British Association for the Advancement of Science.

Circular No. 26, *issued by the Seismological Committee*, Professor H. H. Turner, *F.R.S.* (*Chairman*), Mr. John Milne, *F.R.S.*, *Shide, Isle of Wight* (*Secretary*).

Contents.

I. *General Notes on Registers from Similar Horizontal Pendulums* (*Milne Type*).

The following registers are continuous with those published by the Seismological Investigation Committee in their first twenty-five circulars and in the Reports of the Association, 1896 to 1899.

If observers will kindly send a copy of their register, together with copies of their more important seismograms, to the Secretary of the Seismological Investigation Committee, Shide, Newport, Isle of Wight, England, as early as possible after June 30, *and again after December* 31 *of each year, the interval of time which must elapse before they receive copies of the registers of co-workers in various parts of the world will be considerably reduced.*

The time employed is Greenwich mean time (civil), expressed in hours, minutes, and in decimals of minutes. 24 or 0 hours = midnight.

Amplitude indicates half of the complete range of the maximum motion, and is expressed in millimetres. **Values less than* 0·1 *millimetre refer to the thickening of the line or minute ripples, and indicate half its width.*

As 1° turn of the calibrating screw in the bed-plate of the instrument causes a tilt of 1″·9 (secs. of arc), and as this is accompanied by a measurable displacement of the outer end of the boom, it is easy to determine the angular value corresponding to a 1 millimetre displacement. In each register this quantity should be stated.

Records only obtained at a single station have been excluded.

* In Circulars 1 to 25, 1mm. should read 0·1mm.

II. *Registers.*

The Register from Shide, Newport, Isle of Wight, England. 50°41′N. 1°17′W. John Milne; *Assistants*, Messrs. S. Hirota and J. H. Burgess.

The following entries refer to three pendulums, A, B, and C. The pendulums B and C, given to the Shide Observatory by Mr. A. F. Yarrow in 1901, respectively record E.W. and N.S. motion. A records E.W. motion. The records are photographic.

A. With multiplying lever:
Ja . 1 to June 30 18 secs. period. 1mm. amp.=0″.14.

B. Period 18 seconds. 1° turn=5mm.

C. Jan. 1 to June 30 18 secs. period. 1° turn=6mm. amp. ca.

Ats.=air tremors. P_2 refers to the commencement of the second phase of motion. d.=duration. a.=amplitude. If this is less than 0.1mm. or with Ats., d. is not given.

No.	Date	Commencemen	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
3137	Jan. 1	—	7 1	0.1	—	A.B.C.
3138	,, 3	—	12 8	0.1	—	A.C. Max. for B. 12-7
3139	,, 4	—	4 30.5	0.1	—	A.
3140	,, 4	15 58	16 40	2.5	4 45	A. P_2 16-9
			16 47	3.0		
3141	,, 5	—	3 41	0.2	—	B.C. With Ats.
3142	,, 6	—	0 53.5	0.5	—	A. With Ats.
			1 8.5	0.5		
3143	,, 8	—	9 27	0.5	—	B. With Ats.
		—	9 31.5	0.5	—	C. ,,
3144	,, 16	—	11 38	0.1	—	B.
			11 45	0.1		
		—	11 39	0.1	—	C.
			11 47	0.1		

The Register from Shide, Newport, Isle of Wight, England—continued.

No.	Date	Com. mence-ment	Max.	Max. Ampli-tude	Dura-tion	Remarks
		H. M.	H. M.	MM.	H. M.	
3145	Jan. 16	—	16 43	0.1	—	A.B. Max. for C 16-44.
3146	,, 19	—	2 43	0.1	—	A. With Ats.
		—	2 39	0.1	—	B. ,,
		—	2 42	0.1	—	C. ,,
3147	,, 20	4 21?	5 12.2	1.0	—	A. ,,
			5 24	1.0		
			5 29.5	0.6		
		4 21?	5 12.5	0.4	—	B. ,,
			5 23	0.3		
		4 21.5	5 14	0.4	—	C. ,,
			5 24	0.3		
3148	,, 21	—	2 29	0.2	—	A.B.C.
3149	,, 21	—	3 13	0.1	—	B.C.
3150	,, 23	—	20 40	0.1	—	B.
		—	20 38.5	0.1	—	C. A dismounted
3151	,, 24	16 28	16 36.5	16.0	3 0	A. P_2 16-31.5
3152	,, 25	1 46.5	1 54.4	0.5	0 35	A.
		—	1 54.5	0.1	—	B.
		—	1 54.5	0.2	—	C.
3153	,, 25	—	20 8.5	2.5	—	A. Beginning lost
		—	20 9	0.5	—	B. changing paper.
		—	20 8	0.5	—	C. End in Ats.
3154	,, 26	—	8 31.5	0.1	—	B.
3155	,, 26	—	14 9.2	1.0	—	A. With Ats.
3156	,, 26	15 0?	15 23	5.0	—	A. ,,
			15 28.7	1.5		
3157	,, 26	—	19 1.5	0.5	—	A. ,,
3158	,, 31	—	11 14	0.1	—	A.
		—	11 13	0.1	—	B.C.
3159	,, 31	11 52	12 20	0.5	—	A.
		11 53	12 23	0.2	—	B.
		11 53	12 20	0.1	—	C. End in next eqke.
3160	,, 31	—	13 15	0.1	—	A. P_2 12-56.7. End at 14-55
		—	13 15	0.2	—	B. P_2 12-57
		—	13 15.5	0.5	—	C.
3161	,, 31	—	20 56	0.9	—	B. End at 24-37
		—	20 52.5	1.1	—	C.
3162	Feb. 4	—	2 47	0.2	—	B. Max. for C 2-51
3163	,, 5	—	2 14	0.3	—	A. With Ats.
		—	2 12.5	0.2	—	B. ,,
		—	2 15	0.2	—	C. ,,
3164	,, 6	—	8 36.5	0.4	—	A. ,,
		8 25	8 36	0.2	1 34	B.
		8 24	8 36.5	0.2	1 35	C.
3165	,, 10	—	5 51	0.1	—	B.C.
3166	,, 10	—	18 52.5	0.1	—	B.C.
3167	,, 12	—	0 7	0.2	—	A. With Ats.
3168	,, 13	—	0 17	0.1	—	A.
3169	,, 13	8 8.5	8 16.5	3.0	1 30	A.
3170	,, 13	16 50.5	16 59	0.3	—	A. End lost changing
			17 24	0.3		paper
			17 39.5	0.3		
3171	,, 15	—	3 48.5	1.5	—	A. With Ats.
3172	,, 16	—	10 54	1.0	—	A. ,,
			11 20	0.6		
			11 23	0.5		
			11 54	0.5		
3173	,, 16	—	18 3.5	0.2	—	A. ,,
3174	,, 17	—	4 47	0.2	—	A.
			4 58	0.2		

The Register from Shide, Newport, Isle of Wight, England—continued.

No.	Date	Com-mence-ment	Max.	Max. Ampli-tude	Dura-tion	Remarks
		H. M.	H. M.	MM.	H. M.	
3175	Feb. 19	—	11 38	0.5	—	A.
		—	11 38	0.1	—	B.
		—	11 35	0.1	—	C.
3176	,, 19	23 20?	23 30.5	0.7	—	A. With Ats.
		—	23 32.5	0.3	—	B. ,,
		—	23 33	0.2	—	C. ,,
3177	,, 20	—	5 18.5	0.3	—	A.B.C. a.for B.C.0.1mm.
3178	,, 20	—	13 56	0.5	—	A. With Ats.
		—	13 51	0.6	—	B. ,,
		13 39?	13 50.5	0.5	—	C. ,,
3179	,, 21	—	8 43	0.2	—	A.B.
		—	8 40	0.1	—	C.
3180	,, 21	—	18 22	0.2	—	A.
			18 27	0.2		
		—	18 26	0.1	—	B.
		—	18 27	0.1	—	C.
3181	,, 22	13 34?	14 18.5	0.5	3 20	A. With Ats.
			14 21	0.5		
		—	14 18	0.2	—	B. ,,
			14 26	0.1		
		—	14 19	0.1	—	C. ,,
			14 26	0.1		
3182	,, 23	—	3 34.5	0.3	—	A. ,,
		—	3 34.5	0.2	—	B. ,,
		—	3 34	0.1	—	C. ,,
3183	,, 23	—	22 43.5	0.2	—	A.B.C. a.for B.C.0.1mm.
3184	,, 24	—	15 5	0.1	—	B.C.
3185	,, 24	—	16 41	0.1	—	B.C.
3186	,, 25	3 22?	4 18	0.5	3 30	A. With Ats.
		—	4 19	0.2	—	B. ,,
		—	4 12	0.2	—	C. ,,
3187	,, 25	10 55.5	11 6.5	0.5	1 7	A.
		—	11 6	0.1	—	B.
		—	11 10.5	0.1	—	C.
3188	,, 25	—	22 12	0.2	—	A.B.
		—	22 10	0.1	—	C.
3189	,, 25	—	23 15	0.2	—	A.
		—	23 14	0.1	—	B.
		—	23 15	0.1	—	C.
3190	,, 26	—	20 46	0.1	—	A.
3191	,, 27	—	0 43	1.2	—	A. With Ats.
		—	0 43	0.5	—	B. ,,
		—	0 42.5	0.1	—	C. ,,
3192	,, 29	15 23.5	15 42	0.5	—	C. End in Ats.
3193	,, 29	—	19 35	0.1	—	C.
3194	Mar. 3	—	0 32	0.3	—	A. With Ats.
			0 41	0.4		
		—	0 29.5	0.2	—	C. ,,
3195	,, 5	—	1 40	0.4	—	A.B. ,,
		—	1 39.5	0.2	—	C. ,,
3196	,, 7	—	20 13.5	0.5	—	A. ,,
		—	20 13	0.2	—	B.C. ,,
3197	,, 8	—	15 23	1.0	—	A. ,,
		—	15 23	0.1	—	B.C. ,,
3198	,, 10	—	5 51	0.1	—	A.
		—	5 46.5	0.1	—	B.
		—	5 45	0.1	—	C.
3199	,, 10	—	12 6	0.2	—	A.
		—	12 7.5	0.1	—	B.
		—	12 8	0.1	—	C.
3200	,, 11	—	10 58	3.0	—	A. Beginning and end lost
		10 32.5	10 58	1.0	—	B. End in Ats.
		10 31	11 0	1.5	—	C. ,,

The Register from Shide, Newport, Isle of Wight, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
3201	Mar. 11	—	16 40	0.2	—	A.B. With Ats.
		—	16 41	0.2	—	C. ,,
3202	,, 13	—	20 36.5	0.3	—	A. ,,
		—	20 37	0.1	—	B. ,,
		—	20 34.5	0.2	—	C. ,,
3203	,, 13	—	21 15	0.3	—	A. ,,
		—	21 15	0.1	—	B. ,,
		—	21 17	0.1	—	C. ,,
3204	,, 14	—	7 31.7	0.7	—	A. ,,
		—	7 32	0.2	—	B. ,,
		—	7 28.5	0.2	—	C. ,,
			7 32	0.1		
3205	,, 16	—	14 43.5	0.1	—	B.
		—	14 45	0.1	—	C.
3206	,, 16	—	16 26.5	0.1	—	B.C.
3207	,, 17	—	16 31	0.3	—	A. With Ats.
3208	,, 17	—	23 58.5	0.5	—	A. ,,
3209	,, 21	—	14 8	0.2	—	A.
		—	14 12.5	0.1	—	B.
		—	14 14	0.1	—	C.
3210	,, 21	—	17 10	0.1	—	A.
		—	17 9	0.1	—	B.
		—	17 15	0.1	—	C.
3211	,, 22	—	1 55	0.2	—	A.B.C.
3212	,, 22	—	5 36.2	1.2	—	A. With Ats.
		—	5 36.5	0.3	—	B. ,,
		—	5 35	0.2	—	C. ,,
3213	,, 22	—	18 52	0.1	—	A.B.
		—	18 55	0.1	—	C.
3214	,, 23	—	9 1	0.1	—	B.C.
3215	,, 24	—	13 18.5	0.1	—	B.
		—	13 17	0.1	—	C.
3216	,, 25	—	5 35	0.1	—	A.B.C.
3217	,, 25	—	15 8	0.1	—	A.B.
		—	15 7	0.1	—	C.
3218	,, 26	—	7 29.5	0.1	—	A.B.
		—	7 32.5	0.1	—	C.
3219	,, 29	—	19 19	0.1	—	C.
3220	,, 30	—	8 28	0.5	—	A. With Ats.
3221	,, 30	—	21 33.5	0.1	—	B. ,,
		—	21 34	0.1	—	C. ,,
3222	April 8	—	2 44	0.1	—	B.
3223	,, 8	—	9 15.5	0.3	—	A.
			9 25	0.3		
		—	9 15	0.1	—	B.C.
3224	,, 9	—	7 2	0.5	—	B. With Ats.
		—	7 1	0.2	—	C. ,,
3225	,, 9	—	9 11.5	0.5	—	A. a. for B.C. 0.1mm.
3226	,, 13	—	3 7	0.4	—	B. With Ats.
			3 16	0.3		
		—	3 12.5	0.2	—	C. ,,
3227	,, 13	—	19 39	0.3	—	A. End at 20-30
		—	19 38.5	0.1	—	B. ,,
		—	19 39	0.1	—	C. ,,
3228	,, 14	14 5	14 14	0.1	1 0	B.
		14 5.5	14 16	0.2	1 0	C.
3229	,, 14-15	22 56	23 58	0.5	2 25	A.
		—	0 0	0.2	—	B. End at 1-20
		22 56.5	0 0	0.1	2 25	C.
3230	,, 15	—	17 9.5	0.2	—	A.
		—	17 8	0.1	—	B.
			17 26	0.2		

The Register from Shide, Newport, Isle of Wight, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
3230	Mar. 15	—	17 9	0.1	—	C.
			17 25	0.2		
3231	,, 15	—	23 38	0.3	—	A. a. for B.C. 0.2mm.
3232	,, 17	—	4 40	0.6	—	A. With Ats.
			4 46	0.6		
		—	4 40	0.2	—	B. ,,
			4 46	0.2		
		—	4 43	0.2	—	C. ,,
3233	,, 18	—	8 30	0.2	—	B. ,,
		—	8 33	0.2	—	C. ,,
3234	,, 19	—	0 33	0.3	—	A. ,,
		—	0 32	0.2	—	B.C. ,,
3235	,, 19	—	1 10	0.2	—	A. a. for B.C. 0.1mm.
3236	,, 19	15 26	15 36.5	0.2	0 50	A.
		—	15 36	0.1	—	B.
		—	15 36.5	0.1	—	C.
3237	,, 20	1 52.5	2 51.5	1.5	—	A. End in Ats.
		1 54	2 55	1.0	2 30	B.
		1 53	2 58	0.2	2 25	C.
3238	,, 21	—	3 7.2	0.6	—	A. With Ats.
		3 2	3 7.5	0.2	0 43	B.
		3 5	3 11	0.3	0 43	C.
3239	,, 22	—	18 26	0.1	—	A.
		—	18 23.5	0.1	—	B.C.
3240	,, 22	23 24.5	23 40	0.2	0 45	A.
		—	23 40	0.1	—	B.C.
3241	,, 23	21 59	22 43.7	0.9	—	A. End in Ats.
		—	22 43.5	0.2	—	B. With Ats.
		21 58.5	22 38.5	0.3	2 15	C.
3242	,, 24	—	3 36	0.1	—	B.
		—	3 34	0.1	—	C.
3243	,, 25	—	10 58.5	0.1	—	B. End at 11-30
		10 34.5	10 55.5	0.1	0 55	C.
3244	,, 26	16 0	16 10	0.1	1 45	B.C.
3245	,, 27	—	4 39	0.1	—	A.C.
		—	4 38.5	0.1	—	B.
3246	May 1	—	13 42.5	0.2	—	B.
		—	13 41.5	0.2	—	C.
3247	,, 1	—	23 53	0.1	—	B.C.
3248	,, 3	—	20 19	0.1	—	A.
		—	20 20	0.2	—	B. End at 21-40
		—	20 21	0.1	—	C. End at 22-12
3249	,, 6	19 3.7	19 9.5	>30.0	—	A. P_2 19-7
		19 3.7	19 9	10.5	—	B. P_2 19-7
		19 3.7	19 10.5	27.5	—	C. P_2 19-7.2
3250	,, 6	—	22 19	0.3	—	A. End at 1-28 on 7th.
		—	22 19	0.2	—	B.C.
3251	,, 7	—	14 46	0.1	—	B.C.
3252	,, 8	—	11 55	0.3	—	A.
		—	11 54.5	0.1	—	B.C.
3253	,, 8	—	21 18.5	0.1	—	B.
		—	21 20	0.1	—	C.
3254	,, 10	—	11 11	0.1	—	B.C.
3255	,, 11	5 20	5 51	0.3	1 50	B.
		5 19.5	5 53.5	0.1	1 50	C.
3256	,, 11	15 19	16 7.5	0.1	—	B.C. End lost.
3257	,, 11	17 38.5	18 22	0.5	—	B. ,,
		17 38.5	18 21	0.2	—	C. ,,
3258	,, 11	—	21 20	0.2	—	B. End at 22-0
		—	21 19	0.1	—	C. ,,
3259	,, 12	—	12 21	0.1	—	B.C.
3260	,, 13	—	19 58	0.1	—	A.C.
		—	19 57.5	0.1	—	B.

The Register from Shide, Newport, Isle of Wight, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
3261	May 14	—	15 25	0.5	—	A.
		—	15 24.5	0.2	—	B.C.
3262	,, 15	0 22.5	0 50	0.8	—	A.
			0 56.5	0.8		
		0 24	0 50	0.4	—	B.
		0 24	0 56.5	0.4	—	C.
3263	,, 15	—	2 4.2	0.8	—	A. End at 4-30
		—	2 5	0.2	—	B. ,,
		—	2 6.5	0.2	—	C. ,,
3264	,, 16	15 3.5?	15 12.5	1.5	—	A. With Ats.
			15 15	1.5		
		—	15 12.5	0.4	—	B. ,,
			15 15	0.4		
		15 2.5?	15 12	0.8	—	C. ,,
3265	,, 17	16 48.5	16 54.7	2.0	—	A. End at 18-20
			16 56.2	1.2		
		16 48.5?	16 56.7	0.6	—	B. ,,
		16 48.5?	16 58.2	0.8	—	C. ,,
3266	,, 18	21 54	22 34	0.9	2 35	A. a. for B. 0.5mm.
		21 53	22 33	0.2	2 50	C.
3267	,, 19	—	2 54.5	0.4	—	A. With Ats.
3268	,, 21	—	9 20.5	1.6	—	A.
		8 50	9 20.5	0.9	—	B.
		8 50.5	9 16.5	1.0	—	C.
3269	,, 21	—	10 39	0.5	—	A.C. End at 12-10
		—	10 39	0.2	—	B. ,,
3270	,, 22	—	8 41.5	0.2	—	A.C.
3271	,, 22	13 29.5	13 36.5	1.1	1 35	A. a. for B. 0.3mm.
		13 29	13 37	0.3	—	C. With Ats.
3272	,, 22	—	17 28	0.2	—	A.B.C.
3273	,, 22-23	23 7	23 45	0.2	1 50	A.C.
		—	23 44	0.1	—	B.
3274	,, 23	2 36	2 57	8.0	6 2	A. P_2 2-46
			3 9.5	23.0		
			3 12.7	>40.0		
			3 19	>40.0		
		—	2 57	4.2	—	B.
			3 12.5	>20.0		
			3 19.2	14.0		
		2 36	2 57.5	4.0	6 0	C.
			3 9	19.0		
			3 11	>22.0		
3275	,, 23	—	23 51	0.1	—	B.C.
3276	,, 25	—	16 45	0.1	—	A.
		—	16 38	0.1	—	C.
			16 45	0.1		
3277	,, 25	18 6.5	18 13.5	1.5	1 15	A.
		—	18 13	0.1	—	B.
		18 6	18 13	1.0	1 20	C.
3278	,, 25	—	20 26	0.1	—	A.
3279	,, 25	—	21 27	0.1	—	B.C.
3280	,, 26	—	3 27	0.1	—	B.C.
3281	,, 26	8 6.5	8 19	1.0	—	B.
		—	8 21	1.0	—	C.
3282	,, 28	—	8 1.5	0.1	—	A.B.C.
3283	,, 28	12 57	13 51	1.5	—	A.
			13 56.5	2.5		
		12 57	13 52	0.6	—	B.
		12 58	13 49.5	0.6	3 10	C.
			13 53.5	0.6		
			13 56.5	0.6		
3284	,, 31	—	21 16	0.2	—	B.
		—	21 18.5	0.2	—	C.

The Register from Shide, Newport, Isle of Wight, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
3285	June 1	—	0 51.5	0.4	—	A.
		0 49	0 51.5	0.1	—	B.
		0 50.5	0 53.5	0.1	—	C.
3286	,, 1	—	1 4.5	1.5	—	A. With Ats.
		1 1?	1 4.5	0.3	0 32	B. ,,
		—	1 3	0.2	—	C. ,,
3287	,, 1	—	9 53	0.1	—	B.C.
3288	,, 1	11 40	11 47	0.2	0 45	B.C.
3289	,, 2	12 18	12 30	0.4	3 15	A.
			13 12.2	0.6		
		12 15	12 31	0.1	4 0	B.
			13 12.5	0.2		
		12 18.5	12 34	0.1	—	C.
			13 13	0.1		
3290	,, 3	—	13 38	0.1	—	A. With Ats.
		—	13 30	0.5	—	B. ,,
		—	13 26	0.5	—	C. ,,
			13 33	0.5		
3291	,, 4	—	16 21	0.1	—	A.B.C.
3292	,, 5	11 34	12 45.7	0.5	3 0	A.
		11 34.5	12 29	0.2	—	C.
			12 35	0.2		
3293	,, 6	—	16 4.5	0.3	—	A. a. for B.C. 0.1mm.
3294	,, 6	—	18 2.5	0.2	—	A.
			18 6.5	0.2		
3295	,, 6	—	19 7	0.2	—	A.
3296	,, 6	—	20 40	0.2	—	A.
3297	,, 6	—	22 29	0.2	—	A.
3298	,, 7	—	4 30	0.5	—	A.
3299	,, 7	—	5 18.5	0.6	—	A.
3300	,, 7	—	7 18.2	0.2	—	A.
3301	,, 7	—	9 38.5	0.8	—	A. P_2 9-25.2
3302	,, 7	10 14?	10 37.2	1.5	—	A.
			10 39	2.0		
			10 41.5	2.5		
3303	,, 7	—	11 17.7	1.6	—	A.
			11 21.5	1.5		
			11 26.5	1.6		
3304	,, 7	—	13 6.5	1.5	—	A. P_2 12-48?
			13 20	1.0		
			13 31	1.2		
3305	,, 7	14 48.5?	15 3	0.7	—	A.
3306	,, 7	18 42.5	19 7.7	2.2	—	A.
			19 9.5	1.8		
			19 15.5	2.1		
			19 54	2.6		
3307	,, 8	—	0 41	0.5	—	A.
3308	,, 8	—	1 2.7	0.5	—	A.
3309	,, 8	—	2 0	0.5	—	A.
3310	,, 8	2 39?	2 55.2	0.9	—	A.
3311	,, 8	—	3 37	1.0	—	A.
3312	,, 8	—	4 18	0.5	—	A.
3313	,, 8	—	5 4	0.8	—	A.
3314	,, 8	—	5 37	0.6	—	A.
3315	,, 8	—	5 44	0.6	—	A.
3316	,, 8	—	5 54	0.6	—	A.
3317	,, 8	—	6 54.5	1.0	—	A.
3318	,, 8	—	7 34.5	4.5	—	Smoked paper.
3319	,, 8	—	8 18.5	7.0	—	,,
3320	,, 8	—	8 57	1.0	—	,,
3321	,, 8	—	9 31.2	1.5	—	,,
3322	,, 8	—	9 58	2.5	—	A.
3323	,, 8	—	10 11	2.0	—	A.

The Register from Shide, Newport, Isle of Wight, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
3324	June 8	—	10 23	2.0	—	A.
3325	,, 8	13 19?	13 41	2.5	4 25?	A.
			13 45	3.5		
3326	,, 9	—	9 0	0.1	—	A.
3327	,, 9	17 10	17 23	0.1	—	A.
3328	,, 9	17 34.7?	17 53.2	1.5	3 30	A.
3329	,, 9	21 53.5	22 21.5	0.5	3 0	A.
			22 53	1.0		
			23 3.5	0.7		
		21 55	22 21.5	0.2	3 30	B.
			22 53	0.3		
			23 3	0.4		
		21 55	22 22.5	0 2	3 30	C.
			22 55	0.3		
			23 2.5	0.3		
3330	,, 10	16 20.5	16 50	11.0	—	A. P_2 16-26.5
		16 17	16 50	3.5	—	B. P_2 16-26.5
		16 17	16 51.5	2.5	—	C. P_2 16-17
			16 56	3.0		
3331	,, 10	—	18 48.5	0.6	—	A. End at 22-45
			19 2.5	0.6		
		—	18 48.5	0.4	—	B. ,,
		—	18 58	0.6	—	C. ,,
3332	,, 12	7 22.2	7 49.5	1.5	3 0	A.
		7 23.5	7 50	0.3	3 15	B.
		7 23	7 48.5	0.6	3 10	C.
3333	,, 12	12 55	13 27	2.0	—	A. P_2 13-5
			13 32.5	2.0		
			13 36	3.0		
		12 55	13 27.5	0.6	4 15	B.
			13 32.5	1.5		
		12 55	13 33	1.0	4 15	C.
3334	,, 12	—	15 7	0.2	—	B.C.
3335	,, 14	—	1 48	0.1	—	B.
3335	,, 14	—	1 48	0.1	—	A.
3336	,, 14	—	1 56	0.1	—	A.
		—	1 55	0.1	—	B.
		—	1 54	0.1	—	C.
3337	,, 14	—	14 27.5	0.1	—	B.C.
3338	,, 14	16 57	17 6	0.2	1 30	B.
		16 56.5	17 3	0.2	1 30	C.
3339	,, 15	0 21?	1 12	0.2	—	A. With Ats.
		—	1 9.5	0.1	—	B. ,,
		—	1 10	0.1	—	C. ,,
3340	,, 15	—	19 11.5	0.8	—	A. a. for B. 0.2mm.
		—	19 12	0.2	—	C.
3341	,, 15	—	22 3	0.2	—	A.B.C.
3342	,, 16	—	13 4	0.5	—	A. With Ats.
		—	13 3.5	0.1	—	B. ,,
		—	13 4	0.1	—	C. ,,
3343	,, 16	18 28	18 39	2.0	—	A. P_2 18-32
		—	18 39	0.5	—	B.
		—	18 38.5	0.3	—	C.
3344	,, 17	11 9	12 18.2	1.2	—	A. With Ats.
			14 38.7	0.6		
		11 7.5	12 16.5	0.4	—	B. ,,
			14 39	0.2		
		—	12 8	0.5	—	C. ,,
			12 15.5	0.5		
			14 39	0.2		
3345	,, 18	2 21.5?	2 31.5	0.5	—	A.B.C. With Ats.
3346	,, 18	12 7	12 23.5	1.5	—	A.
		12 7	12 24	0.6	—	B. C.

