

THE MINERAL INDUSTRIES EXPERIMENT STATION

College of Mineral Industries

THE PENNSYLVANIA STATE UNIVERSITY

DEPARTMENT OF GEOPHYSICS AND GEOCHEMISTRY

SEISMOLOGICAL OBSERVATORY,

Geophysics Division,
Dept. of Scientific & Industrial Research,
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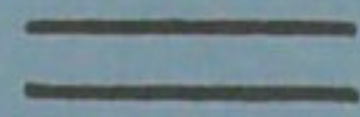
SEISMOGRAPH REPORT XXIII

1954 - 1955



University Park, Pennsylvania

PENNSYLVANIA'S COLLEGE OF MINERAL INDUSTRIES



Division of Earth Sciences

Geology - Mineralogy - Geophysics - Geochemistry - Meteorology - Geography



Division of Mineral Engineering

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Ceramic Technology

Fuel Technology

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THE PENNSYLVANIA STATE UNIVERSITY
MINERAL INDUSTRIES EXPERIMENT STATION
GEOPHYSICAL LABORATORY
Project C-19

Seismograph Report XXIII
1954-1955
College of Mineral Industries
Department of Geophysics and Geochemistry
University Park, Penna., U.S.A.

Locality: The station is located in a vault under the central wing of the College of Mineral Industries Building. The instruments are mounted on a concrete pillar separated from the foundations and anchored to the bedrock (dolomite).

The geographic coordinates are:

$\phi = 40^{\circ} 48' N$ $\lambda = 77^{\circ} 52' W$ $H = 354 m$

The geocentric coordinates are (courtesy of Gutenberg and Richter):

$A = 40^{\circ} 36' N$ $\lambda = 77^{\circ} 52' W$ $H = +3 km.$

Please address all communications to:

Geophysical Laboratory
College of Mineral Industries
University Park, Penna., U.S.A.

During 1954-1955 three seismographs were in operation. The vertical and north - south components were recorded photographically, the east - west motion was recorded by a pen galvanometer until May 5, 1954. Thereafter all three components were recorded photographically. The recording rate was 1.55 cm. per minute on the photographic recorder, until May 5, 1954, and 1.56 cm. per minute thereafter; and 1.7 cm. per minute on the pen recorder. The free periods of the instruments when last measured were:

<u>Component</u>	<u>Seismometer Period</u>	<u>Galvanometer Period</u>
North - South	16.7 sec.	2.6 sec.
East - West	17.0 sec.	Not measured
Vertical	Not measured	4.8 sec.

The east - west instrument was checked on January 22, 1953, and found to have a damping ratio of 2.3:1.

The damping and sensitivity of the recorders have not been kept constant.

The time is controlled by a Stromberg clock, which is compared daily with signals from radio station WWV. The time accuracy of the records is estimated to be about ± 1 second.

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Date	Phase and component		G.M.C.T.	Remarks
12 Jan., 1954	N, E			Seismic activity between the hours of 14:41 and 16:58
12 Jan., 1954	N, E, Z			Seismic activity between the hours of 23:51 and 02:23
16 Jan., 1954	iP	Z	22:52:05	Epicenter 49°N, 129.5°W Vancouver Island 22:45:27 = 0 Courtesy U.S.C.G.S. $\Delta = 4000$ km.
20 Jan., 1954	iP eS	Z N, E	04:24:04 04:33:28	Epicenter 8.5°N, 103.5°W Pacific Ocean; South of Mexico 04:16:25 = 0 $\Delta = 4350$ km. Courtesy U.S.C.G.S.
22 Jan., 1954	E			Seismic activity between the hours of 11:48 and 12:02
1 Feb., 1954	iPP e ePPP e eSKS? ePS	Z Z Z Z N N, Z	01:25:24 01:25:41 01:27:43 01:29:21 01:31:31 01:34:38	Epicenter 24.5°N, 14.5°E Volcano Islands 01:06:51 = 0 $\Delta = 11,650$ km. Courtesy U.S.C.G.S.
1 Feb., 1954	N, E, Z			Seismic activity between the hours of 02:00 and 02:15
1 Feb., 1954	iS	N	04:41:57	Epicenter 32.5°N, 115.3°W Lower California 04:31:59.5 = 0 Courtesy U.S.C.G.S. $\Delta = 3400$ km.
5 Feb., 1954	eSKS? eSS?	N N	09:45:39 09:57:10	Epicenter 4.5°S, 153°E Off coast of New Britain 09:19:42 = 0 Courtesy U.S.C.G.S. $\Delta = 13,700$ km.

