

APIA OBSERVATORY. SAMOA.

SEISMOLOGICAL REPORT

1925 April to June

Lat. 13° 48' 26" S Long. 11h 27m 6s. W

Instruments: Wiechert Astatic Pendulum Seismometer 1000 kg
 Wiechert Vertical Seismometer 130 kg

C. J. Westland, Seismologist

A. Thomson, Director.

Chn	Phase	G.M.T	T	Ae	Av	A _v	m:rons	
April 5	Iv	P	h m s	s	20	10	2	
			21 02 11	1				
			02 42	1				
								Probably in Tongan Deep. Motion not felt here, but rather too small for horizontal seismograph. after 22 h.
							80	
						230		
						390		
6	Iv	e	22 11	1			1	
			22 14	1			2	
Iv	e	23 10	1					
		23 12	7	3	9			
7	Iu	M	18 49	20	10	20	No other phases.	
11	Iu	L	10 53					
			M	10 58				No other phases.
14			6 34	1	70	20	5	
21			1 09	1	30	20	5	
21	Iv	P	20 16 43					
			20 17 17	7	10	8	1	
			23 35 11					
			35 31					
24	Iv	P	38	3	30	30		
			43					
25	Iv	e	13 23					
			28					
			34	12	14	28		
26	Iv	P	13 37 54	1	13	4	2	
			38 42	7	60	60	9	
								after 14 h.

May	Cha	Phase	G.M.T	T	Ae	An	Av	
3		e M	0 24 14 25 19	1 1	100	190	45 70	microns Felt in Apia. 2 RF
4	Iu	M	0 09					No other phases.
4	Iu	M M	11 32 11 39					No other phases.
7		e M	6 37 41 38 15	I	65	35	5	Felt in Apia. 2 RF.
3		e M M	8 31 09 31 26 31 54		85	35	8	Felt in Apia. 2 RF
12			6 56	1	45	24	4	
19	Iu	L M	6 28 6 35	16	2	6		No other phases
25	Iu	M	4 32	20		5		No other phases
25		e M	8 51 58 8 52 37	1	115	40	10	Felt in Apia 2 RF
27	Iv	M	1 52	2			10	EW & NS not working
30	Iv	e F	18 52 19					
June								
1	Iu	P	4 43 00 44 33 53 46	3	3	1		S? Dist 87 deg
		L M F	5 6 46 5 8 5 30	26	30	26		
3			7 07	1	20	18	4	
6			0 03	1	35	25	2	

June	Cha	Phase	G.M.T	T	Ae	An	Av	
9	Iu	P S L L M F	13 49 40 13 56 47 14 06 07 08 14 30	3	11	20 25 36	1	microns. Distance 49 de. O 13h 40m 43s.
12		e M	19 42 52 43 24	1	20	25	7	
17		e M	12 30 05 31 14	1	25	20	3	
19	Id	i M	7 51 07 7 51 55 9 09 10 10	1 2 1 1	50 440 50 14	65 490 20 7	20 85 8 1	Felt in Apia, 3RF prolonged
22			23 47	1	20	15	3	
23	Iv	e M	16 26 16 28	12	7	2		
24	Iv	e M	5 39 02 5 45 30	2 8		4 4		
23	Iu	P L M	1 33 37 2 02 2 06		18 18	5 8		Reported felt in Montana U.S.A
29		e F	15 14 15 25					Difficult,
30	Iv	P L M F	3 44 42 45 0 45 37 4 25	2 4 4 4	7 130 320	11 180 290 200	1	Lat 15 S. Long 172 W. O 3h 44m 21s.

The previous pages include 5 small earthquakes known to have been felt in Samoa, and 8 other shocks which may have been felt by a few persons but have not been reported. There are also 42 movements too small to be felt, which occurred at the times given below.

