

No. 1

SEISMOLOGICAL BULLETIN

January, 19 41.

King's College Observatory,
Aberdeen

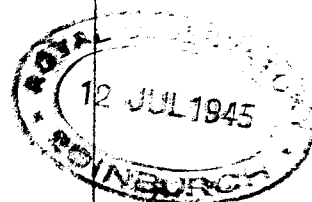
Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12 m.

Lithologic Foundation: Glacial deposit over boulder clay

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

Compts.	Mass	T ₀	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm.	2 : 4 : 40
E	1 lb.	10 sec.	20 : 1	150	18.1 mm.	2 : 4 : 40

Date	Component	Phase	Time G.M.T.			Period	Ampl.		△ km.	Remarks		
			h.	m.	s.		A	E				
Jan. 4	NE	e	22	52	46	s.	/			Traces only.		
		F	23	59	-							
5	NE	iP	19	11	48			66.6° 7400				
	E	iPP		14	23							
	E	iPPP		15	48							
	NE	iS		20	39							
	E	iPS		21	11							
	E	i		28	38							
	N	L		33	8							
	E	L		33	10							
	N	eL _g		37	38							
	N	M		41	37						30	41
E	M ₁		41	43	30	35						
E	M ₂		55	58	18	38						
	F		20	25	-							
6	E	eL	10	25	45	18				Traces only on S-N		
	E	M		31	48							
	F		55	-								
9	NE	e	18	27	55	15	3			Max. not well defined on W-E.		
	N	M		30	36							
	F		40	-								
11	E	i	8	48	42							
	N	i		48	46							
	E	i		52	50							
	N	i		54	40							
	E	i	9	2	50							
	N	M		6	52						17	4
	E	M		6	55						17	6
	F		38	-								
13	NE	iP	16	48	23			83.7° 9300		No indication on N-S compt. of the large waves shown on E-W compt. between 17h. 20m. & 17h. 25m. Several other well defined minor maxima		
	NE	iPPP		53	54							
	E	i		57	56							
	N	i		58	7							
	N	iS		58	46							
	NE	iSS	17	5	18							
	N	i		6	33							
	N	eSSS		9	7							
	E	i		14	13							
	E	eL _g		19	31							
	E	M		23	23						40	33
	NE	L		26	13							
	E	M		28	13						38	110
N	M		28	53	34	117						
	F		19	40	-							



SEISMOLOGICAL BULLETIN

No. 2.

King's College Observatory,
Aberdeen.

Jan.-Feb., 1941.

Date	Component	Phase	Time G.M.T.			Period	Ampl. A E	△ km.	Remarks
			h.	m.	s.				
Jan. 19	NE	e	4	6	-			Slight and badly obscured by microseisms.	
	E	L		12	-				
	E	M		17	45				
	N	M		17	55				
		F		24	-				
20	NE	L	3	48	45				
	E	M		58	40	20	16		
	N	M	4	0	5	18	15		
		F		19	-				
21	NE	i	13	2	56			N-S trace very different in appearance from that on W-E.	
	NE	e		12	50				
	N	M		20	1	28	26		
	E	M		25	56	18	27		
		F	14	7	-				
24	E	eL	21	0	47			No N-S record.	
	E	M		4	20	17	7		
		F		32	-				
Feb 4	NE	iP	14	25	42			62.4° 6940	
	E	i		26	44				
	N	iPPP		28	14				
	NE	e		30	35				
	NE	eS		34	9				
	N	e		37	14				
	E	e		37	44				
	E	eSSS		41	14				
	NE	M		56	54				
		F	15	20	-				
8	N	e	19	43	56			Amplitude small.	
	E	i		48	9				
	NE	eL		50	56				
	E	M ₁		53	21	20			
	N	M ₁		55	16	18			
	NE	M ₂		58	11	20			
		F	20	9	-				
9	NE	i	10	4	45			E e.	
	NE	i		9	17				
	NE	i		12	49				
	NE	eL		15	37				
	N	M ₁		19	11	33	85		
	E	M ₁		19	14	33	85		
	E	M ₂		23	42	18	47		
	E	M ₂		27	54	17	40		
	F	11	20	-					
9	N	e	19	47	35				
	N	e		52	57				
	NE	e		57	7				
	E	eL	20	17	2				
	N	eL		19	57				
	E	M		25	55	30			
	N	M		33	5	25			
		F	21	36	-				

