NEW ZEALAND

Department of Scientific and Industrial Research

Geophysics Division

APIA OBSERVATORY

FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

February 1972

International Seismological Centre

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
1	1	P	Z	02	33	12		27.8	USCGS: 9.8S.,160.1E
		S	ZNE		48	03			Solomon Islands
		Lq	N		49	45			Felt (IV) at Honiara
		Lr	ZE		51	04			h about 39 km
									H = 02 37 24.1
									Mag.5.6(BRK), 5.4MB, 5.4MS (CGS)
2	1	IP	ZNE	05	20	34.6			u
		S	ZNE			56			
3	1	IP	Z	10	46	47.2			
		S	ZNE		47	07			
4	1	P	ZNE	12	10	14			
		S	ZNE			55			
5	2	P	Z	15	13	13			
		S	ZNE		14	08			
6	2	P	Z	22	01	19			
		S	ZNE		02	01			
7	3	P	ZNE	08	43	12		37.1	USCGS: 4.6S., 151.8E
									New Britain region
									Felt (III) at Rabaul
									h about 168 km
									H = 08 36 16.6
									Mag. 5.4 (CGS)
8	4	P	ZNE	07	04	52		7.6	USCGS: 17.8S., 178.6W
		S	ZNE		06	21			Fiji Islands region
									h about 611 km
									H = 07 02 57.6
									Mag. 4.7 (CGS)
9	5	IP	Z	00	25	07.8		54	u
		S	ZNE		32	44			USCGS: 55.4S., 128.7W
		SS	NE		37	00			South Pacific Cordillera
		SSS	ZNE			42			h Normal
		L	ZN		39	44			H = 00 15 51.2
									Mag. 5.9MB 5.9MS(CGS)
10	5	P	ZNE	11	57	39			Samoa Islands region
		S	ZNE			57			
11	5	P	ZNE	21	24	09			
		S	ZNE			52			
12	6	P	Z	11	59	27		19.5	USCGS: 17.8S., 168.4E
		pP	ZE			56			New Hebrides Islands
									Felt (III) at Port Vila
									h about 135 km
									H = 11 55 09.0
									Mag. 5.2 (CGS)
13	6	P	Z	22	12	45		53	USCGS: 12.5N., 141.9E
									South of Mariana Islands
									h about 50 km
									H = 22 03 30.4
									Mag. 5.5 (CGS)

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
14	7	P	ZNE	04	21	13		12.9	USCGS: 24.0S., 179.9E
		S	ZNE		23	25			South of Fiji Islands
									h about 550 km
									H = 04 18 31.0
									Mag. 4.2 (CGS)
15	7	(P)	ZNE	05	55	49			
16	7	P	ZNE	19	05	29			
		S	ZNE		06	14			
		T	ZNE		08	50			
17	7	eP	Z	19	27	57		92	USCGS: 8.5N.,83.9W
									Costa Rica
									h about 14 km
									H = 19 14 47.6
									Mag. 5.9(BRK), 5.5MB
									5.5MS (CGS)
18	7	P	Z	20	33	58			
		S	ZNE		34	32			
19	8	P	ZNE	05	34	54			
		S	ZNE		36	06			
		eT	ZNE		41	17			
20	9	IP	ZNE	13	34	07			u
		S	ZNE			41			
21	9	P	Z	13	54	39		20.9	USCGS: 13.1S.,166.6E
									New Hebrides Islands
									h about 76 km
									H = 13 49 58.0
									Mag. 4.9 (CGS)
22	9	IP	ZNE	14	37	06.5	1.6 1.0	13.4	u
		S	ZNE		39	23			USCGS: 23.7S.,178.7E
									South of Fiji Islands
									h about 549 km
									H = 14 34 18.8
									Mag. 4.4 (CGS)
23	9	P	Z	20	57	07		84	USCGS: 51.8S, 74.0W
		S	ZNE	21	07	48			Near Coast of Southern
		SS	ZN		13	04			Chile
		Lq	NE		20				h Normal
		Lr	Z		23				H = 20 44 36.4
									Mag. 5.5MB 5.8MS(CGS)
24	10	P	Z	00	40	03		14.6	USCGS: 27.8S, 176.3W
		S	ZNE		42	23			Kermadec Islands region
		T	ZNE		53	12			h about 40 km
									H = 00 36 35.6
									Mag. 4.5 (CGS)
25	10	P	ZNE	03	07	20		9.7	USCGS: 20.8S, 178.8W
		S	ZNE		09	02			Fiji Islands region
									h about 575 km
									H = 03 05 09.2
									Mag. 4.5 (CGS)
26	10	P	Z	05	55	26		14.5	USCGS: 27.6S, 176.3W
		S	ZNE		57	46			Kermadec Islands region
									h Normal
									H = 05 51 58.1
									Mag. 4.5 (CGS)
27	10	P	Z	12	30	16			
		S	ZNE			48			
		T	ZNE		33	22			
	11								No Readings.

International Seismological Centre

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
28	12	P	Z	11	04	49		7.7	USCGS: 17.6S, 178.8W
		S	NE		06	28			Fiji Islands region
									h about 580 km
									H = 11 02 56.5
									Mag. 3.9 (CGS)
29	12	IP	ZNE	18	52	32			une
		Motion too rapid for S registration.							USCGS: 15.3S, 173.4W
									Tonga Islands
									Felt (II) at Apia, Samoa Islands
									h about 5 km
									H = 18 51 57.0
									Mag. 5.9MB 5.7MS(CGS)
30	12	IP	ZNE	19	05	17.9			u
		S	ZNE			37			
31	13	e(S)	NE	05	42	28			
		L	ZNE		49	16			
32	13	P	ZNE	13	04	55		13.6	USCGS: 19.2S, 175.1E
		S	ZNE		07	27			South of Fiji Islands
									h about 73 km
									H = 13 01 52.8
									Mag. 5.1 (CGS)
33	14	IP	ZNE	23	34	35		21.6	u
									USCGS: 11.4S, 166.3E
									Santa Cruz Islands
									Felt on San Cristobal, Solomon Islands
									h about 102 km
									H = 23 29 51.7
									Mag. 7.4(PAS),7.0(BRK), 6.2 (CGS)
34	15	(P)	Z	00	08	33			
35	15	IP	ZNE	04	09	44.5		2.7	u
		S	ZNE		10	10			USCGS: 15.8S, 173.7W
									Tonga Islands
									Felt at Apia, Samoa Islands
									h about 92 km
									H = 04 09 03.9
									Mag. 4.8 (CGS)
36	15	IP	ZNE	07	06	52.2			d
		S	ZNE		07	12			
37	15	P	Z	21	34	54		21.6	USCGS: 11.4S, 166.4E
		S	NE		39	24			Santa Cruz Islands
									h about 104 km
									H = 21 30 10.9
									Mag. 5.0 (CGS)
38	16	IP	Z	03	54	35.4		21.6	d
		S	NE		59	12			USCGS: 11.3S, 166.3E
									Santa Cruz Islands
									h about 100 km
									H = 03 49 50.8
									Mag. 5.2 (CGS)
39	16	eP	Z	06	15	19			
		S	ZNE		16	33			
40	16	eP	Z	15	36	31		36.6	USCGS: 6.2S, 151.9E
									New Britain region
									h about 45 km
									H = 15 29 26.9
									Mag. 5.2 (CGS)

International Seismological Centre

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Th	Ae	Te	△ (Deg.)	Remarks
41	17	P	Z	00	46	15	1.1	1.0					36.7	USCGS: 6.1S, 151.0E New Britain region Felt (II) at Rabaul h about 40 km H = 00 39 09.9 Mag. 5.5MB 4.8MS (CGS)
		L	ZNE	01	00									
42	17	P	ZNE	21	13	12								Samoa Islands region
		S	ZNE			31								
43	18	P	Z	13	07	18							12.6	USCGS: 23.7S, 179.9W South of Fiji Islands h about 490 km H = 13 04 36.4 Mag. 4.5 (CGS)
		S	ZNE		09	27								
44	18	P	Z	19	23	47							21.1	USCGS: 12.5S, 166.5E Santa Cruz Islands h about 54 km H = 19 18 54.1 Mag. 4.9 (CGS)
45	19	IP	Z	08	04	42	2.2	1.1					25.0	u USCGS: 12.2S, 162.6E Solomon Islands h about 60 km H = 07 59 21.3 Mag. 5.3 (CGS)
		S	NE		09	08								
		L	ZNE		10									
46	19	IP	Z	14	42	01							14.1	u USCGS: 25.3S, 179.6E South of Fiji Islands h about 488 km H = 14 39 05.3 Mag. 4.6 (CGS)
		S	ZNE		44	24								
47	20	P	ZNE	04	41	21							14.3	USCGS: 26.7S, 178.4W South of Fiji Islands h about 275 km H = 04 38 19.2 Mag. 5.1 (CGS)
		S	ZNE		43	45								
		T	ZNE		53	11								
48	20	P	Z	13	33	06							20.2	USCGS: 14.6S, 167.3E New Hebrides Islands h about 137 km H = 13 28 35.1 Mag. 4.9 (CGS)
49	20	eP	Z	14	14	26							19.5	USCGS: 21.6S, 169.5E Loyalty Islands region h about 18 km H = 14 09 57.3 Mag. 4.8 (CGS)
		S	NE		18	24								
		Lr	ZE		19	28								
50	20	P	Z	16	25	28								
		S	ZNE		26	19								
51	20	P	ZNE	16	27	04								
		S	ZNE		28	22								
52	21	IP	ZNE	00	22	48.4								d Samoa Islands region
		S	ZNE		23	10								
53	21	P	ZNE	03	51	44								
		S	NE		52	50								
54	21	P	ZNE	03	57	09							12.9	USCGS: 25.9S, 176.7W South of Fiji Islands h about 85 km H = 03 54 08.1 Mag. 3.9 (CGS)
		S	ZNE		59	22								
		T	ZNE	04	10	20								

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
55	21	P	ZE	06	07	11	2.0	1.4					20.0	USCGS: 17.6S, 167.9E New Hebrides Islands h about 27 km H = 06 02 37.7 Mag. 5.1 (CGS)
		S	ZE		12	24								
56	21	P	Z	19	46	01							70	USCGS: 55.9N, 158.3W Alaska Peninsula Felt False Pass,Alaska h about 60 km H = 19 34 50.9 Mag. 5.4(BRK).5.7(CGS)
		S	N		56	12								
		Lr	ZN	20	07									
57	21	P	Z	23	46	57	2.5	1.1					21.6	USCGS: 11.4S, 166.3E Santa Cruz Islands h about 107 km H = 23 42 14.2 Mag. 4.9 (CGS)
	22													No Readings.
58	23	IP	ZNE	00	14	40.1								u
		S	ZNE		15	02								
59	23	IP	ZNE	04	39	55.4								d
		S	ZNE		40	45								
60	23	IP	Z	18	19	31.2							1.7	une USCGS: 15.1S, 173.0W Tonga Islands Felt (II) at Apia h about 51 km H = 18 19 04.6 Mag. 5.4(BRK),5.7(CGS)
		Motion too rapid for S registration.												
61	23	IP	ZNE	19	16	38								u
		(S)	ZNE		17	00								
62	24	P	Z	15	55	16							17.9	USCGS: 22.4S, 171.8E Loyalty Islands regio h Normal H = 15 51 11.9 Mag. 5.5MB 5.2MS (CGS)
		S	ZNE		58	40								
63	25	Lq	NE	01	59	32							101	USCGS: 60.6S, 25.7W South Sandwich Islands region h =Normal H = 01 17 12.5 Mag. 6.0MB 6.1MS (CGS)
		Lr	ZN	02	04									
64	25	P	ZNE	08	47	02							13.5	USCGS: 25.1S, 179.7W South of Fiji Islands h about 450 km H = 08 44 12.0 Mag. 5.5(BRK),5.2(CGS)
		S	ZNE		49	19								
65	25	P	ZNE	09	43	05								
		S	ZNE			35								
66	25	(P)	Z	22	34	14								
67	26	e(P)	Z	13	57	37								
68	26	eP	Z	20	48	57							8.1	USCGS: 19.6S, 177.7W Fiji Islands region h about 556 km H = 20 47 04.4 Mag. 4.2 (CGS)
		S	ZNE		50	28								
69	27	P	ZNE	08	44	44								
		S	ZNE		45	04								

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.	Remarks
70	28	IP	ZNE	02	02	29								u
		S	ZNE			49								
71	28	IP	ZNE	16	19	24.1								u
		S	ZNE			45								
72	28	eS	NE	18	39	20							65	USCGS: 4.6S, 105.2W
		eLq	N		46	40								Northern Easter Islands
		eLr	ZE		49	20								Cordillera
														h Normal
														H = 18 19 25.6
														Mag. 5.6(BRK), 4.8MB
														5.6MS (CGS)
73	28	(P)	Z	22	24	47								
		S	ZNE		26	31								
74	29	P	ZNE	09	33	38	5.7	8.0					65	USCGS: 33.3N, 140.8E
		PP	Z		36	00								South of Honshu, Japan
		S	ZNE		42	22								Damage (VI JMA) on
		SS	ZNE		46	11								Hachijojima and in the
		SSS	ZNE		49	28								Tokyo area. Several
		Lr	ZNE		52	30								centimeters Tsunami
														were observed at
														Tateyama Cape, Shionimi-saki and other places.
														Felt widely on Honshu
														h about 56 km
														H = 09 22 59.8
														Mag. 7.2(PAS), 7.1(BRK)
														6.3 (CGS)
75	29	eP	Z	09	52	26							65	USCGS: 33.5N, 140.9E
														South of Honshu, Japan
														Felt (III JMA) on
														Hachijojima (I) at
														Tateyama
														h about 63 km
														H = 09 42 41.9
														Mag. 6.2(BRK), 5.8(CGS)
76	29	e(P)	Z	10	02	33								
77	29	P	Z	11	49	46								
		S	ZNE		50	44								
		T	ZNE		54	40								

"

P.D. Muller

SUPERINTENDENT

NEW ZEALAND

Department of Scientific and Industrial Research

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APIA OBSERVATORY

FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

March 1972

International Seismological Centre

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
1	1	P	ZNE	09	05	57		5.5	USCGS: 18.9S, 173.8W
		S	ZNE		07	04			Tonga Islands
									h Normal
									H = 09 04 41.7
									Mag. 5.8MB 5.3MS(CGS)
2	1	P	Z	09	40	04		70	USCGS: 40.5N, 125.2W
		S	ZNE		49	20			Off coast of Northern
		SS	E		53	32			California. Felt
		SSS	NE		57	04			coastal area in
		L	ZN	10	00				Northern California.
									h Normal
									H = 09 28 56.7
									Mag. 5.2(BRK), 5.4MB
									5.9MS (CGS)
3	2	P	ZNE	04	05	20	1.0 0.9	41.1	USCGS: 5.6S, 147.2E
									East New Guinea region
									h about 188 km
									H = 03 57 52.1
									Mag. 4.9 (CGS)
4	2	iP	ZNE	09	04	15.5			u
		S	ZNE			30			Samoa Islands region
5	2	P	ZE	09	34	39	1.0 1.0	19.8	USCGS: 18.2S, 168.1E
									New Hebrides Islands
									h about 37 km
									H = 09 30 08.7
									Mag. 4.9 (CGS)
6	2	P	ZNE	16	59	00			
		S	ZNE	17	00	54			
7	2	eP	Z	20	20	46		65	USCGS: 33.4N, 140.8E
		eL	ZN		40				South of Honshu, Japan
									Felt on Hachijojima
									h about 57 km
									H = 20 10 08.2
									Mag. 5.7 (CGS)
	3	No Readings.							
8	4	P	ZNE	03	00	54		10.9	USCGS: 21.8S, 179.5W
		S	ZNE		02	49			Fiji Islands region
									h about 570 km
									H = 02 58 28.0
									Mag. 5.4 (CGS)
9	4	P	ZE	04	23	27		20.9	USCGS: 14.7S, 166.6E
		S	ZNE		28	54			New Hebrides Islands
									h about 32 km
									H = 04 18 44.9
									Mag. 5.0MB 5.2MS (CGS)
10	4	P	ZNE	06	28	04			
		(S)	ZNE			48			

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
11	5	eP	Z	08	40	26			
		S	ZNE		41	09			
		eT	ZNE		43	44			
12	6	P	ZNE	00	28	47			
		S	ZNE		30	32			
13	6	eP	Z	06	39	42		25.3	USCGS: 11.0S, 162.4E Solomon Islands h about 62 km H = 06 34.17.2 Mag. 5.2 (CGS)
14	6	P	Z	17	14	57		18.1	USCGS: 22.4S, 171.5E Loyalty Islands region h about 27 km H = 17 10 46.0
15	6	P	ZNE	17	40	53			
16	6	P	Z	17	42	10		18.2	USCGS: 22.4S, 171.3E Loyalty Islands region h about 21 km H = 17 37 59.5 Mag. 5.1 (CGS)
		S	NE		45	52			
17	6	P	ZNE	17	43	19		18.3	USCGS: 22.6S, 171.4E Loyalty Islands region h about 33 km H = 17 39 05.9 Mag. 4.9 (CGS)
		S	NE		46	48			
18	7	P	ZNE	04	41	44			
		(S)	ZNE		43	55			
19	7	P	ZNE	07	48	45		15.6	USCGS: 28.2S, 178.3W Kermadec Islands region Felt on Raoul h about 192 km H = 07 45 21.9 Mag. 6.7(PAS), 6.5(BRK), 6.2 (CGS)
		S	ZNE		51	36			
20	8	eP	Z	03	40	52		57	USCGS: 6.4S, 130.1E Banda Sea h about 117 km H = 03 31 12.5 Mag. 5.7 (CGS)
21	8	P	ZNE	03	55	13		56.9	USCGS: 3.7S, 131.4E West New Guinea region h Normal H = 03 45 25.2 Mag. 5.9MB 5.8MS (CGS)
		S	ZNE	04	03	00			
		SS	ZNE		07	09			
		Lq	N		10				
		Lr	Z		12				
22	8	P	ZNE	06	40	32		18.1	USCGS: 22.5S, 171.5E Loyalty Islands region h about 30 km H = 06 36 27.2 Mag. 5.0 (CGS)
		S	NE		44	00			
23	8	eP	Z	08	36	18			
		S	ZNE		37	04			
24	8	P	ZNE	13	30	33			
		S	ZNE		32	20			
25	8	P	ZNE	16	12	49			
		(S)	ZNE		15	29			

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
26	8	P	ZNE	17	35	56			
		S	ZNE		36	39			
		T	ZNE		39	40			
27	8	P	ZNE	18	06	27			
		S	ZNE		07	10			
28	8	P	Z	18	16	59			
		S	ZNE		17	42			
29	9	P	ZNE	04	50	10		4.6	USCGS: 14.9S, 176.4W Fiji Islands region h about 143 km H = 04 49 26.8 Mag. 4.9 (CGS)
		S	ZNE			59			
30	9	P	Z	14	18	23			
		(S)	ZNE		20	09			
31	10	P	Z	02	38	17		18.0	USCGS: 22.3S, 171.5E Loyalty Islands region h about 9 km H = 02 34 06.6 Mag. 4.3 (CGS)
		eS	NE		41	40			
32	10	eP	Z	09	13	31		18.7	USCGS: 31.5S, 178.2W Kermadec Islands region h about 64 km H = 09 09 17.9 Mag. 4.2 (CGS)
33	10	(P)	ZNE	15	56	06			
34	11	eP	Z	03	30	21	0.8 1.4	76	USCGS: 9.0S, 110.5E South of Java h about 62 km H = 03 18 35.2 Mag. 5⁄3 (CGS)
35	11	eS	ZNE	04	14	00		86	USCGS: 13.4N, 90.0W Near coast of Guatamala Felt (IV) at San Salvador, Ele Salvador h about 85 km H = 03 50 45.9 Mag. 5.6(BRK),5.1(CGS)
		eSS	ZE		19	20			
		eLr	ZNE		30				
36	11	IP	ZNE	15	55	55		3.3	d USCGS: 15.2S, 174.9W Tonga Islands h about 252 km H = 15 54 58.7 Mag. 4.6 (CGS)
		S	ZNE		56	36			
37	12	P	Z	20	25	01			
		S	ZNE			53			
38	13	P	ZNE	05	43	31		12.8	USCGS: 23.9S, 179.9E South of Fiji Islands h about 523 km H = 05 40 50.3 Mag. 4.9 (CGS)
		S	ZNE		45	39			
39	13	P	ZNE	08	37	57			
		S	ZNE		39	10			
40	14	P	ZNE	07	18	22		9.8	USCGS: 22.7S, 175.9W Tonga Islands region h about 135 km H = 07 16 16.6 Mag. 4.7 (CGS)
		S	ZNE		19	56			