Date	Phase and component		G.M.C.T.	Remarks
5 Feb., 1954	iP	N,Z	15:23:37	Epicenter 17.5°N, 92.5°W Chiapas, Mexico 15:17:59 = 0 Depth - 100 km. Courtesy U.S.C.G.S. Δ = 3000 km.
	iS	N,E	15:28:28	
11 Feb., 1954	iPP	Z	00:48:13	Epicenter 39.5°N, 101°E Kingsia Province, China 00:30:16 = 0 Δ = 11,050 km. Courtesy U.S.C.G.S.
	iPPP	Z	00:50:24	
	iSKS	N,E	00:54:48	
	iPS	N	00:57:13	
19 Feb., 1954	iP	N,Z	00:46:47	Epicenter 11.5°N, 87.5°W Off coast of Nicaragua 00:40:25 = 0 Δ = 3250 km. Courtesy U.S.C.G.S.
	iS	N	00:51:46	
19 Feb., 1954	iP	N,Z	21:40:57	Epicenter 12.5°N, 87.5°W Off coast of Nicaragua 21:34:41 = 0 Δ = 3250 km. Courtesy U.S.C.G.S.
	iS	N	21:45:59	
20 Feb., 1954	iP'	N,Z	18:53:30	Epicenter 7°S, 124.5°E Flores Sea 18:35:05 = 0 Depth - 600 km. Δ = 15,900 km. Courtesy U.S.C.G.S.
	epP'	N,Z	18:55:52	
	iSKP?	Z	18:56:18	
	isP'	N,Z	18:56:40	
	iPKS	N,Z	18:57:15	
	e	N,Z	19:02:44	
	e	N	19:05:14	
	eSPP?	N	19:08:35	
	esPS?	N,Z	19:09:20	
	esSP?	N,Z	19:10:30	
	iSS?	N,Z	19:14:18	
20 Feb., 1954		E,Z		Seismic activity between the hours of 22:30 and 23:00
21 Feb., 1954	iP	N,Z	23:45:26	Epicenter 12.5°N, 87°W Near Coast of Nicaragua 23:39:25 = 0 Depth - 60 km. Courtesy U.S.C.G.S. Δ = 13,000 km.
	iS	N	23:50:16	
22 Feb., 1954	iP'	N,Z	12:22:06	Epicenter 66.5°S, 26.5°W Sandwich Islands 12:03:23 = 0 Courtesy U.S.C.G.S. Δ = 13,000 km.
3 Mar., 1954	iP'	Z	06:22:07	Epicenter 5.5°S, 142.5°E Central New Guinea 06:02:55 = 0 Δ = 14,500 km. Courtesy U.S.C.G.S.
	ePP	E,Z	06:24:18	
	iPKS?	N,E	06:25:32	

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Date	Phase and component		G.M.C.T.	Remarks
3 Mar., 1954	E, Z			Seismic activity between the hours of 07:08 and 08:04 intermittent
3 Mar., 1954	N, E, Z			Seismic activity between the hours 21:09 and 21:20
9 Mar., 1954	iP eS	Z E	02:31:44 02:39:55	Epicenter 1.5°N, 30.5°W Atlantic Ocean NE of Brazil 02:21:43 = 0 Δ = 6450 km. Courtesy U.S.C.G.S.
9 Mar., 1954	iP iS	N, Z N	05:51:21 06:01:02	Epicenter 50°N, 157°E South coast of Kamchatka 05:39:20 = 0 Δ = 8550 km. Courtesy U.S.C.G.S.
11 Mar., 1954	ePP? iS	N, Z N	10:36:46 10:40:52	Epicenter 14.5°N, 90.5°W Guatemala 10:30:10 = 0 Δ = 3150 km. Courtesy U.S.C.G.S.
19 Mar., 1954	eS	E	10:06:09	Epicenter 33.3°N, 116.1°W Santa Rosa Mts., Calif. 09:54:27 = 0 Δ = 3500 km. Courtesy U.S.C.G.S.
22 Mar., 1954	iPP isPP epPPP isPPP eSKS eSKKS eS? iSP esSP? esSS	N, E, Z N, Z N, Z N, Z N N N Z N E	00:01:33 00:02:34 00:04:37 00:05:07 00:07:05 00:08:14 00:09:05 00:10:57 00:12:03 00:18:19	Epicenter 24.5°N, 95°E Northwestern Burma Depth - 150 km. 23:42:05 = 0, 21 Mar., '54 Δ = 12,800 km. Courtesy U.S.C.G.S.
22 Mar., 1954		E		Seismic activity between the hours of 10:00 and 11:00

