

RATHFARNHAM CASTLE OBSERVATORY,

RATHFARNHAM, DUBLIN, IRELAND.



SEISMOLOGICAL BULLETIN FOR

JAN.

19 38

Lat. 53° 17' 55"N. Long. 6° 16' 57"W. Height above M.S.L. 52m.

Foundation : Boulder Clay resting on limestone.

INSTRUMENTS 1. O'Leary Seismometer. (1700 Kgs., N.S., E.W.)

2. Milne Shaw Seismometer. (E.W.)

Period. Damping Ratio. Magnification.
12S. 20:1 260

DATE	PHASE	G. M. T.			PER s.	AMP.	DIST. Km.	REMARKS.
		h.	m.	s.				
JAN. 1	eL M M	0	19	0				
2	iP iS i L M F	22	39	44 24 35 7 16 50		8735		
7	L M F	16	22	35 0				
11	eP iP _{R1} iS i i L M	15	24	26 10 7 20 28 57 2 30		9445		
23	iP i L M M M	8	46	16 10 21 25 28 34			Very strong microseisms mask early phases.	
24	L L M	11	22	28 40			10th. Feb. 1938. R.E. Ingram S.J., Director.	

Rathfarnham Castle Observatory, Dublin, Ireland.



SEISMOLOGICAL BULLETIN

.....FEBRUARY.....19.38.....

DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
FEB 13	e L	8	39	30			Earlier phases lost during changing of charts.	
14	iP e eS i L F	3	1 4 7 11 17 40	55 40 45 40		4,035		
15(1)	iP e iPP iS L M F	3	34 35 36 40 43 47 45	58 51 12 46 51 12	15	4,010		
15(2)	eP e S L M.	7	04 10 14 17	24 10		4,000		
21	eL F	14	20 32				Very faint.	
21	eP? e L	6 7	26 35 12	48 12				

R. E. Ingram S.J.,
Director.

10th. March 1938.

RATHFARNHAM CASTLE OBSERVATORY,

RATHFARNHAM, DUBLIN, IRELAND.



SEISMOLOGICAL BULLETIN FOR MARCH

19 38

Lat. 53° 17' 55"N. Long. 6° 16' 57"W. Height above M.S.L. 52m.

Foundation : Boulder Clay resting on limestone.

INSTRUMENTS 1. O'Leary Seismometer. (1700 Kgs., N.S., E.W.)

2. Milne Shaw Seismometer. (E.W.)

Period. Damping Ratio. Magnification.
12S. 20:1 260

DATE	PHASE	G. M. T.			PER s.	AMP.	DIST. Km.	REMARKS.
		h.	m.	s.				
MARCH 2	L	0	20	—				
	F		40					
	L	7	50					
	F	8					Early phases lost when changing chart.	
7	L	6	50					
	F	7	20					
8	eP	5	53	55				
	e(PS)	6	6	52			Very faint on N.S. only.	
	i		18	12				
	L		35					
10	iP	16	35	44				
	i		36	9				
	iS		40	9		2745		
	F	17					No surface waves recorded	
11	iP	14	56	12				
	iS		59	28		2680		
	iSS	15	0	28				
	i		0	48				
	L		3	20				
	M		5	30	20			
13	eP	17	50	48				
	eS		55	6		2680		
	L		59					
	i	18	1	20				
	F	21	28					
	F		50					
14	iP	0	59	18				
	iS?	1	9	38		9265?		
	L		22					
	L		30					

RATHFARNHAM CASTLE OBSERVATORY,

RATHFARNHAM, DUBLIN, IRELAND.



SEISMOLOGICAL BULLETIN FOR APRIL

19 38

Lat. 53° 17' 55"N. Long. 6° 16' 57"W. Height above M.S.L. 52m.

Foundation : Boulder Clay resting on limestone.

INSTRUMENTS 1. O'Leary Seismometer. (1700 Kgs., N.S., E.W.)

