

GEODÆTISK INSTITUT

Proviantgården · Copenhagen · Denmark

Bulletin of the seismological station

SCORESBYSUND

 $\varphi = 70^{\circ}29' N.$ $\lambda = 21^{\circ}57' W.$ $h = 69 m.$

Lithologic foundation: gneiss

Instruments

Galitzin-Wilip. *N* and *E*. $T_p = T_g = 12 \text{ sec}$, $\mu^2 = 0$, $\frac{Ak}{\pi l} = 300$ or V_{\max} abt. 1000.Galitzin-Wilip. *Z*. $T_p = 9 \text{ sec}$, $T_g = 10 \text{ sec}$, $\mu^2 = 0$, $\frac{Ak}{\pi l} = 200$ or V_{\max} abt. 600.Grenet *Z'*. $T_p = 1 \text{ sec}$, $T_g = 1/4 \text{ sec}$. V_{\max} abt. 30000.

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. C means compression and D dilatation.



Scoresbysund 1961

January

1	<i>eP·Z'</i>	13 ^b 34 ^m 07 ^s	
2	<i>iP·Z'</i>	10 30 36	D
		$\Delta = 122^\circ$, h = 160 km.	Santa Cruz Islands.
5	<i>iP·Z'Z</i>	14 16 11	C
	<i>eS·NE</i>	24 09	
	<i>eSS·N</i>	28 08	
	<i>L·ZNE</i>	33	
		$\Delta = 57^\circ$.	Aleutian Islands.
5	<i>iP·Z'</i>	15 20 14	D
		$\Delta = 64^\circ$.	Kurile Islands.
5	<i>ePP·Z'</i>	16 13 05	
		$\Delta = 113^\circ$, h = 100 km.	New Guinea.
5	<i>iPKP·Z'</i>	18 17 01	D
	<i>ePKS·Z'</i>	20 20	
	<i>eSS·N</i>	37 09	
	<i>L·ZN</i>	19 06	
		$\Delta = 130^\circ$, h = 120 km.	Loyalty Islands.
5	<i>iPKP·Z'</i>	18 33 45	D
	<i>iPKS·Z'</i>	37 09	
		$\Delta = 130^\circ$, h = 120 km.	Loyalty Islands.
6	<i>iP·Z'</i>	1 31 25	C
		$\Delta = 67^\circ$.	Japan.
7	<i>eP·Z'</i>	10 38 49	
		$\Delta = 43^\circ$.	Crete.
7	<i>iP·Z'</i>	16 00 28	
		$\Delta = 40^\circ$.	Greece.
7	<i>iPKP·Z'</i>	18 35 56	D
		$\Delta = 128^\circ$.	Sandwich Group.
9	<i>eP·Z'</i>	3 16 17	
		$\Delta = 42^\circ$.	North Atlantic Ocean.
10	<i>iP·Z'</i>	14 32 24	C
	<i>ePPP·N</i>	36 10	
	<i>eS·N</i>	40 32	
	<i>L·N</i>	52	
		$\Delta = 60^\circ$.	Kurile Islands.
10	<i>eP·Z'</i>	15 01 41	

January

11	<i>iP·Z'</i>	12 ^b 09 ^m 34 ^s	D
	<i>L·NE</i>	36	
		$\Delta = 56^\circ$.	Aleutian Islands.
14	<i>eP·Z'</i>	16 48 12	in the time break.
	<i>L·NE</i>	17 06	
		$\Delta = 53^\circ$.	Unimak Island.
16	<i>eP·Z'N</i>	7 31 40	
	<i>i·Z'N</i>	31 44	
	<i>iS·NE</i>	41 09	
	<i>iPS·N</i>	41 35	
	<i>eSS·N</i>	45 14	
	<i>esSS·N</i>	45 48	
	<i>L·NE</i>	53	
		$\Delta = 73^\circ$, h = 130 km.	Honshu, Japan.
16	<i>iP·Z'</i>	8 59 39	D
		$\Delta = 74^\circ$, h = 200 km.	Honshu, Japan.
16	<i>iP·Z'</i>	11 31 07	C
	<i>L·NE</i>	57	
		$\Delta = 73^\circ$, h = 150 km.	Honshu, Japan.
16	<i>eP·Z'</i>	12 23 56	
	<i>eS·E</i>	33 25	
	<i>ePS·E</i>	33 47	
	<i>eSKS·N</i>	34 05	
	<i>L·NE</i>	47	
		$\Delta = 73^\circ$.	Honshu, Japan.
16	<i>eP·Z'</i>	13 20 40	
		$\Delta = 73^\circ$, h = 150 km.	Honshu, Japan.
16	<i>iP·Z'</i>	14 15 25	
	<i>eS·E</i>	24 57	
	<i>eSS·E</i>	29 32	
	<i>L·NE</i>	42	
		$\Delta = 73^\circ$, h = 125 km.	Honshu, Japan.
16	<i>iP·Z'N</i>	15 52 41	D
	<i>eS·E</i>	16 02 07	
	<i>iPS·E</i>	02 30	
	<i>iSKS·NE</i>	02 47	
	<i>L·NE</i>	17	
		$\Delta = 73^\circ$, h = 150 km.	Honshu, Japan.
18	<i>eP·Z'</i>	16 59 56	
		$\Delta = 73^\circ$.	Honshu, Japan.
19	<i>eP·Z</i>	17 32 24	
	<i>L·NE</i>	51	
		$\Delta = 60^\circ$.	Kurile Islands.

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January

20	<i>eP·Z'</i>	17 ^b 17 ^m 57 ^s	C
	<i>ePP·NE</i>	20 01	
	<i>eS·NE</i>	25 03	
	<i>eSS·E</i>	28.3	
	<i>eSSS·NE</i>	29 11	
	<i>L·ZNE</i>	32	
		$\Delta = 49^\circ$.	Kodiak Island region.
20	<i>eP·Z'</i>	17 21 51	
20	<i>eP·Z'</i>	20 46 09	
		$\Delta = 71^\circ$.	Honshu, Japan.
22	<i>ePKP·Z'</i>	3 43 03	
	<i>eSKKS·N</i>	52 01	
	<i>ePS·N</i>	54 49	
	<i>iSS·E</i>	4 01 31	
	<i>eSSS·N</i>	06 12	
	<i>E</i>	15	
	<i>L·ZN</i>	26	
		$\Delta = 122^\circ$.	Santa Cruz Islands.
23	<i>eP·Z'</i>	0 05 36	
	<i>i·Z'</i>	09 12	
		Local shock.	
23	<i>eP·Z'</i>	7 08 03	
24	<i>iPKP·Z'</i>	7 43 44	
	<i>ipPKP·Z'</i>	44 20	
		$\Delta = 125^\circ$.	New Hebrides Islands.
25	<i>iP·Z'</i>	19 14 23	C
		$\Delta = 60^\circ$.	Kurile Islands.
28	<i>eP·Z'</i>	3 37 46	
		$\Delta = 92^\circ$.	Near Coast of Peru.
30	<i>eP·Z'</i>	12 20 17	
	<i>iP·Z'</i>	20 42	
		$\Delta = 40^\circ$.	Central Alaska.
31	<i>eP·Z'</i>	0 57 28	
	<i>eS·N</i>	04 48	
	<i>eScS·E</i>	07 22	
	<i>eSSS·NE</i>	08 34	
	<i>L·NE</i>	15	
		$\Delta = 52^\circ$.	Kodiak Island.
February			
3	<i>eP·Z'</i>	13 43 07	
		$\Delta = 73^\circ$, h = 100 km.	Honshu, Japan.
3	<i>eP·Z'</i>	21 41 05	

February

4	<i>iP·Z'</i>	9 ^b 03 ^m 20 ^s	D
	<i>epP·Z'</i>	03 55	
		$\Delta = 75^\circ$, h = 160 km.	Burma.
4	<i>eP·Z'</i>	12 59 28	
		$\Delta = 59^\circ$, h = 150 km.	Kamchatka.
4	<i>eP·Z'</i>	19 21 37	
	<i>L·E</i>	58	
		$\Delta = 83^\circ$.	Off east Coast of Formosa.
5	<i>eP·Z'</i>	15 50 01	
	<i>L·NE</i>	16 14	
		$\Delta = 73^\circ$.	South of Panama.
6	<i>eP·Z'</i>	11 45 15	
		Local shock.	
6	<i>iP·Z'</i>	18 26 02	C
		$\Delta = 65^\circ$.	Kurile Islands.
6	<i>ePKP·Z'</i>	22 03 54	C
	<i>ePP·Z</i>	04 59	
	<i>ePS·N</i>	14 53	
	<i>eSS·N</i>	20 47	
	<i>L·NE</i>	40	
		$\Delta = 116^\circ$, h = 60 km.	Solomon Islands.
7	<i>eP·Z'</i>	21 12 22	
		$\Delta = 65^\circ$.	Kurile Islands.
8	<i>iPKP·Z'</i>	2 55 26	D
		$\Delta = 125^\circ$, h = 160 km.	New Hebrides Islands region.
8	<i>iP·Z'</i>	8 15 59	D
		$\Delta = 87^\circ$, h = 650 km.	Brazil-Peru border.
8	<i>eP·Z'</i>	17 59 23	
8	<i>iPKP·Z'</i>	2 27 40	C
		$\Delta = 133^\circ$.	Kermadec Islands region.
11	<i>iP·Z'</i>	6 23 58	C
		$\Delta = 80^\circ$, h = 350 km.	Bonin Islands.
11	<i>ePKP·Z'</i>	21 20 19	
		$\Delta = 136^\circ$.	Kermadec Islands.
12	<i>iP·Z'Z</i>	22 04 27	C
	<i>iPPP·Z</i>	08 40	
	<i>iS·NE</i>	13 14	
	<i>iPS·E</i>	13 32	
	<i>iScS·NE</i>	14 07	
	<i>eSS·E</i>	17 32	
	<i>L·ZNE</i>	23	
	<i>iPKPPKP·Z'</i>	33 22	
		$\Delta = 66^\circ$.	Kurile Islands.