The Register from Shide, Newport, Isle of Wight, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
3347	June 18	—	12 51.5	8.3	—	A. End at 16-0.
			12 54.5	8.0		
			12 58	10.0		
			13 4.2	6.0		
		—	12 53	3.0	—	B. End at 16-0.
			12 58	2.5		
		—	12 53.5	2.2	—	C. ,,
			12 58	2.6		
3348	,, 20	—	0 5	0.2	—	A.
3349	,, 20	—	23 24	0.1	—	A.
		—	23 26	0.1	—	B.C.
3350	,, 23	—	19 40.5	0.1	—	B.
3351	,, 26	17 7	17 36	1.1	2 32	A. P_2 17-11.
3352	,, 27	—	2 6	0.1	—	A.B.C.
3353	,, 27	21 33	22 10	1.0	—	A. P_2 21-40.5.
		21 33	22 10	0.6	2 45	B. P_2 21-40.5.
		21 31.5	22 10	0.4	2 45	C. P_2 21-40.5.
3354	,, 28	—	14 21.5	0.1	—	B.C.
3355	,, 28	—	19 42	0.2	—	A.B.C.
3356	,, 29	7 55	8 45	0.6	—	A.
		7 56	8 45	0.3	3 0	B.C.
3357	,, 29	—	20 43	0.2	—	A. End at 22-47.
		—	20 42.5	0.1	—	B.C. ,,
3358	,, 30	—	8 43	0.1	—	B.
		—	8 47	0.1	—	C.

Register from M.O. Central Observatory, Kew Observatory, Richmond.
51°28′N. 0°19′W.
Director, Dr. W. N. Shaw, *F.R.S.*; *Superintendent*, Dr. C. Chree, *F.R.S.*
Observer, E. G. Constable.

B.O.T. = merely a broadening of the trace.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
1370	Jan. 4	—	4 36	—	—	—
1371	,, 4	16 22.5	16 42.4	0.6	1 15	—
1372	,, 20	—	5 21	—	—	B.O.T.
1373	,, 24	16 28.8	16 38.7	3.7	0 46	—
1374	,, 25	20 5.2	20 7.2	0.5	0 12	—
1375	,, 26	15 16.2	15 24.3	0.5	0 45	—
1376	,, 31	20 31.0	20 50.3	0.6	1 13	—
1377	Feb. 13	8 14.0	8 21.7	0.4	0 15	Masked by Ats.
1378	,, 15	—	3 49	—	—	B.O.T.
1379	,, 16	—	10 55	—	—	,,
1380	,, 20	13 49.5	13 52.0	0.6	0 25	—
1381	,, 23	—	22 33	—	—	B.O.T.
1382	,, 25	—	4 18	—	—	,,
1383	,, 27	—	0 43	—	—	,,

Register from M.O., Central Observatory, Kew Observatory—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1384	March 8	—	15 24	—	—	B.O.T.
1385	,, 16	—	16 30	—	—	,,
1386	,, 21	—	14 7	—	—	,,
1387	,, 24	—	13 19	—	—	,,
1388	,, 25	—	15 4	—	—	,,
1389	April 9	—	14 6	—	—	,,
1390	,, 17	4 33.3	4 44.2	0.4	0 20	—
	,, 18	—	8 30	—	—	B.O.T. ? Ats.
1391	,, 20	2 39.5	2 54.0	0.3	0 37	Ill-defined.
1392	,, 23	—	22 48	—	—	B.O.T.
1393	,, 26	—	15 52	—	—	,,
			16 8			
1394	May 1	—	13 43	—	—	,,
1395	,, 6	19 3.7	19 9.7	7.4	1 40	Rather sudden com.
1396	,, 11	—	16 4	—	—	B.O.T.
1397	,, 11	—	18 22	—	—	,,
1398	,, 13	—	19 54	—	—	,,
1399	,, 15	—	0 59	—	—	,,
1400	,, 16	—	15 15	—	—	,,
1401	,, 17	16 49.2	16 56.7	1.1	0 20	—
1402	,, 18	22 18.5	22 36.0	0.3	0 25	Ill-defined.
1403	,, 21	9 0.0	9 23.5	0.4	0 44	—
1404	,, 22	—	13 37	—	—	B.O.T.
1405	,, 22	—	23 46	—	—	,,
1406	,, 23	2 36.7	3 15.2	15.7	2 53	—
1407	,, 25	18 8.5	18 15.5	0.7	0 16	—
1408	,, 28	13 42.2	13 50.0	0.5	0 39	Second Max. at 14-2.3.
1409	June 1	—	1 5	—	—	B.O.T.
1410	,, 2	—	13 15	—	—	,,
1411	,, 3	—	13 30	—	—	,,
1412	,, 7	—	10 30	—	—	,, and frequently until 13-25
1413	,, 7	18 55.2	19 7.0	0.6	2 2	Amplitude increased again at 19-56
1414	,, 8	—	1 0	—	—	B.O.T., and at 2-53, 3-35, 5-4, 5-42, 6-53.
1415	,, 8	7 18.8	8 15.0	2.0	3 57	—
1416	,, 8	13 30.0	13 42.5	0.6	1 5	—
1417	,, 10	16 30.5	16 49.2	1.5	1 52	Second Max. at 16-59.5.
1418	,, 10	—	19 3	—	—	B.O.T.
1419	,, 12	—	7 44	—	—	,,
1420	,, 12	13 7.3	13 36.4	1.0	?	Latest stage spoilt by Ats.
1421	,, 16	—	18 38	—	—	B.O.T.
1422	,, 17	—	12 11	—	—	,,
1423	,, 18	12 17.8	12 51.7	2.3	1 51	—
1424	,, 26	17 32.5	17 36.8	0.4	0 18	—
1425	,, 27	22 4.5	22 11.5	0.3	0 18	—
1426	,, 29	—	8 42	—	—	B.O.T.

Period = 18 seconds.
Scale, 1mm. = 0″.54.

Register from Liverpool Observatory, Bidston. 53°24′N 3°4′W.
Director, W. E. PLUMMER.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
1908	Jan. 4	4 18.6	4 29.2	0.4	0 35	—
1909	,, 4	16 12.7	16 35.8	0.9	1 16	—
1910	,, 6	—	1 8.2	—	—	—
1911	,, 8	—	9 50	—	—	—
1912	,, 20	5 1.8	5 21.2	0.3	0 40	—
1913	,, 24	—	16 42.5	2.4	0 45	Com. not recorded.
1914	,, 25	20 4.4	20 10.6	0.4	0 25	—
1915	,, 26	14 9.0	14 16.0	0.1	—	End uncertain.
1916	,, 26	15 16.7	15 21.0	0.6	0 34	—
1917	,, 31	20 30.6	20 50.8	0.7	1 17	—
1918	Feb. 10	18 43.9	18 55.0	0.1	0 28	Small.
1919	,, 13	8 10.8	8 17.4	0.5	0 26	—
1920	,, 13	—	17 26	—	—	Light bad.
1921	,, 15	3 14.4	3 15.6	—	0 33	Line irregular.
1922	,, 16	10 40.7	10 52.0	0.1	0 39	—
1923	,, 19	23 23.3	23 31.5	0.2	0 22	—
1924	,, 20	13 47.8	13 52.0	0.4	0 25	—
1925	,, 21	18 11.7	18 20.0	0.2	0 18	—
1926	,, 25	4 6.9	4 19.3	0.2	0 30	—
1927	March 5	—	1 40	—	—	Very small.
1928	,, 8	15 18.4	15 25.0	0.1	0 16	—
1929	,, 10	—	5 52.8	—	—	—
1930	,, 10	11 54.3	12 5.3	—	0 36	—
1931	,, 11	11 6.2	11 11.8	0.2	0 23	—
1932	,, 13	20 25.0	20 36.1	—	0 55	—
1933	,, 14	7 28.5	7 34.2	—	0 17	—
1934	,, 21	13 56.7	14 5.9	—	1 8	Irregularities possibly due to Ats.
1935	,, 22	5 20.7	5 30.6	—	0 20	Small and uncertain.
1936	,, 24	13 12	—	—	0 17	—
1937	,, 25	—	15 0	—	0 9	—
1938	,, 30	—	21 42	—	—	—
1939	April 9	—	14 15	—	—	—
1940	,, 13	2 58	—	—	0 16	Very small.
1941	,, 13	—	19 38.4	—	—	—
1942	,, 14	—	14 10	—	—	Line disturbed.
1943	,, 14	23 48.6	23 53.0	0.1	0 12	—
1944	,, 15	17 32.2	17 34.7	0.1	0 15	—
1945	,, 15	—	23 40	—	—	—
1946	,, 17	4 15.6	4 35.2	0.5	0 49	—
1947	,, 20	2 31.0	2 47.7	0.6	1 20	—
1948	,, 21	2 40.5	2 48.8	0.2	0 36	—
1949	,, 23	22 36.2	22 41.8	0.2	0 20	—
1950	,, 24	3 25.2	3 31.4	—	—	Small. End uncertain.
1951	May 3	19 39.1	20 8.2	0.2	0 49	—
1952	,, 6	—	19 11.2	3.2	—	Beginning lost.
1953	,, 6	22 9.9	22 22.7	0.2	0 36	—
1954	,, 14	15 8.3	15 20.7	0.2	0 21	—
1955	,, 15	0 37.8	0 48.7	0.4	1 29	Probably two quakes.
1956	,, 16	15 9.0	15 13.4	0.4	0 25	—
1957	,, 17	16 47.8	16 58.5	0.6	0 40	—
1958	,, 18	22 28.6	22 33.9	0.2	0 21	—
1959	,, 19	2 48	—	—	0 7	—
1960	,, 21	8 51.3	9 14.6	0.2	1 5	End uncertain.
1961	,, 22	23 24.2	23 32.5	0.1	0 31	—
1962	,, 23	2 36.0	3 13.2	12.6	3 10	—
1963	,, 25	16 37.5	16 41.3	0.1	0 12	—
1964	,, 25	18 12.3	18 15.1	1.2	0 23	—
1965	,, 25	—	21 27	—	—	—

Register from Liverpool Observatory, Bidston—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1966	May 26	8 7.8	8 18.2	—	0 12	—
1967	,, 28	7 56.9	8 2.1	0.1	0 20	—
1968	,, 28	13 10.7	13 45.1	0.2	1 27	—
1969	June 1	0 51.0	1 5.8	0.1	0 24	—
1970	,, 1	11 43.7	11 45.8	0.1	0 9	—
1971	,, 2	12 29	—	—	—	—
1972	,, 2	13 4.2	13 16.3	0.2	0 35	—
1973	,, 3	—	13 26	—	—	—
1974	,, 4	—	6 21	—	—	—
1975	,, 5	12 15.8	12 24.7	0.3	0 34	—
1976	,, 7	4 13.0	4 54.7	0.2	1 39	Numerous max. followed to 13-4.
1977	,, 7	14 47.2	14 56.7	0.1	0 40	—
1978	,, 7	18 49.4	19 48.3	0.4	2 31	Again; many max.
1979	,, 8	2 44.1	2 52.7	0.3	0 40	—
1980	,, 8	6 39.6	8 19.3	—	5 18	Many subsidiary max.
1981	,, 9	22 15.1	22 22.4	0.1	0 17	Continued to 22-50 possibly.
1982	,, 10	16 24.8	16 47.7	1.5	—	End uncertain.
1983	,, 10	18 32.6	18 50.7	0.3	0 52	—
1984	,, 12	7 31.7	7 41.6	0.3	1 10	—
1985	,, 12	12 55.8	13 26.2	1.5	2 8	—
1986	,, 14	16 56.9	17 5.8	0.1	0 44	—
1987	,, 15	1 5.6	1 19.0	0.1	0 49	—
1988	,, 15	19 5.7	19 10.4	0.1	0 11	—
1989	,, 16	12 58.3	13 2.5	0.1	0 16	—
1990	,, 16	18 32.0	18 38.3	0.3	0 27	—
1991	,, 17	11 36.6	12 4.7	0.3	1 30	—
1992	,, 23	19 37.2	19 40.7	0.3	0 59	—
1993	,, 26	17 12.2	17 38.4	0.5	0 57	—
1994	,, 27	21 55.0	22 5.8	0.1	0 40	—
1995	,, 28	—	19 12	—	—	—
1996	,, 29	8 14.9	8 46.4	0.4	0 57	—

Period of oscillation = 18.5 seconds.
1mm. displacement = 0″.53.
1° calibrating screw = 4.2mm.

Register from Stonyhurst College Observatory 53°50′N. 2°28′W.
Director, Rev. W. Sidgreaves, *S.J.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM. 2A.	H. M.	
497	Jan. 4	16 1.5	16 43.5	1.5	2 30	—
			16 49	1.1		
498	,, 5	—	3 39	—	—	—
499	,, 6	—	1 5.8	—	—	—
500	,, 8	—	9 41.3	—	—	—
501	,, 20	4 30.7	5 14.5	0.5	—	End in Ats.
			5 22.5	0.6		
502	,, 21	3 7	3 11.5	0.1	0 16	—

Register from Stonyhurst College Observatory—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM. 2A.	H. M.	
503	Jan. 24	16 28.2	16 37.6	4.5	1 10	P_2 16-32.3, P_3 16-36.
504	,, 25	20 0.7	20 9.5	0.5	0 29	P_2 20-6.
505	,, 26	15 15.5	15 26.9	0.9	—	P_2 15-15.5, P_3 15-20.5.
506	,, 31	20 25	20 51.5	0.6	3 5	P_2 20-31.5, P_3 20-35.5.
507	Feb. 13	—	0 11	—	—	—
508	,, 13	8 9.5	8 20	0.5	0 28	—
509	,, 15	3 39	3 51	0.1	0 18	—
510	,, 16	10 16	10 53	0.1	>1 14	End during change.
511	,, 19	23 27.2	23 32.5	0.5	0 14	—
512	,, 20	13 47.8	13 53.4	0.5	0 29	P_2 13-53.4.
513	,, 22	13 57.5	14 30	—	1 57	—
			15 23.5	—		
514	,, 25	3 27	4 20.4	—	2 0	—
515	,, 29	—	15 42	—	—	—
516	March 8	15 13.5	15 21.5	—	0 26	—
517	,, 11	—	10 57	2.5	—	—
518	,, 14	7 21.3	7 24.7	—	0 22	—
			7 37	—		
519	,, 21	—	14 7	—	—	—
520	,, 22	—	5 30	—	—	—
521	,, 24	—	13 20	—	—	—
522	,, 25	—	15 9	—	—	—
523	,, 30	—	21 38	—	—	—
524	Apr. 9	14 15.5	14 23	—	0 28	—
525	,, 14	—	23 56	—	—	—
526	,, 15	—	17 9	—	—	—
527	,, 15	23 36.5	23 42	0.1	0 14	—
528	,, 17	4 16.5	4 39	0.5	0 48	—
529	,, 19	—	0 35	—	—	—
530	,, 20	2 3.5	2 53.5	0.5	1 0	—
531	,, 21	3 4	3 24	—	0 24	—
532	,, 23	22 36.7	22 39.2	0.2	0 37	—
533	May 1	13 31	13 35	—	0 22	—
			13 39.5	—		
534	,, 3	20 5.5	20 17.7	—	0 33	—
535	,, 6	19 4.9	19 10.7	29.8	2 40	P_2 19-4.9, P_3 19-8.4.
536	,, 6	22 6.5	22 22.4	0.1	0 47	—
537	,, 11	5 20.3	5 47	—	0 50	—
538	,, 11	17 50.5	18 19.5	0.2	2 15	—
			18 42	0.2		
539	,, 11	21 15.5	21 19.5	0.1	0 12	—
540	,, 14	15 15.6	15 20.5	0.2	0 13	—
541	,, 15	0 34	1 5	0.2	2 0	Six other max.
542	,, 17	16 49.9	16 59	0.6	0 50	—
543	,, 18	22 15.3	22 35.5	0.4	0 35	Preceded by small tremors.
544	,, 19	—	4 26	—	—	—
545	,, 21	8 52.5	9 19.3	0.6	0 27	—
			9 24.6	0.6		
546	,, 23	2 36.6	3 12.8	34.0	4 48	P_2 2-46.4.
			3 18.1	26.0		
547	,, 25	18 8.1	18 18.2	1.0	0 47	—
548	,, 28	—	8 9	—	—	—
559	,, 28	13 14.7	13 46	0.4	2 30	—
			13 55	0.3		
			13 58	0.3		
			14 7.5	0.5		
550	June 1	0 54.5	1 8	0.2	0 24	—
551	,, 2	12 45	13 25.7	0.1	1 5	—
552	,, 3	13 14.5	13 22.5	0.1	1 8	—
			13 28.4	0.1		
553	,, 5	12 16.4	12 31.5	0.2	1 28	—
554	,, 6	—	15 26.7	—	—	—

Register from Stonyhurst College Observatory—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM. 2A.	H. M.	
555	June 7	18 52	19 7.3	0.5	2 20	—
			19 50.1	0.5		
556	,, 8	7 18	7 31.5	0.5	—	—
557	,, 8	7 56	8 13.3	2.5	—	P_2 8-4.
558	,, 8	13 18.4	13 41	0.6	1 37	—
			13 58	0.5		
559	,, 9	22 45	22 51.4	0.1	0 55	—
560	,, 10	16 25.5	16 47.6	2.4	3 6	P_2 16-33.3.
561	,, 10	—	18 51.5	0.4	—	—
562	,, 12	7 30.5	7 48.6	0.1	1 30	—
563	,, 12	12 55.5	13 35	1.4	2 57	P_2 13-5.4.
564	,, 14	—	16 58	—	—	—
565	,, 15	1 6.5	1 17.5	—	0 24	—
566	,, 15	19 6.1	19 11	0.1	0 12	—
567	,, 16	18 31.2	18 37	0.5	0 14	—
568	,, 18	—	12 51.3	3.0	—	Com. lost. P_2 12-15.5, P_3 12-48.
569	,, 26	17 11.5	17 40.3	0.5	1 34	—
570	,, 27	21 51	—	—	1 0	Max. 22-12 to 22-17.
571	,, 29	8 15.3	8 47.5	0.2	1 25	—

Jan.-March Period, 18 seconds. 1mm. = 0″.44.
April Period, 18.5 ,, 1mm. = 0″.42.
May-June Period, 19 ,, 1mm. = 0″.41.

Register from Hill Top, West Bromwich. 52°32′N. 2°W.
Owner and Observer, J. J. SHAW.

Instrument records on smoked paper.
Pendulum A records N.-S. motion. 1mm. = 0″.1 of arc tilt.
Pendulum B records E.-W. motion. 1mm. = 0″.15 of arc tilt.
Boom Period, 16secs. Weight, 240lb.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
1912						
		H. M.	H. M.	MM.	H. M.	
401	Jan. 4	3 37.7	4 27	0.3	—	A.
		3 35.3	4 32	0.3	1 25	B.
402	,, 4	15 58.5	16 45.5	1.4	—	A.
		—	16 48.5	1.0	2 32	B.
403	,, 24	16 28.1	16 36.2	9.5	1 6	E.W. Max. 16-39.7, 10mm., Greece.
404	,, 25	20 1.5	20 6.4	0.7	0 31	E.W. Max. 20-9, 1mm.
405	,, 26	—	14 7	1.5	—	—
406	,, 26	14 59	15 19	3.0	1 21	B.
407	,, 31	13 16 to	13 26	0.5	—	B.
408	,, 31	20 30.8	20 53	4.0	1 30	A. & B.
409	Feb. 13	8 11 ?	8 16.2	2.5	0 19	A. & B.
410	,, 16	—	10 54	0.2	—	B.
411	,, 19	—	23 31	0.2	—	B.
412	,, 20	13 48	13 52.5	0·7	0 12	B.

Register from Hill Top, West Bromwich—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
413	March 8	—	15 29	0.6	—	B.
414	,, 11	10 28	11 1	2.0	—	A.
		—	10 59.5	3.5	—	B.
415	,, 22	—	5 37	0.1	—	B.
416	April 17	—	4 31	0.1	—	B.
417	,, 20	1 53.1	2 51	—	1 52	B. Com. very clearly defined.
418	May 1	—	13 38	0.1	—	—
419	,, 6	19 3.2	19 14.3	88.0	—	A. P_2 19-6.3. Off Iceland.
		19 3.1	19 9.9	53.0	2 30	B.
420	,, 15	—	0 51	0.2	—	B.
421	,, 16	15 10	15 15	1.5	0 20	A. B. Max. 15-12.5, 1mm.
422	,, 17	16 43.5	16 56	1.0	0 27	B.
423	,, 21	8 50	9 19	0.5	1 10	B.
424	,, 23	2 36.2	3 11	55.0	2 36	A. Burma.
		2 36.2	3 20	75.0	—	B. P_2 2-45.8.
425	,, 25	18 9.7	18 15	0.5	0 23	A. P_2 18-13. Roumania.
		—	18 19	2.5	—	B.
426	June 1	0 52	1 5	0.2	0 23	B.
427	,, 1	11 42	11 49	0.1	—	—
428	,, 7	—	10 37	0.5	—	—
429	,, 7	—	11 20	1.0	—	—
430	,, 7	—	13 4	0.2	—	—
431	,, 7	—	19 7	0.7	—	—
432	,, 7	—	19 54	1.0	—	—
433	,, 8	—	3 36	0.1	—	—
434	,, 8	—	5 9	0.1	—	—
435	,, 8	—	7 26	0.5	—	—
436	,, 8	—	8 21	7.0	—	—
437	,, 8	13 19	13 41	1.8	1 40	—
438	,, 10	16 15.7	16 48	3.0	3 45	—
439	,, 12	7 24	7 45	0.5	1 6	—
440	,, 14	—	17 6	0.1	—	—
441	,, 16	—	18 40	0.1	—	—
442	,, 17	—	12 11	0.5	—	—
443	,, 18	12 2	12 55	3.0	2 0	P_2 12-15, P_3 12-50, 2nd Max. 13-17.
444	,, 26	—	17 38.5	0.2	—	—
445	,, 29	—	8 46	0.7	—	—

Register from Woodbridge Hill, Guildford, England. 51°15′N. 0°35′W.
Owner and Observer, F. EDWARD NORRIS. *Assistant*, E. SMART.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
1912						
		H. M.	H. M.	MM.	H. M.	
330	Jan. 4	4 12.6	4 26	—	—	W. P_2 4-16.5.
331	,, 4	16 3.8	16 44.3	0.3	1 55	W. P_2 16-13.2.
332	,, 5	—	3 37	—	—	W.
333	,, 6	—	1 2.4	0.03	—	W.
334	,, 20	4 20	5 8	0.1	1 15	W. P_2 4-28.8.
335	,, 22	3 3.3	3 15.3	0.02	0 22	W. P_2 3-6.4.

Register from Woodbridge Hill, Guildford, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
336	Jan. 24	16 27.7	16 36.3	2.6	1 47	W. P_2 16-31.2.
337	,, 25	19 58.4	20 4.7	—	0 10	W. P_2 20-0.4
338	,, 26	15 9.5	15 25.3	0.03	0 32	W. P_2 15-14.9.
339	,, 26	—	19 58.5	0.02	—	N.
340	,, 31	—	11 12	0.05	—	N.
341	,, 31	—	13 19.5	0.03	—	N.
342	,, 31	20 28.9	20 50.3	0.15	2 0	N. P_2 20-32.3.
343	Feb. 10	18 10.5	18 47.2	0.1	—	N.
344	,, 12	—	0 14.8	0.1	—	N.
345	,, 13	—	0 14.7	0.02	—	N.
346	,, 13	8 9.8	8 15.3	0.8	0 39	N. P_2 8-12.9.
347	,, 20	13 31.6	13 57.2	1.9	—	N. P_2 13-38.
348	March 7	—	20 13.5	0.2	—	W.
349	,, 8	15 11	15 21.5	3.0	—	N. P_2 15-12.6.
350	,, 11	10 36.5	11 3.7	3.1	1 27	N. P_2 10-42.8.
351	,, 11	16 38.2	16 41	0.1	0 16	N.
352	,, 13	—	20 37.3	0.05	—	W.
353	,, 13	—	21 13.2	0.05	—	W.
354	,, 14	—	7 36	0.2	—	N.
355	,, 22	18 46.9	18 54.7	1.15	0 23	W. P_2 18-51.1.
356	,, 24	—	13 22	0.3	—	N.
357	,, 25	—	5 33	0.2	—	W.
358	,, 25	—	15 8.3	0.15	—	N.
359	,, 30	—	21 33.6	0.1	—	N.
360	April 9	14 15.1	14 20.3	0.4	0 20	W. P_2 14-18.3.
361	,, 13	2 50.2	3 0.7	0.07	—	W. P_2 2-52.9.
362	,, 14	—	14 16.9	0.03	—	N.
363	,, 14	22 56.5	23 56.2	0.05	1 37	W. P_2 23-7.5.
364	,, 15	16 25.4	17 12.7	0.05	1 35	W. P_2 16-34.8.
365	,, 15	23 32.8	23 39.6	0.9	0 20	W. P_2 23-36.2.
366	,, 17	4 3.6	4 34	0.1	1 15	W. P_2 4-11.1.
367	,, 19	0 23.2	0 34	0.75	0 35	W. P_2 0-27.
368	,, 19	—	15 41.2	0.3	—	W.
369	,, 20	1 53.1	2 50	0.5	2 12	W. P_2 2-2.2.
370	,, 21	—	3 19.7	0.75	—	W.
371	,, 23	22 1.0	22 34.8	0.1	0 46	W. P_2 22-8.8.
372	,, 24	3 15.5	3 30.8	0.1	0 32	W. P_2 3-20.1.
373	,, 25	—	10 25	0.05	—	N.
374	,, 26	—	16 9.4	0.04	—	N.
375	,, 27	—	4 45	0.05	—	N.
376	,, 28	—	7 48.3	0.2	—	N.
377	May 1	13 27.9	13 39	0.2	0 23	N. P_2 13-31.2.
378	,, 3	19 27	20 8.9	0.1	1 6	N. P_2 19-35.4.
379	,, 6	19 4.4	19 12.9	37.6	5 10	W. P_2 19-7; P_3 19-9.3.
380	,, 7	—	14 53.7	0.1	—	N.
381	,, 8	—	11 51.5	0.05	—	N.
382	,, 11	5 5.9	5 44.3	0.15	0 55	N. P_2 5-15.8.
383	,, 11	—	15 54.3	0.1	—	N.
384	,, 11	17 39.6	18 18.8	0.3	3 1	N.
			18 34.7	0.35		
385	,, 11	20 31	21 24.6	0.07	1 27	N. P_2 20-40.5.
386	,, 12	—	12 23	0.1	—	N.
387	,, 14	15 7	15 19.3	0.15	0 25	W. P_2 15-12.
388	,, 15	0 34.7	0 55.6	0.03	1 2	W. P_2 0-40.8.
389	,, 16	15 9.3	15 17	6.4	2 0	W. P_2 15-11.5.
390	,, 17	16 44	16 56.5	2.7	0 37	W. P_2 16-48.4.
391	,, 17	—	18 7.2	0.15	—	W.
392	,, 18	22 6.2	22 33.1	0.1	0 39	W. P_2 22-12.6.
393	,, 19	—	4 9.4	0.05	—	W.
394	,, 21	8 44.3	9 16.4	0.5	1 21	W. P_2 8-51.3.
395	,, 21	10 2.9	10 41.4	0.2	1 3	W. P_2 10-9.7.
396	,, 22	—	13 33.3	0.3	—	W.

