

Earthquake Records by Milne Seismograph, Meridian boom
 Register from Stonyhurst College Observatory Lat $55^{\circ} 50' 45''$ N. Long.
 Director, Walter Sidgreaves, S. J.

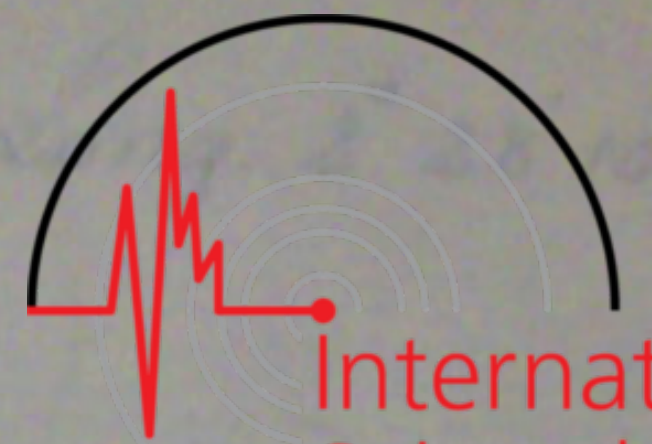


No.	Date 1909	Commence- ment		Max.		Max. Ampli- tude	Duration	Remarks
		P_1	M	A	D			
		$h. m.$	$h. m.$	$mm.$	$h. m.$			
	July 6	16 55.5	17 1.5	0.4	0 23.5			Boom period 15.0 sec.
	"	19 25.5	19 35.	5	0 20.			
	7	21 44.	22 7.5	7.5	2 24.			P_1, A 1.1 mm. - P_2 at 21.5.2. India North
	8		12 42.	5				
		19 25.5	19 35.5	0.2	0 30.			Film 12, 13 failed
	13	13 32.0	13 40.5	0.2	30.			
	15	0 44.2	0 51.5	0.5	30			Greece
	18		8 42.0	5				
	"	4 1.0	4 53.2	0.1	1 00			
	22	23 48.	-	5	40			
	30	11 4.5	11 55.0	7.0	4 36.0			$\{P_1, A$ 0.5 mm. - P_2 at 21.15 - P_3 at 21.51 ? $\}$ Mexico
	31	19 28.7	20 15.2	2.0	2 35.0			$\{P_2$ uncertain, at change of film. $\}$
Aug.	2	11 2.0		5				P_2, A - P_2 at 19.42 - P_3 at 20.5.5 Mexico
	7	18 5.6	18 24.5	0.1	1 2.0			Boom period 16.2 sec.
	10	-	-	-	-			Hours 12 to 15.00 lost by smoky flame
	11		17 4.0	5				
	13		4 3.0	5				
	14	6 53.7	7 24.0	0.65	2 0.0			P_1 5 and sharp - P_2, P_3 uncertain. Japan
	"	and	7 35.5	0.6				
	16	7 10.5	7 48.5	2.7	2 47.0			$\{P_1, A$ - P_2 at 7.21.5 - P_3 at 7.39.5
	18	1 12.0	2 15.0	0.3	2 9.0			Boom period 17.0
	25	0 29.5	0 32.0	5	10.0			$\rightarrow$ 20 th to 21 st 21 st boom not free. Italy?
	30	0 58.0	1 17.7	0.1	0 57.5			Boom period 18.4
	"	13 21.0	13 42.2	0.5	1 41.0			
	31	12 12.5	12 21.5	0.1	1 30.0			$\{$ Beginning and end uncertain on acct of M 's all p.m. $\}$
Sept	8	17 10.5	17 45.0	0.6	2 50.0			P_1, A 0.3 mm.
	9	0 20.0	0 36.	0.5	1 30.0			Times approximate; shutter failing
	"	-	-	-	-			Boom not free: films 10-11, 11-12, 12-13
	16	19 16.5	20 31.	0.2	2 21.5			
	19		21 2.4	5				
	"		21 13.	5				
	"		21 23.7	5				
	21	19 20.2	20 3.0	0.1	1 7.8			
	"	23 15.3		5	10.7			
	22	14 53.5	15 29.2	0.4	2 40.0			P_1, A 5. - P_2 15.5.5 - P_3 ?
	23	7 15.	7 20.5	0.1	15.2			
	"	16 30.3	16 40.0	0.2	44.0			25 th - 16 th Boom period raised to 19.2 sec.
	28		20 42.0	5				
	29	18 25.7	18 31.	0.2	0 12.0			

Earthquake Records by Mine Seismograph, Meridian

Register from Stonyhurst College Observatory. Lat. 53° 56' 55" N. Long. 1° 22' 55" W.