Date	Component	Phase	Time G.M.T.			Period	Ampl.	△	Remarks
			h.	m.	s.		A E		
Feb. 11	E	iP	14	47	33	s.	21	80 8390	
	NE	iS		57	37				
	N	i	15	2	49				
	NE	eL		12	37				
	E	eL		12	57				
	E	M		19	3				
16	N	i	16	59	1	15	16		Obscured by microseisms.
	NE	i		5	35				
	E	i		8	53				
	NE	i		10	1				
	E	M		15	49				
	E	F		27	-				
Mar. 1	NE	iP	4	2	6	11	E24 N28	23° 2555	Greek earthquake.
	E	iPPP		2	45				
	NE	iS		6	11				
	N	i		6	36				
	E	iSS		7	11				
	NE	i		7	41				
	N	i		8	12				
	E	i		9	4				
12	E	eL	15	0	19	17	17		
	N	M		3	32				
	E	M		4	2				
	E	F		47	-				
12	N	eL	22	21	24	20	20		
	E	eL		22	36				
	N	M		23	49				
	E	M		24	26				
	E	F		51	-				
15	E	e	6	13	21	20	14	6 3	
	N	i		18	44				
	E	i		19	38				
	NE	eL		23	28				
	E	M		27	39				
	N	M		30	54				
16	NE	iP	8	3	16	18	5	56.0° 6220	
	E	iS		11	3				
	E	iSSS		15	20				
	E	L		20	43				
	NE	L		22	52				
	N	M		23	56				
16	NE	iP	16	40	0	15	15	21.8° 2420	
	NE	iS		43	54				
	E	M ₁		47	33				
	N	M ₁		48	32				
	NE	i		49	20				
	E	M ₂		50	58				
	N	M ₂		53	5				
	E	F ₂		17	37				

SEISMOLOGICAL BULLETIN

No. 4.

King's College Observatory,
Aberdeen.

March, 1941.

Date	Component	Phase	Time G.M.T.			Period	Ampl. A E	△ km.	Remarks
			h.	m.	s.				
Mar. 16	N	e	18	56	42			Slight.	
	E	e	19	0	21				
	E	M F		4 16	32 -	10			
20	N	e	1	32	30				
	E	e		32	46				
	N	M F		35 53	0 -	15			
21	NE	iP	8	15	31		56.3° 6255	Record between 8h. 42m. and 8h. 48m. lost during changing of chart.	
	E	i		17	34				
	NE	iS		23	20				
	N	i		24	7				
	NE	M F		37 9 30	41 -	15			E3 N5
28/29	N	e	23	43	41				
	NE	e		48	41				
	E	eL		59	1				
	N	eL	0	2	51				
	N	M		7	11	18	2		
	E	M		9	51	18	3		
	E	F		47	-				

No. 1.

SEISMOLOGICAL BULLETIN

April - June, 1941.


King's College Observatory,
Aberdeen

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,
Photographic Registrations, Two Components.

Compts.	Mass	T ₀	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm.	2/4/40
E	1 lb.	10 sec.	20 : 1	150	18.1 mm.	2/4/40

