DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, JANUARY 1948.

Readings from two Milne-Shaw (horizontal) seismograms 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.

On many occasions and for a variety of causes either or both the records have been unserviceable.

Date 1948.	Phase and component.	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T_o.
Jan 6	MN	18.16	14			
Jan 24	iE	18.00.24				
	iE	18.00.29				
	iN	18.04.04				
	iNE	18.04.47				
	iE	18.10.10				
	iNE	18.11.05				
	iNE	18.13.21				
	iNE	18.19.29				
	iN	18.24,53				
	MN	18.43	19	568		
	ME	18.51	19	916		
Jan.26	MN	21.13	18	32		
Jan.28	ME	04.45	27	16		
Jan.29	MN	01.29.30	10	3		
Jan.30	iE	08.55.41				
	iNE	09.01.12				
	iNE	09.01.21				
	iNE	09.01.33				
	iNE	09.06.58				
	iE	09.09.08				
	ME	0923	20	33		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, FEBRUARY 1948.

Readings from two Milne-Shaw (horizontal) seismograms 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 1948	Phase and component.	Time G.M.T.	Period Secs.	Amplitude microns.	Distance degrees.	Time of origin T_o.
Feb. 9	iPN	13.04.05				
	iN	13.04.45				
	iPPN	13.04.58				
	iN	13.05.25				
	iN	13.06.50				
	iSN	13.08.38			26,0	12.58.36
	iN	13.08.50				
	MN	13.18	15	353		
Feb.11	MN	16.17				
Feb.12	ME	05.33	18	24		
Feb.15	ME	18.15				
Feb.18	iPN	20.36.01				
	iSE	20.42.29			43.6	20.28.00
	MN	20.48	10	17		
	MN	20.59	11	14		
Feb.23	ME	10.42				
Feb.28	MN	02.38	14	8		
March 1	eNE	01.31.21				
	eNE	01.31.28				
	iPNE	01.32.10				
	iNE	01.34.33				
	iNE	01.37.53				
	iNE	01.38.58				
	iNE	01.41.27				
	iNE	01.42.43				
	ME	02.13	19	39		
	MN	02.16	20	47		

UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, MARCH 1948

Readings from two Milne-Shaw (horizontal) seismograms 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 1948	Phase and component.	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T_o.
Mar. 1	ePKPNE	01.31.21	(Correction of phases on February list.)			
	eNE	01.31.28				
	iPPNE	01.32.10				
	iPPPNE	01.34.33				
	iSKSNE	01.37.53				
	iSKKSNE	01.38.58				
	iNE	01.41.27				
	iNE	01.42.43				
	ME	02.13	19	39		
	MN	02.16	20	47		
Mar. 3	iN	09.33.33				
	iN	09.34.02				
	iSKSN	09.35.15				
	M_1NE	10.00	22	N 87, E 62.		
	M_2NE	10.05	16	N 62, E 51.		
Mar. 13	ePNE	20.21.34				
	iP_cPNE	20.22.03				
	iN	20.28.57				
	iSNE	20.30.50			71.5	20.10.15
	iPSE	20.31.28				
	iPPSE	20.32.02				
	MN	21.08	20	19		
Mar. 24	MNE	22.42				
Mar. 26	MNE	03.16				
Mar. 29	MN	10.38	16	13		
Correction to February list.						
Feb. 18	iPN	20.36.01				
	iSN	20.40.51			28.5	20.30.09
	iSSE	20.42.29				
	MN	20.48	10	17		
	MN	20.59	11	14		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, APRIL, 1948.