Register from Woodbridge Hill, Guildford, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
397	May 22-23	23 16	23 32.8	0.15	1 12	W. P_2 23-23.
398	,, 23	2 36.0	3 9	17.8	4 40	W. P_2 2-45.5.
399	,, 25	—	16 37.5	0.5	—	W.
400	,, 25	18 6.7	18 16.9	5.1	0 51	N. P_2 18-10.5.
401	,, 28	13 1.9	13 44	0.65	1 55	N. P_2 13-10.9.
402	,, 31	—	21 21	0.05	—	N.
403	June 1	0 47.4	1 7	1.45	0 47	N. P_2 0-52.7.
404	,, 1	11 29.7	11 52.5	0.8	0 50	N. P_2 11-34.6.
405	,, 2	12 45.3	13 21.7	0.4	—	N.
406	,, 3	13 21	13 37.5	0.15	0 35	W. P_2 13-26.5.
407	,, 5	—	12 34.5	0.1	0 43	W. With Ats.
408	,, 7	3 5.4	3 37.7	0.05	1 1	W.
409	,, 7	—	4 39	0.1	—	W.
410	,, 7	—	5 18.8	0.02	—	W.
411	,, 7	—	7 19.7	0.02	—	W. 14 quakes between 9h. and 15-36 and 4 quakes between 18-36 and 20h.
412	,, 8	0 39.3	1 11.5	0.07	0 43	N. P_2 0-48.4. 11 quakes between 2-32 and 11.30 and 3 quakes between 13-11 and 15h.
413	,, 9	17 29.7	17 56	0.25	—	N. P_2 17-35.7.
414	,, 9	—	22 22	0.05	—	N.
415	,, 9	—	22 52.5	0.03	—	W.
416	,, 10	16 17.1	16 50	2.1	3 2	W. P_2 16-25.2.
417	,, 12	7 13.7	7 38.3	0.25	1 15	N. P_2 7-20.4.
418	,, 12	12 55.7	13 25.6	1.0	2 50	N. P_2 13-5.3.
419	,, 14	16 16.7	17 18	0.1	—	N. 2 quakes.
420	,, 15	0 46.5	1 11	0.05	—	N.
421	,, 15	—	19 13	0.15	—	W.
422	,, 16	—	13 7.6	0.6	—	N.
423	,, 16	18 29?	18 32	1.15	0 9	N.
424	,, 17	11 27	12 12.3	0.55	1 46	N. P_2 11-37.2.
425	,, 18	12 2	12 52	1.35	2 27	N. P_2 12-11.1.
426	,, 20	—	0 5.5	0.15	—	N.
427	,, 23	19 30.7	19 43	0.25	—	N.
428	,, 26	17 11.1	17 42.2	0.2	—	N. P_2 17-20.2.
429	,, 27	21 43.9	22 12.2	0.3	0 56	N.
430	,, 29	8 8	8 55.5	0.35	—	N. P_2 8-18.3.
431	,, 29	—	20 47	0.05	—	N.

Boom Period = 10 seconds, Jan. 1 to June 7.
9 seconds, June 7 to 30.
Phases uncertain during January, February, and March.

Register from Frensham Hall, Haslemere, Surrey, England. 51°5′N 0°43′W.
Observer, SAML. KEVAN.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
533	Jan. 4	4 18.7	4 23.4	0.7	0 29	—
	,, 4	16 7.3	16 35	1.0	1 30	—
534	,, 5	—	3 44.8	0.3	—	—
	,, 6	—	0 53	0.2	—	—
537	,, 20	5 2.3	5 12.4	0.9	0 34	—
538	,, 24	16 33.8	16 40.2	3.8	0 43	—
539	,, 26	—	14 9	0.1	—	—
	,, 26	—	15 20.8	0.2	—	—
540	,, 31	20 31.7	20 54.2	0.9	1 30	—
541	Feb. 6	—	8 56.2	0.2	—	—
542	,, 10	—	18 52	0.2	—	—
	,, 12	—	0 7.5	0.1	—	—
	,, 13	—	0 16	0.5	—	—
	,, 13	8 14.8	8 16.6	1.0	0 15	—
543	,, 15	—	3 49	0.2	—	—
	,, 16	—	10 53.3	0.4	—	—
544	,, 19	—	11 37.6	0.1	—	—
	,, 19	—	23 32	0.4	—	—
	,, 20	—	13 49.9	0.6	—	—
545	,, 22	—	14 18.8	0.5	—	—
	,, 24	—	15 4.8	0.2	—	—
546	,, 26	20 42.4	20 45.4	0.7	0 8	—
	,, 27	—	0 43.2	0.5	—	—
	,, 29	—	15 41	0.2	—	—
547	March 3	—	0 31.7	0.7	—	—
548	,, 8	15 18.3	15 22.8	0.3	0 9	—
549	,, 11	10 47.2	10 58.6	2.0	0 28	—
	,, 14	—	7 32	0.1	—	—
551	,, 21	—	14 7.3	0.9	—	—
	,, 22	—	5 33	0.5	—	—
552	,, 24	—	13 17	0.2	—	—
	,, 25	—	5 34	0.2	—	—
554	,, 30	—	21 33	0.1	—	—
556	April 8	—	9 15	0.2	—	—
557	,, 14	23 55	23 57	0.3	0 7	—
558	,, 17	—	4 40	0.6	—	—
559	,, 21	3 5.6	3 7	0.3	0 5	—
560	,, 25	—	10 57	0.2	—	—
	,, 26	—	16 11	0.1	—	—
561	May 1	—	13 40.7	0.1	—	—
562	,, 3	—	20 20	0.3	—	—
	,, 6	19 3.9	19 10.2	10.5	2 10	P_2 19-8.
			19 15.4	8.5		
	,, 6	—	22 20	0.2	—	—
563	,, 7	—	14 44.8	0.1	—	—
	,, 8	—	11 55	0.1	—	—
	,, 11	—	5 50.7	0.2	—	—
564	,, 11	—	17 50.1	0.3	—	—
	,, 11	21 15.8	21 20	0.3	0 9	—
	,, 14	—	15 27	0.4	—	—
	,, 15	—	0 50	0.4	—	—
			0 56.6	0.4		
565	,, 16	15 8.6	15 12.6	0.9	0 11	—
	,, 17	16 35.8	16 41.3	1.0	0 31	—
	,, 18	—	22 34	0.8	—	—
566	,, 21	8 55.4	9 19.3	1.0	1 0	—
	,, 22	—	13 36	0.3	—	—
	,, 22	—	23 45.2	0.4	—	—

Register from Frensham Hall, Haslemere, Surrey, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
	May 23	2 36	3 9	12.5	4 51	P_2 2-46.2.
			3 15.5	14.5		
			3 19.2	11.0		
567	,, 25	—	16 41.9	0.6	—	—
	,, 25	18 5.9	18 9.3	1.5	0 25	—
	,, 28	—	8 3	0.2	—	—
568	,, 31	—	21 17	0.2	—	—
	June 1	—	1 5.6	0.2	—	—
	,, 1	—	11 48	0.3	—	—
569	,, 2	—	12 31	0.2	—	—
	,, 2	13 2.2	13 19.3	0.4	0 41	—
	,, 3	—	13 30	0.4	—	—
	,, 5	—	12 44	0.4	—	—
570	,, 6	—	16 4	0.1	—	—
	,, 6	—	16 32	0.1	—	—
	,, 6	—	18 0	0.4	—	—
	,, 7	3 59	4 22	0.1	—	—
	,, 7	—	4 54	0.2	—	—
	,, 7	—	5 18.5	0.1	—	—
	,, 7	—	7 25	0.2	—	—
	,, 7	—	7 42.2	0.3	—	—
	,, 7	—	8 40	0.2	—	—
	,, 7	—	9 35	0.2	—	—
	,, 7	—	9 48	0.2	—	—
	,, 7	—	10 31.5	0.3	—	—
	,, 7	—	10 40	0.3	—	—
	,, 7	—	10 44	0.5	—	—
	,, 7	—	11 19	0.5	—	—
	,, 7	—	13 11	0.3	—	—
	,, 7	18 41	19 9	0.6	—	—
			19 12.5	0.6		
			19 19	0.6		
	,, 8	—	0 41.5	0.1	—	—
	,, 8	—	2 0	0.1	—	—
	,, 8	—	3 6	3.2	—	—
	,, 8	—	3 47.5	0.2	—	—
	,, 8	—	6 51	0.3	—	—
	,, 8	—	7 43	0.5	—	—
	,, 8	—	8 23	0.6	—	—
	,, 8	—	9 31	1.0	—	—
	,, 8	—	10 23.9	0.4	—	—
	,, 8	—	11 13.5	0.4	—	—
	,, 8	13 20	—	—	—	—
571	,, 9	—	9 15	0.1	—	—
	,, 9	—	17 24	0.1	—	—
	,, 9	—	18 9	0.2	—	—
	,, 9	—	22 54	0.2	—	—
	,, 9	—	23 6	0.2	—	—
	,, 10	—	16 51	0.5	—	—
	,, 10	—	17 0	1.0	—	—
	,, 10	—	18 50	2.2	—	—
	,, 10	—	19 0	0.2	—	—
			19 8.5	0.2		
	,, 12	7 18	7 47	0.3	3 0	—
	,, 12	12 54	13 29	0.2	3 25	—
			13 33	1.2		
			15 8	1.1		
572	,, 14	—	17 6	0.2	—	—
	,, 15	—	19 11	0.2	—	—
	,, 16	—	13 4.2	0.1	—	—
	,, 16	—	18 39	0.6	—	—
	,, 17	—	12 18	0.7	—	—
573	,, 18	12 15.3	12 50.8	3.0	2 20	P_2 12-49.4.

Register from Frensham Hall, Haslemere, Surrey, England—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
575	June 26	17 19	17 32.4	0.8	0 40	—
	„ 27	—	22 9.8	0.7	—	—
	„ 29	8 13.8	8 15	0.3	—	—

Period, 18 seconds.
1° turn = 4.5mm.

Register from Fskdalemuir Observatory. 55°19′N. 3°12′W.
Superintendent. GEORGE W. WALKER, *M.A., A.R.C.Sc.*
Professional Assistant, L. SOUTHERNS, *B.A., B.Sc.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks	
							Scale value
		H. M.	H. M.	MM.	H. M.	Waves.	in secs.
		1912					
349	Jan. 3	11 23	11 55.5	0.1	—	N.S.	1mm. = 0.43.
		11 28.5	11 54	0.1	—	E.W.	0.36.
350	„ 4	3 56	4 35	0.6	2 21.5	N.S.	0.43.
		3 58	4 33.5	0.2	2 14	E.W.	0.36.
351	„ 4	15 58.5	16 39.5	1.0	3 47	N.S.	0.43.
		15 59	16 41	1.0	3 47	E.W.	0.36.
352	„ 5	3 25.5	3 44	0.1	0 38	N.S.	0.43.
		3 27	3 40	0.1	0 33.5	E.W.	0.36.
353	„ 8	9 22	9 24	0.1	0 8	N.S.	0.43.
		9 22	9 23	0.1	0 6	E.W.	0.37.
354	„ 20	4 22.5	5 19	0.2	2 44.5	N.S.	0.44.
		4 22.5	5 21.5	0.4	3 53	E.W.	0.37.
355	„ 21	—	2 26	0.1	—	N.S.	0.44.
		—	2 27.5	0.1	—	E.W.	0.37.
356	„ 23	—	20 45	0.1	—	N.S.	0.43.
		—	20 38	0.1	—	E.W.	0.37.
357	„ 24	16 28	16 41.5	1.4	2 27.5	N.S.	0.43.
		16 29	16 41.5	2.3	2 23.5	E.W.	0.37.
358	„ 25	—	1 51.5	0.2	—	N.S.	0.43.
		—	1 50.5	0.1	—	E.W.	0.37.
359	„ 25	20 1	20 10.5	0.3	0 36	N.S.	0.43.
		20 0	20 10.5	0.4	0 37	E.W.	0.37.
360	„ 26	—	14 7.5	0.1	—	N.S.	0.43.
		—	14 8	0.1	—	E.W.	0.37.
361	„ 26	14 59	15 20.5	1.0	1 42	N.S.	0.43.
		14 59	15 21	0.5	1 47	E.W.	0.37.
362	„ 26	18 56.5	19 2.5	0.1	0 32.5	N.S.	0.43.
		18 57	19 3.5	0.1	0 36	E.W.	0.37.
363	„ 31	—	12 18.5	0.1	—	N.S.	0.43.
		—	12 20.5	0.1	—	E.W.	0.39.
364	„ 31	12 57.5	13 20.5	0.3	1 23	N.S.	0.43.
		12 57.5	13 20.5	0.01	1 27	E.W.	0.39.

Register from Eskdalemuir Observatory—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks	
							Scale value
		H. M.	H. M.	MM.	H. M.	Waves.	in secs.
365	Jan. 31	20 22	20 49.5	0.9	3 27	N.S.	0.43.
		20 22	20 49.5	0.7	3 24	E.W.	0.39.
366	Feb. 13	8 8	8 18	0.4	0 47.5	N.S.	0.43.
		8 8.5	8 19	0.4	0 47	E.W.	0.37.
367	„ 13	16 54	17 28	0.2	1 32	N.S.	0.43.
		16 54	17 27	0.2	1 23	E.W.	0.37.
368	„ 16	10 0.5	10 54.5	0.2	1 55	N.S.	0.43.
		9 58	10 51.5	0.3	2 5	E.W.	0.37.
369	„ 19	10 50	11 22.5	0.1	0 54	N.S.	0.43.
		10 43.5	11 21	0.1	1 6	E.W.	0.36.
370	„ 19	23 19.5	23 33.5	0.1	0 31.5	N.S.	0.43.
		23 19	23 30	0.3	0 26	E.W.	0.36.
371	„ 20	—	14 0.5	0.3	—	N.S.	0.43.
372	„ 21	—	18 29	0.1	—	N.S.	0.43.
		—	18 25	0.1	—	E.W.	0.36.
373	„ 22	14 19.5	14 31.5	0.1	—	N.S.	0.43.
		14 20.5	14 29	0.1	—	E.W.	0.36.
374	„ 24	14 51.5	15 5	0.1	0 32.5	N.S.	0.43.
		14 57	15 6.5	0.1	0 25.5	E.W.	0.36.
375	„ 25	3 15.5	4 13	0.1	1 54.5	N.S.	0.43.
		3 22	4 12	0.1	1 52.5	E.W.	0.36.
376	„ 25	11 3	11 6.5	0.1	0 8.5	N.S.	0.43.
		11 3.5	11 5	0.1	0 11	E.W.	0.36.
377	„ 25	—	22 10	0.1	—	N.S.	0.43.
		—	22 6.5	0.1	—	E.W.	0.36.
378	„ 26	20 45	20 46	0.1	—	N.S.	0.43.
		20 45	20 46	0.1	—	E.W.	0.37.
379	„ 27	—	0 44	0.2	—	N.S.	0.43.
		—	0 42	0.2	—	E.W.	0.37.
380	March 3	—	21 32.5	0.1	—	N.S.	0.43.
		—	21 32	0.1	—	E.W.	0.37.
381	„ 5	1 34.5	1 40.5	0.1	0 13.5	N.S.	0.43.
		1 33	1 40.5	0.1	0 16	E.W.	0.37.
382	„ 8	2 6	2 17	0.1	0 32	N.S.	0.43.
		2 4	2 22.5	0.1	0 33	E.W.	0.37.
383	„ 8	—	15 32	0.1	—	N.S.	0.43.
		—	15 22	0.1	—	E.W.	0.37.
384	„ 11	10 32.5	10 58	1.0	1 43.5	N.S.	0.43.
		10 33	10 57	1.4	1 47	E.W.	0.37.
385	„ 11	12 53.5	13 2.5	0.1	0 39.5	N.S.	0.43.
		12 51.5	13 3.5	0.1	0 42.5	E.W.	0.37.
386	„ 11	16 31	16 47	0.1	0 32.5	N.S.	0.43.
		16 29	16 47	0.1	0 33.5	E.W.	0.37.
387	„ 13	20 19	21 14	0.1	1 11	N.S.	0.43.
		20 21.5	20 51	0.1	1 3	E.W.	0.37.
388	„ 14	7 10	7 32	0.1	0 48.5	N.S.	0.43.
		7 11.5	7 34.5	0.1	0 50.5	E.W.	0.37.
389	„ 16	—	14 40.5	0.1	—	N.S.	0.43.
		—	14 39	0.2	—	E.W.	0.37.
390	„ 17	23 56	0 1.5	0.1	—	N.S.	0.43.
		23 56	0 1	0.1	—	E.W.	0.37.
391	„ 22	—	1 49.5	0.1	—	N.S.	0.43.
		—	1 48	0.1	—	E.W.	0.37.
392	„ 22	—	5 47.5	0.2	—	N.S.	0.43.
		—	5 38	0.1	—	E.W.	0.37.
393	„ 22	18 55	18 57.5	0.1	0 6.5	N.S.	0.43.
		18 55	18 56	0.1	0 6	E.W.	0.37.
394	„ 23	—	8 59.5	0.1	—	E.W.	0.37.
395	„ 24	12 42	13 31.5	0.1	1 13.5	N.S.	0.43.
		12 42	13 26.5	0.1	1 16	E.W.	0.37.
396	„ 25	—	5 32.5	0.1	—	N.S.	0.43.
		—	5 31	0.1	—	E.W.	0.37.

Register from Eskdalemuir Observatory—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks	
		H. M.	H. M.	MM.	H. M.	Waves.	Scale value in secs.
397	April 13	2 53	3 12	0.1	0 30.5	N.S.	0.42.
		2 55.5	3 8	0.1	0 28	E.W.	0.36.
398	,, 13	19 31.5	19 40	0.1	0 22.5	N.S.	0.42.
		19 31.5	19 37	0.1	0 25	E.W.	0.36.
399	,, 14	13 56.5	14 15.5	0.1	1 42.5	N.S.	0.42.
		13 54.5	14 14.5	0.1	1 56	E.W.	0.36.
400	,, 14	22 57	23 8.5	0.2	2 8.5	N.S.	0.42.
		23 5.5	23 8.5	0.2	1 53	E.W.	0.36.
401	,, 15	16 27	17 30	0.1	2 0	N.S.	0.43.
		16 26.5	17 30	0.1	2 9.5	E.W.	0.36.
402	,, 15	23 36	23 43.5	0.1	0 23	N.S.	0.43.
		23 36	23 44	0.1	0 15	E.W.	0.36.
403	,, 17	4 12	4 42.5	0.2	1 43.5	N.S.	0.43.
		4 12.5	4 40.5	0.3	1 45.5	E.W.	0.36.
404	,, 18	8 26	8 32	0.1	0 11.5	N.S.	0.43.
		8 27	8 33	0.1	0 12	E.W.	0.36.
405	,, 19	0 30	0 35.5	0.1	0 44.5	N.S.	0.43.
		0 30	0 35.5	0.1	0 46	E.W.	0.36.
406	,, 19	—	15 41.5	0.1	—	N.S.	0.43.
		—	15 35.5	0.1	—	E.W.	0.36.
407	,, 20	1 54.5	2 53.5	0.4	2 17	N.S.	0.43.
		1 54.5	2 55.5	0.4	2 19.5	E.W.	0.36.
408	,, 21	3 3.5	3 19	0.1	0 30.5	N.S.	0.43.
		3 3.5	3 13.5	0.1	0 34	E.W.	0.36.
409	,, 23	22 7	22 42.5	0.2	1 11	N.S.	0.42.
		22 7	22 45.5	0.2	1 22	E.W.	0.35.
410	,, 24	3 18.5	3 34	0.1	—	N.S.	0.42.
		3 19	3 33.5	0.1	—	E.W.	0.35.
411	,, 25	10 49	10 52	0.1	0 22.5	N.S.	0.42.
		10 44	10 48.5	0.1	0 28.5	E.W.	0.35.
412	,, 26	—	16 10.5	0.1	—	N.S.	0.42.
		—	16 2.5	0.1	—	E.W.	0.35.
413	May 1	—	13 40	0.2	—	N.S.	0.42.
		—	13 39.5	0.1	—	E.W.	0.35.
414	,, 3	19 32	20 10.5	0.1	1 17.5	N.S.	0.42.
		19 32	20 20.5	0.1	1 6.5	E.W.	0.35.
415	,, 6	19 3	19 8.5	6.0	3 56.5	N.S.	0.42.
		19 3	19 8	13.8	3 56.5	E.W.	0.43.
416	,, 10	11 3	11 6	0.1	0 13	N.S.	0.42.
		11 2	11 5	0.1	0 18	E.W.	0.43.
417	,, 11	5 29	5 50.5	0.1	0 56	N.S.	0.42.
		5 23.5	5 48	0.1	1 4.5	E.W.	0.43.
418	,, 11	—	18 31	0.3	—	N.S.	0.42.
		17 39.5	18 21.5	0.3	1 50	E.W.	0.43.
419	,, 11	21 14	21 20	0.2	0 27	N.S.	0.42.
		21 13	21 18	0.1	0 19	E.W.	0.43.
420	,, 12	12 19	12 22	0.1	0 36.5	N.S.	0.42.
		12 19	12 19.5	0.1	0 31	E.W.	0.43.
421	,, 13	—	20 26	0.1	—	N.S.	0.42.
		—	19 57.5	0.1	—	E.W.	0.39.
422	,, 15	0 24.5	0 58.5	0.3	2 36.5	N.S.	0.42.
		0 28.5	1 5	0.2	2 14	E.W.	0.39.
423	,, 16	—	15 13.5	0.6	—	N.S.	0.42.
		15 11.5	15 14.5	0.3	—	E.W.	0.39.
424	,, 17	16 49	16 58	0.6	1 36	N.S.	0.42.
		16 50	17 1	0.4	1 33.5	E.W.	0.39.
425	,, 18	22 5.5	22 36.5	0.1	1 37	N.S.	0.42.
		22 5.5	22 38.5	0.1	1 34.5	E.W.	0.39.
426	,, 19	—	2 52	0.1	—	N.S.	0.42.
		—	2 53	0.1	—	E.W.	0.39.
427	,, 21	—	9 13	0.1	—	N.S.	0.42.
		—	9 15	0.1	—	E.W.	0.39.

Register from Eskdalemuir Observatory—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks	
		H. M.	H. M.	MM.	H. M.	Waves.	Scale value in secs.
428	May 22	—	13 40.5	0.1	—	E.W.	0.39.
429	,, 23	2 46	3 8	0.6	1 22.5	N.S.	0.42.
						Spider webs on boom	
		2 36.5	3 8	1.6	2 23.5	E.W.	0.39.
						Ditto.	
430	,, 25	—	16 48.5	0.1	—	N.S.	0.42.
		—	16 45	0.1	—	E.W.	0.39.
431	,, 25	18 7	18 16.5	0.6	0 54	N.S.	0.42.
		18 6.5	18 18	0.8	0 54.5	E.W.	0.39.
432	,, 25	21 23	21 25	0.1	0 7	N.S.	0.42.
		21 25	21 26.5	0.1	0 5	E.W.	0.39.
433	,, 26	3 31.5	3 38	0.1	0 40	N.S.	0.42.
		3 30.5	3 33	0.1	0 19	E.W.	0.39.
434	,, 26	8 8	8 32	0.1	0 42.5	N.S.	0.42.
		8 9	8 28	0.1	0 25	E.W.	0.39.
435	,, 28	7 55	8 0	0.2	0 30	N.S.	0.43.
		7 54	8 6	0.1	0 36	E.W.	0.36.
436	,, 28	13 6	13 54.5	0.6	—	N.S.	0.43.
		13 11	13 44	0.4	—	E.W.	0.36.
437	,, 31	20 48	21 13.5	0.1	1 3	N.S.	0.43.
438	June 1	0 42	1 5.5	0.1	0 51	N.S.	0.43.
		—	1 6	0.3	—	E.W.	0.36.
439	,, 1	11 43	11 48	0.1	0 27	N.S.	0.43.
		11 44.5	11 46	0.2	0 21	E.W.	0.36.
440	,, 2	12 15	13 7	0.2	—	N.S.	0.43.
441	,, 3	12 55	13 26.5	0.3	1 58.5	N.S.	0.43.
		12 54.5	13 36.5	0.3	1 53.5	E.W.	0.45.
442	,, 4	6 0	6 23.5	0.1	1 13	N.S.	0.43.
		6 9	6 24.5	0.1	0 57.5	E.W.	0.45.
443	,, 5	—	12 35.5	0.2	—	N.S.	0.43.
		—	12 28.5	0.1	—	E.W.	0.45.
444	,, 7	10 15	10 39.5	0.5	0 2	N.S.	0.43.
		—	10 45	0.4	—	E.W.	0.45.
445	,, 7	—	13 7.5	0.3	—	N.S.	0.43.
		—	13 8	0.3	—	E.W.	0.45.
446	,, 7	14 36.5	15 3.5	0.2	1 30	N.S.	0.43.
		14 35	15 1	0.1	1 30.5	E.W.	0.45.
447	,, 7	17 51	17 58	0.1	0 22	N.S.	0.43.
		17 49	17 55	0.1	0 27.5	E.W.	0.45.
448	,, 7	18 43.5	19 10	0.6	—	N.S.	0.43.
		18 43	19 13	0.4	—	E.W.	0.45.
449	,, 7	—	23 3.5	0.2	—	N.S.	0.43.
		—	23 3.5	0.1	—	E.W.	0.45.
450	,, 8	—	3 37	0.2	—	N.S.	0.43.
		—	3 37.5	0.2	—	E.W.	0.45.
451	,, 8	4 52	5 40	0.2	—	N.S.	0.43.
		—	5 40.5	0.2	—	E.W.	0.45.
452	,, 8	—	7 33.5	0.4	—	N.S.	0.43.
		—	7 31	0.4	—	E.W.	0.45.
453	,, 8	—	8 27.5	1.3	—	N.S.	0.43.
		—	8 19.5	1.2	—	E.W.	0.45.
454	,, 8	—	9 32	0.9	—	N.S.	0.43.
		—	9 31.5	0.9	—	E.W.	0.45.
455	,, 8	13 10	13 41.5	0.5	2 8	N.S.	0.43.
		13 17	13 43	0.6	2 7	E.W.	0.45.
456	,, 9	7 31.5	7 38.5	0.1	1 13	N.S.	0.43.
		7 32.5	7 38	0.1	1 2.5	E.W.	0.45.
457	,, 9	8 48.5	9 6	0.2	0 50.5	N.S.	0.43.
		8 48	9 3.5	0.1	0 59	E.W.	0.45.
458	,, 9	17 25	17 55.5	0.2	1 52	N.S.	0.43.
		17 34	17 57.5	0.1	1 37.5	E.W.	0.45.
459	,, 9	22 14	22 52	0.2	1 35	N.S.	0.43.
		22 14.5	23 1.5	0.1	1 49.5	E.W.	0.45.

