No. 28 Jan.—Dec. 1954

GEODÆTISK INSTITUT
Proviantgården · Copenhagen · Denmark

Bulletin of the seismological station

SCORESBYSUND

$\varphi = 70°29'$ N. $\lambda = 21°57'$ W. $h = 69$ m.

Lithologic foundation: gneiss

Instruments

Galitzin-Wilip. *N* and *E*. $T_p = T_g = 12$ sec, $\mu^2 = 0$, $\frac{Ak}{\pi l} = 300$ or V_{max} abt. 1000.

Galitzin-Wilip. *Z*. $T_p = 9$ sec, $T_g = 10$ sec, $\mu^2 = 0$, $\frac{Ak}{\pi l} = 200$ or V_{max} abt. 600.

Grenet *Z'*. $T_p = 1$ sec, $T_g = {}^1/_4$ sec, V_{max} abt. 30 000.

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. 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. Unless otherwise stated, the periods and amplitudes are due to readings on the Galitzin instruments.

January

1 *ePKP·Z′* 13h22m50s
ePS·N 33.6
L·NE 59
$\Delta = 115°$. $h = 100$ km. Flores Sea.

2 *iP·Z′* 1 21 23
$\Delta = 43°$. Dodecanese.

2 *iP·Z′* 20 26 45
$\Delta = 53°$. Aleutian Islands.

3 *e·Z′* 4 32 34

5 *i·Z′* 7 20 52
$\Delta = 10°$. Svalbard region.

5 *eP·Z′* 22 15 40
$\Delta = 10°$. Svalbard region.

5 *i·Z′* 22 21 07

6 *iP·Z′* 15 56 23
eS·NE 58 20
L·ZE 58 51
$\Delta = 10°$. Svalbard region.

7 *L·NE* 7 59

11 *eP·Z′* 17 21 37
ePP·Z′ 24 51
L·E 55
$\Delta = 84°$. Ryukyu Islands region.

12 *ePKP·Z′* 14 36 27
ePP·NE 40 35
$\Delta = 158°$. New Zealand.

12 *ePKP·Z′* 14 40 23
ePP·N 44 40
eSKKS·N 51 26
iSS·NE 15 04 53
Some of the phases possibly due to previous quake.
$\Delta = 158°$. New Zealand.

12 *eP·Z′* 23 43 58
L·NE 24 04
$\Delta = 59°$. California.

13 *ePKP·Z′* 0 33 06 dubious.
iPKP2·Z′ 33 42
ePP·Z′ 37 29
Very strong microseisms.
$\Delta = 158°$. New Zealand.

15 *iPKP·Z′* 23 49 38
$\Delta = 126°$. Tonga Islands.

January

16 *i·Z′* 3h52m28s

16 *i·Z′* 5 22 26
i·Z′ 22 29
i·Z′ 22 35

17 *iP·Z′* 3 15 43
$\Delta = 75°$. Japan.

17 *iP·Z′* 11 57 38
$\Delta = 72°$. Japan.

17 *iP·Z′* 20 53 17
epP·Z′ 53 42
$\Delta = 57°$. $h = 150$ km. Aleutian Islands.

18 *iPKP·Z′* 11 05 48
$\Delta = 113°$. Banda Sea.

18 *eP·Z′* 14 23 44
$\Delta = 40°$. Greece.

19 *e·Z′* 3 26 07
e·Z′ 27 16

20 *e·Z′* 0 49 41
e·Z′ 50 54

20 *eP·Z′* 4 28 39
ePP·Z′ 31 39
$\Delta = 80°$. South of Mexico.

20 *ePKP·Z′* 14 09 06
$\Delta = 129°$. Tonga Islands.

20 *e·Z′* 16 26 21

22 *iP·Z′* 11 25 21
$\Delta = 53°$. Alaska.

30 *eP·Z′* 4 03 21
$\Delta = 40°$. Ionian Sea.

30 *eP·Z′* 18 37 02
L·NE 55
$\Delta = 53°$. Alaska.

31 *L·NE* 12 16

February

1 *iP·Z′Z* 1h19m29s
i·Z 20 09
ePP·Z′Z 22 52
i·N 23 00
eSKS·N 29 59
i·E 30 04
iS·N 30 09
iPS·E 30 59
i·N 31 04
iSS·E 35 45
i·N 35 54
i·E 37 19
eSSS·E 39 14
L·NE 48
M·N 56 $20^s.15\,\mu$.
M·E 57 $20^s.25\,\mu$.
$\Delta = 85°$. Bonin Islands.

1 *eP·Z′* 1 32 47
$\Delta = 85°$. Bonin Islands.

1 *eP·Z′* 4 42 16
L·NE 5 02
$\Delta = 62°$. California.

2 *iP·Z′* 17 48 53
i·Z′ 49 00
eS·Z′ 51 15
L·Z′ 52 20
M·Z′ZNE 53 *N, E*: $10^s.5\,\mu$.
$\Delta = 13°$. Off North-east Greenland.

3 *iP·Z′* 18 34 22
$\Delta = 65°$. $h = 100$ km. Kurile Islands.

5 *ePKP·Z′* 9 38 10
$\Delta = 115°$. New Britain.

5 *e·Z′* 9 49 12

5 *eP·Z′* 15 28 49
$\Delta = 67°$. $h = 100$ km. Mexico.

7 *iPKP·Z′* 6 34 15
$\Delta = 124°$. $h = 100$ km. New Hebrides.

7 *i·Z′* 6 43 57

8 *eP·Z′* 14 32 37
$\Delta = 99°$. $h = 150$ km. Chile-Bolivia border.

8 *iP·Z′* 18 55 22
$\Delta = 80°$. Japan.

February

9 *eP·Z′* 4h14m53s
$\Delta = 66°$. Japan.

9 *iP·Z′* 17 48 59
L·E 18 07
$\Delta = 54°$. $h = 100$ km. Aleutian Islands.

9 *eP·Z′* 23 34 48
e·Z′ 34 59
i·E 43.2
$\Delta = 36°$. South-east of Azores.

11 *iP·Z′Z* 0 40 46 +
i·Z′Z 40 50 −. $6^s.20\,\mu$.
ePP·N 42 54
iPPP·NE 44 57
iS·NE 49 27 10^s. *N*: $10\,\mu$, *E*: $13\,\mu$.
iScS·NE 50 40
eSS·N 53.5
i·NE 55 37
i·NE 56 27
L·NE 1 00
M·N 07 $16^s.45\,\mu$.
M·E 09 $20^s.100\,\mu$.
$\Delta = 63°$. Ningsia Province, China.

14 *eP·Z′* 6 54 29
$\Delta = 86°$. Northern Peru.

17 *eP·Z′* 11 46 41
$\Delta = 63°$. $h = 100$ km. Kurile Islands.

18 *e·Z′* 19 20 09

19 *eP·Z′* 0 51 45
eS·E 1 01 11 uncertain.
eSS·E 05 39
L·E 15
$\Delta = 71°$. Nicaragua.

19 *eP·Z′* 13 37 59
$\Delta = 55°$. Sinkiang Province, China.

19 *L·E* 15 07

19 *ePKP·Z′* 19 27 04
e·E 42 17
iSS·E 48 12
e·E 50 11
$\Delta = 137°$. Kermadec Islands.

February

19 *eP·Z′* 21h45m52s
ePcP·Z′E 46 12
eS·E 55 12
iScS·E 55 47
iSS·E 59 48
L·E 22 10
M·E 11 30s. 50 μ.
Δ = 70°. Nicaragua.

20 *L·E* 2 39

20 *epP·Z′* 18 50 53
iPKP·Z′ 52 42
ePP·Z 53 48
epPP·Z′ 55 30
i·Z 55 42
iSKS·NE 58 43
i·NE 59 53
iS·E 19 00 38
e·N 00 43
isSKS·N 02 33
i·E 02 38
iPS·E 03 28
i·N 03 38
isPS·NE 06 06
Δ = 112°. *h* = 600 km. Flores Sea.

20 *eP·Z′* 20 03 32
Δ = 65°. *h* = 100 km. Lesser Antilles.

22 *iP·Z′* 6 23 09 +
Δ = 75°. Japan.

22 *eP·Z′* 10 38 30
Δ = 75°. Japan.

22 *(i)PKP·Z′* 12 22 26 in the time-break.
eSS·E 41.7
Δ = 128°. Sandwich Group.

23 *eP·Z′* 6 51 55
L·E 7 19
Δ = 72°. Southeastern Tibet.

23 *e·Z′* 22 42 11
i·Z′ 42 15
i·Z′ 42 18

24 *iP·Z′* 17 39 27 –
Δ = 74°. Japan.

24 *eP·Z′* 20 56 50
Δ = 82°. Bonin Islands.

