(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of January, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = $12^{s}{\cdot}0$.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 11394 A, 1924-429 ex.

Date 1928.	Phase.	Time. h. m. s.	Period. s.	Amplitude $A_{E.}$ μ	REMARKS.
January 6	P	19 38 3			
	S	19 43 22			
	M_1	19 49 3	7	± 390	
	M_2	19 50 10	7	± 400	
	F	23.5h.			
" 10	e	2 31 45			
	S	2 36 43			
	M	2 42 38	12	± 126	
	F	4.6h.			
" 12	M	14 17 10	20	± 28	
" 23	P	3 42 40			Local.
" 26	e	22 2 55			
	eS	22 11 55			
	M	22 34 10	16	± 16	
	F	24.0h.			
" 30	P	3 26 26			
	S	3 35 37			
	M	3 59 50	15	± 15	
	F	5.5h.			

Smaller tremors were also recorded at :- 1d 0h. 1d 9h. 1d 18h. 2d 16h. 4d 0h. 4d 18h 8m (local). 4d 21h. 5d 14h. 5d 22h. 6d 5h. 7d 3h. 7d 4h. 7d 12h. 7d 14h. 7d 18h. 7d 20h. 7d 23h. 8d 7h. 8d 22h. 8d 23h. 10d 17h. 11d 18h. 12d 23h. 14d 14h. 15d 3h. 17d 1h. 18d2h. 18d 5h 57m (felt in Palestine). 18d 13h. 19d 23h. 21d 15h. 22d 0h. 22d 7h. 23d 11h. 24d 7h. 26d 14h. 26d 19h. 27d 19h. 27d 22h. 29d 0h.

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of FEbruary, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29^\circ\ 51'\ N$, $\lambda = 31^\circ\ 20'\ E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = $12^s{\cdot}0$.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 5040-1923-320 ex.

Date 1928.	Phase.	Time. h. m. s.	Period. s.	Amplitude A_E. μ	Remarks.
February 7	P	0 12 17			
	S	0 25 40			
	M	0 41 00	15	± 64	
	F	2.7 h.			
" 21	eP	20 01 23			
	S	20 11 32			
	M	20 40 30	22	± 17	
	F	22.5 h.			
" 22	eP	17 51 52			Felt in Palestine.
	eS	17 52 35			
	M	17 53 03	4	± 14	
	F	18.1h.			

Smaller tremors were also recorded at : 1d 3h. 3d 13h. 4d 6h. 5d 23h.
6d 0h. 6d 4h. 10d 5h. 13d 5h. 13d 17h. 17d 23h. 22d 14h. 24d 14h.
26d 1h. 28d 9h. 29d 22h.

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of March, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion
Theoretical magnification = 250.
Period of undamped pendulum = 12s·0.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 7408 A. 1925-100 ex.

Date 1928.	Phase.	Time. h. m. s.	Period. s.	Amplitude $A_{E.}$ μ	REMARKS.
March 7	P	10 58 38			
	S	11 01 21			
	M	11 01 28	2	± 28	
	F	11.9 h.			
" 9	P	18 15 57			
	iS	18 24 31			
	M	18 45 20	15	± 350	
	F	29.9 h.			
" 16	P	5 20 29			
	S	5 33 50			
	M	- -- --			lost in changing paper.
" 19	eP	10 07 38			
	eS	10 12 20			
	M	10 17 55	12	± 38	
	F	11.2 h.			
" 22	P	4 31 41			
	S	4 45 46			?
	M_1	5 18 44	20	± 190	
	M_2	5 29 05	17	± 148	
	F	9.0 h.			
" 27	P	8 37 21			
	S	8 41 22			
	F	9.5 h.			
" 27	eP	19 17 53			
	S	19 26 47			
	M	19 43 50	20	± 14	
	F	20.9 h.			
" 31	P	0 31 54			
	iS	0 33 32			
	M	0 39 26	17	± 220	
	F	2.8 h.			

Smaller tremors were also recorded at : 1d 9h. 3d 7h. 3d 19h. 4d 21h. 7d 22h. 8d 18h. 8d 21h. 57m.(local). 9d 11h. 10d 3h. 12d 9h. 13d 2h. 13d 18h. 14d 16h. 17d 14h. 18d 2h. 18d 3h. 18d 12h. 18d 15h. 20d 5h. 20d 15h. 20d 21h. 22d 13h. 23d 13h. 23d 20h. 24d 10h. 25d 20h. 26d 3h. 26d 5h. 26d 8h. 26d 10h. 26d 14h. 27d 15h. 28d 8h.(local). 28d 12h. 29d 5h. 30d 1h. 31d 5h. 31d 15h.(local).