Director, Walter Sidgreaves, P. I.



International
Seismological
Centre

Ats. = Air tremors.

S = clear, but too small for measurement.

P₁, P₂, P₃, beginnings of 1st, 2nd and 3rd phases.

1mm amplitude = 3" 40" on the film.

Hours G.M.T. 0 or 24 = Midnight.

No.	Date	Commence- ment	Max.	Max Ampli- tude	Duration
	1909	P ₁	M	A	D
		h. m.	h. m.	mm.	h. m.
	Oct. 2	18 26.5	18 28.0	0.2	0 10.0
		18 41.5	18 47.8	.6	16.
		21 39.5	21 45.5	.4	16.5
4	14	44.	14 54.	.1	1 8.
17	22	20.7	22 58.	.2	27.5
18	8	46.2	9 10.5	.2	1 7.
			9 16.5	.3	
20	23	51.	24 21.	8.0	2 36.
27	?		2 49.8	.2	?
28	4	7.7	4 46.5	.6	2 42.
29	7	21.5	7 27.3	.1	30.
			7 32.5	.1	
	17	47.	17 53.2	.4	29.
			17 58.7	.4	
30	10	38.	11 30.5	.2	2 17.
31	10	39.	11 18.7	2.6	3 21.

P₂ at 22^h 43^m

P₂ at 24^h 4^m

Amidst Ats.

P₂ at 4^h 20^m 6

California

P₂ at 10^h 45^m

P₂ at 10 46

Air tremors frequent on days 5, 7, 9 to 15 inclusive, 19, 20 to 24.

Nov. 1	6	36.0	6 57.0	0.3	1 30.0
			6 53.	.3	
	9	37.5	9 45.5	.1	23.0?
			49.5	.1	
8	21	8.2	21 28.	.6	1 26.
10	6	26.2	7 3.2	5.1	3 30.
12	4	38.	5 8.2	.2	1 43.
	20	4.5	20 27.2	.2	1 8.
18	14	53.	15 10.	.1	27.
	21	24.5	21 26.5	.1	34.
21	3	12.7	3 15.5	.1	11.8
			3 20.	.1	
	8	0.	8 34.	3.6	2 22.
28	2	10.5	2 39.	.2	1 5.5
			2 52.	.3	

P₂ at 6^h 45^m

end uncertain.

P₂ at 21^h 18^m

P₁ very sharp. P₃ at 5^h 37^m 5
very irregular large waves.

Possibly Ats.

Probably "

P₂ at 8^h 24^m. P₃ at 8^h 33^m

Air tremors frequent on days 9, 10, 12, 27, 29, 30.

Dec. 8	9	40.5	10 34.0	0.4	2 0.0
9	15	56.2	17 8.0	3.7	3 16.
	22	4.	23 9.	.3	?
	23	48.	24 30.	1.3	3 3.
17	2	43.	3 2.5	.1	2 16.
20	16	29.	17 5.	.2	38.
21	14	8.	14 29.5	1.0	1 56.
			15 7.5	1.0	
			15 23.	1.0	
22	3	33.5	4 27.	.3	3 30.
	13	26.6	14 26.2	.3	1 56.
28	20	8.	20 10.	.1	16.
	22	57.	23 40.8	.2	2 37.
28		32.5	2 42.	<.1	1 22.

P₂ at 16^h 32^m 5

Overlapping the next.

Max uncertain in irregular waves.

Very irregular

Amidst Ats.

P₂ at 16^h 10^m

Switzerland, 2^h 29^m

Air tremors frequent on days 1, 3, 7, 10, 15, 22, 26, 27, 28, 31.