The Pennsylvania State College

Mineral Industries Experiment Station

SEISMOGRAPHIC REPORT I

1935

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

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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

address

Geophysical Laboratory
School of Mineral Industries
State College, Pennsylvania,
U.S.A.

The School of Mineral Industries is an integral part of The Pennsylvania State College. The field of work embraces three distinct types of subject matter, namely, (1) the earth sciences, including geology, mineralogy, geophysics, geography, and related subjects; (2) mineral engineering and economics, including mining and quarrying, and petroleum and natural gas production; and (3) mineral technology, including ceramics, metallurgy, fuel technology, and petroleum refining.

In the discharge of its obligations to the Commonwealth, the School has three functions, namely, resident instruction, extension and correspondence instruction, and research. Of these three functional divisions, the last, research, finds expression through the Experiment Station.

As a part of the Experiment Station plan, the School established a seismological station in November 1934, and the station has been carried on a regular schedule since January 1935. The funds available would not permit a large scale undertaking at the start but it is planned to increase and improve the equipment and service from year to year.

This report contains the results of the first half year of observations January to July 1935, and subsequent reports will be issued semi-annually.

The School will be glad to exchange seismological reports and publications with other stations in this country and abroad. The invaluable advice and assistance of the U.S. Coast and Geodetic Survey in carrying on our seismological studies is gratefully acknowledged.

Edward Steidle, Dean
School of Mineral Industries

State College, Pennsylvania
July 1,1935

Placed on list
L.W.M.

Mr. Hayes,
Do you want this station
put on outgoing Seis. list.
L.W.M.

Mr. Munro. Yes; please put on main list not preliminary list. RLH

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

Date	Phase	G.C.T. h	m	s	T	Remarks
1935						
Jan. 2	eL	23	00,1			
	M		02,7		10	
23	M	8	02,5		20	
Feb. 22	e (P)	17	17	14		Uncertain
	i		26	15		
	e		34	12		
	eL		40			Δ = 7550 km
	M		51,7		14	
	F	18	20			
Apr. 8	e	3	56	54		
	i	4	01	16		
	eL		05,5			
9	M	12	44,2			
18	e	22	28	14		
	e			25		
	i			53		
	i		30	52		
19	iP	15	34	55		
	e		44	11		
	e		47	01		
	e		52,5			
	e		55	46		
	M1	16	03,3		20	
May 30	i	21	58			Seconds uncertain
	i	22	04,5			
	e		06,2			
	eL		22,9			
	M		36,3			
21	-	5 00	-5	25		Long waves
June 16	eL	10	42			
25	i	0	08	46		
	eL		15,1			Begins during change
	M		25		12	of sheet
29	eP	7	00	44		
	e		02	23		
	i		06	30		
	i			44		
	e		07	17		
	M	08,7				
	C				10	
	F		10			

H. LANDSBERG

We thankfully acknowledge the receipt of the following publications and reports during September - December, 1935.

Bergens Museum	Bulletin 1934
University of California	1933, Apr. 1-Sept.30; Vol. IV, 2
Carnegie Inst., Seism. Lab., Pasadena	Bull. Aug.-Oct. 1935
Observ. Cartuja, Granada	Bull. Apr. and May 1935
De Bilt	Seism. Registr. 1932
Hamburg	Jan. 1-Oct. 10, 1935, No. 1-20
Harvard University	Bull. 3 and 4, July 1, 1934-June 30, 1935
Helwan Observatory	June-Sept., 1935
Manila, P. I.	Sept. and Oct. 1935
Univ. Observatory Oxford	Internat. Seism. Summary Constants of Seismol. Observat. Catalogue of Earthquakes 1918-1924 and 1925-1930
Riverview Obs., Sydney	Jan. 1 - Oct. 31, 1935

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Mr. Hayes
Do we exchange?
ERG
Feb 28

Dr. Adams Yes
R.H.

This station was placed
on Main. Seis. List
on 1/12/35.

