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New Zealand Department of Scientific and Industrial Research  
GEOPHYSICS DIVISION

NEW ZEALAND  
SEISMOLOGICAL  
REPORT  
1966

SEISMOLOGICAL OBSERVATORY BULLETIN  
E - 148



A. R. SHEARER, GOVERNMENT PRINTER, WELLINGTON, NEW ZEALAND—1971



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New Zealand Department of Scientific and Industrial Research  
GEOPHYSICS DIVISION

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SEISMOLOGICAL OBSERVATORY, WELLINGTON,  
NEW ZEALAND

ALL measurement and interpretation of records is carried out at the central station in Wellington. Communications should therefore be addressed to:

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## SCIENTIFIC STAFF 1966

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Technicians: A.M. Bould (to July); C.F. Butler (to  
August); C.M. Fisher; C.E. Lock (from  
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### APIA

Observer-in-Charge: P.D. Müller, B.Sc.

Observer/Technician: I. Anapu.

### RAROTONGA

Observer-in-Charge: A.G. French, M.Sc.

### RAOUL ISLAND

Observer: G.N. Marks.

### SCOTT BASE

Observer: R. Vickers.

## INTRODUCTION

The form and lay-out introduced in 1964 and slightly modified in 1965 is retained in the New Zealand Seismological Report for 1966. Its general character and arrangement can be seen from the list of contents. Details of the network and instrumentation are followed by both instrumental and macroseismic data for New Zealand earthquakes, then come the readings of distant earthquakes, details of publications by staff members, and the usual maps.

The introduction of the computer, and the changing requirements of the International Seismological Centre and other users of our data have resulted in some delay in the appearance of this Report. That lost time was not sooner made up is also due, in part, to the occurrence of the magnitude 7 earthquake at Inangahua in 1968 May. A special Report dealing with this event and its aftershocks (E-147) is already published. Other sections of the data are already available in manuscript form. Copies of these manuscripts can be made available to users with special research needs, on application to the Observatory.

This has been a year of steady improvement to the recording network, new stations being placed on outlying islands and in inadequately covered parts of the South Island. Equipment at several existing stations has been improved. Details are given in the section "Stations of the New Zealand Network".



## STATIONS OF THE NEW ZEALAND NETWORK

### THE NETWORK IN 1966

The New Zealand Seismograph Network not only covers the two main islands of New Zealand proper, but includes stations in adjacent territories from Samoa to the Antarctic. The stations are of two kinds, one having short-period instruments intended to record shocks originating within about 1000 km, and the other having long-period instruments designed to provide information about distant earthquakes and the physical condition of the Earth. These functions interlock, and every seismograph gives some useful information in both fields.

Several new stations have been established during the year. The full effect of the three-component Willmore instrument on the Chatham Islands (CIZ) will not be evident until 1967, as it was not installed until December. A Milne pendulum was in operation on the islands from 1932 to 1941, but its low sensitivity made it of only marginal importance to New Zealand seismology. The new station is not in precisely the same position as the old, but the uncertainties in the original latitude and longitude were so great that no confusion should result from the retention of the old name.

Campbell Island (CEZ) has a vertical component Mark II Willmore instrument, and should fill the large gap between the stations in the South Island and the Australian station on Macquarie Island. New Zealand's other sub-Antarctic islands are uninhabited.

The station at Waipapa Point (WPZ), like the Campbell and Chatham Island stations, was established late in the year and does not contribute greatly to this Report. It is likely to remain the southernmost station within New Zealand proper for some time, since Stewart Island has few inhabitants and no continuous power supply. It lies in a very useful azimuth from the active Fiordland Region, and is expected to make a valuable contribution to knowledge of its seismicity.

Milford Sound (MSZ) started operation on March 3, and has both a secluded site on a good foundation, and a strategic position with respect to the Fiordland Region. Also in March, the Mount John (MJZ) station was improved by the addition of horizontal components. It will soon be no longer true that the seismicity of Southern New Zealand is poorly known.

Improvements were also made at Tuai (TUA), where a new galvanometer was fitted, and at Apia (API), which now has a pen-writing instrument driven by a Willmore seismometer to replace the old Wood-Andersons. This should materially improve the speed with which information can be supplied to the tsunami-warning system. In December the timing at Onerahi was improved by the installation of a quartz crystal clock.

One station was closed, that at Tongariro (TON), which was very close to the better Chateau (CNZ) station, and had in consequence become redundant, though in its earlier years it had been a most efficient station in detecting P-phases from teleseisms in the Kermadec region.

## STATION POSITIONS

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### INDEX OF THREE-LETTER STATION CODES

Throughout the tabular sections of this Report, stations are identified by the international three-letter code abbreviations allotted by the U.S. Coast and Geodetic Survey. Codes for stations of the New Zealand network are listed below: -

AfiamaLu	AFI	Gebbies Pass	GPZ	Rarotonga	RAR
Apia	API	Gisborne	GNZ	Roxburgh	ROX
Auckland	AUC	Kaimata	KAI	Scott Base	SBA
Bunnythorpe	BUN	Karapiro	KRP	Suva	SUV
Campbell Island	CBZ	Mangahao	MNG	Tarata	TNZ
Chateau	CNZ	Milford Sound	MSZ	Tuai	TUA
Chatham Island	CIZ	Monowai	MNW	Waipapa Point	WPZ
Cobb River	COB	Mount John	MJZ	Wairakei	WNZ
East Cape	ECZ	Onerahi	ONE	Wellington	WEL
		Raoul Island	RAO		

### INDEX OF STATION POSITIONS

STN	LATITUDE			LONGITUDE			ALT M	GEOCENTRIC DIRECTION COSINES					
	D	M	S	D	M	S		A	B	C			
AFI	13	54	34 S	171	46	38 W	706	-0.961	070	-0.138	883	-0.239	862
API	13	48	26 S	171	46	30 W	2	-0.961	482	-0.138	979	-0.237	142
AUC	36	51	36 S	174	46	41 E	79	-0.798	711	+0.072	996	+0.597	271
BUN	40	17.0	S	175	38.1	E	60	-0.762	783	+0.058	225	+0.644	027
CHZ	52	33	03 S	169	09	33 E	30	-0.599	744	+0.114	851	-0.791	907
CIZ	43	57	15 S	176	33	55 W	45	-0.720	923	-0.043	266	-0.691	663
CNZ	39	12	00 S	175	32	51 E	1116	-0.774	682	+0.060	322	-0.629	467
COB	41	05	16 S	172	44	02 E	213	-0.749	824	+0.095	603	-0.654	594
ECZ	37	41	37 S	178	32	45 E	40	-0.793	026	+0.020	128	-0.608	855
GNZ	38	38	39 S	178	31	21 E	30	-0.782	622	+0.027	021	-0.621	911
GPZ	43	41	47 S	172	38	40 E	225	-0.719	365	+0.092	861	-0.688	397
KAI	42	31	33 S	171	24	31 E	82	-0.730	944	+0.110	432	-0.673	443
KRP	37	55	30 S	175	32	15 E	64	-0.788	423	+0.061	530	-0.612	049
MJZ	43	49	14 S	170	27	58 E	1000	-0.711	861	+0.119	558	-0.692	069
MNG	40	37	07 S	175	28	55 E	396	-0.758	862	+0.059	968	-0.648	484
MNW	45	46	49 S	167	37	07 E	155	-0.683	548	+0.150	055	-0.714	315
MSZ	44	40	14 S	167	55	01 E	38	-0.697	720	+0.149	363	-0.700	627
ONE	35	46	33 S	174	21	45 E	30	-0.809	242	+0.079	881	-0.552	020
RAU	29	15	13 S	177	55	10 W	110	-0.873	304	-0.031	743	-0.486	140
RAR	21	12	45 S	159	46	24 W	28	-0.875	499	-0.322	584	-0.359	779
ROX	45	28	33 S	169	19	13 E	106	-0.691	421	+0.130	458	-0.710	575
SBA	77	51	01 S	166	45	22 E	38	-0.206	194	+0.048	529	+0.977	307
SUV	18	08	56 S	178	27	25 E	5	-0.950	524	+0.025	601	-0.309	595
TNZ	39	11	14 S	174	22	49 E	123	-0.773	432	+0.076	103	-0.629	294
TUA	38	43	29 S	177	39	02 E	274	-0.780	343	+0.038	839	-0.624	145
WEL	41	17	10 S	174	46	06 E	122	-0.750	478	+0.068	739	-0.657	311
WNZ	38	37	53 S	176	06	10 E	350	-0.781	416	+0.053	234	-0.621	736
WPZ	46	39	37 S	168	50	59 E	15	-0.675	767	+0.133	196	-0.724	981



## TIMING ARRANGEMENTS

The Seismological Observatory is administratively responsible for the New Zealand Time Service, which broadcasts 15 sets of time-signals daily through the stations of the New Zealand Broadcasting Corporation. These signals, whose error seldom exceeds 20 msec, are automatically impressed upon the records at all stations within New Zealand except the strong-motion station at Bunnythorpe. The arrangements used have been described by B.H. Olsson (N.Z. Journal of Science and Technology, Vol. 37B, pp.115-8, 1955 Sep.). Minute marks are derived in most cases from a quartz crystal clock, the remaining stations having an electric pendulum clock of the Synchronome type, or a marine chronometer fitted with electrical contacts. Stations of the World-Wide Standard Seismograph Network have the timing arrangements usual at such stations. At Suva, the operator records several time-signals a day by depressing a hand-key when the signal is heard.

## STATION INSTRUMENTATION AND LITHOLOGY

Stations are listed in the alphabetical order of their international three-letter code designations. Pendulum and galvanometer periods  $T_0$  and  $T_g$  are given in seconds. The damping of electromagnetic instruments, when not listed, may be assumed to be critical. Magnifications listed are for the period of maximum response unless some other period is stated.

Instrument	Compt	$T_0$	$T_g$	Damping	Magnification
AFI AFIAMALU					
World-Wide Standard Station.					
Foundation: Basaltic lava flows.					
Benioff	ZNE	1.0	0.75		12,500 at 1.0 sec
Press-Ewing	ZNE	15	100		750 at 15 sec
API APIA					
Foundation: Coral sand on Recent and Pleistocene basalt.					
Willmore I (Photo-cell amplifier used with pen-and-ink recorder).					
	Z	0.7	0.5		
AUC AUCKLAND					
Foundation: Volcanic beds on Tertiary sandstone and mudstone.					
Willmore I (Photo-cell amplifier used with pen-and-ink recorder).					
	Z	1	2		7,600 at 0.8 sec
BUN BUNNYTHORPE					
Strong-motion station without automatic time-signal recording.					
Foundation: Gravels, silts, and sands.					
Imamura	Z	2		5:1	1
	NE	8		5:1	1
CBZ CAMPBELL ISLAND					
Foundation: Basalt.					
Willmore II	Z	1	0.25		5,000 at 0.25 sec
CNZ CHATEAU					
This station was originally operated by the Geophysical Survey for volcanological research, and records made available to the Observatory for seismological study. On 1966 Apr 1 it was transferred to the con-					

trol of the Observatory and is now a normal station of the network. The nearby Wood-Anderson station at Tongariro has been dismantled.					
Foundation: Volcanic ash and lava.					
Willmore I	Z	1.0	0.25		41,900 at 0.2 sec
CIZ CHATHAM ISLAND					
Foundation: Clay over basalt.					
Willmore II	Z	1.0	0.25		5,000 (estimated)
	NE	1.0	0.25		6,000
COB COBE RIVER					
Foundation: Schist.					
Wood-Anderson	E	0.8		crit.	2,800
ECZ EAST CAPE					
Foundation: Mudstone and sandstone.					
Willmore II	Z	1.0	0.25		5,200 at 0.3 sec
GNZ GISBORNE					
Foundation: Alluvium on Tertiary mudstone.					
Willmore I	Z	1.0	0.25		8,900 at 0.3 sec
GPZ GEBBIES PASS					
Foundation: Rhyolite.					
Wood-Anderson	N	0.8		crit.	2,800
KAI KAIMATA					
Foundation: Moraine and river gravels over Tertiary mudstone and sandstone.					
Wood-Anderson	X	0.8		crit.	2,800
This instrument is oriented so that the X component lies north-east.					
KRP KARAPIRO					
Foundation: Greywacke.					
Benioff	Z	1.0	0.25		36,500 at 0.3 sec
	N	1.0	0.25		12,200 at 1.0 sec
	E	1.0	0.25		43,200 at 0.5 sec
MNG MANGAHAO					
Foundation: Greywacke.					
Willmore II	Z	1.0	0.25		48,600 at 0.3 sec
MSZ MILFORD SOUND					
Foundation: Gneiss.					
Willmore II	Z	1	0.25		52,650 at 0.25 sec
MNW MONOWAI					
Foundation: Tertiary sandstone.					
Willmore II	Z	1.0	0.25		28,800 at 0.25 sec
MJZ MOUNT JOHN					
Foundation: Greywacke.					
Willmore II	Z	1.0	0.25		30,480 at 0.25 sec
	N				43,600 at 0.25 sec
	E				41,050 at 0.25 sec



ONE	ONERAHI						
	Foundation:	Basalt.					
	Wood-Anderson	E	0.8			crit.	2,800
RAC	RAOUL ISLAND						
	Foundation:	Volcanic rock.					
	Willmore II	Z	1.0	0.25			4,800 at 0.25 sec
RAR	RAROTONGA						
	World-Wide Standard Station.	Foundation: Basalt.					
	Benioff	ZNE	1.0	0.75			6,250 at 1 sec
	Press-Ewing	ZNE	15	100			375 at 15 sec
ROX	ROXBURGH						
	Foundation:	Chlorite schist.					
	Willmore I	Z	1.0	0.25			12,100 at 0.25 sec
	Galitzin	Z	12	12			200 approximately
		NE	24	24			300 approximately
SBA	SCOTT BASE						
	World-Wide Standard Station.	Foundation: Frozen basaltic debris resting on lava-flows.					
	Benioff	ZNE	1.0	0.75			6,250 (summer) 25,000 (winter)
	Press-Ewing	ZNE	30	100			750 (summer) 1,500 (winter)
SUV	SUVA						
	Foundation:	Hard fine-grained calcareous marl.					
	Willmore II	Z	1.0	0.25			6,500 at 0.2 sec
TNZ	TARATA						
	Foundation:	Pleistocene mudstone.					
	Willmore II	Z	1.0	0.25			7,000 at 0.2 sec
TON	TONGARIRO						
	Foundation:	Volcanic ash and lava.					
	Wood-Anderson	X	0.8			crit.	2,800
	This instrument is oriented so that the X component lies north-west. Station dismantled 1966 Apr 22. See note under Chateau.						
TUA	TUAI						
	Foundation:	Thick Tertiary sandstone and mudstone.					
	Willmore II	Z	1.0	0.25			7,500 at 0.2 sec
WEL	WELLINGTON						
	World-Wide Standard Station.	Foundation: Greywacke.					
	Benioff	ZNE	1.0	0.75			6,250 at 1.0 sec
	Press-Ewing	ZNE	15	100			750 at 15 sec
	Willmore I	Z	1.0	0.25			20,000 at 0.25 sec
	Wood-Anderson	NE	0.8			crit.	1,400
	Imamura	Z	1				5:1 1
		NE	4				5:1 1

WPZ	WAIPAPA POINT						
	Foundation:	Sand overlying Jurassic sediments.					
	Willmore II	Z	1	0.25			3,000 at 0.2 sec
WNZ	WAIRAKEI						
	Foundation:	Pumice breccia.					
	Willmore I	Z	1.0	0.25			300 (approximately)



## PRINCIPAL NEW ZEALAND EARTHQUAKES IN 1966

The two largest shallow earthquakes of the year were that near Gisborne on March 4 (Epicentre 66/104), and that near Seddon on April 23 (Epicentre 66/180). The felt areas are shown in Maps 3 and 4. Both these earthquakes caused minor damage to older structures in the epicentral region, and have been the subject of special seismological and engineering studies. These have been collected and issued as Bulletins of the New Zealand Department of Scientific and Industrial Research, Nos. 194 and 199 respectively. The epicentres given in this report are those obtained by the routine procedures of the Observatory. In the special studies some data that are not usually included could be used. They should therefore be preferred except in those cases where a set of epicentres determined by a consistent method is necessary. For the Gisborne earthquake R.M. Hamilton gives the following solution: -

Origin time: 1966 Mar 4<sup>d</sup> 23<sup>h</sup> 58<sup>m</sup> 56<sup>s</sup>.8 ± 0<sup>s</sup>.3  
 Latitude: 38° 52S ± 0° 03  
 Longitude: 177° 05S ± 0° 03  
 Focal depth: 25 km  
 Magnitude (M<sub>L</sub>): 6.2.

Since the Wairarapa earthquakes of 1942, only the Westport earthquakes of 1962 caused more damage; yet it was not an exceptionally large shock. The radius of the felt area was about 200 km, covering the East Cape peninsula, northern Hawke's Bay and the eastern Bay of Plenty. Gisborne, with about 29,000 inhabitants, is the largest centre of population in the district, and experienced intensities of MM7, though MM8 was reached on some areas of unconsolidated sandy ground near the mouths of the Turanganui and Taruheru Rivers. Many chimneys were cracked at the roof-line, and some water and gas mains broken.

Modern structures were not materially affected, but older brick masonry, some of it approaching 100 years old, suffered damage. In many cases damage in earlier earthquakes had been concealed rather than repaired, and again came to light. Pieces fell from the parapets of two old industrial buildings in a poor state of repair, and these and some other structures were subsequently demolished. There were no casualties or loss of life.

The earthquake was accompanied by some 50 foreshocks and 513 aftershocks, most of them having epicentres within 10 km of the main shock.

The Seddon earthquake, named after the chief township affected (population about 600), had an epicentre in Cook Strait, about 35 km away. The preferred solution, by R.D. Adams, is: -

Origin time: 1966 Apr 23<sup>d</sup> 06<sup>h</sup> 49<sup>m</sup> 40<sup>s</sup>.5  
 Latitude: 41° 64S  
 Longitude: 174° 52E  
 Focal depth: 22 km  
 Magnitude (M<sub>L</sub>): 6.1.

A sequence of 40 aftershocks was recorded.

The felt area of this earthquake extends from Taranaki to Hokitika and Banks' Peninsula, but apparently did not include Hawke's Bay. The damage at Seddon was chiefly confined to the breaking of chimneys, and is mainly consistent with an intensity of MM7, though two isolated reports have been assessed at MM8. Seddon is built upon silts and coarse gravels up to about

18 metres thick, overlying mudstone. This cannot be considered a good foundation from a seismic point of view. Practically every house had chimney damage and damage to household goods. Railway lines were affected, water-mains were broken, and electricity and telephone services failed.

Minor damage to old structures on poor foundations was also experienced in Ward, Blenheim, and Wellington. In most cases, old damage or foundation settlement contributed to the result.

Of the other shallow shocks with magnitudes above 5, the close grouping of three in southern Hawke's Bay calls for special comment. They occurred on Feb 21 (Epicentre 66/87), Jul 27 (66/309) and Oct 9 (66/401), and had magnitudes of 5.0, 5.1, and 5.2 respectively. All three were felt in the Waipukurau-Dannevirke area, but the number of reports is substantially larger for the July 27 shock, and its felt area extends to include Ohakune and Waiouru.

On May 31 a shock of magnitude 5.0 (Epicentre 66/223) was widely felt throughout the province of Marlborough. At Kekerangu the intensity reached MM6, chimneys were damaged, crockery fell from shelves, and doors flew open. The felt area extended across Cook Strait to Wellington, where intensities of MM3 and MM4 were reported. Surprisingly, no reports were received from south of Kaikoura. Several aftershocks were reported, but only one (Epicentre 66/228), of magnitude 3.8, was instrumentally confirmed.

The magnitude 5.4 shock of Feb 26 (Epicentre 66/95) was centred to the north of Lake Wakatipu, and was felt throughout southern Westland and Fiordland, but not in eastern Otago. All reported intensities were MM4. The southern shock, of magnitude 5.0 on Jul 7 (Epicentre 66/278), is rather larger than usual for shocks in this region, the northern part of the Hawkdun Range. An aftershock (Epicentre 66/279) had a magnitude of 4.4. Both shocks were felt at Omarama with an intensity of MM5, and as far as Oamaru, Wanaka, and for the first shock only, Dunedin. Another large shallow shock in the Fiordland region occurred on Aug 30 (Epicentre 66/354). Although the magnitude was 5.1, the epicentral region is not inhabited, and the maximum reported intensity was MM3, at several places near Lake Wakatipu.

Deep-focus activity has followed its usual pattern, but the establishment of new seismograph stations in the south of the country is making it possible to assign depths to many more Fiordland earthquakes. Most of these are of the order of 100-150 km. The largest of those deep Fiordland shocks was on Nov 30 (Epicentre 66/476) with a focal depth of 119 km and a magnitude of 5.4. It was extensively felt throughout Southland and Otago, at intensities of MM3 and MM4. The magnitude 5.3 shock on Mar 20 (Epicentre 66/138) had a depth of 162 km, making it the deepest shock in the Fiordland region so far recorded. Almost all felt intensities reported were MM4, and the area of perceptibility extended to include Stewart Island.

The shock on Dec 27 (Epicentre 66/510) of magnitude 5.0 and focal depth 111 km calls for special comment, as it was apparently followed by aftershocks from only slightly shallower foci (Epicentres 66/511-515, 517, 518 and 521). Aftershocks do not usually accompany shocks as deep as this, but there is no obvious reason to question the results. The only felt report was from Queenstown, where it was described as "moderate". The limited felt area also suggests a shallower depth, but much of the epicentral region is sparsely populated, and it is not wise to base an argument on the absence of reports.

In the Main Seismic Region, the most important deep shock was on Aug 28. The magnitude was 6.1, and the epicentre (66/351) about 100 miles north of East Cape. The focal depth was 240 km, and the felt area extended over the eastern part of the North Island from the Bay of Plenty to Dannevirke. No damage was reported.

At the end of June there was a close grouping of moderately large deep shocks (Epicentres 66/261, 262, 263). The magnitudes were 5.0, 5.5, and 6.0. The first, on Jun 24 beneath the western Bay of Plenty, was the deepest (320 km), and was not reported felt. The shock of Jun 27d 10h 16m, 250



km beneath northern Taranaki, was extensively felt over the southern part of the North Island, most intensities being about MM4. A doubtful report was received from Le Bon's Bay, on Banks' Peninsula. The largest shock, on the same day at 21h 47m, reached magnitude 6.0 and had a depth of 189 km and an epicentre about 30 km south of Opotiki. It was very extensively felt, throughout the provinces of Hawke's Bay and Wellington, and in the Bay of Plenty. The only reported intensity above MM4 was experienced at Tokomaru Bay (MM5).

Several small shallow shocks with unusual (but not unprecedented) epicentres occurred near Waitakaruru, on the Hauraki Plains, on Jul 4d (Epicentres 66/267, 268, 269). The magnitudes were 3.2, 3.3 and 2.5 respectively. About 8 shocks in all were reported felt, but the others cannot be instrumentally confirmed. The "Hauraki Plains Gazette" describes the largest shock as "quite severe", but this must be read in conjunction with the fact that shocks in this district are relatively uncommon. A shock at 22h 27m was said to reach MM5 at Waitakaruru, and is also reported at lesser intensity from Hoe-o-Tainui and Maramarua.

Another unusually placed earthquake was that felt at Waipu, in the Northland Peninsula, on May 10 (Epicentre 66/199). The magnitude was 3.9 and the maximum felt intensity MM4.

In January, a swarm of more than 100 felt earthquakes occurred in the vicinity of Coromandel, but nearly all were too small and shallow to record instrumentally.

On July 24, a steam eruption occurred from Mount Ruapehu. Volcanic tremor was recorded on the Chateau seismograph, but no other increase in seismic activity was noticed.

## INSTRUMENTALLY DETERMINED ORIGINS

The following chronological list of the origins of New Zealand earthquakes is a summary of the determinations included in the next section of the Report, in which the detailed readings for each recording station are given. The Reference Number allocated in the first column of this list is used to identify the same shock in other sections of the Report. Date, Origin Time, Latitude and Longitude should be self-explanatory. Focal depths are given in kilometres, but it should be noted that when shocks are within the crust, the computer is restricted to solutions at depths of 12 or 33 km. The shallower depth is assigned if either of the phases Pg or Sg has been identified, and the greater depth if P\* or S\* is present without Pg or Sg. Quantities so restricted are identified by the letter R. The magnitude given conforms with Richter's original magnitude scale, and is a mean of all separate determinations shown with the detailed station readings. S E is the standard error of the time residuals (in seconds), of those phases that have been used in obtaining the solution. In cases where the number of readings is exactly the number needed for a formal solution the letters ND (Not Defined) appear. NUM OBS is the number of separate phase readings used, and NUM STN the number of stations that recorded the shock, whether the readings were used in the epicentre solution or not.

The main list is followed by a short supplementary one containing only those shocks whose small magnitude or unfavourable position has resulted in insufficient data for an epicentre solution by computer. An asterisk following a reference number in the main list indicates that one or more earthquakes in the supplementary list come next in chronological order.

The lists are intended to contain all shocks of magnitude 4.0 and above within the New Zealand region, together with those shocks of lower magnitude or beyond the boundary of the region that have been reported felt. The boundary of the region is taken at approximately 10° from Wellington. Because accurate distance estimates cannot be made until the final stages of the interpretation, the readings of a few local shocks near the boundary will be found only in the "Distant" section of the Report and vice versa.



REF NUM	ORIGIN TIME			LAT	LONG	DEPTH	MAG	S E	NUM	NUM
	H	M	S	DEG	DEG	KM	SEC	OBS	STN	
66/ 001	JAN	01	06 14 59.5	35,34S	179.25W	33 R	4.3	1.7	13	9
002		03	03 14 57.5	35,03S	178.50W	33 R	4.6	2.3	13	13
003		03	03 19 07.0	35,76S	179.32W	12 R	4.5	1.9	22	14
004		05	06 13 42.7	42,10S	174.24E	33 R	3.8	1.6	13	8
005		05	08 01 31.2	39,05S	176.11E	12 R	3.6	1.4	6	6
006		05	19 38 35.5	41,20S	172.66E	12 R	3.6	1.4	16	9
007		06	09 56 55.0	41,82S	171.53E	33 R	4.0	1.7	13	7
008		06	13 58 00.0	41,80S	171.50E	33 R	2.9	R	0	2
009		06	18 19 04.3	35,59S	179.97E	349	4.5	1.1	12	7
010		06	20 19 47.5	40,68S	178.96E	33 R	4.1	2.1	15	11
011		07	04 29 40.1	38,75S	176.11E	198	4.5	1.6	18	12
012		07	13 00 13.9	37,28S	176.51E	343	5.0	1.1	23	13
013		08	13 48 26.5	45,22S	167.68E	12 R	3.7	2.1	8	5
014		09	23 22 52.4	34,17S	178.08W	271	5.4	1.6	13	11
015		10	05 46 26.7	39,07S	174.08E	33 R	3.3	2.1	8	5
016		11	04 07 34.5	38,49S	175.71E	150	4.4	2.2	14	9
017		11	20 19 36.5	44,90S	167.36E	33 R	3.8	0.7	7	4
018		12	12 45 43.5	38,82S	176.04E	12 R	3.9	2.1	9	5
019		12	12 51 18.4	39,94S	176.08E	12 R	3.8	2.8	8	5
020		12	15 12 09.0	37,80S	178.68E	33 R	4.0	1.7	9	6
021		12	17 20 29.7	37,79S	178.74E	33 R	4.0	2.2	9	6
022		12	17 59 16.8	40,61S	173.41E	167	3.7	1.8	12	7
023		13	06 29 54.2	38,09S	177.48E	99	4.2	2.7	14	8
024		14	13 58 24.1	37,78S	178.75E	33 R	3.6	2.0	9	7
025		14	14 17 36.6	34,33S	179.20W	281	4.6	2.6	11	9
026		14	15 46 13.0	36,78S	177.40W	33 R	4.5	1.7	11	10
027		15	03 48 06.1	38,64S	175.73E	12 R	3.6	1.8	14	8
028		15	10 53 10.9	36,21S	179.46E	33 R	4.2	2.5	16	8
029		16	15 11 06.4	42,01S	174.13E	33 R	4.2	1.5	16	10
030		17	00 09 13.9	34,98S	178.53W	214	4.3	2.4	8	6
031		18	13 58 48.1	44,23S	170.04E	12 R	3.8	2.2	11	7
032		18	18 48 03.1	39,27S	174.68E	230	3.9	1.5	10	7
033		18	22 39 51.5	37,80S	178.90E	33 R	3.8	2.0	11	7
034		19	00 08 04.8	38,76S	176.14E	118	3.9	1.7	12	7
035		19	10 34 19.1	44,32S	170.10E	12 R	4.1	1.6	15	8
036		19	11 06 40.6	38,19S	176.22E	154	3.8	1.0	10	6
037		19	21 11 37.1	36,92S	175.39E	12 R	3.9	2.6	10	7
038		24	06 18 13.0	36,80S	175.50E	12 R	3.4	R	0	3
039		24	06 59 52.8	36,65S	175.58E	12 R	3.9	2.0	11	6
040		25	21 13 59.1	37,94S	179.68E	84	4.0	2.5	8	6
041		25	22 31 06.3	45,21S	167.95E	12 R	4.8	2.1	14	9
042		26	13 44 47.2	38,38S	176.78E	170	3.6	0.8	8	5
043		27	22 02 44.5	36,42S	179.77E	143	4.0	2.5	10	7
044		28	11 45 33.2	38,60S	175.59E	12 R	3.4	2.2	16	9
045		29	01 48 55.5	39,08S	176.30E	174	3.8	1.8	13	9
046		29	06 08 16.5	37,04S	174.86E	12 R	3.1	1.7	7	4
047		30	03 57 41.1	40,20S	174.79E	33 R	3.8	0.8	15	7
048		30	09 16 59.3	34,10S	179.39W	245	5.0	1.3	13	9
049		30	09 33 08.4	38,80S	175.88E	33 R	3.6	1.9	7	5
050	FEB	01	06 33 21.3	41,08S	174.72E	12 R	3.4	1.0	8	5

REF NUM	ORIGIN TIME			LAT	LONG	DEPTH	MAG	S E	NUM	NUM
	H	M	S	DEG	DEG	KM	SEC	OBS	STN	
66/ 051	FEB	01	07 42 22.1	41,74S	171.28E	33 R	3.7	2.5	16	8
052		01	14 44 16.1	44,03S	169.17E	33 R	4.5	1.8	17	10
053		02	07 21 02.4	45,11S	169.72E	12 R	3.3	1.0	6	3
054		03	06 00 59.5	39,82S	174.14E	153	3.7	2.2	12	10
055		03	09 13 22.9	36,14S	177.81E	264	4.8	2.0	20	12
056		03	09 38 55.7	43,13S	171.53E	12 R	3.5	1.4	13	8
057		03	10 13 01.1	40,03S	174.50E	12 R	3.5	0.2	10	6
058		03	23 34 22.3	40,51S	174.39E	12 R	4.2	1.7	22	12
059		04	21 28 32.9	42,27S	174.62E	33 R	4.1	R	0	9
060		04	23 14 13.4	39,77S	174.20E	134	3.7	1.7	11	9
061		05	06 53 05.6	41,56S	173.61E	33 R	3.2	1.3	5	3
062		05	08 19 41.0	38,65S	177.66E	12 R	4.0	2.1	11	8
063		05	08 47 39.2	39,03S	178.24E	12 R	4.2	1.4	9	6
064		05	14 01 50.1	45,37S	167.87E	158	4.5	0.8	8	4
065		06	06 58 15.1	38,50S	176.17E	167	5.0	2.0	14	9
066		07	09 12 49.5	35,21S	179.14W	221	4.5	1.8	17	12
067		07	22 29 09.6	37,67S	176.62E	12 R	3.7	0.9	7	6
068		08	08 57 51.8	37,40S	176.23E	12 R	3.2	2.1	6	4
069		08	19 45 39.3	31,74S	178.85W	491	5.5	2.2	14	12
070		09	23 08 26.5	40,59S	176.03E	33 R	4.1	1.2	13	9
071		10	01 37 49.4	38,78S	176.18E	33 R	3.9	2.6	12	7
072		12	14 04 26.8	37,08S	177.68E	201	4.2	2.0	14	11
073		15	01 01 05.9	38,76S	175.78E	12 R	4.5	0.9	14	9
074		15	01 17 18.8	38,78S	175.78E	12 R	4.2	0.9	12	8
075		15	01 43 51.6	38,81S	175.91E	12 R	4.4	1.1	16	11
076		15	01 52 49.6	38,81S	175.81E	12 R	4.1	0.9	14	7
077		16	02 40 06.1	39,73S	176.34E	33 R	4.0	1.6	8	7
078		16	04 03 31.5	39,02S	175.22E	202	4.1	0.9	14	9
079		16	07 27 57.4	41,26S	172.78E	169	4.0	2.0	19	12
080		17	07 42 36.2	33,32S	178.26W	33 R	5.4	4.7	15	11
081		17	11 13 54.2	41,25S	172.64E	209	4.1	1.5	14	9
082		18	14 24 59.6	39,95S	176.78E	12 R	4.1	1.5	19	11
083		20	08 10 42.0	38,88S	175.84E	12 R	4.6	1.2	22	13
084		20	08 35 51.4	39,81S	175.99E	12 R	3.4	1.3	9	6
085		20	13 57 00.6	37,06S	175.07E	12 R	3.1	1.5	10	5
086		21	05 09 17.1	39,57S	175.67E	12 R	3.5	1.0	11	6
087		21	06 30 09.9	40,19S	176.90E	12 R	5.0	1.7	30	15
088		21	08 26 17.0	41,52S	174.53E	33 R	3.5	1.6	13	7
089		21	11 34 04.8	43,01S	171.69E	12 R	3.5	1.4	13	7
090		22	08 39 41.0	39,82S	175.48E	158	4.1	2.0	18	12
091		22	12 42 56.7	38,95S	176.68E	12 R	3.9	1.8	15	9
092		22	19 23 56.9	37,16S	176.89E	325	4.2	0.7	14	9
093		23	00 19 57.2	38,41S	176.18E	212	4.4	1.7	17	11
094		24	03 47 50.6	40,14S	174.94E	33 R	3.9	1.3	15	9
095		26	18 39 32.9	44,49S	168.29E	33 R	5.4	1.5	25	14
096		28	14 51 28.8	33,43S	179.47W	338	5.1	1.7	7	7
097		28	20 10 14.3	40,16S	174.21E	121	4.0	1.7	15	9
098	MAR	01	08 27 22.9	44,01S	168.71E	12 R	4.0	2.8	8	6
099		01	11 07 42.9	41,61S	171.23E	12 R	3.0	0.2	4	3
100		01	12 47 35.1	34,22S	179.33W	167	5.0	1.5	8	9



REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
66/ 101	MAR 02 01 24 45.4	39,16S	176.84E	12 R	4.4	2.6	12	8
102	03 10 38 07.6	45,16S	168.22E	33	4.8	2.3	15	9
103	04 08 18 45.9	38,82S	175.96E	12 R	3.5	0.7	5	5
104	04 23 58 56.2	38,77S	178.17E	33 R	6.2	1.3	25	19
105	05 00 29 35.2	38,75S	178.30E	33 R	4.5	1.3	5	6
106	05 01 34 34.4	38,93S	178.26E	33 R	3.6	1.6	4	3
107	05 04 58 28.3	38,79S	178.12E	33 R	4.1	0.7	5	6
108	05 07 12 39.9	38,91S	178.24E	33 R	3.7	1.4	4	3
109	05 07 17 12.3	38,95S	178.20E	33 R	3.9	1.7	4	4
110	05 07 58 03.9	39,04S	178.02E	33 R	3.9	4.0	7	6
111	05 10 26 02.6	38,97S	178.28E	33 R	3.9	2.0	4	4
112	05 10 43 08.5	38,78S	178.12E	33 R	4.1	0.9	5	4
113	05 11 40 02.9	38,77S	178.20E	33 R	4.5	4.7	11	7
114	05 13 08 31.6	36,98S	177.55E	224	4.3	1.3	13	11
115	05 13 13 45.1	38,56S	178.01E	33 R	4.2	2.6	8	6
116	05 15 16 54.5	38,58S	177.97E	33 R	4.0	3.0	7	4
117	05 15 54 00.6	38,83S	178.21E	33 R	4.9	2.0	8	7
118	05 20 21 50.2	38,96S	178.25E	33 R	4.1	ND	3	4
119	05 21 09 54.2	38,85S	175.86E	12 R	3.2	0.8	6	5
120	06 02 32 33.3	38,74S	178.08E	33 R	4.5	1.5	8	7
121	06 04 31 37.2	35,11S	179.57W	33 R	4.6	2.8	11	9
122	06 23 41 54.9	41,07S	175.29E	33	4.0	2.0	12	8
123	10 00 16 37.9	34,19S	178.18W	252	4.9	1.9	12	7
124	10 07 01 18.0	38,67S	175.65E	181	5.6	1.6	23	15
125	10 14 50 40.2	39,87S	175.39E	71	3.9	0.5	13	7
126	10 15 59 22.5	39,96S	174.77E	108	4.6	2.0	16	10
127	10 19 13 35.2	38,81S	175.93E	12 R	3.8	0.5	5	6
128	11 05 56 46.9	40,12S	174.90E	33 R	4.2	1.2	13	8
129	11 06 27 19.1	33,47S	179.62W	385	4.8	2.0	12	8
130	11 11 02 53.3	37,72S	177.61E	135	4.2	1.8	12	7
131	12 08 21 14.4	38,80S	175.33E	277	4.4	1.4	15	9
132	12 11 29 25.8	44,47S	168.37E	12 R	3.4	1.3	7	4
133	14 00 47 23.4	38,84S	178.21E	33 R	4.6	0.4	4	3
134	15 16 49 07.1	37,32S	176.63E	300	5.5	1.1	24	16
135	15 23 27 30.8	38,77S	175.89E	12 R	3.6	0.8	5	6
136	16 10 00 23.5	37,49S	177.66E	213	4.1	1.1	14	10
137	17 00 13 56.9	37,93S	177.39E	12 R	4.2	2.4	12	8
138	20 17 42 24.2	45,11S	168.26E	162	5.3	1.0	15	9
139	20 23 38 48.7	38,84S	179.08E	12 R	4.3	2.2	15	13
140	26 22 06 56.4	38,45S	176.14E	170	4.5	1.5	12	9
141	27 00 43 18.7	40,98S	173.78E	106	3.9	1.5	10	7
142	27 01 06 18.6	33,10S	176.64W	344	5.7	0.9	10	6
143	27 06 16 24.6	45,11S	167.83E	33 R	4.5	2.1	14	9
144	27 13 56 08.3	38,28S	176.34E	12 R	3.5	1.0	7	6
145	27 14 31 15.9	38,95S	175.77E	177	4.7	1.6	17	11
146	29 16 34 17.5	40,05S	173.70E	172	4.4	1.4	19	11
147	30 09 06 41.9	41,70S	174.60E	12 R	3.6	2.2	10	6
148	31 07 51 07.8	37,75S	177.23E	178	4.9	1.8	18	12
149	APR 02 06 15 10.3	36,82S	176.40E	12 R	3.0	1.8	9	6
150	02 07 52 19.8	36,94S	176.26E	12 R	2.8	0.0	4	3

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
66/ 151	APR 02 19 54 02.5	40,36S	173.62E	188	4.9	1.7	29	17
152	03 14 37 57.4	38,91S	175.80E	12 R	4.6	2.3	37	17
153	03 14 40 02.6	38,90S	175.79E	12 R	3.1	1.0	9	5
154	03 14 45 18.0	38,94S	175.85E	12 R	3.3	1.9	12	9
155	03 14 45 40.5	38,91S	175.83E	12 R	3.3	1.8	12	9
156	03 15 15 58.5	38,92S	175.79E	12 R	4.0	1.8	24	16
157	03 15 17 18.6	38,92S	175.83E	12 R	3.0	1.8	9	5
158	03 15 59 45.5	38,07S	177.98E	139	4.1	2.2	21	13
159	04 01 18 12.4	40,28S	173.53E	176	3.8	1.3	21	12
160	04 11 28 16.7	36,41S	177.97E	12 R	3.7	2.8	17	9
161	04 12 39 59.8	36,54S	177.66E	12 R	3.5	1.9	24	9
162	04 17 09 55.3	38,82S	175.88E	12 R	2.9	1.6	10	7
163	04 17 10 51.9	38,80S	175.94E	12 R	2.8	1.1	8	7
164	05 01 23 57.0	36,46S	177.67E	12 R	3.3	3.3	11	9
165	05 01 27 07.3	36,13S	177.76E	12 R	3.6	3.7	22	9
166	05 22 14 13.4	38,59S	175.79E	224	4.1	1.3	24	14
167	06 07 09 40.3	32,56S	177.16W	250	5.2	2.3	14	11
168	06 20 10 54.4	33,36S	178.80W	299	4.9	1.3	16	13
169	07 19 55 02.0	38,48S	175.69E	243	4.9	1.0	30	17
170	08 00 26 21.6	38,94S	175.97E	136	4.4	2.3	26	17
171	12 09 35 58.4	44,23S	168.31E	12 R	3.8	1.5	29	9
172	13 13 51 00.8	38,40S	175.70E	209	4.2	1.5	25	16
173	13 23 20 05.8	40,77S	174.56E	12 R	3.6	1.7	25	10
174	17 12 54 07.6	38,90S	175.63E	162	4.0	1.9	18	12
175	19 13 04 01.1	36,77S	176.47E	12 R	3.0	3.1	13	7
176	19 22 51 03.5	32,10S	179.11W	330	5.3	2.9	21	14
177	21 20 27 38.1	35,76S	179.19E	33 R	4.1	2.4	22	11
178	21 23 36 50.3	39,37S	177.55E	12 R	3.8	2.0	17	11
179	22 06 08 55.7	44,29S	167.76E	12 R	4.8	1.7	31	12
180	23 06 49 38.6	41,74S	174.61E	12 R	6.0	2.4	47	16
181	23 07 00 45.4	41,63S	174.51E	12 R	4.1	2.2	29	11
182	23 15 27 43.0	37,85S	177.42E	12 R	4.9	2.4	35	15
183	23 17 43 24.5	41,70S	174.74E	12 R	3.8	1.6	23	9
184	23 19 26 28.2	37,29S	177.47E	201	4.3	0.8	12	9
185	24 06 53 59.8	37,89S	176.76E	12 R	3.8	2.4	15	8
186	24 08 28 05.0	41,59S	174.41E	12 R	3.7	1.2	21	11
187	24 08 28 09.3	41,63S	174.51E	12 R	3.9	1.4	30	11
188	24 08 29 21.7	41,63S	174.57E	12 R	4.6	2.1	52	17
189	24 23 35 46.2	38,85S	175.16E	239	4.3	1.3	18	11
190	25 06 43 09.8	32,37S	179.67W	288	4.9	3.4	9	8
191	26 07 18 22.6	38,88S	176.10E	12 R	4.1	1.8	17	10
192	26 07 30 18.8	38,95S	175.96E	12 R	3.4	1.8	8	6
193	28 04 52 47.9	38,10S	176.06E	226	4.2	1.1	18	12
194	28 11 10 45.9	37,22S	177.56E	198	4.2	0.9	17	12
195	28 18 49 50.2	40,37S	174.12E	110	3.7	1.5	14	10
196	29 05 01 45.9	38,65S	175.79E	202	4.2	1.6	17	10
197	MAY 02 10 35 31.3	40,28S	176.00E	80	4.1	1.8	9	7
198	05 02 36 58.0	36,80S	175.70E	33 R	3.4	R	0	2
199	10 12 02 15.8	36,09S	174.22E	12 R	3.9	2.0	12	6
200	10 13 06 08.9	31,27S	178.67E	33 R	3.2	1.3	13	9



REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
66/ 201	MAY 10 16 12 46.9	45,03S	167.64E	97	4.0	1.1	8	4
202	12 13 42 10.0	37,41S	177.46E	193	4.2	1.1	11	7
203	12 19 09 29.9	39,95S	174.69E	115	4.6	1.3	11	8
204	13 09 05 02.8	41,40S	172.81E	152	4.2	1.2	14	7
205	15 13 54 09.7	39,19S	175.13E	33 R	3.3	1.3	8	4
206	17 04 27 33.0	40,47S	178.89E	33 R	4.1	1.2	11	9
207	19 05 03 02.2	39,29S	174.67E	171	4.7	1.8	19	12
208	21 03 15 11.6	38,84S	175.47E	196	4.4	1.8	18	12
209	21 06 40 22.0	38,29S	176.07E	207	4.3	1.3	15	10
210	21 09 34 21.0	38,59S	175.91E	203	4.0	1.6	12	8
211	22 16 26 05.8	38,67S	175.87E	12 R	3.7	2.0	9	7
212	22 19 11 21.4	38,36S	177.83E	33 R	3.6	1.0	7	5
213	23 05 24 58.0	36,80S	175.70E	33 R	3.1	R	0	1
214	23 11 33 47.0	46,50S	169.10E	33 R	4.0	R	0	3
215	23 19 19 55.0	36,80S	175.70E	33 R	3.2	R	0	1
216	23 21 25 12.1	36,76S	175.64E	12 R	4.0	0.1	5	3
217	24 11 16 15.9	45,01S	167.96E	118	4.5	0.6	8	4
218	25 08 12 23.0	36,80S	175.70E	33 R	3.0	R	0	1
219	27 12 17 31.4	38,80S	175.91E	12 R	3.6	1.0	8	6
220	29 03 54 35.2	41,88S	172.48E	33 R	4.1	1.6	14	10
221	29 17 37 06.6	41,58S	173.42E	33 R	3.8	1.3	9	6
222	30 08 33 25.9	38,63S	175.93E	12 R	3.2	0.6	6	5
223	31 12 06 02.6	42,04S	174.06E	12 R	5.0	1.7	22	15
224	31 12 48 59.0	41,99S	174.01E	33 R	3.2	1.8	8	7
225	JUN 02 00 45 48.3	37,43S	176.76E	231	4.2	2.4	12	8
226	02 01 51 32.1	30,05S	178.32E	33 R	5.1	R	0	8
227	02 07 15 18.9	38,50S	175.89E	184	4.3	2.0	17	12
228	02 07 26 45.7	42,23S	174.16E	12 R	3.8	2.0	19	9
229	02 07 42 11.3	37,10S	179.42W	33 R	5.1	1.4	30	17
230	02 12 21 18.8	38,69S	175.82E	194	4.1	2.2	20	12
231	02 12 22 26.8	37,57S	176.60E	245	4.2	0.7	11	8
232	04 01 17 54.7	38,15S	175.77E	293	4.1	0.9	20	12
233	06 00 07 12.9	36,82S	176.45E	12 R	2.7	1.8	8	5
234	06 07 06 18.2	37,61S	179.77E	152	4.0	1.7	18	12
235	06 23 43 02.2	38,92S	175.87E	193	4.4	1.8	25	15
236	07 08 51 00.4	34,32S	177.91W	281	4.6	1.4	19	14
237	07 17 24 48.4	36,03S	179.13W	33 R	4.7	3.4	31	16
238	07 18 07 41.3	40,67S	176.46E	12 R	4.1	2.5	30	13
239	07 22 41 58.3	41,69S	171.44E	12 R	3.5	2.0	31	12
240	08 19 30 37.3	37,51S	175.73E	12 R	3.2	2.7	16	8
241	08 19 38 02.6	37,58S	175.68E	12 R	2.9	3.4	10	6
242	09 08 30 11.0	45,17S	171.33E	12 R	2.3	1.9	6	3
243	10 07 36 16.5	44,42S	169.90E	12 R	4.5	2.0	31	13
244	11 10 29 54.5	33,33S	176.30W	33 R	5.3	3.6	24	16
245	12 04 32 28.7	40,28S	173.78E	149	3.2	2.0	13	9
246	13 09 20 38.0	37,68S	176.68E	205	4.2	1.3	17	11
247	13 12 20 32.9	37,16S	177.10E	271	4.0	1.4	16	11
248	13 20 52 12.1	34,92S	179.47E	313	4.2	3.5	17	12
249	15 09 28 38.6	36,70S	176.45E	12 R	2.9	4.0	10	6
250	15 11 24 25.0	39,24S	175.24E	163	4.6	1.7	25	15

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
66/ 251	JUN 16 00 25 24.1	39,44S	179.94E	33 R	4.8	1.6	25	15
252	17 00 18 17.0	36,80S	176.30E	12 R	R	R	0	3
253	18 11 59 16.4	39,02S	174.94E	226	3.9	1.2	20	12
254	21 10 42 42.5	38,14S	176.54E	171	4.0	0.8	16	10
255	21 15 15 59.6	44,84S	167.81E	72	4.2	2.2	18	10
256	22 07 24 58.7	39,24S	174.81E	219	3.8	1.6	16	10
257	22 08 42 27.4	36,76S	176.31E	12 R	2.6	2.6	8	5
258	22 08 43 09.3	36,81S	176.20E	12 R	2.8	1.9	8	6
259	22 23 27 52.9	35,24S	179.12E	264	4.7	1.2	16	14
260	23 05 33 55.0	40,08S	176.60E	12 R	4.4	1.5	32	12
261	24 06 07 02.2	37,28S	176.61E	320	5.0	1.1	23	15
262	27 10 16 06.7	38,92S	175.04E	251	5.5	1.3	29	16
263	27 21 47 04.8	38,39S	177.29E	189	6.0	1.6	24	16
264	28 08 40 20.7	39,63S	174.39E	233	4.7	1.4	27	15
265	JUL 01 15 09 15.1	38,07S	175.95E	309	4.9	1.0	20	11
266	02 07 43 31.9	38,87S	175.71E	12 R	3.2	0.7	6	4
267	04 12 57 02.7	37,32S	175.22E	12 R	3.3	2.8	7	5
268	04 13 02 52.0	37,30S	175.50E	12 R	2.5	R	0	1
269	04 18 52 19.0	37,30S	175.50E	12 R	3.6	R	0	2
270	05 03 37 28.4	41,33S	174.85E	82	3.9	1.3	15	10
271	05 16 23 54.7	40,56S	173.30E	178	4.1	1.3	16	9
272	05 22 11 44.0	37,30S	175.50E	12 R	2.9	R	0	3
273	05 22 32 19.4	37,33S	175.12E	12 R	3.9	1.8	12	6
274	06 00 57 25.5	45,31S	167.39E	118	3.8	1.6	9	5
275	06 05 54 03.4	38,72S	175.85E	152	4.5	1.9	16	10
276	06 15 05 49.2	38,40S	178.12E	152	4.4	1.7	10	9
277	06 22 41 50.6	32,60S	179.01W	384	5.6	1.8	23	14
278	07 21 59 59.8	44,59S	169.99E	12 R	5.0	1.6	17	10
279	07 22 05 11.9	44,59S	170.01E	12 R	4.4	1.8	13	7
280	07 22 56 41.9	44,99S	167.83E	45	3.8	1.8	9	7
281	09 07 51 46.1	33,16S	178.48W	33 R	5.5	2.8	13	9
282	09 21 51 26.3	40,91S	173.95E	83	4.1	1.1	14	9
283	11 05 47 07.2	38,78S	175.80E	12 R	3.4	0.3	7	6
284	11 05 58 56.6	38,76S	175.95E	12 R	3.2	0.2	7	6
285	12 14 00 29.8	37,76S	176.71E	179	4.7	1.2	16	11
286	13 13 05 36.0	45,22S	167.74E	12 R	3.3	1.6	4	4
287	13 22 58 36.5	33,42S	178.00W	33 R	2.8	6	5	5
288	14 15 05 17.5	39,26S	174.76E	33 R	3.2	0.6	7	4
289	15 00 37 31.9	38,84S	176.02E	12 R	3.3	0.5	6	5
290	15 23 03 05.6	39,51S	175.81E	191	4.1	1.6	13	9
291	17 01 26 47.5	44,33S	168.41E	33 R	4.1	0.6	7	7
292	17 17 15 28.8	38,22S	178.83E	33 R	4.3	1.5	12	10
293	18 10 47 01.4	39,20S	174.65E	220	4.3	1.7	12	9
294	18 11 48 53.1	38,63S	177.53E	70	4.3	2.2	13	10
295	18 13 30 09.0	45,00S	167.67E	96	4.2	1.4	8	5
296	19 19 09 09.6	38,23S	175.93E	199	4.7	1.9	13	7
297	20 22 55 18.6	36,96S	176.70E	197	4.3	1.8	12	11
298	21 01 59 42.0	37,87S	178.93E	33 R	4.5	1.3	10	10
299	22 16 41 55.5	44,16S	168.56E	12 R	4.7	1.3	16	9
300	24 04 13 52.5	33,70S	179.10E	256 R	5.2	R	0	10



REF NUM		ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
66/ 301	JUL	24 06 29 19.8	32,74S	179.89W	33 R	5.2	2.7	13	9
302		24 10 49 42.2	37,72S	176.24E	329	5.5	1.1	28	17
303		24 11 54 31.3	41,73S	172.35E	33 R	3.9	1.8	14	7
304		25 09 52 49.1	41,05S	174.74E	33 R	3.8	1.2	10	6
305		25 10 51 52.2	32,65S	179.62W	383	5.7	2.2	25	15
306		25 13 09 04.8	37,98S	178.42E	138	4.9	1.8	14	13
307		26 16 32 20.6	38,36S	176.36E	135	4.5	2.0	15	10
308		27 02 53 59.6	45,10S	167.59E	94	4.3	1.4	10	6
309		27 17 42 20.4	39,77S	176.76E	12 R	5.1	1.6	24	17
310		27 19 30 30.4	39,66S	176.61E	33 R	3.5	1.7	7	6
311		28 16 29 23.1	44,99S	167.60E	101	4.0	1.3	10	6
312		29 14 18 57.2	41,05S	174.20E	33 R	4.5	1.6	23	13
313		29 14 59 29.8	34,25S	179.99W	356	5.1	1.5	18	13
314		30 10 22 15.6	39,80S	174.17E	217	4.1	1.8	18	10
315		31 04 29 16.4	37,46S	178.80E	210	4.6	1.6	12	9
316	AUG	01 17 02 42.3	41,73S	174.48E	12 R	3.7	0.9	10	6
317		01 22 41 02.7	44,91S	167.65E	86	3.5	1.1	6	5
318		03 18 39 08.3	44,57S	168.41E	12 R	4.4	2.1	11	8
319		04 15 19 47.3	37,32S	177.41E	217	4.3	2.1	16	11
320		04 18 15 37.7	38,48S	175.98E	168	4.6	1.7	15	11
321		05 05 59 16.3	39,26S	174.96E	33 R	3.8	1.0	12	8
322		06 06 22 55.8	38,83S	175.80E	12 R	3.7	1.0	8	7
323		06 06 48 45.2	38,79S	175.81E	12 R	3.9	1.5	12	8
324		06 12 49 34.7	47,06S	165.81E	33 R	5.3	2.3	14	10
325		07 02 52 50.7	45,02S	167.67E	107	3.9	1.1	8	5
326		07 21 19 08.2	41,30S	173.40E	78	3.9	1.5	11	8
327		08 05 12 06.7	33,91S	178.97W	277	5.2	3.0	13	9
328		11 20 15 32.7	45,18S	167.77E	104	3.7	0.4	5	3
329		13 00 40 47.2	39,35S	177.97E	12 R	4.5	2.1	15	11
330		13 04 54 45.8	38,66S	174.59E	33 R	3.3	0.6	8	4
331		13 05 28 50.9	40,05S	174.51E	140	3.9	1.5	16	10
332		14 03 30 07.5	36,73S	175.82E	12 R	3.2	1.2	6	4
333		14 22 33 56.5	33,14S	177.89E	33 R	4.4	1.6	13	12
334		15 01 25 21.2	39,61S	175.78E	134	4.2	1.0	13	12
335		16 16 21 24.0	40,53S	174.43E	109	4.4	1.2	19	12
336		16 01 05 24.5	45,29S	167.42E	126	4.3	1.7	9	6
337		16 22 40 35.3	39,50S	175.73E	12 R	4.1	1.2	13	9
338		17 14 12 53.7	36,48S	177.82E	289	4.8	0.8	17	13
339		18 07 13 32.7	45,28S	167.24E	33 R	4.0	0.8	8	4
340		18 21 55 29.9	38,68S	176.95E	12 R	4.4	1.7	15	12
341		19 14 04 43.5	45,11S	166.99E	33 R	4.0	1.0	7	4
342		23 18 21 22.9	41,46S	172.82E	135	4.3	1.2	16	10
343		25 00 36 08.6	45,15S	167.81E	112	3.6	0.1	6	4
344		25 02 56 47.4	39,76S	174.19E	208	4.1	1.5	17	9
345		25 19 54 13.2	39,16S	174.68E	33 R	4.0	2.0	11	8
346		26 06 02 00.6	45,11S	167.63E	116	3.8	1.4	6	4
347		26 06 45 53.1	41,61S	174.42E	33 R	3.9	1.2	11	6
348		26 07 18 54.3	38,81S	175.22E	232	4.8	1.3	20	12
349		27 07 32 00.8	44,59S	168.25E	86	4.0	0.7	8	4
350		27 19 52 51.1	38,25S	179.01E	105	4.2	1.4	14	9

REF NUM		ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
66/ 351	AUG	28 07 29 36.1	36,21S	178.71E	240	6.1	2.0	22	17
352		28 14 30 00.6	44,64S	168.13E	12 R	3.9	0.7	8	5
353		29 14 46 37.8	45,03S	167.86E	33 R	4.4	1.4	11	9
354		30 02 44 38.4	44,92S	167.97E	33 R	5.1	1.9	14	9
355		30 08 36 00.7	33,54S	178.70W	33 R	5.2	2.8	17	12
356		31 20 59 01.8	37,05S	177.80E	177	4.4	1.2	13	10
357	SEP	02 19 24 59.8	38,46S	175.96E	186	4.5	1.6	17	12
358		04 15 19 05.1	38,38S	176.51E	218	4.7	1.5	15	10
359		06 07 05 06.9	39,14S	175.06E	226	4.2	1.4	13	9
360		06 16 44 18.4	37,44S	179.61E	170	5.1	1.7	20	14
361		07 05 58 11.9	34,66S	179.39E	273	5.5	1.3	22	14
362		08 03 55 40.7	38,61S	175.90E	154	4.2	1.9	13	8
363		08 07 46 12.6	38,61S	176.25E	12 R	3.0	1.2	6	6
364		08 07 48 47.0	38,68S	176.11E	12 R	2.4		0	2
365		08 07 55 03.0	38,68S	176.11E	12 R		R	0	1
366		10 18 17 31.5	38,82S	175.23E	271	4.8	1.6	17	10
367		12 03 21 29.2	45,13S	167.57E	97	4.2	1.1	7	6
368		12 07 37 55.9	35,88S	179.73E	247	4.6	2.9	12	12
369		13 07 35 19.7	38,24S	176.71E	199	4.1	1.0	12	9
370		14 18 07 01.5	38,20S	175.74E	302	4.2	0.7	15	11
371		15 12 28 34.9	37,93S	176.21E	315	4.7	0.6	21	12
372		16 06 31 38.9	45,03S	167.61E	118	3.7	1.8	6	6
373		17 21 51 39.6	34,41S	178.52W	282	4.8	1.0	12	8
374		18 16 55 47.4	41,34S	173.83E	61	4.2	1.5	17	10
375		18 22 42 43.1	44,20S	168.84E	12 R	3.5	1.2	10	6
376		18 22 56 48.0	45,07S	167.74E	139	4.0	1.4	10	7
377		20 12 34 33.2	44,37S	169.96E	33 R	3.2	0.4	5	3
378		21 09 36 41.7	39,80S	179.09E	33 R	4.0	1.6	12	9
379		21 09 36 47.1	39,52S	178.56E	33 R	3.9	1.8	11	9
380		23 02 51 48.7	45,12S	167.40E	12 R	4.1	1.2	9	4
381		23 12 31 21.7	45,02S	166.89E	12 R	4.0	2.0	10	5
382		23 22 04 01.4	40,51S	174.04E	98	4.5	0.9	12	9
383		23 22 04 12.2	40,51S	174.00E	113	4.6	1.2	11	9
384		25 12 31 22.8	45,03S	167.20E	12 R	3.9	2.2	10	5
385		25 08 46 38.4	37,09S	177.61E	215	5.2	2.2	22	14
386		26 03 35 55.3	40,35S	174.88E	12 R	5.2	1.9	25	14
387		26 06 39 53.0	39,25S	177.80E	12 R	4.2	0.8	11	9
388		28 08 39 13.3	38,78S	176.05E	121	4.1	1.5	14	9
389		30 10 42 40.4	38,37S	176.30E	168	4.4	1.5	17	11
390	OCT	01 22 33 16.6	46,78S	166.59E	12 R	4.3	1.9	28	10
391		02 08 02 34.7	38,09S	177.08E	12 R	3.0	0.8	12	7
392		02 17 30 36.4	42,02S	173.92E	12 R	3.6	1.9	34	10
393		03 14 04 03.0	32,84S	178.87W	427	5.1	2.1	15	10
394		04 01 15 52.8	41,15S	174.52E	33 R	3.5	1.0	19	10
395		05 03 59 33.8	38,00S	177.29E	33 R	4.6	2.0	30	15
396		05 05 09 19.7	43,27S	167.35E	117	4.0	2.0	11	7
397		05 10 54 45.2	38,15S	179.06E	12 R	4.3	2.9	36	16
398		05 13 49 30.1	38,12S	179.22E	12 R	3.8	2.4	20	10
399		07 23 11 38.9	49,36S	163.62E	33	4.7	2.5	14	9
400		09 00 10 23.6	38,77S	176.19E	12 R	2.3	1.5	8	5



REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
66/ 401	OCT 09 09 26 05.6	39,95S	177,23E	12 R	5.2	1,9	44	18
402	09 12 56 51.8	35,82S	177,62E	369	4.9	1,2	29	16
403	09 22 52 17.5	34,05S	179,35E	33 R	5.0	2,5	15	16
404	11 14 07 12.8	37,44S	177,41E	181	4.4	1,5	23	16
405	11 17 50 02.2	32,54S	179,14W	277	5.1	3,0	19	13
406	11 20 40 43.5	33,40S	177,71W	33 R	5.4	2,2	20	16
407	12 00 50 25.8	39,10S	179,42E	33 R	4.1	2,1	24	12
408	12 04 22 24.6	32,57S	176,08W	33 R	5.9	4,2	17	11
409	12 05 07 23.2	40,29S	178,66E	12 R	4.7	1,8	34	15
410	15 03 55 08.5	37,25S	177,46E	12 R	5.0	2,2	41	18
411	16 17 16 23.6	37,11S	176,50E	12 R	2.5	1,8	5	4
412	16 18 02 31.8	40,16S	175,01E	33 R	4.9	2,1	36	16
413	18 15 32 26.7	36,08S	175,53E	12 R	3.0	1,5	10	5
414	19 04 08 56.2	37,30S	177,60E	12 R	4.9	2,2	43	17
415	21 15 59 39.3	39,76S	174,05E	162	3.9	1,2	19	12
416	21 18 25 30.1	40,04S	174,35E	144	4.0	2,0	23	14
417	24 17 06 23.1	37,70S	177,33E	12 R	4.4	1,9	32	16
418	24 18 25 32.9	40,13S	174,90E	12 R	4.2	2,3	41	15
419	25 21 31 02.0	35,89S	175,76E	12 R	2.8	1,4	11	5
420	26 04 33 40.2	34,90S	178,30E	12 R	4.6	3,5	31	15
421	26 23 37 26.6	35,12S	179,58E	196	4.7	1,3	21	14
422	27 05 03 48.9	37,99S	176,04E	312	4.2	1,5	19	11
423	30 15 34 34.7	40,32S	176,61E	12 R	3.7	1,9	15	9
424	NOV 03 10 04 58.9	43,08S	167,71E	115	3.9	1,7	11	8
425	03 10 36 30.2	41,19S	174,03E	12 R	3.4	1,1	13	6
426	03 18 11 19.0	38,28S	175,98E	195	4.3	2,2	21	15
427	03 21 29 32.0	46,26S	166,86E	12 R	4.8	3,6	28	12
428	03 21 50 29.7	46,47S	166,90E	12 R	3.8	2,9	12	5
429	03 23 28 41.9	46,23S	166,68E	12 R	3.0	2,7	10	4
430	04 04 53 28.3	46,27S	166,66E	12 R	4.1	2,3	11	5
431	04 11 08 03.8	41,57S	173,43E	126	4.6	1,4	29	17
432	04 16 52 04.8	38,73S	175,30E	289	3.8	0,9	13	9
433	05 01 07 18.4	39,88S	174,33E	154	4.5	2,3	23	13
434	05 17 31 13.5	38,42S	175,86E	195	3.8	2,2	15	9
435	05 19 26 03.1	38,39S	176,13E	175	4.4	2,2	21	14
436	06 22 23 22.7	38,32S	176,15E	182	4.1	1,9	19	13
437	08 15 27 48.8	35,42S	178,24E	12 R	4.5	2,7	26	12
438	09 01 06 22.3	34,36S	179,55W	33 R	4.9	4,0	20	11
439	09 08 06 04.7	35,99S	177,77E	12 R	4.2	3,0	28	12
440	09 11 08 52.5	41,83S	173,33E	12 R	3.5	1,1	27	11
441	09 18 30 57.9	40,75S	176,50E	12 R	4.1	1,8	37	14
442	10 09 02 46.0	32,05S	179,71W	403	5.1	2,0	17	12
443	10 12 39 07.4	34,66S	179,96E	406	4.2	1,3	13	10
444	10 23 03 30.4	39,86S	174,08E	150	3.6	2,0	13	9
445	11 06 38 33.5	40,82S	174,47E	12 R	3.6	2,0	18	11
446	12 03 47 11.6	40,84S	176,56E	12 R	4.0	2,5	31	11
447	12 13 00 07.4	31,80S	179,43E	489	5.1	2,4	15	11
448	15 07 06 56.3	39,97S	175,52E	12 R	3.8	2,2	28	12
449	15 22 30 27.3	38,62S	176,21E	12 R	2.2	1,3	8	4
450	16 21 58 38.1	37,59S	179,04E	33 R	3.8	1,7	16	8

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
66/ 451	NOV 16 22 55 15.3	33,38S	179,05W	33 R	5.2	4,2	22	14
452	16 23 22 38.2	39,25S	174,93E	12 R	3.3	1,8	14	7
453	17 22 17 09.6	36,77S	177,21E	320	5.0	1,3	24	13
454	18 17 54 45.3	39,46S	177,33E	12 R	3.0	2,0	10	4
455	19 00 26 20.8	41,63S	173,13E	33 R	3.7	2,0	31	13
456	19 08 56 50.1	49,67S	164,90E	33 R	4.1	3,0	12	7
457	19 10 24 44.9	33,88S	179,22W	33 R	4.9	3,7	31	16
458	20 14 42 01.2	39,78S	175,61E	12 R	3.8	1,1	18	9
459	20 15 06 32.8	40,44S	174,15E	98	3.7	1,2	18	11
460	21 04 31 10.4	37,18S	176,96E	180	4.0	2,6	13	8
461	21 14 23 55.9	37,08S	177,52E	223	4.8	1,7	25	16
462	21 20 04 57.1	37,56S	176,66E	250	4.9	1,7	23	15
463	21 22 00 17.9	42,55S	171,47E	12 R	4.5	2,8	40	11
464	22 01 02 01.7	45,10S	167,46E	93	4.3	1,1	11	6
465	23 03 02 40.5	38,84S	179,36W	33 R	4.0	1,0	19	12
466	25 00 05 06.0	32,00S	178,98E	33 R	5.1	3,8	13	10
467	25 05 54 54.3	38,50S	175,72E	188	3.8	1,7	12	8
468	26 11 14 46.9	37,27S	177,36E	228	4.2	1,3	18	13
469	26 13 01 06.8	37,25S	177,03E	250	3.9	0,9	14	11
470	27 08 00 16.6	45,27S	167,48E	98	4.7	0,8	17	12
471	27 10 05 13.2	37,88S	177,84E	160	4.0	2,4	20	13
472	27 22 10 52.0	33,20S	179,06W	33 R	4.6	3,9	11	6
473	29 09 27 57.7	38,93S	176,69E	12 R	3.7	2,6	26	12
474	30 05 12 43.8	35,94S	179,47E	33 R	4.2	2,3	18	11
475	30 12 28 27.5	40,59S	174,08E	12 R	4.3	2,0	46	17
476	30 12 56 35.2	45,23S	167,92E	119	5.4	1,7	28	16
477	DEC 01 07 25 48.5	40,08S	173,81E	181	4.6	1,6	18	11
478	02 03 21 55.4	44,63S	167,96E	60	3.8	0,2	8	4
479	03 04 23 06.0	38,61S	176,01E	12 R	2.9	1,0	9	6
480	06 17 47 23.0	45,21S	166,72E	12 R	3.8	0,9	11	4
481	06 20 32 14.2	39,62S	175,04E	33 R	4.2	2,0	11	8
482	06 20 32 07.6	39,73S	175,34E	105	4.3	3,6	10	6
483	07 10 23 53.1	40,16S	174,99E	33 R	3.8	1,3	11	6
484	10 02 17 18.3	40,36S	174,30E	12 R	4.1	1,1	14	9
485	10 02 17 18.5	40,41S	174,19E	75	4.1	3,0	15	9
486	10 03 01 58.9	48,60S	163,24E	33 R	4.1	4,0	5	4
487	10 05 42 04.6	38,82S	177,54E	80	4.1	2,5	9	8
488	10 13 50 06.5	35,41S	179,20E	227	5.3	2,7	16	13
489	11 06 56 00.2	40,32S	174,07E	86	4.6	1,4	14	8
490	12 11 21 59.7	39,02S	175,93E	12 R	3.6	0,7	6	4
491	12 11 22 02.0	38,98S	175,81E	33 R	3.6	2,7	4	4
492	14 10 57 36.5	40,98S	175,44E	33 R	3.9	1,4	13	8
493	16 14 45 22.6	44,29S	168,17E	12 R	3.7	1,1	10	7
494	17 20 16 39.7	33,23S	178,33W	226	5.2	1,4	10	8
495	18 18 36 56.5	39,42S	176,27E	33 R	4.8	1,8	17	15
496	18 22 33 22.9	35,93S	178,68E	33 R	4.3	6,6	10	9
497	18 23 30 50.2	36,29S	178,02E	33 R	3.7	1,6	6	6
498	19 03 38 41.8	36,43S	177,85E	33 R	4.2	2,0	8	8
499	20 03 08 36.0	44,72S	167,59E	33 R	4.6	1,9	16	11
500	21 10 36 40.8	41,40S	172,81E	131	3.9	1,1	15	9



REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NJM OBS	NUM STN
66/ 501	DEC 22 23 28 05.3	49.71S	163.78E	33 R	4.9	2.2	12	8
502	24 01 26 53.7	44.02S	168.99E	33 R	4.5	1.5	17	9
503	26 03 03 01.1	38.88S	175.87E	198	4.1	1.6	11	8
504	27 00 46 15.7	37.25S	177.10E	33 R	4.4	1.4	7	8
505	27 00 46 15.3	37.23S	177.03E	33 R	4.6	1.6	14	8
506	27 00 55 15.2	37.15S	177.10E	33 R	4.6	2.6	9	11
507	27 00 55 15.0	37.17S	177.04E	33 R	4.5	1.5	17	11
508	27 02 45 13.8	44.93S	167.67E	82 R	2.7	R	0	3
509	27 05 33 43.7	44.90S	167.81E	111	5.0	1.9	16	11
510	27 05 38 48.4	44.93S	167.67E	82 R		R	0	1
511	27 05 44 14.0	44.93S	167.66E	79	3.5	1.3	6	4
512	27 07 17 27.4	44.93S	167.67E	82 R	2.5	R	0	3
513	27 11 39 30.3	44.93S	167.67E	82	3.7	1.5	6	4
514	27 16 57 04.6	44.93S	167.67E	82 R	3.5	R	0	2
515	27 17 13 15.0	38.96S	178.05E	12 R	4.5	1.3	14	11
516	27 22 40 50.8	45.04S	167.88E	63	3.6	0.4	5	3
517	28 14 51 37.4	45.06S	167.52E	80	3.1	0.1	5	3
518	28 04 57 02.0	44.93S	167.67E	82 R		R	0	1
519	28 22 32 39.4	38.92S	175.89E	193	4.5	1.5	12	8
520	29 16 10 41.2	44.94S	167.66E	82	3.5	1.1	7	4
521	29 23 08 46.2	38.56S	175.77E	201	5.5	1.5	25	15
522	31 02 41 26.8	45.39S	167.11E	88	4.1	1.0	8	6
523	31 05 20 59.7	46.81S	166.50E	105	4.1	0.7	8	5
524	31 17 41 07.3	38.85S	175.87E	12 R	3.5	0.4	6	6

## SUPPLEMENTARY ORIGINS

The following events cannot be confirmed instrumentally, but have been reported felt by at least two independent observers, and must be considered real.

66/S1	Feb 5	09h 25m:?	Ward, Wharanui (84); N.F. Seddon (84).
66/S2	Feb 5	09h 30m:?	Ward, Wharanui (84); N.F. Seddon (84).
66/S3	Mar 5	13h 45m:	MM3 at Maungahaumi (36), also felt at Gisborne (45).
66/S4	Jul 4	22h 27m:	MM5 at Waitakaruru (20); MM3 at Hoe-o-Tainui (20); ?Maramarua (20).
66/S5	Jul 27	15h 40m:?	Ohakune (49); Chateau Tongariro (50).

STATION READINGS FOR  
NEW ZEALAND EARTHQUAKES

This section contains origin times, epicentres, focal depths, magnitudes, and station readings of those earthquakes in the New Zealand region that could be located from instrumental data. In general, origins are calculated for all sufficiently well recorded earthquakes within 10° of Wellington. The calculations are carried out by an Elliott 503 digital computer using a programme developed by R.M. Hamilton, similar to that described by B.A. Bolt (Geophysical Journal: Vol. 3, pp. 433-40, 1960). A provisional origin is repeatedly adjusted to obtain the best agreement between observed arrival-times for the various phases, and times computed from tables. More precisely, the origin is adjusted to minimise the sum of the squares of the residuals (observed minus computed arrival-times).

The earthquake origins are determined using the phases Pn, P\* and Pg, and the corresponding S phases. In computing travel-times, it is assumed that the New Zealand crust is 33 km thick, and is divided into two uniform layers by a discontinuity at a depth of 12 km. Above the discontinuity the velocity of P and S are 5.5 and 3.3 km/sec respectively (Pg and Sg), and below it they are 6.3 and 3.7 km/sec (P\* and S\*). Travel-times for Pn and Sn waves, which travel in the mantle, are derived from the Jeffreys-Bullen "Seismological Tables" (British Assn. for the Advancement of Science, 1958), but modified by multiplying the times by 0.96. Several studies have shown that times in the table are too great to fit New Zealand observations. The result of applying this correction is to raise the adopted Pn velocity from about 4.4 to 4.6 km/sec. These values are close to those reported.

In general, all four parameters of the earthquake origin are calculated (origin time, latitude, longitude, and focal depth). In some cases, however, the focal depth is not allowed to vary, but is restricted to a certain depth. The restrictions are as follows: -

1. Depth is restricted to 12 km if Pg or Sg phases are identified.
2. Depth is restricted to 33 km if:
  - (a) P\* or S\* phases, but not Pg or Sg, are identified,
  - (b) the number of readings is insufficient to determine depth,
  - (c) the computer indicates that the depth is less than 33 km,
  - (d) a solution is not obtained with the depth unrestricted.

Parameters that have been restricted are identified by the letter R appearing in the place where the standard error is usually printed.

Solutions are attempted whenever sufficient readings are available. The minimum requirement to determine an epicentre is a total of three readings at two stations, plus a felt report to resolve the ambiguity.

In using the results in this section, it is essential to keep in mind that the position of earthquakes whose epicentres lie outside the network of seismograph stations can be very uncertain, even though the readings may be consistent with the computed origin (i.e., the residuals are small). Because of the presence of systematic errors, the true origin could be very different from the one calculated. Great care should therefore be taken not to attach significance to an epicentre in an unusual place or a focus at an unusual depth if the recording stations used are not well distributed about the epicentre.



## EXPLANATION OF DATA

The first line printed for each earthquake gives the reference number, used throughout the Report. The second line gives the parameters of its origin, the standard error of the residuals, and the average of the magnitude determinations.

The standard error is derived from the equation

$$SE = \sqrt{\frac{\sum_{i=1}^n r_i^2}{n-m}}$$

where  $r_i$  is the  $i$ th residual,  $n$  the number of readings, and  $m$  the number of parameters determined. Below each parameter of the origin, its standard error is printed, or if the parameter was restricted to a particular value, the letter R. When the number of readings and the number of parameters to be determined is the same, the standard error is not defined. This is indicated by printing ND.

The information listed for each station includes the arrival-times of the various phases, the directions of ground motion, the residuals, the epicentral distance in degrees ( $1^\circ = 111$  km), the azimuth of the station from the epicentre, in degrees east of north, and magnitudes computed as described below. The directions of ground motion are indicated by the following letters: - U-up, D-down, N-north, S-south, E-east, W-west. When the instruments are not oriented towards cardinal points, the letters are X for a movement in the northeast and F in the southwest quadrant (as at BUN and KAI), Y for one in the northwest and J in the southwest quadrant (as at BUN and TON).

Magnitudes are  $M_L$  as defined by C.F. Richter (Bull. Seismol. Soc. America: Vol. 25, pp. 1-32, 1935) obtained from the maximum amplitude of the S-group as recorded on a Wood-Anderson seismograph adjusted to standard constants (W-A), or by using equivalent relationships for the maximum P and S amplitudes recorded on a vertical Willmore seismograph (WP or WS). These relationships were empirically derived by A.A. Thomson from a comparison between records of the same earthquakes on the two types of seismograph.

Residuals are listed for all readings used in calculating the origin. An asterisk following the residual indicates that the corresponding reading was not used in the final determination. A reading is omitted from the determination if the absolute value of its residual exceeds twice the standard error, and the residual is not used when the final standard error is calculated. This provision for discarding readings is made to guard against the inclusion of spurious or wrongly identified ones.

Although the main readings from Raoul Island are contained in a later section, readings from this station have been used in the determination of the origins of some earthquakes. In these cases the Raoul Island readings will be found also in the following section. In a small number of cases readings from the station at Macquarie Island (MCG), operated by the Australian Commonwealth Bureau of Mineral Resources, have also been used, and are listed with the New Zealand readings.

## LOCAL EARTHQUAKES

H M S		35.34S 179.25W		33 KM	SE 1.7	AVG MAG	66/ 001
JAN 01 06 14 59.5		0.15 0.22		R			4.3
+- 1.8				DIR RES	DIST AZ	W-A	W P W S
ECZ	EPN	06 15 45		1.9	2.94 216		4.4 4.3
	ES*	16 30		0.2			
GNZ	EPN	06 15 56		-0.9	3.95 213		4.2 4.4
	EP*	16 05		-3.4			
	E	48					
TUA	EPN	06 16 06		1.6	4.50 219		4.3 4.5
	E	17 00					
KRP	EPN	06 16 11		0.9	4.92 237		3.8
CNZ	EPN	06 16 22		1.9	5.66 226		3.7 3.3
	ESN	17 21		-1.2			
TNZ	EPN?	06 16 29		-0.6	6.36 231		
	EP*	48		-1.7			
MNG	EPN	06 16 34		-0.3	6.71 217		
	ESN	17 49		1.6			
WEL	ESN	06 18 08		0.1	7.57 217	5.4	
GPZ	ESN	06 19 09		-6.8*	10.42 214	4.9	
H M S		35.03S 179.50W		33 KM	SE 2.3	AVG MAG	66/ 002
JAN 03 03 14 57.5		0.15 0.18		R			4.6
+- 2.5				DIR RES	DIST AZ	W-A	W P W S
ECZ	EPN	03 15 50		0.2	3.57 221		4.5 4.5
	ESN	16 32		2.3			
GNZ	EPN	03 16 03		-0.3	4.56 217		4.3 4.3
	E	45					
TUA	EPN	03 16 10		-1.0	5.13 221		4.4 4.5
	ESN	17 06		-1.6			
KRP	EPN	03 16 17		-0.4	5.61 237		3.8
	ESN	17 15		-4.0			
ONE	E(P*)	03 16 41		1.6	5.88 261	4.6	
CNZ	E	03 16 36			6.32 227		
	ESN	17 41		4.9			
TON	E	03 16 59			6.33 227	4.7	
	E	17 51					
TNZ	E	03 16 52			7.04 232		
MNG	EPN	03 16 41		0.3	7.33 219		
	E	17 49					
	E	18 46					
WEL	ESN	03 18 21		0.1	8.19 218	5.4	
COB	ESN	03 18 44		-0.5	9.18 226	4.9	
GPZ	ESN	03 19 15		-13.1*	11.03 216	4.9	
MJZ	ESN	03 19 57		-1.6	12.34 220		
H M S		35.76S 179.32W		12 KM	SE 1.9	AVG MAG	66/ 003
JAN 03 03 19 07.0		0.09 0.12		R			4.5
+- 1.3				DIR RES	DIST AZ	W-A	W P W S
ECZ	EPN	03 19 49		1.1	2.58 221		4.7 4.6
	ESG	20 32		-1.9			
GNZ	EPN	03 20 01		-0.3	3.57 216		4.5 4.5
	ESN	45		2.7			
TUA	EPN	03 20 09		0.1	4.14 222		4.5 4.6
	ESN	21 00		3.9			
KRP	EPN	03 20 15		-0.9	4.65 241		4.1
	ESN	21 10.5		2.1			
ONE	EPN	03 20 22		-0.3	5.13 268	4.4	
CNZ	EPN	03 20 24		-0.9	5.33 228		3.4 3.0
	ESN	21 25		0.3			
TON	EPG	03 20 53		-1.9	5.34 228	4.4	
	ESG	22 05		-1.9			
TNZ	EPN	03 20 36		1.3	6.06 234		
MNG	EPN	03 20 37		-1.5	6.34 219		



		ESN	21 43	-5.9*							
		ESG	22 44	3.3							
WEL		ESN	03 22 10	0.7	7.20	218	5.3				
		ESG	23 08	-1.7							
COB		ESN	03 22 33	0.1	8.19	227	5.0				
KAI		ESN	03 23 12	-0.5	9.86	224	5.1				
GPZ		ESN	03 23 14	-2.7	10.05	216	5.3				
MJZ		ESN	03 23 46	-1.1	11.35	221					
JAN 05		H M S	42.10S	174.24E	33 KM	SE	1.6	AVG MAG	66/ 004		
			0.05	0.05	R						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
WEL		P	06 13	56.3	-2.1	0.90	26	4.0	4.3	4.6	
		E	14 10	18.5	0.0						
COB		EP	06 14 05	-1.8	1.52	311	3.4				
		ES	25	0.1							
MNG		EP	06 14 08.5	-1.5	1.75	33		3.8	3.7		
		ES	33	2.4							
GPZ		EP	06 14 13	-0.2	1.98	216	3.5				
		ES	37	0.9							
KAI		EP	06 14 16	0.6	2.14	258	3.4				
		ES	41	1.0							
TON		E	06 14 37		3.06	19	3.8				
CNZ		EP	06 14 30	1.9	3.06	19		3.6	3.7		
		E	15 12								
MJZ		EP	06 14 30	-1.9	3.35	234		3.5			
		ES	15 10	0.5							
JAN 05		H M S	39.05S	175.11E	12 KM	SE	1.4	AVG MAG	66/ 005		
			0.09	0.04	R						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
CNZ		EPG	08 01	41.5	0.6	0.47	251				
		E	56								
TON		EPG	08 01	42.5	1.5	0.47	251	2.4			
TUA		EPG	08 01	49	0.6	0.84	74		4.2		
TNZ		EPG	08 01	57	-1.7	1.36	264		3.7		
GNZ		EPG	08 02	02	-0.5	1.54	76		4.1		
MNG		EPG	08 02	04	-0.5	1.64	197		3.7		
NO TIME SIGNALS ON WNZ RECORD FELT AT TAUPO MM III											
JAN 05		H M S	41.20S	172.66E	12 KM	SE	1.4	AVG MAG	66/ 006		
			0.03	0.04	R						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
COB		IPG	19 38	37.2	-1.6	0.12	28	2.5			
		ESG	40	-1.0							
WEL		EP*	19 39	04.5	0.6	1.59	94	3.6	3.9	4.5	
		ES*	25	-0.0							
KAI		EP*	19 39	03.5	-0.9	1.62	215	3.5			
		ES*	25	-1.0							
MNG		EP*	19 39	14	-0.5	2.22	76		3.8	3.9	
		ES*	43	-0.8							
TNZ		EP*	19 39	16	-1.7	2.40	34		4.0		
GPZ		ES*	19 39	51	-1.3	2.50	180	3.2			
TON		EP*	19 39	29	1.5	2.97	49	3.8			
		ES*	40 07	0.5							
CNZ		EPN	19 39	23	1.1	2.98	49		4.0	3.6	
		ES*	40 08	1.3							
MJZ		EPN	19 39	27	1.9	3.23	209		3.4	3.3	
		ES*	40 16	1.9							

JAN 06		H M S	41.82S	171.53E	33 KM	SE	1.7	AVG MAG	66/ 007		
			0.05	0.07	R						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
KAI		EPN	09 57	06	-2.0	0.71	187	4.0			
		ESN	16	-1.5							
COB		EPN	09 57	12.8	-1.4	1.16	51	3.7			
		ESN	27	-1.5							
GPZ		EP*	09 57	31	-0.4	2.05	157	4.0			
		ES*	58	-0.5							
MJZ		EPN	09 57	31	1.2	2.31	200		4.1	4.1	
		ESN	59	2.7							
WEL		EPN	09 57	33	0.7	2.48	79	3.9	4.3	4.3	
		ESN	58 02	1.4							
MNG		EPN	09 57	41	-1.3	3.21	69		4.1	3.9	
		E	45.5								
		ES	58 20	1.6							
TNZ		EPN	09 57	46	1.0	3.41	40		4.0	3.9	
		E	58 53								
WIDELY FELT ON W COAST OF SOUTH IS. MAX INTENSITY MM V AT WESTPORT.											
JAN 06		H M S	41.80S	171.50E	33 KM	SE	ND	AVG MAG	66/ 008		
			R	R	R						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
KAI		ES	13 58	23	0.1*	0.73	185	3.0			
		E	23								
COB		ES	13 58	33	-0.7*	1.17	53	2.8			
FELT AT WESTPORT											
JAN 06		H M S	35.59S	179.97E	349 KM	SE	1.1	AVG MAG	66/ 009		
			0.20	0.22	9						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
ECZ		EP	18 20	00	1.2	2.39	208		4.9	4.6	
		ES	41	-0.3							
GNZ		EP	18 20	08	0.1	3.43	206		4.7	4.6	
		ES	59	1.1							
TUA		EP	18 20	12	-0.9	3.93	214		4.4	4.6	
		ES	21 05	-1.7							
CNZ		IP	18 20	24.5	-0.3	5.04	223		4.3	3.4	
		ES	21 29	1.0							
MNG		EP	18 20	36.5	-0.9	6.14	214				
		ES	21 45	-5.4*							
WEL		EP	18 20	47	-0.4	7.00	214	5.2			
		ES	22 08.5	0.1							
MJZ		EP	18 21	37.5	0.9	11.12	218				
JAN 06		H M S	40.68S	178.96E	33 KM	SE	2.1	AVG MAG	66/ 010		
			0.05	0.07	R						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
GNZ		EP	20 20	21.5	1.2	2.16	340		4.2	4.3	
		ES	42	-3.2							
TUA		EP	20 20	25	2.3	2.33	323		4.1	4.7	
		ES	50	0.6							
MNG		EP	20 20	28.5	1.5	2.65	270		3.8	4.2	
		ES	55	-2.1							
ECZ		EP	20 20	34	2.1	3.00	354		4.4	4.1	
		ES	21 03	-2.7							
CNZ		ES	20 21	08	2.0	3.01	298		3.9	3.6	
TON		ES	20 21	07	0.9	3.01	298	3.8	3.9	3.6	
WEL		EP	20 20	36	0.9	3.23	258	4.2	4.2	4.4	
		ES	21 09	-2.4							
TNZ		E	20 20	48		3.82	291		3.6	3.8	



COB	ES	20 21 49	1.1	4.74	263	4.4					
							GPZ	ES	20 22 06	-2.2	5.58
MJZ	ES	20 21 33	0.1								
				ES	22 45						
JAN 07	H M S	04 29 40.1		38.75S	175.11E	198 KM	SE	1.6	AVG MAG	4.5	66/ 011
		+ - 1.1		0.08	0.08	10					
	H M S	04 30 08		DIR	RES	DIST	AZ	W-A	W P	W S	
CNZ	EP	04 30 08			0.3	0.63	224		4.4	3.8	
TON	EP	04 30 08			0.2	0.64	224		3.5		
TUA	EP	04 30 10			1.3	0.82	95		4.2	4.9	
	E	04 30 25									
	ES	04 30 30			-0.8						
TNZ	EP	04 30 13			-0.2	1.42	251		4.0	3.7	
	E	04 30 39									
GNZ	EP	04 30 12			-1.9	1.50	87		4.2	4.7	
	E	04 30 15.5									
	E	04 30 32									
	ES	04 30 39			-1.1						
MNG	IP	04 30 20.9	J		2.8	1.93	194		4.8	4.7	
	ES	04 30 48			0.6						
ECZ	P	04 30 20.3			-0.6	2.19	62		4.8	4.5	
	E	04 30 44									
WEL	EP	04 30 29			1.8	2.74	202		4.6	4.8	4.7
	ES	04 30 31			1.4						
COB	ES	04 31 19			-0.5	3.49	227		4.8		
KAI	ES	04 31 56			-2.0	5.20	222		4.8		
GPZ	EP	04 31 04			1.2	5.59	207		5.3		
	ES	04 31 32			-2.1						
MJZ	EP	04 31 19			1.3	6.74	217				
	ES	04 31 32			-1.8						
JAN 07	H M S	13 00 13.9		37.28S	175.51E	343 KM	SE	1.1	AVG MAG	5.0	66/ 012
		+ - 0.7		0.04	0.05	5					
	H M S	13 01 02.7	J	DIR	RES	DIST	AZ	W-A	W P	W S	
TUA	IP	13 01 02.7	J		0.4	1.61	162		5.1	5.2	
	E	13 01 07									
	ES	13 01 32									
ECZ	EP	13 01 02			-2.1						
	E	13 01 07			-0.7	1.67	105		5.3	5.3	
	E	13 01 30									
	ES	13 01 41			0.2						
GNZ	EP	13 01 03			-0.6	1.81	139		5.3	5.5	
	E	13 01 16									
	ES	13 01 38			-4.5*						
CNZ	EP	13 01 06			0.7	2.07	201		4.6	4.3	
	ES	13 01 48			2.4						
TON	EP	13 01 06			0.6	2.07	201		4.4		
	ES	13 01 47			1.4						
OME	EP	13 01 06			-1.0	2.29	310		4.1		
	ES	13 01 48			-0.5						
TNZ	EP	13 01 10			0.9	2.54	221		4.6	3.9	
	E	13 01 02									
MNG	IP	13 01 17.2	J		-0.0	3.43	193		5.0	5.2	
	E	13 01 33									
	ES	13 01 02									
	ES	13 01 06			-0.9						
WEL	EP	13 01 25			-0.3	4.23	198		5.5	5.3	5.4
	ES	13 01 02			-0.3						
COB	EP	13 01 32			0.5	4.81	216		5.2		
	ES	13 01 02			-0.5						
KAI	EP	13 01 53			1.5	6.55	215		5.1		

GPZ	ES	13 03 06			-2.1						
	EP	13 01 58			0.5	7.06	203		5.7		
	ES	13 03 19			0.1						
MJZ	EP	13 02 10			-0.2	8.13	213				
	ES	13 03 38			-3.8*						
JAN 08	H M S	13 48 26.5		45.22S	167.68E	12 KM	SE	2.1	AVG MAG	3.7	66/ 013
		+ - 1.4		0.07	0.07						
	H M S	13 48 41		DIR	RES	DIST	AZ	W-A	W P	W S	
MNW	EPN	13 48 41			0.2	0.56	184		3.6	3.9	
	ESN	13 48 52			0.8						
ROX	ESN	13 49 03			-1.9	1.18	103		3.9	3.7	
	ESG	13 49 08			1.5						
MJZ	EPN	13 49 02			-2.0	2.34	59		3.7	3.4	
	ESN	13 49 33			1.0						
KAI	ESN	13 50 10			2.4	3.81	46		3.8		
GPZ	ESN	13 50 07			-2.0	3.07	69		3.5		
JAN 09	H M S	23 22 52.4		34.17S	179.08W	271 KM	SE	1.6	AVG MAG	5.4	66/ 014
		+ - 1.8		0.25	0.34	15					
	H M S	23 24 03		DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	EP	23 24 03			0.0	4.46	217		5.5	5.4	
	ES	23 25 00			2.0						
GNZ	EP	23 24 15.5			0.5	5.46	214		5.2	5.2	
	ES	23 25 17			-2.6						
TUA	EP	23 24 20			-1.7	6.02	218				
	ES	23 25 33			1.3						
TON	E	23 24 43				7.18	224		5.4		
	E	23 26 12									
TNZ	EP	23 24 46			1.3	7.86	228				
MNG	EP	23 24 49			-0.3	8.22	217				
	ES	23 26 21			-0.1						
	E	23 27 01									
WEL	ES	23 26 40			-0.4	9.08	216		5.7		
	E	23 27 20									
	E	23 27 42									
COB	E	23 25 35				10.03	224		5.5		
	ES	23 27 00			-1.9						
	E	23 27 58									
KAI	ES	23 27 51			11.0*	11.73	222		5.3		
GPZ	ES	23 27 46			1.3	11.93	214		5.5		
MJZ	ES	23 28 14			0.7	13.23	219				
	USCGS EPICENTRE	23 23 09.8			32.2S	179.6W	179KM		3.9		
JAN 10	H M S	05 46 26.7		39.07S	174.08E	33 KM	SE	2.1	AVG MAG	3.3	66/ 015
		+ - 2.0		0.11	0.09						
	H M S	05 46 31.4	D	DIR	RES	DIST	AZ	W-A	W P	W S	
TNZ	IP*	05 46 31.4	D		-2.4	0.26	116				
	ES*	05 46 38.5			-0.4						
TON	EPN	05 46 47			1.4	1.14	97		2.6		
	E	05 47 06									
CNZ	EPN	05 46 55.5	D		-0.3	1.15	97		3.0	3.2	
MNG	IPN	05 46 20.5			2.8	1.88	145		3.6	3.8	
	ESN	05 47 02			1.1	2.26	207		3.2		
COB	EPN	05 47 02			0.1						
	ESN	05 47 27			-2.2	2.27	167		3.4	3.8	
	E	05 47 30									
	FELT AT CAPE EGHMONT MM III										
JAN 11	H M S	04 07 34.5		38.49S	175.71E	150 KM	SE	2.2	AVG MAG	4.4	66/ 016
		+ - 1.6		0.10	0.10	22					



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KRP	EP	04	07	58		0.7	0.58	346	4.6	3.5	
TON	E	08	04								
	E			23							
	E			30							
TNZ	EP	04	08	00	-1.8	1.25	236		3.7	3.6	
	E			05							
	E			32							
	E			39							
GNZ	EP	04	08	09	1.2	1.82	96		4.3	4.3	
	ES			30	-3.4						
MNG	EP	04	08	13.5	2.0	2.13	185		4.3	4.3	
	E			34							
	ES			41	1.1						
ECZ	EP	04	08	15	0.5	2.37	71		5.1	4.3	
	ES			46	0.8						
WEL	EP	04	08	22	0.9	2.88	194	4.8	5.0	4.9	
	ES			57	0.2						
COB	EP	04	08	31	2.5	3.46	221	4.8			
	ES			09 11	1.0						
KAI	EP	04	09	47	-3.8	5.19	218	4.6			
GPZ	EP	04	08	56	-1.9	5.69	203	5.0			
	ES			09 57	-5.7*						
JAN 11											
		H	M	S							
		20	19	36.5	44.90S	167.36E	33 KM	SE	0.7	AVG MAG	66/ 017
				+ 0.8	0.03	0.05	R			3.8	
MNH											
	IP	20	19	52.1	0.1	0.90	168		3.9	4.3	
	ES			20 04	0.5						
ROX	EP	20	20	00	-0.2	1.50	113		3.9	4.0	
	ES			17.5	-0.7						
MJZ	EP	20	20	12	-0.7	2.41	69		3.3	3.5	
	E			27							
	ES			41	0.7						
GPZ	E	20	21	06		3.98	74	3.9			
	ES			19	0.3						
JAN 12											
		H	M	S							
		12	45	43.5	38.82S	175.04E	12 KM	SE	2.1	AVG MAG	66/ 018
				+ 0.8	0.04	0.05	R			3.9	
WNZ											
	EPG	12	45	47	-1.1	0.20	13				
	ESG			51.5	0.4						
KRP	EPG	12	46	09	-1.8	0.98	336		3.7		
	ESG			31	2.0	1.35	254		3.9	3.6	
GNZ	EPG	12	46	17	1.9	1.56	84		4.2		
MNG	EPG	12	46	18	-2.8	1.84	193		4.0	3.6	
	ESG			45	-0.7						
WEL	EPG	12	46	37	-0.1	2.65	201	3.8	4.1		
	ESG			47 15	2.2						
PROBABLY RELATED TO TAUPJ SWARM OF 1964/5											
JAN 12											
		H	M	S							
		12	51	18.4	38.94S	175.08E	12 KM	SE	2.8	AVG MAG	66/ 019
				+ 1.2	0.06	0.07	R			3.8	
KRP											
	EPG	12	51	23	-2.0	0.31	3				
TNZ	EPG	12	51	44.5	-1.2	1.10	337		3.8		
	ESG			52 07	3.1	1.35	259		3.9	3.5	
GNZ	EPG	12	51	53	3.3	1.55	80		4.0		
MNG	EPG	12	51	52	-1.6	1.74	195		3.9	3.6	
	ESG			52 18	0.9						
	E			24							

WEL	EPG	12	52	07		-3.0	2.55	203	3.4	4.0	
	ESG			45		0.6					
PROBABLY RELATED TO TAUPJ SWARM OF 1964/5											
JAN 12											
		H	M	S							
		15	12	09.0	37.80S	173.68E	33 KM	SE	1.7	AVG MAG	66/ 020
				+ 1.3	0.07	0.16	R			4.0	
ECZ											
	IP	15	12	14.3	J	-1.1	0.15	315			
	ES			19	-1.0						
GNZ	EP	15	12	28	2.2	0.99	211		4.2	4.4	
	ES			37	-1.3						
	E			45							
KRP	EP	15	13	05		2.8	2.49	266		3.7	
TNZ	EP	15	13	03	-0.7	3.65	246		3.9		
MNG	EP	15	13	03		3.75	220		3.5	3.6	
	E			38							
	ES			45	-0.6						
WEL	ES	15	14	06	-0.4	4.61	220	4.5		4.2	
COB	ES	15	14	31	-0.5	5.65	233	4.2			
JAN 12											
		H	M	S							
		17	20	29.7	37.79S	173.74E	33 KM	SE	2.2	AVG MAG	66/ 021
				+ 2.7	0.08	0.22	R			4.0	
ECZ											
	EP	17	20	35.2	DIR	-1.2	0.18	303			
	ES			40	-1.2						
GNZ	EP	17	20	49	2.1	1.02	213		4.0	4.3	
	ES			58	-1.7						
	E			21 06							
KRP	EP	17	21	27		3.4	2.54	266		3.6	
TNZ	EP	17	21	24	-0.9	3.69	247		3.9		
MNG	EP	17	21	24	-0.9	3.79	221		3.4	3.6	
	ES			22 07	-0.2						
WEL	ES	17	22	26	-2.0	4.65	220	4.6		4.2	
COB	ES	17	22	55	1.8	5.69	233	4.2			
JAN 12											
		H	M	S							
		17	59	16.8	40.61S	173.41E	167 KM	SE	1.8	AVG MAG	66/ 022
				+ 1.4	0.06	0.07	R			3.7	
COB											
	EP	17	59	43	1.8	0.70	227	3.5			
	ES			18 00 01	0.9						
WEL	IP	17	59	47.0	J	1.7	1.23	124	4.0	4.2	4.3
	ES			18 00 08	0.7						
MNG	IP	17	59	50	1.3	1.58	91		4.2	4.0	
	ES			18 00 12	-1.3						
TNZ	EP	17	59	48	-1.0	1.60	28		3.6	3.5	
	ES			18 00 12	-1.8						
CNZ	ES					2.16	50		3.7	3.3	
KAI	ES	18	00	30	-0.4	2.43	217	3.4			
GPZ	ES	18	00	44	-1.9	3.14	190	4.3			
MJZ	EP	18	00	20.5	2.0	4.02	212		3.2	3.3	
	ES			01 04	-2.0						
JAN 13											
		H	M	S							
		06	29	54.2	38.09S	177.48E	99 KM	SE	2.7	AVG MAG	66/ 023
				+ 1.7	0.08	0.09	R			4.2	
GNZ											
	IP	06	30	13.6	J	1.9	0.69	142		4.6	4.7
	ES			26.5	1.4						
	E			28							
ECZ	EP	06	30	13	-1.1	0.93	65		4.8	4.6	
	ES			26	-3.1						
KRP	EP	06	30	21.5	-0.1	1.55	276		3.5	3.2	
	ES			41	-1.0						
TNZ	EP	06	30	41	4.7	2.66	245		3.9	3.6	



		H	M	S									
MNG	E	31	26										
	EP	06	30	41	0.6	2.96	211					3.8	3.8
	E			50									
	ES		31	13	-2.2								
WEL	EP	06	30	54	1.9	3.81	212	4.5	4.1	4.4			
	ES		31	39	2.9								
	E			59									
GPZ	ES	06	32	45	-1.7	6.69	212	4.6					
MJZ	EP	06	31	48	-0.3	7.92	220						
	ES		33	13	-3.9								
JAN 14		H	M	S									
		13	58	24.1	37.78S	173.75E	33 KM	SE	2.0			AVG MAG	66/ 024
				+ 2.5	0.08	0.20	R					3.6	
ECZ	IP	13	58	29.5	DIR		RES	DIST	AZ	W-A	W P	W S	
	ES			34	J		-1.4	0.18	299				
GNZ	EP	13	58	43			1.4	1.03	213			4.0	4.0
	E		59	00									
KRP	EP	13	59	03			0.7	2.55	266			3.5	3.1
	ES			34			2.7						
TON	E	13	59	22				2.89	240			3.1	
TNZ	EP	13	59	20			1.8	3.70	246			3.9	
MNG	EP	13	59	18			-1.5	3.80	221			3.3	3.2
	ES	14	00	02			0.0						
WEL	ES	14	00	21			-1.8	4.66	220			4.4	
JAN 14		H	M	S									
		14	17	36.6	34.33S	179.20W	281 KM	SE	2.6			AVG MAG	66/ 025
				+ 3.2	0.17	0.28	R					4.6	
ECZ	EP	14	18	39	DIR		RES	DIST	AZ	W-A	W P	W S	
	ES			30			-1.3	3.82	208			4.6	4.5
ONE	EP	14	18	56			0.0	5.48	253			4.7	
KRP	EP	14	19	01			0.3	5.57	228			4.0	3.6
	ES			09			2.3						
TON	E	14	19	26				6.44	219			4.8	
	E			01									
TNZ	EP	14	19	24			4.8	7.08	225				
MNG	EP	14	19	26			0.7	7.57	212				
	ES			49			-1.7						
WEL	ES	14	21	09			-0.9	8.43	213			5.1	
COB	ES	14	21	29			-0.3	9.29	221			4.9	
GPZ	ES	14	22	14			-0.3	11.30	212			4.9	
JAN 14		H	M	S									
		15	46	13.0	36.78S	177.40W	33 KM	SE	1.7			AVG MAG	66/ 026
				+ 2.3	0.10	0.12	R					4.5	
ECZ	EPN	15	47	02	DIR		RES	DIST	AZ	W-A	W P	W S	
	ESN			42			-0.4	3.36	253			4.6	4.5
GNZ	E(P*)	15	47	25			1.9	4.08	241			4.5	
KRP	EPN	15	47	27.5			0.9	5.74	256			3.8	3.7
	ESN			39			-7.2*						
TON	E	15	47	48			1.3	6.08	244			4.6	
	S*			49.16			-1.6						
ONE	EPN	15	47	47			-1.0	6.73	276			4.8	
MNG	E	15	48	01				6.76	233				
	ESN			03			0.9						
WEL	ESN	15	49	22			0.4	7.58	231			5.3	
COB	ESN	15	49	48			-3.1	8.81	238			4.8	
GPZ	ESN	15	50	27			1.2	10.27	225			4.8	
MJZ	E	15	48	44				11.72	228				
	ESN			50 59			-0.5						

