

THE PENNSYLVANIA STATE COLLEGE
MINERAL INDUSTRIES EXPERIMENT STATION
GEOPHYSICAL LABORATORY

Seismograph Report XV

1945

School of Mineral Industries
State College, Penna., U.S.A.

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

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

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

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

Please address all communications to:

Geophysical Laboratory
Mineral Sciences Bldg.
State College, Penna., U.S.A.

Date	Phase and component	G.M.C.T.	Remarks
1 Jan. '45	i P e e S e L M	01:27:13 01:27:51 01:32:13 01:33:47 01:37:3-	Epicenter: 73°N, 70°W Baffin Bay O = 01:20:48 Courtesy U.S.C.G.S. Δ = 3500 Km
12 Jan. '45	e S e L	19:03:33* 19:18:10*	Epicenter: 34°N, 139°E O = 18:38:36 Δ = 10,900 Km Courtesy U.S.C.G.S.
10 Feb. '45	i i S e i e SS	05:21:39 05:21:56 05:22:19 05:23:08 05:27:56	Epicenter: 41.5°N, 142.0°E O = 04:57:54 Δ = 10,050 Km Courtesy U.S.C.G.S.
19 June '45	e	02:05:30*	Pulses Vague Seismic Activity Continues for more than an hour.
20 June '45	e	01:36:09*	Seismic activity continues for over two hours.
20 June '45			Seismic activity recognizable at 09:52:-
20 June '45	e	17:57:42*	Seismic activity continues for an hour. Epicenter: 45°N, 153°E Kurile Island region O = 17:35:00 Δ = 9,200 Km Courtesy U.S.C.G.S.
27 June '45	e P e S M	13:14:30* 13:19:30* 13:25:5-	Epicenter: 26°N, 110°W Gulf of California O = 13:08:12 Δ = 3,200 Km Courtesy U.S.C.G.S.
27 June '45	M	18:25:3-	Epicenter: 27°N, 112°W Gulf of California O = 18:08:06 Δ = 3,300 Km Courtesy U.S.C.G.S.
30 June '45	e P e S e L M	05:39:00* 05:45:10* 05:48:05* 05:55:4-	Epicenter: 17°N, 116°W 650 Miles off west Coast of Mexico O = 05:31:18 Δ = 4,500 Km Courtesy U.S.C.G.S.

Date	Phase and component	G.M.C.T.	Remarks
11 July '45			Seismic activity (?) recognizable about 00:49:-
2 Aug. '45	e	21:01:02*	Epicenter: 54.2°N, 133.1°W Off British Columbia O = 20:44:48 Courtesy U.S.C.G.S. Δ = 4300 Km
3 Aug. '45	e P e e S e L	04:18:29* 04:20:16* 04:24:10* 04:26:02*	Epicenter: 4.4°N, 82.1°W Pacific Ocean - Off Colombia, South America O = 04:11:18 Courtesy U.S.C.G.S. Δ = 4100 Km
9 Aug. '45			Seismic (?) activity recognizable about 00:01:- It continues for more than an hour.
11 Aug. '45	e S	00:46:08*	Epicenter: 4.4°N, 82.1°W Pacific Ocean - Off Colombia O = 00:33:30 Courtesy U.S.C.G.S. Δ = 4000 Km
21 Aug. '45	i	16:38:25*	
21 Aug. '45			Seismic activity begins about 20:02:-
22 Aug. '45			Seismic activity recognizable about 06:15:-
29 Aug. '45	i PP i e PS e SS M	10:42:56 10:43:19 10:52:39 10:58:50 11:28:1-	Epicenter: 14°S, 166°E New Hebrides Islands O = 10:22:36 Courtesy U.S.C.G.S. Δ = 13,500 Km
1 Sept. '45	e i e e e e	23:06:02 23:06:57 23:13:06 23:16:19 23:18:02 23:24:22	
2 Sept. '45	i P i i S	12:06:02* 12:06:20* 12:15:57*	Epicenter: 34.0°N, 30.0°E Eastern Mediterranean Sea

* Time correction unknown

Date	Phase and component	G.M.C.T.	Remarks
2 Sept. '45	e SKS i e PS e SP e SS	12:16:10* 12:16:19* 12:16:33* 12:16:49* 12:21:26	O = 11:53:54 Depth = about 70 Km Δ = 9100 Km Courtesy U.S.C.G.S.
5 Sept. '45	e (P?) e e e (S?) e e (SS?) M	22:10:24 22:14:20 22:15:29 22:20:54 22:25:03 22:26:34 22:52:15	Beginning of pulses vague Δ est. = 9,900 Km
9 Sept. '45	e (?) e (?) e (?) e (?) M	04:23:13 04:35:01 04:36:44 04:38:13 05:13:--	Beginning of pulses questionable.
13 Sept. '45	i P i i S e	11:28:42 11:29:04 11:38:06 11:38:27e	Epicenter: 34°S, 70°W Central Chile, South Am. O = 11:17:00 Depth = 90 Km Δ = 8,300 Km Courtesy U.S.C.G.S.
14 Sept. '45	e PP i S e SS	02:13:06 02:18:17 02:21:33	Epicenter: 7.0°N, 38.8°W Mid Atlantic Ocean O = 02:02:24 Courtesy U.S.C.G.S. Δ = 5,400 Km
23 Sept. '45			Seismic activity recognizable about 16:27:--
26 Sept. '45	e P e e S	14:32:20* 14:33:29* 14:36:40*	Epicenter: 18.9°N, 62.4°W East of Puerto Rico O = 14:26:48 Δ = 2,900 Km Courtesy U.S.C.G.S.
28 Sept. '45	e P e PP e ITP e S e L M	22:31:10 22:32:28 22:32:47 22:36:57 22:38:03 22:44:3-	Epicenter: 40.6°N, 126.9°W Off Northern California O = 22:24:05 Δ = 3900 Km Courtesy U.S.C.G.S.
7 Oct. '45	e P i e	13:29:28 13:29:40 13:31:32	Epicenter: 12.3°N, 89.0°W Off Coast of San Salvador O = 13:23:24

*Time correction unknown

Date	Phase and component	G.M.C.T.	Remarks
7 Oct. '45	i S i M	13:34:31 13:35:00 13:43:24	$\Delta = 3250$ Km Courtesy U.S.C.G.S.
9 Oct. '45	e P e i S i e SS	14:49:12 14:49:54 14:59:30 15:00:12 15:04:58	Epicenter = 43° N, 150° E East of Hokkaido Island, Japan O = 14:36:36 Courtesy U.S.C.G.S. $\Delta = 9,500$ Km
11 Oct. '45	e P e PP i S	16:58:44* 16:59:42* 17:03:34*	Epicenter = 17° N, 97° W Caxaca State, Mexico O = 16:52:42 Courtesy U.S.C.G.S. $\Delta = 3200$ Km

*Time correction unknown

During the period covered by this report, there was one horizontal seismograph operating intermittently. It was of the Galitzin type, and was sensitive to the NE-SW components of horizontal motions. The instrument recorded photographically, the distance from mirror to recording drum being 1 meter and the recording speed 1.5 cm/min. No record was kept of the instrumental constants.

The time was controlled by a Spindler and Hoyer clock, which was compared daily with time signals from the U.S. Naval Observatory, Arlington, Va. The clock movement was satisfactory enough to presume a time accuracy of ± 1 sec. Unfortunately no systematic record was kept of the time corrections during 1945, and for some earthquakes the time correction is unknown. Such times are marked in the bulletin with an asterisk (*).

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