

Instruments: Milne-Shaw Seismographs,  
Photographic Registrations, Two Components.

Cpts.	Mass	T <sub>0</sub>	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm.	5/1/43
E	1 lb.	10 sec.	20 : 1	150	18.1 mm.	29/12/42

Date	Component	Phase	Time G.M.T.			Period	Ampl.		Remarks.
			h.	m.	s.		A	E	
							Δ		
						s.	μ.	km.	
Jan. 7	NE	e	4	14	37	18	4		
	E	eL		20	47				
	NE	eL		20	57				
	E	M		23	50				
7	NE	F		31	-	15	3	Very slight on N-S	
	E	i	22	51	24				
	NE	L		51	43				
	E	M		54	26				
11	NE	F		58	-	20	31	21.3° 2365	
	NE	iP	20	13	10				
	NE	iS		17	0				
	NE	L		18	0				
	E	L		18	50				
	N	M		20	36				
24	NE	M		20	48	15	4	Obscured on N-S by shaking of building.	
	E	F		37	-				
	E	eL	21	20	18				
27	NE	M		29	1	25	13		
	E	F		50	-				
	NE	e	3	6	2				
	NE	eL		6	12				
	E	L		13	17				
	NE	L		20	7				
30	NE	L		20	17	20	22		
	NE	M		24	17				
	E	M		30	44				
	E	F	4	16	-				
Feb. 6	NE	i	5	55	57	18	13		
	E	F		32	-				
14	NE	i	3	13	17	18	13		
	E	i		13	38				
	NE	i		14	53				
	NE	L		20	13				
	E	M		21	13				
	E	F		26	-				
14	NE	i	7	38	1	18	11		
	E	L		42	24				
	NE	L		42	31				
	E	M		43	5				
	E	F		53	-				

			h.	m.	s.	σ.	μ.	km.	
Feb. 16	E E E	e eL M F	3	40	10				Light failed on N-S
			4	52 57 13	40 20 -	18	9		
22	NE NE N E E N E E E	1P 1S 1 1 L L L M <sub>1</sub> M <sub>1</sub> M <sub>2</sub> M <sub>2</sub> F	9	33 43 48 49 54 54 57	7 15 46 25 0 56 53			80.7° 8965	
			10	0 9 9	46 56 55	35 35 20 20	246 273 167 78		
24	NE N	e M F	0	2 3 11	5 10 -	20	6		
28	E E N NE N E N	1 1 1 1 1 1 1 P	13	4 7 10 14 15 19 24 43	31 40 18 20 24 41 0 -				Large displacement 2.8 mm. Large displacement 4.3 mm. No regular waves of type usually associated with the maximum phase. Slight.
Mar. 2	N	e P	3 4	48 31	- -				
4	N	e P	20 21	31 0	0 -				
5	N N N N	1 1 eL M F	0 1	53 58 5 6 59	59 11 3 15 -	23	25		Light failed on E-W.
7	N E NE NE NE NE	1P e 1S 1 L M F	3 4	12 17 21 25 32 34 53	19 24 0 20 24 44 -			64.9° 7210	
						E23 15μ	E25 15μ		
9	E E E E E E N	e 1 1 L L M M F	10 11	17 18 25 26 33 45 52 55 55	4 54 19 14 54 54 41 27 -	20 20	39 61		



Mar. 9 Renewals: no real break in N-S record.

	E	i	11	57	54		
	NE	eL	12	16	14		
	N	M		28	19	15	
	E	M		32	9	18	
		F		52	-		
9	NE	e	20	43	0		
		F	21	6	-		
14	NE	e	12	51	5		
		F	13	15	-		
14	N	e	13	28	40		
	E	e		30	5		
	E	M		35	19	19	11
	N	M		35	24	15	3
		F	14	2	-		
14	E	e	17	39	-		
	N	e		40	-		
	E	eL	18	34	-		
	N	eL		37	-		
	E	M		41	44	17	4
		M		49	0	17	6
		F	19	47	-		
15	E	eL	3	47	4		
	N	e		54	-		
	E	M	4	2	19	20	6
		F		40	-		
15	E	e	5	22	14		
	E	eL		34	24		
	N	M		45	20	30	11
		M		46	11	21	9
		F	6	10	-		
21	E	i	21	59	16		
	E	i	22	12	36		
	E	e		26	30		
	N	L		36	-		
		M		44	26	26	33
		F	23	8	-		
22	NE	e	9	17	-		
	E	eL		22	0		
	N	eL		24	30		
	E	M		27	25	23	11
		M		27	55	23	8
		F		38	-		
25	NE	i	3	0	7		
		F		15	-		
25	N	e	18	54	23		
	E	e		55	49		
	E	eL	19	17	10		
	N	L		26	0		
	E	L		27	25		
		M		34	6	18	20
		F		36	38	18	18
			21	1	-		

very slight.

