

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 due to BCIS or USCGS. C means compression and D dilatation.

Scoresbysund 1960

July

1	<i>eP·Z'</i>	8 ^h 08 ^m 25 ^s	
	<i>i·Z'</i>	08 30	
	<i>ePPP·N</i>	11 54	
	<i>eS·NE</i>	16 00	
	<i>eSS·N</i>	19.8	
	<i>L·NE</i>	26	
	$\Delta = 54^\circ$. Aleutian Islands.		
2	<i>ePKP·Z'</i>	12 14 44	C
	<i>ePP·Z</i>	16 47	
	<i>e·E</i>	21 16	
	<i>eSS·E</i>	33.6	
	$\Delta = 126^\circ$. Sandwich Group.		
3	<i>iP·Z</i>	20 30 43	D
	<i>e·Z</i>	34 31	
	<i>ePS·Z</i>	38 53	
	<i>L·Z</i>	50 ^m	
	Z record only.		
	$\Delta = 58^\circ$. Aleutian Islands.		
3	<i>eP·Z'Z</i>	23 02 23	
	<i>L·NE</i>	22	
	$\Delta = 58^\circ$. Aleutian Islands.		
4	<i>eP·Z'Z</i>	4 37 16	
	<i>ePP·E</i>	38 59	
	<i>ePPP·E</i>	39 41	
	<i>eS·NE</i>	44 19	
	<i>eSS·NE</i>	47 45	
	<i>L·NE</i>	51	
	<i>M·NE</i>	56	
	$\Delta = 49^\circ$. Queen Charlotte Islands.		
4	<i>e·NE</i>	9 10.8	
	<i>L·NE</i>	18	
4	<i>eP·Z'Z</i>	13 18 54	
	<i>eS·N</i>	25 51	
	<i>eS·E</i>	25 57	
	<i>eSS·NE</i>	29 23	
	<i>L·ZNE</i>	34	
	$\Delta = 48^\circ$. Queen Charlotte Islands.		
6	<i>iP·Z'ZE</i>	5 26 15	C
	<i>epP·Z'</i>	27 05	
	<i>esP·Z'</i>	27 25	
	<i>eS·NE</i>	33 59	
	<i>esS·N</i>	35 19	
	<i>e·N</i>	39 25	
	$\Delta = 56^\circ$. $h = 220$ km. Hindu Kush.		
8	<i>L·NE</i>	10 41	
8	<i>iP·Z'Z</i>	13 03 16	C
	$\Delta = 77^\circ$. $h = 100$ km. Japan.		

July

9	<i>eP·Z'</i>	0 ^h 54 ^m 46 ^s	
	<i>eS·N</i>	1 05 16	
	<i>e·N</i>	06 ^m 2	
	<i>L·NE</i>	27	
	$\Delta = 82^\circ$. Ryukyn Islands.		
10	<i>eP·Z'ZE</i>	0 19 07	
	<i>ePP·Z'ZNE</i>	23 08	
	<i>ePPP·E</i>	25 10	
	<i>e·E</i>	26 58	
	<i>eSKS·NE</i>	29 43	
	<i>eSKKS·E</i>	29 59	
	<i>eS·N</i>	30 38	
	<i>e·NE</i>	30 52	
	<i>eSS·NE</i>	37 46	
	<i>L·NE</i>	55	
	$\Delta = 98^\circ$. $h = 150$ km. Sumatra.		
10	<i>L·ZNE</i>	23 34	
13	<i>iP·Z'</i>	2 41 15	
	$\Delta = 66^\circ$. Japan.		
13	<i>L·NE</i>	6 43	
13	<i>ePKP·Z'</i>	8 15 09	
	<i>e·Z'</i>	15 19	
	<i>ePP·N</i>	17.1	
	<i>eSKKS·N</i>	24.2	
	<i>ePS·N</i>	27 09	
	<i>eSS·NE</i>	34 24	
	<i>L·NE</i>	55	
	$\Delta = 125^\circ$. Bouvet Island.		
13	<i>iP·Z'</i>	13 08 22	
	<i>ePP·ZNE</i>	09 56	
	<i>eSS·N</i>	17 09	
	<i>L·NE</i>	23	
	$\Delta = 38^\circ$. Greece.		
13	<i>eP·Z'</i>	16 35 17	
	$\Delta = 68^\circ$. Mexico.		
14	<i>eP·Z'</i>	10 40 58	
	<i>ePP·N</i>	45 15	
	<i>eSKS·NE</i>	51 35	
	<i>eSKKS·N</i>	52 07	
	<i>eS·E</i>	52 57	
	<i>L·NE</i>	11 20	
	$\Delta = 102^\circ$. $h = 100$ km. Molucca Passage.		
14	<i>iP·Z'</i>	18 51 15	
	$\Delta = 75^\circ$. Ethiopia.		
15	<i>L·NE</i>	23 51	