		H	M	S									
JAN 15		03	48	06.1	36.64S	175.73E	12 KM	SE	1.8			AVG MAG	66/ 027
				+ 0.6	0.04	0.04	R					3.6	
WEL	EPN	03	48	11.5	DIR		RES	DIST	AZ	W-A	W P	W S	
	ES*			16			-0.6	0.29	89				
TON	EP*	03	48	15			-0.5					3.1	
	ES*			22			-2.2	0.58	195				
KRP	EPN	03	48	22			-3.3						
	ESN			33			-0.4	0.73	348			3.5	3.5
	E			42			-1.4						
TNZ	EPN	03	48	29			0.7	1.19	242			4.0	3.5
	ESN			46			1.3						
	E			59									
GNZ	EPG	03	48	44			1.6	1.79	91			4.0	
MNG	EPN	03	48	40.5			1.7	1.99	186			3.0	3.5
WEL	EPG	03	49	04			2.3	2.75	195	3.8		4.0	3.8
	ES*			31			0.6						
COB	EP*	03	49	06			1.2	3.36	222			3.8	
	ES*			48			-0.9						
PROBABLY RELATED TO TAUPU SWARM OF 1964/5													
JAN 15		H	M	S									
		10	53	10.9	36.21S	179.46E	33 KM	SE	2.5			AVG MAG	66/ 028
				+ 2.4	0.12	0.12	R					4.2	
ECZ	EPN	10	53	39	DIR		RES	DIST	AZ	W-A	W P	W S	
	EP*			43			2.2	1.65	206			4.5	4.4
	ESN			54 00			2.4						
	ES*			04			3.7						
GNZ	EPN	10	53	50			1.4						
	E			54 12.5			-1.0	2.68	205			4.1	5.0
	ESN			18			-3.5						
KRP	EPN	10	54	04			0.8	3.57	240			3.9	3.5
	ESN			45			1.9						
	ES*			55 00			-0.2						
TON	EP*?	10	54	26			0.0	4.31	225			4.2	
	ESN			55 04			2.9						
TNZ	EPN	10	54	22			-0.7	5.00	232			3.8	3.9
	E			29									
	EP*			36			-1.9						
MNG	E	10	55	08				5.40	214				4.0
	ESN			25			-2.3						
WEL	ESN	10	55	44			-3.9	6.25	214			5.0	
COB	ESN	10	56	08			-1.8	7.17	225			4.8	
JAN 16		H	M	S									
		15	11	06.4	42.01S	174.13E	33 KM	SE	1.5			AVG MAG	66/ 029
				+ 0.5	0.04	0.04	R					4.2	
WEL	IPN	15	11	19.0	DIR		RES	DIST	AZ	W-A	W P	W S	
	ESN			32			-2.5	0.86	34			4.1	5.0
	ESN			46			-0.6						
COB	EPN	15	11	28			-0.8	1.39	311			3.6	
	ESN			46			0.4						
MNG	IPN	15	11	31.8	DIR		RES	DIST	AZ	W-A	W P	W S	
	ESN			55			-1.5	1.72	37			4.9	4.3
	EPN			55			1.5						
GPZ	EPN	15	11	37			-0.3	2.01	212				
	ESN			12 03			2.4						
KAI	EP*	15	11	43			-0.5	2.09	255			3.7	
	ES*			12 10			-1.2						
TNZ	EPN	15	11	50			1.6	2.82	4			3.9	4.1
	E			12 31									
TON	E	15	11	55				3.00	21		</		



ONE	ESN	15	13	44	56	1.7	6.22	2	4.5										
JAN 17	00 09 13.9	34.98S	173.53W	214 KM	SE	2.4			66/ 030										
	+ 3.3	0.44	0.28	50					4.3										
ECZ	EP	00 10 12		DIR	RES	DIST	AZ	W-A	W P	W S									
	ES	00 10 56			0.2	3.59	220		4.8	4.6									
GNZ	EP	00 10 26			-0.6														
	E	11 30			2.0	4.59	216		4.4	4.2									
KRP	EP	00 10 34			-3.1	5.61	237		4.1	3.7									
	E	11 29																	
TON	E	00 11 00			1.2														
	ES	00 11 58			-0.6	6.34	227		4.6										
TNZ	EP	00 10 58			2.4	7.05	231												
MNG	EP	00 10 58			-1.6	7.36	218												
	E	11 15																	
	E	12 47																	
JAN 18	13 58 48.1	44.23S	170.04E	12 KM	SE	2.2			66/ 031										
	+ 0.7	0.08	0.08	R					3.8										
MJZ	IP*	13 58 53.4		DIR	RES	DIST	AZ	W-A	W P	W S									
	ES*	58			-2.4	0.39	52												
ROX	EP*	13 59 13.5			1.2	1.35	202		4.2	4.2									
	ESN	31			0.5														
GPZ	EP*	13 59 22			-0.6	1.95	75		3.6										
	ES*	50.5			2.1														
KAI	EPN	13 59 21			0.4	1.97	31		3.5										
	ESN	48			3.4														
MNW	EPN	13 59 25.5			0.2	2.32	227		3.9	3.7									
	ES*	58			-1.4														
COB	ESN	14 00 27			0.1	3.71	33		4.0										
MNG	E	14 00 15.5				5.40	50			3.3									
JAN 18	18 48 03.1	39.27S	174.68E	230 KM	SE	1.5			66/ 032										
	+ 1.4	0.07	0.11	11					3.9										
TNZ	EP	18 48 34		DIR	RES	DIST	AZ	W-A	W P	W S									
	ES	18 48 58			0.8	0.25	289												
MNG	IP	18 48 41.1		J	-0.7	0.67	85		3.2										
	E	59			1.5	1.48	156		3.9	4.1									
	ES	49 07			-0.8														
KRP	EP	18 48 39			-0.8	1.50	27		3.6										
WEL	EP	18 48 46			1.7	2.02	178		3.9	3.8	3.9								
	ES	49 17			0.8														
GNZ	EP	18 48 50			-1.2	2.68	78		4.0	3.8									
	ES	49 29			0.4														
GPZ	ES	18 50 09			-1.7	4.68	198		4.6										
JAN 18	22 39 51.5	37.80S	173.90E	33 KM	SE	2.0			66/ 033										
	+ 2.4	0.07	0.17	R					3.8										
ECZ	IP	22 39 57.7		DIR	RES	DIST	AZ	W-A	W P	W S									
	ES	40 03		J	-1.6	0.30	290												
GNZ	EP	22 40 12			-1.9														
	ES	24			2.3	1.09	219		4.1	4.2									
	E	29			0.7														
KRP	EP	22 40 32			0.8	2.66	266		3.6										
	ES	41 03			1.6														
GNZ	EP	22 40 37			1.4	2.98	241		3.5	3.1									
	E	49																	

TNZ	EP	22 40 49			2.1	3.81	247		3.9											
MNG	EP	22 40 46			-1.8	3.87	222		3.6	3.6										
	ES	41 30			-0.9															
WEL	ES	22 41 49			-2.7	4.73	221		4.6											
	E	42 32																		
JAN 19	00 08 04.8	38.76S	175.14E	118 KM	SE	1.7			66/ 034											
	+ 1.6	0.06	0.05	16					3.9											
GNZ	IP	00 08 25.4		DIR	RES	DIST	AZ	W-A	W P	W S										
	E	45		J	1.7	0.64	227		4.1	3.3										
KRP	EP	00 08 26			-0.5	0.96	330		2.9	3.0										
	ES	41			-2.1															
TNZ	EP	00 08 33			1.1	1.44	252		3.5	3.4										
	ES	55			2.6															
GNZ	IP	00 08 33.2		D	0.8	1.48	86		4.8	4.2										
	ES	53			-0.2															
MNG	IP	00 08 38.4		J	0.8	1.92	195		4.6	4.1										
	ES	09 02			-0.4															
WEL	EP	00 08 48			-0.5	2.73	202		4.3	4.3	4.4									
	ES	09 20			-1.5															
COB	ES	00 09 38			-1.7	3.50	227		4.1											
JAN 19	10 34 19.1	44.32S	170.10E	12 KM	SE	1.6			66/ 035											
	+ 0.5	0.05	0.06	R					4.1											
MJZ	IPN	10 34 32.5		DIR	RES	DIST	AZ	W-A	W P	W S										
	ESN	39.5			0.5	0.42	38													
ROX	IPN	10 34 42.2		D	-0.3	1.28	206		4.0	4.3										
	E	50																		
	ESN	58			-1.9															
GPZ	EPN	10 34 53			1.9	1.94	72													
	E	35 05																		
	E	13.5																		
	ESG	26			1.5															
	E	42																		
KAI	EPG	10 34 59			-1.2	2.03	28		3.9											
	ESN	35 19			2.1															
MNW	IPN	10 34 56.1		J	0.2	2.29	229		4.4	4.4										
	ESN	35 25			1.7															
COB	EPG	10 35 35			-0.3	3.77	32		4.3											
	ESN	36 00			0.9															
WEL	ESN	10 36 17			-1.7	4.58	50	</												



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KRP	IPG	21	11	59.1	D	1.4	1.02	173		4.2	4.7
	EP*			58		2.5					
	ESG			12 15		3.5					
ONE	EPG	21	12	06		0.4	1.41	324	3.3		
	E			17							
	E			32							
TNZ	EP*	21	12	20		0.7	2.40	199		3.8	3.8
	E			22							
	ESG			55		-3.2					
ECZ	ESG	21	13	04		-2.0	2.63	108			4.0
GNZ	EPG	21	12	33		1.1	2.71	130		4.0	
MNG	EP*	21	12	40		-1.5	3.70	179		3.8	3.4
	EPG			49		-2.9					
	E			13 47							
COR	E	21	13	47			4.65	206	3.9		
FELT AT PLACES ON COROMANDEL PENINSULA MAX INTENSITY MM V											
NO TIME SIGNALS ON KRP UNTIL MAR 22											
JAN 24	H M S	06	18	13.0							66/ 038
	R										3.4
	H M S	06	18	41		0.1*	1.37	318	3.0	3.7	3.8
KRP	EPG			59		-0.5*					
ONE	ESG			19 37		3.2*					
CNZ	EPG	06	18	59.5		-2.0*	2.40	179		3.4	3.0
	ESG			19 37		3.2*					
TNZ	E?	06	18	40			2.54	200		3.4	3.4
	ES*			19 31		-0.0*					
REPORTED FELT AT COROMANDEL BY DOMINION NEWSPAPER											
JAN 24	H M S	06	59	52.8							66/ 039
	R										3.9
	H M S	07	00	16		-0.6	1.28	181	3.6	4.1	4.3
KRP	EPN			34		-0.2					
ONE	ESN			39		1.9					
	ESG			01 07		-0.3	2.55	181		3.8	3.6
CNZ	EPN	07	00	33							
	E			45		0.6	2.55	181	3.6		
TON	EPG	07	00	35		-1.8					
	ESN			01 02		-0.9	2.59	115		4.3	
ECZ	EPN	07	00	33		-3.5	2.71	200		3.9	3.7
TNZ	EPN	07	00	32		1.4					
	ESG			01 25.5		0.5	2.78	137		4.1	
GNZ	E(P*)	07	00	42		2.9					
	EPG			52							
FELT AT PLACES AROUND THE COROMANDEL PENINSULA MAXIMUM INTENSITY MMIV											
JAN 25	H M S	21	13	59.1							66/ 040
	R										4.0
	H M S	21	14	15		-2.9	0.93	285		4.5	4.4
ECZ	EP			33		0.9					
	ES			54		2.0	1.48	241		4.0	3.9
GNZ	EP	21	14	27							
	E										
KRP	EP					3.27	269			3.6	
CNZ	EP	21	14	53		0.8	3.47	247		3.7	
MNG	EP	21	15	02		-0.4	4.21	229		3.8	3.6
	ES			48		-2.7					
TNZ	EP	21	15	05		0.9	4.33	252		4.0	
WEL	ES	21	16	13		1.4	5.06	227	4.5		4.2

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
JAN 25	H M S	22	31	06.3			45.21S	167.95E	12 KM	SE	2.1
	R						0.12	0.16			AVG MAG 4.8
	H M S	22	31	21.3	J	0.1					66/ 041
	R										4.8
MNW	IPN			33		0.9					
	ESN										
ROX	EPN	22	31	40.7	J	-0.9	1.00	106		4.7	5.2
MJZ	EPG			53		2.7	2.18	57		4.4	4.9
	E			59							
KAI	EPN?	22	32	02		0.1	3.67	44		4.6	
	ESN			43		-1.0					
GPZ	EPN	22	32	04		1.9	3.69	67		4.7	
	ESN			44		-0.5					
COB	EPG	22	32	56		0.4	5.41	42		4.7	
	E			33 01							
	ES*			53		2.5					
WEL	E	22	32	51			6.34	54		5.0	
	ESN			33 45		-3.1					
	E			35 07							
MNG	EPN	22	32	45		-4.1	7.19	53			
	E			34 18							
TNZ	EPN	22	32	55		-0.7	7.68	41			
	E			34 25							
	E			42							
CNZ	E	22	33	08			8.24	46			
	ESN			34 35		1.7					
WIDELY FELT IN SOUTHERN PARTS OF THE SOUTH ISLAND											
JAN 26	H M S	13	44	47.2			38.38S	176.78E	170 KM	SE	0.8
	R						0.06	0.05			AVG MAG 3.6
	H M S	13	45	15		0.9	1.01	105		3.8	4.2
GNZ	EP			35		0.1					
	ES			39		0.1	1.26	229		3.1	2.7
CNZ	EP	13	45	16.5		0.1					
	ES			39		0.1					
ECZ	ES	13	45	43		-0.8	1.55	64			3.9
MNG	EP	13	45	29.5		0.2	2.45	204		3.5	3.6
	ES			46 02		0.4					
WEL	ES	13	46	19		-1.1	3.29	208	4.1		3.8
JAN 27	H M S	22	02	44.5			36.42S	179.77E	143 KM	SE	2.5
	R						0.20	0.18			AVG MAG 4.0
	H M S	22	03	15		-0.0	1.60	217		4.6	
ECZ	EP			28		0.5	2.61	212		4.4	
GNZ	EP	22	03	28		-2.0	3.70	245		4.1	3.4
KRP	EP	22	03	39.5		-1.2					
	ES			04 24		-0.0	4.34	229		3.6	3.3
CNZ	EP	22	03	50		1.6					
	ES			04 42		4.2	5.08	236		4.1	
TNZ	EP	22	04	04		-2.6	5.37	217		3.7	3.8
MNG	EP	22	04	01		1.1					
	ES			05 06		-1.6	6.23	217	4.8		
WEL	ES	22	05	24							
JAN 28	H M S	11	45	33.2			38.60S	175.59E	12 KM	SE	2.2
	R						0.03	0.05			AVG MAG 3.4
	H M S	11	45	44		-1.9	0.40	95			66/ 044
WAZ	E(PN)			49.5		2.6					
	ES*										
CNZ	E?	11	45	40			0.60	183		2.5	3.2
	EP*			45		0.4					
	ES*			51		-2.0					







H	M	S	41.74S 171.28E		33 KM	SE 2.5	66/ 051			
FEB 01 07 42 22.1			0.07	0.11	R		AVG MAG 3.7			
+- 1.6										
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KAI	EPN	07	42	36	-0.2	0.79	173	3.8		
	ESN			45	-1.5					
	ES*			46.5	-1.9					
COB	EPN	07	42	42	-0.8	1.28	60	3.8		
	ESN			57	-1.4					
GPZ	EP*	07	43	00	-1.0	2.20	153	3.4		
	ESN			23	2.3					
MJZ	EPN	07	43	01	3.8	2.32	195		3.7	3.5
	ES*			32	-1.8					
WEL	EP*	07	43	08	-0.9	2.66	81		3.9	4.2
	ESN			33	1.0					
MNG	EPN	07	43	11	-0.5	3.37	72		3.8	3.8
	ESN			52	2.7					
	ES*			44 06	0.9					
TNZ	EP*	07	43	32	9.0*	3.48	44		3.9	3.6
	ES*			44 04	-4.6					
CNZ	EPN	07	43	26	4.1	4.13	53		3.6	3.5
	E			44 19						

FELT AT WESTPORT

H	M	S	44.03S 169.17E		33 KM	SE 1.8	66/ 052			
FEB 01 14 44 16.1			0.05	0.06	R		AVG MAG 4.5			
+- 0.8										
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
MJZ	IPN	14	44	31.0	-1.3	0.94	88		4.6	4.6
	ESN			43	-1.1					
ROX	EPN	14	44	39.5	0.3	1.44	176		4.5	4.7
	ESN			58	1.5					
MNW	EPN	14	44	47	-0.7	2.06	212		4.5	4.4
	E			45 16.5						
KAI	EPN	14	44	50	0.1	2.22	48		4.2	
	ESN			45 18	2.5					
GPZ	EPN	14	44	54	-0.2	2.54	84		4.3	
	EP*			45 03	2.1					
	ES*			33	-1.3					
COB	EPN	14	45	12	-1.5	3.95	43		4.3	
	ESN			59	1.5					
WEL	EPN	14	45	30	2.7	4.96	58		4.6	4.3 4.2
	ESN			46 22	0.1					
MNG	EPN	14	45	35	-3.5	5.79	56		4.8	
	E			41.5						
TNZ	EPN	14	45	43	-1.3	6.22	41			
	E			47 00						
CNZ	EPN	14	45	52	-0.0	6.79	47			
	E			47 11						

FELT AT HAAST MM IV

H	M	S	45.11S 169.72E		12 KM	SE 1.0	66/ 053			
FEB 02 07 21 02.4			0.06	0.05	R		AVG MAG 3.3			
+- 0.6										
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ROX	IPN	07	21	23.8	-1.5	0.46	218			
	ESG			45	0.6					
MNW	EPN	07	21	31	0.7	1.62	245		3.2	3.2
	ESG			57	-0.2					
GPZ	E(P*)	07	21	47	0.3	2.53	57		3.4	
	ESN			22 13	0.1					

FELT NEAR DUNEDIN  
INTERPRETATION DOUBTFUL

H	M	S	39.82S 174.14E		153 KM	SE 2.2	66/ 054			
FEB 03 06 00 59.5			0.08	0.08	R		AVG MAG 3.7			
+- 2.0										
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TNZ	ES	06	01	38	-1.7	0.66	16			3.1
TON	ES	06	01	49	0.9	1.24	61		3.0	
CNZ	EP	06	01	28.5	1.4	1.25	61		3.3	3.3
	E			51						
MNG	IP	06	01	29.1	1.6	1.30	128		4.1	4.1
	ES			49	-0.1					
WEL	EP	06	01	32.8	2.8	1.54	162		3.7	4.0 4.0
	ES			54	0.6					
COB	EP	06	01	32.5	1.2	1.66	220		3.9	
	ES			55	-0.7					
GNZ	ES	06	02	27	-2.9	3.23	70			4.2
KAI	ES	06	02	34	0.3	3.40	216		4.0	
GPZ	ES	06	02	45	-3.4	4.03	196		4.0	
MJZ	E?	06	02	20		4.99	212		3.6	3.5

H	M	S	36.14S 177.81E		264 KM	SE 2.0	66/ 055			
FEB 03 09 13 22.9			0.08	0.08	R		AVG MAG 4.8			
+- 1.6										
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	EP	09	14	03	-1.1	1.66	159			4.9 4.9
	E			28						
	ES			36	0.2					
GNZ	IP	09	14	10.7	-0.9	2.51	176		5.1	5.3
	E			40						
	ES			49	-0.5					
ONE	EP?	09	14	14	-0.8	2.82	276		4.1	
	ES			54	-1.2					
CNZ	EP	09	14	23.5	0.9	3.54	210		4.2	4.1
	ES			15 15	5.9*					
TON	EP	09	14	25	2.3	3.55	210		4.3	
	ES			15 14	4.8					
TNZ	EP	09	14	31	2.3	4.08	221		4.2	4.0
	E			15 37						
MNG	EP	09	14	37.0	-0.6	4.83	202		4.9	4.9
	E			55						
	ES			15 33	-3.0					
WEL	IP	09	14	46.7	-1.0	5.66	204		5.3	4.8 5.0
	ES			15 53	-1.1					
COB	ES	09	16	08	-1.1	6.34	217		5.0	
KAI	ES	09	16	49	0.8	8.08	216		5.4	
GPZ	EP	09	15	25	1.4	8.53	206		5.7	
	ES			16 55	-3.3					
MJZ	EP	09	15	38	0.4	9.65	213			
	ES			17 25	1.4					

H	M	S	43.13S 171.53E		12 KM	SE 1.4	66/ 056			
FEB 03 09 38 55.7			0.02	0.03	R		AVG MAG 3.5			
+- 0.4										
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KAI	EP*	09	39	06.5	-0.8	0.61	352		3.0	
	E			11						
	ESG			18	1.2					
GPZ	EPN	09	39	15	-0.3	0.99	125		3.4	
	ESN			29.5	-0.1					
MJZ	EPN	09	39	16	-1.4	1.15	222		3.8	3.8
	ESN			34	0.6					
COB	EP*	09	39	34	-1.0	2.23	24		3.5	
	E			40 00						
	ES*			03	-1.5					
ROX	E	09	40	06		2.83	213			3.7
	ESG			31	-0.1					
MNW	EP*	09	40	01	-1.7	3.85	225		4.0	3.5



		H	M	S		RES	DIST	AZ	W-A	W P	W S	
MNG	EPN	09	39	56	2.2	1.9	3.88	51		3.5	3.1	
	ES*		40	55	1.1							
CNZ	E	09	40	15			4.96	39		3.2		
FELT IN SOUTHERN ALPS INTERPRETATION DOUBTFUL												
FEB 03		10	13	01.1	40.03S	174.50E	12 KM	SE	0.2	AVG MAG	3.5	66/ 057
				+ 0.1	0.00	0.01	R					
TNZ	EPN	10	13	19	0.2		0.85	354		3.3	3.6	
	ESN			31.5	-0.4							
MNG	EPN	10	13	20	-0.2		0.96	128		3.4	3.6	
	ESN			34	-0.2							
TON	EPN	10	13	39	0.2		1.15	45	3.1			
CNZ	IPN	10	13	23.1	0.2		1.16	45		3.8	3.8	
	ESN			39	-0.0							
WEL	EPG	10	13	27	0.1		1.27	171	3.1	3.8	3.8	
	ESN			40	-1.5*							
COB	EPN	10	13	30	-0.1		1.71	231	3.3			
	ESN			51.5	0.1							
FEB 03		23	34	22.3	40.51S	174.39E	12 KM	SE	1.7	AVG MAG	4.2	66/ 058
				+ 0.4	0.03	0.03	R					
WEL	EP*	23	34	39.2	1.6		0.83	160	4.1	4.4	4.5	
	ES*			50	1.1							
MNG	IP*	23	34	38.2	0.4		0.84	98		4.4	4.4	
	ES*			49	-0.2							
TNZ	EPN	23	34	47	0.8		1.32	360		4.1	4.2	
	ESN			35 05	1.1							
COB	EPN	23	34	48	0.9		1.38	245	3.9			
	ESN			35 06	0.6							
TON	EPN	23	34	50	0.4		1.57	35	3.7			
	ESN			35 10	0.2							
CNZ	EPN	23	34	49	-0.7		1.58	35		4.5	4.3	
	ESN			35 12	2.1							
KRP	IPN	23	35	04.7	-0.6		2.73	19		4.4	4.1	
	ESN			37	-0.6							
KAI	EP*	23	35	18.5	3.5		3.01	227	4.3			
	ESN			42.5	-1.6							
GNZ	EPN	23	35	10	-3.9		3.37	58		4.1	4.2	
	E			37								
	E			36 28								
GPZ	EPN	23	35	12	-2.8		3.44	202	4.5			
	ESN			49	-5.5*							
MJZ	EPN	23	35	30	0.4		4.54	219		3.9	4.0	
	EPG			54	-0.1							
	ESN			36 19	-2.0							
ONE	E	23	36	04			4.72	360	4.3			
	ESN			25	-0.5							
FEB 04		21	28	32.9	42.27S	174.62E	33 KM	SE ND		AVG MAG	4.1	66/ 059
				R	R	R	R					
WEL	IPN	21	28	46.7	-3.0*		0.99	6	3.8	4.6	4.7	
	ESN			29 00	-2.2*							
MNG	IPN	21	28	58.8	-1.7*		1.77	22		4.4	4.1	
	ESN			29 24	2.8*							
GPZ	EPN	21	29	04	-0.1*		2.03	225	3.6			
	E			31								
	E			48								
KAI	EP*	21	29	13	-2.2*		2.39	263	3.8			
	E			41								

## LOCAL EARTHQUAKES

TNZ	EPN	21	29	18	-0.5*		3.09	357		4.0	3.9	
	E			30 02								
CNZ	EPN	21	29	20	0.7*		3.15	13		4.2	4.0	
	E			30 05								
MJZ	EPN	21	29	23	-1.0*		3.49	239				
	EP*			33	-1.0*							
KRP	EPN	21	29	38	1.6*		4.40	10		4.0	3.9	
	E			30 35								
GNZ	E	21	30	01			4.46	37		4.1		
FEB 04		23	14	13.4	39.77S	174.20E	134 KM	SE	1.7	AVG MAG	3.7	66/ 060
				+ 1.2	0.05	0.06	R					
TNZ	EP	23	14	33	-0.8		0.60	13		3.5	3.2	
	ES			51	1.6							
CNZ	EP	23	14	39	0.2		1.19	62		3.4	3.4	
	IS			59.2	0.9							
MNG	EP	23	14	40.5	0.5		1.29	131		4.3	4.1	
	ES			15 00	-0.2							
WEL	E	23	14	46			1.57	164	3.7	4.1	4.3	
	ES			15 05	-0.6							
KRP	ES	23	15	15	-2.0		2.12	30			3.1	
GNZ	ES	23	15	41	-0.3		3.17	70			3.8	
KAI	ES	23	15	46	-2.2		3.47	217	3.8			
MJZ	EP	23	15	31	2.8		5.05	212		3.3	3.1	
	E			16 09								
FEB 05		06	53	05.6	41.56S	173.61E	33 KM	SE	1.3	AVG MAG	3.2	66/ 061
				+ 1.7	0.13	0.15	R					
WEL	EPN	06	53	20.3	-1.1		0.91	73		3.5	3.4	
	ESN			32.5	-0.5							
MNG	EPN	06	53	32	-0.2		1.70	57		3.4	3.0	
	ES*			54 00	1.3							
GPZ	ESN	06	54	06	0.5		2.25	198	2.8			
FELT IN NE OF SOUTH IS NZ												
FEB 05		08	19	41.0	38.65S	177.66E	12 KM	SE	2.1	AVG MAG	4.0	66/ 062
				+ 0.6	0.07	0.04	R					
GNZ	IP*	08	19	48.0	1.1		0.28	88				
	ES*			53	1.9							
ECZ	EP*	08	20	03	0.7		1.19	36		4.0	4.2	
	ES*			15	-3.2							
WNZ	E	08	20	15			1.22	271		4.2		
CNZ	EPN	08	20	12	1.7		1.74	251		4.0		
	EPG			17	0.9							
	E			21								
KRP	EPN	08	20	12	0.5		1.82	293		3.7		
	EPG			20	2.1							
MNG	PN	08	20	20	-2.0		2.58	220		3.7	3.6	
	E			31								
	E			21 27.5								
TNZ	EPN	08	20	21	-1.4		2.61	257		4.3		
WEL	ESN	08	21	11	-2.2		3.44	219	4.1		4.1	
FELT AT GISBORNE MM IV												
FEB 05		08	47	39.2	39.03S	178.24E	12 KM	SE	1.4	AVG MAG	4.2	66/ 063
				+ 1.5	0.06	0.09	R					
GNZ	IP*	08	47	48.4	1.0		0.42	336				
	ES*			53	-0.4							
ECZ	EPN	08	48	04	0.5		1.35	10		4.4	4.3	



		E 13							
WNZ	ESN	08 48 22		-7.8*	1.72	283		4.5	
CNZ	EPN	08 48 12		-1.4	2.10	264		4.2	
	EP*	17.5		1.3					
	EPG	22		0.2					
KRP	EPN	08 48 15		-2.4	2.39	297		4.0	
	EP*	22		0.8					
TNZ	EPN	08 48 26.5		0.7	3.01	266		4.1	
FELT AT GISBORNE MM III									
		H M S							
FEB 05		14 01 50.1		45.37S	167.87E	158 KM	SE 0.8	AVG MAG	66/ 064
		+ - 1.0		0.07	0.09	9		4.5	
		H M S		DIR RES		DIST AZ		W-A W P W S	
MNW							0.44	203	
ROX	EPN	14 02 16		-0.0			1.03	96	4.6 4.8
	ESN	36		-0.0					
MJZ	IPN	14 02 28.9	J	-1.0		2.31	54		4.3 4.5
	E	36.5							
	ESN	03 01		0.6					
GPZ	EPN	14 02 49		0.1		3.81	66		4.4
	ESN	03 34		-0.1					
	E	39							
KAI	EPN	14 02 50		0.9		3.83	43		4.4
	ESN	03 34		-0.5					
FELT IN SW OF SOUTH ISLAND MM IV									
		H M S							
FEB 06		06 58 15.1		38.50S	176.17E	167 KM	SE 2.0	AVG MAG	66/ 065
		+ - 1.4		0.06	0.11	17		5.0	
		H M S		DIR RES		DIST AZ		W-A W P W S	
KRP	EP	06 58 40.0		0.0		0.76	319		5.0 4.8
	E	54							
GNZ	EP	06 58 45.8		-0.1		1.46	96		5.1 4.3
	E	59 02							
MNG	IP	06 58 55.8	J	2.1		2.18	194		5.4 5.1
	ES	59 20		-3.5					
WEL	IP	06 59 05.2	J	1.5		2.98	201	5.8	5.8 5.6
	ES	43		2.1					
ONE	EP	06 59 04		-0.8		3.08	332		3.6 3.4
CUB	EP	06 59 14		1.3		3.70	225	5.2	
	ES	59		2.0					
KAI	ES	07 00 35.5		-1.5		5.41	221	5.3	
GPZ	P	06 59 40		-0.6		5.83	206	5.7	
	ES	07 00 45		-1.9					
MJZ	P	06 59 57		1.4		6.96	216		
	ES	07 01 12		-1.8					
FELT IN CENTRAL NORTH ISLAND									
		H M S							
FEB 07		09 12 49.5		35.21S	179.14W	221 KM	SE 1.8	AVG MAG	66/ 066
		+ - 1.8		0.14	0.17	13		4.5	
		H M S		DIR RES		DIST AZ		W-A W P W S	
ECZ	EP	09 13 40		-1.8		3.10	216		5.0 4.6
	ES	14 24		1.6					
GNZ	ES	09 14 45		1.0		4.11	213		3.5
KRP	EP	09 14 03		-2.9		5.07	236	4.1	3.7
	ES	15 06		0.7					
CNZ	EP	09 14 16		0.6		5.81	225		3.7 3.7
	ES	15 22		-0.3					
TON	E	09 14 22				5.82	225	4.6	
	ES	15 22		-0.4					
TNZ	EP	09 14 27		2.6		6.52	231		
MNG	EP	09 14 27		-1.9		6.87	217		
	ES	15 46		-0.5					
WEL	ES	09 16 04		-2.4		7.73	216	5.3	
CUB	ES	09 16 28		-0.3		8.68	225	5.1	

KAI	ES	09 17 08		0.7	10.37	222		5.2	
GPZ	ES	09 17 13		0.8	10.58	214		5.2	
MJZ	EP	09 15 36		3.0	11.87	219			
	ES	17 41		-0.7					
		H M S							
FEB 07		22 29 09.6		37.67S	176.62E	12 KM	SE 0.9	AVG MAG	66/ 067
		+ - 0.7		0.05	0.02	R		3.7	
		H M S		DIR RES		DIST AZ		W-A W P W S	
KRP	EPG	22 29 27.6	D	-0.1		0.89	253		3.7 3.6
	ESG	40		0.1					
GNZ	EPG	22 29 38		-1.4		1.47	132		4.4 4.0
	ESG	30 00		0.7					
ECZ	EPG	22 29 41		0.4		1.53	91		4.1 3.9
CNZ	EPG	22 29 44.5		-0.3		1.74	209		3.1 3.0
	E	30 16							
TNZ	EPG	22 29 57		0.5		2.32	229		3.6
MNG	E	22 30 02				3.07	196		3.4
FELT ON BAY OF PLENTY COAST									
		H M S							
FEB 09		08 57 51.8		37.40S	175.23E	12 KM	SE 2.1	AVG MAG	66/ 068
		+ - 2.6		0.13	0.13	R		3.2	
		H M S		DIR RES		DIST AZ		W-A W P W S	
KRP	EP*	08 58 03		-2.9		0.76	226		3.1 3.9
	ESG	19		1.3					
CNZ	EP*	08 58 26		1.0		1.88	196		2.8 2.8
	ESG	54		-1.1					
TNZ	EPG	08 58 39		0.6		2.31	219		3.3 3.3
	E	59							
MNG	EPN	08 58 43		1.1		3.27	190		3.2 3.3
FELT ON COROMANDEL PENINSULA MM IV									
		H M S							
FEB 08		19 45 39.3		31.74S	179.85W	491 KM	SE 2.2	AVG MAG	66/ 069
		+ - 2.4		0.18	0.35	19		5.5	
		H M S		DIR RES		DIST AZ		W-A W P W S	
ECZ	ES	19 48 39		0.6		6.31	199		
ONE	EP	19 47 24		-1.5		6.74	233	5.2	
GNZ	EP	19 47 30		0.2		7.34	200		
	E	48 47							
KRP	EP	19 47 34		0.5		7.70	215		
TUA	ES	19 49 05		-0.4		7.77	204		
CNZ	EP	19 47 45		0.6		8.73	210		
	ES	49 24		0.3					
TNZ	EP	19 47 51.5		1.6		9.25	215		
	ES	49 37		3.2					
MNG	EP	19 47 56		-1.5		9.97	206		
	E	49 38							
WEL	E	19 48 14				10.82	207	5.9	
	ES	50 02		-2.2					
CUB	ES	19 50 14		-4.0		11.52	214	5.6	
GPZ	ES	19 50 59		-0.4		13.69	207	5.5	
MJZ	ES	19 51 24		3.1		14.83	212		
		H M S							
FEB 09		23 08 26.5		40.59S	176.03E	33 KM	SE 1.2	AVG MAG	66/ 070
		+ - 0.6		0.03	0.04	R		4.1	
		H M S		DIR RES		DIST AZ		W-A W P W S	
MNG	IP*	23 08 35.9	D	0.2		0.42	266		
WEL	IPN	23 08 46	D	0.0		1.18	233	4.0	4.5 4.9
	ESN	59		-1.5					
CNZ	I(P*)	23 08 53.2		0.7		1.43	345		4.1 4.1
	ES*	09 12		0.3					
TNZ	EPN	23 08 57	J	1.3		1.89	317		4.1 4.1
	E	09 14							
TUA	ESN	23 09 20		0.2		1.98	26		4.0



		H	M	S														
GNZ	S*	23	09	42	-0.9	2.48	39			4.0								
COB	EPN	23	09	06	1.3	2.55	258	4.1										
	ESN			33	-0.7													
KRP	EP*?	23	09	14	0.2	2.69	352			3.8	3.8							
	E			18														
	ESN			38	0.9													
	ES*			47	-2.1													
GPZ	ESN	23	10	03	-6.0*	4.00	218	3.9										
FEB 10		H	M	S														
		01	37	49.4	38.78S	175.18E	33 KM	SE	2.6	AVG MAG	3.9							66/ 071
				0.8	0.06	0.05	R											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S							
WNZ	EP*	01	37	57		1.6	0.16	338										
	ES*			38 02		2.2												
CNZ	EPN	01	37	59.7		-1.8	0.65	230		3.9	3.8							
	ESN			38 07		-3.3												
TUA	ESN	01	38	11		-2.0	0.76	92			3.8							
KRP	IPN	01	38	07.8	J	1.5	0.99	329		4.0	4.2							
	ESN			19		0.2												
GNZ	ESN	01	38	29		-0.8	1.45	85			3.7							
TNZ	EP*	01	38	14		-1.8	1.46	253		4.2	4.0							
	ES*			34		-1.4												
MNG	EP*	01	38	24		0.5	1.91	196		3.8	3.5							
	ES*			54		5.1												
FEB 12		H	M	S														
		14	04	27.9	37.12S	177.61E	199 KM	SE	2.0	AVG MAG	4.2							66/ 072
				1.9	0.10	0.10	R											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S							
ECZ	EP	14	04	59		1.7	0.94	128		4.9								
GNZ	EP	14	05	01		-1.3	1.56	168		4.4	4.5							
	E			06														
	ES			29		0.1												
TUA	EP	14	05	03.5		-0.5	1.73	192		4.3	4.5							
	ES			30		-1.8												
KRP	EP	14	05	03		-2.1	1.84	243		3.7								
	ES			33		-0.7												
CNZ	EP	14	05	15		1.1	2.64	217		3.6	3.6							
	ES			58		8.6*												
TNZ	EP	14	05	24		2.6	3.28	230		3.6	3.6							
	E			06 13														
MNG	EP	14	05	27.5		-1.2	3.87	205		4.2	4.2							
	ES			06 19		3.3												
WEL	ES	14	06	36		1.3	4.71	207		4.7								
COB	ES	14	06	54		1.5	5.49	222		4.7								
GPZ	ES	14	07	39		-2.4	7.58	208		5.0								
MJZ	E	14	06	39			8.75	216										
	ES			08 07		-1.7												
FEB 15		H	M	S														
		01	01	05.9	38.76S	175.78E	12 KM	SE	0.9	AVG MAG	4.5							66/ 073
				0.2	0.01	0.01	R											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S							
CNZ	IPG	01	01	16.1	J	0.2	0.48	202										
TON	PG	01	01	16.1		0.1	0.49	203		3.7								
	ISG			22.2		-0.5												
KRP	IPG	01	01	24.2		0.9	0.85	347		4.7	4.6							
	ESG			35		0.1												
	E			38														
TUA	IPG	01	01	27.2		-0.5	1.07	93		4.5	4.7							
	E			32														
	ESG			42		-0.1												
TNZ	IPG	01	01	30.0		0.2	1.18	248		4.8	4.8							
	ESG			47		1.3												
GNZ	EP*	01	01	38		1.0	1.76	87		4.7								
	IPG			42		0.5												

		H	M	S														
AUC	PG	01	01	46.0	-1.5	2.05	337			5.5								
	E			49														
ONE	E?	01	02	05						3.18	339	4.0						
	EPG			10	-0.3													
COB	EP*	01	02	02	-1.6	3.30	224	4.1										
	ES*			44	-2.9*													
KAI										5.03	220	4.5						
GPZ										5.47	205	4.3						
FEB 15		H	M	S														
		01	17	18.8	38.78S	175.78E	12 KM	SE	0.9	AVG MAG	4.2							66/ 074
				0.3	0.01	0.02	R											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S							
CNZ	PG	01	17	28		-0.3	0.46	204										
TON	EPG	01	17	29		0.6	0.46	204		3.5								
	ISG			35.2		0.4												
KRP	PG	01	17	36.7		0.1	0.88	347		4.8	4.2							
	ISG			47.5		-1.0												
TUA	IPG	01	17	40.5		0.0	1.07	92		4.1	4.3							
	E			45														
TNZ	EPG	01	17	43.0		0.5	1.17	249		4.3	4.3							
	ESG			59		0.7												
GNZ	EPG	01	17	54.5		0.1	1.76	86		4.3								
	E			18 00.2														
AUC	IPG	01	18	02		1.2	2.08	337		4.8								
ONE										3.21	339	3.8						
COB	EP*	01	18	15		-1.1	3.29	225		4.0								
	ES*			58		-1.2												
KAI										5.01	220	4.2						
GPZ										5.45	205	4.0						
FEB 15		H	M	S														
		01	43	51.6	38.81S	175.91E	12 KM	SE	1.1	AVG MAG	4.4							66/ 075
				0.3	0.02	0.02	R											
		H	M	S	DIR	RES</												



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
CNZ	PG	01	52	58.9	J	0.2	0.43	208			
	IS*		53	03		-1.3					
TON	PG	01	52	59		0.2	0.44	208	3.3		
	ISG		53	05.8		0.9					
	E			24							
KRP	PG	01	53	07.0		-1.2	0.91	346		4.1	4.2
	IS*			18.2		-0.5					
	ISG			22		1.4					
TUA	EPG	01	53	10		-0.9	1.05	90		4.1	4.3
	ESG			25		-0.2					
TNZ	PG	01	53	12.9		-0.5	1.17	251		4.1	4.1
	ESG			30		0.7					
GNZ	EPG	01	53	26		1.1	1.74	85		4.1	4.0
	ES*			44		0.4					
AUC	EPG	01	53	32		-0.4	2.11	337		4.5	
	I			37							
COB							3.28	225	4.0		
KAI							4.99	221	4.2		
GPZ							5.43	205	4.0		
FEB 16 02 40 06.1 38.73S 176.34E 33 KM SE 1.6 AVG MAG 66/ 077											
+ - 0.6 0.05 0.03 R 4.0											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	ES*	02	40	28		-0.2	0.64	97			3.7
CNZ	IPN	02	40	17.5	J	-2.5	0.77	232		4.3	
KRP	IP*	02	40	25.1	JNE	-0.0	1.02	322		4.4	3.9
	ES*			39		-0.1					
GNZ	ESN	02	40	44		0.4	1.32	87			3.7
TNZ	EPN	02	40	32		0.8	1.59	253		4.1	3.8
	E			41 03							
MNG	EP*	02	40	41		-0.7	2.00	199		4.3	
COB	EP*	02	41	12		2.3	3.64	229	3.9		
FEB 16 04 03 31.5 39.02S 175.22E 202 KM SE 0.9 AVG MAG 66/ 078											
+ - 0.8 0.03 0.04 R 4.1											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
CNZ	IP	04	03	59.4	U	1.0	0.31	126			
	ES			04 20		1.0					
TNZ	EP	04	04	00		0.3	0.68	255		4.0	3.4
KRP	IP	04	04	02.5	DN	0.1	1.12	13		4.0	3.0
	ES			26		-0.4					
TUA	EP	04	04	06		0.3	1.52	83		4.1	4.0
	ES			31		-1.2					
MNG	EP	04	04	07.3	U	0.7	1.61	173		4.8	4.0
	ES			34		0.3					
GNZ	EP	04	04	12.5		-0.3	2.22	81		4.3	4.1
	ES			44		-0.6					
WEL	EP	04	04	14.2		0.7	2.29	189	4.0	4.5	4.3
	ES			46		-0.0					
COB	ES	04	04	55		-1.8	2.81	222	4.0		
GPZ	ES	04	05	41		-5.2*	5.06	202			
FEB 16 07 27 57.4 41.26S 172.78E 169 KM SE 2.0 AVG MAG 66/ 079											
+ - 1.1 0.06 0.08 R 4.0											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
COB	EP	07	28	22.5		2.4	0.18	348	3.9		
	ES			38		0.5					
WEL	EP	07	28	31		2.3	1.50	92	4.3	4.0	4.9
	E			49							
	ES			53		0.2					
KAI	ES	07	28	53.5		-1.7	1.63	219	4.1		
MNG	IP	07	28	37.3	D	1.6	2.14	73		4.2	4.3
	E			56							

	E			29	01						
	ES				06				0.8		
TNZ	EP	07	28	40		1.2	2.41	31		3.9	3.6
	ES			29	11				0.3		
GPZ	E*	07	28	45			2.44	182		4.3	
	ES			29	09		-2.3				
TON	EP	07	28	47		1.5	2.95	47		3.8	
	ES			29	23		0.5				
CNZ	EP	07	28	46		0.4	2.95	47		4.1	3.8
	ES			29	19		-3.7				
	E			48							
MJZ	EP	07	28	50		1.1	3.22	211		3.8	3.7
	ES			29	27		-1.5				
KRP	EP	07	28	59		0.7	3.95	33		3.5	3.4
	ES			29	41		-4.2				
TUA	EP	07	29	07		6.1*	4.15	55		3.9	3.8
	E			47							
GNZ	EP	07	29	09		-0.3	4.80	59		4.2	
FEB 17 07 42 36.2 33.32S 179.26W 33 KM SE 4.7 AVG MAG 66/ 080											
+ - 4.7 0.28 0.45 R 5.4											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	EP	07	43	52		3.0	5.08	210		5.5	5.3
	ES			44 55		10.0					
GNZ	EP	07	44	03		0.2	6.11	209			
	ES			45 10		0.4					
ONE	EP	07	44	07		-2.0	6.56	246	5.1		
AUC	EP	07	44	15		4.0	6.71	236			
KRP	EP	07	44	12		-0.5	6.83	226			
	ES			45 33		6.1					
TNZ	EP	07	44	32		-0.8	8.34	223			
	E			47							
MNG	EP	07	44	35		-4.4	8.84	213			
	ES			46 12		-2.9					
WEL	EP	07	44	52		1.2	9.69	213	5.7		
	ES			46 30		-5.3					
COB	ES	07	46	50		-5.7	10.56	220	5.5		
GPZ	ES	07	47	30		-12.3*	12.56	212	5.6		
MJZ	E	07	45	53			13.81	216			
	ES			48 07.5		-3.4					
USCGS	ORIGIN	07	42	31.4	33.0S	178.8W	26KM	MAG 4.6			
FEB 17 11 13 54.2 41.25S 172.64E 209 KM SE 1.5 AVG MAG 66/ 081											
+ - 1.0 0.05 0.06 R 4.1											
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
COB	EPN	11	14	24		2.2	0.18	24	3.9		
	ESN			44		1.0					
KAI	ESN	11	14	57		-0.0	1.57	215	4.0		
WEL	IPN	11	14	31.1	U	1.2	1.60	92	4.3	5.1	4.0
	ESN			57		-0.5					
MNG	IPN	11	14	37.1	J	0.8	2.24	75		4.4	4.0
	ESN			15 08.5		-0.2					
GPZ	ESN	11	15	11		-1.7	2.45	180	3.8		
	E			30							
TNZ	ESN	11	15	10.5		-2.3	2.45	33			3.9
MJZ	EPN	11	14	47		0.1	3.17	210		3.7	3.5
	E			15 21							
	ESN			27		-0.6					
KRP	E	11	15	37			4.00	35			3.6
	ESN			44		-1.6					
GNZ	EPN	11	15	08		-0.1	4.89	60		4.3	4.5
	ESN			16 07		1.6					



		H	M	S																
FEB 18		14	24	59.6	39.95S	175.78E	12 KM	SE	1.5	AVG MAG	4.1									
					0.03	0.05	R													
							DIR	RES	DIST	AZ	W-A	W P	W S							
TUA	EPN	14	25	22				0.5	1.17	14		4.0	4.3							
	ESN			37				-0.7												
MNG	EPN	14	25	22.4	0			0.5	1.20	235		3.8	3.9							
	E			28																
CNZ	EPN	14	25	22				0.0	1.21	308		4.3	4.2							
	IPG			23.9				-0.2												
	ESN			36.5				-2.1												
GNZ	EPN	14	25	27.5				0.1	1.62	37		3.8	4.1							
	E			38																
TNZ	EPN	14	25	36				3.5	2.00	291		4.4	3.9							
	EP*			38				3.1												
	EPG			41				0.9												
	E			26	21.5															
WEL	EPN	14	25	33				0.1	2.04	228	3.6	4.1	4.1							
	E			47																
	ES*			58				-4.4*												
KRP	EPN	14	25	35				-0.7	2.24	334										
	EPG			43				-1.9												
	ESN			26	02			-0.5												
COB	ESN	14	26	28				-0.0	3.29	248	4.0									
KAI	ESN	14	27	04				-0.6	4.80	236	4.3									
GPZ	ESN	14	27	04				-1.9	4.86	218	4.4									
MJZ	EPN	14	26	30				0.9	6.20	227										
	E			40																
	ESN			27	37			-1.1												

		H	M	S																
FEB 20		08	10	42.0	38.88S	175.84E	12 KM	SE	1.2	AVG MAG	4.6									
					0.02	0.02	R													
							DIR	RES	DIST	AZ	W-A	W P	W S							
WNZ	P*	08	10	48.0				-0.5	0.32	39										
	IPG			50.0				1.2												
CNZ	EPG	08	10	51				0.8	0.40	216										
	E			54																
KRP	P*	08	10	59.7	DN			-0.1	0.98	346	4.1	3.6								
	IPG			11	02			0.1												
	ISG			16				0.7												
TUA	P*	08	10	59.0				-1.5	1.02	86										
	IPG			11	01.2			-1.5												
TNZ	EPG	08	11	07				1.1	1.18	254	4.6									
	E			09.2																
GNZ	EP*	08	11	13				0.6	1.72	83	3.8									
	IPG			19				2.2												
MNG	IP*	08	11	14.8	J			1.7	1.76	189	5.0	4.7								
	ESG			43				1.6												
AUC	EPG	08	11	25.5				-0.7	2.19	337	5.3									
ECZ	EP*	08	11	23				-1.7	2.43	62	5.0									
WEL	EP*	08	11	26.8				0.3	2.54	199	4.4	5.1	5.0							
	IPG			32				-1.4												
	E			34																
	ESG			12	07			-0.7												
	E			11																
COB	EP*	08	11	39				0.3	3.25	226	4.3									
	EPG			47				-0.7												
	ESG			12	30			-1.6												
ONE	EPG	08	11	49				-0.0	3.32	339	4.3									
	ESG			12	37			3.3*												
KAI	E	08	13	38					4.96	221	4.7									
	E			51																

FELT AROUND LAKE TAUPO. MAX INTENSITY MM IV.

		H	M	S																
FEB 20		08	35	51.4	38.81S	175.99E	12 KM	SE	1.3	AVG MAG	3.4									
					0.03	0.03	R													
							DIR	RES	DIST	AZ	W-A	W P	W S							
WNZ	EPG	08	35	56				0.0	0.20	26										
	ESG			36	01			2.0												
CNZ	EPG	08	36	02				-0.2	0.52	221		3.0	2.9							
	ESG			11				1.6												
TUA	EPG	08	36	09				-0.9	0.91	90		3.9	3.8							
	ESG			22				-0.2												
KRP	PG	08	36	09.5				-1.3	0.95	338		3.4	3.0							
TNZ	EPG	08	36	17				-1.0	1.31	253		3.3								
MNG	EP*	08	36	24				-0.1	1.85	192		3.6								

		H	M	S																
FEB 20		13	57	00.6	37.06S	175.07E	12 KM	SE	1.5	AVG MAG	3.1									
					0.06	0.17	R													
							DIR	RES	DIST	AZ	W-A	W P	W S							
AUC	ESN	13	57	21				-0.1	0.31	311										
	E			34																
KRP	PN	13	57	18.4				-1.1	0.94	157		3.1	3.9							
	ESN			34				0.6												
ONE	EPN	13	57	24.5				-1.2	1.41	336	2.8									
	EPG			30				0.9												
	ESN			43				-1.2												
	ESG			49				0.9												
CNZ	EPG?	13	57	47				2.6	2.17	170		3.0	2.9							
	ESG			58	12			-1.7												
MNG	EPG	13	58	13				0.3	3.56	175		3.1								

FELT AT COROMANDEL MM IV

		H	M	S																
FEB 21		05	09	17.1	39.57S	175.67E	12 KM	SE	1.0	AVG MAG	3.5									
					0.01	0.02	R													
							DIR	RES	DIST	AZ	W-A	W P	W S							
CNZ	IP*	05	09	25.2	J			0.5	0.38	345										
MNG	IPG	05	09	39				0.4	1.06	188		3.8	3.5							
	ESG			52				-0.9												
TNZ	EPG	05	09	39				0.1	1.07	291		3.2	3.5							
	ESG			54				0.6												
TUA	EPG	05	09	44				-1.1	1.38	57		3.7	3.6							
	ESG			10	05			1.3												
KRP	EP*	05	09	46				-0.4	1.65	356		3.4	3.3							
	ES*			10	07			-1.3												
WEL	EP*	05	09	51				1.2	1.85	202	3.3	3.9	3.7							
	ESG			10	19			-0.5												

FELT IN CENTRAL NORTH ISLAND MM IV

		H	M	S																
FEB 21		06	30	09.9	40.19S	175.90E	12 KM	SE	1.7	AVG MAG	5.0									
					0.03	0.04	R													
							DIR	RES	DIST	AZ	W-A	W P	W S							
MNG	IPN	06	30	32.1				0.3	1.16	248		4.9	4.7							
	ESN			46				-1.9												
TUA	IPN	06	30	35.0	D			0.2	1.39	8		5.3	5.1							



EPG		52		2.5																			
ESN		31 06		0.0																			
E		22																					
E		53																					
TNZ	EPN	06 30	44.5	-0.8	2.19	296		5.0	4.8														
	EP*		50	1.6																			
	ESN		31 11	-0.6																			
KRP	IPN	06 30	48.7	JSE	-0.9	2.50	334	4.6	4.3														
	EP*		55	1.3																			
	ESN		31 15.5	-3.7																			
	ESG		36	1.8																			
ECZ	EPN	06 30	55	1.1	2.80	28		4.9	4.9														
	E		31 17																				
COB	EPN	06 31	01	0.6	3.29	253		4.8															
	E		12																				
	ESN		38	-0.5																			
	E		32 24																				
AUC	EPN	06 31	07	0.9	3.72	333		5.2	5.0														
	E		33																				
GPZ	EPN?	06 31	20	0.2	4.73	221		5.4															
	E		32 09																				
	E		57																				
KAI	EPG	06 31	45	-0.9	4.74	239		4.9															
	ESN		32 11	-2.6																			
	E		59																				
ONE	EPN	06 31	25	3.7	4.84	335		4.3															
MJZ	EPN	06 31	39.5	1.3	6.11	229																	
	ESN		32 45	-1.2																			
	ESG		33 31.5	-4.2*																			
FELT IN HAWKES BAY																							
H M S																							
EB 21	08 26	17.0	41.52S	174.53E	33 KM	SE	1.6	AVG MAG	3.5	66/ 088													
			0.05	0.04	R																		
			+- 0.9																				
			H M S	DIR	RES	DIST	AZ	W-A	W P	W S													
WEL	IP*	08 26	24.1	JNE	-0.3	0.29	38	4.0															
	ES*		29		-0.8																		
MNG	EP*	08 26	38.0	J	-0.1	1.15	39	3.8	3.9														
	ES*		52.5		-1.2																		
COB	EP*	08 26	41		-1.8	1.42	287	3.2															
	ES*		27 00		-1.9																		
TNZ	EP*	08 27	01		2.8	2.33	357	3.4	3.3														
	ES*		30		1.1																		
CNZ	EP*	08 27	00		-0.1	2.44	19	3.7	3.6														
	ES*		34		1.8																		
KAI	ES*	08 27	37		1.8	2.54	246	3.2															
KRP	EP*	08 27	21		-0.1	3.67	13	3.5	3.4														
	E		23																				
	ES*		28 08		-1.1																		
FELT IN WELLINGTON MM III																							
H M S																							
FEB 21	11 34	04.8	43.01S	171.69E	12 KM	SE	1.4	AVG MAG	3.5	66/ 089													
			0.03	0.03	R																		
			+- 0.4																				
			H M S	DIR	RES	DIST	AZ	W-A	W P	W S													
KAI	EP*	11 34	16		1.2	0.52	337	3.1															
	ES*		22		-0.1																		
GPZ	EP*	11 34	23		0.4	0.98	135	3.2															
	ESN		38		-0.5																		
MJZ	EPN	11 34	28		-0.7	1.32	222	3.9	3.5														
	EPG		31		-0.6																		
	ESN		47		0.5																		
COB	EPG	11 34	43		-3.6	2.07	22	3.3															
	ESN		35 05		1.4																		
WEL	EP*	11 34	55		0.2	2.86	54	3.6	3.7	3.5													
	ESN		35 24		0.8																		
	ESG		36		-5.2*																		

MNG	EPN?	11 35	01	0.2	3.70	51		3.5															
	E		08																				
MNH	EPN	11 35	06	0.9	4.03	225		3.3															
FELT IN CENTRE OF SOUTH ISLAND																							
H M S																							
FEB 22	08 39	41.0	38.02S	175.48E	158 KM	SE	2.0	AVG MAG	4.1	66/ 090													
			0.07	0.08	R																		
			+- 1.2																				
			H M S	DIR	RES	DIST	AZ	W-A	W P	W S													
CNZ	IP.	08 40	03.2		0.3	0.38	172																
	ES		22		2.3																		
TON	EP	08 40	03		0.1	0.38	173	3.0															
	ES		20		0.3																		
KRP	IP	08 40	05.3	DNW	-0.5	0.90	3	4.1	4.0														
	ES		21		-4.0																		
TNZ	EP	08 40	08.5		2.4	0.93	247	3.5	3.3														
	E		42																				
TUA	EP	08 40	10		0.5	1.30	90	4.2	4.5														
	ES		31		-0.4																		
MNG	IP	08 40	16.2	J	1.6	1.79	180	4.7	4.5														
	ES		38		-2.5																		
GNZ	EP	08 40	17		0.1	2.00	86	4.1	4.1														
	E		40																				
WEL	EP	08 40	26		2.7	2.52	192	4.3	4.3	4.5													
	ES		56		0.3																		
ECZ	EP	08 40	25		-0.1	2.66	66	4.4	4.2														
	E		41 11																				
COB	ES	08 41	10		1.5	3.09	222	4.0															
GPZ	ES	08 41	57		-3.4	5.32	203	4.5															
MJZ	ES	08 42	25		-1.0	6.39	215																
H M S																							
FEB 22	12 42	56.7	38.95S	175.68E	12 KM	SE	1.8	AVG MAG	3.9	66/ 091													
			0.03	0.03	R																		
			+- 0.5																				
			H M S	DIR	RES	DIST	AZ	W-A	W P	W S													
TUA	IP*	12 43	05.8		1.3	0.39	69																
	ES*		12		1.8																		
WNZ	ESG	12 43	15		-0.7	0.55	305	4.2	4.1														
GNZ	EP*	12 43	13.5		-3.0	1.09	74	4.2	4.1														
	ESG		33		-0.7																		
KRP	EPN	12 43	21		-0.2	1.36	318	3.3															
	E		28																				
	ESG		43		0.2																		
TNZ	EP*	12 43	31		2.3	1.81	262	3.5	3.4														



		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
TON	ES	19	25	32				3.2*					
MNG	ES	19	25	29				0.1	2.30	207	3.8		
	P	19	25	01.0				0.1	3.62	197		4.4	4.4
	E			46									
	ES			51				-0.1					
WEL	ES	19	26	08				1.4	4.43	201			4.4
COB	ES	19	26	18				-1.5	5.08	218	4.5		
FEB 23	H M S	00	19	57.2	38.41S	175.18E			212 KM	SE	1.7		66/ 093
					0.08	0.07			9				4.4
KRP	IP	00	20	24			JW	-2.7	0.70	313		4.6	
TUA	EP	00	20	28				0.5	0.86	118		4.7	4.5
	E			30									
	ES			52				1.1					
CNZ	IP	00	20	29.1			J	1.2	0.93	212		4.1	3.6
	ES			52				0.3					
TON	EP	00	20	30				2.1	0.94	212	3.4		
	ES			51.5				-0.3					
GNZ	EP	00	20	33				1.1	1.46	100		4.2	4.4
	ES			56				-2.7					
TNZ	EP	00	20	34				0.8	1.61	241		3.9	3.7
	E			21									
ECZ	EP	00	20	36				-0.9	2.00	70		4.7	4.5
	ES			21				-6.5*					
	E			19									
MNG	IP	00	20	41.7			D	1.9	2.27	194		4.5	4.8
	ES			21				-0.1					
WEL	EP	00	20	50				1.2	3.07	200	5.6	4.7	4.5
	ES			21				0.2					
COB	ES	00	21	42				-1.6	3.77	224	4.3		
GPZ	ES	00	22	30				-2.1	5.92	206	4.8		
FEB 24	H M S	03	47	50.6	40.14S	174.94E			33 KM	SE	1.3		66/ 094
					0.02	0.03			R				3.9
MNG	IP	03	48	02.0			J	-0.5	0.63	139		4.3	4.4
	ES			11				-0.1					
TON	EP	03	48	07				-1.3	1.05	26	3.1		
	ES			21				-0.3					
TNZ	EP	03	48	07.5				-0.8	1.05	335		3.7	4.2
	ES			22.5				1.1					
CNZ	EP	03	48	07			D	-1.3	1.05	27		3.9	4.0
	ES			23				1.5					
WEL	EP	03	48	10				0.3	1.15	187	3.7	4.3	4.4
	ES			24				0.1					
	E			44									
COB	EP	03	48	22				1.6	1.93	240	3.3		
	ES			42				-0.8					
TUA	EP	03	48	26				2.4	2.17	53		4.1	3.9
	E			07									
KRP	EP	03	48	23				-2.0	2.26	12		3.9	3.6
	E			30									
	ES			51				0.1					
MJZ	EP	03	49	08				4.5*	5.08	219		3.5	
FEB 26	H M S	18	39	32.9	44.49S	163.29E			33 KM	SE	1.5		66/ 095
					0.05	0.06			R				5.4
MNW	IPN	18	39	53.0			J	-1.9	1.37	200			
MJZ	IPN	18	40	01.0				2.3	1.65	73		5.1	4.9
	E			48									
KAI	EPN	18	40	18				0.6	3.00	50	5.3		
	ESN			54				2.8					

		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
GPZ	EPN	18	40	20				-0.6	3.24	77	5.1		
	EP*			28				-1.6					
	E			42									
	ESN			58				1.0					
	E			41									
COB	PN	18	40	41			E	0.2	4.72	45	5.8		
	ESN			41				-1.0					
	E			34									
WEL	EPN	18	40	54				-0.5	5.74	58	5.7	5.8	5.5
	E			58									
	ESN			41				0.5					
MNG	EPN	18	41	04.5				-1.3	6.57	56			
	E			42									
	ESN			18				0.5					
TNZ	EPN	18	41	12				0.6	6.99	43			
	ESN			42				-2.3					
CNZ	EPN	18	41	20				0.8	7.57	48			
KRP	EPN	18	41	32				-0.1	8.54	42			
	ESN			43				-1.5					
TUA	EPN	18	41	36				1.3	8.73	52			
	E			42									
	E			55									
AUC	EPN	18	41	40.5				1.2	9.08	35			
	ESN			43				-0.4					
GNZ	EPN	18	41	44				1.2	9.34	55			
	E			48									
	ESN			43				-2.7					
ONE	EPN	18	41	52				2.2	9.87	30			
	ESN			43				-1.1					
NO TIME SIGNALS ON ROX RECORD													
WIDELY FELT IN SOUTHERN PARTS OF SOUTH ISLAND													
USCGS ORIGIN 18 39 28.0 44.4S 168.0E 33KM MAG 5.0													
FEB 28	H M S	14	51	28.8	33.43S	179.47W			338 KM	SE	1.7		66/ 096
					0.32	0.45			22				5.1
ECZ	ESN	14	53	43				1.1	4.55	200			4.6
GNZ	ESN	14	54	02				-0.6	5.58	201			4.7
TUA									6.02	206			
CNZ	ESN	14	54	33				0.3	7.02	214			
MNG	EPN	14	53	26				-0.2	8.23	208			
	E			54									
WEL	ESN	14	55	15				-2.2	9.08	209	5.6		
GPZ	ESN	14	56	21				1.2	11.95	209	5.5		
MJZ	ESN	14	56	46				0.5	13.13	214			
FEB 28	H M S	20	10	14.3	40.16S	174.21E			121 KM	SE	1.7		66/ 097
					0.04	0.05			11				4.0
TNZ	IP	20	10	37.2			D	0.7	0.98	8		4.0	3.8
	ES			52				-1.4					
MNG	IP	20	10	39.5			J	2.0	1.07	116		4.6	4.3
	ES			56				0.8					
WEL	EP	20	10	40.7				1.8	1.20	160	3.9	4.3	4.5
	ES			57				-0.6					
TON	EP	20	10	42				0.8	1.40	47	3.8		
	ES			11				-0.6					
CNZ	P	20	10	41.8				0.5	1.41	48			
	ES			11				0.3					
COB	EP	20	10	43				1.2	1.46	230	3.5		
	ES			11				-0.6					
KRP	EP	20	10	55				0.7	2.46	25		3.6	3.6
	ES			11				-10.6*					
GNZ	ES	20	11	42				-3.0	3.32	64			4.2
GPZ	ES	20	11	52				-2.6	3.72	198	4.4		







MJZ	EPN	24 00 45.6	J	0.1	7.79	226													
	I	51.5																	
	EP*	01 08		-2.8															
	ESN	02 10		0.1															
	ES*	45		-7.1*															
ROX	E	24 01 14			9.38	222													
MSZ	EPN	24 01 08.8		-1.6	9.67	229													
	E	15.0																	
	ESN	02 52		-2.7															
MNW	EPN	24 01 21.4		0.1	10.49	225													
	ESN	03 15		0.9															
FELT IN EASTERN NORTH ISLAND. MAX MM VII GISBORNE. SEE PAGE 12 FOR DISCUSSION AND ALTERNATIVE SOLUTION																			
MAR 05	H M S	00 29 35.2	38.75S	178.30E	33 KM	SE	1.3	AVG MAG	66/10										
		+ 3.9	0.09	0.30	R				4.5										
	H M S	00 29 42.1			DIR	RES	DIST	AZ	W-A	W P	W S								
GNZ	IP*	00 29 42.1			J	0.1	0.24	296											
TUA							0.90	266											
ECZ							1.07	11											
WNZ	E	00 31 06					1.72	273		4.8									
CNZ	EPN	00 30 10				1.5	2.19	257											
TON							2.20	257		4.2									
KRP	EPN	00 30 09.7				-0.6	2.32	290		4.5									
	EP*	16.0				-0.3													
	E	26.0																	
MNG	EPN	00 30 17.0				-0.7	2.86	228		4.5	4.4								
	E	31																	
TNZ	E	00 30 23					3.09	261		4.5									
WEL							3.71	226		4.8									
ONE							4.32	312		4.2									
MAR 05	H M S	01 34 34.4	38.93S	178.26E	33 KM	SE	1.6	AVG MAG	66/10										
		+ 4.1	0.41	0.24	R				3.6										
	H M S	01 34 41.0			DIR	RES	DIST	AZ	W-A	W P	W S								
GNZ	IP*	01 34 41.0			J	-1.5	0.34	327											
TUA	IPN	01 34 49.7			J	0.1	0.87	278		4.0	4.3								
	ESN	35 00.5				-0.3													
ECZ	EPN?	01 34 55.2				0.4	1.25	10		3.4	3.1								
TON							2.14	262		3.3									
MAR 05	H M S	04 58 28.3	38.79S	178.12E	33 KM	SE	0.7	AVG MAG	66/11										
		+ 0.6	0.05	0.04	R				4.1										
	H M S	04 58 33.5			DIR	RES	DIST	AZ	W-A	W P	W S								
GNZ	IP*	04 58 33.5			J	-0.8	0.16	334											
TUA	IPN	04 58 42.0			J	0.1	0.75	268											
	SN	52				0.2													
ECZ	EPN	04 58 47.8			J	0.5	1.15	17		4.4	4.7								
	E	59.0																	
WNZ							1.58	275		4.5									
CNZ	E	04 59 02					2.04	258		4.1									
	E	05																	
TON							2.05	258		3.7									
KRP	E	04 59 05					2.20	292											
MNG	EPN	04 59 09.0				0.0	2.73	227		4.0	3.8								
	E	24																	
	E	27																	
TNZ							2.94	261		3.8									
WEL							3.58	225		3.9									
MAR 05	H M S	07 12 39.9	38.91S	178.24E	33 KM	SE	1.4	AVG MAG	66/10										
		+ 3.7	0.35	0.20	R				3.7										

## LOCAL EARTHQUAKES

		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ	IP*	07 12 46.4	J	-1.3	0.31	327			
TUA	EPN	07 12 55.0	J	0.1	0.86	276		4.4	4.5
	SN	13 06		-0.0					
ECZ	EPN	07 13 00.6		0.5	1.23	11		3.4	4.1
TON					2.13	261		2.7	
MNG					2.73	230		3.3	
MAR 05	H M S	07 17 12.3			38.95S	178.20E	33 KM	SE	1.7
		+ 4.0			0.44	0.24	R		AVG MAG 3.9
	H M S	07 17 18.8	J	-1.5	0.34	335			
GNZ	IP*	07 17 18.8	J	-1.5	0.34	335			
TUA	IPN	07 17 27.0	J	0.1	0.83	279		4.3	4.6
	ESN	37		-0.7					
ECZ	IPN	07 17 33.3	J	0.2	1.28	12		4.3	4.2
CNZ	E	07 17 53			2.08	262		3.4	
TON					2.09	262		3.2	
MNG					2.68	231		3.3	
MAR 05	H M S	07 58 03.9			39.04S	178.02E	33 KM	SE	4.0
		+ 3.3			0.23	0.19	R		AVG MAG 3.9
	H M S	07 58 08.7	J	-4.1	0.39	360			
GNZ	IP*	07 58 08.7	J	-4.1	0.39	360			
TUA	IPN	07 58 17.0	J	-0.0	0.72	288			
	ESN	28		1.4					
ECZ	EPN	07 58 23.5	J	-2.9	1.40	17		4.3	4.9
	ESN	48.3		4.9					
CNZ	E	07 58 39			1.93	264		3.9	
TON					1.94	264		3.3	
KRP	EPN	07 58 36		-2.0	2.25	299			3.6
MNG	IPN	07 58 44.4	J	2.8	2.51	230		3.7	
TNZ					2.84	266		3.5	
WEL					3.36	227		3.7	
MAR 05	H M S	10 26 02.6			38.97S	178.28E	33 KM	SE	2.0
		+ 5.3			0.52	0.30	R		AVG MAG 3.9
	H M S	10 26 09.4	J	-1.9	0.38	327			
GNZ	IP*	10 26 09.4	J	-1.9	0.38	327			
TUA	IPN	10 26 18.2	D	0.0	0.90	280		4.5	4.7
	ISN	29.3		-0.4					
ECZ	EPN?	10 26 24		0.5	1.29	9		3.4	3.8
CNZ	E	10 26 41			2.14	263		3.7	
TON					2.15	263		3.2	
MNG					2.72	232		3.7	
MAR 05	H M S	10 43 08.5			38.78S	178.12E	33 KM	SE	0.9
		+ 0.7			0.07	0.06	R		AVG MAG 4.1
	H M S	10 43 13.5	J	-1.0	0.16	330			
GNZ	IP*	10 43 13.5	J	-1.0	0.16	330			
TUA	IPN	10 43 22.1	J	-0.1	0.76	268		4.7	4.8
	ESN	32.5		0.3					
ECZ	EPN	10 43 28.0		0.7	1.14	17		4.5	4.7
TON					2.06	257		3.4	
MNG	EPN	10 43 49.5		0.1	2.74	227		3.7	
TNZ					2.95	261		3.5	
WEL					3.59	225		3.9	
MAR 05	H M S	11 40 02.9			38.77S	178.20E	33 KM	SE	4.7
		+ 3.4			0.22	0.27	R		AVG MAG 4.5
	H M S	11 40 05.6	J	-3.5	0.16	312			
GNZ	IP*	11 40 05.6	J	-3.5	0.16	312			
TUA	IPN	11 40 14.2	J	-3.1	0.82	267			



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S					
ECZ	EPN	11	40	20.3		-1.0	1.10	15	4.8	4.9						
	ISN			40.7		5.7										
WNZ							1.64	274		4.5						
CNZ	EPN	11	40	34.4		-0.6	2.11	257								
TON	EPN	11	40	36		0.8	2.12	257	4.0							
	ESN			41 07		7.4										
KRP	EPN	11	40	33.0		-4.0	2.25	291		4.4						
	EP*			39.4		-3.3										
MNG	EPN	11	40	41.0		-3.5	2.79	228		4.4						
	EP*			57		5.0										
WEL							3.64	225	4.7							
MAR 05		13	08	31.6			36.98S	177.55E	224 KM	SE	1.3	AVG MAG	66/ 111			
							0.05	0.08	10			4.3				
							H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	EP	13	09	05.0		0.5	1.07	132		4.5						
	E			27												
TUA	P	13	09	10.8		-0.1	1.85	190		4.3	4.4					
	ES			39		-2.2										
KRP	P	13	09	11.8		0.9	1.86	239		3.9						
	S			42		0.7										
AUC	P	13	09	14.0		-0.5	2.22	272		4.6						
CNZ	P	13	09	21.6		1.8	2.72	215		4.1						
ONE	EP	13	09	20		-1.1	2.84	294	3.9							
TNZ	EP	13	09	27		0.2	3.33	228		3.9						
MNG	P	13	09	34.0		-0.5	3.98	203		4.6	3.9					
	ES			10 24		0.7										
WEL	ES	13	10	43		1.1	4.81	206	4.8							
COB	E	13	11	00		5.56	221	4.6								
GPZ	ES	13	11	46		-1.4	7.68	208	4.8							
MAR 05		13	13	45.1			38.56S	173.01E	33 KM	SE	2.6	AVG MAG	66/ 115			
							0.13	0.16	R			4.2				
							H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ							0.08	171								
TUA	IPN	13	13	56.9		-1.2	0.71	249								
ECZ	EPN	13	14	02.0		0.4	0.96	26		4.5	4.5					
CNZ	EPN	13	14	16		-0.1	2.02	251		4.5						
TON							2.03	251	3.6							
KRP	EPN	13	14	15.6		-0.8	2.04	287		4.0						
	EP*			22.0		0.6										
MNG	EPN	13	14	23.5		-3.7	2.83	223		4.2						
	EP*			39		4.1										
TNZ	EPN	13	14	29.0		0.9	2.90	256		3.8						
WEL							3.69	221	4.2							
MAR 05		15	16	54.5			38.58S	177.97E	33 KM	SE	3.0	AVG MAG	66/ 111			
							0.15	0.16	R			4.0				
							H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ							0.07	145								
TUA	IPN	15	17	05.2	J	-1.8	0.68	251								
	ESN			16		-0.2										
ECZ	IPN	15	17	11.7	J	0.3	1.00	27		4.6	4.7					
CNZ							1.99	251		4.0						
TON							2.00	251	3.6							
KRP	EPN	15	17	25.0		-0.5	2.02	288		3.8						
	EP*			31.8		1.3										
MNG	EPN	15	17	32.8		-3.3	2.80	223		3.8	3.6					
	EP*			48		4.3										
	ESN			18 33		25.2*										
TNZ							2.87	257		3.8						
WEL							3.65	221	4.0							

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S					
MAR 05		15	54	00.6			38.83S	173.21E	33 KM	SE	2.0	AVG MAG	66/ 117			
							0.13	0.15	R			4.9				
							H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ							0.23	321								
TUA	IPN	15	54	13.8	D	-1.5	0.83	271								
ECZ	EPN	15	54	20.0	D	0.2	1.16	13						5.2	5.3	
WNZ	EPN	15	54	30		3.3	1.66	276						5.2		
TON	EPN	15	54	34		1.1	2.11	259	4.5							
	ISN			55 06.5		9.2*										
KRP	EPN	15	54	33.8	D	-1.4	2.29	292		4.9						
	EP*			40		-1.1										
MNG	EPN	15	54	40.5		-1.3	2.76	229		5.0	4.6					
	E			54												
	E			58												
TNZ	EPN	15	54	45.8		0.7	3.00	262		4.6						
WEL							3.61	226	5.2							
FELT MAX MM IV GISBORNE,																
MAR 05		20	21	50.2			38.96S	173.25E	33 KM	SE	ND	AVG MAG	66/ 118			
							ND	ND	ND			4.1				
							H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ							0.36	330								
TUA	IPN	20	22	05.4		-0.0	0.87	280		4.6	4.9					
ECZ	EPN	20	22	11		-0.0	1.28	10		4.1	4.6					
TON							2.13	263	3.5							
KRP	E	20	22	31.5			2.37	295		3.9						
	E			40.5												
MNG	EPN	20	22	30.5		-0.0	2.70	231		3.8						
TNZ							3.02	264		3.5						
WEL							3.54	228	3.9							
MAR 05		21	09	54.2			38.85S	175.86E	12 KM	SE	0.8	AVG MAG	66/ 119			
							0.02	0.04	R			3.2				
							H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	21	10	00.4		0.1	0.28	41								
CNZ	PG	21	10	03.0		-0.2	0.43	215								
TON							0.44	215						2.3		
KRP	PG	21	10	13.2		-0.4	0.95	344		3.3						
	E			28												
TNZ	EPG	21	10	19.0		0.3	1.21	253		3.5						
MNG	P*	21	10	27.0		1.0	1.79	189		3.7	3.1					
	ES*			49		-0.8										
MAR 06		02	32	33.3			38.74S	173.08E	33 KM	SE	1.5	AVG MAG	66/ 120			
							0.10	0.10	R			4.5				
							H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ	IP*	02	32	37.9	J	-1.0	0.11	335								
TUA	IPN	02	32	46.0	J	-0.6	0.73	265								
ECZ	EPN	02	32	52.6	D	0.8	1.11	19		5.0	5.3					
	E			33 04												
	E			17												
WNZ							1.55</									



MAR 06		H	M	S	35.11S	179.57W	33 KM	SE	2.8	AVG MAG	66/ 121
		+ -		3.3	0.15	0.25	R			4.6	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	EPN	04	32	25		3.5	2.99	210		4.9	
	E			59							
	E			33 06							
GNZ							4.02	208			
TUA	PN	04	32	43		0.5	4.53	214			
KRP	EPN	04	32	47.0		0.3	4.84	233		4.1	4.3
	SN			33 43		3.0					
AUC	EPN	04	32	49		1.4	4.90	248		4.7	
	E			33 08							
ONE	EPN	04	32	47		-1.8	5.00	261			
CNZ	EPN	04	32	57		-0.5	5.64	222		4.2	3.8
	E			34 09							
MNG.	EPN	04	33	11.4		-1.0	6.75	214			
	I			26.9							
WEL	ESN			34 28		2.1					
	E	04	33	40			7.61	214		5.1	
	E			47							
	E			34 00							
	ESN			42		-4.5					
COB	ESN	04	35	05		-3.0	8.51	223		5.1	
GPZ							10.47	213		5.2	
MAR 06 23 41 54.9 41.07S 175.29E 33 KM SE 2.0 AVG MAG 66/ 122											
+ - 1.3 0.07 0.10 11											
WEL	IP	23	42	03.7	DIR	-0.7	0.45	241		3.9	
	IS			10.3		-1.0					
MNG	IP	23	42	02.8	D	-1.8	0.47	18			
	S			08.0		-3.7					
TON	EP	23	42	24.0		0.2	1.87	6		4.1	
	ES			48		2.4					
CNZ							1.88	6			
COB	P	23	42	24.0		-0.7	1.93	269		3.9	
	S			48.0		0.9					
TNZ	P	23	42	26.0		0.4	2.00	339		4.0	4.3
	IS			47.0		-1.8					
	E			52							
TUA	E	23	42	41			2.67	33		4.2	
KRP	EP	23	42	42.8		1.5	3.14	4		4.2	
	E			47.8							
	E			53							
	E			43 28							
KA1							3.25	242		3.8	
GPZ	S	23	43	19		-0.9	3.28	216		3.8	
FELT PONATAHI MM IV											
MAR 10 00 16 37.9 34.19S 178.18W 252 KM SE 1.9 AVG MAG 66/ 123											
+ - 2.1 0.18 0.22 22											
ECZ	EP	00	17	45	DIR	-1.9	4.39	216		4.7	4.6
	ES			18 43		2.3					
GNZ	EP	00	17	59		-0.2	5.40	213		4.8	4.6
	ES			19 02		-0.7					
KRP	P	00	18	12		1.5	6.31	232			
	ES			19 22		-1.0					
CNZ	EP	00	18	23		2.5	7.10	223			
	ES			44 44		4.4					
MNG	EP	00	18	32		-2.0	8.16	216			
	S			20 05		0.1					
WEL	ES	00	20	23		-1.5	9.02	216		5.5	

MAR 10		H	M	S	38.67S	175.65E	181 KM	SE	1.6	AVG MAG	66/ 124
		+ -		0.7	0.04	0.04	6			5.6	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	P	07	01	43.2		0.7	0.36	84			
	S			02 00		-1.4					
CNZ	IP.	07	01	44.8	J	1.6	0.54	189			
TON	P	07	01	45.0		1.8	0.54	189		4.8	
	S			02 03		0.4					
KRP	IP	07	01	44.8	JW	0.5	0.75	353			
	S			02 03.5		-1.0					
TNZ	IP	07	01	49.5	J	2.6	1.12	242			5.8
TUA							1.18	97			
GNZ	IP	07	01	55.0	D	1.1	1.86	90			6.0
	S			02 20		-1.6					
AUC	P	07	01	54		-0.7	1.93	339			
MNG	IP.	07	01	57.0	J	2.1	1.95	184			
ECZ	IP	07	02	01.2	D	0.3	2.48	68		6.3	5.9
	S			33		-1.0					
ONE	EP	07	02	08.5		0.5	3.06	340		4.5	
	S			45		-1.6					
COB	EP	07	02	12		1.0	3.30	222		5.8	
	S			52		0.2					
KA1	E	07	02	38			5.03	219			
	S			03 29		-2.2					
GPZ	P	07	02	38.8		-0.6	5.51	203			
	S			03 39		-3.6					
HJZ	EP	07	02	54.4		0.8	6.59	215			
	S			04 03		-5.0*					
ROX	EP	07	03	16.0		0.3	8.27	213			
	S			04 43		-4.7*					
FELT HAIPAWA AND DANNEVIRKE MM IV WELLINGTON MMIII											
MAR 10 14 50 40.2 39.87S 175.39E 71 KM SE 0.5 AVG MAG 66/ 125											
+ - 0.3 0.01 0.01 3											
TON	EP	14	50	56	DIR	0.6	0.67	10		3.6	
	S			51 06.9		0.1					
CNZ	P	14	50	55.7	D	0.3	0.68	10		3.5	4.0
	S			51 06.3		-0.6					
MNG	IP	14	50	56.1		-0.2	0.75	175		4.3	4.2
	S			51 08.5		0.2					
TNZ	EP	14	51	00.0		0.3	1.04	311		3.6	4.0
	S			14.0		-0.3					
TUA							1.73	53			
KRP	P	14	51	12.0		0.3	1.94	3		3.4	
	S			35.0		0.0					
COB	EP	14	51	18		0.4	2.36	238		3.9	
	ES			45		-0.5					
GNZ	EP	14	51	17.2		-0.7	2.38	60		4.2	
KA1							4.01	227		3.9	
GPZ							4.34	207		4.0	
MAR 10 15 59 22.5 39.96S 174.77E 108 KM SE 2.0 AVG MAG 66/ 126											
+ - 1.0 0.07 0.07 14											
TNZ	IP	15	59	43.0	D	0.9	0.83	339		4.9	4.9
	S			56		-1.0					
MNG	IP	15	59	44.1	J	1.8	0.85	141			
	I			57.4							
TON	P	15	59	44.9		1.5	0.96	38		3.8	
	S			59.2		-0.0					
CNZ	IP.	15	59	44.0	J	0.6	0.97	39			



COB	P	15 59 54.8	0.0	1.92	233	4.8														
	S	16 00 18	-0.9																	
KRP	P	15 59 58.0	0.6	2.12	17	4.7														
	S	16 00 24	0.4																	
GNZ	P	16 00 05.8	-1.6	2.84	64	4.3	4.8													
	E	33.5																		
	ES	40	-1.2																	
KAI	S	16 00 56	-3.5	3.60	224	4.9														
GPZ	EP	16 00 22	-1.7	4.06	202	5.6														
	S	01 04	-6.5																	
ONE				4.19	355	4.3														
MJZ	P	16 00 37.8	-0.7	5.15	217		3.9	4.5												
	S	01 41.8	4.6																	
FELT EXTENSIVELY CENTRAL NZ																				
MAR 10	H M S	19 13 35.2	38.81S	175.93E	12 KM	SE	0.5	AVG MAG	66/ 127	3.8										
		+ 0.2	0.02	0.02	R															
	H M S	19 13 40.8			DIR	RES	DIST	AZ	W-A	W P	W S									
WNZ	(PG)	50.0				0.5	0.23	37												
	E	56																		
CNZ	IPG	19 13 45.2	-0.1	0.49	217															
	E	56																		
KRP	IPG	19 13 54.0	-0.3	0.94	341			3.8												
TUA				0.96	90															
TNZ	PG	19 14 01.0	0.2	1.26	252			3.5												
	E	10																		
GNZ	PG	19 14 08.4	-0.2	1.65	85			4.1												
MNG	E	19 14 09.4		1.83	191															
	E	35.5																		
MAR 11	H M S	05 56 46.9	40.12S	174.90E	33 KM	SE	1.2	AVG MAG	66/ 128	4.2										
		+ 0.3	0.02	0.03	R															
	H M S	05 57 01.0			DIR	RES	DIST	AZ	W-A	W P	W S									
MNG	IP*	09.6			J	0.9	0.67	138		4.2	4.4									
	S*	06.0				-0.0														
TNZ	P*	05 57 06.0	0.2	1.02	337			3.8	4.1											
	S*	21.0				1.3														
CNZ	IP*	05 57 05.8	-0.5	1.05	29															
	ES*	21			D	0.3														
WEL	P*	05 57 08.0	-0.3	1.17	185			4.2	4.4	5.1										
	S*	23.8				-0.4														
WNZ	E	05 57 23.0		1.76	32															
COB	EP*	05 57 22		1.91	239			3.6												
	S*	45				-1.3														
				2.18	54															
TUA	EPN	05 57 22.8	1.8	2.25	13			4.0	4.3											
KRP	IP*	26.2				-0.5														
	S*	54				-2.4														
GNZ	E	05 57 46		2.83	60															
KAI				3.56	226			3.9												
FELT OKOIA MMIV AND WANGANUI																				
MAR 11	H M S	06 27 19.1	33.47S	179.62E	385 KM	SE	2.0	AVG MAG	66/ 129	4.8										
		+ 2.2	0.14	0.25	24															
	H M S	06 28 38			DIR	RES	DIST	AZ	W-A	W P	W S									
ECZ	E	29 35				-0.4	4.48	199												
ONE	EP	06 28 44	-1.9	5.47	243			4.7												
GNZ	P	06 28 48	1.6	5.51	200			4.3	4.3											
	S	29 53				-1.8														
TUA				5.94	205															
KRP	P	06 28 52	0.9	5.94	220			4.5												
CNZ	P	06 29 03.8	1.5	6.92	213															
	ES	30 27				3.5														

TON									6.93	213	5.0									
MNG	P	06 29 16	-0.3	8.14	207															
	ES	30 47	-1.7																	
WEL	EP	06 29 25	-1.2	8.99	208	5.6														
	ES	31 07	0.4																	
COB	ES	06 31 22	-0.6	9.74	216	5.3														
MAR 11	H M S	11 02 53.3	37.72S	177.61E	135 KM	SE	1.8	AVG MAG	66/ 130	4.2										
		+ 1.6	0.08	0.06	12															
	H M S	11 03 15.4			DIR	RES	DIST	AZ	W-A	W P	W S									
ECZ	IP	31	0.6	0.75	88			4.7	4.4											
	ES	31	-0.2																	
GNZ	IP	11 03 18.2	1.6	0.97	160			4.5	4.6											
	ES	34	-0.5																	
TUA				1.14	198															
KRP	P	11 03 20.9	-3.0	1.65	262			3.6												
	S	47.0	-0.2																	
TON	E	11 03 33		2.19	227	3.4														
	ES	04 00	1.3																	
TNZ	EP	11 03 43	3.0	2.92	239			4.0												
MNG	P	11 03 45.2	-0.0	3.33	209			4.2	4.0											
	S	04 24	-0.9																	
WEL	EP	11 03 56.0	-0.6	4.18	211	4.6	4.4	4.3												
	ES	04 44	-1.1																	
MAR 12	H M S	08 21 14.4	38.80S	175.33E	277 KM	SE	1.4	AVG MAG	66/ 131	4.4										
		+ 1.1	0.07	0.07	8															
	H M S	08 21 52.0			DIR	RES	DIST	AZ	W-A	W P	W S									
TON		22 20	1.5	0.43	158			3.8												
CNZ	IP	08 21 52.5	0.8	0.83	242															
	S	08 21 51.7	-0.3	0.89	11															
TNZ	EP	22 19.5	-1.9																	
KRP	IP	08 21 52.5	0.8	0.83	242															
	S	08 21 51.7	-0.3	0.89																



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ	IP*	00	47	30.0	J	-0.3	0.25	323			
TUA	IPN	00	47	36	J	-0.1	0.83	272		4.7	4.6
	SN			49		0.2					
ECZ	E(PN)	00	47	43		0.2	1.17	13			4.4
MAR 15		H M S									66/ 13
		16 49 07.1	37.32S	175.63E			300 KM	SE 1.1		AVG MAG	5.5
		+ 0.7	0.05	0.06			6				
		H M S			DIR	RES	DIST	AZ	W-A	W P	W S
KRP	IP	16 49 48.1	JNE	0.2	1.05	235				5.2	
	S	50 20		0.2							
WNZ	EP	16 49 49.8		-0.0	1.37	197				4.8	
TUA	P	16 49 51.1		0.2	1.54	165					
	E	50 17									
AUC	P	16 49 50.5		-0.4	1.55	287				5.4	
ECZ	P	16 49 49.8		-1.3	1.57	104				5.4	
	E	50 15									
GNZ	IP	16 49 52.0		-0.1	1.72	141				6.1	6.0
	E	50 18									
CNZ					2.06	204					
ONE	EP	16 49 57		-0.4	2.39	310			4.5		
	E	50 31									
TNZ	P	16 50 01.0		1.9	2.57	223				5.3	
MNG	IP	16 50 08.0	J	0.5	3.41	195				5.6	
	S	47.5		-7.1*							
WEL	IP	16 50 16.3	J	0.2	4.22	199			5.9	5.6	5.8
	ES	51 10		-0.2							
COB	EP	16 50 23		-0.1	4.83	218			5.5		
	S	51 23		0.4							
GPZ	P	16 50 50		0.2	7.05	204			6.2		
	S	52 11		0.6							
MJZ	EP	16 51 02		-1.1	8.14	213					
	S	52 33		-1.3							
ROX	EP	16 51 24		0.2	9.82	212					
	S	53 10		-1.6							
MSZ	EP	16 51 23.2		-1.0	9.86	219					
	S	53 11		-1.4							
MNW	EP	16 51 38		2.0	10.81	216					
	ES	53 36		2.4							
FELT GISBORNE MM IV											
MAR 15		H M S									66/ 13
		23 27 30.8	38.77S	175.89E			12 KM	SE 0.8		AVG MAG	3.6
		+ 0.4	0.03	0.02			R				
		H M S			DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	ESG	23 27 38.2		-0.7	0.22	51					
	I	42.5									
CNZ	PG	23 27 41.0		-0.3	0.51	212				3.4	
KRP	PG	23 27 49.3		0.4	0.89	342				3.5	
TUA	EPG	23 27 51.5		0.7	0.99	93				3.8	
TNZ	PG	23 27 56.0		-0.1	1.25	250				3.5	
GNZ	E	23 28 10.8			1.67	86					
MAR 16		H M S									66/ 13
		10 00 23.5	37.49S	177.66E			213 KM	SE 1.1		AVG MAG	4.1
		+ 1.0	0.07	0.07			8				
		H M S			DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	EP	10 00 52.2		-1.1	0.73	107				4.0	
GNZ	P	10 00 57.2		1.0	1.19	166				4.1	4.4
	ES	01 20.5		-1.0							
TUA	EP	10 00 58.0		0.4	1.38	197				4.0	4.3
	ES	01 24.0		-0.1							
KRP	P	10 00 59.7		-1.2	1.74	255				4.0	
CNZ	P	10 01 08.8		1.4	2.38	224				3.5	3.1
	ES	42		0.7							
TNZ	E	10 01 20			3.09	236					

## LOCAL EARTHQUAKES

MNG	P	10 01 21.8		0.8	3.56	208				4.1	3.9
	ES	02 06		0.5							
WEL	P	10 01 2.0		0.5	4.41	210			4.7	4.2	4.2
	S	02 24		-0.1							
COB	ES	10 02 43		-0.1	5.25	225			4.6		
MJZ	ES	10 03 56		-1.9	8.48	218					
MAR 17		H M S									66/ 137
		00 13 56.9	37.93S	177.39E			12 KM	SE 2.4		AVG MAG	4.2
		+ 1.2	0.07	0.05			R				
		H M S			DIR	RES	DIST	AZ	W-A	W P	W S
GNZ	IPG	00 14 13.0	J	-1.5	0.86	145				4.3	4.5
	SG	24.1		-2.1							
TUA	PG	00 14 15.0		-0.1	0.89	192				4.4	4.4
	SG	28		0.8							
ECZ	PG	00 14 17.6		1.5	0.94	76				4.6	
	I	21.2									
KRP	PG	00 14 25.8		-0.8	1.47	270				3.4	
	SG	44		-2.4							
CNZ					1.92	228					
TNZ	EP*	00 14 42.8		-0.9	2.67	241				3.9	
	EPG	54.0		3.1							
MNG	EPN	00 14 42.0		-2.3	3.06	208				3.7	
	EP*	55		4.6							
	E	15 15									
WEL	EP*	00 15 05		0.1	3.91	210				4.2	
	E	36									
	E	16 01									
COB	E	00 16 11			4.78	227			4.4		
MAR 20		H M S									66/ 138
		17 42 24.2	45.11S	163.26E			162 KM	SE 1.0		AVG MAG	5.3
		+ 0.8	0.08	0.08			7				
		H M S			DIR	RES	DIST	AZ	W-A	W P	W S
MSZ							0.50	331			
MNW							0.81	214			
ROX	IP	17 42 49.0	D	0.0	0.83	117				5.3	
	S	43 07.5		-0.6							
MJZ	IP	17 42 59.4	D	-0.2	1.94	55				5.0	5.4
	S	43 28		1.0							
KA1	EP	17 43 18.0		-0.4	3.44	43			5.4		
	S	44 00		0.0							
GPZ	EP	17 43 19.8		1.4	3.45	67			5.3		
	S	44 00		-0.0							
COB	EP	17 43 40.0		-1.0	5.18	41			5.4		
	S	44 38		-2.5*							
WEL	P	17 43 53.8		0.7	6.10	54			5.4		
	S	45 01.8		-0.5							
MNG	EP	17 44 03.0		-1.5	6.95	52					
	S	45 22		-0.5							
TNZ	EP	17 44 11		-0.3	7.46	40					
CNZ	P	17 44 20.5		1.9	8.01	45					
MAR 20		H M S									66/ 139
		23 38 48.7	38.84S	179.08E			12 KM	SE 2.2		AVG MAG	4.3
		+ 1.5	0.06	0.07			R				
		H M S			DIR	RES	DIST	AZ	W-A	W P	W S
GNZ	EPG	23 39 08.0		2.0	0.85	283				3.6	4.6
	ESG	17.5		-0.0							
	I	23.0									
ECZ	P*	23 39 12.7		2.1	1.22	340				4.7	
TUA	PG	23 39 17.2		-2.0	1.51	271				4.3	4.5
	ESG	41		1.4							
CNZ	P*	23 39 35.5		-1.7	2.77	261				4.0	3.8
	ES*	40 12		-1.7							
TON	E	23 39 39			2.78	261					
	E	40 13									



		H	M	S														
	KRP	EP*	23	39	37.0	-2.9	2.93	287		3.7								
		E	40	05														
	MNG	PN	23	39	38.4	-0.8	3.29	236		4.1	4.1							
		SN	40	20.2		2.9												
	TNZ	E	23	39	48		3.67	263										
		E	40	45														
	WEL	EPN	23	39	49	-1.3	4.11	232	4.8	4.2	4.9							
		SN	40	38		0.9												
	COB	E	23	41	13		5.37	243	4.6									
	GPZ	ESN	23	41	40	-2.8	6.86	223	4.8									
	KAI	E	23	41	46		6.89	235	4.6									
	MJZ	EPN	23	46	47	1.2	8.26	229										
		ESN	42	19		2.7												
MAR 26			H	M	S													
			22	06	56.4		38.45S	175.14E	170 KM	SE	1.5		AVG MAG	4.5	66/140			
						+ 1.3	0.09	0.08	14									
	TUA	P	22	07	23		0.8	0.87	115			4.0	4.6					
		ES	40			-2.2												
	CNZ	P	22	07	23.4	1.1	0.88	211		4.1								
	GNZ	P	22	07	28.0	0.3	1.49	98		4.4	4.4							
		S	53			1.2												
	TNZ	EP	22	07	29.6	1.3	1.56	241		4.0								
	ECZ	P	22	07	32.1	-1.5	2.05	69		5.3								
	MNG	IP	22	07	36.2	0.5	2.22	193		4.8	4.3							
		S	08	07		1.1												
	WEL	P	22	07	44.8	-0.6	3.02	200	4.6	4.8	4.5							
		S	08	23		-0.2												
	COB	ES	22	08	37	-1.9	3.72	224	4.4									
	MJZ	E	22	08	50		6.99	216										
		E	10	31														
MAR 27			H	M	S													
			00	43	18.7		40.98S	173.78E	106 KM	SE	1.5		AVG MAG	3.9	66/141			
						+ 0.9	0.05	0.05	9									
	COB	P	00	43	39.8		2.0	0.80	262		3.8							
		S	52.5			0.0												
	WEL	P	00	43	39.5	1.6	0.81	113	4.3	4.1	4.8							
		S	51.5			-1.1												
	MNG	IP	00	43	43.8	-0.1	1.34	75		4.2	3.6							
		E	44	01														
	TNZ	P	00	43	51	1.0	1.85	15		3.9	3.8							
		ES	44	11.5		-1.9												
	TON						2.23	38	3.5									
	CNZ	EP	00	43	55.3	0.2	2.23	38		3.5								
		E	44	06														
	KRP						3.34	25										
	MJZ	ES	00	45	02	-0.3	3.88	218			3.4							
	MSZ	ES	00	45	45	-1.3	5.67	227			3.6							
MAR 27			H	M	S													
			01	06	18.6		33.10S	175.64E	344 KM	SE	0.9		AVG MAG	5.7	66/142			
						+ 1.2	0.29	0.34	14									
	ECZ	EP	01	07	51		0.7	6.04	219									
		ES	09	02		-0.3												
	GNZ	EP	01	08	03	1.1	7.03	217										
		ES	09	23		-0.1												
	TUA	EP	01	08	08	-0.7	7.61	220										
		ES	09	35		-0.4												
	KRP						7.99	231										
	MNG	EP	01	08	34	-1.1	9.81	218										
		ES	10	24		1.0												
	WEL	ES	01	10	41	-0.6	10.66	218	5.9									
	COB	ES	01	11	03	0.3	11.64	224	5.4									

		H	M	S														
MAR 27			H	M	S													
			06	16	24.6		45.11S	167.83E	33 KM	SE	2.1		AVG MAG	4.5	66/143			
						+ 1.1	0.06	0.08	8									
	MSZ	IP*	06	16	33.4	J	-0.9	0.44	8									
	MNH	IP*	06	16	38.1	D	-0.2	0.69	192		4.8							
	ROX	P*	06	16	44.2	D	-1.0	1.11	110		4.5	4.6						
		S*	17	01		0.7												
	MJZ	PN	06	16	56.3		-1.7	2.19	60		3.9	4.2						
		ESN	17	22		-1.2												
	COB	EPN	06	17	40		-1.5	5.39	43	5.0								
		ESN	18	39		-1.8												
	WEL	ESN	06	19	03		-0.8	6.35	55	5.0								
	MNG	EPN?	06	18	05		-0.9	7.19	54									
		EPN	10			4.1												
	TNZ	EPN	06	18	11		-1.1	7.66	42									
		ESN	19	38		2.8												
	CNZ	PN	06	18	23		3.3	8.23	47									
		ESN	19	55		6.2*												
MAR 27			H	M	S													
			13	56	08.3		38.28S	175.34E	12 KM	SE	1.0		AVG MAG	3.5	66/144			
						+ 1.0	0.05	0.02	8									
	WNZ	ESG	13	56	22.5		0.4	0.39	208									
		E	24.2															
	KRP						0.73	299										
	TUA	SG	13	56	35.1		-1.2	0.82	130									
		E	50.0															
	CNZ	P*	13	56	28.0		-0.3	1.10	214		3.5							
	GNZ	ES*	13	56	52		0.9	1.37	106									
	TNZ	EPG	13	56	43.5		-0.9	1.78	239		3.7							
		E	57	03														
	MNG	P*	13	56	51.8		0.9	2.42	196		3.6	3.1						
		ES*	57	23		0.2												
MAR 27			H	M	S													
			14	31	15.9		38.95S	175.77E	177 KM	SE	1.6		AVG MAG	4.7	66/145			
						+ 1.0	0.08											







ONE	P	19 55 13	0.5	4.62	8				
	E	56 18							
ECZ	P	19 55 12.8	0	-0.4	4.67	57	5.7	4.9	
	E	15							
	E	56 03							
	S	06		0.1					
ROX	E	19 56 33			6.00	210			
	E	34.5		-4.3*					
MSZ	P	19 55 30.3			6.02	223			
	S	56 35		-0.3					
	E	38		-4.2*					
MNW	P	19 55 42.7			6.97	217			
	S	57 00		-1.5					
APR 03	H M S	14 37 57.4	38.91S	175.80E	12 KM	SE	2.3	AVG MAG	66/ 152
		+ 0.4	0.02	0.03	R			4.6	
	H M S	14 38 05.9			DIR	RES	DIST	AZ	W-A W P W S
CNZ	IPG	14 38 06		1.2	0.35	215			
TON	PG	14 38 06		1.1	0.35	215	3.6		
	SG	12		2.2					
WNZ	E(PG)	14 38 06		0.8	0.37	40			
	E	07							
	ESG	09		-1.3					
KRP	IPG	14 38 16.7	JW	-1.2	1.01	348			
	E	19							
	E	23							
	SG	31		-0.6					
TUA	IPG	14 38 18.5	D	-0.4	1.06	85	5.3	4.8	
	E	20							
	SG	33		-0.3					
THZ	PG	14 38 20.7	J	0.2	1.14	256	4.4		
	SG	39		3.0					
MNG	PG	14 38 30.0	J	-2.2	1.72	188	5.0	4.6	
	ESG	54		-1.4					
	E	58							
GNZ	EP*	14 38 29.5		1.0	1.76	82	5.1		
	EPG	33		0.0					
	I	38							
AUC	P*	14 38 36		-0.2	2.21	338			
	PG	41		-1.0					
	ESG	39 13		1.2					
	E	17							
ECZ	EP*	14 38 40		-0.9	2.48	61	4.8	4.3	
	PG	51		3.4					
	ESG	39 24		3.0					
WEL	EP*	14 38 40		-1.2	2.50	198	4.2	5.2	4.8
	EPG	45		-2.9					
	ES*	39 11		-3.1					
	ESG	21		-0.7					
	EL	37							
COB	E	14 38 50.5			3.20	226	3.9		
	EP*	57		3.7					
	S*	39 38.5		3.2					
	SG	53		7.6*					
ONE	E(P*)	14 38 52		-3.6	3.34	339	4.2		
	PG	39 04		-0.9					
	S*	38		-1.3					
KAI	E(P*)	14 39 19		-3.6	4.91	221	4.6		
	E	25							
	EPG	40		3.2					
	ESG	40 39		-4.0					
	E	59							
GPZ	EP*	14 39 29		-0.8	5.34	205	4.0		
	E	39							
	EPG	44		-1.3					
	ESN	40 17		1.7					