Record lost from 16d 6h. to 17d 6h.

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS

For the Month of April **, 1928.**

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = $12^{s}{\cdot}0$.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 7762-1922-300 ex.

Date 1928.	Phase.	Time. h. m. s.	Period. s.	Amplitude A_E. μ	Remarks.
April 9	P	17 51 52			
	S	18 02 19			
	M	18 40 08	18	± 80	
	F	20.5 h.			
" 14	P	9 03 05			
	iS	9 05 55			
	M	9 12 17	15	± 185	
	F	12.3 h.			
" 14	P	13 21 23			
	S	13 25 11			
	F	14.0 h.			
" 18	iP	19 26 00			
	iS	19 28 38			
	M	19 34 21	20	± 560	
	F	23.7 h.			
" 22	iP	20 16 25			
	S	20 18 20			
	M	20 24 26	10	± 33	
	F	22.0 h.			
" 27	P	13 19 32			Local. Felt in Cairo.
	S	13 20 24			
	M	13 23 42	7	± 4	
	F	13.8 h.			
" 27	eP	20 53 38			
	eS	21 03 00			
	M	21 37 45	17	± 30	
	F	23.1 h.			

Smaller tremors were also recorded at : 2d 23h. 3d 13h. 3d 17h. 5d 10h. 6d 11h. 6d 16h. 7d 20h. 10d 1h. 11d 10h. 12d 15h. 12d 18h. 13d 23h. 14d 4h. 15d 10h. 16½d 9h. 16d 22h. 17d 3h. 17d 16h. 17d 19h. 19d 22h. 22d 5h. 22d 16h. 24d 16h. 24d 20h. 24d 22h. 25d 0h. 25d 1h. 25d 9h. 26d 15h. 28d 7h. 28d 18h. 29d 9h. 30d 10h. 30d 11h.

(FORM No. 620, P.C.)

SEISMOGRAPH RECORDS.

For the Month of May, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Carry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = 12s·0.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 11394 A, 1924-429 ex.

Date 1928	Phase.	Time. h. m. s.	Period. s.	Amplitude $A_{E.}$ μ	REMARKS.
May 2	P	21 56 52			
	S	21 58 40			
	M_1	21 59 56	4	± 18	
	M_2	22 06 05	15	± 50	
	F	23.5 h.			
" 6	eP	18 06 27			
	S	18 07 10			
	M	18 07 20	4	± 16	
	F	18.5 h.			
" 14	eP	22 29 21			
	S	22 41 15			
	M	23 28 38	18	± 209	
	F	5.0 h.			
" 27	iP	10 03 03			
	iS	10 13 27			
	M	10 45 39	20	± 84	
	F	14.0 h.			

Smaller tremors were also recorded at : 1d 0h. 1d 16h. 1d 19h. 3d 1h. 3d 17h. 5d 19h. 6d 3h. 7d 23h. 8d 4h. 9d 11h. 9d 20h. 11d 9h. 12d 20h. 14d 4h. 15d 2h. 15d 15h. 15d 21h. 16d 8h. 16d 11h. 16d 22h. 17d 11h. 18d 18h. 18d 19h. 18d 23h. 19d 3h. 19d 9h. 20d 16h. 21d 18h. 23d 0h. 23d 21h. 26d 8h. 26d 14h. 27d 20h. 28d 7h. 28d 15h. 29d 12h. 31d 7h. 31d 8h. 31d 14h. 31d 21h. 31d 23h.

MINISTRY OF PUBLIC WORKS.

PHYSICAL DEPARTMENT.

OBSERVATORY.
HELWAN, EGYPT

TELEPHONE No. 45 (HELWAN.)

, 192

Earthquake recorded by Milne-Shaw Seismograph
at Helwan Observatory

----ooOoo----

Date	Phase	G. M. T.			Remarks
15th June, 1928	P	6h	25m	06s	
	S	6	35	28	$10^{m}\ 22^{s}$
Replique					
	e P	17	28	51	10^{22}
	i S	17	39	13	

for Director
Helwan Observatory

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of June, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = 12s·0.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 11394 A, 1924-429 ex.