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
41	14	P	Z	13	53	44							18.3	USCGS: 22.2S, 171.5E Loyalty Islands region h about 160 km H = 13 49 48.4 Mag. 4.7 (CGS)
42	14	PKP	Z	14	25	33							149	USCGS: 39.3N, 29.4E Turkey Slight damage at Siman and Demirci. Felt at Istanbul h about 33 km H = 14 05 45.8 Mag. 5.4MB 4.9MS (CGS)
43	15	S	N	11	42	36							65	USCGS: 51.6N, 176.8E Rat Islands, Aleutian Islands h about 39 km H = 11 23 08.7 Mag. 5.4MB 4.9MS (CGS)
		eL	ZN		53	20								
44	15	eP	Z	15	02	30							19.9	USCGS: 32.7S, 178.8W South of Kermadec Islands h about 28 km H = 14 58 00.9 Mag. 5.0 (CGS)
		eS	ZNE		05	56								
45	16	iP	ZNE	00	31	57.1	1.0	0.9						u
		S	ZNE		33	49								
46	16	eP	Z	07	06	56								
		e(S)	NE		08	24								
47	17	P	ZNE	00	24	15							13.2	USCGS: 24.7S, 179.6W South of Fiji Islands h about 407 km H = 00 21 25.8 Mag. 5.6 (CGS)
		S	ZNE		26	29								
48	18	eP	Z	15	41	08							8.5	USCGS: 19.8S, 178.1W Fiji Islands region h about 591 km H = 15 39 20.3
		S	ZNE		42	58								
49	18	eP	ZNE	23	28	19							65	USCGS: 33.5N, 141.2E Off East Coast of Honshu, Japan Felt (II JMA) on Hachijojima and at Tateyama h about 47 km H = 23 17 40.9 Mag. 6.0(PAS),5.4(BRK), 5.9MB 5.4MS (CGS)
		eS	ZNE		37	08								
		e(SSS)	E		44	40								
		Lr	ZNE		48									
50	19	IP	Z	04	06	17							7.4	u
		S	ZNE		07	47								USCGS: 18.2S, 178.0W Fiji Islands region h about 593 km H = 04 04 25.7 Mag. 4.5 (CGS)
51	19	eP	Z	04	57	04							10.7	USCGS: 23.7S, 176.1W South of Fiji Islands h about 140 km H = 04 54 50.3 Mag. 4.4 (CGS)
		S	ZNE		58	52								

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
52	19	P	Z	16	08	53		70	USCGS: 40.8N, 141.9E
		S	ZNE		18	04			Near East coast of
		eSS	Z		22	24			Honshu, Japan
		eSSS	NE		25	48			Felt (IV JMA) at
		Lr	ZNE		29				Hachinohe, Aomori and
									Morioka
									h about 76 km
									H = 15 57 50.4
									Mag. 6.0 (CGS)
53	20	P	Z	01	49	07			
54	20	P	Z	07	47	05		94	USCGS: 6.8S, 76.8W
		ScS	ZNE		57	28			Northern Peru
		S	ZNE		59	24			7 killed, 50 injured,
		SS	ZNE	08	04	16			and major damage in
		Lq	E		13				Junanjui area.
		Lr	ZNE		17				h about 64 km
									H = 07 33 49.6
									Mag. 6.9(PAS),6.2(BRK),
									6.1 (CGS)
55	20	P	Z	23	42	28		65	USCGS: 51.3N, 179.2W
		S	ZN		51	22			Andreanof Islands,
		Lr	ZN	00	01	20			Aleutian Islands.
									Felt on Amchitka and
									(IV) on Adak
									h about 46 km
									H = 23 31 48.8
									Mag. 5.2(BRK),6.0MB
									5.4MS (CGS)
56	20	P	ZNE	23	45	43		13.2	USCGS: 24.6S, 179.7W
		S	ZNE		47	59			South of Fiji Islands
									h about 516 km
									H = 23 42 56.8
									Mag. 5.0 (CGS)
57	21	e(P)	Z	13	27	57			
		S	ZNE		29	12			
58	22	iP	ZNE	00	23	42			u
		S	ZNE		24	03			
59	22	P	ZNE	08	31	12		8.5	USCGS. 21.8S, 174.8W
		S	ZNE		32	36			Tonga Islands
		T	ZNE		39	11			h about 133 km
									H = 08 29 30.2
									Mag. 4.9 (CGS)
60	22	P	ZNE	08	51	23		8.7	USCGS: 22.2S, 174.4W
		S	ZNE		52	56			Tonga Islands region
		T	ZNE		59	46			h Normal
									H = 08 49 28.8
									Mag. 5.0 (CGS)
61	22	P	ZNE	10	38	39		70	USCGS: 49.1N, 153.6E
		PcP	ZNE		39	14			Kuril Islands
		PP	Z		41	16			h about 134 km
		S	ZNE		47	40			H = 10 27 41.9
		SS	Z		52	00			Mag. 6.8(PAS), 5.9(BRK),
		SSS	E		56	00			6.3 (CGS)
		Lr	ZNE		59				
62	22	P	Z	11	06	43			
63	22	P	ZNE	15	55	15		7.8	USCGS: 21.2S, 174.4W
		S	ZNE		56	35			Tonga Islands
		T	ZNE	16	02	20			h Normal
									H = 15 55 30.9
									Mag. 5.7(BRK), 5.6MB
									5.7MS (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
64	22	P	Z	23	12	22			
		(S)	ZNE		13	44			
65	23	IP	ZNE	07	17	20.5		1.9	une
		S	ZNE			36			USCGS: 15.4S, 172.9W
									Samoa Islands region
									Felt (IV) at Apia
									h Normal
									H = 07 16 53.3
									Mag. 5.5MB 5.5MS (CGS)
66	23	IP	ZNE	08	27	57			u
		D	ZNE		28	28			
67	23	P	Z	09	08	05			
		S	ZNE			24			Samoa Islands region
68	23	P	Z	23	17	03		36.4	USCGS: 45.3S, 166.4E
									Off West Coast of South
									Islands, New Zealand.
									h Normal
									H = 23 09 59.3
									Mag. 5.5 (CGS)
69	24	P	Z	03	49	49		71	USCGS: 56.1N, 157.2W
		S	N		59	00			Alaska Peninsula.
		SSS	E	04	07	00			Felt (IV) at Port
		Lr	ZN		11				Heiden and (II) at King
									Salmon
									h about 69 km
									H = 03 38 27.1
									Mag. 6.0 (CGS)
70	24	IP	ZNE	06	09	34	9.0 0.9	8.4	u
		S	ZNE		11	08			USCGS: 20.0S, 177.7W
									Fiji Islands region
									h about 570 km
									H = 06 07 35.2
									Mag. 5.0 (CGS)
71	25	P	Z	01	06	58			
72	25	P	ZNE	05	28	34		8.4	USCGS: 21.7S, 174.6W
		S	ZNE		29	59			Tonga Islands
		T	ZNE		36	10			h Normal
									H = 05 26 41.0
									Mag. 5.4MB 4.9MS (CGS)
73	25	IP	ZNE	10	22	53.5			u
		S	ZNE		23	16			
74	25	P	Z	12	23	05		39.0	USCGS: 3.5S, 150.1E
		S	NE		28	48			New Ireland region
		SS	ZNE		31	52			h about 41 km
		Lr	ZE		34				H = 12 15 29.6
									Mag. 5.5MB 6.4MS (CGS)
75	25	P	ZNE	13	39	23			
		(S)	ZNE		41	15			
76	25	P	Z	23	10	55		68	USCGS: 43.4N, 146.0E
		S	ZN		19	48			Kuril Islands
		S	E		20	12			Felt (IV JMA) at Nemuro
		SS	Z		23	54			and (III) in Hiroo and
		SSS	ZE		27	36			Kushiro areas
		Lr	ZNE		31				h about 43 km
									H = 22 59 40.3
									Mag. 6.0(PAS),5.7(BRK),
									5.8MB 6.0MS (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
77	26	IP	ZNE	08	11	04			d
		S	ZNE			21			Samoa Islands region
78	26	P	ZNE	09	44	08			
		S	ZNE			27			Samoa Islands region
79	27	iP	Z	05	36	04			
		S	ZNE		37	34		7.8	u
									USCGS: 19.3S, 177.7W
									Fiji Islands region
									h about 576 km
									H = 05 34 11.3
									Mag. 4.3 (CGS)
80	27	IP	ZNE	11	14	21.8			
		S	ZNE		15	52		7.6	d
									USCGS: 17.9S, 178.5W
									Fiji Islands region
									h about 570 km
									H = 11 12 28.1
									Mag. 5.2 (CGS)
81	27	P	ZNE	17	56	30			
		S	ZNE			51			
82	28	IP	Z	07	49	23			
		S	ZNE			54			u
83	28	P	Z	11	20	18			
		(S)	ZNE		21	33			
		(T)	ZNE		27	25			
84	28	IP	Z	14	02	13			
		S	ZNE		05	23		18.5	d
		ScP	Z		09	31			USCGS: 30.7S, 179.8W
		T	ZNE		16	20			Kermadec Islands region
									Felt on Raoul
									h about 337 km
									H = 13 58 21.9
									Mag. 5.7 (CGS)
85	28	P	ZNE	18	20	55			
		S	ZNE		22	48		11.1	USCGS: 24.3S, 175.7W
									South of Tonga Islands
									h about 44 km
									H = 18 18 27.7
									Mag. 5.1 (CGS)
86	28	IP	ZNE	21	28	18			
		S	ZNE			38			u
87	29	P	Z	15	16	05			
		S	ZNE			34			
88	30	eP	Z	02	34	16			
		S	ZNE		35	55		10.7	USCGS: 23.3S, 176.8W
									South of Fiji Islands
									h about 125 km
									H = 02 31 47.8
									Mag. 5.2 (CGS)
89	30	IP	ZNE	05	37	50.2			
		S	ZNE		39	40		14.6	u
									USCGS: 25.7S, 179.4E
									South of Fiji Islands
									h about 532 km
									H = 05 34 54.7
									Mag. 6.2 (CGS)
90	30	P	ZNE	07	07	06			
		S	ZNE		09	30		14.4	USCGS: 25.8S, 179.7E
									South of Fiji Islands
									h about 488 km
									H = 07 04 06.9
									Mag. 5.2 (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
91	30	P	Z	14	57	08		14.5	USCGS: 25.9S, 179.7E
		S	ZNE		59	31			South of Fiji Islands
									h about 500 km
									H = 14 54 09.8
									Mag. 4.7 (CGS)
92	30	P	ZNE	16	01	02		14.6	USCGS: 25.7S, 179.4E
		S	ZNE		03	27			South of Fiji Islands
									h about 500 km
									H = 15 58 02.6
									Mag. 5.0 (CGS)
93	31	P	ZNE	20	59	56		14.4	USCGS: 25.7S, 179.7E
		S	ZNE	21	02	20			South of Fiji Islands
									h about 480 km
									H = 20 56 56.6
									Mag. 5.1 (CGS)

(P.D. Muller)
SUPERINTENDENT

NEW ZEALAND

Department of Scientific and Industrial Research

Geophysics Division

APIA OBSERVATORY

FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

AFI

International Seismological Centre

April 1972

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
1	1	P	ZNE	11	02	49							8.9	USCGS: 21.4S, 176.8W Fiji Islands region h about 216 km H = 11 00 52.4 Mag. 5.2 (CGS)
		S	ZNE		04	17								
2	1	eP	ZNE	15	43	46							8.2	USCGS: 21.5S, 174.2W Tonga Islands h Normal H = 15 42 00.9 Mag. 4.7 (CGS)
		S	ZNE		45	06								
		T	ZNE		51	28								
3	1	IP	ZN	23	59	03.3	4.6	9.0					41	un USCGS: 49.5S, 163.7E Auckland Islands region h Normal H = 23 51 23.0 Mag. 6.4(PAS), 6.0MB 6.3MS (CGS)
		IPP	ZN	00	00	41								
		S	ZNE		05	17								
		SS	NE		08	16								
		Lr	Z		11									
4	2	eP	Z	00	25	23							41	USCGS: 49.6S, 164.2E Auckland Islands region h Normal H = 00 17 43.8 Mag. 5.5 (CGS)
5	2	P	Z	00	46	40							41	USCGS: 49.6S, 164.2E Auckland Islands region h Normal H = 00 38 59.6 Mag. 5.5 (CGS)
6	2	eP	Z	04	22	09								
		S	ZNE			57								
7	2	P	ZNE	04	53	23							17.9	USCGS: 22.3S, 171.6E Loyalty Islands region h about 53 km H = 04 49 17.7 Mag. 5.5(BRK),5.3(CGS)
		S	ZNE		56	38								
8	2	IP	ZNE	09	01	57.1							2.7	dsw USCGS: 16.1S, 173.1W Tonga Islands h Normal H = 09 01 23.8 Mag. 5.9(BRK), 5.9MB 5.8MS (CGS)
		S	ZNE		02	25								
9	2	P	ZNE	10	56	32								
		S	ZNE			57								
10	2	P	ZNE	14	11	57								
		S	ZNE		12	22								

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
11	2	P	ZNE	14	33	02							2.4	USCGS: 15.9S, 172.9W Samoa Islands region h Normal H = 14 32 30.5 Mag. 5.4(BRK), 4.9MB 5.4MS (CGS)
		S	ZNE			24								
12	2	IP	ZNE	15	37	16.6							2.7	d USCGS: 16.2S, 172.9W Samoa Islands region h about 69 km H = 15 36 46.7 Mag. 5.4 (CGS)
		S	ZNE			44								
13	2	P	Z	18	23	39								
14	2	P	ZNE	21	34	54							21.5	USCGS: 13.3S, 166.1E New Hebrides Islands h Normal H = 21 30 05.4 Mag. 6.2(PAS),6.6(BRK), 5.4MB 6.6MS (CGS)
		S	ZNE		39	00								
		Lr	ZE		40	32								
15	3	EP	ZNE	00	31	18								
		S	ZNE			45								
16	3	EP	ZNE	07	07	48								
		S	ZNE		08	14								
		T	ZNE		10	02								
17	3	P	ZNE	08	18	50								
		S	ZNE		19	14								
		T	ZNE		21	09								
18	3	P	ZE	11	51	53							47.6	USCGS: 4.8S, 140.8E West New Guinea h about 40 km H = 11 43 19.3 Mag. 5.3 (CGS)
19	3	IP	ZNE	21	41	00								d
		S	ZNE			24								
20	4	EP	Z	00	33	46								
		S	ZNE		35	23								
21	4	P	ZNE	13	02	41							2.7	USCGS: 16.3S, 172.7W Samoa Islands region h about 30 km H = 13 02 06.3 Mag. 4.7 (CGS)
		S	ZNE		03	08								
		T	ZNE		04	55								
22	4	IP	ZNE	16	51	20								u Samoa Islands region
		S	ZNE			35								
23	4	P	ZNE	18	33	05							2.4	USCGS: 16.1S, 172.6W Samoa Islands region h Normal H = 18 32 31.7 Mag. 4.7 (CGS)
		S	ZNE			31								
24	4	IP	ZNE	22	52	49							62	d USCGS: 7.4S, 125.6E Banda Sea h about 377 km H = 22 43 06.7 Mag. 6.5(PAS), 5.9(BRK), 6.6 (CGS)
		PcP	Z		53	28								
		S	ZNE	23	00	40								
		ScS	E		03	14								
		SS	ZNE		05	00								
		SSS	ZNE		08	05								
25	4	(P)	Z	23	21	49								

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
26	5	EP	ZNE	01	50	52			
		S	ZNE		51	19			
27	5	P	ZNE	04	07	03			
		S	ZNE			31			
		T	ZNE		09	02			
28	6	P	ZNE	05	11	32		11.0	USCGS: 22.1S, 179.5W South of Fiji Islands h about 508 km H = 05 09 03.8 Mag. 4.5 (CGS)
		S	ZNE		13	32			
29	6	P	ZNE	08	37	52			
		S	ZNE		38	20			
		T	ZNE		40				
30	7	P	Z	00	11	31		45	USCGS: 53.3S, 159.0E Macquirie Islands region h Normal H = 00 03 08.5 Mag. 5.9MS (CGS)
		S	ZNE		18	16			
		SS	ZNE		21	40			
		Lq	E		23	14			
		Lr	ZN		25				
31	7	P	ZNE	10	21	41		2.2	USCGS: 15.2S, 173.6W Tonga Islands h Normal H = 10 21 10.7 Mag. 5.0 (CGS)
		S	ZNE		22	00			
32	7	P	ZNE	12	58	15			
		S	ZNE		59	08			
33	7	P	ZNE	23	20	01		7.9	USCGS: 21.4S, 174.1W Tonga Islands h Normal H = 23 18 15.5 Mag. 5.1 (CGS)
		S	ZNE		21	19			
		T	ZNE		27	25			
34	8	IP	ZNE	02	37	09.5			u
		S	ZNE			47			
35	8	P	ZNE	10	20	28		12,9	USCGS: 24.1S, 180.0 South of Fiji Islands h about 509 km H = 10 17 45.5 Mag. 5.1 (CGS)
		S	ZNE		22	40			
36	8	IP	ZNE	22	03	11	1.2 1.0		u
		(S)	NE		04	34			
37	9	P	ZNE	20	40	55		5.4	USCGS: 18.8S, 173.8W Tonga Islands h Normal H = 20 39 40.0 Mag. 5.1 (CGS)
		S	ZNE		41	47			
		T	ZNE		45	30			
38	10	PKP	Z	02	26	19		137	USCGS: 28.4N, 52.8E Southern Iran 5054 killed and many injured. Qir completely dectroyed. Damaged region extended over 1000 sq. km. Felt widely in Southern Iran. h Normal H = 02 06 53.2 Mag. 7(PAS), 7.1(BRK), 6.1MB 6.9MS (CGS)
		PP	Z		29	20			
		SKSP	Z		39	00			
		SKKS	ZE		43	00			
		SS	ZNE		47	05			
		SSS	N		52	32			
		L	NE	03	02				

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
39	10	IP	ZNE	03	14	30.9			u
		S	ZNE		15	02			
40	10	P	ZNE	06	11	21			
		S	ZNE			47			
		T	ZNE		13	42			
41	10	P	ZNE	15	48	13		2.8	USCGS: 16.4S, 172.9W Samoa Islands region h Normal H = 15 47 35.7 Mag. 4.9MB 4.8MS (CGS)
		S	ZNE			43			
		T	ZNE		51				
42	10	P	Z	16	14	26			
		(S)	NE		16	15			
43	10	IP	ZNE	18	46	45			u
		S	ZNE		47	07			
44	11	SSP	ZNE	03	02	40		141	USCGS: 1.0N, 28.3W Central Mid-Atlantic Ridge h Normal H = 02 21 15.7 Mag. 6.5(PAS),6.5(BRK), 6.0MB 6.4MS (CGS)
		SSS	ZN		08	00			
		L	NE		18				
		L	ZE		28				
45	12	P	ZNE	10	01	22		6.3	USCGS: 19.3S, 175.0W Tonga Islands h about 203 km H = 10 00 10.1 Mag. 5.2 (CGS)
		S	ZNE		02	21			
46	12	EP	ZNE	14	49	58		7.2	USCGS: 19.7S, 176.0W Fiji Islands region h Normal H = 14 48 13.3 Mag. 4.9 (CGS)
		S	ZNE		51	08			
47	13	P	ZNE	18	36	55			
		S	ZNE		37	21			
		T	ZNE		39	22			
	14	No Readings.							
48	15	P	ZNE	07	32	31		18.6	USCGS: 21.5S, 170.4E Loyalty Islands region h about 159 km H = 07 28 28.9 Mag. 5.3 (CGS)
		S	ZNE		34	31			
49	15	EP	Z	09	43	44			
		S	ZNE		44	19			
50	15	ES	NE	11	25	12		17.9	USCGS: 22.3S, 171.6E Loyalty Islands region h about 45 km H = 11 17 46.2 Mag. 4.3 (CGS)
		ELr	Z		26	40			
51	15	P	ZNE	19	32	24			
		S	ZNE		33	14			
52	16	P	ZNE	01	11	57			
53	16	P	ZNE	10	21	33		6.7	USCGS: 20.3S, 173.5W Tonga Islands h Normal H = 10 20 05.8 Mag. 4.7 (CGS)
		S	ZNE		22	35			
		L	ZNE		23	16			
		T	ZNE		27	27			

