

**KONINKLIJK NEDERLANDS
METEOROLOGISCH INSTITUUT**

SEISMOLOGICAL BULLETIN
OF THE SEISMOGRAPH STATIONS
IN THE NETHERLANDS

VOLUME 62
1974

DE BILT-1979



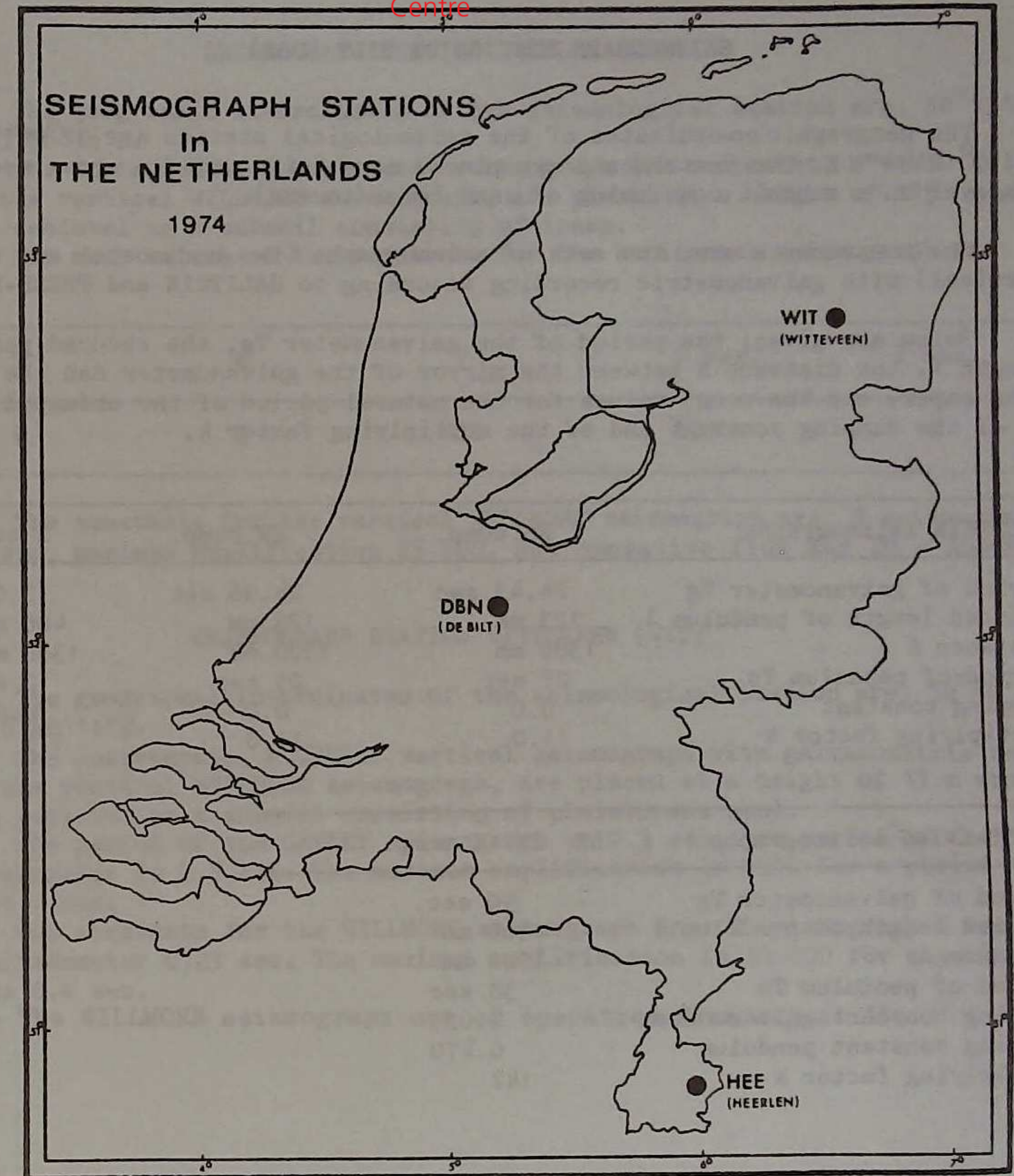
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Publicatienummer K.N.M.I. 108-62



Geographical coordinates of the stations

Code	Latitude (North)	Longitude (East)	Elevation (above m.s.l.)
DBN	52°06'10"	5°10'36"	2 m
HEE	50°53'06"	5°58'56"	115 m
WIT	52°48'48"	6°40'11"	17 m

SEISMOGRAPH STATION DE BILT (DBN)

The geographic co-ordinates of the seismological station are $52^{\circ}06'10''N$ and $5^{\circ}10'36''E$. The instruments are placed at a height of 2 m above mean sealevel on a subsoil consisting of sand (pleistocene).

The instruments are: two sets of seismographs (two horizontal and one vertical) with galvanometric recording according to GALITZIN and PRESS-EWING.

Below are given: the period of the galvanometer T_g , the reduced pendulum length l , the distance A between the mirror of the galvanometer and the recording paper, and the rough values for the natural period of the undamped pendulum T , of the damping constant and of the multiplying factor k .

GALITZIN seismographs	NS comp.	EW comp.	Z comp.
Period of galvanometer T_g	24.43 sec	24.96 sec	12.0 sec
Reduced length of pendulum l	123 mm	123 mm	406 mm
Distance A	1380 mm	1380 mm	1380 mm
Period of pendulum T_s	25 sec	25 sec	12 sec
Damping constant	0.0	0.0	0.0
Multiplying factor k	11.0	11.0	175

PRESS-EWING seismographs	NS	EW	Z comp.
Period of galvanometer T_g	90 sec.		
Reduced length of pendulum l	360 mm		
Distance A	1000 mm		
Period of pendulum T_s	30 sec		
Damping constant galvanometer	0.025		
Damping constant pendulum	0.470		
Multiplying factor k	147		



SEISMOGRAPH STATION HEERLEN (HEE)

The geographic co-ordinates of the seismological station are: $50^{\circ}53'06''N$ and $5^{\circ}58'56''E$.

The instruments, a horizontal seismograph (EW-component, $M = 450$ kg), and one vertical WILLMORE seismograph, are placed at a height of 115 m above mean sealevel on a subsoil consisting of loess.

The mean values of the constants for the horizontal seismograph are:

T	E	V	V max.	T max.
2	3	400	600	2

The constants for the vertical WILLMORE seismograph are: T seismograph 1.7 sec, maximum amplification 25.000. Not operative from May 28 - August 9.

SEISMOGRAPH STATION WITTEVEEN (WIT)

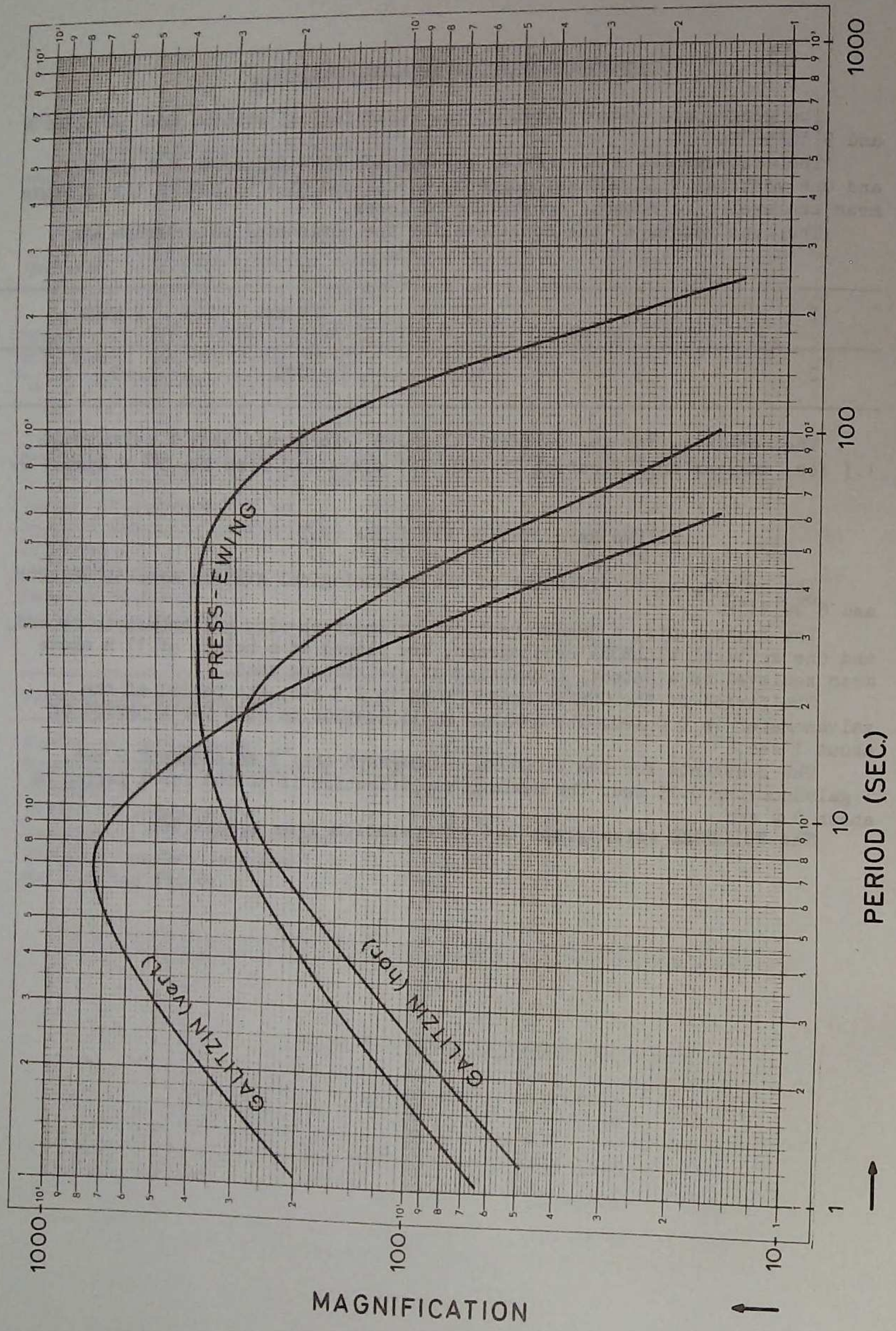
The geographic co-ordinates of the seismological station are: $52^{\circ}48'48''N$ and $6^{\circ}40'11''E$.

The instruments, a GRENET vertical seismograph with galvanometric record, and one vertical WILLMORE seismograph, are placed at a height of 17 m above mean sealevel on a subsoil consisting of pleistocene sand.

The period of the GRENET 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.

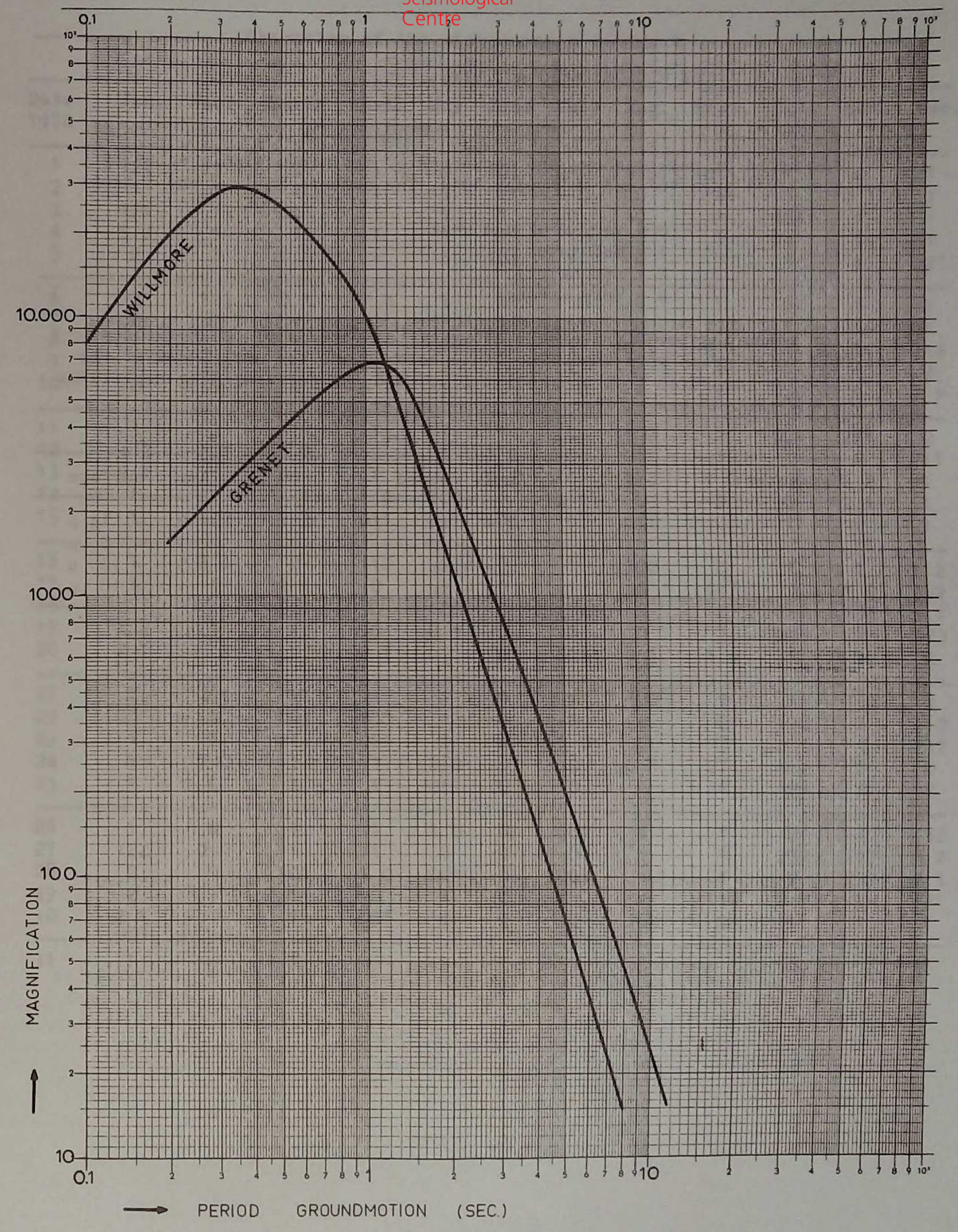
The constants for the WILLMORE seismograph are: T seismograph 2 sec, T galvanometer 0.25 sec. The maximum amplification is 30.000 for a period of about 0.4 sec.

The WILLMORE seismograph out of operation from August 16.



MAGNIFICATION

PERIOD (SEC)



MAGNIFICATION

PERIOD GROUND MOTION (SEC)

THE MICROSEISMIC ACTIVITY.

The table on page 7 shows the character of the microseismic activity (see also 1915 page 101 and 1916 page 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 horizontal 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 - 1/2 mm	0 - 1 1/2 μ
1	1/2 - 2 mm	1 1/2 - 5 μ
2	2 - 4 mm	5 - 10 μ
3	> 4 mm	> 10 μ



Character of the microseismic movement

Date 1974	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	121	1	1	1	1	101	0 1	1 0	011	011	0	1
2	1	1	1	1	1	1	1 0	0	1	1	0 1	1
3	121	1	1	1	1	1	0	0	1	101	1	1
4	1 2	1	1	1	1	1	1	0	1	1	1	1
5	2	1	1 0	1	1	101	1	0	1	1	1	221
6	2	121	0 1	1 0	1	1	1 0	0	1	1	1	1
7	2	1	1	0	1 0	1	0 1	0	122	1	1	1
8	2	112	1	0	001	100	1	0 1	2 1	1	1	112
9	2	332	1	0	1	0	1	1	1	1	1	2
10	2	3	1	0 1	1	0	1 0	1	1	100	1	2 1
11	3	3	1	1	1	1	0	1 0	1	001	221	2
12	3 2	321	1 0	1	1	1 0	0	011	1	1	1	211
13	2 1	1	0--	1	1	0 1	0	110	1 0	1 0	1 2	1
14	1	1	--1	1 0	100	1	0 1	0	0	0	2 1	1
15	1	122	1 2	011	0 1	100	1	011	0	1	1	1
16	1	2 1	2	110	1	0	1	100	0	1	1	112
17	1	1	2 1	0	1	0	1	0	011	1	1 0	332
18	1	1	112	0	100	0	100	0	1	112	001	2 1
19	1 2	1	1	0	0 1	0	0	0	1	221	1	123
20	2 1	1 0	1	0 1	1	0	011	0 1	1 2	1	1	3
21	1	0 1	1	1	1	0	1	100	2	1	101	3
22	1	1	101	100	1	0	1	0	2	112	1	3 2
23	1	1	1	001	1	0	1 0	0	2	2 1	1	232
24	1	1 0	1	1	100	0	0	0 1	211	1 2	1	2
25	1	0	1	1	011	0	0	1	1	2	1	2
26	1	0	1	1	1 0	0	001	1	1	2	1	332
27	122	0 1	1	1	0	0	0	1	1	232	112	3 2
28	2	1	101	1 0	001	0	001	1	1	2	232	2 3
29	2		1	0	1	0	1 0	1	110	2 1	1	321
30	2 1		1	001	1	0	0	100	0	1	1	1
31	1		1		1		1	0		100		1

EXPLANATION OF THE TABLES.

The data given in this yearbook have mostly been obtained from the GALITZIN and the PRESS-EWING records. The velocity of the recording paper is 30 mm and 15 mm per minute, respectively.

The data from the seismographs at Heerlen and Witteveen are also mentioned.

The time is Greenwich mean time.

In the column "first motion" + 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.
- 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.
- 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 wave or surface waves.
- M = maximum of the surface waves.
- L' = surface waves travelling around the major arc.
- M' = maximum of these waves.
- i = sudden beginning of the phase.
- e = gradual beginning of the phase.
- F = end of the discernable movement
- H = time of the shock at point of origin.
- h = depth of the origin.

The indices H, N, E and Z refer to 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 maximum amplitudes measured from the medium line (Galitzin records). The amplitudes have been calculated by means of the formula:

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

In this formula A 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 waves have been given. As the movement of these waves is irregular in general, the accuracy of these data is small. The amplitudes and periods of the maxima of L-waves have been given in case of strong earthquakes.

The magnitudes have been calculated by means of the formula:

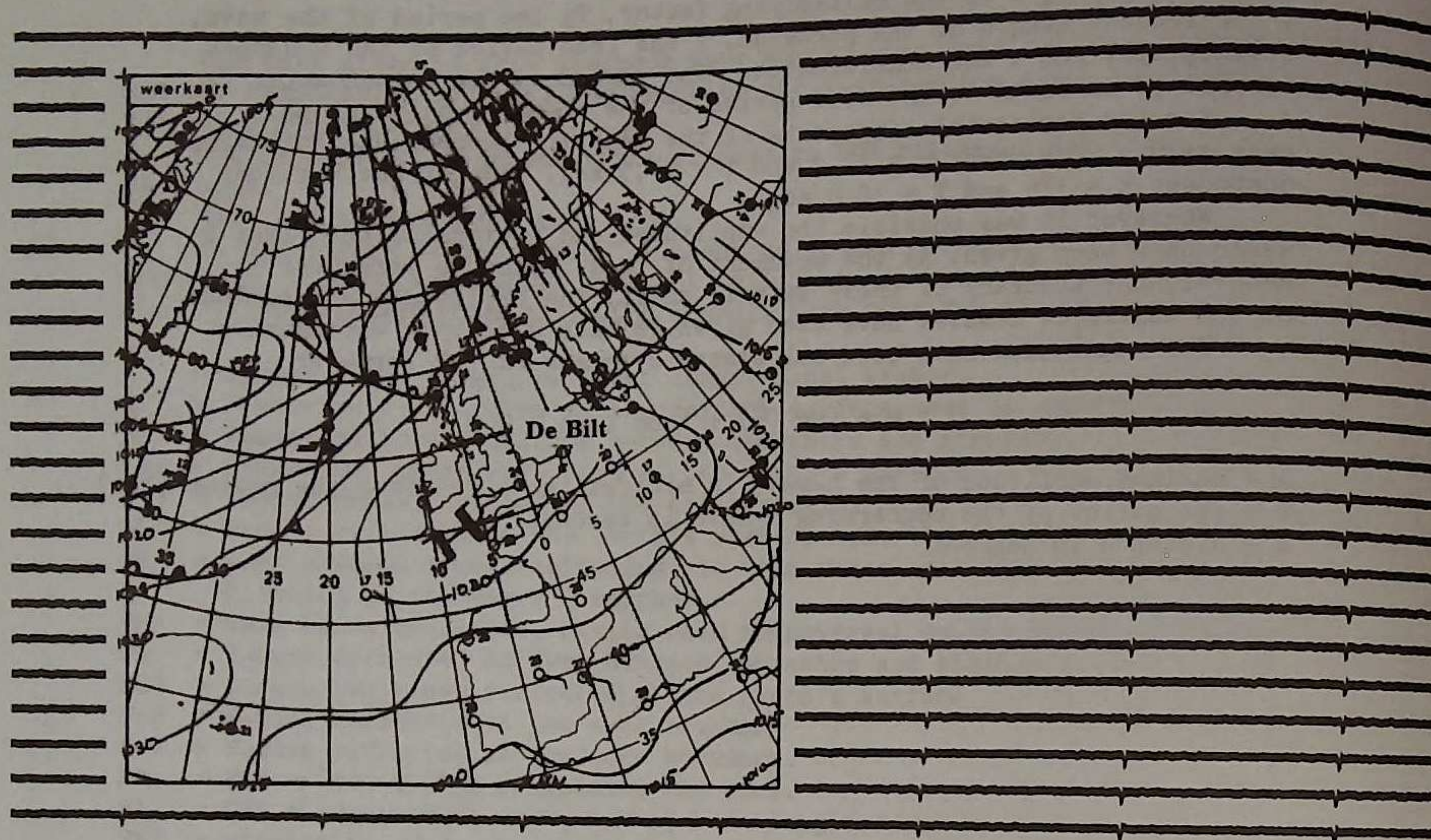
$$M = \log \left(\frac{A}{T} \right) + 1.66 \log \Delta + 3.3$$

A = maximum amplitude of the L-wave in microns (measured from the medium line).

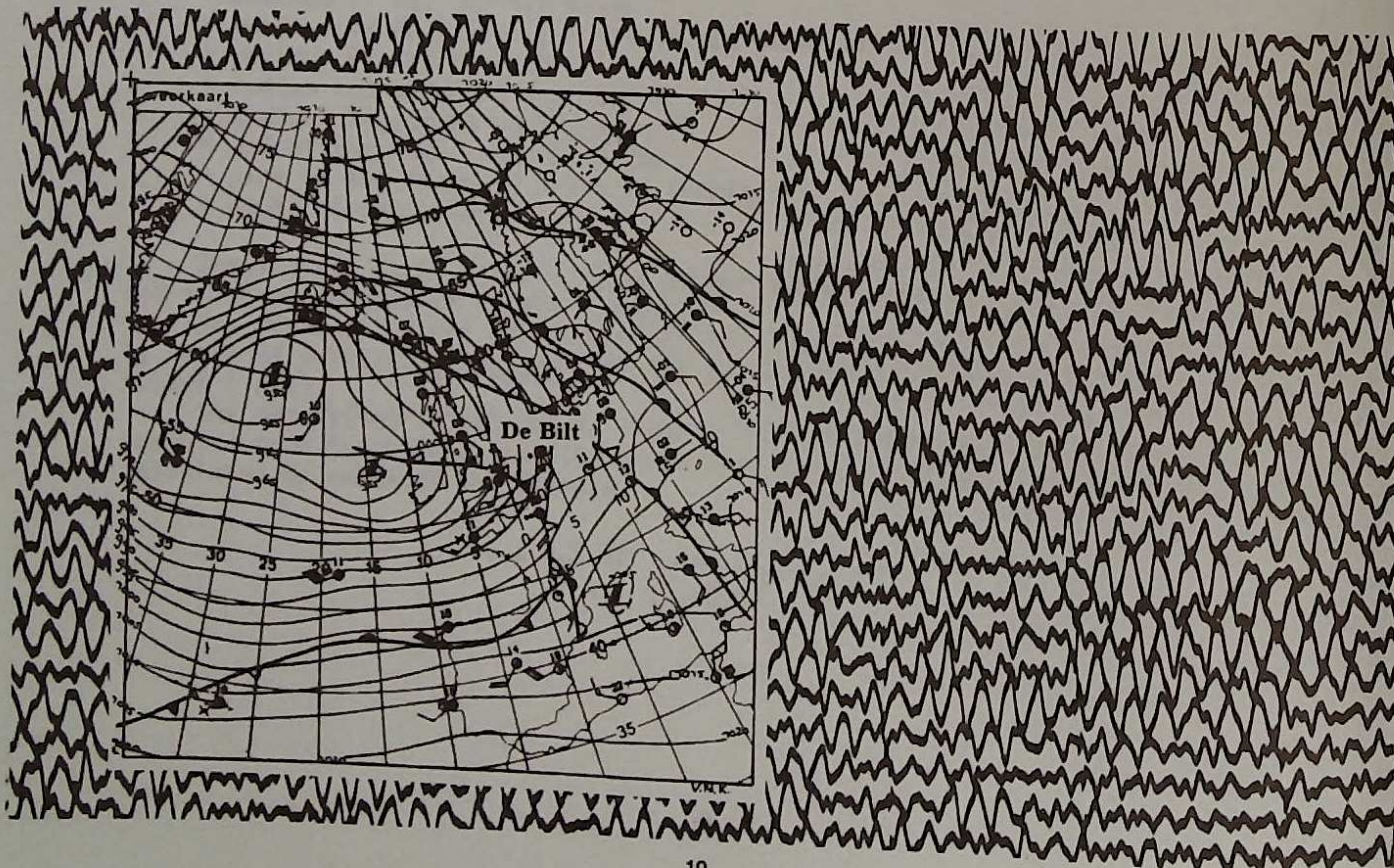
T = the period of the concerning L-wave in seconds.

Δ = distance in degrees.