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Date	Phase and component		G.M.C.T.	Remarks
28 Mar., 1954	iP eS	Z E	20:47:25 20:56:20	Epicenter 52°N 176°E Rat Islands, Aleutians 20:36:22 = 0 Courtesy U.S.C.G.S. Δ = 7700 km.
29 Mar., 1954	iP iS	N,Z N,E,Z	06:15:49 06:32:53	Epicenter 37°N 3.5°W South coast of Spain Depth - 650 km. 06:17:05 = 0 Δ = 6250 km. Courtesy U.S.C.G.S.
30 Mar., 1954	iS	N	19:01:52	Epicenter 20°N 155°W NE coast of Hawaii 18:41:54 = 0 Δ = 7550 km. Courtesy U.S.C.G.S.
31 Mar., 1954	iPP ePS iSS iP'P'	N,E,Z N N,Z N	18:45:22 18:54:36 19:01:18 19:05:31	Epicenter 13.5°N 58°E Arabian Sea 18:25:48 = 0 Δ = 12,400 km. Courtesy U.S.C.G.S.
11 Apr., 1954		E		Seismic activity between the hours 04:09 and 04:44
11 Apr., 1954		E		Seismic activity between the hours 11:40 and 12:03
17 Apr., 1954	eP eS	N,E,Z N,E	20:21:25 20:30:06	Epicenter 51.5°N 179°W Andreanof Islands, Aleutians 20:10:37 = 0 Δ = 7400 km. Courtesy U.S.C.G.S.
25 Apr., 1954		N,E		Seismic activity between the hours 12:48 and 1:21
25 Apr., 1954	eL		20:45:28	Epicenter 36.8°N 121.8°W Central California 20:33:26.5 = 0 Courtesy U.S.C.G.S. Δ = 3300 km.

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Date	Phase and component		G.M.C.T.	Remarks
26 Apr., 1954	iP	N,Z	21:36:29	Epicenter 51°N 158.5°E SE Coast of Kamchatka 20:24:44 = 0 Depth - 60 km. Courtesy U.S.C.G.S. Δ = 8350 km.
	iPP	N	21:39:18	
	iS	N	21:46:01	
27 Apr., 1954	iP	N,Z	10:13:19	Epicenter 6°N 82.5°W South of Panama 10:06:24 = 0 Δ = 3850 km. Courtesy of U.S.C.G.S.
	iS	N	10:18:56	
27 Apr., 1954		N,E		Seismic activity between hours of 23:00 and 24:00
29 Apr., 1954	iP	Z	10:55:57	Epicenter 29.5°N 112.5°W Gulf of California 10:49:27 = 0 Δ = 3400 km. Courtesy U.S.C.G.S.
	iS	N	11:00:35	
	Lp(?)	N,E	11:03:35	
29 Apr., 1954	iP	Z	11:40:53	Epicenter 29.5°N 112.5°W Gulf of California 11:34:34 = 0 Δ = 3400 km. Courtesy U.S.C.G.S.
	eS	N	11:45:37	
30 Apr., 1954	iP	N,Z	13:14:04	Epicenter 39.5°N 22°E Central Greece 13:02:36 = 0 Courtesy U.S.C.G.S. Δ = 8200 km.
	iPP	N,Z	13:16:34	
	iS	N	13:23:29	
3 May, 1954		N,E		Seismic activity between the hours of 16:00 and 17:00
3 May, 1954	iP	N,Z	17:19:32	Epicenter 12°N 86°W Coast of Nicaragua 17:13:32 = 0 Depth - 150 km. Δ = 3300 km. Courtesy U.S.C.G.S.
	iPP(?)	N,Z	17:20:46	
	i S	N	17:24:17	
5 May, 1954	eS	E	13:21:17	Epicenter 27.5°N 112.5°W Gulf of California 13:09:46 = 0 Δ = 3400 km. Courtesy U.S.C.G.S.