February

25 *iP·Z′* 11h53m38s
Δ = 20°. North Atlantic Ocean.

26 *iP·Z′* 0 03 26
Δ = 75°. Japan.

26 *iP·Z′* 18 55 53
Δ = 57°. Hindu Kush.

28 *L·E* 0 37

28 *iP·Z′Z* 1 07 38 –
i·Z′ 07 57 +
iS·E 17 57
eSS·E 23.0
L·E 35
Δ = 82°. Ryukyu Islands.

28 *e·Z′* 21 26 34
i·Z′ 26 44
e·Z′ 26 50

March

2 *L·E* 7 16

3 *e·Z′* 4 18 49
e·Z′ 18 57

3 *iPKP·Z′Z* 6 21 40
iPP·Z′ZN 22 40
i·E 22 45
iPPP·E 24 53
iPS·E 32 11
e·Z′Z 32 18
eSS·E 38 06
i·E 39 41
L·E 7 01
Δ = 115°. New Guinea.

3 *eP·Z′* 19 55 28
Δ = 40°. Greece.

3 *iP·Z′* 20 54 00
e·Z′N 56 06
L·E 21 09
Δ = 42°. Southern Alaska.

6 *iPKP·Z′* 0 47 44 –
ePP·Z′ 50 09
i·Z′ 50 21
iSS·E 1 07 03
Δ = 131°. *h* = 550 km. Fiji Islands region.

6 *e·Z′* 22 22.8

March

7 *eP·Z′* 1h57m01s
Δ = 82°. Ascension Island region.

8 *eP·Z′* 8 24 52
Δ = 39°. Ionian Islands.

8 *iP·Z′* 13 49 01
Δ = 72°. Japan.

9 *eP·Z′* 2 32 55
i·Z′ 33 01
iS·NE 42 08
iPS·E 42 25
eSS·E 46.3
eSSS·E 50.1
L·N 56
Δ = 70°. Mid Atlantic Ocean.

9 *eP·Z′* 5 41 49
Δ = 68°. Chinghai Province, China.

9 *e·Z′* 5 43 46
e·Z′ 44 15
e·Z′ 44 35

9 *iP·Z′* 5 49 29 +
iPcP·Z′ 50 18
eS·NE 57 40
L·E 6 09
Δ = 60°. Kamchatka.

9 *iPKP·Z′* 10 43 28
Δ = 127°. *h* = 350 km. Fiji Islands.

10 *iP·Z′* 14 21 17
Δ = 81°. *h* = 100 km. Ecuador.

11 *eP·Z′* 10 41 12
ePP·Z′ 43 50
Δ = 69°. *h* = 100 km. Guatemala.

12 *e·Z′* 10 36 52

12 *iPKP·Z′* 11 31 17
Δ = 126°. Sandwich Group.

12 *e·Z′* 11 34 22

14 *eP·Z′* 17 54 24
eS·NE 18 02 30
L·E 12
Δ = 58°. Kamchatka.

14 *e·Z′* 20 52 51
e·Z′ 53 01

March

16 *iP·Z′* 5h37m05s
Δ = 59°. Kurile Islands.

16 *e·Z′* 14 32 00

16 *L·E* 20 14

17 *iP·Z′* 13 12 08
Δ = 70°. Mexico.

18 *e·Z′* 17 30 29

19 *e·Z′* 8 32 37
e·Z′ 33 32

19 *iP·Z′* 10 04 42
iS·NE 13 05
L·NE 22
Δ = 62°. California.

19 *eP·Z′* 10 31 28
Repetition.

20 *iP·Z′* 14 14 25
L·E 38
Δ = 62°. *h* = 100 km. Kurile Islands.

21 *iP·Z′* 6 19 12 –
Δ = 56°. Kamchatka.

21 *i·Z′* 11 26 45
i·Z′ 26 57

21 *iP·Z′ZNE* 23 53 41 Z′: +
epP·NE 54 12
isP·Z′ZE 54 24
iPP·ZNE 56 36
isPP·ZE 57 31
iS·NE 24 03 09
esS·N 04 16
eSS·E 07 48
i·N 08 16
Δ = 75°. *h* = 150 km. Northwestern Burma.

NB. From March 22 to April 7 no time-signal has been received due to a break-down of the radio. For the following quake the times are counted from the first phase.

29 *iP·Z′ZNE* 0 00 *H* = 6h17m06s.
ipP·Z′Z 1 49
isP·Z 3 03
iS·E 5 01
i·E 8 13
Δ = 35°. *h* = 650 km. Sierra Nevada.

April

8 $L \cdot NE$ 17^h29^m

11 $iP \cdot Z'$ 10 37 14
$i \cdot Z'$ 37 19
$i \cdot Z'$ 37 26
$eS \cdot N$ 44 48
$e \cdot N$ 55.7
$\Delta = 76°$. Arabian Sea.

11 $iP \cdot Z'$ 11 03 02
$eS \cdot E$ 10 58
$iSSS \cdot N$ 16 48
Strong microseisms. $\Delta = 57°$. Hindu Kush.

13 $iP \cdot Z'$ 15 37 26
$i \cdot Z'$ 37 33
$\Delta = 74°$. Japan.

14 $iP \cdot Z'$ 13 37 43
$\Delta = 89°$. Andaman Islands region.

16 $iP \cdot Z'$ 10 41 11
$\Delta = 66°$. Japan.

17 $iP \cdot Z'Z$ 20 20 26
$e(PcP) \cdot N$ 21 32
$iPPP \cdot N$ 24 07
$iS \cdot E$ 28 31
$i \cdot N$ 28 53
$iSS \cdot N$ 32 35
$eSSS \cdot E$ 34 56
$L \cdot NE$ 39
$M \cdot E$ 41 20^s. 35 μ.
$M \cdot N$ 44 20^s. 40 μ.
$\Delta = 58°$. Aleutian Islands.

17 $iP \cdot Z'$ 21 00 24
$\Delta = 40°$. Greece.

19 $ePKP \cdot Z'$ 16 32 51
$(i)PKS \cdot Z'$ 36 19 in the time-break.
$\Delta = 131°$. Loyalty Islands.

20 $eP \cdot Z'$ 16 35 08
$iS \cdot Z'$ 35 36
$\Delta = 2^1/_2°$.

20 $eP \cdot Z'$ 16 51 26
$iS \cdot Z'$ 51 55
$\Delta = 2^1/_2°$.

April

21 $eP \cdot Z'$ $2^h01^m50^s$
$iS \cdot Z'$ 02 18
$\Delta = 2^1/_2°$.

21 $eP \cdot Z'$ 10 05 42
$e \cdot Z'$ 07 29
$L \cdot E$ 22
$\Delta = 43°$. Caucasia.

21 $eP \cdot Z'$ 20 36 01
$eSKS \cdot N$ 46 31
$\Delta = 91°$. Peru.

22 $iP \cdot Z'Z$ 15 06 15
$eSKS \cdot NE$ 16 07
$e \cdot E$ 18 31
$\Delta = 87°$. $h = 300$ km. Mariana Islands.

23 $i \cdot Z'$ 18 33 39

24 $eP \cdot Z'$ 8 40 46
$\Delta = 40°$. $h = 100$ km. Alaska.

24 $e \cdot Z'$ 14 05 36

24 $e \cdot Z'$ 14 06 49
$L \cdot NE$ 07.4

24 $eP \cdot Z'$ 17 45 32
$\Delta = 75°$. Japan.

24 $iP \cdot Z'$ 18 43 42
$\Delta = 66°$. Japan.

25 $eP \cdot Z'Z$ 0 39 12
$eS \cdot NE$ 48 32
$eSS \cdot NE$ 53.3
$eSSS \cdot E$ 56.6
$L \cdot N$ 1 00
$\Delta = 71°$. Mid Atlantic Ocean.

25 $e \cdot Z'$ 15 06 44

25 $e \cdot N$ 17 56 45

25 $eP \cdot Z'$ 20 11 11
$\Delta = 39°$. Greece.

25 $eP \cdot Z'$ 20 43 30
$L \cdot NE$ 21 02
$\Delta = 57°$. California.

26 $iP \cdot Z'$ 2 22 01
$\Delta = 67°$. Japan.

April

26 $eP \cdot Z'$ $9^h29^m51^s$
$L \cdot NE$ 10 00
$\Delta = 84°$. Galapagos Islands.

26 $i \cdot Z'$ 15 02 24

26 $iP \cdot Z'ZNE$ 20 34 36 Z: 5^s. + 8 μ.
$ePP \cdot N$ 36 49
$ePPP \cdot ZN$ 38 04
$eS \cdot NE$ 42 31
$i \cdot E$ 43 00
$eScS \cdot E$ 44 46
$L \cdot NE$ 52
$\Delta = 58°$. Kamchatka.