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
54	16	IP	ZNE	22	20	13			u
		S	ZNE			31			Samoa Islands region
55	17	IP	ZNE	01	07	13			u
		S	ZNE			34			
56	17	EP	Z	11	01	22		75	USCGS: 24.2N, 122.5E.
		S	ZNE		11	00			Taiwan region
		SSS	N		19	08			h about 35 km.
		Lr	ZNE		24				H = 10 49 42.7
									Mag.5.8MB 6.1MS(CGS)
57	17	P	Z	14	38	41		33.4	USCGS: 6.9S, 155.0E.
									Solomon Islands
									h about 47 km.
									H = 14 32 06.3
									Mag. 5.2 (CGS)
58	18	P	Z	01	53	07		18.7	USCGS: 21.3S, 170.3E.
		S	ZNE		57	14			Loyalty Islands region
									h about 118 km.
									H = 01 48 57.4
									Mag. 5.2 (CGS)
59	18	P	Z	03	32	58		29.9	USCGS: 8.1S, 158.3E.
									Solomon Islands
									h about 78 km.
									H = 03 26 36.8
									Mag. 4.9 (CGS)
60	18	P	ZNE	05	27	07			
		S	ZNE		28	16			
61	18	P	ZNE	10	19	38			
		S	ZNE		20	20			
		T	ZNE		22	49			
	19	No Readings							
62	20	IP	ZNE	12	13	05.5			d
		S	NE			56			
63	20	P	ZNE	17	03	45		9.7	USCGS: 22.9S, 175.1W.
		S	ZNE		05	23			Tonga Islands region
		T	ZNE		11	12			h about 37 km.
									H = 17 01 37.0
									Mag.5.3MB 5.8MS(CGS)
64	21	P	ZNE	01	38	57		67	USCGS:54.0N, 166.9W.
		S	ZNE		47	40			Fox Islands,
		SSS	E		55	16			Aleutian Islands
		Lr	ZN		58	30			Felt (V) at Unalaska
									also felt at Nikolski
									& Cape Sarichef.
									h about 103 km.
									H = 01 28 09.5
									Mag. 5.8 (CGS)
65	21	P	ZNE	01	43	38		74	USCGS: 10.6S, 113.7E.
									South of Java
									h about 44 km.
									H = 01 32 05.8
									Mag. 5.3 (CGS)
66	21	IP	ZNE	13	25	43		2.4	une
		S	ZNE		26	00			USCGS: 15.3S, 173.7W.
									Tonga Islands
									h about 125 km.
									H = 13 25 21.3
									Mag.6.0(BRK)5.6(CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
67	21	EP	Z	13	52	20			
		S	ZNE		53	13			
		T	ZNE		57	18			
	22	No Readings							
68	23	IP	ZNE	02	27	37			u Samoa Islands region
		S	ZNE			55			
69	23	IP	ZNE	16	15	44.2			u Samoa Islands region
		S	ZNE		16	01			
70	23	P	Z	20	52	28	1.5 1.0	84	USCGS:5.7S, 104.2E. Southern Sumatra h about 103 km. H = 20 40 10.0 Mag. 5.5 (CGS)
71	23	P	ZNE	23	41	07		20.1	USCGS:17.5S, 167.7E. New Hebrides Islands Felt (IV) at Port Vila h about 17 km. H = 23 36 33.3 Mag.4.6MB 4.8MS(CGS)
		S	ZNE		45	04			
		(SSS)	ZE		46	16			
72	24	EP	Z	00	12	20			
		S	ZNE			50			
		T	ZNE		14	47			
73	24	P	Z	01	30	42		58	USCGS:31.4S, 111.1W. Easter Island region h normal H = 01 20 48.2 Mag. 6.5(PAS),6.5(BRK), 5.8MB 6.1MS (CGS)
		S	ZNE		38	52			
		SS	Z		42	32			
		Lq	NE		45	20			
		Lr	Z		48				
74	24	P	ZNE	01	40	00			
		S	ZNE			39			
75	24	P	ZNE	02	06	45		10.3	USCGS: 21.3S, 179.3W. Fiji Islands region h about 615 km. H = 02 04 25.0 Mag. 5.5 (CGS)
		S	ZNE		08	35			
76	24	(P)	Z	02	14	29	1.0 1.0		
77	24	P	ZNE	02	54	15		20.0	USCGS: 32.9S, 178.4W. South of Kermadec Islands. h normal H = 02 49 45.8 Mag. 4.7 (CGS)
		S	ZNE		57	35			
		T	ZNE	03	15				
78	24	P	ZNE	10	09	04		75	USCGS: 23.6N, 121.6E. Taiwan 4 killed,11 injured and moderate damage in Hualien area. Felt Island - Wide. h normal H = 09 57 21.7 Mag. 7.2(PAS), 6.0MB 6.9MS (CGS)
		PP	ZE		11	45			
		S	ZNE		18	37			
		SS	ZNE		23	36			
		SSS	N		27	03			
		Lq	NE		29				
		Lr	ZN		32				
79	24	EP	Z	11	43	55		75	USCGS: 23.5N, 121.5E. Taiwan h normal H = 11 32 10.1 Mag. 5.0 (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
80	24	EP	Z	12	00	06			
		S	ZNE			41			
		T	ZNE		03	27			
81	24	EP	Z	12	12	16		75	USCGS: 23.6N, 121.6E. Taiwan h about 19 km. H = 12 00 29.4 Mag. 4.9 (CGS)
82	24	EP	Z	18	10	16		75	USCGS: 23.7N, 121.7E. Taiwan h normal H = 17 58 31.5 Mag. 5.3 (CGS)
83	25	P	ZNE	19	41	35		72	USCGS: 13.4N, 120.3E. Mindoro, Philippine Is. Damage (VI RF) in Manila area. Felt widely on Luzon h about 50 km. H = 19 30 09.3 Mag. 7.3(PAS),7.0(BRK), 6.2MB 7.2MS (CGS)
		PcP	Z			51			
		PP	ZE		44	32			
		PPP	ZN		46	00			
		S	ZNE		51	00			
		SS	ZNE		55	36			
		SSS	ZN		59	00			
		Lq	N	20	01				
		Lr	ZE		04				
84	26	P	ZNE	01	32	48			
		S	ZNE		33	10			
85	26	P	Z	01	36	29		15.3	USCGS: 18.2S, 173.0E. Fiji Islands region h about 593 km. H = 01 33 18.4 Mag. 5.1 (CGS)
86	26	ES	NE	06	40	08		72	USCGS: 13.5N, 120.6E. Mindoro, Philippine Is. Felt (III RF) in Manila and Quezon City areas. h normal H = 06 18 44.9 Mag. 5.2MB 5.2MS(CGS)
		ELq	N		49	24			
		ELr	ZNE		53	00			
87	26	(P)	ZNE	08	21	05			
		(S)	ZNE		23	22			
88	26	P	ZNE	12	24	38		12.8	USCGS: 23.2S, 179.1E. South of Fiji Islands h about 567 km. H = 12 21 55.4 Mag. 5.0 (CGS)
		S	ZNE		26	48			
89	27	ES	NE	01	50	36		72	USCGS:13.5N, 120.7E. Mindoro, Philippine Islands. Felt (IV RF) in Manila area. h about 72 km. H = 01 29 38.2 Mag. 5.4 (CGS)
		Lr	ZNE	02	04				
90	27	P	ZNE	10	49	17			
		S	ZNE		50	48			
91	27	IP	ZNE	16	25	19			u
		S	ZNE			47			

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
92	27	P	ZNE	19	44	56		12.8	USCGS: 23.2S, 179.1E. South of Fiji Islands h about 574 km. H = 19 42 14.5 Mag. 5.2 (CGS)
		S	ZNE		47	05			
93	27	P	ZNE	21	37	38			
		S	ZNE			58			
94	28	P	ZNE	23	38	24		34.7	USCGS: 5.1S, 154.2E. Solomon Islands Felt (IV) at Rabaul h about 409 km. H = 23 32 10.2 Mag. 6.5MB 6.0MS(CGS)
		pP	ZE		39	48			
		S	ZNE		43	27			
		sS	ZNE		45	40			
95	29	P	ZNE	04	12	07			
		S	ZNE			27			
96	29	P	ZNE	10	32	45			
		S	ZNE		33	23			
		T	ZNE		35	56			
97	29	P	ZNE	19	57	36			
		S	ZNE		58	41			
98	29	P	Z	23	13	17		33.5	USCGS: 6.5S, 155.0E. Solomon Islands h about 54 km. H = 23 06 39.0 Mag. 5.5 (CGS)
		S	Z		18	40			
		Lr	ZE		23				
99	30	S	ZE	15	36	20		72	USCGS: 13.5N, 120.5E. Mindoro, Philippine Is. Felt (III RF) in Manila and Quezon City areas. h about 56 km. H = 15 15 34.3 Mag. 5.5 (CGS)
		Lq	N		46	10			
		Lr	ZNE		49				
100	30	P	ZNE	20	10	51			

"
(P.D. Muller)
Superintendent

NEW ZEALAND

Department of Scientific and Industrial Research

Geophysics Division

APIA OBSERVATORY

FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

MAY 1972

International Seismological Centre

API

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
1	1	P	ZE	03	39	00		19.9	USCGS: 15.4S, 167.7E. New Hebrides Islands Felt (II) at Luganville h about 132 km. H = 03 34 33.0 Mag. 4.5 (CGS)
2	1	eP	ZNE	10	38	54		19.9	USCGS: 32.7S, 178.5W. South of Kermadec Islands h normal H = 10 34 24.3 Mag. 4.9 (CGS)
		eS	ZNE		42	36			
		eT	ZNE		59	05			
3	2	iP	ZNE	03	20	34	1.4 1.1	67	d USCGS: 5.6N, 124.6E. Mindanao, Philippine Islands h about 382 km. H = 03 10 24.1 Mag. 5.2 (CGS)
4	2	P	Z	07	07	54		73	USCGS: 5.2N, 100.3W. East Central Pacific Ocean h normal H = 06 56 23.4 Mag. 5.8(PAS),5.8(BRK), 5.8MB 5.5MS (CGS)
		S	ZNE		17	28			
		SS	ZN		22	12			
		SSS	ZN		25	40			
		Lr	ZNE		30				
5	2	iP	ZNE	12	16	35.5			u
		S	ZNE		17	00			
6	3	P	Z	02	12	14		20.2	USCGS: 17.4S, 167.6E. New Hebrides Islands Felt (I) at Port Vila h about 26 km. H = 02 07 26.2 Mag. 4.6 (CGS)
7	3	eP	ZNE	18	13	33		6.4	USCGS: 20.0S, 173.8W. Tonga Islands h normal H = 18 12 05.1 Mag. 4.6 (CGS)
		S	ZNE		14	44			
		T	ZNE		19	42			
8	3	P	Z	18	53	20		21.4	USCGS: 12.9S, 166.3E. Santa Cruz Islands h about 30 km. H = 18 48 33.4 Mag. 4.8 (CGS)
		eS	ZNE		57	24			
9	4	P	ZNE	02	58	17			Samoa Islands region
		S	ZNE			32			

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International Seismological Centre

No	Date	Phase	Time (G.M.T.)	Az Tz An Tn Ae Te	△ (Deg.)	Remarks
10	4	P Z	04 01 24		65	USCGS: 33.5N, 141.0E. Off east coast of Honshu, Japan. Felt (IJMA) in Tokyo area h about 45 km. H = 03 50 28.9 Mag. 5.5 (CGS)
11	4	P Z	04 23 04	0.6 1.1	78	USCGS: 10.7S, 113.7E. South of Java h normal H = 04 11 35.0 Mag. 5.8 (CGS)
12	4	iP ZNE PP ZNE S ZNE Lr ZNE	07 52 49 53 00 56 32 58	4.9 4.0 91.522.0 106.021.0	20.1	dsw USCGS: 15.9S, 167.5E. New Hebrides Islands 2 injured and minor damage (VI) in Santo area h about 45 km. H = 07 48 17.2 Mag. 6.6(PAS),6.8(BRK) 6.1MB 6.8MS (CGS)
13	4	P ZNE S ZNE T ZNE	09 11 22 12 40 18 34		8.0	USCGS: 21.6S, 173.9W. Tonga Islands h about 22 km. H = 09 09 34.8 Mag. 5.0 (CGS)
14	4	P ZNE	09 25 22			
15	4	eP ZNE S ZNE	16 54 11 55 17			
16	4	eP Z (S) NE	16 59 20 17 00 54			
17	4	PKP Z PP Z SKS Z PcPPKPZN SKKS ZN e ZN e Z SSP ZE SSS N	21 59 52 22 03 44 07 03 10 48 14 32 17 12 18 48 24 16 29 00		154	USCGS: 35.1N, 23.6E. Crete Felt h about 46 km. H = 21 40 00.9 Mag. 6.5(PAS),6.4(BRK) 5.9MB 6.3MS (CGS)
18	5	eP Z	10 27 50		75	USCGS: 23.0N, 121.5E. Taiwan h about 55 km. H = 10 16 11.1 Mag. 5.2 (CGS)
19	5	eP Z S ZNE T ZNE	16 29 23 31 06 38 35			
20	5	eP ZNE PP ZE S ZNE SS ZNE Lq NE Lr Z	23 23 32 24 52 29 16 31 40 33 34		36.3	USCGS: 4.2S, 152.7E. New Britain region Minor damage in Rabaul area. h about 32 km. H = 23 16 27.9 Mag. 6.3(PAS), 5.6MB 6.6MS (CGS)

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
21	6	P	ZNE	03	27	41							9.8	USCGS: 20.9S, 179.0W.
		S	ZNE		29	28								Fiji Islands region
														h about 615 km.
														H = 03 25 25.3
														Mag. 4.5 (CGS)
22	6	iP	ZNE	03	40	51.8								d
		S	ZNE		41	25								
23	6	eS	ZNE	04	45	00							51	USCGS; 62.2S, 164.8E.
		eSS	NE		48	41								Balleny Islands region
		Lr	ZN		52									h normal
														H = 04 28 33.9
24	6	P	ZNE	13	10	36								
		S	ZNE		12	10								
25	6	eP	Z	14	56	23								
		S	ZNE	15	04	12								
		(Lq)	NE		09	32								
		(Lr)	ZN		10	24								
26	7	(P)	ZNE	09	50	38								
27	7	P	Z	16	46	30							35.1	USCGS: 4.8S, 153.8E.
		S	ZNE		51	56								New Ireland region
		SS	ZNE		54	28								h about 103 km.
		ScS	ZE		56	24								H = 16 39 41.8
														Mag.6.2(PAS), 5.5(CGS)
28	7	eP	Z	17	25	03							20.0	USCGS: 14.9S, 167.6E.
														New Hebrides Islands
														h about 31 km.
														H = 17 20 22.6
														Mag. 5.2 (CGS)
29	7	P	Z	22	15	17							49	USCGS: 53.7S, 134.2W.
		S	ZNE		22	32								South Pacific
		SSS	ZNE		27	00								Cordillera.
		Lr	ZN		29									h normal
														H = 22 06 30.1
														Mag.5.4MB 6.3MS(CGS)
30	8	P	Z	06	28	15							50.9	USCGS: 1.1S, 138.4E.
		S	ZNE		35	28								Near north coast of
		Lr	ZNE		43									New Guinea.
														h normal
														H = 06 18 57.8
														Mag. 5.7 (CGS)
31	8	P	ZNE	16	16	48							7.1	USCGS: 19.4S, 176.3W.
		S	ZNE		18	00								Fiji Islands region
														h about 71 km.
														H = 16 15 16.7
														Mag.5.8(BRK), 5.4(CGS)
32	8	(P)	Z	17	43	57							13.8	USCGS: 26.4S, 177.8W.
		(S)	NE		46	13								South of Fiji Islands
														h about 187 km.
														H = 17 40 42.1
														Mag. 4.8 (CGS)
33	8	iP	ZNE	18	20	42								u
		S	ZNE		21	17								
34	9	iP	ZNE	12	22	16							7.9	d
		S	ZNE		23	48								USCGS: 17.8S, 178.9W.
														Fiji Islands region
														h about 568 km.
														H = 12 20 22.6
														Mag.6.0(PAS), 5.8(CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
35	9	iP	ZNE	13	10	54.7		3.6	d
		S	ZNE		11	36			USCGS: 15.6S, 175.0W.
									Tonga Islands
									h about 267 km.
									H = 13 09 59.0
									Mag. 5.4 (CGS)
36	10	(SSS)	ZNE	06	04	48		38.8	USCGS: 4.1S, 150.2E.
		Lr	ZE		06	40			New Britain region
									h normal
									H = 05 48 22.0
									Mag.5.5MB 5.2MS (CGS)
37	10	P	ZNE	11	39	16			
		S	ZNE			36			
38	11	P	Z	03	53	24		19.9	USCGS: 16.0S, 167.7E.
									New Hebrides Islands
									h about 61 km.
									H = 03 48 50.7
									Mag. 5.2 (CGS)
39	11	P	ZNE	21	21	42		15.5	USCGS: 27.6S, 179.1W.
		S	ZNE		24	20			Kermadec Islands region
									h about 387 km.
									H = 21 18 29.6
									Mag. 5.8 (CGS)
40	12	P	Z	01	33	09		76	USCGS: 24.6N, 121.6E.
		S	E		43	40			Taiwan
		L	ZNE		56				Felt
									h about 62 km.
									H = 01 21 28.7
									Mag. 5.3 (CGS)
41	12	P	Z	17	41	00			
		S	ZNE			31			
		T	ZNE		43				
42	12	P	Z	19	08	15			
		S	ZNE			35			
43	13	P	ZNE	06	24	46			
		S	ZNE		25	26			
44	13	P	ZNE	09	27	54		19.3	USCGS: 32.0S, 178.6W.
		S	ZNE		31	15			South of Kermadec Is.
		T	ZNE		46				h about 41 km.
									H = 09 23 34.7
									Mag. 5.6 (CGS)
45	13	iP	ZNE	09	58	58.6			d
		S	ZNE		59	18			
46	14	iP	ZNE	21	40	40			u
		S	ZNE			58			Samoa Islands
47	15	P	ZNE	09	35	34		12.6	u
		S	ZNE		37	43			USCGS: 23.6S, 179.9E.
									South of Fiji Islands
									h about 553 km.
									H = 09 32 54.6
									Mag. 5.6 (CGS)
48	15	S	ZE	11	38	31		54	USCGS: 55.3S, 128.5W.
		(SSS)	ZNE		43	20			South Pacific Cordillera
									h normal
									H = 11 21 29.3
									Mag. 5.0 (CGS)
49	15	iP	ZNE	12	20	23			d
		S	ZNE			43			

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
50	16	P	ZNE	03	13	49								
		S	ZNE		14	37								
51	16	P	Z	06	05	14								
		S	ZNE		06	08								
52	17	eP	Z	05	39	32							74	USCGS: 13.4N, 119.9E.
		eS	NE		48	52								Philippine Islands
		Lq	NE		59									region
		Lr	E	06	02									h about 37 km.
														H = 05 27 51.6
														Mag. 5.7MB 5.9MS(CGS)
53	18	P	ZNE	08	21	59								
		S	ZNE		23	12								
54	18	P	ZNE	23	12	50								
55	19	P	ZNE	00	54	35								
56	19	P	ZNE	05	29	59								
		S	ZNE		30	17								
57	19	P	ZE	11	28	25								
58	19	P	ZNE	17	49	28								
		S	ZNE			50								
59	20	P	ZNE	02	39	26	1.5	1.0					20.5	USCGS: 15.6S, 167.1E.
		S	ZNE		43	24								New Hebrides Islands
		(SSS)	ZE		44	40								Felt (IV) at Luganville
														and (III) at Lamap.
														h normal
														H = 02 34 45.6
														Mag. 5.2MB,5.5MS (CGS)
60	21	P	ZNE	06	05	59							18.2	USCGS: 27.1S, 174.9E.
		S	ZNE		09	12								North of New Zealand
		SS	E			40								h normal
		Lr	Z		10	57								H = 06 01 54.4
														Mag 5.5MB 4.9MS (CGS)
61	21	P	ZNE	07	03	29								
62	22	iP	ZNE	02	25	20								u
		S	ZNE			46								
		T	ZNE		27	34								
63	22	P	ZNE	06	15	28							72	USCGS: 16.6N, 122.3E.
		S	ZNE		24	45								Luzon, Philippine
		SS	NE		29	25								Islands, Minor damage
		Lr	ZE		37	12								at Manila (VI RF)
														h about 34 km.
														H = 06 04 00.1
														Mag. 6.7(PAS), 5.7MB
														6.9MS (CGS)
64	22	iP	ZNE	20	47	08							5.2	une
		(S)	ZNE			52								USCGS: 17.7S, 175.2W.
														Tonga Islands
														Felt (III) at Apia
														h about 227 km.
														H = 20 45 57.3
														Mag.7.0(PAS), 6.9(BRK),
														6.2(CGS)
65	22	P	Z	22	36	39								
		S	ZNE		37	32								
66	23	P	ZNE	02	25	03								
		S	ZNE			20								
67	24	P	ZNE	11	02	37								

