



SEISMOLOGICAL BULLETIN.

No. 1.

January - March 1949.

King's College Observatory,
Aberdeen.

Lat. 57°10' M.

Long. 2.6' W.

Height above M.S.L. 12m.

Lithologic Foundation:

Glacial deposit over boulder clay.

Instruments: Milne-Shaw seismograph.
Photographic registrations: Two Components.

Compts.	Mass.	To.	Damping Ratio.	Magnification.	1" Tilt.	Date from which constants apply.
N	1 lb.	10 sec.	20.1	150	18.1	5/4/48
E	1 lb.	10 sec.	20.1	150	18.1	5/4/48

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.
			h.	m.	s.				
Jan 14	E E	No N-S component. e M F	16	8	25 35 -		4		Obscured by micro-seisms.
Jan 19 ✓	E E E	e eL M F	15	39	34 24 17 -	23	55		
Jan 23	E E E E	i i L M F	01	11	26 19 32 9 -	12	7		
Jan 23 ✓	E E E E E E E E	iPP i iSKS iPS iSS L L M F	06	49	12 48 45 23 37 23 8 10 -	20	19	98.8° 10,980Km	T = 06h 3m 26S G.M.T.
Jan 27	E	e F	08	28	22 -				Surface waves.
Feb. 1.	E E E E E E	iPP iPPS i iSSS eL M F	18	35	36 40 26 39 3 23 -	21	12	116.5° 12,945Km.	T _o = 18h 15m 51S G.M.T.

SEISMOLOGICAL BULLETIN.

No. 2.

January - March 1949.

King's College Observatory,
Aberdeen.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.
			h.	m.	s.				
Feb. 2.	E E	iS i F	18	1 9 39	19 27 -		<i>H</i>		
Feb. 13. ✓	E E E E E	iSKS i eL i M F	18 19	55 8 43 47 55 35	10 0 25 0 0 -	21	12	157.5° 17500Km	
Feb. 14. ✓	E E E E	i L e M F	19	1 29 32 35 48	44 30 20 50 -	25	9		
Feb. 23. ✓	E E E E E E E E E E	iP iPP iS iSS iSSS i i L M F	16 17	16 19 25 29 32 33 35 36 41 36	51 17 19 31 5 30 24 50 42 -	13	590	62.6° 6955Km.	T = 16h 6m 35S G.M.T.
Feb. 24.	E	i F	23	25 42	56 -				Very slight
Feb. 28.	E	i F	01	10 28	15 -				Surface waves
Mar. 2.	E E E E	iP iS L M F	06 07	58 0 1 3 17	18 44 42 16 -	13	14	13.1° 1455Km	
Mar. 4.	E E E E	i i eL M F	01 02	41 43 14 26 54	22 49 9 22 -	20	16		

Natural Philosophy Department,
Marishal College,
ABERDEEN.

SEISMOLOGICAL BULLETIN.

No.3.

January -March 1949.

King's College Observatory,
Aberdeen.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.				
			h.	m.	s.								
Mar. 4.	E E E E E E E E E E	e	10	26	55		μ	50.3° 5590Km	T = 10h 19m 23s G.M.T.				
		iP		28	12								
		i		29	22								
		iPP		29	54								
		iPPP		30	54								
		i		33	50								
		iS		35	10								
		iPS		35	44								
		iSS		38	18								
		iSSS		40	25								
		F	12	53	-								
✓ Mar. 16/17.	E E E E E	iPP	22	46	6			121° 13445Km					
		iSKKS		53	4								
		e	23	9	41								
		eL		21	38								
		L		23	40								
		M	30	29	25	30							
		F	00	39	-								
Mar. 17. ✓	E E E E E	i	21	25	17								
		i		35	50								
		e	22	2	7								
		eL		11	27								
		M		17	41					24	12		
		F	23	14	-								
Mar. 24. ✓	E E E E	i	21	17	20								
		i		25	8								
		e		28	50								
		M		38	57					17	22		
		F	22	19	-								
Mar. 27. ✓	E E E E E E E E E E E E	e	06	48	19			118° 13110Km					
		ePP		51	20								
		iSKP		52	53								
		iPPP		53	52								
		iS		59	6								
		iPPS	07	2	16								
		i		3	2								
		i		9	24								
		iSSS		13	57								
		eL		21	29								
		L		28	20								
		M ₁		33	19					30	206		
M ₂		36	0	22	138								
		F	09	46	-								
Mar. 28.	E E	e	13	33	12				Surface waves				
		e		40	44								
		F	14	5	-								
Mar. 30.	E E	E	16	0	0				Surface waves				
		M		6	40					20	6		
		F		26	-								



SEISMOLOGICAL BULLETIN.