Date	Component	Phase	Time G.M.T.			Period	Ampl.		Remarks
			h.	m.	s.		A	E	
April 1	E	iP	11	0	19	20	38	km. 56.0° 6220	
	E	i		0	42				
	NE	i		4	38				
	E	iS		8	6				
	N	i		8	21				
	E	e		11	-				
	NE	L		16	24				
	N	M		20	0				
3	E	M	20	42	20	14	71.5° 7950		
		F	12	17	-				
	NE	iP	15	35	37				
	NE	iS		44	55				
	N	i		45	45				
	NE	iSSS		52	16				
7/8	NE	L _Q		57	55		65.3° 7255		
	NE	L _R	16	0	55				
		F	17	28	-				
	E	iP	23	40	38				
	NE	iS		49	21				
	N	iPS		49	52				
	E	iSS		53	45				
	NE	iSSS		56	5				
	E	L	0	0	58				
	N	L		1	28				
15	E	M		8	58	20	60	79.6° 8845	
	N	M ₁		10	24	16	40		
	N	M ₂		16	46	16	40		
		F	2	29	-				
	NE	iP	19	22	5				
	NE	iPP		25	8				
15	NE	iS		32	7		30 313		
	NE	iSS		37	35				
	NE	iSSS		41	23				
	N	L _Q		43	52				
	N	L _R		47	54				
	E	L _R		48	12				
	N	M		51	58	30		313	
	E	M		53	55	26		395	
		F	23	-	-				

SEISMOLOGICAL BULLETIN

No. 2.

April, 1941.

King's College Observatory,
Aberdeen.

Date	Component	Phase	Time G.M.T.			Period	Ampl.		△ km.	Remarks
			h.	m.	s.		A	E		
April 18	N E E N	e e M M F	6	12	17	18 18				
				19	7					
				22	57					
				23	7					
18	N E N E	e e M M F	14	16	17	21 20	7 3			
				24	17					
				26	54					
				33	4					
19	E N N E E N	i i eL e M M F	8	23	3	16 16	5 9			
				24	10					
				28	18					
				28	48					
				32	45					
				33	21					
20	NE NE N NE NE NE NE	iP i i i i i i F	17	54	19					
				57	9					
			18	58	6					
				5	16					
				5	31					
				9	1					
				14	26					
				57	-					
26	N E N E N E N	i i e i L L M F	23	30	37	15				
				30	44					
			38	11						
			40	19						
			41	24						
			42	2						
			44	30						
			24	-						
27	N NE N E N E E	e i i i L L M M F	12	35	5	24 26	24 14			
				47	3					
			13	12	35					
				13	40					
				17	0					
				19	25					
				19	27					
				20	33					
59	-									
29	N E N E	e e M M F	2	33	6					
				35	6					
			3	50	11					
				52	21					
				24	-					

Maxima not developed.

SEISMOLOGICAL BULLETIN

No. 3

King's College Observatory,
Aberdeen.

April - June, 1941.

Date	Component	Phase	Time G.M.T.			Period	Ampl. A E	△ km.	Remarks
			h.	m.	s.				
May 5	NE N N	1 eL M F	15	52	53	13	3		
			16	1	18				
9	N N E N E NE	e i e eL eL M F	5	49	8	23	46		W-E 4μ doubtful.
				56	10				
			6	57	26				
				8	16				
				19	6				
13	N NE E N	1 L M M F	16	22	43	17 16	-	20	
				35	33				
				44	38				
			17	45	59				
16	N N N E N	1P 1S L M M F	7	36	11	25 20	-	81	W-E compt. slightly obstructed.
				44	47				
				51	57				
			8	57	10				
17	N N N NE E N NE NE N E N E N	1P 1P' 1S 1S e 1S i L L L M M M F	2	44	55	22 22 18	-	70 -	By path > 180°.
				48	19				
				54	27				
				58	26				
			3	4	21				
				7	39				
				19	35				
				24	20				
				30	46				
				31	50				
				42	10				
23	E E NE N E E N	eP 1S 1S eL eL M M F	19	57	30	13 18	12 20	34.8° 3870	N e.
			20	3	4				
				5	4				
				6	56				
				7	10				
				9	33				
23	NE NE	e M F	22	47	30	13	W3 N2		
				51	53				
			23	4	-				
30	E E NE E E N	e e e eL M M F	18	11	33	18 18	4 2		
				19	6				
				45	36				
				49	26				
				58	44				
			19	58	52				

SEISMOLOGICAL BULLETIN

No. 4

King's College Observatory,
Aberdeen.

April - June, 1941.

