	
		35.8 N 70.5 E	
		Hindukush	
		depth about 150 km	
		USCGS H 10 51 42.7	
		36.1 N 70.6 E	
		depth about 120 km	
		Hindukush	
		Mag : 5.1 (CGS), 5.3 (Qt)	
14	Lh	ePZ	14 49 28 ±
		eSNE	50 08
	Wr	ePZ	10.6
		eSZ	51 30.8
	Qt	ePZ	50 51.2
		eSE	52 46.5
		H 14 48 25	
		30.7 N 79.1 E	
		Northern India	
		depth about 33 km	
		USCGS H 14 48 28.4	
		30.3 N 78.5 E	
		Nothern India	
		depth about 33 km	
		Mag : 4.8 (CGS)	
14	Qt	ePZ	17 24 14.4
		iPZ	17.2
		e(S)	29 17.5
	Wr	ePZ	24 58.2
14	Qt	ePZ	17 30 45.5
14	Qt	ePZ	17 35 13.5
15	Wr	ePZ	05 29 47.8
	Qt	ePZ	57.5
		USCGS H 05 19 32	
		1.6 N 127.1 E	
		Halmahera region	
		depth about 33 km	
15	Qt	ePZ	06 40 35.5
		USCGS H 06 28 21.7	
		51.8 N 176.8 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.6 (CGS)	
15	Wr	ePZ	08 52 01.4
	Qt	ePZ	40 ±
		USCGS H 08 41 07.5	
		55.6 N 162.0 E	
		Kamchatka	
		depth about 60 km	
		Mag : 5.2 (CGS)	

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Date	Station	Phase	h m s
15	Qt	ePZ	19 27 57.5
15	Qt	ePZ	19 33 27.2
		USCGS H 19 22 17.9	
		53.2 N 162.9 E	
		Near east coast of Kamchatka	
		depth about 33 km	
		Mag : 4.7 (CGS)	
15	Qt	ePZ	23 15 15.0
		eSE	17 04.2
		H 23 12 55	
16	Qt	ePZ	01 31 26 ±
16	Qt	ePZ	01 39 39 ±
16	Qt	ePZ	09 26 07.5
16	Qt	iPZ	18 32 31.3d
		iSE	36 50.0
		Mu Sec	
		PZ 1.2 2.3	
		△ = 25°.1	
	Wr	ePN	32 39.7
	Kr	iPZ	33 06.4
		ePPZ	46.5
	Lh	ePZ	10
		epPZ	22
		esPZ*	28
		eSN*E*	38 00
	Ch	ePZ	35 42.3d
		ePcPZ	37 14
		H 18 27 13	
		42.7 N 40.8 E	
		Georgia, S.S.R.	
		depth about 33 km	
		USCGS H 18 27 18.4	
		43.1 N 41.5 E	
		Georgia, S.S.R.	
		depth about 33 km	
		Mag : 5.8 (CGS), 6.0 (Qt)	
16	Qt	ePKPZ	19 27 27.3
		USCGS H 19 08 29.2	
		30.6 N 177.2 W	
		Kermadec Islands	
		depth about 41 km	
		Mag : 5.0 (CGS)	
16	Qt	ePZ	20 40 57.0c
		eSN	42 27.0
16	Qt	ePZ	22 16 38.5
	Wr	ePZ	46.8
		USCGS H 22 11 23.0	
		43.3 N 41.6 E	
		Georgia, S.S.R.	
		depth about 17 km	
		Mag : 4.9 (CGS)	
17	Qt	ePZ	01 14 25.3
17	Qt	ePZ	03 36 58.5
		USCGS H 03 24 37.4	
		46.9 S 33.3 E	
		Prince Edward Islands region	
		depth about 33 km	
17	Wr	ePZ	06 18 57.2
		eSZ	19 29.9
	Qt	ePZ	56
		eSE	21 16.5
		H 06 18 16	
		Hindukush region	
17	Qt	ePZ	07 11 18.2
		USCGS H 07 01 57.1	
		7.5 S 107.2 E	
		Java	
		depth about 41 km	
		Mag : 5.1 (CGS)	
17	Qt	iPZ	12 02 20.5d
		eSE*	06 41.2
	Wr	iPZ	02 30.0
		USCGS H 11 57 06.7	
		43.1 N 41.6 E	
		Georgia, S.S.R.	
		depth about 33 (Kan)	
		Mag : 5.3 (CGS)	
17	Qt	ePZ	12 42 19.5
17	Qt	ePZ	12 56 02.4

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Date	Station	Phase	h m s
17	Qt	ePZ	14 20 26.2
		USCGS H 14 10 31.3	
		49.9 N 150.8 E	
		Sea of Okhotsk	
		depth about 370 km	
		Mag : 3.7 (CGS)	
17	Qt	iPZ	15 18 11.0d
		USCGS H 15 07 22.3	
		49.5 N 156.3 E	
		Kurile Islands region	
		depth about 78 km	
		Mag : 4.7 (CGS)	
17	Wr	ePZ	20 59 13.0
	Qt	ePZ	37.5
17	Qt	ePZ	22 31 55.3
17	Wr	ePZ	23 18 28.4
		eSZ	19 06.1
18	Qt	ePZ	34.2
		eSE	21 03.4
		H 23 17 44	
		Hindukush region	
18	Qt	ePKPZ	05 16 47.7
		eSKSN*	23 37.0
		USCGS H 04 58 09.2	
		61.0 S 22.3 W	
		Sandwich Islands region	
		depth about 33 km	
		Mag : 6.0 (CGS)	
19	Qt	ePZ	00 27 21.5
19	Wr	iPZ	01 31 44.8d
		iSZ	32 20.5
	Qt	ePZ	50.7d
		eSE	34 19.0
		Mu Sec	
		PZ 0.01 0.7	
		$\triangle = 7°.8$	
		H 01 30 55	
		Hindukush region	
		Mag : 4.2 (Qt)	

Date	Station	Phase	h m s
19	Qt	ePZ	05 54 04.3
		eSE*	06 01 03.0
	Wr	ePZ	05 54 12.0
	Lh	ePZ	39
		epPZ	48
		USCGS H 05 45 28.0	
		43.4 N 8.2 E	
		Ligurian Sea	
		depth about 33 km	
		Mag : $5\frac{1}{4}$ (Pal), 5.5 (CGS)	
19	Qt	iPZ	05 54 41.5
		eSE	06 01 43.0
	Lh	ePZ	05 55 17
		ePPZ*	57 21
		USCGS H 05 46 05.2	
		43.3 N 8.1 E	
		Ligurian Sea	
		depth about 33 km	
		Mag : 5.6 (CGS)	
19	Lh	ePZ	09 10 08
	Wr	ePZ	17.3
	Qt	iPZ	52.5
		USCGS H 09 00 44.8	
		36.3 N 141.0 E	
		Near east coast of Honshu	
		Japan	
		depth about 70 km	
		Mag : 4.6 (CGS)	
19	Qt	ePZ	11 59 02.0
		USCGS H 11 46 39.1	
		52.0 N 172.5 W	
		Andreanof Islands	
		Aleutian Islands	
		Mag : 4.4 (CGS)	
19	Qt	ePZ	22 32 40.0
		e(S)N*	34 25.5
19	Qt	ePZ	22 56 23.7
		eSN*	58 03.5
		H 22 54 16	

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Date	Station	Phase	h m s
20	Qt	ePZ	00 24 02.6
		USCGS H 00 11 35.0	
		65.2 N 133.7 W	
		Yukon	
		depth about 33 km	
		Mag : 4.6 (CGS)	
20	Qt	ePZ	00 57 08.5
		eSPZ	26.8
	Wr	ePZ	16.4
		USCGS H 00 51 55.7	
		43.4 N 41.2 E	
		Georgia, S.S.R.	
		depth about 33 km	
		Mag : 4.8 (CGS)	
20	Qt	ePZ	02 24 29.5
20	Qt	iPZ!	06 52 09.0c
		e(S)N	59.0
20	Qt	iPZ	07 48 54.5c
		ipPZ	49 30.7
		USCGS H 07 38 50.9	
		32.4 N 140.5 E	
		South of Honshu, Japan	
		depth about 124 km	
		Mag : 4.4 (CGS)	
20	Qt	ePZ	15 17 32.2d
		USCGS H 15 07 58.2	
		68.8 N 4.6 W	
		Jan Mayen Islands region	
		depth about 49 km	
		Mag : 4.8 (CGS)	
21	Qt	ePZ	05 29 30 ±
	Wr	ePZ	30 23.8
21	Qt	ePZ	05 33 17.3
		iXZ	29.1
	Wr	ePZ	34 20.3
21	Qt	iPZ	06 06 08.0c
		esSE*	09 43.0
	Lh	ePZ*	07 05 ±
	Wr	ePZ	07.4

Date	Station	Phase	h m s
		Mu Sec	
		PZ 0.06 1.3	
		△ = 18°.3	
		USCGS H 06 01 57.3	
		14.8 N 56.1 E	
		Arabian Sea	
		depth about 33 km	
		Mag : 4.7 (Qt)	
21	Lh	ePZ	07 15 01
		iSNE	24
	Wr	ePZ	01.5
	Qt	ePZ	55.3
		eSN	16 57.4
		H 07 14 32.6	
		32.8 N 72.9 E	
		West Pakistan	
21	Wr	ePZ	14 07 53.6
		iSZ	08 28.1
	Qt	ePZ	57.5
		eSN	09 23.5
		H 14 07 12	
		Hindukush	
21	Lh	ePZ	14 53 54 d
		epPZ	54 06
	Wr	ePZ	17.5
	Qt	iPZ	38.2d
		USCGS H 14 45 07.1	
		9.7 N 122.3 E	
		Negros, Philippine Islands	
		depth about 54 km	
21	Wr	iPZ	18 49 12.8d
		iSZ	53.5
	Qt	ePZ	50 08.2
		eSZ	51 31.5
		Mu Sec	
		PZ 0.01 0.7	
		△ = 7°.4	
		USCGS H 18 48 30.4	
		36.5 N 69.9 E	
		Hindukush region	
		depth about 112 km	
		Mag : 4.0 (CGS), 4.0 (Qt)	

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Date	Station	Phase	h m s	
22	Lh	ePZ	00 41 22	
		esPZ	51	
	Wr	ePZ	34.1	
	Qt	ePZ	52.1	
		esSN	52 14.0	
		USCGS H 00 29 14.9		
		6.1 S 148.9 E		
		New Britain		
		depth about 59 km		
		Mag : 5 (Berk), 5.1 (CGS)		
22	Wr	iPZ	11 32 35.4	d
		iSZ	33 10.3	
	Qt	ePZ	33 39.0	
		eSN	35 07.5	
		H 11 31 44		
		Hindukush region		
22	Qt	ePZ	19 25 04.5	
		eSN	26 41.0	
23	Qt	iPZ	02 37 36.3	c
23	Lh	ePZ	06 27 10	
	Wr	iPZ	15.2	c
	Qt	iPZ	52.1	c
		USCGS H 06 17 51.5		
		41.5 N 141.9 E		
		Tsugaru Strait		
		depth about 91 km		
		Mag : 4.4 (CGS)		
24	Qt	ePZ	07 53 35	±
24	Wr	ePZ	08 19 13.6	
		eSZ	47.7	
	Qt	ePZ	26	±
24	Qt	iPZ	08 59 56.6	d
		USCGS H 08 50 20.7		
		32.4 N 138.4 E		
		South of Honshu, Japan		
		depth about 297 km		
		Mag : 4.2 (CGS)		
24	Wr	ePZ	11 31 51.3	
		eSZ	32 24.0	
	Qt	ePZ	31 55.0	
		eXZ	32 55.7	

Date	Station	Phase	h m s	
24	Ch	iPZ	11 38 09	d
		ipPZ	20	
	Lh	ePZ	40 13	
		ePcPZ*	42 04	
		ePcSZ*	45 54	
		eSN*E*	46 32	
	Wr	iPZ	40 30.0	d
	Qt	iPZ	41 03.0	d
		eSN	48 09.0	
		Mu Sec		
		PZ 0.1 1.0		
		△ = 49°.8		
		USCGS H 11 32 17.7		
		24.6 N 122.0 E		
		Near east coast of Formosa		
		depth about 33 km		
		Mag : 5.3 (CGS), 5.7 (Qt)		
24	Qt	ePZ	16 59 11.0	
		USCGS H 16 46 38.4		
		6.4 S 147.8 E		
		Near coast of Eastern		
		New Guinea		
		depth about 55 km		
		Mag : 4.5 (CGS)		
24	Qt	ePZ	19 17 07.7	
		eXZ	54.2	
		USCGS H 19 04 32.5		
		9.0 S 158.2 E		
		Solomon Islands region		
		depth about 33 km		
		Mag : 5.8 (CGS)		
24	Lh	ePZ	22 00 37	
	Wr	ePZ	50.8	
	Qt	ePZ	01 06.5	
		USCGS H 21 47 54.1		
		9.7 S 154.4 E		
		Solomon Sea		
		depth about 16 km		
25	Qt	iPZ	07 23 09.7	c
	Wr	ePZ	10.4	

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Date	Station	Phase	h	m	s	
25	Qt	ePZ	15	26	09.0	
		USCGS H 15 17 17.9				
		8.1 N 123.5 E				
		Mindanao, Philippine Islands				
		depth about 637 km				
		Mag : 4.4 (CGS)				
25	Wr	ePZ	18	32	22.7	
	Qt	ePZ		33	35	±
25	Wr	ePZ	22	27	27.6	
		iSZ			56.8	
	Qt	ePZ		28	29.5	
		eSN		29	45.2	
		H 22 26 49				
		Hindukush region				
26	Qt	iPZ	04	24	34.4d	
		eSE*		30	25.0	
		Mu Sec				
		MH 29.8 20				
	Wr	ePZ	04	24	47.3	
	Lh	ePZ		25	16	
		eSE*		31	43	
		USCGS H 04 17 16.7				
		42.1 N 21.5 E				
		Southern Yugoslavia				
		depth about 33 km				
		Mag : $5\frac{1}{2}$-$5\frac{3}{4}$(Berk), $5\frac{1}{2}$(Pal),				
		5.4 (CGS), 6.2 (Qt)				
27	Wr	ePKPZ	00	07	53.0	
	Qt	ePKPZ			54	±
	Lh	ePKPZ		08	02	
		USCGS H 23 48 26.5				
		9.7 S 78.5 W				
		Near coast of Peru				
		depth about 62 km				
		Mag : 4.9 (CGS)				
27	Wr	iPZ	02	18	51.0d	
		eSZ		19	12.2	
	Lh	ePN		19	14	±
		eSNE		20	09	
	Qt	ePZ			06.6	
		eSN		21	23.5	
27	Qt	ePZ	06	07	08	±
		USCGS H 05 58 23.4				
		43.5 N 8.4 E				
		Ligurian Sea				
		depth about 33 km				
		Mag : 5.1 (CGS)				
27	Qt	ePZ	13	51	43	±
		USCGS H 13 44 32.9				
		34.3 N 23.1 E				
		Crete				
		depth about 33 km				
		Mag : 4.3 (CGS)				
27	Qt	ePZ	17	08	23	±
27	Qt	ePZ	17	36	05	±
		eSN		37	44.5	
28	Qt	iPZ	04	30	11.4c	
		USCGS H 04 17 50.7				
		51.7 N 174.5 W				
		Andreanof Islands				
		Aleutian Islands				
		depth about 33 km				
		Mag : 3.8 (CGS)				
28	Qt	ePZ	07	31	16.5	
		USCGS H 07 12 17.1				
		29.8 S 177.6 W				
		Kermadec Islands region				
		depth about 33 km				
		Mag : 5.1 (CGS)				
28	Ch	ePZ	08	02	49	
	Lh	ePZ		04	59	
		eSE*		12	39	
	Wr	iPZ		05	24.3	
		eSZ		13	26.3	
	Qt	ePZ		05	27.5	
		eSN*		13	22.0	
		USCGS H 07 35 21.9				
		11.3 S 112.1 E				
		Off coast of Java				

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Date	Station	Phase	h m s
		depth about 21 km	
		Mag : 5.1 (CGS), 5.5 (Qt)	
28	Qt	ePZ	13 34 46.6
		USCGS H 13 25 18.1	
		72.0 W 0.0	
		Jan Mayen Islands region	
		depth about 33 km	
		Mag : 4.5 (CGS)	
28	Qt	iPZ	14 55 04.4
		USCGS H 14 42 42.7	
		51.9 N 174.3 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.0 (CGS)	
28	Qt	ePZ	15 00 28.1c
		USCGS H 14 48 07.3	
		51.9 N 174.2 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.0 (CGS)	
28	Qt	ePZ	16 35 06.3
		USCGS H 16 22 44.7	
		51.8 N 174.4 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.0 (CGS)	
28	Lh	ePZ	16 44 44 c
		ePcPZ	54
	Wr	ePZ	57.5
	Qt	iPZ	45 13.8c
		USCGS H 16 32 25.0	
		4.9 S 152.7 E	
		New Ireland region	
		depth about 69 km	
		Mag : 4.9 (CGS)	
28	Lh	ePZ	19 10 47 c
	Wr	iPZ	49.1c
	Qt	iPZ	02 24.8c
		USCGS H 18 51 36.7	
		46.6 N 153.1 E	
		Kurile Islands region	
		depth about 33 km	
		Mag : 5.0 (CGS)	
29	Qt	iPZ	01 19 46.5d
		USCGS H 01 09 26	
		1.2 N 126.0 E	
		Molucca Sea	
		depth about 85 km	
		Mag : 4.8 (CGS)	
29	Wr	iPZ	04 55 01.3d
		iSZ	32.0
	Qt	ePZ	56 02.4
		eSE	57 18.3
		H 04 54 22	
		Hindukush region	
29	Qt	iPZ	06 12 50.5
		e(S)N*	14 31.7
		Mu Sec	
		PZ 0.04 0.7	
	Kr	ePZ	06 12 56.4
		epPZ	13 05.2
		esPE	11.7
	Wr	iPZ	13 53.5
	Lh	ePZ	14 13
		USCGS H 06 10 22.6	
		27.8 N 55.6 E	
		Southern Iran	
		depth about 37 km	
		Mag : 5.2 (CGS), 5.3 (Qt)	
29	Wr	ePZ	07 39 45.0
		eSZ	40 45.9
	Qt	ePZ	40 41 ±
		eSE	42 29.3
		H 07 38 22	
		Tadzhik, S.S.R.	
29	Qt	ePKPZ	10 55 55.3
		USCGS H 10 36 26	

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Date	Station	Phase	h m s
		34.1 S 70.4 W	
		Central Chile	
		depth about 33 km	
		Mag : 4.8 (CGS)	
29	Wr	ePN	16 04 42.0
		iSZ	59.6
	Qt	ePZ	05 51 ±
		eSN	07 03.7
		H 16 04 17	
		Hindukush region	
29	Lh	ePZ	16 56 51
	Qt	iPZ	57 22.2d
		USCGS H 16 48 42.6	
		5.7 S 110.2 E	
		Java Sea	
		depth about 530 km	
29	Qt	iPZ	20 33 06.0d
29	Qt	ePKPZ	20 35 36.3
		USCGS H 20 16 36.9	
		29.7 S 177.0 W	
		Kermadec Islands	
		depth about 33 km	
		Mag : 5.5 (CGS)	
29	Lh	ePZ	23 50 45 c
	Wr	ePZ	51 05.8
	Qt	iPZ	19.8c
		eSN	00 00 19.7
		USCGS H 23 40 03.4	
		5.4 S 131.6 E	
		Banda Sea	
		depth about 33 km	
		Mag : 4.8 (CGS), 5.2 (Qt)	
30	Qt	ePZ	01 28 30.2
	Wr	ePZ	29 03.1
30	Qt	ePKPZ	03 16 29.6
		USCGS H 02 57 31.6	
		30.0 S 177.2 W	
		Kermadec Islands	
		depth about 40 km	
		Mag : 4.9 (CGS)	
30	Wr	ePZ	03 34 13.4
		iSZ	35.2
	Qt	ePZ	35 19
		H 03 33 44	
		Hindukush region	
30	Qt	ePKPZ	04 46 26.8
		USCGS H 04 27 25.0	
		30.2 S 177.3 W	
		Kermadec Islands	
		depth about 17 km	
		Mag : 4.6 (CGS)	
30	Wr	ePKPZ	06 04 45.6
	Qt	ePKPZ	51.0
		ePPZ*	06 38.0
		ePKSN*	08 11.1
		eSKSE*	12 00.0
		ePPSN*	18 22.2
		eSSSN*	28 25.1
		USCGS H 05 45 53.3	
		29.6 S 177.3 W	
		Kermadec Islands region	
		depth about 33 km	
		Mag : 5.3 (CGS)	
30	Qt	ePZ	06 11 01
30	Qt	ePZ	07 03 16.6
		USCGS H 06 52 22.7	
		51.7 N 158.1 E	
		Kamchatka	
		depth about 33 km	
		Mag : 5.3 (CGS)	
30	Qt	ePZ	08 11 05.4
30	Qt	ePKPZ	14 10 39.5
	Wr	ePKPZ	11 01.4
30	Qt	ePKPZ	14 42 12.3
		USCGS H 14 23 13.7	
		29.5 S 177.1 W	
		Kermadec Islands region	
		depth about 33 km	
		Mag : 5.2 (CGS)	

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Date	Station	Phase	h m s
30	Qt	ePKPZ	15 23 32.5
		USCGS H 15 04 38.7	
		29.9 S 177.4 W	
		Kermadec Islands	
		depth about 76 km	
		Mag : 5.2 (CGS)	
	Qt	ePZ	23 41 56.0
		USCGS H 23 30 59.0	
		7.3 S 128.9 E	
		Banda Sea	
		depth about 143 km	
		Mag 5.2 (CGS)	
31	Qt	ePKPZ	02 03 15.5
		USCGS H 01 44 18.8	
		29.8 S 177.2 W	
		Kermadec Islands	
		depth about 65 km	
		Mag : 4.8 (CGS)	
31	Wr	ePZ	07 07 15.3
		eSZ	46.5
	Qt	ePZ	08 07
		eSN	09 27.6
		H 07 06 26	
		Hindukush region	
31	Qt	iPZ	11 39 28.4d
		USCGS H 11 29 20.4	
		41.9 N 142.4 E	
		Near south coast of Hokkaido	
		Japan	
		Mag : 4.5 (CGS)	
31	Qt	ePZ	13 37 12.7
		USCGS H 13 24 52.4	
		51.3 N 175.0 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag: 4°.0 (CGS)	
31	Qt	ePKPZ	14 53 49.0
		USCGS H 14 43 40.3	
		8.2 S 116.4 E	
		Sumbawa Islands region	
31	Qt	ePZ	15 19 44.7
		USCGS H 15 09 37.6	
		42.2 N 142.4 E	
		Off south coast of Hokkaido	
		Japan	
		depth about 33 km	
		Mag : 4.3 (CGS)	
31	Qt	ePZ	21 55 01.0
31	Wr	ePZ	21 56 43.8
		Lh ePZ	44
		eSZ	59 32
	Qt	iPZ	57 49.5
		eSN	22 01 41.3
		Mu Sec	
		PZ 0.01 0.7	
		△ = 20°.7	
		H 21 53 04	
		42.5 N 88.0 E	
		Sinkiang Province, China	
		depth about 33 km	
		USCGS H 21 53 03.6	
		43.1 N 88.3 E	
		Sinkiang Province, China	
		depth about 45 km	
		Mag : 4.7 (CGS), 4.3 (Qt)	
31	Wr	ePZ	22 36 55.5
		iSZ	37 28.0
	Qr	iPZ	54.0
		eSN	39 13.5
		H 22 36 14	
		Hindukush region	

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Date	Phase	h m s
	QUETTA	
1	ePZ	03 41 46.0
	eSN	42 12.5
1	eXZ	17 39 20.0
2	ePZ	03 08 43.5
	iSN	59.5
2	eXZ	04 33 12.0
2	ePZ	10 47 21.5
	eSN	36.0
3	ePZ	22 06 42.5
	eSE	07 28.0
4	ePZ	00 04 37.2
	eSN	05 09.5
4	ePZ	00 40 51.5
	eSN	41 16.5
4	ePZ	05 11 41.0
	eSN	12 30.0
4	iPZ	10 22 40.7c
	eSN	23 15.7
5	iPZ	21 24 37.0d
	eSN	39.5
5	iPZ	22 50 39.8d
	eSN	51.7
5	ePZ	23 18 13.5
	eSN	20 29.5
7	ePZ	03 51 38.2
	e(S)N	52 31
7	ePZ	04 25 18.4
	eSN	38.6
7	ePZ	04 30 24.7
	eSE	53.0
7	ePZ	04 34 09.1
	eSE	40.0
7	ePZ	14 38 19.2
	eSN	34.1
7	ePZ	18 52 35.7
	iSN	53 14.0
8	ePZ	01 55 42.2
	eSN	56 17.7
8	ePZ	02 14 02.7
	eSE	51.8
9	ePZ	19 50 02.4
	eSE	04.0
10	ePZ	03 25 14.4
11	ePZ	00 16 50.5
	eSN	17 14.5
11	ePZ	00 25 25.5
	eSN	49.5
11	ePZ	00 30 43.0
	eSN	31 07.5
11	ePZ	01 56 19.7
	iSE	25.6
11	e(P)Z	03 11 35.0
	eSN	12 21.5
11	iPZ	08 35 00.0c
	eSE	36 15.3
12	ePZ	05 30 05
	eSN	29.5
12	ePZ	09 44 16.4
	eSE	45 05
12	eXZ	12 29 05.7
12	ePZ	17 44 41
12	eSE	45 16.0
	ePZ	21 38 48.4
	eSE	54.5
13	ePZ	01 50 17.2
	e(S)N	30.0
13	ePZ	06 14 55.5
	eSN	15 22.0
13	e(P)Z	19 16 16.0
13	e(P)Z	19 31 11.5
13	ePZ	20 16 53.5
	eSN	17 03.7
13	ePZ	20 21 00.0
	eSN	12.0
14	ePZ	06 36 46.6
	eSN	37 13.5

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Date	Phase	h m s
14	ePZ	18 32 51.5
	eSE	33 30.5
15	ePZ	11 01 47.1
	eSN	02 45.0
15	iPZ	13 41 50.6d
	eSN	42 07.0
16	ePZ	13 15 32.5
	eSE	49.5
16	ePZ	15 45 36.0
	eSN	52.5
17	ePZ	00 23 07.5
	eSN	15.0
17	ePZ	01 16 01.0
	eSN	08.3
17	ePZ	10 21 10.5
	eSE	27.0
17	ePZ	10 43 24.0
	eSE	40.5
17	ePZ	11 43 00.7
	eSN	18.5
17	ePZ	18 52 04
	eSE	05.7
17	ePZ	21 54 32
	eSN	52
18	ePZ	12 56 54.2
	iSN	57 02.1
19	ePZ	00 51 24.5
	eSE	43.4
19	ePZ	05 54 41.8d
19	ePZ	06 25 16.5
	eSE	51.0
19	ePZ	08 05 05.5
	eSE	31.1
19	ePZ	08 32 05.0
	iSN	17.0
19	ePZ	12 00 09.5
	eSE	26.6
20	ePZ	01 44 17.0
	eSN	45 37.4
20	iPZ	07 49 30.7c
20	ePZ	08 27 03.2
	eSN	04.5
20	ePZ	09 55 23.0
	eSN	26.5
20	ePZ	12 52 05.0
	eSN	05.7
20	ePZ	17 01 34.0
	eSN	36.0
20	ePZ	19 44 00.5
	eSN	06.0
20	ePZ	20 11 19.5
	eSN	21.0
21	ePZ	13 16 00.5
21	ePZ	15 16 10.7
	eSN	23.5
22	ePZ	04 52 47.5
	eSN	04 53 02.0
22	ePZ	05 03 37.0
	eSN	04 03
22	ePZ	07 45 49.0
	eSN	07 46 02.5
22	ePZ	08 11 48.0
	eSN	12 03.0
22	ePZ	08 13 20.0
	eSN	25.5
22	ePZ	11 30 07.0
	eSN	22.3
22	ePZ	16 11 36.5
	eSN	50.7
22	ePZ	21 08 19.5
	e(S)N	09 03.0
22	ePZ	21 13 44.0
	eSN	14 00.0
23	ePZ	21 47 28.5
	eSN	55.0
22	ePZ	23 56 46.5
	eSN	57 26.8

Minor Shocks

International Seismological Centre

Date	Phase	h m s
23	ePZ	01 06 39.5
	eSN	56.0
23	ePZ	04 21 49.0
	eSN	22 05.5
23	ePZ	04 27 00.0
	eSE	13.0
23	ePZ	06 41 16.0
	eSE	34.5
23	ePZ	07 05 35.0
	eSN	54.0
23	ePZ	17 48 39.0
	eSE	55.7
23	ePZ	18 23 36.5c
	eSN	52.0
23	ePZ	21 47 52.0
	eSE	58.5
23	ePZ	23 16 15.5
	eSN	32.1
24	ePZ	03 54 17.4
	eSN	45.0
24	e(P)Z	15 47 07.0
	e(S)N	32.0
24	iPZ	23 51 50.9c
	eSN	52 25.0
25	iPZ	16 03 57.2c
	eSE	04 22.7
25	iPZ	19 07 26.5d
	eSE	39.6
25	ePZ	21 42 27.7
26	ePZ	03 44 00.0
	eSN	28.7
26	e(P)Z	07 48 03.0
	eSN	15.2
26	e(P)Z	10 41 36.0
	eSN	42 25.5
26	e(P)Z	19 48 45.5
	eSN	49 05.5
27	iPZ	21 36 37.5
28	ePZ	23 26 52.5
29	ePZ	10 47 04.3
	eSN	16.5
29	ePZ	17 26 19.0
	eSN	32.8
31	ePZ	06 50 38.8
	eSN	51 21.9
31	ePZ	09 19 32.0
	eSN	33.0
31	ePZ	29 58 04.7
	eSN	17.5
	WARSAK	
3	ePZ	17 51 41.0
	eSZ	52 06.0
4	ePZ	12 50 00.4
4	ePZ	18 18 39.8
	iSZ	19 13.0
5	ePZ	03 55 21.0
	eSZ	45.2
5	ePZ	14 26 01.4
	eSZ	47.6
6	ePZ	00 17 47.1
	iSZ	18 37.6
6	ePZ	14 38 59.1
6	ePZ	15 12 01.6
	eSE	46.1
6	ePZ	20 06 21.0
	eSZ	07 02.8
7	ePZ	03 31 27.5
	eSZ	32 11.8
8	ePZ	01 56 06.2
9	ePZ	11 33 45.4
	eSZ	34 20.7
9	ePZ	14 35 55.8
10	iPZ	05 51 09.9c
	iSN	42.1
10	ePZ	13 01 11.0

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Date	Phase	h m s
12	ePZ	06 40 08.4
	eSZ	43.6
12	ePN	13 38 22.8
12	ePgN	21 40 36.3
	eSgN	44.7
13	ePZ	19 06 21.8
	eSZ	07 12.5
14	ePZ	05 21 30.4
14	ePZ	23 13 45.4
	iSZ	14 24.8
18	ePZ	04 26 23.4
	eSZ	46.1
19	ePZ	06 25 20.2
	eSZ	26 03.0
20	ePZ	01 43 20.4
	eSZ	49.6
20	ePZ	06 50 06.1
20	ePZ	07 10 03.1
20	ePZ	09 53 08.0
20	ePZ	12 14 59.5
	iSZ	15 28.2
21	ePZ	20 32 37.0
	eSZ	33 24.7
22	ePZ	00 02 32.3
	eSZ	03 14.8
22	ePZ	07 46 50.0
22	ePZ	10 43 56.2
	iSZ	44 42.4
23	ePZ	05 01 33.0
23	ePZ	10 42 16.3
	eSZ	59.5
23	ePZ	12 42 22.0
	iSZ	51.7
24	ePZ	13 49 36.7
25	iPZ	02 56 21.4
	iSZ	36.6
25	ePZ	15 45 21.9
	eSZ	46 03.2
26	iPZ	16 04 09.2d
	eSZ	43.4
28	ePZ	03 40 21.3
30	ePZ	06 56 51.2
	eSZ	57 24.0
30	ePZ	20 02 02.0
30	ePZ	22 49 18.1
31	ePZ	11 02 43.4
	eSZ	03 21.0
31	ePZ	16 15 00,7
	eSZ	36.2

LAHORE

7	eXZ	21 16 16
	eXZ	20
9	eXZ*	09 47 08
12	eXZZ*	11 57 37
	eXZ*	12 00 34
14	eXZ*	06 02 05
16	eXZ	11 44 15
17	eXZ*	12 08 08
	eXZ*	15 10
18	eXZ*	05 42 55
	eXZ*	53
20	eXZ*	06 54 53
	eXZ*	55 07
21	eXZ*	05 49 40
21	eXZ*	18 14 09
	eXZ*	15 02
21	ePZ	18 28 42
	eXZ	29 48
21	ePZ	18 35 28
	eXZ	36 48
21	e(P)Z	18 47 50
	eXZ*	54

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Date	Phase	h	m	s
21	eXZ	18	50	20
	eXZ			36
22	iPZ	02	25	57
22	ePZ	07	47	26
	eXZ			30
22	eNE	11	34	14
	eXZ			17
24	eXZ	19	17	26
	eXZ			32
25	eXN	16	40	51
25	eXZ	22	29	06
26	ePZ	21	18	44
27	eXN	22	00	19
28	eXZ*	13	58	06
29	eXZ	04	56	44
29	ePN	16	05	06
	eXZ			08
29	ePZ	16	56	51
29	eXZ	18	45	18
29	eXZ*	20	34	08
	eXZ			35 06
	KARACHI			
9	ePZ	02	30	02.9
	eSE			44.6
13	ePnZ	19	09	23.1
	ePgZE			36.2
14	eXZE	10	56	22.8
22	ePZ	07	46	51.3
	eXZE		47	14.4
29	iPZE	06	12	56.4
	epPZE		13	05.2
	CHITTAGONG			
	eXZ	04	17	14
	ePZ	20	25	56±
	eSZN		30	51

Date	Phase	h	m	s
1	eXZ	21	17	56
1	ePZ	22	49	28
	epPN			48
2	eXN	00	20	54
2	ePZ	01	48	49
2	ePZ	09	52	58
	epPZ		53	29
2	eXZ	15	12	47
3	ePZ	02	27	36
3	eXZ	08	45	02
4	eXZ	07	01	35
4	eXZ	11	11	42
4	ePZ	21	52	29
4	eXZ	23	17	46
5	eXZ	07	20	40
5	eXZ	08	43	41
5	eXZ	16	33	12
6	ePZ	01	03	22
6	eXZ	22	43	49
9	ePZ	03	14	07
9	eXZ	04	17	54
9	ePZ	06	23	51
10	ePZ	02	16	55
10	ePZ	14	03	54±
12	eXZ	05	46	14
12	eXZ	15	37	28
13	eXZ	09	01	09
13	ePZ	14	12	27
14	eXZ	01	41	19
14	ePZ	05	48	18
14	eXZ	07	54	25
14	eXZ	14	51	02
14	eXZ	17	24	02
15	eXZ	05	29	05
15	ePZ	06	40	01
15	eXZ	19	33	07
16	eXZ	19	22	19
16	ePZ	22	19	46±
17	ePZ	07	08	33
17	ePgZ	07	39	45.5
	iSgNE			47.0

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Date	Phase	h m s
17	ePZ	11 05 35
17	eXZ	15 17 04
17	ePZ	19 17 50
19	eXZ	19 27 07
20	eXZ	00 30 31
20	ePZ	01 00 22
20	ePZ	02 23 04
20	eXZ	06 55 09
20	eXZ	07 46 55
21	eXZ	06 09 02
21	ePKPZ	11 22 30
21	eXZ	14 51 19
21	ePZ	18 53 37±
22	eXZ	00 43 17
22	eXZ	01 08 49
23	eXZ	00 12 10
23	ePZ	12 50 18
23	ePZ	17 26 04
24	eXZ	12 53 29
24	ePZ	19 16 22
25	eXZ	07 23 51
25	eXZ	15 25 15
28	ePZ	12 21 36
28	ePZ	19 01 05
29	ePZ	01 17 01
29	eXZ	06 18 07
29	ePZ	16 55 23
30	ePZ	07 02 26
31	eXZ	22 00 21

Date	Phase	h m s

International Seismological Centre

Date	Station	Phase	h m s
1	Qt	iPZ	04 51 17·3d
		USCGS H 04 39 20·7	
		7·0 S 146·1 E	
		Eastern New Guinea	
		depth about 174 km	
		Mag : 4·7 (CGS)	
1	Qt	ePZ	10 56 01·5
		USCGS H 10 45 02·7	
		55·3 N 161·8 E	
		Near east coast of	
		Kamchatka	
		depth about 50 km	
		Mag: 5·0 (CGS)	
1	Qt	ePZ	12 42 20·7
		eSN	43 37·0
1	Qt	ePZ	14 45 18 ±
		eSN	46 28·5
1	Qt	ePKPZ	15 39 51 ±
		USCGS H 15 20 55·9	
		29·8 S 177·2 W	
		Kermadec Islands	
		depth about 59 km	
		Mag: 4·8 (CGS)	
1	Qt	ePZ	17 16 00·0
1	Wr	iPZ	18 16 01·2
		iSZ	34·4
	Lh	ePZ	40
		iSNE	17 44
	Qt	ePZ	16 42·0
		H 18 15 18	
		35·4 N 69·7 E	
		Hindukush region	
1	Qt	ePZ	19 07 03·0
1	Wr	ePZ	20 02 35·1
	Lh	ePZ	42
	Qt	ePZ	03 39·8
		USCGS H 19 59 02·6	
		44·3 N 85·8 E	
		Sinkiang Province, China	
		depth about 33 km	
		Mag: 4·5 (CGS)	
1	Qt	ePZ	21 54 55
		USCGS H 21 43 08·6	
		52·1 N 173·2 E	
		Near Islands, Aleutian	
		Islands	
		depth about 90 km	
		Mag: 4·4 (CGS)	
2	Qt	iPZ	00 53 27·0d
2	Qt	ePZ	04 37 05·6
2	Qt	ePZ	05 50 15·5
2	Qt	ePZ	09 18 36·9
		USCGS H 09 07 18·0	
		56·2 N 34·1 W	
		North Atlantic Ocean	
		depth about 41 km	
		Mag: 4·6 (CGS)	
2	Qt	ePZ	10 05 06·0
		e(S)E	38·5
	Wr	ePZ	06 00 7
2	Qt	ePZ	10 31 06·5
		USCGS H 10 20 39·7	
		26·8 N 141·3 E	
		Mariana Islands region	
		depth about 109 km	
		Mag: 4·3 (CGS)	
2	Lh	ePZ	19 35 38
	Wr	ePZ	59·8±
	Qt	ePZ	36 18
		USCGS H 19 26 26·0	
		6·0 N 125·1 E	
		Mindanao, Philippine	
		Islands	
		depth about 118 km	
		Mag: 5·0 (CGS)	
3	Qt	ePZ	01 47 44 ±
3	Lh	ePZ	04 00 10
	Wr	ePZ	23·1
	Qt	iPZ	39·4
		epPZ	02 11·5
		USCGS H 03 48 06·4	

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Date	Station	Phase	h	m	s
		7·6 S 156.8 E			
		Solomon Islands			
		depth about 402 km			
		Mag : 5·1 (CGS)			
3	Ch	ePZ	06	38	11
	Qt	ePZ		40	32·3
		USCGS H 06 28 02·5			
		6·7 S 147·5 E			
		Near east coast of New			
		Guinea			
		depth about 83 km			
3	Qt	ePZ	09	04	21·4
3	Qt	ePZ	10	35	07·5
		epPZ			18·0
		ePPZ*		39	03·0
		iSKSN*		45	40·0
		eSE		46	06·0
		Mu Sec			
		PZ 0·1 2·0			
		△ = 97°.0			
	Wr	ePZ		35	19·8
	Lh	ePZ			33
		esPZ			49
		ePPZ*		39	50
		USCGS H 10 21 36·6			
		7·7 N 35·8 W			
		Mid-Atlantic Ocean			
		depth about 33 km			
		Mag : 6·1 (CGS), 6·0(Qt)			
3	Qt	ePZ	12	47	14·5
3	Qt	ePZ	16	41	15
	Wr	ePZ			26·1
	Lh	ePZ			30 c
	Qt	iPZ			56·4c
		USCGS H 16 29 35·8			
		52·0 N 174·3 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 33 km			
		Mag : 4·4(CGS)			

Date	Station	Phase	h	m	s
3	Wr	ePZ	19	32	37·4
		eSZ		33	27·1
	Qt	ePZ			45 ±
		eSN		35	27·2
		H 19 31 33			
		Tadzhik, S.S.R.			
3	Qt	ePZ	20	27	55·7
3	Qt	iPKPZ	20	45	02.0d
		USCGS H 20 26 04.1			
		30.7 S 178.3 W			
		Kermadec Islands			
		depth about 37 km			
		Mag : 5.2 (CGS)			
3	Wr	ePZ	22	39	21.1
		iSZ			50.3
	Qt	ePZ		40	24.2
		eSN		41	42.0
		H 22 38 43			
		Hindukush			
4	Qt	ePKPZ	02	33	45 ±
		USCGS H 02 13 50.6			
		42.6 S 83.4 W			
		Off coast of southern Chile			
		depth about 33 km			
		Mag : 4.7 (CGS)			
4	Wr	ePZ	03	24	12.8
	Qt	ePZ			50±
4	Qt	ePZ	05	50	57.5
		USCGS H 05 40 08.0			
		46.4 N 153.4 E			
		Kurile Islands			
		depth about 33 km			
		Mag : 3.9 (CGS)			
4	Qt	ePZ	07	08	24.2
4	Dh	ePZ	07	18	13
	Wr	iPZ			37.4
	Qt	ePZ			43.1c
		eSE		27	03.0
		USCGS H 07 08 47.1			
		9.4 S 114.2E			

International Seismological Centre

Date	Station	Phase	h m s
		South of Java	
		depth about 117 km	
		Mag : 5.5 (CGS)	
4	Wr	ePZ	09 22 11.0
		eSN	40.0
	Qt	ePZ	23 14.5
		eSE	24 32.0
		H 09 21 33	
		Hindukush	
4	Lh	ePZ	11 52 38
	Wr	ePZ	47.9
	Qt	iPZ	53 23.2c
		USCGS H 11 43 20.3	
		35.7 H 140.1 E	
		Honshu Japan	
		depth about 68 km	
		Mag : 4.7 (CGS)	
4	Qt	ePKPZ	12 26 46 +H
	Wr	ePKPZ	52.7
		USCGS H 12 07 24.4	
		4.1 S 80.9 W	
		Near north coast of Peru	
		depth about 34 km	
		Mag : 4.7 (CGS)	
4	Wr	ePZ	13 11 42.7
	Qt	ePZ	12 07.5
		USCGS H 13 00 44.7	
		12.6 N 143.8E	
		Mariana Islands	
		depth about 61 km	
		Mag : 4.6 (CGS)	
4	Qt	ePZ	21 53 13.0
		USCGS H 21 40 52.4	
		5.2 S 145.9 E	
		Near north coast of eastern	
		New Guinea	
		depth about 59 km	
		Mag : 4.9 (CGS)	
5	Qt	iPKPZ	00 12 05.7c
		ipPKPZ	13 31.4
		USCGS H 23 54 14.0	
		17.5 S 179.1 W	
		Fiji Islands region	
		depth about 515 km	
		Mag : 5.2 (CGS)	
5	Qt	ePKPZ	08 00 36.0
		USCGS H 07 51 37.9	
		27.2 S 178.0 W	
		Kermadec Islands region	
		depth about 33 km	
		Mag : 4.2 (CGS)	
5	Qt	ePZ	20 10 28.6
		USCGS H 20 05 06.3	
		37.0 N 95.8 E	
		Tsinghai Province, China	
		depth about 33 km	
		Mag : 4.6 (CGS)	
5	Wr	ePZ	21 34 24.4
	Qt	iPZ	35 14.5
		eSN	37 10.5
		H 21 32 44	
6	Wr	ePZ	01 37 03.6
		iSZ	30.8
	Qt	ePZ	38 08.0
		eSN	39 27.2
		H 01 36 27	
		Hindukush	
6	Qt	ePZ	05 32 36.2
		eSE*	51.0
		Mu Sec	
		PZ 0.08 0.4	
		$\Delta = 1°.2$	
	Wr	ePZ	33 48.4
		H 05 32 16	
		Mag : 2.8 (Qt)	
6	Qt	ePZ	09 48 04.5
		USCGS H 09 28 30.0	
		38.1 S 72.3 W	

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Date	Station	Phase	h m s	
		Central Chile		
		depth about 96 km		
		Mag : 4.8 (CGS)		
6	Wr	ePZ	13 47 44.1	
	Qt	ePZ	49	±
	Lh	ePZ	48 04	±
6		USCGS H 13 36 35.6		
		57.0 N 33.6 W		
		North Atlantic Ocean		
		depth about 33 km		
		Mag : 5.1 (CGS)		
6	Wr	ePZ	20 54 49.2	
		iSZ	55 20.4	
	Qt	ePZ	41.0	
		eSNE	56 59.3	
		H 20 54 00		
		Hindukush		
7	Wr	ePZ	04 42 52.8	
	Qt	ePZ	43 31.1	
		USCGS H 04 33 42.7		
		54.0 N 142.1 E		
		Sakhalin Islands, U.S.S.R		
		depth about 33 km		
		Mag : 5.1 (CGS)		
7	Wr	iPZ	16 27 41.0	
		iSZ	29 08.7	
	Qt	ePZ	44.9	
		eSNE	30 04.0	
		H 16 27 03		
		Hindukush		
7	Qt	ePKPZ	18 55 54.1	
		USCGS H 18 36 46.6		
		13.6 N 90.0 W		
		Near south coast of		
		Guatemala		
		depth about 67 km		
		Mag : 4.7 (CGS)		
8	Ch	iPZ	02 25 39.0d	
		epPZ	40	
		ePPZ	27 52	
		eSN	34 04	
	Wr	iPZ	25 41.4	
		eSN	34 35.4	
	Lh	ePZ	25 46c	
		eSN*	34 38	
		eSKSN*	35 43	
	Qt	iPZ!	26 17.5c	
		ePPZ	28 56.6	
		eSN*E*	35 37.2	
		Mu Sec		
	PZ	0.2 1.2		
		△ = 72°.3		
		USCGS H 02 14 54.4		
		54.2 N 168.1 E		
		Fox Islands, Aleutian		
		Islands		
		depth about 33 km		
		Mag : 5.5 (CGS), 6.0(Qt)		
8	Wr	ePZ	04 32 16.0	
		eSZ	51.9	
	Qt	ePZ	33 21.3	
		eSNE	34 47.5	
		H 04 31 30		
		Hindukush region		
8	Wr	ePZ	06 45 08.1	
		iSZ	44.3	
	Qt	ePZ	54.1	
		H 06 44 20		
8	Qt	ePZ	11 19 45.0	
8	Ch	ePZ	11 28 25	±
	Wr	ePZ	39.1	
	Qt	ePZ	55.3	
		USCGS H 11 16 11.2		
		5.8 S 151.0 E		
		New Britain		
		depth about 48 km		
		Mag : 5 (Berk), 5.6(CGS)		
8	Wr	ePZ	11 50 14.6	
	Qt	ePZ	47.5	

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Date	Station	Phase	h	m	s
		USCGS H 11 41 30.5			
		27.3 N 129.2 E			
		Ryukyu Islands			
		depth about 92 km			
		Mag : 4.4 (CGS)			
8	Lh	ePZ	14	03	39 ±
	Wr	iPZ			53.6
		eSZ		12	09.5
	Qt	iPZ		04	19.2d
		USCGS H 13 53 42.2			
		18.3 N 145.3 E			
		Mariana Islands region			
		depth about 423 km			
		Mag : 4.9 (CGS)			
8	Wr	ePZ	18	19	18.5
		iSZ			59.0
	Qt	ePZ		20	23.1
		eSNE		21	54 2
		H 18 18 25			
		Hindukush region			
8	Qt	ePZ	19	21	26.8
		USCGS H 19 11 11.2			
		32.2 N 140.9 E			
		South of Honshu, Japan			
		depth about 77 km			
		Mag : 4.0 (CGS)			
9	Wr	ePZ	04	43	15.6
		iSZ			44.9
	Qt	ePZ		44	22.0
		eSN		45	33.0
		H 04 42 45			
		Hindukush region			
9	Qt	ePZ	12	32	06.0
		USCGS H 12 20 02.2			
		51.6 N 178.8 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 53 km			
		Mag : 4.5 (CGS)			
9	Qt	ePKPZ	14	55	37.5
		ePPZ		57	12.2
		USCGS H 14 36 45.9			
		15.3 S 175.7 W			
		Fiji Islands region			
		depth about 33 km			
		Mag : 5.5 (CGS)			
9	Qt	ePZ	15	25	26.5
		USCGS H 15 12 57.0			
		3.0 S 152.3 E			
		New Island			
		depth about 143 km			
		Mag : 5.3 (CGS)			
9	Wr	ePZ	16	06	56.3
		iSN		07	30.0
	Qt	ePZ			50.7
		eSZ		09	07.5
		H 16 06 12			
		Hindukush region			
9	Qt	iPKPZ	20	49	11.5c
		USCGS H 20 29 58			
		36.9 S 71.5 W			
		Central Chile			
		depth about 186 km			
		Mag : 4.3 (CGS)			
10	Qt	ePZ	00	54	48.0
10	Wr	ePZ	01	41	56.7
		eSN		42	33.4
	Qt	ePZ		43	01.3
		H 01 41 09			
		Hindukush region			
10	Qt	ePZ	04	30	26.5
		eSN*		32	49.0
	Wr	ePZ		31	26.4
		USCGS H 04 27 33.5			
		28.1 N 53.3 E			
		Southern Iran			
		depth about 46 km			
		Mag : 4.8 (CGS)			
10	Qt	ePZ	08	17	04.2

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Date	Station	Phase	h m s
10	Ch	ePZ	13 26 09
	Wr	ePZ	28 04.7
	Qt	ePZ	35.1
		USCGS H 13 17 47.1	
		24.7 N 142.7 E	
		Volcano Islands region	
		depth about 33 km	
		Mag : 5.0 (CGS)	
10	Wr	ePZ	18 03 16.5
	Qt	iPZ	33.4
		USCGS H 17 15 40	
		3.2 S 141.9 E	
		Near North coast of	
		New Guinea	
		depth about 88 km	
10	Lh	ePKPZ	18 27 11 ±
	Wr	ePKPZ	12.3
	Qt	ePKPZ	15 ±
		USCGS H 18 07 26.2	
		54.4 S 132.8 W	
		South Pacific Oceans	
		depth about 33 km	
		Mag : 4.7 (CGS)	
10	Qt	ePZ	20 30 30 ±
11	Wr	ePZ	07 46 48.3
	Qt	iPZ	47 25.5c
		USCGS H 07 37 20.4	
		38. 8N 140.9 E	
		Near east coast of	
		northern Honshu, Japan	
		depth about 45 km	
		Mag : 5.0 (CGS)	
11	Qt	ePZ	08 46 37.0
		eSE	50 11.2
	Wr	ePZ	47 00.0
		USCGS H 08 43 48	
		37.1 N 55.2 E	
		Northern Iran	
		depth about 33 km	
		Mag : 4.4 (CGS)	

Date	Station	Phase	h m s
11	Qt	ePZ	10 15 18.2
11	Qt	iPZ	10 22 42.5c
		USCGS H 10 03 05.1	
		38.1 S 73.1 W	
		Near coast of southern	
		Chile	
		depth about 60 km	
		Mag : 5.0 (CGS)	
11	Wr	iPZ	12 11 33.0
		iSZ	12 10.3
	Qt	ePZ	20.0
		eSE	13 30.0
		H 12 10 47	
		Hindukush region	
11	Qt	ePZ	17 27 19.3
11	Wr	iPZ	19 41 20.6
		iSZ	56.8
	Lh	ePZ	42 09 d
		eSNE	43 08
	Qt	ePZ	42 32.3
		eSE	43 50.2
		Mu Sec	
		PZ 0.01 0.5	
		△ = 6°.9	
		H 19 40 52	
		36.1 N 71.3 E	
		Hindukush	
		depth about 18 km	
		USCGS H 19 40 52.2	
		36.2 N 71.2 E	
		Hindukush	
		depth about 148 km	
		Mag: 4.3 (Qt)	
12	Qt	ePZ	01 06 12.0
12	Qt	ePKPZ	01 25 01.5
	Wr	ePKPZ	14.0
	Lh	ePKPZ	19 ±
		USCGS H 01 05 34.1	
		32.5 S 71.1 W	
		Near coast of central Chile	
		depth about 92 km	

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Date	Station	Phase	h m s
		Mag : 4.7 (CGS)	
12	Qt	iPZ	07 22 53.5d
		eSE	25 08.0
	Wr	iPZ	23 55.0
		USCGS H 07 19 54.9	
		27.7 N 53.2 E	
		Near southwest coast of Iran	
		depth about 33 km	
		Mag : 5.0 (CGS)	
12	Wr	ePZ	10 21 05.2
	Qt	iPZ	18.0
		USCGS H 10 10 08.0	
		5.7 S 131.1 E	
		Banda Sea	
		depth about 92 km	
		Mag : 5.2 (CGS)	
12	Qt	ePZ	11 59 22.5
12	Qt	ePZ	12 09 59.0
12	Kr	iPZ	18 30 40.6c
		iSE	31 22.0
	Qt	iPZ	11.0
		eSE	32 28.6
		Mu Sec	
		PZ 0.19 1.0	
		$\triangle$ = 6°.9	
	Wr	ePZ	23.0
	Lh	ePZ	27
		eSEE*	34 33
		H 18 29 46	
		25.3 N 63.0 E	
		West Pakistan	
		depth about 33 km	
		USCGS H 18 29 38.8	
		25.3 N 62.7 E	
		Near coast of West Pakistan	
		depth about 33 km	
		Mag : 5.2(CGS), 5.8(Qt)	
12	Qt	ePZ	20 56 43.0
13	Wr	ePZ	03 38 58.4
	Qt	ePZ	39 38.0
		USCGS H 03 26 45.4	
		55.0 N 156.4 W	
		Kodiak Islands region	
		depth about 33 km	
		Mag: 5.0 (CGS)	
13	Qt	iPZ	05 03 56.5
		USCGS H 04 53 58.8	
		7.2 S 124.5 E	
		Banda Sea	
		depth about 542 km	
		Mag : 5·3 (CGS)	
13	Qt	ePZ	05 26 32·0
13	Qt	iPKPZ	06 47 08·5c
		USCGS H 06 29 19·1	
		20·6 S 178·5 W	
		Fiji Islands	
		depth about 562 km	
		Mag : 4·6 (CGS)	
13	Wr	iPZ	07 04 36·0
		iSZ	05 09·4
	Lh	ePZ	15
		eSN	06 12
	Qt	iPZ	05 34·1d
		eSN	06 56·5
		Mu Sec	
		PZ 0·17 0·7	
		$\triangle$ = 7°·2	
Ch.		cPZ	08 38
		eSE	12 28
		H 07 03 50	
		36·5 N 71·0 E	
		Hindukush	
		depth about 200 km	
		USCGS H 07 03 49·6	
		36·6 N 70·9 E	
		Hindukush	
		depth about 244 km	
		Mag : 4·7(CGS), 5·4(Qt)	

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Date	Station	Phase	h m s
13	Qt	iPZ	07 33 22·7c
13	Wr	ePZ	09 24 45·7
		eSZ	25 21·0
	Qt	iPZ	52·1c
		eSE	27 21·5
		H 09 23 58	
		Hindukush region	
13	Qt	ePZ	13 37 26·3
		USCGS H 13 28 02·2	
		72·2 N 6·4 E	
		Svalbard region	
		depth about 33 km	
		Mag : 4·7 (CGS)	
13	Qt	ePKPZ	22 11 36·0
		USCGS H 21 52 37·4	
		19·3 S 173·7 W	
		Tonga Islands	
		depth about 33 km	
		Mag : 5·1 (CGS)	
13	Wr	iPZ	23 09 37·2
	Qt	iPZ	10 10·0
		USCGS H 23 00 24·8	
		27·2 N 140·1 E	
		Bonin Islands region	
		depth about 448 km	
		Mag : 4·8 (CGS)	
13	Wr	ePZ	23 16 01·5
	Qt	ePZ	20 ±
		e(S)E	17 40·2
14	Qt	ePZ	00 25 11·5
		USCGS H 00 15 07·1	
		16·7 S 28·7 E	
		Northern Rhodesia	
		depth about 33 km	
14	Wr	ePZ	03 45 03·6
	Qt	ePZ	20·2
		USCGS H 03 32 33·5	
		4·9 S 152·3 E	
		New Britian	
		depth about 62 km	
		Mag : 5·8 (CGS)	
14	Qt	ePZ	07 23 24·0
14	Qt	ePZ	08 56 47·3
14	Qt	ePZ	09 05 51·8
14	Wr	iPZ	09 24 30·0d
		eSZ	25 16·7
	Qt	ePZ	34·6
		eSNE	27 17·0
		H 09 23 25	
14	Qt	ePZ	16 27 07·6
		USCGS H 16 18 18·0	
		24·1 N 122·4 E	
		Off coast of Formosa	
		depth about 28 km	
		Mag : 5·3 (CGS)	
14	Wr	iPZ	17 34 19·2
		eSZ	49·4
	Lh	ePZ	59
		eSNE	36 03
	Qt	ePZ	35 23·0
		eSNE	36 48·2
		Mu Sec	
		PZ 0·01 0·5	
		△ = 7°·5	
		H 17 33 35	
		36·7 N 71·3 E	
		Hindukush	
		depth about 160 km	
		Mag : 4·1 (Qt)	
14	Wr	ePZ	17 50 26·5
	Qt	ePZ	51 18·4
		e(S)E	52 05·5
14	Ch	ePZ	18 52 39
	Lh	ePZ	54 52 c
	Wr	iPZ	55 10·8c
	Qt	iPZ!	27·0
		eSN	19 04 52·0
		Mu Sec	
		PZ 0·21 1·0	
		USCGS H 18 43 55·5	
		3·4 S 135·4 E	
		West Iran	

