

No. 82

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GEODÆTISK INSTITUT
Proviantgården · Copenhagen · Denmark

Bulletin of the seismological station

KØBENHAVN

$\varphi = 55^{\circ}41'N.$ $\lambda = 12^{\circ}26'E.$ $h = 13 \text{ m.}$

Lithologic foundation: chalk

Instruments

Galitzin-Wilip. N, E, and Z. $T_p = T_g = 12\frac{1}{2} \text{ sec.}$, $\mu^2 = 0$, $\frac{Ak}{\pi l} = 260 \text{ sec.}^{-1}$ or $V_{\max} = \text{abt. } 1000$.

Benioff. Z'. $T_p = 1 \text{ sec.}$, $T_g = \frac{1}{4} \text{ sec.}$, $V_{\max} = \text{abt. } 30\,000$.

Wiechert 1000 kg. N and E. $T = 8\frac{1}{2} \text{ sec.}$, $\nu = 6:1$, $\varrho = 0.3 \text{ mm}$, $V_0 = 210$.

Wiechert 1300 kg. Z. $T = 6 \text{ sec.}$, $\nu = 4:1$, $\varrho = 0.3 \text{ mm}$, $V_0 = 150$.

Seismological Readings

Phases are indicated by the symbols used in ISS. Times are given in GMT. Positions of epicenters are most often those given by BCIS or USCGS. The periods given are periods of full oscillations. The amplitudes are single amplitudes of the ground in microns. + indicates ground motion towards the north, towards the east, or upwards. - indicates the opposite direction. C means compression and D dilatation. Unless otherwise stated, the periods and amplitudes are due to readings on the Galitzin instruments. Magnitudes have been computed from the following formulas:

$$M = 1.6 \left(3.9 + \log \left(\frac{A}{T} \right)_{PZ} + \frac{\Delta}{200} \right), \quad 20^{\circ} < \Delta < 90^{\circ}.$$

$$M = 2.1 + \log A_H^{20} + 1.66 \cdot \log \Delta, \quad 15^{\circ} < \Delta < 130^{\circ}$$

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2	<i>iPKP·Z'Z</i>	10 ^h 30 ^m 59 ^s	C	
	<i>iPKS·Z'Z</i>	34 20		
	<i>eSKSP·N</i>	43.0		
	<i>eL·N</i>	11 (14)		
	$\Delta = 132^\circ$. $h = 161$ km. Santa Cruz Islands. $H = 10\ 11\ 56.9$.			
5	<i>iP·Z'</i>	14 17 57	C	
	<i>e(PS)·NE</i>	27 41	Wiechert.	
	<i>e(PPS)·E</i>	28 16	-	
	<i>e(SS)·E</i>	32 23	-	
	<i>eL·NE</i>	42	-	
	$\Delta = 73^\circ$. $h = 37$ km. Andreanof Islands. $H = 14\ 06\ 25.9$.			
5	<i>eiPKP·Z'</i>	18 17 14		
	<i>ePP·N</i>	20 25	Wiechert	
	<i>eL·NE</i>	19 10	-	
	$\Delta = 142^\circ$. $h = 123$ km. Loyalty Islands. $H = 17\ 57\ 56.6$.			
5	<i>eiPKP·Z'</i>	18 34 00		
	$\Delta = 141^\circ$. $h = 124$ km. Loyalty Islands. $H = 18\ 14\ 43$.			
7	<i>eiP·Z'</i>	10 35 43		
	$\Delta = 22^\circ$. $h = 127$ km. Crete. $H = 10\ 30\ 58.0$.			
7	<i>iP·Z'</i>	15 57 16		
	<i>e·Z</i>	16 02 28		
	<i>e·Z</i>	04 19		
	<i>e(PcS)·N</i>	05 21		
	<i>e·Z</i>	05 49		
	<i>e(ScS)·N</i>	08 50		
	$\Delta = 19^\circ$. $h = 22$ km. Ionian Islands. $H = 15\ 52\ 54.0$.			
10	<i>iP·Z'</i>	14 33 32		
	<i>e(PPP)·Z</i>	37 53		
	<i>eS·N</i>	42 34		
	<i>e(SKS)·NE</i>	43 32		
	<i>e·N</i>	48 09		
	<i>e·Z</i>	50 (45)		
	<i>e·Z</i>	51 29		
	<i>eR·N</i>	57.8		
	<i>eR·E</i>	15 01.5		
	<i>M·ZN</i>	08.0	$N: 50\mu$.	
	<i>M·E</i>	08.5	52μ .	
	<i>F·N</i>	59		
	$\Delta = 70^\circ$. $h = 29$ km. Kurile Islands. $H = 14\ 22\ 18.2$.			
	$M(L) = 7.0$ (COP).			
11	<i>iP·Z</i>	12 11 23		
	<i>e(S)·N</i>	21 00		
	<i>e(PS)·ZN</i>	21 29		
	<i>e(PPS)·N</i>	21 45		
	<i>e·Z</i>	44 53		
	$\Delta = 73^\circ$. $h = 47$ km. Fox Islands. $H = 11\ 59\ 55.0$.			
14	<i>iP·Z'</i>	16 50 13	Confused by microseisms.	
	$\Delta = 71^\circ$. $h = 41$ km. Unimak Island.			

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16	<i>iP·Z'</i>	07 ^h 32 ^m 13 ^s	C	
	<i>iP·Z</i>	32 14		
	<i>iPcP·Z</i>	32 21		
	<i>i(sP)·Z</i>	33 00		
	<i>i(PP)·E</i>	35 09		
	<i>ePPP·Z</i>	37 03		
	<i>e(S)·E</i>	42 08		
	<i>iScS·N</i>	42 13		
	<i>ipS·N</i>	42 31		
	<i>i(SP)·E</i>	42 47		
	<i>e(SPP)·E</i>	43 04		
	<i>i(sPS)·E</i>	43 31		
	<i>e(SS)·N</i>	47 15		
	<i>isSS·Z</i>	47 33		
	<i>e(SSS)·N</i>	51 04		
	<i>e·Z</i>	51 57		
	<i>e·Z</i>	52 18		
	<i>e(Q)·Z</i>	55.1		
	<i>e·Z</i>	56.9		
	<i>e(R)·N</i>	57.7		
	<i>e·Z</i>	58.4		
	<i>i·Z</i>	08 01 30		
	<i>e(SKPP')·Z</i>	02 33		
	<i>e·ZN</i>	03 25		
	<i>e·Z</i>	03 56		
	<i>e(R)·Z</i>	05.2		
	<i>M·E</i>	10	$E: 9^s, 105\mu$.	
	<i>M·ZN</i>	11	$N: 9^s, 66\mu$.	
	$\Delta = 79^\circ$. $h = 131$ km. Honshu. $H = 07\ 20\ 18.6$.			
	$M(L) = 7.2$ (COP).			
16	<i>eiP·Z'</i>	11 31 39		
	<i>i(PcP)·Z'</i>	31 50 ¹ / ₂		
	<i>i·Z'</i>	31 52 ¹ / ₂		
	<i>i·Z'</i>	32 00		
	<i>e·N</i>	32 59		
	<i>ePP·N</i>	34 33		
	<i>ePPP·Z</i>	36 11		
	<i>e·N</i>	36 57		
	<i>e(S)·N</i>	40 15		
	<i>e(SP)·N</i>	42 04		
	<i>e(sSP)·N</i>	42 43		
	<i>e(SS)·N</i>	45 59		
	<i>e·N</i>	46 23		
	<i>e·N</i>	55.7		
	<i>e(R)·N</i>	56.5		
	<i>e·N</i>	12 00.1		
	<i>e·E</i>	03.0		
	<i>e·Z</i>	04.3		
	<i>e·N</i>	07.9		
	<i>e·Z</i>	08.3		
	<i>e·E</i>	08.9	16 ^s .	
	<i>e·N</i>	10.1	16 ^s .	
	<i>e·Z</i>	20.3		
	$\Delta = 78^\circ$. $h = 157$ km. Honshu. $H = 11\ 19\ 46.5$.			

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16	<i>iP·Z'</i>	12 ^h 24 ^m 29 ^s	C
	<i>iI·Z'</i>	24 32	
	<i>iPcP·Z</i>	24 39	
	<i>i·Z'</i>	24 44	
	<i>e·Z</i>	26 30	
	<i>eiPP·Z</i>	27 30	
	<i>i·Z</i>	27 40	
	<i>eipPPP·Z</i>	29 20	
	<i>e(S)·NE</i>	34 28	
	<i>isS·E</i>	34 46	
	<i>e·Z</i>	40 02	
	<i>ei·Z</i>	41 15	
	<i>e·Z</i>	42 50	
	<i>e·Z</i>	44.7	
	<i>e·N</i>	46.7	
	<i>e·Z</i>	47.4	
	<i>e·N</i>	52.6	
	<i>i(Lg)·N</i>	55 46	
	<i>M·E</i>	13 02	17 ^s , 85 μ .
	<i>M·N</i>	05 ¹ / ₂	17 ^s , 81 μ .
		$\Delta = 78^\circ$. $h = 105$ km. Honshu. $H = 12\ 12\ 35$.	
		$M(L) = 7.0$ (COP)	

16	<i>eiP·Z'</i>	14 15 58	
	<i>e(S)·E</i>	25 19	
	<i>epS·E</i>	26 09	
	<i>eL·NE</i>	(46)	
		$\Delta = 78^\circ$. $h = 127$ km. Honshu. $H = 14\ 04\ 05.3$.	

16	<i>iP·Z'</i>	15 53 12	C
	<i>i(PcP)·Z'</i>	53 24	
	<i>i·Z'Z</i>	53 27	
	<i>i·Z'</i>	53 32 ¹ / ₂	
	<i>i·E</i>	53 41	
	<i>i·Z'</i>	54 13 ¹ / ₄	
	<i>e·Z</i>	55 05	
	<i>ePP·Z</i>	56 12	
	<i>e(pPP)·Z</i>	56 23	
	<i>e(PPP)·Z</i>	58 (02)	
	<i>ipPPP·Z</i>	58 13 ¹ / ₂	
	<i>e·Z</i>	16 01 (00)	
	<i>e(S)·N</i>	03 08	
	<i>iIpS·NE</i>	03 28 ¹ / ₂	
	<i>esSS·E</i>	08 23 ¹ / ₂	
	<i>e·Z</i>	09 40	
	<i>e·E</i>	10 13	
	<i>e·Z</i>	13.5	
	<i>e(R)·E</i>	16.6	
	<i>e·E</i>	16.8	
	<i>eL·N</i>	21	
	<i>eL·ZE</i>	30	
		$\Delta = 78^\circ$. $h = 147$ km. Honshu. $H = 15\ 41\ 23.3$	

19	<i>eL·ZNE</i>	18 01	
	<i>M·ZNE</i>	08	18 ^s , NE: 3 ¹ / ₂ μ .
		$\Delta = 71^\circ$. $h = 31$ km. Kurile Islands. $H = 17\ 22\ 16.9$.	

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20	<i>iP·Z'</i>	17 ^h 20 ^m 10 ^s	D
	<i>i·Z'</i>	20 17 ¹ / ₂	
	<i>eS·NE</i>	29 10	
	<i>e(SKS)·N</i>	30 12	
	<i>eSS·NE</i>	33 (40)	
	<i>eR·ZN</i>	46	
	<i>M·ZN</i>	57	19 ^s , N: 6 μ , E: 4 μ .
		$\Delta = 68^\circ$. $h = 46$ km. Kodiak Island. $H = 17\ 09\ 15.7$.	
22	<i>eiPKP·ZZ'</i>	03 43 26	
	<i>e·Z'</i>	45 27	
	<i>ePP·Z</i>	45 40	
	<i>e·Z</i>	46 27	
	<i>i(PKS)·NE</i>	46 55	
	<i>e·Z</i>	47 28	
	<i>i·NE</i>	47 39 ¹ / ₂	
	<i>i·Z</i>	47 48	
	<i>ePPP·NE</i>	48 29	
	<i>e·E</i>	49 31	
	<i>iSKS·NE</i>	50 22	
	<i>e·N</i>	55	
	<i>e·N</i>	04 07 ¹ / ₂	
	<i>eR·N</i>	29	
	<i>M·ZN</i>	45	20 ^s , N: 32 μ , E: 25 μ .
	<i>F·N</i>	06 22	
		$\Delta = 132^\circ$. $h = 25$ km. Santa Cruz Islands. $H = 03\ 24\ 04.5$.	
		$M(L) = 7.1$ (COP).	

23	<i>eL·E</i>	05 33	
		$\Delta = 74^\circ$. Hokkaido. $H = 04\ 48\ 21.4$.	

26	<i>ePKP·Z</i>	16 32 (36)	
	<i>e·E</i>	35 07	
	<i>ePP·Z</i>	35 53	
	<i>eL·N</i>	17 (31)	
		$\Delta = 142^\circ$. $h = 119$ km. Loyalty Islands. $H = 16\ 13\ 25.1$.	

26	<i>eiPKP·Z'</i>	19 08 12	
	<i>i·Z'</i>	08 20	
		$\Delta = 141^\circ$. $h = 106$ km. Loyalty Islands. $H = 18\ 48\ 56.9$.	

31	<i>eiP·Z'</i>	00 59 (35)	Confused by microseisms.
	<i>eS·N</i>	01 08 (46)	
	<i>eSS·N</i>	13 (17)	
	<i>L·E</i>	(26)	
		$\Delta = 68^\circ$. $h = 26$ km. Kodiak Island. $H = 00\ 48\ 36.5$.	

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4	<i>iP·Z'</i>	09 02 21	
	<i>iIpP·Z'</i>	02 55	
		$(\Delta = 66^\circ$. $h = 162$ km.) Burma. $H = 08\ 51\ 48.9$.	

4	<i>eP·Z'</i>	19 21 31	
	<i>e·N</i>	30 08	
	<i>e(S)·E</i>	31 50	
	<i>L·NE</i>	52	
		$\Delta = 81^\circ$. $h = 14$ km. Formosa. $H = 19\ 09\ 12.9$.	

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- 5 $eP \cdot Z$ 15^h51^m14^s
 $iP \cdot Z'$ 51 14¹/₂
 $eS \cdot E$ 16 02 (03)
 $\Delta = 86^\circ$. $h = 49$ km. Panama. $H = 15$ 38 34.0.
- 5 $eL \cdot N$ 19 04
 $\Delta = 110^\circ$. Indian Ocean. $H = 17$ 50 55.6.
- 6 $eL \cdot ZNE$ 13 01
 $\Delta = 73^\circ$. Andreanof Islands. $H = 12$ 12 26.0.
- 6 $eL \cdot ZNE$ 19 01
 $\Delta = 73^\circ$. Kurile Islands. $H = 18$ 15 21.6.
- 6 $ePKP \cdot Z$ 22 04 03
 $ePP \cdot N$ 05 48
 $e \cdot N$ 07 (15)
 $ePKS \cdot E$ 07 40
 $e \cdot Z$ 21 41¹/₂
 $eSS \cdot NE$ 22.3
 $e \cdot E$ 25.8
 $e \cdot Z$ 35.7
 $e(Q) \cdot N$ 40
 $\Delta = 123^\circ$. $h = 59$ km. Solomon Islands. $H = 21$ 45 13.5.
- 7 $i!P \cdot Z'$ 21 13 11¹/₂ D, $Z': \frac{1}{2}s, \frac{1}{4}\mu$.
 $\Delta = 74^\circ$. $h = 36$ km. Kurile Islands. $H = 21$ 01 37.3.
- 8 $i!PKP \cdot Z'$ 18 09 21 D, $Z': \frac{1}{2}s, \frac{1}{2}\mu$.
 $iSKP \cdot Z'$ 12 13
 $\Delta = 144^\circ$. $h = 543$ km. Tonga Islands. $H = 17$ 50 45.2.
- 9 $ePKP \cdot Z$ 02 28 03
 $i!PKP \cdot Z'$ 28 09 C
 $i \cdot Z'$ 28 12¹/₂ $\frac{1}{2}s, 0.8\mu$.
 $iPKP2 \cdot Z'$ 28 17¹/₂
 $i(pPKP2) \cdot Z'$ 28 36
 $i(sPKP2) \cdot N$ 28 51
 $ePKS \cdot Z$ 31 (38)
 $e(PP) \cdot Z$ 31 57
 $L \cdot N$ 03 23
 $\Delta = 152^\circ$. $h = 37$ km. Kermadec Islands. $H = 02$ 08 15.9.
- 11 $iP \cdot Z'$ 06 24 19 C, $Z': \frac{1}{2}s, \frac{1}{4}\mu$.
 $\Delta = 84^\circ$. $h = 358$ km. Bonin Islands. $H = 06$ 12 23.2.
- 11 $eiPKP \cdot Z'$ 21 20 52 $1s, \frac{1}{4}\mu$.
 $i!(PKP2) \cdot Z'$ 21 00 $-, \frac{1}{2}s, 1\mu$.
 $i(pPKP) \cdot ZZ'$ 21 09
 $isPKP \cdot Z'$ 21 17
 $eL \cdot ZN$ 22 17
 $\Delta = 152^\circ$. $h = 41$ km. Kermadec Islands. $H = 21$ 01 06.4.
- 12 $iP \cdot ZZ'$ 22 05 17 Z: C
 $i!Z'$ 05 18 $\frac{1}{2}s, 1\frac{3}{4}\mu$.
 $i(pP) \cdot Z'$ 05 30
 $i(PcP) \cdot Z$ 05 38
 $i(PP) \cdot Z'$ 07 59

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- 12 $i(pPP) \cdot Z'$ 22^h08^m15^s (Con.).
 $e(PPP) \cdot Z'$ 10 18
 $e \cdot N$ 10 55
 $e \cdot Z$ 14 (30)
 $eS \cdot N$ 14 43
 $e(pS) \cdot N$ 15 05
 $e(PS) \cdot N$ 15 40
 $eSS \cdot Z$ 19 (42)
 $eSSS \cdot Z$ 23
 $eL \cdot Z$ 38
 $M \cdot ZNE$ 42 $17s, Z: 150\mu, N: 135\mu, E: 130\mu$.
 $\Delta = 74^\circ$. $h = 45$ km. Kurile Islands. $H = 21$ 53 43.5.
 $M(L) = 7.0$ (COP).
- 12 Z' 23 03 06 Onset lost in time mark.
 $iPcP \cdot Z'$ 03 20
 $\Delta = 74^\circ$. $h = 17$ km. Kurile Islands. $H = 22$ 51 27.7.
- 12 $iP \cdot Z'$ 23 24 40
 $e \cdot N$ 35 32
Kurile Islands aftershock. $H = 23$ 14.1.
- 12 $eiP \cdot Z'$ 23 38 08¹/₂
 $i \cdot Z'$ 38 12 $0.4s, 0.8\mu$.
 $iPcP \cdot Z'$ 38 26
 $\Delta = 74^\circ$. $h = 23$ km. Kurile Islands. $H = 23$ 26 34.5.
- 13 $eP \cdot Z'$ 00 43 29
 $\Delta = 74^\circ$. $h = 25$ km. Kurile Islands. $H = 00$ 31 51.1.
- 13 $i(P) \cdot Z'$ 01 39 28
Kurile Islands aftershock?
- 13 $iP \cdot Z'$ 02 41 39¹/₂
 $\Delta = 74^\circ$. $h = 18$ km. Kurile Islands. $H = 02$ 30 01.7.
- 13 $iP \cdot Z'$ 02 42 51
 $\Delta = 74^\circ$. $h = 60$ km. Kurile Islands. $H = 02$ 31 19.4.
- 13 $iP \cdot Z'$ 04 54 58¹/₂
 $\Delta = 74^\circ$. $h = 46$ km. Kurile Islands. $H = 04$ 43 24.6.
- 13 $eL \cdot ZNE$ 07 53
 $\Delta = 141^\circ$. Tonga Islands. $H = 06$ 45 25.0.
- 13 $iP \cdot Z'$ 09 18 33 D
 $\Delta = 74^\circ$. $h = 25$ km. Kurile Islands. $H = 09$ 06 55.9.
- 13 $iP \cdot Z$ 16 38 58 C
 $eL \cdot E$ 17 08
 $\Delta = 75^\circ$. $h = 25$ km. Kurile Islands. $H = 16$ 27 20.9.
- 14 $iP \cdot Z'$ 00 27 10¹/₂ D
 $\Delta = 74^\circ$. $h = 92$ km. Kurile Islands. $H = 00$ 15 40.6.
- 14 $iP \cdot Z'$ 03 02 41
 $\Delta = 74^\circ$. $h = 98$ km. Kurile Islands. $H = 02$ 51 15.3.

