The Pennsylvania State College
Mineral Industries Experiment Station

SEISMOGRAPHIC REPORT IV

1938 (Jan - June only)

School of Mineral Industries
State College, Pa.

PENNSYLVANIA'S SCHOOL OF MINERAL INDUSTRIES AND EXPERIMENT STATION

Dedicated to the exploration, development, and conservation of Pennsylvania's natural mineral resources, and their preparation, processing, and efficient utilization.

FIELD OF WORK

Geology, Mineralogy, Geography
Petroleum and Natural Gas
Mining and Geophysics
Mineral Economics
Fuel Technology
Metallurgy
Ceramics

DIVISIONS OF SERVICE

Resident Instruction
Extension Instruction
Correspondence Instruction
Mineral Industries Research

We thankfully acknowledge the receipt of the following publications and reports during January-June 1938.

Apia	Oct.-Dec. 1937; Jan.-March 1938
Berkeley and aux.	Oct.-Dec. 1936; Jan.-Dec. 1937
Budapest	1920-1925; 1933-1935; Hungarian Earthquakes 1933-35 B. Simon, Varpaloton earthquakes
Cartuja	July-Dec. 1937
Denver	Dec. 1936; Jan.-Sept. 1937
Florissant	June 1937
Fordham	Jan.-Apr. 1938
Fort de France	July-Dec. 1937; Jan.,March 1938
Hamburg	Aug. 26 - Dec. 31, 1937; Jan. 1- Apr. 9, 1938
Helwan	Nov., Dec., 1937; Jan.-Apr. 1938
Hukuoka	1937
International Seismol. Summary	Apr.-Dec. 1932
Ivigtut	1934
Jesuit Seismol. Assoc.	Prel. Bulletins #23-32/1937; 1-14/1938
Kobenhavn	Apr.-Dec. 1935
La Plata	Nov., Dec., 1937; Jan.-Mar., 1938
Little Rock	May, 1937
Manila	Oct.-Dec., 1937; Jan.-March,1938
Melbourne	Oct.-Dec. 1937; Jan.-Mar. 1938
Ottawa and aux.	Dec. 1937; Jan.-Apr. 1938
Pasadena	Apr.-June 1937
Praha	Oct.-Dec. 1937; Jan.-Mar. 1938
Reykjavik	Jan.-Dec. 1937
Riverview	Nov., Dec. 1937; Jan.,Feb. 1938
St. Louis	June 1937
Stara Dala	Jan.-Dec. 1937
Switzerland	Oct.-Dec. 1937; Jan.-May, 1938
Tananarive	June-Oct. 1937
Ueele	July-Dec. 1937
U.S.C.G.S.	June-Nov. 1936; Jan., Feb. 1937
Wellington	Bulletins #122, 125, 127-129, 131-133, E68, E69, E72, E80, E81
Weston	June-Aug. 1937
Williamstown	June-Dec. 1937; Jan.-March 1938

Geophysical Laboratory

State College, Pennsylvania

State College, Pennsylvania, N-S Component T_o = 6 sec.

Date	Phase	G.C.T. h.	m.	s.	T sec.	Remarks
1938						
Jan. 2	iP	22	33	35		
	i			57		
	e		35	22		
	e			30		
	e		36	55		
	e		38	51		
	eL		47	11	12	
	M		52			
	F	23	20			
5	e	17	42	04		
13	e?	17	57	14		Wave group of questionable origin.
14	e?	07	31	46		Strong microseisms. " " "
14	i	15	02	13		" " "
23	iP	08	43	57		Δ = 7500 km
	i		44	09		
	e		48	45		
	e		52	47		
	e	09	06.0			
	F		35			
24	e	10	50	29		
	e		56.7			
	e	11	05.9			
	eL	11	30.6			
Feb. 1	e?	19	23	47		Δ = 15000 km (New Guinea)
	i		26	27		
	i		27	28		
	i		28	17		
	e	19	33	16		
	e		36	30		
	e		38	28		
	eL		44	05		
	M	20	14.1		24	
	F	21	35			
5	iP	02	30	28		Δ = 4200 km
	i			31		
	iPP		31	39		
	iS		36	00		
	i		36	42		
	eL		40	22		
	F	03	19			
15	e	03	43	38		One wave group only.

