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GEODÆTISK INSTITUT

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Bulletin of the seismological station

KØBENHAVN

$\varphi = 55°41'$ N. $\lambda = 12°26'$ E. $h = 13$ m.

Lithologic foundation: chalk

Instruments

Galitzin-Wilip. N, E, and Z. $T_p = T_g = 12^1/_2$ sec. $\mu^2 = 0$, $\frac{Ak}{\pi l} = 260$ sec.$^{-1}$ or V_{max} = abt. 1000.

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

Wiechert 1000 kg. N and E. $T = 8^1/_2$ sec, $v = 6{:}1$. $\varrho = 0.3$ mm, $V_0 = 210$.

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

Seismological Readings

Phases are indicated by the symbols used in ISS. Times are given in GMT. Positions of epicenters are most often 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.

Microseismic Readings

For every group of figures the first one indicates the character of the microseisms. 1 is group microseisms, 2 is continuous microseisms, 3 is irregular or mixed microseisms. Thereafter the single ground amplitude in microns is given, and at last the period of a full oscillation is stated. All readings are due to the Galitzin instruments.

July

1	*eP·Z′Z*	2h39m28s			
	epP·Z′Z	41 23			
	iSKS·NE	48 59			
	iS·N	49 13			
	iSP·ZN	50 11			
	isS·NE	52 37			
	eSS·NE	55.1			
	$\Delta = 85°$. $h = 550$ km. Bonin Islands.				
2	*ePKP·Z*	11 52 46			
	$\Delta = 143°$. $h = 650$ km. Fiji Islands.				
3	*iPKP·Z*	18 14 39			
	ePKS·NE	18 14			
	L·NE	19.0			
	$\Delta = 138°$. New Hebrides Islands.				
3	*iPKP·Z′*	18 15 22			
	iPKS·NE	18 59			
	Repetition.				
4	*iPKP·Z′Z*	5 13 54			
	$\Delta = 148°$. $h = 100$ km. Tonga Islands.				
4	*eP·ZNE*	7 44 49			
	L·ZNE	49.6			
	$\Delta = 17°$. Arctic Ocean.				
6	*iP·Z*	9 23 22			
	epP·Z	25 35			
	ePP·ZN	27 42			
	iSKS·NE	33 03			
	iSKKS·NE	33 48			
	eS·N	34 16			
	eSP·ZNE	35 54			
	$\Delta = 103°$. $h = 600$ km. Argentina.				
6	*eP·Z*	9 36 33			
	epP·Z	38 43			
	ePP·Z′Z	40 51			
	epPP·Z	42 52			
	iSKS·NE	46 15			
	iSKKS·NE	46 57			
	eS·N	47 26			
	e·N	48 32			
	eSP·ZNE	48 58			
	iPS·E	50 26			
	Repetition.				
8	*eP·Z*	2 08 45			
	eS·NE	12 35			
	L·NE	15.5			
	$\Delta = 21°$. Off Eastcoast of Greenland.				
8	*iP·Z′*	4 12 02			
	$\Delta = 73°$. $h = 100$ km. Kurile Islands.				
8	*i·Z′*	22 31 27	–		

July

9	*ipP·Z′Z*	16h19m39s	
	ePP·ZE	23 12	
	iSKS·NE	29 39	
	eS·NE	30 34	
	L·NE	53	
	$\Delta = 102°$. $h = 100$ km. Chile-Bolivia border.		
10	*iPKP·Z′*	2 33 20	–
	$\Delta = 152°$. Kermadec Islands.		
10	*L·NE*	13 08	
10	*L·ZNE*	18 03	
11	*ePP·Z*	12 20 13	
	eSKS·N	26 50	
	e·NE	28 10	
	ePS·E	30 02	
	eSS·NE	35 38	
	L·NE	52	
	$\Delta = 109°$. Indian Ocean.		
11	*L·NE*	19 05	
11	*L·NE*	20 27	Very irregular waves.
12	*eP·Z′*	19 29 42	
	e·Z	29 45	
	L·NE	44	
	$\Delta = 41°$. Kirghiz SSR.		
13	*eP·Z′Z*	12 40 17	
	eS·E	49 43	
	eSS·E	54.3	
	L·NE	13.1	
	$\Delta = 73°$. Aleutian Islands.		
16	*eP·Z*	15 29 06	
	eS·NE	38 40	
	L·E	53	extremely small.
	$\Delta = 74°$. Aleutian Islands.		
18	*iP·Z′ZNE*	20 07 31	Z: 8s, $-10\,\mu$.
	iPcP·ZE	07 36	Z: 9s, $+10\,\mu$.
	ePP·ZE	11 01	
	iSKS·NE	17 46	8s. N: $+3\,\mu$, E: $+5\,\mu$.
	iS·NE	17 58	10s. N: $+20\,\mu$, E: $-4\,\mu$.
	L·NE	36	
	$\Delta = 87°$. $h = 200$ km. Philippine Islands.		
19	*L·NE*	4 33	
19	*eP·Z′Z*	15 19 29	Z: +
	epP·Z	20 23	
	i·Z′	20 34	
	iPP·Z′ZNE	23 31	
	ipPP·ZNE	24 17	
	iSKS·NE	29 49	10s. N: $8\,\mu$, E: $30\,\mu$.
	iS·NE	30 40	
	$\Delta = 99°$. $h = 200$ km. Peru.		

July

20 *eP·Z′* 2h53m59s
epP·Z′Z 55 48
epPP·Z′ZE 59 31
iSKS·NE 3 03 48
iS·N 04 50
iSP·ZE 06 17
ePS·E 07 26
eSS·NE 11.8
Δ = 100°. *h* = 500 km. Java Sea.

20 *iPKP·Z′Z* 17 12 20
Δ = 147°. *h* = 600 km. Fiji Islands.

21 *ePKP·Z* 8 02 35
ePP·Z 05.1
ePKS·NE 06 08
Δ = 135°. New Hebrides Islands.

21 *(e)P·Z* 9 29 (02) in the time break.
eS·NE 38 06
eScS·E 39 02
e·NE 39 26
L·NE 52
Δ = 69°. Dominican Republic.

21 *(e)P·ZE* 12 42 (02) in the time break.
ePP·ZNE 45.4
eSKS·NE 52 32
eS·E 52 54
ePS·N 53 22
eSS·NE 58.3
L·NE 13 15
Δ = 88°. Mexico.

22 *iP·Z′ZNE* 19 34 10 *Z′Z* −
epP·ZN 36 19
isP·ZN 37 21 *Z* +
iS·ZNE 42 15 *Z* +, *N* +, *E* −
esS·NE 45.8
eSS·NE 46 51
Δ = 67°. *h* = 650 km. Sea of Okhotsk.

22 *ePKP·Z′Z* 23 21 20
ePP·ZNE 22 39
eSKS·NE 28 15
e·NE 28 34
eSKSP·NE 32.3
ePS·NE 32 47
L·NE 24 01
Δ = 121°. New Britain.

23 *ePKP·Z′Z* 15 16 24
e·Z′Z 16 27
epPKP·Z 16 53
L·NE 16 08
Δ = 148°. Deeper than normal. Tonga Islands.

July

24 *eP·Z′Z* 1h35m07
eS·NE 44 59
L·NE 58
Δ = 77°. California.

25 *L·NE* 20 00

25 *iP·Z′* 21 32 23 –
Δ = 77°. *h* = 100 km. Japan.

26 *eP·Z′Z* 17 11 12
eS·NE 14 31
L·NE 16.6
Δ = 18°. Turkey.

29 *L·NE* 10 19

31 *iP·Z′Z* 20 00 54
ePP·ZE 02 26
eS·NE 07 10
eSS·NE 10.0
L·NE 13
Δ = 42°. Tadzhik S.S.R.

August

5 *L·NE* 6 07

7 *eP·ZN* 10 54 33
eS·NE 11 03 34
L·NE 16
Δ = 68°. Kodiak Island.

7 *iP·Z′ZN* 21 56 26
eS·E 22 05 28
L·NE 19
Δ = 68°. Kodiak Island.

8 *eP·Z* 0 58 41
eS·NE 1 07 28
eScS·E 08 30
L·NE 21
Δ = 67°. Kamchatka.

8 *L·NE* 14 07

9 *eS·E* 5 09.2
eSS·E 13.6
L·NE 24
Δ = 71°. Indian Ocean.

9 *L·NE* 21 32

10 *L·NE* 0 49

10 *L·NE* 23 38

August				
11	*eP·ZN*	18h19m19s		
	e·Z	23 01		
	L·NE	24		
	$\Delta = 18°$. Jan Mayen.			
11	*L·NE*	22 53		
11	*L·NE*	23 37		
12	*L·NE*	1 18		
12	*L·NE*	4 43		
12	*ePKP·Z*	10 18 00		
	ePKS·ZE	21 45		
	eSKS·E	25 21		
	eSS·E	39 25		
	L·NE	11 04		
	$\Delta = 141°$. Fiji Islands.			
13	*eP·Z'*	0 39 05		
	eS·E	43.9		
	L·NE	50		
	$\Delta = 29°$. Azerbeidjan SSR.			
15	*iP·Z'ZNE*	9 09 23	Z: 10s, + 10 μ, E: –	
	i·ZNE	09 45	Z: –, N: +	
	iPP·ZNE	12 34		
	iS·NE	19 37	Wichert.	
	iScS·NE	19 55	„	
	L·NE	40		
	M·NE	42	20s. N: 300 μ, E: 200 μ.	
	$\Delta = 81°$. Formosa.			
16	*ePKP·Z*	1 11.1		
	ePP·Z	14.2		
	L·NE	2 01		
	$\Delta = 141°$. Loyalty Islands.			
16	*L·NE*	18 35		
16	*iP·ZN*	18 46 36		
	eS·ZNE	50 08		
	L·NE	53		
	$\Delta = 20°$. Peloponnese.			
17	*eP·Z'ZN*	1 36 54		
	eS·NE	39 41		
	L·NE	41.1		
	$\Delta = 15°$. Albania.			
17	*L·NE*	4 37		
17	*L·NE*	5 17		
17	*L·NE*	8 42		
17	*L·NE*	9 09		

August			
17	*ePKP·Z'Z*	21h23m45s	
	ePP·Z'ZNE	25 18	
	eSKS·E	30 41	
	ePS·NE	35 31	
	L·NE	22 03	
	M·NE	11	20s. N: 50 μ, E: 50 μ.
	$\Delta = 124°$. Solomon Islands.		
18	*iP·Z'Z*	0 46 05	
	ipP·Z'	46 53	
	eSKS·NE	56 07	
	e·E	57 04	
	isS·NE	57 24	
	L·NE	1 15	
	$\Delta = 82°$. $h = 200$ km. Formosa.		
18	*iP·Z*	6 48 24	–
	e·Z'NE	48 27	
	iPcP·NE	48 47	
	iPP·ZNE	50 51	
	iS·NE	57 35	
	L·NE	7 11	
	M·NE	17	20s. N: 270 μ, E: 200 μ.
	$\Delta = 70°$. $M = 7\,^1/_2$. Montana, U.S.A.		
18	*iP·Z'Z*	15 37 14	Z: –
	ePcP·Z	37 44	
	ePP·ZNE	39 48	
	iS·NE	46 24	
	e·NE	47 02	
	eSS·NE	50 52	
	L·NE	16 00	
	Repetition.		
18	*L·NE*	22 12	
19	*iP·Z'*	4 15 13	
	eS·NE	24 22	
	L·NE	37	
	$\Delta = 70°$. Montana, U.S.A.		
19	*L·NE*	7 53	
19	*iP·Z'*	15 35 02	
	eS·NE	37.5	
	L·NE	39	
	$\Delta = 13°$. $h = 150$ km. Rumania.		
20	*L·NE*	13 14	
21	*L·NE*	7 43	
21	*ePKP·Z'Z*	8 23 04	
	ePP·E	26 52	
	$\Delta = 148°$. South of Australia.		