27 $iP \cdot Z'ZNE$ 10 18 09
$eS \cdot NE$ 27 42
$SS \cdot E$ 32.5
$SSS \cdot E$ 36.1
$L \cdot E$ 41
$\Delta = 75°$. Panama.

27 $ePKP \cdot Z'$ 21 41 42
$ePKP^2 \cdot Z'$ 42 34
$eSKKS \cdot N$ 53 12
$eSS \cdot E$ 22 06 59
$L \cdot NE$ 22.6
$\Delta = 165°$. Tasmania.

28 $iP \cdot Z'$ 5 00 45
$\Delta = 57°$. Aleutian Islands.

29 $eP \cdot Z'Z$ 10 59 56
$eS \cdot NE$ 11 08 27
$L \cdot N$ 18
$M \cdot N$ 20 35^s. 20 μ.
$\Delta = 63°$. Gulf of California.

29 $eP \cdot Z'Z$ 11 45 05
$L \cdot N$ 12 04.5
$M \cdot N$ 11 18^s. 150 μ.
$\Delta = 63°$. Gulf of California.

30 $e \cdot Z'$ 12 06 59

30 $e \cdot Z'$ 13 03 04

30 $iP \cdot Z'ZNE$ 13 10 01 6^s. 16 μ.
$iPP \cdot Z'ZNE$ 11 36
$iS \cdot NE$ 15 59
$iSSS \cdot NE$ 18 57
$M \cdot NE$ 28 N, E: 15^s. 45 μ.
$\Delta = 39°$. Greece.

30 $iP \cdot Z'$ 19 40 55
$\Delta = 39°$. Greece.

April

30 $e \cdot Z'$ $22^h37^m29^s$

30 $eP \cdot Z'$ 23 15 50
$eS \cdot E$ 25 12
$e \cdot N$ 25 27
$SSS \cdot E$ 33 11
$L \cdot N$ 39
$\Delta = 72°$. Mid Atlantic Ocean.

May

1 $ePKP \cdot Z'$ 0 39 14
$\Delta = 125°$. Fiji Islands region.

1 $eP \cdot Z'$ 15 06 11
$\Delta = 42°$. Aegean Sea.

1 $eP \cdot Z'$ 15 32 41
$L \cdot E$ 47
$\Delta = 42°$. Aegean Sea.

1 $eP \cdot Z'$ 18 19 05
$\Delta = 85°$. Formosa.

1 $eP \cdot Z'$ 21 01 14
$eS \cdot E$ 07.5
$e \cdot N$ 10.7
$L \cdot N$ 13
$L \cdot E$ 15
$\Delta = 42°$. Aegean Sea.

2 $eSKS \cdot NE$ 18 12 02
$eSKKS \cdot E$ 12 17
$eS \cdot NE$ 12 43
$eSS \cdot N$ 19 13
$e \cdot NE$ 28.5
$L \cdot NE$ 33
$\Delta = 95°$. Sumatra.

3 $eP \cdot Z'$ 4 09 13
$\Delta = 65°$. Mid Atlantic Ocean.

3 $iP \cdot Z'$ 5 32 46
$SSS \cdot E$ 42.6
$L \cdot NE$ 49
$\Delta = 42°$. Greece.

3 $(i)P \cdot Z'$ 8 59 08 in the time-break.
$S \cdot E$ 9 05.7
$SSS \cdot N$ 08.7
$L \cdot NE$ 13
$\Delta = 42°$. Greece.

3 $eP \cdot Z'$ 13 37.8
$ePP \cdot Z'$ 39 40
$SSS \cdot N$ 48.4
$L \cdot NE$ 52
$\Delta = 44°$. Dodecanese Islands.

May

3 $i \cdot Z'$ 14h05m16s

3 $eP \cdot Z'Z$ 15 39 38
$i \cdot Z'Z$ 39 40 Z: 5s. − 5 μ.
$ePP \cdot Z$ 41 32
$iS \cdot E$ 47 42
$e \cdot N$ 47 48
$iPS \cdot NE$ 47 59
$i \cdot N$ 48 28
$iScS \cdot E$ 49 28
$i \cdot N$ 50 04
$L \cdot NE$ 59
$M \cdot E$ 16 04 20s. 32 μ.
$M \cdot N$ 08 20s. 18 μ.
Δ = 59°. Kamchatka.

3 $iP \cdot Z'Z$ 17 24 33
$ipP \cdot Z'Z$ 25 10
$iS \cdot N$ 33 31
$isS \cdot N$ 34 39
Δ = 70°. h = 150 km. Nicaragua.

3 $eP \cdot Z'$ 18 31 42
Δ = 70°. Sikang Province, China.

4 $ePKP \cdot Z'$ 3 01 45
$iPKP2 \cdot Z'$ 01 59
$e \cdot Z'$ 02 25
Δ = 153°. New Zealand.

4 $iP \cdot Z'$ 6 36 19
Δ = 73°. Japan.

4 $iP \cdot Z'$ 16 50 38
$L \cdot E$ 17 02
Δ = 38°. Greece.

4 $iP \cdot Z'Z$ 16 52 53
Δ = 38°. Greece.

4 $eP \cdot Z'$ 17 45 00
$i \cdot Z'$ 45 18
$L \cdot E$ 18 02
Δ = 58°. Kamchatka.

4 $eP \cdot Z'$ 17 55 29
$iS \cdot Z'$ 58 30
Δ = 18°. Devon Island region, Canada.

4 $e \cdot Z'$ 18 23 36

4 $eP \cdot Z'$ 23 52 18
Δ = 39°. Greece.

5 $L \cdot E$ 0 45

May

5 $eP \cdot Z'$ 1h05m35s
Δ = 40°. Greece.

5 $e \cdot Z'$ 2 35.2

5 $L \cdot E$ 11 35

5 $eP \cdot Z'Z$ 13 20 24 Z: 4s. 1.5 μ.
$i \cdot Z'$ 20 30
$i \cdot E$ 24 33
$eS \cdot E$ 29.2
$L \cdot E$ 40
$M \cdot E$ 48 16s. 50 μ.
Δ = 65°. Gulf of California.

5 $iP \cdot Z'$ 17 23 19
$eS \cdot NE$ 31 26
$L \cdot NE$ 43
Δ = 59°. Kamchatka.

6 $iP \cdot Z'Z$ 9 12 10 Z: 5s. + 4 μ.
$epP \cdot Z'$ 12 48
$isP \cdot Z'$ 12 59
$iS \cdot E$ 20 12
$esS \cdot NE$ 21 08
$e \cdot E$ 21 53
$L \cdot NE$ 35
Δ = 60°. h = 100 km. Kamchatka.

7 $eP \cdot Z'$ 0 35 22
$ipP \cdot Z'$ 36 00
Δ = 86°. h = 150 km. Peru-Brazil border.

7 $iP \cdot Z'$ 2 30 21
Δ = 65°. Japan.

9 $e \cdot Z'$ 1 21.5

9 $iP \cdot Z'$ 14 15 15
$i \cdot N$ 15 27
$iS \cdot NE$ 15 50
$M \cdot ZNE$ 16 Z: 8s. 20μ, N: 12s. 90μ, E: 10s. 25μ.
Δ = 3°. Jan Mayen region.

9 $iP \cdot Z'$ 20 56 40
Δ = 82°. Ryukyu Islands.

10 $iP \cdot Z'$ 8 11 06
Δ = 81°. Ryukyu Islands.

11 $eP \cdot Z'$ 1 01 29
$eS \cdot NE$ 01 57

11 $eP \cdot Z'$ 1 16 57
$eS \cdot N$ 17 28

May

11 $iP \cdot Z'$ 4h29m35s
$eL \cdot N$ 32 57
Δ = 12°. Arctic Ocean.

11 $e \cdot Z'$ 11 08.7
$e \cdot Z'$ 09 27

13 $iP \cdot Z'Z$ 14 57 39 Z: 5s. 4 μ.
$ipP \cdot ZE$ 57 57
$eS \cdot E$ 15 06 37
$i \cdot NE$ 06 42
$i \cdot Z$ 06 54
$e \cdot N$ 07 04
$e \cdot NE$ 07 40
$L \cdot NE$ 20
Δ = 69°. h = 100 km. Mexico.

14 $iP \cdot Z'ZNE$ 22 50 30 Z: 5s. − 10 μ.
$ipP \cdot ZN$ 51 27
$i \cdot Z'$ 51 32
$isP \cdot Z$ 51 55
$i \cdot Z'N$ 51 57
$iS \cdot E$ 59 37 10s. 25 μ.
$i \cdot N$ 59 41 8s. 8 μ.
$i \cdot E$ 23 00 17
$i \cdot N$ 00 42
$esS \cdot NE$ 01 17
$i \cdot E$ 02 07
$eSS \cdot N$ 04 12
$SSS \cdot N$ 07.5
Δ = 72°. h = 250 km. Japan.

