

SEISMOLOGICAL BULLETIN

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.

January - March, 1957

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

Compt.	Mass	To	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm.	8/11/56
E	1 lb.	10 sec.	20 : 1	150	18.1 mm.	8/11/56

Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin
Jan. √ 2	N	i	00 49 34				U.S.C.G.S.: 53°N, 168 ¹ / ₂ °W E 59m 54s
	N	iS	59 44				
	N	iPS	01 00 21				
	E	i	00 47				
	N	iSSS	06 59				
	E	i	10 04				
	NE	e	14 00				
	N	eL	20 39				
	E	L	22 51				
	E	M	23 59	20	11		
E	M	26 29	18	11			
		F	Obscured by following shock				
√ 2	NE	iP	02 28 39			73.4°	U.S.C.G.S.: 52 ¹ / ₂ °N, 168°W
	N	iPP	31 19			8155 Km	
	N	i	34 28				
	E	iS	38 07				
	NE	i	38 24				
	N	iSS	42 39				
	N	i	46 36				
	E	e	53 15				
	N	M ₁	03 02 03	17	20		
	E	M	05 06	15	18		
N	M ₂	06 27	19	25			
		F	Obscured by following shock				
√ 2	N	iP	03 24 04			74.0°	U.S.C.G.S.: 53°N, 168°W
	E	iPPP	28 14			8220 Km	
	E	iS	33 36				
	E	e	37 -				
	N	e	47 45				
	E	M	59 39	19	25		
	N	M	59 54	17	18		
		F	Obscured by following shock				
√ 2	N	i	04 14 14				U.S.C.G.S.: 53°N, 168°W
	NE	i	16 49				
	N	i	22 54				
	N	M	33 00	18	29		
	E	M	35 32	17	28		
		F	Obscured by following chock				
√ 2	N	M	04 52 14	15	15		U.S.C.G.S.: 52 ¹ / ₂ °N, 169°W
	E	M	05 02 39	15	10		
		F	06 50 -				

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin
			h.	m.	s.				
Feb. ✓ 11	E NE E N E N E N	iSKS i i L L M ₁ M ₁ M ₂ M ₂ F ⁻	01	39	24				U.S.C.G.S.: 10°N, 126°E Mindinao Aftershock
				40	29				
				47	24				
			02	02	-				
				05	50				
				10	44	22	10		
				13	01	26	18		
				19	44	18	18		
				20	33	20	19		
			02	54	-				
11	NE E N E NE	i e e e e	15	45	08				B.C.I.S.: 52 ³ / ₄ °N, 1 ¹ / ₄ °W Displacements all very small
				45	18				
				45	19				
				45	33				
				46	29				
✓ 19	N E N N NE N E	iP iS i iSS L M M F	07	49	35			26.0° 2890 Km	Ee.: U.S.C.G.S.: 36 ¹ / ₂ °N, 22° T ₀ = 07h 44.0m
				54	08				
				54	18				
				55	15				
				58	25				
				59	28	20	19		
				59	38	20	27		
			08	25	-				
✓ 20	NE NE NE NE E N	iS i iSS L M M F	04	50	03			22° 2445 Km	U.S.C.G.S.: 36 ¹ / ₂ °N, 9°E T ₀ = 04h 41m
				50	23				
				50	43				
				52	48				
				54	30	15	6		
				54	38	15	3		
			05	03	-				
✓ 23	E N E N E N NE N N E N N E NE E N N E	iP i iPP i ePPP iSKS iS iSKKS iPS i i iSS iSSS L M ₁ M ₁ M ₂ M ₂ F ⁻	20	38	58			86.5° 9610 Km	U.S.C.G.S.: 24°N, 122°E T ₀ = 20h 26m 20s
				40	08				
				42	23				
				42	47				
				44	18				
				49	23				
				49	30				
				49	50				
				50	38				
				51	38				
				54	48				
				55	42				
				58	48				
			21	07	-				
				13	53	22	133		
				14	23	20	82		
				21	53	15	69		
				22	38	16	89		
			22	04	-				
Mar. ✓ 2	N N NE NE E N E N E	iPII iPP iS I iS II iSS I e L M M F	00	38	38			67° 7445 Km	U.S.C.G.S.: 18 ¹ / ₂ °N, 78°W Two shocks
				41	23				
				47	23				
				47	38				
				51	53				
				54	58				
				57	30				
			01	05	58	20	8		
				06	28	17	4		
				46	-				

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks: Time of origin.
			h.	m.	s.				
Mar √ 3	E E	e M F	04	03	10 48 -	22	3		U.S.C.G.S.: $8\frac{1}{2}^\circ$ N, 103° W No effect on N.S
√ 5	NE E NE E E N	e iSS iSSS L M M F	12	35	38 18 44 30 13 21 -	15 15	6 3		U.S.C.G.S.: 33° N, $34\frac{1}{2}^\circ$ W
√ 8	NE NE NE N E NE N E NE	iP iPP iS iSS i i M M M F	12	19	30 03 44 48 04 30 16 26 26 20	15 15 15	65 79 160E) 116N)	23.9° 2655Km	U.S.C.G.S.: $39\frac{1}{2}^\circ$ N, 23° E $T_0 = 12h\ 14m\ 16s$
8	NE	e F	20	54	- -				
√ 8	N E N NE N E	i iS iSS e M M F	23	41	08 43 37 50 49 24	13 10	13 9		U.S.C.G.S.: $39\frac{1}{2}^\circ$ N, 23° E Eastern Greece Aftershock
√ 9	E NE E N NE E N E	iP i iPP iPPP iS M ₁ M ₁ M ₂ F ²	14	33	53 09 34 04 28 00 09 24	10 15 15	76 253 218	72° 8000 Km	U.S.C.G.S.: 51° N, 175° W Series of disturbances continued until 20h.
√ 9	N N E E N E E N N E N	iP iPP iPPP iS i iSS i L M ₁ M ₁ M ₂ F ²	20	50	24 01 30 40 34 24 31 09 16 04 35 -	17 19 17	44 46 54	70.2° 7800Km	U.S.C.G.S.: $52\frac{1}{2}^\circ$ N, $169\frac{1}{2}^\circ$ W $T_0 = 20h\ 39m\ 14s$
9	E E N	e e eLM F	23	08	30 30 - - -				U.S.C.G.S.: 53° N, 168° W