April	May	June
d h m	d h m	d h m
1 13 11	2 18 14	1 1 4
4 8 55	4 12 56	6 6 47
6 7 11	7 6 49	6 10 12
10 10 5	15 8 3	10 4 5
11 6 36	19 0 50	10 4 17
13 14 38	19 6 2	13 6 6
13 15 25	24 22 54	13 17 19
16 9 40	26 23 53	14 1 13
18 3 13	31 3 22	14 15 58
18 3 23		16 19 7
21 0 20		19 21 14
21 23 8		25 9 52
23 22 13		28 2 11
25 22 29		28 9 6
30 10 0		28 19 28
		30 0 55
		30 1 26
		30 5 3

The constants of the instruments on May 24 are

	T	e	V
E W	9.2	2.0	122
N S	9.6	2.0	166
Vert	2.3	2.1	80

Printed at the Observatory.

APIA OBSERVATORY. SAMOA.

SEISMOLOGICAL REPORT.
1925 July to September.

Lat. 13° 48' 26" S Long. 11h 27m 6s. W

Instruments: Wiechert Astatic Pendulum Seismometer 1000 kg
Wiechert Vertical Seismometer 180 kg

C. J. Westland, Seismologist. A. Thomson, Director.

Cha.	Phase.	G.M.T.	T.	Am.	An.	Av.	
July 2	e	22 15 43	1	6	3		micros.
	M	14 2	1	34	15		
4	Ir P	9 16 48	2	3	2		Difficult.
	L	23 18					
	F	26 30	19	15	2		
		9 35					
6	e	7 7	1	14	22	15	
	M	7 9	2	10	30	7	
7	i	8 4 48	1	1	12	2	Felt in Apia, 2RF.
	M	5 19	1	110	90	35	
	F	8 20	1				
7	Ir e	14 45					Difficult.
	L	49					
	M	52	12	10	3		
	F	15					
8	Iv e	4 35					
	M	4 35	4	10	6		
12	i	20 44 6	1	14	18	13	Felt in Apia, 2RF.
	M	20 44 49	1	110	85	35	
18	Iv e	7 6 3					
	M	7 7	7		15		
21	e	8 36 15					
	M	8 36 38	1	60	40	9	Felt in Apia 2RF,
			1				
29	Ir e	5 3					
	L	7					
	M	11 30					
	F	5 30					

Cha.	Phase	G.M.T.	T.	Am.	An.	Av.	
Aug.		h m s	s				microns,
4		14 49 22	1	25	20	4	Felt in Apia. 2RF
7		4 59	1	25	10	1	
11	e	5 2 43					Felt in Apia, 2RF
	M	5 3 6	1	60	20	7	
19	e	1 33 50					Felt in Apia. 2RF
	M	1 34 11	1	45	35	12	
19	Iu	e					Difficult.
		12 27 40					
		33 20					
		37 30					
		L					
		40 22					
		M	18	25		45	
		47	18				
		M					
		48					
		F					
		13 20					
24	e	23 21 4					
	M	23 21 24	1	30	15	2	
27	Iv	P	1	2	6	1	0 23h 18m 37s. Lat 16 S. Long 173 W.
		L	7	20	15		
		M	6	40	75	55	
28	Iv	P	1	2	4	1	0 1h 38m 31s. Epicentre same as last.
		L	6	8	14		
		M	5	25	35	18	
30			1	35	15	2	
30		16 59 1					
Sept							
3	Iv	e				7	
		M	8				
		12 42 9					
		12 45 15					
3	Iv	P	1	3	5	1	
		13 25 42	1	30	40	6	
		26 4	7	30	36		
		L	6	65	45	50	
		M					
		26 26					
		28					
		F					
		13 40					
5	e	14 19 33				3	
	M	14 20 10	1	25	45		

Cha.	Phase	G.M.T.	T.	Am.	An.	Av.	
Sept		h m s	s				microns,
7	i	0 59 41					
	M	1 0 13	1	45	35	12	Felt in Apia. 2RF
11	Iv	P	3	29	23	7	0 3h 33m 4s. Lat 15 S. Long 173 W
		L	4	150	90		
		M	4	180	150	130	
11	Iv	P	3	33 57	1	3	Confused with end of previous shock. Same epicentre,
		L	39	17	4		0 3h 33m 34s.
		M	39	42	4	90	
		F	4			105	
		4				80	
15	e	13 53 53					M is a local shock, e may be a small earthquake felt in Haapai at this time.
	M	13 55 2	1	8	8	2	
	F	14					
20	Iv	P	15	3 34	1		
		L	5	7	11	2	3
		F	15	15			
21			16	6	1	25	15
							18
24	Iv	P	22	40 7			
		M	22	48	8		10
26	Iv	P	11	28 1			
		M	11	30	3	5	