Scoresbysund 1960

July		
16	L·NE	21 ^h 40 ^m
17	L·NE	5 43
18	ePP·ZNE	2 02 56
	eSKKS·N	10 12
	ePS·N	13 01
	ePPS·NE	14 04
	L·NE	38
	$\Delta = 113^\circ$. $h = 200$ km. New Britain.	
20	eP·Z'ZN	9 41 00 C
	i·Z'ZE	41 12
	eS·N	49 13
	L·NE	10 02
	$\Delta = 60^\circ$. Kurile Islands.	
20	ePKP·Z'	21 18 18 C
	ePP·Z	20 28
	ePKS·NE	21 39
	ePPP·NE	23 06
	ePPS·N	32 14
	L·NE	22 02
	$\Delta = 130^\circ$. $h = 200$ km. New Hebrides Islands.	
22	eP·Z'ZNE	6 39 42
	eS·E	43 22
	L·NE	44
	$\Delta = 20^\circ$. North Atlantic Ocean.	
23	L·ZNE	17 49
24	eS·NE	10 05 54
	ePS·N	06 16
	eSSS·E	11 41
	L·ZNE	17
	$\Delta = 53^\circ$. Kamchatka.	
25	eP·Z'ZN	3 50 36
	ePP·N	52 25
	ePPP·NE	53 57
	eS·NE	58 15
	eScS·E	4 00 22
	eSS·E	02 00
	e·N	03.1
	L·NE	09
	$\Delta = 55^\circ$. Kamchatka.	
25	iP·Z'ZN	11 21 35 D
	iS·ZN	22 12
	iPP·ZN	23 39
	iS·NE	29 13
	esS·E	29 39
	i·E	30 10
	iScS·NE	31 07
	eSSS·NE	34 00
	i·E	35 40
	L·ZNE	38
	$\Delta = 55^\circ$. $h = 100$ km. Kamchatka.	

July		
27	e(PP)·NE	10 ^h 24 ^m 56 ^s
	eSKS·NE	30 52
	e(S)·N	33 14
	ePS·NE	35 18
	eSS·NE	42 07
	L·NE	11 06
	$\Delta = 121^\circ$. $h = 150$ km. Chile.	
29	ePKP·Z'Z	0 43 21
	iPP·ZN	45 27
	e(PKS)·NE	46 45
	eSKKS·N	52 07
	ePS·N	55 49
	i·ZN	1 00 09
	L·ZNE	28
	$\Delta = 128^\circ$. Loyalty Islands.	
29	L·NE	15 05
29	eP·Z'ZNE	17 42 43 C
	ipP·Z'Z	43 01
	ePP·N	45 24
	iS·NE	51 46
	iPS·NE	52 11
	eSS·NE	56 20
	L·ZNE	18 05
	M·E	14
	$\Delta = 69^\circ$. $h = 100$ km. Japan.	
30	eS·E	14 29 37
	eSSS·E	34.3
	L·NE	37
	$\Delta = 53^\circ$. Near coast of Kamchatka.	
31	ePP·ZN	3 15 39
	ePPP·NE	18 11
	ePS·NE	25 08
	iPPS·ZN	26 36
	eSS·NE	32 11
	L·NE	51
	$\Delta = 115^\circ$. New Britain.	
31	ePS·N	7 34.1
	ePPS·N	35.4
	L·NE	8 05
	New Britain.	
31	L·NE	16 02
August		
1	eP·Z'	2 30 48
	eS·N	39 01
	L·E	52
	$\Delta = 60^\circ$. Iran.	