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February

12	<i>iP·Z'</i>	23 ^b 37 ^m 20 ^s	D
	<i>L·NE</i>	57	
	<i>ePKPPKP·Z'</i>	0 06 14	
	$\Delta = 65^\circ$. Repetition.		
13	<i>iP·Z'</i>	16 38 09	D
	<i>L·NE</i>	17 05	
	<i>ePKPPKP·Z'</i>	07 00	
	$\Delta = 65^\circ$. Repetition.		
13	<i>eP·Z'</i>	22 48 00	
	$\Delta = 65^\circ$. Repetition.		
14	<i>eP·Z'</i>	0 26 20	
	$\Delta = 65^\circ$. Repetition.		
14	<i>eP·Z'</i>	3 01 51	D
	$\Delta = 65^\circ$. $h = 100$ km. Kurile Islands.		
14	<i>eP·Z'</i>	3 32 49	C
	<i>L·NE</i>	59	
	$\Delta = 65^\circ$. Repetition.		
15	<i>eP·Z'N</i>	10 55 58	
	<i>ePcP·N</i>	56 19	
	<i>eS·NE</i>	11 04 47	
	<i>eScS·N</i>	05 41	
	<i>L·NE</i>	15	
	<i>ePKPPKP·Z'</i>	24 47	
	$\Delta = 66^\circ$. $h = 70$ km. Repetition.		
15	<i>eP·Z'</i>	11 39 42	D
	$\Delta = 66^\circ$. Tibet.		
16	<i>eP·Z'</i>	3 51 54	
	$\Delta = 36^\circ$. $h = 150$ km. Albania.		
16	<i>iP·Z'</i>	14 05 35	C
	$\Delta = 65^\circ$. Kurile Islands.		
18	<i>eP·Z'</i>	1 14 47	
	$\Delta = 65^\circ$. Repetition.		
21	<i>eP·Z'</i>	3 09 58	
	$\Delta = 44^\circ$. Greece.		
23	<i>eP·Z'</i>	3 30 32	
	<i>e·Z'</i>	30 51	
	Local shock.		
23	<i>iP·Z'</i>	4 27 35	D
	<i>iS·E</i>	36 48	
	<i>iPS·E</i>	37 08	
	<i>L·NE</i>	51	
	$\Delta = 70^\circ$. Off east coast of Honshu, Japan.		

February

24	<i>iP·Z'</i>	3 ^b 16 ^m 27 ^s	C
	$\Delta = 80^\circ$. Ryukyu Islands.		
26	<i>L·NE</i>	6 50	
26	<i>iP·Z'ZNE</i>	18 22 35	C
	<i>iPP·ZNE</i>	25 30	
	<i>iS·NE</i>	32 23	
	<i>iPS·NE</i>	32 48	
	<i>eScS·N</i>	32 54	
	<i>iSS·NE</i>	37 02	
	<i>L·ZNE</i>	46	
	$\Delta = 76^\circ$. Near Kyushu, Japan.		
27	<i>e·Z'</i>	12 24 11	
	<i>i·Z'</i>	24 48	
	<i>L·NE</i>	25	
	Jan Mayen region.		
27	<i>eP·Z'</i>	13 16 04	C
	<i>L·NE</i>	38	
	$\Delta = 55^\circ$. Aleutian Islands.		
28	<i>eP·Z'</i>	12 44 01	
	$\Delta = 63^\circ$. Kurile Islands.		
28	<i>e·Z'</i>	16 58 01	
March			
7	<i>iPKP·Z'</i>	10 29 57	C
	<i>iPP·Z'NE</i>	32 31	
	<i>i·Z'</i>	32 53	
	<i>iPKS·NE</i>	33 28	
	<i>ePPP·N</i>	35 25	
	<i>iSKKS·NE</i>	39 34	
	<i>iSKSP·E</i>	42 48	
	<i>ePPS·NE</i>	44 37	
	<i>iSS·NE</i>	50 25	
	<i>iSSS·E</i>	55 45	
	<i>L·NE</i>	11 04	
	$\Delta = 136^\circ$. Kermadec Islands region.		
9	<i>eP·Z'</i>	4 09 33	
	$\Delta = 61^\circ$. Atlantic Ocean.		
11	<i>eP·Z'</i>	1 41 50	
	$\Delta = 60^\circ$. Kurile Islands.		
11	<i>iP·Z'</i>	8 52 27	D
	$\Delta = 72^\circ$. Gulf of Aden.		
13	<i>iP·Z'</i>	8 15 01	C
	<i>L·NE</i>	39	
	$\Delta = 70^\circ$. Off west coast of Mexico.		
13	<i>eP·Z'</i>	19 25 27	
	$\Delta = 44^\circ$. Crete.		

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March

15	<i>e·Z'</i>	4 ^b 52 ^m 34 ^s	
15	<i>ePP·Z'</i>	10 34 24	
	<i>L·NE</i>	11 11	
	$\Delta = 113^\circ$. New Ireland region.		
15	<i>eP·Z'</i>	23 32 14	
	Arctic Ocean.		
16	<i>iP·Z'</i>	5 07 49	
	$\Delta = 57^\circ$. Aleutian Islands.		
16	<i>e·Z'</i>	14 04 28	
	<i>ePP·Z'</i>	05 07	
	<i>iPS·NE</i>	14 45	
	<i>eSS·E</i>	21 07	
	<i>eSSS·N</i>	25 22	
	<i>L·NE</i>	40	
	$\Delta = 114^\circ$. Flores Sea.		
17	<i>eP·Z'</i>	22 52 00	
	<i>ePcP·Z'</i>	52 12	
	$\Delta = 75^\circ$. $h = 120$ km. Japan.		
18	<i>ePKP·Z'Z</i>	15 15 07	
	<i>ePP·Z'ZN</i>	19 18	
	<i>i·N</i>	25 15	
	<i>eSKKS·N</i>	26 17	
	<i>eSKSP·NE</i>	29 48	
	<i>eSS·NE</i>	39 25	
	<i>eSSS·NE</i>	45 45	
	<i>L·NE</i>	16 11	
	$\Delta = 159^\circ$. South of New Zealand.		
19	<i>eP·Z'</i>	5 02 58	
	$\Delta = 69^\circ$. North of Honshu, Japan.		
19	<i>iPKP·Z'</i>	7 34 03	C
	$\Delta = 125^\circ$. New Hebrides Islands.		
19	<i>eP·Z'</i>	9 30 11	D
	$\Delta = 72^\circ$. $h = \text{abt. } 75$ km. Japan.		
19	<i>ePKP·Z'</i>	12 24 53	
	$\Delta = 125^\circ$. New Hebrides Islands.		
20	<i>eP·Z'</i>	3 40 17	
	$\Delta = 58^\circ$. Hindu Kush.		
20	<i>e·Z'</i>	6 28 02	
	<i>L·NE</i>	48	
	$\Delta = 72^\circ$. Off west coast of Nicaragua.		
20	<i>iP·Z'</i>	11 48 35	
	<i>iPcP·Z'</i>	49 09	
	$\Delta = 63^\circ$. $h = 350$ km. Sakhalin Island.		

March

20	<i>iPKP·Z'</i>	16 ^b 11 ^m 57 ^s	C
	<i>ipPKP·Z'</i>	12 53	
	<i>ePP·N</i>	14 18	
	<i>eSKS·NE</i>	19 07	
	<i>eSKSP·E</i>	23 51	
	<i>ePPS·N</i>	25 30	
	<i>iSS·NE</i>	30 25	
	<i>isSS·NE</i>	31 55	
	<i>L·NE</i>	55	
	$\Delta = 125^\circ$. $h = 200$ km. Tonga Islands.		
21	<i>ePKP·Z'</i>	0 01 50	
	<i>iPKS·N</i>	05 20	
	<i>eSS·NE</i>	21 42	
	<i>i·E</i>	24 10	
	<i>L·NE</i>	45	
	$\Delta = 132^\circ$. Tonga Islands.		
24	<i>iP·Z'</i>	23 08 41	C
	$\Delta = 73^\circ$. $h = 100$ km. Japan.		
26	<i>eP·Z'</i>	14 43 06	
	$\Delta = 101^\circ$. $h = 140$ km. Philippine Islands.		
26	<i>eP·Z'</i>	23 39 46	
28	<i>iP·Z'ZN</i>	9 50 03	C
	<i>iPKP·Z'</i>	54 10	
	<i>ePP·N</i>	54 29	
	<i>iPPP·Z</i>	56 39	
	<i>iSKS·NE</i>	10 00 49	
	<i>iSKKS·NE</i>	01 34	
	<i>iS·E</i>	02 21	
	<i>iPS·E</i>	03 59	
	<i>iPPS·N</i>	04 35	
	<i>i·N</i>	05 52	
	<i>iSSS·E</i>	13 41	
	<i>L·NE</i>	27	
	$\Delta = 107^\circ$. $h = 100$ km. Celebes.		
28	<i>iP·Z'Z</i>	12 38 53	
	<i>L·NE</i>	57	
	$\Delta = 56^\circ$. Aleutian Island.		
28	<i>eP·Z'</i>	21 15 32	
	<i>eSKS·E</i>	26 00	
	<i>iS·NE</i>	26 48	
	<i>eSS·N</i>	33 42	
	$\Delta = 98^\circ$. $h = 125$ km. Chile-Bolivia border.		
29	<i>eP·Z'</i>	6 55 21	
	$\Delta = 75^\circ$. $h = 100$ km. Near Honshu, Japan.		
29	<i>eP·Z'</i>	18 21 41	
	$\Delta = 72^\circ$. $h = 125$ km. Near Honshu, Japan.		