Date	Phase and component	G.M.C.T.	Remarks
6 May, 1954	iS(?) N,E,	09:23:49	Epicenter 50°N 155.5°E South coast of Kamchatka 09:02:14 = 0 Depth - 100 km. Δ = 8500 km. Courtesy U.S.C.G.S.
13 May, 1954	iP N,E,Z iS N,E	14:52:28 14:57:14	Epicenter 17°N 95.5°W Oaxaca, Mexico 14:46:38 = 0 Depth - 100 km. Δ = 3050 km. Courtesy U.S.C.G.S.
14 May, 1954	iP Z iPP N,Z iSKS N iS N,E	22:52:30 22:56:27 23:02:43 23:03:37	Epicenter 36°N 137°E Honshu, Japan 22:39:25 = 0 Depth - 250, Δ = 10,750km Courtesy U.S.C.G.S.
20 May, 1954	N,E		Seismic activity between hours of 00:10 and 00:43
21 May, 1954	N,E		Seismic activity between the hours of 16:41 and 16:51
24 May, 1954	N		Seismic Activity between the hours of 00:10 and 00:18
4 June, 1954	iP N,Z ePP N,Z iS N	06:58:45 07:00:12 07:04:24	Epicenter 0.5°S 91.5°W Galapagos Islands 06:50:42 = 0 Δ = 4800 km. Courtesy U.S.C.G.S.
4 June, 1954	eLr(?) N	16:16:14	Epicenter 29.5°N 112.5°W Gulf of California 16:01:45 = 0 Courtesy U.S.C.G.S. Δ = 3600 km.
4 June, 1954	iLr(?) N	20:57:07	Epicenter 29.5°N 112.5°W Gulf of California 20:42:25 = 0 Courtesy U.S.C.G.S. Δ = 3600 km.
6 June, 1954	E		Seismic activity between hours of 17:48 and 19:00

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Date	Phase and component		G.M.C.T.	Remarks
12 June, 1954	N			Seismic activity between hours of 22:06 and 22:12
15 June, 1954	iP	N,Z	13:38:16	Epicenter 5°S, 77°W Northern Peru 13:29:59 = 0 Depth - 100 km. Δ = 5100 km. Courtesy U.S.C.G.S.
	ipP	N,Z	13:38:46	
	iS	N,E	13:44:56	
17 June, 1954	iP	N,Z	01:51:20	Epicenter 56°N 159.5°W Kodiak Island 01:42:22 = 0 Δ = 5600 km.
	iPP	N,Z	01:53:22	
	iS	N,E	01:58:37	
19 June, 1954	N			Seismic activity between the hours of 03:01 and 03:10
19 June, 1954	N			Seismic activity between the hours of 22:25 and 22:35
21 June, 1954	iP	N,Z	01:59:08	Epicenter 23°S 68.5°W Northern Chile 01:48:44 = 0 Depth - 150 km. Δ = 7200 km. Courtesy U.S.C.G.S.
	iS	N,E	02:07:36	
28 June, 1954	N,E			Seismic activity between the hours of 05:24 and 06:50
30 June, 1954	N,E			Seismic activity between the hours of 14:10 and 15:00
30 June, 1954	N,E,Z			Seismic activity between the hours of 15:31 and 16:00
2 July, 1954	iP'	Z	03:04:14	Epicenter 13.5°N 123.5°E Southeastern Luzon, Philippine Islands 02:45:09 = 0 Courtesy U.S.C.G.S. Δ = 13,500 km.
	iPP	N,Z	03:05:44	