Scoresbysund 1960

August

2	<i>ePKP·Z'Z</i>	5 ^h 26 ^m 26 ^s	C
	<i>iPP·Z'ZN</i>	28 43	
	<i>iPKS·NE</i>	29 53	
	<i>e·NE</i>	41 14	
	<i>eSS·E</i>	46 14	
	<i>L·NE</i>	6 10	
	$\Delta = 131^\circ$. $h = 100$ km. Loyalty Islands region.		
2	<i>L·NE</i>	10 46	
2	<i>eP·Z'Z</i>	20 54 29	
	<i>eS·N</i>	57 11	
	<i>eSS·E</i>	57 34	
	<i>L·NE</i>	59	
	$\Delta = 15^\circ$. North Polar region.		
4	<i>iP·Z'ZN</i>	7 44 40	C
	<i>iPPP·ZNE</i>	48 30	
	<i>eS·NE</i>	52 38	
	<i>iPS·E</i>	52 51	
	<i>eSS·E</i>	56 36	
	<i>L·E</i>	59	
	<i>L·ZN</i>	8 04	
	$\Delta = 58^\circ$. Aleutian Islands.		
4	<i>eP·Z'</i>	14 15 18	
	$\Delta = 58^\circ$. Aleutian Islands.		
5	<i>eP·Z'</i>	22 37 29	
	<i>eS·NE</i>	45 30	
	<i>L·NE</i>	56	
	$\Delta = 58^\circ$. Aleutian Islands.		
8	<i>e·Z'</i>	3 02 54	
	<i>i·Z'</i>	02 56	
	<i>i·Z'</i>	02 59	
	Near shock.		
9	<i>L·E</i>	6 50	
9	<i>L·E</i>	7 26	
9	<i>eP·Z'Z</i>	7 49 21	
	<i>eS·NE</i>	57 16	
	<i>L·NE</i>	8 06	
	$\Delta = 57^\circ$. California.		
9	<i>ePKS·NE</i>	17 09 05	
	<i>L·NE</i>	51	
	$\Delta = 132^\circ$. $h = 120$ km. Tonga Islands Region.		
10	<i>L·NE</i>	0 38	
11	<i>iP·Z'</i>	5 04 03	D
	<i>L·NE</i>	43	
	$\Delta = 97^\circ$. $h = 60$ km. Philippine Islands.		

August

12	<i>eP·Z'Z</i>	13 ^h 23 ^m 59 ^s	
	<i>eS·E</i>	33 28	
	<i>eSS·E</i>	38 29	
	<i>L·E</i>	47	
	$\Delta = 73^\circ$. $h = 60$ km. Japan.		
13	<i>iP·Z'ZN</i>	7 22 07	C
	<i>epP·Z</i>	22 22	
	<i>e·Z'</i>	22 28	
	<i>eS·E</i>	31 12	
	<i>ipS·E</i>	31 40	
	<i>L·NE</i>	47	
	$\Delta = 69^\circ$. $h = 60$ km. Japan.		
13	<i>ePP·ZNE</i>	14 34 45	
	<i>e·Z</i>	35 03	
	<i>eSKS·NE</i>	40 30	
	<i>eSKKS·NE</i>	41 45	
	<i>iPS·NE</i>	44 41	
	<i>eSS·E</i>	51 37	
	<i>eSSS·NE</i>	55.4	
	<i>L·NE</i>	15 11	
	$\Delta = 118^\circ$. Chile.		
14	<i>eP·Z'</i>	14 11 24	
	$\Delta = 63^\circ$. Kurile Islands.		
15	<i>L·E</i>	6 03	
15	<i>L·E</i>	7 53	
19	<i>iP·Z'</i>	12 53 42	C
	$\Delta = 82^\circ$. $h = 400$ km. Bonin Islands.		
20	<i>L·NE</i>	0 54	
20	<i>e·E</i>	20 35.6	
	<i>eSS·E</i>	42 03	
	<i>L·NE</i>	21 06	
	$\Delta = 106^\circ$. Tristan da Cunha.		
20	<i>eP·Z'</i>	22 33 30	
23	<i>L·E</i>	9 35	
23	<i>iP·Z</i>	23 03 36	C
	<i>L·NE</i>	50	
	$\Delta = 122^\circ$. Fiji Islands.		
24	<i>iS·NE</i>	2 01 14	
	<i>eSSS·E</i>	07 17	
	<i>L·NE</i>	12	
	$\Delta = 54^\circ$. Kamchatka.		
25	<i>L·NE</i>	18 07	
26	<i>L·NE</i>	1 19	

