



International
Seismological
Centre

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Institute

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Director: S. N. NAQVI

GEOPHYSICAL REVIEW

Vol. 3. 1957

Part I. Seismology

No. 1.

Seismological Bulletin

January 1957

QUETTA OBSERVATORY

Constants of the station and the instruments are as follows:

Latitude : 30°11'.3 N.
Longitude: 66°57'.0 E.
Height : 1719 meters.
Foundation: Mountain Fan Gravels.

Normal Microseism Amplitudes.

- I. Sprengnether (short period)
 $\frac{1}{4}$ mm in summer & $\frac{1}{2}$ mm in winter.
- II. Sprengnether (long period)
 $\frac{1}{2}$ mm in summer & 1 mm in winter.

Instruments.

1. Sprengnether Series H N & E components.
 Sprengnether Series DH Z component.
2. Sprengnether Series H
 (long period). N & E components.
3. Willmore Z, N & E components.

Constants.

Component	To	T	Vs.		Paper	
	Pendulum	Galvanometer	Maximum		speed	
	(Sec)	(Sec.)	Magnification		(mm/min.)	
Z	a1	1.8	1.8	5500	Critical	60
	3	1	$\frac{1}{4}$	-	-	52
N	1	1.8	1.8	4500	Critical	60
	2	15.3	16.0	16000	Critical	30
E	3	1	$\frac{1}{4}$	-	-	52
	1	1.8	1.8	5800	Critical	60
	2	15.8	15.8	15000	Critical	30
	3	1	$\frac{1}{4}$	-	-	52

The Observatory is also equipped with a Sprengnether pen recorder driven by a 1 second Willmore seismometer (horizontal E-W only).

Time Control.

1. Standard Electric Time Coy (Mass.) invar pendulum clock.
 2. Synchronome free pendulum clock.
- Greenwich time signals are received three to four times daily on B.B.C., A.B.C. and Radio Moscow wavelengths and recorded by hand on all seismograms or recorded automatically on a tape recorder. Jeffreys & Bullen's Travel Time Tables (1948) are used unless otherwise mentioned. Except when a depth has been mentioned, interpretations assume a surface or normal focus. Readings are from Sprengnether short period seismograms unless indicated as follows:

Willmore : (W)

Sprengnether : (L)
 (long period)

QUETTA OBSERVATORY

January, 1957.

DATE	COMPT.	PHASE	TIME			REMARKS
			GMT	h.	m. s.	
1	(W)Z,Z (W)Z,E	eP eS	00 52 22 54 12			Lahore P - 00:52:04. S 53:34.
1	(W)Z,Z	eP	01 07 23			USCGS: H - 00:56:28. 53 $\frac{1}{2}$ ^o N. , 159 ^o E. Off east coast of Kamohatka.
2	(W)Z,N,E (W)Z,N (W)Z N,(L)NE (L)NE	iP iPcP ePP eS iScS	00 51 59 52 04 55 17 01 02 24 32			Compression. USCGS: H - 00:39:22. 53 ^o N. , 168 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands. Mag: 6 $\frac{1}{2}$ - 6 $\frac{3}{4}$ (Pas.)
2	(W)Z,N,E N	eP e(S)	02 28 09 38 34			
2	(W)Z	eP	02 29 52			
2	(W)Z,N,E (W)Z (W)Z,N E,N (W)E,N,E N,E	eP iPcP ePP eSKS iS iScS	02 30 14 19 33 32 40 37 42 49			Compression. USCGS: H - 02:17:35. 52 $\frac{1}{2}$ ^o N. , 168 ^o W. Fox Islands. Mag: 6 $\frac{3}{4}$ (Pas.) 6.9 (Upp. & Kir.)
2	(W)Z,N,E (W)Z,N,E (W)E,E N,E N,E	eP iPcP eSKS iS eScS	03 25 29 32 35 53 56 36 06			Compression. USCGS: H - 03:12:52. 53 ^o N. , 168 ^o W. Fox Islands, Aleutian Islands. Mag: 7 (Pas.) 6.5 (Upp. & Kir.)
2	(W)ZE,N	eP	03 43 10			Dilatation. USCGS: H - 03:30:34. 52 $\frac{1}{2}$ ^o N. , 168 $\frac{1}{2}$ ^o W. Fox Islands after-shock.
2	(W)Z	e	03 53 33			USCGS: H - 03:41:08. 52 $\frac{1}{2}$ ^o N. , 169 ^o W. Fox Islands aftershock.
2	(W)Z E	iP eS	03 53 45 04 04 14			Compression.
2	(W)Z,N,E (W)Z,N (W)Z N	iP iPcP ePP eSKS	04 01 21 25 04 40 11 44			Compression. Lahore P - 04:00:58. USCGS: H - 03:48:44. 53 ^o N. , 168 ^o W.

January, 1957. Quetta.

DATE	COMPT.	PHASE	GMT			REMARKS	
			h.	m.	s.		
	(W)E,N	eS	04	11	49	Fox Islands.	
	E	eScS			59	Mag: 7 - 7 $\frac{1}{2}$ (Pas.)	
	N,E	ePS		12	43	7 (Upp. & Kir).	
2	(W)Z,N,E	iP	04	16	05	Compression.	
	(W)Z	ePcP			10	Lahore P - 04:15:40.	
	(W)Z	iPP		19	18	USCGS: H - 04:05:26.	
	N,E	eSKS		26	28	52 $\frac{1}{2}$ °N. , 169°W.	
	E	iS			33	Fox Islands, Aleutian Islands.	
	E,(W)E	iScS			42	Mag: 6.7 (Upp. & Kir.)	
2	Z,N	iP	11	02	09	Compression.	
	Z	ePcP			15	USCGS: H - 10:49:32.	
	N,(L)N	eS		12	34	52 $\frac{1}{2}$ °N. , 168°W.	
	N,(L)N	iScS			47	Fox Islands aftershock.	
						Mag: 6.3 (Upp. & Kir.)	
2	Z,N	eP	12	59	43	Compression.	
	Z,N	ePcP			48	USCGS: H - 12:47:07.	
	Z	ePP		13	02	58	53°N. , 168°W.
	(L)N	eSKS		10	03	Fox Islands aftershock.	
	N,(L)N	eS			09		
	(L)N	eScS			19		
2	Z	eP	14	29	09	Compression.	
						USCGS: H - 14:16:52.	
						52 $\frac{1}{2}$ °N. , 168 $\frac{1}{2}$ °W.	
						Fox Islands aftershock.	
2	Z,N	eP	18	04	34	Compression.	
	Z	ePcP			38	USCGS: H - 17:51:56.	
	N,(L)N	eS		14	59	53°N. , 168°W.	
	(L)N	iScS			15	10	Fox Islands aftershock.
2	Z,N	eP	22	11	35	Compression.	
	Z,N	eS		13	04	Lahore P - 22:11:04.	
5	(W)E,Z,N	iP	00	53	39	Compression.	
	(W)E,Z	ePcP			44	USCGS: H - 00:41:02.	
	Z	ePP		56	52	53°N. , 168°W.	
	N,(W)E,(L)N	eSKS		01	04	02	Fox Islands aftershock.
	(L)N	eS			08		
	(W)E	eScS			16		
5	Z	e	09	03	45	USCGS: H - 08:53:28.	
						Northern Honshu, Japan.	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
5	(W) Z, Z, N, E	1P!	12	56	42	Dilatation. Lahore P - 12:55:57. USCGS: H - 12:48:27. Depth: about 600 km. 44°N. , 130°E. Southern Manchuria. Mag: 7 (Pas.) 7 (Upp. & Kir.)
	Z	1			55	
	Z	1PcP	57	41		
	(L) N, Z	1pP	58	34		
	(L) N	ePP			53	
	Z	1sP	59	34		
	(L) N, N	1S!	13	03	18	
	N	1ScS	05	27		
	(L) N	esS	06	39		
(L) N	eSS	07.1				
5	(W) Z, Z	1P	13	51	44	Dilatation. USCGS: H - 13:43:29. Depth: about 600 km. 44°N. , 130°E. Manchuria aftershock.
	N, (L) N	eS	58	20		
3	(W) Z, Z	eP	14	31	42	Compression?
3	(W) Z, Z	eP	14	38	57	
3	(W) Z, Z	eP	16	04	54	Compression.
4	(W) Z	eP	02	49	44	
4	(W) Z	e	12	55	31	USCGS: H - 12:36:10. 7°N. , 78°W. Near west coast of Columbia.
4	(W) Z	eP	16	04	35	USCGS: H - 15:51:25. Solomon Islands.
4	(W) Z	eP	18	28	08	Compression.
4	(W) Z	eP	19	05	07	
5	(W) Z	eP	01	22	54	USCGS: H - 01:12:16. 44½°N. , 149½°E. Kurile Island.
5	(W) Z, Z	eP	12	48	28	Compression. USCGS: H - 12:36:14. Andreanof Islands, Aleutian Islands.
5	(W) Z, Z	eP	16	13	56	Seismic?
5	(W) Z, Z	e	16	39	16	Seismic?
5	(W) Z	eP	16	43	32	Local?

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
5	(W)Z,Z	eP	17	27	52	USCGS: H - 17:15:15. 54°N. , 165°W. South of Unimak Islands, Aleutian Islands.
6	(W)Z,Z (L)N	eP eS	00	31	12 41 52	Compression. USCGS: H - 00:18:23. 1°S. , 20°W. Mid-Atlantic Ocean.
6	(W)Z,Z	eP	01	46	08	USCGS: H - 01:36:58. 26°N. , 126°E. Ryukyu Islands.
6	(W)Z,Z	eP	02	01	03	
6	(W)Z,Z	eP	05	25	07	USCGS: H - 05:15:06. Depth: about 100 km. 42°N. , 142°E. Near south coast of Hokkaido, Japan.
6	(W)Z (W)E	eP eS	14	57	16 58 39	
6	(W)Z	e	16	10	48	Local?
6	(W)Z,Z (W)E	eP eS	20	33	39 41 43	Compression. USCGS: H - 20:23:37. Near north coast of Mindanao, Philippine Islands.
6	(W)Z,Z	eP	20	54	07	Compression.
7	(W)Z,Z	eP	02	35	22	Compression.
7	(W)Z,Z (L)N	eP eS	16	54	43 17 02 49	USCGS: H - 16:44:44. Depth: about 100 km. About 100 miles off east coast of Mindanao, Philippine Islands.
7	(W)Z,Z	eP	18	57	38	
7	(W)Z,Z	e	23	22	39	
8	(W)Z,Z (L)N	eP eS	01	28	26 34 54	Compression. USCGS: H - 01:20:15. About 150 miles off west coast of Sumatra.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
8	(W) Z, Z (W) Z	eP eS	03	44	42 45 24	Compression.
8	(W) Z, Z (W) Z, Z (W) Z, Z (L) N (L) N (L) N	eP e ePcP eS e eScS	05	30	36 43 32 25 37 03 38 50 40 33	Compression. USCGS: H - 05:22:26. 2°S. , 99°E. Off west coast of Sumatra.
8	(W) Z	e	15	15	57	Seismic?
8	(W) E, Z N, (L) N	iP eSKS	17	42	14 52 37	Compression. USCGS: H - 17:29:36. 52°N. , 169°W. Fox Islands aftershock.
9	Z, (W) EN	eP	01	50	16	USCGS: H - 01:38:50. 54°N. , 169°E. Komandorskie Islands.
9	(W) Z	eP	06	28	14	Compression? USCGS: H - 06:15:37. New Britain region.
9	(W) Z, Z (W) Z N N, E N	eP iPeP eSKS iS iScS	08	05	33 37 15 56 16 00 11	Compression? USCGS: H - 07:52:56. 53°N. , 167½°W. Fox Islands aftershock. Mag: 6½ (Pas.), 6½ (Berk). 6½ (Upp. & Kir.)
9	(W) Z, Z	eP	10	38	03	Compression. USCGS: H - 10:27:45. 34½°N. , 141°E. Off east coast of Honshu, Japan.
9	(W) Z, Z (W) E (W) E E, (W) E E E	eP e e eS i i	21	10	06 13 23 54 11 05 15	
9	(W) Z, Z	iP	22	16	49	Compression.
10	(W) Z, Z	e	00	19	48	Seismic?
10	(W) Z, Z (W) Z, E (W) Z, Z (L) N	eP ePP ePcP iS	04	21	47 23 05 24 14 27 23	Compression. USCGS: H - 04:14:44. 6°N. , 95½°E. Northern Sumatra.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
10	Z, E, N	iP	05	23	33	Compression.
	Z, E	iS			53	Felt at Kalat.
10	(W) Z, Z	eP	13	35	27	H - 13:53:46. $\Delta = 6^{\circ}.6$
	(W) NE	eS			36 44	33°N., 71°E. Hindukush.
						Lahore P - 13:35:05.
						S - :56:05.
10	(W) Z, Z	ePKP	14	06	52	Compression?
						USCGS: H - 13:47:26.
						Depth: about 100 km.
						Central Chile.
10	(W) Z, Z	e	15	55	09	
10	(W) Z, Z	eP	22	55	25	
	(W) E	eS			53 44	
11	(W) ZE	e	08	59	58	
11	(W) Z, Z	iP	23	41	08	Compression.
						USCGS: H - 23:31:50.
						27°N., 127°E.
						Ryukyu Islands.
12	(W) Z	eP	10	50	34	
12	Z	eP	12	19	52	USCGS: H - 12:09:00.
						South of Honshu, Japan.
Power failure from 1730 GMT of 12.1.1957 to 0600 GMT of 13.1.1957.						
13	(W) Z, Z	e	10	38	06	
13	(W) Z, Z	eP	11	40	29	Compression.
	(W) NE	eS			42 10	H - 11:38:18. $\Delta = 8^{\circ}.8$
						38°N., 70°E.
						Lahore P - 11:40:13.
						S - :41:18.
						USCGS: H - 11:38:18.
						38°N., 71°E.
						Tadzhik, S. S. R.
13	(W) Z, Z	eP	12	30	29	USCGS: H - 12:20:00.
						32°N., 142°E.
						About 200 miles off east coast of Japan.
14	(W) Z, Z	eP	13	43	06	
	(W) N, L	eS			46 32	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
14	(W)Z,Z	eP	14	38	07	
14	(W)Z,Z	ePKP	14	39	16	USCGS: H - 14:20:17. 22°S. , 179°W. Fiji Islands region.
15	Z	e	01	12	49	
15	Z	e	09	12	18	
15	(W)ZEN (W)N	eP eS	18	03	00 04 07	
15	(W)Z,Z	e	20	17	53	
15	(W)Z,Z N	eP eS	20	31	53 40 01	Compression. USCGS: H - 20:21:45. Depth: about 100 km. 6½°N. , 127°E. About 100 miles off east coast of Mindanao, Philippine Islands.
15	(W)Z,Z	ePKP	21	59	40	USCGS: H - 21:40:26. 11°N. , 86½°W. Near coast of Nicaragua.
16	(W)Z,Z (W)Z,Z (L)N N,E,(L)N (L)N	eP epP ePPP eS eSS	11	51	01 16 53 08 57 04 12 00 03	Dilatation. Lahore P - 11:51:16. USCGS: H - 11:43:30. Chagos Island region.
17	(W)Z,Z (W)N	eP eS	06	47	19 48 36	
17	(W)Z,Z	eP	07	34	54	Compression. USCGS: H - 07:23:43. Depth: about 100 km. 7½°S. , 129½°E. Banda Sea.
17	(W)NE,Z	eP	11	37	00	Dilatation. USCGS: H - 11:26:17. Flores Island.
17	(W)Z,Z	eP	14	24	01	Compression.
17	(W)Z,Z	eP	16	30	00	Dilatation. USCGS: H - 16:21:08. 21°N. , 121°E. Basco Island region.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
17	(W)Z (W)N	eP eS	19	01	28 03 09	Lahore P - 19:00:44. S - :01:54.
17	(W)Z,Z (W)N,E	iP eS	19	08	06 09 26	Dilatation. Lahore P - 19:07:45. S - :08:50.
17	(W)Z,Z N,E,(L)E	iP iS	22	36	14 43 55	Dilatation. Deeper than normal. Lahore P - 22:35:30. S - :42:29. USCGS: H - 22:26:10. 33°N. , 137½°E. South of Honshu, Japan.
18	(W)Z (W)E	eP eS	03	42	38 43 55	
18	(W)Z	e	11	58	08	Seismic?
18	(W)Z	e	15	03	46	
18	(W)Z (W)ZNE	eP eS	22	07	23 09 02	
19	(W)E,Z	ePKP	05	34	23	Dilatation. USCGS: H - 05:16:36. Depth: about 600 km. 20½°S. , 179°W. Fiji Islands. Mag: 6½ (Berk).
19	(W)Z,Z	eP	14	41	16	Seismic?
20	(W)Z (W)E	eP e(S)	01	28	37 29 59	
20	Z,(W)E	eP	11	10	00	USCGS: H - 10:59:35. About 300 miles off south coast of Honshu, Japan.
20	(W)E (W)E	eP eS	13	31	20 32 56	
20	(W)ZE,Z	eP	14	02	07	
20	(W)ZE (W)EZ	eP e(S)	14	27	06 29 15	

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
20	(W) Z, Z, E	iP	18	14 34	Compression.
	(W) Z, Z	e		53	Lahore P - 18:14:09.
	Z	i		15 03	USCGS: H - 18:12:52.
	E	isP		18	Depth: about 200 km.
	N, E	iS		53	36 $\frac{1}{2}$ ^o N. , 72 ^o E.
	(W) Z, E	i		59	Hindu Kush.
20	(W) Z	e	22	00 01	Seismic?
21	(W) Z	eP	04	37 36	Compression.
22	(W) Z, Z	eP	01	34 22	
	(L) N	e(S)		39 17	
22	Z, (W) NE	eP	11	27 26	Dilatation.
	(L) E	eS		34 39	USCGS: H - 11:18:23. 4 $\frac{1}{2}$ ^o S. , 28 $\frac{1}{2}$ ^o E. Belgian Congo.
22	(W) Z	eP	23	43 28	
23	Z, (W) E	eP	09	16 35	Lahore P - 09:16:12.
	(W) NE	eS		17 52	
23	(W) Z, Z	eP	17	34 14	USCGS: H - 17:26:54.
	E	iS		40 04	37 ^o N. , 22 ^o E. Near west of Greece.
23	Z	e	17	59 21	USCGS: H - 17:40:19. 22 ^o S. , 175 ^o W. Tonga Islands.
23	Z	eP	22	09 52	USCGS: H - 22:04:39. Georgia aftershock.
24	(W) Z, Z	eP	00	45 51	
24	(W) Z, Z	iP	01	23 37	Dilatation.
	Z, E, N	ePcP		40	Lahore P - 01:23:04.
	Z, (W) N	epP		24 01	USCGS: H - 01:11:11.
	Z	ePP		26 58	Depth: about 100 km.
	(L) NE, E	iS		33 50	6 ^o S. , 147 ^o E. Near east of New Guinea.
24	(W) E	eP	04	45 30	
24	(W) Z, Z	ePKP	07	36 02	USCGS: H - 07:16:29. 12 $\frac{1}{2}$ ^o S. , 78 ^o W. Near coast of Peru. Mag: 6 $\frac{1}{2}$ (Pas.), (Berk).

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
24	(W)E, Z	eP	12	52	34	
24	(W)ZE, Z E	eP	15	56	59	USCGS: H - 15:49:23. About 100 miles off west coast of Sumatra.
		eS	16	02	59	
24	Z	e	19	44	10	USCGS: H - 19:25:16. 20°S. , 176½°W. Tonga Islands.
24	(W)Z	eP	23	58	41	
25	(W)Z, Z	eP	02	28	17	
25	(W)Z, Z	iP	03	49	06	Dilatation. USCGS: H - 03:36:47. 51½°N. , 177°W. Andreanof Islands, Aleutian Islands. Mag: 6½ (Pas.), 6 - 6¼ (Berk).
	Z	iPcP			14	
	Z, E	i			47	
	N	ePP			52 09	
	NE, (L)N	eS			59 09	
	E, (L)E	eSKS			19	
	E	eScS			32	
25	(W)N	e	17	11	09	USCGS: H - 16:59:48. 49½°N. , 156°E. Northern Kurile Islands.
26	Z, (W)N (W)N, E	eP	07	20	06	
		eS			21 57	
26	(W)Z, Z	e	09	07	38	
26	(W)Z, Z	eP	10	13	52	
26	(W)Z, Z Z, N (L)N (L)N	eP	16	36	00	USCGS: H - 16:30:48. 42½°N. , 42°E. Georgia, S. S. R.
		ePP			32	
		eS			40 11	
		eSS			56	
27	Z	e	11	15	04	
27	Z, (W)Z Z (L)N	eP	14	13	21	Compression. USCGS: H - 14:03:22. Mindanao, Philippine Islands. Felt: Sungao.
		ePcP			14 11	
		eS			21 23	
28	(W)Z, Z E	eP	05	33	01	
		e(S)			40 48	
28	(W)Z, Z	e	06	11	55	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
28	(W)Z,Z	ePKP	08	35	21	USCGS: H - 08:16:19. 15 $\frac{1}{2}$ ^o S. , 173 ^o W. Samoa Islands region. Mag: 6 $\frac{1}{2}$ (Pas.)
28	(W)Z	eP	13	01	52	
	(W)E	eS		03	34	
28	(W)Z	eP	15	03	29	
28	(W)Z,Z	eP	18	02	52	Dilatation.
	(W)NE	eS		03	52	
28	(W)Z	eP	21	03	46	Dilatation.
	N,E	e(S)		05	55	Lahore P - 21:03:39. S - :05:14.
28	(W)Z,Z	eP	23	29	51	USCGS: H - 23:18:51. 49 ^o N. , 156 ^o E. Northern Kurile Islands.
29	(W)Z,Z	e	00	05	06	
29	(W)Z,Z	e	00	18	57	
29	(W)ZN	eP	09	54	01	
	(W)EN	eS		55	22	
29	(W)Z,Z	e	14	36	19	
29	(W)Z,Z	eP	15	22	42	USCGS: H - 15:17:30.
	N,E,(L)NE	eS		26	52	43 ^o N. , 43 ^o E. Georgia aftershock.
29	(W)Z,Z	eP	18	59	42	Compression.
29	(W)Z,Z	eP	21	30	39	Dilatation.
30	(W)Z,Z	e	02	03	33	
30	(W)Z	eP	02	35	34	
	(W)N,N	e(S)		37	33	
30	(W)Z	e	03	09	04	
30	(W)Z,Z	e	06	42	52	
30	(W)Z,Z	ePKP	15	48	02	USCGS: H - 15:29:00. 20 $\frac{1}{2}$ ^o S. , 174 ^o W. Tonga Islands. Mag: 6 - 6 $\frac{1}{4}$ (Pas.)

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
30	(W) Z, Z	ePKP	17	15 35	Compression? USCGS: H - 16:54:40. Samoa Islands.
31	(W) Z, Z	ePKP	01	06 29	USCGS: H - 00:47:00. Depth: about 150 km. Southern Bolivia.
31	(W) Z	eP	03	27 29 †	
31	(W) Z	e	15	45 44	USCGS: H - 15:54:40. Kurile Islands.
31	(W) Z, Z	e(P)	21	37 01	

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PAKISTAN METEOROLOGICAL SERVICE

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No. 2.

Seismological Bulletin

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QUETTA OBSERVATORY
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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
1	(W) NE, Z	iP	15	12	28	Dilatation. H - 15:10:47. $\Delta = 7^{\circ}.0$ Depth: about 200 km. 36 $\frac{1}{2}$ $^{\circ}$ N. , 71 $\frac{1}{4}$ $^{\circ}$ E. Hindukush. Lahore P - 15:12:06. S - :13:06.
	(W) N	i		56		
	(W) N	e(sP)	13	19		
	(W) N, (L) E	iS		47		
1	(W) E	eP	20	58	38 \pm	Lahore P - 20:58:09.
	(W) NE	eS	21	00	21	
1	Z, (W) NE	eP	22	02	10	Compression.
	Z	i			18	
1	(W) NE, Z	eP	22	43	52	Lahore P - 22:43:13. USCGS: H - 22:32:53. Kurile Islands.
1	(W) NE, Z	eP	23	50	50	H - 23:49:14. $\Delta = 6^{\circ}.3$ 36 $^{\circ}$ N. , 70 $^{\circ}$ E. Hindukush. Lahore P - 23:50:37. S - :51:42.
	(W) NE, E	eS		52	04	
2	(W) N	eP	02	10	45	Lahore P - 02:11:07.
	(W) N	eS		12	12	
2	(W) N, Z	ePKP	12	04	39	USCGS: H - 11:45:35. 21 $\frac{1}{2}$ $^{\circ}$ S. , 170 $^{\circ}$ E. Loyalty Islands region.
2	(W) N, Z	eP	12	05	44	USCGS: H - 11:55:32. 37 $^{\circ}$ N. , 141 $\frac{1}{2}$ $^{\circ}$ E. Near east coast of Honshu, Japan.
2	(W) N, Z	iP	12	46	43	Dilatation.
	(W) NE	eS		47	54	
2	(W) N	e	16	08	24	Lahore P - 16:07:18.
2	(W) N	e	21	33	51	
3	(W) Z	e	10	43	51	USCGS: H - 10:33:09. Kamchatka foreshock.
3	(W) Z, Z	e	13	01	32	
3	(W) Z, Z	eP	17	12	43	Lahore P - 17:12:09. USCGS: H - 17:01:47. 53 $\frac{1}{2}$ $^{\circ}$ N. , 159 $^{\circ}$ E. Kamchatka foreshock.
	Z	ePP		15	18	

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			h.	m.	s.	
3	(W) Z, Z	eP	17	35	47	Lahore P - 17:35:12.
	Z	ePcP			17	USCGS: H - 17:24:50.
	E	ePP		38	17	53 $\frac{1}{2}$ °N. , 159°E. Kamchatka.
	(W) NE, N	eS		44	43	Mag: 6 $\frac{1}{2}$ - 6 $\frac{3}{4}$ (Pas.); 6 $\frac{1}{4}$ (Berk);
3	(W) Z, Z	eP	21	22	51	USCGS: H - 21:11:53. 53 $\frac{1}{2}$ °N. , 159°E. Kamchatka aftershock.
3	(W) ZN, Z	eP	21	28	32	USCGS: H - 21:17:35. 53 $\frac{1}{2}$ °N. , 159°E. Kamchatka aftershock.
3	(W) Z, Z	eP	23	09	21	USCGS: H - 22:58:24.
	Z	ePP		11	52	53 $\frac{1}{2}$ °N. , 159°E.
	(L) E	e		18	03	Kamchatka aftershock.
	(L) N	eS			15	
4	(W) Z, Z	e	04	17	51	
4	Z	e	09	21	02	USCGS: H - 09:01:55. Depth: about 150 km. 9°N. , 84°W. Near coast of Costa Rica.
4	Z, (W) N	eP	10	39	35	Lahore P - 10:39:01.
	N	e(S)		48	41	USCGS: H - 10:28:27. About 125 miles off south coast of Kamchatka.
4	(W) NE, Z	eP	18	58	23	
4	(W) NE, Z	e	19	32	53	
4	(W) NE, Z	e	20	29	47	
4	Z, (W) E	e	22	16	29	
5	Z, (W) E	ePKP	04	20	29	USCGS: H - 04:02:05.
	Z	epPKP		21	38	Depth: about 300 km. 18°S. , 176 $\frac{1}{2}$ °W. Fiji Islands region.
5	Z, N	eP	05	04	46	Compression. USCGS: H - 04:51:20. 25 $\frac{1}{2}$ °W. , 45 $\frac{1}{2}$ °W. Mid-Atlantic Ocean.
5	Z	eP	08	48	18	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
5	Z	e	12	16	16	
5	Z	e	16	14	28	USCGS: H - 15:57:27. 11°S. , 166°E. Santa Cruz Islands.
5	Z, (W)N	eP	17	26	56	Lahore P - 17:27:44. USCGS: H - 17:20:24. 36 ¹ / ₂ °N. , 29°E. Near south coast of Turkey.
5	(W)NE, Z	eP	19	52	52	
5	(W)E (W)N, N	eP e(S)	22	19	45 22 14	
6	(W)E	e	13	25	24	USCGS: H - 13:06:13. 2°N. , 91°W. Galapagos Islands region. Mag: 6 (Pas.)
6	Z	e	13	26	54	USCGS: H - 13:07:30. Galapagos Islands aftershock. Mag: 6 (Pas.)
6	Z	eP	16	04	19	
6	(W)NE, Z Z Z (W)E, E (L)N	1P e ePP eS eSS	20	41	50 42 00 43 08 47 16 49 36	Compression. Lahore P - 20:41:03. USCGS: H - 20:34:55. 50°N., 106°E. Lake Baikal region, U.S.S.R. Mag: 6.4 (Upp. & Kir).
6	(W)E, Z	e	21	25	36	
7	(W)E	e	01	42	34	
7	(W)E, Z	ePKP	09	22	29	Lahore PKP - 09:22:48. USCGS: H - 09:02:23. Cordoba Province, Argentina.
7	(W)E, Z N	eP eS	16	29	24 39 34	USCGS: H - 16:17:09. 52 ¹ / ₂ °N. , 175°W. Depth: about 60 km. Andreanof Islands, Aleutian Islands.
7	Z	e	16	55	29	

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			h.	m.	s.	
7	Z	e	18	08	24	
7	Z	e	18	54	05	
7	(W)EN	eP	19	19	06	
7	(W)EN	eP	21	51	31	
7	(W)EN	e	21	55	56	
7	(W)EN	eP	23	32	31	
	(W)EN	eS		33	51	
8	(W)N	e	02	56	43	
8	(W)NE, Z	eP	05	48	41	
8	(W)E	e	06	25	29	
8	(W)E	e	09	43	02	
8	(W)NE, Z	eP	15	37	10	Compression.
8	(W)E, Z	eP	15	51	50	
	(W)NE	eS		53	01	
8	(W)EN, Z	eP	20	32	59	
9	(W)NE, Z	eP	02	04	43	Compression.
	(L)N, N	eS		14	13	USCGS: H - 01:53:05. 1 $\frac{1}{2}$ $^{\circ}$ S. , 137 $\frac{1}{2}$ $^{\circ}$ E. Near north coast of New Guinea.
9	(W)E, N	e	06	09	00	USCGS: H - 05:59:04. 10 $\frac{1}{2}$ $^{\circ}$ N. , 126 $^{\circ}$ E. Near east coast of Samar. Depth: about 60 km.
9	(W)NE, Z	eP	08	18	22	Compression.
	N	eS		27	23	USCGS: H - 08:07:15. Western Caroline Islands.
9	Z, (W)E	ePKP	13	48	04	USCGS: H - 13:29:18.
	(L)N	ePS		59	50	Depth: about 150 km. 34 $^{\circ}$ S. , 180 $^{\circ}$. Off coast of north island, New Zealand. Mag: 6 $\frac{1}{4}$ (Pas.)
9	(W)N, Z	ePKP	18	15	04	USCGS: H - 17:56:00. Tonga Islands.