15 $eP \cdot Z'$ 12 32 26
$eS \cdot NE$ 38.8
$eSSS \cdot N$ 42.1
$L \cdot NE$ 45
Δ = 42°. Greece.

17 $iP \cdot Z'$ 17 08 50 very small.
$iS \cdot Z'$ 11 05
$eL \cdot Z'N$ 12 15
$eL \cdot Z$ 12.3

18 $eP \cdot Z'$ 5 23 59
Δ = 88°. Peru.

19 $L \cdot NE$ 9 50

19 $i \cdot Z'$ 10 02 55

19 $ePS \cdot NE$ 23 36.8
$eSS \cdot NE$ 43.1
$L \cdot NE$ 24 01
Δ = 114°. New Britain.

May

20 $e(PKP2) \cdot Z'$ 2h37m28s
Δ = 163°. Southern Ocean.

20 $e(P) \cdot Z'$ 3 40 56
$(L) \cdot Z'$ 41 01

21 $iP \cdot Z'$ 5 21 53
$e \cdot N$ 29 22

21 $eP \cdot Z'$ 16 22 13
$ePP \cdot E$ 24.2
$eS \cdot NE$ 29.4
$eSS \cdot E$ 32.3
$L \cdot NE$ 37
Δ = 50°. Alaska Peninsula.

23 $iP \cdot Z'$ 4 20 46
$epP \cdot Z'$ 21 21
$eS \cdot E$ 29.2
$L \cdot E$ 41
Δ = 63°. h = 150 km. Kurile Islands.

23 $eP \cdot Z'$ 7 10 44
$L \cdot E$ 46
Δ = 103°. Celebes Sea.

24 $eP \cdot Z'$ 0 02 49
$L \cdot NE$ 24
Δ = 60°. California.

24 $eP \cdot Z'$ 7 38 57 very small.
$e(pP) \cdot Z'$ 39 14
$L \cdot NE$ 8 01
Δ = 62°. Kurile Islands.

25 $eP \cdot Z'Z$ 22 10 58
$ePP \cdot NE$ 12 29
$eS \cdot N$ 16.9
$eSSS \cdot NE$ 19.9
$L \cdot N$ 26
Δ = 39°. Greece.

26 $eP \cdot Z'Z$ 1 53 02
$eS \cdot NE$ 2 01 11
$L \cdot NE$ 12
Δ = 58°. Kamchatka.

26 $eP \cdot Z'$ 19 07 46
$eS \cdot E$ 16 23
$L \cdot E$ 29
Δ = 62°. Kurile Islands.

27 $eP \cdot Z'$ 7 01 59
Δ = 77°. Japan.

May

27 *eP·Z′ZNE* 14h28m00s
e(S)·NE 28 13
M·NE 28.6 *N*: 10s. 9 μ, *E*: 10s. 8 μ.
M·NE 29.6 *N*: 5s. 8 μ, *E*: 7s. 10 μ.
Δ = 1°. North of Iceland.

27 *e·Z′* 14 50.8
Aftershock?

28 *eP·Z′* 7 50 25
Δ = 39°. Greece.

28 *ePKP·Z′* 13 41 30
e(PP)·Z′ 44 26
Δ = 130°. Fiji Islands region.

29 *iPKP·Z′* 5 55 25
ipPKP·Z′ 57 21
eSS·N 6 13.6
Δ = 125°. *h* = 550 km. Fiji Islands.

29 *ePKP·Z′* 22 40 16
Δ = 134°. Kermadec Islands region.

30 *e·Z′* 5 31 19

31 *ePP·Z′ZNE* 16 08 13
iPPP·Z 10 38
eSKS·NE 13 58
ePS·NE 17 22
ePPS·NE 18 46
eSS·NE 23 45
eSSS·NE 28.1
Δ = 113°. Flores Sea.

June

4 *eP·Z′* 0 55 57
Δ = 65°. Kurile Islands.

4 *e·Z′* 2 23.3

4 *iP·Z′Z* 7 03 12 7s. + 6 μ.
ePP·Z 06 29
iSKS·N 13 39
eSS·N 19 19
L·N 30
M·N 41 20s. 70 μ.
Δ = 84°. Galapagos Islands.

4 *eP·Z′* 16 12 32
eS·N 21 14
eSS·N 25.0
L·N 33
Δ = 65°. Gulf of California.

June

4 *eP·Z′* 16h47m16s
Δ = 62°. Kurile Islands.

4 *iPKP·Z′* 17 16 15
Δ = 138°. Kermadec Islands.

4 *L·NE* 21 15

5 *iP·Z′* 1 59 37
L·NE 2 22
Δ = 69°. Mexico.

5 *iP·Z′* 13 25 50
Δ = 73°. Japan.

5 *eP·Z′* 14 12 56
Δ = 39°. Greece.

6 *eP·Z′* 17 05 21
ePKP·Z′ZN 09 13
ePP·N 09 48
ePPP·Z 12 21
e·N 15 37
eSKS·E 16 00
iSKKS·NE 17 00
iPS·NE 19 25
eSS·NE 25.7
iSSS·E 29 56
L·NE 41
Δ = 111°. New Guinea.

6 *eP·Z′* 22 10 33
e(pP)·Z′ 10 35
eS·E 20 13
Δ = 75°. Japan.

7 *eP·Z′* 7 49 28
e(S)·N 49 51
M·NE 51 6s. 2 μ.

7 *eP·Z′* 8 11 45
(L)·NE 12.6

7 *eP·Z′* 10 29 33
epP·Z′ 31 23
ePKP·Z′ 33 25
ePP·ZN 34 20
i·ZE 36 26 –
eSKS·N 39 21
i·N 39 27
iSKKS·NE 40 36
i(pSKS)·E 41 22
isSKS·N 42 46
eSP·N 43 18
iPS·NE 44 01
Δ = 112°. *h* = 450 km. New Britain.

June

8 *L·NE* 17h17m

10 *eP·Z′N* 4 46 58
i·Z′ 47 01
eS·N 52 52
L·N 57
Δ = 39°. North Atlantic Ocean.

10 *ePKP·Z′* 18 54 39
i·Z′ 54 41
ePP·Z′ 56 40
ipPKP·Z′ 57 27
iSKP·Z′ 57 43
iSS·NE 19 13 02
Δ = 126°. *h* = 750 km. Fiji Islands.

10 *iP·Z′* 22 49 24 –
iS·NE 58 54
Δ = 79°. *h* = 400 km. Japan.

10 *iP·Z′E* 23 35 14
eS·NE 35 53
M·NE 36 10s. 5 μ.
Jan Mayen.

11 *iP·Z′N* 17 05 30
ePPP·N 08 52
eS·NE 13.4
Δ = 57°. Aleutian Islands.

12 *iPKP·Z′* 5 53 16
epPKP·Z′ 55 12
Δ = 126°. *h* = 550 km. Fiji Islands.

14 *iPKP·Z′* 16 37 57
ePKS·N 41.4
Δ = 130°. Sandwich Group.

15 *iP·Z′* 13 41 46
Δ = 61°. *h* = 500 km. Sea of Okhotsk.

15 *iP·Z′ZNE* 13 42 20 Z′Z: –.
ipP·Z′Z 42 50
eSKS·N 52 37
e(S)·E 52 40
e(sS)·N 53 26
e·E 54 20
eSS·NE 58 18
Δ = 84°. *h* = 100 km. Peru.

17 *iP·Z′ZNE* 1 51 12 Z′Z: –.
ePP·ZNE 53 11
iS·NE 58 17
i·E 58 33
eSeS·E 2 01 08
eSS·N 01 49
L·NE 06
Δ = 49°. Kodiak Island.

17 *L·NE* 19 05

June

18 *eS·N* 2h17.8m
e(MSS)·N 21.8
L·NE 28
Δ = 49°. Kodiak Island.

18 *ePP·E* 18 13.5
eSKS·NE 19.6
L·NE 51
Δ = 107°. Sunda Strait.

19 *iP·Z′* 2 08 28
eS·NE 18 13
L·NE 37
Δ = 77°. Japan.

19 *L·NE* 22 42

21 *eP·Z′* 2 02 13
ipP·Z′Z 02 41
eSKS·N 12 38
i·E 12 41
eS·NE 13 32
esS·NE 14 56
Δ = 100°. *h* = 150 km. Northern Chile.

21 *eP·Z′* 14 34 13
L·E 55
Δ = 55°. Kamchatka.