August

21 *ePKP·Z′Z* 8h25m17s
ePP·E 28 33
Repetition.

21 *ePKP·Z′Z* 9 57 39
ePP·E 10 01.0
L·NE 48
Repetition.

23 *iP·Z′Z* 22 26 32 (*Z* Wiechert).
L·E 34 Wiechert.
$\Delta = 23°$. Mediterranean Sea.

24 *ePKP·Z* 21 49 59
ePP·ZE 52 11
i·E 54 05
i·E 22 02 44
eSS·NE 09.0
L·NE 25
$\Delta = 129°$. Solomon Islands.

26 *iP·Z′ZE* 8 38 06
iPP·ZE 41 18
iSKS·E 48 33
eS·N 48 41
e·N 48 58
i·NE 49 42
L·NE 9 02
$\Delta = 85°$. Mexico.

26 *eP·Z* 10 39.0
iS·NE 48 06
iScS·NE 48 57
eSS·NE 52.4
eSSS·NE 55.8
L·NE 11 04
$\Delta = 70°$. Queen Charlotte Islands.

28 *L·NE* 0 30

29 *L·NE* 5 55

29 *iP·Z′ZNE* 17 12 20 *Z*: 9s, + 5 μ.
ePcP·Z 13 39
ePP·ZNE 14 19
iS·NE 19 39
eSS·NE 23 19
L·NE 28
M·NE 33 15s. *N*: 60 μ, *E*: 60 μ.
$\Delta = 52°$. Lake Baikal, U.S.S.R.

30 *iP·Z′* 3 29 59 –
eS·N 34 09
L·NE 37
$\Delta = 23°$. Mediterranean Sea.

30 *L·NE* 15 04

30 *L·NE* 22 43

31 *L·NE* 0 01

September

1 *L·NE* 5h52m

1 *eP·ZE* 7 34 09
L·NE 42
$\Delta = 27°$. Mid Atlantic Ridge.

1 *L·NE* 11 21

1 *eP·Z′ZNE* 11 41 21 5s. *Z*: – 3 μ, *N*: – 4 μ, *E*: + 1 μ.
eS·NE 44 23
L·NE 46
M·E 47 15s, 75 μ.
$\Delta = 16°$. Albania.

3 *L·NE* 4 10

3 *eP·Z* 6 41 42
ePKP·Z 45.5
eSKS·E 52 25
eS·NE 53 38
e·E 54 40
iPS·ZE 55 12
L·NE 7 18
$\Delta = 105°$. Celebes.

4 *L·NE* 11 07

4 *eP·Z* 18 37 20
eS·NE 45 54
eScS·NE 47 24
eSS·E 50.4
L·NE 58
$\Delta = 65°$. Atlantic Ocean.

5 *L·NE* 0 29

5 *eSKS·NE* 6 32 39
eSS·N 41 02
L·NE 7 00
$\Delta = 104°$. Moluccas.

5 *L·NE* 16 28

5 *L·NE* 22 12

6 *e·Z′* 11 58 41
e·Z′ 58 58
e·Z′ 59 01
Explosion?

8 *L·NE* 14 06

8 *eP·Z′Z* 19 31 06
eS·NE 40 35
L·NE 56
$\Delta = 73°$. $h = 100$ km. Japan.

9 *eP·Z′* 5 52 28
$\Delta = 43°$. $h = 200$ km. Hindu Kush.

September			
9	*L·NE*	18h35m	
10	*L·NE*	6 42	
10	*eS·NE*	14 09.6	
	L·NE	15	
	$\Delta = 27°$. Turkey.		
11	*L·NE*	12 46	
12	*ePP·Z*	2 14 36	
	eSS·NE	29 33	
	L·NE	46	
	$\Delta = 116°$. Bismarck Sea.		
12	*L·NE*	7 59	
12	*ePP·Z*	11 45.4	
	eSS·NE	12 02.5	
	L·NE	24	
	$\Delta = 126°$. Solomon Islands.		
12	*iP·Z′*	21 27 26	+
	epP·Z′	28 31	
	e·ZE	30 31	
	eS·E	34 05	
	esS·E	35 30	
	eScS·ZNE	37 21	
	$\Delta = 43°$. $h = 200$ km. Hindu Kush.		
13	*L·NE*	19 39	
13	*L·NE*	23 33	
14	*ePKP·Z′Z*	13 35 39	
	i·Z	35 48	
	L·NE	14 24	
	$\Delta = 147°$. Tonga Islands.		
14	*ePKP·Z′Z*	14 29 30	
	i·Z′	29 37	+
	e·ZNE	30 12	
	ePKS·Z	33 24	
	iPP·E	33 38	
	eSKKS·E	40 16	
	iSKSP·Z	43 33	
	L·NE	15 24	
	M·NE	40	20s. *N*: 60 μ, *E*: 100 μ.
	$\Delta = 152°$. $M = 7\,^1/_2$. Kermadec Islands.		
14	*ePKP·Z′*	15 18 39	
	Aftershock.		
14	*ePKP1·Z′Z*	17 26 06	
	i·Z′	26 12	
	iPKP2·Z	26 22	
	e·E	27 29	
	e·N	43 35	
	L·NE	18 19	
	Aftershock.		
September			
14	*ePKP1·Z*	22h43m46s	
	i·Z′	43 51	
	ePKP2·Z	44 14	
	ePP·ZN	47 33	
	eSKSP·N	57.8	
	e·N	23 02.9	
	eSS·E	07.2	
	L·NE	38	
	Aftershock.		
15	*iPKP·Z*	6 19 32	+
	e·Z′	19 38	
	ePP·N	23 18	
	L·NE	7 10	
	Aftershock.		
15	*iPKP1·Z′*	11 24 09	
	iPKP2·Z′	24 18	
	ipPKP·Z′	26 30	
	eSKP·Z′	26 53	
	$\Delta = 145°$. $h = 600$ km. Fiji Islands.		
16	*e(PKP)·Z*	16 17 07	
	ePKS·Z	20 33	
	L·NE	17 18	
	Kermadec Aftershock.		
17	*ePKP·Z*	14 56 09	
	L·NE	16.0	
	Kermadec Aftershock.		
18	*L·NE*	2 17	
18	*ePP·Z*	12 21.2	
	ePS·N	30.9	
	L·NE	56	
	$\Delta = 116°$. Sandwich Group.		
23	*L·NE*	23 05	
24	*L·E*	6 02	
25	*iP·Z′Z*	2 49 10	+
	iS·NE	59 26	
	eScS·N	59 43	
	L·NE	3 16	
	$\Delta = 82°$. Formosa.		
26	*eS·NE*	8 42 37	
	iPS·NE	43 09	
	eSS·E	47.6	
	L·NE	55	
	$\Delta = 76°$. Off Oregon, U.S.A.		
28	*L·NE*	5 09	
29	*ePKP·Z′*	15 51 43	
	iSS·E	16 15 13	
	L·NE	46	
	$\Delta = 152°$. Kermadec Aftershock.		

September

30 *L·NE* 17h10m

30 *L·NE* 21 32

October

1 *L·NE* 4 50

1 *e·Z′* 15 07 53
e·Z′ 10.2

5 *L·N* 18 17

5 *eP·Z* 18 34 53
iPP·Z 36 14
eS·NE 40 31
L·NE 46
$\Delta = 36°$. Arctic Ocean.

5 *eP·Z′* 20 37 55
eS·E 41.0
L·NE 43
$\Delta = 16°$. Albania.

7 *eP·Z′* 8 34 21
e·Z′ 34 26
e·Z′ZN 34 34
eS·NE 37 29
L·NE 38.7
$\Delta = 16°$. Albania.

8 *iP·Z′* 2 46 51 –
$\Delta = 73°$. Aleutian Islands.

8 *e(L)·ZNE* 11 25.9

8 *L·NE* 14 44

10 *i·Z′* 0 15 18 +
e·Z′ 17 02

12 *iP·Z′Z* 3 34 36 *Z′*: –, *Z* +
eSKS·N 45 04
i(S)·E 45 15
L·NE 4 06
$\Delta = 87°$. Sumatra.

15 *eP·Z* 6 29 23 –
i·Z 29 25 +
e·Z 33 10
iPP·ZNE 33 31
iSKS·NE 40 02
e·E 40 43
iS·N 40 59
iPS·ZNE 42 21
e·Z 43 32
eSS·NE 47.9
L·NE 7 03
$\Delta = 100°$. Celebes.

October

15 *iP·Z′* 7h52m02s +
$\Delta = 74°$. Kurile Islands.

19 *iP·Z′* 19 58 26 +
$\Delta = 74°$. Kurile Islands.

19 *ePKP·Z* 8 47 10
L·NE 9 42
$\Delta = 152°$. Kermadec Islands.

19 *ePP·ZN* 16 15 12
ePS·NE 24 50
eSS·NE 31 11
eSSS·NE 35.2
L·ZNE 50
$\Delta = 115°$. Sandwich Group.

24 *iP·Z′* 23 48 08 –
eS·E 54 11
L·NE 24 01
$\Delta = 40°$. Kirghiz S.S.R.

