

British Association for the Advancement of Science.

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Shide, Isle of Wight (Secretary).

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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-two 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, British Association, Burlington House, London, W., 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 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, 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. This quantity should be stated at the end of each register.

II. *Registers.*

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

JOHN MILNE; Assistants, MESSRS. S. HIROTA AND J. H. BURGESS.

The following entries refer to records obtained from three pendulums, A, B, and C. The periods and "sensibilities" or deflections for 1° turn of the calibrating screw were as follow :

A. Period 18 seconds. 1° turn = 16mm. (multiplication 2·6 times).

B. Period 18 seconds. 1° turn = 6mm.

C. Period 18 seconds. This pendulum records N.S. motion and is without a calibrating screw. A and B record E.W. motion.

A_{ts} = Air tremors. P₂ refers to the commencement of the second phase of motion. d = duration. a = amplitude.

All entries refer to disturbances recorded not only at Shide, but also at other stations. Records only obtained at Shide have been excluded.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
2406	July 2	n. m. 6 29	n. m. 6 44	mm. 0·4	n. m. —	A, B, and C.
2407	" 2	—	17 25	0·1	—	A and B.
2408	" 3	—	1 50	0·1	—	A, B, and C.
2409	" 3	—	2 1·5	0·1	—	" "
2410	" 3	—	3 4·5	0·2	—	" "
2411	" 3	7 33	8 10	0·3	1 20	" "
2412	" 3	9 38	9 55	0·3	1 30	" "
2413	" 4	—	5 22	0·2	—	" "
2414	" 5	—	12 11	0·2	—	C.
		—	12 12·5	0·1	—	B.
2415	" 5	—	19 25	0·1	—	B and C.
2416	" 6	—	9 14·5	0·1	—	A and C.
2417	" 7	4 59	5 14	0·5	1 35	B and C. } A, clock
2418	" 7	8 32	9 30	0·6	3 15	B. } stopped.
		8 34	9 31·5	0·1	3 15	C.

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.				
2419	July 8	4 38	5 10	0.2	—	—	B and C.
2420	" 8	—	16 29	0.1	—	—	"
2421	" 9	—	16 0	0.1	—	—	"
2422	" 10	—	—	—	—	—	Clock stopped at 14h. 50m.
2423	" 11	—	11 5	0.1	—	—	B and C.
2424	" 11	—	22 9	0.2	—	—	"
2425	" 11	—	22 40	0.1	—	—	"
2426	" 11	—	23 6	0.1	—	—	"
2427	" 12	—	7 56	0.3	—	—	B and C. Com. lost in tremors.
2428	" 12	—	22 50.5	1.2	—	—	C. a. = 0.5 for A and B.
2429	" 13	—	8 53	0.1	—	—	A, B, and C.
2430	" 14	20 58.5	21 4	0.3	0 30	—	A.
		—	21 4	0.3	—	—	B.
		—	21 5	0.2	—	—	C.
2431	" 15	—	4 54	0.1	—	—	A and B.
2432	" 15	12 11.5	12 52	0.2	—	—	A, B, and C.
2433	" 15	13 18.5	13 41	0.3	1 40	—	A.
		—	13 41	0.2	—	—	B.
		13 18	13 42	0.5	1 40	—	C.
2434	" 16	—	13 58	0.2	—	—	A only.
2435	" 16	—	22 58	0.1	—	—	A, B, and C.
2436	" 17	10 19	10 25	0.1	—	—	"
2437	" 17	19 17	19 33	0.2	0 40	—	A.
		—	19 33.5	0.1	—	—	B.
		19 20	19 33	0.2	1 20	—	C.
2438	" 18	—	5 25	0.1	—	—	A, B, and C.
2439	" 18	—	15 44	0.2	—	—	"
2440	" 18	21 39	21 41	0.2	0 10	—	"
2441	" 20	3 54.5	4 15	0.2	2 0	—	"
2442	" 21	—	8 25	0.2	—	—	A. Com. lost in Ats.
		—	8 22	0.3	—	—	C.
2443	" 21	22 26.2	23 6	0.5	2 10	—	A. P ₂ = 22h.51m.
		22 27.5	23 6	0.3	2 30	—	B and C.
2444	" 22	—	15 8.7	0.2	—	—	A. Light out on B.
2445	" 24	4 13	4 25.5	0.3	0 30	—	A and C.
		4 17	4 25.5	0.2	0 40	—	B.
2446	" 24	15 0	16 4	0.2	5 0	—	A. Light out, B and C.
		—	16 57.5	0.5	—	—	"
		—	17 39.5	0.2	—	—	"
2447	" 25	—	21 44	0.1	—	—	A only.
2448	" 27	—	6 39	0.1	—	—	B and C.
2449	" 27	14 48	14 56	0.2	—	—	A, B and C.
2450	" 29	10 37	11 36.5	0.5	3 40	—	A.
		10 35	11 49	0.5	4 0	—	B.
		10 36.5	11 42	0.5	4 0	—	C.
		—	12 3	1.0	—	—	"
2451	" 31	—	2 12.5	0.1	—	—	A, B, and C.
2452	" 31	7 7	7 12.7	0.1	1 20	—	A only.
2453	Aug. 1	—	7 10	0.1	—	—	C.
2454	" 1	10 43.5	10 50	0.5	0 40	—	A.
		10 42	10 50	0.5	0 40	—	B and C.
2455	" 1	22 28	22 35	0.3	0 45	—	A. Light out, B and C.
2456	" 2	2 37	2 48	0.3	0 50	—	A.
2457	" 2	—	7 50	0.1	—	—	A, B, and C.
2458	" 3	—	13 9	0.1	—	—	A and B.

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.				
2459	Aug. 3-4	23 4	23 45	0.3	—	—	A.
		—	23 45	0.2	—	—	B.
		—	23 26	0.3	—	—	C.
2460	" 5	1 43	2 14.2	1.6	2 12	—	A. P ₂ = 1h.53m.
		1 43	2 18.5	1.2	2 12	—	B.
		1 43.5	2 14	1.0	2 12	—	C.
2461	" 7	20 55.5	21 0	0.3	0 30	—	A.
		—	21 0	0.3	—	—	B and C.
2462	" 8	2 37.5	2 41	0.1	—	—	A and B. Max. for C 2h.39m.
2463	" 8	—	9 52	0.1	—	—	A, B, and C.
2464	" 8	—	15 8	0.1	—	—	A.
2465	" 10	—	21 28	0.2	—	—	A, B, and C.
2466	" 11	16 50	17 17	1.0	1 45	—	A.
		16 50	17 18	0.6	1 45	—	B.
		16 50	17 18.5	0.5	1 45	—	C.
2467	" 12	—	9 39.5	0.1	—	—	B and C.
2468	" 12	—	14 33.5	0.1	—	—	"
2469	" 12	19 8	—	—	—	—	B and C. Max. and end lost changing paper.
2470	" 13	—	1 0	0.1	—	—	B and C.
2472	" 13	—	22 7	0.2	—	—	A and B.
		21 50	22 5.5	0.2	0 47	—	C.
2473	" 14	7 44	8 5.7	0.3	1 20	—	A.
		7 47.5	8 6.7	0.3	1 20	—	B and C.
2474	" 14	—	15 40	0.1	—	—	A, B, and C.
2475	" 14	20 8.5	21 35.5	0.1	—	—	"
2477	" 17	12 5.2	12 42.7	1.5	> 3 0	—	A.
		12 6.2	12 42.7	1.0	> 3 0	—	B. P ₂ = 12h.7.5m.
		12 6.2	12 41	0.7	> 3 0	—	C.
2478	" 18	—	0 3.5	0.1	—	—	A and C.
2479	" 18	—	3 38	0.1	—	—	A.
2480	" 18	—	11 41.5	0.1	—	—	A.
2481	" 18	—	19 38	0.1	—	—	A.
2482	" 19	—	4 8	0.1	—	—	A.
2483	" 19	—	20 39	0.1	—	—	A.
2484	" 20	1 21.7	1 26.2	1.0	0 46	—	A.
		—	1 26.5	0.5	—	—	B and C.
2485	" 20	16 39	16 45	0.1	0 23	—	A.
2486	" 21	5 42	6 10.5	0.5	> 4 0	—	A, B, and C.
		—	6 20	0.6	—	—	"
		—	6 35	0.5	—	—	"
		—	6 40	0.6	—	—	"
2487	" 24	16 13	16 27	0.5	1 40	—	A.
		—	16 28.5	0.6	—	—	"
		16 13.5	16 29	0.4	1 40	—	B.
		16 13	16 28.5	0.4	1 40	—	C.
2488	" 23	—	21 27	0.1	—	—	A, B, and C.
2489	" 25	1 53.2	1 58	0.1	0 30	—	B and C.
2490	" 25	—	23 37.5	0.1	—	—	A.
2491	" 26	—	16 16	0.1	—	—	A, B, and C.
2492	" 27	—	4 57.5	0.1	—	—	A and B.
2493	" 27	—	7 50	0.1	—	—	A, B, and C.
2494	" 28	—	3 47	0.1	—	—	"
2495	" 29	—	3 20	0.1	—	—	"
2496	" 30	—	2 22	0.2	—	—	A only.
2497	" 30	—	11 35	0.1	—	—	A, B, and C.

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

No.	Date	Com- mence- ment		Max.	Max. Ampli- tude	Dura- tion	Remarks
		H. M.	H. M.				
2498	Aug. 31	19 4	19 5.2	0.2	0 15	A, B, and C.	
2499	.. 31	—	22 33.5	0.1	—	A and B.	
2500	Sept. 1	0 57	1 43	6.5	2 45	A. P ₂ = 1h.7m.	
		0 57	1 43	3.0	3 0	B and C. P ₂ 1h.8m.	
2501	.. 1	14 36	15 20.5	3.0	3 0	A. P ₂ , 14h.44.5m.	
		14 36	15 20	2.0	>3 0	B.	
		14 36.5	15 18.7	1.5	>3 0	C. P ₂ , 14h.44.5m.	
2502	.. 1	—	22 2	0.1	—	A.	
2503	.. 2	16 25	16 31	0.1	0 30	A, B, and C.	
2504	.. 4	—	8 8	0.2	—	A and B.	
2505	.. 6	—	1 27.5	0.1	—	A, B, and C.	
2506	.. 6	20 14	21 3.7	2.0	3 30	A. P ₂ , 20h.23.5m.	
		20 15.5	21 3.5	0.6	3 30	B. P ₂ , 20h.24m.	
		20 15	21 7	1.2	3 30	C.	
2507	.. 7	4 55.5	5 1	0.1	0 20	A, B, and C.	
2508	.. 7	7 21.5	8 35	2.0	3 30	A. P ₂ , 7h.32.5m.	
		7 26.7	8 35	0.5	3 30	B. P ₂ , 7h.32.5m.	
		7 26.7	8 35	1.5	3 30	C. P ₂ , 7h.33.5m.	
2509	.. 7	—	11 39.5	0.5	—	A.	
		—	11 39.5	0.2	—	B.	
		—	11 20.5	0.5	—	C.	
2510	.. 7	—	23 51.5	0.1	—	A.	
		—	23 50	0.1	—	B.	
		—	23 49	0.1	—	C.	
2511	.. 8	2 41	3 39	0.5	—	A.	
		—	3 42	0.5	—	A.	
		—	3 50	0.5	—	A.	
		2 48	3 38	0.5	—	B.	
		—	3 50	0.5	—	A.	
		2 47	3 36	0.4	—	C.	
2512	.. 8	5 50.5	6 32.5	0.3	3 0	A.	
		—	7 1	0.3	—	A.	
		—	7 30.5	0.3	—	A.	
		5 55	6 32.5	0.1	3 0	B.	
		—	7 1	0.1	—	A.	
		—	7 31	0.2	—	A.	
		5 55	6 36	0.3	3 0	C.	
		—	7 31	0.2	—	A.	
2513	.. 9	1 24.7	2 6.5	1.0	>4 0	B. P ₂ , 1h.35.7m.	
		—	3 47	0.2	—	Light out on A.	
		1 24.7	2 10.5	3.0	4 0	C. P ₂ , 1h.35.5m.	
		—	3 52	0.5	—	A.	
2514	.. 9	—	7 43	0.2	—	B and C.	
2515	.. 9	9 34	10 26.7	0.3	2 53	B. Light out on A.	
		—	10 41.5	0.5	—	A.	
		—	11 10.2	0.3	—	A.	
		—	10 35.5	0.5	2 53	C.	
		—	10 41	0.5	—	A.	
		—	11 16.2	0.6	—	A.	
2516	.. 10	—	2 39	0.2	—	A, B, and C.	
2517	.. 10	—	12 50	0.3	—	A.	
2518	.. 12	16 18	16 47	0.2	—	A and B. End lost.	
		—	16 50	0.2	—	A.	
		16 16.5	16 45	0.2	—	C. End lost.	
2519	.. 12	—	18 30	0.1	—	A, B, and C.	
2520	.. 12	—	20 56.7	0.1	—	A.	
2521	.. 14	—	12 8.5	0.1	—	B and C.	

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

No.	Date	Com- mence- ment		Max.	Max. Ampli- tude	Dura- tion	Remarks
		H. M.	H. M.				
2522	Sept. 14	14 39	15 0.5	0.1	—	A, B, and C.	
		—	15 15	0.1	—	A.	
2523	.. 15	—	2 38	0.1	—	" "	
2524	.. 16	19 43	19 57	0.1	—	" "	
2525	.. 16	23 20.5	0 8.2	0.2	1 40	A and C. P ₂ , 23h.29.5m.	
2526	.. 18	—	2 33	0.2	—	B.	
		—	2 31.5	0.2	—	C.	
2527	.. 21	—	14 0	0.1	—	A, B, and C.	
2528	.. 21	16 56	17 4.5	0.2	0 40	A and B. Max. for C, 17h.2.5m.	
2529	.. 22	19 40	19 46	0.1	0 25	A, B, and C.	
2530	.. 23	—	1 55	0.2	—	" "	
2531	.. 23	—	2 18	0.2	—	" "	
2532	.. 23	22 27	22 37.5	0.3	0 47	A and B.	
		—	22 35	0.2	—	C.	
2533	.. 24	3 42	4 23	0.5	2 20	A. P ₂ , 3h.54m.	
		—	4 38	0.5	—	A.	
		3 42.5	4 23.5	0.3	3 0	B. P ₂ , 3h.54m.	
		—	4 38	0.5	—	A.	
		3 42	4 21.5	0.7	3 10	C.	
2534	.. 24	—	11 40	0.1	—	A, B, and C.	
2535	.. 24	15 20	16 18.5	0.5	2 20	A.	
		—	16 18	0.2	3 0	B. P ₂ , 15h.26.5m.	
		—	15 20	0.5	3 0	C. P ₂ , 15h.26.5m.	
2536	.. 26	—	19 26	0.4	—	A, B, and C.	
2537	.. 27	—	7 50	—	—	A.	
		—	7 57.5	—	—	B and C.	
2538	.. 29	—	14 11	0.1	—	A.	
		—	14 13	0.2	—	B and C.	
2539	Oct. 1	—	22 23	0.1	—	A.	
2540	.. 2	—	16 21	0.1	—	A, B, and C.	
2541	.. 3	—	22 21.5	0.2	—	" "	
2542	.. 3	—	12 37	0.1	—	" "	
2543	.. 4	23 12	23 22.5	1.5	2 30	A.	
		—	23 24.5	1.0	—	A.	
		—	23 22.5	0.5	2 30	B.	
		—	23 24.5	0.5	—	A.	
		23 12.5	23 27.5	0.2	3 0	C.	
2544	.. 6	—	21 17.5	0.1	—	B and C.	
2545	.. 7	—	8 29	0.1	—	A.	
2546	.. 7	13 5	13 54	0.3	—	C. Max. for A and B, 13h.49m.	
2547	.. 7	—	16 55	0.2	—	B and C.	
2548	.. 10	—	16 28.5	0.1	—	C.	
2549	.. 11	—	12 55	0.2	—	A, B, and C.	
2550	.. 12	—	14 29	0.5	—	A.	
2551	.. 13	—	15 49	0.2	—	A.	
		—	15 51	0.1	—	B.	
		—	15 54	0.2	—	C.	
2552	.. 16	—	3 12	0.1	—	A.	
		—	3 13	0.1	—	B.	
		—	3 11	0.1	—	C.	
2553	.. 18	3 3	4 16.5	0.1	3 0	A and B.	
		2 53	4 15.5	0.5	3 40	C. P ₂ , 3h.14m.	
2554	.. 20	—	6 11.5	0.5	—	A.	
		—	6 11.5	0.3	—	B.	
		—	6 11	0.7	—	C.	

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

No.	Date	Com- mence- ment		Max. Ampli- tude	Dura- tion	Remarks
		H. M.	H. M.			
2555	Oct. 24	—	3 51	0-1	—	A, B, and C.
2556	"	8 9	8 51	0-1	—	A.
		8 9	8 47	0-1	—	B.
		8 9	8 54	0-5	—	C.
2557	" 24	—	15 36	0-1	—	A, B, and C.
2558	" 26	0 46-5	—	—	—	" "
2559	" 26	—	15 52-5	0-3	—	" "
2560	" 27	0 11-5	1 8-5	0-5	>3 0	A. "
		0 11-7	1 8-5	0-3	>3 0	B. "
		0 11-7	1 11-0	0-3	>3 0	C. "
2561	" 30	—	9 30	0-3	—	A, B, and C.
2562	" 31	—	2 41	0-1	—	" "
2563	" 31	—	7 9	0-2	—	" "
2564	Nov. 1	—	0 19	0-1	—	" "
2565	" 1	—	14 3	0-1	—	" "
2566	" 2	—	14 42	0-2	—	" "
2567	" 2	—	18 49	0-1	—	" "
2568	" 2	—	20 39	0-1	—	" "
2569	" 4	—	7 11	0-1	—	" "
2570	" 5	—	18 32	0-4	—	" "
2571	" 6	19 58	—	—	—	" "
2572	" 6	20 50-5	21 13-5	2-5	>4 0	A. P ₂ = 20h.59m.
		20 51	21 14	1-5	>4 0	B. " "
		20 51	21 15-2	1-2	>4 0	C. " "
2573	" 6	—	23 0	0-1	—	A, B, and C.
2574	" 7	—	7 52	0-2	—	" "
2575	" 7	—	13 29	0-1	—	" "
2576	" 7	20 5	20 28-5	0-1	0 47	" "
2577	" 8	—	17 46	0-1	—	A.
2578	" 9	6 16	7 24	0-7	>5 0	A. P ₂ , 6h.20-5m.
			7 50	3-6	—	" "
			7 54-5	4-2	—	" "
			8 5-5	6-5	—	" "
			8 10-5	4-0	—	" "
			7 26	0-7	—	B. Com. lost in Ats.
			7 50-7	1-1	—	" "
			7 56-2	1-5	—	" "
			8 4	1-5	—	" "
			8 10	1-7	—	" "
			7 26-5	1-0	—	C. Com. lost in Ats.
			7 50-7	1-5	—	" "
			7 58	3-2	—	" "
			8 3-2	5-6	—	" "
			8 6	6-0	—	" "
			8 8-2	6-3	—	" "
2579	" 10	12 39	12 47-5	0-1	—	A.
			12 47	0-1	—	B and C.
2580	" 10	—	13 45	0-1	—	A and B.
			13 47	1-0	—	C.
2581	" 11	—	1 24	0-1	—	A, B, and C.
2582	" 11	13 25	13 38	0-1	—	" "
2583	" 12	—	16 6	0-1	—	" "
2584	" 12	18 17	18 25-5	0-2	>2 0	" "
2585	" 14	7 35-2	8 34-5	4-1	>3 0	A. P ₂ , 7h.53-5m.
		7 36	8 34-7	2-0	>3 0	B. P ₂ , 7h.54m.
		7 36	8 34-7	1-6	>3 0	C. "

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

No.	Date	Com- mence- ment		Max. Ampli- tude	Dura- tion	Remarks
		H. M.	H. M.			
2586	Nov. 14	—	14 34	0-1	—	A, B, and C.
2587	" 14	20 23-5	20 27-7	1-0	0 58	A.
		20 24	20 27-7	0-5	0 58	B.
		20 22-7	20 27-5	0-7	0 58	C.
2588	" 15	0 31-7	0 45-7	0-3	2 3	A. P ₂ = 0h.36m.
		0 31-7	0 50-5	0-3	2 3	B.
		0 32-2	0 50-5	0-3	2 3	C. P ₂ , 0h.36-5m.
2589	" 15	14 35-5	15 10	1-0	>3 0	A. P ₂ , 14h.44-7m.
			15 20-7	2-2	—	" "
			15 30	2-0	—	" "
		14 35-5	15 10	1-0	>3 0	B. P ₂ , 14h.46m.
			15 21-5	1-5	—	" "
			15 30	1-0	—	" "
		14 35-5	15 10	1-0	>3 0	C. P ₂ , 14h.46m.
			15 21-5	1-5	—	" "
			15 30	0-7	—	" "
2590	" 16	—	9 39	—	—	A and C.
2591	" 16	—	19 48	0-2	—	A, B, and C.
2592	" 21	—	9 21	0-2	—	" "
2593	" 23	—	16 4	0-1	—	" "
2594	" 24	—	15 57	0-1	—	" "
2595	" 24	—	16 25-5	0-1	—	A.
			16 28	0-1	—	B.
			16 26	0-1	—	C.
2596	" 25	0 58	1 44-2	0-3	>2 0	A.
			1 43	0-2	—	B.
			1 47-5	0-2	—	" "
			1 44-5	0-3	—	C.
2597	" 26	—	1 46	0-1	—	A and B.
			1 48-5	0-1	—	C.
2598	" 26	4 45	5 16	0-5	>4 0	A. P ₂ , 5h.3-7m.
			6 23	1-5	—	" "
			8 2-2	0-3	—	" "
			5 23	0-5	—	B and C. P ₂ , 5h.3-7m.
			6 23	0-5	—	" "
			6 33-5	0-7	—	" "
			8 3	0-3	—	" "
2599	" 29	2 38	3 20-7	1-5	—	A, B, and C.
			3 26-2	3-5	—	" "
2600	" 30	5 15	5 58	0-1	—	A.
2601	Dec. 1	16 1-5	16 52	0-5	2 45	A. P ₂ , 16h.10-5m. Tremors on B.
		16 6	16 50-2	0-6	—	C.
2602	" 2	—	4 43-5	0-1	—	A.
			4 44-5	0-1	—	B.
		4 33-5	4 46-5	0-2	0 40	C.
2603	" 3	—	5 18-5	0-1	—	A.
			5 17	0-1	—	B.
		4 55	5 20-5	0-2	1 20	C.
2604	" 3	—	8 44	0-1	—	A.
			8 42-5	0-2	—	B.
		8 19-5	8 43	0-2	—	C.
2605	" 3	—	9 35	0-5	—	A, B, and C.
2606	" 4	11 25	11 49	0-5	—	A. P ₂ , 11h.34-5m.
		11 28	11 49	0-2	—	B.
		11 26-5	11 50-5	0-2	—	C.