SMALL AND STRONG MICROSEISMS RECORDED AT DE BILT
RELATED TO DIFFERENT MARINE WEATHER CONDITIONS



Records from GALITZIN vertical seismograph



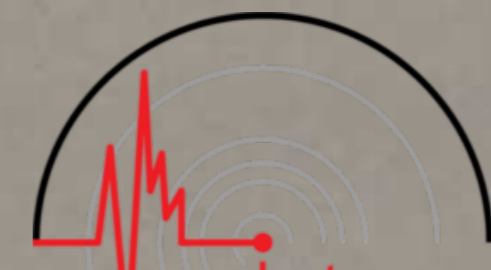
International Seismological Centre
Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
JAN. 1974											
	1. HEE:ePKP	07	11	49.0							ISC: 20.0S 170.4E, H: 06 52 04, h N. New Hebrides.
	1. WIT:ePKP	13	02	10.0	(-)						23.7S 179.7E, H: 12 43 16.1, h 501 km. Mb 5.0.
	HEE:iPKP	13	02	16.0	+						South of Fiji Islands.
	i	13	02	29.0	+						
	1. WIT:eP	14	20	15.5							4.6N 95.9E, H: 14 07 40.1, h 59 km. Mb 5.4.
	e	14	20	40.5							Northern Sumatra.
	2. iP	10	55	56	+	6	2.7				22.5S 68.4W, H: 10 42 29.9, h 105 km. Mb 6.4.
	ipP	10	56	26							Northern Chile.
	ipp	10	59	50							
	iSKS	11	06	24							
	isSKS	11	07	22							
	eSS	11	13.1								
	eSSS	11	17.5								
	eL	11	23								
	F	16.0									
	WIT:iP	10	56	00.5							
	epP	10	56	32.5							
	iPKKP	11	12	57.0	+						
	iP'P'	11	20	45.0							
	HEE:iP	10	55	54.0							
	ipP	10	56	28.0	-						
	i	10	59	49.0	+						
	iPKKP	11	13	02.0	+						
	iP'P'	11	20	47.0	+						
	2. WIT:iP	14	54	01.6	+						26.0N 124.4E, H: 14 41 47.9, h 205 km. Mb 5.7.
	i	14	54	12.6	+						Northeast of Taiwan.
	HEE:iP	14	54	08.0	+						
	4. eL	09	54								40.6N 77.6E, H: 09 27 55.7, h 26 km. Mb 5.5, Ms 4.8.
	F	10	06								Kirgiz-Sinkiang border region.
	5. iP	08	47	02	(-)						12.3S 76.4W, H: 08 33 50.7, h 98 km. Mb 6.3.
	eL	09	14								Near coast of Peru.
	F	10.7									10 Killed.
	WIT:iP	08	47	06.9	+						
	e	08	47	11.0							
	e	08	47	32.0							
	HEE:iP	08	47	02.0							
	e	08	47	26.5							

Seismological Data

Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
JAN. 1974											
6.	WIT:ePKP HEE:ePKP	04	39	40.5 44							21.8S 175.1W, H: 04 19 52.7, h N. Mb 5.0, Ms 5.3. Tonga Islands.
6.	eL F WIT:eP HEE:eP i	10	18.1 27	21.0 21.5 24.5							57.5N 33.8W, H: 10 07 12.6, h N. Mb 4.9, Ms 4.7. North Atlantic Ocean.
6.	HEE:eP	10	38	18.0							57.7N 33.6W, H: 10 33 06.1, h N. Mb 4.6, Ms 4.3. North Atlantic Ocean.
6.	eL F HEE:eP	15	00 15.3	13.5							1.5S 15.5W, H: 14 32 39.9, h N. Mb 5.3, Ms 4.9. North of Ascension Island..
6.	HEE:ePKP	17	58	57.0							14.9S 167.2E, H: 17 39 44.1, h 117 km. Mb 5.6. New Hebrides Islands.
7.	eL F HEE:eP e	04	44 05 04	36.5 47.5							19.1N 121.1E, H: 03 55 39.4, h 39 km. Mb 5.0, Ms 5.2. Philippine Islands region.
7.	WIT:eP	15	31	34.0							33.3N 47.9E, H: 15 24 38.2, h 32 km. Mb 5.0. Western Iran.
7.	eL F	17	25 17 51								26.9S 65.7W, H: 16 35 57.8, h 33 km. Mb 5.8. Tucuman Prov., Argentina.
8.	eSKS eL F	22	11 43 22 34	23.9							39.0S 46.2E, H: 21 47 21.7, h N. Mb 6.0, Ms 6.1. Atlantic - Indian Rise.
8.	eL F	23	59 24 23								41.2N 142.0E, H: 23 12 34.8, h 69 km. Mb 4.8. Hokkaido, Japan region.
9.	eL F WIT:eP HEE:eP	03	30 04.0	18.5 29.5							51.6N 159.6E, H: 02 49 46.3, h N. Mb 5.4, Ms 5.4. Off east coast of Kamchatka.



International Seismological Centre
Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
JAN. 1974											
10.	WIT:ePKP HEE:ePKP	00	58	43.0 47.5	+						ISC: 22.0S 179.7W, H: 00 39 56.0, h 546 km, Mb 4.6. South of Fiji.
10.	HEE:eP	02	48	46.5							51.7N 159.6E, H: 02 37 01.5, h N. Mb 4.9, Ms 4.8. Off east coast of Kamchatka.
10.	eL F WIT:eP HEE:eP	05	59 06 23	26.0 38.0							51.6N 159.7E, H: 05 18 54.3, h N. Mb 5.3, Ms 5.1. Off east coast of Kamchatka.
10.	iPKP iPP iH iSKKS iSS eSSS eL F WIT:iPKP e iSKP HEE:ePKP iSKP	09	10 27 09 13 27 09 22 40 09 27 16 09 31 55 09 37 20 09 48 13.0	5.4	+	7	5.4				14.4S 166.9E, H: 08 51 13.3, h 34 km. Mb 6.7, Ms 7.2. New Hebrides Islands.
10.	eL F WIT:eP e HEE:iP	09	10 37.5 09 14 01.5 09 14 14.0 09 10 34.0 09 14 18.5	21		21	75	7.5			57.3N 33.6W, H: 22 31 47.8, h N. Mb 5.1, Ms 4.6. North Atlantic Ocean.
11.	HEE:eP	02	04	29.0							57.3N 33.5W, H: 01 59 17.5, h N. Mb 4.7, Ms 4.4. North Atlantic Ocean.
11.	eL F WIT:ePKP eSKP HEE:ePKP eSKP	06	45 08 25	51.0 39.5 54.0 39.0							14.2S 166.6E, H: 05 36 30.8, h 15 km. Mb 5.7, Ms 6.2. New Hebrides Islands.
12.	HEE:iPKP	06	40	09.0							18.5S 173.4E, H: 06 20 29.2, h N. Mb 4.9. Fiji Islands region.
14.	WIT:eP HEE:iP	20	43 27.0 20 43 37.5								48.8N 155.0E, H: 20 31 43.0, h 14 km. Mb 5.5, Ms 4.8. Kuril Islands.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
15. JAN. 1974.	eL F	23	29.0		17		8.3		6.0	32.9N 104.2E, H: 22 50 29.9, h N. Mb 5.3, Ms 5.7. Szechwan Prov., China.	
16.	eL F HEE:eP	05 06 05	39 03 05	09.5						23.5N 121.4E, H: 04 52 30.7, h 58 km. Mb 5.1. Taiwan.	
18.	eL F	08 09.0	12							60.3S 150.5E, H: 06 52 43.4, h N. Mb 5.7, Ms 5.6. West of Macquarie Island.	
18.	HEE:iP	17	03	25.5	+					18.8N 69.4W, H: 16 52 43.1, h 82 km. Mb 5.3. Dominican Republic region.	
19.	HEE:ePn e iPg iSn	02 02 02 02	50 50 51 51	56.5 59.0 17.0 47.5						46.7N 7.4E, H: 02 49 50.3, h N. Switzerland.	
20.	HEE:ePKP	02	26	14.0						5.3S 151.5E, H: 02 07 17.9, h 74 km. Mb 5.1. New Britain region.	
20.	WIT:ePKP HEE:ePKP	05 05	32 32	39.0 41.0						14.4S 167.0E, H: 05 13 14.8, h N. Mb 5.6, Ms 4.9. New Hebrides Islands.	
21.	HEE:eP	23	01	24.0						14.9N 93.6W, H: 22 48 52.1, h 33 km. Mb 5.0, Ms 4.8. Near coast of Chiapas, Mexico.	
22.	eL F WIT:iP HEE:iP	14 15.1 13 13	01 39 39		22		4.2		5.7	55.2N 162.1E, H: 13 28 20.0, h N. Mb 5.7, Mb 5.5. Near east coast of Kamchatka.	
23.	WIT:ePKP i HEE:iPKP ₂ i	14 14 14 14	10 10 10 10	04.5 09.1 14.0 24.5	+					22.9S 179.1W, H: 13 51 08.8, h 449 km. Mb 5.4. South of Fiji Islands.	
24.	eL F	09 09	50.0 57							38.3N 20.0E, H: 09 40 16.0, h N. Mb 4.7. Greece.	
24.	HEE:iP	13	22	14.0	+					39.8N 14.6E, H: 13 19 23.2, h 538 km. Mb 4.6. Tyrrhenian Sea.	



International Seismological Centre

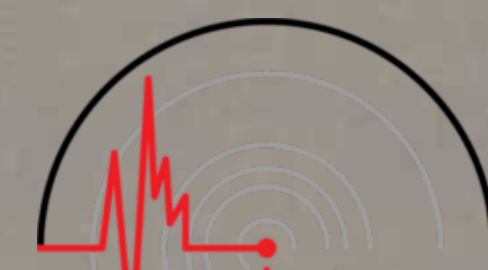
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
24. JAN. 1974.	iP ePP iS iSP eSS eL F WIT:iP HEE:eP	19 19 19 19 19 19 19	24 28 35 36 40 50 24	56 08 02 00 20 22.3 50.2	+	8		2.1		42.1N 143.9E, H: 19 12 52.1, h 45 km. Mb 5.9, Ms 6.1. Hokkaido, Japan region.	
25.	eL F HEE:eP	00 00 23	19 40 50	18.0						41.9N 144.0E, H: 23 38 08.5, h 41 km. Mb 5.2. Hokkaido, Japan region.	
25.	eL F	10 11	44 19							41.8N 144.0E, H: 10 04 28.1, h 41 km. Mb 5.9. Hokkaido, Japan region.	
25.	WIT:ePKP HEE:ePKP	14 14	30 30	16.0 20.5	+					20.0S 178.1W, H: 14 11 37.9, h 606 km. Mb 4.7. Fiji Islands region.	
25.	ePP epPP eS iSPP eL F HEE:ePP	20 20 20 20 21 22.0 20	46 46 52 55 15 22.0 46	02 40 20 48 15 04.5						18.9N 145.5E, H: 20 28 13.0, h 141 km. Mb 5.9. Mariana Islands.	
25.	HEE:iPKP e	22 23	59 00	56.5 08.5	-					16.4S 172.5W, H: 22 40 16.1, h 10 km. Mb 5.2, Ms 5.0. Samoa Islands region.	
26.	iP ePP iS eSS eSSS eL F WIT:eP HEE:eP	05 05 05 06 06 06 06 05 05	48 51 58 05.0 08.6 17 07.9 48 48	20 51 56 20 08.6 17 32.0 33.5	+	7		2.7		18.6N 103.4W, H: 05 35 33.6, h N. Mb 5.1, Ms 6.1. Near coast of Michoacan, Mexico.	
27.	WIT:ePKP HEE:ePKP	07 07	52 52	29.0 35.0	-					17.8S 178.8W, H: 07 33 57.6, h 605 km. Mb 4.7. Fiji Islands region.	
27.	eL F HEE:eP	09 09 08	05.6 11 56	45		17		8.3	5.5	33.8N 38.6W, H: 08 49 41.2, h N, Mb 5.1, Ms 5.3. North Atlantic Ridge.	

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
28. JAN. 1974.	eL	03	46.8								36.1N 4.5E, H: 03 39 03.6, h N. Mb 4.8, Ms 4.6. Algeria.
	F	03	53								
	HEE:eP	03	42	33.0							
29.	WIT:ePKP	19	15	37.0							7.4S 128.6E, H: 18 57 13.1, h 154 km. Mb 5.7. Banda Sea.
	HEE:iPKP	19	15	39.0							
30.	WIT:iP	05	05	05.9							49.8N 78.1E, H: 04 57 02.1, h 0 km. Mb 5.4. Eastern Kazakh SSR.
	HEE:iP	05	05	15.5							
30.	iPP	10	13	08							5.2S 134.1E, H: 09 53 12.0, h N. Mb 5.9, Ms 6.3. Aroe Islands region.
	iPPP	10	16	02							
	eSKKS	10	19	40							
	iSP	10	22	44							
	iSPP	10	24	02							
	eSS	10	29	24							
	eSSS	10	34.0								
	eL	10.7			20		8.9	6.4			
	F	in next shock									
30.	eL	11.9									No determination of epicenter
	F	12.7									
31.	eL	07	47		24		5.0	5.8			31.8N 131.6E, H: 07 03 58.1, h 37 km. Mb 5.6, Ms 5.4. Kyushu, Japan
	F	08	40								
	WIT:eP	07	16	35.0							
	HEE:eP	07	16	42.5							
31.	WIT:iPKP	15	29	02.4							17.8S 178.7W, H: 15 10 29.1, h 584 km. Mb 5.3. Fiji Islands region.
31.	eL	20	34								52.4N 168.7W, H: 19 55 26.2, h 36 km. Mb 5.6, Ms 5.0. Fox Islands, Aleutian Islands.
	F	in next shock									
	WIT:eP	20	07	06.5	+						
	HEE:eP	20	07	15.0	+						
	i	20	07	17.5	-						
31.	eL	21.2									7.5S 156.0E, H: 20 16 22.5, h 62 km. Mb 5.3. Solomon Islands.
	F	22.4									
	WIT:ePKP	20	35	26.0							
	HEE:ePKP	20	35	28.0							




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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
31. JAN. 1974.	iPP	23	51	28							7.5S 155.9E, H: 23 30 05.3, h 34 km. Mb 6.0, Ms 7.0. Solomon Islands.
	iSKP	23	52	44							
	iPPP	23	53	58							
	iSKS	23	56	16							
	iPS	24	01	46							
	iSPP	24	03	02							
	eSS	24	08.5								
	eL	24.5			24		62	7.3			
	F	03.3									
	WIT:ePKP	23	49	11.0	-						
	HEE:iPKP	23	49	14.0	-						
	i	23	49	29.0							
	eSKP	23	52	36.0							
31.	WIT:ePKP	23	57	07.5							ISC: 7.0S 155.8E, H: 23 38 03.9, h N, Mb 5.8. Solomon Islands.
	HEE:ePKP	23	57	12.0							
	eSoSP	00	00	34.5							

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
FEB. 1974											
1.	WIT:eP HEE:iP	00	05	36.5 29.0	+						38.6N 27.0E, H: 00 01 02.4, h 29 km. Mb 5.2. 2 Killed. Turkey.
1.	WIT:ePKP HEE:ePKP	01	23	18.5 21.0							7.3S 155.9E, H: 01 04 14.5, h 49 km. Mb 5.2. Solomon Islands.
1.	iPKP i iPP iSKP iPPP eSKS iPS iSS iSSS eL F WIT:iPKP i HEE:iPKP i eSKP	03	31	40 00 55 19 20 38 07 42 20 11 07.0 31 38.0 31 45.7 31 41.5 31 51.5 35 14.5		22	65	7.3			7.4S 155.6E, H: 03 12 33.1, h 40 km. Mb 6.2, Ms 7.1. Solomon Islands.
1.	eL F	09	20	10.0							6.9S 155.2E, H: 08 24 33.7, h N. Mb 5.3, Ms 5.8. Solomon Islands.
1.	WIT:ePKP	09	27	28.5							7.2S 155.8E, H: 09 08 24.5, h 48 km. Mb 5.3. Solomon Islands.
1.	eL F	16	24	17.6							7.1S 155.1E, H: 15 24 04.6, h 48 km. Mb 5.6, Ms 5.2. Solomon Islands.
2.	eL F	03	52.0	59							35.6N 34.5W, H: 03 37 25.0, h N. Mb 4.9. Azores Islands region.
2.	WIT:ePKP HEE:iPKP ipPKP	08	46	41.5 48.0 07.0	+						19.1S 169.5E, H: 08 27 40.2, h 269 km. Mb 5.6. New Hebrides Islands.



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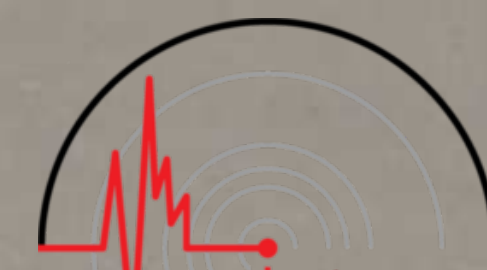
Seismological Data
Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
FEB. 1974											
2.	eL F	12	46	13 23		20		3.6			6.05.0S 134.0E, H: 11 44 52.9, h N. Mb 5.6, Ms 5.8. Aroe Islands region.
2.	eL F WIT:eP HEE:eP ipP	16	30	17.7 16 06 02.5 16 06 13.0 16 06 22.0							61.6N 147.6W, H: 15 55 28.3, h 48 km. Mb 5.1, Ms 4.7. Southern Alaska.
2.	eL F	20	47	21 37		20		2.5	5.7	5.76.2S 104.3E, H: 19 56 11.4, h N. Mb 5.2, Ms 5.6. Sunda Strait.	
2.	HEE:eP	21	22	24.5							16.0S 74.5W, H: 21 09 01.5, h 63 km. Mb 5.2. Near coast of Peru.
3.	eP ePP eS eSS eL F WIT:iP ipP HEE:iP ipP	10	21	46 20 30 39 55 11.9 10 21 39.3 10 21 49.3 10 21 45.5 10 21 55.0		20		5.4	6.0		18.9N 120.1E, H: 10 08 48.4, h 30 km. Mb 5.9, Ms 5.2. Luzon, Philippine Islands.
3.	eL F WIT:ePKP HFE:ePKP	17	12	18 32 16 32 05 16 32 07.5							7.3S 155.5E, H: 16 12 56.7, h 43 km. Mb 5.4, Ms 5.6. Solomon Islands.
3.	HEE:e	19	10	31.0							No determination of epicenter
3.	eL F	19	48	20 19							5.1S 133.8E, H: 18 45 45.7, h N. Mb 5.7, Ms 5.2. Aroe Islands region.
4.	iSKP eSS eL F WIT:iPKP HFE:ePKP e eSKP e	20	33	01 45.3 06 23.0 20 29 47.2 20 29 49.5 20 29 57.0 20 33 17.0 20 33 27.5		20		3.5	6.1		7.3S 155.8E, H: 20 10 42.0, h 55 km. Mb 5.4., Solomon Islands.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
FEB. 1974											
5.	HEE:ePKP e	22	46	58.5							16.2S 177.7W, H: 22 27 26.3, h 62 km. Mb 5.0. Fiji Islands region.
		22	47	03.5							
6.	iP	04	15	49	+	7	6.8				53.8N 164.7W, H: 04 04 07.2, h 2 km. Mb 5.9, Ms 6.5. Unimak Island region.
	iPP	04	18	43							
	iS	04	25	29							
	eSS	04	30.3								
	eSSS	04	34.0				20.0			6.4	
	eL	04	38			21					
	F	in next shock									
	WIT:iP	04	15	44.7							
	HEE:iP	04	15	54.5							
6.	eL	06	21								No determination of epicenter
	F	07	14								
6.	eL	18	04								No determination of epicenter
	F	18	20								
7.	eL	10	42								3.8S 134.0E, H: 09 41 51.0, h 30 km. Mb 5.8, Ms 5.4. West New Guinea region.
	F	11	03								
8.	WIT:eP	14	33	03.5							54.4N 167.6F, H: 14 21 37.4, h N. Mb 5.4, Ms 5.0. Komandorsky Islands region.
8.	WIT:ePKP	18	44	09.5							21.4S 170.1E, H: 18 24 32.2, h N. Mb 5.4, Ms 5.8. Loyalty Islands region.
	HEE:iPKP	18	44	16.5							
14.	eL	00	32								0.0N 122.7E, H: 23 37 52.9 h 11 km. Mb 5.8, Ms 4.8. Northern Celebes.
	F	00	55								
14.	WIT:eP	06	51	02.0							2.5N 99.0E, H: 06 38 06.5, h 34 km. Mb 5.6, Ms 5.0. Northern Sumatra.
	HEE:eP	06	51	03.5							
14.	WIT:eP	12	09	55.0							22.0N 44.2W, H: 12 01 07.0, h N. Mb 5.4. North Atlantic Ridge.
	HEE:iP	12	09	48.5							
15.	HEE:e(P)	04	04	50.0							20.4N 121.5E, H: 03 51 46.6, h 36 km. Mb 5.1. Philippine Islands region.
16.	WIT:eP	02	03	17.5							11.4N 92.3E, H: 01 51 10.8, h 25 km. Mb 5.5, Ms 6.0. Andaman Islands region.



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
FEB. 1974											
16.	eSS	02	21.0								11.4N 92.4E, H: 01 53 46.6, h N. Mb 5.7, Ms 6.1. Andaman Islands region.
	eL	02	36			20	14.2			6.3	
	F	03.6									
	WIT:eP	02	05	46.0							
	HEE:eP	02	05	52							
16.	WIT:ePKP ₂	05	59	32.0	+						31.5S 179.1E, H: 05 39 57.4, h 510 km. Mb 5.2. Kermadec Islands region.
	HEE:iPKP ₂	05	59	39.0	+						
17.	eL	05	23								18.4N 146.7F, H: 04 33 11.9, h 58 km. Mb 5.6. Mariana Islands.
	F	05	48								
18.	eL	21	40								39.7N 143.5F, H: 21 01 22.3, h N. Mb 4.7, Ms 5.3. Off east coast of Honshu, Japan.
	F	22.1									
19.	eS	03	55	12							13.9N 122.1E, H: 03 30 21.8, h 17 km. Mb 5.7, Ms 6.1. Luzon, Philippine Islands.
	eSPP	03	56	56							
	eSS	04	01.5								
	eSSS	04	05.0								
	eL	04	13			20	30.5			6.8	
	F	05.7									
	WIT:eP	03	43	39.5							
	i	03	43	45.4							
	e	03	43	55.5							
	HFE:eP	03	43	43.5							
	e	03	43	48.0							
20.	WIT:ePKP	00	56	18.5							20.8S 174.9W, H: 00 36 37.7, h 60 km. Mb 5.0. Tonga Islands.
	HEE:ePKP	00	56	22.0							
20.	eL	16	44								19.6N 70.0W, H: 16 11 26.8, h 18 km. Mb 4.9. Dominican Republic region.
	F	17	07								
22.	iP	00	48	52	+	6	2.0				33.2N 136.9E, H: 00 36 53.8, h 385 km. Mb 6.0, Near south coast of Southern Honshu, Japan.
	ipP	00	50	16	-						
	iS	00	58	36							
	iSP	00	59	43							
	isS	01	01	20							
	iSS	01	04	36							
	eSSS	01	10	34							
	F	02.7									
	WIT:eP	00	48	43.0							
	i	00	48	45.0	-						
	ipP	00	50	13.9							
	iS	00	58	43.5							
	HEE:eP	00	48	50.5							
	i	00	48	52.5	-						
	ipP	00	50	21.0							
	iS	00	59	02.5							

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
FEB. 1974											No determination of epicenter.
22.	WIT:e HEE:e	01	17	41							
22.	WIT:eP HEE:iP	03	41	50.0	+						36.5N 71.5E, H: 03 33 26.5, h 116 km. Mb 5.4. Afghanistan-USSR border region.
23.	WIT:iP	04	26	50.9	-						42.2N 143.0E, H: 04 14 56.7, h 64 km. Mb 5.3. Hokkaido, Japan region.
25.	eL F	02	03								11.5S 13.3W, H: 01 32 17.3, h N. Mb 5.0, Ms 4.9. Ascension Islands region.
25.	iP iS eL F WIT:iP HEE:iP e	05	58	27	+	22	3.0	5.7			44.0N 147.8E, H: 05 46 25.1, h 12 km. Mb 5.9, Ms 5.4. Kuril Islands.
25.	WIT:e ePg eSn HEE:iPn iPg iSn iSg	20	05	23							51.6N 3.0W, H: 20 03 44.1, h N. Mb 4.3. United Kingdom.
26.	WIT:iP e HEE:iP	06	35	06.1	+						53.3N 159.7E, H: 06 23 45.3, h 49 km. Mb 5.6., Ms 4.7. Near coast of Kamchatka.
26.	eL F	10	48								12.1N 143.6E, H: 09 55 18.2, h 24 km. Mb 5.3, Ms 5.0. South of Mariana Islands.
27.	eL F	05	01								11.6S 13.4W, H: 04 28 30.3, h 5.1, Ms 4.7. Ascension Island region.
27.	WIT:eP HEE:iP	17	11	59.5							37.1N 116.1W, H: 17 00 00.1, h 0 km. Mb 5.8. Southern Nevada.

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
FEB. 1974											
27.	eL F WIT:iP i HEE:iP	18	52								1.3N 97.7E, H: 18 01 48.7, h N. Mb 5.9, Ms 5.4. Northern Sumatra.
27.	HEE:iPKP	19	12	42.5							16.6S 172.3W, H: 18 53 04.4, h N. Mb 5.1. Samoa Islands region.
27.	WIT:ePKP e HEE:ePKP i	20	57	30.5	-						17.8S 173.2W, H: 20 37 53.9, h N. Mb 5.1, Ms 4.8. Tonga Islands.
28.	ePKP iPKP ₂ ePP ePPS eSS eL F WIT:ePKP ₂ HEE:iPKP ₂ ePP	14	19	16	+						36.8S 176.9E, H: 13 59 17.8, h 15 km. Mb 5.8, Ms 6.2. Off east coast of North Island, New Zealand.
28.	WIT:iPKP e HEE:iPKP	16	25	45.0	+						18.6S 174.5W, H: 16 06 14.7, h 98 km. Mb 5.3. Tonga Islands.
28.	WIT:iP HEE:iP i	20	27	59.9	-						9.2N 84.2W, H: 20 15 36.9, h 59 km. Mb 5.2. Costa Rica.
28.	iP iPP iS iPPS eSS eL F WIT:iP HEE:eP i	20	32	30	+	6	4.8				9.3N 84.1W, H: 20 20 10.2, h 46 km. Mb 5.8, Ms 6.2. Costa Rica.
		20	35	36							
		20	42	44							
		20	43	49							
		20	48	16							
		20	57			20			17.5	6.4	
		22.6									
		20	32	33.8	+						
		20	32	31.0	-						
		20	33	20.5							

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms					
		h	m	s			Z	NS	EW							
MARCH 1974	2.	eL	06	07	-					36.8S 177.0E, H: 04 45 58.4, h 28 km. Mb 5.4, Ms 5.0. Off east coast of North Island, New Zealand.						
	F	06	46													
	HEE: ePKP2	05	06	54.5												
MARCH 1974	3.	eP	05	03 18	-	20	5.3	5.9		35.6N 140.6E, H: 04 50 48.9, h 46 km. Mb 5.6, Ms 5.6. Near east coast of Honshu, Japan.						
	iS	05	13 35													
	eSS	05	19.6													
	eL	05	28													
	F	07.0														
	WIT: eP	05	03 12.5													
	i	05	03 14.0													
	i	05	03 26.8													
	HEE: iP	05	03 20.5													
	i	05	03 32.5													
	3.	eL	14	14							+					36.7S 177.1E, H: 12 51 44.9, h 6 km. Ms 5.4. Off east coast of North Island, New Zealand.
	F	in next shock														
		WIT: ePKP2	13	12 39												
	HEE: iPKP2	13	12 46.0													
MARCH 1974	3.	iPKP	14	42 16	(-)	3	2.0			20.1S 169.7E, H: 14 22 37.5, h 17 km. Mb 6.1, Ms 6.1. New Hebrides Islands.						
	iZ	14	43 11													
	eSS	15	04.8													
	eSSS	15	10.0													
	eL	15	30													
	F	17.0														
	WIT: iPKP	14	42 14.0													
	i	14	42 22.0													
	e	14	42 58.5													
	HEE: iPKP	14	42 19.5													
	i	14	42 29.0													
	i	14	42 50.5													
3.	HEE: ePKP	18	27 30							16.7S 176.8E, H: 18 07 54.9, h 90 km. Mb 4.9. Fiji Islands region.						
3.	eL	19	22							No determination of epicenter.						
F	19	47														
4.	eL	01	18.4							36.3N 34.1W, H: 01 03 59.7, h N. Mb 4.9, Ms 4.8. Azores Islands region.						
F	01	25														
MARCH 1974	4.	WIT: ePKP	12	57 30.5	+					18.8S 177.7W, H: 12 38 33.6, h 383 km. Mb 5.5. Fiji Islands region.						
	epPKP	12	59 04.5													
	HEE: ePKP	12	57 35.5													
	ipPKP	12	59 09.5													

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms						
		h	m	s			Z	NS	EW								
MARCH 1974	6.	iP	01	52 32	+					12.3N 86.4W, H: 01 40 26.4, h 110 km. Mb 5.8. Nicaragua.							
	ipP	01	53 10														
	iPP	01	55 39														
	iS	02	02 31														
	isS	02	03 26														
	eSS	02	07 49														
	eL	02	18														
	F	04.5															
	WIT: eP	01	52 37.5														
	i	01	52 39.6														
	ipP	01	53 08.5														
	HEE: iP	01	52 35.5														
	ipP	01	53 07.0														
	6.	HEE: eP	02	43 42												5.6S 11.4W, H: 02 33 47.5, h N. Mb 5.2. Ascension Island region.	
	6.	WIT: e	04	01 34.5							-						No determination of epicenter
	HEE: e	04	01 39.0														
	6.	HEE: iPKP	04	38 47.0													18.7S 169.1E, H: 04 19 38.0, h 247 km. Mb 4.8. New Hebrides Islands.
	MARCH 1974	6.	iPP	19							49 01	18		6.8	6.3		6.6S 129.0E, H: 19 29 08.1, h 26 km. Mb 5.7, Ms 6.3. Banda Sea.
iH		19	56 50														
iSP		19	58 30														
iSPP		19	59 55														
eSS		20	05.0														
eSSS		20	09.3														
eL		20	16														
F		in next shock															
WIT: ePP		19	48 42.5														
HEE: ePP		19	48 57														
6.		eL	21	20						40.3N 142.2E, H: 20 40 55.1, h 59 km. Mb 5.0. Near east coast of Honshu, Japan.							
F		22.6															
7.	HEE: eP	03	55 26							33.9N 25.5E, H: 03 50 29.0, h N. Mb 4.3. Eastern Mediterranean Sea.							
MARCH 1974	7.	eL	11	54						37.6N 55.8E, H: 11 36 02.4, h 21 km. Mb 5.1, Ms 5.0. Iran-USSR border region.							
	F	12	44														
	WIT: eP	11	43 12.0														
	e	11	43 21.0														
	ePP	11	44 39.5														

Seismological Data
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Date MARCH 1974	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
7.	eL F	13	14							No determination of epicentre.	
8.	WIT: eP HEE: eP	02	38	42						34.8N 24.7E, H: 02 33 53.1, h 50 km. Mb 4.5. Crete.	
8.	eL F	10	09							30.9N 131.6E, H: 09 25 06.1, h 42 km. Mb 5.5, Ms 5.4. Kyushu, Japan.	
9.	HEE: eP	04	16	52.0						34.6N 25.1E, H: 04 12 07.7, h 54 km. Mb 4.6. Crete.	
9.	WIT: ePKP HEE: iPKP ipPKP i	18	00	21.0	-					19.0S 169.6E, H: 17 41 20.1, h 286 km. Mb 5.4. New Hebrides Islands.	
9.	ePKP iPP ePKS eSKS eSS eL F WIT: ePKP HEE: ePKP e	20	33	34	+	20		9.0	6.5	7.5S 156.2E, H: 20 14 28.3, h 50 km. Mb 5.8, Ms 6.5. Solomon Islands.	
9.	WIT: ePKP HEE: ePKP	20	37	12						7.3S 156.2E, H: 20 18 06.3, h N. Mb 5.7, Ms 6.6. Solomon Islands.	
10.	WIT: ePKP HEE: ePKP	00	16	53.5						20.3S 178.5W, H: 23 58 13.1, h 586 km. Mb 4.5. Fiji Islands region.	
10.	HEE: ePKP	08	06	39.5						7.4S 156.0E, H: 07 47 32.6, h 54 km. Mb 5.3. Solomon Islands.	
10.	eL F WIT: eP HEE: iP	16	57		+					0.4N 80.0W, H: 16 17 08.8, h 43 km. Mb 5.1, Ms 5.6. Near coast of Ecuador.	