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
68	24	P	ZNE	11	30	08	1.5	1.1					18.3	USCGS: 22.3S, 171.2E.
		S	ZNE		33	28								Loyalty Islands region
		(SSS)	ZNE		34	43								h about 38 km.
														H = 11 26 01.1
														Mag. 5.6MB 5.9MS(CGS)
	25	No readings												
69	26	P	ZNE	02	16	42								
		S	ZNE		18	13								
70	26	e	Z	18	11	28							117	USCGS: 47.4S, 12.3W.
		eSSP	Z		18	16								South Atlantic Ridge
		eLr	ZN		36									h normal
														H = 17 41 54.3
														Mag.4.8MB 5.4MS(CGS)
71	27	P	ZNE	04	17	42	2.5	1.0					73	USCGS: 55.0N, 156.3E.
		(PcP)	Z		19	11								Kamchatka
														h about 409 km.
														H = 04 06 50.4
														Mag. 6.3(PAS), 5.7(CGS)
72	28	P	ZNE	02	06	30							70	USCGS: 11.0S, 117.1E.
		PcP	Z			54								South of Sumbawa Is.
		(PcS)	Z		09	52								h normal
		S	ZNE		15	40								H = 01 55 21.9
		SS	NE		20	00								Mag.6.3MB 6.2MS (CGS)
		SSS	NE		23	28								
		Lq	N		25									
		Lr	ZN		28									
73	28	eP	Z	05	54	08								
		S	ZNE			53								
74	28	iP	ZNE	08	54	28								u
		S	ZNE			47								
75	28	P	ZNE	17	32	25								
		S	ZNE		33	15								
76	28	P	ZNE	18	14	38							8.4	USCGS: 18.0S, 179.4W.
		S	ZNE		16	15								Fiji Islands region
														h about 621 km.
														H = 18 12 36.2
														Mag. 5.1 (CGS)
77	29	P	ZNE	19	07	18							12.4	USCGS: 25.3S, 176.8W.
		S	ZNE		09	24								South of Fiji Islands
														h normal
														H = 19 04 24.1
														Mag. 4.3 (CGS)
78	30	eP	ZE	00	59	18							58	USCGS: 7.2S, 128.7E.
														Banda Sea
														h normal
														H = 00 49 19.8
														Mag. 5.5 (CGS)
79	30	iP	ZNE	03	56	59							2.4	u
		S	ZNE		57	24								USCGS: 15.8S, 173.1W.
														Tonga Islands
														h normal
														H = 03 56 24.5
														Mag. 4.4 (CGS)
80	30	P	ZNE	15	01	13								
		S	ZNE			33								
81	30	iP	ZNE	23	46	55								u
		S	ZNE		47	15								

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
82	31	iP	ZNE	04	04	38.1								une
		S	ZNE		05	00								
83	31	P	ZNE	06	25	27								
		S	ZNE		26	42								
		T	ZNE		32	32								
84	31	P	Z	07	44	11								
		S	ZNE		45	52								
85	31	P	Z	20	28	05								
		S	ZNE			58								

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FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

JUNE 1972

No	Date	Phase		(G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
1	1	eP	Z	07	17	12			
		eiS	ZNE		18	48			
2	2	eiP	ZNE	11	29	32			
		(S)	ZNE			54			
3	3	eL	Z	02	03	44		32.1	USCGS: 7.4S, 156.2E. Solomon Islands h about 48 km. H = 01 48 23.8 Mag. 4.7 (CGS)
4	4	eP	Z	08	38	39			
		eiS	ZNE		39	33			
5	5	eP	Z	09	31	40		65	USCGS: 6.1N, 126.2E. Mindanao, Philippine Islands. Felt (IV RF) in Southern Mindanao h about 67 km. H = 09 20 54.0 Mag. 5.5 (CGS)
		eS	ZNE		40	08			
		eSS	ZE		44	08			
		e	Z		47	44			
		eL	N		48	12			
		eL	ZE		51	12			
6	5	e(P)	Z	14	33	52		86	USCGS: 9.3N, 84.2W. Costa Rica Felt (III) at Balboa Heights Panama h about 26 km. H = 14 20 42.3 Mag.5.4MB 5.1MS (CGS)
		e	ZN		38	12			
		e	ZN		40	12			
		eL	ZNE	15	02	20			
7	5	e	Z	21	04	00			
		e	NE		10	00			
		eL	E		12	00			
8	6	eP	Z	13	07	03			
		eiS	ZNE			43			
9	6	e(P)	ZNE	17	08	27			
10	6	(P)	Z	18	36	00			
		(S)	ZNE		37	25			
11	6	P	ZNE	19	43	00			
		S	ZNE			23			
12	6	e	NE	22	02	16			
		eL	ZN		04	00			
13	6	eiP	Z	23	56	55			
		eiS	ZNE		57	55			
14	7	ei(P)	ZNE	15	48	48			
		ei(S)	ZNE		50	59			
15	8	eP	ZNE	02	58	18			
		S	ZNE			37			
		eT	ZNE	03	00	10			
16	9	iP	Z	03	53	45.6			u
		S	ZNE		54	43			

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
17	9	eiP	ZNE	06	10	38			
		eiS	ZNE		11	23			
18	9	eS	ZNE	13	23	56		56	USCGS: 56.4S, 123.9W.
		eSS	ZE		27	40			Easter Island Cordillera
		eSSS	ZNE		29	48			h normal
		eL	E		30	56			H = 13 06 33.0
									Mag. 5.1 (CGS)
19	9	iP	ZNE	17	37	46		3.2	d
									USCGS: 16.1S, 174.2W.
									Tonga Islands
									h about 78 km.
									H = 17 36 57.4
									Mag. 4.8 (CGS)
20	9	eP	ZNE	20	27	06		3.8	USCGS: 17.5S, 172.7W.
		(S)	ZNE			49			Tonga Islands region
		T	ZNE		30	41			h normal
									H = 20 26 16.4
									Mag. 5.1 (CGS)
21	10	eP	Z	07	01	11.5		93	USCGS: 10.9S, 76.2W.
		ePP	Z		05	16			Peru
		e(S)	ZNE		11	52			Felt in Lima area
		e	ZN		18	00			h about 99 km.
		e	N		24	04			H = 06 47 34.6
		eL	ZE		30	08			Mag. 5.7 (CGS)
22	10	eP	Z	08	00	30		10.7	USCGS: 22.2S, 178.8W.
		eiS	ZNE		02	21			South of Fiji Islands
									h about 418 km.
									H = 07 58 09.5
									Mag. 4.7 (CGS)
23	10	eiP	ZNE	20	10	51		71	USCGS: 41.1N, 138.4E.
									Eastern Sea of Japan
									Felt (II JMA) in
									northern Honshu.
									h about 226 km.
									H = 19 59 52.5
									Mag. 5.7 (CGS)
24	11	[illegible]	ZE	02	14	20			
		eP	Z	07	08	39.2	1.4 1.0		
		e(S)	ZNE		09	08			
		e(L)	[illegible]		11	20			
26	11	eP	Z	13	10	24		106	USCGS: 18.0N, 69.8W.
		ePP	ZE		14	40			Dominican Republic
		eSKS	E		20	56			region. Heavy property
		e	N		22	16			damage and some injuries
		e	ZE		23	32			in Santo Dominigo. Felt
		eSS	NE		29	36			on Puerto. Rico, Guade-
		eSS	Z		30	05			loupe, and in Northern
		e(SSS)	ZN		33	08			Venezuela.
		eSKKS	N		36	52			h about 57 km.
		eL	ZNE		40	00			H = 12 56 04.3
		eL	ZE		44	44			Mag. 6.5(PAS),6.4(BRK),
									6.1(CGS)
27	11	eP	ZNE	13	54	58			
		eiS	ZNE		55	41			
		T	ZNE		58	45			
28	11	eP	Z	14	09	28		65	USCGS: 51.5N, 176.1E.
		iS	ZNE		18	25			Rat Islands, Aleutian Is.
		iSSS	E		26	00			h about 32 km.
		iL	ZN		28	09			H = 13 58 37.7
									Mag. 6.1(PAS), 6.4(BRK),
									5.9MB 6.5MS (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
29	11	eP	Z	15	05	38			
		eiS	ZNE		06	28			
		eT	ZNE		09	32			
30	12	iP	ZNE	22	42	06.2		6.8	u USCGS: 18.8S, 176.5W. Fiji Islands region h about 329 km. H = 22 40 35.3 Mag. 5.2 (CGS)
		eiS	ZNE		43	15			
31	12	iP	ZNE	23	39	23.9		9.8	u USCGS: 20.8S, 178.9W. Fiji Islands region h about 605 km. H = 23 37 10.1 Mag. 4.9 (CGS)
		eiS	ZNE		41	09			
32	13	eP	Z	00	27	20			
		ei(S)	ZNE		28	27			
33	13	eL	Z	04	36	20		67	USCGS: 36.2N, 140.9E. Near east coast of Honshu, Japan. Felt (III JMA) in eastern Honshu. h about 55 km. H = 04 03 51.7 Mag. 5.5 (CGS)
34	13	iP	ZNE	18	37	16		2.2	une USCGS: 15.6S, 173.1W. Tonga Ialands h about 28 km. H = 18 36 43.2 Mag. 5.0 (CGS)
		S	ZNE			37			
35	14	e	N	14	19	20			
		eL	NE		27	00			
		eL	Z		29	20			
36	15	eP	Z	03	23	30		18.5	USCGS: 19.4S, 169.8E. New Hebrides Islands h about 25 km. H = 03 19 14.9 Mag. 4.8 (CGS)
		e	NE		27	00			
		eL	Z		28	20			
37	15	eL	ZN	14	36	40		69	USCGS: 52.8N, 160.8E. Off east coast of Kamchatka h about 55 km. H = 14 04 08.5 Mag. 5.1 (CGS)
38	16	eP	Z	06	37	10			
		(S)	E		39	40			
		e	ZN		40	26			
		e(T)	ZNE		48	07			
39	17	eP	Z	18	20	58			
		eS	ZNE		25	00			
		e(L)	E		27	28			
		eL	Z		28	12			
40	17	iP	Z	21	13	58		95	d? USCGS: 25.5S, 69.2W. Northern Chile One killed and damage at Katalina Felt (V) at Antofagasta h about 93 km. H = 21 00 40.9 Mag. 7.0(PAS),6.8(BRK), 6.3(CGS)
		iPP	ZNE		17	56			
		iS	NE		24	44			
		iS	Z		25	08			
		iSS	ZNE		31	34			
		i	ZNE		38	32			
		iL	Z		41	14			
		iL	ZE		45	00			

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
41	18	eiP	Z	15	13	26		19.0	USCGS: 21.9S, 170.1E.
		e	E		16	24			Loyalty Islands Region
		e	ZN		17	02			h about 28 km.
		e	ZN		18	02			H = 15 09 03.5
									Mag. 5.1 (CGS)
42	19	P	Z	11	00	00		20.1	USCGS: 20.8S, 168.5E.
		e	Z		05	48			Loyalty Islands
									h about 24 km.
									H = 10 55 30.3
									Mag. 5.1 (CGS)
43	20	eP	Z	02	55	34		18.4	USCGS: 19.0S, 169.7E.
		e	ZE	03	00	32			New Hebrides Islands
									Felt (IV) on Isangel
									h about 19 km.
									H = 02 51 25.4
									Mag. 4.9 (CGS)
44	20	eiP	ZNE	10	01	52			
		eiS	ZNE		02	13			
45	20	iP	ZNE	16	43	37.3			u
		S	ZNE			55			
46	21	e(SSS)	ZNE	01	30	32		48	USCGS: 57.4S, 147.7W.
		eL	ZN		32	20			South Pacific Cordillera
									h normal
									H = 01 10 57.7
									Mag. 5.1 (CGS)
47	21	iP	ZNE	20	12	01.1			u
		S	ZNE			22			
48	22	eP	ZNE	02	18	39.3			
		eiS	ZNE			59			
49	22	eP	ZNE	06	52	16		9.9	USCGS: 21.1S, 178.8W.
		eiS	ZNE		54	01			Fiji Islands region
									h about 584 km.
									H = 06 50 08.9
									Mag. 4.7 (CGS)
50	22	eP	Z	11	28	56	0.5 1.0	27.7	USCGS: 9.8S, 160.3E.
		e	N		35	16			Solomon Islands
		e	E			28			h about 20 km.
		e	Z		37	02			H = 11 23 06.1
									Mag. 5.4 (CGS)
51	22	e	NE	20	22	12			
		eL	Z			56			
	23	No readings							
52	24	eP	Z	00	01	04		52	USCGS: 54.4S, 147.0E.
									West of Macquarie Is.
									h normal
									H = 23 51 59.2
									Mag. 5.4MB 5.1MS (CGS)
53	24	e(P)	Z	06	54	21			
		e(S)	NE		55	57			
54	24	eP	Z	13	57	47		11.1	USCGS: 22.2S, 179.5W.
		eS	NE		59	42			South of Fiji Islands
									h about 603 km.
									H = 13 55 15.3
55	24	eS	ZNE	14	13	20		74	USCGS: 23.5N, 123.7E.
		eL	N		23	32			Southwestern Ryukyu
		eL	ZE		26	24			Islands. Felt (III JMA)
									on Ishigaki Jima and
									(I) on Yonaguni Jima
									h about 9 km.
									H = 13 52 12.2
									Mag. 5.6MB 5.4MS (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
56	25	eP	ZNE	00	09	02		15.1	USCGS: 21.1S, 174.2E.
		e(S)	NE		12	08			New Hebrides Islands region
		eL	Z			52			h about 30 km.
									H = 00 05 34.8
									Mag. 4.5 (CGS)
57	26	eiP	Z	09	29	54	1.5 0.9	20.1	USCGS: 15.1S, 167.4E.
									New Hebrides Islands
									h about 130 km.
									H = 09 25 21.9
									Mag. 4.9 (CGS)
58	26	eP	Z	16	24	37		21.5	USCGS: 11.6S, 166.3E.
		e(S)	ZNE		28	40			Santa Cruz Islands
		eL	ZE		30	00			h about 69 km.
									H = 16 19 49.2
									Mag. 4.9 (CGS)
59	26	eP	Z	19	40	16		93	USCGS: 5.2S, 96.9E.
		e(SKS)	E		50	48			Southwest of Sumatra
		eS	ZN		51	20			h about 25 km.
		e	N		56	24			H = 19 27 13.9
		eSS	E		57	16			Mag 6.5(PAS), 5.9(BRK),
		eSSS	N	20	00	44			5.8MB 6.4MS (CGS)
		e	NE		03	40			
		eL	ZE		10	20			
60	27	eiP	Z	03	15	11			
		eiS	ZNE			42			
61	27	eP	Z	08	34	50			
		eiS	ZNE		35	15			
		eiT	ZNE		36	53			
62	27	P	Z	10	49	49			
		S	ZNE		50	27			
		T	ZNE		53	04			
63	27	iP	ZNE	14	25	51		14.8	d
		eiS	ZNE		28	19			USCGS: 25.2S, 178.2E.
									South of Fiji Islands
									h about 607 km.
									H = 14 22 53.1
									Mag. 5.3 (CGS)
64	27	eS	ZE	18	05	32		43.4	USCGS: 3.5S, 145.5E.
		e(SSS)	NE		08	48			Near north coast of New Guinea
		eL	Z		11	12			h normal
									H = 17 50 50.7
									Mag. 5.4 (CGS)
65	28	eP	ZE	19	03	41		10.2	USCGS: 16.3S, 177.9E.
		eS	ZNE		05	32			Fiji Islands
									h normal
									H = 19 01 15.8
									Mag. 4.6 (CGS)
66	28	eP	ZNE	20	41	35	1.0 1.4	19.0	USCGS: 22.2S, 170.3E.
		eS	E		45	08			Loyalty Islands region
		eS	ZN			36			h about 14 km.
									H = 20 37 11.5
									Mag. 4.7 (CGS)
67	29	ePKP	Z	09	27	50		146	USCGS: 37.1N, 36.8E.
									Turkey
									h about 35 km.
									H = 09 08 11.7
									Mag. 5.0MB 5.5MS(CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
68	29	eiP	ZNE	09	28	14		7.5	USCGS: 21.0S, 173.8W. Tonga Islands h about 69 km. H = 09 26 34.9 Mag. 5.2 (CGS)
		eiS	ZNE		29	27			
		eT	ZNE		35	03			
69	29	eL	ZN	14	34	48		67	USCGS: 54.6N, 161.6W. Alaska Peninsula h about 24 km. H = 14 03 19.0 Mag. 5.1ML(ERL)5.2(CGS)
70	29	iP	Z	18	11	38			u Samoa Islands region
		S	ZNE			58			
71	29	eP	ZNE	20	10	07		22.0	USCGS: 11.1S, 165.9E. Santa Cruz Islands h about 46 km. H = 20 05 13.8 Mag. 5.0MB 5.3MS (CGS)
		eS	ZN		14	08			
		eL	ZE		15	48			
72	30	eiP	ZNE	02	17	44			
		S	ZNE		18	22			
73	30	iP	ZNE	03	21	53			u
		S	ZNE		22	15			
74	30	e	N	07	05	28			
		eL	ZE		07	24			

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FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

JULY 1972

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
1	1	P	Z	05	46	46		8.6	USCGS: Tonga
		S	ZNE		48	18			21.9S 175.00W.
		T	ZNE		55	13			h = 41 km. Mag = 5.0
									H = 05 44 48.2
2	1	eS	ZNE	17	29	08		21.5	USCGS New Hebrides
									13.10S 166.10E
									h = 019 km Mag = 4.4
									H = 17 17 49.9
3	1	P	Z	18	09	53			
		S	ZNE		11	28			
4	2	P	ZNE	00	49	18		7.3	USCGS: Tonga
		S	ZNE		50	33			20.8S 174.2W
		T	ZNE		56	10			033 km Mag = 4.6
									H = 00 47 37.7
5	3	P	Z	01	27	53		53	USCGS: Mariana Islands
									18.7N 145.1E.
									h = 618km Mag = 5.7
									H = 01 19 26.7
6	3	P	Z	03	07	13		10.2	USCGS: Fiji Region
		S	ZNE		09	03			21.00S 179.3W
									h = 579
									Mag = 4.0 H = 03 04 52.2
7	3	P	Z	05	42	00		65	USCGS Mindanao
									5.8N,125.9E h = 096 km.
									Mag = 5.6
									H = 05 31 27.5
8	3	eS	NE	22	31	40		82	USCGS S. Chile
		L	Z		35				45.1S 79.6W. h = 033km.
									Mag=4.8 H = 21 57 35.9
9	4	eP	Z	10	27	28		70	USCGS Central Philipp-
		eS	ZNE		36	28			ines
		eSS	E		43	44			9.4N 122.5E h = 058km.
		Lq	N	10	44				Mag= 5.5 H = 10 16 12.2
		Lr	ZE		48				
10	4	(P)	Z	15	38	20		28.5	USCGS Solomon Is.
		S	NE		45	16			9.8S 159.4E h = 063km.
		e	Z		46	50			Mag=5.0 H = 15 32 25.4
11	4	P	Z	22	23	11			
		S	ZNE			39			
		T	ZNE		25	40			
12	5	iP	Z	03	58	07.0			u
		S	ZNE			26			
13	5	P	Z	06	26	13			
		S	ZNE		27	32			
14	5	eiP	Z	09	00	35			
		S	ZNE			54			
		Tmax	NE		02	39			