21 *L·E* 18 42

25 *eP·Z′* 5 22 32
eL·Z 24.9
No *H*-records. Δ = 10°. Arctic Ocean.

25 *iP·Z′* 23 34 40
Δ = 80°. *h* = 500 km. Japan.

26 *eP·Z′* 12 02 54
Δ = 63°. Kurile Islands.

28 *ePKP·Z′* 5 17 48
e·E 25.4
e·NE 34 38
e·E 47.6
L·NE 6.1
Δ = 153°. Antarctic Ocean.

30 *eP·Z′E* 13 16 00
e·Z′ 16 12
e·N 16 18
e·Z′ 16 35
M·NE 17 7s. 4 μ.
Jan Mayen?

30 *eP·Z′* 13 38 35
iS·NE 48 17
eSS·N 52 53
L·NE 14 02
Δ = 74°. Ethiopia.

30 *L·NE* 15 53

30 *iP·Z′* 22 18.5
L·NE 20

July

1 *iP·Z′* 5h36m27s
L·E 6 08
Δ = 83°. Formosa.

2 *iP·Z′Z* 2 58 26 +
iPcP·Z′ 58 32
iPP·NE 3 02 14
i·Z 02 19
i·NE 05 56
iSKS·NE 09 03
ePS·E 11 06
eSS·NE 16 08
L·NE 3.5
Δ = 94°. Philippine Islands.

3 *e·Z′* 0 32 59

3 *eP·Z′* 0 45 14
L·NE 1 18
Δ = 82°. Belgian Congo.

3 *eP·Z′* 21 27.8
eSKS·NE 38 11
eSS 44.0
L·NE 22 01
Δ = 86°. Philippine Islands.

3 *eP·Z′* 22 05 06
Δ = 83°. Hawaii.

√3 *iP·Z′Z* 22 45 42 Z′: −, Z: +.
e(PKP)·Z′Z 49.0
iPP·Z′Z 50 12 +
eSKS·NE 56 20
eS·N 57 41
L·NE 23 24
M 41 23s. *N*: 12 *μ*, *E*: 30 *μ*.
Δ = 107°. *h* = 100 km. Java.

5 *iP·Z′Z* 14 02 17 −
eS·N 10 24
Δ = 59°. Kamchatka.

6 *ePP·NE* 4 19.6
eSS·NE 35.4
Δ = 112°. New Britain.

√6 *iP·Z′Z* 8 15 04 5s. + 8 *μ*.
ipP·Z′ 15 15
isP·Z′ 15 26
ePP·N 17 31
ePPP·N 18 44
iS·NE 23 37
iScS·E 25 00
i·N 25 11
M·E 36 25s. 20 *μ*.
M·E 43 20s. 25 *μ*.
Δ = 63°. *h* = 100 km. Kurile Islands.

July

6 *eP·Z′* 8h31m57s
Δ = 63°. Kurile Islands.

6 *e·Z′Z* 8 44.0

6 *eP·Z′* 9 05 08 in the time-break.
Δ = 63°. Kurile Islands.

6 *eP·Z′Z* 10 24 38
Δ = 63°. Kurile Islands.

6 *(e)·Z′Z* 11 22 08

√6 *iP·Z′Z* 11 22 54 Z′: +, Z: −.
i·Z′N 23 06
eS·NE 30 44
L·NE 39
M·N 44 15s. 20 *μ*.
M·E 46 14s. 20 *μ*.
Δ = 56°. Nevada.

6 *eP·Z′* 15 49 43
L·NE 54.7
Δ = 11°. Arctic Ocean.

√6 *eP·Z′Z* 22 17 18
i·Z′ 17 21
(i)S·NE 25 08 in the time-break.
L·NE 34
M·NE 37 17s. *N*: 15 *μ*, *E*: 12 *μ*.
Δ = 56°. Nevada.

8 *L·NE* 2 43

8 *e·Z′* 17 08.3

8 *L·NE* 20.1

9 *L·NE* 12 51

9 *eS·E* 15 58.0
L·NE 16 16
Δ = 66°. Japan.

10 *L·NE* 17.0

10 *L·NE* 19 27

10 *iP·Z′Z* 23 06 21 Z′: +.
eS·N 14 05
eScS·N 15 27
Δ = 56°. *h* = 200 km. Hindu Kush.

11 *L·NE* 0 32.6

11 *L·NE* 0 39.8

July

11 *L·NE* 5h22m

12 *eP·Z′* 17 42 45
eS·E 51 21
eScS·E 52 40
L·NE 18 03
Δ = 64°. Kurile Islands.

12 *eP·Z′* 22 05 36
Δ = 64°. Kurile Islands.

13 *ePP·Z* 8 24.1
L·E 8.9
Δ = 111°. New Britain.

15 *L·NE* 0.9

16 *L·NE* 09 44.5

16 *L·NE* 14 18

18 *L·NE* 1 34

18 *iP·Z′Z* 6 44 07 Z: +.
ePcP·Z′ 45 11
eS·E 51.8
L·NE 59
Δ = 55°. Kamchatka.

18 *(i)P·Z′Z* 9 19 09 in the time-break.
iPP·ZN 21 55
iS·NE 28 36
i·NE 28 59
e·E 29 42
L·NE 43
Δ = 73°. Japan.

23 *ePP·N* 4 52 00
eSKS·N 58 44
L·N 5 24
Δ = 107°. Chile.

No recording July 23—Aug. 1.

August

3 *eP·Z* 18 25 43
ePP·ZE 27 13
eS·NE 31 39
eSS·NE 34.3
L·NE 38
Δ = 39°. Aegean Sea.

4 *L·NE* 14 18

4 *L·NE* 23 42

5 *L·E* 5 59

August

5 *eP·Z′Z* 8h59m36s Z: +.
ePP·E 9 01 43
e·ZNE 03 18
iS·NE 07 36
eSS·NE 11.3
eSSS·E 13.1
L·NE 17
Δ = 57°. Aleutian Islands.

6 *L·NE* 0 42

6 *iP·Z′* 11 41 21
Δ = 41°. Greece.

6 *iP·Z′* 16 31 12
eS·NE 40 34
eScS·NE 41 27
L·NE 53
Δ = 72°. Mid Atlantic Ocean.

9 *iP·Z′* 19 26 31 +
ipP·Z′ 26 39 −
iS·NE 34 21
isS·E 34 55
i·E 35 14
iScS·E 36 21
L·NE 43
Δ = 57°. *h* = 60 km. Kamchatka.

10 *i·Z′* 22 49 46
i·Z′ 49 53
i·Z′ 49 58
Near quake.

13 *ePS·E* 0 10 08
ePPS·E 11 08
L·NE 32
Δ = 103°. Borneo.

13 *L·NE* 1 06

14 *L·NE* 2 10

14 *eSKS·N* 23 21 21
eSKKS·N 22 20
L·NE 23.9
Δ = 110°. Molucca Islands.

17 *iP·Z′* 7 13 28
iL·Z′ 13 40
Near quake.

August

18	*iPKP·Z′*	5h01m14s	
	epPKP·Z′	01 59	
	ePP·NE	03 46	
	epPP·Z′	04 16	
	i·NE	05 16	
	iSKS·NE	08 12	
	iSKKS·NE	10 04	
	ePSKS·NE	13 56	
	eSS·E	21 27	

$\Delta = 131°$. $h = 150$ km. Tonga Islands.

Jan Mayen Earthquakes.

The first column gives P (most often from Z'), the second column S (most often from N or E), and the last column period and amplitude for M from N or E. Z was out of order.