No. 1.

April - June 1949.

King's College Observatory,
Aberdeen.

Lat. 57°10' N.

Long. 2°6' W.

Height above M.S.L. 12m.

Lithologic Foundation:

Glacial deposit over boulder clay.

Instruments: Milne-Shaw seismograph.
Photographic registrations: Two Components.

Compts.	Mass.	To.	Damping Ratio.	Magnification	1" Tilt	Date from which constants apply.
N	1 lb.	10 sec.	20.1	150	18.1	15/4/49.
E	1 lb.	10 sec.	20.1	150	18.1	15/4/49.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.	
			h.	m.	s.					
Apr. 1	E E E	e e M F	09	37	47	27	5	H		
				41	37					
				47	30					
				10	2					-
Apr. 2	E	e F	17	12	37				Traces only.	
				17	-					
Apr. 3	E E	e M F	07	33	59				Surface waves.	
				36	42					
				50	-					
Apr. 11	E	e F	01	13	40				Very slight.	
				33	-					
Apr. 13 ✓	E E E E E	iP iS e eL M F	20	6	22	35	109	65° 7220Km	T ₀ =19h 55m 50s.	
				14	55					
				19	41					
				22	23					
				27	35					
				21	26					-
Apr. 14	E	e F	23	36	42				Very slight	
				49	-					
Apr. 20 ✓	E E E E E E E E E E	iPP iSKS iPS iPPS i e iSSS e L M ₁	03	48	4	25	37	112.1° 12450Km	T ₀ =03h 28m 53s. Chilean Earthquake.	
				54	12					
				57	40					
				58	40					
				04	0					56
					4					25
				7	30					
				16	35					
				23	30					
				27	57					

SEISMOLOGICAL BULLETIN.

No. 2.

April - June 1949.

King's College Observatory,
Aberdeen.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	△ km.	Remarks.
			h.	m.	s.				
Apr. 20 (Cont.)	E	M ₂ F	05	33	33	20	41		
Apr. 23 ✓	E E E E E E E	ePP iPS iPPS i e eL M F	11	35	38			114°	12,660Km T = 11h 16m ^o 0s. G.M.T.
Apr. 25 ✓	E E E E E E E E E E	iSKS iS iPS iPPS iSS iSSS i L M F	14	18	37			96°	10660Km T = 13h 54m ^o 53s G.M.T.
Apr. 25	E	e F	20	33	-				Traces
Apr. 30 ✓	E E E E E E E E E E	e iPKP iPP iPPP iSKS iPS iSS iSSS eL M F	01	40	50			110°	12220Km T = 01h 23m 25s G.M.T.
May 3	E E	e i F	06	16	45				Slight
May 9 ✓	E E E E E E	e iSKS iS e eL M ₁ M ₂ F	13	56	7			85°	9450Km
			14	8	53				
			14	23	51				
			15	27	30	25	13		
			15	36	57	18	11		
			15	14	-				

SEISMOLOGICAL BULLETIN.

No.3.

April - June 1949.