	E	24							
MJZ	PN	14 39 38		7.5*	6.46	217			
	E	41							
	P*	53		4.0					
	E	40 51							
MSZ	PN	14 40 00.5		6.5*	8.23	223			
	E	06							
	E	41 48							
FELT TOKAANU AND MOTUOAPA MMIV									
APR 03	H M S	14 40 02.6	38.90S	175.79E	12 KM	SE	1.0	AVG MAG	66/ 153
		+ 0.3	0.02	0.02	R			3.1	
	H M S	14 40 11			DIR	RES	DIST	AZ	W-A W P W S
CNZ	EPG	14 40 11		0.9	0.36	213			
	E	13							
	ESG	15		-0.1					
TON	ESG	14 40 16		0.7	0.36	213	2.0		
KRP	EPG	14 40 22		-0.8	0.99	348			
	ESG	36.5		0.3					
	E	38							
TUA	EPG	14 40 25		0.8	1.06	85	3.7	3.3	
	SG	38.5		-0.1					
MNG	EPG	14 40 36		-1.7	1.73	188	3.5		
	E	38							
	ESG	41 01		-0.1					
APR 03	H M S	14 45 18.0	38.94S	175.85E	12 KM	SE	1.9	AVG MAG	66/ 154
		+ 0.5	0.03	0.03	R			3.3	
	H M S	14 45 25.9			DIR	RES	DIST	AZ	W-A W P W S
CNZ	PG	14 45 25.9	J	0.5	0.35	222			
	E	28							
TON	E	14 45 29			0.36	222	2.2		
	SG	32		1.5					
	E	35							
WNZ	ESG	14 45 32		1.2	0.37	33			
TUA	PG	14 45 39.5		0.6	1.03	83	3.8	3.7	
	E	40.5							
	SG	53.5		0.7					
KRP	PG	14 45 37.2	J	-1.9	1.04	346			
	E	38.5							
	E	50							
	SG	52		-1.2					
	E	54							
THZ	EPG	14 45 42		0.3	1.17	257	3.0	3.0	
	ESG	46 00		2.5					
MNG	PG	14 45 50.5	J	-1.9	1.70	189	3.7		
	E	54							
GNZ	PG	14 45 54		1.1	1.73	81	3.7		
	E	58							
WEL	E(PG)	14 46 05		-3.3	2.49	199			
APR 03	H M S	14 45 40.5	38.91S	175.83E	12 KM	SE	1.8	AVG MAG	66/ 155
		+ 0.5	0.03	0.03	R			3.3	
	H M S	14 45 53			DIR	RES	DIST	AZ	W-A W P W S
WNZ	ESG	14 45 53		0.3	0.35	38			
CNZ	E(PG)	14 45 49		0.8	0.37	217			
	ESG	34.5		1.2					
TON	E	14 45 57			0.37	217	2.2		
KRP	E(PG)	14 45 59		-1.9	1.01	347			
	E	46 01							
	ESG	14		-0.6					
	E	16							
TUA	EPG	14 46 03.5		2.0	1.04	85	3.6	3.6	
	SG	15.5		-0.1					







		S	20 07	-2.9			
MSZ	EP?	01 19	40.5	-0.3	6.04	222	
	E		42				
	ES	20 50		0.6			
APR 04	H M S	11 28	16.7				66/ 161
	+-		1.9				
	H M S	36.41S	177.97E		12 KM	SE 2.8	AVG MAG 3.7
		0.08	0.08		R		
ECZ	E	11 28	43		DIR RES	DIST AZ	W-A W P W S
	EPG		46	1.8		1.36 160	3.9 3.9
	SG	29 04		1.4			
	ET	30 30					
GNZ	E(P*)	11 28	58	2.1	2.23	179	3.9 3.6
	ESG	29 28		-3.8			
KRP	PN	11 28	53.5	-2.3	2.46	231	
	S*	29 30		-2.3			
TUA	EP*	11 29	04	3.8	2.48	195	3.8
ONE	EPN	11 29	02	-1.2	2.99	281	3.7
	PG		18	0.8			
	ESN		37	-1.3			
	ES*		52	3.8			
CNZ	E	11 29	13		3.38	214	3.3
	P*		15	-0.6			
TON	E	11 29	22		3.39	214	
	E		33				
	S*	30 02		1.9			
	ESG		15	4.1			
TNZ	EP*	11 29	24	-1.7	3.97	225	3.6
	E		30				
MNG	E	11 29	29		4.63	204	3.4
	EP*		34	-3.0			
	PG		47	-3.3			
APR 04	H M S	12 39	59.8				66/ 161
	+-		1.0				
	H M S	36.54S	177.66E		12 KM	SE 1.9	AVG MAG 3.5
		0.05	0.05		R		
ECZ	(PN)	12 40	23	-1.2	1.35	149	3.9 3.9
	PG		27	-0.3			
	E		34				
	SN		40.5	-1.7			
	ET	42 09					
GNZ	PN	12 40	33	-1.4	2.12	172	3.7 3.6
	P*		38	0.8			
	ESN	41 02		2.0			
	S*		08	2.7			
	ESG		15	3.5			
KRP	PN	12 40	35.5	0.2	2.19	230	
	PG		52	7.8*			
	E	41 50					
TUA	E(PN)	12 40	38	1.2	2.30	190	3.8 3.4
	P*		41	0.7			
	PG		45	-2.4			
	ESN	41 02		-1.5			
	SG		16	-1.5			
ONE	EPN	12 40	43	-0.5	2.78	285	3.4
	PG		57	1.0			
	ESN	41 14		-2.3			
	ES*		28	3.1			
	ESG		43	9.6*			
CNZ	E	12 40	51		3.14	212	3.1
	EP*		57	2.3			
TON	E	12 41	00		3.15	212	3.3
	E		10				
	ESG		57	11.0*			
TNZ	EPN	12 40	56	0.1	3.71	223	3.6

MNG	EP*		41 03	-1.4			
	E	12 41	10		4.42	202	3.2
	P*		16.5	-0.0			
	EPG		28	-1.2			
	E	42 02					
	S*		12	-2.3			
APR 04	H M S	17 09	55.3				66/ 162
	+-		0.5				
	H M S	38.82S	175.88E		12 KM	SE 1.6	AVG MAG 2.9
		0.03	0.03		R		
WNZ	PG	17 10	00.3	-0.5	0.25	43	
	SG		03.9	-0.6			
CNZ	PG	17 10	06	1.1	0.46	214	
TON	E	17 10	09		0.47	215	1.6
	SG		11	-0.6			
KRP	PG	17 10	13.5	-0.7	0.93	343	
	SG		27	0.2			
TUA	EPG	17 10	14.5	-0.9	0.99	90	3.5 2.9
	I		15.5				
	ESG		31	2.2			
TNZ	PG	17 10	22.5	2.3	1.23	252	3.0
	E		45				
MNG	EPG	17 10	30	-2.3	1.83	190	3.2
	E		32				
	E		11 02				
APR 04	H M S	17 10	51.9				66/ 163
	+-		0.4				
	H M S	38.80S	175.94E		12 KM	SE 1.1	AVG MAG 2.8
		0.03	0.03		R		
WNZ	PG	17 10	56.6	-0.0	0.21	37	
	SG		11 00	0.2			
CNZ	EPG	17 11	04	1.7	0.50	217	
TON	ESG	17 11	08	-1.4	0.51	218	2.5
KRP	EPG	17 11	10	-0.8	0.93	340	
TUA	EPG	17 11	11	-0.1	0.95	91	3.0
	I		12				
TNZ	EPG	17 11	18.5	0.8	1.28	252	3.0
MNG	PG	17 11	29	-0.3	1.85	191	2.9
APR 05	H M S	01 23	57.0				66/ 164
	+-		3.4				
	H M S	36.46S	177.67E		12 KM	SE 3.3	AVG MAG 3.3
		0.15	0.10		R		
ECZ	PG	01 24	24.5	-1.2	1.41	151	4.0 3.7
	E		30				
	SG		46	1.2			
	ET	26 05					
GNZ	E(PG)	01 24	45	3.6	2.19	173	
KRP	E(PG)	01 24	48	5.6	2.24	229	3.7
TUA	EP*	01 24	37	-1.7	2.38	190	3.5 3.4
	ESG		25 18	0.9			
ONE	E	01 25	32		2.76	283	3.0
CNZ	P*	01 24	51	-2.0	3.21	211	3.3 2.7
	E		56				
	PG		25 03	1.1			
	SG		45	-0.1			
TON	E	01 25	55		3.21	211	
TNZ	E	01 25	06		3.76	223	
MNG	P*	01 25	10	-4.9	4.49	202	2.9 2.7
	S*		26 11	-2.5			
APR 05	H M S	01 27	07.3				66/ 165
	+-		2.0				
	H M S	36.13S	177.76E		12 KM	SE 3.7	AVG MAG 3.6
		0.09	0.09		R		











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		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
KRP	IP	13	51	28.5	DSE	-0.5	0.49	345					
	S			48.5		-2.2							
CNZ	P	13	51	31.9	J	1.4	0.81	188		4.0	3.7		
	E			58									
	E			52 02									
TON	EP	13	51	32		1.5	0.81	189	3.1				
	S			54		0.5							
	E			52 00									
TUA	P	13	51	33.2	D	0.1	1.21	110		4.2	4.6		
	E			53									
	ES			57		-1.2							
	I			52 03.5									
	I			06									
TNZ	P	13	51	36.6	D	2.8	1.30	232		4.4			
AUC	P	13	51	36.5	D	-0.9	1.70	334					
GNZ	EP	13	51	38.5		-0.2	1.84	98		3.8	4.2		
	E			58									
	E			52 03									
	ES			07		-0.9							
MNG	IP	13	51	43.9	J	1.3	2.22	184		4.5	4.4		
	S			52 14.5		-0.4							
ONE	E	13	51	53			2.83	337					
WEL	P	13	51	52.4	D	1.3	2.97	194	4.5	4.2	4.7		
	E			52 30									
	S			31		0.9							
COB	EP	13	52	00		2.3	3.53	219	4.2				
	E			42									
	S			43		1.3							
KAI	ES	13	53	19		-1.5	5.26	217	4.5				
	E			44									
GPZ	EP	13	52	26		-0.0	5.77	203	4.8				
	S			53 30		-2.3							
MJZ	P	13	52	41		1.3	6.84	214					
	E			42									
	E			53 53.5									
	S			55.5		-1.4							
ROX	ES	13	54	35		-1.0	8.52	212					
MSZ	EP?	13	53	02		-0.1	8.56	220					
	E			05									
	ES			54 35		-2.0							
APR 13	H M S	23	20	05.8			40.77S	174.56E	12 KM	SE	1.7	AVG MAG	66/ 173
				+ 0.3			0.02	0.02				3.6	
	H M S	23	20	16.6	DIR	RES	DIST	AZ	W-A	W P	W S		
WEL	(PG)					-0.3	0.54	163	3.6	3.9	4.0		
	S*			24		0.4							
	ISG			25		0.7							
MNG	IP*	23	20	19.6		0.4	0.72	78		3.9	4.0		
	EPG			22		1.5							
	E			24									
	S*			28.5		-0.5							
	ESG			31		0.8							
COB	P*	23	20	33		1.8	1.42	257	3.1				
	S*			53		2.8							
TNZ	(PG)	23	20	37.5		-0.5	1.59	355		3.6	3.7		
	ESN			51.5		-2.1							
	ESG			21 01		1.5							
TON	EPG	23	20	42		1.0	1.74	26	3.1				
	S*			58		-1.7							
CNZ	P*	23	20	36.5		-0.2	1.74	26		3.6	3.8		
	PG			42		0.9							
	E			45									
	S*			58.5		-1.4							
	ESG			21 04		-0.7							
KRP	E(PG)	23	21	04.5		-0.8	2.94	15					

## LOCAL EARTHQUAKES

	E			14.5									
	SN			28		1.7							
	E			57									
KAI	EPG	23	21	04		-1.3	2.94	232		3.1			
	ESN			26		-0.3							
GPZ	SN	23	21	27		-6.4*	3.25	205		3.8			
MJZ	PN	23	21	09		-2.5	4.42	222		3.2	3.0		
	P*			25		2.5							
	SN			58		-3.6							
FELT NEWTOWN													
APR 17	H M S	12	54	07.6			38.90S	175.63E	162 KM	SE	1.9	AVG MAG	66/ 174
				+ 1.2			0.06	0.06				4.0	
	H M S				DIR	RES	DIST	AZ	W-A	W P	W S		
TON	P	12	54	31.5		1.8	0.31	194		2.6			
	ES			47		0.3							
KRP	P	12	54	33.5		0.2	0.97	355					
	S			50.5		-2.7							
TNZ	P	12	54	36		2.3	1.02	253			3.2	3.2	
	E			58									
TUA	P	12	54	36.0		0.7	1.19	86			4.1	4.3	
	S			55		-1.6							
MNG	IP	12	54	43.1	J	2.5	1.72	184			4.4	4.2	
	S			55 06.5		0.4							
GNZ	P	12	54	43.5	D	1.1	1.88	83			4.6	4.1	
	S			55 07.5		-1.8							
WEL	P	12	54	51.5		2.0	2.48	195	3.9	4.3	4.3		
	ES			55 22		0.3							
	E			23									
	E			24									
ECZ	P	12	54	51		0.2	2.59	63			4.6		
COB	S	12	55	37		1.0	3.12	225		4.0			
KAI	ES	12	56	14		-1.8	4.84	220		3.9			
GPZ	S	12	56	24		-2.6	5.30	204		4.5			
MJZ	S	12	56	50.5		-2.3	6.40	216					
APR 19	H M S	13	04	01.1			36.77S	176.47E	12 KM	SE	3.1	AVG MAG	66/ 175
				+ 3.1			0.08	0.17				3.0	
	H M S				DIR	RES	DIST	AZ	W-A	W P	W S		
AUC	EPG	13	04	31		2.2	1.36	266					
	E			34.5									
KRP	PG	13	04	29		-0.0	1.38	213					
	E			34									
	SG			45		-2.6							
ONE	P*	13	04	36		0.1	1.97	299					
	E			44									
	S*			05 02		-0.0							
	E			25									
CNZ	PG	13	04	54		1.6	2.54	196			2.8	2.7	
	S*			05 24		5.0							
	SG			32		5.3							
TNZ	EPG	13	04	59		-1.3	2.93	214				3.2	
	E			05 23									
	ES*			28		-2.8							
MNG	E(PG)	13	05	19		-1.4	3.92	191				2.7	
	E			26									
	ESG			06 10		-3.4							
	E			35									
WEL	EP*?	13	05	20		-2.7	4.71	196				3.4	
	E												
FELT COROMANDEL MMIV													
APR 19	H M S	22	51	03.5			32.10S	179.11W	330 KM	SE	2.9	AVG MAG	66/ 176
				+ 2.2			0.20	0.34				5.3	



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	EP	22	52	31		-2.1	5.90	198		5.0	5.1
	ES		53	45		1.5					
AUC	EP	22	52	47		1.7	6.93	225			
GNZ	E(P)	22	52	46		0.6	6.93	199			
	E		53	59							
	E		54	02							
	ES			10		4.7					
KRP	E(P)	22	52	48		-1.5	7.28	216			
	ES		54	16		3.2					
TUA	E(P)	22	52	49		-1.4	7.35	203			
	E		54	11							
	ES			16		1.7					
CNZ	EP	22	53	02		0.1	8.31	210			
	E		54	40							
	E			45							
TNZ	EP	22	53	11		2.8	8.83	215			
MNG	EP	22	53	11.5		-5.4	9.55	206			
	I			15.5							
	E		54	52							
	E			56							
	S			59		-3.2					
WEL	E(P)	22	53	25		-2.2	10.40	206	5.9		
	E		55	15							
	ES			18		-2.7					
COB	ES	22	55	32.5		-3.6	11.10	214	5.1		
KAI	ES	22	56	13		-1.1	12.84	213	5.0		
GPZ	E	22	56	20			13.27	207	5.6		
	S			23		-0.6					
MJZ	EP?	22	54	16.5		1.4	14.41	212			
ROX	E(P)	22	54	37		3.8	16.09	211			
	ES		57	24		2.4					

APR 21 H M S 20 27 38.1 35.76S 179.19E 33 KM SE 2.4 AVG MAG 4.1  
 +- 1.9 0.09 0.14 R 66/ 17

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	PN	20	28	11		2.1	2.00	195		4.2	4.1
	S*			40		-0.3					
GNZ	PN	20	28	24		1.0	3.03	198		4.3	4.3
	SN			58		0.9					
	E			29 02							
TUA	PN	20	28	30		1.3	3.45	207		4.5	4.4
	P*			40		1.5					
	SN			29 11		3.6					
	S*			26		2.3					
KRP	EPN	20	28	31.5		0.2	3.64	232			
	EP*			41		-0.7					
	SN			29 15		3.0					
CNZ	PN	20	28	44		1.0	4.49	219		3.6	3.3
	P*			58		1.7					
	E			29 41							
TNZ	EPN	20	28	51		-0.6	5.13	227		3.8	
	P*			29 08		0.8					
MNG	PN	20	28	56		-2.7	5.66	210		3.5	3.9
	P*			29 11		-5.3					
	SN			30 00		-0.9					
	S*			23		-7.1*					
WEL	SN	20	30	19		-2.4	6.52	211	4.5		
CUB	SN	20	30	41		-0.2	7.35	222			
KAI	SN	20	31	20		-2.2	9.06	219	4.7		
GPZ	SN	20	31	26		-4.1	9.39	210	4.7		

APR 21 H M S 23 36 50.3 39.37S 177.55E 12 KM SE 2.0 AVG MAG 3.8  
 +- 0.9 0.04 0.05 R 66/ 17

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	P*	23	37	01.0	D	-1.4	0.64	331		4.3	4.5
	E			07							
	S*			09		-2.3					
GNZ	P*	23	37	04.5		-0.8	0.81	27		4.2	4.3
	I			10.5							
	S*			17.5		1.1					
CNZ	E(P*)	23	37	19		0.8	1.57	276		3.8	3.5
	EPG			26		4.0					
	S*			38		-1.0					
TON						1.57	276	3.0			
MNG	PN	23	37	23.8		0.3	2.02	231		3.3	3.4
	E			36							
	ESN			50.5		2.6					
KRP	(P*)	23	37	29		1.0	2.14	312			
TNZ	E(PG)	23	37	42		1.7	2.47	273		3.4	3.1
	ESG			38 13		-0.6					
WEL	SN	23	38	09		0.2	2.86	227	3.7		3.8
COB	SN	23	38	38		0.4	4.07	244			
KAI	SN	23	39	12		-3.0	5.62	234	4.0		
GPZ	SN	23	39	13		-3.4	5.68	219	4.0		
MJZ	SN	23	39	49		0.5	7.03	227			
FELT WAIROA MMIII											
APR 22 H M S 06 08 55.7 44.29S 167.76E 12 KM SE 1.7 AVG MAG 4.8 +- 0.7 0.03 0.04 R 66/ 179											
MSZ	IPG	06	09	03.0	DIR	RES	DIST	AZ	W-A	W P	W S
MNW	P*	06	09	21.5		-0.8	1.49	184		5.2	
	I			22							
	S*			41		-1.1					
ROX	EP*	06	09	24.8		0.4	1.62	137		5.5	5.3
	S*			46.5		0.6					
MJZ	PN	06	09	28.8		0.6	1.97	82		4.5	4.7
	P*			33		2.5					
	PG			38		2.4					
	SN			54.5		2.4					
	S*			57.5		0.9					
KAI	PN	06	09	45		0.2	3.19	58	5.0		
	PG			58		-2.3					
	SN			10 24		2.2					
	S*			35		1.7					
	ESG			39		-4.3					
GPZ	EPN	06	09	49		-1.0	3.57	82	4.7		
	P*			59		1.1					
	E			10 37							
	SG			54		-2.2					
	E			11 15							
COB	PN	06	10	07		-0.4	4.87	51	4.7		
	P*			20		-0.1					
	E			55							
	ESN			11 02		-0.3					
WEL	EPN	06	10	21		-1.1	5.97	62	4.4	4.7	4.6
	E			26							
	ESN			11 28		-0.7					
	E			36							
	SG			12 16		-0.8					
MNG	PN	06	10	31		-2.2	6.79	60			
	E			37							
	E			12 01							
	ESG			35		-9.5*					
TNZ	PN	06	10	38		0.5	7.11	46			
	EPG			11 19		-0.4					
	E			12 03							
TON							7.72	51	5.0		
CNZ	PN	06	10	48		2.3	7.73	52			



		H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
	P*	11	07									
	E		14									
	E	12	27									
	E		42									
KRP	PN	06	10	59.5				1.6	8.65	45		
	E		11	18								
	SN	12	34					1.4				
	E	13	03									
FELT MILFORD SOUND MM IV												
APR 23		H	M	S								66/ 181
		06	49	38.6				41.74S	174.61E	12 KM	SE 2.4	AVG MAG 6.0
								0.04	0.06	R		
		H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
	WEL	IP*	06	49	47.9	JNE	0.3	0.47	14			
		ES*		54			-0.2					
	MNG	IPN	06	50	02.1	J	-0.1	1.30	31			
	GPZ	PN	06	50	18.4	S	1.0	2.44	216			
		PG		31.5			3.6					
		E		38								
		ESN		47			0.7					
	KAI	P*	06	50	21		-1.6	2.51	251			
		EPG		28			-1.4					
		ES*		57			1.4					
	TNZ	PN	06	50	19.7		0.5	2.55	356			
		P*		25			1.7					
		ESN		48			-1.6					
		ES*		55			-2.0					
	TON							2.63	16	5.9		
	CNZ	PN	06	50	20.2	J	-0.0	2.63	16			
		I		20.6								
		E		22.5								
	WNZ	EP*	06	50	35		-1.2	3.31	21	5.8	5.9	
		EPG		43			-2.4					
		SN		51	07		-0.5					
		ESG		26			-4.0					
	TUA	EPN	06	50	31		-1.0	3.51	34	6.0	5.9	
		EP*		38			-1.7					
		PG		43			-6.6*					
		ESG		51	38		1.0					
	MJZ	PN	06	50	36.5	USW	0.8	3.79	232			
		P*		46			1.5					
		ES*		51	37		3.0					
	KRP	PN	06	50	36.5	D	-0.4	3.87	11			
		E		40								
	GNZ	PN	06	50	37.9		-1.3	4.05	41	6.1	6.1	
		EP*		45			-3.9					
		PG		51	00		-0.4					
		ESN		27			1.7					
		E		52	18							
	AUC	PN	06	50	51.8	D	1.4	4.87	2			
	ECZ	PN	06	50	52.3		-0.5	5.05	38	5.9	5.8	
		EP*		51	10		3.9					
		EPG		25			4.3					
		ES*		52	10		-2.0					
	ROX	EPN	06	50	58.5		1.6	5.36	224		6.2	
		EP*		51	08		-3.4					
		PG		27			0.0					
		ESN		52	02		5.0					
		ESG		38			-1.2					
	ONE	EPN	06	51	06.5		1.7	5.96	358	6.1		
		E		09								
		EPG		42			3.0					
		ESN		52	16		4.7					
		ESG		53	10		10.7*					
	MNH	EPN	06	51	12.5		0.6	6.48	229			
		EP*		29			-1.5					

		H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
	EPG			47								
	ESN			52	20							
	ESG			53	12							
FELT MAXIMUM INTENSITY MMVII AT SEDDON												
APR 23		H	M	S								66/ 181
		07	00	45.4				41.63S	174.51E	12 KM	SE 2.2	AVG MAG 4.1
								0.04	0.05	R		
		H	M	S		DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
	WEL	IP*	07	00	53.8	JNE	0.6	0.39	30	4.4		
		S*		59.3			0.4					
	MNG	IPN	07	01	08.0	J	-0.4	1.25	37			
		SN		24			-1.4					
	TNZ	P*	07	01	28.5		0.3	2.44	358		4.2	4.4
		EPG		33			-1.8					
		SN		56			2.8					
		ES*		59			-1.4					
		ESG		02	03		-4.7					
	KAI	EP*	07	01	26		-2.8	2.47	248	4.1		
		E		43								
		ES*		02	02		0.6					
	GPZ	EPN	07	01	23.5		-1.3	2.48	213	3.7		
		P*		29			0.1					
		SN		53.5			-0.8					
		SG		02	11		1.9					
	TUN							2.55	18	4.2		
	CNZ	E	07	01	29			2.55	19		4.5	4.7
		P*		30.5			0.4					
		ES*		02	08		4.3					
	TUA	EPG	07	01	51		-4.6	3.47	37		4.2	4.1
		ESG		02	45		2.7					
	KRP	E	07	01	47			3.78	12			
		IP*		51.5			0.3					
		EPG		02	02		0.1					
		E		37								
		ES*		41			0.3					
	MJZ	PN	07	01	43		0.3	3.79	230		3.7	3.5
		P*		52			0.6					
		ESN		02	27		0.9					
		S*		41			-0.1					
	GNZ	EP*	07	01	55		-0.2	4.02	43		4.2	3.9
		EPG		02	05		-1.7					
		E		18								
		E		03	19							
	ONE	E(PG)	07	02	48			4.4	5.84	359	4.1	
		ESN		03	21		5.6*					
		E		26								
FELT OCEAN BAY												
APR 23		H	M	S								66/ 182
		15	27	43.0				37.85S	177.42E	12 KM	SE 2.4	AVG MAG 4.9
								0.04	0.03	R		
		H	M	S		DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
	ECZ	IP*	15	27	58.1	D	-1.6	0.91	80		5.8	5.4
		S*		28	13.5		1.5					
	GNZ	IP*	15	27	59.2	D	-0.7	0.92	149		5.0	5.2
		S*		28	14.2		1.7					
		SG		15.5			1.1					
	TUA	P*	15	28	01.2	J	0.4	0.98	192		4.9	5.3
		PG		03.5			0.6					
		E		08								
		S*		14.5			0.4					
		SG		20			3.8					
	WNZ	P*	15	28	06		-0.2	1.29	233		4.4	4.5
		E		17								
		ES*		24.5			0.9					
		SG		29			2.2					



STATION	TIME	DEPTH	DIR	RES	DIST	AZ	W-A	W P	W S
KRP	15 28 08.3	DE	-0.9	1.49	267				
	PG		13.5						
	SN		27.5						
AUC	15 28 20.5	D	0.2	2.32	294				
TNZ	15 28 27.5		1.5	2.73	240		4.7	4.2	
	S*		0.6						
MNG	15 28 28.6		-2.9	3.14	208		4.7	4.9	
	PN								
	E								
	P*		0.1						
	E								
	SG		-5.0						
ONE	15 28 33		0.6	3.21	309	3.8			
	EPN		3.4						
	ESN								
WEL	15 28 40.5	E(PN)	-2.5	3.99	210	5.3			
	P*		-1.5						
	SN		-2.6						
	E								
	S*		2.3						
KAI	15 29 38	EP*	1.7	6.55	223	4.9			
	ESN		4.1						
	ES*		-6.6*						
GPZ	15 29 18	EPN	-3.6	6.87	210	5.2			
	E								
	SN		-6.5*						
MJZ	15 29 34.5	EPN	-3.1	8.07	218				
	P*		-0.3						
	SN		-3.7						
ROX	15 31 50	ESN	4.7	9.73	216				
MNW	15 30 15	E		10.77	220				
	ESN		-1.2						
	E								
	16								
FELT GISBORNE									
APR 23	17 43 24.5		41.70S	174.74E	12 KM	SE	1.6	AVG MAG	66/ 183
	+	0.6	0.03	0.05	R			3.8	
WEL	17 43 33.8	IP*	1.1	0.42	3	4.3			
	S*		0.5						
MNG	17 43 47.9	IPN	0.8	1.22	28	4.4			
	SN		-0.8						
GPZ	17 44 06	E		2.52	217	3.2			
	ESN		-0.8						
TNZ	17 44 09.5	EP*	0.6	2.53	354	3.7	4.1		
	EPG		-0.7						
	E								
	ES*		0.8						
	SG		2.2						
KAI	17 44 06	EPN	0.1	2.61	251	4.0			
	EP*		0.7						
	PG		0.6						
	S*		-1.6						
TUA	17 44 31	EPG	-2.9	3.43	33	4.0	3.9		
	E								
	ESG		8.8*						
KRP	17 44 25	E		3.82	9				
	EP*		2.9						
	ES*		-2.1						
	ESG		-3.4						
MJZ	17 44 23	EPN	0.0	3.88	233	3.6	3.3		
	P*		-0.1						
	EPG		-0.1						
	SN		-0.4						
	S*		0.1						
GNZ	17 44 47	PG	2.4	3.96	41	3.9	3.9		
	E								
	53								
	E								
	45 59								
FELT SEATOUN MMIV									

DATE	TIME	DEPTH	DIR	RES	DIST	AZ	W-A	W P	W S
APR 23	19 26 28.2		37.25S	177.47E	201 KM	SE	0.8	AVG MAG	66/ 184
	+	0.7	0.03	0.04	R			4.3	
ECZ	19 26 56.9	P	-1.1	0.96	118		4.4	3.9	
	E								
GNZ	19 27 02.5	IP	0.6	1.46	163		4.9	4.4	
	ES		-0.5						
TUA	19 27 04.0	P	1.0	1.58	189		4.4	4.3	
	S		0.1						
KRP	19 27 04.5	P	0.6	1.68	246				
	S		-0.5						
AUC	19 27 09.3	P	0.2	2.19	279				
MNG	19 27 26.8	P	-0.2	3.71	204		3.8	3.9	
	S		0.5						
WEL	19 28 31.5	S	0.2	4.55	207	4.4			
GPZ	19 29 35	S	-2.8*	7.42	208	4.5			
MJZ	19 30 04	ES	-0.9	8.58	216				
APR 24									
APR 24	06 53 59.8		37.89S	175.76E	12 KM	SE	2.4	AVG MAG	66/ 185
	+	0.7	0.04	0.03	R			3.8	
KRP	06 54 18.5	PG	-1.0	0.97	267		4.1	4.2	
	E								
	S*		1.9						
	SG		1.3						
TUA	06 54 19	PG	-0.5	0.97	162		4.1	4.2	
	S*		1.4						
	SG		1.3						
GNZ	06 54 24.5	PG	-0.6	1.25	128		4.3	4.2	
	E								
ECZ	06 54 30	PG	1.3	1.43	83		4.3	3.7	
	ESG		1.0						
AUC	06 54 37	PG	-1.0	1.88	302				
	E								
	SG		2.6						
TNZ	06 54 49	EPG	3.1	2.28	234			3.0	
	E								
	55 29								
ONE	06 55 04	E		2.85	317	3.1			
	SG		-3.0						
MNG	06 54 46.5	EP*	-4.1	2.90	200		3.5		
	PG		-3.6						
	55								
FELT EDGECLUMBE MMIII									
APR 24	08 28 05.0		41.59S	174.41E	12 KM	SE	1.2	AVG MAG	66/ 186
	+	0.4	0.03	0.03	R			3.7	
WEL	08 28 13.0	IP*	0.0	0.40	42	4.3			
	ES*		-0.8						
MNG	08 28 26.9	IPN	-1.3	1.26	40	4.4			
COB	08 28 29.0	PN	-0.4	1.36	291	3.7			
	P*		0.7						
	SN		-0.5						
TNZ	08 28 47	P*	-0.1	2.40	359				
	EPG		6.5*						
	S*		0.3						
KAI	08 28 45	EP*	-2.5	2.42	246	3.9			
	SN		0.5						
GPZ	08 28 44	EPN	-0.4	2.48	211	3.5			
	SN		-1.3						
TUA	08 29 10	EPG	-5.4*	3.48	38				
	E		-1.3						
KRP	08 29 02.5	EP*	2.6	3.76	14	3.7			
	E								
	13								
	ES*		-1.6						







		H	M	S														
ECZ	S	23	37	09	0.6													
	P	23	36	38	0.6	2.90	68			5.2	3.7							
	ES		37	16.5	-0.6													
COB	EP	23	36	37.5	0.0	2.91	219			4.2								
	S		37	16.5	-0.8													
KAI	S	23	37	56	2.3	4.65	217			3.9								
GPZ	E	23	37	06		5.23	201			4.5								
	S		38	04	-1.9													
MJZ	E(P)	23	37	18	0.4	6.23	213											
	S		38	26	-3.0*													
MSZ	P?	23	37	38	-1.5	7.94	221											
	S		39	07	-1.2													
APR 25		06	43	09.8	32.37S	179.67W	288 KM	SE	3.4	AVG MAG	66/190							
					0.57	0.99	79			4.9								
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S				
ECZ	S	06	45	40					1.1	5.50	195							
	E			46														
GNZ	E	06	45	55						6.53	196							
	S			46	04				2.8									
MNG	P	06	45	17					-0.7	9.10	204							
	S			46	52				-6.3									
	E			55														
	E			59														
WEL	S	06	47	17					-0.2	9.95	205							
COB	S	06	47	33					0.9	10.61	213							
GPZ	S	06	48	20					-1.1	12.81	206							
MJZ	S	06	48	46					0.4	13.93	211							
MSZ	E	06	48	56						15.63	215							
	S			49	25				2.5									
APR 26		07	18	22.6	38.88S	175.10E	12 KM	SE	1.8	AVG MAG	66/191							
					0.02	0.04	R			4.1								
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S				
WNZ	E	07	18	27						0.25	1							
	PG			28.5					0.4									
	SG			33.5					1.7									
CNZ	PG	07	18	33				J	-0.6	0.53	233							
	SG			44					3.1									
TUA	PG	07	18	42.0				J	-2.0	0.83	85							
KRP	E			48					1.05	335								
	SG			59					0.8									
TNZ	PG	07	18	48					-2.4	1.37	257							
	E			56														
	E			19	07													
GNZ	PG	07	18	55					1.5	1.53	82							
	E			19	26													
MNG	PG	07	18	56.5				J	-2.5	1.80	195							
	SG			19	23				-0.3									
ECZ	P*?	07	19	02.4				J	-0.0	2.26	59							
AUC	PG	07	19	06.5					-2.1	2.27	332							
	E			11														
WEL	EPG	07	19	14					-1.4	2.61	203							
	SG			51					0.4									
COB	EP*	07	19	24					2.2	3.39	228							
	PG			32					0.7									
	S*			20	07				0.7									
	SG			28					10.9*									
APR 26		07	30	18.8	38.95S	175.96E	12 KM	SE	1.8	AVG MAG	66/192							
					0.04	0.05	R			3.4								
					H	M	S											

## LOCAL EARTHQUAKES

		H	M	S														
WNZ	EPG	07	30	25														
	E			28					-0.9									
	SG			31					0.3									
CNZ	PG	07	30	29					1.6	0.41	232							
KRP	PG	07	30	38					-2.7	1.08	342							
	SG			57					1.7									
TNZ	PG	07	30	44					-0.3	1.26	259							3.0
GNZ	PG	07	30	53					1.0	1.64	80							3.6
MNG	PG	07	30	52.5					-0.9	1.71	192							3.6
APR 28		04	52	47.9	38.10S	175.06E	226 KM	SE	1.1	AVG MAG	66/193							
					0.05	0.04	6			4.2								
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S				
KRP	P	04	53	17.7					-0.2	0.45	293							
	S			40					-1.1									
TUA	EP	04	53	21					-0.2	1.11	130							4.1 4.3
	ES			48					0.9									
GNZ	P	04	53	25.8				D	0.5	1.64	110							4.7 4.3
	S			55					0.8									
TNZ	P	04	53	28.3					2.4	1.70	230							3.9
	E			31														
ECZ	P	04	53	28					-0.8	2.01	79							4.6 4.1
	ES			59					-1.3									
	E			54	02													
MNG	P	04	53	35.0				J	0.7	2.55	190							4.1 4.3
	S			54	10				-0.4									
	E			12														
WEL	P	04	53	44.0					0.8	3.33	197							4.0 4.1 4.4
	E			54	22													
	ES			26					-0.1									
	E			28														
COB	S	04	54	39					0.1	3.94	220							3.9
KAI	ES	04	55	14					-3.5*	5.67	217							4.1
GPZ	S	04	55	27.5					-1.2	6.16	204							4.5
MJZ	EP	04	54	32					-0.1	7.24	214							
	ES			55	52				-1.5									
MSZ	ES	04	56	34					0.7	8.97	220							
APR 28		11	10	45.9	37.22S	177.56E	198 KM	SE	0.9	AVG MAG	66/194							
					0.04	0.04	5			4.2								
					H	M	S	DIR	RES	DIST								







		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ROX	P	16	13	11.8		1.2	1.26	111		4.4	4.2
	S			29		0.5					
MJZ	EP	16	13	23		-0.6	2.28	64		3.4	3.2
	S			50		-0.9					
MAY 12		13	42	10.1			37.41S	177.46E	193 KM	SE	1.1
				+1.2			0.07	0.08	10	AVG MAG	4.2
											66/ 202
ECZ	P	13	42	41.8		0.2	0.91	108		4.2	4.4
GNZ	S			43 05		-1.1	1.31	160			
TUA	P	13	42	43.3		0.8	1.42	190		4.1	4.2
	S			43 08		0.2					
KRP	P	13	42	44.0		-0.3	1.61	251		4.4	
CNZ	P	13	42	53.3		1.4	2.33	219		3.5	
MNG	P	13	43	06.3		-0.3	3.55	205		4.3	3.6
	ES			51		0.7					
WEL	P	13	43	16.2	J	-1.0	4.40	207	4.6	4.4	
	ES			44 10		0.8					
COB	ES	13	44	26		-1.4	5.19	223	4.4		
MAY 12		19	09	29.9			39.95S	174.69E	115 KM	SE	1.3
				+1.2			0.05	0.05	16	AVG MAG	4.6
											66/ 203
TNZ	P	19	09	50.8		0.8	0.80	342			
MNG	IP	19	09	52.2	J	1.4	0.90	138			
	E			10 05							
CNZ	IP	19	09	52.3	D	0.5	1.00	42			
WEL	P	19	09	57.3	J	1.6	1.33	178	4.6	5.0	
	S			10 14.5		-0.6					
COB	P	19	10	01.4		-0.6	1.87	232	4.7		
	S			24.8		-1.4					
KRP	P	19	10	05.7		0.4	2.13	18	4.4		
TUA	P	19	10	07		0.5	2.22	60	4.3	4.7	
	S			33		-1.1					
GNZ	P	19	10	14.2		-1.5	2.90	64	4.4	4.8	
	E			44							
	E			50							
FELT NEAR MASTERTON MMIV											
MAY 13		09	05	02.8			41.40S	172.81E	152 KM	SE	1.2
				+0.7			0.06	0.05	7	AVG MAG	4.2
											66/ 204
COB	P	09	05	25.0		1.2	0.31	349	4.0		
	S			39.0		-1.0					
WEL	IP	09	05	34.1	J	1.5	1.48	86	4.6	4.6	5.1
	S			55.0		-0.5					
KAI	E	09	05	35		1.7	1.54	222	4.1		
	S			57.4		0.8					
MNG	P	09	05	40.7		0.3	2.17	70	4.1	4.6	
	E			06 02							
	ES			08		-1.3					
GPZ	P	09	05	44.0		-0.8	2.30	183	4.3		
TNZ	P	09	05	47.0		0.1	2.51	29	3.9	4.1	
	ES			06 17		0.6					
HJZ	EP	09	05	53		0.6	3.11	213	3.7	3.7	
	S			06 30		-0.4					
MSZ	P	09	06	15.0		-0.2	4.86	226	4.4	3.7	
	ES			07 09		-2.1					
MAY 15		13	54	09.7			39.19S	175.13E	33 KM	SE	1.3
				+0.5			0.03	0.03	R	AVG MAG	3.3
											66/ 205

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
CNZ	P*	13	54	18.8		1.2	0.32	91			
	S*			24.5		1.2					
TNZ	P*	13	54	22.0		0.5	0.58	270		3.3	3.3
	S*			30.8		0.7					
KRP	P*	13	54	33.0		-0.5	1.31	14		3.2	3.4
	S*			50		-1.1					
MNG	P*	13	54	34.2		-1.7	1.45	169		3.3	3.5
	E			51							
	S*			55		-0.4					
FELT OHAKUNE MM III											
MAY 17		04	27	33.0			40.47S	173.89E	33 KM	SE	1.2
				+1.1			0.04	0.06	R	AVG MAG	4.1
											66/ 206
GNZ	P	04	28	01.0		-1.9	1.94	340		4.0	4.0
	ES			24.8		-0.7					
TUA	P	04	28	06		0.5	2.13	320			
MNG	P	04	28	12.9		1.0	2.60	266		3.7	
	I			15.9							
	E			41							
CNZ	P	04	28	16.7		1.1	2.87	295		3.9	3.6
	ES			48		-0.0					
WEL	E	04	28	21			3.23	254	4.3	4.2	4.2
	S			56		-0.9					
KRP	P	04	28	29			3.64	313			
TNZ	EP	04	28	29		2.0	3.70	289		4.1	
COB	ES	04	29	33		0.1	4.71	260	4.2		
GPZ	ES	04	29	55		-0.6	5.66	233	4.5		
KAI	ES	04	30	03		-0.5	5.98	247	4.4		
MAY 19		05	03	02.2			39.29S	174.67E	171 KM	SE	1.8
				+0.8			0.06	0.07	8	AVG MAG	4.7
											66/ 207
TNZ	P	05	03	26.8		1.5	0.25	295			
	ES			42.5		-0.5					
CNZ	IP	05	03	28.0	D	1.0	0.69	83			
	S			46		-0.2					
MNG	P	05	03	35.1		1.8	1.46	155		4.6	4.8
	E			53.5							
KRP	P	05	03	34.1		0.2	1.52	27		4.6	3.9
	S			56		-2.4					
TUA	P	05	03	38.5		-0.3	1.99	77		4.7	4.7
	E			04 01							
WEL	IP	05	03	40.8	J	1.9	1.99	178	4.7	5.0	5.0
	S			04 04.8		-2.4					
COR	P	05	03	45.2		2.4	2.33	219	4.7		
	S			04 15.5		1.5					
GNZ	P	05	03	46.4		-0.8	2.69	77		5.3	4.9
	ES			04 15		-6.9*					
ECZ	P	05	03	56.2		-0.3	3.43	64			
KAI	E	05	04	10			4.07	216	4.9		
	S			52		-0.8					
GPZ	P	05	04	27.5		2.3	4.66	198	5.0		
MJZ	EP	05	04	28		-1.8	5.65	213		3.9	4.2
	S			05 28		-0.9					
MSZ	EP	05	04	47		-0.9	7.36	221			
	S			06 08		-2.4					
MAY 21		03	15	11.6			38.84S	175.47E	196 KM	SE	1.8
				+1.1			0.05	0.06	9	AVG MAG	4.4
											66/ 208
CNZ	P	03	15	39.5		1.6	0.36	171			
	S			59		0.8					



Station	Type	H	M	S	Mag	Dir	RES	DIST	AZ	W-A	W P	W S
KRP	P	03	15	39.9	-0.6	0.92	3	4.5	3.6			
	S			15 00	-2.9							
TNZ	P	03	15	42.2	1.7	0.92	248	4.0	3.4			
	ES			16 05	2.1							
TUA	P	03	15	43.2	-0.3	1.31	89	4.2	4.6			
	ES			16 06	-2.2							
MNG	P	03	15	49.8	1.9	1.77	180	4.1	4.3			
	S			16 15	-0.8							
GNZ	P	03	15	50.9	0.7	2.00	85	4.8				
AUC	P	03	15	50	-0.7	2.05	344	4.9				
WEL	P	03	15	57.5	1.7	2.50	192	4.3	4.4	4.4		
	S			16 30	0.1							
ECZ	P	03	15	59.2	1.3	2.68	66	5.0				
COB	ES	03	16	42	0.3	3.08	222	4.2				
KAI	ES	03	17	18	-2.3	4.80	219	4.5				
GPZ	ES	03	17	29	-2.7	5.30	203	4.8				
MAY 21 06 40 22.0 38.29S 175.07E 207 KM SE 1.3 AVG MAG 66/ 209 4.3												
				0.05	0.05		8					
				H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
KRP	P	06	40	50.2	-0.1	0.55	310	4.2				
	S			41 12	-0.1							
TUA	P	06	40	53	0.4	0.99	122	4.1	4.4			
	S			41 14.2	-2.1							
CNZ	P	06	40	54.1	1.5	1.00	204	3.8	3.2			
	ES			41 24	7.6*							
GNZ	P	06	40	57.5	0.3	1.57	104					
	S			41 25	0.5							
ECZ	EP	06	41	01	-0.8	2.04	74	4.8				
MNG	P	06	41	06.3	1.0	2.37	191	4.6	4.3			
	S			39.3	0.5							
WEL	P	06	41	15.0	0.6	3.16	198	4.4	4.3	4.5		
	S			56.5	1.5							
COB	ES	06	42	09	0.2	3.80	222	4.1				
KAI	ES	06	42	46	-1.8	5.53	219	4.4				
GPZ	ES	06	42	57	-1.5	5.99	205	4.8				
MAY 21 09 34 21.0 38.59S 175.91E 203 KM SE 1.6 AVG MAG 66/ 211 4.0												
				0.06	0.07		11					
				H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
CNZ	P	09	34	50.8	1.5	0.67	205	3.5	3.4			
	ES			35 12	0.9							
KRP	P	09	34	49.2	-0.4	0.73	336	4.1				
	S			35 09.8	-1.9							
TUA	ES	09	35	15	0.5	1.00	103	4.0				
TNZ	EP	09	34	55	1.3	1.33	243	3.6				
GNZ	ES	09	35	23	-1.2	1.66	92	3.8				
MNG	P	09	35	01.9	1.3	2.05	189	4.3	4.2			
	S			30.8	-0.2							
WEL	P	09	35	10.2	0.8	2.83	198	4.5	4.4			
	S			46.8	0.0							
GPZ	ES	09	36	47	-2.7	5.66	205	4.4				
MAY 22 16 26 05.8 38.67S 175.87E 12 KM SE 2.0 AVG MAG 66/ 211 3.7												
				0.04	0.04		R					
				H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
WNZ	PG	16	26	13.2	0.0	0.19	79					
	SG			13.4	0.3							
CNZ	PG	16	26	17.8	-0.1	0.59	205	3.6				
KRP	PG	16	26	24.7	2.8	0.79	341	3.5	3.3			
	SG			30.3	-2.3							
TUA	PG	16	26	23.8	-2.6	1.01	98	4.4				
TNZ	EPG	16	26	32	0.4	1.27	245	3.5				
GNZ	PG	16	26	42	2.0	1.69	90	4.3				

Station	Type	H	M	S	Mag	Dir	RES	DIST	AZ	W-A	W P	W S
MNG	EP*	16	26	40	-0.6	1.97	189	3.1				
	I			43								
	E			27 10								
MAY 22 19 11 21.4 38.36S 177.83E 33 KM SE 1.0 AVG MAG 66/ 212 3.6												
				0.05	0.03		R					
				H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
GNZ	P*	19	11	29.4	0.1	0.32	151					
	S*			35.0	0.0							
TUA	P*	19	11	34.0	-1.1	0.69	230	4.4	4.7			
	S*			44.5	-0.4							
ECZ						0.88	41					
KRP	EP*	19	11	54	-0.5	1.86	283	2.9				
CNZ	P*	19	11	57.8	1.4	1.97	244	3.2	3.0			
	ESN			12 15	0.5							
MNG	E	19	12	18		2.89	218					
	E			34								
MAY 23 05 24 58.0 36.80S 175.70E 33 KM SE ND AVG MAG 66/ 213 3.1												
				R	R		R					
				H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
AUC						0.74	265					
KRP	P	05	25	16.0	-0.8*	1.13	187	2.8	3.3			
	S			31.3	0.5*							
ONE						1.49	313					
FELT COROMANDEL MM IV												
MAY 23 11 33 47.0 46.50S 169.10E 33 KM SE ND AVG MAG 66/ 214 4.0												
				R	R		R					
				H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
ROX	P*	11	34	05.2	-1.1*	1.04	8	4.0	4.4			
	S*			19.0	-1.5*							
MNW						1.26	304	4.2	4.3			
MSZ						2.01	335	3.9	3.7			
MJZ	P*	11	34	35.0	0.6*	2.69	21	4.0	3.5			
	I			38.3								
GPZ	ES*			35 11	1.2*							
	E	11	35	02		3.76	43					
	E			23								
	ES*			49	7.1*							
FELT EASTERN SOUTHLAND AND DJNEDIN MMIV EPICENTRE USED MNW S-P INTERVAL												
MAY 23 19 19 55.0 36.80S 175.70E 33 KM SE ND AVG MAG 66/ 215 3.2												
				R	R		R					
				H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
AUC						0.74	265					
KRP	P	19	20	16.2	2.4*	1.13	187	3.0	3.5			
	S			32.8	5.0*							
ONE						1.49	313					
FELT COROMANDEL MM IV												
MAY 23 21 25 12.1 36.76S 175.64E 12 KM SE 0.1 AVG MAG 66/ 216 4.0												
				0.00	0.00		R					
				H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
AUC	PG	21	25	26.5	0.1	0.70	262	4.5	4.7			
	SG			36	-0.0							
KRP	PG	21	25	35.8	0.0	1.17	184	3.4	4.1			
	SG			51.5	-0.0							
ONE	EPG	21	25	41	-0.0	1.43	313	3.4				
	E			25 05								
FELT COROMANDEL MMIV												











Station	Time	Mag	Dir	Res	Dist	Az	W-A	W P	W S		
GNZ	07 42 50.2	0.7	D	2.55	232	5.2	5.8				
	43 19	0.6									
	25										
	29	-0.7									
TUA	07 42 58.5	-0.0		3.25	237	5.0	5.3				
	43 06	-1.4									
	28										
	39	4.5*									
WNZ	07 43 28			3.86	245	4.8	4.8				
	35										
	44 11	1.9									
KRP	07 43 09	-1.6	J	4.09	257						
	29										
	55	-1.2									
CNZ	07 43 16	-0.0		4.49	241	4.6	4.8				
	44 17	1.3									
	10										
AUC	07 43 18	-0.3		4.65	271						
	44 18										
ONE	07 43 24	-1.4		5.18	283	4.8					
	44 33										
MNG	07 43 25	-2.1		5.31	227	4.6	4.8				
	44 14										
	27.5	1.9									
TNZ	07 43 29	1.8		5.31	245	4.4	4.0				
	44 32	6.3*									
WEL	07 43 37	-1.5		6.15	225	5.6					
	44 46	0.1									
	45 16	-2.1									
COB	07 43 54	0.2		7.29	234	5.0					
	44 48										
	45 12.5	-0.5									
KAI	07 45 52	0.6		8.90	230	5.7					
GPZ	07 44 18	2.1		8.95	220	5.7					
	45 52	-0.6									
MJZ	07 44 34	-0.1		10.32	225						
	46 07										
	24	-1.1									
MSZ	07 45 03	4.4*		12.20	228						
	47 07.5	-1.5									
	18										
HNW	07 45 11	1.9		13.02	224						
	47 29	1.1									
	34										
JUN 02	12 21 18.8	38.69S	175.82E	194 KM	SE	2.2	AVG MAG	4.1	66/ 231		
	+ 1.5	0.08	0.07	10							
CNZ	12 21 47.3				DIR	RES	DIST	AZ	W-A	W P	W S
	22 07					1.6	0.55	203		4.2	3.3
	07					0.7					
KRP	12 21 46.4				D	-0.5	0.80	344			
	22 05					-3.6					
TUA	12 21 50					1.5	1.05	97		3.9	4.6
	58										
	22 05										
	10					-1.5					
TNZ	12 21 52					2.1	1.23	246		3.3	3.3
	22 16.5					2.5					
	27										
GNZ	12 21 55.5					1.0	1.72	89		4.0	4.2
	22 13.5										
	19					-2.9					
MNG	12 21 59.2		J			2.5	1.94	188		4.6	4.2
	22 26					0.2					
WEL	12 22 08					2.5	2.72	197	4.0	4.7	4.5
	42					0.5					

COB	S	12 22 55	-0.3	3.37	224	4.0				
KAI	ES	12 23 32	-2.1	5.09	220	4.0				
GPZ	S	12 23 43.5	-1.1	5.55	205	4.6				
MJZ	P	12 22 57	1.7	6.65	216					
	S	24 08	-2.4							
MSZ	ES	12 24 49	-2.5	8.40	222					
JUN 02	H M S	12 22 26.8	37.57S	175.60E	245 KM	SE	0.7	AVG MAG	4.2	66/ 231
		+ 0.9	0.05	0.06	7					
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S	
KRP	P	12 23 01		0.0	0.91	247				
TUA	P	12 23 04		0.4	1.31	161		3.9	4.3	
	S	32		-0.0						
GNZ	P	12 23 05.5		0.1	1.56	134		4.5	4.3	
	S	34.5		-0.7						
MNG	P	12 23 21.5		0.2	3.17	196		4.3	3.8	
	S	24 03.5		-0.1						
WEL	S	12 24 21		0.8	3.98	200	4.0		4.3	
COB	S	12 24 34		-0.1	4.62	219	4.1			
GPZ	S	12 25 24		0.7	6.82	205	4.4			
MJZ	S	12 25 47		-1.3	7.92	214				
JUN 04	H M S	01 17 54.7	38.15S	175.77E	293 KM	SE	0.9	AVG MAG	4.1	66/ 232
		+ 0.7	0.04	0.05	5					
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S	
KRP	P	01 18 31.5		-0.8	0.29	320				
	S	19 01		-0.7						
CNZ	P	01 18 35.8		0.8	1.07	189		3.6	3.2	
	S	19 07.5		1.2						
TUA	P	01 18 36		-0.2	1.27	122		4.5	4.1	
	S	19 09		0.7						
TNZ	P	01 18 39		1.3	1.51	226		3.5		
	E	19 19								
GNZ	P	01 18 39.8	D	-0.1	1.84	106		4.7	4.3	
	S	19 13.5		-1.6						
MNG	P	01 18 46.0	J	0.6	2.48	185		4.4	4.3	
	S	19 24.5		-0.4						
WEL	P	01 18 53.5		0.7	3.23	194	4.1	4.2	4.4	
	ES	19 38.5		0.4						
COB	ES	01 19 47		-1.2	3.76	218	3.9			
KAI	ES	01 20 24		-0.0	5.50	216	4.1			
GPZ	S	01 20 35		-0.4	6.03	202	4.7			
MJZ	P	01 19 39		1.4	7.06	213				
	S	20 58		-0.4						
MSZ	P	01 19 57.5		-1.2	8.79	220				
	S	21 36		-0.3						
JUN 06	H M S	00 07 12.9	36.82S	175.45E	12 KM	SE	1.8	AVG MAG	2.7	66/ 233
		+ 2.1	0.05	0.12	R					
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S	
KRP	EPG	00 07 39.5		-0.2	1.32	213				
	E	53								
	SG	55.5		-2.1						
AUC	PG	00 07 43	J	2.8	1.35	268				
	E	46								
ONE	P*	00 07 46.5		-1.5	1.99	301				
	E	08 06								
	S*	14		-0.3						
CNZ	PG	00 08 03		-0.1	2.48	197		2.8	2.6	
	SG	58		1.5						
MNG	PG	00 08 31		-0.1	3.87	191		2.9		
FELT	COROMANDEL	HMIV								



JUN 06		H	M	S	37.61S 179.77E		152 KM	SE	1.7	AVG MAG 66/20	
		+- 1.5			0.07 0.10		11			4.1	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	P	07	06	40		-3.1	0.98	264		4.4	4.4
	E			45							
	S			58.3		-4.0*					
GNZ	P	07	06	50.5		-0.2	1.73	233		4.0	4.2
	E			07 12							
	S			17		1.4					
TUA	P	07	06	59		0.4	2.39	239		4.1	4.1
	S			07 30		0.5					
KRP	P	07	07	11		-0.2	3.37	263			
	E			17							
	S			49		-2.8					
CNZ	P	07	07	17		1.8	3.68	243		3.5	3.5
	E			33							
	S			08 00		1.0					
MNG	P	07	07	26		0.1	4.49	227		3.7	3.7
	E			35							
	S			08 12		2.0					
ONE	EP	07	07	31.5		2.7	4.72	291			
WEL	EP	07	07	36		-1.0	5.34	225		3.8	4.2
	S			08 38		-0.1					
COB	S	07	07	05		-0.1	6.47	235			
KAI	ES	07	09	43		-0.7	8.08	230			
GPZ	ES	07	09	44		-1.3	8.14	219	4.6		
MJZ	E	07	08	36			9.51	225			
	S			10 17		-0.6					

JUN 06		H	M	S	38.92S 175.87E		193 KM	SE	1.8	AVG MAG 66/20	
		+- 0.9			0.07 0.06		7			4.4	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
CNZ	P	23	43	28.3		0.2	0.37	222			
	S			47		-1.1					
TUA	P	23	43	31.8		0.4	1.01	84		4.5	4.6
	S			51		-3.0					
KRP	P	23	43	29		-2.5	1.03	345			
	S			46		-8.3*					
TNZ	P	23	43	33		0.2	1.19	257		4.0	
	E			41							
	S			58		1.6					
GNZ	P	23	43	39.0		1.5	1.71	81		4.9	4.1
	ES			44 04		-0.7					
MNG	IP	23	43	40.4		2.8	1.72	190		4.8	4.6
	S			44 05		0.1					
ECZ	P	23	43	45.8		0.5	2.44	61		4.6	4.2
	S			44 18		-0.6					
WEL	P	23	43	48		1.8	2.51	199	3.5	4.4	4.1
	E			52							
	S			44 23		2.8					
COB	EP	23	43	56		1.2	3.23	227	4.2		
	S			44 35		-0.5					
KAI	S	23	45	15		1.2	4.94	222	4.2		
GPZ	EP	23	44	22		0.4	5.35	206	4.7		
	E			45 22							
	S			23		-0.3					
MJZ	P	23	44	37.5		1.1	6.48	217			
	S			45 48		-1.8					
ROX	S	23	46	27		-2.0	8.15	214			
MSZ	S	23	46	28		-3.4	8.26	223			
MNW	ES	23	46	53		0.2	9.17	219			

JUN 07		H	M	S	34.32S 177.91W		281 KM	SE	1.4	AVG MAG 66/236	
		+- 1.2			0.10 0.14		11			4.6	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	P	08	52	14		3.0	4.42	219		4.5	4.4
	S			08 53 06		-0.1					
GNZ	S	08	53	27		-0.2	5.42	216			4.5
TUA	P	08	52	28.5		-1.1	5.99	220		4.1	4.5
	S			53 36.5		-1.0					
KRP	EP	08	52	35.5		0.7	6.41	234			
	E			55							
	S			53 48		-0.8					
	E			54							
ONE	EP	08	52	37		1.0	6.50	255			
CNZ	EP	08	52	43		-1.1	7.16	225			
	S			54 05.5		0.0					
	E			21							
TNZ	EP?	08	52	53		0.1	7.86	230			
MNG	P	08	52	57		0.1	8.19	218			
	S			54 29		0.5					
WEL	S	08	54	47		-0.7	9.05	218		5.2	
	EL			56 00							
GOR	ES	08	55	09		-0.6	10.02	225			
KAI	ES	08	55	53		5.6*	11.71	222			
GPZ	S	08	55	53		1.6	11.89	215	5.0		
MJZ	EP	08	53	56		-3.0	13.20	220			
	E			54 12							
	S			56 22		1.6					
MSZ	P	08	54	21		-0.1	15.03	222			

JUN 07		H	M	S	36.03S 179.13W		33 KM	SE	3.4	AVG MAG 66/237	
		+- 2.2			0.13 0.17		R			4.7	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	PN	17	25	26		0.1	2.49	228		5.0	4.8
	E			37							
	SN			26 01		6.7					
	E			36							
GNZ	PN	17	25	38.5		-0.6	3.45	220		4.7	4.8
	EP*			54		5.2					
	SN			26 25		7.2					
TUA	EPN	17	25	47		-0.2	4.05	226		5.1	4.7
	P*			58		-1.1					
	SN			26 37		4.7					
	S*			50		-2.1					
KRP	PN	17	25	52.8		-2.8	4.67	245			
	SN			26 47		-0.2					
AUC	EPN?	17	26	03		3.2	4.98	259			
	I			05							
	E			14							
CNZ	PN	17	26	02		-1.8	5.28	232		4.2	3.9
	E			14							
	EP*			20		0.0					
	E			27 13							
ONE	E(PN)	17	26	02		-2.0	5.29	271			
	P*			20		-0.2					
TNZ	E	17	26	28			6.04	237			
MNG	EPN	17	26	14		-2.8	6.23	221			
	EP*			41		4.6					
	E			27 07.5							
	ESN			24		-0.9					
	ES*			28 08		10.4*					
WEL	SN	17	27	43		-2.4	7.09	220	5.0		
COB	EP*	17	27	11		2.2	8.13	229	4.7		
	SN			28 08		-2.2					
KAI	SN	17	28	47		-2.7	9.78	226	4.8		











		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
COB	EP	04	32	57.5		2.7	1.13	224	2.9		
	ES		33	16.5		1.7					
TNZ	ES	04	33	12.5		-3.2	1.19	23			2.9
	E			24.5							
WEL	F	04	32	58		2.0	1.25	144	3.0	2.9	3.7
	S		33	17		0.1					
MNG	P	04	32	58.4	D	1.6	1.34	105		3.3	3.5
	S		33	17		-1.4					
CNZ	P	04	33	01.4	D	0.4	1.74	52		3.4	2.9
	S			26.5		0.6					
	E			29							
KAI	S	04	33	50		-0.5	2.87	218	3.3		
GPZ	S	04	34	03		-2.4	3.52	194	3.5		
MJZ	S	04	34	26		-1.3	4.45	213			2.8
MSZ	S	04	35	08		-0.3	6.17	223			
JUN 13		H	M	S							66/ 248
		09	20	38.0		37.68S	175.68E	205 KM	SE	1.3	AVG MAG 4.2
						0.06	0.05	7			
KRP	P	09	21	06.9	J	-1.2	0.94	255			
	ES			31		-0.4					
TUA	P	09	21	10		0.2	1.18	162		4.2	4.2
	S			34.5		0.0					
ECZ	P	09	21	12		-0.2	1.48	91		4.1	4.2
	S			38		-0.7					
TNZ	P	09	21	23		2.0	2.35	230		3.5	
	E			22 04							
MNG	P	09	21	29.8		0.5	3.08	197		4.7	4.2
	S			22 11		2.0					
WEL	P	09	21	39		-0.3	3.89	202	4.3	4.4	4.4
	S			22 27		0.3					
COB	S	09	22	42.5		0.6	4.57	221	4.0		
KAI	S	09	23	20.5		-1.2	6.30	218	4.3		
GPZ	S	09	23	30		-1.9	6.74	206	4.6		
MJZ	EP	09	22	32		1.7	7.86	215			
	S			23 56		-2.0					
MSZ	S	09	24	39		0.5	9.61	221			
JUN 13		H	M	S							66/ 248
		12	20	32.9		37.16S	177.10E	271 KM	SE	1.4	AVG MAG 4.3
						0.08	0.08	8			
ECZ	ES	12	21	41		-1.2	1.27	115			4.5
KRP	P	12	21	12.2	J	-1.1	1.46	238			
	S			43		-1.4					
TUA	EP	12	21	15.5		0.9	1.64	179		4.1	4.5
	E			18							
	S			46.5		-0.3					
CNZ	P	12	21	22		1.2	2.37	211		3.3	3.8
	S			22 00		1.9					
TNZ	P	12	21	29		2.4	2.95	226		3.6	
MNG	P	12	21	34.8	J	0.3	3.68	200		4.4	3.8
	E			40.5							
	ES			22 22							
	S			24		1.6					
WEL	EP	12	21	44		0.0	4.50	203	4.2	3.9	4.2
	S			22 39		-0.4					
	E			42.5							
COB	S	12	22	53		-1.1	5.19	220	4.2		
KAI	ES	12	23	32		-0.3	6.92	217			
GPZ	S	12	23	41		-1.2	7.36	206	4.5		
MJZ	S	12	24	06		-1.4	8.48	214			

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
JUN 13		20	52	12.1		34.92S	179.47E	313 KM	SE	3.5	AVG MAG 4.2
						0.17	0.35	25			
ECZ	E	20	53	47							4.6
	S			52		0.5	2.87	195			
	E			54 01							
ONE	P	20	53	19		-3.3	4.26	257			
AUC	P	20	53	22	D	-0.4	4.27	242			
TUA	E(P)	20	53	23		0.2	4.30	205		3.9	4.6
	E			54 14							
	ES			18		-0.1					
	E			27							
CNZ	(P)	20	53	34		-0.1	5.30	215		3.6	3.5
	ES			54 44		5.6					
	E			50							
TNZ	P	20	53	45.5		4.5	5.89	222		3.9	
	E			54 19							
MNG	P	20	53	47.5		-0.9	6.51	208			
	S			55 01		-3.0					
WEL	P?	20	53	57		-1.7	7.36	209	4.8		
	S			55 19		-3.5					
COB	ES	20	55	35		-4.4	8.13	219			
KAI	ES	20	56	24		6.4	9.86	217			
GPZ	E	20	54	40		-1.7	10.23	209	4.9		
	S			56 24							
	E			34							
MJZ	EP	20	54	51		2.7	11.41	215			
	ES			56 51		-0.8					
JUN 15		H	M	S							66/ 249
		09	28	38.6		36.70S	175.45E	12 KM	SE	4.0	AVG MAG 2.9
						0.11	0.26	R			
AUC	EPG	09	29	09		-3.0	1.35	263			
KRP	EPG	09	29	07		-0.4	1.42	210			
	E			12							
	SG			23		-3.6					
ONE	EP*	09	29	13		0.4	1.92	298	2.9		
	E			37							
CNZ	EPG	09	29	32		0.9	2.59	196		2.8	2.8
	S*			59.5		1.3					
	SG			30 11		4.9					
TNZ	ES*	09	30	06		-3.5	2.97	213			
MNG	EPG	09	29	53		-6.2	3.98	191		2.9	3.3
	E			30 02							
	ESG			56		3.1					
FELT COROMANDEL MMIV											
JUN 15		H	M	S							66/ 250
		11	24	25.0		39.24S	175.24E	163 KM	SE	1.7	AVG MAG 4.6
						0.05	0.05	7			
CNZ	IP	11	24	48.5	J	1.4	0.24	80			
	S			25 03.5		-0.5					
TNZ	P	11	24	50		1.1	0.67	274		4.1	3.8
	E			25 12							
KRP	P	11	24	54.8	D	0.6	1.34	10			
	S			25 14.5		-2.2					
MNG	IP	11	24	57.7	J	3.0	1.39	173		4.6	4.9
	E			25 10.5							
	S			17		-0.5					
TUA	P	11	24	58.1	D	1.8	1.55	74		5.2	4.6
	S			25 19.5		-0.9					
WEL	P	11	25	04.4	J	2.3	2.07	190	4.5	4.7	5.1
	S			32		1.3					







Station	Type	H	M	S	Mag	Dir	Res	Dist	Az	W-A	W-P	W-S
WEL	EP	10	43	36.5	-0.3	3.43	203	4.0	4.0	4.0		
	S		44	18	-0.5							
COB	S	10	44	34.5	-0.8	4.16	224	3.9				
GPZ	S	10	45	20	-5.2*	6.29	207	4.2				
MJZ	EP	10	44	28.5	-0.6	7.43	216					
	S		45	47	-5.3*							
	E			51								
JUN 21	H M S	15	15	59.6		44.84S	167.81E	72 KM	SE	2.2	AVG MAG	4.2
				+ - 1.2		0.09	0.08	19				
	H M S					DIR	RES	DIST	AZ	W-A	W-P	W-S
MSZ	IP	15	16	11.1			0.3	0.19	24			
MNW	P	15	16	17.3	0		-0.7	0.95	188		4.2	4.7
	S			29.3			-2.4					
ROX	P	15	16	23.3	0		1.5	1.24	121		4.3	4.2
	I			23.6								
	S			40			1.5					
	E			17	06							
MJZ	P	15	16	34.1	J		1.0	2.09	67		3.9	4.1
	I			36.7								
	S			59			1.1					
GPZ	E	15	17	04				3.66	73	3.8		
	E			12								
	S			16								
	S			35			-2.3					
	E			41								
COB	EP	15	17	17			0.3	5.21	46	4.4		
	S			18	14		-2.1					
MNG	EP	15	17	43			0.7	7.05	56			
	E			47.5								
	S			18	58		-3.6					
	E			19	08							
TNZ	EP	15	17	48			-0.1	7.47	43			
	S			19	13		0.9					
CNZ	EP	15	17	59			2.9	8.06	48			
	E			18	07							
	S			19	30		3.5					
KRP	EP	15	18	10			0.7	9.03	43			
	S			19	47		-3.3					
JUN 22	H M S	07	24	58.7		39.24S	174.81E	219 KM	SE	1.6	AVG MAG	3.8
				+ - 1.3		0.06	0.07	9				
	H M S					DIR	RES	DIST	AZ	W-A	W-P	W-S
TNZ	P	07	25	28			0.3	0.33	278			
CNZ	IP	07	25	29.7	J		1.3	0.58	87		3.7	3.4
	S			50			-1.4					
	E			53								
	E			26	03							
KRP	E	07	25	44				1.43	24			
	S			59			-1.9					
MNG	IP	07	25	36.4	J		2.3	1.47	160		4.1	
	I			40								
	E			56.5								
	S			58								
TUA	E(P)	07	25	39			1.2	1.88	78		3.6	4.1
	E			26	01							
	S			06.5			-1.4					
WEL	EP	07	25	41			1.6	2.05	181	3.7	3.8	4.1
	S			26	11		0.1					
	E			13								
COB	EP	07	25	43			-0.4	2.44	220	3.4		
	S			26	17		-1.1					
GNZ	P	07	25	44.8			-0.2	2.58	78	4.1	4.1	

Station	Type	H	M	S	Mag	Dir	Res	Dist	Az	W-A	W-P	W-S
GPZ	ES	26	20		-0.9							
	S	07	27	04.5	-2.6	4.74	199	4.2				
MJZ	E	07	27	48		5.75	213					2.9
JUN 22	H M S	08	42	27.4		36.76S	175.31E	12 KM	SE	2.6	AVG MAG	2.6
				+ - 3.4		0.08	0.19					
	H M S					DIR	RES	DIST	AZ	W-A	W-P	W-S
AUC	PG	08	42	56			3.6	1.23	265			
KRP	PG	08	42	53.5			-0.6	1.32	207			
	SG			43	09		-2.9					
ONE	P*	08	42	59			-1.2	1.85	301			
	E			43	15							
	S*			24			-0.7					
CNZ	ESG	08	43	53			0.9	2.51	194			2.6
MNG	EPG	08	43	45			-1.5	3.91	189			
	ES*			44	29		2.4					
JUN 22	H M S	08	43	09.3		36.81S	175.20E	12 KM	SE	1.9	AVG MAG	2.8
				+ - 2.6		0.05	0.14					
	H M S					DIR	RES	DIST	AZ	W-A	W-P	W-S
AUC	PG	08	43	35			2.5	1.14	267			
KRP	PG	08	43	34			-0.3	1.23	205			
	E			39.5								
	SG			49			-2.0					
	E			56								
ONE	P*	08	43	40			-1.3	1.81	304	2.8		
	S*			44	05		-0.3					
CNZ	ESG	08	44	38			6.4*	2.44	192			2.5
TNZ	S*	08	44	33			-1.3	2.77	211			3.1
	SG			44			1.2					
MNG	E	08	44	27				3.84	188			2.7
	S*			45	08		1.5					
FELT COROMANDEL MMIV												
JUN 22	H M S	23	27	52.9		35.24S	179.12E	264 KM	SE	1.2	AVG MAG	4.7
				+ - 1.1		0.06	0.08	8				
	H M S					DIR	RES	DIST	AZ	W-A	W-P	W-S
ECZ	P	23	28	42.6			1.3	2.49	190		5.2	5.2
	ES			29	18.5		-0.6					
	E			30								
GNZ	(P)	23	28	51.5			-0.7	3.51	194		4.8	4.9
	E			29	08							
	S			31								
	E			36								
	S			39			0.7					
TUA	P	23	28	56			-0.5	3.89	203		4.4	4.7
	E			29	00							
	E			15								
	S?			46.5			0.4					
ONE	P?	23	28	56			-0.8	3.92	261			
KRP	P	23	28	58			1.0	3.93	226			
	E			29	11							
	S			48			1.1					
TNZ	EP	23	29	21			5.8*	5.46	222			3.9
	E			40								
MNG	P	23	29	22			-0.9	6.09	207			
	S			30	32		-1.5					
WEL	S	23	30	51			-1.5	6.94	208	4.9		
COB	S	23	31	09			-0.7	7.70	219			
KAI	S	23	32	03				9.43	217	4.8		
GPZ	E	23	31	54				9.81	209	4.8		
	S			59.5			2.2					
MJZ	P	23	30	25			0.6	10.98	215			
	E			35								















		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
KNZ	P	05	54	26.2		0.9	0.53	206		4.5		
	E			43.5								
KRP	P	05	54	27.0		-0.2	0.83	343		4.3	3.7	
	S			42.8		-2.7						
TUA	P	05	54	30.6		1.9	1.02	95		4.6	5.0	
	ES			48		-0.2						
TNZ	P	05	54	32.8		2.1	1.23	247		3.8	3.6	
	S			54		2.3						
MNG	IP	05	54	40.0		2.0	1.91	188		4.8		
	S			55 04		-0.6						
ECZ	P	05	54	44.8		1.4	2.36	65		5.2	4.4	
	S			55 12		-2.1						
WEL	P	05	54	48		0.3	2.69	198		4.5	5.1	
	S			55 20		-1.5						
KAI	S	05	56	14		-3.1	5.08	220	4.6			
MJZ	EP	05	55	39		-0.6	6.64	216				
	S			56 49		-5.3*						
MSZ	EP	05	56	03		-0.0	8.39	222				
	E			57 28.5								
JUL 06												66/ 271
	H	M	S									
	15	05	49.2	38.40S	173.12E	152 KM	SE	1.7		AVG MAG	4.4	
			+ 2.6	0.08	0.16	23						
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
GNZ	P	15	06	13.1	0.4	0.25	197		5.3	4.9		
ECZ	ES			29.8	-0.9	0.78	26					
TUA	IP	15	06	13.1	-0.1	0.86	241		5.0	5.0		
	E			25								
KRP	P	15	06	24.8	-1.0	2.09	282		3.8	3.7		
	E			45.5								
CNZ	P	15	06	28.3	1.6	2.16	248		4.0			
MNG	P	15	06	39.5	2.1	3.01	222		3.8			
TNZ	E	15	06	42.2		3.02	254		4.0			
AUC	P	15	06	38	-0.1	3.06	299		4.9			
WEL	EP	15	06	49.5	0.9	3.87	221	4.4	3.9	4.3		
	ES			07 34.5	0.3							
GPZ	ES	15	08	39	-2.9	6.71	216	4.8				
JUL 06												66/ 271
	H	M	S									
	22	41	50.6	32.60S	179.01E	384 KM	SE	1.8		AVG MAG	5.6	
			+ 0.9	0.08	0.14	9						
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
RAO	P	22	42	55.8	-1.3	3.47	16		5.7	5.8		
	ES			43 48	-1.3							
ECZ	P	22	43	25	7.7*	5.46	201		5.1	5.3		
	S			44 25	-0.3							
ONE	P	22	43	26	-1.0	6.34	238	5.2				
	S			44 42	-0.8							
AUC	P	22	43	32.5	2.0	6.65	229					
KRP	P	22	43	35.5	1.7	6.93	218					
	ES			44 57	1.9							
TUA	EP	22	43	37	3.2	6.93	206					
	ES			44 56	0.9							
CNZ	EP	22	43	46	0.7	7.93	212					
	ES			45 15	-0.6							
TNZ	EP	22	43	54	2.3	8.48	217					
MNG	P	22	43	58	-1.4	9.14	207					
	E			45 33								
	S			40	-1.3							
WEL	P	22	44	09.7	0.2	9.99	208	6.0				
	S			45 57	-2.4							
KAI	ES	22	46	51	-1.0	12.48	215	5.7				
GPZ	EP	22	44	43	0.1	12.87	208	6.2				
	S			46 58	-2.1							
MJZ	EP	22	44	57	1.2	14.04	213					

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
	S			47 21		-3.1						
MSZ	ES	22	48	00		2.3	15.77	216				
JUL 07												66/ 278
	H	M	S									
	21	59	59.8	44.59S	169.99E	12 KM	SE	1.6		AVG MAG	5.0	
			+ 0.4	0.06	0.05	R						
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
MJZ	IP*	22	00	11.0	-1.8	0.69	30					
ROX	IP*	22	00	18.3	0.2	1.00	208					
MSZ	PN	22	00	26.0	0.1	1.48	266					
	IP*			26.8	0.5							
MNW	PN	22	00	34.1	0.6	2.06	234		5.4	5.1		
	IP*			36.0	-0.1							
	ES*			01 02	-1.3							
GPZ	EPN	22	00	33.2	-1.0	2.11	66	5.4				
	IP*			38.8	1.8							
	ES*			01 05	0.1							
COB	EP*	22	01	13	2.9	4.04	31	4.7				
	ESN			46	-0.5							
	ES*			02 03	0.0							
	E			01 03								
WEL	IP*	22	01	25.5	2.1	4.82	48	5.0	4.9	5.0		
	E			14.8								
	I			31.5								
	SN			02 02	-3.3							
MNG	EPN	22	01	21.2	-1.1	5.67	47	4.9				
	IP*			34.0	-4.0*							
CNZ	EP*	22	01	58	0.7	6.80	39					
	E			43.6								
KRP	E	22	01	58		7.86	34					
	E			02 07								
FELT OMARAMA MVV, OAMARU, OTIAKE, OTEMATATA MMIV												
JUL 07												66/ 279
	H	M	S									
	22	05	11.9	44.59S	170.01E	12 KM	SE	1.8		AVG MAG	4.4	
			+ 0.5	0.05	0.04	R						
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
MJZ	IP*	22	05	23.0	-1.7	0.68	29					
	S*			32	-2.1							
ROX	S*	22	05	46	1.9	1.02	209					
MSZ	PN	22	05	38.4	0.2	1.50	266		5.0	4.8		
	IP*			39.3	0.7							
	S*			59	0.4							
MNW	EPN	22	05	46.0	0.2	2.07	234		4.5	4.0		
	IP*			47.8	-0.6							
	ES*			06 13	-2.8							
GPZ	P*	22	05	50	1.1	2.10	66	4.2				
	E			06 13.3								
	ES*			15.3	-1.3							
KAI	EP*	22	05	54	1.7	2.30	27	4.1				
	ES*			06 25	2.3							
MNG	E	22	06	52.8		5.66	47					
JUL 07												66/ 280
	H	M	S									
	22	56	41.9	44.99S	167.83E	45 KM	SE	1.8		AVG MAG	3.8	
			+ 1.7	0.07	0.13	16						
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
MSZ	IP	22	56	51.0	-0.4	0.33	11					
	S			58.8	0.4							
MNW	P	22	56	56.1	-1.1	0.80	191		4.1	3.9		
	S			57 08.8	0.2							
MJZ	EP	22	57	15.8	0.0	2.14	63		3.4	3.2		
	S			42	0.8							
KAI	E	22	58	23		3.58	48	3.8				
GPZ	ES	22	58	20	-0.6	3.69	71	3.8				
COB	ES	22	58	59	-2.2	5.30	44	4.1				
MNG	EP	22	58	29	2.9	7.12	55					



H M S		33.16S 173.48W		33 KM	SE 2.8	AVG MAG 5.3		
+/- 1.9		0.14 0.37		R				
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S
RAO	EP	07 52 43	-0.1	3.92	7		5.3	5.3
	S	53 25	-1.8					
ECZ	P	07 53 04.0	4.4	5.14	207		5.5	5.4
	S	54 08	11.8*					
GNZ	EP	07 53 14	0.5	6.17	206			
ONE	EP	07 53 20	2.5	6.46	244			
TUA	EP	07 53 21.5	1.3	6.66	211			
	ES	54 35	2.2					
CNZ	P	07 53 34.0	-0.4	7.73	217			
TNZ	EP	07 53 45	2.4	8.34	222			
MNG	P	07 53 48	-1.8	8.88	211			
	ES	55 22	-3.8					
WEL	EP	07 54 00	-1.2	9.74	212	5.9		
	S	55 42	-4.2					
	EL	56 20						

USCGS ORIGIN 07 51 44.7 33.1S 179.0W 31KM MAG 4.8

H M S		40.91S 173.95E		83 KM	SE 1.1	AVG MAG 4.1		
+/- 0.6		0.03 0.03		9				
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WEL	P	21 51 42.8	0.0	0.72	121	4.2	4.7	4.9
	S	55.8	0.6					
COB	P	21 51 45.6	0.5	0.94	259	4.0		
	S	58.5	-0.8					
MNG	P	21 51 47.9	-0.6	1.20	76		4.2	4.3
	ES	52 04	-1.1					
TNZ	P	21 51 56.5	0.9	1.76	11		4.1	3.9
	S	52 18	0.8					
CNZ	P	21 52 01.0	0.7	2.11	36		3.7	3.9
	S	27.0	1.6					
KAI	ES	21 52 34.8	-0.3	2.49	229	3.7		
GPZ	S	21 52 42	-4.6*	2.94	199	3.9		
KRP	P	21 52 15.7	-0.2	3.23	23		4.2	3.8
	S	51.0	-2.4					
MJZ	ES	21 53 13	0.2	4.01	219			3.4

FELT STEPHENS IS MMIV

H M S		38.78S 175.80E		12 KM	SE 0.3	AVG MAG 3.4		
+/- 0.1		0.01 0.01		R				
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	05 47 13.4	0.2	0.28	58			
	SG	17.0	-0.3					
CNZ	PG	05 47 17.0	0.2	0.46	205			
	ISG	22.8	-0.4					
KRP	PG	05 47 25.0	-0.0	0.88	346		3.1	
	E	40.0						
TUA	PG	05 47 28.8	0.1	1.06	92		3.9	
TNZ	E	05 47 34.8		1.18	249			
MNG	PG	05 47 44.8	0.1	1.85	187		3.3	

H M S		38.76S 175.95E		12 KM	SE 0.2	AVG MAG 3.2		
+/- 0.1		0.01 0.01		R				
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	05 59 00.8	0.1	0.18	42			
	E	04.8						
CNZ	PG	05 59 08.0	0.3	0.54	216		2.5	
	E	12.3						
KRP	PG	05 59 15.0	0.1	0.90	338		3.0	
	ESG	27	-0.0					

## LOCAL EARTHQUAKES

H M S		37.76S 175.71E		179 KM	SE 1.2	AVG MAG 4.7		
+/- 0.9		0.05 0.04		6				
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	PG	05 59 15.5	-0.1	0.94	93			3.8
TNZ	PG	05 59 22.6	-0.3	1.30	250			3.3
MNG	PG	05 59 34.8	-0.0	1.89	191			3.3
	E	32.5						
KRP	IP	14 00 57.7	0.5	0.95	260			4.8
	S	01 17.8	-0.5					
TUA	EP	14 00 59.2	0.8	1.10	162			4.8 4.8
	I	01 00.5						
	S	19.2	-1.3					
GNZ	EP	14 01 00.8	0.2	1.36	131			4.3 4.8
	I	01.8						
	ES	24	-0.4					
ECZ	P	14 01 01.0	-0.5	1.45	88			5.5
	I	04.2						
CNZ	P	14 01 06.0	2.0	1.70	212			4.2
	I	07.0						
	E	17						
MNG	P	14 01 19.8	0.7	3.01	198			4.5 4.4
	I	27.2						
	S	58	0.9					
	E	02 10						
WEL	P	14 01 29.0	-0.4	3.83	203	4.8	4.5	5.0
	S	02 17	1.6					
COB	ES	14 02 31	-0.5	4.53	222	4.7		
KAI	ES	14 03 10	-1.9	6.26	219	4.8		
	E	21						
GPZ	EP	14 02 05	-1.6	6.69	206	5.1		
	ES	03 18	-4.0*					
MJZ	EP	14 02 22	0.5	7.81	215			
	S	03 44.8	-3.9*					
MSZ	EPG	13 05 47.0	-0.6	0.56	13			3.1
	E	51						
	E	06 09						
	E	17						
MNW	PG	13 05 47.9	0.3	0.57	188			4.1
	I	50.0						
	I	06 07.0						
ROX	EPG	13 05 58.3	-0.9	1.14	103			3.1 3.2
	E	06 03.0						
	E	08						
	E	28						
MJZ	EPG	13 06 23.8	1.2	2.31	59			3.0
	E	26						
	E	37						
	E	07 04						
GNZ	EP	23 00 04	0.6	6.13	211			
	E	01 21						
ONE	EP	23 00 11	-0.5	6.72	247			
KRP	P	23 00 13.7	-0.4	6.92	228			
CNZ	EP	23 00 29	3.5	7.77	220			
MNG	EP	23 00 37	-3.2	8.87	214			

H M S		45.22S 167.74E		12 KM	SE 1.6	AVG MAG 3.3		
+/- 1.2		0.06 0.09		R				
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S
MSZ	EPG	13 05 47.0	-0.6	0.56	13			3.1
	E	51						
	E	06 09						
	E	17						
MNW	PG	13 05 47.9	0.3	0.57	188			4.1
	I	50.0						
	I	06 07.0						
ROX	EPG	13 05 58.3	-0.9	1.14	103			3.1 3.2
	E	06 03.0						
	E	08						
	E	28						
MJZ	EPG	13 06 23.8	1.2	2.31	59			3.0
	E	26						
	E	37						
	E	07 04						

H M S		33.42S 173.90W		33 KM	SE 2.8	AVG MAG 3.2		
+/- 5.1		0.27 0.49		R				
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ	EP	23 00 04	0.6	6.13	211			
	E	01 21						
ONE	EP	23 00 11	-0.5	6.72	247			
KRP	P	23 00 13.7	-0.4	6.92	228			
CNZ	EP	23 00 29	3.5	7.77	220			
MNG	EP	23 00 37	-3.2	8.87	214			



ES		02 16		-0.1									
H	M	S											
JUL 14	15 05	17.5	39.26S	174.76E	33 KM	SE	0.6	AVG MAG	66/ 281				
		+ 0.3	0.02	0.02	R			3.2					
			H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
TNZ	P		15 05	24.8			-0.7	0.31	284				
	S			31.2			0.0						
CNZ	P		15 05	28.9			-0.3	0.61	84		3.2	3.4	
	S			37.2			-0.5						
MNG	P		15 05	41.6			0.8	1.46	158		3.0		
KRP	P		15 05	41			0.1	1.47	25		3.0	3.2	
	S			39			0.5						
JUL 15	00 37	31.9	38.84S	175.02E	12 KM	SE	0.5	AVG MAG	66/ 281				
		+ 0.3	0.01	0.03	R			3.3					
			H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
WNZ	EPG		00 37	37.0			0.1	0.22	17				
	ISG			40.0			-0.2						
CNZ	EPG		00 37	42.0			-0.5	0.51	226		3.1		
KRP	PG		00 37	51.8			-0.3	0.99	337		3.3		
	ESG			38 06			0.4						
TNZ	E		00 38	03				1.32	255				
	E			11									
	E			26									
MNG	EPG		00 38	09.2			0.5	1.82	193		3.4		
	E			39									
JUL 15	23 03	05.6	38.51S	175.81E	191 KM	SE	1.6	AVG MAG	66/ 281				
		+ 1.6	0.06	0.06	13			4.1					
			H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
KRP	P		23 03	32.0			-0.3	0.62	339		3.5	3.3	
	S			51.2			-1.7						
CNZ	IP		23 03	34.9	J		2.1	0.72	197		4.1		
TNZ	P		23 03	39.0			2.0	1.31	238		3.8		
GNZ	P		23 03	41.2			0.1	1.74	95		4.1	4.1	
	S			04 07.5			-0.9						
MNG	IP		23 03	46.4	J		1.3	2.12	187		4.7	4.1	
	S			04 16.0			0.4						
WEL	P		23 03	53.8			-0.3	2.89	196	4.3	4.5	4.5	
	ES			04 32			0.5						
COB	ES		23 04	45			0.4	3.50	222	4.0			
KAI	S		23 05	23			-0.9	5.23	219	4.3			
GPZ	S		23 05	32.5			-2.5	5.71	204				
JUL 17	01 26	47.5	44.33S	163.41E	33 KM	SE	0.6	AVG MAG	66/ 281				
		+ 0.3	0.02	0.02	R			4.1					
			H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
MSZ	P*		01 26	57.5			-0.4	0.49	226				
	S*			27 05.5			0.1						
ROX	P*		01 27	11.0			-0.4	1.31	151		4.2	4.6	
	I			12.9									
	S*			29			-0.1						
HJZ								1.52	78		4.1	3.8	
MNW	P*		01 27	16.0			0.5	1.56	201		4.3	4.2	
	S*			41.0			4.6*						
KAI	ES*		01 28	14			-0.4	2.83	51	3.9			
GPZ	EP*		01 27	43			0.9	3.12	80	3.7			
COB	E		01 28	41				4.54	46	4.2			
MNG	E		01 28	30.0				6.41	57				
JUL 17	17 15	28.8	38.22S	173.83E	33 KM	SE	1.5	AVG MAG	66/ 281				
		+ 1.7	0.06	0.14	R			4.3					

		H M S		DIR		RES		DIST		AZ		W-A		W P		W S	
ECZ	P	17 15	38.2				-1.6	0.57	336								
	E		48														
GNZ	IP	17 15	44.9				2.4	0.77	236								
	E		59														
KRP	P	17 16	07.9				-0.0	2.62	275					4.1	3.7		
	S		36.5				-1.2										
CNZ	P	17 16	11.0				1.2	2.75	248					4.1			
MNG	P	17 16	20.6				0.1	3.53	226					4.3	3.9		
	ES		17 01				1.0										
TNZ	E	17 16	23.8					3.62	253					4.1			
ONE	EP	17 16	33				1.6	4.33	303	4.0							
WEL	P	17 16	31				-1.1	4.38	224	4.5	4.4	4.2					
	S		17 21				0.3										
KAI	ES	17 18	25				-1.4	7.12	230	4.7							
GPZ	ES	17 18	27				-1.4	7.20	219	4.7							
JUL 18	10 47	01.4	39.20S	174.65E	220 KM	SE	1.7	AVG MAG	66/ 293								
		+ 1.7	0.06	0.10	14			4.3									
			H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S					
TNZ	P	10 47	32.0				1.8	0.21	272								
CNZ	P	10 47	33.0				1.3	0.70	91			3.8					
	E		53														
KRP	P	10 47	36.0				-0.6	1.45	29			3.5					
	S		48 02				-1.9										
MNG	IP	10 47	39.2	J			1.6	1.56	156			4.6	4.4				
	S		48 05				-0.6										
WEL	P	10 47	44.5				1.9	2.09	178	4.3	4.3	4.7					
	S		48 14				-0.4										
AUC								2.34	2								
COB	S	10 48	21				1.0	2.39	217	4.3							
GNZ	P	10 47	48.0				-1.0	2.69	79			4.4	4.5				
	E		48 20														
KAI	ES	10 48	55				-1.3	4.14	215	4.4							
GPZ	ES	10 49	08				-1.8	4.74	198	4.5							
JUL 18	11 48	53.1	38.63S	177.53E	70 KM	SE	2.2	AVG MAG	66/ 294								
		+ 1.5	0.07	0.09	21			4.3									
			H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S					
GNZ	P	11 49	05.1				-0.3	0.39	92								
	S		14.2				-0.5										
ECZ	P	11 49	13.7				-1.5	1.23	41			4.9					
CNZ	P	11 49	23.0				2.4	1.64	249			4.0					
	E		47.8														
KRP	P	11 49	21				-0.5	1.72	294			3.2					
	ES		41				-1.6										
TNZ	P	11 49	36.4				3.6	2.52	256			4.2					
MNG	P	11 49	34.7				1.6	2.54	218			3.8					
	E		50 07														
WEL	EP	11 49	45				-0.0	3.40	218	4.4	4.2	4.5					
	S		50 26				1.7										
COB	ES	11 50	50				-0.2	4.43	235	4.2							
KAI	ES	11 51	30				-0.9	6.07	228	4.6							
GPZ	ES	11 51	32				-3.7	6.26	214	4.9							
JUL 18	13 30	09.0	45.00S	167.67E	96 KM	SE	1.4	AVG MAG	66/ 295								
		+ 1.6	0.05	0.07	12			4.2									
			H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S					
MSZ	P	13 30	24.3				0.6	0.37	28								
	S		35				0.0										
MNW	IP	13 30	27.4				0.3	0.78	183			4.6	4.7				
	S		39.2														







		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
MNG	EP	06	31	19	-2.2	8.70	204						
	E		32	45									
	ES			53	-2.2								
WEL	S	06	33	13	-2.3	9.54	205	6.1					
COB	ES	06	33	34	3.0	10.21	213	5.5					
KAI	ES	06	34	10	-1.8	11.95	213	5.4					
USCGS ORIGIN 06 29 15.9 33.4S 178.4W 23KM MAG4.4													
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JUL 24		H	M	S			DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
		10	49	42.2	37.72S	175.24E	329 KM	SE	1.1				66/ 304
				+ 0.6	0.03	0.04	5						AVG MAG 5.5
		H	M	S			DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
HNZ	EP	10	50	26.0	0.4	0.92	187	4.9					
TUA	P	10	50	28.0	0.5	1.30	147	5.6	5.5				
	ES		51	02	-0.8								
AUC	P	10	50	28.0	-0.3	1.45	306	5.7	5.2				
	S		51	06	1.8								
CNZ	P	10	50	29.8	0.7	1.58	200	5.0					
	E		51	07									
GNZ	P	10	50	29.8	0.1	1.68	124	5.7	5.9				
	I			57.0									
	IS		51	05.0	-1.8								
ECZ	P	10	50	29.9	-0.8	1.83	90	5.4					
	E			49									
ONE	P	10	50	36	0.4	2.46	321	4.7					
	ES		51	16	-1.2								
MNG	IP	10	50	41.0	0.9	2.96	191	5.3					
	ES		51	26	0.7								
WEL	P	10	50	48.8	1.0	3.74	197	5.8	5.5	5.9			
	S		51	40	0.8								
COB	EP	10	50	54.0	0.0	4.33	218	5.6					
	S		51	50	-0.3								
KAI	EP	10	51	12	-1.7	6.07	216	5.8					
	S		52	25	-0.6								
GPZ	P	10	51	20.5	0.8	6.57	203	6.2					
	S		52	36.8	0.6								
MJZ	EP	10	51	33.0	0.5	7.64	213						
	ES		52	58	-1.3								
ROX	EP	10	51	53	0.1	9.32	212						
	ES		53	37	1.0								
MSZ	P	10	51	53.0	-0.3	9.36	219						
	S		53	34	-2.7								
RAO	ES	10	53	36	-9.2*	9.75	32						
MNW	P	10	52	06.0	1.2	10.31	216						
USCGS ORIGIN 10 49 44 37.7S 176.2E 313KM													
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JUL 24		H	M	S			DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
		11	54	31.3	41.73S	172.35E	33 KM	SE	1.8				66/ 304
				+ 0.6	0.04	0.05	R						AVG MAG 3.9
		H	M	S			DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
COB	P*	11	54	44	-1.1	0.70	25	3.7					
	S*			53	-2.1								
KAI	EP*	11	54	50.5	-0.4	1.06	221	3.8					
	S*		55	05	-0.5								
WEL	P*	11	55	05.0	0.3	1.87	77	3.6	4.3	4.4			
	S*			29	-0.5								
GPZ	EP*	11	55	10	3.5	1.98	174	3.2					
	S*			32	-0.8								
MNG	EP*	11	55	17.5	0.2	2.61	66	4.2	4.1				
	I			15.0									
	S*			50	-1.7								
MJZ	EP*	11	55	19	1.1	2.65	211	3.4					
	E			16									
	S*			51	-1.8								
TNZ	EP*	11	55	25	1.5	2.97	32	3.8	3.8				
	ES*		55	05	2.4								

		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
JUL 25		09	52	49.1	41.05S	174.74E	33 KM	SE	1.2				66/ 304
				+ 0.4	0.02	0.03	R						AVG MAG 3.8
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WEL	P*	09	52	56.2	0.3	0.24	176	3.9					
	S*		53	01.6	0.8								
MNG	P*	09	53	02.0	-1.0	0.71	53	4.1	4.3				
	S*			12.7	-0.4								
COB	EP*	09	53	17	0.5	1.52	268	3.6					
	S*			38	1.1								
TNZ	ES*	09	53	47	-0.7	1.88	351					3.4	
CNZ	PN	09	53	20.2	1.1	1.95	19	3.8	3.9				
	S*			50	0.3								
KAI	ES*	09	54	16	-2.1	2.90	238	3.4					
FELT WELLINGTON MMIV													
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JUL 25		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
		10	51	52.2	32.65S	179.62E	383 KM	SE	2.2				66/ 305
				+ 1.1	0.09	0.15	10						AVG MAG 5.7
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
RAO	EP	10	52	59	-1.7	3.69	24	4.7	5.3				
	S		53	44	-10.6*								
ECZ	P	10	53	21.2	4.6	5.25	196	5.6	5.7				
	S		54	22	-0.8								
ONE	EP	10	53	24	0.6	5.88	236	5.3					
	ES		54	36	1.0								
GNZ	EP	10	53	27.2	-0.7	6.28	197						
	I			31									
	I			54	40								
	S			45	1.8								
TUA	EP	10	53	35	2.5	6.68	202						
	E			54	43								
	S			53	1.6								
CNZ	P	10	53	39.4	-3.9	7.62	210						
TNZ	EP	10	53	52.0	2.7	8.13	215						
	E			55	28								
MNG	P	10	53	55.0	-2.8	8.87	205						
	I			57.0									
	I			55	30								
	S			37	-0.1								
WEL	P	10	54	07	-0.8	9.71	206	6.5					
	E			55	46								
	S			53	-2.0								
COB	EP	10	54	15	-1.0	10.40	214	6.2					
	ES		55	06	-3.7								
KAI	E(P)	10	54	36	-0.2	12.15	213	5.8					
	E			57	04								
GPZ	EP	10	54	41	-0.3	12.58	207	6.4					
	S			56	54	-1.8							
MJZ	EP	10	54	54	-0.0	13.72	212						
MSZ	P	10	55	13.3	1.3	15.43	215						
	ES		57	54	1.2								
	ES		57	54	1.2								
USCGS ORIGIN 10 51 52.5 32.4S 179.7E 333KM MAG 4.4													
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JUL 25		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
		13	09	04.8	37.98S	178.42E	138 KM	SE	1.8				66/ 306
				+ 2.0	0.09	0.16	19						AVG MAG 4.9
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	IP	13	09	20.8	-3.3	0.30	20						
GNZ	P	13	09	27.0	0.6	0.74	205	5.4					
	E			44									



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	66/310
TNZ	P	13	10	00.0		2.4	3.39	248				4.9
	E			48								
MNG	P	13	09	59.8		0.9	3.49	220				4.6
ONE	EP	13	10	04		-0.7	3.93	303		4.6		
WEL	P	13	10	11		0.7	4.34	219		5.2	4.5	5.3
	ES			11 01		0.4						
COB	E	13	10	26			5.38	233		4.9		
	ES			11 26		0.6						
KAI	E	13	10	52			7.03	228		5.2		
	ES			12 04		-1.1						
MJZ	P	13	11	07		1.0	8.50	223				
	S			12 38		-2.5						
MSZ	E	13	11	34			10.34	226				
	ES			13 23		-1.5						
JUL 26		H	M	S								66/310
		16	32	20.6		38.36S	176.36E	135 KM	SE	2.0		AVG MAG 4.5
				+ 1.3		0.06	0.05	12				
TUA	P	16	32	41.5		-0.7	0.77	126				4.5
	S			59		0.1						4.6
KRP	IP	16	32	41.1	VW	-1.2	0.78	304				
	S			56.0		-3.0						
CNZ	IP	16	32	46.0	J	1.3	1.05	217		3.6		4.0
	E			33 08								
GNZ	P	16	32	48.0		0.3	1.34	103		4.8		
	I			33 05.0								
	IS			08.5		0.1						
TNZ	P	16	32	54.0		1.7	1.75	241		4.1		4.2
	S			33 20.8		4.3						
ECZ	P	16	32	53.0		-0.5	1.85	70		4.6		4.3
	ES			33 20		1.4						
AUC	P	16	32	55		0.3	1.95	320		4.5		
WEL	P	16	33	09.5		-0.9	3.17	202		4.8	4.4	
	S			46		-2.4						
COB	S	16	34	05		-0.8	3.90	225		4.8		
GPZ	S	16	34	50		-6.7*	6.02	207		5.1		
JUL 27		H	M	S								66/310
		02	53	59.6		45.10S	167.59E	94 KM	SE	1.4		AVG MAG 4.3
				+ 1.6		0.05	0.07	11				
MSZ	IP	02	54	15.8	J	0.9	0.49	29				
	S			26.3		-0.2						
MNW	IP	02	54	16.5	J	-0.1	0.68	178		4.9	4.7	
	S			28.0		-1.5						
ROX	IP	02	54	24.8	D	1.4	1.28	108		4.6	4.9	
	S			42.2		1.0						
MJZ	P	02	54	37.5		0.4	2.34	63		3.6	3.9	
	S			55 05.8		0.7						
KAI	ES	02	55	40		-0.5	3.78	48		4.0		
GPZ	ES	02	55	41		-2.2	3.89	71		4.2		
JUL 27		H	M	S								66/310
		17	42	20.4		39.77S	176.76E	12 KM	SE	1.6		AVG MAG 5.1
				+ 0.6		0.03	0.06	9				
TUA	P*	17	42	39.3		0.6	1.01	18				
	ES*			52.5		0.2						
CNZ	IP*	17	42	39.3		-0.9	1.10	301				
WNZ	IP*	17	42	42.0		-0.7	1.24	336				5.3
	I			43.3								
MNG	P*	17	42	45.0		1.4	1.29	229		5.1		
	ES*			43 02		1.1						
GNZ	P*	17	42	46.0		-1.0	1.49	42		4.6		
	E			52.5								
	I			55.5								

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	66/310
TNZ	P*	17	42	52.2		-2.3	1.93	287				5.5
	E			43 23								
KRP	IPN	17	42	52.6	D	-1.6	2.07	332				4.9
	IP*			57.0		0.1						
WEL	PN	17	42	55.0		-0.2	2.15	224				5.0
	I			43 05.0								
ECZ	PN	17	43	00.0		-0.1	2.50	35				4.7
	E			15								
AUC	EPN	17	43	11		0.1	3.29	331				5.8
	IP*			19.5		1.7						
COB	E(PN)	17	43	11.0		-0.5	3.34	245		4.4		
	E			19.0								
	I			22.0								
	ESN			42		-8.1*						
ONE	E(PN)	17	43	28		2.0	4.41	334				
	E			50								
	E			44 34								
KAI	E	17	43	39.0			4.89	234		5.3		
	E			50.8								
	I			58								
GPZ	ISN	17	43	26.3		-1.2	4.99	217		5.8		
	EPN	17	43	33.0		-0.7						
	SN			44 27.0		-2.9						
MJZ	EPN	17	43	52.0		0.6	6.31	226				
	E			44 05.0								
	SN			45 00		-1.5						
MSZ	EPN	17	44	19.0		2.6	8.19	230				
	E			26.8								
	SN			45 50		3.8						
MNW	(P*)	17	44	55.0		-0.7	9.01	225				
	SN			46 12		6.2*						
FELT SOUTHERN AND CENTRAL HAWKES BAY AND CENTRAL NORTH IS												
MAXIMUM WAIPUKURAU MMV												
USCGS ORIGIN 17 42 20.1 39.6S 176.6E 11KM												
JUL 27		H	M	S								66/310
		19	30	30.4		39.66S	176.61E	33 KM	SE	1.7		AVG MAG 3.5
				+ 1.1		0.06	0.06	9				
CNZ	P*	19	30	48.5		0.1	0.94	299		4.0	3.5	
	S*			31 01		-0.3						
TUA	P*	19	30	48		-0.6	0.95	26		3.7	3.8	
	ES*			31 01		-0.6						
MNG	P*	19	30	53.8		-0.1	1.29	222		3.2		
GNZ	E	19	31	00			1.50	48				
	E			09								
TNZ	EP*	19	31	01		-1.4	1.79	285		3.2		
	E			32								
KRP	E(PN)	19	31	03		2.9	1.93	334		3.1		
JUL 28		H	M	S								66/311
		16	29	23.1		44.99S	167.60E	101 KM	SE	1.3		AVG MAG 4.0
				+ 1.4		0.05	0.07	9				
MSZ	P	16	29	40.3	J	1.8	0.39	36				
	S			49.0		-1.2						
	I			49.0								
MNW	P	16	29	41.2	J	-0.5	0.79	179		4.5	4.5	
	S			55.5		-0.4						
ROX	P	16	29	48.0		0.4	1.31	113		3.9	4.2	
	S			30 06.7		0.7						
MJZ	P	16	29	59.8		-0.2	2.28	65		3.4	3.8	
	S			30 28.8		1.3						
KAI	S	16	31	02		-0.1	3.69	50		4.0		
GPZ	S	16	31	04		-1.7	3.84	72		4.0		