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Date	Station	Phase	h	m	s	
		depth about 33 km				
		Mag : 6·4 (CGS)				
15	Wr	iPZ	02	26	23·9	
	Qt	iPZ			55·4	
		eSN		34	53·6	
		USCGS H 02 17 16·9				
		27·9 N 139·6 E				
		Bonin Islands				
		depth about 476 km				
		Mag : 4·7 (CGS)				
15	Ch	iPZ	06	19	49	c
		ipPZ		20	09	
		ePPZ		21	41	
		ePPPZ		22	22	
		eSN		26	27	
	Lh	ePZ		20	59	c
		ePcPZ		22	04	
		ePPZ*		23	04	
		ePcSZ*		26	04	
		eSN*E*		28	33	
	Wr	iPZ		21	07·1	
		eSN		28	53·9	
	Qt	ePE*		21	43·0	
		eSN*		29	59·0	
		USCGS H 06 11 34·6				
		37·9 N 141·6 E				
		Near east coast of Honshu				
		Japan				
		depth about 59 km				
15	Wr	iPKPZ	17	43	26·2	
	Qt	ePKPN*			31	
		epPKPN*		45	23·0	
		ePPE*		46	26	
		ePKSN*		47	11·0	
	Kr	ePKPZ		43	31	
		epPKPZ		45	53·7	
		iPPZ		46	27·9	
		iPKSE			35·0	
	Lh	ePKPZ*		43	34	d
		ePPZ		46	38	
	Ch	ePKP1Z		44	06	
		ePKP2Z		45	06	
		epPKPZ		46	15	
		ePPZ		48	40	
		USCGS H 17 25 05·9				
		13·8 N 69·3 W				
		Peru-Bolivia border				
		depth about 543 km				
		Mag : 7 No. ¾ (Pas), 8(Berk)				
16	Qt	ePZ	08	54	59·7	
16	Wr	iPZ	17	11	55·5	
		iSZ		12	27·5	
	Qt	ePZ			56·2	
		eSNE		14	18·5	
		H 17 11 11				
		Hindukush region				
16	Qt	ePZ	23	19	20·5	
16	Lh	ePZ	23	32	36	
	Qt	ePZ			47·0	
	Wr	ePZ			52·6	
		USCGS H 23 19 31·1				
		48·9 S 122·8 E				
		South of Australia				
		depth about 33 km				
17	Qt	ePZ	06	30	08·7	d
		USCGS H 06 17 36·4				
		52·4 N 168·7 W				
		Fox Islands, Aleutian				
		Islands				
		depth about 33 km				
		Mag : 4·3 (CGS)				
17	Ch	iPZ	11	19	42	c
		epPZ			53	
		eSE		25	18	
	Lh	ePZ		21	19	c
		epPZ			32	
	Wr	ePZ			33·7	
	Qt	ePZ		22	08·5	
		iPZ!			09·1	
		eSE*		29	43·0	

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Date	Station	Phase	h	m	s
		Mu Sec			
		PZ 0·1 0·8			
		△ = 58°·4			
		USCGS H 11 12 41·2			
		30·6 N 130·9 E			
		Ryukyu Islands region			
		depth about 33 km			
		Mag : 5·6 (CGS) 6·0 (Qt)			
17	Wr	iPZ	14	44	45·7
		iSE		45	19·1
	Qt	ePZ			40·5
		eSNE		46	57·5
		H 14 44 01			
		Hindukush region			
17	Qt	ePZ	22	01	03·0
		eSE		02	40·2
	Wr	ePZ		01	18·4
		USCGS H 21 58 54·4			
		36·7 N 59·7 E			
		Northern Iran			
		depth about 33 km			
		Mag : 4·8 (CGS)			
17	Qt	ePZ	22	28	10·5
		USCGS H 22 13 22·2			
		32·1 N 40·9 W			
		North Atlantic Ocean			
		depth about 33 km			
		Mag : 4·8 (CGS)			
18	Wr	iPZ	02	50	55·2
		iSZ		15	21·4
	Lh	ePZ			35
		eSNE		52	41
	Qt	ePZ		51	57·0
		eSNE		53	22·7
		H 02 50 10			
		36·6 N 71·2E			
		Hindukush region			
		depth about 200 km			
18	Wr	iPZ	06	08	19·5
	Qt	ePZ		09	01
18	Qt	ePZ	07	19	41·7
		USCGS H 07 09 51·6			
		35·9 N 139·2 E			
		Central Honshu, Japan			
		depth about 153 km			
		Mag : 4·8 (CGS)			
18	Wr	ePZ	18	55	03·7
	Lh	ePZ			07
		ePcPZ			21
		eSN*E*	19	04	54
	Qt	ePZ	18	55	34·5
		eSN*	19	05	50·7
		USCGS H 18 43 16·1			
		50·3 N 176·9 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 33 km			
		Mag : 5·5 (CGS)			
18	Qt	ePZ	19	24	04·5
		eSE			41·5
	Wr	ePZ			25·9
		eSE		25	26·3
		H 19 23 12			
18	Wr	ePKPZ	20	46	31·9
	Qt	ePKPZ			40·6
		USCGS H 20 27 41·9			
		32·1 S 178·1 W			
		Kermadec Islands region			
		depth about 33 km			
		Mag : 5·0 (CGS)			
18	Wr	iPZ	23	09	46·7
		iSZ		10	19·4
	Lh	ePZ			26
		eSE		11	19
	Qt	ePZ		10	51·3
		eSE		12	15·5
		H 23 09 03			
		36·7 N 71·6 E			
		Hindukush			
		depth about 200 km			

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Date	Station	Phase	h m s
19	Qt	ePKPZ	04 42 59·5
		USCGS H 04 24 00·4	
		32·0 S 177·9 W	
		Kermadec Islands region	
		depth about 33 km	
		Mag : 4·8 (CGS)	
19	Qt	iPZ	07 41 49·5c
	Wr	ePZ	42 01·7
		USCGS H 07 29 40·5	
		45·6 S 95·7 E.	
		Indian Ocean	
		depth about 33 km	
19	Wr	ePZ	08 45 12·8
		iSZ	54·3
	Qt	ePZ	46 27·2
		eSE	47 59·0
		H 08 44 24	
		Hindukush region	
19	Qt	ePZ	10 10 07·1
19	Qt	ePZ	12 01 34·7
	Wr	iPZ	46·7
		USCGS H 11 49 26·4	
		45·7 S 95·9 E	
		Indian Ocean	
		depth about 33 km	
19	Qt	ePZ	12 24 02·0
19	Qt	ePZ	13 59 49·5
19	Qt	ePZ	15 08 54·7
		USCGS H 14 58 59·5	
		41·5 N 141·8 E	
		Off east coast of Honshu	
		Japan	
		depth about 117 km	
		Mag : 4·0 (CGS)	
19	Qt	ePZ	19 21 03·5
		USCGS H 19 09 48·2	
		6·1 S 130·7 E	
		Banda Sea	
		depth about 33 km	
		Mag : 4·3 (CGS)	
19	Wr	ePZ	20 49 57·5
		iSZ	50 39·7
	Qt	iPZ	51 01·5c
		eSE	52 33·5
		H 20 49 01	
		Hindukush	
20	Qt	ePZ	07 02 22 ±
		USCGS H 06 53 28	
		6·9 S 103·0 E	
		Off coast of Sumatra	
		depth about 61 km	
20	Lh	ePZ	13 43 07 ±
		eSNE	44 13
	Qt	ePZ	43 24·5
		eSE	44 36·5
		H 13 41 46	
		Hindukush	
20	Lh	ePZ	15 57 38
		epPZ	52
		eSN*E*	16 05 15
		esSN* E*	31
	Qt	ePZ	15 58 20·5
		ipPZ	35·5
		eSE	16 06 35·5
		USCGS H 15 48 12·2	
		41·2N 142·7 E	
		Off coast of Honshu	
		Japan	
		depth about 50 km	
		Mag : 4·5 (CGS)	
20	Lh	ePZ	23 19 00
	Qt	ePZ	44·5
		eSN	21 47·7
		H 23 17 09	
21	Lh	ePZ	02 57 15
		eSNE	41
	Qt	ePZ	58 35·5
		eSE	03 00 03·0
21	Qt	ePZ	11 32 13·8
		eSNE	33 33·3

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Date	Station	Phase	h m s
		Mu Sec	
		PZ 0·02 0·6	
		△ = 7°·1	
		H 11 30 34	
		Hindukush	
		Mag : 4·5 (Qt)	
21	Qt	ePZ	18 13 47·0
		USCGS H 18 02 44·4	
		49·0 N 158·2 E	
		Kurile Islands region	
		depth about 33 km	
		Mag : 4·9 (CGS)	
21	Qt	ePZ	18 33 09·2
		USCGS H 18 20 52·8	
		51·8 N 176·5 W	
		Andeeanof Islands	
		Aleutian Islands	
		depth about 17 km	
		Mag : 4·2 (CGS)	
22	Qt	ePZ	04 10 58·0
		USCGS H 03 58 43·2	
		63·2 N 148·5 W	
		Central Alaska	
		depth about 101 km	
		Mag : 4·6 (CGS)	
22	Qt	ePZ	05 12 26·2
		USCGS H 05 01 38·3	
		1·2 S 128·5 E	
		Halmahera region	
		depth about 33 km	
		Mag : 3·7 (CGS)	
22	Qt	ePZ	14 50 48·2
		USCGS H 14 39 28	
		1.9 S 133·9 E	
		Iran	
		depth about 33 km	
		Mag : 4·3 (CGS)	
22	Wr	iPZ	17 00 57·6
	Qt	ePZ	02 16 ±
		eSE	03 27·0
		H 17 00 40	
		Hindukush region	
22	Qt	ePZ	17 15 19·0
		USCGS H 17 05 27·5	
		7·2 S 120·4 E	
		Flores Sea	
		depth about 398 km	
22	Wr	ePZ	18 23 45·1
	Qt	ePZ	55·5
22	Wr	ePZ	18 38 32·7
	Qt	ePZ	48 ±
22	Lh	ePZ	20 05 21
		epPZ	30
		ePPZ	08 58
		eSKSE*	15 45
		eSN*E*	16 12
	Wr	ePZ	05 33·6
	Qt	ePZ	49·0
		ePPE*	09 46·0
		eSKSN*	16 23·0
		ePSN*	18 21·0
		eSSN*	23 43·0
		ePKPPKPZ	30 56·0
		Mu Sec	
		PZ 9·2 20·0	
		△ = 96°·0	
		USCGS H 19 52 25·0	
		9·4 S 158·0 E	
		Solomon Islands	
		depth about 33 km	
		Mag : 6¼-7(Pas), 6-6¼(Berk),	
		6·1 (CGS), 6·3 (Qt)	
22	Qt	ePKPZ	21 44 29·5
		USCGS H 21 24 47·7	
		45·0 S 75·1 W	
		Near coast of southern	
		Chile	
		Mag : 4·5 (CGS)	

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Date	Station	Phase	h m s
22	Qt	ePZ	22 46 18·5
22	Wr	iPZ	23 50 53·2
		iSZ	51 25·4
	Qt	ePZ	51·0
		eSE	53 08·5
		H 23 50 11	
		Hindukush region	
23	Wr	iPZ	12 16 36·0
		eSZ	17 21·7
	Qt	ePZ	45·0
		eSE	19 35·5
23	Ch	ePZ	13 19 26
	Wr	ePZ	36·6
	Lh	ePZ	49
	Qt	ePZ	20 24·0
		USCGS H 13 09 25·3	
		52·4 N 159·6 E	
		Off east coast of Kamchatka	
		depth about 33 km	
		Mag : 4·5 (CGS)	
23	Qt	ePZ	15 34 05·4
		USCGS H 15 24 06	
		4·9 N 128·1 E	
		Talaut Islands region	
		depth about 268 km	
23	Lh	ePZ	19 30 22
		eSN	47
	Wr	ePZ	37·3
		eSZ	31 11·5
	Qt	ePZ	37 ±
		eSE	33 00·0
		H 19 29 50	
		33·4 N 75·0 E	
		Kashmir	
		depth about 33 km	
23	Qt	ePZ	23 32 45·6
		USCGS H 23 22 10·1	
		28·6 N 142·5 E	
		Bonin Islands	
		depth about 45 km	
		Mag : 4·6 (CGS)	
24	Wr	ePZ	06 51 36·7
		eSZ	52 48·4
	Qt	ePZ	51 51 ±
		H 06 50 06	
24	Wr	ePZ	07 38 16·2
		eSZ	45·4
	Qt	ePZ	39 17 ±
		eSE	40 37·0
		H 07 37 35	
		Hindukush region	
24	Qt	ePZ	11 10 35·3
		USCGS H 10 58 28·2	
		51·0 N 179·4 E	
		Rat Islands, Aleutian Islands	
		depth about 33 km	
		Mag : 4·0 (CGS)	
24	Qt	ePZ	21 52 42 ±
		USCGS H 21 41 57·8	
		45·0 N 151·7 E	
		Kurile Islands region	
		depth about 33 km	
		Mag : 4·1 (CGS)	
25	Wr	ePZ	02 29 47·3
	Qt	ePZ	30 24·4
		USCGS H 02 20 12·7	
		48·7 N 148·8 E	
		Sea of Okhotsk	
		depth about 134 km	
		Mag : 4·7 (CGS)	
25	Wr	ePZ	05 27 50·0
	Qt	ePZ	28 53 ±
25	Ch	ePZ	05 30 58
	Qt	iPZ	32 01·6
		USCGS H 05 21 19·4	
		45·2 N 151·3 E	
		Kurile Islands region	
		depth about 33 km	
		Mag : 4·6 (CGS)	
25	Qt	ePZ	06 17 07·4
		eSN*E*	21 48·0

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Date	Station	Phase	h	m	s
	Wr	ePZ	17	25	·3
		USCGS H 06 11 43 ·3			
		38 ·9 N 38 ·4 E			
		Central Turkey			
		depth about 33 km			
		Mag : 4 ·8 (CGS)			
25	Ch	ePZ	12	30	40
	Lh	ePKPZ		35	41±
	Qt	iPKPZ			59 ·9d
		epPKPZ		37	01 ·0
		ePPZ			28 ·1
		USCGS H 12 18 12 ·5			
		17 ·5 S 178 ·8 W			
		Fiji Islands region			
		depth about 565 km			
		Mag : 6½ (Pas), 6-6¼(Berk), 6 ·1 (CGS)			
26	Wr	iPZ	05	43	39 ·4
	Qt	ePZ		44	16 ·5
		eSN		45	09 ·0
		H 05 43 07			
26	Wr	ePZ	05	15	47 ·3
	Qt	ePZ			49 ·5
		USCGS H 05 42 40 ·3			
		6 ·8 S 105 ·6 E			
		Java			
		depth about 33 km			
		Mag : 5 ·1 (CGS)			
26	Wr	ePZ	18	39	58 ·3
		iSZ		40	31 ·2
	Lh	ePZ			41
		eSNE		41	44
	Qt	ePZ		40	54 ·5
		eSE		42	10 ·9
		H 18 39 16			
		36 ·3 N 70 ·4 E			
		Hindukush			
		depth about 200 km			
26	Lh	ePZ	23	42	55
	Wr	ePZ		43	18 ·3
	Qt	ePZ			29 ·5
		esPZ		44	18 ·6
		USCGS H 23 32 38 ·3			
		7 ·7 S 127 ·3 E			
		Banda Sea			
		depth about 151 km			
		Mag : 4 ·4 (CGS)			
27	Qt	ePKPZ	03	43	16 ·0
	Wr	ePKPZ			32 ·7
		USCGS H 03 23 32 ·6			
		45 ·9 S 75 ·3 W			
		Near coast of southern Chile			
		depth about 33 km			
		Mag : 5 ·3 (CGS)			
27	Qt	iPZ	13	38	43 ·0d
		eSN*			55 ·4
		Mu Sec			
		PZ 0 ·45 0 ·5			
		△ = 1° ·0			
	Wr	iPZ		39	42 ·4
		H 13 38 25 ·0			
		Pakistan-Afghanistan border			
		Mag : 4 ·2 (Qt)			
27	Qt	ePZ	18	36	37 ·0
27	Lh	ePZ	22	12	37
		esPZ			57
	Qt	iPZ		13	19 ·4
		USCGS H 22 02 55 ·9			
		40 ·2 N 145 ·2 E			
		East of Honshu, Japan			
		depth about 55 km			
		Mag : 4 ·8 (CGS)			
28	Wr	iPZ	01	23	29 ·9
		iSZ			59 ·1
	Qt	ePZ			57 ·0
		eSN		24	52 ·0
		H 01 22 48			
		Afghanistan			

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Date	Station	Phase	h m s
28	Wr	iPZ	03 19 36·3
		iSN	20 03·9
	Qt	iPZ	32·0d
		eSE	21 47·0
		Mu Sec	
		PZ 0·03 0·6	
		△ = 6°·3	
		H 03 18 56	
		Hindukush region	
		Mag : 4·7 (Qt)	
28	Qt	ePZ	16 01 27·5
		USCGS H 15 51 06·3	
		28·3 N 141·0 E	
		Bonin Islands region	
		depth about 96 km	
		Mag : 5·1 (CGS)	
28	Qt	ePZ	17 18 24·0
28	Wr	ePZ	18 49 36·9
		iSZ	51·1
	Lh	ePZ	50 09
		eSNE	54
	Qt	ePZ	51 04 ±
		eXE	52 18·0
		H 18 49 15	
		34·9 N 73·7 E	
		Northern West Pakistan	
28	Qt	iPZ	18 58 11·6c
29	Lh	ePZ	01 31 33 c
		epPZ	51
	Wr	iPZ	57·2
	Qt	iPZ	32 13·0 c
		isPZ	31·0
		USCGS H 01 22 06·4	
		2·0 N 123·4 E	
		Northern Celebes	
		depth about 43 km	
29	Wr	iPZ	08 55 16·0
	Lh	ePZ	47
		eSN*E*	57 18
	Qt	iPZ	56 27·9
	Kr	iPZ	57 30·6d
		esPZ	40·3
		eSZ	09 00 25·3
		esSZ	46·9
	Ch	iPZ	08 58 48 c
		H 08 53 54	
		39·4 N 74·0 E	
		Sinkiang Province, China	
		depth about 33 km	
		USCGS H 08 53 48·4	
		39·6 N 74·2 E	
		Sinkiang Province, China	
		depth about 31 km	
		Mag : 5·5 (CGS)	
29	Qt	ePKPZ	15 50 01·0
		ePPZ	53 05·0
		ePKSE	20·5
		ePSE*	16 03 29·1
	Wr	ePKPZ	15 50 04·7
	Kr	ePKPZ	09.8
	Lh	iPKPZ	13 d
		ePPZ	53 39 ±
		ePKPZ	50 37 d
	Ch	USCGS H 15 30 31.4	
		7.1 S 8.6W	
		Off Coast of Peru	
		depth about 23 km	
		Mag : 6½ (Pas), 6.1 (CGS)	
29	Qt	ePKPZ	21 16 28.0
		USCGS H 20 57 31.5	
		15.5 S 172.9 W	
		Tonga Islands region	
		depth about 33 km	
		Mag : 4.9 (CGS)	
30	Lh	ePZ	00 25 42
		epPZ	55
	Wr	ePN	26 09.0
	Qt	iPZ	12.2c
		USCGS H 00 16 36.3	

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Date	Station	Phase	h	m	s
		8.7 S 108.6 E			
		Off coast of Java			
		depth about 33 km			
		Mag : 5.1 (CGS)			
30	Wr	ePZ	00	49	23.3
	Lh	ePZ			40
		eSZ		52	11
	Qt	ePZ		50	28.0
	Ch	ePZ		51	44
		USCGS H 04 46 25.2			
		44.8 N 80.1 E			
		China-Kazakh S.S.R.			
		border			
		depth about 33 km			
		Mag : 4.9 (CGS)			
30	Qt	ePKPZ	14	10	45.0
		USCGS H 13 51 51.6			
		23.4 S 175.4 W			
		Tonga Islands			
		depth about 33 km			
		Mag : 4.9 (CGS)			
31	Wr	ePZ	08	35	59.7
		iSZ		37	30.3
	Lh	ePZ		36	41
	Qt	ePZ		37	01.5
		eSE		39	02.0
		H 08 2634			
		40.3 N 71.0 E			
		Tadzhik-Kirghiz border			
		depth about 33 km			
31	Lh	ePZ	17	03	32 ±
	Wr	ePZ			53.7
	Qt	ePZ		04	11.3
		USCGS H 16 53 44.7			
		2.0 N 127.5 E			
		Halmahera Region			
		depth about 70 km			

Date	Station	Phase

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Date	Station	Phase	h	m	s
		QUETTA			
1		ePZ	20	11	40.3
		eSN			43.5
2		ePZ	06	34	39.5
		eSE			44.2
2		ePZ	06	39	45.7
2		ePZ	09	18	36.9
		eXZ	14	26	00.0
2		eXZ	14	41	11.0
		eSN			35.7
2		ePZ	18	06	25.5
2		ePZ	18	55	30.0
		eSN			57.5
2		ePZ	23	09	25.5
		eSE			45.5
3		ePZ	16	51	27.5
		eSN			46.0
4		ePZ	07	44	28.5
		eSE			39.0
5		iPZ	23	14	07.5
		eSN			09.5
6		e(P)Z	06	38	47.5
		eSN		39	01.0
6		ePZ	09	28	57.7
		eSE		29	23.5
6		ePZ	17	21	03.0
		eSE			37.5
6		e(P)Z	21	39	02.0
		e(P)Z	21	39	34.0 -
		eSN		41	03.0
7		ePgZ	01	48	38.2
		eSgE			52.0
7		e(P)Z	07	15	26.7
7		ePZ	15	20	44.5
7		ePZ	17	58	05.0
		eSE			51.5
8		ePgZ	06	35	21.1
		eSgNE			31.5
8		ePgZ	12	41	33.9
		eSgNE			47.1
9		e(P)Z	20	07	50.0
		eSZ		08	11.0
9		eXZ	21	59	12.5
10		iPZ	12	22	14.0d
		eSE			27.0
10		e(P)Z	12	42	25.5
		eSE			46.2
10		e(P)Z	20	11	45.0
		eSE			48.0
11		ePZ	14	21	03.5
		eSE			27.7
11		ePZ	15	16	19.6
		eSE			34.0
11		ePZ	16	50	48.5
		eSE		51	31.2
11		ePZ	22	39	22.5
		eSE			25.5
11		ePZ	23	24	27.6
		eSE			34.0
12		e(P)Z	09	11	25.0
		eSE			38.3
12		ePZ	21	59	27.0
		eSE			39.0
13		ePgZ	21	18	44.0
		eSgN			46.6
14		ePgZ	05	24	03.5
		eSgNE			09.5
14		ePZ	07	23	24.0
14		ePZ	08	32	24.0
		eSNE			57.5
14		ePZ	21	26	12.0
16		e(P)Z	10	30	05.0
		eSE			17.0
16		e(P)Z	13	44	00.0
		eSE			05.0
16		iPZ	16	03	30.7
		eSE			45.0
17		ePZ	01	06	33.0
		eSE			47.5
17		ePZ	06	49	52.6

International Seismological Centre

Date	Phase	h m s
	eSE	50 07.0
17	e(P)Z	15 43 02.0
	eSN	42.5
17	ePZ	19 47 50.6
	eSE	48 07.7
18	ePgZ	02 18 39.0
	eSgNE	47.0
18	ePZ	07 41 20.0
18	ePZ	08 10 13.5
	eSE	31.6
18	ePZ	08 42 47.0
	eSE	43 03.6
18	iPZ	17 01 47.5c
	eSN	02 04.7
19	e(P)Z	09 47 04.0
	eSE	07.0
19	ePZ	15 30 14.4
	eSE	32.5
19	ePZ	16 03 34.0
	eSE	04 03.0
19	ePZ	16 59 31.0
	eSE	56.0
19	ePZ	17 08 05.5
	eSE	23.0
19	e(P)Z	17 59 39.0
	e(S)E	18 00 06.0
20	iPZ	02 26 47.5c
	eSE	27 11.5
20	ePZ	08 08 45.6
	eSE	09 08.5
20	ePZ	16 18 25.0
	eSE	50.5
21	e(P)Z	03 44 31.0
	eSE	38.5
21	ePZ	08 17 11.5
	eSE	18 36.5
21	ePZ	12 43 30.4
	eSNE	43.3
21	ePZ	23 19 15.5
	eSNE	40.5
21	ePZ	23 21 36.0
	eSE	55.0
21	ePZ	23 57 37.0
	eSNE	58 03.2
22	e(P)Z	01 37 35.0
	eSE	38 18.5
22	ePZ	11 44 09.8
	ePZ	13 31 43.1
	eSN	59.2
	e(P)Z	17 40 36.5
	e(S)E	41 12.0
22	ePZ	18 02 41.5
	eSE	48.5
	ePZ	23 30 13.5
23	eSE	00 13 17.0
	ePZ	07.7
	eSE	09.3
23	ePZ	00 24 22.5
	e(S)E	27.5
23	ePZ	00 28 25.5
	eSE	51.5
23	ePZ	02 10 26.5
	eSE	53.5
23	e(P)Z	18 47 49.0
	eSE	48 06.0
23	ePZ	21 53 07.5
	eSE	20.0
23	iPZ	23 16 48.2
	eSE	17 03.5
24	ePZ	03 44 34.0
24	ePZ	05 43 11.0
	eSE	31.5
24	e(P)Z	14 47 22.0
	eSE	48 00.0
24	e(P)Z	15 56 20.0
	eSE	57 13.5
24	ePZ	16 19 13.2
24	ePZ	16 36 30.0
	eSE	32.5
25	ePZ	00 55 07.1
	eSN	31.5
25	ePZ	05 28 52.0

International Seismological Centre

Date	Phase	h	m	s
25	ePZ	12	32	32·5
26	ePZ	20	07	10·0
	eSE		08	08·5
26	ePZ	23	20	08·0
	eSE		21	10·0
27	ePZ	01	46	53·5
	eSE		47	03·3
27	ePZ	08	48	59·0
	eSE		49	29·0
27	ePZ	09	11	02·5
	eSE			09·0
27	ePZ	18	30	20·5
28	ePZ	00	59	43·5
28	ePZ	03	55	20·3
	e(S)E		57	10·0
28	ePgZ	08	24	55·3
	eSgN		25	00·0
28	ePZ	18	12	32·5
	eSNE			49·2
29	ePgZ	02	41	13·8
	eSgE			51·5
29	eXZ	06	16	26·5
29	ePZ	18	32	07·2
	eSNE		33	52·5
29	ePZ	20	15	37·0
	eSN			40·5
30	ePZ	06	12	56·0
	eSE		13	11·2
30	ePZ	18	13	55·5
	eSN		14	16·7
30	ePZ	19	09	50·0
	eSN			55·8
30	ePZ	22	57	38·5
	eSN		58	38·0
30	ePZ	23	42	05·5
	eSN			13·0
31	iPZ	12	04	29·5c
	iSZN*			35·5
31	ePZ	20	02	01·0
	eSE			07·0
31	ePZ	21	32	35·0

Date	Phase	h	m	s
	eSE			47·6
31	ePZ	23	54	22·2

WARSAK

1	ePZ	10	56	03·6
2	iPZ	03	53	59·4
2	ePZ	19	40	30·1
	eSZ		41	06·3
3	ePZ	18	46	41·6
	eSZ		47	00·0
4	ePZ	17	42	42·1
5	ePZ	15	37	50·2
6	ePZ	00	45	47·0
	eSZ		46	32·7
7	ePZ	14	57	34·0
8	ePZ	00	24	16·8
8	ePZ	12	52	16·2
	eSZ		53	18·6
9	iPZ	12	52	30·6
10	iPgZ	04	54	17·5
	iSgZ			28·3
11	iPZ	05	57	10·6
	iSZ			36·8
11	iPZ	10	08	15·7
	iSZ			45·4
12	iPZ	18	31	02·7
	eSZ			37·3
12	iPZ	22	01	45·5
	iSZ		02	14·7
13	ePZ	05	11	41·5
14	ePZ	00	23	48·2
14	ePZ	19	15	24·0
	eSZ			57·7
15	iPZ	04	05	39·7
	iSZ		06	15·3
15	ePZ	08	09	39·3
15	ePZ	15	23	45·9
15	iPZ	18	20	01·8
16	ePN	02	43	52·8
	eSN		44	18·7

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Date	Phase	h	m	s	
17	ePZ	02	03	00·0	
	iSZ			17·6	
17	ePZ	19	57	45·9	
	eSZ		58	25·0	
18	ePZ	04	25	45·1	
18	ePZ	07	47	26·0	
18	ePZ	07	57	24·4	
19	ePZ	02	10	39·2	
19	ePZ	02	25	08·9	
19	ePZ	17	59	43·0	
24	iPZ	03	44	11·1	
24	ePZ	07	22	24·8	
	eSZ			56·0	
	LAHORE				
1	eXZ	07	51	08	
1	eXZ*	10	59	47	
2	iPgZ	04	02	38·5d	
	i(Sg)Z			39·2	
2	eXZ	09	51	36	
2	eXN	10	06	28	
3	eXZ	19	33	16	
5	eXZ*	16	08	05	
6	ePZ	16	04	14	
	iSNE			42	
6	eXZ	16	07	04	
6	eXNE	20	56	33	
7	eXZ*	05	05	06	
8	eXZ	06	47	06	
9	eXZ*	14	56	20	
10	eXZ*	04	31	48	
11	eXZ*	02	03	07	
11	eXZE	12	13	32	
12	eXZ*	07	29	09	
14	eXZ	17	52	26	
15	eXZ	18	20	14	
17	eXZ	22	05	43	
18	eXZ	19	25	01	
18	eXZ*	21	33	19	
19	eXZ	20	51	24	
22	eXZ*	17	02	13	
22	eXZ	23	52	36	
26	eXZ	05	46	28	
27	eXZ	13	41	11	
28	eXZ	01	23	46	
28	eXZ	03	21	46	
30	eXZ	19	07	20	
31	ePZ	71	03	32	
	KARACHI				
10	ePgZ	15	21	43·4	
	eSgE			51·6	
	CHITTAGONG				
1	eXZ	10	56	42	
1	eXZ	20	04	38	
2	eXZ	19	33	40	
3	ePZ	06	38	11	
3	eXZ	10	10	46	
3	eXZ	10	40	11	
3	eXZ	20	25	40	
4	e(P)Z	03	20	07	
	iSZNE			39	
4	eXZ	10	02	40	
4	eXZ	21	51	01	
5	eXZ	20	10	17	
8	eXZ	11	48	22	
9	eXZ	14	20	06	
11	eXZ	13	24	08	
12	eXZ	03	11	43	
12	eXZ	18	34	57	
13	eXZ	03	05	33	
13	eXZ	03	39	57	
14	eXZ	08	39	53	
16	ePZ	02	46	20	±
16	eXZ	07	20	21	
16	ePZ	20	56	58	
17	eXZ	22	06	56	
21	eXZ	12	14	06	
21	eXZ	18	12	20	
22	eXZ	09	47	54	
23	ePZ	03	54	44	±
23	ePZ	13	19	26	

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Date	Phase	h	m	s
25	eXN	12	31	49
28	eXZ	16	00	01
30	ePN	06	25	53
30	ePZNE	19	07	52
	eSNE		08	14

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Date	Station	Phase	h m s
1	Wr	iPZ	03 59 23.4
		iSZ	56.0
	Qt	ePZ	04 00 22.5d
		iSE	01 43.6
	Ch	ePZ	03 03

	Mu	Sec
PZ	0.02	0.8

△ = 7°.2
H 04 58 45
Hindukush
depth about 220 km
Mag : 4.4 (Qt)

1	Qt	ePZ	13 53 10.6
1	Qt	ePZ	20 07 00
2	Lh	ePZ	01 35 11
	Wr	iPZ	13.9
	Qt	iPZ	36 21.0 c
		eSN*	37 46.0
	Kr	ePZ	38 12 ±
		ePPZ	25.8
		eSE	41 13.0
	Ch	ePZ	38 54
		ePPE	39 18
		ePPPE	25
		eSNE	42 22

	Mu	Sec
PZ	0.04	0.7

△ = 7°.9
H 01 34 27
34.5 N 75.3 E
Northern India
depth about 33 km
USCGS H 01 34 31.6
33.9 N 74.7 E
Northern India
depth about 44 km
Mag : 5.1 (CGS) , 5.3 (Qt)

2	Qt	ePZ	08 15 49.0
		USCGS H	08 03 21.7
		52.5 N	169.2 W
		Fox Islands, Aleutian Islands	
		depth about 33 km	
		Mag : 4.4 (CGS)	
2	Lh	ePZ	11 54 03 ±
	Wr	ePZ	05.2
	Qt	iPZ	41.2c
		USCGS H	11 44 00.2
		45.4 N	150.9 E
		Kurile Islands	
		depth about 33 km	
		Mag : 4.5 (CGS)	
2	Ch	ePZ	22 26 57
	Wr	ePZ	29 48.2
	Qt	ePZ	30 15.4
		eSN	33 46.1
		H 22 25 52.0	
		25.8 N 88.8 E	
		Northern East Pakistan-India border	
		USCGS H 22 25 52	
		26.2 N 90.0 E	
		Assam-India	
		depth about 220 km	
2	Ch	ePZ	23 54 16
	Lh	ePZ	55 02c
		epPZ	11
		esPZ	20
	Wr	iPZ	04.3
	Qt	iPZ	40.2c
		eSN*	00 04 20.6

	Mu	Sec
PZ	0.1	0.5
MH	2.7	20.0

△ = 65°.5
USCGS H 23 45 00.1
45.4 N 150.8 E
Kurile Islands
depth about 33 km
Mag : 4.9 (CGS), 5.6 (Qt)

International Seismological Centre

Date	Station	Phase	h m s
3	Qt	ePZ	05 08 38.5c
3	Lh	ePZ	05 39 41 ±
	Wr	iPZ	43.9
	Qt	ePZ	40 20.2c
		USCGS H 05 29 39.5	
		45.4 N 150.9 E	
		Kurile Island	
		depth about 33 km	
		Mag : 4.5 (CGS)	
3	Qt	ePZ	06 24 29.7
		USCGS H 06 12 08.9	
		51.9 N 173.5 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 50 km	
		Mag : 4.7 (CGS)	
3	Qt	ePZ	15 19 37.5
3	Wr	ePZ	17 09 33.5
		iSZ	10 21.2
	Qt	ePZ	40.7
		eSN	12 21.5
		H 17 08 32	
4	Qt	ePZ	05 15 46.7
		epPZ	16 00.0
		esPZ	13.3
		eSE	23 03.0
	Wr	ePZ	16 01.9
		USCGS H 05 06 47.0	
		36.1 N 5.3 E	
		Near coast of Algeria	
		depth about 38 km	
		Mag : 5.2 (CGS)	
4	Wr	ePZ	13 43 32.7
	Lh	ePZ	51
		ePPZ	46 42
		eSN*	53 31
		ePPSN*	54 17
		eSSE*	58 12
	Qt	ePZ	43 51.3
		eSN*	53 28.0

Date	Station	Phase	h m s
		Mu Sec	
		PZ 0.1 1.0	
		△ = 75°.7	
		USCGS H 13 32 12.3	
		71.4 N 73.3 W	
		Near east coast of	
		Baffin Islands	
		depth about 33 km	
		Mag : 6¼-6½(Pas), 6 (Berk),	
		5.9 (CGS), 5.7 (Qt)	
4	Wr	iPZ	18 41 27.1
	Lh	ePZ	40 55c
		eSZ	44 27
	Qt	ePZ	41 53.6
		USCGS H 18 36 28.1	
		24.1 N 96.0 E	
		Northern Burma	
		depth about 148 km	
		Mag : 5.0 (CGS)	
5	Wr	ePZ	09 49 36.6
	Qt	iPZ	39.0d
		ipPZ	55.2
5	Wr	iPZ	10 28 06.7
		iSZ	39.9
	Qt	ePZ	29 03.5
		eSN	30 19.3
		H 10 27 23	
		Hindukush	
5	Qt	ePZ	17 20 06.9
		USCGS H 17 11 08	
		36.0 N 5.7 E	
		Near coast of Algeria	
		depth about 33 km	
		Mag : 4.0 (CGS)	
5	Wr	ePZ	21 30 31.7
		eSZ	31 06.6
	Qt	ePZ	30.0
		eSE	32 53.2
		H 21 29 46	
		Hindukush	

International Seismological Centre

Date	Station	Phase	h m s
6	Qt	ePZ	01 57 54.0
		USCGS H 01 46 13.3	
		71.5 N 73.0 W	
		Near east coast of	
		Baffin Islands	
		depth about 33 km	
		Mag : 4.4 (CGS)	
6	Ch	ePZ	06 11 04
	Lh	ePZ	12 17
		esSZ*	19 18
	Wr	ePZ	12 27.6
	Qt	ePZ	13 05.0
		ipPZ	16.5
		eSN*	20 36.0
		Mu Sec	
		MH 14.3 20.0	
		△ = 54°.4	
		USCGS H 06 03 52.1	
		36.4 N 130.6 E	
		Sea of Japan	
		depth about 33 km	
		Mag: 5.4 (CGS),5.8 (Qt)	
6	Lh	ePZ	08 19 53
	Wr	ePZ	20 14.6
	Qt	ePZ	33.8
		USCGS H 08 10 26.5	
		6.1 N 126.2 E	
		Near southeast coast of	
		Mindanao, Philippine	
		Islands	
		depth about 47 km	
		Mag: 4.6 (CGS)	
6	Qt	iPKPZ	10 34 35.6c
		USCGS H 10 16 38.9	
		24.0 S 179.9 E	
		Kermadec Islands region	
		depth about 500 km	
		Mag: 5.2 (CGS)	
6	Wr	ePZ	11 28 32.3
		iSZ	29 00.1
	Qt	ePZ	36.5
		eSN	30 53.5
		H 11 27 56	
		Hindukush	
6	Wr	iPZ	13 31 22.9
		iSZ	58.3
	Lh	iPZ	32 04.0d
		iSNE	33 10
	Qt	iPZ	32 16.1d
		eSE	33 29.0
		H 13 30 37	
		36.4 N 70.4 E	
		Hindukush	
		depth about 200 km	
		Mag: 4.6 (Qt)	
6	Lh	ePZ	20 13 42 ±
	Wr	ePZ	14 00.4
	Qt	ePZ	24.1
		USCGS H 20 03 23.3	
		11.8 N 138.5 E	
		Mariana Islands region	
		depth about 33 km	
		Mag : 4.8 (CGS)	
6	Qt	ePZ	21 09 32.7
		USCGS H 20 56 59.9	
		53.9 N 165.6 W	
		For Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag: 5.0 (CGS)	
7	Ch	ePZ	01 24 04
		isPZ	19
	Lh	ePZ	25 20
		eSSE*	35 38
	Wr	ePZ	25 33.1
	Qt	ePZ	26 07.5d
		eSN*	33 37.0
		Mu Sec	
		MH 17.7 20.0	
		△ = 54°.0	

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Date	Station	Phase	h m s	
		USCGS H 01 16 55.1		
		36.4 N 130.6 E		
		Off east coast of		
		South Korea		
		depth about 33 km		
		Mag: 5.3(CGS),5.9(Qt)		
7	Qt	ePZ	04 20 26.1	
		USCGS H 04 09 29.8		
		5.9 S 129.8 E		
		Banda Sea		
		depth about 169 km		
		Mag : 5.2 (CGS)		
7	Lh	ePZ	07 23 42	
	Wr	iPZ	45	±
	Qt	ePZ	24 20.6	
		eSN*	33 02.5	
		Mu Sec		
		MH 3.1 20.0		
		USCGS H 07 13 39.9		
		45.4 N 150.8 E		
		Kurile Islands		
		depth about 33 km		
		Mag: 5.2(CGS),5.3(Qt)		
7	Qt	iPZ	08 53 40.5d	
		USCGS H 08 43 26		
		8.8 S 117.5 E		
		Sumbawa		
		depth about 81 km		
7	Qt	ePZ	09 03 45.7	
		eSN*	14 22.0	
	Wr	ePZ	04 07.6	
		USCGS H 08 50 57.5		
		11.7 S 13.6 W		
		Ascension Islands region		
		depth about 33 km		
		Mag : 5.3 (CGS)		
7	Wr	ePZ	12 54 14.2	
	Qt	ePZ	50.0	
		ipPZ	55 17.3	
		USCGS H 12 44 01.1		
		54.0 N 160.3 E		
		Kamchatka		
		depth about 110 km		
		Mag: 5.4 (CGS)		
7	Qt	iPZ	13 57 43.2d	
		USCGS H 13 44 51.9		
		7.1 S 148.1 E		
		Near east coast of		
		New Guinea		
		depth about 64 km		
		Mag: 4.8 (CGS)		
7	Lh	ePZ	19 36 56.0c	
	Qt	ePZ	37 33.0c	
		eSN*	43 36.0	
		USCGS H 19 26 29.3		
		3.0 S 130.4 E		
		Ceram Sea		
		depth about 33 km		
		Mag : 4.6 (CGS)		
7	Qt	ePZ	22 11 28.5c	
		USCGS H 22 00 58.9		
		27.8 N 141.5 E		
		Bonin Islands region		
		depth about 50 km		
		Mag: 4.9 (CGS)		
7	Qt	ePZ	23 51 16.7	
8	Qt	ePKPZ	01 06 24.5	
		USCGS H 00 47 27.7		
		28.1 S 176.8 W		
		Kermadec Islands region		
		depth about 57 km		
		Mag : 5.3 (CGS)		
8	Qt	ePZ	06 32 27.0	
8	Qt	ePZ	09 26 22.8	
8	Lh	ePKPZ	20 08 10	±
	Qt	ePKPZ	20.8	
		epPKPZ	10 03.0	
		USCGS H 19 50 29.8		
		23.6 S 179.8 E		

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Date	Station	Phase	h m s
		Fiji Islands region	
		depth about 550 km	
		Mag: 5.7 (CGS)	
8	Wr	iPZ	23 29 26.4
		iSZ	47.6
	Qt	ePZ	30 33 ±
		eSN	31 48.5
		H 23 28 52	
		Hindukush	
8	Wr	ePZ	23 47 45.3
		eSZ	48 18.0
	Qt	ePZ	44.5
		eSE	50 12.5
		H 23 46 58	
		Hindukush	
9	Ch	ePZ	02 56 31
	Lh	ePZ	58 06
		eSE*	03 08 20
		ePSE	09 06
	Wr	ePZ	02 58 20.7
	Qt	iPZ	37.8c
		eSKSE*	03 08 46.3
		eSE	09 08.8
		eScSE	18.3
		Mu Sec	
		PZ 0.1 0.8	
		△ = 87°.0	
		USCGS H 02 45 45.5	
		4.4 S 152.7 E	
		New Britain	
		depth about 34 km	
		Mag: 5.6 (CGS),6.0 (Qt)	
9	Wr	ePZ	04 15 17.9
		iSZ	45.0
	Qt	ePZ	16 07.8
		eSE	17 11.5
		H 04 14 45	
		Hindukush	
9	Qt	iPZ	12 32 26.3d
		USCGS H 12 21 19.5	
		12.3 N 141.3 E	
		Mariana Islands region	
		depth about 76 km	
		Mag: 4.6 (CGS)	
9	Lh	iPZ	21 42 17 d
		iSE	31
	Wr	ePZ	26.6
		iSZ	54.6
	Qt	ePZ	43 01.0
		eSE	58.5
		Mu Sec	
		PZ 0.02 0.5	
		△ = 4°.8	
		H 21 41 49	
		31.9 N 72.3 E	
		About 20 miles Southwest	
		of Sargodha, West Pakistan	
		Felt Sargodha	
		USCGS H 21 41 43.6	
		31.3 N 72.1 E	
		Pakistan	
		depth about 33 km	
		Mag: 4.7 (CGS),4.0 (Qt)	
10	Wr	ePKPZ	06 42 59.0
	Qt	ePKPZ	43 06.4d
		USCGS H 06 25 14.5	
		23.0 S 179.8 E	
		Fiji Islands region	
		depth about 520 km	
		Mag: 4.8 (CGS)	
10	Qt	ePZ	14 23 12.5
		USCGS H 14 13 12	
		0.1 N 123.2 E	
		Northern Celebes	
		depth about 160 km	
10	Lh	ePZ	17 13 31
	Qt	ePZ	51.3
		ePPZ	17 17.5
		USCGS H 17 01 07.3	
		53.8 N 159.9 W	

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Date	Station	Phase	h m s
		Alaska Peninsula region	
		depth about 33 km	
		Mag: 5.0 (CGS)	
10	Qt	ePKPZ	19 33 06.5
	Wr	ePKPZ	41.0
		USCGS H 19 14 26.8	
		19.0 S 175.8 E	
		Tonga Islands region	
		depth about 33 km	
		Mag: 5.3 (CGS)	
11	Lh	ePZ	00 06 57 c
	Wr	ePZ	07 17.3
	Qt	iPZ	32.6
		eSE*	16 36.5
		Mu Sec	
		MH 0.7 20	
		$\triangle = 69°.5$	
		USCGS H 23 56 26.2	
		3.4 S 131.4 E	
		Ceram region	
		depth about 64 km	
		Mag: 4.8 (CGS), 4.9 (Qt)	
11	Qt	ePZ	01 05 39.2
		USCGS H 00 53 12.7	
		4.1 S 151.8 E	
		New Britain	
		depth about 205 km	
		Mag. 4.5 (CGS)	
11	Wr	ePZ	04 50 43.4
		iSZ	51 42.6
	Qt	ePZ	45.0
		eSE	53 25.5
		H 04 49 31	
11	Lh	ePZ	09 10 12 c
	Wr	ePZ	32.9
	Qt	iPZ	47.6c
		USCGS H 08 59 37.6	
		3.5 S 131.2 E	
		Ceram	
		depth about 33 km	
		Mag : 5.7 (CGS)	
11	Wr	iPZ	20 28 55.0
		iSZ	29 08.7
	Qt	ePZ	51.3
		eSE	30 49.5
		H 20 28 35	
		Hindukush	
11	Qt	ePKPZ	22 39 27.4
		USCGS H 22 20 26.6	
		33.1 S 178.2 W	
		South of Kermadec Islands	
		depth about 21 km	
		Mag: 4.9 (CGS)	
12	Wr	ePZ	05 29 29.0
		eSZ	57.9
	Qt	ePZ	30 30.6
		eSE	31 46.0
		H 05 28 51	
		Hindukush	
12	Qt	ePZ	08 24 58 ±
		USCGS H 08 18 57.9	
		34.9 N 32.2 E	
		Cyprus	
		depth about 55 km	
		Mag: 5.0 (CGS)	
13	Wr	ePZ	06 10 58.8
		eSZ	11 30.1
	Qt	iPZ	58.4 c
		eSE	13 16.1
		Mu Sec	
		PZ 0.01 0.5	
		$\triangle = 6°.8$	
		Hindukush	
		Mag: 4.3 (Qt)	
13	Wr	ePZ	09 13 56.4
		iSZ	14 30.0
	Qt	ePZ	15 01.0
		eSN	16 25.3
		H 09 13 10	
		Hindukush	
13	Qt	ePZ	12 15 54.1c

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Date	Station	Phase	h m s
13	Wr	ePZ	17 17 38.3
	Qt	ePZ	18 15.2
13	Qt	ePZ	18 28 55.4
		USCGS H 18 15 53.9	
		49.6 S 117.2 E	
		South of Australia	
		depth about 33 km	
13	Qt	ePZ	19 59 34.5
13	Qt	ePZ	21 28 53.4
13	Qt	ePZ	23 14 49.5
		iPcPZ	59.5
		USCGS H 23 02 07.2	
		53.0 N 175.0 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 220 km	
		Mag : 4.9 (CGS)	
14	Qt	ePZ	00 26 54.5
		epPZ	27 05.5
		USCGS H 00 15 45.2	
		3.5 S 131.2 E	
		Ceram region	
		depth about 33 km	
		Mag : 4.4 (CGS)	
14	Qt	ePZ	00 29 52.2
		USCGS H 00 18 33.4	
		3.6 S 131.2 E	
		Ceram region	
		depth about 33 km	
		Mag : 5.8 (CGS)	
14	Wr	ePZ	02 21 51.8
	Qt	ePZ	22 22.0
		USCGS H 02 13 41.2	
		22.0 N 121.3 E	
		Southern Formosa	
		depth about 90 km	
		Mag : 5.0 (CGS)	
14	Wr	ePKPZ	04 11 12.0
	Qt	ePKPZ	19.0
		USCGS H 03 52 16.9	
		31.4 S 179.0 W	
		Kermadec Islands	
		depth about 33 km	
		Mag : 4.9 (CGS)	
14	Qt	ePZ	06 55 13.1
		epPZ	32.2
		USCGS H 06 45 08.3	
		42.2 N 142.3 E	
		Near south coast of	
		Hokkaido, Japan	
		depth about 50 km	
		Mag : 4.3 (CGS)	
14	Lh	ePZ	07 26 57
	Wr	ePZ	27 10.0
		eSZ	35 11.8
	Qt	ePZ	27 36.0
		eSN	36 02.0
		USCGS H 07 17 18.5	
		19.0 N 145.0 E	
		Mariana Islands region	
		depth about 610 km	
		Mag : 5.0 (CGS)	
14	Wr	ePZ	09 37 00.0
	Qt	ePZ	31.0
14	Qt	ePZ	10 16 20.8
		USCGS H 10 06 18.4	
		36.1 N 137.3 E	
		Honshu, Japan	
		depth about 66 km	
		Mag : 4.3 (CGS)	
15	Ch	iPZ	00 58 58 d
		ipPZ	59 13
		ePPZ	01 02 01
		eSNE	09 00
	Lh	ePZ	00 20 d
		ePPZ	04 16
		eSKSE*	11 02
		eSN*	40
		ePSZ*	13 12
		eSSN*E*	18 04

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Date	Station	Phase	h m s
	Wr	ePZ	00 32.0
	Kr	ePZ	38
		ePPZ	04 33
	Qt	ePZ	00 47.6d
		ePPZ	04 57.3
		USCGS H 00 46 54.1	
		10.3 S 165.6 E	
		Santa Cruz Islands	
		depth about 43 km	
		Mag : 7¼-7½(Pas),6¾(Pal), 6.3 (CGS)	
15	Qt	ePZ	04 41 47.4
	Wr	ePZ	52.0
15	Qt	iPZ	08 38 31.2d
		USCGS H 08 26 08.7	
		5.9 S 146.7 E	
		Northern New Guinea	
		depth about 89 km	
		Mag : 4.7 (CGS)	
15	Wr	iPZ	09 18 52.9d
	Qt	ePZ	55.4
		USCGS H 09 09 38	
		7.2 S 106.5 E	
		Java	
		depth about 33 km	
		Mag : 5.0 (CGS)	
16	Qt	ePZ	00 15 31.4
16	Wr	ePZ	01 38 04.1
	Qt	eSN	40 36.2
		H 01 37 25	
		Hindukush	
16	Qt	ePZ	09 55 14.3d
		USCGS H 09 43 55.3	
		55.0 N 166.0 E	
		Komandorskie Islands	
		region	
		depth about 33 km	
		Mag : 4.7 (CGS)	
16	Qt	ePZ	15 24 07.5
		USCGS H 15 11 52	
		52.8 N 171.0 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 140 km	
		Mag : 4.2 (CGS)	
16	Qt	ePZ	16 24 13 ±
16	Qt	ePZ	19 58 44.1d
16	Qt	ePZ	20 23 44 ±
		USCGS H 20 05 21.9	
		13.4 S 156.5 E	
		Santa Cruz Islands	
		depth about 28 km	
		Mag : 5.0 (CGS)	
17	Qt	ePKPZ	06 13 55.6
		eXZ	14 03.2
		ePKSE	17 42.0
	Wr	ePKPZ	14 00.6
	Lh	ePKPZ	11
		USCGS H 05 54 33.7	
		10.6 S 87.2 W	
		Central Peru	
		depth about 61 km	
		Mag : 6¼(Pas),5.5(CGS)	
17	Ch	iPZ	19 32 15d
		ipPZ	20
		iPcPZ	29
		ePPZ	35 15
		eSN	42 14
	Lh	ePZ	33 36 d
		epPZ	43
		ePPZ	37 22
		eSKSN*	44 16
		ePSE*	46 10
	Wr	ePZ	33 47.6
	Qt	ePZ	34 04.8d
		ePPZ	38 16.8
	Kr	ePZ	34 06 ±
		ePPZ	38 04.2
		USCGS H 19 20 08.2	
		10.1 S 165.3 E	

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Date	Station	Phase	h m s	
		Santa Cruz Islands		
		depth about 17 km		
		Mag : 7¼ (Pas), 7½ (Berk),		
		7 (Pal), 6.1 (CGS)		
17	Wr	ePZ	20 14 24.4	
	Qt	ePZ	43	±
		USCGS H 20 00 56.6		
		9.9 S 164.7 E		
		Santa Cruz Islands		
		depth about 33 km		
		Mag : 5.3 (CGS)		
17	Lh	ePZ	21 22 07	
	Wr	ePZ	33.7	
	Qt	ePZ	36.2	
		USCGS H 21 13 28		
		6.7 S 105.3 E		
		Java		
		depth about 33 km		
		Mag : 5.3 (CGS)		
18	Qt	ePZ	10 31 51.5	
18	Qt	iPZ	15 44 50.0c	
		eSZ	47 09.0	
	Wr	ePZ	44 56.1	
		USCGS H 15 42 02.7		
		38.5 N 57.2 E		
		Turkmen, S.S.R.		
		depth about 33 km		
		Mag : 5.1 (CGS)		
18	Qt	iPZ	17 04 39.8d	
		epPZ	46.0	
		ePPPN*	05 58.0	
		esSN	10 12.0	
		Mu Sec		
		MH 17.0 20		
		△ = 32°.3		
	Wr	ePZ	04 54.6	
	Kr	ePZ	05 09.5	
		ePPZ	06 35.6	
	Lh	ePZ	05 22	
		ePPPZ*	07 00	
		eSN*	11 08	
		USCGS H 16 58 12.5		
		40.9 N 29.2 E		
		Turkey		
		depth about 33 km		
		Mag : 6¼(Pas),5¾-6(Pal),		
		5.2(CGS),6.0 (Qt)		
18	Lh	ePZ	17 29 10	±
	Wr	ePZ	28.6	
	Qt	ePZ	45.5c	
		USCGS H 17 18 00.8		
		3.3 S 139.9 E		
		Western New Guinea		
		depth about 90 km		
		Mag : 5.8 (CGS)		
18	Qt	ePZ	20 48 57.5	
		esPZ	49 14.0	
		USCGS H 20 37 52.1		
		3.8 S 134.7 E		
		Western New Guinea		
		depth about 32 km		
		Mag : 5.2 (CGS)		
18	Qt	ePZ	22 52 35.5	
19	Qt	ePZ	05 29 24.5	
19	Qt	iPZ	16 31 31.0d	
		eSN*	44.0	
	Wr	iPZ	32 30.2d	
	Kr	ePZ	44.8	
		esPZ	33 14.3	
		eSE	59.5	
	Lh	ePZ	32 50	
		eSNE	34 02	
		H 16 31 13		
		31.1 N 66.3 E		
		Pakistan-Afghanistan		
		border		
		depth about 50 km		
		USCGS H 16 31 15.0		
		31.0 N 66.8 E		

