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**KONINKLIJK NEDERLANDS
METEOROLOGISCH INSTITUUT**

SEISMIC RECORDS
AT DE BILT

Volume 46

1958

DE BILT 1963

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K O N I N K L I J K N E D E R L A N D S

M E T E O R O L O G I S C H I N S T I T U U T

Seismic Records

at De Bilt

Volume 46

1958

De Bilt - 1962

P R E F A C E

This seismic Yearbook was composed under the supervision of
Dr. J. VELDKAMP, director of the Geophysical Division.
The records have been reduced by Mr. J. OLDEMAN, scientific
headassistant.

The Director in Chief of the
Royal Netherlands Meteorological
Institute,
Ir. C.J. WARNERS.

De Bilt, September 1962.

INTRODUCTION

SEISMOLOGICAL STATION DE BILT

The geographic coordinates of the seismological station are: $52^{\circ}6'1''$ N and $5^{\circ}10'6''$ E. The instruments are placed at a height of 3 m above mean sea-level on a subsoil consisting of sand (pleistocene).

The instruments are:

a set of seismographs (two horizontal and one vertical) with galvanometric recording according to GALITZIN,
one astatic horizontal seismograph according to WIECHERT, $M = 200$ kg,
two horizontal pendulums according to BOSCH, $M = 25$ kg.

THE GALITZIN SEISMOGRAPHS AT DE BILT. Below are given: the period of the galvanometer T_1 , the reduced pendulum length l , the distance A_1 between the mirror of the galvanometer and the recording paper, and the rough values for the natural period T of the undamped pendulum, of the damping constant μ and of the multiplying factor k for the year 1958.

	NS comp.	EW comp.	Z comp.
Period of galvanometer T_1	24.43 sec	24.96 sec	12.0 sec
Reduced length of pendulum l	123 mm	123 mm	406 mm
Distance A_1	1380 mm	1380 mm	1380 mm
Period of pendulum T	25 sec	25 sec	12 sec
Damping constant μ	0.0	0.0	0.0
Multiplying factor k	11.0	11.0	175

THE WIECHERT AND BOSCH SEISMOGRAPHS AT DE BILT. The mean values of the natural period of the undamped pendulum T , of the damping ratio ϵ and of the static magnification V for the year 1958 are:

	T	ϵ	V
WIECHERT (NS comp.)	5.0 sec	4	170
" (EW comp.)	5.0 sec	4	170
BOSCH (NS comp.)	18.0 sec	4	20
" (EW comp.)	18.0 sec	4	20

SEISMOLOGICAL STATION HEERLEN

The geographic coordinates of the seismological station are: $50^{\circ}53'0''$ N and $5^{\circ}59'0''$ E.

The instrument, a horizontal seismograph, $M = 450$ kg, is placed at a height of 100 m above mean sea-level on a subsoil consisting of loess.

The mean values of the constants for the year 1958 are:

T	ϵ	V	V max.	T max.
2	3	400	600	2

SEISMOLOGICAL STATION WITTEVEEN

The geographic coordinates of the seismological station are: $52^{\circ}48'8''$ N and $6^{\circ}40'1''$ E.

The instrument, a GRENET vertical seismograph with galvanometric record, is placed at a height of 2 m above mean sea-level on a subsoil consisting of pleistocene sand.

The period of the seismograph is 2.3 sec, the period of the galvanometer is 0.8 sec. The maximum amplification is 6500 for a period of about 1 sec.

EXPLANATION OF THE TABLES

The data given in this Yearbook have mostly been obtained from the GALITZIN records. The velocity of the recording paper is 30 mm per minute, allowing a good time-accuracy. Only when the earthquake was extraordinarily severe, so that the GALITZIN records could not be analyzed, the records of the WIECHERT and BOSCH seismographs were used. The velocity of the paper of these seismographs is 10 mm and 15 mm per minute respectively. Whenever these WIECHERT and BOSCH records were used, this has been mentioned in the column "remarks".

In a few cases the data from the seismograph at Heerlen are mentioned. The time is Greenwich Mean Time.

In the column "direction" + means an upward movement of the soil (compression), - means a downward movement (dilatation). Uncertain data have been given in parentheses. The following symbols were used for the phases.

P = normal first phase, or first longitudinal tremor.
 PP = P-wave once reflected at the earth's surface near the epicentre.
 PP = P-wave reflected halfway between epicentre and station.
 PPP = P-wave two times reflected at the earth's surface.
 PPPP = P-wave three times reflected.
 S = second phase, arrival of the transversal tremor.
 SS = S-wave reflected at the earth's surface near the epicentre.
 PS = wave changed from longitudinal to transversal oscillation through reflection at the earth's surface.
 PPS = wave twice reflected, having been transversal on one branch of the path.
 SS = S-wave reflected halfway between epicentre and station.
 SSS = S-wave two times reflected at the earth's surface.
 SSSS = S-wave three times reflected at the earth's surface.
 Pcp = P-wave reflected at the core boundary.
 Scs = S-wave reflected at the core boundary.
 P' = PKP = wave having penetrated the core.
 S' = SKS = transversal wave, having been longitudinal within the core.
 PKS = alternating wave having penetrated the core.
 PP' = P'-wave reflected near the epicentre.
 SS' = S'-wave reflected near the epicentre.
 SKKS = alternating wave which has been reflected within the core.
 L = long waves or surface waves.
 M = maximum of the surface waves.
 L' = surface waves travelling around the major arc.
 M' = maximum of these waves.
 1 = sudden beginning of the phase.
 e = gradual beginning of the phase.
 F = end of discernable movement.
 H = time of the shock at point of origin.
 h = depth of the origin.
 Δ = distance of epicentre.

The indices H, N, E and Z refer to the horizontal, north-south, east-west and vertical components of the movement.

The distance of the epicentre and the depth of origin have been calculated by means of curves constructed with the aid of the time tables of Jeffreys and Bullen (1940).

The data given in the column "amplitude" are the maximal amplitudes measured from the medium line. The amplitudes have been calculated by means of the formula:

$$V = \frac{A_1 k T_b}{\pi l} \cdot \frac{1}{\left\{ 1 + \left(\frac{T_b}{T} \right)^2 \right\}^2}$$

In this formula A_1 is the distance between galvanometer mirror and recording paper, k is the multiplying factor, T_b the period of the wave, l the reduced length of the pendulum, T the free period of the undamped seismograph, and V the magnification. The period of the galvanometer is assumed to be equal to the free period of the undamped seismograph.

For the horizontal components of the GALITZIN records the following mean values were used: $k = 11.0$ and $T = 24.5$ sec, and for the vertical component $k = 175$ and $T = 12.0$ sec.

Whenever it was possible the amplitudes and periods of the first P- and S-waves have been given. As the movement of these waves is irregular in general, the accuracy of these data is small. The amplitudes of the maxima of L-waves have been calculated in case of very strong earthquakes.

The amplitudes have been omitted when the oscillations were very irregular.

The seismological bulletins of the following stations were available: Algeria, Alicante, Almeria, Athens, Azores, BCIS (Bureau Central International de Séismologie), Beograd, Bogota, Brisbane, Budapest, Coimbra, Columbia University (Palisades N.Y. and Bermuda), Djakarta, Dublin, Firenze, Geophysics Division (New Zealand), Granada, Harvard University, Helsinki, Hermanus, Huancayo, Istanbul, Jena, John Carroll University (Cleveland), JSA (Jesuit Seismological Association), Kew, Kiruna, København, Ksara, La Paz, Lisboa, Manila, Melbourne, Paris, Pasadena, Perth, Poona, Praha, Prato, Quetta, Reykjavik, Riverview N.S.W., Roma, Santiago (Chile), Seismographic Stations of the University of California, Seismological Service of Canada, Stuttgart, Tacubaya, Tananarive, Toledo, Tortosa, Trieste, Uppsala, USCGS (United States Coast and Geodetic Survey), Western Samoa, Weston (Mass.), Wien, Zürich.

THE MICROSEISMIC ACTIVITY

The table on page 1 shows the character of the microseismic activity (see also 1915 p. 101 and 1916 p. 101). The numbers 0, 1, 2 and 3 mean:

0	= very weak and weak
1	= moderate
2	= strong
3	= very strong

For measuring the microseismic activity the records of the GALITZIN seismograph were used. The table below gives the amplitudes of the oscillations (measured from the medium line) and the corresponding amplitudes of the movement of the surface.

Character	Ampl. record	Ampl. surface
0	0 - $\frac{1}{2}$ mm	0 - $1\frac{1}{4}$ μ
1	$\frac{1}{2}$ - 2 "	$1\frac{1}{4}$ - 5 "
2	2 - 4 "	5 - 10 "
3	> 4 "	> 10 "

CHARACTER OF THE MICROSEISMIC MOVEMENT

Date 1958	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2	2	2	2	1	1 0 1	1 0 1	1	0	1	1	2
2	2	2	2	1	2	1	1 0	1	1	1	2 3 2	1
3	2 1 2	2	2	2 3 1	1	0 1 0	1	1	1	1	2 3 2	1
4	2	2	2	1	1 0 1	0	1 0	1	1	1	2 1	1
5	2 3	2 3	2 3	1	1 0 1	0 1 0	0	1 2 1	1	0	1 2 1	1 2 3
6	3	3 2	3	1 0	1	0 1 0	0	1	1	0	1 2 1	2 3 2
7	3	2 3	3	0 1	1 2 0	1 1 0	1 0	1 0	1	1 2 1	2 1 2	1 2 1
8	3 2 3	3	3 2	1 2 3	1	0 1	1	1	1	1	1	1
9	3	3 2 3	2	1 2 3	2	1	1	1	1	0	1 3	1 1 2 1
10	3	3	2 1 2	1 2 1	1	1	1	1	1	0	1 3	2 1 1 2
11	3	3	1	1	1	1	1	1	1	1	2 1	1 1 2 3
12	3 2 3	2 -	1	1	1	1	1	1	0 1	0	1 1 3	3 3
13	2 1	-	1	1	1	1	1	1 3 0	1 0	1	1 2 1 3	2 3
14	1	- 2 -	1 3	1	1	1	1 3 1 1	0	1	1	2 1	1 3
15	1	- 2 -	3 2	1 2	1	1	1 0 0	1	1	1	2 1	2 3
16	1 2	- 2	2	2 1	1 2 1	1 0 0	1 1 0	1	1	2 3 2	1 3 2	
17	2 3	2 3 2	2	1	1 2 0	0	1 0	1 0	1 3	2 1	2 2	
18	3	2	2 1	1 2 1	0	1 0	1 0	1 1 1 2	2 2	2 2	2 3	
19	3	2	1	1 1	2 0	1 1 0	1	2 2	2 1 2 1	1 3		
20	3 2 2	-	1 1	- 2	1 1 2 1	0 1	1 1	2 1 2 1	1	1 2 1	3	
21	2	- 1 -	1 3	- 1	1 2 1	1	1	1	2 2 1	1	1 3	
22	2	- 2 -	3	1 2	1	1	1	1	2 1	1	1 3	
23	2 1	- 1 -	3 2	3	1	1	1 2 1	1	1	1 1	1 3 2	
24	1 2	-	3	3	1	1 0 2 1	1 1 2	1	1	1 1	1 2 1	
25	2 3	-	3 1	3	1	0 1	1 1 0	2	1	1 2 1	1	
26	3	- 1	1 3	2 1	0	1 1	0 1 2 1	1 1 2 1	1 2 1	1 2 1	2	
27	3	1	1 2 2	1	0	1 2 1	1 1	1 1 0 2 1	2 1	2 2	3	
28	3 2 1	2	2	1 0	2	1 1 2 1	1 1 0	1 1	1 2	1 2	1 3	
29	2 1		2	1 0	1	1 1	1 1 2	1	1 2	1 2	1 3	
30	1 2		2 1	1 0	1 1	1 1	1 1	2 1 2	1 2	1 3	2	
31	2		1 2		1	1 0	1 1	2 1	2 1	2 1		

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	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s	s	μ		
Jan. 2 (1)	eP eS eL F	2 12 51 2 16 32 2 19.2 2 35				{1) Disturbed by microseisms. Wi: eP 2h 12m 51s. BCIS: 36°N 22°E, H. 2h 08m 14s. USCGS: 36½°N 22°E, H. 2h 08m 15s. Off south coast of Greece.
Jan. 3 (2)	eL F	6 43 6 50				{2) Disturbed by microseisms. Wi: iP 6h 32m 10s. USCGS: 33°N 41½°W, H. 6h 24m 31s. North Atlantic Ocean.
Jan. 3 (3)						{3) Wi: iP 6h 57m 41s. BCIS: 30½°N 41°W, H. 6h 49m 55s. USCGS: 31°N 40½°W, H. 6h 49m 56s. North Atlantic Ocean.
Jan. 3 (4)	eP eS eL F	7 10 7 15.7 7 20 7 50				{4) Disturbed by microseisms. Wi: eP 7h 09m 54s. BCIS: H. 7h 02m 10s. USCGS: 31°N 40½°W, H. 7h 02m 07s. North Atlantic Ocean.
Jan. 3 (5)						{5) Wi: eP 9h 33.5m. USCGS: 31½°N 40½°W, H. 9h 25m 47s. North Atlantic Ocean.
Jan. 4 (6)	eSS eL F	6 53.5 6 58 7 20				{6) Disturbed by microseisms. Wi: eP 6h 47m 30s. USCGS: 31½°N 40½°W, H. 6h 39m 45s. North Atlantic Ocean.
Jan. 5 (7)	eS eL F	11 53.0 11 59 12 40				{7) Disturbed by microseisms. Wi: e 11h 54m 05s. USCGS: 56½°N 121°E, H. 11h 30m 44s. Stanovoi mountains region, Siberia.
Jan. 11 (8)						{8) Wi: iPKP 13h 38m 41s +. USCGS: 23½°S 177°W, H. 13h 18m 47s. Tonga Islands region.
Jan. 13 (9)	eL F	4 00 4 30				{9) Disturbed by microseisms. USCGS: 11°S 166°E, H. 2h 54m 37s, h about 100 km. Santa Cruz Islands.
Jan. 13 (10)	eL F	20 58 21 15				{10) Disturbed by microseisms. Wi: iP 20h 26m 33s +. USCGS: 11½°N 92½°E, H. 20h 14m 27s. Andaman Islands.
Jan. 14 (11)	eL F	7 20 7 35				{11) Disturbed by microseisms. Wi: ePKP 6h 14m 38s, i 6h 14m 42s. USCGS: 22°S 175°W, H. 5h 54m 48s. Tonga Islands.
Jan. 14 (12)	eL F	13 49 13 57				{12) Disturbed by microseisms. Wi: iP 13h 40m 24s. BCIS: 39½°N 40½°E, H. 13h 34m 42s. USCGS: 39½°N 41°E, H. 13h 34m 40s. Eastern Turkey.
Jan. 15 (13)						{13) Wi: eP 4h 22m 29s. USCGS: 43°N 136°E, H. 4h 10m 45s. Near coast of Siberia.
Jan. 15 (14)	iP iPP iz iSKS iS ePPS eSS eL F	19 27 47 19 28 07 19 28 26 19 38 17 19 39 06 19 41 09 19 45.1 20 00 22 10				{14) Wi: iP 19h 27m 55s; epP 19h 28m 14s. USCGS: 16½°S 71½°W, H. 19h 14m 29s, h about 100 km. Southern Peru.
Jan. 15 (15)	ePKP ePP ez ePS eSS eL F	22 35.2 22 38 06 22 38 32 22 38.5 22 56.4 23 21 24 40				{15) Wi: ePKP 22h 35m 16s; ePP 22h 38m 06s. USCGS: 13½°S 167°E, H. 22h 15m 44s. New Hebrides Islands.

Seismic Records at De Bilt

Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s	s	μ		
Jan. 16 (16)	eP eS eL F	4 22 38 4 26 18 4 27.5 4 50				{16) Wi: eP 4h 22m 35s. BCIS: 39½°N 25½°E, H. 4h 18m 13s. USCGS: 39½°N 25°E, H. 4h 18m 10s. Aegean Sea.
Jan. 16 (17)	eL F	12 18 12 40				{17) Disturbed by microseisms. USCGS: 14°S 167°E, H. 11h 03m 32s. New Hebrides Islands.
Jan. 17 (18)	eL F	8 30 9 10				{18) Disturbed by microseisms. USCGS: 52°S 139½°E, H. 7h 15m 38s. Antarctic Ocean.
Jan. 19 (19)	eP iz eS eL F	14 20 15 14 20 19 14 30 41 14 43 18 00	-	8	30	{19) Disturbed by microseisms. Wi: eP 14h 20m 12s. USCGS: 1½°N 79½°W, H. 14h 07m 27s, h about 60 km. Near coast of Ecuador.
Jan. 19 (20)						{20) Wi: iP 14h 56m 13s -. USCGS: aftershock of (19), H. 14h 43m 24s.
Jan. 20 (21)	eL F	3 15 3 40				{21) Disturbed by microseisms. USCGS: 30½°S 71½°W, H. 2h 19m 53s. Northern Chile.
Jan. 22 (22)	eL F	19 33 19 55				{22) Disturbed by microseisms. Wi: iP 18h 41m 33s. USCGS: 23°N 121½°E, H. 18h 29m 11s, h about 200 km. Near east coast of Formosa.
Jan. 23 (23)						{23) Wi: iP 2h 45m 51s +. USCGS: 44½°N 146½°E, H. 2h 34m 09s, h about 150 km. Kurile Islands.
Jan. 23 (24)	eL F	13 42 14 00				{24) Disturbed by microseisms. Wi: e 13h 38.3m. BCIS: 64½°N 7°E, H. 13h 35m 07s. USCGS: 65°N 6½°E, H. 13h 35m 03s. Off west coast of Norway.
Jan. 24 (25)	iP eS ePS eSS eL F	6 05 18 6 14.5 6 14 58 6 19.0 7 27.5 7 50	-			{25) Disturbed by microseisms. Wi: iP 6h 05m 13s; i 6h 05m 42s. USCGS: 56½°N 163°E, H. 5h 53m 58s. Near east coast of Kamchatka.
Jan. 24 (26)						{26) Wi: iP 18h 15m 07s. USCGS: 54°N 170°E, H. 18h 03m 32s. Komandorskie Islands region.
Jan. 24 (27)						{27) Wi: iP 23h 28m 15s. USCGS: 60°N 152°W, H. 23h 17m 29s, h about 60 km. Kenai Peninsula, Alaska.
Jan. 25 (28)						{28) Wi: iPKP 0h 12m 09s +. USCGS: 17½°S 178½°W, H. 23h 53m 29s, h about 550 km. Fiji Islands.
Jan. 27 (29)	eL F	8 58 9 15				{29) USCGS: 15°S 174°W, H. 7h 43m 58s. Samoa Islands.
Jan. 30 (30)						{30) Wi: ePKP 2h 28m 05s. USCGS: 21°S 179½°W, H. 2h 08m 44s, h about 250 km. Fiji Islands.
Jan. 30 (31)						{31) Wi: iPKP 5h 17m 46s -. USCGS: 19°S 172°W, H. 4h 58m 01s. Tonga Islands.