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
15	5	P	Z	10	28	15		74	USCGS Vancouver Region
		S	ZNE		37	54			49.5N 127.2W h = 027km.
		Lq	E		47				Mag=5.8 H = 10 16 38.4
		Lr	ZN		50				
16	5	P	Z	14	54	15			
		S	ZNE		55	10			
17	5	P	Z	18	18	43			
		S	ZNE		19	02			
18	6	P	Z	17	46	39			
		S	ZNE		47	15			
		T	ZNE		50	10			
19	6	P	Z	20	08	48			
		S	ZNE		11	02			
20	7	P	Z	01	44	43			
		S	ZNE		45	20			
		T	ZNE		48	10			
21	7	S	ZNE	05	18	16		22.4	USCGS Santa Cruz Is.
									11.1S 165.5E h = 039km.
									Mag=4.6 H = 05 07 30.0
22	7	P	Z	10	14	34			
		S	ZNE			51			
23	7	P	Z	17	32	19			
24	8	P	Z	14	28	53			
		S	ZNE		29	19			
25	9	P	Z	11	10	08		7.7	USCGS Fiji region
		S	ZNE		11	20			20.2S 176.3W h=278km.
									Mag=4.6 H = 11 08 23.7
26	9	P	Z	18	03	08			
		S	ZNE			27			
		T	ZNE		05	02			
27	10	P	Z	06	32	23		10.0	USCGS S. of Fiji
		S	ZNE		33	59			22.8S 176.2W h=033km.
									Mag=5.1 H = 06 30 02.9
28	10	iP	Z	10	54	39.5	15.002.0		u
		S	ZNE		55	20			
29	11	P	Z	12	52	16			
		S	ZNE			48			
		T	ZNE		54	40			
30	11	P	Z	15	22	04			
		S	ZNE			40			
		T	ZNE		24	17			
31	12	eiP	ZNE	10	54	41			
		S	ZNE		55	14			
32	12	P	Z	16	42	48			
		S	ZNE		43	09			
33	12	P	Z	20	07	10			
		S	ZNE		08	35			
34	13	P	Z	07	17	31			
		S	ZNE		18	06			
35	15	iP	Z	13	36	11.5	7.0 2.0		u
36	15	P	Z	22	13	08			
		S	ZNE			28			

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
37	16	P	Z	00	31	30		9.7	USCGS: Fiji Region
		S	ZNE		33	15			20.9S 178.7W h=600km.
		T	ZNE		38	10			Mag=5.4 H = 00 29 16.6
38	16	P	Z	04	26	32	02.002.3	22.1	USCGS: S. of Kermadec Is.
		S	ZNE		30	38			34.9S,179.9E h=051km.
		L	ZNE		32				Mag=5.6 H = 04 21 40.3
		T	ZNE		48	10			
39	16	P	Z	05	55	07			
		S	Z			38			
40	16	P	Z	17	21	51		87	USCGS S. Sumatra
		S	NE		32	32			3.00S 101.0E. h=28km.
		Lq	N		48				Mag=5.6 H = 17 09 05.6
		Lr	ZE		53				
41	16	P	Z	18	10	56		8.3	USCGS Tonga
		S	ZNE		13	04			21.2S 175.7W. h=033km.
									Mag=5.3 H = 18 09 00.5
42	16	(P)	Z	21	32	20			
43	17	P	Z	00	57	54			
		S	ZNE		58	30			
44	17	iP	Z	01	36	16.5			d
		S	ZNE		37	18			
45	17	P	Z	08	11	30.5			
		S	ZNE		12	47			
46	18	P	Z	14	04	56			
		S	ZNE		05	20			
47	19	P	Z	02	16	07			
		S	ZNE		18	30			
48	19	P	Z	03	54	28			
		S	ZNE		55	21			
49	19	P	ZNE	07	08	13			
		S	ZNE		09	57			
50	19	eP	Z	08	21	37			
51	19	P	Z	14	06	47			
		S	ZNE		08	00			
		T	ZNE		14	08			
52	21	eiP	ZNE	08	39	11		9.0	USCGS Fiji Region
		S	ZNE		40	40			21.9S 176.0W h=118km.
		T	ZNE		44	54			Mag=5.5 H = 08 37 11.7
53	21	P	Z	11	51	21			
		S	ZNE			41			
54	22	P	Z	06	08	04		21.7	USCGS Santa Cruz Is.
		e	Z		11	52			12.7S 166.0E h=44km.
		S	ZNE		14	40			Mag=5.0 H = 06 03 13.9
		Lr	ZNE		22				
55	22	P	Z	08	07	58			
		S	ZNE		08	18			
56	22	P	Z	18	07	43			
		S	ZNE		09	33			
57	23	P	Z	03	41	51			
		S	ZNE		43	28			
58	23	P	Z	07	01	36			
		S	ZNE		03	52			

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
59	23	P	Z	09	53	06							7.4	USCGS Fiji Region
		S	ZNE		54	22								15.7S 179.2W h=479km.
														Mag=4.6 H = 09 51 19.6
60	23	(P)	Z	16	13	13								
		S	ZNE		15	29								
61	23	eP	Z	19	24	43							74	USCGS Vancouver Region
		eS	ZNE		34	18								50.1ON 129.30W
		SS	ZNE		38	36								h = 033km. Mag = 5.9
		Lq	N		43									H = 19 13 09.0
		Lr	ZE		46									
62	24	P	Z	06	06	31							9.9	USCGS Fiji Region
		S	ZNE		08	17								20.8S,179.1W h=643km.
														Mag=4.2 H = 06 04 22.1
63	24	P	Z	15	21	43								
		S	ZNE		22	03								
64	24	iP	Z	21	16	53								u
		S	ZNE		17	33								
65	24	(P)	Z	21	28	24								
66	25	P	Z	04	10	47							8.6	USCGS Fiji Region
		S	ZNE		11	30								14.9S,179.4E. h=508km.
		T	ZNE		13	42								Mag=3.6 H = 04 09 04.6
67	25	P	Z	07	35	40								
		S	ZNE		36	12								
68	25	P	Z	08	32	43							13.2	USCGS Kermadec Region
		S	ZNE		35	08								27.2S 176.5W h=62 km.
														Mag=5.1 H=08 29 38.7
69	25	P	Z	08	44	13							14.2	USCGS Kermadec Region
		S	ZNE		45	43								27.2S 176.7W h=60km.
		T	ZNE		57	35								Mag=4.7 H = 08 41 07.8
70	25	P	Z	09	22	26							8.8	USCGS Fiji Region
		PPS	ZNE		23	53								21.5S,176.4W h=180km.
		T	ZNE		27	09								Mag=5.4 H=09 20 28.3
		Tmax	ZNE		28	12								
71	25	(PP)	E	09	35	40								
		S	NE		40	38								
		Lr	ZNE		45									
72	26	P	Z	13	39	53							12.6	USCGS S. of Fiji
		S	ZNE		42	05								23.6S 179.9E h=552km.
														Mag=3.9 H=13 37 13.5
73	27	P	Z	13	15	39								
		S	ZNE		16	04								
74	27	P	Z	14	12	26								
		S	ZNE			47								
75	28	iP	Z	01	36	59.0								u
		S	ZNE		37	28								
76	28	iP	Z	10	02	05.0								u
		S	ZNE			28								
77	28	(P)	ZNE	20	44	10								
		S	ZNE		45	14								
78	29	P	ZNE	05	14	52							66	USCGS Sulawesi
														00.1N 123.5E h=161km.
														Mag=5.8 H=05 04 22.7
79	29	P	Z	11	34	47								
		S	ZNE		36	00								
		T	ZNE		41	30								

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	Δ (Deg.)	Remarks
80	29	iP	Z	17	42	55.0			
		S	ZNE		43	20			u
81	29	P	Z	19	39	45			
		S	ZNE		41	20			
82	29	P	Z	22	42	03			
		S	ZNE		49	08		44	USCGS Bismarok Sea
		Lq	N		52				3.3S 146.5E H=33km.
		Lr	ZE		25				Mag=4.8 H=22 34 33.3
83	30	iP	Z	06	25	15.0			
		S	ZNE			30			u
84	30	P	Z	10	46	32			
		S	ZNE			56			
85	30	P	Z	16	30	22		7.4	USCGS: Fiji Region
		S	ZNE		31	46			18.0S 178.0W h=525km.
									Mag=4.3 H=16 28 36.2
86	30	P	Z	17	47	31		36.6	USCGS New Britain
		S	ZNE		53	12			4.6S 152.3E h=044km.
		Lq	N		56				Mag=5.3 H=17 40 22.8
		Lr	ZE		59				
87	30	P	Z	20	21	05		36.6	USCGS New Britain
		S	ZNE		26	48			4.6S 152.3E h=016km.
		Lq	N		29				Mag=5.5 H=20 13 56.1
		Lr	ZE		33				
88	30	P	Z	21	57	08		76	USCGS S.E. Alaskn
		S	ZNE	22	07	00			56.82N 135.68W h=025km.
		SS	ZE		11	32			Mag=6.5 H=21 45 14.1
		Lq	NE		15				
		Lr	Z		19				
89	31	P	Z	02	33	57			
		S	ZNE		34	49			
90	31	P	Z	07	31	40		20.4	USCGS New Hebrides
									15.8S 167.2E h=017km.
									Mag=4.4 H=072700.7
91	31	P	Z	07	56	56		9.2	USCGS Fiji Region
		S	ZNE		58	37			20.2S 178.7W h=633km.
									Mag=4.5 H=07 54 50.0
92	31	P	Z	12	49	45			
		S	ZNE		50	20			
		T	ZNE		52	44			
93	31	P	ZNE	14	42	56		50	USCGS Mariana Is.
		(L)	ZNE		56				14.6N 145.7E h=111km.
									Mag=5.1 H=14 34 06.9
94	31	eP	Z	16	06	32		64	USCGS S. of Honshu
		S	ZNE		15	16			30.7N 141.6E h=033km.
		Lq	NE		22				Mag=5.4 H=15 56 08.5
		Lr	Z		24				

"
P.D. Muller
Superintendent.

NEW ZEALAND

Department of Scientific and Industrial Research

Geophysics Division

APIA OBSERVATORY

FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

August 1972

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
1	1	eP	Z	08	45	43								
		(S)	NE		47	36								
2	1	P	Z	17	32	12								
		S	ZNE		34	15								
		T	ZNE		45	30								
3	1	iP	Z	19	16	49.0	3.0	2.9					63	u USCGS: 2.3N 127.4E. Moluccoa Passage h about 96 km. H = 19 06 33.8 Mag 5.9(PAS),5.9(CGS)
		S	ZNE		25	10								
		SS	N		29	04								
		Lq	NE		32									
		Lr	Z		37									
4	2	P	ZNE	01	12	09							5.3	USCGS 18.9S 173.3W. Tonga Islands h about 60 km. H = 01 11 02.0 Mag. 4.9 (CGS)
		S	ZNE		13	04								
		T	ZNE		17	03								
5	2	eP	Z	02	40	41								
		S	ZNE		41	23								
		T	ZNE		44	20								
6	2	eP	Z	09	23	06								
		S	ZNE		24	00								
		T	ZNE		28	00								
7	2	eP	Z	09	48	27							25.9	USCGS 11.3S 161.8E Solomon Islands h about 59 km. H = 09 42 58.2 Mag. 4.8 (CGS)
		S	ZNE		54	00								
8	2	P	Z	09	58	02								
9	2	P	Z	13	00	45							25.6	USCGS 11.5S 162.1E. Solomon Islands h about 42 km. H = 12 55 17.3 Mag 4.7 (CGS)
		S	NE		06	20								
		(L)	ZNE		09									
10	2	P	Z	14	22	21								
		eS	ZNE		24	40								
11	2	P	ZNE	19	51	49							13.6	USCGS: 26.2S 177.8W South of Fiji Is. h about 224 km. H = 19 48 57.3 Mag 5.3 (CGS)
		S	ZNE		54	07								
		T	ZNE	20	01	10								
		Tmax	ZNE		05	23								
12	2	e(P)	Z	21	47	35								
		(S)	ZNE		50	30								
13	2	S	N	22	00	14							73	USCGS 56.1N 163.2E Near east coast of Kamchatka. h Normal H = 21 38 50.4 Mag 5.6MB 5.7MS(CGS)
		L	ZN		12									

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
14	3	eP	Z	04	51	42		65	USCGS: 51.2N 178.1W
		eS	ZNE	05	00	24			Andreanof Islands
		SS	ZE		04	32			Aleutian Islands
		Lq	E		07				Minor damage (V) on Adak.
		Lr	ZN		10				h about 49 km.
									H = 04 40 54.9
									Mag 6.1(PAS),6.3(BRK) 5.8MB 6.2MS (CGS)
15	3	P	Z	06	15	25			
		S	ZNE		16	17			
16	3	iP	Z	16	10	52.0	1.0 2.0	25.7	d
		S	NE		16	22			USCGS: 11.3S, 162.0E.
									Solomon Islands
									h Normal
									H = 16 05 21.9
									Mag 4.6 (CGS)
17	3	P	Z	17	59	30		15.3	USCGS: 28.1S, 177.6W.
		S	ZNE	18	02	08			Kermadec Islands region
									h about 232 km.
									H = 17 55 53.2
									Mag. 4.5 (CGS)
18	3	P	Z	19	04	18			
		S	ZNE		05	09			
		T	ZNE		09	15			
19	3	P	Z	22	30	02			
		S	ZNE			22			
20	4	P	Z	00	21	42			
		S	ZNE		23	24			
21	4	S	N	07	28	36		25.6	USCGS: 11.1S, 162.1E.
		L	ZE		30				Solomon Islands
									h Normal
									H = 07 17 23.7
									Mag.4.4MB 4.9MS (CGS)
22	4	P	Z	11	50	06		76	USCGS 56.2N, 135.3W.
		L	ZN	12	12				Southeastern Alaska
									Felt at Juneau and (IV) at Sitka
									h about 20 km.
									H = 11 38 08.3
									Mag 6.0(PAS), 5.6MB 5.8MS (CGS)
23	4	P	Z	18	02	23		68	USCGS: 49.2N, 156.1E
		S	ZNE		11	28			Kuril Islands
		SS	ZN		15	34			h about 54 km.
		Lq	E		18				H = 17 51 12.9
		Lr	ZN		22				Mag5.9(BRK),5.7(CGS)
24	4	P	ZNE	20	07	08		25.6	USCGS: 11.2S, 162.1E.
		S	ZNE		11	40			Solomon Islands
		Lq	N		12				h about 34 km.
		Lr	ZE		14				H = 20 01 37.7
									Mag. 6.0(BRK), 5.2MB 6.0MS (CGS)
25	4	P	Z	21	11	06		25.5	USCGS: 11.2S, 162.3E.
									Solomon Islands
									h about 23 km.
									H = 21 05 36.4
									Mag 4.7 (CGS)

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
26	4	P	Z	22	36	06							25.7	USCGS: 11.1S, 162.0E. Solomon Islands h about 36 km. H = 22 30 36.3 Mag.5.7(PAS), 5.8(BRK), 5.5MB 6.1MS (CGS)
		S	ZN		40	42								
		Lq	Z		41									
		Lr	ZE		43									
27	5	(S)	ZNE	02	15	52							25.6	USCGS: 11.4S, 162.1E. Solomon Islands h about 39 km. H = 02 02 53.5 Mag. 4.6 (CGS)
28	5	(P)	Z	02	40	19							25.6	USCGS: 11.2S, 162.1E. Solomon Islands h about 30 km. H = 02 34 49.7 Mag. 4.8 (CGS)
29	5	iP	Z	03	45	54.5	16.4	1.9					7.6	d USCGS: 17.9S, 178.6W. Fiji Islands region h about 619 km. H = 03 44 01.8 Mag. 5.2 (CGS)
		S	ZNE		47	27								
30	5	P	Z	03	51	30								
		(S)	ZNE		52	40								
31	5	P	Z	04	21	32								
		S	ZNE		22	28								
32	5	(S)	ZNE	05	41	40							25.9	USCGS: 11.2S, 161.9E. Solomon Islands h Normal H = 05 31 32.4 Mag.5.2MB 6.1MS(CGS)
33	5	iP	Z	06	36	28.5	6.5	2.0					25.6	d USCGS: 11.2S, 162.1E. Solomon Islands h Normal H = 06 30 58.8 Mag.6.0(BRK), 5.4MB 6.1MS (CGS)
		S	ZNE		41	12								
		Lq	N		42									
		Lr	ZE		43									
34	5	P	Z	06	45	52								
		S	ZNE		46	12								
35	5	P	Z	10	23	08								
		S	ZNE			47								
		T	ZNE		26	25								
36	5	P	Z	13	54	07							16.8	USCGS: 29.8S, 177.2W. Kermadec Islands h about 63 km. H = 13 50 24.3 Mag. 4.5 (CGS)
		S	ZNE		56	53								
		L	ZNE		57									
37	6	P	Z	07	20	12.6							25.8	USCGS: 11.1S, 162.0E. Solomon Islands h about 56 km. H = 07 14 46.6 Mag. 6.5(BRK),5.9(CGS)
		S	N		25	45								
		Lq	E		26									
		Lr	ZN		27									
38	6	(P)	Z	07	22	43								
		(S)	ZNE		24	39								
39	6	(P)	ZNE	07	29	02								

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
40	6	P	ZNE	10	21	07							25.7	USCGS: 11.2S, 162.0E.
		e	Z		25	46								Solomon Islands
		S	NE		26	40								h about 67 km.
														H = 10 15 40.4
														Mag. 5.1 (CGS)
41	6	P	Z	15	22	02							25.7	USCGS: 11.2S, 162.0E.
		S	ZNE		28	36								Solomon Islands
														h about 49 km.
														H = 15 17 33.1
														Mag. 5.2 (CGS)
42	6	P	Z	15	48	47								
		S	ZNE		49	11								
43	7	eiP	ZNE	04	57	43								
		S	ZNE		58	39								
44	7	iP	Z	09	24	56.5							2.7	d
		S	ZNE		25	40								USCGS: 16.6S, 172.1W.
		T	ZNE		36	45								Samoa Islands region
														h Normal
														H = 09 24 14.7
														Mag. 6.1(PAS),5.9(BRK)
														5.8MB 6.0MS (CGS)
45	7	P	Z	14	39	59								
		S	ZNE		40	19								
46	7	P	Z	23	12	38								
		S	ZNE		13	26								
47	7	P	Z	23	16	25								
		S	ZNE		17	24								
48	7	P	Z	23	20	45							19.0	USCGS$ 19.1S, 169.1E.
		PP	ZNE		21	44								New Hebrides Islands
		S	ZNE		25	08								h about 184 km.
														H = 23 16 39.0
														Mag.6.2(BRK),5.5(CGS)
49	8	iP	Z	04	14	07.5	2.6	1.5						u
		S	ZNE			32								
50	8	P	Z	09	50	34								
		S	ZNE		51	52								
		T	ZNE		57	50								
51	9	P	Z	00	40	26							11.3	USCGS: 23.3S, 178.3W.
		S	ZNE		42	22								South of Fiji Islands
		T	ZNE		52	45								h about 323 km.
														H = 00 37 57.9
														Mag. 5.0 (CGS)
52	9	iP	Z	03	25	08.0								u
		S	ZNE			50								
53	9	P	Z	04	16	19								
		(S)	ZNE		18	07								
54	9	e	N	14	44	20							26.1	USCGS: 10.9S, 161.6E.
		L	ZE		45									Solomon Islands
														h Normal
														H = 14 32 41.1
														Mag. 5.0 (CGS)
55	9	P	Z	18	41	59								
		S	ZNE		42	43								
		T	ZNE		46	45								