The previous pages include 7 small earthquakes known to have been felt in Samoa, and 10 other shocks which may have been felt by a few persons but have not been reported. There are also 58 movements too small to be felt, which occurred at the times given below.

July.	Aug.	Sept.
d h m	d h m	d h m
2 5 45	7 2 17	2 8 18
4 5 54	7 4 1	2 21 57
6 14 16	7 9 31	4 12 5
7 11 36	9 17 34	5 20 3
7 12 35	13 21 58	7 23 45
10 22 47	15 11 43	11 7 1
11 16 30	15 18 35	11 7 14
16 23 50	20 21 39	12 1 41
18 14 37	21 21 24	12 8 23
25 7 39	23 12 3	13 4 9
29 4 1	23 14 32	16 7 55
31 4 37	24 14 30	18 8 16
31 6 14	27 0 22	18 10 4
	27 1 2	18 14 37
	28 1 52	19 13 34
	28 2 7	19 18 33
	29 4 56	20 8 29
	29 12 7	22 15 12
	29 15 8	22 15 38
		26 6 43
		26 15 21
		28 13 43
		28 16 3
		28 17 7
		28 21 36
		30 3 11

Constants.	Aug. 11.	Sept. 17.
	T. e. V.	T. e. V.
E W	8.7 2.0 133	8.6 3.0 143
N S	9.8 2.0 159	9.9 2.3 156
Vert	2.3 2.0 72	2.5 2.6 68

APIA OBSERVATORY. SAMOA.

SEISMOLOGICAL REPORT.
1925. October to December.

Lat. 13° 48' 26" S Long. 11h 27m 6s. W

Instruments: Wiechert Astatic Pendulum Seismometer 1000 kg
Wiechert Vertical Seismometer 180 kg

C. J. Westland. Seismologist. A. Thomson. Director.

Oct.	Cha	Phase	G.M.T.	T.	Ae	An	Av	
2	Iv	P	h m s	s				microns.
			16 9 48	1			2	
			10 7	1			1	
		M ₁	10 30	2			6	Confused.
		M ₂	12 20	8	40			
		M ₃	12 40	2			4	
		F	16 30					
3			1 29	1	24	13	4	
5			10 42 37					
			10 42 56	1	26	13	5	Felt in Apia 2RF.
10	Iv	P	7 6 34					
			7 7 29					
		M	7 13	8				
15	Iv	P	1 22 33	2	50	32	10	Lat 15 S, Long 172 W.
		S	22 52	3				O 1h 22m 10s.
		L	23 0	6	160	150		
		M	23 7	4			120	
		M	1 24 20	6				Striking against stops.
15	Iv	P	1 33 41	2			3	Felt in Apia 2RF.
		S	34 2	3			9	Confused with end of previous eq. Same epicentre
		M	34 36	4			65	O 1h 33m 17s.
		M	1 34 50	6	130	140		
		F	2 15					
23	Iv	e	5 58 24	1		12	1	
			47	1				
		M	54	9	32		30	
		M	59 10	4		35		
		M	5 59 30	9				
		F	6 15					