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March

30 *eP·Z'* 7^h54^m13^s
eS·N 8 03 04
L·NE 17
 $\Delta = 67^\circ$. Gulf of California.

30 *e·N* 9 30 13
L·NE 52

31 *iP·Z'* 5 32 13 C
 $\Delta = 77^\circ$. South of Honshu, Japan.

April
 1^h *iP·Z'* 2 52 36 C
 $\Delta = 78^\circ$. $h = 135$ km. South of Honshu, Japan.

1 *iP·Z'ZNE* 15 28 07 C
iPP·ZE 30 13
iPPP·E 31 20
iS·NE 36 01
iPS·NE 36 24
eSSS·N 41 43
L·ZNE 45
 $\Delta = 57^\circ$. Sinkiang Province, China.

2 *iP·Z'* 2 56 39 C
 $\Delta = 78^\circ$. $h = 175$ km. Japan.

3 *eP·Z'* 16 41 52
 $\Delta = 57^\circ$. Off east coast of Kamchatka.

No time-marks from April 3, 22^h–April 8, 20^h.

9 *iP·Z'* 7 33 21 C
L·NE 53
 $\Delta = 59^\circ$. California.

9 *eP·Z'* 7 35 42
 Repetition.

9 *ePKP·Z* 9 39 40
iSKP·Z' 42 10
 $\Delta = 133^\circ$. $h = 650$ km. South of Fiji Islands.

9 *eP·Z'* 12 15 53
 Near shock.

9 *iP·Z'* 15 47 30 C
eS·NE 58 00
eSS·NE 16 03.2
L·NE 14
 $\Delta = 82^\circ$. Near coast of Formosa.

10 *eP·Z'* 7 09 37
 $\Delta = 82^\circ$. Near coast of Formosa.

April

12 *eP·Z'* 17^h38^m04^s
 $\Delta = 62^\circ$. Kurile Islands.

12 *iP·Z'* 22 31 37 C
ipP·Z' 31 56
eS·E 40 43
ePS·E 41 10
L·ZNE 53
ePKPPK·Z' 59 37
 $\Delta = 69^\circ$. $h = 125$ km. El Salvador.

13 *eP·Z'* 13 04 14
 Near shock.

13 *iP·Z'* 15 38 04 C
 $\Delta = 80^\circ$. $h = 200$ km. Ryukyu Islands.

13 *iP·Z'* 16 44 21 C
eS·E 52 22
ePS·E 52 27
i·NE 52 54
e·NE 57 20
L·ZNE 17 02
 $\Delta = 58^\circ$. Sinkiang Province, China.

16 *iP·Z'* 11 50 22 C
 $\Delta = 57^\circ$. Kamchatka.

16 *L·E* 12 50

17 *eP·Z'* 16 32 03
 $\Delta = 67^\circ$. Mid-Atlantic Ocean.

18 *eP·Z'* 5 36 07
e·Z' 36.23
 Near shock.

19 *iP·Z'Z* 16 23 10 D
L·E 48
 $\Delta = 65^\circ$. Kurile Islands.

19 *iP·Z'* 20 30 28
L·E 50
 $\Delta = 65^\circ$. Kurile Islands.

19 *iP·Z'* 22 18 30 D
 $\Delta = 65^\circ$. Kurile Islands.

20 *ePKP·Z'* 21 58 16
L·NE 22 41
 $\Delta = 122^\circ$. South of Samoa Islands.

21 *eP·Z'* 20 21 01 in time-break.
L·E 41
 $\Delta = 62^\circ$. Kurile Islands.

21 *L·NE* 22 00

April

23 *iP·Z'Z* 5^h26^m42^s D
ipP·Z' 26 53
eS·E 37 01
eSKS·NE 37 06
eSS·NE 42 16
L·E 55
 $\Delta = 82^\circ$. $h = 100$ km. Ryukyu Islands.

23 *iP·Z'ZN* 9 12 21 C
iPcP·ZE 12 34
eS·NE 20 59
iPS·E 21 12
iScS·E 22 06
L·ZNE 30
 $\Delta = 64^\circ$. Kurile Islands.

23 *eP·Z'* 12 28 35
L·E 50
 $\Delta = 65^\circ$. Kurile Islands.

23 *eP·Z'* 14 06 01 in time-break
 $\Delta = 65^\circ$. Kurile Islands.

23 *iP·Z'* 17 01 41 D
ePS·E 10 33
L·NE 22
 $\Delta = 65^\circ$. Kurile Islands.

23 *eP·Z'* 21 41 09
 Near shock.

24 *iP·Z'* 12 38 17
L·E 13 00
 $\Delta = 65^\circ$. Kurile Islands.

25 *eP·Z'* 0^h29^m05^s
 $\Delta = 66^\circ$. Kurile Islands.

25 *eP·Z'* 0 38 52
ipP·Z' 39 19
 $\Delta = 65^\circ$. $h = 75$ km. Kurile Islands.

25 *eP·Z'* 1 28 17 C
epP·Z 28 42
eS·NE 37 02
L·NE 48
 $\Delta = 65^\circ$. $h = 75$ km. Kurile Islands.

26 *iP·Z'* 7 49 37 C
eS·NE 58 23
eScS·NE 59 42
L·NE 8 08
 $\Delta = 66^\circ$. Kurile Islands.

26 *iP·Z'* 19 43 13 C
L·E 20 03
 $\Delta = 65^\circ$. Kurile Islands.

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April

27 *iP·Z'* 18^h05^m11^s
 $\Delta = 91^\circ$. $h = 125$ km. Peru.

29 *iP·Z'Z* 9 29 16 C
 $\Delta = 58^\circ$. Off northern California.

29 *eP·Z'E* 9 30 22
i·N 31 07
L·ZNE 31
 $\Delta = 5^\circ$. Jan Mayen region.

30 *iP·N* 7 38 15
e·E 41 57
L·NE 43
 $\Delta = 19^\circ$. No Z records. North Atlantic Ocean.

30 *eS·NE* 11 34 39
L·NE 45
 $\Delta = 65^\circ$. No Z records. Kurile Islands.

30 *L·NE* 15 46

May

1 *eP·Z'* 12 28 54
 $\Delta = 57^\circ$. California.

1 *eP·Z'* 18 55 12
 $\Delta = 57^\circ$. California.

2 *eP·Z'E* 3 13 00 in time-break
eS·ZNE 14 00 in time-break
L·NE 14 13
 $\Delta = 5^\circ$. Jan Mayen region.

2 *eP·Z'Z* 8 31 35
eS·N 32 31
L·ZNE 33
 $\Delta = 5^\circ$. Jan Mayen region.

2 *ePKP·Z'Z* 23 04 04
ePP·ZE 06 37
ePKS·ZNE 07 31
ePPS·ZN 19 03
eSS·E 24 34
i·E 26 47
L·NE 53
 $\Delta = 136^\circ$. Kermadec Islands region.

3 *iP·Z'* 0 37 28 D
 $\Delta = 70^\circ$. Mid-Atlantic Ocean.

4 *eP·Z'* 2 27 20
 $\Delta = 57^\circ$. California.

5 *L·NE* 12 32

5 *ePPS·E* 14 17 43
e·E 25 21

L·NE 53
 $\Delta = 136^\circ$. Kermadec Islands region.

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May		May	
6	<i>eP·Z'</i> 16 ^b 11 ^m 47 ^s <i>L·E</i> 25 $\Delta = 38^\circ$. Mediterranean Sea.	14	<i>iP·Z'</i> 15 ^b 08 ^m 48 ^s <i>i·Z'</i> 08 53 <i>e·N</i> 09 12 <i>L·NE</i> 09 $\Delta = 3^\circ$. North of Iceland.
6	<i>ePKP·Z'</i> 23 32 28 $\Delta = 126^\circ$. New Hebrides Islands.	14	<i>iP·Z'NE</i> 15 38 53 <i>e·Z'N</i> 39 06 <i>L·NE</i> 39 $\Delta = 3^\circ$. North of Iceland.
7	<i>ePP·NE</i> 0 55 18 <i>L·NE</i> 1 20 $\Delta = 115^\circ$. Solomon Islands region.	14	<i>eP·Z'</i> 19 41 19 <i>eS·N</i> 49 20 <i>L·NE</i> 20 01 $\Delta = 57^\circ$. California.
7	<i>iSKKS·NE</i> 10 47 43 <i>L·NE</i> 11 05 $\Delta = 100^\circ$. Philippine Islands.	15	<i>eP·Z'</i> 6 47 39 <i>e·Z'</i> 48 19 Near shock.
7	<i>eP·Z'ZE</i> 15 42 01 <i>iS·ZNE</i> 43 03 <i>L·ZNE</i> 43.4 $\Delta = 5^\circ$. Jan Mayen region.	15	<i>iPKP·Z'</i> 21 11 57 C $\Delta = 127^\circ$. $h = 100$ km. Tonga Islands.
8	<i>L·E</i> 20 18	16	<i>e·E</i> 18 07 30 <i>ePS·E</i> 09 40 <i>L·NE</i> 40 $\Delta = 135^\circ$. Kermadec Islands.
1	<i>ePS·NE</i> 9 07 45 <i>eSS·NE</i> 13 47 <i>L·NE</i> 36 $\Delta = 114^\circ$. Near coast of southern Chile.	16	<i>iP·Z'NE</i> 21 57 23 D <i>e·N</i> 22 00 43 <i>eS·NE</i> 07 14 <i>ePS·E</i> 07 47 <i>L·NE</i> 30 $\Delta = 77^\circ$. Ryukyu Islands.
13	<i>ePKP·Z'</i> 14 38 04 <i>ePKS·E</i> 41 44 <i>e·E</i> 44 18 <i>e·E</i> 15 00 46 <i>L·NE</i> 30 $\Delta = 136^\circ$. Kermadec Islands region.	17	<i>iP·Z'NE</i> 19 39 08 C <i>e·NE</i> 42 52 <i>iS·NE</i> 47 04 <i>iPS·NE</i> 47 18 <i>L·NE</i> 57 $\Delta = 58^\circ$. Aleutian Islands.
13	<i>iPKP·Z'</i> 15 10 57 C <i>ipPKP·Z'</i> 12 53 $\Delta = 125^\circ$. $h = 550$ km. Fiji Islands.	18	<i>eP·Z'</i> 9 41 28 <i>L·NE</i> 43 $\Delta = 8^\circ$. Arctic Ocean.
13	<i>iP·Z'</i> 16 00 16 C <i>L·NE</i> 23 $\Delta = 66^\circ$. Japan.	19	<i>iP·Z'</i> 16 49 48 <i>L·NE</i> 17 20 $\Delta = 82^\circ$. Ryukyu Islands.
13	<i>iP·Z'</i> 19 31 26 C <i>epP·Z'</i> 32 25 $\Delta = 81^\circ$. $h = 260$ km. Formosa.	22	<i>ePKP·Z'</i> 14 03 38 C <i>L</i> 49 $\Delta = 128^\circ$. $h = 100$ km. Tonga Islands.
14	<i>ePKP·Z'</i> 0 32 16 <i>i·Z'</i> 32 19 $\Delta = 148^\circ$. New Zealand.		
14	<i>eP·Z'</i> 15 04 05 <i>e·Z'</i> 04 37 <i>L·NE</i> 05 $\Delta = 3^\circ$. North of Iceland.		