Scoresbysund 1960

August		September	
30	L·NE 7 ^h 38 ^m	19	e·E 4 ^h 03 ^m 33 ^s
31	L·NE 8 12		L·E 31
September		19	iPS·E 19 22 34
1	L·NE 10 28		L·E 36
1	eP·Z'Z 15 46 03		$\Delta = 72^\circ$. Columbia - Panama border.
	ePP·ZNE 47 59	21	eP·Z' 00 20 45
	eS·NE 53 07		eS·E 21 27
	iPS·NE 53 13		eL·E 21 45
	eSS·NE 56 12		$\Delta = 4^\circ$. North of Iceland.
	e·NE 56 58	21	iP·Z' 16 20 07
	L·ZNE 16 01		$\Delta = 80^\circ$. $h = 200$ km. China Sea.
	$\Delta = 49^\circ$. Kodiak Islands.	26	eP·Z' 6 48 44
2	L·NE 14 27		e·Z' 49 42
2	e·N 22 13 09		L·E 50
	eS·E 20 09	26	L·E 12 45
	eScS·E 22 12	29	L·NE 19 28
	L·NE 28	30	eS·NE 6 51 19
	$\Delta = 55^\circ$. Aleutian Islands.		eScS·NE 54 04
3	ePP·N 13 00 46		L·NE 58
	eSKS·N 05 48		$\Delta = 50^\circ$. Vancouver Island.
	ePS·NE 10 32	October	
	epPS·N 11 42	1	eP·Z'Z 16 20 36 C
	eSSS·E 18 57		ePcP·Z'Z 21 32
	$\Delta = 115^\circ$. $h = 450$ km. Solomon Islands.		ePPP·ZNE 24 05
3	eP·Z 23 57 07		eScS·E 30 28
	$\Delta = 65^\circ$. No horizontal records. Kurile Islands.		eSS·N 32 24
6	eP·Z' 15 35 29		e·E 32 40
	$\Delta = 67^\circ$. $h = 100$ km. Japan.		L·NE 40
6	eP·Z' 16 00 03		$\Delta = 55^\circ$. Aleutian Islands.
9	L·Z 16 22	2	L·NE 12 52
	No horizontal records. Jan Mayen.	3	L·E 1 27
9	L·Z 20 07	6	eP·Z' 19 58 52
	No horizontal records. Jan Mayen.		eS·E 20 01.2
12	iP·Z' 12 29 18		L·ZNE 02
	$\Delta = 80^\circ$. Ryukyu Islands.		M·ZNE 06
13	iP·Z'Z 3 20 47 C		$\Delta = 13^\circ$. North Atlantic Ocean.
	eSS·E 35 38	7	eS·E 3 21 04
	$\Delta = 81^\circ$. $h = 450$ km. Bonin Islands.		eSS·N 21 14
16	L·E 8 23		L·ZNE 22
16	eP·Z' 8 16 40 in the time break.		$\Delta = 13^\circ$. North Atlantic Ocean.
	$\Delta = 60^\circ$. Kurile Islands.		
17	L·E 21 09		

Scoresbysund 1960

October

7 *ePP·Z'ZNE* 15^h38^m11^s
eSKS·N 43 58
eSKKS·NE 45 13
i·E 45 53
ePS·NE 48 03
eSS·NE 54 03
eSSS·E 58 04
L·ZNE 16 16
 $\Delta = 114^\circ$. Banda Sea.

8 *L·NE* 2 30

8 *eP·Z'* 3 37 35
 Local shock.

8 *eP·Z'ZNE* 6 03 05
ipP·Z'ZN 05 10
iS·NE 11 17
eScS·E 11 38
iSP·N 12 03
esS·E 14 28
e·N 15 04
iSS·E 16 16
e·E 17 23
esSS·NE 19 15
L·NE 25
iPKPPKPZ'Z 31 17
 $\Delta = 67^\circ$. $h = 650$ km. Japan Sea.

8 *eP·Z'* 20 53 08
eS·NE 21 04 08
L·NE 26
 $\Delta = 90^\circ$. Nicobar Islands.

9 *iP·Z'Z* 9 11 32
epP·Z' 11 54
iS·NE 20 26
isS·E 21 03
e·E 22 04
eSS·NE 25 13
eSSS·E 28 14
L·NE 35
 $\Delta = 67^\circ$. $h = 100$ km. Japan.

13 *eP·Z'* 2 27 58
 $\Delta = 35^\circ$. Rumania.