25 *L·NE* 16 14

26 *iP·Z* 7 47 10 +
epP·Z 47 30
iPP·ZN 50 06 *Z*: +
ipPP·ZNE 50 20
iS·NE 57 05
eSKS·NE 57 25
eSS·NE 8 02 10
eSSS·N 05.2
L·NE 14
M·NE 18 20s. *N*: 40 μ, *E*: 25 μ.
$\Delta = 78°$. $h = 60$ km. $M = 7$. Japan.

27 *L·NE* 6 56

27 *iP·Z′Z* 7 04 15
iPPP·ZN 08 45
eS·NE 13 37
esS·NE 14 25
L·NE 27
M·NE 37 20s. *N*: 55 μ, *E*: 55 μ.
$\Delta = 73°$. $h = 100$ km. $M = 7$. Kurile Islands.

29 *iP·Z′* 10 46 53 –
$\Delta = 73°$. Kurile Islands.

29 *iPKP·Z′* 14 39 49 –
ePKS·Z′ 43 19
L·NE 15 35
$\Delta = 153°$. $h = 60$ km. Kermadec Islands.

29 *iP·Z′* 14 40 37
epP·Z′ 42 30
$\Delta = 68°$. $h = 550$ km. China-Korea border.

October
30 *L·NE* 1h34m

30 *iP·Z′* 4 09 41 +
i·Z′ 09 44 −
L·NE 29
Δ = 53°. Yakut ASSR.

30 *ePKP·Z′Z* 14 18 14
L·NE 15.4
Δ = 148°. Tonga Islands.

November
2 *L·NE* 9 34

2 *L·NE* 21 05

5 *L·NE* 12 55

6 *L·NE* 2 10

6 *L·NE* 7 45.8

7 *eP·Z′* 2 36 48
eS·E 40.4
L·NE 42.6
Δ = 20°. Algeria.

7 *ePKP·Z′Z* 22 36 04
Δ = 148°. Tonga Islands.

8 *eP·Z′Z* 14 06 20
eS·E 15 42
L·NE 30
M·NE 35 20s. *N*: 35 μ, *E*: 35 μ.
Δ = 72°. *M* = 7. Japan.

10 *L·NE* 21 22

15 *eP·Z′* 10 33 23
eS·E 39 58
L·NE 48.5
Δ = 44°. Turkestan.

15 *iP·Z′ZNE* 17 13 05 8s. *Z*: + 50 μ, *N*: + 50 μ, *E*: — 20 μ.
iS·NE 16 35
L·NE 18.5
Δ = 19°. *M* = 7¼. Ionian Sea.

16 *eP·Z* 10 31 48
eS·NE 40.5
L·NE 51
Δ = 64°. Mid Atlantic Ridge.

19 *iP·Z′* 14 04 53
Δ = 20°. Turkey.

20 *L·NE* 0 37

November
22 *L·NE* 17h50m

22 *iPKP·Z′Z* 19 53 15 −
Δ = 145°. *h* = 550 km. Fiji Islands

24 *L·NE* 20 35

26 *e(SKKS)·E* 7 30.7
e(S)·N 31 15
e·N 31 30
e(PS)·E 32.3
L·NE 7.9
Δ = 95°. Sumatra.

26 *e(SKKS)·E* 23 33 36
eS·NE 34 06
L·NE 56
Δ = 95°. Sumatra.

28 *eS·NE* 3 43.1
L·NE 4 00
Δ = 83°. Ryukyu Islands.

28 *eSKS·E* 13 00 20
eSKKS·NE 01.2
ePS·E 03 31
L·NE 27
Δ = 110°. Chile.

29 *L·NE* 20.8

30 *eP·Z′* 11 21 09
L·NE 34.4 Very short period.
Δ = 44°. Sinkiang Province, China.

December
1 *iP·Z* 12 43 09 −
eS·E 46 40
L·NE 48.8
Δ = 19°. Greece.

1 *L·NE* 16 13

2 *ePP·Z* 9 52 17
iSKS·NE 58 42
i·E 58 59
eS·NE 59 48
L·NE 10 24
Δ = 103°. Celebes.

8 *L·NE* 13 47.3

11 *ePKP·Z* 1 58 27
Δ = 147°. Tonga Islands.

11 *L·NE* 3 03

December

13 $i \cdot Z'$ 18h06m37s

14 $iP \cdot Z'Z$ 22 12 21 Z': –
$eS \cdot N\dot{E}$ 21.8
$L \cdot NE$ 38
$\Delta = 73°$. Aleutian Islands.

14 $iPKP \cdot Z'$ 23 40 49
$i \cdot Z'Z$ 40 53
$iPS \cdot ZNE$ 52 00
$eSS \cdot E$ 58 35
$eSSS \cdot E$ 24 03.0
$L \cdot NE$ 12
$M \cdot NE$ 27 20s. N: 35 μ, E: 25 μ.
$\Delta = 120°$. $M = 7^1/_4$. Sandwich Group.

17 $L \cdot NE$ 3 16

18 $iP \cdot Z'$ 16 36 18
$\Delta = 72°$. Aleutian Islands.

21 $ePKP \cdot Z'$ 10 40 31
$\Delta = 153°$. Kermadec Islands.

21 $eP \cdot Z'Z$ 11 28 25
$ePP \cdot ZNE$ 30 32
$iS \cdot NE$ 35 51 N: –, E: +
$L \cdot NE$ 44
$\Delta = 52°$. Gulf of Aden.

22 $iP \cdot Z'$ 17 32 15
$e(pP) \cdot Z'$ 32 29
$e \cdot Z'$ 32 36
$\Delta = 78°$. Deeper than normal. Japan.

25 $iPKP \cdot Z'$ 4 08 55 –
$\Delta = 152°$. Kermadec Islands.

December

26 $eP \cdot Z'$ 22h13m41s
$L \cdot NE$ 40
$\Delta = 68°$. Kamchatka.

27 $eP \cdot Z'$ 4 58 55
$L \cdot NE$ 5 28
$\Delta = 69°$. Kamchatka.

27 $L \cdot NE$ 12 35

27 $iP \cdot Z'Z$ 16 03 45 Z: +
$iPP \cdot N$ 06 14
$iS \cdot NE$ 12 34
$L \cdot NE$ 24
$M \cdot NE$ 36 20s. N: 70 μ, E: 35 μ.
$\Delta = 66°$. $M = 7$. Kamchatka.

28 $iP \cdot Z'Z$ 7 31 41 Z': +
$iPcP \cdot Z$ 31 56 +
$eS \cdot NE$ 40 45
$L \cdot NE$ 54
$M \cdot NE$ 8 01 20s. N: 15 μ, E: 15 μ.
$\Delta = 69°$. $M = 6^1/_2$. Kamchatka.

28 $eP \cdot Z'$ 13 15 41
$L \cdot NE$ 44
$\Delta = 69°$. Kamchatka.

29 $eP \cdot Z'$ 3 04 32
$e(PcP) \cdot Z'$ 04 57
$\Delta = 69°$. Kamchatka.

29 $iPKP1 \cdot Z'$ 17 34 21
$iPKP2 \cdot Z'$ 34 33
$\Delta = 146°$. Tonga Islands.