20	17h	*e* 29m13s	*e* 29m40s	6s. 6 μ	
	18	*e* 50 01	*e* 50 18	6 3	
	19	*e* 16 50	*i* 17 26	6 3	
	19	*e* 22 06	*e* 22 34	6 20	
	20	*e* 10 28	*e* 11 00		
	20	*e* 23 51	*e* 24.3		
	20	*i* 24 48	*i* 25 17	6 30	
	20			38m: 6 12	
	20			43 5 8	
	20			48 5 7	
	21	*e* 02.1	*e* 02 38	5 2	
	21	*i* 05 06	*i* 05 42	6 10	
	21	*e* 16 29	*e* 16 56		
	21	*e* 19 38	*e* 20 14	5 6	
	21	*i* 24 20		5 4	
	21	*e* 35 46	*e* 36 18		
	21	*e* 47 56	*i* 48 26	5 15	
	22	*e* 03 25	*i* 03 58		
	22	*i* 09 44	*i* 10 12	6 24	
	22	*e* 20 26		6 2	
	22	*e* 30 06	*e* 30 36	6 1	
	22	*e* 36 49			
	22		*e* 39.6	5 5	
	22	*e* 47 14	*e* 47 50	5 2	
	22	*e* 51 39	*e* 52 01	6 4	
	22	*i* 59 51	*i* 60 14	5 24	
	23	*e* 33 53			
	23	*e* 35 56	*i* 36 41		
	23	*e* 39 11	*e* 39 43	4 3	
	23	*e* 48 16			
	23	*e* 51 16	*e* 51 43		
	23	*e* 58 03	*e* 58.6		
21	0	*e* 03 04	*i* 03 32	6 3	
	0	*e* 11 05	*e* 11 31		
	0	*i* 20 27	*i* 21 00	6 4	
	0	*e* 26 09	*i* 26 41	6 25	
	0			54 6 4	
	0		*i* 59 47	6 4	
	1	*e* 10 01			

August

21	1h	*e* 10m56s	*i* 11m26s	5s. 3 μ	
	1	*i* 20 21	*i* 20 41	6 3	
	1	*e* 36 16	*e* 36 51	5 4	
	3	*e* 02 26	*e* 03 01	7 2	
	4	*e* 01 42			
	4	*i* 13 51	*e* 14 21	6 10	
	5	*e* 14 01	*i* 14 31	5 2	
	6	*e* 17 51	*e* 18 21		
	6	*e* 20 09	*e* 20 39	6 5	
	6	*e* 42 10	*i* 42 41	6 2	
	6	*e* 59 56	*e* 60 27	6 3	
	7	*i* 20 25		6 40	
	7	*i* 37 41		7 3	
	7	*e* 53 59		6 1	
	8	*e* 06 05			
	8	*e* 28 46			
	8	*e* 43 25		6 2	
	8	*e* 51 06	*e* 51 36	6 7	
	9	*e* 27 00			
	9	*i* 49 23		5 3	
	9	*e* 56 42		5 2	
	10	*e* 22 44		5 1	
	10	*e* 48 21	*e* 48 51	5 6	
	11	*e* 31 25			
	11	*e* 40 24	*e* 40 48	5 2	
	12	*e* 10 41	*e* 11 11	5 1	
	12	*e* 16 36			
	12	*e* 30 36			
	12	*e* 36 34			
	12	*e* 51 02	*e* 51 32	5 6	
	12	*e* 58 55			
	13	*i* 05 41	*i* 06 09	5 24	
	13	*e* 50 59	*e* 51 28	6 2	
	14	*e* 01 02	*i* 01 26	6 8	
	15	*i* 57 58			
	16	*e* 53 11			
	17	*i* 00 30			
	17	*i* 12 01	*e* 12 28	6 4	
	17	*i* 40 42	*e* 41 11	6 24	
	18	*e* 45 37			
	19	*e* 08 22			
	20		*e* 35 28	7 5	
	20	*e* 45 11	*e* 45 41	6 3	
	21	*e* 23 08	*i* 23 46	5 3	
	21	*e* 31 55		6 1	
	21	*e* 47 51	*e* 48 11		
	22	*e* 08 23	*e* 09 06	6 1	
	22	*i* 51 31	*i* 52 08	6 40	
22	0	*e* 19 53	*e* 20 13	5 2	
	1	*i* 07 26	*e* 07 56	6 4	
	2	*i* 52 18	*i* 52 48	6 25	

No recording 4h35m—20h30m.

	23	*e* 19 56	*e* 20 31	5 2	
	23	*e* 41 23	*e* 41 50		
	23	*e* 46 53			
	23	*i* 52 46	*i* 53 16	6 7	

August

23	0h	*e* 53m26s			
	1	*e* 45.0		6s. 1 μ	
	2	*e* 05 16	*e* 05m47s	5 1	
	2	*e* 23 48			
	2	*e* 30 45			
	3	*e* 02 15			
	3	*e* 37 21	*e* 37 42	6 1	
	3	*e* 44 07			
	4	*e* 18.1	*e* 18 31	6 1	
	5	*i* 17 12	*i* 17 44	6 1	
	5	*e* 41 53	*i* 42 29	6 1	
	7	*i* 42 18		6 1	
	9	*e* 17 43		7 1	
	9	*i* 33 17	*i* 33 47	6 14	
	11	*e* 06.2			
	11	*i* 13 26			
	11	*e* 16.3			
	11	*e* 27 03	*i* 27 24	7 2	
	11	*e* 30.9			
	11	*i* 39 54	*i* 40 24	5 15	
	11	*e* 47.4			
	12	*e* 06.1		6 2	
	12	*e* 59 31			
	13	*e* 49 31			
	14	*i* 11 43	*e* 12 11	5 3	
	14	*e* 50 47	*e* 51 22	5 2	
	21	*e* 24 49		5 1	
	23	*e* 52 18			
24	1	*e* 58 01	*e* 58 34		
	2	*e* 00.1			

124 shocks from Jan Mayen.

24	*iP·Z′E*	6h01m07s	
	iS·E	09 05	
	eSS·E	12 45	

Z' and E only. $\Delta = 58°$. Nevada, U.S.A.

24	*iP·Z′*	6 19 46	
	i·Z′	19 48	
	M	21	Ampl.: 9 cm on the record.

Jan Mayen.

24	*e·Z′*	10 15 50	
	e·Z′	12 27.6	
25	*e·Z′*	4 55 51	M: 6s. 2 μ.
	i·Z′	7 02 31	
	i·Z′	02 46	
	e·Z′	14 34.4	
	i·Z′	34 49	
	e·Z′	15 36 47	
	e·Z′	18 43 30	

7 minor shocks from Jan Mayen.

August.

25	*eE*	20h28m01s	M: 6s. 2 μ.
	eZ′	23 56 19	
26	*iZ′*	3 14 47	
	eZ′E	3 40 54	
	iZ′	5 32 33	
	eE	5 54.0	
	eE	60 35	
	iZ′	6 01 11	
	eZ′	6 08 38	
	eE	6 30 13	
	eZ′E	6 40 49	
	eZ′E	7 01 25	
	iZ′N	01 52	
	iZ′	16 59 19	
	eZ′	19 39.9	
	eZ′	20 55 40	
	eN	21 10.3	
	eZ′	21 19 05	
	eN	19 23	
	eE	21 31 50	
	eE	32 23	
	eZ′	21 48 47	
	eE	21 53.6	
	eZ′	54 11	
	eZ′	22 05.1	
27	*eZ′*	11 00 58	

21 minor shocks from Jan Mayen.

27	*iP·Z′N*	11 07 30		
	iSKS·NE	17 53		
	iS·N	18 13		
	L·NE	42		
	M	45	20s. 4 μ.	

$\Delta = 85°$. Bonin Islands.

27	*eZ′*	11 59 12	
	eZ′	12 08 17	
	eN	08 52	
	iZ′NE	12 22 06	M: 6s. 35 μ.
	eE	16 37 54	
	eZ′	17 49 17	
	eZ′N	49 53	
	e·E	18 55 49	
	e·N	56.3	

6 shocks from Jan Mayen.

28	*eZ′*	2 38.2	

Jan Mayen?

28	*eP·Z′*	9 52 51	
	iS·Z′	53 19	
	M·NE	54	6s. 3 μ.

Jan Mayen.

August

28 $iP \cdot Z'$ $10^h12^m49^s$
$\Delta = 72°$. Japan.

28 $eP \cdot Z'$ 10 40 20
$eS \cdot Z'$ 40 57
$M \cdot NE$ 42 5^s. $3\,\mu$.
Jan Mayen.

28 $eP \cdot Z'$ 12 58 31
$eS \cdot Z'$ 59 05
$M \cdot NE$ 13 00 5^s. $3\,\mu$.
Jan Mayen.

28 $eP \cdot Z'$ 20 10 30
$eS \cdot Z'$ 20 10 58
$M \cdot NE$ 11 7^s. $1\,\mu$.

28 $iPKP \cdot Z'$ 23 23 40
$\Delta = 132°$. Drake Street.

29 $L \cdot NE$ 4 11

30 $iP \cdot Z'$ 8 08 05
$ePcP \cdot Z'$ 08 38
$L \cdot NE$ 32
$\Delta = 66°$. Kurile Islands.

31 eZ' 3 39 12

31 $eP \cdot Z'$ 22 30 11
$eS \cdot NE$ 37 58
$iSS \cdot E$ 41 51
$L \cdot NE$ 47
$M \cdot NE$ 51 15^s. N: $18\,\mu$, E: $14\,\mu$.
$\Delta = 56°$. Nevada, U.S.A.

September

1 $eP \cdot Z'$ 5 28 23
$eS \cdot N$ 36 14
$L \cdot NE$ 45
$\Delta = 56°$. Nevada, U.S.A.

2 $e \cdot Z'$ 14 26 04
$e \cdot N$ 26 31
$(L) \cdot N$ 27

4 $i \cdot Z'$ 1 59 59

4 $ePP \cdot Z'$ 3 47 47
$eSS \cdot E$ 4 03 09
$L \cdot NE$ 28
$\Delta = 112°$. New Guinea.