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May		June	
22	<i>ePKP·Z'</i> 17 ^b 51 ^m 32 ^s <i>i·Z'</i> 51 50 <i>iPKS·Z'NE</i> 54 50 <i>eSKKS·N</i> 18 00 22 <i>ePS·N</i> 03 51 <i>eSS·NE</i> 11 06 <i>L·NE</i> 33 $\Delta = 130^\circ$. Tonga Islands region.	1	<i>ePPP·E</i> 23 ^b 45 ^m 13 ^s (Con.) <i>ePS·NE</i> 50 09 <i>eSKS·E</i> 50 37 <i>eSS·E</i> 54 26 <i>L·NE</i> 0 02 $\Delta = 71^\circ$. Ethiopia.
23	<i>iP·Z'NE</i> 2 53 13 C <i>ePP·E</i> 54 54 <i>i·NE</i> 55 54 <i>iS·NE</i> 59 39 <i>eSS·N</i> 3 02 55 <i>eSSS·E</i> 03 17 <i>L·NE</i> 07 $\Delta = 43^\circ$. Turkey.	2	<i>eP·Z'</i> 5 02 32 D $\Delta = 72^\circ$. Ethiopia.
23	<i>eP·Z'E</i> 16 56 08 D <i>epP·Z'</i> 56 23 <i>ePPP·E</i> 17 00 23 <i>eSeS·NE</i> 05 37 <i>L·NE</i> 16 $\Delta = 70^\circ$. $h = 140$ km. Nicaragua.	2	<i>eP·Z'</i> 5 33 51 C <i>i·Z'</i> 33 55 $\Delta = 72^\circ$. Repetition.
24	<i>e·Z'</i> 17 40 41 Seismic?	2	<i>eP·Z'</i> 5 56 13 C $\Delta = 72^\circ$. Repetition.
26	<i>epP·Z'</i> 8 56 12 $\Delta = 87^\circ$. $h = 700$ km. Peru-Brazil border.	2	<i>eP·Z'</i> 7 14 09 C $\Delta = 72^\circ$. Repetition.
27	<i>eP·Z'</i> 7 29 17 $\Delta = 67^\circ$. Japan.	2	<i>eP·Z'</i> 11 09 24 $\Delta = 15^\circ$. Svalbard region.
29	<i>eP·Z'</i> 0 32 23 C <i>L·NE</i> 53 $\Delta = 55^\circ$. Aleutian Islands.	3	<i>eS·E</i> 1 30 23 <i>L·E</i> 38 $\Delta = 53^\circ$. East coast of Kamchatka.
29	<i>L·NE</i> 8 31	3	<i>eP·Z'</i> 15 34 37 <i>L·E</i> 16 02 $\Delta = 72^\circ$. Ethiopia.
31	<i>eP·Z'</i> 14 28 04 <i>eSS·E</i> 40 54 <i>L·E</i> 49 $\Delta = 62^\circ$. Gulf of California.	4	<i>iP·Z'NE</i> 7 43 30 D <i>ePP·E</i> 45 49 <i>eS·NE</i> 52 24 <i>ePS·E</i> 52 46 <i>eSS·NE</i> 59 06 <i>L·NE</i> 8 07 <i>ePKPPKP·Z'</i> 12 38 $\Delta = 63^\circ$. Tibet.
31	<i>eP·Z'</i> 14 49 33 $\Delta = 61^\circ$. Kurile Islands.	4	<i>eP·Z'</i> 7 ^b 54 ^m 10 ^s D $\Delta = 63^\circ$. Repetition.
31	<i>L·E</i> 20 10	4	<i>eP·Z'</i> 14 01 55 <i>L·E</i> 28 $\Delta = 63^\circ$. Repetition.
June		5	<i>eP·Z'</i> 3 41 00 <i>L·E</i> 4 03 $\Delta = 60^\circ$. Iran.
1	<i>L·E</i> 10 32	7	<i>iP·Z'N</i> 14 27 10 C <i>iPcP·Z'</i> 27 16 <i>eS·NE</i> 36 58 <i>eSeS·N</i> 37 40 <i>L·NE</i> 52 $\Delta = 77^\circ$. Ascension Islands region.
1	<i>eP·Z'E</i> 23 40 37 C <i>iPcP·Z'N</i> 40 49 <i>ePP·E</i> 43 09		

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June	
9	<i>eP·Z'</i> 9 ^h 45 ^m 16 ^s <i>e·Z'</i> 45 32 <i>eSSS·N</i> 56 02 <i>L·E</i> 10 02 $\Delta = 46^\circ$. Caspian Sea.
9	<i>eP·Z'</i> 15 54 50 C $\Delta = 79^\circ$. $h = 150$ km. Japan.
10	<i>eP·Z'</i> 9 04 02 <i>eS·NE</i> 14 12 <i>eSS·E</i> 19 26 <i>L·NE</i> 30 $\Delta = 78^\circ$. Mexico.
10	<i>e·E</i> 21 07 04 <i>e·NE</i> 07 26 <i>eSSS·E</i> 11 06 <i>L·NE</i> 25 $\Delta = 112^\circ$. Easter Island region.
11	<i>iP·Z'ZE</i> 5 20 29 C <i>i·ZE</i> 20 37 <i>ePP·ZE</i> 22 16 <i>ePPP·E</i> 23 56 <i>eS·ZNE</i> 28 51 <i>iSS·E</i> 32 35 <i>ePKPPKP·Z'</i> 39 51 <i>L·ZNE</i> 39 $\Delta = 62^\circ$. Iran.
11	<i>eP·Z'</i> 5 40 16 C $\Delta = 60^\circ$. Repetition.
11	<i>eP·Z'</i> 6 02 46 $\Delta = 58^\circ$. Kamchatka.
11	<i>eP·Z'</i> 6 56 53 $\Delta = 60^\circ$. Iran.
11	<i>eP·Z'</i> 7 01 32 $\Delta = 60^\circ$. Repetition.
11	<i>eP·Z'</i> 10 24 43 $\Delta = 25^\circ$. North Atlantic Ocean.
11	<i>eP·Z'</i> 12 40 26 $\Delta = 60^\circ$. Iran.
11	<i>iP·Z'ZE</i> 12 41 31 C <i>eS·NE</i> 49 49 <i>eScS·E</i> 51 26 <i>eSS·E</i> 53 36 <i>eSSS·NE</i> 56 13 <i>L·NE</i> 13 01 $\Delta = 61^\circ$. Iran.

June	
11	<i>eP·Z'ZE</i> 14 ^h 08 ^m 02 ^s in time-break. <i>ePP·Z'</i> 10 08 <i>L·E</i> 29 $\Delta = 60^\circ$. Repetition.
11	<i>eP·Z'</i> 17 27 21 <i>eS·N</i> 37 11 <i>L·NE</i> 58 $\Delta = 76^\circ$. Burma-China border.
12	<i>L·NE</i> 0 48
12	<i>iP·Z'</i> 10 10 33 C <i>ePP·Z'</i> 13 38 <i>L·E</i> 44 $\Delta = 82^\circ$. North Viet-Nam.
12	<i>e·Z'</i> 11 55 06 Seismic?
12	<i>eP·Z'</i> 17 36 37 <i>L·ZNE</i> 37 Local shock.
13	<i>ePKP·Z'</i> 21 56 49 <i>ipPKP·Z'</i> 57 31 $\Delta = 128^\circ$. $h = 150$ km. Tonga Islands region.
14	<i>iP·Z'</i> 0 52 54 C <i>epP·Z'</i> 53 15 <i>eS·E</i> 1 02 32 <i>L·E</i> 21 $\Delta = 75^\circ$. $h = 60$ km. Burma.
14	<i>eP·Z'</i> 2 23 54 <i>e·Z'</i> 24 08 Local shock.
14	<i>iP·Z'</i> 20 43 38 C <i>L·NE</i> 21 14 $\Delta = 72^\circ$. Ethiopia.
15	<i>eP·Z'</i> 6 31 39 $\Delta = 60^\circ$. Iran.
15	<i>iP·Z'</i> 23 35 14 C <i>eS·E</i> 43 56 <i>ePS·E</i> 44 05 <i>L·E</i> 54 $\Delta = 64^\circ$. Kurile Islands.
16	<i>ePKP·Z'</i> 6 44 44 D $\Delta = 145^\circ$. North Island. New Zealand.
16	<i>iP·Z'ZNE</i> 10 42 57 D <i>epP·Z'ZE</i> 43 35 <i>ePP·Z'</i> 45 30