Register from Eskdalemuir Observatory—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks	
							Scale value
		H. M.	H. M.	MM.	H. M.	Waves.	in secs.
460	June 10	16 16.5	16 47	1.2	3 27.5	N.S.	0.43.
		16 16.5	16 48.5	0.6	3 12	E.W.	0.45.
461	,, 12	7 22	7 46.5	0.4	1 26	N.S.	0.43.
		7 23.5	7 48.5	0.2	1 22	E.W.	0.45.
462	,, 12	11 9	11 12	0.1	0 21	N.S.	0.43.
463	,, 12	12 56.5	13 35.5	0.2	3 16	N.S.	0.43.
		12 55.5	13 6.5	0.3	2 57	E.W.	0.45.
464	,, 14	—	16 32	0.1	—	N.S.	0.43.
465	,, 15	19 5.5	19 11	0.2	0 26	N.S.	0.43.
		19 8.5	19 13	0.1	0 10.5	E.W.	0.45.
460	,, 16	13 1	13 3.5	0.2	0 19	N.S.	0.43.
		13 1	13 2.5	0.1	0 13	E.W.	0.45.
467	,, 16	18 32	18 38.5	0.5	0 34	N.S.	0.43.
		18 31.5	18 37.5	0.2	0 40	E.W.	0.45.
468	,, 17	11 28.5	12 12.5	0.3	1 54	N.S.	0.43.
		11 36.5	12 10.5	0.2	1 51.5	E.W.	0.45.
469	,, 18	12 18.5	13 1.5	1.6	3 33.5	N.S.	0.44.
		12 18.5	12 51.5	0.4	3 2	E.W.	0.52.
470	,, 26	17 12	17 40	0.4	1 49.5	N.S.	0.43.
		17 13	17 42.5	0.2	1 49.5	E.W.	0.50.
471	,, 27	2 0	2 2.5	0.1	0 12.5	N.S.	0.43.
472	,, 27	21 33	21 41.5	0.1	2 13	N.S.	0.43.
		21 41	21 42.5	0.1	1 2	E.W.	0.50.
473	,, 28	—	19 16	0.1	—	N.S.	0.43.
474	,, 29	8 13.5	8 19.5	0.1	1 16.5	N.S.	0.43.
		8 9.5	8 23	0.1	0 53.5	E.W.	0.50.
475	,, 29	20 41	20 44.5	0.1	0 9.5	N.S.	0.43.
		20 41.5	20 48	0.1	0 9	E.W.	0.50.

Register from the Coats Observatory, Paisley. 55°50′N. 4°26′W.
Observer, DONALD MACLEAN.
Convener of Committee, JOHN WOODROW, *F.R.A.S.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
122	Jan. 4	4 28	4 30	0.2	1 20	—
122	,, 4	16 8	16 38	0.7	2 36	—
122	,, 20	4 18	5 16.5	0.3	2 5	—
122	,, 21	—	3 16	0.2	—	—
122	,, 24	16 32.5	16 40	1.3	1 11	—
1227	,, 25	—	1 53.5	0.1	—	—
1228	,, 25	—	20 9	0.5	—	Com. and end in Ats.
1229	,, 26	—	14 9	0.1	—	—
1230	,, 26	15 15.5	15 21	0.6	0 40	—
1231	,, 31	13 7	13 16.5	0.3	0 38	—
1232	,, 31	20 27	20 56	0.5	—	End lost in Ats.
1233	Feb. 13	8 13	8 21	0.6	0 30	—
1234	,, 16	10 18	10 54.5	0.1	1 33	—
1235	,, 16	—	18 4	0.1	—	—
1237	,, 20	13 40	13 52.5	0.3	0 40	—

Register from the Coats Observatory, Paisley—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1238	Feb. 22	14 14	14 41.5	0.2	0 44	—
1239	,, 23	3 19	3 38	0.2	0 33	—
1240	,, 24	—	15 7	0.1	—	—
1241	,, 25	3 30	4 19	0.1	1 7	—
1242	,, 25	—	22 19.5	0.1	—	—
1243	,, 25	—	23 20	0.1	—	—
1244	,, 27	—	0 42.5	0.2	—	—
1245	March 3	—	0 32	0.1	—	—
1246	,, 8	15 10	15 29	0.2	0 45	—
1247	,, 11	10 47	10 56.5	0.7	1 29	—
1248	,, 11	—	16 40.5	0.1	—	—
1250	,, 14	7 23	7 32	0.1		—
			7 46	0.1	0 52	
1251	,, 16	—	16 31	0.1	—	—
1252	,, 21	—	14 6	0.1	—	—
1254	,, 22	—	5 37	0.1	—	—
1255	,, 24	—	13 19	—	—	—
1256	,, 25	—	15 7.5	0.1	—	—
1257	April 14	—	14 14	0.1	—	—
1258	,, 17	—	4 39.5	0.6	—	Com. and end in Ats.
1259	,, 20	—	2 51.5	0.5	—	,, ,,
1260	,, 21	—	3 7.5	0.1	—	—
1261	May 1	13 15	13 36.5	0.1	0 44	—
1262	,, 1	—	23 43	0.1	—	—
1264	,, 6	19 3.5	19 7.5	—	—	Max. beyond range of paper. End in Ats.
1266	,, 7	—	14 46	—	—	—
1267	,, 11	5 16.5	5 55.5	0.1	0 59	—
1268	,, 11	17 46	18 33.5	0.2	—	End lost in Ats.
1269	,, 14	15 14	15 20	0.1	0 21	—
1270	,, 16	15 11	15 15.5	0.5	1 4	—
1271	,, 17	16 47.5	16 59	0.6	1 2	—
1272	,, 21	8 50	9 16	0.3	2 20	—
1273	,, 22	13 28	13 35.5	0.2	0 30	—
1274	,, 22	—	17 27	—	—	—
1275	,, 23	2 39	3 10.5	—	4 53	Max. beyond range o paper.
1276	,, 25	18 9	18 17.5	0.4	0 55	—
1277	,, 26	—	8 18	—	—	—
1278	,, 28	13 13	13 55.5	0.3	2 33	—
1279	June 2	12 25	13 26	0.2	1 29	—
1280	,, 3	13 13	13 30	0.2	1 25	—
1282	,, 5	12 15	12 27	0.2	1 28	—
1283	,, 7	—	7 14	0.1	—	—
1284	,, 7	9 20	9 33	0.2	0 38	—
1285	,, 7	10 22	10 37.5	0.3	0 34	—
1286	,, 7	11 5	11 12	0.3	1 5	—
			11 19	0.2		
			11 26.5	0.2		
1287	,, 7	12 43	13 3	0.2	1 2	—
1288	,, 7	13 48	14 59	0.2	1 49	—
1289	,, 7	18 50	19 5	0.6		—
			19 50	0.3	1 50	
1290	,, 8	—	5 55	0.1	—	—
1291	,, 8	—	6 1	0.1	—	—
1292	,, 8	6 40	8 15	2.2	5 59	—
1293	,, 8	13 26	13 37.5	0.6	1 32	—
1295	,, 9	17 49	17 54.5	0.2	0 28	—
1296	,, 10	16 25.5	16 47	1.5	3 6	—
1297	,, 12	7 33	7 47.5	0.2	1 29	—
1298	,, 12	12 52	13 31.5	1.0	3 1	—
1299	,, 15	19 3	19 10.5	0.1	0 16	—

Register from the Coats Observatory, Paisley—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1300	June 16	18 30	18 36	0.4	0 28	—
1301	,, 17	11 37	12 9	0.2	1 21	—
1302	,, 18	12 10	12 58.5	2.2	2 55	—
1303	,, 26	17 10	17 40.5	0.3	—	End lost in Ats.
1304	,, 29	8 14	8 45	0.3	1 35	—

1mm. of amplitude = 0″.47.
Period of pendulum = 17 seconds.

Register from Royal Observatory, Edinburgh. 55°55′N. 3°11′W.
Director, R. A. Sampson, D.Sc., F.R.S.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
919	Jan. 3	11 41.5	—	—	0 45.7	0
920	,, 4	4 18.7	4 34.2	0.2	1 42.8	—
921	,, 4	15 59.0	16 40.9	0.4	3 24.8	—
922	,, 5	—	3 43.4	—	—	00
923	,, 6	—	1 5.7	—	—	0
924	,, 8	—	9 23.0	—	—	0
925	,, 16	—	11 45.2	—	—	00
926	,, 16	—	16 40.5	—	—	00
927	,, 20	4 27.3	5 13.0	0.1	2 5.5	—
928	,, 21	—	3 17.7	—	—	00
929	,, 23	20 24.8	—	—	1 22.7	0
930	,, 24	16 28.6	16 38.6	0.5	1 47.5	—
931	,, 25	1 46.4	1 50.0	0.1	0 27.7	—
932	,, 25	20 2.4	20 8.2	0.1	0 31.5	—
933	,, 26	—	8 31.2	—	—	000
934	,, 26	—	14 8.4	—	—	00
935	,, 26	14 59.2	15 19.8	0.2	1 23.0	—
936	,, 26	—	19 4.6	—	—	00
937	,, 31	—	12 24.3	—	—	0
938	,, 31	12 57.7	13 20.6	0.1	1 33.3	—
939	,, 31	20 26.0	20 49.8	0.5	3 2.3	—
940	Feb. 10	—	19 15.0	—	—	000
941	,, 13	—	0 40.5	—	—	000
942	,, 13	8 9.2	8 18.2	0.3	0 44.8	—
943	,, 13	17 4.4	17 26.5	—	1 11.1	0
944	,, 15	—	3 14.0	—	—	000
945	,, 15	3 36.3	3 46.5	0.1	0 30.2	—
946	,, 16	10 7.3	10 52.9	0.1	2 4.8	—
947	,, 17	—	4 39.0	—	—	000
948	,, 19	11 18.8	—	—	0 27.0	0
949	,, 19	23 19.4	28 30.9	0.1	0 26.8	—
950	,, 20	13 47.8	13 53.4	0.2	0 27.9	—
951	,, 21	—	8 45.0	—	—	000

Register from Royal Observatory, Edinburgh—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
952	Feb. 21	—	18 20.0	—	—	0
953	,, 22	—	14 21.5	—	—	0
954	,, 24	—	15 5.6	—	—	00
955	,, 25	3 54.0	—	—	1 6.5	0
956	,, 25	—	11 3.5	—	—	00
957	,, 25	—	22 9.5	—	—	000
958	,, 25	—	23 13.1	—	—	000
959	,, 26	20 45.5	20 48.8	0.1	0 7.5	—
960	,, 27	0 36.5	0 42.4	0.1	0 8.6	—
961	,, 29	—	15 42.9	0.1	—	Duration uncertain; Ats
962	,, 29	—	19 36.0	—	—	00
963	March 3	—	0 33.0	—	—	0
964	,, 5	—	1 36.0	—	—	0
965	,, 7	—	20 12.8	—	—	00
966	,, 8	15 7.8	15 26.8	0.1	1 17.0	—
967	,, 10	—	5 52.0	—	—	000
968	,, 10	—	12 1.5	—	—	000
969	,, 11	10 35.4	10 57.2	1.1	2 56.9	—
970	,, 11	—	16 38.0	—	—	00
971	,, 13	—	20 43.5	—	—	000
972	,, 13	—	21 18.8	—	—	000
973	,, 14	—	7 35.0	—	—	00
974	,, 16	14 31.9	14 44.0	0.1	1 51.6	—
975	,, 17	—	16 36.5	—	—	0
976	,, 21	—	14 12.0	—	—	00
	,, 21		17 12.0			0
977	,, 22	—	1 51.0	—	—	0
978	,, 22	—	5 31.0	—	—	00
979	,, 22	—	18 58.0	—	—	0
980	,, 24	13 8.7	13 18.9	0.1	0 44.8	—
981	,, 25	5 30.2	5 34.7	0.1	1 33.4	—
982	,, 25	—	15 16.1	—	—	000
983	,, 26	—	7 30.6	—	—	000
984	,, 29	—	19 23.3	—	—	0
985	,, 30	—	8 40.0	—	—	0
986	,, 30	—	21 36.0	—	—	0
987	April 8	2 35.5	2 46.6	0.1	0 17.1	—
988	,, 8	—	9 17.0	—	—	0
989	,, 9	—	7 10.7	—	—	000
990	,, 13	—	2 57.3	—	—	000
991	,, 13	—	19 37.0	—	—	0
992	,, 14	—	14 14.0	—	—	0
993	,, 14	—	23 12.0	—	—	00
994	,, 15	—	17 31.5	—	—	00
995	,, 15	—	23 44.0	—	—	000
996	,, 17	4 13.7	4 37.2	0.1	1 17.3	—
			4 42.6			
997	,, 19	—	0 35.4	—	—	0
998	,, 19	—	1 12.2	—	—	000
999	,, 19	—	15 38.0	—	—	000
1000	,, 20	2 1.3	2 53.0	0.1	2 11.0	—
1001	,, 21	3 3.4	3 11.2	0.1	0 21.8	—
1002	,, 22	—	23 39.7	—	—	000
1003	,, 23	—	22 38.0	—	—	0
1004	,, 24	—	3 31.3	—	—	00
1005	,, 25	—	11 4.0	—	—	0
1006	,, 26	—	16 11.0	—	—	0
1007	May 1	13 28.9	13 38.3	0.1	0 21.5	—
1008	,, 1	—	23 58.8	—	—	000
1009	,, 3	—	19 32.5	—	—	00
1010	,, 3	—	20 7.4	—	—	0
1011	,, 3	—	20 21.2	—	—	000

Register from Royal Observatory, Edinburgh—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1012	May 6	19 2.9	19 7.0	>15.0	3 53.9	—
1013	,, 10	—	11 4.7	—	—	000
1014	,, 11	5 23.7	5 54.0	0.1	0 58.7	—
1015	,, 11	17 39.4	18 29.2	0.2	1 51.0	—
1016	,, 11	21 14.3	21 16.9	0.1	0 11.2	—
1017	,, 12	—	12 18.5	—	—	0
1018	,, 14	—	15 21.5	—	—	00
1019	,, 15	0 29.7	1 5.0	0.1	1 56.8	—
			2 5.4			
1020	,, 16	15 9.5	15 15.5	0.3	0 51.3	—
1021	,, 17	16 50.0	16 57.5	0.5	0 52.9	—
1022	,, 17	—	18 5.2	—	—	0
1023	,, 18	22 31.9	22 35.5	0.1	0 38.4	—
1024	,, 19	—	2 50.6	—	—	00
1025	,, 19	—	4 32.7	—	—	000
1026	,, 21	8 51.0	9 16.1	0.4	2 39.7	—
1027	,, 22	13 29.5	13 35.3	0.2	0 9.1	—
1028	,, 22	—	17 26.2	—	—	0
1029	,, 22	23 24.4	23 45.4	0.1	0 49.9	—
1030	,, 23	2 36.3	3 10.0	>15.0	4 30.7	—
			3 15.3	12.4		
1031	,, 23	—	23 50.8	—	—	000
1032	,, 25	—	16 10.5	—	—	000
1033	,, 25	—	16 45.3	—	—	00
1034	,, 25	18 6.9	18 18.9	0.8	0 47.8	—
1035	,, 25	—	20 34.3	—	—	000
1036	,, 25	—	21 27.3	—	—	00
1037	,, 26	—	8 18.5	—	—	00
1038	,, 28	—	8 11.3	—	—	0
1039	,, 28	13 9.7	14 5.7	0.2	2 33.6	—
1040	,, 31	—	21 12.0	—	—	00
1041	June 1	0 51.3	1 6.5	0.2	0 26.4	—
1042	,, 1	—	9 51.5	—	—	000
1043	,, 1	11 44.2	11 46.0	0.1	0 56.	—
1044	,, 2	12 23.8	—	—	2 13.5	0
1045	,, 3	—	12 39.0	—	—	0
1046	,, 3	12 56.1	13 36.1	0.1	1 29.1	—
1047	,, 4	—	6 16.0	—	—	000
1048	,, 5	11 46.2	12 31.4	0.1	1 35.1	—
			12 45.0			
1049	,, 7	—	10 38.3	0.2	—	June 6th, 17-3, to 8th, tremors practically continuous; Max of 0.2mm. or greater entered.
1050	,, 7	—	11 16.4	0.2	—	
1051	,, 7	—	19 7.0	0.3	—	
1052	,, 7	—	19 11.5	0.3	—	
1053	,, 7	—	19 51.0	0.2	—	
1054	,, 7	—	20 2.4	0.2	—	—
1055	,, 8	7 55.0	8 12.5	1.1	—	—
			8 14.3	1.0		
1056	,, 8	—	13 39.5	0.5	—	—
1057	,, 8	—	13 41.7	0.5	—	—
1058	,, 9	—	9 3.5	—	—	0
1059	,, 9	17 38.5	17 57.1	0.1	1 17.5	—
1060	,, 9	22 12.9	22 20.2	0.1	0 14.2	—
1061	,, 9	22 39.7	22 56.5	0.1	1 18.8	—
1062	,, 10	16 20.9	16 52.9	1.0	2 59.5	—
1063	,, 12	7 23.7	7 44.8	0.1	1 27.2	—
1064	,, 12	12 55.5	13 32.8	1.0	3 11.0	—
1065	,, 14	—	16 58.2	—	—	0
1066	,, 15	—	1 15.9	—	—	0
1067	,, 15	19 4.0	19 9.7	0.1	0 8.9	—
1068	,, 16	—	13 1.9	—	—	0
1069	,, 16	18 31.5	18 37.0	0.2	0 27.0	—

Register from Royal Observatory, Edinburgh—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1070	June 18	—	2 28.5	—	—	000
1071	,, 18	12 16.5	12 54.3	0.7	3 6.8	—
1072	,, 20	—	23 20.4	—	—	000
1073	,, 26	17 11.9	17 39.8	0.2	1 17.1	—
1074	,, 27	—	21 42.2	—	—	0
1075	,, 27	22 0.6	22 12.5	0.1	0 51.9	—
1076	,, 28	—	19 16.0	—	—	00
1077	,, 29	8 15.2	8 46.0	0.2	1 13.5	—
1078	,, 29	—	20 43.4	—	—	0

Period of Pendulum = 17 seconds. 1mm. = 0″.54.
For records below 0.1mm. of amplitude the intensity is denoted by 0, 00, or 000, in decreasing order of magnitude.

Register from University College, Cork. 51°53′N. 8°28′W.
Observer, JAMES J. LALOR.
Director, I. SWAIN, B.A., A.R.C.Sc.I.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1912				
		H. M.	H. M.	MM.	H. M.	
1	Jan. 4	4 10	4 22	0.6	0 40	—
2	,, 4	16 10	16 42	1.5	1 22	—
3	,, 24	16 32	16 38	2.0	0 40	—
4	,, 26	15 18	15 26	0.5	0 26	—
5	Feb. 15	3 49	3 51	0.25	0 7	—
6	Mar. 11	10 48	10 56	1.0	0 43	—
7	May 6	19 2	19 7	18.0	2 38	—
8	,, 23	2 36	3 13	15.0	2 30	—

Register from Ponta Delgada, St. Miguel, Azores. 37°44′N. 25°41′W.
Director, Colonel F. A. CHAVES.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
476	Jan. 24	16 35.8	—	—	0 36	I. of Mercalli's scale. Thickening of line.
476	,, 26	13 56.2	13 56.9	4.2	0 13	VII. ditto.
477	,, 31	12 56.3	12 58.7	1.4	0 18	I. ditto.
477	,, 31	20 17.9	—	—	1 36	I. ditto. Thickening of line.
481	Feb. 27	0 39.6	—	—	0 12	I. ditto. Ditto.
481	March 3	0 15.5	—	—	0 16	I. ditto. Ditto.
482	,, 11	10 51.5	—	—	0 24	I. ditto. Ditto.
486	April 5	0 57.1	0 57.1	1.3	0 2	III. ditto.
491	May 6	19 10.3	19 14.6	21.4	1 33	I. ditto.
491	,, 11	17 53.5	—	—	0 12	I. ditto. Thickening of line.
492	,, 16	15 0	15 2.9	2.8	0 37	I. ditto.
493	,, 22	12 49.6	12 49.6	2.0	0 4	I. ditto.
493	,, 23	2 44.0	2 55.8	1.6	1 25	I. ditto.
495	June 8	7 50.2	—	—	1 57	I. ditto. Thickening of line.
496	,, 10	16 27.5	—	—	0 51	I. ditto. Ditto.
496	,, 12	13 1.5	—	—	0 24	I. ditto. Ditto.
496	,, 16	18 38.6	—	—	0 8	I. ditto. Ditto.

Mean scale value, 1mm. = 0″.49.

Register from Rio Tinto Mines, Huelva, Spain. 37°46′N. 6°38′W.
Observer, W. A. JENKIN.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
378	Jan. 4	4 5	4 19	1.0	1 0	—
379	,, 4	16 10	16 52	1.0	1 46	—
399	,, 24	16 25	16 37	0.7	1 3	—
406	,, 31	20 33	20 55	0.5	1 32	—
			21 6	0.5		
			21 15	0.5		
451	Mar. 16	14 33	14 41	0.4	0 20	—
463	,, 27	20 3	20 5	0.3	0 8	—
473	April 8	2 26	2 31	0.3	0 13	—
482	,, 17	4 12	4 38	0.5	0 38	—
485	,, 20	2 8	2 59	0.5	1 33	—
499	May 3	20 12	20 19	0.4	0 20	—
502	,, 6	19 4	19 14	12.0	2 12	—
507	,, 11	17 51	18 20	0.5	0 49	—
510	,, 15	0 33	0 39	0.4	0 37	—
514	,, 18	22 17	22 26	0.5	0 21	—
518	,, 23	2 36	3 11	8.5	3 41	—
521	,, 25	18 12	18 18	0.5	0 27	—

Register from Rio Tinto Mines, Huelva, Spain—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
524	May 28	13 17	14 1	0.7	0 52	—
534	June 7	10 30	10 44	0.7	1 25	—
	,, 7	12 56	13 6	0.5	0 35	—
	,, 7	18 58	19 7	0.7	—	—
	,, 7	19 35	19 48	0.6	—	—
535	,, 8	6 50	—	—	—	—
	,, 8	—	8 21	0.5	5 24	—
			8 29	1.5		
			8 34	1.0		
			8 42	1.4		
			8 53	0.7		
			8 58	0.5		
			9 5	0.5		
			9 25	0.6		
			9 31	1.0		
			9 36	1.0		
			9 46	0.6		
			9 59	0.5		
			11 24	0.5		
535	,, 8	13 24	13 46	1.0	1 47	—
			13 59	0.6		
			14 11	0.5		
			14 28	0.5		
537	,, 10	16 30	16 58	1.7	2 30	—
539	,, 12	13 5	13 22	2.0	1 8	—
544	,, 17	11 55	12 15	0.5	0 [illegible]	—
545	,, 18	12 13	12 45	3.5	2 13	—
553	,, 26	17 22	17 32	0.4	0 38	—
554	,, 27	21 37	22 3	0.4	0 38	—
555	,, 28	21 1	22 9	0.5	2 3	—

Feb. 12. Ats. from 16h. to 8h. on 13th.
Mar. 9. ,, 15h. to 6h. on 10th.
April 26. ,, 22h. to 24h.
Period = 19 seconds. 1° turn = 5mm.

Register from the Observatorio de Marina de San Fernando.
36°27′N. 6°12′W.
Director, Rear-Admiral T. DE AZCARATE.

Pendulum A (new model) records N.-S. motion.
Pendulum B (old model) records E.-W. motion.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
2	Jan. 4	4 5.2	4 19.7	2.0	0 26	A. Max. for B. 4-19.5.
3	,, 4	16 3.7	16 46.2	3.0	2 40	A.
		16 9.7	16 47.2	3.5	2 25	B.
4	,, 6	0 49	0 54	0.5	0 10	A.
		0 51.6	0 54.6	0.5	0 7	B.

Register from the Observatorio de Marina de San Fernando, Spain—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
7	Jan. 14	—	7 57	0.3	—	A.
8	,, 17	14 57.8	—	—	—	A.
10	,, 20	4 32.6	5 54.2	0.7	2 6	A.
		5 14.2	5 53	0.5	0 52	B.
11	,, 24	16 28.5	16 40	1.5	0 58	A. Cephalonia.
		16 32	16 35.8	1.5	0 53	B.
12	,, 26	1 40	—	—	—	B.
13	,, 26	15 19.5	15 28.7	0.8	0 22	A.
		15 22.3	15 28.5	1.1	0 22	B.
18	,, 31	—	13 7.3	—	—	A.
19	,, 31	20 33.3	20 57.8	2.0	2 41	A.
		20 34	20 58	1.3	2 30	B.
26	Feb. 13	—	8 20.6	—	—	A.
27	,, 13	16 50.9	—	—	0 54	A.
		17 8	17 18	0.5	0 20	B.
30	,, 16	10 42.1	11 1	0.7	1 17	A.
		10 43	11 6	0.4	0 45	B.
31	,, 17	6 38.5	—	—	—	A.
34	,, 20	13 33.5	13 45.5	0.7	0 23	A.
		13 44.4	13 45	0.5	0 14	B.
36	,, 22	—	14 15	—	—	A.
38	,, 25	3 9.5	4 16.5	—	2 3	A.
39	,, 26	23 28.3	—	—	—	A.
41	,, 29	—	2 35.5	—	—	A.
42	,, 29	15 20	15 31.3	—	0 35	A.
44	March 3	0 25.4	—	—	0 32	A.
49	,, 8	15 8.5	15 22.4	0.4	0 44	A.
52	,, 11	10 51	11 5.8	1.9	0 40	A.
56	,, 16	14 40.3	14 45.7	—	0 38	A.
57	,, 16	22 29.7	22 33.7	—	0 52	A.
58	,, 20	0 0	—	—	—	A.
60	,, 22	1 37	1 45	0.6	0 24	A.
		1 40	1 45	0.5	0 12	B.
63	,, 25	—	5 43	—	—	A.
78	April 13	3 9.7	—	—	—	A.
80	,, 14	23 49.2	—	—	—	B.
81	,, 16	—	6 47.3	—	—	A.
82	,, 17	4 12.5	4 41.5	0.4	0 58	A.
		4 16	4 36.2	0.4	0 46	B.
85	,, 20	2 44.5	3 5.5	1.0	1 11	A.
		2 46.6	3 1	0.6	1 2	B.
89	,, 24	—	3 59.7	—	—	A.
95	May 3	20 13	20 18.8	0.2	0 34	A.
		20 15.8	20 18.8	0.4	0 19	B.
98	,, 6	19 6.5	19 19.5	6.0	—	A.
		19 7.5	19 17.5	>18.0	3 15	B.
101	,, 8	21 52.5	—	—	—	A.
102	,, 11	17 50.2	18 20.5	1.5	1 43	A.
		17 51	18 20.7	1.0	1 5	B.
103	,, 11	20 50.2	—	—	—	A.
106	,, 15	0 20	1 57.4	0.5	—	A.
		0 36.4	1 56.4	0.5	1 26	B.
108	,, 16	15 9	15 12.4	0.5	0 18	A.
		15 9.4	15 16	0.4	0 11	B.
109	,, 17	16 49.3	16 58.5	1.0	0 32	A.
		16 48.5	16 58	0.8	0 29	B.
111	,, 18	22 28	22 36.2	0.5	—	A.
		22 28.5	22 35.5	0.4	0 13	B.
113	,, 21	9 21.5	9 26.5	0.6	—	A.
		9 22	9 24.5	0.5	—	B.
114	,, 22	13 39	13 42	0.6	0 8	A.
		13 38	13 40	0.5	0 8	B.