4 $eP \cdot Z'$ 6 54 53
$\Delta = 69°$. Nepal.

September

4 $iP \cdot Z'$ $6^h56^m22^s$
$\Delta = 69°$. Nepal.

4 $eP \cdot Z'$ 9 06 07 in the time-break.
$e \cdot E$ 16 47
$iPS \cdot E$ 17 13
$L \cdot NE$ 38
$\Delta = 85°$. Formosa.

4 $e \cdot Z'$ 13 27 47
$e \cdot N$ 28.2

4 $L \cdot NE$ 14 11

5 $ePKP \cdot Z$ 8 04 46
$ePP \cdot N$ 06 46
$ePS \cdot E$ 16 44
$ePPP \cdot N$ 21 26
$iSS \cdot E$ 24 03
$L \cdot NE$ 44
$\Delta = 127°$. Fiji Islands region.

6 $e(SKS) \cdot NE$ 17 10 13
$L \cdot NE$ 32
$\Delta = 85°$. Philippine Islands.

6 $iP \cdot Z'ZN$ 18 40 44
$ePP \cdot N$ 42 56
$ePPP \cdot N$ 44 34
$iS \cdot NE$ 48 49
$iScS \cdot NE$ 50 52
$i \cdot E$ 55 51
$L \cdot NE$ 19 00
$\Delta = 58°$. Kamchatka.

7 $eP \cdot Z'$ 0 24 27
$eSKS \cdot N$ 34 48
$\Delta = 85°$. Philippine Islands.

7 $eSKS \cdot NE$ 0 31 26
$\Delta = 85°$. Philippine Islands.

7 $iP \cdot Z'Z$ 0 47 52 +
$eSKS \cdot NE$ 58 31
$\Delta = 85°$. Philippine Islands.

7 $e \cdot Z'$ 9 30 34

9 $eP \cdot Z'$ 1 11 47
$iP \cdot Z'$ 11 50
$ePP \cdot NE$ 13 05
$iPPP \cdot N$ 13 19
$iS \cdot NE$ 17 37
$eSS \cdot NE$ 19 50
$L \cdot NE$ 22.5
$M \cdot NE$ 25 20^s. N: $160\,\mu$, E: $100\,\mu$.
$\Delta = 37°$. Orléansville, Algeria.

September

9 $ePPP \cdot NE$ $9^h37.4^m$
$L \cdot NE$ 47
$\Delta = 37°$. Orléansville.

9 $eP \cdot Z'$ 18 17 41
$eS \cdot N$ 19.7
$M \cdot E$ 22.0
$\Delta = 10°$. SW of Svalbard.

9 $eP \cdot Z'$ 18 29 45
$eS \cdot N$ 31.6
$L \cdot NE$ 32.2
$\Delta = 10°$. SW of Svalbard.

10 $eP \cdot Z'$ 5 51 12
$i \cdot Z'$ 51 20
$iPP \cdot NE$ 52 40
$i \cdot E$ 59 40
$L \cdot NE$ 6 02
$M \cdot NE$ 07 13^s. N: $15\,\mu$, E: $20\,\mu$.
$\Delta = 37°$. Orléansville.

12 $iP \cdot Z'$ 7 54 55
$eS \cdot E$ 8 03 58
$eScS \cdot N$ 04 58
$L \cdot E$ 16
$\Delta = 68°$. Japan.

13 $iPKP \cdot Z'$ 2 28 52 +
$ePP \cdot E$ 30 35
$e \cdot N$ 30 49
$ipPP \cdot N$ 31 38
$iPKS \cdot NE$ 32 15
$e \cdot E$ 38 49
$iSS \cdot NE$ 47 50
$isSS \cdot E$ 49 01
$e \cdot E$ 50 30
$\Delta = 128°$. $h = 150$ km. Tonga Islands.

13 $eP \cdot Z'$ 18 25 17
$eSKS \cdot N$ 35 37
$\Delta = 85°$. Philippine Islands.

13 $iP \cdot Z'$ 18 31 57
$eSKS \cdot N$ 42 23
$L \cdot NE$ 19 05
$\Delta = 85°$. Philippine Islands.

14 $eP \cdot Z'$ 1 00 59
$L \cdot NE$ 36
$\Delta = 85°$. Philippine Islands.

14 $L \cdot NE$ 14 01

15 $L \cdot NE$ 13 54

September

15 $iPKP \cdot Z'$ $18^h14^m10^s$
$ipPKP \cdot Z'$ 16 07 +
$ePP \cdot E$ 16 23
$iPKS \cdot N$ 17 30
$i \cdot E$ 31 25
$\Delta = 125°$. $h = 600$ km. Fiji Islands.

17 $iPKP \cdot Z'$ 11 22 00 –
$epPKP \cdot Z'$ 23 10
$iPP \cdot Z'$ 24 01
$i \cdot NE$ 24 09
$ipPP \cdot N$ 25 08
$isPP \cdot N$ 25 28
$i \cdot E$ 25 37
$i \cdot NE$ 26 50
$eSKS \cdot N$ 28 56
$isSKS \cdot NE$ 30 44
$i \cdot E$ 32 06
$i \cdot N$ 34 13
$e \cdot E$ 34 20
$i \cdot N$ 37 16
$iSS \cdot NE$ 41 08
$esSS \cdot E$ 42 50
$i \cdot E$ 43 44
$i \cdot E$ 45 27
$\Delta = 129°$. $h = 250$ km. Tonga Islands region.

20 $eS \cdot E$ 0 18 07
$L \cdot E$ 20
$\Delta = 19°$. North Atlantic Ocean.

20 $eSKS \cdot N$ 1 04 34
$L \cdot NE$ 38
$\Delta = 107°$. Celebes.

23 $iP \cdot Z'Z$ 21 53 51 +
$eS \cdot NE$ 22 02 13
$iPS \cdot E$ 02 23
$iScS \cdot E$ 03 48
$L \cdot NE$ 13
$\Delta = 61°$. Kurile Islands region.

25 $L \cdot NE$ 12 45

October

1	$ePKP \cdot Z'$	$3^h14^m35^s$		
	$iSS \cdot NE$	32 33		
	$iSSS \cdot NE$	36 52		
	$L \cdot N$	52		
	$\Delta = 120°$. Santa Cruz Islands.			
1	$L \cdot NE$	7 52		
3	$eSS \cdot NE$	3 24 19		
	$eSSS \cdot NE$	28.3		
	$L \cdot NE$	46		
	$\Delta = 119°$. Santa Cruz Islands.			
3	$iP \cdot Z'ZNE$	11 26 50	Z: 5^s. $-8\,\mu$.	
	$ipP \cdot Z'Z$	27 14		
	$iPP \cdot ZNE$	28 44		
	$iS \cdot NE$	33 19		
	$isS \cdot E$	33 49		
	$iSS \cdot NE$	36 46		
	$L \cdot NE$	40		
	$\Delta = 44°$. $h = 100$ km. Alaska.			
5	$eP \cdot Z'$	4 30 01		
	$\Delta = 75°$. Japan.			
6	$L \cdot NE$	8 53		
8	$iP \cdot Z'$	10 56 47		
	$\Delta = 65°$. Kurile Islands.			
8	$e \cdot Z'$	17 30 28		
11	$i \cdot Z'$	23 52 47	$0^s.5$.	
	$i \cdot Z'$	52 53	1^s.	
	$i \cdot Z'$	52 56	2^s.	
	Near shock.			
14	$ePKP \cdot Z'$	1 53 31		
	$ePP \cdot Z'$	54 43		
	$ePS \cdot N$	2 04 21		
	$\Delta = 113°$. Banda Sea.			
16	$iPn \cdot Z'$	0 28 50		
	$iP^* \cdot Z'$	28 53		
	$iPg \cdot Z'$	28 58		
	$i(S) \cdot Z'$	29 25		
	$M \cdot ZNE$	30	Z: $6^s.50\mu$, N: $8^s.30\mu$, E: $6^s.30\mu$.	
	$\Delta = 2^1/_2°$. Jan Mayen.			
16	$eP \cdot Z'$	1 03 00		
	$e(S) \cdot Z'$	03 33		
	$M \cdot ZNE$	04	Z: $5^s.13\mu$, N: $8^s.6\mu$, E: $7^s.10\mu$.	
	$\Delta = 2^1/_2°$. Jan Mayen.			
16	$e \cdot Z'$	1 30 43		
	Jan Mayen?			