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June	
16	<i>eS·NE</i> 10 ^h 51 ^m 55 ^s (Con.) <i>eScS·NE</i> 52 43 <i>L·NE</i> 11 05 $\Delta = 69^\circ$. $h = 120$ km. Colombia.
17	<i>eP·E</i> 15 18 44 <i>ePS·E</i> 28 22 <i>eSS·E</i> 32 46 <i>L·NE</i> 40 $\Delta = 70^\circ$. Mexico-Guatemala border.
18	<i>ePKP·Z'</i> 14 13 55 <i>eSKP</i> 16 51 $\Delta = 139^\circ$. $h = 450$ km. Kermadec Islands region.
19	<i>eP·Z'</i> 1 58 38 <i>ePS·E</i> 2 10 39 <i>L·E</i> 32 $\Delta = 93^\circ$. Philippine Islands.
19	<i>eP·Z'</i> 2 57 08 $\Delta = 70^\circ$. Off east coast of Japan.
19	<i>eP·Z'</i> 7 49 37 D <i>eS·E</i> 58 53 <i>L·E</i> 8 18 $\Delta = 70^\circ$. Off east coast of Japan.
19	<i>eP·Z'</i> 17 14 05 C <i>epP·Z'</i> 14 50 <i>eS·E</i> 21 52 <i>iPS·E</i> 22 06 <i>L·NE</i> 28 $\Delta = 57^\circ$. $h = 200$ km. Hindu Kush.
20	<i>eP·Z'</i> 3 32 53 D <i>eScS·E</i> 43 09 <i>L·NE</i> 56 $\Delta = 71^\circ$. Gulf of Aden.
21	<i>iP·Z'</i> 4 08 31 <i>L·NE</i> 36 $\Delta = 67^\circ$. Honduras.
21	<i>iP·Z'</i> 6 49 26 C $\Delta = 60^\circ$. Iran.
21	<i>eP·Z'</i> 16 12 37 <i>L·E</i> 26 $\Delta = 42^\circ$. Turkey.
21	<i>eP·Z'</i> 20 ^h 39 ^m 36 ^s <i>e·Z'</i> 39 52 <i>e·Z'</i> 43 32 $\Delta = 110^\circ$. Java.

June	
21	<i>L·NE</i> 21 03
22	<i>eP·Z'</i> 1 02 55 <i>L·NE</i> 16 $\Delta = 35^\circ$. Albania-Yugoslavia border.
23	<i>eP·Z'ZE</i> 9 05 21 D <i>eS·NE</i> 13 05 <i>eSS·N</i> 17 22 <i>eSSS·E</i> 18 07 <i>L·NE</i> 22 $\Delta = 55^\circ$. Off coast of Oregon.
23	<i>iP·Z'</i> 9 32 13 C <i>eS·E</i> 39 53 $\Delta = 55^\circ$. Repetition.
23	<i>eP·Z'</i> 11 16 24 $\Delta = 73^\circ$. Honshu, Japan.
23	<i>iP·Z'</i> 13 30 40 $\Delta = 63^\circ$. Kurile Islands.
23	<i>eP·Z'</i> 16 46 29 <i>L·E</i> 17 11 $\Delta = 60^\circ$. Iran.
24	<i>e·Z'</i> 0 59 17
24	<i>L·NE</i> 10 27
24	<i>iP·Z'</i> 11 04 41 <i>i·NE</i> 04 57 <i>iS·NE</i> 05 03 $\Delta = 2^\circ$. East of the station.
25	<i>eP·Z'</i> 2 40 31 $\Delta = 68^\circ$. Honshu, Japan.
25	<i>eP·Z'Z</i> 16 59 28 D <i>e·N</i> 17 09 22 <i>eSKS·NE</i> 10 03 <i>L·NE</i> 33 $\Delta = 87^\circ$. Mariana Islands.
26	<i>iP·Z'ZNE</i> 14 ^h 57 ^m 12 ^s C <i>ePPP·N</i> 15 00 36 <i>iS·E</i> 05 08 <i>eSS·N</i> 09 08 <i>L·NE</i> 14 $\Delta = 57^\circ$. Aleutian Islands.
27	<i>iP·Z'ZNE</i> 7 15 18 C <i>eS·NE</i> 24 53

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June

27 *ePS·N* 25 20
eScS·NE 25 30
eSS·N 29 27
L·NE 39
 $\Delta = 74^\circ$. Yunan Province, China.

27 *eP·Z'* 8 02 02 in the time-break.
ipP·Z' 02 58
 $\Delta = 55^\circ$. $h = \text{abt. } 300 \text{ km}$. Kamchatka.

28 *eP·Z'* 17 20 34
e·Z' 21 22
e·Z' 21 55
 Local shock.

29 *ePKP·Z'* 9^b41^m52^s C
iPP·Z 43 34

June

29 *ePS·N* 53 37
eSS·N 59 55
L·N 10 30
 $\Delta = 123^\circ$. New Hebrides Islands.

29 *iP·Z'* 11 45 26
 $\Delta = 64^\circ$. Kurile Islands.

29 *iP·Z'* 14 12 14 C
epP·Z' 12 34
 $\Delta = 55^\circ$. $h = 75 \text{ km}$. Aleutian Islands.

30 *eP·Z'* 5 13 32
L·E 31
 $\Delta = 45^\circ$. Mediterranean Sea.

September 1964.

Erik Moller.

GEODÆTISK INSTITUT

Proviantgården · Copenhagen · Denmark

Bulletin of the seismological station

SCORESBYSUND

 $\varphi = 70^{\circ}29' \text{ N.}$ $\lambda = 21^{\circ}57' \text{ W.}$ $h = 69 \text{ m.}$

Lithologic foundation: gneiss

Instruments

Galitzin-Wilip. *N* and *E*. $T_p = T_g = 12 \text{ sec.}$ $\mu^2 = 0,$ $\frac{Ak}{\pi l} = 300$ or V_{\max} abt. 1000.Galitzin-Wilip. *Z*. $T_p = 9 \text{ sec.}$ $T_g = 10 \text{ sec.}$ $\mu^2 = 0,$ $\frac{Ak}{\pi l} = 200$ or V_{\max} abt. 600.Grenet *Z'*. $T_p = 1 \text{ sec.}$ $T_g = \frac{1}{4} \text{ sec.}$ V_{\max} abt. 30000.

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. C means compression and D dilatation.

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July

1	<i>iP·Z'</i>	13 ^h 23 ^m 50 ^s	
	$\Delta = 93^\circ$.	$h = 70$ km.	Near coast of Peru.
1	<i>eP·Z'</i>	23 53 54	
	$\Delta = 58^\circ$.		Aleutian Islands.
3	<i>iP·Z'</i>	15 02 14 D	
	$\Delta = 88^\circ$.	$h = 60$ km.	Near coast of Peru.
4	<i>eP·Z'</i>	05 05 27	
	<i>L·NE</i>	26	
	$\Delta = 54^\circ$.		Nevada.
4	<i>iP·Z'</i>	06 23 39	
	<i>e·Z'</i>	24 01	
	<i>eS·NE</i>	34 32	
	$\Delta = 90^\circ$.	$h = 145$ km.	Mariana Islands.
5	<i>eP·Z'</i>	02 33 57	
	$\Delta = 79^\circ$.		Ryukyu Islands.
5	<i>iP·Z'</i>	06 44 10 D	
	<i>L·E</i>	07 06	
	$\Delta = 56^\circ$.		Sinkiang Province, China.
5	<i>eP·Z'</i>	13 21 15	
			Local shock.
5	<i>eP·Z'</i>	13 23 56	
			Local shock.
6	<i>eP·Z'</i>	00 43 54	
	<i>iP·Z'</i>	44 37	
			Local shock.
6	<i>iP·Z'</i>	16 20 21 D	
	$\Delta = 78^\circ$.		Ascension Island region.
6	<i>iPKP·Z'Z</i>	22 28 37 C	
	<i>ePP·ZN</i>	30 46	
	<i>ePKS·ZNE</i>	32 01	
	<i>ePS·NE</i>	40 55	
	<i>e·N</i>	49 11	
	<i>L·ZNE</i>	23 12	
	$\Delta = 129^\circ$.		Loyalty Islands region.
7	<i>eP·Z'</i>	08 15 27	
	$\Delta = 62^\circ$.		Kurile Islands.
7	<i>ePP·ZN</i>	13 30 35	
	<i>eSKS·N</i>	36 32	
	<i>ePS·NE</i>	40 01	
	<i>eSS·N</i>	46 26	
	<i>L·NE</i>	14 07	
	$\Delta = 115^\circ$.		New Britain.
7	<i>ePKP·Z'</i>	22 38 36	
	<i>e·Z'</i>	38 46	
	$\Delta = 129^\circ$.		Loyalty Islands region.