record structure by showing of ...

at



Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12 m.

Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw Seismographs,  
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Date	Components	Phase	Time G.M.T.			Period	Ampl.		Remarks
			h.	m.	s.		A	E	
Apr. 1	E	iP	14	43	19		μ.	In.	
	E	iPP		46	14				
	N	iPP		46	23				
	NE	S		53	39				
	NE	LQ	15	7	29				
	E	LR		13	19				
	N	LR		15	12				
	N	M		21	51				
	E	M		24	19				
	E	F	16	23	-				
5	NE	e	2	11	49	17	40		No definite maximum on N-S
	NE	i		16	1				
	N	i		21	29				
	E	i		22	36				
	E	M		27	39				
	E	F	3	10	-				
6	NE	i	16	26	14	38	485		
	NE	i		32	20				
	NE	i		35	19				
	NE	i		40	54				
	NE	i		47	59				
	NE	L		52	49				
	N	M <sub>1</sub>		56	13				
	E	M	17	5	46				
	N	M <sub>2</sub>		8	39				
	N	F	19	39	-				
7	E	e	14	6	30				Obscured on N-S by microseisms.
	E	F		14	-				
7/8	E	i	23	45	45	20	8		
	E	eL	0	10	50				
	N	eL		14	20				
	E	M		20	23				
	N	M		22	47				
	N	F	1	2	-				
9	NE	e	0	0	0				Very slight.
	NE	F		12	-				
9	NE	i	9	7	13	32	14		No definite maximum on N-S.
	NE	i		13	50				
	NE	i		20	25				
	NE	i		36	15				
	E	eL		39	2				
	E	F	10	25	-				
9	NE	e	20	5	0				
	NE	F		18	-				



Apr. 11			h.	m.	s.	s.	u.	km.
	NE	1P	14	58	16			9100
	NE	1S	15	8	30			820
	E	1		13	2			
	N	eSS		13	41			
	N	eSSS		17	11			
	N	eL <sub>Q</sub>		25	41			
	N	L		28	59			
	N	L <sub>R</sub>		32	11			
	N	M		35	29	21	39	
	N	M		38	21	19	61	
	N	FM	17	15	-			
12	NE	1	4	37	21			
	NE	L		58	21			
	NE	M	5	1	31	(E 30	6	
		F		29	-	(N 25	11	
12	NE	e	13	52	10			Slight.
		F		56	-			
12	NE	e	20	26	20			
	NE	1		30	16			
	N	L		32	31			
	E	L		32	54			
	N	M		36	11	20	6	
	N	M		36	21	20	4	
		F	21	5	-			
13	E	e	9	36	20			Slight.
		F		50	-			
13	N	e	13	23	0			
	N	e		24	15			
	N	M		32	52			
	N	M		33	17	35	13	
		F		46	-			
14	NE	e	0	45	-			
		F	2	6	-			
15	NE	e	12	3	30			
	N	e		23	52			
	N	L <sub>Q</sub>		27	42			
	N	L		32	12			
	N	L <sub>R</sub>		33	22			
	N	M		38	22	20	14	
	N	M		40	0	18	4	
		F	13	23	-			
16	N	1	11	48	5			
	N	1		51	52			
	N	e		54	17			
	N	M		55	32	15	5	
	N	M		57	10	12.5	8	
		F	12	10	-			
29	NE	1	15	46	15			
	NE	L	16	3	15			
		F		37	-			
30	NE	e	8	45	29			
	N	M		50	47	15		
	N	M		51	9	15		
		F	9	2	-			