Seismological Data
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Date MARCH 1974	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
11.	iS eL F WIT: iP HEE: iP epP	11	58	36						48.3N 153.2E, H: 11 37 33.5, h 169 km. Mb 5.9. Kuril Islands.	
12.	eL F	16	05							8.8N 150.9E, H: 15 11 05.5, h N. Mb 5.5, Ms 4.8. Caroline Islands region.	
12.	HEE: iP	18	26	09.5	+					36.8N 26.3F, H: 18 21 33.9, h 39 km. Mb 4.7, Ms 4.1. Dodecanese Islands.	
12.	eL F	18	55							23.6N 125.4F, H: 18 07 56.0, h 69 km. Mb 4.8. Southwestern Ryukyu Islands.	
13.	eL F	01	12							2.6N 125.3E, H: 00 15 32.1, h 10 km. Mb 5.0, Ms 4.6. Talaud Islands.	
13.	WIT: ePKP	08	50	23.5						23.5S 180.0F, H: 08 31 29.2, h 494 km. Mb 4.8. South of Fiji Islands.	
13.	eL F WIT: e HEE: eP	17	33.5							34.7N 24.8E, H: 17 20 45.5, h 51 km. Mb 4.6. Crete.	
14.	WIT: ePKP HEE: iPKP	10	32	07.5						20.2S 170.0F, H: 10 12 27.6, h 1 km. Mb 5.2, Ms 5.0. New Hebrides Islands.	
14.	WIT: e HEE: e	16	10	04.5						BNS: Rockburst supposed.	
14.	ePP eSS eL F WIT: ePKP HEE: iPKP	21	21	12						13.9S 166.8F, H: 20 58 54.8, h 18 km. Mb 5.6, Ms 5.3. New Hebrides Islands.	
14.	HEE: iPKP i	21	54	59.0	+					19.2S 167.7E, H: 21 35 23.0, h N. Mb 5.2. New Hebrides Islands region.	

Seismological Data

Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date MARCH 1974	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
14.	WIT: iPKP HEE: iPKP	23	12	50.6	-						19.2S 177.8E, H: 22 54 09.0, h 542 km. Mb 5.0. Fiji Islands region.
15.	HEE: iPKP	08	09	53.0	+						19.2S 167.8E, H: 07 50 12.8, h 7 km. Mb 4.9. New Hebrides Islands.
17.	WIT: iP HEE: eP	04	10	03.5							1.3N 98.6E, H: 03 57 07.1, h 61 km. Mb 5.7. Northern Sumatra.
18.	eL F HEE: iPKP i	12	05			22	3.4		6.1		14.9S 172.8W, H: 10 56 12.4, h 27 km. Mb 5.9, Ms 6.0. Samoa Islands.
18.	WIT: iP ipP HEE: eP epP	23	51	37.2	+						27.0N 126.5E, H: 23 39 15.5, h 140 km. Mb 5.1. East China Sea.
19.	WIT: iPKP HEE: iPKP	08	03	35.2							18.5S 177.8W, H: 07 44 58.2, h 570 km. Mb 4.5. Fiji Islands region.
20.	HEE: i	02	53	49.0	+						No determination of epicenter.
21.	eL F WIT: eP epP HEE: eP	06	32								36.9N 141.7E, H: 05 48 52.7, h 43 km. Mb 5.3, Ms 4.9. Near east coast of Honshu, Japan.
21.	eL F	14	10								0.2S 18.2W, H: 13 42 31.8, h N. Mb 4.9. Central Mid-Atlantic Ridge.
22.	eL F WIT: eP e	07	46								53.6N 163.4W, H: 07 04 06.2, h N. Mb 5.1, Ms 4.6. Unimak Island region.
22.	WIT: iPKP HEE: iPKP	14	32	40.5							21.2S 178.9W, H: 14 14 01.4, h 614 km. Mb 4.7. Fiji Islands region.

Seismological Data

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Date MARCH 1974	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
22.	eL F WIT: ePP HEE: eP ePP	18	41								49.9N 90.8E, H: 18 13 40.6, h N. Mb 5.5, Ms 4.7. USSR-Mongolia border region.
22.	eP iZ eL F WIT: eP HEE: iP	19	15	10	+						70.7N 14.7W, H: 19 10 27.6, h 22 km. Mb 5.0. Jan Mayen Island region.
23.	eL F	02	26								58.7S 25.0W, H: 01 28 05.3, h 61 km. Mb 5.3. South Sandwich Islands region.
23.	eL F	07	17.9								54.0N 36.1W, H: 07 05 06.9, h N. Mb 4.6, Ms 4.6. North Atlantic Ocean.
23.	eL F HEE: eP	07	20.6								53.9N 35.3W, H: 07 09 02.8, h N. Mb 5.0, Ms 4.9. North Atlantic Ocean.
23.	eL F HEE: eP	07	30.8								53.8N 35.4W, H: 07 19 14.2, h N. Mb 5.1, Ms 5.1. North Atlantic Ocean.
23.	eL F	10	35								ISC: 53.9N 164.8W, H: 10 05 41, h 0 km, Mb 4.3. Unimak Island Region.
23.	iPKP ipPKP iPP ipPP iPPS iSS iSSS F WIT: iPKP i i ipPKP HEE: iPKP i ipPKP	14	47	24	+	7	5.4				23.9S 179.8E, H: 14 28 35.4, h 535 km. Mb 6.1. South of Fiji Islands.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
23. MARCH 1974	WIT: iPKP	15	12	55.4	-						23.8S 178.8E, H: 14 54 11.3, h 569 km. Mb 5.6. South of Fiji Islands.
	i	15	13	00.4							
	HEE: ePKP	15	12	56.5							
	i	15	13	04.5							
	i	15	13	16.0							
	epPKP	15	15	15.5							
23.	HEE: ePKP	15	31	32.5							ISC: 26.3S 179.0W, H: 15 11 56. h 320 km. South of Fiji.
23.	iPKP2	20	45	47							21.9S 173.7E, H: 20 25 51.8, h N. Mb 5.7, Ms 6.1. New Hebrides Islands region.
	eL	21	36			20		3.9	6.2		
	F	23.0									
	WIT: ePKP	20	45	37.0	-						
	HEE: ePKP	20	45	40.0							
23.	WIT: iPKP	21	11	00.6	-						23.9S 179.5E, H: 20 52 06.8, h 521 km. Mb 5.0. South of Fiji Islands.
	HEE: ePKP	21	11	04							
23.	WIT: ePKP	22	05	55.0							20.7S 175.2W, H: 21 46 12.0, h N. Mb 5.3, Ms 5.4. Tonga Islands.
	HEE: ePKP	22	06	00							
23.	HEE: iP	22	27	29.5	+						37.0N 95.7E, H: 22 17 03.9, h N. Mb 4.8. Tsinghai Province, China.
24.	WIT: ePKP	00	31	24.0							21.1S 175.7E, H: 00 12 46.0, h 600 km. Mb 4.6. South of Fiji Islands.
	epPKP	00	33	38.5							
	HEE: iPKP	00	31	28.5	+						
	i	00	31	35.5	-						
	epPKP	00	33	43.5							
24.	iSKS	04	45	49							12.6N 144.3E, H: 04 21 05.8, h 79 km. Mb 5.9. South of Mariana Islands.
	iSP	04	48	44							
	eL	05	13								
	F	05	54								
	HEE: ePP	04	39	39.0							
	i	04	50	42.5	+						
	e	04	50	57.0							
24.	iS	14	35	00							27.7N 86.1E, H: 14 16 03.1, h N. Mb 5.7, Ms 5.7. Nepal.
	eL	14	48.5			20		7.5			
	F	15.9								5.9	
	WIT: iP	14	26	24.5	-						
	i	14	26	47.8	+						
	HEE: iP	14	26	28.5	-						
	i	14	26	53.0	+						

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
25. MARCH 1974	eL	05	30								19.4S 176.2W, H: 04 08 11.0, h N. Mb 5.0, Ms 5.2. Fiji Islands region.
	F	05	49								
	WIT: ePKP	04	27	55.0							
	HEE: ePKP	04	27	58.5							
25.	eL	08	17								18.2N 103.3W, H: 07 37 12.3, h 87 km. Mb 4.7. Near coast of Michoacan, Mexico.
	F	09	46								
26.	HEE: i	19	28	36.5							No determination of epicenter.
27.	WIT: ePKP2	03	27	35.0							27.3S 175.3W, H: 03 07 22.3, h 44 km. Mb 5.7, Ms 5.0. Kermadec Islands region.
	HEE: ePKP	03	27	09.5							
	iPKP2	03	27	42.0	+						
27.	HEE: iPKP	16	33	37.0							15.7S 173.7W, H: 16 14 15.8, h 136 km. Mb 4.8. Tonga Islands.
27.	WIT: iP	16	40	41.2	-						50.1N 179.7W, H: 16 28 47.3, h 37 km. Mb 5.6, Ms 4.8. Andreanof Is., Aleutian Is.
	HEE: iP	16	40	51.0	-						
28.	WIT: ePKP	02	18	54.5							20.4S 177.0W, H: 01 59 42.4, h 287 km. Mb 5.0. Fiji Islands region.
	HEE: iPKP	02	18	59.5							
	i	02	19	04.0	+						
	e	02	20	15.0							
28.	eL	21	41.7								37.1N 15.0E, H: 21 32 35.3, h N. Mb 4.6. Sicily.
	F	21	51								
	HEE: eP	21	36	12.5							
29.	iP	22	01	40							57.6N 153.9W, H: 21 50 35.3, h 44 km. Mb 5.7, Ms 5.2. Kodiak Island region.
	eS	22	10	48							
	eL	22	25								
	F	23.6									
	WIT: iP	22	01	37.8	-						
	ipP	22	01	49.5							
	HEE: iP	22	01	48.0	-						
ipP	22	02	00.0								
30.	WIT: iPKP	02	10	49.4							23.5S 180.0E, H: 01 52 01.0, h 572 km. Mb 4.7. South of Fiji Islands.
	HEE: ePKP	02	10	53.5							
	e	02	11	06.0							
30.	eL	18	51.0								63.9N 23.1W, H: 18 41 26.3, h N. Mb 4.6. Iceland region.
	F	18	59								
	WIT: eP	18	45	46.0							
30.	eL	19	20.0								63.8N 23.4W, H: 19 09 59.6, h N. Mb 4.4. Iceland region.
	F	19	36								

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MARCH 1974	eL	20	27	5						63.4N 23.6W, H: 20 16 36.7, h N. Mb 4.3. Iceland region.	
	F	20	32								
	WIT: eP	20	20	57.0							
31.	HEE: ePKP	05	07	58.0						36.0S 103.2W, H: 04 48 50.2, h N. Mb 5.2, Ms 5.2. Southern Pacific Ocean.	
31.	ePP	07	07	43						2.2S 139.1E, H: 06 47 45.0, h N. Mb 5.6, Ms 5.6. Near north coast of west New Guinea.	
	eSS	07	23	40							
	eL	07	46								
	F	09	4								
31.	eL	21	53							11.8N 87.9W, H: 21 13 45.9, h 49 km. Mb 5.0, Ms 4.7. Near coast Nicaragua.	
	F	22	15								

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms	
		h	m	s			Z	NS	EW			
APRIL 1974	WIT: ePKP	15	50	31.0	+						18.6S 175.4W, H: 15 31 10.7, h 180 km. Mb 4.9. Tonga Islands	
	eL	21	23	40							60.3S 26.9W, H: 20 24 11.4, h N. Mb 5.4, Ms 5.0. South Sandwich Islands region.	
												F
	eL	22	37	42							31.0N 142.0E, H: 21 50 49.5, h 16 km. Mb 5.3, Ms 5.3. South of Honshu, Japan.	
												F
												WIT: eP
												HEE: eP
	WIT: iP	03	36	26.9							41.3N 141.6E, H: 03 24 27.4, h 41 km. Mb 5.2, Ms 5.4. Hokkaido, Japan region.	
												HFE: eP
	eL	05	02	36.0	39.0						6.9S 155.3E, H: 04 02 33.6, h 47 km. Mb 5.4, Ms 5.7. Solomon Islands.	
												F
												WIT: ePKP
												HEE: ePKP
	eL	08	05	32							11.7N 144.6E, H: 07 09 23.8, h 21 km. Mb 5.3. South of Mariana Islands.	
												F
	eL	14	07	30							44.1S 41.4E, H: 13 15 30.8, h N. Mb 5.0. Prince Edward Islands region.	
												F
eL	23	35	01							No determination of epicenter.		
											F	
eL	06	21	40							17.6S 13.2W, H: 05 46 53.7, h N. Mb 4.9. South Atlantic Ridge.		
											F	
WIT: eP	07	49	10.5(+)							37.7N 140.8E, H: 07 37 02.6, h 97 km. Mb 5.3. Honshu, Japan.		
WIT: iP	18	38	28.8							20.9S 178.7W, H: 18 19 47.4, h 584 km. Mb 4.4. Fiji Islands region.		
eL	05	16	05	05						28.6N 43.6W, H: 04 56 04.9, h N. Mb 5.0, Ms 4.3. North Atlantic Ridge.		
											F	
											HEE: eP	

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
APRIL 1974	6. iP	02	05	14	+						55.1N 160.4W, H: 01 53 47.3, h 27 km. Mb 5.7, Ms 5.1. Alaska Peninsula.
	iZ	02	05	30	-						
	eL	02		28							
	F	03		13	-						
	WIT: iP	02	05	10.6	+						
	HEE: iP	02	05	21.0	+						
6.	WIT: ePKP	02	31	13.5							14.6S 166.8E, H: 02 11 40.3, h 8 km. Mb 5.3, Ms 5.2 New Hebrides Islands
	e	02	34	54.0							
	HEE: ePKP	02	31	15.5							
	e	02	34	58.5							
6.	WIT: eP	02	46	32							49.9N 29.0W, H: 02 41 32.2, h N. Mb 4.7. North Atlantic Ridge.
	HEE: eP	02	46	27.0	-						
	e	02	46	29.5	+						
6.	eL	03		56							14.6S 166.7E, H: 02 43 25.2, h 16 km. Mb 5.4, Ms 5.2. New Hebrides Islands.
	F	in next shock									
	WIT: ePKP	03	02	57							
	e	03	06	36.5							
6.	HEE: iPKP	03	02	59.0	+						
	e	03	06	42.0							
6.	HEE: ePKP	04	03	17.5							14.6S 166.8E, H: 03 43 46.2, h 19 km. Mb 5.2. New Hebrides Islands.
6.	iP	04	07	27	+						55.1N 160.4W, H: 03 56 01.8, h 40 km. Mb 6.0, Ms 5.3. Alaska Peninsula.
	iZ	04	07	43	-						
	eL	04		30							
	F	05		24							
	WIT: iP	04	07	23.2	+						
	i	04	07	34.8	-						
	i	04	07	40.3	+						
	HEE: iP	04	07	33.5	+						
	i	04	07	47.5							
	WIT: ePKP	06	19	53.0	-						
	HEE: iPKP	06	19	58.0							
	WIT: ePKP	08	10	54.0							
	HEE: ePKP	08	10	51.0							
6.	eL	20		46.4							20.4S 178.2W, H: 06 01 11.4, h 579 km. Mb 4.7. Fiji Islands region
	F	20		55							
6.											14.6S 166.7E, H: 02 43 25.2, h 16 km. Mb 5.4, Ms 5.2. New Hebrides Islands.
6.											37.1N 72.5E, H: 20 19 36.9, h 84 km. Mb 5.2. Tadzhik SSR.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms	
		h	m	s			Z	NS	EW			
APRIL 1974	6. WIT: eP	22	19	08.5							43.4N 146.3E, H: 22 07 13.5, h 53 km. Mb 4.9. Kuril Islands. ISC: 18.1S 173.5W, H: 22 40 17, h 5 km, Mb 4.6. Tonga. 34.8N 24.7E, H: 14 22 47.1, h 29 km. Mb 4.7, Ms 5.0. Crete. 45.5N 148.3E, H: 13 11 21.6, h 139 km. Mb 5.5. Kuril Islands 10.1S 160.5E, H: 20 25 36.0, h 25 km. Mb 5.1, Ms 4.8. Solomon Islands 14.5N 91.6W, H: 22 43 00.6, h 108 km. Mb 5.4. Guatemala. 22.8N 121.3E, H: 22 59 51.1, h 53 km. Mb 4.9. Taiwan region 42.4N 144.4E, H: 21 37 53.0, h 75 km. Mb 5.3. Hokkaido, Japan region. 18.6S 169.2E, H: 12 16 15.3, h 244 km. Mb 5.1. New Hebrides Islands.	
	6. HEE: ePKP	23	00	03.5								
	7.	iP	14	27	44	+						
		iS	14	31	50		18		3.4	4.8		
		eL	14		34.2							
		F	15		19							
		WIT: eP	14	27	42.0							
	9.	HEE: iP	14	27	32.5	-						
		WIT: iP	13	23	00.0							
	9.	HEE: iP	13	23	09.5	-						
		eL	21		38							
	10.	F	22		11							
iP		22	55	14								
i		22	55	32								
eS		23	05	26								
eSS		23	11	00								
eL		23		22.0								
F		in next shock										
WIT: eP		22	55	18.5	-							
epP		22	55	45.5	+							
e		22	55	52.0								
HEE: iP		22	55	18.0	-							
10.	epP	22	55	44.5								
	e	22	55	52.0								
	eL	23		45								
	F	24		10								
	WIT: eP	23	12	26.5								
11.	HEE: eP	23	12	33.5								
	e	23	12	41.5								
11.	WIT: iP	21	49	47.2	+							
	HEE: eP	21	49	56.0								
12.	HEE: iPKP	12	35	25.0	+							

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
APRIL 1974	WIT: ePKP	01	31	07						20.9S 168.7E, H: 01 11 15.1, h 4 km. Mb 4.4. Loyalty Islands.	
	HEE: ePKP	01	31	04.0							
14.	WIT: eP	07	07	14.0	+					14.7N 91.3W, H: 06 55 01.8, h 138 km. Mb 5.3. Guatemala.	
	ipP	07	07	45.0							
	HEE: iP	07	07	14.0							
	ipP	07	07	43.5							
14.	WIT: iP	10	56	17.3	+					26.0N 128.5E, H: 10 43 31.2, h N. Mb 5.1. Ryukyu Islands.	
	e	10	56	25.0							
14.	eL	11	33	9						No determination of epicenter.	
	F	11	39								
14.	eL	11	40	0						34.4N 25.6E, H: 11 29 31.3, h 2 km. Mb 4.2. Crete.	
	F	11	47								
14.	eL	12	35	0						No determination of epicenter.	
	F	12	41								
14.	HEE: ePKP	18	44	52.5						20.9S 168.5E, H: 18 24 58.3, h N. Mb 5.0. Loyalty Islands.	
15.	eL	04	32							18.9N 120.8E, H: 03 43 52.4, h 45 km. Mb 5.3, Ms 4.8. Luzon, Philippine Islands.	
	F	05	04								
	HEE: eP	03	56	50.0							
17.	ePP	00	40	04	19		3.5		5.1	35.2N 35.3W, H: 00 32 21.4, h N. Mb 5.1, Ms 5.0. North Atlantic Ridge.	
	eS	00	44	20							
	eL	00	47	0							
	F	01	30								
17.	eP	18	35	44						17.3N 40.4E, H: 18 27 33.7, h N. Mb 5.0, Ms 5.1. Red Sea.	
	eS	18	42	4							
	eSS	18	45	8							
	eL	18	50								
	F	19	8								
	WIT: eP	18	35	42.0							
	HEE: eP	18	35	35.0							
18.	eL	02	00							6.9N 72.9W, H: 01 19 22.6, h 24 km. Mb 5.0, Ms 4.5. Northern Colombia.	
	F	02	18								
	HEE: eP	01	31	20.0							
18.	HEE: e	02	28	08.0						BCIS 44.7N 2.5E, H: 02 24 39 France.	

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
APRIL 1974	HEE: ePKP	02	59	29.0						16.1S 174.2W, H: 02 40 09.0, h 160 km. Mb 4.1. Tonga Islands.	
18.	WIT: iPKP	08	24	20.3	+					17.7S 178.3W, H: 08 05 42.8, h 541 km. Mb 5.0. Fiji Islands region.	
	HEE: ePKP	08	24	25.5							
18.	HEE: ePKP	14	35	30.0						20.6S 168.4E, H: 14 15 47.8, h N. Mb 4.7. Loyalty Islands.	
	e	14	35	50.0							
18.	eL	21	35							38.3S 93.8W, H: 20 33 01.4, h N. Mb 5.1, Ms 4.7. West Chile Rise.	
	F	in next shock									
18.	eL	22	08							38.2S 93.7W, H: 21 05 58.5, h N. Mb 5.5, Ms 4.7. West Chile Rise.	
	F	22	52								
19.	HEE: i	03	30	42.5						No determination of epicenter.	
19.	WIT: ePKP	07	23	49.0						24.0S 178.5E, H: 07 05 09.1, h 596 km. Mb 5.5. South of Fiji Islands.	
	i	07	23	55.3							
	i	07	23	56.0							
	epPKP	07	26	17.5							
HEE: ePKP	i	07	23	52.0	+						
	i	07	24	00.0							
	i	07	24	13.0							
ipPKP	07	26	21.0								
19.	WIT: ePKP	08	22	00.0						24.1S 178.7E, H: 08 03 13.3, h 601 km Mb 5.1. South of Fiji Islands.	
20.	eL	03	19							22.9S 171.8E, H: 02 01 00.7, h N. Mb 5.1, Ms 4.8. Loyalty Islands region.	
	F	in next shock									
	WIT: ePKP	02	20	45.0							
	HEE: ePKP	02	20	48.0							
	e	02	20	54.0							
20.	ePKP	03	29	51						23.0S 171.8E, H: 03 10 07.9, h N. Mb 5.2, Ms 5.4. Loyalty Islands region.	
	eL	04	21								
	F	05.9									
	WIT: ePKP	03	29	54.0							
	HEE: ePKP	03	29	55.0							
	i	03	30	03.5							
20.	HEE: ePKP	03	43	55.0						ISC: 22.9S 171.5E, H: 03 23 47, h 60 km. Loyalty Islands Region.	
	i	03	43	59.0							
	i	03	44	03.0							



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms	
		h	m	s			Z	NS	EW			
20.	iPKP	08	47	04	-					22.8S 171.9E, H: 08 27 15.4, h N. Mb 5.1, Ms 5.5. Loyalty Islands region.		
	eL	09	42									
	F	10.9										
	HEE: ePKP	08	47	04.0								
20.	WIT: eP	16	14	50						42.4N 143.0E, H: 16 02 58.3, h 66 km. Mb 5.1. Hokkaido, Japan region.		
21.	WIT: ePKP	01	01	50.0						20.1S 178.4W, H: 00 43 16.6, h 667 km. Mb 4.6. Fiji Islands region.		
	HEE: iPKP	01	01	54.5								
21.	iPKP	01	13	20	-					22.8S 171.7E, H: 00 53 30.0, h N. Mb 5.3, Ms 5.6. Loyalty Islands region.		
	ePP	01	16	48								
	eL	02.1										
	F	in next shock										
	WIT: ePKP	01	13	19.0								
	HEE: ePKP	01	13	17.0								
21.	eL	02	45							46.2N 145.4E, H: 02 08 02.9, h 28 km Mb 5.3, Ms 5.5. Sea of Okhotsk.		
	F	03.4										
	WIT: eP	02	19	44.0								
	HEE: eP	02	19	55.5								
21.	HEE: ePKP ₂	05	40	39.5						23.0S 171.7E, H: 05 20 47.7, h 47 km. Mb 4.7. Loyalty Islands region.		
22.	eL	01	04		18		5.1	5.8		31.6N 119.2E, H: 00 29 19.8, h N. Mb 5.2, Ms 5.5. Eastern China.		
	F	01	45									
	HEE: eP	00	41	22.5								
22.	eL	03	23							22.9N, 171.8E, H: 02 05 21.7, h 38 km. Mb 5.2. Loyalty Islands region.		
	F	04	21									
	WIT: ePKP	02	25	13								
	HEE: ePKP	02	25	03.5								
22.	eL	15	55							15.1N 45.2W, H: 15 26 41.4, h N. Mb 4.6, Ms 4.0. North Atlantic Ridge.		
	F	16	04									
24.	HEE: iPKP	01	27	47.0						16.2S 175.1W, H: 01 08 42.7, h 306 km. Mb 4.8. Tonga Islands.		
25.	eL	00	34							1.0N 30.1E, H: 00 03 49.1, h N. Mb 5.0. Uganda.		
	F	01	00									
	WIT: eP	00	13	21.5								
	HEE: eP	00	13	10.5								

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
25.	eL	09	47							17.0S 70.7W, H: 08 56 44.0, h N. Mb 5.3, Ms 4.8. Near Coast of Peru.	
	F	10	00								
27.	eS	06	25	40						15.0S 72.2W, H: 06 01 47.3, h 113 km. Mb 5.8. Southern Peru.	
	eL	06	49								
	F	07.4									
	HEE: eP	06	14	54.0							+
27.	WIT: ePKP	06	37	27.0						17.9S 178.4W, H: 06 18 55.2, h 579 km. Mb 4.5. Fiji Islands region.	
	HEE: iPKP	06	37	33.0							+
27.	ePKP	07	44	40		8	2.7			26.2S 175.9W, H: 07 24 54.0, h 45 km. Mb 6.1, Ms 5.9. South of Tonga Islands.	
	iPP	07	43	39							
	eL	08.7									
	F	10.3									
	WIT: iPKP	07	44	41.9							
	i	07	44	50.0							+
27.	iPKP ₂	07	45	03.4							
	HEE: iPKP ₂	07	44	46.0							-
	i	07	44	54.0							+
	iPKP ₂	07	45	07.5							
28.	eL	04	50							3.9S 104.0W, H: 03 57 49.9, h N. Mb 5.1, Ms 5.3. Northern Easter Island Cordillera.	
	F	05	26								
28.	WIT: ePKP	12	56	10.0						20.8S 177.2W, H: 12 37 00.7, h 319 km. Mb 4.7, Fiji Islands region.	
	HEE: iPKP	12	56	14.0							
28.	HEE: eP	16	34	20.0						34.2N 24.5E, H: 16 29 31.4, h N. Mb 4.3. Crete.	
28.	eL	18	20							22.9S 171.8E, H: 17 00 04.7, h 29 km. Mb 4.9, Ms 5.0, Loyalty Islands region.	
	F	19.0									
	WIT: ePKP	17	19	49.0							
	HEE: ePKP ₂	17	20	00.5							
28.	eL	20	07							No determination of epicenter.	
	F	20	24								
29.	HEE: eP	20	10	38.0						30.5N 31.7E, H: 20 04 39.7, h N. Mb 4.9. United Arab Republic.	