DATE	H	M	S	LAT	LONG	DIR	RES	DIST	AZ	W-A	W P	W S	66/315	
													AVG MAG	66/315
JUL 29	14	18	57.2	41.05S	174.20E	33 KM	SE	1.6					4.5	66/315
			+0.3	0.03	0.33									
				H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
	WEL	IP*	14	19	08.2	JW	0.6	0.49	119	4.8				
		S*			16.2		1.2							
	MNG	IP*	14	19	16.4	D	-0.6	1.07	66					
		S*			32.0		0.4							
	COB	P*	14	19	17.8		0.1	1.11	268	4.5				
		S*			32.8		-0.0							
	TNZ	P*	14	19	29.0		-1.6	1.87	4		4.4	4.5		
		ES*			55		-0.4							
	CNZ	P*	14	19	31.2		-3.6	2.12	30					
	KAI	EPN	14	19	38		2.5	2.55	234	4.4				
		SN			20	11	6.4*							
	GPZ	EPN	14	19	39.3		-1.0	2.88	203	4.4				
		SN			20	09.5	-3.1							
	TUA	EP*	14	19	52.0		-1.1	3.19	46		4.5	4.6		
		E			55									
	GNZ	EPN	14	19	52.0		-0.6	3.80	52		4.5	4.7		
		E			20	11								
	MJZ	EPN	14	19	56.5		0.9	4.03	222					
		E			20	09								
	AUC	EPN	14	20	01		-0.5	4.21	6		4.7			
		IP*			11		0.4							
	ONE	EP*	14	20	29		0.3	5.27	1					
	MSZ	EPN	14	20	21.5		1.0	5.86	230		4.1	4.7		
		I			24.2									
		SN			21	26	1.2							
	FELT MARLBOROUGH SOUNDS WELLINGTON AND BLENHEIM MMIV AND WANGANUI MMIII													
JUL 29	14	59	29.8	34.25S	179.99W	356 KM	SE	1.5					5.1	66/315
			+1.2	0.12	0.17									
				H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
	ECZ	P	15	00	39.0		3.1	3.63	199		5.0	5.0		
		ES			01	34		6.1*						
	GNZ	EP	15	00	44.5		-2.1	4.67	199		4.9	5.0		
		I			48.0									
		E			01	41								
	AUC	EP	15	00	49		0.1	4.99	237		4.8			
	TUA	EP	15	00	51		-0.3	5.10	206		4.6	4.9		
		ES			01	54		-1.2						
	RAO	E	15	01	35			5.29	20		5.0			
	CNZ	EP	15	01	02.5		-0.1	6.10	215					
		ES			02	17		1.6						
	TNZ	EP	15	01	11.5		2.1	6.68	221					
	MNG	EP	15	01	15.0		-1.6	7.30	208					
		I			16.3									
	WEL	S	15	01	02		-0.6							
		EP	15	01	26.2		-0.5	8.16	209		5.7			
		S			02	58		-0.7						
	COB	ES	15	03	15		-0.4	8.93	218		5.4			
	GPZ	EP	15	02	02		1.0	11.03	209		5.4			
		ES			04	02		1.3						
	MJZ	EP	15	02	15		-0.1	12.21	214					
	MSZ	EP	15	02	35		-0.5	13.96	218					
JUL 30	10	22	15.6	39.80S	174.17E	217 KM	SE	1.8					4.1	66/315
			+1.0	0.07	0.07									

DATE	H	M	S	LAT	LONG	DIR	RES	DIST	AZ	W-A	W P	W S	66/315	
													AVG MAG	66/315
	TNZ	P	10	22	46.0		0.7	0.63	15				3.8	3.6
		S			23	09		0.8						
	MNG	P	10	22	51.0		1.7	1.30	130				3.8	4.9
		S			23	15.8		0.2						
	WEL	P	10	22	53.6		2.1	1.56	163	4.2	3.9	4.8		
		S			23	20.5		1.2						
	COB	P	10	22	54.0		1.2	1.70	220	4.0				
		S			23	21.0		-0.5						
	TUA	EP	10	23	00.0		-1.0	2.51	68		4.4	4.2		
		ES			33		-3.2							
	GNZ	P	10	23	09.0		0.1	3.20	70		4.6	4.3		
		ES			49		-1.3							
	KAI	E	10	23	16			3.43	217	4.5				
		S			53		-2.2							
	ECZ	P	10	23	18.2		-0.5	4.01	60		5.0			
	GPZ	EP	10	23	21		1.7	4.06	196		3.0	4.1		
		S			24	07		-1.7						
	MJZ	EP	10	23	34		2.7	5.02	212		3.3	3.7		
		S			24	28		-2.1						
JUL 31	04	29	16.4	37.46S	179.80E	210 KM	SE	1.6					4.6	66/315
			+1.7	0.16	0.19									
				H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
	ECZ	P	04	29	41.5		-2.8	0.31	221					
		S			59.0		-6.7*							
	GNZ	P	04	29	51.0		1.2	1.33	207				5.3	
		E			30	18								
	TUA	P	04	29	55.5		0.8	1.87	224		4.8	4.6		
		ES			30	24		-0.3						
	TNZ	EP	04	30	19.0		1.3	3.88	242		4.2			
		E			31	44.0								
	MNG	P	04	30	22.0		1.9	4.08	218		4.2	4.2		
		S			31	10.5		1.1						
	WEL	E	04	30	45			4.93	218	4.8	4.5	4.7		
		S			31	29		0.3						
	COB	ES	04	31	51		-0.7	5.94	231	4.8				
	GPZ	ES	04	32	34		-0.7	7.79	215	5.0				
	MJZ	EP	04	31	24		-0.5	9.08	222					
		ES			33	03		-1.6						
AUG 01	17	02	42.3	41.73S	174.48E	12 KM	SE	0.9					3.7	66/316
			+0.5	0.02	0.02									
				H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
	WEL	P*	17	02	52.2	J	0.4	0.49	26	4.2				
		S*			58.1		-0.7							
	MNG	P*	17	03	07.0		0.6	1.34	35		3.9	3.9		
		ES*			24		-0.3							
	COB	P*	17	03	08.6		0.2	1.46	295	3.6				
		S*			27		-0.8							
	GPZ	SN	17	03	49		0.1	2.39	214	3.1				
	KAI							2.42	250	3.3				
	TNZ	EP*	17	03	30		3.1*	2.54	358		3.7	3.7		
		ES*			04	02		1.7						
	CNZ	P*	17	03	28.3		-0.5	2.65	18		3.6	3.9		
		S*			04	03		-0.7						
	FELT KARORI MMIV													
AUG 01	22	41	02.7	44.91S	167.65E	86 KM	SE	1.1					3.5	66/317
			+1.6	0.05	0.06									
				H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
	MSZ													



		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
ROX	S	22	41	45	34.0			-0.9	1.31	116			3.4
MJZ	S	22	42	04.0				0.8	2.22	66	3.2		3.1
GPZ	E	22	42	48				-0.8	3.79	73			
AUG 03		18	39	08.3	44.57S	168.41E	12 KM		SE	2.1	AVG MAG	66/ 321	4.4
				± 0.9	0.05	0.05	R						
MSZ	PG	18	39	15.4			J	-0.6	0.37	253			
ROX	PG	18	39	31.7				0.8	1.11	145	4.6		4.8
MNW	PG	18	39	33.7				-1.7	1.34	204	5.0		4.5
MJZ	PG	18	39	39.8				0.5	1.59	69	4.1		4.4
KAI	E	18	40	15				-0.8	2.98	48	4.0		
GPZ	EPG	18	40	11				2.1	3.17	76	4.2		
COB	SN	18	41	14				-1.4	4.71	44	4.2		
MNG	EPN	18	40	50				-3.2	6.54	55			
FELT MT ASPIRING EARNSLAW MMIV													
AUG 04		15	19	47.3	37.32S	177.41E	217 KM		SE	2.1	AVG MAG	66/ 321	4.3
				± 2.1	0.11	0.10	12						
ECZ	E	15	20	17					0.98	113	4.2		4.2
GNZ	IP	15	20	21.2			J	-10.4*	1.40	160	4.6		4.5
TUA	EP	15	20	23				-0.8	1.50	188	4.3		4.4
KRP	P	15	20	22.2				0.3	1.60	247	3.8		
GNZ	P	15	20	33.3				-1.1	2.38	217	3.5		3.5
TNZ	EP	15	20	41				-1.4	3.02	231	3.9		
MNG	P	15	20	46.0				-2.7	3.62	204	4.1		4.2
WEL	P	15	20	56.0				2.0	4.46	207	4.7		4.5
COB	ES	15	22	06				4.7	5.23	223	4.6		
GPZ	ES	15	22	53				0.1	7.33	208	4.8		
MJZ	ES	15	23	20				-0.2	8.49	216			
AUG 04		18	15	37.7	38.48S	173.98E	168 KM		SE	1.7	AVG MAG	66/ 321	4.6
				± 1.3	0.05	0.05	11						
KRP	P	18	16	02.0				-0.0	0.66	328	3.8		3.7
GNZ	P	18	16	04.2				-1.7	0.79	205	4.3		
TUA	P	18	16	05.0				1.4	0.97	110	4.6		5.0
TNZ	P	18	16	10.4				0.9	1.43	240	3.9		
GNZ	P	18	16	10.5				0.1	1.61	96	4.7		4.7
MNG	P	18	16	17.9				2.1	2.17	190	4.8		4.6
ECZ	IP	18	16	16.0				-1.9	2.17	70	5.6		
WEL	P	18	16	26.0				0.2	2.95	198	4.8		4.9
	ES	17	03					0.1					

## LOCAL EARTHQUAKES

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COB	S	18	17	18.0				0.4	3.61	223	4.6		
GPZ	S	18	18	03.7				-4.7*	5.79	205	5.2		
MJZ	S	18	18	31.0				-3.7	6.89	215			
AUG 05		05	59	16.3	39.26S	174.96E	33 KM		SE	1.0	AVG MAG	66/ 321	3.8
				± 0.3	0.02	0.02	R						
TNZ	P*	05	59	26.0				-0.2	0.46	279			
GNZ	IP*	05	59	25.2				-0.3	0.46	83			
KRP	P*	05	59	42.0			J	0.8	1.40	19	3.6		3.8
MNG	P*	05	59	41.3				0.1	1.42	164	3.7		3.7
WEL	P*	05	59	52.7				-1.1	2.03	184	3.6		4.1
COB	ESN	06	00	23				0.2	2.50	222	3.5		
KAI	ESN	06	01	10				2.0	5.4*	4.23	218	4.0	
GPZ	ESN	06	01	17				2.0	4.76	201	4.1		
A NOTABLE FEATURE IS THE LACK OF ENERGY RECEIVED AT TUA GNZ AND ECZ. NOT RECORDED ALSO AT AUC OR ONE													
AUG 06		06	22	55.8	38.83S	175.80E	12 KM		SE	1.0	AVG MAG	66/ 322	3.7
				± 0.4	0.02	0.02	R						
WNZ	E	06	23	02.0					0.31	51			
GNZ	PG	06	23	03.3			J	-1.3	0.42	208			
KRP	PG	06	23	14.3				-0.3	0.92	347	3.7		3.6
TUA	PG	06	23	17.0				0.1	1.06	89	4.0		3.9
TNZ	PG	06	23	18.5				-0.3	1.16	252	3.4		3.3
GNZ	E	06	23	33				0.7	1.75	85	3.9		
MNG	P*	06	23	28.4				1.4	1.80	188	3.7		
FELT TURANGI MOTUOAPA MMIV													
AUG 06		06	48	45.2	38.79S	175.81E	12 KM		SE	1.5	AVG MAG	66/ 323	3.9
				± 0.5	0.02	0.03	R						
WNZ	SG	06	48	55.0				-0.3	0.28	56			
GNZ	IPG	06	48	52.1			J	-2.7	0.46	206			
KRP	PG	06	49	03.4			J	0.1	0.89	346	4.0		4.0
TUA	PG	06	49	06.0				0.6	1.05	92	4.1		4.1
TNZ	PG	06	49	07.5				-0.5	1.18	250	3.7		3.6
GNZ	E	06	49	21.8				0.3	1.74	86			
MNG	P*	06	49	17.6				0.6	1.85	188	4.2		3.7
WEL	EP*	06	49	34				-0.3	2.62	197			
	ES*	50	07					1.4					
FELT TURANGI, MOTUOAPA MMIV													
AUG 06		12	49	34.7	47.06S	165.81E	33 KM		SE	2.3	AVG MAG	66/ 324	5.3
				± 2.3	0.27	0.25	R						
MNW	P	12	50	01.2			J	-1.3	1.79	45			
MSZ	P	12	50	14.2				0.2	2.81	32	5.4		











		H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S	
MNG	IPG	22	40	56.6	D	-1.6	1.13	189		4.7	4.1		
	SG	41	13.0			-0.5							
TUA	EPG	22	41	01		-0.8	1.31	58		3.9	4.1		
	SG	21				1.5							
KRP	P*	22	41	03.5		0.1	1.58	355		4.1	4.1		
	S*	24				-0.5							
WEL	EP*	22	41	08.4		-0.9	1.93	202	3.7	4.6	4.2		
	E	16.0											
	ES*	35.5				0.7							
	E	38											
GNZ	E	22	41	18.0			1.98	65					
	E	24.8											
	E	53											
COB	E	22	41	57			2.78	234	3.8				
	ES*	42	02			1.5							
KAI	E	22	42	22			4.45	226	4.0				
	ES*	52				1.4							
FELT MOAWHANGO MMIV TAIHAPE													
		H	M	S						66/33			
AUG 17		14	12	53.7		36.48S	177.82E	289 KM	SE 0.8	AVG MAG	4.8		
		0.03		0.04									
			H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	P	14	13	34.4		-0.9	1.34	155		5.2			
GNZ	P	14	13	41.2		-0.0	2.17	176		5.2	5.1		
	S	14	18			-0.2							
KRP	P	14	13	43.9		1.3	2.32	231		4.0			
	S	14	21			0.3							
TUA	EP	14	13	43		-0.2	2.38	193		4.5	4.9		
	ES	14	21			-0.7							
AUC	P	14	13	44.8		0.8	2.47	260		5.4			
ONE	EP	14	13	47.3		-1.0	2.89	283					
CNZ	EP	14	13	54.0		2.2*	3.26	213		3.9			
MNG	P	14	14	06.2		0.4	4.52	203		4.4	4.4		
	S	15	03			0.9							
WEL	P	14	14	16.0		0.4	5.36	205	5.3	4.9	4.8		
	S	15	20			0.3							
COB	ES	14	15	35		-0.2	6.08	219	4.7				
KAI	ES	14	16	12		-1.4	7.81	217	4.9				
GPZ	ES	14	16	23		0.3	8.22	207					
MJZ	ES	14	16	48		-0.2	9.37	215					
		H	M	S						66/33			
AUG 18		07	13	32.7		45.28S	167.24E	33 KM	SE 0.8	AVG MAG	4.1		
		0.02		0.04									
			H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
MNW	IP*	07	13	44.8	J	0.5	0.57	152		4.6	4.2		
	S*	52.2				-0.5							
MSZ	IP*	07	13	47.8		-0.1	0.78	39		4.1	4.1		
	S*	57.8				-1.0							
ROX	EP*	07	13	59.2		-0.2	1.48	98		3.7	3.9		
	S*	14	19			-0.3							
MJZ	EP*	07	14	20		0.7	2.64	62		3.4	3.4		
	S*	55				0.9							
GPZ							4.18	70		3.9			
		H	M	S						66/33			
AUG 18		21	55	29.9		38.68S	175.95E	12 KM	SE 1.7	AVG MAG	4.4		
		0.04		0.02									
			H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
TUA	IPG	21	55	35.3		0.8	0.20	130					
WNZ	SG	21	55	54.0		1.4	0.67	274		4.1			
GNZ	PG	21	55	46.0		-0.9	0.84	88		4.7	5.1		
	SG	56	01.0			2.7							
CNZ	PG	21	55	55.1		0.6	1.21	244		4.3			
	I	56.0											
KRP	EPG	21	55	56.0		-1.1	1.34	304		4.3	3.9		

	I			58.2									
	SG	56	16.5			1.3							
ECZ	PG	21	56	00		-2.1	1.59	53		4.9			
TNZ	EP*	21	56	08.0		1.6	2.07	255		3.9			
	EPG			10.2		-1.6							
MNG	EP*	21	56	08.8		-0.6	2.25	210		4.4			
	IPG			14.0		-1.4							
	E	51											
AUC	EPG	21	56	20		-0.5	2.50	316		4.1			
WEL	EPG	21	56	30.4		-2.2	3.10	212		4.6			
COB							4.04	232		4.2			
GPZ	SN	21	58	05		2.0	5.98	212		4.4			
MJZ	SN	21	58	37		4.6*	7.21	221					
S ENERGY IS SMALL FOR THIS EARTHQUAKE													
		H	M	S						66/341			
AUG 19		14	04	43.5		45.11S	166.99E	33 KM	SE 1.0	AVG MAG	4.0		
		0.04		0.07									
			H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
MSZ	P	14	04	56.5		-1.1	0.79	56		4.2			
	E	05	08.5										
	E	11.0											
MNW	IP	14	04	58.0		0.3	0.80	147		4.5	4.5		
	S	05	07.3			-0.8							
ROX	P	14	05	10.5		0.8	1.68	103		3.3	4.0		
	S			30.0		0.5							
MJZ	EP	14	05	25.0		0.9	2.72	67		3.7	3.9		
	S			54.5		-0.5							
KAI							4.11	53		3.9			
GPZ							4.29	73		4.0			
		H	M	S						66/342			
AUG 23		18	21	22.9		41.46S	172.82E	135 KM	SE 1.2	AVG MAG	4.3		
		0.04		0.04									
			H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
COB	P	18	21	43.0		0.8	0.38	350		4.8			
	S			55.8		-1.2							
WEL	P	18	21	52.8	J	1.3	1.47	84		4.6	4.7	5.0	
	S	22	13.0			-0.3							
KAI	E	18	21	58			1.50	224					
	S	22	16			2.3							
MNG	P	18	21	59.1		-0.7	2.18	68		4.3	4.8		
	S	22	27.0			-1.0							
GPZ	EP	18	22	02		1.5	2.24	183		4.3			
	S			28.5		-0.7							
TNZ	P	18	22	06		1.0	2.57	28		4.1	4.1		
	ES			37		0.1							
MJZ	EP	18	22	12.0		0.7	3.06	214		3.7	3.9		
	S			47.5		-0.7							
CNZ	P	18	22	12		0.5	3.07	44		4.0			
KRP	P	18	22	24.2		-0.9	4.11	32		4.1			
	E			35									
MSZ	EP	18	22	35		0.4	4.82	227		4.0	4.3		
	S			23		-2.8*							
FELT MANGLES VALLEY MMIV NELSON MMII													
		H	M	S						66/343			
AUG 25		00	36	08.6		45.15S	167.81E	112 KM	SE 0.1	AVG MAG	3.6		
		0.01		0.01									
			H	M	S		DIR	RES	DIST	AZ	W-A	W P	W S
MSZ	IP	00	36	25.9	D	0.1	0.48	9					
	S			39.0		0.0							
MNW	P	00	36	27.0		-0.0	0.65	192		4.1	3.8		
	S			41.0		-0.1							
ROX	ES	00	36	49		0.1	1.11	108			3.2		
	E			52									
MJZ	S	00	37	12.5		-0.1	2.23	59			3.2		



AUG 25		H	M	S	39.76S	174.19E	208 KM	SE	1.5	AVG MAG	66/34
		+ -		0.9	0.05	0.06	8			4.1	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TNZ	EP	02	57	16.6		0.6	0.59	15		3.9	3.5
	S			39		1.0					
CNZ	P	02	57	19.5		-0.0	1.19	62		4.2	4.1
	ES			42		-2.5					
MNG	P	02	57	22.1	J	1.7	1.31	131		4.2	4.4
	S			46		-0.1					
WEL	EP	02	57	24		1.2	1.59	164	4.3		4.7
	S			51		0.8					
COB	P	02	57	25		0.8	1.73	219	4.1		
	S			53		0.4					
KRP	P	02	57	26.0		-2.0	2.12	30		3.6	
GNZ	EP	02	57	41.8		1.7	3.18	71		4.6	4.2
	ES			58 20		-0.9					
GPZ	EP	02	57	52		0.7	4.10	196	4.6		
	S			58 39.0		-1.7					
MJZ	EP	02	58	04		0.7	5.05	212		3.5	3.4
	S			59 00		-2.3					
AUG 25		H	M	S	39.16S	174.68E	33 KM	SE	2.0	AVG MAG	66/34
		+ -		0.6	0.04	0.07	R			4.1	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TNZ	P	19	54	19.8		-0.7	0.24	262			
	I			24.7							
CNZ	P	19	54	23.5	D	-2.2	0.67	94		4.0	
	E			32.4							
KRP	P	19	54	34.8		-0.9	1.40	29		4.6	4.5
	S			52.2		-0.4					
MNG	EP	19	54	36.8		-1.4	1.59	157		3.8	3.6
	S			58		1.0					
WEL	EP	19	54	48.0		2.3	2.13	178	3.7	4.0	4.2
	S			55 12.5		2.3					
AUC	ES	19	55	17		2.8	2.29	2		4.0	
	I			30							
	I			40							
COB	EP	19	54	48		-1.9	2.44	217	3.6		
	ES			55 17		-0.8					
GNZ	E	19	55	06			2.66	80			
AUG 26		H	M	S	45.11S	167.63E	116 KM	SE	1.4	AVG MAG	66/34
		+ -		2.4	0.07	0.08	15			3.8	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
MSZ	IP	06	02	19.1	J	0.9	0.48	25			
	S			31.8		0.1					
MNW	P	06	02	19.5		-0.1	0.67	180		4.3	4.3
	S			33.2		-0.9					
ROX	E	06	02	29			1.25	108		3.5	3.7
	S			45.2		1.1					
MJZ	S	06	03	06		-1.1	2.32	62		3.0	
AUG 26		H	M	S	41.61S	174.42E	33 KM	SE	1.2	AVG MAG	66/34
		+ -		1.2	0.07	0.04	R			3.9	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WEL	IP*	06	46	02.0	J	-0.3	0.41	39	3.9		
	IS*			08.0		-1.0					
MNG	IP*	06	46	16.9		0.5	1.27	39		4.2	4.3
	S*			32.5		-1.1					
COB	P*	06	46	17.8		-0.2	1.37	292	3.8		
	ES*			36		-0.5					
TNZ	EP*	06	46	37		1.2	2.42	359		3.7	3.8

CNZ	E	47	13									
	IP*	06	46	39.2		1.0	2.56	20		4.0	4.0	
	E			38.0								
	ES*	47	14			2.2						
KRP	P*	06	46	58.8		-0.3	3.78	14		3.6		
	ES*			47 47		-1.5						
AUG 26		H	M	S	38.81S	175.22E	232 KM	SE	1.3	AVG MAG	66/348	
		+ -		0.7	0.05	0.05	6			4.8		
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
CNZ	IP	07	19	26.2	J	1.1	0.46	147				
	S			49.5		0.5						
TNZ	P	07	19	28.2		1.9	0.75	240		4.2		
KRP	P	07	19	27.0		-0.1	0.92	16		4.9		
	S			51.1		-1.5						
TUA	E	07	19	32			1.51	90			4.7	
	ES			58		-1.8						
MNG	IP	07	19	36.0	J	2.1	1.81	174		4.8	4.8	
	ES			20 04		-0.4						
AUC	P	07	19	35		-0.4	1.98	350		5.1		
GNZ	P	07	19	38.8		1.3	2.20	86		4.6	4.7	
	E			20 03								
	ES			10		-1.0						
WEL	IP	07	19	42.3		1.7	2.49	188	4.9	5.0	5.2	
	S			20 17.2		0.8						
ECZ	EP	07	19	44		-0.5	2.85	68		4.9		
COB	EP	07	19	46		0.2	2.97	219	4.5			
	S			20 25.5		-0.3						
MJZ	EP	07	20	27		0.6	6.28	213				
	S			21 37		-1.2						
MSZ	EP	07	20	47.0		-1.4	8.00	221				
	ES			22 16		-1.6						
AUG 27		H	M	S	44.59S	169.25E	86 KM	SE	0.7	AVG MAG	66/349	
		+ -		0.7	0.03	0.03	6			4.0		
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
MSZ	IP	07	32	14.1		0.2	0.25	252				
	S			24.0		0.2						
ROX	P	07	32	23.5		0.8	1.16	140		3.5	4.3	
	S			39.3		0.2						
MNW	IP	07	32	24.2	J	0.1	1.27	200		4.3	4.3	
	S			40.7		-0.8						
MJZ	IP	07	32	29.8	D	0.2	1.70	70		4.1	3.2	
	S			50		-0.8						
AUG 27		H	M	S	38.25S	179.01E	105 KM	SE	1.4	AVG MAG	66/350	
		+ -		1.2	0.06	0.06	9			4.2		
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	P	19	53	07.0		-2.0	0.67	326		5.0	5.0	
	E			11.2								
GNZ	P	19	53	11.7		0.9	0.87	243		4.4	4.4	
	ES			25.3		-0.5						
TUA	P	19	53	21.0		2.1	1.56	249		4.3	4.5	
	I			23.7								
	ES			40		0.2						
KRP	P	19	53	35.2		0.5	2.76	276		3.8	3.2	
	I			39.1								
	S			54 07		-0.6						
CNZ	P	19	53	37.8		1.6	2.87	250		3.7	3.7	
	ES			54 11		0.8						
MNG	P	19	53	47.0		0.7	3.61	228		4.0	3.8	
	E			54 23.2								
	ES			28.5		0.3						
AUC	E	19	53	48			3.64	291				



		H	M	S			DIR	RES	DIST	AZ			
WEL	EP	19	53	57	-0.8	4.46	226	4.7	3.9	4.0			
	ES		54	47.8	-1.1								
COB	ES	19	55	15	-2.1	5.61	238	4.5					
AUG 28		07	29	36.1	36.21S	173,71E	240 KM	SE	2.0	AVG MAG	66/		
				+ - 1.1	0.09	0.13	13				6.2		
ECZ	EP	07	30	13.2	J	-0.6	1.49	185					
	E			42									
GNZ	IP	07	30	24.1		1.1	2.49	192					
TUA	IP	07	30	27.3	J	0.1	2.88	205					
KRP	IP	07	30	30.3	JS	1.2	3.06	235			5.8		
WNZ	EP	07	30	32.0		1.4	3.19	220			5.4		
AUC	P	07	30	31.4		0.3	3.23	257					
ONE	IP	07	30	34.2		-0.5	3.55	276					
CNZ	P	07	30	39.7	J	0.8	3.90	219					
TNZ	P	07	30	49.2		2.6	4.54	228			5.7		
	E			58									
MNG	P	07	30	52.0	J	-1.2	5.08	209					
WEL	P	07	31	03.3	J	-0.6	5.93	210	6.8	5.8			
	S			32 11.0		-1.4							
COB	EP	07	31	14		-0.2	6.75	222	6.3				
	S			32 30		-1.0							
RAO	EP	07	31	20.5		-3.2	7.49	23					
	S			32 33		-14.9*							
KAI	E	07	31	41		-2.2	8.47	220	6.7				
	S			33 08		-2.2							
MJZ	EP	07	31	57.0		1.3	10.01	217					
	S			33 42		-3.3							
MSZ	EP	07	32	19.0		0.8	11.78	221					
	I			21.0									
	S			34 23.5		-2.4							
MNW	EP	07	32	33		3.4	12.70	218					
	S			34 50		3.4							
FELT EXTENSIVELY FROM EAST CAPE TO WELLINGTON MMIV AND MHIII													
AUG 28		14	30	00.6	44.64S	169,13E	12 KM	SE	0.7	AVG MAG	66/		
				+ - 0.4	0.02	0.02	R				3.1		
MSZ	IP*	14	30	04.3	J	-0.0	0.15	257					
ROX	P*	14	30	22.0		-0.0	1.19	135			3.9	4.1	
	S*			38.0		-0.0							
MNW	P*	14	30	22.0		-0.2	1.20	197			4.0	4.5	
	S*			38.5		0.2							
MJZ	EPN	14	30	30.0		-0.8	1.80	70			3.9	3.5	
	IP*			33.8		1.3							
	S*			56		-0.4							
KAI							3.18	50	3.8				
GPZ							3.38	75	3.7				
MNG	EP*	14	32	03		5.8*	6.75	56					
	E			31 45									
FELT MILFORD SOUND MMIV													
AUG 29		14	46	37.8	45.03S	167,86E	33 KM	SE	1.4	AVG MAG	66/		
				+ - 0.7	0.03	0.05	R				4.1		
MSZ	IP*	14	46	46.8	J	0.6	0.36	7					
MNW	IP*	14	46	51.6	D	-1.2	0.77	193			4.6		
	ES*			47 04		0.5							
ROX	P*	14	46	58.2		-0.3	1.12	114			4.4	4.7	
	S*			47 15		1.2							
MJZ	EPN	14	47	09.8		-0.6	2.14	62			3.9	4.1	
	I			10.5									
	S*			42		-2.0							

		H	M	S			DIR	RES	DIST	AZ			
KAI	ESN	14	48	13		2.6	3.59	47	4.1				
	E			34									
GPZ								3.68	70	4.0			
COB	EPN	14	47	54		0.2	5.32	44	4.7				
	SN			48 52		-0.3							
WEL	E	14	49	15			6.29	56	4.8				
MNG	EPN	14	48	24.0		5.8*	7.13	54					
	ESN			49 35		-0.7							
CNZ	E	14	48	38			8.16	47					
	E			50 06									
AUG 30		02	44	38.4	44.92S	167,97E	33 KM	SE	1.9	AVG MAG	66/	354	
				+ - 1.0	0.04	0.06	R				5.1		
MSZ	IP*	02	44	47.2	J	1.7	0.26	352					
MNW	IP*	02	44	54.0	D	-1.5	0.89	196					
	E			45 07									
ROX	IP*	02	44	58.7	D	-0.1	1.10	120			5.0	5.3	
	ES*			45 15.2		1.3							
KAI	EPN	02	45	30		0.8	3.46	47	4.8				
	SN			46 09		1.0							
COB	EPN	02	45	51		-1.7	5.19	44	5.2				
	SN			46 48		-1.8							
WEL	ESN	02	47	12		-1.3	6.16	56	5.1				
MNG	EPN	02	46	10.2		-7.0*	7.01	55					
	E			23									
	ESN			47 31		-2.4							
CNZ	EPN	02	46	33		2.1	8.03	47					
	ESN			48 01		3.1							
KRP	EPN	02	46	44		0.0	9.01	42					
	ESN			48 20		-1.3							
FELT MILFORD SOUND MMIV GLENORCHY GIBBSTON MHIII AND QUEENSTOWN													
USCGS 02 44 33.2 44.8S 167.8E 35KM													
AUG 30		08	36	00.7	33.54S	179,70W	33 KM	SE	2.8	AVG MAG	66/	355	
				+ - 1.8	0.13	0.31	R				5.2		
RAO	EP	08	37	06		2.7	4.33	9			4.8	4.9	
	ES			48		-3.4							
ECZ	P	08	37	11.0		2.5	4.71	208			5.1	4.9	
	ES			38 04		3.5							
							5.74	207					
GNZ							6.13	247					
ONE	EP	08	37	32		4.3	6.13	247					
TUA	P	08	37	30.0		1.0	6.23	211					
	ES			38 40		2.8							
KRP	P	08	37	33.0		1.6	6.41	225					
CNZ	EP	08	37	43		-0.5	7.30	218					
MNG	EP	08	37	55		-3.8	8.45	212					
	S			39 29		-1.2							
WEL	S	08	39	48		-2.7	9.31	212	5.8				
COB	ES	08	40	09		-1.7	10.15	220	5.5				
KAI	ES	08	40	51		0.1	11.87	218	5.4				
GPZ	ES	08	40	55		-3.0	12.18	211	5.5				
MSZ	EP	08	39	26		0.2	15.19	219					
	ES			42 04		-2.7							
USCGS 08 36 03.4 33.4S 179.1W 33KM MAG 4.5													
AUG 31		20	59	01.8	37.05S	177,80E	177 KM	SE	1.2	AVG MAG	66/	356	
				+ - 1.1	0.07	0.06	R				4.4		
ECZ	EP	20	59	27		-1.4	0.87	137			4.7	4.6	
	S			48		-1.0							
GNZ	IP	20	59	35.4	J	0.7	1.60	174			5.0	4.6	











		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
	S	36	13			-1.0					
CNZ	P	07 35	51.8			-0.2	1.32	223		3.6	
ECZ	EP	07 35	55			1.0	1.55	70		4.7	
TNZ	EP	07 35	59			-0.0	2.05	242		3.7	
MNG	P	07 36	05.2			0.5	2.56	201		4.6	3.9
	ES		40			0.5					
WEL	EP	07 36	14.0			-0.6	3.39	206	4.5	4.5	4.3
	S		59			2.0					
COB	ES	07 37	14			-0.5	4.19	226	4.2		
GPZ	ES	07 38	01			-1.2	6.26	208	4.5		
		H M S								66/ 370	
SEP 14		18 07 01.5	38.20S	175.74E	302 KM	SE	0.7			AVG MAG	4.2
		+ - 0.6	0.05	0.04	5						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
KRP	P	18 07 39		-1.1	0.32	330					
CNZ	P	18 07 43		0.7	1.01	189		3.2	3.8		
	S	08 15		0.8							
TUA	EP	18 07 44		0.2	1.26	119		4.2			
	E	08 20									
TNZ	EP	18 07 46		1.1	1.45	227		3.8	3.7		
	ES	08 21		2.5*							
GNZ	P	18 07 47.5		-0.0	1.85	105		4.2	4.4		
	S	08 23		-0.4							
ECZ	P	18 07 51.2		0.2	2.27	78		5.0	4.4		
	E	08 26									
	ES	29		-0.6							
MNG	P	18 07 52.8		0.5	2.42	185		3.9	4.2		
	S	08 32		0.1							
WEL	S	18 08 45		0.2	3.17	193		4.5	4.7		
COB	ES	18 08 54		-0.7	3.70	218		4.4			
KAI	ES	18 09 29		-1.0	5.44	216		4.6			
MSZ	P	18 09 05		0.2	8.73	220					
		H M S								66/ 371	
SEP 15		12 28 34.9	37.93S	175.21E	315 KM	SE	0.6			AVG MAG	4.7
		+ - 0.4	0.03	0.03	3						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
KRP	P	12 29 15.3		-0.1	0.53	271		4.4			
	S	47		-0.1							
TUA	P	12 29 18.0		0.2	1.15	140		5.0	4.9		
	S	50		-1.3							
CNZ	P	12 29 19.2		0.1	1.37	202		4.1	3.9		
	ES	54		0.6							
GNZ	P	12 29 20.8		0.4	1.59	117		4.6			
	E	53									
	E	56									
ECZ	E(P)	12 29 23		0.7	1.87	83		4.5	4.6		
	E	53									
	ES	59		-0.3							
MNG	IP	12 29 30.0		0.3	2.74	192		5.1	4.6		
	ES	30 12		-0.5							
WEL	P	12 29 37.2		-0.2	3.53	198	5.0	4.9	5.0		
	S	30 27		0.7							
COB	EP	12 29 44		0.1	4.14	219	4.9				
	ES	30 38		0.1							
KAI	EP	12 30 04		0.3	5.88	217	4.7				
	ES	31 12		-1.4*							
GPZ	EP	12 30 10		0.5	6.36	204	5.3				
	S	31 24.0		0.2							
MJZ	EP	12 30 22		-0.6	7.45	214					
	ES	31 47		-0.2							
MSZ	P	12 30 42.5		-1.1	9.17	220					
		H M S								66/ 372	
SEP 16		06 31 38.9	45.03S	167.61E	118 KM	SE	1.8			AVG MAG	3.7
		+ - 2.7	0.11	0.10	17						

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
MSZ	P	06 31	57.9			1.5	0.42	31			
	S		32 08.8			-1.0					
MNW	EP	06 31	58			-0.7	0.75	179			
ROX	ES	06 32	24			0.6	1.29	111			
MJZ	ES	06 32	46			0.9	2.30	64		3.4	
KAI	E	06 32	44				3.72	49	3.9		
GPZ	ES	06 33	21			-1.2	3.85	71	3.9		
		H M S								66/ 373	
SEP 17		21 51 39.6	34.41S	173.52E	282 KM	SE	1.0			AVG MAG	4.8
		+ - 1.1	0.13	0.18	10						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
ECZ	P	21 52 46		0.1	4.05	215		5.3	5.0		
	ES	53 37		-0.7							
	E	41									
GNZ	P	21 52 58.0		0.3	5.06	212		4.6			
	E	53 56									
TUA	P	21 53 04		-0.2	5.60	217		4.9	4.6		
	S	54 11		0.5							
KRP	EP	21 53 07		-1.4	5.95	232		4.2	4.0		
	E	54 14									
CNZ	EP	21 53 20		1.8	6.74	223					
	ES	54 36		0.5							
MNG	EP	21 53 31		-0.5	7.82	216					
	ES	54 59		-0.3							
WEL	ES	21 55 19		0.5	8.68	216	5.5				
GPZ	ES	21 56 22		+0.6	11.53	214	5.3				
		H M S								66/ 374	
SEP 18		16 55 47.4	41.34S	173.83E	61 KM	SE	1.5			AVG MAG	4.2
		+ - 0.5	0.04	0.04	11						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
WEL	IP	16 56 01.8	D	-0.6	0.71	86	4.2				
	S	12.5		-1.0							
COB	IP	16 56 04.2		0.0	0.86	286	4.1				
	S	16.5		-0.2							
MNG	IP	16 56 10.4	D	-1.6	1.44	61	4.7				
	S	34		3.6							
KAI	EP	16 56 23		1.2	2.16	236	4.1				
	S	48		0.6							
TNZ	EP	16 56 23		0.8	2.19	11	4.0				
	E	55									
CNZ	P	16 56 26.7		-0.2	2.51	32	4.3				
	E	59									
GPZ	EP	16 56 25		-2.0	2.52	200	3.8				
	S	52		-4.9*							
MJZ	EP	16 56 43.0		0.5	3.63	222	3.7	4.0			
	S	57 26		1.6							
KRP	P	16 56 43		0.1	3.65	22					
	ES	57 24		-1.1							
MSZ	P	16 57 07.8		-0.3	5.47	230	4.3	4.4			
	S	58 09		-1.4							
FELT WELLINGTON MHIV BLEVHEIM YMIII											
AN ALTERNATIVE EPICENTRE WITH DEPTH RESTRICTED TO 33KM IS											
41.37S 173.90E WITH ORIGIN TIME 16 55 49.3 AND S.E. 1.5											
CLOSE EXAMINATION SHOWS THIS EPICENTRE ALSO IS AN ACCEPTABLE SOLUTION											
		H M S								66/ 375	
SEP 18		22 42 43.1	44.20S	168.84E	12 KM	SE	1.2			AVG MAG	3.5
		+ - 0.5	0.05	0.03	17						
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
MSZ	PG	22 43 00.3		0.7	0.81	234		3.3	3.6		
	SG	10.3		-0.3							
MJZ	PG	22 43 08.4		1.1	1.19	80		3.7	3.2		
	SG	24		0.6							



		H	M	S	RES	DIST	AZ	W-A	W P	W S
MNW	PG	22	43	19	-0.5	1.80	208		3.7	3.4
	SG			44	0.2					
KAI	EPG	22	43	32	-2.0	2.51	49		3.4	
	ESG			44 09	1.1					
GPZ	EPG	22	43	40	0.4	2.79	81		3.4	
	ESG			44 16	-1.3					
MNG	EPN	22	44	19	8.0*	6.08	56			
SEP 18										
	H M S	22	56	48.0					66/ 376	
	45.07S	167.74E	139 KM	SE	1.4				AVG MAG	4.0
	0.10	0.09								
	H M S	22	57	09.1	DIR	RES	DIST	AZ	W-A	W P W S
MSZ	P	22	57	09.1		1.2	0.42	17		
	S			22		-1.2				
MNW	P	22	57	09		-0.6	0.71	187		
ROX							1.18	110		
MJZ	P	22	57	27.0		1.2	2.23	62	3.5	3.9
	S			55		0.4				
KAI	ES	22	58	30		1.9	3.68	47	4.2	
GPZ	ES	22	58	30		-0.4	3.78	70	4.1	
COB	ES	22	59	08		-1.3	5.41	44	4.5	
MNG	EP	22	58	32		-0.2	7.22	55		
	ES			59 52		-1.1				
SEP 20										
	H M S	12	34	33.2					66/ 377	
	44.37S	169.96E	33 KM	SE	0.4				AVG MAG	3.2
	0.04	0.02								
	H M S	12	34	43.8	DIR	RES	DIST	AZ	W-A	W P W S
MJZ	P*	12	34	43.8		-0.5	0.53	44	2.7	2.9
	S*			52.5		0.3				
MSZ	P*	12	35	00.3		0.2	1.49	258	3.7	3.6
	S*			20		-0.1				
GPZ	ES*	12	35	37		0.1	2.05	72	3.1	
SEP 21										
	H M S	09	36	41.7					66/ 378	
	39.80S	179.09E	33 KM	SE	1.6				AVG MAG	4.0
	0.05	0.08								
	H M S	09	37	04.2	DIR	RES	DIST	AZ	W-A	W P W S
GNZ	EP	09	37	04.2		-0.2	1.42	324	3.6	4.0
	ES			18.6		-2.7				
TUA	EP	09	37	11.0		1.3	1.80	303	4.1	4.3
	ES			30.3		-0.4				
CNZ	P	09	37	24.8		1.4	2.80	281	3.7	3.9
	ES			57		1.8				
MNG	P	09	37	25.0		0.5	2.88	252	3.7	3.9
	S			57		-0.1				
KRP	E	09	37	50			3.34	303		3.2
WEL	EP	09	37	36		1.5	3.61	244	4.5	4.0 4.3
	S			38 14		-0.9				
TNZ	EP	09	38	20		44.4*	3.69	278		3.9
COB	ES	09	38	49		0.1	5.02	253	4.5	
GPZ	ES	09	39	15		-2.3	6.20	229	4.6	
SEP 21										
	H M S	09	36	47.1					66/ 379	
	39.52S	179.56E	33 KM	SE	1.8				AVG MAG	3.9
	0.04	0.08								
	H M S	09	37	04.2	DIR	RES	DIST	AZ	W-A	W P W S
GNZ	EP*	09	37	04.2		-1.3	0.97	334	3.4	3.8
	S*			18.8		0.0				
TUA	EP*	09	37	11.0		0.1	1.31	302	4.0	4.1
	S*			30.3		1.8				
CNZ	PN	09	37	24.8		2.1	2.36	277	3.6	3.8
	ES*			57		-2.9				
MNG	PN	09	37	25.0		-1.1	2.61	244	3.6	3.8
	SN			57		1.3				
KRP	E	09	37	50			2.85	303		3.1
TNZ	E	09	38	20			3.26	275		3.8

## LOCAL EARTHQUAKES

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		H	M	S	RES	DIST	AZ	W-A	W P	W S
WEL	EPN	09	37	36	-0.9	3.39	237		4.4	4.0 4.2
	SN			38 14	-0.9					
COB	ESN	09	38	49	1.8	4.72	249		4.4	
GPZ	ESN	09	39	15	-5.1*	6.09	225		4.6	
SEP 23										
	H M S	02	51	48.7					66/ 380	
	45.12S	167.40E	12 KM	SE	1.2				AVG MAG	4.1
	0.03	0.06								
	H M S	02	51	59.2	DIR	RES	DIST	AZ	W-A	W P W S
MSZ	P*	02	51	59.2		-0.6	0.58	39		4.2 4.2
	S*			52 06.2		-1.7				
MNW	IP*	02	52	01.0	D	-0.3	0.67	167		4.5
	S*			10.2		-0.5				
ROX	P*	02	52	13.8		0.1	1.40	105		4.2 4.4
	S*			32		-0.4				
MJZ	EPN	02	52	29.2		1.2	2.47	64		3.5 3.5
	EP*			34		1.9				
	S*			53 05		0.4				
GPZ							4.02	71	3.9	
SEP 23										
	H M S	12	31	21.7					66/ 381	
	45.02S	166.89E	12 KM	SE	2.0				AVG MAG	4.0
	0.05	0.10								
	H M S	12	31	35.0	DIR	RES	DIST	AZ	W-A	W P W S
MSZ	P*	12	31	35.0		-1.6	0.81	65		3.6 4.2
	S*			45.8		-1.8				
MNW	P*	12	31	38.0	D	-0.5	0.92	146		4.4 4.5
	ES*			51		-0.0				
ROX	P*	12	31	52.8		-0.3	1.77	106		4.1 4.0
	S*			32 17		0.3				
MJZ	EP*	12	32	12		2.0	2.76	69		3.6 3.6
	E			07.8						
	S*			48		1.8				
KAI							4.11	54	4.1	
GPZ							4.33	74	4.0	
MNG	EPN	12	33	14		2.8	7.69	58		
	EP*			32		-2.5				
SEP 23										
	H M S	22	04	01.4					66/ 382	
	40.51S	174.04E	98 KM	SE	0.9				AVG MAG	4.5
	0.02	0.03								
	H M S	22	04	22.0	DIR	RES	DIST	AZ	W-A	W P W S
WEL	P	22	04	22.0		0.6	0.95	145	4.1	4.8 4.9
	E			23.8						
	S			36		-0.4				
MNG	IP	22	04	24.0	J	0.8	1.10	96		4.4
COB	EP	22	04	24.0		0.2	1.15	239	4.7	
	S			40		-0.6				
TNZ	P	22	04	27.0		0.7	1.35	11		4.8
	ES			45		0.1				
CNZ	P	22	04	32.0		0.8	1.75	42		4.0
KRP	P	22	04	46.4		0.6	2.83	25		4.7
	S			05 18.0		-1.2				
TUA	E	22	04	53.0			2.94	56		4.4 4.5
	S			05 21.0		-0.8				
GPZ	EP	22	04	52		-0.9	3.35	198	4.7	
	E			05 26.5						
	S			28.3		-3.6*				
MJZ	E	22	04	58			4.37	216		
SEP 23										
	H M S	22	04	12.2					66/ 383	
	40.51S	174.00E	113 KM	SE	1.2				AVG MAG	4.6
	0.03	0.04								
	H M S	22	04	51	DIR	RES	DIST	AZ	W-A	W P W S
WEL	ES	22	04	51		1.2	0.97	143	4.0	5.0
COB	EP	22	04	36		0.7	1.12	239	4.5	
	ES			52		-0.9				



MNG	EP	22 04 35.5	0.1	1.13	96	4.9		
TNZ	P	22 04 39.2	1.1	1.36	12	4.9	4.7	
	ES	57	-0.6					
CNZ	E	22 04 42.0		1.77	43			
	EP	43.5	0.6					
KAI				2.80	223			
KRP	P	22 04 58.6	1.4	2.85	25	4.6	4.6	
	S	05 30.3	-1.0					
TUA	E	22 05 05.0		2.97	56	4.7	4.4	
	ES	33	-1.2					
GPZ	E	22 05 39.0		3.34	197	4.8		
	S	41.5	-1.4					
HJZ	E	22 05 10		4.35	216			

THIS EARTHQUAKE AND ITS PREDECESSOR HAVE ORIGIN TIMES SEPARATED BY ONLY ELEVEN SECONDS AND THE SAME EPICENTRE WITHIN LIMITS OF ERROR. THEY HAVE QUITE DIFFERENT RADIATION PATTERNS OF P AND S ENERGY

		H	M	S					66/ 384	
SEP 25		12 31 22.8	45.03S	167.20E	12 KM	SE 2,2	AVG MAG	3.9		
		+ - 1.9	0.05	0.09	R					
			H	M	S	DIR	RES	DIST	AZ	W-A W P W S
MSZ	PG	12 31 35.0					-0.7	0.63	55	3.5 4.1
	SG	45.8					1.6			
MNW	PG	12 31 38.0	0				-1.2	0.81	158	4.3 4.4
	ESG	51					0.8			
ROX	PG	12 31 52.8					-1.6	1.56	107	4.0 3.9
	SG	32 17					1.5			
HJZ	EPG	12 32 12					-2.6	2.56	67	3.5 3.5
	E	07								
	SG	48					-1.2			
KAI								3.95	52	4.0
GPZ								4.13	73	3.9
MNG	EPN	12 33 14					4.0	7.52	57	
	EP*	32					-0.6			

		H	M	S					66/ 385	
SEP 25		08 46 36.4	37.09S	177.61E	215 KM	SE 2,2	AVG MAG	5.2		
		+ - 0.9	0.06	0.08	9					
			H	M	S	DIR	RES	DIST	AZ	W-A W P W S
ECZ								0.96	130	6.2
GNZ	IP	08 47 16.1					1.6	1.59	168	5.8 5.8
	S	41.0					-1.4			
TUA	P	08 47 17.0					0.9	1.76	192	4.9 5.5
	S	44					-1.1			
KRP	P	08 47 18.7					1.8	1.85	242	4.9 4.5
	S	44.8					-1.8			
WNZ	P	08 47 20.5					2.6	1.95	217	4.8 4.9
	E	58								
AUC	P	08 47 22.5					1.2	2.28	275	5.5 5.0
	S	53					-1.4			
CNZ	P	08 47 27.8					2.2	2.67	217	
ONE								2.93	296	
TNZ	EP	08 47 36.5					3.6	3.30	230	4.6
WEL	P	08 47 51.3					0.7	4.74	207	5.4 5.1 5.2
	S	48 45					-1.6			
COB	EP	08 48 00					-0.4	5.51	222	5.1
	ES	49 04					-0.1			
KAI	E	08 48 27						7.23	219	5.3
	ES	49 42					-1.8			
GPZ	EP	08 48 28					0.6	7.61	208	5.8
	ES	49 49					-3.6			
RAO	ES	08 50 13					-3.9	8.66	27	
HJZ	EP	08 48 44					1.5	8.78	216	
	S	50 18					-1.6			
MNW	P	08 49 19					2.0	11.47	218	
USCGS ORIGIN		08 46 44	37.4S	177.E	191 KM					

		H	M	S					66/ 386	
SEP 26		03 35 55.3	40.35S	174.88E	12 KM	SE 1,9	AVG MAG	5.2		
		+ - 0.4	0.03	0.05	R					
			H	M	S	DIR	RES	DIST	AZ	W-A W P W S
MNG	P*	03 36 06.1				D	0.6	0.53	120	
WEL	P*	03 36 11.6					-0.9	0.94	185	5.1
	S*	24.2					-1.0			
TNZ	PN	03 36 15.3					-2.6	1.22	342	4.8
	EP*	19					1.7			
CNZ	IP*	03 36 16.8				D	-1.1	1.26	24	
COB	PN	03 36 23.0					-2.4	1.79	245	5.2
	SN	46					-1.5			
WNZ	P*	03 36 29.8					-0.2	1.96	29	5.1 5.4
	E	37 01								
TUA	EPN	03 36 34					1.2	2.34	49	5.5
	EP*	38					1.6			
GNZ	PN	03 36 41.0					-0.6	2.97	56	5.7
	I	57								
KAI	IP*	03 36 55					0.5	3.39	229	5.4
	E	49								
	ESN	37 28					1.7			
	ES*	45					6.0*			
AUC	EP*	03 36 55					-1.1	3.49	359	5.9
	EPN	50					1.6			
	E	37 01								
GPZ	EP*	03 37 01					0.7	3.73	206	4.8
	EPN	36 50					-1.8			
	E	37 05								
	ESN	32					-2.6			
HJZ	EPN	03 37 06.8					-0.6	4.89	221	4.7
	I	11.3								
	EP*	22.5					2.3			
	ESN	38 03					0.4			
ROX	EPN	03 37 27					-2.6	6.55	217	
	E	37								
	EP*	53					4.5			
MNW	EPN	03 37 49					5.5*	7.59	222	
	ESN	39 09					2.0			

FELT WELLINGTON NELSON AND TARANAKI PROVINCES MMIV AND MMIII

		H	M	S					66/ 387	
SEP 26		06 39 53.0	39.25S	177.80E	12 KM	SE 0,8	AVG MAG	4.2		
		+ - 0.5	0.02	0.04	R					
			H	M	S	DIR	RES	DIST	AZ	W-A W P W S
GNZ	IP*	06 40 04.2				J	-0.6	0.63	16	5.1 4.9
	S*	13.5					0.0			
TUA	P*	06 40 05.5					-0.1	0.67	311	4.2 4.4
	E	14								
CNZ	P*	06 40 24.0					-0.0	1.75	271	3.6
	E	31								
	EP*	50								
KRP	EP*	06 40 32					0.1	2.21	306	3.3
	E	47								
MNG	PN	06 40 30.0					0.8	2.25	232	3.8
WEL	EPN	06 40 42					1.3	3.09	228	4.1 3.9 4.1
	SN	41 17					0.4			
KAI	SN	06 42 23					-0.1	5.85	234	4.4
GPZ	ESN	06 42 23					-1.2	5.89	219	4.6
HJZ	ESN	06 42 56					-0.6	7.25	227	

		H	M	S					66/ 388	
SEP 28		08 39 13.3	38.78S	176.05E	121 KM	SE 1,5	AVG MAG	4.1		
		+ - 1.1	0.05	0.04	9					
			H	M	S	DIR	RES	DIST	AZ	W-A W P W S
CNZ	P	08 39 32.5					0.4	0.57	223	
	I	41.0								



		ES	46	-0.4						
	TUA	P	08 39 34.9	0.5	0.86	92	4.5	4.4		
	KRP	P	08 39 35.0	-0.2	0.95	335	4.1	3.7		
	TNZ	EP	08 39 41.0	1.2	1.36	252	3.7			
	GNZ	P	08 39 42.8	0.9	1.55	85	3.9	4.0		
	MNG	IP	08 39 46.5	0.7	1.88	193	4.1	4.3		
	WEL	P	08 39 56.0	-0.5	2.69	201	4.0	4.0	4.5	
	COB	ES	08 40 46	-0.7	3.43	227	3.9			
	GPZ	ES	08 41 30	-7.6*	5.54	267	4.3			
SEP 30	H M S		38,37S 175,30E	168 KM	SE	1,5	AVG MAG	66/389	4,4	
			0,05 0,05	9						
	KRP	P	10 43 05.2	-0.1	0.75	306	3.9	3.5		
	TUA	P	10 43 06.5	0.9	0.79	123	4.9	4.6		
	GNZ	P	10 43 09.0	1.8	1.01	215	3.9			
	GNZ	P	10 43 10.9	0.5	1.38	102	4.5	4.4		
	TNZ	EP	10 43 16	2.2	1.71	241	3.9			
	ECZ	EP	10 43 16	0.2	1.90	70	4.4	4.3		
	MNG	IP	10 43 22.5	1.6	2.33	196	4.7	4.3		
	WEL	P	10 43 31.7	0.8	3.14	202	4.7	4.9	4.6	
	COB	ES	10 44 26	-0.1	3.86	224	4.3			
	KAI	ES	10 45 04	-2.3	5.58	220	4.4			
	GPZ	ES	10 45 14	-2.1	5.99	206	4.6			
OCT 01	H M S		46,78S 165,59E	12 KM	SE	1,9	AVG MAG	66/390	4,3	
			0,07 0,07	R						
	MNH	IPG	22 33 39.9	-1.6	1.22	36	4.6	4.4		
	ROX	PN	22 33 54	0.5	2.30	57	4.2	4.4		
	MSZ	ESG	22 33 56.5	0.0	2.30	24	4.6	4.4		
	MJZ	PN	22 34 13.6	-1.7	3.90	46	3.9	3.8		
	GPZ	EPN	22 34 35	-1.7	5.27	56	4.4			
		SN	35 31	-1.9						
		E	43							

KAI	ESG	36 11	-3.2							
	E(PN)	22 34 37	0.7	5.46	41	4.3				
	EP*	53	1.8							
	ESN	35 41	3.4							
COB	SG	36 19	-1.8							
	EPN	22 34 58.5	-1.2	7.21	40	4.5				
	ESN	36 18	-1.1							
MNG	PN	22 35 22	-0.1	8.90	49					
	E	30								
GNZ	ESN	37 01	1.5							
	PN	22 35 37	0.3	10.01	44					
	E	39								
KRP	PN	22 35 49	-1.1	11.04	40					
	E	36 01								
OCT 02	H M S								66/391	
	08 02 34.7	38,09S 177,08E	12 KM	SE	0,8	AVG MAG	3,0			
	+ 0.4	0,02 0,02	R							
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
TUA	(PG)	08 02 49		-0.4	0.72	176		3.3	3.1	
	E	03 03.5								
GNZ	PG	08 02 54		0.5	0.92	127		3.1	3.4	
	E	56								
	SG	03 13		7.0*						
	E	15								
ECZ	PG	08 03 00		0.5	1.22	72		3.7		
KRP	P*	08 02 56.5		-0.4	1.23	277				
	PG	03 00		0.3						
	ESG	16.5		0.1						
GNZ	PG	08 03 07		-0.9	1.64	227		2.3	2.3	
	SG	31.5		1.6						
MNG	EP*	08 03 24.5		0.6	2.81	206		2.5		
	PG	31		-0.6						
	SG	04 09.5		-0.1						
WEL	PN?	08 03 29		-1.1	3.66	209		3.6		
	FELT	WAIMANA	MMIV							
OCT 02	H M S								66/392	
	17 30 36.4	42,02S 173,92E	12 KM	SE	1,9	AVG MAG	3,6			
	+ 0.4	0,03 0,03	R							
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
WEL	P*	17 30 53.1	J	-1.0	0.97	41		3.6	4.7	4.4
	SG	31 07		-0.2						
	SG	08		-1.3						
COB	P*	17 30 58	E	-1.4	1.29	316		3.1		
	S*	31 15		-1.7						
	SG	17		-2.9						
MNG	PN	17 31 04.8	J	-2.2	1.83	41		4.3	3.8	
	P*	08		-0.8						
	ESG	37		-1.2						
GPZ	EPN	17 31 07		-1.1	1.92	209		3.2		
	E	08.5		1.3						
	P*	11.5		-0.0						
	SN	31.5		0.0						
	E	51		-1.3	1.93	254		3.3		
KAI	EPN?	17 31 07		-0.4						
	P*	10		1.6						
	PG	17		0.1						
	S*	36		5.6*						
	SG	47		-2.3	2.85	7		3.5	3.8	
TNZ	P*	17 31 24		-1.1						
	EPG	33		3.9						
	SN	58.5		3.4						
GNZ	PN	17 31 23.8		-0.2	3.08	24		4.1	3.9	
	P*	28		-2.1						
	S*	32 11		0.4						



















		H	M	S	RES	DIST	AZ	W-A	W	P	W	S
ROX	S	46	21		-2.1							
MSZ	EL	20	48	00		15.65	216					
	EP	20	44	16		-0.5	15.82	221				
	S	47	08		4.2							
MNW	E	20	44	35		16.72	218					
	ES	47	22		-1.7							
OCT 12	H M S	00	50	25.8		39.10S	179.42E	33 KM	SE	2.1	AVG MAG	66/407 4.1
						0.04	0.07	R				
GNZ	P*	00	50	48.0	J	0.4	1.18	292		4.1	3.9	
	SN			51 02		2.1						
	S*			04		0.3						
	E			07.5								
	E			15								
ECZ	P*?	00	50	53		-1.0	1.56	334		4.2	3.9	
	ESN			51 08		-1.1						
TUA	P*	00	50	56		-1.9	1.80	279		4.0	4.2	
	S*			51 18.5		-3.3						
CNZ	PN	00	51	12.9	J	2.4	3.02	267		3.7	3.7	
	P*			21		2.3						
	SN			48		3.6						
	ES*			53		-5.3*						
KRP	EPN	00	51	14.5		0.6	3.27	290				
	EP*			20		-3.0						
	E			41								
	SN			53		2.4						
MNG	PN	00	51	14.7	D	-0.9	3.39	242		4.4	3.9	
	P*			24		-1.1						
	SN			55.5		1.9						
	E			59								
TNZ	E	00	51	26.5			3.92	267			3.3	
	EP*			33		-1.2						
	E			52 15								
	ES*			24		-1.5						
WEL	SN	00	52	13		0.2	4.18	237	4.3		4.4	
GPZ	SN	00	53	13.5		-3.7	6.86	226	4.3			
	E			21.5								
KAI	E	00	53	32			6.98	238	4.3			
MJZ	EPN	00	52	23		1.1	8.30	231				
	SN			53 52		0.2						
MSZ	EPN?	00	52	49		1.6	10.22	233				
	E			52								
	ESN			54 37		-0.4						
	E			39								
OCT 12	H M S	04	22	24.6		32.57S	176.08W	33 KM	SE	4.2	AVG MAG	66/408 5.9
						0.69	0.83	R				
CNZ	EP	04	24	31	DIR	-5.2	9.47	223				
	E			50								
	S			26 20		1.6						
	E			25								
TNZ	E(P)	04	24	53		7.7	10.16	227				
	E			26 41								
MNG	EP	04	24	43		-6.8	10.50	218				
	E			25 01								
	S			26 39		-3.6						
	E			43								
WEL	E	04	25	10			11.36	217	6.4			
	S			27 03		0.3						
	EL			28 00								
COB	E	04	25	26			12.34	223	5.6			
	E			27 18								
	S			22		-3.4						

		H	M	S	RES	DIST	AZ	W-A	W	P	W	S
KAI	S	04	28	03		-1.3	14.02	221		5.7		
GPZ	E(P)	04	25	38		0.8	14.19	215		5.9		
	E			46								
	E			28 05								
	S			08		-0.1						
MJZ	EP	04	25	52		-1.7	15.51	219				
	E			58								
	S			28 37		-0.8						
ROX	P	04	26	16		2.7	17.13	217				
	E			29 17								
	S			22		8.3						
	EL			30 00								
MSZ	P	04	26	14.5		-1.4	17.34	221				
	S			29 19		0.6						
MNW	P	04	26	29		2.6	18.22	219				
	E			29 54								
OCT 12	H M S	05	07	23.2		40.29S	173.66E	12 KM	SE	1.8	AVG MAG	66/409 4.7
						0.03	0.04	R				
GNZ	IPN	05	07	49.9	U	-2.4	1.72	343		4.8	5.2	
	E			59								
	E			08 03.5								
	SN			06		-7.8*						
	E			22								
TUA	PN	05	07	54		-0.5	1.89	321		4.7	4.9	
	ESN			08 17.5		-0.1						
MNG	PN	05	08	02		-0.1	2.45	261		4.4	4.5	
	P*			06		-0.1						
	SN			31		-0.2						
WNZ	S*	05	08	42		-0.4	2.58	309			4.7	
	ESG			53		2.7						
ECZ	PN	05	08	02		-2.4	2.60	358		4.8	4.6	
	EP*			09		0.3						
	EPG			17		1.3						
	SN			33		-2.3						
CNZ	IPN	05	08	06.0	J	1.1	2.63	293		4.7	4.6	
	PG			15		-1.5						
	SN			37		0.8						
	S*			41.5		-2.5						
WEL	EPN	05	08	11		-0.3	3.12	250	4.7	4.8	5.1	
	SN			47		-0.5						
	S*			52		-6.5*						
	SG			09 04		-4.3						
KRP	PN	05	08	14.5		-0.5	3.39	313				
	P*			25		2.7						
	PG			40		8.3*						
TNZ	E	05	08	19			3.48	287		4.3	4.1	
	PG			34		0.5						
	SN			09 03		6.8*						
	ESG			21		0.6						
COB	EPN	05	08	33		2.0	4.57	258		4.7		
	SN			09 25		2.3						
GPZ	EPN	05	08	45		-0.0	5.62	231		4.9		
	P*			59		-1.5						
	SN			09 46		-2.0						
KAI	SN	05	09	54		-0.3	5.89	245		4.7		
MJZ	EPN	05	09	06		0.9	7.12	236				
	P*			30		3.9						
	SN			10 24		0.4						
MSZ	EPN	05	09	32		1.2	9.06	238				
	ESN			11 11		1.3						
MNW	E	05	11	43			9.76	232				



OCT 15		H	M	S	37.25S 177.46E		12 KM	SE 2,2	AVG MAG 5.0		66/411
		+ - U.8			0.04 0.04		R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	P*	03	55	27.0	J	0.8	0.97	118		5.8	5.7
	S*			41.5		2.1					
GNZ	IP*	03	55	34.0	D	-0.7	1.47	162		5.5	5.4
	PG			39		0.8					
	S*			54		-0.2					
TUA	P*	03	55	37.1	J	0.5	1.58	189		5.1	5.2
	IPG			38.2		-2.3					
	ESG			56 03		1.2					
KRP	IP*	03	55	40.9	D	2.7	1.67	245			
	S*			56 03		2.6					
WNZ	EPG	03	55	42		-2.0	1.75	217		4.4	4.5
	S*			56 04		1.2					
	ESG			17		9.4*					
AUC	IP*	03	55	49.8	D	2.9	2.18	279			
CNZ	P*	03	55	51.6	D	-0.2	2.46	217		4.7	4.5
	PG			55.5		-2.9					
	SG			56 33.5		1.9					
ONE	EP*	03	55	57.5		-1.6	2.89	300	3.9		
	E			59							
	ESN			56 26		-1.8					
	ES*			53		15.9*					
TNZ	P*	03	56	01.5		-1.2	3.10	230		5.1	
	PG			10		-1.3					
MNG	PN	03	56	03.8	J	-0.8	3.70	204		4.8	5.0
	E			05.3							
	SN			49.5		2.5					
	SG			57 08		-5.4					
WEL	PN	03	56	15		-0.9	4.54	207	5.2	5.0	5.4
	P*			25		-2.4					
	SN			57 06		-1.3					
	S*			28		1.3					
COB	EPN	03	56	27		0.9	5.31	222	5.0		
	P*			39		-1.5					
	SN			57 29		3.2					
	S*			50		0.3					
KAI	E	03	56	54			7.03	220	5.2		
	SN			58 08		1.2					
GPZ	EPN	03	56	52		-2.3	7.41	208	5.6		
	ESN			58 12		-3.9					
MJZ	PN	03	57	09.4		-0.3	8.58	216			
	SN			58 42		-1.6					
	E			45.5							
RUX	EPN	03	57	33		1.3	10.24	214			
	ESN			59 26		3.1					
MSZ	E(PN)	03	57	34		1.0	10.34	221			
	E			36							
	ESN			59 23		-2.1					
MNH	E	03	57	50			11.27	218			
	ESN			59 52		5.3					
OCT 16											
OCT 16		H	M	S	37.11S 176.50E		12 KM	SE 1,8	AVG MAG 2.5		66/411
		+ - 2.2			0.06 0.13		R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KRP	PG	17	16	46.3		0.1	1.12	223			
	SG			17 02		0.6					
AUC	PG	17	16	50		-1.9	1.40	280			
ONE	EPG	17	17	09		1.5	2.17	307			
CNZ							2.22	199		2.5	
MNG	EPG	17	17	36		-0.3	3.59	192			
FELT COROMANDEL MMIV											

OCT 16		H	M	S	40.16S 175.01E		33 KM	SE 2,1	AVG MAG 4.9		66/412
		+ - 0.4			0.02 0.04		R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
MNG	IP*	18	02	46.1	D	2.5	0.58	142			
TNZ	IP*	18	02	51.7	D	-0.2	1.09	333		4.9	5.4
	S*			03 05		-1.7					
WEL	IP*	18	02	52.7	D	-0.1	1.14	189	5.0		
	E			56							
	S*			03 08		-0.3					
	E			11							
WNZ	PN	18	03	01		2.0	1.75	29		4.5	4.9
	E			14							
	ESN			22		2.5					
	E			31							
COB	EPN	18	03	03		1.0	1.96	241	4.7		
	SN			28.5		3.8					
TUA	EPN	18	03	04.5		0.1	2.14	52		5.0	5.2
	EP*			08		-1.7					
	S*			38		-0.1					
KRP	PN	18	03	06.3	J	0.1	2.27	11			
	P*			13		1.0					
	E			17							
	I			29							
	SN			34		1.8					
GNZ	PN	18	03	12.8		-0.4	2.78	58		4.8	5.2
	E			25							
	E			30							
	SN			44		-0.7					
	E			04 02							
AUC	PN	18	03	22	D	1.7	3.30	357			
	E			55							
	ES*			04 12		-0.9					
KAI	EPN	18	03	26		1.7	3.59	228	4.9		
	E			42							
	E			52							
	E			04 05.5							
	ESN			08.5		4.0					
ECZ	PN	18	03	25		-0.8	3.70	49		5.0	5.2
	P*			36		-0.4					
	S*			04 15		-9.8*					
	E			28							
GPZ	EPN	18	03	27		-2.1	3.95	206	5.2		
	SN			04 09		-4.1					
	I			12.5							
ONE	PN	18	03	37		1.6	4.41	353	4.8		
	SN			04 25.5		1.2					
	ES*			41		-5.1					
MJZ	PN	18	03	44.3		-0.6	5.10	220		4.4	4.2
	P*			52		-8.4*					
	E			04 08							
	E			25							
	SN			40		-1.1					
ROX	EPN	18	04	07		-0.2	6.76	216			
	P*			25		-3.7					
	E			42							
	ESN			05 19		-1.9					
	E			06 15							
MSZ	E(PN)	18	04	10		0.7	6.92	227			
	P*			30		-1.4					
	E			05 23							
	SN			26.5		1.9					
FELT OVER SOUTH-EAST OF NORTH ISLAND MMII TO MMIV											











	ESG		44		-0.3															
KRP	PN	21	31	36	0.6	2.04	185													
	PG			43	-0.3															
	SN		32	00	-0.1															
	E			01																
CNZ	P*	21	31	59	-0.7	3.31	183			3.0	2.4									
	PG		32	06	-2.9															
	S*			43	-0.1															
	SG			55	1.4															
MNG	EP*	21	32	26	2.0	4.73	183			3.0										
	ESG		33	53	11.7*															

FELT LITTLE BARRIER IS

OCT 26 H M S 04 33 40.2 34.90S 179.30E 12 KM SE 3.5 AVG MAG 4.6  
 +/- 2.3 0.11 0.10

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	PN	04	34	22		-2.1	2.79	176		5.0	4.7
	EPG			40		3.3					
	ESN			59		2.0					
	E			36							
ONE	EPN?	04	34	28		-3.3	3.33	254		4.6	
	E			31							
	EP*			38		-0.3					
	EPG			49		1.4					
	SN			35		2.7					
AUC	PN	04	34	37		4.0	3.46	235			
	EPG			49		-1.2					
	E			35							
	E			08							
	S*			26		0.1					
GNZ	PN	04	34	34.5		-2.3	3.74	183		4.8	4.6
	P*			45		-0.3					
	PG			57		1.1					
	ESN			35		2.4					
	E			37							
KHP	PN	04	34	36		-0.9	3.75	216			
	ESN			35		6.2					
	E			37							
TUA	PN	04	34	41		0.7	4.00	193		4.5	4.4
	P*			56		6.2					
	ES*			35		-4.2					
	E			37							
GNZ	EPN	04	34	52		0.7	4.82	206		4.4	3.8
	ESN			35		5.3					
TNZ	PN	04	35	00		2.3	5.30	215		4.9	
	E			04							
MNG	PN	04	35	06.5		-2.3	6.12	201			
	ESN			36		2.0					
	E			35							
HEL	ESN	04	36	32		-4.7	6.95	203		4.6	
	EL			37							
COB	PN	04	35	29		0.8	7.57	214			
	SN			36		-2.5					
KAI	E	04	36	01			9.32	213			
GPZ	E	04	36	10			9.81	205		4.8	
	EP*			24		-5.2					
	ESN			37		-5.4					
MJZ	EPN	04	36	12		0.1	10.90	211			
	E			28							
MSZ	E	04	36	41			12.59	216			
	EP*			37		-6.9					

OCT 26 H M S 23 37 26.6 35.12S 179.58E 196 KM SE 1.3 AVG MAG 4.7  
 +/- 1.1 0.05 0.07

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	P	23	38	13.0		-0.1	2.70	198		5.1	5.1
	E			21							
	S			48		-1.0					
	E			58							
	ET			41							
GNZ	P	23	38	31		0.1	3.73	199		4.9	5.1
TUA	P	23	38	40			4.16	207		4.9	5.2
	S			39		2.9					
	E			52							
AUC	P	23	38	34.0	J	1.9	4.26	245			
KRP	P	23	38	34		1.5	4.29	228			
	S			39		4.4*					
ONE	P	23	38	32	E	-0.7	4.31	260		4.4	
	S			39		-0.9					
GNZ	P	23	38	44		-0.0	5.19	217		4.2	4.0
	E			50							
	I			39							
TNZ	EP?	23	38	52		0.0	5.81	224		4.2	3.6
	E			54							
	E			59							
	E			40							
MNG	P	23	38	58		-1.4	6.37	209			
	S			39							
	E			40		0.4					
HEL	P	23	39	09		-1.5	7.23	210		5.4	
	S			40		-1.6					
COB	S	23	40	50		-0.6	8.04	220		4.7	
KAI	S	23	41	30		-0.7	9.76	218		4.8	
	E			38							
GPZ	S	23	41	38		-0.7	10.10	210		5.3	
MJZ	P	23	40	03		-0.4	11.30	216			
	S			42		-0.1					
MSZ	P	23	40	27		1.2	13.07	220			
	S			42		1.7					

OCT 27 H M S 05 03 48.9 37.99S 175.04E 312 KM SE 1.5 AVG MAG 4.2  
 +/- 1.2 0.08 0.08

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KRP	P	05	04	27.8	J	-1.0	0.40	279			
	S			58		-2.1					
TUA	P	05	04	31.9	D	0.1	1.19	133		4.5	4.6
	S			05		-1.2					
GNZ	P	05	04	32.2	J	-0.0	1.27	198		3.8	3.5
	E			05							
	ES			08		2.1					
GNZ	P	05	04	36		0.7	1.69	113		4.4	4.5
TNZ	EP	05	04	36		0.7	1.77	227		3.5	
	ES			05		2.4					
ECZ	EP	05	04	38		0.9	2.00	82		4.0	4.3
	E			05							
	S			15		0.3					
MNG	P	05	04	43.7	J	0.9	2.66	189		4.6	4.4
	S			05		-1.8					
HEL	EP	05	04	50		-0.3	3.44	196		4.5	4.1
	S			05		0.7					
COB	S	05	05	47		-2.2	4.01	219		4.0	
KAI	S	05	06	27		2.3	5.75	217		4.2	
	E			32							
GPZ	S	05	06	35		-0.4	6.25	203		4.8	
MJZ	EP	05	05	35		-0.1	7.32	213			
	S			06		-1.5					



		H	M	S			12 KM	SE	1.9	AVG MAG		66/ 423	
OCT 30		15	34	34.7	40.32S	175.61E							
					0.03	0.06	R						
					H	M	S	DIR	RES	DIST	AZ	W-A	W P W S
MNG	PG	15	34	53.5	J				0.2	0.91	250	3.9	3.9
	E			58									
	SG			35 07					1.4				
CNZ	PG	15	35	01.7					-1.0	1.38	323	4.1	3.8
	SG			20					-1.4				
	E			25									
TUA	E(PG)	15	35	08					1.6	1.56	16	3.6	3.7
	SG			38					10.5*				
WEL	PN?	15	35	03					-0.6	1.70	235	3.1	4.0 3.9
	PG			10					0.8				
	SG			32					-0.1				
GNZ										2.00	34	3.5	3.6
TNZ	EPG	15	35	13					-3.3	2.05	303	3.6	3.6
	SG			47					3.0				
	E			58									
KRP	PG	15	35	24					-1.9	2.53	340		
	E			45									
	SG			36 02					2.0				
COB	E	15	35	52						3.04	254	3.4	
	SG			36 15					-2.3				
KAI	ESN	15	36	34					1.8	4.49	239		
MJZ	SN	15	37	05					-0.0	5.85	229		
FELT	DANNEVIRKE MIII												

		H	M	S			115 KM	SE	1.7	AVG MAG		66/ 424	
NOV 03		10	04	58.9	45.08S	167.71E							
					0.07	0.08	R						
					H	M	S	DIR	RES	DIST	AZ	W-A	W P W S
MSZ	P	10	05	16.3	D				0.2	0.44	19		
	E			25									
	S			30					0.7				
MNW	IP	10	05	17.5	J				-0.5	0.70	185	4.6	4.3
	S			32.0					-0.6				
ROX	P	10	05	23.8	J				0.8	1.20	110	3.8	3.9
	S			42.9					1.6				
	E			43.5									
MJZ	P	10	05	34.6					-1.3	2.25	62	3.5	3.4
	S			06 03					-0.7				
KAI	E	10	06	01						3.70	48	3.5	
	S			37					-1.4				
	E			41									
GPZ	S	10	06	39					-1.8	3.80	70	3.6	
WEL	E	10	07	17						6.40	56	4.7	
	E			26									
	S			34					-10.1*				
CNZ	E	10	08	25						8.27	47		
	E			28									
	S			32.5					2.9				

		H	M	S			12 KM	SE	1.1	AVG MAG		66/ 425	
NOV 03		10	36	30.2	41.19S	174.03E							
					0.02	0.02	R						
					H	M	S	DIR	RES	DIST	AZ	W-A	W P W S
WEL	PG	10	36	41.6	J				-0.1	0.56	100	3.4	3.8 4.1
	SG			50					0.6				
COB	PG	10	36	50					-0.3	0.99	275	3.1	
	SG			37 05					1.3				
MNG	IP*	10	36	52.0	D				-0.4	1.24	63	3.6	3.5
	S*			37 09					0.0				
	ESG			13					1.0				
TNZ	E(PG)	10	37	09					-2.0	2.02	8		3.0
	ESG			38.5					0.3				

		H	M	S			195 KM	SE	2.2	AVG MAG		66/ 426	
NOV 03		18	11	19.0	38.28S	175.98E							
					0.05	0.07	R						
					H	M	S	DIR	RES	DIST	AZ	W-A	W P W S
KRP	IP	18	11	45.8	D				0.1	0.50	316		
	S			12 03.5					-2.7				
CNZ	P	18	11	50.1					1.9	0.97	200	4.1	3.5
	E			12 27.5									
TUA	P	18	11	50					1.2	1.06	120	4.5	4.8
	S			12 09					-2.9				
TNZ	P	18	11	55.8					2.9	1.54	234	4.0	3.3
	ES			12 23.5					4.4				
	E			43									
GNZ										1.64	103	4.2	4.6
AUC	P	18	11	55					0.4	1.71	326		
ECZ	P	18	11	59.7	J				1.0	2.11	75	4.7	4.3
	E			12 40									
MNG	IP	18	12	03.1	J				1.6	2.36	189	5.1	4.5
	S			35					0.8				
ONE	EP	18	12	06.5					-0.4	2.82	332		
	ES			42					-1.8				
WEL	P	18	12	12					1.4	3.14	197	4.3	4.5 4.7
	S			49					-1.5				
	E			51									
COB	E	18	12	34						3.76	221	3.8	
	S			13 04					0.0				
KAI	S	18	13	42					-1.4	5.49	218	4.1	
GPZ	S	18	13	51					-3.6	5.97	204	5.1	
	E			54									
MJZ	S	18	14	17.5					-2.5	7.05	214		
MSZ	E	18	14	58						8.79	221		
	S			15 01					0.3				
MNW	S	18	15	23.5					1.0	9.73	217		
	E			29									

		H	M	S			12 KM	SE	3.6	AVG MAG		66/ 427	
NOV 03		21	29	32.0	46.26S	165.86E							
					0.15	0.15	R						
					H	M	S	DIR	RES	DIST	AZ	W-A	W P W S
MNW	IP*	21	29	43.6	J				-1.8	0.72	48		
	ES*			55.5					0.3				
MSZ	PN	21	29	58.4	D				-3.3	1.76	25	5.0	
	I			30 01									
	ES*			26					-0.5				
ROX	PN	21	30	00.7	D				-2.7	1.89	66	5.0	5.3
	P*			03					-2.4				
	SN			28.5					1.9				
MJZ	EPN	21	30	19.5					-4.8	3.42	50	4.7	4.5
	P*			29					-2.7				
	PG			34					-7.2				
	S*			31 12					-4.5				
	SG			21					-6.4				
GPZ	EPN	21	30	44.5					1.1	4.84	60	5.2	
	PG			31 11					1.1				
	SN			43.5					5.5				
	E			55									
	ES*			32 00					0.8				
KAI	E	21	31	03.5						4.96	43	4.7	



Station	ESN	Time	Mag	Dir	RES	DIST	AZ	W-A	W P	W S
COB	E	21 31 11	4.1			6.70	42		4.4	
	PG	52	4.5							
	SN	32 23	0.5							
WEL	E	21 32 43	-0.4		7.58	52	4.8			
	SN	34 00								
	EL	40								
MNG	EPN	21 31 34	2.6		8.44	51				
	E	42								
	SN	33 07	3.2							
TNZ	EPN	21 31 41	2.5		8.98	41				
	ESN	33 20	3.4							
	E	44								
CNZ	E	21 31 51	9.52		45					
	EP*	32 07	-9.1*							
	ESN	33 34	4.6							
KRP	PN	21 32 02	3.1		10.53	41				
	P*	30	-3.4							
	ESN	33 54	1.0							

## FELT MANAPOURI MMIII

NOV 03	H M S	46.47S	165.90E	12 KM	SE	2.9	AVG MAG	66/ 428
	21 50	29.7					3.8	
		+ 3.0	0.15	0.13				

Station	Time	Mag	Dir	RES	DIST	AZ	W-A	W P	W S
MNW	IP* 21 50 46.5	1.1	J	3.0	0.85	36		4.4	4.1
MSZ	S* 51 00								
	PN 21 51 00.9	-0.8		1.93	22		3.6	3.7	
	P* 03.5	-0.4							
ROX	PG 09	0.1							
	S* 30.5	1.0							
	P* 21 51 05	0.7		1.96	60		3.7	3.9	
MJZ	E 07.5								
	SN 31	5.2							
	P* 21 51 31	-0.3		3.54	47		3.4	3.1	
GPZ	PG 36	-5.3							
	SG 52 26	-2.9							
	E 32								
GPZ	ES* 21 52 58	-1.3		4.92	58		3.9		
	E 53 16								

NOV 03	H M S	46.23S	165.68E	12 KM	SE	2.7	AVG MAG	66/ 429
	23 28	41.9					3.0	
		+ 3.0	0.14	0.13				

Station	Time	Mag	Dir	RES	DIST	AZ	W-A	W P	W S
MNW	P* 23 28 55.8	-0.7	D	2.6	0.79	56		3.3	3.3
MSZ	S* 29 10								
	EPN 23 29 09.5	-2.4		1.79	30		2.7	2.8	
	P* 12.5	-1.0							
ROX	PG 22	3.9							
	S* 37	-0.2							
	SG 43	0.8							
MJZ	E 23 29 17			1.99	69		3.1	2.9	
	SN 20								
	E 41	2.2							
MJZ	E 23 29 53			3.50	51				
	S* 30 25	-3.6							
	SG 38	-1.7							

NOV 04	H M S	46.27S	165.66E	12 KM	SE	2.3	AVG MAG	66/ 431
	04 53	28.3					4.1	
		+ 2.0	0.12	0.12				

Station	Time	Mag	Dir	RES	DIST	AZ	W-A	W P	W S
MNW	IP* 04 53 43.8	0.3	J	1.2	0.83	54		4.6	4.5
	S* 56								
	E 58								
MSZ	PN 04 53 57.5	-1.4		1.83	29		4.1	3.9	
	P* 54 00	-0.6							
	S* 27.5	2.7							
ROX	EPN 04 54 01	-0.4		2.02	68		4.0	4.4	
	EP* 03	-0.9							
	E 05								
MJZ	SN 29	3.2							
	P* 04 54 29	-0.8		3.53	51		3.6	3.3	
	PG 33	-6.7*							
MNG	E 55 21								
	SG 23	-4.3							
	EPN 04 55 30	0.9		8.54	52				
E 40									
NOV 04 H M S 41.57S 173.43E 126 KM SE 1.4 AVG MAG 4.6									
NOV 04 11 08 03.8 0.03 0.04 7									
+ 0.4									
COB	P 11 08 24	-0.2		0.71	313		4.4		
	E 27								
	S 35.5	-4.3*							
WEL	IP 11 08 28.6	1.4	J	1.05	75		5.0	4.9	
	E 37								
	S 44.5	-0.5							
KAI	P 11 08 37	1.7		1.78	237		4.5		
	S 58.5	-0.8							
	MNG 11 08 37.8	1.9	D	1.82	59		4.9		
GPZ	E 46								
	S 59	-1.2							
	P 11 08 42	1.4		2.20	195		5.1		
TNZ	E 44								
	S 09 08	-0.5							
	P 11 08 46.5	2.0		2.49	17		4.7	4.6	
CNZ	E 56								
	S 09 11	0.7							
	P 11 08 51.0	1.4		2.87	35		4.8	4.9	
MJZ	E 09 02	-0.4							
	S 45								
	P 11 08 55.8	1.3		3.25	221		4.4	4.3	
WNZ	ES 11 09 40	-1.1		3.58	36		4.4	4.4	
	TUA 11 09 04	-0.1		3.97	47		4.4	4.6	
	E 13								
KRP	E 26								
	S 38.5	-0.3							
	P 11 09 05	0.6		3.99	25				
GNZ	E 23								
	S 50	-0.8							
	E 10 14								
AUC	E 19			4.58	52		4.3	5.0	
	E 11 09 27.5			4.82	13				
	E 10 48								
ROX	P? 11 09 17.5	0.7		4.91	216		4.2	4.1	
	E 19								
	E 42								
MSZ	S 10 11	-2.0							
	E 20								
	P 11 09 19.8	0.7		5.08	231		4.6	4.8	







MSZ	S	19 29 43	-2.8	8.82	222																
MNW	E	19 28 29		9.76	218																
	ES	30 11	3.3																		
NOV 06	H M S	22 23 22.7	38,32S 175,15E	182 KM	SE	1.9	AVG MAG	4.1												66/ 436	
		+ - 1.1	0.04 0.05	9																	
KRP	IP	22 23 48.7	DE	0.3	0.62	309															
	S	24 06		-2.3																	
TUA	P	22 23 50.3		0.1	0.93	122			4.5	4.6											
	E	24 04																			
	S	09		-2.5																	
CNZ	P	22 23 52.7	D	1.9	1.00	208			3.4	3.6											
	E	55.5																			
	S	24 13.5		1.1																	
	E	16																			
GNZ				1.51	103				4.5	4.5											
TNZ	EP?	22 23 58.5		2.1	1.63	237			3.3												
	E	24 02.8																			
ECZ	P	22 23 59.8		-0.4	1.99	73			4.8	4.8											
	E	24 26																			
	S	29.5		0.5																	
MNG	IP	22 24 05.6	J	1.3	2.36	192			4.2	4.1											
	S	37		0.7																	
ONE	S	22 24 48		-0.3	2.91	330			3.4												
WEL	P	22 24 15.0	J	1.1	3.15	199			4.1	4.2	4.4										
	I	15.4																			
	S	54		0.6																	
COB	S	22 25 08.5		0.2	3.82	223			3.8												
KAI	S	22 25 51		2.9	5.55	219			4.1												
GPZ	S	22 25 56		-2.6	5.99	205			4.2												
MJZ	S	22 26 22		-2.8	7.10	215															
MSZ	S	22 27 04		-2.0	8.85	222															
NOV 08	H M S	15 27 48.8	35,42S 173,24E	12 KM	SE	2.7	AVG MAG	4.5													66/ 437
		+ - 1.8	0.08 0.07	R																	
ECZ	P*	15 28 30		1.1	2.28	174			5.3	4.8											
	PG	33		-2.0																	
	S*	58		-1.0																	
AUC	P*	15 28 45		1.2	3.15	242															
	IPG	53		0.5																	
ONE	P*	15 28 43.5		-0.8	3.18	262			4.6												
	PG	53		-0.2																	
	S*	29 24.5		-1.6																	
	ESG	40		3.9																	
GNZ				3.22	183				4.9	4.8											
KRP	(PN)	15 28 36.4	D	-3.2	3.31	220															
	P*	45		-1.6																	
	I	29 00																			
	SN	12		-5.9																	
TUA	EPN	15 28 45		3.0	3.49	194			4.4	4.5											
	P*	52		2.4																	
	PG	29 01		1.6																	
	SN	25		2.8																	
	SG	49		2.5																	
WNZ	ESG	15 29 50		-1.3	3.63	207				4.4											
CNZ	EPN	15 28 52.5		-0.9	4.34	209			4.5												
	E	56																			
TNZ	PN	15 28 59		-1.4	4.86	218			4.1												
MNG	PN	15 29 10.0		-0.7	5.63	202			4.1	3.9											
	E	17																			
	E	33																			
	EPG	44		1.4																	
	ESN	30 16		2.3																	

WEL	EPN	15 29 21		-0.9	6.46	204			4.5												
	P*	32		-8.5*																	
	E	30 04																			
	ESN	28		-5.5																	
	EL	55																			
COB	EP*	15 29 56		4.2	7.13	216															
MJZ	E	15 30 28			10.44	213															
NOV 09	H M S	01 06 22.3	34,36S 179,55W	33 KM	SE	4.0	AVG MAG	4.9													66/ 438
		+ - 3.2	0.16 0.28	R																	
ECZ	PN	01 07 18		2.2	3.66	204			5.1	4.9											
	SN	08 02		5.3																	
	E	37																			
	ET	10 59																			
GNZ				4.70	204				4.8	4.7											
TUA	PN	01 07 38		1.7	5.17	210			5.0	4.6											
	E	48																			
	P*	58,5		6.5																	
	ES*	09 00		0.6																	
ONE	EPN?	01 07 37		0.5	5.19	253															
	P*	53		0.7																	
KRP	PN	01 07 40		1.6	5.33	227															
	E	44																			
	E	49																			
	E	58																			
CNZ	PN	01 07 50.5		-0.0	6.23	218															
	E	56																			
	ESN	09 00		1.4																	
	ES*	38		6.8																	
TNZ	EPN	01 08 01		2.1	6.85	224															







		H	M	S			RES	DIST	AZ	W-A	W P	W S
MJZ	P	09	05	54	1.9	14.19	210					
	S		08	22	0.7							
MSZ	E	09	06	14		15.88	214					
	S		09	04	10.4*							
NOV 10		12	39	07.4	34.66S	179.96E	406 KM	SE	1.3	AVG MAG	4.2	66/443
				+ 1.4	0.15	0.22	12					
ECZ	P	12	40	14.0			0.6	3.23	200		4.5	4.2
	E		41	00								
	S			06			0.6					
GNZ								4.27	201		4.3	4.2
TUA	S	12	41	30			-0.1	4.71	208			4.5
KRP	P	12	40	27			-1.6	4.83	226			
CNZ	P	12	40	38.0			-0.1	5.74	217		3.7	3.1
	ES		41	51			1.7					
TNZ	E(P)	12	40	46			1.3	6.35	223			
MNG	P	12	40	50.9			-0.2	6.92	210			
	E		42	09.5								
	S			11			-2.0					
WEL	P	12	41	00.5			-0.3	7.78	210		4.9	
	E		42	27								
	S			30			-0.3					
COB	ES	12	42	46			-1.0	8.59	220			
MJZ	S	12	43	57			1.5	11.85	215			
MSZ	S	12	44	39			7.9*	13.62	219			
NOV 10		23	03	30.4	39.86S	174.08E	150 KM	SE	2.0	AVG MAG	3.6	66/444
				+ 1.7	0.07	0.08	17					
TNZ	EP	23	03	52.5			-0.7	0.71	19		3.1	3.1
	E			57								
	E			04								
CNZ	EP	23	03	58			-0.4	1.31	61		3.5	3.5
	E			04								
	S			18.5			-1.4					
MNG	IP	23	04	00.2			1.7	1.32	126		4.2	4.1
	E			02			0.0					
	S			20								
WEL	EP	23	04	02			1.4	1.52	160		3.5	3.7
	E			03.5								
	S			25			1.3					
COB	EP	23	04	02			0.6	1.60	219		3.3	
	S			26			0.8					
KAI	ES	23	05	02			-1.2	3.34	216		3.5	
GPZ	S	23	05	14.5			-3.6	3.98	195		4.1	
MJZ	ES	23	05	39			-1.4	4.93	212			
MSZ	ES	23	06	24			2.8	6.63	222			
NOV 11		06	38	33.5	40.82S	174.47E	12 KM	SE	2.0	AVG MAG	3.6	66/445
				+ 0.5	0.03	0.03						
WEL	IPG	06	38	45.7			1.5	0.52	154		3.9	4.3
	E			48.5								
	SG			52.5			1.1					
MNG	IPG	06	38	49.8			0.1	0.80	76		3.8	3.9
	E			52								
	SG			39			0.5					
COB	EPG	06	39	02			1.4	1.34	258		3.4	
	SG			20			1.3					
TNZ	PG	06	39	07			0.6	1.63	358		3.8	3.6
	E			18.5								

	SG			32								3.6	
	E			50									
CNZ	P*	06	39	07						1.4	1.82	28	3.6
	E			16									
	ESG			34						-0.7			
	E			48									
KAI	ESN	06	39	53						1.2	2.86	232	3.1
KRP	(P*)	06	39	23						-2.9	3.00	16	
	PG			33						-1.2			
	E			46									
	ES*			40						-2.4			
	E			20									
GPZ	SN	06	39	53						-6.3*	3.18	205	3.6
	E			57									
MJZ	E(PN)	06	39	40						1.9	4.34	222	2.9
	E			40									
	SN			24.5						-2.8			
MSZ	SN	06	41	10						-1.3	6.17	229	
MNW	SN	06	41	29						-2.9	7.04	223	
FELT WAINUIOMATA MMIII													
NOV 12		03	47	11.6	40.84S	175.56E	12 KM	SE	2.5	AVG MAG	4.0	66/446	
				+ 1.0	0.03	0.05							
MNG	IP*	03	47	28.1			0.9	0.85	285			4.5	
	S*			37.5			-1.3						
WEL	P*	03	47	38			0.9	1.43	251		4.0	4.8	
	PG			46								4.9	
	S*			53.5			-2.7						
	SG			59.5			-0.4						
	E			48									
CNZ	(PN)	03	47	41.5			-0.5	1.81	334			4.3	
	IP*			42.8			-0.9						
	S*			48			-2.8						
	E			06.5									
TUA	PN	03	47	45			-0.5	2.08	13			3.9	
	PG			53			-0.7					4.0	
	SG			48			12.3*						
TNZ	EPN	03	47	50			0.7	2.35	314			3.8	
	P*			56			3.1					3.9	
	S*			48			0.1						
	ESG			35			4.1						
GNZ	EPN	03	47	58			1.0	2.47	28			3.9	
COB	PG			48			-4.4	2.91	264		4.0	4.0	
	S*			42			1.3						
KRP	EP*	03	48	05			0.7	3.02	344				
	S*			42			-1.9						
GPZ	EP*	03	48	22			-0.4	4.07	224			3.9	
	PG			34			0.0						
	SN			49			1.0						
KAI	ESG	03	49	32			-1.5	4.21	245			3.7	
MJZ	EPN	03	48	34.5			2.8	5.50	233			3.4	
	P*			47.5			0.7					3.3	
	PG			58			-4.8						
	SN			49			1.6						
	SG			50			-8.9*						
MSZ	EPN	03	49	00			2.5	7.42	236				
	P*			15			-4.7						
	ESN			50			0.8						
	S*			48			-8.3*						
FELT WAITAHORA													
NOV 12		13	00	07.4	31.80S	179.43E	489 KM	SE	2.4	AVG MAG	5.1	66/447	
				+ 2.3	0.18	0.45	24						



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ECZ	EP	13	01	44		0.6	5.92	187		5.4	5.0
	E		02	52							
	ES		03	02		2.6					
AUC	EP?	13	01	49		1.4	6.34	216			
	E		51								
KRP	P	13	01	53.5		0.3	6.89	207			
	E		02	25							
TUA	EP	13	01	55		-1.7	7.23	194			
	ES		03	24		0.6					
	E		29								
CNZ	P	13	02	03.5		-1.5	8.03	202			
	E		03	45							
TNZ	EP	13	02	09.5		0.1	8.44	208			
WEL	EP	13	02	25		-2.9	10.18	200	5.2		
	S		04	17		-2.9					
COB	ES	13	04	28		-2.4	10.72	208			
GPZ	S	13	05	14		-0.9	13.02	202	5.0		
MJZ	EP	13	03	09		0.4	14.06	208			
	S		05	39		4.4					
MSZ	P	13	03	27		2.0	15.69	212			
	E		06	16							
NOV 15		H	M	S						66/448	
		07	06	56.3		39.97S	175.52E	12 KM	SE	2.2	AVG MAG 3.8
						0.02	0.03	R			
MNG	IP*	07	07	10.1	J	1.6	0.65	183		4.2	4.2
	S*			20.5		3.1					
CNZ	IP*	07	07	10.0	J	-0.5	0.77	2		4.1	4.3
	S*			20		-1.1					
TNZ	P*	07	07	17.5		-0.0	1.18	311		3.4	3.7
	PG			21		0.8					
	S*			34.5		1.1					
	ESG			36.5		0.3					
WEL	P*	07	07	20		-1.9	1.43	203	3.3	4.3	4.1
	PG			23		-2.4					
	S*			39		-2.1					
	SG			46		1.2					
TUA	EPN	07	07	24		-1.4	1.72	48		4.2	3.7
	SN			48		1.1					
	ESG			57		2.8					
KRP	PN	07	07	28		-1.8	2.04	0			
	E			42							
	SN			55		0.5					
	S*			58		-1.3					
GNZ	EP*	07	07	38		0.4	2.35	57			
	PG			43.5		-0.4					
	ES			08 29		13.4*					
COB	EPN	07	07	35.5		0.9	2.45	241	3.3		
	SN			08 04		0.8					
	S*			08		-2.1					
	SG			24		6.8					
KAI	ESN	07	08	41		-1.4	4.02	229	3.6		
MJZ	SN	07	09	15.5		-2.7	5.50	222			2.9
MSZ	SN	07	09	58		-3.8	7.33	228			
MNH	SN	07	10	24		1.4	8.21	222			
NOV 15		H	M	S						66/449	
		22	30	27.3		38.62S	176.21E	12 KM	SE	1.3	AVG MAG 2.2
						0.03	0.09	R			
WNZ	IPG	22	30	30.0	D	-0.0	0.08	261			
	ESG			32		0.2					
CNZ	EPG?	22	30	44		0.9	0.76	221			1.9
	S*			53		0.8					
KRP	PG	22	30	45		0.0	0.87	323			

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
MNG	ESG	22	31	56		-0.8					
	P*			05		1.2	2.07	195		2.5	
	ESG			35		-2.2					
FELT WAIRAKEI MHIV											
NOV 16		H	M	S						66/450	
		21	58	38.1		37.59S	179.04E	33 KM	SE	1.7	AVG MAG 3.8
						0.06	0.07	R			
ECZ	(PN)	21	58	47		-0.1	0.41	255			
	P*			49		1.8					
	ES*			59 03		9.2*					
GNZ	PN	21	59	01.5		2.0	1.33	217		3.9	3.7
	E			12							
	ES*			22		1.9					
	E			29							
	E			37							
KRP	PN	21	59	18.5		-1.2	2.80	262			
	P*			27		-0.3					
	ESN			50		-1.4					
	ES*			05		0.9					
CNZ	PN	21	59	24.8		-0.2	3.18	239		3.4	3.3
	P*			31.5		-2.3					
	ESN			02.5		1.7					
	E			08							
TNZ	EPN	21	59	38		1.9	4.00	245		3.7	
	E			43							
WEL	ESN	22	00	44		0.1	4.96	221	4.2		4.1
GPZ	SN	22	01	50		-2.0	7.80	217	4.5		
MJZ	EPN	22	00	44		-1.0	9.12	223			
	SN			02 21.5		-1.9					
NOV 16		H	M	S						66/451	
		22	55	15.3		33.38S	179.05W	33 KM	SE	4.2	AVG MAG 5.2
						0.18	0.34	R			
ECZ	PN	22	56	26		2.7	4.73	204		5.5	5.1
	SN			23		7.5					
	E			26							
	ES*			44		4.8					
GNZ	PN	22	56	36		-1.2	5.76	203		5.0	4.8
	P*			55		-0.2					
	E			57 05							
	ESN			43		2.5					
	ES*			58 22		11.8*					
ONE	PN	22	56	41		1.5	5.93	244			
	E			50							
AUC	PN	22	56	48		5.8	6.13	234			
	E			57 08							
KRP	PN	22	56	44.5		-0.3	6.32	223			
	ESN			57 58		4.2					
CNZ	PN	22	56	56		-1.4	7.26	215			
	E			57 01							
	SN			58 19		2.7					
	E			42							
TNZ	(PN)	22	57	05		-0.3	7.85	221			
	E			19							
MNG	PN	22	57	08		-5.2	8.44	210			
	SN			58 41		-3.6					
	E			59 17							
WEL	SN	22	59	00		-5.0	9.30	210	5.4		
	S*			44		-12.4*					
	EL			23 00 26							
COB	SN	22	59	19		-4.9	10.10	218	5.0		
GPZ	SN	22	00	05		-7.3	12.17	210	5.3		
MJZ	EPN	22	58	15		-2.6	13.37	215			
	E			23 00 34							



		SN	40	-0.1						
ROX	EL	23 03 00			15.03	213				
HSZ	(PN)	22 58 44		4.3	15.13	218				
	ESN	23 01 16		-4.0						
NOV 16	H M S	23 22 38.2	39.25S	174.93E	12 KM	SE	1.8	AVG MAG	3.3	66/452
		+ 0.5	0.03	0.03	R					
	H M S	23 22 47.7	DIR	RES	DIST	AZ	W-A	W P	W S	
TNZ	IPG	23 22 47.7	D	0.6	0.43	278				
	ES*	54		1.3						
	ISG	55		1.9						
CNZ	IPG	23 22 49.3	D	1.0	0.49	85				
	ISG	58		3.0						
KRP	P*	23 23 02		-1.3	1.40	20				
	E	08								
	S*	19		-3.0						
MNG	P*	23 23 03.5		-0.4	1.44	163	3.3	3.2		
	E	11								
	SG	25.5		-1.3						
WEL	P*	23 23 15		0.8	2.04	183	2.9	3.6	3.6	
	S*	42		0.7						
COB	SN	23 23 46		-1.3	2.49	222	3.0			
	ES*	54		-0.7						
GPZ	ESN	23 24 41		-1.4	4.77	200				
PROBABLY FELT AT OHAKUNE MMIV										
NOV 17	H M S	22 17 09.6	36.77S	177.21E	320 KM	SE	1.3	AVG MAG	5.0	66/453
		+ 0.9	0.07	0.07	6					
	H M S	22 17 54.2	DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	IP	22 17 54.2	J	-0.3	1.41	131	5.5	5.2		
	E	18 23								
	S	29		-0.5						
	E	31								
KRP	P	22 17 56.6	J	-0.1	1.76	229				
	ES	18 35		1.5						
GNZ	IP	22 17 58.4	J	0.1	1.98	161	5.4	5.5		
	E	18 06								
	E	29								
	E	32								
	S	38		1.8						
TUA	P	22 17 58.4	J	-0.3	2.03	181	5.6	5.2		
	E	18 10								
	E	29								
	E	35								
	S	37		0.0						
CNZ	P	22 18 05.4		0.5	2.75	208	4.4	4.1		
	S	47		-1.1						
	E	53								
	E	59								
TNZ	P	22 18 11	J	1.0	3.29	222	4.5	3.7		
	ES	19 03		5.9*						
	E	22								
MNG	IP	22 18 17.1	J	-1.0	4.07	199	5.2	5.0		
	E	19 04								
	E	09								
	S	12		0.3						
WEL	EP	22 18 26		-1.2	4.89	202	5.2	4.5	5.2	
	E	42								
	E	19 24								
	S	28		-0.0						
	E	30								
COB	E(P)	22 18 33		-1.7	5.54	218	4.9			
	E	19 39								
	S	40		-1.5						
KAI	E	22 20 14			7.28	216	5.0			