Readings from two Milne-Shaw (horizontal) seismograms 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 1948	Phase and component.	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T_o.
April 17	iPNE	16.24.05				
	iP_cPN	16.24.16				
	iN	16.24.21				
	iPPNE	16.27.25				
	iSNE	16.34.27			83.3	16.11.40
	iSKSNE	16.34.36				
	iPSNE	16.35.35				
	iE	16.36.21				
	iN	16.36.26				
	iNE	16.38.34				
	iSSN	16.40.26				
	iN	16.41.06				
	iN	16.44.03				
	iE	16.47.29				
	MN	17.09	18	128		
	ME	17.13	18	119		
April 18th	MNE	13.32	20	N 25 E. 18		
April 21	iPE	20.32.27				
	ipPNE	20.32.35				
	iE	20.34.38				
	iE	20.35.38				
	iE	20.36.57				
	iN	20.37.11				
	iN	20.37.41				
	iSNE	2o.40.51			62.2	20.22.17
	isSNE	20.41.03				
	iNE	20.44.43				
	LNE	20.53	21	N 78 E 110		
April 22	iPE	00.38.41				
	iSNE	00.47.03			62.0	00.28.24
	iE	00.50.51				
	MNE	01.06	18	N 10 E 17		
	iPNE	10.47.46				
	iN	10.51.38				
	iSNE	10.51.45			22.0	10.42.55
	ME	10.56	12	104		
	MN	10.57	12	118		
April 23	ME	12.26				
April 26	iE	09.36.54				
	iE	09.40.54				
	MN	09.44	12	5		

Correction to March list.

Mar. 13	oPKPNE	20.21.34				
	iPPNE	20.22.03				
	SKSN	20.27.45				
	iSKKSN	20.28.57				
	iNE	20.30.50				
	iPSE	20.31.28				
	PPSNE	20.31.57				
	iE	20.32.02				
	SSN	20.37.02				
	SSPN	20.37.18				
	MN	21.08	20	19		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, MAY 1948.

Readings from two Milne-Shaw (horizontal) seismograms 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 1948	Phase and component.	Time G.M.T.	period secs.	Amplitude microns.	Distance degrees.	Time of origin T_o
May 8	PN	02.58.23				
	iSN	03.08.09			77.0	02.46.31
	iNE	03.08.15				
	iSKSNE	03.08.40				
	MN	03.37	20	3		
May 9	iPNE	02.21.39				
	iP_cPN	02.21.53				
	iPPNE	02.25.04				
	iN	02.32.00				
	iSNE	02.32.19			87.0	02.08.57
	iE	02.38.03				
	iN	02.38.12				
	MN	03.03.	18	50		
	ME	03.04	15	29		
May 11	iE	09.08.52				
	iNE	09.09.08				
	iE	09.21.13				
	ME	09.50	17	7		
May 12	iPNE	01.09.22				
	iPPPN	01.14.27				
	iSNE	01.19.37			82.0	00.57.04
	iE	01.20.44				
	iPPSN	01.20.53				
	iSSE	01.25.03				
	ME	01.49.	20	53		
	MN	01.50.	20	59		
May 14	MN	14.11.	18	10		
May 14	MN	19.32	17	7		
May 14	iPNE	22.42.55				
	iP_cPN	22.43.23				
	iPPN	22.45.38				
	iSNE	22.52.02			70.0	22.31.45
	iNE	22.52.23				
	iPSN	22.52.38				
	iPPSN	22.52.53				
	iSSN	22.56.43				
	iSSSN	22.59.38				
	MN	23.11.	22	285		
	ME	23.13.	20	187		
May 15	ME	18.56	18	2		
May 17	iPNE	17.59.44				
	iSNE	18.08.49			69.5	17.48.36
	iPSNE	18.09.08				
	iSKSN	18.09.37				
	MN	18.34	18	5		

P.T.O.

Date 1948	Phase and component.	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T_o
May 25	iPNE	07.23.12				
	iP_cPN	07.23.39				
	iSNE	07.32.28			71.3	07.11.53
	NE	07.32.38				
	iN	07.32.52				
	iN	07.34.21				
	iSSNE	07.37.19				
	MNE	07.52	20	N264 E158		
May 26	ME	10.00	20			
May 29	?iE	04.51.31				
	iPE	04.53.23				
	iSNE	04.56.59			19.3	04.49.00
	iNE	04.57.09				
	iNE	04.57.14				
May 29	MN	14.46	18	5		

Durham June 4th, 1948.

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, JUNE 1948.