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14	<i>iP·Z'</i>	03 ^h 27 ^m 02 ^s ₂	
	$\Delta = 74^\circ$.	$h = 25$ km.	Kurile Islands. $H = 03\ 15\ 25.0$.
14	<i>i!P·Z'</i>	03 33 37	C
	<i>iPcP·Z'</i>	33 56	
	<i>i·Z'</i>	34 10	
	<i>eL·E</i>	04 01	
	$\Delta = 74^\circ$.	$h = 20$ km.	Kurile Islands. $H = 03\ 22\ 00.7$.
15	<i>eiP·Z'</i>	10 56 48	
	<i>eS·N</i>	11 06 (15)	
	<i>e(SSS)·Z</i>	14	
	<i>eL·E</i>	23	
	<i>M·ZNE</i>	33	$Z: 17^s, 28\ \mu$.
	$\Delta = 74^\circ$.	$h = 69$ km.	Kurile Islands. $H = 10\ 45\ 15.9$.
15	<i>eiP·Z'</i>	11 38 25	
	$\Delta = 55^\circ$.	$h = 66$ km.	Tibet. $H = 11\ 28\ 55.0$.
16	<i>eL·ZNE</i>	03 54	
	$\Delta = 15^\circ$.	Albania.	$H = 03\ 44\ 58.8$.
16	<i>iP·Z'</i>	14 06 25	C
	<i>eL·E</i>	33	
	$\Delta = 75^\circ$.	$h = 71$ km.	Kurile Islands. $H = 13\ 54\ 53.7$.
16	<i>iP·Z'</i>	15 06 00 ¹ / ₂	C
	$\Delta = 74^\circ$.	$h = 50$ km.	Kurile Islands. $H = 14\ 54\ 27.7$.
18	<i>eL·NE</i>	17 35	
	$\Delta = 61^\circ$.	Atlantic Ocean.	$H = 17\ 02\ 10.0$.
21	<i>iP·Z'</i>	03 06 33 ¹ / ₂	C
	<i>iPP·Z'</i>	06 50	
	$\Delta = 20^\circ$.	$h = 25$ km.	Greece. $03\ 01\ 52.6$.
22	<i>iPKP·Z'</i>	22 13 25	D
	<i>eL·N</i>	23 11	
	$\Delta = 152^\circ$.	$h = 66$ km.	Kermadec Islands. $H = 21\ 53\ 33.8$.
23	<i>eiP·Z'</i>	04 28 12	
	<i>i(PcP)·Z'</i>	28 28	
	<i>i(pP)·Z'</i>	28 44	
	<i>eS·E</i>	38 03	
	<i>eL·N</i>	52	
	<i>eL·N</i>	57	
	<i>M·ZNE</i>	05 04 ¹ / ₂	$15^s, N: 8^s/4\ \mu, E: 10^1/2\ \mu$.
	$\Delta = 76^\circ$.	$h = 116$ km.	Honshu. $H = 04\ 16\ 24.3$.
23	<i>ei(P)·Z</i>	21 51 (24)	
	<i>eS·N</i>	55 25	
	<i>e(R)·E</i>	58	
	$\Delta = 22^\circ$.	$h = 25$ km.	Dodecanese Islands. $H = 21\ 45\ 50.5$.
23	<i>eL·E</i>	22 08	
	$\Delta = 21^\circ$.	Dodecanese Islands.	$H = 21\ 56\ 40.2$.

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24	<i>iP·Z'</i>	03 ^h 16 ^m 20 ^s	C. Confused by microseisms.
	$\Delta = 80^\circ$.	$h = 50$ km.	Ryukyu Islands. $H = 03\ 04\ 16.1$.
26	<i>eL·ZNE</i>	07 10	
	$\Delta = 135^\circ$.	Easter Island.	$H = 05\ 48\ 46.3$.
26	<i>iP·ZZ'</i>	18 22 48 ¹ / ₂	C from northeast.
	<i>i!PcP·Z'</i>	22 50 ¹ / ₂	
	<i>i(pP)·Z'</i>	23 02	
	<i>iPP·Z</i>	25 54	
	<i>ePPP·Z</i>	27 37	
	<i>ePPPP·Z</i>	28 53	
	<i>i·Z</i>	29 15	
	<i>iS·E</i>	32 46	
	<i>ePS·Z</i>	33 20	
	<i>i·N</i>	33 32	
	<i>i·N</i>	33 47	
	<i>eSS·Z</i>	37 48	
	<i>i!·N</i>	38 12	
	<i>e·E</i>	38 50	
	<i>i(SSS)·N</i>	41 23	
	<i>e·E</i>	41 43	
	<i>e·Z</i>	42.0	
	<i>eR·Z</i>	46	
	<i>M·ZNE</i>	19 00 ¹ / ₂	$20^s, ZE: (380\ \mu), N: 290\ \mu$.
	$\Delta = 78^\circ$.	$h = 54$ km.	Kyushu. $H = 18\ 10\ 48.7$.
	$M(L) = 7.8 - 7.9$	(COP).	
27	<i>eL·N</i>	21 53	
	$\Delta = 21^\circ$.	Dodecanese Islands.	$H = 21\ 40\ 02.6$.
27	<i>eL·E</i>	22 07	
	$\Delta = 21^\circ$.	Dodecanese Islands.	$H = 21\ 54\ 33.6$.
28	<i>iP·Z'</i>	12 45 01	D
	<i>e·Z</i>	55 (51)	
	$\Delta = 72^\circ$.	$h = 29$ km.	Kurile Islands. $H = 12\ 33\ 32.1$.
March.			
7	<i>eiPKP·Z'Z</i>	10 30 25	D $Z: 7-8^s, 24\ \mu$.
	<i>i·Z'</i>	30 32 ¹ / ₂	
	<i>iPKP2·Z'</i>	30 42 ¹ / ₂	
	<i>i·Z</i>	31 16	
	<i>i·Z</i>	31 36	
	<i>i·Z</i>	32 57	
	<i>i!PP·ZN</i>	34 14	
	<i>i·E</i>	36 17	
	<i>i(SKS)·Z</i>	37 26	
	<i>i(PPP)·E</i>	37 42	
	<i>i·N</i>	38 10	
	<i>e·Z</i>	38 27	
	<i>i·E</i>	39 00	
	<i>i·Z</i>	41 18	
	<i>i·Z</i>	41 55	
	<i>e·E</i>	43 17	
	<i>i·Z</i>	43 45	
	<i>i·N</i>	43 55	

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March.

- 7 $e(SKSP) \cdot N$ 10^h44^m27^s (Con.).
 $e \cdot E$ 46 39
 $e \cdot E$ 49 24
 $eL \cdot N$ 11 23
 $\Delta = 152^\circ$. $h = 43$ km. Kermadec Islands. $H = 10$ 10 38.9.
- 7 $iPKP \cdot Z'$ 23 30 46 (D)
 $\Delta = 120^\circ$. $h = 90$ km. New Britain. $H = 23$ 11 59.6.
- 8 $eiP \cdot Z'$ 00 29 (22^{1/2})
 $\Delta = 72^\circ$. $h = 34$ km. Fox Islands. $H = 00$ 17 58.9.
- 9 $eL \cdot N$ 04 29
 $\Delta = 61^\circ$. Atlantic Ocean. $H = 03$ 59 08.7.
- 11 $iP \cdot Z'$ 01 42 56^{1/2} D
 $i \cdot Z'$ 43 25^{1/2}
 $eQ \cdot EN$ 02 01
 $eR \cdot E$ 10
 $\Delta = 71^\circ$. $h = 26$ km. Kurile Islands. $H = 01$ 31 34.4.
- 13 $eP \cdot Z'$ 19 22 21
 $i \cdot Z'$ 22 34
 $i \cdot Z'$ 23 09
 $eS \cdot E$ 26.5
 $eL \cdot E$ 31
 $\Delta = 23^\circ$. $h = 25$ km. Crete. $H = 19$ 17 16.0.
- 15 $eL \cdot E$ 11 22
 $\Delta = 118^\circ$. New Ireland. $H = 10$ 14 55.5.
- 16 $ePP \cdot Z$ 14 04 28
 $e(SK) \cdot E$ 10 (30)
 $e(PS) \cdot Z$ 13 35
 $e(PPS) \cdot N$ 14 47
 $eQ \cdot E$ 34
 $eR \cdot E$ 42
 $\Delta = 108^\circ$. $h = 74$ km. Flores Sea. $H = 13$ 45 35.6.
- 17 $ei(PKP) \cdot Z'$ 20 30 20
 $eL \cdot ZN$ 21 37
 $(\Delta = 148^\circ$. $h = 79$ km.) Tonga Islands. $H = 20$ 11 17.4.
- 18 $ePKP \cdot Z$ 15 14 (40)
 $e \cdot Z$ 20 16
 $e \cdot Z$ 21 15
 $e \cdot E$ 24 22
 $ei \cdot Z$ 25 14
 $e \cdot Z$ 31 (40)
 $e(SS) \cdot N$ 39 52
 $eL \cdot N$ 16 07
 $eL \cdot ZN$ 20
 $\Delta = 161^\circ$. $h = 38$ km. New Zealand. $H = 14$ 54 59.3.
- 19 $eL \cdot N$ 08 29
 $\Delta = 137^\circ$. New Hebrides Islands. $H = 07$ 14 57.8.

March.

- 20 $iP \cdot Z'$ 03^h38^m24^{1/2}^s D
 $i \cdot Z'$ 38 35^{1/2}
 $eL \cdot N$ 52
 $\Delta = 44^\circ$. $h = 86$ km. Hindu Kush. $H = 03$ 30 28.3.
- 20 $eL \cdot ZNE$ 06 58
 $\Delta = 86^\circ$. Nicaragua. $H = 06$ 16 21.1.
- 20 $iPKP \cdot Z$ 16 12 24 C
 $i \cdot Z'$ 13 11
 $ipPKP \cdot Z$ 13 23
 $e(PP) \cdot Z$ 15 38
 $i(SK) \cdot N$ 16 11
 $i(pPKS) \cdot Z$ 17 27
 $e(SKKS) \cdot N$ 21 (45)
 $e(PS) \cdot N$ 26 (35)
 $e(SPP) \cdot Z$ 28 07
 $i \cdot N$ 29 23
 $\Delta = 142^\circ$. $h = 178$ km. Tonga Islands. $H = 15$ 53 26.1.
- 21 $eiPKP \cdot Z'$ 00 02 (22)
 $i(PKP2) \cdot Z$ 02 25 (D) } Confused by microseisms.
 $i \cdot Z$ 02 45
 $eL \cdot E$ 01 10
 $\Delta = 148^\circ$. $h = 25$ km. Tonga Islands. $H = 23$ 42 36.8.
- 24 $iP \cdot Z'$ 23 09 12 D
 $eL \cdot NE$ 39
 $\Delta = 78^\circ$. $h = 102$ km. Honshu. $H = 22$ 57 14.3.
- 28 $iP \cdot Z$ 09 49 43^{1/2} C
 $i \cdot Z$ 50 24
 $iPP \cdot Z$ 53 56 -
 $i \cdot ZE$ 54 42
 $i \cdot Z$ 55 16
 $eSKS \cdot NE$ 10 00 (15)
 $iS \cdot E$ 01 13
 $i(PS) \cdot E$ 03 23
 $e \cdot N$ 05 12
 $eL \cdot N$ 23
 $M \cdot NE$ 30 20^s, N : 41 μ , E : 26^{1/2} μ .
 $\Delta = 102^\circ$. $h = 83$ km. Celebes. $H = 09$ 35 55.4.
 $M(L) = 7.0-7.1$ (COP).
- 28 $eL \cdot N$ 13 05
 $\Delta = 73^\circ$. Andreanof Islands. $H = 12$ 29 12.7.
- 28 $eSKS \cdot E$ 21 26 25
 $eS \cdot N$ 27 32
 $e(PS) \cdot N$ 28 26
 $eSS \cdot N$ 34 (36)
 $\Delta = 103^\circ$. $h = 125$ km. Chile/Bolivia. $H = 21$ 01 56.2.
- 30 $eL \cdot Z$ 08 26
 $\Delta = 87^\circ$. California. $H = 07$ 42 59.4.
- 30 $eL \cdot N$ 10 03
 $\Delta = 140^\circ$. Samoa Islands. $H = 08$ 49 45.6.

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March.

30 *eL·N* 12h35m
 $\Delta = 65^\circ$. China. *H* = 12 00 12.8.

April.

1 *eP·ZZ'* 15 26 42 *C* from East. *Z*: $7\frac{1}{2}^s$, $12\frac{1}{2}\mu$.
iPP·Z 28 $17\frac{1}{2}$
e(PCP)·E 28 27
e·E 28 35
i·Z 28 42
iPPP·Z 29 $02\frac{1}{2}$
e·Z 31 05
ePcS·E 32 (12)
iS·N 33 14
i!(PS)·E 33 25 —
eSS·N 36 38
i(ScS)·E 36 43
e·N 38 37
eR·Z 39.4
i·N 41.7
M·ZNE 46 approx. 10^s , *Z*: 105μ , *N*: 85μ ,
E: 110μ .
 $\Delta = 45^\circ$. *h* = 21 km. Sinkiang. *H* = 15 18 22.8.

4 *eS·Z* 10 01 39 Wiechert (No *Z'*, Gal. records).
eL·Z 10 37
 $\Delta = 44^\circ$. *h* = 16 km. Sinkiang. *H* = 09 46 36.6.

4 *iP·Z'* 22 44 $34\frac{1}{2}$
i·Z' 44 42
i(PP)·Z' 44 53
i(PPP)·Z' 45 $06\frac{1}{2}$
i·Z' 45 $25\frac{1}{2}$
i(S)·Z' 46 $48\frac{1}{2}$
e(SS)·E 47 04
i(SSS)·E 47 20
eR·E 47.6
eR·N 48.1
 $\Delta = 9^\circ$. Norway. *H* = 22 42 30.

5 *eL·NE* 07 11
 $\Delta = 45^\circ$. Sinkiang. *H* = 06 47 07.4.

6 *iP·Z'* 01 42 04 *D*
eR·Z 55.5
i·E 02 01 $15\frac{1}{2}$
 $\Delta = 45^\circ$. *h* = 33 km. Sinkiang. *H* = 01 33 46.9.

6 *eL·E* 04 45
 $\Delta = 77^\circ$. California. *H* = 04 04 46.1.

6 *eL·NE* 14 58
 $\Delta = 86^\circ$. Sumatra. *H* = 14 05 00.3.

6 *iP·Z'* 18 20 28 *D*
i!·Z' 20 $34\frac{1}{2}$
ePP·Z 22 06
eS·N 26 47

April.

6 *eSS·N* 18h30.0m (Con.).
eL·NE 34
 $\Delta = 42^\circ$. *h* = 109 km. Iran. *H* = 18 12 40.7.

6 *eL·Z* 22 30 120^s, Trace amplitude = 1 mm.
eL·E 30.7 } Irregular motion. 12^s, 0.6 μ .
eL·N 31 }

7 *eL·N* 14 20

7 *eP·Z* 20 05 42
ePP·Z 08 12
eS·NE 14 18
eL·NE 28
 $\Delta = 65^\circ$. *h* = 20 km. Kamchatka. *H* = 19 54 51.9.

7 *iP·Z'* 21 25 $40\frac{1}{2}$ *C*
ipP·Z' 25 52
ePP·Z 27 27
eS·E 32 07
eSS·N 35 (04)
eR·N 37.9
 $\Delta = 42^\circ$. *h* = 44 km. Kirghiz/Tadzhik. *H* = 21 17 43.8.

8 *eL·ZE* 00 52 15–20^s.
less well shown on *N*.

8 *ePP·Z* 18 19 43
ePPP·Z 22 23
iSKS·E 25 $27\frac{1}{2}$
ePS·E 29 35
eSS·N 35 (36)
eSSS·N 40
eL·NE 55
 $\Delta = 118^\circ$. *h* = 60 km. Chile. *H* = 17 59 46.7.

8 *eL·NE* 22 (26)
 $\Delta = 99^\circ$. Mariana Islands. *H* = 21 37 41.6.

9 *eL·NE* 08 02
 $\Delta = 79^\circ$. California. *H* = 07 23.3.

9 *iPKP·Z'* 09 40 $08\frac{1}{2}$ *D*
 $\Delta = 148^\circ$. Fiji Islands. *H* = 09 21 29.0.

9 *iP·ZZ'* 15 47 22 *C* from East.
i·Z' 47 39
ePP·Z 50 24
eS·E 57 15
eSKS·E 57 28
eScS·E 57 40
e(PS)·N 58 22
e(SS)·N 16 03 08
e(SSS)·E 06 12
e(Q)·Z 07.1
eR·N 13
M·ZNE 26 19–20^s, *N*: 53μ , *E*: 72μ .
 $\Delta = 80^\circ$. *h* = 13 km. Formosa. *H* = 15 35 05.4.

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April.

