DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, JANUARY, 1952

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
Jan. 13	ME	04 55	20	80		
Jan. 21	iNE	04 04 32				
	ME	04 33	18	9		
Jan. 23	iNE	14 36 00	Artificial			
Jan. 23	iNE	16 06 50	Artificial			

3 February, 1952

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, FEBRUARY, 1952

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 0°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 To
Feb. 14	iNE	03 58 08				
	iE	03 59 07				
	iE	04 08 10				
	ME	04 44	30	110		
Feb. 14	iNE	16 09 07	(Artificial)			
Feb. 16	iNE	11 46 42	(Artificial)			
Feb. 17	ME	18 23	12	2		
Feb. 22	iNE	09 20 04	?Derbyshire			
Feb. 25	iN	01 39 39				
	iN	01 40 15				
	iE	01 58 09				
	MN	02 34	21	8		
Feb. 26	iPE	11 43 34				
	iE	11 44 34				
	iE	11 53 15				
	iSE	11 53 39			80.5	11 31 24
	iSKSNE	11 54 07				
	iE	11 55 17				
	iNE	11 55 48				
	iE	11 56 27				
Feb. 26	iPE	16 01 26				
	iSE	16 06 50			34	15 54 48
	ME	16 25	18	7		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, MARCH, 1952.

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_o
March 4	iNE	01 35 00				
	iPNE	01 35 07				
	iN	01 35 52				
	iPPN	01 38 12				
	iN	01 38 44				
	iNE	01 42 34				
	iN	01 44 51				
	iSNE	01 44 58			78	01 23 11
	iN	01 47 02				
	ME	02 02	35	3600		
March 4	iNE	20 18 28				
	MN	20 47	15	30		
March 5	MN	04 42	20	13		
March 5	MN	16 48	17	13		
March 7	iNE	07 52 28				
	iNE	07 55 20				
	ME	08 18	21	50		
March 9	iE	05 53 29				
	iN	05 53 39				
March 9	iPNE	17 15 49				
	iSNE	17 25 47			79	17 03 45
March 12	eNE	12 20 35				
March 13	eE	14 17 49				
	iE	14 19 46				
March 13	eE	19 47 45				
	iE	19 50 09				
March 15	MN	12 16	25	20		

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns	Distance degrees	Time of origin T_o
March 16	. ME	23 02	20			
March 19	iE	01 32 50				
	iE	01 37 26				
	ME	01 45	21	13		
March 19	MN	09 56	13	7		
March 19	iN	10 48 59				
	iN	10 59 28				
	iE	11 01 34				
March 19	iNE	11 11 14				
	iNE	11 15 33				
	iNE	11 21 53				
	iE	11 22 54				
	iN	11 23 01				
	iE	11 24 19				
	iN	11 24 27				
	LE	11 53 38				
	LN	11 53 45				
	. ME	12 05	17	180		
March 21	iNE	16 50 00	Artificial			
March 23	MN	16 24				

3 April 1952

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, APRIL, 1952.

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_o
April 1	iE	01 44 46				
	iE	01 45 20	?Seismic.			
April 1	ME	04 32	15	2		
April 1	ME	15 28				
April 2	MN	19 25				
April 4	iNE	03 13 52				
	MN	03 44	16	4		
April 4	MN	08 47	13	3		
April 7	iNE	18 50 09	Artificial			
April 8	ME	11 07	16	4		
April 9	iE	08 10 07				
	iN	08 17 24				
	ME	08 21				
April 10	ME	06 55	17	24		
April 15	eNE	00 14 49				
	MN	00 52	20	14		
April 15	MN	20 02	16	8		
April 18	MN	17 06	22	5		
April 19	iE	10 10 28				
	iE	10 14 51				
	iNE	10 19 50				
	ME	10 38	17	13		
April 19	iNE	11 44 51	Artificial			
April 21	iE	16 21 29	?Artificial			
April 24	iNE	11 55 37	Artificial			
April 28	MN	11 39	25	9		

May 2, 1952

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, MAY, 1952

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_o
May 4	MN	10 19	15	2		
May 4	ME	15 37	20	3		
	ME	16 09	18	2		
May 7	iNE	11 11 14	Artificial			
May 8	MN	11 46	20	4		
May 8	eN	21 25 48				
	iE	21 30 08				
	ME	22 10	25	11		
May 9	ME	05 03	17	1		
May 9	iE	18 08 56				
	iN	18 09 05				
	MN	18 56	23	24		
May 10	iNE	10 47 24	Artificial			
May 12	MN	09 12	25	6		
May 13	iE	19 53 40				
	eN	19 47 54				
	ME	20 20	16	16		
May 14	iNE	00 59 06				
	ME	01 25	15	3		
May 15	ME	11 25				
May 15	ME	19 11				
May 16	ME	06 32				
May 16	ME	11 07				