King's College Observatory,
Aberdeen.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.		
			h.	m.	s.						
May 10	E	e	01	11	23		4				
	E	i		14	29						
		F		25	-						
May 13	E	e	20	20	24						
	E	i		32	30						
	E	i		34	24						
		F		44	-						
May 16	E	e	05	32	30	22	6				
	E	M		46	36						
		F		57	-						
May 21 ✓	E	eP	21	52	51			80° 8890Km			
	E	i	22	2	15						
	E	iS		2	50						
	E	i		15	39						
	E	eL		19	16						
	E	M ₁		24	55					20	8
	E	M ₂		31	5					18	11
		F	23	2	-						
May 30 ✓	E	e	01	54	40	20	4	96° approx. 10700Km			
	E	iS		56	33						
	E	i		58	34						
	E	iSS	02	3	32						
	E	M		24	27						
		F		29	-						
June 11	E	eS	14	37	-	15	3				
	E	eL	15	1	18						
	E	M		9	24						
		F		24	-						
June 12	E	iSKS	18	14	44						
	E	e		17	30						
	E	i	18	44							
	E	i	20	52							
		F	19	9	-						
June 14	E	e	01	10	12				Very slight		
		F		26	-						
June 16	E	i	18	29	6						
	E	i		34	18						
	E	i		36	31						
	E	i	42	40							
		F	19	5	-						
June 19	E	e	12	46	30	20	3				
	E	M		47	32						
		F		48	30						



King's College Observatory,
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Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.		
			h.	m.	s.						
June 24/25	E	iPP	22	57	12		4	105° 11650Km approx.			
	NE	eSKS	23	3	29						
	E	iPPS	23	6	12						
	E	e		9	34						
	E	iSSS		16	11						
	NE	eL		30	30						
	E	M		41	55	20					
	N	M		43	42	20					
June 25.	E	e	20	44	30		c	10	7	Very slight	
		F		58	-						
June 26.	N	e	05	51	40					Very slight	
		e		55	20						
		F	06	6	-						
June 26.	E	i	09	10	15					Early part lost during changing of chart	
		e		16	17						
		eL		36	20						
		M		45	3	E 22 6					
		F	10	8	-	N 23 4					
June 27	E	e	13	46	45						
		i		55	39						
		M		58	29	16					4
		M	14	0	30	16					3
		F		5	-						
June 28	E	e	20	30	30					Very slight on N-S	
		M		31	40	20					3
		F		36	-						

Natural Philosophy Department,
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Long. 2°6' W.

Height above M.S.L. 12m.

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Instruments: Milne-Shaw seismograph.
Photographic registrations: Two Components.

Compts.	Mass.	To.	Damping Ratio.	Magnification.	1" Tilt	Date from which constants apply.
N	1 lb.	10 sec.	20.1	150	18.1	15/4/49.
E	1 lb.	10 sec.	20.1	150	18.1	15/4/49.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	△ km.	Remarks.		
			h.	m.	s.						
July 2	E E E	ePP e M F	11	50	23		/				
			12	48	20						
			13	6	33						
July 2 ✓	E E E E E E E E E E	iPP i iSKS iSKKS iS iPS iSS eSSS eL M M F	20	15	25			103.2° 11,450Km			
				21	16						
				21	43						
				22	45						
				23	3						
				24	33						
				29	54						
				34	28						
				48	15						
				53	26						
				22	10					53	26
July 4	E E E E E E	iP ePP i iS iSS e M F	03	49	38			50.2° 5580Km	Surface waves by supplementary path. T = 3h 40m ° 51s. G.M.T. Persian Gulf Region U.S.C.G.S. T = 18h 18m ° 6s. G.M.T.		
				51	38						
				55	25						
				56	49						
			04	0	31					18	3
				10	13						
July 8	N N E N N E	iP e eS eS M M F	18	21	36			15.2° 1690Km			
				24	1						
				24	19						
				24	28						
				26	42					14	4
				26	46					14	4
				42	-						

SEISMOLOGICAL BULLETIN.

No.6.

July - September 1949.