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Date	Station	Phase	h m s
		Afghanistan-Pakistan border	
		depth about 37 km	
		Mag : 4.2 (CGS)	
19	Wr	ePZ	17 00 46.6
	Qt	ePZ	48.2
		USCGS H 16 49 29.9	
		47.1 N 27.4 W	
		North Atlantic Ocean	
		depth about 33 km	
19	Wr	ePZ	21 05 42.0
		eSZ	06 14.1
	Qt	ePZ	36.7c
		eSN	07 53.5
		H 21 05 00	
		Hindukush	
20	Qt	ePZ	00 08 06.0d
		UCGS H 23 57 58	
		0.2 N 124.0 E	
		Northern Celebes	
		depth about 122 km	
		Mag : 5.6 (CGS)	
20	Qt	ePZ	03 12 55.7
		USCGS H 03 03 32.9	
		76.5 N 7.9 E	
		Svalbard region	
		depth about 33 km	
		Mag : 4.7 (CGS)	
20	Qt	ePZ	04 36 56.5
20	Qt	ePZ	10 35 33.9d
		eSN	37 23.0
20	Qt	ePKPZ	15 00 33.7c
		ePPZ	03 18.0
	Wr	ePKPZ	00 38.2
	Lh	ePKPZ	44 c
		epPKPZ	01 19
		USCGS H 14 41 22.6	
		21.5 S 68.0 W	
		Chile-Bolivia border	
		depth about 155 km	
		Mag : 4.8 (CGS)	
20	Lh	ePZ	15 03 13 ±
		eSNE	04 18
	Wr	ePZ	03 47.6
	Qt	ePZ	04 36.2
		eSE	06 42.5
		H 15 01 52	
		Tibet	
20	Ch	ePZ	19 09 53
	Lh	iPZ	12 01 d
	Wr	ePZ	23.9
	Qt	iPZ	39.0
		eSE	21 06.3
		USCGS H 19 02 15.5	
		1.6 N 127.1 E	
		Molucca Sea	
		depth about 97 km	
		Mag : 5.1 (CGS)	
20	Qt	ePKPZ	22 30 36.5
		epPKPZ	31 24.5
		ePPZ	33 29.4
		ePKSE	34 01.7
	Wr	ePKPZ	30 48.2
	Lh	ePKPZ	49
		epPKPZ	31 33
		ePKSZ	34 18
		USCGS H 22 11 32.2	
		17.8 S 68.8 W	
		Peru-Bolivia border	
		depth about 171 km	
		Mag: 5.1 (CGS)	
21	Wr	ePZ	00 46 27.0
	Qt	ePZ	47 15.5c
		USCGS H 00 41 56.6	
		37.1 N 95.4 E	
		Tsinghai Province, China	
		depth about 33 km	
		Mag: 4.6 (CGS)	
21	Lh	ePZ	04 04 46
	Wr	ePZ	05 06.2
	Qt	ePZ	19.6
		iPZ	23.6d

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Date	Station	Phase	h m s
		USCGS H 03 55 26.6	
		0.0 119.7 E	
		Northern Celebes	
		depth about 47 km	
		Mag: 4.4 (CGS)	
21	Wr	iPZ	04 39 23.1c
		iSN	53.8
	Lh	ePZ	40 03
		eSNE	41 06
	Qt	ePZ	40 26.7d
		eSNE	41 47.2
		H 04 38 42	
		36.3 N 71.4 E	
		Hindukush	
		depth about 180 km	
21	Wr	ePZ	17 00 41.5
		iSZ	01 14.2
	Qt	iPZ	41.0c
		eSE	03 00.0
		H 16 59 58	
		Hindukush region	
21	Lh	ePZ	18 31 46
		esPZ	56
		eXZ	33 19
	Wr	ePZ	32 04.4
	Qt	ePZ	37.3
		epPZ	44.0
		eXZ	34 20.0
		USCGS H 18 23 32 2	
		24.2 N 125.1 E	
		Ryukyu Islands	
		depth about 33 km	
		Mag : 4.3 (CGS)	
22	Wr	ePZ	00 29 35.0
		eSZ	30 10.7
	Qt	ePZ	44.0
		eSE	32 10.0
		H 00 28 54	
		Hindukush region	

Dates	Station	Phase	
22	Ch	ePZ	03 09 32
	Qt	ePKPZ	15 05.4d
		USCGS H 02 56 24.3	
		19.3 S 175.9 E	
		Fiji Islands region	
		Islands region	
		depth about 28 km	
		Mag : 5.8 (CGS)	
22	Wr	iPZ	03 29 29.1c
		iSZ	58.4
	Lh	ePZ	30 10
		iSNE	31 10
	Qt	ePZ	30 36.0
		eSN	31 56.2
		H 03 28 52	
		36.2 N 71.6 E	
		Hindukush	
		depth about 130 km	
		USCGS H 03 28 54.0	
		36.1 N 71.5 E	
		Hindukush	
		depth about 147 km	
22	Qt	ePZ	04 17 44 5
22	Qt	ePZ	10 43 20.8d
		iSE	45 19 0
	Wr	ePZ	44 25 1
		Mu See	
		PZ 0.03 1.0	
		$\Delta = 10^{\circ}.5$	
		USCGS H 10 40 55.8	
		29.3 N 55.3 E	
		Southern Iran	
		depth about 33 km	
		Mag : 4.7(CGS), 5.2(Qt)	
22	Qt	ePZ	16 08 22.4
22	Qt	ePZ	17 20 45 8
22	Qt	ePZ	17 31 54.0d
		eXZ	32 14 0
22	Qt	ePZ	17 53 23 5d

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Date	Station	Phase	h m s
22	Wr	ePKPZ	19 40 33.6
	Qt	ePKPZ	38.2d
		USCGS H 19 21 57.1	
		19.2 S 175.9 E	
		Tonga Islands region	
		depth about 24 km	
22	Qt	ePZ	22 39 32.5
		USCGS H 22 32 10.0	
		37.5 N 20.6 E	
		Ionian Sea	
		depth about 33 km	
		Mag: 4.6 (CGS)	
23	Qt	iPZ	05 47 33.2c
		USCGS H 05 37 46.5	
		7.3 S 122.1 E	
		Flores Sea	
		depth about 543 km	
		Mag: 5.0 (CGS)	
23	Qt	iPZ	06 50 39.0d
		eSE*	58 54.0
	Wr	iPZ	51 14.3c
	Ch	ePZ	52 05 d
		USCGS H 06 40 36.5	
		16.6 S 28.6 E	
		Northern Rhodesia	
		depth about 33 km	
		Mag: 5.5 (CGS)	
23	Qt	ePZ	08 20 38.5
		USCGS H 08 10 35.4	
		16.7 S 28.7 E	
		Northern Rhodesia	
		depth about 33 km	
23	Qt	iPZ	09 11 58.8d
		ePPZ	14 11.5
		eSE*	20 13·0
		eSSN*	24 11.0
		Mu Sec	
		PZ 0.1 1.3	
		△ = 60°.9	
		Lh ePZ	12 35 d
		Wr iPZ	34.4
		Ch ePZ	13 26 d
		epPZ	36
		ePPZ	16 12
		eSE	22 51
		USCGS H 09 01 56.8	
		16.6 S 28.8 E	
		Northern Rhodesia	
		depth about 33 km	
		Mag: 5.8(CGS) 5.8(Qt)	
23	Qt	iPZ	10 11 39.1c
		USCGS H 09 58 46.0	
		5.6 S 153.8 E	
		New Britain	
		depth about 80 km	
		Mag: 5.1 (CGS)	
23	Qt	ePZ	15 12 26.2d
		iPZ	30.0c
	Wr	ePZ	13 02.6
		USCGS H 15 02 23.3	
		16.7 S 28.4 E	
		Northern Rhodesia	
		depth about 33 km	
23	Qt	ePZ	16 17 39.0
23	Ch	iPZ	17 14 00.8c
		epPZ	12
		ePcPZ	19
	Wr	ePZ	14.3
	Lh	ePZ	18 c
		epPZ	25
	Qt	iPZ	45.6c
		eSN*	24 49.0
		Mu Sec	
		PZ 0.1 1.3	
		△ = 80°.6	
		USCGS H 17 02 36.6	
		51.3 N 179.2 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag : 5.2 (CGS)	

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Date	Station	Phase	h m s
23	Qt	ePZ	18 37 05.0
		eSN	39 40.5
		Mu Sec	
		PZ 0.02 0.8	
		△ = 14°.0	
	Wr	ePZ	37 56.8
	Lh	ePZ	38 21
		ePPZ	42
		eSN*E*	42 04
		H 18 33 46.9	
		30.1 N 50.3 E	
		Iran	
		depth about 33 km	
		USCGS H 18 33 47.4	
		29.6 N 50.9 E	
		Persian Gulf	
		depth about 39 km	
		Mag: 4.7(CGS) 4.9(Qt)	
23	Qt	ePZ	19 08 51.5
23	Qt	ePZ	19 23 02.2
		e(S)E	25 55.0
23	Qt	ePZ	21 07 39.7
23	Qt	iPZ	22 33 40.3d
	Lh	ePZ	34 15
	Wr	ePZ	16.8
		USCGS H 22 23 37.7	
		16.6 S 28.7 E	
		Northern Rhodesia	
		depth about 33 km	
		Mag: 5.5 (CGS)	
23	Qt	ePZ	22 46 16.5c
24	Qt	ePZ	00 58 02.5
24	Wr	iPZ	03 46 35.8d
		iSZ	47 04.0
	Qt	ePZ	40.5
		eSN	48 59.5
		H 03 46 00	
		Hindukush	
24	Wr	iPZ	06 38 17.7
		iSE	51.0

Date	Station	Phase	h m s
	Qt	ePZ	39 14.8
		eSE	40 36.0
		H 06 37 30	
		Hindukush	
24	Qt	ePZ	08 08 37.5
		USCGS H 07 55 41.4	
		15.8 S 13.3 W	
		Atlantic Ocean, south of	
		Ascension Islands	
		depth about 33 km	
		Mag: 5.2 (CGS)	
24	Qt	ePKPZ	08 49 21 ±
		ePPZ	52 29.5
	Wr	ePKPZ	49 32.7
	Lh	ePKPZ	36
		USCGS H 08 30 01.6	
		28.6 S 68.4 W	
		La Rioja Province	
		Argentina	
		depth about 94 km	
		Mag: 4.9 (CGS)	
24	Qt	iPZ	09 23 39.7c
	Wr	ePZ	24 15.9
		USCGS H 09 13 38	
		16.6 S 28.7 E	
		Northern Rhodesia	
		depth about 33 km	
24	Qt	iPKPZ	16 49 37.5d
		ePPZ	52 45.5
	Wr	iPKPZ	49 42.3
	Kr	ePKPZ	47.2
		epPKPZ	50 14.0
		ePPZ	53 11.0
	Lh	ePKPZ	49 50
	Ch	ePKPZ	50 14
		USCGS H 16 30 16.0	
		10.6 S 78.0 W	
		Near coast of Peru	
		depth about 80 km	
		Mag: 7 (Pas), 6½ (Berk),	
		6.0 (CGS)	

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Date	Station	Phase	h m s
25	Qt	ePZ	04 00 49 ±
25	Qt	ePZ	05 32 02.5
25	Qt	iPZ	07 13 57.0d
		eSE	22 06.0
		Mu Sec	
		PZ 0.2 1.5	
		△ = 60°.1	
	Lh	ePZ	14 32 d
	Wr	ePZ	33.4
	Ch	iPZ	15 24 d
		USCGS H 07 03 54.6	
		16.7 S 28.7 E	
		Northern Rhodesia	
		depth about 33 km	
		Mag : 5.8(CGS) 5.9, (Qt)	
25	Wr	ePZ	08 46 29.7
		iSZ	59.0
	Qt	iPZ	47 25.0d
		eSN	48 36.0
		Mu Sec	
		PZ 0.02 0.5	
		△ = 6°.3	
		H 08 45 53	
		Hindukush	
		Mag : 4.6(Qt)	
25	Wr	ePZ	17 05 59.8
		eSZ	06 33.4
	Qt	ePZ	07 10 ±
		eSE	08 32.0
		H 17 05 21	
		Hindukush	
26	Qt	ePZ	04 33 05.5
		USCGS H 04 20 21.5	
		56.5 N 153.4 W	
		Kodiak Islands region	
		depth about 33 km	
		Mag : 4.8 (CGS)	
26	Ch	ePZ	05 39 41 c
	Wr	ePZ	57.0
	Lh	ePZ	59
		eSE*	49 46
		esSE*	50 02
	Qt	iPZ	40 26.0d
		ePPZ	43 32.0
		iSN*	50 42.8
		Mu Sec	
		PZ 1.0 1.0	
		△ = 83°.3	
		USCGS H 05 28 07.3	
		50.4 N 176.9 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 33 km	
		Mag : 5.3(CGS) 5.7(Qt)	
26	Ch	ePZ	06 05 22 ±
	Wr	ePZ	07 13.4
	Qt	ePZ	29.5
		USCGS H 05 55 09.7	
		5.6 S 148.0 E	
		New Britiain region	
		depth about 156 km	
		Mag : 4.9 (CGS)	
26	Qt	ePZ	06 55 46.4
26	Wr	ePZ	20 47 40.4
	Qt	ePZ	57.3d
		USCGS H 20 35 54.3	
		3.3 S 141.9 E	
		Near east coast of	
		New Guinea	
		depth about 33 km	
		Mag : 5.3 (CGS)	
27	Ch	ePZ	11 11 08 d
	Lh	ePZ	13 24
		epPZ	35
	Wr	ePZ	44.7
	Qt	ePZ	14 08.1
		ePPE	16 16.0
		eSN*	22 08.0
		USCGS H 11 04 17.3	
		Off east coast of Leyte	

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Date	Station	Phase	h m s
		Philippine Islands	
		depth about 17 km	
		Mag: 5.3 (CGS)	
27	Qt	ePZ	11 29 01.0
27	Qt	ePZ	16 36 55.4
		USCGS H 16 26 49.8	
		37.0 N 141.3 E	
		Off east coast of Honshu	
		Japan	
		depth about 81 km	
		Mag: 4.1 (CGS)	
27	Qt	iPZ	17 10 11.5d
	Lh	ePZ	11 24
		eSZ	12 49
	Wr	ePZ	11 24.8
		H 17 09 34	
		28.0 N 66.4 E	
		West Pakistan	
		depth about 100 km	
		USCGS H 17 09 33	
		27.9 N 66.1 E	
		West Pakistan	
		depth about 88 km	
		Mag: 4.7 (CGS)	
27	Qt	ePZ	17 38 26.0
		USCGS H 17 28 10.9	
		2.9 N 126.6 E	
		Molucca Passage	
		depth about 99 km	
		Mag: 5.5 (CGS)	
27	Qt	ePZ	22 32 45.6c
	Wr	ePZ	33 03.7
		USCGS H 22 20 06.6	
		0.1 S 18.4 W	
		Atlantic Ocean	
		Northwest of Ascension	
		Islands	
		depth about 33 km	
		Mag: 5.0 (CGS)	
28	Qt	ePZ	03 43 43.5
		USCGS H 03 30 48.8	
		14.3 S 13.7 W	
		Atlantic Ocean	
		South of Ascension Islands	
		depth about 33 km	
		Mag: 5.0 (CGS)	
28	Ch	ePZ	06 01 05
	Lh	ePZ	04 51
		eSNE	08 19
	Wr	ePZ	05 25.4
		eSZ	09 35.8
	Qt	e(P)Z	06 07
		eSE	10 32.0
		H 06 00 30	
		23.2 N 94.0 E	
		Western Burma	
		depth about 100 km	
		USCGS H 06 00 25.4	
		22.9N 94.5 E	
		Western Burma	
		depth about 108 km	
		Mag: 5.6 (CGS)	
28	Qt	ePZ	07 16 17.0
		USCGS H 06 58 12.7	
		31.5 S 179.6 E	
		Kermadec Islands	
		depth about 457 km	
		Mag: 5.0 (CGS)	
28	Lh	ePZ	18 50 29
		esPZ	47
	Wr	ePZ	57.8
	Qt	ePZ	58.8
		USCGS H 18 42 25.2	
		3.5 S 102.0 E	
		Near coast of Sumatra	
		depth about 29 km	
		Mag: 5.6 (CGS)	
28	Wr	iPZ	20 03 40.6
		iSZ	04 00.8

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Date	Station	Phase	h m s
	Lh	ePZ	03 56
		eSNE	04 27
	Qt	ePZ	27.7
		eSN	05 24.0
		H 20 03 16	
		32.7 N 71.8 E	
		West Pakistan	
28	Wr	iPZ	22 09 09.2
		eSZ	39.4
	Qt	ePZ	10 06.6d
		eSN	11 26.3
		H 22 08 25	
		Hindukush	
28	Wr	ePZ	22 37 56.5
	Qt	ePZ	39 50.0
29	Wr	iPN	10 40 43.2
		iSN	41 16.4
	Lh	ePZ	25 d
		eSN*E*	42 28
	Qt	iPZ	41 37.4c
		eSN	42 55.0
		Mu Sec	
		PZ 0.03 0.6	
		$\Delta = 6°.9$	
		H 10 39 58	
		36.3 N 70.4 E	
		Hindukush region	
		depth about 180 km	
		USCGS H 10 33 58.4	
		36.4 N 70.4 E	
		Hindukush	
		depth about 214 km	
		Mag: 4.8 (CGS)	
29	Qt	ePZ 13 42 08 ±	
		USCGS H 13 35 45.3	
		35.5 N 29.2 E	
		Near north coast of	
		Turkey	
		depth about 33 km	
		Mag: 4.5 (CGS)	
29	Wr	iPN	15 32 07.0
		iSN	35.8
	Lh	iPZ	44 c
		iSN*E*	33 40
	Qts	ePZ	14.7
		eSN	34 34.5
		Mu Sec	
		PZ 0.03 0.5	
		$\Delta = 7°.2$	
		H 15 31 31	
		36.0 N 72.1 E	
		Hindukush	
		depth about 120 km	
		USCGS H 15 31 31.4	
		36.1 N 72.0 E	
		Hindukush	
		depth about 150 km	
		Mag: 4.9 (CGS)	
29	Qt	ePZ 18 27 15.0	
		USCGS H 18 16 21	
		0.1 S 130.4 E	
		Spice Islands region	
		depth about 33 km	
29	Qt	ePZ 19 35 42.7	
		esSN* 39 20.5	
	Lh	ePZ 36 36 ±	
		USCGS H 19 31 22.7	
		13.5 N 57.5 E	
		Arabian Sea	
		depth about 33 km	
29	Lh	ePZ 19 44 16	
		eSN*E* 51 44	
		esSN* 52 27	
		eSSE* 55 23	
	Wr	ePN 44 38.2	
		eSN 52 26.1	
	Qt	iPZ 44 56.6c	
		iSN 52 56.0	
		USCGS H 19 35 01.6	
		6.0 N 125.3 E	

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Date	Station	Phase	h	m	s	
		Mindanao, Philippine Islands				
		depth about 117 km				
		Mag: 5.3 (CGS)				
29	Qt	iPZ	20	41	36.5	c
		USCGS H 20 31 10.1				
		21.6 N 142.9 E				
		Volcano Islands				
		depth about 325 km				
		Mag: 4.6 (CGS)				
29	Qt	ePZ	21	51	23.0	d
29	Qt	ePZ	22	18	62	±
29	Qt	iPZ	22	24	18.5	c
		eSN		30	30.0	
	Wr	ePN		24	38.2	
	Lh	ePZ		25	02	c
		USCGS H 22 16 38.6				
		36.1 N 180.0 E				
		Ionian Sea				
		depth about 47 km				
		Mag: 5.3 (CGS)				
29	Wr	ePN	22	36	03.2	
		iSN			36.1	
	Qt	iPZ		37	05.0	c
		iSN		38	26.2	
		H 22 35 20				
		Hindukush				
29	Qt	ePKPZ	23	03	10·5	
		iPKSZ		06	37·0	
	Lh	ePKPZ			12	±
		USCGS H 22 44 02·9				
		14·4 N 91·9 W				
		Guatemala				
		depth about 61 km				
		Mag: 5·5¼(Pal), 5·1 (CGS)				
30	Qt	ePZ	01	23	38·5	
30	Lh	ePZ	09	04	29	±
	Wr	ePZ			47·6	
	Qt	ePZ		05	06·0	
		USCGS H 08 54 15·0				
		1·3 S 128·5 E				
		Ceram Sea				
		depth about 30 km				
		Mag: 4·9 (CGS)				
30	Qt	ePZ	12	48	54·2	
		USCGS H 12 36 25·4				
		52·6 N 169·5 W				
		Fox Islands, Aleutian Islands				
		depth about 33 km				
		Mag: 4·1 (CGS)				
30	Wr	ePZ	15	51	38·1	
	Qt	ePZ			55·5	
		USCGS H 15 40 46·3				
		2·2 S 134·1 E				
		West New Guinea				
		depth about 135 km				
		Mag: 4·7 (CGS)				
30	Wr	ePZ	23	10	55·7	
	Qt	ePZ		11	19·5	
		USCGS H 22 59 52·8				
		9·4 N 142·3 E				
		Mariana Islands region				
		depth about 33 km				
		Mag: 4·4 (CGS)				

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Date	Phase	h m s
	QUETTA	
1	ePZ	03 57 05·0
	eSN	09·2
1	ePZ	05 24 43·2
	eSN	25 17·5
1	ePZ	11 24 49·0
	eSE	59·2
1	ePZ	15 07 43·0
	eSE	08 47·5
2	ePZ	00 30 32·0
	e(S)E	31 28·0
2	eXZ	03 02 53·5
	eSZ	56·5
2	ePZ	16 52 10·5
	eSN	41·2
3	iPgZ	18 09 52·3
	eSgE	10 00·0
3	ePZ	18 47 19·0
3	ePZ	19 09 16·0
	eSE	41·0
3	iPZ	22 12 12·1c
	eSE	40·0
3	ePZ	22 52 06·0
	eSN	36·0
4	ePZ	15 29 51·5
	eSN	30 33·5
4	ePZ	21 52 35·1
5	ePZ	04 15 21·0
	eSN	44·2
5	ePgZ	10 27 51·5
	eSgN	56·7
5	iPZ	16 32 36·2d
	iXZ	34 42·5
6	iPZ	09 09 30·2d
	eSN	33·2
6	ePZ	10 36 02·5
6	e(P)Z	10 37 27·5
	eSN	35·6
6	ePZ	10 44 41·0
6	ePZ	12 18 33·0
	eXZ	48·6
6	ePZ	17 55 35·0
	eSE	55·5
	ePZ	20 14 24·1
	iPZ	23 32 26·0d
	eSN	33 45·2
7	ePZ	14 44 06·5
	eSE	17·3
7	ePZ	20 51 06·0
	eSE	14·0
8	ePZ	01 03 36·2
	eSN	48·0
8	iXZ	07 56 07·0
8	ePZ	10 29 29·5
	eSE	53·5
8	ePZ	20 18 28·5
8	ePgZ	21 41 45·1
	eSgNE	47·0
8	ePZ	22 13 45·5
	eSE	14 08·6
9	ePZ	13 53 06·8
	e(S)N	30·8
10	ePZ	01 37 56·4
	eSN	38 18·9
	ePZ	09 31 28·5
10	eSN	51·5
10	ePZ	13 50 31·5
10	ePZ	13 58 34·4
	eSE	44·0
10	ePZ	21 31 33·8
	eSE	58·5
11	ePZ	00 38 12·5
	eSE	32·0
11	ePZ	08 27 21·0
	eSN	32·2
11	ePZ	09 58 14·2
	eSE	27·5
11	eSN	11 03 22

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Date	Phase	h	m	s	
11	ePZ	12	23	10·0	
	e(S)E			59·8	
11	ePZ	13	32	20·0	
	eSN		33	33·0	
11	ePZ	14	13	50·2	
	eSN		14	12·0	
12	ePZ	09	14	38·5	
	eSEN			52·5	
13	iPZ	00	36	13·0	
	eSNE			14·8	
13	ePZ	00	41	28·2	
	eSE			30·1	
13	ePZ	08	09	53·4	
	e(S)E		10	31·0	
13	ePZ	13	22	01·3	
13	ePZ	14	35	00·1	
	e(S)		38	10·3	
13	ePZ	17	29	24·7	
14	ePZ	06	34	06·6	
	eSN			34·5	
14	ePZ	11	20	29·1	
14	ePZ	11	51	54·2	
14	ePZ	12	18	36·5	
	eSE			44·1	
14	ePZ	21	27	01·0	
15	ePZ	17	27	19	±
	eSN		28	37	
15	iPZ	18	50	56·0	
	ISE		51	07·8	
15	ePZ	22	53	42	
	eSE		54	09·2	
16	ePZ	08	08	35·5	
	e(S)N		09	08·0	
16	ePZ	13	40	21·6	
16	ePZ	23	12	18·7	
	eXE			27·1	
17	ePZ	01	36	09·8	
	eSE			20·0	
17	ePZ	09	22	38·0	
	eSE			51·0	
17	ePZ	11	55	55	
17	ePZ	12	21	05·9	
	eSN			36·8	
17	ePZ	14	44	10·9	
	eSE			55·0	
17	ePZ	17	38	50·4	
	eSE		39	18·5	
17	ePZ	21	07	53·4	
	eSE		08	08·8	
17	ePZ	21	25	27·0c	
17	ePZ	22	58	11·6	
	e(S)E			14·5	
18	ePZ	04	55	22·0	
	eSE			44·5	
18	ePZ	17	16	52·5	
18	iPZ	17	31	47·0	
	eSE		32	55·0	
18	ePZ	20	56	33·8	
	eSN			53·1	
18	ePZ	22	04	12·0	
19	e(P)Z	03	18	14.5	
19	ePZ	07	22	44.5	
g	eSE			50.7	
19	ePZ	08	22	50.7	
19	ePZ	12	00	55.0	
	eSE			58.5	
19	iPZ	16	58	56.8c	
	eSN		59	11.2	
19	iPZ	17	06	53.2d	
	eSE		07	07.2	
19	ePZ	18	26	26.9	
	e(S)N			45.0	
19	ePZ	18	55	12.3	
	e(S)N		57	11.0	
19	ePZ	20	44	38.3	
	eSN			53.1	
19	ePZ	20	52	59.7	
	eSN		53	03.5	

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Date	Phase	h m s
20	ePZ	06 50 33.3
20	ePZ	07 50 23 ±
	eSN	41.7
20	ePZ	11 51 16.0
	eSE	47.6
20	ePZ	15 57 21.5
	eXZ	26.0
	eSN	58 29.5
20	ePZ	21 16 39.8
21	ePZ	04 15 00.7
	eSN	38.8
21	iPZ	06 42 36.0c
21	ePZ	07 43 45.5
21	iPZ	07 58 56.4c
21	ePZ	19 15 21.5
	e(S)E	56.0
21	ePZ	22 06 40.5
	eSE	46.4
21	iPZ	23 15 57.7
	eSE	16 12.0
21	iPZ	23 22 00.1c
	eSE	14.4
22	ePZ	05 10 09.6
	eSN	17.6
22	ePZ	14 30 59.4
	eSN	31 03.0
23	iPZ	04 43 24.1c
23	ePZ	07 50 47.5
23	ePZ	10 48 10.7
23	ePZ	19 00 28.5
	eSE	41.0
23	iPZ	20 54 17.0d
	eSE	28.5
23	eSE	21 41 16.7
23	ePZ	22 04 26.5
	eSE	39.0
23	ePZ	23 40 48.2c
	eSE	41 20.0
24	ePZ	04 14 23.3
	eSE	15 06.0
24	ePZ	07 51 27.2
	eSN	54.2
24	ePZ	08 49 03.0
	eSE	04.5
24	ePZ	11 51 51.0
	eSN	52 02.0
24	ePZ	13 00 05.8d
24	ePZ	17 45 37.5
	eSN	46 04.0
25	ePZ	01 45 45.0
	eSE	56.1
25	ePZ	07 59 54 ±
	eSE	08 00 24.5
26	ePZ	02 00 28.6
	eSN	48.7
26	eSE	10 32 02.5
26	ePZ	15 09 36.0
	eSE	10 02.8
26	ePZ	20 04 13.2
	eSN	39.5
27	ePZ	09 03 26.3
	eSN	04 10.1
27	ePZ	14 30 32.4
	eSN	45.0
27	ePZ	18 15 07.0c
27	ePZ	18 39 00.0d
27	iPZ	22 37 24.7d
	eSE	36.2
27	iPZ	23 12 48.3d
	eSN	13 00.8
28	ePZ	08 53 32.3
	eSE	44.3
28	ePgZ	12 20 23.5
	eSgNE	34.6
29	ePgZ	21 09 10.0
	eSgNE	11.1

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Date	Phase	h m s
29	ePZ	03 06 57.5
	eSE	07 11.5
29	ePZ	05 52 34.8
	eSN	53 00.8
29	ePZ	10 25 30.5
29	ePZ	16 36 03.0
	eSN	06.5
29	eSN	16 49 07.0
30	eSN	02 34 54.5
30	eSE	12 04 32.5
30	ePE	13 17 05.8
	iSE	23.2
30	ePZ	14 13 31.2
30	iSE	16 19 50
30	ePZ	19 20 01.5
	eSN	16.5
30	ePZ	22 20 12.6

WARSAK

1	ePZ	13 44 58.1
	eSZ	45 26.8
1	ePZ	15 10 45.5
1	ePZ	23 49 53.2
2	ePZ	00 28 53.9
2	ePZ	13 09 07.0
	eSZ	50.3
3	ePZ	22 51 42.1
	iSZ	52 10.8
4	ePZ	00 43 19.4
	eSZ	41.0
4	ePZ	06 12 49.5
	iSZ	13 17.9
5	ePZ	17 32 55.0
	eSZ	33 05.4
6	ePZ	09 24 14.4
	eSZ	41.6
6	ePZ	10 09 23.5
6	ePZ	10 35 38.8
7	ePZ	03 45 37.7
8	ePZ	12 46 34.7
9	ePZ	16 22 34.3
	eSZ	23 11.7
9	ePZ	18 22 56.3
10	ePZ	07 06 51.1
	eSZ	07 25.0
10	ePgZ	13 34 16.9
	eSgZ	31.2
11	iPZ	13 30 44.3
	iSZ	31 12.4
12	iPZ	02 13 38.9
	iSZ	14 03.2
12	iPZ	18 55 17.2
	iSZ	41.0
12	ePZ	19 34 37.9
13	ePZ	13 19 45.1
	eSZ	20 21.3
13	ePZ	14 37 44.0
14	ePZ	00 28 38.8
15	ePZ	02 14 13.7
15	ePZ	04 07 38.8
	eSZ	08 17.3
15	ePZ	09 29 53.6
15	ePZ	09 35 38.4
	eSZ	36 19.0
15	ePZ	19 55 05.6
	eSZ	33.2
16	ePZ	03 29 28.2
	eSZ	44.9
16	ePZ	17 23 34.7
17	ePS	11 52 44.4
17	iPZ	12 16 27.8
18	ePZ	23 17 57.5
	eSZ	18 35.2
20	ePZ	08 13 21.0
20	ePZ	08 35 39.8

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Date	Phase	h m s
21	ePZ	02 46 35.1
21	ePZ	15 54 34.4
	eSZ	55 06.6
24	ePZ	00 29 12.8
	eSZ	47.2
24	iPZ	03 46 35.8
	iSZ	47 04.0
26	ePZ	12 29 44.0
	iSZ	30 08.9
26	iPZ	18 47 33.8
	iSZ	59.5
27	ePZ	17 32 47.2
	eSZ	33 14.0
28	ePZ	16 59 43.5
29	iPgZ	01 28 47.2
	iSgZ	49.6
30	iPZ	16 18 24.7
	iSZ	58.9

LAHORE

2	eXZ*	15 16 06
2	eXZ	22 20 27
3	eXZ	22 53 10
5	eXZ	10 29 51
5	eXZ	16 59 34
6	eXZ	11 30 12
7	eXZ*	13 20 28
7	eXZ	19 09 30
8	eXZ	20 18 45
8	eXZ	23 39 46
10	eXZ*	19 32 44
12	eXZ	08 25 55
13	eXZ	17 19 24
14	eXZ	07 04 13
14	ePZ	20 15 44
15	ePZ	21 01 44c
16	eXE*	16 44 39
18	eXZ*	15 51 06
21	eXZ*	00 53 17
21	eXZ	04 39 35
24	eXZ	03 48 13
24	eXZ	04 14 17
24	eXZ	13 04 19
27	eXZ	08 50 55
28	eXZ	22 09 46

KARACHI

20	ePgZ	15 56 08.5c
	eSgE	21.6
27	eXE	23 12 52.0
	eXE	13 25.5

CHITTAGONG

1	eXZ	01 38 21
1	ePZ	04 03 30
1	eXZ	04 59 44
2	eXZ	00 29 43
3	ePZ	02 02 49.8
3	eXZ	05 39 26
4	eXZ	18 38 18
6	ePZ	09 26 43
6	eXZ	10 35 00
7	eXZ	03 27 00
7	eXZ	04 18 54
7	eXZ	12 54 19
9	eXN	21 46 04
11	eXZ	09 08 36
11	eXZ	15 19 56
15	ePZ	02 09 38
15	ePZ	06 27 26 ±
15	ePZ	06 40 55 ±
15	eXZ	09 17 54
16	ePZ	02 01 18.5

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Date	Phase	h	m	s	
16	eXN	09	56	08	
16	ePZ	20	17	33.8	
17	eXZ	21	21	02	
17	ePZ	22	40	33.4	
	ePcPZ			47	
17	ePZ	22	45	54	±
18	eXZ	00	02	57	
18	ePZ	0₁	28	55	
	eXZ		31	29	
18	ePZ	02	07	53	
18	eXZ	15	50	12	
18	eXZ	17	08	38	±
19	eXZ	16	36	18	
20	eXZ	22	31	58	
21	eXZ	00	45	45	
23	eXZ	05	47	44	
23	eXZ	18	41	06	
24	ePZ	00	33	03	
24	eXZ	02	22	13	
24	ePZ	09	25	07.1	
24	ePZ	15	57	31.4	
25	eXZ	07	56	00	
25	eXZ	15	03	30	
25	ePZ	15	13	41	
25	ePZ	23	00	04	
27	eXZ	18	14	12	

Date	Phase	h	m	s

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International Seismological Centre

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The Seismological Bulletin of Pakistan is a quarterly publication containing data of Seismological Stations of Pakistan.

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PAKISTAN

Pakistan Meteorological Services, Geophysical Centre, Quetta.

Vol. 9 October to December No. 4

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Particulars of Stations and Instruments

(*a*) Stations

Station	Symbol	Latitude	Longitude	Height(a.s.l.)	Ground
Quetta	Qt	30° 11′ N	66° 57′ E	1721 meters	Cretaceous Limestone
Lahore	Lh	31° 33′ N	74° 20′ E	210 ”	Alluvium
Karachi	Kr	24° 50′ N	67° 02′ E	30 ”	Alluvium
Chittagong	Ch	22° 21′ N	91° 49′ E	35 ”	Alluvium
Warsak	Wr	34° 09′ N	71° 25′ E	343 ”	River Terrace

(*b*) Instruments

Instruments	Components	Period Sec		Damping	Max. Magnification
		To	Tg		
Quetta					
Sprengnether	Z	1.9	1.9	Critical	5,500
”	N	15.8	15.8	”	15,000
Benioff	Z	1.0	0.77	”	2,00,000
”	N	1.0	0.76	”	2,00,000
”	E	1.0	0.77	”	2,00,000

Instruments	Components	Period Sec		Damping	Mag.
		To	Tg		
Sprengnether	Z	30.1	100.0	Critical	3,000
,,	N	30.3	100.0	,,	3,000
,,	E	30.2	100.0	,,	3,000
Willmore	Z	1.0	0.25	—	—
Sprengnether	E	1.0	6.0	—	—
Pen recorder					
Lahore					
Sprengnether	Z	1.8	1.8	Critical	4,900
,,	N	1.7	1.7	,,	4,200
,,	E	1.6	1.6	,,	4,100
Benioff	Z	1.0	0.75	,,	6,250
,,	N	1.0	0.75	,,	6,250
,,	E	1.0	0.75	,,	6,250
Sprengnether	Z	30.0	100.0	,,	750
,,	N	30.0	100.0	,,	750
,,	E	30.0	100.0	,,	750
Karachi					
Sprengnether	Z	1.8	1.8	Critical	5,890
,,	N	1.8	1.8	,,	4,700
,,	E	1.4	1.4	,,	4,700
Chittagong					
Sprengnether	Z	1.7	1.7	Critical	5,200
,,	N	1.8	1.8	,,	5,700
,,	E	1.5	1.5	,,	3,600
Warsak					
Sprengnether	Z	1.95	1.95	Critical	8,000
,,	N	1.8	1.8	,,	4,000

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* indicates long period seismographs
c=compassion, d=dilatation, X=unidentified phase
Mu=Actual ground motion of the indicated phase in microns
Sec=Period of the indicated phase in seconds.
(Pas), (Berk), (Up), (Ki), (Pal), stand for seismological observatories Pasadena (U.S.A.), Berkeley (U.S.A.), Uppsala (Sweden), Kiruna (Sweden) & Palisade (U.S.A.), respectively
All times are in Greenwich Mean Time.

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Date	Station	Phase	h	m	s	
1	Qt	ePZ	01	04	07·5	
1	Wr	ePZ	14	41	28·4	
	Qt	ePZ			46·0	±
1	Qt	ePZ	17	29	00·0	
		USCGS H 17 21 54·0				
		36·1 N 22·3 E				
		South of Greece				
		depth about 106 km				
		Mag : 4·6 (CGS)				
1	Qt	ePZ	20	41	27	±
2	Lh	ePZ	03	43	42	±
	Wr	iPZ			56·8	d
	Qt	ePZ			44 13·0	c
		USCGS H 03 31 27·0				
		5.4 S 152·0E				
		New Britain				
		depth about 65 km				
		Mag : 5·6 (CGS)				
2	Qt	ePZ	04	56	34·5	
2	Wr	ePKPZ	06	05	59·1	
	Qt	ePKPZ			06 04·5	
		ePPZ			07 51·5	
		ePKSZ			09 34·7	
		eSKSE*			13 18·0	
		ePSE*			17 50·0	
		eSSE*			24 32·0	
		USCGS H 05 47 05·5				
		20·8 S 174·1 W				
		Tonga Islands				
		depth about 33 km				
		Mag: 5·3 (CGS)				
2	Qt	ePZ	07	22	40·5	
2	Qt	ePZ	10	01	58·5	
		USCGS H 09 51 41·1				
		36·3 N 142·4 E				
		Off east coast of Honshu				
		Japan				
		depth about 48 km				
		Mag : 4·1 SD 0·1 (CGS)				
2	Qt	ePZ	12	27	17·0	
2	Qt	ePZ	21	12	16	±
	Wr	ePZ			38·6	
	Lh	ePZ			13 03	±
		USCGS H 21 05 14·7				
		35·1 N 23·5 E				
		Near west coast of Crete				
		depth about 72 km				
		Mag : 4·5 SD 0·2 (CGS)				
2	Qt	iPZ	21	18	23·0	d
3	Qt	ePZ	05	41	01·5	
		USCGS H 05 32 18·4				
		22·3 N 121·1 E				
		Near east coast of Taiwan				
		depth about 55 km				
		Mag : 4·4 (CGS)				
3	Qt	ePZ	06	49	58·6	
		USCGS H 06 38 32.2				
		3·4 S 135·7 E				
		West New Guinea				
		depth about 78 km				
		Mag : 5·4 (CGS)				
3	Qt	ePZ	14	53	28·5	
3	Qt	ePKPZ	16	06	58·0	
	Wr	ePKPZ			07 07·4	
	Lh	ePKPZ			08	±
		USCGS H 15 48 17·2				
		58·5 S 25·1 W				
		Sandwich Islands				
		depth about 54 km				
3	Qt	ePZ	17	32	52	±
3	Qt	ePZ	17	39	02·0	
3	Qt	ePKPZ	18	14	34·5	
		USCGS H 17 55 54·2				
		58·6 S 25·5 W				
		Sandwich Islands				
		depth about 33 km				
		Mag : 5·5 (CGS)				
3	Wr	ePZ	19	26	18·8	
	Qt	ePZ			21·6	
3	Wr	iPZ	20	08	14·6	c
		iSZ			42·8	

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Date	Station	Phase	h	m	s	
	Lh	ePZ			57	±
		eSZ		09	57	±
	Qt	ePZ			16·5	
		eSE		10	30·5	
		H 20 07 40				
		36·0 N 70·9 E				
		Hindukush region				
		depth about 180 km				
3	Qt	ePZ	22	14	40	±
3	Wr	iPZ	23	07	05·1	c
		iSZ			26·3	
	Qt	ePZ		08	08·0	
		eSN		09	17·0	
		H 23 06 38				
		Hindukush region				
3	Ch	ePZ	23	31	40	d
		ipPZ			50	
		ePPPZ		33	20	
		eSN		37	18	
	Lh	ePZ		33	12	c
		epPZ			25	
		ePPZ		35	06	
		eScSE*		43	02	
	Wr	ePZ		33	25·7	
	Qt	iPZ		34	01·6	
		ePPZ		36	03·5	
		ePPPZ		37	27·0	
		eSE		41	34·0	
		eSSN		45	27·0	
		ePKPPKPZ	00	04	31	±
		Mu Sec				
	PZ	0·1 1·0				
		△ = 54°.1				
	Kr	ePE	23	34	17·5	
		epPE			25·0	
		esPE			30·0	
		ePcPE		35	05·5	
		eSE		42	14·5	
		esSE			32·0	
		USCGS H 23 24 34·7				
		32·2 N 131·6 E				
		Kyushu, Japan				
		depth about 33 km				
		Mag: 6½ (Pas), 6 (Pal),				
		5·7 SD 0·2 (CGS)				
4	Ch	ePZ	00	34	56	
	Lh	ePZ		36	35	±
	Wr	ePZ			48·0	
	Qt	ePZ		37	23·6	c
		USCGS H 00 27 56.7				
		32.8 N 131.4 E				
		Kyushu, Japan				
		depth about 21 km				
		Mag: 4.9 (CGS)				
4	Qt	ePZ	02	59	49.4	
4	Qt	ePKPZ	03	06	32.8	
		USCGS H 02 47 32.1				
		20.7 S 174.0 W				
		Tonga Islands				
		depth about 33 km				
		Mag: 5.3 SD 0.2 (CGS)				
4	Qt	ePZ	03	56	42.0	
	Wr	ePZ		57	03.0	
4	Qt	iPZ	10	26	37.7	c
		eSN		28	00.0	
4	Qt	ePZ	13	32	56.0	
		iPZ			59.3	d
		eSE		35	27.0	
		Mu ~~2(3)~~ Sec				
		MH 11.3 ~~2(3)~~ 20				
		△ = 11°.3				
	Lh	ePZ		34	00	
	Wr	ePN			09.1	
		H 13 29 48				
		18.8 N 60.5 E				
		Arabian Sea				
		depth about 33 km				
		USCGS H 13 29 44.6				
		18.1 N 60.1 E				
		Arabian Sea				

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Date	Station	Phase	h	m	s	
		depth about 33 km				
		Mag: 5.3 (CGS), 5.5 (Qt)				
4	Qt	ePZ	15	55	00.0	
5	Qt	ePKPZ	00	33	49.0	
		USCGS H 00 14 52.1				
		15.7 S 173.3 W				
		Tonga Islands				
		depth about 33 km				
		Mag: 4.6 SD 0.3 (CGS)				
5	Wr	iPN	01	04	33.8c	
		iSN		05	07.2	
	Qt	iPZ			35.4c	
		iSE		06	56.5	
		H 01 03 49				
		Hindukush region				
5	Qt	iPKPZ	02	14	27.2c	
		epPKPZ			34.0	
		USCGS H 01 55 35.2				
		16.0 S 173.2 W				
		Tonga Islands				
		depth about 79 km				
		Mag: 5.5 SD 0.3 (CGS)				
5	Qt	ePZ	02	33	45	±
5	Qt	ePZ	04	32	39.5	
		USCGS H 04 22 26*				
		43.9 N 144.4 E				
		Hokkaido, Japan				
		depth about 33 km				
		Mag : 4.9 SD 0.2 (CGS)				
5	Qt	ePZ	04	47	11.6	
	Wr	ePN			33.1	
		USCGS H 04 39 59*				
		34.7 N 22.9 E				
		West of Crete				
		depth about 33 km				
		Mag: 4.5 (CGS)				
5	Qt	ePKPZ	05	34	30	±
		USCGS H 05 15 32.4				
		15.9 S 173.2 W				
		Tonga Islands				
		depth about 33 km				
		Mag: 4.9 SD 0.3 (CGS)				
5	Wr	ePZ	06	51	02.6	
	Qt	ePZ			19.5	
		USCGS H 06 41 06.7				
		2.7 N 127.4 E				
		Molucca Sea				
		depth about 175 km				
		Mag: 4.7 (CGS)				
5	Ch	ePZ	07	39	40	
	Wr	ePZ		41	22.2	
	Qt	iPZ!			54.6	
		eSN		49	42.5	
		USCGS H 07 32 19*				
		28.8 N 139.2 E				
		South of Honshu, Japan				
		depth about 454 km				
		Mag: 4.6 SD 0.3 (CGS)				
5	Kr	ePE	15	03	25.5	
	Qt	ePZ			47.0	
		epPZ			56.0	
		ePPZ		04	29.0	
		esSN*		08	47.0	
		Mu 2 (3) Sec				
		MH 42.3 2 (3) 20				
		△ = 29°.0				
	Wr	ePZ		04	33.7	
	Lh	ePZ			40	
		esSZ*		10	31	
		sSSE*		12	34	
	Ch	ePZ		06	23	
		USCGS H 14 57 47.4				
		11.6 N 42.8 E				
		French Somaliland				
		depth about 33 km				
		Mag: 5.3 (CGS), 6.2 (Qt)				
5	Qt	ePZ	15	55	09.0c	
	Wr	ePZ			56.0	
5	Qt	ePZ	17	05	01.6d	

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Date	Station	Phase	h	m	s	
		USCGS H 16 54 57.7				
		16.9 S 28.6 E				
		Southern Rhodesia				
		depth about 33 km				
		Mag: 4.9 (CGS)				
5	Qt	ePZ	17	24	26.2d	
		epPZ			36.5	
		esSE*		29	28.0	
	Wr	ePZ		25	12.7	
	Lh	ePZ			21	±
		USCGS H 17 18 25.0				
		11.7 N 42.6 E				
		French Somaliland				
		depth about 33 km				
5	Qt	ePZ	20	31	49.8d	
		USCGS H 20 20 02.7				
		52.1 N 178.1 E				
		Rat Islands, Aleutian				
		Islands				
		depth about 140 km				
		Mag: 4.9 SD 0.3 (CGS)				
5	Qt	ePZ	20	39	37	±
5	Qt	ePZ	20	46	17.0d	
5	Qt	ePZ	21	49	00.0	
	Wr	ePZ			46.9d	
	Lh	ePZ			52	±
6	Qt	ePZ	00	01	21.2c	
		USCGS H 23 50 46.3				
		45.3 N 150.0 E				
		Kurile Islands				
		depth about 50 km				
		Mag: 4.3 SD 0.3 (CGS)				
6	Wr	ePZ	05	49	42.2	
		eSZ		50	21.8	
	Lh	ePZ			29	
		eSZ		51	22	
	Qt	ePZ		50	46.5	
		eSN		52	18.0	
6	Qt	ePKPZ	17	34	57.5d	
		ePKSZ		38	26.6	
	Wr	ePKPZ			35	04.4
	Lh	ePKPZ				16
		USCGS H 17 15 33.9				
		33.9 S 70.0 W				
		Central Chile				
		depth about 101 km				
		Mag: 5.1 SD 0.2 (CGS)				
6	Wr	ePZ	17	47	46.8	
	Qt	ePZ			48	56.0
		eSE			51	03.5
		H 17 46 13				
6	Qt	ePZ	18	52	13.0c	
7	Wr	ePZ	11	06	01.4	
	Qt	ePZ			07	01.3d
		eSE			08	46.2
		H 11 04 46				
7	Qt	ePZ	11	23	56.7	
		USCGS H 11 16 06.0				
		12.1 S 65.4 E				
		About 1200 km				
		northeast of				
		Mascarene Islands				
		depth about 33 km				
7	Wr	ePKPZ	13	30	51.8	
	Qt	ePKPZ			32	15.5c
		ePPZ			33	56.2
		eSKSE*			38	24.0
		USCGS H 13 14 24.6				
		23.6 S 179.9 E				
		Fiji Islands region				
		depth about 550 km				
		Mag: 5.7 SD 0.4 (CGS)				
7	Qt	ePZ	13	42	22.7	
7	Qt	ePZ	21	51	10.0	
		USCGS H 21 38 53.9				
		1.0 S 147.5 E				
		Admiralty Islands region				
		depth about 68 km				
		Mag : 5.0 (CGS)				

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Date	Station	Phase	h m s
7	Lh	ePZ	23 40 38
	Wr	ePZ	47.4
	Qt	iPZ	41 31.7c
		USCGS H 23 34 26.6	
		42.7 N 110.5 E	
		Outer Mongolia-Inner Mongolia border	
		depth about 33 km	
		Mag : 4.9 SD 0.3 (CGS)	
8	Qt	ePKPZ	00 35 57.0
	Wr	ePKPZ	36 07.5
		USCGS H 00 17 01.1	
		15.1 S 173.2 W	
		Samoa Islands region	
		depth about 33 km	
		Mag : 6 (Pas), 5½-5¾ (Berk), 5.7 SD 0.4 (CGS)	
8	Qt	ePZ	01 15 31.4d
		USCGS H 01 04 35.1	
		3.1 S 128.8 E	
		Ceram	
		depth about 33 km	
		Mag: 4.2 (CGS)	
8	Ch	ePZ	02 52 50 ±
		eSNE	54 04
	Lh	ePZ	55 19 ±
	Wr	iPZ	48.8c
	Qt	ePZ	56 26.3
		esSE*	03 01 05.0
	Kr	ePZ	02 56 34.3
		US CGS H 02 51 06.0	
		28.6 N 95.1 E	
		Assam, India	
		depth about 24 km	
		Mag: 5.4 (CGS)	
8	Qt	iPZ	04 05 50.2c
8	Wr	ePZ	06 35 44.7
	Qt	ePZ	36 05.5
		USCGS H 06 26 17.6	
		11.3 N 125.9 E	
		Samar region, Philippine Islands	
		depth about 39 km	
		Mag: 5.4 (CGS)	
8	Qt	ePZ	10 48 21.0
	Wr	ePZ	35.2
8	Qt	ePZ	13 24 27.4
	Wr	ePZ	53.8
		USCGS H 13 12 15.8	
		45.5 S 35.3 E	
		Prince Edward Islands region	
		depth about 33 km	
8	Wr	iPZ	16 06 21.6c
		iSZ	55.2
	Qt	ePZ	07 19.3
		eSE	08 38.5
		H 16 05 37	
		Hindukush region	
8	Qt	ePZ	18 53 56.0
		eSE	55 16.0
		H 18 52 12	
8	Wr	ePZ	20 00 25.4
	Qt	ePZ	01 33.5
		eSE	04 10.5
		H 19 58 12	
8	Qt	ePZ	20 40 00.4
		esPZ	51.8
		USCGS H 20 29 40.1	
		2.6 N 128.4 E	
		Halmahera	
		depth about 166 km	
8	Wr	iPZ	21 47 17.2c
		iSZ	51.9
	Qt	iPZ	48 22.5
		eSE	49 47.5
		H 21 46 32	
		Hindukush region	
8	Wr	ePZ	23 28 45.9
	Qt	ePZ	29 56 ±
		eSN	32 03.0
		H 23 27 13	

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Date	Station	Phase	h m s
9	Qt	ePZ	04 41 36.6d
		epPZ	45.5
	Wr	ePZ	51.2
		USCGS H 04 36 43.6	
		39.4 N 42.8 E	
		Eastern Turkey	
		depth about 35 km	
		Mag : 4.6 (CGS)	
9	Qt	iPKPZ	05 32 25.2d
		USCGS H 05 13 26.9	
		18.6 S 173.7 W	
		Tonga Islands	
		depth about 33 km	
		Mag: 4.6 SD 0.5 (CGS)	
9	Wr	ePZ	06 31 28.2
		iSZ	56.3
	Qt	ePZ	32 18 ±
		eSN	33 25
		H 06 30 51	
		Hindukush region	
9	Qt	iPZ	16 26 55.5c
		eSE	28 14.0
		H 16 25 13	
9	Qt	ePZ	16 36 51.5
		USCGS H 16 24 13.9	
		0.2 N 18.4 W	
		1000 km northwest of	
		Ascension Islands	
		depth about 33 km	
		Mag : 4.6 SD 0.4 (CGS)	
9	Qt	ePZ	19 56 37.0
9	Wr	ePZ	23 51 26.2
	Qt	ePZ	35.5d
		USCGS H 23 40 57*	
		8.4 S 126.1 E	
		Timor	
		depth about 229 km	
10	Qt	ePZ	00 01 26.5
10	Wr	iPZ	01 02 35.9c
	Qt	iPZ !	52.0c
		USCGS H 00 50 35.4	
		5.6 S 145.6 E	
		New Britain region	
		depth about 102 km	
		Mag: 4.7 (CGS)	
10	Ch	ePZ	10 24 44
	Qt	ePZ	26 05.7d
		USCGS H 10 15 17.4	
		46.0 N 153.7 E	
		Kurile Islands region	
		depth about 45 km	
		Mag: 4.4 SD 0.3 (CGS)	
10	Wr	ePZ	17 00 54.6
	Qt	ePZ	01 19.4
		USCGS H 16 49 52.0	
		12.4 N 144.0 E	
		Mariana Islands	
		depth about 35 km	
		Mag: 4.6 (CGS)	
10	Qt	ePZ	22 55 29.3
11	Qt	ePZ	05 15 16 ±
11	Wr	ePKPZ	10 36 05.0
	Qt	ePKPZ	26.8
		USCGS H 10 17 07.6	
		17.8 N 105.9 W	
		Off coast of Jalisco Mexico	
		depth about 33 km	
		Mag: 5.0 SD 0.4 (CGS)	
11	Wr	iPZ	18 07 17.2c
		iSZ	49.5
	Qt	iPZ	08 16.0c
		iSE	09 35.0
		H 18 06 34	
		Hindukush region	
11	Wr	ePZ	18 55 53.3
	Qt	ePZ	56 47.3
		iSN	58 07.0
		H 18 55 03	
		Hindukush region	

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Date	Station	Phase	h	m	s
12	Wr	ePZ	05	33	50.9
	Qt	ePZ		34	17.5
12	Qt	ePZ	08	35	58.5
12	Qt	ePZ	10	46	12.0c
		e(S)E		48	36.5
12	Ch	iPZ	11	36	02 c
		ipPZ			14
		ePPZ		38	02
		eSNE		43	19
	Lh	ePZ		36	51 c
		epPZ		37	00
		eSN*		44	48
		esSN *		45	06
	Wr	iPZ		36	55.8c
		eSN		44	57.9
	Qt	iPZ		37	31.1c
		isSN*		46	19.0
		ePKPPKPZ	12	06	38.2
		Mu ~~2 (3)~~ Sec			
	PZ	0.5 ~~2 (3)~~ 1.5			
		△ = 64°.2			
	Kr	ePE	11	37	53.5
		epPE		38	04.4
		ePPE		40	19.7
		eSE		46	48.0
		ePKPPKPE	12	06	23.0
		USMGS H 11 26 57.9			
		44.8 N 149.0 E			
		Kurile Islands			
		depth about 40 km			
		Mag: 6¾-7(Pas), 7 (Berk),			
		6¾-7(Pal)			
12	Ch	ePZ	12	02	02 ±
	Lh	ePZ			52 ±
	Wr	ePZ			54.2
	Qt	ePZ		03	31.5
		USCGS H 11 53 05*			
		46.0 N 148.8 E			
		Kurile Islands			
		depth about 33 km			

Date	Station	Phase	h	m	s
12	Qt	ePZ	12	27	07.0
		epPZ			19.0
12	Ch	ePZ	12	41	43
	Wr	ePZ		42	34.6
	Qt	ePZ		43	02.5
		epPZ			10.9
		USCGS H 12 32 35.8			
		44.7 N 149.6 E			
		Kurile Islands			
		depth about 40 km			
		Mag: 4.6 (CGS)			
12	Ch	ePZ	13	16	13
	Lh	ePZ		17	02 c
	Wr	ePZ			05.2
	Qt	ePZ			41.0c
		USCGS H 13 07 07.9			
		44.5 N 149.4 E			
		Kurile Islands			
		depth about 50 km			
		Mag: 4.8 SD 0.4 (CGS)			
12	Qt	ePZ	13	40	09.5
		USCGS H 13 29 36.4			
		44.5 N 149.3 E			
		Kurile Islands			
		depth about 50 km			
		Mag: 4.5 (CGS)			
12	Qt	ePZ	14	05	41.4
		USCGS H 13 54 58.3			
		43.5 N 151.1 E			
		Kurile Islands			
		depth about 40 km			
		Mag: 4.3 SD 0.3 (CGS)			
12	Ch	ePZ	14	24	12
	Qt	ePZ		25	43.5d
		USCGS H 14 15 08.2			
		44.7 N 149.5 E			
		Kurile Islands			
		depth about 45 km			
		Mag: 4.6 SD 0.3 (CGS)			

