

DURHAM UNIVERSITY OBSERVATORY.

READINGS FROM SEISMOGRAMS, JANUARY 1950.

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 : 1, magnification 250.

Position:- Latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

Date	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees	Time of origin T_0
Jan. 1.	iNE	14 46 50				
Jan. 3.	iNE	03 15 40				
	iN	03 16 12				
	iNE	03 16 30				
	MN	03 52	18	31		
Jan. 3.	MN	12 15	18	6		
Jan. 19.	iE	17 37 56				
	iE	17 39 58				
	iE	17 47 09				
	ME	18 03				
Jan. 23.	iN	10 44 30				
	iNE	10 44 45				
	iE	10 44 50				
	iNE	10 44 55				
Jan. 23.	iN	10 57 58				
	iN	10 58 08				
Jan. 25.	ME	12 56	15	2		
Jan. 30.	ME	02 04	20	36		

Any further January readings will be given in the February list.

4th February, 1950.



DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, FEBRUARY, 1950.

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. T = 12 secs., damping ratio 20 : 1, magnification 250.

Position:- latitude 54°46' N, longitude 01°35' W, height above M.S.L. 103 metres.

There have been times when one of the instruments has not recorded.

Date	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees	Time of origin T ₀
3 Feb.	MN	00 17	22	80		
3 Feb.	MN	03 35	22	58		
5 Feb.	MN	03 04	15	4		
14 Feb.	iN	09 37 18				
	iN	09 37 22				
	iN	09 37 28				
	iN	09 37 35				
17 Feb.	iE	14 58 53				
	iN	14 58 58				
	iN	14 59 03				
24 Feb.	iNE	10 37 07				
	iE	10 37 11				
28 Feb.	iN	10 32 11				
	iN	10 34 09				
	iN	10 35 06				
	iN	10 36 21				
	iN	10 41 21				
	iN	10 43 06				
	iN	10 43 43				
28 Feb.	iNE	12 09 54				
	iN	12 10 45				

4th March 1950.



DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, MARCH, 1950.

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 : 1, magnification 250.

Position:- latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

There have been times when both the instruments have not recorded.

Date	Phase & Component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees	Time of origin T_0
Mar. 7	iSNE	02 32 20	18	52		
	iSSN	02 39 54				
	ME	03 12				
Mar. 27	iE	13 24 54	18	10		
	ME	13 52				
Mar. 27	ME	22 30	19	6		
Mar. 29	eNE	18 11 15	28	9		
	ME	18 47				

DURHAM UNIVERSITY OBSERVATORY
READINGS FROM SEISMOGRAMS, April 1950.


Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 : 1, magnification 250.

Position:- latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

There have been times when both the instruments have not recorded.

Date.	Phase and component.	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin To
1 April	iNE	20 50 30				
	iNE	20 58 30				
	iNE	21 05 12				
	iNE	21 10 14				
	iNE	21 10 34				
4 April	iNE	19 01 48				
	iE	19 04 29				
	iE	19 05 02				
	iE	19 08 14				
	iE	19 08 24				
	iE	19 08 54				
	ME	19 23	12	69		
5 April	iNE	13 58 19				
12 April	iNE	16 29 36				
13 April	eE	12 02 37				
	MN	12 04 30	10	2		
15 April	ME	15 40	16	2		
20 April	MN	10 41	18	2		
20 April	iN	17 28 06				
	MN	17 36				
26 April	ME	07 52				

Any further April readings will be given in the May list.

DURHAM UNIVERSITY OBSERVATORY
READINGS FROM SEISMOGRAMS, MAY 1950.


Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 : 1, magnification 250.

Position:- latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

There have been times when both the instruments have not recorded.

Date.	Phase and component.	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T_0
4 May	iNE	15 16 46				
	iNE	15 16 55				
9 May	eN	06 20 51				
	iE	06 23 56				
	ME	06 49	17	2		
9 May	ME	09 43				
9 May	iPE	11 26 41				
	iSE	11 31 19			27	11 21 05
	ME	11 49	16	26		
10 May	ePNE	23 51 48				
	iSNE	24 01 39			78	23 59 31
	ME	24 25	17	22		
17 May	iNE	18 32 53				
	iN	18 33 06				
	ME	19 38	23	9		
19 May	iNE	02 57 53				
	ME	04 08	20	6		
25 May	iNE	18 54 00				
	iNE	18 54 11				
	iNE	18 59 44				
	iNE	19 00 28				
	ME	19 32	25	11		
26 May	eNE	01 36 45				
	iN	01 36 57				
	iNE	01 37 02				
	iN	01 37 12				
	iE	01 37 18				
	iE	01 37 23				
	ME	02 50	20	21		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, JUNE 1950.



Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. T = 12 secs., damping ratio 20 : 1, magnification 250.

Position:- latitude 54°46' N, longitude 01°35' W, height above M.S.L. 103 metres.

Date	Phase and Component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T ₀
<u>Correction to May list:-</u> 10 May T ₀ should read 23 39 51.						
7 June	iPNE	17 05 03				
	ipPE	17 05 36				?deep.
	iN	17 15 22				
	iSNE	17 16 16			98	16 51 44
	iE	17 16 26				
8 June	iE	16 33 05				
	ME	17 07	17	7		
11 June	eE	22 42 42				
	iE	22 56 52				
	ME	23 49	20	3		
12 June	iNE	15 22 44				
	iNE	15 22 49				
17 June	MN	23 31	20	2		
19 June	eE	12 56 06				
	iE	13 02 15				
	MN	13 35	32	30		
21 June	iNE	07 15 20				
	MN	08 23	15	14		
24 June	iNE	22 45 09				
	MN	23 53	21	30		
27 June	ME	16 24	21	15		

Any later June readings will be given in the July list.

3rd July, 1950.

29 July	iNE	17 05 27				
	iE	17 10 54				
	iNE	17 14 13				
	iNE	17 15 14				
	ME	17 55	19	2		
30 July	iN	00 10 10				
	iNE	00 11 30				
	iNE	00 17 03				
	LN	00 57 38				
	MN	01 04	20	10		

DURHAM UNIVERSITY OBSERVATORY
READINGS FROM SEISMOGRAMS, August 1950

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 ; 1, magnification 250.

Position:- latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

There have been times when one of the instruments has not recorded.

Date	Phase and component	Time G.M.T.	Period secs	Amplitude microns	Distance degrees	Time of origin To
Aug.1	eNE	09 33 27				
	eNE	09 49 33				
	MN	10 05	17	3		
Aug.2	iN	11 08 44				
	iNE	11 15 04				
	ME	12 00	19	4		
Aug.2	iNE	13 59 02				
	iN	14 06 27				
	iNE	14 08 52				
	iE	14 12 23				
Aug.4	iPE	22 29 32				
	iSNE	22 38 39			70	22 18 22
	ME	22 54	20	12		
Aug.4	iNE	15 33 47				(Artificial)
	iNE	09 38 17				
	iNE	09 42 10				
	iNE	09 52 37				
	iNE	10 03 13				
	MN	10 59	20	13		
Aug.7	eNE	03 03 19				
	iNE	03 03 53				
	iNE	03 09 22				
	iNE	03 14 21				
	iE	03 19 23				
	MN	03 47	19	15		
Aug.9	iNE	13 25 17				(Artificial)

DURHAM UNIVERSITY OBSERVATORY
READINGS FROM SEISMOGRAMS, August 1950 continued

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 : 1, magnification 250.

Position:- latitude $54^{\circ}46'N$, longitude $01^{\circ}35' W$, height above M.S.L. 103 metres.

There have been times when one of the instruments has not recorded.

Date	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin To
Aug.14	iPNE	23 03 56			76	22 52 11
	iNE	23 08 02				
	iSNE	23 13 36				
	iPSN	23 14 22				
	iE	23 17 12				
	iNE	23 17 24				
	iNE	23 17 51				
	iNE	23 18 01				
	iSSN	23 18 36				
	iNE	23 19 48				
	ME	23 40	19	6		
Aug.15	iPNE	14 20 56			72	14 09 32
	iSNE	14 30 16				
	MN	15 00	18	1300		
Aug. 15	ME	22 29	19	9		
Aug. 16	MN	07 22	20	26		
Aug,16	ME	16 14	20	7		
Aug,16	ME	18 36	16	4		
Aug.17	ePNE	02 05 42			70	01 54 31
	iSNE	02 14 50				
	MN	02 33	20	14		
Aug.18	iPE	01 19 15			71	01 07 59
	iSNE	01 28 28				
	iPPSNE	01 29 17				
	ME	01 53	14	13		
Aug,18	iNE	15 52 27	(Artificial)			
Aug.18	MN	17 45	16	6		

DURHAM UNIVERSITY OBSERVATORY
READINGS FROM SEISMOGRAMS, August 1950 continued

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 : 1, magnification 250.

Position:- latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

There have been times when one of the instruments has not recorded.