King's College Observatory,
Aberdeen.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.
			h.	m.	s.				
Sept. 14 (Cont.) ✓	NE	L		38	42		μ		
	NE	M		45	6 →	E 32			79)
	N	M ₂	22	14	30	N 35			87)
		F		19	-	→ 16			2
Sept. 16.	NE	e F	20	10 31	35 -			Very slight.	
Sept. 16.	N	e F	21	4 45	35 -			No E-W record.	
Sept. 18	N N	e M F	00	16 25 49	45 24 -	18	2	No E-W record.	
Sept. 19 ✓	N E NE	e e M F	22	38 39 45	30 40 33	18	2		
Sept. 21	E	eP	13	7	0				
	E	iS		16	41				
	N	i		17	28				
	E	i		17	41				
	NE	eSS		21	25				
	E	L		27	15				
	E	M F		33 14	30 0	-	32	15	
Sept. 24	NE	e	05	1	17				
	NE	e		30	20				
		F	06	11	-				
Sept. 27 ✓	NE	iP	15	41	15				
	E	ePP		43	40				
	NE	eS		49	45				
	NE	iSSS		56	13				
	E	L		59	27				
	N	L	16	0	0				
	N	M		8	16	19	67		
	E	M		8	24	16	38		
		F	17	39	-				
	Sept. 27.	E	e	17	58	15			
N		e	18	0	23				
E		e		5	40				
N		e		6	0				
E		M		7	40	20	3		
N		M F		9 44	40	20	3		

76.0°
8445Km

63.0°
7000Km

N-S 16m
45s.
T = 12h
° 55m 22s

T = 15h 30m
° 54s

Perhaps a
renewal of
the previous
shock.

SEISMOLOGICAL BULLETIN.

No.2.

July - September 1949.

King's College Observatory,
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Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	△ km.	Remarks.
			h.	m.	s.				
July 10 ✓	NE	iP	04	2	21			49.1° 5455Km	T = 03h 0 53m 42s G.M.T.
	N	i		3	36				
	N	iPP		4	16				
	N	iPPP		4	58				
	N	iP.S		6	45				
	N	i ^e		8	43				
	N	iS		9	25				
	N	i		10	25				
	N	iSS		12	21				
	N	i		13	5				
	N	i		16	25				
	N	L		19	33				
N	M		27	15	12	736			
N	F		08	7	-				
July 10	N	e	11	11	16				Very slight
		F		43	-				
July 10	N	i	12	36	26				
		e		29	25				
		F		41	-				
July 10	N	e	14	25	17				
	N	i		33	0				
	N	i		39	45				
	N	eL		42	30				
		F		15	-				
July 10	N	ePP	15	29	28			49.4° 5445Km	T = 15h 0 18m 54s G.M.T.
	N	eS		34	38				
	N	iSS		38	24				
	N	i		44	52				
	N	L		46	5				
	N	M		49	58	15	10		
July 10 ✓	N	ePP	15	59	35			49.4° 5490Km	T = 15h 0 48m 57s G.M.T.
	N	iS	16	5	10				
	N	i		7	55				
	N	iSS		8	32				
	N	i		15	35				
	N	L		17	5				
	N	M ₁		20	38	18	44		
	N	M ₂		22	50	16	47		
July 10 ✓	N	eP	16	32	45			49.2° 5465Km	T = 16h 0 24m 05s G.M.T.
	N	iPP		34	38				
	N	iPPP		35	25				
	N	iS		39	50				
	N	i		43	41				
	N	iSSS		44	35				
	N	L		47	55				
	N	M ₁		51	24	10	51		
	N	M ₂		54	55	12	56		
	N	F	18	30	-				

SEISMOLOGICAL BULLETIN.

No.3.

July - September 1949.

King's College Observatory,
Aberdeen.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.
			h.	m.	s.				
July 11	N	iP	16	23	19		4	79° 8780Km	
	NE	iS		33	10				
	E	eL		51	20				
	N	eL		53	20				
		F	17	53	-				
July 13	N	e	10	38	20				
	E	e		41	20				
	NE	M		45	27				
		F	11	5	-				
July 14	NE	e	11	18	2				
	NE	e		22	2				
		F		45	-				
July 18	E	e	00	59	40	25	4		
	N	e	01	1	38				
	NE	eL		26	30				
	E	M		34	43				
		F	02	1	-				
July 19	E	iP	17	51	3	13	5	52° 5780Km	N-S ePP 17h 53m 01s. T = 17h °42m 1s G.M.T.
	E	iPP		52	57				
	E	eS		58	25				
	N	e	18	1	30				
	E	iSS		1	51				
	NE	i		9	33				
	N	M		13	20				
	E	M		13	39				
		F		45	-				
July 23	NE	i	10	45	59				
	NE	i		49	38				
	N	i		59	20				
	NE	L	11	7	22				
		F	12	22	-				
July 23 ✓	NE	iP	15	9	10	13	126	27.0° 3000Km	T = 15h 3m °35s G.M.T.
	NE	iPP		9	50				
	NE	iS		13	50				
	E	i		14	50				
	NE	L		17	20				
	N	M		20	31				
	E	M		22	4				
July 27 ✓	NE	e	15	31	37	20	4		E-W e
	NE	e		34	39				
	N	i		41	57				
	NE	i		45	37				
	NE	e	16	11	42				
	NE	eL		28	-				
	N	M ₁		32	42				
	E	M ₁		33	42				
	N	M ₂	17	4	39				
	E	M ₂		10	38				
	F		41	-					
					20	6	Surface waves in supplementary direction.		
					20	3			
					16	4			