Register from the Observatorio de Marina de San Fernando, Spain—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
115	May 22	23 34.5	23 40.5	0.9	0 15	A.
		23 35	23 37	0.4	0 8	B.
116	,, 23	?	3 19	17.0	—	A. P_2 2-48. Com. and end in Ats.
		—	3 24	12.0	—	A.
		—	3 18	>17.5	—	B.
118	,, 25	18 7.6	18 20	1.0	0 52	A.
		18 10.6	18 20	—	0 23	B.
122	,, 28	13 16	13 55.6	0.8	2 3	A.
		13 22.6	13 55	0.8	1 40	B.
123	,, 31	—	4 30	—	—	A.
124	June 1	—	12 15.3	—	—	A.
126	,, 3	13 29.5	13 31.7	0.5	0 34	A.
		13 28.2	13 41	0.5	0 32	B.
128	,, 5	11 43.6	12 41.6	0.5	2 7	A.
		12 32	12 40.6	0.4	0 22	B.
130	,, 7	7 37.1	10 48	1.7	4 17.5	A. Several quakes.
		9 37	10 48	1.0	5 51	B. ,,
131	,, 7	18 48.1	19 16.6	—	1 19	A.
	,, 7	19 7	19 9	1.0	—	B.
			19 47.5	4.0	1 53	B.
132	,, 7	—	23 37.5	0.4	—	A.
	,, 8	—	0 10.5	0.3	—	A.
	,, 8	—	0 31.5	0.3	—	A.
	,, 8	—	0 47.0	0.3	—	A.
	,, 8	—	1 12.5	0.3	—	A.
	,, 8	—	2 8.0	0.5	—	A.
	,, 8	—	3 5.5	1.0	—	A.
	,, 8	—	3 45.0	1.0	—	A.
	,, 8	—	5 52.5	0.6	—	A.
	,, 8	—	6 12.0	0.5	—	A.
	,, 8	—	7 3.0	0.9	—	A.
	,, 8	—	7 40.5	1.6	—	A.
	,, 8	—	8 27.0	6.0	—	A.
		7 20.5	8 20.5	4.0	—	B.
	,, 8	—	9 25.0	1.0	—	A.
	,, 8	—	9 48.0	3.5	—	A.
	,, 8	—	10 32.0	0.6	—	A.
	,, 8	—	10 50.5	0.6	—	A.
	,, 8	—	11 23.0	0.7	—	A.
	,, 8	—	12 24.5	0.5	—	A.
	,, 8	—	13 25.5	0.5	—	A.
	,, 8	—	13 48.0	1.2	—	A.
	,, 8	—	14 10.0	0.8	—	A.
133	,, 9	17 56.6	18 6.6	0.8	0 19	A.
		17 57.5	18 7.0	—	0 17	B.
134	,, 10	16 19.1	16 59.0	6.5	3 4	A. P_2 16-29.
		16 35	16 56.0	3.0	2 38	B.
	,, 10	—	18 46.5	1.7	—	A.
	,, 10	—	20 10.0	0.2	—	A.
135	,, 12	7 49.6	7 50.6	0.6	—	A.
		7 49.6	7 49.6	0.5	0 33	B.
136	,, 12	13 4	13 29.3	3.0	—	A.
		13 4.6	13 23	2.0	1 13	B.
137	,, 15	12 17.7	12 18.4	0.5	0 7	A.
138	,, 16	18 41.5	18 43.8	0.6	0 8	A.
		18 42.2	18 44	0.4	0 6	B.
139	,, 17	11 41	12 21.2	0.8	1 18	A.
		11 51.7	12 21	0.5	0 54	B.
140	,, 18	11 35	12 16.5	0.8	3 27	A.
			12 46.7	7.0		
		12 14.3	12 46.7	6.5	2 15	B.

Register from the Observatorio de Marina de San Fernando, Spain—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
145	June 26	17 15.7	17 39.5	0.5	0 26	A.
		17 31.2	17 32.2	0.7	0 21	B.
146	,, 27	21 40	22 9	0.5	0 48	A.
		21 37.7	22 11.2	0.5	0 47	B.
147	,, 29	8 14.6	8 44.3	1.0	0 41	A.
		8 15	8 43	0.5	0 34	B.

Pendulum A. Period = 20 seconds. 1mm. = 0″.25.
,, B. ,, = 19 seconds. 1mm. = 0″.28.

Register from the University, Valetta, Malta. 35°54′N. 14°31′E.
Observer, C. LEACH.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1912				
		H. M.	H. M.	MM.	H. M.	
455	Jan. 20	4 4	4 26	0.3	2 20	—
456	,, 24	16 25.5	16 30	3.0	2 5	Zante.
457	,, 25	19 55	20 2.8	0.5	0 25	—
458	,, 26	14 56.7	15 29.7	0.5	0 52	—
459	,, 31	12 57	13 14.7	1.5	1 14	Marianopolis.
460	Feb. 13	8 4.5	8 7.5	1.0	—	—
461	,, 22	14 1.8	14 10.8	0.5	0 13	—
462	,, 29	15 13.5 or 15 28	15 34.5	0.5	0 28	—
463	Mar. 3	0 26.5	0 44.3	0.5	0 27	—
464	,, 5	—	1 34.5	0.3	—	—
465	,, 8	—	15 6.3	1.0	—	Masked by Ats.
			15 13			
466	,, 11	10 51.3	11 12	1.0	1 9	—
467	,, 22	1 29	1 33	0.5	0 16	—
468	April 8	2 35.5	2 46	0.3	—	—
469	,, 16	—	6 30	0.3	—	End at 6-40.
470	,, 20	2 54.3	3 12.5	0.5	3 0	—
471	,, 21	2 57.5	2 59.5	1.0	0 13	—
472	,, 30	8 57.3	9 47.8	0.5	—	—
473	May 6	19 8.3	19 21.3	3.0	1 43	Iceland.
474	,, 6	21 44.3	22 2	0.5	1 4	—
475	,, 11	17 47.5	18 5	1.0	1 0	—
476	,, 15	0 26.5	0 53	1.0	1 32	—
477	,, 16	15 12.7	15 23.5	0.5	0 21	—
478	,, 17	16 29.5	16 46.5	1.5	1 28	—
479	,, 18	22 26	22 29.5	0.5	0 24	—
480	,, 21	8 32.8	9 17.3	0.5	2 31	—
481	,, 23	2 35.5	3 10.8	5.0	3 42	Burmah.
482	,, 25	18 9	18 12.3	0.5	0 15	—
483	June 1	—	11 21	0.5	—	—
484	,, 7	11 14.5	11 54	0.7	—	End in Ats.
485	,, 7	19 48.5	20 34	1.0	2 14	—
486	,, 8	6 2.5	6 37.5	0.5	1 0	—
487	,, 8	7 54	9 27.5	1.5	—	End in next quake.
488	,, 8	—	10 44.5	1.5	—	Probably two shocks.
499	,, 12	13 7.5	13 34.5	1.5	1 36	—
490	,, 18	—	12 46.3	2.5	—	Tremors.
491	,, 26	17 12	17 21.1	1.0	1 7	—
492	,, 28	20 8.5	20 16.5	0.5	0 22	—

Register from Helwan Observatory, Cairo, Egypt. 29°51′N. 31°20′E.
Director, B. F. E. KEELING.

A records E.W. motion.
B records N.S. motion.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1912				
		H. M.	H. M.	MM.	H. M.	
1455	Jan. 3	11 11	11 34.4	0.7	1 37	A.
		11 12	11 46	0.3	1 5	B.
1457	,, 4	3 51.5	4 16.2	1.4	—	A.
		3 18	4 22.7	—	—	B. P_2 3-52, P_3 4-11.2.
1458	,, 4	12 23	—	0.1	0 24	B.
1461	,, 4	14 43	—	0.1	0 33	B.
1462	,, 4	15 42	16 19	0.3	—	A. P_3 16-9. End at 9-27, 5th.
			16 52	0.8		
		15 42	16 14	0.5	—	B. P_3 16-3. End at 11-12, 5th.
			16 54.4	0.9		
1464	,, 6	0 35	—	0.2	0 33	A.
		0 40	—	0.1	0 43	B.
1472	,, 10	—	3 25	0.3	—	A. and B.
1481	,, 14	7 34	8 25	0.1	1 1	A.
1482	,, 16	16 42	16 59	0.1	0 50	A.
1483	,, 17	14 34	—	0.1	0 5	A.
		14 17	—	0.1	0 5	B.
1484	,, 19	2 27	2 40	0.2	0 53	A.
		2 28	2 43	0.2	0 39	B.
1486	,, 20	4 19	5 43	0.2	2 36	A.
		4 21	5 56	0.3	2 32	B.
1487	,, 21	0 18	0 21.2	0.3	0 43	A.
		0 18	0 22	0.2	0 26	B.
1488	,, 21	2 25	—	0.1	0 3	A. Com. for B. 2-26.
1489	,, 21	3 13	3 22	0.2	0 52	A.
		3 9	3 21	0.2	0 52	B.
1492	,, 23	20 55	—	0.1	0 51	A. Com. for B. 20-58.
1493	,, 24	16 26.3	16 33	1.3	2 7	A.
			16 36	1.5		
			16 37.4	2.0		
		16 25.9	16 32	1.6	2 6	B.
			16 33.6	2.4		
			16 36.6	1.4		
1494	,, 25	19 55.6	20 1.9	0.3	1 2	A.
			20 6.6	0.4		
		19 55.8	20 4	0.4	0 58	B.
			20 8.9	0.4		
1495	,, 26	0 47	0 53	0.3	0 34	A. Max. for B. 0-56.
1496	,, 26	14 56.6	15 17	0.3	1 36	A.
			15 21	0.3		
		14 56.8	15 15.9	0.4	1 35	B.
1501	,, 31	12 39	13 11.6	0.5	2 13	A.
			13 20.6	0.5		
		12 41	13 10.6	0.5	2 10	B.
			13 11.8	0.5		
			13 20.6	0.4		
1502	,, 31	20 36	21 42	0.3	3 15	A.
		20 35	21 25	0.3	3 22	B.
1552	Feb. 10	19 1	—	0.1	0 17	A.
		19 2	19 10	0.1	0 27	B.
1554	,, 12	0 23	—	0.1	0 50	A.
		0 31	—	0.1	0 33	B.
1556	,, 13	0 31	—	0.1	0 58	A.
		0 35	—	0.1	0 57	B.
1557	,, 13	8 8	8 18.4	0.4	0 53	A.
		8 7	8 18	0.3	1 1	B.

Register from Helwan Observatory, Cairo, Egypt—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1560	Feb. 13	16 49.6	17 14.6	0.4	1 35	A.
			17 21.4	0.3		
		16 49.2	17 20.4	0.6	1 35	B. P_2 17-8.
1562	,, 15	3 11	3 44	0.2	0 26	A.
		3 13	3 48	0.2	1 3	B.
1567	,, 16	9 35	—	0.2	3 8	A.
		9 42	11 7	0.2	3 27	B.
1568	,, 17	4 10	—	0.1	1 54	A.
		4 5	—	0.1	0 30	B.
1569	,, 17	6 52.5	7 2.7	0.2	0 43	A.
		6 57.4	7 4.5	0.3	0 34	B.
1574	,, 20	13 26	13 35	1.2	1 19	A. P_2 13-31.4.
		13 22	13 35.5	0.5	1 37	B.
1575	,, 20	17 50	18 3	0.2	0 42	A.
		17 53	18 9	0.2	0 34	B.
1576	,, 21	9 2	—	0.1	0 12	A.B.
1577	,, 21	18 23	18 33	0.2	0 42	A.
			18 37	0.2		
		18 24	18 28	0.2	0 51	B.
			18 34	0.2		
1579	,, 22	13 44	14 6	0.4	1 33	A.
			14 11	0.4		
		13 44	14 8	0.3	1 30	B.
			14 11	0.3		
1580	,, 23	21 44	22 15	0.2	0 18	A.
		21 51	—	0.1	1 12	B.
1583	,, 24	14 40	14 48.5	0.3	2 46	A.
		14 42	14 46.5	0.5	2 41	B.
1584	,, 25	2 28	—	0.1	0 11	A.
1585	,, 25	3 0	4 46	0.2	2 57	A. and B.
1586	,, 25	22 9	—	0.1	0 44	A.
1589	,, 26	20 42	20 49	0.1	0 16	A.B.
1590	,, 26	23 16	—	0.1	0 5	A.
		23 4	—	0.1	0 21	B.
1591	,, 27	1 5	—	0.1	0 8	A.
		1 6	—	0.1	0 6	B.
1593	,, 29	2 14	4 53	0.1	3 22	A.
		2 42	—	0.1	2 34	B.
1594	,, 29	15 4.5	15 33.7	0.3	1 50	A.
			15 38	0.4		
			15 43.4	0.4		
		15 4.7	15 38.2	0.3	1 54	B.
			15 43.5	0.5		
1595	,, 29	19 41	—	0.1	0 26	A.
		19 43	—	0.1	0 19	B.
1598	Mar. 3	0 26.3	0 51.5	0.2	1 9	A.
			1 0.5	0.2		
		0 26	0 54.4	0.2	1 4	B.
			0 59.5	0.2		
1601	,, 5	1 28	1 40	0.1	0 20	A.
		1 31	1 39	0.2	0 25	B.
1605	, 8	2 6	—	0.1	0 17	A.
		2 3	—	0.1	0 13	B.
1607	,, 8	8 40.5	8 46	0.2	0 56	A.
		8 39.9	—	0.1	1 0	B.
1608	,, 8	14 58.5	15 3.8	0.9	1 45	A.
		14 55.1	15 4.9	1.0	1 47	B.
1609	,, 9	12 47	—	0.1	0 20	A.
		12 22	—	0.1	0 31	B.
1610	,, 10	5 52	—	0.1	0 15	A.
		5 51	—	0.1	0 13	B.
1611	,, 10	8 16	—	0.1	0 16	A.
		8 9	—	0.1	0 9	B.

Register from Helwan Observatory, Cairo, Egypt—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1613	Mar. 10	11 28	—	0.1	0 58	A.
		11 32	—	0.1	0 52	B.
1614	,, 11	10 44	11 26	0.2	3 46	A.
			11 57	0.2		
			12 49	0.3		
1614	,, 11	10 45	11 10	0.2	3 45	B.
			11 25	0.3		
			11 51	0.4		
			11 58	0.4		
			12 51	0.3		
1615	,, 11	15 56	16 37	0.2	1 14	A.
		16 20	—	0.1	0 50	B.
1618	,, 13	20 30	21 0	0.1	1 45	A.
		20 25	—	0.1	1 20	B.
1619	,, 14	6 48	—	—	1 4	A. Max. lost.
		6 53	—	—	0 58	B. ,,
1622	,, 16	13 58	—	0.1	1 46	A.B.
1623	,, 16	16 22	16 31	0.1	0 35	A.
		16 31	—	0.1	0 30	B.
1624	,, 16	22 23	22 26.3	0.2	0 35	A.
		22 25	—	0.2	0 37	B.
1625	,, 17	15 56	—	0.1	1 3	A.
		15 53	—	0.1	0 53	B.
1626	,, 17	23 51.7	23 57.8	0.2	0 21	A.
		23 52	23 55.1	0.2	0 21	B.
			23 58.6	—		
1627	,, 18	10 47	—	0.1	0 13	A.
1629	,, 19	1 57	—	0.1	0 42	A.
		2 4	—	0.1	0 35	B.
1631	,, 19	12 21	—	0.1	0 4	A.
1635	,, 20	0 10	—	0.1	0 21	A.
		0 18	—	0.1	0 8	B.
1636	,, 20	18 39	—	0.1	0 7	A.
		18 42	—	0.1	0 7	B.
1639	,, 21	14 20	—	0.1	0 29	A.
		14 17	14 23	0.1	0 41	B.
1640	,, 21	17 32	—	0.1	0 37	A.
		17 35	—	0.1	0 36	B.
1641	,, 22	1 19.8	1 22.8	1.4	1 9	A.
			1 23.7	1.3		
		1 18.2	1 21.5	0.6	1 4	B.
			1 23.3	0.5		
1642	,, 22	4 52	5 33	0.2	1 44	A.
		4 52	5 29.5	0.2	1 1	B.
1643	,, 22	18 45	18 54.4	0.1	0 16	A.
		18 46	18 53.2	0.1	0 16	B.
1644	,, 23	9 2	—	0.1	0 5	A.
		9 4	—	0.1	0 4	B.
1645	,, 23	9 24	9 45	0.1	0 44	A.
			9 58	—		
		9 22	—	0.1	0 38	B.
1646	,, 24	12 34	13 0.5	0.6	1 47	A.
		12 36	13 0.5	0.4	1 25	B.
1647	,, 25	5 10	5 34	0.2	2 0	A.
		5 15	—	0.2	2 0	B.
1650	,, 25	14 56	—	0.1	0 24	A.
		14 54	15 2	0.1	0 27	B.
1651	,, 25	16 36	—	0.1	0 5	A.
1652	,, 26	4 56	—	0.1	0 14	A.
		4 50	4 57	0.1	0 15	B.
1653	,, 26	6 37	—	0.1	0 13	A.B.
1658	,, 29	19 29	—	0.1	0 11	A.

Register from Helwan Observatory, Cairo, Egypt—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1659	Mar. 30	0 54	0 56.8	0.1	0 10	A.
		0 49	—	0.1	0 18	B.
1660	,, 30	8 1	8 38.1	0.2	1 3	A. a. for B. 0.1mm.
1661	,, 30	21 12	—	0.1	1 11	A.
		21 17	21 19	0.2	0 38	B.
1666	April 4	1 20	1 23	0.2	0 18	A.
		1 20	1 22	0.1	0 14	B.
1672	,, 8	2 35	2 52.7	0.2	1 2	A.
		2 41	2 53.1	0.2	0 57	B.
1674	,, 8	9 8	9 16.2	0.2	0 23	A.
		9 6	9 17	0.2	0 27	B.
1676	,, 9	7 33	—	0.1	0 15	A.
		7 39	—	0.1	0 16	B.
1677	,, 9	13 49	—	0.1	0 7	A. Com. for B 13-4.2.
1680	,, 13	2 58	—	0.1	0 5	A.B.
1681	,, 13	3 16	—	0.1	0 35	A.
		3 21	—	0.1	0 20	B.
1683	,, 13	19 54	—	0.1	0 19	A.
		20 6	—	0.1	0 8	B.
1684	,, 14	14 40	—	0.1	0 7	A.
		14 37	—	0.1	0 13	B.
1686	,, 14	20 0	23 56.4	0.2	2 53	A.
			0 6.9	0.2		
			0 38.2	0.2		
		23 8	23 56	0.2	2 39	B.
			0 25.3	0.2		
			0 46.2	0.2		
1687	,, 15	16 23	—	0.2	2 59	A.
		16 39	—	0.2	3 2	B.
1688	,, 15	23 31	23 40.1	0.2	2 26	B.
1689	,, 16	6 32	—	0.1	0 8	B.
1693	,, 17	4 11	—	0.2	2 37	A.
		4 17	—	0.2	2 23	B.
1695	,, 18	8 37	—	0.1	0 11	A.
		8 35	—	0.1	0 9	B.
1698	,, 19	0 26	0 35.5	0.2	1 0	A.
		0 26	0 34.5	0.2	0 58	B.
1699	,, 19	15 11	15 12	0.3	0 56	A.
		15 11.3	15 12.2	0.6	0 51	B.
1700	,, 20	1 52	—	0.3	3 21	A.
		1 58	—	0.3	3 27	B.
1701	,, 21	2 59	—	0.2	0 50	A.
		2 57	3 8.6	0.2	1 11	B.
			3 15	0.2		
			3 28	0.2		
1710	,, 23	22 2	22 27.7	0.3	1 13	A.
		22 2	22 29	0.3	1 10	B.
1711	,, 24	3 1	—	0.1	0 3	A.
1712	,, 24	—	—	0.1	—	A. End at 8-45.
		—	—	0.1	—	B. ,, 8-22.
1717	,, 25	10 34	10 50.8	0.1	0 49	A.
		10 40	10 47.1	0.2	0 36	B.
1718	,, 25	12 26	—	0.1	0 7	A.
		12 23	—	0.1	0 11	B.
1720	,, 26	13 49	—	—	3 34	A.
			16 40.3	0.2		
		13 44	—	—	3 34	B.
			16 43.8	0.2		
			16 51.6	0.2		
1721	,, 27	3 53	—	0.1	1 10	A.
		4 11	—	0.1	0 59	B.
1725	,, 30	9 20	—	0.1	0 14	A.
		9 23	—	0.1	0 6	B.

Register from Helwan Observatory, Cairo, Egypt—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1726	April 30	14 19	—	0.1	0 7	A.B.
1730	May 1	13 7	13 35	0.1	1 2	A.
1732	,, 3	19 21	21 32	0.2	2 30	A. Two eqkes.
		19 38	21 10	0.2	2 10	B.
1733	,, 5	20 38	—	0.1	0 7	A.
1734	,, 6	19 8.1	19 31.7	3.1	2 57	A. P_2 19-10.7.
		19 8.5	19 32.1	1.6	2 44	B. P_2 19-11.
1735	,, 11	4 56	—	0.1	2 1	A.
		4 52	—	0.1	2 3	B.
1736	,, 11	17 35.7	17 55.2	0.7	4 6	A. P_2 17-47.9.
			18 5.6	0.9		
			18 8.0	0.9		
		17 36.8	17 56.7	0.6	2 25	B. P_2 17-44.2.
			18 5.6	0.5		
1737	,, 12	11 46	12 49	0.1	0 13	A.
		11 46	12 51	0.1	0 9	B.
1739	,, 13	19 58	—	0.1	0 18	A.B.
1740	,, 13	20 34	—	0.1	0 17	A.
		20 32	—	0.1	0 11	B.
1741	,, 14	15 36	—	0.1	0 19	A.
		15 44	—	0.1	0 18	B.
1742	,, 15	0 24	—	0.3	2 20	A.
		0 27	0 52.6	0.3	2 15	B.
1744	,, 16	15 20	—	0.1	1 20	A.
		15 18	15 30	0.2	1 18	B.
1746	,, 17	16 40.8	16 47.8	1.5	2 0	A.
		16 40.4	16 46.4	1.0	2 23	B.
1747	,, 17	23 29	—	0.1	0 11	A.
		23 33	—	0.1	0 3	B.
1749	,, 18	22 7	22 52	0.5	1 44	A.
		22 12	22 52	0.3	1 38	B.
1750	,, 19	3 51	3 59	0.2	1 1	A.
		3 46	—	0.2	0 40	B.
1752	,, 20	8 44	—	0.1	0 5	B.
1753	,, 21	8 39	9 8.2	0.5	3 39	A.
			9 13.4	0.5		
		8 48	9 8.2	0.6	3 48	B.
1754	,, 22	23 20	1 44	0.2	1 27	A. Two eqkes.
		23 21	—	0.2	1 19	B. ,, ,,
1755	,, 23	2 34.5	2 49.8	3.0	4 47	A. P_2 2-38.2.
			3 1.9	4.9		
			3 2.9	5.5		
			3 5.8	10.5		
			3 7.3	9.2		
		2 34.5	3 0.4	9.5	4 36	B. P_2 2-38.1, P_3 2-42.
			3 2.4	12.5		
			3 5.8	10.9		
1756	,, 25	16 8	—	0.1	0 45	B.
1757	,, 25	18 6	18 17	0.3	1 18	B.
1758	,, 26	3 54	—	0.1	0 41	B.
1759	,, 26	7 54	—	0.1	0 49	A.
		7 57	—	0.1	0 37	B.
1761	,, 28	—	—	0.2	—	A. End at 8-25.
		—	—	0.2	—	B. End at 8-21.
1762	,, 28	13 2	13 52	0.2	3 14	A.
			13 58	0.3		
		13 5	13 53	0.3	3 20	B.
1764	June 2	12 20.7	13 1	0.2	2 17	A.
		12 29	13 7	0.1	2 20	B.
1765	,, 3	12 58	13 35	0.1	2 35	A.
		12 41	13 42	0.1	2 53	B.

Register from Helwan Observatory, Cairo, Egypt—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1767	June 5	11 33.5	12 16.5	0.2	2 49	A.
		11 37	—	0.1	2 23	B.
1768	,, 6	17 40	—	0.1	2 14	A.
1769	,, 6	20 5	—	0.1	0 5	B.
1770	,, 6	23 34	—	0.1	2 46	A.
1771	,, 7	3 52	—	0.1	2 47	A.
		4 21	—	0.1	1 14	B.
1772	,, 7	7 0	—	—	—	A. Many eqkes. until 16-14.
			11 14	0.2		
			12 33	0.2		
1772	,, 7	7 0	—	—	—	B. Many eqkes. until 16-14.
			11 6	0.2		
			12 47	0.2		
			13 39	0.2		
1773	,, 7	16 43	16 55	0.1	0 36	A.
		16 46	—	0.1	0 30	B.
1774	,, 7	18 48.5	19 43.8	0.8	3 6	A.
		18 40	19 31.6	0.5	2 42	B.
1775	,, 7	22 50	—	0.1	0 26	B.
1776	,, 7	23 44	—	—	—	A. Many eqkes. until 17h. 8th.
	,, 8	—	9 17	0.6		A.
	,, 7	23 40	—	—	—	B. Ditto, ditto.
	,, 8	—	8 56	0.8	—	B.
1778	,, 9	7 53	—	0.1	0 32	A.
		7 36	—	0.1	0 51	B.
1779	,, 9	9 3	9 27	0.1	2 9	A.
		9 20	9 51	0.1	1 57	B.
1780	,, 9	17 46	19 51	0.1	2 28	A.
		17 36	18 33	0.1	2 48	B.
1781	,, 9	22 39	23 30	0.1	2 36	A.
		22 33	—	0.1	2 39	B.
1783	,, 10	16 19	17 24	0.7	3 53	A.
			18 41	0.7		
		16 11	17 24	0.6	4 33	B.
1785	,, 12	7 27	8 11	0.1	2 51	B.
1786	,, 12	11 4	—	0.1	0 18	B.
1787	,, 12	13 5	13 40	0.2	2 54	B.
1788	,, 14	16 17	16 54	0.1	2 31	A.
		16 24	16 58	0.1	1 55	B.
1789	,, 15	1 4	1 20	0.1	0 30	A.
		1 4	1 14	0.1	0 18	B.
1790	,, 15	3 38	3 40	0.1	0 9	B.
1791	,, 16	17 57	17 58	0.1	0 6	A.
		17 53	17 57	0.1	0 8	B.
1792	,, 16	18 45	18 46	0.1	0 24	A.
		19 1	19 3	0.1	0 17	B.
1793	,, 17	11 33	12 24	0.4	3 19	B.
1801	,, 20	23 23	—	0.1	0 18	A.
1808	,, 23	20 2	20 5	0.1	0 14	A. Max. for B. 20-3.
1811	,, 26	17 3	17 13	3.0	2 29	A.
		17 3	17 12	3.4	1 53	B.
1814	,, 27	21 35	22 28	0.4	2 36	A.
		21 50	22 50	0.4	2 31	B.
1816	,, 28	19 40	—	0.1	0 19	B.
1817	,, 29	3 3	3 47	0.1	1 6	A.
1819	,, 29	8 14	9 3	0.5	2 0	A.
		8 12	9 4	0.2	1 57	B.
1820	,, 29	20 21	—	0.1	0 49	A.
		20 23	20 26	0.1	0 32	B.
1821	,, 30	8 45	8 45	0.2	0 13	A.