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
56	10	e	N	03	20	20							26.6	USCGS: 10.7S, 161.9E.
		(S)	ZE		22	24								Solomon Islands
														h about 51 km.
														H = 03 09 39.5
														Mag. 4.9 (CGS)
57	10	P	Z	03	54	45								
		S	ZNE		55	11								
58	10	P	Z	15	33	13							8.2	USCGS: 21.5S, 174.6W.
		S	ZNE		34	34								Tonga Islands
		T	ZNE		40	22								h Normal
		Tmax	NE		41	07								H = 15 31 24.7
														Mag. 5.7MB 5.3MS(CGS)
59	10	P	Z	23	37	57								
		S	ZNE		38	20								
		T	ZNE		39	49								
60	11	P	Z	07	34	21							13.3	USCGS: 25.1S, 179.2W.
		S	ZNE		36	37								South of Fiji Islands.
		T	ZNE		46	07								h about 390 km.
														H = 07 31 31.0
														Mag. 4.9 (CGS)
61	11	S	ZNE	07	41	07								
62	11	P	Z	16	31	22							6.7	USCGS: 18.4S, 176.7E.
		S	E		32	52								Fiji Islands region
		L	ZNE		35									h about 47 km.
														H = 16 29 35.1
														Mag. 4.7 (CGS)
63	12	P	Z	04	13	58								
		S	ZNE		14	15								
64	12	(S)	NE	05	05	20								
65	12	P	Z	07	46	34								
		S	ZNE		47	06								
66	12	P	Z	09	52	57							65	USCGS 51.4N, 179.3W.
		S	ZNE	10	01	32								Andreanof Islands,
		SS	E		05	40								Aleutian Islands
		Lq	E		09									Felt (III) on Adak
		Lr	ZN		11									h about 29 km.
														H = 09 42 05.2
														Mag.5.8ML(ERL),
														5.4(PAS), 5.4(BRK),
														5.9MB 5.7MS(CGS)
67	12	P	Z	13	46	05							22.0	USCGS: 10.9S, 165.9E.
		S	ZN		52	48								Santa Cruz Islands
		Lr	ZE		57									h about 60 km.
														H = 13 42 31.7
														Mag. 4.3 (CGS)
68	12	P	Z	16	33	31							11.7	USCGS: 24.5S, 176.8W.
		S	ZNE		35	27								South of Fiji Islands
		T	ZNE		44	30								h about 128 km.
														H = 16 31 04.9
														Mag. 3.9 (CGS)
69	13	(S)	ZE	04	28	04							26.1	USCGS: 11.1S, 161.6E.
		SS	ZE		30	44								Solomon Islands
		Lq	Z		32									h Normal
		Lr	NE		33									H = 04 22 28.7
														Mag. 4.9 (CGS)
70	13	P	ZE	05	58	26							26.4	USCGS: 10.9S, 161.4E.
		S	ZNE	06	05	44								Solomon Islands
														h about 53 km.
														H = 05 51 33.7
														Mag. 5.0 (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
71	13	P	NE	09	58	09		16.6	USCGS: 29.6S, 177.1W.
		S	NE	10	00	39			Kermadec Islands
		T	NE		14	12			h about 39 km.
									H = 09 54 12.6
									Mag. 4.7 (CGS)
72	13	P	NE	10	58	28			
		S	NE			44			
73	13	(P)	NE	15	32	08			
		S	NE		34	10			
74	14	P	Z	01	31	19			
		S	ZNE			40			
		T	ZNE		33	26			
75	14	P	Z	04	02	50		23.3	USCGS: 10.9S, 164.6E.
		S	N		06	58			Santa Cruz Islands
		Lr	ZE		09				region
									h Normal
									H = 03 57 31.0
									Mag. 4.8 (CGS)
76	14	P	Z	06	19	41			
		S	ZNE		20	10			
77	14	P	Z	11	48	43		7.6	USCGS: 17.9S, 178.6W.
		S	ZNE		50	15			Fiji Islands region
									h about 622 km.
									H = 11 46 50.6
									Mag. 4.8 (CGS)
78	14	iP	Z	22	37	30.4	2.5 2.0	43.7	u
		S	ZE		44	12			USCGS: 6.3S, 144.4E.
		Lq	N		48				New Guinea
		Lr	ZE		51				Felt (V) at Kerowagi
									h about 44 km.
									H = 22 29 27.6
									Mag. 5.6MB 5.5MS(CGS)
79	15	P	Z	03	00	31			
		S	ZNE		01	40			
80	15	P	ZNE	03	52	29		7.0	USCGS:17.8S, 178.8W.
		S	ZNE		54	00			Fiji Islands region
									h about 573 km.
									H = 03 50 38.3
									Mag. 4.9 (CGS)
81	15	P	ZNE	05	27	57			
82	15	P	Z	08	29	42			
		S	ZNE		30	20			
83	15	iP	Z	09	32	38.5	5.5 1.0		u
		S	ZNE			59			
84	15	P	ZNE	10	22	45		4.1	USCGS: 17.7S, 173.0W.
		S	ZNE		23	30			Tonga Islands
		Tmax	ZNE		26	42			h Normal
									H = 10 21 53.2
									Mag. 4.8 (CGS)
85	15	P	Z	21	10	41			
		S	ZNE			59			
86	16	P	Z	05	53	26			
		S	ZNE		54	13			
87	16	P	Z	13	59	20			
		S	ZNE	14	00	00			
		T	ZNE		02	18			
88	17	iP	Z	06	45	04.0			d
		S	ZNE			45			

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
89	17	P	Z	19	00	47			
		S	ZNE		01	32			
90	17	P	Z	19	40	12			
		S	ZNE			57			
91	17	P	Z	23	51	07		35.6	USCGS: 6.0S, 152.9E.
		PcP	ZNE		56	40			New Britain region
		S	ZNE		59	44			Max. int. (V) at Rabaul
		ScS	ZNE	00	01	00			and Palmamal. Felt
		Lq	ZNE		05				widely on New Britain
									and as far as Port
									Moresby, New Guinea.
									Local Tsunami reported
									at Pomio.
									h about 10 km.
									H = 23 44 05.9
									Mag.6.9(PAS),7.0(BRK),
									6.4MB 7.1MS (CGS)
92	18	(S)	NE	14	11	24			
93	18	(P)	Z	16	20	10			
		S	NE		21	16			
94	18	P	Z	20	46	16			
		S	ZNE		47	46			
95	19	P	Z	12	44	25		9.2	USCGS: 21.5S, 177.0W.
		S	ZNE		45	53			Fiji Islands region
									h about 318 km.
									H = 12 42 31.9
									Mag. 4.4 (CGS)
96	19	P	Z	17	24	01			
		S	ZNE		25	42			
97	20	P	Z	00	58	15			
		S	ZNE			36			
98	20	P	Z	09	54	09			
		S	ZNE			29			
99	20	P	Z	21	23	35			
		S	ZNE			53			
100	21	iP	Z	05	16	56.0			u
		S	ZNE		17	12			
101	21	P	ZNE	06	34	20		73	USCGS: 49.5N, 147.0E.
		PP	ZN		36	35			Sea of Okhotsk.
		e	ZNE		37	24			Felt (IJMA) at Kushiro
		S	ZNE		43	00			Hokkaido, Japan.
									h about 578 km.
									H = 06 23 48.9
									Mag. 5.9 (CGS)
102	21	P	ZNE	08	54	01		35.6	USCGS: 5.8S, 153.0E.
		Lr	ZNE	09	05				New Britain region
									h about 35 km.
									H = 08 47 05.4
									Mag. 5.3 (CGS)
103	21	P	Z	12	13	45			
		S	ZN		14	15			
104	21	(P)	ZNE	22	09	28		81	USCGS: 8.3S, 105.9E.
									South of Java
									h about 62 km.
									H = 21 57 17.2
									Mag. 5.3 (CGS)
105	22	iP	Z	00	00	10.0			u
		S	ZNE			38			

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
106	22	P	Z	09	08	41								
		S	ZNE		10	16								
107	22	P	Z	13	56	05								
		S	ZNE			25								
108	23	P	ZNE	23	39	05								
		S	ZNE		40	55								
	24	No Readings												
109	25	P	Z	04	43	12								
		S	ZNE		44	05								
110	25	P	Z	03	48	26								
		S	ZNE		49	12								
111	25	P	Z	11	42	29.5	2.4		1.0				6.7	USCGS: 17.0S, 177.9W. Fiji Islands region h about 436 km. H = 11 40 53.1 Mag. 4.1 (CGS)
		S	ZNE		43	47								
112	25	P	Z	14	12	32							20.6	USCGS: 33.4S, 179.1W. South of Kermadec Is. h about 111 km. H = 14 07 57.1
		S	ZNE		16	06								
		(T)	ZNE		31	50								
113	26	P	Z	04	14	31								
		S	ZNE		16	43								
114	26	P	Z	12	42	11							8.0	USCGS: 21.5S, 174.0W. Tonga Islands h Normal H = 12 40 22.8 Mag. 4.4 (CGS)
		S	ZNE		43	34								
		L	ZNE		44									
		(T)	ZNE		50	00								
115	27	P	Z	06	37	10							3.9	USCGS: 16.9S, 177.4W. Fiji Islands region h about 432 km. H = 06 35 43.4 Mag. 4.1 (CGS)
		S	ZNE		38	23								
116	28	P	Z	02	06	27								
		S	ZNE			54								
117	28	P	ZNE	02	27	50							50	USCGS: 24.9S, 136.3E. Northern Territory, Australia. h about 59 km. H = 02 19 00.5 Mag. 5.6 (CGS)
		(L)	ZE		46									
118	28	P	Z	13	50	06							6.4	USCGS: 18.1S, 176.6W. Fiji Islands region h Normal H = 13 48 37.9 Mag. 5.1 (CGS)
		S	ZNE		51	16								
119	28	P	Z	14	28	08								
		S	ZNE			27								
120	28	P	Z	18	59	50							7.7	USCGS: 21.3S, 174.5W. Tonga Islands h Normal H = 18 58 03.2 Mag. 5.8(BRK), 5.6MB 6.0MS (CGS)
		S	ZNE	19	01	17								
		T	ZNE		07	40								
121	29	P	Z	06	01	35							7.0	USCGS: 20.0S, 175.3W. Tonga Islands h about 154 km. H = 05 59 01.7 Mag. 5.4 (CGS)
		S	ZNE		02	45								
		T	ZNE		06	10								

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
122	30	P	Z	02	23	56			
		S	ZNE		24	17			
123	30	iP	Z	05	23	16.0		8.3	d USCGS: 19.8S, 177.7W. Fiji Islands region h about 562 km. H = 05 21 15.6 Mag. 4.9 (CGS)
		S	ZNE		24	50			
124	30	P	ZNE	10	38	20		44.0	USCGS: 3.5S, 144.9E. Near North Coast of New Guinea. h about 13 km. H = 10 29 51.1 Mag. 5.6MB 6.4MS (CGS)
		S	ZNE		46	40			
		L	ZNE		48				
125	31	P	Z	05	37	05		10.2	USCGS: 21.2S, 179.2W. Fiji Islands region h about 625 km. H = 05 34 47.4 Mag. 4.8 (CGS)
		S	ZNE		38	55			
126	31	P	Z	09	54	12			
		S	ZNE		55	07			

"
P.D. Muller
Superintendent.

NEW ZEALAND

Department of Scientific and Industrial Research

Geophysics Division

APIA OBSERVATORY

FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

Nov 12 12 54 73
International Seismological Centre

September 1972

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
1	1	P	ZNE	12	51	42							20.3	USCGS New Hebrides
		S	ZNE		55	28								15.0S 167.3E h=130km.
														Mag=5.6 H = 12 47 14.2
2	2	P	Z	17	56	57								
3	2	P	Z	19	54	18								
		S	ZNE		55	16								
4	3	P	Z	04	27	50								
		S	ZNE		28	15								
		T	ZNE		30	45								
5	3	P	ZNE	06	38	37							37.3	USCGS: New Britain
		PcP	E		41	40								5.6S 151.3E h=45 km.
		S	NE		44	22								Mag=5.4 H=06 31 21.6
		Lr	NE		47									
6	3	P	Z	08	03	15							37.3	USCGS New Britain
		S	N		09	00								5.6S 151.2E h=49 km.
		Lr	NE		12									Mag=5.2 H=07 55 19.1
7	3	P	Z	08	59	16							37.3	USCGS New Britain
		S	NE	09	08	08								5.6S 151.2E h=32 km.
														Mag=4.7 H=085211.1
8	3	P	Z	10	27	36								
		S	ZNE			51								
9	3	iPP	Z	17	07	16.0	1.4	2.5					105	d
														USCGS: Kashmir
														36.0N 73.4W h=36 km.
														Mag=6.3 H=16 48 28.8
10	4	P	ZNE	18	16	00							21.5	USCGS Santa Cruz Is.
		S	ZNE		20	00								11.70S 166.20E h=62km.
		Lq	ZNE		22									Mag=6.0 H=18 11 12.0
11	4	iP	Z	21	26	21.5							7.5	u
		S	ZNE		27	51								USCGS Fiji Region
														17.9S 178.4W h=607
														Mag=5.3 H=21 24 30.6
12	4	(P)	Z	21	28	57							4.0	USCGS Tonga
		S	ZNE		29	27								17.6S 173.0W h=33km.
		T	ZNE		32	45								Mag=4.9 H=21 27 51.5
13	5	P	ZNE	02	44	05							19.3	USCGS: Loyalty Is.
		S	NE		47	44								21.6S 169.7W h=55km.
		Lr	Z		49									Mag=4.9 H=02 39 46.1
14	5	P	ZNE	05	32	49							58	USCGS Banda Sea
		PP	Z		33	20								6.9S 129.7E h=086km
		S	ZNE		40	44								Mag=5.8 H=05 23 02.1
		SSS	NE		47	12								
		Lr	ZE		51									
15	5	(P)	Z	10	20	11							21.9	USCGS Santa Cruz Is.
		S	ZNE		24	16								12.3S 165.8E h=037
														Mag=4.9 H=10 15 01.7

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
16	5	P	ZNE	17	28	34							61	USCGS Halmahera 1.9N 128.2E h=132 km. Mag=6.1 H=17 18 27.1
17	5	iP	Z	17	34	58.0	6.7	2.5					19.4	d
		PP	ZNE		35	12								USCGS New Hebrides
		S	ZNE		38	48								19.9S 169.0E h=052km.
		Lr	ZNE		40									Mag=6.1 H=17 30 35.6
18	5	P	Z	18	43	50							10.3	USCGS Fiji
														16.2S 177.8E h=33km.
														Mag=5.3 H=18 41 25.7
19	5	P	Z	19	04	14								
		S	ZNE		05	24								
20	6	P	Z	05	57	55							10.1	USCGS Fiji
		S	ZNE		59	52								16.0S 178.0E h=033km.
														Mag=5.2 H=05 55 28.5
21	6	P	Z	18	02	36								
		S	ZNE			55								
22	7	P	Z	20	07	58							39.9	USCGS New Britain
		(S)	Z		14	20								6.4S 148.4E h=051km.
		Lq	N		17									Mag=5.3 H=20 00 26.9
		Lr	ZE		19									
23	8	P	ZNE	17	52	24							3.9	USCGS Tonga
		S	ZNE		53	22								15.3S 175.5W h=33km.
		T	ZNE		56	00								Mag=5.2 H=17 51 36.0
24	9	iP	Z	02	44	54.5							4.1	d
		S	ZNE		45	20								USCGS Tonga
														15.4S 175.7W h=035km.
														Mag=5.9 H=02 44 03.1
25	10	P	Z	06	07	51							19.9	USCGS Loyalty Is.
		S	ZNE		11	44								20.2S 168.5S h=039
		Lr	ZNE		13									Mag=5.4 H=06 03 25.7
26	10	iP	Z	08	43	21.8							7.5	USCGS Fiji Region
		S	ZNE		44	50								18.8S 177.6W h=541
														Mag=4.5 H=08 41 27.4
27	10	P	Z	11	11	58							19.6	USCGS Loyalty Is.
		S	ZNE		15	44								20.1S 168.8E. h=058km
		Lq	ZE		17									Mag=5.2 H=11 07 31.2
		Lr	N		18									
28	10	P	Z	12	51	00								
		S	ZNE			27								
29	10	P	Z	19	41	07							7.6	USCGS Fiji Region
		S	ZNE		42	38								17.8S 178.6W h=552km
														Mag=4.9 H=19 39 12.0
30	11	P	Z	08	21	40								
		S	ZNE		22	02								
31	11	P	Z	10	44	26							40.	USCGS Bismarck Sea
		e	N		50	32								3.6S 149.8E h=33km.
		S	ZNE		53	28								Mag=5.2 H=10 36 56.9
32	11	P	Z	11	24	51							40	USCGS Bismarck Sea
		S	ZNE		34	06								3.5S 149.9E h=17 km.
														Mag=5.5 H=11 17 21.5
33	11	P	Z	13	45	40							58	USCGS Ceram
		S	ZNE		53	52								3.2S 130.8E h=33km
		Lr	NE	14	00									Mag=5.5 H=13 13 48.5

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
34	11	P	Z	16	39	28							39.1	USCGS New Ireland
		S	NE		48	32								3.6S 150.0E h=33km.
														Mag=5.2 H=16 31 57.1
35	11	S	ZNE	17	41	24							40	USCGS Bismarck Sea
		SS	ZE		44	40								3.7S 149.9E h=33km.
														Mag=5.3 H=17 24 57.1
36	11	P	Z	19	22	11								
		S	ZNE			49								
		T	ZNE		24	34								
37	12	S	ZNE	02	27	24							19.6	USCGS Loyalty Is.
														20.5S 168.9E h=30km
														Mag=4.8 H=02 17 21.6
38	12	(P)	Z	09	31	36								
		S	ZNE		32	40								
39	13	P	Z	01	10	10								
		S	ZNE		12	14								
40	13	(PKP)	ZNE	04	33	11							154	USCGS S. Greece
														37.9N 22.4E h=083km
														Mag=6.0 H=04 13 20.5
41	13	iP	Z	06	26	49	1.6	2.0					19.7	d
		S	ZNE		32	12								USCGS Loyalty Is.
														20.3S 168.7E h=48km.
														Mag=5.1 H=06 22 22.5
42	13	P	ZNE	12	56	44							19.7	USCGS Loyalty Is.
		S	NE	13	00	36								20.4S 168.7E h=32km
		L	ZE		02									Mag=5.0 H=12 52 17.6
43	13	P	ZNE	13	11	20							19.6	USCGS Loyalty Is.
														20.3S 168.8E h=75km
														Mag=4.9 H=13 06 55.9
44	13	P	Z	13	56	29							19.6	USCGS Loyalty Is.
		S	ZNE	14	01	40								20.2S 168.8E h=58km
														Mag=4.9 H=13 51 59.0
45	13	P	Z	14	38	03							19.7	USCGS Loyalty Is.
		e	E		41	54								20.4S 168.8E h=035km
		S	ZNE		42	06								Mag=5.9 H=14 33 38.0
		Lq	ZE		43									
		Lr	N		44									
46	13	P	ZNE	15	00	12							19.6	USCGS Loyalty Is.
														20.4S 168.9E h=53km.
														Mag=5.6 H=14 55 46.1
47	13	P	Z	16	01	35								
		S	ZNE		02	25								
48	14	P	Z	09	28	40							19.6	USCGS Loyalty Is
		S	ZNE		32	28								20.5S 168.9E h=33km
		L	ZNE		34									Mag=5.3 H=09 24 12.0
49	14	P	Z	13	59	07								
		S	ZNE	14	00	21								
50	15	P	Z	02	16	35								
		S	ZNE		17	10								
		T	ZNE		20	10								
51	15	P	ZNE	03	15	02							7.7	USCGS Fiji Region
		S	ZNE		16	31								17.9S 178.6W h=600km.
														Mag=5.0 H=03 13 09.9

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
52	15	P	Z	13	23	12		19.6	USCGS Loyalty Is.
		S	ZNE		27	00			20.1S 168.8E h=021km.
		Lq	ZE		28				Mag=5.2 H=13 18 45.4
		Lr	N		29				
53	15	P	ZNE	17	51	22		19.7	USCGS Loyalty Is.
		S	ZNE		56	52			20.4S 168.7E h=025km
									Mag=5.4 H=17 46 50.8
54	15	P	Z	21	45	24		7.6	USCGS Fiji Region
		S	ZNE		46	55			17.2S 178.9W h=539km.
		T	ZNE		52	23			Mag=5.3 H=21 43 34.1
55	15	P	Z	23	29	42		7.3	USCGS Fiji Region
		S	ZNE		31	14			18.0S 178.0W h=614km
									Mag=4.6 H=23 27 49.6
56	16	P	Z	06	03	02			
		S	ZNE			24			
57	16	S	ZNE	09	37	12		81	USCGS Central America
		SS	Z		42	06			15.2N 096.2W h=033km.
		Lq	N		48				Mag=6.0 H=09 14 34.6
		Lr	ZE		51				
58	16	P	Z	10	45	18		7.4	USCGS Tonga
		S	ZNE		46	35			20.6S 174.8W h=33km.
									Mag=4.6 H=10 43 32.7
59	16	P	Z	12	17	00		26.6	USCGS Solomon Is.
		S	ZE		21	44			10.6S 161.2E h=056km.
		Lq	N		22				Mag=5.5 H=12 11 26.6
		Lr	ZE		24				
60	16	iP	Z	14	55	22.2			d
		S	ZNE		56	09			
61	16	P	Z	15	58	52		26.6	USCGS Solomon Is.
		S	ZNE	16	04	44			10.6S 161.2E h=52km.
		L	ZE		06				Mag=5.4 H=15 53 18.8
62	16	P	Z	16	40	55			
		S	ZNE		41	15			
63	16	P	Z	21	32	19			
		S	ZNE			39			
64	17	(P)	Z	09	21	16		9.5	USCGS Fiji Region
		S	ZNE		22	40			20.5S 178.8W h=625km.
									Mag=4.4 H=19 18 49.7
65	17	(P)	Z	14	27	17			
66	17	iP	Z	19	47	42.5			u
		S	ZNE		48	08			
67	18	P	Z	00	53	27		13.6	USCGS S. of Fiji
		S	ZNE		55	42			24.8S 179.8E h=499km.
									Mag=4.7 H=00 50 34.6
68	18	P	Z	07	30	46			
		S	ZNE		31	04			
69	18	S	NE	09	08	48		26.4	USCGS Solomon Is.
									10.9S 161.4E h=026km.
									Mag=5.0 H=08 57 10.1
70	18	S	ZNE	10	53	12		20.0	USCGS Loyalty Is.
									20.6S 168.5E h=21km.
									Mag=4.8 H=10 42 49.8
71	18	P	Z	18	04	50			
		S	ZNE		06	05			
		T	ZNE		12	32			