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns	Distance degrees	Time of origin T_o
May 16	eE	14 39 40				
	ME	14 43	10	2		
May 16	iPE	20 57 39				
	iN	20 57 49				
	iSNE	21 07 29			78	20 45 44
	ME	21 26	17	8		
May 17	iE	10 10 23				
	MN	10 35	20	11		
May 19	eN	18 44 23				
	iPN	18 44 29				
	iPcPN	18 44 44				
	iPPN	18 47 30				
	iPPPN	18 49 23				
	SE	18 54 27			79	18 32 25
	iSKSE	18 54 40				
	iScSE	18 54 52				
	iPSE	18 55 07				
	iPPSE	18 55 29				
	MN	19 25	17	64		
May 20	eE	13 48 08	Artificial			
	iE	13 48 17	ditto			
May 22	iE	23 31 26				
	iNE	23 31 34				
	MN	00 02	20	7		
May 23	ME	05 18	16	1		
May 24	ME	02 51	20	2		
May 24	eE	16 30 07				
	iNE	16 30 22				
	iN	16 30 52				
	MN	17 04	22	11		
May 25	ME	16 59	16	1		
May 26	iNE	03 07 03				
	iNE	03 08 03				
	ME	03 31	16	12		

June 4, 1952

DURHAM UNIVERSITY OBSERVATORY.

READINGS FROM SEISMOGRAMS, JUNE, 1952.

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_o
Correction to May list.	For May 13 read iE 19 43 40					
June 6	MNE	10 55				
June 10	iN	10 21 40				
	iN	10 31 12				
	iNE	10 31 19				
	ME	11 12	20	5		
June 11	eNE	00 46 03				
	iN	00 56 24				
	ME	01 31	20	14		
June 12	iNE	14 57 14	Artificial			
June 15	iE	15 43 40				
	ME	15 59	15	4		
June 19	iPNE	12 34 55				
	iN	12 35 39				
	iPPPNE	12 36 20				
	iSN	12 40 02			31	12 28 38
	iSSN	12 41 55				
	MN	12 56	21	80		
June 19	eNE	21 31 18				
	eE	21 33 33				
	iNE	21 35 29				
	MN	22 10	20	10		
June 20	iNE	05 59 08				
	iE	06 09 46				
	iE	06 10 09				
	iN	06 10 19				
	MN	06 43	15	65		
June 21	ME	07 19				

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, JUNE, 1952 continued.

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns	Distance degrees	Time of origin T_o
June 22	MN	11 02	15	3		
June 22	iPNE	21 53 48				
	iPPNE	21 56 41				
	iNE	21 59 54				
	eE	22 03 28				
	iSNE	22 03 33			77	21 41 57
	MN	22 34	15	74		
June 23	MN	09 40	22	3		
June 23	M_1E	12 53	20	10		
	M_2E	13 00	20	16		
June 24	MN	17 23	15	1		
June 25	iNE	23 40 58				
	MN	00 01	25	25		
June 26	MN	15 45	12	6		
June 27	MN	13 22	12	1		
June 30	iE	21 13 15				
	ME	21 42	11	2		

3 July, 1952

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, JULY 1951.

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 To.
Correction to June list:- for June 5 17 10 36 read $iP_c PNE$..						
June 30	iNE	10 59 22	Artificial			
June 30	iNE	17 05 36	Artificial			
July 3	eNE	05 41 25				
July 7	iNE	11 01 36	Artificial			
July 8	iNE	06 08 42				
	ME	06 50	21	13		
July 11	eN	18 36 39				
	iNE	18 40 18				
	iNE	18 43 51				
	iNE	18 47 36				
	iNE	18 48 36				
	ME	19 10	24	12		
July 16	iNE	10 42 46	Artificial			
July 18	iPNE	09 16 09				
	iNE	09 19 29				
	iNE	09 19 49				
	iSNE	09 24 12			58.5	09 06 16
	MN	09 36	14	100		
July 21	iN	01 53 05				
July 25	iE	10 51 48				
	MN	10 58				
July 28	iNE	11 02 54	Artificial			
July 28	ME	23 56	18	3		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, AUGUST, 1952

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_o
6 Aug.	iNE	15 02 12	Artificial			
16 Aug.	iNE	10 48 18	Artificial			
16 Aug.	MN	15 14	19	4		
	ME	16 02	16	2		
17 Aug.	ePNE	16 13 05				
	iPNE	16 23 10				
	iPcPN	16 13 40				
	iPPNE	16 15 38				
	iPPPNE	16 17 15				
	iSNE	16 22 07			68	16 02 12
	iPPSN	16 22 51				
	iScSNE	16 23 15				
	iSSNE	16 26 13				
	MN	16 41	17	650		
20 Aug.	iPNE	15 36 43				
	iPPE	15 39 32				
	eE	15 45 53				
	iSNE	15 46 03			72	15 25 19
	iScSN	15 46 49				
	iPPSE	15 46 58				
	MN	16 10	13	27		
23 Aug.	iNE	10 46 20	Artificial			
28 Aug.	MN	15 29				

September 13, 1952.