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
APRIL 1974											
29.	HEE: ePKP	21	13	41.0							ISC: 14.2S 179.6W, H: 20 54 14, h o km. Fiji Region.
29.	WIT: eP	22	33	04.0							4.8N 76.1W, H: 22 20 52.2, h 87 km. Mb 5.1. Colombia.
	HEE: eP	22	33	01.5							
30.	eL	04	15								15.9N 147.0E, H: 03 20 24.7, h N. Mb 4.8. Mariana Islands region.
	F	04	34								
30.	WIT: iPKP	19	49	51.2	+						20.3S 177.0W, H: 19 31 07.4, h 550 km. Mb 4.3. Fiji Islands region.
	HEE: iPKP	19	49	56.0	+						
	i	19	50	02.5	-						
30.	HEE: ePKP	20	15	15.5							19.7S 169.2E, H: 19 55 52.1, h 158 km. Mb 5.0. New Hebrides Islands.
	i	20	15	48.5	-						

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MAY 1974											
1.	HEE: iP	15	35	31.5							18.3N 145.2E, H: 15 22 24.7 h 455 km. Mb 5.5. Mariana Islands.
1.	WIT: ePKP	18	54	44.5							23.8S 179.9E, H: 18 35 51.2 h 522 km. Mb 4.8. South of Fiji Islands
2.	eL	04	50								35.0N 141.3E, H: 04 04 55.3 h 42 km. Mb 4.8. Near east coast of Honshu, Japan.
	F	05	15								
2.	eL	06	21								35.2N 141.3E, H: 05 35 31.8, h 14 km. Mb 4.9. Near east coast of Honshu, Japan.
	F	06	48								
2.	eL	22	18								35.1N 141.3E, H: 21 32 41.3, h N. Mb 5.0. Near east coast of Honshu. Japan.
	F	22	39								
	HEE: eP	21	45	19.0							
3.	eL	23	25								35.0N 141.4E, H: 22 40 24.8, h 14 km. Mb 4.5. Near east coast of Honshu, Japan.
	F	23	51								
4.	WIT: ePKP	09	28	50.0							24.8S 178.9E, H: 09 10 01.9 h 545 km. Mb 5.2. South of Fiji Islands.
	i	09	28	55.1	-						
	e	09	29	07.0							
	HEE: ePKP	09	28	45.5							
	e	09	28	58.5							
	e	09	29	14.0							
4.	iPKP	13	05	44	-	6	1.2				13.9S 172.6E, H: 12 47 28.3 h 602 Km. Mb 5.5. New Hebrides Islands region
	eSS	13	39	16							
	F	14	21								
	WIT: ePKP	13	05	43.5	+						
	i	13	05	53.0	-						
	i	13	08	33.5	-						
	HEE: iPKP	13	05	49.0	+						
	i	13	08	37.5							
4.	eL	15	23.2								34.8N 5.1E, H: 15 14 11.9, hN. Mb 4.3. Algeria.
	F	15	29								
4.	HEE: eP	18	06	33.0							7.7N 82.6W, H: 17 54 07.0, h N. Mb 5.2. South of Panama
5.	eL	06	18.3								35.0N 4.6E, H: 06 09 19.2, h 30 km Mb 4.1. Algeria
	F	06	26								

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MAY 1974											
5.	eL F WIT: eP HEE: eP	06	44		20	2.8		5.7		22.3N 121.5E, H:05 57.35.1, h 26 km. Mb 5.5 Taiwan region	
5.	iPKP eL F HEE: ePKP	08	37	32						17.5S 167.9E, H:08 17 50.3, h 33 km. Mb 5.1, Ms 5.6 New Hebrides Islands.	
5.	eL F WIT: iP HEE: iP	15	01							37.7 141.7E, H:14 19 12.0, h 48 km. Mb 5.6. Near east coast of Honshu, Japan	
5.	HEE: eP	19	22	29.5						46.2N 149.2E, H:19 10 40.0, h 143 km. Mb 5.1. Kuril Islands.	
6.	eL F	11	19							2.6N 125.5E, H:10 25 22.8, h 39 km. Mb 5.0, Ms 5.1. Talaud Islands.	
6.	HEE: iPKP	11	57	56.0 +						15.2S 173.4W, H:11 38 19.7, h 13 km. Mb 5.7, Ms 5.2. Tonga Islands.	
6.	eL F	23	13							ISC: 39.5N 119.2E, H:22 35 52, h 73 km. Mb 4.1. North-Eastern China.	
7.	ePKP iZ iZ eSS eL F WIT: ePKP HEE: iPKP	02	44	49	20	5.3		6.3		16.7S 177.3W, H:02 25 10.8, hN. Mb 5.5, Ms 6.0. Fiji Islands region.	
7.	eL F WIT: eP HEE: eP	03	32							12.7N 44.5W, H:03 04 57.5, hN. Mb 5.2, Ms 5.8 North Atlantic Ridge.	
7.	eL F	12	35							8.6N 82.5W, H:11 54 32.5, hN. Mb 5.0. Panama-Costa Rica border region.	
8.	HEE: iPKP	12	11	00.5						18.0S 178.3W, H:11 52 26.5, h 634 km. Mb 4.5. Fiji Islands region	



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MAY 1974											
8.	iP iZ iPP iS iSP iSPP iSS eSSS eL F WIT: eP HEE: iP HEE: i	23	46	00						34.5N 138.7E, H:23 33 25.2, h 2 km Mb 6.0, Ms 6.5, Near south coast of Honshu, Japan. (27 killed)	
9.	ePPS eL F	13	56	56						0.8N 125.9E, H:13 27 37.0, h 18 km. Mb 5.4, Ms 5.3. Molucca Passage.	
9.	WIT: iPKP HEE: iPKP	16	27	20.6 + 26.0 +						21.8S 169.7E, H:16 07 43.0, h 35 km. Mb 5.5. Loyalty Islands region.	
10.	iPP iSKS iSP iSS eL F	00	14	36	20			10.6	6.3	46.0S 35.3E, H:23 56 38.0, h N. Mb 5.7, Ms 5.9. Prince Edward Islands region.	
10.	WIT: iPKP2 HEE: iPKP2	02	23	49.0 + 56.5 +						30.7S 179.6W, H:02 03 46.1, h 227 km. Mb 5.3. Kermadec Islands region	
10.	eL F WIT: iP	06	15							27.5N 129.6E, H:05 25 37.3, hN. Mb 5.0 Ryukyu Islands.	
10.	ePP eSP eSS eSSS eL F	08	30	00	21			5.5	6.1	4.4S 102.1W, H:08 12 05.0 hN. Mb 6.1, Ms 6.0. Northern Easter Island Cordillera.	

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MAY 1974											
10.	iP	19	36	49		6	1.6				28.2N 104.0E, H:19 25 15.0, h 11 km. Mb 6.2 Ms 6.8. Szechwan Province, China.
	iS	19	46	16							
	iPPS	19	47	04							
	iSS	19	51	00							
	eSSS	19	54.2			20	93		7.1		
	eL	19	58								
	F	22.9									
	WIT: eP	19	36	42.5							
	i	19	36	50.5							
	i	19	37	04.6							
	HEE: eP	19	36	49.0							
	i	19	36	57.0							
11.	iP	00	58	03							1.7N 126.4E, H:00 43 44.9, hN. Mb 6.0, Ms 6.0. Molucca Passage.
	ePP	01	02	32							
	iSKS	01	08	39							
	iSP	01	11	40							
	eSS	01	17.6								
	eL	01	36			20		6.4	6.2		
	F	03.8									
	WIT: eP	00	58	00.5							
	e	01	01	12.5							
	HEE: eP	00	58	03.0							
	e	01	01	17.0							
11.	iP	06	28	02							19.7N 147.3E, H:06 14 08.7, h 6 km. Mb 6.4, Ms 5.9. Mariana Islands region.
	iPP	06	32	12							
	iPPP	06	34	24							
	iPS	06	41	17							
	iSPP	06	42	08							
	eL	07	01			20		4.3	6.0		
	F	08.8									
	WIT: eP	06	27	57.0							
	HEE: iP	06	28	05.0							
	ePP	06	32	05.5							
11.	eL	09	28.0								64.9N 20.9W, H:09 17 49.2, h 16 km. Mb 4.6. Iceland.
	F	09	32								
11.	ePS	13	29	36							57.9S 7.3W, H:13 01 05.4, hN. Mb 5.8, Ms 5.9. Southwestern Atlantic Ocean
	eSS	13	39.5								
	eL	13	47			20		3.2	5.9		
	F	15.8									



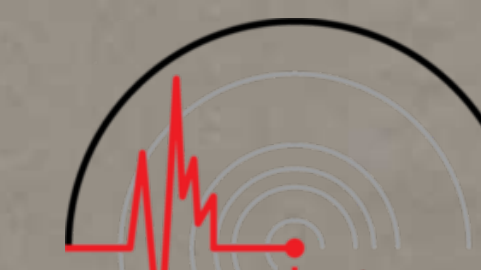
Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MAY 1974											
11.	WIT: e	15	34	52.0							No determination of epicenter.
	e	15	35	13.0							BNS: Rockburst supposed.
	HEE: i	15	34	52.5							
	i	15	35	07.5	+						
11.	eL	19	14								15.2S 166.8E, H:18 05 33.7, h 5 km. Mb 5.2, Ms 5.2. New Hebrides Islands.
	F	20	10								
11.	eSKS	21	18	12							1.9N 126.4E, H:20 53 16.0, hN. Mb 5.5, Ms 5.4. Molucca Passage
	eL	21	46								
	F	22.6									
12.	HEE: eP	00	25	26.5							36.7N 27.0E, H:00 20 56.9, h 156km. Mb 4.5. Dodecanese Islands.
12	eSKS	10	29	40							19.6S 69.0W, H:10 05 55.4, h 112 km. Mb 5.8. Northern Chile.
	eSP	10	31	40							
	eL	10	54								
	F	11	35								
	WIT: eP	10	19	16.0							
	HEE: eP	10	19	09.5							
12.	eL	12	55								55.9S 26.9W, H:11 47 50.6, hN Mb 5.1, Ms 5.4. South Sandwich Islands region
	F	13	35								
12.	WIT: e	19	49	47							48.3N 9.1E, H:19 48 13.3, h 12 km. Germany.
	HEE: iPn	19	49	06.0	-						
	i	19	49	08.5							
	eP ^M	19	49	15.0							
12.	eL	20	56								2.8N 126.8E, H:19 59 14.7 hN. Mb 5.1 Molucca Passage.
	F	21	38								
13.	HEE: eP	02	24	11.0							10.1N 124.1E, H:02 11 29.7, h 592 km. Mb 5.3. Leyte, Philippine Islands.
13.	eL	12	57								7.3S 155.5E, H:11 52 55.9, h 33 km. Mb 5.6, Ms 5.4. Solomon Islands.
	F	14	00								

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms							
		h	m	s			Z	NS	EW									
MAY 1974	13.	iP	17	48	48	+	4	0.8			36.5N 70.9E, H:17 40 28.4, h 208 km. Mb 5.5. Hindu Kush region.							
			iZ	17	49							44						
			eL	17	59							4						
		F	18	17														
			18	17														
		WIT: eP	17	48	40.0													
			e	17	49							47.0						
		HEE: eP	17	48	45.0													
			ipP	17	49							30.0						
			e	17	49							51.0						
13.	eP	19	08	32						6.7S 102.6E, H:18 54 32.2, hN. Mb 5.6. Southwest of Sumatra.								
		ePP	19	12							28							
		eSKS	19	18							58							
		eS	19	19							50							
		ePS	19	21							25							
		eL	19	51														
		F	21	6														
14.	i	03	51	32						Local shock?								
		F	03	52							30							
15	eL	13	52							52.4N 168.8W, H:13 04 04.1, h 44 km Mb 5.0, Ms 4.5. Fox Islands, Aleutian Islands.								
		F	14	43														
15.	iP	19	11	36	+	8	2.8			50.0N 156.1E, H:18 59 55.9, h 56 km. Mb 6.1. Kuril Islands.								
		ipP	19	14							20							
		iS	19	21							12							
		eSS	19	26							0							
		eL	19	33														
		F	19	33														
		in next shock									19							
		WIT: eP	19	11							29.0							
			i	19							11	30.5						
		HEE: ipP	19	11							40.0							
			i	19							11	45.0						
		15.	HEE: eP	19							37	45.0						27.4N 44.4W, H:19 29 32.2, hN Mb 5.2. North Atlantic Ridge.
15	eL	21	15							No determination of epi-center.								
		F	23	4														



International Seismological Data

Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms								
		h	m	s			Z	NS	EW										
MAY 1974	16.	WIT: eP	03	11	01.5	+					49.7N 78.2E, H:03 02 57.3 h 0 km. Mb 5.3. Eastern Kazakh SSR.								
			HEE: ipP	03	11							12.0							
	16.	HEE: ipKP	05	38	36.0							-					18.5S 169.0E, H:05 19 23.9 h 225 km, Mb 4.4. New Hebrides.		
	16.	eL	20	49													27.2N 140.1E, H:20 00 01.5, h 471 km. Mb 5.3. Bonin Islands region.		
			F	21	12														
			WIT: eP	20	12													13.5	
			HEE: eP	20	12													21.0	
	16.	eP	23	20	05												11.2N 86.0W, H:23 07 46.6, h 36 km. Mb 5.5, Ms 5.6. Near coast of Nicaragua		
			ePPS	23	31													25	
eL			23	43															
F			01	10															
HEE: epP			23	20	23.0														
17.	WIT: eP	13	53	25.5	-					36.5N 70.9E, H:13 45 13.8, h 208 km. Mb 5.3. Hindu Kush region									
		HEE: eP	13	53							30.5								
17.	ipP	14	31	47	-	4	0.8			64.7N 21.2W, H:14 27 32.0 hN. Mb 5.0. Iceland.									
		eL	14	37.2															
		F	14	51															
		WIT: eP	14	31							48.5								
		HEE: ipP	14	32							01.0								
		17.	ipP	15							35	09	-	5	0.9			11.2S 75.1W, H:15 22 07.4, h 111 km. Mb 6.0. Peru.	
				ipP							15	35							39
				iZ							15	35							51
				iSKS							15	45							35
				eL							16	06							
17.	eP	15	35	15.0	+					25.1N 125.6E, H:17 11 50.8, h 18 km Mb 5.8. Ms 5.6. Southwestern Ryukyu Islands									
		ipP	15	35							43.5								
		eP	15	35							10.5								
		e	15	35							16.5								
		ipP	15	35							39.0								
17.	ipP	17	24	36	6	0.8				25.1N 125.6E, H:17 11 50.8, h 18 km Mb 5.8. Ms 5.6. Southwestern Ryukyu Islands									
		ePS	17	36							32								
		eL	17	57															
		F	19	5															
		WIT: ipP	17	24							32.6								
		HEE: ipP	17	24							39.0								
		17.	eL	17							57		20		10.6	6.3			
				F							19	5							

Seismological Data

Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MAY 1974											
17.	eP ipP iSKS iS iH iSP iSS eL F	21	08	53	+						6.5S 106.8E, H:2055 11.2, h 131 km. Mb 6.0. Java
	WIT: eP e	21	08	49.5							
	HEE: eP e	21	21	44.0							
		21	08	52.5							
		21	21	51.0							
17.	WIT: ePKP HEE: e	23	25	46.0							26.1S 179.5W, H:23 06 44.1, h 494 km. Mb 5.3. South of Fiji Islands.
		23	26	07.5							
18.	eP eL F WIT: eP HEE: eP	23	44	12							BCIS; 64.8N 21.7W, H: 23 39 52, Iceland
		23	49.3								
		24	06								
		23	44	11.5							
		23	44	23.5							
19.	HEE: e	08	15	56.0							No determination of epi- center.
19.	iP eH eL F WIT: eP HEE: iP e	22	06	03	+						35.5N 26.3E, H:22 01 09.4 h 83 km. Mb 4.9. Crete.
		22	10	16							
		22	13.4								
		22	24								
		22	05	59.5							
		22	05	50.5							
		22	06	00.5							
20.	HEE: ePn i iSn	04	19	50.0							49.8N 7.7E H:04 19 25.2, h 25 km. Germany.
		04	19	53.5							
		04	20	09.0							
21.	WIT: iP HEE: ePKP i	05	06	24.0	+						21.2S 178.7W, H:04 47 40.7, h 571 km. Mb 5.2. Fiji Islands region.
		05	06	29.0							
		05	06	37.0	+						
21.	HEE: i i	07	43	30							47.7N 7.7E, H:07 42 35.7, h N. Switzerland.
		07	43	44.0							

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MAY 1974											
21.	WIT: e	20	07	23.0							No determination of epi- center.
23.	eL F	08	10	09.2							No determination of epi- center.
23.	eS eL F HEE: eP	11	23	20							27.3N 44.4W, H:11 08 24.8, hN. Mb 5.1, Ms 5.0. North Atlantic Ridge.
		11	28								
		12	16								
		11	16	42.5							
23.	WIT: iP HEE: iP	17	42	49.0	-						18.1S 177.8W, H:17 24 02.1, h 450 km. Mb 4.7 Fiji Islands region.
		17	42	54.5	+						
24.	WIT: eP HEE: iP	20	37	59.0							53.1N 159.8E, H:20 26 34.9, hN. Mb 5.0 Near east coast of Kamchatka.
		20	38	10.0	-						
25.	HEE: eP	20	18	39.5	-						71.0N 20.9W, H:20 13 30.0, hN. Mb 4.7. Eastern Greenland.
26.	iPKP ePP eSS eSSS eL F WIT: ePKP HEE: iP e	01	51	43	+						17.7S 167.8E, H:01 32 11.2, h 13 km. Mb 5.8, Ms 6.0. New Hebrides Islands.
		01	55	04							
		02	13	46							
		02	19	00							
		02	40			20				3.9	6.2
		04.8									
		01	51	44							
		01	51	46.0							
		01	56	19.5							
26.	HEE: ePKP	02	34	59.5							17.8S 167.5E, H:02 15 26.4, h 31 km. Mb 5.2. New Hebrides Islands.
26.	HEE: ePKP	05	57	17.5							17.6S 167.6E, H:05 37 43.4, h 17 km Mb 4.9. New Hebrides Islands.
26.	WIT: iP HEE: iP i i	06	06	19.8	-						20.8S 178.5W, H:05 47 36.9, h 565 km. Mb 5.7. Fiji Islands region.
		06	06	24.0	-						
		06	06	31.5	+						
		06	08	01.5							
26.	HEE: ePKP	06	12	12.0							17.3S 167.1E, H:05 52 40.2, h 53 km. Mb 5.5 New Hebrides Islands.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms	
		h	m	s			Z	NS	EW			
MAY 1974												
26.	HEE: iPKP e	07	35	18.0							17.7S 167.8E, H:07 15 44.4, h 27 km. Mb 4.7. New Hebrides Islands.	
26.	HEE: iPKP	08	34	24.5	-						17.7S 167.7E, H:08 14 50.0, h 8 km. Mb 5.1. New Hebrides Islands.	
26.	HEE: ePKP	10	22	15.0							17.7S 167.8E, H:10 02 42.1, h 27 km. Mb 5.0. New Hebrides Islands.	
26.	HEE: iPKP e	11	43	48.0							17.7S 167.7E, H:11 24 14.0, h 19 km. Mb 4.6. New Hebrides Islands.	
26.	eL F HEE: eP	13	17.5								37.5N 21.1E, H:13 06 53.3, h 57 km. Mb 4.2. Southern Greece.	
27.	iP ePP iS eSS eL F WIT: eP HEE: iP e	04	53	01	+	6	1.2				50.8N 157.3E, H:04 41 23.6, h 47 km. Mb 5.6, Ms 5.5. Kuril Islands.	
		04	55	48					20	6.8	5.9	
		05	02	36								
		05	07	20								
		05	18.5									
		06	34									
		04	52	55.0	+							
		04	53	06.0	+							
		04	53	25.0								
27.	HEE: iP e	05	13	48.0							17.3N 98.9W, H:05 01 11.3, h 50 km. Mb 5.3. Gerrero, Mexico.	
		05	14	00.0								
27.	eL F	11	29								8.5N 123.2E, H:10 37 05.8, h 35 km. Mb 5.2. Mindanao, Philippine Islands.	
		12	19									
27.	eP eL F WIT: iP	14	12	28							60.3N 146.0W, H:14 01 43.5, h 21 km. Mb 5.5, Ms 5.7. Southern Alaska.	
		14	37									
		15	16									
		14	12	24.9	-							
28.	WIT: ePKP2 HEE: iPKP2	03	15	33.5							31.8S 179.4E, H:02 55 50.9, h 450 km. Mb 5.0. Kermadec Islands region.	
		03	15	41.0								
28.											Station Heerlen (HEE) Not operative from May 28-August 9, 1974.	



Seismological Data

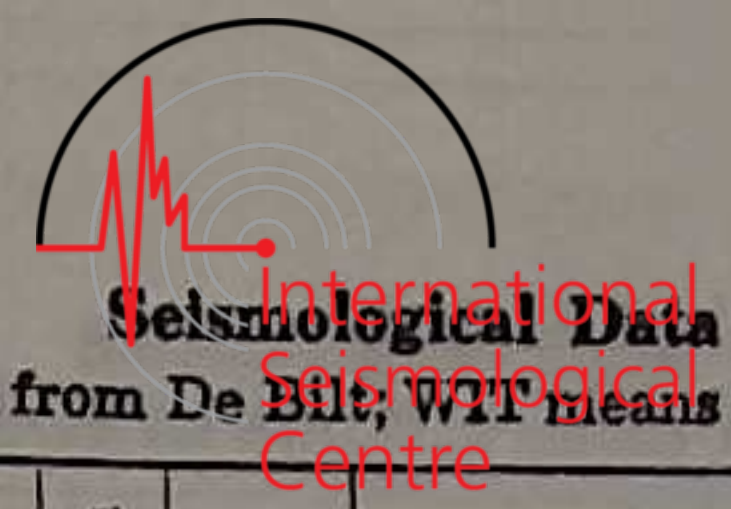
Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
MAY 1974											
29.	eL F	07	42.5								41.3N 29.5W, H:07 29 47.9, hN. Mb 4.5, Ms 4.3. Azores Islands region.
		07	48								
30.	eL F	01	36								49.1N 128.4W, H:00 59 56.1, hN. Mb 4.8, Ms 4.2. Vancouver Island region.
		01	46								
31.	WIT: iP ePcP	03	35	03.7	+						50.0N 78.8E, H:03 26 57.4, h 0 km. Mb 5.9. Eastern Kazakh SSR.
		03	36	47.5							
31.	eL F	03	55								53.6N 163.8W, H:03 13 10.7, hN. Mb 4.8, Ms 4.6. Unimak Island region.
		04	29								
31.	eL F	09	01								14.7S 177.3W, H:07 43 38.6, hN. Mb 5.0, Ms 5.4. Fiji Islands region.
		09	50								
31	WIT: iP	09	22	02.5	+						53.0N 160.1E, H:09 10 37.9, hN. Mb 5.1, Ms 4.4. Near east coast of Kamchatka.
31.	iP iS iSS iSSS eL F WIT: eP	14	17	32	+	4	1.1				27.2N 111.2W, H:14 04 59.9, hN. Mb 5.3, Ms 6.3. Gulf of California.
		14	27	52							
		14	33	24							
		14	36	49							
		14	41			18		20.0		6.5	
		17.4									
		14	17	29							

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
JUNE 1974											
1.	iP eS eL F	20	27	37							55.3N 35.3W, H:20 22 23.0 hN. Mb 4.7. North Atlantic Ocean
2.	eL F	16	53		20		2.7	5.8			2.7N 125.3E, H:15 59 51.4, hN. Mb 5.4, Ms 5.5. Talaud Islands.
2.	WIT: ePKP	22	46	59.0							22.9S 179.8W, H:22 28 11.5, h 577 km. Mb 4.8. South of Fiji Islands.
2.	WIT: eP	23	16	01.5	-						5.3N 76.9W, H:23 03 46.2, h 64 km Mb 5.2. Colombia.
3.	eL F	07	28								15.4S 173.3W, H: 06 14 38.5, hN Mb 5.4, Ms 5.0. Tonga Islands.
3.	eL F WIT: eP	12	05								36.9N 71.4E, H:11 45 36.2, h 100 km. Mb 5.3. Afghanistan-USSR border region.
4.	eL F	03	21.5								No determination of epicenter.
4.	iPKP ipPKP iPP ipPP iSS iH F WIT: ePKP ipPKP iPP	04	33	16	- 8	4.8					15.8S 175.1W, H:04 14 15.9, h 276 km. Mb 6.0. Tonga Islands.
4.	eL F	15	38								10.8N 42.6W, H:15 14 03.4, hN. Mb 5.0, Ms 5.0 North Atlantic Ridge.
5.	eL F WIT: eP	00	36								29.4N 99.5E, H:00 02 10.8, hN. Mb 5.1. Szechwan Province, China.
6.	eL F	19	16								2.9S 149.1E, H:18 15 33.4, h 37 km Mb 5.3, Ms 5.7. New Ireland region



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
JUNE 1974											
7.	eL F	08	04								15.4S 175.3W, H:06 47 36.3, hN. Mb 5.2, Ms 6.0. Tonga Islands.
7.	eP eS eSS eL F WIT: eP	23	01	17							5.7N 82.6W, H:22 48 48.5, hN. Mb 5.4, Ms 5.9. South of Panama.
8.	eL F	18	18						3.6	5.8	7.2S 155.1E, H:17 15 25.1, h 33 km. Mb 5.1, Ms 5.3. Solomon Islands.
9.	eL F	04	14								16.5S 172.7W, H:03 01 33.4, hN. Mb 5.1, Ms 5.1. Samoa Islands region.
9.	eP eL F	10	54	29							5.8S 80.9W, H:10 41 22.1, h 52 km. Mb 5.1 Near coast of northern Peru.
9.	iP eL F WIT: eP	14	29	11	+						5.8S 81.0W, H:14 16 03.7, h 50 km. Mb 5.7. Near coast of northern Peru.
10.	eL F	10	33.1								44.7N 28.3W, H:10 20 58.2, hN. Mb 4.3. North Atlantic Ridge.
11.	eL F	23	37								29.9S 178.5W, H:22 15 12.5, h 16 km. Mb 4.7, Ms 5.3. Kermadec Islands.
12.	eL F	16	19								64.9N 20.8W, H:16 08 58.7, h 16 km. Mb 4.8. Iceland.
12.	iP eS eL F WIT: eP	16	36	49		4	1.5				10.6N 63.4W, H:16 25 47.6, h 34 km. Mb 5.7, Ms 6.1. Near coast of Venezuela. (3 killed).
12.	iP iZ eS eL F WIT: eP i	17	59	24	-	8	3.4				64.8N 21.0W, H:17 55 08.7, h 13 km. Mb 5.5, Ms 5.3. Iceland.
					+	20		23.0		5.6	

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
JUNE 1974											
12.	WIT: ePKP	22	24	36.0							17.8S 178.4W, H:22 06 00.0 h 555 km. Mb 4.8. Fiji Islands region.
14.	eL F	14	21								60.6S 37.6W, H:13 24 40.9, h N.Mb 5.4, Ms 5.6. Scotia Sea.
14.	WIT: ePKP	18	58	01.0							22.1S 179.7W, H:18 39 18.8, h 603 km. Mb 5.1. South of Fiji Islands.
15.	eL F	01	08								42.9N 45.2E, H:00 52 05.9, h 45 km. Mb 4.7. Eastern Caucasus.
15.	eS eL F WIT: eP e ipP	02	58	16							52.3N 178.8E, H:02 37 13.8, h 157 km Mb 5.7. Rat Islands, Aleutian Islands.
15.	iP eL F WIT: iP	07	14	29	+	20	2.1	5.4			28.3N 104.0E, H:07 03 00.2, h 39 km. Mb 5.5, Ms 5.3. Szechwan Province, China.
15.	eL F	10	57.0								No determination of epi- center.
15.	eL F	15	06								28.3N 104.0E, H:14 27 29.3 h 10 km. Mb 5.2 Szechwan Province, China.
17.	eL F WIT: eP	02	59								48.2N 154.4E, H:02 18 29.5, h N. Mb 5.1, Ms 4.3. Kuril Islands.
17.	eL F	06	31								No determination of epi- center.
17.	eL F	19	35.5								38.7N 17.8E, H:19 25 52.8 h N. Mb 3.8. Southern Italy.
18.	eP eL F	08	30	20							38.5N 20.4E, H:08 26 12.9, h N. Mb 4.8, Ms 4.4. Greece.
19.	eL F	03	42								33.4S 56.9E, H:02 55 19.7, h N. Mb 5.0, Ms 6.6. Atlantic-Indian Rise.