October

16	$eP \cdot Z'$	$3^h02^m27^s$	
	$iS \cdot Z'$	03 06	
	$M \cdot ZNE$	04	Z: $8^s.10\mu$, N: $10^s.6\mu$, E: $8^s.6\mu$.
	Jan Mayen?		
16	$eP \cdot Z'$	20 16 14	
	$i \cdot Z'$	16 38	
	$M \cdot ZNE$	17	Z: $7^s.30\mu$, N: $8^s.14\mu$, E: $6^s.18\mu$.
	$\Delta = 2^1/_2°$. Jan Mayen.		
17	$eS \cdot N$	23 16 14	
	$L \cdot N$	29	
	$\Delta = 62°$. Lower California.		
19	$eP \cdot Z'$	17 51 29	in strong microseisms.
	$\Delta = 15°$. North Atlantic Ocean.		
20	$iP \cdot Z'$	23 53 48	–
	$\Delta = 78°$. Japan.		
21	$L \cdot E$	1.5	in strong microseisms.
21	$L \cdot E$	7 27	in strong microseisms.
22	$i \cdot Z'$	20 37 27	
	Very short period. Seismic?		
24	$eP \cdot Z'$	9 54 30	
	$ePPP \cdot N$	58 28	
	$eS \cdot N$	10 02 58	
	$eSS \cdot N$	07 13	
	$eSSS \cdot N$	09.6	
	$L \cdot N$	14.4	
	$\Delta = 63°$. Lower California.		
25	$i \cdot Z'$	5 30 19	
25	$i \cdot Z'$	5 32 41	
26	$e \cdot Z'$	4 50 41	
26	$e \cdot Z'$	9 19 12	
28	$i \cdot Z'$	11 17 41	
	$i \cdot Z'$	17 46	
29	$i \cdot Z'$	11 44 41	
	$i \cdot Z'$	44 46	
29	$e \cdot Z'$	20 12 58	
29	$iP \cdot Z'$	21 26 44	very small.
	$\Delta = 6°$. SW of Iceland.		
30	$e \cdot Z'$	15 48 53	

November

1	$L \cdot N$	0^h22^m	
1	$iP \cdot Z'$	21 07 39	very small.
	$L \cdot NE$	33	
	$\Delta = 70°$. Guatemala.		
2	$ePKP \cdot Z'$	8 42 58	
	$ePP \cdot NE$	43 48	
	$ePPP \cdot ZE$	46 24	
	$eSKS \cdot NE$	49 46	
	$eSKKS \cdot E$	50 52	
	$ePS \cdot ZNE$	53 19	
	$ePPS \cdot NE$	54 22	
	$eSS \cdot NE$	59 34	
	$eSSS \cdot NE$	9 03 47	
	$L \cdot NE$	18	
	$\Delta = 113°$. Sunda Islands.		
2	$e \cdot Z'$	10 36 21	
	$e \cdot Z'$	36 40	
5	$iP \cdot Z'$	21 56 34	
	$\Delta = 57°$. Kamchatka.		
6	$eP \cdot Z'$	13 19 44	
	$\Delta = 83°$. Ryukyu Islands.		
8	$i \cdot Z'$	4 56 42	
12	$eP \cdot Z'$	12 37 09	
	$eSS \cdot E$	49 52	
	$eSSS \cdot N$	52 31	
	$L \cdot NE$	56.5	
	$M \cdot NE$	58	30^s. N: $30\,\mu$, E: $15\,\mu$.
	$M \cdot NE$	13 00	20^s. N: $30\,\mu$, E: $15\,\mu$.
	$M \cdot NE$	02	15^s. N: $30\,\mu$, E: $15\,\mu$.
	$\Delta = 62°$. Lower California.		
15	$eP \cdot Z'$	11 42 10	
	$\Delta = 75°$. Japan.		
17	$iP \cdot Z'$	17 30 16	
	$\Delta = 90°$. $h = 600$ km. Mariana Islands.		
18	$L \cdot NE$	5 51	
18	$iP \cdot Z'$	20 56 11	+
	$\Delta = 70°$. Japan.		
19	$iP \cdot Z'$	6 06 04	–
	$\Delta = 67°$. $h = 600$ km. Japan.		
21	$L \cdot NE$	8 50	
23	$iP \cdot Z'$	10 09 30	
	$\Delta = 57°$. Kamchatka.		

November

23	$eP \cdot Z'$	$10^h27^m25^s$	
	$\Delta = 57°$. Kamchatka.		
23	$eP \cdot Z'$	13 06 58	
	$\Delta = 38°$. Mediterranean Sea.		
23	$eP \cdot Z'$	21 22 46	
	$ipP \cdot Z'$	23 00	
	$L \cdot NE$	42	
	$\Delta = 58°$. $h = 60$ km. Kamchatka.		
25	$iP \cdot Z'$	11 26 19	–
	$iS \cdot N$	34 10	
	$i \cdot E$	34 20	
	$SS \cdot E$	38 15	
	$M \cdot N$	45	20^s. $120\,\mu$.
25	$iP \cdot Z'$	12 15 57	+
	$\Delta = 66°$. Japan.		
25	$eP \cdot Z'$	21 00 07	
	$\Delta = 70°$. Mexico.		
25	$iPKP \cdot Z'$	21 51 42	–
	$iSKP \cdot Z'$	54 00	+
	$(i)pPKP \cdot Z'$	54 07	in the time-break.
	$\Delta = 130°$. $h = 650$ km. Fiji Islands.		
30	$L \cdot NE$	20.5	

December

1	$i \cdot Z'$	2 50 11	
	$i \cdot Z'$	50 15	
	Very short period.		
1	$i \cdot Z'$	9 51 22	very short period.
1	$i \cdot Z'$	12 56 42	
	$i \cdot Z'$	56 46	
	Very short period.		
3	$L \cdot NE$	9 16	
4	$ePKP \cdot Z'$	7 19 08	very small.
	$ePS \cdot N$	30.0	
	$L \cdot NE$	53	
	$\Delta = 114°$. New Britain.		
4	$iP \cdot Z'$	18 41 49	+
	$eS \cdot NE$	50 26	
	$iPS \cdot NE$	50 59	
	$iSeS \cdot N$	51 39	
	$L \cdot NE$	19 02	
	$\Delta = 64°$. Trinidad.		

Scoresbysund 1954

December				
7	$iP \cdot Z'$	$6^h30^m56^s$		+
	$\Delta = 53°$. Alaska.			
9	$eP \cdot Z'$	14	26	39 very small.
	$\Delta = 94°$. Peru.			
10	$eP \cdot Z'$	13	10	58
	$L \cdot NE$		30	
	$\Delta = 63°$. Jamaica.			
11	$e \cdot Z'$	4	02	25
11	$i \cdot Z'$	5	43	25
11	$iP \cdot Z'ZNE$	13	01	30 Z: 6^s. + 14 μ.
	$iS \cdot NE$		05	04
	$M \cdot NE$		07.5	10^s. N: 90 μ, E: 110 μ.
	$\Delta = 20°$. North Atlantic Ocean.			
16	$eP \cdot Z'$	11	16	48
	$i \cdot Z'$		16	51
	$iS \cdot NE$		24	36
	$iScS \cdot N$		26	41
	$L \cdot NE$		34	
	M		38	17^s. N: 200 μ, E: 175 μ.
	$\Delta = 56°$. Nevada.			
16	$eP \cdot Z'$	11	21	05
	$i \cdot Z'$		21	16
	$\Delta = 56°$. Nevada. Conf. previous shock.			
21	$iP \cdot Z'$	20	06	04
	$iS \cdot N$		13	51
	$i \cdot E$		14	08
	$eSS \cdot NE$		17.7	
	$L \cdot NE$		24	
	$\Delta = 56°$. California.			
December				
22	$e \cdot Z'$	$12^h37^m21^s$		
	$e \cdot Z'$		38	25
23	$iP \cdot Z'$	16	34	52
	$\Delta = 40°$. Greece.			
23	$e \cdot Z'$	19	03	00
26	$eP \cdot Z'$	3	52	50 doubtful.
	$\Delta = 78°$. Japan.			
26	$iP \cdot Z'$	3	53	44 +
	$\Delta = 78°$. Japan.			
28	$eSKS \cdot N$	1	26	18
	$eSKKS \cdot N$		27	38
	$ePS \cdot NE$		29	51
	$L \cdot NE$		55	
	$\Delta = 114°$. New Britain.			
30	$e \cdot Z'$	8	33	31
30	$eP \cdot Z'$	11	13	48
	$i \cdot Z'$		13	54
	$\Delta = 41°$. Greece.			
30	$iP \cdot Z'$	11	41	57 +
	$L \cdot NE$		58	
	$\Delta = 54°$. Aleutian Islands.			

April 1958. HENRY JENSEN

PRINTED BY BIANCO LUNO A/S · COPENHAGEN