Date	Component	Phase	Time G.M.T.			Period	Ampl. A E /L	△ km.	Remarks
			h.	m.	s.				
JUNE 1			Slight effect from about 1800 to 1817. Exact measurement not possible owing to failure of time breaks.						
6	E N NE E	e e L M F	21	7	23 55 28 36 -	12			
9	E N NE E N	i i eL M M F	6	45 46 50 59 7	46 0 50 0 35 10	18 15	4 4		
11/12	N E	e e F	23	47 53 0	46 33 -				
16	E N E E N	i e L M M F	21	16 19 20 21 22 35	6 36 44 59 4 -	15 15	3 2		
26	NE NE E N N NE NE N E NE NE NE E N N E E	1P 1PcP 1PP i i 1S 1SKKS 1PS 1PPS 1SS 1SSS Lq Lr Lr M M ₁ M ₂ F	12	4 4 7 7 11 14 14 15 15 20 23 31 33 35 40 42 47 16	30 48 38 45 46 39 59 10 24 26 50 50 36 20 55 20 30 -		80.9° 8990		
27	E E E	e L M F	8 9	44 16 25 44	51 56 49 -	20	546 638 878	N-S traces only.	
30	NE E E	e eL M F	17 18	11 22 30 6	53 53 56 -	18		N-S: very slight.	
30	E E	e M F	19	13 18 24	53 13 -			N-S: traces only between 1910 and 1915.	

SEISMOLOGICAL BULLETIN

No. 1.

King's College Observatory, July - Sept. 19 41.
Aberdeen

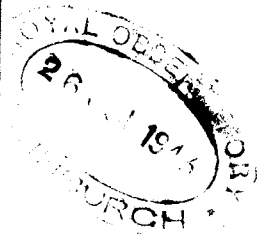
Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12 m.

Lithologic Foundation: Glacial deposit over boulder clay

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

Compts.	Mass	T ₀	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm.	2/4/40 24/7/41
E	1 lb.	10 sec.	20 : 1	150	18.1 mm.	2/4/40 24/7/41

Date	Component	Phase	Time G.M.T.			Period	Ampl.		Remarks								
			h.	m.	s.		A	E									
July 1	E E E N	e L M M F	8	17	-	15 13		km.									
				30	-												
				35	48												
				39	12												
				55	-												
3	NE E N N E	e L L M M F	8	6	50	18 18	3 11										
				8	40												
				9	15												
				12	7												
				12	52												
7	NE	e F	22	53	32	11	8		Slight.								
				59	-												
				13	NE NE N E NE					e i L L M F	15	45	10	11	8		
												50	9				
												54	15				
55	12																
59	22																
14	NE	e F	2	48	-				Very slight.								
				3	5												
				16	N					e F	3	52	10				No W-E trace.
4	10																
19	N N	e M F	16			2	27	14					W-E trace very slight.				
				6	25												
				23	-												
				24	E E NE N E	i e eL M M F	14			15	43			19 19	5 5		
										37	13						
41	53																
46	25																
48	21																
26	E N NE N	e e eL M F	20	28	13	19	5										
				29	13												
				21	1					3							
				10	13												
				42	-												



SEISMOLOGICAL BULLETIN

No. 2

King's College Observatory,
Aberdeen.

July - Aug., 1941.