- 9 $ei(P'P') \cdot Z'$ 16^h13^m37^s
(Possibly $P'P'$ from the previous earthquake).
- 10 $eL \cdot ZNE$ 07 46
 $\Delta = 80^\circ$. Formosa. $H = 06\ 57\ 13.6$.
- 10 $eL \cdot E$ 20 46
 $\Delta = 107^\circ$. New Guinea. $H = 19\ 40\ 15.9$.
- 12 $iP \cdot Z'$ 22 33 02 D
 $i(pP) \cdot Z$ 33 22
 $ePP \cdot Z$ 36 23
 $i(pPP) \cdot Z$ 36 43
 $e(SKS) \cdot E$ 43 16
 $e(S) \cdot E$ 43 27
 $e(PS) \cdot N$ 44 40
 $eSS \cdot E$ 49
 $eR \cdot NE$ 59
 $\Delta = 85^\circ$. $h = 122$ km. El Salvador. $H = 22\ 20\ 33.6$.
- 13 $eP \cdot Z$ 16 42 55 C
 $i \cdot Z'$ 42 55¹/₂ D
 $i \cdot Z'$ 42 59
 $i(PcP) \cdot Z'$ 44 12¹/₂
 $e(PP) \cdot Z$ 44 35
 $e \cdot Z$ 44 57
 $e \cdot Z$ 47 02
 $eS \cdot E$ 49 32
 $ePS \cdot E$ 49 45
 $e \cdot E$ 50 24
 $e \cdot E$ 52 23
 $e(SS) \cdot E$ 52 40
 $i \cdot N$ 53 02
 $e(Q) \cdot E$ 53 21
 $i(Lg) \cdot E$ 17 02 05 +, 15^s, 160 μ .
 $i(Lg) \cdot Z$ 02 07 -, 15^s, 150 μ .
 $M \cdot ZNE$ 02.1 N : 15^s, 66 μ .
 $\Delta = 45^\circ$. $h = 19$ km. Sinkiang. $H = 16\ 34\ 39.1$.
- 16 $iP \cdot Z'$ 06 29 09 C
 $\Delta = 83^\circ$. $h = 387$ km. Honshu. $H = 06\ 17\ 21.3$.
- 16 $iP \cdot Z'$ 11 51 38 D
 $i \cdot Z'$ 51 43
 $i(pP) \cdot Z'$ 51 48
 $\Delta = 68^\circ$. $h = 27$ km. Kamchatka. $H = 11\ 40\ 40.7$.
- 17 $iPKP \cdot Z'$ 21 06 49¹/₂ D
 $\Delta = 145^\circ$. $h = 549$ km. Tonga Islands. $H = 20\ 48\ 12.5$.
- 19 $eiP \cdot Z'$ 16 24 01
 $i \cdot Z'$ 24 01¹/₂
 $i \cdot Z'$ 24 04
 $eL \cdot NE$ 49
 $\Delta = 74^\circ$. $h = 51$ km. Kurile Islands. $H = 16\ 12\ 28.7$.

April.

- 19 $iP \cdot Z'$ 18^h24^m46^s¹/₂ (D)
 $eL \cdot NE$ 53
 $\Delta = 67^\circ$. $h = 21$ km. Kamchatka. $H = 18\ 13\ 51.8$.
- 19 $iP \cdot Z'$ 20 31 22¹/₂ C
 $iPcP \cdot Z'$ 31 36
 $eL \cdot E$ 56
 $\Delta = 74^\circ$. $h = 27$ km. Kurile Islands. $H = 20\ 19\ 46.4$.
- 19 $iP \cdot Z'$ 22 19 24 D
 $i \cdot Z'$ 24 08
 $eL \cdot E$ 49
 $\Delta = 73^\circ$. $h = 34$ km. Kurile Islands. $H = 22\ 07\ 51.2$.
- 20 $eL \cdot NE$ 22 46
 $\Delta = 139^\circ$. Samoa Islands. $H = 21\ 39\ 07.0$.
- 21 $eL \cdot E$ 20 08
 $\Delta = 71^\circ$. Kurile Islands. $H = 19\ 30\ 36.9$.
- 21 $iP \cdot Z'$ 20 22 04 Confused by microseisms.
 $e(S) \cdot N$ 31 12
 $e(S) \cdot E$ 31 23
 $eL \cdot E$ 46
 $\Delta = 72^\circ$. $h = 27$ km. Kurile Islands. $H = 20\ 10\ 38.3$.
- 21 $eL \cdot E$ 22 05
 $\Delta = 73^\circ$. Andreanof Islands. $H = 21\ 26\ 42.1$.
- 22 $eL \cdot NE$ 01 30
 $\Delta = 121^\circ$. New Britain. $H = 00\ 30.4$.
- 23 $iP \cdot Z'$ 05 26 48¹/₂ D
 $i \cdot Z'$ 26 58
 $ipP \cdot Z'$ 27 12
 $e(S) \cdot N$ 37 08
 $e(PS) \cdot E$ 38 10
 $e(SSS) \cdot Z$ 46¹/₂
 $eL \cdot NE$ 58
 $\Delta = 82^\circ$. $h = 110$ km. Ryukyu Islands. $H = 05\ 14\ 31.1$.
- 23 $iP \cdot Z'$ 09 13 15 C
 $i \cdot Z'$ 13 22
 $i(pP) \cdot Z'$ 13 30 } Intermediate phases lost in
 $ePPP \cdot Z$ 17 39 } record change.
 $e \cdot Z$ 18 56
 $eS \cdot N$ 22 39
 $iPS \cdot E$ 23 26
 $e \cdot E$ 26 47
 $e \cdot E$ 28 48
 $e(Q) \cdot E$ 31.1
 $e \cdot N$ 34.7
 $eR \cdot E$ 37
 $M \cdot E$ 48 15^s, 35 μ .
 $M \cdot ZN$ 51 15^s, Z : 22 μ , N : 37 μ .
 $\Delta = 74^\circ$. $h = 44$ km. Kurile Islands. $H = 09\ 01\ 41.8$.

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April.

23 $eL \cdot NE$ 13^h01^m
 $\Delta = 74^\circ$. Kurile Islands. $H = 12\ 17\ 59.7$.

23 $iP \cdot Z$ 17 02 35
 $eS \cdot N$ 12 (14)
 $eL \cdot E$ 28
 $\Delta = 74^\circ$. $h = 76$ km. Kurile Islands. $H = 16\ 51\ 03.6$.

24 $eL \cdot E$ 13 05
 $\Delta = 74^\circ$. Kurile Islands. $H = 12\ 27\ 39.5$.

25 $iP \cdot Z$ 01 29 12 C
 $i(P) \cdot Z'$ 29 13 D
 $e(PPP) \cdot N$ 34 30
 $eS \cdot N$ 35 45
 $eL \cdot E$ 51
 $\Delta = 74^\circ$. $h = 78$ km. Kurile Islands. $H = 01\ 17\ 42.7$.

25 $eL \cdot NE$ 12 46
 $\Delta = 156^\circ$. Kermadec Islands. $H = 11\ 16\ 41.4$.

26 $eL \cdot ZNE$ 00 32
 $\Delta = 81^\circ$. Ryukyu Islands. $H = 23\ 40\ 34.3$.

26 $iP \cdot Z$ 07 50 31^{1/2} C
 $eS \cdot N$ 08 00 04
 $e(SS) \cdot N$ 04 11
 $e(Q) \cdot N$ 08 30
 $\Delta = 74^\circ$. $h = 20$ km. Kurile Islands. $H = 07\ 38\ 54.1$.

26 $eP \cdot Z$ 19 44 07
 $eL \cdot E$ 20 11
 $\Delta = 74^\circ$. $h = 51$ km. Kurile Islands. $H = 19\ 32\ 34.2$.

27 $eL \cdot N$ 01 07^{1/2}
 $\Delta = 44^\circ$. Sinkiang. $H = 00\ 44.3$.

29 $eP \cdot Z$ 09 31 31
 $\Delta = 78^\circ$. $h = 26$ km. California. $H = 09\ 19\ 28.3$.

29 $iP \cdot Z'ZNE$ 09 33 19 C from North-west, 5°, ZN: 8 μ ,
E: 3 μ .
 $i \cdot Z$ 34 24
 $i \cdot Z$ 36 09
 $i(S) \cdot E$ 36 45^{1/2} +
 $i(SSS) \cdot N$ 37 17
 $eL \cdot E$ 39.0
 $M \cdot ZNE$ 42 12°, Z: 38 μ , N: 39 μ , E: 40 μ .
 $\Delta = 18\frac{3}{4}^\circ$. $h = 14$ km. Jan Mayen Island. $H = 09\ 29\ 09.5$.

29 $eL \cdot NE$ 11 17
 $\Delta = 58^\circ$. Outer Mongolia. $H = 10\ 45\ 39.1$.

30 $eP \cdot Z$ 07 39 25
 $i(pP) \cdot Z'$ 39 36
 $e(PPP) \cdot Z$ 40 31
 $eS \cdot E$ 44 04
 $eL \cdot ZNE$ 47
 $\Delta = 26^\circ$. $h = 38$ km. Atlantic Ocean. $H = 07\ 33\ 53.5$.

April.

30 $iP \cdot Z'$ 11^h26^m49^{1/2}^s
 $i \cdot Z'$ 26 53
 $eS \cdot N$ 36 14
 $eL \cdot ZNE$ 53
 $\Delta = 73^\circ$. $h = 70$ km. Kurile Islands. $H = 11\ 15\ 19.8$.

30 $eL \cdot NE$ 15 53
 $\Delta = 139^\circ$. Samoa Islands. $H = 14\ 48\ 11.5$.

May.

2 $eL \cdot E$ 03 22
 $\Delta = 18^\circ$. Jan Mayen Island. $H = 03\ 11\ 45.7$.

2 $eL \cdot N$ 21 04
 $\Delta = 151^\circ$. Kermadec Islands. $H = 19\ 38\ 13.5$.

2 $iPKP \cdot Z$ 23 04 36 D
 $iPP \cdot Z$ 08 16
 $e(SKSP) \cdot E$ 18 31
 $e \cdot N$ 19 31
 $e \cdot E$ 28 53
 $eL \cdot NE$ 57
 $\Delta = 151^\circ$. $h = 47$ km. Kermadec Islands. $H = 22\ 44\ 44.3$.

2 $eiPKP \cdot Z'$ 23 43 53 Confused by microseisms.
 $\Delta = 151^\circ$. $h = 84$ km. Kermadec Islands. $H = 23\ 24\ 03.6$.

3 $eL \cdot N$ 13 58
 $\Delta = 85^\circ$. Luzon. $H = 13\ 10\ 04.0$.

4 $eL \cdot E$ 03 01
 $\Delta = 78^\circ$. California. $H = 02\ 17\ 34.0$.

4 $eL \cdot E$ 07 29
 $\Delta = 58^\circ$. Atlantic Ocean. $H = 07\ 00\ 32.9$.

5 $eiPKP \cdot Z'$ 14 03 12
 $e \cdot Z$ 04 49
 $e \cdot N$ 18 10
 $e \cdot E$ 27 24
 $eL \cdot NE$ 15 03
 $\Delta = 152^\circ$. $h = 84$ km. Kermadec Islands. $H = 13\ 43\ 21.7$.

6 $eL \cdot E$ 16 15^{1/2}
 $\Delta = 18^\circ$. Mediterranean Sea. $H = 16\ 04\ 33.1$.

6 $eL \cdot NE$ 20 09
 $\Delta = 62^\circ$. Atlantic Ocean. $H = 19\ 38\ 04.6$.

7 $ePP \cdot Z$ 00 46.0
 $ePS \cdot E$ 56.0
 $eL \cdot NE$ 01 20
 $\Delta = 122^\circ$. $h = 123$ km. Solomon Islands. $H = 00\ 25\ 40.8$.

7 $eiP \cdot Z'$ 04 56 04
 $eL \cdot N$ 05 (31)
 $\Delta = 17^\circ$. Corfu. $H = 04\ 51\ 43$.

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May.

- 7 *eS·E* 10^h47^m16^s
eL·NE 11 13
 $\Delta = 98^\circ$. $h = 89$ km. Mindanao. $H = 10\ 22\ 43.7$.
- 7 *eL·E* 12 56
 $\Delta = 77^\circ$. Honshu. $H = 12\ 14\ 15.5$.
- 7 *eP·Z* 15 45 09
eL·E 51
 $\Delta = 17^\circ$. $h = 66$ km. Jan Mayen Island. $H = 15\ 40\ 52.5$.
- 8 *ePS·E* 19 51 33
eL·E 20 17
 $\Delta = 106^\circ$. $h = 48$ km. Chile. $H = 19\ 23\ 35.4$.
- 10 *eL·E* 17 19
 $\Delta = 20^\circ$. Mediterranean Sea. $H = 17\ 08\ 00$.
- 11 *ePP·Z* 08 58 41
ePS·Z 09 08 (12)
ePPS·Z 09 38
eSS·N 14 33
eL·ZNE 40
 $\Delta = 118^\circ$. $h = 47$ km. Chile. $H = 08\ 38\ 27.1$.
- 11 *eL·N* 14 13
 $\Delta = 74^\circ$. Kurile Islands. $H = 13\ 36\ 36.2$.
- 13 *eL·N* 14 55
 $\Delta = 151^\circ$. Kermadec Islands. $H = 14\ 18\ 42.4$.
- 13 *eL·NE* 15 41.0
eL·ZNE 44
 $\Delta = 141^\circ$. $h = 556$ km. Fiji Islands. $H = 14\ 52\ 55.3$.
- 13 *eiP·Z'Z* 16 01 07¹/₂ C
e(SS)·E 15 (54)
eL·E 31
eL·ZN 37
 $\Delta = 74^\circ$. $h = 31$ km. Hokkaido. $H = 15\ 49\ 29.6$.
- 14 *eP·ZNE* 15 12 24 C from North-west, $Z: 5^\circ, 1\ \mu$.
eS·N 16 09
eL·ZNE 18
 $\Delta = 19^\circ$. $h = 47$ km. Iceland. $H = 15\ 08\ 04.2$.
- 14 *eP·ZNE* 15 42 39 C from North-west, $Z: 5^\circ, 2\ \mu$.
eS·Z 46 07
eL·ZE 47
 $(\Delta = 19^\circ, h = 23$ km.) Iceland. $(H = 15\ 38\ 07.5)$.
- 14 *eL·E* 20 16
 $\Delta = 78^\circ$. California. $H = 19\ 31\ 34.4$.
- 15 *eL·NE* 20 28
 $\Delta = 135^\circ$. Santa Cruz Islands. $H = 19\ 12\ 10.8$.

May.

- 15 *iPKP·Z'Z* 21^h12^m26^s D
 $\Delta = 144^\circ$. $h = 89$ km. Tonga Islands. $H = 20\ 53\ 05.3$.
- 16 *ePKP·Z'* 17 47 09 D
e·Z' 47 19
eL·NE 18 58
 $\Delta = 152^\circ$. $h = 53$ km. Kermadec Islands. $H = 17\ 27\ 34.1$.
- 16 *iP·Z'* 21 57 35 D
iPcP·Z' 57 41
i·Z' 57 48
eS·E 22 07 38
iScS·E 07 52
e(PS)·E 08 06
eSS·E 13 (08)
eL·Z 22.8
 $\Delta = 80^\circ$. $h = 25$ km. Ryukyu Islands. $H = 21\ 45\ 24.0$.
- 17 *iP·Z'* 19 40 43 D
iP·ZN 40 43 C from North.
i·Z 40 49
ePP·Z 43 23
eS·N 49 57
e·ZNE 50 14
ePS·NE 50 43
eSS·N 55 09
eQ·Z 58.5
eR·NE 20 02
 $\Delta = 72^\circ$. $h = 21$ km. Near Islands. $H = 19\ 29\ 19.3$.
- 18 *eL·NE* 00 57
 $\Delta = 61^\circ$. China. $H = 00\ 23\ 45.2$.
- 18 *eP·ZN* 09 43 (29)
eS·E 46 (51)
eL·E 48¹/₂
 $\Delta = 17^\circ$. Arctic Ocean. $H = 09\ 39\ 30$.
- 19 *eL·ZNE* 00 14
 $\Delta = 119^\circ$. Chile. $H = 23\ 10\ 13.7$.
- 19 *iPKP·Z'* 02 40 10³/₄ (C)
i·Z' 40 13
ei·Z' 41 (40)
 $\Delta = 146^\circ$. $h = 600$ km. Fiji Islands. $H = 02\ 21\ 31.8$.
- 19 *eL·E* 10 09
 $\Delta = 87^\circ$. Nicaragua. $H = 09\ 25\ 26.6$.
- 19 *e(P)·Z'* 14 58 10 approx. $\frac{1}{2}^\circ$.
i·Z' 58 30
- 19 *i(P)·Z'* 14 59 37¹/₂ D, approx. $\frac{1}{2}^\circ$.
 $(\Delta = 78^\circ, H = 14\ 47.7, \text{California})$.
- 19 *eS·N* 16 59 53
eL·N 17 13
 $\Delta = 81^\circ$. $h = 71$ km. Ryukyu Islands. $H = 16\ 37\ 28.9$.

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May.			
19	$e(P) \cdot Z'$	23 ^h 59 ^m 35 ^s	
20	$eL \cdot N$	02 44	
	$\Delta = 45^\circ$.	Sinkiang.	$H = 02\ 20.3$.
20	$eiP \cdot Z'$	12 02 33	
	$\Delta = 74^\circ$.	$h = 59$ km.	Kurile Islands. $H = 11\ 51\ 01.2$.
20	$eL \cdot ZN$	17 57	
	$\Delta = 17^\circ$.	Arctic Ocean.	$H = 17\ 47\ 19.3$.
20	$eL \cdot NE$	18 32	
	$\Delta = 64^\circ$.	Tanganyika.	$H = 17\ 52\ 04.6$.
21	$eL \cdot N$	16 14	
21	$eL \cdot N$	20 11	
	$(\Delta = 40^\circ$.	Iran.	$H = 19\ 44\ 19)$.
22	$ePKP \cdot Z$	14 04 07 ¹ / ₂ C	
	$i \cdot Z'$	04 19	
	$i \cdot Z$	04 23	
	$ePP \cdot Z$	07 33	
	$e(SKKS) \cdot E$	14 (07)	
	$e(SSS) \cdot N$	32 (02)	
	$eL \cdot N$	59	
	$\Delta = 145^\circ$.	$h = 97$ km.	Tonga Islands. $H = 13\ 44\ 35.8$.
22	$iPKP \cdot Z'$	17 52 01 ¹ / ₂ C	
	$i \cdot Z'$	52 21	
	$i \cdot Z$	52 45 ¹ / ₂	
	$i \cdot Z$	53 03 ¹ / ₂	
	$i \cdot Z$	53 27	
	$iPP \cdot Z$	55 29	
	$e \cdot Z$	58 17	
	$eSKKS \cdot N$	18 02 27	
	$e(PcSPKP) \cdot E$	04 13	
	$e \cdot N$	04 29	
	$eSKSP \cdot N$	05 37	
	$eSS \cdot E$	14 24	
	$e \cdot E$	23 32	
	$eL \cdot E$	38	
	$\Delta = 147^\circ$.	$h = 35$ km.	Tonga Islands. $H = 17\ 32\ 21.6$.
23	$iP \cdot Z'ZNE$	02 50 08	C from South-east.
	$i!pP \cdot ZNE$	50 27	approx. $2^{1/2}^\circ$, $Z: 43 \mu$, $N: 24 \mu$, $E: 23 \mu$.
	$eS \cdot ZNE$	54 09 ¹ / ₂	$N: +$, $E: -$.
	$i!sS \cdot ZNE$	54 (37)	10° , $Z: 37 \mu$, $N: 67 \mu$, $E: 64 \mu$.
	$i(SSS) \cdot ZN$	55 08	
	$eL \cdot E$	56 54	
	$M \cdot ZNE$	03 00	approx. 13° , $Z: 135 \mu$, $N: 61 \mu$, $E: 78 \mu$.
	$\Delta = 22^\circ$.	$h = 70$ km.	Turkey. $H = 02\ 45\ 18.8$.
23	$iP \cdot Z'$	03 52 54 ¹ / ₄ (C)	
	$eP \cdot Z$	52 55	D
	$eS \cdot N(E)$	04 03 24	
	$\Delta = 86^\circ$.	$h = 136$ km.	Costa Rica. $H = 03\ 40\ 26.1$.

