

The Pennsylvania State College Mineral Industries Experiment Station



ACKNOWLEDGED

SEISMOGRAPHIC REPORT VI

1940

SEISMOLOGICAL OBSERVATORY.

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State College, Pa.

We thankfully acknowledge the receipt of the following publications and reports during January-June, 1940.

Apia	Oct.-Dec. 1939; Jan.-Mar. 1940
Bur. Centr. France	Feb., Mar. 1940
Bur. Centr. U.G.G.I.	Feb., Mar. 1940
Florissant	June-Oct. 1939
Fordham	Oct.-Dec. 1939; Jan.-Mar. 1940
Fort de France	July-Dec. 1939
Georgetown	Seism. Desp. Jan.-Mar. 1940
Hamburg	July-Dec. 1939
Harvard	1937, 1938, 1939
Helgoland	July-Sept. 1939
Helwan	Aug.-Dec. 1939
Jesuit Seismol. Assoc.	Prel. Bulls. 29, 37-49, 51/1939 1, 4, 5, 8, 10/1940 #37-39, Jan.-Sept. 1936
Kjobenhavn	1937; Oct.-Dec. 1939; Jan.-Mar. 1940
Ksara	July-Dec. 1939
La Plata	Jan.-May 1939
Little Rock	July-Dec. 1936
Malaga	Oct.-Dec. '39; Jan.-Apr. 1940
Manila	July-Oct. 1939; Jan.-Mar. 1940
Melbourne	Nov., Dec. 1939; Jan.-Apr. 1940
Ottawa and aux.	Feb., Mar. 1940
Paris	Oct.-Dec. 1938; Prel. #14-16
Pasadena	Jan.-April 1940
Perth	Jan.-April 1940
Pittsburgh	1939
Reykjavik	Oct.-Dec. 1939; Jan., Feb. 1940
Riverview	May-Sept. 1939
St. Louis	#14, Jan.-June 1936
Scoresby Sund	Feb., Mar. 1940
Strasbourg (Clermont-Ferrand)	1938; Dec. 1939; Jan.-May 1940
Switzerland	1938; Jan.-May 1939
Tananarive	Mar. 23, 1939 - Dec. 31, 1939
Uccle	July 1938 - June 1939
Upsala	Aug.-Dec. 1937; Jan.-May 1938
U.S.C.G.S.	P 93-98; S56
Wellington and aux.	Apr.-Dec. 1938; Jan.-Dec. 1939; Jan.-Mar. 1940
Williamstown	

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 N-45-E Component, $T_0 = 6$ sec.

Date	Phase	G. C. T.			T	Remarks
		h.	m.	s.		
1940						
I/6	e	14	24	45		
	e		32	21		
	e(L)	15	01.7			
	M		10		18	
I/17	e	01	38.9			
	eL	02	03			
I/24		05	01.0-07.5			Strange disturbance standing out from heavy microseisms.
I/28	e ?	08	47	01		
	e		48	56		
	e		50	19	2	
	M		35		2	
	F		55			
II/7	e	17	27	25		
	i		36	02	5	
	M		52			
II/8	M	08	26.5			
II/20	i	03	04	23		
	M		28.0			
II/29	e	16	19	37		
	i			53		
III/6	e	00	18	28		
	i		19	05		
III/6	e	06	15	48		
III/9	e	05	29			
III/21	e	14	12	37		
	i			47		
III/14	e	18	42	25		
	i			39		
III/14	i	20	05	13		
	i			43		
III/27	e	12	42	16		
	e		50	50		
	e		53	47		
	e		58	39		
	i	13	00	23		
	e		02	21		
	e		03	27		
	eL		07.5			
	M		13.5		15	
III/28	e	16	07	26		
III/28	e	17	55.6			
III/31	e	17	03	17		
IV/16	eP	06	18	46		
	i			52		
	i		19	20		
	i		20	03		
	is		27	45		
	i		28	44		
	e	06	35.7			
	eL		39.4			
	M		44.9		20	
	C					Merging with the following.