Date	Component	Phase	Time G.M.T.			Period s.	Ampl. A E	△ km.	Remarks
			h.	m.	s.				
July 30	NE	iP	2	1	30				
	NE	iS		9	40			59.7°	
	NE	i		9	56			6520	
	E	i		11	15				
	N	i		11	35				
	NE	iSS		13	30				
	NE	L		22	55				
	N	M		29	41	18	24		
Aug. 2	E	M		29	49	17	10		
	E	F	3	38	-				
	NE	e	12	1	12				
	N	i		1	27				
	E	i		1	35				
	N	i		11	56				
	N	i		16	37				
	E	e		24	54				
9	N	i		35	1				
	E	eL _Q		49	22				
	N	L		53	47				
	E	L		55	37				
	N	M _R		57	22	25	30		
	E	M	13	5	10	25	30		
		F	14	43	-				
14	NE	e	15	34	27				
	N	eL		46	17				
	N	M		47	48	11	3		
		F		59	-				
15	NE	i	10	6	49				
	N	i		10	19				
	E	i		11	14				
		F		31	-				
30	NE	iP	6	17	18			41.8°	
	NE	eS		23	36			4645	
	NE	i		23	59				
	NE	iSSS		26	19				
	NE	L		27	50				
	E	M		29	1	13	49		
	N	M		29	43	13	37		
		F	8	-	-				
30	NE	e	10	0	52				
	NE	e		30	-				
	E	M		44	-	15			
30		F	11	5	-				
	N	e	14	2	-				
	NE	M		26	38	17			
Sept. 4		F		42	-				
	E	e	10	42	34				
	N	iP		42	37				
	NE	iS		52	29			77.8°	
	NE	iSSS	11	0	49			8650	
	N	i		8	56				
	E	i		11	44				
	NE	L		16	34				
	E	M ₁		25	36	28	8		
	N	M ₁		29	26	25	4		
		M ₂	12	24	8	20	3		
	M ₂		24	35	20	3			
	F		53	-					

SEISMOLOGICAL BULLETIN.

Oct. - Dec., 1941.

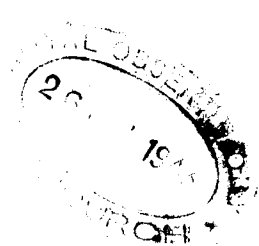
King's College Observatory,
Aberdeen.

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.
Photographic Registrations, Two Components.

Compts.	Mass	T ₀	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm.	24/7/41 2/4/40
E	1 lb.	10 sec.	20 : 1	150	18.1 mm.	

Date	Component	Phase	Time G.M.T.			Period	Ampl.		Remarks
			h.	m.	s.		A	E	
Oct. 3	NE	iP	16	33	43	16	6	60.4° 6710	
	NE	S		41	57				
	NE	e		45	28				
	N	L		50	18				
	E	L		50	53				
	E	M		53	36				
5	N	F	17	24	-	16	13		
	N	i	10	33	34	20	6		W-E effect slight.
	N	i		40	17				
	N	i		51	32				
	NE	eL	11	17	47				
N	M		27	47					
8	N	F	12	19	-				
	N	e	16	0	37	15	7	89° 9890	No W-E effect.
	NE	F		15	-				
NE	e	16	25	30					
26	NE	M		34	20				
	NE	F		36	-				
	N	e	7	9	-	22	7		W-E e.
	E	M		11	-				
N	F		13	27					
N	F		34	-					
Nov. 5	NE	P	17	55	31	22	73	93° 10340	No W-E effect.
	NE	i		2	54				
	NE	i		4	51				
	NE	L		24	25				
	N	M		32	12				
	E	F		32	20				
6	N	eL	19	32	-	23	11		
	N	M		3	35				
	N	F		9	42				
8/9	NE	e	23	55	39	30	56		
	NE	i		56	14				
	N	i	24	4	14				
	N	i		11	6				
	N	i		12	0				
	E	eL		15	14				
	NE	L		19	54				
	N	L		26	41				
	E	M		32	28				
	N	F		34	12				
	N	F	1	40	-				

SEISMOLOGICAL BULLETIN.

Oct. - Dec., 1941.

No. 2.

King's College Observatory,
Aberdeen.