Date	Phase and component		G.M.C.T.	Remarks
2 July, 1954	N, E			Seismic activity between the hours of 01:25 and 01:40
3 July, 1954	iP	N, E, Z	22:50:58	Epicenter $6.5^{\circ}\text{S}, 106^{\circ}\text{E}$ Near southwest coast of Java 22:31:28 = 0 Depth - 10 km. $\Delta = 16,300$ km. Courtesy U.S.C.G.S.
	iS	N, Z	22:54:11	
4 July, 1954	N, Z			Seismic activity between the hours of 16:45 and 16:55
6 July, 1954	iP	N, Z	08:16:55	Epicenter $46.5^{\circ}\text{N}, 153.5^{\circ}\text{E}$ Kurile Islands 08:04:42 = 0 Depth - 100 km. $\Delta = 9100$ km. Courtesy U.S.C.G.S.
	eS	N, E	08:27:07	
6 July, 1954	iP	N, E, Z	11:19:41	Epicenter $39.5^{\circ}\text{N}, 118.5^{\circ}\text{W}$ Near Fallon, Nevada 11:13:19 = 0 Courtesy U.S.C.G.S. $\Delta = 3400$ km.
	iS	N, E	11:24:42	
6 July, 1954	iP	N, E, Z	22:13:59	Epicenter $39.5^{\circ}\text{N}, 118.5^{\circ}\text{W}$ Nevada 22:07:41 = 0 Courtesy U.S.C.G.S. $\Delta = 3400$ km.
	eS	N, E, Z	22:19:05	
8 July, 1954	N, Z			Seismic activity between the hours of 01:30 and 01:41
8 July, 1954	N, E, Z			Seismic activity between the hours of 19:46 and 20:10
9 July, 1954	N, E			Seismic activity between the hours of 09:10 and 09:13
11 July, 1954	N, E, Z			Seismic activity between the hours of 05:14 and 05:31

Date	Phase and component		G.M.C.T.	Remarks
11 July, 1954	N			Seismic activity between hours of 10:15 and 10:21
13 July, 1954	N,E			Seismic activity between hours of 08:20 and 10:30
15 July, 1954	N,E			Seismic activity between hours of 00:30 and 01:50
15 July, 1954	N,E			Seismic activity between the hours of 13:45 and 13:53
16 July, 1954	N,E			Seismic activity between the hours of 09:24 and 09:32
16 July, 1954	N			Seismic activity between the hours of 18:30 and 18:36
18 July, 1954	N			Seismic activity between the hours of 01:12 and 01:29
18 July, 1954	N,E			Seismic activity between the hours of 07:13 and 07:30
18 July, 1954	N,E			Seismic activity between the hours of 09:32 and 10:19
20 July, 1954	N			Seismic activity between the hours of 00:28 and 00:31
20 July, 1954	N			Seismic activity between the hours of 01:59 and 02:36
23 July, 1954	iP	N,Z	04:44:50	Epicenter 31°S 70.5°W Central Chile and Argentine border 04:33:26 = 0 Depth - 60 km. Courtesy U.S.C.G.S. Δ = 8000 km.
	iS	N,E,Z	04:54:03	

Date	Phase and component		G.M.C.T.	Remarks
25 July, 1954	N			Seismic activity between the hours of 15:20 and 15:27
26 July, 1954	iP	N,E,Z	20:28:03	Epicenter 41°S 73°W Central Chile 20:15:45 = 0 Courtesy U.S.C.G.S. Δ = 9200 km.
	iS	N,E,Z	20:38:12	
26 July, 1954	iP	N,E,Z	22:17:43	Epicenter 12.5°N 49°W 22:09:57 = 0 Δ = 4500 km. Courtesy U.S.C.G.S.
	iS	N,E,Z	22:24:11	
29 July, 1954	iP	N,Z	03:40:20	Epicenter 49.5°N 158°E Off south coast of Kamchatka 03:34:20 = 0 Δ = 8500 km. Courtesy U.S.C.G.S.
	i	N,Z	03:40:35	
	i	Z	03:47:21	
	e	Z	03:47:43	
	eS	N,Z	03:56:07	
30 July, 1954	iP	N,Z	08:58:08	Epicenter 36.5°S 97°W Pacific Ocean Southeast of Easter Island 08:46:00 = 0 Δ = 8800 km. Courtesy U.S.C.G.S.
	eS	N,E	09:08:04	
31 July, 1954	ePP	N,Z	01:18:08	Epicenter 39°N 104°E Ningsia Province, China 00:59:57 = 0 Δ = 11,150 km. Courtesy U.S.C.G.S.
2 Aug., 1954		N,E,Z		Seismic activity between hours of 10:33 and 10:54
2 Aug., 1954		N,E		Seismic activity between the hours of 23:50 and 00:23
3 Aug., 1954		N,E		Seismic activity between the hours of 18:50 and 19:18