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.				
2607	Dec. 4	—	12 50.5	MM. 2.0	—	A. Max. for B and C 12h.43m. $a = 1.5\text{mm.}$	
2608	" 4	—	14 26.5	0.3	—	A, B, and C.	
2609	" 5	—	17 18.5	0.2	—	A and B.	
		16 55.5	17 18.5	0.3	1 20	C.	
2610	" 6	—	2 49	0.1	—	A, B, and C.	
2611	" 8	—	2 45	0.1	—	" "	
2612	" 10	9 29.5	10 44.2	1.0	>4 0	A. " "	
			10 56	1.7			
			11 1	1.5			
			10 44.5	1.2	—	B and C.	
			10 58	3.0			
			11 1	2.2			
2613	" 10	—	14 46	0.1	—	A, B, and C.	
2614	" 11	—	0 10.5	0.1	—	" "	
2616	" 12	0 20	0 24	0.1	0 25	" "	
2617	" 12	1 0	1 15.5	0.2	1 25	" "	
2618	" 12	21 49	21 54.5	0.2	0 30	" "	
2619	" 13	—	2 20	0.1	—	" "	
2620	" 13	11 46	12 14	14.0	>4 0	A. $P_2 = 11\text{h.}56\text{m.}$	
			12 20	12.5			
		11 47	12 14.5	6.2	>4 0	B.	
			12 20.5	6.5			
		11 47.5	12 19	>22.0	>4 0	C.	
2621	" 14	20 19	20 20	0.1	—	A, B, and C.	
		20 57	20 58.7	0.2	—	" "	
2622	" 14	—	21 26.5	0.5	—	" "	
2623	" 15	9 15	9 17.5	0.1	—	" "	
2624	" 16	14 58	15 47	6.0	>4 0	A. $P_2, 15\text{h.}11\text{m.}$	
			15 52	8.0			
			15 56.5	23.5			
			15 58	19.0			
			16 0.7	7.5			
		15 1.5	15 46.5	3.5	>4 0	B. $P_2, 15\text{h.}11\text{m.}$	
			15 51.5	3.5			
			15 55.5	12.0			
			15 58	11.0			
			16 0.7	5.0			
		15 1	15 46.5	4.6	>4 0	C. $P_2, 15\text{h.}11\text{m.}$	
			15 52.5	4.5			
			15 57.5	3.5			
			16 1	5.5			
			16 7	4.0			
2625	" 16	19 9	20 1	1.7	—	A and B.	
			20 4.7	1.5			
		19 12	19 54	0.7	—	C.	
			20 4	1.0			
2626	" 17	—	0 3.5	0.2	—	A, B, and C.	
2627	" 17	6 58	7 32.5	0.3	1 30	" "	
2628	" 18	—	2 41	0.1	—	" "	
2629	" 18	3 5.5	3 56.5	0.5	—	" $P_2, 3\text{h.}14.5\text{m.}$	
			4 2.2	0.5			
2630	" 18	—	5 49.5	0.7	—	A and B.	
			6 33	0.2			
			5 54	0.6	—	C.	
			6 39	0.2			
2631	" 18	—	10 49	0.2	—	A, B, and C.	

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.				
2632	Dec. 18	16 52.5	16 56.2	0.2	0 25	A, B, and C.	
2633	" 18	20 47.5	20 56.2	0.3	0 45	A and B.	
		20 44	20 59.5	0.2	0 55	C.	
2634	" 20	—	9 15	0.2	—	B.	
2635	" 20	19 23	10 27.7	0.1	0 16	A, B, and C.	
2636	" 20	—	11 27	0.1	—	" "	
2637	" 21	10 46	—	—	—	" "	
2639	" 23	—	1 11	0.5	—	A and B.	
			1 11.2	1.0	—	C.	
2640	" 26	—	6 48	0.2	—	B and C.	
2641	" 26	—	10 27	0.2	—	A, B, and C.	
2642	" 27	—	20 2	0.2	—	" "	
2643	" 28	—	9 52	0.3	—	" "	
2644	" 28	—	10 20	0.2	—	" "	
2645	" 28	23 52	23 59.5	0.1	—	A.	
2646	" 29	—	0 50	0.1	—	A.	
2647	" 29	13 28	13 41	0.1	—	A, B, and C.	
2648	" 29	14 6.5	14 16	0.5	1 10	A and B.	
			14 22.5	0.5			
		14 5.5	14 16	0.5	1 10	C. $P_2 = 14\text{h.}10\text{m.}$	
			14 25.5	0.5			
2649	" 29	22 9.5	22 20	0.1	—	A.	
2650	" 30	0 58	1 13	0.2	—	A. $P_2, 1\text{h.}6\text{m.}$	
			1 16.7	0.3			
			1 31	0.2			
			1 50	0.3			
			1 58	0.7			
			1 59	0.5	—	B.	
			1 50	0.2	—	C.	
			2 0	0.4			
2651	" 30	3 25.5	3 32.7	0.5	1 35	A, B, and C.	
2652	" 30	—	20 2	0.5	—	" "	
2653	" 31	—	17 52	0.1	—	A.	

Register from The Meteorological Office, Central Observatory, Kew Observatory. Director, W. N. SHAW, Sc.D., F.R.S.; Superintendent, C. CHREE, LL.D., F.R.S.; Observer, E. G. CONSTABLE.

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

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
1091	July 3	H. M. 8 5	H. M. —	MM. —	H. M. —	B.O.T.
1092	" 5	9 43	—	—	—	"
1093	" 5	19 14	—	—	—	"
1094	" 6	9 20	—	—	—	"
1095	" 7	5 14	—	—	—	"
1096	" 7	9 21.5	9 32.0	0.7	0 38	"
1097	" 8	5 13	—	—	—	B.O.T.
1098	" 10	15 47	—	0.4	0 16	Ill-defined.
1099	" 12	22 31	22 53.2	0.4	0 43	"
1100	" 13	8 40	—	—	—	B.O.T.
1101	" 21	8 33	—	—	—	"
1102	" 21	23 28	—	—	—	"
1103	" 22	15 16	—	—	—	"
1104	" 24	16 48.5	17 19.5	0.3	0 42	Ill-defined.
1105	" 29	11 35.5	12 22.0	0.3	1 20	"
1106	" 31	7 49	—	—	—	B.O.T.
1107	Aug. 3	23 27	—	—	—	"
1108	" 5	2 10.8	2 15.6	0.7	0 46	"
1109	" 8	9 8	—	—	—	B.O.T.
1110	" 11	17 15	—	—	—	"
1111	" 12	9 16	—	—	—	"
1112	" 13	22 15	—	—	—	"
1113	" 14	16 4	—	—	—	"
1114	" 17	12 31.2	12 39.8	0.9	0 43	"
1115	" 21	6 13.5	6 27.3	0.5	0 47	"
1116	" 21	15 21.4	16 29.5	0.4	0 25	"
1117	" 30	11 39	—	—	—	B.O.T.
1118	Sept. 1	1 9.2	1 39.8	2.4	1 10	"
1119	" 1	15 3.5	15 20.4	1.5	0 44	"
1120	" 2	16 12	—	—	—	B.O.T.
1121	" 6	20 35.5	21 13.2	1.0	1 10	"
1122	" 7	8 20.8	8 34.3	0.6	1 8	"
1123	" 9	1 42.9	2 6.6	1.4	1 19	"
1124	" 9	10 39	—	—	—	B.O.T.
1125	" 10	12 34	—	—	—	"
1126	" 12	16 52	—	—	—	"
1127	" 16	19 49	—	—	—	"
1128	" 20	8 31	—	—	—	B.O.T.
1129	" 24	4 11.0	4 32.0	0.3	0 30	Ill-defined.
1130	" 24	11 18	—	—	—	B.O.T.
1131	" 24	11 44	—	—	—	"
1132	" 27	16 20	—	—	—	"
1133	" 27	7 59	—	—	—	"
1134	Oct. 4	19 31	23 24.0	0.7	0 43	"
1135	" 6	21 12	—	—	—	B.O.T.
1136	" 7	8 26	—	—	—	"
1137	" 12	14 34	—	—	—	"
1138	" 18	4 17	—	—	—	"
1139	" 20	6 10	—	—	—	"
1140	" 27	1 8	—	—	—	"
1141	" 30	9 6	—	—	—	"
1142	Nov. 2	14 30	14 47.0	0.3	0 20	Ill-defined.
1143	" 6	21 8.7	21 13.0	1.0	0 34	B.O.T.
1144	" 7	7 59	—	—	—	"
1145	" 8	4 48	—	—	—	"
1146	" 9	17 43	—	—	—	"
1147	" 9	6 33.1	8 11.9	3.5	2 51	"
1148	" 10	13 45	—	—	—	B.O.T.
1149	" 14	8 18.3	8 33.1	2.0	1 11	"
1150	" 15	0 49	—	—	—	B.O.T.
1150	" 15	14 46.1	15 22.2	1.4	1 8	"

Register from the National Physical Laboratory, Kew Observatory—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1151	Nov. 29	H. M. 3 17.2	H. M. 3 26.3	MM. 2.9	H. M. 0 33	—
1152	Dec. 1	16 43	—	—	—	B.O.T.
1153	" 3	8 30	—	—	—	"
		9 35	—	—	—	"
1154	" 4	12 33.9	12 32.5	0.5	0 47	Ill-defined.
1155	" 10	9 33.3	10 35.3	1.8	1 55	"
1156	" 13	11 43.3	12 29.1	7.5	3 29	East African E.Q.
1157	" 14	21 27	—	—	—	"
		21 45	—	—	—	"
1158	" 16	15 10	15 53.1	5.2	2 30	Time of commencement uncertain.
1159	" 16	19 37.0	20 4.7	0.9	1 35	"
1160	" 18	3 43.8	3 56.0	0.6	0 22	"
1161	" 18	5 49	—	—	—	"
1162	" 23	1 6.7	1 11.0	0.7	0 25	B.O.T.
1163	" 26	6 45	—	—	—	B.O.T.
1164	" 27	20 1	—	—	—	"
1165	" 30	29 6	—	—	—	B.O.T.

August 1-3, paper not running.
November 25-27, paper sticking.
December 28-30, rollers not working properly.

July to October, Imm. amplitude = 0°55 of arc.
October to December " = 0°54 of arc.

Register from Liverpool Observatory, Bidston. Director, W. E. PLUMMER

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
1584	July 12	H. M. —	H. M. 8 3	MM. —	H. M. —	—
1585	" 12	22 41.7	22 58.8	1.8	0 41	—
1586	" 13	—	13 49	—	—	Repeated at 15h.22m. Possibly insect.
1587	" 15	13 12.0	13 18.0	0.2	0 39	—
1588	" 21	21 41.0	—	—	1 16	Small and irregular.
1589	" 24	16 43.0	16 54.3	0.3	0 36	—
1590	" 29	11 42.2	12 37.5	0.3	0 55	Indistinct.
1591	Aug. 1	10 47.8	10 59.0	0.2	0 27	—
1592	" 1	—	22 30	—	—	"
1593	" 3	23 18.7	23 30.9	0.2	0 39	—
1594	" 5	1 54	—	—	—	Clock stopped.
1595	" 5	—	21 8	—	—	"
1596	" 11	17 8.2	17 17.3	0.3	0 38	—
1597	" 13	8 9	—	—	0 30	Small.
1598	" 14	—	16 22	—	—	"
1599	" 16	8 42.3	8 51.1	0.1	0 35	—
1600	" 17	12 33.7	12 42.2	0.7	0 36	—
1601	" 20	1 24	1 27	—	0 8	Small.
1602	" 21	6 19.3	6 42.0	0.6	1 24	—
1603	" 21	16 21.9	16 28.0	0.2	0 21	—
1604	" 23	—	15 50	—	—	"
1605	" 26	16 12.4	16 16.3	—	0 26	Small.
1606	" 27	4 30	—	—	0 40	Line irregular.
1607	" 27	7 48.0	7 57.3	—	0 22	Small.
1608	" 31	—	23 34	—	—	"
1609	Sept. 1	1 6.2	1 37.0	3.6	0 58	—
1610	" 1	15 7.4	15 13.7	1.8	0 50	—
1611	" 6	20 52.2	21 5.0	1.9	1 43	—
1612	" 7	7 42.2	7 51.8	0.3	0 25	—
1613	" 7	8 20.0	8 53.8	1.4	1 21	—
1614	" 9	1 31.7	2 2.4	1.6	1 59	—

Register from Liverpool Observatory, Bidston—continued.

No.	Date	Com-mence-ment		Max.	Max. Ampli-tude	Dura-tion	Remarks
		H. M.	M. M.				
1615	Sept. 9	3 44.6	3 53.7	—	0 41	Small.	—
1616	" 9	9 42.0	9 49.7	0.2	0 16	—	—
1617	" 9	10 25.0	10 33.8	0.9	1 7	—	—
1618	" 12	—	16 48.4	—	—	Small.	—
1619	" 14	14 47.2	14 50.8	0.2	0 19	—	—
1620	" 16	23 53.7	24 3.1	0.5	0 40	—	—
1621	" 21	16 56.0	17 3.4	0.1	0 21	—	—
1622	" 24	3 43.0	3 53.5	0.7	1 7	—	—
1623	" 24	16 10.5	16 19.2	0.4	—	End uncertain.	—
1624	" 24	19 23.2	19 27.0	0.3	0 17	—	—
1625	" 27	7 51.2	7 58.4	0.4	0 22	—	—
1626	Oct. 1	—	22 30	—	—	—	—
1927	" 2	21 45.0	21 53.7	0.1	0 28	—	—
1628	" 4	23 20.7	23 54.2	1.2	0 42	—	—
1629	" 7	8 17.2	8 22.4	0.3	0 18	—	—
1630	" 7	—	13 30	—	—	—	—
1631	" 11	—	21 37	—	—	—	—
1632	" 18	4 3.7	4 12.5	0.6	0 49	—	—
1633	" 20	6 3.2	6 12.0	1.0	0 29	—	—
1634	" 24	—	8 36	—	—	—	—
1635	" 26	15 50.0	15 56.7	0.2	0 40	—	—
1636	" 27	—	1 3	—	—	—	—
1637	" 27	—	21 22	—	—	—	—
1638	Nov. 6	20 48.3	21 16.2	2.0	1 23	Probably two quakes.	—
1639	" 9	6 23.0	6 57.2	0.9	2 53	—	—
1640	" 12	18 13.0	18 26.2	0.2	0 28	—	—
1641	" 14	7 13.0	7 21.8	1.0	0 27	—	—
1642	" 14	8 19.0	8 37.2	1.4	0 45	—	—
1643	" 15	14 48.0	14 58.3	0.4	0 53	—	—
1644	" 25	1 42.0	1 47.1	0.3	0 17	—	—
1645	" 26	4 4.3	4 20.0	0.5	2 29	—	—
1646	" 29	3 16.4	3 28.3	1.0	0 44	—	—
1647	Dec. 1	16 10.0	16 15.2	0.2	0 15	—	—
1648	" 4	11 48.2	11 53.5	0.2	0 16	—	—
1649	" 6	—	2 50	—	—	—	—
1650	" 8	—	2 50	—	—	—	—
1651	" 10	9 58.2	10 20.4	0.3	1 50	—	—
1652	" 10	—	14 57	—	—	—	—
1653	" 11	—	0 13	—	—	—	—
1654	" 13	2 18.0	2 23.8	0.2	0 15	—	—
1655	" 13	11 48.2	12 22.5	7.2	2 5	—	—
1656	" 13	14 9.0	14 22.6	1.3	1 12	—	—
1657	" 14	20 48.1	21 17.8	0.4	1 11	—	—
1658	" 16	14 54.7	15 56.2	5.0	2 52	—	—
1659	" 16	19 29.5	19 56.0	1.2	1 15	—	—
1660	" 18	2 21.0	2 47.3	0.6	2 25	End uncertain.	—
1661	" 18	5 40.7	5 53.3	0.4	—	—	—
1662	" 18	—	10 49	—	—	—	—
1663	" 20	9 12.1	9 22.3	—	0 34	Small.	—
1664	" 21	10 55.2	11 7.8	0.3	0 35	—	—
1665	" 23	0 58.0	1 11.7	0.3	1 13	—	—
1666	" 26	6 32.0	6 37.7	0.4	0 28	—	—
1667	" 26	—	10 26	—	—	—	—
1668	" 27	19 48.6	20 2.0	0.3	0 48	—	—
1669	" 28	—	10 20	—	—	Small.	—
1670	" 28	23 24	—	0 16	—	—	—
1671	" 29	0 12.2	0 20.4	0.2	0 28	—	—
1672	" 29	1 57	—	0.1	0 21	—	—
1673	" 29	—	5 34	—	—	—	—
1674	" 29	—	9 35	—	—	—	—
1675	" 29	12 53.0	14 12.7	1.6	2 21	—	—
1676	" 29	—	22 23	—	—	—	—
1677	" 30	1 43.0	1 58.7	0.2	0 37	—	—
1678	" 30	3 20.2	3 30.7	0.7	0 41	—	—

Period = 17.5 secs.
Scale, 1mm. = 0".53.

Register from Woodbridge Hill, Guildford, England.
Owner and Observer, F. EDWARD NORRIS. Assistant, E. SMART.

North—South Boom (N.), and West—East Boom (W.), have each a period of 17½ seconds.
1" arc. = 0.53mm., or 1mm. = 1.88" arc.
As there is no multiplication, all amplitudes give the complete range of motion.

No.	Date	Com-mence-ment		Max.	Max. Ampli-tude	Dura-tion	Remarks
		H. M.	M. M.				
1910							
50	July 5	12 3.7	12 19.8	0.25	1 0	N.	—
		12 3.8	12 20.1	0.07	0 56.7	W.	—
51	" 7	8 38.9	9 30.8	0.7	2 52.2	N.	—
		8 36.4	9 32	1.0	2 36.6	W.	—
52	" 10	15 36.3	15 57	0.3	1 16	N.	—
		15 36.6	15 48.2	0.15	0 35.4	W.	—
53	" 11	22 6.5	22 17.5	0.07	0 33	N.	—
		22 9.8	22 16.3	0.05	0 19	W.	—
54	" 12	21 52	22 3.6	0.07	0 28	N.	—
		—	22 5.5	0.05	?	W.	Ats.
55	" 12	22 30.1	22 54	0.4	1 15	N.	P ₂ 22h.35.1m.; P ₃ 22h.47.2m.
		22 29.2	22 58.7	0.35	1 15	W.	P ₂ 22h.33m.; P ₃ 22h.50.5m.
56	" 14	20 5.4	20 16	0.1	0 20	N.	—
		—	20 18.6	—	—	—	—
		20 6.6	20 16.1	—	0 21.5	W.	—
		—	20 18.7	—	—	—	—
57	" 15	13 6.1	13 44.8	0.25	1 33.4	N.	—
		—	13 47	—	—	—	—
		13 4.6	13 41	0.07	1 42	W.	—
		—	13 48	—	—	—	—
58	" 16	13 27.5	13 39	0.05	0 21.5	N.	—
		13 23.4	13 39	0.05	0 27.5	W.	—
59	" 24	16 7.5	17 1	0.7	2 8	N.	—
		16 0	16 36	0.15	2 6	W.	—
60	Aug. 5	1 54.5	2 18.5	0.9	1 13	N.	P ₂ 1h.57.7m.; P ₃ 2h.13.1m.
		1 51.2	2 16.2	0.6	1 31	W.	P ₂ 1h.58.1m.; P ₃ 2h.12.7m.
61	" 6	16 38	17 4	0.05	0 48	N.	—
		16 32	16 45	0.07	0 52	W.	—
		—	17 3	—	—	—	—
62	" 7	20 54.3	21 7	0.07	0 29.5	N.	—
		20 53.9	21 5	0.2	0 34.5	W.	—
63	" 11	16 43.3	17 21.9	0.8	2 7	N.	—
		16 48	17 21.5	0.15	1 38	W.	—
64	" 13	22 3.9	22 6	0.07	0 13	N.	—
		22 3.3	22 7	micro.	0 14	W.	—
65	" 21	16 8.8	16 35	0.2	0 53	N.	—
		16 13	16 34	0.2	0 36	W.	—
66	Oct. 3	12 10	12 17	0.1	0 21.5	N.	—
		12 7	12 37	0.1	0 46	W.	—
67	" 7	13 22	13 30	0.2	0 39	N.	—
		13 22.7	13 31.7	0.3	1 7	W.	—
68	" 13	16 50	16 59	0.1	0 21.6	N.	—
		16 52.5	17 2	0.1	0 31.3	W.	—
69	" 18	4 6.5	4 24.5	0.25	1 8	N.	—
70	" 20	—	6 9	0.07	—	N.	—
71	" 24	—	3 40	0.05	—	N.	—
72	" 25	—	16 11	0.07	—	N.	—
73	" 26	—	15 36.1	0.1	—	N.	—
74	Nov. 1	—	6 25	0.15	—	N.	—
75	" 1	—	14 8.5	0.07	—	N.	—
76	" 10	13 26.3	13 52.7	0.3	1 37	N.	P ₂ 13h.53m.; P ₃ 13h.46.7m.
77	" 11	—	1 35	0.07	—	N.	—
78	" 12	—	18 26.4	0.07	—	N.	—
79	" 15	0 33	1 2.5	0.1	0 41	N.	—
80	" 15	14 32.5	15 22	1.25	1 53	N.	P ₂ 14h.41.3m.; P ₃ 15h.17.8m.
81	" 19	—	7 47.2	0.1	—	N.	—
82	" 26	4 45	6 44.5	0.85	3 53	N.	P ₂ 4h.56m.; P ₃ 6h.12.1m.
83	" 29	2 54.7	3 26.8	1.1	1 10	N.	P ₂ 3h.4m.; P ₃ 3h.17.8m.
		2 54	3 29	0.65	1 8.5	W.	P ₂ 2h.57.9m.; P ₃ 3h.18.3m.
		—	5 33	0.1	—	N.	—
84	" 30	—	16 48.2	0.3	0 51	N.	—
85	Dec. 1	16 35.9	16 54.6	—	—	N.	—
		—	17 9	—	—	—	—

Register from Woodbridge Hill, Guildford, England—continued.

