

EARTHQUAKE REPORTS.—NEW ZEALAND.



Register from the Hector Observatory, Wellington, for the Year 1921

LATITUDE: 41° 17' S. LONGITUDE: 174° 46' E. HEIGHT: 401.5 ft.

INSTRUMENT: Milne Horizontal Seismograph. Magnification, 5.6. E-W component Pendulum not damped.

OBSERVER: C. E. ADAMS.

Time is Greenwich Civil Mean Time—0 h. or 24 h. = Greenwich midnight.

Date.	Phase.	Time. G. C. M. T.			Period.	AMPLITUDE.			Remarks.
						A _E .	A _N .	A _V .	
		h.	m.	s.	s.	mm.			
1921. Jan. 3	e	20	59	12					
	M	21	01	0	..	<1			
	F	21	51	0					
Jan. 5	e	16	28	0	..	<1			
	F	16	30	0					
	e	16	36	0	..	<1			
	F	16	38	0					
Jan. 6	e	12	10	12					
	e	12	14	18					
	e	12	17	48					
	e	12	20	48					
	e	12	23	0					
	M	12	27	0	..	<1			
	F	13	10	0					
Jan. 7	eP	1	4	36					
	iS	1	6	36					
	eL	1	7	36					
	M	1	8	30	..	0.8			
	M	1	11	0	..	0.8			
	F	2	45	0					
	eP	2	57	0					
	iS	3	1	48					
	eL	3	4	0					
	M	3	7	30	..	2.0			
	F	4	57	0					
	eP	17	34	0					
	M	17	40	0	..	<1			
	F	18	20	0					
Jan. 9	e	13	19	30					
	e	13	28	24					
	e	13	36	42					
	e	13	44	24					
	e	13	53	30					
	e	14	06	18					
	M	14	08	0	..	1.0			
	F	15	53	0					
Jan. 12	..	..	..	..	..	..	..	..	Boom adjusted and weights altered.
Jan. 14	..	..	..	..	..	..	..	..	"
Jan. 17	..	..	..	..	..	..	..	..	Tilt to east.
Jan. 19	e	0	50	36	..	..	..	..	T = 19 secs.
	e	1	28	0					
	M	1	33	0	..	<1			
	F	1	36	0					
	e	15	41	48					
	M	15	50	0	..	<1			
	F	16	25	0					

Date	Phase.	Time. G. C. M. T.			Period.	AMPLITUDE.			Remarks
		h.	m.	s.		A _E .	A _N .	A _V .	
1921. Jan. 19	e	18	50	0	s.	mm.			
	M	18	53	0	..	<1			
	F	19	1	10					
Jan. 20	e	1	33	0	..	..	..	..	Amplitudes very small.
	e	1	35	30	..	..	..	..	"
	e	1	39	54	..	..	..	..	"
	F	2	10	0	..	..	..	..	"
Jan. 23	e	12	2	0	..	..	..	..	"
	F	12	9	36	..	..	..	..	"
	e	15	3	36	..	..	..	..	"
	F	15	7	0	..	..	..	..	"
	e	16	35	24	..	..	..	..	"
	F	16	38	0	..	..	..	..	"
	i	21	44	24	..	..	..	..	"
	i	21	47	48	..	..	..	..	"
	F	21	53	0	..	..	..	..	"
	e	23	34	54	..	..	..	..	"
	F	23	38	0	..	..	..	..	"
Jan. 24	i	0	39	12	..	<1	..	..	"
	F	0	45	0	..	..	..	..	"
	e	3	4	54	..	<1	..	..	"
	F	3	6	0	..	..	..	..	"
	e	12	1	36	..	<1	..	..	"
	F	12	13	0	..	..	..	..	"
Jan. 29	iP	4	48	36	..	<1	..	..	Tilt towards west of 0.5 mm.
	F	4	53	0					
Jan. 30	iP	5	28	36	..	<1	..	..	Tilt towards east of 0.2 mm.
	F	5	32	0					
	iP	5	50	54	..	<1	..	..	Tilt towards west of 0.2 mm.
	F	5	54	0					
Feb. 4	eP	8	36	36	..	..	..	..	T = 18 secs.
	ePR	8	40	42					
	e	8	45	30					
	eS	8	47	12					
	eSR	8	49	54					
	M	8	51	0	..	0.6			
	e	8	55	0					
	e	9	3	0					
	e	9	6	24					
	eL	9	9	48					
	F	11	22	0					
	e	16	22	0					
	F	16	27	0					
Feb. 8	eP	9	42	0					
	iP	10	28	0					
Feb. 10	eS	19	56	0					
	L	19	57	42	..	..	..	..	T = 16.5 secs.
	M	19	59	0	..	..	..	..
	F	20	51	0					
Feb. 19	eP	9	35	0					
	F	9	42	0					
	ePR	14	47	0					
	e	14	51	0					
	eS	14	53	0					