13 *iP·Z'ZN* 15 02 08 C
ePPP·N 05 34
iS·NE 09 55
iPS·E 10 11
iScS·E 11 53
iSS·E 13 21
L·ZNE 21
 $\Delta = 56^\circ$. Kamchatka.

October

14 *eP·Z'* 21^h28^m53^s
ePPP·Z' 31 38
e·NE 32 21
eS·N 36 36
iPS·E 36 48
eScS·E 38 34
i·E 38 46
iSS·NE 40 39
 $\Delta = 55^\circ$. Aleutian Islands.

14 *iP·Z'ZN* 22 59 31
iS·E 23 02 19
i·E 02 48
iL·E 04 05
 $\Delta = 15^\circ$. North Atlantic Ocean.

14 *eP·Z'* 23 07 34

15 *iP·Z'* 2 00 29
e·E 02 29
L·NE 04

16 *L·NE* 10 12

17 *L·NE* 22 56

20 *ePKP·Z'* 11 24 50 C
 $\Delta = 120^\circ$. Santa Cruz Islands.

22 *ePKP·Z'* 8 40 44
ePP·Z'ZN 42 21
ePS·N 52 02
e·N 54 02
e·SS 58.6
L·NE 9 20
 $\Delta = 120^\circ$. $h =$ abt. 100 km. Solomon Islands.

23 *eP·Z'* 6 40 04
L·NE 59
 $\Delta = 41^\circ$. Atlantic Ocean.

24 *ePKP·Z'* 5 30 51
 $\Delta = 124^\circ$. $h =$ abt. 150 km. New Hebrides Islands.

No time marks from October 25, 17^h–October 30, 0^h.

30 *eS·N* 12 39 44
e·N 45 36
L·N 13 07
 $\Delta = 100^\circ$. Chile.

30 *e·Z'* 21 46 51
eSKS·N 56 58
eS·N 57 48
e·N 22 03 48
 $\Delta = 99^\circ$. $h = 60$ km. Chile–Bolivia border.

Scoresbysund 1960

November

1	<i>ePP·Z'Z</i>	9h05m56s	
	<i>eSKS·N</i>	11 44	
	<i>sS·N</i>	13 32	
	<i>ePPS·N</i>	16 44	
	<i>eSS·N</i>	21 20	
	<i>eSSS·N</i>	25.5	
	<i>L·ZN</i>	44	
	$\Delta = 115^\circ$. Chile.		
2	<i>iPKP·Z'</i>	17 33 52	
	<i>ePPS·N</i>	45 45	
	<i>e·N</i>	56 52	
	<i>L·N</i>	18 20	
	$\Delta = 120^\circ$. Santa Cruz Islands.		
5	<i>eP·Z'</i>	1 03 27	
	<i>epP·Z'</i>	03 40	
	$\Delta = 77^\circ$. <i>h</i> = abt. 75 km. Japan.		
5	<i>L·N</i>	20 37	
6	<i>iP·Z'ZN</i>	4 48 03	
	<i>eS·N</i>	55 53	
	<i>L·N</i>	5 06	
	$\Delta = 57^\circ$. Kamchatka.		
6	<i>L·N</i>	7 31	
6	<i>iP·Z'</i>	22 19 36	
	<i>L·N</i>	40	
	$\Delta = 55^\circ$. Aleutian Islands.		
8	<i>iP·Z'</i>	5 32 49	
	$\Delta = 65^\circ$. Kurile Islands.		
8	<i>eP·Z'</i>	5 38 02	
	$\Delta = 65^\circ$. Kurile Islands.		
8	<i>eP·Z'</i>	11 45 40	
	<i>L·NE</i>	12 06	
	$\Delta = 52^\circ$. Near coast of Oregon.		
9	<i>ePKP·Z'</i>	3 37 08	
	<i>ePKS·Z'N</i>	40 40	
	<i>e·E</i>	47 52	
	<i>eSS·E</i>	57 11	
	<i>eSSS·NE</i>	4 01.8	
	<i>L·NE</i>	21	
	$\Delta = 132^\circ$. Sandwich Group.		
9	<i>eP·Z'</i>	10 54 57	
	<i>eS·NE</i>	11 04 08	
	<i>eSS·E</i>	08.8	
	<i>L·NE</i>	18	
	$\Delta = 70^\circ$. China.		
9	<i>L·NE</i>	21 00	