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks: Time of origin.
			h.	m.	s.				
Var. ✓10	E NE N E E N	i i e L M M F	03	26	59 44 50 40 54 14 -	20 18	19 22	U.S.C.G.S.: 52°N, 176°W	
10	E N	eL eLM F	12	05	- - -15- 20 -			U.S.C.G.S.: 52°N, 171°W	
10	E N	eLM eLM	13 14	50 15	-) -) - -			U.S.C.G.S.: 51 ¹ / ₂ °N, 180°	
✓10	NE E E N E N	e e L M M F	15 16	47 04	20 40 10 00 33 18 -	20 20	8 14	U.S.C.G.S.: 52°N, 173°W	
11V	N N N N E N E E N	i iS iPS iSS i L L M M F	03	24	28 23 08 18 28 - - 07 32 -	19 20	46 54	72° 8000Km U.S.C.G.S.: 51°N, 177°W E 34m 19s E 38m 38s	
11V	N E N E N N N NE N E	i i i iS iSS iSSS L M M F	10	10	01 48 38 13 40 28 - 43 50 -	18 21	50 51	70° 7780Km U.S.C.G.S.: 53°N, 164 ¹ / ₂ °W	
11V	E N E N	e i M LM F	12	23	- 30 36 - -42- 54 -	18	2		
11V	N N E N N E N E N	iP iPP iS i iSS i L M M F	15	06	43 28 02 20 38 59 40 11 40 40 -	20 17	27 26	71.7° 7965Km U.S.C.G.S.: 51 ¹ / ₂ °N, 178 ¹ / ₂ °W N 15m 48s	
			17	48	-				

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin
			h.	m.	s.				
7.12	✓	E N E N	eS iPS M M F	07 49 28 49 53 08 10 53 13 48 09 35 -	20 18	6 20		U.S.C.G.S.: 51½°N, 173½°W.	
✓12		N N N N N E E	eP iPP iS i iSS i M M F	11 56 13 59 03 12 05 32 05 48 10 28 18 53 29 37 29 44 14 46 -	17 18	38 64	72.0° 8000Km	U.S.C.G.S.: 51°N, 177°W. E 05m 53s. T ₀ = 11h 44m 53s.	
✓13		E N E	e eLM M F	03 26 40 30 - -40- 38 33 47 -	15	1		U.S.C.G.S.: 52°N, 171½°W.	
✓13		N NE NE NE E N	i iS i i M M F	15 58 30 16 02 48 03 32 06 40 22 28 27 29 17 42 -	25 15	9 13		U.S.C.G.S.: 51½°N, 179°W.	
✓13		E N N E	e e M M F	20 35 - 41 - 44 28 46 23 21 00 -	17 15	2 3		U.S.C.G.S.: 52½°N, 168°W.	
✓14		N NE N N N E E N	iP i iPP iS iPS i M M F	14 59 08 59 24 15 01 39 08 36 09 00 17 13 28 22 42 15 18 08 -	20 19	82 90	72° 8000Km	U.S.C.G.S.: 51½°N, 177°W. E 08m 42s.	
✓15		N E N N E	iS i i M M F	03 12 30 15 30 20 28 36 13 38 30 04 52	15 16	11 7		U.S.C.G.S.: 53°N, 167°W.	
✓16		N N NE NE N NE N N E	iP iPPP i iS iPS iSSS L M M F	02 45 48 50 03 54 54 55 03 55 38 03 02 28 14 33 21 57 26 03 05 26 -	17 19	38 49	71° 7890Km	U.S.C.G.S.: 52°N, 179°W. E 50m 11s. T ₀ = 02h 34m 32s.	

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin	
			h.	m.	s.					
Mar. 17 ✓	N	iP	22	55	53	21 20	6 22	67.4° 7490Km	U.S.C.G.S: 54°N, 166°W T ₀ = 22h 45m 00s.	
	NE	iS	23	04	48					
	N	iPS		05	23					
	N	iSSS		11	54					
	N	M		27	38					
	E	M		31	53					
		F	55	-						
18	E	i	23	34	33					
	N	i		36	35					
		F		44	-					
✓19	N	e	13	02	36	20 16	16 13	70° 7780Km	U.S.C.G.S: 51½°N, 175°W. E 11m 48s. T ₀ = 12h 51m 28s.	
	N	iPPP		06	48					
	N	iS		11	45					
	N	iPS		12	18					
	E	iSS		16	29					
	N	iSSS		19	17					
	N	L		26	38					
	N	L		28	03					
	E	M		33	26					
	N	M		43	02					
		F	15	07	-					
✓22	NE	Pi,e	14	32	06	21 19	45 39	68.2° 7580Km	U.S.C.G.S: 54°N, 166°W. T ₀ = 14h 21m 08s.	
	NE	iS		41	06					
	E	iPS		41	36					
	N	eSS		45	36					
	E	e		48	45					
	E	L		51	05					
	N	L		53	25					
	N	M		15	01					51
	N	M		03	45					
		F	17	06	-					
✓23	E	e	05	47	40	18	4		No effect on N-S component.	
	E	e		54	35					
	E	e	06	07	45					
	E	M		16	36					
		F		42	-					
✓24	N	e	09	00	-	18	13		U.S.C.G.S: 51°N, 130°W. No definite maximum on N-S.	
	E	i		00	18					
	E	M		01	21					
		F		10	-					
25	E	e	22	08	35					
	N	e		11	25					
		F		16	-					
✓28	L	e	20	51	25	15 15	1 1		U.S.C.G.S.: 51°N, 171½°W	
	N	e		52	30					
	N	M		53	37					
	E	M		57	24					
		F		21	09					-
✓29	N	iP	05	21	32	28	37	69.5° 7720Km	U.S.C.G.S: 53½°N, 167°W. T ₀ = 05h 10m 26s.	
	L	e		21	37					
	NE	iS		30	39					
	E	i		30	59					
	NE	eSS		35	22					
	E	L		40	30					
	N	L		43	30					
	E	M		45	15					

SEISMOLOGICAL BULLETIN

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin
			h.	m.	s.				
Mar. 29	N	M	05	46	37	27	44		
		F	08	08	-				
✓ 29	N	i	23	01	52			U.S.C.G.S: 53°N, 169°W.	
	N	i		10	57				
	N	e		11	23				
	E	e		20	30				
	E	M		36	52	17	2		
	N	M		38	43	15	1		
		F		57	-				
Natural Philosophy Department, Marischal College, Aberdeen.									
A. E. M. Geddes									

SEISMOLOGICAL BULLETIN



KING'S COLLEGE OBSERVATORY, ABERDEEN

April - June, 1957

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12m. Lithologic Foundation: Glacial deposit over boulder clay.

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

Compt.	Mass	To	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1mm. E-W 18.1mm.	8/11/56
E	1 lb.	10 sec.	20 : 1	150	19.0mm. N-S 19.0mm.	

Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Remarks: Time of origin.
April							
✓ 2	E E	e M F	20 53 25 21 06 22 24 -	16	2		U.S.C.G.S.: 51 ¹ / ₂ ° N, 173° W
2	E	e F	22 13 20 29 -				U.S.C.G.S.: 51° N, 173° W
✓ 5	E E N E N E	e i e i i M F	03 18 25 21 22 24 20 25 17 30 15 33 23 04 12 -	20	5		U.S.C.G.S.: 52° N, 172 ¹ / ₂ ° W No definite maximum on N-S
✓ 8	E E E	i e M F	20 40 00 45 18 21 02 38 16 -	19	2		U.S.C.G.S.: 8 ¹ / ₂ ° N, 83° W
✓ 9	NE NE NE E	i i i M F	00 46 33 49 33 52 25 01 14 49 34 -	17	2		U.S.C.G.S.: 30 ¹ / ₂ ° N, 138 ¹ / ₂ ° E
9	E N E N	e e M M F	21 05 25 07 45 10 26 11 38 28 -	15 17	1 1		U.S.C.G.S.: 52 ¹ / ₂ ° N, 169° W
10	E N NE NE N E E N	iP i e, iPP i, eS i eSS M M F	05 24 19 25 24 27 24 34 25 38 44 39 44 54 39 55 49 06 29 -			80.4° 8935Km	U.S.C.G.S.: 15 ¹ / ₂ ° N, 98° W T ₀ = 05h 12m 09s



KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks: Time of origin.
			h.	m.	s.				
April ✓ 10	NE	iP	11	40	41			65.3° 7255 Km U.S.C.G.S.: 56°N, 154°W N 49m 30s T ₀ = 11h 30m 00s	
	N	iPP		43	06				
	E	ePPP		44	41				
	E	iS		49	24				
	NE	i		50	31				
	E	iSS		53	42				
	E	iSSS		56	09				
	N	i		56	59				
	E	L	12	01	09				
	E	M		09	38	18	51		
N	M		11	40	18	58			
	F		16	03	-				
✓ 13	NE	e	04	03	-			U.S.C.G.S.: 48 ¹ / ₂ °N, 128°W	
	NE	e		11	25				
	N	M		18	42	22	3		
	E	M		18	51	20	3		
		F		32	-				
✓ 14	E	e	07	26	30			63° 7000Km U.S.C.G.S.: 31°N, 84 ¹ / ₂ °E	
	NE	i,e		30	51				
	NE	i		32	19				
	E	eSSS		37	44				
	NE	L		44	40				
	E	M		49	54	18	27		
	N	M		50	35	17	14		
	F		08	44	-				
✓ 14	N	e	19	37	44			137° 15220Km U.S.C.G.S.: 15 ¹ / ₂ °S, 173°W	
	N	iSKP		40	51				
	N	eSKS		44	15				
	N	i		47	02				
	N	iPPS		52	19				
	N	iSS		58	09				
	N	L	20	22	30				
	N	M		34	48	20	55		
		F		22	30	-			
	✓ 15	E	e	22	09	-			
N		M		16	39	22	2		
E		M		19	31	15	1		
		F		42	-				
✓ 16	E	e	04	17	09			104.5° 11610Km U.S.C.G.S.: 4 ¹ / ₂ °S, 107 ¹ / ₂ °E Deep focus	
	NE	iPP		21	39				
	NE	iSKS		26	51				
	NE	i		29	50				
	N	i		32	00				
	E	i		33	22				
	E	M	05	01	29	22	8		
	N	M		02	49	20	4		
	F		06	07	-				
✓ 19	NE	iP	22	30	45			70.0° 7780Km U.S.C.G.S.: 52°, 166 ¹ / ₂ °W T ₀ = 22h 19m 35s	
	NE	iS		39	55				
	E	iPS		40	30				
	N	i		40	47				
	NE	e,iSS		44	35				
	E	i		47	35				
	E	L		56	30				
	N	M	23	04	59	17	20		
	E	M		05	39	19	25		
		F		24	09	-			

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks: Time of origin.
			h.	m.	s.				
April ✓ 20	E N E N E	e e L M M F	13 34 30 37 50 40 - 47 53 48 16 14 01 -			17 18	3 4	U.S.C.G.S.: 6°S , $147\frac{1}{2}^\circ\text{E}$	
✓ 21	E E NE N N N N E	e i iS i iSS e eL M M F	21 24 30 29 22 33 32 34 53 38 28 43 40 50 50 58 36 59 45 23 09 -					73° 8110Km U.S.C.G.S.: 7°N , 72°W	
23	E E	e M F	22 52 46 55 00 23 15 -			19	2	U.S.C.G.S.: 27°S , 68°W Very slight on N-S Compt.	
✓ 24	NE NE E NE N E N	iP iPPP iS i L M M F	19 16 07 17 09 21 02 22 02 23 52 27 41 28 54 21 16 -			21 18	118 78	29.0° 3220Km U.S.C.G.S.: 36°N , $28\frac{1}{2}^\circ\text{E}$ Turkish Shock $T_o = 19\text{h } 10\text{m } 05\text{s}$	
✓ 25	NE NE E NE NE N E E N	iP iPPP i i iS i L M M F	02 31 36 32 42 35 37 36 25 36 37 37 25 40 47 43 54 44 02 04 33 -			17 15	182 113	29.3° 3255Km U.S.C.G.S.: $36\frac{1}{2}^\circ\text{N}$, 29°E Turkish major shock $T_o = 02\text{h } 25\text{m } 32\text{s}$	
✓ 26	NE E NE NE	e i L M F	06 45 32 46 22 49 30 51 54 07 11 -			15	13E) 10N)	U.S.C.G.S.: $36\frac{1}{2}^\circ\text{N}$, 29°E Turkish after shock	
✓ 28	E NE E N E N E N	e e,i L L M ₁ M ₁ M ₂ M ₂ F ₂	01 48 - 51 20 02 12 40 16 50 18 42 25 19 32 29 42 29 57 55 -			25 30 20 20	4 6 5 3	U.S.C.G.S.: 7°N , 127°E	
28	N N NE	iS e LM F	15 09 02 28 30 35 - 47 16 00 -					U.S.C.G.S.: $52\frac{1}{2}^\circ\text{N}$, $168\frac{1}{2}^\circ\text{W}$	

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin
			h.	m.	s.				
April ✓ 29	E N NE	e e M F	21	52	-	24	4	U.S.C.G.S.: 9°S, 107°E	
			22	02	38				
			22	-	-				
May ✓ 2	N E NE E N	i ePP iS M M F	04	01	53	20	11	U.S.C.G.S.: 72°N, 67 ¹ / ₂ °W	
				02	33				
				06	38				
				11	29	22	7		
				11	38				
				50	-				
✓ 2	NE E E E	e e L M F	11	16	50	19	5	U.S.C.G.S.: 56 ¹ / ₂ °S, 123°W	
				37	30				
				46	-				
				54	35				
			Lost in following shock						
✓ 2	N E N E	e i M M F	12	09	25	16	4	U.S.C.G.S.: 52 ¹ / ₂ °N, 169°W	
				14	14				
				22	58	18	4		
				25	45				
			13	24	-				
2	E	e F	22	04	50			U.S.C.G.S.: 7 ¹ / ₂ °S, 120°E Very slight	
			22	-	-				
✓ 4	E E E	eL e M F	11	08	35	18	2	U.S.C.G.S.: 37 ¹ / ₂ °S, 137°E	
				15	35				
				19	52				
				25	-				
12	N	i F	05	17	53				
			06	00	-				
13	N N N N	e L M M F	05	01	-	16	4		
				17	15				
				18	27	22	7		
				26	06				
				58	-				
18	E N	e e F	06	08	55			U.S.C.G.S.: 51°N, 171°W	
				13	45				
				25	-				
19	E E	e M F	21	40	45	15	2	U.S.C.G.S.: 12°N, 87°W	
				50	50				
				57	-				
✓ 20	N E E N	e e M M F	02	31	55	15	2	U.S.C.G.S.: 51°N, 180°	
				33	35				
				36	40	15	2		
				46	00				
			03	12	-				
20	E E E N	e i i i F	20	01	54			U.S.C.G.S.: 38 ¹ / ₂ °N, 14°E N: 08 ^m 39 ^s	
				08	44				
				11	54				
				12	57				
				20	-				