		S	16	-2.5						
GPZ					7.74	205	5.5			
MJZ	EP?	22 19 14		-0.4	8.85	213				
	E	19								
	E	20 49								
	S	53		0.2						
HSZ	EP	22 19 35		-0.5	10.57	219				
	E	21 27								
	E	30								
	S	33		2.2						
MNH	EP	22 19 49		1.9	11.52	216				
	ES	21 53		1.4						
NOV 18	H M S	17 54 45.3	39.46S	177.33E	12 KM	SE	2.0	AVG MAG	3.0	66/454
		+ 1.0	0.05	0.05	R					
	H M S	17 54 58.0	DIR	RES	DIST	AZ	W-A	W P	W S	
TUA	IPG	17 54 58.0	J	-0.9	0.67	348	4.0	3.7		
	SG	55 06		-2.0						
GNZ	EP*	17 55 02.5		-0.6	0.98	34	2.8	3.1		
	PG	07		1.8						
	S*	15		-1.3						
	ESG	20		1.6						
CNZ	EPG	17 55 16		2.2	1.41	280	2.8	2.5		
	ESG	34		1.2						
MNG	S*	17 55 39		-2.9	1.83	230	2.2			
	E	44								
	SG	48		1.0						
FELT WAIROA MMIV										
NOV 19	H M S	00 26 20.8	41.63S	173.13E	33 KM	SE	2.0	AVG MAG	3.7	66/455
		+ 0.4	0.03	0.03	R					
	H M S	00 26 33.9	DIR	RES	DIST	AZ	W-A	W P	W S	
COB	PN	00 26 33.9		1.3	0.62	331	3.7			
	SN	43.3		2.2						
WEL	IPN	00 26 42.8	J	1.3	1.27	75	3.2	4.1	4.1	
	P*	45		0.9						
	SN	27 00		2.9						
	S*	05.5		4.2						
KAI	PN	00 26 47		1.5	1.56	235	3.5			
	E	55								
	SN	27 05.5		1.4						
MNG	IPN	00 26 51.4	D	-0.7	2.04	61	4.3	3.9		
	IP*	55.8		-1.3						
	SN	27 15		-0.7						
	S*	24		-0.2						
GPZ	E	00 27 00			2.09	190	3.3			
	E	04.5								
	SN	18		1.0						
	S*	22		-3.7						
TNZ	PN	00 27 00		-0.0	2.62	22	3.4	3.6		
	E	19								
	SN	29.5		-0.3						
	S*	40.5		-1.0						
CNZ	EPN	00 27 04		-1.9	3.05	38	3.8	3.9		
	S*	46		-8.3*						
MJZ	PN	00 27 06.5		0.4	3.07	219	3.7	3.4		
	P*	10		-4.6						
	SN	42		1.4						
KRP	PN	00 27 19.5		-1.3	4.14	27				
	SN	28 05		-1.8						
	S*	17		-10.0*						
ROX	ESN	00 28 22		0.7	4.74	215			3.4	
GNZ	EPN?	00 27 27		-2.6	4.79	53	3.7	3.8		
	EP*	46		2.0						
	SN	28 20		-2.5						



		H	M	S		RES	DIST	AZ	W-A	W P	W S
MSZ	E	00	27	31.0	0.2	4.88	230			3.7	4.0
	PN	00	27	28							
	E			23							
	SN			24.5	-0.1						
MNW	EPN	00	27	43	0.3	5.76	222			3.5	3.6
	ESN			28	1.1						
	E			49							
NOV 19 08 56 50.1 49.67S 164.90E 33 KM SE 3.0 AVG MAG 4.1 +- 3.6 0.19 0.28 R											
WPZ	P*	08	57	58	-2.0	4.01	43			4.0	4.1
	SN			58	1.1						
MNW	PN	08	57	55	2.7	4.30	26			4.2	4.1
	E			58							
	SN			43	3.0						
ROX	E	08	59	01		5.15	37				3.9
	SN			04	3.4						
MSZ	PN	08	58	09	1.7	5.41	23			4.1	4.0
	E			16							
	SN			07	0.3						
	E			11							
	S*			31	-3.4						
MJZ	E	08	58	39		6.85	36				
	P*			43	-5.5						
	E			59							
	ESN			40	-1.2						
	ES*	09	00	05	-12.6*						
WEL	EL	09	03	00		10.87	43				
MNG	PN?	08	59	30	-1.3	11.72	43				
	E			42							
	ESN	09	01	38	1.2						
NOV 19 10 24 44.9 33.88S 179.22W 33 KM SE 3.7 AVG MAG 4.9 +- 2.4 0.13 0.19 R											
ECZ	PN	10	25	44	-1.9	4.21	205			5.1	4.9
	I			47							
	SN			26	4.3						
	E			42							
GNZ	PN	10	25	36	-4.0	5.25	204			4.7	4.7
	E			58.5							
	E			26							
	SN			27	6.3						
ONE	PN	10	26	02	-2.7	5.60	248			4.3	
	E			27							
	SN			07	0.7						
	E			15							
TUA	EPN	10	26	05.5	-0.8	5.72	210			4.8	4.9
	SN			27	6.9						
	E			33							
	S*			43	4.3						
AUC	E	10	26	10		5.73	237				
KRP	PN	10	26	07.5	-0.7	5.86	225				
	SN			27	5.5						
	E			22							
	E			28							
CNZ	E(PN)	10	26	20.5	-0.0	6.77	217				
	E			30							
	ESN			27	1.7						
	ES*			28	-3.3						
TNZ	E(PN)	10	26	29	0.3	7.38	222				
	E			33							
	EP*			57	4.4						
	E			28							

MNG	EPN	10	26	31	-5.1	7.94	211				
	E			33							
	EP*			27	-2.0						
	SN			28	-0.2						
	ES*			39	-6.3						
WEL	SN	10	28	20	-2.7	8.79	211			5.1	
	E			43							
	S*			29	-4.0						
COB	ESN	10	28	41	-1.2	9.62	219				
KAI	ESN	10	29	19	-3.7	11.34	218			4.9	
	E			28							
GPZ	SN	10	29	28	-2.3	11.67	210			5.2	
MJZ	E(PN)	10	27	41	-0.0	12.88	215				
	E			57							
	SN			29	-4.9						
MSZ	PN	10	28	06	2.7	14.65	219				
	SN			30	1.1						
	E			46							
MNW	E(PN)	10	28	20	5.2	15.57	216				
	SN			31	2.4						
NOV 20 14 42 01.2 39.78S 175.61E 12 KM SE 1.1 AVG MAG 3.8 +- 0.4 0.01 0.02 R											
CNZ	IPG	14	42	13.0	-0.2	0.58	355				
	SG			20.5	-0.6						
MNG	P*	14	42	17.3	0.6	0.84	187			4.3	4.1
	S*			28.5	0.3						
TNZ	P*	14	42	21.3	-0.2	1.12	301			3.4	3.6
	S*			37.5	0.9						
	ESG			40	0.7						
	E			45							
TUA	P*	14	42	31.0	2.4	1.54	51			4.2	3.5
	E			43							
WEL	P*	14	42	29.5	-0.8	1.64	203			3.6	4.0
	S*			52	-0.1						
	SG			57	0.5						
KRP	P*	14	42	33	-1.0	1.85	358				
	E			35							
	S*			56	-2.6*						
	SG			43	-0.8						
GNZ	E(P*)	14	42	46	-0.0	2.19	60			3.6	3.4
COB	E			49		2.56	238			3.1	
	S*			43	-0.7						
	ESG			29	1.5						
GPZ	ESN	14	43	57	-2.0	4.50	209				
MJZ	ESN	14	44	27	-0.7	5.69	221				
FELT OHAKUNE MMIV AND PUKEROA											
NOV 20 15 06 32.8 40.44S 174.15E 98 KM SE 1.2 AVG MAG 3.7 +- 0.5 0.03 0.03 R											
WEL	P	15	06	54	1.0	0.96	151			3.3	3.8
	E			55.3							
	S			07	-0.3						
	E			11							
MNG	P	15	06	54.1	0.3	1.03	100			3.9	3.8
	E			55.5							
	S			07	-1.1						
	E			10							
COB	P	15	06	57	0.4	1.25	239			4.2	
	IS			07	-0.6						
TNZ	P	15	06	57.0	0.3	1.27	8			3.9	3.8
	S			07	-0.1						



Station	Type	Time	Mag	Dist	Az	W-A	W P	W S
CNZ	P	15 07 01.5	0.2	1.64	41		4.0	4.0
	S	24	1.5					
KRP	P	15 07 15.9 J	-0.0	2.73	24			
	S	47	-1.3					
KAI	E	15 07 21		2.93	224	3.2		
	ES	53.5	0.5					
	E	58						
GPZ	EP	15 07 24	-1.6	3.44	199	3.8		
	S	08 00	-5.5*					
	E	18						
GNZ				3.49	60			3.6
MJZ	EP	15 07 41	1.2	4.48	216	3.2	3.0	
	S	08 32	1.0					
MSZ	E	15 08 05.5		6.25	225			
	S	09 12	-2.6					
MNW	ES	15 09 38	1.0	7.16	220			
H M S 66/ 460 NOV 21 04 31 10.4 37.18S 175.96E 180 KM SE 2.6 AVG MAG 4.0 +- 2.5 0.16 0.13 20								
		H M S DIR RES DIST AZ W-A W P W S						
KRP	P	04 31 44.5	3.2	1.36	236			
ECZ	EP?	04 31 41	-0.4	1.36	113	3.7	3.7	
	S	32 04.5	-0.8					
GNZ				1.69	151	4.5	4.2	
TNZ	P	04 31 55.5	-2.5	2.86	225	3.5	3.2	
	S	32 31	-3.7					
MNG	IP	04 32 07.3 D	-0.2	3.63	198	4.3	3.6	
	S	53.5	2.0					
WEL	P?	04 32 17.3	-0.7	4.44	202	4.1	4.5	
	I	18.7						
	S	33 12	1.9					
COB	S	04 33 29.5	4.1	5.10	219			
GPZ	S	04 34 14.5	-2.6	7.30	205	4.4		
MJZ	E(P)	04 33 10	0.1	8.41	214			
	S	34 43	-0.3					
H M S 66/ 461 NOV 21 14 23 55.9 37.08S 177.52E 223 KM SE 1.7 AVG MAG 4.8 +- 1.1 0.05 0.08 8								
		H M S DIR RES DIST AZ W-A W P W S						
ECZ	P	14 24 26	-2.2	1.02	127	5.3	5.4	
	E	30						
	E	43.5						
	E	58						
GNZ				1.61	166	4.9	5.7	
TUA	EP	14 24 34	-0.1	1.75	190	4.8	4.8	
	E	41						
	E	57						
KRP	IP	14 24 34.9 DNE	0.4	1.79	241			
	S	25 04	-0.2					
AUC	IP	14 24 38.3 D	-0.2	2.21	275			
CNZ	P	14 24 45.4 D	2.4	2.63	216	4.3	4.0	
	S	25 28	8.5*					
ONE	EP	14 24 44	-1.6	2.86	296			
TNZ	EP	14 24 53	2.9	3.25	229	4.1	3.6	
	E	25 01						
	E	26 03						
MNG	P	14 24 57.5 D	-0.1	3.88	204	4.8	4.8	
	E	25 42						
	S	46	0.6					
WEL	P	14 25 07.8	-0.1	4.72	206	5.2	4.7	5.0
	S	26 05	1.1					
COB	EP	14 25 17	-0.4	5.47	221	4.8		
	S	25 21	0.1					
KAI	S	14 26 57.5	-2.9	7.19	219	4.9		

Station	Type	Time	Mag	Dist	Az	W-A	W P	W S
	E	27 08						
GPZ	P	14 25 44.5	-0.0	7.59	208	5.5		
	S	27 07.5	-2.0					
MJZ	P	14 25 59.5	0.0	8.74	216			
	E	26 34						
	S	27 35.5	-0.7					
	E	41						
ROX	S	14 28 11.5	-3.1	10.41	214			
	E	15.5						
MSZ	P	14 26 22	-0.0	10.50	221			
	E	51						
	S	28 18	1.3					
MNW	EP	14 26 35	1.2	11.43	217			
	ES	45						
	S	28 41	2.9					
H M S 66/ 462 NOV 21 20 04 57.1 37.56S 175.66E 250 KM SE 1.7 AVG MAG 4.9 +- 1.0 0.07 0.07 7								
		H M S DIR RES DIST AZ W-A W P W S						
KRP	IP	20 05 31.5 JSN	-0.6	0.96	248			
	S	57.5	-1.9					
TUA	P	20 05 35.0 D	0.6	1.30	163	5.1	5.5	
	E	55.5						
	S	06 01.5	-1.6					
ECZ	P	20 05 35.5 J	-0.3	1.50	96	5.2	5.0	
	E	39						
	S	06 05	-0.6					
GNZ				1.52	136	5.4	5.7	
CNZ	P	20 05 40.2 J	1.6	1.85	208	4.4	4.2	
	E	06 07						
	ES	17	6.3*					
TNZ	P	20 05 46.5 D	2.6	2.42	227	4.5	3.7	
	ES	06 23.5	3.3					
	E	34						
ONE	EP	20 05 44	-1.5	2.57	313			
MNG	IP	20 05 52.8 D	0.7	3.19	196	5.1	5.2	
	E	06 26						
	E	32.5						
	S	35.5	0.7					
WEL	P	20 06 02.0	0.6	4.00	201	5.0	4.6	5.0
	S	53	1.6					
	E	07 12						
COB	E	20 06 11		4.65	220	4.8		
	S	07 05.5	0.0					
KAI	S	20 07 41	-2.9	6.39	217	4.9		
	E	53						
GPZ	P	20 06 36.5	0.0	6.84	205	5.5		
	S	07 54	-0.3					
MJZ	P	20 06 51	0.5	7.95	214			
	S	08 18	-1.4					
	I	21						
ROX	ES	20 08 55	-2.6	9.63	213			
MSZ	EP	20 07 12.5	-0.0	9.69	220			
	E	14						
MNW	P	20 07 26	1.6	10.63	217			
	E	08 01						
	E	09 19						
	E	24						
	S	27.5	7.1*					
H M S 66/ 463 NOV 21 22 00 17.9 42.55S 171.47E 12 KM SE 2.8 AVG MAG 4.5 +- 0.5 0.04 0.04 R								
		H M S DIR RES DIST AZ W-A W P W S						
KAI	IPG	22 00 20.9	0.5	0.05	300			
GPZ	P*	22 00 42.7 S	-0.8	1.43	143	4.1		



Station	Time	Magnitude	Depth (km)	Distance (km)	Azimuth	W-A	W-P	W-S
PG	46	-1.0						
S*	01 01	-1.6						
SG	07	0.7						
MJZ	22 00 46.5	-0.1	1.61	207	4.6			
I	48							
S*	01 08	-0.0						
COB			1.74	33	4.2			
WEL	22 01 05	-1.4	2.77	64	4.2	5.0	4.8	
EPG	13	-0.9						
ESN	36	1.9						
S*	45	2.3						
ESG	54	2.8						
ROX	22 01 17	1.3	3.31	207	4.2	4.3		
PG	24.5	-0.4						
SN	46	-0.9						
SG	02 06	-3.5						
MSZ	22 01 09	-0.0	3.34	229	4.5	4.7		
EPN								
P*	19.5	3.3						
IPG	26	0.5						
SN	48	0.4						
SG	02 06	-4.5						
MNG	22 01 11.4	-0.9	3.58	59	4.8	4.4		
PN								
E	16							
P*	21	0.8						
S*	02 08	0.9						
TNZ	22 01 21.5	3.2	4.02	34	4.4	4.4		
E(PN)								
P*	28	0.2						
EPG	45	5.7						
S*	02 15	-5.4						
ESG	36	2.5						
MNW	22 01 22	0.6	4.25	219	4.2	4.3		
EPN?								
E	24							
P*	37	5.2						
EPG	44	0.0						
SN	02 14	4.2						
CNZ	22 01 33	-4.0	4.56	44	4.4	4.6		
P*								
EPG	44	-6.1						
S*	02 28	-8.5*						
ESG	54	2.5						
KRP	22 01 39.5	0.4	5.57	35				
PN								
E	43							
EP*	53	-1.4						
PG	02 05	-5.6						
ESN	40	-1.5						

## FELT BLACKBALL MMV, BARRYTOWN AND ROSS MMIV

Station	Time	Magnitude	Depth (km)	Distance (km)	Azimuth	W-A	W-P	W-S
NOV 22	01 02 01.7	45.10S	167.46E	93 KM	SE 1.1	AVG MAG 4.3		
		-1.1	0.03	0.06				
MSZ	01 02 18.3	J	1.0	0.54	38	4.3	4.5	
IP								
S	29	-0.2						
MNW	01 02 18.8	D	0.1	0.69	171	4.2	4.4	
IP								
S	30.2	-1.4						
ROX	01 02 27.5	D	0.9	1.37	107	4.5	3.9	
P								
I	27.9							
E	34							
S	46.5	1.4						
WPZ	01 02 32.7	0.2	1.84	149	4.2	4.3		
P								
E	35							
HJZ	01 02 39.9	D	-0.1	2.42	64			
P								
S	55	-0.4						
E	50							
E	59							
S	03 09	-0.1						
E	32							

Station	Time	Magnitude	Depth (km)	Distance (km)	Azimuth	W-A	W-P	W-S
NOV 23	03 03 46	-1.4	3.97	71	3.9			
GPZ								
S								
H M S	38.84S	179.36E	33 KM	SE 1.0	AVG MAG 4.0			
	0.03	0.05						
ECZ	03 03 10	D	-1.3	2.01	304	4.5	4.0	
EPN								
E	17							
ESN	34	-0.5						
GNZ	03 03 10	-2.0	2.06	275	4.0	4.1		
PN								
E	29							
E	39							
E	49							
TUA	03 03 48	-4.0*	2.72	270			4.2	
ESN								
CNZ	03 03 39	D	0.7	3.98	263	3.5	3.5	
EPN								
ESN	04 22	-0.7						
CNZ	03 03 39	D	0.7	3.98	263	3.5	3.5	
EPN								
ESN	04 22	-0.7						
KRP	03 03 41	0.9	4.11	281				
EPN								
E	49							
ESN	04 27	1.2						
KRP	03 03 41	0.9	4.11	281				
EPN								
E	49							
ESN	04 27	1.2						
MNG	03 03 43.6	D	0.2	4.35	244	4.2	3.7	
PN								
SN	04 31	-0.7						
WEL	03 03 54	0.1	5.12	240	4.2	3.8	4.3	
PN?								
SN	04 50	-0.3						
WEL	03 03 54	0.1	5.12	240	4.2	3.8	4.3	
PN?								
SN	04 50	-0.3						
GPZ	03 05 54	1.2	7.73	229	4.5			
SN								
MJZ	03 04 53	4.4*	9.21	233				
PN								
SN	06 27.5	-0.6						
NOV 25	00 05 06.0	32.00S	179.98E	33 KM	SE 3.8	AVG MAG 5.1		
		4.4	0.25	0.35				
ECZ	(P) 00 06 29	DIR	RES	DIST	AZ	W-A	W-P	W-S
S	07 31		2.0	5.69	183	5.3	4.8	
E	37		1.5					
KRP	00 06 44		5.4	6.55	205			
P								
E	08 12							
TUA	00 08 03		3.2	6.96	192			
S								
E	06							
CNZ	00 06 56		1.9	7.71	200			
P								
E	08 30							
MNG	00 07 07		-5.1	9.05	197			
P								
E	09							
E	08 39							
S	48.5		-1.4					
WEL	00 07 18.3		-4.6	9.87	199	5.3		
P								
S	09 07		-2.2					
COB	00 09 21		0.1	10.36	207			
S								
GPZ	00 10 10		-5.3	12.70	201	5.3		
S								
MJZ	00 10 39		0.4	13.71	207			
S								
MSZ	00 11 19		3.9	15.32	211			
S								
NOV 25	05 54 54.3	38.50S	175.72E	188 KM	SE 1.7	AVG MAG 3.8		
		1.5	0.07	0.08				
KRP	05 55 21.3	J	0.7	0.59	346			
P								
S	39	-1.8						
CNZ	05 55 23.7	J	2.6	0.71	191	3.5	2.9	
P								
E	49							
GNZ			1.81	95	3.3	3.9		







	S	46.5	1.2						
WEL	EP	10 06 18	1.5	4.15	214	4.2	3.8	4.2	
	S	07 05	-0.1						
COB	ES	10 07 27	-0.2	5.08	229	4.1			
KAI	ES	10 08 07	-0.2	6.76	225	4.3			
GPZ	S	10 08 10	-3.3	7.02	213	4.4			
MJZ	S	10 08 40	-3.0	8.26	220				
	E	47							
MSZ	ES	10 09 24	-2.0	10.08	225				
	H M S								66/ 472
NOV 27	22 10 52.0	33.20S	179.06W	33 KM	SE	3.9			AVG MAG 4.6
	+ - 4.6	0.21	0.51	R					
	H M S			DIR	RES	DIST	AZ	W-A	W P W S
ECZ	PN	22 12 04.5			2.2	4.89	203		5.0 4.7
	ESN	13 00			3.8				
	S*	23			2.1				
	E	30							
GNZ	PN	22 12 16.5			0.3	5.93	203		4.5 4.2
	EP*	32			-2.7				
	E	43							
	ESN	13 25			3.8				
	E	29							
ONE	PN	22 12 20			2.7	6.01	243		
KRP	PN	22 12 25			1.7	6.45	222		
	E	32							
	E	13 52							
MNG	PN	22 12 48			-4.1	8.60	209		
	SN	14 19			-6.1				
	S*	57			-15.2*				
GPZ	SN	22 15 49			-3.7	12.33	209		
	H M S								66/ 473
NOV 29	09 27 57.7	38.93S	175.69E	12 KM	SE	2.6			AVG MAG 3.7
	+ - 11.5	0.04	0.04	R					
	H M S			DIR	RES	DIST	AZ	W-A	W P W S
TUA	P*	09 28 05.8			0.5	0.38	72		
	S*	12			1.3				
CNZ	IP*	09 28 16.3			1.6	0.93	253		4.0 3.4
	S*	30.5			3.1				
GNZ	EP*	09 28 15			-2.3	1.08	75		3.8 3.9
	EPG	21			1.4				
	S*	34			2.2				
	E	45							
KRP	PN	09 28 19.5			-2.6	1.35	317		
	P*	21			-0.9				
	E	34							
	S*	39			-1.0				
TNZ	PN	09 28 29			0.8	1.82	261		3.2 2.9
	S*	56			2.0				
ECZ	PN	09 28 26			-3.4	1.91	50		3.7 3.8
	P*	31			-0.5				
	SG	29 03			0.8				
MNG	PN	09 28 28			-1.7	1.93	209		3.6 3.5
	P*	35			3.2				
	EPG	40			3.2				
	SN	52			-1.2				
	ESG	29 13			10.2*				
WEL	EP*	09 28 47			0.6	2.78	211	3.7	4.0 4.0
	PG	52			-2.0				
	SN	29 12			-2.3				
	E	16							
	ESG	34			2.5				
COB	EPN	09 28 58			3.9	3.73	233	3.7	
	ESN	29 45			8.2*				
KAI	E	09 30 21				5.39	226	4.0	
GPZ	SN	09 30 17.5			-5.8	5.65	211	4.0	

	SN	09 30 49	-3.6	6.88	221				
MJZ	SN	09 30 49	-3.6	6.88	221				
FELT	MAUNGATANIWHA								
	H M S								66/ 474
NOV 30	05 12 43.8	35.94S	179.47E	33 KM	SE	2.3			AVG MAG 4.2
	+ - 2.1	0.09	0.15	R					
	H M S			DIR	RES	DIST	AZ	W-A	W P W S
ECZ	PN	05 13 15			1.8	1.90	203		4.4 4.4
	SN	37			1.7				
	E	42							
	E	54							
GNZ	PN	05 13 27			-0.4	2.94	203		4.7 4.1
	SN	14 02			1.5				
	S*	15			1.0				
TUA	PN	05 13 34.5			0.6	3.41	212		5.1 4.5
	SN	14 15			2.9				
KRP	PN	05 13 39		DE	0.9	3.72	237		
	E	46							
	P*	50			1.2				
	E	14 18							
	SN	22			2.3				
CNZ	PN	05 13 49			0.2	4.51	223		3.9 3.4
	ESN	14 40			1.3				
	E	47							
TNZ	E(PN)	05 13 59			1.0	5.18	230		3.8
	E	14 02							
MNG	PN	05 14 00.5			-3.5	5.63	213		3.9 3.7
	SN	15 03.5			-2.3				
	S*	05 15 23			-3.4	6.49	213	4.5	
WEL	SN	05 15 45			-2.5	7.37	224		
COB	ESN	05 16 29			-5.9*	9.36	212	4.7	
GPZ	SN	05 17 00			-4.1	10.60	218		
MJZ	SN	05 17 00							
	H M S								66/ 475
NOV 30	12 28 27.5	40.59S	174.08E	12 KM	SE	2.0			AVG MAG 4.3
	+ - 0.3	0.02	0.02	R					
	H M S			DIR	RES	DIST	AZ	W-A	W P W S
WEL	IP*	12 28 44.6		JS	1.2	0.87	144		4.1 5.0
	PG	45.5			0.3				
	ES*	56.5			1.2				
	SG	59			2.0				
MNG	IP*	12 28 46.9		J	0.1	1.07	92		4.7
	S*	29 01			-0.2				
COB	P*	12 28 48.8			0.8	1.14	244	4.5	
	S*	29 04.8			1.5				
TNZ	PN	12 28 53.0			0.3	1.42	9		4.2 4.4
	P*	54.4			1.6				
	SN	29 11.5			0.2				
	S*	12.5			0.8				
	SG	16			0.6				
CNZ	EPN	12 28 57			-0.5	1.79	40		4.6 4.5
	P*	58.2			-0.9				
	E	29 07							
	S*	22			-0.8				
	E	51							
KAI	E(PN)	12 29 11			-0.3	2.79	225	4.2	
	EP*	16			-0.3				
	SN	43			-1.2				
	S*	49			-3.9				
	ESG	30 06			4.5				
KRP	PN	12 29 12.2			-0.4	2.89	23		
	P*	21			3.0				
	SN	45			-1.6				
	S*	58			2.1				
	SG	30 08			3.1				
TUA	P*	12 29 17.8			-1.4	2.96	54		4.1 4.3
	E	35.5							



Station	SN	Mag	Time	Dir	Res	Dist	Az	W-A	W P	W S
GPZ	SN 46	-2.3								
	S* 58	-0.1								
GPZ	EPN 12 29 15.5	-2.4	3.29	199	4.7					
	P* 28	3.2								
	E 42									
GNZ	SN 49.5	-6.4*								
	PN 12 29 18.6	-3.6	3.61	59	3.8 4.1					
	P* 31	0.7								
	E 56									
AUC	SN 30 01	-2.7								
	ESG 35	5.9*								
AUC	E(PN) 12 29 25	0.7	3.76	9						
	E 30 02									
	SN 11	3.6								
MJZ	SN 12 30 18	-3.1	4.33	217	3.8					
ECZ	P* 12 29 45	-0.8	4.52	52	4.1 3.8					
	PG 30 02	3.2								
	SN 25	-0.6								
ONE	EP* 12 29 49	-1.9	4.81	3	4.3					
	PG 30 02	-2.7								
	SN 31	-1.7								
ROX	SN 12 31 01.7	0.4	6.00	214						
MSZ	SN 12 31 01.5	-2.3	6.11	226						
MNW	SN 12 31 26	0.6	7.02	220						
FELT STEPHENS IS MIII										
NOV 30	H M S									66/ 476
	12 56 35.2	45.23S	167.92E	119 KM	SE 1.7					AVG MAG 5.4
	+ 0.7	0.05	0.07	7						
MSZ	IP 12 56 53.0	-0.8	0.56	0						
MNW	IP 12 56 55.0	1.1	0.59	201						
	S 57 07	-1.3								
ROX			1.02	104	5.4					
MJZ	IP 12 57 13.4	DS4 1.6	2.21	57						
	IS 40.5	1.1								
KAI	P 12 57 32	0.2	3.70	44	5.6					
	E 51									
	E 58 14.5									
GPZ	P 12 57 34	1.0	3.72	67	5.2					
	E 35.5									
	E 58.5									
	E 58 04									
COB	P 12 57 54	0.6	5.44	42	5.6					
	E 56									
	E 58 06									
	S 55.5	-1.6								
WEL	P 12 58 07	-0.9	6.37	54	5.4					
	E 17									
	S 59 16.5	-3.2								
MNG	P 12 58 16.0	-3.5	7.22	53						
	E 37									
	E 59 19									
CBZ	P 12 58 22	1.6	7.37	174						
	S 59 44.5	0.4								
	E 13 00 28									
	E 43									
TNZ	P 12 58 26	-0.2	7.71	41						
	E 34									
	S 59 54	1.6								
KRP	P 12 58 46.8	-0.2	9.26	41						
	E 59 14									
	E 13 00 24									

Station	SN	Mag	Time	Dir	Res	Dist	Az	W-A	W P	W S
TUA	S 31	1.1								
	E 12 58 57				9.40	50				
	S 13 00 29.5	-3.6								
	E 37									
AUC	S 13 00 46	2.5	9.84	34						
	I 01 05									
	I 24									
GNZ	P 12 58 57	0.3	10.00	52						
	E 59 23									
	ES 13 00 43	-4.4*								
	E 50									
	E 01 27									
ONE	P 12 59 07	1.7	10.64	30	5.5					
	E 13 00 59									
	ES 01 02	-0.7								
ECZ	P 12 59 09	-0.6	10.96	50						
	E 13									
	E 13 01 09									
	S 11	0.6								
FELT MAXIMUM MMIV AROUND VICINITY OF TE ANAU										
DEC 01	H M S									66/ 477
	07 25 48.5	40.08S	173.81E	181 KM	SE 1.6					AVG MAG 4.6
	+ 0.7	0.06	0.05	7						
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
TNZ	P 07 26 17.2		0.8	1.00	27				4.0	4.1
	E 31.0									
	ES 36.8	-1.3								
COB	P 07 26 21.0	2.0	1.30	219	4.8					
	S 42.5	0.0								
MNG	P 07 26 23.0	D 3.2	1.39	113	4.6	5.0				
	S 43	-1.0								
WEL	P 07 26 22.0	J 2.0	1.41	149	4.8	4.8				
	S 44.2	-0.1								
KRP	P 07 26 32.0	-0.3	2.54	33	4.1					
	E 27 01									
TUA	P 07 26 37.0	0.5	2.88	65	4.8					
KAI	E 07 26 51		3.04	216	4.7					
	S 27 16	-0.6								
GNZ	P 07 26 44.2	-0.7	3.57	68	5.2	4.6				
	S 27 26	-2.4								
ECZ	P 07 26 54.8	-0.7	4.40	59	5.4	4.6				
	S 27 48	0.8								
MJZ	E 07 27 03		4.63	211	3.9					
	S 50	-2.5								
MSZ	EP 07 27 21	0.4	6.33	222						
	S 28 32	-0.3								
DEC 02	H M S									66/ 478
	03 21 55.4	44.63S	167.96E	60 KM	SE 0.2					AVG MAG 3.8
	+ 0.2	0.01	0.01	2						
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
MSZ	IP 03 22 04.8		0.2	0.05	214					
	S 11.2	-0.1								
MNW	P 03 22 16.2	-0.2	1.18	192	4.0	4.4				
	ES 32	-0.1								
ROX	P 03 22 18.1	0.3	1.28	132	3.7	3.9				
	S 34.5	-0.0								
MJZ	EP 03 22 26.2	-0.1	1.91	71	3.5	3.6				
	S 49	-0.1								
DEC 03	H M S									66/ 479
	04 23 06.0	38.61S	175.01E	12 KM	SE 1.0					AVG MAG 2.9
	+ 0.3	0.02	0.03	R						
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	PG 04 23 08.4		-0.3	0.08	108					
	SG 10.4	-0.1								







WEL		10.95		52								
H	M	S			RES	DIST	AZ	W-A	W P	W S	66/487	
DEC 10	05 42	04.6	38.82S	177.54E	80 KM	SE	2.5	AVG MAG			4.1	
		+ - 1.3	0.09	0.08	17							
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
TUA	P	05 42	18.1		0.8	0.31	273					
	S		26		-0.9							
GNZ	P					0.42	65					
ECZ	P	05 42	28.2		-0.8	1.38	35		4.7			
KRP	EP	05 42	34		-0.6	1.81	299		3.2			
	E		51.5									
MNG						2.40	221		3.9	3.7		
TNZ	EP	05 42	46		2.1	2.49	261		4.0			
WEL	S	05 43	35		2.7	3.25	220		4.3	4.3		
COB	ES	05 44	00		0.8	4.33	237		4.2			
GPZ	ES	05 44	39		-4.2	6.11	216		4.6			
CIZ	E	05 43	35			6.77	141					
	ES		45 00		0.4							
DEC 10		H	M	S	35.41S		179.20E	227 KM	SE	2.7	AVG MAG	66/488
				+ - 1.2	0.08	0.11	17				5.3	
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
ECZ	P	13 50	51.0		0.3	2.34	193		5.9	5.6		
	ES		51 25		0.0							
TUA	P	13 51	07.8		0.8	3.76	205		5.3	5.3		
	S		52		-1.9							
AUC	P	13 51	12		3.8	3.86	247		5.9	5.2		
	E		50.5									
KRP	P	13 51	10.8		2.5	3.87	229		5.1			
CNZ	P	13 51	21.7		2.3	4.77	217		5.0	4.6		
	I		27.5									
TNZ	E	13 51	40.8			5.38	224		4.7			
	E		31.0									
	I		34.8									
RAO	ES	13 52	54		-3.7	6.61	22					
WEL	EP	13 51	44.8		-0.5	6.82	209		5.7			
	E		52.0									
	E		52 04.5									
	ES		58.5		-4.1							
COB	ES	13 53	20		-0.8	7.61	220		5.3			
CIZ	P	13 52	19.5		4.4	9.13	160					
	S		53 55		-0.7							
KAI	ES	13 54	00		-0.5	9.34	218		5.4			
GPZ	ES	13 54	06		-2.7	9.70	209		5.7			
MSZ	E	13 53	05			12.65	220					
	S		55 17		0.7							
DEC 11		H	M	S	40.32S		174.07E	86 KM	SE	1.4	AVG MAG	66/489
				+ - 0.7	0.03	0.04	14				4.6	
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WEL	P	06 56	22.0		0.6	1.11	151		4.4	4.8		
	S		37		-0.3							
MNG						1.12	106		4.4	4.7		
TNZ	P	06 56	22.5		0.5	1.15	12		4.7	4.7		
	S		39		0.7							
COB	P	06 56	24		0.4	1.27	232		4.5			
	S		40		-1.0							
CNZ	P	06 56	7.0		-0.6	1.60	46		4.7	4.6		
	S		49		1.0							
KRP	P	06 56	40.9		-1.1	2.65	26		4.5	4.5		
	S		57 12		-1.2							
TUA	EP	06 56	46		1.7	2.82	59		4.5	4.5		
	S		57 16		-1.5							
KAI	EP	06 56	49		2.5	2.98	221		4.2			

GPZ		57 20		-1.4								
H	M	S			RES	DIST	AZ	W-A	W P	W S	66/490	
DEC 12	11 21	59.7	39.02S	175.93E	12 KM	SE	0.7	AVG MAG			3.6	
		+ - 0.6	0.01	0.05	R							
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
CNZ	PG	11 22	07.4		0.3	0.35	239					
KRP	PG	11 22	22.0		-0.8	1.14	344		4.0	3.2		
	ESG		39		0.8							
TNZ	PG	11 22	24.0		-0.5	1.22	262		3.7			
MNG	PG	11 22	32.8		0.0	1.63	192		3.9	3.1		
	ESG		55		0.2							
GNZ						1.68	78				3.7	
VERY SMALL S ENERGY												
DEC 12		H	M	S	38.98S		175.81E	33 KM	SE	2.7	AVG MAG	66/491
				+ - 2.4	0.11	0.24	R				3.6	
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
CNZ	P*	11 22	07.4		-2.2	0.30	223					
KRP	P*	11 22	22.0		0.1	1.08	348		4.0	3.2		
	ESG		39									
TNZ	P*	11 22	24.0		1.1	1.13	259		3.7			
MNG	P*	11 22	32.8		1.1	1.65	189		4.0	3.1		
	ESG		55									
GNZ						1.76	80				3.7	
VERY SMALL S ENERGY												
DEC 14		H	M	S	40.98S		175.44E	33 KM	SE	1.4	AVG MAG	66/492
				+ - 1.0	0.04	0.07	R				3.9	
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
MNG	IP*	10 57	43.8		-1.2	0.37	5					
	S*		49.4		-1.7							
WEL	P*	10 57	48.0		-0.5	0.59	239		4.1	4.5		
	S*		57.2		0.0							
CNZ	PN	10 58	05.0		0.8	1.78	3		3.9	3.7		
	EP*		11		2.6							
	ES*		34		1.9							
TNZ	EP*	10 58	10		-1.6	1.97	335		3.7	3.9		
	ES*		38		0.3							
KRP	EP*	10 58	30.0		-0.1	3.06	1		4.1	3.7		
	E		36									
	S*		59 09		-1.2							
KAI	ESN	10 59	05		0.8	3.39	242		3.9			
GPZ	ESN	10 59	01		-3.8*	3.41	217		3.9			
MJZ	SN	10 59	37		-0.2	4.75	229					
FELT WELLINGTON MMIV PONATAHI MM111												
DEC 16		H	M	S	44.29S		168.17E	12 KM	SE	1.1	AVG MAG	66/493
				+ - 0.7	0.04	0.04	R				3.7	
	H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
MSZ	IP*	14 45	31.0		0.1	0.42	206					
	ES*		36.3		-0.7							
ROX	P*	14 45	48.7		0.4	1.44	146		3.8	4.1		
	S*		46 06.8		-0.7							
MNW	P*	14 45	50.0		-0.1	1.54	195		3.6	3.9		
	S*		46 11		0.4							
MJZ	EPN	14 45	53		1.8	1.68	80		3.6	3.4		
	SN		46 13		0.7							
KAI	E	14 47	06			2.94	54		3.5			
GPZ	ES*	14 47	03		0.1	3.28	81		3.6			
MNG	E	14 47	03.5			6.53	58					
	ESN		48 07		-2.0							



DEC 17		H M S	33,23S	179,33W	226 KM	SE	1.4	66/491		
		+- 1.9	0.11	0.09	26	AVG MAG 5.2				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	EP	20 17 57		-0.0	5.13	209		5.0		
	E	18 57								
TUA	EP	20 18 15		-1.5	6.66	212				
	ES	19 32		-0.1						
KRP	EP	20 18 21		2.1	6.85	225				
MNG	EP	20 18 44		-1.1	8.88	212				
	ES	20 23		-0.1						
WEL	ES	20 20 42		-0.9	9.74	212		5.4		
COB	ES	20 21 04		1.4	10.59	220		5.3		
CIZ	E	20 19 18			10.80	173				
	S	21 08		0.7						
GPZ	ES	20 21 48		-0.6	12.61	211		5.3		
USCGS		20 16 59	33.75	179.9W	178KM					

DEC 18		H M S	39.42S	175.27E	33 KM	SE	1.8	66/495		
		+- 0.5	0.04	0.04	R	AVG MAG 4.8				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
CNZ	IP	18 37 09.0		1.1	0.60	291				
WNZ	P	18 37 09.3		-1.4	0.80	351		5.1	5.6	
	I	19.2								
TUA	IP	18 37 13.2	D	0.9	0.92	49				
MNG	IP	18 37 20.7	J	2.6	1.34	207				
TNZ	P	18 37 21.2	D	1.2	1.48	279		4.9		
	E	27								
	E	35								
GNZ	EP	18 37 20.8		-0.5	1.57	61		3.6		
WEL	P	18 37 31.0	D	1.3	2.19	211		4.5	4.9	
	E	43								
	E	38 00								
COB	E	18 37 48			3.18	237		4.7		
	E	56								
	ES	38 17		-2.0						
ONE	EP	18 37 52.7		-1.0	3.94	337				
KAI	E	18 38 16			4.81	228		4.7		
	E	47								
	ES	39 02		3.3						
GPZ	EP	18 38 08		-1.0	5.06	211		5.1		
	E	39 12								
MJZ	EP	18 38 25		-0.6	6.30	222				
	E	37								
	E	55								
	S	39 34		-0.4						
CIZ	P	18 38 37.0		1.6	7.02	132				
	S	39 50		-1.7						
MSZ	E	18 38 55			8.13	227				
	E	39 04								
	ES	40 16		-2.3						
MNH	E	18 39 11			9.00	222				
	ES	40 38		-1.1						

FELT MM1V NAPIER TO WAIRORA MM111 SOUTHERN HAWKES BAY AND CENTRAL NORTH IS

DEC 18		H M S	35,93S	179,68E	33 KM	SE	6.6	66/495		
		+- 8.9	0.62	0.37	R	AVG MAG 4.3				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	EP	22 33 48.4		-2.0	1.76	183		4.9		
	I	55.0								
	E	35 52								
GNZ	EP	22 34 01.0		-3.1	2.76	191		4.3		
	I	06.8								

	I									14.3
TUA	EP	22 34	06.0		-3.0	3.12	202			4.9
	I		12.1							
KRP	P	22 34	03.3		-6.9	3.21	231			4.0
	I		10.0							
AUC	IS	22 34	56		8.0	3.28	252			4.3
ONE	EP	22 34	20		5.7	3.51	271		4.0	
CNZ	EP	22 34	18.2		-4.2	4.10	216			4.2
	I		26.0							
MNG	EP	22 34	33		-5.8	5.31	207			3.8
CIZ	EP	22 35	28		2.3	8.81	157			
	ES		37 10		9.0					

DEC 18		H M S	36,29S	179,02E	33 KM	SE	1.6	66/497		
		+- 3.0	0.24	0.17	R	AVG MAG 3.7				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	EP	23 31	13		-0.5	1.46	163			4.0
	I		21.5							
	E	33 17								
GNZ	EP	23 31	28		2.3	2.35	180			
	E		32							
KRP	EP	23 31	28.0		-0.7	2.57	230			3.4
	E		35							
CNZ	E	23 31	47			3.50	213			3.7
MNG	EP	23 31	58		-0.6	4.76	204			
	E		32 05							
CIZ	EP	23 32	52		0.3	8.70	153			
	ES		34 25		-0.8					

DEC 19		H M S	36,43S	177,85E	33 KM	SE	2.0	66/498		
		+- 4.3	0.33	0.17	R	AVG MAG 4.2				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	EP	03 39	03.8		-0.2	1.38	156			4.6
	I		10.8							
	E		35							
	E	41 05								
GNZ	EP	03 39	15		-0.5	2.22	176			4.4
	I		21.0							
KRP	P	03 39	18.7		1.1	2.37	230			4.0
TUA	EP	03 39	21.0		2.5	2.44	193			4.6
	I		27.5							
AUC	E	03 39	33.8			2.51	259			
	IS		40.5		-7.5*					
ONE	ES	03 39	55		-2.5	2.90	282		3.9	
MNG	EP	03 39	49		1.2	4.58	203			3.6
	E		56							
	E		40 55							
CIZ	EP	03 40	42		-0.5	8.65	152			
	ES		42 14		-2.0					

DEC 20		H M S	44,72S	167,59E	33 KM	SE	1.9	66/499		
		+- 1.2	0.05	0.08	R	AVG MAG 4.6				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
MSZ	IP	03 08	42.5	J	-0.7	0.24	77			
MNH	P	03 08	54.1	J	0.4	1.06	179			4.8
ROX	P	03 08	59.0		0.1	1.43	122			4.6
	ES		09 17		0.9					
WPZ	EP	03 09	08		-0.4	2.13	156			4.6
	S		33		0.1					
MJZ	P	03 09	08.5		-0.8	2.19	71			4.5
	I		13.0							
	S		35		0.5					
KAI	S	03 10	09		1.7	3.54	53		4.5	
GPZ	E	03 09	35			3.78	76		4.3	



		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
COB	S	10	10					-3.1					
	P	03	09	49.0				-1.9	5.24	48	4.9		
	S	10	52					3.4					
	IP	03	10	19.0				2.8	7.12	58			
	P	03	10	30.0				0.7	8.10	50			
KRP	EP	03	10	41				-0.9	9.04	44			
	E			51									
	E			59									
ES		12	17					-2.7					
DEC 21		10	36	40.8	41.40S	172.81E	131 KM		SE	1.1	AVG MAG	66/ 500	3.9
				+ 0.6	0.03	0.04	6						
COB	P	10	37	00.5				1.1	0.31	349	4.1		
	S			13.7				0.1					
WEL	P	10	37	10.0				0.8	1.48	86	4.1	4.2	4.7
	S			31.0				0.2					
KAI	S	10	37	31.2				-0.8	1.54	222	3.5		
MNG	P	10	37	17.3				-0.1	2.17	70		3.6	4.3
	S			45.5				0.3					
GPZ	EP	10	37	20.5				1.4	2.30	183	4.1		
	S			47.5				-0.8					
TNZ	EP	10	37	23				1.0	2.51	29		3.7	3.7
	ES			53				-0.3					
CNZ	EP	10	37	27				-1.7	3.03	45		3.6	4.0
	ES			38 04				-1.2					
MJZ	E	10	37	34					3.11	213		3.1	
	S			38 06				-1.1					
MSZ	EP	10	37	54				1.0	4.86	226		3.5	4.0
	S			38 44				-4.7*					
DEC 22		23	28	05.3	49.71S	163.78E	33 KM		SE	2.2	AVG MAG	66/ 501	4.9
				+ 2.3	0.13	0.15	R						
WPZ	P	23	29	09				-2.1	4.56	50		4.8	5.0
	S			58				-3.6					
MNW	EP	23	29	11.0				-2.1	4.71	35		5.2	4.9
	I			12.0									
ROX	P	23	29	23.8				-2.0	5.65	44		5.0	4.6
	S			30 28				0.1					
MSZ	P	23	29	27.0				-0.4	5.78	31		5.0	4.7
	S			30 33				2.2					
MJZ	E	23	29	44					7.33	41			
	E			30 00									
GPZ	E(P)	23	30	06				1.2	8.56	49			
	E			31 29									
MNG	EP	23	30	55				1.5	12.27	47			
	P	23	31	26				2.7	14.62	74			
ES				33 59				0.5					
DEC 24		01	26	53.7	44.02S	163.99E	33 KM		SE	1.5	AVG MAG	66/ 502	4.5
				+ 0.5	0.03	0.03	R						
MSZ	P*	01	27	11.3				-1.3	1.01	229		4.5	
	S*			25.2				-1.2					
MJZ	IP*	01	27	13.0				-0.5	1.07	89		4.1	4.2
	S*			26.0				-2.1					
ROX	P*	01	27	21.8				1.3	1.48	171		4.6	5.1
	S*			41.5				1.2					
MNW	P*	01	27	28.5				-1.1	2.01	208		4.7	4.5
	ES*			58				1.7					
KAI	E			28 01									
	E(P*)	01	27	36.0				1.3	2.31	51			

		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WPZ	S*	28	03										
	E	01	27	38							2.65	182	4.5 4.7
	EP*			40.5							0.1		
	E			28 11									
	ES*			14							-1.2		
GPZ	EP*	01	27	42							2.66	84	4.2
	E			44									
	S*			28 16							0.2		
COB	EPN	01	27	53.5							4.03	45	4.4
	SN			28 39							2.0		
MNG	EPN	01	28	16.5							5.89	57	4.7
	E			23.0							-0.9		
E			29 35										
FELT HAASST MM1V													
DEC 26		03	03	01.1	38.88S	175.87E	198 KM		SE	1.6	AVG MAG	66/ 503	4.1
				+ 1.6	0.10	0.10	14						
KRP	EP	03	03	30							0.99	345	4.2
	S			52							1.00	86	3.7 3.9
TUA	EP	03	03	32.3							1.20	255	3.8
	P			37							0.2	1.70	83
GNZ	EP			04 07									
	E			04 07									
MNG	P	03	03	39.7							2.4	1.76	190
	S			04 06							0.7		4.5 4.3
WEL	P	03	03	46.8							0.9	2.54	199
	S			04 22							1.6		4.0 4.8 4.2
COB	ES	03	04	35							-0.4	3.26	227
	ES	03	05	22							-1.2	5.38	206
GPZ	ES	03	05	48							-1.5	6.52	217
	ES												
DEC 27		00	46	15.7	37.25S	177.10E	33 KM		SE	1.4	AVG MAG	66/ 504	4.4
				+ 0.7	0.06	0.06	R						
ECZ	EP	00	46	37							1.1	1.24	112
	E			40.5									3.9 4.1
TUA	P	00	46	38.8							-1.5	1.56	178
	E			42.2									4.5
GNZ	P	00	46	40.5							-0.1	1.58	153
	I			43.3									4.5 4.5
AUC	P	00	46	45.5							0.5	1.89	281
	I			49.5									5.7
ONE	EP	00	46	55							-0.3	2.65	303
	E			58									
TNZ	E	00	46	59									2.89 227
	E			47 05									
MNG	EP	00	47	07							-1.3	3.60	200
	E			19									3.5
WEL	ES	00	48	10							1.5	4.42	203
	ES												4.3
DEC 27		00	46	15.3	37.23S	177.03E	33 KM		SE	1.6	AVG MAG	66/ 505	4.6
				+ 0.6	0.05	0.05	R						
ECZ	EPN	00	46	37							0.7	1.29	112
	EP*			40.5							1.6		4.4
TUA	PN	00	46	38.8							-1.5	1.58	177
	IP*			42.2							-1.6		
GNZ	E			47 05									
	PN	00	46	40.5							-0.3	1.62	151
AUC	IP*	00	46	43.3							-1.1		4.7
	PN	00	46	45.5							1.7	1.84	281
IP*				49.5							1.3		5.7



ONE	EPN	00 46 55	0.9	2.59	303														
	EP*	58	-3.0																
TNZ	E	00 46 59		2.86	226					3.8									
	EP*	47 05	-0.6																
MNG	EPN	00 47 07	-0.9	3.59	199														
	EP*	19	0.9																
WEL	ESN	00 48 10	1.9	4.42	203					4.3									
DEC 27	H M S	00 55 15.2	37.15S	177.10E	33 KM	SE	2.6			AVG MAG	4.6								66/ 506
		+ - 1.5	0.11	0.11	R														
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S										
ECZ	P	00 55 37.5		1.6	1.27	116				4.7	4.6								
	E	40.7																	
TUA	EP	00 55 38.7		-2.5	1.65	179				4.9									
	I	42.2																	
	E	56 06																	
GNZ	P	00 55 40.5		-0.7	1.66	154				5.2									
	I	43.8																	
WNZ	E	00 55 46			1.67	208													
	E	56 31																	
AUC	P	00 55 44.0		-0.3	1.88	278													
	I	50																	
ONE	EP	00 55 53		-1.1	2.60	301													
	E	58																	
	E	56 42																	
TNZ	EP	00 55 59		-0.0	2.95	226				4.1									
	E	56 05																	
MNG	P	00 56 07.0		-2.0	3.68	200				3.9									
	E	19																	
WEL	ES	00 57 10		-0.2	4.51	203				4.5									
GPZ	E	00 58 18			7.37	206													
MJZ	EP	00 57 19		5.2	8.49	214													
DEC 27	H M S	00 55 15.0	37.17S	177.04E	33 KM	SE	1.5			AVG MAG	4.5								66/ 507
		+ - 0.6	0.04	0.04	R														
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S										
ECZ	PN	00 55 37.5		1.4	1.31	114				4.9									
	EP*	40.7		1.9															
WNZ	EP*	00 55 46		1.7	1.63	207													
	E	56 31																	
TUA	EPN	00 55 38.7		-1.9	1.63	177				4.9									
	E	56 06																	
	IP*	55 42.2		-2.1															
GNZ	PN	00 55 40.5		-0.5	1.66	152													
	IP*	43.8		-1.0															
AUC	PN	00 55 44.0		0.6	1.84	279													
	IP*	50		2.2															
ONE	EPN	00 55 53		-0.5	2.57	302													
	EP*	58		-2.3															
	E	42																	
TNZ	EPN	00 55 59		0.9	2.90	225				4.3									
	EP*	56 05		-1.0															
MNG	PN	00 56 07.0		-1.2	3.65	199				3.9									
	EP*	19		0.3															
WEL	ESN	00 57 10		1.0	4.47	203				4.5									
GPZ	ESN	00 58 18		0.4	7.32	206				4.7									
MJZ	E	00 57 19			8.44	214													
DEC 27	H M S	02 45 13.8	44.93S	167.67E	82 KM	SE	ND			AVG MAG	2.7								66/ 508
	R		R	R	R														
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S										
MSZ	P	02 45 26.7		-0.1*	0.31	34													
	S	36.7		0.1*															
MNW	E	02 45 49			0.85	182				2.7									

MJZ	E	02 46 06		2.21	66														
DEC 27	H M S	05 33 43.7	44.90S	167.81E	111 KM	SE	1.9			AVG MAG	5.0								66/ 509
		+ - 1.1	0.07	0.08	R														
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S										
MSZ	IP	05 33 58.0	D	-1.6	0.25	18													
MNW	P	05 34 02.8		-1.3	0.89	189													
ROX	P	05 34 08.9		1.2	1.21	119				5.1									
	S	25.5		-0.4															
WPZ	P	05 34 16.0		0.1	1.90	158				4.9	4.9								
	S	40		-0.1															
MJZ	P	05 34 20.0	J	1.3	2.11	65				4.6									
	S	46		1.0															
KAI	EP	05 34 40		2.2	3.53	49				5.0									
	S	35 21		2.0															
GPZ	EP	05 34 40		0.2	3.68	73													
	S	35 20.5		-2.1															
WEL	E	05 35 20			6.25	57				5.0									
	S	36 23		-2.2															
MNG	IP	05 35 26.0		-0.2	7.09	55													
	S	36 36		-9.7*															
TNZ	EP	05 35 34.8		2.7	7.52	43													
	E	36 56																	
	E	37 04																	
ONE	ES	05 38 03		-2.7	10.40	31				5.3									
	FELT	QUEENSTOWN		MODERATE															
DEC 27	H M S	05 38 48.4	44.93S	167.67E	82 KM	SE	ND			AVG MAG	2.5								66/ 510
	R		R	R	R														
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S										
MSZ	EP	05 39 01.8		0.4*	0.31	34													
	S	10.8		-0.4*															
DEC 27	H M S	05 44 14.0	44.93S	167.66E	79 KM	SE	1.3			AVG MAG	3.5								66/ 511
		+ - 1.8	0.05	0.07	R														
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S										
MSZ	P	05 44 27.5	D	0.8	0.32														



DEC 27	H M S	44.93S 167.67E	82 KM	SE ND	AVG MAG	66/ 514
	16 57 04.6				3.5	
	R	R	R			
	H M S	DIR	RES	DIST	AZ	W-A W P W S
MSZ	P	16 57 17.8	0.2*	0.31	34	
	S	27.0	-0.4*			
MNW	P	16 57 22.7	0.3*	0.85	182	3.9 3.1
	S	36	0.1*			

DEC 27	H M S	38.96S 173.06E	12 KM	SE 1,3	AVG MAG	66/ 515
	17 13 15.0				4.5	
	+ - 0.5	0.03 0.03	R			
	H M S	DIR	RES	DIST	AZ	W-A W P W S
GNZ	IP*	17 13 21.0	D -0.5	0.32	355	
TUA	P*	17 13 29.5	1.0	0.73	282	4.7
	S*	39.5	1.1			
ECZ	P*	17 13 38.1	-0.6	1.32	17	4.8
WNZ	E	17 13 48	1.56	282		4.5 4.5
	E	14 14				
KRP	PN	17 13 55.0	-1.0	2.23	297	4.1
MNG	ESN	14 29	2.2	2.59	229	4.0 4.2
TNZ	EPN	17 14 01	1.1	2.87	264	4.1
	E	13				
AUC	IPN	17 14 05	-1.1	3.34	308	5.2
WEL	EPN	17 14 06	-1.3	3.43	226	4.7 4.1 4.7
	SN	46	-0.9			
GPZ	ESN	17 15 51	-3.5*	6.24	219	5.0
CIZ	PN	17 14 49	1.5	6.42	143	
	SN	15 59	0.3			
MJZ	EPN	17 15 03	-0.2	7.60	226	
	ESN	16 25	-1.7			

FELT GISBORNE AND WAIROA MM1V

DEC 27	H M S	45.04S 167.88E	63 KM	SE 0,4	AVG MAG	66/ 514
	22 40 50.8				3.6	
	+ - 0.8	0.03 0.05	7			
	H M S	DIR	RES	DIST	AZ	W-A W P W S
MSZ	P	22 41 02.0	-0.3	0.37	4	
	S	11.0	0.1			
MNW	P	22 41 06.7	0.3	0.76	194	3.7 3.5
	S	18	-0.2			
MJZ	ES	22 41 50	-0.0	2.13	61	

DEC 28	H M S	45.06S 167.52E	80 KM	SE 0,1	AVG MAG	66/ 517
	14 51 37.4				3.1	
	+ - 0.2	0.01 0.01	2			
	H M S	DIR	RES	DIST	AZ	W-A W P W S
MSZ	P	14 51 51.3	-0.1	0.48	36	
	S	52 02	0.0			
MNW	P	14 51 53.8	0.1	0.72	175	3.1 3.0
	S	52 06.0	-0.0			
ROX	ES	14 52 19	-0.0	1.33	109	

DEC 28	H M S	44.93S 167.67E	82 KM	SE ND	AVG MAG	66/ 518
	04 57 02.0					
	R	R	R			
	H M S	DIR	RES	DIST	AZ	W-A W P W S
MSZ	P	04 57 15.4	0.4*	0.31	34	
	S	24.5	-0.3*			

DEC 28	H M S	38.92S 175.89E	193 KM	SE 1,5	AVG MAG	66/ 519
	22 32 39.4				4.5	
	+ - 1.1	0.08 0.06	10			

GNZ	H M S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	P	22 33 10.0	1.6	0.39	224		4.1	4.9
	E	22.2		0.99	84			
	S	29.2	-1.7					
KRP	P	22 33 11.0	0.9	1.03	344		4.1	3.4
TNZ	P	22 33 33.8	-0.1	1.21	257		4.0	4.5
	S	23.1	0.8					
ECZ	P	22 33 54	-1.4	2.42	60		5.2	4.3
	S	25.5	1.9					
WEL	P	22 33 58.3	0.7	2.52	200	4.5	4.7	4.9
	S	13.0	-0.1					
COB	S	22 34 50.8	-0.7	3.25	227	4.6		
KAI	S	22 35 00.5	-0.3	4.96	222	4.5		
GPZ	S	22 36 07	-2.0	5.36	206	5.0		
MSZ	ES			8.27	223			

DEC 29	H M S	44.94S 167.66E	82 KM	SE 1,1	AVG MAG	66/ 520
	16 10 41.2				3.5	
	+ - 1.3	0.04 0.06	9			
	H M S	DIR	RES	DIST	AZ	W-A W P W S
MSZ	IP	16 10 55.2	1.0	0.33	34	
	S	11 03.8	-0.3			
MNW	P	16 10 59.6	0.7	0.84	182	3.9 4.1
	S	11 11.2	-1.0			
ROX	S	16 11 22.5	0.7	1.28	115	3.6
MJZ	EP	16 11 16	-0.8	2.22	66	2.9 2.8
	S	43	-0.2			

DEC 29	H M S	38.56S 175.77E	201 KM	SE 1,5	AVG MAG	66/ 521
	23 08 46.2				5.5	
	+ - 0.7	0.03 0.04	6			
	H M S	DIR	RES	DIST	AZ	W-A W P W S
WNZ	P	23 09 14.0	1.1	0.27	106	
KRP	P	23 09 14.5	0.3	0.66	344	5.3 5.1
	S	34	-1.9			
TUA	P	23 09 17.4	0.4	1.11	104	5.7
	ES	39	-1.9			
TNZ	IP	23 09 20.8	J 2.7	1.26	239	5.3 4.7
	ES	43	0.1			
GNZ	P	23 09 23.2	0.4	1.77	94	5.5
	E	49				
AUC	P	23 09 23.0	-0.8	1.87	335	6.1
MNG	P	23 09 28.0	J 2.1	2.07	186	
	S	57	0.6			
ECZ	P	23 09 28.7	-0.2	2.35	69	6.0 5.8
	E	57				
WEL	P	23 09 35.2	JS 0.6	2.83	195	5.7
	S	10 13	1.1			
ONE	P	23 09 36.8	0.4	2.99	338	4.5
	S	10 15.2	-0.0			
COB	P	23 09 43.5	1.7	3.44	222	5.6
	S	10 25.8	1.1			
KAI	E	23 10 07		5.17	219	5.7
	S	11 01.5	-2.1			
GPZ	P	23 10 09.8	0.1	5.65	204	6.1
	S	11 12.8	-1.8			
MJZ	P	23 10 25.0	1.2	6.74	215	
	S	11 37	-2.9			
MSZ	EP	23 10 45.0	-1.5	8.48	221	
	S	12 17	-3.5*			

DEC 31	H M S	45.39S 167.11E	88 KM	SE 1,0	AVG MAG	66/ 522
	02 41 26.8				4.1	
	+ - 1.4	0.04 0.07	17			



		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
MNW	P	02	41	41.0	D	-0.9	0.53	137			
MSZ	P	02	41	46.2		0.4	0.92	39		4.2	
	E			42 03							
ROX	P	02	41	54.8		1.0	1.56	94		4.5	4.6
	S			42 14.8		0.9					
WPZ	P	02	41	56.0		-0.3	1.75	137		4.3	4.4
	S			42 17.8		-0.2					
MJZ	EP	02	42	10.5		0.1	2.78	61		3.2	3.7
	E			18							
	S			42		-1.1					
GPZ	E	02	43	12			4.31	69	4.2		
											66/ 523
DEC 31	H M S	05	20	59.7	46.81S	165.50E	105 KM	SE	0.7	AVG MAG	4.1
				+ 0.9	0.04	0.05	8				
	H M S	05	21	23.5							
MNW	P			23.5		-0.8	1.29	37		4.2	4.5
	S			42.5		-0.3					
WPZ	P	05	21	28.8		0.5	1.62	86		4.2	4.3
	S			49.5		-0.1					
MSZ	P	05	21	38.0		0.2	2.36	25		3.9	3.9
	ES			22 07		0.6					
ROX	S	05	22	07		0.4	2.37	57			3.9
MJZ	E	05	21	57			3.97	46			
	ES			22 45		-0.6					
											66/ 524
DEC 31	H M S	17	41	07.3	38.85S	175.87E	12 KM	SE	0.4	AVG MAG	3.5
				+ 0.2	0.01	0.01	R				
	H M S	17	41	13.6							
WNZ	PG			13.6		0.1	0.28	40			
	ISG			17.4		-0.2					
CNZ							0.43	216			
KRP	PG	17	41	26.8		-0.0	0.96	344		3.2	
	E			34							
TUA	PG	17	41	28.2		0.5	1.00	88		3.8	3.4
	ESG			41		-0.3					
TNZ	E	17	41	34			1.21	253			
	E			39							
GNZ	E	17	41	45			1.70	84			3.4
MNG	PG	17	41	43.5		-0.1	1.79	189		3.5	
	E			42 12							
FELT NGAMOANA											

## FELT EARTHQUAKES

## THE FELT REPORTING SYSTEM

In addition to its instrumental network, the Observatory has organised a network of about 400 voluntary observers covering the country, who describe the effects of any earthquakes they feel on a standard form. The Observatory also receives many unsolicited reports from meteorological observers, radio and newspaper reporters, postmasters, and members of the general public. In the case of large earthquakes, or ones that present features of special interest, questionnaires are issued, or the district visited.

Several difficulties arise in assessing the distribution of felt intensity. The population of the country is very unevenly distributed, and the observer's personal circumstances may prevent him from feeling a shock that has been noticed by others. Similar shortcomings affect lists of earthquakes felt at any one place. It may reasonably be assumed that a strong earthquake reported from one township was felt in another a few miles distant, even though the Observatory has received no report. However, an index of this kind must summarise the data and not the deductions, so the following scheme is used.

The land area of New Zealand has been divided into numbered rectangles, with sides measuring half a degree of latitude or longitude, as shown on the accompanying map. Each rectangle is given a number and a name, usually that of the principal centre of population within it. These areas are termed 'localities', and the names are listed on the following page. In most areas, there are at least two well-separated reporters, but there are still some sparsely populated parts of the country without observers, notably in Fiordland, the mountainous parts of Southland, and on the boundary between Nelson and Marlborough.

The first section of the index gives the names of the actual places from which each earthquake was reported, together with the number of the locality. Intensities on the Modified Mercalli scale (N.Z. version, 1965) have been assigned at the Observatory. This intensity scale is set out in the N.Z. Journal of Geology and Geophysics, Vol. 9, pp.122-9, 1966. A ? indicates that no information is available beyond the fact that the shock was felt, or that the description is too imprecise to allow an intensity to be assigned.

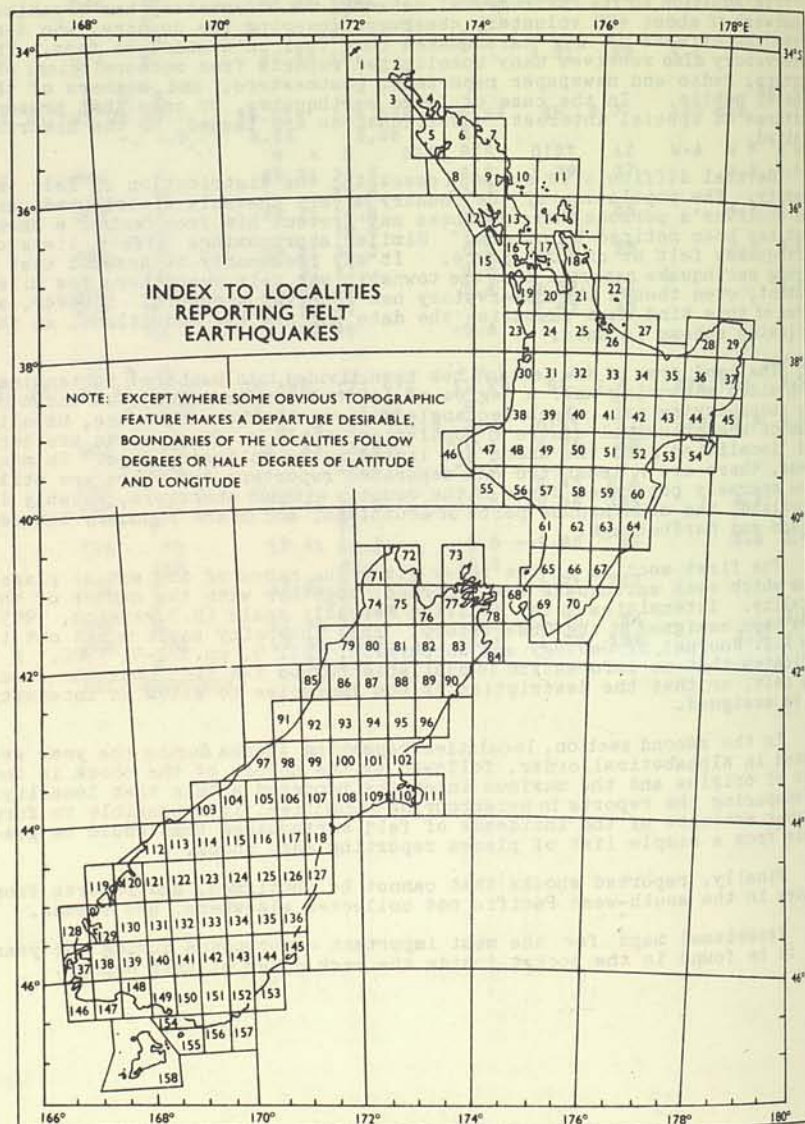
In the second section, localities reporting shocks during the year are listed in alphabetical order, followed by the number of the shock in the list of origins and the maximum intensity reported within that locality. By comparing the reports in neighbouring localities, it is possible to form a truer estimate of the incidence of felt earthquakes than would be possible from a simple list of places reporting each shock.

Finally, reported shocks that cannot be confirmed, and reports from places in the south-west Pacific not collected elsewhere, are listed.

Isosismal maps for the most important earthquakes during the year are to be found in the pocket inside the back cover of this Report.







## LIST OF REPORTING LOCALITIES

1	Three Kings	54	Mahia	107	Mt. Somers
2	Te Reinga	55	Hawera	108	Ashburton
3	Ninety Mile Beach	56	Waverley	109	Rakaia
4	Doubtless Bay	57	Wanganui	110	Christchurch
5	Kaitaia	58	Taihape	111	Akaroa
6	Kaikohe	59	Ruahine	112	Big Bay
7	Bay of Islands	60	Hastings	113	Jacksons Bay
8	Dargaville	61	Bulls	114	Makarora
9	Whangarei	62	Palmerston North	115	Lake Ohau
10	Bream Head	63	Dannevirke	116	Pukaki
11	Moko Hinau	64	Porangahau	117	Fairlie
12	Kaipara	65	Otaki	118	Timaru
13	Warkworth	66	Masterton	119	George Sound
14	Barrier Islands	67	Castlepoint	120	Milford
15	Helensville	68	Wellington	121	Glenorchy
16	Auckland	69	Featherston	122	Arrowtown
17	Waiheke	70	Martinborough	123	Wanaka
18	Coromandel	71	Mt. Stevens	124	St. Bathans
19	Pukekohe	72	Takaka	125	Kurow
20	Mercer	73	D'Urville Is.	126	Duntroon
21	Thames	74	Karamea	127	Waimate
22	Mayor Is.	75	Motueka	128	Secretary Is.
23	Raglan	76	Nelson	129	Doubtful Sound
24	Hamilton	77	Blenheim	130	Te Anau
25	Matamata	78	Picton	131	Livingstone Mts.
26	Tauranga	79	Westport	132	Kingston
27	Whakatane	80	Murchison	133	Alexandra
28	Te Kaha	81	Glenhope	134	Poolburn
29	East Cape	82	Wairau	135	Renfurlly
30	Kawhia	83	Awatere	136	Oamaru
31	Te Kuiti	84	Cape Campbell	137	Resolution Is.
32	Tokoroa	85	Greymouth	138	Pillans Pass
33	Rotorua	86	Reefton	139	Monowai
34	Murupara	87	Maruia	140	Mossburn
35	Opotiki	88	Hanmer	141	Waikaia
36	Motu	89	Clarence	142	Roxburgh
37	Tolaga Bay	90	Kaikoura	143	Lawrence
38	Mokau	91	Hokitika	144	Outram
39	Taumarunui	92	Kumara	145	Dunedin
40	Tokaanu	93	Arthur's Pass	146	Fuysegur Point
41	Taupo	94	Lake Sumner	147	Poteretere
42	Te Whaiti	95	Culverden	148	Tuatapere
43	Tuai	96	Cheviot	149	Invercargill
44	Whakapunaki	97	Franz Josef	150	Gore
45	Gisborne	98	Hari Hari	151	Clinton
46	Cape Egmont	99	Whitcombe Pass	152	Balclutha
47	New Plymouth	100	Lake Coleridge	153	Waihola
48	Whangamomona	101	Oxford	154	Bluff
49	Ohakune	102	Rangiora	155	Ruapuke
50	Chateau	103	Haast	156	Tahakopa
51	Kaweka	104	Bruce Bay	157	Owaka
52	Napier	105	Mount Cook	158	Stewart Is.
53	Wairoa	106	Tekapo	159	Chatham Is.



## PLACES REPORTING FELT EARTHQUAKES

66/005	Jan	5d MM3	08h 01m Taupo (41)
66/007	Jan	6d MM5 MM4 ?	09h 56m Westport (79) Westport (79); Barrytown (85); Maimai (86) Metro Caves (79)
66/008	Jan	6d MM4	13h 58m Westport (79)
66/015	Jan	10d MM3	05h 46m Cape Egmont (46)
66/037	Jan	19d MM5 MM4	21h 11m Tararu (21) Coromandel (18)
66/038	Jan	24d ?	06h 18m Coromandel (18)
66/039	Jan	24d MM4 MM3 MM3	06h 59m Colville, Whitianga (18) Cuvier Island (14) Coromandel (18) "quite severe"
66/041	Jan	25d MM4 MM3 MM3 ?	22h 31m Manapouri (139); Lumsden (140); Otatara (149) Queenstown (132) Otautau (148) Te Anau (130); Rosedale (149) "sharp"
66/049	Jan	30d MM4	09h 33m Taupo (41)
66/050	Feb	1d MM4	06h 33m Tawa (68)
66/051	Feb	1d "sharp"	07h 42m Westport (79)
66/052	Feb	1d MM4	14h 44m Haast (114)
66/053	Feb	2d MM3	07h 20m Palmerston (136)
66/056	Feb	3d MM4	09h 38m Arthur's Pass (93)
66/061	Feb	5d ? N.F.	06h 53m Ward, Wharanui (84) Seddon (84)
66/062	Feb	5d MM4	08h 19m Gisborne (45)
66/063	Feb	5d MM3	08h 47m Gisborne (45)

66/S1	Feb	5d ? N.F.	09h 25m Ward (84) Wharanui (84) Seddon (84)
66/S2	Feb	5d ? N.F.	09h 30m Ward, Wharanui (84) Seddon (84)
66/064	Feb	5d MM4	14h 01m West Arm Manapouri (138)
66/065	Feb	6d MM3	06h 58m Patoka (52)
66/067	Feb	7d MM3	22h 29m Maketu (26)
66/068	Feb	8d MM4 "sharp"	08h 57m Coromandel (18) Mercury Bay (18)
66/075	Feb	15d MM4	01h 43m Whakamaru (32); Taupo, Wairakei (41)
66/085	Feb	20d MM4 ?	08h 10m Taupo (41) Turangi (40)
66/084	Feb	20d MM3	08h 35m Taupo (41)
66/085	Feb	20d MM4	13h 57m Coromandel (18)
66/086	Feb	21d MM4	05h 09m Moawhango (58)
66/087	Feb	21d MM4	06h 30m Patoka (52); Table Flat (58); Waipukurau (60); Dannevirke (63)
66/088	Feb	21d MM3	08h 26m Wellington (68)
66/089	Feb	21d MM4	11h 34m Arthur's Pass (93)
66/095	Feb	26d MM4	18h 39m Aspiring Hut, Jackson's Bay (113); Minaret Station (114); Milford Sound (120); Glenorchy (121); Wanaka (123); Gibbston, Kingston (132); Manapouri (139); Athol (141)
66/098	Mar	1d MM3	08h 27m Jackson's Bay (113)
66/099	Mar	1d MM3	11h 07m Westport (79)
66/101	Mar	2d MM4 MM3	01h 24m Whakatane (27); Kaingaroa Forest (34) Waimana (35)
66/102	Mar	3d MM3	10h 38m Arrowtown (122)



66/104	Mar	4d	23h 58m (see Isoseismal Map)
		MM8	Gisborne (45)
		MM7	Puha (36); Gisborne (45)
		MM6	Whapaoa (36); Tataranui (37); Ormond (44); Kaiti, Mangaoranga (45)
		MM5	Thornton (27); Cape Runaway (29); Ngakuru (33); Arowhana (36); Rahiri, Tolaga Bay (37); Ardkeen (43); Beckington, Eastwoodhill (44); Gisborne (45); Te Rangi (52); Wairoa (53)
		MM4	Whakatane (27); Aorangi (29); Lake Okataina, Reporoa (33); Galatea, Kaingaroa Forest, Murupara (34); Maungahaumi, Motu, Otoko (36); Hautanoa, Mokairau, Owhena, Tokomaru Bay (37); Wairakei (41); Erepeti, Tuai (43); Ngatapa (44); Taraponui (52); Kiakia, Wairoa, Kotemaori (53); Maketu (26); Whakatane (27); Mangaoporo Valley, Pakira, Tikitiki (29); Kawerau, Waimana (34); Opotiki (35); Taupo (41)
		MM2	Ashley Clinton (59)
			"Not Felt" observations were received from localities 26, 29, 33-35, 41, 51-2, 59, 60, 62.
66/105	Mar	5d	00h 29m
		"moderate"	Gisborne (45)
66/108	Mar	5d	07h 12m
		"slight"	Gisborne (45)
66/109	Mar	5d	07h 17m
		"very slight"	Gisborne (47)
66/110	Mar	5d	07h 58m
		"moderate"	Gisborne (45)
66/111	Mar	5d	10h 26m
		"slight"	Gisborne (45)
66/112	Mar	5d	10h 43m
		MM4	Moawhango (58)
66/113	Mar	5d	11h 40m
		"moderate"	Gisborne (45)
66/115	Mar	5d	13h 13m
		MM3	Gisborne (45)
66/83	Mar	5d	13h 45m
		MM3	Maungahaumi (36)
		?	Gisborne (45)
66/116	Mar	5d	15h 16m
		MM4	Ngatapa (44)
		MM2	Gisborne (45)
66/117	Mar	5d	15h 54m
		MM4	Rahiri (37); Gisborne (45); Wairoa (53)
66/118	Mar	5d	20h 21m
		?	Gisborne (45)
66/120	Mar	6d	02h 32m
		MM4	Rahiri (37)
		?	Gisborne (45)
		"heavy"	Kaiti (45)
66/124	Mar	10d	07h 01m
		MM4	Tareha, Te Rangi (52); Moawhango (58); Mount

				Vernon, Waipawa (60); Dannevirke (63)
		MM3	Waiwhare (51); Okoia (57); Highbury, Lower Hutt, Wellington (68)	
		MM2	Kelburn (68)	
		"sharp"	Waiouru (50)	
		"slight"	Nelson (76)	
66/125	Mar	10d	14h 50m	
		?	Wanganui (57)	
66/126	Mar	10d	15h 59m	
		MM4	Waitotara (56); Pukerua Bay, York Bay (68); Collingwood (72)	
		MM3	Okoia, Wanganui (57); Ponatahi (70)	
		?	New Plymouth (47); Hawera (55)	
66/127	Mar	10d	19h 20m	
		MM3	Coromandel (18)	
66/128	Mar	11d	05h 58m	
		MM4	Okoia (57)	
		"sharp"	Wanganui (57)	
66/132	Mar	12d	11h 29m	
		MM4	Glenorchy (121)	
66/134	Mar	15d	16h 49m	
		MM4	Gisborne (45)	
66/138	Mar	20d	17h 42m	
		MM4	Jackson's Bay (113); Minaret Station (114); Milford Sound (120); Glenorchy (121); Te Anau (130); Gibbston (132); Alexandra (133); West Arm Manapouri (138); Manapouri (139); Athol (141); Moa Flat, Roxburgh (142); Invercargill (149); Croydon Siding, Gore (150); Milton (152); Waipapa Point (154); Quarry Hills (156); Half-moon Bay (158)	
		"moderate"	Queenstown (132)	
		"slight"	Oamaru (136)	
66/147	Mar	30d	09h 06m	
		?	Island Bay (68)	
66/149	Apr	2d	06h 15m	
		MM4	Coromandel (18)	
66/150	Apr	2d	07h 52m	
		MM4	Coromandel (18)	
66/152	Apr	3d	14h 37m	
		MM4	Motuoapa, Tokaanu (40)	
66/153	Apr	3d	14h 40m	
		?	Motuoapa, Tokaanu (40)	
66/154	Apr	3d	14h 45m	
		?	Motuoapa, Tokaanu (40)	
66/155	Apr	3d	14h 55m	
		?	Motuoapa, Tokaanu (40)	
66/173	Apr	13d	23h 20m	
		?	Newtown (68)	
66/175	Apr	19d	13h 04m	
		MM4	Coromandel (18)	



66/178	Apr	21d	23h 36m	MM3	Wairoa (53)
66/179	Apr	22d	06h 08m	MM4	Milford Sound (120)
66/180	Apr	23d	06h 49m (see Isoseismal Map)	MM8	Seaview, Seddon (84)
				MM7	Blenheim (83)
				MM6	Hawera (55); Wellington (68); Aotea (83)
				MM5-6	Kaikoura (90)
				MM5	Toko (47); Owhango, Pipiriki (49); Foxton Beach (61); Bunnythorpe (62); Dannevirke (63); Hokio (65); Johnsonville, Karori, Lower Hutt, Lyall Bay, Mahina Bay, Miramar, Wellington (68); Te Hopai (69); Hikawera, Longbush (70); Uruwhenua (72); Koromiko, Opouri Valley (77); Ocean Bay, Waitaria Bay (78); Wairau Valley (82); Blenheim (83); Cape Campbell, Ward (84)
				MM4-5	Farewell Spit (72)
				MM4	Ormond (44); Eltham, Inglewood, Tarata (47); Purangi (48); Raetahi, Waipuna Ridge (49); Waitahinga, Waitotara (56); Ohakune, Okoia, Puke-roa, Wanganui (57); Hihitahi, Mangaweka, Rewa, Taihape (58); Marton, Tangimoana (61); Linton (62); Tataramoia (63); Moutoa, Muhunua East, Otaki, Waikawa Beach, Waitarere (65); Eastry, Ihurua, Mangapakeha, Masterton, Wangaehu (66); Linden, Newlands, Northland, Pauatahanui, Seatoun, Wellington (68); Morrison's Bush, Waiorongomai (69); Gladstone, Ponatahi (70); Patara River (71); Bainham, Farewell Spit, Takaka (72); Greville Harbour, Stephens Island (73); Motueka, Motupiko, Riwaka Valley (75); Maitai Valley (76); Onamalutu, Wakamarina (77); Manaroa, Picton (78); Howard, St. Arnaud (81); The Branch (82); Fairhall Valley, Wairau Valley (83); Ward (84); Blackball, Greymouth (85); Fox Hills, Molesworth (89); Kaikoura (90); Ross (91); The Poplars (94); Riverside (95); Conway Flat, Keinton Combe, Parnassus (96)
				"sharp"	Hokitika (91)
				MM3	Uruti (38); Dawson's Falls, New Plymouth (47); Omoana (48); Waiouru (50); Manaia (55); Waverley (57); Taihape (58); Opiki (61); Palmerston North (62); Levin (65); Haunui (67); Stronvar (70); Eighty Eighty Valley, Tadmor (75); Hara-keke, Nelson (76); Six Mile, Mangles (80); Grey Robinson River Junction (86); Hokitika (91); Hanmer Springs (95); Cheviot (96); Hickory Bay (111)
				"slight"	Masterton (66); Hokitika (91)
				MM2	Pukeokahu (58); Waitatapia (61); Kimbolton (62); Te Ore Ore (66); Mataikona (67); Doredale (75); St. Arnaud (81); Kaiwara Station (95); Kilmarnock (96); Gore (150)
				MM1	Cambridge (24); Warea (46); Thorpe (75)
					"Not Felt" reports were received from the following localities: 38-40, 43, 44, 47, 49, 50, 53, 58-60, 63, 64, 70, 85, 86, 91, 93-95, 98, 100-102, 107-110, 117.
					The shock was also felt on ships in Cook Strait.
66/181	Apr	23d	07h 00m	"light"	Ocean Bay (78)

66/182	Apr	23d	17h 27m	MM4	Ormond (44)
				MM3	Opotiki (35)
				"slight"	Gisborne (45)
66/183	Apr	23d	17h 43m	MM4	Seatoun (68)
66/185	Apr	24d	05h 53m	MM3	Edgecumbe (27)
				MM2	Kaiwara Station (95)
66/187	Apr	24d	08h 29m	MM4	Ocean Bay (78)
66/188	Apr	24d	08h 29m	MM5	Kelburn (68)
				MM4	Lower Hutt, Wellington (68); Waiorongomai (69); Manaroa, Ocean Bay (78); Seddon (84)
				MM3	Johnsonville, Seatoun (68); Cape Campbell (84)
				MM1	Cambridge (24)
				N.F.	Omana (48)
66/197	May	2d	10h 35m	MM4	Table Flat (58)
				MM2	Dannevirke (63)
				?	Palmerston North (62)
66/198	May	5d	02h 36m	MM4	Coromandel (18)
66/199	May	10d	12h 02m	MM4	Paparoa (12); Waipu (9)
				MM3	Maungaturoto (12); Waipu (9)
				MM2	Waipu (9); Waipu Cove (12)
				?	Mareretu (12)
				N.F.	Kaiwaka (12)
66/205	May	15d	13h 54m	MM3	Ohakune (49)
66/207	May	19d	05h 03m	MM3	Wainuiomata (68)
66/213	May	23d	05h 24m	MM4	Coromandel (18)
66/214	May	23d	11h 33m	MM5	Waimahaka, Waipapa Point (154); Quarry Hills (156)
				MM4	Dunedin (144)
				?	Fortrose, Tokanui (154); Fortification (156)
66/215	May	23d	19h 19m	MM4	Coromandel (18)
66/216	May	23d	21h 25m	MM4	Coromandel (18)
66/218	May	25d	08h 12m	MM4	Coromandel (18)
66/219	May	27d	12h 17m	MM3	Motuopa (40)



66/223	May	31d MM6 MM4 MM3 ?	12h 06m Kekerangu (84) Island Bay, Kelburn, Wellington (68); Manaroa (78); Blenheim (83); Seddon (84) Gracefield, Wellington (68); Kaikoura (90) Ward (84)
66/224	May	31d ?	12h 48m Kekerangu (84)
66/233	Jun	6d MM4	00h 07m Coromandel (18)
66/238	Jun	7d MM3	18h 07m Dannevirke (63)
66/239	Jun	7d MM3	22h 41m Westport (79)
66/240	Jun	8d "sharp" ?	19h 30m Waitawheta (21) Te Aroha (25)
66/241	Jun	8d "sharp" ?	19h 38m Waitawheta (21) Te Aroha (25)
66/242	Jun	9d MM4	08h 30m Hunter (127); Oamaru (136)
66/243	Jun	10d MM4 MM3 MM2 ? N.F.	07h 36m Wanaka (123); Otiake (125); Otekaieke (126) Tekapo (105) Alexandra (133) Otematata (125) Mt. John (105)
66/249	Jun	15d MM4	09h 28m Coromandel (18)
66/252	Jun	17d MM4	00h 18m Coromandel (18)
66/252 <sup>B</sup>	Jun	22d MM4	08h 4 <sup>3</sup> m Coromandel (18)
66/260	Jun	23d MM4 MM3	05h 33m Waipawa (60); Dannevirke (63) Waiwhare (51)
66/262	Jun	27d MM4 MM3 ?	10h 16m Bunnythorpe, Palmerston North (62); Eketahuna (66); Eastbourne, Khandallah, Linden, Pukerua Bay, Seatoun, Wellington (68); Ocean Bay (78) Waiwhare (51); Rukumoana (52); Table Flat (58); Pa Valley (66); Lower Hutt, Ngaio, Woburn, Wellington (68); Le Bons Bay ? (111) Paekakariki (65)
66/263	Jun	27d MM5 MM4	21h 47m Tokomaru Bay (37) Whakatane (27); Galatea, Te Teko (34); Waimana (35); Tolaga Bay (37); Ongarue (39); Gisborne (45); Waiwhare (51); Patoka, Rukumoana (52); Wairoa (53); Table Flat (58); Awatoto (60); Dannevirke (63); Wairere (66); Ngaio (68)

				MM3	Awakino (38); Turangi (40); Purangi (48); Woburn (68)
				MM2	Nelson (76)
				MM1	Wellington (68)
			?		Tauranga (26); Opotiki (35); Napier (52); Hastings (60)
66/266	Jul	2d MM4	07h 43m Turangi (40)		
66/267	Jul	4d "severe"	12h 57m Waitakaruru (20)		
66/268	Jul	4d ?	13h 02m Waitakaruru (20)		
66/84	Jul	4d MM5 MM3 ?	22h 27m Waitakaruru (20) Te Hoe-o-Tainui (20) Maramarua (20)		
66/278	Jul	7d MM5 MM4 "slight" ?	21h 59m Oamaru (115) Wanaka (123); Otiake (125); Oamaru (136) Dunedin (145) Otematata (125)		
66/279	Jul	7d MM5 ?	22h 05m Oamaru (115) Otematata (125)		
66/282	Jul	9d MM4 MM3	21h 51m Stephen's Island (73) Stephen's Island (73)		
66/299	Jul	22d MM5 MM4	16h 41m Pleasant Flat (103) Jackson's Bay, Mount Aspiring (113)		
66/304	Jul	25d MM5 MM4 MM3 ?	09h 52m Porirua (68) Wainuiomata (68) Khandallah, Wellington, York Bay (68) Crofton Downs (68)		
66/85	Jul	27d ?	15h 40m Ohakune (49); Chateau Tongariro (50)		
66/309	Jul	27d MM5 MM4 MM3 ?	17h 4 <sup>6</sup> m Waipukurau (60) Motuoapa (40); Ohakune (49); Waiwhare (51); Ohakune (57); Napier, Patoka, Taraponui (52); Moawhango, Table Flat (58); Hastings, Waipawa (60); Dannevirke (63) Ashley Clinton (59); Pa Valley (66) Chateau Tongariro, Waiouru (50); Taihape (58)		
66/310	Jul	27d ?	19h 30m Ohakune (49); Chateau Tongariro (50)		
66/312	Jul	29d MM4 MM3	14h 18m Karori, Kelburn (68); Stephen's Island (73); Manaroa, Ocean Bay (78); Blenheim (83) Wanganui (57)		
66/316	Aug	1d MM4	17h 02m Karori (68)		



66/318	Aug	3d	18h 39m	MM4	Mount Aspiring, Earnslaw (121)
66/322	Aug	6d	06h 22m	MM4	Motuoapa, Turangi (40)
66/323	Aug	6d	06h 48m	MM4	Motuoapa, Turangi (40)
66/326	Aug	7d	21h 19m	"slight"	Nelson (76)
66/329	Aug	13d	00h 40m	MM4	Wairoa (53)
66/330	Aug	13d	04h 54m	MM4	Awakino (38)
66/332	Aug	14d	03h 30m	MM4	Coromandel (18)
66/333	Aug	14d	22h 33m	MM4	Tolaga Bay (37)
66/337	Aug	16d	22h 40m	MM4	Moawhango (58)
				?	Taihape (58)
66/342	Aug	23d	18h 21m	MM4?	Mangles Valley (80)
				MM2	Nelson (76)
66/351	Aug	28d	07h 29m	MM4	Whakatane (27); Tolaga Bay (37); Wairoa (53); Wainuiomata (68)
				MM3	Waimana (35); Gisborne (45); Waiwhare (51); Redclyffe (60); Dannevirke (63); Wairere (66); Naenae (68)
				?	Napier (52)
66/352	Aug	28d	14h 30m	MM4	Milford Sound (120)
66/354	Aug	30d	02h 44m	MM4	Milford Sound (120)
				MM3	Glenorchy (121); Gibbston (132)
				"moderate"	Queenstown (132)
66/363	Sep	8d	07h 46m	MM5	Wairakei (41)
				MM4	Taupo, Wairakei (41)
66/364	Sep	8d	07h 48m	"minor"	Wairakei (41)
66/365	Sep	8d	07h 55m	"minor"	Wairakei (41)
66/374	Sep	18d	16h 55m	MM4	Ngaio (68); Ocean Bay (78)
				MM3	Blenheim (78)
				?	Paraparaumu (65); Khandallah, Miramar (68)
66/386	Sep	26d	03h 35m	MM4	Awakino (38); Owhango (39); Purangi (48); Waitotara (56); Okoia (57); Hunterville (58); Bunnythorpe, Feilding (62); Kelburn (68); Colling-

				MM3	wood, Tarakohe (72); Manaroa (78)
					Ohakune (49); Ohakune, Wanganui (57); Taihape (58); Dannevirke (63); Ocean Bay (78)
				MM2	Wellington (68)
				?	New Plymouth (46); Waitara (47); Whangamomona (48); Waverley (56); Ohingaiti (58); Lake Alice (61); Palmerston North (62); Otaki (65); Masterton (66); Opouri Valley (77); Ugbrook (84)
66/391	Oct	2d	08h 02m	MM4	Waimana (35)
66/394	Oct	4d	01h 15m	MM4	Wellington (68)
				MM3	Wellington (68)
66/400	Oct	9d	00h 10m	"sharp"	Wairakei (41)
66/401	Oct	9d	09h 26m	MM4	Patoka (52); Taradale, Waipawa (60); Dannevirke (63); Aramoana (64)
				MM3	Patoka (52)
				"sharp"	Glenfarg (53)
				"slight"	Waipuna (62)
				?	Napier (52); Wairoa (53)
66/410	Oct	15d	03h 55m	MM3	Gisborne (45)
66/411	Oct	16d	17h 16m	MM4	Coromandel (18)
66/412	Oct	16d	18h 02m	MM4	Dawson's Falls, Tarata (47); Omoana, Purangi (48); Ohakune (49); Waitotara (56); Okoia, Wanganui (57); Hunterville, Moawhango (58); Bunnythorpe, Palmerston North (62); Hokio Beach (65)
				MM3	Ohakune (49); Ohakune (57); Feilding (62); Pa Valley, Wairere (66); Lower Hutt (68)
				MM2	Dannevirke (63)
				"strong"	Lake Alice (61)
				"sharp"	Tirohanga (65)
				"moderate"	Waiouru (50)
				"slight"	Otaki (65); Waipuna (62); Whangamomona (48)
				?	Waitarere (65)
66/413	Oct	18d	15h 35m	MM4	Great Barrier Island (14)
66/417	Oct	24d	17h 06m	MM4	Waimana (35)
				MM3	Opotiki (35)
66/418	Oct	24d	18h 25m	MM4	Waitotara (56); Okoia, Wanganui (57); Hunterville (58); Wellington (68)
66/419	Oct	25d	21h 31m	?	Little Barrier Island (14)
66/423	Oct	30d	15h 34m	MM3	Dannevirke (63)
				"slight"	Glebelands (64)
66/425	Nov	3d	10h 36m	MM3	Ocean Bay (78)



66/427	Nov	3d	21h 29m	MM3	Manapouri (139)
66/431	Nov	4d	11h 08m	MM4	Khandallah, Newlands (68); Ocean Bay (78)
				MM3	Manaroa (78)
				MM2	Nelson (76)
				"moderate"	Westport (79)
				"slight"	Farewell Spit (72)
66/445	Nov	11d	06h 38m	MM3	Wainuiomata (68)
66/446	Nov	12d	03h 47m	"slight"	Waitahora (63)
66/449	Nov	15d	22h 30m	MM4	Wairakei (41)
66/458	Nov	20d	14h 44m	MM4	Ohakune (49)
				?	Pukeroa (57)
66/461	Nov	21d	14h 23m	MM4	Waimana (35)
66/462	Nov	21d	20h 04m	"sharp"	Gisborne (45)
66/463	Nov	21d	22h 00m	MM5	Blackball, Greymouth (85)
				MM4	Barrytown (85); Ross (91)
				"fairly severe"	Hokitika (91)
				"moderate"	Westport (79)
				"slight"	Greymouth (85)
66/470	Nov	27d	08h 00m	MM4	Te Anau (130)
66/473	Nov	29d	09h 27m	"slight"	Maungataniwha (42)
66/475	Nov	30d	12h 28m	MM3	Stephen's Island (73)
66/476	Nov	30d	12h 56m	MM4	Te Anau (130); Alexandra, Cromwell (133); Manapouri (139); Athol (141); Awarua, Waimahaka (154)
				MM3	Gibbston (132); Tuatapere (148)
				"slight"	Hillside (139)
				"moderate"	Heddon Bush (149)
				"slight"	Millers Flat (142); Raebury Downs (150)
66/479	Dec	3d	04h 23m	MM4	Taupo (41)
66/492	Dec	14d	10h 57m	MM4	Miramar, Seatoun (68)
				MM3	Ponatahi (70)
66/495	Dec	18d	18h 36m	MM4	Kohurau (51); Patoka (52); Wairoa (53); Tataramoia (63)
				MM3	Taupo (41); Ohakune (57); Hunterville, Moa-whango (58); Ashley Clinton (59); Dannevirke (63); Ponatahi (70)

					"slight" Wairakei (41)
66/502	Dec	24d	01h 26m	MM4	Haast (103)
66/510	Dec	27d	05h 33m	"moderate"	Queenstown (132)
66/516	Dec	27d	17h 13m	MM4	Gisborne (45); Wairoa (53)
				MM3	Gisborne (45)
				"sharp"	Gisborne (45)
66/522	Dec	29d	23h 08m	"slight"	Tareha (52)
66/525	Dec	31d	17h 41m	?	Ngamoana (41)



## EARTHQUAKES FELT IN STANDARD LOCALITIES

Localities within which earthquakes were felt in 1966 are listed in alphabetical order, preceded by its number on the reference map. The figure following the name of the locality is the number of the epicentre, followed by the maximum intensity (in brackets) reported within the district covered by the locality name. The instrumental magnitude may be found from the epicentre list, and the places that actually reported the shock from the table of "Places Reporting Felt Earthquakes".

111	Akaroa	180 (3),	262 (7)		
133	Alexandra	138 (4),	243 (2),	476 (4)	
122	Arrowtown	102 (3)			
93	Arthur's Pass	56 (4),	89 (4)		
83	Awatere	180 (7),	223 (4),	312 (4)	
152	Balclutha	138 (4)			
14	Barrier Islands	39 (3),	413 (4),	419 (?)	
77	Blenheim	180 (5),	386 (?)		
154	Bluff	138 (4),	214 (5),	476 (4)	
61	Bulls	180 (5),	386 (?),	412 (?)	
84	Cape Campbell	61 (?),	S1 (?),	S2 (?),	180 (8),
		188 (4),	223 (6),	224 (?),	386 (?)
46	Cape Egmont	15 (3),	180 (1),	386 (?)	
67	Castlepoint	180 (3)			
50	Chateau	124 (?),	180 (3),	S5 (?),	309 (?),
		310 (?),	412 (?)		
96	Cheviot	180 (4)			
89	Clarence	180 (4)			
18	Coromandel	37 (4),	38 (?),	39 (4),	68 (4),
		85 (4),	127 (3),	149 (4),	150 (4),
		175 (4),	198 (4),	203 (4),	215 (4),
		216 (4),	218 (4),	233 (4),	249 (4),
		252 (4),	257 (4),	332 (4),	411 (4)
95	Culverden	180 (4),	185 (2)		
63	Dannevirke	87 (4),	124 (4),	180 (5),	197 (2),
		233 (3),	260 (4),	263 (4),	351 (3),
		386 (3),	401 (4),	412 (2),	423 (3),
		446 (?),	495 (4)		
145	Dunedin	278 (?)			

126	Dunroon	243 (4)			
73	D'Urville Island	180 (4),	282 (4),	312 (4),	475 (3)
29	East Cape	104 (5)			
69	Featherston	180 (5),	188 (4)		
45	Gisborne	62 (4),	63 (3),	104 (8),	105 (?),
		108 (?),	109 (?),	110 (?),	111 (?),
		113 (?),	115 (?),	S3 (?),	116 (2),
		117 (2),	118 (?),	120 (4),	134 (4),
		263 (4),	351 (3),	410 (3),	462 (?),
		516 (4)			
81	Glenhope	180 (4)			
121	Glenorchy	95 (4),	132 (4),	138 (4),	182 (?),
		318 (4),	354 (3)		
150	Gore	138 (4),	150 (2),	476 (?)	
85	Greymouth	7 (4),	180 (4),	463 (5)	
103	Haast	299 (5),	502 (4)		
24	Hamilton	180 (1),	188 (1)		
60	Hastings	87 (4),	124 (4),	260 (4),	263 (4),
		309 (5),	309 (4),	351 (3),	401 (4)
55	Hawera	126 (?),	180 (6)		
91	Hokitika	180 (4),	463 (4)		
149	Invercargill	41 (4),	138 (4),	476 (?)	
113	Jackson's Bay	95 (4),	98 (3),	138 (4),	299 (4)
90	Kaikoura	180 (5-6),	223 (3)		
12	Kaipara	199 (4)			
51	Kaweka	124 (3),	260 (3),	262 (3),	309 (4),
		351 (3),	495 (4)		
132	Kingston	41 (3),	95 (4),	138 (4),	354 (3),
		476 (3),	510 (?)		
125	Kurow	243 (4),	278 (4),	279 (?)	
115	Lake Ohau	278 (5),	279 (5)		
94	Lake Sumner	180 (4)			
114	Makarora	52 (4),	95 (4),	138 (4)	
70	Martinborough	126 (3),	180 (5),	492 (3),	495 (3)
66	Masterton	180 (4),	262 (4),	309 (3),	351 (3),
		386 (?),	412 (4)		
25	Matamata	240 (?),	241 (?)		
20	Mercer	267 (?),	268 (4),	S4 (5)	



120	Milford	95 (4), 354 (4)	138 (4)	179 (4)	352 (4)
38	Mokau	180 (3)	263 (3)	330 (4)	386 (4)
139	Monowai	41 (4), 476 (4)	95 (4)	138 (4)	427 (3)
140	Mossburn	41 (4)			
36	Motu	104 (7)	53 (3)		
75	Motueka	180 (4)			
105	Mount Cook	243 (3)			
71	Mount Stevens	180 (4)			
80	Murchison	180 (3)	342 (4?)		
34	Murupara	101 (4)	104 (4)	263 (4)	
52	Napier	65 (3), 262 (3), 401 (4)	87 (4), 263 (4), 495 (4)	104 (5), 309 (4), 522 (?)	124 (4), 351 (?)
76	Nelson	124 (?), 342 (2)	180 (4), 431 (2)	263 (2)	326 (?)
47	New Plymouth	126 (?)	180 (5)	386 (?)	412 (4)
136	Oamaru	53 (3)	242 (4)		
49	Ohakune	180 (5), 310 (?), 495 (3)	205 (3), 386 (3)	85 (4), 412 (4)	309 (4), 458 (4)
35	Opotiki	101 (3), 351 (3)	104 (3), 391 (4)	182 (3), 417 (4)	263 (4), 461 (4)
65	Otaki	180 (5)	262 (?)	386 (?)	412 (4)
144	Outram	214 (4)			
62	Palmerston North	180 (5), 401 (4)	197 (?), 412 (4)	262 (4)	386 (4)
78	Picton	180 (5), 223 (4), 386 (4)	181 (?), 262 (4), 425 (3)	187 (4), 312 (4), 431 (4)	188 (4), 374 (4)
64	Porangahau	401 (4)	423 (?)		
138	Pillan's Pass	64 (4)	138 (4)		
86	Reefton	7 (4)	180 (3)		
33	Rotorua	104 (5)			
141	Roxburgh	138 (4)	476 (?)		
59	Ruahine	104 (2)	309 (3)	495 (3)	
158	Stewart Island	138 (4)			
156	Tahakopa	138 (4)	214 (5)		

58	Taihape	86 (4), 180 (4), 337 (4)	87 (4), 197 (4), 386 (4)	112 (4), 262 (3), 412 (4)	124 (4), 309 (4)
72	Takaka	126 (4)	180 (5)	386 (4)	431 (?)
41	Taupo	5 (3), 84 (3), 365 (?), 495 (3)	49 (4), 104 (4), 400 (?), 495 (3)	75 (4), 363 (5), 449 (4), 525 (?)	83 (4), 364 (?), 479 (4)
39	Taumarunui	263 (4)	386 (4)		
26	Tauranga	67 (3)	104 (3)	120 (3)	263 (?)
130	Te Anau	138 (4)	470 (4)	476 (4)	
42	Te Whaiti	475 (?)			
21	Thames	37 (5)	240 (?)	241 (?)	
40	Tokaanu	83 (?), 219 (3), 322 (4)	152 (4), 263 (3), 323 (4)	153 (?), 266 (4)	155 (?), 309 (4)
32	Tokoroa	75 (4)			
37	Tolaga Bay	104 (6), 351 (4)	117 (4)	263 (5)	333 (4)
43	Tuai	104 (5)			
148	Tuatapere	476 (3)			
141	Waikaia	138 (4)	476 (4)		
127	Waimate	242 (4)			
82	Wairau	180 (5)			
53	Wairoa	104 (5), 351 (4)	117 (4), 401 (4)	178 (3), 495 (4)	329 (4), 516 (4)
123	Wanaka	95 (4)	243 (4)	278 (4)	
57	Wanganui	124 (3), 180 (4), 418 (4)	125 (?), 312 (3), 458 (?)	126 (3), 386 (4)	128 (4), 412 (4)
56	Waverley	126 (4), 418 (4)	180 (4)	386 (4)	412 (4)
68	Wellington	50 (4), 147 (?), 188 (5), 263 (4), 351 (4), 412 (3), 492 (4)	88 (3), 173 (?), 207 (3), 304 (5), 374 (4), 418 (4)	124 (3), 180 (6), 223 (4), 312 (4), 386 (4), 431 (4)	126 (4), 183 (4), 262 (4), 316 (4), 394 (4), 445 (3)
79	Westport	7 (5), 431 (?)	8 (4), 463 (?)	99 (3)	239 (3)
44	Whakapunaki	104 (6)	116 (4)	180 (4)	182 (4)
9	Whangarei	199 (4)			



48	Whangamomona	180 (3),	263 (3),	386 (4),	412 (4)
27	Whakatane	101 (4),	104 (5),	185 (3),	263 (4),
		351 (4)			

## UNCONFIRMED REPORTS

The following shocks reported to have been felt cannot be confirmed either by an instrumental record or by an independent report. In the early part of the year, a local swarm brought a large number of reports from Coromandel. The times of these are given separately after the main chronological list.