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Date	Station	Phase	h	m	s
12	Lh	ePZ	16	21	49
	Wr	ePZ			52.2
	Qt	ePZ		22	29.5c
		USCGS H 16 11 55.0			
		44.4 N 149.7 E			
		Kurile Islands			
		depth about 60 km			
		Mag: 4.4 SD 0.3 (CGS)			
12	Lh	ePZ	16	38	05
	Wr	ePZ			07.1
	Qt	ePZ			43.2
		USCGS H 16 28 10.4			
		44.8 N 149.4 E			
		Kurile Islands			
		depth about 50 km			
		Mag: 4.3 SD 0.3 (CGS)			
12	Qt	ePZ	18	16	23.5
		USCGS H 18 05 47.8			
		44.5 N 149.7 E			
		Kurile Islands			
		depth about 45 km			
		Mag: 4.2 SD 0.3 (CGS)			
12	Wr	ePZ	18	48	41.0
		eSZ		49	15.3
	Qt	ePZ			33.5
		eSE		50	52.2
		H 18 47 53			
		Hindukush region			
12	Lh	ePZ	18	58	27
	Wr	ePZ			32.8
	Qt	ePZ		59	09.0
		eSN*	19	07	45.5
		Mu ~~2 (3)~~ Sec			
		MH 2.3 ~~2 (3)~~ 20			
		$\triangle = 64°.6$			
		USCGS H 18 48 35.5			
		44.7 N 149.4 E			
		Kurile Islands			
		depth about 50 km			
		Mag: 5.0 SD 0.3 (CGS)			

Date	Station	Phase	h	m	s
12	Qt	ePZ	19	57	28.0
		USCGS H 19 46 52.9			
		44.3 N 149.4 E			
		Kurile Islands			
		depth about 45 km			
		Mag: 4.4 (CGS)			
12	Lh	ePZ	20	06	55
	Wr	ePZ			55.9
	Qt	ePZ		07	33.8c
		epPZ			51.5
		USCGS H 19 57 00.2			
		44.6 N 149.4 E			
		Kurile Islands			
		depth about 50 km			
		Mag: 4.4 SD 0.4 (CGS)			
12	Qt	ePZ	20	29	06 ±
12	Ch	ePZ	20	30	09
	Lh	ePZ			58
	Qt	ePZ		31	37
		USCGS H 20 21 04.5			
		44.4 N 149.2 E			
		Kurile Islands			
		depth about 45 km			
		Mag: 4.7 SD 0.1 (CGS)			
12	Qt	ePZ	21	27	56.5d
		USCGS H 21 17 37*			
		17.9 N 145.2 E			
		Mariana Islands region			
		depth about 638 km			
		Mag: 4.0 SD 0.4 (CGS)			
12	Ch	ePZ	22	11	06
	Lh	ePZ			57
	Wr	ePZ			59.4
	Qt	ePZ		12	35.6c
		USCGS H 22 02 01.2			
		44.5 N 149.5 E			
		Kurile Islands			
		depth about 45 km			
		Mag: 4.4 SD 0.3 (CGS)			

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Date	Station	Phase	h	m	s	
12	Lh	ePZ	22	17	25	
	Qt	ePZ		18	03	±
		USCGS H 22 07 29·3				
		44·4 N 149·2 E				
		Kurile Islands				
		depth about 40 km				
		Mag: 4·2 SD 0·3 (CGS)				
12	Qt	ePZ	22	32	09·5	
13	Ch	ePZ	10	35	42	
	Lh	ePZ		36	32	
	Wr	ePZ			35·2	
	Qt	ePZ		37	10·2c	
		UkCGS H 01 26 34·3				
		44·4 N 149·3 E				
		Kurile Islands				
		depth about 33 km				
		Mag: 4·4 SD 0·4 (CGS)				
13	Wr	ePZ	01	44	51·0	
	Qt	ePZ		45	30·0	
		USCGS H 01 34 54·3				
		44·4 N 149·2 E				
		Kurile Islands				
		depth about 33 km				
		Mag: 4·3 SD 0·3 (CGS)				
13	Qt	ePZ	01	47	48·0	
13	Qt	ePZ	02	22	55·0	
		USCGS H 02 12 20·0				
		44·0 N 149·4 E				
		Kurile Islands				
		depth about 45 km				
		Mag: 3·8 SD 0·3 (CGS)				
13	Ch	ePZ	04	14	56	±
	Qt	ePZ		16	27·5	
		USCGS H 04 05 50·0				
		44·4 N 149·2 E				
		Kurile Islands				
		depth about 30 km				
		Mag: 4·4 SD 0·3 (CGS)				
13	Ch	ePZ	05	27	01	
		ipPZ			22	
		ePPZ			29	02
		eSE			34	19
	Lh	ePZ			27	50c
	Wr	ePZ				53·3
	Qt	iPZ			28	29·5c
		eSN*			37	11·0
		USCGS H 05 17 57·1				
		44·8 N 149·5 E				
		Kurile Islands				
		depth about 60 km				
		Mag: 8¼ (Pas), 7¾-8 (Pal)				
13	Ch	ePZ	06	56	04	
	Lh	ePZ			39	±
	Wr	ePN			42·2	
		USCGS H 06 46 54·0				
		45·3 N 147·5 E				
		Kurile Islands				
		depth about 55 km				
		Mag: 5·3 (CGS)				
13	Ch	iPZ	06	57	45	c
		eSNE	07	05	16	
		USCGS H 06 48 26·3				
		45·4 N 150·8 E				
		Kurile Islands				
		depth about 55 km				
13	Ch	ePZ	07	12	37	
		epPZ			53	
		eSNE		20	07	
	Lh	ePZ		13	25	
	Wr	ePZ			28·0	
		USCGS H 07 03 23·8				
		45·5 N 150·6 E				
		Kurile Islands				
		depth about 50 km				
		Mag: 5·6 SD 0·4 (CGS)				
13	Qt	ePZ	08	45	20·5	
		USCGS H 08 34 40*				
		44·5 N 150·9 E				
		Kurile Islands				
		depth about 33 km				
		Mag: 4·5 SD 0·4 (CGS)				

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Date	Station	Phase	h	m	s	
13	Qt	ePZ	08	58	25	±
		USCGS H 08 37 11.4				
		45·2 N 149.9 E				
		Kurile Islands				
		depth about 50 km				
		Mag: 4·5 (CGS)				
13	Ch	ePZ	09	21	22	c
		epPZ			34	
	Wr	ePZ		22	11·2	
	Qt	ePZ			39·0	
		epPZ			46·0	
		USCGS H 09 10 15·4				
		44·2 N 149·5 E				
		Kurile Islands				
		depth about 40 km				
		Mag: 4·4 (CGS)				
13	Ch	ePZ	09	25	31	c
	Lh	ePZ		26	20	
	Wr	ePZ			24·0	
	Qt	ePZ		27	00·5	c
		USCGS H 09 27 24*				
		46·2 N 151·8 E				
		Kurile Islands				
		depth about 40 km				
		Mag: 4·6 (CGS)				
13	Ch	ePZ	09	32	11	
	Lh	ePZ			47	
	Wr	ePZ			50·3	
	Qt	ePZ		33	25·0	
		USCGS H 09 22 44·6				
		44·9 N 151·0 E				
		Kurile Islands				
		depth about 50 km				
		Mag: 5·0 SD 0·3 (CGS)				
13	Ch	ePZ	09	54	01	
	Wr	ePZ			54·0	
	Qt	ePZ		55	29·3	
		USCGS H 09 44 51·6				
		44·1 N 150·0E				
		Kurile Islands				
		depth about 45 km				
		Mag: 4·5 (CGS)				
13	Qt	ePZ	10	01	51·5	
		USCGS H 09 51 50·4				
		42·0 N 149·5 E				
		Kurile Islands				
		depth about 45 km				
		Mag: 4·5 (CGS)				
13	Qt	ePZ	10	07	27·0	c
		USCGS H 09 56 43·1				
		45·5 N 151·8 E				
		Kurile Islands				
		depth about 40 km				
		Mag: 4·7 SD 0·4 (CGS)				
13	Ch	ePZ	10	15	34	d
	Wr	ePZ		16	27·3	
	Qt	ePZ		17	03·0	
		USCGS H 10 06 23·8				
		44·2 N 150·2 E				
		Kurile Islands				
		depth about 45 km				
		Mag: 4·5 SD 0·2 (CGS)				
13	Ch	ePZ	10	19	36	
	Lh	ePZ		20	24	
	Qt	ePZ		21	03·5	
		USCGS H 10 10 28·2				
		44·5 N 149·6 E				
		Kurile Islands				
		depth about 45 km				
		Mag: 4·7 SD 0·2 (CGS)				
13	Qt	ePZ	10	40	01·4	
13	Ch	ePZ	10	43	09	d
		epPZ			22	
	Wr	ePZ		44	01·1	
	Qt	ePZ			36·5	
		USCGS H 10 33 57·3				
		44·4 N 150·3E				
		Kurile Islands				
		depth about 45 km				
		Mag: 4·7 SD 0·2 (CGS)				

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Date	Station	Phase	h	m	s	
13	Ch	ePZ	10	56	32	
	Qt	ePZ		57	57·5d	
		USCGS H 10 47 13·7				
		45·4 N 151·8 E				
		Kurile Islands				
		depth about 40 km				
		Mag: 4·9 SD 03 (CGS)				
13	Qt	ePZ	11	18	14·7d	
13	Qt	ePZ	11	23	58·0d	
13	Ch	ePZ	11	24	55	
	Qt	ePZ		26	22·5d	
		USCGS H 11 15 40·4				
		44·9 N 151·1 E				
		Kurile Islands				
		depth about 45 km				
		Mag: 4·9 SD 0·2 (CGS)				
13	Lh	ePZ	11	33	03	±
	Qt	ePZ			39·0d	
		USCGS H 11 22 58·6				
		44·9 N 150·7E				
		Kurile Islands				
		depth about 55 km				
		Mag: 4·8 SD 0·3 (CGS)				
13	Qt	ePZ	11	39	01	±
13	Qt	ePZ	11	46	02·5	
		USCGS H 11 35 18·1				
		45·4 N 151·6E				
		Kurile Islands				
		depth about 25 km				
		Mag: 4·8 (CGS)				
13	Ch	ePZ	11	48	19	
	Qt	ePZ		49	33·0	
		USCGS H 11 38 56·9				
		44·3 N 149·3 E				
		Kurile Islands				
		depth about 25 km				
		Mag: 4·3 (CGS)				
13	Ch	ePZ	12	06	36	±
	Qt	ePZ		08	03·0	
		USCGS H 11 57 20·3				
		44·7 N 151·3E				
		Kurile Islands				
		depth about 50 km				
		Mag: 4·3 (CGS)				
13	Ch	ePZ	12	15	21	
	Qt	ePZ		16	32·0d	
		USCGS H 12 05 48·3				
		45·0 N 150·8 E				
		Kurile Islands				
		depth about 25 km				
		Mag: 4·6 SD 0·3 (CGS)				
13	Qt	ePZ	12	31	20	±
		USCGS H 12 20 46·9				
		44·8 N 149·6 E				
		Kurile Islands				
		depth about 45 km				
		Mag: 4·3 SD 0·4 (CGS)				
13	Ch	ePZ	12	39	01	
	Lh	ePZ			45	
	Qt	ePZ		40	24·0c	
		USCGS H 12 29 39·2				
		45·9 N 151·8 E				
		Kurile Islands				
		depth about 30 km				
		Mag: 5·0 SD 0·4 (CGS)				
13	Qt	ePZ	12	49	06·6d	
13	Lh	ePZ	12	50	44	
	Qt	ePZ		51	22·4c	
		USCGS H 12 40 44·2				
		45·6 N 150·5 E				
		Kurile Islands				
		depth about 45 km				
		Mag: 4·6 SD 0·3 (CGS)				
13	Ch	ePZ	12	51	16	
	Lh	ePZ		52	06	
		ePZ			20	
	Qt	cpPZ			45·2 c	
		USCGS H 12 42 13·0				
		44·4 N 149·4 E				
		Kurile Islands				
		depth about 55 km				
		Mag: 5·2 SD 0·3 (CGS)				

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Date	Station	Phase	h m s
13	Qt	ePZ	13 04 33.5c
		USCGS H 12 53 56.9	
		44.6 N 149.3 E	
		Kurile Islands	
		depth about 25 km	
		Mag : 4.6 SD 0.4 (CGS)	
13	Ch	epZ	13 07 30c
		eSN	14 54
	Lh	cPZ	08 18
	Qt	ePZ	57.0c
		eSN*E*	17 39.0
		USCGS H 12 58 21.6	
		45.0 N 150.1 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 5.0 SD 0.4 (CGS)	
13	Qt	ePZ	13 31 33.5
		USCGS H 13 21 00.3	
		44.5 N 149.3 E	
		Kurile Islands	
		depth about 60 km	
		Mag : 4.5 (CGS)	
13	Ch	ePZ	13 52 41
	Qt	ePZ	54 06.5
		USCGS H 13 43 25.3	
		44.4 N 151.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.8 SD 0.3 (CGS)	
13	Lh	ePZ	14 04 32
		epPZ	40
	Qt	ePZ	05 10.0c
		USCGS H 13 54 24.8	
		44.9 N 150·7 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.8 (CGS)	
13	Lh	ePZ	14 14 01
	Qt	ePZ	39.0
		USCGS H 14 03 56.3	
		45.3 N 151.0 E	
		Kurile Islands	
		depth about 25 km	
		Mag : 4.8 SD 0.2 (CGS)	
13	Lh	ePZ	14 36 08
	Qt	ePZ	46.7c
		eSN	45 25.0
		USCGS H 14 26 11.9	
		44.5 N 149.5 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 5.1 SD 0.4 (CGS)	
13	Wr	iPZ	15 00 19.3c
	Qt	ePZ	01 23.5
		eSE	02 43.0
		H 14 59 39	
		Hindukush region	
13	Qt	ePZ	15 44 34.5d
		USCGS H 15 33 53.7	
		46.1 N 151.9 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 4.3 (CGS)	
13	Qt	ePZ	16 00 39 ±
		USCGS H 15 50 09	
		47.0 N 149.5 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.1 (CGS)	
13	Ch	iPZ	16 09 06c
		ipPZ	16
		ePPZ	11 06
		eSN	16 29
	Lh	iPZ	09 52c
		eSN*	17 55
		esSN*	18 14
		eScSN*	19 36
		eSSN*	22 56
	Wr	iPZ	09 55.6

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Date	Station	Phase	h m s
	Qt	iPZ	10 31.5c
		eSE	19 08.5
		Mu ~~2 (3)~~ sec	
		PZ 0.6 ~~2 (3)~~ 1.0	
		△ = 64°.8	
		USCGS H 15 59 52.9	
		45.6 N 150.5 E	
		Kurile Islands	
		depth about 35 km	
		Mag : 6.1 SD 0.3 (CGS)	
13	Ch	ePZ	16 21 47
	Lh	ePZ	22 35
	Qt	ePZ	23 14.5
		USCGS H 16 12 33.2	
		45.1 N 150.8 E	
		Kurile Islands	
		depth about 30 km	
		Mag : 4.8 SD 0.3 (CGS)	
13	Ch	ePZ	16 38 13
	Lh	ePZ	57
	Wr	ePZ	39 00.6
	Qt	ePZ	36.5c
		USCGSH 16 28 58.2	
		44.9 N 150.3 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 5.2 SD 0.2 (CGS)	
13	Qt	ePZ	16 43 20 ±
		USCGS H 16 32 39.0	
		45.1 N 151.3 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.5 SD 0.2 (CGS)	
13	Qt	ePZ	16 47 26.5c
13	Ch	ePZ	16 58 56
	Qt	ePZ	17 00 21.2
		USCGS H 16 49 41.2	
		44.5 N 150.4 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.5 SD 0.2 (CGS)	
13	Qt	ePKPZ	17 04 26.6
		USCGS H 16 45 18.8	
		18.4 N 103.1 W	
		Near coast of Michoacan	
		Mexico	
		Mag : 4.8 SD 0.4 (CGS)	
13	Ch	ePZ	17 35 08
	Lh	ePZ	57
	Qt	ePZ	36 36.0c
		USCGS H 17 25 55.4	
		44.5 N 150.8 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.6 SD 0.3 (CGS)	
13	Ch	ePZ	17 40 35 ±
	Lh	ePZ	41 14
	Qt	ePZ	52.5
		USCGS H 17 31 18.7	
		44.3 N 149.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.7 SD 0.3 (CGS)	
13	Qt	ePZ	18 07 05.5
		USCGS H 17 56 27.0	
		44.5 N 150.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.2 (CGS)	
13	Qt	ePZ	18 18 18.5
13	Ch	ePZ	18 20 17
	Lh	ePZ	55
	Wr	ePZ	58.0
	Qt.	ePZ	21 33.5c
		USCGS H 18 10 55.2	
		44.0 N 150.0 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.7 SD 0.2 (CGS)	
13	Ch	ePZ	18 22 48
	Lh	ePZ	23 39

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Date	Station	Phase	h m s
	Qt	ePZ	24 19.0c
		USCGS H 18 13 44.6	
		44.2 N 149.4 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 4.7 SD 0.4 (CGS)	
13	Ch	ePZ	18 24 19
	Lh	ePZ	58
	Qt	ePZ	25 37.3
		USCGS H 18 14 57.5	
		45.2 N 150.8 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 5.2 SD 0.2 (CGS)	
13	Ch	ePZ	18 46 01
	Lh	ePZ	39
	Qt	ePZ	47 18.2
		USCGS H 18 36 41.6	
		44.9 N 150.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.2 (CGS)	
13	Qt	ePZ	18 56 07.5
13	Ch	ePZ	19 35 21
	Lh	ePZ	36 09
	Wr	ePZ	11.1
	Qt	iPZ	46.8d
		USCGS H 19 26 04.2	
		45.7 N 151.5 E	
		Kurile Islands	
		depth about 30 km	
		Mag : 4.6 SD 0.4 (CGS)	
13	Ch	iPZ	19 36 55
		ipPZ	37 06
	Lh	ePZ	42 d
	Wr	ePZ	44.3
	Qt	iPZ	38 20.3d
		eSN	47 05.6
		USCGS H 19 27 38.2	
		45.7 N 151.7 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 5.5 SD 0.2 (CGS)	
13	Lh	ePZ	19 51 23
	Wr	iPZ	26.8d
	Qt	ePZ	52 02.0
		USCGS H 19 41 20.5	
		45.3 N 151.4 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.9 SD 0.4 (CGS)	
13	Qt	ePZ	20 03 00±
		USCGS H 19 52 16.9	
		55.0 N 151.0 E	
		Kurile Islands	
		depth about 25 km	
		Mag : 4.4 (CGS)	
13	Qt	ePZ	20 05 38.5
		USCGS H 19 54 55.7	
		44.5 N 150.9 E	
		Kurile Isands	
		depth about 35 km	
		Mag : 4.2 (CGS)	
13	Qt	ePZ	20 24 56.7d
		USCGS H 20 14 07.7	
		44.4 N 151.4 E	
		Kurile Islands	
		depth about 25 km	
		Mag : 4.5 (CGS)	
13	Lh	ePZ	20 37 45
	Wr	iPZ	47.3d
	Qt	ePZ	38 22.8d
		USCGS H 20 27 38.2	
		45.6 N 151.7 E	
		Kurile Islands	
		depth about 30 km	
		Mag : 4.8 SD 0.4 (CGS)	
13	Qt	ePZ	20 46 36.7
		USCGS H 20 35 53.3	
		46.1 N 151.8 E	

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Date	Station	Phase	h m s	
		Kurile Islands		
		depth about 30 km		
		Mag : 4.5 SD 0.3 (CGS)		
13	Qt	ePZ	20 49 17	±
13	Qt	ePZ	21 28 26.2	
		USCGS H 21 17 45		*
		45.4 N 151.5 E		
		Kurile Islands		
		depth about 45 km		
		Mag : 4.4 (CGS)		
13	Ch	ePZ	21 44 56	c
	Lh	ePZ	45 42	
	Wr	ePZ	45.0	
	Qt	ePZ	46 21.0	
		USCGS H 21 35 37.3		
		45.3 N 151.7 E		
		Kurile Islands		
		depth about 45 km		
		Mag : 4.7 SD 0.3 (CGS)		
13	Qt	ePZ	21 58 37.2	
		USCGS H 21 48 01.5		
		44.3 N 149.5 E		
		Kurile Islands		
		depth about 50 km		
		Mag : 4.3 (CGS)		
13	Qt	ePZ	22 00 42.5	
		USCGS H 21 50 02.4		
		46.1 N 151.8 E		
		Kurile Islands		
		depth about 45 km		
		Mag : 4.5 SD 0.3 (CGS)		
13	Ch	iPZ	22 04 19	d
		eSE	11 44	
	Lh	ePZ	05 07	
	Wr	ePZ	10.2	
	Qt	iPZ	45.5	
		USCGS H 21 55 00.8		
		44.7 N 152.1 E		
		Kurile Islands		
		depth about 50 km		
		Mag : 5.5 SD 0.3 (CGS)		
13	Ch	ePZ	22 12 12	
	Lh	ePZ	13 00	
	Wr	ePZ	03.2	
	Qt	iPZ	38.5	e
		USCCS H 22 02 58.1		
		45.1 N 150.9 E		
		Kurile Islands		
		depth about 45 km		
		Mag : 4.9 SD 0.4 (CGS)		
13	Qt	ePZ	22 22 02	
13	Qt	ePZ	22 36 11.5	c
		USCGS H 22 25 37.0		
		44.2 N 149.3 E		
		Kurile Islands		
		depth about 45 km		
		Mag : 4.4 SD 0.2 (CGS)		
13	Qt	ePZ	22 40 24.0	
		USCGS H 22 29 48.6		
		44.3 N 149.5 E		
		Kurile Islands		
		depth about 40 km		
		Mag : 4.8 (CGS)		
13	Ch	ePZ	23 14 54	
	Qt	ePZ	16 18.5	
		USCGS H 23 05 33.5		
		45.5 N 151.8 E		
		Kurile Islands		
		depth about 30 km		
		Mag : 4.6 (CGS)		
13	Qt	ePZ	23 19 31.7	
		USCGS H 23 08 49		
		45.2 N 151.4 E		
		Kurile Islands		
		depth about 45 km		
		Mag : 4.6 SD 0.2 (CGS)		
13	Lh	ePZ	23 35 15	
	Wr	ePZ	16.8	
	Qt	ePZ	52.5	c
		USCGS H 23 25 00.8		
		44.4 N 153.0 E		
		Kurile Islands		
		depth about 50 km		
		Mag: 4.7 (CGS)		

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Date	Station	Phase	h m s
14	Ch	ePZ	00 01 34
		epPZ	47
	Lh	ePZ	02 22
		eSN*	01 30
	Wr	ePZ	02 25.8
	Qt	ePZ	03 01.2
		eSE*	11 44.0
		USCGS H 23 52 22.8	
		44.5 N 150.1 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 5.5 (CGS)	
14	Ch	ePZ	00 12 18
	Lh	ePZ	13 04
	Wr	ePZ	07.1
	Qt	ePZ	42.3
		USCGS H 00 03 04.1	
		45.0 N 150.9 E	
		Kurile Islands	
		depth about 60 km	
		Mag : 4.7 SD 0.2 (CGS)	
14	Qt	ePZ	00 22 15.7d
14	Qt	ePZ	00 29 57.0
		USCGS H 00 19 17.9	
		44.5 N 150.5 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.4 SD 0.3 (CGS)	
14	Ch	ePZ	01 01 26
	Qt	ePZ	02 50.5
		USCGS H 00 52 04.0	
		46.6 N 150.6 E	
		Kurile Islands	
		depth about 35 km	
		Mag : 4.5 (CGS)	
14	Qt	ePZ	01 04 03.5
14	Qt	ePZ	01 28 56.0
14	Qt	ePZ	01 30 00.0
		USCGS H 01 19 17.1	
		44.3 N 151.2 E	
		Kurile Islands	
		depth about 55 km	
		Mag: 4.4 SD 0.2 (CGS)	
14	Wr	ePZ	02 06 23.8
	Qt	ePZ	52.0
		eSE	11 33.0
		USCGS H 02 01 24*	
		25.2 N 95.3 E	
		Assam-India-Burma border	
		Mag : 5.3 (CGS)	
14	Wr	ePZ	03 41 16.4
	Qt	iPZ	52.5d
		USCGS H 03 31 07.8	
		45.9 N 151.8 E	
		Kurile Islands	
		depth about 25 km	
		Mag : 5.0 SD 0.3 (CGS)	
14	Qt	ePZ	03 59 12.7
14	Ch	ePZ	04 15 11 c
		epPZ	24
		eSNE	22 32
	Lh	ePZ	15 59 c
	Wr	ePZ	16 01.2
	Qt	ePZ	37.7c
		USCGS H 04 06 01.7	
		44.9 N 150.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 5.3 SD 0.3 (CGS)	
14	Ch	ePZ	04 20 27 c
		cpPZ	39
		eSE	27 52
	Lh	ePZ	21 15 c
		epPZ	28
		ePPZ*	23 24
		eSN*E*	29 23
	Wr	ePZ	21 17.3
	Qt	ePZ	53.0c
		USCGS H 04 11 14.0	
		44.7 N 150.6 E	

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Date	Station	Phase	h m s
		Kurile Islands	
		depth about 45 km	
		Mag : 5.3 SD 0.3 (CGS)	
14	Wr	ePZ	05 34 16.0
	Qt	ePZ	53.2
		USCGS H 05 24 12.3	
		44.5 N 151.0 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 4.9 SD 0.3 (CGS)	
14	Qt	ePKPZ	05 52 44.0
		USCGS H 05 39 17.1	
		2.3 S 77.6 W	
		Peru-Ecuador border	
		depth about 33 km	
		Mag: 4.7 SD 0.3 (CGS)	
14	Qt	ePZ	06 30 50.0
14	Ch	ePZ	06 38 09
	Wr	ePZ	36.4
	Qt	ePZ	43.4d
		USCGS H 06 26 11.7	
		52.8 N 167.1 W	
		Fox Islands, Aleutian Islands	
		depth about 80 km	
		Mag : 5.1 SD 0.2 (CGS)	
14	Wr	ePZ	07 26 00.3
	Qt	ePZ	36.0
		USCGS H 07 15 58.0	
		44.6 N 150.3 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.9 SD 0.2 (CGS)	
14	Wr	ePZ	08 03 47.3
	Qt	ePZ	04 24.0d
		USCGS H 07 53 42.7	
		45.3 N 151.0 E	
		Kurile Islands	
		depth about 35 km	
		Mag: 4.1 (CGS)	
14	Qt	ePZ	08 05 15.3d
		USCGS H 07 54 33.9	
		44.8 N 151.2 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 5.1 SD 0.3 (CGS)	
14	Ch	ePZ	09 38 27
	Qt	ePZ	39 50.0
		USCGS H 09 29 07.1	
		45.5 N 151.7 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.6 SD 0.4 (CGS)	
14	Qt	ePZ	10 09 55.5
14	Qt	ePZ	10 12 06.7d
		USCGS H 10 01 27.2	
		45.1 N 150.8 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.2 (CGS)	
14	Qt	ePZ	10 35 17.0
		USCGS H 10 24 36.9	
		45.7 N 150.2 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.3 (CGS)	
14	Wr	ePZ	11 23 22.8
	Qt	ePZ	59.0
		USCGS H 11 13 19 4	
		45.0 N 150.9 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.4 (CGS)	
14	Ch	ePZ	11 32 32
	Qt	ePZ	33 55.5
		USCGS H 11 23 13.5	
		45.5 N 151.7 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.3 (CGS)	

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Date	Station	Phase	h m s
14	Qt	ePZ	12 22 28.0
		USCGS H 12 11 42.5	
		45.6 N 152.4 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.5 SD 0.2 (CGD)	
14	Wr	iPZ	12 36 08.6
		iSZ	39.2
	Qt	ePZ	37 06.2d
		eSN	38 24.0
		H 12 35 27	
		Hindukush region	
14	Ch	ePZ	13 30 59 d
		epPZ	31 15
		eSN	38 27
	Lh	ePZ	31 45
		esPZ	32 01
		eSN*E*	39 53
		eScSE*	41 31
	Wr	ePZ	31 48·2
	Qt	ePZ	32 25·0d
		epPZ	37·0
		eSN*	41 05·0
		Mu ~~2(3)~~ Sec	
		PZ 0·2 ~~2(3)~~ 1·0	
		MH 23·6 ~~2(3)~~ 20	
		△ = 65°·3	
		USCGS H 13 21 45·2	
		48·8 N 151·0 E	
		Kurile Islands	
		depth about 60 km	
		Mag : 5¾ (Berk),	
		5·9SD 0·3 (CGS)	
14	Wr	ePZ	14 03 25·1
	Qt	ePZ	04 00·5
		USCGS H 13 53 17·4	
		45·0 N 151·1 E	
		Kurile Islands	
		depth about 30 km	
		Mag : 4·8 SD 0·3 (CGS)	
14	Qt	ePZ	14 38 34 ±
14	Qt	ePZ	14 58 16·2d
		USCGS H 14 47 30·9	
		3·3 S 126·7 E	
		Ceram Sea	
		depth about 33 km	
		Mag : 4·7 (CGS)	
14	Qt	ePZ	15 41 51·0
		USCGS H 15 31 39*	
		1·6 N 127·6 E	
		Timor region	
		depth about 231 km	
14	Qt	ePZ	16 00 48·5
14	Ch	ePZ	17 59 30·8
	Lh	ePZ	18 00 17 c
	Wr	ePZ	19·6
	Qt	ePZ	55·5c
		epPZ	01 05·5
		USCGS H 17 50 15·3	
		45·2 N 151·3 E	
		Kurile Islands	
		depth about 60 km.	
		Mag : 5·0 SD 0·4 (CGS)	
14	Qt	ePZ	18 07 01·5
		USCGS H 17 56 17·8	
		45·0 N 151·3 E	
		Kurile Islands	
		depth about 30 km.	
		Mag : 4·5 SD 0·3 (CGS)	
14	Qt	ePZ	18 40 52·0
		USCGS H 18 32 07*	
		4·2 S 103·4 E	
		Sumatra	
		depth about 33 km	
14	Qt	ePZ	20 57 04·0
		USCGS H 20 46 16·8	
		44·8 N 152·3 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4·6 (CGS)	

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Date	Station	Phase	h	m	s
14	Wr	iPZ	21	13	21·7
		iSN			59·4
	Lh	ePZ		14	07
		iSNE		15	08
	Qt	iPZ		14	36·2c
		eSN		16	06·0
		Mu ~~2(3)~~ Sec			
		PZ 0·2 ~~2(3)~~ 0·8			
		△ = 7°·9			
	Ch	ePZ	21	17	34
		H 21 12 43			
		36·8 N 71·9 E			
		Hindukush			
		depth about 160 km			
		Mag : 5·4 (Qt)			
14	Qt	ePZ	21	30	28·2
		USCGS H 21 19 54·7			
		44·3 N 149·3 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4·7 SD 0·2 (CGS)			
14	Qt	ePZ	21	54	18 ±
		USCGS H 21 43 46·7			
		44·5 N 149·2 E			
		Kurile Islands			
		depth about 60 km			
		Mag : 4·1 (CGS)			
14	Qt	ePZ	22	10	45·5
14	Ch	ePZ	22	44	48
	Lh	ePZ		45	32
		epPZ			45
	Wr	ePZ			36·2
	Qt	ePZ		46	12·0d
		USCGS H 22 35 31·7			
		44·5 N 150·6 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 5·0 SD 0·4 (CGS)			
14	Wr	ePZ	23	06	43·0
	Lh	ePZ		07	11
	Qt	ePZ			52·2
		eSE		09	57·5
		H 23 05 13			
		39·5 N 75·0 E			
		Sinkiang Province, China			
		depth about 100 km			
		USCGS H 23 05 16 *			
		39·5 N 74·4 E			
		Sinkiang Province, China			
		depth about 69 km			
15	Qt	ePZ	00	49	37·5
		USCGS H 00 38 53·0			
		45·0 N 151·8 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4·3 (CGS)			
15	Qt	ePZ	00	53	32·0
		USCGS H 00 42 52·4			
		45·1 N 150·9 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4·2 (CGS)			
15	Wr	ePZ	00	57	48.3
	Qt	ePZ		58	21.0d
		USCGS H 00 47 41.0			
		43.2 N 150.2 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4.2 (CGS)			
15	Wr	ePZ	05	20	43.8
	Qt	ePZ		21	19 ±
		USCGS H 05 10 34.2			
		44.3 N 151.4 E			
		Kurile Islands			
		depth about 42 km			
		Mag : 4.2 SD 0.2 (CGS)			
15	Wr	ePZ	06	59	45.1
	Qt	ePZ	07	00	22 ±
		eSN*		09	04.0
		USCGS H 06 49 37.8			

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Date	Station	Phase	h	m	s
		42.2 N 152.3 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4.2 SD 0.2 (CGS)			
15	Qt	ePKPZ	07	25	59.0
		USCGS H 07 06 59.9			
		20.5 S 173.9 W			
		Tonga Islands			
		depth about 33 km			
		Mag : 5.1 SD 0.3 (CGS)			
15	Lh	ePZ	08	10	15
	Wr	iPZ			17.5
	Qt	ePZ			53.5
		ipPZ		11	05.7
		eSE		19	35.0
		USCGS H 08 00 11.5			
		45.0 N 151.1 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4.9 SD 0.3 (CGS)			
15	Ch	ePZ	09	11	20 d
	Lh	ePZ		12	06
	Wr	iPZ			08.8
	Qt	iPZ			45.2d
		epPZ			59.0
		eSE		21	05.6
		Mu 2(3) Sec			
		MH 1.6 2(3) 20			
		$\triangle = 64°.3$			
		USCGS H 09 02 08.3			
		45.3 N 150.2 E			
		Kurile Islands			
		depth about 40 km			
		Mag :5.4 SD 0.2 (CGS), 5.6 (Qt)			
15	Ch	ePZ	09	41	20
	Lh	ePZ		42	06
	Wr	ePZ			10.6
	Qt	iPZ			46.5d
		eSN		51	23.5
		USCGS H 09 32 08.7			
		45.2 N 150.2 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 5.5 SD 0.4 (CGS)			
15	Wr	ePZ	10	09	28.8
	Qt	ePZ			41.7c
		eSE		18	07 ±
	Ch	ePZ		11	25
		USCGS H 09 59 30.1			
		67.2 N 18.4 W			
		North of Iceland			
		depth about 33 km			
		Mag: 5½ (Pal), 5.2 SD 0.3 (CGS)			
16	Ch	ePZ	10	56	18
	Lh	ePZ		57	06
	Wr	ePZ			08.4
	Qt	iPZ			45.5c
		eSE	11	06	19 ±
		USCGS H 10 47 12.6			
		44.6 N 149.0 E			
		Kurile Islands			
		depth about 50 km			
		Mag: 5.4 SD 0.4 (CGS)			
15	Ch	ePZ	12	03	08 d
		epPZ			21
	Lh	ePZ			50
	Wr	ePZ			53.2
	Qt	ePZ		04	30.0d
		eSN*		13	18.0
		USCGS H 11 53 45.5			
		45.1 N 151.9 E			
		Kurile Islands			
		depth about 55 km			
		Mag : 4.8 SD 0.3 (CGS)			
15	Ch	ePZ	12	13	12
	Wr	ePZ			57.7
	Qt	iPZ		14	33.6c
		USCGS H 12 03 48.7			
		45.1 N 151.8 E			

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Date	Station	Phase	h m s	
		Kurile Islands		
		depth about 45 km		
		Mag : 4.7 SD 0.3 (CGS)		
15	Wr	ePZ	13 41 32.4	
	Qt	ePZ	42 21.2	
		eSE	44 27.0	
		H 13 39 39		
		Tadzhik, S.S.R.		
15	Wr	ePZ	14 08 49.0	
	Qt	ePZ	53.0	
15	Wr	ePZ	17 25 54.6	
	Qt	ePZ	26 29	±
		USCGS H 17 15 55.7		
		44.0 N 149.3 E		
		Kurile Islands		
		depth about 50 km		
		Mag : 4.4 (CGS)		
15	Qt	ePZ	17 45 38.5	
		USCGS H 17 35 00.8		
		44.8 N 150.4 E		
		Kurile Islands		
		depth about 40 km		
		Mag : 4.2 (CGS)		
15	Ch	ePZ	18 03 26	
	Lh	ePZ	04 09	d
	Wr	ePZ	12.3	
	Qt	ePZ	48.5	d
		USCGS H 17 54 04.3		
		45.2 N 151.3 E		
		Kurile Islands		
		depth about 29 km		
		Mag : 4.6 (CGS)		
15	Ch	ePZ	18 33 17	
		epPZ	29	
		eSN	40 41	
	Lh	ePZ	34 00	c
		epPZ	14	
		eSN*	42 09	
		esSN*	26	
	Qt	iPZ	40.0	c
		eSN	43 23.0	
		Mu ~~2(3)~~ Sec		
		MH 5.7 ~~2(3)~~ 20		
		△ = 65°.9		
		USCGS H 18 23 57.8		
		45.3 N 151.0 E		
		Kurile Islands		
		depth about 35 km		
		Mag: 4.9 SD 0.5 (CGS),		
		6.0 (Qt)		
15	Ch	ePZ	20 50 48	
	Lh	ePZ	51 30	
	Wr	ePZ	35.3	
	Qt	ePZ	52 10.5	
		eSN*	21 00 50.0	
		Mu ~~2(3)~~ Sec		
		MH 2.6 ~~2(3)~~ 20		
		△ = 65°.2		
		USCGS H 20 41 30.2		
		45.4 N 151.1 E		
		Kurile Islands		
		depth about 40 km		
		Mag: 4.9 SD 0.3 (CGS),		
		5.8 (Qt)		
15	Ch	ePZ	21 53 17	c
		eSE	59 56	
	Lh	ePZ	55 24	c
		epPZ	37	
		eSN*E*	22 03 53	
		esSN*E*	04 14	
	Wr	ePZ	21 55 46.0	
	Qt	ePZ	56 01.0	
		eSN	22 05 02.0	
		USCGS H 21 44 58.0		
		3.0 S 129.9 E		
		Ceram		
		depth about 27 km		
		Mag: 5.2 (CGS)		
15	Qt	ePZ	22 17 03	±

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Date	Station	Phase	h m s
15	Qt	ePZ	22 52 28.5
		USCGS H 22 41 44.7	
		46.8 N 152.4 E	
		Kurile Islands	
		depth about 35 km	
		Mag: 4.6 SD 0.3 (CGS)	
15	Ch	ePZ	23 18 19
	Qt	ePZ	19 35.0
		USCGS H 23 09 00.5	
		45.9 N 149.9 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.6 (CGS)	
16	Qt	ePZ	01 35 48.0 c
		USCGS H 01 25 06.7	
		46.1 N 151.8 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.9 SD 0.3 (CGS)	
16	Qt	iPZ	02 36 12.0 d
16	Ch	ePZ	05 24 58
	Lh	ePZ	25 36±
	Wr	ePZ	41.0
	Qts	ePZ	26 14.5
		USCGS H 05 15 36.1	
		44.8 N 150.4 E	
		Kurile Islands	
		depth about 33 km	
		Mag: 5.2 SD 0.2 (CGS)	
16	Qt	ePZ	07 49 38.5
		eSE	51 18.0
		H 07 47 29	
16	Qt	ePZ	08 36 19.0
16	Ch	ePZ	08 43 06
	Lh	ePZ	48±
	Wr	ePZ	50.8
	Qt	ePZ	44 26.5
		USCGS H 08 33 42.0	
		45.6 N 151.9 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 5.0 SD 0.4 (CGS)	

Date	Station	Phase	h m s
16	Qt	ePZ	09 40 50 ±
		USCGS H 09 29 56.7	
		45.2 N 153.8 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.6 SD 0.3 (CGS)	
16	Qt	ePZ	09 47 49.5
		eSE	48 15.0
	Wr	ePZ	37.1
		H 09 47 14	
16	Ch	ePZ	10 40 09
	Lh	ePZ	55 ±
	Wr	iPZ	58.8
	Qt	ePZ	41 34.0
		USCGS H 10 30 55.2	
		45.2 N 150.4 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 5.0 SD 0.3 (CGS)	
16	Qt	ePZ	11 56 54.4
16	Ch	ePZ	12 55 39
		eSN	13 01 59
	Lh	ePZ	12 57 52
	Qt	iPZ	58 28.5c
		USCGS H 12 47 44.2	
		1.8 S 127.9 E	
		Halmahera region	
		depth about 33 km	
		Mag : 5.2 (CGS)	
16	Qt	iPZ	14 46 29.2c
		eSN	47 49.8
		H 14 44 44	
16	Qt	ePZ	15 10 19±
		USCGS H 14 59 43.8	
		46.6 N 150.4 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.3 (CGS)	
16	Qt	ePZ	15 27 03.6c
		eSE	28 25.0
		H 15 25 19	

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Date	Station	Phase	h m s
16	Wr	iPZ	15 44 17.8
	Lh	iPZ	46 d
		eSZ	46 06
	Qt	ePZ	45 25.0
		e(S)N	47 17.0
		Mu ~~2(3)~~ Sec	
		PZ 0.17 ~~2(3)~~ 0.9	
		△ = 10°.8	
	Ch	iPZ	48 02 d
		eSN	52 06
		H 15 42 55	
		39.0 N 73.0 E	
		Tadzhik, S.S.R.	
		depth about 33 km	
		USCGS H 15 43 00.8	
		38.6 N 73.4 E	
		Tadzhik, S.S.R.	
		depth about 33 km	
		Mag: 5.9 SD 0.2 (CGS),	
		5.7 (Qt)	
16	Qt	ePZ	16 23 09±
		eSE	25 08.2
		H 16 20 36	
16	Wr	ePZ	16 49 50.4
	Qt	ePZ	51 00.0
16	Wr	ePZ	18 24 01.5
	Qt	ePZ	25 06±
		eSN	27 09.0
		H 18 22 28	
16	Qt	iPZ	19 04 23.5c
		eSSN*	06 19.0
	Wr	ePZ	05 31.2
	Lh	ePZ	49
		USCGS H 19 02 25.0	
		28.8 N 58.0 E	
		Southern Iran	
		depth about 32 km	
		Mag: 4.8 (CGS)	
16	Wr	ePZ	19 16 06.0
	Qt	ePZ	17 06±
		eSE	18 56.0
		H 19 14 44	
16	Wr	ePZ	20 32 26.9
	Lh	ePZ	55
		eSNE	34 19
	Qt	iPZ	33 33.1c
		eSN	35 26.0
		Mu ~~2(3)~~ Sec	
		PZ 0.02 ~~2(3)~~ 1.0	
		△ = 10°.3	
		H 20 31 10	
		39.1 N 73.5 E	
		Tadzhik, S.S.R.	
		depth about 100 km	
		USCGS H 20 31 15	
		38.6 N 73.1 E	
		Tadzhik, S.S.R.	
		depth about 70 km	
16	Ch	ePZ	20 47 55
	Lh	ePZ	49 55
		epPZ	50 03
	Qt	ePZ	37.0
		USCGS H 20 39 30.5	
		8.8 N 137.9 E	
		Pelau Islands region	
		depth about 28 km	
		Mag: 5.0 (CGS)	
16	Ch	ePZ	21 40 09
	Lh	ePZ	52±
	Wr	ePZ	56.4
	Qt	ePZ	41 31.0
		USCGS H 21 30 52.7	
		44.4 N 150.9 E	
		Kurile Islands	
		depth about 80 km	
		Mag: 5.0 SD 0.5 (CGS)	
16	Qt	ePZ	22 50 21.7
		eSN	52 06.0
		H 22 48 08	

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Date	Station	Phase	h m s
17	Wr	ePZ	00 13 32.0
	Qt	ePZ	14 35.5
		eSE	16 34±
		H 00 12 02	
17	Qt	ePZ	03 55 48±
		USCGS H 03 45 08.6	
		45.1 N 151.4 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.3 SD 0.3 (CGS)	
17	Ch	ePZ	04 29 21
	Qt	ePZ	30 35±
		USCGS H 04 19 50.0	
		45.2 N 151.7 E	
		Kurile Islands	
		depth about 50 km	
		Mag: 4.5 SD 0.3 (CGS)	
17	Ch	ePZ	08 20 00
	Lh	ePZ	49
		epPZ	21 02±
	Wr	ePZ	20 53.4
	Qt	ePZ	21 29.2
		epPZ	41.0
		USCGS H 08 10 55.2	
		44.3 N 149.1 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.7 SD 0.2 (CGS)	
17	Wr	ePZ	09 34 39.3
		eSZ	35 56.0
	Lh	ePZ	09
		eSNE	36 34
	Qt	ePZ	35 45
		eSE	37 41.0
		Mu 2(3) Sec	
		PZ 0.04 2(3) 1.0	
		△ = 10°.1	
	Ch	ePZ	38 25
		H 09 33 20	
		39.1 N 73.8 E	
		Tadzhik, S.S.R.	
		depth about 60 km	
		USCGS H 09 33 24.0	
		38.8 N 73.4 E	
		Tadzhik, S.S.R.	
		depth about 40 km	
		Mag: 4.4 (CGS) , 5.1 (Qt)	
17	Wr	ePZ	10 26 45·2
	Qt	ePZ	27 35±
		USCGS H 10 16 48.9	
		43.8 N 151.0 E	
		Kurile Islands	
		depth about 50 km	
		Mag: 4.5 SD 0.3 (CGS)	
17	Wr	ePZ	13 08 32.9
	Qt	ePZ	09 09.2d
		USCGS H 12 58 33.6	
		45.1 N 150.3 E	
		Kurile Islands	
		depth about 50 km	
		Mag: 4.2 SD 0.2 (CGS)	
17	Ch	ePZ	14 15 49.7
	Qt	ePZ	17 07.1
		USCGS H 14 06 23.2	
		44.2 N 149.2 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.6 SD 0.4 (CGS)	
17	Ch	ePZ	14 20 55
		eSN	26 27
	Wr	ePZ	23 36.1
	Qt	iPZ	55.1c
		USCGS H 14 13 59.8	
		9.8 N 126.5 E	
		Near coast of Mindanao	
		Philippine Islands	
		depth about 33 km	
		Mag: 5.4 SD 0.4 (CGS)	
17	Wr	ePZ	14 32 00.6

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Date	Station	Phase	h m s
	Qt	ePZ	56.2
		eSN	34 25.1
		Hindukush region	
17	Qt	ePZ	15 13 44 ±
		USCGS H 15 03 12.7	
		44.1 N 149.2 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 4.6 SD 0.3 (CGS)	
17	Ch	ePZ	19 10 28
	Qt	iPZ	13 40.1
		USCGS H 19 03 31.6	
		6.6 N 126.3 E	
		Off east coast of Mindanao,	
		Philippine Islands	
		depth about 33 km	
		Mag : 5.4 (CGS)	
17	Qt	ePZ	22 42 41.7
17	Ch	ePZ	22 45 11
	Wr	ePZ	48.2
	Qt	ePZ	46 23.9
		USCGS H 22 35 40.1	
		45.3 N 151.6 E	
		Kurile Islands	
		depth about 30 km	
		Mag : 4.4 SD 0.4 (CGS)	
17	Wr	ePZ	23 07 09.7
	Qt	ePZ	08 17 ±
		eSE	10 14.4
		H 23 05 46	
17	Ch	ePZ	23 33 39
		eSE	40 58
	Lh	ePZ	35 26 c
		esPZ	46
		ePcPZ	35 15
		eSN*	42 24
		esSN*	46
	Wr	ePZ	34 30.6
	Qt	iPZ	35 06.7
		eSN	43 44.7
		ePKPPKPZ	00 04 14.2
		Mu ~~2(3)~~ Sec	
		MH 24.1 ~~2(3)~~ 20.0	
		△ = 65°.0	
		USCGS H 23 24 34.4	
		44.6 N 149.0 E	
		Kurile Islands	
		depth about 45 km	
		Mag. 5.4 SD 0.3 (CGS),	
		6.4 (Qt)	
18	Ch	ePZ	00 04 02
	Lh	ePZ	50 c
	Wr	ePZ	54.0
	Qt	ePZ	05 29.7
		USCGS H 23 54 56.9	
		44.5 N 149.0 E	
		Kurile Islands	
		depth about 45 km	
		Mag ; 4.9 SD 0.2 (CGS)	
18	Wr	ePZ	02 09 36.4
	Qt	iPZ	10 12.6c
		USCGS H 01 59 38.8	
		44.5 N 149.1 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.9 SD 0.2 (CGS)	
18	Qt	ePZ	02 39 16.7
		USCGS H 02 28 40.6	
		44.5 N 153.3 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.2 (CGS)	
18	Ch	ePZ	04 10 45
	Wr	ePZ	11 24.2
	Qt	ePZ	12 00.0
		USCGS H 04 01 21.7	
		44.5 N 150.4 E	
		Kurile Islands	
		depth about 60 km	
		Mag : 4.8 SD 0.3 (CGS)	

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Date	Station	Phase	h m s
18	Qt	ePZ	05 14 37.0
18	Qt	ePZ	05 26 11.0
		USCGS H 05 16 10.4	
		42.8 N 141.4 E	
		Near north coast of	
		Hokkaido, Japan	
		depth about 40 km	
		Mag : 4.6 SD 0.3 (CGS)	
18	Lh	ePZ	06 30 18±
	Wr	ePZ	22.2
	Qt	ePZ	58.8c
		USCGS H 06 20 21.6	
		44.7 N 149.9 E	
		Kurile Islands	
		depth about 60 km	
		Mag . 4.3 SD 0.4 (CGS)	
18	Wr	ePZ	07 15 17.7
	Qt	ePZ	54.0
		USCGS H 07 05 14.9	
		45.8 N 150.8 E	
		Kurile Islands	
		depth about 30 km	
		Mag : 4.5 SD 0.3 (CGS)	
18	Qt	ePZ	08 05 45±
		USCGS H 07 55 14.0	
		44.5 N 151.1 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 4.3 SD 0.3 (CGS)	
18	Ch	ePZ	09 02 43.0d
		eSE	10 09
	Lh	ePZ	03 29
	Wr	ePZ	44.0
	Qt	ePZ	04 09.0
		eSN*	13 00.0
		Mu 2(3) Sec	
		MH 4.6 2(3) 20.0	
		△ = 67°.2	
		USCGS H 08 53 33.9	
		44.8 N 150.2 E	
		Kurile Islands	
		depth about 60 km	
		Mag: 5.0 SD 0.3 (CGS),	
		5.9 (Qt)	
18	Ch	ePZ	10 27 35
	Qt	ePZ	46 ±
	Wr	ePZ	28 10.6
18	Wr	ePZ	12 33 01.4
	Qt	ePZ	49 ±
18	Qt	ePZ	17 10 23.6
18	Ch	iPZ	18 04 13 c
		eSE	11 40
	Lh	ePZ	04 59 c
		epPZ	05 10
		esPZ	21
	Wr	ePZ	01.4
	Qt	iPZ	38.0c
		eSN*	14 12.0
		Mu 2(3) Sec	
		MH 1.9 2(3) 20.0	
		△ = 64°.3	
		USCGS H 17 55 00.2	
		45.6 N 150.6 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 5.2 SD 0.3 (CGS),	
		5.7 (Qt)	
18	Lh	ePZ	20 15 24
	Wr	ePZ	26.8
	Qt	ePZ	16 02.6
		eSN*	24 52.0
		Mu 2(3) Sec	
		MH 2.4 2(3) 20.0	
		△ = 66°.9	
		USCGS H 20 05 14.4	
		47.6 N 154.3 E	
		Kurile Islands	
		depth about 40 km	
		Mag. 5.1 SD 0.3 (CGS),	
		5.8 (Qt)	

Major Shocks
International Seismological Centre

Date	Station	Phase	h	m	s
18	Ch	ePZ	21	32	08
	Lh	ePZ			55
		epPZ		33	07
		ePPN		35	10
	Wr	ePZ		32	57.7
	Qt	iPZ		33	33.5d
		epPZ			46.0
		USCGS H 21 22 52.7			
		45.2 N 151.1 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 5.0 SD 0.3 (CGS)			
18	Wr	ePZ	21	45	45.2
	Qt	ePZ			47.6
		USCGS H 21 36 55.0			
		5.3 S 103.5 E			
		Sumatra			
		depth about 33 km			
		Mag : 5.1 (CGS)			
18	Wr	ePZ	22	12	30.2
	Qt	ePZ			32.5
18	Qt	ePZ	22	29	22±
18	Qt	ePZ	23	03	36±
		USCGS H 22 52 50.6			
		46.1 N 152.5 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4.4 SD 0.3 (CGS)			
18	Qt	ePZ	23	12	46±
18	Lh	ePZ	23	53	29
	Qt	ePZ		54	08.7
		USCGS H 23 43 35.9			
		44.7 N 149.2 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4.4 SD 0.2 (CGS)			
19	Ch	iPZ	02	28	09d
		eSE		35	54
	Lh	ePZ		28	49
		epPZ		29	01
	Wr	ePZ		28	49.7
	Qt	ePZ			29 26.6
		eSN*E*			38 12.1
		Mu ~~2(3)~~ Sec			
		PZ 0.1 ~~2(3)~~ 1.0			
		MH 12.1 2(3) 20.0			
		△ = 66°.3			
		USCGS H 02 18 37.9			
		46.8 N 153.7 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 5.2 SD 0.4 (CGS), 6.0 (Qt)			
19	Ch	ePZ	03	24	34
	Lh	ePZ		25	14
	Qt	iPZ			52.6c
		USCGS H 03 15 02.5			
		46.5 N 153.9 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 5.1 SD 0.3 (CGS)			
19	Ch	ePZ	03	43	53
	Lh	ePZ		44	33
	Wr	ePZ			33.5
	Qt	iPZ		45	09.2c
		USCGS H 03 34 19.6			
		56.6 N 153.8 E			
		Kurile Islands			
		Depth about 33 km			
		Mag: 5½ (Pa l), 5.4 SD 0.4 (CGS)			
19	Ch	iPZ	03	56	41c
		ipPZ			50
	Lh	ePZ		57	22
	Wr	ePZ			22.3
	Qt	iPZ			59.5c
		USCGS H 03 47 07.7			
		46.8 N 153.7 E			
		Kurile Islands			
		depth about 25 km			
		Mag : 5.2 SD 0.2 (CGS)			
19	Qt	ePZ	04	18	25.0
		USCGS H 04 07 35.4			

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Date	Station	Phase	h m s
		46.8 N 153.7 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.5 SD 0.5 (CGS)	
19	Qt	ePZ	04 21 30.0
		USCGS H 04 10 44*	
		47.3 N 153.6 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.2 (CGS)	
19	Qt	ePZ	05 51 52.0
		USCGS H 05 41 18.1	
		44.6 N 149.1 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.2 (CGS)	
19	Wr	ePZ	06 47 49.0
	Qt	ePZ	48 50.6
		eSE	51 01.0
	Ch	ePZ	42
		USCGS H 06 46 06.7	
		41.2 N 71.3 E	
		Kirghiz, S.S.R.	
		depth about 33 km	
		Mag: 5.0 (CGS)	
19	Qt	ePZ	07 38 03.2
		esPZ	19.0
19	Qt	ePZ	09 12 10.0
		USCGS H 09 02 20.1	
		9.9 N 126.1 E	
		Near coast of Leyte,	
		Philippine Islands	
		depth about 86 km	
19	Qt	ePZ	11 46 25.0
19	Qt	iPZ	12 03 30.2d
		USCGS H 11 52 55.2	
		10.1 S 119.3 E	
		Sumba	
		depth about 33 km	
19	Ch	ePZ	16 24 27
	Lh	ePZ	25 17 c
		epPZ	30
	Wr	ePZ	19.8
	Qt	ePZ	55.8
		USCGS H 16 15 21.4	
		44.4 N 150.9 E	
		Kurile Islands	
		depth about 120 km	
		Mag. 5.1 SD 0.2 (CGS)	
19	Qt	ePZ	16 54 37±
19	Wr	ePZ	18 12 06.7
	Qt	ePZ	42.4
		USCGS H 18 01 58*	
		46.5 N 152.7 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.2 (CGS)	
19	Lh	ePZ	19 20 18
	Qt	ePZ	57.2
		USCGS H 19 10 15.4	
		45.2 N 151.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.3 SD 0.3 (CGS)	
19	Lh	ePZ	21 03 33±
		epPZ	47
	Wr	ePZ	37.8
	Qt	ePZ	04 27.2
		USCGS H 20 53 37*	
		42.6 N 152.0 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 3.9 (CGS)	
11	Lh	ePZ	23 21 45
		epPZ	56
	Qt	ePZ	22 23.2
		epPZ	35.1
		USCGS H 23 11 40.9	
		45.2 N 151.1 E	