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin
			h.	m.	s.				
May ✓28	NE E E	i e M F	06	12	56 31 35 37 56 47 -	16	2	U.S.C.G.S.: $25\frac{1}{2}^\circ\text{N}, 95^\circ\text{E}$	
29	N E	LM M F	10	32	- -44- 37 03 47 -	16	2	U.S.C.G.S.: Turkish aftershock	
29	E N NE E	eP e e, iS iSS F	18	44	26 45 20 49 06 49 51 19 05 -			U.S.C.G.S.: Southern Greece	
✓30	E N N E	e e M M F	01	36	38 40 48 46 43 48 38 02 21 -	20 18	2 2	U.S.C.G.S.: $20^\circ\text{S}, 175^\circ\text{W}$	
31	NE NE NE	i i i F	02	38	53 42 48 44 58 52 -			U.S.C.G.S.: $27\frac{1}{2}^\circ\text{S}, 63^\circ\text{W}$	
31	NE N N	iS e i F	22	19	38 24 35 37 54 41 -			U.S.C.G.S.: $3\frac{1}{2}^\circ\text{N}, 77^\circ\text{W}$	
June 1	NE N E	e M M F	05	37	30 44 51 48 43 59 -	20 15	3 2	U.S.C.G.S.: $40\frac{1}{2}^\circ\text{N}, 31^\circ\text{E}$ Turkish aftershock	
1	E N E N	e e M LM F	21	18	40 23 50 27 50 27 - -32- 41 -	15	1	U.S.C.G.S.: Turkish aftershock	
1	E N	e e F	23	12	45 13 40 29 -				
2	NE E N	e M M F	01	27	45 31 35 33 38 41 -	15 15	1 1	U.S.C.G.S.: Turkish aftershock	
5	E NE NE E N	iP iS L M M F	07	20	42 24 23 25 30 27 45 28 12 08 10 -	13 11	10 8	20.4° 2265Km U.S.C.G.S.: $52\frac{1}{2}^\circ\text{N}, 35^\circ\text{W}$ $T_o = 07\text{h } 16\text{m } 08\text{s}$	

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin		
			h.	m.	s.						
June ✓6	E	e	20	45	-	20	3	U.S.C.G.S.: 3°N, 126 ¹ / ₂ °E			
	E	M		53	55						
		F	21	04	-						
✓10	E	e	01	19	35	23	4				
	E	i		24	31						
	NE	i		25	14						
	E	e		29	05						
	NE	e,i		39	55						
	E	M	02	02	10						
	N	LM		01	-						
				-15-							
		F	20	-	-						
11	NE	e	06	48	-			No maximum: deep focus			
	NE	i,e		57	35						
	NE	e	07	08	55						
	N	i		16	50						
	NE	e		30	00						
		F	08	30	-						
✓11	NE	i,e	15	02	05	24 20	6 4				
	NE	iPKP		09	45						
	N	iSKS		16	42						
	N	i		22	35						
	NE	e		33	10						
	E	M	16	24	13						
	N	M		42	47						
		F	17	11	-						
✓11	NE	i,ePP	19	06	02	24 25 20 20	28 52 23 33	91.2° 10135 Km U.S.C.G.S.: 18°N, 120 ¹ / ₂ °E T _o = 18h 49m 22s.			
	E	i		09	42						
	NE	i		13	01						
	NE	iS		13	25						
	N	iSS		19	35						
	E	iSSS		23	05						
	N	i		23	35						
	N	M ₁		38	43						
	E	M ₁		38	45						
	N	M ₂		46	35						
	E	M ₂		46	37						
			F	20	51				-		
	12	NE	e	00	14				40		
NE		e		19	45						
N		LM		40	-						
					-50-						
E		LM		43	-						
					-59-						
		F	01	25	-						
✓13	NE	i,eP	10	52	10	19 17 18 16	27 26 24 27	71.9° 7990Km U.S.C.G.S.: 51 ¹ / ₂ °N, 175°W T _o = 10h 40m 45s			
	N	iPP		56	30						
	E	iS	11	01	35						
	N	i		01	44						
	N	iSS		06	15						
	E	M ₁		11	50						
	N	M ₁		28	50						
	E	M ₂		29	56						
	N	M ₂		32	40						
			F	13	58				-		

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin
			h.	m.	s.				
June 14	NE	e	06	44	55			U.S.C.G.S.: 52°N, 175 ¹ / ₂ °W	
	NE	e		53	-				
	N	LM	07	03	-				
				-14	-				
	E	LM		04	-				
		F		-17	-				
			40	-					
✓ 15	E	ePP	01	02	40			103.3° 11,480Km U.S.C.G.S.: 34°S, 56°E	
	N	eSKS		08	40				
	E	eL		37	-				
	N	eL		40	-				
	E	M		49	50	17	4		
	N	M		52	45	17	2		
		F	02	15	-				
✓ 15	N	iP	18	29	40			71° 7890Km U.S.C.G.S.: 52°, 171°W	
	NE	e		36	50				
	N	iPS		39	37				
	E	LM		55	-				
			19	13	-				
	N	M		06	48	17	2		
	F		38	-					
✓ 18	E	eP	02	24	37			82.2° 9135Km U.S.C.G.S.: 14 ¹ / ₂ °N, 96°E T _o = 02h 12m 14s	
	E	ePP		27	37				
	NE	iS		34	52				
	E	e		39	49				
	N	i		45	14				
	N	M	03	00	52	20	3		
	E	M		07	54	18	3		
		F		38	-				
✓ 18	E	iP	15	00	50			82.2° 9135Km U.S.C.G.S.: 14°N, 96°E N 11m 02s T _o = 14h 48m 31s	
	E	iPP		03	57				
	E	iS		11	07				
	NE	M		36	57	20	11		
	E	M		44	00	18	11		
		F	16	48	-				
✓ 18	N	ePKP	18	16	02			U.S.C.G.S.: 25°S, 170°E	
	E	e		16	57				
	E	eSKS		22	37				
	E	i		50	07				
	NE	L	19	11	47				
	N	M		22	58	20	2		
	E	M		24	58	20	3		
		F	20	50	-				
19	E	e	02	46	50			U.S.C.G.S.: 24°S, 175 ¹ / ₂ °W	
	E	M		52	00	20	2		
		F	03	12	-				
✓ 19	N	e	08	23	-			U.S.C.G.S.: 16 ¹ / ₂ °S, 176 ¹ / ₂ °E	
	N	iSKP		24	37				
	E	ePPP		27	10				
	N	i		29	55				
	NE	L	09	12	-				
	E	M		25	46	20	3		
	N	M		29	47	20	3		
		F	10	25	-				