No.	Date	Com-mence-ment	Max.	Max. Ampli-tude	Dura-tion	Remarks
86	Dec. 2	H. M.	H. M.	MM.	H. M.	N.
87	" 8	—	4 59	0.97	—	N.
88	" 10	10 0.3	11 3.6	1.05	2 25	N. P ₂ 10h.6.9m.; P ₃ 10h.39.8m.
89	" 13	11 40.1	12 20.1	0.1	2 37	W. P ₂ 10h.6.2m.; P ₃ 10h.40m.
	" 13	11 48.1	12 19	10.3	3 44.5	W. P ₂ 11h.37.2m.; P ₃ 12h.12.1m.
90	" 14	20 53	21 6	0.2	0 21	N.
91	" 16	14 34.2	15 56	9.3	4 8	N. P ₂ 14h.48m.; P ₃ 15h.38.9m.
92	" 16	19 0	—	—	3 0	Heavy tremors. a. of Max. about 0.5mm.
93	" 17	7 1.5	7 29	0.25	1 1	N. Com. at P ₂ . P ₃ at 7h.24.5m.
94	" 18	2 46.9	3 56.5	0.6	1 45	N. P ₂ 2h.58.4m.; P ₃ 3h.40m.
95	" 18	5 20	5 49.8	0.2	1 5	N. P ₂ 5h.27.2m.; P ₃ 5h.48.2m.
96	" 18	16 18.9	16 45.4	0.1	1 14	W. P ₂ 5h.26m.; P ₃ 5h.50.5m.
97	" 29	13 47.3	14 15	0.4	0 58	N.
	" 29	13 47.7	14 16.8	0.5	1 1	W.

Register from Stonyhurst College Observatory.
Director, REV. WALTER SIDGREAVES, S.J.

No.	Date	Com-mence-ment	Max.	Max. Ampli-tude 2A.	Dura-tion	Remarks
1910						
217	July 2	H. M.	H. M.	MM.	H. M.	—
218	" 3	6 30.5	6 36	0.1	0 25	—
219	" 3	7 29	7 52	0.1	0 23	—
220	" 5	9 45	9 50	0.1	?	—
221	" 5	19 20.5	19 25	0.1	0 22	—
222	" 7	5 2.5	5 12.5	0.4	1 4	P ₂ 5h.7m.
	" 7	8 37	8 38	0.7	2 50	P ₂ 8h.43.6m. P ₃ 9h.26m.
223	" 8	5 0	5 12	0.1	0 42	—
224	" 10	15 25	15 48	0.2	1 6	—
225	" 12	7 55	8 10.5	0.1	0 40	—
226	" 12	21 43	22 37	0.1	?	—
227	" 12	22 23.4	22 50.8	1.2	1 0	P ₂ 22h.33m. P ₃ 22h.45m.
228	" 14	—	21 8.5	0.1	—	—
229	" 15	13 1	13 43	0.2	1 2	P ₂ 13h.13m. P ₃ 13h.31m.
230	" 20	4 3.3	4 6	0.1	0 45	—
231	" 21	22 50.2	23 7	0.1	0 44	—
232	" 24	?	10 30	0.3	?	P ₁ and End in AIs.
233	" 27	—	6 46	0.1	—	—
234	" 29	11 31.3	12 34	0.5	6 0	Beginning uncertain owing to work just finished in the room.
235	Aug. 1	10 46.4	10 52.5	0.2	0 30.6	—
236	" 1	22 33.5	22 38.7	0.1	0 24.5	—
237	" 2	2 42.7	2 49.1	0.1	0 22.6	—
238	" 2	—	7 14	0.1	—	—
239	" 2	8 43	8 47	0.1	0 9	—
240	" 2	15 5	15 23.7	0.1	0 35	—
241	" 3	23 12.5	23 52.3	0.1	0 38.5	—
242	" 5	1 55	2 15.3	1.3	2 21	P ₂ 2h.3.5m. P ₃ 2h.11.4m.

Register from Stonyhurst College Observatory—continued.

No.	Date	Com-mence-ment	Max.	Max. Ampli-tude 2A.	Dura-tion	Remarks
243	Aug. 10	H. M.	H. M.	MM.	H. M.	—
244	" 11	21 21	21 30	0.1	0 24	—
245	" 16	16 54.2	17 16.5	0.3	1 2.8	P ₃ 17h.10m.
246	" 17	8 25	8 43	0.1	0 40.5	—
	" 17	During change	12 44.5	0.5	—	End 14h.5m.
247	" 20	—	1 30	< 0.1	—	—
248	" 21	5 37	6 31	0.6	2 50	P ₂ 6h.6m. P ₃ 6h.19m.
	" 21	—	6 40	0.8	—	—
	" 21	—	6 43	0.6	—	—
249	" 21	16 22	16 30.5	0.3	0 30.5	—
250	" 23	—	15 48	< 0.1	—	—
251	Sept. 1	0 56	1 35	6.0	2 22	P ₂ 1h.5.5m. P ₃ 1h.32.5m.
252	" 1	14 34	15 12.9	1.9	2 26	P ₂ 14h.45.5m. P ₃ 15h.10m.
253	" 6	20 28	21 2.5	3.0	2 34	—
254	" 7	7 34.5	8 33.5	1.9	0 11	P ₂ 7h.51m. P ₃ 8h.24.5m.
255	" 7	23 44	23 46	0.1	0 11	—
256	" 8	3 34	3 37	0.1	0 22	—
257	" 8	6 28	6 37.5	0.1	1 11	—
258	" 9	1 26.5	2 7.5	4.3	4 17.5	P ₂ 1h.35.5m. P ₃ 1h.58.2m.
259	" 9	10 17.5	10 38	0.2	1 25.5	P ₂ 10h.29m. P ₃ 10h.35.5m.
260	" 10	12 50	13 49.5	0.1	1 51	P ₂ 13h.0.7m. P ₃ 13h.37.2m.
261	" 12	16 25.7	16 44	0.1	1 10.3	—
262	" 14	14 16.2	15 11	0.1	1 54.8	—
263	" 15	1 42	1 55	0.1	0 58	—
	" 15	—	2 12	0.1	—	—
264	" 16	23 33.7	24 4	1.0	1 4.3	P ₂ 24h.0.7m. P ₃ 24h.3m.
265	" 18	2 23.5	2 34	0.1	0 20.5	P ₂ 2h.23.5m. P ₃ 2h.30.5m.
266	" 20	—	8 35.5	0.1	—	—
267	" 21	—	14 20	0.1	—	—
268	" 24	3 46.5	4 23.2	1.5	1 50.5	P ₂ 3h.57m. P ₃ 4h.20.2m.
269	" 24	16 0	16 17	0.2	1 45	P ₂ 16h.11.3m. P ₃ 16h.15m.
270	" 24	19 4.2	19 23.5	0.3	0 53.8	—
271	Oct. 2	—	16 19	—	—	—
272	" 2	22 13.5	22 18.2	0.1	0 37.5	—
273	" 4	23 16.5	23 55.5	1.5	1 53.5	P ₂ 23h.29.7m. Very sudden, with 0.5 amp.
274	" 7	8 12.5	8 24.5	0.2	1 7.5	—
275	" 7	13 18	13 25.5	0.2	0 39	—
276	" 7	—	16 54	—	—	—
277	" 16	—	3 8.5	—	—	—
278	" 18	3 10.5	4 8.8	0.2	1 34.5	—
279	" 20	5 31	6 10.5	0.2	1 13	P ₂ 5h.37m. P ₃ 5h.5.5m.
280	" 26	15 50.8	15 58.5	0.1	0 24.2	P ₃ 15h.34.5m.
281	" 27	1 7.5	1 15.3	0.1	0 5.8	—
282	" 30	8 18	9 7.5	0.1	1 31	—
	Nov. 1	—	14 12.5	—	—	—
	" 2	14 27.4	14 49	0.7	1 13	P ₂ 14h.38m. P ₃ 14h.46m.
	" 9	6 23.5	7 24	2.6	—	—
	" 9	—	7 33	2.0	—	—
	" 9	—	7 45	1.8	—	—
	" 9	—	8 3	8.5	—	—
	" 9	—	8 12	5.0	—	—
283	" 10	12 48	13 42	0.3	> 5 10	End during change. Small Maxima.
	" 10	—	13 46	0.3	2 18	P ₂ ? P ₃ 13h.40.7m.
	" 10	—	13 51	0.3	—	—
	" 10	—	13 55	0.6	—	—
	" 10	—	13 59.5	0.7	—	—
284	" 12	—	16 20.5	—	—	—
285	" 12	—	18 25.5	—	—	—
286	" 14	7 54	8 26.7	4.4	2 0	P ₂ 8h.10.5m. P ₃ 8h.23m.
	" 14	—	8 33.5	2.7	—	—
287	" 15	0 37.6	0 51.0	0.9	0 42.4	P ₂ 0h.44m. P ₃ 0h.48m.
288	" 15	14 41.7	15 23.5	3.0	2 45.3	P ₂ 14h.50m. P ₃ 15h.20.8m.
	" 15	—	15 32	2.0	—	—
289	" 26	5 0.5	6 2.6	2.2	4 48.5	P ₂ 5h.8.5m. P ₃ ?
	" 26	—	6 3	1.4	—	—
	" 26	—	6 9.5	1.8	—	—
	" 26	—	6 17	2.7	—	—
	" 26	—	6 46	2.2	—	—
290	" 29	2 51.5	3 20	4.2	1 33.5	P ₂ 3h.3m. P ₃ 3h.17.8m.
291	" 30	6 47	6 57.5	0.1	0 37	—
292	Dec. 1	16 1	16 46.5	0.2	2 24	P ₃ 16h.44m. to 17h.18.5m.
	" 1	—	17 6.5	0.2	—	—

Register from Stonylurst College Observatory—continued.

No.	Date	Com- mence- ment	Max.	Max. Amplitude		Duration	Remarks
				2° A.	2° A.		
293	Dec. 4	H. M. ?	H. M. 12 45.4	MM. 1.5	H. M. ?	P ₂ 12h.13m. P ₃ 12h.37.7m. End 13h.57m.	
294	" 4	—	12 50.5	1.1	—	—	
295	" 4	—	14 28.5	—	—	—	
296	" 10	9 49.3	14 33.5	—	—	—	
			10 48.4	2.0	2 30	P ₂ 10h.6.6m. P ₃ 10h.32.6m. End during change.	
			10 57.5	4.5	—	—	
297	" 11	15 26	15 31	0.1	0 9	—	
298	" 12	1 5.5	1 32.8	0.1	0 31	—	
299	" 13	?	12 17	12.4	?	P ₁ lost in Abs. P ₂ during change. P ₃ 12h.19.5m.	
			12 22.5	10.7	—	—	
			12 29.2	6.5	—	—	
			12 35.7	7.0	—	—	
			12 45	5.0	—	—	
300	" 14	21 22.2	21 28.7	0.5	1 40	P ₃ 21h.26m.	
301	" 16	15 4	15 47.2	7.4	3 34	P ₂ 15h.13.7m. P ₃ 15h.43.8m. to 16h.25m.	
			15 57.6	6.5	—	—	
302	" 17	0 14	0 19.2	0.1	1 13	—	
			0 24.5	0.1	—	—	
303	" 18	3 13.2	3 48.2	0.5	—	Ending in next.	
			3 53.5	0.6	—	—	
304	" 18	?	5 53	0.5	?	P ₂ 5h.40.5m. P ₃ 5h.47m. End 6h.33m.	
305	" 21	10 47.1	11 12	0.3	0 50	P ₂ 10h.51.6m.	
306	" 22	0 47.6	1 13.2	0.6	1 26	—	
			6 50.2	0.1	0 57	—	
			6 54.5	0.1	—	—	
307	" 27	19 44.7	20 6	0.1	1 15	P ₂ 19h.51.5m. P ₃ 20h.2.4m.	
308	" 28	—	9 31.5	—	—	—	
309	" 28	—	23 23	—	—	—	
310	" 29	—	0 13	—	—	—	
311	" 29	—	1 21.7	—	—	—	
312	" 29	—	2 14.5	—	—	—	
313	" 29	13 47.6	14 13.5	1.1	2 0	P ₂ 13h.56.9m. P ₃ 14h.7.2m. Duration doubtful.	
314	" 30	—	0 38	0.1	—	These may belong to following quake.	
			0 43.5	0.1	—	—	
315	" 30	1 12	1 15.9	0.1	2 5	—	
			1 48	0.1	—	—	
316	" 30	3 27.5	3 38.5	0.1	1 7	Gunpowder explosion, Belgium, 3.30 p.m.	
317	" 30	19 50.5	19 55.5	0.1	0 34	—	
318	" 31	—	17 47	—	—	—	

1mm. = 220° arc boom deviation.
1mm. = 0.41 pillar inclination.
19 secs. boom period.

Register from Hill Top, West Bromwich.
Observer, J. J. SHAW.

Pendulum A records N.-S. motion. 1mm. = 0°'1 of arc.
Pendulum B records E.-W. motion. 1mm. = 0°'15 of arc.
Boom periods, 16 secs.

No.	Date	Com- mence- ment	Max.	Max. Amplitude		Duration	Remarks
				2° A.	2° A.		
1910							
141	July 2	H. M. 6 55	H. M. 6 44	MM. —	H. M. —	—	B.
143	" 7	4 35.5	5 17	0.75	—	—	A.
		4 44.2	5 12	0.6	1 15	—	B.
144	" 7	8 26	9 31.5	3.5	3 0	—	B. Max. for A 9h.29m.
145	" 8	4 30.5	5 18	0.1	1 8	—	A.
		4 32.5	5 9	0.1	0 54	—	B.
146	" 10	15 25	15 49.6	0.2	0 56	—	A and B. Max. for B 15h.48.8m. a. = 0.4.
147	" 12	21 29.3	21 59	0.5	—	—	B.
148	" 12	—	22 56.2	1.0	—	—	A and B. Max. for B 22h.56m. a. = 1.25.
149	" 16	—	14 0	0.5	—	—	B.

Register from Hill Top, West Bromwich—continued.

No.	Date	Com- mence- ment	Max.	Max. Amplitude		Duration	Remarks
				2° A.	2° A.		
150	July 20	H. M. 3 54	H. M. 4 0	MM. 0.5	H. M. 1 6	—	B.
151	" 21	—	8 23	—	—	—	B.
152	" 21	—	23 4	0.2	—	—	B.
155	" 22	—	15 7	0.6	—	—	B.
156	" 24	—	16 56	0.5	—	—	B.
157	" 29	10 6	11 49	1.0	3 0	—	A and B. One long tremor.
158	Aug. 1	10 44	10 51	0.75	0 39	—	A.
		10 44.4	10 50	1.0	0 33	—	B.
159	" 1	22 31	22 39	0.1	0 19	—	B.
160	" 2	2 42	2 47	0.1	0 12	—	B.
161	" 3	23 20	23 27	0.2	0 17	—	B.
162	" 5	1 46	2 18	8.25	1 26	—	A.
		1 49.5	2 14.5	3.75	1 23	—	B.
163	" 7	—	20 59.5	0.5	—	—	A and B.
164	" 8	—	2 40.7	0.1	—	—	B.
165	" 10	21 13.5	21 27	0.2	0 23	—	A and B. Max. for B 21h.29m.
166	" 11	16 50.8	17 6	0.2	1 16	—	A and B.
168	" 17	12 10.2	12 42	3.0	1 50	—	B. A not working.
170	" 20	1 13.3	1 22.6	0.5	0 23	—	B.
171	" 21	4 36.2	6 18.8	0.5	3 34	—	A. Probably two quakes.
		4 39.2	6 25.2	1.25	3 30	—	B.
172	" 21	16 21.5	16 30	0.75	0 27	—	B.
173	" 28	—	23 3	0.4	—	—	B.
174	" 29	—	10 4.5	0.3	—	—	B.
175	Sept. 1	0 58	1 36.7	9.5	2 9	—	A.
		0 58	1 42.7	9.0	2 13	—	B.
		—	1 48	10.0	—	—	B.
176	" 1	—	15 19	4.0	—	—	A and B. a. for B=0.5mm. *Changing paper. End 16h.30m.
177	" 6	20 23	21 5	4.0	2 17	—	A.
		20 20	21 7	3.0	2 20	—	B.
178	" 7	7 30.2	8 26	1.25	2 50	—	A and B. Max. for B 8h.29m. a.=1.75mm.
179	" 7	—	11 28	0.5	—	—	A and B.
180	" 9	1 25	2 19	4.5	2 45	—	A and B. Max. for B 2h.5.6m. a.=4.25mm.
181	" 9	—	9 57.5	0.75	—	—	A and B.
182	" 9	—	10 38.5	0.6	—	—	A and B.
183	" 10	—	7 9.5	0.1	—	—	B.
184	" 10	12 6	12 53	0.5	1 54	—	Jl.
186	" 16	23 21.7	0 6	1.1	2 39	—	A and B. Max. for B 0h.9m. a.=2.25mm.
187	" 21	—	17 8	0.5	—	—	A and B.
188	" 23	22 5	22 37.2	0.6	0 55	—	A and B.
189	" 24	3 44.8	4 18.4	0.5	1 15	—	A and B. Max. for B 4h.25m. a.=1.25mm.
190	" 24	—	16 18.5	0.3	—	—	A and B.
191	Oct. 4	23 17	23 23.6	2.25	2 43	—	B. Second max. 23h.56m.
192	" 13	—	15 52	0.6	—	—	B.
193	" 18	2 58	4 10	0.5	3 6	—	A and B.
194	" 20	5 15	6 14	0.4	1 43	—	B. A not working.
195	" 25	—	15 55	1.0	—	—	B.
196	" 27	—	1 9.5	0.4	—	—	B.
197	Nov. 2	—	14 47	0.3	—	—	B.
198	" 6	20 59	21 16	3.0	1 1	—	B.
199	" 9	6 21.5	7 25.5	4.0	3 38	—	A and B. c. for B 6h.22m. Possibly double quake.
		—	8 10	22.5	—	—	A. N.-S. motion. Maxima ceased suddenly at 8h.25m.
		—	8 15	12.0	—	—	B. E.-W. Ditto at 8h.35m.
200	" 10	12 0.2	13 45	0.75	3 0	—	A and B. Long tremors.
201	" 11	—	1 35	0.3	—	—	B.
203	" 12	—	18 25.5	0.5	—	—	B.
204	" 14	—	8 38.3	9.5	—	—	A.
205	" 15	7 45.5	8 40	3.7	2 15	—	B. First max. 8h.25m., 5mm.
206	" 15	0 9.7	0 47	0.2	1 30	—	A and B.
		14 34	15 27	4.5	2 26	—	A and B. Max. for B 15h.21m. a.=2.0mm.
		14 34	15 21	2.0	2 26	—	B.
207	" 25	1 39	1 52	0.1	0 26	—	B.
209	" 26	4 54.6	6 4	2.75	3 43	—	A and B.
210	" 29	2 43 or 2 49	3 29	3.25	1 30	—	B. P ₂ 2h.53.5m. Max. for A 3h.19m. and 3h.31.6m. a.=2h.25m. and 3h.7.5m.

Register from Hill Top, West Bromwich—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
211	Dec. 1	H. M.	H. M.	MM.	H. M.	B. Second max. 17h.3'lm.
212	" 3	—	16 53.0	1.9	—	—
213	" 4	—	9 40	0.5	—	—
			12 46	1.5	—	A. Commencement lost in change of paper.
			12 45	0.8	—	B. End 13h.15m.
214	" 5	—	17 31	0.5	—	B.
215	" 10	—	6 45	0.5	—	B.
216	" 10	9 50.3	10 44	3.0	2 44	A. Record lost on B.
217	" 12	—	22 8	0.5	—	A and B.
218	" 13	11 48.3	12 21	75.0	4 12	A. P ₂ 11h.57m. Zanzibar.
		11 48.6	12 23	°	4 12	B. ° 63mm. to East, 54mm. to West.
219	" 14	20 57.7	21 26.5	1.75	1 30	B.
		21 5	—	—	—	—
220	" 14	—	23 21	0.1	—	B.
221	" 15	—	9 21	0.2	—	B.
222	" 16	—	8 55	0.5	—	B.
223	" 16	15 0.3	15 58	34.0	—	A and B. Max. for B 15h.57.8m. a. = 50.0mm.
224	" 16	—	19 54.5	2.0	—	A.
		19 12.8	20 3	8.5	—	B. P ₂ 19h.21.8m.
225	" 18	3 15	3 46	0.8	1 10	A and B. Max. for B 3h.55m. a. = 1.75mm.
226	" 18	5 3.5	5 51	1.25	1 27	B and A. Max. for A 5h.56m. a. = 0.8mm.
227	" 18	—	17 0	0.1	—	B.
228	" 18	—	20 57	0.1	—	B.
229	" 21	—	10 59.5	1.5	—	A and B. Max. for B 11h.19.5m. a. = 1.0mm. End 11h.40m.
230	" 22	0 27	1 15	1.0	0 50	B.
231	" 26	6 9	6 49	0.1	1 5	B.
232	" 27	19 27	19 57	0.2	1 19	B.
233	" 29	—	9 23	0.1	—	—
234	" 29	—	14 15.2	0.6	—	A. Grecian quake.
		—	14 17	2.25	—	B. End 15h.5m.
235	" 30	—	0 43	0.1	—	B.
236	" 30	—	1 13	0.1	—	B.
237	" 30	—	1 57	0.1	—	B.
238	" 30	3 21.1	3 33	0.6	—	B and A. Max. for A 3h.33.5m. a. = 0.1mm.
239	" 30	—	20 0	0.1	—	B.