International Seismological Centre
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
JUNE 1974											
19.	WIT: e	08	57	12.5	-						No determination of epi- center.
20.	eL F	03	14								3.1N 31.3W, H:02 44 19.8, h N Mb 5.0, Ms 4.2. Central Mid-Atlantic Ridge.
20.	eL F WIT: eP eL	09	34.5								44.4N 17.7E H:09 28 33.4, h N. Mb 5.1 Yugoslavia.
20.	eL F WIT: e i e eL	17	13.3								46.0N 15.5E, H:17 08 27.3, h 47 km Mb 4.5. Yugoslavia.
20.	eL F WIT: e eL	22	31.2								46.1N 15.5E, H:22 26 31.8, h N. Mb 4.4. Yugoslavia.
20.	eL F	23	30								18.3N 121E, H:22 40 06.7, h N Mb 5.0. Luzon, Philippine Islands.
21.	eL F	06	41								18.9N 67.0W, H:06 10 48.1, h 46 km. Mb 4.9, Ms 4.0. Mona Passage.
21.	eL F	08	57.5		18		1.7	4.5			57.8N 32.6W, H:08 46 45.0 h N. Mb 4.8, Ms 4.4. North Atlantic Ocean.
21.	eL F	21	28								56.5N 117.3E, H:20 56 48.7, h N Mb 5.3, Ms 4.5. East of Lake Baikal.
22.	ePP eSS eL F WIT: ePKP	08	33	28		20			1.8	5.7	22.1S 113.6W, H:08 12 47.5 h N Mb 5.9, Ms 5.7. Easter Island region.
22.	eL F WIT: iP	11	18								20.8S 174.4W, H:09 59 53.0, h N Mb 5.1, Ms 4.9. Tonga Islands.

Seismological Data

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Date	Phase	G.M. Time h m s	First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
					Z	NS	EW		
22.	eL F WIT: eP	23 38.9 23 48 23 34 04.0						41.3N 23.0E, H:23 30 15.0, h N. Mb 5.1, Ms 4.4. Greece -Bulgaria border re- gion	
23.	eL F WIT: iPKP	07 26 07 45 06 39 50.7	-					7.0S 155.8E, H:06 20 50.3, h 70 km. Mb 5.5. Solomon Islands.	
24.	iPP iPPP iSP eSS eL F	20 53 38 20 55 56 21 03 12 21 09 35 21 27 in next shock		20	3.2	5.9		55.8S 27.5W, H:20 34 35.4, h 80 km. Mb 6.0. South Sandwich Islands region	
24.	eL F	22 32 24.1		20	2.7	5.8		2.3S 141.1E, H:21 35 09.8, h N. Mb 5.7. Ms 5.6. Near north coast of New Guinea.	
25.	eP eS eL F WIT: iP	05 13 32 05 24 05 05 45 in next shock 05 13 34.5						15.5N 95.4W, H:05 00 58.9 h 25 km. Mb 5.3, Ms 4.9. Near coast of Oaxaca, Mexico	
25.	eL F	06 19 07.4						54.6S 131.6W, H:05 05 19.0, h N Mb 6.1, Ms 5.7. South Pacific cordillera.	
25.	iP ipP iS eL F WIT: eP epP	08 57 18 08 57 28 09 07 50 09 24 10 15 08 57 19.5 08 57 30.0	+ +					15.4N 95.5W, H:08 44 45.3 h 30 km. Mb 5.6, Ms 5.0. Near coast of Oaxaca, Mexico.	
25.	eP iPP iSKS eS iSP iSPP eSS eSSS eL F	17 36 22 17 40 45 17 47 00 17 48 16 17 49 41 17 50 36 17 55.0 17 59.0 18 11 21.5		20		21.5	6.7	26.1S 84.3E, H:17 22 19.3. h N. Mb 6.2, Ms 6.6. South Indian Ocean.	



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Date	Phase	G.M. Time h m s	First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
					Z	NS	EW		
25.	iP iS eL F WIT: eP	22 27 44 22 31 07 22 32.0 23 09 22 27 43.5	-					64.6N 17.7W, H:22 23 46.2 h N. Mb 5.1, Ms 5.2. Iceland.	
26.	ePS eSS eL F	14 14 28 14 21.5 14 43 15 59		22		2.7	5.9	36.6S 98.2W, H:13 43 35.3, h N. Mb 5.4, Ms 5.6. Southern Pacific Ocean.	
26.	eS eL F	19 01 00 19 08 19 45						10.7N 44.0W, H:18 43 16.5, h N. Mb 4.7. North Atlantic Ridge.	
26.	WIT: ePKP i epPKP	23 52 14.0 23 52 19.9 23 54 20	+ -					23.9S 179.2E, H:23 33 28.7, h 551 km. Mb 5.4. South of Fiji Islands.	
27.	iP eS iSP eL F WIT: eP e	02 01 48 02 12 20 02 13 15 02 29 04.8 02 01 41.5 02 01 48.5	-	4	1.0		17.0	6.4	33.8N 139.2E, H:01 49 08.1, h 16 km. Mb 5.7, Ms 5.9. South of Honshu, Japan,
27.	WIT: ePKP	02 08 47.0						18.1S 177.9W, H:01 50 11.2, h 591 km. Mb 4.8. Fiji Islands region.	
27.	eL F	05 32 06 19						32.3N 132.2E, H:04 49 15.5, h 39 km. Mb 5.0. Shikoku, Japan.	
27.	ePP eSP eL F WIT: iPKP	08 07 02 08 16 52 08 45 10.2 08 05 05.6						4.7S 152.5E, H:07 46 11.9, h 70 km. Mb 6.1. New Britain region.	
27.	eL F	13 40 14 08						6.6S 154.7E, H:12 29 08.4, h 50 km Mb 5.1, Ms 5.4. Solomon Islands.	
27.	WIT: eP	19 04 40.5						10.5N 92.8E, H:18 52 36.2, h N. Mb 5.3. Andaman Islands region.	

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
27.	eL	23	22							1.7N 30.8W, H:22 51 09.2, hN. Mb 5.3, Ms 5.0. Central Mid-Atlantic Ridge.	
	F	23	31								
28.	eL	03	46							33.3S 178.5W, H:02 32 50.3, h 38 km. Mb 5.0. South of Kermadec Islands.	
	F	04	40								
28.	WIT: ePn	05	30	06.5						51.6N 7.8E, H:05 29 39.5, h 1 km Rockburst. Germany. (4 miners killed).	
	iPg	05	30	13.5							
	iSn	05	30	24.0							
28.	eP	11	13	22	18	4.1	4.7			36.6N 5.3E, H:11 09 40.3, hN. Mb 5.0, Ms 4.8. Algeria	
	eL	11	17.0								
	F	11	43								
29.	WIT: eP	11	13	33.0						36.7N 5.2E, H:01 06 58.6, hN. Mb 4.7, Ms 4.5. Algeria.	
	eP	01	10	40	18	2.4	4.4				
eL	01	14.0									
30.	F	01	42							18.0S 168.3E, H:08 33 46.5, h 61 km. Mb 5.7. New Hebrides Islands.	
	WIT: e	01	10	58							
30.	ePKP	08	53	15						7.1S 155.8E, H:17 55 44.4, h 53 km. Mb 5.3. Solomon Islands.	
	eL	09.7									
	F	10.8									
30.	WIT: ePKP	08	53	11.5							
	eL	19	04								
30.	F	19	21								
	WIT: ePKP	18	14	47.0							

International Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
July 1974	e(Sg)	01	28	13						49.4N 6.0E, H: 01 26 38.0, h 0 km. Mb 4.3. Rockburst. France.	
	F	01	32								
	WIT:ePn	01	27	32.5							
	iPg	01	27	49.6							
	iSn	01	28	11.0							
1.	eSg	01	28	36						ISC: 17.9S 178.6W, H: 06 23 02.5, h 33 km, Mb 5.0. Fiji Region.	
	WIT:iPKP	06	42	34.8	+						
1.	eL	17	39		20			6.0	6.1	22.1S 64.7W, H:16 51 51.5, h 13 km. Mb 5.5, Ms 5.9. Salta Province, Argentina.	
	F	19.0									
1.	eP	23	22	58	18			2.7	5.6	22.6S 10.7W, H:23 11 14.5, h N. Mb 5.6, Ms 5.6. South Atlantic Ridge.	
	eL	23	48								
	F	24.9									
2.	WIT:eP	23	23	06.0						54.1S 140.2E, H:07 15 46.1, h N. Mb 5.4, Ms 5.3. West of Macquarie Island.	
	eL	08	36								
2.	F	09	10							42.2N 75.6E, H:16 41 05.8, h N. Mb 5.0. Alma-Ata region.	
	eL	17	06.5		20			1.8	5.0		
2.	F	17	17							16.0S 75.1W, H:19 34 10.4, h N. Mb 4.8, Ms 4.8. Off coast of Peru.	
	eL	20	25								
2.	F	20	46							29.1S 176.0W, H:23 26 26.6, h N. Mb 6.8, Ms 7.2. Kermadec Islands region.	
	iPKP	23	46	22	+	8		9.6			
2.	iPKS	23	50	16						No determination of epicenter.	
	iSKKS	24	01	04							
	iSS	24	10	26							
	eSSS	24	16	23							
	eL	24.8			20			40.0	7.3		
3.	F	04.0								40.4N 125.1W, H:05 00 58.6, h 12 km. Mb 5.4, Ms 5.2. Off coast of Northern California.	
	WIT:ePKP	23	46	21.0							
3.	eL	04	07							1.7 5.4	
	F	04	36								
3.	eL	05	38		18					1.7 5.4	
	F	06.4									

Seismological Data
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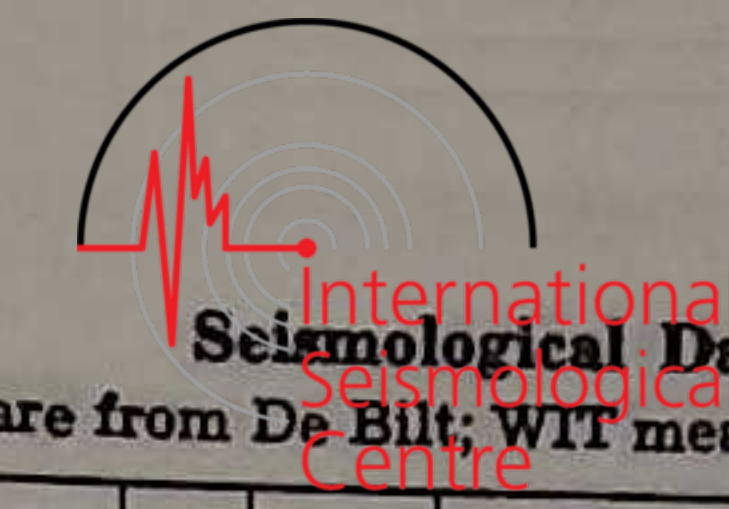
Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
July 1974											
3.	iPKP iZ iPP iSKKS iSPP eSS eL F WIT:ePKP e	23 23 23 23 24 24 24 02.9 23 23	45 45 49 59 02 08.7 41 02.9 45 45	03 34 10 35 28 28 41 02.9 05.0 12.5	-	10	3.8				29.1S 176.1W, H:23 25 09.3, h N. Mb 6.2, Ms 6.6. Kermadec Islands region.
4.	iP iPP iS iSS eL F WIT:iP i	19 19 19 19 19 22.5 19 19	40 42 48 51 56.5 22.5 40 40	25 27 00 53 56.5 09.3 16.4		20	200		6.5		45.1N 94.0E, H:19 30 42.1, h N. Mb 6.1, Ms 6.7. Mongolia.
4.	eL F	23 24.4	34								No determination of epi- center.
5.	eL F	06 06	05 24								44.8S 80.0W, H:04 58 55.4, h N. Mb 5.2, Ms 5.1. Off coast of Southern Chile.
6.	eL F	15 16	48 23								60.8S 38.1W, H:14 51 23.6, h N. Mb 5.6, Ms 5.5. Scotia Sea.
7.	WIT:eP	13	05	08.0	+						46.6N 152.7E, H:12 53 17.3, h 33 km. Mb 5.2. Kuril Islands.
8.	iP iPP eS eSS eL F WIT:iP i	05 06 06 06 06 08.5 05 05	58 01 08 14 25 08.5 57 58	04 16 24 00 25 59.0 11.0	+	6	2.6				36.4N 141.1E, H:05 45 37.0, h 35 km. Mb 6.0, Ms 6.0. Near east coast of Honshu, Japan.
8.	WIT:iP	12	21	15.0	+						52.6N 158.8E, H:12 09 52.4, h 60 km. Mb. 4.8. Near east coast of Kamchatka.
9.	eL F WIT:eP	02 02 02	44.0 53 37	09							36.7N 28.4E, H:02 32 17.6, h 69 km. Mb 5.0. Dodecanese Islands.
9.	eL F	17 17	00 14								28.2N 103.9E H:16 20 29.5, h 33 km. Mb 5.2. Szechwan Province, China.

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms	
		h	m	s			Z	NS	EW			
July 1974												
9.	eL F	18 18	14 48								14.6N 81.8W, H:17 37 21.9, h N. Mb 5.0, Ms 4.9. Caribbean Sea.	
10.	WIT:ep	03	05	02.0							49.8N 78.1E, H:02 56 57.5, h 0 km. Mb 5.3. Eastern Kazakh SSR.	
10.	WIT:iP	16	12	00.5	+						37.1N 116.0W, H:16 00 00.1, h 0 km. Mb 5.7. Southern Nevada.	
11.	eL F	06 06	40 56								13.1N 145.4E, H:05 34 22.1, h 53 km. Mb 5.3. Mariana Islands.	
11.	iP eL F	18 18 18	00 06.0 24	51							71.6N 4.1W, H:17 56 18.5, h N. Mb 5.0. Jan Mayen Island region.	
13.	iP iZ iS eSS eL F WIT:eP i i	01 01 01 01 01 06.6 01 01 01	30 30 40 46.0 52 06.6 30 30 30	32 50 36 46.0 52 36.5 37.4 53.3	+	8	18.6		20	175	7.4	7.7N 77.7W, H:01 18 22.8, h 12 km. Mb 6.4, Ms 7.3. Panama-Colombia border region. (11 Fatalities)
13.	WIT:iP i e	01 01 01	43 43 43	08.6 12.6 42.5	+							7.5N 77.8W, H:01 30 56.8, h N. Mb 5.4. Panama-Colombia border region.
13.	WIT:eP epP	01 01	52 52	15 21.5								6.9N 77.9W, H:01 39 59.3, h 21 km. Mb 5.2. Near West coast of Colombia.
13.	WIT:eP	02	08	51.5								7.6N 77.8W, H:01 56 39.9, h N. Mb 4.8. Panama-Colombia border region.
13.	WIT:eP epP	02 02	19 19	26 30.5								7.6N 77.7W, H:02 07 13.1, h 24 km. Mb 5.3. Panama-Colombia border region.
13.	WIT:eP	02	24	50.5								7.6N 77.7W, H:02 12 39.6, h N. Mb 5.0. Panama-Colombia border region.
13.	WIT:eP	02	27	04								7.5N 77.7W, H:02 14 54.0, h 23 km. Mb 5.2. Panama-Colombia border region.

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms	
		h	m	s			Z	NS	EW			
July 1974												
13.	WIT:eP	02	32	33.5	+						7.4N 77.7W, H:02 20 22.8, h 45 km. Mb 5.5 Panama-Colombia border region.	
13.	WIT:eP epP	04 04	03 03	16.0 23.5							7.7N 77.7W, H:03 51 04.0, h 23 km. Mb 5.0. Panama-Colombia border region.	
13.	WIT:eP	10	33	38.0	-						7.7N 77.6W, H:10 21 24.3, h 12 km. Mb 4.9. Panama-Colombia border region.	
13.	WIT:iP	10	50	33.5							26.5N 125.7E, H:10 38 06.8, h 97 km. Mb 5.1. Northeast of Taiwan.	
13.	WIT:eP	12	59	52.5							7.7N 77.5W, H:12 47 39.6, h 29 km. Mb 4.9, Ms 4.2. Panama-Colombia border region.	
13.	eL F WIT:eP	13 14 13	39 14 13	09.5							7.5N 77.6W, H:13 00 53.3, h N Mb 4.9, Ms 4.6. Panama-Colombia border region.	
13.	eL F	16 16	04.4 36		18			3.0	4.5		36.0N 4.8E, H:15 57 25.2, h 37 km. Mb 4.8. Algeria.	
13.	WIT:iP	16	28	08.9	-						7.8N 77.6W, H:16 15 56.0, h 18 km. Mb 4.9. Panama-Colombia border region.	
13.	iP eS eL F	18 18 18	10 20 36	20.7	+	4	0.8			2.1	5.5	7.7N 77.7W, H:17 58 41.4, h 5 km. Mb 5.4, Ms 5.7. Panama-Colombia border region.
13.	WIT:iP	23	20	59.7	+							7.5N 77.6W, H:23 11 27.8, h 28 km. Mb 5.3, Ms 4.4. Panama-Colombia border region.
14.	WIT:eP	02	00	54.5	+							7.8N 77.6W, H:01 48 43.6, h 26 km. Mb 5.2, Ms 4.5. Panama-Colombia border region.
14.	iP eL F WIT:eP i	02 02 02 02	26 46 03.8 26	00 03.5 09.5	+							7.7N 77.6W, H:02 13 50.4, h 15 km. Mb 5.9, Ms 5.0. Panama-Colombia border region.
15.	WIT:eP	23	23	41.0	-							7.5N 77.6W, H:23 11 27.8, h 28 km. Mb 5.3, Ms 4.4. Panama-Colombia border region.



Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms	
		h	m	s			Z	NS	EW			
July 1974												
17.	e F WIT:iP	05 05 05	15 25 12	52 49.0	+							45.8N 26.5E, H:05 09 23.0, h 145 km. Mb 5.1. Rumania.
17.	eL F	08 08	18 41									56.3S 27.5W, H:07 19 53.7, h N. Mb 5.4, Ms 4.9. South Sandwich Islands region.
17.	eL F	10 11	50 04									27.5S 70.9W, H:09 54 16.4, h N. Mb 5.2, Ms 4.7. Near coast of Northern Chile.
18.	eL F	03 04	53 12									41.6S 86.1W, H:02 46 07.5, h N. Mb 4.6, Ms 4.9. West Chile Rise.
18.	ePKP iZ ePP eSS eL F WIT:ePKP	11 11 11 11 12 13 11	24 24 27 45.5 11 39 24	15 28 42		20				2.1	5.9	15.2S 173.6W, H:11 04 43.2, h N. Mb 5.9, Ms 5.8. Tonga Islands.
18.	ePP eL F	18 19 20	50 29 55	14		20				1.8	5.7	45.8S 76.3W, H:18 29 50.7, h N. Mb 5.1, Ms 5.4. Off coast of Southern Chile.
18.	WIT:iP	19	33	59.9	+							17.1N 98.4W, H:19 21 24.6, h 48 km. Mb 5.6, Ms 5.2. Guerrero, Mexico.
18.	WIT:iPKP	23	30	58.0								20.7S 178.4W, H:23 12 18.4, h 600km. Mb 4.6. Fiji Islands region.
19.	eL F	00 01	24 08									31.3S 177.7W, H:22 59 01.6, h N. Mb 5.0, Ms 5.2. Kermadec Islands region.
19.	eL F	02 03	59 25									32.8S 71.7W, H:02 02 51.3, h 44 km. Mb 5.2, Ms 4.5. Near coast of Central Chile.
19.	WIT:iPKP	18	04	29.9								6.1S 154.9E, H:17 45 43.9, h 157 km. Mb 5.7. Solomon Islands.
20.	eL F	20 21	28 00									0.8S 127.4E, H:19 30 13.8, h N. Mb 5.2, Ms 4.9. Halmahera.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
July 1974											
21.	iP eS eL F WIT:eP	08 08 09 09.9 08	40 51 07 41	56 13 07 03.0	+						14.3N 92.1W, H:08 28 35.3, h 70 km. Mb 5.3. Near coast of Chiapas, Mexico.
21.	eL F	22 22	23 48								11.6N 86.1W, H:21 41 58.1, h 78 km. Mb 5.0. Near coast of Nicaragua.
21.	eL F	23 23	11 54								11.3N 86.1W, H:22 33 38.2, h 87 km. Mb 5.2. Near coast of Nicaragua.
22.	eL F	16 16	38 50								12.8N 71.1W, H:16 03 30.4, h N. Mb 4.6, Ms 4.7. Near north coast of Colombia.
23.	WIT:ePKP e	00 00	47 48	58.0 08.5							20.7S 174.3W, H:00 28 13.3, h N Mb 5.0, Ms 5.0. Tonga Islands.
23.	WIT:ePKP	07	04	43.0							16.6S 173.6W, H:06 45 12.6, h 46 km. Mb 5.5, Ms 4.3. Tonga Islands.
23.	WIT:iPKP eSKP	11 11	18 21	04.6 31.5	-						19.5S 169.3E, H:10 58 47.5, h 162 km. Mb 5.6. New Hebrides Islands.
24.	eL F	05 05	05 21								55.5S 28.3W, H:04 07 33.2, h 37 km. Mb 5.5, Ms 5.2. South Sandwich Islands region.
24.	iPKP ePP eSKSP eSS eL F	08 08 09 09 09 11.5	47 51 02 11 53	35 45 12 56		20			1.8	5.9	31.3S 177.8W, H:08 27 35.9, h N. Mb 5.4, Ms 5.8. Kermadec Islands region.
24.	WIT:ePKP	14	33	49.0							18.3S 174.6W, H:14 14 11.2, h N. Mb 5.2. Tonga Islands.
24.	eL F	21 21	19 42								13.0N 144.9E, H:20 23 01.2, h 78 km. Mb 5.4. Mariana Islands.
25.	ePP eL F WIT:ePKP	17 18 19 17	38 24 41 36	44							6.1S 153.1E, H:17 17 38.9, h 33 km. Mb 5.5, Ms 5.3. New Britain region.



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
July 1974											
25.	WIT:ePg eSn eS*	19 19 19	11 11 11	36.5 50.0 55.5							51.0N 6.4E, H:19 10 58.3, h 8 km. Germany.
26.	ePP eL F	13 14	20 01	32							3.6S 128.9E, H:13 01 02.6, h 25 km. Mb 5.6, Ms 5.4. Ceram.
27.	iP iS eL F WIT:eP	04 04 05 06 04	38 47 01 10 38	12 30	+	18		1.8		5.4	55.5N 166.4E, H:04 26 47.0, h N. Mb 5.3, Ms 5.4. Komandorsky Islands region.
28.	iP iZ iPP iPPP iZ iS iSS eSSS eL F WIT:eP	11 11 11 11 11 11 12 12 12 11	46 47 49 51 52 56 02 05 09 46	56 34 58 51 58 55 20 40	+	9	10.0				46.3N 153.3E, H:11 34 59.7, h 52 km. Mb 5.9. Kuril Islands.
28.	WIT:eP	12	04	39.5							46.3N 153.4E, H:11 52 51.9, h 60 km. Mb 5.0. Kuril Islands.
28.	WIT:eP	12	19	42.5							46.2N 153.3E, H:12 07 50.0, h 46 km. Mb 5.3. Kuril Islands.
28.	WIT:eP	13	16	09.5							46.3N 153.3E, H:13 04 17.5, h 44 km. Mb 4.8. Kuril Islands.
28.	WIT:iP	13	43	29.2	-						46.3N 153.5E, H:13 31 39.3, h 66 km. Mb 5.3. Kuril Islands.
28.	WIT:eP	13	53	31.0							46.3N 153.3E, H:13 41 38.8, h 46 km. Mb 5.4. Kuril Islands.
28.	WIT:eP	16	45	48.5							46.2N 153.2E, H:16 33 55.6, h 49 km. Mb 4.9, Ms 5.0. Kuril Islands.
28.	WIT:eP	17	17	33							46.3N 153.1E, H:17 05 40.0, h 42 km. Mb 4.8. Kuril Islands.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
July 1974											
28.	eL F	17	19								No determination of epicenter.
29.	iP iZ iS iSS eL F WIT:eP	03	27	16	+	9	4.3				46.2N 153.1E, H:03 15 16.7, h 38 km. Mb 5.7, Ms 5.8. Kuril Islands.
29.	eS eSS eL F WIT:eP	07	38	20				10.6	6.2		46.1N 153.1E, H:07 16 26.1, h N. Mb 5.9, Ms 6.2. Kuril Islands. DBN: P in change of papers.
29.	eL F	10	09						16.0	6.4	46.3N 153.3E, H:09 28 48.4, h N. Mb 4.9, Ms 5.5. Kuril Islands.
29.	WIT:iPKP	12	11	45.9	+						18.0S 175.2W, H:11 52 36.9, h 260 km. Mb 4.9. Tonga Islands.
29.	WIT:iPKP	22	32	46.1	-						17.9S 178.5W, H:22 14 12.8, h 586 km. Mb 5.4. Fiji Islands region.
30.	iP ipP isP ipPP iS isS eL F WIT:iP ipP isP	05	20	59	+	6	15.0				36.4N 70.8E, H:05 12 40.6, h 211 km. Mb 6.5. Hindu Kush region.
30.	WIT:ePKP	22	01	48.5							17.8S 178.6W, H:21 43 18.8, h 613 km. Mb 5.3. Fiji Islands region.
30.	eL F WIT:eP epP	23	24								46.2N 153.2E, H:22 39 44.5, h 42 km. Mb 5.0, Ms 4.7. Kuril Islands.