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			h.	m. s.	
9	(W)EN	eP	22	19 40	
	(W)EN	e(S)		21 09	
10	(W)NE, Z	iP	06	00 20	Dilatation. USCGS: H - 05:47:59. 35 $\frac{1}{2}$ ^o N. , 35 ^o W. Azores Islands region. Mag: 5 $\frac{3}{4}$ (Pas.)
	E	eS		10 32	
10	Z	e	15	52 05	
10	(W)NE, ZEN	eP	22	42 14	Compression. Lahore P - 22:41:28. USCGS: H - 22:32:15. 10 ^o N. , 126 ^o E. Mindanao foreshock. Felt: Samar. Mag: 6 $\frac{1}{2}$ - 6 $\frac{3}{4}$ (Pas.), 6 $\frac{3}{4}$ (Upp. & Kir.).
	Z, E	ePcP	43	11	
	N	ePP	44	26	
	N, E, (L)N	iS	50	17	
	N, E	eSoS	52	02	
10	Z	e	22	58 39	
10	(W)E, Z	eP	23	00 51	Compression. Lahore P - 23:00:05. USCGS: H - 22:50:52. 10 $\frac{1}{2}$ ^o N. , 126 $\frac{1}{2}$ ^o E. Mindanao, Philippine Islands. Felt: Samar. Mag: 6 $\frac{3}{4}$ (Pas.), 6.8 (Upp. & Kir.).
	E, (W)E	e	01	04	
	N	ePcP	43		
	N, Z	ePP	03	02	
	Z	ePPP	04	26	
	E	eS	08	54	
11	(W)E, Z	eP	01	24 41	Compression. Lahore P - 01:23:58. USCGS: H - 01:14:44. 10 ^o N. , 126 ^o E. Mindanao aftershock. Felt: Samar. Mag: 6 $\frac{1}{2}$ (Pas.)
11	Z, (W)N	e	03	21 50	
11	Z	e	03	35 21	
11	Z	e	03	46 14	USCGS: H - 03:36:11. Mindanao aftershock.
11	(W)E, Z	eP	03	54 31	USCGS: H - 03:44:33. 10 ^o N., 126 ^o E. Mindanao aftershock. Felt: Surigao.
11	Z	e	04	05 03	

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			h.	m.	s.	
11	Z	eP	04	14	08	USCGS: H - 04:04:18. Depth: about 100 km. 10°N. , 126°E. Mindanao aftershock.
11	Z	eP	04	57	51	USCGS: H - 04:47:52. Mindanao aftershock. Felt: Surigao.
11	Z	e	05	44	10	
11	Z	e	06	57	42	USCGS: H - 06:47:37. 10°N. , 126°E. Mindanao aftershock. Felt: Surigao.
11	Z	eP	08	55	10	
	H	eS		36	16	
11	(W) Z, Z	eP	12	07	16	USCGS: H - 11:57:16. 10°N. , 126½°E. Mindanao aftershock.
11	(W) Z	e	12	30	59	USCGS: H - 12:20:09. Mindanao aftershock.
11	Z	eP	15	11	34	
11	Z, (W) Z	eP	14	55	59	Compression.
	(L) N, N	eS		43	42	USCGS: H - 14:25:58. 10°N. , 126°E. Mindanao aftershock. Mag: 6½ (Pas.), 6.2 (Upp. & Kir.)
11	(W) Z, Z	eP	19	08	50	Lahore P - 19:06:02. USCGS: H - 18:56:50. Mindanao aftershock.
12	Z	e	08	46	56	
12	Z	eP	09	05	43	USCGS: H - 08:52:48. 48½°N. , 155°E. Northern Kurile Islands.
12	(W) Z	e	16	05	49	
12	(W) Z, Z	eP	17	24	15	USCGS: H - 17:14:10. Mindanao aftershock. Felt: Surigao.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
12	(W)ZE	e	18	20	49	
12	(W)Z,Z	eP	21	16	56	USCGS: H - 21:06:56. Mindanao aftershock.
12	(W)Z	e	22	07	12	
13	Z,E,(W)Z	eP	00	39	49	Compression.
	(W)ZE,Z	ePP		41	59	Lahore P - 00:39:04.
	N,(L)N	eS		47	54	USCGS: H - 00:29:48.
	E	ePPS		48	17	10°N. , 126½°E.
	(L)N	e(ScS)		49	43	Mindanao aftershock.
13	(W)ZE	e	04	51	08	
13	(W)Z	e	12	54	25	USCGS: H - 12:36:51. 18°S. , 170°E. New Hebrides Islands.
13	(W)Z,Z	eP	14	52	38	USCGS: H - 14:41:34. 48½°N. , 157½°E. Northern Kurile Islands.
13	(W)Z	iP	17	07	03	Dilatation.
14	Z	e	10	26	14	USCGS: H - 10:16:13. Mindanao aftershock.
14	(W)Z,Z	eP	23	10	02	USCGS: H - 23:01:13. 20°N. , 120½°E. Basco Island region.
14	(W)Z,Z	eP	23	37	19	
15	(W)E,Z	ePKP	07	52	11	USCGS: H - 07:33:10. Depth: about 100 km. 14°S. , 71°W. South eastern Peru.
15	(W)E	eP	11	07	26	
	N,E	eS		08	43	
15	(W)E	e	17	42	43	
15	Z,(W)E	eP	17	59	49	
15	(W)E,Z	eP	18	33	32	
15	(W)E	e	18	48	49	

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			h.	m. s.	
15	(W)E	eP	19	00 58	USCGS: H - 18:49:43. 13 $\frac{1}{2}$ ^o N. , 141 $\frac{1}{2}$ ^o E. Marianas Islands region.
16	(W)Z,Z	iP	14	21 10	Dilatation.
	(W)Z,Z	i		21	Lahore P - 14:20:38.
	(W)Z,Z	iPcP		22 06	USCGS: H - 14:12:30.
	Z,E	epP		57	Depth: about 550 km.
	E,Z	ePP		23 26	5 $\frac{1}{2}$ ^o S. , 110 ^o E.
	E	eS		28 07	Java Sea.
16	(W)Z	eP	23	02 03	USCGS: H - 22:49:28. Depth: about 100 km. Near Islands, Aleutian Islands.
17	Z	e	03	56 14	USCGS: H - 03:46:38. Near east coast of Luzon, Philippine Islands.
17	Z	e	04	47 15	USCGS: H - 04:36:20. Near east coast of Kamchatka.
17	(W)Z	e	10	00 58	USCGS: H - 09:51:10. 13 ^o N. , 126 ^o E. Near east coast of Samar, Philippine Islands.
17	(W)Z,Z	iPKP	16	05 58	Compression.
	(L)N,E	ePKS		09 25	USCGS: H - 15:46:45. Depth: about 60 km. 16 ^o N. , 96 $\frac{1}{2}$ ^o W. Oaxaca, Mexico. Felt: Distrito Federal & Oaxaca. Mag: 5 $\frac{3}{4}$ - 6 (Pas.) 6 (Upp. & Kir).
17	(W)ZE,Z	eP	16	15 17	Compression. Lahore P - 16:14:40. USCGS: H - 16:03:55. Banda Sea.
17	(W)Z	e	17	33 50	
17	(W)Z	e	17	56 51	
17	(W)Z	e	21	42 14	Lahore P - 21:41:58.
17	(W)ZE	eP	22	15 55	Lahore P - 22:15:37.
	(W)E	eS		17 40	

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			h.	m. s.	
18	(W)ZE,Z	eP	00	29 19	Lahore P - 00:28:39. USCGS: H - 00:18:34. Depth: about 60 km. 45°N. , 152°E. Kurile Islands.
18	(W)Z,Z	eP	02	42 24	Compression.
18	(W)E,Z	eP	07	29 17	Compression.
18	Z,(W)E	eP	15	02 56	Dilatation. USCGS: H - 14:43:30. 25½°N. , 45½°W. Mid-Atlantic Ocean. Mag: 6½ - 6½ (Pas.)
18	(W)EZN	eP	15	15 30	Lahore P - 15:14:25.
19	(W)E,Z N,E E E,N	ePKP e e oPKS	00	09 11 56 11 18 12 55	Lahore P - 00:09:25. USCGS: H - 23:49:52. Depth: about 100 km. 11½°S. , 78°W. Near coast of Peru. Felt: Lima. Mag: 6½ - 6½ (Pas.)
19	(W)E	e	04	37 52	
19	(W)Z,Z N,E (L)N	eP eS I	07	51 16 57 09 16	Compression? USCGS: H - 07:43:54. 36½°N. , 22°E. Near south coast of Greece. Mag: 6½ (Upp. & Kir.)
19	(W)Z,Z	eP	09	45 30	
19	(W)Z N,E	eP eS	17	01 39 03 23	
19	(W)Z,Z	e	17	28 51	Lahore P - 17:28:12.
19	(W)Z,Z N,(L)N	eP eS	20	10 03 19 04	Dilatation. Lahore P - 20:09:30. USCGS: H - 19:58:55. 56°N. , 164°E. Near east coast of Kamohatka.
20	(W)Z,Z	eP	04	49 48	Compression. USCGS: H - 04:41:00. 36½°N., 9°E. Northern Tunisia. Also felt in Algeria. Mag: 5.6 (Upp. & Kir.)

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			h.	m.	s.	
20	(W)Z (W)ZN	eP eS	09	40	19 [±] 41 32	Lahore P - 09:39:58.
20	(W)Z,Z	eP	09	54	52	
20	(W)Z,Z	eP	13	10	39	USCGS: H - 12:59:44. Depth: about 60 km. 53 $\frac{1}{2}$ ^o N. , 160 ^o E. Near east coast of Kamchatka.
20	(W)Z	e	20	21	17	
20	(W)Z,Z Z,(L)N (W)Z,(L)N (L)N E,(L)N E	eP ePP ePcP e eS eScS	22	06	01 07 35 08 06 11 29 12 05 16 06	Dilatation. USCGS: H - 21:58:23. 2 ^o N. , 97 ^o E. Near coast of Sumatra. Mag: 6.3 (Upp. & Kir.)
21	(W)Z	e	01	21	58	
21	(W)Z,Z N,(W)N E,N,Z,(W)Z Z,N Z,N E,(W)E E,(W)E (W)N,N,E	iP iPcP epP ePP ipPP eS eSKS esS	14	42	23 30 49 45 34 46 03 52 24 53 32 53 10	Dilatation. Lahore P - 14:41:58. USCGS: H - 14:30:08. Depth: about 100 km. 53 ^o N. , 171 ^o W. Fox Islands, Aleutian Islands. Mag: 6 $\frac{3}{4}$ (Pas.), 6 $\frac{1}{2}$ (Upp. & Kir.)
21	(W)Z,Z	ePKP	19	55	09	USCGS: H - 19:36:05. 31 ^o S. , 178 ^o W. Kermadec Islands.
21	(W)Z	e	22	28	22	
21	(W)N	e	23	54	42	Lahore P - 23:54:10.
22	Z	eP	05	01	23	Lahore P - 05:00:40.
22	(W)Z,Z	e	07	58	45	
22	(W)Z,Z	eP	12	28	23	
22	(W)Z (L)N	eP e(S)	17	23	44 32 51	USCGS: H - 17:12:49. 49 ^o N. , 158 ^o E. Kurile Islands foreshock.
23	(W)Z,Z	e	00	24	07	

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			h.	m.	s.	
23	(W)Z	e	00	30	37	
23	(W)Z	eP	02	21	03	
23	(W)Z,Z	eP	03	45	48 ⁺	USCGS: H - 03:34:46. Kurile Islands foreshock.
23	(W)Z	e	04	10	56	
23	Z	eP	05	08	43	USCGS: H - 04:57:46. 49°N. , 156°E. Northern Kurile Islands.
23	Z	e	05	12	24	USCGS: H - 05:01:21. Kurile Islands aftershock.
23	Z, (W)Z Z, E, (W)E	iP eS	06	27	29 28 57	Dilatation. Lahore P - 06:27:00. S - :28:01.
23	Z	e	11	14	28	
23	Z	e	13	38	32	Lahore P - 13:39:03. USCGS: H - 13:16:51. 49°N. , 129°W. Off coast of Vancouver Island.
23	Z	eP	19	06	04	USCGS: H - 18:54:37. 12°N. , 141°E. Caroline Islands region.
23	Z, E, N Z, E, N Z, N E, N E, N, Z Z E (L)N	iP i i ePcP ePP i i iS	20	34	57 35 03 23 36 23 49 37 16 21 41 57	Compression. Chittagong P - 20:31:59. S - :36:33. Lahore P - 20:34:05. USCGS: H - 20:26:12. 24°N. , 122°E. Formosa. Mag: 7 - 7½ (Pas.), 7½ (Upp. & Kir).
24	Z	e	05	38	58	
24	Z	eP	06	11	04	
24	Z	eP	17	33	13	Lahore P - 17:32:27.
24	Z	eP	21	56	11	Compression. Lahore P - 21:55:18. USCGS: H - 21:47:27. Formosa aftershock.

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			h.	m.	s.	
25	Z	eP	02	14	33	USCGS: H - 02:04:08. 8½°S. , 118°E. Sumbawa Island.
25	(W)Z	eP	07	36	01	
25	(W)Z,Z	1P	13	32	35	Compression. Lahore P - 13:32:01. USCGS: H - 13:21:17. 6°S. , 130°E. Banda Sea.
25	(W)Z	eP	18	01	43	
25	(W)Z,Z	eP	23	34	03	Compression. Lahore P - 23:34:50.
	Z	i			08	S - :35:31.
	Z	i			14	
	N,Z	1S			43	
	E	i			51	
	E	i			58	
25	(W)Z	eP	23	50	19	
	Z	e			24	
	N	eS			59	
	E	e			51 14	
26	(W)Z	eP	01	53	16	
	(W)E,Z	eS			54 40	
26	(W)Z	e	03	04	36	USCGS: H - 02:54:43. 9½°N. , 126°E. Near north coast of Mindanao, Philippine Islands. Depth: about 100 km.
26	(W)Z,Z	eP	04	16	36	
26	(W)Z,Z	eP	06	21	28	Compression. USCGS: H - 06:10:22. 52½°N. , 161°E. Near east coast of Kamchatka.
	N	eS			30 32	
26	(W)ZE	e	14	08	57	
26	(W)E,Z	e	16	57	14	
26	(W)ZE	e	18	07	25	
27	(W)E	e	10	01	06	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
27	(W)Z,Z	eP	15	10	11	Compression. Lahore P - 15:09:17. Formosa aftershock.
	Z	ePcP		11	35	
	E	ePP		12	09	
	(L)N	eS		17	10	
27	(W)ZN,Z	eP	19	01	12	
	(W)E,N	eS		02	31	
28	(W)ZN,Z	eP	11	13	59	Compression. USCGS: H - 11:01:45. Andreanof Islands, Aleutian Islands.
	Z,N	ePcP		14	06	
	N	eS		24	01	
	N	eSKS			13	
29	(W)Z	e	19	29	07	Lahore P - 19:31:32.
29	(W)Z,Z	eP	23	41	48	Lahore P - 23:42:03. USCGS: H - 23:31:25. Western Indian Ocean. About 800 miles off coast of Madagascar.
	Z,N	e			56	
	N,Z	ePP		44	04	
	(L)NE	eS		50	11	

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PAKISTAN METEOROLOGICAL SERVICE

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Seismological Bulletin

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QUITTA OBSERVATORY

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
1	(W) Z	ePKP	02	34	27	USCGS: H - 02:15:12. Near east coast of Oaxaca, Mexico.
1	(W) Z	eP	03	11	11	
	(W) NZ	eS		12	32	
1	(W) Z, Z	e	14	23	16	
1	(W) Z, Z	eP	15	42	48	H - 15:40:06. $\Delta = 11^{\circ}.0$
	(W) Z, Z	e			53	$29\frac{1}{2}^{\circ}N.$, $79\frac{3}{4}^{\circ}E.$
	(W) Z	ePP			56	Lahore P = 15:41:24.
	(W) N, E	eS		44	53	S = :42:21.
	E	eSS		45	11	Felt: at Almora & Ranikhet.
2	(W) Z, Z	ePKP	00	46	29	Lahore PKP = 00:46:39.
	(W) N, (L) N, N	ePP		48	05	USCGS: H - 00:27:33.
	(L) NE	iSKS		53	40	$18\frac{1}{2}^{\circ}N.$, $78^{\circ}W.$
	(L) N	eSKKS		54	58	Jamaica.
	(L) EN	ePS		58	00	Mag: $6\frac{3}{4}$ (Pas.), $6\frac{1}{2}$ (Derk.),
	(L) E	e	01	04	23	6.5 (Upp. & Kir).
	(L) EN	eSS			47	
2	(W) Z, Z	e	06	47	01	
2	(W) Z, Z	eP	06	49	27	Southern Iran foreshock.
	(W) E	e		51	13	
	(W) N, N	eS			37	
	(L) N	eL		52	32	
2	(W) E, Z	eP	07	15	07	Lahore P = 07:16:29.
	Z	ePP			16	USCGS: H - 07:12:10.
	(W) N, N	eS		17	16	Southern Iran.
	(L) N	eL		18	12	
2	Z, (W) Z	eP	08	23	19	Compression.
	Z, N	ePP		26	53	Lahore P - 08:22:48.
	Z, E	ePPP		28	48	S - :32:59.
	N, E	eSKS		33	48	USCGS: H - 08:10:24.
	(L) N	eS		34	04	$6^{\circ}S.$, $151^{\circ}E.$
	E	eScS			08	Near south coast of New Britain. Felt: Rabaul & Promie.
2	Z, (W) Z	eP	09	14	38	Southern Iran aftershock.
	Z	ePPP		15	00	
	(W) N, N	eS		16	48	
	(L) N	eL		17	43	

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
3	(W)Z	e	03	37 55	USCGS: H - 03:18:23. 8 $\frac{1}{2}$ ^o N. , 103 ^o W. Off coast of Mexico. Mag: 5 $\frac{3}{4}$ (Pas.)
3	Z	e	21	02 32	USCGS: H - 20:49:30. 9 $\frac{1}{2}$ ^o S. , 154 ^o E. Depth: about 100 km. Off coast of New Guinea.
4	Z, (W)N E	eP	03	31 37	Lahore F - 03:31:12. S :32:42.
		e(S)		33 26	
5	(W)ZE (W)E	eP	04	46 21	Dilatation.
		eS		47 33	
5	(W)ZE E	eP	05	56 38	
		e(S)		57 48	
5	(W)Z,Z (W)Z,Z E (L)N N (L)N (L)EN	eP	12	37 21	USCGS: H - 12:24:35. 33 ^o N. , 34 $\frac{1}{2}$ ^o W. North Atlantic Ocean. Mag: 6 $\frac{1}{2}$ - 6 $\frac{3}{4}$ (Pas.), 6 (Upp. & Kir.)
		ePcP		24	
		ePP		40 44	
		eSKS		47 46	
		eS		57	
		eScS		48,04	
6	Z, (W)NE	eP	11	37 38	USCGS: H - 11:26:44. 4 ^o N. , 155 ^o E. Kuril Islands.
6	Z	eP	17	40 50	
7	Z	ePKP	11	05 19	USCGS: H - 10:47:25. 19 ^o S. , 176 $\frac{1}{2}$ ^o W. Fiji Islands. Depth: about 550 km.
7	(W)E	e	22	05 47	USCGS: H - 21:55:42. Arctic Ocean, north of Spitsbergen.
8	Z	e	07	20 22	
8	Z, (W)E (W)E Z (L)N (L)N, (W)E, E	eP	12	21 27	USCGS: H - 12:14:12. 39 $\frac{1}{2}$ ^o N. , 23 ^o E. Eastern Greece foreshock.
		ePP		22 53	
		ePcP		23 47	
		i		26 49	
		iS		27 20	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
8	Z, N, F Z E	eP e(PP) eS	12	28	28 02 20	Dilatation. USCGS: H - 12:21:08. 39½°N., 23°E. Eastern Greece. Mag: 6½ (Pas.), 7 (Upp. & Kir.)
8	Z	ePKP	16	53	02	USCGS: H - 16:35:11. 23°S., 179°E. South of Fiji Islands. Depth: about 600 km.
8	Za	eP	20	45	09 †	USCGS: H - 20:37:54. Eastern Greece aftershock. Mag: 5½ (Upp. & Kir.)
8	Z, F. (L)N E Z, (L)NE (L)E (L)E	eP i ePP i i e(S)	23	42	23 22 51 58 32 09	Dilatation. Lahore P - 23:43:06. USCGS: H - 23:35:08. 39½°N., 23°E. Eastern Greece aftershock. Mag: 6.2 (Upp. & Kir.)
9	Z	e	14	19	11	USCGS: H - 14:06:52. 65°N., 149°W. Central Alaska. Felt: College.
9	Z, (W)Z (L)N (L)NE	iP eS iSKS	14	34	47 58 03	Compression. Lahore P - 14:34:19. Chittagong P - 14:34:07 † USCGS: H - 14:22:27. 51°N., 175°W. Andreanof Islands, Aleutian Islands. Seismic Sea Waves caused. Mag: 8 - 8½ (Pas.), 8 (Berk), 8½ (Upp. & Kir.)
9	(W)Z	e	15	22	47	
9	(W)Z (W)Z (W)E	eP ePcP eS	15	54	14 20 30	Lahore P - 15:53:47. S - 16:03:37. Chittagong P - 15:53:31 † USCGS: H - 15:41:50. 50½°N., 177°W. Andreanof Islands, Aleutian Islands.
9	(W)Z	iP	16	00	35	Compression.
9	(W)Z	e	16	08	02	
9	(W)Z	e	16	16	05	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
9	(W)Z	iP	16	18	46	
9	(W)Z	eP	16	28	50	
9	(W)Z	eP	16	44	53	USCGS: H - 16:32:30. 51°N., 176°W. Andreanof Islands, Aleutian Islands.
	(W)E	eS		55	03	
9	(W)Z	eP	16	51	54	
9	(W)Z	eP	16	57	46	USCGS: H - 16:45:26. 51½°N., 174°W. Andreanof Islands, Aleutian Islands.
9	(W)Z	e	17	03	01	
9	(W)Z	eP	17	22	41	USCGS: H - 17:10:13. 51½°N., 172½°W. Andreanof Islands, Aleutian Islands.
	(W)E	eS		32	57	
9	(W)Z	eP	17	55	46	Compression.
9	(W)Z,Z	eP	18	04	15	Compression.
9	(W)Z,Z	eP	18	10	05	Compression.
9	(W)Z,Z	e	18	25	01	
9	(W)Z,E	e	18	26	18	
9	(W)ZE,Z	eP	18	34	05	Compression.
9	(W)ZE	e	18	43	19	
9	(W)ZE,Z	eP	18	58	39	Compression.
9	(W)Z,Z	e	19	05	46	
9	(W)ZE,Z	eP	19	10	58	Compression.
9	(W)Z,Z	e	19	18	39	
9	(W)Z,Z	eP	19	26	07	Compression.
9	(W)Z,Z	iP	19	31	50	Compression.
9	(W)Z,Z	eP	19	39	21	
9	(W)Z,Z	e	19	41	53	

DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
9	(W)Z,Z	eP	19	47	22	Compression.
9	(W)Z,Z (W)E	eP eS	19	49	57	Compression. USCGS: H - 19:37:31. 51 $\frac{1}{2}$ ^o N., 173 ^o W. Andreanof Islands, Aleutian Islands.
9	(W)Z,Z	eP	19	54	53	Compression.
9	(W)Z,Z	eP	19	57	15	Compression.
9	(W)Z,Z (W)E	eP eS	20	13	31	USCGS: H - 20:00:56. 51 $\frac{1}{2}$ ^o N., 170 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands.
9	(W)Z,Z	eP	20	19	35	
9	(W)E,Z (W)E	eP eS	20	34	39	USCGS: H - 20:22:02. 52 ^o N., 169 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands.
9	(W)Z,Z	eP	20	44	36	Compression.
9	(W)Z,Z	eP	20	51	09	Compression.
9	(W)Z,Z Z,E E N,E,(W)E	iP iPcP ePP iS	20	51	50	Compression. Lahore P - 20:51:25. S - 21:01:25. Chittagong P - 20:51:18. USCGS: H - 20:39:15. 52 $\frac{1}{2}$ ^o N., 169 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands. Mag: 6 $\frac{3}{4}$ - 7 (Pas.), 7 - 7 $\frac{1}{4}$ (Berk.), 7 (Upp. & Kir.)
9	(W)Z,Z	e	21	05	24	
9	(W)Z,Z	eP	21	10	04	Compression.
9	(W)Z,Z	eP	21	15	45	Compression.
9	(W)Z,Z	e	21	23	46	
9	(W)Z,Z	eP	21	32	58	
9	(W)Z,Z	eP	21	47	11	
9	(W)Z,Z	eP	21	54	12	Compression.
9	(W)Z,Z	eP	22	00	23	Compression.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
9	(W) Z, Z	eP	22	09	01	Compression. USCGS: H - 21:56:24. 53°N., 168°W. Fox Islands, Aleutian Islands.
	Z	ePcF			05	
	N	eSKS		19	24	
	E, (W) E	eS			26	
	E	eScS			38	
9	(W) Z, Z	eP	22	16	20	Compression.
9	(W) Z, Z	e	22	26	09	
9	(W) Z, Z	ePKP	22	38	46	USCGS: H - 22:19:15. Southern Bolivia. Felt: Santa Cruz.
9	Z	e	22	46	41	
9	(W) Z, Z	eP	22	49	37	
9	(W) Z, Z	eP		55	01	Compression.
9	(W) Z, Z	e	23	00	04	
9	(W) Z, Z	eF	23	04	13	
9	Z	e	23	07	12	
9	(W) Z, Z	eP	23	12	01	Compression. USCGS: H - 22:59:26. 51 $\frac{1}{2}$ °N., 171°W. Fox Islands, Aleutian Islands.
	N	eS		22	27	
9	(W) Z, Z	e	23	15	13	
9	(W) Z, Z	eP	23	19	35	Compression.
9	(W) Z, Z	eP	23	21	57	Compression.
9	(W) Z, Z	eP	23	25	18	Compression.
9	(W) Z, Z	e	23	31	41	
9	(W) Z, Z	eP	23	33	18	Compression.
9	(W) Z, Z	eP	23	43	03	
9	(W) Z, Z	eF	23	50	15	
10	(W) Z, Z	eP	00	10	00	Compression.
10	(W) Z, Z	eP	00	19	08	Compression.

