

NEW ZEALAND
Department of Scientific and Industrial Research
Geophysics Division
APIA OBSERVATORY



FINAL SEISMOLOGICAL BULLETIN
STANDARD SEISMIC STATION (AFI)
AFIAMALU, WESTERN SAMOA

October 1982

No	Date	Phase	Time (G.M.T.)		Az	Tz	An	Tn	Ae	Te	Δ (Deg.)	Remarks
1	1	eP	ZNE	09	52	14						
2	1	P	ZNE	16	12	22						
		S	ZNE		13	14						
3	1	iP	ZNE	22	45	55						
		S	ZNE		46	35						u
4	2	eP	ZNE	03	10	41					7.3	USGS:17.51S, 178.42W. Fiji Islands region. h = 613 km. H = 03 08 47.3* Mag. 4.4 (GS)
		S	ZNE		13	10						
5	2	P	ZNE	08	30	52					20.3	USGS:14.74S, 167.27E. Vanuatu Islands. h = 149 km. D H = 08 26 25.2 Mag. 5.6 (GS)
		pP	ZNE		31	32						
		S	ZNE		34	36						
		sS	ZNE		35	24						
6	2	P	ZNE	13	53	53						
		S	ZNE		54	40						
		T	ZNE		57							
7	3	(P)	Z	08	45	14					14.6	USGS:03.48S, 177.66E. Gilbert Islands region. h = 033 km. N H = 08 41 29.3 Mag.5.1MB 4.8MSZ(GS)
		eS	ZNE		47	44						
8	3	eS	ZE	18	32	41					61	USGS:09.31S, 109.98W. Northern Easter Island Cordillera. h = 010 km. G H = 18 13 47.6* Mag.5.0MB 5.2MSZ(GS)
		e(L)	N		39	28						
		Lr	ZE		41							
9	3	P	ZNE	18	50	10						
		(S)	ZNE		51	57						
10	4	P	ZNE	02	20	05					6.1	USGS:18.00S, 176.31W. Fiji Islands region. h = 033 km. N H = 02 18 45.0* Mag.5.2MB 5.1MSZ(GS)
		S	ZNE		21	09						
11	4	eP	ZNE	02	42	32						
		eS	ZNE		43	45						
12	4	P	ZNE	13	20	29						
		S	ZNE		21	39						
		(T)	ZNE		26							
13	4	P	ZNE	15	27	39					18.5	USGS:22.65S, 171.18E. Loyalty Islands region. h = 033 km. N H = 15 23 26.9 Mag.5.1MB 5.0MSZ(GS)
		S	ZNE		31	37						

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No	Date	Phase	Time (G.M.T.)		Az	Tz	An	Tn	Ae	Te (Deg.)	Remarks
14	4	eP eS	ZNE ZNE	15 45 29 48 59						19.2	USGS:31.98S, 178.51W. Kermadec Islands region. h = 066 km. H = 15 41 08.9 Mag. 5.6 (GS)
15	4	(P) S	ZNE ZNE	15 52 43 53 57							
16	5	eP e(S)	ZNE ZNE	04 12 42 15 07						14.6	USGS:03.49S, 177.69E. Gilbert Islands region. h = 033 km. N H = 04 09 16.7 Mag. 5.3MB 4.8MSZ(GS)
17	5	P S	ZNE ZNE	04 48 22 49 57						9.4	USGS:22.69S, 175.01W. Tonga Islands region. h = 033 km. N H = 04 46 14.6 Mag. 5.0 (GS)
18	5	P eS	ZNE ZNE	09 18 57 22 44						19.7	USGS:15.59S, 168.00E. Vanuatu Islands. h = 018 km. N H = 09 14 32.5 Mag. Ms5.7(BRK), 5.4(PAS), 5.8MB 5.4MSZ(GS)
19	5	P S	ZNE ZNE	10 19 00 21 57						17.6	USGS:30.52S, 177.81W. Kermadec Islands. h = 054 km. D H = 10 15 04.6 Mag. 5.6 (GS)
20	5	P (S)	ZNE ZNE	20 21 03 24 00						17.6	USGS:30.07S, 179.22W. Kermadec Islands region. h = 327 km. H = 20 17 19.5 Mag. 4.8 (GS)
21	5	P eS	ZNE ZNE	20 30 07 33 32						18.5	USGS:22.80S, 171.15E. Loyalty Islands region. h = 041 km. H = 20 25 56.4 Mag. 5.5MB 5.4MSZ(GS)
22	6	P S	ZNE ZNE	03 43 22 39							
23	6	P S	ZNE ZNE	13 19 24 43							
24	6	eP eS eSS	ZNE E ZNE	21 17 28 20 48 21 16						18.6	USGS:22.66S, 171.12E. Loyalty Islands region. h = 033 km. N H = 21 13 12.2 Mag. 5.3MB 5.0MSZ(GS)
25	7	P PcP PP S sS SS	ZNE Z ZNE ZNE ZNE ZNE	07 25 26 47 27 52 33 10 36 20 37 36						63	USGS:01.16S, 125.88E. Banda Sea. h = 516 km. H = 07 15 56.6 Mag. mb 6.6(PAS), 6.2(GS)
26	7	eP eS	ZNE ZNE	13 43 44 46 11						14.5	USGS:03.57S, 177.73E. Gilbert Islands region. h = 029 km. D H = 13 40 19.2 Mag. 4.9MB 4.4MSZ(GS)