31 $L \cdot NE$ 21 07

March 1961. HENRY JENSEN

Microseisms. København

1959 July	Z 0h	Z 6h	Z 12h	Z 18h	N 0h	N 6h	N 12h	N 18h	E 0h	E 6h	E 12h	E 18h	1959 July
1	2 0.1 3.7	2 0.1 4.0	2 0.1 3.8	3 0.2 3.3	2 0.1 4.1	2 0.1 4.3	2 0.1 3.7	3 0.2 3.7	2 0.2 4.2	2 0.1 4.5	2 0.1 3.7	3 0.2 3.3	1
2	3 0.3 3.3	3 0.3 3.2	3 0.3 3.2	3 0.4 3.3	3 0.2 3.5	3 0.3 3.4	3 0.3 3.3	3 0.3 3.3	3 0.4 3.2	3 0.4 3.3	3 0.4 3.2	3 0.5 3.0	2
3	3 0.5 3.4	3 0.4 3.5	3 0.2 3.3	3 0.2 3.6	3 0.4 3.2	3 0.5 3.4	3 0.3 3.7	3 0.2 3.8	3 0.6 3.5	3 0.5 3.3	3 0.3 3.8	3 0.3 4.0	3
4	2 0.2 3.8	2 0.2 4.0	2 0.1 4.0	2 0.1 4.0	3 0.2 3.8	3 0.2 4.1	3 0.2 4.3	2 0.1 4.0	3 0.3 3.7	3 0.2 4.1	2 0.2 4.0	2 0.2 4.4	4
5	2 0.1 4.0	2 0.1 4.3	2 0.1 5.0	2 0.1 4.6	2 0.1 4.0	2 0.1 4.4	2 0.1 5.0	2 0.1 5.0	2 0.1 4.2	2 0.2 4.6	2 0.2 5.0	2 0.2 5.0	5
6	2 0.1 4.5	2 0.1 4.5	2 0.1 5.0	2 0.1 4.7	2 0.1 5.0	2 0.1 4.5	2 0.1 4.4	2 0.1 4.5	2 0.2 4.7	2 0.2 4.8	2 0.2 4.0	2 0.2 4.3	6
7	2 0.2 4.0	2 0.2 3.7	2 0.2 3.8	2 0.2 3.7	2 0.1 4.0	2 0.1 3.8	2 0.2 4.2	2 0.2 4.3	2 0.2 3.8	2 0.1 3.7	2 0.2 4.4	2 0.2 4.0	7
8	2 0.2 3.8	2 0.2 4.0	2 0.1 4.0	2 0.1 3.7	2 0.2 3.7	2 0.1 4.0	2 0.1 4.0	2 0.1 4.0	2 0.2 3.8	2 0.2 3.9	2 0.1 4.4	2 0.1 4.0	8
9	2 0.1 3.9	2 0.1 4.0	2 0.1 4.–	2 0.1 4.–	2 0.1 4.3	2 0.1 4.0	2 0.1 4.–	2 0.1 4.–	2 0.1 3.8	2 0.1 4.0	2 0.1 4.1	2 0.1 4.0	9
10	2 0.1 4.–	2 0.1 4.–	2 0.1 3.–	2 0.1 3.–	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 3.–	2 0.1 3.3	10
11	2 0.1 3.–	2 0.1 3.6	2 0.2 4.1	2 0.2 4.0	2 0.1 3.–	2 0.1 4.–	2 0.2 4.3	2 0.2 3.8	2 0.1 3.1	2 0.1 4.0	2 0.2 4.0	2 0.3 4.0	11
12	2 0.3 3.3	2 0.4 4.0	2 0.3 3.8	2 0.3 3.5	2 0.3 3.7	2 0.3 3.5	2 0.3 3.5	2 0.4 3.7	3 0.4 3.3	3 0.4 3.7	3 0.3 4.0	2 0.3 3.8	12
13	2 0.4 3.8	2 0.5 4.2	2 0.7 3.8	1 0.8 4.4	2 0.5 3.9	2 0.6 4.2	3 0.7 3.8	3 1.1 4.5	2 0.6 4.0	2 0.7 4.1	3 0.8 4.1	1 1.5 4.6	13
14	1 0.8 4.0	1 0.8 4.3	2 0.7 4.4	2 0.5 3.8	1 1.0 4.3	3 0.9 4.0	3 0.5 4.2	3 0.5 3.9	1 1.0 4.6	1 0.9 4.5	3 0.6 4.0	2 0.5 3.8	14
15	2 0.5 4.2	2 0.3 4.0	2 0.3 3.9	2 0.2 3.8	2 0.4 3.7	2 0.3 4.2	2 0.3 3.8	2 0.2 4.1	2 0.4 3.9	2 0.4 4.2	2 0.3 3.9	2 0.2 3.6	15
16	2 0.1 3.8	2 0.1 4.4	2 0.1 3.8	2 0.1 3.9	2 0.1 4.2	2 0.1 4.1	2 0.1 3.8	2 0.1 4.1	2 0.2 4.1	2 0.2 4.4	2 0.2 4.0	2 0.2 3.9	16
17	2 0.2 4.2	2 0.3 4.4	2 0.5 4.7	2 0.2 4.5	2 0.2 4.3	2 0.5 4.0	2 0.4 4.4	2 0.2 4.0	2 0.3 4.5	2 0.5 4.6	2 0.4 4.3	2 0.3 4.2	17
18	2 0.1 4.5	2 0.1 4.5	2 0.1 4.6	2 0.1 4.5	2 0.1 4.2	2 0.1 4.5	2 0.1 4.–	2 0.1 4.–	2 0.2 3.9	2 0.1 4.5	2 0.1 4.6	2 0.1 4.0	18
19	3 0.1 4.0	3 0.1 4.0	3 0.2 3.8	3 0.1 4.0	2 0.1 4.–	2 0.1 4.–	3 0.1 3.5	3 0.1 4.–	2 0.1 4.2	3 0.1 4.0	3 0.2 4.0	3 0.1 4.0	19
20	3 0.1 4.0	3 0.1 4.0	2 0.1 4.4	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 4.4	2 0.1 4.2	2 0.1 4.3	2 0.1 4.2	2 0.1 4.7	2 0.1 4.6	20
21	2 0.1 4.–	2 0.1 4.4	2 0.1 4.6	2 0.1 4.3	2 0.1 4.3	2 0.1 4.1	2 0.1 4.–	2 0.1 4.–	2 0.1 4.4	2 0.1 4.8	2 0.1 4.4	2 0.1 4.5	21
22	2 0.1 4.7	2 0.1 4.3	2 0.1 4.9	2 0.1 4.4	2 0.1 4.3	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 4.3	2 0.1 4.4	2 0.1 4.1	2 0.1 4.0	22
23	.. ..	2 0.1 4.3	2 0.1 4.8	2 0.1 4.7	.. ..	2 0.1 4.2	2 0.1 4.6	2 0.1 4.7	.. ..	2 0.1 4.2	2 0.1 4.5	2 0.1 4.3	23
24	2 0.1 4.7	2 0.1 5.0	2 0.1 5.4	2 0.1 5.3	2 0.1 4.7	2 0.1 5.0	2 0.1 4.8	2 0.1 5.2	2 0.1 4.6	2 0.1 4.9	2 0.1 5.0	2 0.1 5.4	24
25	0.1	0.1	2 0.1 5.0	2 0.1 4.7	0.1	0.1	2 0.1 5.0	2 0.1 5.0	0.1	0.1	2 0.1 4.8	2 0.1 4.5	25
26	2 0.1 5.0	2 0.1 4.8	2 0.1 4.9	2 0.1 4.9	2 0.1 4.8	2 0.1 4.8	2 0.1 5.–	2 0.1 4.–	2 0.1 4.9	2 0.1 5.0	2 0.1 4.6	2 0.1 4.2	26
27	2 0.1 4.5	2 0.1 4.3	2 0.1 4.4	2 0.1 4.2	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 4.3	2 0.1 4.3	2 0.1 4.3	2 0.1 4.2	27
28	2 0.1 4.2	2 0.1 4.5	2 0.1 4.6	2 0.1 4.4	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	2 0.1 3.6	2 0.1 4.0	2 0.1 4.1	2 0.1 4.3	2 0.1 4.0	28
29	2 0.1 3.8	2 0.1 3.5	2 0.2 3.7	2 0.2 3.6	2 0.1 3.3	2 0.2 3.6	2 0.2 3.5	2 0.2 3.6	2 0.1 3.8	2 0.1 3.3	2 0.2 3.7	2 0.2 3.6	29
30	2 0.2 3.4	2 0.2 4.0	2 0.2 3.5	2 0.2 4.0	2 0.2 3.6	2 0.2 3.7	2 0.2 3.7	2 0.2 3.9	2 0.2 3.8	2 0.2 3.7	2 0.3 3.5	2 0.2 3.8	30
31	2 0.1 4.2	2 0.1 4.0	2 0.1 3 9	2 0.1 3.6	2 0.2 4.1	2 0.2 4.3	2 0.1 3.7	2 0.1 3.3	2 0.2 4.2	2 0.2 4.1	2 0.2 3.5	2 0.1 3.5	31

Microseisms. København

1959 Aug.	Z 0h	Z 6h	Z 12h	Z 18h	N 0h	N 6h	N 12h	N 18h	E 0h	E 6h	E 12h	E 18h	1959 Aug.
1	2 0.1 3.9	2 0.1 4.0	2 0.1 3.6	2 0.1 3.7	2 0.1 3.8	2 0.1 3.9	2 0.1 3.5	2 0.1 3.6	2 0.1 3.8	2 0.1 3.5	2 0.1 3.6	2 0.1 3.3	1
2	2 0.1 3.8	2 0.1 4.–	2 0.1 4.0	2 0.1 4.0	2 0.1 3.8	2 0.1 3.8	2 0.1 4.0	3 0.1 3.8	2 0.1 3.5	2 0.1 4.0	2 0.1 3.8	3 0.1 3.5	2
3	3 0.1 4.–	3 0.1 3.–	3 0.2 3.0	3 0.1 3.5	3 0.1 2.7	3 0.1 3.8	3 0.2 3.0	3 0.2 4.0	3 0.1 2.7	3 0.1 2.8	3 0.2 3.0	3 0.2 3.5	3
4	2 0.1 4.6	2 0.1 6.0	2 0.2 5.0	2 0.5 5.2	2 0.1 5.0	2 0.2 5.7	2 0.2 5.4	2 0.5 5.1	3 0.2 4.0	3 0.2 5.0	2 0.3 5.3	2 0.4 4.6	4
5	2 0.3 4.7	2 0.1 4.4	2 0.1 4.0	2 0.1 3.8	2 0.3 4.8	2 0.2 4.4	2 0.1 4.3	2 0.1 4.4	2 0.2 4.3	2 0.2 4.2	2 0.2 4.3	2 0.1 4.3	5
6	2 0.1 3.4	2 0.1 3.5	2 0.1 3.2	2 0.1 4.0	2 0.1 3.6	2 0.1 3.3	2 0.1 3.1	2 0.1 3.–	2 0.1 3.5	2 0.1 3.4	3 0.1 3.1	3 0.1 3.3	6
7	2 0.1 3.7	2 0.1 4.–	.. ..	2 0.1 3.6	3 0.1 3.5	3 0.1 3.3	.. ..	3 0.1 3.3	3 0.1 3.4	3 0.1 3.7	.. ..	3 0.1 3.0	7
8	2 0.1 4.0	2 0.1 4.–	2 0.1 4.–	2 0.1 4.–	3 0.1 3.3	3 0.1 3.–	2 0.1 4.–	2 0.1 4.–	3 0.1 3.–	3 0.1 3.–	2 0.1 4.–	2 0.1 4.–	8
9	2 0.1 4.–	2 0.1 4.–	2 0.1 4.0	2 0.1 4.2	2 0.1 4.–	2 0.1 4.–	2 0.1 4.2	2 0.1 4.0	2 0.1 4.–	2 0.1 4.–	2 0.1 4.0	2 0.1 4.0	9
10	2 0.1 4.–	2 0.1 4.–	2 0.1 4.0	2 0.1 4.5	2 0.1 3.5	2 0.1 3.3	2 0.1 3.8	2 0.1 4.2	2 0.1 3.8	2 0.1 3.6	2 0.1 3.8	3 0.1 3.7	10
11	2 0.1 4.–	2 0.1 4.–	3 0.1 3.8	3 0.2 4.3	3 0.1 3.6	3 0.1 3.9	3 0.1 3.5	3 0.1 4.2	3 0.1 3.6	3 0.1 3.7	3 0.1 4.0	3 0.2 3.8	11
12	2 0.1 4.3	2 0.1 4.8	.. ..	2 0.1 4.2	3 0.2 4.8	2 0.1 4.7	.. ..	3 0.1 4.4	3 0.3 4.0	2 0.1 5.0	.. ..	3 0.1 4.6	12
13	2 0.1 4.3	2 0.1 4.7	2 0.1 3.9	2 0.1 3.7	3 0.1 3.8	2 0.1 4.1	2 0.1 3.9	2 0.1 4.2	3 0.1 4.0	2 0.1 4.5	2 0.1 4.0	2 0.1 4.1	13
14	2 0.1 4.3	2 0.1 4.6	3 0.2 4.7	3 0.2 4.5	2 0.1 4.7	2 0.2 5.0	3 0.2 4.4	3 0.2 4.8	2 0.2 4.5	2 0.3 5.0	3 0.3 4.4	3 0.3 4.7	14
15	3 0.2 4.1	3 0.2 4.3	.. ..	3 0.2 4.4	3 0.2 4.3	3 0.2 4.9	.. ..	3 0.2 4.4	3 0.3 4.6	3 0.3 4.7	.. ..	3 0.3 4.6	15
16	3 0.2 4.5	3 0.2 4.0	3 0.2 3.7	3 0.1 3.2	3 0.2 4.4	3 0.2 4.1	3 0.2 3.7	3 0.2 3.3	3 0.4 4.6	3 0.3 4.2	3 0.3 4.5	3 0.2 4.0	16
17	3 0.1 4.0	2 0.1 4.4	2 0.1 4.7	2 0.2 4.8	3 0.1 3.7	2 0.1 4.3	2 0.2 4.6	2 0.2 4.9	3 0.2 3.8	2 0.2 4.6	2 0.3 5.0	2 0.3 4.9	17
18	.. ..	2 0.2 4.4	2 0.2 4.3	2 0.3 5.0	.. ..	2 0.2 4.7	2 0.2 4.7	2 0.4 5.0	.. ..	2 0.2 4.6	2 0.2 5.0	2 0.3 4.9	18
19	2 0.2 4.5	2 0.1 4.5	2 0.1 4.2	2 0.1 4.1	2 0.2 4.8	2 0.1 4.6	2 0.1 4.2	2 0.1 4.2	2 0.2 4.9	2 0.2 4.8	2 0.1 4.3	2 0.1 4.0	19
20	2 0.1 4.4	2 0.1 4.1	2 0.1 4.0	2 0.1 4.3	2 0.1 4.1	2 0.1 4.2	2 0.1 3.8	2 0.1 4.0	2 0.1 4.0	2 0.1 3.8	2 0.1 3.6	2 0.1 3.7	20
21	2 0.1 4.0	2 0.1 4.0	2 0.1 3.8	2 0.1 4.2	2 0.1 3.7	2 0.1 3.9	2 0.1 3.9	2 0.1 4.0	2 0.1 3.7	2 0.1 4.1	2 0.1 3.8	2 0.1 4.1	21
22	2 0.1 4.0	2 0.1 3.8	2 0.1 4.5	2 0.1 4.2	2 0.1 3.7	2 0.1 4.0	2 0.1 4.1	2 0.1 4.4	2 0.1 4.0	2 0.1 4.3	2 0.1 4.3	2 0.1 3.9	22
23	2 0.1 4.7	2 0.1 4.4	.. ..	.. ..	2 0.1 4.3	2 0.1 4.3	.. ..	.. ..	2 0.1 4.5	2 0.1 4.0	.. ..	.. ..	23
24	.. ..	.. ..	2 0.2 5.3	3 0.4 4.7	.. ..	.. ..	3 0.2 4.8	3 0.4 5.0	.. ..	.. ..	2 0.2 4.4	3 0.4 4.8	24
25	.. ..	3 0.4 3.9	2 0.5 3.7	2 0.4 3.7	.. ..	3 0.5 4.0	3 0.4 3.7	3 0.4 3.6	.. ..	3 0.5 4.3	3 0.5 3.9	3 0.6 3.8	25
26	2 0.5 3.6	2 0.5 3.5	.. ..	2 0.8 4.0	2 0.4 3.9	2 0.5 3.8	.. ..	3 0.8 4.1	3 0.6 3.8	3 0.6 3.8	.. ..	3 0.6 3.6	26
27	2 1.0 3.9	2 0.7 3.8	2 0.6 3.7	2 0.5 3.9	3 0.6 3.8	3 0.5 4.0	2 0.1 4.2	2 0.5 4.0	3 0.8 4.0	3 1.0 3.8	3 0.6 4.3	3 0.6 5.0	27
28	2 0.5 4.0	2 0.7 4.2	3 0.4 4.3	3 0.5 4.3	3 0.5 4.5	3 0.7 5.3	3 0.9 5.1	3 0.9 4.6	3 0.5 4.7	3 0.7 4.7	3 1.0 4.8	3 0.8 4.9	28
29	3 0.5 4.6	3 0.3 4.3	3 0.3 3.8	.. ..	3 0.6 4.9	.. ..	3 0.5 3.9	.. ..	3 0.8 5.1	.. ..	3 0.4 4.2	.. ..	29
30	3 0.3 3.6	3 0.3 3.7	2 0.2 4.2	2 0.2 3.7	3 0.3 3.6	3 0.2 3.5	2 0.2 3.8	2 0.2 3.4	3 0.3 3.6	3 0.3 3.7	2 0.3 3.8	2 0.2 3.9	30
31	2 0.2 3.7	2 0.1 4.3	2 0.1 4.0	2 0.1 4.2	2 0.1 3.7	2 0.1 3.8	2 0.1 3.9	2 0.1 3.9	2 0.2 3.7	2 0.1 3.8	2 0.1 3.8	2 0.1 4.0	31