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Date	Phase and component		G.M.C.T.	Remarks
3 Aug., 1954	N			Seismic activity between the hours of 21:42 and 22:46
5 Aug., 1954	iP	N,Z	09:00:49	Epicenter 52°N 176°E Rat Islands, Aleutian Islands 08:49:52 = 0 Depth - 60 km. Courtesy U.S.C.G.S. Δ = 7500 km.
	iS	N,E	09:09:45	
5 Aug., 1954	N			Seismic activity between the hours of 16:13 and 16:05
6 Aug., 1954	N,E			Seismic activity between the hours of 00:47 and 01:12
6 Aug., 1954	E			Seismic activity between the hours 01:49 and 01:54
6 Aug., 1954	iS	N,E		Epicenter 1°S 23.5°W Mid Atlantic Ocean 16:19:45 = 0 Courtesy U.S.C.G.S. Δ = 7300 km.
9 Aug., 1954	iP	N,Z	19:28:20	Epicenter 53°N 161°E Off east coast of Kamchatka 19:16:48 = 0 Depth - 60 km. Courtesy U.S.C.G.S. Δ = 8400 km.
	iPP	Z	19:31:10	
	iS	N,E	19:37:43	
10 Aug., 1954	N,E			Seismic activity between the hours of 14:50 and 15:02
18 Aug., 1954	e	Z	05:00:56	Epicenter 21.5°S 176°W Tonga Islands 04:42:20 = 0 Depth - 150 km. Δ = 11,600 km. Courtesy U.S.C.G.S.
	ipPP	N,E,Z	05:01:08	
	esPP	E	05:01:42	
	e	N,E	05:07:02	
	e	E	05:08:16	
	i	N	05:08:40	
	e	N,E	05:10:34	
	eSS	N	05:15:26	
	esSS	N	05:16:18	

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Date	Phase and component		G.M.C.T.	Remarks
18 Aug., 1954	N			Seismic activity between the hours of 23:12 and 23:15
20 Aug., 1954	N			Seismic activity between the hours of 19:40 and 19:50
20 Aug., 1954	N			Seismic activity between the hours of 20:48 and 21:05
20 Aug., 1954	N			Seismic activity between the hours of 22:12 and 22:17
20 Aug., 1954	N			Seismic activity between the hours of 22:33 and 22:37
20 Aug., 1954	N			Seismic activity between the hours of 23:23 and 23:28
21 Aug., 1954	N			Seismic activity between the hours of 00:51 and 01:01
21 Aug., 1954	N,Z			Seismic activity between the hours of 07:45 and 08:01
21 Aug., 1954	iS	N,Z	23:05:48	Epicenter 72°N 13°W - Jan Mayen Island region 22:51:00 = 0 Courtesy U.S.C.G.S. $\Delta = 5100$ km.
24 Aug., 1954	iP iS	N,E,Z E,Z	05:57:55 06:02:52	Epicenter 39.5°N 118.5° Near Fallon, Nevada 05:51:31.5 = 0 Courtesy U.S.C.G.S. $\Delta = 3420$ km.
28 Aug., 1954	N			Seismic activity between the hours of 03:57 and 04:24