Register from Frensham Hall, Haslemere, Surrey, England.
Observer, SAML KEVAN.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
407	July 3	H. M.	H. M.	MM.	H. M.	—
	" 4	3 1.12	3 2.0	0.3	0 10	—
	" 5	5 7.0	5 15.10	0.3	0 30	—
408	" 5	12 2.0	12 8.40	0.2	0 34	—
	" 5	19 19.35	19 22.0	0.3	0 16	—
	" 7	5 5.0	5 11.48	0.4	0 41	—
	" 7	8 40.36	9 29.30	1.1	2 4	P ₂ 9h.20m.
	" 8	5 5.12	5 12.0	0.2	0 50	—
409	" 10	15 28.10	15 51.0	0.6	0 30	—
	" 12	22 22.0	22 42.50	0.9	0 39	Other (?) movements.
	" 15	13 25.0	13 30.44	0.2	0 16	—
	" 16	22 44.0	22 42.50	0.9	0 39	—
411	" 20	4 23.46	4 26.54	0.1	0 5	—
	" 21	8 4.3	8 23.35	0.3	0 35	—
	" 21	22 52.10	23 59.38	0.2	0 16	—
	" 22	15 5.0	15 9.0	0.3	0 7	—

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

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
412	July 24	H. M.	H. M.	MM.	H. M.	—
	" 29	15 58.0	16 43.0	0.8	1 35	—
413	" 29	11 3.7	11 43.0	0.9	2 30	—
414	Aug. 1	10 47.48	10 48.30	0.4	0 25	Many Ats.
	" 1	22 30	22 52.15	0.2	0 10	—
	" 2	2 44.10	2 48.0	0.2	0 14	—
	" 2	7 30.12	7 44.16	0.2	0 26	—
415	" 5	2 1.0	2 12.20	1.8	1 10	P ₂ 2h.8m.
	" 5	4 2.18	4 4.0	0.1	0 4	—
	" 7	20 57.24	21 0.0	0.2	0 8	—
416	" 8	7 56.18	7 57.0	0.1	0 5	—
	" 10	21 22.14	21 27.5	0.3	0 11	—
	" 11	17 1.42	17 19.0	0.4	0 32	—
417	" 13	14 28.8	14 32.0	0.2	0 7	—
	" 13	22 3.5	22 4.10	0.2	0 4	—
418	" 17	12 26.0	12 41.8	1.3	0 40	P ₂ 12h.34m.
	" 18	11 5.20	11 7.15	0.3	0 5	—
	" 30	11 47.0	11 52.0	0.2	0 13	—
	" 31	19 7.0	19 8.28	0.1	0 5	—
419	Sept. 1	1 9.0	1 57.20	4.0	1 8	P ₂ 1h.35m. Italy!
	" 1	15 8.22	15 13.20	0.0	0 30	P ₂ 15h.11m.
420	" 6	1 21.10	1 27.0	0.1	0 12	—
	" 6	20 29	21 0.0	1.5	2 13	P ₂ 20h.52m.
421	" 7	7 35.18	8 35.10	1.0	2 17	P ₂ 8h.27m.
	" 8	3 36.18	3 38.0	0.4	0 4	—
	" 9	1 32.10	2 7.50	3.5	2 45	P ₂ 1h.46.88m.
	" 9	10 29.0	10 35.24	0.3	0 30	—
422	" 10	15 28.0	15 29.0	0.1	0 8	—
	" 12	16 43.14	16 45.0	0.3	0 15	—
	" 14	15 8.8	15 10.45	0.2	0 20	Ats.
423	" 15	21 20.0	21 44.40	0.1	0 12	—
	" 16-17	23 8.35	24 1.48	0.8	0 27	—
	" 18	2 26.30	2 31.0	0.2	0 8	—
424	" 21	17 2.34	17 3.28	0.1	0 4	—
	" 23	6 31.0	6 35.50	0.2	0 8	—
425	" 24	3 55.0	4 21.0	1.5	1 5	P ₂ 4h.16m.
	" 24	16 10.0	16 14.30	0.5	0 27	—
	" 24	19 19.0	19 21.0	0.4	0 14	—
	" 27	7 54.8	7 53.10	0.3	0 7	—
426	" 30	15 17.50	15 18.12	0.2	0 5	—
427	Oct. 2	16 20.28	16 21.50	0.1	0 5	—
	" 4-5	28 23.48	23 24.10	0.8	1 10	Strong Ats. due to varying temperatures.
428	" 7	8 17.12	8 20.38	0.6	0 15	—
	" 7	16 52.48	16 53.12	0.2	0 10	—
429	" 8	15 46.12	15 48.18	0.9	0 22	—
	" 12	14 28.0	14 30.0	0.2	0 5	—
	" 12	20 13.10	20 13.30	0.5	0 7	—
	" 13	15 43.12	15 50.0	0.7	0 17	—
	" 15	7 34.18	7 38.12	0.2	0 5	—
430	" 16	3 5.37	3 10.17	0.1	0 4	—
	" 18	4 1.12	4 14.0	0.2	0 40	—
431	" 19	16 1.0	16 6.10	0.2	0 7	—
	" 20	6 0.0	6 10.24	0.3	0 20	—
432	" 24	15 23.40	15 28.0	0.2	0 11	—
433	" 27	1 7.0	1 9.14	0.2	0 10	—
434	Nov. 2	23 4.0	23 6.0	0.6	0 6	—
	" 3	3 22.0	3 26.0	0.2	0 4	—
435	" 5	4 14.10	4 15.0	0.2	0 2	—
	" 6	21 5.0	21 13.30	1.5	0 48	P ₂ 21h.5m.
	" 7	7 50.0	7 52.0	0.1	0 3	—
	" 7	16 55.10	16 58.36	0.1	0 9	—
436	" 8	16 7.0	16 8.50	0.1	0 4	—
	" 9	6 20.48	7 54.15	5.5	4 0	P ₂ 6h.34.28m. Beginning and end lost in tremors.
	" 10	13 30.0	13 42.0	0.8	0 50	—
437	" 12	18 24.0	18 25.8	0.1	0 3	—
	" 13	18 18.34	18 19.0	0.1	0 7	—
	" 14	7 59.0	8 30.42	2.0	1 8	P ₂ 8h.22m.
	" 15	0 44.0	0 47.30	0.8	0 11	—
	" 15	14 48.10	15 18.36	1.8	1 19	P ₂ 15h.4m. Ending running into Ats.
438	" 21	9 4.0	9 25.8	0.3	1 0	—
	" 23	10 48.30	10 49.36	0.2	0 5	—
	" 24	15 52.40	15 53.45	0.3	0 6	—

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

No.	Date	Com- mencement	Max.	Max. Ampli- tude	Dura- tion	Remarks
440	Nov. 25	H. M. 15 41.0	H. M. 15 46.0	MM. 0.4	H. M. 0 15	—
	" 25	"	6 11.8	5.8	4 0	—
441	" 20	3 12.12	3 25.13	2.0	0 45	P ₂ 5h.22.40m. Beginning and ending uncertain.
	" 20	11 55.18	11 57.0	0.3	0 4	P ₂ 9h.19m. —
	Dec. 1	16 44.42	17 1.8	1.5	0 40	P ₂ 16h.58m. —
442	" 3	5 18.0	5 23.0	0.1	0 5	—
	" 3	9 33.16	9 37.36	0.6	0 20	—
	" 4	12 30.50	12 41.12	1.0	0 42	Ats. —
443	" 9	11 45.0	11 47.0	0.4	0 7	—
	" 10	11 6.1	11 43.0	3.5	2 0	Ending uncertain. —
444	" 12	1 10.10	1 12.0	0.2	0 20	—
	" 13	11 48.30	12 15.0	2.5	6 0	P ₂ 12h.11.16m. Beginning and ending uncertain.
445	" 14	20 53.30	20 55.0	0.7	0 15	—
	" 16	15 53.0	15 53.0	8.5	6 0	P ₂ 15h.12.36m. —
	" 18	3 21.0	3 51.48	1.0	0 35	Java? —
	" 18	5 46.12	5 49.0	0.5	0 20	—
446	" 20	11 24.50	11 26.0	0.2	0 25	—
	" 20	15 33.28	15 40.0	0.7	0 23	—
	" 21	11 18.0	11 20.46	0.8	0 20	—
447	" 23	17 8.0	17 9	0.1	0 9	—
	" 26	6 41.0	6 46.0	0.1	0 10	—
448	" 29	9 27.20	9 30.0	0.1	0 15	—
	" 29	14 5.46	14 18.30	1.2	0 41	—
	" 30	1 46.0	1 52.23	0.8	0 24	—
	" 30	3 30.0	3 33.9	0.1	0 20	—

Room period = 20 secs.

1st turn of the calibrating screw in the plate bed = boom displacement 5mm.Register from Royal Observatory, Edinburgh.
Director, R. A. SAMPSON, F.R.S.

No.	Date	Com- mencement	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
385	July 2	H. M. 6 33.6	H. M. 6 38.1	MM. —	H. M. 0 37.8	Small.
386	" 2	17 25.2	—	—	0 40.1	Very small.
387	" 3	2 58.0	—	—	0 9.3	"
388	" 3	9 39.5	9 48.5	0.2	0 33.3	"
389	" 5	11 39.5	12 10.3	—	1 42.5	Small.
390	" 5	19 19.5	—	—	0 37.7	Very small.
391	" 7	5 0.1	5 19.8	0.3	1 31.7	—
392	" 7	8 37.1	9 33.8	0.5	2 37.4	—
393	" 8	3 34.0	5 18.6	—	2 43.6	Small.
394	" 8	16 50.4	—	—	0 3.5	Very small.
395	" 10	15 15.2	15 52.2	0.3	1 18.7	—
396	" 11	21 52.3	22 6.9	—	1 0.2	Very small.
397	" 11	23 38.1	23 48.6	—	0 22.0	"
398	" 12	7 32.7	8 8.6	—	0 37.4	"
399	" 12	21 36.9	22 52.6	0.3	2 20.0	—
400	" 14	21 5.9	—	—	0 8.3	Small.
401	" 15	12 27.5	13 58.7	0.2	1 56.6	—
402	" 17	10 34.8	10 59.2	—	0 45.7	Small.
403	" 17	19 26.2	—	—	0 41.0	"
404	" 18	21 39.8	—	—	0 6.4	Very small.
405	" 20	3 59.0	4 30.4	0.2	1 16.2	—

Register from Royal Observatory, Edinburgh—continued.

No.	Date	Com- mencement	Max.	Max. Ampli- tude	Dura- tion	Remarks
406	July 21	H. M. 7 36.5	H. M. 8 33.0	MM. —	H. M. 2 17.4	Small.
407	" 21	22 29.2	23 6.2	0.2	1 31.4	—
408	" 22	14 53.3	14 59.0	—	0 34.7	Small.
409	" 24	4 13.1	—	—	0 20.5	"
411	" 24	15 44.8	16 50.2	0.2	2 15.3	—
411	" 25	21 41.6	22 11.4	—	0 41.8	Small.
412	" 27	6 43.8	—	—	0 13.0	Extremely small.
413	" 27	13 1.5	—	—	0 8.0	"
414	" 29	10 46.3	11 45.8	0.2	3 10.5	"
415	" 31	2 18.6	—	—	0 4.9	—
416	" 31	7 16.2	—	—	—	Thickening.
417	Aug. 1	19 43.6	10 52.1	0.2	0 31.8	—
418	" 1	22 30.6	22 37.7	—	0 22.8	Small.
419	" 2	7 43.4	—	—	0 25.7	"
420	" 2	7 35.2	7 47.1	—	0 30.6	"
421	" 3	23 6.1	23 29.5	—	0 31.2	"
422	" 5	1 52.2	2 12.0	0.7	2 31.5	—
423	" 7	20 56.4	21 1.9	—	0 19.3	Small.
421	" 8	2 41.0	—	—	0 4.3	Very small.
425	" 8	9 51.5	—	—	0 13.7	"
426	" 10	15 1.7	—	—	0 7.0	"
427	" 10	21 15.1	21 38.1	—	0 49.1	—
428	" 11	16 51.5	17 18.0	0.3	1 26.0	—
429	" 12	9 25.3	—	—	0 7.5	Very small.
430	" 13	0 55.1	—	—	0 14.1	"
431	" 13	22 1.9	—	—	0 9.5	"
432	" 14	7 48.8	8 5.5	—	0 39.7	Small.
433	" 14	29 5.0	—	—	0 8.5	—
434	" 14	8 30.1	8 51.4	—	0 45.0	—
435	" 17	12 19.8	12 39.5	0.8	2 22.4	—
436	" 17	23 42.5	24 16.2	—	0 58.5	Small.
437	" 18	3 13.9	—	—	0 10.6	Very small.
438	" 18	11 37.3	—	—	—	"
439	" 20	1 27.5	—	—	0 9.3	"
440	" 21	5 37.0	6 40.0	0.4	2 39.4	—
441	" 21	16 22.6	16 32.5	0.2	0 33.6	—
442	" 23	15 42.0	15 49.9	—	0 29.7	Small.
443	" 23	23 32.0	—	—	0 6.9	Extremely small.
444	" 27	4 55.2	—	—	0 6.8	"
445	" 27	7 53.5	—	—	0 25.0	"
446	" 29	3 16.3	—	—	0 13.0	—
447	" 30	3 25.8	—	—	—	Thickening.
448	" 31	19 7.8	—	—	0 11.8	Small.
449	" 31	23 29.8	23 33.5	—	0 14.8	—
450	Sept. 1	0 53.2	1 35.5	2.8	2 12.3	—
451	" 1	14 33.8	15 16.5	1.8	2 16.9	—
452	" 2	16 27.8	—	—	0 19.0	Small.
453	" 6	20 16.7	21 7.6	1.9	3 10.2	—
454	" 7	4 53.5	5 5.5	—	0 26.0	Small.
455	" 7	7 32.3	8 31.8	1.1	4 49.5	—
456	" 7	13 23.8	—	—	0 16.2	Very small.
457	" 7	23 40.5	23 52.6	—	0 24.5	Small.
458	" 8	3 32.5	—	—	0 30.9	—
459	" 8	5 57.2	6 42.5	—	2 0.3	—
460	" 9	1 25.2	2 5.7	1.1	4 18.5	—
461	" 9	7 50.1	—	—	0 4.8	Very small.
462	" 9	9 37.8	10 35.5	0.2	2 25.6	—
463	" 10	2 23.4	—	—	0 5.4	Very small.
464	" 10	12 47.3	13 47.6	—	1 59.8	"
465	" 12	16 29.0	16 41.8	—	1 2.5	"
466	" 14	14 14.5	15 12.6	—	1 40.6	"
467	" 15	3 10.8	—	—	0 11.0	—
468	" 16	19 33.5	—	—	—	Thickening.
469	" 16	23 24.5	24 1.7	0.5	1 44.8	—
470	" 18	2 3.2	2 31.7	—	0 54.5	Small.
471	" 20	6 40.3	—	—	2 30.5	Very small.
472	" 21	17 1.0	17 6.2	0.2	0 11.6	—
473	" 22	19 44.4	—	—	0 5.1	Very small.
474	" 23	1 48.4	—	—	—	Thickening.
475	" 23	2 14.1	2 42.5	0.1	0 40.5	—
476	" 23	22 33.7	22 39.2	0.1	0 8.3	—
477	" 24	3 24.7	4 23.0	0.8	2 10.5	—
478	" 24	11 35.0	11 42.4	—	0 21.2	Small.

Register from Royal Observatory, Edinburgh—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
479	Sept. 24	H. M. 15 41.1	H. M. 16 21.0	MM. 0.2	H. M. 1 45.0	—
480	" 24	19 5.7	19 26.9	0.1	0 44.7	—
481	" 27	7 42.7	7 51.0	—	0 30.8	Small.
482	Oct. 2	16 17.4	—	—	0 16.7	Very small.
483	" 2	22 8.1	—	—	0 21.5	"
484	" 3	12 24.7	—	—	0 38.0	"
485	" 4	23 9.9	23 32.7	0.5	2 27.9	—
486	" 7	7 23.6	8 22.6	0.1	2 12.0	—
487	" 7	12 35.6	—	—	1 13.2	Small.
488	" 7	16 49.5	17 0.9	—	0 37.3	—
489	" 10	16 33.6	—	—	—	Very small.
490	" 13	15 27.5	15 52.2	0.1	1 3.3	—
491	" 15	12 15.3	12 21.6	0.3	0 23.3	—
492	" 16	2 40.4	—	—	0 48.2	Extremely small.
495	" 18	3 18.2	4 14.0	0.2	1 57.2	—
494	" 19	14 50.8	—	—	0 11.8	Very small.
495	" 20	5 26.3	6 12.1	0.3	2 18.6	—
496	" 24	3 2.8	—	—	0 11.6	Very small.
497	" 24	8 54.0	—	—	0 17.9	—
498	" 24	15 36.6	—	—	0 53.7	Small.
499	" 26	15 45.7	16 1.7	0.1	0 53.5	—
500	" 27	1 5.5	—	—	0 48.1	Very small.
501	" 30	8 8.2	9 5.8	0.2	2 26.7	—
502	" 31	7 6.0	7 18.4	0.1	0 52.2	—
503	Nov. 2	13 57.3	14 52.3	0.1	1 58.9	—
504	" 4	20 11.1	—	—	—	Very small.
505	" 4	10 54.8	—	—	0 8.4	—
506	" 6	—	—	—	—	Began before 21h.18m. Ended at 0h.37m. Light failed.
507	" 8	17 59.2	—	—	0 29.0	Very small.
508	" 9	6 22.1	8 10.7	2.2	5 49.2	—
509	" 10	12 41.6	13 51.2	0.2	2 44.6	—
510	" 12	16 29.5	—	—	0 16.8	Very small.
511	" 12	18 18.2	—	—	0 27.0	"
512	" 14	7 47.1	8 25.4	1.1	2 48.3	—
513	" 15	0 37.2	0 51.7	0.1	1 13.3	—
514	" 15	14 40.8	15 25.8	1.5	3 15.3	—
515	" 16	19 34.3	—	—	0 28.0	Very small.
516	" 16	22 55.3	—	—	—	"
517	" 19	7 54.5	—	—	0 37.3	"
518	" 19	14 16.7	—	—	0 26.3	Clock stopped—20th, 10h., to 21st, 3h.
519	" 24	16 4.0	16 40.8	0.1	1 29.3	—
520	" 25	1 44.3	1 47.6	0.2	0 15.7	—
521	" 26	5 9.6	7 14.1	1.0	5 8.1	—
522	" 29	2 30.5	3 19.1	1.2	3 0.6	—
523	" 30	5 29.8	—	—	0 43.9	Very small.
524	" 30	6 59.2	—	—	0 41.9	"
525	Dec. 1	16 2.1	16 53.3	0.2	2 47.8	—
526	" 2	4 53.0	—	—	0 16.5	Small.
527	" 3	5 17.2	—	—	0 14.4	—
528	" 3	8 24.6	9 45.8	0.2	2 7.6	Two equal max.
			9 51.6	—	—	—
529	" 4	11 28.3	13 51.0	0.6	3 13.4	—
530	" 5	16 53.9	17 27.9	0.1	1 27.3	—
531	" 10	9 47.8	10 48.0	1.0	3 30.7	—
532	" 11	15 19.4	15 35.5	0.1	1 11.5	—
533	" 12	0 9.1	—	—	0 15.2	Very small.
534	" 12	1 1.9	1 15.1	0.1	1 8.3	—
535	" 12	21 33.1	—	—	0 24.5	Light failed—12th, 23h.40m. to 13th, 10h.40m.
536	" 13	10 52.1	12 18.1	0.0	5 18.3	—
537	" 14	11 57.3	—	—	0 1.3	Very small.
538	" 14	21 11.7	21 26.2	0.3	2 2.3	Two max.
			21 30.0	—	—	—
539	" 15	18 11.3	—	—	0 16.0	Extremely small.
540	" 16	10 25.3	—	—	0 2.7	"
541	" 16	12 15.9	—	—	0 26.8	"
542	" 16	14 20.0	—	—	0 14.1	"
543	" 18	14 56.3	15 56.3	4.7	1 59.5	—
544	" 18	23 29.8	24 28.5	0.1	1 33.7	—
545	" 17	7 21.5	—	—	0 21.3	—
546	" 18	3 4.9	3 48.7	0.4	3 21.7	—
547	" 18	16 57.7	—	—	—	Very small.

Register from Royal Observatory, Edinburgh—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
548	Dec. 18	H. M. 20 57.0	H. M. —	MM. —	H. M. 0 22.6	Very small.
549	" 19	16 8.2	—	—	0 53.2	"
550	" 20	11 22.2	—	—	—	"
551	" 21	10 46.5	11 11.8	0.4	1 25.1	—
552	" 23	0 43.4	1 17.9	0.5	1 43.3	—
553	" 26	6 8.1	6 39.8	0.2	1 36.9	—
554	" 26	10 19.4	—	—	0 13.3	—
555	" 27	19 31.1	19 56.1	0.1	0 59.9	—
556	" 29	13 34.5	14 16.3	0.5	3 42.1	Duration uncertain, A.T's.
557	" 29	0 34.7	1 34.0	0.2	2 8.3	—
558	" 30	3 14.3	3 29.2	0.2	1 36.4	—
559	" 30	19 51.7	20 2.2	0.1	0 30.3	—

November 1-2, frequent thickenings.
December 20-21 and 21-22, frequent A.T's and thickenings.
December 28-29, frequent A.T's.
1 mm. of amplitude = 0".51. Period of boom = 17 secs.