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	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s	s	μ		
Jan. 30 (32)	ePP eSKP eSS eL F	6 35.0 6 36.0 6 52.1 7 13 8 30				(32) Disturbed by microseisms. Wi: ePKP 6h 32m 38s. USCGS: $7\frac{1}{2}^{\circ}$ S $155\frac{1}{2}^{\circ}$ E, H. 6h 13m 24s. Solomon Islands.
Jan. 30 (33)						(33) Wi: e 15h 06m 25s.
Jan. 30 (34)						(34) Wi: eP 19h 18m 14s. BCIS: $36\frac{1}{4}^{\circ}$ N 260° E, H. 19h 13.5m. Dodecanese Islands.
Jan. 30 (35)						(35) Wi: iPKP 21h 19m 32s. USCGS: 23° S 175° W, H. 20h 59.5m. South of Tonga Islands.
						No Galitzin records on Feb. 3, 9h 39 - 16h 00; Feb. 6, 2h 28 - 7h 59; Feb. 7, 8h 45 - Feb. 8, 8h 04; Feb. 11, 1h 45 - 7h 24; Feb. 12, 16h 20 - Feb. 13, 15h 08; Feb. 14, 20h 39 - Feb. 16, 8h 20; Feb. 20, 13h 30 - Feb. 26, 3h 55.
Feb. 1 (36)	iP ePP eSKS iS iS ePS eL	16 22 55 16 26 10 16 33 16 16 33 27 16 34 29 16 53	+ 5	10		(36) F in next shock. Wi: iP 16h 22m 59s +. USCGS: 2° N 79° W, H. 16h 10m 15s. Near coast of Ecuador.
Feb. 1 (37)	iP eSKS eS eL F	18 15 19 18 25.8 18 26 09 18 44 19 30				(37) Wi: iP 18h 15m 25s (+). USCGS: aftershock of (36), H. 18h 02m 39s.
Feb. 1 (38)	eP eSKS eS eL F	20 58 26 21 08.9 21 09 14 21 29 22 20				(38) Disturbed by microseisms. Wi: iP 20h 58m 31s (+); i 21h 00m 44s. USCGS: aftershock of (36), H. 20h 45m 45s.
Feb. 2 (39)	eL F	8 50 9 15				(39) Disturbed by microseisms. Wi: iP 8h 23m 41s. USCGS: $48\frac{1}{2}^{\circ}$ N $154\frac{1}{2}^{\circ}$ E, H. 8h 11m 53s. Northern Kurile Islands.
Feb. 2 (40)						(40) Wi: iP 9h 02m 00s. USCGS: aftershock of (36), H. 8h 49m 13s.
Feb. 7 (41)						(41) Wi: iP 23h 34m 45s; i 23h 34m 51s. USCGS: $31\frac{1}{2}^{\circ}$ N 104° E, H. 23h 23m 30s. Szechwan Province, China.
Feb. 9 (42)	eL F	23 15 23 45				(42) Disturbed by microseisms. USCGS: $12\frac{1}{2}^{\circ}$ N 121° E, H. 22h 29m 23s. Mindoro, Philippine Islands.
Feb. 12 (43)						(43) Wi: iP 23h 43m 23s. USCGS: $43\frac{1}{2}^{\circ}$ N $145\frac{1}{2}^{\circ}$ E, H. 23h 31m 21s. Near east coast of Hokkaido, Japan.
Feb. 12 (44)						(44) Wi: iP 23h 55m 37s. USCGS: 52° N 175° W, H. 23h 43m 45s. Andreanof Islands, Aleutian Islands.
Feb. 15 (45)						(45) Wi: iP 1h 58m 42s. USCGS: 44° N 147° E, H. 1h 46m 40s. Kurile Islands.
Feb. 16 (46)						(46) Wi: eP 6h 16m 22s. USCGS: 39° N 142° E, H. 6h 04m 05s. Near east coast of Honshu, Japan.

Seismic Records at De Bilt

Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s	s	μ		
Feb. 16 (47)	eL F	23 12 23 25				(47) USCGS: $67\frac{1}{2}^{\circ}$ N 19° W, H. 23h 01m 59s. North coast of Iceland.
Feb. 17 (48)	iP iS eSS eScS F	5 27 00 5 33 44 5 35.0 5 36.5 6 15				(48) Wi: iP 5h 26m 53s -. USCGS: $35\frac{1}{2}^{\circ}$ N 70° E, H. 5h 18m 35s, h about 200 km. Hindu Kush.
Feb. 18 (49)	eL F	20 35 21 30				(49) USCGS: $20\frac{1}{2}^{\circ}$ N $120\frac{1}{2}^{\circ}$ E, H. 19h 48m 45s. Batan Islands region.
Feb. 19 (50)	eL F	20 20 21 00				(50) USCGS: 8° S 108° E, H. 19h 25m 21s. Near south coast of Java.
Feb. 20 (51)	eL F	9 52 10 05				(51) USCGS: aftershock of (49), H. 9h 04m 44s.
Feb. 22 (52)						(52) Wi: iP 11h 02m 22s -. USCGS: $50\frac{1}{2}^{\circ}$ N 175° W, H. 10h 50m 23s. Andreanof Islands, Aleutian Islands.
Feb. 27 (53)	e F	8 18 8 25				(53) Nova Zembla, explosion?
Feb. 27 (54)	eP ez eSKS eS eL F	23 40 48 23 41 12 23 51 17 23 51 50 0 12 1 15				(54) Wi: eP 23h 40m 38s. USCGS: aftershock of (49), H. 23h 27m 49s.
Feb. 28 (55)	eL F	10 13 11 05				(55) No z-record. USCGS: 27° N 44° W, H. 9h 54m 53s. Central Atlantic Ocean.
Mar. 1 (56)						(56) Wi: iP 9h 34m 53s. BCIS: $27\frac{1}{2}^{\circ}$ N 55° W, H. 9h 26m 49s. USCGS: 28° N $54\frac{1}{2}^{\circ}$ E, H. 9h 26m 46s. Southern Iran.
Mar. 3 (57)	eL F	8 10 8 30				(57) Wi: iP 7h 35m 26s. USCGS: $23\frac{1}{2}^{\circ}$ N 122° E, H. 7h 22m 42s. Near east coast of Formosa.
Mar. 3 (58)	iP eS eL F	16 29 44 16 39.1 16 52 17 30				(58) Disturbed by microseisms. Wi: iP 16h 29m 36s. USCGS: $55\frac{1}{2}^{\circ}$ N $166\frac{1}{2}^{\circ}$ E, H. 16h 18m 17s. Komandorskie Islands.
Mar. 3 (59)	eL F	18 20 18 40				(59) Disturbed by microseisms. USCGS: aftershock of (58), H. 17h 32m 47s.
Mar. 4 (60)	eL F	18 35 18 50				(60) Disturbed by microseisms. USCGS: 27° N 130° E, H. 17h 48m 35s. Ryukyu Islands.
Mar. 9 (61)	ePKP eSS eL F	10 42.6 11 07 11 40 12 30				(61) Wi: ePKP 10h 42.5m. USCGS: 34° S $178\frac{1}{2}^{\circ}$ W, H. 10h 22m 25s, h about 60 km. Kermadec Islands region.
Mar. 11 (62)	ez iP ePP iE F	0 38 47 0 38 57 0 42 19 0 49 08 3 30	(+) - 7 10			(62) Wi: iP 0h 38m 32s; e(P) 0h 42m 55s. He: e 0h 38m 49s; e 0h 39m 03s. USCGS: $25\frac{1}{2}^{\circ}$ N 125° E, H. 0h 25m 56s, h about 60 km. Ryukyu Islands.
Mar. 11 (63)						(63) Wi: iPKP 14h 18m 34s (+). USCGS: 13° S 167° E, H. 13h 59m 00s.



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Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Mar. 14 (64)	eL F	0 37 1 10				(64) USCGS: $12\frac{1}{2}^{\circ}$ N $123\frac{1}{2}^{\circ}$ E, H. 23h 49m 23s. Masbate Island, Philippine Islands.
Mar. 15 (65)	eL F	1 07 1 35			✓	(65) Wi: eP 0h 36m 43s. USCGS: 23° N $121\frac{1}{2}^{\circ}$ E, H. 0h 24m 01s. Near east coast of Formosa.
Mar. 15 (66)	eL F	6 36 6 45			✓	(66) Wi: e 6h 35m 40s. BCIS: 40° N 21° E, H. 6h 27m 08s. USCGS: 40° N $20\frac{1}{2}^{\circ}$ E, H. 6h 27m 00s. Albania - Greece border.
Mar. 18 (67)						(67) Wi: 1P 22h 32m 00s. USCGS: $50\frac{1}{2}^{\circ}$ N 173° W, H. 22h 20m 02s. Fox Islands, Aleutian Islands.
✓ Mar. 19 (68)	eS F	16 08 16 15		24	✓	(68) Wi: eP 16h 06.2m. BCIS: 47° N $14\frac{1}{2}^{\circ}$ E, H. 16h 04m 03s. Austria - Yugoslavia border.
✓ Mar. 20 (69)	iP iz iS iPS eSS eL F	1 50 1 50 2 00 2 00 2 05.0 2 15 4 30	-	6	6	(69) Wi: iP 1h 50m 02s -. USCGS: 51° N 173° W, H. 1h 38m 04s. Fox Islands, Aleutian Islands.
Mar. 21 (70)	e F	9 13 9 18				
Mar. 22 (71)	eL F	10 35 11 00				(71) Disturbed by microseisms. Wi: 1P 10h 22m 41s. USCGS: $23\frac{1}{2}^{\circ}$ N $94\frac{1}{2}^{\circ}$ E, H. 10h 11m 27s. Burma - Pakistan border.
Mar. 22 (72)	eL F	11 33 12 00				(72) Wi: eP 11h 16m 10s. BCIS: $35\frac{1}{2}^{\circ}$ N $67\frac{1}{2}^{\circ}$ E, H. 11h 07m 48s. USCGS: $35\frac{1}{2}^{\circ}$ N 67° E, H. 11h 07m 47s. Afghanistan.
Mar. 23 (73)	eL F	11 00 11 30				(73) USCGS: 18° N 120° E, H. 10h 14m 42s. Near north-west coast of Luzon, Philippines Islands.
Mar. 24 (74)						(74) Wi: ePKP 1h 15.7m. USCGS: 21° S $170\frac{1}{2}^{\circ}$ E, H. 0h 55m 55s. Loyalty Islands region.
✓ Mar. 28 (75)	iP iPP ePPP eS eH F	12 14 12 16 12 17.5 12 21.5 12 25.3 12 45	+ 3	8	✓	(75) Wi: 1P 12h 14m 37s +; 1 12h 14m 39s. USCGS: 37° N 71° E, H. 12h 06m 24s, h about 200 km. Hindu Kush.
✓ Apr. 3 (76)	eS eL F	2 30.5 2 31 3 00		28		(76) Wi: eP 2h 27m 15s. BCIS: 41° N 209° E, H. 2h 23m 40s. USCGS: 41° N $20\frac{1}{2}^{\circ}$ E, H. 2h 23m 43s. Albania.
✓ Apr. 3 (77)	e F	7 35 7 40				(77) Wi: eP 7h 25m 41s. Disturbed by microseisms. Change of papers: 7h 27 - 7h 35. BCIS: $35\frac{1}{4}^{\circ}$ N $27\frac{1}{4}^{\circ}$ E, H. 7h 18m 37s. USCGS: 35° N $27\frac{1}{2}^{\circ}$ E, H. 7h 18m 34s. Near Crete.
✓ Apr. 3 (78)						(78) Wi: eP 8h 38m 32s; 1 8h 38m 37s. USCGS: $1\frac{1}{2}^{\circ}$ N 79° W, H. 8h 25m 43s. Near coast of Ecuador.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Apr. 4 (79)	eL F	16 38 17 30				(79) Disturbed by microseisms. USCGS: $5\frac{1}{2}^{\circ}$ S 152° E, H. 15h 38m 03s. New Britain.
✓ Apr. 7 (80)	iP iS eSS eL	15 41 00 15 49 28 15 56.1 16 02.5	-	6	4	(80) Wi: eP 15h 40m 57s; e 15h 41m 05s. F in next shock. USCGS: $66\frac{1}{2}^{\circ}$ N 157° W, H. 15h 30m 38s. Alaska.
✓ Apr. 7 (81)	iP iz eS eL	18 17 29 18 17 33 18 27.8 18 44				(81) F in next shock. Wi: iP 18h 17m 24s. USCGS: $38\frac{1}{2}^{\circ}$ N 143° E, H. 18h 05m 02s. Near east coast of Honshu, Japan.
✓ Apr. 7 (82)						(82) Wi: 1P 18h 42m 36s. USCGS: aftershock of (81), H. 18h 30m 12s.
✓ Apr. 7 (83)						(83) Wi: eP 18h 50m 40s. USCGS: aftershock of (81), H. 18h 38m 18s.
✓ Apr. 7 (84)						(84) Wi: eP 19h 23m 10s; e 19h 23m 11s. USCGS: 45° N 98° E, H. 19h 13m 20s. Outer Mongolia.
✓ Apr. 8 (85)	eS eL	0 33.0 0 46				(85) F in next shock. Wi: eP 0h 24.6m. USCGS: aftershock of (80), H. 0h 14m 20s.
✓ Apr. 8 (86)	eL F	1 27 2 00				(86) BCIS: $45\frac{1}{2}^{\circ}$ N $98\frac{3}{4}^{\circ}$ E, H. 0h 55m 27s. Outer Mongolia.
✓ Apr. 8 (87)	e F	10 28 11 07				(87) USCGS: aftershock of (81), H. 10h 01m 14s.
✓ Apr. 9 (88)	eL F	5 02 5 15				(88) Wi: 1P 4h 44m 16s. BCIS: 29° N 52° E, H. 4h 36m 32s. USCGS: H. 4h 36m 29s. Near south-west coast of Iran.
✓ Apr. 9 (89)	eS eL F	6 35 45 6 48 7 20				(89) USCGS: $56\frac{1}{2}^{\circ}$ N 139° W, H. 6h 15m 12s. Gulf of Alaska.
✓ Apr. 10 (90)	eL F	11 25 11 40				(90) Disturbed by microseisms. BCIS: 52° N $98\frac{1}{2}^{\circ}$ E, H. 10h 55m 30s. USCGS: $51\frac{1}{2}^{\circ}$ N 99° E, H. 10h 55m 31s. Outer Mongolia.
✓ Apr. 10 (91)	eL F	12 35 13 00				(91) Disturbed by microseisms. Wi: eP 12h 02.6m. USCGS: $38\frac{1}{2}^{\circ}$ N 143° W, H. 11h 50m 05s. Off east coast of Honshu, Japan.
✓ Apr. 11 (92)	eL F	0 10 0 30				(92) Disturbed by microseisms. USCGS: $4\frac{1}{2}^{\circ}$ S 107° W, H. 23h 12m 47s. 100 miles west of Galapagos Islands.
✓ Apr. 11 (93)	eP eS eL F	1 10 37 1 21.0 1 40 2 40				(93) Wi: eP 1h 10m 35s. USCGS: $38\frac{1}{2}^{\circ}$ N $142\frac{1}{2}^{\circ}$ E, H. 0h 58m 13s. Off east coast of Honshu, Japan.
✓ Apr. 11 (94)	iP eS eH eL F	23 23 11 23 32 51 23 33.7 23 49 0 30	+ 3 $\frac{1}{2}$	7		(94) Wi: iP 23h 23m 07s. USCGS: $47\frac{1}{2}^{\circ}$ N $153\frac{1}{2}^{\circ}$ E, H. 23h 11m 26s. Kurile Islands.
✓ Apr. 12 (95)	eP eS eL F	11 59 34 12 10 00 12 21 13 30				(95) Wi: iP 11h 59m 42s. USCGS: $26\frac{1}{2}^{\circ}$ N 111° W, H. 11h 46m 58s. Gulf of Baja California.

Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Apr.12 (96)	eP ePP eS eH ePS eL F	13 38 12 13 41 40 13 49 00 13 49 21 13 50 18 14 08 14 45				(96) Wi: 13h 38m 09s. BCIS and USCGS: 25°N 126°E, H. 13h 25m 22s. Ryukyu Islands.
Apr.13 (97)	eL F	4 40 5 00				(97) BCIS: 45½°N 98½°E, H. 4h 08m 50s. USCGS: 41°N 98°E, H. 4h 08m 56s. Outer Mongolia.
Apr.13 (98)	eS eL F	9 26 09 9 38 11 00				(98) Wi: eP 9h 17m 45s. USCGS: 66°N 156°W, H. 9h 07m 24s. Alaska.
Apr.13 (99)	iP ePP eS eSS eSSS eL F	12 40 42 12 43 18 12 50 13 12 55.1 12 58.3 13 03 15 30	+ 7	6		(99) Wi: eP 12h 40m 38s. USCGS: 53°N 161°E, H. 12h 29m 07s. Near east coast of Kamchatka.
Apr.14 (100)	eL F	3 32 3 45				(100) Wi: iP 3h 01m 35s +. USCGS: 47°N 152°E, H. 2h 49m 41s. Kurile Islands.
Apr.14 (101)	eL F	17 00 17 10				(101) USCGS: 45°N 98°E, H. 16h 26m 55s. Outer Mongolia.
Apr.14 (102)	eL F	18 50 19 10				(102) USCGS: 53°N 161°E, H. 18h 08m 40s. Near east coast of Kamchatka.
Apr.14 (103)	iP iz is eL F	21 45 12 21 45 18 21 55 50 22 12 25 00	+ -			(103) Wi: iP 21h 45m 19s. USCGS: 1°N 79½°W, H. 21h 32m 28s. Near coast of Ecuador.
Apr.15 (104)	iP iz eH is eL F	1 43 30 1 43 44 1 53 54 1 54 04 2 08 3 20	+ 4	4		(104) Wi: iP 1h 43m 34s. USCGS: after- shock of (103), H. 1h 30m 43s.
Apr.15 (105)	eP eS eH eSSS eL F	4 05.1 4 15 29 4 21 4 24.4 4 27 6 00				(105) Wi: eP 4h 05m 11s. USCGS: 9°N 84°W, H. 3h 52m 39s. Off west coast of Costa Rica.
Apr.17 (106)	eL F	11 10 11 35				(106) USCGS: 5½°S 152°E, H. 10h 04m 46s. New Britain.
Apr.17 (107)						(107) Wi: iP 11h 45m 08s. USCGS: 37°N 140½°E, H. 11h 32m 48s. Near east coast of Honshu, Japan.
Apr.18 (108)						(108) Wi: iPKP 7h 50m 47s. USCGS: 20°S 178°W, H. 7h 32m 06s, h about 600 km. Fiji Islands.
Apr.19 (109)	eP eS eL F	4 16 00 4 26.5 4 42 5 10				(109) Wi: eP 4h 16m 04s. USCGS: 26½°N 110½°W, H. 4h 03m 26s. Gulf of California.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Apr.19 (110)						(110) Wi: ePKP 11h 13m 01s. BCIS: 22½°S 169½°E, H. 10h 53.4m. Loyalty Islands region.
						No Galitzin records on 20 Apr. 9h 24 - 21 Apr. 15h 46.
Apr.21 (111)	ePKP eSS eL F	20 34.5 20 56.3 21 24 22 30				(111) Wi: eP 20h 34m 37s. USCGS: 15°S 174½°W, H. 20h 14m 47s. Samoa Islands region.
Apr.21 (112)	eS ePS eL F	23 02 12 23 03 39 23 22 24 00				(112) USCGS: 4½°S 104°E, H. 22h 37m 18s. Sumatra.
Apr.23 (113)	eS eL F	3 19.9 3 40 4 40				(113) Disturbed by microseisms. Wi: iP 3h 09m 45s. USCGS: 45°N 152°E, H. 2h 57m 40s. Kurile Islands.
Apr.23 (114)						(114) Wi: e 13h 10m 55s.
Apr.23 (115)						(115) Wi: e 17h 01m 50s.
Apr.24 (116)						(116) Wi: e 19h 03m 02s.
Apr.27 (117)	eL F	19 45.4 20 30				(117) USCGS: 52½°N 169°W, H. 19h 03m 50s. Fox Islands, Aleutian Islands.
Apr.28 (118)	eP eSKS eL F	12 01 00 12 11 26 12 26 13 30				(118) Wi: eP 12h 00m 56s. USCGS: 11°S 74°W, H. 11h 47m 40s. Peru.
Apr.30 (119)	iP eS eL F	14 12 36 14 16 22 14 18 12 14 50	+ 5	2		(119) Wi: eP 14h 12m 50s. BCIS: 37½°N 14½°W, H. 14h 07m 59s. USCGS: 37½°N 14°W, H. 14h 08m 00s. Off coast of Portugal.
May 1 (120)	ez ePKP epPKP ePP epPP eSS eL F	0 48 10 0 48 20 0 49 14 0 51 14 0 52 01 1 09 20 1 36 2 35				(120) Wi: e Oh 48m 09s; iPKP Oh 48m 21s (+); ePP Oh 51.2m. USCGS: 13½°S 167½°E, H. Oh 29m 15s, h about 200 km. New Hebrides Islands.
May 1 (121)						(121) Wi: eP 12h 46m 00s. USCGS: 25½°N 141°E, H. 12h 33m 28s, h about 400 km. Volcano Islands.
May 1 (122)	ez F	21 23.1 21 30				(122) BCIS: 41½°N 21°E, H. 21h 15m 30s. Albania.
May 2 (123)	eP eS	20 42 40 20 52 44				(123) USCGS: 16½°N 99°W, H. 20h 29m 18s. Mexico.
May 3 (124)	eL F	8 30 8 50				(124) BCIS: 10½°W, H. 8h 00m 48s. Ascen- sion Island region.



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Date 1958	Phase	Time	Direction	Period	Amplitud	Remarks
		h m s		s	μ	
May 3 (125)	eP eS eL F	20 22 57 20 26 30 20 29 20 50				(125) Wi: eP 20h 23m 01s. BCIS: $36^{\circ}5N$ $21^{\circ}8E$, H. 20h 18m 16s. USCGS: $36\frac{1}{2}^{\circ}N$ $22^{\circ}E$, H. 20h 18m 16s. Near south coast of Greece.
May 3 (126)						(126) Wi: iPKP 23h 22m 53s (+). USCGS: $20^{\circ}S 178^{\circ}W$, H. 23h 00m 33s. Fiji Islands region.
May 4 (127)	ez ez F	10 56.5 10 57 11 00				(127) BCIS: $44^{\circ}4N 79^{\circ}4E$, H. 10h 52m 45s. Italy.
May 5 (128)	eL F	5 36 5 00				(128) Wi: eP 5h 27m 48s. USCGS: $36\frac{1}{2}^{\circ}N$ $45\frac{1}{2}^{\circ}E$, H. 5h 21m 33s. Iran - Irak border.
May 5 (129)	iP iz eS eL F	6 42 20 6 42 31 6 51.0 7 01 7 35	-			(129) Wi: 6h 42m 21s. USCGS: $9\frac{1}{2}^{\circ}S 27\frac{1}{2}^{\circ}E$, H. 6h 31m 39s. Congo, south-west of Lake Moero.
May 6 (130)	eL F	0 32 0 45				(130) Disturbed by microseisms. USCGS: $57\frac{1}{2}^{\circ}N 136\frac{1}{2}^{\circ}W$, H. 23h 53m 29s. Near south-east coast of Alaska.
May 6 (131)	eL F	14 36 14 40				(131) Disturbed by microseisms. BCIS: $51\frac{1}{2}^{\circ}N 30^{\circ}W$, H. 14h 24m 44s. North Atlantic Ocean.
May 7 (132)	eL F	7 42 8 05				(132) Disturbed by microseisms. BCIS: $55^{\circ}N 26^{\circ}W$. North Atlantic Ocean.
May 8 (133)	eS eL F	2 56.5 2 59 3 05				(133) Disturbed by microseisms. Wi: eP 2h 52.5m. USCGS: $45\frac{1}{2}^{\circ}N 28^{\circ}W$, H. 2h 47m 14s. North Atlantic Ocean.
May 8 (134)	eL F	13 05 13 55				(134) Disturbed by microseisms. Wi: iP 12h 54m 15s, iPP 12h 55m 01s. USCGS: $24^{\circ}S 67^{\circ}W$, H. 12h 40m 46s, h about 200 km. Salta Province, Argentina.
May 9 (135)	eL F	2 53 3 05				(135) Disturbed by microseisms. Wi: eP 2h 45m 42s. BCIS: $36\frac{1}{2}^{\circ}N 27\frac{1}{2}^{\circ}E$, H. 2h 40m 47s. USCGS: $36\frac{1}{2}^{\circ}N 27\frac{1}{2}^{\circ}E$, H. 2h 40m 46s. Dodecanese Islands.
May 10 (136)	eP eS eSS eL F	23 05 00 23 13.5 23 17.5 23 27 24 30				(136) Disturbed by microseisms. Wi: eP 23h 05.1m. USCGS: $65^{\circ}N 152\frac{1}{2}^{\circ}W$, H. 22h 54m 40s. Central Alaska.
May 11 (137)	eP eS eL F	5 34 16 5 42 50 5 51 7 00				(137) Disturbed by microseisms. Wi: eP 5h 34m 17s. USCGS: $65^{\circ}N 152\frac{1}{2}^{\circ}W$, H. 5h 23m 54s. Central Alaska.
May 11 (138)	e F	13 00 13 10				(138) Moscow: H. 12h 07m (07s). Ryukyu Islands.
May 12 (139)		:				(139) Wi: iP 17h 02m 41s +. USCGS: $31^{\circ}N$ $140\frac{1}{2}^{\circ}E$, H. 16h 50m 05s, h about 100 km. South of Honshu, Japan.
May 14 (140)	eL F	2 48 2 53				(140) Disturbed by microseisms. BCIS: $38^{\circ}35'N 28^{\circ}50'W$, H. 2h 34.5m. Capellinha Rock, Azores Islands.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
May 14 (141)	eL F	5 04 5 20				(141) Disturbed by microseisms. USCGS: $4\frac{1}{2}^{\circ}S 153^{\circ}E$, H. 3h 58m 09s. New Ireland.
May 15 (142)						(142) Wi: iPKP 5h 00m 44s. USCGS: 4h 40m 54s. Tonga Islands region.
May 17 (143)	eL F	8 00 8 35				(143) Disturbed by microseisms. USCGS: $3^{\circ}S 147\frac{1}{2}^{\circ}E$, H. 7h 02m 25s. New Britain region.
May 18 (144)	ePKP ePP eL F	2 52 22 2 55 12 3 38 5 15				(144) Disturbed by microseisms. USCGS: $13^{\circ}S 167^{\circ}E$, H. 2h 32m 52s. New Hebrides Islands.
May 19 (145)						(145) Wi: iPKP 13h 10m 21s. BCIS: $20^{\circ}S$ $169\frac{1}{2}^{\circ}E$, H. 12h 50m 39s. New Hebrides Islands.
May 21 (146)	eL F	5 33 5 40				(146) Disturbed by microseisms. USCGS: $22^{\circ}N 121^{\circ}E$, H. 4h 45m 24s, h about 100 km. Near south coast of Formosa.
May 22 (147)						(147) Wi: iP 11h 44m 48s. USCGS: $50\frac{1}{2}^{\circ}N$ $175^{\circ}W$, H. 11h 32m 50s. Andreanof Islands, Aleutian Islands.
May 25 (148)	eL F	0 20 0 45				(148) BCIS: $12^{\circ}N 43\frac{1}{2}^{\circ}E$, H. 23h 53m 38s. Gulf of Aden.
May 25 (149)	eL F	1 20 1 50				(149) Wi: eP 0h 47m 14s. USCGS: $51\frac{1}{2}^{\circ}N$ $177^{\circ}W$, H. 0h 35m 23s. Andreanof Islands, Aleutian Islands.
May 25 (150)						(150) Wi: e 8h 51m 20s; e 8h 51m 38s.
May 25 (151)	eP eL F	15 06 25 15 40 16 25				(151) Wi: iP 15h 06m 24s -. USCGS: $51\frac{1}{2}^{\circ}N 177^{\circ}E$, H. 14h 54m 30s. Andreanof Islands, Aleutian Islands.
May 25 (152)	eL F	18 29 18 40				(152) Wi: iP 17h 53m 20s -. USCGS: $31^{\circ}N$ $129\frac{1}{2}^{\circ}E$, H. 17h 40m 47s. Near west coast of Kiusiu, Japan.
May 25 (153)	iP eS eL F	21 24 37 21 35 18 21 49 23 30				(153) Wi: iP 21h 24m 38s (-). USCGS: $30^{\circ}S 77^{\circ}W$, H. 21h 11m 45s, h about 100 km. Ecuador - Peru border region.
May 26 (154)						(154) Wi: iP 9h 02m 40s -. USCGS: $3^{\circ}S$ $77^{\circ}W$, H. 8h 49m 47s. Ecuador - Peru border.
May 26 (155)						(155) Wi: ePKP 16h 36m 46s. USCGS: $17\frac{1}{2}^{\circ}S 178\frac{1}{2}^{\circ}W$, H. 16h 18m 10s, h about 600 km. Fiji Islands.
May 27 (156)	eP eS eL F	18 32 22 18 36.2 18 37 18 50				(156) Wi: iP 18h 32m 20s +. BCIS: $36^{\circ}5N 27^{\circ}0E$, H. 18h 27m 42s. USCGS: $36\frac{1}{2}^{\circ}N 26\frac{1}{2}^{\circ}E$, H. 18h 27m 28s. Dodecanese Islands, Aegean Sea.
May 28 (157)	eL F	0 35 1 10				(157) USCGS: $5\frac{1}{2}^{\circ}S 146^{\circ}E$, H. 23h 32m 43. North coast of New Guinea.
May 30 (158)						(158) Wi: iPKP 5h 16m 31s. BCIS: $15^{\circ}S$ $176\frac{1}{2}^{\circ}W$, H. 4h 57.0m. Fiji Islands region.



Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
May 30 (159)	iP eS eSS eL F	18 16 43 18 26 38 18 32 18 44 20 00	+ 			(159) Wi: iP 18h 16m 38s. USCGS: $52\frac{1}{2}^{\circ}$ N 169° W, H. 18h 04m 50s. Fox Islands, Aleutian Islands.
May 30 (160)						(160) Wi: iPKP 21h 39m 39s. USCGS: 21h 20m 05s. Fiji Islands region.
May 31 (161)	eS eL F	4 01.5 4 04 4 20				(161) BCIS: $41\frac{1}{2}^{\circ}$ N 44° E, H. 3h 50m 08s. Caucasus.
May 31 (162)	ePKP iPP eH eSS eL F	19 52 00 19 52 10 19 55.2 20 13 40 20 40 23 00				(162) USCGS: 15° N 169° E, H. 19h 32m 30s. New Hebrides Islands.
Jun. 1 (163)	eL F	19 01 19 10				(163) Wi: iP 18h 31m 59s. USCGS: $60\frac{1}{2}^{\circ}$ N $143\frac{1}{2}^{\circ}$ W, H. 18h 21m 17s. Alaska.
Jun. 3 (164)	ePKP ePP ePKS eSS eL F	19 51 20 19 54 33 19 55 04 20 13.2 20 40 22 20				(164) USCGS: 15° S 168° E, H. 19h 31m 52s. New Hebrides Islands.
Jun. 4 (165)	eS eL F	14 51 18 15 04 17 40				(165) Wi: eP 14h 41m 33s. No z-record. USCGS: $52\frac{1}{2}^{\circ}$ N 167° W, H. 14h 29m 50s. Fox Islands, Aleutian Islands.
Jun. 5 (166)	iP eS eL F	13 34 04 13 37 34 13 39.5 14 00				(166) Wi: eP 13h 33m 16s. BCIS: $37\frac{1}{2}^{\circ}$ N $21\frac{1}{4}^{\circ}$ E, H. 13h 29m 50s, h about 100 km. USCGS: $36\frac{1}{2}^{\circ}$ N 20° E, H. 13h 29m 42s, h about 100 km. Off west coast of Greece.
Jun. 6 (167)	eP ePP eS eSS eL F	9 23 50 9 27 00 9 34 06 9 39.5 9 45.5 12 00				(167) (Wi: eP 9h 23m 40s). BCIS: 8° N $84\frac{1}{2}^{\circ}$ W, H. 9h 11m 16s. USCGS: H. 9h 11m 14s. Off coast of Costa Rica.
Jun. 6 (168)	eP eS eL F	19 28.2 19 38 36 19 51 21.0				(168) Wi: iP 19h 28m 11s. USCGS: $5\frac{1}{2}^{\circ}$ N $82\frac{1}{2}^{\circ}$ W, H. 19h 15m 28s. Off south coast of Costa Rica
Jun. 6 (169)	eL F	23 20 23 50				(169) USCGS: 8° N $84\frac{1}{2}^{\circ}$ W, H. 22h 44m 05s. Off coast of Costa Rica.
Jun. 7 (170)	eL F	14 26 14 55				(170) USCGS: 53° S 140° E, H. 12h 55m 01s. South of Tasmania.
Jun. 8 (171)	eH F	1 20 1 50				(171) Wi: eP 0h 50m 45s. No z-record. USCGS: 53° N 167° W, H. 0h 38m 52s. Fox Islands, Aleutian Islands.
Jun. 8 (172)	eH F	21 33 22.0				(172) No z-record. BCIS: 7° N 34° W, H. 21h 09m 25s. USCGS: 7° N $34\frac{1}{2}^{\circ}$ W, H. 21h 09m 23s. Atlantic Ocean.
Jun. 10 (173)	e F	7 27 7 55				(173) Change of papers 7h 33 - 7h 53. USCGS: $30\frac{1}{2}^{\circ}$ N $51\frac{1}{2}^{\circ}$ E, H. 7h 04m 02s. Western Iran.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Jun. 10 (174)	e F	8 36 8 40				(174) BCIS: $41\frac{1}{2}^{\circ}$ N $19\frac{1}{4}^{\circ}$ E, H. 8h 28m 52s. Near coast of Albania.
Jun. 12 (175)	eL F	12 30 13 00				(175) USCGS: $7\frac{1}{2}^{\circ}$ N $84\frac{1}{2}^{\circ}$ W, H. 11h 54m 04s. Off coast of Costa Rica.
Jun. 12 (176)						(176) Wi: e 18h 27m 38s.
Jun. 12 (177)	ez iP eS eH eL F	21 04 38 21 04 50 21 14 31 21 20.1 21 26 24.0	-			(177) Wi: iP 21h 04m 40s. USCGS: 53° N 167° W, H. 20h 52m 57s. Fox Islands, Aleutian Islands.
Jun. 12 (178)						(178) Wi: iP 21h 45m 06s. USCGS: after- shock of (177), H. 21h 33m 25s.
Jun. 15 (179)						(179) Wi: iPKP 2h 59m 53s -. USCGS: 20° S 178° W, H. 2h 41m 10s, h about 550 km. Fiji Islands.
Jun. 15 (180)	iPKP ipPKP essKS eSS F	15 13 16 15 15 22 15 22 43 15 35 16.5				(180) Wi: iPKP 15h 13m 18s. Wi: time correction doubtful. USCGS: 18° S $178\frac{1}{2}^{\circ}$ W, H. 14h 54m 37s, h about 600 km. Fiji Islands.
Jun. 16 (181)	eL F	9 30 10 00				(181) USCGS: $14\frac{1}{2}^{\circ}$ S $177\frac{1}{2}^{\circ}$ W, H. 8h 13m 07s. Fiji Islands region.
Jun. 17 (182)	eL F	19 55 20 30				(182) USCGS: 25° N $142\frac{1}{2}^{\circ}$ E, H. 19h 06m 43s. Vulcano Islands.
Jun. 18 (183)	iP eS eL F	1 19 34 1 23 20 1 24.5 2 10	+			(183) Wi: 1h 19m 30s, time correction doubtful. BCIS: $68\frac{3}{4}^{\circ}$ N $17\frac{1}{4}^{\circ}$ W, H. 1h 15m 01s. USCGS: $68\frac{1}{2}^{\circ}$ N 160° W, H. 1h 15m 02s. Off north coast of Iceland.
Jun. 18 (184)	iP eH F	2 28 00 2 31.5 3 00				(184) Aftershock of (183). BCIS: H. 2h 23m 25s. USCGS: H. 2h 23m 27s.
Jun. 18 (185)	iP eS eL F	4 38 34 4 42 20 4 43.5 5 15				(185) BCIS and USCGS: aftershock of (183), H. 4h 34m 04s.
Jun. 19 (186)	iP eS ePS eL F	5 29 48 5 39 22 5 40 20 5 55 7 10				(186) Wi: iP 5h 29m 43s. USCGS: $49\frac{1}{2}^{\circ}$ N 156° E, H. 5h 18m 00s. Kurile Islands.
Jun. 20 (187)						
Jun. 23 (188)	e eL F	5 32 5 39 6 30				(187) Wi: iPKP 17h 51m 19s. USCGS: $20\frac{1}{2}^{\circ}$ S 179° W, H. 5h 18m 00s, h about 600 km. Fiji Islands.
Jun. 23 (189)	eL F	7 25 7 40				(188) USCGS: 49° N 102° E, H. 5h 10m 03s. Outer Mongolia.
						(189) BCIS: H. 7h 12.1m. 300 miles south-east of Azores Islands. Mid- Atlantic Ridge.