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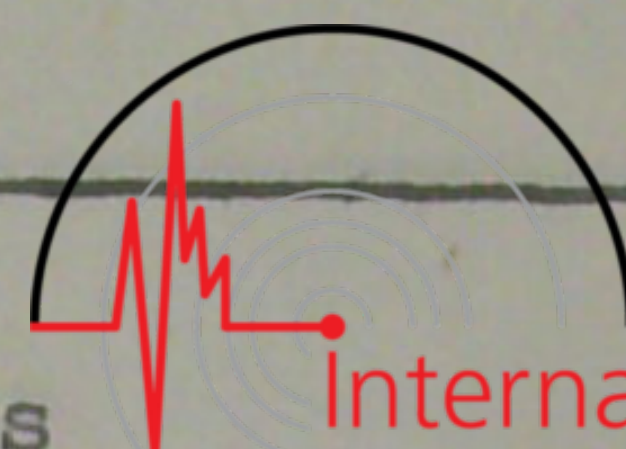
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No	Date	Phase	Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te (Deg.)	Remarks
27	8	iP S	ZNE ZNE	01	33	04					2.3	u USGS:15.54S, 173.31W. Tonga Islands. h = 033 km. N H = 01 32 34.1* Mag. 4.4 (GS)
28	8	P S	ZNE ZNE	18	48	08					12.1	USGS:23.19S, 179.80W. South of Fiji Islands. h = 536 km. H = 18 45 30.2* Mag. 5.1 (GS)
29	9	eP eS e	ZNE ZNE ZNE	18	56 58 59	42 53 12					14.6	USGS:03.44S, 177.76E. Gilbert Islands region. h = 033 km. N H = 18 53 02.3 Mag.5.3MB 4.7MSZ(GS)
30	9	eP S	ZNE ZNE	19	43 46	51 10					14.6	USGS:03.47S, 177.70E. Gilbert Islands region. h = 033 km. N H = 19 40 23.0 Mag. 5.3 (GS)
31	9	P	ZNE	19	59	45						
32	9	P S e	ZNE ZNE ZNE	22	13 17 19	43 32 08					20.3	USGS:16.64S, 167.42E. Vanuatu Islands. h = 033 km. N H = 22 09 11.7 Mag.4.9MB 4.9MSZ(GS)
33	10	P S	ZNE ZNE	12	42 44	58 47					7.4	USGS:17.79S, 178.41W. Fiji Islands region. h = 570 km. H = 12 41 05.8 Mag. 4.7 (GS)
34	10	eS eLr eLq	N E ZN	17	43 52 55	08					68	USGS:40.18N, 143.75E. Off East Coast of Honshu Japan. Felt (IJMA) in northern Honshu and southern Hokkaido .. h = 028 km. D H = 17 23 03.9 Mag.5.4MB 5.2MSZ(GS)
35	11	iP S	ZNE ZNE	10	15 16	46 35					3.9	u USGS:16.14S, 175.01W. Tonga Islands. h = 302 km. H = 10 14 40.8 Mag. 4.6 (GS)
36	11	P	ZNE	15	54	30					8.8	USGS:20.62S, 177.81W. Fiji Islands region. h = 539 km. H = 15 50 53.7? Mag. 4.4 (GS)
37	11	P S T	ZNE ZNE ZNE	16	37 40 50	55 17					14.4	USGS:27.48S, 176.42W. Kermadec Islands region. h = 045 km. D H = 16 34 47.1 Mag. 5.2 (GS)
38	11	P S	ZNE ZNE	20	15	16 32						