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.
			h.	m.	s.				
July 30	E NE	e e F	17	57	37		u		
			18	2	10				
				20	-				
<u>August.</u>									
Aug. 5. ✓	NE NE N E N E	iS i e L M M F	19	31	41	20 20	5 8		Ecuador Earth- quake.
				34	31				
				43	39				
				49	2				
				54	36				
				55	44				
Aug. 6. ✓	N E NE NE NE N N E	iPP i iSS i e L M M F	00	58	11	24 25	6 9	141.6° 15740Km U.S.C.G.S.	
			01	11	19				
				16	28				
				17	0				
				35	-				
				42	20				
				49	37				
				55	54				
			02	33	-				
			Aug. 13. ✓	E N N E N N NE E N	e i i e e M M F				
	55	20							
19	1	39							
	4	32							
	4	48							
	13	40							
	25	8							
	27	41							
	53	-							
Aug. 17.	N	iP				18	45	48	
Aug. 17. ✓	NE NE E NE NE NE N E N E	iP iPPP i iS iSSS i L L M M F	18	50	47	19 17	149 104	32.4° 3600Km	T ₀ =18h 44m 24s.
				51	59				
				53	7				
				56	5				
				58	17				
			19	0	28				
				3	23				
				3	44				
				5	56				
				6	58				
Aug. 18. ✓	E E	e M F	13	54	-	20	4		Very slight on N-S
			14	14	25				
				43	-				
Aug. 22. ✓	NE NE NE	iP iPP i	04	11	38			62.9° 6990Km.	T ₀ =04h 01m 20s.
				13	53				
				15	58				

SEISMOLOGICAL BULLETIN.

No.5.

July - September 1949.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	km.	Remarks.
			h.	m.	s.				
Aug. 22 (cont.)	NE	iS	20	8					
	NE	iPPS	20	51					
	NE	iSS	24	19					
	NE	iSSS	26	38					
	E	L	31	8					
	N	L	31	48					
	E	M	35	13		20	1500		
	E	M	38	-		15	1043	Deflection off chart.	
		F	08	42					
Aug. 23	E	e	20	15	50				
	E	M	20	-				Very slight Fore shock of the next (U.S.C.G.S.)	
		F	27	-					
Aug. 23 ✓	NE	iF	20	35	4				
	NE	iS	43	41				64.2°	
	NE	i	48	39				7135Km	
	NE	L	56	59				T = 20h 24m	
	E	M	21	1	16	15	13	° 37s	
	N	M	3	36		18	13	E-W e	
		F	22	0	-				
Aug. 28	E	i	19	33	28				
	NE	i	36	58					
	NE	L	38	8					
	E	M	39	43		16	2		
	N	M	40	53		16	2		
		F	50	-					
<u>September.</u>									
Sept. 5.	NE	eSKS	03	17	49				
	NE	iS		18	30				N-S 17m
	E	iSS		24	55				55s
	N	i		40	40				
	E	eL		40	56				
	N	eL		42	48				
	E	M		47	13	20	3		
	N	M		47	20	18	2		
Sept. 5.	E	eL	04	5	28				
	N	L		5	41				Renewal of the above shock
	N	M		11	33	20	3		
	E			11	42	20	3		
		F		36	-				
Sept. 14.	N	e	02	14	-				
	E	e		22	-				Very slight
		F		35	-				
Sept. 14.	NE	iPP	20	9	16				
	E	SKP		12	18				
	NE	SKS		15	26				108°
	N	iS		16	48				12000Km
	NE	iPS		18	36				T = 19n
	NE	PSS		19	33				° 50m 30w
	NE	e		24	43				E-W 15m
	NE	eSSS		28	28				20s
	E	e		32	12				

go back

SEISMOLOGICAL BULLETIN.