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Date	Station	Phase	h	m	s	
		Kurile Islands				
		depth about 33 km				
		Mag : 4.6 SD 0.3 (CGS)				
19	Qt	ePZ	23	55	14	±
		USCGS H 23 44 31.6				
		45.1 N 151.4 E				
		Kurile Islands				
		depth about 40 km				
		Mag : 4.4 SD 0.2 (CGS)				
20	Qt	ePKPZ	00	42	33.2	
	Wr	ePKPZ			45	
		USCGS H 00 22 53.3				
		37.7 S 73.2 E				
		Near coast of Chile				
		depth about 35 km				
		Mag : 5.0 SD 0.2 (CGS)				
20	Ch	ePZ	01	02	21	
		epPZ			30	
	Lh	ePZ	03	10		
	Wr	ePZ			12.7	
	Qt	iPZ			50 2d	
		eSN	12	35.2		
		Mu ~~2(3)~~ Sec				
		MH 89.0 ~~2(3)~~ 20.0				
		△ = 66°.2				
		USCGS H 00 53 07.2				
		44.7 N 150.7 E				
		Kurile Islands				
		depth about 25 km				
		Mag : $6\frac{3}{4}$-7 (Pas),				
		$7\frac{1}{4}$-$7\frac{1}{2}$ (Pal), 6.7 (Qt)				
20	Wr	ePZ	03	44	49.4	
	Qt	ePZ		45	25.4	
20	Wr	ePZ	04	07	19.4	
	Qt	ePZ			55.7	
20	Wr	ePZ	04	41	37.4	
	Qt	ePZ		42	13.7	
20	Qt	ePZ	04	50	47	±
		USCGS H 04 40 09.1				
		44.9 N 150.3 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 4.6 SD 0.Z (CGS)				
20	Qt	ePZ	04	57	35.2	
		USCGS H 04 46 57.9				
		44.6 N 149.8 E				
		Kurile Islands				
		depth about 40 km				
		Mag : 4.2 SD 0.2 (CGS)				
20	Wr	ePZ	05	08	55.4	
	Qt	ePZ			09 31.4	
		USCGS H 04 58 55.0				
		44.5 N 149.7 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 4.4 SD 0.3 (CGS)				
20	Qt	ePZ	05	15	05	
20	Qt	ePZ	05	31	01.2	
		USCGS H 05 27 18.0				
		44.9 N 151.4 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 4.8 SD 0.4 (CGS)				
20	Qt	ePZ	05	51	35.8	
		USCGS H 05 40 50.6				
		42.2 N 153.7 E				
		Kurile Islands				
		depth about 55 km				
		Mag : 4.5 SD 0.5 (CGS)				
20	Lh	cPZ	06	20	26	±
	Wr	cPZ			29.5	
	Qt	cPZ			21 05.6	
		USCGS H 06 10 25.0				
		43.9 N 150.7 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 5.2 (GCS)				
20	Qt	ePZ	06	49	27	±
		USCGS H 06 38 51.0				
		44.4 N 150.3 E				

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Date	Station	Phase	h	m	s
		Kurile Islands			
		depth about 50 km			
		Mag : 4·8 SD 0·2 (CGS)			
20	Lh	ePZ	08	36	09
		ipPZ			21
	Wr	iPZ			12·2d
	Qt	ePZ			48·3
		USCGS H	08	26	12·3
		44·3 N	149·4 E		
		Kurile Islands			
		depth about 33 km			
		Mag : 4·9 SD 0·2 (CGS)			
20	Ch	ePZ	09	19	53
		eSNE		27	12
	Lh	ePZ		20	42
		esPZ		21	04
		eSN*E*		28	48
		esSN*		29	04
		eScSE*		30	21
	Wr	ePZ		20	45·7
	Qt	iPZ		21	28·8
		eSN*		30	04·2
		Mu ~~2(3)~~ Sec			
		MH 9·5 ~~2(3)~~ 20·0			
		△ = 65°.7			
		USCGS H	09	10	43·9
		44·4 N	150·0 E		
		Kurile Islands			
		depth about 40 km			
		Mag : 5·5 SD 0·3 (CGS), 6·1 (Qt)			
20	Qt	ePZ	11	19	43·2
20	Ch	iPZ	12	01	30 c
		eSE		08	54
	Lh	ePZ		02	19 c
		eSN*Z*		10	27
		eScSE*		12	04
		eSSN*E*		14	23
	Wr	ePZ		02	21·7
	Qt	iPZ			58·7c
		eSE*		11	42·2

Date	Station	Phase	h	m	s
		Mu ~~2(3)~~ Sec			
		MH 14·2 ~~2(3)~~ 20·0			
		△ = 66°.0			
		USCGS H	11	52	20·7
		44·7 N	150·2 E		
		Kurile Islands			
		depth about 45 km			
		Mag : 5·1 SD 0·5 (CGS)			
20	Qt	ePZ	13	09	30·8
	Wr	ePZ			53·7
		USCGS H	12	59	58·6
		24·1 N	5·1 E		
		Southern Algeria			
		depth about 0 km			
		Mag : 5·6 SD 0·1 (CGS)			
20	Lh	ePZ	13	31	13
	Wr	ePZ			16·1
	Qt	ePZ			52·2
		USCGS H	13	21	14·1
		45·1 N	150·5 E		
		Kurile Islands			
		depth about 45 km			
		Mag : 5·2 (CGS)			
20	Wr	ePZ	15	21	30·8
	Qt	ePZ			22 05·8c
		USCGS H	15	11	23·5
		44·1 N	151·1 E		
		Kurile Islands			
		depth about 50 km			
		Mag : 4·7 SD 0·3 (CGS)			
20	Qt	ePZ	15	39	46·3
		USCGS H	15	29	06·5
		43·7 N	150·3 E		
		Kurile Islands			
		depth about 50 km			
		Mag : 4·5 SD 0·3 (CGS)			
20	Wr	ePZ	16	10	15·8
	Qt	ePZ			51·6
		USCGS H	16	00	15·1
		44·3 N	149·7 E		

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Date	Station	Phase	h	m	s
		Kurile Islands			
		depth about 45 km			
		Mag : 4·4 SD 0·4 (CGS)			
20	Lh	ePZ	17	51	23
		epPZ			32
		esPZ			44
	Wr	ePZ			27·2
	Qt	ePZ		52	03·3
		esPZ			23·3
		eSE	18	00	54
		Mu 2 ~~(3)~~ Sec			
		MH 2·9 ~~2 (3)~~ 20·0			
		△ = 67°.2			
		USCGS H 17 41 27·3			
		44·2 N 149·6 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4·8 SD 0·3 (CGS)			
20	Ch	ePZ	18	08	08
	Lh	ePZ			55
		epPZ		09	07
		esPZ			19
	Wr	ePZ		08	58·3
	Qt	ePZ		09	33·5
		epPZ			45·8
		esPZ			57·8
		USCGS H 17 58 58·7			
		44·2 N 149·6 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 5·0 SD 0·3 (CGS)			
20	Lh	ePZ	19	57	10
		epPZ			21
		esPZ			32 ±
	Wr	ePZ			14·4
	Qt	ePZ			50·7
		esPZ		58	12·4
		USCGS H 19 47 14·3			
		44·2 N 149·6 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4·3 SD 0·2 (CGS)			
20	Lh	ePZ	21	18	18
	Qt	ePZ			56·7
		USCGS H 21 08 21·7			
		45·0 N 149·8 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4·5 SD 0·3 (CGS)			
20	Ch	ePZ	21	50	19 d
		eSNE			48
	Wr	iPZ		54	40·4
	Qt	ePZ		55	02·2
		USCGS H 21 49 36·0			
		21·9 N 94·7 E			
		Burma			
		depth about 115 km			
20	Qt	ePZ	22	58	30 ±
		USCGS H 22 47 53·3			
		44·2 N 149·7 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4·1 SD 0·3 (CGS)			
20	Qt	ePZ	23	02	50·5
		USCGS H 22 52 08·8			
		45·9 N 151·7 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4·7 SD 0·3 (CGS)			
21	Qt	ePZ	02	24	22·0
21	Qt	ePZ	05	53	52·0
21	Qt	ePZ	09	50	54 ±
		epPZ			51 07·2
		USCGS H 09 40 14·6			
		44·7 N 150·3 E			
		Kurile Islands			
		depth about 55 km			
		Mag : 4·7 SD 0·3 (CGS)			

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Date	Station	Phase	h	m	s
21	Qt	ePZ	10	18	29·2
		USCGS H 10 07 52·9			
		45·0 N 150·3 E			
		Kurile Islands			
		depth about 55 km			
		Mag : 4·4 SD 0·4 (CGS)			
21	Qt	ePZ	11	28	01 ±
		eSE		29	18·0
		H 11 26 20			
21	Ch	ePZ	13	18	24
	Lh	ePZ		19	10
		epPZ			23
	Qt	ePZ			48·1c
		esPZ		20	02·1
		USCGS H 13 09 05·4			
		45·2 N 151·6 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4.8 SD 0.3 (CGS)			
21	Lh	ePZ	14	50	57
		eSN*E*		52	08
	Qt	iPZ		51	33.9
		eSE		53	18·1
		Mu ~~2 (3)~~ Sec			
		PZ 0·04 ~~2 (3)~~ 0·8			
		△ = 9°.3			
		USCGS H 14 49 14·9			
		38·4 N 73·3 E			
		Tadzhik, S.S.R.			
		depth about 84 km			
		Mag : 4·8 (CGS), 4·7 (Qt)			
21	Qt	ePZ	15	46	15 ±
		USCGS H 15 35 35·4			
		44·6 N 150·5 E			
		Kurile Islands			
		depth about 50 km			
		Mag : 4·5 SD 0·3 (CGS)			
21	Ch	ePZ	15	47	31
	Lh	ePZ		48	18
	Qt	iPZ			57.4c
		USCGS H 15 38 24.3			
		45.5 N 149.7 E			
		Kurile Islands			
		depth about 55 km			
		Mag : 5.4 SD 0.3 (CGS)			
21	Ch	ePZ	17	29	53
	Lh	ePZ		30	44
		epPZ		31	00
	Qt	ePZ			23.7
		eSE*		40	10.0
		USCGS H 17 20 46.0			
		44.1 N 150.3 E			
		Kurile Islands			
		depth about 65 km			
		Mag : 5.0 SD 0.4 (CGS)			
21	Qt	ePZ	19	41	17.1
21	Lh	ePZ	20	49	42
	Qt	ePZ		50	21.1
		USCGS H 20 39 39.3			
		44.2 N 151.0 E			
		Kurile Islands			
		depth about 50 km			
		Mag : 4.6 SD 0.3 (CGS)			
21	Qt	ePZ	21	26	42.6
		USCGS H 21 15 48.8			
		43.3 N 152.5 E			
		Kurile Islands			
		depth about 20 km			
		Mag : 4.4 (CGS)			
21	Lh	ePZ	23	28	40
	Qt	ePZ		29	19.6
		eSN		38	03.1
		USCGS H 23 18 41.3			
		44.0 N 150.3 E			
		Kurile Islands			
		depth about 50 km			
		Mag : 4.9 SD 0.4 (CGS)			
21	Ch	ePZ	23	38	32.5
	Lh	ePZ		39	20
	Qt	ePZ			58 ±
		USCGS H 23 29 20.7			

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Date	Station	Phase	h m s
		44.0 N 150.1 E	
		Kurile Islands	
		depth about 55 km	
		Mag: 5.2 SD 0.3 (CGS)	
21	Lh	ePZ	23 43 10
		epPZ	20
	Qt	ePZ	49.2
		ipPZ	44 02.7
		USCGS H 23 33 16.1	
		44.2 N 149.0 E	
		Kurile Islands	
		depth about 55 km	
		Mag: 4.7 SD 0.2 (CGS)	
22	Ch	ePZ	01 07 22
	Qt	ePZ	10 32.4
		USCGS H 01 00 14.8	
		13.7 N 121.6 E	
		Luzon, Philippine Islands	
		depth about 15 km	
		Mag: 5.0 (CGS)	
22	Qt	ePZ	02 39 50 ±
		USCGS H 02 29 06.9	
		44.3 N 151.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.7 SD 0.4 (CGS)	
22	Ch	ePZ	03 26 27.4
	Lh	ePZ	27 14
		epPZ	27
		eSN*	35 20
	Qt	ePZ	27 52.7
		iPZ	54.1d
		eSN*	36 36.0
		Mu ~~2(3)~~ Sec	
		MH 6.7 ~~2(3)~~ 20.0	
		△ = 65°.9	
		USCGS H 03 17 15.2	
		45.0 N 150.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 5.2 SD 0.3 (CGS)	
		6.0 (Qt)	
22	Lh	ePZ	03 35 39
	Qt	ePZ	36 18.7d
		USCGS H 03 25 38.8	
		43.9 N 150.3 E	
		Kurile Islands	
		depth about 50 km	
		Mag: 4.9 SD 0.4 (CGS)	
22	Ch	ePZ	04 40 32.2
		epPZ	46
	Qt	iPZ	41 19.2c
		ipPZ	31.7
22	Qt	ePZ	04 59 51.4
		USCGS H 04 49 17.0	
		44.5 N 149.1 E	
		Kurile Islands	
		depth about 33 km	
		Mag: 4.5 SD 0.3 (CGS)	
22	Qt	ePZ	06 25 13.9
22	Wr	ePZ	10 28 17.5
	Qt	ePZ	53.5
		USCGS H 10 18 14.5	
		44.2 N 150.3 E	
		Kurile Islands	
		depth about 50 km	
		Mag: 4.9 SD 0.4 (CGS)	
22	Qt	ePZ	12 30 05.1
		USCGS H 12 19 17.5	
		45.1 N 151.8 E	
		Kurile Islands	
		depth about 20 km	
		Mag: 4.3 (CGS)	
22	Qt	ePZ	13 37 32 ±
		USCGS H 13 27 05.2	
		44.5 N 149.8 E	
		Kurile Islands	
		depth about 33 km	
		Mag: 4.3 SD 0.3 (CGS)	

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Date	Station	Phase	h m s
22	Wr	ePZ	14 34 34.5
		eSZ	35 07.2
	Qt	ePZ	32 ±
		eSE	36 54.5
		H 14 33 52	
		Hindukush	
22	Ch	ePZ	15 47 32.4
	Qt	ePZ	49 35.2
22	Qt	ePZ	16 11 19.2
		USCGS H 16 00 43.8	
		43.5 N 150.4 E	
		Kurile Islands	
		depth about 105 km	
		Mag: 4.0 SD 0.2(CGS)	
22	Qt	ePZ	19 24 53.2
		USCGS H 19 14 14	
		45.3 N 149.4 E	
		Kurile Islands	
		depth about 33 km	
		Mag : 4.5 SD 0.3 (CGS)	
22	Qt	ePZ	19 37 03.2
		USCGS H 19 26 14	
		44.2 N 152.3 E	
		Kurile Islands	
		depth about 33 km	
		Mag : 4.6 SD 0.4(CGS)	
22	Wr	ePZ	20 45 43.1
	Qt	ePZ	46 20.2
		e(S) E	48 30.2
22	Lh	ePZ	21 23 27
		iSN*E*	24 16
	Wr	ePZ	24 06
	Qt	ePZ	51.4
		eSE	26 40.2
		H 21 22 26.2	
		30.3 N 79.0 E	
		India	
		depth about 33 km	
22	Qt	ePZ	23 14 31.4
		USCGS H 23 03 39.5	
		44.0 N 152.4 E	
		Kurile Islands	
		depth about 20 km	
		Mag: 4.7 SD 0.4 (CGS)	
23	Qt	ePZ	00 10 17
	Wr	ePZ	19.4
	Qt	ePZ	56.1
		USCGS H 00 06 09.0	
		45.7 N 151.6 E	
		Kurile Islands	
		depth about 20 km	
		Mag: 5.2 SD 0.4 (CGS)	
23	Qt	ePZ	02 48 55.2
		USCGS H 02 38 18.6	
		45.6 N 150.1 E	
		Kurile Islands	
		depth about 25 km	
		Mag: 4.7 SD 0.4 (CGS)	
23	Qt	ePKPZ	04 43 21.6
	Wr	ePKPZ	35.8
		USCGS H 04 24 06.2	
		31.4 S 68.7 W	
		San Juan Province,	
		Argentina	
		Mag: 4.7 SD 0.2 (CGS)	
23	Wr	ePZ	05 42 40.3
	Qt	ePZ	43 16.0
		USCGS H 04 32 33.9	
		45.0 N 151.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.3 SD 0.3 (CGS)	
23	Qt	iPZ!	07 10 20.9
		eSN	29.0
	Wr	ePZ	12 09.3
		H 07 10 11	
		West Pakistan	
23	Qt	ePZ	08 25 49.0
		USCGS H 08 15 15.4	
		44.3 N 149.4 E	
		Kurile Islands	
		depth about 50 km	
		Mag: 4.5 SD 0.4 (CGS)	
23	Ch	ePZ	09 55 42.4
	Lh	ePZ	56 42
		epPZ	55
	Wr	ePZ	48.0

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Date	Station	Phase	h m s
	Qt	ePZ	57 23.0
		eSE	10 05 48.7
		USCGS H 09 47 08.1	
		41.2 N 144.2 E	
		East of Honshu, Japan	
		depth about 29 km	
		Mag: 5.4 (CGS)	
23	Wr	ePZ	10 29 03.4
	Qt	ePZ	20.0
		USCGS H 10 16 38.9	
		6.9 S 148.4 E	
		Near north east coast	
		of New Guinea	
		depth about 29 km	
23	Qt	ePZ	11 28 55.1
		USCGS H 11 18 18.0	
		44.4 N 149.5 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.6 SD 0.2 (CGS)	
23	Wr	ePZ	18 44 48.8
	Qt	ePZ	45 22.6
		USCGS H 18 34 38.0	
		45.4 N 152.3 E	
		Kurile Islands	
		depth about 50 km	
		Mag: 4.2 (CGS)	
23	Qt	ePZ	21 28 51.9
		USCGS H 21 18 14	
		44.3 N 150.7 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.3 (CGS)	
23	Lh	ePZ	22 12 22
	Wr	ePZ	25.3
	Qt	ePZ	22 01.5
		USCGS H 22 11 13.1	
		44.0 N 151.3 E	
		Kurile Islands	
		depth about 20 km	
		Mag: 4.7 SD 0.2 (CGS)	
24	Lh	ePZ	01 16 26 c
	Wr	ePZ	28.8
	Qt	iPZ	17 04.9c
		ipPZ	17.5
		eSN*	25 43.5
		USCGS H 01 06 25.9	
		44.5 N 150.3 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 5.0 SD 0.4(CGS)	
24	Ch	ePZ	01 15 40
		epPZ	55
	Qt	ePZ	57 51.5
24	Ch	ePZ	07 32 23.8
	Qt	ePZ	03 32 ±
		USCGS H 06 44 18.5	
		4.3 N 78.4 W	
		Near west coast of	
		Columbia	
		depth about 38 km	
		Mag: 5.0 SD 0.3(CGS)	
24	Wr	iPZ	07 05 56.8
	Qt	ePZ	06 14.5
		USCGS H 06 57 24.3	
		19.2 N 121.3 E	
		Bobuyan Islands	
		Philippine Islands	
		Mag : 4.8 (CGS)	
24	Lh	ePZ	07 34 37 c
		epPZ	48
		ePPZ*	36 18
		eSN*E*	41 13
		esSN*E*	36
		eSSN*E*	44 31
	Kr	ePZ	34 41.6c
		epPZ	59.1
		ePPZ	36 34.2
		eSE	41 26.6
	Qt	iPZ	35 06.6c
		eSN*	42 06.0
		Mu Sec	
		PZ 0.1 1.0	
		MH 9.7 20	
		△ = 48°.8	
	Wr	ePZ	35 07.2
		USCGS H 07 26 23.9	

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Date	Station	Phase	h m s	
		4.9 S 102.9 E		
		Off south coast		
		of Sumatra		
		depth about 50 km		
		Mag: 6.0 (Pal), 6.1 SD		
		0.3 (CGS) 5.9 (Qt)		
24	Wr	iPZ	13 53 00.6	c
		eSZ	30.0	
	Qt	ePZ	54 02.3	
		eSN	55 19.1	
		H 13 52 21		
		Hindukush region		
24	Wr	ePZ	15 34 03.0	
	Qt	ePZ	38.7	
		epPZ	51.6	
		USCGS H 15 24 06.0		
		44.8 N 149.9 E		
		Kurile Islands		
		depth about 45 km		
		Mag: 4.5 (CGS)		
24	Wr	ePZ	19 04 38.6	
	Lh	ePZ	05 16	
		eSNE	06 38	
	Qt	ePZ	05 32	±
		eSE	07 16	±
		USCGS H 19 03 31*		
		38.4 N 70.3 E		
		Tadzhik, S.S.R.		
		depth about 183 km		
24	Wr	ePZ	19 27 52.0	
	Qt	ePZ	28 30.4	
		USCGS H 19 19 10.2		
		28.3 N 128.5 E		
		Ryukyu Islands		
		depth about 33 km		
		Mag: 5.1 SD 0.3 (CGS)		
24	Lh	ePZ	20 28 09	
		epPZ	19	
	Wr	ePZ	13.8	
	Qt	ePZ	49.7	
		USCGS H 20 18 12.7		
		44.4 N 149.7 E		
		Kurile Islands		
		depth about 40 km		
		Mag: 5.0 SD 0.3(CGS)		
24	Wr	ePZ	22 03 38	±
	Qt	ePZ	04 07.7	
		USCGS H 21 53 25.0		
		45.3 N 151.5 E		
		Kurile Islands		
		depth about 40 km		
		Mag: 4.2 (CGS)		
25	Qt	ePZ	01 19 08.7	
		USCGS H 01 08 35.5		
		44.7 N 149.5 E		
		Kurile Islands		
		depth about 50 km		
		Mag: 4.0 (CGS)		
25	Wr	ePZ	05 58 53.5	
	Qt	ePZ	59 30.1	
		USCGS H 05 48 51.1		
		45.0 N 150.7 E		
		Kurile Islands		
		depth about 50 km		
		Mag: 4.7 SD 0.3 (CGS)		
25	Wr	ePZ	06 12 58.0	
	Ch	ePZ	13 34	
	Qt	ePZ	50.5	
		USCGS H 06 02 06.6		
		52.0 N 174.0 E		
		Near Islands, Aleutian		
		Islands		
		depth about 70 km		
		Mag: 4.6 SD 0.4(CGS)		
25	Qt	ePZ	07 39 45.7	
		USCGS H 07 29 02.0		
		45.7 N 151.3 E		
		Kurile Islands		
		depth about 33 km		
		Mag: 4.4 SD 0.3(CGS)		

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Date	Station	Phase	h m s
25	Qt	ePZ	08 18 54.5
		USCGS H 08 08 12.1	
		43.7 N 150.8 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.4 SD 0.2 (CGS)	
25	Qt	ePZ	08 57 11.5
25	Qt	ePZ	10 28 34.8d
		USCGS H 10 17 47.1	
		45.3 N 150.2 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 5.0 SD 0.3 (CGS)	
25	Wr	ePZ	12 43 07.8
	Qt	ePZ	44.3
		USCGS H 12 33 05.8	
		44.5 N 150.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.2 SD 0.1 (CGS)	
25	Qt	ePZ	15 17 50.4
		USCGS H 15 07 10*	
		45.2 N 150.6 E	
		Kurile Islands	
		depth about 33 km	
		Mag: 4.0 (CGS)	
25	Wr	ePZ	15 40 24.0
	Qt	ePZ	29.1
25	Qt	ePZ	16 37 05.9
		USCGS H 16 25 24*	
		2.2 S 138.3 E	
		Western New Guinea	
		depth about 33 km	
		Mag: 5.4 (CGS)	
25	Qt	ePZ	16 52 25.6
		USCGS H 16 41 46.0	
		44.3 N 149.7 E	
		Kurile Islands	
		depth about 20 km	
		Mag: 4.3 (CGS)	
25	Wr	ePZ	17 26 15.3
	Qt	ePZ	27 18 ±
25	Lh	ePZ	20 09 48
		epPZ	10 00
		eSN*E*	18 37
		eScSE*	19 42
	Wr	iPZ	10 03.8
		eSZ	19 27.5
	Qt	ePZ	10 28.6
		epPZ	40.1
		eSN	19 55.3
	Kr	ePZ	10 35.0
		USCGS H 19 58 58.3	
		12.3 N 144.5 E	
		Mariana Islands	
		depth about 29 km	
		Mag: 5.4 SD 0.4(CGS)	
25	Wr	ePZ	22 05 06.6
	Qt	ePZ	06 18 ±
25	Qt	ePZ	22 47 22.5
25	Lh	ePZ	22 53 52
		ePPZ	54 05
	Wr	ePZ	07.3
	Qt	ePZ	55 02.2
		USCGS H 22 49 42*	
		36.9 N 95.2 E	
		Tsinghai Province, China	
		Mag: 5.1 (CGS)	
25	Wr	iPZ	23 26 20.1
		iSZ	47.7
	Qt	ePZ	27 25.7
		eSE	28 43.7
		H 23 25 47	
		Hindukush region	
25	Wr	ePZ	23 32 39.8
	Qt	ePZ	33 05.8
		USCGS H 23 21 42.7	
		13.4 N 144.1 E	
		Mariana Islands	
		depth about 57 km	
		Mag: 4.7(CGS)	

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Date	Station	Phase	h	m	s
26	Qt	ePZ	00	28	50.2
26	Lh	ePZ	04	05	36
	Wr	ePN			39.5
	Qt	iPZ		06	15.9
		eSN*E*		14	58.2
		Mu Sec			
		MH 5.0 20			
		△ = 65°.5			
		USCGS H 03 55 39.7			
		44.5 N 150.1 E			
		Kurile Islands			
		depth about 55 km			
		Mag: 5.1 SD 0.2(CGS),			
		5.9 (Qt)			
26	Wr	ePZ	05	11	37.8
	Qt	ePZ		12	14.0d
		USCGS H 05 01 31.5			
		43.7 N 150.5 E			
		Kurile Islands			
		depth about 40 km			
		Mag: 5.1 SD 0.3(CGS)			
26	Lh	ePZ	06	09	41
		epPZ			54
	Wr	iPZ			43.2
	Qt	ePZ		10	20.5
		USCGS H 05 59 44.2			
		44.5 N 149.8 E			
		Kurile Islands			
		depth about 60 km			
		Mag: 5.1 SD 0.1(CGS)			
26	Qt	ePZ	07	36	43.1d
		USCGS H 07 24 28.7			
		51.2 N 177.5 W			
		Andreanof Islands			
		Aleutian Islands			
		depth about 33 km			
		Mag: 4.6 (CGS)			
26	Qt	ePZ	07	40	47.0
26	Lh	ePZ	11	31	45 ±
	Wr	ePZ			48.6
	Qt	ePZ			32 23.0
		eSN*			41 04.0
		Mu Sec			
		MH 2·8 20			
		△ = 65°.5			
		USCGS H 11 21 47·6			
		44·7 N 149·7 E			
		Kurile Islands			
		depth about 55 km			
		Mag: 5(Pal), 5·4 SD 0·2			
		(CGS), 5·7(Qt)			
26	Wr	ePZ	11	41	43 ±
	Qt	ePZ		42	29·5
		USCGS H 11 31 53.0			
		44·6 N 149·8 E			
		Kurile Islands			
		depth about 55 km			
		Mag: 5·1 SD 03 (CGS)			
26	Qt	ePZ	12	13	25·0
26	Qt	ePKPZ	12	52	34·5
		USCGS H 12 33 50·1			
		15·8 S 174·0 W			
		Tonga Islands			
		depth about 115 km			
		Mag: 5·5 SD 0·4 (CGS)			
26	Wr	ePZ	16	56	10·0
		eSZ			38·2
	Qt	ePZ		57	13·0
		eSN		58	29·2
		H 16 55 34			
		Hindukush region			
26	Qt	ePZ	17	13	28 ±
26	Qt	ePZ	18	01	23·1
26	Qt	ePZ	18	22	27 ±
		eSN		26	05·0
		H 18 17 54			
26	Lh	ePZ	19	06	09
	Qt	ePZ			43·(c
		USCGS H 19 05 58·1			
		44·1 N 148·9 E			

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Date	Station	Phase	h	m	s	
		Kurile Islands				
		depth about 45 km				
		Mag: 4 ·5 SD 0 ·4(CGS)				
26	Qt	ePZ	19	16	31	±
26	Lh	ePZ	22	53	45	c
	Qt	ePZ		54	15 ·7	c
		eSKSE*	23	04	43 ·1	
		eSKKSE			51 ·1	
		eSN		05	01 ·1	
		Mu 2 (3) Sce				
	PZ	0 ·1 2 (3) 1 ·4				
		△ = 88° ·0				
		USCGS H 22 41 29 .8				
		5 ·2 S 152 .0 E				
		New Britain				
		depth about 73 km				
		Mag: 5 ·9 SD 0 ·4(CGS)				
27	Lh	ePZ	00	09	03	
	Qt	ePZ			42 ·6	
		USCGS H 23 58 57 ·8				
		43 ·8 N 151 ·2 E				
		Kurile Islands				
		depth about 33 km				
		Mag: 5 ·0 SD 0 ·3 (CGS)				
27	Qt	ePZ	01	51	23	±
27	Qt	ePZ	02	58	05 ·7	
27	Wr	iPZ	05	49	13 ·0	
		iSZ			45 ·2	
	Qt	ePZ		50	12 ·1d	
		eSE		51	33 ·1	
		Mu 2(3) Sec				
	PZ	0 ·02 2(3) 0 ·7				
		△ = 7° ·0				
		H 05 48 29				
		Hindukush region				
		Mag: 4 ·5 (Qt)				
27	Wr	ePZ	13	06	34 ·4	
	Qt	ePZ		07	34 ·7	
		USCGS H 13 02 43 ·8				
		43 ·5 N 89 ·0 E				

Date	Station	Phase	h	m	s	
		Sinkiang Province, China				
		depth about 56 km				
		Mag: 4 ·5 (CGS)				
27	Qt	ePZ	14	24	51 ·6d	
		USCGS H 14 14 18 ·1				
		45 ·4 N 150 ·0E				
		Kurile Islands				
		depth about 60 km				
		Mag: 4 ·3 SD 0 ·2 (CGS)				
27	Qt	ePZ	17	55	24	±
27	Wr	ePKPZ	18	43	33 ·7	
	Qt	ePKPZ			41 ·2d	
		USCGS H 18 24 42 ·9				
		24 ·3 S 176 ·1 W				
		Tonga Islands region				
		depth about 33 km				
		Mag: 5 ·3 SD 0 ·2 (CGS)				
27	Qt	ePZ	19	18	30 ·7	
27	Lh	ePZ	20	15	35	
		cpPZ			49	
	Wr	ePN			38 ·6	
	Qt	ePZ		16	13 ·7d	
		USCGS H 20 05 38 ·1				
		44 ·5 N 150 ·1 E				
		Kurile Islands				
		depth about 50 km				
		Mag: 5-5¼ (Pal),				
		5 ·2 SD 0 ·3 (CGS)				
27	Qt	ePZ	20	25	57 ·7	
27	Wr	ePN	20	48	17 ·4	
		eSN			49 ·6	
	Qt	ePZ		49	16 ·2d	
		eSN			50 33 ·2	
		H 20 47 35				
		Hindukush region				
28	Qt	ePZ	01	51	22 ·2	
28	Wr	iPZ	05	08	48 ·1	
	Qt	ePZ		09	23 ·2	
		USCGS H 04 58 42 ·9				
		45 ·4 N 151 ·3 E				

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Date	Station	Phase	h	m	s
		Kurile Islands			
		depth about 45 km			
		Mag: 4 ·4 SD 0 ·4 (CGS)			
28	Wr	ePKPZ	08	14	03 ·1
	Qt	ePKPZ			09 ·7
		USCGS H 07 55 12 ·3			
		24 ·3 S 176 ·0 W			
		Tonga Islands region			
		depth about 33 km			
		Mag: 5¼ (Berk),			
		5.4 SD 0.4 (CGS)			
28	Qt	ePZ	10	28	48.7
		USCGS H 10 18 10.3			
		44.6 N 149.6 E			
		Kurile Islands			
		depth about 50 km			
		Mag: 5 2 (CGS)			
28	Ch	ePZ	12	13	20.4
	Wr	iPZ			42.3
	Lh	ePZ			44
		eScSN*E*		23	28
	Qt	ePZ		14	18.4
		eSE		23	13.2
		eScSE		24	14.2
		Mu 2(3) Sec			
		MH 4.8 2(3) 20			
		△ = 67°.9			
		USCGS H 12 03 19.8			
		52.8 N 159.8 E			
		Off east coast of Kamchatka			
		depth about 33 km			
		Mag: 5-5¼ (Berk), 5-5¼ (Pal),			
		5.7 SD 0.3 (CGS), 5.9 (Qt)			
28	Wr	ePZ	12	42	26.0
	Qt	ePZ			29.7
28	Qt	ePZ	14	24	13.2
		USCGS H 14 13 31.6			
		45.3 N 151.3 E			
		Kurile Islands			
		depth about 45 km			
		Mag: 4.1 SD 0.4(CGS)			
28	Qt	ePZ	14	46	54.7
		USCGS H 14 36 20.0			
		45.7 N 150.3 E			
		Kurile Islands			
		depth about 55 km			
		Mag: 4.5 SD 0.3 (CGS)			
28	Qt	ePZ	18	15	51.2
		USCGS H 18 05 09.7			
		45.0 N 151.7 E			
		Kurile Islands			
		depth about 60 km			
		Mag: 4.3 SD 0.2 (CGS)			
28	Qt	ePZ	19	34	52.2d
		USCGS H 19 15 12.5			
		42.8 S 73.7 W			
		Southern Chile			
		depth about 30 km			
		Mag: 4.9 SD 0.3 (CGS)			
28	Qt	ePKPZ	20	17	08.8
		USCGS H 19 59 15.0			
		24.5 S 179.9 E			
		Fiji Islands region			
		depth about 532 km			
		Mag: 5.0 SD 0.4(CGS)			
28	Ch	ePZ	20	46	00.4
	Lh	ePZ			51 c
	Wr	ePN			55.3
	Qt	ePN		47	30.8
		USCGS H 20 36 56.0			
		44.8 N 149.6 E			
		Kurile Islands			
		depth about 45 km			
		Mag: 4.7 (CGS)			
28	Qt	ePZ	21	59	02.8
		USCGS H 21 48 24.1			
		49.9 N 154.7 E			
		Kurile Islands			
		depth about 105 km			
		Mag: 4.8 (CGS)			

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Date	Station	Phase	h m s
29	Qt	ePZ	02 25 43±
29	Qt	ePZ	02 34 34.4
		USCGS H 02 23 53.6	
		44.6 N 151.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.6 SD 0.3(CGS)	
29	Wr	iPZ	10 42 59.8
		eSZ	43 32.4
	Qt	iPZ	44 02.2c
		eSN	45 23.7
		H 10 42 17	
		Hindukush region	
29	Wr	iPZ	11 32 42.5
		iSZ	33 11.8
	Qt	ePZ	43±
		eSE	35 00.5
		H 11 32 02	
		Hindukush region	
29	Qt	ePZ	15 22 09.1
29	Qt	ePKPZ	16 08 26.0
	Wr	iPKPN	39.9
	Lh	ePKPZ	45
		USCGS H 15 49 10.3	
		24.8 S 68.6 W	
		Northern Chile	
		depth about 67 km	
		Mag: 5.0 SD 0.2 (CGS)	
29	Qt	ePZ	16 11 35.5
29	Qt	ePZ	16 18 56.0
29	Wr	iPN	17 53 54.6
		iSN	54 26.0
	Lh	ePZ	34±
	Qt	iPZ	53.7c
		eSN	56 10.6
		Mu ~~2~~ (3) Sec	
		PZ 0.04 ~~2~~ (3) 0.6	
		△ = 6°.8	
		H 17 53 14	
		Hindukush region	
		Mag: 4.8 (Qt)	

Date	Station	Phase	h m s
29	Qt	ePKPZ	20 14 05±
		USCGS H 20 22 15.7	
		26.2 S 177.8 W	
		Kermadec Islands region	
		depth about 49 km	
		Mag: 4·8 SD 0·2(CGS)	
29	Ch	ePZ	22 29 23·3
	Qt	ePZ	26·1
29	Wr	ePN	22 28 32·9
	Lh	ePZ	35 d
	Qt	ePZ	29 35 ±
		e(S)E*	34 04.0
		Mu 2 (3) Sec	
		PZ 0.03 2 (3) 1.0	
		△ = 27°.5	
		Mag: 5.0 (Qt)	
30	Qt	ePZ	00 45 15.6
		ePZ	27.5
		USCGS H 00 35 40.4	
		44.7 N 150.0 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 4.3 SD 0.2 (CGS)	
30	Qt	ePKPZ	01 36 57.6
		USCGS H 01 17 31.1	
		4.8 S 77.9 W	
		Northern Peru	
		depth about 20 km	
		Mag: 5.3 SD 0.2(CGS)	
30	Wr	ePZ	11 01 44.3
	Qt	ePZ	02 23.0
		USCGS H 10 51 45.9	
		44.6 N 150.2 E	
		Kurile Islands	
		depth about 55 km	
		Mag: 4.4 (CGS)	
30	Wr	iPZ	12 30 26.4
		eSZ	31 00.4
	Qt	ePZ	25.5
		eSN	32 46.0

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Date	Station	Phase	h m s
		H 12 29 41	
		Hindukush region	
30	Qt	ePZ	15 31 45.0
		USCGS H 15 21 07.2	
		44.8 N 150.2 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.5 SD 0.3 (CGS)	
30	Wr	ePN	22 28 11.7
	Qt	ePZ	29 40 ±
30	Qt	ePZ	22 53 10 ±
		USCGS H 22 42 27	
		43.5 N 150.5 E	
		depth about 33 km	
		Mag: 4.4 (CGS)	
31	Qt	ePZ	00 14 35.7c
31	Wr	ePZ	00 57 58.5
	Qt	ePZ	59 40.3
		eSN*	01 00 23.5
		H 00 57 27	
31	Qt	ePKPZ	03 36 40.5
		USCGS H 03 17 42.0	
		21.8 S 175.0 W	
		Tonga Islands	
		depth about 33 km	
		Mag: 6¼ (Pas), 5¼ (Berk),	
		6¼–6½ (Pal), 5.2 SD 0.3 (CGS)	
31	Qt	ePKPZ	04 43 36.3
		USCGS H 04 25 38.0	
		23.9 S 179.8 W	
		Fiji Islands region	
		depth about 464 km	
		Mag: 4.5 SD 0.5 (CGS)	
31	Qt	ePZ	08 56 07.5
31	Qt	ePZ	09 09 23.5
		USCGS H 08 51 42	
		17.9 S 178.8 W	
		Fiji Islands region	
		depth about 637 km	
		Mag: 4.3 SD 0.4 (CGS)	
31	Ch	ePZ	09 50 58.5
	Qt	iPZ	52 04.6c
		USCGS H 09 39 47.3	
		51.8 N 173.8 W	
		Andreanof Islands	
		depth about 70 km	
		Mag: 3.9 SD 0.4 (CGS)	
31	Qt	iPZ	09 59 29.5d
		eSE	10 01 21.0
	Wr	ePZ	00 49.5
		H 09 57 01.0	
		27.4 N 55.6 E	
		Southern Iran	
		depth about 35 km	
		Mag: 5.3 (CGS)	
31	Ch	ePZ	10 18 26.5
	Qt	ePZ	19 36.0
		USCGS H 10 07 25.5	
		46.6 S 96.3 E	
		Indian Ocean	
		depth about 33 km	
		Mag: 5.2 (CGS)	
31	Qt	ePZ	13 23 10.3
		eSN	25 04.5
		H 13 20 42	
31	Qt	ePZ	16 15 03.2
31	Wr	ePZ	19 19 31.8
		eSZ	20 11.3
	Qt	ePZ	36.4
		eSE	21 57.0
		H 19 18 47	
		Hindukush region	
31	Wr	iPZ	20 11 45.8
	Lh	ePZ	12 29
		eSNE	13 50 ±
	Qt	iPZ	40.6c
		eSE	14 10.5

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Date	Station	Phase	h	m	s
		Mu 2 (3) Sec			
		PZ 0.07 2 (3) 0.8			
		△ = 8°.0			
		H 20 10 50			
		37.5 N 70.3 E			
		Hindukush region			
		depth about 100 km			
		USCGS H 20 10 54.2			
		37.2 N 70.0 E			
		Hindukush region			
		depth about 105 km			
		Mag: 4.5 (CGS) 5.2(Qt)			
31	Qt	ePZ	23	23	45

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Date	Phase	h m s
	QUETTA	
1	ePZ	05 36 48.2
	eSE	37 10.0
1	ePnZ	07 08 18.0
	eP*Z	22.0
	ePgZE	26.7
	eSnE	51.0
	eS*ZN	54.0
	eSgZE	59.5
1	ePZ	08 52 58.2
1	ePZ	10 07 30.0
	eSE	07 58.5
1	ePZ	13 34 43.0
i	ePZ	17 40 28.5
1	ePZ	18 51 21.5
	e(S)E	53 12
1	ePZ	19 41 46.2
	eSE	50.0
1	ePZ	23 24 16.5
2	ePZ	00 23 08.0
2	ePZ	08 16 49.6
	eSE	17 23.5
2	ePZ	08 29 12.6
	eSE	39.0
2	ePZ	14 00 18.5
	eSE	38.5
2	ePZ	19 05 11.0
	eSE	38.5
2	ePZ	21 54 38.5
	eSE	55 00.0
3	ePZ	04 44 02.5
	eSN	35.7
3	ePZ	05 38 25.4
	eSE	32.6
3	ePE	18 33 33 ±
3	ePZ	20 02 06.5
	iXZ	09.2
	eSE	35.1
3	ePZ	23 16 06.5
	eSE	17 07.5
4	ePZ	03 27 51.5
4	ePZ	17 06 04 ±
4	ePZ	17 08 31.0
4	ePZ	20 49 39.6
	e(S)E	51 43.5
5	ePZ	06 53 05.7
5	ePZ	16 06 10.0
5	ePZ	16 32 50.0
	eSE	33 46.2
5	ePZ	20 53 48.5
	eSN	54 12.6
5	ePZ	23 21 17.6
	eSE	29.5
6	e(P)Z	08 52 19.0
6	ePZ	13 12 36.0
6	ePZ	16 19 33.0
	eSE	52.5
6	ePZ	21 38 53.2
7	ePZ	14 02 03.7
	eXZ	07.0
	eSN	36.5
7	ePZ	15 29 42.0
	eSE	30 05.0
7	e(P)Z	15 35 00.0
	eSE	02.5
8	ePZ	05 47 19.0
8	ePZ	09 19 07.5
	e(S)E	46.5
8	iPZ	11 55 01.0d
	eSN	14.6
8	ePZ	17 38 18.0
	eSN	41.7
8	ePZ	17 40 06.5
	eSN	30.0
8	ePZ	22 50 45.2
	eSN	56.0
8	ePZ	23 18 04.2
	eSE	25.4

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Date	Phase	h	m	s
9	ePZ	18	22	41 ±
	e(S)E		23	44.0
	eSE		24	41.5
9	iPZ	18	47	31.4d
	iSE			43.2
9	ePZ	19	27	44.0
	eSE		28	33.5
9	ePZ	20	07	00 ±
	eSE		07	55.2
9	ePZ	22	55	46.0
	eXN		56	05 ±
9	ePZ	23	25	47.0
	eSE		26	03.5
9	ePZ	23	51	35.5d
10	ePZ	06	34	43.5
	eXN		35	32.5
10	ePZ	11	11	02.5
	eSN			29.0
10	ePZ	14	48	16.6
	eSE			19.0
10	ePZ	17	44	39.0
	eSE		45	04.8
10	ePZ	17	51	58.5
10	eSE		52	25.5
11	ePZ	23	35	12.0
11	eXZ	00	44	20 ±
	ePZ	04	15	51.1
	eSN		16	09.6
11	ePZ	04	54	36.6
11	eSN	04	59	18.4
11	ePZ	05	16	52 ±
	eSE		17	28.5
11	ePN	07	27	45.0
	eSE		28	08.0
11	iPZ	08	01	58.0c
	eSN		02	24.2
11	iPZ	08	25	56.4
	eSE		26	24.5
11	iPZ	08	41	07.6d
	iSN			28.2

Date	Phase	h	m	s
11	ePZ	20	30	27.0
	e(S)E		32	41.0
11	ePZ	22	28	09 ±
	e(S)E			50.0
12	ePZ	00	09	10.0
	e(S)E		10	14.0
12	ePZ	01	54	19.5
	eSN			41.0
12	eSE	06	23	19.0
12	ePZ	13	59	46.0
	eSE			57.3
12	ePZ	15	13	20.0
	eSN			50.7
12	ePZ	16	46	52.0
	eSN		47	19.5
13	ePZ	09	01	25 ±
13	eSN	09	57	15.0
13	ePZ	16	06	44.0
13	ePZ	18	33	21 ±
	eSN			59.5
13	ePZ	20	53	04.0
13	ePZ	23	06	44.0
13	ePZ	23	26	20.0
14	ePZ	01	02	31.6
14	ePZ	02	50	51 ±
	eSN		51	52.0
14	ePZ	14	01	06.2d
14	ePZ	17	48	27.0
	e(S)N		49	06.0
14	ePZ	19	03	25.5
	eSN			55.5
15	eSE	04	18	40.6
15	ePZ	04	20	52.6
15	eXZ	05	07	09 ±
15	ePZ	13	15	10.0
	eSE			23.5
15	ePZ	15	55	26.0
	eSE			48.5
15	ePZ	16	30	39.5
	eSE		31	04.5

International Seismological Centre

Date	Phase	h m s
15	iPZ	16 40 20.5c
	eSN	21.6
15	ePZ	17 16 08.5
	eSE	36.0
15	ePZ	19 00 35.0
	eSN	53.5
15	ePZ	19 20 00.0
	eSE	21.0
15	ePZ	20 31 15.5
	eSE	52.0
15	ePZ	20 55 54.0
	eSE	56 19.0
15	eXZ	22 24 27.0
16	ePZ	00 08 06.0
	eSE	27.7
16	iPZ	01 03 29.2
	eSE	56.0
16	ePZ	01 40 01.2
	e(S)E	41 57.0
16	ePZ	02 11 16.0
	eSE	39.2
16	ePZ	03 34 42.5
	eSE	35 16.5
16	ePZ	09 14 20.5
	eSE	28.5
16	ePZ	13 44 54.0
	eSE	59.5
16	eXZ	15 45 00.0
17	ePZ	04 22 54 ±
	eSE	23 12.3
17	ePZ	09 46 20.0
	eSE	47 41.0
17	ePZ	11 41 41.0
	eSE	42 02.0
17	iPZ	13 25 27.5c
	eSN	26 37.1
17	ePZ	18 36 15.1
	eSN	36 28.1
17	ePZ	20 23 27.5
	eSN	24 25.6
17	ePZ	21 31 52.4
	eSN	32 22.1
18	ePZ	01 41 19.7
	eSN	48.2
18	iPZ	03 05 08.2
	eSN	31.7
18	iPZ	07 06 49.0
	eSN	07 00.0
18	ePZ	07 45 14.5
	eSE	24.0
18	ePZ	10 53 02.0
	eSN	21.5
18	ePZ	18 56 36.0
19	ePZ	01 00 22.6
	iSN	24.3
19	ePZ	04 09 08.0
	eSN	29.5
19	ePZ	06 56 17.0
19	eSN	07 15 06.5
19	ePZ	11 17 01.8
	eSN	15.0
19	ePZ	12 32 12.0
	eSN	33 35.0
19	ePZ	13 28 26.1
	eSN	27.3
19	ePZ	18 53 01.2
	eSN	54 11.8
19	ePZ	21 09 06.7
	e(S)N	10 31.2
20	ePZ	05 49 28 ±
20	ePZ	06 57 37.2
	e(S)N	59 16.2
20	iPZ	08 15 22.2d
	eSE	33.2
20	ePZ	09 50 08.6
20	ePZ	13 12 17.8
	eSN	30.0
21	eXZ	02 58 42.0
21	ePZ	03 14 20.0

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Date	Phase	h	m	s	
21	ePZ	18	40	48.0	
	eSE		41	02.3	
21	ePZ	22	30	31.0	
	eSE		31	50.1	
22	ePZ	02	14	00.1	
	eSE			10.6	
22	ePZ	07	13	12	±
22	ePZ	08	30	13.0	
22	ePnZ	08	41	11.0	
	eP*Z			12.7	
	ePgZ			16.2	
	eSnE			38.6	
	eS*E			40.3	
	eSgN			43.5	
22	ePZ	08	50	01.9	
22	ePZ	09	20	18	±
22	ePgZ	09	30	19.0	
	eSgE			21.1	
22	ePZ	12	16	15	±
22	ePZ	18	41	18.2	
	eSN			31.7	
22	ePZ	19	19	42.7	
23	ePZ	05	45	49.5	
	eSE			58.7	
23	ePZ	07	47	58.5	
	eSE		48	06.3	
23	iPZ	11	10	36.7d	
	eSN			39.1	
23	ePZ	12	15	10.6	
	eSE			14.6	
23	ePZ	18	54	24.0	
	eSE			43.7	
23	ePZ	21	16	08.2	
23	ePZ	21	42	01	±
24	ePZ	01	11	48.7	
	eSE			56.4	
24	ePZ	01	14	50	±
	eSE			51.2	
24	ePgZ	01	16	26.5	
	eSgE			27.2	
24	iPZ	01	35	39.2c	

Date	Phase	h	m	s
	eSN			44.7
24	ePZ	15	58	00.5
	eSN			27.6
24	ePZ	17	42	57.0
	eSE		43	54.1
24	ePZ	19	40	32.0
	eSN			41.1
25	ePZ	02	18	55.0
	eSN		19	06.7
25	ePZ	06	11	17 ±
25	ePZ	06	27	51.0
	eSE			59.3
25	ePZ	18	36	08 ±
25	ePZ	19	12	35.6
25	ePZ	19	29	22.6
25	ePZ	19	33	09.1
25	ePZ	19	59	51.0
25	ePZ	21	02	47.6
	eSE			54.3
26	ePZ	04	29	49.0
26	ePgZ	13	46	20.2
	eSgN			22.2
26	ePZ	14	21	40.4
	eSE		22	17.0
26	ePZ	15	45	21.0
	eSE			34.0
26	ePZ	16	44	32.5
	eSN			39.5
26	iPZ	20	48	07.1c
	eSE			30.6
27	ePZ	04	41	30.1
	eSE			52.6
27	eSE	05	59	46.6
27	ePZ	09	03	28.1
27	ePZ	09	15	55.0
	e(S)E		17	00.1
27	ePZ	16	01	25.0
	eSN			39.1
27	ePZ	16	43	27.6
27	ePZ	20	04	23.5

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Date	Phase	h m s	
28	ePZ	00 47 14.2	
	eXZ	48 10.2	
28	ePZ	03 56 07.0	
28	ePZ	05 54 08.0	
28	ePZ	07 44 45.2	
	eSE	57.2	
28	ePZ	12 43 03.2	
	eSE	25.7	
28	ePZ	16 03 00.0	
29	ePZ	01 10 15.8	
	eSN	36.9	
29	eSN	06 34 36.0	
29	ePZ	08 06 19.0	
	eSN	29.5	
29	ePZ	14 13 00	±
	eSE	07.4	
29	ePZ	15 23 05.0	
	eSE	25 16.0	
29	ePZ	21 33 41.0	
	eSN	34 08.0	
30	ePZ	00 40 42.0	
30	ePZ	00 43 16.6	
30	ePZ	04 15 35	±
	eSE	45.0	
30	ePZ	05 25 35	±
	eSN	56.8	
30	e(P)Z	06 50 40.5	
	eSN	54.5	
30	ePZ	07 02 18	±
	eSE	40.0	
30	e(P)Z	13 30 57.0	
30	ePZ	17 01 28.2	
	eXN	32.0	
	eSN	43.3	
30	ePZ	22 29 40	±
30	ePZ	22 33 34.4	
	eSE	35.5	
31	ePZ	02 00 05	
	eSN	59.5	
31	ePZ	03 02 20.0	

Date	Phase	h m s	
	eSE	49.2	
31	eSE	05 09 12.5	
31	ePE	05 47 31	±
	eSE	37.5	
31	eSE	18 17 23	±
31	ePN	21 58 34.5	
	eSN	41.6	
	WARSAK		
1	ePZ	07 06 46.6	
1	ePZ	18 54 47.3	
1	ePZ	23 31 49.1	
2	ePZ	12 00 28.8	
	eSZ	52.0	
3	ePZ	20 43 58.3	
4	ePZ	04 02 58.3	
5	ePZ	15 25 35.4	
6	ePZ	06 55 49.8	
	eSZ	56 19.1	
6	ePZ	22 32 17.7	
	eSZ	33 13.0	
7	ePZ	01 53 05.0	
7	ePZ	10 15 09.6	
	eSZ	53.8	
7	ePZ	11 26 28.4	
7	ePZ	13 30 51.8	
	eXZ	32 04.0	
7	ePZ	15 32 42.2	
	eSZ	33 11.9	
8	ePZ	01 15 38.9	
9	ePZ	04 41 51.2	
9	ePZ	23 24 05.8	
10	ePZ	10 24 36.2	
	eSZ	55.3	
10	ePZ	14 44 38.2	
11	iPZ	05 11 52.2	
	iSZ	12 30.4	
11	ePZ	07 25 47.2	
	eSZ	26 21.5	
11	ePZ	20 29 03.0	

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Date	Phase	h m s
12	ePZ	07 29 41.0
12	ePZ	09 31 00.1
	eSZ	25.7
12	ePZ	12 12 18.2
13	ePN	06 58 33.2
13	ePN	07 29 18.2
13	ePN	07 45 29.3
13	ePZ	08 21 36.2
13	ePZ	16 36 01.1
14	iPZ	02 49 27.7
	iSZ	50 04.8
14	ePZ	03 32 03.5
14	ePZ	11 02 56.3
	eSZ	03 42.6
14	ePZ	14 00 44.3
15	ePZ	15 19 41.4
	eSZ	20 08.7
15	iPZ	18 33 00.8
16	iPZ	12 59 15.0
16	ePgZ	15 43 53.4
16	eSgZ	44 03.0
16	ePZ	17 26 33.5
16	ePZ	17 51 18.0
17	ePZ	03 16 33.8
17	ePZ	05 11 31.0
17	ePZ	13 24 39.6
	eSZ	25 10.8
18	ePZ	14 19 56.7
19	ePZ	05 38 03.1
19	ePZ	08 17 26.8
19	ePZ	09 30 39.5
19	ePZ	10 00 17.0
19	iPZ	18 51 56.7
	iSZ	52 19.0
19	iPZ	19 58 03.1
	iSZ	21.4
20	ePZ	01 51 20.0
20	ePZ	02 19 31.1
20	ePZ	04 56 36.0
20	ePZ	09 58 43.8
20	ePZ	11 09 17.0
21	ePZ	02 55 08.2
	iSZ	32.6
22	ePZ	09 17 14.6
22	ePZ	21 22 41.1
23	ePZ	00 55 29.0
	eSZ	59.7
23	ePZ	10 49 48.5
23	ePZ	21 16 35.3
25	ePZ	10 27 15.0
	eSZ	58.3
26	iPN	03 14 13.1
26	iPN	03 21 38.6
	iSN	22 06.2
26	ePZ	04 14 34.3
27	ePZ	13 09 26.6
27	iPZ	16 00 20.4
	iSZ	49.5
27	ePZ	19 44 06.4
	eSZ	27.7
27	ePN	20 25 17.1
29	ePZ	06 17 35.8
	eSZ	18 10.0
29	ePN	13 52 36.0
30	ePZ	13 29 05.7

LAHORE

3	eXZ*	16 39 54
	eXZ*	44 07
3	e(P)Z	17 46 43
	eSZNE	47 13
3	eXZ	17 50 08
3	eXZ	23 09 21
4	eXZ*	04 19 11
5	eXN*E*	17 31 02
	eXZ*	33 32
6	eXZ	00 00 41
7	eXZ	21 50 36
	eXZ	43
8	eXZ*	01 15 39

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Date	Phase	h	m	s	
8	eXZ*	03	01	13	
	eXZ		02	21	
8	eXZNE	16	08	04	
8	eXZ	19	23	27	
8	eXZ	20	00	32	
	eXZ		02	28	
8	eXZ	21	48	29	
	eXZ			57	
8	e(P)Z	23	32	33	
	eXZ		33	38	
9	eXZ	06	32	37	
	eXNE		33	23	
9	eXZ	23	51	03	
11	eXZ*	11	31	04	
	eXN*			40	
13	e(P)Z	06	15	31	
13	ePZ	06	19	01	
13	ePZ	06	58	30	
13	eXZ	09	22	21	
14	eXZ	12	37	44	
	eXZ			49	
15	eXZ*	06	54	05	
16	eXZ	16	22	56	
16	eXZN	18	25	52	
17	eXZ	00	14	35	
17	eXZ*	10	54	14	
17	eXZ*	14	20	08	
17	eXZ*	23	07	52	
18	e(P)Z	21	45	18	
	eXZ			27	
19	eXZ	06	49	07	
	eXZ		50	13	
	eXE			41	
20	eXZ*	09	01	33	
22	eXN	20	46	05	
	eXZNE			41	
22	eXZNE	21	21	01	
24	eXZ*	07	24	30	
24	eXN*	19	43	40	
	eXZ		46	50	
24	eXN*	20	50	08	
	eXZ*		51	49	
26	ePZZ*	11	41	50	
	eXZ*		55	44	
27	eXZ*	19	27	32	
28	eXZ*	08	44	13	
	eXN*	09	02	04	
28	eXE	17	01	32	
	eXNE			40	
	eXZ			44	
29	eXZ	15	23	24	
	eXZ			34	
29	ePZZ*	22	28	35	d
	e!XZN			41	
	eXE		29	45	
31	eXZ*	03	33	27	
31	eXZ	10	00	54	
	KARACHI				
11	ePE	04	16	01.0	
	eSE			21.2	
	CHITTAGONG				
4	ePZ	03	23	10.2	
	eXZ			31	
	eSZNE			46	
4	eXZ	13	37	17	
5	eXZ	15	31	25	
5	eXZ	20	38	33	
6	ePZ	00	00	18	
8	eXZ	03	22	04	
8	eXZ	06	33	00	
8	eXZ	17	21	04	
9	ePZ	10	41	05	
	eSNE			33	
10	ePE	01	59	01	
10	eXE	03	04	23	
10	ePE	03	16	46	±
	eSE			17 01	
10	ePE	04	56	34	