July

8	<i>ePKP·Z'</i>	02 ^h 54 ^m 29 ^s	
	<i>ePP·ZN</i>	56 32	
	<i>ePKS·N</i>	57 44	
	<i>L·NE</i>	03 41	
	$\Delta = 129^\circ$.		Loyalty Islands region.
8	<i>iPKP·Z'</i>	15 53 44 C	
	<i>ePP·Z</i>	55 51	
	<i>ePKS·N</i>	57 09	
	<i>eSKKS·N</i>	16 02 49	
	<i>L·NE</i>	38	
	$\Delta = 129^\circ$.		Loyalty Islands region.
8	<i>L·NE</i>	22 19	
8	<i>ePKP·Z'</i>	22 07 50	
	<i>ePKS·N</i>	11 16	
	<i>L·NE</i>	50	
	$\Delta = 129^\circ$.		Loyalty Islands region.
9	<i>eP·Z'</i>	06 43 42	
	<i>L·NE</i>	07 08	
	$\Delta = 67^\circ$.		Off Honduras.
9	<i>eP·Z'</i>	08 15 47	
	$\Delta = 59^\circ$.		Iran.
10	<i>eS·N</i>	13 14 40	
	<i>L·NE</i>	29	
	$\Delta = 71^\circ$.		Mexico.
11	<i>iP·Z'NE</i>	09 44 49 C	
	<i>eS·NE</i>	55 44	
	<i>eSS·N</i>	10 01 59	
	<i>L·NE</i>	21	
	$\Delta = 90^\circ$.		Nicobar Islands.
12	<i>eP·Z'</i>	02 55 58	
	$\Delta = 38^\circ$.		Near east coast of Greece.
12	<i>iP·Z'</i>	13 40 34 C	
	$\Delta = 65^\circ$.		Kurile Islands.
15	<i>L·NE</i>	01 13	
16	<i>ePKS·N</i>	14 24 21	
	<i>L·NE</i>	15 12	
	$\Delta = 132^\circ$.		Loyalty Islands region.
17	<i>eP·Z'</i>	01 12 16	
	<i>L·NE</i>	38	
	$\Delta = 69^\circ$.		Mexico.
17	<i>eP·Z'</i>	02 12 53	
17	<i>iP·Z'</i>	16 31 48 D	
	<i>eS·NE</i>	41 20	
	<i>eSS·NE</i>	46 20	
	<i>L·NE</i>	57	
	$\Delta = 73^\circ$.		Off Honshu, Japan.

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July

18	<i>iP·Z'NE</i>	14 ^h 15 ^m 39 ^s D	
	$\Delta = 79^\circ$.		Northern Ryukyu Islands.
18	<i>eP·Z'</i>	15 28 14 C	
	$\Delta = 79^\circ$.		Northern Ryukyu Islands.
18	<i>iP·Z'</i>	16 32 06 C	
	$\Delta = 79^\circ$.		Repetition.
18	<i>eP·Z'</i>	17 00 39	
	$\Delta = 79^\circ$.		Repetition.
18	<i>eP·Z'</i>	19 41 11	
	$\Delta = 79^\circ$.		Repetition.
18	<i>eP·Z'</i>	23 54 38 C	
	$\Delta = 79^\circ$.		Repetition.
19	<i>eP·Z'</i>	06 45 20 D	
	<i>eS·E</i>	55 19	
	<i>L·NE</i>	07 25	
	$\Delta = 79^\circ$.		Repetition.
19	<i>eP·Z'</i>	10 47 41	
	$\Delta = 79^\circ$.		Repetition.
19	<i>iP·Z'</i>	12 10 46 C	
	<i>eS·E</i>	20 44	
	$\Delta = 79^\circ$.		Repetition.
19	<i>eS·N</i>	23 14 30	
	<i>L·NE</i>	24	
	$\Delta = 40^\circ$.		Ionian Sea.
20	<i>L·NE</i>	07 38	
20	<i>iP·Z'</i>	09 14 40 C	
	$\Delta = 78^\circ$.		Northern Ryukyu Islands.
21	<i>iP·Z'</i>	19 02 53	
	<i>eS·NE</i>	12 56	
	<i>L·NE</i>	27	
	$\Delta = 79^\circ$.		Repetition.
23	<i>ePKP·Z'</i>	14 22 42	
	<i>ePP·E</i>	24 43	
	<i>ePKS·E</i>	26 01	
	$\Delta = 128^\circ$.		New Hebrides Islands.
23	<i>ePKP·Z'</i>	14 35 37	
	$\Delta = 128^\circ$.		Repetition.
23	<i>iP·Z'Z</i>	14 50 43 D	
	<i>eS·NE</i>	15 01 26	
	<i>ePS·E</i>	02 31	
	<i>eSS·NE</i>	07 26	
	$\Delta = 88^\circ$.		Pacific Ocean.

July

23	<i>ePKP·Z'</i>	15 ^h 49 ^m 21 ^s	
	$\Delta = 128^\circ$.		New Hebrides Islands.
23	<i>ePKP·Z'ZNE</i>	22 10 11 C	
	<i>ePP·ZNE</i>	12 06	
	<i>i·NE</i>	13 23	
	<i>ePS·NE</i>	22 18	
	<i>ePPS·NE</i>	23 50	
	<i>L·E</i>	51	
	$\Delta = 128^\circ$.		New Hebrides Islands.
23	<i>iPKP·Z'</i>	22 21 00 D	
	$\Delta = 128^\circ$.		Repetition.
24	<i>ipPKP·Z'</i>	01 51 22 D	
	$\Delta = 128^\circ$.	$h = 600$ km.	Fiji Islands region.
25	<i>iP·Z'Z</i>	02 59 32	
	<i>eS·N</i>	03 09 39	
	$\Delta = 86^\circ$.	$h = 600$ km.	Western Brazil.
26	<i>iP·Z'</i>	09 38 23	
	$\Delta = 145^\circ$.	$h = 80$ km.	North Island, New Zealand.
28	<i>iP·Z'NE</i>	01 17 32 C	
	<i>ipP·Z'NE</i>	18 08	
	<i>iS·NE</i>	27 29	
	<i>esS·E</i>	28 26	
	<i>e·N</i>	29 01	
	<i>eSS·E</i>	33 01	
	<i>L·NE</i>	43	
	$\Delta = 81^\circ$.	$h = 135$ km.	Ecuador.
28	<i>ePP·N</i>	06 32 47	
	<i>ePKS·N</i>	34 09	
	<i>e·E</i>	41 05	
	<i>eSS·E</i>	50 05	
	$\Delta = 128^\circ$.		New Hebrides Islands.
28	<i>eP·Z'</i>	10 25 08	
	<i>eS·N</i>	34 16	
	<i>eSS·N</i>	38 48	
	<i>L·NE</i>	47	
	$\Delta = 70^\circ$.		About 500 km west of Mexico.
28	<i>iP·Z'</i>	15 30 27	
	$\Delta = 66^\circ$.		Off Hokkaido, Japan.
30	<i>L·NE</i>	08 44	
August			
1	<i>ePKP·Z'</i>	05 58 46	
	<i>ePP·Z'N</i>	06 00 03	
	<i>eSKS·N</i>	05 46	
	<i>ePS·N</i>	10 03	
	<i>L·N</i>	39	
	$\Delta = 120^\circ$.		Solomon Islands.

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August

1	<i>ePKP·Z'</i>	07 ^h 40 ^m 19 ^s	
	<i>L·N</i>	08 23	
	$\Delta = 128^\circ$.		Sandwich Group.
1	<i>ePKP·Z'</i>	09 53 43	
	<i>L·N</i>	10 37	
	$\Delta = 128^\circ$.		Sandwich Group.
2	<i>ePKP·Z'</i>	01 36 49	
	<i>L·NE</i>	02 30	
	$\Delta = 146^\circ$.		South Pacific Ocean.
2	<i>L·NE</i>	03 35	
3	<i>iP·Z'Z</i>	03 17 49	D
	<i>eScS·N</i>	27 26	
	$\Delta = 58^\circ$.	$h = 135$ km.	Puerto Rico.
3	<i>eP·Z'</i>	14 34 43	
	$\Delta = 57^\circ$.		Aleutian Islands.
4	<i>eP·Z'</i>	07 28 38	
	$\Delta = 67^\circ$.		Hokkaido, Japan.
4	<i>eP·Z'</i>	18 42 37	
	<i>eS·NE</i>	48 34	
	<i>eSSS·E</i>	51 29	
	<i>L·NE</i>	53	
	$\Delta = 37^\circ$.		North Atlantic Ocean.
	<i>iP·Z'ZN</i>	23 03 28	D
	<i>eS·NE</i>	12 06	
	<i>L·NE</i>	24	
	$\Delta = 65^\circ$.		Kurile Islands.
5	<i>iP·Z'</i>	02 34 23	C
	<i>L·NE</i>	51	
	$\Delta = 44^\circ$.		Kenai Peninsula.
6	<i>eP·Z'</i>	03 33 01	
	$\Delta = 83^\circ$.		Bonin Islands region.
6	<i>eP·Z'</i>	09 12 08	
	$\Delta = 44^\circ$.		Crete.
7	<i>L·NE</i>	13 44	
8	<i>iP·Z'ZNE</i>	12 28 05	D
	<i>e·E</i>	28 13	
	<i>eS·N</i>	35 56	
	<i>ePS·ZN</i>	36 01	
	<i>eScS·E</i>	38 06	
	<i>L·NE</i>	46	
	$\Delta = 57^\circ$.		Aleutian Islands.
9	<i>iPKP·Z'</i>	16 21 37	C
	<i>ePKS·N</i>	25 08	
	<i>L·NE</i>	17 06	
	$\Delta = 128^\circ$.		New Hebrides Islands.