Register from the Coats Observatory, Paisley.
Observer to the Board of Directors, DONALD MACLEAN.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
918	July 3	H. M. —	H. M. 8 10.5	MM. 0.1	H. M. —	—
919	" 3	9 38.5	9 47.0	0.2	0 47.5	—
920	" 5	—	12 11.0	0.1	—	—
921	" 5	—	19 23.5	—	—	—
922	" 6	—	9 14.5	0.1	—	—
923	" 7	8 41.0	9 30.5	0.7	2 4.0	—
924	" 9	—	16 0.5	0.1	—	—
925	" 11	—	11 5.5	—	—	Very small tremor.
926	" 12	—	7 56.5	—	—	"
927	" 13	—	8 33.0	—	—	"
928	" 15	12 10.5	13 32.5	0.2	1 59.5	—
929	" 16	—	13 59.0	—	—	—
930	" 17	—	10 25.5	0.1	—	—
931	" 18	—	5 26.0	—	—	—
932	" 18	—	15 44.5	0.1	—	—
933	" 21	8 11.5	8 25.0	0.2	0 53.0	—
934	" 22	—	15 8.5	—	—	—
935	" 24	16 4.0	16 57.0	0.2	1 49.0	—
936	" 27	—	14 56.0	—	—	—
937	" 27	—	15 14.5	0.1	—	—
938	" 27	—	16 58.0	0.1	—	—
939	" 29	10 54.5	11 43.5	0.3	2 35.0	—
940	" 31	—	7 11.1	—	—	Very small.
941	Aug. 1	10 46.5	10 51.0	0.3	0 19.0	—
942	" 2	—	15 58.0	—	—	Very small.
943	" 2	—	16 1.5	—	—	"
944	" 5	13 13.0	13 33.5	0.1	1 40.0	—
945	" 8	—	15 8.5	—	—	—
946	" 11	17 4.0	17 19.5	0.4	0 10.0	—
947	" 12	—	14 53.0	—	—	—
948	" 14	7 53.0	8 4.5	0.2	0 25.1	—
949	" 14	—	15 39.5	—	—	—
950	" 14	—	20 8.3	—	—	—
951	" 17	12 33.5	12 43.5	0.8	1 16.0	—
952	" 18	—	19 38.5	—	—	—
953	" 20	—	16 43.0	—	—	—
954	" 21	6 2.5	6 40.0	0.4	1 46.5	—

Register from the Coats Observatory, Paisley—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
955	Aug. 21	H. M. 16 28.0	H. M. 16 32.5	mm. 0.3	H. M. 0 16.5	
956	" 23	—	21 26.5	—	—	
957	" 26	—	16 16.3	—	—	
958	" 27	—	4 57.0	—	—	
959	" 27	—	7 49.5	—	—	
960	" 28	—	3 46.0	—	—	
961	" 29	—	3 20.5	—	—	
962	" 30	—	11 35.0	0.1	—	
963	" 30	—	11 58.0	0.1	—	
964	" 31	—	0 59.0	—	—	
965	Sept. 1	15 5.0	15 19.0	1.0	1 54.5	
966	" 6	20 27.5	21 6.5	3.7	>138.5	
967	" 7	—	5 1.0	—	—	
968	" 7	7 33.5	8 55.5	0.8	>232.0	
969	" 8	—	7 44.5	—	—	
970	" 9	—	7 44.0	—	—	
971	" 9	—	10 26.3	0.1	—	
972	" 10	—	12 50.0	0.1	—	
973	" 12	16 6.0	16 42.5	0.2	1 24.0	
974	" 12	—	18 30.0	—	—	
975	" 14	—	12 8.0	—	—	
976	" 14	11 14.5	15 15.0	0.2	2 2.0	
977	" 18	2 3.0	2 33.0	0.1	0 56.0	
978	" 21	—	14 0.0	—	—	
979	" 21	16 56.0	17 4.2	0.2	0 34.0	
980	" 22	—	19 46.0	—	—	
981	" 23	1 30.0	2 21.0	0.1	1 45.0	
982	" 23	22 9.0	22 39.5	0.1	1 11.0	
983	" 24	3 30.0	4 21.0	0.7	2 3.0	
984	" 24	—	11 39.0	0.1	—	
985	" 24	16 1.0	16 21.0	0.3	1 46.0	
986	" 24	19 2.0	19 25.5	0.3	1 4.0	
987	" 27	7 15.0	7 58.5	0.2	1 10.0	
988	" 29	—	14 10.7	—	—	
989	Oct. 2	—	15 29.5	—	—	
990	" 4	23 24.0	23 54.7	0.9	1 50.0	
991	" 7	8 8.0	8 54.5	0.2	1 22.0	
992	" 7	13 17.0	13 24.5	0.2	0 48.0	
993	" 13	15 47.0	15 51.0	0.2	0 16.0	
994	" 26	15 18.0	15 56.5	0.1	1 2.0	
995	" 27	1 5.0	1 11.5	0.1	0 40.0	
996	" 30	8 15.5	9 38.5	0.2	1 44.0	
997	" 31	—	7 9.5	—	—	
998	Nov. 2	14 22.0	14 59.5	0.3	1 16.0	
999	" 6	19 7.0	19 41.0	0.2	1 15.0	
1000	" 6	21 4.5	21 11.0	0.9	1 32.0	
1001	" 7	—	7 52.0	—	—	
1002	" 9	6 55.0	8 13.0	3.0	>640.0	Commencement and end uncertain, due to Afs.
1003	" 10	12 43.0	14 0.5	0.3	2 42.0	Two earthquakes.
1004	" 12	18 18.7	18 24.0	0.2	—	
1005	" 14	8 4.0	8 32.0	1.3	1 15.0	
1006	" 15	0 35.0	0 52.5	0.3	0 35.0	
1007	" 15	14 48.5	15 25.0	1.0	1 38.0	
1008	" 25	1 41.0	1 47.0	0.3	0 17.0	
1009	" 26	5 4.0	6 14.3	1.2	>126.0	
1010	" 29	—	3 19.5	0.8	—	Commencement and end uncertain, due to Afs.
1011	Dec. 1	16 11.0	16 59.8	0.3	1 10.0	
1012	" 3	9 30.5	9 42.0	0.2	0 24.5	
1013	" 4	11 49.0	12 54.0	0.5	2 1.0	
1014	" 5	16 3.0	17 30.5	0.2	>329.0	
1015	" 10	9 50.0	11 19.5	1.0	2 53.0	
1016	" 13	11 47.0	12 22.5	5.5	>441.0	
1017	" 14	—	20 20.5	—	—	
1018	" 14	—	20 54.0	0.2	—	Glasgow.
1019	" 14	21 20.0	21 29.5	0.3	—	
1020	" 14	—	22 21.0	—	—	
1021	" 14	—	22 10.5	—	—	
1022	" 16	15 2.0	15 57.0	3.3	>238.0	
1023	" 16	19 15.0	20 5.5	0.4	1 57.0	
1024	" 17	0 3.5	0 30.0	0.1	1 26.5	
1025	" 17	7 13.0	7 31.0	0.1	0 55.0	

Register from the Coats Observatory, Paisley—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1026	Dec. 18	H. M. 3 5.0	H. M. 3 56.0	MM. 0.4	H. M. 1 55.0	
1027	" 18	5 5.0	5 58.0	0.2	1 45.0	
1028	" 18	—	20 56.0	—	—	
1029	" 20	—	11 26.5	—	—	
1030	" 21	10 29.0	11 11.0	0.3	1 44.0	
1031	" 22	0 40.0	1 35.5	0.3	1 42.0	
1032	" 23	0 45.0	1 10.5	0.6	1 31.0	
1033	" 29	13 42.0	14 15.5	0.6	1 48.0	Two earthquakes.
1034	" 30	—	0 58.0	0.1	—	
1035	" 30	1 13.5	2 2.5	0.2	1 11.5	
1036	" 30	3 25.0	3 30.0	0.3	0 53.0	
1037	" 30	19 43.0	20 2.5	0.1	0 36.0	Duration uncertain due to Afs.
1038	" 31	—	17 53.0	0.1	—	
1039	" 31	—	19 39.0	0.1	—	

From. of amplitude = 0°.47.
Period of Pendulum = 17 seconds.

Register from Eskdalemuir Observatory,
Superintendent, GEORGE W. WALKER.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
106	July 7	H. M. 5 2	H. M. 5 16	MM. 0.4	H. M. 9 40	Waves. Scale value. Imm. = 0°.41.
107	" 7	5 2	5 15	0.5	0 56	E.W.
108	" 7	8 44	9 30	0.5	2 6	N.S.
109	" 7	8 44	9 29.5	0.5	2 4	E.W.
110	" 10	15 23	13 30	0.1	0 51	N.S.
111	" 10	15 21	15 45	0.2	0 56	E.W.
112	" 12	21 47	22 53	0.5	1 57	N.S.
113	" 12	21 42	22 52	0.5	1 53	E.W.
114	Aug. 11	16 54	17 21	0.2	1 22	N.S.
115	" 11	16 57	17 20	0.3	0 52	E.W.
116	" 13	—	22 6	—	—	N.S.
117	" 13	—	22 4	—	—	E.W.
118	" 14	—	8 6	—	—	N.S.
119	" 14	—	8 4	—	—	E.W.
120	" 17	12 19	12 41.5	0.7	1 3	N.S.
121	" 17	12 23	12 39	0.8	1 12	E.W.
122	" 21	5 57.5	6 20	0.5	2 9	N.S.
123	" 21	6 2.5	6 22.5	0.5	2 9	E.W.
124	" 23	—	16 32	—	—	N.S.
125	" 23	—	15 44	—	—	N.S.
126	" 23	—	15 44	—	—	E.W.
127	" 31	1 0	1 42.5	4.0	2 7	N.S.
128	" 31	0 58	1 36	3.0	2 0	E.W.
129	Sept. 1	14 12	15 29.5	1.6	2 26	N.S.
130	" 1	14 23	15 19.5	1.7	2 34	E.W.
131	" 6	20 19	20 32	0.7	2 36	N.S.
132	" 6	20 16	20 54.5	2.1	2 47	E.W.
133	" 7	7 20	8 24	0.8	2 5	N.S.
134	" 7	7 29	8 20	1.2	2 6	E.W.
135	" 9	1 13	1 53	1.3	3 27	N.S.
136	" 9	1 13	1 53	1.3	3 31	E.W.
137	" 16-17	23 32	0 7	1.5	1 14	N.S.
138	" 16-17	23 31	0 9	0.5	1 7	E.W.
139	Oct. 4-5	23 24	23 32.5	0.3	1 28.5	N.S.
140	" 4-5	23 24	23 21.5	0.5	1 28.5	E.W.

Small tremors.

Register from Eskdalemuir Observatory—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
141	Oct. 18	H. M. 4 13	H. M. 4 13	MM. 0.2	H. M. 1 5	Waves. N.S. Scale value. Imm. = 0°43.
142	" 18	"	"	"	"	E.W. 0°36.
143	Nov. 6	20 53	21 10	1.2	1 5	N.S. 0°43.
144	" 6	20 53	21 9	1.3	1 3	E.W. 0°36.
145	" 9	6 21	8 8.5	4.0	3 18	N.S. 0°43. Times of start and duration approximate owing to continuous tremors.
146	" 9	6 21	8 10	4.0	3 19	E.W. 0°36.
147	" 10	12 42	13 43	0.2	2 24	N.S. 0°43.
148	" 10	12 43	13 54	0.3	2 15	E.W. 0°36.
149	" 12	18 23	18 26	0.2	0 11	N.S. 0°43.
150	" 12	18 19	18 26	0.1	0 12	E.W. 0°36.
151	" 14	7 59	8 37	1.5	1 41	N.S. 0°43.
152	" 14	7 59	8 26	1.6	1 45	E.W. 0°36.
153	" 15	14 41	15 28	1.2	2 33	N.S. 0°43.
154	" 15	14 44	15 25	2.3	2 25	E.W. 0°36.
155	" 25	5 0	6 20	1.3	5 9	N.S. 0°43.
156	" 26	5 0	6 10	1.3	5 12	E.W. 0°36.
157	" 29	1 53	3 22	1.2	3 19	N.S. 0°43.
158	" 29	1 53	3 21.5	2.4	3 19	E.W. 0°36.
159	Dec. 1	"	16 56	0.2	"	N.S. 0°43.
160	" 1	"	16 54	0.3	"	E.W. 0°36.
161	" 2	14 48	14 51	0.4	"	N.S. 0°43. Times doubtful hour breaks not showing.
161	" 2	14 47	14 51	0.4	"	E.W. 0°36.
162	" 3	"	9 40	0.4	"	N.S. 0°43.
163	" 3	"	9 38	0.3	"	E.W. 0°36.
164	" 4	11 33	12 47	0.4	3 6	N.S. 0°43.
165	" 4	11 26	12 46.5	0.7	3 14	E.W. 0°36.
166	" 10	"	10 59	1.8	"	N.S. 0°43. Start somewhere between 9h.40m. and 9h.59m. (times of heect changing).
166	" 10	"	10 54.5	1.6	"	E.W. 0°36.
167	" 13	11 48	12 22.5	12.2	"	N.S. 0°43.
168	" 13	11 47	12 17.5	0.3	"	E.W. 0°36.
169	" 13	"	12 23.5	7.6	"	E.W. 0°36.
170	" 13	"	14 31	0.6	"	N.S. 0°43.
171	" 13	"	14 19	0.6	"	E.W. 0°36.
172	" 14	21 26	21 26.5	0.5	0 31	E.W. 0°36. Galizin seismo. Maxima at 21h. 26m., 21h.30m., 21h.32m., and 21h.49m.
173	" 16	15 0	15 55.5	10.2	3 0	N.S. 0°43.
174	" 16	15 0	15 50.5	3.7	3 0	E.W. 0°36.
175	" 16	19 17	20 1.5	1.2	1 28	N.S. 0°43.
176	" 16	19 17	20 1	0.7	1 35	E.W. 0°36.
177	" 18	3 21	3 56	0.5	1 2	N.S. 0°43.
178	" 18	3 19	3 49	0.6	1 5	E.W. 0°36.
179	" 18	5 41	5 57.5	0.3	0 32	N.S. 0°43.
180	" 18	5 31	5 53	0.5	0 43	E.W. 0°38.
181	" 21	10 46	11 13	0.1	0 46	N.S. 0°43.
182	" 21	10 46	11 10.5	0.2	0 40	E.W. 0°38.
183	" 23	0 44	1 11	0.4	1 13	N.S. 0°44.
184	" 23	0 36	1 8.5	0.6	1 22	E.W. 0°36.
185	" 27	19 35	20 4	0.2	0 55	N.S. 0°45.
186	" 27	19 35	20 3	0.3	0 51	E.W. 0°33.
187	" 29	(13 51)	14 17.5	0.7	(0 47)	N.S. 0°45.
188	" 29	(13 54)	14 16.5	0.8	(0 56)	E.W. 0°36.
189	" 30	1 41	1 49.5	0.1	0 30	N.S. 0°45.
190	" 30	1 42	1 54.5	0.2	0 28	E.W. 0°36.
191	" 30	3 27	3 31	0.4	0 17	N.S. 0°45.
192	" 30	3 27	3 30	0.3	0 20	E.W. 0°36.
193	" 30	19 54	20 2.5	0.2	0 17	N.S. 0°45.
194	" 30	19 52	20 2.5	0.1	0 34	E.W. 0°36.

There were many days on which records could not be obtained. owing to tremors due to high wind and other causes.

Register from the Observatorio de Marina de San Fernando, Spain.
Director, Commodore T. DE AZCÁRATE.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
Pendulum A (new model) records N-S motion. Pendulum B (old model) records E-W motion.						
1910						
178	July 3	H. M. 19 17.2	H. M. 19 17.2	MM. —	H. M. —	A. Tremors.
181	" 7	5 4.1	5 23.4	1.1	—	0 39.5 A. Tremors.
183	" 7	5 19.9	—	—	—	0 27.5 B.
184	" 7	8 45.1	9 32.1	1.1	—	3 30.0 A.
184	" 7	8 42.9	—	—	—	1 26.0 B.
188	" 10	15 29.6	15 48.9	1.0	—	1 24.7 A.
188	" 10	15 36.9	—	—	—	0 49.0 B.
191	" 12	22 11.7	22 41.2	2.3	—	13.5 A.
191	" 12	22 31.2	22 48.2	0.5	—	0 47.0 B.
198	" 20	0 3.4	—	—	—	A. Small movement.
198	" 20	4 0.0	—	—	—	0 23.0 B.
199	" 21	7 5.4	—	—	—	2 12.0 A. Small movement.
199	" 21	8 29.2	—	—	—	0 49.0 B.
200	" 21	22 35.4	—	—	—	1 19.8 A. Small movement.
200	" 21	22 49.4	—	—	—	0 48.8 B.
201	" 24	16 53.2	—	—	—	0 35.2 A. Small movement.
201	" 24	17 3.3	—	—	—	0 18.0 B.
202	" 29	10 39.7	12 31.1	1.5	—	2 15.6 A.
202	" 29	10 48.3	—	—	—	2 5.5 B.
203	" 30	19 16.4	—	—	—	0 3.0 B.
204	Aug. 1	10 49.2	10 51.9	0.6	—	0 7.7 A.
204	" 1	10 46.0	10 48.9	0.7	—	0 4.5 B.
205	" 1	22 26.4	—	—	—	0 21.9 A.
205	" 1	22 28.0	—	—	—	0 17.0 B.
206	" 2	2 4.8	—	—	—	0 3.5 A. Tremors.
208	" 5	1 56.0	2 35.0	1.0	—	1 24.0 B.
209	" 11	16 51.6	17 12.9	0.50	—	0 44.8 A.
209	" 11	17 2.3	—	—	—	0 29.0 B.
210	" 14	7 28.9	7 55.6	0.50	—	0 56.0 A.
210	" 14	7 37.6	—	—	—	0 42.0 B.
211	" 17	12 19.3	12 46.8	0.7	—	1 40.5 A.
211	" 17	12 23.6	—	—	—	1 13.0 B.
212	" 20	1 23.0	—	—	—	0 7.5 A.
212	" 20	1 24.2	—	—	—	0 4.0 B.
213	" 20	16 34.0	16 35.0	0.6	—	0 11.5 A.
213	" 20	16 34.2	—	—	—	0 8.5 B.
214	" 21	5 58.5	6 12.5	1.2	—	2 4.5 A.
214	" 21	5 58.5	6 32.0	1.1	—	2 4.0 B.
214	" 21	5 57.7	6 16.7	1.0	—	2 4.0 B.
214	" 21	5 57.7	6 22.7	1.1	—	2 4.0 B.
215	" 21	16 23.0	—	—	—	0 29.5 A.
218	" 21	16 23.7	—	—	—	0 16.2 B.
221	" 28	22 25.4	—	—	—	11 47.0 A. Tremors.
221	Sept. 1	1 39.7	1 53.7	2.6	—	1 11.5 A. P ₂ = 1h.43.2m.
221	" 1	1 49.0	1 49.0	2.6	—	1 3.0 B. P ₂ = 1h.43.5m.
222	" 1	14 46.2	15 30.0	1.4	—	1 10.0 A.
222	" 1	15 18.0	15 28.0	1.1	—	0 38.0 B.
228	" 6	20 26.5	20 59.5	3.1	—	1 52.5 A. P ₂ = 20h.47.2m.
228	" 6	20 26.5	21 8.1	1.1	—	1 50.6 B.
229	" 7	7 28.2	8 45.0	1.9	—	2 29.8 A.
229	" 7	7 33.0	—	—	—	2 29.3 B.
230	" 7	11 18.5	11 35.2	0.8	—	0 29.5 A.
231	" 9	1 37.4	2 15.5	4.9	—	2 42.6 A. P ₂ = 1h.55.0m.
231	" 9	1 37.2	2 20.0	5.0	—	2 25.0 B.
231	" 9	1 37.2	2 23.2	3.6	—	1 42.0 B.
232	" 9	10 30.0	10 52.0	0.9	—	1 10.5 A.
232	" 9	10 35.5	—	—	—	0 19.5 B.
236	" 12	16 50.0	—	—	—	0 38.7 A.
236	" 12	16 52.2	—	—	—	0 13.5 B.
240	" 23	2 16.8	—	—	—	5 27.0 A. Tremors.
241	" 23	22 32.0	—	—	—	0 9.3 A. Tremors.
241	" 23	22 31.0	—	—	—	0 11.0 B.
242	" 24	3 37.0	4 19.1	1.0	—	1 35.8 A. Tremors till 9h.15.8m.
242	" 24	3 44.0	—	—	—	1 26.0 B.