May.			
23	$iP \cdot Z'$	03 ^h 55 ^m 38 ^s	
	$\Delta = 86^\circ$.	$h = 150$ km.	Costa Rica. $H = 03\ 43\ 10$.
23	$eL \cdot N$	05 57	
	$eL \cdot ZE$	06 10	
23	$eP \cdot Z$	16 57 25	
	$ePP \cdot Z$	17 00 44	
	$eS \cdot E$	07 47	
	$ePS \cdot E$	09 08	
	$eL \cdot N$	22	
	$\Delta = 85^\circ$.	$h = 138$ km.	Nicaragua. $H = 16\ 44\ 59.4$.
26	$eL \cdot E$	23 34	
	$\Delta = 77^\circ$.	Honshu.	$H = 22\ 49\ 49.4$.
27	$iP \cdot Z'$	07 29 39 D	
	$eL \cdot E$	59	
	$\Delta = 74^\circ$.	$h = 156$ km.	Honshu. $H = 07\ 18\ 12.2$.
27	$eL \cdot N$	11 02	
	$\Delta = 44^\circ$.	Hindu Kush.	$H = 10\ 37\ 39.6$.
27	$eS \cdot NE$	17 15 42	
	$eL \cdot N$	44	
	$\Delta = 87^\circ$.	$h = 39$ km.	Sumatra. $H = 16\ 52\ 19.3$.
27	$eL \cdot ZE$	23 31	
	$\Delta = 86^\circ$.	Luzon.	$H = 22\ 38\ 35.5$.
28	$iPKP \cdot Z'$	19 47 52 ¹ / ₂	
	$i \cdot Z'$	47 59	
	$\Delta = 149^\circ$.	$h = 219$ km.	Fiji Islands. $H = 19\ 28\ 21.9$.
29	$eL \cdot ZNE$	08 32	
	$\Delta = 119^\circ$.	Chile.	$H = 07\ 28\ 11.7$.
29	$eS \cdot E$	11 08 (10)	
	$eSS \cdot N$	11 (52)	
	$eL \cdot NE$	18	
	$\Delta = 50^\circ$.	$h = 25$ km.	Ethiopia. $H = 10\ 52\ 01.2$.
29	$eL \cdot E$	19 52	
	$\Delta = 50^\circ$.	Ethiopia.	$H = 19\ 26\ 05.5$.
31	$eP \cdot Z$	14 30 (15)	
	$eS \cdot N$	40 35	
	$e \cdot N$	52 21	
	$eL \cdot NE$	58	
	$\Delta = 83^\circ$.	$h = 74$ km.	California. $H = 14\ 17\ 43.8$.
31	$ePS \cdot Z$	19 46 21	
	$ePPS \cdot Z$	47 20	
	$eL \cdot E$	20 16	
	$\Delta = 120^\circ$.	$h = 56$ km.	New Britain. $H = 19\ 15\ 57.0$.

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June.

1	<i>eP·Z'</i>	23 ^h 38 ^m 13 ^s	
	<i>i(pP)·Z</i>	38 24	
	<i>ePcP·Z</i>	39 33	
	<i>iPP·Z</i>	40 19	
	<i>i·Z</i>	40 44	
	<i>e·N</i>	45 12	
	<i>iS·N</i>	45 38	
	<i>i(sS)·N</i>	45 53	
	<i>eSS·N</i>	49 20	
	<i>eL·NE</i>	52	
	$\Delta = 51^\circ$. $h = 33$ km. Ethiopia. $H = 23\ 29\ 21.2$.		
2	<i>iP·Z</i>	05 00 08	<i>D</i> to South-east.
	<i>ePP·Z</i>	02 08	
	<i>e·Z</i>	02 21	
	<i>eS·N</i>	07 24	
	<i>i·E</i>	10 15	
	<i>e(SS)·E</i>	11 10	
	<i>i·N</i>	11 24	
	<i>eL·ZNE</i>	13.2	
	$\Delta = 50^\circ$. $h = 33$ km. Ethiopia. $H = 04\ 51\ 14.8$.		
2	<i>eP·Z</i>	07 11 (50)	
	$\Delta = 51^\circ$. $h = 33$ km. Ethiopia. $H = 07\ 02\ 49.9$.		
2	<i>e(SS)·E</i>	18 40.0	
	<i>eL·NE</i>	59	
	$\Delta = 93^\circ$. $h = 43$ km. Mariana Islands. $H = 18\ 09\ 27.2$.		
2	<i>eL·NE</i>	24 06	
	$\Delta = 51^\circ$. Ethiopia. $H = 23\ 32\ 32.1$.		
3	<i>eP·Z</i>	01 24 16	
	<i>eS·N</i>	33 07	
	<i>e·N</i>	33 39	
	<i>eSS·N</i>	37 35	
	<i>eL·N</i>	48	
	$\Delta = 66^\circ$. $h = 29$ km. Kamchatka. $H = 01\ 13\ 25.4$.		
3	<i>eS·E</i>	06 25.2	
	<i>eL·NE</i>	28	
	$\Delta = 21^\circ$. $h = 45$ km. Turkey. $H = 06\ 16\ 16.7$.		
3	<i>eP·Z</i>	15 32 14	<i>D</i>
	<i>ePP·Z</i>	34 16	
	<i>eS·E</i>	39 27	
	<i>ePS·N</i>	39 47	
	<i>eL·NE</i>	(50)	
	$\Delta = 51^\circ$. $h = 33$ km. Ethiopia. $H = 15\ 23\ 15.8$.		
4	<i>iP·ZZ'</i>	07 42 09 ¹ / ₂	<i>D</i> to East, <i>Z</i> : 6 ^s , 5 ¹ / ₂ μ .
	<i>i·Z'</i>	42 13 ¹ / ₂	
	<i>ePP·Z</i>	44 09	
	<i>iS·N</i>	49 31	
	<i>ePS·E</i>	49 49	
	<i>e(SS)·Z</i>	53 20	
	$\Delta = 52^\circ$. $h = 32$ km. Tibet. $H = 07\ 33\ 06.0$.		

June.

4	<i>iP·Z'</i>	07 ^h 52 ^m 49 ¹ / ₂ ^s (<i>C</i>)	
	$\Delta = 52^\circ$. $h = 30$ km. Tibet. $H = 07\ 43\ 43.6$.		
4	<i>eL·NE</i>	13 52 32	
	<i>e·E</i>	57 30	
4	<i>eP·Z</i>	14 00 34	
	<i>iP·Z'</i>	00 35 (<i>C</i>)	
	<i>e·N</i>	12.4	
	<i>eL·N</i>	19	
	$\Delta = 52^\circ$. $h = 32$ km. Tibet. $H = 13\ 51\ 29.9$.		
5	<i>eiP·Z'</i>	03 38 41	<i>C</i>
	<i>eS·E</i>	44 (50)	
	<i>eL·NE</i>	50	
	$\Delta = 41^\circ$. $h = 30$ km. Iran. $H = 03\ 30\ 56.0$.		
6	<i>eL·N</i>	21 21	
	$\Delta = 45^\circ$. Sinkiang. $H = 20\ 56\ 20.1$.		
7	<i>iP·Z</i>	14 25 55	<i>C</i>
	<i>iPP·Z</i>	28 15	
	<i>ePPP·Z</i>	30 02	
	<i>e·Z</i>	31 34	
	<i>eS·N</i>	34 35	
	<i>eScS·E</i>	35 57	
	<i>eSS·E</i>	38 29	
	<i>e·N</i>	40 10	
	<i>eSSS·E</i>	41 29	
	<i>eL·NE</i>	44	
	$\Delta = 64^\circ$. $h = 17$ km. Ascension Island. $H = 14\ 15\ 18.9$.		
8	<i>ePP·Z</i>	16 03 00	
	<i>ePS·E</i>	12 20	
	<i>ePPS·E</i>	13 25	
	<i>eSS·E</i>	18 31	
	<i>eSSS·E</i>	22 (09)	
	<i>eL·N</i>	39	
	$\Delta = 108^\circ$. $h = 18$ km. Flores. $H = 15\ 44\ 02.4$.		
9	<i>ei(P)·Z'</i>	04 04 12	
	$\Delta = 46^\circ$. $h = 110$ km. India. $H = 03\ 55\ 51.4$.		
9	<i>iP·Z'</i>	09 42 49 ¹ / ₂	<i>C</i>
	<i>i·Z'</i>	43 05	
	<i>eS·E</i>	47 32	
	<i>e·N</i>	48 (13)	
	<i>i(SS)·N</i>	49 24	
	<i>eL·N</i>	51.8	
	$\Delta = 29^\circ$. $h = 17$ km. Caspian Sea. $H = 09\ 36\ 49.2$.		
10	<i>ePS·NE</i>	09 18.4	
	<i>eSS·NE</i>	23.7	
	<i>eL·E</i>	38	
	$\Delta = 97^\circ$. $h = 33$ km. Mexico. $H = 08\ 52\ 05.4$.		
10	<i>ePKP·Z</i>	20 51.3	
	<i>ePP·Z</i>	52.7	

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June.

- 10 *ePKS·Z* 20^h54.4^m (Con.).
eSS·N 21 09.8
e·N 10.6
eL·E 15.3
 $\Delta = 123^\circ$. $h = 47$ km. Easter Island. $H = 20\ 31\ 50.9$.
- 11 *eL·E* 04 48
 $\Delta = 69^\circ$. Kamchatka. $H = 04\ 02\ 44.6$.
- 11 *iP·ZZ'* 05 18 08 C
i·Z 18 16
iPP·Z 19 50
i·NE 20 44
i·E 24 12
eS·E 24 23
i·NE 24 33¹/₂ 10^s, $N: 9\ \mu$, $E: 23\ \mu$.
i·E 24 53
e·N 25 31
eSS·ZNE 27.1
M·N 37.5 18^s, 70 μ .
M·E 39 14^s, 45 μ .
 $\Delta = 41^\circ$. $h = 37$ km. Iran. $H = 05\ 10\ 26.3$.
- 11 *iP·Z'* 05 37 55 C
i·Z' 37 59¹/₂
ipP·Z' 38 13
 $\Delta = 41^\circ$. $h = 62$ km. Iran. $H = 05\ 30\ 14.5$.
- 11 *ei(P)·Z'* 06 04 05
 $\Delta = 69^\circ$. $h = 18$ km. Kamchatka. $H = 05\ 52\ 51.7$.
- 11 *ei(P)·Z'* 06 27 57
 $\Delta = (41^\circ)$. Iran. $H = 06\ 19\ 24$.
- 11 *eP·Z'* 06 54 30
 $\Delta = 41^\circ$. $h = 41$ km. Iran. $H = 06\ 46\ 57.9$.
- 11 *eiP·Z'* 06 59 11¹/₂
i·Z' 59 22¹/₂
 $\Delta = 41^\circ$. $h = 49$ km. Iran. $H = 06\ 51\ 29.6$.
- 11 *eL·N* 11 46
 $\Delta = 41^\circ$. Iran. $H = 11\ 24\ 09.4$.
- 11 *eiP·Z'* 12 38 04
 $\Delta = 41^\circ$. $h = 35$ km. Iran. $H = 12\ 30\ 23.5$.
- 11 *iP·ZZ'* 12 39 09 C from East.
i·Z' 39 31¹/₂
e·Z 39 40
e(PP)·Z 40 23
iS·E 45 22¹/₂
i·E 45 51
e(SSS)·E 49 12
eL·NE 53
 $\Delta = 41^\circ$. $h = 36$ km. Iran. $H = 12\ 31\ 26.8$.

June.

- 11 *eiP·ZZ'* 14^h05^m42^s C
i·Z' 05 47¹/₂
eS·E 11 52
eSS·E 15.0
eL·NE 20
 $\Delta = 41^\circ$. $h = 34$ km. Iran. $H = 13\ 57\ 58.3$.
- 11 *eiP·Z'* 17 26 31
eS·N 35.6
eScS·N 36.6
eL·NE 51
 $\Delta = 67^\circ$. $h = 33$ km. Burma. $H = 17\ 15\ 34.5$.
- 11 *iP·Z'* 23 20 50 C
 $\Delta = 41^\circ$. $h = 42$ km. Iran. $H = 23\ 13\ 07.8$.
- 12 *eL·N* 01 04
 $\Delta = 90^\circ$. Pacific Ocean. $H = 00\ 14\ 28.7$.
- 12 *iP·Z* 10 09 54¹/₂ (C)
ePP·Z 12 (50)
ePPP·ZE 14 32
eL·N 34
 $\Delta = 74^\circ$. $h = 33$ km. Vietnam. $H = 09\ 58\ 17.1$.
- 13 *iPKP·ZZ'* 21 57 19 D Z: 4^s, 3¹/₂ μ .
ipPKP·ZZ' 58 01
 $\Delta = 145^\circ$. $h = 146$ km. Tonga Islands. $H = 21\ 37\ 55.0$.
- 14 *eiP·Z'* 00 32 09
eL·N 50
 $\Delta = 41^\circ$. $h = 36$ km. Iran. $H = 00\ 24\ 27.3$.
- 14 *eiP·Z'* 00 51 54 Confused by microseisms.
eL·NE 01 13
 $\Delta = 66^\circ$. $h = 62$ km. Burma. $H = 00\ 41\ 13.0$.
- 14 *eL·NE* 09 29
 $\Delta = 41^\circ$. Iran. $H = 09\ 03\ 37.0$.
- 14 *eL·N* 17 57
 $\Delta = 41^\circ$. Hindu Kush. $H = 17\ 31\ 45.7$.
- 14 *eP·Z* 20 41 17 C
ePcP·Z 42 36
ePP·Z 43 15
eS·E 48 31
eSS·N 52.4
eL·E 57
 $\Delta = 50^\circ$. $h = 33$ km. Ethiopia. $H = 20\ 32\ 21.6$.
- 15 *eL·N* 01 41.4
eL·E 48
 $\Delta = 82^\circ$. Colombia. $H = 00\ 51\ 30.6$.
- 15 *eL·N* 06 44.0
eL·E 47
 $\Delta = 41^\circ$. Iran. $H = 06\ 21\ 35.6$.

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June.

- 15 $iP \cdot Z'$ 23^h36^m11^{1/2}^s (C) Confused b microseisms.
 $eL \cdot NE$ 24 01
 $\Delta = 73^\circ$. $h = 36$ km. Kurile Islands. $H = 23$ 24 43.8.
- 16 $e(PPP) \cdot Z$ 07 31.3
 $eL \cdot NE$ 08 12
 $\Delta = 122^\circ$. $h = 17$ km. Chile. $H = 07$ 08 16.5.
- 16 $i!P \cdot ZZ'$ 10 44 00 D
 $ipP \cdot Z$ 44 29
 $isP \cdot Z$ 44 40
 $i(sPcP) \cdot Z$ 44 46
 $eS \cdot Z$ 53 46
 $i!SKS \cdot N$ 53 59^{1/2} -
 $ipS \cdot N$ 54 19
 $iPS \cdot N$ 54 51^{1/2}
 $eL \cdot N$ 11 04
 $\Delta = 80^\circ$. $h = 120$ km. Colombia. $H = 10$ 31 56.2.
- 16 $eL \cdot E$ 15 16
 $\Delta = 23^\circ$. Dodecanese Islands. $H = 14$ 59 48.3.
- 17 $eP \cdot Z$ 08 13 35^{1/2} (C)
 $eL \cdot NE$ 28
 $\Delta = 41^\circ$. $h = 38$ km. Iran. $H = 08$ 05 53.0.
- 17 $eL \cdot E$ 11 48
 $\Delta = 98^\circ$. Peru. $H = 10$ 56 30.3.
- 17 $eiP \cdot Z'$ 15 20 09
 $e(S) \cdot NE$ 30 48
 $i \cdot N$ 32 39
 $e \cdot E$ 33 19
 $e(SS) \cdot E$ 36 54
 $e(SSS) \cdot E$ 40.5
 $eL \cdot NE$ 45
 $\Delta = 86^\circ$. $h = 85$ km. Mexico/Guatemala. $H = 15$ 07 33.7.
- 18 $iPKP \cdot Z'$ 14 14 30 (C) Confused by microseisms.
 $i \cdot Z'$ 14 45
 $iPKP2 \cdot Z'$ 14 58
 $\Delta = 154^\circ$. $h = 434$ km. Kermadec Islands. $H = 13$ 55 16.6.
- 19 $eL \cdot N$ 02 33
 $\Delta = 90^\circ$. Luzon. $H = 01$ 45 25.5.
- 19 $eL \cdot NE$ 03 31
 $\Delta = 76^\circ$. Honshu. $H = 02$ 46 03.6.
- 19 $eL \cdot E$ 08 (23)
 $\Delta = 76^\circ$. Honshu. $H = 07$ 38 25.0.
- 19 $eiP \cdot Z'$ 17 12 20^{1/2} Confused by microseisms.
 $i \cdot Z$ 12 23
 $ipP \cdot Z'$ 13 02^{1/2}
 $iS \cdot E$ 18 39
 $i(SS) \cdot E$ 22 10
 $\Delta = 43^\circ$. $h = 200$ km. Hindu Kush. $H = 17$ 04 37.0.