Readings from two Milne-Shaw (horizontal) seismograms 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 1948	Phase and component	Time G.M.T.	period secs.	Amplitude microns.	Distance degrees	Time of Origin T_o.
June 1	eE	19.19.30				
	E	19.19.35				
	N	19.19.44				
	N	19.19.52				
	MN	19.52	21	8		
June 15	iPNE	11.57.27				
	iSNE	12.07.37			81	11.45.13
	SKSNE	12.07.46				
	S_cSNE	12.07.57				
	PSNE	12.08.34				
	SSN	12.13.06				
	MNE	12.43	16N	22N		
			11E	12E		
June 21	eNE	12.30.14				
	iE	12.30.31				
	MN	13.04	20	11		
June 23	iE	03.53.36				
June 27	eNE	00.29.39				
	eNE	00.38.24				
	MN	00.51	20	11		
June 27	MN	22.24	20	7		
June 28	iN	07.36.10				
	MN	08.07	14	115		
June 29	iN	16.18.30				
	iN	16.22.55				
	MN	16.28	20	27		
June 30	iPN	12.26.08				
	iN	12.26.19				
	iN	12.26.57				
	iSN	12.30.10			22.2	12.21.15
	iP_cPN	12.30.13				
	iSSN	12.30.48				
	iN	12.31.25				
	iP_cSN	12.33.54				
	MN	12.35	15	92		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, JULY 1948.

Readings from two Milne-Shaw (horizontal) seismograms 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 1948	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T_o.
July 3	MN	15.54	10	3		
July 5	iN	14.09.14				
	iE	14.09.25				
	iNE	14.13.10				
	MN	14.25	19	14		
July 7	eNE	02.31.51				
	N	02.32.11				
	E	02.32.18				
	N	02.35.19				
	E	02.35.41				
	NE	02.42.16				
	N	02.42.43				
	MNE	03.16	17	15N 11E		
July 8	iN	12.37.33				
	iN	12.37.41				
	iE	12.39.16				
	iN	12.41.05				
	iE	12.41.47				
	MNE	12.44	11	9N 10E		
July 14	eN	22.51.18				
	eE	22.51.23				
	eNE	22.51.45				
	eNE	23.02.41				
	eNE	23.06.50				
	MN	23.44	20	10		
July 16	ePE	07.31.51				
	iSNE	07.41.20			74	07.20.17
	ME	08.04	20	3		
July 18	eE	07.01.41				
	eNE	07.08.33				
	MN	07.54	18	6		
July 20	iNE	11.26.06				
	MN	11.52	22	10		
July 22	MN	18.13	15	3		
July 23	MN	13.29	20	7		
July 24	iPNE	06.08.53				
	iSNE	06.13.25			27	06.03.12
	isSN	06.13.42			? deep30 kms.	
	iN	06.13.59				
	iE	06.14.08				
	iP_cSNE	06.15.53				
	iE	06.18.06				
	iN	06.18.46				
	iNE	06.20.22				

P.T.O.

Date 1948	Phase and component	Time G.M.T.	Period secs.	Amplitude microns	Distance degrees.	Time of origin T_o.
July 29	MN	01.27	20	4		
July 30	iPNE	03.44.33				
	eNE	03.47.49				
	iSNE	03.48.15			20	03.39.56
	MN	03.57	15	2		

Notes. The above readings are for the period ended on July 29; any readings for July 30 and 31 will be given in the August list.

The June list should have contained the note that there were times when either or both the instruments were not recording.

DURHAM UNIVERSITY OBSERVATORY,
READINGS FROM SEISMOGRAMS, AUGUST, 1948

Readings from two Milne-Shaw (horizontal) seismograms 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.

Notes. There were times when both the instruments were not recording. Any readings after 21 hrs on August 31 will be given on the September list.