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Date	Phase	h	m	s	
10	ePE	05	58	59	
10	ePE	06	52	20	±
10	ePZ	08	54	24	
	eSE			52	
10	ePE	11	04	51	
10	eXE	20	27	06	
11	eXZN	03	12	14	
11	eXZ	08	00	38	
11	eXZ	09	24	27	
12	ePZ	08	32	11	±
	iSNE		33	56	
12	ePZ	12	11	22	
12	eXZ	14	05	02	
12	eXZ	18	47	53	
12	eXZ	20	07	34	
12	eXZ	22	17	01	
12	eXZ	23	14	27	
12	eXZ	23	49	43	
13	iPZ	05	51	30.4	d
13	ePZ	05	14	45.3	
13	iPZ	06	18	16.4	d
13	ePZ	07	12	36.7	
	epPZ			53	
	eSNE		20	07	
13	ePZ	07	28	25.3	
13	ePZ	07	41	06.1	
13	ePZ	07	44	52.3	
13	eXZ	08	11	30	
13	ePZ	08	20	47.5	
13	ePZ	08	46	27	±
13	ePZ	08	48	57.2	
13	ePZ	08	59	47.5	
13	eXZ	09	19	30	
13	ePZ	09	36	52.4	
13	ePZ	10	10	34.8	
13	ePZ	10	46	01.3	
13	ePZ	11	29	04	
13	eXZ	11	32	54	
13	eXZ	11	45	21	
13	eXZ	12	30	27	

Date	Phase	h	m	s	
13	ePZ	13	51	00	
13	ePZ	14	01	15	
13	eXZ	14	03	56	
13	ePZ	14	13	13.2	
13	ePZ	14	35	16.3	c
	epPZ			31	
	eSN		42	36	
13	ePZ	15	36	12.4	
13	ePZ	16	26	54	
13	ePZ	18	43	52.8	
13	eXZ	19	20	42	
13	ePZ	21	55	29.2	
	e(S)N			59	
14	ePZ	00	14	00.1	
14	ePZ	01	45	06	±
14	ePZ	02	00	02.5	
14	ePZ	02	02	31.4	
	eSZN			03 15.8	
14	ePZ	02	27	52.5	
14	ePZ	03	31	11.7	
14	eXZ	03	40	57	
14	ePZ	04	01	07.2	
14	ePZ	04	22	15.5	
14	ePZ	04	43	46.1	
14	ePZ	05	33	27.3	c
14	ePZ	05	52	13.3	
14	ePZ	06	37	41.3	
14	eXZ	08	04	03	
14	eXZ	12	05	59	
14	eXZ	12	54	11.2	
14	eXZ	14	01	31	
14	eXZ	14	55	26	
14	eXZ	15	39	37	
14	eXZ	23	08	54	
15	eXZ	00	58	55	
15	eXZ	04	18	25	±
	iXN		19	02	
15	eXZ	06	59	18	
15	eXZ	07	22	26	
15	eXZ	08	09	49	

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Date	Phase	h	m	s
15	ePZ	22	00	03.1
16	eXZ	12	32	37
16	ePZ	20	36	15.3
	eSN		40	23
17	eXZ	03	15	22
17	eXZ	08	40	48.1
18	eXZ	06	30	43.0
18	eXZ	08	53	33.8
18	ePZ	20	14	47.0
18	eXZ	22	08	43
19	iPZ	07	33	33.2d
	ipPZNE			42
	eXNE			54
	eSNE		34	13
19	ePZ	08	05	56 ±
19	eXZ	09	09	08
19	eXZ	18	07	27
19	eXZ	18	11	52
19	eXZ	21	03	35
20	ePZ	02	18	47
20	eXZ	03	08	24
20	eXZ	03	44	07
20	ePZ	13	12	03 c
20	ePZ	13	30	27
20	eXZ	17	50	56
20	eXZ	23	46	47
21	eXZ	14	54	11
21	eXZ	16	55	00
23	eXZ	00	15	52
23	eXZ	02	47	55
23	ePZ	08	08	16.5
	epPZ			41
23	eXZ	14	52	21
24	eXZ	07	03	51
25	eXZ	20	09	11
25	eXZ	22	54	12
27	eXZ	20	15	01
30	eXZ	17	49	55
31	eXZ	03	35	44
31	ePE	16	10	16.3
31	eXZ		11	06
31	eXZ	22	00	55
31	ePZ	23	34	56.2
	eXZ		35	36

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Date	Station	Phase	h	m	s	
1	Qt	ePZ	00	04	50	±
		epPZ			56.6	
		USCGS H 23 54 08*				
		43.7 N 151.2 E				
		Kurile Islands				
		depth about 33 km				
		Mag : 4.5 SD 0.3 (CGS)				
1	Ch	ePZ	04	02	26	
	Qt	ePZ		03	26.6	
		USCGS H 03 52 25.9				
		51.7 N 159.8 E				
		Near east coast of				
		Kamchatka				
		depth about 33 km				
		Mag : 4.4 SD SD 0.4 (CGS)				
1	Qt	ePZ	05	35	33	±
1	Kr	ePZ	07	06	28.4	
		epPZ			35.9	
		ePPZ			43.0	
	Qt	ePZ		07	13.2	
	Wr	ePZ		08	09.3	
	Ch	ePZ		09	51	
		epPZ		10	01	
		USCGS H 07 02 41.7				
		14.6 N 53.6 E				
		Gulf of Aden				
		depth about 33 km				
		Mag : 5.1 (CGS)				
1	Qt	ePZ	07	17	46.0	
	Wr	ePZ		18	41.1	
1	Qt	ePZ	09	13	35.1	
1	Qt	ePZ	10	08	30.7	
1	Lh	ePKPZ	21	18	05	
	Wr	ePKPZ			09.8	
	Qt	iPKPZ			17.7c	
		ePKSZ		21	41.2	
		USCGS H 20 59 28.1				
		22.5 S 176.8 W				
		Tonga Islands				
		depth about 71 km				
		Mag : 5.4 SD 0.4 (CGS)				
1	Wr	ePN	21	41	01.5	
	Qt	ePZ		42	11	
		e(S)N		44	07.5	
1	Ch	iPZ	22	50	26	c
		epPZ			39	
	Lh	ePZ		51	14	c
	Wr	ePN			17.0	
	Qt	iPZ			53.5c	
		eSN	23	20	26.0	
	Kr	ePZ	22	52	13.5	
		Mu ~~2 (3)~~ Sec.				
		PZ 0.1 ~~2 (3)~~ 1.0				
		△ = 64°.0				
		USCGS H 22 41 23.8				
		44.9 N 148.9 E				
		Kurile Islands				
		depth about 60 km				
		Mag : 5.5 SD 0.3 (CGS),				
		5.8 (Qt)				
1	Qt	ePZ	23	20	48.5	
2	Qt	ePZ	06	18	26	±
2	Wr	ePZ	09	27	28.1	
	Qt	ePZ		28	03	±
		USCGS H 09 17 18.2				
		44.6 N 151.2 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 4.6 SD 0.2 (CGS)				
2	Qt	ePZ	14	28	44.6	
2	Ch	ePZ	18	02	35	±
	Lh	ePZ		03	28	
	Wr	ePZ			32.1	
	Qt	ePZ		04	07.5d	
		USCGS H 17 53 27.2				
		44.0 N 150.5 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 5.0 SD 0.3 (CGS)				

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Date	Station	Phase	h	m	s	
2	Qt	ePZ	20	03	35.0	
		USCGS H 19 51 58.6				
		43.3 N 29.5 W				
		North Atlantic Ocean				
		depth about 33 km				
		Mag : 4.2 SD 0.2 (CGC)				
2	Qt	ePZ	20	23	59.9	
		USCGS H 20 12 27*				
		5.3 S 133.9 E				
		Tanimbar Islands region				
		depth about 38 km				
		Mag : 4.9 (CGS)				
2	Qt	ePZ	21	02	38.7	
2	Qt	ePKPZ	21	54	40	±
	Lh	ePKPZ			58	
		epPKPZ		55	31	
		USCGS H 21 35 29.8				
		24.3 S 68.1 W				
		Chile-Argentina border				
		depth about 106 km				
		Mag : 4.8 SD 0.2 (CGS)				
2	Ch	ePZ	22	30	27	±
	Wr	ePZ		32	47.4	
	Qt	ePZ		33	03.5	
		USCGS H 22 21 20.7				
		1.9 S 138.9 E				
		Near north coast of				
		western New Guinea				
		depth about 33 km				
		Mag : 5.2 (CGS)				
2	Qt	ePZ	23	14	02.3	
	Wr	iPZ			09.5	
3	Lh	ePZ	00	21	44	
	Qt	ePZ		22	45	±
3	Wr	ePZ	01	25	41.7	
	Qt	ePZ		26	06.4	
		USCGS H 01 15 24.9				
		45.2 N 151.4 E				
		Kurile Islands				
		depth about 45 km				

Date	Station	Phase	h	m	s	
		Mag : 4.2 (CGS)				
3	Qt	ePZ	01	47	44.5	
		USCGS H 01 37 04.0				
		45.4 N 151.0 E				
		Kurile Islands				
		depth about 33 km				
		Mag : 4.3 SD 0.1 (CGS)				
3	Ch	ePZ	02	20	18	
		eSNE		25	02	
	Wr	iPZ		22	43.9	
	Qt	ePZ		23	13.5	
		USCGS H 02 14 24*				
		23.9 N 122.6 E				
		Off east coast of Taiwan				
		depth about 33 km				
		Mag : 4.6 (CGS)				
3	Qt	ePKPZ	03	29	37.0	
		ePPZ		32	20.0	
	Wr	iPKPZ		29	37.6	
	Lh	iPKPZ			42	±
	Kr	ePKPZ			43.5	
		ePPZ		32	53.0	
		ePKSZ		33	18.3	
	Ch	ePKPZ		30	11	
		epPKPZ			22	
		ePPZ		34	29	
		USCGS H 03 10 12.7				
		3.5 S 77.8 W				
		Peru-Ecuador border				
		depth about 33 km				
		Mag : 6¾(Pas), 6-6¼ (Berk),				
		6.0 (Pal), 6.0 SD 0.3 (CGS)				
3	Qt	ePZ	04	05	38.2	
3	Lh	ePZ	19	32	50	
	Qt	iPZ		33	29.5o	
		USCGS H 19 22 53.6				
		45.3 N 150.1 E				

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Date	Station	Phase	h m s	
		Kurile Islands		
		depth about 45 km		
		Mag : 4.7 SD 0.2 (CGS)		
3	Qt	ePZ	23 05 11.5	
		USCGS H 22 54 36.6		
		44.3 N 149.2 E		
		Kurile Islands		
		depth about 45 km		
		Mag : 4.3 SD 0.3 (CGS)		
4	Qt	ePZ	00 42 51.8	
4	Qt	ePZ	01 03 26.0	
		USCGS H 00 52 53.0		
		45.2 N 150.0 E		
		Kurile Islands		
		depth about 66 km		
		Mag : 4.2 (CGS)		
4	Ch	iPZ	01 25 36	c
		ipPZ	26 02	
	Lh	iPZ	27 62	c
		iSNE	36 18	±
	Kr	ePZ	28 02.2	
	Wr	ePZ	14.0	
	Qt	iPZ	16.5	c
		eSE	37 25.0	
		USCGS H 01 17 08.9		
		6.8 S 129.6 E		
		Banda Sea		
		depth about 80 km		
4	Qt	ePZ	03 54 21.7	
		USCGS H 03 43 15.9		
		6.9 S 129.8 E		
		Banda Sea		
		depth about 100 km		
		Mag : 5.1 (CGS)		
4	Qt	ePZ	04 41 11	±
4	Qt	ePZ	05 11 33.0	
		USCGS H 05 00 29.1		
		7.0 S 129.5 E		
		Banda Sea		
		depth about 115 km		
4	Wr	ePZ	05 33 55.6	
	Qt	ePZ	34 07.0	
		USCGS H 05 22 59.0		
		6.8 S 129.8 E		
		Banda Sea		
		depth about 80 km		
		Mag : 5.4 (CGS)		
4	Qt	ePZ	06 03 52	±
4	Qt	ePZ	06 20 00	±
		USCGS H 06 09 19.8		
		44.5 N 150.6 E		
		Kurile Islands		
		depth about 40 km		
		Mag : 4.2 (CGS)		
4	Ch	ePZ	15 21 54	
	Qt	ePZ	24 36.2	
		USCGS H 15 13 35.1		
		7.0 S 129.4 E		
		Banda Sea		
		depth about 132 km		
		Mag : 5.0 (CGS)		
4	Qt	ePZ	15 32 14.0	
4	Qt	ePZ	15 36 16.2	
4	Qt	ePZ	16 06 15	±
4	Qt	ePZ	16 20 20.5	
4	Qt	ePZ	16 23 40.5	
4	Qt	ePZ	20 03 09.0	
		USCGS H 19 52 04.0		
		6.9 S 129.5 E		
		Banda Sea		
		depth about 104 km		
4	Wr	ePZ	21 12 50.3	
		eSZ	13 18.3	
	Lh	ePZ	30	
		iSZ	14 28	
	Qt	iPZ	13 53.5	c
		eSN	15 12.5	
		~~Mu 2(3) Sec~~		
		~~PZ 0.02 2(3) 0.7~~		
		Mu Sec		
		PZ 0.02 0.7		

Major Shocks
International Seismological Centre

Date	Station	Phase	h	m	s
		△ = 6°.9			
		H 21 12 13			
		36.0 N 71.3 E			
		Hindukush			
		depth about 180 km			
		USCGS H 21 12 11.5			
		36.3 N 71.3 E			
		Hindukush			
		depth about 148 km			
		Mag : 4.7 (CGS), 4.5 (Qt)			
4	Wr	ePZ	22	25	16.7
	Qt	ePZ			32.5
4	Qt	ePZ	22	28	11.5
		USCGS H 22 17 09.0			
		6.8 S 129.9 E			
		Banda Sea			
		depth about 136 km			
		Mag : 5.6 (CGS)			
4	Qt	ePZ	22	32	21.2
4	Qt	iPZ	22	36	46·2c
		USCGS H 22 25 03*			
		0·9 S 139·7 E			
		Near north coast of			
		western New Guinea			
		depth about 33 km			
4	Lh	ePZ	22	52	10 ±
	Qt	ePZ			45·5
5	Qt	ePZ	03	07	38·0
5	Qt	ePZ	04	59	55·5
5	Qt	ePZ	05	27	31·6
		USCGS H 05 16 31·2			
		7·3 S 129·2 E			
		Banda Sea			
		depth about 141 km			
		Mag : 5·1 (CGS)			
5	Qt	ePZ	06	13	58·5
5	Qt	ePZ	06	17	25·5
		USCGS H 06 06 19*			
		6·9 S 129·4 E			
		Banda Sea			
		depth about 94 km			
		Mag : 4·7 (CGS)			
5	Wr	ePZ	08	54	24·2
	Qt	ePZ			37·0
		eSE		56	42·0
5	Qt	ePZ	09	29	26·5
		USCGS H 09 18 42·6			
		43·5 N 150·9 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4·6 SD 0·4 (CGS)			
5	Wr	ePZ	14	51	10·8
		eSZ			50·3
	Qt	ePZ		52	16·8
		eSE		53	46·0
		H 14 50 21			
		Hindukush region			
5	Qt	ePKPZ	23	29	37·0
		USCGS H 23 10 54·0			
		55.5 S 28·4 W			
		Sandwich Islands region			
		depth about 33 km			
6	Lh	ePZ	00	02	44
		eSN*E*		10	39
	Wr	ePZ		03	05·8
	Qt	ePZ			22·5
		eSE		11	54·0
		USCGS H 23 52 56·3			
		1·7 N 126·4 E			
		Molucca Passage			
		depth about 28 km			
		Mag : 5·8 (CGS)			
6	Qt	ePZ	01	12	07 ±
6	Qt	ePZ	01	30	30·0
		USCGS H 01 19 37·4			
		7·8 S 129·8 E			
		Banda Sea			
		depth about 158 km			
		Mag : 4·9 (CGS)			

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Date	Station	Phase	h	m	s	
6	Lh	ePZ	02	24	24	
		eSN*E*		33	32	
	Wr	iPZ		24	41·3	
	Qt	ePZ			58·0	
		eSE		34	43	±
		USCGS H 02 13 16·8				
		2·6 S 138·4 E				
		Western New Guinea				
		depth about 33 km				
		Mag : 5·7 SD 0·3 (CGS)				
6	Qt	ePZ	03	03	00·8	
6	Wr	ePZ	03	07	20·1	
	Qt	ePZ			38·0	
		USCGS H 02 55 54·0				
		2·5 S 138·6 E				
		Western New Guinea				
		depth about 32 km				
		Mag : 4·8 (CGS)				
6	Ch	ePZ	03	09	21	
		eSN		16	42	
	Qt	ePZ		11	53·5	
		USCGS H 03 00 12·2				
		2·2 S 138·6 E				
		Western New Guinea				
		depth about 43 km				
		Mag : 5·1 (CGS)				
6	Ch	ePZ	04	15	58	
	Wr	ePZ		18	08·3	
	Qt	ePZ			30·5	
		USCGS H 04 06 45·4				
		2·4 S 138·6 E				
		Western New Guinea				
		depth about 22 km				
		Mag : 5·3 (CGS)				
6	Qt	ePZ	04	46	53·5	
		USCGS H 04 35 09·3				
		2·5 S 138·4 E				
		Western New Guinea				
		depth about 33 km				
6	Qt	ePKPZ	06	47	03	±
		USCGS H 06 28 55·3				
		30·8 S 179·9 E				
		Kermadec Islands region				
		depth about 411 km				
		Mag : 4·7 (CGS)				
6	Ch	ePZ	07	44	35	
	Wr	ePN		46	52·2	
	Qt	ePZ		47	10·0	
		USCGS H 07 35 25·6				
		2·5 S 138·6 E				
		Western New Guinea				
		depth about 38 km				
		Mag : 5·5 (CGS)				
6	Ch	ePZ	09	09	37	
	Wr	ePN		12	06·9	
	Qt	ePZ			17·5c	
		USCGS H 09 01 12·0				
		7·1 S 129·2 E				
		Banda Sea				
		depth about 90 km				
		Mag : 5·5 (CGS)				
6	Ch	iPZ	09	34	27d	
	Wr	ePN		35	09·7	
	Qt	ePZ			45·2d	
		USCGS H 09 24 49·2				
		46·3 N 15 4·8 E				
		Near west coast of				
		Kamchatka				
		depth about 33 km				
		Mag : 5·4 SD 0·3 (CGS)				
6	Qt	ePZ	11	04	40	±
		USCGS H 10 53 00·1				
		3·0 S 138·7 E				
		Western New Guinea				
		depth about 16 km				
		Mag : 5·8 (CGS)				
6	Qt	ePZ	11	44	50	±
		USCGS H 11 33 08*				
		2·8 S 139·1 E				
		Western New Guinea				

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Date	Station	Phase	h	m	s	
		depth about 95 km				
		Mag : 5·2 (CGS)				
6	Qt	ePZ	17	17	06·5	
		USCGS H 17 07 22*				
		9·8 S 113·6 E				
		Near south coast of Java				
		depth about 230 km				
6	Qt	ePZ	17	57	02·0	
6	Qt	ePZ	18	42	51·5	
6	Qt	ePZ	18	51	19·0	
6	Qt	ePZ	18	55	20	±
6	Wr	iPZ	23	54	54·5	
		iSZ		55	23·4	
	Qt	ePZ		55	38·0	
		H 23 54 16				
7	Qt	ePZ	00	06	00	±
		USCGS H 23 55 10·1				
		7·0 S 129·7 E				
		Banda Sea				
		depth about 229 km				
		Mag : 5·3 (CGS)				
7	Wr	ePZ	02	54	19·3	
	Qt	ePZ			36·0	
		USCGS H 02 42 57·8				
		2·5 S 138·7 E				
		Western New Guinea				
		depth about 69 km				
		Mag : 4·9 (CGS)				
7	Qt	ePZ	06	22	35·0	
		USCGS H 06 12 22·8				
		36·5 N 141·7 E				
		Off east coast of				
		Honshu, Japan				
		depth about 49 km				
		Mag : 3·4 (CGS)				
7	Wr	ePN	09	32	59·6	
	Qt	ePZ		33	36·0d	
		USCGS H 09 22 53·3				
		44·2 N 151·1 E				
		Kurile Islands				

Date	Station	Phase	h	m	s	
		depth about 50 km				
		Mag : 4·4 SD 0·4 (CGS)				
7	Ch	ePZ	13	04	20	
	Lh	ePZ		06	19c	
		eSN*E*		15	12	
	Wr	ePN		06	34.0	
	Qt	ePZ			58.6c	
		USCGS H 12 55 25.6				
		14.1 N 146.2 E				
		Mariana Islands region				
		depth about 48 km				
		Mag : 5.0 (CGS)				
7	Qt	ePZ	15	23	10.0	
		USCGS H 15 12 34.5				
		45.5 N 150.0 E				
		Kurile Islands				
		depth about 40 km				
		Mag : 4.1 SD 0.4 (CGS)				
7	Qt	ePZ	16	12	38.5	
7	Ch	ePKPZ	17	05	35	
	Wr	ePKPZ			58	
	Qt	ePKPZ		06	02	±
		eXZ			42.0	
		USCGS H 16 45 59.8				
		50.2 S 114.9 W				
		South Pacific Ocean				
		depth about 33 km				
		Mag : 4.7 SD 0.4 (CGS)				
7	Lh	ePZ	20	48	01	
		esPZ			16	
	Wr	ePZ			04.6	
	Qt	ePZ			39.5c	
		USCGS H 20 37 53.6				
		44.9 N 151.9 E				
		Kurile Islands				
		depth about 29 km				
		Mag : 4.5 SD 0.4 (CGS)				
8	Wr	ePZ	06	32	39.1	
	Qt	ePZ		33	31	±
		eSE		35	02.7	
		H 06 31 32				
		Hindukush region				

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Date	Station	Phase	h m s
8	Ch	ePZ	08 17 25
	Lh	ePZ	18 11 c
	Wr	ePZ	13.3
	Qt	iPZ	49.3c
		esPZ	19 07.0
		USCGS H 08 08 09.2	
		45.0 N 150.9 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.8 SD 0.3 (CGS)	
8	Qt	ePZ	10 09 26.5
	Wr	ePZ	10 02.7
	Ch	ePZ	54
		USCGS H 09 59 24.3	
		16.5 S 28.5 E	
		Northern Rhodesia	
		depth about 33 km	
		Mag : 5.5 (CGS)	
8	Qt	ePZ	14 45 53±
		USCGS H 14 35 26	
		44.4 N 149.4 E	
		Kurile Islands	
		depth about 33 km	
		Mag : 5.3 (CGS)	
8	Ch	iPZ	16 20 59 c
		eSE	26 51
	Lh	ePZ	23 11 c
	Wr	ePZ	31.6
	Qt	iPZ	49.5c
		USCGS H 16 13 36.2	
		2.7 N 128.4 E	
		Molucca Passage	
		depth about 216 km	
		Mag : 5.7 (CGS)	
8	Qt	ePZ	23 18 51.5
9	Wr	ePZ	01 32 49.2
	Qt	ePZ	33 25.6
9	Qt	ePZ	01 41 42.4
9	Wr	ePZ	02 57 42.3
	Qt	ePZ	58 00.0
		USCGS H 02 46 44.5	
		56.8 N 34.6 W	
		South of Iceland	
		depth about 33 km	
		Mag : 4.8 (CGS)	
9	Wr	ePZ	05 46 15.4
	Qt	ePZ	19.6
		USCGS H 05 37 15.1	
		5.6 S 105.5 E	
		Sumatra	
		depth about 33 km	
		Mag : 4.8 (CGS)	
9	Qt	ePZ	06 40 33.5c
9	Qt	ePZ	08 46 00.5
		USCGS H 08 35 25.3	
		45.6 N 150.0 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.2 SD 0.3 (CGS)	
9	Ch	ePZ	09 00 33c
	Lh	ePZ	01 20
	Wr	ePZ	22.3
	Qt	iPZ	58.2c
		USCGS H 08 51 18.6	
		45.3 N 150.8 E	
		Kurile Islands	
		depth about 33 km	
		Mag : 5.2 SD 0.2 (CGS)	
9	Qt	iPZ	10 35 59.5c
		eSE	37 16.0
		H 10 34 17	
		Hindukush region	
9	Qt	iPZ	11 24 09.5d
		USCGS H 11 13 30.6	
		45.6 N 150.9 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.4 SD 0.3 (CGS)	
9	Qt	ePZ	13 07 32.0
		USCGS H 12 54 30.3	

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Date	Station	Phase	h	m	s
		0.1 S 25.1 W			
		Atlantic Ocean			
		depth about 33 km			
		Mag : 5.2 SD 0.2 (CGS)			
9	Wr	ePZ	15	13	32.1
	Qt	ePZ			55.5
		eSE		15	26.0
		H 15 11 57			
9	Qt	ePZ	19	01	48.6c
		USCGS H 18 50 42*			
		7.1 S 129.4 E			
		Banda Sea			
		depth about 80 km			
		Mag : 5.2 (CGS)			
9	Qt	ePZ	19	42	26.0
9	Qt	ePZ	21	31	28±
9	Qt	ePKPZ	21	33	36±
	Wr	ePKPN			41.2
	Lh	ePKPZ			49
	Ch	ePKPZ		34	23
		ePPZ		38	54
		USCGS H 21 15 30.4			
		9.0 S 71.5 W			
		Western Brazil			
		depth about 600 km			
		Mag : 6¾-7 (Pas), 6¾-7 (Berk),			
		5.9 SD 0.4 (CGS)			
9	Qt	ePZ	22	33	14.5
9	Qt	ePZ	22	51	55—
9	Qt	iPZ	23	35	00.8d
	Lh	ePZ			14
10	Qt	ePZ	00	42	05.0d
		USCGS H 00 30 31.2			
		2.0 S 139.1 E			
		Western New Guinea			
		depth about 129 km			
		Mag : 4.8 (CGS)			
10	Qt	ePKPZ	01	18	43.0
	Wr	ePKPZ			48.1
	Lh	ePKPZ			59
	Ch	ePKPZ			
		ePPZ			
		USCGS H 01 00 38.8			
		9.2 S 71.5 W			
		Western Brazil			
		depth about 600 km			
		Mag : 6½-6¾ (Pas), 6¼ (Berk)			
		5.6 SD 0.4 (CGS)			
10	Qt	ePZ	04	42	49.0
		USCGS H 04 31 50.5			
		6.9 S 129.3 E			
		Banda Sea			
		depth about 181 km			
		Mag : 4.4 (CGS)			
10	Qt	ePZ	04	54	17±
10	Ch	iPZ	04	59	57.0d
		eSNE	05	00	45
	Wr	iPZ		03	04.0
	Qt	ePZ			56.0
		USCGS H 04 58 52.7			
		26.5 N 93.2 E			
		North Eastern India			
		depth about 66 km			
10	Qt	ePZ	08	10	00.0
10	Ch	ePZ	08	59	15
	Wr	ePZ	09	00	03.3
	Qt	ePZ			40.1
		USCGS H 08 50 06.1			
		44.5 N 149.4 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4.9 SD 0.3 (CGS)			
10	Qt	ePZ	11	25	21.5
		USCGS H 11 18 32*			
		36.5 N 29.9 E			
		Aegean Islands region			
		depth about 34 km			
		Mag : 4.5 SD 0.2 (CGS)			
10	Qt	ePZ	16	22	48.5
10	Ch	ePZ	17	26	50

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Date	Station	Phase	h m s
		eSNE	34 07
	Lh	ePZ	27 35
		eSN*E*	35 37
		eScSN*	37 21
		eSSE*	39 34
	Wr	ePZ	27 39.4
	Qt	ePZ	28 15.1
		eSN	36 54.1
	Kr	ePZ	28 38.0
		ePPE	31 11.1
		eSE	37 32.0
		Mu ~~2(3)~~ Sec	
	PZ	0.1 ~~2(3)~~ 1.0	
	MH	23.5 ~~2(3)~~ 20	
		$\triangle = 65°.1$	
		USCGS H 17 17 42.7	
		44.4 N 149.0 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 5.5 SD 0.4 (CGS),	
		6.1 (Qt)	
10	Qt	ePZ	17 57 08 ±
10	Qt	ePZ	19 38 22.6
11	Qt	ePZ	00 21 07 ±
		USCGS H 00 10 25.6	
		43.8 N 149.5 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 4.7 SD 0.2 (CGS)	
11	Ch	ePZ	00 23 26
	Qt	iPZ	26 07.2c
		USCGS H 00 15 04.8	
		7.0 S 129.5 E	
		Banda Sea	
		depth about 132 km	
		Mag : 5.6 (CGS)	
11	Qt	ePZ	02 12 15.2
11	Qt	ePZ	04 02 50.0
		eSN	04 31.0
		H 04 00 39	
11	Qt	ePZ	04 31 41.5
11	Qt	ePZ	07 09 58.5
11	Ch	ePZ	09 58 46
	Lh	ePZ	59 35 ±
	Wr	ePZ	38.6
	Qt	ePZ	10 00 15.0
		USCGS H 09 49 43.3	
		44.6 N 148.9 E	
		Kurile Islands	
		depth about 55 km	
		Mag : 4.7 SD 0.3 (CGS)	
11	Qt	ePKPZ	11 47 43.5
		USCGS H 11 29 06.4	
		16.9 S 174.4 W	
		Tonga Islands	
		depth about 185 km	
		Mag : 5.2 SD 0.3 (CGS)	
11	Qt	ePZ	13 12 13 ±
11	Qt	ePKPZ	20 12 27.0
		USCGS H 19 54 09.4	
		9.1 S 71.4 W	
		Western Brazil	
		depth about 585 km	
		Mag : 4.9 SD 0.3 (CGS)	
11	Qt	ePZ	20 14 40 ±
		eXZ	15 03.1
11	Wr	iPZ	23 56 37.7
		iSZ	52.8
	Qt	ePZ	57 30 ±
		eSE	58 06.3
		H 23 56 13	
		West Pakistan	
12	Qt	ePZ	00 42 35 ±
		USCGS H 00 31 47*	
		44.0 N 149.2 E	
		Kurile Islands	
		deprh about 33 km	
		Mag : 4.4 SD 0.2 (CGS)	
12	Qt	ePZ	07 12 50.0
	Kr	ePE	13 25.7

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Date	Station	Phase	h m s
		ePPE	14 57.0
		USCGS H 07 06 31.2	
		35.5 N 29.7 E	
		Near southwest coast of Turkey	
		depth about 69 km	
		Mag : 5.0 SD 0.3 (CGS)	
12	Qt	ePZ	08 07 28.0
		USCGS H 07 56 53.6	
		44.2 N 149.0 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.9 SD 0.3 (CGS)	
12	Qt	ePZ	08 43 49.0c
		USCGS H 08 33 15.9	
		44.2 N 149.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.8 SD 0.3 (CGS)	
12	Qt	ePZ	11 17 40.2
12	Ch	ePZ	13 09 07
	Qt	ePZ	10 35.0
		USCGS H 13 00 00.7	
		44.2 N 149.4 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.9 SD 0.2 (CGS)	
12	Lh	ePZ	15 29 40
		eSNE*	30 19
	Wr	ePZ	16.9
	Qt	iPZ	31 06.5d
		eSN	32 53.0
	Kr	ePZ	31 47.3
		H 15 28 49	
		32.3 N 78.0 E	
		Northern India	
		depth about 33 km	
		USCGS H 15 28 43.9	
		31.7 N 78.5 E	
		Northern India	
		depth about 33 km	
		Mag : 4.6 (CGS)	
12	Qt	ePZ	15 51 55
12	Qt	ePZ	17 20 50 ±
12	Ch	ePZ	17 31 36.5
12	Qt	ePZ	19 27 26.0
12	Qt	ePZ	19 45 42.5
12	Qt	ePZ	21 05 06.0
		USCGS H 20 54 03.5	
		7.1 S 129.5 E	
		Banda Sea	
		depth about 131 km	
12	Qt	ePZ	22 22 04.0
13	Qt	ePZ	01 26 24.0
		USCGS H 01 15 38.5	
		44.5 N 149.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.1 SD 0.2 (CGS)	
13	Qt	ePZ	05 26 04.0
		eSN	27 47.5
		H 05 23 51	
13	Qt	ePZ	07 43 18.0
		epPZ	30.0
		USCGS H 07 32 42.0	
		44.2 N 149.6 E	
		Kurile Islands	
		depth about 40 km	
		Mag : 4.2 SD 0.1 (CGS)	
13	Qt	iPKPZ	11 36 23.5c
		USCGS H 11 18 28.6	
		23.8 S 179.9 W	
		Fiji Islands region	
		depth about 520 km	
		Mag : 4.9 SD 0.5 (CGS)	
13	Qt	ePZ	16 35 51.5d
		USCGS H 16 25 17	
		45.5 N 150.0 E	
		Kurile islands	
		depth about 50 km	
		Mag : 4.4 SD 0.3 (CGS)	

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Date	Station	Phase	h m s
13	Qt	ePKPZ	17 37 49 ±
		USCGS H 17 18 50.1	
		22.9 S 175.3 W	
		Tonga Islands	
		depth about 33 km	
		Mag : 5.1 SD 0.2 (CGS)	
14	Qt	ePKPZ	00 39 00.0
		USCGS H 00 20 03.0	
		30.1 S 177.4 W	
		Kermadec Islands	
		depth about 42 km	
		Mag : 4.7 (CGS)	
14	Qt	ePZ	01 13 55 ±
14	Ch	ePZ	04 07 05
		epPZ	45
		eSNE	13 43
	Wr	ePZ	08 57.8
		eSZ	17 15.4
	Qt	ePZ	09 28.0
		eSN	18 11.5
		Mu ~~2(3)~~ Sec	
		MH 1.1 ~~2(3)~~ 20	
		△ = 65°.9	
		USCGS H 03 58 48.9	
		22.6 N 142.9 E	
		Mariana Islands region	
		depth about 117 km	
		Mag : 4.9 SD 0.2 (CGS)	
14	Wr	ePZ	05 16 18.0
	Qt	ePZ	54.0c
		USCGS H 05 06 07.5	
		47.5 N 151.2 E	
		Kurile Islands	
		depth about 15 km	
		Mag : 4.6 SD 0.2 (CGS)	
14	Qt	ePKPZ	09 25 00 ±
		USCGS H 09 05 47.8	
		15.1 N 93.9 W	
		Off coast of Chiapas	
		Mexico	
		depth about 33 km	
		Mag : 4.9 SD 0.3 (CGS)	
14	Qt	iPZ	10 26 58.6d
		USCGS H 10 17 27✱	
		30.5 N 138.8 E	
		South of Honshu, Japan	
		depth about 439 km	
		Mag : 3.9 (CGS)	
14	Qt	ePZ	13 25 33 ±
		eSN	27 37.5
		H 13 22 54	
14	Qt	ePZ	14 02 35.2
14	Qt	ePZ	14 45 10.5d
14	Qt	ePZ	19 28 30.6
	Wr	ePZ	29 34.8
14	Qt	ePZ	20 36 53 ±
14	Lh	ePZ	21 37 28 ±
	Qt	ePZ	38 06.5c
		USCGS H 21 27 25.6	
		45.4 N 151.4 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.4 (CGS)	
15	Qt	ePZ	00 15 12.5d
		USCGS H 00 44 38.5	
		44.4 N 149.1 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.7 SD 0.3 (CGS)	
15	Qt	ePZ	01 22 53.0
		USCGS H 01 11 57.2	
		3.3 S 129.1 E	
		Ceram	
		depth about 54 km	
15	Wr	ePZ	01 23 02.4
		eSZ	31.0
	Qt	ePZ	56.3
		H 01 22 24	
		Hindukush region	

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Date	Station	Phase	h m s	
15	Qt	ePZ	06 44 57.0	d
		USCGS H 06 34 07		
		45.6 N 153.2 E		
		Kurile Islands region		
		depth about 33 km		
		Mag : 4.1 (CGS)		
15	Qt	ePZ	15 29 31.6	
		USCGS H 15 17 07.7		
		52.9 N 16~.3 W		
		Unimak Island		
		Aleutian Islands		
		depth about 33 km		
		Mag : 4.6 SD 0.3 (CGS)		
15	Wr	ePZ	16 29 30.6	
		eSZ	30 03.6	
	Qt	ePZ	32.5	
		eSN	31 53.5	
		H 16 28 42		
		Hindukush region		
15	Ch	iPZ	21 15 37	d
		ipPZ	53	
		eSE	22 53	
	Lh	ePZ	16 26	d
		eSN*E*	24 26	
		eSSN*E*	28 29	
	Wr	ePZ	16 29.3	
	Qt	iPZ	17 06.2	d
		eSN	25 43.0	
		Mu ~~2(3)~~ Scc		
		PZ 0.2 ~~2(3)~~ 1.5		
		MH 38.8 ~~2(3)~~ 20		
		$\triangle$ = 64°.8		
		USCGS H 21 06 34.0		
		44.3 N 149.0 E		
		Kurile Islands		
		depth about 50 km		
		Mag : 6.0 (Berk), 6¼-6½ (Pal),		
		6.0 SD 0.4 (CGS), 6.2 (Qt)		
15	Qt	iPZ	23 59 42.5	d
16	Qt	ePZ	01 54 21	±
16	Ch	ePZ	02 39 11	
	Lh	ePZ	40 00	
		epPZ	14	
	Wr	iPZ	04.4	
	Qt	ePZ	40.0	
		epPZ	54.5	
		USCGS H 02 30 07.0		
		44.3 N 149.0 E		
		Kurile Islands		
		depth about 50 km		
		Mag : 5.0 SD 0.2 (CGS)		
16	Qt	ePZ	04 44 30	±
		eSN	47 20	
		H 04 40 54		
16	Qt	ePZ	06 16 51	±
		eSN	21 23.0	
		H 06 11 12		
16	Qt	ePKPZ	07 06 12.5	d
	Wr	ePKPZ	18.0	
		USCGS H 06 46 15.7		
		41.3 S 87.5 W		
		Off coast of Chile		
		depth about 11 km		
		Mag : 5.3 SD 0.2 (CGS)		
16	Ch	ePZ	11 09 29	
		eSNE	10 46	
	Lh	ePZ	12 30	
		esSE*	16 23	
	Wr	ePZ	13 00.7	
	Qt	ePZ	33.0	
		esSN	18 19.0	
		H 11 08 03		
		26.2 N 96.6 E		
		Northern Burma		
		USCGS H 11 07 53.7		
		26.7 N 97.2 E		
		Northern Burma		
		depth about 33 km		
		Mag : 5.1 (CGS)		

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Date	Station	Phase	h m s
16	Ch	ePZ	11 41 12
		eSNE	42 21
	Wr	ePZ	44 21.5
	Qt	iPZ	57.2c
		USCGS H 11 39 37.8	
		28.1 N 95.1 E	
		Assam, India	
		depth about 37 km	
16	Wr	iPZ	12 56 25.0
	Qt	ePZ	47 ±
		eSE	58 27.0
		H 12 54 38	
16	Lh	ePKPZ	23 02 13
		eSKSE*	09 07
	Wr	ePKPZ	02 17.6
	Qt	ePKPZ	24.5
		USCGS H 22 43 26.4	
		22.3 S 175.0 W	
		Tonga Islands	
		depth about 33 km	
		Mag : 6 (Pas), 5¼-5½ (Berk),	
		5.6 SD 0.3 (CGS)	
16	Qt	ePZ	23 58 57.3
		USCGS H 23 39 58.3	
		22.1 S 175.3 W	
		Tonga Islands	
		depth about 33 km	
		Mag : 5.3 SD 0.3 (CGS)	
17	Qt	ePZ	01 01 40.0
		ePPZ	05 57.2
		e(S)N*	13 17.0
		USCGS H 00 48 02.6	
		7.6 N 37.4 W	
		North Atlantic Ocean	
		depth about 33 km	
		Mag : 6¼-6½ (Pas), 5½-5¾ (Berk),	
		6-6¼ (Pal), 5.9 SD 0.4 (CGS)	
17	Qt	ePKPZ	01 32 30.8
		USCGS H 01 13 36.0	
		21.8 S 175.0 W	
		Tonga Islands	
		depth about 33 km	
		Mag : 5.0 SD 0.1 (CGS)	
17	Qt	ePZ	06 20 53.2
17	Qt	ePZ	08 00 45 ±
		USCGS H 07 50 34.4	
		6.3 N 126.2 E	
		Mindanao, Philippine Islands	
		Mag : 5.6 (CGS)	
17	Qt	ePZ	08 31 47 ±
17	Qt	ePZ	10 35 36.5
17	Qt	ePZ	11 00 27.7d
17	Qt	ePZ	11 56 00.0
		eSN	57 22.5
		H 11 54 14	
17	Qt	ePKPZ	13 31 41.5
		USCGS H 13 13 49.3	
		17.4 S 178.5 W	
		Fiji Islands region	
		depth about 509 km	
		Mag : 4.7 SD 0.5 (CGS)	
17	Qt	ePZ	17 21 13.2
17	Qt	ePZ	17 23 27.0
17	Qt	ePZ	20 14 35.6
		USCGS H 20 03 33.2	
		7.1 S 129.6 E	
		Banda Sea	
		depth about 137 km	
		Mag : 4.1 (CGS)	
17	Qt	ePZ	21 05 41.6
17	Qt	ePZ	21 12 09.5
18	Ch	ePZ	01 11 41
	Qt	ePZ	14 03 ±
		USCGS H 01 01 52.9	
		3.6 S 143.4 E	
		Near coast of northeast	
		New Guinea	

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Date	Station	Phase	h m s
		depth about 33 km	
		Mag : 5.2 (CGS)	
18	Qt	ePZ	01 45 02.0
		eSN	46 40.0
		USCGS H 01 42 55.9	
		29.3 N 57.0 E	
		Southern Iran	
		depth about 33 km	
		Mag : 5.0 (CGS)	
18	Qt	ePZ	01 55 24.5
		USCGS H 01 45 27.6	
		47.2 N 148.5 E	
		Sea of Okhotsk	
		depth about 319 km	
		Mag : 4.7 SD 0.4 (CGS)	
18	Kr	iPZ	03 51 53.7d
		iXE	52 08.5
	Qt	ePZ	53 07.2
		eSE	54 12.0
	Wr	ePZ	10.8
		Mu 2(3) Sec	
		PZ 0.01 2(3) 0.5	
		Δ = 5[illegible]°.7	
		H 03 51 33	
		24.5 N 67.5 E	
		West Pakistan	
		Mag : 4.5 (Qt)	
18	Qt	ePZ	07 58 46 ±
18	Wr	ePZ	13 29 06.8
	Qt	ePZ	58 ±
18	Qt	ePKPZ	14 10 33.2
		USCGS H 13 51 35.8	
		15.9 S 173.3 W	
		Tonga Islands	
		depth about 33 km	
		Mag : 5.1 SD 0.2 (CGS)	
18	Wr	ePKPZ	14 57 11.5
	Qt	ePKPZ	21.5
		USCGS H 14 38 28.9	
		29.9 N 113.6 W	
		Gulf of California	
		depth about 14 km	
		Mag : 6½(Pas), 6½-6¾ (Pal), 5.7 SD 0.6 (CGS)	
18	Qt	ePZ	15 35 41.0
18	Qt	ePZ	17 55 28.5
19	Qt	ePZ	02 11 53
		USCGS H 02 01 16*	
		44.1 N 150.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.5 SD 0.3 (CGS)	
19	Ch	iPZ	04 44 15.3
	Wr	ePZ	45 34.5
	Qt	iPZ	46 12.5d
		USCGS H 04 37 56.8	
		39.7 N 129.5 E	
		Off east coast of Korea	
		depth about 537 km	
		Mag : 4.4 SD 0.4 (CGS)	
19	Qt	ePKPZ	11 04 24.5
		USCGS H 10.45 49.1	
		22.5 S 171.3 E	
		Loyalty Islands region	
		depth about 33 km	
		Mag : 5.0 SD 0.4 (CGS)	
19	Ch	ePZ	11 09 58
	Lh	ePZ	10 49
		epPZ	59
		eSN*E*	18 50
	Wr	ePZ	10 52.0
	Qt	iPZ	11 29.0d
		epPZ	37.5
		eSN*	20 08.0
		Mu 2(3) Sec	
		MH 2.2 2(3) 20	
		Δ = 65°.1	
		USCGS H 11 00 54.3	
		44.4 N 149.2 E	
		Kurile Islands	

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Date	Station	Phase	h m s
		depth about 33 km	
		Mag : 5.8 SD 0.3 (CGS),	
		5.7 (Qt)	
19	Qt	ePZ	12 35 46.5
		USCGS H 12 25 39.5	
		30.2 S 60.8 E	
		Indian Ocean	
		depth about 33 km	
		Mag : 5.7 (CGS)	
19	Wr	ePZ	17 48 59.5
	Qt	ePZ	49 35.5
		USCGS H 17 38 39.7	
		53.1 N 159.6 E	
		Off east coast of	
		Kamchatka	
		depth about 40 km	
		Mag : 4.9 SD 0.3 (CGS)	
19	Ch	ePZ	18 23 02
		epPZ	11
		eSZ	27 49
	Lh	ePZ	25 16
		eSN*E*	31 51
		eScSN*E*	35 10
	Wr	ePZ	25 43.5
	Qt	ePZ	44.5
		epPZ	57.0
		eSE*	32 46.0
		Mu ~~2(3)~~ Sec	
		MH 1.2 ~~2(3)~~ 20	
		$\triangle$ = 49°.1	
		USCGS H 18 17 02.2	
		5.0 S 102.2 E	
		Off coast of Sumatra	
		depth about 37 km	
		Mag : 5.4 SD 0.4 (CGS),	
		5.5 (Qt)	
19	Qt	iPZ	19 20 43.5d
		eSE*	21 14.0
		Mu ~~2(3)~~ Sec	
		PZ 0.18 ~~2(3)~~ 0.6	
		$\triangle$ = 2°.6	
	Wr	ePZ	21 13.7
		H 19 20 03	
		Mag : 3.5 (Qt)	
20	Qt	ePZ	03 40 41.0c
		eSE*	44.5
	Wr	ePZ	41 58.7
		H 03 40 36.0	
		30.3 N 66.1 E	
		About 15 miles north of	
		Geophysical Institute,	
		Quetta.	
		Felt Quetta	
20	Qt	ePZ	06 19 08 ±
		eSN	20 45.5
		H 06 17 03	
20	Qt	ePZ	08 45 27.2
20	Qt	ePKPZ	12 18 57.3
		USCGS H 11 59 58.5	
		22.2 S 175.2 W	
		Tonga Islands	
		depth about 33 km	
		Mag : 5.6 SD 0.2 (CGS)	
20	Wr	iPZ	12 25 12.8
		iSZ	44.5
	Qt	iPZ	26 11.3c
		eSN	27 29.0
		H 12 24 27	
		Hindukush region	
20	Wr	ePZ	15 58 08.4
	Qt	ePZ	59 04.0
		eSN	16 00 30.2
		H 15 57 13	
		Hindukush region	
20	Qt	ePZ	17 06 42.0
		USCGS H 16 57 13.5	
		31.5 N 131.6 E	
		Kyushu, Japan	
		depth about 33 km	
		Mag : 4.5 (CGS)	

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Date	Station	Phase	h m s
20	Kr	iPZ	18 57 41.5d
	Qt	ePZ	58 51.0
		eSE	59 55.0
		Mu ~~2(3)~~ Sec	
		PZ 0.01 ~~2(3)~~ 0.5	
	Wr	ePZ	59 52.9
		H 18 57 30	
		25.0 N 67.5 E	
		West Pakistan	
		Mag : 4.2 (Qt)	
20	Qt	ePZ	20 51 29.5
20	Qt	ePZ	22 44 04.0
		epPZ	16.5
		USCGS H 22 33 30.3	
		44.1 N 149.1 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.6 SD 0.3 (CGS)	
21	Qt	ePZ	02 14 03.5
21	Wr	iPZ	05 15 50.4
		iSZ	16 16.2
	Qt	ePZ	53.2
		eSN	18 10.0
		H 05 15 14	
		Hindukush region	
21	Qt	ePZ	06 46 46.6
		USCGS H 06 36 24.2	
		8.9 S 117.8 E	
		Sumbawa	
		depth about 33 km	
21	Qt	ePZ	08 38 23.0
		eSE	53.0
	Wr	iPZ	39 06.4
		iSZ	40 09.9
		H 08 37 44	
21	Wr	ePZ	20 08 23.4
	Qt	ePZ	59.7
21	Ch	ePZ	21 11 18
	Wr	ePZ	11 45.8
	Qt	ePZ	12 21.4
		USCGS H 21 01 35.3	
		50.3 N 156.4 E	
		Southern Kamchatka	
		depth about 80 km	
		Mag : 5.3 SD 0.4 (CGS)	
22	Ch	ePZ	00 24 38
		eSNE	29 30
	Wr	ePZ	27 18.3
	Qt	ePZ	22.4c
		eSE	34 38.0
		USCGS H 00 18 35.9	
		5.9 S 107.9 E	
		Near north coast of Java	
		depth about 323 km	
		Mag : 5.1 (CGS)	
22	Wr	ePZ	05 47 42.0
	Qt	ePZ	49.0
22	Qt	ePZ	11 45 48 ±
		eSE	47 16.0
	Wr	ePZ	46 17.8
		H 11 43 54	
22	Ch	ePZ	14 54 59
		epPZ	55 09
		eSN	15 02 17
	Lh	ePZ	14 55 47
		epPZ	56 00
		eSN*E*	15 03 48
	Wr	ePZ	14 55 50.0
	Qt	iPZ	56 26.6c
		eSN*	15 05 05.5
		Mu ~~2(3)~~ Sec	
		MH 6.7 ~~2(3)~~ 20	
		$\Delta = 65°.1$	
		USCGS H 14 45 51.7	
		44.4 N 149.0 E	
		Kurile Islands	
		depth about 33 km	
		Mag : 5.6 SD 0.4 (CGS),	
		6.0 (Qt)	

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Date	Station	Phase	h	m	s	
22	Ch	ePZ	15	13	03	
	Qt	ePZ		15	34.5	
		e(S)E		21	06.5	
22	Qt	ePZ	15	31	29.0	
		eSE			40.0	
	Wr	ePZ		32	08.0	
		H 15 31 14				
22	Qt	ePZ	16	16	33.0	
22	Qt	ePZ	16	21	49.5	
22	Lh	ePZ	16	21	44	±
	Wr	ePZ		22	13.6	
	Qt	ePZ			20.0	
		eSE		27	30.0	
		USCGS H 16 15 54.0				
		10.4 N 94.0 E				
		Andaman Islands region				
		depth about 33 km				
		Mag : 5.7 (CGS)				
22	Qt	ePKPZ	17	22	39.0	
		USCGS H 17 03 38.9				
		17.9 S 172.8 W				
		Tonga Islands region				
		depth about 33 km				
		Mag : 5.2 SD 0.3 (CGS)				
22	Wr	ePZ	17	23	17.3	
		iSZ			50.6	
	Lh	ePZ			56	±
	Qt	ePZ		24	15.0d	
		eSE		25	35.5	
		Mu ~~2(3)~~ Sec				
		MH 0.02 ~~2(3)~~ 0.5				
		△ = 7°.0				
		H 17 22 31				
		Hindukush region				
		Mag : 4.6 (Qt)				
22	Qt	ePZ	20	32	20.5	
	Wr	ePZ			41 9	
		USCGS H 20 26 00.2				
		37.3 N 30.1 E				
		Southwestern Turkey				
		depth about 28 km				
		Mag : 4.4 (CGS)				
23	Qt	ePZ	01	57	07	±
23	Wr	ePZ	02	33	36.4	
	Qt	ePZ			43.2	
23	Wr	ePKPZ	08	09	31.6	
	Qt	ePKPZ			39	±
		USCGS H 07 50 46.3				
		30.1 N 114.0 W				
		Gulf of California				
		depth about 14 km				
		Mag : 6(Pas), 6(Berk),				
		5.1 SD 0.4 (CGS)				
23	Qt	ePZ	08	19	45.5	
23	Lh	ePZ	19	10	40	
		epPZ			53	
	Wr	ePZ			42.8	
	Qt	ePZ		11	18.6c	
		USCGS H 19 00 35.6				
		45.1 N 151.5 E				
		Kurile Islands				
		depth about 45 km				
		Mag : 4.6 SD 0.4 (CGS)				
23	Qt	ePKPZ	19	48	13.5	
		USCGS H 19 30 19.4				
		20.2 S 178.1 W				
		Fiji Islands				
		depth about 515 km				
		Mag : 4.7 SD 0.3 (CGS)				
23	Wr	ePZ	22	43	12.4	
	Lh	ePZ			34	
	Qt	ePZ			35.0d	
		USCGS H 22 33 56.3				
		79.9 N 0.9 E				
		Svalbard region				
		depth about 33 km				
		Mag : 4.3 SD 0.2 (CGS)				
24	Wr	ePZ	01	47	45.2	
		eSZ		48	32.3	

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Date	Station	Phase	h	m	s	
	Qt	ePZ			53	±
		eSE		50	42.0	
		H 01 46 43				
24	Qt	ePZ	02	00	15.5	
24	Wr	ePZ	05	05	44.1	
	Qt	ePZ			51.0	
24	Qt	ePKPZ	05	27	38	±
		USCGS H 05 08 42.8				
		22.1 S 175.6 W				
		Tonga Islands				
		depth about 33 km				
		Mag : 5.1 SD 0.2 (CGS)				
24	Qt	ePKPZ	05	32	21.5	
		USCGS H 05 13 23.5				
		21.9 S 175.8 W				
		Tonga Islands				
		depth about 33 km				
		Mag : 5.0 SD 0.2 (CGS)				
24	Ch	iPZ	11	13	40	d
		eSN		19	50	
	Wr	ePZ		15	39.4	
	Qt	ePZ			57.5	d
		USCGS H 11 05 56.8				
		28.2 N 140.1 E				
		South of Honshu, Japan				
		depth about 260 km				
		Mag : 5.2 SD 0.4 (CGS)				
24	Qt	ePZ	15	43	56.6	
		USCGS H 15 31 29.4				
		6.1 S 147.6 E				
		Near coast of northeast				
		New Guinea				
		depth about 75 km				
		Mag : 4.6 (CGS)				
24	Qt	ePZ	17	04	43	±
	Wr	ePZ			45.4	
		e(S)Z		05	35.5	
	Lh	ePZ			28	
24	Lh	ePZ	18	05	56	±

Date	Station	Phase	h	m	s
	Wr	ePZ			59.0
	Qt	ePZ		06	35.6
		USCGS H 17 56 02.2			
		44.3 N 149.3 E			
		Kurile Islands			
		depth about 50 km			
		Mag : 4.6 SD 0.3 (CGS)			
24	Ch	ePZ	18	18	16
	Lh	ePZ		19	03 ±
	Wr	ePZ			06.6
	Qt	ePZ			43.3c
		USCGS H 18 09 08.7			
		46.4 N 150.0 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4.9 SD 0.4 (CGS)			
24	Ch	ePZ	19	32	32
	Wr	ePZ		33	17.8
	Qt	ePZ			56.4
		USCGS H 19 23 13.8			
		45.6 N 151.6 E			
		Kurile Islands			
		depth about 33 km			
		Mag : 4.2 SD 0.2 (CGS)			
24	Wr	ePZ	21	41	43.3
		iSZ		42	12.0
	Qt	ePZ			41.0
		eSE		43	54.0
		H 21 41 06			
		Hindukush region			
25	Ch	ePZ	06	52	40
	Wr	ePZ		53	29.1
	Qt	ePZ		54	04.5
		USCGS H 06 43 23.5			
		45.4 N 151.4 E			
		Kurile Islands			
		depth about 50 km			
		Mag : 4.8 SD 0.3 (CGS)			
25	Qt	ePZ	09	29	29.5
25	Ch	ePZ	10	11	29

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Date	Station	Phase	h	m	s	
	Wr	ePZ	12	22.3		
	Qt	ePZ			58.5	c
		USCGS H 10 02 23.8				
		44.3 N 149.5 E				
		Kurile Islands				
		depth about 55 km				
		Mag : 4.9 SD 0.4 (CGS)				
25	Ch	ePZ	10	20	10	
	Qt	ePZ		21	42.2	
		USCGS H 10 11 06.7				
		44.3 N 149.8 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 4.8 SD 0.4 (CGS)				
25	Ch	ePZ	11	39	48	
	Qt	ePZ		41	16.0	
		USCGS H 11 30 33.0				
		45.4 N 151.7 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 4.5 (CGS)				
25	Qt	ePZ	11	41	28	±
25	Wr	ePZ	16	54	47.6	
	Qt	ePZ		55	23.5	d
		USCGS H 16 46 36.2				
		22.6 N 121.3 E				
		Near east coast of				
		Taiwan				
		depth about 33 km				
		Mag : 4.7 (CGS)				
26	Ch	iPZ	07	00	32	c
		epPZ		01	02	
		eSN		07	13	
	Wr	ePZ		03	00.0	
	Qt	ePZ			13.1	c
		USCGS H 06 52 08.2				
		6.8 S 129.6 E				
		Banda Sea				
		depth about 111 km				
		Mag : 5.1 (CGS)				
26	Qt	ePZ	08	58	19.5	
		USCGS H 08 47 17.0				
		7.1 S 129.2 E				
		Banda Sea				
		depth about 117 km				
		Mag : 4.7 (CGS)				
26	Qt	ePZ	10	29	49.5	
26	Qt	ePZ	15	22	39.5	
26	Qt	ePZ	16	26	30.0	
		USCGS H 16 19 48.8				
		34.9 N 27.4 E				
		Crete region				
		depth about 33 km				
		Mag : 4.5 (CGS)				
26	Qt	ePKPZ	23	08	47	±
		USCGS H 22 50 08.9				
		16.6 S 175.2 E				
		Fiji Islands region				
		depth about 33 km				
		Mag : 5.3 SD 0.2 (CGS)				
27	Qt	ePKPZ	02	39	05.0	
		USCGS H 02 19 41.9				
		16.6 S 72.1 W				
		Southern Peru				
		depth about 79 km				
		Mag : 4.9 SD 0.2 (CGS)				
27	Qt	ePZ	05	52	22.0	
27	Qt	ePZ	06	36	56.5	
27	Wr	ePZ	07	57	23.7	
	Qt	ePZ		58	32.2	
		iPZ			35.0	d
		ipPZ			44.3	
		iSE	08	01	06.2	
		Mu ~~2(3)~~ Sec				
		PZ 0.04 ~~2(3)~~ 0.8				
		$\Delta = 13°.6$				
Ch		ePZ	08	00	27	c
		USCGS H 07 55 17				
		42.0 N 76.5 E				
		Kazakh, S.S.R.				

