

SEISMOGRAPH RECORDS

For the Month of January, 1924.

FROM HELWAN OBSERVATORY, EGYPT.

 $\varphi = 29^{\circ} 51' N$, $\lambda = 31^{\circ} 20' E$, $h = 115$ m.Director H. Knox - Shaw.

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 7269-1921-500 ex.

DATE 192 <u>4</u>	PHASE.	TIME.			PERIOD, s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
January 14	eP	21	2	56			
	S	21	13	19			
	M	21	45	49	17	\pm 23	
	F	0	13	\pm			
18	e	15	1	33			
	S	15	5	25			
	M	15	11	31	5	\pm 9	
	F	15	59	\pm			
21	P	2	4	54			
	S	2	14	50			
	F	3	22	\pm			
29	e	2	14	19			
	PR	2	20	16			
	S	2	24	3			
	M	4	7	19	19	\pm 116	
	F	4	46	\pm			
Smaller tremors were also recorded at 2 ^d 8 ^h , 7 ^d 10 ^h , 8 ^d 11 ^h , 10 ^d 18 ^h , 12 ^d 14 ^h , 16 ^d 21 ^h , 22 ^d 11 ^h , 24 ^d 18 ^h , 26 ^d 2 ^h , 27 ^d 4 ^h , 30 ^d 0 ^h , 30 ^d 5 ^h , 31 ^d 1 ^h .							

SEISMOGRAPH RECORDS

For the Month of February, 1924.

FROM HELWAN OBSERVATORY, EGYPT.

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

Director H. Knox - Shaw.

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 7269-1921-500 ex.

DATE 192 <u>4</u>	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
February 18	IP	17	5	14			
	S	17	6	20			
	M	17	8	5	7	± 77	
	F	18	50	±			
19	IP	7	3	49			
	S	7	7	6			
	M	7	12	9	6	± 40	
	F	8	47	±			
Smaller tremors were also recorded at 9 ^d 23 ^h , 11 ^d 6 ^h , 11 ^d 10 ^h , 13 ^d 23 ^h , 16 ^d 0 ^h , 16 ^d 9 ^h , 29 ^d 8 ^h .							

SEISMOGRAPH RECORDS

For the Month of March, 1924.

FROM HELWAN OBSERVATORY, EGYPT.

 $\varphi = 29^{\circ} 51' N$, $\lambda = 31^{\circ} 20' E$, $h = 115$ m.Director H. Knox-Shaw.

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 7269-1921-500 ex.

DATE 192 .	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
1924 March 4	e	10	25	40	\pm		
	PR ?	10	32	47			
	S ?	10	35	50			
	M	11	10	59	22	± 48	
	F	14	4	\pm			
March 13	e	12	51	23			
	S	12	54	10	?		
	M	12	56	21	4	± 14	
	F	13	42	\pm			
March 15	iP	10	43	35			
	S	10	53	37			
	M	11	15	7	8	± 12	
	F	13	42	\pm			
March 16	eP	10	22	25			
	S	10	26	40			
	M	10	32	50	12	± 10	
	F	11	25	\pm			
Smaller tremors were also recorded at 1 ^d 2 ^h , 11 ^d 11 ^h , 11 ^d 23 ^h , 13 ^d 10 ^h , 16 ^d 1 ^h , 22 ^d 13 ^h , 24 ^d 20 ^h , 25 ^d 14 ^h , 26 ^d 20 ^h , 30 ^d 0 ^h .							

SEISMOGRAPH RECORDS.

For the Month of April, 1924.

FROM HELWAN OBSERVATORY, EGYPT.

 $\varphi = 29^{\circ} 51' N$, $\lambda = 31^{\circ} 20' E$, $h = 115$ m.Director H. Knox - Shaw.

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 5040-1923-320 ex.