May 1	N E	e P	10	30	10		
2	NE NE	e P		20	24		
2	NE NE N N E E	P 13 1 L M L M P	22	30	14		
3	NE NE N NE E NE E N	1P 1 1 SKS 1 1 L M M P	2	20	0		
7	NE	e P	22	7	12		
22	N E E E N	e L M M P	10	11	40		
22	NE NE NE	1 L M P	22	15	22		
25/26	NE NE NE N E NE NE N E NE NE N E	1P 1 SKS 1 1 1 PFS 1 1 1 L M M P	22	21	42		
26	NE	e P	11	15	0		
28	NE NE E N	1P 1 S 1 P	0	20	24		

76.5°  
8500

90.9°  
10,100

106.5°  
11,830

E 1P N eP.  
This phase very  
well marked on  
N-S.

Slight.

14.5°  
1610

German earthquake.



			h.	U.	H.	•	μ.	km.	
June 2	NE NE	e 1 F	3	15 25 35	0 25				
3	E N N NE	e e M K F	21 22 23	10 11 23 5	22 24 32	20 17			May be two disturbances.
7/8	E E E E N N R	e i i i e L M M F	23 0 1	43 44 45 45 53 7 23 30	40 33 23 30 4 45 50 56	25 19	9 12		
8	NE NE NE NE	i i i i F	1 2	23 27 29 33 32	3 10 30 45				First phase very faint.
8	NE NE E N NE N E	eP 3KKS i i L M M F	20 21	55 7 20 22 23 40 43 22	32 42 36 39 30 52 54	20 20	151 151	98.6° 10,960	
9	NE NE NE N NE N E	1P 3KKS i i L M M F	3 4 7	20 31 35 45 51 3 35	27 24 2 12 10 42 32	22 25	333 652	92.8° 10,310	
13	NE NE NE N E N E N E N	P 1S SS SSS L L M <sub>1</sub> M <sub>1</sub> M <sub>2</sub> M <sub>2</sub> F	5 8	23 33 37 42 47 47 49 52 55 55 20	33 41 42 30 12 56 52 23 21 34	35 30 24 24	183 133 116 68	79.9° 8880	P-phase slight especially on E-W.
13	NE NE NE E E N	i i L L M M F	8 9 10	53 7 13 19 22 23 16	39 13 30 50 53 5	20 20	28 33		Probably S-phase. May be a recurrence of last disturbance.



June 13

E  
E  
E  
E

1  
L  
L  
L  
M  
F

18 1 8  
16 10  
22 0  
25 28  
58 -

20

19

15

NE  
NE  
NE  
E  
E  
E

P  
S  
e  
L  
L  
L  
M  
F

11 22 41  
32 32  
42 18  
47 32  
53 12  
55 35  
12 40 -

22

10

77.5°  
8610

Later phases not well defined on N-S.

15

E  
E  
E  
E  
E

1  
e  
L  
L  
M

13 33 47  
34 12  
43 52  
19 1 32  
10 45

17

34

Appears to merge into another disturbance.

E  
E  
E

e  
M  
M  
F

20 23 42  
34 27  
21 12 30  
35 -

18

4

18

4

Much less marked on N-S.

20

NE  
NE  
NE  
E  
E  
E  
E  
E

1P  
1  
1S  
1  
L  
L  
L  
M  
M  
F

15 38 34  
43 9  
43 24  
45 29  
47 49  
48 38  
51 48  
51 53  
17 25 -

20

110

17

86

28

E  
E  
E  
E

e  
e  
M  
M  
F

15 35 38  
41 33  
56 28  
58 0  
16 15 -

15

13

13

13

29

NE  
E

e  
M  
F

0 49 15  
55 23  
1 0 -

17

Very slight.

29

E  
E  
E  
E

1  
1  
eL  
M  
F

9 14 20  
9 29 29  
58 43  
10 9 23  
30 -

17

This phase doubtful.

Disturbance slight.



Lat. 57°10' N.

Long. 2°6' W.

Height above M.S.L. 12 m.

Lithologic Foundation: Glacial deposit over boulder clay.