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			h.	m. s.	
10	(W)Z,Z	eP	00	23 51	Compression.
10	(W)Z,Z	eP	00	52 44	Compression.
10	(W)Z,Z	eP	01	02 52	Compression.
10	(W)Z,Z	eP	01	12 52	Compression.
10	(W)Z,Z N	eP eS	01	29 23 39 47	Dilatation.
10	(W)Z,Z	eP	01	34 41	
10	(W)Z,Z	eP	01	40 33	Compression.
10	(W)Z,Z	eP	01	55 50	Compression.
10	(W)Z,Z	eP	02	35 03	Compression. Lahore P - 02:34:39.
10	(W)Z,Z	eP	02	36 03	Lahore P - 02:35:38.
10	(W)Z,Z	eP	02	43 22	Compression. Lahore P - 02:42:56.
10	(W)Z,Z	e	02	51 13	
10	(W)Z,Z	e	03	05 21	
10	(W)Z,Z	eP	03	18 36	Compression.
	(W)Z,Z	ePcP		40	Lahore P - 03:18:10.
	E	eSKS		28 56	USCGS: H - 03:06:02.
	N	iS		57	52°N., 176°W. Andreanof Islands,
	E	iScS		29 08	Aleutian Islands.
					Mag: 6½ - 6¾ (Pas.), (Berk.), 6.8 (Upp. & Kir.)
10	(W)Z,Z	iP	03	21 26	Compression. USCGS: H - 03:06:55. 51½°N., 174°W. Andreanof Islands, Aleutian Islands.
10	(W)Z,Z	iP	03	32 05	Dilatation.
	Z,N	i		22	H - 03:30:28. $\Delta = 6^{\circ}.7$
	N,E,Z	e		35	Depth: about 200 km.
	Z,N,E	iSP		48	36°N., 71°E. Hindukush.
	Z	e		33 18	Felt: Peshawar, Risalpur &
	E,N	iS		22	Kohat. Lahore P - 03:31:46.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
10	(W)Z,Z	eP	04	06	56	Dilatation.
10	(W)Z,Z	eP	04	46	19	
10	(W)Z,Z	eP	04	47	31	
10	Z	e	04	48	52	
10	(W)Z,Z E,N	eP eS	04 53 37 05 04 01			Compression. USCGS: H - 04:41:04. 52°N., 170°W. Fox Islands, Aleutian Islands.
10	(W)E,Z	e	05	43	03	
10	(W)E,Z N	eP eSKS	05 45 54 56 14			Compression. USCGS: H - 05:33:27. 52°N., 174°W. Andreanof Islands, Aleutian Islands.
10	Z (W)E	e	05	55	02	
10	Z	e	06	26	23	
10	Z, (W)E	eP	06	33	29	
10	Z, (W)E	eF	06	36	15	Dilatation.
10	Z, (W)E	eP	07	18	43	Compression.
10	Z, (W)E	eP	07	24	48	Compression.
10	Z, (W)E Z N,E N	eP ePcP eS eScS	07 35 40 46 45 52 46 07			USCGS: H - 07:23:18. 52°N., 176°W. Andreanof Islands, Aleutian Islands.
10	Z, (W)E	iP	07	44	09	Compression. USCGS: H - 07:31:36. 53°N., 168°W. Fox Islands, Aleutian Islands.
10	Z, (W)E	eP	08	07	02	
10	Z, (W)E	e	08	16	29	
10	Z, (W)E	eP	09	17	29	Compression.
10	Z	e	09	30	46	

DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
10	Z, (W)E	e	09 35 49	
10	Z, (W)E	eP	09 36 06	Compression.
10	Z, (W)E	eP	10 03 23	
10	Z	e	10 25 16	
10	Z, (W)E	eP	10 49 25	Compression.
10	Z	e	11 29 29	
10	Z, (W)E N, E	iP iS	11 33 19 43 44	Compression. USCGS: H - 11:20:45. 52°N., 171°W. Fox Islands, Aleutian Islands. Mag: 6.6 (Upp. & Kir.)
10	Z, (W)E	eP	11 47 37	
10	Z, (W)E	iP	11 53 02	Compression.
10	Z, (W)E	eP	12 00 11	Compression.
10	Z	e	12 07 22	
10	Z, (W)E	eP	12 24 45	Compression. USCGS: H - 12:12:18. Andreanof Islands, Aleutian Islands.
10	Z, (W)E	eP	12 43 47	Compression.
10	Z, (W)E N E E	iP eP eSKS eS	12 48 40 51 58 59 03 07	USCGS: H - 12:36:04. 51°N., 171°W. Fox Islands, Aleutian Islands.
10	Z, (W)E N E	eP eS eSKS	12 57 55 13 08 09 13	USCGS: H - 12:45:31. 51°N., 177°W. Andreanof Islands, Aleutian Islands.
10	Z, (W)E Z N N	eP ePcP eS eScS	13 22 24 32 32 27 46	USCGS: H - 13:10:13. 51½°N., 180. Andreanof Islands, Aleutian Islands.
10	Z, (W)E E, N	eP eS	13 40 45 50 51	Compression. Lahore F - 13:40:18. USCGS: H - 13:28:30. 51½°N., 179°W. Andreanof Islands, Aleutian Islands. Mag: 6½ (Upp. & Kir.)

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DATE	COMPT.	PHASE	TIME			REMARKS	
			h.	m.	s.		
10	Z, (W)E	eP	14	05	48	Felt: at Peshawar. Lahore P - 14:05:30.	
10	Z, (W)E	eP	14	21	45		
10	Z, (W)E	eP	14	58	16		
10	Z, (W)E	eP	15	37	27	Lahore P - 15:37:00.	
10	Z, (W)E	iP	15	38	51	Compression.	
	Z, (W)E	iPcP			56	Lahore P - 15:38:24.	
	N, E	iS		49	09	S - :48:16.	
	H	iScS			24	USCGS: H - 15:26:23. 52°N., 173°W. Andreanof Islands, Aleutian Islands. Mag: 6 $\frac{3}{4}$ (Berk.), 6 $\frac{3}{4}$ (Upp. & Kir.)	
10	Z, (W)E	eP	15	56	31		
10	Z, (W)E	eP	15	58	19		
10	Z, (W)E	eP	16	42	34	Compression.	
10	Z, (W)E	eP	16	43	49		
10	Z, (W)E	iP	16	50	15	Compression.	
	Z, (W)E	ePcP			19	Lahore P - 16:49:49.	
	N	eS		17	30	56	USCGS: H - 16:37:45.
	N	eScS			49	51 $\frac{1}{2}$ °N., 173 $\frac{1}{2}$ °W. Andreanof Islands, Aleutian Islands.	
10	Z, (W)E	iP	16	52	14	Compression.	
	Z, (W)E	ePcP			20	Lahore P - 16:51:47.	
	N	eS		17	02	30	
	N	eScS			46		
10	Z, (W)E	eP	17	36	36	Compression.	
10	Z, (W)E	eP	17	58	02		
10	Z, (W)E	eP	18	04	19		
10	Z, (W)E	eP	18	31	52	Compression.	
10	Z, (W)E	eP	18	30	52	Lahore P - 18:30:20.	
	N	eS		48	58	USCGS: H - 18:18:30. 51°N., 177°W. Andreanof Islands, Aleutian Islands.	

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DATE	COMP.	PHASE	GMT		REMARKS
			h.	m. s.	
10	Z, (W)E	eP	19	53 22	Compression. Lahore P - 19:52:55. USCGS: H - 19:40:55. 52°N., 173°W. Andreanof Islands, Aleutian Islands.
	Z, (W)E	ePcP		27	
	N, E	iS	20	03 40	
	N, E	eScS		52	
10	Z	e.	20	34 14	
10	Z, (W)E	eP	20	46 33	Compression. Lahore P - 20:46:09.
10	Z, (W)E	eP	21	09 38	Compression. Lahore P - 21:09:14.
10	Z, (W)E	eP	21	23 00	Lahore P - 21:22:37.
10	Z, (W)E	eP	21	45 00	Compression. Lahore P - 21:43:34.
	N	eS		55 26	
10	Z, (W)E	eP	21	56 45	Lahore P - 21:56:15.
10	Z, (W)E	eP	22	11 43	Compression. Lahore P - 22:11:15.
10	Z, (W)E	eP	22	24 07	Compression.
10	Z, (W)E	eP	23	23 57	Compression.
10	Z	eP	23	49 03	Lahore P - 23:48:34.
11	Z, (W)E	iP	00	09 25	Compression. Lahore P - 00:09:01. USCGS: H - 23:56:50. 53°N., 169°W. Fox Islands, Aleutian Islands.
	(W)E	ePcP		30	
	E	eSKS	19	47	
	N	eS		50	
	N	eScS	20	03	
11	Z, (W)E	eP	00	20 45	Lahore P - 00:20:18. USCGS: H - 00:08:07. 52°N., 174°W. Fox Islands, Aleutian Islands.
	(W)E	ePcP		49	
	N	eSKS	31	09	
	N	eS		14	
	E	eScS		22	
11	Z, (W)E	eP	01	19 01	Compression.
11	Z, (W)E	eP	01	40 46	Compression.
11	Z, (W)E	eP	02	03 37	Lahore P - 02:03:12. USCGS: H - 01:50:53. Fox Islands, Aleutian Islands.
	E	eSKS	13	59	
	N	eS	14	10	
	N	eScS		19	

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
11	Z, (W)E	eP	02 42 56	Compression
11	Z, (W)E	eP	02 45 37	
11	Z	eP	02 51 13	
11	Z	eP	02 57 43	
11	Z, (W)E	eP	03 25 01	Lahore P - 03:24:33.
	Z	eP	08	USCGS: H - 03:12:41.
	E	eS	35 11	51°N., 177°W. Andreanof Islands,
	E	eSKS	17	Aleutian Islands.
	N	iScS	24	Mag: 6.7 - 7 (Pas.), (Berk.) 6.6 (Upp. & Kir.)
11	Z, (W)E	eP	03 34 16	Compression.
11	Z, (W)E	eP	03 47 23	Lahore P - 03:46:56.
	N, E	eS	57 37	USCGS: H - 03:35:00.
				51½°N., 177°W. Andreanof Islands, Aleutian Islands.
				Mag: 6.4 (Upp. & Kir.)
11	Z, (W)E	eP	04 07 47	USCGS: H - 03:55:27.
	E	eS	17 58	50½°N., 177°W. Andreanof Islands, Aleutian Islands.
11	Z, (W)E	eP	04 17 33	Lahore P - 04:17:06.
	E, N	eS	27 46	USCGS: H - 04:05:09.
				51°N., 177°W. Andreanof Islands, Aleutian Islands.
11	Z	eP	05 03 12	
11	Z, (W)Z	eP	05 40 24	Compression.
11	Z	eP	06 00 43	
11	Z, (W)Z	eP	06 42 30	
11	Z, (W)Z	eP	06 55 26	USCGS: H - 06:42:49.
				51½°N., 168°W. Fox Islands, Aleutian Islands.
11	Z, (W)Z	eP	07 04 29	USCGS: H - 06:51:56.
	E	eS	14 53	51½°N., 170½°W. Fox Islands, Aleutian Islands.
11	Z, (W)Z	iP	07 20 19	Compression.
	E	eScS	30 45	USCGS: H - 07:08:00.
				51°N., 177°W. Andreanof Islands, Aleutian Islands.

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DATE	COMPT	PHASE	CMT h. m. s.	REMARKS
11	Z, (W) Z	eP	07 51 21	USCGS: H - 07:37:05. 51 $\frac{1}{2}$ ^o N., 178 ^o W. Andreanof Islands, Aleutian Islands.
11	Z, (W) Z	eP	08 11 02	Compression.
11	Z, (W) Z	eP	08 12 33	
11	Z, (W) Z	eP	08 33 44	
11	Z, (W) Z	eP	08 39 56	Compression.
11	Z, (W) Z	eP	08 49 54	Compression.
	Z, E	ePcP	57	USCGS: H - 08:37:15.
	N	eScS	09 00 32	53 ^o N., 168 ^o W. Fox Islands, Aleutian Islands.
11	(W) Z, Z	eP	08 55 11	USCGS: H - 08:42:48. 50 $\frac{1}{2}$ ^o N., 170 ^o W. Andreanof Islands, Aleutian Islands.
11	Z, (W) Z	e	08 59 13	
11	Z, (W) E	eP	09 27 10	
11	Z, (W) E	eP	09 29 21	Compression.
11	Z, (W) E	eP	10 09 51	Compression.
11	Z, (W) ZE	IP	10 11 17	Compression.
	Z, N	IPcP	22	Lahore P - 10:10:53.
	Z	IP	14 33	S - :20:53.
	E	eSKS	21 40	53 ^o N., 164 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands.
	E	iS	44	
	N	iScS	53	Mag: 6 $\frac{3}{4}$ - 7 (Pas.), 7 - 7 $\frac{1}{2}$ (Berkeley), 7.1 (Upp. & Kir.)
11	Z, (W) Z	eP	10 26 49	USCGS: H - 09:58:42. Compression.
11	Z, (W) Z	eP	10 31 27	Compression. Lahore P - 10:31:02.
11	Z, (W) Z	eP	12 07 44	
11	Z, (W) Z	eP	12 16 50	Lahore P - 12:16:13.
	N	eS	22 58	USCGS: H - 12:09:10. 2 ^o N., 97 ^o E. Off coast of Sumatra. Mag: 6.4 (Upp. & Kir.)
11	Z, (W) Z	eP	14 07 45	Compression.

DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
11	Z, (W) Z	eP	14	25	32	Compression.
11	Z, (W) Z Z (W) E, E Z E, N E, N N, E	iP i ! ePcP ePP iS eSKS eScS	15	07	35 38 43 40 42 50 00	Compression. Lahore P - 15:07:06. USCGS: H - 14:55:19. 51 $\frac{1}{2}$ ^o N., 178 $\frac{1}{2}$ ^o W. Andreanof Islands, Aleutian Islands. Mag: 6 $\frac{3}{4}$ (Pas.), 7 - 7 $\frac{1}{4}$ (Berk.), 7 (Upp. & Kir.)
11	Z, (W) Z (W) E, Z Z N, E N E, N	eP iPeP ePP eS eSKS eScS	15	48	09 17 12 15 22 31	Compression. Lahore P - 15:47:40. USCGS: H - 15:35:58. 51 $\frac{1}{2}$ ^o N., 178 ^o W. Andreanof Islands, Aleutian Islands. Mag: 6 $\frac{1}{2}$ (Pas.), 6.6 (Upp. & Kir.)
11	Z, (W) Z	eP	16	29	13	
11	Z, (W) Z	eP	16	44	05	Lahore P - 16:43:20.
11	Z, (W) Z	eP	16	56	52	
11	Z	eP	18	41	15	Lahore P - 18:40:50.
11	Z, (W) H	eP	19	10	26	USCGS: H - 18:58:16. Lahore P - 19:09:59. Andreanof Islands, Aleutian Islands.
11	Z, (W) Z	eP	19	27	59	
11	Z, (W) Z	eP	20	08	37	Compression. Lahore P - 20:08:12.
11	Z	e	20	14	54	
11	Z, (W) Z	eP	21	29	28	Compression. Lahore P - 21:28:59.
11	Z, (W) Z	eP	21	52	36	
11	Z, (W) Z	eP	23	44	36	Compression. Lahore P - 23:44:05. USCGS: H - 23:32:03. 52 ^o N., 173 ^o W. Andreanof Islands, Aleutian Islands.
11	Z, (W) Z	eP	23	54	55	Compression. Lahore P - 23:54:30.

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			h.	m.	s.	
12	Z, (W) Z	eP	00	04	19	Compression. Lahore P - 00:03:54.
12	Z, (W) Z	eP	00	30	40	Compression. Lahore P - 00:30:16. USCGS: H - 00:18:00. 53°N., 168°W. Fox Islands, Aleutian Islands.
12	Z	e	00	48	38	
12	Z, (W) Z N, E	eP eS	01	14	58 25 11	Compression. Lahore P - 01:14:32. USCGS: H - 01:02:33. 52°N., 174 ¹⁰ °W. Andreanof Islands, Aleutian Islands.
12	Z, (W) Z	eP	01	16	56	Lahore P - 01:16:30.
12	Z, (W) Z N N, E	eP eS eSKS	01	59	01 02 09 18 21	Compression. Lahore P - 01:58:35. USCGS: H - 01:46:35. 52°N., 173°W. Andreanof Islands, Aleutian Islands.
12	Z, (W) Z	eP	02	29	52	Compression.
12	Z, (W) Z N N	eP eS eScS	02	35	28 45 49 46 02	Compression. USCGS: H - 02:22:57. 53°N., 170 ¹⁰ °W. Fox Islands, Aleutian Islands.
12	Z, (W) Z	eP	03	39	49	Compression.
12	Z, (W) Z	eP	04	00	27	
12	Z	eP	04	55	25	Compression.
12	Z	eP	05	02	08	
12	Z, (W) Z (L) N	eP eS	05	24	42 35 08	Compression. Lahore P - 05:24:18. USCGS: H - 05:12:08. 52 ¹⁰ °N., 169°W. Fox Islands, Aleutian Islands.
12	Z, (W) Z	eP	06	15	29	USCGS: H - 06:02:47. Fox Islands, Aleutian Islands.
12	Z, (W) Z	eP	06	42	57	

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			h.	m. s.	
12	Z, (W) Z	iP	07	41 14	Compression.
	Z	ePcP		20	Lahore P - 07:40:48.
	E	eSKS		36	S - :50:42.
	E	eS		39	USCGS: H - 07:28:40.
	E	eScS		49	51 $\frac{1}{2}$ ^o N., 173 $\frac{1}{2}$ ^o W. Andreanof Islands, Aleutian Islands. Mag: 6 $\frac{1}{4}$ - 6 $\frac{1}{2}$ (Pas), 6 $\frac{3}{4}$ - 7 (Berk), 6 $\frac{1}{2}$ (Upp. & Kir.)
12	Z, (W) Z	iP	07	51 34	Compression.
	Z	ePcP		41	Lahore P - 07:51:05.
	N, E	eS	08	01 43	USCGS: H - 07:39:17.
	N	eSKS		48	52 ^o N., 178 ^o W. Andreanof Islands, Aleutian Islands.
	N	eScS		02 01	Mag: 6 $\frac{1}{4}$ - 6 $\frac{1}{2}$ (Pas.), 6 $\frac{1}{2}$ (Upp. & Kir.)
12	Z, (W) Z	eP	08	15 29	Compression.
	Z	ePcP		35	Lahore P - 08:15:02.
	N	eSKS		25 44	USCGS: H - 08:03:13.
	N, E	eScS		53	51 $\frac{1}{2}$ ^o N., 178 ^o W. Andreanof Islands, Aleutian Islands.
12	Z, (W) Z	eP	08	59 11	Compression.
12	Z	e	09	18 13	
12	Z, (W) Z	eP	09	33 57	
12	Z, (W) Z	eP	10	50 57	Compression.
	Z, (W) Z	ePcP		51 03	USCGS: H - 10:38:30.
	N, E	eS	11	01 13	51 $\frac{1}{2}$ ^o N., 174 $\frac{1}{2}$ ^o W. Andreanof Islands, Aleutian Islands.
	N, E	eScS		28	
12	Z, (W) Z	eP	11	13 08	Compression.
12	Z, (W) Z	eP	11	22 16	Compression.
12	Z, (W) Z	iP	11	57 07	Compression.
	Z, (W) Z	iPcP		13	Lahore P - 11:56:41.
	Z	i		18	S - 12:06:30.
	N	eS	12	07 15	USCGS: H - 11:44:50.
	N, E	eSKS		22	51 ^o N., 177 ^o W. Andreanof Islands, Aleutian Islands.
	N, E	eScS		32	Mag: 7 - 7 $\frac{1}{4}$ (Pas), 7 $\frac{1}{4}$ (Berk.), 7.2 (Upp. & Kir.)
12	Z, (W) Z	eP	12	15 20	Compression. Lahore P - 12:14:51.
12	Z, (W) Z	eP	12	22 21	Compression.

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			h.	m. s.	
12	Z, (W) Z	eP	12	58 46	Compression.
	Z, (W) Z	ePcP		51	USCGS: H - 12:46:12.
	Z	ePP	13	02 05	53°N., 168½°W. Fox Islands,
	E	eSKS		09 09	Aleutian Islands.
	N, E	eS		11	
	N, E	eScS		23	
12	Z, (W) Z	eF	13	37 56	
12	Z, (W) Z	eP	14	44 29	
12	Z, (W) Z	eP	14	48 16	Compression.
12	Z, (W) Z	e	15	31 06	
	Z, (W) Z	e		20	
12	Z, (W) Z	eP	15	32 48	Compression. Lahore P - 15:32:21.
12	Z, (W) Z	eP	15	42 38	
12	Z, (W) Z	eP	15	53 27	Compression.
12	Z, (W) Z	eP	15	56 33	Compression.
12	Z, (W) Z	eP	16	15 23	Compression. Lahore P - 16:14:56.
12	Z	e	16	50 44	USCGS: H - 16:32:05. 14½°S., 168°E. New Hebrides Islands.
12	Z, (W) Z	eP	17	01 09	Compression.
12	Z, (W) Z	eP	17	12 47	Compression.
	Z, (W) Z	ePcP		53	Lahore P - 17:12:19.
	N	eS	23	00	USCGS: H - 17:00:21. 51½°N., 175°W. Andreanof Islands, Aleutian Islands.
12	Z, (W) Z	ePKP	17	39 31	USCGS: H - 17:21:47. 21½°S., 179°W. Fiji Islands. Depth: about 700 km.
12	Z, (W) Z	eP	18	37 35	USCGS: H - 18:25:18. 51°N., 178°W. Andreanof Islands, Aleutian Islands.
12	Z, (W) Z	ePKP	19	28 44	Lahore P - 19:28:21. USCGS: H - 19:11:16. 16°S., 176½°W. Fiji Islands region. Depth: about 400 km.

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			h.	m. s.	
12	Z, (W) Z N	eP eSKS	20 13 10 23 34		Lahore P - 20:12:47. USCGS: H - 20:00:30. 54°N. , 165°W. Near Unimak Island.
12	Z(W) Z	eP	20 20 10		Lahore P - 20:19:46. USCGS: H - 20:07:31. 54°N. , 165°W. Unimak Island aftershock.
12	Z, (W) Z	eP	21 32 07		Lahore P - 21:31:45.
12	Z	e	21 42 15		USCGS: H - 21:22:45. 2½°S., 80°W. Near coast of Ecuador.
12	Z, (W) Z	eP	22 39 47		Lahore P - 22:39:21.
12	Z, (W) Z Z, (W) Z N N E E, N	iP ePcP ePP eS eSKS eScS	23 57 52 59 00 01 02 08 10 11 22		Compression. Lahore P - 23:57:26. USCGS: H - 23:45:25. 52°N., 174°W. Andreanof Islands, Aleutian Islands.
13	Z, (W) Z	eP	02 03 55		Compression.
13	Z, (W) Z N, E N, E	eP iSKS iS	03 00 53 11 13 16		Compression. Lahore P - 05:00:27. USCGS: H - 02:48:20. 52°N., 171½°W. Andreanof Islands, Aleutian Islands. Mag: 6.1 (Upp. & Kir.)
13	Z, (W) Z N	eP eS	03 19 51 30 17		
13	Z, (W) Z N, E	eP eS	03 45 22 55 36		Compression. Lahore P - 03:44:56. USCGS: H - 03:32:58. 52°N., 175°W. Andreanof Islands, Aleutian Islands.
13	Z, (W) E	eP	05 30 18		
13	Z	eP	07 09 43		
13	Z	e	07 34 07		USCGS: H - 07:21:54. 52°N., 178°W. Andreanof Islands, Aleutian Islands.
13	Z	e	09 02 41		

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
13	Z, (W) Z Z (L) NE (L) N	eP ePcP eSKS eScS	09 22 08 14 32 29 44	Compression. Lahore P - 09:21:41. USCGS: H - 09:09:34. 52½°N., 170°W. Fox Islands, Aleutian Islands.
13	Z	ePKP	09 29 49	USCGS: H - 09:11:15. Near west coast of north Island, New Zealand. Felt: North Island and north south Island.
13	Z, (W) Z E	eP eS	11 50 09 12 00 20	Compression. USCGS: H - 11:37:49. 51°N., 177°W. Andreanof Islands, Aleutian Islands.
13	Z, (W) Z E, N	eP eS	12 10 27 20 46	Compression. USCGS: H - 11:57:58. 52°N., 173°W. Andreanof Islands, Aleutian Islands.
13	Z, (W) Z	eP	12 54 58	Compression. Lahore P - 12:54:30. USCGS: H - 12:42:35. 51½°N., 177°W. Andreanof Islands, Aleutian Islands.
13	Z, (W) Z	eP	14 29 42	
13	Z, (W) Z	eP	15 01 35	
13	Z, (W) Z Z, (W) Z (L) NE N, E N, E N, E	eP ePcP iS eS eSKS eScS	15 54 21 29 16 04 25 29 38 47	Compression. Lahore P - 15:53:53. USCGS: H - 15:42:05. 51½°N., 179°W. Andreanof Islands, Aleutian Islands. Mag: 6½ (Pas.), (Berk.), 6.9 (Upp. & Kir.)
13	Z, (W) Z	eP	16 21 00	
13	Z, (W) Z	eP	17 03 39	
13	Z, (W) Z N	eP eSKS	17 56 13 18 06 33	Compression. Lahore P - 17:55:44. USCGS: H - 17:43:40. 51°N., 175°W. Andreanof Islands, Aleutian Islands.

