The Pennsylvania State College
Mineral Industries Experiment Station

SEISMOGRAPHIC REPORT III

1937

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, 1937.

Apia	Oct.-Dec., 1936; Jan.-March, 1937
Bergen	1935, 1936
Berkeley	Jan.-June, 1936; Vol. VI, #1 and 2
de Bilt	1934
Budapest	1932, 1936; Macroseism. Report 1932, 1936; Publ. Ser. C #1
Canada	Dec., 1936; Jan.-Apr., 1937
Cartuja	June-August, 1936
Florissant	Aug.-Nov., 1936
Hamburg	Sept. 21, 1936-Feb. 17, 1937
Helwan	Dec., 1936; Jan.-April, 1937
Ithaca	1936
J. S. A.	1936, Bull. 29; 1937, Bulls. 1-9
Kobenharn	Oct.-Dec., 1934; Jan.-March, 1935
Ksara	1934
La Plata	Nov., Dec., 1936; Jan.-March, 1937
Little Rock	June-Nov., 1936
Manila	Oct.-Dec., 1936; Jan.-March, 1937
Melbourne	Oct.-Dec., 1936; Jan.-March, 1937
Oxford	Internat. Seism. Summary Oct.-Dec., 1931; Jan.-March, 1932
	Jeffreys, Table for the Near Earthquake Pulses
Pasadena	Oct.-Dec., 1936
Prague	Oct.-Dec., 1936; Jan.-March, 1937
Reykjavik	1936
Riverview, N.S.W.	Nov., Dec., 1936; Jan.-Apr., 1937
Scoresby Sund	July-Dec., 1934; Jan.-Dec., 1935
St. Louis	Oct., 1936
Switzerland	Nov., Dec., 1936; Jan.-May, 1937
Uccle	July-Dec., 1936
U.S.C.G.S.	July-Sept., 1935
Wellington, N.Z.	Bulls. E 46-49; E 55-60; 106 II; 108; 111-114; 116
Weston	Jan., Febr., 1937
Williamstown	March, 1937
Württemberg	Erdbebendienst, 1935

GEOPHYSICAL LABORATORY

State College, Pennsylvania

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

Date 1937	Phase	G.C.T. h	m	s	T	Remarks
Jan. 7	e	13	45	30		
	e		48	06		
	e	14	02	12		
	e		11.6			
	eL		19.5			
	M		28.3		18	
	C				16-20	
	F	15	06			
19	e	22	37	09		
	M		38.8		8	
	F		43			
25	e	07	02	03		△ >13000 km
	e		10	31		
	eL		27	22		
	F	08	20			
Febr. 7	eL	04	59.1			
	M	05	02			
21	eP	07	15	21		
	i			58		
	eScPcS		25	49		
	eSSS		39	29		
	eL		43.2			
	e		50	15		
	M		59.2		20	
	C				16	
Mar. 2	iP	14	48	58		epicenter in Ohio
	i		49	28		△ = 450 km
	i		50	04		
	F		57			
9	iP	00	45	56		Same focus as preceding
	i		46	20		
	i			54		Later lines confused
	F		58			
9	e	15	47.9			Record disturbed by presence of person in recording room
	e		52			
	M	16	01.3			
14	i	12	06	30		
	i		07	01		
	e		15	21		Surface waves not prominent
25	i	17	05	26	2	
	i		06	09	12	
	C				6	
	F		18			

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

Date		Phase	G. C. T. h	m	s	T	Remarks
April	5	e	07	19.0			One wave group only
	16	eP	03	25	43	2	= 12000 km
		epP		27	32	8	d = 300 km
		ePPP		30	05		
		eS		35	22		
		eSS		39	20		
		eL		51.2			Large surface waves
		F	04	11			missing
	29	iP	19	02	24		
		i			31		
		e		09.7			
		eL		22			
		F		36			
May	4	eL	05	35.0		12	
	21	e	13	18.8			
June	8	i	22	38	59		
		e		40	48		
		i		42	21		
	21	iP	15	21	56		Seconds not certain
		i		22	38		Δ = 5300 km
		eS		28	44	4	Felt in Peru
		e		32	54		
		M		43.1		18	

H. LANDSBERG

We thankfully acknowledge the receipt of the following publications and reports during July-December 1937.