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

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
243	Sept. 24	H. M. 15 49.3	H. M. 16 13.6	MM. 0.6	H. M. 1 55.5	A. Tremors.
	" 21	15 40.0	—	—	1 13.0	B. "
248	Oct. 4	23 13.4	23 24.4	1.2	1 48.5	A. "
	" 4	23 12.4	23 23.6	1.7	1 37.2	B. "
251	" 7	8 18.4	8 23.4	0.6	0 54.5	A. "
252	" 7	13 20.4	13 32.1	0.6	0 46.0	A. "
258	" 13	15 34.0	—	—	1 9.5	A. Tremors.
263	" 18	3 16.0	—	—	1 41.0	B. "
265	" 20	6 1.6	—	—	0 51.6	B. Tremors
268	" 24	8 27.4	—	—	0 46.8	A. "
	" 24	8 44.6	—	—	0 12.9	B. "
269	" 27	1 0.0	1 2.8	1.9	0 14.6	A. "
	" 27	—	1 2.6	1.4	0 12.4	B. "
270	" 30	8 58.3	9 6.1	0.7	1 4.9	A. "
	" 30	9 28.0	—	—	0 29.0	B. "
271	Nov. 1	0 0.0	—	—	1 49.0	A. Tremors.
273	" 2	13 59.0	—	—	0 50.2	A. Tremors.
276	" 6	21 8.5	21 18.7	2.0	0 50.2	A. "
	" 6	21 3.8	21 26.0	1.0	0 55.2	B. "
277	" 9	6 22.6	7 51.8	8.0	3 24.2	A. Tremors till 11h.56.8m.
	" 9	6 22.6	7 57.3	9.0	—	—
	" 9	6 22.6	7 55.6	6.0	—	B. "
	" 9	6 22.6	8 0.0	3.8	3 16.2	—
	" 9	6 22.6	8 6.0	5.4	—	—
278	" 10	12 44.6	13 55.9	1.6	2 12.3	A. "
	" 10	13 45.2	—	—	0 49.4	B. "
280	" 14	7 59.1	8 36.8	1.0	2 9.0	A. "
	" 14	8 29.0	8 35.0	1.0	0 52.5	B. "
281	" 15	0 32.7	0 51.7	1.6	1 1.3	A. "
	" 15	0 39.0	—	—	0 34.5	B. "
282	" 15	14 35.2	15 14.9	5.0	3 3.0	A. P ₂ 14h.45.2m.
	" 15	14 35.5	15 18.0	1.8	2 5.5	B. P ₂ 14h.47.5m.
284	" 16	19 59.2	—	—	3.6	A. "
291	" 23	1 38.2	1 41.7	0.5	0 20.0	A. "
	" 23	1 40.0	1 45.0	0.5	0 12.5	B. "
292	" 26	5 1.8	6 13.8	6.0	3 47.0	A. P ₂ 5h.16.3m.
	" 26	5 1.0	6 24.3	7.0	—	—
	" 26	5 1.0	6 29.5	5.7	—	—
	" 26	5 1.0	6 19.4	1.3	3 44.4	B. "
293	" 29	2 51.0	3 34.5	1.0	1 33.7	A. "
	" 29	3 18.4	3 36.4	1.0	0 46.6	B. "
296	Dec. 1	16 7.4	17 18.4	0.5	2 28.8	A. "
	" 1	16 18.5	—	—	1 26.2	B. Tremors
298	" 3	8 18.7	9 31.7	1.2	2 26.5	A. "
	" 3	8 19.0	—	—	1 53.4	B. "
300	" 4	11 44.8	12 37.5	2.2	2 13.0	A. "
	" 4	11 43.0	12 38.2	0.5	1 52.5	B. "
302	" 10	9 20.8	11 2.8	5.5	5 39.2	A. "
	" 10	9 53.0	10 51.3	1.5	1 34.2	B. "
303	" 13	11 47.1	12 12.6	18.6	4 55.0	A. "
	" 13	11 56.1	12 15.6	15.2	—	—
	" 13	11 47.5	—	—	3 9.5	B. "
304	" 14	21 3.8	—	—	1 58.7	A. Small movement.
	" 14	21 16.0	—	—	0 44.0	B. "
305	" 16	15 4.9	16 8.7	6.5	2 46.7	A. P ₂ 15h.13.9m.
	" 16	15 5.0	16 6.0	4.5	2 47.2	B. "
306	" 16	19 23.5	20 10.0	1.25	1 24.5	A. "
	" 16	19 23.0	—	—	1 15.0	B. Small movement
307	" 16	23 19.5	—	—	0 40.0	A. "
	" 16	23 28.0	—	—	0 9.0	B. "
312	" 23	0 31.2	1 19.0	1.85	1 51.8	A. Tremors.
	" 23	1 8.0	1 20.0	1.5	0 49.0	B. "
316	" 29	0 7.5	—	—	0 53.5	B. Small movement
317	" 29	14 9.0	—	—	0 34.0	B. "
318	" 29	22 0.6	—	—	—	B. Tremors.

Pendulum A: Period = 20s. Imm. = 0°25.

Pendulum B: Period = 16s. Imm. = 0°43.

Register from Toronto, Ont., Canada.
Director, R. F. STUART, F.R.S.C.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
933	July	H. M. 9 2.2	H. M. 9.1	MM. 0 8.8	H. M. 0 8.8	Very small. Double Quake. Skagway.
934	" 7	No Pts. 4 59.3	1.0	0 47.8	1.0	L.W. 4 58.9. Do. Do.
935	" 10	15 17.6	15 25.0	0.4	0 33.8	—
936	" 29	11 26.9	—	—	0.1	0 33.1
937	Aug. 5	1 43.8	1 53.1	4.0	0 10.6	Tapered off gradually after max.
938	" 11	16 41.4	16 46.0	4.5	0 51.9	—
939	" 21	5 57.2	6 10.2	0.5	1 21.5	Very small and extended.
940	Sept. 1	1 59.4	—	0.3	0 33.0	—
941	" 1	15 25.0	—	—	0.05	0 19.5
942	" 6	20 23.5	—	—	0.2	0 47.5
943	" 7	7 43.2	—	—	0.05	0 14.4
944	" 7	8 15.8	—	—	0.10	1 4.4
945	" 7	10 57.7	11 5.0	0.8	0 37.8	Gradual swelling after L.W.
947	" 9	V ₁ 1 24.5 V ₂ 1 31.8 B 1 41.1	2 4.0	4.5	2 16.0	L.W. 1 44.9
948	" 9	14 36.0	—	—	0.05	0 3.0
949	" 24	3 44.7	3 55.8	1.0	0 25.8	Small and well defined. Thickening measured at 4 22.4.
950	" 24	4 13.0	4 22.0	0.35	0 20.0	—
951	" 24	18 59.7	—	—	0.3	0 17.3
953	Oct. 4	23 11.0	—	—	0.02	0 0.3
954	" 4	No Pts. 23 20.3	1.05	0 28.7	1.05	L.W. 25h.19.3m. Began suddenly.
955	" 7	8 0.1	—	—	0.05	0 26.8
956	" 7	13 15.6	—	—	0.1	0 7.2
957	" 16	2 32.8	—	—	0.05	0 3.9
958	" 18	3 44.5	—	—	0.05	0 4.5
959	" 18	3 57.0	—	—	0.05	0 5.0
960	" 30	8 43.0	—	—	0.10	0 23.5
961	Nov. 4	6 25.0	—	—	0.10	0 6.0
962	" 6	20 49.5 20 43.6	20 53.4	4.1	1 29.5	V ₂ 20 46.3 V ₂ 20 49.2 B 20 51.3
963	" 7	13 0.7 alt.	—	0.1	?	Mixed up with Ats. preceding and following for sometime
964	" 9	6 22.7	7 30.8	1.4	3 7.8	L.W. 6 34.7 B. 6 59.5
965	" 10	13 22.6	—	—	0.15	0 49.9
966	" 12	18 33.3	—	—	0.05	0 14.0
967	" 13	23 52.5	—	—	0.05	0 9.5
968	" 14	8 32.4	—	—	0.4	0 39.2
969	" 15	14 49.9	—	—	0.1	1 2.6
970	" 26	4 31.7	—	—	0.05	?
971	" 26	5 1.6	5 56.2	1.2	3 9.0	Thickenings mixed up with Ats. Doubtful as to being seismic. V ₂ 5 11.5 Small and prolonged. B 5 36.7 L.W. 5 56.2
972	" 29	3 31.8	—	—	0.2	0 17.7
973	Dec. 10	9 52.3	10 26.6	0.5	1 55.7	Conspicuous for long duration of L.W.
974	" 13	9 56.5	12 46.5	2.1	2 14.0	Beginning & ending mixed up with Ats.
975	" 14	21 7.3	—	—	0.2	0 18.5
976	" 16	15 6.4	16 11.1	1.0	2 38.6	Extended movements
977	" 21	10 33.3	10 49.3	0.5	0 42.1	Air Currents at ending
978	" 23	1 8.7	—	—	0.8	0 24.0
979	" 30	1 19.6 1 27.6	—	—	—	P.T.'s mixed with Air Currents. Mixed up with Air Currents.
980	" 30	3 45.8	—	—	0.3	0 14.0
981	" 30	9 48.1	—	—	—	Doubtful as to being seismic.

Period: 14.8 seconds. Imm. = 0°64.

In last report from Nos. 927 to 932 + 0.6 of a minute to be applied to tables.

Register from Victoria, B.C., Canada.
Superintendent, E. BAYNES REID.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
966	July 3	H. M. 9 10.2	H. M. 9 12.0	MM. 1.0	H. M. 0 21.6	Skagway
967	" 7	4 44.4	4 48.3	2.5	0 51.8	Began suddenly. Skagway. V ₂ 4 45.2 4 46.4 B 4 47.3
968	" 10	15 34.3	15 46.6	0.2	0 17.9	---
969	" 17	19 21.4	---	0.1	0 5.8	---
970	" 29	10 54.5	---	0.05	0 38.5	---
471	Aug. 5	1 33.0	1 37.2	8.9	1 13.5	---
972	" 6	7 29.1	---	0.1	0 10.1	---
973	" 11	16 41.4	17 04.8	0.35	0 46.0	---
974	" 21	5 48.7	6 5.2	0.9	1 4.6	---
975	Sept. 1	1 38.5	---	0.05	0 28.5	---
976	" 1	15 14.5	---	0.05	0 2.5	---
977	" 6	21 1.2	---	0.05	0 11.0	---
978	" 7	7 24.4	---	0.2	1 0.8	---
979	" 7	10 40.2	10 53.2	0.3	0 45.9	---
980	" 9	1 19.5	1 27.0	1.1	1 54.0	Small and well marked.
981	" 10	12 49.4	---	0.1	0 5.1	---
982	" 18	2 2.7	---	0.05	0 4.5	---
983	" 21	3 39.8	3 56.8	1.6	0 32.0	Marked increase of thickening at 4.10
984	" 24	4 14.3	---	0.3	0 21.1	---
985	Oct. 4	23 12.7	---	0.1	0 3.0	---
986	" 4	No Pts.	23 25.0	0.5	0 41.5	L.W. 23 23.2
987	" 18	2 58.7	---	0.1	0 4.5	---
988	Nov. 6	20 31.8	20 34.1	17.0	1 19.1	Very large. V ₂ 20 33.9
989	" 7	13 27.9	---	0.1	0 11.0	---
990	" 7	13 31.5	---	---	---	Mixed up with Air Currents.
991	" 9	6 14.6	7 3.1	1.05	2 53.5	L.W. 6 26.5
992	" 10	13 2.6	---	0.05	0 30.5	B. 6 40.6
993	" 12	18 42.5	---	0.05	0 3.8	---
994	" 14	8 25.5	---	0.2	0 36.0	---
995	" 15	14 42.5	---	0.6	1 21.2	Gradual swelling
996	" 26	4 54.1	5 30.5	0.8	2 34.4	Extended
997	" 29	2 49.2	---	0.05	0 1.0	---
998	" 29	3 19.0	---	0.05	0 30.2	30th, a local earthquake felt at 11 50.30
999	Dec. 10	9 39.9	10 10.9	1.0	2 31.0	L.W. lasting a long time.
1000	" 13	12 0.0	13 2.2	1.4	2 37.2	Do. Do.
1001	" 14	21 6.5	---	0.15	0 27.8	---
1002	" 16	15 2.2	15 16.0	1.5	2 31.2	Medium and extended
1003	" 21	10 40.6	11 9.3	0.15	0 44.8	---
1004	" 23	0 48.9	1 0.4	0.9	0 35.5	---
1005	" 30	1 11.3	---	0.05	0 24.1	---
1006	" 30	3 42.8	3 45.1	0.13	0 13	Ending mixed up with Air Currents.

Period: 15 seconds. 1 mm. = 0".76.

Nos 960 to 965 last report entries will require + 4 minutes.

Register from Baltimore, Md., U.S.A.
Director, PROFESSOR HARRY FIELDING REID.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
1	Jan. 22	H. M. 9 15.5	H. M. 19 8.7	MM. 5.0	H. M. ---	P ₂ 9h.6.8m.
2	" 23	---	12 6	0.8	---	P ₂ 19h.2.0m.!
3	" 26	12 2	12 6	0.5	---	Swelling.
4	May 13	8 15.9	8 40.2	4.0	---	P ₂ 8h.27.6m.!
5	" 20	12 15.8	12 24.3	1.5	---	Record very faint.
6	" 31	5 1.9	---	1.0	---	P ₂ 5h.7.5m.
7	June 1	6 56	---	0.1	---	Slight Swelling.
8	July 7	5 1	5 1.8	0.9	4.5 4	Earthquake began pretty strong.
9	Sept. 1	2 0	---	0.2	4.8 0	Swelling on line.
10	" 1	± 16 0	---	0.3	---	for 15 mins. or so.
11	" 7	± 8 0	---	0.2	---	for 30 or 40 mins.
12	" 7	± 10 50	---	0.4	---	Well marked swellings for 20 mins.; length of P ₁ about 9.5 mins.
13	" 9	1 13	± 1 38	2.0	---	Well marked quake
14	" 24	± 3 40	---	1.3	± 4 40	---
15	Nov. 6	± 20 30	---	---	---	---
16	" 26	± 5 0	---	1.2	---	---
17	Dec. 13	12 5.5	---	1.8	---	Phases of time uncertain.
18	" 16	14 9	---	1.0	---	Phases uncertain; beginning definite, but time uncertain.
19	" 21	10 40.5	10 43	1.0	---	No time marks, phases uncertain.
20	" 23	---	0 17	0.8	---	Phases of time uncertain, no time marks.

Period of Pendulum—Jan. 22, 23".2; May 13, 13".6; May 31, 13".8

No Records:

Jan. 4th, 16.5h. to 11th, 14.5h.	June 8th, 21.8h. to 9th, 21.7h.
Feb. 24th, 14.7h. to 28th, 20.4h.	June 14th, 5.3h. to 20th, 16.6h.
Mar. 5th, 20.1h. to 7th, 17.4h.	Aug. 1st, 18.3h. to 15th, 18.3h.
Mar. 29th, 2h. to 30th, 14.4h.	Aug. 26th, 18h. to 29th, 18h.
Apr. 2nd, 17h. to 3rd, 18h.	Sept. 5th, 22h. to 6th, 14.5h.
Apr. 8th, 8h. to 8th, 13h.	Sept. 16th, 14.6h. to 17th, 18.2h.
Apr. 13th, 14.4h. to 14th, 20h.	Sept. 27th, 14.2h. to Oct. 31st, 20.1h.
June 2nd, 22h. to 4th, 16.8h.	Nov. 7th, 23h. to 9th, 14.7h.
June 6th, 15.9h. to 6th, 17.4h.	Dec. 6th, 9.5h. to 15.8h.

Register from St. Vincent, Cape Verde.
Observers, HAROLD LLOYD, J. G. MEATS.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
1	Nov. 15	H. M. 14 47	H. M. 15 3.5	MM. 1.5	H. M. 1 2	Origin doubtful.
2	" 16	---	---	---	---	Slight ripples of short duration throughout day.
3	" 25	5 3	6 25	3.0	3 27	P ₂ 5h.24.5m. P ₃ 6h.21m.
4	" 29	---	---	---	---	2h.40m Boom deviated 1mm. E. Ats. throughout day Max. 5mm. at 3h.55m. P ₂ 10h.38m. P ₃ 11h.18m.
5	Dec. 10	9 51	11 29.5	2.0	2 8	Ats. throughout record. Clock stuck at 11h.15m.
6	" 11	5 42.5	5 50	0.75	0 54	Record faint. No synchronisation, contact stuck.
7	" 13	0ca	12 30	10.0	3 5	P ₂ 16h.2m. P ₃ 16h.16m.
8	" 16	15 5	16 24.5	1.0	2 45	Small ripples at very frequent intervals from 21h.20m. to 24h. Max. a. 5mm.
9	" 24	---	---	---	---	Small ripples from 1h. to 7h.55m. Max. 1mm.
10	" 25	---	---	---	---	---

Period = 20 secs.
1mm. = 0".76 arc.
Boom of instrument N & S.

Register from Ponta Delgada, St. Miguel, Azores.
Director, Lieutenant-Colonel F. A. CHAVES.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
397	July 20	H. M.	H. M.	MM.	H. M.	I. of Mercalli's scale. Thickening of line.
398	" 29	3 59.2			0 59.8	"
399	Aug. 3	1 51.4			0 56.9	"
400	" 14	7 16.8			0 01.3	"
401	" 21	6 01.2			0 50.1	"
403	Sept. 1	1 57.3			0 06.5	"
404	" 6	20 17.0			1 03.3	"
	" 7	7 31.8	7 38.0	1.2	0 50.0	"
	" 9	1 28.2	1 38.3	1.7	1 03.5	"
406	" 21	16 53.3			0 01.8	Thickening of line.
	" 23	22 23.8	22 26.8	1.2	0 15.2	"
	" 24	4 43.0	4 53.0	1.2	0 31.9	"
407	" 27	7 41.0	7 43.0	1.6	0 16.8	"
408	Oct. 4-5	23 12.8	23 22.8	1.8	0 54.7	"
412	Nov. 6	21 04.5			0 27.5	"
413	" 9	6 23.2	6 39.4	1.9	2 03.8	"
	" 12	18 21.3			0 08.3	"
414	" 15	0 33.5	0 34.9	2.6	0 25.0	Thickening of line at Ponta Delgada and III at Villa Franca and Povoaças.
	" 15	14 36.0			0 48.5	Thickening of line.
415	" 25	1 38.7	1 40.3	1.2	0 18.6	"
	" 26	5 03.2			2 08.4	Thickening of line.
416	" 29	3 39.2			0 04.8	"
	Dec. 1	0 32.8			0 42.5	"
	" 3	8 17.5			0 35.7	"
	" 4	11 31.3			0 42.2	"
417	" 9	3 49.8			0 03.2	"
	" 10	9 47.0			1 11.0	"
418	" 13	11 49.0	12 21.8	5.8	1 40.6	"
	" 15	21 08.0			0 55.0	Thickening of line.
	" 16	15 06.0	15 17.0	2.0	1 41.0	"
	" 18	5 31.5			0 19.0	Thickening of line.
	" 25	9 03.5				"
420	" 29	10 30.0			1 4.15	"

Register lost from 11h.40.0m. to 11h.57.0m. on October 10.
Register lost from 13h.00.0m. to 14h.33.5m. on November 4.
Register lost from 2h.20.0m. to 15h.30.0m. on November 24.
Register lost from 13h.08.0m. to 17h.31.0m. on November 30.
Register lost from 9h.35.5m. to 16h.19.0m. on December 2.

Mean Scale value imm. = 0^m.48.

Register from the Royal Observatory, Cape of Good Hope, South Africa.
Director, S. S. HOUGH, M.A., F.R.S.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
694	July 7	H. M.	H. M.	MM.	H. M.	
695	" 12	21 42.1	21 18.5	0.2	0 16	
696	" 20		21 51.1	0.2	0 21	
697	" 21	22 36.0	22 46.5	0.8	0 29	
698	" 29	10 54.4	11 43.4	0.4	1 9	
699	Aug. 1	22 19.3	22 20.3	0.5	0 13	
700	" 11	17 36.0	17 40.0	0.2	0 13	
701	" 17	12 47.5	12 54.5	0.2	0 21	
702	" 21	6 12.0	6 15.0	0.8	0 55	
703	" 21	16 50.8	16 59.0	0.3	0 10	

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

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
704	Sept. 1	H. M.	H. M.	MM.	H. M.	Slight thickening
705	" 1	15 32.0	15 33.0	0.2	0 6	"
706	" 6	20 14.6	20 58.6	1.1	1 39	"
707	" 7	7 40.4	8 31.6	0.4	1 53	"
708	" 7	15 5.5	15 6.5	0.4	0 3	"
709	" 9	1 47.4	2 52.4	0.5	1 55	"
710	" 9	10 18.4	10 32.0	0.2	0 36	"
711	" 18		2 45.0			Thickening
712	" 24		4 43.0	0.2	0 10	"
713	Oct. 4		13 16.2	0.1	0 3	"
714	" 4	23 20.0	23 22.2	0.4	1 2	"
715	" 7	8 4.5		0.1	0 16	"
716	" 7	12 57.4		0.1	0 5	"
717	" 21	5 35.0	5 41.0	0.4	0 44	"
718	" 20		18 45.8			Slight thickening
719	" 24		8 14.5	0.3	0 8	"
720	Nov. 2	13 49.6	14 11.0	0.2	0 22	"
721	" 9	6 22.7	7 8.7	3.9	2 52	Third max. 7h.20.7m. a=4.6mm.
	" 10	13 28.6	13 38.6	0.4	1 12	"
722	" 10	8 34.1	8 42.0	0.2	0 59	"
723	" 15	14 29.0	14 40.8	0.5	2 2	"
724	" 23	15 55.3	16 20.0	0.2	0 30	"
725	" 24		16 37.0	0.1	0 17	"
726	" 25	5 11.2	6 2.5	0.8	2 32	"
727	" 29		1 32.0	0.1	0 3	"
728	" 30	4 40.4	4 43.4	0.2	0 4	"
729	" 30	6 0.0	6 3.0	0.3	0 4	"
730	Dec. 1		16 8.7	0.1	0 2	"
731	" 4		11 26.3	0.2	0 2	"
732	" 10	9 59.1	10 39.5	0.3	0 58	Instrument disturbed for winding.
733	" 13	11 43.6	11 52.3	2	2 19	Beyond scale of paper.
734	" 14	21 22.0	21 24.4	0.2	0 16	"
735	" 15	17 47.2		0.1	0 4	"
736	" 16	15 2.9	15 13.1	1.0	0 56	Light failed at 16h.0m.
737	" 18	20 33.4	20 34.9	0.4	0 5	"
738	" 30		1 14.0			Thickening.

Imm. boom motion = 0^m.30. Boom period 19 seconds.

Register from Ascension Island.
Superintendent, F. MARX.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
1	Nov. 9	H. M.	H. M.	MM.	H. M.	Record spoiled by unaccountable disturb- ance
2	" 10	6 24	6 47.7	9.5	2 46	Tremors
3	" 13	16 53			0 30	"
4	" 14	0 38			0 8	"
5	" 14	11 39			0 6	"
6	" 15	0 38			0 8	"
7	" 15	14 33	14 49	2.5	2 34	True Earthquake
8	" 16	19 3			0 8	Tremors
9	" 17	8 29			0 6	"
10	" 22	13 58			0 16	"
11	" 23	17 7			0 8	"
12	" 29	11 57			0 11	"
13	" 30	11 11			0 54	"

Register from Ascension—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
14	Dec. 2	H. M. 11 6	H. M. 12 5	MM. 1.5	H. M. 0 34	Tremors
15	" 4	12 2	12 5	1.5	0 18	True Earthquake
16	" 5	17 3	17 30	1.0	0 37	"
17	" 8	3 15			0 5	Tremors
18	" 8	11 5			0 10	"
19	" 13	11 46	12 4		1 54	True Earthquake. 1m. = 0" 286.
1911						
20	Feb. 26	12 45	12 51	3.5	1 6	Tremors continuous
21	" 27	11 5			—	" "
22	" 28	19 33			—	" "
23	Mar. 2	19 32			0 15	Tremors
24	" 10	4 50			0 12	"

Between Dec. 13th, 1910, and Feb. 26th, 1911, no records obtained as clockwork under repair.
1 mm = 0" 308 secs. of arc.