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Date	Components	Phase	Time G.M.T.			Period	Ampl. μ.	Δ km.	Remarks							
			h.	m.	s.											
July 4	E N E E N	e i eL eL M M F	10	13	44	20 18	3 2									
				13	54											
			11	27	24											
				29	44											
			5	NE NE E N E	i e L L M M F					21	31	41	17 17	4 4		
											53	24				
22	58	4														
	58	14														
8	E E E N	e eL eL M M F	15	24	14	20 18	4 4									
				33	24											
			11	NE N NE E N E	i i e L L M M F					2	31	12	20 20	19 14		
											35	34				
										4	3	34				
											28	19				
21	NE NE	e M F	2	16	30	14		Slight.								
				24	47											
				31	-											
21	E E E	e L M F	4	53	41	20		Very slight on N-S comp.								
				5	16				46							
				22	6				-							
22	NE NE N E E N	1P 1S L L M M F	7	14	36	16 15	4 4	25.1° 2790								
				19	0											
				22	38											
				23	14											
				24	54											
				25	1											
59	-															



Date	Direction	Station	Time	12	4	32	27	11,000	Remarks
	NE NE NE N NE E N	13KS 1PPS i i L M M F	12 18 21 27 37 49 53 57 5	3 18 3	12 20 30 31 32 37 40 42 45 18	4 3 18 18 38 8 17 28	25		N15 52 36 30" 73M E16 2 8 23" 80M
29	NE NE E N E N N E N	1P 13 L L M <sub>1</sub> L M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	12 20 30 31 32 37 40 42 45 18	3 18 7	12 20 30 31 32 37 40 42 45 18	30 41 10 3 31 20 2 28 -	22 18 18 17	59.80 6645	
30	E NE E N S	i i L L M F	12 20 30 31 34 25	1 2	12 20 30 31 34 25	40 55 35 40 54 -	18		N-S very slight.
31	E	e F	51 17	3 4	51 17	31 -			No trace on N-S.
AUG. 2	E E E E E E	i i i i eL M F	6 11 17 31 59 18 11	1 2 3	6 11 17 31 59 18 11	42 29 33 57 42 52 -	24		
9	NE	e F	55 12	17 18	55 12	40 -			Slight.
10	E	i F	13 27	14	13 27	46 -			Slight.
10	N NE E N E N	e i eL M M F	24 33 43 48 2 3 55	15 16	24 33 43 48 2 3 55	16 16 0 36 24 2 -	16 16		
15	N E	e e F	41 43 7	0 1	41 43 7	37 17 -			Slight.
31	E	e F	52 2	15 16	52 2	25 -			Very slight on N-S.
31	NE NE E	i L M F	32 48 50 15	16 17	32 48 50 15	13 3 53 -	23		No definite max. on N-S.



Date	Components	Phase	Time G.M.T.			Period	Ampl.	Δ	Remarks	
			h.	m.	s.					
Sep. 5	NE	1P	8	58	59					
	NR	1PPP	9	3	23			74.6°		
	E	1S		8	34			8290		
	E	e		12	24					
	NE	eL		26	54					
	E	M		39	47	22	13			
6	E	M		41	14	26	24		N-S affected by shaking of building.	
	E	F	10	10	-					
	NE	eP <sub>c</sub> P	4	1	49			111.3°		
	E	i		6	54			12370		
	N	1PPP		8	49					
	NE	1SKKS		14	9					
	NE	i		17	36					
	NE	1SSS		26	47					
	E	i		32	31					
	E	L <sub>Q</sub>		50	34					
	E	L		53	44					
	E	L <sub>R</sub>		55	14					
10	E	M	5	24	24	20	125			
	E	M		24	50	20	125			
	E	F	6	55	-					
	NE	1S	8	59	21			84.0°		
	E	i	9	8	6			9340		
	E	e		9	46					
	E	L		16	56					
	E	L		17	23					
	E	M		21	3	22	107			
	E	M		24	15	18	93			
	E	F	11	5	-					
	11	E	e	20	41	56				
E		e		46	46					
E		M		50	49	18	4		No definite max. on N-S.	
E		F	21	40	-					
14		E	i	2	20	46				
		E	eL <sub>Q</sub>	3	14	-				
	E	L <sub>R</sub>		27	-					
	E	M <sub>1</sub>		36	26	18	4		Appears to be more than one disturbance.	
	E	M <sub>2</sub>	5	14	42	20	6			
	E	F	6	15	36	18	11			
14	NE	i	7	38	26					
	NE	L	8	1	10					
	E	L		27	0					
	E	L		30	6					
	E	M		43	9	22	23		Portion lost during changing of charts.	
	E	M		43	12	18	4			
	E	F	9	55	-					
	2/23	E	e	23	48	47				
		NR	L		50	57				
N		L	0	43	50					
N		M		51	50	20				
N		F	1	5	2	20				
24	E	e	11	51	49					
	E	L		58	59					
	E	M	12	1	59					
	E	F		4	43	14	10		Effect on N-S indefinite	
26	N	e	14	6	4					
	N	F	3	6	4					

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12 m.