Date 1958	Phase	Time	Direction	Period	Amplitud	Remarks
		h m s		s	μ	
Jun. 24 (190)	eP ePP eS eL F	4 57 15 4 59 13 5 04 31 5 16.5 5 40				(190) USCGS: $40\frac{1}{2}^{\circ}$ N $78\frac{1}{2}^{\circ}$ E, H. 4h 48m 15s. Western Sinkiang Province, China.
Jun. 24 (191)	eL F	6 13 6 30				(191) BCIS: $42^{\circ}4N$ $13^{\circ}5E$, H. 6h 07m 04s. Gran Sasso, Italy.
Jun. 24 (192)	eL F	7 30 8 10				(192) BCIS: $47^{\circ}S$ $80^{\circ}W$, H. 6h 36.2m. Off coast of Chile.
Jun. 25 (193)	ePP eSS eL F	9 56.8 10 14.0 11 00 13.0				(193) USCGS: $3^{\circ}S$ $144\frac{1}{2}^{\circ}$ E, H. 9h 36m 30s. Near north coast of New Guinea.
Jun. 26 (194)	iP ipP iS iss F	4 49 36 4 50 08 4 58 49 4 59 30 6 00	-			(194) USCGS: $54\frac{1}{2}^{\circ}$ N $159\frac{1}{2}^{\circ}$ E, H. 4h 38m 12s. Slightly deeper than normal. Kamchatka.
Jun. 26 (195)	eL F	8 30 8 40				(195) USCGS: $24^{\circ}N$ $125^{\circ}E$, H. 7h 39m 21s. Ryukyu Islands.
Jun. 26 (196)	eP ePP eS eL F	23 43 28 23 46 12 23 53 20 0 15 0 50				(196) BCIS: $31^{\circ}N$ $141\frac{3}{4}^{\circ}$ E, H. 23h 29m 35s. USCGS: $31^{\circ}N$ $141\frac{1}{2}^{\circ}$ E, H. 23h 29m 32s. South of Honshu, Japan.
Jun. 30 (197)	iP epP iS eL F	8 47 33 8 47 52 8 52 16 8 55 9 15	+			(197) Wi: eP 8h 47m (30s). BCIS: $36^{\circ}5N$ $27^{\circ}4E$, H. 8h 42m 41s. USCGS: $36\frac{1}{2}^{\circ}$ N $27\frac{1}{2}^{\circ}$ E, H. 8h 42m 33s. Dodecanese Islands.
Jun. 30 (198)	eP iS eL F	18 39 16 18 50 00 19 10 21 00				(198) Wi: eP 18h 39m (07s). USCGS: $31^{\circ}N$ $141\frac{1}{2}^{\circ}$ E, H. 18h 26m 20s. Off south coast of Honshu, Japan.
Jul. 1 (199)	eP eS eL F	6 04 58 6 14 44 6 30 7 25				(199) USCGS: $51\frac{1}{2}^{\circ}$ N $176\frac{1}{2}^{\circ}$ W, H. 5h 53m 07s. Andreanof Islands, Aleutian Islands.
Jul. 3 (200)	eP eS eL F	5 58 10 6 09 48 6 21 7 40				(200) BCIS: $17\frac{1}{2}^{\circ}S$ $65\frac{1}{2}^{\circ}$ E, H. 5h 45m 15s. USCGS: $18^{\circ}S$ $66^{\circ}E$, H. 5h 45m 07s. Mascarene Islands region.
Jul. 3 (201)	iPKP ₁ iPKP ₂	6 47 00 6 47 32	+			(201) USCGS: $29^{\circ}S$ $179^{\circ}E$, H. 6h 27m 44s, h about 400 km, Kermadec Islands.
Jul. 4 (202)	ePKP F	0 39.4 0 41.0				(202) Wi: ePKP 0h 39m 12s; i 0h 39m 28s. USCGS: $19^{\circ}S$ $173\frac{1}{2}^{\circ}$ W, H. 0h 19m 28s. Tonga Islands.
Jul. 4 (203)	ePP ePPP ePS eL F	18 52.3 18 54 30 19 01.3 19 20 20.0				(203) USCGS: $6^{\circ}N$ $125^{\circ}E$, H. 18h 34m 03s. Near south coast of Mindanao, Philippine Islands.
Jul. 5 (204)	eS eL F	2 16 24 2 20 2 35				(204) BCIS and Moscow: $43^{\circ}N$ $41\frac{1}{2}^{\circ}$ E, H. 2h 05m 57s. Caucasus.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Jul. 6 (205)	e F	0 12 0 30				(205) USCGS: $31\frac{1}{4}^{\circ}$ N $141\frac{1}{2}^{\circ}$ E, H. 23h 21m 50s. Off coast of Honshu, Japan.
Jul. 6 (206)	eH F	5 01 5 10				(206) USCGS: $55^{\circ}N$ $166\frac{1}{2}^{\circ}$ W, H. 4h 40m 59s. Alaska Peninsula.
Jul. 6 (207)	eL F	20 37 21 00				(207) BCIS: H. 19h 49.6m. Off south coast of Formosa.
Jul. 8 (208)	ez eH eH F	5 03 23 5 04 09 5 04 24 5 30				(208) Wi: 1 5h 03m 15s. BCIS: $50^{\circ}8N$ $10^{\circ}2E$, H. 5h 02m 26s. Thüringer Wald.
Jul. 8 (209)	ePS eL F	23 15 39 23 33 0 20				(209) USCGS: $43^{\circ}S$ $41\frac{1}{2}^{\circ}$ E, H. 22h 48m 36s. Indian Ocean, north-east of Prince Edward Islands.
Jul. 9 (210)	eL F	1 58 2 25				(210) BCIS: aftershock of (209), H. 1h 08m 06s.
Jul. 10 (211)	iP iz eS eH F	6 26 42 6 26 46 6 35 37 6 35 41 11 30				(211) Wi: iP 6h 26m 41s. BCIS: and USCGS: $58^{\circ}6N$ $137^{\circ}W$, H. 6h 15m 51s. South-east Alaska.
Jul. 10 (212)	eS F	15 17 22 16 00				(212) BCIS: $\frac{1}{2}^{\circ}S$ $24^{\circ}W$, H. 14h 59m 14s. Mid-Atlantic Ridge.
Jul. 11 (213)	eP ez ePP eL F	19 24 00 19 27 58 19 28 15 20 00 20 30				(213) Wi: iP 19h 24m 06s. USCGS: $21^{\circ}S$ $69^{\circ}W$, H. 19h 10m 20s. Northern Chile.
Jul. 12 (214)	eSS eL F	1 21.6 1 39 2 30				(214) USCGS: $5^{\circ}S$ $106\frac{1}{2}^{\circ}$ W, H. 0h 48m 30s. Pacific Ocean.
Jul. 15 (215)	eS F	8 08.1 8 15				(215) Wi: eP 8h 04m 07s. BCIS: $35^{\circ}4N$ $23^{\circ}6E$, H. 7h 59m 18s. USCGS: $35\frac{1}{2}^{\circ}N$ $23\frac{1}{2}^{\circ}E$, H. 7h 59m 18s. Near west coast of Crete.
Jul. 16 (216)	eL F	14 00 14 45				(216) USCGS: $29\frac{1}{2}^{\circ}S$ $113^{\circ}W$, H. 12h 54m 18s. South Pacific Ocean.
Jul. 17 (217)	eP eS eL F	5 41 14 5 44 27 5 45.5 6 30				(217) Wi: iP 5h 41m 08s. BCIS: $40\frac{3}{4}^{\circ}N$ $23\frac{1}{4}^{\circ}E$, H. 5h 37m 08s. USCGS: $41\frac{1}{2}^{\circ}N$ $23^{\circ}E$, H. 5h 37m 06s. Northern Greece.
Jul. 17 (218)	eP eL F	19 14.1 19 45 20 30				(218) USCGS: $51^{\circ}N$ $176^{\circ}W$, H. 19h 02m 10s. Andreanof Islands, Aleutian Islands.
Jul. 17 (219)	eP eS eL F	21 11.2 21 21.0 21 35 22 30				(219) USCGS: $51^{\circ}N$ $177\frac{1}{2}^{\circ}W$, H. 20h 59m 17s. Andreanof Islands, Aleutian Islands.
Jul. 18 (220)	eP eS eL F	0 51 43 0 01.5 1 17 2 30				(220) USCGS: $51^{\circ}N$ $176\frac{1}{2}^{\circ}W$, H. 0h 39m 18s. Andreanof Islands, Aleutian Islands.



Date 1958	Phase	Time			Direction	Period	Amplitude	Remarks
		h	m	s		s	μ	
Jul.18 (221)	eP	21	50	46				(221) Wi: eP 21h 50m 39s. USCGS: $25\frac{1}{2}^{\circ}$ N 124° E, H. 21h 38m 05s. Ryukyu Islands region.
	eS	22	01	00				
	eL	22	19					
	F	22	40					
Jul.19 (222)	ePP	6	50	16				(222) Wi: iPKP 6h 48m 53s. USCGS: 40° S $138\frac{1}{2}^{\circ}$ E, H. 6h 30m 19s. New Guinea.
	ez	6	51	10				
	ePS	7	00.1					
	eSS	7	06.5					
	eL	7	29					
	F	8	00					
Jul.19 (223)	e	15	40					(223) Wi: iP 15h 09m 35s. USCGS: 41° N $143\frac{1}{2}^{\circ}$ E, H. 14h 57m 24s. Near south coast of Hokkaido, Japan.
	F	16	30					
Jul.19 (224)	ePP	18	36	10				(224) Wi: iPKP 18h 36m 05s. USCGS: 0° 129° E, H. 18h 16m 52s. Molucca Islands.
	eSKS	18	42.0					
	eSKS	18	43	06				
	ePS	18	45.6					
	eL	19	05					
	F	21	30					
Jul.19 (225)								(225) Wi: iPKP 19h 08m 28s. BCIS: 16° S $179\frac{1}{2}^{\circ}$ W, H. 18h 48m 58s. Fiji Islands.
Jul.20 (226)	eS	19	31	07				(226) Wi: e 19h 30m (08s); e 19h 31.0m. BCIS: 46° N 19° W, H. 19h 27m 17s. Ile d'Oléron, France.
	F	19	45					
Jul.21 (227)	eS	7	47.3					(227) Wi: iP 7h 37m 00s +. USCGS: $44\frac{1}{2}^{\circ}$ N $147\frac{1}{2}^{\circ}$ E, H. 7h 24m 58s. Kurile Islands.
	eL	8	00					
	F	9	00					
Jul.21 (228)	eP	14	49	14				(228) Wi: eP 14h 49m 12s. USCGS: $49\frac{1}{2}^{\circ}$ N 178° W, H. 14h 37m 18s. Andreanof Islands, Aleutian Islands.
	eS	14	59	56				
	eL	15	15					
	F	16	00					
Jul.22 (229)								(229) Wi: iPKP 15h 12m 42s. USCGS: 22° S 180° W, H. 14h 54m 00s, h about 600 km. Fiji Islands region.
Jul.23 (230)	eP	10	40	21				(230) USCGS: 31° N 142° E, H. 10h 27m 19s. South of Honshu, Japan.
	eS	10	51.0					
	ePS	10	52.2					
	eL	11	13					
	F	13.0						
Jul.26 (231)	ePP	6	31	36				(231) USCGS: 40° S $45\frac{1}{2}^{\circ}$ E, H. 6h 13m 50s. South Indian Ocean.
	ePS	6	40.4					
	eL	7	01					
	F	7	40					
Jul.26 (232)	eL	8	25					
	F	8	45					
Jul.26 (233)	iP	17	49	15	-			(233) Wi: iP 17h 49m 49s -. He: iP 17h 49m 17s. USCGS: $13\frac{1}{2}^{\circ}$ S 69° W, H. 17h 37m 09s, h about 650 km. Peru - Bolivia border.
	ipP	17	51	36	-			
	iPP	17	53	00	-			
	iS	17	59	04				
	eH	18	01	56				
	esS	18	03	08				
	F	20	30					
Jul.27 (234)								(234) Wi: iPKP 0h 41m 15s -. USCGS: $20\frac{1}{2}^{\circ}$ S $178\frac{1}{2}^{\circ}$ W, H. 0h 22m 32s, h about 600 km. Fiji Islands region.

Seismic Records at De Bilt								
Date 1958	Phase	Time			Direction	Period	Amplitude	Remarks
		h	m	s		s	μ	
Jul.27 (235)	eP	18	35	50				(235) USCGS: 55° N $34\frac{1}{2}^{\circ}$ W, H. 18h 30m 33s. North Atlantic Ocean.
	eS	18	40	13				
	eL	18	42					
	F	19	05					
Jul.28 (236)								(236) Wi: iPKP 17h 43m 30s -. USCGS: 20° S $177\frac{1}{2}^{\circ}$ W, H. 17h 24m 40s, h about 500 km. Fiji Islands region.
Jul.29 (237)								(237) Wi: iPKP 4h 18m 35s. BCIS: fore- shock of (238), H. 3h 59m 02s.
Jul.29 (238)								(238) Wi: iPKP 11h 09m 22s. USCGS: $20\frac{1}{2}^{\circ}$ S $175\frac{1}{2}^{\circ}$ W, H. 10h 49m 27s. Tonga Islands.
Jul.29 (239)	iP	21	47	00				(239) BCIS and USCGS: 40° N $26\frac{1}{2}^{\circ}$ W, H. 21h 37m 25s. Atlantic Ocean.
	eS	21	54	45				
	eL	22	03					
	F	23	00					
Jul.30 (240)	eL	3	25					(240) Wi: iP 2h 59m 17s. USCGS: $44\frac{1}{2}^{\circ}$ N $148\frac{1}{2}^{\circ}$ W, H. 2h 47m 17s. Kurile Islands.
	F	4	00					
Jul.30 (241)	eL	5	40					(241) USCGS: $2\frac{1}{2}^{\circ}$ S 140° E, H. 4h 44m 53s. New Guinea.
Aug. 1 (242)	iPKP	5	56	41				(242) Wi: ePKP 5h 56m 40s. USCGS: 16° S $176\frac{1}{2}^{\circ}$ W, H. 5h 37m 50s, h about 450 km. Fiji Islands region.
	ipPKP	5	58.9					
	ePS	6	12.0					
	eSS	6	18.2					
	F	7	00					
Aug. 3 (243)	ePPK	1	27	28				(243) Wi: iPKP 1h 25m 13s -. USCGS: $21\frac{1}{2}^{\circ}$ S 179° W, H. 1h 06m 24s, h about 550 km. Fiji Islands region.
	e(S)	1	39	52				
	eSS	1	47.3					
	F	2	10					
Aug. 4 (244)	ePP	4	33.0					(244) USCGS: 6° S 130° E, H. 4h 13m 19s, h about 150 km. Banda Sea.
	ePS	4	42.5					
	F	6	00					
Aug. 6 (245)								(245) Wi: i 17h 17m 49s; F 17h 22.0m. BCIS: $59^{\circ}7'$ N $59^{\circ}4'$ E, H. 17h 16m 04s. USCGS: $59\frac{1}{2}^{\circ}$ N $5\frac{1}{2}^{\circ}$ E, H. 17h 16m 05s. Near coast of Norway.
Aug. 6 (246)	iPKP	21	28	50				(246) Disturbed by microseisms. Wi: ePKP 21h 28m 49s. USCGS: 17° S 173° W, H. 21h 09m 09s. Tonga Islands.
	eSS	21	51.0					
	eL	22	22					
	F	23	30					
Aug. 8 (247)	eH	5	35.0					(247) No z-record. Wi: e 5h 35m 28s. He: e 5h 35m 03s; e 5h 35m 08s. BCIS: $41^{\circ}4'N$ $2^{\circ}8'E$, H. 5h 29m 34s. USCGS: 42° N $1\frac{1}{2}^{\circ}$ E, H. 5h 29m 40s. France - Spain border.
	eH	5	35	38				
	eF	5	40					
Aug. 8 (248)	e(S)	20	42	44				(248) No z-record. Wi: e(P) 20h 40.5m; e 20h 43m 50s. He: 20h 42m 44s; 20h 42m 50s; e 20h 43m 20s. Aftershock of (247). BCIS: H. 20h 37m 26s. USCGS: H. 20h 37m 30s.
	F	20	50					
Aug. 9 (249)	eL	13	38					



Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Aug. 12 (250)	eL F	19 10 19 30				(250) USCGS: $3\frac{1}{2}^{\circ}$ S $150\frac{1}{2}^{\circ}$ E, H. 18h 05m 33s. New Britain.
Aug. 12 (251)	eP ePP eSKS ePS eL F	19 39 32 19 43 44 19 50 30 19 53.5 20 20 22 00				(251) USCGS: 0° $126\frac{1}{2}^{\circ}$ E, H. 19h 25m 05s. Molucca Passage.
Aug. 13 (252)	eL F	4 45 5 25				(252) USCGS: aftershock of (251), H. 3h 50m 35s.
Aug. 13 (253)	ez F	7 52 00 8 15				(253) No records from 7h 56 - 8h 06. BCIS: 37° N 67° E, H. 7h 33m 31s. USCGS: $36\frac{1}{2}^{\circ}$ N $66\frac{1}{2}^{\circ}$ E, H. 7h 33m 29s. Northern Afghanistan.
Aug. 13 (254)	eP eS eL F	20 25 00 20 34 53 20 50 21 30				(254) Wi: iP 20h 24m 56s +. USCGS: 51° N $177\frac{1}{2}^{\circ}$ W, H. 20h 13m 00s. Andreanof Islands, Aleutian Islands.
Aug. 14 (255)	eP eS eL F	11 34.0 11 39 36 11 43.0 12 30				(255) USCGS: $34\frac{1}{2}^{\circ}$ N 48° E, H. 11h 27m 00s. Iran.
Aug. 14 (256)	iP eSS eL F	15 07 05 15 22.0 15 32 18.0				(256) Wi: eP 15h 07m 00s. No records from 15h 16m - 15h 19m. USCGS: 52° N 175° W, H. 14h 55m 10s. Andreanof Islands, Aleutian Islands.
Aug. 15 (257)	eL F	3 32 3 50				(257) USCGS: 60° S $150\frac{1}{2}^{\circ}$ E, H. 2h 26m 51s. New Britain.
Aug. 15 (258)	eP eS eSS eL	20 07 10 20 16 28 20 21.5 20 29				(258) F in next shock. USCGS: 53° N $160\frac{1}{2}^{\circ}$ E, H. 19h 55m 39s, h about 60 km. Near east coast of Kamchatka.
Aug. 15 (259)	eP ePP eSKS ePS eSS eL F	22 43 15 22 47 30 22 53 39 22 56 28 23 03.0 23 17 1 30				(259) Wi: eP 22h 43m 12s; ePP 22h 47m 14s. USCGS: $1\frac{1}{2}^{\circ}$ N 125° E, H. 22h 29m 17s, h about 200 km. Celebes.
Aug. 16 (260)	ePKP F	11 33.7 12 05				(260) Wi: ePKP 11h 33m 40s. USCGS: $24\frac{1}{2}^{\circ}$ S 175° W, H. 11h 13m 47s. Tonga Islands region.
Aug. 16 (261)	eP	13 29 47				(261) Wi: eP 13h 29m 47s. USCGS: $51\frac{1}{2}^{\circ}$ N 176° W, H. 13h 17m 52s. Andreanof Islands, Aleutian Islands.
Aug. 16 (262)	iP ePP eS eL F	19 20 42 19 22 06 19 26 18 19 29 22.0	+ 6	5		(262) Wi: eP 19h 20m 36s. BCIS: 34° ON 48° OE, H. 19h 13m 44s. USCGS: $34\frac{1}{2}^{\circ}$ N 48° E, H. 19h 13m 45s. Iran.
Aug. 17 (263)	eP eS eL F	9 20 30 9 31 05 9 46 10 35				(263) USCGS: $51\frac{1}{2}^{\circ}$ N 176° W, H. 9h 08m 35s. Andreanof Islands.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Aug. 17 (264)	ePP ePS eL F	18 21 46 18 31 30 18 58 20 30				(264) USCGS: 3° S $145\frac{1}{2}^{\circ}$ E, H. 18h 01m 05s. Bismarck Sea.
Aug. 17 (265)	iPKP ₁ ePKP ₂ ePP eL F	21 31 12 21 32 05 21 35 50 22 40 23 30				(265) Wi: ePKP ₂ 21h 31m 59s. USCGS: 35° S 179° W, H. 21h 11m 09s. Kermadec Islands region.
Aug. 18 (266)						(266) Wi: eP 10h 28m 57s. USCGS: $7\frac{1}{2}^{\circ}$ N 78° W, H. 10h 16m 40s. Panama - Colombia border.
Aug. 18 (267)						(267) Wi: eP 23h 59m 00s. BCIS: 34° N 26° OE, H. 23h 54m 02s. South-east of Crete, Mediterranean Sea.
Aug. 19 (268)						(268) Wi: iP 16h 41m 01s. USCGS: 53° N 160° E, H. 16h 29m 44s. Near east coast of Kamchatka.
Aug. 19 (269)	ePP ez eS eL F	22 08.7 22 18 26 22 26 22 45 23.5				(269) USCGS: 1° S $149\frac{1}{2}^{\circ}$ E, H. 21h 48m 07s. New Ireland.
Aug. 20 (270)	ePKP ePP eL F	3 59.5 4 02 30 4 45 6 10				(270) Wi: ePKP 3h 59.7m. USCGS: 14° S 167° E, H. 3h 40m 10s. New Hebrides Islands.
Aug. 21 (271)	eL F	2 41 2 50				(271) Wi: ePKP 1h 29m (58s). USCGS: 24° S 176° W, H. 1h 09m 00s. Tonga Islands region.
Aug. 21 (272)	iPKP ipPKP F	21 18 27 21 19 28 22 30	-			(272) Wi: iP 21h 18m 24s-. USCGS: 18° S 176° W, H. 20h 59m 10s, h about 250 km. Fiji Islands region.
Aug. 27 (273)						(273) Wi: iP 13h 20m 36s. USCGS: $53\frac{1}{2}^{\circ}$ N $159\frac{1}{2}^{\circ}$ E, H. 13h 09m 03s. Kamchatka.
Aug. 27 (274)	iP iS eL F	15 20 51 15 24 21 15 26.0 17 15	- 7	5		(274) No z-record. Wi: iP 15h 20m 55s -. He: e 15h 20m 38s. BCIS: 37° N 20° OE, H. 15h 16m 34s. USCGS: 38° N $20\frac{1}{2}^{\circ}$ E, H. 15h 16m 35s. Off west coast of Greece.
Aug. 29 (275)	eL F	13 31 14 00				(275) USCGS: $14\frac{1}{2}^{\circ}$ S 167° E, H. 12h 24m 23s. New Hebrides Islands.
Aug. 30 (276)						(276) Wi: eP 7h 40.0m. BCIS: aftershock of (274), H. 7h 35.7m.
Aug. 30 (277)	eP eL F	18 50 56 19 14 19 50				(277) Wi: eP 18h 50m 55s. USCGS: $27\frac{1}{2}^{\circ}$ N 112° W, H. 18h 38m 18s. Gulf of California.
Aug. 31 (278)						(278) Wi: eP 9h 26m 55s. BCIS: $28\frac{1}{4}^{\circ}$ N $61\frac{3}{4}^{\circ}$ E, H. 9h 18m 15s. Pakistan - Iran border.
Aug. 31 (279)	iP ePP iS eL F	23 10 42 23 13 00 23 19 14 23 30 0 30	+			(279) Wi: iP 23h 10m 47s +. USCGS: 63° N $144\frac{1}{2}^{\circ}$ W, H. 23h 00m 16s. Central Alaska.



Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s	s	s	μ	
Aug. 31 (280)						(280) Wi: ePKP 23h 47m 14s. BCIS: 23 $\frac{3}{4}$ S 175°W, H. 23h 27m 15s. Tonga Islands region.
Sep. 1 (281)	eL F	2 35 3 00		-	6	(281) Wi: iPP 1h 20m 37s. USCGS: 24°S 175 $\frac{1}{2}$ W, H. 0h 57m 10s. Tonga Islands region.
Sep. 2 (282)	iz eH eL F	1 17 40 1 21 08 1 23 55 2 00		6	3	(282) Wi: e 1h 17m 38s. BCIS: 37°7N 20°9E, H. 1h 13m 22s. USCGS: 38°N 21°E, H. 1h 13m 26s. Ionian Islands.
Sep. 2 (283)	eL F	3 20 3 30				(283) Wi: eP 3h 13m 03s. BCIS: 35 $\frac{1}{4}$ N 33°E, H. 3h 08m 14s. West of Crete Island.
Sep. 2 (284)	eL F	20 50 21 20				(284) No z-record. USCGS: 15°N 92 $\frac{1}{2}$ W, H. 20h 07m 04s. Near coast of Oaxaca, Mexico.
Sep. 3 (285)	eP eS eL F	3 54 02 4 01 51 4 08 5 30				(285) Wi: iP 3h 54m 10s. No z-record. BCIS: 0° 17°8W, H. 3h 44m 24s. USCGS: 0° 18°W, H. 3h 44m 24s. Mid-Atlantic Ridge.
Sep. 3 (286)	eS eL F	8 32 34 8 48 9 30				(286) Wi: eP 8h 22m 32s. No z-record. USCGS: 40 $\frac{1}{2}$ N 143°E, H. 8h 10m 26s, h about 60 km. Off north-east coast of Honshu, Japan.
Sep. 4 (287)	e eL F	0 12.0 0 14.5 0 25				(287) Wi: e 0h 07m 46s. BCIS: 35°8N 26°4E, H. 0h 02m 50s. USCGS: 37°N 26 $\frac{1}{2}$ E, H. 0h 03m 00s, h about 60 km. Dodecanese Islands.
Sep. 4 (288)	eP ePP e(SK) ePS eSS eL F	22 05 38 22 10 00 22 16.3 22 19.5 22 25.5 22 41 1 30				(288) USCGS: 31 $\frac{1}{2}$ S 69 $\frac{1}{2}$ W, H. 21h 51m 08s. Chile - Argentina border.
Sep. 4 (289)						(289) Wi: iPKP 23h 29m 13s. USCGS: 18 $\frac{1}{2}$ S 178°W, H. 23h 10m 22s, h about 500 km. Fiji Islands.
Sep. 8 (290)	eP eS ePS eL F	5 37 08 5 46 30 5 47.0 6 00 7 00				(290) Wi: iP 5h 37m 03s +. USCGS: 53 $\frac{1}{2}$ N 159°E, H. 5h 25m 37s. Near east coast of Kamchatka.
Sep. 9 (291)						(291) Wi: iP 11h 44m 02s. USCGS: 46°N 151°E, H. 11h 32m 05s. Kurile Islands.
Sep. 11 (292)	ePP eS eL F	18 20 18 29.3 18 50 19 30				(292) USCGS: 7 $\frac{1}{2}$ N 126 $\frac{1}{2}$ E, H. 18h 01m 44s. Near east coast of Mindanao, Philippine Islands.
Sep. 14 (293)	eP eS eSS eL F	14 31 48 14 39 56 14 43 40 14 50 16.0				(293) No z-record. USCGS: 57°N 121°E, H. 14h 21m 37s. Stanovoi Mountains region, Siberia.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s	s	s	μ	
Sep. 14 (294)	eH F	20 26 20 40				(294) No z-record. USCGS: 31°N 133°E, H. 19h 42m 13s. Off east coast of Kyushu, Japan.
Sep. 14 (295)	ePS eL F	21 54.5 22 20 20 50				(295) No z-record. USCGS: 7°N 68°E, H. 21h 33m 55s. Chagos Archipelago region.
Sep. 15 (296)	ePP epPP iSKS eS eSS eSS F	20 03.2 20 05.2 20 08 18 20 09 33 20 13 50 20 17 09 21 30				(296) No z-record. USCGS: 2 $\frac{1}{2}$ N 120 $\frac{1}{2}$ E, H. 19h 45m 40s, h about 600 km. Celebes Sea.
Sep. 18 (297)	eS eL F	15 00 05 15 06.5 15 40				(297) USCGS: $\frac{1}{2}$ N 30°W, H. 14h 41m 40s. Mid-Atlantic Ridge.
Sep. 20 (298)	eL F	11 00 11 10				(298) Disturbed by microseisms. USCGS: 15 $\frac{1}{2}$ S 46°W, H. 10h 34m 00s. Atlantic Ocean.
Sep. 20 (299)	e(PKS) e(PPS) eL F	17 31.8 17 42 18 06 19 30				(299) Disturbed by microseisms. USCGS: 6 $\frac{1}{2}$ S 154 $\frac{1}{2}$ E, H. 17h 09m 24s. Solomon Islands.
Sep. 21 (300)	eL F	6 28 6 40				(300) Disturbed by microseisms. USCGS: 38°N 142°E, H. 5h 45m 10s. Honshu, Japan.
Sep. 22 (301)	iPKP ₁ iPKP ₂ iPP eSKKS eSKSP eSS eL F	19 25 46 19 26 43 19 30 12 19 37 19 41 19 50 20 15 21 30	+ 5	3		(301) Disturbed by microseisms. USCGS: 33 $\frac{1}{2}$ S 177 $\frac{1}{2}$ W, H. 19h 05m 44s. Kermadec Islands region.
Sep. 24 (302)	eS eL F	4 04.0 4 21 5.0				(302) Disturbed by microseisms. USCGS: 59 $\frac{1}{4}$ N 143 $\frac{1}{2}$ W, H. 3h 44m 14s. Gulf of Alaska.
Sep. 25 (303)	eS eL F	7 37 46 7 45 8 35				(303) Disturbed by microseisms. Change of papers 7h 25 - 7h 35. USCGS: 9°N 39 $\frac{1}{2}$ W, H. 7h 20m 02s. Mid-Atlantic Ridge.
Sep. 26 (304)	e F	00 01 00 05				(304) Disturbed by microseisms. BCIS: 45 $\frac{1}{2}$ N 28 $\frac{1}{2}$ W, H. 23h 48m 32s. Mid-Atlantic Ridge.
Sep. 27 (305)	eL F	13 20 13 45				(305) Disturbed by microseisms. USCGS: 37°N 141 $\frac{1}{2}$ E, H. 12h 37m 07s. Near coast of Honshu, Japan.
Sep. 29 (306)	eL F	13 55 14 25				(306) Disturbed by microseisms.
Sep. 30 (307)	e F	8 48 43 8 54				(307) Disturbed by microseisms. Wi: e 8h 47m 09s. Re: 8h 46m 40s. BCIS: 47°16'N 10°34'E, H. 8h 45m 27s. USCGS: 47°N 10°E, H. 8h 45m 28s. Lechtal, Austria.



Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Oct. 1 (308)	eSS eL F	10 14 10 55 11 30				(308) Disturbed by microseisms. USCGS: 57°S 147°E, H. 9h 29m 43s. Antarctic Ocean, south-west of Macquarie Islands.
Oct. 7 (309)	ez eH eL F	12 53 13 30 13 41 15.0				(309) Disturbed by microseisms. BCIS: 5 $\frac{1}{4}$ °S 151 $\frac{3}{4}$ °E, H. 12h 32m 38s. USCGS: 5°S 151 $\frac{1}{2}$ °E, H. 12h 32m 40s. New Britain.
Oct. 9 (310)	ePS eL F	11 49 12 15 13 00				(310) Disturbed by microseisms. USCGS: 55 $\frac{1}{2}$ °S 27 $\frac{1}{2}$ °W, H. 11h 20m 17s. Sandwich Islands region.
Oct. 10 (311)	eL F	9 00 9 30				(311) Disturbed by microseisms. Wi: 1P 8h 42m 15s -. USCGS: 53 $\frac{1}{2}$ °N 160 $\frac{1}{2}$ °E, H. 8h 30m 26s. Near east coast of Kamchatka.
Oct. 12 (312)	eL F	8 13 8 17				(312) Disturbed by microseisms. Uppsala: 74°N 51°E, H. 7h 53m 43s. Nuclear explosion, off east coast of Nuova Zembla.
Oct. 12 (313)	1P esP ePP eS ePS esS esSS F	15 30 55 15 32 24 15 34 14 15 41 05 15 41 56 15 42 40 15 48.5 16 30				(313) Wi: 1P 15h 30m 51s +; esP 15h 32m 22s. USCGS: 27 $\frac{1}{2}$ °N 125 $\frac{1}{2}$ °E, H. 15h 18m 42s, h about 250 km. East China Sea.
Oct. 13 (314)	eL F	9 24 9 35				(314) Disturbed by microseisms. Wi: e 9h 07m. BCIS: 40 $\frac{1}{2}$ °N 75 $\frac{3}{4}$ °E, H. 5h 58m 00s. USCGS: 41 $\frac{1}{2}$ °N 75°E, H. 8h 58m 10s. Kirghiz, S.S.R.
Oct. 15 (315)	eL F	8 10 8 16				(315) Uppsala: H. 7h 51m 14s. Nuclear explosion, off east coast of Nuova Zembla.
Oct. 18 (316)	eL F	10 10 10 15				(316) Uppsala: 74°N 51°E, H. 9h 51m 10s. Nuclear explosion, off west coast of Nuova Zembla.
Oct. 19 (317)	eL F	3 20 4 00				(317) USCGS: 19°S 172 $\frac{1}{2}$ °W, H. 2h 14m 02s. Tonga Islands.
Oct. 19 (318)	eL F	13 22 13 35				(318) USCGS: 34 $\frac{1}{2}$ °S 178°W, H. Kermadec Islands region.
Oct. 20 (319)	eS esS eL F	1 38 52 1 44.5 2 05 2 50				(319) USCGS: 9 $\frac{1}{2}$ °S 122 $\frac{1}{2}$ °E, H. 1h 12m 30s. Off south coast of Java.
Oct. 22 (320)	eL F	8 41 8 50				(320) Uppsala: 74°N 51°E, H. 8h 21m 11s. Nuclear explosion, off west coast of Nuova Zembla.
Oct. 23 (321)	ePKP ePP ePKS eL F	0 02.3 0 05 20 0 06 06 0 57 1 20				(321) USCGS: 14 $\frac{1}{2}$ °S 168°E, H. 23h 42m 47s. New Hebrides Islands.
Oct. 24 (322)	eL F	8 23 8 30				(322) Uppsala: H. 8h 6m (00s). Nuclear explosion, off west coast of Nuova Zembla.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Oct. 24 (323)	eL F	22 10 22 30				(323) USCGS: 0° 125°E, H. 21h 13m 06s. Molucca Passage.
Oct. 26 (324)	eL F	3 10 3 35				(324) USCGS: 5 $\frac{1}{2}$ °N 117°E, H. 2h 17m 32s. Northern Borneo.
Oct. 27 (325)						(325) Wi: 1P 18h 29m 53s. USCGS: 44 $\frac{1}{2}$ °N 147 $\frac{1}{2}$ °E, H. 18h 16m 53s. Kurile Islands.
Oct. 28 (326)	iP es eSS eL F	10 56 45 11 04 58 11 09.0 11 14.5 12 45				(326) Wi: 1P 11h 56m 34s +. USCGS: 30 $\frac{1}{2}$ °N 85°E, H. 10h 46m 27s. Southern Tibet.
Oct. 29 (327)	e eL F	0 15 0 36 1 10				(327) Wi: eP 0h 01m 57s. USCGS: 52°N 179 $\frac{1}{2}$ °E, H. 23h 50m 08s. Andreanof Islands, Aleutian Islands.
Oct. 29 (328)	eP es eSS eL F	7 56 06 8 05 54 8 11 20 8 20 10 00				(328) USCGS: 51 $\frac{1}{2}$ °N 179 $\frac{1}{2}$ °E, H. 7h 44m 10s. Andreanof Islands, Aleutian Islands.
Oct. 29 (329)						(329) Wi: 1P 8h 07m 07s. USCGS: 51 $\frac{1}{2}$ °N 179°E, H. 9h 55m 14s. Andreanof Islands, Aleutian Islands.
Oct. 31 (330)						(330) Wi: 1P 23h 51m 54s. USCGS: 25°N 122 $\frac{1}{2}$ °E, H. 23h 39m 27s. Near north coast of Formosa.
Nov. 1 (331)	eSS eL F	4 16 4 39 6 00				(331) No z-record. USCGS: 30°S 150°E, H. 3h 38m 35s. Bismarck Sea.
Nov. 1 (332)						(332) Wi: iPKP 19h 59m 16s. BCIS: New Hebrides region.
Nov. 3 (333)	eL F	15 00 15 20				(333) Wi: 1P 14h 41m 40s. BCIS: 30°N 84°E, H. 14h 31m 37s. USCGS: 30°N 84 $\frac{1}{2}$ °E, H. 14h 31m 35s. Tibet.
Nov. 4 (334)	eL F	9 15 10 00				(334) USCGS: 28°N 141°E, H. 8h 31m 00s. Bonin Islands region.
Nov. 6 (335)	iP es eL F	23 10 10 23 20 02 23 33 6 30		10	65	(335) Wi: 1P 23h 09m 59s; eS 23h 19m 51s. He: 1P 23h 10m 23s; iS 23h 20m 18s. BCIS: 44 $\frac{1}{2}$ °N 148 $\frac{1}{2}$ °E, H. 22h 58m 07s. USCGS: 44 $\frac{1}{2}$ °N 148 $\frac{1}{2}$ °E, H. 22h 58m 06s. Kurile Islands.
Nov. 6 (336)						(336) Wi: 1P 23h 39m 31s. Aftershock of (335). BCIS: H. 23h 27.7m.
Nov. 6 (337)						(337) Wi: eP 23h 58m 30s. Aftershock of (335). BCIS: H. 23h 46.6m.
Nov. 7 (338)						(338) Wi: 1P 0h 48m 10s. Aftershock of (335). USCGS: H. 0h 36m 12s.
Nov. 7 (339)						(339) Wi: 1P 0h 49m 48s. Aftershock of (335). BCIS: H. 0h 37.9m.
Nov. 7 (340)						(340) Wi: 1P 0h 51m 22s. Aftershock of (335). BCIS: H. 0h 39.5m.



Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s	s	s	μ	
Nov. 7 (341)						(341) Wi: eP 1h 13m 55s. Aftershock of (335). USCGS: H. 1h 01m 58s.
Nov. 7 (342)						(342) Wi: iP 1h 25m 42s. Aftershock of (335). BCIS and USCGS: H. 1h 13m 52s.
Nov. 7 (343)						(343) Wi: eP 1h 54m 53s. Aftershock of (335). USCGS: H. 1h 42m 56s.
Nov. 7 (344)						(344) Wi: iP 2h 07m 31s. Aftershock of (335). BCIS: H. 1h 55m 41s. USCGS: 1h 55m 33s.
Nov. 7 (345)						(345) Wi: eP 2h 22m 12s. Aftershock of (335). BCIS: H. 2h 10m 20s.
Nov. 7 (346)	eL F	8 25				(346) Wi: iP 7h 52m 29s. Aftershock of (335). USCGS: H. 7h 40m 36s.
Nov. 7 (347)		8 45				(347) Wi: eP 10h 41m (21s). Aftershock of (335). USCGS: 10h 29m 17s.
Nov. 7 (348)	eL F	12 10				(348) Wi: eP 11h 36m 24s. USCGS: $44\frac{1}{2}^{\circ}$ N $149\frac{1}{2}^{\circ}$ E, H. 11h 24m 25s, h about 60 km. Kurile Islands.
Nov. 7 (349)	eL F	12 45				(349) Wi: eP 17h 44m 47s. Aftershock of (335). USCGS: H. 17h 32m 48s.
Nov. 7 (350)						(350) Wi: eP 19h 26m 36s. Aftershock of (335). USCGS: H. 19h 14m 31s.
Nov. 8 (351)	iP eL F	9 34	34			(351) Wi: iP 9h 34m 28s +. USCGS: 52° N $159\frac{1}{2}^{\circ}$ E, H. 9h 22m 59s. Off south-east coast of Kamchatka.
Nov. 9 (352)		10 03				(352) Wi: iP 3h 26m 52s. Aftershock of (335). USCGS: H. 3h 14m 47s.
Nov. 9 (353)		10 50				(353) Wi: iP 18h 04m 58s. Aftershock of (335). USCGS: H. 17h 52m 52s.
Nov. 10 (354)	eL F	12 12				(354) BCIS: 9° S 110° E, H. 11h 13m 04s. USCGS: H. 11h 13m 05s. Pacific Ocean.
Nov. 12 (355)	iP iS ePS eSS eL F	20 35	36	+		(355) Disturbed by microseisms. Wi: iP iS 20h 35m 29s +. BCIS: $44^{\circ}55'N$ $148^{\circ}5'E$, 20h 23m 32s. USCGS: $44\frac{1}{2}^{\circ}$ N $48\frac{1}{2}^{\circ}$ E, H. 20h 23m 36s. Kurile Islands.
Nov. 13 (356)	eL F	4 50				(356) Wi: iP 4h 16m 39s. Aftershock of (335). USCGS: 4h 04m 37s.
Nov. 14 (357)	eL F	6 18				(357) Wi: iP 5h 46m 54s. Aftershock of (335). USCGS: 5h 34m 53s.
Nov. 14 (358)	ePKP ePS eSS eL F	14 07	38			(358) Wi: i 14h 09m 02s +. USCGS: 6° S 131° E, H. 13h 48m 20s. Banda Sea.
Nov. 15 (359)	iz eH F	5 47	02			(359) Wi: e 5h 47m 02s. BCIS: $37^{\circ}7'N$ $22^{\circ}0'E$, H. 5h 42m 42s. South of Greece.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s	s	s	μ	
Nov. 15 (360)	iP eS eL F	9 12	52	+		(360) Wi: iP 9h 12m 47s. USCGS: 44° N 149° E, H. 9h 00m 45s. Kurile Islands.
Nov. 15 (361)		9 22	42			
Nov. 15 (362)		9 38				(361) Wi: eP 23h 32m 21s. Aftershock of (335). USCGS: H. 23h 20m 18s.
Nov. 16 (363)		10 30				(362) Wi: eP 4h 59m 31s; i 4h 59m 46s. Aftershock of (335). USCGS: H. 4h 47m 31s.
Nov. 16 (364)	eL F	18 35				(363) Wi: eP 6h 27m 31s; i 6h 27m 44s. Aftershock of (335). USCGS: H. 6h 15m 36s.
Nov. 16 (365)		19 20				(364) Wi: ePKP 18h 04m 23s. USCGS: 160° S 172° W, H. 17h 44m 48s. Samoa Islands region.
Nov. 17 (366)	ePKP	18 22	07			(365) Wi: ePKP 18h 22m 05s. USCGS: 20° S 169° E, H. 18h 02m 25s. Loyalty Islands.
Nov. 17 (367)		10 50				(366) USCGS: $10\frac{1}{2}^{\circ}$ S $162\frac{1}{2}^{\circ}$ E, H. 9h 46m 30s. Solomon Islands.
Nov. 18 (368)		11 25				(367) Wi: iP 15h 46m 38s. Aftershock of (335). USCGS: H. 15h 34m 23s.
Nov. 19 (369)	eP eL F	9 36	1			(368) Wi: eP 7h 57m 13s. USCGS: $50\frac{1}{2}^{\circ}$ N 179° E, H. Andreanof Islands, Aleutian Islands.
Nov. 20 (370)	eL F	10 10				(369) Wi: eP 9h 35m 47s. USCGS: 44° N 149° E, H. 9h 23m 51s, h about 60 km. Kurile Islands.
Nov. 20 (371)		11 00				(370) Wi: eP 5h 48m 07s. BCIS: 52° N $158\frac{1}{2}^{\circ}$ E, H. 5h 36m 31s. USCGS: 52° N $159\frac{1}{2}^{\circ}$ E, H. 5h 36m 33s. Near east coast of Kamchatka.
Nov. 20 (372)	eP eS eL F	6 15				(371) Wi: iP 6h 46m 34s. Aftershock of (335). BCIS: H. 6h 34.6m.
Nov. 20 (373)		6 55				(372) Wi: eP 14h 29m 57s. Aftershock of (335). USCGS: H. 14h 18m 04s.
Nov. 22 (373)	eL F	1 03				
Nov. 22 (374)	eL F	1 30				
Nov. 22 (375)	eL F	2 55				(374) USCGS: 4° S $131\frac{1}{2}^{\circ}$ E, H. 1h 56m 56s. Ceram Island region.
Nov. 23 (376)	ez eL F	20 51				(375) USCGS: 29° N 87° E, H. 29h 15m 48s. Southern Tibet.
Nov. 25 (377)	ez eL F	20 55				(376) BCIS: $43^{\circ}0'N$ $0^{\circ}3'E$, H. 2h 23m 56s. USCGS: 43° N $\frac{1}{2}^{\circ}$ W, H. 2h 23m 57s. Pyrenees.
Nov. 30 (377)	eP eS eL F	2 29	05			(377) Wi: iP 1h 45m 31s. USCGS: 32° N $142\frac{1}{2}^{\circ}$ E, H. 1h 32m 41s. South of Honshu, Japan.
Nov. 30 (378)		2 30	34			
Nov. 30 (379)		2 33				
Nov. 30 (377)		3 05				



Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Nov. 30 (378)						(378) Wi: iP 2h 08m 18s. Aftershock of (377). USCGS: H. 1h 55m 28s.
Dec. 1 (379)	eL F	4 00 4 30				(379) USCGS: $32^{\circ}3N$ $115^{\circ}8W$, H. 3h 21m 17s. California - Mexico border.
Dec. 2 (380)						(380) ✓ Wi: iP 1h 24m 26s. Aftershock of (335). USCGS: H. 1h 12m 22s.
Dec. 3 (381)	eL F	10 35 11 00				(381) Disturbed by microseisms. USCGS: $19^{\circ}N$ $121\frac{1}{2}^{\circ}E$, H. 9h 48m 26s. Near north coast of Luzon, Philippine Islands.
Dec. 4 (382)	eL F	20 00 20 15				(382) Disturbed by microseisms. USCGS: $11\frac{1}{2}^{\circ}N$ $86\frac{1}{2}^{\circ}W$, H. 19h 19m 23s, h about 100 km. Near coast of Nicaragua.
Dec. 6 (383)	eL F	10 06 11 00				(383) Disturbed by microseisms. USCGS: $6\frac{1}{2}^{\circ}N$ $83^{\circ}W$, H. 9h 33m 45s. South of Panama.
Dec. 7 (384)	eL F	18 40 19 10				(384) Disturbed by microseisms. USCGS: $18^{\circ}N$ $105^{\circ}W$, H. 17h 58m 08s, h about 100 km. Off coast of Mexico.
Dec. 8 (385)	eL F	12 50 13 25				(385) Disturbed by microseisms. Wi: iP 12h 20m 24s (-). USCGS: $44^{\circ}N$ $149\frac{1}{2}^{\circ}E$, H. 12h 08m 23s. Kurile Islands.
Dec. 10 (386)						✓ (386) Wi: eP 3h 52m 07s. USCGS: $36\frac{1}{2}^{\circ}N$ $71\frac{1}{2}^{\circ}E$, H. 3h 43m 43s, h about 150 km. Hindu Kush.
Dec. 10 (387)	iPKP ₁ iPKP ₂ ePP ePPP e F	7 22 7 23 7 27 7 30 7 32.6 9 30	+ -	5	6	(387) Disturbed by microseisms. Wi: iPKP ₂ 7h 23m 22s -; ePP 7h 27m 04s. USCGS: $37^{\circ}S$ $176\frac{1}{2}^{\circ}E$, H. 7h 02m 59s, h about 300 km. Off North Island, New Zealand.
Dec. 10 (388)	eL F	22 25 23 05				(388) Disturbed by microseisms. USCGS: $24\frac{1}{2}^{\circ}N$ $109^{\circ}W$, H. 21h 49m 20s. Gulf of California.
Dec. 17 (389)						(389) Wi: eP 2h 37m 25s. USCGS: $55^{\circ}N$ $162^{\circ}W$, H. 2h 25m 55s, deeper than normal. Off coast of Alaska.
Dec. 17 (390)	eL F	16 20 16 35				(390) Disturbed by microseisms. USCGS: $28\frac{1}{2}^{\circ}N$ $127\frac{1}{2}^{\circ}E$, H. 15h 34m 15s. Ryukyu Islands region.
Dec. 19 (391)						(391) Wi: eP 18h 48m 15s. USCGS: $51\frac{1}{2}^{\circ}N$ $177\frac{1}{2}^{\circ}W$, H. 18h 36m 23s. Andreanof Islands, Aleutian Islands.
Dec. 20 (392)	eL F	20 05 20 25				(392) Disturbed by microseisms. After-shock of (390). USCGS: H. 19h 20m 43s.
Dec. 21 (393)	eS eL F	6 02.3 6 10 7 15				(393) Disturbed by microseisms. Wi: iP 5h 55m 07s. USCGS: $44\frac{1}{2}^{\circ}N$ $81^{\circ}E$, H. 5h 46m 26s. Western Sinkiang Province, China.
Dec. 25 (394)	eL F	8 45 10 30				(394) Disturbed by microseisms. Wi: iPKP 8h 24m 38s. USCGS: $5\frac{1}{2}^{\circ}S$ $151^{\circ}E$, H. 8h 05m 38s, h about 60 km. New Britain.

Seismic Records at De Bilt						
Date 1958	Phase	Time	Direction	Period	Amplitude	Remarks
		h m s		s	μ	
Dec. 28 (395)	eP eS eL F	5 44 5 52.5 6 05 6 45				(395) Disturbed by microseisms. Wi: iP 5h 44m 26s. USCGS: $29\frac{1}{2}^{\circ}N$ $80^{\circ}E$, H. 5h 34m 36s. Western Nepal - India border.
Dec. 31 (396)						(396) Wi: iPKP 2h 04m 59s +. BCIS: $23\frac{1}{2}^{\circ}S$ $178\frac{1}{2}^{\circ}W$, H. 1h 45m 53s, h about 400 km. USCGS: H. 1h 45m 52s, h about 400 km. Tonga Islands region.