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Remarks Time of origin
			h.	m.	s.				
June ✓ 22	NE	iP	06	31	03			78.3° 8700Km T _o = 06h 19m 07s	
	N	i		34	38				
	E	i		36	03				
	NE	iS		40	58				
	NE	i		41	13				
	E	L		56	00				
	E	M		07	01	59	22		8
✓ 23	N	M		02	01	20	3		
	N	F	08	00	-				
	NE	i, eP	00	10	17			76.6° 8620Km T _o = 23h 58m 20s	
	NE	i, ePP		13	10				
	NE	iS		20	08				
	E	iSS		25	48				
	N	i		26	54				
NE	i		38	08					
E	L		43	43					
✓ 27	N	L		44	53				
	N	M ₁		50	46	26	84		
	N	M ₁		55	05	23	111		
	E	M ₁	01	00	38	22	59		
	E	M ₂		01	12	22	131		
	E	F ₂	04	19	-				
✓ 27	NE	iP	00	19	16			57.4° 6380Km U.S.C.G.S.: 56 ¹ / ₂ °N, 116°E T _o = 00h 09m 29s	
	NE	i		19	22				
	NE	iPP		21	22				
	NE	i		22	50				
	NE	iS		27	12				
	NE	iSS		31	01				
	N	i		33	29				
	E	i		33	57				
	N	M		46	51	12	184		
	E	M		51	02	11	221		
28	E	e	21	32	-				
	E	i		35	30				
	N	i		37	12				
		F		39	-				
29	E	e	23	57	-			U.S.C.G.S.: 56°N, 116°E	
	E	M		58	42	14	3		
	N	e		59	40				
		F	24	04	-				

A. E. M. Geddes

Natural Philosophy Department,
Marischal College,
Aberdeen.

SEISMOLOGICAL BULLETIN

KING'S COLLEGE OBSERVATORY, ABERDEEN

July, 1957

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

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

Compt.	Mass	To	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm E-W 19.0 mm N-S 18.1 mm	8/11/56
E	1 lb.	10 sec.	20 : 1	150		

Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin	
July ✓ 1	E	eP	19 41 52			72.5 8055 Km	N E	U.S.C.G.S.: 25°N, 94°E T ₀ = 19h 30m 20s	
	E	ePPP	45 59				+		
	NE	iS	51 07				+		
	E	iPS	51 38				-		
	N	i	51 46				+		
	N	eSS	55 47				-		
	N	i	59 05				-		
	E	M	20 16 32				15		8
	N	M	17 15				15		5
	N	F	58 -						
✓ 2	NE	iP	00 50 12			41.9 4655 Km	- -	U.S.C.G.S.: 36°N, 53°E T ₀ = 00h 42m 21s	
	N	i	50 47				-		
	E	ePP	51 45				-		
	N	i	52 10				+		
	NE	iS	56 32				-		
	N	i	57 22				-		
	NE	iSS	59 33				-		
	NE	i	01 05 12						
	N	M	09 52				25		161
	E	M	11 48				20		137
3	N	iP	12 36 13			73.0° 8110 Km	+	U.S.C.G.S.: 50°2'N, 179°W T ₀ = 12h 24m 45s	
	N	iS	45 40				+		
	E	e	13 04 -						
	NE	LM	09 -						
		F	-19- 32 -						
7	E	e	06 14 55				+	U.S.C.G.S.: 39°N, 40°E	
	N	e	18 40						
	E	L	20 05				17		2
	E	M	22 40				17		2
	N	M	23 48						
✓ 7	E	e	17 16 50				+	U.S.C.G.S.: 67°2'S, 150°E	
	E	M	32 50				20		2
		F	41 -						
9	NE	e	21 37 35				+		
		F	33 -						

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin
			h.	m.	s.					
July 10	NE NE	e i F	06	13	-			N E		
				14	13					
				22	-					
√10	E E NE E E E N	iP ePP iS eSS eL M M F	09	16	13		78.2° 8690 Km	+ - - - - - -	U.S.C.G.S.: 8°N, 82 ¹ / ₂ °W T ₀ = 09h 04m 15s	
				19	17					
				26	08					
				31	23					
				40	25					
				44	43	22				
				46	55	20				
			10	45	-					
10	E	LM	23	52	-				Very slight	
				-58-						
√14	NE NE E N N N N N E E	PKP(I) PKP(II) i iSKP iSKS iSKKS iPSKS eSS L M F	06	43	22		150 ¹ / ₂ ° 16,720Km	+ + - - + + - -	U.S.C.G.S.: 27 ¹ / ₂ °S, 177°W Two shocks	
				44	40					
				45	37					
				46	44					
				50	12					
				53	32					
				57	15					
			07	06	05					
				47	22					
				53	44	16				
			Lost in following shock							
√14	NE NE E N	i eL M M F	08	49	50				U.S.C.G.S.: 30°S, 177°W	
			09	25	-					
				36	44	22				
				38	52	20				
			10	26	-					
17	E N NE N N	e iPP i, eSKP iPPP e F	11	28	50		134.7° 14965 Km	- + - -	U.S.C.G.S.: 11°S, 167°E T ₀ = 11h 10m 10s	
				31	57					
				32	54					
				34	52					
				46	-					
			13	45	-					
17	E E N	e M M F	19	05	-				U.S.C.G.S.: 1°S, 13°W	
				10	45	15				
				15	-					
				26	-					
√19	NE NE E	i, eS isS M F	13	25	04			+ - -	U.S.C.G.S.: 25°N, 122 ¹ / ₂ °E	
				25	57					
				54	52	17				
			14	10	-					
√21	E E	e M F	06	44	-				U.S.C.G.S.: 14 ¹ / ₂ °N, 92°W Nothing measurable on N-S.	
				51	45	15				
			07	02	-					
√23	NE N NE NE E N E N	i, eP i iS eSS e L M M F	00	56	38		70.8° 7865 Km	+ - + + - - - -	U.S.C.G.S.: 52°N, 177°W T ₀ = 00h 45m 23s	
			01	02	05					
				05	52					
				10	40					
				13	55					
				25	47					
				34	58	20				
				35	14	17				
			03	40	-					