DATE 192 <u>4</u> .	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
April 13	P	13	0	42			
	S	13	11	7			
	M	13	42	20	19	± 16	
	F	15	46	\pm			
14	P	16	33	38			
	S	16	44	10			
	M ₁	17	13	37	26	± 480	
	M ₂	17	21	36	20	± 327	
	F	21	11	\pm			
20	P	14	32	27			
	iS	14	36	56			
	M	14	42	19	10	± 170	
	F	16	44	\pm			
Smaller tremors were also recorded at 11 14 , 15 ^d 21 ^h , 21 ^d 20 ^h , 25 ^d 18 ^h , 28 ^d 21 ^h , 29 ^d 21 ^h , 30 ^d 4 ^h .							

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SEISMOGRAPH RECORDS.

For the Month of May, 1924

FROM HELWAN OBSERVATORY, EGYPT.

 $\varphi = 29^{\circ} 51' N$, $\lambda = 31^{\circ} 20' E$, $h = 115$ m.Director H. Knox - Shaw.

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 5040-1923-320 ex.

DATE 192 <u>4</u>	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
/ May 1	e	20	9	15			
	is	20	19	30			
	M	20	58	40	20	± 17	
	F	23	5	\pm			
/ 4	iP	17	10	35			Period very short at beginning of record.
	M	17	4 ⁴ 10		18	± 17	
	F	19	47	\pm			
/ 6	P	16	21	40			
	S	16	31	43			
	M	17	6	45	16	± 16	
	F	19	10	\pm			
/ 28	P	10	3	37			Period very short at beginning of record.
	is	10	13	9			
	M ₁	10	13	23	8	± 20	
	M ₂	10	13	27	8	- 22	
	F	11	27	\pm			

Smaller tremors were also recorded at 3^d 11^h, 4^d 3^h, 6^d 4^h, 7^d 1^h, 8^d 7^h, 10^d 3^h, 13^d 1^h, 17^d 5^h, (record lost from 19^d 7^h to 20^d 7^h owing to clock stopping), 21^d 2^h (local), 22^d 17^h, 2 31^d 12^h.

local ↗

SEISMOGRAPH RECORDS.

For the Month of June, 1924.

FROM HELWAN OBSERVATORY, EGYPT.

 $\varphi = 29^{\circ} 51' N$, $\lambda = 31^{\circ} 20' E$, $h = 115$ m.Director H. Knox - Shaw

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 5040-1923-320 ex.

DATE 192 .	PHASE.	TIME.			PERIOD. s.	AMPLITUDE	REMARKS.
		h.	m.	s.		A _E . μ	
/ June 26	e	1	54	10			
	?	1	56	53			
	?	1	59	25			
	M	2	18	30	16	\pm 128	
	F	6	5	\pm			
<p>Almost continuous series of tremors from 29d 6h till 30d 18h. The shocks at 29d 14h, 29d 19h, 30d 3h, and 30d 11h are nearly identical in form.</p>							
/ June 30	P	15	56	50			Record of this shock superposed on that of an earlier one.
	S	16	7	0			
	M	16	27	38	14	\pm 16	
	F	18	58	\pm			
<p>Small tremors were also recorded at 7d 17h, 7d 20h, 9d 21h(local) 14d 16h, 20d 16h, 22d 16h, 29d 6h, 29d 8h, 29d 9h, 29d 13h, 29d 14h, 29d 16h, 29^d 17h, 29d 19h, 29d 23h, 30d 0h, 30d 1h, 30h 3h, 30d 8h, 30d 11h, 30d 14h, 30d 15h.</p>							

SEISMOGRAPH RECORDS.

For the Month of July, 1924

FROM HELWAN OBSERVATORY, EGYPT.

 $\varphi = 29^{\circ} 51' N$, $\lambda = 31^{\circ} 20' E$, $h = 115$ m.Director H. Knox-Shaw.

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 5040-1923-320 ex.