Apia	April-Sept. 1937
Berkeley and aux.	July-Sept. 1936
Cartuja	Oct.-Dec. 1936
	Met. Resumen 1936
Denver	1936
Florissant	Dec. 1936; Jan.-May 1937
Hamburg	Feb. 21-Aug. 24,1937
Harvard	July-Dec. 1935; Jan.-Dec. 1936
Helwan	May-Oct. 1937
Hukuoka	1936
J. S. A.	Prel. Bull. 10-22, 1937
La Plata	Apr.-Oct. 1937
	Contrib. Geophys. Vol. V No. 1-3
Little Rock	Dec. 1936; Jan.-Apr. 1937
Manila	Apr.-Sept. 1937
Melbourne	Apr.-Sept. 1937
Ottawa and aux.	May-Nov. 1937
Pasadena and aux.	Jan.-March 1937
Praha	Apr.-Sept. 1937
Riverview	May-Oct. 1937
St. Louis	Nov., Dec. 1936; Jan.-May 1937
Switzerland	June-Sept. 1937
Tananarive	Oct.-Dec. 1936; Jan.-May 1937
Ucele	Jan.-June 1937
U.S.C.G.S.	Oct.-Dec. 1935; Jan.-May 1936
Upsala	Jan. 1934-June 1937
Wellington	Bull. E61, 62, 64-67; 119, 123, 124, 126
Weston	March-May 1937
Württemberg	Jan.-Dec. 1936

Geophysical Laboratory
State College, Penna.

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

Date	Phase	G.C.T. h	m	s	T	Remarks
1937						
July 9	e	13	27	38		
	e		31	17		
July 11-Aug.16						No records taken
August 21	eL	13	11.9			Begin lost during
	M	13	21.3		16	change of sheets
Sept. 4	eP	18	58	37		Δ = 7100 km
	i		59	01		
	i			23		
	i			43		
	e	19	07	05		
	i		08	35		
	eL		19.5		4	
	M		25.0			Rather inconspicuous
	F		54			
15	eP	23	54	51		Δ = 3300 km
16	e	00	00	11		
	e		01	40		
	eL		06.8			
	M		08.9		14	
23	eP'	13	26	33		Δ = 13600 km
	ePP		31	42		
	ePKP		39	11		
	ePPP		43	12		
	eL	14	00.1			
	M_1	14	08.1		15	
	F	15	07			
27	e	09	14	53		
	i			59		
	e		15.2			Begin in minute mark
	i		15	16		
	i			20		
	i			30		
	F		20			
28	eP	06	26	55		Δ = 3900 km
	i		27	20		
	e		32	29		
	e		36.2			
	M		40.3		12	
29	e?	11	43	26		Δ = 2800 km
	e		48	19		
	e		50.2			
	e		50	56		
	M		52.7		10	
	F		59			

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

Date		Phase	G. C. T. h	m	s	T	Remarks
1937							
Oct.	5	e	06	37	46		Δ = 3600 km
		e		38	16		
		e		40	08		
		M					
		F	07	00			Not prominent
	6	e	09	53	10	2	Δ = 3200 km
		e		54	07		
		i		57	56	3	
		e	10	00	48		
		M					
		F		20			Not prominent
	24	e	11	44	34		Δ = 5300 km
		e			49		Felt in Alaska
		e		55.1			
		eL		59.8			
		M					
		F	12	12			Not prominent
	27	e	09	52	46		Δ = 50-55°
		e		53	55		Focal depth below
		e		55	20		normal
		i	10	00	15		
		e		00	46		
		M					
		F		08			Not prominent
Nov.	3	iP	15	19	19		
		i			48		
		i		20	17		
		i		21	56		
		e		40	41		
		e		41	42		
		e		43	53		
		e		46	08		
	5	e	08	49	44		
		e		50	08		
		e			59		
	6	e	06	19	45		Δ = 7200 km
		e		21	35		
		e		27	05		
		i		27	48		
		e		41	36		
		M		48.0		20	
	14	e?	11	14	46		Deep focus earth-
		i		15	26		quake, destructive
		i		16	16	3	in northern India
		e			43		
		i		18	44	5	
		e		21	40		
		e		23	25		
		M		25.1			
		F	12	00			

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

Date	Phase	G. C. T. h	m	s	T	Remarks
1937						
Nov. 28	e	05	46	15		
			47	20		
29	e	04	38	22		
	e			43		
	e		44	37		
30	e	07	34	08		
	e		35	05		
Dec. 23	iP	13	24	07		Δ = 3500 km
	i		25	13		
	eS		29	15		
	eL		34	25		
	M		38.5		20	
	F	15				
23	e	23	41	16		Δ = 3500 km
	e		44	29		
	M		47.6		8	
27					6	Strong microseisms
31	iP	17	47	37		Δ = 3500 km
	e		52	39		
	e		54	35		
	e	18	00	55		
	M		07.6		6	
	F		24			

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

$T_0 = 6$ 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

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