Date	Component	Phase	Time G.M.T.			Period	Ampl.		Δ	Remarks
			h.	m.	s.		A	E		
Nov. 12	NE	1 F	10	22	0				Obscured by microseisms	
				32	-					
18	N	1	10	45	5					
	N	1		47	19					
	N	1		56	29					
	N	1	11	7	9					
	N	e		16	29					
	NE	L		20	19					
	E	M		24	14	20	8			
	N	M		29	20	18	20			
		F	12	24	-					
18	NE	1	16	58	49					
	N	1	17	2	1					
	N	1		5	24					
	E	1		9	8					
	NE	1		10	17					
	E	1		14	41					
	N	1		15	19					
	NE	1		18	19					
	E	L		23	35					
	E	M		28	39	35	250			
	N	M ₁		29	43	30	250			
	N	M ₂		40	29	16	258			
		F	19	34	-					
25	<p>During this period N-W component was out of action and the results are those for the N-S component. The magnitudes of the displacements observed are far larger than any hitherto observed. The displacements are given in mm. except where otherwise indicated, and are the distances measured on the chart, the direction being that in which the light spot moved.</p>									
			Displacements							
	N	1	18	8	56	mm.	Dir.			
						10.8	S		Return swing.	
						13.5	N			
				9	10	58.0	N			
				9	16	31.0	N			
				9	40	52.0	N		A permanent set of 15 mm. towards N followed this gradually decreasing to 5 mm.	
				12	30	15.0	N		Very large displacement magnitude uncertain.	
				13	0					
				13	15	48.0	N		Total N-S swing of 100 mm.	
				13	35	60.0	N			
				16	20					
				16	35	78.0	N (from original zero)		Total N-S swing of 113 mm.	
				19	15				Total swing of 120 mm.	
				24	0					
				26	30	15° period 951μ	S		Total swing 114 mm. Total swing 110 mm.	
				31	15	63.0				
			22	15	-					



Date	Time	Phase	Time G.M.T.			Period	Amplitude	Δ	Remarks
			h.	m.	s.				
Dec. 5	E	1P	20	59	4				
	E	1P		59	11			82.4°	
	E	1		59	17			9155	
	E	1S	21	9	20				
	E	1S		9	26				
	E	1PS		10	8				
	E	1		10	31				
	E	1SS		14	16				
	NE	1SSS		17	36				
	NE	L		23	56				
	E	M ₁		28	36	20	150		
	E	M ₂		30	1	20	111		
	E	M ₃		30	11	19	150		
	E	F	24	15	-				
	6	E	eL	2	3	30			Obscured on N-S by shaking of building.
E		F		23	-				
6	E	1P	21	36	6			86.3° 9590	
	E	1PP		39	21				
	NE	1S		46	41				
	E	1PS		47	36				
	E	1		51	46				
	E	1SS		52	21				
	E	1		53	31				
	E	1		59	14				
	NE	L ₁	22	2	6				
	NE	L ₂		6	50				
	E	M ₁		10	52	17	56		
	E	M ₂		11	13	17	34		
E	F		56	-			Maxima badly defined on N-S.		
9	NE	e	3	40	15				
	E	M ₁		46	35	25	25		
	E	M ₂		51	25	25	25		
E	F	4	9	-					
13	NE	1	6	33	34			Very much obscured by microseisms.	
	E	1		34	19				
	E	1		36	5				
	E	1		36	14				
	E	1		38	6				
	E	F		46	-				
16	NE	1P	19	32	33			85.6° 9510	
	NE	1		39	23				
	NE	1S		43	6				
	NE	1PS		44	4				
	NE	1SS		49	12				
	NE	1SSS		53	8				
	E	L	20	0	33				
	E	L		0	43				
	E	M ₁		7	19	22	183		
	E	M ₁		7	29	24	231		
	E	M ₂		15	17	15	148		
	E	M ₂		15	22	14	97		
E	F	21	10	-					
24	E	e	20	48	52			N-S very badly obscured by microseisms and by shaking of building.	
	E	M ₁		51	7	30	24		
	E	F	21	55	-				

Date	Component	Phase	Time G.M.T.			Period	Ampl.		Δ km.	Remarks
			h.	m.	s.		A	B		
Dec. 26	E N N N N N NE N N N	1P	15	9	56				69.2° 7690	
		1P		10	2					
		1S		18	52					
		1S		19	1					
		1		22	16					
		1		22	22					
		1		26	8					
		L		27	42					
		L		31	22	21	73			
		M		31	24	22	117			
		F	16	42	-					
27	NE NE N N N	1P	18	22	15				Portugese earthquake.	
		1S		26	19					
		1		29	2	15	5			
		1		30	15	15	5			
		M		30	17	15	5			
		F		55	-					
31	E N N	e	17	59	2					
		1		59	14					
		eL	18	21	12					
		F		44	-					