Time	N-S												E-W														
	Z				N-S				Z				N-S				Z				N-S						
Date	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T			
	μ sec																										
1 0.6	5.2	1 0.6	5.0	2 0.9	5.0	2 0.8	6.0	1 2.4	6.0	1 2.9	6.0	2 3.0	5.6	2 3.1	5.5	1 3.1	5.5	2 3.1	5.5	2 3.1	5.5	1 4.8	6.0	1 4.8	6.0		
2 0.7	5.2	2 0.7	5.0	2 0.8	4.4	2 1.1	4.5	2 3.1	5.5	2 2.5	5.0	2 2.6	5.0	2 3.1	5.5	2 2.5	5.0	2 2.4	5.0	2 2.4	5.0	1 4.6	7.0	1 4.6	7.0		
3 1.1	5.4	2 1.3	5.6	2 1.1	5.0	2 1.3	5.6	2 1.3	5.4	2 2.8	6.0	2 3.4	6.0	2 3.3	5.8	2 3.6	6.0	2 3.6	5.8	2 3.6	5.8	1 7.2	7.5	1 7.2	7.5		
4 2.1	5.2	2 1.1	5.6	1 1.3	5.4	...	...	2 2.8	6.0	2 3.4	5.4	1 3.7	6.4	1 3.8	6.0	2 3.5	6.4	2 4.5	5.8	1 5.4	7.0	1 5.4	7.0	1 5.4	7.0	1 5.4	7.0
5 ...	...	...	...	...	...	...	...	1 2.0	6.0	1 1.8	7.0	1 4.3	6.0	1 4.1	6.0	1 6.0	6.0	1 6.0	6.0	1 6.0	6.0	1 6.0	6.0	1 6.0	6.0	1 6.0	6.0
6 1.8	7.0	3 2.0	6.0	3 3.0	3.0	3 4.1	3.0	1 5.4	6.0	1 5.6	6.0	1 6.3	5.8	1 6.8	6.0	1 7.0	6.0	1 7.0	6.0	1 7.0	6.0	1 7.0	6.0	1 7.0	6.0	1 7.0	6.0
7 3.6	3.0	3 4.1	3.0	3 1.6	3.0	...	...	2 1.2	5.6	1 5.0	6.0	1 7.5	5.8	1 7.2	6.0	1 5.4	6.0	1 6.4	5.5	1 4.2	5.3	1 5.1	5.7	3 4.5	5.4	3 4.5	5.4
8 3.1	3.1	2 1.2	1.6	3 0.9	...	2 2.5	2.8	3 1.8	3.0	1 3.4	5.0	1 2.8	5.0	3 4.4	5.6	3 3.1	5.6	3 3.6	4.5	3 3.6	4.5	3 3.6	4.5	3 3.6	4.5	3 3.6	4.5
9 2.1	0.0	2 0.8	5.0	3 2.5	2.8	3 1.8	3.0	1 0.8	5.0	1 0.9	5.0	3 3.0	5.2	3 3.5	4.5	1 2.9	5.6	3 4.2	5.2	3 4.2	5.2	3 4.2	5.2	3 4.2	5.2	3 4.2	5.2
10 3 1.6	3.0	3 1.4	3.0	1 0.9	5.0	1 0.9	5.0	1 0.8	5.0	1 0.8	5.0	3 3.2	5.0	3 3.5	4.5	1 2.9	5.6	3 4.0	5.2	3 4.0	5.2	3 4.0	5.2	3 4.0	5.2	3 4.0	5.2
11 1 0.8	5.0	1 1.0	4.0	2 1.0	4.0	2 1.1	4.0	1 3.1	5.6	1 5.6	5.6	2 2.6	5.5	2 3.4	5.7	1 3.4	5.7	1 3.8	5.6	2 2.8	5.0	2 2.8	5.0	2 2.8	5.0	2 2.8	5.0
12 2 1.4	4.0	2 1.2	4.4	2 0.9	4.5	2 1.4	4.3	2 2.8	4.5	2 3.0	4.5	2 4.0	4.6	3 2.9	4.8	3 4.0	4.6	3 2.8	5.0	3 4.4	4.8	3 3.6	4.5	3 3.4	4.5	3 3.4	4.5
13 3 1.4	3.0	3 1.6	3.0	3 2.4	3.2	3 1.1	3.8	3 3.0	4.0	3 2.8	5.0	3 2.8	5.0	3 3.3	5.0	3 5.0	5.0	3 4.6	5.4	1 4.5	5.1	3 5.0	5.0	3 5.0	5.0	3 5.0	5.0
14 3 2.2	2.5	3 1.8	2.8	3 1.4	2.8	3 1.6	2.8	3 1.4	4.5	3 1.6	4.5	3 1.6	4.5	3 1.6	4.5	3 1.6	4.5	3 1.6	4.5	1 4.5	5.5	1 4.5	5.5	1 4.5	5.5	1 4.5	5.5
15 3 2.4	6.0	3 2.1	5.2	3 1.8	5.0	3 2.3	4.5	3 1.8	5.0	3 2.3	4.5	3 1.8	5.0	3 2.3	4.5	3 1.8	5.0	3 2.3	4.5	1 5.6	5.0	1 5.6	5.0	1 5.6	5.0	1 5.6	5.0
16 3 3.1	4.8	3 1.4	6.0	3 1.4	4.4	1 1.1	4.5	1 5.2	5.4	1 3.4	5.6	1 2.8	5.0	1 4.4	5.0	1 3.8	5.0	3 4.2	4.9	1 5.6	4.8	1 3.8	5.0	1 3.8	5.0	1 3.8	5.0
17 1 1.9	4.0	1 2.0	4.2	...	...	1 1.0	3.2	1 1.0	4.0	1 1.0	3.8	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0
18 ...	...	...	...	...	...	1 1.0	3.2	1 1.0	4.0	1 1.0	3.8	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0
19 ...	...	...	...	...	...	1 1.0	3.2	1 1.0	4.0	1 1.0	3.8	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0
20 ...	...	...	...	...	...	1 1.0	3.2	1 1.0	4.0	1 1.0	3.8	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0	1 1.0	4.0
21 1 1.4	3.5	1 1.9	3.4	1 1.1	5.0	1 1.3	4.8	1 3.7	4.4	1 3.9	4.7	1 3.9	4.5	1 4.1	5.0	1 4.2	4.7	1 3.2	5.0	1 5.2	5.0	1 5.2	5.0	1 5.2	5.0	1 5.2	5.0
22 1 1.9	5.5	1 1.8	5.3	3 2.1	5.0	3 2.2	5.5	3 1.5	4.8	3 1.4	5.6	1 7.6	5.0	1 5.0	5.0	1 6.6	5.0	1 7.8	5.0	1 7.8	5.0	1 7.8	5.0	1 7.8	5.0	1 7.8	5.0
23 3 2.0	5.0	3 1.6	4.5	3 1.6	4.5	3 1.5	4.5	3 2.4	5.4	3 1.8	4.5	3 1.8	4.5	3 1.8	4.5	3 1.8	4.5	3 1.8	4.5	3 1.8	4.5	3 1.8	4.5	3 1.8	4.5	3 1.8	4.5
24 3 2.3	5.0	3 2.4	5.4	3 1.2	4.7	3 1.3	4.7	1 1.2	4.0	1 1.2	4.8	1 1.2	4.0	1 1.2	4.8	1 1.2	4.0	1 1.2	4.8	1 1.2	4.0	1 1.2	4.8	1 1.2	4.0	1 1.2	4.8
25 3 1.8	4.8	3 1.3	4.7	3 1.2	4.0	3 1.2	4.0	1 1.2	4.8	1 1.2	4.0	1 1.2	4.8	1 1.2	4.0	1 1.2	4.8	1 1.2	4.0	1 1.2	4.8	1 1.2	4.0	1 1.2	4.8	1 1.2	4.0
26 1 1.1	4.5	1 1.0	4.2	1 0.8	4.0	1 0.9	4.0	1 0.7	4.0	1 0.7	4.0</																



International
Seismological
Centre

DE BILT, MICROSEISMIC ACTIVITY, MAY 1958

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Time	E-W												N-S																			
	Z				0				6				12				18				0				6							
Date	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T					
1	2 0°.3	4.5	2 0°.3	4.9	2 0°.5	4.2	2 0°.5	4.0	***	2 1.3	4.1	2 1.3	4.0	2 1.2	4.7	2 1.3	4.4	2 2.2	5.2	2 1.7	4.9	2 1.7	5.0	2 1.4	4.1	2 1.4	4.2					
2	2 0°.5	4.0	2 0°.5	3.7	2 0°.7	3.5	2 0°.7	3.7	2 0°.8	2.1	2 0°.8	2.1	2 0°.6	2.0	2 0°.7	4.2	2 1.0	4.2	2 1.0	4.2	2 1.0	3.9	2 1.0	4.2	2 0.7	3.8	2 0.7	4.2				
3	2 0°.8	2.0	2 1.5	2.2	2 0.8	2.2	2 0.6	2.0	2 0.4	2.2	2 1.5	3.5	2 1.4	3.6	2 1.0	4.0	2 0.9	3.0	2 2.0	3.2	2 1.0	4.0	2 0.6	4.2	2 0.6	4.2	2 0.6	4.2				
4	2 0°.7	2.4	2 0.6	2.0	2 0.6	2.0	2 0.6	2.0	2 0.4	2.1	2 0.7	4.0	2 0.7	4.2	2 0.6	4.0	2 0.6	4.2	2 0.6	4.2	2 0.6	4.2	2 0.6	4.2	2 0.6	4.2	2 0.6	4.2				
5	2 0.3	2.0	2 0.3	2.0	2 0.2	2.0	2 0.2	2.0	2 0.2	3.8	2 0.4	2.1	2 0.7	4.0	2 0.7	4.2	2 0.6	4.0	3 0.6	4.2	2 0.3	4.2	2 0.3	4.2	2 0.3	4.2	2 0.3	4.2				
6	2 0.9	2.9	2 0.9	2.5	2 1.0	0	2 1.0	0	3 0.0	2 1.1	3.0	3 1.0	0	3 2.1	2.7	3 2.0	4.2	3 3.4	3.2	3 2.9	2.8	3 2.7	2.7	3 1.9	3.2	3 0.0	4.7	3 0.0	4.7			
7	2 2 1.2	2.4	2 1.0	0	3 0.2	2 1.1	3.6	2 1.1	3.9	2 1.0	8	2 1.0	4.5	2 1.4	4.0	2 0.4	4.7	2 2.4	4.2	2 2.7	4.2	2 2.6	4.2	2 2.7	4.2	2 2.0	4.2	2 2.0	4.2			
8	2 2 1.3	4.2	3 2.0	0	4.3	3 2.0	5.7	3 2.0	5.6	2 4.8	4.6	1 7.0	4.7	3 9.6	4.9	3 8.4	5.4	2 5.0	5.0	1 9.0	5.4	1 13.0	0	5.5	5.5	3 1.3	4.2	3 1.3	4.2			
9	3 1.8	5.1	3 1.6	5.2	3 1.3	5.1	2 0.9	5.0	3 5.2	5.2	3 5.0	5.3	1 3.3	5.0	2 3.4	4.9	1 7.2	5.0	1 8.0	5.2	1 6.1	5.4	1 6.1	5.4	1 6.1	5.4	1 6.1	5.4	1 6.1	5.4		
10	2 0.8	4.0	2 0.5	3.6	2 0.5	4.7	2 0.5	4.7	2 0.5	4.1	2 1.9	4.0	2 1.6	4.2	2 1.4	4.6	2 1.4	4.6	2 3.4	5.3	3 3.1	4.5	2 1.6	5.1	2 1.6	5.1	2 1.6	5.1				
11	***	2 1.0	2.9	2 1.3	2.7	2 0.9	2.7	2 1.0	3.0	2 0.6	2.6	3 2.0	2.2	3 1.3	3.0	3 1.0	3.0	3 1.0	3.0	3 1.0	3.0	3 1.0	3.0	3 1.0	3.0	3 1.0	3.0	3 1.0	3.0			
12	2 1.2	2.1	2 1.8	3.1	2 1.5	2.8	2 0.6	2.8	2 0.6	2.8	2 0.6	2.8	2 0.6	2.8	2 0.7	4.0	2 0.6	4.1	2 1.0	4.3	2 0.8	4.1	2 0.6	4.3	3 1.0	0	4.0	2 0.2	2 0.9	2 0.2		
13	2 1.3	2.1	2 1.8	3.1	2 1.5	2.8	2 0.6	2.8	2 0.6	2.8	2 0.6	2.8	2 0.6	2.8	2 0.7	4.0	2 0.7	4.0	3 1.0	0	4.0	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0			
14	2 1.4	2.0	2 0.5	2.2	2 0.4	2.0	2 0.4	2.0	2 0.4	3.3	2 0.4	3.0	2 0.4	3.0	2 0.5	3.6	2 0.5	3.6	3 1.0	0	4.0	2 1.0	4.3	2 0.9	4.0	3 1.0	0	4.0	2 0.2			
15	2 1.5	2.0	2 0.5	2.4	2 0.5	2.6	2 0.5	2.6	2 0.5	2.6	2 0.5	2.6	2 0.5	2.6	2 0.5	2.6	2 0.5	2.6	3 1.0	0	4.0	2 1.0	4.3	2 0.7	4.0	3 1.0	0	4.0	2 0.2			
16	2 1.6	2.0	2 0.9	3.5	2 1.2	2.8	3 2.8	2.3	3 2.2	3.5	2 3.2	4.2	2 2.9	4.7	3 3.0	3.0	3 5.5	3.5	2 2.0	5.0	2 3.8	4.8	3 4.7	3.1	3 3.7	4.5	3 3.7	4.5	3 3.7	4.5		
17	2 1.7	3 1.8	3 1.8	3.2	3 1.1	3.0	3 1.2	2.3	3 1.2	2.3	3 1.2	2.3	3 1.2	2.3	3 1.2	2.3	3 4.0	3.0	3 4.0	3.0	3 4.0	3.0	3 4.0	3.0	3 4.0	3.0	3 4.0	3.0	3 4.0	3.0		
18	2 1.8	3 1.4	3 1.3	3.1	2 2.4	2.7	***	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1	2 1.2	3.1			
19	***	2 1.9	3.1	2 0.9	4.5	2 1.0	4.5	2 1.3	4.9	2 4.1	4.8	2 3.3	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1			
20	2 2 1.0	4.3	2 0.4	3.2	2 0.9	4.5	2 1.2	3.3	2 1.3	4.9	2 4.1	4.8	2 3.3	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1	2 4.1	5.1		
21	2 2 0.9	4.9	2 1.0	4.5	2 0.6	4.0	2 1.0	4.6	2 0.9	4.7	2 4.0	4.9	2 4.1	5.0	3 0.3	5.0	2 4.1	5.0	2 4.1	5.0	2 4.1	5.0	2 4.1	5.0	2 4.1	5.0	2 4.1	5.0	2 4.1	5.0		
22	2 2 0.7	4.5	2 0.6	4.0	2 0.5	4.0	2 0.5	4.4	2 0.4	4.3	2 2.1	4.8	2 2.2	4.7	2 1.3	4.3	3 1.2	4.4	2 1.7	4.4	2 1.7	4.4	2 1.7	4.4	2 1.7	4.4	2 1.7	4.4	2 1.7	4.4		
23	2 2 0.4	3.5	2 0.3	4.4	2 0.3	4.4	2 0.3	4.4	2 0.4	4.0	2 0.4	3.8	2 1.4	3.9	2 1.3	4.4	2 1.3	4.2	2 1.3	4.2	2 1.3	4.2	2 1.3	4.2	2 1.3	4.2	2 1.3	4.2	2 1.3	4.2		
24	2 2 0.5	3.9	2 0.2	4.8	2 0.8	2.4	2 0.9	2.3	2 0.9	2.3	2 0.9	2.3	2 0.9	2.3	2 1.5	4.5	2 1.5	4.5	2 1.8	4.8	2 2.5	4.4	2 2.1	4.8	2 2.1	4.8	2 2.1	4.8	2 2.1	4.8		
25	2 2 0.7	3.0	2 0.4	4.4	2 0.5	3.8	2 0.3	4.4	2 0.4	4.4	2 2.2	5.1	2 1.9	5.1	2 1.9	5.1	2 1.9	5.1	2 1.9	5.1	2 1.9	5.1	2 1.9	5.1	2 1.9	5.1	2 1.9	5.1	2 1.9	5.1		
26	2 2 0.3	4.5	2 0.3	3.8	3 0.5	2.1	2 0.3	2.5	2 0.9	4.7	2 0.7	4.2	2 1.0	4.2	2 1.0	4.2	2 1.0	4.2	2 1.0	4.2	2 1.0	4.2	2 1.0	4.2	2 1.0	4.2	2 1.0	4.2	2 1.0	4.2		
27	2 2 1.0	2.7	2 0.4	2.6	2 0.3	2.1	2 0.2	2.4	2 0.2	2.4	2 0.2	2.4	2 0.2	2.4	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0		
28	2 2 0.2	3.1	2 0.2	2.9	2 0.5	4.2	2 0.2	2.9	2 0.5	4.2	2 0.2	4.1	2 0.7	4.0	2 0.8	3.7	2 0.8	3.7	2 0.8	3.7	2 0.8	3.7	2 0.8	3.7	2 0.8	3.7	2 0.8	3.7	2 0.8	3.7		
29	2 2 0.4	3.6	2 0.5	4.0	2 0.6	4.0	2 0.5	4.0	2 0.5	4.0	2 0.5	4.0	2 0.5	4.0	2 1.0	4.0	2 1.0	4.0	2 1.0	4.0	2 1.0	4.0	2 1.0	4.0	2 1.0	4.0	2 1.0	4.0	2 1.0	4.0		
30	2 2 0.3	3.8	2 0.3	3.5	2 0.4	4.0	2 0.4	4.0	2 0.4	4.0	2 0.7	4.0	2 0.7	4.0	2 0.7	4.0	3 0.7	6.8	2 0.8	4.0	2 0.8	4.0	2 0.6	4.5	2 1.0	4.0	3 0.8	6.3	3 0.8	6.3	3 0.8	6.3
31	3 0.8	3.0	3 0.5	3.8	3 0.6	2.9	3 1.7	3.3	3 1.0	6.0	3 0.9	5.1	3 0.8	5.0	3 0.8	5.0	3 0.8	5.0	3 0.8	5.0	3 0.8	5.0	3 0.9	5.2	3 0.9	5.2	3 0.9	5.2	3 0.9	5.2		

From the ISC collection scanned by

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From the ISC collection scanned by SISMOS

Time	Z			N-S						E-W										
	0	6	12	18	0	6	12	18	0	6	12	18	0	6	12	18				
Date	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T		
	μ sec																			
1	2.0.3	3.0.7	2.0.5	2.0.6	2.0.3	3.0.9	2.0.3	4.0.1	2	0.8	4.0.9	2	0.9	4.0.2	2	1.0	4.0.7	2	0.6	4.0.3
2	2.0.3	2.0.8	3.0.5	4.0.2	2.0.4	2.0.4	2.0.3	3.0.2	2	1.0	4.0.2	2	1.1	5.0.9	2	0.7	5.0.0	2	0.8	5.0.1
3	2.0.3	2.0.7	2.0.2	2.0.2	2.0.2	2.0.7	2.0.3	3.0.1	2	0.7	5.0.1	2	0.6	4.0.2	2	0.6	4.0.2	2	0.3	4.0.6
4	2.0.3	2.0.3	2.0.2	2.0.2	2.0.2	2.0.2	2.0.3	3.0.5	2	0.3	4.0.5	2	0.3	4.0.5	2	0.3	3.0.3	2	0.3	4.0.6
5	2.0.3	3.0.2	2.0.4	3.0.1	2.0.4	3.0.1	2.0.4	3.0.5	2	0.0	0.0	2	0.0	0.0	2	0.0	0.0	2	0.3	0.0
6	2.0.3	3.0.2	2.0.4	3.0.1	2.0.4	3.0.1	2.0.4	3.0.5	2	0.5	5.0.7	2	0.7	4.0.1	2	0.3	4.0.0	2	0.8	3.0.2
7	2.0.4	3.0.3	2.0.5	2.0.5	2.0.4	2.0.5	2.0.3	3.0.5	2	0.7	4.0.9	2	0.4	6.0.7	2	0.3	7.0.6	2	0.8	3.0.2
8	2.0.5	3.0.5	2.0.4	3.0.0	2.0.5	4.0.8	2.0.3	5.0.0	2	1.1	4.0.3	2	1.0	4.0.9	2	1.4	4.0.6	2	1.0	4.0.1
9	2.0.4	5.0.0	2.0.5	5.0.0	2.0.5	4.0.7	2.0.5	4.0.8	2	1.2	4.0.5	2	1.4	4.0.9	2	1.4	4.0.7	2	2.5	5.0.0
10	2.0.4	5.0.0	2.0.5	5.0.0	2.0.5	5.0.0	2.0.5	5.0.0	2	1.8	4.0.5	2	1.4	5.0.0	2	1.9	4.0.9	2	1.4	4.0.7
11	2.0.6	4.0.7	2.0.3	4.0.0	2.0.3	4.0.3	2.0.3	4.0.2	2	1.6	4.0.4	2	1.1	4.0.7	2	0.8	4.0.2	2	1.0	5.0.0
12	2.0.2	5.0.4	2.0.2	4.0.5	2.0.3	4.0.7	2.0.3	4.0.0	2	0.8	4.0.3	2	1.0	4.0.6	2	0.7	4.0.8	2	0.7	4.0.8
13	2.0.4	3.0.5	2.0.5	3.0.8	3.0.1	3.0.2	3.0.5	4.0.0	2	1.3	3.0.5	2	1.6	4.0.2	2	1.9	5.0.0	2	1.9	5.0.0
14	2.0.7	3.0.0	2.0.5	2.0.5	2.0.6	2.0.4	2.0.4	3.0.2	2	1.4	3.0.2	2	0.8	3.0.8	2	1.0	3.0.3	2	0.4	3.0.4
15	2.0.4	2.0.0	2.0.8	2.0.8	2.0.7	2.0.4	2.0.7	3.0.0	2	0.9	3.0.3	2	0.7	3.0.2	2	0.9	3.0.0	2	1.2	3.0.5
16	2.0.4	2.0.8	2.0.2	2.0.8	2.0.7	2.0.3	2.0.0	3.0.3	2	0.7	3.0.2	2	0.7	4.0.3	2	1.9	4.0.2	2	1.0	3.0.3
17	2.0.8	2.0.4	2.0.5	2.0.5	2.0.9	2.0.7	2.0.9	3.0.0	2	1.0	3.0.2	2	0.9	3.0.0	2	1.0	3.0.0	2	1.0	3.0.0
18	2.1.0	2.0.9	2.0.3	2.0.3	2.0.6	2.0.2	2.0.8	2.0.9	2	0.9	2.0.9	2	1.0	2.0.7	2	1.0	2.0.7	2	1.0	2.0.7
19	2.1.7	2.0.8	2.0.2	2.0.2	2.0.2	2.0.8	2.0.2	2.0.8	2	0.9	2.0.8	2	1.0	2.0.7	2	1.0	2.0.7	2	1.0	2.0.7
20	2.0.7	3.0.1	2.0.7	2.0.7	2.0.7	2.0.7	2.0.7	3.0.0	2	0.8	2.0.8	2	0.9	2.0.8	2	0.9	2.0.8	2	0.9	2.0.8
21	2.0.3	2.0.2	2.0.9	2.0.9	2.0.9	2.0.9	2.0.9	3.0.0	2	0.7	2.0.7	2	1.1	3.0.1	2	0.9	3.0.0	2	1.0	3.0.0
22	2.0.5	2.0.2	2.0.2	2.0.2	2.0.2	2.0.2	2.0.2	2.0.2	2	0.6	2.0.4	2	0.6	2.0.6	2	0.6	2.0.6	2	0.6	2.0.6
23	2.0.1	2.0.3	2.0.2	2.0.3	2.0.2	2.0.3	2.0.2	2.0.3	2	0.7	2.0.3	2	0.7	2.0.3	2	0.7	2.0.3	2	0.7	2.0.3
24	2.0.4	2.0.1	2.0.2	2.0.2	2.0.3	2.0.2	2.0.3	2.0.2	2	0.8	2.0.3	2	0.8	2.0.3	2	0.8	2.0.3	2	0.8	2.0.3
25	2.0.7	3.0.1	2.0.7	2.0.7	2.0.7	2.0.7	2.0.7	3.0.0	2	0.7	2.0.7	2	0.7	2.0.7	2	0.7	2.0.7	2	0.7	2.0.7
26	2.0.3	2.0.2	2.0.9	2.0.9	2.0.9	2.0.9	2.0.9	3.0.0	2	0.8	2.0.0	2	1.1	3.0.1	2	0.9	3.0.0	2	1.0	3.0.0
27	2.0.5	2.0.6	2.0.4	2.0.8	2.0.7	2.0.4	2.0.7	2.0.8	2	0.9	2.0.8	2	0.9	2.0.8	2	0.9	2.0.8	2	0.9	2.0.8
28	2.0.4	2.0.6	2.0.5	2.0.5	2.0.5	2.0.5	2.0.5	3.0.0	2	0.4	4.0.3	2	0.3	4.0.3	2	0.3	4.0.3	2	0.3	4.0.3
29	2.0.5	4.0.6	2.0.5	2.0.5	2.0.6	4.0.5	2.0.4	4.0.5	2	0.7	5.0.7	2	1.5	4.0.7	2	1.5	4.0.7	2	1.0	5.0.3
30	2.0.4	4.0.4	2.0.7	2.0.9	2.0.7	2.0.9	2.0.7	3.0.0	2	0.1	3.0.2	2	0.1	3.0.2	2	0.1	3.0.2	2	0.2	3.0.0
31	2.0.6	5.0.3	2.0.3	5.0.4	2.0.2	4.0.8	2.0.2	4.0.8	2	0.4	3.0.0	2	2.1	3.0.4	2	0.7	4.0.0	2	1.2	3.0.3