Jan	3d	12h45m	Taupo (41)	MM3
	10	13 10	Ponotahi (70)	MM3
	13	22 45	Colville (18)	MM4
	27	10 49	Taupo (3)	MM3
	31	19 50	Palmerston (136)	"Accompanied by explosion. No lights swung or crockery rattled."
Mar	5	03 00	Gisborne (45)	?
		06 40	Gisborne (45)	?
		06 58 $\frac{1}{2}$	Gisborne (45)	"Slight".
		07 23 $\frac{1}{2}$	Gisborne (45)	"Very, very slight".
		10 30	Gisborne (45)	"Very slight".
		15 45	Maungahaumi (36)	MM3
		16 59	Maungahaumi (36)	MM4
		17 46	Wairoa (53)	"Light".
		19 40	Gisborne (45)	?
		20 26	Gisborne (45)	"Slight".
	6	23 40	Ponotahi (70)	MM4
	9	07 02	Taraponui (52)	MM4
	10	12 40	Wainuiomata (68)	MM4
		18 03	Waitotara (56)	MM4
	11	08 05	Taupo (41)	MM4
		09 01 $\frac{1}{2}$	Gisborne (45)	MM4
		12 12	Gisborne (45)	MM4
	16	12 07	Ponotahi (70)	MM2
	20	11 31	Gisborne (45)	MM2
	21	04 00	North Taranaki	"Two short sharp shocks" reported by press.
	25	13 15	Quarry Hills (156)	MM4
	30	05 34	Taupo (41)	MM3
Apr	3	21 30	Motucapa (40)	?
	23	06 51	Gisborne (45)	"Slight".
May	12	19 10	Eastry (66)	MM4
	13	12 24	Ohakune (49)	MM3
	19	09 10	Farewell Spit (72)	MM3
	31	13 $\frac{1}{2}$	Kekerangu (84)	?
Jun	28	00 00	Waiwhare (51)	MM3
	30	13 16	Taupo (41)	MM3
Jul	4	17 55	Waitakaruru (20)	?
		19 30	Waitakaruru (20)	?
		21 10	Waitakaruru (20)	?
	10	23 03	Hastings (60)	MM4
	27	21 50	Awakino (38)	MM3
	29	10 52	Patoka (52)	MM4
Sep	8	08 09	Wairakei (41)	"Minor with rumble".
Nov	2	15 42	Moawhango (58)	MM4

Nov	16	11h55m	Ohakune (49)	MM4
	18	18 38	Wairoa (53)	MM4
	21	13 01	Taipo (92)	MM4
	22	- -	Rotomohana (33)	"Three tremors".
	29	00 40	Snake Point (78)	"Minor".

The following shocks reported from Coromandel (18), form part of a "swarm", the largest members of which were recorded instrumentally, and appear in the main epicentre list.

Jan	5	15h40m	MM4
	6	22 25	Moderate
	7	10 30	Moderate
		17 53	MM4
		20 15	MM3
		20 30	Moderate
		22 45 $\frac{1}{2}$	MM3
		23 30	Moderate
	8	- -	"Six slight tremors"
		23 30	Severe
	9	00 00	Severe
		01 53	MM3
		12 13	MM4
		17 40	MM3
		18 45	Severe (could refer to 10d 06h 45m)
	11	22 25	Severe
		22 35	Severe
	13	11 00	Severe
		11 30	Severe
		21 10	Severe
		21 30	Severe
	14	00 50	Severe
		01 00	Severe
		02 00	Severe
		07 00	Severe
		08 00	Severe
	15	- -	"Sixteen slight to moderate jolts"
		- -	"Six slight to moderate jolts"
	16	21 30	Moderate
		22 10	Moderate
		23 00	Moderate (could refer to 17d 11h 00m)
	16	23 15	Moderate (could refer to 17d 11h 15m)
	18	11 15	Severe
		11 30	Severe
		11 45	Moderate
	18	20 10	Moderate
		22 30	Moderate
	19	02 11	Severe
	20	- -	"Seven moderate shocks"
		16 35	Severe (could refer to 21d 04h 35m)
	21	- -	"Seven shocks"
	22	- -	"Six slight tremors"
	23	- -	"Nine tremors"
	24	- -	"Nine tremors"
		21 10	Severe
		23 30	Severe
	25	01 30	Severe
		03 15	Severe
		03 18	Severe
		11 50	Severe
	26	00 15	Severe
		03 15	Severe
	27	01 45	Severe
		23 30	Slight (could refer to 28d 11h 30m)
	29	02 30	Slight
		02 45	Slight



Jan 29	22h10m	Moderate
	22 15	Moderate
30	00 55	Moderate
	09 00	Moderate
	18 15	Slight
Feb 8	20 30	MM3
16	23 56	MM4
17	02 15	MM4
	03h-	
	04h	?
	07 31	MM4
	16 23	?
21	02 00	MM4
	04 05	MM4
23	08 19	MM4
Mar 3	09 51	MM4
7	19 20	MM4
Apr 2	09 32	MM3
Jun 1	07 58	MM4
27	09 00	MM4
Nov 6	02 26	MM4

#### FELT EARTHQUAKES REPORTED FROM OUTSIDE NEW ZEALAND

The Observatory sometimes receives reports of felt earthquakes from islands in the south-west Pacific and other places beyond the limits of its systematic reporting network. The following reports were received during 1966: -

Jan 1	10h23m	Raoul Island	MM3
22	03 55	Raoul Island	MM2
Feb 1	02 16	Campbell Island	MM4
Mar 12	01 06	Raoul Island	MM2
27	05 51	Raoul Island	MM2
Apr 8	20 04	Raoul Island	MM3
13	04 42	Raoul Island	MM2
25	07 44	Raoul Island	MM4
May 17	23 58	Raoul Island	MM2
20	17 16	Raoul Island	MM3
26	11 59	Raoul Island	MM2
Jul 6	18 04	Raoul Island	MM3
10	10 00	Raoul Island	MM4
13	05 48	Raoul Island	MM2
28	12 08	Raoul Island	MM4
Aug 26	00 52	Raoul Island	MM3
Sep 19	12 58	Raoul Island	MM2
Nov 24	07 32	Raoul Island	MM2
28	04 40	Raoul Island	MM2
Dec 1	07 20	Raoul Island	MM2

#### STATION READINGS FROM DISTANT EARTHQUAKES

Readings of earthquakes at distances beyond about 10 degrees from Wellington made at stations within New Zealand are presented in a unified list, together with U.S. Coast and Geodetic Survey origin data, and magnitudes computed from the New Zealand data.

The unified list is arranged as follows. For each earthquake, the first line gives the origin time, epicentre, focal depth and magnitude assigned by the USCGS, and the distance of the epicentre from Wellington, in degrees. When no USCGS data are available, this line is omitted. Next, the arrival times of phases at the individual stations are listed. With these are given directions of first motion, the amplitudes and periods of the associated ground motions, and for Wellington, Karapiro, Gisborne, Monowai and Roxburgh only, the magnitudes.

Periods are given in seconds, and amplitudes in microns. These are worked out by the computer, using a stored polynomial approximation to the response curve of the seismometer concerned. The magnitudes are the "unified magnitude"  $m = \log_{10} A/T + Q$ , defined by Gutenberg and Richter (Annali di Geofisica, 9: 1-15, 1956). No station correction is applied. Only the vertical component recordings of P or PP, and the horizontal components of P, PP or S are used. The value printed on the right is the mean of separate determinations for all the components whose amplitude and period data are given on the same line.

#### READINGS FROM STATIONS WITHIN NEW ZEALAND.

Readings from Pacific and Antarctic stations begin page 428.



JAN 01	H M S			EPICENTRE			DEPTH 33KM	MAG 5.6 D	ENTRECASTEAUX IS			DIST (DEG)		
	12	24	30.3	9:8S	154.7E	DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	WEL
	KRP	EP	Z	12	31	16		-1.39						5.5
		E(PCP)	Z		33	30								
	MNG	EP	Z	12	31	34								
	WEL	E(PP)	Z	12	32	46								
		E	Z		39	50			2	6				
		ELR	Z		41				4	20				
JAN 01	H M S			EPICENTRE			DEPTH 7KM	MAG 5.1 D	ENTRECASTEAUX IS			DIST (DEG)		
	16	10	20.5	9:7S	154.8E	DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	WEL
	KRP	EP?	Z	16	16	45		-1.52						5.3
	WEL	E(SCP)	Z	16	23	36								
		ELR	Z		27					1	15			
			Z							3	22			
JAN 01	MNW	EP	Z	19	30	21		-0.90						
		ES	Z		31	23								
	MJZ	E(S)	Z	19	32	20								
JAN 02	H M S			EPICENTRE			DEPTH 113KM	MAG 4.9	TONGA IS.			DIST (DEG)		
	03	33	54.7	16:0S	174.0W	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td> </td>			LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td>	AZ	TZ	AN	TN	WEL
	GNZ	EP	Z	03	38	59		-1.01						5.1
	KRP	EP	Z	03	39	00		-1.07						5.3
	MNG	EP	Z	03	39	21								
JAN 02	H M S			EPICENTRE			DEPTH 368KM	MAG 5.2	S OF HONSHU			DIST (DEG)		
	04	04	43.0	31:4N	138.2E	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td> </td>			LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td>	AZ	TZ	AN	TN	WEL
	KRP	EP	Z	04	15	59		-1.21						5.4
	MJZ	EP	Z	04	16	15								
JAN 02	H M S			EPICENTRE			DEPTH 33KM	MAG 4.9	SAMOA IS			DIST (DEG)		
	14	47	06.5	16:6S	172.3W	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td> </td>			LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td>	AZ	TZ	AN	TN	WEL
	GNZ	E(P)	Z	14	52	19		-1.34						5.3
	KRP	EP	Z	14	52	23		-1.04						
JAN 02	H M S			EPICENTRE			DEPTH 523KM	MAG 5.1	S OF FIJI IS			DIST (DEG)		
	18	41	56.1	23:4S	179.9W	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td> </td>			LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td>	AZ	TZ	AN	TN	WEL
	KRP	EP	Z	18	45	06		-1.68						5.4
		E	Z		47	10								
		ES	Z		47	49								
	GNZ	E(P)	Z	18	45	10		-0.88						
		ES	Z		47	44								
	MNG	EP	Z	18	45	29								
		E	Z		48	19								
		ES	Z		48	19								
	WEL	EP	Z	18	45	38		-1.05						5.4
		ES	Z		48	37								
	MJZ	EP	Z	18	46	11								
		ES	Z		49	39								
JAN 03	H M S			EPICENTRE			DEPTH 566KM	MAG 5.0	S OF FIJI IS			DIST (DEG)		
	00	42	02	23:1S	179.1E	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td> </td>			LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td>	AZ	TZ	AN	TN	WEL
	KRP	EP	Z	00	45	13		-1.51						5.3
	GNZ	EP	Z	00	45	15		-1.17						
		ES	Z		47	56								
	MNG	EP	Z	00	45	35								
		ES	Z		48	25								
	MJZ	EP	Z	00	46	15								

JAN 03	H M S			EPICENTRE			DEPTH 569KM	MAG 4.9	FIJI IS			DIST (DEG)		
	13	33	34.6	20:6S	178.4W	DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	WEL
	KRP	EP	Z	13	37	13		-0.96						5.5
		E(*SP)	Z		39	40								
		ES	Z		40	20								
	GNZ	EP	Z	13	37	15		-1.10						5.4
		EPP?	Z		38	06								
		ES	Z		40	11								
		E	Z		40	25								
	MNG	EP	Z	13	37	34								
		E	Z		52									
		ES	Z		40	49								
		E(SCP)	Z		44	06								
		ESCS	Z		47	51								
	MJZ	EP	Z	13	38	14								
		E(PP)	Z		39	24								
		ES	Z		42	12								
		ESCS	Z		48	12								
JAN 03	H M S			EPICENTRE			DEPTH 247KM	MAG 5.4	NEW HEBRIDES IS			DIST (DEG)		
	15	44	44.8	18:9S	169.4E	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td> </td>			LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td>	AZ	TZ	AN	TN	WEL
	KRP	EP	Z	15	48	57		-1.45						4.9
		E*PP	Z		49	40								
	GNZ	EP	Z	15	49	11		-1.31						5.1
	MNG	EP	Z	15	49	22								
		E*PP	Z		50	02								
		ESCP	Z		56	24								
	MJZ	EP	Z	15	49	47								
		E*PP	Z		50	33								
		ESCP	Z		56	32								
JAN 03	H M S			EPICENTRE			DEPTH 172KM	MAG 4.3	SANTA CRUZ IS			DIST (DEG)		
	23	48	53	11:3S	166.2E	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td> </td>			LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td>	AZ	TZ	AN	TN	WEL
	MNG	EP	Z	23	54	49								
	MJZ	EP	Z	23	55	12								
JAN 04	KRP	EP	Z	13	45	23		-1.45						
	MNG	EP	Z	13	45	38								
NO TIME SIGNALS ON KRP RECORDS UNTIL JAN 12														
JAN 05	H M S			EPICENTRE			DEPTH 233KM	MAG 4.7	TONGA IS			DIST (DEG)		
	07	48	29.6	20:1S	175.8W	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td> </td>			LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN</td> <td>TN</td> <td>WEL</td> <td>MAG</td>	AZ	TZ	AN	TN	WEL
	GNZ	EP	Z	07	52	38		-0.49						5.9
	MNG	EP	Z	07	53	00								
		ES	Z		56	43								
	WEL	EP	Z	07	53	09		-0.90						5.6
		ES	Z		57	07								
	MJZ	EP	Z	07	53	45								
JAN 05	GNZ	EP	Z	15	33	59		-0.61						
		E(S)	Z		35	20								
		E	Z		31									
	TUA	EP	Z	15	34	06								
		ES	Z		35	35								
	CNZ	EP	Z	15	34	14								
		ES	Z		35	43								
	MNG	EP	Z	15	34	27								
		ES	Z		36	12								
	WEL	EP	Z	15	34	37								



DATE	H M S	EPICENTRE			DEPTH	MAG	DIST (DEG)												
		LOG <sub>a</sub> /T	AZ	TZ			AN	TN	AE	TE	MAG								
JAN 05	17 21 27.9	13.2N	95.5E	33KM	5.2	ANDAMAN IS													
	MJZ EP	Z	17 34 19																
	MNG EP?	Z	17 34 46																
	WEL ES	E	17 45 03																
	E(SP)	Z	47 00																
	ESS	Z	51 32																
	E	Z	56 24																
	ELQ	N	18 01																
	ELR	NE	04																
	EMAX	ZE	11																
JAN 05	18 10 00.9	21.8N	146.8E	35KM	5.5	MARIANA IS													
	MNG EP	Z	18 20 54																
	E*PP	Z	21 05																
	MJZ EP	Z	18 21 03																
JAN 07	14 57 43.7	5.2S	152.6E	47KM	5.3	NEW BRITAIN													
	GNZ EP	Z	15 05 20.5																
	MNG EP	Z	15 05 22.5																
	WEL EP	Z	15 05 25																
	E(L)	Z	15 34																
	ELR	ZNE	17																
	MJZ EP	Z	15 05 31																
JAN 07	18 15 44.1	31.4S	178.3W	33KM	4.9	KERMADEC IS													
	GNZ EP	Z	18 17 37																
	ES	Z	18 59																
	ONE EP	E	18 17 41																
	MNG EP	Z	18 18 15.5																
	ES	Z	19 55																
	MJZ EP	Z	18 19 23																
	ES	Z	21 59																
	WEL ES	ZNE	18 20 22																
JAN 07	20 17 14.0	62.6S	155.6E	33KM		BALLENY IS													
	MNW EP	Z	20 21 27																
	MJZ EP	Z	20 21 55																
	WEL EP	Z	20 22 29																
	ES	ZE	26 53																
	E	N	27 28																
	EL	ZNE	28 34																
	MAX	Z	30																
	MAX	NE	31																
	MNG EP	Z	20 22 33																
JAN 08	04 07 41.3	25.4S	179.1W	387KM	4.7	S OF FIJI IS													
	GNZ EP	Z	04 10 33																
	E(S)	Z	12 58																
	E(S)	Z	13 02																
	MNG EP	Z	04 11 01																
	ES	Z	13 41																
	WEL ES	ZNE	04 14 05																

DATE	H M S	EPICENTRE			DEPTH	MAG	DIST (DEG)												
		LOG <sub>a</sub> /T	AZ	TZ			AN	TN	AE	TE	MAG								
JAN 09	12 08 24.7	56.9S	158.9E	33KM		MACQUARIE IS													
	MNW EP	Z	12 11 16																
	ES	Z	29																
	MJZ EP	Z	12 11 51																
JAN 10	01 19 10.8	13.8N	120.7E	124KM	5.4	PHILIPPINE IS													
	MJZ EP	Z	01 30 57																
	E(*PP)	Z	31 17																
JAN 10	16 12 14.7	6.6S	154.6E	64KM	5.9	SOLOMON IS													
	GNZ EP	Z	16 19 32																
	MNG EP	Z	16 19 34																
	WEL ELR	Z	16 31																
JAN 11	MNG EP	Z	03 21 29																
	E(S)	Z	24 54																
JAN 11	14 16 32.3	33.7N	137.1E	33KM	5.6	S COAST OF HONSHU													
	MJZ EP	Z	14 28 53																
JAN 13	05 53 49	18.0S	178.4W	621KM		FIJI IS													
	KRP EP	Z	05 57 48																
	GNZ EP	Z	05 58 07																
	WEL EP	Z	05 58 15																
	MJZ EP	Z	05 58 45																
JAN 13	10 41 11.7	52.9N	172.3E	17KM	5.6	ALEUTIAN IS													
	KRP EP	ZNE	10 54 24																
	MNG EP	Z	10 54 34																
JAN 13	23 42 47	15.3S	173.8W	89KM	4.6	TONGA IS													
	KRP EP	Z	23 03 00																
JAN 14	07 39 13.2	5.9S	148.3E	88KM	5.4	NEW BRITAIN													
	KRP EP	Z	07 46 44																
	MJZ EP	Z	07 46 45																
	MNG EP	Z	07 46 58																
	GNZ EP	Z	07 46 59																
	WEL EP	Z	07 47 10																
JAN 14	20 41 04.2	17.4S	166.6E	10KM	5.4	NEW HEBRIDES IS													
	KRP EP	ZNE	20 45 53																
	GNZ EP	Z	20 46 13					</											



		MAX	ZE	56	4 18			4 16		
		MJZ EP	Z	20 46 44						
	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
JAN 15	03 57 40	19.1S 174.3W	33KM	4.7 TONGA IS	WEL	24				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	ZNE	04 02 23	-1.22						5.3
	MNG EP	Z	04 02 45							
	MJZ EP	Z	04 03 29							
JAN 15	07 11 10.5	6.2N 126.2E	65KM	5.1 PHILIPPINE IS	WEL	65				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	MJZ E(P)	Z	07 21 38							
JAN 15	10 56 35	20.3S 174.4W	33KM	TONGA IS	WEL	23				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	Z	11 01 03	-1.63						4.6
	GNZ EP	Z	11 01 05	-1.04						5.1
	MNG EP	Z	11 01 30							
	WEL EP	Z	11 01 35	-1.12						5.2
	MJZ EP	Z	11 02 15							
JAN 15	11 32 48.3	18.7S 169.2E	214KM	4.4 NEW HEBRIDES IS	WEL	23				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	ZNE	11 37 06	-1.30						5.1
	GNZ EP	Z	11 37 19	-0.87						5.6
	MNG EP	Z	11 37 31							
	WEL EP	ZNE	11 37 36	-0.98						5.5
	MJZ EP	Z	11 37 56							
JAN 15	19 29 36	33.5S 69.8W	50KM	5.5 CHILE-ARGENTINA	WEL	85				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	MNG EP	Z	19 42 07							
	MJZ EP	Z	19 42 10							
	KRP EP	Z	19 42 15	-0.99						6.3
	WEL E(L)	Z	20 02							
	E(LR)	Z	08	1 21						
JAN 15	21 56 30	32.3S 178.2W	33KM	4.2 S OF KERMADEC IS	WEL	11				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	GNZ EP	Z	21 58 11	-1.09						
	ES	Z	59 32							
	ONE EP	E	21 58 19							
	KRP EP	ZNE	21 58 21	-1.60						
	E*PP	ZNE	40							
	MNG EP	Z	21 58 47							
	ES	Z	22 00 32							
	WEL ES	ZNE	22 00 52							
JAN 16	09 11 47.3	52.8N 172.0E	9KM	5.5 ALEUTIAN IS	WEL	94				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	ZNE	09 24 51	-1.39						6.2
JAN 16	KRP E(P)	Z	09 29 49	-1.30						
	MNG E(P)	Z	09 30 03							
	MJZ E(P)	Z	09 30 03							
JAN 16	21 45 48.7	17.4S 176.8W	359KM	4.3 FIJI IS	WEL	25				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	Z	21 50 10	-1.42						4.8

		MNG EP	Z	21 50 29						
		MJZ EP	Z	21 51 12						
JAN 17	KRP EP	ZNE	06 19 07	-1.41						
	MNG EP	Z	06 19 22							
JAN 17	KRP EP	ZNE	17 27 47	-1.33						
	MNG EP	Z	17 28 03							
JAN 17	17 50 00.8	20.9S 178.5W	561KM	5.6 FIJI IS	WEL	21				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	ZNE	17 53 37	-0.69						5.8
	E	Z	54 57							
	E*SP	ZNE	55 58							
	ES	ZNE	56 39							
	E	ZN	49							
	GNZ EP	Z	17 53 37	-0.84						5.6
	ES	Z	56 37							
	E	Z	53							
	E	Z	57 06							
	MNG EP	Z	17 53 57							
	E	Z	54 05.5							
	ES	Z	57 12							
	MJZ EP	Z	17 54 37							
	E	Z	43							
	E(*PP)	Z	55 48							
JAN 17	23 57 59.0	19.0S 175.5W	196KM	TONGA IS	WEL	24				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	ZNE	24 02 27	-1.71						4.7
	MNG EP	Z	24 02 43							
JAN 18	05 39 56.4	18.0S 178.2W	550KM	4.2 FIJI IS	WEL	24				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	ZNE	05 45 57	-1.39						5.1
JAN 18	06 27 15.0	18.8S 177.6W	389KM	5.3 FIJI IS	WEL	23				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	ZNE	06 31 21	-0.39						5.9
	E	ZN	32 21							
	ES	Z	34 45							
	GNZ EP	Z	06 31 22	-0.20						6.1
	ES	Z	34 40							
	MNG EP	Z	06 31 42							
	ES	Z	35 19							
	WEL EP	ZNE	06 31 50	-0.41						5.8
	ES	ZE	35 37							
	MJZ EP	Z	06 32 24							
	E*PP	Z	33 38							
	ES	Z	36 47							
JAN 18	08 00 05.7	5.3S 153.4E	48KM	NEW IRELAND	WEL	41				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	MNG EP	Z	08 07 39							
JAN 18	20 19 24.7	2.6S 138.8E	47KM	5.4 W NEW GUINEA	WEL	50				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG	
	KRP EP	ZNE	20 28 08	-1.28						5.7
	MJZ EP	Z	20 28 15							
	MNG EP	Z	20 28 19							
	WEL EP	Z	20 28 20	-0.85						6.2



		EPICENTRE		DEPTH	MAG	DIST (DEG)			
		H M S	H M S			WEL	AE	TE	MAG
	GNZ EP	Z 20 28 22			-1.23				5.8
JAN 19	H M S	20:8S 178.4E		582KM	5.1 FIJI IS				21
	KRP EP	Z 13 49 40.5			-0.59				5.9
	GNZ EP	Z 13 49 39			-1.30				5.2
	E	Z 42							
	ES	Z 52 36							
	MNG EP	Z 13 50 00							
	ES	Z 53 09							
	WEL EP	Z 13 50 03			-0.51				6.0
	MJZ EP	Z 13 50 42							
JAN 20	H M S	37:9N 138.0E		6KM	5.6 W HONSHU JAPAN				86
	MJZ EP	Z 01 57 31.5							
JAN 20	H M S	15.2S 168.1E		23KM	5.5 NEW HEBRIDES IS				27
	KRP EP	Z 04 32 55			-0.13				6.3
	MNG EP	Z 04 33 17							
	WEL E	NE 04 33 10							
	EP	Z 24			-0.60				6.0
	ES	Z 38 12				1 10			
	ELQ	Z 39							
	ELR	ZE 40							
	MAX	ZN 43				4 17 6 18			
	MJZ EP	Z 04 43 44							
JAN 20	H M S	15:2S 168.1E		18KM	4.7 NEW HEBRIDES IS				27
	KRP EP	Z 05 39 57			-1.77				4.7
	MNG EP	Z 05 40 19							
JAN 20	ECZ E(P)	Z 08 54 58							
	ES	Z 56 24							
	GNZ EP	Z 08 55 12			-0.99				
	ES	Z 56 39							
	MNG EP	Z 08 55 44							
	ES	Z 57 43							
	WEL ES	ZNE 08 58 02							
	MJZ EP	Z 08 57 30							
	E(S)	Z 59 34							
JAN 20	H M S	25:1S 180.0E		409KM	4.5 S OF FIJI IS				17
	KRP EP	Z 11 06 56			-0.45				
	ES	NE 09 24							
	GNZ EP	Z 11 06 55			-0.46				
	ES	Z 09 20							
	MNG EP	Z 11 07 19							
	ES	Z 10 01							5.8
	WEL EP	ZNE 11 07 27			-0.48				
	ES	ZNE 10 19							
	MJZ EP	Z 11 08 03							
	ES	Z 11 27							
JAN 20	H M S	53:0N 171.8E		21KM	5.6 ALEUTIAN IS				94
	KRP EP	Z 14 59 16			-1.39				6.1

		EPICENTRE		DEPTH	MAG	DIST (DEG)			
		H M S	H M S			WEL	AE	TE	MAG
JAN 20	H M S	15:01 55.4	15:2S 172.7E	33KM	5.3 SAMOA IS				28
	GNZ EP	Z 15 07 14			-0.41				6.0
	KRP EP	ZNE 15 07 15			-1.00				5.4
	WEL EP	Z 15 07 40			-1.20				5.4
	MJZ EP	Z 15 08 21							
JAN 20	GNZ EP	Z 23 25 25.5			-0.50				
	ONE E(P)	E 23 26 10							
	MNG EP	Z 23 26 29							
	E	Z 48							
	ES	Z 28 24							
	WEL E(P)	Z 23 27 03			-0.65				
	E	Z 28 10							
	E(S)	Z 42							
	MJZ EP	Z 23 27 34							
	ES	Z 29 50							
JAN 20	H M S	23 37 02.8	22:9N 121.3E	69KM	5.1 TAIWAN				81
	MJZ EP	Z 23 49 08							
JAN 21	H M S	01 32 19.7	23:6S 179.8E	611KM	S OF FIJI IS				18
	GNZ EP	Z 01 35 25			-1.07				5.1
	ES	Z 38 00							
	MNG EP	Z 01 35 42							
	ES	Z 38 35							
	MJZ EP	Z 01 36 23							
	ES	Z 39 43							
JAN 21	H M S	02 20 02	23:7S 179.5E	645KM	4.0 S OF FIJI IS				18
	GNZ EP	Z 02 23 02			-1.28				
	MNG EP	Z 02 23 22							
	ES	Z 26 11							
JAN 22	H M S	03 54 51.9	28:9S 176.7E	27KM	5.1 KERMADEC IS				14
	CNZ ES	Z 04 00 01							
	MNG EP	Z 03 57 54							
	ES	Z 04 00 15							
	WEL ES	ZNE 04 00 32							
	MAX	ZNE 04					6 20	3 12	
	EL	Z 01							
	MJZ EP	Z 03 58 59							
	ES	Z 04 02 08							
JAN 22	H M S	11 01 05.2	18:1S 178.4E	598KM	5.2 FIJI IS				24
	KRP EP	ZNE 11 05 05			-0.74				5.8
	GNZ EP	Z 11 05 15			-1.04				5.5
	WEL EP	Z 11 05 33			-0.65				5.9
	MJZ EP	Z 11 06 34							
JAN 22	H M S	14 27 07.9	56:0N 153.7E	33KM	5.8 KODIAK IS				101
	WEL E(SKS)	ZNE 14 51 30					1 15	3 17	3 20
	EPS	Z 54 00							



ELR EMAX		ZNE 15 14 ZNE 16	8 24 3 24 3 25				
H M S	EPICENTRE	DEPTH	MAG	TONGA IS			DIST (DEG)
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
JAN 22 19 36 32.2	20:7S 174.6W	33KM	5.0				22
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
GNZ EP	Z 19 40 53		-0.96				5.2
KRP EP	ZNE 19 41 06		-1.59				4.6
MJZ EP	Z 19 42 06						
JAN 23 15 04 07	28:0S 176.6W	33KM	4.8	KERMADEC IS			15
	H M S	DIR <td>LOG<sub>a</sub>A/T</td> <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
GNZ EP	Z 15 06 49		-1.40				
ES	Z 15 08 59						
ONE EP	E 15 07 15						
WEL ES	NE 15 10 09						
JAN 24 CNZ EP	Z 21 12 33						
JAN 25 18 05 54.8	1:7N 117.9E	43KM	5.3	BORNEO			67
	H M S	DIR <td>LOG<sub>a</sub>A/T</td> <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
MJZ EP	Z 18 16 34		-1.20				5.9
WEL EP	Z 18 16 50						
MNG EP	Z 18 16 52						
GNZ EP	Z 18 16 59		-1.16				6.1
JAN 26 01 00 14.6	59.5S 26.3W	74KM	5.6	S OF SANDWICH IS			78
	H M S	DIR <td>LOG<sub>a</sub>A/T</td> <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
MJZ EP	Z 01 11 55						
WEL EP	Z 01 12 07		-0.93				6.1
MNG EP	Z 01 12 09						
JAN 26 13 04 16	15.4S 174.8W	249KM	4.2	TONGA IS			27
	H M S	DIR <td>LOG<sub>a</sub>A/T</td> <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
MNG EP	Z 13 09 31						
JAN 26 15 30 42.6	14.3S 167.3E	209KM	4.8	NEW HEBRIDES IS			28
	H M S	DIR <td>LOG<sub>a</sub>A/T</td> <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
MNG EP	Z 15 36 07						
MJZ EP	Z 15 36 32						
JAN 26 19 01 17.7	18:9S 173.6W	33KM	4.8	TONGA IS			24
	H M S	DIR <td>LOG<sub>a</sub>A/T</td> <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
MNG EP	Z 19 06 16						
ES	Z 19 10 35						
MJZ EP	Z 19 07 27						
JAN 27 02 01 35.3	18:0S 178.4W	580KM	5.1	FIJI IS			24
	H M S	DIR <td>LOG<sub>a</sub>A/T</td> <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
KRP EP	ZNE 02 05 36.5		-1.31				5.2
E	Z 02 06 56						
MNG EP	Z 02 05 59						
ES	Z 02 09 19						
MJZ EP	Z 02 06 37						
E	Z 02 08 07						
JAN 27 19 39 06.0	51.3N 178.2E	42KM	5.5	ALEUTIAN IS			92
	H M S	DIR <td>LOG<sub>a</sub>A/T</td> <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
KRP EP	Z 19 52 01		-1.46				5.1

H M S	EPICENTRE	DEPTH	MAG	NEW HEBRIDES IS			DIST (DEG)
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
JAN 27 23 45 49.6	13.8S 167.3E	206KM	4.4	NEW HEBRIDES IS			28
	H M S	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td> </td>	LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	AZ	TZ	AN TN	AE TE MAG
KRP EP	Z 23 50 57		-1.90				4.7
MNG EP	Z 23 51 19						
MJZ EP	Z 23 51 43						
JAN 28 04 36 46.1	17.6S 177.0E	556KM	5.5	FIJI IS			24
	H M S	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td> </td>	LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	AZ	TZ	AN TN	AE TE MAG
KRP EP	ZNE 04 40 45		-0.35				6.2
ES	NE 04 44 00						
GNZ EP	Z 04 40 49		-0.26				6.3
ES	Z 04 44 07						
MNG EP	Z 04 41 05.5						
ES	Z 04 44 31						
WEL IP	ZNE 04 41 14.2	DNE	0.34				6.8
E*SP	ZN 04 43 44						
ES	ZNE 04 44 46						
MJZ EP	Z 04 41 41						
ES	Z 04 45 38						
ESCP	Z 04 47 39						
JAN 28 05 42 16.3	17:1S 168.4E	23KM	5.7	NEW HEBRIDES IS			25
	H M S	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td> </td>	LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	AZ	TZ	AN TN	AE TE MAG
KRP EP	ZNE 05 47 08		-0.27				6.0
ES	ZNE 05 51 20						
GNZ EP	Z 05 47 24		-0.58				5.8
MNG EP	Z 05 47 33						
WEL EP	ZNE 05 47 39		-0.20				6.3
ES	NE 05 52 01						
EL	ZNE 05 53						
ELR	ZNE 05 54						
MJZ EP	Z 05 47 58						
EPCP	Z 05 51 22						
ESCP	Z 05 54 59						
JAN 28 06 52 42.7	17:1S 168.7E	5KM	4.6	NEW HEBRIDES IS			25
	H M S	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td> </td>	LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	AZ	TZ	AN TN	AE TE MAG
KRP EP	ZN 06 57 37		-1.39				4.9
MNG EP	Z 06 58 02						
JAN 28 MNW EPN	Z 07 00 34						
E(P*)	Z 07 01 46						
ESN	Z 07 01 18						
MJZ E(PN)	Z 07 01 05						
E	Z 07 01 31						
E(SN)	Z 07 02 21						
ROX E(SN)	Z 07 01 52						
WEL EPN?	ZNE 07 02 13						
MNG EPN	Z 07 02 19						
E	Z 07 04 50						
JAN 28 07 59 58.3	2:7N 95.3W	33KM	5.1	GALAPAGOS IS			92
	H M S	DIR <td>LOG<sub>a</sub>A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td> </td>	LOG <sub>a</sub> A/T <td>AZ</td> <td>TZ</td> <td>AN TN</td> <td>AE TE MAG</td>	AZ	TZ	AN TN	AE TE MAG
KRP EP	Z 08 13 00						
WEL EP	Z 08 13 38		-1.28				6.2
JAN 28 KRP EP	ZNE 08 06 45						
E(SCP)	Z 08 13 00						
GNZ EP	Z 08 06 45		-0.84				
MNG EP	Z 08 07 06						
E(S)	Z 08 10 57						



		ZNE 08 07 19		-1.21									
		ZNE 11 16											
		Z 13 33											
		Z 08 07 54											
JAN 28	H M S	EPICENTRE	DEPTH	MAG	FIJI IS	DIST (DEG)							
	09 27 34.4	17.9S 178.5W	579KM			WEL 24							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							4.9						
	KRP EP	ZNE 09 31 36		-1.63									
	GNZ EP	Z 09 31 37		-1.10			5.4						
	MNG EP	Z 09 31 56											
	E(PCP)	Z 35 25											
	ESCP	Z 38 09											
	ESCS	Z 41 52											
	MJZ EP	Z 09 32 35											
	E(*PP)	Z 34 20											
	ESCP	Z 38 23											
	ESCS	Z 42 17											
JAN 28	H M S	EPICENTRE	DEPTH	MAG	4.2 S OF FIJI IS	DIST (DEG)							
	17 09 11	25.1S 179.7E	600KM			WEL 17							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							-1.91						
	KRP EP	Z 17 11 59											
	GNZ ES	Z 17 14 27											
	MNG EP	Z 17 12 20											
	ES	Z 15 02											
JAN 28	H M S	EPICENTRE	DEPTH	MAG	5.4 ALEUTIAN IS	DIST (DEG)							
	19 07 15.0	51.9N 177.1W	55KM			WEL 93							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							5.5						
	MNG EP	Z 19 19 43											
	KRP EP	Z 19 20 06		-1.91									
JAN 28	H M S	EPICENTRE	DEPTH	MAG	5.7 E KAMCHATKA	DIST (DEG)							
	22 38 13.7	51.6N 157.0E	122KM			WEL 94							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							6.1						
	KRP EP	ZNE 22 51 04		-1.15									
	E*PP	Z 31											
	MNG EP	Z 22 51 14											
	E*PP	Z 43											
JAN 29	H M S	EPICENTRE	DEPTH	MAG	4.7 NEW HEBRIDES IS	DIST (DEG)							
	00 10 44.5	17.0S 168.3E	33KM			WEL 25							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							4.9						
	KRP EP	Z 00 15 36											
	MNG EP	Z 00 16 01											
	MJZ EP	Z 00 16 21											
JAN 29	H M S	EPICENTRE	DEPTH	MAG	4.5 NEW HEBRIDES IS	DIST (DEG)							
	01 13 15	17.0S 168.2E	33KM			WEL 25							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							4.9						
	KRP EP	Z 01 18 06		-1.40									
	MNG EP	Z 01 18 30											
JAN 29	H M S	EPICENTRE	DEPTH	MAG	3.7 KERMADEC IS	DIST (DEG)							
	02 37 03.7	31.2S 177.7W	33KM			WEL 12							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							-1.08						
	GNZ EP	Z 02 39 10											
	ES	Z 40 22											
	KRP EP	ZNE 02 39 16		-1.91									
	E(*SP)	Z 35											
	MNG EP	Z 02 39 34											
	E	Z 45											
	ES	Z 41 25											
	WEL ES	NE 02 41 45											
	ONE EP	E 02 39 39											

		H M S		EPICENTRE		DEPTH		MAG		TONGA IS		DIST (DEG)	
		03 19 23		19.4S 175.5W		248KM		4.3		AZ TZ AN TN		WEL 23	
				H M S		DIR		LOG <sub>a</sub> /T				AE TE MAG	
												4.9	
JAN 29	KRP EP	ZNE 03 23 39.5		-1.50									
	MNG EP	Z 03 24 01											
	ES	Z 27 49											
JAN 29	H M S	EPICENTRE	DEPTH	MAG	4.9 NEW HEBRIDES IS	DIST (DEG)							
	06 24 22.7	16.9S 168.4E	33KM			WEL 25							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							4.8						
	KRP EP	Z 06 29 16		-1.45									
	MNG EP	Z 06 29 39											
JAN 29	H M S	EPICENTRE	DEPTH	MAG	LOYALTY IS	DIST (DEG)							
	15 06 29	21.8S 169.6E	33KM			WEL 20							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
	MJZ EP?	Z 15 11 25											
JAN 30	H M S	EPICENTRE	DEPTH	MAG	4.4 SAMOA IS	DIST (DEG)							
	07 16 30	16.5S 172.7W	107KM			WEL 27							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							5.4						
	GNZ EP	Z 07 21 37		-0.99									
	KRP EP	ZNE 07 21 37.5		-1.21									
	MNG EP	Z 07 22 01											
	MJZ EP	Z 07 22 46											
JAN 30	H M S	EPICENTRE	DEPTH	MAG	5.3 LOYALTY IS	DIST (DEG)							
	11 05 02.2	22.1S 170.0E	46KM			WEL 20							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							4.9						
	KRP EP	Z 11 08 53		-1.18									
	E*PP	Z 09 19											
	MNG EP	Z 11 09 19.5											
	MJZ EP	Z 11 09 54											
JAN 30	H M S	EPICENTRE	DEPTH	MAG	4.6 NEW HEBRIDES IS	DIST (DEG)							
	13 32 28.7	17.0S 168.2E	24KM			WEL 25							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							4.8						
	KRP EP	Z 13 37 32		-1.52									
	MNG EP	Z 13 37 45.5											
JAN 31	H M S	EPICENTRE	DEPTH	MAG	LOYALTY IS	DIST (DEG)							
	06 08 01	21.9S 170.0E	21KM			WEL 20							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							4.6						
	KRP EP	Z 06 11 59		-1.52									
	MNG EP	Z 06 12 22											
JAN 31	H M S	EPICENTRE	DEPTH	MAG	5.1 LOYALTY IS	DIST (DEG)							
	08 33 41.4	22.0S 170.0E	25KM			WEL 20							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							4.6						
	KRP EP	ZNE 08 37 34		-1.52									
	MNG EP	Z 08 38 01											
	WEL EP	Z 08 38 12		-1.03									
JAN 31	H M S	EPICENTRE	DEPTH	MAG	ARGENTINA	DIST (DEG)							
	14 01 24.3	24.9S 64.4W	35KM			WEL 94							
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN	AE TE	MAG						
							6.0						
	MNG EP	Z 14 14 43											
	KRP EP	Z 14 14 50		-1.52									
JAN 31	H M S	EPICENTRE	DEPTH	MAG	NEW HEBRIDES IS	DIST (DEG)							
	19 12 14	17.1S 167.8E	23KM			WEL 25							
		H M S	DIR	LOG <sub>a</sub> /T</									



	H	M	S	EPICENTRE	DEPTH	MAG	NEW HEBRIDES IS			DIST (DEG)		
				H M S	KM		LOG <sub>e</sub> A/T	AZ	TZ	AN TN	AE TE	MAG
JAN 31	21	18	42	17.0S 168.5E	33KM							25
	MNG	EP	Z	21 23 59								
FEB 01	MNW	EP	Z	02 17 29		-1.05						
	E		Z	19 12								
	ES		Z	20 12								
	MJZ	EP	Z	02 17 49								
	ES		Z	20 59								
	MNG	EP	Z	02 18 39								
FEB 01				15.9S 167.2E	30KM	5.2 NEW HEBRIDES						26
	MNG	EP	Z	08 26 18								
FEB 01				23.3S 179.8E	545KM	5.1 S OF FIJI IS						18
	MNG	EP	Z	17 59 53								
FEB 02				17.9S 173.0E	59KM	5.2 TONGA IS REGION						26
	GNZ	EP	Z	05 38 59		-1.21						5.1
	KRP	EP	ZNE	05 39 00		-0.28						6.0
	ES		NE	43 05								
	MNG	EP	Z	05 39 22.5								
	ES		Z	43 51								
	WEL	ELR	Z	05 45				6	21			
	MAX		Z	50								
	MJZ	EP	Z	05 40 14.5								
FEB 02				21.6S 176.6E	226KM	4.2 FIJI IS						21
	GNZ	EP	Z	17 14 26		-1.01						5.4
	ES		Z	17 23								
	KRP	EP	ZNE	17 14 26.5		-1.04						5.3
	E(S)		NE	17 34								
	MNG	EP	Z	17 14 48								
	E(S)		Z	18 12.5								
	WEL	ES	ZNE	17 18 38								
	MJZ	EP	Z	17 15 38								
FEB 03				0.1N 123.5E	165KM	6.0 N CELEBES						62
	MNW	EP	Z	05 58 01.5		-0.62						6.3
	E*PP		Z	37								
	MJZ	EP	Z	05 58 06								
	E*PP		Z	42								
	WEL	EP	Z	05 58 14		-0.60						6.3
	E(SCP)		ZNE	06 01 54								
	ES		ZN	06 22								
	E(L)		Z	14								
	MNG	EP	Z	05 58 15								
	E*PP		Z	47								
	GNZ	EP	Z	05 58 22		-0.69						6.2
FEB 03				16.6N 120.0E	69KM	5.5 PHILIPPINE IS						77
	MJZ	EP	Z	12 10 19								5.9
	GNZ	EP	Z	12 10 25		-1.09						

	H	M	S	EPICENTRE	DEPTH	MAG	4.7 TONGA IS			DIST (DEG)				
				H M S	KM		LOG <sub>e</sub> A/T	AZ	TZ	AN TN	AE TE	MAG		
FEB 04	04	02	58.1	15.4S 173.5E	143KM							28		
	GNZ	EP	Z	04 08 06		-0.80						5.7		
	KRP	EP	ZNE	04 08 05		-1.31						5.2		
	MNG	EP	Z	04 08 26										
FEB 04				21.5S 174.1E	7KM	4.5 TONGA IS						22		
	KRP	EP	ZE	05 08 44		-1.24						4.9		
	MNG	EP	Z	05 09 07										
	ES		Z	12 44										
	MJZ	EP	Z	05 09 59										
	WEL	EL	ZNE	05 15				6	18	5	15	4	14	
	MAX		ZNE	17										
FEB 04				21.3S 174.5E	116KM	4.0 TONGA IS						22		
	KRP	EP	Z	09 55 20		-1.52						4.7		
FEB 04				15.9S 167.9E	179KM	5.9 NEW HEBRIDES IS						26		
	KRP	IP	ZNE	10 44 01.3	J	0.54						7.1		
	EPCP		Z	47 40										
	ES		E	48 02										
	ESCP		ZE	51 05										
	GNZ	EP	Z	10 44 13		-0.19						6.4		
	ES		Z	48 20										
	ESCP		Z	50 45										
	MNG	IP	Z	10 44 22.4										
	ES		Z	48 32										
	ESCP		Z	51 12										
	WEL	EP	Z	10 44 29		-0.13		11	15			6.4		
	E		N	55						9	7			
	EPP		ZN	45 19				15	10	13	8	6.2		
	ES		ZNE	48 42				5	15	9	15	12	9	6.0
	E		ZN	49 12				8	18	15	15			
	E(*SS)		ZNE	50 06				14	14	24	10	29	10	
	MJZ	EP	Z	10 44 46.5										
	EPCP		Z	47 57										
	ES		Z	49 22										
	ESCP		Z	51 21										
	E(SCS)		Z	55 10										
	ROX	EP	ZN	10 45 00		-0.16		8	5	7	6	6.6		
	EPP		N	46 00						5	11	5.8		
	ES		ZNE	49 42				11	6					
	ESCP		Z	51 27										
	E(L)		ZNE	55				12	12	30	16	26	18	
	EMAX		ZNE	55										
FEB 04				21.3S 174.3E	55KM	4.9 TONGA IS						22		
	GNZ	EP	Z	15 40 48		-1.04						5.1		
	E(*PP)		Z	41 12										
	KRP	EP	ZNE	15 40 49.5		-1.41						4.8		
	MNG	EP	Z	15 41 12										
	WEL	ELR	ZNE	15 47				4	17	3	14	5	15	
	MAX		ZNE	49										







		ESS	ZN	08 22				4 21
		ELR	ZN	18				
		MAX	ZN	26	14 19			8 18
MNG	EP	Z	04 52 44					
KRP	EP	Z	04 52 57	-0.84			6.4	
FEB 09	H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)			
	07 18 47.8	9.8S 116.4E	33KM	5.9 SUMBAWA IS	WEL 60			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	HJZ EP	Z	07 28 37					
	KRP EP	ZNE	07 28 52	-1.39			5.8	
	MNG EP	Z	07 28 54					
	E*PP	Z	29 10					
FEB 09	H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)			
	08 14 04.8	2.0N 94.6E	33KM	5.3 OFF N SUMATRA	WEL 84			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	MNG EP?	Z	08 26 35					
	E	Z	59					
FEB 09	H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)			
	09 53 39.8	26.0S 177.7W	170KM	4.7 S OF FIJI	WEL 16			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	GNZ ES	Z	09 58 43					
	MNG EP	Z	09 56 53					
	ES	Z	59 38					
FEB 09	H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)			
	10 46 57.3	56.5S 25.2W	50KM	5.5 S SANDWICH IS	WEL 81			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	MNG EP	Z	10 59 11					
	KRP EP	Z	10 59 24	-1.18			6.0	
FEB 09	H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)			
	13 57 48.6	35.3S 106.0W	33KM	5.4 EASTER IS CORD	WEL 60			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	MNG EP	Z	14 07 53					
	WEL ES	Z	14 16 50	2 23				
	ELR	ZNE	25	4 20				
	MAX	Z	28					
	KRP EP	Z	14 08 02	-1.30			5.9	
FEB 10	H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)			
	01 24 11.8	29.8S 178.6W	9KM	4.6 KERMADEC IS	WEL 13			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	ONE EP	E	01 26 21					
	GNZ EP	Z	01 26 32	-0.66				
	ES	Z	28 53					
	KRP EP	ZNE	01 26 33	-0.28				
	MNG EP	Z	01 27 00					
	ES	Z	29 02					
	WEL EP	Z	01 27 24	-0.54				
	ELR	ZN	30	11 18 7 15				
	MJZ EP	Z	01 28 16					
FEB 10	H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)			
	01 59 26.4	30.0S 178.3W	24KM	4.5 KERMADEC IS	WEL 13			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	KRP EP	Z	02 01 46	-1.30				
	MNG EP	Z	02 02 16					
	ES	Z	04 22					
FEB 10	H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)			
	05 29 13.6	31.1N 141.6E	33KM	5.3 S HONSHU JAPAN	WEL 78			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	KRP EP	Z	05 41 01	-1.72			5.3	
	MNG EP	Z	05 41 10.5					

		MJZ	EP	Z	05 41 25			
		H M S	EPICENTRE	DEPT4	MAG	DIST (DEG)		
FEB 10	14 21 11.2	20.8N 146.3E	46KM	6.2 MARIANA IS	WEL 67			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	KRP EP	ZNE	14 31 46	-0.54			6.6	
	E*PP	Z	32 01					
	GNZ EP	Z	14 31 54.5	-0.44			6.7	
	MNG EP	Z	14 31 59					
	WEL EP	ZNE	14 32 02	-0.19			6.5	
	ES	ZNE	40 50	4 10 11 12			4 16 6.5	
	ESS	Z	45 19	3 13				
	ELQ	NE	49	3 13				
	ELR	NE	53	16 38 16 36				
	MAX	ZNE	59	16 20 13 20			6 20	
	MJZ EP	Z	14 32 08					
	ROX EP	Z	14 32 14	-0.70			6.4	
	ES	NE	41 18	5 11 7 13			6.5	
	E(LQ)	NE	49					
	MAX	NE	52	11 35 13 31				
FEB 10	14 58 04.4	19.4S 173.1E	12KM	5.0 TONGA IS	WEL 22			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	KRP EP	ZNE	15 02 50	-1.56			4.6	
	MNG EP	Z	15 03 11					
	ES	Z	07 24					
	MJZ EP	Z	15 04 04					
FEB 10	15 51 23.6	5.3S 150.6E	154KM	5.1 NEW BRITAIN	WEL 42			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	KRP EP	Z	15 58 43	-1.63			5.0	
	MNG EP	Z	15 58 58					
FEB 10	20 13 35.5	47.2N 150.8E	180KM	5.3 KJRILE IS	WEL 91			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	KRP EP	Z	20 26 05	-1.39			5.5	
	MNG EP	Z	20 26 14					
FEB 11	04 46 23.3	10.8N 143.9E	29KM	5.1 S OF MARIANA IS	WEL 59			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	KRP EP	Z	04 56 08	-1.30			5.9	
	MNG EP	Z	04 56 20					
	MJZ EP	Z	04 56 26					
FEB 12	02 55 15.5	31.0S 177.5W	33KM	4.4 KERMADEC IS	WEL 12			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	GNZ ES	Z	02 59 52					
	KRP E(P)	Z	02 57 39	-1.86				
	ES	E	59 04					
	MNG EP?	Z	02 58 08					
	ES	Z	59 48					
	WEL ES	NE	03 00 03					
FEB 12	11 39 27.1	18.3S 174.8W	203KM	5.6 TONGA IS	WEL 25			
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG	
	GNZ EP	Z	11 43 53.5	-0.49			6.0	
	ES	Z	47 40					
	KRP EP	ZNE	11 44 01	-0.71			5.8	
	ES	NE	47 50					
	MNG EP	Z	11 44 21.5					
	ES	Z	48 25					



		ZNE	11 44 30				-0.79				5,8
WEL	EP	ZNE	11 44 30				-0.79				5,8
	ES	ZNE	48 39								
MJZ	EP	Z	11 45 05								
	ES	Z	50 07								
FEB 12		H M S	12 41 53	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				20.9S 178.7W	586KM	4.4 FIJI	WEL	21			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	ZNE	12 45 29				-1.33				5,1
GNZ	EP	Z	12 45 29,5				-1.28				5,2
MNG	EP	Z	12 45 49								
FEB 12		H M S	20 15 14.5	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				3.8S 152.1E	33KM	5.4 NEW IRELAND	WEL	43			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	Z	20 22 52				-1.39				5,4
GNZ	E(*PP)	Z	20 23 14								
MNG	EP	Z	20 23 07.5								
MJZ	EP	Z	20 23 22								
FEB 12		H M S	23 37 50.2	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				3.8S 152.2E	10KM	5.6 NEW IRELAND	WEL	42			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	ZNE	23 45 31				-1.22				5,5
GNZ	EP	Z	23 45 43				-1.04				5,7
MNG	EP	Z	23 45 47								
WEL	EP	Z	23 45 50				-1.11				5,7
MJZ	EP	Z	23 45 53								
FEB 13		H M S	00 56 00.6	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				16.4S 167.1E	16KM	NEW HEBRIDES	WEL	26			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	Z	01 01 06								
MNG	EP	Z	01 01 26								
FEB 13		H M S	04 57 57.9	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				49.8N 78.1E	0KM	6.2 E KAZAKH SSR	WEL	124			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EPKP	Z	05 16 53								
MJZ	EPKP	Z	05 16 55								
WEL	EPKP	ZN	05 16 57								
GNZ	EPKP	Z	05 16 57,5								
FEB 13		H M S	06 35 59.2	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				6.6S 132.6E	33KM	5.8 TANIMBAR IS	WEL	51			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
MJZ	EP	Z	06 44 51								
	E*PP	Z	45 04								
KRP	EP	ZNE	06 44 52				-1.18				5,8
	E*PP	ZNE	45 06								
WEL	P	ZNE	06 44 53,3				-0.90				6,1
	ELR	Z	07 02					3	22		
GNZ	EP	Z	06 45 06				-1.08				5,9
	E(*PP)	Z	26,5								
MNG	EP	Z	06 44 59								
FEB 13		H M S	10 44 41.3	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				26.1N 103.2E	33KM	5.7 YUNNAN CHINA	WEL	94			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	Z	10 57 54				-1.27				6,3
MJZ	EP	Z	10 57 55								
FEB 13		H M S	21 03 15	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				17.1S 177.3W	365KM	4.3 FIJI	WEL	25			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	Z	21 07 40,5				-1.72				4,5
MNG	EP	Z	21 07 59								

		E	Z	09 53							
FEB 14		H M S	06 12 49	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				50.6S 139.7E	33KM	5.0 S OF AUSTRALIA	WEL	26			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
MNG	EP	Z	06 18 28								
FEB 14		H M S	08 32 12.5	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				22.3S 171.3E	101KM	4.8 LOYALTY IS	WEL	19			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP?	Z	08 35 49				-1.69				4,4
	EP	ZNE	53				-1.15				5,0
GNZ	EP	Z	08 36 07				-0.94				5,2
MNG	EP	Z	08 36 20								
WEL	EP	Z	08 36 32				-0.90				5,3
	EL	ZNE	41					3	21	2	22
MJZ	EP	Z	08 36 55								1
FEB 15		H M S	08 47 47.2	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				7.7N 126.5E	103KM	5.1 PHILIPPINE IS	WEL	66			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	Z	08 58 15				-1.69				5,3
MJZ	EP	Z	08 58 19,5								
MNG	EP	Z	08 58 22								
FEB 15		H M S	09 56 29.8	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				23.0S 176.2W	33KM	4.8 S OF FIJI	WEL	20			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	ZNE	10 00 22				-1.31				4,8
	E(S)	NE	1 03 30								
MNG	EP	Z	10 00 43								
	ES	Z	04 01								
WEL	E(P)	Z	10 01 02				-1.05				5,1
	ES	ZNE	04 20								
	ELQ	NE	05					6	34		
	ELR	Z	06								
	MAX	ZE	07					7	19		
MJZ	EP	Z	10 01 41								9
	E*PP	Z	48,5								20
FEB 15		H M S	17 40 34.7	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				19.9S 168.9E	27KM	7.1 NEW HEBRIDES	WEL	22			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
MNG	EP	Z	17 45 20								
FEB 15		H M S	22 14 45.1	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				26.5S 178.2E	617KM	4.9 S OF FIJI	WEL	15			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	EP	ZNE	22 17 20,5				-0.40				
	ES	NE	19 32								
GNZ	EP	Z	22 17 21				-0.52				
	ES	Z	19 24								
MNG	EP	Z	22 17 42								
	ES	Z	20 07								
WEL	EP	ZNE	22 17 52				-0.05				6,1
	ES	ZNE	20 25								
MJZ	EP	Z	22 18 23								
	ES	Z	21 21								
FEB 15		H M S	22 34 07.2	EPICENTRE	DEPTH	MAG	DIST (DEG)				
				26.4S 178.3E	617KM	5.9 S OF FIJI	WEL	15			
				H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	
KRP	IP	ZNE	22 36 43,2				JNE				-0.02
	ES	ZNE	38 53								
	ESCP	Z	44 11								
GNZ	EP	Z	22 36 45				-0.17				
	ES	Z	38 54								







		E*PP	Z	16 17.5						
MJZ		EP	Z	19 15 34						
		E*PP	Z	16 25						
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
FEB 20 06 11 54.5	17.9S 178.5W	583KM	4.5 FIJI	WEL	24					
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	KRP EP	ZNE	06 15 56.5	-1.26					5.3	
	MNG EP	Z	06 16 17							
	MJZ EP	Z	06 16 55							
FEB 20 10 28 56	15.3S 173.1E	33KM	4.8 FIJI	WEL	26					
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	KRP EP	Z	10 33 55	-1.39					4.9	
	MNG EP	Z	10 34 20							
FEB 20 20 04 02.9	25.9S 178.7W	294KM	4.7 S OF FIJI	WEL	18					
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	KRP EP	ZNE	20 07 33	-0.19						
	ES	NE	09 27							
	GNZ EP	Z	20 06 58	-0.17						
	ES	Z	09 17							
	MNG EP	Z	20 07 24							
	ES	Z	10 08							
	MJZ EP	Z	20 08 15							
	ES	Z	11 33							
FEB 21 00 22 29.5	55.7S 26.9W	33KM	6.1 S SANDWICH IS	WEL	82					
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	MJZ EP	Z	00 34 36							
	WEL EP	Z	00 34 44							
	ELR	Z	01 01							
	MAX	Z	05							
	KRP EP	ZNE	00 35 01	-1.22					6.0	
	MAX	Z	00 35 01							
FEB 21 00 28 26.2	55.7S 26.7W	5KM	5.9 S SANDWICH IS	WEL	82					
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	MJZ EP	Z	00 40 39							
	KRP EP	ZNE	00 41 01	-1.45					5.8	
FEB 21 03 21 02	03 21 02		-1.21							
FEB 21 03 21 17	03 21 17									
FEB 21 03 50 13	03 50 13		-0.55							
FEB 21 03 50 29.5	03 50 29.5									
FEB 21 09 30 28.1	7.0N 124.2E	82KM	5.2 PHILIPPINE IS	WEL	67					
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	MJZ EP	Z	09 31 14							
FEB 21 13 18 46.8	26.3N 125.7E	100KM	5.5 NE OF TAIWAN	WEL	81					
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	KRP EP	Z	13 30 41	-1.58					5.3	
	GNZ EP	Z	13 30 50	-0.96					5.9	
	MNG EP	Z	13 30 50							
	WEL EP	Z	13 30 51	-1.20					5.7	
	MJZ EP	Z	13 30 52							

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
FEB 21 13 52 10.6	24.0S 179.9E	516KM	4.3 S OF FIJI	WEL	18				
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP EP	Z	13 55 12	-1.68					
FEB 21 16 45 16.7	0.1N 123.6E	191KM	5.2 N CELEBES	WEL	62				
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	MJZ EP	Z	16 55 09						
	KRP EP	Z	16 55 12	-1.30					5.5
	MNG EP	Z	16 55 17						
	GNZ EP	Z	16 55 25	-1.06					5.8
FEB 21 17 17 12.4	18.0S 167.7E	28KM	NEW HEBRIDES	WEL	24				
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP EP	Z	17 21 55.5	-1.30					5.0
	MNG EP	Z	17 22 23						
FEB 22 05 02 38.9	5.4S 151.5E	44KM	6.1 NEW BRITAIN	WEL	41				
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP EP	ZNE	05 10 03	-0.45					6.4
	EPCP	Z	12 13						
	ES	ZNE	15 59						
	ESCS	NE	20 13						
	GNZ EP	Z	05 10 18	-0.05					6.7
	ES	Z	16 34						
	MNG EP	Z	05 10 18						
	WEL EP	ZNE	05 10 23	0.04					6.8
	EPP	ZNE	12 19	14 15	7 13	5 13	6.4		
	ES	ZNE	16 28	55 44	89 33	57 33	6.9		
	ESS	ZNE	19 54	100 28	62 29	65 26			
	ELQ	N	21						
	ELR	ZNE	22						
	MAX	ZN	24	162 22	56 21				
	MAX	E	25					61 19	
	MJZ EP	Z	05 10 25.5						
	E(*PP)	Z	12 12						
	E(PP)	Z	16 11						
	ES	Z	16 11						
	ROX EP	Z	05 10 44	-0.46	9 4	6 22	3 22	6.3	
	EPP	ZN	12 31	8 5	5 14			6.5	
	ES	NE	16 45	51 25	42 24	43 21	6.8		
	ESS	ZNE	20 20	26 22	42 24	43 21			
	EL	ZNE	23						
	MAX	ZNE	26	81 21	72 21	70 20			
FEB 22 09 16 24.3	30.0S 179.3W	286KM	4.1 KERMADEC IS	WEL	12				
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	ONE EP	E	09 18 17						
	GNZ EP	Z	09 18 20	-0.56					
	ES	Z	19 56						
	KRP EP	ZNE	09 18 26	-1.73					
	ES	NE	20 16						
	MNG EP	Z	09 18 47						
	ES	Z	20 50						
	WEL ES	Z	09 21 10						
	MJZ ES	Z	09 22 32						
FEB 22 18 18 36.3	5.6S 151.4E	55KM	5.5 NEW BRITAIN	WEL	41				
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP EP	Z	18 25 59	-1.52					5.3
	GNZ EP	Z	18 26 12	-0.96					5.8







MJZ EP		Z	02 02 38						
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE
FEB 28	02 02 13.5	43.8N 139.6E	224KM	5.7	E SEA OF JAPAN				
				-0.94					
KRP EP	Z	02 14 38							
MNG EP	Z	02 14 48							
WEL EP	Z	02 14 50		-0.66					
MJZ EP	Z	02 14 56.5							
FEB 28	17 53 2.2	21.7S 170.5E	108KM	5.3	LOYALTY IS				
MJZ EP	Z	17 57 13							
MNG EP	Z	17 57 39.5							
FEB 28	21 38 52.8	26.0S 70.4W	68KM	5.7	N CHILE				
MNG EP	Z	21 51 47							
KRP EP	ZNE	21 51 54		-0.34					
MAR 01	23 08 40.1	56.9S 26.8W	37KM	5.6	S SANDWICH IS				
MNW EP	Z	23 20 29		-1.39					
MJZ EP	Z	23 20 37							
KRP P	Z	23 21 05		-1.16					
MAR 02	07 24 55.1	2.9S 129.9E	34KM	5.7	CERAM				
MNG EP	Z	07 34 28							
MAR 02	17 32 38.8	5.3S 134.0E	18KM	5.4	AROE IS				
MNG P	Z	17 41 41.2							
MAR 04	03 47 44.4	25.3S 178.9W	370KM	4.5	S OF FIJI				
KRP P	Z	03 50 44		-1.09					
MNG P	Z	03 51 05							
MAR 04	07 53 07.2	17.7S 168.0E	42KM		NEW HEBRIDES				
MNG EP	Z	07 58 19							
MAR 05	15 45 04.9	17.6S 176.2E	31KM	5.4	FIJI				
KRP EP	ZNE	15 49 44		-0.71					
MNG P	Z	15 50 08							
MSZ EP	Z	15 50 57							
MAR 05	22 49 35.9	21.9S 174.9W	46KM	5.4	TONGA				
MNG EP	Z	22 54 07							
ES	Z	57 40							
WEL EP	Z	22 54 23		-1.06					
ELQ	NE	58 40			3 24	3 27	9 21		
MJZ EP	Z	22 54 59							
MNW P	Z	22 55 23		-1.43					

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE
MAR 06	00 09 33.4	9.5N 126.3E	95KM	5.1	PHILIPPINE IS				
MJZ EP	Z	00 20 15							
MAR 06	02 15 57.2	31.5N 80.5E	50KM	6.0	TIBET				
WEL EPP	Z	02 35 14			3 9				
EPS	ZNE	45 05			2 5				
MAR 06	18 01 47.4	24.1S 177.0W	15KM	5.4	S OF FIJI				
KRP P	ZNE	18 05 26		-0.43					
MNG EP	Z	18 05 49							
MJZ EP	Z	18 06 45							
MAR 07	01 16 09.7	39.1N 41.6E	38KM	5.3	TURKEY				
KRP PKP	Z	01 35 41.6							
CNZ PKP	Z	01 35 41.6							
MNG PKP	Z	01 35 42.0							
WEL EPKP	Z	01 35 42							
MAR 07	02 35 27.3	20.6S 178.4W	596KM	5.0	FIJI				
MNG P	Z	02 39 25.0							
ES	Z	42 37							
MAR 07	21 29 17.4	37.3N 114.9W	33KM	6.0	S HOPEH CHINA				
WEL EPP	Z	21 46 37			1 10				
SP	Z	55 15			3 20				
ESS	NE	59 55			5 26	3 22			
LQ	NE	22 09 15			17 53	13 50			
LR	Z	15			47 38				
ROX	NE	21 53			4 5				
EPS	NE	55 36			6 20				
MAR 08	00 18 12.6	19.0S 173.2W	56KM	5.2	TONGA				
GNZ EP	Z	00 22 55		-0.76					
KRP P	ZNE	00 22 56		-0.88					
MNG P	Z	00 23 17.0							
ES	Z	27 40							
WEL EP	Z	00 23 30		-0.90					
MJZ EP	Z	00 24 07							
MAR 08	01 13 42.7	13.8S 166.5E	40KM	6.1	NEW HEBRIDES				
KRP EP	ZNE	01 19 07		-0.58					
SCP	Z	26 23							
GNZ EP	Z	01 19 27		-0.93					
CNZ EP	Z	01 19 27							
MNG EP	Z	01 19 29							
SCP	Z	26 30							
WEL EP	Z	01 19 45		-0.90	4 21				
S	ZNE	24 14			16 32	1 18			
ELQ	E	26 15			12 27				
ELR	Z	29 15			53 18				







MAR	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
					WEL	AE	TE
MAR 13	17 58 34.5	55:5S 126.5W	33KM	5.5 EASTER IS CORD			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	MJZ EP	Z 18 06 13					
	CNZ EP	Z 18 06 19					
	WEL ES	ZNE 18 12 18				1 12	5.7
		L				6 32	2 30
	ROX ES	NE 18 12 30					
	ELQ	NE 15 30				4 30	4 26
	ELR	Z 17 30					
MAR 13	18 40 40.9	20:5S 175.5W	66KM	5.2 TONGA			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	GNZ P	Z 18 44 57.0		-0.76			5.4
	KRP P	ZNE 18 44 55		-1.51			4.6
	CNZ EP	Z 18 45 05					
	MNG EP	Z 18 45 18					
		S					
	WEL P	Z 18 45 29.0		-0.81			5.5
		S					
	MJZ EP	Z 18 46 07					
	MNW EP	Z 18 46 30		-1.08			5.5
MAR 13							
	KRP P	ZNE 22 54 43		-1.06			
	CNZ P	Z 22 55 00					
MAR 14	14 04 22.1	30:9S 179.9W	396KM	KERMADEC IS			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	ONE EP	Z 14 06 06					
	GNZ P	Z 14 06 16		-0.55			
		S					
	KRP P	ZNE 14 06 19.0		-0.63			
		S					
	MNG EP	Z 14 06 39					
		I					
		S					
	WEL P	Z 14 06 50.5					
		S					
	MJZ EP	Z 14 07 34					
MAR 14	19 34 24.3	4:0S 152.9E	19KM	NEW BRITAIN			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	KRP EP	Z 19 41 56		-1.52			5.2
	MNG EP	Z 19 42 12					
	MJZ P	Z 19 42 22					
	MNW EP	Z 19 42 29		-1.39			5.5
MAR 14	21 57 42.5	0:5N 125.5E	37KM	5.4 MOLUCCA PASSAGE			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	MNW EP	Z 22 07 41		-1.39			5.8
	MJZ P	Z 22 07 45.8					
		P					
	MNG EP	Z 22 07 52					
MAR 15	11 14 00.5	24:2N 122.7E	60KM	5.2 TAIWAN			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	KRP EP	Z 11 26 01		-1.71			5.3
	MNG P	Z 11 26 09.3					
	MJZ EP	Z 11 26 09					

MAR	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
					WEL	AE	TE
MAR 15	16 10 25.4	22:1S 179.4W	591KM	4.8 S OF FIJI			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	KRP P	ZNE 16 13 48.8		-1.08			5.3
	GNZ EP	Z 16 13 49		-0.93			5.4
	MNG EP	Z 16 14 08.8					
		S					
	WEL EP	Z 16 14 17		-0.96			5.5
	MJZ EP	Z 16 14 23					
MAR 15	16 32 36	25:1S 179.8E	503KM	4.2 S OF FIJI			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	KRP EP	Z 16 35 20		-1.60			
	GNZ EP	Z 16 35 25		-1.18			
	MNG EP	Z 16 35 45					
	WEL ES	NE 16 38 43					
MAR 15	23 31 48.0	24:2N 122.6E	35KM	5.4 TAIWAN			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	MJZ EP	Z 23 44 01					
MAR 16	10 58 53.9	6:2S 149.1E	57KM	5.0 NEW BRITAIN			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	CNZ EP	Z 11 06 30					
	MNG EP	Z 11 06 37.8					
	MSZ EP	Z 11 06 38					
	MJZ EP	Z 11 06 41					
MAR 16	12 13 01.7	21:2S 174.3W	60KM	5.4 TONGA			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	CNZ EP	Z 12 17 32					
	MNG EP	Z 12 17 40					
		ES					
	WEL EP	Z 12 17 51		-0.90			5.4
		ES					
	MJZ EP	Z 12 18 31					
	MSZ EP	Z 12 18 47					
MAR 16	20 38 23.7	5:6N 122.1E	23KM	5.4 PHILIPPINE IS			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	MSZ EP	Z 20 49 19					
	MJZ EP	Z 20 49 26					
	MNG EP	Z 20 49 31					
MAR 17	03 57 27.1	2:0N 126.4E	76KM	5.4 MOLUCCA PASSAGE			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	MSZ EP	Z 04 07 24					
	KRP EP	Z 04 07 30		-1.56			5.7
	MNG P	Z 04 07 36.0					
MAR 17	08 07 19	8:1S 122.2E	33KM	5.0 FLORES IS			
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ	AN TN	MAG
	MSZ P	Z 08 16 41					
	WEL EP	Z 08 17 02		-1.20			6.0
	MNG P	Z 08 17 05					



MAR 17	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	15	50	33.1	21:15	179.2	W	639KM	6.2 FIJI				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
KRP	IP			ZNE	15 54	03.0	U	0.03				6.2
	*SP			NE		56 39						
	S			NE		57 02						
	SCP			ZNE	16 00	43						
	SCS			ZNE		04 21						
MNG	EP			Z	15 54	22.5						
	S			Z		57 27						
	PCP			Z		58 12.5						
	SCP			Z	16 00	48.8						
	SCS			Z		04 25						
WEL	P			ZNE	15 54	31.7		0.00	1 10			5.9
	*SP			ZNE		57 08			14 16	11 12	10 17	
	S			ZNE		38						
	SCP			Z	16 00	51			8 12			
	SCS			ZNE		04 34					21 11	
	E*SSCS			NE		08 54				18 12	7 11	
MSZ	P			Z	15 55	17.2						
	S			Z		59 04						
	ESCP			Z	16 01	07						
	ESCS			Z		04 58						
ROX	EP			Z	15 55	49		-0.76	4 12	5 14		5.8
	E*SP			ZNE		58 11					5 18	5.1
	S			E		59 04					10 11	
	SCP			Z	16 01	07						
	SCS			NE		04 58						
	E*SSCS			E		09 22						
MAR 18	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	09	19	11.3	20:13	177.8	W	518KM	3.9 FIJI				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
MNG	EP			Z	09 23	15						
MAR 18	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	20	46	20.9	20:6S	169.6	E	89KM	5.0 NEW HEBRIDES				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
MJZ	P			ZNE	20 51	22.0		-0.62				5.5
KRP	P			ZNE	20 50	26.5						
MSZ	P			Z	20 51	29.0						
CNZ	P			Z	20 50	40						5.7
GNZ	P			Z	20 50	41.0		-0.43				
MNG	IP			Z	20 50	53.3	U					
	ES			Z		54 41						5.1
WEL	EP			ZNE	20 50	58		-0.81				
	ES			ZNE		54 49						
ROX	EP			Z	20 51	35						
MNW	EP			Z	20 51	38						
MAR 19	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	13	42	27.4	9:3S	159.1	E	33KM	5.4 SOLOMON IS				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
KRP	EP			Z	13 48	57		-1.63				5.2
CNZ	EP			Z	13 49	10						
MNG	EP			Z	13 49	15						
MJZ	EP			Z	13 49	34						
MSZ	EP			Z	13 49	34						5.6
MNW	EP			Z	13 49	42		-1.26				
MAR 19	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	14	51	52.7	52:7S	19.8	E	33KM	5.2 SW OF AFRICA				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
CNZ	EP			Z	15 04	28						5.7
KRP	EP			ZNE	15 04	45		-1.63				

MAR 19	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	16	29	09.7	24:5S	180.0	E	500KM	4.7 S OF FIJI				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
KRP	EP			ZNE	16 32	12		-1.28				
CNZ	P			Z	16 32	22.2						
MNG	P			Z	16 32	35						
WEL	EP			ZNE	16 32	43		-0.70				5.8
	ES			ZNE		35 38						
MAR 19	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	17	16	41.2	52:8S	19.9	E	33KM	5.4 SW OF AFRICA				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
MNG	EP			Z	17 29	13						
CNZ	P			Z	17 29	17.0						
MNH	P			Z	17 28	36.0		-1.29				5.8
KRP	EP			Z	17 29	21		-1.63				5.7
MSZ	EP			Z	17 28	43						
MAR 20	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	01	42	49.8	0:7N	29.8	E	24KM	6.2 CONGO				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
MNG	EPKP			Z	02 01	59						
GNZ	EPKP			Z	02 02	08						
MAR 20	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	07	47	50.5	16:9S	174.3	W	117KM	5.7 TONGA				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
GNZ	EP			Z	07 52	43.2		-0.30				6.0
CNZ	EP			Z	07 52	53.0						
MNG	EP			Z	07 53	05						
WEL	EP			ZNE	07 53	12		-0.66				5.8
EL				Z	08 00							
MJZ	EP			ZN	07 53	46						
MAR 20	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	09	04	34.7	21:0S	174.6	W	122KM	5.2 TONGA				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
GNZ	EP			Z	09 08	43		-0.93				5.3
CNZ	EP			Z	09 08	56						
MNG	P			Z	09 09	09.8						
	S			Z		12 58						
WEL	EP			ZNE	09 09	22		-0.69	1 16			5.4
	ES			ZNE		13 15					1 14	5.4
	ELQ			NE		14 36				6 18	10 20	
	ELR			Z		15 00				7 18		
MJZ	EP			ZNE	09 09	58						
ROX	EP			Z	09 10	15		-1.13				5.4
MAR 20	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	10	00	44.2	7:0S	105.8	E	58KM	5.0 JAVA				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
CNZ	EP			Z	10 11	51						
MNG	EP			Z	10 11	51						
MJZ	EP			ZNE	10 11	33						
MAR 20	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	17	27	12.9	13:2N	124.9	E	33KM	5.1 PHILIPPINE IS				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
CNZ	P			Z	17 38	25.7						
MNG	EP			Z	17 38	29						
MJZ	EP			NE	17 38	25						
MAR 20	H M S			EPICENTRE			DEPTH DIR	MAG	DIST (DEG)			
	WEL	WEL	WEL	WEL	WEL	WEL			WEL	WEL	WEL	
	18	09	02.8	12:1S	167.4	E	6KM	5.3 SANTA CRUZ IS				
				H M S	H M S	DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG	
CNZ	EP			Z	18 15	03						



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MNG EP	Z	18	15	07			
WEL S	N	18	20	14		1 14	5,3
EL	ZN		24			11 25	8 23
MJZ EP	ZN	18	15	29			
MAR 21	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	06	29	01.5	26.2N 129.1E	30KM	5.5 RYUKYU IS	WEL 79
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
KRP EP	Z	06	40	54		-1.58	5,5
MSZ EP	Z	06	41	03			
MNG EP	Z	06	41	04			
MAR 21	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	07	17	22.0	16.4S 173.1E	68KM	4.4 TONGA	WEL 27
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
KRP EP	ZNE	07	22	27.0		-1.43	4,9
MNG EP	Z	07	22	29.0			
MAR 21	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	07	54	20.0	20.5S 176.2E	250KM	4.4 FIJI	WEL 22
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
KRP P	ZNE	07	58	21.0		-1.37	5,1
MNG EP	Z	07	58	43			
MSZ EP	Z	07	59	45			
MAR 21	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	16	00	21.8	2.6S 140.3E	13KM	5.2 NW OF NEW GUINEA	WEL 49
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
KRP EP	Z	16	08	59		-1.73	5,2
MNG P	Z	16	09	13			
MAR 22	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	00	22	04	17.3S 174.9E	234KM	4.4 TONGA	WEL 26
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
GNZ EP	Z	00	26	35		-0.93	5,5
MAR 22	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	08	19	34.5	37.6N 115.2E	33KM	NE CHINA	WEL 101
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
MSZ EP	Z	08	32	55		-0.80	6,7
GNZ EP	Z	08	32	58			6,4
WEL EP	Z	08	32	59			6,5
EPP	ZNE		36	50			6,9
S	NE		44	13			
ESP	Z		45	37			5 23
LR	ZNE	09	00	00			16 24
ROX SKS	NE	08	44	28			48 50
							8 20
							16 23
MAR 22	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	13	05	06.0	24.2S 180.0E	511KM	4.3 S OF FIJI	WEL 18
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
GNZ EP	Z	13	08	10		-0.87	
ES	Z		10	38			
MAR 22	GNZ	EP	Z	19	23	30	-0.63
ES	Z		24	39			
TUA	ES	Z	19	25	52		
WEL	S	ZNE	19	26	00		
TUA	EP	Z	19	23	39		
MJZ	EP	Z	19	25	13		
ES	Z		27	37			
MSZ	EP	Z	19	25	33		
ES	Z		28	18			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAR 23	00	04	33.2	23.9N 122.9E	36KM	6.6 TAIWAN	WEL 81
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
KRP EP	N	00	16	35			
CNZ EP	Z	00	16	39.0			
WEL EP	Z	00	16	39			1 12
ES	ZNE		26	30			1 10
EL	E		39				2 28
MNG P	Z	00	16	42.0			
GNZ P	Z	00	16	44		-0.71	6,4
MJZ P	Z	00	16	42			
MAR 23	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	08	01	13.3	21.5S 174.0E	33KM	4.8 TONGA	WEL 22
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
KRP EP	N	08	05	32			
MNG EP	Z	08	05	55			
MJZ EP	ZNE	08	06	44			
MAR 23	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	11	20	27	32.9S 178.4E	19KM	S OF KERMADEC IS	WEL 10
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
ECZ EP	Z	11	21	45			
GNZ EP	Z	11	22	00		-0.54	
TUA P	Z	11	22	05.0			
S	Z		23	22			
ONE P	E	11	22	09			
KRP EP	NE	11	22	10			
ES	NE		23	30			
CNZ EP	Z	11	22	20			
ES	Z		23	50			
MNG EP	Z	11	22	33			
ES	Z		24	08			
WEL S	ZNE	11	24	30			
EL	ZNE		26				
MJZ EP	ZNE	11	23	41			
S	ZNE		26	05			
MAR 24	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	04	04	55.5	21.5S 176.3E	191KM	5.3 FIJI	WEL 21
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
GNZ P	Z	04	08	53.0		-0.80	5,5
I	Z		59	00			
ES	Z		11	56			
CNZ E(P)	Z	04	09	01			
MNG P	Z	04	09	14.0			
S	Z		12	47			
WEL EP	ZNE	04	09	25		-0.85	5,6
S	ZNE		13	04			
MJZ EP	ZNE	04	10	02			
MSZ P	Z	04	10	15.7			
MNW EP	Z	04	10	25		-1.21	5,4
MAR 24	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	08	27	51.4	13.7S 166.8E	45KM	5.8 NEW HEBRIDES	WEL 28
				H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
GNZ EP	Z	08	33	28		-1.08	5,4
MNG EP	Z	08	33	37			
MJZ EP	ZNE	08	34	00			
PCP	ZNE		36	59			
S	ZNE		40	44			
MSZ P	Z	08	34	05.0			
ROX P	Z	08	34	12		-0.99	5,8
MNW EP	Z	08	34	14		-1.30	5,5



H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAR 24 13 03 39.4	2.6S 140.4E	8KM	5.0 N OF W NEW GUINEA	WEL 49
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
MNG EP	Z 13 12 24			
MAR 24 16 47 04.2	19.1S 175.9W	280KM	4.5 TONGA	WEL 24
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
MNG EP	Z 16 51 39			
MAR 24 22 08 11.5	15.7S 176.0W	257KM	4.5 TONGA	WEL 27
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
GNZ EP	Z 22 12 20			5.5
MNG EP	Z 22 12 42			
MJZ EP	ZNE 22 13 29			
MSZ EP	Z 22 13 45			
MNW EP	Z 22 13 54			5.1
MAR 25 08 56 45.5	2.0S 139.0W	45KM	5.6 W OF NEW GUINEA	WEL 57
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
MNG EP	Z 09 05 40			
MAR 25 11 17 59.4	8.1S 121.7W	33KM	5.1 FLORES IS	WEL 65
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
MSZ P	Z 11 27 23.5			
MJZ P	ZNE 11 27 32.0			
CNZ EP	Z 11 27 45			
MNG P	Z 11 27 46.8			
GNZ EP	Z 11 27 57			-1.06 6.1
MAR 25 12 54 55.2	51.3S 179.7W	36KM	5.0 ALEUTIAN IS	WEL 11
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
MSZ P	Z 13 08 11			
MJZ EP	Z 13 08 14			
MNG E(P)	Z 13 08 28			
MAR 26 22 13 22.2	5.7S 149.3W	111KM	5.1 NEW BRITAIN	WEL 48
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
GNZ P	Z 22 21 03			5.9
*PP	Z 22 21 03			
MNG P	Z 22 21 03.2			
*PP	Z 22 21 03			
MJZ EP	Z 22 23 24			
MAR 26 22 41 31	18.5S 174.5W	155KM	4.2 TONGA	WEL 25
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
GNZ P	Z 22 46 03			5.6
MNG P	Z 22 46 24			
MJZ EP	Z 22 47 13			
MAR 28 15 46 07.4	17.4N 145.7E	201KM	5.7 MARIANA IS	WEL 64
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
KRP P	ZNE 15 56 05.4			6.4
*PP	ZE 15 56 46			
GNZ P	Z 15 56 15.3			6.4
MNG P	Z 15 56 20.2			
WEL P	ZNE 15 56 21.7 D			6.8
L	ZE 16 15			
MJZ P	NE 15 56 29			4 28

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAR 29 02 08 44.6	32.0S 178.6W	12KM	4.7 KERMADEC IS	WEL 11
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
ECZ EP	Z 02 10 19			
S	Z 11 31			
GNZ P	Z 02 10 32			-0.63
S	Z 11 52			
KRP P	ZNE 02 10 39			-1.56
MNG S	Z 02 12 49			
MAR 29 02 17 39.4	23.7N 142.1E	82KM	6.1 VOLCANO IS	WEL 71
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
KRP P	ZNE 02 28 31.5			6.5
CNZ P	Z 02 28 44.0			
GNZ P	Z 02 28 46			6.4
MNG P	Z 02 28 49.8			
WEL P	ZNE 02 28 51.8			-0.36 6.6
ES	ZNE 37 59			
ROX P	Z 02 29 03			-0.84 6.1
MAR 29 10 42 15.2	20.0S 175.4W	97KM	5.2 TONGA	WEL 23
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
GNZ EP	Z 10 46 35			5.4
KRP EP	ZE 10 46 37.0			-1.17 5.0
CNZ EP	Z 10 46 46			
MNG EP	Z 10 46 58.8			
WEL EP	Z 10 47 11			-0.87 5.4
MAR 29 11 38 22.4	15.2S 166.8E	101KM	4.3 NEW HEBRIDES	WEL 27
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
KRP EP	Z 11 43 33			-1.41 5.0
MNG EP	Z 11 43 53			
MAR 30 01 26 35.7	10.3S 161.6W	50KM	5.0 SOLOMON IS	WEL 37
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
GNZ P	Z 01 32 59			-0.80 6.1
MNG P	Z 01 33 04			
MAR 30 01 34 34	17.6S 179.1W	541KM	3.6 FIJI	WEL 24
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
MNG EP	Z 01 38 54			
MAR 30 11 29 55.7	16.6S 177.2W	393KM	4.2 FIJI	WEL 26
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
CNZ EP	Z 11 34 37			
MAR 30 13 09 21.1	19.5S 175.6W	205KM	4.4 TONGA	WEL 23
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
MNG EP	Z 13 14 01			
ES	Z 17 45			
MAR 30 13 13 45.7	4.7S 153.0E	78KM	4.6 NEW IRELAND	WEL 41
	H M S DIR	LOG <sub>e</sub> A/T	AZ TZ AN TN	AE TE MAG
CNZ EP	Z 13 21 14			
MNG EP	Z 13 21 21.5			
MJZ EP	Z 13 21 32			



H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN AE TE MAG
MAR 30	20 40 44.1	32.5S 178.0W	16KM	4.8 S OF KERMADEC IS			WEL 11
	GNZ EP	Z 20 42 29		-1.09			
	E	Z 43 49					
	ES	Z 43 54					
	TUA P	Z 20 42 33					
	S	Z 43 56					
	ONE EP	E 20 42 40					
	MNG EP	Z 20 43 02					
	ES	Z 44 41					
	WEL S	ZNE 20 45 04					
	LR	Z 46 42					
MAR 30	KRP EP	Z 21 35 19		-1.71			
	MNG EP	Z 21 35 41					
	ES	Z 37 29					
	WEL S	ZNE 21 37 47					
	EL	ZN 39 30					
MAR 30	23 09 38.0	17.3S 167.9E	32KM	NEW HEBRIDES			WEL 25
	KRP EP	Z 23 14 29		-1.71			4.6
	MNG EP	Z 23 14 52					
MAR 31	05 05 54.7	17.3S 167.8E	34KM	5.2 NEW HEBRIDES			WEL 25
	KRP P	ZNE 05 10 45.0		-0.65			5.4
	CNZ EP	Z 05 10 58.0					
	GNZ P	Z 05 10 59		-0.71			5.4
	MNG P	Z 05 11 09.6					
	WEL EP	ZNE 05 11 15		-0.66			5.8
	MNW P	Z 05 11 42.0		-1.48			5.1
MAR 31	14 33 24.8	33.1S 178.4W	33KM	4.9 S OF KERMADEC IS			WEL 10
	GNZ P	Z 14 34 55		-0.77			
	KRP P	Z 14 35 04		-1.31			
	CNZ EP	Z 14 35 14					
	MNG EP	Z 14 35 27					
MAR 31	20 13 35.6	21.7S 179.1W	580KM	4.2 FIJI			WEL 20
	KRP P	ZE 20 17 03.0		-1.28			5.1
	MNG P	Z 20 17 23					
MAR 31	23 38 01.2	36.4N 70.8E	207KM	5.4 HINDU KUSH			WEL 122
	MSZ PKP	Z 23 56 26.0					
	KRP PKP	Z 23 56 30					
	MNG PKP	Z 23 56 31					
APR 01	05 21 08.1	5.8S 149.2E	95KM	5.9 NEW BRITAIN			WEL 42
	KRP P	Z 05 28 35.5		-0.66			6.1
	GNZ P	Z 05 28 20.5 J					
	CNZ EP	Z 05 28 43					
	MNG P	Z 05 28 50.8					
	WEL EP	Z 05 28 52		-1.03			5.6
	MSZ P	Z 05 28 52.5					

H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN AE TE MAG
MJZ P	Z 05 28 54.5						
MNW P	Z 05 28 59			-1.30			5.5
APR 01	15 51 26.0	29.0S 178.8W	283KM	3.9 KERMADEC IS			WEL 13
	KRP EP?	Z 15 53 43					
	E	Z 47					
	TUA S	Z 15 55 41					
	MNG E(P)	Z 15 54 17.5					
	E	Z 21					
	ES	Z 56 23					
	WEL S	E 15 56 40					
	GPZ S	N 15 57 43					
	MJZ E(S)	E 15 58 09					
APR 01	19 17 58.0	21.7S 179.2W	575KM	4.1 FIJI			WEL 20
	KRP P	Z 19 21 25					
	E	Z 35					
	MNG E(P)	Z 19 21 46					
	E	Z 59					
	(S)	Z 25 00					
	MNW E(P)	Z 19 22 59.5					
APR 02	11 01 38.0	3.6S 151.1E	23KM	4.5 NEW IRELAND			WEL 43
	MNG EP	Z 11 09 39					
	E	Z 47					
	WEL EL	Z 11 23					
APR 02	12 31 30.0	21.0S 179.3W	641KM	4.1 FIJI			WEL 21
	MNG E(P)	Z 12 35 15					
APR 02	21 08 23.2	22.3S 176.1W	160KM	4.5 FIJI			WEL 20
	MNG P	Z 21 12 35					
	E(S)	Z 16 05					
	MSZ (P)	Z 21 13 43					
APR 02	22 39 11.0	16.0S 173.4W	33KM	4.4 TONGA			WEL 27
	MNG EP	Z 22 44 34					
APR 02	22 43 21.8	38.6N 142.0E	43KM	5.2 JAPAN			WEL 85
	KRP E(P)	Z 22 55 39					
	E	Z 52					
	MNG EP?	Z 22 55 54					
	E	Z 56 01					
	MJZ E(P)	Z 22 56 04					
	E	Z 11					
	MSZ E	Z 22 56 11					
APR 03	02 32 46.0	20.7S 179.2W	625KM	4.3 FIJI			WEL 21
	KRP P	Z 02 36 15					
	MNG P	Z 02 36 37					
	MSZ EP	Z 02 37 32					



DATE	TIME	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 03	04 37 42				
APR 03	04 43 38.0	36.6N 141.0E	45KM	5.8 JAPAN	WEL 83
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
KRP	P	Z 04 55 49			
MNG	EP	Z 04 56 02			
	E	Z 14			
MSZ	EP	Z 04 56 09			
	E	Z 21			
MJZ	EP	Z 04 56 10			
	E	Z 21			
APR 03	MSZ P?	Z 11 56 33			
	MNG EP?	Z 11 57 11			
APR 03	15 55 20.4	16.3S 177.0W	33KM	4.9 FIJI	WEL 26
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
KRP	EP?	Z 16 00 08			
	E	Z 15			
APR 03	16 42 25.5	10.4S 165.7E	153KM	4.3 SANTA CRUZ IS	WEL 32
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
CNZ	P	Z 16 48 19			
MNG	P	Z 16 48 25.5			
APR 04	05 37 50.5	54.5S 146.1E	33KM	5.4 MACQUARIE IS	WEL 23
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
MNW	E(P)	Z 05 41 38			
	E	Z 45			
MSZ	E(P)	Z 05 41 54			
MJZ	EP	Z 05 42 12			
WEL	P	Z 05 42 54			
	S	NE 47 09			6 6 7 10 6.9
	EL	ZNE 49			
MNG	EP	Z 05 43 00			
APR 04	06 17 44.6	5.5S 151.7E	43KM	5.3 NEW BRITAIN	WEL 41
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
KRP	E	Z 06 25 14			
CNZ	E	Z 06 25 22			
MNG	EP	Z 06 25 28			
APR 04	06 42 12.2	11.8N 92.5E	22KM	5.1 ANDAMAN IS	WEL 92
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
MSZ	E	Z 06 55 08			
MJZ	EP	Z 06 55 11			
KRP	EP	Z 06 55 20			
MNG	E	Z 06 55 31			
APR 04	10 30 27.5	5.3S 151.7E	57KM	5.2 NEW BRITAIN	WEL 41
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
KRP	E(P)	Z 10 37 52			
MNG	P	Z 10 38 07.5			
MSZ	E(P)	Z 10 38 52			
APR 04	19 50 53.0	17.9S 168.2E	32KM	NEW HEBRIDES IS	WEL 24
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
MNG	P	Z 19 56 02.5			

DATE	TIME	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 04	23 32 21.0	10.8S 164.3E	27KM	5.2 SANTA CRUZ IS	WEL 32
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
MNG	P?	Z 23 38 39			
	E	Z 41			
CNZ	E	Z 23 38 45			
MJZ	P	Z 23 39 01.5			
MSZ	P	Z 23 39 04			
APR 05	05 50 02.6	15.8S 167.1E	46KM	4.3 NEW HEBRIDES IS	WEL 26
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
KRP	P	Z 05 55 08			
CNZ	P	Z 05 55 20.5			
MNG	P	Z 05 55 31			
APR 05	11 57 41.1	55.1S 158.4E	33KM	5.4 MACQUARIE IS	WEL 18
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
MNW	P	Z 12 00 15			
ROX	P	Z 12 00 25			
	S	Z 02 39			
	NE	Z 46			
MSZ	P	Z 12 00 30.5			
	I	Z 34			
MJZ	E(S)	Z 02 41			
	EP	Z 12 00 47.5			
	E	ZNE 52			
	E	ZNE 59			
WEL	P	Z 12 01 42.5		-0.98	1 13 5.1
	E(S)	ZE 05 05			
	EL	ZE 06			
MNG	P	Z 12 01 53			
CNZ	EP	Z 12 02 07			
KRP	P	Z 12 02 21			
GNZ	EP	Z 12 02 26			
APR 05	18 59 55.1	6.0S 147.6E	69KM	5.1 NEW GUINEA	WEL 43
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
KRP	EP	Z 19 07 29			
CNZ	E(P)	Z 19 07 40			
MNG	EP	Z 19 07 45.5			
MSZ	P	Z 19 07 46			
	E	Z 48.5			
MJZ	P	ZNE 19 07 48.5			
	(PCP)	Z 09 39			
MNW	P?	Z 19 07 52			
APR 06	02 59 02.4	45.8S 92.6E	33KM	5.7 INDIAN RISE	WEL 57
		H M S	DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN AE TE MAG
MSZ	P?	Z 03 07 49			
	E	Z 54			
ROX	S	NE 03 15 04			9 8 6.7
	ELQ	NE 20			
	ELR	ZNE 23			6 20 11 20
MJZ	P	ZNE 03 08 03			
WEL	E	Z 03 08 35			
	ES	E 16 11			
	E(SSS)	ZNE 22 16			
	ELR	ZE 25 30			
	MAX	ZE 27			
MNG	EP	Z 03 08 35			10 20 6 20
CNZ	EP	Z 03 08 44			



		KRP E(P)		Z 03 08 52							
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
APR 06	05	03	22.4S 171.4E	81KM	4.7 LOYALTY IS	WEL	19				
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			KRP EP	Z	05 06 48						
			CNZ P?	Z	05 07 02.5						
			MNG P	Z	05 07 16	D					
			MJZ E	Z	05 08 09						
			MSZ P	Z	05 08 03						
			I(*PP)	Z	17.9 D						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 06	05	47	08.2	59.5S	26.3W	33KM	5.2 SANDWICH IS	WEL	78		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			MNG EP	Z	05 59 08						
			CNZ P	Z	05 59 15.5						
			KRP P	Z	05 59 21						
			MSZ EP	Z	05 59 50						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 06	17	02	40.0	4.1S	152.0E	199KM	4.7 NEW BRITAIN	WEL	42		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			MNG P	Z	17 10 12.2	D					
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 06	18	02	36.0	38.6S	74.6W	21KM	4.7 CHILE	WEL	78		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			MNG EP	Z	18 18 35						
			KRP EP	Z	18 18 45						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 06	19	45	48.3	22.3S	171.5E	121KM	5.1 LOYALTY IS	WEL	19		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			ONE E	E	19 49 05						
			ES	E	51 36						
			KRP EP	Z	19 49 27						
			E	Z	35						
			ECZ E	Z	19 49 41						
			E	Z	46						
			GNZ P	Z	19 49 43	-0.98					
			CNZ EP	Z	19 49 44						
			E	Z	50 00						
			MNG EP	Z	19 49 57	D					
			MJZ EP	Z	19 50 31						
			E	ZNE	53						
			MSZ E	Z	19 51 02						
			MNW E	Z	19 51 22						
APR 06			MNG (P)	Z	19 51 40						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 06	19	52	29.1	21.5S	170.2E	61KM	5.4 LOYALTY IS	WEL	20		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			KRP EP?	Z	19 56 22						
			E	Z	35						
			MNG EP	Z	19 56 55						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 06	19	45	59.0	30.6S	130.9E	66KM	4.9 JAPAN	WEL	37		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			KRP P	Z	19 58 07						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 06	20	55	57.0	5.1S	133.7E	33KM	4.9 AROE IS	WEL	51		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			MNG P	Z	21 05 02						

		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 06	21	53	08.4	9.0N	126.4E	50KM	5.4 PHILIPPINE IS	WEL	67		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			MSZ EP	Z	22 03 46						
			KRP EP	Z	22 03 48.5						
			MJZ P	Z	22 03 52.5						
			CNZ E	Z	22 04 01						
			MNG E	Z	22 04 04						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 07	00	14	56.0	1.8S	134.2E	36KM	5.0 NEW GUINEA	WEL	54		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			KRP EP	Z	00 24 07						
			MNG E(P)	Z	00 24 22						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 07	05	02	57.4	15.6S	174.4W	38KM	4.9 TONGA IS	WEL	27		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			GNZ EP	Z	05 08 09	-0.79					
			KRP P	Z	05 08 11						
			CNZ EP	Z	05 08 20						
			MNG EP	Z	05 08 31						
			E	Z	34						
			WEL E	Z	05 08 55						
			E(LO)	E	15						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 07	09	42	32.2	26.2N	127.4E	45KM	5.8 RYUKYU IS	WEL	80		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			KRP P	Z	09 54 29.0	J					
			E	Z	41.5						
			CNZ EP	Z	09 54 32.5						
			E	Z	46						
			GNZ EP	Z	09 54 37	-1.26					
			MNG E(P)	Z	09 54 36						
			MSZ EP	Z	09 54 36						
			WEL EP	Z	09 54 39	-0.78					
			MJZ P	Z	09 54 39						
			MNW P	Z	09 54 39	-1.29					
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 07	11	51	26.0	20.5S	177.7W	478KM	3.8 FIJI	WEL	22		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			KRP P	Z	11 55 11						
			MNG EP?	Z	11 55 31						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 07	14	36	32.0	24.1S	175.2W	56KM	5.2 TONGA	WEL	19		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			KRP E(P)	Z	14 40 19						
			CNZ E(P)	Z	14 40 24						
			MNG P?	Z	14 40 32						
			E	Z	33.5						
			S	Z	43 49						
			E	Z	58						
			WEL S	ZNE	14 44 06						
			COB ES	Z	14 44 24						
			GPZ S	Z	14 45 12						
			MJZ E(S)	ZNE	14 45 36						
			MSZ P?	Z	14 41 52						
			E	Z	55						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 07	23	53	51.1	2.0S	100.2E	33KM	4.9 SUMATRA	WEL	77		
			H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE MAG
			CNZ E(P)	Z	00 05 45						



		E	Z	06 02.5						
		E	Z	22						
		MNG E(P)	Z	00 05 45						
		E	Z	06 01						
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 08	01 46 45.5	51.3N 157.8E	49KM	6.0	KAMCHATKA					93
KRP	P	Z	01 59 41							
	(*PP)	Z	01 59 55							
CNZ	P	Z	01 59 45							
	(*PP)	Z	02 00 00							
MNG	P	Z	01 59 50							
	(*PP)	Z	02 00 05							
MJZ	E	Z	02 00 24							
WEL	ESKS	Z	02 10 22							
	ESP	Z	12 12							
	ESS	Z	17							
	ELR	Z	29							
	MAX	Z	36							18 21
ROX	ESS	N	02 18 30							
	ELR	NE	32							
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 08	02 41 34.3	9.1S 158.3E	73KM	4.9	SOLOMON IS					35
MNG	P	Z	02 48 21							
MSZ	E	Z	02 48 47							
APR 08										
GNZ	P	Z	03 27 20							
KRP	P	Z	03 27 28							
CNZ	P	Z	03 27 47							
MNG	EP	Z	03 27 53							
	ES	Z	29 22							
MJZ	P?	ZNE	03 28 32.5							
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 08	05 24 45.2	51.3N 157.9E	49KM	5.3	KAMCHATKA					93
KRP	P	Z	05 37 41							
	*PP	Z	55							
MNG	EP	Z	05 37 52							
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 08	07 15 54.5	20.3S 174.1W	121KM	3.9	TONGA					23
KRP	P	Z	07 20 15							
CNZ	EP	Z	07 20 23							
MNG	EP	Z	07 20 33							
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 08	10 32 05.0	8.1S 156.3E	19KM	5.1	SOLOMON IS					37
KRP	EP	Z	10 38 52.5							
	E	Z	39 00							
CNZ	EP	Z	10 39 02							
	E	Z	09							
MNG	P	Z	10 39 10							
MSZ	EP	Z	10 39 14							
	E	Z	30							
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 08	11 10 21.2	14.9S 175.5W	33KM	5.2	SAMOA					23
KRP	EP	Z	11 15 35							5.1
GNZ	EP	Z	11 15 37							
ROX	EL	NE	11 25							

		H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
		H M S	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 08		14 07 51.9	26.6S 114.4W	33KM	5.3	EASTER IS						59
KRP	EP	Z	14 17 49									
MSZ	E(P)	Z	14 18 23									
WEL	S	ZE	14 26 05			2 22				3 24	5.7	
	LR	ZE	35									
	MAX	ZE	36			5 22				3 22		
ROX	ES	E	14 27 00									
	EL	E	37									
APR 08	MNG	EP	Z	18 26 43								
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)								
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG		
APR 08	20 03 43.7	27.8S 176.7W	87KM	4.9	KERMADEC IS					15		
ECZ	P	Z	20 06 09									
	S	Z	08 14									
GNZ	P	Z	20 06 25									
	ES	Z	08 35									
KRP	E(P)	Z	20 06 27									
	S	N	08 47									
CNZ	P	Z	20 06 42.5									
	E	Z	08 50									
	E(S)	Z	09 03.5									
	E	Z	13									
MNG	P	Z	20 06 49.5									
	E	Z	55									
	E	Z	07 10									
	ES	Z	09 31									
MJZ	P?	Z	20 07 57.5									
	E	Z	08 01									
	S	ZNE	11 22									
MNW	EP	Z	20 08 33									
	E(S)	Z	12 34									
TUA	ES	Z	20 08 43									
WEL	S	N	20 09 52									
	EL	Z	12									
KA1	ES	X	20 10 55									
GPZ	S	N	20 10 55									
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)								
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG		
APR 09	02 42 11.1	9.5N 84.1W	49KM	5.7	COSTA RICA					105		
WEL	ESS	Z	03 17									
	EL	Z	31									
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)								
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG		
APR 09	14 23 54.0	23.8S 179.9W	493KM	3.9	FIJI					18		
MNG	P	Z	14 27 25									
	S	Z	30 17									
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)								
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG		
APR 09	14 31 57.0	32.8N 137.7E	355KM	4.5	JAPAN					81		
MSZ	P	Z	14 43 39									
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)								
	H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG		
APR 09	14 49 23.1	14.1S 166.7E	49KM	5.2	NEW HEBRIDES					28		
KRP	EP	Z	14 54 45									
CNZ	EP?	Z	14 54 48									
	E	Z	55									
MNG	EP	Z	14 55 05									
MJZ	EP	Z	14 55 29									