No.7.

July - September, 1949.

King's College Observatory,
Aberdeen.

Date	Components	Phase	Time G.M.T.			Period secs.	Ampl.	Δ km.	Remarks.
			h.	m.	s.				
Sept. 29	NE E N	e	05	16	10		μ		Very slight
		i		19	33				
		e		20	15				
		F		27					
Sept. 30 ✓	N E E	e	05	21	30	20	6		No definite maximum on N-S.
		e		22	0				
		M		29	50				
		F	06	10					

Natural Philosophy Department,
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SEISMOLOGICAL BULLETIN.

No.1.

October - December, 1949.

King's College Observatory,
Aberdeen.

Lat. 57°10'N.

Long. 2°6'W.

Height above M.S.L. 12m.

Lithologic Foundation: Glacial deposit over boulder clay.

Instruments: Milne-Shaw seismograph.
Photographic registrations: Two Components.

Compts.	Mass.	To.	Damping Ratio.	Magnification.	1" Tilt	Date from which constants apply.
N	1 lb.	10 sec.	20.1	150	18.1	15/4/49.
E	1 lb.	10 sec.	20.1	150	18.1	15/4/49.

Date.	Compon-ents.	Phase.	Time G.M.T.			Period secs.	Amp.	△ Km.	Remarks: Time of origin.
			h.	m.	s.				
✓ Oct. 4	N E E N N E E N	eS	10	37	52	14 15	19 13	56° 6220Km.	
			i	38	43				
		PS	42	12					
		SSS	44	22					
		e	46	37					
		L	48	12					
		M	50	32					
		M	51	23					
✓ Oct. 7	NE NE NE N NE E N	iPP	12	20	13	18 13	13 9	103° 11445Km.	N 12h 20m 16s. N 12h 30m 31s. T _o = 12h 2.1m.
			iSKS	27	3				
		i	27	13					
		iPPS	30	34					
		eSS	35	40					
		eL	53	50					
Oct. 7	N E E N E	M	13	7	42	16	2		Perhaps renewal of previous shock. No definite maximum on N-S.
			F	14	1				
		e	14	4	50				
		e	6	40					
		e	17	40					
Oct. 8	NE E N	i	03	18	25	13 10	3 2		E e
			M	26	25				
		M	30	27					
		F	42	-					
Oct. 8	N E	e	21	25	40				Slight surface waves.
			e	29	40				
		F	34	-					

SEISMOLOGICAL BULLETIN.

No. 2.

October - December, 1949.

King's College Observatory,
Aberdeen.

Date.	Compon- ents.	Phase.	Time G.M.T. h. m. s.	Period secs.	Amp. <i>u</i>	Δ Km	Remarks: Time of origin.
✓ Oct. 19	N E E N N N E E N E	i iPS e iSS eSSS eL L M ₁ M M ₂ F	21 30 24 31 26 37 14 39 14 45 9 48 44 51 45 56 31 22 5 18 6 22 23 27 -				Obscured by microseisms 125.2° U.S.C.G.S.
✓ Oct. 20	E E E E	ASKS e eL M F	13 13 7 20 35 50 34 58 34 14 20 -	20	3		After shock of 19d 21h. No indication on N-S compt.
Oct. 21	E	e F	22 54 12 23 5 -				
✓ Oct. 31	E E E	i e M F	01 57 37 02 5 17 14 26 42 -	16	11		
Oct. 31	E	e F	18 24 - 19 15 -				Very slight.
Nov. 1	E	i F	13 38 44 49 -				Surface waves.
Nov. 2	E	e F	03 27 - 57 -				Surface waves. No trace on N-S compt.
✓ Nov. 7	E NE NE N E N E	i e e M ₁ M ₁ M ₂ M ₂ F	06 56 51 07 8 15 15 50 30 36 30 46 08 0 26 2 26 13 -	20 24 20 16	5 20 8) 5)		Perhaps due to a renewal of the shock.
✓ Nov. 11	NE E	e M F	16 32 6 33 24 36 -	20	3		Slight.
Nov. 13	E E E	e eL M F	05 18 - 21 40 28 25 44 -	17	4		No trace on N-S compt.
✓ Nov. 20	E NE E NE N E	i i e eL M M F	07 30 14 31 20 42 10 44 30 54 5 55 10 08 50 -	14 12	29 20		Mainly surface waves.