Date	Phase.	Time. G.C.M.T.			Period.	AMPLITUDE.			Remarks.
		h.	m.	s.		A _E .	A _N .	A _V .	
1921. Feb. 19	eSR	14	57	42	s.	mm.			
	e	15	3	0					
	L	15	4	42					
	M	15	5	42	..	1			
	F	16	52	0					
	ePR	18	23	42					
	eS	18	30	24					
	iSR	18	35	30					
	iL	18	42	36					
	M	18	46	30	..	1.9			
	F	21	29	0					
Feb. 27	iP	18	29	0					
	iS	18	33	18					
	SR	18	34	0					
	SR ₂	18	35	12					
	L	18	35	36					
	M	18	37	42	..	12			
	M	18	40	42	..	13			
	F	22	45	0					
Mar. 1	e	6	48	30	..	<1			
	e	6	52	12					
	e	6	57	12					
	F	7	45	0					
Mar. 3	e	8	34	42	..	..	..	..	T = 18.7 secs.
	e	8	41	6					
	e	8	58	36					
	L	9	1	12					
	M	9	4	0	..	1.1			
	F	10	0	0					
Mar. 5	e	7	6	24					
	M	7	21	30	..	1.0			
	F	7	50	0					
Mar. 6	M	6	15	0	..	0.5			
	M	6	16	0	..	0.5			
Mar. 10	eP	20	17	24					
	L	20	22	54					
	M	20	23	48	..	0.5			
	F	21	0	0					
Mar. 15	e	0	4	12					
	e	5	1	48					
	e	5	8	48					
	F	5	15	0					
	eP	22	37	0					
	eL	22	38	30					
	M	22	39	30	..	1.0			
	M	22	40	30	..	1.0			
	F	23	0	0					
Mar. 16	e	11	48	42					
	M	11	57	0	..	0.3			
	M	11	59	0	..	0.3			
	F	12	10	0					
Mar. 18	..	..	..	..	..	..	..	..	Boom adjusted. T = 23.5 secs
Mar. 22	e	12	10	0					
	L	12	11	24					
	M	12	12	0	..	0.9			
	F	13	0	0					
Mar. 23	e	22	47	30					
	M	23	16	30	..	1.5	..	..	T = 22.2 secs.
	F	24	0	0					