Register from Helwan Observatory, Cairo, Egypt—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		SUPPLEMENTARY LIST, 1912.				
		H. M.	H. M.	MM.	H. M.	
1530a	Jan. 25	1 57	—	0.1	0 8	A.
		1 53	—	0.1	0 8	B.
1532a	,, 26	14 26	—	0.1	0 6	A.
		14 25	—	0.1	0 3	B.
1543a	Feb. 5	2 10	2 16	0.1	0 10	A.
		2 11	—	0.1	0 6	B.
1586a	,, 25	23 16	—	0.1	0 5	A.
		23 4	—	0.1	0 21	B.
1734a	May 10	11 5	—	0.1	0 7	A. only.
1753a	,, 22	13 40	—	0.1	0 4	A. only.
1755a	,, 23	23 45	—	0.1	0 5	A.
		23 42	—	0.1	0 10	B.
1763a	,, 31	21 22	—	0.1	0 7	B. A. out of order.
1763b	June 1	0 48	0 53	0.2	0 31	A. A. out of order.
1765a	,, 4	6 12	—	0.1	0 6	A. only.
1769a	,, 6	21 33	—	0.1	0 10	A.
		21 42	—	0.1	0 5	B.
1769b	,, 6	22 19	—	0.1	0 36	A. only.
1815a	,, 28	14 10	—	0.1	0 17	B. only.

Register from Syrian Protestant College, Beirut, Syria. 33°54′N. 35°28′E.
Director, ALFRED H. JOY, *M.A., F.R.A.S.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1911				
		H. M.	H. M.	MM.	H. M.	
480	March 2	19 25	19 27	—	0 6	Thickening.
481	,, 6	6 2	6 9	—	0 8	,,
482	,, 6	11 27	11 29	—	0 10	,,
484	,, 10	4 46	4 49	—	2 5	,,
485	,, 27	6 2	6 5	—	0 19	,,
486	April 4	15 45	15 49	1.5	0 25	—
487	,, 7	7 7	7 51	0.6	0 52	—
488	,, 10	19 6	19 8	—	1 10	Thickening.
489	,, 11	14 23	14 24	—	1 4	,,
490	,, 16	6 4	6 5	0.3	0 8	—
491	,, 18	11 24	11 29	0.4	0 11	—
492	,, 18	18 19	18 29	3.3	1 51	—
493	,, 21	3 31	3 42	0.3	0 17	—
494	June 1	14 48	14 49	0.7	0 10	—
495	,, 8	0 4	0 11	1.1	0 34	—
496	July 5	2 22	2 27	2.1	0 32	—
497	,, 19	8 44	8 45	0.1	0 4	Thickening.
498	,, 23	17 10	17 21	0.6	1 0	—
499	Aug. 29	20 56	20 58	1.1	0 9	—
500	Sept. 6	2 13	2 18	0.3	0 18	—
501	,, 17	3 39	4 36	0.7	2 8	—
502	Oct. 13	2 6	3 30	0.9	1 11	—
503	,, 14	23 32	23 50	0.5	1 5	—
504	,, 17	12 46	12 49	0.3	0 22	—
505	,, 22	22 26	22 28	0.9	0 21	—

Register from Syrian Protestant College, Beirût, Syria—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
506	Mar. 22	1 24	1 26	0.3	0 11	—
507	,, 25	5 25	5 27	—	0 8	Thickening.
508	,, 30	21 15	21 16	—	0 4	,,
509	April 19	15 12	15 14	1.0	0 8	—
510	May 6	19 14	19 29	7.8	1 12	—
511	,, 11	17 44	17 55	1.3	0 39	—
512	,, 15	0 43	0 50	0.3	1 5	—
513	,, 23	2 34	3 7	9.0	3 4	—
514	,, 25	18 10	18 12	0.5	0 25	—
515	,, 28	13 22	13 45	0.4	0 57	—
516	June 2	12 50	13 0	0.2	0 19	—
517	,, 3	13 30	13 36	0.2	0 19	—
518	,, 7	10 54	10 59	0.3	1 2	—
519	,, 7	19 2	19 21	0.5	1 11	—
520	,, 7	20 56	21 0	0.1	0 18	—
521	,, 8	7 37	8 40	1.0	1 53	—
522	,, 8	9 32	9 45	0.6	1 13	—
523	,, 8	10 57	11 22	0.1	1 0	—
524	,, 10	18 33	18 39	0.4	0 37	—
525	,, 12	8 1	8 9	0.1	0 16	—
526	,, 12	13 9	13 10	0.1	0 7	—
527	,, 12	13 49	13 54	0.2	1 16	—
528	,, 17	11 39	12 11	0.5	0 57	—
529	,, 18	12 14	12 51	4.8	2 12	—
530	,, 26	17 9	17 14	4.2	0 33	—
531	,, 27	21 47	21 48	0.1	0 6	Thickening.
532	,, 27	22 20	22 22	0.1	0 9	,,

Pendulum period, 1911, 15 seconds.
,, ,, 1912, 18 seconds.

Register from Ascension Island. 7°57′S. 14°21′W.
F. Marx, *Supt. Eastern Telegraph Co.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
62	Jan. 31	12 43	12 46.5	2.5	—	End lost.
63	June 8	8 44	8 48	2.5	0 30	—
64	,, 8	14 8	14 12	1.0	0 11	—

Period, 18 seconds.
1° turn = 6½mm.

Register from St. Vincent, Cape Verde Islands. 16°30′N. 24°W.
Observers, Messrs. Meats and Walker.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1911			
		H. M.	H. M.	MM.	H. M.	
23	July 5	2 51.5	—	1.0	—	—
24	,, 5	19 51	—	0.5	—	—
25	,, 12	3 38	5 25.5	1.5	2 34	—

Period, 20 seconds.
1mm. = 0″.3.

			1912			
		H. M.	H. M.	MM.	H. M.	
26	April 13	—	19 31	1.8	—	—
27	May 6	19 7	19 16	6.2	1 37	—
28	,, 11	—	18 30	1.0	—	—
29	,, 16	—	16 5	1.8	—	—
30	,, 17	—	18 25	1.5	—	—
31	,, 23	2 43	3 39.5	7.0	2 48	—
32	June 8	7 31.5	8 29	3.0	2 41	—
33	,, 10	—	17 13.5	2.5	—	—

Period, 15 seconds.
1mm. = 0″.6.

Register from Royal Observatory, Cape of Good Hope. 33°56′S. 18°28′E.
Director, S. S. Hough, M.A., F.R.S.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
817	Jan. 1	—	23 22.5	0.2	0 2	—
818	,, 3	10 58.3	11 0.1	1.0	0 11	—
819	,, 4	3 37.7	3 40.0	2.2	0 35	—
820	,, 4	16 33.7	17 24.7	0.4	1 49	—
821	,, 5	—	2 49.2	0.3	0 1	—
822	,, 20	4 59.3	5 11.3	0.3	0 24	—
823	,, 21	—	0 15.2	0.2	0 1	—
824	,, 24	17 2.1	17 9.9	0.5	0 18	—
825	,, 31	13 2.5	13 7.5	0.4	0 13	—
826	,, 31	21 29.5	21 46.5	0.4	0 35	—
827	Feb. 13	—	9 16.2	0.5	—	? Earthquake. Instrument disturbed for winding.
828	,, 13	16 37.2	16 40.4	0.7	0 39	—
829	,, 20	13 5.4	13 7.2	1.5	0 37	Shock felt throughout South Africa.
830	,, 22	13 30.0	13 30.8	0.6	0 8	—
831	,, 29	14 51.5	14 55.5	0.3	0 19	—
832	Mar. 8	15 5.3	15 6.4	0.8	0 13	—
833	,, 11	11 47.3	11 50.1	0.2	0 10	—

Register from Royal Observatory, Cape of Good Hope—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
834	Mar. 16	—	21 52.7	0.1	—	—
835	,, 24	13 14.2	13 18.2	0.2	0 9	—
836	April 19	—	15 40.5	0.1	0 2	—
837	May 6	19 33.2	19 58.0	1.0	1 14	
			20 0.7	0.9		—
			20 5.3	0.9		
			20 11.3	0.8		
838	,, 11	17 52.1	18 1.1	0.8	0 54	—
839	,, 17	17 15.8	17 19.8	0.6	0 23	—
840	,, 21	—	9 26.2	0.1	0 16	—
841	,, 23	2 50.2	3 22.0	0.5	1 29	—
842	June 7	18 54.9	19 1.3	0.9	0 47	—
843	,, 8	8 53.4	9 9.4	0.3	0 56	—
844	,, 8	—	10 30.4	0.1	0 2	—
845	,, 10	17 30.0	17 50.7	0.5	0 57	—
846	,, 12	—	13 14.1	0.1	0 4	—
847	,, 18	11 59.0	12 13.8	1.7	1 56	
			12 20.0	1.5		—
			12 30.5	1.6		
848	,, 26	17 29.0	17 35.3	0.5	0 37	—
849	,, 27	—	22 18.0	0.1	0 5	—
850	,, 28	—	14 15.0	0.1	0 1	—

1mm. Boom Motion = 0″.24. Period, 20 seconds.

Register from Fernando Noronha. 3°50′S. 32°25′W.
Superintendent, C. E. HOLMES.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1911			
		H. M.	H. M.	MM.	H. M.	
50	Dec. 21	—	14 23.5	0.1	—	—
51	,, 21	—	15 35.5	0.1	—	—
52	,, 21	15 57.5	16 2.5	0.6	—	End in Ats.
53	,, 22	12 42?	13 17.5	0.2	—	End in Ats.
			13 44	0.4		
54	,, 23	—	19 16.5	0.1	—	—
55	,, 23	—	21 36.5	1.5	—	Com. in Ats. End at 24-55.
56	,, 24	—	14 41	0.1	—	—
57	,, 26	—	12 45	0.1	—	—
58	,, 29	—	16 37	0.1	—	Com. and end in Ats.
59	,, 30	9 47	10 10	0.1	1 40	—
			10 57	0.1		
60	,, 31	—	7 3	0.3	—	Com. in Ats. End at 10-16.
			7 56	0.5		
			8 8	0.5		
61	,, 31	—	15 36	0.1	—	—

Register from Fernando Noronha—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
62	Jan. 3	—	11 31.5	0.2	—	Com. and end in Ats.
			12 11	0.2		
63	,, 4	—	4 12.5	0.6	—	Com. and end in Ats.
64	,, 4	—	16 32	0.6	—	,, ,,
			17 15	0.6		
			17 17.5	0.6	—	
65	,, 6	—	0 53	0.2	—	—
66	,, 16	16 1.5	16 14	0.4	0 34	—
67	,, 19	1 55	2 4.5	0.3	—	End in Ats.
			2 15	0.2		
68	,, 20	4 5?	4 56	0.3	—	Com. and end in Ats.
			5 47	0.3		
69	,, 21	—	0 37	0.1	—	—
70	,, 21	2 5.5?	2 38.5	0.6	—	End at 3.35.
			2 42	0.6		
71	,, 24	16 45	17 0.5	0.8	2 0ca	—
72	,, 25	—	20 25	0.2	—	Com. and end in Ats.
			20 31	0.1		
73	,, 26	—	14 32	0.1	—	—
74	,, 26	—	15 53	0.2	—	—
75	,, 26	—	19 22	0.3	—	—
76	,, 31	—	11 14	0.1	—	—
			11 49	0.1		
77	,, 31	12 40	12 46.5	4.5	1 45	—
78	,, 31	20 23	21 2	0.5	2 10	—
79	Feb. 4	—	2 20	0.1	—	—
80	,, 6	—	8 26	0.2	—	Com. and end in Ats. 11th & 15th no record.
	,, 16	—	—	—	—	16th, 3 eqkes. recorded ; as there are no time marks they cannot be measured.
81	,, 24	—	15 10.5	0.1	—	—
			15 36	0.1		
			15 50	0.1		
			16 42	0.1		
82	,, 25	—	4 19	0.2	—	Com. in Ats. End at 5-30.
83	,, 26	—	20 28	0.2	—	—
84	April 8	—	2 9	0.5	—	Com. and end in Ats.
85	,, 13	19 25	19 38	0.1	1 10	—
86	,, 17	3 57.5	4 19	0.5	—	End in Ats.
			4 25	0.5		
87	,, 19	—	0 23	0.1	—	—
88	,, 19	—	1 6	0.1	—	—
89	,, 19	—	15 28	0.1	—	—
90	,, 20	—	2 22.5	0.2	—	—
91	,, 21	2 56.7	2 57.2	0.6	0 56	—
92	,, 22	—	23 20	0.1	—	—
93	,, 23	—	21 44	0.1	—	—
94	,, 25	—	10 13.5	0.1	—	—
95	,, 26	—	16 0	0.2	—	Ats. all day.
			16 18	0.2		
96	May 6	—	11 27.5	0.1	—	—
			11 52	0.1		
97	,, 6	19 19	19 38.5	1.0	3 40	—
			19 41	1.0		
			19 55	1.2		
98	,, 7	14 19	14 25	1.5	0 32	—
99	,, 8	—	11 25	0.2	—	—
100	,, 8	14 25.5	14 26.5	0.5	0 32	—

Register from Fernando Noronha—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
101	May 10	11 40	11 46	0.6	0 54	—
102	,, 11	3 57.5	4 15	0.6	1 0	—
103	,, 11	5 13.5	5 35	0.7	1 40	—
104	,, 11	—	17 52	0.1	—	—
105	,, 11	18 11	18 28	1.5	2 30	—
106	,, 14	—	15 12.5	0.1	—	—
107	,, 15	—	0 46.5	0.5	—	End at 3-41.
108	,, 17	—	17 25	0.2	—	—
109	,, 18	21 50	22 10	2.0	—	End lost by changing paper.
110	,, 19	—	2 35	0.1	—	—
111	,, 19	—	4 32.5	0.2	—	—
112	,, 21	—	9 22	0.2	—	—
113	,, 21	—	10 0	0.2	—	—
114	,, 22	—	8 30	0.1	—	—
115	,, 22	—	8 44	0.1	—	—
116	,, 22	—	13 35.5	0.1	—	—
117	,, 22	—	16 58.5	0.6	—	Com. and end in Ats.
118	,, 22	22 53.5	23 7.7	0.2	—	End lost by changing paper.
119	,, 23	2 47	3 48	4.0	4 0	P_2 2-56.5.
			3 51.5	4.5		
			4 5.5	1.5		—
	,, 28	—	—	—	—	Many eqkes. recorded, but as there are no time marks they cannot be measured.
120	June 1	—	1 41.5	0.1	—	—
121	,, 1	—	9 58	0.1	—	—
122	,, 2	13 15	13 29	0.2	1 40	
			13 40	0.2		
			13 48.5	0.2		
123	,, 3	—	13 52.5	0.2	—	—
124	,, 4	16 53	16 55.5	1.0	1 0	Time uncertain as there are no time marks.
	,, 8	—	—	—	—	Many eqkes. recorded, but as there are no time marks they cannot be measured.
	,, 10	—	—	—	—	Ditto.
125	,, 17	—	12 37.5	0.2	—	—
126	,, 18	12 0	12 16	5.0	3 40	P_2 12-8.
			12 23	2.5		
			12 31.5	3.5		

Machine not working during March.
Period, 16 seconds.

Register from St. Clair Experiment Station, Trinidad, B.W.I.
10°40′N. 61°30′W.
Assistant Director, W. G. FREEMAN, *B.Sc., A.R.C.S., F.L.S.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1912				
		H. M.	H. M.	MM.	H. M.	
1	June 8	—	14 12.7	0.2	—	—
2	,, 9	12 37	13 7.4	1.2	2 25	—
3	,, 9	—	17 26.9	0.1	—	—
4	,, 10	—	17 14.5	0.1	—	—
5	,, 11	8 53.5	9 1.5	1.5	1 5	—
			9 14.2	1.2		
6	,, 18	7 17.1?	7 40.3	2.0	—	Com. and end in Ats.
7	,, 18	9 43.2?	9 45.5	0.6	0 50	Com. in Ats.

Register from Toronto, Ont. 43°39′N. 79°23′W.
Director, R. F. STUPART, *F.R.S.C.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1912				
		H. M.	H. M.	MM.	H. M.	
1072	Jan. 4	14 37	—	0.1	0 5	—
1073	,, 4	14 49.3	—	0.05	0 4	—
1074	,, 4	15 57.7	16 29.8	1.0	2 4	P_2 16-6.5, P_3 16-12.7.
1075	,, 16	11 18.6	11 20.7	0.1	0 10	With Ats.
1076	,, 24	16 59.6	17 11.9	0.2	0 36	P_2 17-6.5, P_3 17-9.5.
1077	,, 25	2 4.2	2 10.5	0.2	0 17	P_3 2-8.3.
1078	,, 31	11 44 ?	—	0.1	—	With Ats.
1079	,, 31	20 21.6	20 37.9	5.9	1 57	P_2 20-28.9. P_3 20-33.6.
		20 25.8				S.W. Alaska.
1080	Feb. 19	23 12.5	23 12.8	0.5	0 15	—
1081	,, 21	8 2.8	8 15.6	0.4	0 32	P_2 8-8.6, P_3 8-15.
1082	Mar. 11	10 31.2or	10 37.9	3.0	1 13	P_2 10-35.9, P_3 10-37.
		10 34	10 40			
1083	,, 25	5 20.3	—	0.05	0 1	Com. may be lost.
1084	April 3	21 58.2	—	0.1	0 47	—
1085	,, 13	19 8.1	19 8.9	0.4	0 4	—
1086	,, 14	—	13 54.8	0.4	0 16	P_3 13-54.3.
1087	,, 17	4 2.7	4 14.2	5.0	0 55	P_3 4-10.5.
1088	,, 20	2 27.8or	—	0.05	0 25	—
		2 34.2				
1089	May 6	19 13.7	19 24.3	8.5	1 58	P_2 19-16.8, P_3 19-20.5.
1090	,, 11	5 34.7	—	0.1	0 2	—
1091	,, 18	22 19.8	—	0.05	0 1	—
1092	,, 21	10 16or	10 26.3	0.4	0 27	P_2 10-23.8.
		10 20				
1093	,, 23	2 52or	3 36.8	4.5	2 28	P_2 3-0.4, P_3 3-16.3.
		2 54	3 37.8	4.9		
			3 41.0	3.9		
			3 42.1	5.5		
1095	,, 27	13 0.7	—	0.05	0 5	Felt in Toronto and more severely in Hamilton.
1096	,, 28	13 13.6	—	0.1	0 53	—

Register from Toronto, Ont.—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1098	June 3	12 39.4	—	0.05	0 1	—
1099	,, 3	12 51.9	13 28.5	0.3	1 8	—
			13 38.9	0.2		
1100	,, 6	15 32.9	—	0.05	0 1	—
1101	,, 6	—	—	0.05	0 17	P_3 16-34.8.
1102	,, 6	18 45.6	—	0.05	0 2	—
1103	,, 6	21 37.3	—	0.05	0 1	Alaska.
1104	,, 6	21 46.7	—	0.05	0 1	,,
1105	,, 6	22 21.7	—	0.05	0 2	,,
1106	,, 6	22 49	—	0.05	0 1	,,
1107	,, 7	0 47.5	—	0.05	0 1	,,
1108	,, 7	4 3.8	—	0.2	0 45	,,
1109	,, 7	5 2	—	0.2	0 18	—
1110	,, 7	5 41	—	0.1	0 41	—
1111	,, 7	6 36	—	0.05	0 10	—
1112	,, 7	6 54.6	7 41.7	0.3	0 14	—
1113	,, 7	8 28	8 28.9	0.2	0 28	—
1114	,, 7	9 16	9 23	0.4	0 32	P_3 9-20.1.
1115	,, 7	10 17.1	10 26.7	0.8	—	P_3 10-21.
1116	,, 7	—	11 4.1	0.6	—	P_3 11-0.1. End at 12-13.
1117	,, 7	12 24.1	12 51.5	0.8	1 50	P_3 12-49.5.
1118	,, 7	14 39.5	14 46.3	0.3	0 48	P_3 14-45.3.
1119	,, 7	16 28.8	—	0.05	0 25	—
1120	,, 7	18 39.7	18 52.1	0.8	3 35	P_2 18-45.5, P_3 18-50.5.
1121	,, 7	21 30.2	—	—	—	Alaska.
1122	,, 7	—	—	0.2	—	P_3 22-8.7. Alaska.
1123	,, 7	—	—	0.2	—	P_3 23-12. ,,
1124	,, 8	—	—	0.3	—	P_3 0-25.3. ,,
1125	,, 8	—	—	0.4	—	P_3 0-44.8. ,,
1126	,, 8	—	—	0.3	—	P_3 1-23.2. ,,
1127	,, 8	—	—	0.3	—	P_3 1-45.9. ,,
1128	,, 8	2 37.3	2 41.8	0.3	—	P_3 2-40.3. ,,
1129	,, 8	—	3 21.3	0.4	—	P_3 3-20. ,,
1130	,, 8	4 54.4	—	0.1	—	P_3 5-0. ,,
1131	,, 8	—	—	0.2	—	P_3 5-26.3. ,,
1132	,, 8	—	—	0.3	—	P_3 5-51. ,,
1133	,, 8	—	6 42	0.3	—	P_3 6-39. ,,
1135	,, 8	—	6 56.9	0.2	—	P_3 6-54. ,,
1136	,, 8	—	7 18.5	0.8	—	P_3 7-15.6. ,,
1137	,, 8	—	8 1.9	4.0	—	P_3 7-54.9. ,,
			8 3.2	5.0		P_3 8-1.4. ,,
			8 5.7	8.0		End at 13-2. ,,
1138	,, 8	13 6.2	—	0.5	0 6	,,
1139	,, 8	13 15	13 27.6	1.8	2 55	P_3 13-25.2. ,,
1141	,, 9	7 21	—	0.1	0 6	,,
1142	,, 9	8 8.2	—	0.05	0 2	,,
1143	,, 9	8 45.7	8 50.8	0.3	0 18	,,
1144	,, 9	16 21.8	—	0.1	0 24	,,
1145	,, 9	17 1	—	0.05	0 4	,,
1146	,, 9	17 35.7	17 44.1	0.8	1 15	P_3 17-39.6. ,,
1147	,, 9	22 3.9	22 7.5	0.3	0 24	,,
1148	,, 9	22 35	22 39.8	0.3	0 42	,,
1149	,, 10	11 59.4	—	0.05	0 1	,,
1150	,, 10	12 19.4	—	—	—	End at 13-48. ,,
1151	,, 10	13 48.2	—	0.05	0 1	,,
1152	,, 10	14 25.8	—	0.05	0 1	,,
1153	,, 10	16 15.5	16 36.8	6.0	2 15	P_2 16-22.9, P_3 16-27.7.
1154	,, 10	18 53	—	0.05	0 43	—
1155	,, 12	7 22.7	7 32.8	0.8	0 50	P_2 7-28.2, P_3 7-30.3.
1156	,, 12	12 51.5	12 57.8	0.8	1 39	P_3 12-54.7.
			12 58.8	0.8		
1157	,, 13	11 44.5	—	0.05	—	—

Register from Toronto, Ont.—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1158	June 17	11 34.4	11 58.7	0.5	1 15	P_3 11-52.6.
1159	,, 18	3 54.1	—	0.1	0 16	—
1160	,, 18	12 13.7	—	0.2	2 7	—
1162	,, 27	22 39.5	—	0.2	—	End in Ats. P_3 22-41.5.
1163	,, 29	8 2.6	—	0.2	0 21	P_3 8-10.6.

June 13th. 11-56 to 13-35, many small movements.
Period, 14.7 seconds.
1mm. = 0″.64.

Register from Victoria, B.C. 48°23′N. 123°19′W.
Superintendent, E. Baynes Reid.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
1087	Jan. 4	14 37.4	—	0.05	0 4	—
1088	,, 4	14 50.2	—	0.1	0 7	—
1089	,, 4	15 53.5	16 18	1.2	2 13	P_2 15-59.3, P_3 16-10.2.
1090	,, 16	11 28	11 32.7	0.1	0 8	—
1091	,, 24	17 11.4?	17 22.1	0.1	0 27	P_3 17-18.8.
1092	,, 25	2 1.8	—	0.05	0 10	—
1093	,, 31	11 40.2	11 51.7	0.2	0 13	—
1094	,, 31	—	20 27.4	4.1	—	P_3 20-23.2. Alaska.
1095	Feb. 19	22 53.1	22 54.3	1.2	0 20	—
1096	Mar. 11	10 18.3	10 20.4	12.5	1 11	P_3 10-20.1. Two very severe eqkes. felt at Triangle I., 2-17 and 2-25 a.m.
1097	,, 25	5 14.1	—	0.05	0 3	—
1100	April 14	—	13 35.4	1.0	0 23	P_3 13-33.4.
1101	,, 17	4 9.2	—	0.1	0 45	—
1102	,, 20	2 15.5	—	0.05	0 24	—
1103	May 6	19 16	19 29.3	6.8	1 46	P_2 19-20.5, P_3 19-26.8.
			19 32.5			
1104	,, 11	5 35	5 36.5	0.5	0 7	—
1105	,, 15	0 27	—	0.3	0 7	—
1106	,, 18	22 28.8	—	0.05	0 3	—
1107	,, 21	10 1.1	10 11.1	0.3	0 35	P_3 10-5.3.
1108	,, 23	2 43.8?	3 26.9	2.7	2 37	P_2 2-50.5, P_3 3-17.3.
			3 28.9	2.9		
1109	,, 28	13 5.3	13 6.1	0.05	0 10	—
1110	,, 28	13 18.9	13 33.9	0.2	0 49	—
1112	June 3	12 45.2	13 1.9	0.3	0 53	—
1113	,, 6	15 16.8	15 20.9	0.2	0 10	—
1114	,, 6	16 21.2	—	0.05	0 4	—
1115	,, 6	16 43.5	—	0.05	0 10	—
1116	,, 6	17 24.4	—	0.05	1 11	—
1117	,, 6	19 23.7	—	0.05	—	End at 20-3.
1118	,, 6	22 1.9	22 9.4	0.2	0 24	—

Register from Victoria, B.C.—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1119	June 6	22 39.5	—	0.05	0 41	Alaska.
1120	,, 6	23 32.3	23 38.4	0.05	1 2	,,
1121	,, 7	3 46.4	3 53.3	0.2	0 35	,,
1122	,, 7	4 43.4	4 46.4	0.2	1 50	,,
1123	,, 7	6 45	6 49.5	0.3	0 22	,,
1124	,, 7	7 8.5	7 9	0.3	0 56	,,
1125	,, 7	8 10	8 16	0.4	0 35	,,
			8 18			
1126	,, 7	9 4	9 6.3	0.4	0 23	,,
1127	,, 7	10 2.3	10 11.3	1.4	—	P_3 10-4.5.
1128	,, 7	—	10 46	0.8	—	P_3 10-43.3. End at 12-11.
1129	,, 7	12 27	12 38.5	0.8	1 5	P_3 12-34.
1130	,, 7	14 23.5	14 31.3	0.5	0 20	P_3 14-30.5.
1131	,, 7	18 28.7	18 38.4	1.5	1 36	P_3 18-32.8.
			18 40.4	1.5		
1133	,, 7	—	—	0.1	—	P_3 20-33.3.
1134	,, 7	—	—	0.1	—	P_3 20-36.6.
1135	,, 7	—	—	0.1	—	P_3 20-38.8.
1136	,, 7	—	—	0.05	—	P_3 22-54.4.
1137	,, 7	—	—	0.05	—	P_3 23-0.5.
1138	,, 8	—	—	0.1	—	P_3 0-7.5.
1139	,, 8	—	—	0.1	—	P_3 0-26.3.
1140	,, 8	—	—	0.1	—	P_3 0-28.8.
1141	,, 8	1 7.8	1 10.8	0.3	—	—
1142	,, 8	1 27.8	1 29.3	0.3	—	—
1143	,, 8	2 23.6	2 24.6	0.3	—	—
1144	,, 8	3 1.8	3 6.3	0.8	—	P_3 3-3.8.
1145	,, 8	4 42.3	—	0.1	—	—
1146	,, 8	5 11.7	—	0.2	—	—
1147	,, 8	5 32.6	—	0.3	—	—
1148	,, 8	6 20.5	6 27.5	0.8	—	P_2 6-22.8.
1149	,, 8	6 38.4	—	0.3	—	—
1150	,, 8	6 53.3	7 1.8	1.8	—	P_3 6-57.2.
1151	,, 8	—	7 48.4	8.6	—	P_3 7-44.4.
			7 50.6	9.9		
1152	,, 8	—	8 59.2	3.4	—	P_3 8-57.8.
1153	,, 8	—	10 11	1.7	—	P_3 10-9.8.
1154	,, 8	10 40.3	10 43.9	0.8	—	P_2 10-42.6.
1155	,, 8	13 4	13 11.8	2.9	1 44	P_3 13-8.8.
1156	,, 9	7 2.8	7 9.3	0.1	0 13	—
1157	,, 9	7 51	—	0.05	0 5	—
1158	,, 9	8 30.4	8 33.5	0.3	0 16	P_3 8-32.5.
1159	,, 9	17 23.6	17 26.6	0.8	0 23	P_3 17-25.6.
1160	,, 9	21 46.8	21 50.2	0.3	0 18	P_3 21-49.2.
1161	,, 9	22 14.4	22 21.8	0.8	1 1	P_3 22-20.6.
1162	,, 10	11 54.5	—	0.05	—	—
1163	,, 10	12 10.6	—	0.05	0 2	—
1164	,, 10	12 45.5	—	0.05	0 2	—
1165	,, 10	16 10.2?	16 18.5	5.9	—	P_3 16-10.8. With Ats.
1166	,, 12	7 9.1	7 16.6	0.8	1 1	P_2 7-12.6, P_3 7-15.3.
1167	,, 12	12 52.1	13 17.5	0.7	1 12	P_2 12-58, P_3 13-14.6.
1168	,, 17	11 29	11 42.4	0.8	1 3	P_3 11-39.
1169	,, 18	12 11	—	0.2	1 50	—
1171	,, 29	8 13.7	—	0.05	0 18	—

Period, 15 seconds.
1mm. = 0″.76.