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
72	19	S	NE	02	01	52							105	USCGS Caribbean Sea
		L	ZNE		26									19.5N 70.1W h=33km.
														Mag=5.8 H=01 36 52.4
73	19	P	ZNE	15	15	41							40.3	USCGS New Britain
		PPP	Z		17	40								5.7S 148.1E h=202km.
		S	NE		21	32								Mag=5.4 H=15 08 19.1
		Lq	Z		23									
		Lr	NE		24									
74	19	P	Z	17	41	31							5.7	USCGS Tonga
		S	ZNE		42	36								19.2S 173.8W h=055km
		T	ZNE		46	27								Mag=5.4 H=17 40 13.6
		Tmax	ZE		47	25								
75	20	P	Z	07	46	39							5.8	USCGS Tonga
		S	ZNE		47	34								19.3S 173.8W h=33km.
		Tmax	ZNE		52	25								Mag=5.4 H=07 45 17.0
76	20	P	Z	18	46	38							22.0	USCGS Santa Cruz Is.
		S	ZNE		50	44								10.9S 165.9E h=47km.
		L	ZE		52									Mag=5.2 H=18 41 44.0
77	21	P	Z	21	01	17								
		S	ZNE		02	32								
		T	ZNE		08	38								
78	21	P	Z	22	57	23								
		S	ZNE		58	00								
79	22	P	ZNE	08	04	52								
		S	ZNE		06	28								
80	22	P	Z	08	07	38								
		S	ZNE		08	05								
81	22	P	Z	11	46	04							3.9	USCGS Tonga
		S	ZNE			36								16.5S, 174.6W h=219km.
														Mag=5.5 H=11 45 14.8
82	22	P	Z	20	09	22							75	USCGS Taiwan
		S	NE		18	46								22.3N 121.2E h=33km.
		PS	ZN		19	40								Mag=5.7 H=19 57 27.4
		SS	NE		23	40								
		Lq	NE	20	28									
		Lr	Z		33									
83	22	iP	Z	22	55	15.0	1.1	2.0					8.9	USCGS Fiji Region
		S	ZNE		56	52								20.2S 178.4W h=578km.
														Mag=4.2 H=22 53 13.2
84	23	P	Z	02	26	25							75	USCGS Taiwan
		S	ZNE		35	40								22.3N 121.4E h=33km.
		SS	NE		40	20								Mag=5.4 H=02 14 26.8
		Lq	NE		45									
		Lr	Z		48									
85	23	P	Z	11	22	42							11.3	USCGS S. of Fiji
		S	ZNE		24	39								22.10S 179.7W h=640km.
														Mag=4.6 H=11 20 19.6
86	24	P	Z	16	11	10								
		S	ZNE		12	02								
87	24	P	Z	20	19	21							57	USCGS Banda Sea
		PP	E		22	44								6.3S 131.2E h=33km.
		S	ZNE		27	32								Mag=6.1 H=20 09 35.6
		SS	Z		31	44								
		Lq	N		33									
		Lr	ZE		37									

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	(Deg.)	Remarks
88	26	P	Z	08	20	15							2.5	USCGS Samoa Region
		S	ZNE			40								16.3S 172.3W h=33km.
		T	ZNE		22	50								Mag=4.5 H=08 19 40.6
89	26	S	ZNE	21	32	08							94	USCGS Andes
		SS	Z		36	52								30.9S 68.1W h=16km.
		L	ZNE		49									Mag=5.9 H=21 05 44.4
90	27	P	Z	04	48	55							2.8	USCGS Samoa Region
		S	ZNE		49	22								16.5S 172.2W h=33km.
														Mag=4.9 H=04 48 21.0
91	27	iP	Z	09	02	17.5							2.8	d
		S	ZNE		03	26								USCGS Samoa Region
														16.5S 172.2W h=33km.
														Mag=5.9 H=09 01 43.8
92	27	P	Z	09	30	45							2.4	USCGS Samoa Region
		S	ZNE		31	14								16.3S 172.3W h=033km.
														Mag=5.2 H=09 30 11.5
93	27	P	Z	10	20	02								
		S	ZNE			53								
		T	ZNE		24	50								
94	27	P	Z	10	58	33								
		S	ZNE		59	01								
		T	ZNE	11	01	05								
95	27	P	Z	12	12	39								
		S	ZNE		13	00								
		T	ZNE		14	32								
96	27	P	Z	15	44	57								
		S	ZNE		45	44								
97	27	P	Z	21	36	22							10.0	USCGS Tonga Region
		S	ZNE		38	02								23.0S 175.9W h=33km.
		T	ZNE		46	10								Mag=5.0 H=21 34 03.2
98	28	P	Z	07	52	06								
		S	ZNE			25								
99	28	P	Z	13	27	00								
		S	ZNE			23								
100	28	iP	Z	16	42	03.5							7.2	d
		(S)	ZNE		43	24								USCGS Fiji Region
														15.1S 179.1W h=434km.
														Mag=4.5 H=16 40 21.7
101	29	P	Z	03	59	52								
		S	ZNE	04	00	40								
102	29	P	Z	06	39	20							7.7	USCGS Tonga
		S	ZNE		40	42								21.1S 174.6W h=33km.
		T	ZNE		47	00								Mag=5.8 H=06 37 35.3
103	29	P	Z	10	35	50							12.5	USCGS S. of Fiji
		S	ZNE		37	55								25.2S 177.3W h=136km.
		T	ZNE		40	10								Mag=5.1 H=10 33 07.2
104	29	P	Z	17	10	02								
		S	ZNE			25								
		T	ZNE		12	15								
105	29	P	Z	18	28	57								
		S	Z		29	51								
106	30	P	Z	03	11	17							7.6	USCGS Tonga
		S	ZNE		12	36								21.1S 174.4W h=33km.
		T	ZNE		18	36								Mag=5.3 H=03 09 32.5

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
107	30	P	Z	09	46	24			
		S	ZNE		47	05			
		T	ZNE		49	11			
108	30	P	Z	11	23	22			
		S	ZNE		23	53			

"

P.D. Muller
Superintendent

NEW ZEALAND

Department of Scientific and Industrial Research

Geophysics Division

APIA OBSERVATORY

International Seismological Centre

NOV 12 17 54 '73

FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

October 1972

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
1	1	iP	Z	23	59	35	1.5	1.1					69	u
		eS	Z	00	08	12								USCGS: 7.5N, 123.7E Mindanao, Philippine Islands h about 613 km H = 23 49 36.2 Mag. 6.0 (CGS)
2	2	(P)	ZNE	05	06	33								
		S	ZNE		07	55								
3	2	P	ZNE	08	27	13								
		S	ZNE			37								
4	2	P	ZNE	15	32	39							7.5	USCGS: 18.0S, 178.4W Fiji Islands region h about 609 km H = 15 30 43.6 Mag. 4.8 (CGS)
		S	ZNE		34	08								
5	2	P	Z	17	20	33								
		S	ZNE		21	22								
6	2	P	Z	18	24	58							7.6	USCGS: 18.1S, 178.4W Fiji Islands region h about 611 km H = 18 23 06.3 Mag. 4.6 (CGS)
		(S)	NE		26	32								
7	2	P	ZNE	19	31	32							6.3	USCGS: 17.3S, 177.3W Fiji Islands region h about 439 km H = 19 30 02.4 Mag. 4.6 (CGS)
		S	ZNE		32	44								
8	3	P	ZNE	00	06	08								
		S	ZNE			31								
9	3	P	ZNE	18	06	26							8.1	USCGS: 21.5S, 174.4W Tonga Islands h about 61 km H = 18 04 41.9 Mag. 5.1 (CGS)
		S	ZNE		07	43								
		T	ZNE		14	12								
	4	No Readings.												
10	5	iP	ZNE	09	37	13								d
		S	ZNE			38								
11	5	eP	Z	11	00	56							85	USCGS: 13.8N, 91.1W Near coast of Guatemala Felt (IV) at San Salvador, Ele Salvador h about 89 km H = 10 48 19.1 Mag. 5.4 (CGS)
		eS	ZN		11	28								
		eSS	Z		16	48								
		Lr	ZNE		27									
12	6	P	ZNE	05	13	46								
		S	ZNE		15	00								

No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
13	6	P	ZNE	16	42	29	1.0	1.0					38.5	USCGS: 6.1S, 14[illegible] New Britain region Felt (IV) h about 61 km H = 16 35 10.9 Mag. 5.4 (CGS)
14	6	iP	ZNE	16	50	14	1.5	1.0					38.6	d USCGS: 6.1S, 149.8E New Britain region Felt (V) h about 59 km H = 16 42 54.3 Mag. 6.4(PAS),5.5(CGS)
		PPP	ZE		52	00								
		S	ZNE		56	08								
		SSS	NE		59	08								
		Lr	ZE	17	01									
15	7	P	ZNE	05	35	12							10.2	USCGS: 21.4S, 177.8W Fiji Islands region h about 365 km H = 05 33 08.2 Mag. 5.0 (CGS)
		S	ZNE		36	47								
16	8	P	ZNE	03	47	22								
		S	ZNE		48	02								
17	8	P	ZNE	19	29	42							9.1	USCGS: 20.1S, 178.7W Fiji Islands region h about 613 km H = 19 27 36.8 Mag. 4.4 (CGS)
		S	ZNE		31	23								
18	8	P	ZNE	23	03	42								
		S	ZNE		05	43								
		T	ZNE		15									
	9	No Readings.												
19	10	P	Z	08	03	20							22.1	USCGS: 10.5S, 165.9E Santa Cruz Islands h about 123 km H = 07 58 35.5 Mag. 4.9 (CGS)
20	10	P	ZNE	22	40	43								
		S	ZNE		41	28								
21	11	P	ZNE	10	50	30							11.1	USCGS: 21.9S, 179.7W Fiji Islands region h about 623 km H = 10 48 09.2 Mag. 5.1 (CGS)
		S	ZNE		52	25								
22	11	P	ZNE	11	01	39							7.7	USCGS: 19.2S, 177.6W Fiji Islands region h about 571 km H = 10 59 46.8 Mag. 4.0 (CGS)
		S	ZNE		03	10								
23	11	P	ZNE	22	46	38								
		S	ZNE		48	11								
24	12	P	ZNE	02	16	29								
		S	ZNE		18	07								
25	12	iP	ZNE	17	40	15.9								u
		S	ZNE			37								
26	12	P	Z	18	00	05	1.3	1.5					62	USCGS: 1.8N, 127.4E Halmahera h about 108 km H = 17 49 51.1 Mag. 5.6 (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
27	12	P	ZNE	20	58	17			
		S	ZNE			36			
28	13	P	ZNE	04	57	01		66	USCGS: 52.8N, 163.1W
		S	ZNE	05	05	53			South of Alaska
		SS	Z		10	16			h about 38 km
		Lq	E		13	48			H = 04 46 11.0
		Lr	ZN		17				Mag. 5.6(BRK), 6.4(PAS)
									5.9MB 5.4MS (CGS)
29	13	P	ZNE	13	19	58			
		S	ZNE		20	20			
30	14	eP	Z	12	11	05		20.1	USCGS: 33.0S, 178.5W
		S	ZNE		14	52			South of Kermadec Islands
									h Normal
									H = 12 06 34.6
									Mag. 4.4 (CGS)
31	14	iP	ZNE	16	09	22	2.0 1.0		u
		(S)	ZNE		10	54			
32	14	P	ZNE	19	06	06			
33	14	iP	ZNE	22	31	55			u
		S	ZNE		32	13			
34	14	P	ZNE	23	56	34		20.0	USCGS: 32.8S, 178.6W
		S	ZNE	00	00	24			South of Kermadec Islands
									h Normal
									H = 23 52 05.7
									Mag. 4.4 (CGS)
35	15	P	ZNE	01	04	29		20.0	USCGS: 32.9S, 178.4W
		S	ZNE		08	16			South of Kermadec Islands
		T	ZNE		25				h Normal
									H = 01 00 00.0
									Mag. 5.2MB 5.5MS (CGS)
36	15	P	ZNE	05	25	48		20.0	USCGS: 32.9S, 178.3W
		S	ZNE		29	34			South of Kermadec Islands
									h Normal
									H = 05 21 18.7
									Mag. 4.5 (CGS)
37	15	P	ZNE	10	32	11		18.1	USCGS: 22.1S, 171.3E
		S	ZNE		35	26			Loyalty Islands region
		SS	ZE		37	06			h about 101 km
									H = 10 28 08.3
									Mag. 5.5(BRK),5.6(CGS)
38	15	eP	Z	12	04	48		20.0	USCGS: 32.9S, 178.4W
									South of Kermadec Islands
									h Normal
									H = 12 00 09.1
									Mag. 4.6 (CGS)
39	15	P	ZNE	19	52	25			
		S	ZNE			55			
40	16	P	ZNE	08	47	02			
		S	ZNE		48	44			

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
41	17	P	ZNE	06	19	11		20.1	USCGS: 33.0S, 178.4W
		S	ZNE		23	00			South of Kermadec Islands
									h Normal
									H = 06 14 40.4
									Mag. 4.3 (CGS)
42	17	P	Z	17	39	01			
		S	NE			53			
43	17	eP	Z	21	34	08		66	USCGS: 10.3S, 120.5E
		eS	ZNE		43	10			Sumba Island region
		eSS	ZE		47	14			h Normal
		eSSS	N		50	28			H = 21 23 16.2
		eLr	ZE		56				Mag. 5.7MB 5.8MS (CGS)
44	18	P	Z	08	01	41			
		S	ZNE		02	41			
45	18	iP	Z	09	28	12.1			u
46	18	P	Z	14	14	31			
		S	ZNE		16	09			
47	18	P	Z	18	28	48		63	USCGS: 8.5S, 124.9E
		eS	ZNE		37	14			Timor
		eSS	Z		41	24			h Normal
		eSSS	ZNE		44	16			H = 18 18 25.1
		eLq	N		45				Mag. 5.7MB 5.9MS (CGS)
		eLr	ZE		47				
48	19	P	Z	06	26	10			
		S	ZNE			31			
49	19	eS	ZE	22	33	48		54	USCGS: 50.7S, 139.1E
		eLq	N		39				South of Australia
		eLr	ZE		42				h Normal
									H = 22 16 38.1
									Mag. 5.4MB 5.3MS (CGS)
50	19	iP	ZNE	22	34	19			u
		S	ZNE			39			
51	20	eSSP	ZE	05	15	40		144	USCGS: 20.6N, 29.7W
		eSSS	ZE		21	00			North Atlantic Ocean
									h Normal
									H = 04 33 48.9
									Mag. 5.7MB 5.8MS(CGS)
52	20	S	ZNE	06	56	12		54	USCGS: 50.3S, 139.6E
		SS	ZNE		59	28			South of Australia
		Lq	NE	07	02				h Normal
		Lr	ZNE		05				H = 06 39 17.4
									Mag. 5.3 (CGS)
53	20	P	Z	06	57	21			
		S	ZNE			49			
54	20	(P)	Z	07	02	33			
		S	ZNE		03	35			
55	20	P	Z	08	29	21		72	USCGS: 18.8N, 106.7W
		S	ZNE		38	28			Off Coast of Jalisco,
		SS	ZNE		43	08			Mexico
		SSS	ZNE		46	36			h about 38 km
		Lq	NE		48				H = 08 17 48.6
		Lr	ZNE		50				Mag. 5.7MB 6.5MS(CGS)
56	20	P	Z	12	11	23			
		S	ZNE		12	25			
		T	ZNE		16	17			

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
57	20	P	ZNE	19	10	50			
		S	ZNE		11	18			
58	21	eP	Z	06	18	05			
		S	ZNE		20	17		13.4	USCGS: 25.9S, 177.6W South of Fiji Islands h about 138 km H = 06 15 08.2 Mag. 4.3 (CGS)
59	21	P	Z	09	09	14			
		S	ZNE		10	29		7.9	USCGS: 21.4S, 174.1W Tonga Islands h about 39 km H = 09 07 29.1 Mag. 5.3 (CGS)
		T	ZNE		16	30			
60	22	P	ZNE	06	08	49			
		S	ZNE		09	16		2.7	USCGS: 15.8S, 173.7W Tonga Islands h about 102 km H = 06 08 08.2 Mag. 5.3 (CGS)
61	22	P	ZNE	11	26	15			
		S	ZNE			35			
62	22	eP	Z	11	33	56			
		S	ZNE		35	13		8.5	USCGS: 20.7S, 176.8W Fiji Islands region h about 248 km H = 11 31 55.7 Mag. 4.3 (CGS)
63	22	eP	Z	22	42	29			
		S	ZNE		45	39		17.6	USCGS: 30.4S, 178.1W Kermadec Islands h about 106 km H = 22 38 48.9 Mag. 4.1 (CGS)
64	23	(P)	ZNE	17	23	56			
65	23	P	Z	19	02	23			
		S	ZNE			55			
66	24	P	Z	05	42	09			
		S	ZNE		43	00			
67	25	P	Z	01	56	08			
		S	ZNE		57	48			
68	25	P	ZNE	03	58	25			
		S	ZNE			43			
69	25	P	Z	07	48	21			
		S	ZNE			43			
70	25	P	ZNE	09	02	00			Samoa Islands region
		S	ZNE			18			
71	26	P	Z	17	16	30		71	USCGS: 27.4N, 128.5E Ryukyu Islands Felt (III JMA) at Naha h about 47 km H = 17 05 03.7 Mag. 6.0MB 4.8MS (CGS)
		eS	E		25	36			
		eLr	ZNE		38				
72	26	P	ZNE	22	53	05	4.8 1.0	20.4	USCGS: 14.3S, 167.2E New Hebrides Islands Felt (II) at Luganville h about 157 km H = 22 48 34.4 Mag. 5.4 (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
73	27	P	ZNE	03	45	36.9			u
		S	ZNE			59			
74	27	P	ZNE	09	27	32		19.5	USCGS: 20.0S, 168.9E
		PP	ZE			46			New Hebrides Islands
		PPP	ZE		28	05			Felt (II) at Anatom
		S	ZNE		31	11			and Port Vila
		SS	NE			20			h about 39 km
		Lr	ZNE		33				H = 09 23 08.7
									Mag. 6.1(PAS),6.1(BRK),
									5.7MB 6.2MS (CGS)
75	27	P	ZNE	14	53	11			
		S	ZNE		54	40			
76	28	P	Z	02	34	59		41.3	USCGS: 7.3S, 146.7E
		S	ZNE		41	14			East New Guinea region
		SS	ZNE		44	28			h about 2 km
		Lq	NE		45	45			H = 02 27 10.1
		Lr	ZE		47				Mag. 6.0(PAS),6.1(BRK),
									5.9MB 6.0MS (CGS)
77	28	P	ZNE	03	21	18		20.1	USCGS: 15.3S, 167.5E
		PP	ZNE			48			New Hebrides Islands
		S	ZNE		24	52			Felt (III) at Lamapand
		SS	ZNE		25	40			Luganville,(II) at
		(PcS)	Z		28	52			Port Vila
									h about 128 km
									H = 03 16 52.0
									Mag. 5.7(BRK),5.8(CGS)
78	28	P	Z	22	30	19			
		S	ZNE		31	22			
		T	ZNE		36				
79	29	P	Z	04	52	19			
		S	ZNE		54	15			
80	29	iP	Z	07	30	58.7			u
81	29	P	ZN	17	45	27		18.5	USCGS: 31.4S, 178.1W
		S	ZN		48	35			Kermadec Islands region
		T	ZN	18	03				h about 59 km
									H = 17 41 17.3
									Mag. 5.3 (CGS)
82	30	P	ZNE	10	34	00		18.7	USCGS: 21.1S, 170.2E
									Loyalty Islands region
									h about 154 km
									H = 10 29 51.2
									Mag. 5.0 (CGS)
83	30	P	Z	13	45	48		7.4	USCGS: 18.4S, 177.9W
		S	ZNE		47	17			Fiji Islands region
									h about 645 km
									H = 13 43 59.2
									Mag. 4.6 (CGS)
84	30	P	ZNE	16	54	47		33.7	USCGS: 6.3S, 154.8E
		eS	ZE	17	00	08			Solomon Islands
		e(SSS)	ZNE		02	28			Felt (VI) at Panguna,
		eLr	ZE		04				(IV) at Arawa and Kieta
									h about 50 km
									H = 16 48 09.4
									Mag. 6.1(BRK), 5.8MB
									6.2MS (CGS)
85	31	(P)	ZNE	17	43	58			