		MAX		Z		15		6 20			
MJZ	(PCP)	Z	03	47	23						
	E	Z			26						
	E	Z			32						
MSZ	(PCP)	Z	03	47	27						
	E	Z			31						
	E	Z			35						
ROX	MAX	NE	04	14				3 20	8 20		
KRP	P?	Z	03	47	29						
	(PCP)	Z			33						
	E	Z			37						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 13	04 27 54.9	23.6S	179.8W	549KM	5.1	FIJI				18	
		H M S		DIR		AZ TZ		AN TN		AE TE MAG	
KRP	IP	Z	04	30	53.1	J					
	S	ZNE			33	44.5					
GNZ	EP	Z	04	31	04		-0.24			6.2	
CNZ	P	Z	04	31	13						
	I	Z			15						
MNG	P	Z	04	31	24.5	D					
	E	Z			27.5						
	E	Z			34	14					
	ES	Z			19						
	(SCP)	Z			38	21					
	E(SCS)	Z			42	03					
WEL	P	Z	04	31	33.5		0.17			6.6	
	E	ZE			34	33					
	(S)	ZNE			35.5						
MJZ	P	Z	04	32	05.5						
	E	N			23						
	ES	NE			35	32					
	(SCP)	ZNE			38	31					
MSZ	P	Z	04	32	21.8						
	I	Z			24						
ROX	P	Z	04	32	24						
MNW	P	Z	04	32	31		-0.56			5.9	
APR 13	MSZ	P	Z	09	50	47					
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 13	15 24 59.0	7.1S	127.9E	15KM	4.8	BANDA SEA				54	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
MSZ	P	Z	15	34	03						
MJZ	P	Z	15	34	11						
APR 13	CNZ	P?	Z	23	18	18.5					
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 14	02 10 32.8	13.1N	144.9E	50KM	4.9	MARIANA IS				61	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
MNG	EP	Z	02	20	37						
	E	Z			42						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 14	08 08 01.0	5.2S	141.5E	15KM		NEW GUINEA				47	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
CNZ	E(P)	Z	08	16	29						
MJZ	EP	Z	08	16	30						
MNG	EP	Z	08	16	33						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 14	09 46 57.0	13.5N	144.5E	86KM	4.3	MARIANA IS				61	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
CNZ	P	Z	09	56	49						
MNG	P	Z	09	56	55						

		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 14	16 33 29.4	4.8N	96.2E	35KM	4.8	SUMATRA				85	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
MSZ	P	Z	16	45	40						
	E	Z			46	19					
MJZ	P	Z	16	45	49						
KRP	EP	Z	16	46	02						
CNZ	EP	Z	16	46	02						
MNG	P	Z	16	46	04						
	E	Z			06						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 14											
KRP	E(P)	Z	17	20	30						
CNZ	E(P)	Z	17	20	42						
MNG	P	Z	17	20	56						
	E(S)	Z			22	33					
MSZ	E(P)	Z	17	22	29						
	E(S)	Z			25	15					
WEL	(S)	ZNE	17	22	51						
	E	Z			55						
	EL	Z			24						
GPZ	ES	N	17	23	58						
MJZ	ES	ZNE	17	24	28						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 14	19 16 00.8	3.8S	151.4E	33KM	4.8	NEW IRELAND				43	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
KRP	EP	Z	19	23	39						
CNZ	P	Z	19	23	48						
GNZ	EP	Z	19	23	52		-1.46			5.3	
MNG	P	Z	19	23	54						
MJZ	P	Z	19	24	01						
MSZ	EP	Z	19	24	04						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 15	00 24 57.6	18.7N	120.7E	66KM	4.3	PHILIPPINE IS				78	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
MNG	P?	Z	00	36	41						
	E	Z			49						
MSZ	P	Z	00	36	43						
CNZ	EP	Z	00	36	47						
MJZ	(P)	Z	00	36	47						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 15	02 48 03.2	5.3N	126.6E	60KM		PHILIPPINE IS				64	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
MSZ	P	Z	02	58	20						
MJZ	EP	Z	02	58	25						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 15	03 39 14.4	0.1S	124.1E	161KM	4.6	MOLUCCA SEA				61	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
MSZ	P	Z	03	48	58						
MNW	EP	Z	03	49	00		-1.86			5.1	
KRP	EP	Z	03	49	02						
MJZ	P	Z	03	49	05.5						
	E*PP	Z			32						
MNG	P	Z	03	49	14.5						
	*PP	Z			33						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 15											
MNG	P	Z	04	40	25						
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 15	06 34 31.1	21.7S	174.4W	51KM	4.3	TONGA				22	
		H M S		DIR		LOG <sub>10</sub> A/T		AZ TZ		AN TN AE TE MAG	
CNZ	EP	Z	06	39	01						
MNG	P	Z	06	39	09						







APR 18	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)				
	10 34 06.0			20.1S 178.3E					559KM	4.4 FIJI	WEL 22		
									LOG <sub>a</sub> A/T	AZ TZ	AN TN	AE TE	MAG
KRP	P	Z	10 37 51										
GNZ	EP	Z	10 37 52					-1.40					5.1
CNZ	P	Z	10 38 01										
	?	Z	10 38 23										
MNG	EP	Z	10 38 11										
MNW	P	Z	10 39 13					-1.66					4.8
APR 18	11 55 46.3			13.9N 144.5E			119KM	4.5 MARIANA IS	WEL 62				
KRP	P	Z	12 05 35										
CNZ	P	Z	12 05 44										
MNG	P	Z	12 05 49.5										
MJZ	E(P)	Z	12 05 55										
MSZ	E(P)	Z	12 05 55										
APR 18	MNG	EP	Z 20 59 16										
	I	Z	21 01 13										
	E	Z	21 01 15										
	ES	Z	21 00 24										
TUA	ES	Z	21 00 44										
CNZ	ES	Z	21 01 02										
WEL	ES	ZNE	21 01 43										
APR 19	01 03 46.0			16.2S 167.1E			57KM	NEW HEBRIDES	WEL 26				
KRP	P	Z	01 08 49										
MNG	EP	Z	01 09 12										
MJZ	P	Z	01 09 57										
APR 19	07 18 34.1			28.0S 178.1W			215KM	4.1 KERMADEC IS	WEL 14				
MNG	P	Z	07 21 30.5										
	E	Z	07 21 37										
	E	Z	07 23 49										
	ES	Z	07 23 55										
ECZ	E	Z	07 22 39										
	S	Z	07 22 43.5										
GNZ	E	Z	07 22 57										
	E(S)	Z	07 23 02										
KRP	ES	N	07 23 13										
WEL	ES	ZNE	07 24 15										
MJZ	S	ZN	07 25 37										
MSZ	S	Z	07 26 19										
APR 19	09 48 08.0			19.7S 175.9E			149KM	TONGA	WEL 23				
KRP	P	Z	09 52 25										
GNZ	P	Z	09 52 25					-1.49					4.8
MNG	P	Z	09 52 49										
WEL	P	Z	09 52 55					-0.57					5.9
APR 19	19 28 27.5			7.9S 130.0E			12KM	4.9 TANIMBAR IS	WEL 52				
MSZ	P	Z	19 37 20										
MJZ	P	Z	19 37 25										
	E	Z	19 37 35										
MNG	P	Z	19 37 37										
	E	Z	19 37 44										

APR 19	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)				
	22 18 20.0			20.3S 179.5E					591KM	4.4 FIJI	WEL 21		
									LOG <sub>a</sub> A/T	AZ TZ	AN TN	AE TE	MAG
KRP	EP	Z	22 21 51										
CNZ	E(P)	Z	22 22 07										
MNG	P	Z	22 22 12.5										
	E	Z	22 22 21										
	E(S)	Z	22 25 29										
APR 20	02 32 51.8			18.8N 146.9E			23KM	5.0 MARIANA IS	WEL 65				
KRP	EP	Z	02 43 15										
MNG	EP	Z	02 43 29										
	E	Z	02 43 35										
MJZ	E	Z	02 43 44										
APR 20	MNG	P	Z 05 14 01.5										
	E	Z	05 17 19										
	(S)	Z	05 17 29										
CNZ	E	Z	05 17 29										
APR 20	05 33 52.7			19.0N 146.8E			34KM	4.8 MARIANA IS	WEL 65				
CNZ	EP	Z	05 44 27										
MNG	EP	Z	05 44 29										
	E	Z	05 44 57										
APR 20	06 00 37.2			18.9N 146.8E			16KM	5.1 MARIANA IS	WEL 65				
KRP	P?	Z	06 11 01										
	E	Z	06 11 04										
CNZ	P	Z	06 11 09										
	E	Z	06 11 13										
MNG	P	Z	06 11 15										
	E	Z	06 11 20										
MJZ	E	Z	06 11 23										
APR 20	06 42 59.0			18.8N 146.9E			41KM	5.0 MARIANA IS	WEL 65				
KRP	EP	Z	06 53 20										
CNZ	P	Z	06 53 29										
MNG	EP	Z	06 53 34										
APR 20	14 01 29.5			18.8N 146.8E			56KM	5.0 MARIANA IS	WEL 65				
MNG	EP	Z	14 12 05										
KRP	E	Z	14 12 11										
APR 20	16 26 20.8			18.8N 147.0E			50KM	5.3 MARIANA IS	WEL 65				
KRP	P	Z	16 36 40										
CNZ	P	Z	16 36 43.4 D										
GNZ	P	Z	16 36 50										5.7
CNZ	E	Z	16 36 53										
MNG	P	Z	16 36 54.2 U										
WEL	EP	Z	16 36 55										-0.98
	S	N	16 36 55										
	S	N	16 37 02								1 14		5.8
MJZ	P	Z	16 37 02										
MNW	EP	Z	16 37 09										-1.90



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 20	16	42	06.0	41.7N 48.2E	36KM	5.4 EASTERN CAUCASUS	WEL 141
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	PKP	Z	17 01 25				
	PKP	Z	36				
	E	Z	47				
MNG	EPKP	Z	17 01 25.5				
	PKP	Z	35				
	E	Z	49				
CNZ	E	Z	17 02 19				
APR 21	03	57	57.9	49.8N 78.1E	0KM	5.4 EASTERN KAZAKH SSR	WEL 124
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MSZ	PKP?	Z	04 16 54				
MNG	PKP?	Z	04 16 55.5				
APR 21	08	47	47.2	18.8S 169.4E	245KM	4.4 NEW HEBRIDES	WEL 23
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	P	Z	08 51 59.5				
GNZ	P	Z	08 52 12			-1.23	5.2
CNZ	P	Z	08 52 12				
MNG	P	Z	08 52 23				
WEL	EP	Z	08 52 27			-0.72	5.3
MJZ	P	Z	08 52 49				
MSZ	P	Z	08 52 55				
APR 21	09	16	57.9	21.7N 142.8E	325KM	4.5 MARIANA IS	WEL 69
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	P	Z	09 27 15				
MNG	P	Z	09 27 23				
APR 21	09	31	19.5	5.6N 95.4E	99KM	4.6 SUMATRA	WEL 86
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MSZ	EP	Z	09 43 33				
	E=PP	Z	50.5				
MNG	E(P)	Z	09 43 55				
APR 21	15	43	18.0	13.5N 142.1E	52KM	4.9 MARIANA IS	WEL 62
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MSZ	P	Z	15 53 33				
APR 21	15	45	23.0	35.7N 142.0E	29KM	5.2 JAPAN	WEL 82
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	EP	Z	15 57 34				
	E	Z	33				
CNZ	P	Z	15 57 44				
MNG	EP	Z	15 57 49				
MJZ	EP	Z	15 57 56				
APR 21	16	05	54.0	20.8S 174.1W	33KM	4.5 TONGA	WEL 23
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	EP	Z	16 10 19				
MNG	E(P)	Z	16 10 44				
MJZ	EP?	Z	16 11 33				
	E	Z	37				

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 21	16	12	45.0	20.4S 178.0W	511KM	4.5 FIJI	WEL 22
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	P	Z	16 16 29				
GNZ	P	Z	16 16 30			-1.40	5.1
CNZ	P?	Z	16 16 35				
	E	Z	41				
MNG	EP	Z	16 16 50				
	ES	Z	20 14				
	PCP	Z	35				
MSZ	E(P)	Z	16 17 49				
APR 21	17	36	47.9	35.6N 142.0E	23KM	5.0 JAPAN	WEL 82
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MNG	EP	Z	17 49 05				
MSZ	EP	Z	17 49 21				
APR 21	22	45	17.9	4.5S 152.0E	119KM	4.7 NEW BRITAIN	WEL 42
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	P	Z	22 52 38				
MNG	P	Z	22 52 54.8 J				
MSZ	P	Z	22 53 03				
	E	Z	31				
	E	Z	43				
APR 22	03	06	32.3	37.8S 73.4W	15KM	5.5 CHILE	WEL 80
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
WEL	P?	Z	03 18 33				
	E	Z	40				
	E(PCP)	Z	46				
	ES	ZE	28 44				
	ESS	ZE	34				
	ELR	ZE	43				
	MAX	Z	47				
MNG	EP	Z	03 18 40				
	E	Z	45				
MJZ	E(P)	Z	03 18 43				
	E	Z	49				
CNZ	EP?	Z	03 18 45				
	E	Z	51				
	E	Z	55				
MNW	E(P)	Z	03 18 49.5			-1.77	5.4
KRP	P	Z	03 18 50				
	E	Z	57				
MSZ	E(P)	Z	03 18 50				
ROX	ES	E	03 28 42				
	MAX	E	37				
							5 18
APR 22	08	07	14.3	23.0S 176.3W	94KM	4.4 FIJI	WEL 20
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	E(P)	Z	08 11 07				
MNG	EP	Z	08 11 24				
	(S)	Z	14 42				
	E	Z	49				
MJZ	P	Z	08 12 17				
APR 22	KRP	P	Z	11 21 20.5			
APR 22	12	17	36.3	60.6S 25.4W	33KM	5.6 SANDWICH IS	WEL 77
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MNW	P	Z	12 29 07			-1.86	5.2











		Z	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
		Z	H	M	S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
MSZ	EP	Z	21	37	31									
	E(S)	Z		41	00									4.8
MNW	P	Z	21	37	41			-1.66						
APR 27	H M S		22	47	14.0	29.6S 178.1W	33KM	4.4	KERMADEC IS					
						H M S	DIR		LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE TE MAG
	MNG	P	Z	22	30	09								
		ES	Z		52	13								
APR 27	MNG	P	Z	23	04	39								
		E	Z			49								
APR 28	H M S		00	17	50.8	21.8S 179.2W	595KM	4.7	FIJI					
						H M S	DIR		LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE TE MAG
	KRP	P	Z	00	21	15								
		E(S)	E		24	06								
	GNZ	E(P)	Z	00	21	17								
		S	Z		24	04								
	MNG	P	Z	00	21	36.5								
		ES	Z		24	39								
		(SCP)	Z		28	12								
	WEL	(P)	Z	00	21	44								
	MJZ	EP	Z	00	22	13								
	MSZ	P	Z	00	22	33								
		ES	Z		26	14								
	MNW	P	Z	00	22	40			-1.64					4.9
APR 28	H M S		01	15	36.0	49.0S 164.2E	14KM	5.6	AUCKLAND IS					
						H M S	DIR		LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE TE MAG
	MNW	P	Z	01	16	37.9	D		0.34					
		ES	Z		17	29								
	ROX	EP	Z	01	16	50.5	D		-0.25					
		E	Z		58									
		S	ZNE		17	49								
		E	ZN		57									
		L	NE		18	10								
	MSZ	EP	Z	01	16	52.5	D							
		S	Z		17	54								
	MJZ	P	ZNE	01	17	11								
		I	ZN		25									
		ES	ZN		18	23								
		E	N		33									
	GPZ	EP	N	01	17	30								
		S	N		18	57								
	KAI	P	X	01	17	37								
		S	X		19	09								
	COB	P	E	01	17	58								
		ES	E		19	43								
	WEL	(P)	Z	01	18	12			-0.48					
		ES	NE		20	04								
		EL	Z		22									
	MNG	P	Z	01	18	19								
		E	Z		22									
		ES	Z		20	24								
	TNZ	EP	Z	01	18	30								
	KRP	P	Z	01	18	49								
		E(S)	NE		21	22								
	TUA	P	Z	01	18	54								
	GNZ	P	Z	01	19	01			-1.17					
APR 28	TUA	E	Z	12	48	47								
		ES	Z		50	26								
	KRP	EP	Z	12	48	59								
	MNG	EP	Z	12	49	09								

		Z	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
		Z	H	M	S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG
	E	Z												
	ES	Z												
	GNZ	(S)	Z	12	50	12								
		E	Z			13								
	HJZ	E(P)	Z	12	50	19								
		E(S)	NE		53	06								
	MSZ	P	Z	12	50	36								
	WEL	ES	ZE	12	51	38								
	GPZ	ES	N	12	52	40								
APR 28	MSZ	P	Z	14	42	12								
APR 28	H M S		16	56	21.3	19.4S 173.4W	36KM	5.1	TONGA IS					
						H M S	DIR		LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE TE MAG
	GNZ	EP	Z	17	01	01								
	KRP	P	Z	17	01	03								
	MNG	P	Z	17	01	25								
		E(S)	Z		05	39								
	WEL	E	Z	17	01	36								
		ES	E		05	47								3 20 5.3
		L	ZE		08									
	MJZ	EP	Z	17	02	17								
	MSZ	EP	Z	17	02	33								
	MNW	EP	Z	17	02	42								
									-1.90					4.9
APR 28	H M S		17	13	34.5	19.2S 173.6W	56KM	5.1	TONGA IS					
						H M S	DIR		LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE TE MAG
	GNZ	EP	Z	17	18	12								
		(S)	Z		22	01			-1.26					5.0
	KRP	EP	Z	17	18	13								
	MNG	P	Z	17	18	35								
		ES	Z		22	48								
	MJZ	EP	Z	17	19	27								
	MSZ	EP	Z	17	19	42								
	MNW	EP	Z	17	19	52								
									-1.39					5.4
APR 28	H M S		21	29	47.0	18.9S 169.5E	240KM	4.3	NEW HEBRIDES					
						H M S	DIR		LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE TE MAG
	MNG	P	Z	21	34	24								
APR 29	KRP	EP	Z	17	56	14								
		E	Z		13									
	GNZ	P	Z	17	56	18								
	TUA	E(P)	Z	17	56	18								
	TNZ	E(P)	Z	17	56	32								
	MNG	EP	Z	17	56	36								
		ES	Z		59	29								
	MJZ	EP	Z	17	57	20								
	MNW	EP	Z	17	57	42								
									-1.94					
APR 30	GNZ	P	Z	02	33	16								
		E	Z		33									
		(S)	Z		34	33								
		E	Z		40									
	KRP	P	Z	02	33	26								
	TNZ	P	Z	02	33	44								
	MNG	P	Z	02	33	47.5								
		E	Z		50									
		S	Z		35	35								
	ECZ	ES	Z	02	34	13								
	WEL	S	NE	02	35	54								
	GPZ	ES	N	02	36	58								



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 30	04	53	31.0	16,2S 167.0E	37KM	NEW HEBRIDES	WEL 26
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	E(P)	Z	04 58 46			
APR 30	06	24	53.2	15,9S 167.0E	43KM	4.4 NEW HEBRIDES	WEL 26
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	P	Z	06 30 01			
	MNG	EP	Z	06 30 28,5			
	WEL	EP	Z	06 30 32			
APR 30	MJZ	P	ZNE	09 36 02,5			
APR 30	19	23	10.0	22,3S 179.6W	527KM	3.8 FIJI	WEL 29
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	19 26 33			
	MNG	P	Z	19 26 54			
		ES	Z	29 53			
MAY 01	12	57	12.2	3,6S 143.0E	21KM	NEW GUINEA	WEL 47
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	P	Z	13 05 31			
	MNG	P	Z	13 05 43,5			
MAY 01	13	14	47.4	3,5S 143.0E	33KM	4.6 NEW GUINEA	WEL 47
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	13 23 08			
	MNG	EP	Z	13 23 17			
MAY 01	18	30	41.8	30,6N 140.6E	114KM	5.0 SOUTH OF JAPAN	WEL 78
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	18 42 16			
	MSZ	P	Z	18 42 34,8			
MAY 02	09	52	48.5	6,0S 149.7E	52KM	5.2 NEW BRITAIN	WEL 42
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	10 00 14			
	MNG	EP	Z	10 00 32			
	MJZ	EP	Z	10 00 33			
MAY 02	10	53	28.4	18,0S 178.3W	537KM	4.9 FIJI	WEL 24
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	P	ZNE	10 57 31,2			
	MNG	P	Z	10 57 50			
	MJZ	EP	Z	10 58 32			
	MNW	EP	Z	10 58 55,0			
MAY 02	16	39	44.4	8,6S 114.9E	103KM	5.8 BALI IS	WEL 62
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	MJZ	EP	Z	16 49 39			
	KRP	EP	Z	16 49 54,0			
		*PP	Z	50 34			
	MNG	P	Z	16 49 56,8			
MAY 03	18	43	29	10,9N 141.8E	30KM	5.6 CAROLINE IS	WEL 60
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	CNZ	P	Z	18 53 31,8			

	MNG	P	Z	18 53 37,0			
	MSZ	P	Z	18 53 39,5			
MAY 04	07	46	41.2	15,4S 174.9W	240KM	4.6 TONGA IS	WEL 27
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	P	ZNE	07 51 33,5			
	CNZ	EP	Z	07 51 52			
	MSZ	P	Z	07 52 50			
	MNG	P	Z	07 52 54			
	MNW	P	Z	07 52 59			
MAY 04	16	53	17.6	62,6S 155.1E	33KM	BALLENY IS	WEL 24
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	MNW	P	Z	16 57 23			
	MJZ	EP	ZNE	16 57 52			
	MNG	EP	Z	16 58 37			
	CNZ	EP	Z	16 58 49			
MAY 04	20	19	02.8	16,0S 173.9W	107KM	5.0 TONGA IS	WEL 27
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	20 24 07			
	MNG	EP	Z	20 24 27			
MAY 05	02	14	03.6	0,1S 123.7E	146KM	5.6 NORTHERN CELEBES	WEL 62
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	MNW	EP	Z	02 23 55			
	MJZ	P	Z	02 23 59			
	MNG	EP	Z	02 24 09			
MAY 05	14	21	22.7	24,4N 122.6E	60KM	5.7 TAIWAN	WEL 81
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	EP	ZNE	14 33 23			
		I	ZNE	23			
	CNZ	P	Z	14 33 27,8			
		I	Z	32,3			
	MJZ	EP	Z	14 33 31			
	MNG	P	Z	14 33 31,0			
		I	Z	35,4			
	MNW	EP	Z	14 33 33			
	WEL	EP	Z	14 33 50			
		ES	ZNE	43 42			
		LQ	NE	55			
MAY 05	15	23	35.5	21,7S 179.3W	604KM	4.7 FIJI	WEL 20
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	KRP	P	ZNE	15 27 00,8			
	GNZ	EP	Z	15 27 02			
	CNZ	EP	Z	15 27 09			
	MNG	EP	Z	15 27 20			
		ES	Z	30 21			
	MNW	EP	Z	15 28 25			
MAY 06	07	14	13.5	25,0S 179.6E	488KM	5.3 SOUTH OF FIJI	WEL 17
				H M S	DIR	LOG <sub>A/T</sub> AZ TZ AN TN	AE TE MAG
	ECZ	P	Z	07 17 05,0			
	KRP	P	ZNE	07 17 09,5			
		S	NE	19 37			
	GNZ	P	Z	07 17 09,5			
		S	Z	19 35			
	CNZ	P	Z	07 17 19,0			







	S	ZNE	26 30																		
MJZ	EP	ZNE	23 25 11																		
	S	ZNE	27 56																		
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 12	08 16 59.7	20.7S 168.9E	69KM	4.1	LOYALTY IS																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	MNG	EP	Z	08 11 33.8																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 12	11 49 41.3	65.4S 179.7W	33KM		S, PAC. CORDILLERA																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	ROX	EP	Z	11 54																	
	MNW	EP	Z	11 54 22				-0.53												5.7	
	MJZ	EP	Z	11 54 37																	
	WEL	EP	Z	11 54 59				-1.00	2 6											5.6	
	ELQ		E	59 30																1 14	
	ELR		ZN	12 00 50					4 30	5 27											
	MNG	EP	Z	11 55 03																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 13	05 02 14.7	7.2S 146.3E	177KM	4.8	NEW GUINEA																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	MJZ	EP	Z	05 09 32																	
	MNG	P	Z	05 09 53.0																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 15	14 46 06.5	51.5N 178.4W	31KM	5.8	ALEUTIAN IS																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	KRP	EP	ZNE	14 58 59				-0.59												6.8	
	MNG	EP	Z	14 59 12																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 16	02 46 42.4	6.9S 129.4E	212KM	5.9	BANDA SEA																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	MSZ	P	Z	02 55 20.0																	
		•PP	Z	56 04.0																	
	KRP	P	ZE	02 55 31				-1.22												5.4	
		•PP	ZE	56 12																	
	SCP		Z	03 00 21																	
	MNG	P	Z	02 55 37.8																	
		•PP	Z	56 18																	
	GNZ	P	Z	02 55 44				-0.44												6.3	
		•PP	Z	56 33																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 16	11 13 19.7	15.1S 167.5E	137KM		NEW HEBRIDES																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	KRP	P	ZN	11 18 21.6				-1.21												5.2	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 16	14 51 00.6	15.8S 174.1W	117KM	4.2	TONGA																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	KRP	P	ZNE	14 56 05				-1.41												5.0	
	MNG	EP	Z	14 56 25																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 17	04 30 44.8	6.9S 129.0E	195KM	5.1	BANDA SEA																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	MSZ	EP	Z	04 39 27																	
	MNG	EP	Z	04 39 44																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 17	09 33 31.1	18.5S 167.6E	32KM	4.7	NEW HEBRIDES																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	MNG	EP	Z	09 38 39																	

	H M S	EPICENTRE	DEPTH	MAG																	
MAY 17	16 58 17.0	44.0S 75.2W	33KM	5.7	SOUTHERN CHILE																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	MNG	EP	Z	17 07 52																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 17	23 58 21.5	29.5S 176.7W	33KM		KERMADEC IS																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	GNZ	EP	Z	24 01 05				-1.01													
		S	Z	02 30																	
	MNG	EP	Z	24 01 12																	
		I	Z	17																	
		S	Z	03 27																	
	MSZ	EP	Z	24 02 41																	
	WEL	S	ZNE	24 03 47																	
		EL	Z	06																	1 19
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 18	07 23 05.4	2.8S 137.2E	33KM	5.3	NEW GUINEA																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	MNG	EP	Z	07 32 03.1																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 19	11 38 25.7	5.2S 153.7E	48KM		NEW IRELAND																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	MNG	EP	Z	11 46 00.9																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 19	11 56 23.8	29.7S 177.0W	26KM	4.3	KERMADEC IS																
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE	MAG													
	ONE	EP	E	11 58 53																	
	MNG	EP	Z	11 59 19																	
		ES	Z	12 01 30																	
	MJZ	EP	ZNE	12 00 22																	
	MSZ	P	Z	12 00 41																	
	WEL	ES	E	12 01 50																	
	H M S	EPICENTRE	DEPTH	MAG																	
MAY 19	23 08 04.8	17																			



	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAY 21	17 43 14.2	3,2N 125.4E	172KM	5.0 TALAUD IS	WEL 63
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG EP	Z 17 53 23			
MAY 21	19 05 17.0	5,3S 153.2E	81KM	4.5 NEW IRELAND	WEL 41
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 19 12 32		-1.68	5.2
MAY 21	19 39 14.8	19,1S 169.5E	233KM	5.0 NEW HEBRIDES	WEL 23
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 22 43 28		-1.52	4.9
	MNG P	Z 22 43 52			
MAY 21	23 53 51.7	18,0S 178.4W	555KM	5.1 FIJI	WEL 24
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	ZNE 23 57 54		-1.68	4.8
	CNZ EP	Z 23 58 10			
	MNG EP	Z 23 58 13			
MAY 22	02 52 12.7	7,4S 155.5E	83KM	5.6 SOLOMON IS	WEL 38
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 02 59 01		-1.22	5.7
	PCP	Z 03 01 31			
	MNG P	Z 02 59 19			
MAY 23	00 02 49.5	7,4S 155.8E	111KM	5.4 SOLOMON IS	WEL 38
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP P	Z 00 09 59.8		-1.30	5.5
MAY 23	07 47 28.3	16,6S 173.2W	33KM	4.8 TONGA	WEL 27
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP P	ZNE 07 52 35		-0.85	5.5
MAY 23	08 39 44.4	30,0N 139.8E	29KM	5.5 SOUTH OF JAPAN	WEL 78
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP P	ZNE 08 51 27		-1.46	5.6
	MNG EP	Z 08 51 40			
MAY 23	14 22 32.5	13,8N 146.4E	39KM	5.9 S OF MARIANA IS	WEL 61
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 14 32 28		-1.22	6.0
	CNZ EP	Z 14 32 33			
	MNG EP	Z 14 32 40			
MAY 24	15 29 12.4	25,6S 177.4W	112KM	5.3 SOUTH OF FIJI	WEL 17
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 15 32 31		-1.60	
	MNG P	Z 15 32 53			
	S	Z 35 35			
	WEL S	ZNE 15 35 56			
MAY 25	07 42 44.7	4,8S 153.2E	104KM	NEW IRELAND	WEL 41
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG EP	Z 07 50 15			
	MJZ EP	Z 07 50 23			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAY 25	08 28 58.6	6.4S 131.1E	39KM	5.8 TANIMBAR IS	WEL 52
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MJZ P	Z 08 37 58			
	KRP P	ZNE 08 38 00		-1.60	5.4
	CNZ EP	Z 08 38 04			
	MNG P	Z 08 38 05.8			
	GNZ EP	Z 08 38 15		-1.01	6.1
MAY 25	12 07 04.8	21.6S 169.9E	35KM	5.5 LOYALTY IS	WEL 20
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP P	ZNE 12 11 04		-0.86	5.3
	GNZ EP	Z 12 11 20		-1.16	5.0
	ES	Z 14 15			
	CNZ EP	Z 12 11 20			
	ES	Z 14 30			
	MNG P	Z 12 11 31.0			
	I	Z 12 12,2			
	WEL EP	Z 12 11 32		-0.86	4 14 1 12 5.4
	S	ZNE 15 32			5 14 6 12 4 16 5.4
	LR	Z 16 40			12 14
	MJZ P	Z 12 12 01			
MAY 25	13 20 56.2	52.9S 160.0E	33KM	6.6 MACQUARIE IS	WEL 15
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	ROX P	ZNE 13 23 09.2		0.13	4 7 4 5
	S	ZNE 24 53			143 22 239 20
	LR	Z 25 48			124 14
	MJZ EP	Z 13 23 30			
	WEL P	Z 13 24 30.0		0.53	22 10 6.5
	P	ZN 27 20			37 17 59 13 6.6
	L	ZNE 28			44 24 87 40 121 30
	MNG P	Z 13 24 39.8			
	CNZ P	Z 13 24 56.0			
	KRP EP	ZNE 13 25 09		-0.32	5.8
	GNZ EP	Z 13 25 14		-0.66	5.5
MAY 25	13 59 04.8	26.1S 180.0E	432KM	4.3 SOUTH OF FIJI	WEL 16
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG EP	Z 14 02 18			
	ES	Z 04 56			
MAY 26	04 33 51.0	15.8S 167.1E	34KM	5.0 NEW HEBRIDES	WEL 26
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 04 39 01		-1.46	4.9
	CNZ EP	Z 04 39 13			
	MNG EP	Z 04 39 22			
MAY 26	11 58 56.3	30.5S 177.6W	33KM	4.3 KERMADEC IS	WEL 12
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	ONE EP	Z 12 01 07			
	KRP EP	Z 12 01 20		-1.31	
	MSZ EP	Z 12 03 02			
MAY 26	12 21 47.9	17.6S 176.7W	33KM	4.6 FIJI	WEL 25
		H M S DIR		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 12 26 35		-1.52	4.8



H M S		EPICENTRE			DEPTH	MAG	DIST (DEG)				
MAY 26 12 26 23.8		25,5S	179.8W	455KM	5.0	SOUTH OF FIJI					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
ONE	P	E	12 29 01								
ECZ	EP	Z	12 29 05								
	S	Z	31 19								
GNZ	P	Z	12 29 14		-0.02						
	S	Z	31 38								
KRP	P	ZNE	12 29 15.5		-0.78						
	S	ZN	31 39								
CNZ	P	Z	12 29 25.8								
	ES	Z	32 12								
MNG	P	Z	12 29 37								
	S	Z	32 18								
WEL	P	Z	12 29 48		-0.76					5.7	
	S	ZNE	32 34								
MJZ	EP	ZNE	12 30 24								
	S	ZNE	33 44								
MSZ	EP	Z	12 30 38								
MAY 26 18 30 07.4		21,2S	176.9W	230KM	5.4	FIJI					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
KRP	P	ZN	18 34 01.5		-1.15						5.2
CNZ	EP	Z	18 34 13								
MNG	EP	Z	18 34 23								
MJZ	EP	Z	18 35 11								
MSZ	EP	Z	18 35 26								
MAY 26 23 12 52.9		25,4S	179.7E	525KM	4.6	SOUTH OF FIJI					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
KRP	P	Z	23 15 41.0		+0.86						
MNG	P	Z	23 16 05								
WEL	P	Z	23 16 15		-0.65					5.8	
	S	ZNE	19 02								
MJZ	EP	Z	23 16 49								
MNW	EP	Z	23 17 12		-1.30					5.2	
MAY 27 04 55 42.1		20,1S	170.0E	39KM	4.2	NEW HEBRIDES					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
MNG	P	Z	05 00 23.2								
MAY 28 00 03 56.8		24,4N	122.5E	33KM	5.7	TAIWAN					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z	00 16 01		-1.52						5.6
CNZ	EP	Z	00 16 06								
GNZ	EP	Z	00 16 07		-0.93					6.2	
MNG	EP	Z	00 16 10								
MJZ	EP	Z	00 16 11								
MAY 28 02 09 53.4		22,2S	179.6W	600KM	4.9	SOUTH OF FIJI					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
KRP	P	Z	02 13 14.0		+0.40						5.9
GNZ	P	Z	02 13 15		-0.59						5.7
	ES	Z	15 51								
CNZ	P	Z	02 13 24								
MNG	P	Z	02 13 35								
	S	Z	16 36								
	SCP	Z	20 15								
WEL	EP	Z	02 13 42		-0.92					5.6	
	S	ZNE	16 54								
MSZ	P	Z	02 14 29								

E Z		41,3									
H M S		EPICENTRE			DEPTH	MAG	DIST (DEG)				
MAY 28 14 58 46.3		53,4S	157.4E	33KM			MACQUARIE IS				
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
MNH	P	Z	15 00 38.8		-0.45						
MSZ	P	Z	15 00 57.0								
MJZ	EP	Z	15 01 20								
MNG	P	Z	15 02 23								
MAY 28 22 23 45.3		4,4S	153.4E	122KM	5.4	NEW IRELAND					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
MNG	EP	Z	22 31 16								
MSZ	EP	Z	22 31 26								
MNH	EP	Z	22 31 31		-1.60						5.2
MAY 29 08 30 29.6		15,0S	12.8W	33KM	4.4	SAMOA IS					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
MNG	EP	Z	08 36 12								
MAY 29 13 44 32.9		21,6S	178.7W	516KM	5.2	FIJI					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
GNZ	EP	Z	13 48 05		-0.24						6.3
	ES	Z	51 00								
MNG	P	Z	13 48 25.8								
	S	Z	51 39								
	SCP	Z	55 10.0								
WEL	P	Z	13 48 34.5		-0.11						6.4
	S	ZNE	51 50								
MJZ	P	ZNE	13 49 07								
	ESCP	Z	55 21								
MSZ	P	Z	13 49 21.8								
	E*PP	ZNE	50 45								
MNH	P	Z	13 49 30		-0.95						5.5
	*PP	Z	50 56								
MAY 31 18 51 01.6		19,3S	167.8E	33KM	5.0	NEW HEBRIDES					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
CNZ	EP	Z	18 55 45								
MNG	EP	Z	18 55 57								
MJZ	EP	Z	18 56 22								
MAY 31 19 59 48.2		15,2S	168.3E	19KM		NEW HEBRIDES					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
CNZ	P	Z	20 05 12								
JUN 01 02 33 56.3		51,5N	176.2E	15KM	5.1	ALEUTIAN IS					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP?	Z	02 46 52								
	E	Z	47 24								
JUN 01 03 48 49.2		5,8S	151.2E	61KM	5.5	NEW BRITAIN					
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
MNG	P	Z	03 56 25								
MSZ	P	Z	03 56 32								
MJZ	P	Z	03 56 34								



JUN 01	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	10	14	43.2	13.8S	166.6E		49KM	5.5 NEW HEBRIDES	WEL	28					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	EP	Z	10	20	05										
CNZ	EP	Z	10	20	19										
MNG	EP	Z	10	20	29										
	E	Z			40										
MJZ	P	Z	10	20	52										
ROX	EP	Z	10	21	02			-1.20						5.6	
JUN 01	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	11	47	33.1	23.4S	174.9W		24KM	5.9 TONGA	WEL	20					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
GNZ	P	Z	11	51	25										
	E(S)	Z			54	10									
KRP	EP	Z	11	51	30										
CNZ	EP	Z	11	51	41										
MNG	EP	Z	11	51	46										
	E	Z			51										
	ES	Z			55	08									
WEL	S	NE	11	55	25										
MJZ	E(P)	Z	11	52	47										
MSZ	EP	Z	11	53	04										
ROX	E(P)	Z	11	53	05										
MNW	EP	Z	11	53	10			-0.92						5.6	
JUN 01	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	12	34	33.5	15.2S	167.2E		93KM	5.6 NEW HEBRIDES	WEL	27					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	12	39	39										
GNZ	P	Z	12	39	50			-0.61						5.8	
	S	Z			44	18									
CNZ	P	Z	12	39	51.4	D									
	(S)	Z			44	17									
MNG	P	Z	12	40	01										
	ES	Z			44	29									
MSZ	EP	Z	12	40	31										
ROX	EP	Z	12	40	35										
MNW	EP	Z	12	40	39										
JUN 01	CNZ	E(P)	Z	12	46	50									
	KRP	E(P)	Z	12	46	51									
	E	Z			55										
	MNG	E(P)	Z	12	47	05									
JUN 02	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	02	44	56.3	19.3S	167.8E		33KM	4.7 NEW HEBRIDES	WEL	23					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	E(P)	Z	02	49	31.0										
MNG	EP?	Z	02	49	53										
	E	Z			55										
JUN 02	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	03	14	17.3	23.7S	174.9W		45KM	4.5 TONGA	WEL	20					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
MNG	P	Z	03	18	35										
JUN 02	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	03	27	53.3	51.1N	176.0E		41KM	6.0 ALEUTIAN IS	WEL	92					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	EP	Z	03	40	41										
MNG	P	Z	03	40	53										

JUN 02	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	07	08	08.4	0.0N	123.2E		185KM	5.8 CELEBES IS	WEL	62					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
MSZ	P	Z	07	17	55	J									
	E*PP	Z			18	27									
MNW	P	Z	07	17	55.2	J		-0.91						5.9	
	*PP	Z			18	28									
MJZ	P	Z	07	18	01.5										
	E(*PP)	Z			34										
KRP	P	Z	07	18	06	J									
CNZ	EP	Z	07	18	08.5										
MNG	P	Z	07	18	11.5	J									
GNZ	P	Z	07	18	18			-0.79						6.0	
JUN 02	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	16	53	56.6	18.6S	173.4W		33KM	5.0 TONGA	WEL	25					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
GNZ	EP	Z	16	58	43			-1.40						4.9	
KRP	P	Z	16	58	44										
CNZ	EP	Z	16	58	58										
MNG	EP	Z	16	59	05.5										
	E	Z			08										
	ES	Z	17	03	33										
MJZ	E(P)	Z	16	59	58										
	E	Z	17	00	14										
MNW	P	Z	17	00	07.5			-1.48						5.3	
MSZ	EP	Z	17	00	12										
	E	Z			46										
JUN 02	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	19	47	40.7	8.4N	125.7E		33KM	5.1 PHILIPPINE IS	WEL	67					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
MSZ	E	Z	19	58	36										
MJZ	E	Z	19	58	41										
JUN 02	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	20	59	04												
TUA	EP	Z	20	59	10										
KRP	P	Z	20	59	14										
MNG	P	Z	20	59	36										
	ES	Z	21	01	14										
WEL	ES	E	21	01	29										
JUN 03	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	13	49	13.8	17.9S	178.8W		643KM	5.3 FIJI	WEL	24					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	EP?	Z	13	52	51										
MNG	EP	Z	13	53	32.5										
	ES	Z			57	00									
JUN 03	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	18	40	41.4	1.8S	100.4E		33KM	4.2 SUMATRA	WEL	77					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
MNG	EP	Z	18	52	36										
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	04	24	42.3	19.6S	173.8W		176KM	4.3 TONGA	WEL	24					
	H M S			DIR			LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	04	29	20										
MNG	P	Z	04	29	43										
	ES	Z			33	56									
WEL	E	Z	04	30	25										
MJZ	P	Z	04	30	31.5										
MSZ	P	Z	04	30	35										
MNW	EP	Z	04	30	53										



JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	U5	11	54.2	36.3N	70.8E		207KM	5.7 INDIA	WEL	122	
	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MSZ	EPKP	Z	05	30	13					
	HJZ	PKP	Z	05	30	21					
	KRP	PKP	Z	05	30	23					
	MNG	PKP	Z	05	30	24					
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	06	16	57.4	36.6N	21.0E		80KM	5.1 MEDITERRANEAN SEA	WEL	159	
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MSZ	EPKP	Z	06	36	43					
	MSZ	P	Z	08	28	45					
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	08	35	15.4	14.8S	171.2E		660K	4.6 NEW HEBRIDES	WEL	27	
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	P	Z	08	39	33.8	J				
		S				43	16				
	GNZ	P	Z	08	39	45.5		-0.82		5.6	
		ES	Z			43	23				
	CNZ	P	Z	08	39	49.2	J				
		ES	Z			43	29				
	MNG	IP	Z	08	39	58.8	J				
		ES	Z			43	44				
		SCP	Z			45	45				
	WEL	P	Z	08	40	04		-0.08		6.4	
		ES	Z			43	54				
	MJZ	P	Z	08	40	27.0	J				
		S	Z			44	34				
		SCP	Z			45	53				
	MSZ	P	Z	08	40	34.9	J				
	POX	P	Z	08	40	40		-0.71		5.9	
	MNW	P	Z	08	40	42		-1.13		5.5	
		E(+PP)	Z			42	31				
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	09	11	09.2	24.5S	177.4W		24KM	4.0 TONGA	WEL	18	
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MSZ	EP	Z	09	16	25.5					
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MJZ	P	Z	10	31	55					
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	14	30	01.5	5.0N	124.3E		79KM	4.8 PHILIPPINE IS	WEL	65	
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MSZ	P	Z	14	40	23					
	HJZ	P	Z	14	40	27					
		E+PP	Z			44					
	MNG	EP	Z	14	40	32					
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	14	51	25.2	23.6S	174.8W		12KM	4.6 TONGA	WEL	20	
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MNG	EP	Z	14	55	44					
		E	Z			53					
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	15	57	45.4	7.6N	126.8E		80KM	5.1 PHILIPPINE IS	WEL	66	
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	EP?	Z	16	08	17					

JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	21	38	16.3	29.9S	178.8W		214KM	4.2 KERMADEC IS	WEL	13	
	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	E(P)	Z	21	40	24					
		ES	E			42	20				
	CNZ	P	Z	21	40	39.5					
	MNG	E(P)	Z	21	40	47					
		E	Z			51					
		S	Z			42	53				
	MSZ	E(P)	Z	21	42	19					
		ES	Z			45	21				
	WEL	S	Z	21	43	12					
	MJZ	S	Z	21	44	40					
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	23	52	15	23	52	35					
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	P	Z	23	52	44		-0.77			
	MJZ	EP	Z	23	53	19					
	MSZ	P	Z	23	53	33					
	MNH	P	Z	23	53	41		-1.96			
JUN 04	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	23	48	17.8	46.5N	152.5E		27KM	5.9 KAMCHATKA	WEL	90	
JUN 04	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	P	Z	24	01	00	J				
	MNG	P	Z	24	01	10.5	D				
		E	Z			19					
		E	Z			26					
	CNZ	E	Z	24	01	20					
	WEL	P	Z	24	01	13		-0.92		6.5	
		E	Z			28					
	EPS	S	Z			13	30				
	ELR	ZNE	Z			30					
	MJZ	P	Z	24	01	22					
		E	Z			36					
	MSZ	EP	Z	24	01	24					
JUN 05	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	02	09	25	02	09	45					
JUN 05	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	P	Z	02	09	25					
	MNG	EP	Z	02	09	45					
		S	Z			12	50				
	MSZ	EP	Z	02	10	45					
JUN 05	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	04	49	53.2	24.7N	122.3E		33KM	4.7 TAIWAN	WEL	82	
JUN 05	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MNG	EP?	Z	05	02	02					
		E	Z			11					
JUN 05	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	11	21	41.1	0.3N	122.0E		147KM	5.5 CELEBES	WEL	63	
JUN 05	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MSZ	E(P)	Z	11	31	33					
	MNG	EP	Z	11	31	54					
JUN 05	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	22	07	06.7	20.4S	168.3E		39KM	LOYALTY IS	WEL	22	
JUN 05	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MNG	P	Z	22	11	49					
JUN 06	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)		
	00	52	08.8	2.7S	150.6E		33KM	4.6 NEW IRELAND	WEL	44	
JUN 06	H M S			DIR			LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MNG	EP	Z	01	00	16					







JUN 07	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
	00 59 46.6	15.0S	75.8W	48KM	5.5	NEAR PERU			WEL	94		
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
WEL	EP	Z	01 13 06									
	E	ZE	22 20									
	(PS)	ZE	25 35									
	E	ZN	26 04									
	ESS	E	31									
	LR	ZE	43									
	MAX	ZE	45				18 22			12 22		
KRP	E(P)	Z	01 13 11									
ROX	SS	E	01 31 30							6 20		
	EL	E	44									
	MAX	E	49							8 18		
JUN 07	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
05 58 50.5	5.1S	151.1E	146KM	4.6	NEW BRITAIN			WEL	42			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
KRP	EP	Z	06 06 09									
CNZ	EP	Z	06 06 17.5									
MNG	P	Z	06 06 24.5									
MSZ	P	Z	06 06 29									
MJZ	EP	Z	06 06 31									
JUN 07	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
11 44 51.5	24.2N	122.5E	41KM	5.7	TAIWAN			WEL	81			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
KRP	P	Z	11 56 55									
CNZ	P	Z	11 56 59.4				D					
HSZ	P	Z	11 57 00									
MNW	EP	Z	11 57 02				-1.34				5.8	
MJZ	P	Z	11 57 03									
MNG	P	Z	11 57 03									
GNZ	P	Z	11 57 05				J -0.64				6.5	
JUN 07	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
13 59 36.0	11.3N	139.6E	50KM	6.5	W CAROLINE IS			WEL	62			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
KRP	EP	Z	14 09 35									
CNZ	P	Z	14 09 42.8				D					
	PKPPKP	Z	39 02									
MNG	P	Z	14 09 47									
	ES	Z	17 55									
	EPKPPKP	Z	39 04									
GNZ	EP	Z	14 09 49				-0.48				6.7	
MSZ	P	Z	14 09 49									
	PKPPKP	Z	39 02									
MJZ	P	Z	14 09 50									
WEL	P	Z	14 09 51.5				D -0.48				6.7	
	S	ZNE	18 04									
	E	ZNE	40							48 26	42 26	
	SS	ZNE	22 24									
	ESSS	ZNE	25									
	ELR	ZNE	29									
	MAX	ZNE	32							139 21	86 20	63 22
MNW	P	Z	14 09 53				-1.21				5.9	
	E	Z	10 16									
ROX	S	NE	14 18 22									
JUN 07	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
19 05 47.4	21.4S	179.3W	605KM	5.2	FIJI			WEL	20			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
KRP	P	Z	19 09 15									
	*PP	Z	10 45									
	S	E	12 10									
GNZ	P	Z	19 09 17.5				-1.01				5.3	

	(S)	Z	12 07									
CNZ	P	Z	19 09 26									
	ES	Z	12 32									
MNG	P	Z	19 09 35.6									
	E(S)	Z	12 40									
	E	Z	50									
	(SCP)	Z	16 07									
	ESCS	Z	19 49									
	E	Z	22 53									
WEL	ES	NE	19 12 52									
	SCP	Z	15 40							5 14		
MJZ	P	Z	19 10 13									
MSZ	EP	Z	19 10 31									
MNW	P	Z	19 10 40							-1.26		5.3
JUN 07	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
22 18 57.4	5.7S	105.5E	40KM	5.3	SUNDA STRAIT			WEL	71			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
MNG	E(P)	Z	22 30 20									
JUN 08	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
03 42 13.7	7.7S	158.9E	55KM	5.1	SOLOMON IS			WEL	36			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
KRP	EP	Z	02 43 05									
	E	Z	03 49 17									
MJZ	P	Z	03 49 24									
MSZ	EP	Z	03 49 25									
MNG	E	Z	03 49 29									
CNZ	E	Z	03 49 42									
JUN 08	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
05 32 38.5	18.0S	178.1W	562KM	4.1	FIJI			WEL	24			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
KRP	EP	Z	05 36 42									
GNZ	EP	Z	05 36 45									
MNG	P	Z	05 37 02.5				-1.49				5.0	
MJZ	P	Z	05 37 42									
MSZ	P	Z	05 37 57									
MNW	P	Z	05 38 05				-1.43				5.2	
JUN 08	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
18 53 14.7	22.6S	171.6E	94KM	4.0	LOYALTY IS			WEL	19			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
MNG	EP	Z	18 57 26									
MJZ	E	Z	18 58 21									
JUN 08	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
19 56 21.3	53.1N	171.1E	20KM	5.4	ALEUTIAN IS			WEL	94			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
KRP	EP?	Z	20 09 26									
	E	Z	31									
JUN 08	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
21 03 42	6.1S	147.5E	61KM		NEW GUINEA			WEL	43			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
MSZ	P	Z	21 03 42									
MJZ	EP	Z	21 03 59									
JUN 08	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
21 21 52.2	6.1S	147.5E	61KM		NEW GUINEA			WEL	43			
	H M S			DIR LOG <sub>a</sub> /T AZ TZ AN TN					AE	TE	MAG	
MNG	EP	Z	21 29 45									
	E	Z	54									
MJZ	E	Z	21 29 55									
MSZ	E	Z	21 29 55									



DATE	H M S	EPICENTRE H M S	DEPTH DIR	MAG	DIST (DEG)			
					WEL	AE	TE	MAG
JUN 08	22 01 14.1	9.6N 126.7E	29KM	5.3 JAPAN				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	MSZ P	Z 22 11 57						
	MNG EP	Z 22 11 57						
	MJZ P	Z 22 12 05						
JUN 09	00 12 12.1	7.6N 94.1E	55KM	5.3 NICOBAR IS				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	MSZ P	Z 00 24 43						
	MJZ EP	Z 00 24 50						
	MNG P	Z 00 25 04						
	KRP P	Z 00 25 04						
	GNZ P	Z 00 25 05						
JUN 09	01 57 38.0	45.0N 146.4E	160KM	4.9 JAPAN				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	MNG P	Z 02 10 14						
JUN 09	11 21 15.8	30.0N 142.1E	33KM	4.8 S HONSHU, JAPAN				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	MNG P	Z 11 33 10						
	E	Z 24						
	MJZ E	Z 11 33 15						
JUN 09	12 01 19.8	20.8S 178.3W	560KM	5.2 TONGA				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	KRP P	Z 12 04 57						
	MNG P	Z 12 05 17						
JUN 09	13 08 10.3	39.9N 141.6E	60KM	4.8 JAPAN				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	MNG EP	Z 13 20 43						
JUN 09	15 39 27.8	44.3N 147.6E	110KM	5.5 KURILE IS				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	KRP P	Z 15 51 59.5						
	MNG P	Z 15 52 07						
	MJZ P	Z 15 52 19						
	E+PP	Z 44						
	E+PP	Z 44						
	MSZ P	Z 15 52 19						
	ROX EP	Z 15 52 24						
	MNW EP	Z 15 52 24						
				-1.10				6.2
JUN 09	22 16 22.1	30.1N 142.2E	12KM	5.1 JAPAN				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	MNG EP	Z 22 28 16						
	MSZ EP	Z 22 28 25						
JUN 10	TUA E(S)	Z 07 10 03						
	KRP P	E 07 07 35						
	S	E 10 05						
	GNZ S	Z 07 10 06						
	CNZ E(P)	Z 07 07 45						
	E(S)	Z 10 24						
	TNZ P	Z 07 07 50						
	MNG P	Z 07 07 55						
	E	Z 10 34						

DATE	H M S	EPICENTRE H M S	DEPTH DIR	MAG	DIST (DEG)			
					WEL	AE	TE	MAG
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	COB ES	Z 07 11 02						
	MJZ EP	Z 07 08 42						
	E	ZNE 14 51						
	MSZ EP	Z 07 08 51						
JUN 10	12 15 05.7	6.1S 149.8E	53KM	5.0 NEW BRITAIN				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	MNG EP	Z 12 22 43						
	MSZ P	Z 12 23 00						
JUN 11	03 01 08.7	23.6N 119.9E	33KM	5.2 TAIWAN				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	KRP EP	Z 03 13 23						
	CNZ P	Z 03 13 24						
	E	Z 29						
	MSZ EP	Z 03 13 24						
	MJZ EP	Z 03 13 25						
	MNW EP	Z 03 13 23						
	MNG E	Z 03 13 32						
JUN 11	05 04 15.2	12.1S 166.6E	99KM	5.6 SANTA CRUZ IS				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	KRP P	Z 05 09 48.5						
	CNZ P	Z 05 10 01						
	MNG P	Z 05 10 10						
	E	Z 12 23						
	MJZ P	Z 05 10 34.5						
	MSZ P	Z 05 10 38						
	ROX EP	Z 05 10 46						
	MNW EP	Z 05 10 47						
JUN 11	MSZ E(P)	Z 10 56 41						
	MNW EP	Z 10 56 43						
	MJZ P	Z 10 56 46						
				-1.82				
JUN 11	18 13 40.6	51.6N 178.4W	60KM	5.9 ALEUTIAN IS				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	KRP EP	Z 18 26 30						
	MNG E	Z 18 26 41						
JUN 12	00 28 25.0	19.1S 169.6E	265KM	4.7 LOYALTY IS				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	KRP P	Z 00 32 34						
	GNZ P	Z 00 32 47						
	CNZ P	Z 00 32 47						
	MNG P	Z 00 32 59.1 J						
	E(S)	Z 36 44						
	WEL P	Z 00 33 03						
	MJZ P	Z 00 33 24						
				-0.66				5.8
JUN 12	01 57 46.9	19.2N 145.1E	191KM	4.8 MARIANA IS				
					LOG <sub>a</sub> /T	AZ	TZ	AN TN
	KRP P	Z 02 07 59						
	MNG P	Z 02 08 14						
	MJZ EP	Z 02 08 16						
	MSZ P	Z 02 08 19						



DATE	H M S	EPICENTRE		DEPTH	MAG	DIST (DEG)			
		WEL	WEL			WEL	WEL		
JUN 12	03 33 45.7	13.9S	166.4E	56KM					
		H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE TE MAG
	KRP EP	Z	03 39 09						
	MNG EP	Z	03 39 33						
	MJZ EP?	Z	03 39 52						
	E	Z	59						
	E	Z	42 52						
	MSZ E(P)	Z	03 39 57						
JUN 12	16 33 42.3	22.7S	178.7W	402KM	4.5 S OF FIJI				
	MNG P	Z	16 37 30						
	S	Z	40 38						
JUN 13	04 00 02.3	16.8S	174.0W	39KM	4.9 TONGA				
	KRP P	Z	04 05 05						
	CNZ E(P)	Z	04 05 19						
	MNG P	Z	04 05 26						
	ES	Z	10 05						
	MJZ P	Z	04 06 09						
	MSZ EP	Z	04 06 22						
	MNW P	Z	04 06 31		-1.66				5.2
JUN 13	07 33 13.4	21.2S	174.1E	49KM	5.9 FIJI				
	KRP P	Z	07 37 05						
	TUA P	Z	07 37 18						
	CNZ P	Z	07 37 22						
	MNG P	Z	07 37 36.0 D						
	E(S)	Z	41 36						
	WEL EP	Z	07 37 43						
	E(S)	E	41 25						
	L	ZNE	43						
	MAX	ZNE	44			58 19	42 19	41 19	
	MJZ EP	Z	07 38 17						
	MSZ EP	Z	07 38 27						
	ROX EP	ZN	07 38 29						
	E	Z	33						
	E	N	42 36						
	E(S)	NE	54						
	L	N	45						
	MNW P	Z	07 38 38						
	EPP	Z	39 25						4.9
JUN 13	13 19 35.1	73.1N	7.2E	33KM	4.7 GREENLAND SEA				
	MJZ PKP	Z	13 39 22						
JUN 13	18 08 38.4	12.2S	167.1E	259KM	6.2 SANTA CRUZ IS				
	KRP P	ZNE	18 13 54						
	PCP	ZNE	17 13						
	ES	NE	18 20						
	E(PCS)	Z	20 28						
	SCS	ZNE	24 21						
	TNZ P	Z	18 14 04						
	TUA P	Z	18 14 05						
	PCP	Z	17 15						
	ES	Z	18 33						

DATE	H M S	EPICENTRE		DEPTH	MAG	DIST (DEG)			
		WEL	WEL			WEL	WEL		
		H M S	DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE TE MAG
	PCS	Z	20 56						
	E	Z	21 11						
	SCS	Z	24 27						
	CNZ P	Z	18 14 05.2 D						
	PCP	Z	17 14						
	ES	Z	18 34						
	E	Z	19 38						
	E(PCS)	Z	20 32						
	MNG P	Z	18 14 15.5						
	E(*PP)	Z	15 10						
	EPCP	Z	17 18						
JUN 13	MNG ES	Z	18 18 47						
	ESCS	Z	24 32						
	E	Z	26 26.5						
	WEL P	Z	18 14 20.4 D		0.59		8 3		
	PCP	ZNE	17 19						
	ES	ZNE	18 56						13 19 22 20 26 4
	SCS	NE	24 31						
	(*PP)	ZN	15 04						6 12
	MJZ P	ZNE	18 14 39.0 D						
	PCP	ZNE	17 25						
	E	Z	18 22						
	E	ZNE	27						
	ES	ZN	19 30						
	SCS	ZNE	24 44						
	MSZ P	Z	18 14 45.0 D						
	PCP	Z	17 27						
	ES	Z	19 43						
	ROX P	ZN	18 14 52.0 D		0.50		12 3	7 3	
	*PP	ZN	15 40						12 3 4 6
	EPCP	Z	17 29						
	S	ZNE	19 51						11 8 21 22 15 6
	(SS)	NE	21 30						25 23 6 24
	MNW P	Z	18 14 53						
	ES	Z	19 55						-0.43
JUN 14	02 38 37.2	20.8S	178.6W	545KM	4.6 TONGA				
	MNG P	Z	02 42 35						
	S	Z	45 48						
	MSZ E(P)	Z	02 43 32						
JUN 14	MNG P	Z	15 51 52						
JUN 14	16 39 50.5	5.3S	124.5E	656KM	5.4 BANDA SEA				
	MSZ P	Z	16 48 21.5 J						
	E*PP	Z	50 19						
	MNW P	Z	16 48 24						-1.18
	E*PP	Z	50 22						5.2
	MJZ P	Z	16 48 29						
	*PP	Z	50 26						
	CNZ P	Z	16 48 38						
	WEL P	Z	16 48 39						-0.55
	MNG P	Z	16 48 41.2 J						5.8
	E(*PP)	Z	50 41						
	E	Z	50						
	GNZ P	Z	16 48 49						-0.73
JUN 14	18 57 19.2	1.0N	123.1E	147KM	N CELEBES				
	MSZ P	Z	19 07 15						
	MNG P	Z	19 07 31						



JUN 14	H M S			EPICENTRE			DEPT <sup>H</sup>	MAG	DIST (DEG)							
	21 03 48.3			30.7N 138.7E			397KM	5.1 S HONSHU, JAPAN	WEL 79							
				H M S			DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	21 14 57.5													
CNZ	P	Z	21 15 03													
MNG	P	Z	21 15 08.3													
	E	Z	16 46													
	E	Z	56													
MSZ	EP	Z	21 15 12													
	E	Z	14													
MJZ	P	Z	21 15 14													
JUN 15	KRP	P	Z	00 54 56												
	CNZ	P?	Z	00 55 06												
	MNG	P	Z	00 55 19												
	E	Z	47													
JUN 15	H M S			EPICENTRE			DEPT <sup>H</sup>	MAG	DIST (DEG)							
				10.4S 160.8E			31KM	6.1 SOLOMON IS	WEL 33							
				H M S			DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	01 05 57.5													
	(PCP)	Z	09 01													
	E(S)	E	10 31													
	E	ZE	11 25													
	E	Z	12 51													
CNZ	P	Z	01 06 07.8				J									
GNZ	P	Z	01 06 10.5					0.03							6.9	
MNG	P	Z	01 06 15.0				D								6.6	
WEL	P	Z	01 06 20				J									
MJZ	P?	Z	01 06 30.5													
	E	Z	32													
	(S)	ZN	12 09													
MSZ	P	Z	01 06 33												6.2	
MNW	P	Z	01 06 41					-0.69								
	E	Z	08 23													
ROX	P	Z	01 06 42					-0.30	14	8	17	15	5	15	6.7	
	E	Z	08 16													
JUN 15	KRP	EP	ZN	01 10 16												
	CNZ	P	Z	01 10 26												
	GNZ	P	Z	01 10 29					-1.09							
	MNG	EP	Z	01 10 33												
	MJZ	P	Z	01 10 51.5												
	MNW	P	Z	01 11 03					-1.56							
JUN 15	KRP	EP	ZN	01 10 24												
	CNZ	P	Z	01 10 34												
	GNZ	P	Z	01 10 36					-1.09							
	MNG	P	Z	01 10 41												
	MSZ	P	Z	01 11 00												
JUN 15	MNG	P	Z	01 15 53												
	MJZ	(P)	Z	01 16 08												
JUN 15	KRP	P	Z	01 16 38												
	MNG	P	Z	01 16 55												
	MJZ	E	Z	01 17 18												
JUN 15	H M S			EPICENTRE			DEPT <sup>H</sup>	MAG	DIST (DEG)							
				10.5S 160.9E			33KM	SOLOMON IS	WEL 33							
				H M S			DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	01 18 59													
CNZ	P	Z	01 19 10.5													
MNG	EP	Z	01 19 18													
JUN 15	CNZ	P	Z	01 19 54												

MNG	P	Z	01 20 04													
	E	Z	09													
MSZ	E(P)	Z	01 20 22													
	E	Z	42													
MNW	P	Z	01 20 30												-1.82	
JUN 15	H M S			EPICENTRE			DEPT <sup>H</sup>	MAG	DIST (DEG)							
				10.6S 161.7E			33KM	5.9 SOLOMON IS	WEL 33							
				H M S			DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	01 38 19.5													
CNZ	P	Z	01 38 30													
GNZ	EP	Z	01 38 32												-1.23	
MNG	P	Z	01 38 38.5												5.6	
MJZ	P	Z	01 38 54													
MSZ	P	Z	01 38 58													
MNW	P	Z	01 39 04												-1.56	
JUN 15	H M S			EPICENTRE			DEPT <sup>H</sup>	MAG	DIST (DEG)							
				10.2S 161.1E			33KM	6.2 SOLOMON IS	WEL 33							
				H M S			DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	01 39 05.5													
	E	ZNE	12													
	E	Z	44 11													
	E	Z	22													
	E	Z	45 49													
CNZ	P	Z	01 39 18													
GNZ	EP	Z	01 39 21												-0.46	
MNG	P	Z	01 39 26												6.4	
	E	Z	29.5													
	E	Z	40 57													
WEL	E(P)	Z	01 39 32													
	E	Z	36													
MJZ	P?	Z	01 39 44													
	E	Z	47													
MSZ	EP	Z	01 39 45													
	E	Z	48													
ROX	EP	Z	01 39 55												0.28	
MNW	EP	Z	01 40 51												-1.86	
	E	Z	55												5.0	
JUN 15	KRP	P	ZN	01 41 15												
	CNZ	P	Z	01 41 26												
	E	Z	35													
	GNZ	EP	Z	01 41 28												-0.80
	MNG	P	Z	01 41 34												
	E	Z	45													
	MJZ	E	Z	01 41 55												
	MNW	EP	Z	01 42 00												-1.07
	MSZ	E	Z	01 42 04												
JUN 15	KRP	P	Z	01 45 21												
	MJZ	(P)	Z	01 46 00												
	MSZ	P	Z	01 46 01												
JUN 15	KRP	E(P)	Z	01 51 31												
	MNG	E(P)	Z	01 51 46												
	MJZ	E	Z	01 52 05												
JUN 15	KRP	P	Z	01 57 11												
	CNZ	P	Z	01 57 25												
	MNG	E(P)	Z	01 57 38												
JUN 15	H M S			EPICENTRE			DEPT <sup>H</sup>	MAG	DIST (DEG)							
				9.1S 160.7E			33KM	4.7 SOLOMON IS	WEL 34							
				H M S			DIR	LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	02 03 52													
CNZ	P	Z	02 04 01													



		H	M	S	EPICENTRE	DEPTH	MAG	SOLOMON IS			DIST (DEG)	
		H M S			H M S			LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
	MNG	P	Z	02 04 08								
	MJZ	E	Z	02 04 29								
	MSZ	E	Z	02 04 45								
JUN 15				02 05 38.2	10.2S 160.3E	33KM	4.8					33
	KRP	P	Z	02 11 53								
	CNZ	P	Z	02 12 04								
	MNG	P	Z	02 12 11								
	MJZ	E(P)	Z	02 12 28								
	MSZ	P	Z	02 12 33								
	MNW	P	Z	02 12 43			-1.66					5.2
JUN 15	KRP	EP	Z	02 19 43								
	CNZ	P	Z	02 19 49								
	MNG	P	Z	02 20 00								
	MJZ	E(P)	Z	02 20 19								
	MSZ	EP	Z	02 20 20								
	MNW	P	Z	02 20 27			-1.82					
JUN 15	KRP	P	Z	02 20 11								
	E		Z	02 20 25								
	CNZ	P	Z	02 20 21								
	MNG	EP	Z	02 20 29								
	MJZ	P	Z	02 20 46								
	E		Z	02 21 43								
	MSZ	EP	Z	02 20 50								
JUN 15	CNZ	P	Z	02 22 14								
	MNG	P	Z	02 22 25								
	MJZ	E	Z	02 22 48								
JUN 15	KRP	P	Z	02 22 18								
	CNZ	EP	Z	02 22 29								
	MNG	P	Z	02 22 38								
	E		Z	02 22 44								
JUN 15	KRP	EP	Z	02 24 15								
	MNG	EP	Z	02 24 31								
JUN 15				02 36 26.9	10.7S 161.0E	33KM	5.5					33
	KRP	P	Z	02 42 35.5								
	CNZ	P	Z	02 42 46.5								
	GNZ	P	Z	02 42 50								
	MNG	P	Z	02 42 54								
	MJZ	P	Z	02 43 10								
	E		Z	02 43 20								
	MNW	EP	Z	02 43 22								
JUN 15	KRP	EP	Z	02 45 38								
	E		Z	02 45 47								
	MJZ	(P)	Z	02 45 45								
	E		Z	02 45 57								
	MNG	EP	Z	02 45 52								
JUN 15				02 47 21.7	10.7S 161.1E	33KM	4.5					33
	KRP	EP	Z	02 53 30								
	MNG	P	Z	02 53 48								
	MJZ	EP	Z	02 54 04								

		H	M	S	EPICENTRE	DEPTH	MAG	SOLOMON IS			DIST (DEG)	
		H M S			H M S			LOG <sub>a</sub> A/T	AZ	TZ	AN TN	AE TE MAG
JUN 15				02 49 41.0	10.0S 160.6E	33KM						34
	MNG	P	Z	02 56 12								
	MJZ	EP	Z	02 56 24								
JUN 15				02 57 22.2	10.2S 160.9E	33KM	4.8					33
	KRP	EP?	Z	03 03 19								
	MNG	P	Z	03 03 53								
	MJZ	E	Z	03 04 16								
JUN 15	KRP	EP	Z	03 04 04								
	MNG	P	Z	03 04 21								
JUN 15				03 03 34.2	10.2S 160.7E	33KM	5.7					33
	KRP	P	Z	03 09 45.5								
	CNZ	P	Z	03 09 57								
	GNZ	EP	Z	03 09 59								
	MNG	P	Z	03 10 05								5.7
	MJZ	P	Z	03 10 23.5								
	MSZ	P	Z	03 10 25								
	MNW	EP	Z	03 10 30								5.1
JUN 15	KRP	P	Z	03 12 44								
	MJZ	P?	Z	03 12 56								
	CNZ	P?	Z	03 13 02								
JUN 15	CNZ	EP?	Z	03 16 36								
JUN 15				03 27 18.8	10.2S 161.1E	33KM	4.8					33
	KRP	EP?	Z	03 33 37								
	MNG	P	Z	03 33 50								
JUN 15				03 32 12.2	10.6S 161.3E	33KM	5.1					33
	KRP	EP	Z	03 38 21								
	E		Z	03 38 29								
	CNZ	P	Z	03 38 30								
	MNG	P	Z	03 38 41								
	MJZ	EP	Z	03 38 59								
	E		Z	03 39 07								
JUN 15				03 35 46.4	10.3S 161.0E	10KM	4.7					33
	CNZ	P	Z	03 42 08								
	MNG	EP	Z	03 42 18								
JUN 15	KRP	P	Z	03 43 02								
	MNG	EP	Z	03 43 25								
JUN 15				03 39 29.0	10.5S 161.1E	33KM	4.7					33
	KRP	P	Z	03 45 38								
	CNZ	EP	Z	03 45 49								
	MNG	EP	Z	03 45 59								
JUN 15	KRP	EP	Z	03 46 52								



		MNG E(P)		Z 03 47 23							
		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
JUN 15		03 41	16.1	10.7S	161.3E	33KM	4.9	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	KRP	P		Z	03 47 25						
	CNZ	P		Z	03 47 35						
		E		Z			44				
	MNG	P		Z	03 47 45						
		E		Z			53				
	MJZ	P		Z	03 48 00						
		E		Z			09				
	MSZ	E(P)		Z	03 48 03						
		E		Z			15				
JUN 15		03 43	55.4	10.5S	161.2E	33KM	4.9	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	KRP	EP		Z	03 50 05						
		E		Z			10				
	CNZ	P		Z	03 50 15						
		E		Z			28				
	MNG	P		Z	03 50 25						
	MJZ	P		Z	03 50 41						
		E		Z			48				
	MSZ	P		Z	03 50 44						
	MNW	EP		Z	03 50 51		-1.86				5.0
JUN 15		04 04	39.8	10.5S	161.0E	33KM	5.2	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	KRP	P		Z	04 10 49.5						
		E		Z			57				
	CNZ	P		Z	04 11 00						
		E		Z			09				
	MNG	P		Z	04 11 09						
	MJZ	P		Z	04 11 25						
		E		Z			29				
	MSZ	P		Z	04 11 29						
JUN 15		04 26	53.3	10.7S	161.3E	33KM	5.3	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	KRP	EP		Z	04 32 59						
		E		Z			02				
	CNZ	EP		Z	04 33 12.5						
		E		Z			16				
	MNG	P		Z	04 33 20						
		E		Z			24				
	MJZ	P		Z	04 33 37						
		E		Z			41				
	MSZ	EP		Z	04 33 40						
		E		Z			44				
	MNW	EP		Z	04 33 46						
		E		Z			58				
JUN 15		06 00	43.5	10.4S	161.1E	33KM	4.2	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	MNG	E(P)		Z	06 07 20						
	MJZ	P?		Z	06 07 31						
JUN 15		06 04	58.2	30.2S	177.9W	41KM	4.1	KERMADEC IS		WEL 13	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	GNZ	E		Z	06 08 36						
		(S)		Z			46				
	KRP	E		ZE	06 07 20						
		E		Z			27				

## DISTANT EARTHQUAKES

		ES		E 08 59							
		MNG P		Z 06 07 38							
	CNZ	(P)		Z	06 07 45						
		E		Z			09 21				
		(S)		Z			33				
	WEL	S		ZNE	06 09 59						
	MJZ	EP		Z	06 08 44						
		S		ZNE	11 31						
	MSZ	EP		Z	06 09 04						
	ROX	EP		Z	06 09 04						
JUN 15		06 09	19.8	13.5S	165.4E	33KM	4.8	NEW HEBRIDES		WEL 29	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	CNZ	E(P)		Z	06 15 33						
	MNG	P		Z	06 15 45						
	MJZ	P		Z	06 16 03						
JUN 15		06 13	52.3	10.1S	161.0E	39KM	5.9	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	KRP	P		Z	06 20 04						
		E		Z			14				
	CNZ	P		Z	06 20 15						
		E		Z			26				
	MNG	P		Z	06 20 24.0 J						
		E		Z			34.5 J				
	GNZ	E		Z	06 20 29						
	MJZ	EP		Z	06 20 41						
		E		Z			50				
	MSZ	EP		Z	06 20 43						
		E		Z			48				
	MNW	EP		Z	06 20 51		-1.94				4.9
		E		Z			21 20				
JUN 15				CNZ	(P)						
					E	Z	06 21 49				
					E	Z	06 21 55				
					E	Z	06 22 17				
JUN 15		06 39	47.7	10.4S	161.1E	33KM	4.8	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	MNG	E		Z	06 46 29						
	MJZ	P		Z	06 46 30						
	MNW	P?		Z	06 46 51						
		E		Z			47 22				
JUN 15				CNZ	EP						
					E	Z	07 04 17				
					E	Z	27				
JUN 15		07 31	03.2	10.9S	160.7E	33KM	4.2	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	KRP	EP		Z	07 37 14						
	MNG	P		Z	07 37 34						
	MJZ	E		Z	07 37 56						
JUN 15		07 54	10.8	10.3S	161.3E	33KM	4.7	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	MNG	EP		Z	08 00 39						
JUN 15		08 59	47.6	10.3S	161.1E	33KM	4.1	SOLOMON IS		WEL 33	
								LOG <sub>a</sub> /T	AZ TZ	AN TN	AE TE MAG
	MNG	EP		Z	09 06 19						



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUN 15	09	31	27.3	10.8S 161.2E	49KM	4.5 SOLOMON IS	WEL 33
	MNG	P?	Z	09 37 59		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
JUN 15	09	38	58.3	10.6S 161.0E	33KM	4.6 SOLOMON IS	WEL 33
	KRP	EP	Z	09 45 05		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	09 45 25			
JUN 15	09	57	06.2	10.6S 161.4E	33KM	4.8 SOLOMON IS	WEL 33
	KRP	P	Z	10 03 15		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	E(P)	Z	10 03 35			
	MJZ	EP	Z	10 03 51			
JUN 15		MNG	EP	Z	10 16 50		
		E	Z	18 07			
		E	Z	10 18 47			
JUN 15	11	10	59.6	10.5S 161.5E	33KM	4.8 SOLOMON IS	WEL 33
	KRP	P	Z	11 17 11		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	CNZ	EP?	Z	11 17 19			
	MNG	EP	Z	11 17 33			
JUN 15	11	21	54.9	10.2S 161.3E	33KM	SOLOMON IS	WEL 33
	MSZ	E	Z	11 28 54		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
JUN 15	11	27	03.8	10.5S 161.1E	33KM	4.6 SOLOMON IS	WEL 33
	MNG	E	Z	11 33 45		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
JUN 15	14	08	59.2	10.4S 161.2E	33KM	4.5 SOLOMON IS	WEL 33
	KRP	E(P)	Z	14 15 12		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	E	Z	14 15 48			
JUN 15	14	38	38.3	10.5S 161.5E	33KM	SOLOMON IS	WEL 33
	KRP	EP?	Z	14 44 52		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
JUN 15	16	17	13.2	10.7S 161.2E	21KM	5.4 SOLOMON IS	WEL 33
	KRP	EP	Z	16 23 24		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	P	Z	16 23 43			
		E	Z	50			
	MJZ	EP	Z	16 23 59			
	MSZ	EP	Z	16 24 05			
	MNW	(P)	Z	16 24 18		-1.86	5.0
JUN 15	16	36	24.1	10.3S 160.7E	18KM	5.8 SOLOMON IS	WEL 33
	KRP	EP	Z	16 42 38		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	CNZ	P	Z	16 42 49			

	GNZ	P	Z	16 42 53		-1.10	5.7
	MNG	P	Z	16 42 58			
	MJZ	P	Z	16 43 14			
		E	Z	44 13			
	MSZ	E	Z	16 43 23			
	MNW	E	Z	16 43 31			
JUN 15	KRP	P	Z	16 47 08			
	MNG	P	Z	16 47 29			
JUN 15	18	39	53.1	10.7S 161.2E	33KM	4.6 SOLOMON IS	WEL 33
	KRP	P	Z	18 46 00		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	E	Z	18 46 27			
JUN 15	19	59	00.6	10.5S 161.4E	33KM	5.4 SOLOMON IS	WEL 33
	KRP	P	Z	20 05 12		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	CNZ	EP	Z	20 05 22			
	MNG	P	Z	20 05 30			
	MJZ	P	Z	20 05 48			
		E	Z	55			
JUN 15	20	27	49.1	10.3S 161.1E	33KM	4.7 SOLOMON IS	WEL 33
	MNG	EP	Z	20 34 21		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
JUN 15	20	49	21.1	11.4S 167.1E	151KM	4.7 SANTA CRUZ IS	WEL 31
	KRP	EP	Z	20 54 55		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	P	Z	20 55 15.5			
	MJZ	P	Z	20 55 39			
	MNW	P	Z	20 55 54		-1.90	4.8
JUN 15	21	13	53.3	10.5S 161.6E	33KM	4.1 SOLOMON IS	WEL 33
	MNG	P	Z	21 20 23		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MJZ	P	Z	21 20 40			
JUN 15	22	43	38.2	11.2S 167.0E	107KM	4.9 SANTA CRUZ IS	WEL 31
	KRP	E(P)	Z	22 49 25		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	CNZ	E(P)	Z	22 49 34			
	MNG	EP	Z	22 49 43			
	MJZ	EP	Z	22 50 05			
	MSZ	E	Z	22 50 11			
JUN 16	MNG	P	Z	00 09 55			
	MJZ	P	Z	00 10 08			
JUN 16	00	03	48.5	10.8S 161.3E	34KM	4.9 SOLOMON IS	WEL 33
	KRP	P	Z	00 09 57		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	CNZ	P	Z	00 10 08.5			
		E	Z	15			
	MNG	P	Z	00 10 16			
	MJZ	P	Z	00 10 31			
	MSZ	E	Z	00 10 38			
	MNW	P	Z	00 10 42		-1.90	5.0
JUN 16	MNG	E(P)	Z	00 13 01			



















		E	Z	53							
	CNZ	?	Z	23 49 40							
JUN 22	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	01 49 52.8	17:5S 167.2E	13KM	5.1 NEW HEBRIDES	WEL 25						
	MNG	P	Z	01 55 10.5	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG		
JUN 22	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	02 00 23.3	23.9S 179.7E	649KM	4.1 TONGA	WEL 18						
	MNG	P	Z	02 03 41	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG		
	ES	Z		06 34							
JUN 22	KRP	P?	Z	11 23 51							
JUN 22	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	17 46 34.1	11.4S 166.5E	75KM	4.5 SANTA CRUZ IS	WEL 31						
	MNG	P?	Z	17 52 35.5	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG		
	E	Z		38.5							
	E	Z		40							
JUN 22	MJZ	(P)	Z	18 25 45							
	KRP	E(P)	Z	18 26 11							
JUN 22	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	19 13 48.6	6.4S 146.4E	121KM	5.3 NEW GUINEA	WEL 43						
	MSZ	P	Z	19 21 38	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG		
	MNG	P	Z	19 21 38.7	J						
	E*PP	Z		22 04							
JUN 22	MNG	EP	Z	19 55 02.5							
	S	Z		57 56							
	WEL	E(S)	NE	19 58 13							
	GPZ	S	N	19 59 17							
	MJZ	P	Z	19 55 59							
	MNW	E(P)	Z	19 56 24	-1.66						
	E	Z		20 01 08							
	E	Z		12							
JUN 22	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	20 29 03.6	7.2S 124.6E	507KM	6.1 BANDA SEA	WEL 56						
	MSZ	P	Z	20 37 33.5	D						
	E	Z		39							
	EPCP	Z		38 37							
	SCP	Z		41 44							
	EPKPPKP	Z		21 07 58							
	E	Z		14 55							
	MNW	P	Z	20 37 35	D	-0.45	6.0				
	E	Z		41							
	ROX	P	Z	20 37 41.5	-0.30	6.1					
	E	Z		46	11 7						
	E	Z		41 45							
	(SCP)	Z		51							
	ES	NE		44 42	14 26				6.3		
	ESS	NE		47 42	11 20				24 22		
	E	NE		51 20	19 20				18 16		
	MJZ	P	ZNE	20 37 41.9	DW						
	E	ZNE		47							
	E*PP	Z		39 54							
	E	NE		44 07							
	E(S)	ZN		47							
	WEL	P	Z	20 37 52							
	E	Z		57							

## DISTANT EARTHQUAKES

		E	Z	39 46							
	E*PP	Z		40 09							
	S	NE		45 01							
	ESS	ZE		48	11 9				9 11 6,5		
	MNG	IP	Z	20 37 54.9	D						
	E*PP	Z		40 07							
	E	Z		11							
	GNZ	P	Z	20 38 03	D	0.35	6.8				
	E	Z		40 02							
	(S)	Z		45 20							
	E	Z		30							
JUN 23	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	05 01 42.4	43.8N 139.9E	219KM	5.5 JAPAN	WEL 90						
	KRP	P	Z	05 14 06	DIR	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG	
	MNG	P	Z	05 14 18							
JUN 23	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	21 51 57.4	38.2N 141.4E	92KM	5.0 JAPAN	WEL 85						
	KRP	P	Z	22 04 08	DIR	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG	
	CNZ	P?	Z	22 04 10							
	MNG	P	Z	22 04 19							
	MJZ	P	Z	22 04 28							
JUN 24	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	02 57 02.5	6.3S 155.0E	155KM	5.6 SOLOMON IS	WEL 39						
	KRP	P	Z	03 03 55	DIR	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG	
	GNZ	P	Z	03 04 08	-0.80	5.9					
	MNG	P	Z	03 04 12							
	MJZ	P	Z	03 04 22							
	MSZ	P	Z	03 04 22							
JUN 24	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	08 17 49.1	26.7S 177.3W	146KM	5.3 KERMADEC IS	WEL 16						
	GNZ	EP	Z	08 20 49	DIR	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG	
	KRP	EP	Z	08 20 51	-1.38						
	CNZ	E(P)	Z	08 21 01							
	MNG	EP	Z	08 21 06.5							
	E	Z		15							
	E(S)	Z		23 48							
	WEL	S	NE	08 24 05							
	MJZ	ES	ZNE	08 25 34							
	MSZ	P	Z	08 22 27							
	E	Z		23 02							
	E(S)	Z		26 14							
JUN 24	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)						
	13 47 50.0	24.2S 178.7E	619KM	4.3 FIJI	WEL 17						
	KRP	P	Z	13 50 43	DIR	LOG <sub>A/T</sub>	AZ TZ	AN TN	AE TE	MAG	
	GNZ	P	Z	13 50 45							
	E	Z		47							
	E(S)	Z		53 17							
	CNZ	P	Z	13 50 55							
	MNG	P	Z	13 51 06							
	S	Z		53 51							
	WEL	(P)	Z	13 51 16							
	S	NE		54 05							
	MJZ	EP	Z	13 51 50							
	ES	N		55 01							
	MSZ	EP	Z	13 52 03							



DATE	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)				
	H M S			H M S					WEL				
JUN 25	01	46	10.4	29.6N	142.1E	49KM	5.5	JAPAN	WEL	77			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	EP	Z	01	57	42							
	CNZ	P	Z	01	57	49							
	MNG	P	Z	01	57	54							
	MSZ	P	Z	01	58	02							
	MJZ	EP	Z	01	58	04							
JUN 25	10	32	07.6	19.7S	169.5E	199KM	4.8	NEW HEBRIDES	WEL	22			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	P	Z	10	36	15.5							
	MNG	P	Z	10	36	42							
		E+PP	Z	37	23								
	MJZ	E+PP	Z	10	37	51							
JUN 25	16	01	21.5	10.1S	160.9E	78KM	5.6	SOLOMON IS	WEL	33			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	P	Z	16	07	29							
	CNZ	P	Z	16	07	41							
	MNG	P	Z	16	07	49							
	MJZ	P	Z	16	08	05							
		E	Z	15									
	MSZ	P	Z	16	08	09							
		E	Z	20									
JUN 25	18	38	35.7	5.0S	151.4E	123KM	5.6	NEW BRITAIN	WEL	42			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	P	Z	18	45	55							
	CNZ	P	Z	18	46	04							
		E	Z	35									
	MNG	P	Z	18	46	11							
	MJZ	EP	Z	18	46	19							
	MSZ	EP	Z	18	46	20							
		E	Z	47	03								
	MNH	E	Z	18	47	16							
JUN 26													
	KRP	P	Z	04	30	11							
	MNG	P	Z	04	30	32							
		(S)	Z	33	23								
JUN 26	06	49	17.6	21.2S	174.3W	33KM	5.0	TONGA	WEL	22			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	P	Z	06	53	39							
	MNG	EP	Z	06	54	00							
JUN 26	ECZ	P	Z	17	02	30							
	KRP	P	Z	17	02	47							
	MNG	P	Z	17	03	11							
		E	Z	04	27								
JUN 27	06	28	05.2	21.4S	170.0E	43KM	4.9	NEW HEBRIDES	WEL	29			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	EP	Z	06	32	05							
	CNZ	EP	Z	06	32	13							
	GNZ	EP	Z	06	32	20							
	MNG	P	Z	06	32	34.8							

DATE	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)				
	H M S			H M S					WEL				
JUN 27	08	38	45.8	22.7S	175.8W	60KM	5.3	TONGA	WEL	20			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	EP	Z	08	42	42							
	MNG	EP	Z	08	43	04.5							
		E	Z	44									
		S	Z	46	29								
	WEL	EP	Z	08	43	18							
		E(S)	Z	46	43								
		E	Z	50									
	MJZ	EP	Z	08	43	58							
		(+PP)	Z	44	09								
	MSZ	P	Z	08	44	12							
JUN 27	12	14	04.9	16.4S	174.8W	80KM	4.6	SAMOA	WEL	26			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	GNZ	EP	Z	12	19	09							
	KRP	P	Z	12	19	09							
	CNZ	E	Z	12	19	26							
	MNG	P	Z	12	19	31.5							
	MJZ	E(P)	Z	12	20	15							
	MSZ	EP	Z	12	20	29							
JUN 27	18	11	37.4	15.8S	167.1E	15KM	4.4	NEW HEBRIDES	WEL	26			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	P	Z	18	16	50							
	MNG	E	Z	18	17	29							
JUN 27	22	14	21.2	20.8S	175.9W	217KM	4.0	TONGA	WEL	22			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	MNG	EP	Z	22	18	41							
		ES	Z	22	26								
	MJZ	E(P)	Z	22	19	32							
JUN 27	22	44	22.1	7.3N	125.0E	39KM	6.3	PHILIPPINE IS	WEL	66			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	MSZ	EP?	Z	22	55	00							
JUN 28	00	59	54.4	12.6S	167.1E	233KM	5.3	SANTA CRUZ IS	WEL	29			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	P	Z	01	05	11							
	MNG	P?	Z	01	05	29							
		E	Z	33									
	WEL	E	Z	01	05	39							
	MJZ	P	Z	01	05	56							
	MSZ	EP?	Z	01	06	00							
JUN 28	01	49	59.2	5.6S	146.4W	32KM	5.0	NEW GUINEA	WEL	50			
						DIR	LOG <sub>a</sub> A/T	AZ TZ AN TN	AE TE	MAG			
	KRP	P	Z	01	57	47							
		E	Z	58	17								
	MSZ	EP	Z	01	58	00							
	MNG	P	Z	01	58	02							
JUN 28													
	KRP	E(P)	Z	04	21	15							
	CNZ	(P)	Z	04	21	24							



DATE	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
	H	M	S	10.9S	164.5E	33KM			WEL	32	AE	TE
JUN 28	07	40	59.1	10.9S	164.5E	33KM	4.3	SANTA CRUZ IS				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	KRP	EP	Z	07	47	04						
	WEL	E	Z	07	49	07						
JUN 28	MJZ	P	Z	09	30	43						
JUN 28	11	39	02.1	10.2S	161.2E	33KM	5.6	SOLOMON IS				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	KRP	EP	Z	11	45	15						
	CNZ	P?	Z	11	45	25						
	GNZ	P	Z	11	45	28		-1.40				5.4
	MNG	EP	Z	11	45	33						
	MJZ	P	Z	11	45	49						
	MSZ	P	Z	11	45	51						
	ROX	EP	Z	11	46	00						
JUN 29	02	39	52.8	22.3S	179.4W	501KM	4.5	FIJI				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	KRP	P	Z	02	43	21						
	GNZ	P	Z	02	43	22.5		-1.28				5.2
	MNG	P	Z	02	43	42						
		ES	Z	02	46	44						
	MSZ	P	Z	02	44	37						
JUN 29	06	57	58.1	49.9N	78.0E	0KM	5.7	E KAZAKHSTAN				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	MSZ	PKP	Z	07	16	53						
	MNG	PKP	Z	07	16	56						
	MJZ	PKP	Z	07	16	57						
JUN 29	07	38	14.0	19.4S	174.2W	50KM	4.5	TONGA				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	GNZ	EP	Z	07	42	43		-1.23				5.0
	KRP	P	Z	07	42	50						
	CNZ	P	Z	07	43	01						
	MNG	P	Z	07	43	12						
		ES	Z	07	47	13						
	WEL	P	Z	07	43	27		-0.60				5.8
	MJZ	EP	Z	07	44	02						
		(*PP)	Z	07	44	12						
	MSZ	P	Z	07	44	13						
JUN 29	21	46	54.5	13.8S	166.7E	35KM	6.2	NEW HEBRIDES				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	KRP	P	Z	21	52	26						
	MNG	P	Z	21	52	43						
	MSZ	E(P)	Z	21	53	03						
	MJZ	E	Z	21	53	15						
	ROX	EP	Z	21	53	13		-1.03				5.7
JUN 29	22	51	22.7	24.2N	122.5E	33KM	5.2	TAIWAN				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	MNG	EP?	Z	23	03	33						
		E	Z	23	03	40						

DATE	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
	H	M	S	20.1S	178.6W	629KM			WEL	22	AE	TE
JUN 30	03	55	57.2	20.1S	178.6W	629KM	4.5	FIJI				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	MNG	P	Z	03	59	59.6						
		E	Z	04	05	29						
JUN 30	06	06	42.3	21.0S	176.3W	169KM	4.5	TONGA				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	KRP	P	Z	06	10	45						
		E	Z	06	11	05						
	GNZ	P	Z	06	10	46		-1.31				5.0
	CNZ	EP	Z	06	10	57						
	MNG	P	Z	06	11	07						
		E(S)	Z	06	14	44						
		E	Z	06	11	22		-0.53				5.9
	WEL	(P)	Z	06	11	55						
	MJZ	P	Z	06	11	55						
	MSZ	EP	Z	06	12	03						
		E	Z	06	12	13						
JUN 30	07	49	42.4	5.7S	146.8E	61KM	4.7	NEW GUINEA				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	KRP	EP	Z	07	57	27						
	CNZ	P	Z	07	57	33.5						
	MSZ	EP	Z	07	57	33						
	MNG	P	Z	07	57	39						
		(*PP)	Z	07	57	42						
	MJZ	EP	Z	07	57	42						
JUN 30	12	27	41.9	9.6N	126.7E	44KM	5.4	PHILIPPINE IS				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	KRP	P	Z	12	38	24						
	MSZ	EP	Z	12	38	25						
	MJZ	P	Z	12	38	29						
	CNZ	P	Z	12	38	30						
	ROX	EP	Z	12	38	32		-1.15				6.0
	WEL	P	Z	12	38	33		-1.15				6.0
	MNG	P	Z	12	38	34						
	GNZ	EP	Z	12	38	38		-1.28				5.9
JUN 30	MSZ	P	Z	12	56	14						
	MJZ	E(P)	Z	12	56	21						
		E	Z	12	56	30						
JUN 30	KRP	P	Z	12	58	34						
	CNZ	P	Z	12	58	43.5						
	MNG	P	Z	12	58	53						
	MSZ	P	Z	12	59	52						
JUN 30	15	45	26.0	24.4N	122.2E	47KM	5.4	TAIWAN				
								LOG <sub>a</sub> /T	AZ	TZ	AN	TN
	KRP	P	Z	15	57	31						
	MSZ	EP	Z	15	57	34						
		E	Z	15	57	44						
	CNZ	P	Z	15	57	34.7						
	MNG	P	Z	15	57	33						
	MJZ	EP	Z	15	57	39						
	ROX	EP	Z	15	57	41		-1.15				6.0
	GNZ	P	Z	15	57	41		-1.10				6.0



DATE	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
					WEL	AE	TE
JUN 30	16 57 23.4	15.5S 177.3W	33KM	4.9 FIJI			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	P	Z 17 02 29					
CNZ	EP	Z 17 02 41					
MNG	?	Z 17 02 57					
JUN 30	GNZ	P	Z 19 21 01	-1.69			
	ES	Z 23 26					
TUA	ES	Z 19 23 35					
KRP	P	Z 19 21 03					
	(S)	NE 23 41					
CNZ	S	Z 19 24 00					
MNG	EP	Z 19 21 25					
	E	Z 24 08					
	(S)	Z 15					
WEL	S	ZNE 19 24 32					
GPZ	S	N 19 25 26					
MJZ	E(S)	ZN 19 25 51					
JUL 01	05 50 38.8	24.8N 122.4E	109KM	6.2 TAIWAN			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	P	ZNE 06 02 36.9		-0.07			6.8
	*PP	Z 03 05					
CNZ	P	Z 06 02 40.8					
	*PP	Z 03 09.0					
MSZ	P	Z 06 02 41.0					
	*PP	Z 03 09					
MNG	P	Z 06 02 44.0					
	*PP	Z 03 13.8					
WEL	P	ZNE 06 02 46		-0.30	4 6		6.5
	*PP	ZNE 03 13			4 7		6.6
	PP	Z 05 57			2 7		6.5
	S	NE 12 44				3 8	6.5
ROX	P	Z 06 02 47		-0.12			6.8
	*PP	Z 03 16				3 8	2 14
	S	NE 12 54					
JUL 01	10 21 52.5	3.1S 129.5E	63KM	5.3 CERAM			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
MNG	EP	Z 10 31 24					
JUL 01	19 20 26.6	23.8S 179.9E	555KM	4.0 S OF FIJI			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	P	ZNE 19 23 30.5		-1.03			
MNG	P	Z 19 23 52.8					
	S	Z 26 40					
WEL	S	E 19 27 03					
MSZ	P	Z 19 24 49					
ROX	EP	Z 19 24 51		-1.22			5.3
JUL 01	22 12 18.3	2.4N 127.3E	90KM	5.0 MOLUCCA PASSAGE			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
MJZ	EP	Z 22 22 17					
JUL 03	04 09 34.2	21.2S 174.2W	69KM	4.9 TONGA IS			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	EP	Z 04 13 49		-1.30			4.9
MNG	EP	Z 04 14 13					
WEL	EP	Z 04 14 32		-0.76			5.5
	EL	ZNE 20 30			3 16	3 15	5 15

DATE	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
					WEL	AE	TE
JUL 04	02 55 37.2	51.8S 176.4E	37KM	5.5 ALEUTIAN IS			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	EP	Z 03 08 30		-1.37			
MNG	P	Z 03 08 41.8					
	*PP	Z 57					
JUL 04	07 14 02.8	18.5S 178.2W	488KM	3.2 FIJI IS			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	EP	Z 07 18 03		-1.60			4.9
JUL 04	07 22 25.5	22.2S 179.5W	601KM	4.4 S OF FIJI			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	P	ZNE 07 25 46.8		-1.21			5.1
CNZ	P	Z 07 25 54					
MNG	P	Z 07 26 08					
	S	Z 29 11					
JUL 04	18 33 37.1	51.9N 179.8E	15KM	6.0 ALEUTIAN IS			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	P	ZNE 18 46 33.0		0.31			
CNZ	P	Z 18 46 40					
MNG	EP	Z 18 46 46					
WEL	EP	Z 18 46 55		-0.66			6.9
	SKS	ZNE 57 21			4 18	10 25	
	ES	E 58 00					7 16
	LQ	E 19 11					184 42
	MAX	ZNE 20			80 26	34 25	53 26
MJZ	EP	ZE 18 47 05					
ROX	ES	E 18 58 38					14 20
							7.1
JUL 04	18 50 22.6	51.4N 179.5W	36KM	5.0 ALEUTIAN IS			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	EP	Z 19 03 16		-0.88			6.5
JUL 05	03 22 45.5	15.1S 175.0W	252KM	5.0 TONGA			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	P	ZNE 03 27 40.8		-0.97			5.5
CNZ	EP	Z 03 27 48					
MNG	EP	Z 03 28 01					
MSZ	EP	Z 03 28 56					
JUL 05	03 48 44.8	17.8S 178.7W	516KM	4.0 FIJI			
		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN
KRP	EP	Z 03 52 51		-1.60			4.9
MSZ	EP	Z 03 54 03					
JUL 07	ECZ	P	Z 04 55 11				
	S	Z 56 12					
KRP	P	ZNE 04 55 21		-1.16			
TUA	EP	Z 04 55 22					
	ES	Z 56 41					
CNZ	EP	Z 04 55 33					
	ES	Z 57 03					
MNG	P	Z 04 55 46					
	S	Z 57 23					







JUL	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)
	WEL	AE	TE	LOG <sub>a</sub> /T	AZ	TZ			
JUL 12	21	39	58.1	20.6S	174.4W		33KM	4.6 TONGA	23
	MNG	P	Z	21	44	45			
	MJZ	EP	Z	21	45	35			
	MSZ	EP	Z	21	45	49			
	MNW	EP	Z	21	45	59		-1.43	5.2
JUL 13	MNG	P	Z	00	39	22.0			
	ES	Z		42	03				
	MSZ	EP	Z	00	40	17			
JUL 13	04	03	21.4	19.1S	169.5E		270KM	4.4 NEW HEBRIDES	23
	MNG	EP	Z	04	07	53			
JUL 13	05	47	43.7	28.0S	177.6W		115KM	5.1 KERMADEC IS	15
	GNZ	EP	Z	05	50	20			
	ES	Z		53	10				
	MNG	P	Z	05	50	44			
	S	Z		53	10				
	WEL	S	ZNE	05	53	31			
	MSZ	EP	Z	05	52	07.2			
JUL 13	06	46	55.6	23.3S	179.9E		537KM	4.6 S OF FIJI	18
	KRP	P	ZNE	06	50	05.5		-1.31	5.1
	MNG	EP	Z	06	50	29			
	ES	Z		53	20.5				
	WEL	ES	ZNE	06	53	36			
	MJZ	EP	ZNE	06	51	09			
	MSZ	P	Z	06	51	23			
JUL 13	09	03	13	18.7S	172.3W		33KM	4.2 TONGA	25
	KRP	EP	Z	09	08	13		-1.46	4.8
JUL 13	14	40	27.4	0.1S	122.9E		135KM	5.4 N CELEBES	62
	MSZ	P	Z	14	50	19.3			
	MJZ	P	ZNE	14	50	27.0			
	KRP	P	ZNE	14	50	31.0		-0.51	6.5
	MNG	P	Z	14	50	35.2			
JUL 14	07	24	06.4	15.1S	174.3W		192KM	4.5 TONGA	28
	KRP	EP	Z	07	29	08		-1.60	5.0
	MSZ	EP	Z	07	30	23			
JUL 15	08	37	35.5	20.2S	178.6W		613KM	4.2 FIJI	22
	KRP	P	ZNE	08	41	15.2		-1.21	5.2
	MNG	P	Z	08	41	35.0			
	MNW	P	Z	08	41	39		-1.13	5.4

JUL	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)
	WEL	AE	TE	LOG <sub>a</sub> /T	AZ	TZ			
JUL 16	00	34	35.6	0.4N	121.5E		169KM	5.2 N CELEBES	64
	MSZ	EP	Z	00	44	32			
	MNG	P	Z	00	44	50			
JUL 16	07	19	55.4	10.9S	165.9E		66KM	5.1 SANTA CRUZ IS	31
	KRP	EP	ZNE	07	25	44		-1.43	5.1
	CNZ	P	Z	07	25	55.2			
	MNG	P	Z	07	26	04.2			
	WEL	P	ZNE	07	26	09		-0.77	6.0
	EL	ZNE		35					
	MSZ	EP	Z	07	26	30			
JUL 17	02	24	04.2	21.7S	169.8E		42KM	4.9 LOYALTY IS	20
	KRP	EP	Z	02	28	03		-0.99	5.1
	MNG	P	Z	02	28	30			
	MSZ	EP	Z	02	29	21			
JUL 17	06	48	26.7	5.5S	153.7E		66KM	5.0 NEW IRELAND	40
	KRP	P	ZNE	06	55	39.5		-1.33	5.5
	MNG	P	Z	06	55	55.8			
	MSZ	P	Z	06	56	07.5			
JUL 17	16	04	37.0	19.6S	175.7W		215KM	4.1 TONGA	23
	KRP	P	ZNE	16	08	52		-1.15	5.3
	MNG	EP	Z	16	09	14			
	ES	Z		12	08				
JUL 18	07	36	04.0	25.0S	177.1W		120KM	4.2 S OF FIJI	18
	KRP	EP	Z	07	39	34		-1.77	
	MNG	EP	Z	07	39	48			
JUL 19	19	20	33.5	51.7N	173.3W		47KM	5.4 ALEUTIAN IS	93
	KRP	EP	Z	19	33	39		-1.39	6.0
JUL 21	03	33	09.1	52.7S	160.5E		33KM	5.5 MACQUARIE IS	15
	MNW	P	Z	03	35	08		-0.83	
	ES	Z		36	44				
	MSZ	EP	Z	03	35	24			
	MNG	EP	Z	03	36	52			
JUL 21	05	23	51.5	5.0S	154.3E		421KM	4.6 SOLOMON IS	41
	KRP	P	Z	05	30	34.5		-1.09	5.3
	*SP	Z		32	39				
	MNG	P	Z	05	30	50.4			
	MSZ	P	Z	05	30	59.5			















H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN AE TE MAG
AUG 08	09 57 29.7	27.7S 69.0W	83KM	5.6 N CHILE			WEL 90 6.0
	GNZ EP	Z 10 10 19		-1.23			
	MJZ P	Z 10 10 24					
	MSZ EP	Z 10 10 27					
	KRP EP	ZE 10 10 27.5		-1.16			6.2
AUG 08	22 37 41.9	20.1S 168.5E	37KM	4.1 LOYALTY IS			WEL 22 6.2
	MNG EP	Z 22 42 29					
AUG 09	17 30 35.9	20.7S 175.3W	33KM	4.9 TONGA			WEL 22 4.6
	KRP EP	Z 17 34 57		-1.58			
	MJZ EP	Z 17 36 10					
	MSZ EP	Z 17 36 24.5					
AUG 09	22 25 42.3	17.2S 167.5E	33KM	5.2 NEW HEBRIDES			WEL 25 5.4
	KRP EP	ZN 22 30 33.5		-0.92			
	MNG EP	Z 22 30 58					
	MSZ EP	Z 22 31 29					
	MJZ EP	Z 22 31 31					
AUG 10	05 01 09.4	20.1S 175.3W	96KM	5.8 TONGA			WEL 23 6.6
	GNZ EP	Z 05 05 28		0.40			
	KRP EP	ZNE 05 05 30		-0.09			6.1
	ES	ZNE 08 58					
	ESCS	NE 16 53					
	MNG EP	Z 05 05 52					
	ES	Z 09 39					
	ESCP	Z 13 21					
	ESCS	Z 17 01.5					6.8
	WEL EP	ZNE 05 06 00		0.53			
	ES	ZNE 09 55					
	ESCP	Z 13 22.5					4 6 8 9
	ESCS	ZNE 17 07					4 12
	E*SSCS	E 57					
	MJZ EP	ZNE 05 06 37					
	ES	ZNE 11 03					
	ESCP	Z 13 34					
	ESCS	E 17 24					
	MSZ EP	Z 05 06 51.5					
AUG 10	12 33 42.2	5.5S 151.8E	40KM	5.3 NEW BRITAIN			WEL 41 5.7
	KRP EP	ZNE 12 41 05.5					
	MNG EP	Z 12 41 22.5					
	MSZ EP	Z 12 41 28					
	WEL EP	Z 12 41 30					3 25
	ES	ZNE 47 32					
	ESS	ZNE 50 56					
	EL	ZNE 53 34			15 21	7 19	6 19
	MJZ EP	ZNE 12 41 30					