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, SEPTEMBER, 1952.

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_o
Correction to August list: for 17 Aug. iPNE 16 23 10 read 16 13 10.						
Sept. 9	?eNE	13 04 54				
	ePNE	13 06 46				
	iSNE	13 16 40				
	MN	13 38	20	25	78.5	12 54 46
Sept.14	MN	10 12	19	7		
Sept.15	iNE	11 59 33				
	MN	12 03	22	7		
Sept.21	iPNE	02 43 28				
	PcPE	02 43 42				
	PPE	02 46 41				
	PPPE	02 48 34				
	iSNE	02 53 39				
	SKSE	02 53 50			81.5	02 31 13
	iNE	02 55 43				
	iE	02 57 09				
	SSSN	03 02 27				
	ME	03 25	14	9		
Sept.21	MN	12 11	15	5		
Sept.24	iNE	15 05 13	Artificial			
Sept.27	iNE	08 18 46	?Seismic			
Sept.27	iN	10 33 10				
	iN	10 33 14				
	iN	10 33 18				
	iN	10 33 21				
Sept.30	iNE	13 13 10				
	MN	13 33	20	60		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, OCTOBER, 1952

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 both the instruments have not recorded.

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns	Distance degrees	Time of origin T_o
Oct.5	ME	22 46	12	6		
Oct.8	MN	15 10	12	3		
Oct.10	ME	12 15	11	1		
Oct.10	ME	17 31	15	2		
Oct.10	iPE	18 57 09				
	iSE	19 04 39			53	18 47 56
	iPSE	19 04 59				
	MN	19 23	16	15		
Oct.18	iN	12 14 29				
	MN	12 21	22	10		
Oct.22	MN	17 19	15	6		
Oct.26	MN	16 49	18	12		
Oct.26	MN	18 51	20	11		
Oct.26	MN	20 15	19	14		
Oct.27	MN	04 13	18	15		
Oct.28	MN	07 33				
Oct.31	eE	16 59 22				
	iE	17 00 05				
	iE	17 04 57				
	iE	17 05 24				
	ME	17 24	22	14		

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

3 November, 1952

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, NOVEMBER, 1952

Readings from two Milne-Shaw (horizontal) seismographs recording North and East components respectively. T = 12 sec., 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 both the instruments have not recorded.

Date	Phase and component	Time G.M.T.	Period Secs.	Amplitude microns	Distance degrees	Time of origin T_o
Nov.1	MN	00 31				
Nov.4	ePNE	17 09 52				
	iNE	17 09 55				
	PcPNE	17 10 16				
	PPNE	17 12 36				
	PPPNE	17 14 26				
	iSN	17 19 09			71.5	16 58 32
	iE	17 19 32				
	PSNE	17 19 51				
	ME	17 50	20	1400		
Nov.5	ME	03 12	15	7		
Nov.5	MN	04 21	15	7		
Nov.5	MN	06 49	18	16		
Nov.5	MN	13 57	17	21		
Nov.6	MN	20 38	14	16		
Nov.7	iE	14 29 58				
	ME	15 01	15	13		
Nov.7	MN	23 00	15	14		
Nov.8	MN	21 24	17	22		
Nov.10	eN	01 39 29				
	MN	01 49	16	1		
Nov.10	MN	05 59	16	1		
Nov.12	iNE	16 14 58	Artificial			
Nov.13	MN	08 48	19	16		
Nov.13	eE	15 41 02				
	MN	16 16	13	3		
Nov.13	MN	23 18	15	6		
Nov.15	iNE	11 46 06	Artificial			
Nov.20	eN	15 58 32				
	MN	16 23	18	6		
Nov.22	ME	08 32	15	9		
Nov.27	iNE	07 37 24				
Nov.29	ME	09 13	19	47		
Nov.30	iN	19 49 25				
	iN	19 50 19				
	iN	19 54 21				
	MN	20 18	16	3		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, DECEMBER, 1952

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_o
Correction to November list:- for Nov.4 PSNE 17 19 51 read ScSNE						
Dec.6	ME	11 56	20	50		
Dec.7	MN	01 34	20	17		
Dec.8	eE	15 40 25				
	iN	15 40 30				
	MN	15 52	25	14		
Dec.10	iPN	06 01 58				
	iPPN	06 02 22				
	iPPPN	06 02 35				
	iSN	06 05 13			17	05 58 07
	iSSN	06 05 41				
	ME	06 10	12	37		
Dec.17	iPNE	23 09 49				
	iPPPNE	23 10 45				
	iSNE	23 14 15			25	23 04 29
	iSSNE	23 15 26				
	PcSE	23 17 17				
	iN	23 17 31				
	LN	23 19 57				
	ME	23 23	18	115		
Dec.22	iN	23 05 00				
	ME	23 13				
Dec.24	ME	19 50	21	50		
Dec.25	ME	23 01	14	13		
Dec.28	MN	16 06	20	19		
Dec.29	ME	03 04				
Dec.31	ME	15 08				