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			h.	m. s.	
13	Z, (W) Z	eP	19	09 07	USCGS: H - 18:56:33. 52 $\frac{1}{2}$ ^o N., 168 ^o W. Fox Islands, Aleutian Islands.
13	Z, (W) Z	eP	20	12 01	Compression.
	Z, (W) Z	ePcP		05	Lahore P - 20:11:36.
	(L) N	eSKS	22	23	S - :21:39.
	(L) EN, E	iS		28	USCGS: H - 19:59:23. 54 ^o N., 166 ^o W. Fox Islands, Aleutian Islands. Mag: 6.2 (Upp. & Kir.)
(L) EN, N	iScS		45		
13	Z, (W) Z	eP	22	21 00	Lahore P - 22:20:35.
13	Z, (W) Z	eP	22	46 12	
13	Z, (W) Z	eP	23	26 03	
14	Z, (W) Z	eP	00	17 37	
	E	eS		22 30	
14	Z, (W) Z	eP	00	40 14	Compression. Lahore P - 00:39:50.
14	Z, (W) Z	iP	00	47 57	Compression.
	N	eS		58 08	Lahore P - 00:47:30. USCGS: H - 00:35:38. 51 ^o N., 178 ^o W. Andreanof Islands, Aleutian Islands.
14	Z, (W) Z	eP	01	19 03	Compression.
14	Z, (W) Z	eP	02	04 54	Compression.
	Z, (W) Z	ePcP		56	Lahore P - 02:40:30.
	(L) N	eSKS	15	17	USCGS: H - 01:52:16.
	(L) N, N	eS		24	52 $\frac{1}{2}$ ^o N., 169 ^o W. Fox Islands, Aleutian Islands.
	(L) NE, N	eScS		32	Mag: 5.7 (Upp. & Kir.)
14	Z, (W) Z	eP	02	21 42	
14	Z, (W) Z	eP	02	59 39	Lahore P - 02:59:15.
	Z	ePcP		43	USCGS: H - 02:46:55.
	E	eSKS	10	00	53 $\frac{1}{2}$ ^o N., 163 $\frac{1}{2}$ ^o W. Off south coast of Unimak Island.
	N, E	eS		13	
	N	eScS		20	
14	Z	e	03	26 55	
14	Z, (W) Z	eP	03	41 34	Compression.

DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
14	Z, (W) Z	eP	04	12	15	Compression.
14	Z, (W) Z (L) N	eP eS	10	07	49 10 56	Compression. Lahore P - 10:06:30. S - :08:35.
14	Z	eP	10	47	02	USCGS: H - 10:34:33. Fox Islands, Aleutian Islands.
14	Z, (W) E	eP	12	42	08	USCGS: H - 12:29:32. 53°N., 166½°W. Fox Islands, Aleutian Islands.
14	Z, (W) E Z, (W) E N, E N, E E N	iP ePcP ePP eS eSKS eScS	15	00	05 12 03 10 10 15 21 32	Compression. Lahore P - 14:59:40. USCGS: H - 14:47:45. 51½°N., 177°W. Andreanof Islands, Aleutian Islands. Mag: 7½ (Pas.), 7¼ - 7½ (Berk.), 7.1 (Upp. & Kir.)
14	Z, (W) E	eP	15	17	26	Compression. Lahore P - 15:18:58.
14	Z, (W) E	eP	15	24	55	Compression.
14	Z, (W) E N, E	eP eS	16	03	21 13 32	USCGS: H - 15:51:00. 51½°N., 177½°W. Andreanof Islands, Aleutian Islands.
14	Z, (W) E	eP	16	14	00	
14	Z, (W) E N, E	eP e(S)	17	18	44 28 54	Compression. Lahore P - 17:18:17. USCGS: H - 17:06:21. 51°N., 178°W. Andreanof Islands, Aleutian Islands.
14	Z, (W) E	eP	18	02	17	Compression. Lahore P - 18:01:55.
14	Z, (W) E	eP	18	26	58	Compression.
14	Z, (W) E	eP	20	08	52	Compression. Lahore P - 20:08:25.
14	Z, (W) E	eP	21	35	30	Lahore P - 21:35:04.
14	Z	e	21	52	39	

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			h.	m.	s.	
14	Z, (W) E	eP	22	30	41	Compression. Lahore P - 22:30:13. USCGS: H - 22:18:23. 51 ¹ / ₂ ^o N., 176 ^o W. Andreanof Islands, Aleutian Islands.
	Z	ePcP			49	
	E	eS		40	50	
14	Z, (W) E	eP	23	22	44	Compression.
14	Z, (W) E	eP	23	31	32	Compression.
15	Z, (W) E	eP	03	04	47	Lahore P - 03:04:24. USCGS: H - 02:52:08. 53 ^o N., 167 ^o W. Fox Islands, Aleutian Islands. Mag: 6 ³ / ₂ (Pas.), 6 ¹ / ₂ (Berk.), 6.5 (Upp. & Kir.)
	Z, (W) E	ePcP			50	
	Z	i		06	01	
	E	eSKS		15	12	
	N	eS			14	
	N, E	eScS			27	
15	Z, (W) E	eP	03	48	33	Compression.
15	Z, (W) E	eP	04	25	18	Compression. Lahore P - 04:24:51. USCGS: H = 04:12:56. 51 ^o N., 176 ^o W. Andreanof Islands, Aleutian Islands.
	(W) E	ePcP			24	
15	Z	eP	04	59	10	
15	Z	eP	05	14	32	
15	Z	eP	07	44	23	
15	Z	eP	09	41	03	Compression.
15	Z	e	10	00	23	
15	Z	e	11	18	10	
15	Z, (W) E	eP	12	10	00	Lahore P - 12:09:33. USCGS: H - 11:57:28. 51 ^o N., 173 ^o W. Andreanof Islands, Aleutian Islands.
	Z	ePcP			05	
	Z	ePP		13	11	
	N	eS		20	23	
	E, N	eScS			35	
15	Z, (W) Z	eP	16	42	30	Compression.
	E	eS		52	59	
15	Z, (W) E	eP	16	50	39	Compression. Lahore P - 16:50:13. USCGS: H - 16:38:02. Fox Islands, Aleutian Islands.
	Z	ePcP			44	
	E	eSKS	17	01	02	
	(L) N	iS			07	
	N	eScS			18	

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			h.	m. s.	
15	Z	eP	18	45 47	Compression. Lahore P - 18:45:20.
15	Z	eP	21	31 28	Lahore P - 21:31:00.
15	Z, (W)E	eP	22	25 46	Compression. Lahore P - 22:25:18. USCGS: H - 22:13:27. 51 $\frac{1}{2}$ ^o N., 177 ^o W. Andreanof Islands, Aleutian Islands.
16	Z	eP	00	46 50	Lahore P - 00:47:57.
	Z, (L)NE	ePP	47	00	USCGS: H - 00:43:41.
	E	ePPP		06	35 ^o N. , 53 ^o E.
	(L)N	eS	49	21	Northern Iran.
16	Z	eP	02	23 13	
16	Z, (W)E	eP	02	25 48	Compression.
	N, (L)N	eS	36	04	USCGS: H - 02:13:23. Andreanof Islands, Aleutian Islands.
16	Z	iP	02	46 25	Compression.
	Z, N	ePcP		33	Lahore P - 02:45:58.
	(L)E	ePP	49	31	Chittagong P - 02:45:45.
	(L)NE, N	iS	56	29	S - :55:06.
	N, E	eSKS		37	USCGS: H - 02:34:12.
	N	eScS		47	52 ^o N., 179 ^o W. Andreanof Islands, Aleutian Islands. Mag: 6 $\frac{3}{4}$ (Pas.), 7 (Berk.), 7.2 (Upp. & Kir.).
16	Z, (W)E	iP	03	46 24	Compression.
	Z	ePcP		30	USCGS: H - 03:33:57.
	N, E	eS	56	42	52 ^o N., 174 ^o W. Andreanof Islands, Aleutian Islands.
16	Z, (W)E	eP	05	34 13	Compression.
16	Z	e	07	43 09	
16	Z, (W)E	iP	09	42 54	Compression.
	(W)E	ePcP	43	00	USCGS: H - 09:30:36.
	E	eS	53	02	51 ^o N., 177 ^o W. Andreanof Islands, Aleutian Islands.
16	Z	e	11	55 05	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
16	Z, (W)E E	iP iS	12	24	21 25 44	H - 12:22:34. $\Delta = 7^{\circ}.5$ Depth: about 100 km. 36 $\frac{3}{2}$ ^o N., 71 $\frac{1}{2}$ ^o W. Hindukush. Lahore P - 12:23:55. S - :24:58.
16	Z, (W)E	iP	14	23	06	Compression.
16	Z, (W)E	eP	14	57	41	Compression.
16	Z, (W)E	iP	15	42	27	Compression.
16	Z	eP	17	45	53	
16	Z, (W)E	eP	20	47	43	
17	Z, (W)E	eP	00	04	27	USCGS: H - 23:55:08. 27 ^o N., 127 $\frac{1}{2}$ ^o E. Ryukyu Islands.
17	Z, (W)E (W)E, N, E	eP eS	00	07	40 08 57	
17	Z, (W)E N	eP eS	01	59	14 02 09 19	Dilatation. USCGS: H - 01:46:56. 51 ^o N., 180. Andreanof Islands, Aleutian Islands.
17	Z, (W)E	eP	03	00	57	USCGS: H - 02:48:36. 51 ^o N., 178 $\frac{1}{2}$ ^o W. Andreanof Islands, Aleutian Islands.
17	Z Z (L)N, N, E (L)NE (L)NE, N	eP ePcP eSKS eS eScS	07	17	16 21 27 41 43 53	Compression. USCGS: H - 07:04:40. 52 $\frac{1}{2}$ ^o N., 169 ^o W. Fox Islands, Aleutian Islands.
17	Z, (W)E Z, (W)E N, E	eP ePcP eS	08	06	05 13 16 10	Compression. Lahore P - 08:05:36. USCGS: H - 07:53:51. 51 ^o N., 179 ^o W. Andreanof Islands, Aleutian Islands. Mag: 6.1 (Upp. & Kir.)
17	Z	e	09	14	59	
17	Z, (W)E	eP	10	02	40	Compression.
17	Z, (W)E E, N	eP eS	11	43	09 54 01	Compression. USCGS: H - 11:30:07. 53 $\frac{1}{2}$ ^o N., 167 ^o W. Fox Islands, Aleutian Islands.

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			h.	m.	s.	
17	Z, (W) E	eP	15	24	20	Compression.
	Z	ePcP			25	Lahore P - 15:23:57.
	(L) N	iSKS	34	46		USCGS: H - 15:11:42.
	(L) E	eS			49	53°N., 167½°W. Fox Islands,
	(L) E	eScS			58	Aleutian Islands.
17	Z, (W) E	eP	16	01	06	
17	Z, (W) E	eP	16	29	56	Compression.
	N	ePcP	30	00		Lahore P - 16:29:32.
	Z	ePP	33	17		S - :39:45.
	N, (L) N	eSKS	40	19		USCGS: H - 16:17:13.
	N, (L) N	eS			29	52½°N., 166°W. Fox Islands,
	(L) NE, N	eScS			36	Aleutian Islands.
17	Z	e	17	33	02	
17	Z	e	17	47	41	
17	Z, (W) E	eP	18	41	51	
17	Z	e	18	45	54	
17	Z, (W) E	eP	22	57	23	Compression.
	Z, (W) E	iPcP			26	Lahore P - 22:56:58.
	Z, E	ePP	23	00	40	S - 23:07:02.
	N, E, (L) NE	eSKS	07	45		USCGS: H - 22:44:44.
	(L) N	i			48	54°N., 166°W. Fox Islands,
	(L) E, E	iS			50	Aleutian Islands.
	N	eScS	08	00		Mag: 6½ (Pas.),
	(L) E, N	ePS			45	6.6 (Upp. & Kir.)
18	Z	eP	00	24	26	Compression.
						Lahore P - 00:23:57.
						S - :33:35.
18	Z	eP	02	37	09	USCGS: H - 02:24:39.
						52½°N., 171°W. Fox Islands,
						Aleutian Islands.
18	Z, (W) E	iP	02	37	57	Compression.
	Z	ePcP	38	02		USCGS: H - 02:25:26.
	(L) N	e	48	12		52½°N., 171°W. Fox Islands,
	E	eSKS			16	Aleutian Islands.
	(L) E, N	eS			18	Mag: 6.2 (Upp. & Kir.)
	E	eScS			32	
18	Z, EN	eP	05	20	47	Lahore P - 05:20:18.
	Z, N	ePcP			55	USCGS: H - 05:08:34.
	Z	ePP	23	48		51½°N., 179°W. Andreanof Islands,
	(L) EN, N, E	eS	30	54		Aleutian Islands.
	N, E	eSKS	31	00		
	(L) N, N	eScS			08	

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
18	Z	e	06	54 21	
18	Z (L)NE	eP eS	08	03 24 13 46	
18	Z	e	12	10 55	
18	Z	e	14	37 56	
18	Z	eP	14	55 03	Lahore P - 14:55:22.
18	Z	eP	16	46 01	
18	Z	eP	18	44 21	
18	Z	eP	19	19 34	Compression.
18	Z	ePKP	19	48 24	USCGS: H - 19:30:17. 19°S., 179°W. Fiji Islands. Depth: about 400 km.
18	Z,N	eP	20	02 52	Compression.
18	Z,N Z (L)N (L)N	eP ePcP eS eScS	20	16 01 08 26 04 23	Lahore P - 20:15:31. USCGS: H - 20:03:47. 52°N., 180. Andreanof Islands, Aleutian Islands.
18	Z (L)NE (L)NE (L)E,N (L)N E	eP ePP eSKS eSKKS i eS	21	27 13 30 48 37 41 50 57 38 01	Lahore P - 21:26:43. S - :37:02. USCGS: H - 21:14:12. 6°S., 152°E. New Britain.
18	Z E, (L)E	eP eS	23	23 40 28 41	USCGS: H - 23:17:22. 45°N., 33°E. Near coast of Crimean Peninsula.
19	Z	e	01	56 17	
19	Z	e	02	16 12	
19	Z (L)N	eP eS	03	51 57 04 02 02	USCGS: H - 03:39:35. 52°N., 175°W. Andreanof Islands, Aleutian Islands.
19	Z, (W)N N	eP eS	08	25 17 35 47	USCGS: H - 08:12:40. 52°N., 169°W. Fox Islands, Aleutian Islands.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
19	Z, (W)N (L)NE	eP eS	08	26	47 37 15	Compression. Lahore P - 08:26:23. USCGS: H - 08:14:10. 53°N., 168°W. Fox Islands, Aleutian Islands.
19	Z, (W)N Z N, E, (L)N E	iP ePcP eS eScS	11	41	10 18 51 20 39	Compression. Lahore P - 11:40:43. S - :50:45. USCGS: H - 11:28:50. 51½°N., 176½°W. Andreanof Islands, Aleutian Islands.
19	Z, (W)N Z N N N	eP ePcP eS eSKS eScS	13	03	15 22 13 30 32 45	Compression. Chittagong P - 13:02:58. S - :12:46. Lahore P - 13:02:47. S - :12:31. USCGS: H - 12:50:51. 51½°N., 175°W. Andreanof Islands, Aleutian Islands. Mag. 6½ (Pas.), 6.6 (Upp. & Kir.)
19	Z, (W)N	eP	13	32	59	Compression.
19	Z, (W)N	eP	13	38	01	Compression.
19	Z, (W)N	eP	14	08	08	
19	Z, (W)N	eP	14	35	34	
19	Z, (W)N Z N, (L)N E (L)NE	eP ePcP eSKS eS eScS	15	59	56 16 00 00 10 17 19 30	Dilatation. Lahore P - 15:59:29. S - 16:09:29. USCGS: H - 15:47:24. 52°N., 172½°W. Fox Islands, Aleutian Islands.
19	Z, (W)N (W)N Z, N N, E, (L)EN (L)N	iP ePcP ePP eS eScS	17	16	58 17 03 20 09 27 21 33	Compression. Lahore P - 17:16:33. USCGS: H - 17:04:25. 52½°N., 171°W. Fox Islands, Aleutian Islands.
19	Z	eP	20	37	08	
19	Z, (W)N	eP	23	36	35	
19	Z, (W)N	eP	23	52	36	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
20	Z, (W) N N, E	eP	00	13	20	Compression. Lahore P - 00:12:54. USCGS: H - 00:00:51. 52°N., 173°W. Andreanof Islands, Aleutian Islands.
		eS		23	38	
20	Z, (W) N	iP	00	34	59	Compression. Lahore P - 00:34:34. S - :44:50. USCGS: H - 00:22:25. 53°N., 169°W. Fox Islands, Aleutian Islands.
	Z	ePcP		35	03	
	Z	ePP		38	12	
	N	eSKS		45	20	
	(L) N, EN	eS			24	
	(L) N, N	eScS			34	
20	Z, (W) N	eP	00	38	43	Compression.
20	Z, (W) N	eP	00	55	36	Lahore P - 00:55:12.
20	Z N, E	eP	02	55	31	
		eS	03	05	54	
20	Z, (W) N	eP	03	10	57	Compression.
20	Z, N	eP	03	37	23	Compression. Lahore P - 03:36:56. USCGS: H - 03:25:00. 51½°N., 175½°W. Andreanof Islands, Aleutian Islands.
	Z	ePcP		29		
	Z	ePP		40	28	
	E	eS		47	38	
	(L) N, N	eSKS			40	
	(L) N	eScS			51	
20	Z Z	eP	06	20	40	USCGS: H - 06:10:27. Near north coast of Mindanao, Philippine Islands.
		ePcP		21	23	
20	Z	e	06	38	58	
20	Z, N	iP	11	14	14	Lahore P - 11:15:47. S - :23:42. Karachi P - 11:14:37. USCGS: H - 11:01:42. 52°N., 172°W. Andreanof Islands, Aleutian Islands.
	Z	ePcP		19		
	(L) N, N	eSKS		24	35	
	(L) N, N	eS			37	
	(L) N	eScS			49	
20	Z	e	13	02	20	
20	Z	e	15	13	26	
20	Z	e	17	06	05	
20	Z	eP	19	03	34	Compression. Lahore P - 19:03:06.

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			h.	m. s.	
20	Z	eP	20	05 32	Lahore P - 20:05:07.
20	Z,N	eP	20	11 25	Compression.
20	Z E	eP eSKS	20	40 35 50 54	Dilatation. Lahore P - 20:40:08. USCGS: H - 20:28:03. 51 $\frac{1}{2}$ ^o N., 174 $\frac{1}{2}$ ^o W. Andreanof Islands, Aleutian Islands.
21	Z,N	iP	04	41 28	Compression. USCGS: H - 04:29:02. 52 ^o N., 173 ^o W. Andreanof Islands, Aleutian Islands.
21	Z	e	05	58 18	
21	Z,N	eP	08	44 19	Compression.
21	Z,N	e	09	04 01	
21	Z,N	eP	12	21 09	
21	Z,N Z,N Z (L)N,N (L)E,E E,N	eP ePcP ePP eSKS eS eScS	12	44 04 10 47 14 54 25 29 39	Compression. Lahore P - 12:43:40. USCGS: H - 12:31:30. 52 ^o N., 171 ^o W. Fox Islands, Aleutian Islands.
21	Z,N N	eP e(S)	14	24 23 34 35	Compression.
21	Z,N N,E	eP eS	15	58 41 16 08 55	Dilatation. Lahore P - 15:58:13. S - 16:08:01. USCGS: H - 15:46:16. 51 ^o N., 175 ^o W. Andreanof Islands, Aleutian Islands.
21	Z	e	16	47 49	USCGS: H - 16:35:28. 3 ^o S., 144 $\frac{1}{2}$ ^o E. Near north coast of New Guinea. Mag: 6.3 (Upp. & Kir.)
21	Z,N Z,N (L)N,E N,E (L)N	iP ePcP eS eSKS iScS	17	51 31 38 18 01 41 44 55	Compression. Lahore P - 17:51:01. USCGS: H - 17:39:12. 51 $\frac{1}{2}$ ^o N., 177 ^o W. Andreanof Islands, Aleutian Islands.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
21	Z	e	18	53	02	
21	Z	eP	21	34	52	
22	Z	eP	00	03	21	Lahore P - 00:02:57.
22	Z	eP	00	46	54	Compression. Lahore P - 00:46:26.
22	Z N	eP eS	09	48	56 59 15	Compression.
22	Z N	eP eS	10	37	04 47 21	
22	Z	eP	11	45	42	
22	Z,N,E Z,N Z,N N,E E N	iP iPcP ePP eSKS iS eScS	14	33	44 48 37 03 44 06 12 24	Compression. Chittagong P - 14:33:20. S - :43:26. Lahore P - 14:33:19. S - :43:15. Karachi P - 14:34:04. USCGS: H - 14:21:06. 54°N., 166°W. Fox Islands, Aleutian Islands. Mag: 7 (Pas.), (Berk.), 7.1 (Upp. & Kir.)
22	Z E	eP eS	14	45	48 56 15	Lahore P - 14:45:24. Karachi P - 14:46:07. USCGS: H - 14:33:13. 54°N., 165½°W. Fox Islands, Aleutian Islands.
22	Z,N N,E	iP iS	17	22	21 32 41	Compression. Lahore P - 17:21:55. S - :31:51. Karachi P - 17:22:45. USCGS: H - 17:09:51. 52½°N., 171°W. Fox Islands, Aleutian Islands.
22	Z	eP	19	55	01	Compression. Lahore P - 19:54:34.
22	Z	ePKP	20	05	40	USCGS: H - 19:44:22. 37.9N., 122.6W. Northern Cali- fornia, minor damage at Daly City and San Francisco. Mag: 5½ - 5½ (Pas.)