Date.	Phase.	Time, G.C.M.T.			Period.	AMPLITUDE.			Remarks.
		h.	m.	s.		A _E .	A _N .	A _V .	
1921. Mar. 24	e	1	43	0	s.	mm.			
	e	1	46	42					
	M	1	58	0	..	1.3			
	F	3	0	0					
	eP	9	20	48					
	iS	9	23	42					
	M	9	25	0	..	3.0			
	L	9	26	0					
	F	10	30	0					
	e	15	5	48					
	e	15	12	48					
	e	15	20	42					
	M	15	31	0	..	0.5			
	F	19	0	0					
Mar. 28	eP	8	3	36					
	ePR	8	7	42					
	iS	8	14	0					
	e	8	22	48					
	eL	8	37	18					
	M	8	40	0	..	6.0			
	F	10	50	0					
Mar. 30	e	15	11	24					
	e	15	16	12					
	i	15	18	24					
	i	15	19	12					
	i	15	21	48					
	i	15	23	42					
	L	15	31	0					
	M	15	34	0	..	2.5			
	F	18	0	0	..	..	..	..	T = 23.7 secs.
April 1	e	4	29	12					
	e	4	34	12					
	e	4	41	54					
	e	4	47	0					
	M	4	54	0	..	0.6			
	F	6	0	0					
	e	12	0	0					
	e	12	4	30					
	e	12	12	18					
	L	12	15	0					
	M	12	17	18	..	1.5			
	F	13	0	0					
April 15	e	21	9	12					
	i	21	10	30					
	M	21	11	0	..	0.5			
	F	21	30	0					
April 22	cP	6	23	48					
	e	6	24	48					
	e	6	26	30					
	iL	6	26	48					
	M	6	28	0	..	4.0			
	F	9	49	0					
	eP	20	50	42					
	e	20	53	18					
	iL	20	53	54					
	M	20	55	0	..	0.8			
	i	20	59	6					
	F	21	25	0					
April 25	eP	17	35	36					
	e	17	38	30					



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Date.	Phase.	Time. G.C.M.T.			Period.	AMPLITUDE.			Remarks.
		h.	m.	s.		A _E .	A _N .	A _V .	
						mm.			
1921. April 25	eL	17	42	48					
	M	17	44	48	..	1.0			
	M	17	46	12	..	1.0			
	M	17	48	0	..	1.0			
	F	18	55	0					
April 27	e	1	50	18					
	e	1	52	18					
	M	1	54	0	..	0.5			
	e	1	54	24					
	F	2	0	0					
May 1	e	6	3	0					
	e	6	8	0					
	e	6	16	0					
	L	6	23	12					
	M	6	26	0	..	0.6			
	F	8	8	0					
May 2	e	16	21	0					
	e	16	23	0					
	M	16	23	30	..	0.2			
	e	16	26	06					
	F	16	31	0					
May 5	iP	10	24	0					
	M	10	24	12	..	1.0			
	F	10	30	0					
May 12	P	3	48	0					
	S	3	54	0					
	L	3	58	18					
	M	4	3	0	..	1.5			
	F	4	47	0					
May 14	M	11	57	0	..	0.5			
	e	12	27	24					
	e	12	33	24					
	M	12	34	0	..	0.6			
	F	13	10	0					
	eP	20	22	24					
	iM	20	25	12					
	M	20	26	0	..	3.5			
F	21	40	0						
May 16	eP	15	16	6					
	eL	15	18	48					
	M	15	20	0	..	0.6			
	F	16	35	0					
May 21	e	9	3	0					
	e	9	7	48					
	e	9	14	30					
	eL	9	17	48					
	M	9	22	0	..	0.5			
	M	9	26	30	..	0.5			
	F	10	0	0					
June 13	M	16	33	12	..	1.4			
	M	16	52	54	..	0.3			
June 28	iP	13	59	36	..	..	..	..	Local earthquake, R.-F. IV.
	M	14	0	0	..	6			
	M	14	1	0	..	6			
	F	15	40	0					
July 7	e	10	54	12					
	e	11	0	48					
	M	11	3	0	..	0.8			
	F	11	30	0					