Date 1928.	Phase.	Time. h. m. s.	Period. s.	Amplitude A_E. μ	Remarks.
June 15	P	6 25 06			
	iS	6 35 28			
	M	7 08 44	19	± 47	
	F	9.5 h.			
" 15	P	17 28 51			
	S	17 39 13			
	M	18 12 16	18	± 23	
	F	20.1 h.			
" 17	P	3 34 10			
	PR_1	3 38 50			
	S	3 47 08			
	M	4 25 30	18	± 190	
	F	9.0 h.			
" 21	eP	16 40 32			
	S	16 50 42			
	F	20.2 h.			

Smaller tremors were also recorded at : 1d 8h. 1d 12h. 1d 23h. 2d 2h. 2d 16h. 3d 8h. 3d 22h. 4d 12h. 5d 6h. 6d 19h. 6d 20h. 7d 6h. 7d 12h. 8d 15h. 11d 6h. 13d 18h. 14d 16h. 15d 4h. 16d 9h. 16d 18h. 16d 19h. 17d 23h. 18d 0h. 18d 16h. 18d 22h. 21d 4h. 21d 16h. 24d 4h. 24d 22h. 25d 8h. 27d 11h. 28d 1h. 28d 23h. 29d 20h. 29d 23h.

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of July, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion
Theoretical magnification = 250.
Period of undamped pendulum = 12s·0.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 7408 A, 1925-100 ex.

Date 192 .	Phase.	Time.	Period.	Amplitude $A_{E.}$	REMARKS.
		h. m. s.	s.	μ	
July 15	eP	9 35 37			
	S	9 37 18			
	M	9 43 11	16	± 20	
	F	10.2 h.			
Smaller tremors were also recorded at :				2d 10h.	3d 7h. 3d 8h.
4d 18h.	5d 3h.	6d 0h.	6d 20h.	6d 21h.	7d 18h. 9d 21h.
10d 2h.	11d 3h.	11d 4h.	13d 9h.	13d 20h.	14d 8h. 16d 1h.
18d 19h.	20d 0h.	21d 3h.	21d 16h.	23d 8h.	24d 22h. 27d 15h.
28d 20h.	30d 3h.	31d 0h.	31d 1h.	31d 2h.	31d 20h.

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of August, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = $12^{s}{\cdot}0$.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 11394 A, 1924-429 ex.

Date 192 .	Phase.	Time. h. m. s.	Period. s.	Amplitude $A_{E.}$ μ	Remarks.
August 4	e	18 41 05			
	Pr	18 45 37			
	S	18 55 19			
	M	19 41 08	16	± 34	
	F	22,0 h.			
Smaller tremors were also recorded at:				3d 7h.	3d 11h. 4d 7h.
5d 3h.	5d 14h.	8d 2h.	8d 7h.	10d 15h.	10d 18h. (Local)
10d 23h.	12d 8h.	14d 0h.	15d 8h.	15d 10h.	15d 12h. 15d 16h.
15d 17h.	19d 4h.	20d 2h.	21d 19h.	22d 6h.	23d 1h. 23d 4h.
23d 6h.	24d 9h.	24d 14h.	24d 22h.	26d 4h.	26d 20h. 26d 23h.
27d 3h.	27d 4h.	30d 0h.	30d 6h.	30d 12h.	31d 5h. 31d 18h.

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of September, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = $12^{s}{\cdot}0$.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 11394 A, 1924-429 ex.

Date 1928.	Phase.	Time. h.	m.	s.	Period. s.	Amplitude $A_{E.}$ μ	Remarks.
September 18	e	17	29	10			
	S	17	37	23			
	M	17	56	52	9	± 36	
	F	19.5 h.					
" 18	P	19	58	00			
	S	20	02	35			
	M	20	07	00	10	± 160	
	F	21.6 h.					

Smaller tremors were also recorded at: 1d 6h. 1d 16h. 2d 0h. 2d 18h. 3d 6h. 6d 7h. 6d 9h. 6d 10h. 7d 2h. 9d 3h. 9d 12h. 10d 17h. 11d 0h. 11d 11h. 12d 1h. 13d 3h. 14d 8h. 15d 10h. 18d 0h. 18d 1h. 18d 8h. 18d 23h. 19d 8h. 20d 0h. 20d 15h. 21d 13h. 21d 21h. 22d 7h. 24d 9h. 25d 8h. 25d 19h. 27d 0h. 29d 22h.