SEISMOLOGICAL BULLETIN.

No.3.

October - December, 1949.

King's College Observatory,
Aberdeen.

Date.	Components.	Phase	Time G.M.T.			Period secs.	Amp.	△ Km.	Remarks: Time of origin.	
			h.	m.	s.					
Nov.22	NE	PKP ₁	01	11	34		H	Km.	Obscured by microseisms.	
	E	i		12	18					
	N	i	01	12	57					
	E	i		13	35					
	N	iPP		15	48					
	E	iPPP		18	43					
	E	SKS		22	34					
	NE	PS		25	18					
	E	PPS		26	14					
	NE	i		32	1					
NE	SS		35	32			E 35m 47s.			
		F	02	47	-					
Nov.23	NE	e	17	6	0				Very slight.	
		F		18	-					
Nov.27	N	iPP	09	4	35		140.4°	U.S.C.G.S.	E e.	
	NE	i		5	19					
	NE	i		10	24					
	NE	i		15	30					
	NE	eSS		23	0					
	E	e		35	20					
	N	e		40	40					
	NE	eL		50	40					
	E	M	10	6	56	19				8
	N	M		7	29	16				9
		F	11	0	-					
Dec.17	N	iPKP	07	13	4		118.8° 13.200° Km.	E e T _o = 06h 54m 11s G.M.T.		
	NE	PP		14	25					
	N	i		19	27					
	N	iSKKS		21	11					
	NE	iPS		24	14					
	NE	iPPS		25	52					
	N	i		27	20					
	E	i		27	41					
	NE	iSS		31	23					
	NE	iSSS		35	44					
	E	i		39	0					
	N	i		40	4					
	E	L		44	18					
	NE	L		52	18					
	E	M	08	0	21	22				380
N	M		0	45	21	270				
		F	10	7	-					
Dec.17	N	iPP	15	28	25		121° 13,450° Km.	T = 15h 8m 9s G.M.T.	E 45m 8s. N 49m 44s.	
	N	iSKP		30	7					
	N	iSKS		34	32					
	NE	iPPS		39	23					
	NE	iSS		45	0					
	NE	iSSS		49	40					
	NE	i		58	52					
	N	L	16	5	44					
	E	L		6	22					
	N	M		10	21	29				388

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Date	Compon- ents.	Phase	Time			Period secs.	Amp.	Δ km.	Remarks: Time of origin.
			h.	m.	s.				
Dec. 17 (Cont).	E	M F	18	15 5	51 -	24	204		
Dec. 22.	N E E N N E E	S i SS e M eL M F	09	52 53 57	49 56 42			71° 7890Km	
			10	3 5 7	19 40 29	20	11		
				11	54	23	25		
				25	-				
Dec. 25/ 26	N E N E N	e i eL e M F	23 00	58 4 7 10	3 3 8 26	18	9	Very slight on E-W Compt.	
				14	8				
				37	-				
Dec. 26	N N N N E N N E	i i i e e eL M M F	06	49 53 58	24 28 12			Obscured by microseisms.	
			07	4 7	21 9				
				17	28				
				25	0	19	25		
				40	29	20	16		
				52	4				
			08	55	-				
Observations on 28d at 00h and on 29d at 03h doubtful through failure of time breaks.									
Dec. 29	E E E E	i i e M F	18	14 16 22 39 55	4 16 0 16 -	17	4		

 Natural Philosophy Department,
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