Date	Phase and component	-13-		G.M.C.T.	Remarks
28 Aug., 1954	N				Seismic activity between the hours of 23:28 and 23:31
1 Sept., 1954	N				Seismic activity between the hours of 22:45 and 22:48
4 Sept., 1954	iPS? N		03:59:57		Epicenter 3°S 139.5°E Northern New Guinea 03:28:32 = 0 Depth - 60 km. $\Delta = 14,400$ Courtesy U.S.C.G.S.
4 Sept., 1954	N				Seismic activity between the hours of 10:09 and 10:12
5 Sept., 1954	iS N i N,Z eSS N		08:12:10 08:14:28 08:20:11		Epicenter 19°S 176°E Fiji Islands region 07:45:31 = 0 Courtesy U.S.C.G.S. $\Delta = 12,100$ km.
6 Sept., 1954	iP N,Z i N,Z i N,Z i N eS N,E i N,E e E		18:42:37 18:42:51 18:43:05 18:43:25 18:52:17 18:52:51 18:53:09		Epicenter 51°N 158°E near southeast coast of Kamchatka 18:30:48 = 0 Depth - 60 km. Courtesy U.S.C.G.S. $\Delta = 8400$ km.
9 Sept., 1954	iP N,E,Z ePP N ePPP N,E,Z eS N,E eSS E		01:14:54 01:17:08 01:18:36 01:23:04 01:27:12		Epicenter 36°N 1.5°E Northern Algeria 01:04:37 = 0 $\Delta = 6750$ km. Courtesy U.S.C.G.S.
12 Sept., 1954	eScS N,E		08:07:52		Epicenter 41°N 143°E Off south coast of Hokkaido, Japan 07:43:50 = 0 $\Delta = 9950$ km. Courtesy U.S.C.G.S.

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Date	Phase and component		G.M.C.T.	Remarks
13 Sept., 1954	ePP	E,Z	02:28:47	Epicenter 21°S 175.5°W Tonga Islands 02:09:55 = 0 Depth - 150 km. Δ = 12,150 km. Courtesy U.S.C.G.S.
	epPP?	E,Z	02:29:22	
	eSKS?	E	02:34:36	
	eS	N	02:36:12	
	eSP	N	02:37:44	
	ePS	N	02:38:05	
	eSS	N	02:43:59	
	esSS	N	02:45:12	
15 Sept., 1954	N,E,Z,			Seismic activity between the hours of 13:36 and 13:39
17 Sept., 1954	iPP	Z	11:22:06	Epicenter 20.5°S 177.5°W Fiji Island region 11:03:19 = 0 Depth - 250 km. Δ = 12,250 km. Courtesy U.S.C.G.S.
	isPP	E,Z	11:23:22	
	eSKS	E	11:27:49	
	iS	N,E	11:29:28	
	ePS	N,Z	11:31:26	
18 Sept., 1954	N			Seismic activity between the hours of 16:00 and 16:50
23 Sept., 1954	iP	N	21:55:44	Epicenter 49°N 156°E Kurile Islands region 21:43:36 = 0 Δ = 8700 km. Courtesy U.S.C.G.S.
	eS	N,E	22:05:36	
28 Sept., 1954	N,E			Seismic activity between the hours of 00:58 and 01:13
28 Sept., 1954	E			Seismic activity between the hours of 13:40 and 14:10
1 Oct., 1954	Z			Seismic activity between the hours of 03:15 and 04:30
3 Oct., 1954	iPP	Z	03:07:46	Epicenter 10°S 166°E Santa Cruz Islands 02:47:19 = 0 Δ = 12,950 km. Courtesy U.S.C.G.S.
	eSS	E	03:23:47	
	eL	E	03:44:30	