Microseisms. København

1959 Sept.	Z 0h	Z 6h	Z 12h	Z 18h	N 0h	N 6h	N 12h	N 18h	E 0h	E 6h	E 12h	E 18h	1959 Sept.
1	2 0.2 4.2	2 0.2 4.2	.. ..	2 0.2 4.3	2 0.2 4.2	2 0.2 4.2	.. ..	2 0.1 4.2	2 0.2 4.3	2 0.2 4.2	.. ..	2 0.2 4.4	1
2	2 0.1 4.5	2 0.1 5.–	2 0.1 5.–	2 0.1 5.–	2 0.1 4.–	2 0.1 5.–	2 0.1 5.–	2 0.1 6.–	2 0.2 4.3	2 0.1 4.1	2 0.1 5.–	2 0.1 6.–	2
3	2 0.1 6.–	2 0.1 6.–	2 0.2 5.8	2 0.2 5.3	2 0.1 6.–	2 0.1 6.–	2 0.2 6.3	2 0.2 6.2	2 0.1 6.–	2 0.1 5.8	.. ..	.. ..	3
4	2 0.2 5.3	2 0.2 5.5	2 0.2 5.0	2 0.2 4.8	2 0.2 5.9	2 0.3 5.4	2 0.2 5.2	2 0.2 4.8	.. ..	.. ..	2 0.3 5.0	2 0.2 4.7	4
5	2 0.2 4.6	2 0.1 4.7	2 0.2 5.0	2 0.2 5.0	2 0.2 4.8	2 0.2 5.2	2 0.2 5.1	2 0.2 5.3	2 0.3 4.9	2 0.2 4.6	2 0.2 5.4	2 0.3 5.4	5
6	2 0.3 5.3	2 0.3 5.3	2 0.3 5.3	2 0.4 5.1	2 0.3 5.1	2 0.3 5.4	2 0.5 4.9	2 0.5 5.2	2 0.3 5.0	2 0.4 5.0	2 0.4 4.9	2 0.5 5.5	6
7	2 0.5 5.7	2 0.5 5.5	.. ..	.. ..	2 0.6 5.7	2 0.6 5.8	.. ..	.. ..	2 0.5 5.5	2 0.6 5.3	.. ..	.. ..	7
8	.. ..	.. ..	2 0.3 4.4	2 0.2 4.0	.. ..	.. ..	2 0.2 4.5	2 0.2 4.0	.. ..	.. ..	2 0.3 4.4	2 0.2 4.1	8
9	2 0.2 3.8	2 0.2 4.3	2 0.2 4.6	2 0.2 4.3	2 0.2 3.8	2 0.2 4.0	2 0.2 4.3	2 0.2 4.5	2 0.1 3.9	2 0.2 3.7	2 0.2 4.5	2 0.2 4.3	9
10	2 0.3 4.8	2 0.3 4.8	2 0.4 4.6	2 0.6 4.6	2 0.2 4.8	2 0.3 4.3	2 0.3 4.3	2 0.6 4.8	2 0.3 4.3	2 0.4 4.8	2 0.4 4.7	2 0.5 4.5	10
11	2 0.8 4.7	2 1.0 5.0	2 0.7 4.5	2 0.6 4.8	2 0.8 5.0	2 1.0 4.8	2 0.7 4.6	1 0.5 4.8	2 1.0 4.5	2 1.2 5.0	2 0.8 4.8	1 0.8 4.2	11
12	2 0.6 4.5	2 0.4 4.0	2 0.6 4.6	2 0.6 4.7	1 0.5 4.3	1 0.5 4.6	1 0.5 5.1	1 0.6 4.8	1 0.4 4.2	1 0.5 4.4	1 0.6 5.3	1 0.6 4.9	12
13	2 0.5 4.7	3 0.3 4.0	3 0.3 3.8	3 0.3 3.6	1 0.5 4.9	3 0.3 4.6	3 0.3 3.7	3 0.3 3.3	1 0.5 5.0	3 0.5 4.6	3 0.4 3.9	3 0.3 4.1	13
14	3 0.3 3.9	2 0.3 4.4	2 0.3 4.8	.. ..	3 0.3 3.8	2 0.3 4.7	2 0.3 4.9	.. ..	3 0.3 3.5	2 0.4 4.7	2 0.3 4.8	.. ..	14
15	.. ..	2 0.3 4.4	.. ..	2 0.2 4.0	.. ..	2 0.3 4.6	.. ..	2 0.2 3.9	.. ..	2 0.3 4.6	.. ..	2 0.2 4.2	15
16	3 0.3 3.8	3 0.6 3.6	3 0.7 4.0	.. ..	2 0.3 4.2	3 0.5 3.4	3 0.5 4.5	.. ..	3 0.4 4.2	3 0.5 3.7	3 0.7 3.8	.. ..	16
17	3 0.5 4.2	2 0.3 4.5	.. ..	2 0.2 4.2	3 0.6 5.0	2 0.3 5.0	.. ..	2 0.2 4.0	3 0.4 4.5	3 0.6 5.2	.. ..	3 0.3 3.8	17
18	2 0.2 4.2	2 0.3 3.8	2 0.3 4.2	2 0.3 4.2	2 0.2 3.9	2 0.3 4.2	2 0.3 3.9	2 0.4 4.2	2 0.3 4.1	3 0.3 4.2	2 0.3 4.0	2 0.4 4.0	18
19	2 0.5 4.3	2 0.3 4.1	2 0.3 4.0	2 0.2 4.1	2 0.4 4.5	2 0.4 4.4	2 0.3 3.8	2 0.3 3.8	2 0.4 4.0	2 0.4 4.4	2 0.3 4.0	2 0.3 4.0	19
20	2 0.3 4.3	2 0.2 4.0	2 0.2 4.0	2 0.3 4.5	2 0.4 4.3	2 0.2 4.2	2 0.3 4.7	2 0.2 4.5	2 0.4 3.9	2 0.3 3.8	2 0.2 4.0	2 0.3 4.5	20
21	3 0.4 5.2	3 0.5 5.5	3 0.4 4.5	3 0.5 4.5	3 0.6 5.4	3 0.8 5.7	3 0.6 4.4	3 0.8 5.5	3 0.6 5.2	3 0.7 5.6	3 0.7 5.0	3 0.8 5.0	21
22	3 0.4 4.2	3 0.4 4.0	3 0.4 3.7	3 0.5 3.4	3 0.6 5.1	3 0.5 4.8	3 0.5 4.2	3 0.5 4.2	3 0.7 4.3	3 0.7 4.1	3 0.6 3.9	3 0.7 4.2	22
23	3 0.8 4.2	3 0.7 4.1	3 0.6 3.8	3 0.6 4.0	3 1.0 4.1	3 0.9 4.4	3 0.7 4.2	3 0.6 4.3	3 0.8 4.0	3 0.9 4.5	3 0.7 4.2	3 0.6 4.8	23
24	3 0.4 4.3	2 0.4 4.8	2 0.3 4.8	2 0.3 5.0	3 0.6 4.6	3 0.5 4.8	3 0.5 4.8	2 0.4 5.3	3 0.8 4.5	3 0.5 4.3	3 0.7 5.0	2 0.7 4.8	24
25	2 0.4 4.9	2 0.4 5.3	2 0.3 5.0	2 0.4 4.8	2 0.5 5.1	2 0.6 5.3	2 0.6 5.0	2 0.4 5.0	2 0.7 5.0	2 0.8 5.2	2 0.6 5.2	2 0.5 5.0	25
26	2 0.4 5.0	2 0.3 4.5	2 0.4 5.4	2 0.3 4.8	2 0.6 5.0	2 0.5 4.8	2 0.5 4.8	2 0.3 4.7	2 0.4 4.8	2 0.6 4.9	2 0.7 4.6	2 0.6 4.9	26
27	2 0.3 5.0	2 0.3 4.6	3 0.6 4.2	3 0.5 3.5	2 0.3 4.7	2 0.4 4.1	3 0.6 5.1	3 0.5 4.2	2 0.7 5.0	2 0.5 4.6	3 0.8 4.7	3 1.1 3.7	27
28	3 0.8 4.2	3 0.6 4.2	2 0.4 5.5	2 0.4 5.1	3 0.6 4.2	3 0.5 4.3	2 0.3 4.9	2 0.4 5.3	3 0.9 3.7	3 0.8 4.3	1 1.1 5.2	1 0.9 5.6	28
29	2 0.5 5.0	2 0.3 4.7	2 0.4 4.9	.. ..	2 0.6 5.2	2 0.7 4.7	2 0.4 5.0	.. ..	1 1.0 5.4	1 0.8 4.9	1 0.5 5.0	.. ..	29
30	2 0.4 5.6	2 0.2 5.5	2 0.3 5.3	2 0.3 5.3	2 0.3 4.8	2 0.4 4.9	2 0.3 5.3	2 0.4 4.8	2 0.4 5.0	2 0.5 5.1	2 0.3 4.9	2 0.4 5.0	30