SEISMOLOGICAL BULLETIN

KING'S COLLEGE OBSERVATORY, ABERDEEN

Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin
July							N E	
✓24	NE	e	02 50 30					U.S.C.G.S.: 30°S, 70 ¹ / ₂ °W
	N	M	03 00 44	20	2			
	E	M	00 48	22	3			
		F	21 -					
✓25	E	eS	08 03 12				-	U.S.C.G.S.: 51°N, 177°W
	N	e	03 52					
	E	L	22 40					
	N	L	23 50					
	N	M	31 40	17	2			
	E	M	32 47	17	2			
		F	Lost while changing records					
✓28	E	i	08 52 14		79.1°		+	U.S.C.G.S.: 17°N, 99°W
	NE	iP	52 29		8790Km		+	
	NE	iPP	55 29				+	Mexican Shock
	N	i	56 52				-	T _o = 08h 40m 26s
	E	iPPP	57 22				-	
	NE	i	09 01 59				-	
	NE	iS	02 28				-	
	E	iSS	08 08				+	N 08m 12s
	N	iSSS	10 57				+	
	E	L	18 -				-	
	N	M ₁	21 16	28	137			
	E	M ₁	23 03	24	498			
	N	M ₂	23 45	24	122			
		F	13 10 -					
✓29	E	eP	17 28 57			99.9°	+	U.S.C.G.S.: 23 ¹ / ₂ °S, 71 ¹ / ₂ °W
	E	ePP	32 57				-	
	NE	e	37 40			11110 Km		
	NE	iSKS	39 48				+	
	NE	iPS	41 53				+	
	E	L	58 40				+	
	N	L	18 00 50					
	E	M	08 37	22	10			
	N	M	08 47	22	3			
		F	19 00 -					

Department of Natural Philosophy,
Marischal College,
Aberdeen,
Scotland.

A.E.M.Geddes

SEISMOLOGICAL BULLETIN

KING'S COLLEGE OBSERVATORY, ABERDEEN

August, 1957

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12m. Lithologic Foundation: Glacial deposit over boulder clay.

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

Compt.	Mass	To	Damping Ratio	Magnification	1" Tilt	Date from which constants apply		
N	1 lb.	10 sec.	20 : 1	150	18.1 mm. E-W 19.0 mm. N-S 20.1 mm.	8/11/56		
E	1 lb.	10 sec.	20 : 1	150				

No.	Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Direction of Motion	Remarks: Time of origin.
1	Aug. 4	E	e	01 11 10				NE	U.S.C.G.S.: 3.1/2°S, 145°E
		NE	eSS	15 57				+	
		E	e	16 39				++	
		E	L	35 -				+	
		N	L	40 -					
		E	M ₁	43 44	22	3			
		E	M ₂	52 52	20	3			
		N	M	54 02	20	2			
			F	02 08 -					
2	4	E	eS	14 38 37				+	U.S.C.G.S.: 17°N, 99.1/2°W Repeat of Mexican Shock of 28.7.57. Effect on N-S very slight.
		E	eSS	43 54				+	
		E	M	15 06 44	18	2			
			F	34 -					
3	4	NE	e	21 34 06				--+	U.S.C.G.S.: 45°S, 35°E
		N	e	37 02				-	
		E	e	41 57				-	
		N	e	46 42				-	
		E	M	22 09 00	16	9			
		N	M	14 18	15	5			
			F	58 -					
4	8	NE	iS	22 52 29				--+	U.S.C.G.S.: 7°S, 13°W
		E	i	54 32				+	
		E	e	59 40					
		E	M	23 06 52	18	2			
5	9	NE	e	02 58 06				--+	U.S.C.G.S.: 2°S, 137°E
		N	e	03 03 16				+	
		NE	L	27 40					
		E	M	32 51	20	3			
		N	M	32 56	20	3			
			F	56 -					
6	16	E	i	23 47 57				+	U.S.C.G.S.: 10/2°N, 104°W
		E	e	50 50					
		N	i	52 58				+	
		NE	iS	55 36				--	
		E	L	24 13 -					
		E	M	17 43	25	22			
		N	M	18 45	25	4			
		E	M ₂	25 57	16	9			
		N	M ₂	28 42	15	2			
			F ²	26 00 -					

SEISMOLOGICAL BULLETIN

KING'S COLLEGE OBSERVATORY, ABERDEEN

No.	Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin
7	Aug. 18	NE N E N E	L M ₁ M ₁ M ₂ M ₂ F	09 22 - 30 55 31 18 39 08 39 12 10 18 -	 22 22 20 17	 31 56 11 14			B.C.I.S.: 12°N, 124 ¹ / ₂ °E Early portion lost during changing of charts.
8	18	E E E E E E	e i e L M ₁ M ₂ F	21 52 40 22 03 32 12 05 19 00 24 32 27 33 23 19 -	 22 17	 8 6	 + -		U.S.C.G.S.: 50°N, 157°E
9	23	E E E	e L M F	02 38 05 53 30 03 05 -13 36 -			+		U.S.C.G.S.: 6°S, 154 ¹ / ₂ °E No readable effect on N-S component.
10	26	E N E N NE N E	e eSKS i iPPS L M M F	11 51 55 52 35 54 15 54 38 12 09 30 15 55 18 36 13 13 -	 22 19	 6 12	 - - +		U.S.C.G.S.: 19°S, 63°W
11	26	E E NE E N E N E	e i i iS iPS L M M F	14 11 35 15 42 21 55 22 53 24 00 40 - 47 46 50 06 15 25 -	 20 18	 6 11	 + - - + +		U.S.C.G.S.: 12°S, 81°W
12	29		Slight effect on	E-W component from 00h 13m - 00h 33m					
13	30	E N NE E	e i i i F	16 36 50 37 54 45 31 49 21 17 05 -			 - ++ +		Very slight
14	30	E N E	e e M F	20 51 45 56 30 21 01 53 07 -	 17	 2			
15	31	E N E	e LM M F	12 33 40 36 42 37 38 46 -	 15	 3			

Natural Philosophy Dept.,
Marischal College,
Aberdeen.



SEISMOLOGICAL BULLETIN

KING'S COLLEGE OBSERVATORY, ABERDEEN

September, 1957

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

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

Compt.	Mass	To	Damping Ratio	Magnification	1" Tilt	Date from which constants apply		
N	1 lb.	10 sec.	20 : 1	150	18.1 mm. E-W 19.0 mm. N-S 18.1 mm.	8/11/56		
E	1 lb.	10 sec.	20 : 1	150				

Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Dir ⁿ . of Motion	Remarks Time of origin
Sep 2		Slight effect from		21h 48m	- 22h	03m.	NE	U.S.C.G.S.: 37°N, 71°E
3	NE	LM	20 31					
		F	-35 47 -					
4	E	e	05 46 -					U.S.C.G.S.: South
	E	M	55 40	15	2			Indian Ocean
		F	06 03 -					
9	E	e	01 23 45					U.S.C.G.S.: 48°S, 100°E
	N	LM	30					
			-40					
	E	L	34 51	20	4			
		F	52 -					
12	E	e	00 48 -					U.S.C.G.S.: 177/2°N, 85°W
	E	iSS	53 35				+	
	E	e	01 02 45					Very slight on N-S
	E	M	11 39	17	4			component
		F	35 -					
20		Slight disturbance		22h 27m	- 22h	58m.		
		May not be seismic.						
21	E	iS	20 27 49			28.7°	+	U.S.C.G.S.: 407/2°N, 347/2°E
	E	L	34 30			3190Km		T = 20h 16m 53s
	E	M	38 39	15	2			N8 N-S record: light
		F	50 -					cut off.
24	E	iP	08 35 29			105.5°	+	U.S.C.G.S.: 57/2°N, 127/2°E
	N	iPP	39 45			11720Km	-	Near Mindinao
	E	i	39 51				-	T ₀ = 08h 21m 21s
	E	iPPP	42 02				-	
	E	iSKKS	46 41				-	N 47m 00s
	E	iS	47 41					
	E	iPS	49 07					
	E	iSS	54 44				+	
	E	L	09 09 -					
	E	M ₁	16 26	32	462			
	E	M ₂	19 22	26.	332			
	N	M ₁	19 43	25	222			
	N	M ₂	25 23	24	145			
	E	M ₃	25 56	22	325			
		F	11 03 -					