June

- 20 $eL \cdot N$ 03^h45^m
 $\Delta = 50^\circ$. Gulf of Aden. $H = 03$ 21 34.3.
- 21 $iP \cdot Z'$ 06 47 06
 $i \cdot Z'$ 47 10
 $i \cdot Z'$ 47 34
 $eL \cdot NE$ 07 00.6
 $\Delta = 41^\circ$. $h = 40$ km. Iran. $H = 06$ 39 23.0.
- 21 $eiP \cdot Z$ 16 09 34
 $eS \cdot Z$ 13.4
 $eL \cdot E$ 16
 $\Delta = 21^\circ$. $h = 31$ km. Turkey. $H = 16$ 04 47.2.
- 21 $eL \cdot E$ 21 09
 $\Delta = 101^\circ$. Java. $H = 20$ 25 00.9.
- 22 $e(Q) \cdot Z$ 01 02.3
 $eR \cdot E$ 03.4
 $\Delta = 14^\circ$. Albania/Yugoslavia. $H = 00$ 56 03.7.
- 23 $eP \cdot Z$ 09 07 40
 $eL \cdot NE$ 27
 $\Delta = 75^\circ$. $h = 56$ km. Oregon. $H = 08$ 55 55.2.
- 23 $eS \cdot E$ 16 50 23
 $eSS \cdot N$ 53.4
 $\Delta = 42^\circ$. $h = 32$ km. Iran. $H = 16$ 36 22.8.
- 24 $eL \cdot NE$ 05 57
 $\Delta = 86^\circ$. El Salvador. $H = 05$ 07 55.6.
- 25 $ePP \cdot Z$ 17 03 32
 $e \cdot Z$ 04 16
 $e(PS) \cdot E$ 14 09
 $eL \cdot ZNE$ 35
 $\Delta = 92^\circ$. $h = 33$ km. Mariana Islands. $H = 16$ 46 38.6.
- 25 $eL \cdot NE$ 20 02
 $\Delta = 118^\circ$. Chile. $H = 19$ 32 14.4.
- 26 $eP \cdot Z$ 14 58 42
 $i \cdot Z'$ 58 46
 $eS \cdot E$ 15 08 05
 $e(PS) \cdot N$ 08 47
 $e \cdot E$ 09 32
 $e \cdot E$ 10 11
 $e(SS) \cdot E$ 13 18
 $eQ \cdot Z$ 16.8
 $eR \cdot E$ 23
 $\Delta = 71^\circ$. $h = 40$ km. Near Islands. $H = 14$ 47 27.3.
- 27 $eiP \cdot Z'$ 07 14 28 Confused by microseisms.
 $i \cdot Z'$ 14 33^{1/2}
 $i(pP) \cdot Z'$ 14 39^{1/2}
 $e \cdot Z$ 16 06
 $eS \cdot N$ 23 19
 $e(PS) \cdot E$ 23 54

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June.

27	<i>eScS·N</i>	07 ^h 24 ^m 31 ^s	(Con.).
	<i>eSS·E</i>	27 41	
	<i>eSSS·N</i>	30 15	
	<i>eQ·Z</i>	30.8	
	<i>eR·N</i>	35	
	$\Delta = 66^\circ$. $h = 33$ km. Yunnan. $H = 07\ 03\ 42.2$.		
29	<i>ePKP·Z</i>	09 42 04	
	<i>ePP·E</i>	44 36	
	<i>i·Z</i>	45 03	
	<i>e·NE</i>	45 13	
	<i>ePKS·ZNE</i>	45 46	
	<i>e·E</i>	46 51	
	<i>e(SKKS)·Z</i>	51.7	
	<i>e·ZN</i>	58 08	
	<i>eL·E</i>	10 26	
	$\Delta = 134^\circ$. $h = 37$ km. New Hebrides Islands. $H = 09\ 22\ 55.8$.		
29	<i>eS·E</i>	22 13 41	
	<i>i·N</i>	13 45 ¹ / ₂	
	<i>eL·ZE</i>	17	
	$\Delta = 34^\circ$. $h = 33$ km. Severnaya Zemlya. $H = 22\ 01\ 24.1$.		
30	<i>eL·E</i>	05 18	
	$\Delta = 23^\circ$. Crete. $H = 05\ 05\ 24.8$.		

July.

1	<i>iP·Z'</i>	08 12 30	
	$\Delta = 84^\circ$. $h = 117$ km. Bonin Islands. $H = 08\ 00\ 11.6$.		
2	<i>iP·Z'</i>	02 18 31 ¹ / ₂	
	$\Delta = 73^\circ$. $h = 100$ km. Hokkaido. $H = 02\ 07\ 15.0$.		
4	<i>iP·Z'</i>	06 24 04 ¹ / ₂	Confused by microseisms.
	$\Delta = 96^\circ$. $h = 145$ km. Mariana Islands. $H = 06\ 10\ 44.8$.		
5	<i>e(SS)·Z</i>	03 12	
	<i>eL·NE</i>	04 04	
	$\Delta = 157^\circ$. $h = 33$ km. Macquarie Island. $H = 02\ 28\ 41.2$.		
5	<i>eL·N</i>	07 00	
	$\Delta = 45^\circ$. Sinkiang. $H = 06\ 34\ 30.7$.		
6	<i>eL·NE</i>	16 39	
	$\Delta = 63^\circ$. Ascension Island. $H = 16\ 08\ 20.8$.		
6	<i>ePKP·Z</i>	22 28 50	
	<i>iPKP·Z'</i>	28 52	(C)
	<i>iPKP·Z</i>	28 53	—
	<i>e·Z</i>	29 14	
	<i>ePKS·Z</i>	31 52	
	<i>iPP·Z</i>	32 12 ¹ / ₂	
	<i>e·N</i>	34 47	
	<i>e(SKKS)·NE</i>	38 44	
	<i>e·N</i>	41.8	
	<i>e(PS)·Z</i>	43.7	
	<i>M·ZNE</i>	23 30	23 ^s , ZN: 27 μ , E: 21 μ .
	$\Delta = 141^\circ$. $h = 27$ km. Loyalty Islands. $H = 22\ 09\ 29.4$.		

July.

7	<i>ePKP·Z</i>	13 ^h 30.6 ^m	
	<i>e(PP)·Z</i>	30 54	
	<i>i·Z</i>	31 03	
	<i>e·Z</i>	31 31	
	<i>e(PPP)·Z</i>	33 30	
	<i>ePS·E</i>	40 44	
	<i>e·E</i>	41 23	
	<i>eSS·NE</i>	47.2	
	$\Delta = 120^\circ$. $h = 57$ km. New Britain. $H = 13\ 10\ 43.8$.		
7	<i>ePKP·Z</i>	22 39 (04)	
	<i>ePP·Z</i>	41 57	
	<i>eL·NE</i>	23 39	
	$\Delta = 141^\circ$. $h = 41$ km. Loyalty Islands. $H = 22\ 19\ 31.6$.		
8	<i>ePKP·Z</i>	02 54 41	
	<i>ePP·Z</i>	57 45	
	<i>ePKS·E</i>	58 19	
	<i>e(PS)·N</i>	03 08 47	
	<i>eSS·N</i>	16.2	
	<i>eL·E</i>	38	
	$\Delta = 140^\circ$. $h = 33$ km. Loyalty Islands. $H = 02\ 35\ 20.5$.		
8	<i>ePKP·Z</i>	15 53 58	(D)
	<i>i·Z</i>	54 07 ¹ / ₂	
	<i>e·Z</i>	55 20	
	<i>ePP·Z</i>	57 00	
	<i>ePKS1·E</i>	57 32	
	<i>ePKS2·N</i>	57 44	
	<i>e·N</i>	58 57	
	<i>e(PPP)·Z</i>	16 00 37	
	<i>e(SKKS)·N</i>	03 21	
	<i>eL·E</i>	36	
	$\Delta = 140^\circ$. $h = 26$ km. Loyalty Islands. $H = 15\ 34\ 37.4$.		
8	<i>ePKP·Z</i>	21 33 (28)	
	<i>ePP·Z</i>	36.4	
	$\Delta = 141^\circ$. $h = 33$ km. Loyalty Islands. $H = 21\ 13\ 59.5$.		
8	<i>ePKP·Z</i>	22 08 08	
	<i>ePP·Z</i>	11 11	
	<i>ePKS·NE</i>	11 53	
	$\Delta = 141^\circ$. $h = 18$ km. Loyalty Islands. $H = 21\ 48\ 42.3$.		
9	<i>eiP·Z'</i>	08 13 28	
	<i>e(S)·E</i>	19.6	
	$\Delta = 40^\circ$. $h = 25$ km. Iran. $H = 08\ 05\ 45.9$.		
10	<i>eSKS·E</i>	04 14 (10)	
	$\Delta = 101^\circ$. $h = 117$ km. Chile/Bolivia. $H = 03\ 49\ 56.4$.		
11	<i>eP·Z</i>	09 43 43	(C)
	<i>eS·E</i>	53 37	
	<i>e·E</i>	53 43	
	<i>ePS·Z</i>	54 13	
	<i>eL·N</i>	10 15	
	$\Delta = 78^\circ$. $h = 17$ km. Nicobar Islands. $H = 09\ 31\ 42.6$.		

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July.

- 12 *eL·NE* 02^h59^m
 $\Delta = 17^\circ$. Greece. $H = 02\ 48\ 48.0$.
- 13 *e·N* 22 05.0
eS·NE 07.1
eL·N 25
 $\Delta = 82^\circ$. $h = 33$ km. Formosa. $H = 21\ 44\ 33.4$.
- 15 *eL·N* 01 04
 $\Delta = 89^\circ$. Luzon. $H = 00\ 17\ 53.5$.
- 16 *iPKP·ZZ'* 14 21 09
eL·ZNE 15 19
 $\Delta = 144^\circ$. $h = 15$ km. Loyalty Islands. $H = 14\ 01\ 35.8$.
- 16 *eL·ZN* 21 50
 $\Delta = 70^\circ$. Kurile Islands. $H = 21\ 08\ 45.6$.
- 17 *eP·Z* 01 13 53
ePP·Z 17.2
eS·NE 24.6
eL·ZNE 46
 $\Delta = 87^\circ$. $h = 40$ km. Mexico. $H = 01\ 01\ 09.7$.
- 17 *eP·Z'* 05 21 08
eS·E 27 23
 $\Delta = 41^\circ$. $h = 16$ km. Iran. $H = 05\ 13\ 21.3$.
- 17 *iP·Z'* 15 01 09 *D*
eL·ZNE 15
 $\Delta = 41^\circ$. $h = 64$ km. Kirghiz. $H = 14\ 53\ 30.9$.
- 17 *eiP·Z'* 16 32 19¹/₂
i·Z' 32 28¹/₂
eS·N 42 17
e(Q)·E 53.9
eL·NE 17 01
 $\Delta = 78^\circ$. $h = 51$ km. Honshu. $H = 16\ 20\ 19.1$.
- 18 *i!P·Z'ZNE* 14 15 50 *D* to North-east.
i·Z 16 20
i·Z 17 00
iPP·Z 18 56
iS·E 25 55 +
iPS·E 26 42
iSS·N 31 23
eR·NE 43
M·ZNE 56 17^s, $ZN: 105\ \mu$, $E: 145\ \mu$.
 $\Delta = 80^\circ$. $h = 21$ km. Ryukyu Islands. $H = 14\ 03\ 36.5$.
- 18 *iP·Z'* 14 46 13 *D*
 $\Delta = 80^\circ$. $h = 33$ km. Ryukyu Islands. $H = 14\ 34\ 03.1$.
- 18 *eiP·Z'* 15 28 24
i(PcP)·Z' 28 35
 $\Delta = 80^\circ$. $h = 35$ km. Ryukyu Islands. $H = 15\ 16\ 12.5$.

July.

- 18 *eiP·ZZ'* 19^h41^m22^s
eL·NE 20 12
 $\Delta = 80^\circ$. $h = 33$ km. Ryukyu Islands. $H = 19\ 29\ 07.5$.
- 18 *eP·Z* 21 35 55
e(S)·E 44.1
 $\Delta = 54^\circ$. $h = 43$ km. Socotra Island. $H = 21\ 26\ 30.5$.
- 18 *iP·ZZ'* 23 54 49
eL·NE 24 25
 $\Delta = 80^\circ$. $h = 39$ km. Ryukyu Islands. $H = 23\ 42\ 36.5$.
- 19 *eL·NE* 06 15
 $\Delta = 80^\circ$. Ryukyu Islands. $H = 05\ 29\ 59.3$.
- 19 *eP·Z* 06 45 33
eS·NE 55 39
eL·NE 07 16
 $\Delta = 80^\circ$. $h = 27$ km. Ryukyu Islands. $H = 06\ 33\ 18.1$.
- 19 *eiP·Z'* 10 47 58
eL·NE 11 19
 $\Delta = 80^\circ$. $h = 20$ km. Ryukyu Islands. $H = 10\ 35\ 41.4$.
- 19 *eL·NE* 10 51
 $\Delta = 20^\circ$. Greece. $H = 10\ 39\ 27$.
- 19 *iP·ZZ'* 12 10 57 *Z': (+), Z: (-)*.
eS·NE 21 04
eL·NE 43
 $\Delta = 80^\circ$. $h = 31$ km. Ryukyu Islands. $H = 11\ 58\ 43.7$.
- 19 *eP·ZN* 23 05 16 (*D*) to South.
eiP·Z' 05 18
iPP·Z' 05 31
e·Z 08 39 8^s.
iS·E 08 49 -
i(S)·N 09 01
eL·E 11.6
eL·ZN 12
 $\Delta = 19^\circ$. $h = 37$ km. Ionian Sea. $H = 23\ 00\ 56.7$.
- 20 *eiP·Z'* 03 16 54
eL·N 50
 $\Delta = 80^\circ$. $h = 33$ km. Ryukyu Islands. $H = 03\ 04\ 42.8$.
- 20 *e(S)·E* 07 13.8
eL·N 35
 $\Delta = 93^\circ$. $h = 37$ km. Leyte. $H = 06\ 47\ 43.4$.
- 20 *eL·NE* 09 48
 $\Delta = 79^\circ$. Ryukyu Islands. $H = 09\ 02\ 44.9$.
- 20 *eL·E* 15 52
 $\Delta = 141^\circ$. $h = 570$ km. Fiji Islands. $H = 15\ 10\ 26.7$.
- 20 *eiP·Z'* 15 45 16
Near shock.

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July.

- 21 *eL·E* 04^h49^m
 $\Delta = 32^\circ$. Azores. $H = 04\ 32\ 28.2$.
- 21 *iP·ZZ'* 19 03 04¹/₂
eL·NE 20
 $\Delta = 80^\circ$. $h = 33$ km. Ryukyu Islands. $H = 18\ 50\ 54.7$.
- 21 *eS·N* 23 02.1
eL·NE 25
 $\Delta = 80^\circ$. $h = 32$ km. Ryukyu Islands. $H = 22\ 39\ 53.2$.
- 22 *eL·N* 21 15
 $\Delta = 41^\circ$. Kirghiz. $H = 20\ 53\ 30.0$.
- 23 *ePKP·Z* 14 23 06
ePKS·E 26 46
ePPS·Z 38 39
e·N 45 57
eL·ZE 15 06.2 10^s
 $\Delta = 138^\circ$. $h = 44$ km. New Hebrides Islands. $H = 14\ 03\ 39.8$
- 23 *ePP·Z* 14 56 45
 $\Delta = 108^\circ$. $h = 33$ km. Pacific Ocean. $H = 14\ 37\ 56.9$.
- 23 *eL·N* 16 39
 $\Delta = 139^\circ$. New Hebrides Islands. $H = 15\ 30\ 17.2$.
- 23 *eP·Z* 22 07 42
ePKP·ZNE 10 22 D to East. 11^s, Z : 16 μ .
i·Z 11 25
e·E 13 22
i·ZE 13 26
i!PKS·NE 14 11
i(PPP)·Z 16 17
eSKSP·E 23 37
i·E 24 58
iPPS·Z 25 39
e·E 26 58
i·ZN 27 04
iSS·N 31 35
i!SSP·E 32 17 22^s
e·N 33 24
e·E 35.5
e(SSS)·N 36 33
e·N 37 04
eR·Z 56
20^s.ZNE 23 12 Z : 82 μ , N : 41 μ , E : 70 μ .
 $\Delta = 139^\circ$. $h = 44$ km. New Hebrides Islands.
 $H = 21\ 51\ 07.5$. $M(L) = 7.6$ (COP).
- 24 *i!PKP·Z'* 01 49 26¹/₂ (C)
 $\Delta = 144^\circ$. $h = 598$ km. Fiji Islands. $H = 01\ 30\ 56.6$.
- 25 *eL·NE* 19 33
 $\Delta = 103^\circ$. Celebes. $H = 18\ 39\ 24.1$.
- 27 *eL·E* 18 48
 $\Delta = 22^\circ$. Crete. $H = 18\ 35\ 44.2$.

July.

- 27 *eL·ZNE* 24^h30^m
 $\Delta = 52^\circ$. Lake Baikal. $H = 23\ 59\ 26.9$.
 - 28 *eP·Z'ZE* 01 18 24¹/₂ (C)
ipP·Z 19 00
iPP·Z 22 01
ipPP·Z 22 37
i!SKS·E 28 44 +, 8^s, 6 μ .
i!S·E 29 14 -, 8^s, 14 μ .
e(pS)·N 30 00
e(SP)·E 30 20
e(sSP)·E 31 17
e(SS)·E 35 39
 $\Delta = 91^\circ$. $h = 136$ km. Ecuador. $H = 01\ 05\ 30.0$.
 - 28 *i(PKP)·Z'* 05 14 21 C
 $\Delta = 138^\circ$. $h = 50$ km. New Hebrides Islands.
 $H = 04\ 54\ 55.1$.
 - 28 *ePKP·Z* 06 31 16
iPKS·Z 34 36¹/₂
e(SKS)·Z 38 40
e·N 43 27
 $\Delta = 138^\circ$. $h = 41$ km. New Hebrides Islands.
 $H = 06\ 11\ 38.7$.
 - 28 *eL·NE* 10 51
 $\Delta = 90^\circ$. Mexico. $H = 10\ 13\ 51.1$.
 - 28 *iP·Z'* 15 31 14 Confused by microseisms.
i·Z' 31 26
eL·NE 16 02
 $\Delta = 74^\circ$. $h = 34$ km. Hokkaido. $H = 15\ 19\ 40.0$.
 - 29 *ePKP·Z* 16 47 01
eiPKP·Z' 47 04
eL·N 17 47
 $\Delta = 148^\circ$. $h = 23$ km. Tonga Islands. $H = 16\ 27\ 19.0$.
 - 30 *eL·E* 17 00
 $\Delta = 19^\circ$. Aegean Sea. $H = 16\ 34.5$.
- August.
- 1 *ePKP·Z* 05 59 04
ePP·Z 06 01 01
eL·E 34
 $\Delta = 128^\circ$. $h = 50$ km. Solomon Islands. $H = 05\ 39\ 53.2$.
 - 1 *ePP·Z* 07 41 02 Confused by previous shock.
eL·ZNE 08 22
 $\Delta = 116^\circ$. $h = 44$ km. South Sandwich Islands.
 $H = 07\ 21\ 12.3$.
 - 1 *eL·ZNE* 10 36
 $\Delta = 117^\circ$. South Sandwich Islands. $H = 09\ 34\ 40.7$.
 - 2 *eL·N* 03 34
 $\Delta = 116^\circ$. South Sandwich Islands. $H = 02\ 31\ 28.9$.

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August.