2. Milne Shaw Seismometer. (E.W.)

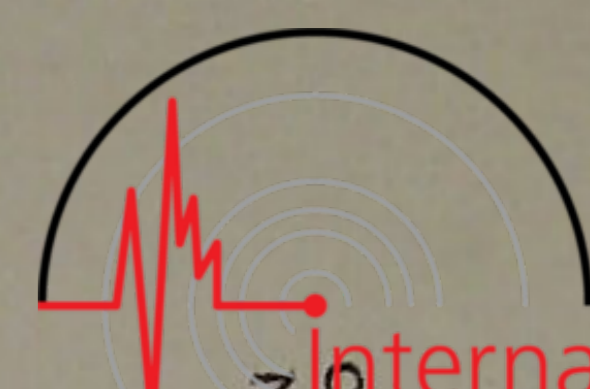
Period. Damping Ratio. Magnification.
12S. 20:1 260

DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
APRIL 9	1 F	10 11	20	0			Very faint.	
13	iP i iPP iPPP i i iS iSS i L M M F	2	50	5 12 23 29 50 22 39 22 42 10 40 20	7 7	35 56	2090	
14	iP i iPP iPPP iS i iSS iSS i i L L F	1	28	18 44 20 4 20 0 30 48 18 40 57	20		8945	
19	iP iS iSS L M e ₁	11	5	35 39 17 13 30			3310	
		23	17	29 32				

Rathfarnham Castle Observatory, Dublin, Ireland.

SEISMOLOGICAL BULLETIN

APRIL



19 38
International
Seismological
Centre

DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
April 20	iP	6	447	46				
	i		49	14				
	i		51	6				
	i		54	32				
	L	7	10					
	F	8						
22	i	4	35	36				
	i		35	49				
	i		36	45				
	L		5L					
	L		55					
	iP	11	9	15				
	i		11	38				
	F		20					
	eP	14	56	10				
	i		58	0				
F		15	10					
23	eP	0	40	57				
	i		41	37				
	i		45	34				
	iSLS?		51	29				
	iS		52				10,200	
	i		55	48				
	L	1	18					
	i	6	20	13				
	L		34					
	L		41		40			
i	i	9	42	50				
	L		56	20				
	F	10	20					
29	L	4	58					
	F	5	20					

10th May 1938
R. Ingram S.J. Director.
E. Lawlor S.J. Assistant.

RATHFARNHAM CASTLE OBSERVATORY,

RATHFARNHAM, DUBLIN, IRELAND.



SEISMOLOGICAL BULLETIN FOR MAY-JUNE

1938

Lat. 53° 17' 55"N. Long. 6° 16' 57"W. Height above M.S.L. 52m.

Foundation : Boulder Clay resting on limestone.

INSTRUMENTS 1. O'Leary Seismometer. (1700 Kgs., N.S., E.W.)

2. Milne Shaw Seismometer. (E.W.)

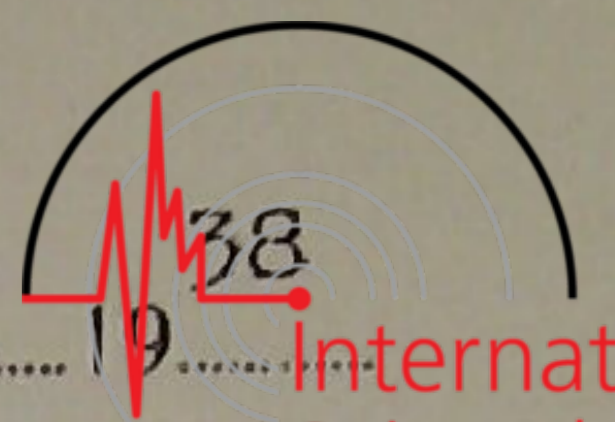
Period. Damping Ratio. Magnification.
12S. 20:1 260

DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
May 1	OL F	1	30					
2	L F	15	40					
3	iP iS L F	2	27	37			Minute marks is failed Time by measurement.	
		3	30		8	8980		
6	L F	20	30				0 to 8 hrs. Traces badly crossed no readings poss le	
	iP iS iPS L	13	29	19		8335		
8	c L F	14	50	5				
11	iP iPP iS L M	14	56	30			9100	
		15	6	40				
12	iP iP ₁ iPP iSKP iPPP iSKS iSKKS iPPS iSS iSSS	15	55	20				
		15	58	20				
		16	2	0				
			2	12				
			5	20				
			5	40				
			8	42				
			15					
			21					
			26	30				

Rathfarnham Castle Observatory, Dublin, Ireland.

SEISMOLOGICAL BULLETIN

May -- June.



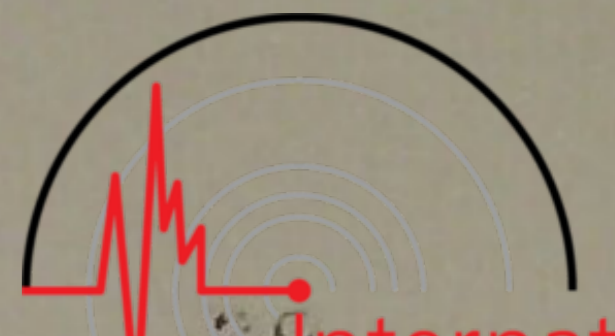
International
Seismological
Centre

DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
May (contd.) 12	L M F L F		49 17 0 19 30 21 50 22 30			14200	Superposed on previous shock.	
May 14	iP i i i L F	4	54 56 58	24 0 30				
15	i L F	3	45 47	20				
19	eP iPKP i iSKS iS i iPS iPPS i iSR ₁ iSR ₂ i L M ₁ M ₂ M ₃ F	17	23 26 28 33 35 36 37 38 39 43 48 53 18 7 11 14	30 40 8 26 18 00 30 40 56 35 0 30 30 40 56 35 0 30 30 30 30 30			12410	
22	iP i i F iP L F	8	5 6 7 30 8 41 9 6 10	31 5 16				
23(1)	iP iPP iS iPS iSS iSSS L M M M (ii)iP L	7	31 34 41 42 47 51 57 8 5 13 16	15 46 49 44 26 1 26 5 13 16			9510	
		8	35 45	0 25				
			14			9290		
27	iP i i i	21	28 29 30 31	14 0 38 30				

Rathfarnham Castle Observatory, Dublin, Ireland.

SEISMOLOGICAL BULLETIN

May _____ June _____



International
Seismological
Centre

DATE	PHASE	G. M. T.			PER s.	AMP.	DIST. Km.	REMARKS.
		h.	m.	s.				
May 27 (contd)	iS	20	53	30				
	L	21	36	40		3455		
	M	21	37					
28	L	10	50				Minute marks failed time by measurement.	
	F	11	20					
	L	17	20					
	F	18	40					
30	i	14	49	30				
	i		53	0				
	L	15	16					
	M		56					
JUNE 9	eP	19	34	15				
	F		35	24				
	i		38	13				
	i		38	45				
	S		45	50				
	i		50	31				
	i		51	37				
	i	20	19	5				
	L		30	32		3355		
10	iP	10	7	2				
	F		10	26				
	iS		17	24				
	iS		17	51				
	iPS		18	49				
	iPS		19	27				
	i		22	58				
	iSS		24	0		9365		
	L		39	5				
M		47	0					
11	eP	10	58	58				
	iS	11	0	3				
	iL			1 2				
	F		10			690		
16	iP	2	28	15				
	i		31	47				
	iSKS		38	47				
	i		38	59				
	iSKKS	39		30				
	iS		40	10				
	iPS		41	25				
	L	3	4	5				
	M ₁		12	17				
	M ₂		16	14				

No records from June 18
to June 30

H LAWLER SJ

July 30 1938.