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			h.	m.	s.				
Oct. 19									Slight indication of disturbance on E-W from 21h. 55m. to 24h. 20m. May not be of seismic origin.
22	E E	eL N F	0	16	48	20			Too slight on N-S to be measured.
22	E E E E	1 eL N <sub>1</sub> N <sub>2</sub> F	16	24	48	20 15	7 11		Record missing on N-S.
23	NE E NE NE NE N E E	1P 1 1S FS 1SSS L L M M F	17	34	39			70.4° 7820	
24	E E E	1 L M F	16	25	22	20	6		N-S lamp not functioning.
Nov. 2	E E E E E E	1 1 eL L L M M F	18	34	41				
3	NE NE NE E E E E	1P 1S 1SS 1SSS L L M M F	14	42	22			58.7° 6520	
			15	0	12				
				9	4	17	102		
				10	12	17	220		
			18	34	-				

Date	Components	Phase	Time	h.	m.	s.	Period	Ampl.	Δ	Remarks
Nov. 4	N N	eL M F		7	40	-				No indication on E-W.
				8	58	7	17	4		
16	NE NE NE NE NE NE N N N	1P 1 1 1S 1 1 L M <sub>1</sub> M <sub>1</sub> M <sub>2</sub> M <sub>2</sub> F		8	52	3				84° 9340
					54	46				
				9	0	13				
					2	28				
					8	21				
					23	13				
					30	5				
					45	29	22	160		
					46	39	18	104		
					48	26	18	64		
18	NE N E	1 M M F		7	8	33				Turkish Earthquake very strongly recorded but early parts lost owing to sticking of relay and consequent closing of shutters. Record from 23h.12m.21s.
					12	0	15	3		
					12	5	13	2		
					30	-				
26/27	N E			23	12	24	16	138		
					15	36	16	104		
				2	35	-				
23	E E E	1 eM M F		4	44	46			5	
				5	10	34				
					22	42	20			
28	NE N E NE	eL L M F		17	42	25			N24 E20	
					45	35				
					47	15				
				18	54	43	17			
Dec. 1	NE N NE NE E N	1 1 1 L M M F		6	25	36			18 13	
					35	14				
					35	43				
				7	3	29				
					7	47	28			
					11	4	25			
1	N E NE NE N E NE E N	1 1 1 1 1 L M M F		10	51	15			13 6	
					51	58				
					58	30				
					59	25				
				11	5	25				
					5	35				
					16	-				
					28	25	18			
					29	27	18			
					5	-				

Dec. 2	E E	e e F	2 3 4	54 12 30	29 10 -		
2	NE N E E N	i eL L M M F	5    6	32 42 43 57 58 40	26 20 - 37 36 -	22 17	70 54
3	E NE E E	e eL M M F	5   6	32 37 50 50 10	17 5 30 51 -	20 22	14 17
8	E E E	i eL M F	20	0 18 24 44	37 52 5 -	20	6
13	N E N	i eM F	21  22	45 50 54 25	41 41 24 -	17	
22	N E N E	i i L L F	13	10 13 21 26 59	17 12 15 5 -		
23	NE N E	e L M F	16	16 24 30 51	0 14 12 -	20	7
23	N NE NE E E N N E E	i i i L L L M <sub>1</sub> M <sub>1</sub> M <sub>2</sub> M <sub>2</sub> F	19     20  21	14 21 36 51 58 59 11 13 19 40 57	1 2 18 14 32 38 18 42 15 4 -	22 24 22 20	60 44 63 49
24	N E N	L L M	2  3	52 58 5	12 12 40 -	20	

N-S component  
doubtful through  
shaking of building.

Very slight on  
N-S.

No definite  
maximum.