Date	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin To
Aug, 20	ME	09 53				
Aug, 21	MN	09 06	20	9		
Aug, 21	ME	23 40	18	3		
Aug. 22	iN	02 43 10				
.	MN	03 01	25	5		
Aug. 22	ME	07 28	18	10		
Aug. 22	eNE	13 43 26				
.	MN	14 03	20	11		
Aug. 23	eE	03 20 41				
.	eE	03 31 03				
.	ME	03 54	18	16		
Aug. 23	iNE	19 07 47				
.	ME	19 33	14	5		
Aug. 24	eNE	02 07 19				
.	MN	02 14	13	1		
Aug. 26	iN	04 57 53				
.	ME	05 16	16	2		
Aug. 26	iE	06 54 06				
.	iE	06 57 44				
.	ME	07 39	18	16		
Aug. 31	eE	07 24 27				
.	iE	07 24 52				
.	iNE	07 30 24				
.	MN	08 03	20	13		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, August 1950 continued

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 ; 1, magnification 250.

Position:- latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

There have been times when one of the instruments has not recorded.

Date	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees	Time of origin To
Aug. 31	iNE	16 07 30	(Artificial)			
Aug. 31	eE	17 29 11				
	eE	17 29 28				
	eE	17 30 34				
	iE	17 30 56				

2nd September 1950.

DURHAM UNIVERSITY OBSERVATORY
READINGS FROM SEISMOGRAMS, SEPTEMBER 1950

Readings from two Milne-Shaw (Horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20: 1, magnification 250.

Position: - latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

There have been times when both the instruments have not recorded.

Date	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin To
Sep.2	eE	02 57 30				
.	eE	02 59 22				
.	MN	03 36	20	6		
Sep.2	ME	15 00	19	2		
Sep.2	eE	16 26 05				
.	iNE	16 43 17				
.	iNE	16 43 49				
.	MN	17 01	10	3		
Sep.5	iNE	04 20 14				
Sep.10	eE	03 44 13				
.	iN	03 44 18				
.	iE	03 44 43				
.	iE	03 50 13				
.	MN	04 15	20	7		
Sep.10	iN	15 35 30				
.	iN	15 35 43				
.	iN	15 39 08				
.	iN	15 40 00				
.	iNE	15 45 03				
.	MN	16 29	20	11		
Sep.13	MN	00 49	18	2		
Sep.13	MN	11 48	22	24		
Sep. 19	iNE	20 50 04				
.	iNE	20 59 50				
.	MN	21 41	21	35		

DURHAM UNIVERSITY OBSERVATORY
READINGS FROM SEISMOGRAMS, SEPTEMBER 1950, continued

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20:1, magnification 250.

Position: - latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

There have been times when both the instruments have not recorded.

Date	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees	Time of origin To
Sep. 21	iNE	23 14 08	18	2		
	iNE	23 14 18				
	ME	23 44				
Sep. 24	ME	23 30				
Sep. 26	ME	00 26				
Sep. 26	ME	19 56	20	2		
Sep. 27	iN	15 57 23		(Artificial)		
	iE	15 57 28				
Sep. 28	MN	04 27	14	6		
Sep. 29	iPE	06 44 52	15	28	83	06 32 29
	iSNE	06 55 11				
	ME	07 21				
Sep. 30	iNE	07 49 24	16	29		
	iE	07 50 30				
	ME	08 13				

Correction to August list.

In the August list the readings between Aug. 4 and Aug. 7 are for Aug. 5.

DURHAM UNIVERSITY OBSERVATORY.

READINGS FROM SEISMOGRAMS, OCTOBER, 1950.

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20 : 1, magnification 250.

Position:- latitude $54^{\circ}46'$ N, longitude $01^{\circ}35'$ W, height above M.S.L. 103 metres.

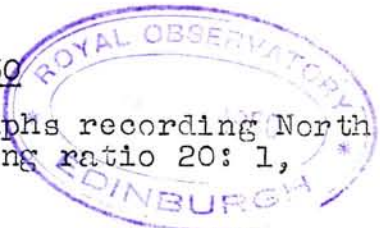
There have been times when one of the instruments has not recorded.

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns.	Distance degrees	Time of origin To
5 Oct.	iPE	16 21 29				
	iP ₂ PE	16 21 42				
	iPPE	16 24 29				
	iE	16 31 17				
	iSE	16 31 31			80	16 09 22
	iSKSN	16 31 44				
	iPSN	16 32 23				
	iSSN	16 36 55				
	iSSSNE	16 40 33				
	ME	16 58	16	340		
8 Oct.	iNE	03 43 05				
	iNE	03 47 20				
	iNE	03 52 57				
	MN	04 33	22	135		
15 Oct.	MN	17 21	20	2		
19 Oct.	iE	15 55 10	(Artificial)			
23 Oct.	iPE	16 25 19				
	iP ₂ PE	16 25 31				
	iPPE	16 28 21				
	iSNE	16 35 15			79	16 13 17
	iSKSE	16 35 42				
	iS ₂ SE	16 35 57				
	iSSE	16 40 35				
	iSSSE	16 43 57				
	ME	17 00	20	140		
25 Oct.	ME	08 01				
26 Oct.	ME	17 10	20	9		
31 Oct.	iNE	19 33 11				
	MN	19 46				

Any later October readings will be given in the November list.