International Seismological Centre

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
1.	iP iZ iS iH iSS eSSS eL F	05	18	54	-						56.5N 152.3W, H:05 07 59.0, h 10 km. Mb 5.2, Ms 6.1. Kodiak Island region.
1.	iP eL F WIT:iP	06	06	50	+						56.7N 152.1W, H:05 55 38.2, h N. Mb 5.7, Ms 6.3. Kodiak Island region.
1.	eL F	08	38						19	11.4	56.6N 152.3W, H:07 59 56.9, h N. Mb 5.2, Ms 6.0. Kodiak Island region.
1.	eL F	20	58						20	1.1	41.9S 88.3E, H:19 57 30.0, h N. Mb 5.1, Ms 5.7. Southeast Indian Rise.
1.	iP eS eL F	22	51	04	+						49.8N 156.0E, H:22 39 21.0, h 41 km. Mb 5.3, Ms 5.2. Kuril Islands.
2.	eL F	08	44								30.5N 50.6E, H:08 23 44.0, h 44 km. Mb 4.8. Iran.
2.	eL F	11	11								3.7N 126.1E, H:10 15 10.2, h 56 km. Mb 4.9. Talaud Islands.
2.	eL F	15	19								33.4N 139.4E, H:14 33 26.6, h 24 km. Mb 5.1, Ms 4.5. South of Honshu, Japan.
2.	eL F	16	52								33.4N 139.3E, H:16 05 25.1, h 34 km. Mb 4.8. South of Honshu, Japan.
3.	eL F	04	35.4						20	1.8	5.2 35.4N 80.6E, H:04 08 13.8, h 20 km. Mb 5.0. Kashmir-Tibet border region.
3.	iP ePP eS eL F WIT:iP i e	18	29	00	+	4	0.8				36.0N 139.8E, H:18 16 34.0, h 58 km. Mb 5.6, Honshu, Japan. (2 killed).

Seismological Data

Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
4.	eL F	11 12	01 00								62.1N 154.9W, H:09 39 58.7, h N. Mb 5.2, Ms 5.3. South Pacific Cordillera.
4.	eP eS eL F WIT:eP e e	15 15 15 16 15 15 15	12 17 20.5 05 12 12 12	16 16 08.5 13.0 24.5		16			2.0 4.8		42.3N 45.9E, H:15 06 17.1, h N. Mb 5.4, Ms 5.0. Eastern Caucasus.
5.	WIT:eP	13	27	37.0							28.0N 53.5E, H:13 19 39.5, h 11 km. Mb 5.3. Southern Iran.
6.	eL F	11 12	25 02								78.7N 2.4E, H:11 11 07.0, h N. Mb 4.4, Ms 4.0. Greenland Sea.
6.	eL F	13 13	41 51								56.6N 152.5W, H:12 59 55.6, h 16 km. Mb 4.5, Ms 4.7. Kodiak Island region.
6.	iPKP ePP eSS eL F WIT:iPKP i	18 19 19 19 21 18 18	58 01 20 55 35 57 58	00 32 48 58.0 09.0	+				2.5 6.0		21.8S 175.2W, H:18 38 13.1, h 48 km. Mb 5.7, Ms 5.7. Tonga Islands.
7.	eL F	01 01	04 18								73.5N 6.9E, H:00 52 14.9, h N, Mb 4.6. Greenland Sea.
7.	eL F	01 02	59 04								73.3N 6.7E, H:01 47 48.2, h N. Mb 4.5. Greenland Sea.
7	eP eS eSS eL F	08 08 08 08 09	34 44 48.4 59 51	48 15	+				2.0 5.3		56.6N 152.3W, H:08 23 36.8, h N. Mb 4.9, Ms 5.3. Kodiak Island region.
8.	eP eL F WIT:eP	01 01 02 01	30 35.4 05 29	05	-				4.0 4.9		73.2N 6.2E, H:01 25 15.8, h N. Mb 5.0, Ms 5.2. Greenland Sea.



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
8.	WIT:ePKP	10	40	47.5							19.8S 177.8W, H:10 22 06.3, h 569 km. Mb 5.0. Fiji Islands region.
8.	eL F	19 19	16 23								73.2N 5.9E, H:19 05 00.9, h N. Mb 4.8, Ms 4.6. Greenland Sea.
8.	eS eL F	19 19 21.5	40 56	40		20			50.0 6.9		24.6N 122.7E, H:19 16 45.9, h 32 km. Mb 5.4, Ms 6.0. Taiwan region.
8.	eL F	23 23	37 41								73.4N 6.5E, H:23 24 42.4, h N. Mb 4.7, Ms 4.5. Greenland Sea.
9.	WIT:eP	05	06	21.0							8.5S 74.3W, H:04 53 30.7, h 159 km. Mb 5.6. Peru-Brazil border region.
9.	WIT:ePn HEE:ePn eSn	22 22 22	19 19 19	30.0 21.5 34.5	-						51.5N 7.1E, H:22 19 04.0, h 0 Km. Rockburst Germany.
10.	WIT:iPKP HEE:iPKP e	10 10 10	06 06 06	13.4 17.5 22.0	+						18.5S 179.5W, H:09 47 39.2, h 595 km. Mb 5.1. Fiji Islands region.
10.	WIT:iPKP epPKP HEE:iPKP i epPKP	11 11 11 11 11	41 43 41 41 43	08.1 33.0 11.5 20.5 33.0	- - - + -						21.4S 179.2W, H:11 22 26.4, h 602 km. Mb 5.5. Fiji Islands region.
10.	WIT:ePn e e HEE:ePn	12 12 12 12	51 52 53 51	40.0 10.5 08.0 52.5	- - - -						57.1N 5.2W, H:12 49 38.1, h 10 km. Mb 4.3. United Kingdom.
11.	iP iPP iH iS eSS eL F WIT:eP i eS eL HEE:eP ePP eL	01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01	22 24 27 29 32.6 36.5 05.4 22 22 30 38 22 24 39	37 26 28 32	+	6	8.4				39.5N 73.8E, H:01 13 55.5, h 9 km. Mb 6.4, Ms 7.3. Tadzhik-Sinkiang border region.

Seismological Data
Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
11.	HEE:eP	05	28	14.0							39.4N 73.8E, H:05 19 33.2, h 32 km. Mb 5.2. Tadzhik-Sinkiang border region
11.	eL F WIT:eP HEE:eP	05	37	in next shock	20		4.5		5.5		39.3N 73.8E H:05 12 33.3, h N. Mb 5.4. Tadzhik-Sinkiang border region
11.	eL F WIT:eP HEE:iP ePP	05	46	21.5 + 28.0 + 17.0	20		5.4		5.6		39.4N 73.8E, H:05 23 52.5, h 27 km. Mb 5.6. Tadzhik-Sinkiang border region
11.	eL F WIT:eP HEE:eP	07	26	42.5 48.0	20		9.0		5.8		39.4N 73.9E, H:07 02 08.5, h N. Mb 5.2, Ms 5.4. Tadzhik-Sinkiang border region
11.	eL F	09	34	44							39.2N 73.9E, H:09 08 58.5, h 29 km. Mb 5.1. Tadzhik-Sinkiang border region
11.	iP ePP iS eSS iZ eL F WIT:iP ePP HEE:iP ePP	20	14	06 00 04 16 53 58.5 in next shock 58.9 49.0 04.0 + 59.0	6	0.7			6.2		39.5N 73.7E, H:20 05 30.1, h N. Mb 5.8, Ms 5.7. Tadzhik-Sinkiang border region.
11.	iP iPP iS eSS eL F WIT:eP HEE:eP i ePP	21	30	16 03 11 22 44.5 23.6 05.0 + 11.0 13.5 - 04.5	6	1.4			6.4		39.5N 73.6E, H:21 21 33.8, h 9 km. Mb 5.9, Ms 6.1. Tadzhik-Sinkiang border region.

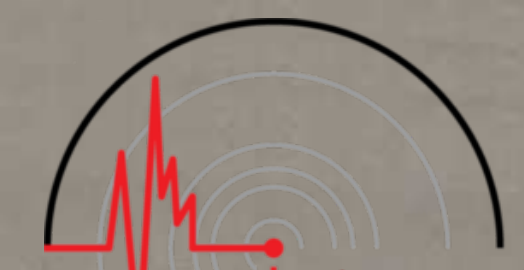
Seismological Data
Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
12.	ePKP eSS eL F HEE:ePKP	03	12	12 34 00 05.6 12 16.0	20			3.2	6.1		16.0S 179.4W, H:02 52 42.4, h 70 km. Mb 5.7. Fiji Islands region.
12.	eL F	14	42	14 55							0.0S 16.5W, H:14 17 05.1, h N. Mb 5.0, Ms 4.5. North of Ascension Island.
12.	HEE:eP e	21	40	04.0 12.0							17.6N 100.4W, H:21 27 18.6, h 73 km. Mb 5.1. Guerrero, Mexico.
12.	eL F	21	44	21 53	20			2.5	5.2		39.2N 74.0E, H:21 17 47.6, h 27 km. Mb 5.2, Ms 5.4. Southern Sinkiang Prov., China.
12.	eL F	22	23	22 34	20			1.8	5.1		39.4N 73.9E, H:21 57 17.6, h N. Mb 5.0. Tadzhik-Sinkiang border region
13.	eP eS eSS eL F WIT:eP HEE:eP e	03	58	10 57 00 18.5 06.9 03 58 05.0 03 58 15.0 03 58 36.0	20			7.0	6.0		51.5N 178.1W, H:03 46 20.3, h 52 km. Mb 5.8. Andreanof Is., Aleutian Islands.
13.	eL F HEE:ePKP e	07	08	08.1 06 12 44 06 12 53.0							16.1S 179.4W, H:05 53 07.4, h 29 km. Mb 5.3, Ms 5.4. Fiji Islands region.
13.	ePKP eSS eL F HEE:ePKP	13	12	20 12 00 in next shock 13 12 21.5	22			1.9	5.8		15.8S 179.5W, H:12 52 47.3, h 55 km. Mb 5.4. Fiji Islands region.
13.	eL F HEE:ePKP	14	53	15.7 14 01 07							15.9S 179.3W, H:13 41 29.2, h N. Mb 5.0, Ms 5.4. Fiji Islands region.
13.	WIT:ePKP HEE:ePKP	15	22	03.0 07.0							5.3S 150.8E, H:15 03 14.8, h 100 km. Mb 5.5. New Britain region.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
13.	eL F	16	00								55.5S 146.3E, H:14 45 42.0, h N. Mb 5.6, Ms 5.7. West of Macquarie Island.
14.	eL F	04	34								No determination of epi- center.
14.	iP eS eL F WIT:iP HEE:eP	05	46	42	+						51.6N 178.1W, H:05 34 54.4, h 56 km. Mb 5.7. Andreanof Is., Aleutian Islands.
14.	eL F WIT:eP HEE:eP	07	32		-						41.1N 142.8E, H:06 49 21.7, h 41 km. Mb 5.3. Hokkaido, Japan region.
14.	WIT:iP HEE:eP	15	06	56.0	+						68.9N 75.9E, H:14 59 58.3, h 0 km. Mb 5.5. Western Siberia.
14.	HEE:ePKP	21	34	14.0							15.9S 173.1W, H:21 14 37.7, h N. Mb 4.5, Ms 4.3. Tonga Islands.
14.	eL F	22	33			20		2.1	5.1		39.2N 73.9E, H:22 06 52.9, h N. Mb. 5.0. Tadzhik-Sinkiang border region.
15.	WIT:ePKP ₂ HEE:ePKP ₂	01	38	56.0							22.1S 175.7W, H:01 19 24.8, h 170 km. Mb 4.8. Tonga Islands region.
15.	HEE:ePKP	08	47	18.0							ISC: 20.1S 177.5W, H:08 28 31.2, h 554 km, Mb 4.4. Fiji Region.
16.	eL F	00	38								39.3N 73.8E, H:00 11 08.0, h 50 km. Mb 4.9. Tadzhik-Sinkiang border region.
16.	WIT:iPKP HEE:ePKP	07	22	57.7	+						20.4S 178.4W, H:07 04 09.6, h 503 km. Mb 4.6. Fiji Islands region.



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
16.	iP iS iPPS eL F WIT:eP HEE:eP	09	53	20	+	7					51.5N 177.8W, H:09 41 31.7, h 46 km. Mb 5.7, Ms 5.8. Andreanof Is. Aleutian Islands.
16.	eL F	12	08								No determination of epi- center.
16.	HEE:ePKP	17	16	35.0							19.8S 177.8W, H:16 57 36.4, h 435 km. Mb 4.7. Fiji Islands region.
17.	eL F WIT:eP HEE:eP e	05	50								54.9N 143.9E, H:05 13 08.1, h 1 km. Mb 5.4, Ms 4.9. Sakhalin Island.
18.	eL F HEE:eP	00	15			20					39.2N 73.9E, H:23 50 58.9, h 32 km. Mb 5.0, Ms 5.3. Tadzhik-Sinkiang border region.
18.	iPdiff. iPKP iPP iPPP eSKS iPS iSPP iSS eSSS eL F WIT:ePKP HEE:ePP	10	58	56	+	10	1.1				38.5S 73.4W, H:10 44 12.8, h 36 km. Mb 5.9, Ms 7.1. Near coast of central Chile.
18.	HEE:eP	17	28	30							50.6N 175.1E, H:17 16 26.0, h N. Mb 5.0, Ms 4.7. Rat Islands, Aleutian Islands.
18.	eL F	20	57								No determination of epi- center.
19.	eL F	00	09								41.7S 75.2W, H:23 07 47.8, h 21 km. Mb 5.3, Ms 4.3. Off coast of southern Chile.



Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
19.	eL F WIT:eP HEE:iP	13	08								33.3N 139.5E, H:12 17 32.5, h 23 km. Mb 5.3, Ms 4.6. South of Honshu, Japan.
19.	eP eL F HEE:eP	20	07	08							12.3N 88.9W, H:19 54 44.8, h 67 km. Mb 5.2. Off coast of Central America.
20.	eL F HEE:eP	05	30								33.4N 139.4E, H:04 39 52.8, h 31 km. Mb 4.8. South of Honshu, Japan.
20.	eL F	07	10								No determination of epi- center.
20.	eL F	19	28								11.3N 140.7E, H:18 31 15.7, h 6 km. Mb 5.3, Ms 4.4. West Caroline Islands.
20.	iP eS eL F WIT:iP HEE:iP epP	20	56	43	+						52.2N 175.0E, H:20 45 01.4, h 58 km. Mb 5.6. Rat Islands, Aleutian Islands.
21.	eL F	03	10								No determination of epi- center.
21.	eL F	13	14								37.2N 19.6E, H:13 02 46.2, h N. Mb 4.1. Ionian Sea.
21.	eL F	19	12								39.2N 74.0E, H:18 45 16.7, h N. Mb. 5.0. Southern Sinkiang Prov., China.
21.	eL F	22	07								0.4N 125.2E, H:21 12 29.9, h 46 km. Mb 5.0, Ms 4.6. Molucca Passage
22.	WIT:iPKP HEE:ePKP i	12	07	55.4	-						20.7S 178.5W, H:11 49 14.8, h 583 km. Mb 5.1. Fiji Islands region.
23.	eL F WIT:eP HEE:eP	04	46								23.8N 121.6E, H:03 58 49.1, h N. Mb 5.0. Taiwan.

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
23.	iPP iSP iPPS eSS eL F WIT:iPKP ePKKP HEE:ePKP e	05	10	12							7.5S 127.5E, H:04 50 34.6, h 136 km. Mb 5.8. Banda Sea.
23.	eL F	06	54								No determination of epi- center.
23.	eL F	16	54								39.3N 73.7E, H:16 26 30.5, h N Mb 4.9. Tadzhik-Sinkiang border region.
23.	eL F	17	45								4.6S 105.4E, H:16 52 03.0, h N. Mb 4.8, Ms 5.3. Northern Easter Island Cordillera.
24.	eL F WIT:eP HEE:eP	00	24								19.1N 68.0W, H:23 55 36.8, h N. Mb 5.0. Ms 4.3. North Atlantic Ocean.
24.	iP eS eL F WIT:iP epP HEE:iP e	02	59	42	+						4.3N 76.9W, H:02 47 30.1, h 84 km. Mb 5.9. Colombia.
24.	HEE:ePKP	03	41	34.5							21.7S 174.2W, H:03 21 43.8, h N. Mb 4.8, Ms 4.3. Tonga Islands.
24.	iP eS eL F WIT:iP HEE:iP	10	52	55	+	6	1.0				52.4N 168.3W, H:10 41 11.2, h 41 km. Mb 5.7, Ms 5.6. Fox Islands, Aleutian Islands.



Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
24.	eL F	12	40								39.3N 73.9E, H:12 14 37.1, h N. Mb 4.9. Tadzhik-Sinkiang border region.
24.	WIT:ePKP HEE:ePKP e	18	52	06.5							21.5S 174.5W, H:18 32 19.3, h N. Mb 4.8. Tonga Islands.
24.	eL F	22	19								37.9N 19.6E, H:22 08 38.6, h 11 km. Mb 4.1. Ionian Sea.
24.	eL F WIT:eP HEE:eP	23	03								52.3N 168.3W, H:22 18 55.4, h 37 km. Mb 5.3, Ms 4.5. Fox Islands, Aleutian Islands.
25.	iP ePP eS eSP eSS eL F WIT:iP e HEE:iP e	01	31	29	-	6	1.5				32.0N 142.3E, H:01 18 39.9, h N. Mb 5.9, Ms 5.6. South of Honshu, Japan.
25.	WIT:eP HEE:eP epP	04	33	01.5					3.6	5.8	32.0N 142.4E, H:04 20 17.0, h 40 km. Mb 5.3. South of Honshu, Japan.
25.	eL F HEE:ePKP e	04	38								16.8S 175.8E, H:03 27 46.3, h N. Mb 5.1, Ms 5.3. Fiji Islands region.
25.	eL F	10	55								32.0N 142.3E, H:10 13 18.1, h N. Mb 5.0. South of Honshu, Japan.
25.	WIT:ePKP HEE:iPKP i	12	10	48.5							19.7S 178.0W, H:11 51 51.2, h 404 km. Mb 4.8. Fiji Islands region.
25.	WIT:iPKP i epPKP HEE:ePKP i ePKP epPKP i	14	53	38.0	+						23.5S 179.9W, H:14 34 46.7, h 542 km. Mb 5.3. South of Fiji Islands.

International Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
25.	HEE:e(P)	19	47	00.0							38.4N 19.8E, H:19 43 11.5, h N. Mb 4.1. Ionian Sea.
26.	eL F WIT:eP HEE:iP	07	10								16.0N 91.0W, H:06 27 40.7, h N. Mb 5.1, Ms 4.8. Mexico-Guatemala border region.
27.	eL F	07	24								38.3S, 73.4W, H:06 24 07.1, h 23 km. Mb 5.4, Ms 4.6. Near coast of central Chile.
27.	iP iPP iS eSS eL F WIT:eP i ePP HEE:iP iPP	13	04	36		5	0.6				39.7N 73.8E, H:12 56 03.2, h N. Mb 5.8, Ms 5.9. Tadzhik-Sinkiang border region.
27.	eL F WIT:eP HEE:eP	13	06	28		20	26.5		6.2		39.4N 73.9E, H:17 33 58.1, h N. Mb 5.3, Ms 5.2. Tadzhik-Sinkiang border region.
28.	WIT:ePKP HEE:iPKP i	13	11	36							17.9S 178.5W, H:10 19 27.4, h 613 km. Mb 4.8. Fiji Islands region.
28.	eP eL F	13	15	16							59.5N 144.5W, H:18 43 25.7, h 4 km. Mb 4.9, Ms 4.6. Gulf of Alaska.
28.	eL F	13	20.6								No determination of epi-center.
28.	eL F WIT:eP HEE:eP	14	22								36.5N 71.3E, H:01 02 28.5, h 228 km. Mb 5.0. Afghanistan-USSR border region.
28.	WIT:ePKP HEE:iPKP i	14	22								28.9S 177.5W, H:02 50 14.9, h 58 km. Mb 5.3. Kermadec Islands region.
29.	eL F	17	04	30.0							19.2S 173.3W, H:04 32 33.3, h N. Mb 5.2, Ms 4.8. Tonga Islands.
29.	eL F	17	04	31.7							
29.	HEE:iP iPP	17	04	36.5							
29.	eL F	17	06	33.0							
29.	eL F	18	00								
29.	WIT:eP HEE:eP	18	14								
29.	WIT:eP HEE:eP	17	42	26.5							
29.	WIT:eP HEE:iPKP i	17	42	33.0							
29.	eP eL F	10	37	57.5(-)							
29.	eP eL F	10	38	03.0							
29.	eP eL F	10	38	06.0	+						
29.	eP eL F	18	54	20							
29.	eL F	19	16								
29.	eL F	20.2									
29.	eL F	00	24								
29.	HEE:eP	01	10	45.0							
29.	eL F HEE:ePKP ₂	04	12								
29.	WIT:ePKP e HEE:iPKP	04	52	13							



Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
August 1974											
29.	iP eL F WIT:iP iPcP HEE:iP iPcP	10 10 11 10 10 10 10	06 15 00 05 09 06 09	06.0 + 56.0 + 05.5 + 12.5 + 12.0	+	3 20	2.1	4.3	5.1	73.4N 55.1E, H:09 59 55.6, h 0 km. Mb 6.4, Ms 5.0. Novaya Zemlya.	
29.	HEE:eP	15	06	27.5						67.2N 62.1E, H:14 59 59.6, h 0 km. Mb 5.2. Ural Mountains region.	
30.	eL F	08 08	24 40							12.8N 87.4W, H:07 45 20.9, h 62 km. Mb 4.9. Near coast of Nicaragua.	
30.	WIT:iP HEE:iP	15 15	11 12	59.3 + 05.0						37.2N 116.1W, H:15 00 00.2, h 0 km. Mb 5.8. Southern Nevada.	
30.	eL F	19 19	01 36							30.6N 141.8E, H:18 14 09.9, h 46 km. Mb 5.1, Ms 4.6. South of Honshu, Japan.	
30.	WIT:ePKP HEE:ePKP	19 19	27 27	20.5 + 26.5						18.0S 178.5W, H:19 08 47.3, h 587 km. Mb 4.2. Fiji Islands region.	
30.	eP ePP eSKS iS iSP eSS eSSS eL F WIT:eP e HEE:eP e	23 23 23 23 23 23 24 24 24 23 23 23 23	42 45 52 53 54 59.0 03.0 14 02.0 42 42 42 42	20 + 16.0 27.0 23.5 34.5	+	20		3.2	5.8	30.6N 141.9E, H:23 29 23.6, h 24 km. Mb 5.3, Ms 5.7. South of Honshu, Japan.	
31.	WIT:ePKP HEE:ePKP	01 01	33 33	45.0(+) 50.0						22.7S 170.9E, H:01 14 00.5, h 17 km. Mb 4.6. Loyalty Islands region.	
31.	eL F	18 19	56 24							0.6N 97.9E, H:18 05 04.4, h N. Mb 4.9. Northern Sumatra.	

International Seismological Centre
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Sept. 1974											
1.	eL F	10 10	39 51							43.0S 82.7W, H:09 33 40.1, h N. Mb 5.0, Ms 4.8. West Chile Rise.	
2.	eL F	09 10	40 00							2.8S 101.2E, H:08 41 54.9, h 56 km. Mb 5.4. Southern Sumatra.	
3.	eL F	02 02	33 58							32.2N 142.3E, H:01 39 45.2, h 20 km. Mb 5.3, Ms 4.9. South of Honshu, Japan.	
3.	eL F WIT:eP HEE:iP e	06 06 06 06 06	41 07.3 08 08 08	01.5 - 06.5 - 18.0		20		7.0	6.1	18.3N 119.2E, H:05 55 06.4, h 11 km. Mb 5.9, Ms 5.4. Philippine Islands region.	
3.	eL F HEE:eP	20 20 19	07.0 19 49	54.0 + 54.0						39.4N 73.7E, H:19 41 19.9, h N. Mb 5.4, Tadzhik-Sinkiang border region.	
4.	iP iS eL F WIT:eP ipP HEE:eP epP e	06 06 06 06 06 06 06 06 06	33 37 38.8 07.7 33 33 33 33 33	52 + 36 18 54.5 + 58.8 + 35.0 40.0 43.5		4 18	1.6		16.0 5.4	33.1N 13.6E, H:06 29 16.4, h 17 km. Mb 5.1, Ms 5.6. Mediterranean Sea.	
6.	eL F	15 15	51.0 58							39.3N 73.8E, H:15 23 58.3, h N. Mb 4.9. Tadzhik-Sinkiang border region.	
6.	HEE:ePKP	20	55	26.5						15.6S 173.3W, H:20 36 02.1, h 124 km. Mb 4.7. Tonga Islands.	
6.	eL F WIT:epPKP HEE:ePKP epPKP	24 24 23 23 23	32 50 45 45 45	47.0 36.0 50.0						7.1S 155.9E, H:23 26 32.8, h 63 km. Mb 5.4. Solomon Islands.	

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Sept. 1974											
7.	eL F WIT:iP i HEE:eP i	20 20 19 19 19 19	11 18 51 51 51 51	 24.0 40.7 20.0 37.0	+						d.b.m. 15.1N 60.6W, H:19 40 52.2, h 58 km. Mb 5.7. Leeward Islands.
7.	eL F HEE:ePKP	21 23.5 21	30 01	 31.0		20	26.7	6.8			d.b.m. 9.8S 108.4E, H:20 43 11.5, h N. Mb 6.1, Ms 6.5 South of Java.
8.	WIT:ePKP HEE:iPKP	05 05	35 35	34.5 39.5	- -						3.7S 153.9E, H:05 17 27.5, h 449 km. Mb 5.7. New Ireland region.
9.	eL F	18 18	14 24								34.6N 36.6W, H:17 58 07.1, h N. Mb 5.0, Ms 4.5. North Atlantic Ridge.
10.	eL F WIT:ePKP ₂ HEE:ePKP ₂	22 23 21 21	24 08 26 26	 35.0 42.0	 - -						30.4S 177.8W, H:21 06 07.9, h 27 km. Mb 5.5, Ms 5.1. Kermadec Islands.
11.	eL F HEE:ePKP ₂	02 03 01	45 26 37	 33.0							30.4S 178.0W, H:01 17 02.1, h 43 km. Mb 5.3, Ms 5.2. Kermadec Islands.
11.	HEE:ePKP	16	37	22.0							15.0S 173.0W, H:16 17 50.0, h N. Mb 5.2, Ms 4.7. Tonga Islands.
11.	eL F	20 20	14 39								8.4S 121.9E, H:19 16 17.2, h N. Mb 5.8. Flores Island region.
12.	eL F	06 06	00 14								41.9N 126.6W, H:05 19 35.3, h N. Mb 5.0. Ms 4.9. Off coast of northern California.
12.	eL F	06 06	29.0 39								39.2N 74.2E, H:06 03 00.2, h N. Mb 5.2. Southern Sinkiang Prov., China.
12.	WIT:ePKP HEE:ePKP e	20 20 20	06 06 06	32.5 37.0 46.0							21.0S 179.1W, H:19 47 53.2, h 606 km. Mb 4.8. Fiji Islands region.
12.	eL F	20 21	56 30								13.6N 89.9W, H:20 14 37.3, h 85 km. Mb 5.0. El Salvador.



International Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Sept. 1974											
12.	eL F	23 24	55 05								58.6S 25.2W, H:22 56 22.2, h N. Mb 5.5, Ms 5.0. South Sandwich Islands region.
13.	WIT:iP HEE:eP	03 03	11 11	01.2 12.0	+						49.8N 78.1E, H:03 02 57.8, h 0 km. Mb 5.2. Eastern Kazakh SSR.
13.	eP eL F WIT:iP HEE:iP	08 08 09.2 08 08	04 27 04 04	18 13.2 24.0	 + +						55.3N 162.0E, H:07 53 02.7, h 55 km. Mb 5.8. Near east coast of Kamchatka.
13.	eL F	18 18	34.5 39								40.5N 23.4E, H:18 24 59.2, h 24 km. Mb 4.5. Greece.
15.	eL F	19 20	55.8 01								No determination of epi- center.
15.	HEE:ePKP	20	53	28.5	+						18.6S 169.2E, H:20 34 18.8, h 244 km. Mb 5.1. New Hebrides Islands.
16.	WIT:iP HEE:eP	00 00	51 51	24.4 18.0	- -						23.9S 65.5W, H:00 38 15.3, h 280 km. Mb 5.6. Jujuy Province, Argentina.
16.	eL F	17 17	12.6 21								39.5N 73.5E, H:16 45 57.1, h 64 km. Mb 5.0. Tadzhik-Sinkiang border region.
16.	eL F WIT:eP HEE:eP	21 22 21 21	36 06 08 09	 56.0 07.0	 + +						44.3N 148.7E, H:20 57 03.3, h 54 km. Mb 5.3. Kuril Islands.
16.	eL F WIT:eP HEE:eP	22 23 22 22	34 04 07 07	 27.5 38.0	 - -						49.6N 155.9E, H:21 55 50.8, h 48 km. Mb 5.5, Ms 4.7. Kuril Islands.
17.	eS eZ eL F WIT:eP HEE:eP	02 02 02 03.4 02 02	21 30 36 12 12	48 24 32.5 42.5	 - -						56.7N 151.7W, H:02 01 23.2, h 17 km. Mb 5.0, Ms 5.1. Kodiak Island region.

Sismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Sept. 1974											
17.	eS eL F WIT:eP eL HEE:eP e eL	05	17	20		16		7.8	4.9	40.3N 20.6E, H:05 10 31.5, h 17 km. Mb 5.2, Ms 5.0. Greece-Albania border region.	
19.	eL F	20	48							10.3S 13.1W, H:20 15 52.6, h N. Mb 4.8. Ascension Island region.	
20.	eL F WIT:eP e HEE:eP	01	31							42.8N 145.0E, H:00 53 01.0, h 51 km. Mb 5.6. Hokkaido, Japan region.	
20.	eL F WIT:iPKP i HEE:ePKP e	20	43							23.8S 175.9W, H:19 24 24.3, h N. Mb 5.3, Ms 5.4. Tonga Islands region.	
20.	HEE:ePKP	20	09	45.0						44.5S 168.0E, H:19 48 42.9, h 51 km. Mb 5.4. South Island, New Zealand.	
20.	eSS eL F WIT:iPKP e HEE:ePKP e	21	58	00						6.2S 146.1E, H:21 20 12.3, h 111 km. Mb 5.8. East New Guinea region.	
21.	eL F	04	10							6.4S 129.0E, H:03 13 05.6, h N. Mb 5.4, Ms 5.5. Banda Sea.	
21.	HEE:ePKP ₂	06	17	01.5						44.4S 168.1E, H:05 55 57.6, h 49 km. Mb 5.8, Ms 5.3. South Island, New Zealand.	
21.	iPKP ₂ ePP ₂ eSS eL F WIT:iPKP i HEE:iPKP	13	00	28	+					23.7S 176.0W, H:12 40 22.1, h N. Mb 5.6, Ms 6.3. South of Fiji Islands.	



International Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Sept. 1974											
21.	WIT:eP e e HEE:eP e	16	06	15.0	-						52.2N 157.5E, H:15 54 59.2, h 118 km. Mb 5.8. Kamchatka.
21.	WIT:ePKP HEE:ePKP i	19	45	30.5	-						22.4S 179.7E, H:19 26 45.7, h 576 km. Mb 5.1. South of Fiji Islands.
23.	iP eS eSS eL F	19	37	28							d.b.m. 0.3 S 12.9E, H:19 28 17.2, h N. Mb 5.9, Ms 6.2. Gabon.
26.	WIT:eP HEE:iP	19	37	35.5	-	20			10.7	6.0	
26.	WIT:eP HEE:eP	15	17	00.5							37.1N 116.1W, H:15 05 00.2, h 0 km. Mb 5.6, Ms 4.2. Southern Nevada.
26.	WIT:ePKP HEE:ePKP	15	20	50.5							23.4S 175.7W, H:15 00 58.2, h N. Mb 5.2, Ms 4.8. Tonga Islands region.
27.	eP iS eSS eL F WIT:iP e e HEE:iP i i	03	22	48							33.6N 141.1E, H:03 10 07.9, h 46 km. Mb 5.8, Ms 6.1. Off east coast of Honshu, Japan.
27.	iS eL F WIT:iP HEE:iP	04	31	08		20			8.9	6.1	2.7N 71.4W, H:04 09 01.3, h 43 km. Mb 5.6, Ms 5.8. Colombia.
27.	WIT:iP HEE:iP epP	05	36	49.7							28.6N 85.5E, H:05 26 39.4, h 70 km. Mb 5.6. Nepal.

Seismological Data

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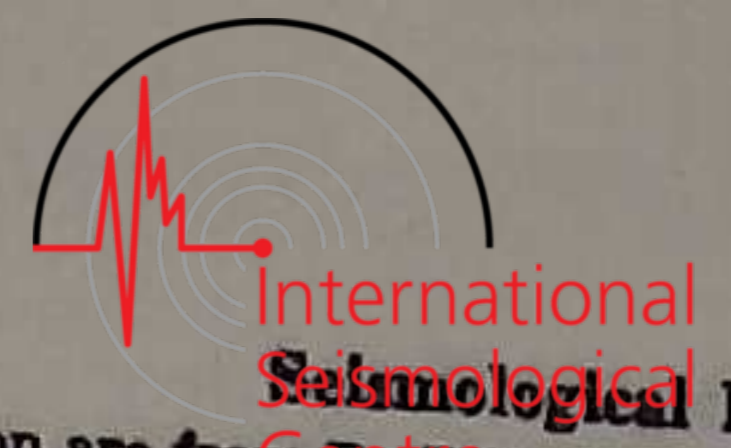
Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Sept. 1974	27.	iP	05	59	32	+	9	7.2			43.2N 146.7E, H:05 47 29.4, h 43 km. Mb 6.0, Ms 6.7. Kuril Islands.
	ePP	06	02	30							
	ePPP	06	04	24							
	iS	06	09	32							
	eSS	06	14	45		20	110	7.2			
	eL	06	22								
	F	09.4									
	WIT:eP	05	59	27.5	+						
	ipP	05	59	41.2	-						
	HEE:iP	05	59	36.5	+						
ipP	05	59	50.5								
28.	WIT:ePKP	00	02	50.5	+					25.3S 178.6E, H:23 44 00.9, h 605 km. Mb 5.4. South of Fiji Islands.	
HEE:ePKP	00	02	54.0								
i	00	03	10.0								
29.	HEE:eP	06	40	35.0						35.5N 27.9E, H:06 35 34.4, h 56 km. Mb 4.6. Dodecanese Islands.	
29.	eL	16	17.0		20	7.1	5.7			40.4N 78.0E, H:15 51 51.7, h N. Mb 5.4, Ms 5.1. Southern Sinkiang Prov., China.	
F	16	50									
WIT:eP	16	00	36.0								
ePcP	16	02	06.0								
ePP	16	02	30.0								
HEE:eP	16	00	43.5								
ePcP	16	02	09.0								
ePP	16	02	42.0								
29.	HEE:eP	23	38	43.0						35.1N 9.6E, H:23 34 57.3, h N. Mb 4.5. Tunisia	
30.	eL	06	36							2.6N 71.2W, H:05 55 37.3, h 22 km. Mb 4.9, Ms 4.3. Colombia.	
F	06	45									



International
Seismological
Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Oct. 1974	1.	eL	00	43.1							39.7N 18.8E, H:00 34 40.2, h 22 km. Mb 3.9. Southern Italy.
	F	00	53								
1.	ipKP	04	25	56							12.0N 141.1E, H:04 07 26.9, h 43 km. Mb 5.3, Ms 5.7. South of Mariana Islands.
	ipP	04	26	16							
	iSKS	04	32	20							
	iPS	04	35	12							
	iPPS	04	36	12							
	eSS	04	40	52							
	eL	04	55		20		3.5	5.9			
	F	06.5									
	HEE:ePKP	04	26	03.5							
	1.	eL	09	25							13.0N 145.2E, H:08 29 55.5, h 51 km. Mb 5.3. Mariana Islands.
F	09	55									
2.	iP	03	08	12						5.9S 81.1W, H:02 54 59.7, h 5 km. Mb 5.7, Ms 5.6. Near coast of northern Peru.	
eSKS	03	18	56								
eL	03	35									
F	04.6										
WIT:eP	03	08	18.0								
HEE:eP	03	08	14.5								
2.	WIT:iP	15	07	57.8	-					51.7N 158.1E, H:14 56 30.1, h 51 km. Mb 5.2. Near east coast of Kamchatka.	
HEE:iP	15	08	09.5	-							
3.	iP	14	34	54	+	10	18.2			12.3S 77.8W, H:14 21 29.1, h 13 km. Mb 6.6, Ms 7.6. Near coast of Peru. (78 killed).	
ipP	14	38	45								
iS	14	46	00								
iSS	14	52	16								
eSSS	14	56.4									
eL	15	00		20			375	7.8			
F	19.5										
WIT:iP	14	35	06.0	+							
eL	15	09									
HEE:eP	14	34	55.5	+							
i	14	35	07.5								
eP'P'	15	00	13.0								
eL	15	03									
4.	HEE:eP	04	10	58.0						22.8S 63.7W, H:03 58 31.0, h 533 km. Mb 5.0. Salta Province, Argentina.	
4.	WIT:eP	17	47	38.5						52.7N 159.0E, H:17 36 13.7, h N. Mb 4.9, Ms 4.1. Off east coast of Kamchatka.	
HEE:eP	17	47	49.5								
4.	WIT:eP	18	09	38.5						52.4N 160.0E, H:17 58 10.7, h N. Mb 5.0. Off east coast of Kamchatka.	



Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Oct. 1974	4. iP	22	33	44	-	5	26.0	6.3	26.3N 66.5E, H:22 24 32.7, h N. Mb 5.8, Ms 5.9. West Pakistan.		
	eS	22	41	04		19					
	eL	22	49								
	F	24.2									
	WIT:eP	22	33	36.0							
	i	22	33	38.0							
	HEE:eP	22	33	38.0	-						
	e	22	33	52.5							
	4. WIT:iP	22	46	58.5						52.2N 160.5E, H:22 35 26.6, h 16 km. Mb 5.3. Off east coast of Kamchatka.	
	HEE:eP	22	47	08.5							
7. eL	05	48				12.2S 77.9W, H:04 57 51.4, h N. Mb 5.0, Ms 4.7. Near coast of Peru.					
F	06	09									
7. WIT:iP	10	04	17.5	-		45.9N 143.1E, H:09 53 09.7, h 325 km. Mb 5.2. Hokkaido, Japan region.					
HEE:eP	10	04	26.5								
7. eL	11	52.0				39.7N 18.8E, H:11 43 36.9, h 19 km. Mb 4.6. Southern Italy.					
F	12	00									
7. WIT:eP	17	22	34.0			11.6N 85.4W, H:17 10 36.3, h 225 km. Mb 5.1. Nicaragua.					
HEE:eP	17	22	32.0								
7. iSP	22	21	25			58.3S 27.4W, H:21 52 40.4, h N. Mb 6.0. South Sandwich Islands region.					
eSS	22	27.6									
eSSS	22	31.6									
eL	22.7										
F	23.5										
8. iP	10	01	18.5	-			17.3N 62.0W, H:09 50 58.1, h 47 km. Mb 6.6, Ms 7.5. Leeward Islands.				
i	10	01	27								
iS	10	09	50								
iSPP	10	10	22								
eSS	10	14.3									
eSSS	10	16	48								
eL	10	20.0									
F	14.7			19							
WIT:iP	10	01	25.7	-							
i	10	01	28.2	+							
i	10	01	35.4								
eP'P'	10	30	32								
HEE:iP	10	01	21.0	-							
i	10	01	32.0								
eS	10	09	48								
eL	10	20									
eP'P'	10	30	29.0								

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Oct. 1974	8. HEE:iP	12	59	45.0	+					17.5N 61.9W, H:12 49 23.7, h 53 km. Mb 5.1, Leeward Islands.	
	8. HEE:iP	18	16	47.0	+						
	9. iP	07	44	02	+	7	13.5			44.7N 150.1E, H:07 32 02.2, h 49 km. Mb 6.3, Ms 6.4. Kuril Islands.	
	i	07	44	28							
	iPP	07	47	03							
	iPPP	07	48	56							
	iS	07	53	56							
	iH	07	54	40							
	iSS	07	59	20							
	eL	08	06.5			22	35.0	6.7			
	F	11.0									
	WIT:iP	07	43	57.2	+						
HEE:iP	07	44	07.0	+							
i	07	44	32.5								
eS	07	54	06								
10. WIT:ePKP	02	05	55.5	-					22.1S 179.5W, H:01 47 12.7, h 588 km. Mb 5.1. South of Fiji Islands.		
HEE:ePKP	02	06	00.5	-							
e	02	06	10.5	+							
10. iP	07	00	24	+	6	1.3			41.0N 143.1E, H:06 48 14.0, h 29 km Mb 5.8, Ms 6.2. Hokkaido, Japan region.		
iPP	07	03	28								
iS	07	10	28								
eL	07	25			20		45	6.8			
F	in next shock										
WIT:eP	07	00	19.5	+							
HEE:eP	07	00	28.0	+							
10. iP	07	08	58	+	6	2.3			40.9N 143.1E, H:06 56 49.0, h 45 km. Mb 5.8, Ms 6.2. Off east coast of Honshu, Japan.		
iPP	07	12	06								
iS	07	19	04								
eL	07	33			20		45	6.8			
F	10.5										
WIT:eP	07	08	52.0								
i	07	08	57.0								
HEE:eP	07	09	02.0								
i	07	09	06.0								
10. eL	20	44							12.4S 77.6W, H:19 52 59.0, h 27 km. Mb 5.3, Ms 5.1. Near coast of Peru.		
F	21	02									
10. eL	21	49							13.0S 77.5W, H:20 57 47.5, h N. Mb 4.8, Ms 4.4. Off coast of Peru.		
F	22	10									
10. eL	22	23							4.1S 102.8E, H:21 32 10.6, h 21 km. Mb 6.0. Southern Sumatra.		
F	23	04									
HEE:eP	21	45	44.0								

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Oct. 1974											
11.	HEE:eP	04	49	36.0							14.5S 74.3W, H:04 36 22.8, h 99 km. Mb 5.3. Peru.
11.	eL F	07 08.2	25								60.7S 153.3E, H:06 00 14.2, h N. Mb 5.3. West of Macquarie Island.
11.	eL F	08 in next shock	39								13.3S 112.3W, H:07 43 27.3, h N. Mb 5.0, Ms 5.6. Northern Easter Island Cordillera.
11.	eL F	09 11	50 40		20			3.5	6.2		60.7S 153.9E, H:08 33 52.3, h N. Mb 5.3, Ms 6.1. West of Macquarie Island.
11.	eP eL F WIT:eP HEE:iP	14 14 15 14 14	24 57 39	36 32.0 38.5	20		3.5		5.8		23.2N 121.4E, H:14 11 56.1, h 44 km. Mb 5.3, Taiwan.
12.	eL F WIT:iP HEE:eP	05 06 04 04	28 24	39.5 48.5	20			1.8	5.4		40.5N 143.5E, H:04 47 31.4, h 26 km. Mb 5.3, Ms 5.3. Off east coast of Honshu, Japan.
12.	iP i iPP iS eSS eSSS eL F WIT:eP epP HEE:eP epP	06 06 06 06 06 06 06 08.8 06 06 06 06	27 27 30 37 42 46.0 54	04 20 12 14 40 17.5	4	0.8					40.5N 143.6E, H:06 14 51.5, h 24 km. Mb 5.5, Ms 6.0. Off east coast of Honshu, Japan.
12.	eL F	13 13	14 57					9.5	6.2		56.1N 153.7W, H:12 33 24.9, h 10 km. Mb 4.8, Ms 4.8. Kodiak Island region.
12.	eL F	17 17	03 27								No determination of epicenter.
12.	WIT:ePKP HEE:ePKP	19 19	18 18	14.0 19.5							17.9S 178.7W, H:18 59 44.2, h 623 km. Mb 4.9. Fiji Islands region.



International Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Blit	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms	
		h	m	s			Z	NS	EW			
Oct. 1974												
13.	eL F	03 04	31 04								0.5N 126.0E, H:02 34 53.1, h 41 km. Mb 5.5, Ms 5.1. Molucca Passage.	
13.	eL F	22 22	01 26		20			2.1		5.3	34.7N 87.2E, H:21 29 52.2, h N Mb 5.0. Tibet.	
14.	WIT:iP HEE:eP	07 07	57 57	50.5 45.0	- +						2.4S 76.4W, H:07 45 17.2, h 162 km. Mb 5.1. Peru-Ecuador border region.	
14.	iP ePP eS eSS eL F WIT:iP i HEE:eP e	14 14 14 14 14 16 14 14 14 14	23 27 34 39 51 33	56 00 12 28	+ + + + +	7	0.8			6.5	6.0	40.6N 143.7E, H:14 11 41.1, h 15 km. Mb 5.3, Ms 5.7. Off east coast of Honshu, Japan.
14.	eL F	21 22	46 11								40.5N 143.7E, H:21 02 03.0, h 21 km. Mb 4.9. Off east coast of Honshu, Japan.	
15.	iP eS eSS eL F WIT:iP e HEE:eP e e	01 01 01 01 01 01 01 01 01 01	29 39 44 56 02.9 28 29 29 29 36	00 10 28	+ - + +	20		3.6		5.8	40.6N 143.7E, H:01 16 47.1, h 22 km. Mb 5.4, Ms 5.5. Off east coast of Honshu, Japan.	
15.	HEE:ePKP	07	09	09.5							16.6S 172.7W, H:06 49 32.2, h N Mb 4.9, Ms 5.0. Samoa Islands region.	
15.	eL F WIT:ePKP ₂ i HEE:iPKP ₂ i	22 23 21 21 21 21	54 34 48 48 48 48	05.0 08.8 14.5 18.0	- + +						30.7S 178.0W, H:21 27 42.5, h 59 km. Mb 5.7. Kermadec Islands.	
16.	WIT:ePg HEE:ePn eP*	03 03 03	43 43 43	44.5 00.5 10.0	+ +						48.3N 9.1E, H:03 42 08.6, h 21 km. Germany.	

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Oct. 1974											
16.	eS eL F WIT:eP HEE:eP e	05 05 05 05 05	45 47.2 next shock 41 41 41	32 34.0 35.5 44.5	- +						52.6N 32.2W, H:05 36 27.6, h N Mb 5.0. North Atlantic Ocean.
16.	iP iS eL F WIT:iP i eL HEE:iP i eS eL	05 05 05 05 05 05 05 05 05 05 05	50 54 55.8 09.6 50 50 59.0 50 50 54 58.0	09 28 09.6 15.4 27.8 16.5 28.0 49	+ + - +	18	440	7.0			52.6N 32.1W, H:05 45 09.8, h N Mb 5.8, Ms 6.9. North Atlantic Ocean.
16.	WIT:iP HEE:iP	06 06	41 41	04.2 14.0	+						50.0N 79.0E, H:06 32 57.5, h 0 km. Mb 5.5. Eastern Kazakh SSR.
16.	eL F WIT:iP e HEE:iP i	10 10 09 09 09 09	12 10.8 41 42 42 42	58.3 09.0 07.5 18.5	+						40.3N 143.7E, H:09 29 49.0, h 24 km. Mb 5.6, Ms 5.2. Off east coast of Honshu, Japan.
17.	eL F	22 22	25 37								No determination of epi- center.
18.	eL F HEE:eP ipP	00 01 00 00	56 09 37 37	06.5 19.0							17.6N 62.2W, H:00 26 42.6, h 45 km. Mb 5.2, Ms 4.4. Leeward Islands.
18.	eL F	10 10	05 32								3.2S 142.0E, H:09 04 04.3, h 36 km. Mb 5.4, Ms 5.4. Near north coast of New Guinea.
18.	HEE:iPKP i	12 12	11 11	26.5 41.5	-						16.3S 172.4W, H:11 51 49.0, h N. Mb 5.4, Ms 5.2. Samoa Islands region.
20.	eL F WIT:e(P) HEE:eP	11 11 11 11	33.7 57 29 29	18 43.0 22.0		18	8.5	4.9			39.7N 18.9E, H:11 25 55.3, h N Mb 4.9, Ms 4.9. Southern Italy.
20.	WIT:eP	11	55	03.0							42.3N 142.3E, H:11 43 05.1, h 24 km. Mb 5.3, Ms 4.9. Hokkaido, Japan region.



International Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Oct. 1974											
20.	eL F HEE:ePKP	16 17 15	36 17 46	44.5							6.6S 154.8E, H:15 27 39.6, h 43 km. Mb 5.6, Ms 5.7. Solomon Islands.
20.	eL F	20 21.5	48								6.6S 154.7E, H:19 39 31.1, h 43 km. Mb 5.5, Ms 5.8. Solomon Islands.
21.	eL F	03 04	32 20								54.3S 133.1W, H:02 14 39.3, h N. Mb 5.4. South Pacific Cordillera.
21.	WIT:iPKP i epPKP HEE:iPKP i ipPKP	04 04 04 04 04 04	31 31 33 31 31 33	02.5 09.4 23.5 07.5 10.5 25.0	+ + + + -						17.9S 178.6W, H:04 12 29.4, h 602 km. Mb 6.0. Fiji Islands region.
21.	WIT:iP HEE:iP	12 12	59 59	33.2 43.5	+						53.9N 160.5E, H:12 48 13.6, h N. Mb 5.7, Ms 4.7. Near east coast of Kamchatka.
22.	eL F	04 05	57.4 01								62.3N 26.0W, H:04 46 32.6, h N. Mb 4.0, Ms 4.5. Iceland region.
22.	iP eS eL F WIT:eP HEE:eP i	05 05 05 05 05 05 05	10 14 17.5 48 10 10 11	43 30 48.5 54.5 01.5	+ + + +	6 17	2.1	5.8	5.0		62.1N 26.4W, H:05 06 16.2, h N. Mb 5.1, Ms 5.4. Iceland region.
22.	eL F	10 10	06 44								0.7S 98.1E, H:09 16 41.0, h 84 km. Mb 5.2. Southern Sumatra.
22.	iP eS eL F HEE:eP i	12 12 12 12 12 12	10 14 15.3 48 10 10	39 24 56.0 58.0	+ + + +	6 17	3.0	8.3	5.2		62.1N 26.2W, H:12 06 11.2, h N. Mb 4.9, Ms 5.6. Iceland region.
22.	eL F	23 24.2	34			20	5.3	6.0			13.5N 120.6E, H:22 45 42.1, h 41 km. Mb 5.2, Ms 5.1. Mindoro, Philippine Islands.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Oct. 1974											
23.	eL F WIT:ePKP HEE:ePKP i ePP	07 10.2 06 34 06 34 06 34 06 36	20 08.5 08.0 13.5 20.5		21		55		7.3	8.4S 154.0E, H:06 14 54.0, h 48 km. Mb 6.1, Ms 7.2. Dentrecaesteaux Islands region. DBN: Clock failure. From Oct. 22, 23 13 GMT- Oct. 23, 08 23 GMT. no time marks.	
23.	eL F HEE:eP	12 18 12 26 11 56	30.0							1.0S 16.0W, H:11 46 56.0, h N. Mb 4.9, Ms 5.1. North of Ascension Island.	
24.	WIT:eP HEE:eP	05 39 05 39	19.0 27.5	+						33.4N 140.8E, H:05 26 47.0, h 63. km. Mb 5.4. South of Honshu, Japan.	
24.	eL F	08 16 09.0								30.9N 141.5E, H:07 30 49.5, h 45 km. Mb 5.1, Ms 4.8. South of Honshu, Japan.	
24.	WIT:iPKP HEE:iPKP	21 21 21 22	55.8 01.5	-						17.4S 178.7W, H:21 03 20.7, h 556 km. Mb 5.0. Fiji Islands region.	
25.	eL F WIT:eP epP e HEE:eP epP	00 45 01.1 00 17 00 18 00 18 00 17 00 18	50 18.5 30.0 50.0 16.5							15.8N 93.1W, H:00 05 34.1, h 120 km. Mb 5.5. Near coast of Chiapas, Mexico.	
25.	HEE:ePKP	03 38	13.0							6.3S 152.3E, H:03 19 07.7, h 18 km. Mb 5.7, Ms 5.0. New Britain region.	
27.	HEE:ePKP ₂	00 02	33.0							31.5S 177.5W, H:23 41 56.2, h 50 km. Mb 5.2, Ms 5.0. Kermadec Islands region.	
29.	eL F WIT:eP eL HEE:eP i eS eL	01 11.2 01 22 01 08 00 01 11.5 01 07 01 07 01 09 01 11.0	47.0 58.5 43.0	14		10.6		4.8		44.6N 18.4E, H:01 05 15.5, h N. Mb 5.1, Ms 4.8. Yugoslavia.	



International Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Oct. 1974											
29.	iPKP iPP iZ iSKKS iPS iSS eL F WIT:iPKP HEE:iPKP e e ePKKP	03 32 03 33 03 34 03 40 03 43 03 49 04 09 06.2 03 32 03 32 03 33 03 33 03 43	42 50 48 36 21 36 09 06.2 43.5 45.0 42.0 52.0 20.5								6.9S 129.5E, H:03 14 14.6, h 117 km. Mb 6.5. Banda Sea.
29.	eL F	03 43									10.5N 63.4W, H:03 10 17.0, h N. Mb 5.1, Ms 5.3. Near coast of Venezuela.
30.	HEE:e	10 08	41.0								No determination of epicenter.
30.	eP eS eL F WIT:eP	16 20 16 30 16 51 17.8 16 20	12 40 05.0		20				10.6	6.2	29.9N 130.4E, H:16 07 33.2, h 33 km. Mb 5.3, Ms 5.8. Ryukyu Islands.
31.	HEE:ePn e i e	07 17 07 19 07 20 07 20	57.0 19.5 08.0 27.5	+							43.2N 0.9W, H:07 15 41.4, h N. Mb 3.8. Pyrenees, France.
31.	eL F WIT:iPKP HEE:ePKP i	08 08 09 01 07 06 07 06 07 06	08 26.7 31.5 40.0								22.4S 174.8W, H:06 46 35.2, h N. Mb 4.9, Ms 5.3. Tonga Islands region.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Nov. 1974	1. WIT: ePKP	03	56	07.0							21.6S 174.3W, H: 03 36 19.6, h N. Mb 4.7, Ms 4.9 Tonga Islands.
	HEE: ePKP	03	56	10.5	+						
	e	03	56	23.0							
	2. eL	01	29								10.3N 40.9W, H: 01 03 36.7, h N. Mb 4.9, Ms 5.0 North Atlantic Ridge.
	F	02	01								
	HEE: eP	01	13	11.5							
	2. iP	05	05	57	+	2	18.0				70.8N 54.1 E, H:04 59 56.7, h 0 km. Mb 6.7, Ms 5.3, Novaya Zemlya.
	iS	05	10	46		18		8.5	5.4		WIT: Not recorded because of instrument failare.
	eL	05	14.0								
	F	06	32								
HEE: iP	05	06	03.5	+							
iPcP	05	09	09.5								
2. HEE: e	05	38	18.0	-						No determination of epi- center.	
2. eL	09	13								41.4 N 142.1E, H: 08 27 29.2 h 67 km. Mb 5.1. Hokkaido, Japan region	
F	09	20									
WIT: eP	08	39	25.5								
2. eL	22	39								36.3 N 141.7E, H:21 55 20.4, h 44 km. Mb 5.1 Near east coast of Honshu, Japan.	
F	in next shock										
WIT: eP	22	07	43.0								
HEE: eP	22	07	51.5								
2. eL	23	30								15.2S 174.1W, H:22 19 05.2, h 97 km Mb 5.6. Tonga Islands,	
F	24.5										
WIT: ePKP	22	38	25.0								
e	22	38	30.0								
HEE: iPcP	22	38	31.0	-							
i	22	38	59.5	+							
4. WIT: iPcP	15	06	48.6							22.4S 174.9W, H:14 47 00.1, h N. Mb 5.0, Ms 4.4. Tonga Islands region.	
HEE: iPcP	15	06	53.0	-							
4. WIT: iPcP	17	49	12.8							22.3S 174.8W, H:17 29 24.4, h N. Mb 4.9, Ms 4.9. Tonga Islands Region.	
i	17	49	24.6								
e	17	49	36.0								
HEE: ePKP	17	49	17.0								
i	17	49	29.0	-							
i	17	49	37.0								



International Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Nov. 1974	5. eL	12	09								39.7S 173.8E, H:10 38 41.2, h 33 km. Mb 5.3, Ms 4.9. Off west coast of North Island, New Zealand.
	F	12	45								
	7. HEE: e	02	38	58.5							No determination of epi- center. Germany ?
	8. HEE: ePKP	13	54	13.0							15.6S 173.2 W, H:13 34 35.3, h 12 km. Mb 5.3, Ms 4.9, Tonga Islands.
	e	13	54	22.5							
	8. HEE: ePKP	13	57	46.0	+						15.7 S 173.2W, H:13 38 12.1, h N. Mb 5.4, Ms 5.2 Tonga Islands.
	8. iP	21	35	11	+	4	2.0				42.5N 141.8E, H:21 23 21.8, h 132 km. Mb 6.0. Hokkaido, Japan region
	ipP	21	35	43	+						
	iPP	21	38	12							
	iS	21	44	56							
i	21	45	34								
eL	22	00									
F	23.3										
WIT: eP	21	35	04.0								
i	21	35	06.5	+							
e	21	37	31.0								
HEE: eP	21	35	13.5	+							
i	21	35	16.0	+							
i	21	37	55.0								
i	21	38	17.0								
9. WIT: ePKP	01	49	29.0							ISC: 22.4S 170.5E, H:01 29 51, h 31 km. Loyalty Islands Region.	
HEE: ePKP	01	49	35.0								
9. HEE: eP	05	58	03.5	+						48.1 N 152.9 E, H:05 46 24.2 h 153 km. Mb 4.8. Kuril Islands	
9. iP	10	41	52	+						ISC: 11.5N 75.2W, H:10 29 59.4, h 0 km. Mb 4.6. Near north coast of Colombia	
iS	10	51	24								
eSS	10	56	00		22				25.0		
eL	11	05									
F	12.8										



Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms			
		h	m	s			Z	NS	EW					
Nov. 1974	9.	iP	13	13	17	+	10	6.0			12.5S 77.8W, H: 12 59 49.8, h 6 km. Mb 6.0, Ms 7.2. Near coast of Peru.			
		iPP	13	16	48									
		iSKS	13	23	56									
		eSS	13	31.5										
		eL	13	40	20									
		F	16.8											
		WIT: eP	13	13	22.5	+							150	7.5
		e	13	13	39.5									
		e	13	14	15.0									
		eL	13	53										
		HEE: iP	13	13	18.0	+								
		e	13	13	35.0									
e	13	14	10.0											
eL	13	52												
WIT: eP	14	28	47.3	-										
HEE: eP	14	28	56.0	+										
9.	9.	iP	19	24	42		22	9.6	6.3	6.5S 105.3E, H: 19 10 55.2, h 51 km. Mb 6.1. Sunda Strait.				
		iSP	19	37	43									
		eL	19	59										
		F	21.5											
		WIT: e	19	28	08.0									
		HEE: e	19	28	13.5									
		WIT: ePKP	23	07	42.0	+								
HEE: ePKP	23	07	47.5	+										
10.	10.	iPKP	04	45	16		20	3.9	6.2	15.9S 178.5W, H: 04 25 31.9, h 33 km. Mb 5.8, Ms 6.1. Fiji Islands region.				
		iPP	04	48	38									
		eL	05	33										
		F	07.0											
		HEE: iPKP	04	45	10.5	-								

Seismological Data
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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms						
		h	m	s			Z	NS	EW								
Nov. 1974	11.	WIT: iPKP	04	30	51.5	+					17.9S 178.5W, H: 04 12 18.7, h 593 km. Mb 5.2. Fiji Islands region.						
		HEE: iPKP	04	30	57.0	+											
	11.	11.	eL	06	00											51.6N 178.1W, H: 05 17 51.0, h 68 km. Mb 5.8. Andreanof Is., Aleutian Islands.	
			F	06	15												
			WIT: iP	05	29	33.5											+
	HEE: eP	05	29	42.5													
	11.	11.	WIT: iPKP	06	48	52.7						-					23.9S 177.6W, H: 06 29 21.1, h 196 km. Mb 5.6. South of Fiji Islands.
			HEE: iPKP	06	48	56.5						-					
			i	06	49	08.5											
	12.	12.	eL	01	45											10.7S 79.1W, H: 00 53 54.2, h N. Mb 5.0, Ms. 4.5. Off coast of Peru.	
			F	02	00												
	12.	12.	WIT: ePg	03	00	13.0											48.3N 6.8E, H: 02 58 40.1, h 36 km. France.
HEE: ePn			02	59	21.0												
iP \times			02	59	27.0	-											
i			02	59	41.5	-											
i			03	00	02.5												
12.	12.	eL	23	07						2.3N 121.1E, H: 22 13 25.8, h 54 km. Mb 5.8. Celebes Sea.							
		F	23	40													
13.	13.	eL	02	52						42.7N 46.6E, H: 02 36 25.5, h 42 km. Mb 5.1, Ms 4.7. Eastern Caucasus.							
		F	03	09													
13.	13.	eL	18	23						58.0S 148.3E, H: 16 59 16.6, hN. Mb 5.3, Ms 5.9. West of Macquarie Island.							
		F	19	00													

Seismological Data
Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Nov. 1974											
14.	eL F	05 21 06 25									58.8N 154.6W, H:04 48 54.7, h 37 km Mb 5.5, Ms 5.6, Alaska Peninsula.
14.	eL F	13 32.2 13 55			15		8.1		5.1		38.5N 23.1E, H:13 22 33.1, h 19 km. Mb 5.0, Ms 5.0. Greece.
14.	eL F WIT: eP	14 36.4 14 48 14 31 07.5			15		6.0		4.9		38.5N 23.0E, H:14 26 45.8, h 3 km Mb 5.1, Ms 5.2. Greece.
14.	eL F	15 39.4 15 52			15		4.8		4.8		38.5N 23.1E, H:15 29 44.8, h 24 km Mb 5.0, Ms 5.1. Greece.
15.	eL F	22 58 23 04									37.4N 76.9E, H:22 31 29.2, h 34 km Mb 5.0. Southern Sinkiang Prov., China
15.	iP iZ eS	23 45 12 23 45 28 23 55 32		+	5	0.9					35.8N 141.0E, H:23 32 42.1, h 36 km Mb 5.8, Ms 5.6. Near east coast of Honshu Japan
	eL F WIT: iP e HEE: iP e	24 12 01 07 23 45 06.6 23 45 17.5 23 45 15.5 23 45 24.0			18		5.3		5.9		
16.	eL F	17 04.4 17 30									33.0N 104.0E, H:16 25 53.8, h N. Mb 5.1, Ms 5.2. Kansu Province, China.
16.	iP iZ iS eL F WIT: eP e HEE: eP	19 29 15 19 29 35 19 33 23 19 35.0 20 08 19 29 22.0 19 29 46.0 19 29 22.0			20		3.5		4.8		52.7N 32.1W, H:19 24 14.5, h N. Mb 5.0, Ms 4.9. North Atlantic Ocean.
17.	HEE: eP e	00 17 10.0 00 17 13.5									7.7N 77.6W, H:00 05 00.4, h 21 km Mb 5.0, Ms 4.3. Panama-Colombia border region
17.	WIT: ePKP HEE: iPKP e	01 19 50.5 01 19 55.5 01 20 43.5		+							17.0S 174.3W, H:01 00 36.5, h 192 km Mb 5.0 Tonga Islands.



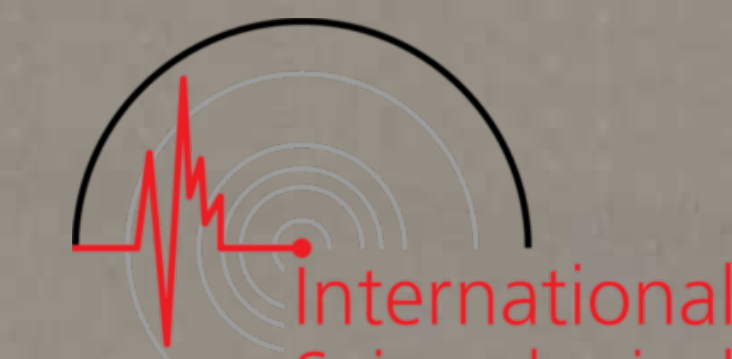
International Seismological Data
Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Nov. 1974											
17.	WIT: eP HEE: eP	15 13 19.0 15 13 19.5									32.8N 55.1E, H:15 05 47.7, h 43 km Mb 5.2. Iran.
17.	eL F	16 10 16 19									43.5N 127.0W, H:15 27 59.4, h 12 km Mb 5.1. Off coast of Oregon.
17.	WIT: iP HEE: iP	17 35 33.3 17 35 44.0		+							54.8N 161.5E, H:17 24 17.9, h 31 km Mb 5.3. Near east coast of Kamchatka
18.	eL F WIT: eP HEE: iP	18 50 19 10 18 15 50.0 18 15 56.0								+	20.6N 121.2E, H:18 03 03.3, h 36 km. Mb 5.5. Philippine Islands region.
19.	iSPP eL F WIT: eP HEE: iP i	04 20 08 04 43 05 15 04 08 14.0 04 08 17.5 04 08 26.0			20		3.5		5.8		19.0N 121.3E, H:03 55 18.9, h 44 km. Mb 5.7, Ms 5.7. Philippine Islands region
19.	eL F	05 58 07.7			20			3.5	6.0		3.2S 150.6E, H:04 58 23.0, h 18 km Mb 5.5, Ms 6.1. New Ireland region.
19.	WIT: iPKP HEE: iPKP	05 58 59.0 05 59 04.5		-							17.9S 178.7W, H:05 40 29.6, h 639 km. Mb 5.1. Fiji Islands region.
20.	iPKP iPP iPKS iPS iZ iSKKS eSS eSSS eL F WIT: iPKP i ePP HEE: ePKP i i ePP	04 34 06 04 37 15 04 38 00 04 47 40 04 49 04 04 50 36 04 56.0 05 01.0 05 20 09.5 04 34 11.6 04 34 30.0 04 37 02.0 04 34 09.0 04 34 10.5 04 34 28.0 04 37 22.0		+							15.0S 167.1E, H:04 14 46.9, h N. Mb 6.4, Ms 6.9. New Hebrides Islands.
					22		46		7.2		

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Nov. 1974											
20.	eL F	14	12								53.6S 28.3W, H:13 21 41.2, h N. Mb 6.0, Ms 5.6. Southwestern Atlantic Ocean.
21.	eL F	08	44								8.0S 155.7E, H:07 32 49.5, h N. Mb 5.1, Ms 5.2. Solomon Islands
21.	eS eL F WIT: eP HEE: eP	21	52	24							52.3N 31.6W, H:21 43 19.6, h N. Mb 4.7. North Atlantic Ridge.
22.	WIT: iPKP HEE: iPKP i i	00	55	35.2	-						22.8S 177.5W, H:00 36 08.9, h 211 km Mb 5.4 South of Fiji Islands.
23.	eL F HEE: eP	10	28								23.5N 123.8E, H:09 44 03.8 h N Mb 5.4, Ms 5.1 Southwestern Ryukyu Islands.
23.	eL F	18	55.0								39.7N 19.1E, H:18 46 33.4, h N. Mb 4.7. Ionian Sea.
24.	eL F	07	46								5.6N 82.6W, H:07 05 37.2 h 36 km Mb 5.0, Ms 4.9. South of Panama.
28.	WIT: eP	16	43	42.0							53.6N 163.7W, H:16 31 58.3, h 32 km Mb 5.3 Unimak Island region
29.	HEE: iPKP	10	08	40.0							19.6S 169.4E, H:09 49 15.4, h 142 km Mb 5.5 New Hebrides Islands
29.	eL F	21	34								51.8N 98.9E, H:21 05 31.6, h N. Mb 5.2 USSR-Mongolia border region



International Seismological Centre

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Nov. 1974											
29.	iP ipP isP iS isS iSS eL F WIT: iP ipP HEE: iP epP	22	17	27	-	8	6.5				30.7N 138.3E, H:22 05 22.4, h 419 km Mb 6.1 South of Honshu, Japan.
30.	WIT: eP	13	08	56.0							53.3N 173.0E H:12 57 20.6, h 17 km Mb 5.2, Ms 4.9. Near Islands, Aleutian Islands
30.	eL F	14	47								19.4N 155.4W, H:13 54 23.0, h 8 km Mb 5.1, Ms 5.5 Hawaii.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USCGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Dec. 1974											
1.	HEE:eP	12	13	45							39.5N 26.2E, H: 12 09 28.8, h 36 km. Mb 4.5. Turkey.
2.	HEE:ePKP ₂	00	38	45.5							35.2S 179.6W, H: 00 18 02.7, h 120 km. Mb 5.1. East of North Island, New Zealand.
2.	eL F HEE:e e e	02 00 02 25 01 57 01 57 01 59	00 25 35.0 53.0 32.0								43.0N 13.0E, H: 01 55 15.9, h 7 km. Mb 4.9. Central Italy.
2.	HEE:ePKP	02	10	44.0							11.0S 166.4E, H: 01 51 37.0, h 153 km. Mb 5.2. Santa Cruz Islands.
2.	eL F WIT:eP HEE:eP e	07 19 07 56 06 47 06 47 06 47	19 56 03.5 03.5 12.0								19.1N 121.2E, H: 06 34 07.7, h 53 km. Mb 5.5 Philippine Islands region.
2.	WIT:ePKP HEE:iPKP	07 02 07 02	32.5 + 37.0								6.2S 153.1E, H: 06 43 30.4, h 28 km. Mb 5.8, Ms 5.3. New Britain region.
2.	eL F WIT:eP HEE:eP i	09 29.7 09 56 09 13 09 13 09 13	29.7 56 48.5 48.0 54.0 +								28.0N 55.8E, H: 09 05 44.2, h 36 km. Mb 5.4. Southern Iran.
2.	WIT:ePKP HEE:iPKP	12 40 12 41	56.5 01.5								20.4S 178.1W, H: 12 22 15.7, h 587 km. Mb 4.8. Fiji Islands region.
2.	HEE:eP	12	49	03.0							14.6N 91.5W, H: 12 36 44.5, h 97 km. Mb 5.2. Guatemala.
3.	iPP eSKS eSKKS eSS eL F HEE:ePKP ePP	03 26 20 03 32 12 03 33 20 03 42.3 04 03 06.5 03 25 20 03 26 22.5			22			13.4 6.5			5.0S 129.8E, H: 03 06 35.2, h N. Mb 6.2, Ms 6.5. Banda Sea.



International Seismological Centre

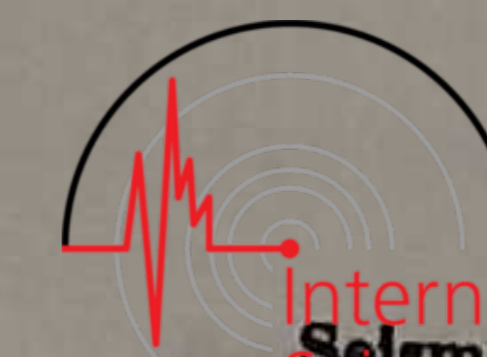
Data without indication are from De Bilt; WIT means Witteveen, HEE means Heerlen

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Dec. 1974											
4.	iP iS eL F WIT:eP i e HEE:eP	03 20 52 03 31 42 03 47 06.8 03 20 49.0 03 20 51.8 03 21 07.5 03 20 51.5				19		42.5	6.8		0.4N 97.8E, H: 03 07 46.3, h 20 km. Mb 6.0, Ms 6.9. Northern Sumatra.
4.	WIT:iPKP HEE:iPKP	05 29 58.5 05 30 04.5									18.3S 177.1W, H: 05 11 02.4, h 375 km. Mb 4.7. Fiji Islands region.
5.	iP ipP iS eSS eL F WIT:iP HEE:iP i iPKKP	12 10 10 12 10 53 12 20 32 12 26.7 12 35 13.8 12 10 20.0 12 10 13.5 12 10 15.5 12 27 29.5				6	2.7				d.b.m. 7.7S 74.5W, H: 11 57 31.3, h 162 km. Mb 6.0. Peru-Brazil border region.
6.	eL F	14 39.5 15 18									8.3N 82.9W, H: 13 58 38.6, h 46 km. Mb 5.4, Ms 5.4. Panama-Costa Rica border region.
7.	HEE:ePKP	05 49 15.5									15.1S 173.5W, H: 05 29 46.0, h N. Mb 4.8, Ms 4.7. Tonga Islands.
7.	iP iS eL F WIT:eP HEE:eP	07 46 00 07 56 02 08 13 10.0 07 45 55.5 07 46 06.5				17	5.0	5.8			51.9N 170.8W, H: 07 34 11.0, h N. Mb 5.5, Ms 5.8. Fox Islands, Aleutian Islands.
7.	WIT:eP HEE:eP	22 14 23.5 22 14 30.5									51.7N 174.8E, H: 22 02 40.2, h 33 km. Mb 5.0, Ms 4.9. Near Islands, Aleutian Islands.
8.	eL F	00 37.5 00 42									64.0N 22.8W, H: 00 26 53.6, h N. Mb 4.3. Iceland.
8.	eL F	01 37.0 01 45									63.7N 22.6W, H: 01 26 34.5, h 28 km. Mb 4.6. Iceland region.
8.	eL F	01 57.1 02 00									64.0N 22.8W, H: 01 46 28.7, h N. Mb 4.4. Iceland.

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Dec. 1974											
8.	eL F	04	01.0								64.0N 22.8W, H: 03 50 35.4, h 15 km. Mb 4.1. Iceland.
8.	eL F	06	59.0								63.8N 22.5W, H: 06 47 54.4, h 11 km. Mb 4.3. Iceland region.
8.	eL F	07	15.8								64.1N 22.5W, H: 07 05 16.8, h N. Mb 4.3. Iceland.
9.	HEE:ePKP	10	06	22.0							20.3S 174.3W, H: 09 46 32.1, h N. Mb 5.4, Ms 4.9. Tonga Islands.
10.	WIT:iPKP HEE:iPKP	01	23	13.5	-						20.0S 178.5W, H: 01 04 37.9, h 626 km. Mb 4.7. Fiji Islands region.
10.	iS isS eL F WIT:eP i HEE:iP e	01	56	03							36.5N 70.5E, H: 01 41 06.0, h 204 km. Mb 5.5 Hindu Kush region.
10.	eL F	02	50.7								30.4N 41.9W, H: 02 31 39.8, h N. Mb 5.0, Ms 4.9. North Atlantic Ridge.
14.	eS eL F WIT:eP HEE:iP	02	44	08		16			4.9	4.8	38.3N 20.8E, H: 02 36 38.4, h N. Mb 5.3. Greece.
14.	HEE:e(P)	21	33	10							38.6N 20.4E, H: 21 29 19.8, h 11 km. Mb 5.0. Greece.
15.	WIT:ePKP HEE:ePKP	17	07	14.5							18.0S 174.2W, H: 16 47 35.7, h N. Mb 5.1, Ms 4.9. Tonga Islands.
16.	eSS eL F	08	31	52							24.9S 112.1W, H: 07 53 56.8, h N. Mb 5.1., Ms 5.9. Easter Island region.
16.	HEE:ePn iSg e	17	19	44.5							49.7N 6.4E, H: 17 19 23.2, h N. Germany.



International Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
Dec. 1974											
16.	HEE:iPn iSg e	17	53	36.0	+						49.8N 6.4E, H: 17 53 14.3, h N. Germany.
17.	WIT:ePKP HEE:iPKP	23	21	41.5	+						20.5S 175.3W, H: 23 01 52.6, h 31 km. Mb 5.4, Ms 5.2. Tonga Islands.
18.	eL F	08	27.7								d.b.m. 48.4N 103.1E, H: 07 54 40.4, h N. Mb 5.0, Ms 5.1. Mongolia.
19.	WIT:iPKP HEE:iPKP	11	17	29.1	-						17.5S 179.0E, H: 10 59 01.9, h 646 km. Mb 4.5. Fiji Islands.
19.	eS eSS eSSS eL F WIT:eP i HEE:eP	16	23	16		23			5.9	5.9	7.4N 78.7W, H: 16 00 49.0, h 13 km. Mb 5.4, Ms 5.8. Panama.
20.	WIT:ePKP HEE:iPKP	02	59	19.0	-						15.4S 177.1W, H: 02 40 31.3, h 374 km. Mb 5.1. Fiji Islands region.
20.	HEE:eP	15	13	05.5							39.7N 20.4E, H: 15 09 29.0, h 12 km. Mb 4.8. Greece-Albania border region.
20.	WIT:eP HEE:iP	16	49	49.0							49.8N 149.7E, H: 16 38 55.6, h 416 km. Mb 5.0. North-west of Kuril Islands.
21.	HEE:eP e	00	39	07.5							7.3N 78.6W, H: 00 26 53.8, h N. Mb 5.1. Panama.
21.	eL F WIT:ePKP HEE:iPKP	09	40								14.6S 175.2W, H: 08 28 55.9, h N. Mb 5.6. Ms 6.1, Samoa Islands region.
21.	WIT:ePKP HEE:iPKP	08	48	27.5	-						ISC: 17.6S 177.7W, H: 21 21 42.2, h 33 km. Mb 4.7. Fiji Region.
21.	WIT:ePKP HEE:ePKP	21	41	09.5							17.6S 179.0W, H: 16 44 05.3, h 559 km. Mb 5.1. Fiji Islands region.
22.	WIT:iPKP HEE:iPKP	17	02	40.7	+						
		17	02	46.0	+						

Seismological Data

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Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
23. Dec. 1974	eL F HEE:iPKP	02	17								14.6S 175.7W, H: 01 04 02.7, h N. Mb 5.4, Ms 5.6, Samoa Islands region.
23.	eL F	05	38								43.1N 47.0E, H: 05 22 08.4, h N. Mb 4.9, Ms 5.0. Eastern Caucasus.
23.	HEE:iPKP	11	35	40.0							16.2S 176.7W, H: 11 16 48.3, h 421 km. Mb 4.6. Fiji Islands region.
23.	HEE:e	16	36	07.5							35.4N 26.1E, H: 16 31 24.5, h N. Mb 4.5. Crete.
23.	eL F WIT:eP HEE:eP	24 24 23 23	22 39 54 54								5.3N 82.5W, H: 23 42 14.5, h N. Mb 5.1, Ms 5.0. South of Panama
24.	WIT:epP HEE:ipP	02 02	23 23	11.0 09.5	-						14.3N 90.1W, H: 02 10 25.4, h 155 km. Mb 5.4. Guatemala.
24.	eL F	02 03	48 11								No determination of epi- center.
24.	HEE:e(Pn) e(Sg) e	03 03 03	28 29 29	46.0 04.5 24.5	-						No determination of epi- center. Local shock ?
24.	iP iZ iPP eSKS eS eL F HEE:eP	07 07 07 07 07 07 10.5 07	09 09 13 19 20 41 10.5 09	08 31 05 30 12 12 05.0	- +				23 35.5 6.8		2.3S 99.0E, H: 06 55 47.1, h N. Mb 5.8, Ms 6.8. Southern Sumatra.
25.	HEE:ePKP	02	36	12.5							14.3S 167.3E, H: 02 17 14.4, h 179 km. Mb 5.0. New Hebrides Islands.
25.	iP eS eSS eL F WIT:iP e HEE:iP	03 03 03 03 05.0 03 03 03	01 10 15 26 05.0 00 01 01	01 52 56	+ 18					3.7 5.7	51.7N 174.6E, H: 02 49 13.0, h 40 km. Mb 5.7, Ms 5.8. Near Islands, Aleutian Islands.
25.	WIT:eP HEE:eP	08 08	06 06	28.5 39.0							51.7N 174.5E, H: 07 54 46.0, h 37 km. Mb 5.1, Ms 4.8. Near Islands, Aleutian Islands.

Date	Phase	G.M. Time			First motion	Period s	Amplitude μ			Magnitude De Bilt	Remarks Data without indication are from USGS; d.b.m. means disturbed by microseisms
		h	m	s			Z	NS	EW		
25. Dec. 1974	HEE:ePKP ₂	12	53	13.0							31.9S 179.8E, H: 12 33 09.6, h 327 km. Mb 5.1. Kermadec Islands region.
27.	WIT:iP ePcP HEE:iP	05 05 05	55 56 55	04.3 43.0 14.5	+ +						50.0N 79.0E, H: 05 46 56.8, h 0 km. Mb 5.6., Ms 4.7. Eastern Kazakh SSR.
28.	iP iPP iH eL F WIT:iP HEE:iP	12 12 12 12 13.5 12 12	20 22 31 35.4 13.5 20 20	36 24 48 31.6 37.0	+ +	23	27.5	6.3			d.b.m. 35.1N 72.9E, H: 12 11 43.8, h 22 km. Mb 6.0, Ms 6.2. West Pakistan. (5300 reported killed)
29.	eL F WIT:iP HEE:iP	03 04 03 03	59.5 12 54 54		+ +						d.b.m. 64.5N 17.6W, H: 03 50 06.1, h N. Mb 5.2. Iceland.
29.	WIT:eP HEE:iP	18 18	35 35	32.0 44.0	-						61.6N 150.5W, H: 18 25 00.7, h 67 km. Mb 5.6. Southern Alaska.
30.	HEE:eP	04	56	07.0							36.0N 69.7E, H: 04 47 44.3, h 116 km. Mb 5.3. Hindu Kush region.
31.	eP eS eL F HEE:eP	20 20 20 in next shock 20	27 38 56 57.5	52 02							14.1N 91.9W, H: 20 15 32.8, h 75 km. Mb 5.4. Guatemala.
31.	iP eL F WIT:eP HEE:eP	20 21 21.8 20 20	33 00 36.5 36.5	31	+ 20 +	6 20	1.9	7.1 6.1			14.1N 91.8W, H: 20 21 09.1, h 39 km. Mb 5.7. Ms 6.1, Guatemala.
31.	eL F	23 23	36 58								19.1N 155.4W, H: 22 40 48.0, h 5 km. Mb 5.5. Ms 5.2, Hawaii.