DATE 192 <u>4</u> .	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
/ July 3	P	4	48	20	19	± 152	
	S	4	54	52			
	M	5	10	02			
	F	8	45	\pm			
/ " 6	P	18	38	50	10	± 13	
	Pr	18	40	07			
	S	18	44	37			
	M	18	59	10			
	F	20	08	\pm			
/ " 11	P	19	52	49	13	± 143	
	S	19	59	25			
	M	20	13	00			
	F	23	40	\pm			
/ " 12	P	15	19	37	11	± 23	
	Pr	15	20	59			
	S	15	25	15			
	M	15	39	50			
	F	17	21	\pm			
Smaller tremors were also recorded at 1 ^d 6 ^h , 1 ^d 11 ^h , 1 ^d 23 ^h , 2 ^d 5 ^h , 2 ^d 10 ^h , 2 ^d 21 ^h , 3 ^d 20 ^h , 4 ^d 7 ^h , 4 ^d 18 ^h , 5 ^d 23 ^h , 6 ^d 14 ^h , 7 ^d 3 ^h , 7 ^d 12 ^h , 7 ^d 18 ^h , 8 ^d 12 ^h , 10 ^d 1 ^h , 17 ^d 12 ^h , 21 ^d 1 ^h , 22 ^d 4 ^h , 22 ^d 14 ^h , 24 ^d 5 ^h , 25 ^d 21 ^h , 29 ^d 5 ^h .							

SEISMOGRAPH RECORDS.

For the Month of August, 1924.

FROM HELWAN OBSERVATORY, EGYPT.

 $\varphi = 29^{\circ} 51' N$, $\lambda = 31^{\circ} 20' E$, $h = 115$ m.Director Dr. H. E. Hurst.

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 5040-1923-320 ex.

DATE 192 <u>4</u>	PHASE.	TIME.			PERIOD, s.	AMPLITUDE A _E , μ	REMARKS.
		h.	m.	s.			
August 14	P	18	15	21			
	S ?	18	18	52			
	M ?	18	26	22	8	+ 18	
	F	21	58	±			
" 25	e	2	33	28			
	S	2	43	08			
	M	3	02	15	16	± 98	
	F	4	46	±			
" 30	P	3	18	00			
	S	3	28	27			
	M	3	58	21	28	± 156	
	F	6	33	±			

Smaller tremors were also recorded at 10^d 6^h, 13^d 10^h, 13^d 13^h, 13^d 16^h,
14^d 0^h, 14^d 23^h, 17^d 2^h, 25^d 14^h, 25^d 23^h.

SEISMOGRAPH RECORDS.

For the Month of September, 1924.

FROM HELWAN OBSERVATORY, EGYPT.

 $\varphi = 29^{\circ} 51' N$, $\lambda = 31^{\circ} 20' E$, $h = 115$ m.Director Dr. H. E. Hurst.

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 5040-1923-320 ex.

DATE 192 <u>4</u> .	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
September 4	e	19	42	25			
	S	19	43	47			
	M	19	45	12	6	± 20	
	F	20	22	\pm			
" 10	iP	12	01	19			
	M	12	02	36	2	- 24	
	F	12	36	\pm			
" 13	iP	14	37	21			
	iS	14	39	57			
	M ₁	14	42	14	14	± 442	Erzerum
	M ₂	14	44	17	14	- 535	"
	F	18	29	\pm			
" 16	eP	2	42	40			
	S	2	48	02			
	M	2	59	17	15	± 21	
	F	4	12	\pm			

Smaller tremors were also recorded at 2^d 12^h, 3^d 3^h, 6^d 4^h, 6^d 19^h,
7^d 20^h, 10^d 17^h, 11^d 3^h, 13^d 20^h, 13^d 23^h, 18^d 1^h, 21^d 13^h, 23^d 23^h,
25^d 5^h, 27^d 4^h, 27^d 13^h, 28^d 13^h.

SEISMOGRAPH RECORDS.

For the Month of October 1924.

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.0.

Times are expressed in Greenwich Civil Mean Time.