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of October, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director H. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = $12^{s}{\cdot}0$.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 11394 A, 1924-429 ex.

Date 1928.	Phase.	Time. h.	m.	s.	Period. s.	Amplitude $A_{E.}$ μ	Remarks.
October 4	P	18	28	11			
	S	18	32	30			
	M	18	37	41	7	± 380	
	F	20.2 h.					
" 9	P	3	15	54			
	iS	3	30	05			
	M	4	07	33	20	± 160	
" 15	iP	14	26	03			
	eS	14	31	16			
	M	14	41	49	12	± 110	
	F	17.0 h.					

Smaller tremors were also recorded at : 3d 1h. 4d 11h. 7d 4h. 9d 12h. 9d 15h. 10d 21h. 12d 0h. 12d 7h., 12d 10h. 13d 2h. 13d 15h. 15d 9h. 17d 7h. 17d 15h. 19d 6h. 19d 10h. 19d 17h. 20d 13h. 21d 10h. 21d 13h. 21d 16h. 22d 3h. 22d 7h. 22d 15h. 23d 18h. 24d 7h. 25d 12h. 27d 2h. 30d 5h. 31d 20h.

(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS.

For the Month of November, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = $12^s{\cdot}0$.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 11394 A, 1924-429 ex.

Date 1928.	Phase.	Time. h. m. s.	Period. s.	Amplitude $A_{E.}$ μ	Remarks.
Nov. 11	P	22 52 02			
	S	23 01 02			
	M	23 23 10	18	± 14	
	F	24.3 h.			
" 20	P	20 54 05			
	(S)	21 04 02			
	L	21 29			
	M	21 43 15	18	± 120	
	F	23. 0 h..			
" 22	eP	8 46 40			
	S	8 55 29			
	L	9 13			
	M	9 20 45	12	± 65	
	F	10.8 h.			
" 28	eP	10 56 32			
	S	11 07 02			
	M	11 42 27	18	± 90	

Smaller tremors were also recorded at :- 1d 4h. 1d 16h. 2d 3h. 6d 4h. 6d 13h. 7d 16h. 8d 17h. 9d 19h. 10d 12h. 10d 13h. 10d 20h. 11d 18h. 13d 9h. 14d 4h. 15d 3h. 21d 17h. 25d 6h. 25d 13h. 26d 3h. 26d 15h. 29d 12h. 29d 16h. 29d 18h. 29d 23h. 30d 8h.

Record lost from 16d 19h. to 17d 6h. owing to stoppage of clock.

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(Form No. 620, *F.C.*)

SEISMOGRAPH RECORDS

For the Month of December, 1928.

FROM HELWAN OBSERVATORY, EGYPT.

$\varphi = 29° 51' N$, $\lambda = 31° 20' E$, $h = 115$ m.

Director P. A. Curry.

Seismograph Milne-Shaw recording E—W motion.
Theoretical magnification = 250.
Period of undamped pendulum = $12^{s}.0$.
Times are expressed in Greenwich Civil Mean Time.

Govt. Press 7762-1922-300 ex.

Date 1928	Phase.	Time. h.	m.	s.	Period. s.	Amplitude A_E. μ	Remarks.
December 2	P	4	40	20			
	PR_1	4	46	01			
	S	4	50	07			
	F	7.0 h.					Maximum lost.
" 10	iP	7	05	05			
	iS	7	06	32			
	M	7	06	35	2	± 18	
	F	7.5 h.					
" 28	P	14	32	35			
	S	14	43	00			
	M	15	15	32	20	± 23	
	F	17.0 h.					

Smaller tremors were also recorded at : 1d 6h. 1d 10h. 1d 18h. 3d 5h. 3d 17h. 8d 14h. 9d 0h. 9d 5h. 9d 14h. 9d 18h. 10d 5h. 11d 17h. 11d19h. 12d 1h. 12d 20h. 14d 0h. 14d 2h. 15d 19h. 16d 19h. 20d 2h. 20d 7h. 21d 0h. 21d 1h. 21d 16h. 22d 11h. 22d 13h. 23d 8h. 24 d 5h. 25d 6h. 26d 22h. 27d 5h. 27d 9h. 29d 14h. 29d 20h.

Trace lost at 1d from 2h. to 6h. lamp out.

REcord lost from 19d 6h. to 19d 13h. for repairing clock.

Clock stopped from 24d 7h, to 25d 7h.

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