Ack'd

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

Date	Phase	G. C. T. h	m	s	T	Remarks
1935						
July 26	e	4	40	25		
	M	5	03,6			
29	e	7	55	23		Deep focus earthquake
	e		56	15		
	e	8	01	19		
	i		06	09		
	e			39		
	e		11	26		
	M		17,8		12	
	F	9	20			
Aug. 1	iP	16	14	39		△ = 3500 km.
	iS		19	32		Bagaces, Costa Rica.
	e		22	21		
	M		25,8		14	
	F		50			
22	e	20	42			
	M		46			
Sept. 4	iP	1	36	19		△ = 5200 km
	i		37	06		Alaska
	iS		43	16	5	
	e?		47,1			
	e		51	25		
	e		52	41		
	i			50		
	i		53	05		
	M		55,2			
	C				8	
	F	2	15			
4	eL	2	40			
	M		47,5			
11	iP	14	16	44		△ = 9500 km
	i		17	18		
	iPP		20	10		
	iS		27	10		
	e		27,8			
	eL		45,8			
	M	15	0,0		18	
	C				16	
	F		30			
15	i	4	11	26		Seismic origin questionable
15	i	14	21	13		Very weak record
	e		24	01		
18	e	5	04	55		
	e		15	45		
	M		20,6		20	

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

Date	Phase	G. C T. h	m	s	T	Remarks
1935						
Sept. 20	e?	2	09	11		△ = 14000 km.
	e?		13	00		
	e		21	02		
	e		26	08		
	e		30	03		
	eL		44	32		
	M		53,2		22	
	C				18	
	F	4	10			
20	eL	6	24,5			
	M		38,3		20	
24	e?	22	23	31		△ = 4100 km.
	e?		25	36		
	e		28	51		
	e		31	32		
	e		32	05		
	e		32	41	10	
	e		33	35	6	
	M		34,9		10	
Oct. 4	e	14	46	15		
	e		49	12		
	e		56	27		
	e	15	02	01		No surface waves?
17		11 51	- 12	02		Long waves
19	e?	4	59	45		Earthquakes with
	e	5	00	41		damages at Helena
	e		01	08		(Montana).
	i			16	3	
	i			25		
	i		02	00		
	i			08		
	i			45		
	i		03	03		
	F		10			
31	e	18	49	19		Helena, Montana
	e			39		
	e		50	17		
	e			50		
	i			58		
	i		51	06		
	i			16		
	i			37		
	C				5	
	F	19	00			

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

Date	Phase	G. h	C. m	T. s	T	Remarks
Nov. 1	i	6	05	05		Felt in State College,
	i			06		Pa., with approximate-
	i			16		ly intensity IV
	i			47		Mercalli-Sieberg.
	i		06	11		Recording mirror over-
						turned and rest of
						record lost.
2	i	14	34	05		Felt in State College,
	i			10		Pa., intensity about
	i			19		II/III Mercalli-Sieberg.
	i			28		Aftershcok of the pre-
	i			35		ceding quake.
	i			47		
	i		35	05		
	F		45			
4	e	4	12	33		Aftershock of Nov. 1,
	i		13	09		1935.
	F		18			
4	e	10	28	46		
	i		29	19		Aftershock of Nov. 1,
	i			29		1935.
	i			52		
	F		40			
4	i	14	09	14		Aftershock of Nov. 1,
	i			40		1935.
	i		10	02		
	i			30		
	i			38		
	C					Merging with the follow-
						ing.
4	i	14	17	10		
	i			27		
	i			38		Aftershock of Nov. 1,
	i		18	04		1935.
	i			17		
	F		32			
10	e	18	35,5			Seconds uncertain.
	i		36,1			
	e		40.2			
	i		41,6			
	eL		42,7			
	M		59,3		10	
	F	19	20			

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

Date	Phase	G. h	CC. m	T. s	T	Remarks
Nov. 30	e	3	47,6			
	e		51,4			
	M		58,9		20	
Dec. 14	i	1	39	16		Deep focus quake
	i		40	24		
	i		45	46	3	No surface waves
14	iP	22	11	26		Δ = 3500 km.
	i			46		
	i		12	03		
	iPP			42		
	e		13,2			
	e		16,3			
	eS		16	48		
	eSS		18	30		
	i		20	41		
	eL		22	52		
	M		25,2		22	
	C				10-12	
	F	23	20			
28	e	2	57	45		Δ = 15500 km.
	i		58	01		
	i		58	53		
	e	3	02	34		
	e		08	19	12	
	e		10	20	8	
	e		13,4			
	M	4	01,0		23	
	C				16-18	
	F		50			

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 coordinates are:

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

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

Geophysical Labortory
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