Microseisms. København

1959 Oct.	Z 0h	Z 6h	Z 12h	Z 18h	N 0h	N 6h	N 12h	N 18h	E 0h	E 6h	E 12h	E 18h	1959 Oct.
1	2 0.3 4.4	2 0.3 4.6	2 0.3 4.7	2 0.3 4.8	2 0.3 4.8	2 0.3 4.8	2 0.3 5.2	2 0.3 4.4	2 0.3 4.6	2 0.5 4.5	2 0.4 4.5	2 0.3 4.8	1
2	2 0.3 4.3	2 0.2 4.1	2 0.2 4.8	2 0.2 4.9	2 0.3 4.2	2 0.2 4.8	2 0.3 5.0	2 0.2 4.5	2 0.4 5.0	2 0.3 5.0	2 0.3 4.7	2 0.3 5.0	2
3	2 0.1 5.6	2 0.1 5.0	2 0.1 5.0	2 0.2 4.8	2 0.2 5.5	2 0.2 5.5	2 0.2 4.7	2 0.2 5.2	2 0.3 5.0	2 0.2 4.5	2 0.2 5.3	2 0.2 5.3	3
4	2 0.1 4.7	2 0.2 4.6	2 0.1 4.4	2 0.2 4.6	2 0.1 4.9	2 0.2 5.2	2 0.2 4.3	3 0.2 4.4	2 0.2 4.8	3 0.2 5.0	3 0.2 4.0	3 0.3 4.5	4
5	2 0.2 4.3	2 0.2 4.2	2 0.3 4.6	2 0.3 4.3	3 0.3 4.3	3 0.3 4.3	2 0.3 4.1	2 0.3 4.0	3 0.3 4.3	3 0.3 4.5	2 0.3 4.0	2 0.4 4.0	5
6	2 0.3 3.8	2 0.2 3.9	2 0.2 3.8	2 0.2 4.1	2 0.3 3.9	2 0.3 4.0	2 0.2 4.0	2 0.3 4.3	2 0.5 4.0	2 0.3 3.9	2 0.3 4.3	2 0.3 4.4	6
7	2 0.3 4.3	2 0.4 4.2	1 0.4 4.3	1 0.3 4.8	2 0.4 4.5	2 0.3 4.3	1 0.6 4.8	1 0.5 5.0	2 0.4 4.2	2 0.3 4.2	1 0.5 4.4	1 0.4 4.2	7
8	2 0.3 4.6	1 0.4 4.6	2 0.3 5.0	2 0.3 4.6	1 0.5 4.6	1 0.6 4.4	1 0.5 4.6	3 0.3 4.7	1 0.6 4.8	1 0.5 4.7	3 0.5 4.6	3 0.5 4.7	8
9	2 0.3 5.0	2 0.5 6.5	2 0.8 7.0	2 0.5 6.4	2 0.3 5.0	2 0.4 7.0	2 0.9 7.8	2 0.8 7.2	2 0.3 4.8	2 0.5 6.7	2 0.7 6.3	2 0.8 6.3	9
10	2 0.3 6.8	2 0.3 6.2	3 0.2 4.3	3 0.2 4.5	2 0.5 6.7	2 0.3 6.2	3 0.3 4.5	3 0.2 4.4	2 0.5 5.9	3 0.5 5.4	3 0.3 4.5	3 0.3 4.6	10
11	3 0.2 4.3	3 0.2 4.1	3 0.3 4.7	3 0.2 3.8	3 0.3 4.4	3 0.2 4.2	3 0.2 4.3	3 0.2 4.0	3 0.4 4.4	3 0.3 4.5	3 0.3 3.8	3 0.3 4.3	11
12	2 0.2 3.8	2 0.2 4.0	2 0.2 4.3	2 0.2 3.7	2 0.2 4.0	2 0.2 4.4	2 0.2 4.4	2 0.2 3.8	2 0.2 3.8	2 0.3 3.8	2 0.2 4.1	2 0.2 4.0	12
13	2 0.2 4.1	2 0.2 4.2	2 0.2 4.4	2 0.3 4.8	2 0.2 4.3	2 0.2 4.0	2 0.3 4.3	2 0.3 4.4	2 0.2 4.3	2 0.2 4.7	2 0.2 4.1	2 0.4 4.7	13
14	2 0.3 5.0	2 0.3 4.6	2 0.3 4.9	2 0.2 4.7	2 0.3 4.5	2 0.3 4.8	2 0.3 4.8	2 0.3 4.8	2 0.3 4.8	2 0.4 5.1	2 0.4 4.6	2 0.4 5.0	14
15	2 0.3 4.7	2 0.3 4.8	1 0.5 5.0	1 0.6 4.9	2 0.3 4.7	2 0.5 4.6	2 0.4 5.0	2 0.5 5.2	2 0.4 4.7	1 0.6 4.7	1 0.6 5.0	1 0.6 5.0	15
16	2 0.4 4.8	3 0.6 5.5	3 0.5 4.9	2 0.5 4.4	2 0.5 5.2	3 0.6 5.4	3 0.7 5.0	3 0.4 5.0	2 0.6 4.8	3 0.8 4.5	3 0.6 5.5	3 0.8 5.6	16
17	2 0.6 4.9	2 0.4 4.7	2 0.4 4.7	2 0.5 5.2	2 0.5 4.8	2 0.3 4.9	1 0.6 4.9	1 0.7 5.0	1 0.9 4.5	1 0.5 4.8	1 0.7 4.8	1 0.9 4.4	17
18	2 0.4 4.8	3 0.6 4.5	1 1.0 4.0	1 1.2 4.2	2 0.5 5.0	3 0.5 4.7	1 0.9 4.2	1 1.3 4.3	1 0.8 5.0	3 0.8 4.8	1 1.2 4.4	1 1.3 3.7	18
19	1 1.5 4.3	2 0.6 3.7	2 0.5 4.1	2 0.4 4.1	1 1.6 3.8	2 0.4 3.7	2 0.4 3.8	2 0.4 4.0	1 2.0 3.7	3 0.9 4.1	3 0.7 4.2	2 0.4 4.1	19
20	2 0.4 4.2	2 0.6 4.0	3 0.4 4.3	3 0.3 3.8	2 0.5 4.3	2 0.5 4.0	3 0.4 3.8	3 0.3 4.3	2 0.5 4.0	3 0.6 4.2	3 0.6 4.4	3 0.6 4.0	20
21	3 0.4 4.2	3 0.6 4.–	3 0.7 7.–	3 0.7 7.–	3 0.4 3.8	3 0.6 4.–	3 0.8 6.–	3 0.8 7.–	3 0.6 4.2	3 0.9 4.–	3 0.7 6.–	3 0.8 6.–	21
22	3 0.6 6.–	3 0.6 6.–	3 0.6 4.0	3 0.6 4.0	3 1.2 7.–	3 1.0 6.–	3 0.7 4.3	3 0.6 4.0	3 1.2 6.–	3 1.5 6.–	3 0.9 4.2	3 1.0 4.0	22
23	3 1.3 4.4	3 0.8 4.0	3 1.3 6.–	3 1.5 6.–	3 0.8 4.0	3 1.0 6.–	3 1.2 7.–	3 1.6 7.–	3 1.3 3.9	3 0.8 4.0	3 1.3 7.–	3 1.6 6.–	23
24	3 0.8 5.–	3 1.3 6.–	3 1.3 5.0	3 0.8 4.5	3 1.3 6.–	3 1.8 7.–	3 1.6 5.8	3 1.2 5.0	3 1.3 6.–	3 1.6 7.–	3 1.3 4.8	3 0.7 5.4	24
25	.. ..	3 0.9 3.8	3 0.9 4.3	3 0.9 4.5	.. ..	3 1.0 4.4	3 1.0 4.7	3 1.1 5.5	.. ..	3 0.8 4.8	3 0.7 5.0	3 0.6 4.3	25
26	3 0.6 4.3	3 0.6 5.1	3 0.6 4.8	3 0.8 4.8	3 0.8 5.5	3 0.7 4.3	3 0.8 4.9	3 1.0 4.9	3 0.8 4.1	3 0.6 4.0	3 0.7 4.8	3 0.7 4.8	26
27	1 1.1 4.8	1 1.4 4.3	3 2.2 5.2	1 2.2 5.0	3 0.9 4.2	1 1.7 4.9	3 2.2 5.0	1 3.2 4.8	1 1.1 4.6	1 1.6 5.0	3 2.2 5.2	1 2.7 5.2	27
28	1 3.0 5.2	1 3.2 5.0	1 2.6 4.8	3 1.7 5.2	1 3.0 5.5	1 3.5 5.0	3 2.3 5.4	1 2.6 5.2	1 3.5 5.0	1 3.7 4.2	1 3.3 5.0	3 1.7 5.3	28
29	2 1.2 5.2	1 1.6 5.4	1 1.1 5.0	1 0.9 4.7	1 1.7 5.8	1 1.7 6.2	1 1.2 5.2	1 1.1 4.8	3 1.2 5.3	1 1.3 5.5	1 1.0 5.7	2 0.8 4.6	29
30	1 1.0 4.8	2 0.7 4.2	2 0.3 4.6	2 0.3 4.0	1 2.0 4.8	1 0.7 4.4	2 0.5 4.3	2 0.4 4.7	1 0.9 4.2	1 0.8 4.6	2 0.4 4.5	2 0.4 4.0	30
31	2 0.2 4.0	2 0.2 3.9	2 0.2 4.2	2 0.2 4.5	2 0.3 4.2	2 0.3 4.0	2 0.3 4.6	2 0.4 4.5	2 0.4 4.0	2 0.4 4.3	2 0.3 5.0	2 0.3 5.0	31