Register from the Honolulu Observatory. 21°19′N. 158°3′W.
Observer, O. H. Gaarden.

No.	Date	First P.P. begin	Large waves begin	Max.	End	Max. Amplitude	Remarks
			1912				
		H. M.	H. M.	H. M.	H. M.	MM.	
987	Jan. 4	15 55.5	16 0.8	16 6.6	—	5.0	2nd P.T. 15-59.3 ?
988	,, 16	0 9.6	0 15.2	0 17.0	0 50	0.1	Very small tmrs.
990	,, 20	4 10.1	4 27.5	4 33.7	5 30	2.5	2nd P.T. 4-18.2.
991	,, 20	—	8 49.7	8 56.3	9 10	0.4	—
992	,, 23	—	19 28.8	19 32.0	20 8	0.3	—
993	,, 30	—	23 40.0	23 44.5	23 55	0.1	—
994	,, 31	20 25.7	20 28.6	20 30.5	22 0	4.2	—
997	Feb. 16	9 43.7	9 52.9	10 0.9	10 57	1.5	—
998	,, 25	2 56.9	33 3.8	3 7.4	3 26	0.4	2nd P.T. 3-0.0.
999	,, 25	—	21 16.0	21 23.6	21 33	0.3	—
1000	,, 29	—	1 24.0	1 29.4	1 33	0.2	—
1001	,, 29	3 32.0	3 42.9	3 44.0	3 51	0.2	2nd P.T. 3-36.4.
1002	Mar. 11	10 30.6	10 32.7	10 34.6	11 47	1.0	Not far distant.
1003	,, 13	19 26.5	19 35.5	19 39.8	20 4	0.5	2nd P.T. 19-31.5.
1004	,, 14	6 45.7	7 4.1	7 7.2	7 23	0.1	—
1005	,, 16	13 28.8	13 31.4	13 32.4	14 23	1.0	—
1006	,, 16	—	15 5.9	15 6.7	15 18	0.4	—
1008	,, 22	—	5 7.0	5 13.0	5 28	0.3	—
1009	,, 24	—	13 13.0	13 19.0	13 28	0.1	—
1010	,, 25	4 57.9	5 10.8	5 11.4	5 59	0.6	2nd P.T. 5-6.8.
1012	,, 30	8 4.2	8 14.4	8 20.4	8 40	0.2	—
1013	April 14	—	13 45.5	13 48.4	13 56	0.2	Very slight. Phases not well marked.
1014	,, 14	22 48.8	22 58.6	23 2.7	23 46	1.4	—
1015	,, 15	16 11.0	16 32.8	16 37.0	17 0	0.5	2nd P.T. 16-21.8.
1016	,, 17	3 49.0	4 25.1	4 28.9	4 50	0.8	2nd P.T. 4-11.2.
1017	,, 20	1 41.4	1 58.2	2 4.7	4 22	3.9	2nd P.T. 1-49.3.
1018	,, 24	2 32.8	2 43.4	2 46.9	3 0	0.3	—
1019	,, 26	—	14 55.6	14 59.5	15 26	0.1	—
1020	,, 29	—	1 17.6	1 19.3	1 26	0.8	Local.
1021	May 3	19 22.4	19 37.8	19 43.6	20 35	0.5	—
1022	,, 5	—	19 28.4	19 31.0	19 37	0.1	—
1023	,, 6	19 23.9	19 37.5	19 48.0	21 19	1.0	2nd P.T. 19-29.8.
1025	,, 11	—	5 34.3	5 38.0	5 49	0.4	—
1027	,, 15	0 13.7	0 20.8	0 23.3	1 30	0.3	Very slight.
1028	,, 21	—	9 1.7	9 51.4	10 48	0.3	See remarks.
1029	,, 23	2 40.2	2 59.8	3 20.8	6 10	5.4	2nd P.T. 2-50.3.
1030	,, 26	2 38.9	2 55.5	2 58.3	3 15	0.2	2nd P.T. 2-46.0.
1031	,, 28	12 44.3	13 8.3	13 14.6	14 29	4.3	—
1032	,, 31	—	20 43.9	20 51.6	21 2	0.1	Merely a broadening of trace.
1033	June 2	12 11.3	—	12 48.3	13 19	0.3	2nd P.T. 12-22.0.
1034	,, 3	—	11 51.7	12 6.0	12 13	0.2	—
1035	,, 3	12 37.8	12 47.5	12 54.7	14 10	0.5	Series of slight tremors.
1036	,, 5	11 36.4	11 51.6	11 54.8	12 39	0.6	2nd P.T. 11-44.8.
1037	,, 7	1 12.0	1 15.8	1 17.0	1 25	0.4	See remarks.
1038	,, 7	2 43.6	2 48.6	2 49.9	2 55	0.4	,,
1039	,, 7	—	3 55.4	4 9.6	4 26	0.2	—
1040	,, 7	—	6 48.3	6 51.7	6 59	0.2	—
1041	,, 7	—	7 7.2	7 17.5	7 20	0.1	—
1042	,, 7	—	7 29.7	7 31.0	7 37	0.1	—
1043	,, 7	—	8 15.0	8 18.5	8 25	0.1	—
1044	,, 7	—	9 9.2	9 10.6	9 17	0.2	—
1045	,, 7	—	10 11.8	10 14.2	10 20	1.2	—
1046	,, 7	—	10 50.1	10 52.4	10 58	1.0	—
1047	,, 7	—	12 33.0	12 42.0	12 51	0.2	—
1048	,, 7	—	14 35.2	14 36.5	14 45	0.2	—

Register from the Honolulu Observatory—continued.

No.	Date	First P.P. begin	Large waves begin	Max.	End	Max. Amplitude	Remarks
		H. M.	H. M.	H. M.	H. M.	MM.	
1049	June 7	18 36.1	18 40.9	18 42.8	18 53	1.3	2nd P.T. 18-38.0.
1050	,, 7	—	19 48.2	19 51.0	19 59	0.5	—
1051	,, 8	—	0 10.8	—	0 20	0.1	—
1052	,, 8	—	0 34.5	0 36.0	0 48	0.2	—
1053	,, 8	—	1 11.6	1 12.8	1 16	0.3	—
1054	,, 8	—	2 28.8	2 33.1	2 38	0.2	—
1055	,, 8	—	3 12.2	3 15.6	3 21	0.2	—
1056	,, 8	—	7 3.7	7 9.8	7 12	0.6	—
1057	,, 8	—	7 51.2	7 54.0	8 15	2.8	—
1058	,, 8	—	9 1.0	9 4.8	10 5	4.0	—
1059	,, 8	—	10 49.0	10 50.8	10 54	0.7	—
1060	,, 8	13 12.9	13 15.2	13 16.4	15 1	2.3	—
1061	,, 9	2 51.5	3 14.0	3 17.5	3 24	0.5	2nd P.T. 3-7.8.
1062	,, 9	—	7 10.4	7 11.5	7 18	0.1	—
1063	,, 9	—	8 42.2	8 43.0	8 56	0.1	—
1064	,, 9	21 58.8	22 28.0	22 36.2	23 30	0.1	Very slight tmrs.
1065	,, 10	16 15.2	16 21.5	16 27.6	19 27	2.4	2nd P.T. 16-19.3.
1066	,, 12	7 17.5	7 20.0	7 21.8	8 43	1.5	—
1067	,, 12	12 55.3	13 14.3	13 17.1	15 44	0.5	2nd P.T. 13-3.6.
1068	,, 14	16 17.2	16 33.8	16 37.8	17 4	0.3	—
1069	,, 15	0 12.6	0 35.4	0 39.0	1 0	0.4	—
1070	,, 17	11 28.5	11 30.7	11 34.6	12 36	0.6	—
1071	,, 18	—	12 10.8	12 55.0	14 40	0.4	—
1072	,, 27	21 37.1	21 55.8	21 59.1	22 18	0.3	2nd P.T. 21-47.1.
1074	,, 29	8 14.4	8 35.3	8 39.7	9 21	1.0	—

REMARKS.

Period of pendulum, 19secs. to 20secs.
Sensitiveness, January 1 to February 16, 0″.31.
,, February 25 to June 12, 0″.28.
,, June 14 to 30, 0″.42.

No. 987.—End obscured by air tremors.
No. 1020.—Local shock, recorded on magnetograph at 1-17.4.
No 1028.—Phases not well defined; probably end of distant eqke.
No 1037.—Recorded on magnetograph at 1-16.2.
No. 1038.—Recorded on magnetograph at 2-48.7.

Register from Alipore Observatory, Calcutta. 22°32′N. 88°20′E.
Director, J. H. Field, *M.A.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1912				
		H. M.	H. M.	MM.	H. M.	
833	Jan. 4	15 57.8	16 31.9	1.25	1 57	P_3 16-30.9.
834	,, 14	10 50.2	—	—	0 10	Thickening.
836	,, 26	14 47.2	14 50.2	5.0	0 24	—
837	,, 31	20 34.8	21 7.8	2.0	1 16	P_3 20-57.7.
838	Mar. 8	15 23.5	—	—	0 8	Thickening.
839	,, 24	12 25.9	12 36.1	1.2	0 34	P_3 12-33.5.
843	April 23	21 49.6	21 54.7	1.5	0 21	P_3 21-53.7.
844	May 6	19 21	19 50.5	5.0	1 34	P_3 19-43.3.

Register from Alipore Observatory, Calcutta—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
845	May 11	—	17 53.2	4.0	1 8	P_3 17-39.
846	,, 21	8 30.8	8 38.4	3.5	1 17	—
847	,, 23	—	—	—	—	P_3 2-26.1. Begins with morning Ats. and as the boom moved throughout trace, time, max. and amp. cannot be given. Burmah eqke.
848	,, 28	13 2.1	13 20.9	1.0	1 16	Times approx.
850	June 7	10 6.3	10 42.9	2.0	0 38	—
851	,, 8	8 58.5	9 34.6	3.0	3 9	P_3 9-32.1.
852	,, 8	13 10.7	13 48.4	3.0	1 27	P_3 13-44.8.
853	,, 9	17 49.1	18 1.8	0.8	—	End in Ats.
854	,, 10	16 28.5	16 54	5.0	2 24	P_3 16-50.9.
855	,, 12	7 44.3	7 51.5	1.25	0 45	P_3 7-49.4.
856	,, 12	13 12.7	14 9.6	0.8	1 51	P_3 14-7.6.
857	,, 14	16 11.9	—	—	0 30	Thickening.
858	,, 17	11 36.8	11 56.2	0.8	0 57	P_3 11-53.1.
859	,, 18	12 18.2	12 56.7	3.5	2 7	P_3 12-55.2.
860	,, 26	17 10.1	—	—	0 39	Thickening.
861	,, 29	20 17	—	—	0 7	,,

Period, 18 seconds.
Sensibility, 1mm. amp. = 0″.38.

Register from Government Observatory, Bombay. 18°53′N. 72°48′E.
Director, N. A. F. Moos.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1912				
		H. M.	H. M.	MM.	H. M.	
4	Jan. 4	16 10.9	16 40.7	0.9	1 2	—
5	,, 6	0 30	—	—	1 30	Thickening.
17	,, 6	14 21	—	—	—	,,
18	,, 26	14 50.7	14 59.2	0.4	0 18	—
24	,, 31	—	21 15.5	0.5	—	With Ats.
48	Feb. 24	16 25	—	—	—	Thickening.
82	Mar. 24	12 29	12 35.5	0.3	0 19	—
89	April 1	5 19	5 23	0.4	0 11	—
115	,, 23	18 18	—	—	—	Thickening.
116	,, 23	21 52.4	21 59.6	0.5	0 18	—
119	,, 25	10 34.7	10 35.9	0.2	0 8	—
141	May 6	19 21.1	19 44.4	1.9	1 31	—
146	,, 11	6 10	—	—	—	Thickening.
147	,, 11	17 36.7	17 40.5	1.1	0 37	—
149	,, 15	—	0 34.8	0.3	—	With Ats.
150	,, 15	6 18	—	—	—	Thickening.
154	,, 18	22 35	—	—	—	,,
157	,, 21	8 38.1	8 44.6	1.0	0 49	—

Register from Government Observatory, Bombay—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
161	May 23	2 28.9	—	—	2 14	Trace overlapped.
167	,, 28	12 55	—	—	—	Thickening.
171	June 1	0 43	—	—	—	,,
174	,, 2	12 29	—	—	—	,,
178	,, 5	11 43	—	—	—	,,
179	,, 5	11 50	—	—	—	,,
180	,, 5	11 57	—	—	—	,,
181	,, 6	22 15	—	—	—	,,
183	,, 7	10 42.9	10 49.2	11.0	—	End in next eqke.
184	,, 7	—	11 30.5	0.5	—	Com. in previous eqke. End in next eqke.
185	,, 7	12 59.7	13 8.1	0.4	0 30	—
186	,, 7	14 30	—	—	0 55	Thickening.
187	,, 7	18 56.9	19 12.5	1.0	0 55	—
189	,, 8	3 5	—	—	—	Thickening.
190	,, 8	3 45.5	—	—	—	,,
191	,, 8	3 50.5	—	—	—	,,
192	,, 8	3 53.5	—	—	—	,,
193	,, 8	7 4.7	—	—	—	,,
194	,, 8	7 40.3	8 29.1	1.8	—	End in next eqke.
195	,, 8	—	9 45	1.3	—	Com. in previous eqke. End in next eqke.
196	,, 8	—	11 26.9	0.5	—	Ditto.
197	,, 8	13 45.7	13 52.6	1.3	0 44	—
199	,, 9	18 5.5	—	—	—	Thickening.
200	,, 9	18 13.5	—	—	—	,,
201	,, 10	16 39.4	16 59.8	2.5	1 5	—
202	,, 10	17 35	—	—	—	End at 19-10.
206	,, 12	7 53.8	7 58.8	0.5	0 21	—
207	,, 12	9 25	—	—	—	End at 15-20.
215	,, 16	18 15	—	—	0 55	Thickening.
217	,, 17	11 58	12 1.9	0.7	0 19	—
220	,, 18	12 16.4	12 50.2	1.0	1 33	—
227	,, 26	17 2.3	17 9.5	0.6	0 24	—
231	,, 29	8 25	—	—	—	Thickening.

Jan. 1 to June 30. 1mm. amp. = 0″.40.

Register from the Solar Physics Observatory, Kodaikanal, Madras.
10°14′N. 77°27′E.
Director, J. EVERSHED.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM. ″	H. M.	
1	Jan. 4	4 7.4	7 15.1	0.8 = 0.3	0 22	P_3 4-12.3.
2	,, 4	16 9.9	16 44.0	1.1 = 0.4	2 19	P_2 16-40.7.
3	,, 20	4 22.3	—	—	0 26	Widening of line.
4	,, 26	14 52.4	14 58.2	0.7 = 0.3	0 33	P_2 14-57.7.
5	,, 31	13 33.9	—	—	0 11	Widening of line.
6	,, 31	20 44	21 21.1	1.0 = 0.4	1 4	P_3 21-8.5, P_3 21-14.4.
7	Feb. 13	17 16.7	—	—	0 13	Widening of line.
8	,, 16	10 0.3	10 19.3	0.6 = 0.3	0 56	P_3 10-19.1.
9	Mar. 11	11 23.1	—	—	0 56	Widening of line.
10	,, 11	16 1.8	—	—	0 10	,, ,,
12	,, 24	12 28.3	12 30.6	0.8 = 0.3	0 19	—
			12 32	0.7 = 0.3		
14	April 11	10 14.6	10 15.1	0.6 = 0.3	0 14	P_3 10-14.9.
15	,, 20	2 11	—	—	0 44	Widening of line.
16	,, 23	3 54.1	3 55.9	0.7 = 0.3	0 8	P_3 3-34.4.
17	,, 23	21 52.2	21 54.6	0.7 = 0.3	0 18	—
18	,, 25	—	10 32.6	—	0 7	Widening of line.
19	May 6	19 22.3	19 54.2	2.7 = 1.3	1 50	P_3 19-49.5.
20	,, 11	17 30.8?	17 35.9	3.3 = 1.6	0 55	P_3 17-33.1.
21	,, 15	0 33.3?	0 34.4	0.4 = 0.2	0 54	P_3 0-33.
22	,, 15	—	1 14.4	0.6 = 0.3	—	P_3 1-12.
23	,, 17	17 13.1	—	—	0 16	Widening of line.
24	,, 18	23 9.1	—	—	0 16	,, ,,
25	,, 19	—	3 39.8	0.5 = 0.2	—	P_3 3-39. End at 3-49
26	,, 21	8 33.6	8 53.1	0.9 = 0.4	0 56	P_3 3-38.2.
27	,, 21	10 35.1	—	—	0 23	Widening of line.
28	,, 22	23 17.5	23 23.6	0.4 = 0.2	0 12	P_3 23-23.1.
29	,, 23	2 29	2 39.9	13.5 = 5.4	3 46	P_3 2-29.5. Burmah.
			2 42.0	14.5 = 5.8		
			2 47.9	16.0 = 6.0		
30	,, 28	7 7.1	7 8.6	0.4 = 0.2	0 20	—
31	,, 28	13 4.7	13 28.2	0.6 = 0.3	1 8	P_3 13-26.2.
32	June 1	0 46.3	—	—	0 10	Widening of line.
33	,, 2	12 14.9	12 30.2	0.5 = 0.2	0 36	—
34	,, 3	12 31?	—	—	0 18	Widening of line.
35	,, 5	11 30.5?	11 48.1	0.5 = 0.2	0 38	P_3 11-45.8.
36	,, 7	10 46.4	10 58.2	0.8 = 0.3	—	P_3 10-50.8.
37	,, 7	—	11 36.7	0.4 = 0.2	—	P_3 11-30. End at 11-58.
38	,, 7	13 14.6	—	—	0 23	Widening of line.
39	,, 7	15 10.9	—	—	0 25	,, ,,
40	,, 7	18 55.1	19 9.5	0.9 = 0.4	1 14	P_3 19-3.3.
			19 26.9	0.9 = 0.4		
41	,, 8	7 40.7	7 51	0.6 = 0.3	0 35	P_3 7-47.2.
42	,, 8	—	8 37.2	2.4 = 1.0	—	P_3 8-25.7.
43	,, 8	—	9 48.4	1.4 = 0.6	—	P_3 9-41.
44	,, 8	13 49.9	14 0.2	1.0 = 0.4	0 33	P_3 13-56.9.
45	,, 10	16 33.1	17 10.1	2.0 = 0.8	2 8	P_3 16-58.6.
46	,, 18	12 13.3	12 47.4	1.8 = 0.8	1 49	P_3 12-43.3.
47	,, 26	17 7.8	17 14.4	0.9 = 0.4	0 47	P_3 17-11.4.

Register from Colombo Observatory. 6°56′N. 79°50′E.
Acting Superintendent, A. J. BAMFORD.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1912				
		H. M.	H. M.	MM.	H. M.	
194	Jan. 4	16 11.9	16 53.1	0.9	1 14	—
195	,, 10	2 51.2	2 52.5	0.4	0 9	—
196	,, 24	17 2.1	17 10.9	0.4	0 29	—
197	,, 26	14 55.8	15 5.0	0.5	0 6	—
198	,, 31	21 23.2	21 23.8	0.4	0 13	—
199	Feb. 20	13 36.7	13 40.0	0.3	0 10	—
200	Mar. 24	12 26.1	12 30.0	1.0	0 24	—
	April 23	3 24	—	—	—	Trace
200a	,, 23	21 51.7	21 55.5	0.3	0 25	—
201	May 6	19 35.6	19 55.6	1.1	0 58	—
202	,, 11	17 30.5	17 35.4	3.7	1 7	P_2 17-33.5.
203	,, 15	—	0 39.3	0.4	0 50	—
204	,, 19	3 40.1	3 41.2	0.4	0 6	—
205	,, 21	8 35.4	8 46.7	1.2	1 0	P_2 8-39.3.
206	,, 23	2 31.5	2 41.0	15.0	3 15	P_2 2-35.2.
207	,, 28	7 5.0	7 7.1	0.5	0 28	—
208	,, 28	13 4.2	13 31.0	0.5	0 45	—
210	June 5	11 29.2	11 33.6	0.3	0 35	—
211	,, 7	10 51.2	10 54.0	0.6	1 4	—
212	,, 7	13 21.1	13 29.0	0.2	0 14	—
213	,, 7	15 18.2	—	—	0 13	—
214	,, 7	18 53.6	19 7.2	0.8	1 1	—
215	,, 8	3 52.0	—	0.2	0 14	—
216	,, 8	6 3.4	—	—	0 5	—
217	,, 8	7 8.7	—	—	—	—
218	,, 8	7 46.9	8 34.6	2.0	7 24	—
219	,, 8	9 44.5	9 52.4	0.7		
220	,, 8	13 53.6	13 59.5	0.5		
221	,, 9	6 55.7	6 57.8	0.3	0 5	—
222	,, 10	16 40.7	17 5.5	1.1	2 11	—
			17 11.2			
223	,, 12	8 0.3	—	—	0 20	—
224	,, 12	14 12.0	14 38.0	0.2	0 43	—
225	,, 17	12 7.5	12 21.0	0.2	0 27	—
226	,, 18	12 13.7	12 46.4	3.8	1 55	P_2=12-22.9.
228	,, 26	17 9.4	17 15.9	0.4	0 22	—
229	,, 27	22 45.5	22 53.8	0.2	0 12	—

Jan. to May, Period 18 seconds. June, Period 17 seconds.
January : 1mm.=0″.62. April : 1mm.=0″.43.
February : 1mm.=0″.58. May : 1mm.=0″.47.
March : 1mm.=0″.50. June : 1mm.=0″.51.

Register from Mahé, Seychelles, Indian Ocean. 4°5′S. 55°5′E.
Superintendent, A. J. BESLY. *Assistant*, G. E. ATKINSON.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1612				
		H. M.	H. M.	MM.	H. M.	
47	Jan. 4	4 0	—	—	0 15	—
48	Feb. 21	9 8	—	0.5	1 0	—

Period, 17 seconds.
1° turn=5mm.