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No	Date	Phase	Time (G.M.T.)	Az	Tz	An	Tn	Ae	Te (Deg.)	Remarks
39	12	P S	ZNE ZNE	03	15 17	30 54			14.4	USGS:25.41S, 179.17E. South of Fiji Islands. h = 656 km. H = 03 12 45.7? Mag. 4.6 (GS)
40	12	P S	ZNE ZNE	08	41 42	42 57			7.5	USGS:20.21S, 175.94W. Tonga Islands. h = 175 km. H = 08 39 57.3 Mag. 4.9 (GS)
41	13	P	ZNE	16	56	53			22.2	USGS:34.36S, 178.95E. South of Kermadec Island h = 238 km. H = 16 52 15.9? Mag. 4.6 (GS)
42	13	P S	ZNE ZNE	20	05 06	33 23				
43	14	iP S	ZNE ZNE	07	27	03.3 23				u
44	14	P	ZNE	08	56	46			13.0	USGS:23.92S, 179.47E. South of Fiji Islands. h = 494 km. H = 08 53 56.8* Mag. 4.9 (GS)
45	15	P S T	ZNE ZNE ZNE	22	36 39 49	38 05			14.0	USGS:27.19S, 176.24W. Kermadec Islands region. h = 033 km. N H = 22 33 30.0* Mag. 4.7 (GS)
46	16	P	ZNE	02	01	19			42.2	USGS:05.55S, 146.23E. East Papua New Guinea region. h = 076 km. H = 01 53 31.2 Mag. 5.3 (GS)
47	16	P S	ZNE ZNE	10	41 42	21 37			7.3	USGS:20.21S, 175.47W. Tonga Islands. h = 267 km. H = 10 39 37.0* Mag. 4.5 (GS)
48	17	eP (S)	ZNE ZNE	20	44 45	34 46				
49	19	P S T	ZNE ZNE ZNE	03	35 36 39	23 10			4.3	USGS:17.89S, 172.89W. Tonga Islands region. h = 053 km. D H = 03 34 32.1 Mag. 5.5 (GS)
50	19	P S	ZNE ZNE	03	44	02 45			3.6	USGS:15.80S, 174.86W. Tonga Islands. h = 286 km. D H = 03 43 05.6 Mag. 5.2 (GS)
51	19	P S	ZNE ZNE	16	24 28	22 44			24.6	USGS:11.36S, 163.14E. Solomon Islands. h = 040 km. H = 16 19 04.9 Mag. 5.7MB 5.9MSZ(GS)

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No	Date	Phase	Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te (Deg.)	Remarks
52	20	P	ZNE	09	30	51					18.4	USGS:22.21S, 171.13E. Loyalty Islands region. h = 114 km. H = 09 26 47.5 Mag. 4.0 (GS)
53	20	eP S	ZNE ZNE	10	10 11	26 35						
54	20	eP	ZNE	18	40	30					20.1	USGS:27.92S, 172.90E. Norfolk Island region. h = 023 km. H = 18 36 03.8* Mag. 5.2 (GS)
55	20	P eS eSS eLq eLr	ZNE ZNE ZNE E ZNE	20	13 23 28 33 36	43 24 10					76	USGS:23.83N, 121.84E. Taiwan. h = 033 km. D H = 20 01 57.2 Mag. 5.4MB 5.9MSZ(GS)
56	21	eP epP	ZNE ZE	09	51	10 40					19.0	USGS:18.96S, 169.07E. Vanuatu Islands. h = 179 km. D H = 09 47 01.6 Mag. 5.1 (GS)
57	21	P S T	ZNE ZNE ZNE	19	02 04	08 28						
58	22	eP eS	ZNE ZNE	07	11 13	30 19					12.2	USGS:25.35S, 175.67W. South of Tonga Islands. h = 033 km. N H = 07 08 38.4* Mag. 4.7 (GS)
59	22	eP eS	ZE ZNE	08	54 56	10 40					14.6	USGS:03.44S, 177.72E. Gilbert Islands region. h = 033 km. N H = 08 50 31.0 Mag. 4.9 (GS)
60	22	P S	ZNE ZNE	20	01 03	57 34						
61	23	eP	ZE	00	18	28					63	USGS:01.91S, 126.62E. Molucca Sea. h = 033 km. N H = 00 08 06.5 Mag. 5.4MB 5.0MSZ(GS)
62	23	eP eS	ZNE ZNE	10	39 41	47 57					12.6	USGS:25.97S, 175.32W. South of Tonga Islands. h = 033 km. N H = 10 37 07.2* Mag. 4.7 (GS)
63	23	P (S)	ZNE ZNE	15	06 08	26 53						
64	23	P S	ZNE ZNE	23	36 38	01 19					13.8	USGS:25.61S, 179.51W. South of Fiji Islands. h = 409 km. H = 23 33 06.4* Mag. 4.2 (GS)
65	24	P S	ZNE ZNE	07	56 58	26 01					8.7	USGS:20.73S, 177.33W. Fiji Islands region. h = 485 km. H = 07 54 25.5* Mag. 4.7 (GS)