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Date-1938	Phase	G.C.T. h.	m.	s.	T sec.	Remarks
March 22	e	15	35	11		
	i			28		
	e		38	15		
	e		39	20		
	e		40	29		
	eL		41	45		
	M		45.9		8	
	C				8	
	F	16	35			
22	e	22	45	20		
	e		47	26		
	e			49		
	e		48	35		
	M		51.4		8	
	F	23	09			
April 8	e	01	50	29		
	e	02	01.6			
	e		10	51		
13	iP	02	56	20		
	i			25		
	i			29		
	i			49		
	i		57	23		
	e		58	42		
	e	03	04	58		
	e		06	43		
19	iP	11	11	27		$\triangle$ = 8700 km Destructive in Central Anatolia. 200 killed in Kirshehr.
	i			35		
	e		21	26		
	eL		38.6			Not prominent.
	M					
	F		54			
22	e	04	33.5			
	e		35.0			
	M		36.4		6	
	F		57			
25	e	17	20	28		
	M		26.0		8	
	F		39			
25	e	23	17	48		Disturbance, seismic origin questionable.
	i		29	29		
	e		36	42		
	e		41	22		
	e	23	49	42		
	i		52	04		

State College, Pennsylvania, N-S Component T_o = 6 sec.

Date		Phase	G.C.T. h.	m.	s.	T sec.	Remarks
1938							
May	3	iP	02	21	23		△ = 3200 km
		e		22	01		Destructive in State
		e		23.2			of Guerrero, Mexico.
		e		27	34		
		M					Not prominent.
		F		45			
	6	e?	18	23	33		Uncertain because
		i?		28	27		of traffic dis-
		e		29	45		turbance.
		M		39.2		9	
		F		47			
	11	e	14	51	04		△ = 3500 km
		e		52	03		
		e		56	35		
		e		59.7			
		M	15	09.7		9	
		F		55			
	12	e?	16	01	08		Disturbed by build-
		e	16	05	48		ing activities.
		e	16	10	46		
		i	16	11	37		
		e		17	43		
		eL		35.0			
		M		48.0		20	
		F	17	55			
	19	i	17	30	48		
		i		31	43		
		e		40	56		
		e		43	18		
		e		55.8			
		M	18	21		24	
		F	19	15			
	23	eP	07	32	05		Destructive near
		ePP		36	08		Takahagi, Honshu,
		i		42	27		Japan.
		e		43	07		
		eSS		50.6			
		eL		09		18	
		M		24.1			
		F	09	00			

State College, Pennsylvania, N-S Component T_o = 6 sec.

Date		Phase	G.C.T. h.	m.	s.	T sec.	Remarks
1938							
May	28	iP	10	21	00		
		e		21	40		
		ePP		22	14		
		EPPP		22	41		
		eS		26	42		
		eSS		29	49		
		eL		30	05		
		eM		35.7		9	
		F		49			
	30	eL	15	55.3			
June	10	e	10	18	58		
		e		23	34		
		e		32	11		
		eL	10	49.8			
		M	11	04.5		18	
		F	11	30			
	10		16	22			Records interrupted for an indefinite period because of remodeling of seismograph vault.

H. Landsberg

The Earthquake Station
of
The Pennsylvania State College

Locality: The Station is located in an unused elevator shaft in 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:

$\Phi = 40°48'N.$ $\Lambda = 77°52'W.$ $H = 390$ m

Geocentric coordinates (according to Gutenberg and Richter):

$A = 40°36'N.$ $\Lambda = 77°52'W.$ $H = +3$ 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 NS and records photographically, the distance from mirror to recording drum being 1 m and the recording speed 1.5cm/min. The instrument constants are

$T_o = 6$ sec. $E:1 = 4:1$ $V = 120$

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

Geophysical Laboratory
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