August

10	<i>eP·Z'</i>	12 ^h 14 ^m 39 ^s	C
	$\Delta = 71^\circ$.		Off Honshu, Japan.
10	<i>iP·Z'</i>	12 16 11	C
	$\Delta = 65^\circ$.		Eastern Hokkaido, Japan.
11	<i>L·E</i>	01 12	
11	<i>eP·Z'</i>	06 20 03	
	$\Delta = 76^\circ$.		Eastern Kyushu, Japan.
11	<i>ePKP·Z'</i>	10 44 06	
	$\Delta = 127^\circ$.		New Hebrides Islands.
11	<i>iP·Z'ZE</i>	16 02 20	C
	<i>ePcP·E</i>	03 10	
	<i>i·E</i>	03 51	
	<i>iS·E</i>	11 07	
	<i>iPS·E</i>	11 31	
	<i>iSKS·E</i>	12 06	
	<i>eSS·E</i>	15 14	
	<i>i·E</i>	19 12	
	<i>L·ZE</i>	23	
	<i>ePKPPKP·Z'</i>	30 56	
	$\Delta = 66^\circ$.	$h = 50$ km.	Eastern Hokkaido, Japan.
11	<i>eSKS·N</i>	23 02 24	
	<i>eSKKS·E</i>	03 22	
	<i>eS·E</i>	03 59	
	$\Delta = 108^\circ$.		Celebes.
11	<i>iP·Z'Z</i>	23 44 37	C
	<i>eS·E</i>	53 26	
	$\Delta = 66^\circ$.	$h = 50$ km.	Eastern Hokkaido, Japan.
12	<i>e·NE</i>	10 40 20	
	<i>L·NE</i>	41	
13	<i>eP·Z'</i>	06 13 24	
	<i>L·E</i>	44	
	$\Delta = 82^\circ$.		Near coast of Formosa.
14	<i>ePKP·Z'Z</i>	19 10 08	
	<i>ePKS·ZNE</i>	13 30	
	$\Delta = 132^\circ$.		Tonga Islands region.
14	<i>iPKP·Z'Z</i>	23 47 49	C
	<i>ePP·Z</i>	49 58	
	<i>ePKS·NE</i>	51 12	
	<i>SKKS·N</i>	57 12	
	<i>e·ZN</i>	00 04 20	
	<i>L·ZNE</i>	30	
	$\Delta = 129^\circ$.	$h = 100$ km.	New Hebrides Islands region.
15	<i>eP·Z'</i>	02 58 12	
	<i>e·Z'</i>	58 42	
			Near shock.

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August

15	<i>iP·ZNE</i>	19 ^h 15 ^m 45 ^s	D
	<i>ePP·ZN</i>	18 37	
	<i>eS·NE</i>	25 32	
	<i>L·N</i>	41	
	$\Delta = 76^\circ$.		South of Honshu, Japan.
16	<i>eP·Z'</i>	09 09 29	
	$\Delta = 77^\circ$.		South of Honshu, Japan.
17	<i>iP·Z'ZNE</i>	21 26 43	D
	<i>ipP·Z'ZN</i>	27 20	
	<i>isP·N</i>	27 36	
	<i>iS·NE</i>	35 02	
	<i>esS·N</i>	35 47	
	<i>iScS·E</i>	36 08	
	<i>eSS·E</i>	38 20	
	<i>e·NE</i>	40 14	
	<i>L·ZNE</i>	45	
	<i>ePKPPKP·Z'</i>	55 37	
	$\Delta = 63^\circ$.	$h = \text{abt. } 150$ km.	Kurile Islands.
19	<i>iP·Z'</i>	02 53 47	C
	$\Delta = 66^\circ$.		Eastern Hokkaido, Japan.
19	<i>iP·Z'ZNE</i>	05 21 35	D
	<i>ipP·ZE</i>	23 46	
	<i>isP·N</i>	24 42	
	<i>iSKS·NE</i>	31 06	
	<i>iS·N</i>	31 27	
	<i>iSP·NE</i>	32 32	
	<i>isS·N</i>	35 17	
	<i>L·NE</i>	44	
	$\Delta = 87^\circ$.	$h = 650$ km.	Peru-Brazil border.
19	<i>eP·Z'</i>	05 29 18	
	<i>ipP·Z'</i>	31 25	
	$\Delta = 87^\circ$.		Repetition.
19	<i>iP·Z'</i>	05 39 20	C
	$\Delta = 87^\circ$.		Repetition.
19	<i>iP·Z'</i>	05 45 00	C
	$\Delta = 73^\circ$.		Off Honshu, Japan.
19	<i>e·Z'</i>	06 07 46	
19	<i>iP·Z'ZE</i>	15 02 24	C
	<i>epP·Z'ZE</i>	02 49	
	<i>ePcP·N</i>	03 17	
	<i>eS·E</i>	10 27	
	<i>ePS·N</i>	10 34	
	<i>esS·N</i>	11 10	
	<i>L·NE</i>	22	
	$\Delta = 59^\circ$.	$h = 100$ km.	Mona Passage.
19	<i>iP·Z'</i>	16 13 16	C
	<i>ipP·Z'</i>	15 23	
	$\Delta = 87^\circ$.	$h = 600$ km.	Peru-Brazil border.

August

20	<i>iPKP·Z'</i>	05 ^h 22 ^m 15 ^s	C
	<i>ipPKP·Z'Z</i>	24 12	
	$\Delta = 127^\circ$.	$h = 600$ km.	Fiji Islands.
21	<i>iPKP·Z'</i>	16 25 50	C
	$\Delta = 126^\circ$.	$h = 75$ km.	Tonga Islands.
21	<i>iP·Z'</i>	17 11 36	C
	$\Delta = 68^\circ$.		Off Honshu, Japan.
22	<i>eP·Z'</i>	23 45 59	
	<i>eS·N</i>	46 06	
	<i>L·Z'N</i>	46 23	
			Local shock.
23	<i>L·NE</i>	04 44	
24	<i>eP·Z'</i>	22 51 40	C
	$\Delta = 65^\circ$.		Eastern Hokkaido, Japan.
25	<i>iP·Z'</i>	07 07 48	C
	$\Delta = 53^\circ$.		Alaska Peninsula.
26	<i>iP·Z'</i>	07 56 35	
	<i>iS·Z'</i>	56 42	
			Local shock.
27	<i>eP·Z'</i>	02 04 37	
	$\Delta = 86^\circ$.		South of Ascension Island.
27	<i>L·NE</i>	16 52	
27	<i>eP·Z'</i>	17 00 57	
	$\Delta = 90^\circ$.		Mariana Islands.
27	<i>iP·Z'</i>	21 06 43	
	$\Delta = 62^\circ$.		Kurile Islands.
29	<i>L·NE</i>	15 22	
31	<i>iP·Z'N</i>	02 00 26	D
	<i>ipP·Z'</i>	02 33	
	<i>iS·N</i>	10 16	
	$\Delta = 87^\circ$.	$h = 625$ km.	Peru-Brazil border.
31	<i>iP·Z'N</i>	02 08 52	D
	<i>ipP·Z'</i>	11 02	
	<i>iSKS·N</i>	18 25	
	$\Delta = 87^\circ$.		Repetition.
September			
1	<i>iPKP·Z'</i>	00 28 31	
	<i>ipPKP·Z'</i>	29 09	
	<i>ePP·N</i>	30 57	
	<i>i·Z'</i>	31 41	
	<i>iPKS·N</i>	31 59	
	<i>eSKS·N</i>	35 34	

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September

1 *eSKSP·N* 00^h40^m34^s
iPPS·N 42 41
L·N 01 09
 $\Delta = 130^\circ$, $h = 130$ km. Sandwich Group.

1 *iP·Z'ZE* 19 01 51 C
eS·NE 11 11
ePS·NE 11 29
L·NE 21
 $\Delta = 72^\circ$. Off coast of Guatemala.

2 *iP·Z'* 00 35 43 C
L·NE 57
 $\Delta = 56^\circ$. Aleutian Islands.

2 *iP·Z'* 11 03 34 D
 $\Delta = 92^\circ$, $h = 130$ km. Indian Ocean.

2 *eP·Z'* 14 23 39
 $\Delta = 39^\circ$. Aegean Sea.

4 *L·N* 10 20

5 *eP·Z'* 02 40 12
L·NE 43
 $\Delta = 11^\circ$. Svalbard region.

5 *e·E* 06 30 29
L·N 35

5 *iP·Z'* 11 42 52 D
i·ZNE 42 57
iPP·NE 44 59
eS·NE 49 38
eSS·NE 53 02
L·ZNE 56
 $\Delta = 46^\circ$. Kenai Peninsula, Alaska.

8 *L·ZNE* 05 16

8 *iPKP·Z'ZN* 11 45 22 C
ipPKP·Z' 45 49
iPP·ZN 47 21
epPP·NE 47 39
iSKS·N 52 19
iSKKS·N 54 09
i·E 55 27
ePS·N 57 01
eSS·NE 12 04 26
L·NE 25
 $\Delta = 126^\circ$, $h = 125$ km. Sandwich Group.

8 *i·Z'* 20 29 21
 Seismic?

9 *iP·Z'* 09 19 57 C
 $\Delta = 55^\circ$. Aleutian Islands.

September

10 *eP·Z'* 04^h58^m07^s
 $\Delta = 98^\circ$, $h = 520$ km. Argentina.

10 *L·E* 09 12

11 *eP·Z'* 02 56 37
 $\Delta = 57^\circ$. Aleutian Islands.

11 *iP·Z'* 22 25 28
 $\Delta = 64^\circ$, $h = 135$ km. Off Venezuela.

12 *iP·Z'* 11 30 19
 $\Delta = 88^\circ$, $h = 550$ km. Peru-Brazil border.

12 *iP·Z'* 12 37 48
 $\Delta = 65^\circ$. Kurile Islands.

12 *L·NE* 19 50

15 *iP·Z'* 01 54 35 D
iPcP·Z' 56 09
 $\Delta = 46^\circ$. Cyprus.

17 *iP·Z'* 08 54 16 C
L·NE 09 27
 $\Delta = 82^\circ$. Near east coast of Taiwan.

18 *L·NE* 02 50

18 *iP·Z'* 11 09 27 C
L·NE 20
 $\Delta = 46^\circ$. Caspian Sea.