Register from Alipore Observatory.—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
700	May 18	H. M. 9 20.3	H. M. 9 40.7	MM. 1.25	H. M. 0 39.7	P ₃ , 9h. 37.6m.
701	" 22	6 34.9	6 42.0	1.00	1 16.8	P ₃ , 6h. 41.5.
702	" 24	18 57.4			0 39.2	Thickening of the line.
703	June 1	5 58.5	6 56.9	1.50	2 21.4	P ₃ , 6h. 19.5m.
704	" 16	6 42.5	6 53.2	+6.00	2 47.8	P ₃ , 6h. 52.7m. *Measured from the base line.
705	" 17	5 33.7	5 50.5	1.00	0 33.5	P ₃ , 5h. 42.3m.
706	" 21	13 37.6	14 16.3	0.50	1 9.7	—
707	" 25	19 40.8	19 51.0	1.00	0 35.5	P ₃ , 19h. 48.9m.
708	" 29	9 7.8	9 13.9	0.75	0 37.5	—
709	" 29	16 44.3	12 3.0	1.50	3 29.2	P ₃ , 11h. 52m.
710	" 29	15 41.0	15 35.9	1.00	1 26.4	P ₃ , 15h. 25.7m.
711	" 30	3 7.7	3 22.0	0.75	0 52.6	—

Sensibility. 1mm. = 0" 38 of tilt.

Register from the Government Observatory, Bombay.
Director, N. A. F. Moos.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
168	July 7	H. M. 8 29.8	H. M. 8 49.4	MM. 2.6	H. M. 0 39.9	
169	" 12	7 42.2	7 43.7	0.2	0 8.6	
176	" 21	22 19.4	22 22.1	0.6	0 19.2	
183	" 29	19 47.7	11 28.0	0.4	1 2.6	
196	Aug. 13	8 0.8	8 1.8	0.3	0 6.3	
197	" 13	21 27.3	21 29.9	0.2	0 6.0	
202	" 17	12 1.9	12 6.8	4.6	1 7.9	
204	" 21	6 0.7	6 5.1	0.4	0 29.3	
212	Sept. 1	6 59.6	1 17.4	2.0	0 39.4	
213	" 1	14 18.9	14 54.7	0.6	1 4.4	
221	" 6	21 16.4	21 27.2	0.4	0 40.5	
222	" 7	7 58.0	8 10.2	0.3	0 27.6	
223	" 9	1 30.5	2 13.6	1.2	1 12.7	
229	" 16	23 27.6	23 36.0	0.2	0 29.0	
236	Oct. 5	9 14.4	9 27.9	0.4	0 33.6	
236	" 7	16 9.7	16 16.2	0.3	0 18.1	
265	" 18	3 42.3	3 44.3	0.3	0 16.0	
268	" 20	5 13.0	5 25.9	2.4	0 55.8	
285	Nov. 9	6 20.3	7 10.0	7.8	3 25.9	
292	" 14	7 50.5	8 10.7	0.1	1 16.0	
293	" 15	14 46.7	15 22.1	2.2	—	End lost in shifting time.
298	" 24	15 45.2	15 55.2	0.5	0 30.0	
301	" 26	4 39.5	5 30.4	1.6	2 42.9	
306	" 29	2 51.7	2 56.8	0.9	0 28.1	
310	Dec. 1	16 3.2	16 22.4	0.9	0 36.1	
312	" 3	8 39.7	8 52.0	0.3	0 21.7	
314	" 4	11 45.4	12 3.8	3.3	0 44.8	
318	" 10	9 43.2	10 28.2	1.5	2 43.8	
322	" 13	11 38.1	12 5.9	11.3	3 43.9	
325	" 16	14 53.2	15 29.1	8.2	—	End lost in shifting time.
326	" 16	18 57.9	19 27.9	1.1	1 12.1	
327	" 18	3 2.5	3 23.1	0.5	0 49.0	
333	" 23	1 0.2	1 5.7	1.1	0 50.3	
337	" 29	13 22.0	13 42.1	0.5	0 43.7	
328	" 30	0 56.7	1 10.0	0.5	0 37.8	

Between July 1 and September 30, 1910, 1.0mm. of amplitude = 0" 41. Between October 1 and December 31, 1910, 1.0mm. of amplitude = 0" 37.

Register from Alipore Observatory, Calcutta.

Director, GILBERT T. WALKER, M.A., F.R.S.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
678	Jan. 1	H. M. 11 32.6	H. M. 12 36.2	MM. 1.30	H. M. 2 21.0	P ₃ , 12h. 22.4m.
679	" 8	15 1.5	15 9.2	0.75	0 38.2	P ₃ , 15h. 7.1m.
680	" 9	9 13.7	9 14.2	0.75	0 3.5	
681	" 15	22 29.3	22 36.9	1.00	0 35.1	
682	" 20	17 44.4	17 46.9	0.75	0 7.6	
683	" 22	9 4.1	9 35.6	3.25	1 54.3	P ₃ , 6h. 24.9 m.
684	" 23	19 23.3			1 50.8	Thickening of the line.
685	" 30	3 43.0	4 53.7	1.50	2 42.2	P ₃ , 4h. 37.9m.
686	Feb. 4	14 14.8	14 24.4	0.75	2 34.1	
687	" 10	8 19.1	8 21.2	0.50	0 11.2	
688	" 12	18 18.2	18 29.9	2.25	0 55.5	P ₃ , 18h. 26.9m.
689	" 27	14 41.8	14 51.4	0.75	0 28.5	P ₃ , 14h. 47.9m.
690	Mar. 2	14 46.1	14 54.2	1.00	0 17.2	P ₃ , 14h. 53.7m.
691	April 1	13 41.0	14 19.1	0.50	1 8.6	
692	" 6	18 38.0			0 49.8	Thickening of the line.
693	" 9	9 10.4	9 20.2	1.50	0 43.7	P ₃ , 9h. 29.2m.
694	" 12		0 38.4	*11.0	1 42.7	P ₃ , 0h. 28.2. *Measured from the base line
695	" 16		12 59.1	1.25	1 18.7	P ₃ , 12h. 45.4m. The clock did not drive the paper from 24th, to the end of the month, and it was under cleaning.
696	May 10	14 24.4			0 12.2	Thickening of the line.
697	" 10	18 49.8	18 53.9	0.50	0 40.2	
698	" 11	15 59.5			0 7.1	Thickening of the line.
699	" 13	11 8.5			1 33.6	

* As the paper was changed at the time when the displacement occurred, the time and max. amplitude cannot be given.

Register from the Solar Physics Observatory, Kodaikānal, Madras.
Director, J. EVERSHED.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
36	July 7	H. M.	H. M.	MM.	H. M.	
37	" 12	8 24.4	8 46.4	2.5 = 1.4	1 33	
38	" 15	7 46.4			0 14	Widening of line (Kashmir).
39	" 21	23 10.5	13 17.2		0 16	" "
40	" 24	16 16.4	16 29.5		0 34	" "
41	" 29	10 46.4	11 22.3	1.1 0.5	1 54	" "
42	Aug. 1	8 06.4	8 08.0		0 16	Widening of line.
43	" 16	7 48.5			0 28	" "
44	" 17	11 51.5	12 14.4	4.0 1.9	1 22	" "
45	" 17	23 33.6	23 36.1		0 26	Widening of line.
46	" 21	5 47.4	6 06.9	0.6 0.3	2 09	" "
47	Sept. 1	0 52.6	1 16.6	3.5 1.7	1 19	" "
48	" 1	14 33.1	14 52.6	0.8 0.4	0 53	" "
49	" 6	20 26.4	21 30.0	1.0 0.5	1 42	" "
50	" 7	6 35.2	8 05.1	0.6 0.3	3 03	" "
51	" 9	1 25.9	2 18.1	0.6 0.3	2 47	Many small maxima.
52	" 9	9 36.2			1 49	Widening of line.
53	" 10	12 38.6	12 50.0		0 47	" "
54	" 12	16 42.7			0 09	" "
55	" 14	14 09.0	14 52.3	0.1 0.2	1 00	" "
56	" 16	23 16.8			0 41	Widening of line.
57	Oct. 4-5	12 54.6			0 17	" "
58	" 7	16 04.7	16 11.6	0.4 0.2	0 20	" "
59	" 11	3 02.8	3 40.3	0.6 0.2	1 03	" "
60	" 18	5 02.8	5 17.2	1.7 0.6	0 52	" "
61	" 20	6 10.5	7 06.0	7.5 3.8	0 52	‡ Possibly not till 6h. 13.1m.
62	Nov. 9	7 11.0	7 11.0	7.0 3.6	3 26	" "
63	" 14	7 44.4	8 06.0	0.5 0.3	1 20	" "
64	" 15	14 46.4	15 27.1	0.7 0.4	1 35	" "
65	" 24	15 50.4	15 50.4	0.6 0.3	0 25	" "
66	" 25	20 57.7	21 06.9		0 21	Widening of line.
67	" 26	5 53.6	6 41.2	5.0 2.4	3 43	" "
68	" 29	2 41.6	6 43.8	5.0 2.4	3 49	" "
69	Dec. 1	15 57.8	2 55.4	1.6 0.8	0 49	" "
70	" 3	8 33.6	16 15.3	2.5 1.2	1 07	Widening of line.
71	" 4	11 37.9	8 52.6		0 44	" "
72	" 10	9 42.3	11 58.8	1.1 0.5	1 01	" "
73	" 13	11 42.7	10 22.6	2.0 0.9	2 36	" "
74	" 13	11 42.7	12 06.5	15.2 7.2	3 30	" "
75	" 16	14 50.6	15 19.4	15 7.1	3 50	" "
76	" 16	19 01.9	19 27.7	1.6 0.8	1 00	" "
77	" 18	2 52.6	3 04.9	0.6 0.3	1 13	" "
78	" 18	5 38.2	5 42.8	0.4 0.2	0 15	Widening of line.
79	" 23	19 23.4			0 25	" "
80	" 23	1 04.9	1 08.9	0.8 0.4	0 40	" "
81	" 29	13 12.5	13 38.6	0.4 0.2	1 02	" "
81	" 30	0 55.8	1 09.1	1.0 0.5	1 00	" "

Register from the Observatory, Colombo, Ceylon.
Superintendent, H. O. BARNARD, F.R.A.S., F.R.M.S.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
64	June 30	H. M.	H. M.	MM.	H. M.	
65	July 4	3 9.0	3 24.8	0.5	0 24	
66	" 4	15 35.0	15 37.5	0.3	0 10	
67	" 4	16 43.8	16 47.0	0.2	0 10	
68	" 4	18 41.0	18 43.5	0.2	0 58	
69	" 5	11 42.0	11 42.2	0.9	0 1	Doubtful.
70	" 7	8 28.0	8 42.4	3.2	1 31	
71	" 8	4 10.2	4 25.0	0.5	0 26	
72	" 21	22 19.5	22 23.2	0.4	0 11	
73	" 24	16 22.0	16 26.0	0.2	0 17	
74	" 29	10 45.2	11 20.5	0.5	1 12	
75	Aug. 10	20 26.0	20 40.0	0.3	0 27	
76	" 12	2 16.5			0 3	
77	" 13	8 9.7	8 15.0	0.2	0 10	
78	" 17	12 10.2	12 13.7	2.4	0 29	
79	" 17	23 29.0	23 32.1		0 5	
80	" 21	5 55.4	6 5.8	0.8	1 15	
81	Sept. 1		1 13.7	3.0	> 0 50	
82	" 1	14 34.7	14 50.5	1.0	0 44	
83	" 6	21 18.7	21 26.2	0.4	0 45	
84	" 7	7 21.9	7 32.8	0.4	1 30	
85	" 9	1 36.5	2 25.0	0.5	1 20	
86	" 14	14 7.3	14 29.0	0.2	0 47	
87	" 16	23 33.0			0 2	
88	Oct. 7	16 6.1	16 9.3	0.9	0 25	
89	" 20	5 13.6	5 16.3	1.4	0 46	
90	Nov. 9	6 14.5	6 25.8	4.5	3 16	
91	" 15	14 47.5	15 22.5	1.0	1 22	
92	" 24	15 46.8	15 50.4	0.6	0 44	
93	" 26	4 55.0	5 16.4	2.0	3 10	
94	" 29	2 41.7	2 57.6	0.5	0 35	
95	Dec. 1	15 57.5	16 14.4	1.9	0 57	
96	" 3	8 20.4	8 35.0	0.3	0 36	
97	" 4	11 26.7	11 54.7			
98	" 10	9 53.9	10 24.7	1.5	1 56	
99	" 13	11 47.0	12 7.8	12.4	3 21	
100	" 14	21 2.9	21 15.0	0.3	0 52	
101	" 16	14 52.0	15 13.4	16.4	9 6	
102	" 16	19 2	19 24.0	2.0		
103	" 18	3 0.8	3 16.8	1.1	0 40	
104	" 18	4 38.4	5 42.8	0.4	0 12	
105	" 18	19 20.9			0 7	
106	Dec. 21	0 53	1 0.6	0.4	> 0 18	
107	" 23	1 9	1 15.7	0.5	0 26	
108	" 29	13 21.9	13 37.2	0.7	0 47	
108	" 30		1 4	1.1	> 0 37	

In Cir. No. 22, Record No. 52, on May 1, 1910, con. should read 18 53.7, not 18 35 as printed.

Sensitivity : Angle per mm. :
 June 26 0.50
 Oct. 19 0.32
 Nov. 17 0.55
 Dec. 8 0.59

Air tremors specially noticeable on : July 9, 10, 11, 23, 24. Oct. 15, 11. Nov. 18. Dec. 9.

Register from the Syrian Protestant College Observatory, Beirut, Syria.
Observer, ALFRED H. JOY, M.A.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1910						
		H. M.	H. M.	MM.	H. M.	
442	Jan. 16	11 36.5	11 40	0 7	0 7	Thickening.
443	" 17	10 16	10 20	0 8.5	0 8.5	"
444	" 22	9 1	9 22	2.2	1 43	"
445	" 23	19 14	19 50	0.5	1 33	"
448	" 30	4 22	5 23.5	0.7	1 34	"
447	Feb. 3	18 10	18 11.5	0.2	0 2	"
448	" 4	14 23.5	15 30	0.6	2 28	"
449	" 4	17 59.5	18 0.5	0 2	0 2	Thickening.
450	" 4	18 55.5	19 0.5	0.4	1 35	"
451	" 12	18 50.5	19 12	0.4	1 8	"
452	" 28	21 23	22 9	1 0	1 0	Thickening.
453	Mar. 25	15 54	16 9	0.5	0 39	"
454	" 30	17 19	18 20.5	1.8	2 35	Interrupted by cleaning lamp.
455	" 31	19 6	19 20.5	1.3	1 17	"
456	April 1	14 49	0 52.5	2.2	0 16.5	Thickening.
457	" 12	0 32	0 47.5	1.1	0 38	"
458	" 16	1 35	1 47.5	1.1	0 38	"
459	May 1	18 55	19 58.5	0.8	1 39	"
460	" 10	18 41.5	18 53.5	0.8	0 29	"
461	" 13	8 28	9 4	0.4	0 58	"
462	" 18	9 19	9 21	0.7	0 55	"
463	" 22	6 28.5	7 9	1.2	1 36	"
464	" 23	19 33.5	19 41.5	0 7	0 17	Thickening.
465	" 26	8 11.5	8 12.5	0.3	0 5	"
466	" 28	6 44.5	6 53	0.4	0 23.5	"
467	" 30	12 43	12 44.5	0.3	0 9	"
468	" 31	5 25	5 26.5	0 8	0 8	Thickening.
469	" 31	5 57	6 9	0.3	1 26	"
470	June 1	6 19	6 20	0.3	0 40	"
471	" 1	7 2	7 24.5	1.3	2 0	"
472	" 7	2 14.5	2 15	0.3	0 6	"
473	" 9	12 11	0 52	0 11	0 52	Thickening.
474	" 10	19 37.5	19 45.5	0 11	0 11	"
475	" 12	20 41.5	20 43	0.3	0 13.5	"
476	" 14	19 50.5	20 26.5	0.3	0 40	"
477	" 16	6 48.5	6 53.5	2.9	3 0	"
478	" 17	5 47.5	5 38	0 50	7 57	Thickening.

Pentulum period 15sec.

Register from the Honolulu Observatory.
Observer, O. H. GAARDEN.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	End.	Remarks
1910						
		H. M.	H. M.	MM.	H. M.	
744	July 3	18 03.4	18 05	0.2	18 05	Tremors.
745	" 3	11 08.2	11 18	0.2	11 18	"
746	" 4	53.2	4 56.3	0.6	3 17	Small shock.
747	" 7	8 41.0	9 22.0	0.5	10 55	"
748	" 11	20 52.7	21 10	0.1	21 10	Very small tremor.
749	" 12	21 53.1	22 30	0.2	22 30	Tremors.
750	" 15	12 35.4	13 19	0.3	13 19	Tremors.
751	" 15	22 05.2	22 18	0.5	22 18	Tremors.
752	" 21	7 42.8	8 16	1.1	8 16	"
753	" 22	0 14.5	0 23	0 23	0 23	Tremors.
754	" 29	10 36.9	11 04.6	2.0	13 28	Second P.T. at 10h.45.4m.
755	Aug. 1	24 13.3	24 26	0.1	24 26	Tremors.
756	" 2	7 09.0	7 29	0.1	7 29	"

Register from Honolulu.—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	End.	Remarks
		H. M.	H. M.	MM.	H. M.	
757	Aug. 3	1 38.4	1 49.0	2.1	4 37	"
758	" 6	20 38.0	20 38.0	0.4	20 50	Tremors.
759	" 7	21 03.5	21 03.5	0.2	21 10	"
760	" 8	9 18.0	9 18.0	0.1	9 29	"
761	" 8	17 36.3	17 47.7	0.3	17 58	Second P.T. at 17h.40.6m.
762	" 11	16 51.4	17 08.5	0.3	17 41	"
763	" 15	15 35.5	15 35.5	0.4	15 48	Tremors.
764	" 17	23 45.8	23 45.8	0.3	23 52	"
765	" 21	5 45.7	5 51.3	2.5	8 55	"
766	Sept. 1	0 56.2	1 28.0	0.7	3 39	Second P.T. at 1h.08.5m.
767	" 1	14 39.5	15 05.7	1.1	17 55	Beginning and end obscured by air tremors.
768	" 3	1 49.8	1 49.8	0.2	1 55	Tremors.
769	" 5	23 47.5	23 47.5	0.2	23 52	"
770	" 6	20 27.0	20 53.4	2.1	22 40	"
771	" 7	7 19.9	7 45.0	4.2	11 20	Second P.T. at 7h.28.2m.
772	" 8	5 43.5	6 02.9	0.2	6 07	Tremors.
773	" 9	0 53.5	1 33.3	7.7	5 09	"
774	" 9	9 17.2	9 26.5	0.6	10 59	Second P.T. at 9h.22.5m.
775	" 10	12 35.5	12 57.8	0.6	13 42	Second P.T. at 12h.42.8m.
776	" 16	23 30.5	23 51.5	0.3	24 20	"
777	" 18	1 40.0	2 05.5	0.7	2 27	Second P.T. at 1h.54.8m.
778	" 24	3 38.8	4 03.7	0.6	5 24	Second P.T. at 3h.52.0m.
779	" 24	11 29.5	11 29.5	0.4	11 33	Tremors.
780	" 24	16 06.7	16 06.7	0.4	16 18	"
781	" 24	19 53.0	19 53.0	0.2	19 28	"
782	Oct. 2	22 00.5	22 00.5	0.2	22 20	"
783	" 3	11 21.7	11 21.7	0.2	11 27	"
784	" 4.5	23 17.4	23 50.7	0.3	1 12	Possibly second P.T. at 20h.25.0
785	" 6	22 34.3	22 34.3	0.2	22 28	Tremors.
786	" 7	7 03.5	7 13.8	0.2	8 18	Second P.T. at 7h.08.3m.
787	" 7	12 01.6	12 18.2	0.2	13 09	Second P.T. at 12h.09.4m.
788	" 11	20 48.1	20 48.1	0.2	21 20	Tremors.
789	" 12	3 32.5	3 32.5	0.1	3 35	"
790	" 11	4 29.0	4 29.0	0.1	4 32	"
791	" 18	2 53.0	3 07.5	0.5	4 01	"
792	" 20	5 53.4	6 13.2	0.2	7 18	"
793	" 25	4 41.5	4 41.5	0.2	4 52	"
794	" 30	7 36.5	7 36.5	0.4	8 51	"
795	Nov. 2	14 00.4	14 00.4	0.3	14 28	"
796	" 4	6 24.0	6 24.0	0.2	6 28	"
797	" 6	20 43.8	20 48.5	2.0	22 00	"
798	" 9	6 11.1	6 30.0	6.0	10 30	Second P.T. at 6h.19.0m.
799	" 9	9 00.5	9 00.5	1.0	10 30	Second P.T. at 8h.44.0m.
800	" 10	1 24.0	1 24.0	0.2	1 29	Tremors.
801	" 10	12 39.0	12 48.4	6.2	14 16	"
802	" 14	7 55.0	8 19.9	0.8	9 17	Second P.T. at 12h.36.0m.
803	" 15	14 43.0	15 29.0	0.6	17 00	Obscured by air tremors.
804	" 17	22 20.4	22 20.4	0.2	22 24	Tremors.
805	" 25	19 22.0	19 33.8	0.2	20 27	Second P.T. at 19h.27.0m.
806	" 26	4 49.3	5 07.7	16.9	9 15	Second P.T. at 4h.57.1m.
807	" 29	2 47.2	3 06.6	0.7	3 45	Second P.T. at 2h.59.4m.
808	Dec. 1	4 02.5	4 02.5	0.2	4 16	Tremors.
809	" 1	16 27.0	16 27.0	1.6	16 28	Second P.T. at 16h.14.3m. obscured by air tremors.
810	" 2	4 00.0	4 00.0	0.1	4 19	Tremors.
811	" 3	4 17.2	4 33.0	0.4	4 47	Second P.T. at 4h.21.0m.
812	" 3	8 18.0	8 38.5	0.3	9 07	Second P.T. at 8h.27.0m.
813	" 4	11 25.7	11 53.0	0.5	13 45	Second P.T. at 11h.41.1m.
814	" 5	16 43.5	16 58.5	1.2	17 33	"
815	" 10	9 39.0	9 54.5	20.0	13 22	Second P.T. at 9h.43.3m.
816	" 11	4 10.0	4 10.0	0.2	4 23	Tremors.
817	" 11	24 08.5	24 08.5	0.2	24 57	Tremors.
818	" 13	11 57.5	13 21.3	3.4	14 30	Second P.T. at 12h.30.0m.
819	" 14	17 21.6	17 21.6	0.7	17 26	Obscured by air tremors.
820	" 14	21 03.4	21 03.4	1.0	21 38	Beginning obscured by air tremors.
821	" 16	15 26.2	15 26.2	0.2	20 40	Second P.T. at 15h.6.5m.
822	" 16	23 58.0	23 58.0	0.2	24 30	Tremors.
823	" 18	2 57.5	3 27.0	1.6	4 15	Second P.T. at 3h.07.0m.
824	" 18	21 32.5	21 32.5	0.2	21 38	Tremors.
825	" 21	11 01.0	11 01.0	0.3	11 09	"
826	" 23	0 48.2	1 02.2	0.5	1 45	Second P.T. at 0h.53.0m.
827	" 26	5 43.8	6 04.0	0.4	6 45	Second P.T. at 5h.52.3m.
828	" 27	4 21.0	4 21.0	0.2	4 38	Tremor doubtful.
829	" 27	19 39.3	19 39.3	0.2	19 53	"

Register from Honolulu.—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	End.	Remarks
830	Dec. 29	H. M. 13 27.7	H. M. 13 31.5	MM. 0.6	H. M. 9 10	Tremor.
831	" 29	13 27.7	13 17.0	0.4	11.15	Tremor.
832	" 30	0 02.0	1 10.9	1.0	1.55	Tremor.
833	" 30		3 32.0	0.2	3.46	Tremor.
Period of Pendulum up to December 15, 19-lsec. after December 15, 20.0sec.						
Sensitiveness:						
July 1 to August 16 0".47 tilt per mm. deflection.						
August 16 to September 24 0.44 " " "						
September 24 to December 15 0.43 " " "						
December 15 to December 31 0.24 " " "						
No. 797.—Secondary maximum at 7.32. End confused with beginning of next earthquake.						
No. 798.—Secondary maximum at 6.41, 7.37, 8.37.						
No. 815.—Maximum amplitude too great to measure accurately.						
No. 818.—End obscured by air tremors. Phases not well defined.						
No. 821.—Beginning and end obscured by air tremors.						