Date	Phase and component		G.M.C.T.	Remarks
14 Oct., 1954	iP ⁺ iPKS	Z N,Z	01:54:40 01:58:12	Epicenter 7°S, 128°E Banda Sea 01:35:00 = 0 Δ = 15,500 km. Courtesy U.S.C.G.S.
17 Oct., 1954	iP iS	Z N	23:04:17 23:09:12	Epicenter 31.5°N 116.5°W Lower California San Diego and Imperial Valley 22:57:18 = 0 Courtesy U.S.C.G.S. Δ = 3420 km.
21 Oct., 1954	eP ePP eS	N,Z N,Z N,Z	06:58:05 06:59:20 07:02:36	Epicenter 14°N 90.5°W Guatemala 06:51:48 = 0 Depth - 60 km. Δ = 3500 km. Courtesy U.S.C.G.S.
24 Oct., 1954		N,E,Z		Seismic activity between the hours of 10:00 and 10:07
1 Nov., 1954	eP iS	Z N,E,Z,	21:02:30 21:07:24	Epicenter 14°N 92°W Off coast of Guatemala 20:56:20 = 0 Depth - 60 km. Courtesy U.S.C.G.S. Δ = 3300 km.
2 Nov., 1954	iP ⁺	N,Z	08:43:58	Epicenter 7.5°S 119°E Sunbawa Island region 08:24:08 = 0 Δ = 15,950 km. Courtesy U.S.C.G.S.
12 Nov., 1954	eS eScS	N,E,Z E,Z	12:38:31 12:43:37	Epicenter 31.5°N 116°W Lower California 12:26:47 = 0 Δ = 3500 km. Courtesy U.S.C.G.S.
20 Nov., 1954		N		Seismic activity between the hours of 08:39 and 09:02

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Date	Phase and component		G.M.C.T.	Remarks
25 Nov., 1954	eP eS	N, E E	11:23:40 11:29:23	Epicenter 40.5°N 126°W Off Cape Mendocino, California 11:16:36 = 0 Courtesy U.S.C.G.S. $\Delta = 4000$ km.
25 Nov., 1954		N, E, Z		Seismic activity between the hours of 21:00 and 21:26
27 Nov., 1954		N		Seismic activity between the hours of 16:13 and 16:40
3 Dec., 1954		N, Z		Seismic activity between the hours of 09:05 and 09:27
4 Dec., 1954		N, E, Z		Seismic activity between the hours of 07:37 and 09:12
4 Dec., 1954	iP ipP iS	N, Z N, E N	18:37:46 18:38:47 18:43:03	Epicenter 11°N 61°W Near Trinidad 18:31:07 = 0 Depth - 60 km. $\Delta = 3700$ km. Courtesy U.S.C.G.S.
6 Dec., 1954		N		Seismic activity between the hours of 03:48 and 04:18
10 Dec., 1954	iP eS	N, Z N, E	13:05:41 13:09:57	Epicenter 18.5°N 81.5°W West of Jamaica 13:00:27 = 0 Courtesy U.S.C.G.S. $\Delta = 2650$ km.
11 Dec., 1954	iP iS e	E, Z E, Z N, E, Z	13:03:53 13:08:48 13:09:08	Epicenter 53.5°N 32°W North Atlantic Ocean 12:57:07 = 0 Courtesy U.S.C.G.S. $\Delta = 3600$ km.

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Date	Phase and component		G.M.C.T.	Remarks
13 Dec., 1954	N			Seismic activity between the hours of 04:35 and 04:52
16 Dec., 1954	eP	N,E,Z	11:14:32	Epicenter 39.5°N, 118°W Near Fallon, Nevada 11:07:10 = 0 Courtesy U.S.C.G.S. Δ = 4000 km.
	i	N	11:19:33	
	eS	E,Z	11:19:50	
	eScS	E	11:24:23	
19 Dec., 1954	eP	N,Z	10:34:59	Epicenter 23°S, 66.5°W Jujury Province, Argentina 10:23:40 = 0 Depth - 250 km. Courtesy U.S.C.G.S. Δ = 9000 km.
	ipP	N,Z	10:35:50	
	eScS	N,E	10:44:20	
21 Dec., 1954	iP	N,E,Z	20:03:14	Epicenter 41°N, 124°W Humboldt County, California 19:56:25 = 0 Courtesy U.S.C.G.S. Δ = 3700 km.
	iPP	Z	20:04:23	
	iPPP	N	20:04:39	
	iS	N,E,Z	20:08:19	
28 Dec., 1954	N,E,Z			Seismic activity between the hours of 01:33 and 02:58
29 Dec., 1954	N			Seismic activity between the hours of 12:40 and 13:15
30 Dec., 1954	N			Seismic activity between the hours of 12:02 and 12:30