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Date	Station	Phase	h m s
		depth about 33 km	
		Mag : 4.6 (Qt)	
27	Qt	ePZ	09 32 42.2
		USCGS H 09 21 58.1	
		46.6 N 152.6 E	
		Kurile Islands region	
		depth about 45 km	
		Mag : 4.4 SD 0.4 (CGS)	
27	Qt	ePZ	13 24 16.5
		USCGS H 13 13 11*	
		7.5 S 127.7 E	
		Banda Sea	
		depth about 33 km	
		Mag : 4.4 (CGS)	
27	Ch	ePZ	14 06 22
		epPZ	33
		eSN	12 19
	Wr	ePZ	09 02.0
	Kr	ePZ	12.7c
	Qt	iPZ	19.6c
		USCGS H 13 58 58.4	
		3.1 N 126.6 E	
		Molucca Passage	
		depth about 33 km	
		Mag : 4.8 (CGS)	
27	Ch	ePZ	20 27 19
		epPZ	32
	Qt	ePZ	28 43.0
		USCGS H 20 18 01*	
		45.8 N 151.8 E	
		Kurile Islands region	
		depth about 40 km	
		Mag : 4.4 SD 0.2 (CGS)	
27	Qt	ePZ	20 31 48.3
27	Lh	ePZ	21 11 43
		eSN*E*	12 44
	Wr	ePZ	54.9
	Qt	ePZ	13 07.5
		epPZ	12.5
		e(S)N*	15 13.0
	Kr	ePZ	13 32.0
		eSE	15 45.0
	Ch	ePZ	13 59 c
		epPZ	14 06
		iSN	16 33
		Mu ~~2(3)~~ Sec	
		PZ 0.01 ~~2(3)~~ 0.5	
		△ = 10°.5	
		H 21 10 32	
		40.0 N 79.8 E	
		India	
		USCGS H 21 10 39.9	
		30.8 N 79.1 E	
		Northern India	
		depth about 33 km	
		Mag : 5.1 (CGS), 5.3(Qt)	
28	Wr	ePZ	01 47 10.1
		eSZ	44.1
	Qt	ePZ	48 10.5
		eSE	49 29.5
		H 01 46 26	
		Hindukush region	
28	Wr	ePZ	08 52 54.9
		eSZ	53 28.7
	Qt	ePZ	53.0c
		eSE	55 12.2
		H 01 52 10	
		Hindukush region	
28	Qt	ePZ	11 26 10.0
		USCGS H 11 16 21.0	
		8.3 N 124.5 E	
		Near west coast of Mindanao	
		Philippine Islands	
		depth about 57 km	
		Mag : 5.8 (CGS)	
28	Qt	ePZ	11 54 40.0
28	Qt	ePZ	13 15 56.0
28	Ch	iPZ	15 24 10 c
		epPZ	19
		eSN	33 05

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Date	Station	Phase	h	m	s	
	Wr	ePZ		24	24.4	
	Qt	iPZ			58.6c	
	Kr	ePZ		25	21.0c	
		USCGS H 15 13 11.0				
		52.2 N 174.2 E				
		Near Islands, Aleutian Islands				
		depth about 33 km				
		Mag : 5.4 (CGS)				
28	Qt	ePZ	19	30	53.5	
28	Ch	ePZ	20	06	17	
	Wr	ePZ		08	45.6	
	Qt	ePZ		09	00.5	
		USCGS H 19 57 56.7				
		7.1 S 129.4 E				
		Banda Sea				
		depth about 113 km				
28	Qt	ePZ	22	14	57.5	
28	Wr	ePZ	22	34	23.2	
		eSZ			55.6	
	Qt	ePZ		35	22.6d	
		eSE		36	40.0	
		H 22 33 42				
		Hindukush region				
28	Qt	ePZ	23	29	03.2	
		USCGS H 23 18 19.8				
		43.6 N 150.6 E				
		Kurile Islands				
		depth about 33 km				
		Mag : 4.4 SD 0.4 (CGS)				
29	Qt	ePZ	12	31	34.5	
		eSN		34	37.0	
29	Qt	ePZ	14	19	47	±
		USCGS H 14 09 11.4				
		44.6 N 149.8 E				
		Kurile Islands				
		depth about 50 km				
		Mag : 4.6 SD 0.3 (CGS)				
29	Ch	ePZ	14	58	00	c
		epPZ			13	
		eSN		04	52	
	Lh	ePZ			59	38
	Wr	ePZ			52.0	
	Qt	ePZ	15	00	20.5	
		ipPZ			31.5	
		eSN*		09	14.0	
		USCGS H 14 49 26.6				
		23.7 N 143.2 E				
		Bonin Islands region				
		depth about 33 km				
		Mag : 5.2 SD 0.2 (CGS)				
29	Qt	ePZ	15	37	42	±
29	Qt	ePZ	18	46	07.5	
		USCGS H 18 33 23.0				
		5.3 S 151.6 E				
		New Britain				
		depth about 58 km				
		Mag : 5.0 SD 0.5 (CGS)				
29	Wr	ePZ	19	08	48.4	
	Qt	ePZ			39	±
		eSE		10	47.5	
		H 19 08 10				
		Hindukush region				
29	Qt	ePZ	19	17	02.5	
29	Qt	ePZ	19	56	52	±
29	Wr	iPZ	20	25	33.1	
		iSZ		26	04.5	
	Lh	ePZ			14	
		eSNE		27	15	
	Qt	ePZ		26	29.7	
		eSE		27	46.5	
		Mu ~~2(3)~~ Sec				
		PZ 0.02 ~~2(3)~~ 0.6				
		$\triangle = 6°.8$				
		H 20 24 51				
		36.1 N 70.4 E				
		Hindukush				
		depth about 250 km				
		Mag : 4.5 (Qt)				
30	Qt	ePZ	03	10	05.5c	
		eSN		11	25.0	
		H 03 08 21				

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Date	Station	Phase	h	m	s	
30	Ch	iPZ	09	55	39	c
		esPZ		56	13	
		iSNE	10	01	47	
	Lh	ePZ	09	57	54	
		epPZ		58	12	
		eSN*E*	10	05	54	
		esSN*E*		06	27	
	Wr	ePZ	09	58	14.8	
	Kr	ePZ			22.9	c
		epPZ			44.4	
		eSE	10	06	51.9	
	Qt	iPZ	09	58	32.1	c
		iSN	10	07	08.0	
		Mu ~~2(3)~~ Sec				
		PZ 0.1 ~~2(3)~~ 1.4				
		△ = 64°.6				
		USCGS H 09 47 59.0				
		1.6 N 128.4 E				
		Halmahera region				
		depth about 61 km				
		Mag : 5.5 (CGS), 5.7(Qt)				
30	Qt	ePZ	10	49	34.0	
30	Qt	ePZ	11	41	37.5	
		USCGS H 11 29 46.4				
		51.9 N 174.2 E				
		Near Islands, Aleutian Islands				
		depth about 33 km				
		Mag : 4.2 SD 0.3 (CGS)				
30	Wr	ePZ	11	58	47.7	
	Qt	ePZ		59	56.0	
		eSE	12	02	27.0	
		H 11 56 43				
30	Ch	ePZ	21	44	05	
		eSNE		46	55	
	Wr	ePZ		47	06.8	
	Qt	ePZ			10.5	
		epPZ			21.5	
		eSE*		52	40.0	
		USCGS H 21 40 20.3				
		6.6 N 94.2 E				
		Nicobar Islands				
		depth about 33 km				
		Mag : 5.3 (CGS)				
30	Qt	ePZ	23	32	03.0	

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Date	Phase	h m s
	QUETTA	
1	ePZ	05 26 08.6
	eSN	29.5
1	ePZ	07 17 46.0
1	ePZ	23 42 13.5
	eSN	43 34.0
2	ePZ	02 09 48.0
	eSE	58.0
2	ePE	03 28 52.6
2	ePZ	04 01 03.0
	eSN	02 02.5
2	ePgZ	05 29 53.3
	eSgNE	57.0
2	ePZ	06 18 26 ±
2	ePZ	09 39 42 ±
	eSE	48.5
2	ePZ	10 25 14.0
2	ePZ	12 30 40 ±
	eSE	45.0
2	ePZ	18 12 40 ±
	eSE	49
3	ePZ	05 34 15 ±
	eSN	55.0
3	ePZ	05 40 02.0
	eSN	06.5
3	ePZ	09 35 51 ±
3	ePZ	19 27 31 ±
	eSE	28 10
3	iPZ	21 54 31.0d
	eSE	34.6
3	ePZ	22 04 26.0
	eSE	06 07.0
4	ePZ	05 11 33.0
4	ePZ	07 12 41.0
4	ePZ	07 26 31.2
4	ePZ	08 17 00 ±
4	ePE	08 45 13 ±
	iSE	34.5
4	ePZ	09 58 22.8
4	ePZ	14 59 32 ±
5	ePZ	00 12 48 ±
	eSE	58.5
5	eXZ	01 37 05.0
5	eSE	03 07 16.7
5	ePZ	06 43 50.5
5	ePZ	18 20 29.5
	eSN	52.5
6	ePZ	00 46 45.0
	iSE	47 04.0
6	ePZ	06 51 44.5
	eSZ	56.0
6	eXE	13 36 41 ±
6	eXZ	14 18 02 ±
6	ePZ	15 47 19.0
	eSE	54 ±
6	ePZ	19 34 37 ±
	eSE	35 40.5
6	ePZ	21 09 23.0
	eSE	44.0
7	ePZ	02 58 34 ±
7	ePZ	17 32 00 ±
	eSE	26.5
8	ePZ	16 42 03.5
	eSE	21.5
8	ePZ	18 44 39.0
	eSE	44.2
8	ePZ	19 45 58.5
	eSE	46 06.5
8	ePZ	22 13 17 ±
	eSE	39.2
9	ePZ	04 39 18 ±
	eSN	21.2
9	ePZ	04 43 52 ±
	eSE	56.1
9	ePZ	04 44 27 ±
	eSE	30.0
9	eSE	06 02 37.0
9	ePZ	06 40 33.5

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Date	Phase	h m s
9	ePZ	07 27 30 ±
	eSE	33.5
9	ePE	08 53 29.2
	eSE	32.5
9	ePZ	08 46 00.5
9	ePZ	14 16 27.8
	eSE	50.5
9	ePZ	16 34 56 ±
	eSE	36 11.3
9	ePZ	19 21 50.5
	eSN	22 15.0
9	ePZ	19 57 40.5
	eSN	42.2
10	ePZ	00 42 05.0d
10	ePZ	00 45 31.6
	e(S)E	46 11.0
10	ePZ	01 04 02.0
	eSE	12.0
10	ePZ	01 11 00.5
	eSE	11.0
10	eXZ	01 18 56 ±
	eXZ	20 48.0
	eXZ	21 11.0
	eXZ	33.0
10	ePZ	01 54 29.5
	eSE	34.0
10	ePZ	02 30 55 ±
	e(S)N	31 25.0
10	i!PZ	05 50 39.6c
	iSE	42.6
10	eSN	07 25 07 ±
10	ePZ	08 15 39.4
	eSE	50 ±
10	ePZ	08 30 10.5
	eSN	21.0
10	ePZ	08 43 45 ±
	eSZ	44 18
10	ePZ	11 14 17.5
	eSE	15 13.0
10	ePZ	17 07 33.0
	eSE	36.0
10	eXZ	18 44 42 ±
10	eXZ	23 16 10 ±
11	ePZ	00 44 36.5
	eSE	45 54.5
11	ePZ	01 01 01.0
	eSN	03.5
11	ePZ	02 11 06.0
	eSE	28.5
11	ePZ	04 24 04.5
11	eSN	07 08 48.5
11	ePZ	07 52 38.0
11	ePZ	08 59 26.5
	eSE	28.0
11	ePZ	14 47 22.0
	eSE	26.5
11	ePZ	14 50 27.5
	eSE	30.5
11	ePZ	18 00 55.0
	eSE	17.5
11	ePZ	18 09 49.5
	eSE	10 12.3
11	eP Z	23 42 23 ±
	eSE	43 00.0
12	ePgZ	02 05 21.9
	eSgE	33.5
12	ePgZ	02 19 04.5
	eSgE	08.0
12	ePZ	03 03 24.8
	eSN	38.0
12	ePZ	11 18 22 0
	eSE	25.0
12	ePZ	11 21 06.5
	eSE	09.5
12	ePZ	18 49 06 ±
12	eSE	19 47 44.2
12	ePgZ	22 28 49.0
	eSgE	50.0
13	ePgZ	07 37 45.5
	eSgE	48.9

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Date	Phase	h m s
13	ePZ	07 43 18.0
	eXZ	30.0
13	ePZ	12 59 39.0d
	eXN	51.5
13	ePZ	15 48 49.0
	eSE	59.8
13	ePZ	23 16 11.0
14	ePZ	20 25 03 ±
14	ePZ	21 34 41 ±
15	ePZ	00 37 52 ±
15	e(S)N	01 25 26.0
15	ePZ	08 02 04.5
	eSN	07.6
15	ePZ	14 43 38 ±
	eSE	44 00.0
17	ePZ	10 46 22 ±
	eSN	47 08.0
17	ePZ	12 13 38 ±
	eSN	46.0
17	ePZ	19 32 44.5
17	eSN	19 38 29.0
17	ePZ	19 46 02.0
	eSN	05.0
17	ePZ	19 54 52
	eSN	55.2
17	ePZ	19 58 35.0
	eSN	38.0
17	ePZ	20 04 55 ±
17	ePZ	20 07 10.5
17	ePZ	20 08 33.5
17	ePZ	20 18 43.0
17	iPZ	20 27 11.5d
17	ePZ	20 38 51.8
17	ePZ	20 41 38.5
17	ePZ	20 50 33.0
17	eSE	36.5
17	ePZ	20 57 03.2
	eSN	12.6
17	ePZ	22 03 02.0
17	ePZ	22 23 02.0
17	eSN	05.0
17	ePZ	22 39 15.5
	eSN	18.5
18	ePZ	02 52 41.5
	eSE	44.5
18	ePZ	04 07 22.5
	eSN	25.5
18	ePZ	05 59 13 ±
	eSE	59 17.0
18	eSN	06 05 17.6
18	ePZ	08 10 01.5
	eSZ	04.5
18	ePZ	10 38 13.4
	eSE	16.3
18	ePZ	11 04 39.5
	eSE	42.5
18	ePZ	11 47 11.6
	eSE	16.5
18	ePZ	12 15 53 ±
18	ePZ	12 29 05 ±
	eSE	10
18	ePZ	13 15 45.0
	eSE	48.0
18	ePZ	13 53 52.5
	eSE	55.5
18	ePZ	18 02 35.0
	eSE	38.0
18	ePZ	18 22 31.6
	eSE	34.5
18	ePZ	18 35 11.2
	eSN	50
18	ePZ	19 33 52.3
	eSE	35 26.0
18	eSE	20 08 44
18	ePZ	20 45 03.5
	eSE	06.7
18	ePZ	21 10 19.0
	eSN	22.0
18	ePZ	21 15 47
	eSN	50.2
18	ePZ	22 46 21.6

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Date	Phase	h m s	
	eSN	25.0	
19	ePZ	00 58 25.0	
	eSE	28.2	
19	eSE	02 43 42	±
19	ePZ	03 05 30	
19	ePZ	03 13 06.0	
	eSN	09	
19	ePZ	04 22 33.5	
	eSN	36.6	
19	iPZ	04 27 27.5	c
	eSE	30.6	
19	ePZ	04 37 56.5	
	eSE	59.5	
19	ePZ	21 27 30	±
	e(S)N	28 13.5	
19	ePZ	23 33 17.2	
	eSN	20.5	
20	ePZ	00 46 01.5	
	eSN	04.5	
20	ePZ	02 18 30.5	
	eSN	33.3	
20	ePgZ	04 28 43.5	
	eSgN	46.0	
20	ePgZ	04 31 09.0	
	eSgN	14.5	
20	ePgZ	04 33 38.0	
	eSgN	42.8	
20	ePgZ	04 39 40.4	
	eSgN	43.5	
20	ePgZ	04 40 59.0	
	eSgN	41 02.5	
20	ePgZ	04 48 19.0	
	eSgN	22.3	
20	ePgZ	04 51 47.4	
	eSgN	52 01.0	
20	ePgZ	04 57 37.5	
	eSgN	40.5	
20	ePgZ	05 16 50.3	
	eSgN	53.4	

Date	Phase	h m s	
20	ePgZ	05 37 05.0	
	eSgN	09.1	
20	ePgZ	05 42 48.2	
	eSgN	51.9	
20	ePgZ	05 48 40.5	
	eSgN	44.6	
20	ePgZ	05 58 18.5	
	eSgN	21.5	
20	ePgZ	06 00 42.3	
	eSgN	44.5	
20	ePgZ	06 07 29	±
	eSgN	34.3	
20	ePgZ	06 12 34.0	
	eSgN	37.2	
20	ePgZ	06 31 36.0	
	eSgN	39.1	
20	ePgZ	06 50 41.4	
	eSgN	44.4	
20	ePgZ	06 59 15	±
	eSgN	22.5	
20	ePgZ	07 43 12.2	
	eSgN	14.9	
20	ePgZ	08 23 28.6	
20	ePZ	08 30 38	±
20	ePgZ	08 47 57	±
	eSgN	00.6	
20	ePgZ	90 06 32.4	
	eSgN	38.0	
20	eSgN	09 08 04.3	
20	ePgZ	09 14 09.5	
	eSgN	13.8	
20	ePZ	09 18 03	
20	eSN	27.0	
20	ePgZ	09 31 29.6	
	eSgN	33.3	
20	ePgZ	10 05 02	±
	eSgN	06.9	
20	ePgZ	10 06 14.2	
	eSgN	18.0	

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Date	Phase	h	m	s	
20	ePgZ	10	09	16.0	
	eSgN			20.1	
20	ePgZ	10	15	20	±
	eSgN			27.0	
20	ePgZ	10	29	04.6	
	eSgN			08.5	
20	ePgZ	11	03	04.0	
	eSgN			07.0	
20	ePgZ	11	05	43.5	
	eSgN			36.7	
20	ePZ	11	33	28	±
	eSN			44.5	
20	ePgZ	11	43	26	±
	eSgN			29.8	
20	ePgZ	11	59	37.0	
	eSgN			40.4	
20	ePgZ	12	23	32.5	
20	ePgZ	13	15	58.0	
	eSgN			03.2	
20	ePgZ	14	35	41.0	
	eSgN			44.3	
20	ePgZ	14	46	23.6	
	eSgN			26.7	
20	ePgZ	15	55	59.4	
	eSgN		56	02.0	
20	ePgZ	16	06	04.5	
	eSgN			07.8	
20	ePgZ	16	34	33.7	
	eSN			50.5	
20	ePgZ	17	01	15.2	
	eSgN			17.0	
20	ePgZ	17	33	45.5	
	eSgN			48.1	
20	eSgZN	17	43	40.5	
20	ePgZ	17	49	20.0	
	eSgN			23.0	
20	ePZ	18	00	39.0	
20	ePZ	18	12	43.5	
	eSN		13	10.0	
20	ePgZ	19	32	31.1	

Date	Phase	h	m	s	
	eSgN			34.5	
20	ePgZ	20	06	13.0	
	eSgN			16.1	
20	ePgZ	20	20	45.5	
	eSgN			48.5	
20	ePgZ	21	20	47.0	
	eSgN			50.6	
20	ePZ	21	24	54.5	
20	ePZ	23	27	09	±
21	ePZ	00	01	01	
21	ePgZ	00	04	22	±
	eSgN			26.5	
21	ePgZ	02	09	47	±
	eSgN			50.5	
21	ePZ	03	08	15.0	
	eSN			18.3	
21	ePZ	04	20	10	±
21	ePgZ	04	35	28	±
	eSgN			32.6	
21	ePZ	07	16	23	±
	eSgE			26.5	
21	ePgZ	07	21	55	
	eSgE			57.2	
21	ePZ	10	03	38.0	
21	ePZ	12	23	52	±
21	ePZ	13	17	26.5	
21	ePZ	16	48	17.2	
	eSgN			20.6	
21	ePgZ	17	00	22.5	
	eSgN			25.5	
21	ePZ	18	55	43.0	
21	ePgZ	19	09	38.5c	
	eSgE			41.7	
21	ePZ	19	40	42.5	
22	ePZ	00	52	27	±
	eSN			32.0	
22	ePZ	01	07	26	±
	eSN			28.0	
22	ePgZ	09	49	21.5	
	eSgE			25.0	

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Date	Phase	h m s	Date	Phase	h m s
22	ePgZ	10 17 46.5	24	ePZ	14 18 42.0
	eSgE	59.5		eSE	19 05.6
22	ePZ	14 10 26.7	24	ePZ	19 30 19.0
	eSE	11 42.0		eSE	22.1
22	ePZ	17 19 10 ±	24	ePZ	22 24 10.5
22	ePZ	17 34 57.0		eSN*	35.0
	eXZ	36 25.0	25	ePZ	02 24 13.0
22	ePgZ	18 28 28.0		eSE	27.0
	eSgE	33.8	25	ePZ	02 48 00.0
22	ePZ	19 16 11.0		eSE	03.5
22	ePZ	19 31 46.5	25	ePZ	02 49 27.5c
	eSN	57.4		eSE	31.0
22	ePZ	19 43 34.5d	25	eSE	11 29 49.1
	eSN	48.5	25	ePZ	17 23 58.0
22	eXZ	20 28 27.0		eSE	24 01.5
23	ePZ	00 42 50.5	25	iPZ	21 40 09.0d
23	ePgZ	00 50 03.0		eSE	15.5
	eSgE	06.5	25	ePZ	22 22 40.0
23	ePZ	01 59 55.5	26	ePZ	07 59 05 ±
23	ePgZ	03 00 51.6	26	eSN	08 15 39.5
	eSgE	59.4	26	eSE	12 06 18.5
23	ePgZ	03 56 56.0	26	eSN	15 23 01.5
	eSgE	59 59.0	26	eSE	22 36 26.2
23	ePgZ	07 06 30.0	27	eSE	01 13 30.0
	eSgE	31.0	27	ePZ	03 10 14.0
23	ePgZ	07 52 05.3		eSE	45.0
	eSgE	08.5	27	ePZ	06 07 22 ±
23	ePgZ	10 36 28.0		eSE	31.5
	eSgE	32.0	27	ePZ	08 15 02 ±
23	ePgZ	11 09 48.5		eSE	26.2
	eSgE	52.5	27	ePZ	08 24 29 ±
23	ePZ	15 45 32 ±		eSE	31.6
	eSE	55 14.0	27	ePZ	09 01 13.0
23	ePZ	18 29 59±	27	ePZ	14 53 51.5
23	ePZ	18 34 09.0		iPZ	53.2
24	ePZ	02 00 15.5		iXZ	54 05.0
24	ePZ	03 05 08 ±		eSE	20.0
	eSN	38	27	ePgZ	15 44 18.0
24	ePZ	05 05 51.0		eSgE	21.5
	eSN	05 15 01.7	27	ePZ	15 54 06.5

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Date	Phase	h m s
	eSN	16.5
27	ePZ	16 40 29.5
	eSE	38.0
27	ePZ	21 09 52 ±
	eSE	55.0
28	ePgZ	01 20 42.5
	eSgE	45.5
28	eSE	06 13 54.0
28	ePgZ	18 40 02.2
	eSgN	12.5
28	ePZ	18 41 04.5
	eSE	07.5
29	ePZ	00 45 35.6
	eSN	46 27 ±
29	ePZ	12 42 04 ±
	eSN	18.2
29	ePgZ	20 03 13.2
	eSgE	16.7
30	ePZ	10 32 01.5
	eSE	25.0
	WARSAK	
1	ePZ	02 10 11.3
2	ePZ	08 42 47.6
3	iPgZ	00 20 45.2
3	iPZ	00 27 12.4
3	ePZ	00 59 56.8
3	ePZ	05 31 51.5
	eSZ	32 18.5
3	ePZ	05 52 53
3	ePZ	07 07 11.0
3	ePZ	09 15 36.9
3	ePZ	12 48 06.4
3	ePZ	14 43 33.5
3	ePZ	16 42 55.5
4	ePZ	19 51 21.6
	eSZ	47.3
4	ePZ	22 36 55.7
5	ePZ	05 55 32.8
6	ePZ	00 11 17.7
6	ePZ	04 46 05.5
6	ePZ	13 44 16.7
7	ePZ	03 34 51.0
7	ePZ	17 05 57.6
	eXZ	10 39.9
8	ePZ	17 19 41.5
9	ePN	22 11 03.0
10	ePN	00 46 08.2
10	ePZ	04 16 44.1
10	ePZ	07 22 36.0
	eSZ	23 10.3
11	ePZ	05 19 59.9
	eSZ	20 40.2
11	ePZ	12 15 01.1
	eSZ	33.7
13	ePZ	08 33 08.0
13	ePZ	11 08 51.1
13	ePZ	17 35 00.3
13	ePZ	20 00 07.8
13	ePZ	21 30 39.2
14	ePZ	03 15 04.1
	iSZ	25.3
14	ePZ	04 17 15.4
14	ePZ	05 22 32.1
	eSZ	58.6
14	ePZ	11 00 52.2
14	ePZ	14 13 20.1
	eSZ	51.2
15	ePZ	08 29 27.4
	eSZ	30 16.5
15	ePZ	11 28 56.6
	eSZ	29 32.0
15	ePZ	15 37 12.1
15	ePZ	16 55 54.4
15	ePZ	21 08 55.8
	eSZ	09 18.5
16	ePZ	08 00 25.4
16	ePZ	15 47 13.7
16	ePZ	21 27 05.6

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Date	Phase	h	m	s
17	ePZ	01	02	55.7
17	ePZ	10	25	29.3
	eSZ			55.1
17	ePZ	16	53	13.8
	eSZ			39.5
18	ePZ	11	19	14.8
	eSZ			59.0
18	ePZ	13	57	33.3
	eSZ		58	00.6
20	iPZ	04	19	21.2
20	ePZ	09	29	40.0
20	ePZ	10	12	43.8
21	ePZ	04	05	04.3
	eSZ			27.9
21	ePZ	07	05	11.8
21	ePZ	21	19	17.7
22	ePZ	00	09	59.8
22	ePZ	04	07	02.0
22	ePZ	04	57	29.1
22	ePZ	07	31	33.0
22	ePZ	07	46	10.1
22	ePZ	11	09	26.6
	eSZ			53.9
22	ePZ	11	32	54.5
22	ePZ	21	19	21.2
23	ePZ	12	51	44.7
	eSZ		52	11.9
23	ePZ	15	35	46.8
	eSZ		36	40.2
23	ePZ	20	42	46.8
24	ePZ	05	12	25.3
	iSZ			56.0
24	ePZ	15	04	04.0
26	ePZ	01	36	47.8
27	ePZ	08	27	38.2
27	ePZ	21	07	51.0
28	ePZ	17	49	30.1
	eSZ			57.8
30	ePZ	04	17	20.1
30	ePZ	09	12	14.3
30	ePZ	10	27	28.6
30	ePZ	22	52	54.3
	LAHORE			
2	eXZ	21	42	03
2	eXZ	23	13	57
3	eXZNE	22	47	15
4	eXZ	22	25	00
6	eXZ	23	56	00
	eXZNE			10
	iSZNE			52
7	eXZ*	18	02	46
9	eXZ*	02	58	14
9	e(P)Z	22	18	28
10	eXZ	00	46	27
10	eXZZ*	05	08	42
11	eXZ	23	57	25
	eXZ			39
	eXZNE		58	06
	eXZ			43
15	eXZ	18	29	12
	eXZ		32	10
15	eXNE	21	09	58
16	eXZNE	08	01	02
16	eXZ	11	43	52
16	eXZNE*	21	19	01
17	eXZ	01	06	06
18	eXZ	03	56	51
	eXZ*		57	04
	eXN		58	41
18	eXN*	14	58	33
	eXZ			40
19	eXZ	19	22	52
20	eXZ	19	59	38
	3XZ	19	02	10
23	eXZ*	08	42	19
24	eXZ	22	25	31
	eXZ		27	03
26	eXZ*	23	08	38
	eXZ			50

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Date	Phase	h	m	s	
27	eXZ*	07	58	24	
	eXZ			38	
28	eXZ*	15	54	07	
28	eXZNE	22	36	06	
29	eXZ	19	11	30	
30	eXZ	21	46	47	
	eXN*E*		55	08	
	KARACHI				
1	eXZ	07	17	06.5	
12	eXZ	09	13	26.0	
12	ePZ	21	17	27.6d	
	epPZ			41.1	
18	e(P)Z	01	05	08.5	
	eXZ			31.5	
18	eXE	03	41	35.5	
18	ePgZ	04	05	08.2	
	e(Sg)E			22.7	
20	ePZ	19	11	59.5	
20	ePgZ	23	10	36.2	
	e(Sg)Z			49.1	
21	ePnZ	06	47	18.2	
	eSnZE			41.0	
29	ePZ	00	45	56.5c	
	eXZ		46	41.5	
	CHITTAGONG				
1	eXZ	03	18	24	
1	ePZ	20	01	34.9	
1	eXZ	21	16	34	
1	eXZ	22	56	36	
2	eXZ	02	50	41	
2	eXZ	09	28	01	
2	eXZ	15	18	35	
3	ePZ	11	48	26	±
	eSE			52	
4	ePZ	02	45	03.1	
4	ePZ	05	31	24.4	
5	eXZ	03	07	37	
6	eXZ	00	00	31	
6	eXZ	04	44	36	
6	ePZ	05	45	40	
7	eXZ	09	32	41	
7	ePZ	15	43	22.2	
7	ePZ	16	38	41.4	
8	ePZ	07	24	15.1	
8	ePZ	10	41	44.1	
9	ePZ	03	36	38.2	
10	ePZE	06	01	53.2	
10	ePZ	16	07	50	±
10	eXZ	20	30	55	
11	eXZ	01	30	19	
11	eXZ	11	47	52	
12	eXZ	07	16	39	
12	eXZ	15	32	38	
12	iPgZ	19	47	53.9	
	eSgZNE		48	10	
13	ePZ	05	22	54.4	
14	ePZ	04	48	22.5	
14	eXZ	05	16	06	
14	ePZ	11	28	22.1	
14	ePZ	12	07	03.8	
14	ePZ	14	13	51.5	
14	ePZ	14	18	10.2	
14	ePZ	23	51	57.4	
15	ePZ	22	42	46.1	
16	eXZ	07	06	17.5	
	eXZ		07	00	
16	eXZ	09	39	46	
16	eXZ	16	23	24	
16	eXZ	22	56	45	
	eXZ	23	00	58	
17	eXZ	01	07	00.0	
17	eXZ	07	57	52	
17	ePZ	09	42	07	
17	eXZ	11	00	29	
18	eXZ	01	54	06	
18	eXZ	13	29	13	
18	eXZ	14	59	04	
18	ePZ	21	23	25.2	

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Date	Phase	h	m	s
19	iPZ	04	14	57.2d
19	eXZ	12	40	15
20	eXZ	01	48	22
20	ePZ	02	33	09.4
20	ePZ	04	17	20.5
20	eXZ	04	46	40
20	eXZ	17	06	08
20	ePZ	18	55	31.5
21	ePZ	05	59	27.2
21	eXZ	16	31	00
21	ePZ	17	50	00.1
21	ePZ	19	38	48
21	ePZ	22	56	07.1
22	ePZ	01	14	36.1
	iXZ			54
22	eXZ	05	44	06
22	eXZ	16	15	09
22	eXZ	16	18	45
22	eXZ	17	22	45
22	ePZ	18	09	47.2
22	ePZ	21	48	06.2
22	eXZ	01	37	10
23	ePZ	05	11	07.2
23	eXZ	05	42	40
23	eXZ	07	05	57
23	eXZ	08	09	46.2
	eXZ		11	20
23	eXZ	08	53	03
23	ePZ	11	31	26.1
23	ePZ	23	25	00.0
24	ePZ	04	03	38.1
24	eXZ	04	06	51
24	eXZ	05	20	13
24	eXZ	16	29	41
24	ePZ	17	26	39.8
25	iPgZ	02	16	28.3d
	iSgZNE			46.3
25	ePZ	09	03	10.0
25	eXZ	16	53	15
25	ePZ	21	14	59.6

Date	Phase	h	m	s
	e(S)NE		15	30
26	eXZ	01	05	17
26	eXZ	08	36	09
26	ePZ	15	09	44.1
26	eXZ	22	45	46
26	eXZ	23	03	08
27	eXZ	07	18	41
27	ePZ	11	24	37.5
27	eXZ	14	33	58
27	eXZ	16	14	44
27	eXZ	19	45	29
27	eXZ	23	16	03
28	eXZ	10	29	38

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Date	Station	Phase	h	m	s
1	Qt	ePZ	01	28	49.0
1	Wr	iPZ	04	33	06.6c
	Ch	ePZ			17
	Qt	iPZ			52.6d
		USCGS H 04 26 12.8			
		56.1 N 41.8 E			
		Lake Baikal region			
		depth about 3 km			
		Mag : 5.3 SD 0.4(CGS)			
1	Qt	ePKPZ	09	10	17±
		USCGS H 08 50 42*			
		38.3 S 73.9 W			
		Near coast of central Chile			
		depth about 55 km			
		Mag : 4.4 SD 2.0(CGS)			
1	Ch	ePZ	09	38	30±
	Qt	ePZ		41	40.5
		USCGS H 09 34 56			
		7.4 N 93.5 E			
		Nicobar Islands			
		depth about 27 km			
1	Qt	ePZ	12	05	04.0
		USCGS H 11 52 52.9			
		4.6S 154.8 E			
		Solomon Islands region			
		depth about 479 km			
		Mag : 4.6 SD 0.4 (CGS)			
1	Qt	ePZ	13	44	35.0
		USCGS H 13 33 55.6			
		45.3N 150.7 E			
		Kurile Islands			
		depth about 35 km			
		Mag : 4.3 SD 0.3 (CGS)			
1	Ch	ePZ	16	06	31
	Qt	ePZ		07	53.5
		USCGS H 15 57 12.0			
		44.5 N 150.7 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4.4 SD 0.3 (DGS)			
1	Ch	ePZ	16	21	50.4
	Wr	iPZ		23	51.5
	Qt	ePZ		24	25.5c
		iPZ			26.7d
		USCGS H 16 15 01*			
		28.9 N 130.0 E			
		Ryukya Islands			
		depth about 31 km			
		Mag : 4.8 SD 0.3 (CGS)			
1	Qt	ePZ	17	55	13.5
		USCGS H 17 44 33			
		44.9 N 150.3 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 4.4 SD 0.3 (CGS)			
2	Qt	ePZ	09	56	08.5
		USCGS H 09 46 37*			
		48.0 N 145.2 E			
		Sea of Okhotsk			
		depth about 448 km			
		Mag : 4.1 SD 0.3 (CGS)			
2	Ch	ePZ	11	55	14
	Qt	ePZ		56	28.5
		USCGS H 11 45 38.5			
		48.1 N 154.7 E			
		Kurile Islands			
		depth about 50 km			
		Mag : 4.5 SD 0.3 (CGS)			
2	Wr	ePZ	15	41	23.5
	Qt	ePZ		42	14.0
		eSN		43	58.2
		H 15 40 00			
2	Wr	ePZ	21	05	17.5
	Lh	iPZ			40.0d
		epPZ			49.0
		eSN*E*		13	34.0
		eScSN*E		15	08.0
	Qt	ePZ		05	40.7c
		iPZi			42.0d
		epPZ			51.5
		eSE		13	38.0

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Date	Station	Phase	h	m	s
		Mu ~~2(3)~~ Sec			
		PZ 0.1 ~~2(3)~~ 1.0			
		MH ~~5.8~~ ~~5.8~~ 20.0			
		△ = 58°.1			
		USCGS H 20 55 58.8			
		80.1 N 0.6 W			
		Svalbard region			
		depth about 33 km			
		Mag : 5.1 SD 0.3 (CGS),			
		5.9 (Qt).			
3	Ch	ePZ	00	04	18
		ePcPZ			33
	Wr	ePZ			29
	Lh	ePZ			35.0c
	Qt	iPZ	05	00	.7c
		eSE	15	20	.0
		Mu ~~2(3)~~ Sec			
		PZ 0.1 ~~2(3)~~ 1.0			
		△ = 84°.0			
		USCGS H 23 52 38.3			
		51.5 N 174.0 W			
		Andreanof Islands			
		depth about 55 km			
		Mag : 4.9 SD 0.3(CGS),			
		6.0 (Qt)			
3	Qt	ePZ	02	44	53.0
3	Wr	ePZ	03	54	45.9
	Qt	ePZ		55	22.0
		USCGS H 03 44 39.2			
		45.4 N 151.6 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4.3 SD 0.2 (CGS)			
3	Wr	ePZ	04	26	36.0
	Qt	ePZ			38.0
		USCGS H 04 17 58*			
		4.2 S 102.9 E			
		Near coast of Sumatra			
		depth about 50 km			
		Mag : 5.2 (CGS)			
3	Qt	ePZ	04	55	59±
3	Lh	ePZ	05	19	31.0
	Wr	ePZ			34.9
	Qt	ePZ		20	10.4c
		USCGS H 05 09 22.0			
		46.2 N 153.0 E			
		Kurile Islands			
		depth about 40 km			
		Mag : 5.1 SD 0.2 (CGS)			
3	Qt	ePZ	07	32	38±
		USCGS H 07 21 10*			
		21.6 N 144.3 E			
		Mariana Ialands			
		depth about 45 km			
		Mag : 4.6 (CGS)			
3	Wr	ePZ	08	49	19.3
	Qt	ePZ			55.5
		USCGS H 08 39 07.4			
		46.1 N 152.9 E			
		Kurile Islands			
		depth about 45 km			
		Mag : 4.7SD 0.4(CSG)			
3	Wr	ePZ	12	41	09.2
	Qt	ePZ		42	21.5
		eSNE		44	46.5
		H 12 39 15			
3	Qt	ePZ	15	59	55±
3	Lh	ePZ	15	58	38.5
		iSNE		59	25.0
	Qt	ePZ	16	00	12.5
		eSNE		01	43.0
		H 15 58 15.0			
		Kashmir region			
3	Lh	ePZ	17	09	40.7
		eSZ		10	23.0
	Wr	ePZ			41.8
	Qt	ePZ			42.0
		eSN		11	22.6
		H 17 08 40			
		India			

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Date	Station	Phase	h m s
3	Lh	ePZ	18 13 23.0
		iSZ	52.0
	Wr	ePZ	52 ±
	Qt	ePZ	14 40.5
		eSN	16 09.0
		H 18 12 45	
		India	
3	Wr	ePZ	18 34 12.3
	Qt	ePZ	35 07.0
		eSE	37 33.0
		H 18 32 00	
3	Qt	ePZ	20 02 09.5
3	Qt	ePKPZZ*	23 23 15.0
		epPKPZ*	24.0
		ePPZ	26 12.5
		ePKSE*	54.0
		eSSN*	44 32.0
		Mu 2(3) Sec	
		MH 3.1 2(3) 20	
		△ = 141°.0	
	Lh	ePKPZ	23 24.0
		ipPKPZ	35.0
	Wr	ePKPZ	26.0
	Ch	ePKPZ	46
		USCGS H 23 03 41.6	
		22.4 S 69.3W	
		Northern Chile	
		depth about 18 km	
		Mag : 6¼(Pas), 6.1 SD 0.3 (CGS), 6.0 (Qt)	
4	Qt	ePKPZ 01 03 29.5	
		USCGS H 00 44 37.4	
		34.0 S 179.3 W	
		Kermadec Islands	
		depth about 33 km	
		Mag : 4.8 SD 0.3(CGS)	
4	Ch	ePZ	01 37 04 c
	Lh	ePZ	46.0c
	Wr	ePZ	46 ±
	Qt	ePZ	38 24.2c
		eSN*	47 16.0
		USCGS H 01 27 34.1	
		46.2 N 153.1E	
		Kurile Islands	
		depth about 20 km	
		Mag : 5.2 SD 0.4(CGS)	
4	Qt	ePZ	02 32 43.0
	Wr	ePZ	33 34.9
		USCGS H 02 30 18.1	
		31.3 N 55.4 E	
		Iran	
		depth about 46 km	
4	Ch	ePZ	02 52 56.2d
	Wr	iPZ	53 42.5
	Qt	ePZ	54 18.0
		USCGS H 02 43 30.4	
		45.9 N 153.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.8 SD 0.3(CGS)	
4	Qt	iPZ	03 04 50.2c
		USCGS H 02 53 42*	
		4.8 S 130.1 E	
		Ceram region	
		depth about 33 km	
4	Ch	ePZ	08 33 44.9c
	Lh	ePZ	34 27.0
	Wr	iPZ	29.7d
	Qt	iPZ	35 05.6c
		eSN*	43 53.0
		Mu 2(3) Sec	
		PZ 0.1 2(3) 1.5	
		MH 1.6 2(3) 20	
		△ = 66°.6	
		USCGS H 08 24 17.1	
		46.1 N 152.9 E	
		Kurile Islands	
		depth about 33 km	

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Date	Station	Phase	h m s
		Mag. 5.3 SD 0.4(CGS), 5.7(Qt)	
4	Qt	ePZ	10 32 53.0d
4	Qt	ePZ	10 45 57
4	Ch	iPZ	15 54 21.0c
	Lh	ePZ	55 04.0c
	Wr	iPZ	05.7
	Qt	iPZ	41.7c
		USCGS H 15 44 52.9	
		46.0 N 153.2 E	
		Kurile Islands region	
		depth about 40 km	
		Mag : 4.9 SD 0.4 (CGS)	
4	Qt	ePKPZ	16 19 48.6
	Wr	ePKPZ	55.3
		USCGS H 15 59 42.1	
		35.5 S 102.8 W	
		Easter Islands region	
		depth about 33 km	
		Mag : 6 (Pal), 4.6 SD 0.4 (CGS)	
5	Wr	iPZ	00 30 49.4
	Lh	ePZ	31 31.0
		eSNE	32 36.0
	Qt	iPZ	31 54.5c
		iSE	33 18.5
		Mu ~~2(3)~~ Sec	
		PZ 0.01 ~~2(3)~~ 0.5	
		$\triangle$ = 7°.5	
		H 00 30 05.4	
		36.8 N 71.1 E	
		Hindukush	
		depth about 100 km	
		Mag : 4.3 (Qt)	
5	Qt	ePZ	04 11 52.0
		USCGS H 04 07 42.8	
		17.3 N 80.1 E	
		Southern India	
		depth about 33 km	
5	Qt	ePZ	04 15 21 ±
		e(S)E	16 12.5
	Wr	ePZ	15 39.4
5	Qt	ePKP$_1$Z	04 43 33 ±
		ePKP$_2$Z	44 42.0
		USCGS H 04 23 22.2	
		35.7 S 103.1 W	
		Easter Islands region	
		depth about 33 km	
		Mag : 4.8 (CGS)	
5	Qt	ePZ	06 02 03.0c
5	Wr	ePKPZ	11 48 58.4
	Qt	ePKPZ	59.0
		USCGS H 11 29 49.4	
		7.4 N 77.3 E	
		Columbia	
		depth about 33 km	
		Mag : 4.7 (CGS)	
5	Wr	ePZ	23 22 56.4
		eSZ	23 29.0
	Qt	ePZ	24 01.2
		eSN	25 26.0
		H 23 22 12	
		Hindukush region	
6	Ch	ePZ	02 07 11.1
	Wr	ePZ	09 07.7
	Qt	ePZ	24.5
		USCGS H 01 56 42.8	
		5.8 S 150.3 E	
		New Britain	
		depth about 61 km	
		Mag : 5.3 (CGS)	
6	Qt	iPZ	07 02 42.0d
		epPZ	53.1
		USCGS H 06 51 58	
		46.5 N 152.6 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.4 SD 0.3 (CGS)	
7	Qt	ePZ	04 11 54 ±
7	Qt	ePKPZ	04 25 43.2
		USCGS H 04 07 52.8	

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Date	Station	Phase	h m s
		22.1 S 179.4 W	
		Fiji Islands region	
		depth about 546 km	
		Mag : 5.5 SD 0.4 (CGS)	
7	Wr	iPZ	05 35 05.3d
		eSZ	37.0
	Qt	ePZ	36 02 ±
		eSE	18.5
		H 05 34 23	
		Hindukush region	
7	Qt	ePZ	09 09 51 ±
		eSSE	12 34.0
	Wr	ePZ	10 40.7
		USCGS H 09 06 41.3	
		30.9 N 51.3 E	
		Southern Iran	
		depth about 64 km	
7	Wr	ePZ	15 15 13.0
	Qt	ePZ	16 47 ±
7	Wr	ePZ	15 29 02.3
	Qt	ePZ	24.5
		USCGS H 15 17 57.3	
		12.3 N 143.9 E	
		Mariana Islands region	
		depth about 33 km	
		Mag : 5.1 (CGS)	
7	Qt	ePKPZ	17 55 59.5d
		USCGS H 17 37 25.6	
		29.3 S 178.5 W	
		Kermadec Islands	
		depth about 209 km	
		Mag: 4.9 SD 0.2 (CGS)	
7	Qt	ePZ	18 09 01 ±
7	Qt	ePZ	20 24 55 ±
7	Qt	ePZ	20 33 45.0
7	Qt	ePZ	23 32 44.0
8	Wr	ePZ	05 34 41.5
		eSZ	35 12.2
	Qt	iPZ	40.5
		eSE	36 59.2
		H 05 33 51	
		Hindukush region	
8	Ch	ePZ	08 02 44
		epPZ	52
	Lh	ePZ	03 26.6
	Wr	ePZ	28.2
	Qt	ePZ	04 04.6c
		ipPZ	11.3
		USCGS H 07 53 15.1	
		46.4 N 153.0 E	
		Kurile Islands	
		depth about 20 km	
		Mag : 5.2 SD 0.4 (CGS)	
8	Qt	ePZ	11 12 20 ±
	Wr	ePZ	31.0
		USCGS H 11 08 04.7	
		39.9 N 58.7 E	
		Turkmen, S.S.R.	
		depth about 33 km	
		Mag : 4.5 (CGS)	
8	Qt	ePZ	14 25 25 ±
8	Wr	iPZ	15 18 54.2
		iSZ	19 26.4
	Lh	ePZ	34.0
		iSNE	20 36.0
	Qt	iPZ	19 52.6d
		eSE	21 12.5
		Mu ~~2(3)~~ Sec	
		PZ 0.4 ~~2(3)~~ 0.7	
		△ = 7°.1	
		H 15 18 10	
		36.4 N 70.9 E	
		Hindukush region	
		depth about 220 km	
		USCGS H 15 18 09.8	
		36.5 N 70.8 E	
		Hindukush	
		depth about 212 km	
		Mag : 4.8 (Qt)	

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Date	Station	Phase	h m s
8	Qt	ePZ	20 42 28.0
		USCGS H 20 31 45.7	
		45.3 N 151.3 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 4.4 SD 0.2 (CGS)	
8	Qt	ePZ	20 50 20.5
		USCGS H 20 39 38.9	
		45.3 N 151.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag: 4.3 SD 0.4 (CGS)	
8	Wr	iPZ	23 58 58.6d
		iSZ	59 29.9
	Qt	iPZ	00 00 02.1d
		eSE	01 23.5
		Mu 2(3) Sec	
		PZ 0.01 2(3) 0.5	
		△ = 7°.2	
		H 23 58 18	
		Hindukush region	
		Mag: 4.3 (Qt)	
9	Wr	iPZ	01 31 39.3c
		eSE	32 14.5
	Qt	iPZ	44.5c
		eSE	34 11.0
		Mu 2(3) Sec	
		PZ 0.01 2(3) 0.7	
		△ = 7°.8	
		H 01 30 52	
		Hindukush region	
		Mag: 4.2 (Qt)	
9	Qt	ePZ	02 34 47.5
		USCGS H 02 24 08.5	
		45.6 N 151.4 E	
		Kurile Islands	
		depth about 55 km	
		Mag: 4.3 (CGS)	
9	Qt	iPZ	03 35 17.0d
		e(S)E	51.5
	Wr	ePZ	24.3
9	Wr	ePZ	05 50 41.7
	Qt	ePZ	51 08.5c
		USCGS H 05 38 29.5	
		54.9 N 159.4 W	
		depth about 45 km	
		Mag : 5.1 SD 0.4 (CGS)	
9	Qt	ePZ	08 44 38.0d
		USCGS H 08 33 57.6	
		44.0 N 150.4 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.7 SD 0.3 (CGS)	
9	Qt	ePKPZ	11 11 43.0
		epPKPZ	13 22.6
		USCGS H 10 53 39.4	
		21.1 S 178.0 W	
		Fiji Islands region	
		depth about 435 km	
		Mag : 5.0 SD 0.4 (CGS)	
9	Qt	ePZ	11 32 23.0
		epPZ	33 09.4
		USCGS H 11 22 27.3	
		7.6 N 126.8 E	
		Near east coast of Mindanao	
		Philippine Islands	
		depth about 139 km	
		Mag : 4.5 (CGS)	
9	Ch	ePZ	12 31 58.3
		epPZ	32 11
	Lh	ePZ	45.0
	Wr	iPZ	47.3d
	Qt	ePZ	33 23.5
		USCGS H 12 22 42.0	
		45.2 N 151.2 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.7 SD 0.4 (CGS)	
9	Wr	ePZ	12 39 06.2

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Date	Station	Phase	h m s
	Qt	cPZ	42.5
		iSE	41 33.4
		Mu ~~2(3)~~ Sec	
		PZ 0.01 ~~2(3)~~ 1.0	
		△ = 9°.9	
		H 12 37 19	
		Mag : 4.5 (Qt)	
9	Wr	iPZ	18 02 26.8
		iSZ	54.4
	Lh	ePZ	03 08.4
		iSNE	04 06.0
	Qt	ePZ	03 30.5d
		iSE	04 46.5
		Mu ~~2(3)~~ Sec	
		PZ 0.02 ~~2(3)~~ 1.0	
		△ = 6°.7	
		H 18 01 52	
		35.8 N 71.1 E	
		Hindukush region	
		depth about 160 km	
		USCGS H 18 01 55	
		36.1 N 71.2 E	
		Hindukush	
		depth about 157 km	
		Mag : 5.0 (CGS), 4.3 (Qt)	
9	Wr	PZ	19 03 40.5
	Qt	ePZ	04 49.0
		iSE	06 37.5
		H 19 02 30	
9	Qt	ePZ	20 44 02.5
	Wr	ePZ	38.4
10	Qr	ePZ	01 11 03.8
		eSZ	30.1
	Qt	ePZ	12 06.6
		iSE	13 25.0
		H 01 10 26	
		Hindukush region	
10	Ch	iPZ	03 39 07.6d
		ipPZ	40 24
		iSNE	46 20
	Lh	ePZ	41 15.0
		ePPZ	42 34
		eSN*E*	49 16.0
		eScSN*E*	50 29.0
		esSN*E*	51 34.0
	Wr	iPZ	41 36.0c
		iSZ	49 56.6
	Qt	iPZi	41 48.4d
		ipPZ	43 09.0
		iSN*	50 19.0
		iScSN*	51 09.0
		ePKPPKPZ	04 09 56.0
		Mu Sec	
		PZ 0.1 1.0	
		MH 1.5 2.0	
		△ = 68°.0	
		USCGS H 03 31 21.1	
		6.2 S 128.1 E	
		Banda Sea	
		depth about 366 km	
		Mag : 5.6 (CGS), 5.5 (Qt)	
10	Qt	ePKPZ	06 49 27.5d
		ipPKPZ	50 40.0
	Ch	ePKPZ	49 41.2
		eXZ	51 18
		USCGS H 06 31 54.8	
		58.1 S 26.4 W	
		Sandwich Islands	
		depth about 110 km	
10	Ch	ePZ	09 38 12
	Qt	ePZ	39 19.0
		USCGS H 09 28 38.6	
		45.8 N 151.7 E	
		Kurile Island	
		depth about 50 km	
		Mag : 4.7 SD 0.3 (CGS)	
10	Ch	ePZ	13 15 02 ±
	Wr	ePZ	17 48.7

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Date	Station	Phase	h m s
	Qt	ePZ	18 09.0
		eXZ	19 06.0
		USCGS H 13 08 08.7	
		7.2 N 125.1 E	
		Near coast of Mindanao	
		Philippine Islands	
		depth about 33 km	
		Mag : 4.7 (CGS)	
10	Qt	ePZ	15 09 03 ±
10	Qt	ePZ	15 11 50.5
10	Wr	iPZ	17 57 59.4
		iSZ	58 30.1
	Qt	ePZ	59 02.5
		iSE	18 00 24.5
		Mu ~~2(3)~~ Sec	
		PZ 0.03 ~~2(3)~~ 0.5	
		$\triangle = 7°.2$	
		H 17 57 17	
		Hindukush region	
		Mag : 4.8 (Qt)	
11	Qt	ePKPZ	01 06 43.0
		USCGS H 00 47 48.3	
		15.1 S 173.6 W	
		Tonga Islands region	
		depth about 33 km	
		Mag : 5.6 SD 0.3 (CGS)	
11	Wr	iPZ	01 50 35.0c
		iSZ	51 08.7
	Qt	ePZ	26.5d
		iSE	52 43.0
		H 01 49 48	
		Hindukush region	
11	Qt	iPKPZ	02 49 09.5d
		USCGS H 02 31 19.4	
		17.8 S 178.6 W	
		Fiji Islands	
		depth about 537 km	
		Mag : 4.9 (CGS)	
11	Ch	ePZ	04 02 42
	Qt	ePZ	05 21.5
		eXZ	06 54.5
		eXN	13 42.5
		USCGS H 03 54 39.5	
		7.2 S 125.5 E	
		Banda Sea	
		depth about 145 km	
		Mag : 5.3 (CGS)	
11	Qt	ePZ	06 17 53.0
		USCGS H 06 06 45	
		19.6 N 145.7 E	
		Mariana Islands region	
		depth about 110 km	
		Mag : 4.5 (CGS)	
11	Qt	ePZ	09 22 51.5d
		USCGS H 09 12 15.5	
		45.3 N 150.1 E	
		Kurile Islands	
		depth about 43 km	
		Mag : 4.5 (CGS)	
11	Qt	ePZ	10 12 04.2c
		USCGS H 10 20 02	
		8.0 N 126.1 E	
		Near east coast Mindanao,	
		Philippine Islands	
		depth about 33 km	
11	Ch	ePZ	17 19 36
		eSN	28 59
	Wr	iPZ	19 50.8
	Lh	ePZ	55.0
		eSN*	29 36.0
		eScSE*	30 06.0
	Qt	iPZ	20 22.5c
		ePPZ	23 23.0
		eSNE	30 28.5
		Mu ~~2(3)~~ Sec	
		PZ 0.1 ~~2(3)~~ 1.0	
		MH 4.4 20	
		$\triangle = 81°.2$	
		USCGS H 17 08 12.3	