Register from Government Astronomical Observatory, Adelaide, S. Australia
Director, G. F. DODWELL, B.A., F.R.A.S.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
1909						
1	Jan. 1	H. M. 10 39.2	H. M. 12 18.5	MM. 0.75	H. M. 4 21	
2	" 1	16 55.7			3 56	Slightest possible with occasional in- crease in amplitude.
3	" 2	13 3.5			0 26	Slightest possible.
4	" 5	8 20			0 53	Slightest possible.
5	" 5	13 44	13 47	< 0.1	0 49	" "
6	" 7	6 2.7	7 4.7	0.2	4 45	" "
7	" 8	0 44			0 22	Slightest possible.
8	" 8	4 27	5 11.7	0.1	1 48	" "
9	" 8		11 9.9	< 0.1	2 12.2	Beginning and end uncertain.
10	" 13	13 37.1	13 56.1	1.25	2 12.2	" "
11	" 14	11 20.7			0 12	Slightest possible.
12	" 14	12 8.5			0 16	Very slight.
13	" 15	0 51.6	10 54.4	0.6	14 2	Two earthquakes together. J.M.
14	" 15	22 29.6	22 37.9	0.35	11 0	" "
15	" 15	23 30			?	Very slight com. mixed up with end of 14
16	" 18	13 41.1			0 5	Very slight.
17	" 19	11 50.5			2 45	" "
18	" 19	15 1.2	15 20.5	0.7	1 55	Com. not quite certain.
19	" 19	17 59.4			4 0	Very slight.
20	" 22	8 58.3	9 48.25	0.15		" "
20a	" 22		21 5.4			" "
21	" 22	22 39.4			0 1	Slightest possible.
22	" 23	19 23.5	19 35	0.2	2 6	" "
23	" 24	5 15			0 22	Very slight.
24	" 25	0 25.2			8 17	Slightest possible.
25	" 26	1 1.8			0 41	Very slight.
26	" 26	16 25	16 32.7	0.5	0 52	" "
27	" 26	17 55.1			3 55	" "
28	" 28	6 42.1			2 32	" "
29	" 28	13 54.1			1 6	" "
30	" 28-29	18 50	2 55.2	0.2	?	Several earthquakes together.

Register from Government Astronomical Observatory, Adelaide, S. Australia.—continued.

No.	Date	Com- mence- ment	Max.	Max. Ampli- tude	Dura- tion	Remarks
31	Jan. 29	H. M. 5 13.5	H. M. 5 34.8	MM. 0.3	H. M. 3 45	End lost in tremors.
32	" 30	3 50.8	3 58.8	13.5		Slightest possible.
33	" 30	10 57.7			6 2	" "
34	" 30	16 58.7	17 9.7	0.1	0 58	Very slight.
35	" 31	9 29			0 58	" "
36	" 31	10 52.3			2 2	" "
37	Feb. 2	5 1			4 7	" "
38	" 2	11 15.8				" "
39	" 4	14 6.9	14 23	5.3		End lost in No. 40.
40	" 4	17 43.7	17 37.7	2.9		" "
41	" 8	11 37.2				" "
42	" 9	7 53.6	8 5.25	0.6	1 8	" "
43	" 12	17 55.2	(18 29.5	1.25	?	Very slight till 18h. 29.2m., then there
			(18 32.6	0.95		is a sudden jerk to E. max. occurs
						3 min. later. End lost in A6.
44	" 13	10 8	10 19.9	0.25	1 4	" "
45	" 13	16 28.5	(16 33.25	0.7	1 21	" "
			(16 36.5	0.6		" "
			(16 39.2	0.5		" "
46	" 13	18 44.7			0 34	" "
47	" 14	17 21.7	17 36	0.15	0 54	Very slight.
48	" 16	2 31.7			0 22	" "
49	" 16		20 37.1			Very slight.
50	" 18	2 34.2	2 40.2	0.1	0 10	" "
51	" 18	5 7.2			0 8	" "
52	" 18	5 40.3			0 12	" "
53	" 18	5 30.3			0 7	" "
54	" 19-20	23 30	1 8.3	< 0.1	2 2	" "
55	" 22	1 4.5	1 16.5	< 0.1	1 13	Very slight.
56	" 22	8 50.9			0 3	" "
57	" 23		11 49.9	0.3		" "
58	" 25	0 40.7			0 46	" "
59	" 26	1 51.2			0 4	" "
60	" 26	7 46.7			0 40	" "
61	" 27	14 45	15 1.5	< 0.1	0 44	" "
62	Mar. 1	0 19.4				" "
63	" 4	4 52	5 5	0.1	0 17	" "
64	" 4	9 58.9	10 0	0.1	0 10	Very slight.
65	" 4	15 37.4			0 6	" "
66	" 4	16 56.8			0 1	" "
67	" 4	17 59.4			0 9	" "
68	" 7	21 46.8			0 43	" "
69	" 11	6 34.9			0 16	" "
70	" 11	7 49	8 15.5	< 0.1	0 44	" "
71	" 11	15 2.1			0 5	" "
72	" 13	14 14				" "
73	" 13	21 11.5				" "
74	" 17	3 31.4	3 51.4	< 0.1	0 6	" "
75	" 18	14 5.1	14 7.6	< 0.1	0 8	Slightest possible.
76	" 18	19 29.8			0 7	" "
77	" 19	1 10			0 13	Very slight.
78	" 21	0 1.5			0 11	" "
79	" 21	23 0.4	23 34.2	< 0.1	1 54	Slightest possible.
80	" 22	1 8.4			0 3	" "
81	" 23	1 29.8	1 55.5	< 0.1	2 1	Slightest possible.
82	" 23	5 34.7			0 2	Very slight.
83	" 23	13 3.1			0 5	" "
84	" 24	20 15.7			0 13	" "
85	" 24	21 6.4			0 44	" "
86	" 25		21 19.8	0.2		" "
87	" 26	0 15.5			2 20	" "
88	" 27	4 13.7			0 10	" "
89	" 27	4 59.7			0 50	" "
90	" 27	11 27.2	11 35	0.15	2 4	" "
91	" 29	6 2.7	6 3	0.1	0 22	" "
92	" 30	15 19.2	15 31.9	0.1	0 54	" "
93	" 30	17 2.1	17 12.6	5.5		End lost in tremors, P ₂ 17h.17m.
			17 15.6	7.1		" "
			17 19.7	6.2		" "
94	April 1	13 59.3	14 5.9	4.1		End uncertain. Submarine nr. Kawahi, N.Z.
95	" 6	2 49.9			0 59	Very slight.
96	" 8	16 16			0 11	" "
97	" 8	16 42.5	17 6.7	0.9		" "

Register from Government Astronomical Observatory, Adelaide, S. Australia.—continued.

No.	Date	Com-mence-ment			Max.	Max. Ampli-tude	Dura-tion	Remarks
		H.	M.	MM.				
98	April 9	11	30.5			1 0	Very slight.	
99	" 9	11	30.5			1 0	"	
100	" 10	1	38.7	2	42.7	0.2	"	
101	" 11	8	4.3			0 8	"	
102	" 11	8	32.8			0 3	"	
103	" 15	5	4.7	5	49	1.0	"	
104	" 15	7	21.1	8	31.3	0.2	"	
105	" 14	29	18.2	21	53.1	0.15	"	
106	" 15	6	32.3				Very slight.	
107	" 16	12	36.5	12	47	5.0	P ₂ 13h. 41.6m.	
108	" 17	0	47.1			0 7	Very slight.	
109	" 17	1	8.5	2	7.3	0.2	"	
110	" 19	11	14.5	13	25.7	0.2	The 1st max. continues of uniform amp. for 55min.	
111	" 20	22	29.7	22	45.1	0.5	"	
112	" 22	5	1.6			1 18	Very slight.	
113	" 22	8	1.4				"	
114	May 1	18	38.1	18	54.4	8.5	End uncertain. P ₂ 18h. 42.1m. New Guinea	
115	" 4	2	4.0			0 5	Very slight.	
116	" 4	15	46.2	15	51.3	0.6	"	
117	" 4	18	8.5			10 37.2	"	
118	" 6	1	3.9	1	8.1	0.1	"	
119	" 6	5	43.5			0 24	Very slight.	
120	" 6	11	32.5				"	
121	" 6	23	26.7	23	35.1	0.3	"	
122	" 9	8	26.5			0 1	Slightest possible.	
123	" 9	10	26.6			0 12	"	
124	" 9	15	5.2			0 2	"	
125	" 10			19	4.5	0.1	"	
126	" 11	14	7.4			0 3	Very slight.	
127	" 11	15	36.1			0 7	"	
128	" 11	16	12.3	16	45.4	0.1	"	
129	" 11	18	32.2			0 13	Very slight.	
130	" 11	19	7			0 57	"	
131	" 13						"	
132	" 13	8	12	8	51.9	0.2	"	
133	" 14	12	23.6				Very slight.	
134	" 15			4	56.3	0.2	"	
135	" 15	16	11.3	16	24.2	1.2	"	
136	" 16	4	46.4	4	49.9	0.1	"	
137	" 16	5	32.2	6	2.3	0.1	"	
138	" 16	13	31.0	14	18.7	0.1	"	
139	" 18	9	27.3	9	57.3	0.1	"	
140	" 20	4	8			2 29	Slightest possible.	
141	" 20	12	13				"	
142	" 21	22	54.6	23	6.9	0.4	Very slight.	
143	" 22	6	36.1	7	11	0.3	"	
144	" 26	10	38.5			0 40	Very slight.	
145	" 27	7	41.2			2 28	"	
146	" 27	10	38				"	
147	" 31	5	5.7	6	8	0.3	"	
148	" 31	6	2.4	6	16.1	2.0	P ₂ 6h. 7.4m.	
149	June 1	18	29.7	18	32	1.2	Boom partially aground.	
150	" 7	2	47.6			0 37	Very slight.	
151	" 7	11	22.5			0 57	"	
152	" 8	12	17.8			0 3	"	
153	" 8	12	40.6			2 20	"	
154	" 9	12	7.8	12	22.3	0.2	"	
155	" 13	2	52.3			1 4	Very slight. End uncertain.	
156	" 13	11	30.1	11	53.4	0.1	"	
157	" 13	13	12.3	13	27.8	0.2	"	
158	" 13	14	35.1			0 37	Slightest possible.	
159	" 14	7	41			0 19	Very slight.	
160	" 14			18	55.4	0.2	"	
161	" 15	11	54.8			0 17	"	
162	" 15	6	37.2				"	
				6	50.5	44.8		
				7	6	3.6		
				7	12.7	3.5		
				7	18.7	3.1		
				7	27.2	3.8		
				7	35	2.7		
				7	37.8	3.5		

Register from Government Astronomical Observatory, Adelaide, S. Australia.—continued.

No.	Date	Com-mence-ment			Max.	Max. Ampli-tude	Dura-tion	Remarks
		H.	M.	MM.				
163	June 16	18	36.5			0 52	Very slight.	
164	" 18	11	50.2				"	
165	" 21	10	37.8			0 3	Slightest possible.	
166	" 21	14	16				End lost.	
167	" 22	13	26.2				"	
168	" 22			19	37.9	0.2	"	
169	" 23			3	14.4	0.3	"	
170	" 23	10	10.3	10	17.5	0.3	"	
171	" 24	14	1.6			1 50	Very slight.	
172	" 24	18	1.8			0 5	"	
173	" 25	15	40.4			0 36	"	
174	" 25	20	23.4			1 3	"	
175	" 26	16	46.7			0 15	"	
176	" 27	13	43.4			3 17	"	
177	" 29	10	56	11	11	2 0	Times approximate.	
				11	18.4		"	
178	" 29	14	26	14	43	4.0	"	

Register from Perth Observatory, Western Australia.
Director, W. E. COOKE.

No.	Date	Com-mence-ment			Max.	Max. Ampli-tude	Dura-tion	Remarks
		H.	M.	MM.				
1910								
11	July 7	8	21.0	8	31.8	5.0	1 19	
12	" 8	4	6.4	4	13.0	3.0	0 38.4	
13	" 29	19	34.2	10	47.0	0.0	1 55.0	
14	Aug. 10	20	24.0	20	33.7	1.5	0 56.3	
15	" 16	7	39.9	7	47.8	1.6	0 43.8	
16	Sept. 7	7	19.5	7	39.0	4.25	1 13.0	
17	" 9	9	15.0	9	47.6	2.25	1 15.0	
18	" 10	12	35.5	12	55.0	1.0	0 30.0	
19	" 11	14	5.0	14	13.0	1.5	0 16.0	
20	Oct. 20	5	12.9	5	23.0	4.0	1 13.7	
21	" 30	7	54.1	8	14.5	1.0	1 14.7	
22	Nov. 8	17	05.8	17	11.7	1.9	0 7.8	
23	" 9	0	57.2			0.6	0 38.8	
24	" 9	6	08.7	6	32.6		4 47.3	Against stops.
				7	0.0			
25	" 15	13	34.6	13	51.0	1.2	2 56.4	
26	" 25	19	21.3	19	37.3	1.2		
27	" 26	4	50.2	5	12.0		6 15.6	Against stops.
				5	15.2			
28	Dec. 1	3	53.0	3	34.0	0.8		
29	" 1	15	30.8	16	07.0	3.5	1 27.5	
30	" 2	3	24.5	3	32.0	0.6		
31	" 1-2	23	0.9	1	43.4			Decided thickenings, vertical movements
32	" 2-3	23	28.0	0	27.4			"
33	" 5	8	3.9	8	12.7	5.0	1 40.9	
34	" 4	11	5.0	11	19.4	6.8	3 1.2	
35	" 16	9	35.7	10	51.0	0.6	Over 2h.	Against stops.
36	" 17	11	50.0	12	25.0	11.5	4 27.3	
37	" 14	20	55.9	21	21.0	2.4	1 17.3	
38	" 16	14	52.8	15	5.5			Against stops.
				16	20.0			
39	" 16	19	6.6	19	15.9	2.3	5 28.7	
40	" 18	2	54.0	3	11.4	1.4		
41	" 27	19	4.9	19	16.0	0.6	0 53.8	
42	" 29	13	20.0	13	27.8	1.0	1 20.3	
43	" 30	0	57.3	1	10.5	1.1	1 29.4	

June 30, 11m = 0°53. Dec. 8, 11m. = 0°56.

Register from Mauritius R. A. Observatory.
Director, T. F. CLAXTON, F.R.A.S.

No.	Date	Com- mence- ment		Max.	Max. Ampli- tude	Dura- tion	Remarks
		H.	M.				
1910							
811	Jan. 1	11	36.0	12 25.5	1.1	1 25	In N.S. very slight, principal move- ments 11.5 to 14h.
812	" 5	5	17.2			0 5.5	Very irregular movements in both booms.
813	" 13	22	41.1			0 21	Very slight.
814	" 16	11	13.1	11 16.1		0 9	
815	" 17	9	49.3	9 52.3		0 6	
816	" 22	9	18.1	9 51.6	0.5	1 11	Register faint in N.S.
817	" 23	19	18.6	19 55.6		1 4.5	
818	" 30	4	7.7	4 27.7	1.5	1 0.5	
819	" 30	4	8.2	4 30.7	3.0	0 32.5	(N.S.)
820	Feb. 3	17	6.0	17 8.0		0 17	
820	" 4	14	25.5	14 58.0	3.0	1 27.5	(N.S.)
821	" 4	14	25.5	14 59.5	1.0	1 27.5	(N.S.)
821	" 4	18	39.5	18 34.5	1.7	0 17	(N.S.)
822	" 4	19	27.0	19 30.0	1.0	0 11.5	N.S. very slight.
823	" 12	9	31.9			0 2	14th-19th. Frequent tremors. A cyclone passed south of Mauritius 14th-17th. And a second cyclone to east and south of Rodrigues, 17th-20th.
824	Mar. 30	17	21.4	17 55.4	5.0	2 30	(N.S.)
825	" 31	17	21.4	17 55.9	1.5	2 30	(N.S.)
825	" 31	18	40.9	19 50.9	1.0	1 19	A second maximum at 19h.57.9m.
826	April 2	13	5.0	13 11.0		0 15	(N.S.)
827	" 8	17	35.7	17 43.7		0 15.5	
828	" 12	0	35.9	0 46.9	2.0	1 28	A second maximum at 1h.6.4m. (1.2mm.)
829	" 16	0	55.9	0 57.4	0.8	1 21	(N.S.)
829	" 16	12	31.5	13 16.5	0.5	0 47	In N.S. slight and register faint.
830	" 17	1	7.0	1 27.5	0.8	0 38.5	(N.S.)
831	" 17	1	8.0	1 29.5	1.0	0 57.5	(N.S.)
831	" 24	11	27.2			0 5	(N.S.)
832	" 25	11	29.2			0 10	(N.S.)
832	" 25	4	38.1	4 40.4		0 10	Very irregular movements. Seismic origin uncertain.
833	" 27	4	38.4			0 7	(N.S.)
833	" 27	2	31.3	2 41.3	1.0	0 30.5	(N.S.)
833	" 27	2	36.3	2 46.8	0.5	0 24	(N.S.)
834	May 1	18	52.9	19 28.4	3.0	1 40	(N.S.)
834	May 1	18	55.4	19 32.9	1.5	1 31.5	(N.S.)
835	" 5	1	45.0			0 10.5	Slight thickenings.
836	" 9	18	23.7			0 4.5	Seismic origin uncertain.
837	" 10	18	30.3	18 25.8	0.5	0 36.5	(N.S.)
837	" 10	18	18.8	18 31.8	0.6	0 44	(N.S.)
838	" 13	9	20.5			0 48	Very slight thickenings.
839	" 14	8	50.9			0 6	Seismic origin uncertain.
840	" 15	16	37.3			0 14	
841	" 18	9	12.3	9 18.3	2.0	0 26.5	(N.S.)
842	" 20	9	12.3	9 20.3	1.0	0 22.5	(N.S.)
843	" 21	13	14.5	13 22.0		0 16	
843	" 21	14	32.0			0 6.5	Irregular movements in both components
844	" 22	6	50.8			1 6	In both components.
845	" 28	6	34.6	6 40.6		0 12	
846	" 31	6	18.2	6 31.2		0 43	In N.S. thickenings.
847	" 31	13	32.2	13 34.2		0 7	In N.S. very irregular.
848	June 1	6	13.3	6 34.8		2 20	
848	June 1	6	13.3	6 35.3		7 45.3	
849	" 1	6	13.3	6 37.8		2 20	(N.S.)
849	" 9	12	30.9	12 41.9		0 20	
850	" 12	6	3.7	6 9.2		0 12.5	(N.S.) in E-W. very slight.
851	" 16	6	43.3	7 27.3		2 45	(N.S.)
852	" 17	6	47.8	7 29.8		0 7	
853	" 25	9	10.9	9 13.9		1 6	
853	" 25	19	5.3	19 38.3		0 12	(N.S.)
854	" 29	11	9.8	11 35.8		2 26	Times correspond in both components. In E-W. frequent large oscillations occur nearly equal to maximum.
855	" 29	15	9.8	15 27.3		0 41	(N.S.)
855	" 29	15	10.8	15 21.3		1 0	(N.S.)
856	" 30	3	18.8	3 19.8		0 23	

Num. of ordinate 0.5 for E-W. and N-S. component.
Unless otherwise stated times refer to E-W. component.