RATHFARNHAM CASTLE OBSERVATORY,

RATHFARNHAM, DUBLIN, IRELAND.



SEISMOLOGICAL BULLETIN FOR

JULY

19

38

Lat. 53° 17' 55"N. Long. 6° 16' 57"W. Height above M.S.L. 52m.

Foundation : Boulder Clay resting on limestone.

INSTRUMENTS 1. O'Leary Seismometer. (1700 Kgs., N.S., E.W.)

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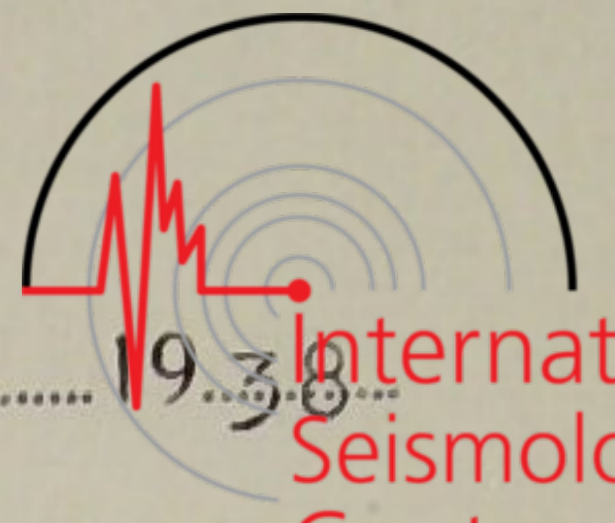
Period. Damping Ratio. Magnification.
12S. 20:1 260

DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
July I to 8							No records.	
8 to II							Microseisms much in evidence	
I7	eP	I6	I	5				
I8	eP	I	3	30				
	iS		4	59				
	i		6	44				
	i		9	17				
20	P	00	29	9				
	PR		30	42				
	B		33	42				
	SR		35	40				
	L		36	52				
	M		38	7				
	F	I	20	—		2865 km.		
21	1P	22	10	0				
	e		15	0				
	L?		13	10				
22	1P	8	I	54				
	PR _I		6	20				
	B		11	33				
	1		29	2		8265		
	1		35	40				
	1		40	20				
	1		46	50				
	1		50	45				
24	1P	I3	23	50				
	1B		33	15				
	eL		50	40				
	M?		58	0				
29	1P	I3	24	56				
	ePP		27	45				
	1S		32	3				
	φ		34	0				

Rathfarnham Castle Observatory, Dublin, Ireland.

SEISMOLOGICAL BULLETIN

JULY.....AUGUST.....



International
Seismological
Centre

DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
July 31	i	8	44	40				
	i		48	46				
	i		55	45				
	i		57	54				
AUG. 8	iP	13	14	15				
	iS		20	0				
	M		27	30		3890		
21	eP	15	40	25				
	oS		44	10				
	i		47	58		2245		
14	e	8	53	20				
	e		58	0				
	e	9	1	31				
22	i	22	19	40			AUG. 16 to 22 very microseismic	
	eL		24	43				
25	i	1	57	1				
	i	2	10	15				
	i		12	49				
	i		30	55				
	e		38	0				
28	i	21	12	50				
	i		14	45				
	eL		16	4				
	i		20	25				
29	eP	15	34	36				
	PR _I		38	31				
	iS		46	31				
	iPS		47	54				
	iPPS	16	49	43				
	L		11	0				
30	M		20	40		11590		
	i	6	14	0				
	e		20	2				
	i		25	28				
	eL		52	35				
	e	7	4	45				
	e		7	25				
	e		13	0				
	e		14	32				
	e		17	20				
	e		22	0				
	31	eP	5	54	21			

A. B. Lawlor S.F.

RATHFARNHAM CASTLE OBSERVATORY,

RATHFARNHAM, DUBLIN, IRELAND.