November

10	<i>ePP·Z'</i>	15h04m03s	
	<i>ePS·N</i>	13 34	
	<i>e·E</i>	13 41	
	<i>L·E</i>	42	
	$\Delta = 111^\circ$. New Guinea.		
11	<i>iP·Z'</i>	5 38 57	C
	$\Delta = 39^\circ$. Greece.		
13	<i>eSKS·N</i>	7 01 41	
	<i>ePPS·N</i>	06 06	
	<i>eSS·E</i>	10.4	
	<i>eSSS·NE</i>	14 52	
	<i>L·NE</i>	26	
	$\Delta = 106^\circ$. Molucca Passage.		
13	<i>iP·NE</i>	9 30 14	
	<i>ePP·N</i>	32 22	
	<i>e·N</i>	35 18	
	<i>iS·NE</i>	38 03	
	<i>iScS·E</i>	39 48	
	<i>eSS·N</i>	41 44	
	<i>iSSS·E</i>	43 28	
	<i>L·NE</i>	47	
	$\Delta = 56^\circ$. Aleutian Islands.		
14	<i>L·NE</i>	20 39	
16	<i>iP·Z'</i>	23 10 05	D
	$\Delta = 61^\circ$. Sinkiang Province, China.		
17	<i>iP·Z'</i>	19 56 24	D
	<i>L·NE</i>	20 13	
	$\Delta = 55^\circ$. Aleutian Islands.		
20	<i>eP·Z'</i>	22 14 40	
	<i>eS·N</i>	25 21	
	<i>eScS·NE</i>	25 37	
	<i>ePS·NE</i>	26 14	
	<i>eSS·NE</i>	31 06	
	<i>L·NE</i>	41	
	$\Delta = 87^\circ$. <i>h</i> abt. 100 km. Near coast of Peru.		
22	<i>eP·Z'</i>	3 13 34	
	$\Delta = 63^\circ$. Atlantic Ocean.		
22	<i>L·NE</i>	4 32	
22	<i>e·NE</i>	6 58.9	
	<i>L·NE</i>	7 18	
22	<i>eP·Z'</i>	7 19 01	
	$\Delta = 57^\circ$. Kamchatka.		
22	<i>ePP·Z'</i>	12 48 40	
	<i>ePS·E</i>	58 44	
	<i>ePPS·E</i>	59 50	
	<i>eSS·NE</i>	13 04 57	
	<i>eSSS·NE</i>	09 20	
	<i>L·NE</i>	25	
	$\Delta = 117^\circ$. Southern Chile.		

Scoresbysund 1960

November

22	<i>iP·Z'</i>	19 ^h 11 ^m 09 ^s	
23	<i>ePKP·Z'Z</i>	14 31 42	
	<i>ePKS·Z</i>	35 10	
	<i>eSKSP·N</i>	43 55	
	<i>ePS·E</i>	44 13	
	<i>e·ZN</i>	46 54	
	<i>e·E</i>	47 13	
	<i>eSS·E</i>	51 40	
	<i>e·N</i>	51 59	
	<i>L·ZNE</i>	15 14	
	$\Delta = 132^\circ$. Tonga Islands.		
24	<i>ePKP·Z'Z</i>	7 11 58	
	<i>ePP·Z'</i>	14 16	
	<i>e·Z</i>	14 26	
	<i>ePKS·NE</i>	15 20	
	<i>eSKKS·N</i>	21 38	
	<i>ePS·E</i>	24 45	
	<i>e·N</i>	25 00	
	<i>ePPS·E</i>	26 43	
	<i>eSS·E</i>	31 50	
	<i>L·NE</i>	50	
	$\Delta = 132^\circ$. Tonga Islands.		
25	<i>eS·E</i>	22 14 28	
	<i>e·E</i>	15 12	
	$\Delta = 70^\circ$. $h = 100$ km. Japan.		
27	<i>iP·Z'</i>	15 27 57	C
	<i>epP·Z'</i>	28 07	
	<i>esP·Z'</i>	28 21	
	$\Delta = 65^\circ$. $h = \text{abt. } 100$ km. Japan.		
28	<i>eP·Z'</i>	19 52 27	
	$\Delta = 65^\circ$. North Atlantic Ocean.		
29	<i>iP·Z'</i>	14 19 03	C
	$\Delta = 82^\circ$. Ryukyu Islands.		