DURHAM UNIVERSITY OBSERVATORY
FROM SEISMOGRAMS, NOVEMBER 1950



Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. T = 12 secs., damping ratio 20: 1, magnification 250.

Position:- latitude 54°46'N, longitude 01°35' W, height above M.S.L. 103 metres.

There have been times when one of the instruments has not recorded,

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns.	Distance degrees	Time of origin To
Nov. 2	iN	07 30 54	12	7		
	eN	07 54 27				
	MN	08 05				
Nov. 2	eNE	15 43 25	22	67		
	iNE	15 45 12				
	iNE	15 46 47				
	iE	15 47 35				
	iE	15 47 45				
	iN	15 47 57				
	iNE	15 48 32				
	iNE	15 48 58				
	iNE	15 49 16				
	iNE	15 50 12				
	iNE	15 59 34				
	iNE	16 00 00				
	ME	16 43				
Nov. 3	iNE	16 28 52	Artificial			
Nov. 5	iN	16 57 20	20	2		
	ME	17 24				
Nov. 5	iNE	17 49 58	10	23		
	iNE	17 50 17				
	iNE	18 00 24				
	iNE	18 00 42				
	ME	18 36				
Nov. 8	iN	02 40 03	20	32		
	iN	02 41 01				
	iN	02 41 09				
	iNE	02 46 48				
	iNE	02 51 52				
	iNE	03 02 22				
	ME	03 38				

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November 1950

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns.	Distance degrees	Time of origin to.
Nov. 16	iNE	12 05 01	Artificial			
Nov. 17	MN	16 24	12	3		
Nov. 17	iNE	19 50 52				
	iNE	19 51 47				
	ME	20 19	18	9		
Nov. 22	eNE	10 37 50				
	iNE	10 42 34				
	MN	11 07	19	6		
Nov. 28	MN	18 08				

Any further November readings will be given in the December list.

4th December, 1950.

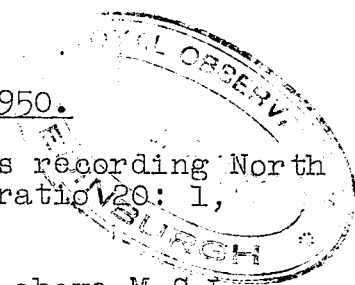
URHAM UNIVERSITY OBSERVATORY
READINGS FROM SEISMOGRAMS, December, 1950.

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. $T = 12$ secs., damping ratio 20:1, magnification 250.

Position:— latitude $54^{\circ}46'N$, longitude $01^{\circ}35'W$, height above M.S.L. 103 metres.

There have been times when one of the instruments has not recorded.

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns.	Distance degrees	Time of origin To
Dec. 1	iE	15 07 51				
	iNE	15 08 20				
	iNE	15 10 15				
	iNE	15 11 46				
	ME	15 19	16	48		
Dec. 2	iNE	20 11 35				
	iN	20 11 52				
	iNE	20 12 28				
	iN	20 14 30				
	ME	21 29	20	56		
Dec. 4	iNE	16 50 23				
	ME	17 40	25	26		
Dec. 9	iE	21 52 21				
	iE	21 52 34				
	iNE	21 52 44				
	iE	21 53 10				
	iNE	21 53 19				
	iE	21 56 02				
	iE	21 56 30				
	iE	22 02 37				
	ME	22 38	19	113		
Dec. 10	ME	03 42	18	18		
Dec. 10	iN	13 42 50				
	iNE	13 42 59				
	iN	13 52 49				
	iNE	13 56 21				
	iNE	13 56 45				
	iNE	14 05 41				
	iNE	14 05 49				
	iNE	14 14 59				
	iNE	14 15 34				





IRHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, December 1950 (Continued)

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. T = 12 secs., damping ratio 20: 1, magnification 250.

Position:- latitude 54°46'N, longitude 01°35'W, height above M.S.L. 103 metres.

There have been times when one of the instruments has not recorded.

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns.	Distance degrees.	Time of origin To
Dec.14	iPNE	02 12 07				
	iE	02 33 44				
	iE	02 34 57				
	iE	02 53 27				
Dec.14	iN	14 28 27				
	iNE	14 31 14				
	iNE	14 38 25				
	ME	15 07	19	60		
Dec.19	ME	21 39				
Dec.22	MN	09 59				
Dec.24	MNE	06 06				
Dec.29	iNE	12 22 28				
	MN	12 41	12	6		

Any further December readings will be given in the January list.