SEISMOLOGICAL BULLETIN FOR SEPTEMBER

19 38

Lat. 53° 17' 55"N. Long. 6° 16' 57"W. Height above M.S.L. 52m.

Foundation : Boulder Clay resting on limestone.

INSTRUMENTS 1. O'Leary Seismometer. (1700 Kgs., N.S., E.W.)

2. Milne Shaw Seismometer. (E.W.)

Period. Damping Ratio. Magnification.
12S. 20:1 260

DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
SEPT. 1	1P	3	47	43	s.		Km.	
	i		53	25				
	1		56	0				
3	1P	4	53	50				
	e		54	30				
	eL		56	50				
4	eP	19	16	0				
	e		21	55				
	e		25	0				
	M?		28	45				
5	1	15	8	0				
7	1P	4	16	29				
	1PRI		19	58				
	1		24	30				
	1SKS?		26	50				
	1S		27	18				
	1PS		28	20				
	1PPS		28	40				
	M		54	0				
18	1	3	51	33				
	1P		56	30				
	1f	4	0	40				
	L		2	04				
	1M		5	01				
21	1P	19	4	10				
	1		7	28				
	1S		15	00				
	1		16	00				
	1		20	32				
	eL		33	30				
	M1		41	25				
	M2		44	50				

9835 Km.

2680 Km.

9890 Km.

Rathfarnham Castle Observatory, Dublin, Ireland.

SEISMOLOGICAL BULLETIN

SEPTEMBER--OCTOBER.



International
Seismological
Centre

1938

DATE	PHASE	G. M. T.			PER	AMP.	DIST. Km.	REMARKS.
		h.	m.	s.				
Sept. 26	iP	2	45	13				
	iS		49	45				
	e		53	40				
	i		54	23				
	i	3	1	20				
	L		3	35				
28	i		7	31				
	i		12	27				
	e	II	27	5				
OCT. 3---8							Extremely microseismic.	
10	iP	2I	15	39				
	e		21	46				
	e		29	19				
	eL		39	33				
	M.		43	23				
12	i	I	14	57				
	eL		22	20				
	M, ?		28	59				
13	eP	I5	52	42				
	e	I6	3	26				
	e		8	21				
	eL		13	24				
20	M.		25	2				
	iP	2	39	36				
	PR1		42	51				
	PR2		44	55				
	i		49	15				
	iS		50	0				
	iPS		50	36				
	i		51	35				
	iSRI		56	00				
	L	3	8	30				
22	M		15	30				
	e	5	5	30				
	i	3	50	32				
	i		54	0				
	iL		55	48				
23	i	4	5	20				
	M		10	55				
	e	I5	24	00				
	eL		46	22				
	M		47	35				
	M		52	40				

RATHFARNHAM CASTLE OBSERVATORY,

RATHFARNHAM, DUBLIN, IRELAND.

NOVEMBER

38.

SEISMOLOGICAL BULLETIN FOR

19



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Foundation : Boulder Clay resting on limestone.

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2. Milne Shaw Seismometer. (E.W.)

Period. Damping Ratio. Magnification.
12S. 20:1 260

DATE	PHASE	G. M. T.	PER	AMP.	DIST.	REMARKS.
5	iP	8 h. 56 m. 1 s.	s.		Km.	
	iPR ₁	59 37				
	iPR ₂	9 1 42				
	iSKS	6 35				
	SKKS	6 56				
	iS	7 6				
	e	13 10				
	eL	27 37				
	L ₁	31 38				
	M ₂	37 34			10245 Km.	
	iP	11 3 23				
	iPR ₁	6 30				
	iPR ₂	9 6				
	iSKS	13 38				
	iS	14 28				
	iPS	15 28				
	i	16 28				
	i	19 13				
	JSR ₁	20 54				
	L	34 16				
L ₁	38 32					
L ₂	44 20					
F	14 0 0				10255 Km.	
6	iP	9 7 14				
	iPR ₁	10 53				
	iPR ₂	12 57				
	iSKS	17 37				
	iS	18 20				
	iPS	19 21				
	iPRS	20 54				
	iSR ₁	24 41				
	iSR ₂	28 24				
	L	38 0				
	M	45 0				10280 Km.
	iP	21 51 59				
	iSKS	22 2 21				
	iS	3 3				
	iPS	4 4				
	L	22 0				
	L	29 0				

Rathfarnham Castle Observatory, Dublin, Ireland.