NEW ZEALAND

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

Geophysics Division

APIA OBSERVATORY

Nov 12 17 54 '73

International Seismological Centre

FINAL SEISMOLOGICAL BULLETIN

STANDARD SEISMIC STATION (AFI)

AFIAMALU, WESTERN SAMOA

November 1972

No.	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
1	1	P	ZNE	06	31	12		6.6	USCGS: 20.1S, 173.9W
		S	ZNE		32	21			Tonga Islands
		T	ZNE		38				h Normal
									H = 06 29 43.7
									Mag. 5.1MB 5.0MS(CGS)
2	1	P	ZNE	16	18	38			
		S	ZNE		19	09			
3	1	P	ZNE	21	30	19		43.7	USCGS: 6.3S, 144.5E
									New Guinea
									h about 39 km
									H = 21 22 15.4
									Mag. 5.4MB 4.9MS(CGS)
4	2	eS	NE	10	09	48		57	USCGS: 6.4S, 131.2E
		eLr	ZE		19				Tanimbar Islands region
									h Normal
									H = 09 51 47.0
									Mag. 5.7MB 5.6MS(CGS)
5	2	P	Z	15	24	49			
		S	ZNE		25	23			
6	2	iP	ZNE	19	59	46.4		19.6	une
		PP	Z	20	00	03			USCGS: 20.0S, 168.8E
		S	ZNE		03	20			Loyalty Islands
		Lr	ZNE		05				Felt (V) on Tana and
									Anatom
									h about 32 km
									H = 19 55 22.1
									Mag. 7.0(PAS),7.2(BRK),
									6.3MB 7.0MS (CGS)
7	2	P	ZNE	23	10	27		2.8	USCGS: 16.5S, 172.7W
		S	ZNE			56			Samoa Islands region
		T	ZNE		13				h Normal
									H = 23 09 50.3
									Mag. 5.0 (CGS)
8	3	P	Z	15	10	40		19.2	USCGS: 19.8S, 169.2E
		S	NE		14	16			New Hebrides Islands
		SS	ZNE			28			h about 15 km
		SSS	E		15	08			H = 15 06 21.8
		Lr	ZNE		16				Mag. 5.0MB 4.9MS (CGS)
9	3	P	Z	16	19	36		19.6	USCGS: 20.1S, 168.8E
		S	E		23	04			Loyalty Islands
		(SSS)	N			48			h about 26 km
		Lr	ZE		25				H = 16 15 03.1
									Mag. 5.4 (CGS)

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
10	3	SSS	NE	16	38	28		60	USCGS: 13.4S, 111.4W
		Lr	ZE		41				Northern Easter Island, Cordillera
									h Normal
									H = 16 13 42.0
									Mag. 5.1MB 5.6MS (CGS)
11	3	P	Z	22	47	00		18.9	USCGS: 19.6S, 169.4E
		SS	E		50	40			New Hebrides Islands
		SSS	ZN		51	03			h about 22 km
		Lr	Z		52				H = 22 42 38.4
									Mag. 5.2MB 5.2MS(CGS)
12	4	P	ZNE	03	54	18		19.4	USCGS: 20.1S, 169.1E
		PP	Z			28			New Hebrides Islands
		PPP	Z		55	00			Felt (V) in Isangol area, and (III) at Port Vila
		S	ZNE		57	50			h about 53
		Lr	ZE		59	42			H = 03 49 56.6
									Mag. 62(PAS), 6.1(BRK), 5.7 (CGS)
13	4	iP	ZNE	05	21	04.7			d
		S	ZNE			25			
14	4	P	Z	09	55	19		43.8	USCGS: 4.8S, 144.6E
		S	ZN	10	01	57			Near North coast of New Guinea
		SS	ZNE		05	12			Felt (V) in Goroka area
		SSS	ZN			44			h about 85 km
		Lr	ZE		08				H = 09 47 19.9
									Mag. 5.6 (CGS)
15	4	P	ZNE	11	09	45		8.7	USCGS: 20.2S, 178.0W
		S	ZNE		11	17			Fiji Islands region
									h about 554 km
									H = 11 07 49.7
									Mag. 4.7 (CGS)
16	4	P	Z	21	47	29		75	USCGS: 8.2S, 112.3E
		S	N		57	02			Java
									h about 126 km
									H = 21 36 01.7
									Mag. 6.0 (CGS)
17	4	P	Z	21	52	44			
		S	ZNE		53	04			
18	4	P	Z	23	52	48		19.5	USCGS: 20.2S,168.9E
		SS	ZNE		56	39			Loyalty Islands
		Lr	ZNE		58		18.5 20.0 17.1 20.0		h about 21 km
									H = 23 48 22.3
									Mag. 5.2MB 6.1MS(CGS)
19	5	P	Z	00	16	33		65	USCGS: 9.7S, 122.2E
									Sawu Sea
									h Normal
									H = 00 05 50.2
									Mag. 5.8MB 5.9MS(CGS)
20	5	P	ZNE	02	55	53			
		S	ZNE		56	31			
21	5	P	ZNE	07	44	58			
		S	ZNE		45	19			

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No	Date	Phase		Time (G.M.T.)			Az	Ta	An	Tn	Ae	Te	Δ (Deg.)	Remarks
22	5	eP	Z	13	34	44							11.4	USCGS: 22.2S, 179.8W South of Fiji Islands h about 635 km H = 13 32 18.4 Mag. 4.9 (CGS)
		S	ZNE		36	36								
23	5	P	Z	20	15	33	4.2	1.4					41.7	USCGS: 5.4S, 146.7E East New Guinea region h about 230 km H = 20 08 03.2 Mag. 5.5 (CGS)
		pP	ZNE		16	18								
		S	NE		21	28								
		ScS	ZNE		24	56								
24	5	P	Z	22	11	27							19.6	USCGS: 20.1S, 168.8E Loyalty Islands h about 25 km H = 22 07 02.2 Mag. 5.3 (CGS)
		SS	ZNE		15	16								
		Lr	ZE		17									
25	6	P	ZNE	18	24	59								
		S	ZNE		25	23								
		T	ZNE		27									
26	7	P	ZNE	15	19	07							19.2	USCGS: 22.0S, 170.0E Loyalty Islands region h about 32 km H = 15 14 43.7
		eS	NE		22	40								
		eLr	ZE		24									
27	7	P	Z	19	40	29								
		S	ZNE		41	34								
28	8	P	ZNE	12	50	07							6.6	USCGS: 20.1S, 174.1W Tonga Islands h Normal H = 12 48 36.9 Mag. 4.6 (CGS)
		S	ZNE		51	11								
		T	ZNE		56	35								
29	9	P	Z	02	51	28							10.4	USCGS: 21.4S, 179.1W Fiji Islands region h about 542 km H = 02 49 03.5 Mag. 4.7 (CGS)
		S	ZNE		53	20								
30	9	P	Z	08	11	20							10.0	USCGS: 21.1S, 179.0W Fiji Islands region h about 621 km H = 08 09 05.4 Mag. 4.5 (CGS)
31	9	P	ZNE	08	12	00							9.9	USCGS: 20.9S, 179.0W Fiji Islands region h about 606 km H = 08 09 44.3 Mag. 5.7 (CGS)
		S	ZNE		13	50								
32	9	P	ZE	16	41	17							19.0	USCGS: 19.6S, 169.3E New Hebrides Islands Felt (V) on Anatom, and (IV) on Tanna h about 25 km H = 16 36 55.2 Mag. 5.6MB 5.2MS(CGS)
		S	ZNE		44	40								
		SS	NE		45	20								
		Lr	ZE		46	28								
33	9	P	Z	17	56	06							18.0	USCGS: 22.2S, 171.5E Loyalty Islands region h about 100 km H = 17 52 02.0 Mag. 4.3 (CGS)
		eS	NE		59	36								
		eSSS	ZE	18	00	32								

International Seismological Centre

No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
34	9	P	Z	18	52	55		75	USCGS: 23.9N, 121.6E
		eS	ZNE	19	02	40			Taiwan
		eS	ZE		03	32			h Normal
		eSS	ZNE		07	12			H = 18 41 14.5
		eSSS	ZNE		10	40			Mag. 5.7MB 6.1MS(CGS)
		eLq	NE		13				
		eLr	ZE		16				
35	9	iP	ZNE	20	00	35			u
		S	ZNE			55			
36	9	P	ZNE	21	46	44			
		S	ZNE		47	51			
37	10	iP	ZNE	00	25	44		9.5	d
		S	ZNE		27	22			USCGS: 20.9S, 178.2W
									Fiji Islands region
									h about 516 km
									H = 00 23 42.1
									Mag. 4.7 (CGS)
38	10	iP	ZNE	21	20	47.5			d
		S	ZNE		21	17			
39	11	P	Z	04	48	32			
		S	ZNE			53			
40	12	eS	ZNE	02	42	20		51	USCGS: 12.3N, 144.1E
		eSSS	E		47	00			South of Mariana Is.
		eL	ZN		49				h about 37 km
									H = 02 25 57.0
									Mag. 5.5MB 5.0MS(CGS)
41	12	P	Z	05	41	30		17.9	USCGS: 22.5S, 171.7E
		eS	ZNE		44	38			Loyalty Islands region
		eSS	ZNE		45	12			h about 40 km
		eLr	ZE		46	20			H = 05 37 24.1
									Mag. 4.7 (CGS)
42	12	P	Z	08	38	30		6.8	USCGS: 20.4S, 173.6W
		S	ZNE		39	41			Tonga Islands
		T	ZNE		45	10			h Normal
									H = 08 36 56.9
									Mag. 4.5 (CGS)
43	12	P	Z	11	55	37		8.0	USCGS: 21.4S, 174.4W
		S	ZNE		56	58			Tonga Islands
		T	ZNE	12	03	27			h Normal
									H = 11 53 48.7
									Mag. 4.9 (CGS)
44	12	ePKKP	Z	18	26	16		119	USCGS: 38.4N, 73.3E
		e(SSP)	ZNE		33	16			Tadzhik-Sinkiang
		eSS	ZNE		37	12			border region
		eLq	NE		45				h Normal
		eLr	ZN		48				H = 17 56 44.4
									Mag. 6.0MB 5.7MS (CGS)
45	13	P	Z	04	56	09		82	USCGS: 15.6N, 95.0W
		eS	ZNE	05	06	15			Near Coast of Qaxaca,
		eSS	ZNE		11	40			Mexico
		eSSS	ZE		15	00			h Normal
		Lq	NE		18				H = 04 43 45.2
		Lr	ZE		21				Mag. 6.5(PAS), 5.5MB
									6.5MS (CGS)
46	13	P	ZNE	05	39	50			
		S	ZNE		40	31			

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
47	13	(P)	Z	05	56	10			
		S	ZNE		57	30			
48	13	P	Z	06	39	00		10.8	USCGS: 21.9S, 179.4W Fiji Islands region h about 610 km H = 06 36 34.2 Mag. 5.1 (CGS)
		S	ZNE		40	54			
49	14	P	Z	00	01	12			
		S	ZNE		02	45			
		T	ZNE		10				
50	14	P	Z	15	15	06			
		S	ZNE			24			
51	15	P	ZNE	05	24	23			
		S	ZNE		26	10			
52	16	P	ZNE	02	28	27		8.5	USCGS: 18.2S, 179.4W Fiji Islands region h about 615 km H = 02 26 43.3 Mag. 5.2 (CGS)
		S	ZNE		29	58			
53	16	PKP	Z	13	01	41		122	USCGS: 35.7N, 69.9E Hindu Kush region Felt (V) in Kabul. Felt widely in Eastern and Northern Afghanistan h about 124 km H = 12 43 05.5 Mag. 5.6 (CGS)
54	17	P	ZNE	06	45	20			
		S	ZNE		46	54			
55	17	P	Z	07	15	23			
		S	ZNE			47			
		T	ZNE		17	37			
56	18	iP	ZNE	02	45	41.1		3.4	u USCGS: 16.2S, 174.3W Tonga Islands h about 180 km H = 02 44 55.1 Mag. 4.7 (CGS)
		S	ZNE		46	16			
57	18	P	ZNE	15	05	11			
		S	ZNE			29			
58	18	P	ZNE	22	07	31			
		S	ZNE			52			
59	19	P	Z	10	15	30			
		S	ZNE		16	14			
60	19	(P)	Z	20	01	22			
		(S)	ZNE		02	48			
61	20	P	ZNE	13	09	26		12.2	USCGS: 24.7S, 177.4W South of Fiji Islands h about 152 km H = 13 06 47.5 Mag. 5.2 (CGS)
		S	ZNE		11	24			
62	21	P	Z	02	58	59		75	USCGS: 23.8N, 121.6E Taiwan h about 14 km H = 02 47 14.2 Mag. 5.7 (CGS)
		eS	E	03	08	40			
		eS	ZN		09	16			
		eSS	ZN		13	40			
		eLr	ZNE		22				

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	Δ (Deg.)	Remarks
63	21	P	Z	04	05	50		34.2	USCGS: 6.5S, 154.3E
		S	ZNE		11	36			Solomon Islands
		SS	E		13	46			h about 34 km
		(SSS)	N		14	00			H = 03 59 08.5
		(Lq)	E		15				Mag. 6.5(PAS),6.4(BRK),
		Lr	ZE		17				5.4MB 6.4MS (CGS)
64	21	P	ZNE	11	47	31			
		S	ZNE		48	17			
65	21	P	Z	15	21	08			
		S	ZNE			45			
66	22	P	ZNE	06	39	53			
		S	ZNE		40	22			
67	22	P	Z	08	53	05		6.0	USCGS: 15.6S, 177.7W
		S	ZNE		54	20			Fiji Islands region
									h about 384 km
									H = 08 51 29.5
									Mag. 4.8 (CGS)
68	22	P	Z	13	55	47		20.4	USCGS: 15.4S, 167.2E
		PP	ZNE		56	00			New Hebrides Islands
		eS	NE		59	24			Felt (V) at Luganville
		eSS	NE	14	00	02			and (II) at Port Vila
		eLr	ZE		01	12			h about 43 km
									H = 13 51 10.4
									Mag.5.4MB 5.7MS (CGS)
69	22	P	ZNE	13	58	22			
		S	ZNE			42			
70	22	eS	ZNE	14	59	40			
		eLq	NE		06				
		eLr	ZN		09				
71	22	iP	ZNE	17	54	20.5		2.1	une
		S	ZNE			41			USCGS: 15.5S, 173.0W
									Tonga Islands
									h about 57 km
									H = 17 53 51.9
									Mag. 5.5 (CGS)
72	23	eP	Z	08	11	51		19.7	USCGS: 20.2S, 168.7E
		eS	NE		15	12			Loyalty Islands
		eSS	NE		15	40			h Normal
		e(SSS)	E		16	20			H = 08 07 25.1
		eLr	ZNE		17	20			Mag. 4.8MB 4.9MS (CGS)
73	23	P	ZNE	09	05	36			
		S	ZNE			57			
74	23	P	ZNE	19	54	11			
		S	ZNE			40			
75	24	iP	ZNE	20	08	27			d
		S	ZNE		09	19			
76	25	eP	Z	01	35	41		19.7	USCGS: 32.6S, 178.1W
									South of Kermadec Islands
									h Normal
									H = 01 31 10.3
									Mag. 4.3 (CGS)
77	25	eP	Z	15	58	22		19.6	USCGS: 32.6S, 177.9W
		eS	ZNE	16	01	43			South of Kermadec Islands
									h about 32 km
									H = 15 53 55.5

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No	Date	Phase		Time (G.M.T.)			Az	Tz	An	Tn	Ae	Te	△ (Deg.)	Remarks
78	25	P	Z	18	49	49							20.3	USCGS: 14.9S, 167.3E New Hebrides Islands h about 142 km H = 18 45 21.4 Mag. 4.9 (CGS)
79	25	P	Z	19	45	18							19.7	USCGS: 32.7S, 177.6W South of Kermadec Islands h Normal H = 19 40 48.6
		e(S)	E		49	08								
80	26	iP	ZNE	04	25	17.9	1.9	0.9					11.0	u USCGS: 22.1S, 179.5W South of Fiji Islands h about 599 km H = 04 22 51.9 Mag. 5.5 (CGS)
		S	ZNE		27	13								
81	26	(P)	ZNE	04	31	31								
		(S)	ZNE		33	15								
82	26	iP	Z	04	47	44.1								u
		eS	NE		49	10								
83	26	P	ZNE	12	46	19							19.6	USCGS: 32.6S, 178.0W South of Kermadec Islands h about 5 km H = 12 41 51.3 Mag. 5.3 (CGS)
		S	ZNE		49	38								
84	26	P	ZNE	13	20	22								
		S	ZNE		22	06								
85	26	P	ZNE	15	34	06							10.8	USCGS: 24.2S, 175.0W South of Tonga Islands h Normal H = 15 31 38.0 Mag. 5.5 (CGS)
		S	ZNE		35	56								
		T	ZNE		42	26								
86	27	P	Z	02	57	16							75	USCGS: 20.2N, 121.5E Philippine Islands region h Normal H = 02 45 41.8 Mag. 5.4 (CGS)
87	27	eP	Z	03	29	58							20.4	USCGS: 13.8S, 167.2E New Hebrides Islands h about 208 km H = 03 25 34.2 Mag. 4.1 (CGS)
88	27	eP	Z	04	31	41							19.3	USCGS: 32.2S, 178.1W South of Kermadec Islands h about 48 km H = 04 27 18.9
		eS	E		35	06								
89	27	iP	ZNE	08	17	28.8								d
		S	ZNE			46								
90	27	P	ZNE	11	06	53								
		S	ZNE		07	10								
91	27	iP	Z	15	27	15	3.1	1.0					65	d USCGS: 5.3S, 126.6E Banda Sea h about 425 km H = 15 17 40.8 Mag. 5.8 (CGS)
		(pP)	ZNE		28	48								
		S	ZNE		35	00								
		(sS)	ZE		37	40								
		SS	NE		41	12								
		SSS	ZE		44	00								

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No	Date	Phase		Time (G.M.T.)			Az Tz An Tn Ae Te	△ (Deg.)	Remarks
92	28	eP	Z	09	58	27		19.9	USCGS: 32.2S, 179.9E South of Kermadec Islands h about 308 km H = 09 54 20.7 Mag. 4.1 (CGS)
		S	ZNE	10	01	50			
93	29	P	ZNE	02	14	47		4.3	USCGS: 17.5S, 173.9W Tonga Islands h about 80 km H = 02 13 50.8 Mag. 5.0 (CGS)
		S	ZNE		15	30			
94	29	P	Z	07	26	38			
		S	ZNE		27	01			
95	29	P	ZNE	07	58	21		2.3	USCGS: 16.0S, 172.5W Samoa Islands region h about 13 km H = 07 57 45.1 Mag. 4.5 (CGS)
		S	ZNE			50			
96	29	P	ZNE	09	52	28			
		S	ZNE			55			
		T	ZNE		54	30			
97	30	iP	ZNE	02	46	33			d
		S	ZNE		47	05			
98	30	P	Z	20	40	58			
		S	ZNE		41	18			

(P.D. Müller)
SUPERINTENDENT