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Date	Station	Phase	h m s
		51.2 N 179.3 W	
		Andreanof Islands,	
		Aleutian Islands,	
		depth about 32 km	
		Mag : 5. 3 SD 0.3 (CGS),	
		6.0 (Qt)	
11	Ch	ePZ	17 24 09.2
	Qt	ePZ	55.2
		USCGS H 17 12 45.1	
		51.1 N 179.4 W	
		Andreanof Islands,	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.7 (CGS)	
11	Ch	ePZ	17 36 36
	Qt	iPZ	37 22.0c
		USCGS H 17 25 12.5	
		Andreanof Islands,	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.9 SD 0.3 (CGS)	
11	Ch	ePZ	17 54 42
	Qt	ePZ	55 27.2c
		USCGS H 17 43 17.4	
		51.0 N 179.3 W	
		Andreanof Islands,	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.5 (CGS)	
11	Wr	ePZ	18 17 44.8
	Qt	ePZ	18 40 ±
		eSE	20 35.0
		H 18 16 12	
11	Qt	iPZ	18 21 28.5c
		USCGS H 18 09 17.2	
		51.0 N 179.7 W	
		Andreanof Islands,	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.6 SD 0.3 (CGS)	
11	Qt	ePZ	18 33 05.6c
11	Ch	ePZ	18 40 12
	Qt	iPZ	57.5c
		ipPZ	41 08.0
		USCGS H 18 28 48.3	
		51.3 N 179.2 W	
		Andreanof Islands,	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.7 (CGS)	
11	Qt	ePZ	18 50 27.2c
11	Qt	ePZ	19 21 27.0
11	Ch	ePZ	19 24 21.0
	Qt	iPZ	25 06.5c
		USCGS H 19 12 59.6	
		51.3 N 179.5 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 54 km	
		Mag : 4.7 SD 0.2 (CGS)	
11		ePZ	19 31 11 ±
11	Qt	ePZ	19 40 12.0c
		USCGS H 19 28 02.7	
		51.3 N 179.4 W	
		Andreanof Islands,	
		Aleutian Islands	
		depth about 33 km	
		Mag : 4.8 (CGS)	
11	Qt	ePZ	20 37 22.5
		USCGS H 20 25 13.5	
		51.3 N 179.4 W	
		Andreanof Islands	
		Aleutian Islands	
		depth about 4.6 (CGS)	
11	Wr	iPZ	21 21 33.0
		iSZ	22 03.7
	Lh	ePZ	22 12 ±
		eSN	23 14.2
	Qt	iPZ	22 31.5d
		eSE	23 51.0

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Date	Station	Phase	h m s
		Mu 2(3) Sec	
		PZ 0.05 2(3) 0.6	
		△ = 7°.0	
		H 21 20 50	
		Hindukush	
		Mag : 5.0 (Qt)	
11	Qt	ePZ	22 49 29.5d
11	Qt	ePZ	22 53 23 ±
12	Wr	ePZ	01 28 44.4
	Qt	ePZ	29 38.8
		eSE	31 18.0
		H 01 27 31	
		Mu 2(3) Sec	
		PZ 0.01 2(3) 0.7	
		△ = 8°.8	
		Mag : 4.2 (Qt)	
12	Qt	ePZ	03 18 12.2
12	Qt	ePZ	14 14 45.5
		USCGS H 14 04 03.2	
		46.0 N 149.9 E	
		Kurile Islands	
		depth about 33 km	
		Mag : 4.1 (CGS)	
12	Ch	ePZ	15 06 55 ±
	Qt	ePZ	09 54.0c
		USCGS H 15 02 48*	
		4.5 N 97.2 E	
		Northern Sumatra	
		depth about 33 km	
12	Qt	iPZ	19 45 40.5d
12	Qt	ePZ	20 36 54 ±
12	Ch	ePZ	23 33 45d
		eSNE	41 12 ±
	Lh	ePZ	34 30.0
	Wr	iPZ	31.0
	Qt	ePZ	35 07.5d
		eSN*	44 24.0
		Mu 2(3) Sec	
		PZ 0.01 2(3) 1.5	
		△ = 72°.8	
		USCGS H 23 24 36.6	
		46.3 N 150.5 E	
		Kurile Islands	
		depth about 90 km	
		Mag : 5.2 SD 0.4 (CGS)	
12	Qt	ePZ	23 55 19.0
13	Qt	iPZ	00 44 20 d
13	Qt	ePZ	02 56 15 ±
		USCGS H 02 47 14*	
		25.9 N 126.1 E	
		Ryukyu Islands	
		depth about 109 km	
		Mag : 4.6 (CGS)	
13	Wr	iPZ	12 55 04.4c
		iSZ	45.2
	Qt	ePZ	56 08.5c
		iSNE	57 39.0
		H 12 54 16	
		Hindukush region	
13	Wr	ePZ	15 24 25.5
		eSZ	53.9
	Qt	ePZ	25 17 ±
		eSE	26 29
		H 15 23 46	
		Hindukush region	
13	Qt	ePZ	19 03 32 ±
13	Wr	ePZ	21 18 47.8
	Qt	ePZ	19 45 ±
		eSN	21 34.0
		H 21 17 25	
14	Qt	ePKPZ	00 24 35 ±
		USCGS H 00 05 39.8	
		2.3 S 61.2 W	
		Northern Brazil	
		depth about 36 km	
		Mag : 4.8 SD 0.3 (CGS)	
14	Qt	iPKPZ	02 03 02.5d
		USCGS H 01 45 13.8	
		17.9 S 178.3 W	
		Fiji Islands region	
		depth about 550 km	

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Date	Station	Phase	h	m	s
		Mag : 4.3 SD 0.2 (CGS)			
14	Qt	ePZ	03	54	37.5
		USCGS H 03 44 01.01			
		45.4 N 150.1 E			
		Kurile Islands			
		depth about 33 km			
		Mag : 4.6 SD 0.3 (CGS)			
14	Wr	ePZ	08	02	59.7
	Qt	ePZ		03	27.0
		iPZ			28.0d
	Ch	e(P)Z			41.0
		USCGS H 07 51 07.9			
		62.7 N 149.5 W			
		Central Alaska			
		depth about 95 km			
		Mag : 5.1 SD 0.3 (CGS)			
14	Qt	ePZ	15	19	06.5
		eXZ			17.8
		USCGS H 15 06 05			
		7.1 S 155.7 E			
		Solomon Islands			
		depth about 95 km			
		Mag : 4.5 (CGS)			
14	Qt	ePZ	17	43	52.5
		USCGS H 17 34 01*			
		41.7 N 139.4 E			
		Near south coast of			
		Hokkaido, Japan			
		depth about 33 km			
		Mag : 3.9 (CGS)			
15	Wr	ePZ	01	54	00.6
		eSZ			28.5
	Qt	ePZ			59 ±
		eSN		56	18.5
		H 01 53 20			
		Hindukush region			
15	Qt	iPZ	03	52	19.0d
		USCGS H 03 39 49.4			
		52.6 N 169.3 W			
		Fox Islands, Aleutian			
		Islands			
		depth about 26 km			
		Mag : 3.9 (CGS)			
15	Wr	ePZ	07	11	26.7
	Qt	iPZ		12	00.5d
		ipPZ			10.0
		USCGS H 07 02 36.5			
		28.6 N 129.9 E			
		Ryukyu Islands			
		depth about 33 km			
		Mag : 4.8 SD 0.2 (CGS)			
15	Ch	ePZ	07	36	14±
	Wr	ePZ			43.3
	Qt	ePZ		37	41.5d
		esSE*		41	25.0
		USCGS H 07 33 20.2			
		34.3 N 88.8 E			
		Tibet			
		depth about 33 km			
		Mag : 4.8 (CGS)			
15	Qt	ePZ	09	05	09±
		e(S)		07	56±
15	Wr	ePZ	15	13	57.6
	Qt	ePZ			59.0
		USCGS H 15 05 18.4			
		4.7 S 102.9 E			
		Near coast of Sumatra			
		depth about 72 km			
		Mag : 5.0 (CGS)			
15	Wr	iPZ	17	43	23.0
	Qt	ePZ			31.6d
		USCGS H 17 32 37.2			
		9.4 S 124.1 E			
		Timor region			
		depth about 33 km			
		Mag : 4.5 (CGS)			
15	Ch	ePZ	19	40	20
		ipPZ		42	02
		iSN		44	44

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Date	Station	Phase	h m s
	Lh	ePZ	42 31.0
		ePcPZ	43 47.0
		epPZ	44 32.0
		iSN*E*	48 41.0
		esSN*	52 13.0
	Kr	iPZ !	42 41.2d
		iPcPZ	43 51
		ipPZ	44 41.7
		eSE	49 06.5
		eScSE	51 27.0
		esSE	52 36.1
	Wr	iPZ	42 57.3
		iSZ	49 30.0
		ePKPPKPZ	20 12 49.8
	Qt	ePZ !	19 43 01.9
		epPZ	45 20.0
		iSE	49 42.0
		iPKPPKPZ	20 13 12.1
		Mu ~~2(3)~~ Sec	
		PZ 0.4 ~~2(3)~~ 1.0	
		△ = 52°.0	
		USCGS H 19 34 45.5	
		4.8 S 108.0 E	
		Java Sea	
		depth about 650 km	
		Mag : 6.4 (CGS)	
		5.8 (Qt)	
15	Qt	ePZ	20 20 20.5
15	Qt	ePZ	22 52 04.6
16	Ch	ePZ	01 57 53.8d
	Lh	ePZ	02 00 06.0
		ePPZ*	02 02.0
		eSSN*E*	10 33.0
	Kr	ePZ	00 10.0
		epPZ	18.5
		eSE	07 08.2
	Wr	ePZ	00 29.7
		eSZ	07 40.7
	Qt	iPZ	00 33.0d
		ipPZ	39.5
		eSN	07 50.1
		esSN*	08 01.0
		Mu ~~2(3)~~ Sec	
		PZ 0.1 ~~2(3)~~ 1.0	
		△ = 51°.6	
		USCGS H 01 51 30.6	
		6.4 S 105.4 E	
		Sunda Strait	
		depth about 64 km	
		Mag : 6.0 SD 0.3 (CGS)	
		6.0 (Qt)	
16	Wr	ePZ	02 15 42.0
	Qt	ePZ	44.0
		USCG S H 02 06 38.2	
		6.3 S 105.5 E	
		Near west coast of	
		Sumatra	
		depth about 33 km	
16	Qt	ePZ	02 54 39.0
		USCGS H 02 45 35.3	
		6.2 S 105.4 E	
		Near west coast of	
		Sumatra	
		depth about 55 km	
		Mag : 5.0 (CGS)	
16	Qt	ePZ	04 25 38.0
	Wr	ePZ	43.2
		USCGS H 04 16 43.0	
		6.3 S 105.5 E	
		Near west coast of	
		Sumatra	
		depth about 63 km	
		Mag : 5.8 (CGS)	
16	Wr	ePZ	05 28 19.5
	Qt	ePZ	44±
		USCGS H 05 17 14.4	
		17.1 N 147.0 E	
		Mariana Islands region	
		depth about 48 km	

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Date	Station	Phase	h m s
		Mag : 4.6 SD 0.3 (CGS)	
16	Qt	ePZ	06 24 33 ±
16	Wr	iPZ	11 18 30.6
	Qt	iPZ	19 07.6d
		eSE	26 51.0
		USCGS H 11 09 30.4	
		45.8 N 142.6 E	
		Southern Sakhalin	
		depth about 258 km	
16	Qt	ePZ	13 55 18.5
		eSNE	14 01 15.0
		Mu ~~2(3)~~ Sec	
		PZ 0.1 ~~2(3)~~ 1.0	
		△ = 39°.0	
	Wr	ePZ	13 55 38.2
	Lh	ePZ	56 03.4
		eSN*E*	14 02 32.0
		eScSN*	06 02.5
	Ch	ePZ	13 58 18
		eSN	14 06 33
		USCGS H 13 47 56.4	
		37.1 N 20.9 E	
		Ionion Sea	
		depth about 15 km	
		Mag : 5.6 SD 0.1 (CGS), 5.5 (Qt)	
16	Ch	ePZ	14 30 03
	Qt	ePZ	31 29±
		USCGS H 14 18 04.9	
		49.1 S 127.1 E	
		2000 km south of Australia	
		depth about 33 km	
		Mag : 5.3 (CGS)	
16	Qt	ePZ	15 31 17±
		e(S)N	33 31.7
		ePZ	16 15 38.1
		eSZ	22 54.8
	Qt	ePZ	15 39.5
		e(S)E	23 05.0
		USCGS H 16 06 35.2	
		6.5 S 105.3 E	
		Sunda Strait	
		depth about 46 km	
		Mag : 6.0 (CGS)	
17	Qt	ePZ	00 33 36.2
17	Qt	ePZ	04 23 35.0c
		USCGS H 04 12 38.5	
		22.2 N 144.4 E	
		Volcano Islands region	
		depth about 101 km	
		Mag : 4.4 SD 0.2 (CGS)	
17	Qt	ePZ	05 23 22±
		eSN	25 09.0
17	Qt	iPZ	10 59 58.5c
		iSNE	11 01 19.5
		Mu ~~2(3)~~ Sec	
		PZ 0.07 ~~2(3)~~ 0.8	
		△ = 7°.2	
		USCGS H 10 58 12.0	
		36.7 N 71.2 E	
		Hindukush	
		depth about 203 km	
		Mag : 4.2 (CGS), 4.9 (Qt)	
17	Qt	ePZ	11 09 16.5
		e(S)N	11 09.5
17	Qt	ePZ	14 12 20±
17	Qt	ePZ	17 43 25.0
17	Qt	ePZ	18 56 16.0
17	Qt	ePZ	20 28 02.0
	Wr	ePZ	50.8
17	Qt	ePZ	21 11 02.5
17	Qt	ePZ	21 14 02.5
17	Qt	ePZ	21 32 22.5
17	Qt	ePZ	21 37 40.5
17	Wr	ePZ	23 34 20.3
	Qt	ePZ	48.0
		USCGS H 23 22 11.2	
		52.9 N 165.4 W	

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Date	Station	Phase	h	m	s
		Fox Islands, Aleutian Islands			
		depth about 33 km			
		Mag : 4.9 SD 0.4 (CGS)			
18	Ch	ePZ	00	43	51
	Lh	ePZ		45	06.0
		ePKPZ		48	46.0
	Wr	ePZ			37.8
		ePKPZ		48	51.2
	Kr	ePKPZ			55.3
		epPKPZ		49	06.7
	Qt	ePZ		45	33.0
		ePKPZ		48	57.0
		eSKSN		55	52.0
		USCGS H 00 30 02.6			
		24.8 S 176.6 W			
		Tonga Islands			
		depth about 46 km			
		Mag : 6.5 SD 0.3 (CGS)			
18	Qt	ePZ	01	24	26.2
18	Ch	ePZ	02	59	51.0
	Wr	ePZ	03	00	37.3
	Qt	iPZ		01	15.5c
	Kr	ePZ			39.0
		USCGS H 02 50 31.0			
		45.5 N 151.3 E			
		Kurile Islands			
		depth about 33 km			
		Mag : 5.2 SD 0.4 (CGS)			
18	Wr	ePZ	06	42	51.7
		eSZ		44	56.7
	Lh	e(P)N		43	00.0
	Qt	ePZ		44	01.9c
		eSN		47	07.0
		Mu 2(3) Sec			
		PZ 0.09 2(3) 1.0			
		$\triangle =$ 16°.0			
	Ch	ePZ		44	13.2
		USCGS H 06 40 05.9			
		41.7 N 82.5 E			
		Sinkiang Province, China			

Date	Station	Phase	h	m	s
		depth about 33 km			
		Mag : 5.2 SD 0.2 (CGS)			
		4.9 (Qt)			
18	Qt	ePZ	12	40	38.5
18	Wr	iPZ	17	25	18.3c
		iSZ			46.9
	Lh	ePZ		26	02.4
		iSNE		27	05.0
	Qt	iPZ		26	12.4d
		iSE		27	24.2
		Mu 2(3) Sec			
		PZ 0.1 2(3) 0.5			
		$\triangle =$ 6°.4			
		H 17 24 39			
		36.3 N 70.6 E			
		Hindukush region			
		depth about 200 km			
		Mag : 5.3 (Qt)			
18	Qt	ePZ	18	23	21.2
		USCGS H 18 13 15.8			
		37.2 N 140.7 E			
		Near east coast of Honshu, Japan			
		depth about 59 km			
		Mag : 4.2 (CGS)			
18	Qt	ePZ	19	40	47.5
		USCGS H 19 20 06.1			
		46.2 N 151.5 E			
		Kurile Islands			
		depth about 33 km			
		Mag : 4.3 (CGS)			
18	Wr	ePZ	23	34	08.6
		iSZ			54.2
	Qt	ePZ			58±
		eSZ		36	22.5
		H 23 33 10			
19	Wr	ePZ	01	16	26.2
		eSZ			58.3

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Date	Station	Phase	h	m	s
	Qt	ePZ		17	18.0
		iSE		18	37.5
		H 01 15 35			
		Hindukush region			
19	Qt	ePKPZ	02	07	28.5
		USCGS H 01 47 34*			
		39.0 S 70.4 W			
		Nenquen Province			
		Argentina			
		depth about 33 km			
		Mag : 4.3 (CGS)			
19	Qt	ePZ	05	12	10±
19	Ch	ePZ	08	21	02
	Wr	ePZ		22	46.0
	Qt	ePZ		23	35.0
19	Qt	ePZ	10	49	20.0
		eSE			45.6
	Wr	ePZ		50	16.1
		H 10 48 45			
19	Qt	ePZ	11	26	37.5
19	Qt	ePZ	12	55	02.5
19	Qt	ePZ	15	43	10.6
19	Kr	ePKPZ	17	23	27.0
		ePPZ		26	37.0
		ePKSZ			59.3
	Qt	ePKPZ		23	33.0
		ePPZ		26	49.0
		ePKSN		27	18.5
	Wr	ePKPZ		23	36.1
	Lh	ePKPZ			45.0
	Ch	ePKPZ		24	09.4
		USCGS H 17 04 07.8			
		9.7 S 79.1 W			
		Near coast of Central			
		Peru			
		depth about 56 km			
		Mag : 5.1 (CGS)			
19	Qt	ePZ	18	50	28.5
		USCGS H 18 43 38.3			
		35.6 N 25.7 E			
		Near north coast of			
		Crete			
		depth about 33 km			
		Mag : 4.8 (CGS)			
19	Wr	iPZ	20	13	34.7
		iSZ		14	06.0
	Qt	iPZ			27.4d
		iSE		15	39.5
		Mu 2(3) Sec			
		PZ 0.1 2(3) 0.5			
		$\Delta = 6°.3$			
		H 20 12 54			
		Hindukush region			
		Mag : 4.6 (Qt)			
19	Qr	ePKPZ	20	53	15.9
	Wr	ePKPZ			30.0
	Lh	ePKPZ			36.0
		USCGS H 20 33 50.1			
		35.2 S 68.0 W			
		Mendoza Province,			
		Argentina			
		depth about 32 km			
		Mag : 5.3 (CGS)			
19	Qt	ePZ	22	47	28.2c
		USCGS H 22 34 59.8			
		52.0 N 170.8 W			
		For Islands, Aleutian			
		Islands			
		depth about 33 km			
		Mag : 4.4 SD 0.3 (CGS)			
19	Qt	ePZ	23	23	09.1
20	Ch	ePZ	00	35	22.8
	Wr	ePZ		37	01.5
	Qt	ePZ			17.7
		ipPZ			26.0
		USCGS H 00 23 50.2			
		8.6 S 160.4 E			
		Solomon Islands			
		depth about 69 km			
		Mag : 5.5 SD 0.5 (CGS)			

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Date	Station	Phase	h m s
20	Qt	ePZ	04 31 22.5
		USCGS H 04 20 12.5	
		6.9 S 129.5 E	
		Banda Sea	
		depth about 58 km	
		Mag : 4.4 (CGS)	
20	Qt	ePZ	05 09 00 ±
20	Qt	ePKPZ	05 11 00.5
		USCGS H 04 52 32.6	
		14.8 S 173.4 W	
		Samoa Islands region	
		Mag : 4.9 (CGS)	
20	Wr	ePZ	07 23 36.5
		eSZ	59.7
	Qt	ePZ	24 51.4d
		H 07 23 04	
		Hindukush region	
20	Ch	ePZ	09 05 44.0d
	Wr	iPZ	08 11.1
	Qt	iPZ!	22.5 c
		iXZ	34.0
		USCGS H 08 57 17.8	
		7.0 S 129.3 E	
		Banda Sea	
		depth about 103 km	
		Mag : 5.5 (CGS)	
20	Wr	iPZ	10 02 40.3 c
		iSZ	03 10.0
	Qt	ePZ	42 ±
		eSNE	05 08.4
		H 10 01 59	
		Hindukush region	
20	Wr	ePZ	10 47 37.3
	Qt	ePZ	48 24.5
		eSE	50 05.0
		H 10 46 13	
20	Qt	ePKPZ	11 07 31.0
		USCGS H 10 48 04.2	
		5.2 S 80.8 W	
		Near coast of southern Peru	
		depth about 55 km	
		Mag : 5.2 SD 0.3 (CGS)	
20	Qt	ePZ	13 04 36.0
20	Qt	ePZ	15 34 17.0
		eSN*	40 43.0
		Mu ~~2(3)~~ Sec	
		MH 2.6 ~~2(3)~~ 20	
		△ = 43°.5	
		H 15 26 15	
		Mag : 5.6 (Qt)	
20	Qt	ePZ	15 46 42.5
20	Qt	ePZ	15 51 57.5
20	Kr	ePZ	15 56 54.6
		epPZ	57 05.1
	Qt	ePZ	42.0
		eSN*	16 04 08.0
	Ch	ePZ	15 57 47.5
		Mu ~~2(3)~~ Sec	
		Mu 4.9 ~~2(3)~~ 20	
		△ = 43°.4	
		USCGS H 15 49 44.9	
		12.8 S 66.0 E	
		Indian Ocean	
		depth about 33 km	
		Mag : 5.6 (CGS), 5.8(Qt)	
20	Qt	ePZ	16 32 00.5
		eSN*	38 30.0
		Mu ~~2(3)~~ Sec	
		MH 2.9 ~~2(3)~~ 20	
		△ = 44°.0	
	Ch	ePZ	32 07.0
	Wr	ePZ	33.0
		USCGS H 16 24 05.1	
		12.7 S 66.3 E	
		Indian Ocean	
		depth about 33 km	
		Mag : 5.6 (Qt)	
20	Qt	ePZ	16 54 10.0
	Ch	ePZ	15.4
	Wr	ePZ	42.2

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Date	Station	Phase	h m s
		USCGS H 16 46 14.4	
		12.6 S 66.4 E	
		Indian Ocean	
		depth about 33 km	
		Mag : 4.9 (CGS)	
20	Qt	ePZ	17 42 00.0
		USCGS H 17 29 48.7	
		51.8 N 177.7 W	
		Andreanof Islands,	
		Aleutian Islands	
		Mag : 4.4 (CGS)	
21	Qt	ePZ	02 13 41.6
21	Qt	ePZ	02 21 38.5
		eSN	22 55.5
		H 02 19 58.5	
21	Qt	ePZ	04 53 56.0
		eSN*	56 34.0
	Wr	ePZ	54 26.2
		USCGS H 04 50 39.7	
		33.8 N 51.5 E	
		Iran	
		depth about 51 km	
		Mag : 4.5 (CGS)	
21	Qt	ePZ	05 38 32 ±
21	Qt	ePZ	05 41 40.5
21	Qt	ePZ	07 00 44.5
21	Qt	ePZ	08 45 36.5
		USCGS H 08 34 36.7	
		7.1 S 129.2 E	
		Banda Sea	
		depth about 143 km	
		Mag : 4.4 (CGS)	
21	Qt	ePKPZ	12 53 11.5
		USCGS H 12 34 22.7	
		21.2 S 175.8 W	
		Tonga Islands	
		depth about 90 km	
		Mag : 5.1 SD 0.2 (CGS)	
21	Ch	iPZ	13 14 51 d
		epPZ	15 03
	Lh	ePZ*	17 13.0
		ePPZ*	19 03 ±
	Wr	iPZ	17 35.9 c
	Qt	iPZ!	18 02.0
		epPZ	12.0
		esPZ*	25.0
		eSE*	25 13.0
		Mu ~~2(3)~~ Sec	
		MH 5.2 ~~2(3)~~ 20	
		△ = 50°.6	
		USCGS H 13 09 09.6	
		16.1 N 119.7 E	
		Near west coast of Luzon	
		Philippine Islands	
		depth about 49 km	
		Mag : 5.6 SD 0.2 (CGS)	
		5.8 (Qt)	
21	Wr	ePZ	16 33 03.7
	Qt	ePZ	38.5
		USCGS H 16 23 17.9	
		32.5 N 141.0 E	
		South of Honshu, Japan	
		depth about 33 km	
		Mag : 4.3 (CGS)	
21	Qt	ePZ	22 51 59.0
		eSN*	52 42.0
		Mu ~~2(3)~~ Sec	
		PZ 0.14 ~~2(3)~~ 0.5	
		△= 3°.7	
	Wr	ePZ	52 15.9
		H 22 51 02.8	
		Afghanistan	
		Mag : 4.8 (Qt)	
22	Qt	ePZ	04 37 56.5
		eSN	38 36.0
	Wr	ePZ	38 26.8
		H 04 37 02	
22	Ch	ePZ	10 44 38
	Wr	ePZ	46 11.0
	Qt	ePZ	47 20.0
22	Ch	ePZ	12 08 02±

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Date	Station	Phase	h m s
	Wr	iPZ	09 34.6 c
	Qt	ePZ	50.2
		eXZ	10 19.5
		USCGS H 11 57 27.4	
		6.1 S 146.9 E	
		Northeast New Guinea	
		depth about 102 km	
		Mag : 5.4 (CGS)	
22	Qt	ePZ	17 59 52.5
22	Qt	ePZ	18 56 49.5
22	Qt	ePZ	21 02 29.5
22	Qt	ePKPZ	23 32 42.6
		epPKPZ	33 27.0
	Wr	ePKPZ	32 43.3
	Ch	ePKPZ	33 25
		epPKPZ	34 15
		USCGS H 23 13 55.2	
		6.9 N 73.0 W	
		Columbia	
		depth about 153 km	
		Mag : 5.2 SD 0.4 (CGS)	
22	Wr	iPZ	23 33 21.8
		iSZ	48.6
	Qt	ePZ	34 27.0
		eSN	35 44.0
		Hinduksh region	
23	Qt	ePZ	13 53 05.0
		USCGS H 13 42 23.3	
		43.8 N 150.5 E	
		Kurile Islands	
		depth about 33 km	
		Mag : 4.7 SD 0.3 (CGS)	
23	Qt	ePZ	14 04 50.6
		USCGS H 13 52 34.8	
		5.3 S 144.9 E	
		North-east New Guinea	
		depth about 65 km	
23	Ch	ePZ	16 30 26.8
	Qt	ePZ	33 19.5
		USCGS H 16 24 46.2	
		24.5 N 121.8 E	
		Near east coast of Taiwan	
		depth about 130 km	
		Mag : 4.7 (CGS)	
23	Qt	ePKPZ	18 17 20.5
		USCGS H 17 58 40.8	
		25.8 S 177.8 W	
		Tonga Islands region	
		depth about 140 km	
		Mag : 4.7 (CGS)	
23	Ch	ePZ	18 48 54
	Lh	ePZ	49 41.2
		ePPZ	53.2
	Wr	ePN	45.1
	Qt	ePZ	50 20.4c
		epPZ	32.5
	Kr	ePZ	42.3
		epPZ	53.8
		USCGS H 18 39 46.6	
		44.1 N 149.4 E	
		Kurile Islands	
		depth about 65 km	
		Mag : 4.8 SD 0.3 (CGS)	
23	Qt	ePZ	22 05 39.5 d
24	Qt	ePZ	01 22 15.5
24	Wr	ePN	02 36 06.4
	Qt	iPZ	43.1 c
		USCGS H 02 26 01.4	
		45.2 N 151.4 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.5 SD 0.5 (CGS)	
24	Ch	ePZ	03 10 14.4
	Qt	iPZ	11 38.7 c
		USCGS H 03 00 57.3	
		45.4 N 151.3 E	
		Kurile Islands	
		depth about 50 km	
		Mag : 4.9 S 0.5 (CGS)	
24	Ch	ePZ	03 36 40.4

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Date	Station	Phase	h m s
	Wr	iPZ	37 30.2
	Qt	ePZ	38 04.6 c
		USCGS H 03 27 23.9	
		45.5 N 151.5 E	
		Kurile Islands	
		depth about 45 km	
		Mag : 4.8 SD 0.5 (CGS)	
24	Wr	ePN	10 45 23.2
		eSN	55.4
	Qt	iPZ	46 20.3 c
		eSN	47 41.6
		Hindukush region	
24	Ch	iPZ	11 30 30.1 c
		ePZ	32 18 ±
		USCGS H 11 18 15.2	
		13.1 S 166.7 E	
		Santa Cruz Islands region	
		depth about 61 km	
		Mag : 5.5 SD 0.5 (CGS)	
24	Qt	iPZ	13 05 47.3 c
		USCGS H 12 55 46.4	
		36.2 N 139.7 E	
		Honshu, Japan	
		depth about 70 km	
		Mag : 4.8 SD 0.3 (CGS)	
24	Wr	ePN	18 07 27.0
	Qt	ePZ	08 ±
		eSN	09 33.8
		H 18 06 22	
24	Qt	ePZ	18 49 32.8
		USCGS H 18 37 06*	
		6.9 S 147.4 E	
		New Guinea	
		depth about 49 km	
24	Qt	ePZ	19 13 41.7
		USCGS H 19 01 11.7	
		6.6 S 146.8 E	
		North-east New Guinea	
		depth about 53 km	
24	Qt	ePKPZ	21 24 33.3
		ePPZ	25 30.3
		USCGS H 21 05 54.6	
		53.0 S 159.5 E	
		Macquarie Islands region	
		depth about 33 km	
		Mag : 5.8 (CGS)	
25	Qt	ePZ	00 06 30.5d
		USCGS H 23 55 59.9	
		31.1 N 142.5 E	
		South of Honshu, Japan	
		depth about 33 km	
		Mag : 4.2 (CGS)	
25	Wr	ePN	02 05 08.8
		eSN	42.2
	Qt	ePZ	06 08.2
		eSE	07 29.0
		Mu ~~2(3)~~ Sec	
		PZ 0.01 ~~2(3)~~ 0.5	
		$\Delta = 7°.1$	
		H 02 04 24	
		Hindukush region	
25	Wr	ePZ	05 46 42.6
		iSZ	47 07.3
	Qt	ePZ	46 ±
		eSN	48 54
		H 05 46 14	
		Hindukush region	
25	Qt	ePZ	08 23 40 ±
25	Qt	ePZ	09 12 31 ±
		USCGS H 09 00 20.7	
		52.0 N 172.1 W	
		Andreanof Islands,	
		Aleutian Islands	
		depth about 45 km	
		Mag : 4.7 SD 0.2 (CGS)	
25	Wr	ePZ	16 19 32.0
	Qt	ePZ	20 15.0
		USCGS H 16 14 08.4	
		37.2 N 102.0 E	
		Tsinghai Provice, China	

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Date	Station	Phase	h m s
		depth about 33 km	
		Mag : 4.6 (CGS)	
25	Qt	ePZ	18 12 48.0
25	Qt	ePZ	19 52 43 ±
26	Wr	iPZ	01 39 34.3
	Qt	ePZ	35.6 d
		USCGS H 01 03 52*	
		5.1 S 102.3 E	
		Near south coast of Sumatra	
		depth about 40 km	
		Mag : 5.6 (CGS)	
26	Qt	ePZ	08 07 23.5 d
		USCGS H 07 58 22.4	
		76.5 N 22.4 E	
		Svalbard region	
		depth about 33 km	
		Mag : 5.1 (CGS)	
26	Qt	ePZ	08 58 57 ±
		USCGS H 08 48 52.1	
		69.3 N 16.5 W	
		300 km north of Island	
		depth about 33 km	
		Mag : 4.5 SD 0.4 (CGS)	
26	Qt	ePZ	10 57 00 ±
		USCGS H 10 56 26.9	
		43.6 N 148.3 E	
		Kurile Islands	
		depth about 33 km	
		Mag : 4.4 SD 0.4 (CGS)	
26	Qt	ePZ	16 16 51 ±
26	Wr	ePZ	16 34 00.6
	Qt	ePZ	18.5 c
		USCGS H 16 23 54.2	
		1.4 N 126.7 E	
		Molucca Sea	
		depth about 65 km	
		Mag : 4.8 (CGS)	
26	Wr	iPZ	20 51 01.8
		iSZ	31.5
	Lh	ePZ	41.2
		iSN*E*	52 41.2
	Qt	iPZ	03.8 d
		eSNE	53 21.8
		Mu ~~2 3~~ Sec	
		PZ 0.16 ~~2 3~~ 0.6	
		△ = 7°.0	
	Kr	ePZ	08.5 c
		eSE	55 19.0
		H 20 50 18	
		36.0 N 71.5 E	
		Hindukush region	
		depth about 160 km	
		USCGS H 20 50 21.2	
		36.4 N 71.3 E	
		Hindukush	
		depth about 140 km	
		Mag : 4.9 (CGS), 5.4(Qt)	
26	Qt	iPZ	21 23 42.2 c
		USCGS H 21 11 11.9	
		51.2 N 169.8 W	
		Fox Islands, Aluetian Islands	
		depth about 33 km	
		Mag : 4.3 SD 0.2 (CGS)	
27	Wr	iPZ	00 10 33.0
	Qt	ePZ	11 34.0
		eSE	13 18.2
		H 00 09 20	
27	Wr	iPZ	01 41 36.3 c
	Qt	ePZ	42 24.0
		eSN	43 51.2
		H 01 40 31	
		Hindukush region	
27	Qt	ePZ	02 58 00.7
		epPZ	17.9
		eXZ	58.2
27	Qt	ePZ	04 13 15.7
27	Qt	ePZ	05 42 14.0
		USCGS H 05 33 08.0	
		6.4 S 105.2 E	

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Date	Station	Phase	h m s
		Sunda Staint	
		depth about 33 km	
		Mag : 4.9 (CGS)	
27	Wr	ePZ	07 46 47.3
		eSZ	47 22.7
	Qt	ePZ	48 03.5
		eSE	49 31.5
		H 07 46 05	
		Hindukush region	
27	Qt	ePZ	10 10 18.0
		USCGS H 10 01 15.2	
		5.8 S 105.5 E	
		Flores Sea	
		depth about 52 km	
		Mag : 5.0 (CGS)	
27	Wr	iPZ	11 04 45.2
		iSZ	05 17.3
	Qt	ePZ	44.5
		eSN	07 04.0
		H 11 04 02	
		Hindukush region	
27	Qt	ePZ	12 37 49.0
		epPZ	56.0
27	Qt	ePZ	12 59 25.5
		USCGS H 12 48 45.6	
		45.9 N 151.0E	
		Kurile Islands	
		depth about 33 km	
		Mag : 4.1 (CGS)	
27	Qt	ePZ	15 48 30 ±
27	Wr	ePZ	16 41 21.5
	Qt	ePZ	51.0
		eSE	43 18.5
	H	16 40 00	
27	Qt	ePZ	19 41 31.5
27	Qt	ePZ	22 21 22.2
28	Wr	iPZ	01 44 52.4
	Lh	ePZ	45 35.0
		iSN*E*	46 36.0
	Qt	iPZ	45 45.2 d

Date	Station	Phase	h m s
		eSN	46 00.5
		Mu 2(3) Sec	
		PZ 0.04 2(3) 0.7	
		△ = 6°.5	
		H 01 44 10	
		36.0 N 70.1 E	
		Hindukush	
		depth about 225 km	
		USCGS H 01 44 05.0	
		36.6 N 70.2 E	
		Hindukush	
		depth about 205 km	
		Mag : 5 .0 (CGS),4 .8(Qt)	
28	Lh	ePZ*	05 57 41.0
		epPZ*	58 03.0
		eSN*E*	06 07 55.0
	Wr	iPZ	05 57 55.2
	Qt	iPZ	58 11.6 d
		ePcPZ	17.0
		epPZ	40.0
		eSKSNE	06 08 37.0
		eSE	09 00.5
		eScSN	14.0
		Mu 2(3) Sec	
		PZ 0.1 2(3) 1.0	
		△ = 90°.1	
		USCGS H 05 45 20.2	
		5.1 S 153.5 E	
		New Ireland region	
		depth about 70 km	
		Mag : 5.5 SD 0.4(CGS),	
		6.0 (Qt)	
28	Wr	ePKPZ	09 22 43.7
	Qt	iPKPZ	49.5 d
		eSKSN	29 45.5
		USCGS H 09 03 52.9	
		32.7 S 178.9 W	
		Kermadec Islands	
		depth about 33 km	
		Mag: 5.8 SD 0.4 (CGS),	

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Date	Station	Phase	h m s
28	Qt	ePZ	09 32 32.3
28	Wr	ePZ	16 59 08.9
	Qt	ePZ	37.6
28	Wr	iPZ	18 07 22.8
		iSZ	50.4
	Qt	iPZ	08 16.4 d
		eSN	09 26.5
		H 18 06 45	
		Hindukush region	
28	Qt	ePKPZ	18 17 37.0
		iPKPZ	39.2 d
		ePKSZ	21 00.0
		USCGS H 17 58 33.1	
		60.4 N 51.8 W	
		South Shetland Islands region	
		depth about 49 km	
		Mag : 5½-5¾ (Pal), 5.4 (CGS)	
28	Qt	ePZ	18 30 42±
28	Wr	ePZ	23 15 44.7
		eSZ	16 17.8
	Qt	ePZ	30.5
		eSN	17 40.0
		H 23 14 59	
		Hindukush region	
29	Qt	ePKPZ	00 15 05 ±
		iXZ	32.5
		USCGS H 23 55 07.7	
		53.0 S 118.4 W	
		South Pacific Ocean	
		depth about 33 km	
		Mag: 5.0 SD 0.3 (CGS)	
29	Qt	ePZ	13 04 40.5 d
		USCGS H 12 52 02.2	
		4.1 S 151.9 E	
		New Britain	
		depth about 119 km	
		Mag: 4.9 (CGS)	
29	Qt	ePKPZ	15 18 16.5 d
		USCGS H 15 00 24.0	
		20.7 S 178.4 W	
		Fiji Islands region	
		depth about 534 km	
		Mag: 4.8 SD 0.4 (CGS)	
29	Wr	ePZ	15 54 04.8
	Qt	ePZ	55 11.0
		eSN	57 10.0
		H 15 52 38	
29	Qt	ePKPZ	17 34 55.5
		epPKPZ	35 24.8
		ePPZ	37 43.0
		ipPPZ	38 13.5
	Wr	ePKPZ	35 01.4
	Lh	ePKPZ	03.4
		epPKPZ	32.0
		ePPE*	38 22.0
		USCGS H 17 15 39.2	
		18.5 S 69.7 W	
		Northern Chile	
		depth about 113 km	
		Mag: 5.5 SD 0.2 (CGS)	
29	Wr	ePZ	18 10 36.4
		eSZ	11 20.8
	Qt	ePZ	40±
		eSN	13 19.0
		H 18 09 34	
29	Wr	ePZ	21 16 35.4
		eSZ	17 04.8
	Qt	ePZ	38±
		eSE	18 53.5
		H 21 15 58	
		Hindukush region	
29	Qt	ePZ	23 17 58.0
30	Qt	ePZ	01 09 03.0
		iPZ	06.5d
		USCGS H 00 58 13.3	
		3.4 S 128.8 E	
		Banda Sea	
		depth about 82 km	
		Mag: 5.0 (CGS)	
30	Wr	ePZ	01 25 49.8

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Date	Station	Phase	h m s
	Qt	ePZ	26 18.6
		iSN	35 16.0
		USCGS H 01 15 24.5	
		21.6 N 144.5 E	
		Mariana Islands region	
		depth about 120 km	
		Mag: 5.2 SD 0.3 (CGS)	
30	Qt	ePKPZ	06 42 35.0
		USCGS H 06 23 35.2	
		29.3 S 176.8 W	
		Kermadec Islands	
		depth about 34 km	
		Mag: 4.7 (CGS)	
30	Wr	ePZ	08 24 19.0
		eSZ	59.4
	Qt	ePZ	25 20.5
		eSE	26 37.5
		H 08 23 35	
		Hindukush region	
30	Qt	ePZ	12 31 49.1
30	Lh	ePZ	13 39 24.3
		eSN*	47 25.0
		eSSN*	51 25.0
	Wr	ePZ	39 26.0
	Qt	iPZ	40 03.6 c
		eSN*E*	48 36.0
		Mu 2~~(3)~~ Sec	
		PZ 0.3 2~~(3)~~ 1.0	
		MH 7.8 2~~(3)~~ 20	
		$\triangle$ = 64°.0	
		USCGS H 13 29 25.3	
		45.5 N 150.6 E	
		Kurile Islands	
		depth about 40 km	
		Mag: 5.7 SD 0.2 (CGS),	
		6.2 (Qt)	
30	Qt	ePZ	14 06 24.5
		eXZ	08 50.5
		USCGS H 13 46 45.9	
		40.1 S 84.3 W	
		West of Chile	
		depth about 33 km	
		Mag: 5.0 SD 0.2 (CGS),	
30	Kr	iPZ	15 13 59.5 d
	Qt	iPZ	14 03.0 d
		eSNE	22 00.1
		Mu 2~~(3)~~ Sec	
		PZ 0.1 2~~(3)~~ 1.5	
		$\triangle$ = 58°.1	
		USCGS H 15 04 14.2	
		9.4 N 126.0 E	
		Near east coast Mindanao,	
		Philippine Island	
		depth about 102 km	
		Mag: 5.6 (CGS), 6.1 (Qt)	
30	Qt	ePZ	15 52 42.5
		eSE	54 29.5
30	Qt	ePZ	18 16 26±
		eSN	18 05.5
30	Qt	ePZ	20 24 26.0 c
		epPZ	39.0
		USCGS H 20 32 19.5	
		42.4 N 142.8 E	
		Hokkaido, Japan	
		depth about 50 km	
		Mag: 4.6 SD 0.2 (CGS)	
30	Qt	iPZ	22 12 55.4
		eXZ	18 59.0
		USCGS H 22 06 07.1	
		6.9 N 94.7 E	
		Nicobar Islands	
		depth about 64 km	
		Mag: 5.6 (CGS)	
30	Qt	ePZ	22 25 57.0
31	Wr	ePZ	01 17 55.4
		eSZ	18 20.5
	Qt	ePZ	59.5
		eSE	20 24.5
		H 01 17 16	
		Hindukush region	

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Date	Station	Phase	h m s
31	Qt	ePZ	04 38 49.5
		USCGS H 04 28 04*	
		45.0 N 151.3 E	
		Kurile Islands	
		depth about 33 km	
		Mag: 4.2 (CGS)	
31	Qt	ePZ	10 56 00±
		USCGS H 10 45 17.7	
		45.2 N 151.5 E	
		Kurile Islands	
		depth about 45 km	
		Mag: 4.5 SD 0.2 (CGS)	
31	Kr	ePZ	15 22 12.8
	Qt	ePZ	38.5
		esSN*	26 24.0
	Wr	ePZ	22 58.1
		USCGS H 15 18 08*	
		38.4 N 45.3 E	
		Northwestern Iran	
		depth about 33 km	
		Mag: 4.5 (CGS)	
31	Kr	ePKPZ	17 56 06.2
		ePPZ	59.0
	Qt	ePZ	52 31 ±
		ePKPZ	56 13.0
		epPKPZ	27.7
		ePPZ	57 23.0
		eSKSZ	18 03 04.0
		eSKKS	04 16.0
		ePSN*	07 04.0
		Mu ~~2(3)~~ Sec	
	MH	23.1 ~~2(3)~~ 20	
	△ =	116°.0	
	Lh	ePKPZ	17 56 22.0
		ePPN*E*	58 03.3
		eSKSN*E*	18 03 17.0
		eSKKSN*E*	04 46.0
		ePSE*	07 37.0
		eSSN*E*	14 28.0
	Wr	ePKPZ	17 56 28.0
		USCGS H 17 37 32.1	
		56.5 S 26.0 W	
		Sandwich Islands	
		depth about 30 km	
		Mag: 6½ (Pal), 6.3 (CGS),	
		6.6 (Qt)	
31	Qt	ePZ	19 09 48.0
		USCGS H 18 58 43	
		7.1 S 129.3 E	
		Banda Sea	
		depth about 100 km	
		Mag: 4.6 (CGS)	
31	Qt	ePZ	19 35 44.5
		USCGS H 19 16 54.9	
		17.4 S 174.2 W	
		Tonga Islands	
		depth about 80 km	
		Mag: 5.4 SD 0.4 (CGS)	

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Date	Phase	h m s
	QUETTA	
1	ePZ	01 22 06.1
	eSN	15.6
1	ePZ	03 07 46.0
	eSE	48.0
1	ePZ	04 51 55±
1	ePZ	08 02 20.0
	eSNE	40.0
1	ePZ	10 32 28±
	eSE	42.5±
1	ePZ	14 54 50
1	ePZ	17 02 00.0
1	ePZ	17 05 33.4
1	ePZ	17 51 02±
2	ePgZ	03 04 43±
	eSgN	45.0
3	ePZ	15 43 19.5
	eSN	44.5
3	ePZ	17 20 20±
	eSE	38.0
4	ePZ	10 44 42±
	eSE	45 10.0
4	ePZ	09 49 29±
4	ePZ	20 42 24±
	eSE	33.5
5	ePZ	02 59 13.5
5	ePgZ	15 14 48±
	eSgE	51.0
6	iP!Z	04 27 34.5d
	iSEN	36.0
6	ePZ	12 24 21±
	eSN	31
6	ePZ	16 26 46±
6	ePZ	17 32 10±
	eSN	26.0
7	ePZ	04 35 51.5
7	ePZ	05 24 12.0
	eSE	25 34.6
7	ePZ	07 07 33.0
	eSN	40.5
7	ePZ	15 37 35±
	eSN	52.5
7	ePZ	16 52 16.0
	eSE	53 21.0
7	ePZ	18 24 35±
	eSE	56.0
7	ePZ	21 42 00.0
	eSE	47.0
7	eXZ	23 01 00
8	ePZ	01 22 22.5
	eSNE	25.5
8	ePZ	01 23 35.0
	eSN	46.5
8	ePZ	06 44 45±
	eSN	55.5
8	iPZ	18 39 55.0c
	eSE	57.3
9	ePZ	09 07 09.3
	e(S)E	41.0
9	ePZ	10 16 20±
	eSE	27.5
10	ePZ	08 19 04±
	eSE	08.5
10	ePZ	17 35 52.5
	eXZ	36 30.0
10	ePZ	19 14 40.5
	iSE	43.0
11	ePZ	10 28 14.5
	e(S)E	42.0
11	ePZ	12 10 24±
	eSE	33.5
11	ePZ	17 23 53±
	eSE	24 04.0
11	ePZ	17 27 16.5
	eSE	31.0
11	ePZ	19 57 37.5
	eSE	47.7
12	ePZ	01 52 50.5
	eSE	53 09.5
12	ePnZ	04 27 25.3

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Date	Phase	h	m	s
	ePgZ			26.5
	eSnE			46.0
12	ePZ	05	01	31±
	eSE		02	23.0
12	ePZ	08	00	46±
	eSE		01	07
12	ePZ	13	47	39±
12	ePZ	14	09	14.5
	e(S)N			50.0
12	ePnZ	15	27	29.0
	ePgZ			31.0
	eSnE			49.5±
12	ePZ	21	08	50
13	ePZ	00	25	23.5
	e(S)N		26	04.0
13	ePZ	01	27	04
	eXZ			51.5
13	iPZ	21	16	58.5d
	eSE		17	14.0
13	iPZ	21	31	42.5d
	e(S)N			56.5
14	ePZ	01	16	45.5
	eSNE			56.5
14	ePZ	09	50	26.7
	iSE			53.5
14	ePZ	09	55	42.6
	eSE		56	07.0
14	ePZ	17	12	24.0
	eSN			39.5
14	ePZ	23	13	31±
	eSE			33
15	ePZ	05	19	59.0
	eSNE		20	24.5
15	ePZ	15	25	14.0
	eSE			36.5
15	ePZ	17	25	45.6
	eSE		26	04.5
16	ePZ	06	59	26.6
	eSEN			30.0
16	ePZ	07	02	05.3
	e(S)NE			08.5
16	eSN	09	47	39.5
16	ePZ	10	08	16.0
	eSE			22.5
16	ePZ	14	51	59.0
	eSE		52	29.0
17	ePZ	01	02	25.5
	eSN			49.5
17	ePZ	08	47	07.0
	eSN			11.5
17	ePZ	10	31	42.5
17	ePZ	13	57	13.0
	e(S)E		58	32.0
17	ePZ	14	46	14.5
	e(S)E		47	35.5
17	ePZ	15	50	13.0
	eSE			14.5
18	ePZ	14	44	27.0
	eSN			55.0
19	ePZ	08	34	14±
	e(S)N			53.5
19	ePZ	08	40	00.5
	eSNE			25.0
19	ePZ	09	14	48.0d
	eSE		15	01.0
20	ePZ	05	09	00±
20	ePZ	09	52	42±
20	ePZ	22	10	00.5
	eSE		11	10.0
21	ePZ	07	14	48.5
	eSN		15	20.5
22	ePZ	08	41	32±
22	ePZ	16	46	11.2
	eSE			24.5
22	ePZ	19	08	14.0
	eSN			21.0
23	ePZ	01	02	13.5
	eSE			25.0
23	ePZ	01	19	35±
	eSN		20	10.0
23	ePZ	05	33	40.5
	eSN			43.5

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Date	Phase	h m s
23	ePZ	08 49 35.6
	eXZ	42.5
23	iPZ	17 07 06.0d
	iSE	18.5
23	ePZ	17 13 16.5
	eSE	28.0
23	ePZ	18 33 30.0
	eSE	41.0
23	ePZ	22 48 44.5
24	ePZ	01 54 17.5
	eSN	28.0
24	ePZ	02 11 27.0
24	ePZ	02 53 09±
24	ePZ	05 50 38±
24	ePZ	06 35 25.3
	eSN	46.0
24	ePZ	19 38 41.9
	eSNE	39 01.7
24	iPZ	23 36 35.0c
	eSNE	46.3
24	eSNE	23 37 38.8
25	eSN	02 25 00.0
25	ePZ	14 25 04.1
	eSE	11.7
25	ePZ	15 30 09.5
	eSE	19.0
26	ePZ	00 42 59.2
26	ePZ	05 32 58±
	e(S)E	34 15.0
26	eSE	07 48 25.5
26	eSE	07 49 51.0
26	ePZ	17 49 51.0
	eSE	58.0
27	ePZ	01 29 05.7
	eSE	24.7
27	ePZ	09 33 41±
	e(S)E	34 43.0
27	ePZ	11 12 13.0
	eXZ	49.0
27	ePZ	21 16 01±
	eSN	05.5
28	eSN	01 49 44
28	ePZ	04 34 06.0
	eSN	21.3
28	ePZ	08 38 51.5
	eSN	39 00.0
28	ePZ	16 53 58 ±
29	ePZ	02 15 33.5
	eSN	40·0
29	eSE	15 29 01.0
29	ePZ	18 50 23 ±
	eSN	30.0
30	ePZ	05 19 23.5
	e(S)N	58.0
30	ePZ	05 49 13 ±
	e(S)E	51 09.5
30	ePZ	09 34 45 ±
	eSN	53
30	eSE	11 19 58.0
30	ePZ	20 14 32.5
	eSN	49.0
30	ePZ	22 01 12.0
	eSN	28.5
31	ePZ	00 12 22 ±
	eSN	13 13.5
31	ePZ	01 45 36.0
	eSN	55.5
31	ePZ	19 28 36.5
	iSE	45.5
WARSAK		
2	ePZ	14 53 28.1
	eSZ	54 01.3
2	ePZ	17 33 20.8
	eSZ	49.4
3	ePZ	13 17 50.2
3	ePZ	16 58 59.1
4	ePZ	20 48 15.6
	eSZ	49 06.8
6	iPZ	07 04 46.5
6	iPZ	07 19 36.7
	ESZ	55.4

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Date	Phase	h m s
7	ePZ	12 08 50.8
9	ePZ	02 37 57.7
	eSZ	38 34.6
10	ePZ	06 49 17.6
10	ePZ	16 06 47.1
	eSZ	07 10.3
12	ePZ	12 40 24.1
	eSZ	41 03.3
14	ePZ	23 11 10.6
15	ePZ	20 12 49.8
16	ePZ	15 11 25.2
16	ePZ	15 45 58.6
17	ePZ	13 57 22.8
	eSZ	58 02.1
18	ePZ	00 45 37.8
18	ePZ	01 27 56.8
20	ePZ	09 53 35.2
	eSZ	54 05.4
20	ePZ	15 45 51.0
20	iPZ	17 44 58.0
	eSZ	45 19.2
20	ePZ	20 55 19.1
21	ePZ	10 50 13.1
22	ePZ	09 03 59.2
22	ePZ	09 21 33.5
23	ePN	07 07 10.2
23	ePN	09 42 43.4
23	ePN	11 41 03.2
24	ePZ	06 30 59.0
	eSZ	31 33.3
24	ePN	18 58 36.0
	eSZ	59 04.2
25	ePZ	08 20 15.8
25	ePZ	10 26 06.8
26	ePgZ	07 47 44.1
	eSgZ	56.8
27	ePZ	09 31 57.8
	eSZ	32 46.0
29	ePZ	18 18 59.5
	eSZ	19 45.4
30	ePZ	05 48 47.9
	eSZ	49 13.4
30.	ePZ	08 41 48.8
	eSZ	42 07.8
30	ePZ	11 18 03.4
	eSZ	19.9
31	ePZ	00 10 48.9
	eSZ	11 17.0
	LAHORE	
3	eXZ	18 36 00
5	eXZ	04 15 49.0
	eXNE	16 15.0
6	eXZZ*	18 34 12.0
8	eXZ	05 36 23.0
9	eXZ	00 09 07.1
	eiXZ	43.6
9	eXZ	19 04 06
	eXNE	05 17
11	eXZ	18 17 42.0
	eiXZ	18 38.0
12	eXZ*	22 57 03.0
15	eXZ*	07 39 43.0
17	eXZ	23 34 25.3
20	eXZZ*	10 47 28.0
20	eXZ*N*	15 34 32.0
20	eXZ*N*	16 32 17.3
21	eXZ*	05 02 38.0
22	e(P)Z	23 34 45.3
	eiXZNE	58.2
24	eXZN	18 09 23.0
25	eXNE	00 24 50.0
26	eXZ	16 33 40.0
28	eXZ	18 08 37.0
	eXE	09 51.0
28	eXZ*	18 20 18.0
30	eXZ*	05 20 04.0
30	eXN	05 50 29.0
30	eXN	08 26 11.0

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Date	Phase	h m s
	KARACHI	
18	ePZ	03 01 39.0
22	e(P)Z	13 58 32.8
	CHITTAGONG	
1	eXZ	04 30 52
1	eXZ	07 57 26
1	eXE	09 51 18
1	eXE	21 56 49
2	eXZ	21 06 59
3	eXZ	01 15 03
4	eXE	09 17 53
4	eXE	09 43 45
4	eXZ	11 05 34
4	eXZ	16 20 28
5	eXZ	11 49 36
6	eXZ	21 17 12
7	eXZ	15 27 52
8	eXZ	07 18 28
8	eXZ	09 24 00
8	eXZ	11 15 47
9	eXZ	02 34 32
9	eXZ	05 50 47.1
9	eXZ	09 23 49.2
9	ePZ	10 00 03.1
9	eXZ	18 07 23
9	ePZ	21 17 34.1
10	ePZ	09 38 11.8
10	ePZ	13 15 02 ±
11	eXZ	01 05 55
11	eXZ	13 23 29
11	eXZ	04 24 04
12	eXZ	20 34 04
13	eXZ	02 43 59
13	eXZ	22 01 20
14	eXZ	00 25 20.0
14	eXZ	11 13 08
14	eXZ	18 55 11
14	ePZ	23 03 12.1
15	eXZ	00 28 49
15	eXZ	07 09 27
15	eXZ	20 22 31
15	ePZ	22 32 51.1
16	eXZ	04 21 19
17	eXZ	11 03 26
18	eXZ	01 08 18
19	eXZ	10 00 10
19	eXZ	12 00 55
19	eXZ	16 32 05
19	eXZ	19 29 46
20	eXZ	10 33 45
20	eXZ	11 08 11
20	eXZ	15 34 09
20	eXZ	15 54 34
20	eXZ	15 56 14
20	eXZ	17 33 57
21	eXZ	04 37 21
21	eXZ	05 39 24
21	eXZ	21 20 01
22	eXZ	05 23 49
22	iSNE	05 58 53
22	SXZ	13 50 48.1
22	ePZ	16 12 28.1
24	eXZ	21 19 19
24	ePZ	23 10 37.1
25	eXZ	06 08 49
25	eXZ	09 12 16
26	eXZ	09 50 48
26	eXZ	20 55 42 ±
26	eXZ	23 00 30

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