- 2 $iP \cdot Z'$ 12^h23^m34^s (D)
 $\Delta = 74^\circ$. $h = 38$ km. Kurile Islands. $H = 1$ 12 02.0.
- 3 $iP \cdot Z'$ 03 18 58¹/₂ (C)
 $eS \cdot N$ 27 53
 $e(ScS) \cdot NE$ 28 51
 $\Delta = 68^\circ$. $h = 132$ km. Puerto Rico. $H = 03$ 08 05.1.
- 3 $eL \cdot N$ 07 48
 $\Delta = 108^\circ$. Ceram. $H = 06$ 51 41.1.
- 3 $eL \cdot NE$ 24 25
 $\Delta = 101^\circ$. Mariana Islands. $H = 23$ 33 37.7.
- 4 $eL \cdot E$ 18 49
 $\Delta = 40^\circ$. North Atlantic Ocean. $H = 18$ 35 20.8.
- 4 $eL \cdot NE$ 23 30
 $\Delta = 73^\circ$. Kurile Islands. $H = 22$ 52 54.0.
- 7 $ePP \cdot Z$ 04 40 (30)
 $e \cdot E$ 47.1
 $e(SKS) \cdot NE$ 48.1
 $eL \cdot N$ 05 16
 $\Delta = 103^\circ$. $h = 18$ km. Celebes. $H = 04$ 22 20.5.
- 7 $eL \cdot NE$ 11 36
 $\Delta = 102^\circ$. Celebes. $H = 10$ 43 21.
- 7 $iPKP \cdot Z'$ 12 42 48 Confused by microseisms.
 $eSS \cdot E$ 13 05 32
 $eL \cdot N$ 46
 $\Delta = 152^\circ$. $h = 33$ km. Kermadec Islands. $H = 12$ 22 24.2.
- 7 $eL \cdot NE$ 16 35
- 8 $e(PKP) \cdot Z$ 00 38 25
 $eL \cdot ZNE$ 02 00
 $\Delta = 152^\circ$. $h = 33$ km. Kermadec Islands. $H = 00$ 18 52.3.
- 8 $iP \cdot Z'Z$ 12 29 55¹/₂ D to North.
 $i \cdot Z$ 30 29¹/₂
 $iS \cdot N$ 39 28
 $eSS \cdot N$ 44.0
 $eL \cdot N$ 54
 $\Delta = 73^\circ$. $h = 33$ km. Fox Islands. $H = 12$ 18 23.1.
- 9 $eL \cdot N$ 17 21
 $\Delta = 139^\circ$. New Hebrides Islands. $H = 16$ 02 35.5.
- 10 $eL \cdot NE$ 12 45
 $\Delta = 73^\circ$. Hokkaido. $H = 12$ 05 29.8.
- 11 $eL \cdot NE$ 01 22
 $\Delta = 66^\circ$. Commander Islands. $H = 00$ 43 29.6.
- 11 $eL \cdot ZNE$ 05 16
 $\Delta = 78^\circ$. Kyushu. $H = 04$ 27 23.3.

August.

- 11 $eL \cdot NE$ 06^h50^m
 $\Delta = 78^\circ$. Kyushu. $H = 06$ 08 16.7.
- 11 $eL \cdot N$ 11 55
 $\Delta = 102^\circ$. Celebes. $H = 11$ 04 39.1.
- 11 $i!P \cdot Z'ZNE$ 16 03 06¹/₂ C from North-east, $Z: 7^\circ$, 34μ .
 $i \cdot Z$ 03 31
 $i(PP) \cdot Z$ 05 40
 $iPPP \cdot N$ 07 31
 $i \cdot Z$ 08 43 10^s
 $i \cdot ZN$ 12 28 $Z: -$, $N: +$.
 $i!S \cdot NE$ 12 33¹/₂ $N: -$, $E: +$.
 $i!(SKS) \cdot N$ 13 09
 $i(PS) \cdot Z$ 13 21
 $i! \cdot E$ 13 25
 $i!(PPS) \cdot N$ 13 31
 $i \cdot E$ 14 13
 $iSS \cdot E$ 17 21
 $i \cdot E$ 17 49
 $i \cdot E$ 18 16
 $i \cdot E$ 19 10
 $e \cdot E$ 19 50
 $iSSS \cdot E$ 20 33
 $i \cdot E$ 23 51
 $eL \cdot NE$ 26
20^s. ZNE 38 $Z: 130 \mu$, $N: 94 \mu$, $E: (110) \mu$.
 $\Delta = 74^\circ$. $h = 50$ km. Hokkaido. $H = 15$ 51 34.6.
 $M(L) = 7.3$ (COP).
- 11 $eP \cdot Z'$ 22 51 35
 $ePP \cdot Z$ 55 (37)
 $ePPP \cdot Z$ 57 41
 $eSKS \cdot NE$ 23 02 05
 $eS \cdot NE$ 03 12
 $ePS \cdot ZE$ 04 40
 $eSS \cdot N$ 10 09
 $e \cdot N$ 12 41
 $e \cdot N$ 15 40
 $eL \cdot NE$ 31
 $\Delta = 103^\circ$. $h = 33$ km. Celebes. $H = 22$ 37 24.7.
- 11 $eiP \cdot Z'$ 23 23 15
 $\Delta = 74^\circ$. $h = 95$ km. Honshu. $H = 23$ 11 48.2.
- 11 $iP \cdot ZZ'$ 23 45 23 C
 $i \cdot Z'$ 45 35
 $i(PcP) \cdot Z'$ 45 47
 $\Delta = 74^\circ$. $h = 50$ km. Hokkaido. $H = 23$ 33 52.2.
- 13 $eL \cdot NE$ 06 45
 $\Delta = 80^\circ$. Formosa. $H = 06$ 01 01.8.
- 14 $ePKP \cdot Z$ 19 10 35
 $i \cdot Z$ 10 41¹/₂
 $eL \cdot N$ 20 10
 $\Delta = 148^\circ$. $h = 70$ km. Tonga Islands. $H = 18$ 50 55.3.

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August.

- 14 *eL·NE* 22^h46^m
 $\Delta = 78^\circ$. Kyushu. $H = 22\ 04\ 59.7$.
- 14 *ePKP·Z* 23 48 02
iPP·Z 51 06¹/₂
ePKS·NE 51 49
iPPP·Z 54 10
e(SS)·E 24 10 33
e(SSS)·N 15 (04) 21^s
e·N 26 (16) 21^s
eL·NE 32
 $\Delta = 141^\circ$. $h = 97$ km. New Hebrides/Loyalty Islands.
 $H = 23\ 28\ 46.5$.
- 15 *iP·ZZ'* 19 16 16 *D*
eS·NE 26 27
e·N 28 30
e(SS)·N 31 43
e(SSS)·NE 36 00
eL·NE 48
 $\Delta = 82^\circ$. $h = 39$ km. Honshu. $H = 19\ 03\ 55.7$.
- 16 *eS·N* 16 37 02
eSS·N 41 42
eL·ZN 51
 $\Delta = 73^\circ$. $h = 25$ km. Ascension Island. $H = 16\ 15\ 57.5$.
- 17 *eL·ZE* 07 46
 $\Delta = 135^\circ$. Easter Island. $H = 06\ 36\ 23.0$.
- 17 *iP·Z'ZNE* 21 27 38 *D* to North-east. $Z: 6^\circ, 7\ \mu$.
iPcP·Z' 27 57
ipP·Z 28 17
i(PP)·Z' 30 09¹/₂
ipPP·Z' 30 59
iPPP·N 32 06
epPPP·N 32 41
iPPPP·Z 33 13
eS·N 36 44
eScS·N 37 14
i(pS)·E 37 28 $8^\circ, 4\frac{1}{2}\ \mu$.
epScS·E 38 19
i(sScS)·N 38 41
isSS·E 42 35 $10^\circ, 5\ \mu$.
eL·NE 45
 $\Delta = 72^\circ$. $h = 160$ km. Kurile Islands. $H = 21\ 16\ 30.1$.
- 19 *iP·Z'* 02 54 33
eL·N 03 26
 $\Delta = 74^\circ$. $h = 32$ km. Hokkaido. $H = 02\ 42\ 58.2$.
- 19 *iP·Z'ZNE* 05 22 10¹/₂ *D* to South-west. $Z: 8^\circ, 10\ \mu$.
i1·Z' 22 12
ipP·Z 24 22¹/₂
e(sP)·Z 25 17
iPP·Z 26 08
e(PPP)·Z 28 59
e·Z 31 03

August.

- 19 *eSKS·N* 05^h31^m48^s —. (Con.).
i1SKS·E 31 49 +.
i·Z 32 28
i1S·NE 32 35 $N: -, E: -$.
i1SP·Z 33 53 $10^\circ, 16\ \mu$.
i·E 34 02
e·Z 34 34 $11^\circ, 14\ \mu$.
epS·N 35 10
iPS·Z 35 15
i1·E 35 25
i1PPS·E 36 04
isS·NE 36 30
e(sPS)·E 37 41
i·E 38 41
i1SS·E 39 10
i1·E 39 32
i·E 40 20
iSSP·N 41 03
i(SSS)·N 41 42
e(sSS)·N 42 25
eL·E 43
 $\Delta = 95^\circ$. $h = 649$ km. Peru/Brazil. $H = 05\ 09\ 49.5$.
 $M(P) = 7.2$ (COP).
- 19 *ei(P)·Z'* 05 24 27 } Aftershocks of Peru/Brazil
19 *ei(P)·Z'* 05 28 04 } earthquake?
- 19 *iP·Z'* 05 29 52
Peru/Brazil aftershock. $H = 05\ 17.5$.
- 19 *iP·Z'* 05 32 02¹/₂ } Aftershocks of Peru/Brazil
19 *iP·Z'* 05 39 01 } earthquake?
- 19 *iP·Z'Z* 05 45 25¹/₂ *C*
iS·N 55 15
i1·E 55 19
 $\Delta = 76^\circ$. $h = 17$ km. Honshu. $H = 05\ 33\ 30.6$.
- 19 *eL·E* 12 14
 $\Delta = 16^\circ$. Italy. $H = 12\ 04.4$.
- 19 *eL·NE* 14 06
 $\Delta = 76^\circ$. Honshu. $H = 13\ 24\ 11.8$.
- 19 *iP·Z'* 15 03 34¹/₂ (*D*)
eS·NE 12 42
eL·N 31
 $\Delta = 70^\circ$. $h = 100$ km. Mona Passage. $H = 14\ 52\ 29.7$.
- 20 *iPKP·Z'* 05 22 40¹/₂ (*C*)
 $\Delta = 141^\circ$. $h = 592$ km. Fiji Islands. $H = 05\ 04\ 14.3$.
- 21 *iP·Z* 17 12 10 Willmore. (No Z' record).
eL·NE 40
 $\Delta = 74^\circ$. Honshu. $H = 17\ 00\ 38.9$.

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August.

- 22 *eL·NE* 10^h15^m
 $\Delta = 133^\circ$. New Hebrides Islands. $H = 08\ 59\ 27.9$.
- 23 *iP·Z* 04 20 18 (C) Willmore. (No Z' record).
eL·ZNE 31
 $\Delta = 40^\circ$. $h = 25$ km. Tadzhik. $H = 04\ 12\ 35.9$.
- 24 *eP·Z* 22 52 26 Willmore. (No Z' record).
 $\Delta = 74^\circ$. $h = 45$ km. Hokkaido. $H = 22\ 40\ 54.6$.
- 27 *eP·Z'Z* 02 03 29
eL·NE 31
 $\Delta = 74^\circ$. $h = 49$ km. Ascension Island. $H = 01\ 51\ 51.8$.
- 27 *iP·Z'Z* 16 33 38 C
i·Z 33 45
eS·N 43 02
ePS·Z 43 41
eL·E 58
 $\Delta = 72^\circ$. $h = 45$ km. Kurile Islands. $H = 16\ 22\ 12.8$.
- 27 *iP·Z'* 21 07 46 (C)
 $\Delta = 73^\circ$. $h = 51$ km. Kurile Islands. $H = 20\ 56\ 20.9$.
- 27 *iP·Z'Z* 22 13 33 (D) $Z': -$, $Z: +$.
iS·E 17 27
eSS·E 17 52
eL·NE 21
 $\Delta = 21^\circ$. $h = 33$ km. Crete. $H = 22\ 08\ 45.2$.
- 28 *iP·Z'* 12 25 18^{1/2} D
 $\Delta = 72^\circ$. $h = 45$ km. Kurile Islands. $H = 12\ 13\ 50.6$.
- 29 *eP·Z'* 15 02 39
eL·ZN 28
 $\Delta = 70^\circ$. $h = 41$ km. Fox Islands. $H = 14\ 51\ 14.2$.
- 29 *iP·Z'* 20 01 25^{1/2}
 $\Delta = 72^\circ$. $h = 17$ km. Kurile Islands. $H = 19\ 49\ 52.9$.
- 30 *eL·NE* 04 03
 $\Delta = 62^\circ$. Atlantic Ocean. $H = 03\ 35\ 02.7$.
- 31 *iPKP·Z'* 00 42 38 (D)
 $\Delta = 152^\circ$. $h = 56$ km. Kermadec Islands. $H = 00\ 22\ 47.3$.
- 31 *iP·Z'Z* 02 00 59 D $Z: 5^s, 4\ \mu$.
i·Z' 01 00
ipP·Z 03 08 $+$, $7^s, 4\ \mu$.
iPP·Z'Z 04 58 $Z: 4^s, 2\ \mu$.
i·Z 07 50 $6^s, 3\ \mu$.
iSKS·NE 10 39
iS·N 11 22 $-$.
i·E 11 24 $-$, $7^s, 16\ \mu$.
iPS·E 14 09
iSS·N 18 11
iSSS·Z 22 12
 $\Delta = 95^\circ$. $h = 626$ km. Peru/Brazil. $H = 01\ 48\ 37.5$.
 $M(P) = 6.8$ (COP).

August.

- 31 *iP·Z'* 02^h09^m27^s C
i·P·Z 09 30 D $6^s, 8\ \mu$.
i·Z 09 34
i·Z' 10 05
i·pP·Z 11 44 $-$, $6^s, 9\ \mu$.
i·Z' 12 23
iPP·Z' 13 22
i(pPP)·Z 15 35
iSKS·E 19 09 $7^s, 39\ \mu$.
iS·ZNE 19 55 $Z: -$, $10^s, 19\ \mu$. In time break.
iSP·E 21 06 $8^s, 26\ \mu$.
iPS·E 22 35
iSS·NE 26 38 9^s
 $\Delta = 95^\circ$. $h = 629$ km. Peru/Brazil. $H = 01\ 57\ 08$.
 $M(P) = 7.2$ (COP).
- 31 *i(P)·Z'* 02 26 20
i·Z' 26 26
 Peru/Brazil aftershock?
- 31 *e(P)·Z'* 02 34 25
i·Z' 34 37
 Peru/Brazil aftershock?

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- 1 *eP·Z* 00 24 30
ePKP·Z' 28 11 (C)
iPP·Z 29 23
iPPP·Z 32 09
iSKS·N 34 51
iS·E 37 24 $-$, $12^s, 7\ \mu$.
iSP·E 39 08
ePS·N 39 19 $12^s, 12\ \mu$.
iPPS·Z 40 28
eSS·E 45 41 $16^s, 10\ \mu$.
e·E 49 11
eSSS·E 50 00 $18^s, 12\ \mu$.
 $\Delta = 119^\circ$. $h = 131$ km. South Sandwich Islands.
 $H = 00\ 09\ 34.6$.
- 1 *e(PKP)·Z* 00 38 23
 South Sandwich Islands Aftershock?
- 1 *eP·Z'Z* 19 03 20
i·ZE 03 21 $ZE: -$.
eSKS·E 13 48
eL·E 32
 $\Delta = 87^\circ$. $h = 37$ km. Guatemala. $H = 18\ 50\ 35.4$.
- 2 *iP·Z'* 00 37 34 C
 $\Delta = 72^\circ$. $h = 39$ km. Fox Islands. $H = 00\ 26\ 06.2$.
- 3 *iP·Z'* 17 40 27
 $\Delta = 68^\circ$. $h = 33$ km. Kamchatka. $H = 17\ 29\ 25.2$.
- 4 *iP·Z'* 03 29 (01) Confused by time mark.
 $\Delta = 83^\circ$. 492 km. Honshu. $H = 03\ 17\ 24.6$.

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4	<i>iP·Z'</i>	05 ^h 04 ^m 43 ^s	<i>D</i>	
	$\Delta = 72^\circ$.	$h = 60$ km.	Kurile Islands.	$H = 04\ 53\ 19.2$.
4	<i>iP·Z'Z</i>	10 00 39		
	<i>eL·ZNE</i>	26		
	$\Delta = 72^\circ$.	$h = 40$ km.	Andreanof Islands.	$H = 09\ 49\ 13.5$.
5	<i>eL·ZNE</i>	01 29		
	$\Delta = 18^\circ$.	Greece.		$H = 01\ 16\ 51.7$.
5	<i>eP·Z</i>	02 43.0		
	<i>eS·N</i>	47 33		
	<i>eL·ZNE</i>	50		
	$\Delta = 25^\circ$.	$h = 33$ km.	Spitsbergen.	$H = 02\ 37\ 37.8$.
5	<i>iP·Z'Z</i>	06 20 52	(<i>D</i>)	
	<i>ipP·Z'</i>	21 23		
	<i>iPP·ZE</i>	22 40		
	<i>iPPP·Z</i>	23 18		
	<i>eS·E</i>	27 12		
	<i>esS·N</i>	28 05		
	<i>eSS·N</i>	30 27		
	$\Delta = 43^\circ$.	$h = 104$ km.	Tadzhik.	$H = 06\ 12\ 59.7$.
5	<i>iP·Z'ZN</i>	11 45 20	<i>C</i> from North.	
	<i>iPP·Z</i>	47 39		
	<i>e(S)·E</i>	53 44		
	<i>i(S)·E</i>	54 05		
	<i>i(ScS)·E</i>	55 22		
	<i>eL·NE</i>	12 09		
	$\Delta = 64^\circ$.	$h = 43$ km.	Alaska.	$H = 11\ 34\ 37.3$.
8	<i>eL·ZNE</i>	05 30		
	$\Delta = 68^\circ$.	Queen Charlotte Islands.		$H = 04\ 52\ 08.6$.
8	<i>eP·Z</i>	11 41 22		
	<i>ipP·Z</i>	41 46	+	
	<i>iPKP·Z</i>	45 07	-	
	<i>ipPKP·Z</i>	45 34	-	
	<i>iPP·ZN</i>	46 10	<i>ZN</i> : -	
	<i>ipPP·ZE</i>	46 30	<i>ZE</i> : -	
	<i>isPP·Z</i>	46 59	-	
	<i>iPPP·ZN</i>	48 39	<i>ZN</i> : -	
	<i>iSKS·N</i>	51 44	-	10^8 , $10\ \mu$.
	<i>i(SKKS)·N</i>	52 25		
	<i>i(sSKS)·NE</i>	53 02	<i>NE</i> : +, 12^8 , <i>N</i> : $19\ \mu$, <i>E</i> : $12\ \mu$.	
	<i>e(PKKP)·ZN</i>	55 23		
	<i>i(PKKP)·Z</i>	55 35	-	
	<i>i!PS·ZN</i>	55 51	<i>ZN</i> : -, 8^8 , <i>Z</i> : $29\ \mu$, <i>N</i> : $22\ \mu$.	
	<i>i!PS·E</i>	55 57	+, 8^8 , $12\ \mu$.	
	<i>iSS·NE</i>	12 02 00		
	<i>iSSP·N</i>	02 28		
	<i>isSS·N</i>	02 51		
	<i>iSSS·NE</i>	06 29	14^8 , <i>N</i> : $15\ \mu$, <i>E</i> : $20\ \mu$.	
	<i>isSSS·E</i>	07 14		
	<i>eL·E</i>	15		
	20^8 . <i>ZNE</i>	31	<i>Z</i> : $58\ \mu$, <i>N</i> : $77\ \mu$, <i>E</i> : $42\ \mu$.	
	$\Delta = 116^\circ$.	$h = 125$ km.	South Sandwich Islands.	
	$H = 11\ 26\ 32.9$.	$M(L) = 7.5$ (<i>COP</i>).		