19 *iSKS·NE* 02 48 01
ePS·N 51 27
is·E 52 32
i·N 54 25
 $\Delta = 95^\circ$, $h = 600$ km. Southern Bolivia.

19 *eS·N* 10 07 31
L·NE 19
 $\Delta = 75^\circ$. Off south coast of Panama.

20 *L·NE* 19 59

October

2 *iP·Z'* 07 29 27 D
 $\Delta = 41^\circ$. Near coast of Greece.

5 *iP·Z'* 23 10 09 D
 $\Delta = 58^\circ$, $h = 500$ km. Sea of Okhotsk.

6 *eP·Z'* 01 35 54
 $\Delta = 61^\circ$, $h = 150$ km. Kurile Islands.

6 *L·E* 07 11

October

6 *iP·Z'* 18 52^m40^s
L·E 54 44
 Near the station.

13 *ePKP·Z'* 05 18 01
e·Z' 18 31
e·Z' 21 03
 $\Delta = 126^\circ$. Sandwich Group.

13 *ePKP·Z'* 11 05 55
 $\Delta = 130^\circ$. Sandwich Group region.

14 *iP·Z'* 12 42 29 C
 $\Delta = 75^\circ$. South of Honshu, Japan.

18 *ePS·E* 17 21 19
eSS·NE 27 15
L·NE 50
 $\Delta = 113^\circ$. Off coast of southern Chile.

23 *iPKP·Z'* 00 27 52 C
iPKS·ZNE 31 20
L·NE 01 05
 $\Delta = 130^\circ$. Sandwich Group.

23 *L·E* 08 42

23 *eSKS·NE* 15 04 19
L·NE 28
 $\Delta = 103^\circ$. Molucca Passage.

25 *iP·Z'* 16 35 45 C
 $\Delta = 72^\circ$, $h = 100$ km. Gulf of Aden.

26 *e·N* 15 59 31
L·N 16 27

28 *iP·Z'* 10 55 50
 $\Delta = 52^\circ$. Western Iran.

29 *eP·Z'* 09 21 29
L·NE 36
 $\Delta = 50^\circ$. Vancouver Island region.

30 *eP·Z'* 02 26 13
 $\Delta = 56^\circ$. Off coast of Oregon.

30 *iP·Z'* 08 38 28 C
L·E 45
 $\Delta = 22^\circ$. Novaya Zemlya.

30 *iP·Z'* 21 27 46 C
 $\Delta = 80^\circ$. South of Honshu, Japan.

31 *iP·Z'* 01 53 41 C
 $\Delta = 58^\circ$. Aleutian Islands.

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November

3 *eP·Z'* 22^h43^m56^s
 $\Delta = 9^\circ$. North Atlantic Ocean.

4 *iP·Z'* 18 26 35
 $\Delta = 56^\circ$. Aleutian Islands.

12 *eP·Z'* 02 27 14
 $\Delta = 78^\circ$. Congo.

13 *eP·Z'* 14 13 29
 $\Delta = 6^\circ$. Jan Mayen region.

13 *iP·Z'* 19 48 44 D
 $\Delta = 63^\circ$. Kurile Islands.

14 *iP·Z'* 10 13 47 D
 $\Delta = 73^\circ$, $h = 160$ km. Near east coast of Honshu, Japan.

15 *iP·Z'Z* 07 27 59 C
eS·N 36 49
L·Z 50
 $\Delta = 66^\circ$. Near east coast of Hokkaido, Japan.

17 *eP·Z'* 11 24 19
eS·Z' 24 37
 $\Delta = 2^\circ$. Local shock.

17 *eP·Z'* 14 58 36
 $\Delta = 55^\circ$. Aleutian Islands.

17 *ePKP·Z'* 19 22 37
 $\Delta = 126^\circ$, $h = 200$ km. Tonga Islands.

18 *eP·Z'* 22 22 13
 $\Delta = 82^\circ$. Near east coast of Taiwan.

19 *eP·Z'* 21 58 01
 Near shock.

20 *iP·Z'* 04 12 51 D
 $\Delta = 50^\circ$. Outer Mongolia-Siberia border.

20 *eP·Z'* 18 05 56 C
i·Z' 06 06
 $\Delta = 40^\circ$. Azores region.

20 *eP·Z'* 23 19 06
 $\Delta = 80^\circ$, $h = 525$ km. South of Honshu, Japan.

22 *eP·Z'* 11 44 31
 Near shock.

27 *iP·Z'* 06 08 59
 $\Delta = 77^\circ$. South of Kyushu, Japan.

December

1 *iP·Z'* 21 24 55 C
ipP·Z'Z 25 49
eSKS·N 34 55
eSS·N 40 04
 $\Delta = 80^\circ$, $h = 200$ km. East China Sea.

Scoresbysund 1961

December

2	<i>L·N</i>	13 ^h 01 ^m	
3	<i>eP·Z'</i>	01 11 35	
	$\Delta = 70^\circ$.	Mexico.	
3	<i>eP·Z'</i>	08 52 55	C
	$\Delta = 82^\circ$.	Taiwan.	
3	<i>iP·Z'</i>	18 40 04	C
	$\Delta = 44^\circ$.	Armenia.	
3	<i>iP·Z'</i>	20 05 07	C
	$\Delta = 65^\circ$.	$h = 400$ km. Japan Sea.	
4	<i>eP·Z'</i>	12 49 15	
	<i>e·Z'</i>	49 20	
	<i>L·N</i>	13 17	
	$\Delta = 67^\circ$.	Tsinghai Province, China.	
4	<i>eS·N</i>	17 39 57	
	<i>iL·N</i>	40 25	
	$\Delta = 5^\circ$.	East of Jan Mayen.	
5	<i>ePKP₁·Z'</i>	13 21 09	
	<i>ePKP₂·Z'</i>	21 47	
	<i>L·N</i>	14 21	
	$\Delta = 159^\circ$.	Southwest of Tasmania.	
5	<i>ePKP·Z'</i>	13 21 15	
	<i>e·Z'</i>	21 36	
	$\Delta = 125^\circ$.	$h = 200$ km. New Hebrides Islands.	
6	<i>iP·Z'</i>	06 01 16	C
	<i>e·E</i>	13 49	
	<i>L·E</i>	36	
	$\Delta = 86^\circ$.	Andaman Islands.	
6	<i>eP·Z'</i>	16 49 44	C
	<i>ipP·Z'</i>	50 09	
	<i>eS·N</i>	57 59	
	<i>ePS·E</i>	58 14	
	<i>L·NE</i>	17 06	
	$\Delta = 60^\circ$.	$h = 60$ km. Kurile Islands.	
9	<i>iP·Z'</i>	02 24 09	D
	<i>L·NE</i>	42	
	$\Delta = 49^\circ$.	Kodiak Island.	
9	<i>iP·Z'</i>	04 12 07	D
	$\Delta = 93^\circ$.	Near coast of Peru.	
9	<i>ePKP·Z'</i>	04 45 23	
	$\Delta = 144^\circ$.	North Island, New Zealand.	
9	<i>ePKP·Z'</i>	11 37 00	
	$\Delta = 121^\circ$.	Off southern Chile.	
9	<i>L·N</i>	12 26	
12	<i>iP·Z'</i>	23 17 03	C
	<i>i·Z'</i>	17 09	
	$\Delta = 66^\circ$.	East of Hokkaido, Japan.	

December

13	<i>eP·Z'</i>	08 ^h 53 ^m 09 ^s	
	$\Delta = 82^\circ$.	Ryukyu Islands.	
17	<i>eP·Z'</i>	21 45 07	
	$\Delta = 92^\circ$.	Near coast of Peru.	
18	<i>eP·Z'</i>	21 43 03	
	$\Delta = 39^\circ$.	Ionian Sea.	
20	<i>iP·Z'</i>	13 36 52	D
	<i>epP·Z'</i>	37 33	
	<i>isP·Z'</i>	37 52	
	<i>iS·N</i>	46 13	
	<i>eScS·N</i>	46 40	
	<i>isS·N</i>	47 25	
	<i>eSS·N</i>	50 18	
	<i>L·N</i>	56	
	$\Delta = 74^\circ$.	$h = 175$ km. Colombia.	
21	<i>eP·Z'</i>	02 09 31	
		Near shock.	
25	<i>L·NE</i>	00 48	
27	<i>eP·Z'</i>	16 58 05	
	$\Delta = 72^\circ$.	Atlantic Ocean.	
28	<i>ePKP₁·Z'</i>	00 07 47	
	<i>ePKP₂·Z'</i>	07 58	
	<i>eSS·NE</i>	30 40	
	<i>L·NE</i>	01 03	
	$\Delta = 150^\circ$.	Near North Island, New Zealand.	
29	<i>L·E</i>	15 31	
30	<i>iP·Z'Z</i>	00 49 09	C
	<i>i·Z</i>	49 17	
	<i>iS·NE</i>	57 04	
	<i>iPS·NE</i>	57 10	
	<i>eSS·NE</i>	01 01 08	
	<i>L·ZNE</i>	07	
	$\Delta = 57^\circ$.	Aleutian Islands.	
30	<i>eP·Z'</i>	10 24 21	
	$\Delta = 57^\circ$.	Aleutian Islands.	
30	<i>eP·Z'</i>	16 51 36	
	<i>L·E</i>	17 15	
	$\Delta = 57^\circ$.	Aleutian Islands.	
30	<i>eP·Z'</i>	23 29 59	C
	$\Delta = 57^\circ$.	Atlantic Ocean.	
31	<i>eP·Z'</i>	16 04 32	
	$\Delta = 57^\circ$.	Aleutian Islands.	
31	<i>eP·Z'</i>	17 58 07	
	$\Delta = 55^\circ$.	Aleutian Islands.	
31	<i>L·NE</i>	18 41	

Erik Moller.