Date 1948	Phase and component.	Time G.M.T.	Period secs	Amplitude microns	Distance Degrees	Time of origin To
Aug.7	ePNE	14.52.59				
	P_cPN	14.53.11			81	14.40.45
	iSN	15.03.09				
	SKSE	15.03.20				
	S_cSNE	15.03.27				
	NE	15.04.11				
	NE	15.04.21				
	SSN	15.08.19				
	SSSN	15.11.48				
	MN	15.36	17	17		
Aug.10	MNE	13.45				
Aug.11	iPE	10.48.12				
	iSNE	10.57.57			77	10.36.21
	iSKSNE	10.58.11				
	iPSE	10.58.55				
	iPPSE	10.59.06				
	ME	11.24	18	4		
Aug.17	iE	17.31.54				
	MN	18.08	15	2		
Aug.20	MN	19.45				
Aug.25	eNE	06.26.44				
	iNE	06.35.36				
	iE	06.35.49				
	ME	07.06	16	33		
Aug.27	eE	10.48.18				
	iPNE	10.48.34				
	iN	10.52.08				
	iSNE	10.52.12			19.5	10.44.09
	ME	10.55	6	4		
Aug.29	MN	18.55	20	3		
Aug.30	MN	00.23	20	5		
Aug.30	eNE	01.44.42				
	MN	01.47				

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, SEPTEMBER 1948.

Readings from two Milne-Shaw (horizontal) seismograms 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 1948	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees	Time of origin T_0.
Sept. 1	MN	20.37	18	3		
Sept. 2-3	iNE	23.53.54				
	iNE	00.00.19				
	MN	00.31	20	52		
Sept. 4	MN	16.13	14	6		
Sept. 6	MNE	09.04				
	MN	10.04				
Sept. 8	iNE	15.29.53				
	iNE	15.30.08				
	iNE	15.51.04				
	ME	16.39	18	121		
Sept.10	ME	12.34				
Sept.10	iPNE	14.00.35				
	iP_cPNE	14.00.58				
	iSN	14.10.29			78.4	13.48.36
	iNE	14.10.53				
	PPSN	14.11.38				
	SSSN	14.18.49				
	ME	14.41	16	54		
Sept.11	eN	08.58.18				
	iPNE	08.58.22				
	iSNE	09.01.58			19.3	08.53.56
	SSSNE	09.02.34				
Sept.21	iN	17.57.14				
	iN	18.03.39				
	MN	18.08	16	8		
Sept.23	ME	01.41	15.	4		
Sept.25	M,N	00.19	15	7		
	M_2N	00.26	15	7		
Sept.26	?iN	01.21.48				
	?iN	01.22.15				

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, OCTOBER, 1948.

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 1948	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T_o .
Correction to September list.						
Sept.11	ePNE	08.57.52				
	iSNE	09.02.07			23.7	08.52.45
Oct. 1	MN	04.08	12	2		
Oct. 4	ME	06.54	15	7		
Oct. 5	iPE	20.20.11				
	iE	20.21.50				
	iPPE	20.21.59				
	iP_cPE	20.22.07				
	iSN	20.26.35			43	20.12.14
	iSSN	20.29.43				
	iS_cSN	20.30.15				
	ME	20.47	12	188		
Oct. 6	ME	01.53	10	2		
Oct.10	MNE	17.59				
Oct.12	eE	13.42.29	?seismic			
	iE	13.42.36				
Oct.21	MN	06.29	20	3		
Oct.28	MN	21.39	16	8		

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, NOVEMBER, 1948.

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 during the month when either one or both the instruments have not recorded.

Date 1948	Phase and component	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T_o
Nov. 1	iNE	12.30.59				
	MNE	12.57				
Nov. 3	MN	06.41	26	12		
Nov.13	MN	05.07				
Nov.14	MN	02.15				
Nov.19	ME	01.55				
Nov.26	MN	06.47	16	8		
Nov.28	MN	22.31				

DURHAM UNIVERSITY OBSERVATORY

READINGS FROM SEISMOGRAMS, DECEMBER, 1948.

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 1948	Phase and component.	Time G.M.T.	Period secs.	Amplitude microns.	Distance degrees.	Time of origin T
Dec. 4	iPNE	00.35.05				
	iP_cPN	00.35.19				
	iSNE	00.45.08			80.0	00.22.57
	iPSNE	00.46.20				
	MN	01.19.				
Dec. 20	ME	23.58.				
Dec. 23	iNE	09.01.30				
	iNE	09.02.06				
	MNE	09.33.				
Dec. 31	MNE	00.31.				