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10	<i>e·N</i>	09 ^h 09.9 ^m		
	<i>M·ZNE</i>	17.6	<i>Z</i> : 12^8 , $8\ \mu$. <i>N</i> : 10^8 , $6\ \mu$.	
			<i>E</i> : 11^8 , $3\frac{1}{2}\ \mu$.	
	$\Delta = 24^\circ$.	Novaya Zemlya.	Nuclear explosion.	
	$H = 09\ 00\ 09.2$.			
10	<i>eL·NE</i>	16 33		
	$\Delta = 24^\circ$.	Turkey.		$H = 16\ 17\ 20$.
10	<i>iPKP·Z'</i>	18 28 42		
	$\Delta = 151^\circ$.	$h = 152$ km.	Kermadec Islands.	$H = 18\ 09\ 07.3$.
11	<i>iP·Z'</i>	02 58 15	<i>D</i>	
	<i>eL·NE</i>	03 32		
	$\Delta = 72^\circ$.	$h = 60$ km.	Rat Islands.	$H = 02\ 46\ 50.3$.
11	<i>eiP·Z'</i>	23 58 52		
	$\Delta = 74^\circ$.	$h = 49$ km.	Hokkaido.	$H = 23\ 47\ 23.1$.
12	<i>eS·NE</i>	10 17.9		
	<i>M·E</i>	25.6	10^8 , $2\ \mu$.	
	<i>M·ZN</i>	25.7	<i>ZN</i> : 10^8 , $3\frac{1}{2}\ \mu$.	
	$\Delta = 24^\circ$.	Novaya Zemlya.	Nuclear explosion.	
	$H = 10\ 08\ 15.3$.			
12	<i>iP·Z'</i>	12 38 39	<i>D</i>	
	<i>eL·E</i>	13 08		
	$\Delta = 74^\circ$.	$h = 50$ km.	Kurile Islands.	$H = 12\ 27\ 07.6$.
12	<i>eL·N</i>	20 01		
	$\Delta = 81^\circ$.	California/Mexico.		$H = 19\ 18\ 42.9$.
12	<i>eL·ZNE</i>	20 34		
	$\Delta = 120^\circ$.	South Sandwich Islands.		$H = 19\ 29\ 09.2$.
13	<i>eL·NE</i>	22 21		
	$\Delta = 122^\circ$.	Chile.		$H = 21\ 19\ 19.9$.
14	<i>iP·Z'</i>	08 09 44	<i>C</i>	
	$\Delta = 33^\circ$.	$h = 33$ km.	Iran/Iraq.	$H = 08\ 03\ 08.7$.
14	<i>M·ZNE</i>	10 13.7	10^8 , <i>Z</i> : $3\frac{1}{2}\ \mu$, <i>N</i> : $4\ \mu$, <i>E</i> : $1\frac{3}{4}\ \mu$.	
	$\Delta = 24^\circ$.	Novaya Zemlaya.	Nuclear explosion.	
	$H = 09\ 56\ 16.7$.			
15	<i>iP·ZNE</i>	01 51 36	<i>C</i> from South-east, 6^8 , <i>Z</i> : $4\frac{1}{2}\ \mu$, <i>NE</i> : $2\ \mu$.	
	<i>iP·Z'</i>	51 37	<i>D</i>	
	<i>ipP·Z'</i>	51 45 ¹ / ₂		
	<i>i·Z</i>	51 50		
	<i>eS·N</i>	55 58		
	<i>i·Z</i>	56 18	8^8 , $4\ \mu$.	
	<i>i·E</i>	56 26	9^8 , $6\ \mu$.	
	<i>e·E</i>	57 32		
	<i>e·N</i>	59 22		
	$\Delta = 25^\circ$.	$h = 36$ km.	Cyprus.	$H = 01\ 46\ 09.9$.
	$M(P) = 6.2$ (<i>COP</i>).			

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16	$e \cdot Z$	09 ^h 23.8 ^m		
	$e \cdot E$	24.6		
	$e \cdot E$	25.6	Confused by microseisms.	
	$M \cdot ZN$	25.7	$ZN: 10^s, 2^{3/4} \mu$.	
	$M \cdot E$	26.5	$6^s, 2 \mu$.	
	$\Delta = 24^\circ$. Novaya Zemlaya. Nuclear explosion.			
	$H = 09\ 08\ 13.7$.			
17	$iP \cdot Z'$	08 54 08	(C)	
	$eL \cdot NE$	09 25		
	$\Delta = 80^\circ$. $h = 53$ km. Formosa. $H = 08\ 41\ 57.3$.			
18	$eL \cdot E$	05 23	Confused by microseisms.	
	$\Delta = 23^\circ$. Crete. $H = 05\ 08\ 31.9$.			
18	$e \cdot N$	08 15.2		
	$e \cdot E$	15.8		
	$M \cdot ZNE$	17.1	$10^s, Z: 3^{1/2} \mu, N: 2^{3/4} \mu, E: 2^{1/4} \mu$.	
	$\Delta = 24^\circ$. Novaya Zemlya. Nuclear explosion.			
	$H = 07\ 59\ 36.8$.			
18	$eP \cdot Z'$	11 06 58		
	$i \cdot Z'$	06 58 ^{1/2} +.		
	$i(ScS) \cdot ZN$	17 35		
	$eL \cdot ZNE$	18		
	$\Delta = 28^\circ$. $h = 55$ km. Caspian Sea. $H = 11\ 01\ 04.5$.			
19	$iP \cdot Z'$	02 38 32	D	
	$i \cdot Z'$	38 36		
	$ePP \cdot Z$	42 39		
	$eSKS \cdot NE$	48 16		
	$i \cdot E$	48 21	$6^s, 3 \mu$.	
	$e(SKKS) \cdot E$	48 46		
	$iS \cdot N$	49 15		
	$ePS \cdot E$	51 58		
	$\Delta = 98^\circ$. $h = 580$ km. Bolivia. $H = 02\ 25\ 49.2$.			
19	$eP \cdot Z'Z$	09 59 05		
	$e(S) \cdot E$	10 09 38		
	$i(ScS) \cdot NE$	09 52		
	$i(SP) \cdot N$	10 14		
	$eL \cdot ZNE$	25		
	$\Delta = 87^\circ$. $h = 33$ km. Panama. $H = 09\ 46\ 17.7$.			
19	$iPKP \cdot Z'$	18 44 00	C	
	$\Delta = 145^\circ$. $h = 592$ km. Fiji Islands. $H = 18\ 25\ 28.9$.			
19	$eL \cdot ZNE$	22 40		
	$\Delta = 119^\circ$. South Sandwich Islands. $H = 21\ 34\ 42.3$.			
20	$e \cdot E$	08 28.6		
	$M \cdot ZNE$	29.7	$10^s, Z: 2^{3/4} \mu, N: 2^{1/2} \mu, E: 1^{1/2} \mu$.	
	$\Delta = 24^\circ$. Novaya Zemlya. Nuclear explosion.			
	$H = 08\ 12\ 09$.			
20	$ePP \cdot Z$	19 23 38		
	$ePS \cdot Z$	33 19		
	$ePPS \cdot Z$	34 41		

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20	<i>eSS</i> · <i>N</i>	19 ^h 39 ^m 48 ^s	(Con.).
	<i>eSSS</i> · <i>E</i>	44 27	
	<i>eL</i> · <i>E</i>	20 00	
	$\Delta = 118^\circ$. $h = 44$ km. New Britain. $H = 19\ 03\ 37.7$.		
22	(<i>e</i> · <i>E</i>	08 16.5)	
	<i>e</i> · <i>N</i>	17.5	
	<i>M</i> · <i>E</i>	18.3	9 ^s , 1 ¹ / ₄ μ .
	<i>M</i> · <i>ZN</i>	18.6	10 ^s , Z : 1 ³ / ₄ μ , N : 1 ¹ / ₄ μ .
	$\Delta = 24^\circ$. Novaya Zemlya. Nuclear explosion.		
	$H = 08\ 00\ 53$.		
24	<i>eiP</i> · <i>Z'</i>	21 53 06	
	<i>eS</i> · <i>NE</i>	22 03.5	
	<i>eL</i> · <i>NE</i>	23	
	$\Delta = 81^\circ$. $h = 50$ km. Honshu. $H = 21\ 40\ 57.3$.		
27	<i>ei</i> · <i>Z'</i>	06 55 21	Confused by microseisms.
	$(\Delta = 141^\circ$. $h = 555$ km. Fiji Islands. $H = 06\ 34\ 05.4)$.		
27	<i>eiP</i> · <i>Z'</i>	11 32 15	
	$\Delta = 72^\circ$. $h = 27$ km. Fox Islands. $H = 11\ 20\ 46.8$.		
27	<i>eSS</i> · <i>E</i>	12 43.7	
	<i>eL</i> · <i>ZNE</i>	13 10	
	$\Delta = 118^\circ$. $h = 33$ km. South Sandwich Islands.		
	$H = 12\ 07\ 32.6$.		
27	<i>i</i> (<i>P</i>)· <i>Z'</i>	17 53 38	
27	<i>iP</i> · <i>Z'</i>	19 32 12 ¹ / ₂	
	$\Delta = 71^\circ$. $h = 42$ km. Fox Islands. $H = 19\ 20\ 48.6$.		
27	<i>eiP</i> · <i>Z'</i>	19 38 25	
	<i>e</i> (<i>ScS</i>)· <i>N</i>	48 37	
	<i>eL</i> · <i>ZNE</i>	20 09	
	$\Delta = 71^\circ$. $h = 22$ km. Fox Islands. $H = 19\ 27\ 00.7$.		
28	<i>iP</i> · <i>Z'</i>	03 37 04	
	<i>e</i> (<i>SKS</i>)· <i>E</i>	46 58	
	<i>eScS</i> · <i>NE</i>	47 25	
	<i>eL</i> · <i>NE</i>	04 09	
	$\Delta = 83^\circ$. $h = 41$ km. Honshu. $H = 03\ 24\ 37.7$.		
28	<i>iP</i> · <i>Z'</i>	05 08 27	
	$\Delta = 43^\circ$. $h = 204$ km. Hindu Kush. $H = 05\ 00\ 43.4$.		
28	<i>eL</i> · <i>E</i>	05 47.4	
	$\Delta = 19^\circ$. Turkey. $H = 05\ 35.1$.		
28	<i>iP</i> · <i>Z'</i>	22 44 22	
	<i>i</i> · <i>Z'</i>	44 31 ¹ / ₂	
	<i>i</i> · <i>Z'</i>	44 38 ¹ / ₂	
	$\Delta = 42^\circ$. $h = 41$ km. Iran. $H = 22\ 36\ 24.7$.		
29	<i>iP</i> · <i>Z'</i>	17 02 08	(C)
	$\Delta = 74^\circ$. $h = 45$ km. Hokkaido. $H = 16\ 50\ 35.4$.		

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29 *e*·*Z* 19^h23^m57^s
ePP·*Z* 24 29
ePPP·*Z* 26 44
e(SKS)·*E* 30 58
e(PS)·*E* 34 (04)
eSS·*N* 38 (05)
e·*N* 44 24
eL·*N* 58
 $\Delta = 101^\circ$. $h = 110$ km. Celebes. $H = 19$ 06 13.4.

30 *eP*·*Z'* 00 32 51¹/₂ +
i·*Z'* 32 52 -
 $\Delta = 73^\circ$. $h = 49$ km. Kurile Islands. $H = 00$ 21 18.8.

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2 *iP*·*Z'ZN* 07 26 16¹/₂ *C* from South.
i·*Z'* 26 24
i·*Z'* 26 31¹/₂
eS·*Z* 29 56
eS·*E* 29 59
eL·*NE* 34
i(Lg)·*ZN* 35 14 *ZN*: -
M·*ZN* 35.5 12^s, *Z*: 19¹/₂ μ , *N*: 17¹/₂ μ .
M·*E* 35.9 10^s, 11¹/₂ μ .
 $\Delta = 20^\circ$. $h = 33$ km. Greece. $H = 07$ 21 44.7.

2 *eL*·*ZNE* 08 22 25^s

2 *e*·*N* 10 47.8
M·*E* 48.2 Confused by microseisms.
M·*N* 48.3 10^s, 1 μ .
M·*Z* 48.6 10^s, 1¹/₄ μ .
 Nuclear explosion, Novaya Zemlya.

4 *eL*·*N* 03 31
 $\Delta = 133^\circ$. New Hebrides Islands. $H = 02$ 23 23.5.

4 *e*·*E* 07 42.8
M·*ZNE* 48.4 *Z*: 10¹/₂ ^s, 5 μ , *N*: 10^s, 5 μ , *E*: 10^s, 2³/₄ μ .
 $\Delta = 24^\circ$. Novaya Zemlya. Nuclear explosion.
 $H = 07$ 30 54.8.

5 *e(P)*·*Z* 22 47 18
eS·*NE* 57 16
eL·*NE* 23 17
 $\Delta = 80^\circ$. $h = 39$ km. Formosa. $H = 22$ 34 58.9.

6 *eP*·*NE* 07 05 28
iP·*Z* 05 33
eS·*N* 09 56
eL·*E* 12.3
eL·*ZN* 14.7
M·*ZNE* 17.6 *Z*: 11^s, 6¹/₄ μ , *N*: 10^s, 6¹/₂ μ ,
E: 11^s, 3³/₄ μ .
 $\Delta = 24^\circ$. Novaya Zemlya. Nuclear explosion.
 $H = 07$ 00 12.2.

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10 *eL*·*N* 18^h23^m
 $\Delta = 114^\circ$. New Guinea. $H = 17$ 24 58.9.

12 *eL*·*ZNE* 07 10
 $(\Delta = 116^\circ$. New Guinea. $H = 06$ 01 28.6).

13 *iPKP*·*Z'Z* 17 47 41¹/₂ *D* *Z*: 3^s, 2¹/₄ μ .
i·*Z'* 47 42 +
 $\Delta = 146^\circ$. $h = 55$ km. Tonga Islands. $H = 17$ 28 21.5.

16 *i(P)*·*Z'* 13 27 09¹/₂
i·*Z'* 27 13¹/₂
i·*Z'* 27 22

17 *eL*·*NE* 05 28
 $\Delta = 111^\circ$. Bouvet Island. $H = 04$ 27 31.3.

17 *iP*·*Z'* 13 11 18
iS·*Z'* 11 34
 $\Delta = 1^\circ$. Bornholm. $H = 13$ 10 47.

18 *ePP*·*Z* 17 11 (48)
eSKKS·*E* 19 (08)
eS·*N* 19 (36)
ePS·*E* 21 41
eSS·*NE* 28.0
eL·*NE* 51
 $\Delta = 117^\circ$. $h = 33$ km. Chile. $H = 16$ 51 57.3.

20 *e*·*N* 08 21.8
M·*ZNE* 24.6 *Z*: 10^s, 3³/₄ μ . *N* and *E* confused by
 microseisms. *N*: 3¹/₄ μ , *E*: 1¹/₂ μ .
 $\Delta = 24^\circ$. Novaya Zemlya. Nuclear explosion.
 $H = 08$ 07 02.0.

22 *e(SKS)*·*N* 10 16.9
eL·*N* 11 02
 $\Delta = 142^\circ$. $h = 65$ km. New Hebrides Islands. $H = 09$ 50 30.8.

23 *ePKP*·*Z* 00 27 32
ePP·*Z* 29 05
e(SKS)·*N* 35 37
iPS·*Z* 39 12
iPS·*N* 39 18
i·*Z* 44 52
eSS·*N* 45.9
eL·*E* 59
 $\Delta = 121^\circ$. $h = 33$ km. South Sandwich Islands.
 $H = 00$ 08 36.6.

23 *e*·*ZNE* 08 43 (41)
i·*E* 47 44 -
M·*ZNE* 48.8 *Z*: 11^s, 15 μ , *N*: 10^s, 14¹/₂ μ ,
E: 10^s, 8 μ .
 $\Delta = 24^\circ$. Novaya Zemlya. Nuclear explosion. $H = 08$ 31 22.1.

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- 23 $iP \cdot Z'$ 10^h36^m00^s (D)
 $i \cdot Z'$ 36 04 +
 $i(PP) \cdot Z'$ 36 23 +
 $\Delta = 23^\circ$. Novaya Zemlya. Submarine nuclear explosion.
 $H = 10\ 30\ 48.5$.
- 23 $eL \cdot N$ 15 28
 $\Delta = 101^\circ$. Molucca Strait. $H = 14\ 39\ 35.3$.
- 25 $e \cdot Z$ 08 47.5
 $M \cdot E$ 48.5 (10^s), 1¹/₂ μ
 $M \cdot Z$ 48.6 10^s, 1¹/₂ μ
 $M \cdot N$ 48.7 (10^s), 2 μ } Confused by
microseisms.
 $\Delta = (24^\circ)$. Novaya Zemlya. Nuclear explosion. $H = 08\ 31\ 03$.
- 26 $ePP \cdot Z$ 00 58 14
 $eSKKS \cdot E$ 01 05 15
 $iPS \cdot E$ 08 01
 $ePPS \cdot Z$ 09 (11)
 $eSS \cdot E$ 14.3
 $e \cdot E$ 17 38
 $e(SSS) \cdot E$ 19 16
 $eL \cdot NE$ 35
 $\Delta = 117^\circ$. $h = 33$ km. Bismarck Sea. $H = 00\ 38\ 22.8$.
- 26 $iP \cdot Z$ 15 39 55 C
 $eSKS \cdot E$ 50 17
 $eS \cdot N$ 50 27
 $iScS \cdot NE$ 50 42
 $eSKKS \cdot N$ 50 52
 $iPS \cdot E$ 51 55
 $ePPS \cdot E$ 52 03
 $eSS \cdot E$ 56 45
 $eL \cdot N$ 16 08
 $\Delta = 88^\circ$. $h = 34$ km. Sumatra. $H = 15\ 27\ 05.9$.
- 28 $iP \cdot Z'$ 10 53 17 C
 $eL \cdot NE$ 11 07
 $\Delta = 33^\circ$. $h = 52$ km. Iran. $H = 10\ 46\ 42.2$.
- 28 $eL \cdot E$ 15 53
 $\Delta = 119^\circ$. Chile. $H = 14\ 49\ 17.5$.
- 28 $ePP \cdot Z$ 23 06.1 Confused by microseisms.
 $ePKS \cdot N$ 07.2
 $iPKS \cdot E$ 07 22¹/₂
 $e(SKS) \cdot NE$ 11 48
 $\Delta = 134^\circ$. $h = 37$ km. New Hebrides Islands.
 $H = 22\ 44\ 30.2$.
- 28 $eL \cdot N$ 23 16
 $\Delta = 52^\circ$. Lake Baikal. $H = 22\ 45\ 45.6$.
- 29 $e(SSS) \cdot E$ 09 40.0
 $eL \cdot E$ 43
 $\Delta = 70^\circ$. $h = 16$ km. Vancouver Island. $H = 09\ 12\ 15.7$.