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
22	(W)Z	e	20	51	05	
22	(W)Z	eP	22	50	30	
	(W)N	eS		51	59	
23	(W)Z,Z	eP	00	18	18	
23	(W)Z,Z	eP	00	56	51	
23	(W)Z,Z	eP	01	04	24	
23	Z,(W)Z	iP	05	23	45	Compression.
	Z	i			52	Lahore P - 05:23:10.
	(L)N,Z	ePcP	24	04		(S) - 05:31:35.
	(L)N,Z	epP			14	USCGS: H - 05:12:31.
	(L)N,N	esP			24	5 $\frac{1}{2}$ $^{\circ}$ S., 131 $^{\circ}$ W. Banda Sea.
	(L)N	iPPP			28 14	Depth: about 100 km.
	(L)N	iS			32 49	Mag: 7 (Pas.),
	(L)N	isS			33 26	7.1 (Upp. & Kir.)
23	Z,(W)Z	eP	05	51	40	
23	Z,(W)Z	eP	06	56	11	
23	Z,(W)Z	eP	10	41	49	Compression.
23	Z,N	eP	13	36	50	Compression.
	N,E	eS		47	03	USCGS: H - 13:24:33. 51 $\frac{1}{2}$ $^{\circ}$ N., 179 $^{\circ}$ W. Andreanof Islands, Aleutian Islands.
23	Z,N	eP	13	52	06	Lahore P - 13:51:37.
	Z	ePcP			12	Karachi P - 13:52:28.
	N,(L)N	eS	14	02	10	USCGS: H - 13:39:53.
	N,E	eSKS			19	51 $^{\circ}$ N., 179 $\frac{1}{2}$ $^{\circ}$ W. Andreanof Islands, Aleutian Islands.
23	Z	eP	16	31	00	
23	Z	eP	22	21	11	
24	Z,(W)Z	eP	01	12	03	
24	Z,(W)Z	eP	01	32	55	Compression.
24	(W)Z	eP	02	36	22	
24	(W)Z	e	03	53	55	

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			h.	m. s.	
24	Z, (W) Z	eP	04	48 24	Compression. USCGS: H - 04:36:22. 51 $\frac{1}{2}$ ^o N., 175 $\frac{1}{2}$ ^o W. Rat Islands region, Aleutian Islands.
24	Z, (W) Z	eP	05	13 30	Compression.
24	Z	e	06	57 59	
24	Z	eP	07	41 36	Compression. USCGS: H - 07:29:15. 51 ^o N., 179 $\frac{1}{2}$ ^o W. Andreanof Islands, Aleutian Islands.
24	Z, N N, E	eP eS	11	18 45 29 10	Compression. Lahore P - 11:18:20. Karachi P - 11:19:07. S - :29:53. USCGS: H - 11:06:10. 52 $\frac{1}{2}$ ^o N., 169 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands. Mag: 6.3 (Upp. & Kir.)
24	Z, N Z N, E N, E N	iP iPcP eSKS iS eScS	11	49 20 24 59 39 40 55	Compression. Lahore P - 11:48:54. S - :58:57. Karachi P - 11:49:42. USCGS: H - 11:36:50. 52 $\frac{1}{2}$ ^o N., 171 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands.
24	Z, (W) N Z, N N, E	iP eSP iS	12	06 58 07 38 08 15	Dilatation. H - 12:05:18. Depth: about 200 km. $\Delta = 6^{\circ}.9$ 36 $\frac{1}{2}$ ^o N., 70 $\frac{3}{4}$ ^o E. Hindukush. Lahore P - 12:06:39. S - :07:41. Karachi P - 12:08:01. S - :10:06. USCGS: H - 12:05:10. 37 ^o N., 71 ^o E. Hindukush. Depth: about 200 km.
24	Z	eP	14	06 13	USCGS: H - 13:53:53. Andreanof Islands, Aleutian Islands.
24	Z (L) E	eP eS	16	45 05 55.33	Compression. Lahore P - 16:44:39. Karachi P - 16:45:28. USCGS: H - 16:32:28. 52 $\frac{1}{2}$ ^o N., 169 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
24	Z	eP	19	16	44	
24	Z	eP	20	06	05	Compression. Lahore P - 20:05:41.
24	Z	eP	21	15	20	
24	Z	eP	23	54	14	
25	Z	eP	00	52	07	Compression.
	Z	ePcP		09		Lahore P - 00:51:43.
	(L)N	iSKS	01	02	32	Karachi P - 00:52:30.
	(L)N	iS		42		USCGS: H - 00:39:22. 53°N., 168°W. Fox Islands, Aleutian Islands.
25	Z	eP	01	16	18	Compression.
	(L)N	eS		26	28	USCGS: H - 01:03:59. 52°N., 176°W. Andreanof Islands, Aleutian Islands.
25	Z	ePKP	02	47	49	USCGS: H - 02:28:36.
	(L)N	ePKS		51	22	13 $\frac{1}{2}$ °N., 91°W. Near coast of Guatemala. Felt: San Salvador.
25	Z(W)Z	eP	05	50	08	USCGS: H - 05:37:25. 54°N., 163 $\frac{1}{2}$ °W. Unimak Islands region, Alaska.
25	Z	eP	07	16	09	Compression.
25	Z	eP	08	56	49	
25	Z	eP	09	25	54	Compression.
25	Z	e	09	39	37	
25	Z	e	10	20	14	
25	Z	eP	10	36	54	
25	Z	e	11	32	52	
25	Z	e	11	37	36	
25	Z	eP	14	28	13	USCGS: H - 14:13:33.
	N,E	eS		36	38	54°N., 165 $\frac{1}{2}$ °W. Fox Islands, Aleutian Islands.
25	Z	eP	14	56	01	

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			h.	m. s.	
25	Z (W)N	eP e(S)	15	21 00 53	
25	Z, (W)N (W)N	eP eS	17	56 20 57 20	H - 17:55:11. $\Delta = 2^{\circ}.1$ 32°N., 72°E. Lahore P - 17:55:48. S - :56:15.
25	Z	e	18	09 49	
25	Z	eP	21	25 02	Lahore P - 21:25:10.
26	Z (L)N	eP eS	02	22 53 33 18	Compression. USCGS: H - 02:10:15. 54°N., 165½°W. Fox Islands, Aleutian Islands.
26	Z, (W)N	eP	03	00 10	Compression. USCGS: H - 02:47:50. 51°N., 177½°W. Andreanof Islands, Aleutian Islands.
26	Z	e	03	07 46	
26	Z, (W)N Z, N Z (L)N N, E, (L)N N, (L)N	eP ePcP e(PP) eSKS eS iScS	03	17 54 37 20 46 27 56 28 00 11	Compression. USCGS: H - 03:04:55. 51½°N., 170°W. Fox Islands, Aleutian Islands.
26	(W)ZN (W)N	eP eS	04	52 29 54 55	Lahore P - 04:53:51. S - :57:37. Karachi P - 04:52:41. USCGS: H - 04:49:20. 28°N., 52½°E. Near south coast of Iran.
26	(W)Z	e	06	37 06	
26	Z, (W)Z (L)N	eP eS	16	14 10 24 18	Lahore P - 16:13:41. USCGS: H - 16:01:53. 52°N., 180. Andreanof Islands, Aleutian Islands.
26	Z, (W)Z N	eP e(S)	18	03 00 04 14	
26	Z, (W)Z	eP	18	29 01	Lahore P - 18:28:35. USCGS: H - 18:16:47. 51°N., 179½°W. Andreanof Islands, Aleutian Islands.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
27	Z, (W) Z N	eP eS	04	26	26 36 47	Compression. USCGS: H - 04:13:52. 52 ¹ / ₂ °N., 170 ¹ / ₂ °W. Fox Islands, Aleutian Islands.
27	Z	ePKP	07	50	40	USCGS: H - 07:31:56. 22°S., 177°W. Tonga Islands region. Depth: about 150 km.
27	Z, (W) Z N (L) E	eP eSKS eS	13	13	19 23 39 24 00	Compression. USCGS: H - 13:00:27. 5°S., 153 ¹ / ₂ °E. Off coast of New Britain. Felt: Rabaul & Karoala. Depth: about 100 km.
27	(W) Z, Z	eP	13	47	35	
27	Z, (W) Z	eP	16	59	20	
27	(W) Z, Z	eP	25	12	36	
28	(W) Z	eP	01	25	53	
28	(W) Z, Z E	eP eS	01	27	47 38 05	Compression. USCGS: H - 01:15:20. 51 ¹ / ₂ °N., 174 ¹ / ₂ °W. Andreanof Islands, Aleutian Islands.
28	(W) Z E, (W) N	eP eS	01	45	33 46 50	
28	(W) Z	e	05	13	25	
28	Z, (W) Z	eP	07	26	34	Compression.
28	Z, (W) Z	eP	08	54	49	
28	Z, (W) Z	eP	13	04	17	Compression.
28	Z, (W) Z	eP	13	13	02	Karachi P - 13:12:30.
28	(W) Z	e	14	18	03	
28	(W) Z	e	18	10	15	
28	(W) Z	e	18	40	14	
28	Z, (W) Z	eP	20	07	56	USCGS: H - 19:55:31. Andreanof Islands, Aleutian Islands.

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
28	Z, (W) Z E, N	eP eS	20	20 54 31 17	Compression. Lahore P - 20:20:26. USCGS: H - 20:08:20. 51°N., 171½°W. Fox Islands, Aleutian Islands.
28	Z, (W) Z N, E	eP eS	22	33 15 39 04	Lahore P - 22:33:58. USCGS: H - 22:25:58. 39½°N., 22½°E. Central Greece. Mag: 5.9 (Upp. & Kir.)
29	(W) ZN (W) Z E E	eP ePcP eSKS eS	05	23 05 10 33 25 33	Compression. Lahore P - 05:22:42. Karachi P - 05:23:31. S - 05:34:16. USCGS: H - 05:10:28. 53½°N., 167°W. Fox Islands, Aleutian Islands.
29	(W) Z, E E, (W) N	iP e(S)	05	48 37 57 03	Compression. Karachi P - 05:48:31. USCGS: H - 05:37:50. 4°N., 127°E. Talaud Islands.
29	Z, (W) Z N N	eP eSKS eS	07	38 36 48 59 49 06	USCGS: H - 07:25:58. 53½°N., 167°W. Fox Islands, Aleutian Islands.
29	Z, (W) Z	eP	08	28 41	USCGS: H - 08:16:03. 53°N., 167°W. Fox Islands, Aleutian Islands.
29	(W) Z	e	11	20 34	
29	(W) Z, Z	eP	11	27 23	
29	Z, (W) Z E	eP e(S)	14	39 05 40 20	Lahore P - 14:37:45. S - 14:38:41.
29	Z, (W) Z	eP	14	47 07	
29	(W) Z, Z	eP	18	50 27	Compression. Lahore P - 18:50:35.
29	Z, (W) Z	eP	19	50 36	
29	Z, (W) Z	eP	20	06 34	Lahore P - 20:05:40.
29	Z, (W) Z N, (L) N N, (L) N	eP eSKS eS	23	02 27 12 52 13 00	Lahore P - 23:02:02. USCGS: H - 22:49:51. 53°N., 169°W. Fox Islands, Aleutian Islands. Mag: 6 - 6½ (Pas.), 6.0 (Upp. & Kir.)

PAKISTAN METEOROLOGICAL SERVICE

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No. 4.

Seismological Bulletin

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QUETTA OBSERVATORY
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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
1	(W) Z	e	03	09 43	
1	Z, (W) Z	eP	07	40 11	COMPRESSION. USCGS: H - 07:30:21. Near coast of Samar, Phillipine Island.
1	Z(W) Z	IP	08	04 44	COMPRESSION.
	Z	eP		05 00	Lahore P - 08:04:01.
	(L) N, (W) N, NE	eS		13 10	Karachi P - 08:04:39.
	E	eS		47	S - :13:00.
	(L) N	e		50	USCGS: H - 07:54:20. 4 $\frac{1}{2}$ ^o N., 129 ^o W. Molucca. Depth: about 100 km.
1	Z, (W) Z	eP	11	22 04	
1	Z, (W) Z	eP	11	48 00	DILATATION?
	(W) Z, Z	I		02	Lahore P - 11:47:34.
	Z, (W) Z	e(p)		10	USCGS: H - 11:35:30.
	ZN, (W) N	ePP		51 13	51 ^o N., 173 ^o W. Andeanof Island,
	(L) N	ISKS		58 23	Aleutian Islands.
	NE, (W) N	eScS		32	Mag: 6 (Upp. & Kir.)
1	(W) ZN	eP	16	03 21	
1	(W) Z	eP	17	05 33	Lahore P - 17:04:18.
	(W) N	e(S)		07 38	S - :05:02.
	(W) N, N	e		48	
1	Z, (W) Z	eP	18	48 07	
1	Z	e	19	16 52	USCGS: H - 19:04:41. 51 $\frac{1}{2}$ ^o N., 178 $\frac{1}{2}$ ^o W. Andeanof Islands, Aleutian Islands.
1	(W) Z, Z	eP	20	14 34	Lahore P - 20:14:50.
	P	e		17 33	
1	Z, (W) Z	eP	20	58 21	COMPRESSION?
2	Z, (W) Z	eP	00	52 12	DILATATION.
	Z, (W) Z	IPcP		18	Lahore P - 00:51:45.
	Z	IP		26	S - 01:01:44.
	Z	ePP		55 24	Karachi P - 00:52:39.
	N	eSKS	001	02 33	USCGS: H - 00:39:42.
	(L) N, P	IS		36	51 ^o N., 173 ^o W. Andeanof Islands,
	N	eScS		48	Aleutian Islands. Mag: 6 $\frac{1}{2}$ (Upp. & Kir.)

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
2	Z (W)N, (L)N, N	iP eS	08	42 30 50 00	DILATATION. Karachi P - 08:42:41. USCGS: H - 08:33:10. 30°N., 137°E. Off south coast of Honshu, Japan. Leptn: about 550 km.
2	Z N, (L)N	eP e eS	12	04 14 05 56 14 37	USCGS: H - 11:51:42. 51°N., 173°W. Andreanof Islands, Aleutian Islands.
2	Z, (W)Z N, (L)N	eP e(S)	14	47 23 48 12	
2	Z Z N, Z (L)E (L)N, E (L)E, (W)N	eP ePc eP eSKS i eScS	20	29 26 32 32 39 39 46 51 58	DILATATION Lahore P - 20:29:00. S - :39:01. USCGS: H - 20:16:57. 51½°N., 173°W. Andreanof Islands, Aleutian Islands. Mag: 6¼ (Upp. & Kir.)
2	Z, N N, E	eP eS	20	51 34 01 55	Lahore P - 20:51:08. DILATATION. USCGS: H - 20:39:04. 51°N., 173½°W. Andreanof Islands, Aleutian Islands.
2	Z, (W)N Z, N Z Z N, (W)N (L)N, N N	eP ePc i(pP) eP eSKS iS eScS	21	40 25 32 40 56 43 32 50 45 47 51 00	DILATATION. Lahore P - 21:39:58. DILATATION. S - :49:56. Karachi P - 21:40:50. USCGS: H - 21:27:54. 51°N., 173°W. Andreanof Islands, Aleutian Islands. Mag: 6¼ (Upp. & Kir.)
2	Z	eP	22	00 13	COMPRESSION. Lahore P - 21:59:37.
3	Z	eP	01	36 58	Karachi P - 01:36:56. (S) - :38:58.
3	Z (L)NE	eP e(S)	02	16 39 18 22	
3	Z	e	17	01 48	
3	Z, N	e	22	28 59	

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
3	Z, (W) E	e	23	19 41	
3	Z	eP	23	21 34	COMPRESSION. USCGS: H - 23:09:15. 51 $\frac{1}{2}$ °N., 177°W. Andreanof Islands, Aleutian Islands.
4	Z, (W) E	eP	00	25 32	COMPRESSION.
	Z	ipP	26	05	Lahore P - 00:25:11.
	Z, N, (L) N	ePcP		38	S - :35:16.
	Z, N	ePP	28	42	USCGS: H - 00:13:08.
	(L) N, N	iS	35	50	5°N., 155 $\frac{1}{2}$ °W. Near coast of Alaska Peninsula. Felt: Kodiak Island. Depth: about 150 km. Mag: 6 (Upp. & Kir.)
4	Z	eP	01	03 23	USCGS: H - 00:50:47.
	N	eSKS	13	46	53°N., 168°W. Fox Islands,
	E	s		48	Aleutian Islands.
4	Z	eP	01	42 24	USCGS: H - 01:29:42. 52°N., 166°W. Fox Islands, Aleutian Islands.
4	Z	eP	05	18 46	
4	Z, (W) E	eP	06	13 34	
	N, (W) E	iS		14 53	
4	Z	eP	07	03 13	COMPRESSION.
	(L) NE	s		12 03	USCGS: H - 06:52:18. 48°N., 155°E. Northern Kurile Islands.
4	Z, (W) E	e	10	01 03	
4	Z	ePKP	11	20 10	COMPRESSION.
	Z	e		38	USCGS: H - 11:00:20. Southern Mendoza Province, Argentina.
4	Z	eP	11	37 49	COMPRESSION.
	Z	eP*	38	03	Lahore P - 11:37:41.
	(W) N	e(Pg)		11	S - :38:39.
	(W) N	e		43	Karachi P - 11:39:01.
	(W) N	eS		59	e - :37.
	E	eS*	39	16	e(S) - :40:51.
	(W) N, E	eSg		32	USCGS: H - 11:36:17. 36°N., 70°E. Hindukush.

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DATE	COMPT.	PHASE	CMT H. m. s.	REMARKS
4	Z N, (L)N	eP eSKS	14 56 20 15 08 42	COMPRESSION. USCGS: H - 14:43:49. 52 $\frac{1}{2}$ ^o N., 170 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands.
4	Z	eP	16 14 52	
4	(W)E (W)N, N	eP e(S)	20 22 28 24 12	
5	Z, (W)E (W)E, N	eP eS	00 06 33 08 18	
5	Z	eP	03 02 09	DILATATION? Lahore eP - 03:01:44. USCGS: H - 02:49:39. 52 ^o N., 172 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands. Mag: 6 $\frac{1}{2}$ (Pas.), 6 $\frac{1}{2}$ (Upp. & Kir.)
5	(W)N, Z (W)NE	eP eS	06 39 45 41 44	Lahore eP - 06:39:21.
5	Z (L)E (L)EN (L)NE (L)NE (L)E (L)N	cPKP epPKP ePP ePKS eSKS e e(S) e(L)	07 49 17 44 50 59 52 11 53 15 57 51 08 07 28 35 00	COMPRESSION. USCGS: H - 07:30:22. 26 $\frac{1}{2}$ ^o S., 177 ^o W. Kermadec Islands region. Depth: about 100 km. Mag: 6 $\frac{3}{4}$ (Pas.)
5	Z	eP	15 14 44	USJGS: H - 15:04:09. 45 ^o N., 148 ^o E. Kurilo Islands.
5	Z	ePKP	16 31 36	USCGS: H - 16:12:20. 12 $\frac{1}{2}$ ^o N., 88 ^o W. Near coast of Vi. Angria; W. of El-Salyad. Depth: about 100 km.
5	Z	eP	16 48 35	COMPRESSION. USJGS: H - 16:36:20. 51 $\frac{1}{2}$ ^o N., 172 $\frac{1}{2}$ ^o W. Andreanof Islands, Aleutian Islands.
5	Z	eP	22 14 51	COMPRESSION.
5	Z	eP	25 04 35	COMPRESSION?

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DATE	COMPT.	PHASE	CMT		REMARKS
			h.	m. s.	
6	(W)Z,Z	eP	06	53 24	
6	(W)Z	eP	09	02 45	
	(W)N	e(S)	04	05	
	(W)N,E	e		24	
6	(W)Z	eP	12	52 35	
	(W)N	eS		54 27	
6	(W)Z,Z	eP	14	07 33	
	(W)Z,N	eS		08 51	
6	Z,(W)Z	eP	14	39 55	
	(W)N	e(S)		42 25	
	(L)NE	e(L)		43 58	
6	(W)ZE	eP	18	16 37	
	(W)ZE	e(P)		17 40	
6	(W)ZE	eP	21	05 56	
	(W)EN	eS		07 12	
6	(W)ZE	eP	23	19 35	
7	Z(W)Z	eP	04	34 25	USCGS: H - 04:23:16. Near east coast of Kamchatka.
7	Z(W)Z	eP	06	30 40	
7	Z(W)Z	eP	07	46 12	USCGS: H - 07:33:47. 51 $\frac{1}{2}$ ^o N., 175 $\frac{1}{2}$ ^o W. Andreevof Islands, Aleutian Islands.
7	Z(W)Z	eP	08	16 23	COMPRESSION.
	Z(W)Z	eP		28	USCGS: H - 08:05:46.
	(L)N	eSKS		26 49	53 ^o N., 167 ^o W. Fox Islands,
	(L)N	eScS		27 01	Aleutian Islands.
	(L)NE	e(L)		51 26	
7	Z(W)Z	eP	09	54 44	
7	Z(W)Z	eP	10	25 43	COMPRESSION.
	Z	e		25 50	Lahore P - 10:25:06.
	Z	e		55	Karachi P - 10:25:39.
	(L)E	eP		26 01	S - :35:02.
	Z	e		27 46	USCGS: H - 10:14:08.
	Z,(L)E	ePP		28 27	1 ^o S., 137 $\frac{1}{2}$ ^o E. Near north
	(E)E	e(PPP)		29 45	Coast of New Guinea.
	(L)E	e		31 55	Mag: 6 - 6 $\frac{1}{4}$ (Pas.),
	E	e		34 38	6 $\frac{1}{2}$ (Upp. & Kir.)
	N	eS		35 11	
	(L)N	e		14	
	(L)E	e(SS)		39 28	

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DATE	COMPT.	PHASE	CMT			REMARKS
			h.	m.	s.	
7	Z(W)Z	eP	11	53	49	COMPRESSION.
7	Z(W)Z	eP	13	25	23	COMPRESSION. USCGS: H - 13:13:10. Andreanof Islands, Aleutian Islands.
7	Z(W)Z	eP	15	54	21	
7	Z(W)Z (L)EN (L)N	eP e(S) eL	15	40	49	COMPRESSION.
7	Z(W)Z (W)ZN	eP eS	22	15	00	
7	Z(W)Z	eP	22	51	20	COMPRESSION?
8	Z(W)Z N(W)N	eP eS	09	36	12	H - 09:35:32. Karachi P - 09:36:16. S - :19.
8	(W)Z,Z	e	11	13	06	
8	Z(W)Z (L)N (L)E	eP e(S) e	14	02	21	DILATATION.
8	Z(W)Z	eP	14	25	32	DILATATION?
8	Z(W)Z	e	15	27	17	
8	Z(W)Z	eP	16	46	47	COMPRESSION.
8	Z(W)Z (W)NE	eP eS	18	28	29	
8	Z, (W)Z : 0 (W)Z ZN, (L)NE (L)EN (L)N	ePKP e ePKP eSKS e(SKKS)	20	37	19	USCGS: H - 20:18:09. 8 1/2°N, 83°W. Panamacosta Rica border. Felt: Balboa Heights. Mag: 0 1/2 (Pas.), 6 (Upp. & Kir.)
8	Z, (W)Z	eP	20	55	35	USCGS: H - 20:43:10. Andreanof Islands, Aleutian Islands.
8	(W)Z (W)ZN, E	eP eS	23	51	34	

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
9	Z, (W)Z Z, (L)E Z (L)E (L)EN (L)NE, E (L)NE (L)NE	eP epP ePP epPE IS eSS ISS ISSS	00 34 08 35 41 36 27 37 46 41 49 44 38 46 01 49 06	DILATATION. Lahore P - 00:33:23. IS - :40:27. IS - :42:25. USCGS: H - 00:24:39. 30 ¹⁰ N., 138 ¹⁰ E. Off south coast of Honshu, Japan. Depth: about 450 km. Mag: 4 ³ (Pas.), 4 ¹ (Perk.), 5 ³ (Upp. & Kir.)
9	Z, (W)Z	eP	01 03 08	
9	Z, (W)Z Z E N, (L)N	eP epP eP IS	02 28 14 30 55 37 13 17	DILATATION. USCGS: H - 02:17:06. 22 ¹⁰ N., 144 ¹⁰ E. Mariana Islands region. Lahore eP - 02:27:31. eS - :35:57.
9	(W)Z	eP	03 36 25	
9	(W)Z	eP	07 52 18	USCGS: H - 07:30:40. Fox Islands, Aleutian Islands.
9	(W)ZE	eP	10 11 43	USCGS: H - 09:50:17. 51 ⁰ N., 178 ¹⁰ W. Andreanof Islands, Aleutian Islands.
9	(W)Z (W)N, (L)E (L)E	e eS eSS	10 44 55 52 38 55 31	Lahore P - 10:44:13. Karachi eP - 10:45:10. IS - :53:02. USCGS: H - 10:35:34. 30 ¹⁰ N., 138 ⁰ E. South of Honshu, Japan. Depth: about 500 km.
9	(W)Z (L)E (L)N (L)E (L)E	eP eS i eSS eSSS	11 14 27 24 30 35 49 51 33 51	COMPRESSION. Lahore P - 11:13:59. S - :23:42. USCGS: H - 11:02:15. 54 ¹⁰ N., 178 ¹⁰ W. Andreanof Islands, Aleutian Islands. Mag: 3 (Upp. & Kir.)
9	(W)Z	eP	13 45 53	
9	(W)Z	eP	14 23 58	
9	(W)Z (W)Z	e e(I)	14 41 16 42 58	

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
9	(W) ZL	ndcP	17 52 30	USCGS: H - 17:40:13. 51 ¹ / ₂ °N., 170 ¹ / ₂ °W. Andreanof Islands, Aleutian Islands.
	(L) EN	e	18 02 31	
	(L) E	eS	38	
	(L) N	eScS	48	
9	(W) Z	eP	20 38 30	COMPRESSION. Lahore IT # 20:36:06. eS - :46:09. USCGS: H - 20:23:56. 52 ¹ / ₂ °N., 169°W. Fox Islands, Aleutian Islands.
	(L) N	ePP	39 40	
	(L) NE, (W) N	iS	46 56	
	(W) N	eScS	47 08	
9	(W) Z	e	22 25 55	
9	(W) Z	iP	22 43 13	COMPRESSION. Lahore I - 22:45:48. USCGS: H - 22:33:56. 51°N., 177°W. Andreanof Islands, Aleutian Islands.
9	(W) ZE	eP	23 01 55	USCGS: H - 22:49:47. 51 ¹ / ₂ °N., 177°W. Andreanof Islands, Aleutian Islands.
10	Z, (W) Z	iP	03 37 55	COMPRESSION. USCGS: H - 03:25:20. 53°N., 139°W. Fox Islands, Aleutian Islands.
	Z	eCP	38 01	
	Z	e	03	
	(L) N, N	iSKS	48 19	
	E, N	eS	21	
	N, (L) Z, (W) N	eScS	38	
10	Z	ePKP	05 31 17	USCGS: H - 05:12:08. 15 ¹ / ₂ °N., 98°W. Near coast of Oaxaca, Mexico. Mag: 6 ³ / ₂ - 7 (Pas.), 6 ¹ / ₂ (Berk.).
	Z, (W) Z	ePKP	24	
	(L) N	ePP	33 35	
	(W) Z, (L) N	e	45	
	(L) NE	i	50	
	(L) NE, N	iKKS	34 52	
	(L) NE	ic	35 08	
	(L) N	i(PPP)	36 53	
	(L) NE	e(SKKS)	40 45	
	(L) N	ePIS	45 22	
	(L) N	eS	50 52	
(L) N	e(SCS)	56 12		
(L) N	M	06 23 06		
10	Z, (W) Z	ePKI	07 47 17	USCGS: H - 07:28:03. 14°N., 91 ¹ / ₂ °W. Guatemala.
	N, (W) N	ePKS	50 46	
10	Z, (W) Z	eP	09 21 41	DILATATION. USCGS: H - 09:09:18. 51°N., 177°W. Andreanof Islands, Aleutian Islands.
	Z	epP	53	
	Z, (L) N	eP	24 46	
	(W) N, N, (L) N	iS	31 55	

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
	(L) E, E	iSKS	09	51 59	
	(L) N	eScS		32 10	
	(L) N	ePS		44	
	(L) N	eSS		37 13	
10	(W) Z	eP	10	49 11	
	(W) ZN	eS		47 30	
10	Z, (W) Z	eP	11	42 42	COMPRESSION.
	Z	iPcP		51	Lahore iP - 11:42:29.
	Z O	i	43	28	S - :52:49.
	(W) Z, Z	ePP		12	Karachi eP - 11:45:13.
	(E) N	iSKS	53	16	(S) - :53:41.
	(L) E, EN	i		19	USCGS: H - 11:29:58.
	E	eSKKS		21	52°N., 154°W.
	EN	eS		32	Kodiak Islands region.
	(W) N, N	eScS		38	Mag: 7 (Pas.), 7½ (Berk).
	(W) E, E	e		44	
10	(W) Z, Z	eP	13	32 34	COMPRESSION.
					USCGS: H - 13:20:14.
					52½°N., 176½°W. Andreanof
					Islands, Aleutian Islands.
10	Z, (W) Z	eP	13	56 14	
	Z, (W) N	e		59 37	
10	(W) Z	ePKP	14	01 45	USCGS: H - 13:43:43.
	(W) Z, Z	e		02 44	15°S., 173°W.
					Samoa Islands.
11	Z, (W) Z	eP	01	58 29	COMPRESSION.
11	Z	eP	03	45 31	DILATATION.
	Z	e		49	Lahore eP - 03:45:13.
	(W) N, E(L) N	iS		46 50	
11	Z	e	07	03 33	USCGS: H - 08:44:33.
					Samoa Islands.
11	Z, (W) N	eP	16	24 42	USCGS: H - 13:12:08.
	(L) NE, N	eSKS		35 13	52½°N., 169½°W.
					Fox Islands, Aleutian Islands.
11	Z	eP	17	53 14	COMPRESSION.
	Z	e		31	Lahore P - 17:52:48.
	N	eSKS	18	03 37	USCGS: H - 17:40:37.
	(E) NE	iS		40	52°N., 168½°W. Fox Islands,
					Aleutian Islands.