Microseisms. København

1959 Nov.	Z 0h	Z 6h	Z 12h	Z 18h	N 0h	N 6h	N 12h	N 18h	E 0h	E 6h	E 12h	E 18h	1959 Nov.
1	2 0.3 4.3	2 0.3 5.0	2 0.4 5.5	3 0.6 8.–	2 0.2 4.7	2 0.5 5.2	3 0.4 5.2	3 0.7 7.–	2 0.3 4.5	2 0.4 5.2	2 0.3 5.2	3 0.9 6.–	1
2	3 0.7 7.–	3 0.8 8.–	3 0.6 5.8	3 0.7 5.9	3 0.7 7.–	3 1.0 7.–	1 0.9 6.1	1 1.0 6.8	3 0.6 6.3	3 0.8 6.5	3 0.7 7.0	3 0.8 6.0	2
3	3 1.1 6.3	1 1.2 6.3	1 1.5 6.8	1 1.6 6.3	1 1.4 6.3	1 1.6 6.6	1 2.2 6.5	1 2.2 6.2	1 0.9 5.8	1 1.2 5.8	3 1.6 7.0	3 1.8 6.7	3
4	3 1.4 6.0	1 1.4 5.7	1 0.8 5.8	1 0.6 5.9	1 2.2 6.3	1 1.4 6.2	1 1.0 5.8	1 0.8 5.8	3 1.7 5.9	1 1.4 5.0	1 0.9 5.5	1 1.0 5.3	4
5	1 0.7 5.4	1 0.5 5.6	2 0.5 5.2	2 0.4 4.8	1 0.7 5.3	1 0.8 5.3	2 0.6 5.2	2 0.4 5.5	1 1.0 5.6	1 0.7 5.0	2 0.5 4.9	2 0.4 4.2	5
6	2 0.3 4.0	2 0.4 4.5	2 0.5 4.5	2 0.7 5.0	2 0.5 3.8	2 0.6 4.3	2 0.5 5.0	2 0.5 5.5	2 0.4 5.0	2 0.4 4.8	2 0.4 4.6	2 0.5 4.8	6
7	2 0.6 5.7	2 0.5 5.3	2 0.4 5.0	3 0.5 5.7	1 0.9 5.2	2 0.6 5.3	3 0.7 5.2	3 0.8 5.8	2 0.5 4.7	2 0.5 5.7	3 0.5 5.6	3 0.6 4.5	7
8	.. ..	2 0.9 6.0	3 1.2 6.0	3 2.2 6.4	.. ..	1 1.3 6.5	3 1.3 5.9	1 3.3 6.2	.. ..	3 1.2 6.5	3 1.3 5.7	1 1.8 5.8	8
9	3 1.7 5.8	1 4.3 7.3	1 3.5 6.5	3 2.0 4.8	1 3.4 6.2	1 3.7 6.8	3 3.5 6.2	3 2.0 5.8	1 3.2 6.2	1 2.8 6.0	3 3.4 6.0	3 3.3 5.0	9
10	3 1.6 5.0	3 1.3 5.0	3 1.3 4.–	3 1.0 4.–	3 2.5 5.5	3 1.8 5.6	3 1.6 5.–	3 1.6 4.7	3 1.9 4.9	3 1.8 4.8	3 1.6 5.0	3 1.6 4.2	10
11	3 0.8 4.0	3 0.8 4.6	3 0.6 4.2	3 0.6 5.0	3 1.5 5.–	3 1.0 5.–	3 0.6 5.5	3 0.6 4.4	3 1.0 4.6	3 1.0 5.0	3 0.7 5.7	3 0.6 3.8	11
12	3 0.5 3.5	2 0.5 4.0	2 0.4 4.2	2 0.5 4.2	3 0.6 3.9	2 0.5 3.7	2 0.5 4.0	2 0.7 4.2	3 0.6 3.6	3 0.7 3.4	2 0.7 4.0	2 0.7 3.8	12
13	2 0.5 4.1	2 0.5 4.5	3 0.4 4.2	3 0.6 3.7	2 0.6 4.4	2 0.4 4.0	3 0.4 4.7	3 0.5 4.2	2 0.5 4.3	2 0.6 4.8	3 0.4 3.9	3 0.5 4.0	13
14	1 0.9 4.6	1 1.6 5.0	1 1.5 4.9	1 1.6 4.0	1 1.2 5.0	1 1.7 4.8	1 1.3 4.8	1 1.6 4.2	1 1.0 5.0	1 1.4 4.4	1 1.6 5.2	1 1.7 4.7	14
15	1 1.3 4.4	1 1.0 4.2	.. ..	.. ..	1 1.5 4.3	1 0.9 4.0	.. ..	.. ..	1 1.4 4.3	1 1.5 4.2	.. ..	.. ..	15
16	.. ..	.. ..	1 1.0 3.8	1 1.0 4.3	.. ..	.. ..	1 0.9 3.9	1 1.0 4.3	.. ..	.. ..	1 1.0 3.8	1 1.0 4.2	16
17	3 0.7 3.8	3 0.9 4.3	3 0.6 3.8	3 0.7 4.0	3 0.8 4.2	3 0.6 4.2	3 0.7 3.8	3 0.7 3.8	1 0.8 4.4	3 0.8 4.2	3 0.8 4.0	3 0.9 4.2	17
18	3 0.7 3.5	3 0.7 3.5	3 1.0 3.8	3 0.8 4.0	3 0.6 4.2	3 0.8 3.6	3 1.0 3.9	3 1.0 4.2	3 0.8 3.9	3 1.0 3.7	3 1.0 4.0	3 0.9 4.3	18
19	3 0.9 3.7	3 1.0 4.0	.. ..	1 1.8 3.8	3 0.8 3.7	3 1.1 4.2	.. ..	1 1.3 3.8	3 1.0 4.0	3 1.0 3.8	.. ..	1 1.6 3.9	19
20	1 2.2 3.6	1 2.2 3.8	1 1.7 3.5	1 1.3 3.7	1 1.0 3.5	1 1.0 3.8	1 1.0 3.9	3 0.7 3.8	1 1.3 4.0	1 1.5 3.9	1 1.4 3.6	3 0.7 4.3	20
21	3 0.9 3.8	3 1.2 3.9	3 0.7 4.0	3 0.9 4.2	3 0.8 4.1	3 0.7 4.4	3 0.5 4.–	3 1.0 7.5	2 0.8 5.0	2 0.6 5.0	3 0.9 4.4	3 1.2 5.0	21
22	1 1.0 4.0	1 1.2 4.1	2 0.8 3.9	1 1.2 3.8	3 1.3 4.3	3 0.8 4.0	2 0.6 4.2	.. ..	3 1.3 4.3	1 1.2 4.0	2 0.7 4.0	.. ..	22
23	2 0.8 3.9	2 0.6 4.0	2 0.7 3.6	2 0.9 3.8	2 0.6 4.5	2 0.6 4.0	3 0.7 5.–	3 0.8 3.8	2 0.7 4.7	2 0.8 4.7	3 0.6 4.8	3 1.3 4.5	23
24	2 1.0 4.2	2 0.7 4.2	3 0.9 4.1	3 0.7 3.8	3 0.7 5.5	3 0.5 4.3	3 0.7 4.8	3 0.7 4.3	3 1.2 4.8	3 1.0 5.0	3 0.7 5.0	3 0.8 4.8	24
25	3 0.8 4.2	3 1.0 4.1	3 0.7 3.7	3 0.6 3.8	3 0.7 4.8	3 0.8 4.3	3 0.8 4.1	3 0.9 4.6	3 1.2 4.4	3 1.1 4.5	3 0.9 4.7	3 0.9 4.7	25
26	3 1.2 4.7	3 0.8 4.4	3 0.9 4.5	3 0.9 3.8	2 0.6 4.6	2 0.6 4.8	2 0.7 4.7	3 0.9 4.9	2 0.8 4.9	3 1.2 4.3	3 1.1 4.0	3 1.0 4.2	26
27	3 1.1 3.8	3 1.0 4.0	3 0.7 4.0	3 0.6 3.7	.. ..	3 0.8 3.9	3 0.5 3.9	3 0.5 3.8	.. ..	3 1.0 4.3	3 0.6 3.7	3 0.5 4.0	27
28	3 0.6 3.5	3 0.6 3.8	3 0.6 3.8	3 0.6 3.7	3 0.5 3.5	3 0.5 3.4	2 0.6 4.0	2 0.5 4.0	3 0.5 3.5	3 0.5 3.4	2 0.5 3.8	2 0.5 3.8	28
29	3 0.5 3.8	3 0.5 3.8	2 0.6 3.8	2 0.7 4.1	3 0.5 3.7	3 0.4 3.8	2 0.6 3.8	3 0.5 4.1	2 0.5 4.1	2 0.4 3.8	2 0.5 3.8	2 0.6 4.0	29
30	2 0.7 3.8	3 1.1 3.6	3 1.0 4.4	3 0.9 3.9	3 0.6 4.2	3 0.7 4.5	3 1.0 3.8	3 1.0 4.0	3 0.7 4.1	3 1.0 4.7	3 1.0 3.8	3 1.1 4.2	30