Govt. Press 5040-1923-320 ex.

DATE 192 <u>4</u> .	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
October 8	eP	20	41	47	16	± 26	
	P _r	20	43	48			
	S	20	48	53			
	M	21	05	21			
	F	22	32	\pm			
" 12	e	19	45	00	12	± 84	
	S	19	54	05			
	M	20	14	11			
	F	21	43	\pm			

Smaller tremors were also recorded at 4^d 6^h, 4^d 23^h, 13^d 12^h, 13^d 16^h,
14^d 5^h, 18^d 23^h, 20^d 0^h, 20^d 9^h, 20^d 20^h, 25^d 19^h, 27^d 20^h.

Clock stopped from Oct. 21^d 19^h to Oct. 23^d at 7^h

SEISMOGRAPH RECORDS.

For the Month of October 1924.

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.0.

Times are expressed in Greenwich Civil Mean Time.

Govt. Press 5040-1923-320 ex.

DATE 192 <u>4</u> .	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
October 8	eP	20	41	47			
	P _r	20	43	48			
	S	20	48	53			
	M	21	05	21	16	± 26	
	F	22	32	±			
" 12	e	19	45	00			
	S	19	54	05			
	M	20	14	11	12	± 84	
	F	21	43	±			

Smaller tremors were also recorded at 4^d 6^h, 4^d 23^h, 13^d 12^h, 13^d 16^h,
14^d 5^h, 18^d 23^h, 20^d 0^h, 20^d 9^h, 20^d 20^h, 25^d 19^h, 27^d 20^h.

Clock stopped from Oct. 21^d 19^h to Oct. 23^d at 7^h

SEISMOGRAPH RECORDS.

For the Month of November, 1924.

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.0.

Times are expressed in Greenwich Civil Mean Time.

Govt. Press 5040-1923-320 ex.

DATE 1924.	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
November 8	P	9	09	01	8	± 16	
	S	9	12	12			
	M	9	16	13			
	F	10	14	\pm			
" 20	P	20	29	53	6	- 32	
	S	20	31	23			
	M	20	36	44			
	F	21	52	\pm			
Smaller tremors were also recorded at 1 ^d 5 ^h , 1 ^d 9 ^h , 10 ^d 21 ^h , 12 ^d 13 ^h , 13 ^d 8 ^h , 16 ^d 23 ^h , 19 ^d 10 ^h , 19 ^d 23 ^h , 26 ^d 7 ^h , 28 ^d 20 ^h , 29 ^d 4 ^h							
Clock stopped from 5 ^d 7 ^h to 7 ^d 6 ^h .							
" " " 8 ^d 1 ^h to 8 ^d 5 ^h .							

SEISMOGRAPH RECORDS

For the Month of December, 1924.

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.0.

Times are expressed in Greenwich Civil Mean Time.

Govt. Press 7762-1922-300 ex.

DATE 1924.	PHASE.	TIME.			PERIOD. s.	AMPLITUDE A _E . μ	REMARKS.
		h.	m.	s.			
December 11	P	23	06	10	8	± 8	
	S	23	10	21			
	M	23	17	52			
	F	23	48	\pm			
" 27	P	11	34	24	9	± 26	
	M	11	44	45			
	F	12	55	\pm			
" 28	P	23	07	40	8	-17	
	M	23	18	30			
	F	2	16	\pm			

Smaller tremors were also recorded at 1^d 23^h, 5^d 9^h, 8^d 0^h, 8^d 8^h,
8^d 10^h, 9^d 12^h, 11^d 3^h, 11^d 17^h, 12^d 2^h, 12^d 10^h, 12^d 23^h, 13^d 18^h,
15^d 21^h, 17^d 0^h, 17^d 12^h, 18^d 15^h, 19^d 16^h, 20^d 13^h, 22^d 17^h, 23^d 17^h,
24^d 17^h, 24^d 22^h, 25^d 1^h, 26^d 23^h.