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 N-45-E Component, $T_0 = 6$ sec

Date	Phase	G. h.	C. m.	T. s.	T	Remarks
1940						
IV/16	iP	06	54	08		
	es	07	00	11		
	eL		15.4			Merging with the following.
IV/16	iP	07	59	58		
	i	08	03	02		
	F		15			
IV/23	i	21	37	55		Disturbance ?
V/3	i	21	46	25		Blast ?
V/4	e	07	55	11		
	i			37		
	e		37	59		
	i		44	12		
	eL		58.5			
	M					Not pronounced.
V/5	e	02	12	21		
	e			40		
	e		14	20		
V/11	e	14	14	45		
V/17	i	02	06	24		
	e		08	17		
	eL		19.7		18	
V/19	e	04	43	12		Destructive in Imperial
	e		44	06		Valley, California.
	e		45	13		
	e		46	15		
	e	04	47	12		
	e		48	15		
	e		49	22		
	e		50	29		
	e		51.7			
	i		52	54		Remainder lost because recording mirror is moved off to one side.
V/19	e	15	29	08		
	e		35	34		
	i		38	33		
V/24	iP	16	42	59		
	i		43	05		
	i			26		Mirror off.
V/28	e?	10	01	12		
	eL		39			
V/29	eP	02	05	38		
	e?		06	34		
	e		10	34		
	i		11	29		
	i(?)			48		
	e		13	22		
	e		14	32		
	i		15	36		
	M		19.5			

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 N-45-E Component, $T_0 = 6$ sec.

Date	Phase		G.	C.	T.		Remarks
			h.	m.	s.		
1940							
VI/3	eP		18	11	35		
	e			12	29		
	e			15	19		
	i		18	15	32		
	e			16	40		
	e			18.3			
	i			21	21		
	eL			22	02		
	F			57			
VI/7	i		23	21	50		Blast.
VI/10	i		14	00	05		Disturbance ?
	i			01	07		
VI/17	i		10	37	40		
	i				53		
	i			38	26		
	i			39	55		
	e			41	09		
	e			46	21		
	e			47	45		
	e(L)			58	41		
	M		11	01.4		10	
	C					8	
	F		12				
VI/18	eP(?)		18	50	00		Disturbed by microseisms.
	i				34		
	i			53	02		
	i			59	05		
	eL		19	13.4			
	M						Not pronounced.
VI/23	e		21	55	30		Preliminaries very weak, beginning uncertain.
	i		21	57	31		
	i				58		
	i			58	23		
	i		22	00	23		
	M			02.5		8	

Macroseismic Report: On May 28, 1940, several inhabitants of Harrisburg, Pa., reported having felt a slight earthquake around 20 o'clock G.M.T. The records of our seismograph, as well as those of the Franklin Institute, Philadelphia, Pa., according to a notification from the U. S. Coast and Geodetic Survey, failed to disclose any disturbance.

H. Landsberg

The Earthquake Station of The Pennsylvania State College

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

$$\Phi = 40^\circ 48' \text{N.} \quad \Lambda = 77^\circ 52' \text{W.} \quad H = 390 \text{ m}$$

Geocentric coordinates (according to Gutenberg and Richter):

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

Instrumental Equipment: The Station has one horizontal seismograph of the Bosch-Omori type with 5 kg mass which was designed and constructed at the School. The pendulum is orientated N45E and records photographically, the distance from mirror to recording drum being 1 m and the recording speed 1.5cm/min. The instrument constants are:

$$T_0 = 6 \text{ sec.} \quad E : 1 = 4 : 1 \quad V = 120$$

Time Service: The time is controlled by a Spindler and Hoyer clock, which is compared twice daily with the NAA-Time signals from the U. S. Naval Observatory, Arlington. The clock movement is satisfactory enough to warrant an accuracy of time within one second.

Communications: Please address all communications to the

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