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
12	Z, (W) Z	eP	04	29 52	USCGS: H - 04:17:45. 51 $\frac{1}{2}$ °N., 178 $\frac{1}{2}$ °W. Andreanof Islands, Aleutian Islands.
	(L) N	e		37 56	
	(L) E	eS		40 06	
12	(W) Z, Z	eP	11	04 42	COMPRESSION.
12	Z, (W) Z	eP	13	15 53	USCGS: H - 13:03:45. Andreanof Islands, Aleutian Islands.
12	Z, (W) Z	eP	15	09 48	
12	Z, (W) Z	eP	16	04 46	
		ePP		05 48	
		eS		09 45	
	(L) N	IS		49	
	(L) E	e(SS)		11 03	
12	Z, (W) Z	e(P)	16	12 02	
12	Z, (W) Z	eP	21	10 59	
13	Z, (W) Z	eP	02	00 34	
13	Z, (W) Z	eP	05	26 10	COMPRESSION. USCGS: H - 05:13:32. 52 $\frac{1}{2}$ °N., 168 $\frac{1}{2}$ °W. Fox Islands, Aleutian Islands.
	N	ePP		29 28	
	N, (L) E	eSKS		52 32	
	(L) N	IS		35	
	N, (L) E	eScS		43	
13	(W) Z, Z	iP	06	40 25	COMPRESSION. Lahore P - 06:39:41. USCGS: H - 06:30:08. 6 $\frac{1}{2}$ °N., 126 $\frac{1}{2}$ °E. Near coast of Mindanao, Philippines Islands.
	Z	e		49	
	Z	ePcS		45 08	
	(L) N	eS		48 34	
	(L) E	e(PB)		49 00	
	(L) E	eScS		50 12	
13	Z, (W) Z	eP	08	11 57	COMPRESSION. USCGS: H - 07:59:23. 52 $\frac{1}{2}$ °N., 168 $\frac{1}{2}$ °W. Fox Islands, Aleutian Islands.
	H	e		12 34	
	(L) N	eS		22 23	
	(L) IN	eScS		34	
N.B. The clock remained out of order from 0900 GMT of 13th to 0500 GMT of 15th April. Several earthquakes could not be timed accurately.					
14	Z, (W) Z	ePKP	19	36 59	Karachi ePKP - 19:36:52. USCGS: H - 19:17:57. 15 $\frac{1}{2}$ °S., 173°W. Samoa Islands. Felt: Apia. Mag: 8 (Pas.), 7 $\frac{1}{2}$ - 7 $\frac{3}{4}$ (Berk).
	Z	e		39 25	
	(L) E	i		36	
	N	ePP		52	
	(L) N	eSKS		44 13	

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DATE	COMPT.	PHASE	MT		REMARKS
			h.	m. s.	
14	Z, (W) Z	iP	21	11 19	DILATATION. Lahore iP - 21:10:49. Karachi eP - 21:11:38. USCGS: H - 20:59:00. 50 $\frac{1}{2}$ ^o N., 179 ^o W. Andreanof Islands, Aleutian Islands.
	NE, (W) E	eS		21 30	
15	(W) Z	eP	08	52 37	
15	Z, (W) Z	eP	10	50 50	COMPRESSION.
	Z	ePcP		58	Lahore P - 10:50:23
	Z	ePP		53 48	USCGS: H - 10:38:37.
	(L) N, N	iS	11	00 52	51 $\frac{1}{2}$ ^o N., 179 ^o W. Andreanof
	(L) E	i		57	Islands, Aleutian Islands.
(L) E	eScS		01 10		
15	(W) Z	eP	13	30 28	
	(W) N, NE	e(S)		33 33	
15	Z, (W) Z	eP	18	24 45	COMPRESSION.
	Z	ePcP		52	Lahore P - 18:24:17.
	Z, (W) Z, N	ePP		27 45	USCGS: H - 18:12:33.
	(L) NE, NE	oS		34 47	51 $\frac{1}{2}$ ^o N., 179 ^o W. Andreanof Islands, Aleutian Islands.
15	Z, (W) Z	eP	20	05 59	COMPRESSION. USCGS: H - 19:53:39. 51 $\frac{1}{2}$ ^o N., 176 ^o W. Andreanof Islands, Aleutian Islands.
15	Z, (W) Z	iP	21	45 46	DILATATION.
	Z	ePcP		51	Lahore iP - 21:45:22.
	N	i(pP)		46 01	USCGS: H - 21:33:05.
	(W) Z, Z	ePP		49 01	52 $\frac{1}{2}$ ^o N., 167 ^o E. Fox Islands,
	(L) N, N	iSKC		56 11	Aleutian Islands.
	N, E	eS		18	
	N, E	iScS		28	
	(L) E, E	i		35	
15	(W) Z, Z	eP	23	06 19	
	(L) N, E	e(S)		07 33	
16	Z, (W) Z	iP	04	12 21	DILATATION.
	Z	i		33	Lahore iP - 04:11:51.
	Z	i		55	iS - :18:00.
	Z, N	iPcP		13 25	oS - :20:42.
	Z, N	iPP		14 09	Karachi iP - 04:12:01.
	NE	i		19	iPP - :13:54.
	Z	i		24	iS - :18:18.
	E, N	iPP		17 11	USCGS: H - 04:04:04.
	E	i		18 18	4 $\frac{1}{2}$ ^o N., 107 $\frac{1}{2}$ ^o E. Western Java Sea.

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
	(L)N (L)N,E E	iS i i	04	18 57 59 19 09	Depth: about 600 km. Mag: 7 $\frac{1}{2}$ (Pas.)
13	(W)Z,Z Z,(W)Z (W)E	eP e e	04	41 49 42 48 45 47	
13	(W)Z	eP	05	43 43	
13	(W)Z (W)N	eP eS	08	05 42 06 59	
16	(W)Z,Z (W)N,E	eP eS	10	34 41 35 59	DILATATION.
16	(W)Z	eP	13	10 01	
16	(W)Z,Z (W)Z,Z E	eP e e	15	19 35 20 22 24 01	COMPRESSION.
16	(W)Z,Z	eP	18	05 25	COMPRESSION.
16	(W)Z,Z	eP	18	33 36	
16	(W)Z (W)N,E	eP eS	20	57 37 58 49	
16	(W)Z,Z	eP	23	00 44	DILATATION.
17	(W)Z,Z	eP	04	48 35	USCGS: H - 04:35:47. 58°N., 154°W. Kodiac Islands region.
17	Z,(W)Z (W)Z,Z E Z,(W)Z,(L)Z (L)N E,N (L)N	iPKT epPKT e eP e e(SKd) eSS	08	26 39 27 27 28 02 15 33 05 10 44 51	DILATATION. Karachi P - 08:26:40. USCGS: H - 08:07:58. 20°S., 176°W. Tonga Island, Depth: about 200 km.
17	(W)Z (W)Z,Z E (L)N (L)NE,NE (L)N	eP iP e eS i eSeS	09	40 24 41 25 42 24 50 45 49 51 01	DILATATION. USCGS: H - 09:27:54. 52 $\frac{1}{2}$ °N., 171°W. Fox Islands, Aleutian Islands.
17	(W)Z,Z	eP	10	47 11	

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s	
17	Z, (W) Z	eP	13	37 34	COMPRESSION.
	(W) Z	ePoP		40	Karachi P - 13:38:00.
	Z	e		46	USCGS: H - 13:24:58.
	Z	ePP	40	49	52 $\frac{1}{2}$ °N., 169°W. Fox Islands,
	N	eSKS	47	55	Aleutian Islands.
	(L) NE, N	eS		59	
	(L) NE	eScS	49	13	
	(L) D	e		35	
(L) N	e(S)		53 53		
17	Z, (W) Z	eP	15	20 06	COMPRESSION.
	Z	e		17	USCGS: H - 15:07:24.
	Z, (W) Z	ePP	23	25	54°N., 164°W.
	(L) E, N	eSKS	30	32	South of Unimak Island.
	N	eS		39	
	(L) N	eScS		52	
17	Z, (W) Z	ePKT	18	28 40	COMPRESSION.
	(L) N, (W) N	ePKS	32	07	Karachi PKT - 18:28:54.
	(L) N	e		29	USCGS: H - 18:09:25.
	(L) E	e(SKS)	35	20	14 $\frac{1}{2}$ °N., 92°W.
	(L) N	e		53	Mexico-Guatemala border.
17	(W) Z, Z	eP	19	07 34	
17	(W) Z	eP	23	20 40	
	E, (W) N	eS		22 01	
18	(W) Z, Z	eP	00	28 51	COMPRESSION.
	Z, (W) Z	e		29 12	USCGS: H - 00:16:17.
	Z	ePP	32	00	52°N., 171°W. Fox Islands,
	(L) N, E	eSKS	39	08	Aleutian Islands.
	(L) N	eS		16	
	(L) E	eScS		25	
18	Z, (W) Z	eP	05	30 19	
	NE	ePP		53	
	(L) N, N	eS		34 45	
18	Z, (W) Z	eP	07	12 24	COMPRESSION.
	NE	eS		22 25	USCGS: H - 07:00:06.
					51 $\frac{1}{2}$ °N., 176°W. Andreanof Islands,
					Aleutian Islands.
18	Z, (W) Z	eP	07	56 39	
18	(W) Z	e	13	40 10	
18	Z, (W) Z	eP	21	03 55	
	(L) E	e(S)		08 10	

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DATE	COMPT.	PHASE	TIME			REMARKS
			h.	m.	s.	
18	Z, (W)Z (L)E	eP eS	22	23	41 32 17	COMPRESSION. USCGS: H - 22:13:10. 51°N., 142°E. South of Honshu, Japan.
19	(W)Z, Z	eP	00	57	00	
19	(W)Z, Z (W)N	eP e(S)	02	18	29 59	
19	(W)Z, Z (L)N	eP e(SKS)	07	17	23 27 52	COMPRESSION.
19	Z, (W)Z	eP	07	39	27	
19	Z, (W)Z	eP	08	52	49	DILATATION. USCGS: H - 08:39:37. 82°E., 155½°E. Solomon Islands.
19	(W)Z, Z	eP	11	32	50	
19	Z, (W)Z (W)Z Z Z, (W)Z Z, E N, (W)N (L)NE N E (L)E (L)N	iP ePcP i(pP) i cPP oSKS i eS iScS i eS	15	57	33 41 51 58 11 00 50 07 58 59 08 05 11 38 17 41	DILATATION. Lahore P - 15:57:08. S - 13:07:15. USCGS: H - 15:44:53. 51½°N., 188½°W. Fox Islands, Aleutian Islands.
19	Z, (W)Z E, (L)E	eP eS	17	44	24 48 33	
19	Z, (W)Z (W)Z, Z E Z (W)Z, Z Z, (W)Z Z (L)N, (W)N, NE NE, (W)N (L)E, N, (W)N N, (L)N, (W)N (W)Z, Z Z, (W)Z (W)N, E	iP i i i iPP i e(PPP) iSKS iS c o(S) ePKP eP e(P)PKS	22	32	10 12 42 51 35 28 33 05 37 31 42 38 44 44 45 48 04 50 10 58 17 23 01 45	DILATATION. Lahore P - 22:31:47. S - :41:50. Karachi P - 22:32:20. SKS - :43:03. IS - :27. USCGS: H - 22:19:26. 52°N., 169½°W. Fox Islands, Aleutian Islands. Mag: 7 - 7¼ (Par.)

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
21	Z, (W)Z	eP	23	30 15	USCGS: H - 23:17:52. 52°N., 176°W. Andreanof Islands, Aleutian Islands.
22	Z, (W)Z E, (L)E (L)NE	eP eS eSS	00	21 52 24 37 55	Lahore P - 00:20:27. S - :22:08. Karachi P - 00:22:09. S - :27:26. USCGS: H - 00:18:16. 30°N., 84°E. Tibet.
22	(W)Z, Z	e	01	44 52	
22	Z, (W)Z Z (L)E, L NE, (L)N (L)N (L)N	eP ePP e eS eSS	01	45 51 46 02 48 22 31 40 50	DEFLATION. Karachi P - 01:48:07. (S) - :51:19. USCGS: H - 01:42:15. 30°N., 84°E. Tibet.
22	(W)Z, Z (L)E (L)NE, L N	eP eS e e	05	33 43 37 29 34 38	USCGS: H - 05:29:31. 51°N., 91°E. Tibet.
22	(W)Z, Z (W)E, L	eP eS	18	59 30 59 48	
22	(W)Z, Z (W)E, E	eP eS	20	50 01 51 25	
22	(W)Z, Z E, (W)E	eP e(S)	21	40 07 42 52	
22	Z, (W)Z	eP	23	42 29	COMPRESSION?
23	(W)ZE (W)E, E	eP eS	00	33 20 34 33	
23	(W)Z, Z	eP	04	51 34	
23	Z, (W)Z	eP	19	24 48	
23	(W)Z, Z E, (L)E N, (L)N L, (L)E	eP e(S) e e	20	45 12 48 34 40 50	COMPRESSION.
23	(W)Z, Z (W)N	eP eS	21	55 21 48	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
20	Z, (W)Z (L)NE	e e	07	08	02 17 48	USCGS: H - 06:48:04. 54 $\frac{1}{2}$ °S., 148 $\frac{1}{2}$ °E. South Pacific Ocean.
20	(W)Z,Z	e(P)	10	35	56	
20	(W)Z,Z	eP	11	07	37	
20	Z, (W)Z (W)Z (W)Z,Z (L)E (L)E (L)N (L)E (L)N	eP ePct e iPP eSKS eS iSeS i	12	43	16 21 45 11 46 35 53 41 48 54 00 04	COMPRESSION. USCGS: H - 12:30:37. 6°S., 147 $\frac{1}{2}$ °E. New Coast of New Guinea.
20	(W)Z,Z (W)E,E	eP eS	13	38	46 40 10	
20	(W)Z,Z	eP	14	52	52	
20	(W)Z,Z	eP	18	06	57	USCGS: H - 17:54:20. 52°N., 168°W. Fox Islands.
20	(W)Z,Z	eP	18	19	59	
20	(W)Z,Z	eP	18	25	15	
20	(W)Z,Z	eP	20	06	43	DILATATION. USCGS: H - 19:54:24. 51°N., 177°W. Andreanof Islands, Aleutian Islands.
20	(W)Z (W)E,E	eP eS	23	34	56 36 42	
21	(W)Z,Z	eP	13	47	44	
21	(W)Z (L)E (L)E	eP iS iSS	18	34	49 38 08 25	
21	Z, (W)Z (L)NE, L (L)E (L)E E, (L)N, N (L)N, E (L)E	ePKP ePP ePKS iSKS iSKKS i(P)S e(SS)	21	31	30 33 31 35 05 38 42 40 22 43 40 50 23	Lahore P - 21:31:31. USCGS: H - 21:12:26. 7°N., 72°W. Columbia- Venezuela border. Mag: 6 $\frac{1}{2}$ - 6 $\frac{3}{4}$ (Pas.)
21	(W)Z		21	42	01	

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DATE	COMPT.	PHASE	GMT		REMARKS
			h. m. s.		
23	Z, (W)Z	eP ^{PP}	22	18 15	Lahore P - 22:18:29. USCGS: H - 21:58:35. 27°S., 68°W. North Chile - Argentina border.
	Z	ePP		21 28	
	Z	ePXS		54	
24	(W)Z, Z	eP	00	02 59	
	(W)N	e(S)		03 33	
24	Z, (W)Z	eP	02	03 33	
24	(W)Z, Z	eP	10	59 59	DILATATION.
24	Z, (W)Z	eP	13	14 31	
24	(W)Z, Z	eP	16	44 52	
24	Z, (W)Z	eP	19	16 40	DILATATION. Lahore P - 19:17:25. S - :23:09. Karachi P - 19:17:01. S - :22:36. USCGS: H - 19:10:05. 36°N., 28½°E. Turkey. foreshock. Mag: 6½ - 7 (Pas.), 7 - 7½ (Berk).
	Z	i		45	
	Z, (W)Z	c		55	
	Z	a		17 18	
	Z, NE	ePP		54	
	Z	ePcP		19 26	
	(W)N, (L)N	i		20 53	
	(L)E, E, (W)N	i		21 08	
	EN, (W)N	iS		48	
	E	e(PoS)		23 00	
	E	cSS		53	
24	(W)Z	eP	21	45 12	
	(W)E	cS		45	
25	Z, (W)Z	eP	02	32 07	COMPRESSION. Lahore P - 02:32:54. S - :38:39. Karachi IP - 02:32:28. USCGS: H - 02:25:36. 36½°N., 29°E. Near south coast of Turkey. Mag: 7 - 7½ (Pas.), 7½ (Berk).
	Z	i		33	
	N	iPP		33 14	
	Z	iPPF		25	
	(W)EN	iS		37 17	
	NE	i		20	
	(W)E	iSS		39 04	
25	Z, (W)Z	eP	03	03 35	
25	(W)Z, Z	eP	04	43 29	
25	Z	a	07	01 17	
25	Z, (W)Z	eP	07	15 26	COMPRESSION. Lahore P - 07:14:33. USCGS: H - 07:09:20. 45°N., 100°E. Outer Mongolia.
	(L)E	e		20 37	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
23	Z, (W) Z	eP	22	18	15	Lahore P - 22:18:29. USCGS: H - 21:50:35. 27°S., 68°W. North Chile - Argentina border.
	Z	ePP		21	28	
	Z	ePXS			34	
24	(W) Z, Z	eP	00	02	59	
	(W) N	e(S)		03	33	
24	Z, (W) Z	eP	02	08	33	
24	(W) Z, Z	eP	10	59	59	DILATATION.
24	Z, (W) Z	eP	13	14	31	
24	(W) Z, Z	eP	16	44	52	
24	Z, (W) Z	eP	19	16	40	DILATATION. Lahore P - 19:17:25. S - :23:09. Karachi P - 19:17:01. S - :22:38. USCGS: H - 19:10:05. 36°N., 28½°E. Turkey. foreshock. Mag: 6½ - 7 (Pas.), 7 - 7½ (Berk).
	Z	i			45	
	Z, (W) Z	e			55	
	Z	e		17	18	
	Z, NE	ePP			54	
	Z	ePP		19	28	
	(W) N, (L) N	i		20	53	
	(L) E, E, (W) N	i		21	08	
	EN, (W) N	iS			48	
	E	e(PoS)		23	00	
E	eSS			53		
24	(W) Z	eP	21	45	12	
	(W) E	eS			45	
25	Z, (W) Z	eP	02	32	07	COMPRESSION. Lahore P - 02:32:54. S - :38:39. Karachi 1P - 02:32:28. USCGS: H - 02:25:36. 36½°N., 29°E. Near south coast of Turkey. Mag: 7 - 7½ (Pas.), 7½ (Berk).
	Z	i			33	
	N	iPP		33	14	
	Z	iPP			25	
	(W) EN	iS		37	17	
	NE	i			20	
	(W) E	iSS		39	04	
25	Z, (W) Z	eP	03	03	35	
25	(W) Z, Z	eP	04	43	29	
25	Z	e	07	01	17	
25	Z, (W) Z	eP	07	15	26	COMPRESSION. Lahore P - 07:14:33. USCGS: H - 07:09:20. 45°N., 100°E. Outer Mongolia.
	(L) E	e		20	37	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
25	Z, (W) Z	iP	07	27	43	COMPRESSION.
	NZ	iPcP			50	Karachi P - 07:28:04.
	N	ePP	30	58		SKS : 38:34.
	E	c	37	54		USCGS: H - 07:15:15.
	(L) N, NE	eS	58			52°N., 173½°W. Androanof Islands,
	(L) E	i	38	01		Aleutian Islands.
	N, (L) E, (W) N	iScS			17	
25	Z, (W) Z	eP	07	58	36	USCGS: H - 07:52:03.
	NE	eS	08	03	47	Turkey aftershock.
25	Z, (W) Z	eP	08	27	28	COMPRESSION.
25	(W) Z, Z	e	08	44	38	
25	Z, (W) Z	eP	10	27	50	Karachi P - 10:27:41.
	(L) E	iPcP			11	USCGS: H - 10:16:18.
	(L) E	e			36 58	4½°S., 134°E. Off coast of
	(L) EN, NE	eS			37 15	New Guinea.
	NE	ePS			47	
	(L) E	eSS			51 55	
25	(W) E, E	eP	10	39	26	COMPRESSION.
25	Z, (W) Z	eP	11	16	34	Karachi P - 11:16:27.
	E	ePcP			17 14	DILATATION.
	Z	ePP			18 56	Lahore P - 11:15:55.
	E	eS			24 58	DILATATION.
						USCGS: H - 11:06:02.
					1½°S., 126°E. Molucca Passage.	
25	Z	e	11	45	28	
25	(W) Z, Z	eP	13	38	39	
25	Z, (W) Z	eP	14	20	37	USCGS: H - 14:07:58.
	Z	ePP			23 53	60½°N., 145°W. Near south
	(L) N	eSKS			31 00	coast of Alaska.
	NE	eScS			20	
25	Z, (W) Z	eP	17	57	25	COMPRESSION.
	(W) Z, Z	ePcP			37	USCGS: H - 17:45:14.
	(L) N	e	18	01	12	51½°N., 180. Androanof Islands.,
	(L) N, N	iS			07 25	Aleutian Islands.
	(L) E, E	c			28	
	NE	eScS			51	
25	Z, (W) Z	eP	18	58	22	COMPRESSION.

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DATE	COMPT.	PHASE	CMT		REMARKS
			h.	m. s.	
25	Z, (W) Z	eP	19	05 38	COMPRESSION.
25	(W) Z, Z	eP	21	23 31	DILATATION.
	(W) N, E	eS		24 48	Lahore P - 21:24:19.
26	(W) Z, Z	eP	00	48 09	
26	Z, (W) Z	iP	02	13 35	DILATATION.
	Z	iPg		58	Lahore P - 02:13:15.
	Z	iSP	14	16	S - :14:13.
	(L) NE, Z, E	i		28	Karachi P - 02:14:35.
	(L) N, E	i		40	COMPRESSION?
	E	iSg	15	23	IS - :16:40.
					USCGS: H - 02:11:52.
					37°N., 70½°E. Hindukush. Felt: Parachinar. Depth: about 200 km.
26	Z, (W) Z	eP	04	44 59	COMPRESSION.
26	(W) Z	eP	06	40 01	Lahore P - 06:40:50.
	Z	eP		04	S - :46:37.
	Z	e(P)		56	Karachi P - 06:40:22.
	(L) E	e	44	55	COMPRESSION.
	(L) N, E	iS	45	17	USCGS: H - 06:33:32.
	(L) E	i		21	36½°N., 29°E.
	(L) NE, N	e(SS)	47	16	Turkey aftershock.
26	Z, (W) Z	eP	10	36 04	USCGS: H - 10:23:17. 60°N., 147°W. Near south coast of Alaska.
26	Z, (W) Z	eP	15	13 54	COMPRESSION.
	(L) NE, N	iS		27 19	Lahore P - 15:13:12.
	E, N	e(SoS)		28 48	S - :26:01.
	(L) E	e		30 04	USCGS: H - 15:00:22.
	(L) N	eSC		31 23	45°N., 148°E. Kurile Islands.
26	(W) Z, Z	eP	16	15 36	
27	Z, (W) Z	eP	00	19 52	COMPRESSION.
	Z	iP		20 03	Lahore P - 00:19:12.
	(L) E	iP		22 11	S - :26:53.
	(L) E, N	i		24 00	Karachi P - 00:19:36.
	(L) E	e		27 52	USCGS: H - 00:09:47.
	(L) N, N	eS		28 01	0°, 121½°E. Near coast of
	(L) E, E	i		05 00	Celebes. Depth: about 60 km.
27	(W) Z, Z	eP	00	46 25	

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
27	Z, (W) Z E L N, N L E	eP eP eS eScS	02 52 00 55 18 05 02 26 35	COMPRESSION. USCGS: H - 02:52:54. 7°N., 166°W. Fox Islands, Aleutian Islands.
27	Z, (W) Z	eP	04 32 24	COMPRESSION. USCGS: H - 04:19:20. Near coast of central Chile. Felt: Santiago.
27	Z (W) E E	eP eS	13 01 02 11.10	USCGS: H - 12:48:45. Andreaf Islands, Aleutian Islands.
27	(W) Z, E (W) E (W) N, E	eP eS e	15 27 10 29 00 01	Lahore P - 15:27:26.
27	(W) Z, Z	eP	22 04 12	
28	(W) Z, Z	eP	00 14 39	USCGS: H - 00:00:15. New Britain Region. Felt: Warramung, Rabaul and Karoia.
28	Z, (W) Z ZE Z, (W) Z Z NE E (L) N (W) Z, Z	eP i iP e e e i P	01 33 55 34 08 40 37 50 07 43 14 45 11 03 02	COMPRESSION. Lahore P - 01:33:13. Karachi iP - 01:33:46. DILATATION. USCGS: H - 01:23:40. 7°N., 127°E. Off coast of Mindanao, Phillipine Islands. Mag: 5 $\frac{3}{4}$ - 6 (Pas.)
28	(W) Z, Z	e	02 02 24	
28	Z Z (L) N (L) N NE, (L) E	eP eP eSKS eS eScS	10 49 41 59 11 00 02 30 33	Lahore P - 10:49:12. S - :59:36. USCGS: H - 10:36:41. 6°S., 155°E. Solomon Island. Depth: about 60 km.

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DATE	COMPT.	PHASE	GMT		REMARKS
			h. m. s.		
28	Z	cP	15	01 30	COMPRESSION?
	(W)Z	cPcP		35	Karachi P - 15:01:40.
	Z	i		40	COMPRESSION.
	Z	cPP	04	45	Lahore P - 15:01:05.
	(L)N, NE	iSKS	11	50	DILATATION.
	(L)E, (W)N	iS		50	(S) - :11:22.
	NE	cScS	12	09	USCGS: H - 14:48:52.
(L)E	c(S)S	17	40	52 $\frac{1}{2}$ °N., 168 $\frac{1}{2}$ °W. Fox Islands, Aleutian Islands.	
28	Z	eP	17	17 09	
28	Z	eP	19	02 29	USCGS: H - 18:55:04. Northern Sumatra.
28	Z	eP	20	16 04	COMPRESSION.
	Z	ePcP		11	Lahore P - 20:15:36.
	N, (L)N	eS	20	15	COMPRESSION.
					USJIS: H - 20:03:42. 50 $\frac{1}{2}$ °N., 178°W. Andreanof Islands, Aleutian Islands.
28	(W)N, Z	eP	20	49 34	
28	Z, (W)N	eP	21	49 08	
28	Z, (W)N	eP	23	51 55	USCGS: H - 23:30:14. 52°N., 166°W. Fox Islands, Aleutian Islands.
29	Z	e	04	41 32	
29	Z	eP	04	42 40	USCGS: H - 04:30:04.
	ZE	cPP		45 53	52 $\frac{1}{2}$ °N., 160 $\frac{1}{2}$ °W. Fox Islands, Aleutian Islands.
	(L)N, N	iSKS		53 05	
	(L)E	iS		07	
	(L)EN	iScS		19	
29	Z, (W)Z	eP	04	49 49	COMPRESSION.
	(L)NE	eSKS	05	00 13	USCGS: H - 04:37:12.
	NE	eS		16	52 $\frac{1}{2}$ °N., 169°W. Fox Islands, Aleutian Islands.
29	Z, (W)Z	eP	04	57 10	
29	(W)Z, Z	eP	05	12 35	
	(W)N, N	eS		14 13	
29	Z, (W)Z	eP	09	32 40	USCGS: H - 09:22:14.
	N, (L)N	eS		41 14	44°N., 147°E. Kurile Islands.