Microseisms. København

1959	Z				N				E				1959
Dec.	0^h	6^h	12^h	18^h	0^h	6^h	12^h	18^h	0^h	6^h	12^h	18^h	Dec.
1	3 1.0 3.5	3 0.9 3.8	3 1.0 4.4	3 0.7 4.2	3 1.0 4.2	3 1.0 4.5	3 0.9 4.2	3 0.7 4.2	3 1.0 4.2	3 1.1 4.7	3 0.8 4.2	3 0.8 4.3	1
2	3 0.7 4.0	3 0.9 3.9	3 1.1 4.3	3 1.0 4.1	3 0.7 4.6	3 0.8 4.1	3 0.7 4.8	3 1.3 4.0	3 0.9 3.7	3 1.0 4.1	3 1.1 5.0	3 1.4 4.5	2
3	3 1.6 6.0	3 1.3 4.5	3 1.3 4.6	3 1.7 5.5	3 1.2 4.6	3 1.5 5.0	3 1.4 4.0	3 1.2 5.0	3 1.7 5.0	3 1.8 4.4	3 1.7 4.5	3 1.7 5.8	3
4	3 1.6 5.3	3 1.5 6.0	3 1.2 4.2	3 1.1 4.2	3 1.6 5.4	3 1.7 5.8	3 1.4 6.0	3 1.2 4.1	3 1.4 5.7	3 1.6 5.6	3 1.5 4.3	3 1.7 4.8	4
5	3 1.2 4.0	3 1.3 4.0	3 1.3 4.0	3 1.5 3.8	3 1.4 4.0	3 1.2 4.5	3 1.5 5.0	3 1.6 4.8	3 1.4 4.9	3 1.6 4.8	3 1.7 5.0	3 1.8 4.3	5
6	3 1.7 3.8	3 1.8 4.0	3 1.7 4.4	3 2.5 4.2	3 1.7 4.5	3 1.7 5.3	3 1.7 5.1	3 2.2 4.8	3 1.6 4.2	3 1.7 3.8	3 2.0 4.4	3 2.8 4.0	6
7	3 2.5 4.2	3 2.0 4.0	3 2.0 4.5	3 3.0 5.5	3 2.1 4.2	3 1.6 4.8	3 2.6 5.2	3 2.4 5.2	3 2.2 4.8	3 2.5 5.4	3 2.3 5.7	3 2.6 5.7	7
8	3 3.0 5.5	3 2.3 5.7	3 2.8 4.8	3 2.6 5.5	3 2.7 5.5	3 2.3 5.0	3 2.3 5.8	3 2.2 5.5	3 3.6 5.5	3 3.0 5.8	3 2.6 4.2	3 1.8 5.8	8
9	3 2.0 4.4	3 1.8 5.0	3 1.0 5.0	3 0.8 4.2	3 1.8 5.7	3 1.5 5.2	3 1.1 5.2	3 1.0 4.6	3 2.2 6.2	3 1.7 4.3	3 1.6 5.0	3 1.1 4.4	9
10	2 0.7 4.5	2 0.6 4.3	2 0.7 4.1	2 0.7 3.9	3 0.7 4.8	3 0.5 4.8	2 0.5 3.8	2 0.7 4.1	3 0.7 4.4	3 0.6 4.3	2 0.6 5.0	2 0.7 4.2	10
11	2 0.6 3.8	2 0.7 3.8	2 0.6 4.0	2 0.5 4.2	2 0.7 3.6	2 0.5 4.0	2 0.6 3.8	2 0.7 3.7	2 0.6 4.1	2 0.6 4.2	2 0.6 4.2	2 0.7 4.0	11
12	2 0.5 3.7	2 0.5 4.0	2 0.5 4.5	2 0.4 5.2	2 0.6 4.1	2 0.7 4.2	2 0.4 4.8	2 0.4 5.2	2 0.6 4.2	2 0.5 4.3	2 0.7 4.6	2 0.6 5.1	12
13	2 0.4 4.0	2 0.4 4.6	2 0.5 5.5	2 0.6 5.0	2 0.4 4.7	2 0.4 4.1	2 0.4 5.0	2 0.4 5.0	2 0.5 4.4	2 0.6 5.0	2 0.6 5.5	2 0.6 4.8	13
14	2 0.6 5.1	3 1.1 5.6	3 1.5 5.2	3 1.5 5.8	2 0.7 5.0	3 1.5 5.8	3 1.3 6.0	3 1.6 5.7	1 1.2 5.2	3 1.3 5.0	3 1.5 5.7	3 1.6 5.8	14
15	.. ..	3 1.4 4.1	3 1.4 4.1	3 1.0 5.8	.. ..	3 1.5 4.5	3 1.4 4.8	3 1.5 4.5	.. ..	3 1.4 4.3	3 1.7 4.2	3 1.3 4.0	15
16	3 1.0 3.9	3 0.7 3.7	3 0.8 4.0	3 1.0 4.2	3 1.2 4.8	3 1.0 4.0	3 0.8 4.4	3 0.9 4.3	3 1.2 4.0	3 1.3 4.1	3 1.0 3.8	3 1.0 4.7	16
17	3 1.2 4.1	3 0.9 4.3	3 2.2 4.9	3 2.5 5.5	3 1.0 5.0	3 1.2 5.0	3 1.7 5.0	3 3.4 6.2	3 1.3 4.3	3 1.6 4.4	3 2.5 5.0	3 3.8 5.0	17
18	3 2.7 6.3	3 2.2 5.2	1 2.7 5.5	1 3.4 5.4	3 2.3 5.8	3 2.3 5.4	1 2.0 5.8	1 2.3 5.5	3 3.5 5.3	3 3.0 6.2	1 2.6 5.7	1 3.5 5.1	18
19	1 2.4 5.0	1 2.5 5.8	3 1.5 5.2	3 1.3 5.7	1 2.6 4.8	1 1.9 5.7	3 1.6 5.2	1 1.1 5.0	1 3.0 5.0	1 2.5 5.0	3 1.4 5.3	3 1.7 5.0	19
20	3 1.2 4.2	1 1.5 4.6	1 1.9 4.9	3 1.6 4.9	1 1.4 5.8	1 1.4 5.2	1 2.0 5.0	3 1.2 4.1	3 1.3 5.2	1 1.5 4.8	1 2.4 4.8	3 2.0 4.8	20
21	1 2.0 5.0	1 1.8 4.8	.. ..	1 1.7 4.7	3 1.5 4.8	1 1.9 4.3	.. ..	1 1.5 5.2	3 1.8 4.8	1 2.6 5.0	.. ..	1 1.7 4.8	21
22	1 1.5 5.0	1 1.2 4.7	2 0.7 4.8	3 0.8 4.7	1 1.6 5.2	1 1.5 5.0	2 1.0 5.2	3 0.8 5.3	1 1.7 5.6	1 1.6 5.0	3 1.3 5.0	3 1.3 4.2	22
23	3 1.1 4.8	3 1.6 5.0	3 1.4 4.3	3 1.2 4.0	3 1.0 4.8	3 1.2 4.8	3 1.3 5.1	3 1.2 4.2	3 1.1 4.6	3 2.0 4.8	3 1.7 4.9	3 1.5 4.0	23
24	3 1.3 4.6	3 1.3 4.7	3 1.0 5.2	3 1.1 4.3	3 1.0 4.4	3 1.0 5.0	3 1.0 4.2	3 0.8 4.2	3 1.3 4.6	3 1.1 4.7	3 1.1 5.0	3 0.9 4.0	24
25	3 0.7 4.1	3 0.8 4.1	3 0.7 4.0	3 0.6 4.8	3 0.8 4.2	3 0.6 4.3	3 0.6 4.6	3 0.6 5.0	3 0.8 4.5	3 0.7 4.8	3 0.8 4.7	3 0.7 4.4	25
26	3 0.7 5.2	3 0.9 4.3	3 1.3 4.1	3 1.2 3.8	3 0.8 4.8	3 1.0 4.2	3 1.1 3.7	3 1.1 3.8	3 0.8 5.0	3 1.1 4.8	3 1.2 3.8	3 1.2 3.6	26
27	3 1.2 4.2	3 0.8 4.6	3 1.1 4.3	3 1.0 4.8	3 1.3 4.0	3 1.4 4.2	3 1.1 4.6	3 1.0 4.5	3 1.5 4.8	3 1.2 4.3	3 1.3 4.2	3 1.5 4.8	27
28	1 1.0 4.1	1 1.2 4.8	1 1.6 5.0	1 1.3 4.8	1 1.3 4.3	1 1.1 4.4	1 1.8 5.0	1 1.3 4.7	1 1.5 4.6	1 1.5 4.8	1 1.6 5.0	1 1.3 4.9	28
29	2 0.7 4.6	2 0.5 4.5	2 0.4 4.2	2 0.7 4.1	2 0.6 5.2	2 0.6 4.9	2 0.5 4.5	2 0.6 4.6	1 1.1 4.8	1 0.7 4.9	2 0.5 4.5	1 0.7 5.0	29
30	2 0.8 4.4	3 1.2 4.6	3 1.5 4.1	3 1.6 4.5	2 0.8 4.8	2 1.1 5.0	3 1.5 4.6	3 1.3 4.8	1 1.1 4.7	1 1.5 4.8	3 1.8 4.2	3 1.5 4.5	30
31	3 1.4 4.1	3 1.6 5.3	3 1.0 4.4	3 1.1 4.2	3 1.6 5.2	3 1.5 5.0	3 1.1 4.0	3 1.0 4.8	3 1.6 5.0	3 1.3 4.3	3 1.1 5.0	3 1.3 4.2	31