KING'S COLLEGE OBSERVATORY, ABERDEEN

No.	Date	Compt.	Phase	Time G.M.T.			Period sec.	App. μ	Δ° km.	Dir ⁿ . of motion	Remarks Time of origin
				h.	m.	s.					
9	Sep 25	NE	i	06	05	22			N E	U.S.C.G.S.: $34^\circ N, 38\frac{1}{2}^\circ W$ No maximum	
		N	i		10	14			- +		
		E	i		11	02			-		
		N	i		12	05			-		
			F		32	-			-		
10	25	E	eL	17	30	30				U.S.C.G.S.: Mindinao aftershock	
		N	e		32	35					
		E	M ₁		38	45	22	3			
		E	M ₂		43	55	18	4			
			F ²		58	-					
11	27	E	e	05	05	35				U.S.C.G.S.: $1^\circ S, 127^\circ E$	
		N	e		11	30					
		E	M		12	42	25	4			
			F		33	-					
12	28	NE	iS	00	49	18				U.S.C.G.S.: $30\frac{1}{2}^\circ N, 137\frac{1}{2}^\circ W$	
		E	e		52	-					
			F		57	-					
13	28	N	iPKP	14	38	31				E 38m 37s U.S.C.G.S.: $20\frac{1}{2}^\circ S, 178^\circ W$	
		E	e		41	20			+ +		
		N	iPP		41	41			+ +		
		E	i		44	00			+ -		
		NE	i		49	36			+ -		
		N	i		57	18			+ +		
		E	iSS		59	36			+ +		
		E	i	15	03	20			+ +		
		E	e		07	37			+ +		
		E	M		31	18	25	26	+ +		
	F		16	42	-						

Natural Philosophy Department,
University of Aberdeen.

SEISMOLOGICAL BULLETIN

KING'S COLLEGE OBSERVATORY, ABERDEEN

October, 1957

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

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

Compt.		Mass	To	Damping Ratio	Magnification	1" Tilt	Date from which constants apply	
N		1 lb.	10 sec.	20 : 1	150	18.1 mm E-W 19.0 mm N-S 18.1 mm	8/11/56	
E		1 lb.	10 sec.	20 : 1	150			

No.	Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin				
				h.	m.	s.									
1	Oct. 2	E NE E E E	i i,eS iPS i M F	12	44	24	20	4	64.7° 7190Km	N E + - + + +	U.S.C.G.S.: 11°N, 63°W Venezuela foreshock				
2	4	E NE N E NE E E N E	eP e,i iPPP i iS iPS i L M F	05	36	49	18	22	64.7° 7190Km	- - - + - + -	U.S.C.G.S.: 11°N, 63°W Venezuela shock T _o = 05h 26m 15s				
3	5	Slight effect on N-S from			00h	05m	-	00h	49m		U.S.C.G.S.: 53°N, 178°W				
4	5	NE	LM	11	54	-					U.S.C.G.S.: 34 ¹ / ₂ °N, 26 ¹ / ₂ °E Crete				
				12	07	-									
5	5	NE	LM	23	11	-					U.S.C.G.S.: 38°N, 69 ¹ / ₂ °E				
					-15	-									
6	13	NE	Slight effect from			05h	03m	-	05h	25m	U.S.C.G.S.: 52 ¹ / ₂ °N, 16°E				
7	13	N	Slight effect from			22h	07m	-	22h	23m	U.S.C.G.S.: 60°S, 151°E				
8	19	E E E NE E E N E E N	eP ePP i iS i L L M ₁ M ₁ M ₂ M ₂ F ²	18	41	39	24	122	86.1° 9565Km	+ + + + + +	U.S.C.G.S.: 23 ¹ / ₂ °N, 122°E T _o = 18h 29m 00s				
9	20	E N NE NE	i i i,e M F	12	17	15	E22 N21	23 14	- - - -	U.S.C.G.S.: 11 ¹ / ₂ °N, 42°W					
				13	13	-									

KING'S COLLEGE OBSERVATORY, ABERDEEN

No.	Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin
10	Oct. 23	N N N E N NE N E	iP iS i i eSS eL M M F	06 08 08 17 13 18 05 18 16 32 - 37 15 44 11 48 10 59 -	16 15	4 2	69.2° 7690Km	N E + - - +	U.S.C.G.S.: 52 ¹ / ₂ °N, 169 ¹ / ₂ °W T ₀ = 05h 57m 03s
11	24	E N N E	e e i e F	22 22 40 22 50 24 46 27 21 51 -				+ -	U.S.C.G.S.: 25°N, 109 ¹ / ₂ °W No definite maximum
12	25	E	Slight effect	07h 15m - 07h 17m					May not be seismic
13	25	E E E E	e e L M F	10 25 15 32 20 35 10 45 26 11 15 -	22	7		+ -	U.S.C.G.S.: 50 ¹ / ₂ °N, 156 ¹ / ₂ °E No N-S record: light cut off
14	(see below)								
15	30	NE E N E	i i i i F	01 59 04 02 02 14 02 30 05 37 13 -				- + + +	B.C.I.S.: 35 ¹ / ₂ °N, 27°E
16	(see below)								
17	31	E E NE E E N E N	iP i iS i eSS e M M F	10 19 51 28 33 30 04 31 51 35 21 42 30 45 56 50 33 11 31 -	30 20	19 8	81.7° 9080Km	+ - + +	
14	26	NE	Slight effect	from 15h 13m - 15h 43m					
16	30	NE	LM	07 47 - -58-					B.C.I.S.: 35 ¹ / ₂ °N, 27°E

Natural Philosophy Department,
University of Aberdeen.

SEISMOLOGICAL BULLETIN

KING'S COLLEGE OBSERVATORY, ABERDEEN

November, 1957

Lat. 57°10' N. Long. 2°6' W. Height above M.S.L. 12M. Lithologic Foundation: Glacial deposit over boulder clay.