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
29	(W)Z,Z	e	10 34 06	USOGS: H - 10:11:53. 22°S., 66°W. Argentina - Bolivia border. Felt: Antofagasta. Depth: about 200 km.
29	Z	eP	13 10 41	
29	(W)Z,Z	eP	19 32 40	USOGS: H - 19:22:58. 5½°N., 126°E. Near south coast of Mindanao, Phillipine Islands. Depth: about 400 km.
29	Z, (W)Z	eP	21 05 30	COMPRESSION.
	EN	e(PcP)	06 23	Lahore P - 21:04:59.
	(W)Z,Z	ePP	07 43	S - :12:19.
	N	e	12 43	Karachi P - 21:05:04.
	(L)E	iS	13 11	S - :12:32.
	(L)N	i	15	USOGS: H - 20:55:57. 9°S., 107°E. Off south coast of Java.
30	Z	e	03 42 56	USOGS: H - 03:32:49. 10½°N., 127°E. Off coast of Samar, Phillipine Islands.
30	(W)Z,Z	eP	13 59 53	
30	Z, (W)Z	eP	15 32 12	
30	Z, (W)Z	eP	18 11 28	
30	Z, (W)Z	eP	22 22 59	

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
1	(W) Z, Z	eF	00 48 28	USCGS: H - 00:45:00. 41 $\frac{1}{2}$ ^o N., 78 $\frac{1}{2}$ ^o E. Kirghiz - China Border.
	(L) N, (W) N	eS	51 13	
	(W) N	eSS	25	
	(L) N	eL	53 12	
1	(W) Z	eP	03 13 18	
	(W) E, E	e(S)	15 43	
1	(W) Z	e	04 02 23	
1	(W) Z	eP	11 04 27	
1	(W) Z, Z	eP	13 57 51	COMPRESSION.
	F, (L) N, (W) E	eS	14 02 41	
1	(W) Z, Z	eP	15 02 27	
1	(W) ZE	eP	18 50 20	
	(W) EN	eS	19 01 36	
1	(W) Z, Z	eP	20 03 27	
	(W) ZN	e(S)	04 53	
1	Z, (W) Z	eP	23 40 40	COMPRESSION. USCGS: H - 23:28:09. 52 $\frac{1}{2}$ ^o N., 171 ^o W. Fox Islands, Aleutian Islands.
	Z	e	41 05	
	N, (W) NE	eSKS	50 59	
	N	eS	51 02	
2	Z, (W) Z	eP	02 03 02	COMPRESSION. 4 $\frac{1}{2}$ ^o S., 153 ^o E. Near New Britain.
	NE	eSKS	13 34	
	E, (L) N	eScS	59	
2	Z, (W) Z	eP	02 34 54	COMPRESSION. USCGS: H - 02:22:18. 54 ^o N., 166 ^o W. Fox Islands, Aleutian Islands.
	N	eS	45 20	
2	Z, (W) Z	eP	04 07 08	COMPRESSION. Lahore - eP: 04:07:08. eS: :16:40. USCGS: H - 03:55:34. 72 ^o N., 67 $\frac{1}{2}$ ^o W. Baffin Bay. Mag: 6 $\frac{1}{4}$ - 6 $\frac{1}{2}$ (Pas.), 6 (Berk), 5.8 (Upp. & Kir.)
	N, (W) Z	e	15	
	(W) Z	ePcP	26	
	Z, (L) N	i	33	
	(L) N, E	eS	16 30	
	(W) E, N	e(ScS)	17 21	
	(L) N	e	26	
2	(W) ZN	e	05 32 19	
2	Z, (W) Z	eP	07 33 28	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
2	(W)Z,Z (W)NE,N	eP eS	10	28	27 30 04	H - 10:26:21. 37½°N., 72°E. Afghanistan. Felt: Faizabad. $\Delta = 2^{\circ}.4$ Lahore P - 10:27:57. S - :29:05.
2	Z, (W)Z N, (W)N N	ePKP e e	10	54	16 55 55 59 57	USCGS: H - 10:34:14. 56½°S., 123°W. South Pacific Ocean.
2	Z, (W)Z Z (W)Z,Z (L)N	eP iPcP e ePP	11	41	49 52 42 00 45 01	COMPRESSION. Lahore P - 11:41:26. USCGS: H - 11:29:13. 52½°N., 169°W. Fox Islands, Aleutian Islands. Mag: 6¼ (Upp. & Kir.)
2	Z, (W)Z (W)Z Z, (W)Z Z NE, (W)N N	eP iFcP i ePP iGKS eScS	11	51	28 32 42 54 43 12 01 54 02 05	COMPRESSION. Lahore eP - 11:51:08. Karachi eP - 11:51:48. USCGS: H - 11:38:52. 52½°N., 169°W. Fox Islands, Aleutian Islands. Mag: 6½ (Upp. & Kir.)
2	Z, (W)Z (W)N, (L)N	eP eS	14	05	47 15 59	COMPRESSION. USCGS: H - 13:53:27. 51°N., 176½°W. Andreanof Islands, Aleutian Islands.
2	Z, (W)Z	e	20	11	07	
2	Z, (W)Z Z Z Z Z F, (L)N N, (L)N (L)N	iP! i e(PcP) epP epPP eS i(ScS) e(ss)	21	46	02 12 41 47 55 50 13 53 42 54 56 57 05	DILATATION. Lahore P - 21:45:30. S - :52:44. Karachi P - 21:45:43. S - :53:15. USCGS: H - 21:36:25. 7½°S., 120°E. Depth: about 600 km. Flores Sea.
2	(W)Z,Z	e	22	14	16	
3	(W)Z,Z	e	01	12	11	
3	(W)Z (W)E	eP eS	02	48	22 52	
3	Z (L)N, NE (L)N (L)N	eP eS eScS eL	07	22	37 32 40 33 03 53 41	DILATATION. USCGS: H - 07:10:25. 51°N., 179½°E. Andreanof Islands, Aleutian Islands.

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
3	Z	eP	14	52 48	COMPRESSION. USCGS: H - 14:43:03. 12 $\frac{1}{2}$ ^o N., 125 $\frac{1}{2}$ ^o E. Near East Coast of Samar, Phillipine Islands.
	(L)N	eS	15	00 41	
3	Z, (W)N	eP	16	27 15	
4	Z, (W)Z	eP	10	17 24	COMPRESSION?
	Z, (W)Z	e		26	Karachi P - 10:17:20.
	Z, (W)Z	i !		28	USCGS: H - 10:05:45.
	(W)Z, Z	e(PcP)		32	3 $\frac{1}{2}$ ^o S., 137 ^o E.
	Z	ePP		20 08	Western New Guinea.
	(L)N	iS		26 59	Mag: 6.4 (Upp. & Kir.)
	E	e		27 06	
4	Z, (W)Z	eP	11	35 32	USCGS: H - 11:22:53. 52 $\frac{1}{2}$ ^o N., 166 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands.
4	Z, (W)Z	eP	13	12 57	
4	Z, (W)Z	eP	14	57 49	COMPRESSION.
	E	ePP		58 28	USCGS: H - 14:52:20.
	E	eS	15	02 13	37 ^o N., 96 $\frac{1}{2}$ ^o E.
	(L)N	e		22	Chinghai Province, China.
4	Z, (W)Z	eP	16	40 39	COMPRESSION.
4	(W)Z	e	20	51 39	
4	(W)Z	eP	23	30 14	
	(W)E, N	eS		32 03	
4	(W)Z, Z	eP	23	37 11	
	(L)N, E	eS		38 25	
	(L)N1	i(SS)		39	
4	Z, (W)Z	eP	23	43 57	COMPRESSION.
5	(W)EZ	e	00	20 32	
5	(W)Z	eP	19	29 20	
	(L)N	e(S)		32 06	
	(L)N	eL		34 17	
6	Z, (W)Z	eP	01	02 55	
	(W)NE	e(S)		05 47	
	(L)N, E	e		56	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
6	Z, (W) Z	eP	01	38	44	
	(W) E	e(S)		41	31	
6	(W) ZE	eP	05	26	41	
6	(W) ZF	eP	06	43	16	
	(W) EN	eS		44	36	
6	(W) Z, Z	e	10	19	13	
6	(W) Z, Z	eP	11	30	41	COMPRESSION. USCGS: H - 11:18:15. 52°N., 173°W. Andreanof Islands, Aleutian Islands.
	(W) F, N	eS		40	57	
6	(W) Z, Z	eP	11	32	14	COMPRESSION. USCGS: H - 11:19:47. 52°N., 173°W. Andreanof Islands, Aleutian Islands.
	(W) Z	ePcP			19	
	(L) N, NF	eS		42	30	
	(L) N	eScS			43	
6	(W) Z, Z	eP	13	48	56	
	(L) N	e(S)		53	06	
6	(W) Z, Z	eP	14	16	46	
	(L) N	e(S)		21	03	
6	(W) Z, Z	eP	14	23	15	
	F	e(S)		26	09	
	(L) N	e		27	27	
	N	e			42	
6	(W) Z, Z	eP	15	10	26	DILATATION. USCGS: H - 15:06:47. Northern Iran. Mag: 5.5 (Kir.)
	(L) N	iS		13	15	
	N, (W) F, N	e			24	
6	(W) Z	eP	21	51	32	USCGS: H - 21:41:30. 10½°N., 127°E. Off Coast of Mindanao, Phillipine Islands.
7	(W) Z, Z	eP	05	48	42	COMPRESSION. USCGS: H - 05:36:32. 51½°N., 179½°E. Andreanof Islands, Aleutian Islands.
	(L) N, NF	iS		58	46	
	N	e			49	
	(L) N	e(ScS)		59	11	
7	(W) Z	e	05	55	51	
7	Z, (W) Z	eP	09	22	27	DILATATION. USCGS: H - 09:09:53. 51½°N., 170°W. Fox Islands, Aleutian Islands.
	Z	ePP		25	42	
	N	eSKS		32	50	
	N, (L) N	eS			54	

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DATE	COMPT	PHASE	GMT h. m. s.	REMARKS
7	(W)Z,Z	eP	22 20 40	COMPRESSION. USCGS: H - 22:10:03. 30°N., 137½°E. South of Honshu, Japan.
8	Z (W)E (W)N,N (W)N,Z (L)N	eP ePP eS e e	14 27 38 48 30 02 00 53	DILATATION. Lahore eP - 14:27:00. e(S) - :28:45. USCGS: H - 14:24:30. 41½°N., 75°E. Kirghiz, U.S.S.R.
8	Z	ePKP	20 20 05	USCGS: H - 20:00:55. 15½°S., 170°E. Fizi Islands. Depth: about 400 km.
9	(W)Z,Z (W)E,N (W)NZ (W)E	eP eS i iSS	00 46 31 40 11 15 21	DILATATION. $\Delta = 0.7$ H - 00:44:21.
9	(W)Z,Z	eP	10 57 50	
9	(W)ZN (W)NE	eP eS	14 37 50 30 16	
9	(W)Z,Z	eP	17 53 57	
10	(W)ZE	eP	00 44 21	
10	(W)Z,Z (W)EN	eP eS	12 26 17 28 27	
10	(W)Z	e	17 30 16	
11	(W)ZE	e	00 47 14	
11	(W)Z,Z (L)N,N	eP eS	07 42 36 52 40	USCGS: H - 07:30:22. 51½°N., 170½°W. Andreanof Islands, Aleutian Islands.
11	(W)ZN,Z	e	10 24 30	
11	(W)Z	e	11 57 10	
11	(W)Z,Z	eP	15 07 35	COMPRESSION? USCGS: H - 14:56:30. 52½°N., 160°E. Near East Coast of Kamchatka.
11	(W)Z,Z	eP	19 52 24	COMPRESSION?

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
12	(W)Z,Z	e	05	17 00	
12	(W)Z N	eP eS	06 58 21 07 06 18		USCGS: H - 06:42:27. 53°N., 142°E. Northern Sakhalin. Mag: 6.1 (Upp. & Kir.)
12	Z, (W)Z Z, (W)Z N (L)F N, (W)N, (L)F (W)E	iP e(PP) e i(PoS) eS e	11 38 38 40 48 42 46 43 56 46 12 26		COMPRESSION. Lahore P - 11:38:11. S - :45:28. USCGS: H - 11:29:07. 8½°S., 107½°E. Near South Coast of Java. Mag: 6.7 (Upp. & Kir.)
12	(W)Z,Z	eP	19	47 52	
12	(W)Z (W)E	eP e(S)	20 11 51 13 42		
12	(W)Z,Z (W)FN	eP eS	23 44 29 45 30		
12	(W)Z,Z	e	23	48 34	
13	(W)Z,Z	e	00	49 05	
13	(W)Z,Z N	eP eS	02 29 56 37 05		DILATATION. USCGS: H - 02:20:55. 44°N., 135½°E. Depth: about 300 km. Sikhota Alin, Silesiria.
13	(W)Z,Z N, (L)N (L)N	eP eS eSS	12 27 23 30 41 31 08		
13	(W)Z,Z	eP	13	26 57	COMPRESSION.
13	(W)Z,Z (L)N, (W)F	eP eS	15 29 00 36 39		COMPRESSION. USCGS: H - 15:19:35. 32½°N., 137°E. Depth: about 400 km. South of Honshu, Japan.
13	(W)Z (W)F, N	eP e(S)	19 28 06 29 50		
13	(W)Z,Z	eP	19	26 45	
14	(W)Z,Z	eP	03	09 09	USCGS: H - 02:59:03. 39°N., 140°E. Northern Honshu, Japan.

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
14	(W)Z,Z	e	04	18 43	
14	(W)Z	eP	05	30 54	
14	(W)Z,Z	eP	18	35 33	DILATATION.
14	(W)Z,Z	eP	18	55 58	COMPRESSION. USCGS: H - 18:43:28. Andreanof Islands, Aleutian Islands.
15	(W)ZE	eP	00	11 34	
	(W)E	eS		12 51	
15	Z,(W)Z	eP	01	21 33	DILATATION.
	N	e		22 11	Labore P - 01:21:20.
	N,Z	i		22	S - :22:15.
	(W)E,(L)N	iS		40	USCGS: H - 01:19:58. 35°N., 70°E. Northern Afghanistan.
15	Z,(W)Z	eP	01	55 28	COMPRESSION. USCGS: H - 01:43:05. 51½°N., 175°W. Andreanof Islands, Aleutian Islands.
15	Z,(W)Z	ePKP	02	30 04	COMPRESSION.
	Z,N,(W)Z	ePKS		33 17	USCGS: H - 02:11:05. 17½°N., 93½°W. Depth: about 100 km. Chiapas, Mexico.
15	Z,(W)N	eP	18	41 42	DILATATION.
	(W)N	iS		42 58	H - 18:40:01. 37°N., 67½°E. Hindukush. ∠ = 6.6 Warsak eP - 18:40:51. eS - :41:23.
16	(W)Z,Z	iP	08	05 24	DILATATION.
16	Z,(W)Z	e	08	26 24	
16	(W)Z,Z	ePKP	15	13 49	USCGS: H - 14:54:33. 28°S., 66°W. Depth: about 100 km. Catamarca Province, Argentina.
17	Z,(W)Z	ePKP	03	00 48	COMPRESSION. USCGS: H - 02:42:02. 18°S., 176½°W. Depth: about 60 km. Fiji Islands region.
17	(W)Z,Z	eP	04	51 54	COMPRESSION.



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DATE	COMET.	PHASE	GMT		REMARKS
			h.	m. s.	
14	(W)Z,Z	e	04	18 43	
14	(W)Z	eP	05	30 54	
14	(W)Z,Z	eP	18	35 33	DILATATION.
14	(W)Z,Z	eP	18	55 58	COMPRESSION. USCGS: H - 18:43:28. Andreanof Islands, Aleutian Islands.
15	(W)ZE (W)E	eP eS	00	11 34 12 51	
15	Z,(W)Z N N,Z (W)E,(L)N	eP e i iS	01	21 33 22 11 22 40	DILATATION. Lahore P - 01:21:20. S - :22:15. USCGS: H - 01:19:58. 35°N.,70°E. Northern Afghanistan.
15	Z,(W)Z	eP	01	55 28	COMPRESSION. USCGS: H - 01:43:05. 51½°N.,175°W. Andreanof Islands, Aleutian Islands.
15	Z,(W)Z Z,N,(W)Z	ePKP ePKS	02	30 04 33 17	COMPRESSION. USCGS: H - 02:11:05. 17½°N.,93½°W. Depth: about 100 km. Chiapas, Mexico.
15	Z,(W)N (W)N	eP iS	18	41 42 42 59	DILATATION. H - 18:40:01. 37°N.,67½°E. Hindukush. ∆ = 6.6 Warsak eP - 18:40:51. eS - :41:23.
16	(W)Z,Z	iP	08	05 24	DILATATION.
16	Z,(W)Z	e	08	26 24	
16	(W)Z,Z	ePKP	15	13 49	USCGS: H - 14:54:33. 28°S.,66°W. Depth: about 100 km. Catamarca Province, Argentina.
17	Z,(W)Z	ePKP	03	00 48	COMPRESSION. USCGS: H - 02:42:02. 18°S.,176½°W. Depth: about 60 km. Fizi Islands region.
17	(W)Z,Z	eP	04	51 54	COMPRESSION.

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
19	(W)Z,Z	eP	21	07 11	
19	Z,(W)Z (L)N,(W)Z,Z (L)N (L)N	ePKP iPKS eSKS eSKKS	21	19 42 23 08 26 37 28 15	COMPRESSION? USCGS: H - 21:00:36. 12°N., 87°W. Depth: about 100 km. Near Coast of Nicaragua.
19	(W)Z ZN,(W)N N,(L)E	eP e e	22	04 36 05 09 07 03	
19	(W)Z,Z Z,N	ePKP ePP	23	00 11 03 30	USCGS: H - 22:41:03. 8°S., 74°W. Depth: about 200 km. Peru.
20	Z,(W)Z Z N,(L)E (L)N,N N,(L)N	eP ePcP eS iScS ePPS	02	03 04 13 13 09 27 14 03	USCGS: H - 01:50:54. 51°N., 180. Andreanof Islands, Aleutian Islands. Mag: 5.7 (Upp. & Kir.)
20	Z,(W)Z	eP	03	55 00	USCGS: H - 03:42:26. 53½°N., 167°W. Fox Islands, Aleutian Islands.
20	(W)Z	e	10	39 22	
20	(W)Z,Z	eP	20	05 44	USCGS: H - 19:57:35. 38½°N., 14°E. Sicily foreshock - Felt. Mag: 5.6 (Upp. & Kir.)
21	Z,(W)Z (W)Z (W)Z,Z (L)N,Z (L)N,N (L)N,N (L)N,N	iP ePcP ePP iPP iS isS iSS	01	22 58 23 23 27 25 28 31 50 32 30 36 20	COMPRESSION. Lahore P - 01:22:15. S - :30:30. USCGS: H - 01:11:58. 21½°N., 144°E. Depth: about 100 km. Mariana Islands region. Mag: 7-7¼ (Pas.), 6.9 (Upp. & Kir.)
21	(W)Z,Z	e	01	51 04	
21	(W)ZN (W)N	eP eS	03	28 51 29 47	
21	Z,(W)Z Z	eP e	09	27 54 28 06	COMPRESSION.
21	Z,(W)Z Z,N (L)E	eP ePcP eL	11	46 21 47 05 12 10 46	COMPRESSION. USCGS: H - 11:36:06. 36½°N., 141½°E. Near East Coast of Honshu, Japan. Felt: Tokyo. Mag: 6.0 (Upp. & Kir.)

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
21	(W)Z,Z	eP	11 52 16	COMPRESSION. USCGS: H - 11:44:04. 38 $\frac{1}{2}$ °N., 14°E. Near North Coast of Sicily. Felt.
21	(W)Z,Z	eP	13 31 31	USCGS: H - 13:24:16. 39 $\frac{1}{2}$ °N., 23°E. Near East Coast of Greece.
21	(W)Z,Z	eP	15 14 30	COMPRESSION.
21	(W)Z,Z	eP	19 22 45	DILATATION.
22	Z, (W)Z	eP	13 42 06	DILATATION.
	Z, (W)Z	iPcP	11	Warsak P - 13:41:41.
	Z	i	24	USCGS: H - 13:29:44.
	Z, (W)Z	ePP	45 19	50°N., 177°W. Andreanof Islands,
	(L)N,N	eS	52 22	Aleutian Islands.
	(L)E, (W)N	iS	30	Mag: 6 $\frac{1}{2}$ (Pas.), (Berk),
	(L)N	iScS	32	6.5 (Upp. & Kir.)
	(L)E	i(PPS)	53 22	
	(L)N	iSS	57 47	
22	Z	e	14 08 23	
22	Z, (W)Z	eP	18 42 05	DILATATION?
	(L)N,N	eS	49 45	USCGS: H - 18:32:32.
	(L)N	eSS	53 26	77 $\frac{1}{2}$ °N., 13 $\frac{1}{2}$ °E.
	(L)N	eL	19 03 40	Svalbard Island.
23	(W)E	eP	02 46 22	
	(W)E,N	e(S)	47 23	
23	Z, (W)Z	eP	04 16 37	Warsak P - 04:15:25.
	N, (W)NE	e(S)	18 30	
23	(W)Z	e	07 58 51	
23	(W)Z,Z	eP	09 23 15	DILATATION?
	(L)N	i(S)	28 38	
23	(W)Z,Z	eP	10 47 55	Warsak P - 10:47:01.
	(W)NE	eS	49 01	S - :30.
23	(W)Z,Z	eP	23 46 36	DILATATION?
	N, (W)N	eS	50 22	
24	Z	ePKP	02 56 35	COMPRESSION.
	(W)Z,Z	ePKP	51	Karachi (PKP) - 02:57:05.
	(W)Z,Z	iPKP	58	PKS - 03:00:32.
	(L)E,N	ePP	59 14	USCGS: H - 02:37:37.

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
24	Z(W)Z (L)NE (L)N (L)E	iPKS eSKS eSKKS i	03 00 19 04 07 06 04 11 11	3°N., 76½°W. Columbia. Mag: 6½ (Pas.), 6½ (Berk.), 6.5 (Upp. & Kir.)
24	Z, (W)Z	eP	03 07 44	Karachi P - 03:08:13.
24	(W)Z, Z N, (W)N N, (L)E N.	eP eSKS eS eScS	03 49 08 59 30 34 43	COMPRESSION. Karachi P - 03:49:23. USCGS: H - 03:36:33. 53°N., 167½°W. Fox Islands, Aleutian Islands. Mag: 6 - 6½ (Berk.), 5.7 (Upp. & Kir.)
24	(W)Z, Z (L)N	eP e(S)	09 27 35 31 29	
24	(W)Z, Z (L)N	eP eS	10 19 06 28 26	COMPRESSION. USCGS: H - 10:07:40. 17°N., 146°E. Depth: about 100 km. Mariana Islands.
24	(W)Z, Z N, (W)N (L)NE	eP e(S) i	18 12 12 16 20 27	COMPRESSION.
25	(W)Z, Z N, (W)E (L)NE	eP eS e	01 16 54 18 49 19 49	DILATATION. Warsak P - 01:15:48.
25	(W)Z, Z (L)N	eP eL	05 52 06 06 14 33	
25	(W)Z, Z	eP	07 10 31	COMPRESSION.
25	Z, (W)Z	eP	08 23 43	COMPRESSION.
25	(W)Z	ePKP	14 42 54	USCGS: H - 14:23:37. 25½°S., 85°W. Salta Province, Argentina.
25	Z, (W)Z	e	17 21 53	
25	Z, (W)Z	e	18 36 52	
25	(W)Z (W)Z, Z	e e	19 09 43 55	
26	Z, (W)Z (L)N	eP eL	00 48 21 01 09 24	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
27	(W)Z,Z	iP	11	07	47	Lahore P - 11:08:28.
	(L)NE	iPP		08	55	USCGS: H - 11:01:26.
	N	e		12	43	40 $\frac{1}{2}$ ^o N., 31 ^o E. Turkey aftershock.
	(L)E	iS			55	Mag: 6.1 (Upp. & Kir.)
27	(W)Z,Z	eP	13	16	44	
27	Z,(W)Z	eP	13	29	55	COMPRESSION. USCGS: H - 13:17:37. 51 $\frac{1}{2}$ ^o N., 177 $\frac{1}{2}$ ^o W. Andreevof Islands, Aleutian Islands.
27	(W)Z,Z	eP	20	10	29	COMPRESSION.
	N	eSKS		20	48	USCGS: H - 19:57:56.
	N	eS			52	52 ^o N., 170 $\frac{1}{2}$ ^o W. Fox Islands, Aleutian Islands.
28	(W)Z	eP	00	16	07	USCGS: H - 00:09:45. 40 $\frac{1}{2}$ ^o N., 31 ^o E. Turkey aftershock. Mag: 5.3 (Upp. & Kir.)
28	(W)Z,Z	ePKP	00	38	04	USCGS: H - 00:19:10.
	(L)N	ePKS		41	42	Samoa Islands.
28	Z,(W)Z	eP	01	32	03	COMPRESSION.
	Z,(W)Z	ePcP			07	USCGS: H - 01:19:26.
	N,(L)NE	eSKS		42	27	53 ^o N., 169 ^o W. Fox Islands, Aleutian Islands.
	(L)NE	eScS			40	
	(L)E	ePS		43	26	
28	Z,(W)Z	e	01	38	03	
28	(W)Z,Z	eP	05	57	01	DILATATION.
	Z	i			03	Depth: about 80 km.
	Z	e			14	Lahore P - 05:55:57.
	Z,(W)E	ipP			31	PP - :56:15.
	Z	i(sP)			46	S - :59:15.
	Z,(W)Z	iPP		58	18	Karachi P - 05:57:02.
	(L)NE	e	06	01	21	pP - :18.
	N	eS			31	Warsak P - 05:56:33.
	(L)N	i			41	USCGS: H - 05:51:30.
						25 $\frac{1}{2}$ ^o N., 95 ^o E. Assam Burma border. Mag: 6.0 (Upp. & Kir.)
28	(W)Z,Z	eP	07	36	44	Warsak P - 07:35:56.
	(W)E,(L)E	eS		37	48	S - :36:15.
	N	eL		38	09	
28	(W)Z,Z	eP	15	41	40	
	(W)E,N	eS		43	40	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
30	(W) Z, Z	eP	19	59	38	USCGS: H - 10:49:25. 41 $\frac{1}{2}$ ^o N., 143 ^o E. Near South Coast of Hokkaido, Japan.
30	(W) ZF	ePKP	21	16	08	USCGS: H - 20:58:15. 22 ^o S., 179 ^o W. Depth: about 600 km. Fiji Islands.
30	(W) Z, Z	eP	21	40	24	
30	(W) Z, Z	e	23	16	22	
31	(W) Z, Z, (L) N (L) NF	eP e(S)	01	16	51 20 29	
31	(W) Z, Z (W) Z, Z Z, (W) Z (W) Z, Z (L) F (L) F, N (L) F (L) F	ePKP ePKP iPKP e ePP iPKS e eSS	02	34	36 42 50 37 40 55 38 27 52 48 54 58	Lahore iPKP - 02:34:58. PKS - :38:32. USCGS: H - 02:16:27. 27 $\frac{1}{2}$ ^o S., 65 ^o W. Santiago del Estero Province, Argentina. Depth: about 600 km. Mag: 6 $\frac{1}{4}$ - 6 $\frac{1}{2}$ (Pas.), 6 $\frac{1}{4}$ (Berk.)
31	(W) Z, Z (L) F (L) NF	eP eSKS eScS	03	23	01 33 30 48	USCGS: H - 03:10:18. 54 ^o N., 163 $\frac{1}{2}$ ^o W. Unimsk Islands region.
31	(W) Z, Z	eP	04	25	03	
31	(W) Z, Z	eF	16	32	12	COMPRESSION. USCGS: H - 16:10:30. 53 ^o N., 160 ^o W. Fox Islands, Aleutian Islands.
31	(W) Z, Z (W) Z, Z	ePKP iSKP	22	16	57 20 18	USCGS: H - 21:57:46. 3 $\frac{1}{2}$ ^o N., 77 ^o W. Near Coast of Columbia. Depth: about 100 km.
31	(W) Z, Z N, (W) F (W) Z, Z (W) Z, Z (L) NF (L) N, N (L) E, N N	eP ePcP I ePP e IS IScS e(PPS)	22	29	24 31 36 32 26 36 44 39 30 47 40 26	DILATATION. Warsak P - 22:29:53. Lahore S - 22:38:31. USCGS: H - 22:17:10. 51 ^o N., 179 $\frac{1}{2}$ ^o W. Andreanof Islands, Aleutian Islands. Mag: 6.0 (Upp. & Kir.)