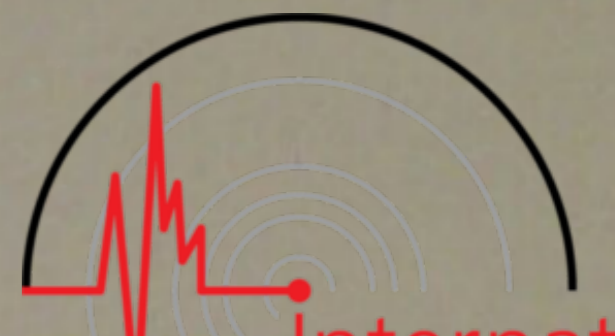
SEISMOLOGICAL BULLETIN

NOVEMBER



DATE	PHASE	G. M. T.			PER	AMP.	DIST.	REMARKS.
		h.	m.	s.				
NOV. 7	1P	1	51	54				
	1S	2	01	30				
	L		30	00				
	M		35	00				
9	1P	9	29	10				
	1S		40	5				
	1PS		41	16				
	L	10	0	0				
	M		7	0		10220 Km.	Very strong microseis	
10	eL	11	40					
	F		55					
	1P	20	29	54				
	PR ₁		32	32				
	PR ₂		33	57				
	S		39	10				
	FB		39	33				
	SR ₁		43	40				
	SR ₂		46	15				
	L		51	55				
			57	37			7635 Km.	
	11	i	I	18	22			
		i		27	0			
		eL		37	2			
M			40	31				
14	i	22	55	11				
	eL	23	13	2				
	e		21	0				
			23	32				
15	i	21	37	23				
	i		50	19				
	e	22	2	17				
	i		10	0				
16	i	11	32	15				
	i		52	51				
	eL	12	0	13				
	i		3	27				
17	iP	4	5	40				
	i		7	1				
	iPR ₁		8	25				
	iPR ₂		9	53				
	iS		15	7				
	iPS		15	39				
	iSRI		19	50				
	iL		20	57				
	M ₁		31	30				
	M ₂		34	2				
	M ₃		36	0				
	F	7	35	0			8035 Km.	
	22	iP	I	30	19			
		i		32	51			
iS			39	25				
e		2	5	49				
iL			8	19				
F		3	10	0			7300 Km.	

Rathfarnham Castle Observatory, Dublin, Ireland.



SEISMOLOGICAL BULLETIN

NOVEMBER & DECEMBER 1938

International
Seismological
Centre

DATE	PHASE	G. M. T.			PER s.	AMP.	DIST. Km.	REMARKS.
		h.	m.	s.				
NOV. 30	iS?	2	53	58				
	iL	3	15	7				
	M		25	18				
DEC. 2	i	22	26	13				
	i		32	16				
	eL		52	44				
3	eL	13	5	17				
	M		15	9				
6	i	23	25	31				
	i		36	4				
	eL		45	6				
	M		54	18				
7	i	14	3	48				
	eL		31	36				
	iM		38	43				
9	i	4	11	0				
	i		18	20				
	e		29	46				
16	i	18	16	21				
	i		20	10				
	iL		58	39				
	M	19	8	10				
20	eL	14	35	2				
	F	15	35	0				
	eL?	16	51	0				

DEC. 7 - 14 extremely
microseismic.

H.B. Lawlor.S.J.