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

Compt.	Mass	To	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm E-W 19.0 mm N-S 18.1 mm	8/11/56
E	1 lb.	10 sec.	20 : 1	150		

No.	Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. "	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin
1	Nov 10	E	LM	00 11 - -15 -				N E	
2	√10	E E E	i e M F	06 48 01 59 15 07 06 21 12 -	16	1		+	U.S.C.G.S.: 67 ¹ / ₂ ° S, 147° E
3	√10	E E E E N	iS i L M M F	19 43 21 59 16 20 01 15 08 08 08 16 46 -	18 18	6 2		+	U.S.C.G.S.: 34° N, 139 ¹ / ₂ ° E
4	√13	E N N E N E N E	ePKP i i e eSS eL M M F	17 42 47 43 17 51 42 18 05 10 06 27 38 15 45 05 49 18 19 46 -	23 20	7 6		+	U.S.C.G.S.: 33° S, 179° W
5	√15	E N N NE	e e M M F	08 45 - 47 30 55 07 57 42 09 16 -	20 15	4 2			U.S.C.G.S.: 87 ¹ / ₂ ° N, 124° E
6	√15	N E NE N E N	i eP i e M M F	16 39 16 42 12 44 14 17 03 09 18 45 19 27 45 -	18 15	2 1		-	U.S.C.G.S.: 51 ¹ / ₂ ° N, 158° E
7	√20	N N E E NE N	e eS i eSSS e, i L	12 56 40 13 00 35 01 46 07 32 08 46 15 40				-	U.S.C.G.S.: 54° N, 165° W

KING'S COLLEGE OBSERVATORY, ABERDEEN

No.	Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin
				h.	m.	s.					
7	20 (contd)	E	M ₁	13	21	39	20	.6		N E	
		N	M ₁		23	30	22	20			
		E	M ₂		24	00	17	8			
		N	M ₂		24	34	17	16			
			F		47	-					
8	25	E	iPS	23	02	55	18	2		+	U.S.C.G.S.: 172° S, 116° E
		E	i		04	15					
		E	i		09	35					
		E	i		13	42					
		E	i		18	07					
		E	L		33	25					
		E	L		36	30					
		N	M		43	20					
		N	M		43	-					
				F	58	-					
9	26	E	LM	06	10	-					U.S.C.G.S.: 2° S, 116° E
10	27	E	i	03	17	40	12	2		-	B.C.I.S.: 3974° N, 2274° E
		E	i		22	56					
		N	LM		24	40					
					-28	20					
		E	M		25	27					
			F		31	-					
11	29	E	iP	22	32	55	20	110	94.0° 10445Km	-	U.S.C.G.S.: 21° S, 66° W
		E	i		33	44					
		E	iPP		35	55					
		E	i		37	27					
		E	iSKS		42	56					
		E	iS		43	38					
		E	iPS		44	58					
		E	iSS		50	12					
		E	i		55	55					
		E	L		23	07					
		N		11	50						
			F		25	30					
12	30	N	e	22	39	-					
		E	LM		43	-					
					-50	-					
		N	LM		46	-					
					-52	-					
			F	23	15	-					Very slight

Natural Philosophy Department,
The University,
Aberdeen.

A.E.M. Geddes

SEISMOLOGICAL BULLETIN

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.

December, 1957

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

Compt.	Mass	To	Damping Ratio	Magnification	1" Tilt	Date from which constants apply
N	1 lb.	10 sec.	20 : 1	150	18.1 mm E-W	8/11/56
E	1 lb.	10 sec.	20 : 1	150	19.0 mm N-S 18.1 mm	

No. Date	Compt.	Phase	Time G.M.T. h. m. s.	Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin
1 ✓ 4	NE N N E E NE N E N N E	iP	03 47 52	14 15	833 758	59.6° 6620Km	N E	U.S.C.G.S.: 45 ¹ / ₂ ° N, 99 ¹ / ₂ ° E Outer Mongolia Shock N 53m 57s T ₀ = 03h 37m 50m
		i	48 12					
		iPPP	51 17					
		i	51 27					
		i	54 00					
		iS	56 02					
		iSS	59 34					
		i	04 01 37					
		i	02 33					
		L	07 -					
2 ✓ 4	N E NE	eL	13 48 30	20	5		+	U.S.C.G.S.: 45° N, 101 ¹ / ₂ ° E
		eL	50 40					
		M F	14 07 -					
3 ✓ 10	N E NE N E	e	15 24 25	20 20	8 14		-	U.S.C.G.S.: 6° S, 154 ¹ / ₂ ° E
		e	29 30					
		e	40 45					
		M	56 27					
		M F	16 57 32					
4 ✓ 13	E E E E E E E E	iP	01 52 38	16 15	58 61		-	U.S.C.G.S.: 34 ¹ / ₂ ° N, 48° E Iran shock T ₀ = 01h 44m 59s Light failed on N-S Compt.
		iPP	54 06					
		iS	58 49					
		iSS	02 01 27					
		i	05 19					
		i	08 03					
		M	13 55					
		M	14 53					
		F	03 41 -					
		5 ✓ 13	E N N E					
e	05 20							
M	11 20							
M F	16 25							
6 16 ✓	E N E	e	17 59 25	20	11		-	U.S.C.G.S.: 50° N, 127° W
		LM	18 01 40					
		M F	02 45					
			13 -					

KING'S COLLEGE OBSERVATORY, ABERDEEN

No. Date	Compt.	Phase	Time G.M.T.			Period sec.	Ampl. μ	Δ° km.	Dir ⁿ of Motion	Remarks Time of origin
			h.	m.	s.					
7 \checkmark 17	E	e	05	30	10	16 15	13 3	N E + + + -	U.S.C.G.S.: $43\frac{1}{2}^\circ N, 162^\circ E$	
	E	i		30	31					
	E	iS		31	33					
	E	eSSS		40	20					
	N	e		52	40					
	N	M		59	44					
8 \checkmark 17	N	F	06	01	41	33 20	30 47	+ + - - + - + - + + +	U.S.C.G.S.: $12^\circ S, 167^\circ E$ E 12m 25s $T_0 = 13h 50m 17s$ N 25m 43s	
	NE	iPKP	14	09	35					
	N	i		12	30					
	NE	iSKP		13	00					
	NE	i		13	30					
	N	iPPP		14	53					
	N	i		17	41					
	N	i		22	00					
	E	i		25	40					
	N	i		26	06					
	N	i		29	00					
	E	i		45	00					
9 \checkmark 23	N	e	12	47	25	20	16		U.S.C.G.S.: $35^\circ N, 36\frac{1}{2}^\circ W$	
	N	M		48	40					
		F		59	-					
10 \checkmark 28	E	e	15	19	40	20	8		Very slight on N-S Compt.	
	E	M		25	03					
		F		31	-					
11 31	NE	e, i	10	28	40	13 12.5 10	6 9 7	- - - - -		
	N	M ₁		30	45					
	E	M		31	24					
	N	M ₂		31	45					
		F		41	-					
12 31	N	i	13	15	25	12 12.5	1 2	+ + + + +		
	E	e		15	45					
	N	M		16	27					
	E	M		17	17					
		F		27	-					
	13 31	N	e	16	01					30
E		e		07	20					
N		M		11	28					
E		M		12	28					
		F		25	-					

A. E. M. Geddes.

Natural Philosophy Department,
The University,
Aberdeen.