DE BILT, MICROSEISMIC ACTIVITY, AUGUST 1958

Time	Z			N-S						E-W					
	0	6	12	18	0	6	12	18	0	6	12	18	0	6	12	18
Date	K	A	T	K	A	T	K	A	T	K					

From the ISC collection scanned by SISMOS

Time	Z												N-S																		
	0				6				12				18				0				6				12						
Date	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K			
1	0.3	5.0	2.0.2	2.0.2	2.0.2	3.0.3	4.9	2.0.7	5.0	2.0.6	4.7	2.2.3	4.8	2.2.6	5.3	2.1.7	4.9	2.2.4	4.6	2.1.2	4.6	2.0.7	4.5	2.1.0	4.5	2.0.7	4.5	2.1.2	4.6		
2	0.6	2.6	3.0.7	2.6	2.0.6	3.0.9	3.0.8	3.0.2	2.2.4	4.7	2.1.7	4.9	2.2.4	4.9	2.2.2	5.0	2.1.7	5.0	2.1.3	5.3	2.2.0	4.9	2.1.7	5.0	2.2.0	4.9	2.2.0	4.9	2.2.0	4.9	
3	0.6	2.6	3.0.7	2.6	2.0.6	3.0.9	3.0.8	3.0.2	2.2.4	4.7	2.1.7	4.9	2.1.7	5.0	2.0.6	4.5	2.1.3	4.3	2.0.6	4.7	2.0.7	5.0	2.0.6	4.7	2.0.7	5.0	2.0.6	4.7	2.0.6	4.7	
4	0.6	2.6	3.0.7	2.6	2.0.6	3.0.9	3.0.8	3.0.2	2.2.4	4.7	2.1.7	4.9	2.0.7	4.0	2.0.6	4.5	2.1.3	4.3	2.0.6	4.7	2.0.7	5.0	2.0.6	4.7	2.0.7	5.0	2.0.6	4.7	2.0.6	4.7	
5	0.6	2.6	3.0.7	2.6	2.0.6	3.0.9	3.0.8	3.0.2	2.2.4	4.7	2.1.7	4.9	2.0.7	4.0	2.0.6	4.5	2.1.3	4.3	2.0.6	4.7	2.0.7	5.0	2.0.6	4.7	2.0.7	5.0	2.0.6	4.7	2.0.6	4.7	
6	0.3	4.6	2.0.3	4.3	2.0.2	4.5	2.0.2	4.4	2.0.6	4.3	2.0.6	4.4	2.0.6	4.4	2.0.6	4.4	2.0.7	4.1	2.0.6	4.5	2.0.6	4.9	2.1.2	4.6	2.0.6	4.6	2.0.6	4.6	2.0.6	4.6	
7	0.3	4.8	2.0.3	4.2	0.0.0	3.0.0	3.0.2	3.0.0	2.0.6	4.6	3.0.6	4.8	3.0.6	4.2	3.1.1	5.0	3.1.7	7.1	2.1.3	4.4	2.0.0	0.0	2.0.0	0.0	2.0.0	0.0	2.0.0	0.0	2.0.0	0.0	
8	0.2	3.3	2.0.2	2.6	2.0.2	3.0	2.1.2	4.6	2.0.6	4.6	3.1.9	6.0	3.1.7	3.2	3.2.0	2.0	2.7	2.1.2	2.0.2	3.1.8	3.0	3.0.9	3.0	3.0.1	2.2	3.0.1	2.2	3.0.1	2.2	3.0.1	2.2
9	0.2	2.9	2.0.2	2.6	2.0.2	2.7	2.0.5	2.7	2.0.5	2.7	3.1.9	6.0	3.1.7	3.2	3.2.0	2.0	2.7	2.1.2	2.0.2	3.1.8	3.0	3.0.9	3.0	3.0.1	2.2	3.0.1	2.2	3.0.1	2.2	3.0.1	2.2
10	0.6	2.0.5	2.0.5	2.4	2.0.4	3.2	2.0.6	4.2	2.0.6	4.5	2.1.3	4.3	2.1.2	4.6	2.0.6	4.6	2.1.2	4.6	2.0.6	4.6	2.0.6	4.6	2.1.3	4.1	2.0.6	4.1	2.0.6	4.1	2.0.6	4.1	
11	0.5	5.3	2.0.4	1.5	3	1.8	1.6	2.1.5	3.8	2.1.7	4.9	3.1.3	4.3	3.1.7	5.2	3.1.4	4.3	3.1.7	5.2	2.1.3	4.0	3.1.3	4.2	2.1.3	4.2	2.1.3	4.2	2.1.3	4.2	2.1.3	4.2
12	0.6	3.1	3.0.5	1.6	2	2.0.2	2.0.2	2.0.0	2.0.2	2.0.0	2.0.2	2.1.6	2.0.8	2.1.4	2.0.8	2.1.7	2.0.8	2.1.4	2.0.8	2.1.7	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8		
13	0.6	3.2	3.0.2	2.0.2	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.1.6	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4			
14	0.6	3.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.1.6	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4			
15	0.6	3.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.1.6	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4			
16	0.6	3.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.1.6	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4			
17	0.8	5.2	3.0.7	5.0	3	2.0.2	2.0.2	2.0.0	2.0.2	2.0.0	2.0.2	2.1.6	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8		
18	0.6	5.4	3.0.7	6.6	3	2.0.2	2.0.2	2.0.0	2.0.2	2.0.0	2.0.2	2.1.6	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8		
19	0.6	5.0	3.0.0	2.0.3	2.0.5	2.0.3	2.0.5	2.0.3	2.0.5	2.0.3	2.0.5	2.1.6	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8		
20	1.6	6.0	3.1.4	6.0	3	0.9	6.5	2.0.9	6.7	2.0.7	6.0	3.0.6	6.0	3.0.5	6.7	2.0.4	6.2	3.0.6	6.0	2.0.4	6.3	3.0.4	6.0	2.0.4	6.3	3.0.4	6.0	2.0.4	6.3	3.0.4	6.0
21	0.7	5.7	3.0.9	6.5	2	0.9	6.7	2.0.9	6.0	2.0.6	5.2	3.0.6	6.0	3.0.5	6.7	2.0.4	6.2	3.0.6	6.0	2.0.4	6.3	3.0.4	6.0	2.0.4	6.3	3.0.4	6.0	2.0.4	6.3	3.0.4	6.0
22	2.1	0.0	6.5	2.0.7	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.0.0	2.1.6	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.3	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8	2.1.4	2.0.8		
23	2.0.5	3.0.0	2.0.3	2.0.5	2.0.3	2.0.5	2.0.3	2.0.5	2.0.3	2.0.5	2.0.3	2.1.6	2.0.8	2.1.4																	



From the ISC collection scanned by SISMOS

E-W

N-S

Z

Time	0	6	12	18	0	6	12	18	0	6	12	18	0	6	12	18	0	6	
Date	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	
	sec	sec	μ sec	sec	sec	μ sec	sec	sec	μ sec	sec	sec	μ sec	sec	sec	μ sec	sec	sec	μ sec	
1	***	3.0.7	3.4.1	1.0.8	2.9	***	3.0.6	2.7	3.0.5	3.6	***	3.2.8	5.0	3.3.0	5.8	3.3.0	5.0	3.2.7	5.1
2	3.0.7	5.0.2	2.0.6	5.1	2.0.4	5.5	3.1.6	5.3	2.2.1	5.2	2.2.1	5.0	3.2.1	5.0	3.2.0	5.4	3.3.0	4.3	
3	3.0.6	5.5	3.0.6	4.9	3.0.6	5.1	3.0.6	4.9	3.0.6	5.2	2.2.6	5.0	3.2.6	5.4	3.2.1	5.0	3.2.3	4.9	
4	3.0.7	4.8	3.0.6	4.9	3.0.5	4.9	3.0.6	4.9	2.1.6	5.2	2.1.6	5.5	2.2.4	6.1	2.1.6	5.2	2.2.2	5.2	
5	3.0.7	6.5	3.0.8	6.2	3.1.0	6.1	3.1.0	6.1	2.3	6.4	2.2.7	6.4	3.3.3	6.1	3.3.7	6.5	3.2.9	5.9	
6	3.0.7	6.6	3.0.6	5.8	3.0.9	5.8	3.0.7	6.6	***	6.6	3.2.3	6.4	3.3.0	7.0	3.3.0	7.0	3.3.1	6.6	
7	3.0.7	6.6	3.0.6	5.8	3.0.5	4.1	3.0.8	4.1	3.0.8	4.6	3.2.4	6.4	3.2.1	5.9	3.2.0	5.9	3.2.1	5.9	
8	3.0.7	5.6	3.0.7	5.4	3.0.7	4.0	3.0.8	3.1	3.2.5	5.8	3.2.5	5.7	3.2.1	5.6	3.2.6	5.4	3.2.6	5.4	
9	3.0.8	4.2	3.0.8	4.6	3.0.8	4.6	3.0.9	3.4	3.2.1	5.3	3.2.3	4.8	3.2.0	3.3	3.3.3	5.0	3.3.3	5.0	
10	3.0.6	3.7	3.0.7	3.4	3.0.9	3.4	3.0.9	3.4	3.2.1	5.3	3.2.3	4.8	3.2.0	3.3	3.3.3	5.0	3.3.3	5.0	
11	3.0.6	3.7	3.0.7	3.7	3.0.7	3.7	3.0.7	3.8	3.2.0	8.0	3.2.1	5.1	3.2.2	5.1	3.3.1	4.5	3.2.2	5.4	
12	3.0.6	5.1	3.0.7	6.7	3.0.7	6.7	3.1.1	7.3	3.2.1	6.7	3.4.5	7.0	3.4.9	8.0	3.4.9	8.0	3.4.5	7.9	
13	3.2.1	7.3	2.1.5	6.9	2.1.5	6.3	2.0.7	6.3	2.2.0	6.7	2.2.9	6.0	2.2.0	5.0	2.2.5	5.7	2.2.0	5.4	
14	2.1.1	6.6	2.0.7	6.3	2.0.7	6.3	2.0.6	6.3	2.2.0	5.6	2.2.2	5.0	2.1.2	4.9	2.1.2	4.9	2.1.2	4.9	
15	2.0.6	5.5	2.0.7	5.7	1.0.6	5.2	2.0.6	5.7	2.2.0	5.6	2.2.2	5.0	2.1.2	4.9	2.1.2	4.9	2.1.2	4.9	
16	1.0.9	6.3	2.0.9	6.1	2.0.8	5.6	2.1.0	5.8	2.2.8	6.1	2.2.8	6.0	2.3.1	5.6	2.3.0	5.9	2.3.0	5.8	
17	2.0.7	5.5	2.0.9	6.1	2.0.8	5.8	2.1.0	5.6	2.2.1	5.4	2.2.1	5.0	2.3.3	5.9	2.3.3	5.9	2.3.3	5.8	
18	2.1.5	6.1	2.1.0	6.0	2.0.8	6.1	2.0.8	6.1	2.3.3	6.2	2.3.4	6.0	2.2.7	6.6	2.3.6	6.4	2.3.6	6.4	
19	2.1.0	6.4	2.1.1	6.1	2.1.1	6.4	2.1.0	6.4	2.2.8	6.3	2.2.9	6.1	2.2.7	6.1	2.3.6	6.0	2.3.6	6.0	
20	3.0.8	5.9	3.0.7	5.6	3.0.6	5.9	3.0.6	5.8	3.2.4	6.0	3.2.4	5.9	3.2.0	6.0	3.2.9	5.7	3.2.9	5.7	
21	3.0.6	5.7	3.0.6	5.5	3.0.5	4.4	3.0.5	4.5	3.2.0	5.7	3.1.7	4.8	3.1.1	4.9	3.1.8	5.7	3.1.9	5.0	
22	3.0.4	4.6	3.0.5	4.4	3.0.5	4.6	3.0.5	4.6	3.2.0	4.8	3.1.7	4.9	3.1.5	5.2	3.1.6	5.2	3.1.6	5.2	
23	3.0.6	5.1	3.0.6	4.6	3.0.6	4.6	3.0.5	5.7	3.2.1	5.9	3.2.1	5.9	3.2.0	5.7	3.2.1	5.9	3.2.1	5.9	
24	3.0.4	6.1	3.0.4	5.7	3.0.5	5.7	3.0.7	5.7	3.2.1	5.8	3.2.0	5.6	3.2.3	5.8	3.2.4	5.6	3.2.4	5.6	
25	3.0.6	5.6	3.0.5	5.7	3.0.5	5.7	3.0.9	5.7	3.2.0	5.6	3.2.3	5.6	3.2.3	5.6	3.2.4	5.6	3.2.4	5.6	
26	3.0.9	6.0	3.1.0	6.5	3.0.8	6.6	0.8	7.0	3.2.9	6.0	3.3.0	6.5	3.3.1	6.8	3.3.6	6.7	3.3.7	6.6	
27	3.0.9	6.2	3.0.9	6.5	3.0.9	6.7	3.1.1	7.1	3.3.6	6.4	3.3.4	6.0	3.3.3	6.6	3.4.1	6.7	3.4.2	6.6	
28	3.1.1	6.7	3.1.1	7.4	3.1.2	7.3	3.1.0	7.0	3.3.4	7.0	3.3.9	7.0	3.4.2	7.0	3.4.2	7.0	3.4.2	7.0	
29	3.1.1	7.0	3.1.1	6.5	3.0.7	6.8	3.0.6	6.1	3.3.8	7.1	3.3.6	6.6	3.3.1	6.6	3.3.7	6.7	3.3.8	6.6	
30	3.0.6	6.0	3.0.5	6.1	3.0.4	6.0	3.0.4	6.0	3.2.0	5.6	3.2.0	5.7	3.2.1	6.7	3.2.1	5.5	3.2.0	5.6	
31	3.1.2	6.2	3.1.4	2.8	3.1.6	3.8	3.1.6	3.8	3.4.3	6.1	3.4.3	6.1	3.4.0	4.2	3.4.6	5.2	3.4.3	5.2	

DE BILT, MICROSEISMIC ACTIVITY, DECEMBER 1958

Time	0	6	12	18	0	6	12	18	0	6	12	18	0	6	12	18	0	6	
Date	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	K	A	T	
	sec	sec	μ sec	sec	sec	μ sec	sec	sec	μ sec	sec	sec	μ sec	sec	sec	μ sec	sec	sec	μ sec	
1	3.0.4	3.9	3.0.6	3.1	3.0.9	3.0.0	3.0.9	3.0.3	2.5.1	3.0.3	2.5.1	3.0.3	2.5.1	3.0.3	2.5.1	3.0.3	2.5.1	3.0.3	2.5.1
2	3.0.7	5.2	3.0.8	6.0	2.0.8	5.4	2.0.8	5.5	2.3.1	5.5	2.3.1								