December

1	<i>eP·Z'</i>	20 58 51	
	<i>L·NE</i>	21 14	
	$\Delta = 51^\circ$. Vancouver Island.		
1	<i>L·NE</i>	22 15	
2	<i>eP·Z'</i>	9 24 36	
	<i>eSKS·N</i>	35 24	
	<i>iSKKS·NE</i>	35 34	
	<i>eS·NE</i>	36 46	
	<i>ePS·E</i>	37 48	
	<i>eSS·NE</i>	42 38	
	<i>i·N</i>	43 35	
	<i>L·NE</i>	52	
	$\Delta = 101^\circ$. Chile.		

December

3	<i>iP·Z'</i>	4 ^h 34 ^m 24 ^s	C
	$\Delta = 60^\circ$. Outer Mongolia.		
3	<i>iP·Z'</i>	7 18 03	C
	$\Delta = 55^\circ$. $h = 150$ km. Aleutian Islands.		
3	<i>eP·Z'</i>	20 27 31	
	$\Delta = 33^\circ$. Laptev Sea.		
4	<i>eP·Z'</i>	16 32 21	
	$\Delta = 75^\circ$. Japan.		
5	<i>eP·Z'</i>	18 17 02	
	$\Delta = 55^\circ$. Kamchatka.		
5	<i>eP·Z'</i>	21 29 06	C
	$\Delta = 36^\circ$. Straits of Gibraltar.		
6	<i>L·NE</i>	9 35	
7	<i>e·Z'</i>	13 37 49	
	Possibly local quake.		
9	<i>eP·Z'</i>	21 26 34	
	<i>L·E</i>	27	
	$\Delta = 7^\circ$. Jan Mayen region.		
11	<i>eP·Z'</i>	0 25 22	
11	<i>ePKP·Z'</i>	19 11 57	
	$\Delta = 125^\circ$. New Hebrides Islands.		
13	<i>ePKP2·Z'</i>	7 57 17	
	<i>e·Z'Z</i>	57 48	
	<i>i·ZNE</i>	8 01 52	
	<i>eSKS·Z</i>	03 39	
	<i>ePPP2·E</i>	08 32	
	<i>eSKSP·N</i>	11 18	
	<i>i·Z</i>	13 15	
	<i>eSKSP2·NE</i>	14 55	
	<i>eSS·E</i>	21 18	
	<i>ePSS·N</i>	26 22	
	<i>L·NE</i>	52	
	$\Delta = 162^\circ$. Macquarie Islands.		
13	<i>iP·Z'</i>	10 17 42	C
	$\Delta = 82^\circ$. Bonin Islands.		
15	<i>eP·Z'</i>	0 05 28	
	<i>iS·N</i>	17 07	
	<i>iPPS·N</i>	19 37	
	<i>eSSS·N</i>	28.6	
	<i>L·N</i>	47	
	$\Delta = 103^\circ$. $h = 75$ km. Molucca Passage.		

Scoresbysund 1960

December

15 *iP·Z'* 0^h22^m08^s C

16 *eP·Z'* 1 29 35
 $\Delta = 55^\circ$. Aleutian Islands.

16 *iP·Z'* 18 27 16 C
L·N 35
 $\Delta = 28^\circ$. North Atlantic Ocean.

17 *eP·Z'* 2 14 21
 $\Delta = 57^\circ$. Aleutian Islands.

17 *eP·Z'* 16 55 11
 $\Delta = 62^\circ$. Kurile Islands.

21 *iP·Z'* 14 47 54 C
eSSS·N 58 12
 $\Delta = 45^\circ$. $h = 125$ km. Alaska.

22 *eP·Z'* 14 37 04
e·Z' 37 32
 $\Delta = 53^\circ$. Aleutian Islands.

December

25 *eP·Z'* 5^h33^m15^s
 $\Delta = 80^\circ$. Bonin Islands.

26 *eP·Z'* 1 56 33
 $\Delta = 74^\circ$. Japan.

26 *ePKP·Z'* 4 51 35
 $\Delta = 132^\circ$. Sandwich Group.

27 *iP·Z'* 18 22 46 C
 $\Delta = 92^\circ$. $h = \text{abt. } 100$ km. Near coast of Peru.

28 *eP·Z'* 5 47 41
 $\Delta = 43^\circ$. Southwest of Crete.

29 *eP·Z'* 18 27 37
 $\Delta = 43^\circ$. Crete.

29 *eP·Z'* 19 15 05
 $\Delta = 95^\circ$. Northern Chile.

May 1963

Henry Jensen / Erik Møller