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QUETTA OBSERVATORY



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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
1	(W)Z	eP	05	33	11	USCGS: H - 05:26:50. 40 ¹ / ₂ ° N., 31° E. Northern Turkey aftershock.
1	(W)Z,Z N,(L)E	eP eSKS	16	16	31 26 59	DILATATION. USCGS: H - 16:03:52. 59 ¹ / ₂ ° N., 150 ¹ / ₂ ° W. Kenai Peninsula, Alaska.
1	(W)Z,Z	e	19	08	43	
1	(W)Z,Z (L)N	ePKP eL	19	54	44 20 49 00	USCGS: H - 19:35:08. 1° N., 91° W. Galapagos Islands.
1	Z	eP	21	14	34	USCGS: H - 21:08:12. Turkey aftershock.
1	(W)Z,Z	eP	22	37	00	
1	(W)Z,Z	iP	22	40	40	DILATATION.
2	(W)Z	e	01	18	25	USCGS: H - 01:11:56. Turkey aftershock.
2	Z,(W)Z Z (L)N	eP ePcP eL	21	32	50 33 12 22 00 40	USCGS: H - 21:21:45. 52 ¹ / ₂ ° N., 160° E. Near East Coast of Kamchatka.
2	Z,(W)Z Z,(W)Z Z,(W)Z	iP e ePcP	23	10	33 44 11 25	COMPRESSION. USCGS: H - 23:00:29. Eastern Java.
3	Z;(W)Z	eP	15	02	45	USCGS: H - 14:51:15. 31° N., 142° E. South of Honshu, Japan.
3	(W)Z (W)EN	eP eS	19	46	23 47 40	H - 19:44:42. Hindukush. $\Delta = 6^{\circ}.6$ Warsak P - 19:45:26.
4	(W)Z (W)Z,Z	eP iP	00	53	19 23	USCGS: H - 00:40:35. 54., 165° W. Unimak Islands region.
4	(W)Z	e	01	02	33	

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
4	Z, (W)Z	ePKP	17 22 57	USCGS: H - 17:05:02. 17½°S., 178°W. Depth: about 550 km. Fiji Islands. Mag: 6¼ - 6½ (Pas.)
	(W)Z, Z	iPP	24 27	
	Z	e	27 06	
	N, (L)E	eSKS	29 03	
	(L)E	ePS	34 30	
	(L)N	eSS	40 10	
4	(W)Z	ePKP	20 17 41	USCGS: H - 19:59:10. 18½°S., 176°W. Depth: about 250 km. Tonga Islands.
4	(W)Z, Z	eP	20 26 32	COMPRESSION? Lahore iP - 20:26:04. iS - :32:21. Warsak eP - 20:26:33. USCGS: H - 20:18:05. Central Sumatra.
	(L)NE	iS	33 15	
	(L)N	iScS	36 26	
	(L)NE	eSS	30	
5	(W)Z	eP	06 40 03	
5	Z, (W)Z	eP	07 27 52	USCGS: H - 07:16:17. 52½°N., 35°W. North Atlantic Ocean. Mag: 5.6 (Upp. & Kir.)
	(L)NE	iS	37 27	
	(L)E	iScS	53	
	(L)E	eSS	41 58	
5	(W)Z	eP	08 32 15	
	(W)NE	eS	33 30	
5	(W)Z, Z	eP	09 22 18	DILATATION. USCGS: H - 09:09:40. 53°N., 167°W. Fox Islands, Aleutian Islands.
(Power failed between 1100 G.M.T. to 1140 G.M.T.)				
5	Z, (W)Z	eP	14 08 55	DILATATION. USCGS: H - 13:57:42. 53°N., 162½°E. Off East Coast of Kamchatka. Mag: 5.8 (Upp. & Kir.)
	Z	iPcP	09 12	
	Z	ePP	11 27	
	(L)N, N	iS	18 03	
	N	eScS	52	
5	(W)Z	e	16 34 49	
5	(W)Z, Z	e	22 30 59	
6	(W)Z	eP	03 42 36	USCGS: H - 03:30:22. 52°N., 178°W. Andreanof Islands, Aleutian Islands.
	(W)Z	iP	37	
	(L)N	eS	52 43	
	(L)N	eL	04 14 30	

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
6	(W)Z	iP	05 50 58	COMPRESSION.
	(W)Z	ePcP	51 02	USCGS: H - 05:38:27.
	(L)N	eSKS	06 01 14	52°N., 171½°W. Fox Islands, Aleutian Islands.
6	(W)Z	eP	08 15 49	Warsak eP - 08:16:13. i - :39.
6	(W)Z	eP	13 53 54	DILATATION.
6	(W)Z	eP	20 00 12	COMPRESSION.
	(W)Z	iPcP	51	Lahore P - 19:59:31.
	(L)E	iS	08 31	COMPRESSION.
	(L)N	eS	35	S - 20:07:21.
	(L)E	eScS	10 04	Warsak P - 19:59:57. USCGS: H - 19:49:47. 3°N., 126½°E. Molucca Passage. Mag: 6.1 (Kir.)
7	(W)Z	eP	00 07 30	Warsak P - 00:06:08. Lahore P - 00:06:42. S - :09:29. USCGS: H - 00:03:17. 44½°N., 81°E. Sinkiang Province, China.
7	(W)ZE	e	02 55 56	Seismic?
7	(W)Z	eP	02 58 58	USCGS: H - 02:46:40. 51½°N., 179°W. Andreanof Islands, Aleutian Islands.
7	(W)Z	eP	08 09 39	
7	(W)Z	eP	20 11 10	H - 20:09:22.
	(W)NE	eS	12 30	Hindukush. $\Delta = 6^{\circ}.9$ Warsak eP - 20:10:12. iS - :46.
7	(W)Z	e	22 12 04	Seismic?
7	(W)Z	iP	23 32 41	COMPRESSION.
	(W)E	iS	34 05	H - 23:30:52. Hindukush. $\Delta = 7^{\circ}.2$ Warsak P - 23:31:41. S - :32:13.
7	(W)Z	eP	23 39 02	
8	(W)Z	eP	03 36 02	USCGS: H - 03:23:33. 3°S., 147½°E. Bismarck Sea.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
9	(W) Z	e	04	09	09	Seismic?
9	Z, (W) Z	eP	06	20	25	USCGS: H - 06:07:47.
	Z, (W) Z	ePcP			30	2 $\frac{1}{2}$ ° S., 150° E.
	N	eSKS			30 48	New Ireland.
	N	eS			58	
9	(W) Z	eP	09	12	35	DILATATION. USCGS: H - 09:01:28. Near east Coast of Kamchatka.
9	(W) Z, Z	eP	16	49	36	
9	(W) Z, Z	ePKP	17	31	04	USCGS: H - 17:12:03. 16 $\frac{1}{2}$ ° S., 173 $\frac{1}{2}$ ° W. Tonga Islands.
9	(W) Z, Z	eP	21	28	41	Lahore P - 21:28:13.
	(W) Z, Z	i			50	i - :21.
						USCGS: H - 21:19:42. Off south coast of Sumatra.
9	(W) Z, Z	eP	04	16	17	
9	(W) Z	eP	13	22	44	
	(W) FZ	e(S)			24 05	
9	(W) Z	eP	16	03	34	Seismic?
9	(W) Z, Z	eP	21	03	18	COMPRESSION.
10	Z, (W) Z	iP	01	10	01	COMPRESSION.
	Z	i			04	Lahore P - 01:09:52.
	H	ePcS			14 51	Karachi E - 01:10:00.
	N	eS			18 13	Warsak P - 01:10:17.
						USCGS: H - 00:59:54. 9° S., 117° E. Sumbawa Islands. Mag: 6.6 (Upp. & Kir.)
10	(W) Z, Z	e	01	39	11	
10	Z, (W) Z	e	01	43	52	
10	Z	eP	02	43	08	DILATATION. USCGS: H - 02:31:00. 51 $\frac{1}{2}$ ° N., 176° W. Andreanof Islands, Aleutian Islands.
10	Central Baluchistan earthquake lost due to adjustment of clock.					Lahore P - 04:47:24. S - :48:27. Warsak P - 04:47:13. USCGS: H - 04:46:12. 30° N., 68° E. Central Baluchistan, Pakistan.

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
11	Z	eP	04	17	12	COMPRESSION. USCGS: H - 04:04:33. 54°N., 165°W. Unimak Islands region.
11	Z	iP	04	50	07	DILATATION.
	Z	isP			51	Lahore P - 04:58:50.
	N	is	05	00	22	isP - :59:31. S - :52. Karachi P - 05:00:09: S - :02:11. USCGS: H - 04:57:24. 36½°N., 70°W. Depth: about 200 km. Hindukush. Mag: 5.8 (Upp. & Kir.)
11	Z, (W) Z	ePKP	15	08	40	COMPRESSION.
	Z, (W) Z	ePKP		09	08	Lahore PKP - 15:08:29.
	(L) F, Z	ePP		10	23	USCGS: H - 14:49:47.
	(L) F	ePS		20	30	30°S., 178°W. Kermadec Islands. Felt: Raoul Islands. Depth: about 100 km. Mag: 6½ - 7 (Pas.); 6½ (Berk).
11	(W) Z, Z	eP	17	58	03	Seismic?
11	Z, (W) Z	iP	18	58	22	DILATATION.
	(W) Z, N	ePcP		59	43	Lahore iP - 18:57:31.
	ZN	ePP	19	00	22	Karachi P - 18:58:20.
	(L) F	ePcS		03	33	Warsak P - 18:57:54.
	N, (L) N	is		05	29	USCGS: P - 18:49:24.
	N	e			44	18°N., 120½°W. Near coast of
	(L) F	e(ScS)		08	01	Luzon, Phillipine Islands.
	(L) F	i		09	50	Mag: 6.8 (Upp. & Kir.)
	(L) FN	eL		17	19	
12	Z, (W) Z	iP	00	06	18	COMPRESSION.
	Z, (W) Z	ePcP			24	Lahore iP - 00:05:50.
	(L) N, N	eS		16	33	USCGS: H - 23:53:57.
	(L) N	iScS			45	52°N., 176°W. Andeanof Islands, Aleutian Islands. Mag: 6.1 (Upp. & Kir.)
12	Z, (W) Z	iP	00	11	31	COMPRESSION. Lahore P - 00:11:04. i - :24.
12	Z, (W) Z	eP	00	16	04	COMPRESSION.
12	Z, (W) Z	eP	01	42	51	COMPRESSION. USCGS: H - 01:30:36. 52½°N., 175½°W. Andeanof Islands, Aleutian Islands.

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
12	(W)Z,Z	eP	02 44 1 ^o	Seismic?
12	Z,(W)Z	eP	02 46 34	Seismic?
12	(W)Z (W)F	eP eS	06 44 37 46 18	
12	Z,(W)Z Z,(W)Z (W)Z,Z (L)N,(W)F (L)FN,N N N Z,(W)Z	eP i ePP eS i eScS eSS ePKPPKP	08 38 47 58 41 01 47 01 04 48 33 50 58 09 08 09	COMPRESSION. Karachi P - 08:39:03. i - :13. S - :47:31. Lahore P - 08:38:03. e - :13. PcP - :39:05. eS - :45:41. USCGS: H - 08:28:34. 41 ¹ / ₂ °N., 142 ¹ / ₂ °E. Near south coast of Hokkaido, Japan. Mag: 6.2 (Upp. & Kir.)
13	Z,(W)Z Z N N ZN	iP ePcP eS iScS ePKPPKP	10 53 03 09 11 03 17 34 19 29	COMPRESSION. Karachi P - 10:53:24. PcP - :30. S - 11:03:56. Lahore P - 10:52:36. Warsak P - 10:52:33. USCGS: H - 10:40:38. 51 ¹ / ₂ °N., 175°W. Andreanof Islands, Aleutian Islands. Mag: 7 (Pas.), 6.9 (Upp. & Kir.)
13	(W)Z,Z	e	14 12 12	
13	(W)Z,Z (W)Z,Z ZN (L)N,N N	eP ePcP ePP iS iScS	20 29 59 31 28 53 36 36 39 35	DILATATION. Lahore P - 20:29:28. S - :35:40. USCGS: H - 20:21:42. 3°S., 102 ¹ / ₂ °E. Depth: about 200 km. Central Sumatra,
13	(W)Z Z,(W)Z	eP iP	21 37 34 36	DILATATION. Lahore eP - 21:36:58. iP - :59. eS - :44:36. USCGS: H - 21:27:18. 1 ¹ / ₂ °N., 123 ¹ / ₂ °E. Northern Celebes.
14	(W)Z,Z N (L)F,N (L)F (L)F	iP ePcP eS iScS ePS	06 36 39 45 46 43 47 07 36	COMPRESSION. Lahore P - 06:36:11. e - :32. S - :45:52. USCGS: H - 06:24:20.

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DATE	COMPT.	PHASE	GMT h. m. s.	REMARKS
				52°N., 175½°W. Andreanof Islands, Aleutian Islands. Mag: 6½ (Berk.), 5.9 (Upp. & Kir.)
14	Z, (W) Z Z	iP eS	11 37 22 48	DILATATION. Lahore P - 11:38:24. S - :39:34. Karachi P - 11:38:29. S - :39:49. Warsak P - 11:38:03. H - 11:56:44. 32°N., 66½°E. Southern Afghanistan. Felt: Kandhar, Mohammad Qila, and Khalakbund. USCGS: H - 11:36:49. 32°N., 67°E. Southern Afghanistan.
14	Z, (W) Z (L), N, N	eP eS	14 11 14 40	DILATATION Afghanistan aftershock.
14	(W) Z (W) F, N	eP e(S)	14 54 34 56 21	Warsak P-14 53 46
15	(W) Z	eP	00 52 48	
15	Z, (W) Z (L) N, N N (L) N (W) Z, Z	eP iS eScS eSS ePKPKP	00 54 55 01 03 36 04 51 07 40 23 45	DILATATION. Lahore P - 00 55 09 S - 01 04 07 USCGS: H - 00:44:15 34°S., 56°E. Indian Ocean Mag: 6-6½ (Pas), 6.4(up, ki)
of failure/power between 10 G.M.T of 15th to 12 GMT of 16th.				
17	(W) Z, Z	ePKP	06 35 45	COMPRESSION USCGS: H - 06:16:44 15S., 173½ W. Samoa Islands region. Mag: 5½ (Berk)
17	Z, (W) Z	eP	07 44 49	USCGS: H - 07:32:25 52N., 174½°W Andreanof Islands, Aleutian Islands.
18	Z, (W) Z (L) F (L) FN (L) FN	eP eS i eL	02 18 33 23 33 25 00 31 00	DILATATION Lahore P - 02 17 50 (S) - 22 38 Karachi P- 02 18 16 Warsak P- 02 18 23 Chittagon P 02 14 24 USCGS: H - 02:12:12 14½°N., 96°E. Gulf of Martaban, Burma. Mag: 6.4(Upp, Kir)

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
18	Z, (W) Z	eP	05	55 32	USCGS: H - 05:45:19. Near south coast of Hokkaido, Japan.
18	Z, (W) Z	eP	06	45 49	
18	Z (W) W	eP e(S)	09	03 29 04 32	DILATATION.
18	Z, (W) Z Z N N	eP e eS eSS	11	27 47 59 34 54 35 10	USCGS: H - 11:18:53. 18°N., 120½°E. Depth: about 60 km. Northern Luzon, Phillipine Islands.
18	Z, (W) Z	eP	14	54 40	DILATATION. Chittagong P - 14:50:31. (S) - :52:05. Lahore P - 14:53:56. (S) - :58:37. Warsak P - 14:54:32. USCGS: H - 14:48:17. 14°N., 96°E. Burma aftershock. Mag: 6.7 (Upp. & Kir.)
18	Z (W) W ZN	e(PKP) ePKP ePP	18	14 27 42 15 35	USCGS: H - 17:56:03. 25°S., 170°E. Loyalty Islands region. Mag: 6 (Pas.)
19	Z, (W) W	ePKP	01	48 51	USCGS: H - 01:29:48. 24°S., 175½°W. Tonga Islands. Mag: 6½ - 6½ (Pas.)
19	Z, (W) Z	eP	05	33 48	COMPRESSION: USCGS: H - 05:21:37. 51°N., 179°E. Rat Islands, Aleutian Islands.
19	Z Z Z, N (L) W (L) N (L) W (L) N	ePKP ePKP ePKP i(PP) i i(PS) i(SS)	08	20 14 35 51 21 12 29 12 31 08 37 10	USCGS: H - 08:01:30. 16½°S., 176½°W. Fiji Islands. Mag: 6½ (Pas.), 6¾ (Bark.), and 6.8 (Upp. & Kir.)
19	Z, (W) Z	eP	18	22 00	COMPRESSION.
20	(W) Z	eP	00	41 43	

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
20	Z, (W)Z	eP	01	17	45	DILATATION.
	Z	epP		18	16	Lahore iP - 01:17:06.
	N	e			36	ipP- :36.
	(L)NE	eS		26	48	USCGS: H - 01:06:25.
	(L)N	isS		27	42	20° N., 145½° E.
	(L)E	i		28	52	Depth: about 120 km.
	(L)E	e(SS)		31	58	Mariana Islands. Mag: 6 (Upp. & Kir.)
21	(W)Z	eP	11	59	50	H - 11:58:17.
	(W)NE	eS	12	00	58	36° N., 70° E. Hindukush. $\Delta = 6^{\circ}.2$ Warsak P - 11:58:55. S - :59:23.
21	Z	eP	18	49	07	COMPRESSION.
	Z	ePcP			33	Lahore P - 18:43:30.
	(L)N,N	eS		58	06	USCGS: H - 18:38:03.
	(L)NE	i			17	48° N., 155° E.
	(L)NE	eScS		59	06	Kurile Islands.
	(L)E	eL	19	06	00	
21	(W)ZE	eP	20	37	45	DILATATION. Lahore P - 20:37:05.
21	(W)ZE, Z	eP	21	39	34	H = 21:36:38. $\Delta = 12^{\circ}.1$
	(W)N	eS		41	51	Kashmir-Tibet Border. Lahore P - 21:38:11. S - :39:21. Warsak P - 21:38:35.
21	Z, (W)Z	eP	23	26	55	Lahore P - 23:26:00.
	(L)E	e		31	58	S - :30:30.
	(L)N	e(S)		32	14	
21	(W)Z, Z	e	23	46	16	
22	(W)Z, Z	eP	02	38	15	H = 02:36:33. $\Delta = 6^{\circ}.7$
	(W)NE	is		39	33	36° N., 71° E. Hindukush. Warsak P - 02:37:11 S - :38.
22	(W)Z	ePKP	06	38	08	Lahore PKP - 06:38:21.
	(W)ZN	ePKP			13	ePP - :40:40.
	(W)Z, Z	iPKP			19	e(PKS) - :41:40.
	Z	epPKP			41	Depth: about 100 km.
	N, Z, (L)N	ePP		40	33	USCGS: H - 06:19:06.
	N, Z, (L)N	iPKS		41	38	15° N., 94° W. Near Coast
	(L)N	eSKS		45	23	of Chiapas, Mexico.
	(L)EN	eSS		58	00	Felt: Tehuantepec and San Salvador. Mag: 6½ (Pas), (Berk) and 7.1 (Upp. & Kir.)

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
22	(W)Z	eP	1 ^o	44 44	
	(W)EN	eS		4 ^c 01	
23	Z, (W)Z	eP	00	02 01	DILATATION.
	N	i		0 ^o	Karachi F - 00:01:54.
	ZN	iPP	04	41	(PP) - :04:2 ^o .
	Z	ePPP	0 ^c	3 ^c	S - :11:17.
	(L)E,N	iS	11	34	Lahore P - 00:01:24.
	N, (L)N	i		3 ^o	PcP - :4 ^o .
	Z	ePKPKP	2 ^o	2 ^o	S - :10:22.
					USCGS: H - 23:50:23.
					1 $\frac{1}{2}$ ^o S., 137 ^o E. Near North
					Coast of New Guinea.
					Mag: 7 $\frac{1}{2}$ (Pas),
					7 - 7 $\frac{1}{2}$ (Berk), and
					7.2 (Upp. & Kir.)
23	(W)Z, Z	e	00	55 5 ^o	
23	Z, (W)Z	iP	03	40 03	COMPRESSION
	Z, (W)Z	iPcP		0 ^o	USCGS: H - 03:27:02.
	(L)NE	eKS	50	34	5 $\frac{1}{2}$ ^o N., 137 ^o W. Near Coast
	(L)NE	eS		55	of South Eastern Alaska.
	(L)E,N	iScS		5 ^o	Mag: 5 $\frac{1}{2}$ - 5 $\frac{3}{4}$ (Berk), and
	N	ePPS	52	33	6 (Upp. & Kir.)
23	Z, (W)Z	eP	20	2 ^c 34	Lahore F - 20:27:2 ^c .
	(L)EN	iS		30 1 ^o	
24	(W)Z	eP	05	57 15	
24	(W)Z	eFKF	10	0 ^o 51	USCGS: H - 00:40:47.
	Z, (W)Z	ePKP		5 ^o	1 ^o N., 04 ^o W.
	Z, (W)Z	ePP	11	1 ^c	Depth: about 100 km.
	Z, (W)Z	iPKS	12	1 ^o	Mexico aftershock.
					Felt: Tehuantepec.
					Mag: 6.2 (Upp. & Kir.)
24	(W)Z, Z	eP	10	24 43	
	(W)EN, N	eS		26 05	
24	Z, (W)Z	e	11	21 45	
24	Z, (W)Z	eP	11	31 30	COMPRESSION.
	N, (L)NE	iS		3 ^o 47	Lahore eP - 11:30:5 ^o .
					eS - :3 ^o :51.
					USCGS: F - 11:21:11.
					About 150 miles Southeast of
					Java.

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DATE	COMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
25	Z, (W)Z (L)N,N	eP iS	10	17 48 23 00	Lahore P - 10:17:12. (S) - :21:42. USCGS: H - 10:11:17. 10°N., 94°E. Andaman Islands region.
26	Z, (W)Z N,Z Z,N (L)N (L)EN	iP ePP i i iS	02	55 25 57 00 04 03 01 19 36	DILATATION. Lahore P - 02:55:14. S - 03:01:14. Warsak P - 02:55:38. USCGS: H - 02:47:36. 7½°S., 85½°E. Indian Oceans. East of Chagos Archipelago.
26	Z, (W)E Z,N (W)E (W)E	eP e e(s) e	09	01 04 18 02 00 13	Karachi P - 09:00:32. S - :54.
26	Z, (W)E E	eP eS	16	34 21 35 37	COMPRESSION. H - 16:32:40. $\Delta = 6^{\circ}.6$ 36½°N., 70°E. Hindukush. Warsak P - 16:33:23. S - :55.
26	Z	eP	17	00 37	COMPRESSION. USCGS: H - 16:48:12. Andreanof Islands, Aleutian Islands.
27	Z,N Z,N N N (L)N	eP iPP i eS e	00	17 32 19 18 23 47 24 03 14	DILATATION. Lahore P - 00:16:50. DILATATION. (S) - :22:30. Karachi P - 00:18:07. PP - :20:04. (S) - :25:12. Warsak P - 00:16:48. USCGS: H - 00:08:28. 56½°N., 116°E. North East of Lake Baikal, U. S. S. R. Mag: 7½ (Fas), 7½ - 7¼ (Berk), and 7.9 (Upp. & Kir).
27	Z, (W)E	eP	01	47 26	
27	Z, (W)Z N, (W)E	eP eS	04	13 26 21 40	Lahore eP - 04:12:45. iS - :20:25. Warsak P - 04:13:08.

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DATE	CCMPT.	PHASE	GMT		REMARKS
			h.	m. s.	
27	(W)Z, Z N, (W)Z	eP eS	06	44 06 45 23	H - 06:42:24. $\Delta = 6^{\circ}.6$ 36°N., 70°E. Hindukush. Warsak P - 06:43:06.5. S - :37.0.
27	Z, (W)Z	eP	07	20 35	
28	(W)E (L)N	eP eS	05	10 35 20 59	USCGS: H - 04:58:03. Fox Islands, Aleutian Islands.
28	(W)E (W)E, (L)E	iP iS	08	38 40 40 07	H - 08:37:07. $\Delta = 6^{\circ}.7$ Hindukush. Lahore e - 08:39:26. iS - :35.
28	(W)E	eP	21	32 57	USCGS: H - 21:23:25. Near Coast of Algeria. Felt: Orleans Ville.
28	(W)E	e	21	41 18	
29	Z, (W)Z	ePKP	04	17 43	Warsak PKP - 04:17:51. Lahore PKP - 04:17:59. USCGS: H - 03:58:06. 32 $\frac{1}{2}$ ° S., 72 $\frac{1}{2}$ ° W. Near Coast of Central Chile.
29	Z, (W)Z N, Z Z, (W)Z (L)E N, (L)E (L)N (L)NE (L)N (L)NE (L)N	iP iPcP ePP e eSKS eS i iScS ePS eL	08	00 59 01 07 04 16 11 12 24 28 35 40 12 25 23 00	DILATATION. Warsak P - 08:00:31. Lahore iP - 08:00:35. eS - :10:40. USCGS: H - 07:48:18. 51 $\frac{1}{2}$ ° N., 166° W. Fox Islands, Aleutian Islands. Mag: 6.3 (Upp. & Kir.)
29	Z, (W)Z (W)Z	eP ePcP	11	01 56 02 03	USCGS: H - 10:49:42. 51 $\frac{1}{2}$ ° N., 178° W. Andreev Islands, Aleutian Islands.
29	(W)Z, Z Z	eP ePP	22	41 58 43 41	DILATATION. Warsak P - 22:41:14. Lahore P - 22:41:18. USCGS: H - 22:33:52. 56° N., 116 $\frac{1}{2}$ ° E. Lake Baikal aftershock. Mag: 5.7 (Upp. & Kir.)

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DATE	COMPT.	PHASE	GMT			REMARKS
			h.	m.	s.	
29	Z, (W)Z	eP	23	36	12	
30	Z, (W)Z	eP	03	03	33	
	(W)EN, N	e(S)		06	50	

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