Date.	Phase.	Time, G. C. M. T.			Period.	AMPLITUDE.			Remarks.
		h.	m.	s.		A _E .	A _N .	A _V .	
1921.					s.	mm.			
July 8	e F	23 2	54 15	0 0	25 ..	0.4 ..	.. ..	.. ..	} Well-marked sine waves for over two hours. T = 25 secs.
July 9	e F	0 8	30 0	0 0	24	0.1	..	..		Sine waves.
July 13	e F	0 2	20 30	0 0	26				
July 31	eP e M F	10 10 10 11	1 2 6 0	0 48 0 0	..	<0.1			
Aug. 2	..	7	44	42	..		..	..	Tilt to east.
Aug. 5	iP F	3 4	58 5	30 0					
	iP F	14 14	37 43	36 0					
Aug. 12	iP F	3 3	38 44	54 0	..	0.1			
	iP F	3 4	56 5	12 0	..	0.1			
	iP F	6 6	44 51	48 0	..	0.1			
Aug. 16	e F	11 20	40 20	0 0	23.5	0.4	..	..	Well-marked sine curves for 9 hours.
Aug. 17	e F	6 12	0 0	0 0	24.3	0.4	..	..	Well-marked sine curves for 6 hours.
Sept. 6	P P P P	2 4 4 13	44 10 27 12	0 0 0 18	.. .. .. ..	0.2 0.2 0.6 0.2			
Sept. 11	P S SR L M M M F	4 4 4 4 4 4 4 7	12 20 25 33 40 42 43	18 54 24 24 54 6 6 0	.. .. .. .. .. .. ..	.. .. .. 5.5 6.2 8.7			O = 4h 1m. 40s. T = 23 secs. Δ = 64°.
Sept. 13	e e i e L M F	2 2 2 3 3 3 5	47 53 59 08 17 19 33	0 48 24 12 36 0 0	..	1.4			
Sept. 19	e e i L M F	23 23 23 23 23 2	18 23 26 27 29 50	18 12 30 12 0 0	..	7.0			
Sept. 20									
Sept. 25	iP F	10 10	45 51	42 0	..	<1			
Oct. 3	iP F	10 10	35 39	54 0	..	1			



Date.	Phase	Time, G.C.M.T.			Period.	AMPLITUDE			Remarks.
		h.	m.	s.		A _E .	A _N .	A _V .	
1921. Oct. 9	eS	0	36	30	s.	mm.			
	eSR ₁	0	41	36					
	eSR ₂	0	45	36					
	eL	0	52	30					
	M	1	0	0	..	0.6			
	F	2	0	0					
	iP	17	50	36					
	F	17	55	0					
	iP	17	59	36					
	F	18	04	0					
Oct. 10	e	2	18	18					
	i	2	21	54					
	M	2	29	0	..	1.0			
	L	2	30	36					
	F	3	45	0					
Oct. 15	eP	5	4	18	..	..	..	..	$\Delta = 25.5^\circ$. O = 4h. 58m. 35s.
	iS	5	8	48					
	iL	5	11	0					
	M	5	13	0	..	8.5			
	F	8	30	0					
Oct. 20	eP	6	16	18					
	ePR	6	20	54					
	iS	6	26	54					
	M	6	47	0	..	0.6			
	SR	6	47	54					
	M	6	48	54	..	0.6			
	F	8	30	0					
	e	10	49	42					
	e	10	54	54					
	M	10	58	0	..	0.9			
	F	11	20	0					
Nov. 2	PR	8	13	12					
	eS	8	20	42					
	eSR ₁	8	28	30					
	eSR ₂	8	34	12					
	L	8	41	54					
	M	8	44	0	..	0.6			
	L	9	7	12					
	M	9	8	30	..	0.6			
	F	10	0	0					
Nov. 5	eP	21	16	54					
	iS	21	17	30					
	M	21	18	0	..	1.6			
	F	21	50	0					
Nov. 6	e	17	18	12					
	M	17	9	0	..	0.5			
	F	17	40	0					
Nov. 7	eP	16	11	0	..	..	..	..	$\Delta = 64.2^\circ$. O = 16h. 0m. 21s
	ePR	16	54	24					
	S	16	19	36					
	SR	16	24	18					
	L	16	33	0					
	M	16	37	0	..	1.7			
	F	18	47	0					
Dec. 22	iP	10	45	6					
	M	10	45	30	..	0.1			
	F	10	50	0					



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Date	Phase.	Time. G. C. M. T.			Period.	AMPLITUDE.			Remarks
						A _E .	A _N .	A _V .	
1921. Dec. 22	eP	h.	m.	s.	s.	mm.			$\Delta = 3^\circ$. O = 18h. 11m. 7s.
	iS	18	11	54	..	..	..
	M	18	12	30	..	1.5			
	F	18	13	0	..				
		18	25	0					



Observers are invited to address their earthquake reports to the Hector Observatory, Wellington, N.Z.

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