Register from Royal Alfred Observatory, Mauritius. 20°6′S. 57°33′E.
Director, A. WALTER, *F.R.A.S.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1911				
		H. M.	H. M.	MM.	H. M.	
911	Jan. 1	10 38	10 47.5	—	0 22	E.W.
		10 34	10 49	—	0 34	N.S.
912	,, 1	19 4	19 7	—	0 7	E.W. Thickening.
		18 58.5	—	—	0 19	N.S. ,,
913	,, 3	7 39.5	7 44.5	—	0 12	E.W.
		7 39	7 44.5	—	0 11	N.S.
914	,, 3	23 35.7	0 1.7	—	3 22	E.W. A 2nd dis. occurred between 1-56 and 2-34 ;
		23 36.7	0 2.7	—	3 22	N.S. Max. at 2-9.
915	,, 4	—	9 1.2	—	0 29	N.S. and E.W.
916	,, 7	2 35.8	3 3.3	—	—	E.W.
919	,, 9	4 56.9	5 17.4	—	0 30	E.W.
920	,, 16	17 10.2	17 19.2	—	0 18	E.W. Faint in N.S.
921	,, 16	9 14.5	9 33	—	0 29	N.S. and E.W.
930	Feb. 18	18 59.1	19 6.6	1.3	1 9	E.W.
		18 58.1	19 15.3	2.0	1 10	N.S.
932	,, 21	16 29.1	16 33.1	0.3	0 9	E.W.
933	,, 23	12 2.4	12 2.6	0.4	0 16	E.W.
934	,, 26	13 27.7	13 30.6	0.4	0 10	E.W. Slight in N.S.
936	Mar. 11	3 35.7	4 14.3	—	1 27	E.W. ,,
948	April 3	12 9.4	12 9.9	0.6	0 7	E.W.
		12 9.4	12 9.9	1.0	0 6	N.S.
951	,, 10	19 0.6	20 9.6	—	2 0	E.W.
952	,, 11	—	3 31.4	—	—	E.W.
954	,, 11	14 21.4	14 35.2	0.5	0 26	E.W.
		14 19.8	14 24	0.4	0 17	N.S.
957	,, 15	—	11 28.6	—	—	N.S. Slight in E.W.
			12 34.6			
959	,, 18	11 49.6	11 53.3	—	0 47	N.S. ,,
960	,, 18	18 20.5	18 45.6	3.0	1 5	E.W.
		18 30.8	18 44.3	2.0	0 53	N.S.
962	,, 21	2 36.7	3 2.4	—	0 44	N.S. Slight in E.W.
963	,, 24	—	8 21.4	—	—	E.W. Slight.
964	,, 25	—	13 5.5	—	—	E.W. ,,
		—	12 56.9	—	—	N.S. ,,
966	May 4	13 45	14 3.2	0.5	0 35	E.W.
		13 44.5	13 55.9	0.6	0 15	N.S.
967	,, 4	23 56.2	0 7.6	1.5	1 20	E.W.
		23 55	0 7.8	0.6	1 57	N.S.
			0 43			
969	,, 11	3 58.1	4 14.9	2.2	1 12	E.W.
			4 10.2	2.2		
972	June 1	14 31.8	14 48.7	0.7	0 34	E.W.
		14 31.8	14 50.4	0.4	0 26	N.S. Slight tremors for several hours after.
974	,, 3	21 4.8	21 27.1	—	0 49	E.W.
		—	21 25	—	—	N.S.
975	,, 7	10 54.2	12 58.6	2.1	3 38	E.W.
		11 2.6	12 45.1	3.0	3 33	N.S.
976	,, 8	0 18.5	0 36.4	0.6	0 35	N.S. Slight in E.W.
977	,, 12	10 3.6	11 1	—	1 15	E.W. only.
978	,, 15	14 37.3	—	—	3 47	E.W. and N.S.
979	,, 25	—	9 31.6	—	—	E.W.
981	,, 28	20 18.2	20 21.9	—	0 33	E.W.
983	July 1	23 33.3	—	—	0 32	E.W. Thickening.
		23 25.3	—	—	0 40	N.S. ,,
984	,, 3	—	15 50.4	—	—	E.W. ,,

Register from Royal Alfred Observatory, Mauritius—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
985	July 3	22 53.7	—	—	—	E.W. Thickening.
986	,, 4	13 41.8	13 58.6	2.2	1 14	E.W.
		13 42.7	13 59.7	1.6	1 14	N.S.
987	,, 5	2 40.2	—	—	0 35	E.W. ,,
		2 51.3	—	—	0 37	N.S. ,,
988	,, 5	18 58.2	19 11.3	—	0 24	E.W. Faint movement till 20h.
		18 50.8	19 6.4	—	0 28	N.S.
989	,, 11	21 48.3	22 17.1	—	0 34	E.W.
990	,, 12	4 18.7	4 48.9	3.1	3 10	E.W.
		4 18.2	—	—	2 47	N.S.
991	,, 19	10 25.5	10 30.7	—	1 5	E.W.
		10 27	10 30.7	—	0 47	N.S.
992	,, 23	16 36.7	16 37.7	—	0 33	E.W.
		16 32.6	16 37.7	—	0 37	N.S.
994	Aug. 4	—	1 53.4	—	—	E.W. and N.S.
995	,, 8	18 41.8	18 52.5	0.4	0 19	E.W. Slight in N.S.
997	,, 16	22 52.4	23 31.8	1.5	2 22	E.W.
			1 4.7			
		22 52.4	23 16.6	1.0	3 22	N.S.
			1 9.8			
999	,, 21	16 48.9	17 1.1	0.6	1 43	E.W.
		16 52.9	17 1.1	0.5	0 52	N.S.
1001	,, 23	16 23.8	16 46.8	—	0 41	E.W.
		—	16 47.2	—	—	N.S.
1002	,, 25	—	15 49.7	—	—	E.W. Thickening.
1003	Sept. 6	1 22.6	—	—	0 15	E.W. ,,
		1 20.1	—	—	0 19	N.S. ,,
1004	,, 12	13 14.2	—	—	0 38	E.W. ,,
		13 19.3	—	—	0 26	N.S. ,,
1005	,, 15	13 44.4	13 46.2	—	2 11	E.W. and N.S.
			14 15.9			
1006	,, 17	3 35.4	5 32.5	1.0	3 25	Time uncertain.
		4 43.9	5 33	1.0	2 17	,,
1008	,, 22	6 8	6 18	—	0 52	E.W. Thickening.
1009	,, 24	—	4 29	—	—	E.W.
1010	Oct. 6	11 15.8	11 29.6	—	1 17	E.W. Slight in N.S.
1011	,, 7	—	15 57	—	—	E.W. Thickening.
1012	,, 10	—	12 39.6	—	—	E.W. ,,
1013	,, 10	—	14 35.7	—	—	E.W. ,,
		—	14 36.7	—	—	N.S. ,,
1014	,, 13	3 25	3 39.8	—	0 55	E.W.
		3 35	3 47	—	0 46	N.S.
1015	,, 14	12 20	13 23	0.4	1 59	E.W.
		13 19	13 26	—	0 38	N.S.
1016	,, 14	17 24.5	17 34.4	—	1 4	E.W. Slight in N.S.
1017	,, 14	23 32.5	23 46.5	1.1	0 33	E.W.
		23 33.5	23 45	1.0	0 22	N.S.
1018	,, 17	9 38	10 10.5	—	0 50	E.W.
1019	,, 19	2 27	2 32.1	—	0 8	N.S.
1020	,, 20	18 9	18 39.3	0.6	0 41	E.W.
		18 10	18 42.8	0.3	0 40	N.S.
1021	,, 24	0 36.5	0 55.9	0.6	0 39	E.W. only.
1022	,, 29	18 56.5	19 38	—	1 9	E.W.
		18 56.5	19 39.6	—	0 57	N.S.
1023	Nov. 1	10 40.8	10 46.3	1.0	0 7	E.W.
		10 18.3	10 59	—	1 4	N.S.
1024	,, 2	—	12 21	—	—	E.W.
1026	,, 13	16 52.4	17 17.3	0.9	0 40	E.W.
		16 50	17 20.5	0.5	0 58	N.S.
1027	,, 14	—	18 58	—	—	N.S.
1028	,, 16	12 29	—	—	0 17	E.W. Thickening.
1029	,, 18	—	9 9.2	—	—	E.W. ,,
		—	9 10	—	—	N.S. ,,

Register from Royal Alfred Observatory, Mauritius—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
1030	Nov. 22	23 29.6	0 3	—	0 38	E.W.
1031	,, 28	16 7.3	16 32	—	0 38	E.W.
1032	Dec. 2	—	4 35.4	—	—	E.W. N.S. at 4-36.
1033	,, 11	11 20.5	11 36.7	1.1	1 24	E.W.
		—	11 37.5	—	—	N.S.
1034	,, 13	—	9 15	—	—	E.W.
1035	,, 13	22 48	23 10.7	1.4	0 33	E.W.
1037	,, 16	19 30.6	20 40.8	1.6	1 57	E.W.
		19 48	19 58	1.5	1 40	N.S.
1038	,, 23	21 49	22 24.6	1.1	1 12	E.W.
		21 46.8	22 24.6	0.5	0 52	N.S.
1039	,, 25	—	2 3.5	—	—	E.W.
1040	,, 31	6 30.1	6 50.5	1.0	0 39	E.W.

Register from Adelaide Observatory, South Australia. 34°57′S. 138°38′E.
Director, G. F. Dodwell, *B.A., F.R.A.S.*

In Circular 23 the year 1909 should read 1910.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		1910				
		H. M.	H. M.	MM.	H. M.	
179	July 3	6 18.3	6 30.4	1.1	1 35	P_2 6-24.9.
181	,, 5	9 15.0	10 59.0	0.8	3 18	—
183	,, 7	7 55.8	8 11.2	5.2	3 27	P_2 8-1.5.
184	,, 8	3 6.0	4 20.9	0.6	2 52	—
185	,, 9	7 34.0	7 45.5	0.7	—	—
186	,, 10	2 31.4	3 19.8	0.6	1 45	—
187	,, 10	16 13.2	16 27.7	0.6	0 33	—
188	,, 11	20 44.6	20 53.4	0.7	1 20	—
189	,, 11	22 46.6	23 2.2	0.6	1 1	—
190	,, 12	2 39.7	2 55.4	0.5	3 35	—
191	,, 12	21 10.6	21 16.3	2.6	1 56	P_2 21-13.5.
192	,, 15	8 7.2	12 49.0	1.1	16 7	Several eqkes.
193	,, 17	7 12.8	18 31.6	0.5	16 31	,, ,,
194	,, 21	—	7 8.1	0.6	—	—
195	,, 22	—	5 11.6	0.8	4 38	—
196	,, 24	—	15 40.4	1.2	—	—
197	,, 25	—	22 11.8	0.5	—	—
198	,, 29	10 32.6	10 42.9	29.5	—	—
199	Aug. 6	—	20 26.0	0.8	—	—
200	,, 8	—	1 31.0	0.5	—	End lost in changing paper.
202	,, 11	16 54.7	17 53.8	0.5	2 12	—
203	,, 12	23 46.5	0 8.4	0.5	4 50	—
204	,, 15	17 16.8	17 25.2	0.9	1 7	—
205	,, 16	7 42.2	7 50.6	1.1	1 15	—
206	,, 17	12 24.4	12 58.0	0.5	2 37	—
207	,, 17	—	23 22.6	0.7	—	—
208	,, 20	—	20 59.6	0.6	—	—
209	,, 21	5 46.2	5 56.0	5.8	3 42	—

Register from Adelaide Observatory, South Australia—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
210	Sept. 1	0 57.6	1 23.8	0.7	6 55	—
211	,, 1	12 22.4	14 57.4	0.6	—	Two eqkes. ?
213	,, 2	—	17 48.2	0.5	—	—
215	,, 6	—	21 15.8	0.8	5 59	—
216	,, 7	7 18.0	7 33.6	9.5	5 5	P_2 7-22.6.
217	,, 8	5 20.0	6 4.0	1.0	2 24	—
218	,, 9	—	2 19.4	0.9	—	—
219	,, 9	9 15.4	9 35.8	3.8	2 14	P_2 9-27.6.
220	,, 14	14 7.4	14 20.4	0.8	5 38	—
221	,, 17	0 5.6	0 20.8	0.5	1 12	—
222	,, 22	1 9.6	1 17.8	0.7	—	—
224	Oct. 4	22 59.8	23 32.6	0.5	6 3	—
225	,, 5	5 29.0	5 53.2	0.5	3 6	—
227	,, 7	7 0.8	7 24.2	0.7	2 28	—
228	,, 7	9 45.2	12 16.0	1.0	13 9	Several eqkes.
229	,, 8	—	21 5.2	0.6	—	—
231	,, 18	1 49.0	2 59.6	1.9	3 23	—
234	,, 20	—	5 36.8	1.5	5 7	—
235	,, 21	—	5 7.4	0.5	—	—
237	,, 24	8 47.6	—	—	—	—
237a	,, 24	—	14 54	1.1	—	—
238	,, 30	7 35.6	8 2.0	1.6	2 30	—
239	Nov. 2	13 8.6	13 57.4	1.3	2 13	—
241	,, 5	—	19 33.4	0.5	—	—
242	,, 9	6 8.9	6 23.3	44.0	4 58	P_2 6-14.3.
243	,, 10	—	1 14.2	0.8	—	Beginning lost in changing paper.
244	,, 10	—	12 40.2	2.3	—	P_2 12-32. Beginning uncertain.
246	,, 14	7 52.4	8 21.2	0.7	2 6	—
247	,, 15	13 40.4	15 21.2	1.5	16 19	Two eqkes.
248	,, 16	12 35.4	12 42.6	0.7	0 48	—
249	,, 17	11 58.4	—	0.5	—	—
250	,, 19	—	15 18.0	0.7	—	—
254	,, 25	—	19 26.8	0.9	—	Beginning lost in changing.
255	,, 26	4 48.1	5 5.0	16.5	—	P_2 4-53.
257	,, 29	2 44.2	3 5.4	0.6	4 33	—
258	,, 29	11 6.2	—	0.6	—	—
259	Dec. 1	—	3 48.6	1.6	—	—
260	,, 1	15 49.5	16 7.9	3.8	2 6	P_2 15-54.7.
261	,, 1	18 18.2	—	—	—	—
261a	,, 1	—	20 43.5	0.6	—	—
262	,, 2	3 17.2	3 24.2	1.5	1 58	P_2 3-22.
263	,, 3	4 9.2	4 24.4	0.9	1 8	P_2 4-13.4.
264	,, 3	8 1.0	8 8.6	8.1	6 25	P_2 8-5.3.
265	,, 4	11 8.4	11 16.0	7.8	4 45	P_2 11-12.7.
			11 18.5	8.1		
268	,, 10	9 33.7	9 46.5	19.2	—	P_2 9-38.8.
269	,, 11	3 53.0	4 2.4	0.8	0 22	—
270	,, 12	0 5.4	0 9.2	0.7	0 33	—
271	,, 13	12 2.1	12 42.7	6.1	5 7	P_2 12-16.5.
272	,, 14	20 53.9	21 3.2	2.7	4 42	P_2 20-59.1.
273	,, 15	1 38.8	—	—	—	—
273a	,, 15	—	19 43.6	0.7	—	—
274	,, 16	14 53.6	14 59.4	9.7	6 25	—
275	,, 16	23 5.6	—	—	—	—
275a	,, 18	—	3 19	1.3	—	—
276	,, 18	11 6.0	—	—	—	—
277	,, 18	—	19 12.4	0.7	—	—
278	,, 20	11 13.0	—	—	—	—
278a	,, 20	—	23 25.4	0.5	—	—
280	,, 21	11 9.0	—	0.7	—	End lost in changing.

Register from Adelaide Observatory, South Australia—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
281	Dec. 26	—	6 6.2	0.7	—	—
282	,, 27	—	19 32.8	0.8	—	—
283	,, 29	—	1 5.6	1.4	—	Beginning lost in changing.
284	,, 30	1 20 ?	—	—	—	Beginning doubtful.
284a	,, 30	—	19 28.8	0.6	—	—
285	,, 31	—	13 16.2	0.6	—	—

Period = 15.5 seconds.
1mm. = 0″.55.

Record lost owing to failure of light—
July 3rd, 23h. 34m. to July 4th, 5h. 11m.
and July 10th, 8h. 44m. to July 12th, 4h. 24m.

1911

286	Jan. 2	10 16.0	11 33.2	0.5	3 37	Two eqkes.
287	,, 2	22 55.6	23 13.2	2.2	3 48	P_2 23-0.7.
288	,, 3	23 39.2	0 37.0	5.6	6 45	P_2 23-49.7.
289	,, 4	8 39.0	8 50.0	0.75	2 39	—
290	,, 5	—	20 32.0	0.6	—	—
291	,, 7	—	2 44.6	4.2	—	P_2 2-30.1.
292	,, 10	0 43.0	—	—	—	—
293	,, 10	—	16 46.2	2.7	—	—
294	,, 16	—	9 11.6	3.0	—	P_2 9-2.9.
295	,, 26	—	21 5.2	0.5	—	—
296	Feb. 4	10 15.6	—	0.5	—	—
297	,, 9	—	7 29.0	0.5	—	—
298	,, 17	—	10 24.4	0.9	—	—
299	,, 18	2 6.0	3 13.4	0.5	8 2	—
300	,, 18	19 5.8	19 54.8	1.3	4 20	—
301	,, 23	7 54.8	—	0.7	—	—
302	,, 5	—	16 15.3	0.7	—	—
303	Mar. 6	9 41.8	—	—	—	Continuous small tremors.
304	,, 6	—	17 51.2	0.2	—	—
305	,, 11	3 22.0	3 40.9	3.0	2 21	P_2 3-27.7.
306	,, 13	9 58.8	—	—	—	—
307	,, 13	—	14 52.5	1.1	—	—
308	,, 17	9 32.4	9 42.0	0.8	1 25	—
309	,, 22	—	13 32.0	0.5	—	—
310	,, 27	—	9 59.6	1.2	—	—
311	,, 30	10 52.6	11 47.8	0.5	—	—
312	,, 31	—	22 19.2	1.4	—	—
313	April 1	2 9.8	2 27.8	0.5	1 22	—
314	,, 2	7 8.6	7 17.6	0.5	0 31	—
315	,, 4	13 46.7	—	—	—	—
316	,, 4	—	18 30.5	0.5	—	—
317	,, 6	9 43.4	10 11.4	0.8	7 18	—
318	,, 7	7 5.6	7 9.2	0.6	1 46	—
319	,, 10	—	19 15.2	0.5	—	—
320	,, 11	13 36.0	14 0.2	1.0	1 53	—
321	,, 13	8 11.2	8 27.2	0.6	0 38	—
322	,, 15	—	5 12.2	1.2	4 57	—
323	,, 18	18 25.2	19 19.2	0.7	2 47	—
324	,, 21	—	3 52.2	0.5	0 40	—
325	,, 22	8 9.0	8 10.2	0.5	0 13	—
326	,, 23	7 52.6	8 10.6	0.5	3 25	—
327	,, 23	12 46.0	12 54.0	0.75	1 13	—
328	,, 24	—	7 48.4	0.5	—	—
329	,, 26	1 18.4	1 36.6	0.6	2 15	—

Register from Adelaide Observatory, South Australia—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
330	April 26	10 10.2	—	—	—	—
331	,, 28	—	10 32.4	0.5	—	—
332	,, 28	18 41.8	18 51.4	0.8	1 24	—
333	,, 28	23 3.8	23 39.8	0.5	2 15	—
334	,, 30	—	4 44.4	0.5	—	—
335	May 2	2 24.2	2 26.2	0.5	0 24	—
336	,, 3	17 17.8	17 33.0	0.6	0 59	—
337	,, 4	13 36.0	13 54.8	0.7	1 17	—
338	,, 4-5	23 46.7	0 3.0	3.3	2 35 ?	—
339	,, 8	—	13 1.0	0.5	—	End lost in changing.
340	,, 11	3 44.8	4 14.8	0.7	3 26	—
341	,, 11	15 30.3	15 39.5	0.5	0 42	—
342	,, 21	0 27.8	0 32.8	0.5	0 10	—
343	,, 22	11 15.9	11 24.3	0.6	0 28	—
344	,, 25	—	3 24.2	0.5	4 30 ?	—
345	,, 27	—	22 5.6	0.5	—	—
346	,, 29	—	16 41.2	0.5	14 42	—
347	June 1	—	13 6.6	0.5	—	End lost in changing.
348	,, 2	—	4 54.2	0.8	—	—
349	,, 7	—	12 18.5	4.2	—	P_2 11-29.8.
350	,, 10	—	17 17.8	0.6	1 24	—
351	,, 17	5 4.3	5 49.0	0.5	1 39	—
352	,, 20	—	5 12.2	0.5	—	—
353	,, 24	15 39.4	15 58.2	0.5	1 0	—
354	,, 28	7 27.6	7 34.4	1.0	1 2	—
355	,, 28	18 20.8	—	—	—	—
356	,, 28	—	20 12.2	3.0	—	—

Period : Jan. 1st to March 27th = 16 seconds.
March 27th to May 22nd = 15 seconds.
May 22nd to June 30th = 16 seconds.

Sensibility : Jan. 1st to March 27th, 1mm. = 0″.48
March 27th to May 22nd 1mm. = 0″.59
May 22nd to June 30th 1mm. = 0″.48

The record was lost owing to the electric light failing—
March 21st, 1h. 10m. to March 21st, 1h. 36m.
April 16th, 21h. 20m. to April 18th, 6h. 0m.
June 3rd, 0h. 20m. to June 6th, 0h. 30m.
June 12th, 16h. 38m. to June 16th, 2h. 43m.

1912

1	Jan. 1	—	6 21.9	1.2	—	Max. com. 6-12.2.
2	,, 4	5 8.8	5 16.0	0.5	0 35	—
3	,, 4	—	16 38.5	0.6	1 33	Max. com. 16-11.
4	,, 5	—	23 35.0	1.0	—	Max. com. 23-33.9.
11	,, 30	5 57.4	6 1.2	0.5	0 11	—
12	,, 31	20 38.8	21 10.9	0.6	2 54	—
20	Feb. 16	9 31.7	9 49.8	3.0	2 47	P_2 9-43.7.
23	,, 24	14 37.4	—	—	—	—
23a	,, 25	—	3 10.2	0.7	—	—
24	March 8	8 37.8	—	—	—	—
24a	,, 8	—	15 47.6	0.6	—	—
25	,, 11	—	12 22.4	0.9	—	Beginning lost in changing.
26	,, 13	—	19 30.2	0.8	—	—
27	,, 16	13 29.6	13 44.2	0.6	1 27	—
28	,, 19	12 13.8	—	—	—	—
30	,, 23	—	8 38.8	0.6	—	—
31	,, 25	—	5 9.8	3.5	2 0 ?	Beginning lost in changing.

Register from Adelaide Observatory, South Australia—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
34	April 8	20 52.2	20 54.8	0.5	0 43	—
35	,, 14	22 43.8	22 54.0	1.5	1 14	—
36	,, 15	16 8.8	16 19.9	2.0	1 20	P_2 16-14.2.
37	,, 19	—	16 33.6	0.6	—	—
38	,, 20	1 25.6	1 51.7	1.8	2 15	—
39	,, 26	14 32.9	15 10.8	0.7	—	—
40	May 3	—	19 20.4	4.7	3 33ca	P_2 19-12.5.
41	,, 6	19 37.0	—	0.6	2 39	—
44	,, 15	0 8.4	0 27.9	1.7	4 56	P_2 0-13.7.
45	,, 17	14 7.1	14 11.3	0.5	0 31	—
48	,, 23	2 34.8	3 8.0	4.5	3 8	P_2 2-44.2.
49	,, 26	6 45.4	6 53.6	1.0	0 55	—
50	,, 28	7 6.6	7 23.8	0.5	1 11	—
51	,, 28	—	13 21.0	1.1	—	—
52	June 2	12 4.4	12 16.5 12 19.6	2.0	1 44	P_2 12-9.2.
53	,, 5	—	11 34.2	2.6	1 15	P_2 11-25.4.
54	,, 7	—	3 55.2 3 58.2	1.4	—	Beginning lost in previous small tremors.
55	,, 10	12 15.5	—	—	—	—
55a	,, 10	—	17 11.4	0.5		
56	,, 12	—	13 55.0	0.5	—	—
57	,, 14	15 44.2	16 13.6 16 15.9	1.2	1 56	P_2 16-6.8.

Period, 15.6 seconds.
1mm. = 0″.51.

Record was lost owing to failure of electric light from—
May 11th, 8h. 58m. to May 13th, 4h. 45m.
June 3rd, 9h. 45m. to June 4th, 1h. 59m.
Record from June 18th, 2h. 47m. to June 22nd, 2h. 50m. was lost through the driving clock failing. It was cleaned and replaced on June 22nd.

Register from Sydney Observatory, New South Wales. 33°52′S. 151°1′E.
Officer-in-Charge, W. E. RAYMOND ; *Observer*, W. C. GRAHAM.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
706	Feb. 16	9 37.3	9 44.7	1.5	1 19	P_3 9-43.2.
707	,, 25	2 45.8	3 2.9	0.5	0 53	—
708	,, 25	20 52	21 5.3	0.4	0 33	—
709	,, 26	7 27.4	7 29.2	0.3	0 13	—
710	,, 29	1 8.7	1 12.8	0.4	0 18	—
711	,, 29	3 18.5	3 26.5	0.4	0 37	—
712	,, 29	15 14.7	—	—	0 22	—
713	Mar. 5	1 51.5	—	—	0 7	—
714	,, 11	11 9	—	—	0 45	—
715	,, 11	12 18.6	12 22.2	1.0	0 32	P_3 12-21.4.
716	,, 11	15 56.2	—	—	0 19	—
717	,, 13	1 14.3	1 17.3	0.4	0 7	P_3 1-16.3.
718	,, 13	19 20.2	—	—	0 36	—

Register from Sydney Astronomical Observatory, New South Wales—continued.

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
		H. M.	H. M.	MM.	H. M.	
719	Mar. 14	6 42.8	—	—	0 39	—
720	,, 16	13 27	13 37.5	0.5	0 27	P_3 13-35.9.
721	,, 16	15 1.5	15 11.7	0.3	0 12	—
722	,, 22	4 43.4	—	—	0 15	—
723	,, 29	7 2.3	—	—	0 46	—
724	,, 31	23 52.7	23 55.6	0.5	0 10	P_3 23-54.7.
725	April 14	22 42.2	22 45.6	2.0	0 51	P_3 22-44.3.
726	,, 15	16 9.2	16 16.4	4.6	0 49	P_3 16-15.6.
727	,, 16	6 11.1	—	—	0 49	—
728	,, 20	1 32	1 47.4	2.5	1 51	P_2 1-42.4, P_3 1-46.4.
729	,, 24	2 26.2	2 32.2	0.9	0 34	P_3 2-31.1.
730	,, 30	7 50.7	—	—	0 13	—
731	May 3	19 13.2	19 21.1	2.5	0 46	P_2 19-19.4, P_3 19-20.6.
732	,, 5	19 38.1	20 40.3	0.5	2 3	—
733	,, 11	17 48.7	18 12.2	1.0	0 56	P_3 18-8.5.
734	,, 15	0 6.7	0 20.1	1.6	0 30	P_2 0-10.3, P_3 0-13.6.
735	,, 15	21 27.9	21 29.5	0.2	0 10	—
736	,, 17	14 2.1	14 5.3	0.5	0 12	P_3 14-4.1.
737	,, 17	18 0.4	—	—	0 15	—
738	,, 21	8 54.7	9 17.6	0.5	1 57	—
739	,, 23	2 33.6	3 12.3	6.0	7 20	P_2 2-45.4, P_3 3-7.1.
740	,, 26	6 41.3	6 44.6	0.4	0 16	P_3 6-43.9.
741	,, 28	13 0.5	13 8.5	1.0	1 20	P_2 13.4-5, P_3 13-7.5. Times approx.
742	June 2	12 5	12 21	2.4	1 17	P_2 12-10.5, P_3 12-17.5. Times approx.
743	,, 5	11 21.2	11 34.1	2.0	1 23	P_2 11-26.5, P_3 11-33.3.
744	,, 7	3 39.5	3 52	1.5	1 9	P_2 3-46.9, P_3 3-49.7.
745	,, 7	18 55.9	19 8.5	2.3	1 53	P_2 19-3.6, P_3 19-6.3.
746	,, 8	7 21.8	—	—	—	—
747	,, 10	16 31.8	17 13.3	0.8	2 42	—
748	,, 12	13 39.5	13 49.7	0.7	0 57	P_3 13-47.4. Beginning and end in Ats.
749	,, 14	16 3.8	16 15.8	1.0	1 2	P_2 16-9.5, P_3 16-15.
750	,, 18	12 12	12 38.6	1.7	—	P_3 12-36.5. End in Ats.

Mean displacement value = 1mm. equivalent to 0″.26.

No record kept from January 1st to February 15th owing to the erection of a new recorder for the seismograph.

Register from Wellington, New Zealand. 41°16′S. 174°48′E.
Director, GEORGE HOGBEN, *M.A., F.G.S.*

No.	Date	Commencement	Max.	Max. Amplitude	Duration	Remarks
			1912			
		H. M.	H. M.	MM.	H. M.	
20	June 7	11 27.8	11 56.2	13.0	2 30	B.P. 18.4 secs.
21	,, 10	16 59.1	17 0.1	1.2	0 7	Local.
		17 4.1	17 5.2	0.8		
22	,, 15	14 30.2	14 49.3	8.0	3 7	B.P. 18.2 secs.
23	,, 21	16 33.9	16 44.9	2.5	0 44	—
24	July 12	4 18.6	4 51.3	8.0	1 8	B.P. 17.5 secs.
25	Aug. 16	22 51.4	23 16.7	7.0	3 18	B.P. 17 secs.
			23 22.2	10.0		
26	Oct. 5	7 36.7	7 37.5	—	—	B.P. 12.5secs. Origin about 200 — 250 miles east of Wellington.
			7 39	—		
27	,, 17	9 41.9	9 46.4	2.0	0 36	B.P. 12 secs.

B.P. = Boom Period.

In Mr. Hogben's original MSS. he refers to phases P_1 to P_8, and gives greater detail than is here reproduced.

During Nov. and Dec. Observer absent from Wellington.

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