Cha	Phase	G.M.T.	T	A ₂	A ₁	A _v		
Oct	Ir	P	h m s	s			2	microns. S?
30			14 48 1	1				
			53 38					
		L	54 34	12	8	10		
		M	53 25	10	18	12		
		M	57 50	15		16		
		M	14 58 10	15	25			
Nov		e	5 1					
10		F	5 17					
10	IIu	P	14 0 44	3	2	2	1	Distance 59 deg. Lat 2 S, Long 129 E. O 13h 40m 40s.
		S	8 52	13	10	20		
		SR1	12 50					
		SR2	16 47					
		L	18 13	26		100		
		M	22	20		165		
		M	23	20	320			
		M	14 26	17	400	235	130	
		F	15 30					
13	IIIu	P	12 25 55	2	3	5	2	Distance 67 deg. Lat 11 N, Long 122 E. O 12h 15m 0s.
		S	34 51	14	12	15	1	
		SR1	39 20					
		SR2	42 47					
		L	46 30	27	90			
		L	47 0	24		190		
		M	48 30	20	230	270	90	
		M	12 57	18		170		
		F	13 45					
14		e	11 21 10					
		M	11 21 32	1	35	30	50	Felt in Apia 2RF.
15	Ir	P	22 26 40	2	2	2		Distance 11 deg.
		L	29 10	6		8		
		M	29 50	7	8	12	2	
		F	22 40					
16	Ir	P	7 1 50					
		L	4 20	6	2	4		
		M	5 20	7	8	18	10	
		F	7 15					
16	Ir	e	12 21 31					
		L	26 54	13		2		
		L	28 20	12	2			
		M	29 20	10		12		
		M	33 45	10		14		
		M	12 36 20	10	4			
		F	13 15					

Cha	Phase	G.M.T.	T	A ₂	A ₁	A _v		
Nov		e	h m s	s				microns:
17		F	7 12					
		F	7 20					
19	Ir	P	19 13 42	2	3	1	1	Distance 12 deg.
		S	16 7					
		L	16 34	12		30		
		M	16 45	10	40	60		
		F	19 50					
19		e	22 0 17					Felt in Apia 3RF.
		M	22 0 50	1	210	190	63	
27		e	14 10 45					
		M	14 11 13	1	20	18	2	
28	IIr	P	18 18 5					Distance 22 deg. Lat 17 S, Long 164 E. O 16h 12m 58s.
		PR1	18 20	2	12	16	17	
		PS	20 25					
		S	22 7					
		L	23 15	20				
		M	27 10	18		700	90	
		M	28 33	18	330			
		F	16 32 15	12	70	55	30	
		F	17 20					
Dec		e	3 46 52					
5		M	3 47 10	1	38	40	6	
10	Iu	e	14 38					Difficult.
		M	14 54					
11	Iv	P	19 48 26	1			1	Distance 2 deg.
		S	48 53	2			3	
		L	49 6	8	25	40		
		M	49 20	8	80			
		M	49 40	8		35		
		M	51 55	4			18	
		F	20 5					
13	Iv	e	21 1					
		F	21 7					
28	Iv	e	22 47 12					
		L	48					
		M	22 49 30					
29	Iv	M	23 35	8	3	7		
31	Id	i	8 47 21					Felt in Apia, 5RF.

The previous pages include 5 small earthquakes known to have been felt in Samoa, and 4 other shocks which may have been felt by a few persons but have not been reported. There are also 52 movements too small to be felt, which occurred at the times given below.

Oct	Nov	Dec
d h m	d h m	d h m
1 17 6	1 16 36	6 2 44
4 11 50	1 19 40	7 1 54
5 17 16	2 4 48	9 22 17
8 6 32	14 14 9	14 8 38
8 16 34	10 13 17	15 6 56
8 21 36	15 11 40	16 13 38
10 3 51	16 3 49	16 22 0
11 5 18	16 10 44	16 23 58
11 19 36	16 15 6	18 6 45
13 11 36	17 6 44	20 5 34
15 3 47	17 8 53	29 23 58
15 4 32	21 6 22	
15 5 25	22 18 25	
17 22 51	22 18 44	
17 23 40	22 19 8	
17 23 50	24 6 30	
18 0 8	26 4 40	
22 4 14	26 12 46	
22 10 32		
22 10 45		
23 22 41		
24 2 22		
31 15 42		

Constants, October 13.
T. e V
EW 9.7 2.1 130
NS 9.5 2.2 145
Vert 2.4 2.2 66