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66	24	P e(S)	ZNE ZNE	08	26 30	38 39			20.5	USGS:33.08S, 179.39W. South of Kermadec Is. h = 033 km. N H = 08 21 56.1* Mag.4.5MB 4.9MSZ(GS)
67	24	iP S	ZNE ZNE	08	53	01.9 26				u
68	24	e(P)	ZNE	11	30	47				
69	24	eS e(SSS)E eLr	ZNE ZNE	22	45 51 54	40 44			54	USGS:53.66S, 140.99E. West of Macquarie Is. h = 010 km. G H = 22 28 22.3* Mag.4.8MB 5.2MSZ(GS)
70	25	P S	ZNE ZNE	12	31 32	31 12			4.4	USGS:17.39S, 174.29W. Tonga Islands. h = 069 km. H = 12 30 27.4 Mag. 4.9 (GS)
71	25	iP S	ZNE ZNE	13	42 43	43.9 04			2.3	d USGS:15.51S, 173.38W. Tonga Islands. h = 043 km. D H = 13 42 12.7* Mag. 5.0 (GS)
72	25	P (S)	ZNE ZNE	19	26 28	37 50	3.9	0.9	13.1	USGS:23.90S, 179.37E. South of Fiji Islands. h = 546 km. H = 19 23 50.7* Mag. 4.8 (GS)
73	25	eS eL	ZNE ZNE	22	47 57	00			69	USGS:36.32N, 120.51W. Central California. Felt. h = 011 km. G H = 22 26 04.4& Mag. BRK ML5.4(BRK) 5.4(PAS),5.3MB 5.2MSZ(GS)
74	26	eP S	ZNE ZNE	13	29 30	18 50				
75	26	P	ZNE	21	35	40				
76	27	eP S T	ZNE ZNE ZNE	13	41 42 47	24 38			7.1	USGS:19.69S, 175.70W. Tonga Islands. h = 271 km. H = 13 39 44.9* Mag. 4.7 (GS)
77	27	P	ZNE	17	46	43				
78	27	eP eS	ZNE ZNE	21	20 23	39 59			18.8	USGS:31.40S, 179.13W. Kermadec Islands region h = 033 km. N H = 21 15 58.9* Mag. 5.1 (GS)
79	28	P S T	ZNE ZNE ZNE	16	21 24	09 48 30			4.4	USGS:18.14S, 172.47W. Tonga Islands region. h = 033 km. N H = 16 20 20.1? Mag. 4.3 (GS)
80	28	eP S	ZNE ZNE	21	13 14	40 33				
81	28	P S	ZNE ZNE	23	50	04 52				

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No	Date	Phase	Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te (Deg.)	Remarks
82	29	iP S	ZNE ZNE	01 06	05 00	25.8 00					3.6	d USGS:16.78S, 173.79W. Tonga Islands. Felt (II)at Apia, Western Samoa. h = 033 km. N H = 01 04 34.4 Mag. 5.2 (GS)
83	29	P e(S)	ZNE ZNE	08 59	57 04	39 04						
84	29	e(P)	Z	10	51	24						
85	30	iP S	ZNE ZNE	03 59	58 04	39.8 04						u
86	30	P	ZNE	16	34	12	2.1	1.0			20.2	USGS:12.19S, 167.46E. Santa Cruz Islands. h = 325 km. H = 16 29 59.8 Mag. 5.1 (GS)
87	31	P S	ZNE ZNE	00 40	39 32	53 32						
88	31	eS eSS eL eL	ZNE N N ZE	06 31 38 41	26 31 38 41	00 40					85	USGS:14.09N, 090.27W. Guatemala. Felt (VI)at Guatemala City. h = 098 km. D H = 06 03 04.5 Mag. 5.3 (GS)
89	31	iP S	ZNE ZNE	15 08	07 06	23 06					3.2	d USGS:15.15S, 174.80W. Tonga Islands. h = 259 km. H = 15 06 29.1* Mag. 4.3 (GS)

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