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- 30 $iP \cdot Z'$ 02^h28^m28¹/₂^s
 $eP \cdot Z$ 28 31
 $eL \cdot E$ 03 01
 $\Delta = 77^\circ$. $h = 36$ km. Oregon. $H = 02\ 16\ 32.7$.
- 30 $eiP \cdot Z'$ 08 38 48
 $i \cdot Z'$ 38 49¹/₂ +
 $i \cdot Z'ZNE$ 38 51 $Z': -$, $Z: +$, 3¹/₂^s, 2¹/₂ μ , $NE: -$,
5^s, 2¹/₄ μ , 1 μ .
 $i \cdot Z'$ 38 55 -
 $i \cdot Z$ 42 51 +
 $eS \cdot N$ 43 16 +, (6^s), 1¹/₂ μ .
 $eS \cdot E$ 43 24 5^s, 1¹/₂ μ .
 $i \cdot Z$ 43 30 +
 $i \cdot Z$ 43 37 -
 $i \cdot E$ 43 39 +, 5^s, 1¹/₂ μ .
 $e \cdot N$ 43 40 +, 5^s, 2³/₄ μ .
 $i \cdot Z$ 45 35 +
 $i \cdot E$ 45 41¹/₂ -, 5^s, 2¹/₄ μ .
 $eL \cdot N$ 46.7
 $eL \cdot Z$ 46.9 5^s, 1¹/₂ μ .
 $M \cdot ZNE$ 51.0 $Z: 12^s$, 40 μ , $N: 10^s$, 36 μ , $E: 11^s$,
22 μ .
 $\Delta = 24^\circ$. Novaya Zemlya. Nuclear explosion.
 $H = 08\ 33\ 27.8$.
- 30 $iPKP \cdot Z'$ 17 54 36 D
 $\Delta = 152^\circ$. $h = 219$ km. Kermadec Islands. $H = 17\ 35\ 03.3$.
- 30 $eL \cdot N$ 22 01
 $\Delta = 85^\circ$. Honshu. $H = 21\ 15\ 35.2$.
- 31 $e \cdot NE$ 08 44.5 Confused by microseisms.
 $e \cdot Z$ 45.1
 $M \cdot E$ 46.6 7^s, 3¹/₂ μ .
 $M \cdot N$ 46.9 (8^s), 4 μ .
 $M \cdot Z$ 47.3 6^s, 5 μ .
 $\Delta = 25^\circ$. Novaya Zemlya. Nuclear explosion. $H = 08\ 29\ 17.2$.
- 31 $e \cdot N$ 08 55.2 Confused by microseisms.
 $e \cdot Z$ 55.8
 $M \cdot N$ 56.4 6^s, 3¹/₂ μ .
 $M \cdot Z$ 56.6 6^s, 3 μ .
 $\Delta = 26^\circ$. Novaya Zemlya. Nuclear explosion. $H = 08\ 38\ 00.5$.
- November.
4 $e \cdot E$ 07 35.5 Confused by microseisms.
 $M \cdot ZN$ 38.0 $Z: (10^s)$, 3¹/₄ μ , $N: 10^s$, 2³/₄ μ .
 $\Delta = 25^\circ$. Novaya Zemlya. Nuclear explosion. $H = 07\ 20\ 19.7$.
- 5 $iP \cdot Z'$ 03 53 17 (D)
 $\Delta = 74^\circ$. $h = 18$ km. Kurile Islands. $H = 03\ 41\ 40.0$.
- 5 $eP \cdot Z'$ 10 47 50
 $i \cdot Z'$ 47 55
 $\Delta = 72^\circ$. $h = 142$ km. Kurile Islands. $H = 10\ 36\ 39.5$.

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- 6 *eL·N* 06^h36^m
 $\Delta = 133^\circ$. New Hebrides Islands. $H = 05\ 28\ 22.8$.
- 6 *eL·N* 12 53
 $\Delta = 45^\circ$. Hindu Kush. $H = 12\ 29\ 05.5$.
- 7 *eL·ZNE* 02 11
 $\Delta = 72^\circ$. Oregon/Washington. $H = 01\ 29\ 08.4$.
- 10 *iPKP·Z'* 18 19 14
 $\Delta = 141^\circ$. $h = 586$ km. Fiji Islands. $H = 18\ 00\ 49.6$.
- 12 *iP·Z'* 02 24 59 *D*
eL·E 48
 $\Delta = 57^\circ$. $h = 39$ km. Congo. $H = 02\ 15\ 16.7$.
- 14 *eSKS·N* 05 05 39
eS·N 05 54
i(ScS)·N 06 12
ePS·N 07 05
eL·NE 20
 $\Delta = 87^\circ$. $h = 29$ km. Panama. $H = 04\ 42\ 26.5$.
- 15 *i!P·Z'Z* 07 28 45 *C Z*: $6\frac{1}{2}^s$, $16\ \mu$.
i(pP)·Z' 28 55 +
i!·Z' 28 58 -
iPcP·Z' 29 $02\frac{1}{2}$ +
i·Z' 29 $09\frac{1}{2}$ -
i·Z' 29 $37\frac{1}{2}$ -
ePP·Z 31 28
i·Z 31 35 -
iPPP·Z 33 $14\frac{1}{2}$ +, 6^s , $5\ \mu$.
ePPPP·Z 34 12
e·Z 34 42
i!S·NE 38 $13\frac{1}{2}$ *N*: -, 10^s , $16\frac{1}{2}\ \mu$. *E*: +, 7^s , $14\frac{1}{2}\ \mu$.
i(sS)·N 38 $31\frac{1}{2}$ 6^s , $11\frac{1}{2}\ \mu$.
i(PS)·N 39 10
i(PPS)·Z 39 21
eL·NE 46
20^s·ZNE 08 04 *Z*: $60\ \mu$, *N*: $50\ \mu$, *E*: $(50)\ \mu$.
 $\Delta = 74^\circ$. $h = 43$ km. Hokkaido. $H = 07\ 17\ 12.4$.
M(L) = 7.0 (COP), M(P) = 7.5 (COP).
- 18 *iPKP·Z'* 11 36 45 *D*
 $\Delta = 151^\circ$. $h = 61$ km. Kermadec Islands. $H = 11\ 16\ 56.8$.
- 18 *eiP·Z'* 22 21 57
i·Z' 22 22 +
eL·N 51
 $\Delta = 80^\circ$. $h = 38$ km. Formosa. $H = 22\ 09\ 51.9$.
- 19 *i(PKP)·Z'* 10 31 44 *D*
 $(\Delta = 123^\circ)$. $h = 42$ km. Solomon Islands. $H = 10\ 12\ 48.4$.
- 19 *(iP·Z'* 23 35 26 *D)*
ePP·Z 39 50
epPP·Z 40 36

November.

- 19 *iSKS·E* 23^h45^m53^s -, 5^s , $2\ \mu$. (Con.).
eS·E 47 18
e(SP)·Z 48 24
eSS·E 54 19
esSS·N 55 14
eL·N 24 12
 $\Delta = 102^\circ$. $h = 157$ km. Celebes. $H = 23\ 21\ 55.5$.
- 20 *eP·Z'* 04 12 (12)
eL·ZNE 29
 $\Delta = 46^\circ$. $h = 33$ km. Outer Mongolia/Siberia. $H = 04\ 03\ 56.7$.
- 20 *iP·Z'* 04 44 26 *D*
 $\Delta = 77^\circ$. $h = 33$ km. Honshu. $H = 04\ 32\ 34.7$.
- 20 *ePKP·Z* 12 03 36
e·Z 04 45
iPP·Z 07 02 Confused by time break.
e(PKS)·Z 07 51
ePPP·Z 10 05
e(SKs)·Z 11 04
e·Z 11 21
eQ·E 48.5
eR·E 13 03
 $\Delta = 142^\circ$. $h = 33$ km. Loyalty Islands. $H = 11\ 44\ 19.4$.
- 20 *eP·Z'* 18 06 27
i(pP)·Z 06 35 +, 4^s , $5\ \mu$.
i(pP)·Z' 06 $36\frac{1}{2}$ -
i·Z'Z 06 44 -
i·Z 06 51 -
i(PP)·Z 08 36
e(PcS)·E 12 06 5^s , $2\frac{3}{4}\ \mu$.
eS·ZN 13 13 *Z*: +, 5^s , $2\frac{1}{4}\ \mu$, *N*: +, 8^s , $2\frac{1}{2}\ \mu$.
iS·E 13 17 +, 5^s , $4\ \mu$.
i(PS)·E 13 41
e(SS)·Z 16.7
e(SSS)·N 17 02
eL·ZNE 18
 $\Delta = 44^\circ$. $h = 34$ km. Atlantic Ocean. $H = 17\ 58\ 17.5$.
- 22 *iPKP·Z'* 20 59 04
 $\Delta = 150^\circ$. $h = 43$ km. Tonga Islands. $H = 20\ 39\ 15.8$.
- 25 *(i)(P)·Z'* 20 32 (01) Confused by time break.
 $\Delta = 78^\circ$. $h = 45$ km. Honshu. $H = 20\ 19\ 50.4$.
- 27 *eP·Z'* 06 09 10
eL·NE 40
M·ZNE 47 19^s , *Z*: $13\ \mu$, *N*: $11\ \mu$, *E*: $13\ \mu$.
 $\Delta = 78^\circ$. $h = 25$ km. Kyushu. $H = 05\ 57\ 07.7$.
- 27 *ePP·Z* 17 29 05
eSKS·E 35 $21\frac{1}{2}$ -, 9^s , $2\frac{3}{4}\ \mu$.
iSKS·N 35 26 +
eSKKS·E 35 43
ePS·E 38 17
e(SPP)·Z 39 (08)

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27 *e(PPS)·E* 17^h39^m16^s (Con.).
iSS·E 44 02¹/₂ 11^s, 3¹/₂ μ .
i(SSS)·Z 48 05
eL·NE 18 01
 $\Delta = 104^\circ$. $h = 33$ km. Halmahera. $H = 17\ 10\ 38.1$.

28 *e·Z'* 00 44 39

December.

1 *eP·Z* 21 25 38
ipP·Z'Z 25 46¹/₂
i!pP·ZNE 25 48¹/₂ $Z: -, 4^s, 8^1/₂ μ , $N: +, 4^s, 2^1/₂ μ ,
 $E: +, 5^s, 3^1/₂ μ .
esP·Z 26 13
ePP·Z 38 41
eS·E 34 40 13^s, 3 μ .
epS·E 35 47
ePS·NE 36 08
esS·E 36 15 $-, 7^s, 3^1/₂ μ .
isS·N 36 18 $-, 8^s, 4$ μ .
esPS·N 36 38 10^s, 2¹/₄ μ .
eSS·E 40 05
esSS·E 41 33
eQ·Z 45.4
e·N 46 11 13^s.
eR·N 49.0
 $\Delta = 80^\circ$. $h = 206$ km. China Sea. $H = 21\ 13\ 04.1$.$$$$

2 *eP·Z'Z* 12 44 42
iPPP·Z 45 03 $-$
e(S)·E 48 23
e(S)·ZN 48 27
e(SSS)·E 49 06
e(L)·N 50 56
eL·NE 52
 $\Delta = 19^\circ$. $h = 33$ km. Algeria/Tunisia. $H = 12\ 40\ 16.2$.

3 *eP·Z'* 18 37 26
eL·N 45
 $\Delta = 25^\circ$. $h = 33$ km. Armenia. $H = 18\ 31\ 56.1$.

3 *iP·Z'* 20 05 37 C
 $\Delta = 70^\circ$. $h = 386$ km. Sea of Japan. $H = 19\ 55\ 05.5$.

4 *eP·Z'* 12 48 (14)
ePPP·Z 51 36
eS·E 56 21
e(Q)·Z 13 02 51
i·Z 04 49
eR·NE 07.8
M·N 12 15^s, 23 μ .
M·ZE 16 $Z: 11^s, 9$ μ , $E: 12^s, 12^1/₂ μ .
 $\Delta = 59^\circ$. $h = 45$ km. Tibet. $H = 12\ 38\ 11.9$.$

6 *eL·N* 06 31 Confused by microseisms.
 $\Delta = 74^\circ$. Andaman Islands. $H = 05\ 48\ 38.3$.

December.

6 *eL·N* 15^h01^m
 $\Delta = 147^\circ$. Tonga Islands. $H = 13\ 35\ 48.2$.

6 *iP·Z* 16 50 51 $C, 6^s, 3^1/₂ μ .
iPPP·Z 55 19
ipPPP·Z 55 33¹/₂
eS·NE 17 00.1
esS·N 00 28
e(SP)·N 00 53
i(PS)·N 01 08
i(sPS)·N 01 16
e(SS)·N 05.3
eL·ZNE 08
20^s·ZN 25 $Z: 24$ μ , $N: 26$ μ .
 $\Delta = 71^\circ$. $h = 60$ km. Kurile Islands. $H = 16\ 39\ 37.6$.
 $M(P) = 6.4$ (COP).$

9 *eP·Z'* 02 26 24
eS·N 35.2
iPS·E 35 29
eL·NE 52
 $\Delta = 67^\circ$. $h = 31$ km. Kodiak Island. $H = 02\ 15\ 22.0$.

9 *ePP·Z* 11 39 (23)
ePPP·Z 41 33
ePS·E 48 44 $+, 7^s, 3$ μ .
eL·E 12 13
 $\Delta = 124^\circ$. $h = 34$ km. Chile. $H = 11\ 18\ 08.9$.

9 *iPKP·Z'* 20 08 15 (C)
iPKP·Z 08 15¹/₂ C
i!·Z' 08 16 $-$
 $\Delta = 145^\circ$. $h = 620$ km. Fiji Islands. $H = 19\ 49\ 41.3$.

11 *eiP·Z'* 16 57 45
 $\Delta = 21^\circ$. $h = 33$ km. Greece. $H = 16\ 53\ 06.4$.

12 *eiP·Z'* 23 17 51
 $\Delta = 74^\circ$. $h = 65$ km. Hokkaido. $H = 23\ 06\ 20.6$.

14 *eL·ZNE* 08 (14) Earlier phases, if present, lost in record-change.
 $\Delta = 113^\circ$. New Guinea. $H = 07\ 10\ 23.2$.

16 *iPKP·Z'* 20 54 40¹/₂ (C)
 $\Delta = 152^\circ$. $h = 295$ km. Kermadec Islands. $H = 20\ 35\ 29.0$.

18 *eL·NE* 21 46
 $\Delta = (20^\circ)$. Ionian Islands.

20 *eP·Z'* 13 37 52
ePcP·Z 37 58 $+$
i!pP·Z 38 37 $-, 8^s, 9^1/₂ μ .
isP·Z 38 56 $+, 8^s, 8$ μ .
e(PP)·Z 41 00
i(pPP)·Z 42 08
iPPP·Z 43 17
e·Z 44 44$

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20	<i>eSKS·E</i>	13 ^h 48 ^m 02 ^s	(Con.).
	<i>i!S·N</i>	48 12	-, 10 ^s , 35 μ .
	<i>eS·ZE</i>	48 15	-, Z: 10 ^s , 6 μ , E: 9 ^s , 15 μ .
	<i>eSP·Z</i>	49 00	
	<i>i!sS·NE</i>	49 21	N: +, 13 ^s , 19 μ , E: -, 8 ^s , 14 ¹ / ₂ μ .
	<i>e(pPS)Z</i>	49 52	+, 7 ^s , 3 ¹ / ₂ μ .
	<i>esPS·N</i>	52 19	
	<i>e·Z</i>	52 47	8 ^s , 3 ¹ / ₂ μ .
	<i>eSS·N</i>	53 45	17 ^s , 9 ¹ / ₂ μ .
	<i>eL·NE</i>	58	
	$\Delta = 85^\circ$. $h = 176$ km. Colombia. $H = 13\ 25\ 34.4$.		

24	<i>iP·Z'</i>	07 02 14	(C)
	<i>e·Z'</i>	03 (26)	
	<i>eL·N</i>	40	
	$\Delta = 73^\circ$. $h = 125$ km. Hokkaido. $H = 06\ 50\ 54.0$.		

25	<i>eL·E</i>	00 47	
	$\Delta = 120^\circ$. Chile. $H = 23\ 43\ 19.2$.		

28	<i>eL·N</i>	01 22	Confused by microseisms.
	$\Delta = 162^\circ$. New Zealand. $H = 23\ 48\ 01.7$.		

December.

30	<i>iP·Z</i>	00 ^h 50 ^m 52 ^s	(C)
	<i>i·Z</i>	51 42	
	<i>ePPP·Z</i>	55 14	
	<i>i(pPPP)·Z</i>	55 27	6 ^s , 5 ¹ / ₂ μ .
	<i>eS·NE</i>	01 00 10	
	<i>i!l(pS)·E</i>	00 16 ¹ / ₂	+, 8 ^s , 8 μ .
	<i>iPS·E</i>	00 32	+, 6 ^s , 7 μ .
	<i>ePPS·Z</i>	00 41	
	<i>i(sS)·N</i>	00 54	-, 10 ^s , 5 μ .
	<i>i·N</i>	01 23	-, 10 ^s , 6 μ .
	<i>i·E</i>	01 32	8 ^s , 8 μ .
	<i>e·N</i>	03 05	
	<i>eSS·E</i>	04 44	
	<i>e·E</i>	05 35	
	<i>eSSS·ZE</i>	07 34	
	<i>eL·NE</i>	12	
	20 ^s ·ZN(E)	20	Z: 15 ¹ / ₂ μ , N: 19 μ , E: (19) μ .
	M·NE	27	16 ^s , N: 30 μ , E: 36 ¹ / ₂ μ .
	M·Z	30	15 ^s , 17 ¹ / ₂ μ .
	$\Delta = 71^\circ$. $h = 56$ km. Rat Islands. $H = 00\ 39\ 27.1$.		
	M(L) = 6.6 (COP).		

30	<i>eL·NE</i>	07 32	
	$\Delta = 45^\circ$. Sinkiang. $H = 07\ 08\ 39.1$.		

May 1964.

J. H. LATTER.