H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN AE TE MAG
AUG 10	13 07 18.5	5.4S 151.7E	63KM	5.1 NEW BRITAIN			WEL 41 5.5
	KRP EP	Z 13 14 38.5		-1.29			
	MSZ EP	Z 13 15 00					
	MJZ EP	Z 13 15 03					
AUG 10	15 57 40.0	5.5S 151.7E	53KM	5.5 NEW BRITAIN			WEL 41 6.2
	MSZ EP	Z 16 05 22					
AUG 11	05 12 42.5	19.3S 173.8W	31KM	5.4 TONGA			WEL 24 5.8
	GNZ EP	Z 05 17 20		-0.44			
	ES	Z 20 56					
	KRP EP	ZNE 05 17 21.5		-0.73			5.5
	ES	NE 21 13					
	MNG EP	Z 05 17 43.5					
	ES	Z 21 47					
	WEL EP	ZNE 05 17 54		-0.60			5.8
	ES	ZNE 22 04					
	EL	ZNE 24					
	MAX	ZNE 29					
	MJZ EP	ZNE 05 18 31			13 20	9 21	7 20
	ES	ZNE 23 29					
	MSZ EP	Z 05 18 45					
AUG 11	08 40 06.2	18.1S 178.3W	572KM	4.0 FIJI			WEL 24 6.4
	KRP EP	Z 08 44 09					
	MNG EP	Z 08 44 28.5					
	MJZ EP	ZNE 08 45 06					
	MSZ EP	Z 08 45 23					
AUG 11	10 45 59.1	52.7N 169.7W	56KM	5.3 ALEUTIAN IS			WEL 95 6.4
	KRP EP	ZNE 10 58 58		-1.04			
	MNG EP	Z 10 59 08.5					
	MJZ EP	ZNE 10 59 27					
AUG 11	18 58 27	21.5S 169.2E	33KM	5.2 TONGA			WEL 20 6.2
	MNG EP	Z 19 02 55					
AUG 11	20 39 56.0	23.5S 175.9W	33KM	5.2 TONGA			WEL 19 6.2
	MNG EP	Z 20 44 05					
	ES	Z 47 15.5					
	MJZ EP	ZNE 20 45 08					
AUG 11	22 16 15.2	23.4S 175.7W	33KM	4.8 TONGA			WEL 20 6.2
	MNG EP	Z 22 20 27					
	MSZ EP	Z 22 21 42					
AUG 11	23 25 37.9	23.4S 175.9W	36KM	5.3 TONGA			WEL 19 6.2
	KRP EP	ZNE 23 29 29					







H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN AE TE MAG
AUG 14	11 52 00.4	22.0S 170.4E	33KM	LOYALTY IS			WEL 20
	MNG EP	Z 11 56 21					
AUG 14	21 18 57.6	21.8S 169.9E	39KM	LOYALTY IS			WEL 20
	MNG EP	Z 21 23 17					
	MJZ EP	Z 21 23 50					
AUG 14	23 02 41.9	21.2S 179.2W	581KM	3.9 FIJI			WEL 21
	KRP EP	Z 23 06 13.5					
	GNZ EP	Z 23 06 13.5					
	MNG EP	Z 23 06 35					
AUG 15	02 12 48.1	17.9S 178.3W	571KM	4.5 FIJI			WEL 24
	KRP EP	Z 02 16 50					
	MNG EP	Z 02 17 11					
	MJZ EP	ZNE 02 17 50					
	MSZ EP	Z 02 18 05					
AUG 15	02 45 34.3	13.3N 121.3E	24KM	5.4 PHILIPPINE IS			WEL 73
	MSZ EP	Z 02 56 55					
	KRP EP	ZNE 02 56 57		-1.09			6.0
	EPP	Z 59 31					
	MJZ EP	ZNE 02 56 59.5					
	EPP	ZN 59 39.5					
	WEL EP	ZE 02 57 03		-1.08		6 24	6.0
	EL	ZNE 03 21					
	MNG EP	Z 02 57 04					
	EPP	Z 59 41.5					
	GNZ EP	Z 02 57 09		-0.96			6.1
AUG 15	07 40 20	20.0S 177.6W	523KM	FIJI			WEL 22
	KRP EP	ZNE 07 44 05.5		-1.46			5.0
	GNZ EP	Z 07 44 07.5		-1.08			5.4
	MNG EP	Z 07 44 26					
	WEL EP	Z 07 44 34		-1.21			5.3
AUG 15	09 54 49.8	17.3S 167.7E	49KM	NEW HEBRIDES			WEL 25
	MNG EP	Z 10 00 04					
AUG 15	12 58 02.3	20.7S 178.8W	525KM	4.5 FIJI			WEL 21
	KRP EP	Z 13 01 43		-1.88			4.6
	MNG EP	Z 13 02 04					
AUG 15	GNZ EP	Z 18 14 52		-1.16			
	ES	Z 16 35					
	KRP EP	Z 18 14 55.5		-1.56			
	MNG EP	Z 18 15 17.5					
	ES	Z 17 19					
	WEL ES	ZNE 18 17 42					
	MJZ ES	ZNE 18 19 09					

H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN AE TE MAG
AUG 16	01 15 57.5	16.3S 172.8E	33KM	4.7 NEW HEBRIDES			WEL 25
	KRP EP	ZNE 01 20 49		-0.62			
	MNG EP	Z 01 21 13.5					5.7
	MJZ EP	ZN 01 21 48					
AUG 16	04 54 29.7	21.9S 170.1E	47KM	4.2 LOYALTY IS			WEL 20
	KRP EP	ZNE 04 58 23		-1.21			
	MNG EP	Z 04 58 48					4.9
	MJZ EP	ZNE 04 59 23.5					
	MSZ EP	Z 04 59 41					
AUG 16	GNZ EP	Z 08 35 58					
	ES	Z 37 23					
	KRP EP	ZNE 08 36 02.5		-1.51			
	MNG EP	Z 08 36 23					
	ES	Z 38 10					
	WEL EP	ZNE 08 36 36					
	ES	ZNE 38 34					
AUG 16	08 53 42.9	18.4S 169.3E	214KM	3.8 NEW HEBRIDES			WEL 23
	MNG EP	Z 08 58 30					
AUG 16	17 47 42.9	27.8S 178.0W	196KM	4.9 KERMADEC IS			WEL 15
	GNZ ES	Z 17 52 08					
	KRP EP	ZNE 17 50 21					
	MNG EP	Z 17 50 42					
	ES	Z 53 06					
	WEL ES	ZNE 17 53 28					
	MJZ ES	ZNE 17 54 56					
	MSZ EP	Z 17 52 38					
	ES	Z 55 32					
AUG 16	19 45 38.0	21.4S 171.4E	28KM	5.2 LOYALTY IS			WEL 20
	KRP EP	ZNE 19 49 34		-0.31			
	GNZ EP	Z 19 49 48.5		-0.64			5.8
	MNG EP	Z 19 50 03					5.5
	WEL EP	ZNE 19 50 10.5		-0.50	16 13	8 13	6.0
	ES	ZNE 54 03			10 12	16 14	17 9 6.0
	EL	ZNE 55 20			134 22	87 22	56 21
	MJZ EP	Z 19 50 38					
	MSZ EP	Z 19 50 47					
	ROX EP	ZN 19 50 54					
	ES	ZNE 55 15			4 8		6.0
	EL	ZNE 57			18 16		6.2
					28 20	39 18	
AUG 16	21 25 33.9	20.0S 177.6W	536KM	4.5 FIJI			WEL 22
	KRP IP	ZNE 21 29 22.6		-1.04			
	MNG EP	Z 21 29 42					5.5
AUG 17	00 53 43.8	21.7S 171.0E	40KM	4.7 LOYALTY IS			WEL 20
	KRP EP	ZN 00 57 37.5		-0.62			
	MNG EP	Z 00 58 05					5.5







	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 19	13 15 12.3	39.4N 41.3E	52KM	5.0 TURKEY	WEL 145
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EPKP	Z 13 34 42.5			
	MNG EPKP	Z 13 34 43			
AUG 19	13 39 42.0	19.1S 173.6W	33KM	4.4 TONGA	WEL 24
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EP	ZE 13 44 27		-1.73	4.5
	MNG EP	Z 13 44 48			
	MJZ EP	ZNE 13 45 40.5			
	MSZ EP	Z 13 45 55			
AUG 19	13 54 24.7	39.0N 41.8E	29KM	5.3 TURKEY	WEL 144
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EPKP	ZNE 14 13 56.5			
	MNG EPKP	Z 14 13 57			
AUG 19	13 57 23.1	18.8S 177.5W	564KM	4.6 FIJI	WEL 23
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP P	ZNE 14 01 20.6		-1.41	5.1
	MNG EP	Z 14 01 39			
	MJZ EP	ZNE 14 02 23			
	MSZ EP	Z 14 02 34.5			
AUG 19	14 03 57.8	39.2N 41.3E	33KM	4.7 TURKEY	WEL 145
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EPKP	Z 14 23 30			
	MNG EPKP	Z 14 23 30			
AUG 19	14 17 57.0	39.3N 41.3E	44KM	5.0 TURKEY	WEL 145
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP PKP	ZNE 14 37 28			
	MNG EPKP	Z 14 37 29			
AUG 19	18 41 15.8	39.2N 41.5E	34KM	4.8 TURKEY	WEL 145
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EPKP	Z 19 00 47			
	MNG EPKP	Z 19 00 48			
AUG 20	06 14 37.4	10.4S 161.1E	44KM	4.6 SOLOMON IS	WEL 33
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EP	Z 06 21 06			
AUG 20	08 26 50.3	22.6N 143.1E	86KM	4.6 VOLCANO IS	WEL 70
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP P	ZNE 08 37 39		-1.09	5.9
	GNZ EP	Z 08 37 48		-1.01	5.9
	MJZ EP	ZNE 08 37 48.5			
	MNG EP	Z 08 37 51			
	MSZ EP	Z 08 37 58			
AUG 20	09 32 31.9	43.1N 140.6E	163KM	5.7 JAPAN	WEL 89
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP IP	ZNE 09 44 59.3 J		-0.90	6.0
	GNZ EP	Z 09 45 05		-1.01	6.0
	MNG P	Z 09 45 09.0			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 20	11 31 18.0	4.1S 102.6E	98KM	5.4 S SUMATRA	WEL 74
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	MNG EP	Z 11 42 46.5			
AUG 20	11 59 08.8	39.4N 40.9E	12KM	5.3 TURKEY	WEL 145
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EPKP	ZNE 12 18 45			
	MNG EPKP	Z 12 18 45			
	GNZ EPKP	Z 12 18 52.5			
AUG 20	12 01 43.2	39.1N 40.7E	33KM	5.5 TURKEY	WEL 145
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	MNG EPKP	Z 12 21 15			
	KRP EPKP	ZNE 12 21 16			
AUG 20	22 55 00.9	23.5S 175.9W	37KM	5.6 TONGA	WEL 19
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	GNZ EP	Z 22 58 46		-0.94	5.2
	ES	Z 23 01 19			
	KRP EP	ZE 22 58 49		-1.33	4.8
	MNG EP	Z 22 59 07			
	ES	Z 23 02 16			
	WEL EP	Z 22 59 22		-0.90	5.3
	ES	ZNE 23 02 38			
	ELQ	NE 03 36			19 25 38 24
	ELR	Z 04 02			
	EMAX	ZNE 07			37 19 25 19 32 20
	MJZ EP	ZNE 23 00 06.5			
	ES	ZNE 04 08			
	MSZ EP	Z 23 00 21			
	ES	Z 04 34			
AUG 20	23 13 17.9	23.5S 175.3W	13KM	5.0 TONGA	WEL 20
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	MNG EP	Z 23 17 30			
	ES	Z 20 40			
AUG 20	MNG E(P)	Z 23 15 33			
AUG 21	00 15 03.0	39.0N 41.9E	37KM	4.7 TURKEY	WEL 144
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EPKP	Z 00 34 34			
	MNG EPKP	Z 00 34 34.5			
AUG 21	02 14 03.0	23.5S 176.0W	47KM	4.8 S OF FIJI	WEL 19
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	KRP EP	Z 02 17 47			
	MNG EP	Z 02 18 11			
AUG 21	05 00 28.6	8.5N 126.6E	79KM	5.9 PHILIPINE IS	WEL 66
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN AE TE MAG
	MSZ EP	Z 05 11 00			
	KRP IP	ZNE 05 11 01.8 J		-0.58	6.5
	MJZ EP	ZNE 05 11 06			
	WEL EP	Z 05 11 09			
	EL	ZNE 32			



		GNZ EP	Z	05 11 14				-0.86				6.1
		H M S	EPICENTRE		DEPTH	MAG		DIST (DEG)				
AUG 21		06 04 00.5	24.0S	175.8W	33KM	4.4 S OF TONGA		WEL 19				
		H M S	DIR		LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
			Z	06 08 07.5								
AUG 21	KRP EP		ZNE	07 12 11								-1.86
	GNZ EP		Z	07 12 26								-1.16
	MNG EP		Z	07 12 27								
AUG 21		07 43 23	24.1S	176.6W	33KM	4.5 S OF FIJI		WEL 19				
			Z	07 47 21								
AUG 21		20 25 36.3	28.9N	132.0E	34KM	5.2 E OF RYUKYU IS		WEL 80				
			Z	20 37 32.5							5.5	
			Z	20 37 40								
AUG 22		14 21 14.0	50.3N	147.7E	630KM	5.1 SEA OF OKHOTSK		WEL 94				
			Z	14 33 14.5							5.4	
			Z	14 33 24								
			Z	14 33 28								
			Z	14 33 40								
AUG 22		17 02 04.2	1.8S	134.2E	17KM	5.9 W NEW GUINEA		WEL 54				
			Z	17 11 16							6.2	
			Z	17 11 18								
			Z	17 11 16							-0.86	
			ZNE	17 11 21.5								
			Z	17 11 26							5.8	
			Z	17 11 31							-1.28	
AUG 22		17 42 09.9	22.4S	170.6E	36KM	LOYALTY IS		WEL 19				
			Z	17 45 55.5							6.1	
			ZNE	17 46 02								
			Z	17 46 13							-0.50	
			Z	17 46 24.5								
			Z	17 46 29								
			ZNE	17 46 32							0.05	
			ZNE	50 02				22 20	39 20	32 24	96 34	6.2
			ZNE	53				76 21	56 21	113 22		6.2
			ZNE	17 46 57								
			Z	17 47 04								
AUG 22		18 19 39.4	1.9S	134.0E	50KM	W NEW GUINEA		WEL 54				
			Z	18 28 48							5.6	
			Z	18 28 49								
AUG 22		20 31 57.2	22.5S	170.6E	33KM	4.9 LOYALTY IS		WEL 19				
			Z	20 36 13							5.4	
			Z	20 36 25							-0.76	

		MJZ EP	Z	20 36 45								
		H M S	EPICENTRE		DEPTH	MAG		DIST (DEG)				
AUG 22		23 53 35.4	22.6S	170.5E	33KM	5.5 LOYALTY IS		WEL 19				
			Z	23 57 23							4.9	
			Z	23 57 37								
			Z	23 57 50								
			Z	23 57 59								
			ZN	24 03								
			ZN	23 58 22.5				4 16	4 15			
			Z	23 58 34								
AUG 23		01 41 58	22.4S	170.4E	33KM	3.8 LOYALTY IS		WEL 19				
			Z	01 46 13.5								
			Z	01 46 48								
AUG 23		KRP EP	Z	02 28 20								
		MNG EP	Z	02 28 51								
		E	Z	02 29 27								
		MJZ EP	ZN	02 29 27								
AUG 23		MJZ EP	Z	02 51 54								
AUG 23		18 22 17.3	23.8N	123.3E	41KM	5.4 SW RYUKYU IS		WEL 80				
			Z	18 34 17.5							5.4	
			Z	18 34 24							-1.68	
			Z	18 34 25								
			Z	18 34 25.5								
			Z	18 34 27							-0.98	
			Z	18 34 27							6.2	
AUG 23		18 57 42.1	22.4S	170.7E	33KM	LOYALTY IS		WEL 19				
			Z	19 01 59								
AUG 23		21 58 55.7	22.5S	170.1E	18KM	4.4 LOYALTY IS		WEL 19				
			Z	22 03 16								
			Z	22 03 57								
AUG 23		22 35 02.7	16.2S	173.2W	33KM	4.9 TONGA IS		WEL 27				
			Z	22 40 12							5.1	
			Z	22 40 34							-1.33	
			ZN	22 41 19								
AUG 24		01 51 09.2	30.0S	177.5W	33KM	4.6 KERMADEC IS		WEL 13				
			Z	01 54 58								
			Z	01 53 54								
			Z	01 55 57								
			ZNE	01 56 19								
			Z	01 55 02								
			Z	01 57 53								
			Z	01 55 19								



AUG 24	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG			
	21	25	00.2	20.0S	175.3W		33KM	4.2 TONGA							
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	GNZ	EP	Z	21	29	27									
	KRP	EP	Z	21	29	27		-1.58						4.6	
	MNG	EP	Z	21	29	49.5									
AUG 25	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG			
	11	45	45	18.9S	173.8W		33KM	4.7 TONGA							
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	KRP	EP	ZNE	11	50	29									
AUG 25	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG			
	23	59	01.3	10.3S	161.2E		91KM	5.0 SOLOMON IS							
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	MNG	EP	Z	24	05	26									
	MJZ	EP	Z	24	05	42									
	MSZ	EP	Z	24	05	45									
AUG 26	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG			
	00	51	54.1	27.8S	176.9W		83KM	5.6 KERMADEC IS							
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	GNZ	EP	Z	00	54	39		-0.87							
	ES		Z			56	30								
	KRP	EP	ZNE	00	54	36		-1.61							
	E		ZNE			52									
	CNZ	EP	Z	00	54	43.5									
	MNG	EP	Z	00	55	00									
	ES		Z			57	29								
	WEL	EP	ZNE	00	55	19									
	ES		ZNE			57	53								
	EL		Z	01	00					7	20				
	MJZ	EP	ZNE	00	56	09									
	E		ZNE			49									
	ES		ZNE			59	22								
	MSZ	EP	Z	00	56	25									
	E		Z			59									
	ES		Z			59	53								
AUG 26	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG			
	09	06	47.5	22.1S	170.1E		12KM	5.0 LOYALTY IS							
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	KRP	EP	ZNE	09	10	38.5		-0.65						5.5	
	GNZ	EP	Z	09	11	05		-0.86						5.3	
	MNG	EP	Z	09	11	10									
	WEL	EP	Z	09	11	18		-0.14							
	ES		ZNE			14	58			4	10			5.9	
	EL		ZNE			16				10	13	11	13	23	20
	MJZ	EP	ZNE	09	11	42				41	19	29	18	56	18
	MSZ	EP	Z	09	11	49									
	ROX	EP	ZN	09	12	15									
	ES		NE			16	10				8	16	17	20	5.9
AUG 26	KRP	EP	Z	09	16	29									
	MNG	EP	Z	09	16	55									
	MSZ	EP	Z	09	17	27									
	MJZ	EP	ZNE	09	17	35									
AUG 26	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)						
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG			
	12	01	17.7	7.3S	147.6E		64KM	5.1 E NEW GUINEA							
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	
	MNG	EP	Z	12	09	01									
	MSZ	EP	Z	12	09	02									

AUG 26	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	13	28	13.2	22.1S	169.8E		48KM	4.6 LOYALTY IS						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP	EP	ZNE	13	32	04		-1.52						4.6
	MNG	EP	Z	13	32	31								
	MJZ	EP	ZNE	13	33	15								
	MSZ	EP	Z	13	33	28								
AUG 26	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	13	32	26.5	22.3S	169.8E		64KM	4.1 LOYALTY IS						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP	EP	ZNE	13	36	14		-1.39						4.7
	MNG	EP	Z	13	36	42								
	MJZ	EP	ZNE	13	37	12								
	MSZ	EP	Z	13	37	25								
AUG 26	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	22	24	48.6	23.4S	175.9W		61KM	4.5 TONGA						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	MNG	EP	Z	22	28	57.5								
AUG 27	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	02	36	33.2	3.2N	128.1E		172KM	5.4 N OF HALMAHERA						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP	P	ZNE	02	46	24		-0.79						6.1
	PCP		Z			47	10							
	MNW	P	Z	02	46	24		-0.86						6.0
	MJZ	IP	ZNE	02	46	26.6	D							
	WEL	EP	Z	02	46	31		-0.73						6.2
	MNG	P	Z	02	46	32								
	GNZ	EP	Z	02	46	37		-1.06						5.8
AUG 27	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	03	02	32.7	23.7S	175.7W		60KM	4.8 TONGA						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP	EP	Z	03	06	18								
	MNG	EP	Z	03	06	41								
	ES		Z			09	47							
AUG 27	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	04	35	48.1	5.8N	126.0E		116KM	5.3 PHILIPPINE IS						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP	EP	Z	04	46	07								
	MJZ	EP	ZNE	04	46	09								
	MNG	EP	Z	04	46	18								
AUG 27	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	10	27	49.9	17.9S	178.4W		547KM	4.3 FIJI						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	MNG	EP	Z	10	32	15								
	MJZ	EP	Z	10	32	55								
AUG 27	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	17	10	44.8	13.9N	123.6E		16KM	4.9 PHILIPPINE IS						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	MJZ	P	ZNE	17	22	09								
AUG 27	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)					
	WEL	AE	TE	WEL	AE	TE			WEL	AE	TE	MAG		
	17	51	48.2	26.1S	179.6E		510KM	4.8 S OF FIJI						
				H M S			DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE
	KRP													



H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 28 10 03 02.2		4.6S 155.3E		501KM	5.5 SOLOMON IS	WEL 40				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	ZE	10 09 39		-1.10					5.4
	E*PP	ZE	11 05							
	EPCP	ZNE	41							
	E	Z	13 39							
	ESCP	ZE	14 43							
CNZ	P	Z	10 09 55							
	EPCP	Z	11 46							
	SCP	Z	14 49							
	ES	Z	15 29							
WEL	EPCS	ZNE	10 15 29							
MJZ	EP	ZNE	10 10 06							
	E*PP	ZN	11 36,5							
	EPCP	ZNE	51,5							
	ES	ZNE	15 43							
MSZ	P	Z	10 10 06							
	E*PP	Z	11 36							
	EPCP	Z	51							
	ESCP	Z	14 56							
	ES	Z	15 44							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 28 13 21 13.5		18.7S 175.6W		175KM	4.6 TONGA	WEL 24				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	Z	13 25 44,5		-1.51					4,9
MNG	EP	Z	13 26 04,5							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 28 16 44 25.4		23.5S 179.7E		629KM	4.1 S OF FIJI	WEL 18				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	ZNE	16 47 30		-1.30					
CNZ	EP	Z	16 47 37							
MNG	EP	Z	16 47 49							
	ES	Z	50 38							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 28 22 30 54.9		2.3N 128.5E		70KM	5.4 HALMAHERA	WEL 60				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	22 40 45							
KRP	EP	Z	22 40 50							
MJZ	EP	ZN	22 40 51							
MNG	EP	Z	22 40 56							
CNZ	EP	Z	22 41 02							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 29 13 10 27.1		64.8S 177.9E		33KM	5.4 BALLENY IS	WEL 24				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MNW	EP	Z	13 14 57							5,7
ROX	EP	Z	13 14 59		-0.50					5,7
	ES	ZNE	18 54					5 16	13 18	5,5
	EL	ZNE	20							
MSZ	EP	Z	13 15 10							5,5
WEL	EP	Z	13 15 37							5,5
	ES	ZE	19 59							
	EL	ZNE	21 30					1 10		
MNG	EP	Z	13 15 43							
	E	Z	16 01							
CNZ	E(P)	Z	13 15 53							
KRP	EP	ZE	13 16 05							
								15 25	12 26	
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 01 03 11.7		55.0S 158.5E		33KM	MACQUARIE IS	WEL 17				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MNW	EP	Z	01 05 48							

ES		Z		07 49						
MSZ EP		Z		01 06 06						
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 12 40 27.8		13.4N 120.7E		81KM	5.4 PHILIPPINE IS	WEL 74				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	12 51 43							
KRP	EP	Z	12 51 47		-1.63					5,3
MNW	EP	Z	12 51 47							
CNZ	EP	Z	12 51 50,5							
MNG	EP	Z	12 51 54							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 13 37 38.8		17.4S 173.4W		33KM	4.7 TONGA	WEL 26				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	Z	13 42 36		-0.60					5,7
CNZ	EP	Z	13 42 45							
MNG	EP	Z	13 42 57							
MSZ	EP	Z	13 44 02							
MNW	EP	Z	13 44 11							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 15 04 01.3		23.5S 179.9W		502KM	4.1 S OF FIJI	WEL 18				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	ZNE	15 07 12		-1.21					
CNZ	EP	Z	15 07 25,5							
MNG	EP	Z	15 07 34							
	ES	Z	10 22							
MSZ	EP	Z	15 08 31,5							
MNW	EP	Z	15 08 41							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 16 54 38.2		23.8S 179.8W		510KM	4.3 S OF FIJI	WEL 18				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	ZNE	16 57 43		-0.78					
CNZ	EP	Z	16 57 55,5							
	ES	Z	17 00 39							
MNG	EP	Z	16 58 05,5							
	ES	Z	17 00 54							
WEL	EP	Z	16 58 15,5							
MSZ	EP	Z	16 59 07							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
AUG 30 19 42 40		4.6N 126.8E		33KM	5.5 TALAUD IS	WEL 63				
		H M S		DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE TE MAG
MSZ	EP	Z	19 52 54							
KRP	EP	Z	19 52 58							



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 31	09	38	17.0	26.9S 176.5W	57KM	4.7 S OF FIJI	WEL 16
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	09 41 35			
	MNG	EP	Z	09 41 42.5			
	MSZ	EP?	Z	09 43 01			
AUG 31	KRP	EP	Z	11 01 46.5		-1.63	
	MNG	EP	Z	11 02 05.5			
	MSZ	EP	Z	11 02 34			
AUG 31	18	15	4.0	71.6N 2.7W	33KM	5.0 JAN MAYEN IS	WEL 150
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EPKP	Z	18 35 19			
	MNG	EPKP	Z	18 35 24			
SEP 01	03	31	35	16.3S 176.0W	351KM	3.8 FIJI	WEL 26
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	03 36 10			
SEP 01	08	57	13.7	0.5S 134.4E	60KM	5.3 W NEW GUINEA	WEL 55
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	09 06 29		-1.27	5.8
	MSZ	EP	Z	09 06 29			
	MNW	EP	Z	09 06 32			
	MNG	EP	Z	09 06 37			
SEP 01	14	16	14.1	31.8N 142.4E	39KM	5.3 S OF HONSHU JAPAN	WEL 79
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	14 27 59		-1.56	5.5
	MNG	EP	Z	14 28 10			
	MSZ	P	Z	14 28 13.8			
SEP 01	14	22	58.6	37.5N 22.1E	29KM	5.2 S GREECE	WEL 159
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	E(PKP)	Z	14 42 55			
	MNW	E(PKP)	Z	14 42 56			
	MNG	EPKP2	Z	14 43 32.5			
	KRP	EPKP2	ZE	14 43 33			
SEP 01	14	25	48.8	7.6S 117.3E	281KM	5.6 BALI SEA	WEL 61
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	P	Z	14 35 09.7			
	MNG	EP	Z	14 35 34			
SEP 01	15	24	59.6	20.6S 175.3W	33KM	5.1 TONGA	WEL 22
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	GNZ	EP	Z	15 29 21		-0.91	5.3
	KRP	EP	ZNE	15 29 21.5		-1.05	5.1
	MNG	EP	Z	15 29 43			
	WEL	EP	ZNE	15 29 54			
	MSZ	EP	Z	15 30 46.5			5.1
	MNW	EP	Z	15 30 55		-1.48	
SEP 01	20	06	53.8	4.3S 146.3E	87KM	5.5 E NEW GUINEA	WEL 45
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	20 14 59			
	MSZ	EP?	Z	20 15 01			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 02	00	54	44.9	51.2N 178.0E	37KM	5.1 ALEUTIAN IS	WEL 92
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	01 07 45			
	KRP	E(P)	Z	01 07 47		-1.13	6.2
SEP 02	KRP	EP	Z	06 15 35		-1.73	
	MNG	EP	Z	06 15 56			
SEP 02	07	59	05.2	4.5S 106.1W	33KM	5.1 N EASTER IS	WEL 79
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	08 11 09			
	MSZ	EP	Z	08 11 41			
SEP 02	09	09	02.6	13.6N 144.2E	93KM	4.8 MARIANA IS	WEL 61
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	IP	Z	09 18 54.8	J	-1.56	5.7
	MNG	EP	Z	09 19 07.5			
	MSZ	EP	Z	09 19 13.5			
SEP 02	10	15	17.8	3.2S 139.8E	42KM	5.1 W NEW GUINEA	WEL 49
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	10 23 51			
	MSZ	EP	Z	10 23 55.5			
	MNG	EP	Z	10 24 00			
SEP 02	14	34	55.4	2.2N 126.7E	102KM	5.2 MOLUCCA PASSAGE	WEL 61
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	P	Z	14 44 49			
	MNW	EP	Z	14 44 51.5			
	KRP	EP	Z	14 44 54			
	MNG	EP	Z	14 45 00			
SEP 02	KRP	EP	ZE	17 08 11			
	WEL	E(P)	Z	17 08 30			
		E(S)	ZNE	11 44			
	MSZ	EP	Z	17 08 30			
	MNG	EP	Z	17 08 32.5			
		E(S)	Z	11 26			
SEP 03	KRP	P	Z	08 05 19		-1.51	
	ES		E	07 59			
	CNZ	ES	Z	08 08 14			
	MNG	EP	Z	08 05 42			
			Z	07 04			
	ES		Z	08 33			
	WEL	EP	Z	08 05 52			
	ES		ZNE	08 52			
	GNZ	EP	Z	08 07 48		-0.88	
SEP 03	12	08	40.6	57.0S 25.6W	40KM	5.3 S SANDWICH IS	WEL 81
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNW	EP	Z	12 20 30.5		-1.39	5.7
	MSZ	EP	Z	12 20 36			
	WEL	P	Z	12 20 50.4		-0.81	6.3
	MNG	EP	Z	12 20 52.5			
	GNZ	EP	Z	12 21 02		-1.23	5.9
	KRP	IP	ZNE	12 21 05.0	J	-0.98	6.2



SEP	DD	HH	MM	SS	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 03	19 45 46.4	20.8S 178.8W	580KM	4.6	FIJI			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		KRP EP	Z	19 49 22				5.2
		GNZ EP	Z	19 49 24				5.4
		MNG P	Z	19 49 42				
		WEL EP	Z	19 49 50				5.6
SEP 03	20 43 13	22.1S 170.4E	47KM		LOYALTY IS			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		MNG EP	Z	20 47 24.5				
SEP 04	09 41 24.1	2.5S 138.8E	38KM	5.7	W NEW GUINEA			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		MSZ EP	Z	09 50 13				
		MJZ EP	Z	09 50 17				
		MNG EP	Z	09 50 17				
		WEL EP	Z	09 50 21.5				
		EL	Z	10 05 09				
SEP 04	13 28 42.0	16.5S 167.4E	3KM	5.3	NEW HEBRIDES			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		CNZ EP	Z	13 34 00				
		MNG P	Z	13 34 09				
SEP 05	00 08 05.4	21.6S 176.3W	212KM	4.8	FIJI			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		KRP EP	Z	00 11 59				5.1
		CNZ EP	Z	00 12 10				
		MNG EP	Z	00 12 21				
		WEL EP	Z	00 12 33				5.5
		MJZ EP	Z	00 13 09.5				
		MSZ EP	Z	00 13 22.5				
SEP 05	06 52 51.2	7.5S 155.9E	65KM	4.7	SOLOMON IS			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		MNG EP	Z	06 59 59				
SEP 05	11 10 00	20.2S 177.6W	487KM	3.9	FIJI			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		KRP P	Z	11 13 49				5.0
		MNG EP	Z	11 14 09				
SEP 05	11 17 01.4	23.7S 175.8W	40KM	4.6	TONGA			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		MNG EP	Z	11 21 07				
SEP 05	11 52 43	22.8S 179.9E	650KM	3.9	S OF FIJI			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		MNG EP	Z	11 56 13.5				
SEP 05	17 58 31.3	15.8S 167.4E	47KM	5.1	NEW HEBRIDES			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		KRP P	Z	18 03 37				5.4
		CNZ EP	Z	18 03 49.5				
		MNG EP	Z	18 03 59				
		EPCP	Z	07 26				

SEP	DD	HH	MM	SS	EPICENTRE	DEPTH	MAG	DIST (DEG)
					WEL E(P)	ZNE 18 04 04		
					MJZ EP	ZNE 18 04 23		
					PCP	Z 07 34.5		
					MSZ EP	Z 18 04 29		
SEP 06	20 50 53.8	3.8S 127.0E	15KM	5.3	CERAM			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		MSZ EP	Z	21 00 21				
		MJZ EP	Z	21 00 27.5				
		MNG EP	Z	21 00 37				
SEP 07	07 38 57	22.0S 170.2E	34KM		LOYALTY IS			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		KRP EP	Z	07 42 52				
		MNG P	Z	07 43 20				
		WEL EP?	Z	07 43 26				
SEP 07	MNG EP		Z	14 32 35				
		ES	Z	34 32				
SEP 07	15 55 11.6	5.1S 154.7E	80KM	5.3	SOLOMON IS			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		KRP P	Z	16 02 22				5.7
		E*PP	Z	04 40				
		PCP	Z	04 39				
		CNZ EP	Z	16 02 31				
		MNG IP	Z	16 02 39.3				
		MSZ EP	Z	16 02 48.5				
		MJZ EP	Z	16 02 49				
SEP 07	16 12 34.5	8.4S 106.7E	30KM	5.1	S OF JAVA			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		MJZ EP	Z	16 23 09				
		MNG EP	Z	16 23 26				
SEP 08	08 28 54.3	23.5S 66.6W	219KM	5.2	ARGENTINA			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		MSZ EP	Z	08 41 56				
		KRP EP	Z	08 41 56.5				
SEP 08	16 37 22.1	19.7S 175.8W	187KM	4.2	TONGA			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		KRP EP	Z	16 41 39				4.6
		MNG EP	Z	16 42 01.5				
		MJZ EP	Z	16 42 49				
		MSZ EP	Z	16 43 02				
SEP 08	21 17 23.7	21.8S 176.0W	95KM	5.6	FIJI			
		H M S	DIR	LOG <sub>10</sub> A/T	AZ	TZ	AN	TN
		KRP EP	Z	21 21 22				5.6
		ES	Z	24 37				
		CNZ EP	Z	21 21 33				
		MNG EP	Z	21 21 43				
		ES	Z	25 14.5				
		WEL EP	Z	21 21 56				6.0
		ES	Z	25 29				
		MJZ EP	Z	21 22 33.5				
		ROX EP	Z	21 22 50.5				
		MNW EP	Z	21 22 59				5.9



H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG
SEP 08	21 15 50.5	2.4N 128.3E	71KM	6.8 HALMAHERA			WEL 61
KRP	EP	ZNE 21 25 49.5					
MNW	EP	Z 21 25 46					
MJZ	EP	ZNE 21 25 47.5					
CNZ	EP	Z 21 25 52					
WEL	EP	Z 21 25 53			13 10		7.0
ES		ZNE 34 05					
E(PS)		NE 34				26 38	26 38
ESS		ZNE 37 55					
E		ZNE 41 10			21 25	20 26	36 25
ELQ		NE 42 32				91 44	60 45
ELR		Z 45 02					
MNG	EP	Z 21 25 54.5					
SEP 09	12 04 32.1	4.2S 102.8E	33KM	5.3 S SUMATRA			WEL 74
MJZ	EP	Z 12 15 49					
CNZ	EP	Z 12 16 06.5					
MNG	EP	Z 12 16 06.5					
SEP 09	23 13 20.1	17.6S 168.0E	36KM	5.0 NEW HEBRIDES			WEL 24
KRP	EP	Z 23 18 05					5.1
MNG	P	Z 23 18 21.7					
MJZ	EP	Z 23 19 09					
SEP 10	17 32 02.9	23.5S 179.9E	550KM	4.9 S OF FIJI			WEL 18
ECZ	EP	Z 17 35 07					
ES		Z 37 40					
KRP	EP	ZNE 17 35 09.5					-0.61
ES		ZNE 37 52					
MNG	EP	Z 17 35 31.5					
ES		Z 38 19					
MJZ	EP	Z 17 36 14.5					
MSZ	EP	Z 17 36 29					
ES		Z 40 03					
SEP 10	KRP	EP	Z	20 35 30			-1.15
SEP 11	03 49 16.3	58.9S 25.6E	59KM	5.2 S SANDWICH IS			WEL 79
MSZ	EP	Z 04 00 59					
MNG	EP	Z 04 01 16					
KRP	EP	Z 04 01 29					5.5
SEP 11	07 03 18.1	6.2S 147.3E	80KM	5.3 E NEW GUINEA			WEL 43
MNG	EP	Z 07 11 05.5					
MSZ	EP	Z 07 11 07					
MJZ	EP	ZE 07 11 09.5					
SEP 11	07 55 47	21.3S 179.2E	595KM	4.4 FIJI			WEL 21
KRP	P	Z 07 59 17.3					5.0
GNZ	EP	Z 07 59 19.5					
MNG	EP	Z 07 59 37.5					
E(S)		Z 08 02 41.5					

## DISTANT EARTHQUAKES

H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		DIR	LOG <sub>10</sub> A/T	AZ TZ	AN TN	AE TE	MAG
SEP 11	12 04 51	22.1S 169.8E	32KM	LOYALTY IS			WEL 20
KRP	EP	Z 12 08 45					
MNG	EP	Z 12 09 00					
SEP 11	22 19 07	17.5S 177.5W	369KM	FIJI			WEL 25
KRP	P	Z 22 23 29					5.0
MNG	EP	Z 22 23 49					
ES		Z 27 39					
MJZ	EP	Z 22 24 32					
MSZ	EP	Z 22 24 44					
SEP 12	00 42 26.9	15.9S 167.1E	71KM	4.9 NEW HEBRIDES			WEL 26
KRP	EP	Z 00 47 32					
MNG	EP	Z 00 47 53.5					5.3
MJZ	EP	Z 00 48 19					
SEP 12	11 29 35.8	23.0S 170.6E	14KM	5.8 LOYALTY IS			WEL 19
KRP	EP	ZN 11 33 14					6.2
GNZ	EP	Z 11 33 35					5.8
MNG	EP	Z 11 33 47					
ES		Z 37 22					
WEL	P	ZNE 11 33 54	JSE	0.36	70 15		6.6
ES		ZNE 37 23					
MJZ	P	ZNE 11 34 20				84 15 180 20	6.8
ROX	P	ZNE 11 34 40					
ES		ZNE 38 44				113 17 134 17	6.9
SEP 12	KRP	EP	Z	12 29 27			
MNG	EP	Z	12 29 56				
MSZ	EP	Z	12 30 35				
SEP 12	12 40 06.2	23.0S 170.6E	33KM	4.8 LOYALTY IS			WEL 22
KRP	EP	Z 12 43 44					
MNG	EP	Z 12 44 14.5					4.8
MJZ	EP	ZNE 12 44 47.5					
MSZ	EP	Z 12 44 56					
SEP 12	12 53 58	22.9S 170.6E	33KM	LOYALTY IS			WEL 19
KRP	EP	Z 12 57 41					
MNG	EP	Z 12 58 09.5					
MSZ	EP	Z 12 58 50					
E		Z 59 41					
SEP 12	13 14 13.1	23.1S 170.6E	33KM	4.2 LOYALTY IS			WEL 18
KRP	P	Z 13 17 55.0					4.4
MNG	EP	Z 13 18 23					
MJZ	EP	ZNE 13 18 55					
MSZ	EP	Z 13 19 03.5					



SEP	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 12	14	02	57	23.0S 170.4E	33KM	4.4 LOYALTY IS	WEL 19
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	14 06 35		
				Z	14 07 03,5		
				ZNE	14 07 38		
				Z	14 07 45		
SEP 12	14	05	20.7	22.8S 170.4E	33KM	4.9 LOYALTY IS	WEL 19
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	14 09 04		
				Z	14 09 29		
				ZNE	14 10 00,5		
				Z	14 10 09,5		
SEP 12	14	10	16.3	23.1S 170.5E	33KM	4.1 LOYALTY IS	WEL 18
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	14 14 25		
				Z	14 15 05		
SEP 13	00	31	32.3	23.0S 170.4E	33KM	4.5 LOYALTY IS	WEL 19
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	00 35 12		
				Z	00 35 38		
				ZNE	00 36 11,5		
				Z	00 36 20		
SEP 13	00	50	43.3	23.0S 170.6E	32KM	4.9 LOYALTY IS	WEL 19
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				ZE	00 54 21	-1.41	4,7
				Z	00 54 51		
				ZNE	00 55 24,5		
				Z	00 55 33		
SEP 13	07	44	56.6	23.1S 170.5E	33KM	4.4 LOYALTY IS	WEL 18
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				ZE	07 48 39		
				Z	07 49 14		
				ZNE	07 49 37,5		
				Z	07 49 48		
SEP 13	09	38	57	23.1S 170.6E	33KM	4.9 LOYALTY IS	WEL 18
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	09 42 37		
				Z	09 43 02		
				ZNE	09 43 38		
				Z	09 43 49,5		
SEP 13	09	44	05				
				Z	09 44 05		
				Z	09 44 34		
				ZNE	09 45 06		
				Z	09 45 14		
SEP 13	22	53	57.2	24.0S 175.4W	36KM	5.4 S OF TONGA	WEL 19
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	22 57 43		
				Z	22 57 44		

SEP	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
				Z	22 58 05		
				Z	23 01 16		
				ZNE	23 01 30		
				ZNE	04 10		
				Z	22 59 19		
SEP 13	23	45	16.6	9.4N 126.1E	72KM	5.2 PHILIPPINE IS	WEL 67
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	23 55 56		
				ZE	23 55 58	-1.51	5,5
				Z	23 56 02,5		
				Z	23 56 05		
SEP 14	00	12	25	23.1S 170.7E	19KM	4.8 LOYALTY IS	WEL 18
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	00 16 09,5		
				Z	00 16 37		
				ZNE	00 17 09		
				Z	00 17 19,5		
SEP 14	00	20	59.2	23.1S 170.6E	33KM	4.8 LOYALTY IS	WEL 18
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				ZE	00 24 40,5		
				Z	00 25 07		
				Z	00 25 12		
				ZNE	30		
				ZNE	00 25 40,5		
				Z	00 25 49		
SEP 14	04	57	59	23.7S 176.0W	156KM	4.3 S OF FIJI	WEL 19
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	05 01 53		
SEP 14	14	07	10	22.8S 170.7E	33KM	4.4 LOYALTY IS	WEL 19
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	14 11 18		
				Z	14 11 58,5		
SEP 14	21	03	18.1	25.6S 177.7W	160KM	4.5 S OF FIJI	WEL 17
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	21 06 47		
				Z	09 28		
				ZNE	21 09 53		
				Z	21 08 37		
SEP 14	23	18	40.8	60.2S 27.2W	22KM	6.3 S SANDWICH IS	WEL 77
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				ZNE	23 30 16		
				ZNE	39 48		
				ZNE	23 30 23		
				ZNE	23 30 34,5	-0.44	12 14
				ZNE	40 24		15 17
				ZN	58		29 21
				ZNE	23 30 50	-0.71	6,5
SEP 15	00	40	11	60.6S 27.8W	33KM	5.1 S SANDWICH IS	WEL 77
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
				Z	00 52 22,5		



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 15	01	46	29.1	60.4S 26.9W H M S DIR	33KM	5.1 S SANDWICH IS	WEL 77
	KRP	EP	Z	01 58 41.5		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
SEP 15	02	24	52.1	60.3S 27.1W H M S DIR	33KM	5.6 S SANDWICH IS	WEL 77
	MSZ	EP	Z	02 36 30		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	02 36 45.5			
	KRP	P	Z	02 37 01		-1.39	5.8
SEP 15	02	53	38.7	60.2S 26.6W H M S DIR	33KM	5.2 S SANDWICH IS	WEL 77
	KRP	EP	Z	03 05 48.5		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
SEP 15	03	32	40.7	6.6S 129.6E H M S DIR	153KM	5.3 BANDA SEA	WEL 53
	MSZ	EP	Z	03 41 25		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MJZ	EP	Z	03 41 32.5			
	MNG	EP	Z	03 41 41			
SEP 15	04	07	05.1	23.6S 175.8W H M S DIR	67KM	5.2 TONGA	WEL 19
	GNZ	EP	Z	04 10 45		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	ES	Z	13 28.5				
	KRP	EP	ZE	04 10 45		-1.63	4.5
	MNG	EP	Z	04 11 09			
	ES	Z	14 22				
	MJZ	EP	ZNE	04 12 11			
SEP 15	06	07	56.3	60.1S 26.7W H M S DIR	33KM	5.3 S SANDWICH IS	WEL 77
	MSZ	EP	Z	06 19 35.5		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	06 20 06.5		-1.39	5.8
SEP 15	07	46	56	23.0S 170.6E H M S DIR	40KM	4.3 LOYALTY IS	WEL 19
	MNG	EP	Z	07 51 13		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	EP	Z	07 51 45			
SEP 15	07	50	55.3	8.1S 117.1E H M S DIR	195KM	5.3 SUMBAWA IS	WEL 61
	MSZ	P	Z	08 00 23		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	08 00 30.5			
	MJZ	EP	Z	08 00 31.5			
	MNG	P	Z	08 00 45			
SEP 15	11	51	56.4	60.2S 26.8W H M S DIR	33KM	5.6 S SANDWICH IS	WEL 77
	ROX	EP	ZN	12 03 29		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	ES	NE	13 02				8 16 6.6
	MJZ	EP	ZNE	12 03 36			
	WEL	EP	Z	12 03 49		3 10	6.3
	ES	ZNE	13 38				6 12 6.6
	EL	ZNE	31 30			9 21 7 21	3 21
	MNG	EP	Z	12 03 51			
	KRP	EP	ZE	12 04 05		-1.30	5.9

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 15	11	59	57.6	60.2S 26.4W H M S DIR	33KM	5.5 S SANDWICH IS	WEL 77
	KRP	EP	Z	12 12 08		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
SEP 15	14	14	19.0	22.8S 170.6E H M S DIR	24KM	4.9 LOYALTY IS	WEL 19
	KRP	EP	Z	14 18 03		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	GNZ	EP	Z	14 18 17.5			
	MNG	EP	Z	14 18 30			
	MJZ	EP	ZNE	14 19 02			
SEP 15	17	10	46.9	22.9N 121.4E H M S DIR	46KM	5.4 TAIWAN	WEL 81
	KRP	P	ZE	17 22 48		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	P	Z	17 22 50		-1.00	6.1
	MJZ	EP	ZNE	17 22 54			
	MNG	P	Z	17 22 55			
SEP 15	17	24	45.8	22.9N 121.4E H M S DIR	47KM	4.8 TAIWAN	WEL 81
	MSZ	P	Z	17 36 49		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MJZ	EP	Z	17 36 53			
	MNG	EP	Z	17 36 54			
SEP 16	02	01	59.3	22.8N 121.3E H M S DIR	50KM	5.0 TAIWAN	WEL 81
	MSZ	EP	Z	02 14 02		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MJZ	P	Z	02 14 05.5			
SEP 16	07	50	42.5	1.9S 134.1E H M S DIR	37KM	5.3 W NEW GUINEA	WEL 54
	KRP	EP	Z	07 59 56		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	07 59 58			
SEP 16	13	02	32.5	23.8S 175.8W H M S DIR	68KM	4.8 TONGA	WEL 19
	MNG	EP	Z	13 06 35		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
SEP 16	13	11	55.1	22.9S 170.5E H M S DIR	33KM	4.9 LOYALTY IS	WEL 19
	KRP	EP	ZE	13 15 37		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	13 16 04.5			
SEP 16	14	54	32.4	16.2S 171.5W H M S DIR	33KM	4.7 SAMOA	WEL 28
	KRP	EP	Z	14 59 56		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	15 00 15			
SEP 16	17	05	25.3	18.7S 169.0E H M S DIR	213KM	5.3 NEW HEBRIDES	WEL 23
	KRP	EP	ZE	17 09 44		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	GNZ	EP	Z	17 09 57		-0.85	5.6
	MNG	IP	Z	17 10 09.0		-0.63	5.8
	MJZ	EP	ZNE	17 10 32.5			



SEP	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 16	19	39	43	23.6S 175.9W H M S DIR	33KM	4.3 TONGA LOG <sub>a</sub> /T AZ TZ AN TN	WEL 19 AE TE MAG
	MNG	EP	Z	19 43 53			
SEP 17	10	51	40.8	17.1S 174.0W H M S DIR	115KM	4.5 TONGA LOG <sub>a</sub> /T AZ TZ AN TN	WEL 26 AE TE MAG
	KRP	P	Z	10 56 35			
	MNG	EP	Z	10 56 54			
	MJZ	EP	Z	10 57 41			
SEP 17	20	17	26.8	27.8S 176.5W H M S DIR	39KM	5.1 KERMADEC IS LOG <sub>a</sub> /T AZ TZ AN TN	WEL 15 AE TE MAG
	GNZ	EP	Z	20 20 09			
		ES	Z	22 19			
	KRP	EP	ZE	20 20 15		-1.56	
	MNG	EP	Z	20 20 42.5			
	WEL	EP	ZNE	20 21 01		-0.55	5.6
		ES	ZNE	23 34			
	MJZ	EP	ZNE	20 21 46			
SEP 17	21	05	26.4	20.8S 176.2W H M S DIR	215KM	5.0 FIJI LOG <sub>a</sub> /T AZ TZ AN TN	WEL 22 AE TE MAG
	KRP	EP	ZNE	21 09 29		-1.13	5.2
		ES	ZNE	12 52.5			
	MNG	EP	Z	21 09 52			
		ES	Z	13 31			
	MJZ	EP	ZNE	21 10 38			
	MSZ	EP	Z	21 10 53			
SEP 17	23	02	24.1	28.0S 176.4W H M S DIR	56KM	4.5 KERMADEC IS LOG <sub>a</sub> /T AZ TZ AN TN	WEL 15 AE TE MAG
	KRP	EP	Z	23 05 08			
	MNG	EP	Z	23 05 37			
		ES	Z	08 07			
SEP 18	06	40	37.8	18.4S 132.8W H M S DIR	42KM	5.0 S PACIFIC LOG <sub>a</sub> /T AZ TZ AN TN	WEL 50 AE TE MAG
	MSZ	EP	Z	06 50 10			
SEP 18	15	14	25.0	60.4S 26.9W H M S DIR	32KM	5.3 S SANDWICH IS LOG <sub>a</sub> /T AZ TZ AN TN	WEL 77 AE TE MAG
	MSZ	EP	Z	15 26 00			
	KRP	EP	Z	15 26 34			
SEP 18	17	58	20.6	60.4S 27.2W H M S DIR	41KM	5.4 S SANDWICH IS LOG <sub>a</sub> /T AZ TZ AN TN	WEL 77 AE TE MAG
	KRP	EP	Z	18 10 28			
SEP 18	19	44	28.5	22.9N 121.3E H M S DIR	41KM	4.9 TAIWAN LOG <sub>a</sub> /T AZ TZ AN TN	WEL 81 AE TE MAG
	MSZ	EP	Z	19 56 34			
SEP 18	20	14	16	18.9S 177.7W H M S DIR	545KM	4.1 FIJI LOG <sub>a</sub> /T AZ TZ AN TN	WEL 23 AE TE MAG
	KRP	EP	Z	20 18 13.5		-1.50	5.0

SEP	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 18	20	43	53.8	27.9N 54.3E H M S DIR	19KM	5.9 S IRAN LOG <sub>a</sub> /T AZ TZ AN TN	WEL 130 AE TE MAG
	MSZ	EPKP	Z	21 02 55			
	MJZ	EPKP	ZNE	21 02 59			
	MNG	EPKP	ZE	21 03 04			
	KRP	EPKP	ZE	21 03 05			
		ESKP	Z	07 27			
SEP 19	03	36	53.7	23.3S 170.5E H M S DIR	33KM	4.9 LOYALTY IS LOG <sub>a</sub> /T AZ TZ AN TN	DIST (DEG) WEL 18 AE TE MAG
	MNG	EP	Z	03 41 08			
	MSZ	EP	Z	03 41 41			
SEP 19	06	06	36.8	3.6S 144.2E H M S DIR	17KM	5.2 N OF NEW GUINEA LOG <sub>a</sub> /T AZ TZ AN TN	DIST (DEG) WEL 46 AE TE MAG
	MNG	EP	Z	06 15 03			
SEP 19	07	02	13.2	20.8S 178.4W H M S DIR	590KM	5.3 FIJI LOG <sub>a</sub> /T AZ TZ AN TN	DIST (DEG) WEL 21 AE TE MAG
	KRP	EP	ZNE	07 05 50		-0.66	5.8
	GNZ	EP	Z	07 05 51.5		-0.64	5.8
		ES	Z	08 47			
	MNG	EP	Z	07 06 09.5			
		ES	Z	09 22			
	MJZ	EP	ZNE	07 06 53			
SEP 19	21	16	07.6	22.9S 170.7E H M S DIR	33KM	4.7 LOYALTY IS LOG <sub>a</sub> /T AZ TZ AN TN	DIST (DEG) WEL 19 AE TE MAG
	KRP	EP	Z	21 19 49			
	MNG	EP	Z	21 20 17			
	MJZ	EP	ZNE	21 20 49.5			
	MSZ	EP	Z	21 20 57			
SEP 20	06	38	00.1	17.2S 172.7W H M S DIR	35KM	4.6 TONGA LOG <sub>a</sub> /T AZ TZ AN TN	DIST (DEG) WEL 26 AE TE MAG
	GNZ	EP	Z	06 43 05.5			
	KRP	EP	ZNE	06 43 04		-1.10	5.3
	MNG	EP	Z	06 43 28			
	MJZ	EP	Z	06 44 15			
SEP 20	KRP	EP	ZE	07 44 54		-1.16	
SEP 20	KRP	P	ZE	08 25 07		-1.24	
	MNG	EP	Z	08 25 28			
	MJZ	EP	ZNE	08 25 51			
	MSZ	EP	Z	08 25 57			
SEP 20	09	24	03.7	60.5S 26.3W H M S DIR	33KM	5.4 S SANDWICH IS LOG <sub>a</sub> /T AZ TZ AN TN	DIST (DEG) WEL 77 AE TE MAG
	KRP	EP	Z	09 36 11		-1.52	5.6
	MSZ	EP	Z	09 35 39.5			
SEP 20	11	49	36	5.9S 145.7E H M S DIR	102KM	E NEW GUINEA LOG <sub>a</sub> /T AZ TZ AN TN	DIST (DEG) WEL 44 AE TE MAG
	KRP	EP	Z	11 57 19			
	MSZ	EP	Z	11 57 30			
	MNG	P	Z	11 57 32.6			
	MJZ	EP	Z	11 57 33			







GNZ EP		Z 06 15 04.5									
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)							
				WEL							
SEP 27 03 19 57.5	13.8N 146.5E	57KM	5.0 S OF MARIANA IS	61							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 03 29 49		-1.51							5.7	
	CNZ EP	Z 03 29 55									
SEP 27 04 01 35.5	54.1S 7.0E	33KM	5.2 BOUVET IS	84							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 04 13 50										
	MJZ EP	Z 04 13 50									
SEP 27 09 06 33.8	20.7S 178.7W	600KM	4.5 FIJI	21							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 09 10 09										
	KRP P	Z 09 10 09									
	GNZ EP	Z 09 10 10									
	CNZ EP?	Z 09 10 17									
	MJZ EP	Z 09 11 12									
SEP 27 18 41 43.5	2.5N 128.3E	106KM	5.2 HALMAHERA	61							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 18 51 48										
	KRP EP	Z 18 51 37									
	MJZ EP	Z 18 51 37									
SEP 28 00 27 56											
	KRP EP	Z 00 27 56									
SEP 28 01 17 47			-1.41								
	KRP EP	Z 01 17 47									
SEP 28 11 49 42	15.5S 178.6W	407KM	4.3 FIJI IS	26							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 11 55 16										
	MJZ EP	Z 11 55 16									
SEP 28 14 00 22.3	27.5N 100.1E	27KM	6.1 CHINA	97							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 14 13 48										
	MJZ EP	Z 14 13 48									
	WEL EP	Z 14 13 57									
	EPP	Z 17 44									
	EPS	ZNE 26 35									
	EL	ZNE 46									
	ET	ZNE 15 00				9	21			3	20
SEP 29 02 44 19.2	19.9S 176.3W	246KM	5.0 FIJI	23							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 02 48 25.5		-0.79								
	GNZ EP	Z 02 48 25.5									
	ES	Z 51 43									
	KRP EP	ZNE 02 48 27									
	ES	ZNE 51 53.5									
	MNG EP	Z 02 48 47.5									
	ES	Z 52 34									
	WEL EP	ZNE 02 49 00									
	ES	ZNE 52 47									
	MJZ E(P)	ZNE 02 49 32									
	EP	ZNE 35.5									
	ES	ZNE 53 43									
SEP 29 05 27 44	19.9S 176.5W	318KM	3.7 FIJI	23							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 05 31 44										
	KRP EP	Z 05 31 44									
	MNG EP	Z 05 32 05									
	ES	Z 35 51									

SEP 29 14 54 46.6		8.6S 110.5E <th colspan="2">33KM <th colspan="2">5.2 JAVA <th colspan="2">DIST (DEG)</th> <th colspan="2"></th> </th></th>		33KM <th colspan="2">5.2 JAVA <th colspan="2">DIST (DEG)</th> <th colspan="2"></th> </th>		5.2 JAVA <th colspan="2">DIST (DEG)</th> <th colspan="2"></th>		DIST (DEG)			
H M S	EPICENTRE	DEPTH	MAG	WEL							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 15 05 29									65	
	KRP EP	Z 15 05 29									
	MNG EP	Z 15 05 27									
	MJZ P	ZNE 15 05 09.6									
SEP 30 15 02 17.8	17.4S 172.5W	33KM	4.8 TONGA	26							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 15 07 20										
	GNZ EP	Z 15 07 20									
	KRP EP	ZNE 15 07 21									
	MNG EP	Z 15 07 42									5.2
	ES	Z 12 11									
	MJZ EP	Z 15 08 33									
SEP 30 15 16 24			-1.51								
	KRP EP	ZE 15 16 24									
SEP 30 15 29 53.1	17.9S 178.6W	631KM	4.0 FIJI	24							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 15 33 51										
	KRP EP	Z 15 33 51									
SEP 30 19 24 10	17.8S 168.4E	109KM	NEW HEBRIDES	24							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 19 28 47										
	KRP EP	ZE 19 28 47									
	GNZ EP	Z 19 29 01									4.9
	MNG EP	Z 19 29 11									5.1
	MJZ EP	Z 19 29 37									
OCT 01 03 56 49.8	18.4S 172.2W	33KM	4.1 TONGA	25							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 04 01 57										
	KRP EP	ZE 04 01 57									
	MNG EP	Z 04 02 20									
OCT 01 10 05 15.0	24.7S 179.1W	388KM	3.9 S OF FIJI	17							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 10 08 19										
	KRP EP	ZE 10 08 19									
	ES	ZE 11 04									
	MNG EP	Z 10 08 42									
	ES	Z 11 33									
OCT 02 11 21 44.8	45.7N 26.5E	140KM	5.2 RUMANIA	157							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 11 41 51										
	KRP EPKP	Z 11 41 51									
	MNG EPKP	Z 11 41 53									
	E	Z 42 27									
OCT 02 18 49 09											
	KRP EP	ZE 18 49 09									
OCT 02 19 42 09.6	53.7S 140.1E	57KM	5.2 W OF MACQUARIE IS	26							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	ZNE 19 46 57										
	MJZ EP	ZNE 19 46 57									
OCT 04 23 37 34.7	26.1S 179.5E	489KM	5.0 S OF FIJI	16							
	H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG	
	Z 23 40 17.9										
	KRP IP	ZE 23 40 17.9									
	GNZ EP	Z 23 40 20									
	E	Z 41 15									
	ES	Z 42 31									



OCT	H	M	S	EPICENTRE			DEPTH	MAG	DIST (DEG)				
				H	M	S			WEL	AE	TE	MAG	
10	06	11.7	20.3S	175.8W	225KM	4.7	TONGA						
								LOG <sub>a</sub> A/T	AZ	TZ	AN	TN	
	GNZ	EP	Z	10	10	21							
	E		Z			13	33						
	ES		Z				42						
	MNG	EP	Z	10	10	42							
	ES		Z			14	29						
	GPZ	EP	Z	10	11	22							
	MJZ	EP	Z	10	11	31							
10	05												
	KRP	EP	ZE	19	40	45		-1.22					
10	06	03	11	03.5	6.2S	146.4E	113KM	5.0	E NEW GUINEA				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	P	ZE	03	18	40		-1.16					
	CNZ	P	Z	03	18	49							6.0
	GNZ	P	Z	03	18	55		-0.86					
	MNG	P	Z	03	19	52							
10	06	14	10	37.4	4.7N	125.7E	153KM	5.4	TALAUD IS				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	EP	Z	14	20	49							
	MJZ	P	ZNE	14	20	50.8							
	MNG	EP	Z	14	20	53							6.0
	GNZ	EP	Z	14	21	01		-0.96					
10	06	23	49	53	17.4S	172.9W	40KM	4.4	TONGA				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	GNZ	P	Z	23	54	55							
	KRP	P	ZE	23	54	57							
	MNG	P	Z	23	55	16							
10	07	15	55	10.4	21.6S	170.6E	160KM	6.3	LOYALTY IS				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	IP	ZNE	15	58	59.4	UNE						
	S		ZNE	16	02	11.7							
	ESCP		ZE			06	57						
	WEL	P	ZNE	15	59	32		0.29					6.6
	PP		Z			55							
	S		ZNE	16	03	07							
	SS		NE			04	06						
	SCP		Z			07	04						
	SCS		ZNE			10	43						
	MJZ	P	ZNE	15	59	54.7							
	PP		ZNE	16	00	26							
	IS		ZNE			03	52	DS					
	ESCP		ZN			07	10						
	ESCS		ZNE			10	53						
	ROX	EP	Z	16	00	15		-0.29					6.2
	EPP		Z			45							
	E		Z			02	24						
	IS		NE			04	22	USW					105 13 75 14 7.1
	ESS		NE			05	09						
	ESCP		Z			07	20						
10	07	23	04	07.0	4.4S	143.1E	86KM	5.2	NEW GUINEA				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	WEL	EP	Z	23	11	22							
	KRP	EP	Z	23	11	23							
	MNG	EP	Z	23	12	25							

OCT	H	M	S	EPICENTRE			DEPTH	MAG	DIST (DEG)				
				H	M	S			WEL	AE	TE	MAG	
	MJZ	EP	ZNE	23	12	45							
10	08	00	12	16.2	16.6S	177.4W	18KM	5.5	FIJI				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	IP	ZNE	00	17	13							
	ES		E			21	30						
	GNZ	EP	Z	00	17	15							
	MNG	EP	Z	00	17	29							
	WEL	EP	Z	00	17	42							
	EPP		Z			18	22						
	ES		ZN			22	10						
	ESS		E			23	09						
	ESSS		Z			25							
	ELR		ZN			24	41						59 22 35 19
10	08	02	21	38.3	19.4S	175.2W	75KM	5.1	TONGA				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	GNZ	EP	Z	02	26	09							
	ES		Z			29	34						
	KRP	EP	ZNE	02	26	10							
	MNG	EP	Z	02	26	12							
	E		Z			31							
	MJZ	EP	ZNE	02	27	17							
10	08	02	34	11.2	16.5S	177.3W	16KM	4.8	FIJI				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	EP	ZNE	02	39	10							
	WEL	EP	Z	02	39	40							5.8
	E		Z			42	31						
	ES		ZNE			44	10						
	ELR		ZNE			45	55						
	ELQ		Z			46	44						
	MJZ	EP	ZNE	02	40	20							
10	08	14	43	55.2	15.6S	177.8W	435KM	4.8	FIJI				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	IP	ZNE	14	48	25.0	J						
	GNZ	EP	Z	14	48	27							
	WEL	EP	ZNE	14	48	53							
	MJZ	EP	ZNE	14	49	24							
10	10	23	58	25.1	15.8S	172.9W	40KM	4.6	SAMOA				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	EP	ZE	24	03	43							
	MNG	EP	Z	24	04	04							
10	11	05	39	08.1	30.1S	71.9W	34KM	5.2	NEAR CENTRAL CHILE				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	KRP	EP	ZE	05	51	56							
10	11	06	25	56.4	60.5S	26.3W	36KM	5.8	S SANDWICH IS				
									LOG <sub>a</sub> A/T	AZ	TZ	AN	TN
	MSZ	EP	Z	06	37	32							
	MJZ	EP	ZNE	06	37	36							
	WEL	EP	ZNE	06	37	49							
	ES		ZE			47	40						
	ESS		ZE			2	19						
	ELQ		E			58	05						
	ELR		Z	07	01	26							
	KRP	EP	ZE	06	38	04		-0.93					6.2



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 11	07	59	42.5	60.4S 26.2W	33KM	5.4 S SANDWICH IS	WEL 77
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				08 11 19			
				08 11 35			
				08 11 51			
OCT 11				ZNE 20 01 33			
				ZNE 03 05			
				Z 20 02 56			
				Z 20 03 03			
				E 20 04 44			
OCT 12	00	06	38.8	12.0S 121.7E	33KM	5.6 S OF TIMOR	WEL 55
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				00 15 43			
				00 15 50			
				00 16 04			
				00 16 05			
				18 09			
				24 02			
				28 30			
				34 46			
OCT 12	04	22	17.7	31.3S 177.7W	41KM	5.1 KERMADEC IS	WEL 12
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				04 24 20			
				31			
				ZNE 25 19			
				ZNE 04 25 10			
				ZNE 26 59			
				NE 28 14			
				ZNE 36			
				ZNE 04 25 59			
				ZNE 28 37			
				Z 04 26 14			
				Z 29 19			
OCT 14	01	04	43.8	36.4N 87.4E	25KM	5.3 S CHINA	WEL 111
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				01 23 39			
OCT 14	02	34	37.5	23.8S 179.9W	514KM	4.9 S OF FIJI	WEL 18
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				ZNE			
				02 37 43			
				E 40 24			
				Z 02 37 49.8			
				Z 40 28			
				Z 02 38 05			
				Z 40 57			
OCT 14	09	17	18.7	9.0S 158.7E	30KM	5.0 SOLOMON IS	WEL 35
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				09 24 07			
OCT 14	12	12	09.0	24.3S 176.4W	33KM	4.7 S OF FIJI	WEL 18
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				12 16 20			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 15	20	34	53.0	23.5S 175.3W	33KM	4.6 TONGA	WEL 20
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				20 39 11			
OCT 15	22	39	22.0	23.6S 175.4W	40KM	4.7 TONGA	WEL 19
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				22 43 40			
OCT 16	09	13	32.2	29.7N 142.4E	60KM	5.4 S OF HONSHU	WEL 77
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				09 25 04			
				09 25 10			
				09 25 23			
OCT 16	12	55	30.8	56.1S 27.2W	101KM	5.5 S SANDWICH IS	WEL 81
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				ZNE			
				13 07 25			
				Z 13 07 39.3			
				ZNE 13 07 51.8			
						-0.85	6.1
OCT 17	07	30	11.4	23.6S 179.9E	550KM	4.8 S OF FIJI	WEL 18
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				07 33 18			
				ZE 07 33 18			
				35 55			
				Z 07 33 21			
				Z 35 58			
				Z 07 33 41			
				Z 36 25			
				Z 07 34 37			
OCT 17	10	15	38.7	11.0S 166.8E	35KM	5.5 SANTA CRUZ IS	WEL 31
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				10 21 29			
				Z 10 21 50			
				Z 10 22 02			
				E 26 56			
				ZN 27 02			
				ZN 29 11			
				ZN 31 06			
				Z 10 22 17			
						23 21 14 17 14 20	
OCT 17	12	35	55.3	10.5S 161.5E	32KM	5.0 SOLOMON IS	WEL 33
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				Z			
				12 42 03.7			
				Z 12 42 17.3			
				Z 12 42 23.0			
				Z 12 42 42			
						-0.71	6.1
OCT 17	13	48	53.8	11.1S 166.8E	25KM	5.1 SANTA CRUZ IS	WEL 31
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				ZNE			
				14 02 28			
				ZNE 04 22			
				Z 13 55 36			
OCT 17	14	41	07.0	21.2S 175.6W	225KM	4.6 TONGA	WEL 22
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
				ZN			
				14 45 05			







	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 20	15	03	49.0	3.7S 145.4E	29KM	4.9 NEAR NEW GUINEA	WEL 46
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	CNZ	EP	Z	15 11 45			
	MNG	EP	Z	15 12 05			
OCT 23	09	15	54.6	6.3S 154.8E	95KM	5.0 SOLOMON IS	WEL 39
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	09 22 54			
	CNZ	EP	Z	09 23 03			
	MNG	EP	Z	09 23 11			
OCT 23	17	20	00.7	6.3S 130.0E	100KM	5.1 BANDA SEA	WEL 53
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	17 29 08			
		E+PP	Z	43			
	MJZ	EP	Z	17 29 23			
	CNZ	EP	Z	17 29 40			
OCT 24	15	37	26.1	30.5S 177.2W	25KM	4.6 KERMADEC IS	WEL 13
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	ONE	EP	Z	15 39 43			
	CNZ	EP	Z	15 39 59			
		ES	Z	41 47			
	MNG	EP	Z	15 40 03			
		ES	Z	42 10			
	MJZ	EP	ZNE	15 41 18			
OCT 25	00	26	36.3	6.7S 147.2E	61KM	5.2 E NEW GUINEA	WEL 42
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	00 34 24			
	MJZ	EP	ZNE	00 34 26			
OCT 25	07	46	30.0	16.0S 172.7W	35KM	4.5 SAMOA	WEL 27
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	ZE	07 51 45			
OCT 25	12	38	53.0	15.9S 176.7W	33KM	4.3 FIJI	WEL 26
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	12 43 53			
OCT 25							
	KRP	EP	Z	12 52 24			
OCT 25	18	04	09.1	36.7N 138.2E	13KM	5.3 HONSHU JAPAN	WEL 65
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	18 16 29			
OCT 25	23	16	00.3	14.6S 167.5E	180KM	4.5 NEW HEBRIDES	WEL 27
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	23 21 03			
	MNG	EP	Z	23 21 24			
	MJZ	EP	ZE	23 21 49			
	ROX	EP	Z	23 22 00			
OCT 26							
	KRP	EP	ZE	07 05 00			
	CNZ	EP	Z	07 05 09			
	MNG	EP	Z	07 05 21			
		ES	Z	08 16			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 26	13	26	23				
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	13 26 23			
		ES	ZE	29 19			
	CNZ	EP	Z	13 26 40			
		ES	Z	29 33			
	MNG	EP	Z	13 27 05			
OCT 26	13	34	26				
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	ZE	16 30 58			
OCT 26	18	28	53.9	18.4S 167.6E	34KM	5.4 NEW HEBRIDES	WEL 24
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	CNZ	EP	Z	18 33 44			
	ECZ	EP	Z	18 33 45			
	TUA	EP	Z	18 33 49			
	MNG	EP	Z	18 33 59			
OCT 26	18	28	59.2	40.2S 152.9E	68KM	4.8 NEW BRITAIN	WEL 17
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	18 36 25			
		EPCP	Z	38 32			
	MNG	EP	Z	18 36 41			
	MJZ	EP	ZNE	18 36 50			
OCT 26	20	09	36.9	13.6N 121.2E	55KM	5.0 PHILIPPINE IS	WEL 74
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	20 20 57			
	MJZ	EP	ZNE	20 20 59			
OCT 27	02	27	49.6	14.1N 145.2E	124KM	5.2 MARIANA IS	WEL 62
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	02 37 53			
		E+PP	Z	38 25			
OCT 27	05	57	57.7	73.4N 54.9E	0KM	6.3 NOVAYA ZEMLYA	WEL 138
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EPKP	Z	06 17 05			
		PKP2	ZE	13			
	MNG	EPKP	Z	06 17 12			
		PKP2	Z	21			
		EPKS	Z	20 50			
	MSZ	PKP	Z	06 17 15			
		PKP2	Z	23			
	MJZ	EPKP	ZNE	06 17 17			
		PKP2	ZNE	29			
		EPP	Z	19 55			
		PKS	ZNE	21 03			
OCT 27	07	04	48				
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	07 04 48			
	CNZ	EP	Z	07 04 53			
OCT 27	09	18	14.4	20.2N 145.7E	107KM	5.4 MARIANA IS	WEL 67
				H M S	DIR	LOG=A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	09 28 39			
	CNZ	EP	Z	09 28 45			
	MNG	EP	Z	09 28 51			



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 27	14	21	04.7	22.1N 145.9E	28KM	6.0 N PACIFIC OCEAN	WEL 69
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	P	Z	14 31 50			-0.68	6.5
	ES	E	40 54				
WEL	P	ZNE	14 32 05			-0.40	6.8
	PCP	Z	49				
	ES	ZNE	40 52				
	ELQ	E	49 55				
	ELR	Z	53 22				
MJZ	P	ZNE	14 32 12				
	EPCP	Z	34				
MSZ	P	Z	14 32 12				
OCT 27	ECZ	EP	Z 19 04 47				
	ES	Z	07 13				
KRP	P	Z	19 04 56				
	ES	ZE	07 33				
TUA	EP	Z	19 04 58				
	ES	Z	07 41				
MNG	EP	Z	19 05 30				
	ES	Z	08 13				
OCT 27	22	26	20.7	7.4S 146.8E	135KM	5.3 E NEW GUINEA	WEL 42
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	P	Z	22 33 45				
CNZ	P	Z	22 33 52				
MNG	P	Z	22 33 58				
OCT 27	23	46	47.6	41.6N 142.0E	71KM	5.3 HOKKAIDO JAPAN	WEL 88
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MNG	P	Z	23 59 27				
OCT 28	01	41	19.2	9.7S 159.8E	35KM	5.6 SOLOMON IS	WEL 34
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	EP	ZE	01 47 41				
	EPCP	Z	50 32				
MNG	EP	Z	01 47 55				
MJZ	EP	ZNE	01 48 11				
	EPCP	Z	50 42				
MNW	EP	Z	01 48 21				
OCT 28	13	20	29.8	35.8N 140.1E	74KM	5.2 E OF HONSHU	WEL 83
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	EP	Z	13 32 34				
MNG	EP	Z	13 32 47				
MJZ	EP	Z	13 32 53				
MSZ	EP	Z	13 32 54				
OCT 28	22	11	47.9	20.1S 168.8E	20KM	5.3 LOYALTY IS	WEL 22
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	P	ZNE	22 16 08			-0.82	5.3
ECZ	P	Z	22 16 17				
	ES	Z	20 04				
WEL	EP	ZNE	22 16 49				
	ES	ZNE	20 41				
MJZ	EP	ZNE	22 17 01				

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 28	23	24	14.4	22.6S 170.9E	26KM	4.9 LOYALTY IS	WEL 19
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	EP	ZE	23 28 00			-0.97	5.1
CNZ	EP	Z	23 28 12				
MNG	P	Z	23 28 30				
MJZ	P	ZNE	23 29 02				
OCT 28	23	54	00.3	20.0S 168.2E	33KM	4.6 LOYALTY IS	WEL 22
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MNG	EP	Z	23 58 43				
OCT 29	00	56	37.3	20.1S 168.8E	33KM	4.2 LOYALTY IS	WEL 22
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MNG	P	Z	01 01 22				
OCT 29	02	39	26.0	38.9N 21.1E	8KM	5.8 GREECE	WEL 160
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MNG	EPKP	Z	02 59 28				
	EPKP2	Z	03 00 05				
	EPP	Z	03 44				
MJZ	PKP2	ZNE	02 59 51				
KRP	PKP2	ZE	03 00 06				
CNZ	EPKP2	Z	03 00 05				
OCT 29	05	11	26.0	22.0S 179.5W	600KM	4.0 S OF FIJI	WEL 20
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	EP	ZE	05 14 49				
MNG	EP	Z	05 15 09				
	ES	Z	18 08				
OCT 29	07	08	31.1	6.7S 155.6E	100KM	4.9 SOLOMON IS	WEL 38
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	EP	Z	07 15 22				
MNG	EP	Z	07 15 41				
	E+PP	Z	59				
OCT 29	10	38	29.1	20.2S 168.5E	19KM	4.3 LOYALTY IS	WEL 22
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
MNG	EP	Z	10 43 21				
OCT 29	14	32	40.9	41.8N 144.1E	35KM	5.2 HOKKAIDO JAPAN	WEL 87
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	P	ZE	14 45 13				
MNG	P	Z	14 45 22				
OCT 29	16	11	03.0	20.2S 168.5E	44KM	4.6 LOYALTY IS	WEL 22
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
CNZ	EP	Z	16 15 29				
MNG	EP	Z	16 15 45				
OCT 30	00	02	30.8	20.9S 176.3W	250KM	4.5 FIJI	WEL 22
				H M S		LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
KRP	EP	ZE	00 06 31			-1.12	5.2
MNG	EP	Z	00 06 53				
	ES	Z	10 29				



	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 30	07 24 43.0	20.9S 176.8W	447KM	3.5 FIJI	WEL 22
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 07 28 19			
	MNG EP	Z 07 28 42			
	ES	Z 32 19			
OCT 30	09 50 15.5	21.3S 178.6W	503KM	4.4 FIJI	WEL 21
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	ZE 09 53 53			
	MNG EP	Z 09 54 12			
OCT 30	22 22 46.4	31.4S 179.2W	211KM	4.7 KERMADEC IS	WEL 11
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	ECZ EP	Z 22 24 21			
	ES	Z 25 38			
	CNZ EP	Z 22 24 50			
	ES	Z 26 25			
	MNG P	Z 22 25 02			
	ES	Z 26 48			
	MJZ EP	Z 22 26 06			
	ES	Z 28 40			
OCT 31	02 00 23.0	21.9S 169.8E	33KM	LOYALTY IS	WEL 20
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG P	Z 02 04 31			
NOV 01	07 01 00.7	43.2N 143.5E	132KM	5.2 JAPAN	WEL 89
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	ZE 07 13 29.5			5.6
	MNG P	Z 07 13 40			
	MJZ EP	Z 07 13 49			
NOV 01	16 45 03	15.0S 173.2W	33KM	4.6 TONGA	WEL 28
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 16 50 25.5			
	MNG EP	Z 16 50 46			
NOV 01	19 58 04	19.4S 177.4W	576KM	3.5 FIJI	WEL 23
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP IP	Z 20 01 52.6			5.0
	MNG EP	Z 20 02 11.5			
NOV 02	20 00 11.6	6.2S 153.6E	37KM	4.6 NEW BRITAIN	WEL 40
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 20 07 21			
	MNG EP	Z 20 07 33.5			
NOV 03	03 29 13.2	15.1S 167.5E	124KM	4.8 NEW HEBRIDES	WEL 27
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP P	ZNE 03 34 17			6.1
	MNG EP	Z 03 34 38			
	E=PP	Z 35 02.5			
	MJZ EP	Z 03 35 02			
	MNW EP	Z 03 35 15			5.5

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 03	16 24 32.7	19.2N 68.0W	33KM	5.6 N ATLANTIC OCEAN	WEL 123
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG EPKP	Z 16 43 26			
	WEL EPP	Z 16 45 02			
	ESP	Z 34 50			
	EL	ZNE 17 23			
	MJZ EPKP	ZNE 16 43 32			
	MNW EPKP	Z 16 43 35			
NOV 03	21 11 16.5	7.6S 107.9E	33KM	5.1 JAVA	WEL 68
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MJZ EP	Z 21 21 53			
	MNG EP	Z 21 22 12			
NOV 04	15 43 07.0	26.0S 178.4E	594KM	4.9 S OF FIJI	WEL 16
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	ZE 15 45 49			
	MNG EP	Z 15 46 10.5			
	ES	Z 48 38			
	WEL EP	ZNE 15 46 20			5.7
	ES	ZNE 48 58			
	MJZ EP	ZNE 15 46 52			
	ES	ZNE 49 59			
	MNW EP	Z 15 47 16			-0.99
NOV 05	02 13 50.7	41.7S 80.1E	33KM	5.4 MID-INDIAN RISE	WEL 67
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MJZ EP	Z 02 24 20.5			
	MNG EP	Z 02 24 43			
	KRP EP	Z 02 25 03			
NOV 05	02 30 12.8	19.2S 169.3E	13KM	5.3 NEW HEBRIDES	WEL 23
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	ZNE 02 34 39.5			
	MNG P	Z 02 35 05.5			5.1
	WEL EP	Z 02 35 14			
	MJZ EP	Z 02 35 34.5			-0.58
NOV 05	02 42 44	19.3S 169.3E	19KM	4.3 NEW HEBRIDES	WEL 22
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG EP	Z 02 47 37			
NOV 05	05 43 19	19.3S 169.2E	33KM	NEW HEBRIDES	WEL 22
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	Z 05 47 44			
	MNG EP	Z 05 48 09			
NOV 05	12 45 13.5	15.2S 175.1W	33KM	5.5 TONGA IS	WEL 27
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	ZE 12 50 27.5			
	MNG EP	Z 12 50 50			
	WEL E(P)	Z 12 51 14			
	EL	ZNE 57			
NOV 05	13 42 07.5	22.6S 172.8E	72KM	4.9 LOYALTY IS	WEL 19
		H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP EP	ZNE 13 45 34			-0.85
					5.2



		Z	13 46 15																		
MNG EP		Z	13 46 15																		
WEL EP		ZNE	13 46 23			-0.34														5.8	
MJZ P		Z	13 46 52.7																		
	H M S	EPICENTRE	DEPTH	MAG																DIST (DEG)	
NOV 05	16 03 49.2	11.0S 166.9E	41KM	4.5	SANTA CRUZ IS															WEL 31	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN															AE TE MAG	
MNG EP		Z	16 10 01																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 06	14 22 07	19.3S 169.3E	33K		NEW HEBRIDES															WEL 22	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
MNG EP		Z	14 27 03																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 06	14 43 17.4	17.9S 178.6E	560KM	5.0	FIJI															WEL 24	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
KRP EP		Z	14 47 20																		
MNG EP		Z	14 47 40																		
MJZ EP		Z	14 48 19																		
MSZ EP		Z	14 48 33.5																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 06	19 46 52	20.3S 178.5W	412KM	4.1	FIJI															WEL 22	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
KRP EP		Z	19 50 52																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 07	08 55 51.5	7.2N 125.5E	92KM	5.0	PHILIPPINE IS															WEL 66	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
KRP EP		Z	09 06 27																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 07	13 16 45.8	41.9S 88.3E	33KM	5.1	SE INDIAN RISE															WEL 62	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
MJZ EP		Z	13 26 35																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 07	17 37 39.9	15.3S 173.3W	33KM	5.0	TONGA															WEL 28	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
KRP EP		ZE	17 42 59																		
MNG EP		Z	17 43 20																		
MJZ EP		ZE	17 44 03																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 07	23 24 04	19.3S 169.3E	146KM	4.1	NEW HEBRIDES															WEL 22	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
KRP EP		Z	23 28 21																		4.8
MNG EP		Z	23 28 46																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 09	11 26 24.2	26.9N 125.6E	36KM	5.3	NE OF TAIWAN															WEL 82	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
MNG EP		Z	11 38 39																		
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 10	00 54 28																				-1.41
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)
NOV 10	03 02 32.7	31.9S 68.4W	113KM	6.0	ARGENTINA															WEL 87	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																AE TE MAG
MJZ EP		ZN	03 15 09.5																		
		ZNE	37.5																		
KRP EP		ZE	03 15 14																		
		ZE	43																		
		E(*SP)	ZE	16 01																	

	H M S	EPICENTRE	DEPTH	MAG																		
NOV 10	22 05 04	20.8S 178.5W	457KM	4.3	FIJI																DIST (DEG)	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																WEL 21	
KRP P		ZE	22 08 47																		AE TE MAG	
MSZ EP		Z	22 10 04																		5.0	
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)	
NOV 11	09 47 37.2	18.9S 168.8E	84KM	4.9	NEW HEBRIDES																WEL 23	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																	AE TE MAG
KRP EP		ZNE	09 52 04.5																			
MNG EP		Z	09 52 30																			
MJZ EP		ZNE	09 52 55.5																			
MSZ EP		Z	09 53 02																			
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)	
NOV 11	15 31 04.5	52.2N 169.1W	40KM	5.4	ALEUTIAN IS																WEL 94	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																	AE TE MAG
KRP EP		Z	15 44 04																			
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)	
NOV 11	16 03 37.3	50.2N 155.5E	136KM	5.1	KURILE IS																WEL 93	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																	AE TE MAG
KRP EP		Z	16 16 20																			
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)	
NOV 11	17 57 43.4	17.6S 177.2W	390KM	4.6	FIJI																WEL 25	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																	AE TE MAG
KRP EP		ZNE	18 02 01																			
MNG EP		Z	18 02 21																			
WEL EP		Z	18 02 30																			
MJZ EP		Z	18 03 04																			
MSZ EP		Z	18 03 19																			
	H M S	EPICENTRE	DEPTH	MAG																	DIST (DEG)	
NOV 12	06 15 32.6	10.7S 166.2W	177KM	4.2	SANTA CRUZ IS																WEL 35	
		H M S	DIR	LOG <sub>a</sub> /T	AZ TZ AN TN																	AE TE MAG
MNG EP		Z	06 21 33.5																			



H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN AE TE MAG
NOV 12	12 49 43.7	41.7N 144.1E	36KM	5.8 JAPAN			
		Z 13 02 29					
		ZN 12 56					
		ZNE 32 15			5 22	3 22	2 22
		Z 13 02 36					
		Z 13 02 30					
NOV 12	15 56 05.0	4.8S 134.1E	33KM	5.4 W NEW GUINEA			
		Z 16 04 54.3					
		Z 16 04 59.5					
		ZNE 16 05 00.4					
		Z 16 05 05.5					
NOV 12	17 23 57.1	15.0S 166.6E	46KM	4.6 NEW HEBRIDES			
		ZNE 17 29 03.8		-1.34			5.0
NOV 12	18 45 00.0	15.7S 167.2E	30KM	5.2 NEW HEBRIDES			
		ZNE 18 50 09		0.20			6.6
		ZE 57 35					
		Z 18 50 20.5					
		ZNE 18 50 34.5		-0.37	16 16		6.3
		ZNE 55 09			24 16	70 20	16 14 6.5
		ZNE 57 42			105 22	66 20	110 22
		ZNE 58					
		ZNE 18 50 53.5					
		ZNE 54 08.5					
		ZNE 57 49					
		ZNE 19 01 41					
		ZNE 18 51 05.5					
		ZNE 56 00			48 22	20 9	6.6
		Z 57 54.5					
NOV 12	19 32 24.7	18.9S 175.64	250KM	4.1 TONGA			
		ZNE 19 36 46.5		-1.20			5.2
		ZNE 19 37 15.5					
		ZNE 19 37 56					
NOV 13	03 03 33.2	11.1S 166.3E	167KM	4.7 SANTA CRUZ IS			
		Z 03 09 08.5					
		ZNE 03 09 52					
NOV 13	05 02 29.0	15.9S 179.74	103KM	4.5 FIJI			
		ZE 05 07 19.5		-1.00			5.3
		ZNE 05 07 48					
NOV 13	05 37 22.0	15.8S 167.4E	23KM	4.9 NEW HEBRIDES			
		Z 05 42 32		-1.46			4.9

H M S		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	DIR	LOG <sub>a</sub> /T	AZ	TZ	AN TN AE TE MAG
NOV 13	16 51 49	14.5S 166.6E	33KM	4.3 NEW HEBRIDES			
		Z 16 57 13		-1.31			5.1
		Z 16 57 32.5					
NOV 14	03 08 26.5	2.0N 99.1E	133KM	5.4 N SUMATRA			
		Z 03 20 27					
NOV 14	KRP EP	ZE 03 45 17		-1.61			
	MNG EP	Z 03 45 39.5					
		Z 47 05.5					
NOV 14	KRP EP	Z 15 58 09					
NOV 15	09 23 35	18.1S 173.74	36KM	4.1 TONGA			
		Z 09 28 20					
		ZE 09 28 21		-1.31			
		Z 09 28 42					5.0
NOV 15	16 19 06.8	51.2N 176.54	43KM	5.1 ALEUTIAN IS			
		Z 16 31 57					
NOV 16	00 54 32.4	18.3S 168.1E	19KM	5.0 NEW HEBRIDES			
		ZE 00 59 14					
		Z 00 59 39					
NOV 16	02 26 11	6.1S 153.1E	93KM	4.8 NEW BRITAIN			
		Z 02 33 31					
NOV 16	03 39 46	6.6S 147.3E	88KM	E NEW GUINEA			
		Z 03 47 49					
NOV 16	05 58 31	19.5S 176.34	51KM	4.8 FIJI			
		Z 06 02 56					
		Z 06 03 19					
NOV 16	08 08 13.1	13.1S 166.5E	45KM	5.2 NEW HEBRIDES			
		ZE 08 13 44					
		Z 08 14 04					
		ZNE 08 14 27.5					
NOV 16	GNZ EP	Z 12 10 22					
	ES	Z 11 51					
	KRP EP	Z 12 10 29					
	MNG EP	Z 12 10 51.5					
	ES	Z 12 49					
	WEL ES	ZNE 12 13 06.5					
	MSZ EP	Z 12 12 14.5					



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 18	09	12	10.7	36.2S 100.3W	33KM	5.1 S PACIFIC OCEAN	WEL 64
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	WEL	ES	Z	09 31 19			
		ESS	Z	35 04			
		EL	Z	41			
NOV 19	05	19	55.2	37.5N 141.4E	61KM	5.3 JAPAN	WEL 84
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	MNG	EP	Z	05 32 30			
	MJZ	EP	ZNE	05 32 41.5			
NOV 19	06	56	39	4.3S 144.1E	154KM	NEW GUINEA	WEL 46
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	07 04 35			
	MJZ	EP	Z	07 04 41.5			
	MNG	P	Z	07 04 47			
	GNZ	EP	Z	07 04 49			
NOV 19	08	50	10	16.2S 167.9E	159KM	NEW HEBRIDES	WEL 26
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	08 55 02			
	MSZ	EP	Z	08 55 54			
NOV 19	GNZ	EP	Z	19 53 54		-0.21	
		ES	Z	55 27			
	KRP	EP	ZNE	19 53 59.5			
		ES	ZNE	55 37			
	MNG	EP	Z	19 54 19.5			
		ES	Z	56 15			
	WEL	EP	ZNE	19 54 31			
		ES	ZNE	56 33			
	MSZ	EP	Z	19 55 35.5			
NOV 20	KRP	EP	Z	00 25 12			
NOV 20	16	47	32.7	55.1S 129.4W	33KM	5.0 S PACIFIC OCEAN	WEL 39
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	WEL	ES	ZE	17 01 04			
		EL	Z	05 22			
	MJZ	EP	Z	16 55 07			
NOV 21	12	19	30.5	46.7N 152.5E	66KM	5.6 KURILE IS	WEL 90
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	12 32 08			
NOV 21	12	32	44.9	15.5S 167.5E	130KM	NEW HEBRIDES	WEL 28
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	ZNE	12 37 44.5			
NOV 22	06	29	53.1	48.0N 146.8E	452KM	5.7 SEA OF OKHOTSK	WEL 92
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	IP	ZNE	06 42 01.8 J		-0.69	6.3
NOV 22	07	01	10.7	58.0S 25.3W	32KM	5.6 S SANDWICH IS	WEL 80
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	MSZ	EP	Z	07 13 02			
	MJZ	EP	ZNE	07 13 04.5			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	WEL	EP	Z	07 13 15.5			
	KRP	P	ZNE	07 13 33		-0.65	6.6
NOV 23	02	19	13.6	14.9S 166.8E	43KM	5.6 NEW HEBRIDES	WEL 27
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	ZNE	02 24 23		0.05	6.4
		ESCP	Z	31 43			
	WEL	P	ZNE	02 24 56		-0.47	6.0
		ES	ZNE	29 15			
	MJZ	EP	ZNE	02 25 14.5			
		EP	ZNE	28 20			
		ESCP	ZNE	31 57			
	MSZ	EP	Z	02 25 13			
NOV 23	08	21	01.5	14.8S 166.8E	21KM	NEW HEBRIDES	WEL 27
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	08 26 19		-1.61	4.8
NOV 23	18	17	59	20.1S 177.7W	465KM	4.2 FIJI	WEL 22
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	P	ZE	18 21 47		-1.31	5.1
	TNZ	EP	Z	18 22 02			
	MJZ	EP	Z	18 22 50			
NOV 24	07	31	53.2	30.7S 177.8W	19KM	5.0 KERMADEC IS	WEL 12
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	ECZ	EP	Z	07 33 44			
		ES	Z	35 10			
	ONE	EP	E	07 34 03			
	KRP	EP	ZNE	07 34 07			
	WEL	ES	ZNE	07 36 54			
		EL	ZE	38			
	MJZ	EP	ZNE	07 35 41			
		ES	ZNE	38 23			
	MSZ	EP	Z	07 35 59			
NOV 24	12	59	16	25.5S 179.4E	520KM	4.2 S OF FIJI	WEL 16
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	ZE	13 02 03			
	TUA	EP	Z	13 02 06			
		ES	Z	04 29.5			
	ECZ	ES	Z	13 04 07			
NOV 24	10	45	46	39.3S 91.9W	33KM	5.1 W CHILE RISE	WEL 68
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	MJZ	EP	Z	16 56 49			
	WEL	ES	ZNE	17 05 37			
		EL	ZNE	16			
NOV 24	19	10	53.7	17.2N 146.0E	86KM	5.2 MARIANA IS	WEL 64
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	19 21 03			
NOV 25	03	18	51.1	15.5S 179.3E	33KM	5.0 FIJI	WEL 26
				H M S	DIR	LOG <sub>a</sub> A/T AZ TZ AN TN	AE TE MAG
	KRP	EP	ZE	03 23 47.5			



	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 26	02	18	17.5	25.6S 70.7W	54KM	5.6 OFF N CHILE	WEL 90
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P		ZE 02 31 20,7		-1.04	6,4
NOV 27	08	59	59	23.4S 179.8W	495KM	4.3 S OF FIJI	WEL 18
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		ZE 09 03 13			
NOV 27	13	41	18.7	17.5N 145.5E	210KM	5.4 MARIANA IS	WEL 64
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	IP		ZNE 13 51 17,7		-0.55	6,2
	WEL	P		ZNE 13 51 32,5		-0.22	6,6
	MSZ	EP		Z 13 51 37			
	MJZ	EP		ZNE 13 51 38			
	GNZ	EP		Z 13 51 46,5		-0.53	6,3
NOV 27	14	37	52	6.2S 112.0E	558KM	JAVA	WEL 66
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	EP		Z 14 47 13			
	MJZ	EP		Z 14 47 26,5			
	KRP	EP		Z 14 47 41			
NOV 27	18	11	26.9	15.3S 166.3E	23KM	4.5 NEW HEBRIDES	WEL 27
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		Z 18 16 43			
NOV 27	20	13	02.0	78.5N 5.8E	33KM	5.5 SVALBARD	WEL 142
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MJZ	EPKP		ZNE 20 32 39			
NOV 27	ECZ	EP		Z 22 12 04,5			
	GNZ	EP		Z 22 12 17			
	ONE	EP		E 22 12 21			
	KRP	EP		ZE 22 12 25,5			
		E(S)		ZE 13 52			
NOV 28	03	04	10.6	5.4S 151.2E	78KM	4.7 NEW BRITAIN	WEL 41
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		Z 03 11 32			
NOV 28	08	17	10.8	7.4S 154.8E	16KM	4.9 SOLOMON IS	WEL 38
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		Z 08 24 01			
		PCP		Z 26 44			
NOV 28	10	08	09.4	16.9S 174.3W	122KM	4.5 TONGA	WEL 26
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		ZE 10 13 04			
NOV 28	KRP	EP		ZE 11 50 52			
NOV 28	KRP	EP		ZE 12 09 03			
NOV 28	14	48	54.0	22.4S 171.5E	132KM	4.9 LOYALTY IS	WEL 19
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	GNZ	EP		Z 14 52 47			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
				ZNE 14 52 32			
				Z 14 53 45			
NOV 28	19	28	56	17.7N 145.6E	317KM	4.6 MARIANA ISLANDS	WEL 65
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		Z 19 38 45,5			
NOV 29	02	51	21	19.8S 176.0W	202KM	4.1 FIJI	WEL 23
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P		ZE 02 55 36			
NOV 29	03	17	22.2	11.5S 166.3E	84KM	4.5 SANTA CRUZ IS	WEL 31
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		Z 03 23 04			
NOV 29	08	00	09.5	15.9S 176.8W	375KM	4.7 FIJI	WEL 26
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P		ZNE 08 04 44		-0.98	5,2
	GNZ	EP		Z 08 04 45		-0.93	5,3
NOV 29	09	21	22.7	9.8S 90.6E	33KM	5.0 S INDIAN OCEAN	WEL 79
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	EP		Z 09 32 58			
	KRP	EP		Z 09 33 32			
NOV 29	KRP	EP		ZE 12 31 57			
NOV 29	KRP	EP		ZE 15 42 56,5			
	GNZ	EP		Z 15 42 59			
		ES		Z 45 30			
NOV 29	22	17	30.4	14.7S 167.4E	166KM	5.4 NEW HEBRIDES	WEL 27
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		ZNE 22 22 33,5		-0.42	6,1
	ESCP			ZE 29 36			
	GNZ	EP		Z 22 22 41			
	WEL	EP		Z 22 23 00			
		EPP		Z 51			
		ES		ZNE 27 23			
	MJZ	EP		ZNE 22 23 17,5			
	MSZ	EP		Z 22 23 26			
NOV 30	KRP	P		ZNE 01 06 00			
	GNZ	EP		Z 01 06 02			
NOV 30	KRP	P		Z 07 48 16			
NOV 30	22	10	26.0	4.7S 153.0E	72KM	4.9 NEW IRELAND	WEL 41
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP		Z 22 17 46			
		E		Z 56,5			
		E		ZE 18 01,5			
	MSZ	EP		Z 22 18 14			
DEC 01	04	56	58.4	14.0S 167.1E	132KM	6.0 NEW HEBRIDES	WEL 28
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	ONE	EP		E 05 01 52			
		ES		E 05 59			
		ESCS		E 12 59			







	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
DEC 11	17	57	18.8	15.0S 167.4E	120KM	4.8 NEW HEBRIDES	WEL 27
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	18 02 23		-0.83	5.6
DEC 11	19	52	08.4	13.5N 145.9E	45KM	5.3 MARIANA IS	WEL 61
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	20 01 59			
DEC 11	20	08	22.6	13.5N 145.9E	49KM	5.4 MARIANA IS	WEL 61
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	20 18 14			
DEC 11	21	54	51.5	20.4S 178.1E	493KM	3.9 FIJI	WEL 22
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	21 58 39			
DEC 12	05	27	18.6	21.7S 179.2E	562KM	4.3 FIJI	WEL 20
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	05 30 47			
DEC 13	10	01	14.6	15.1S 166.8E	34KM	4.7 NEW HEBRIDES	WEL 27
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	10 06 23			
DEC 13	20	16	55.0	23.4S 179.8E	422KM	4.3 S OF FIJI	WEL 18
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	20 20 11		-1.29	5.1
	MNG	EP	Z	20 20 32			
DEC 14	03	44	02.2	52.8N 177.6E	252KM	5.2 ANDREANOF IS	WEL 94
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	03 56 36			
DEC 14	11	15	52.9	28.7S 178.4E	185KM	4.6 KERMADEC IS	WEL 14
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	11 18 26			
	MNG	EP	Z	11 18 48			
	ES		Z	21 02			
	MJZ	EP	Z	11 19 54			
	ES		ZNE	22 50			
DEC 14	21	07	53.1	4.9S 144.1E	80KM	5.7 NEAR NEW GUINEA	WEL 45
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P	Z	21 15 53		-0.49	6.4
	ESCP		Z	21 28			
	ESCS	E	Z	25 50			
	MJZ	P	Z	21 16 05			
	ESCP		ZNE	21 35			
	MNG	P	Z	21 16 05			
	ESCP		Z	21 37			
	GPZ	P	Z	21 16 11			
DEC 14	23	21	08	11.2S 166.6E	101KM	SANTA CRUZ	WEL 31
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	P	Z	23 27 10			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
DEC 15	02	08	04.8	21.5N 94.4E	98KM	5.6 BURMA	WEL 97
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	EP	Z	02 21 12			
	MJZ	EP	Z	02 21 18			
	KRP	EP	Z	02 21 24		-0.97	6.6
	MNG	EP	Z	02 21 24			
DEC 15	04	32	13.1	15.9S 167.1E	23KM	4.9 NEW HEBRIDES	WEL 26
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	04 37 21			
	MNG	EP	Z	04 37 42			
DEC 15	09	26	52.3	5.8S 147.2E	85KM	5.2 NEW GUINEA	WEL 43
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	09 34 30			
	MNG	P	Z	09 34 43			
DEC 15	13	42	05.6	11.2S 165.7E	39KM	4.6 SANTA CRUZ IS	WEL 31
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	13 47 56			
	MNG	EP	Z	13 48 16			
DEC 15	14	32	20.8	5.5S 147.4E	182KM	5.4 NEW GUINEA	WEL 43
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	IP	ZNE	14 39 49.9 D		-0.78	5.7
	MSZ	EP	Z	14 40 03			
	MNG	IP	Z	14 40 04.0 D			
	MJZ	EP	ZNE	14 40 06			
DEC 15	18	40	40.5	15.3S 167.5E	134KM	NEW HEBRIDES	WEL 27
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	EP	Z	18 45 41			
	MNG	EP	Z	18 46 02			
DEC 15	19	08	26.6	40.5S 155.8E	33KM	SE OF AUSTRALIA	WEL 14
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MSZ	P	Z	19 10 47			
	ES		Z	12 30			
	MJZ	P	Z	19 11 10			
	ES		ZNE	13 10			
	MNG	EP	Z	19 11 56			
	ES		Z	14 32			
	KRP	EP	ZE	19 12 04			
DEC 16	12	50	44.8	19.5S 169.1E	68KM	4.2 NEW HEBRIDES	WEL 22
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	KRP	P	ZE	12 55 06			
	MNG	P	Z	12 55 32			
	MJZ	EP	ZNE	12 55 59			
	MSZ	EP	Z	12 56 07			
DEC 17	05	59	07.9	70.8N 14.0W	9KM	5.1 JAN MAYEN IS	WEL 150
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	AE TE MAG
	MNG	EPKP	Z	06 18 56			
	E		Z	19 02			
	MJZ	EPKP	ZNE	06 19 11			



DATE	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	WEL MAG
DEC 17	06	24	55	16,8S 168.8E	243KM	NEW HEBRIDES	WEL 25
	MNG	EP	Z	06 29 53			
DEC 17	07	42	21.9	3,1S 130.1E	33KM	5.3 CERAM	WEL 55
	MNG	EP	Z	07 55 53			
DEC 17							
	MNG	P	Z	07 46 14			
		ES	Z	49 04			
	MJZ	EP	ZNE	07 46 57			
	MNW	P	Z	07 47 20			
DEC 18	04	57	57.7	49,9N 77.8E	0KM	5.9 E KAZAKHSTAN	WEL 124
	MNG	EPKP	Z	05 16 57			
DEC 18	06	23	48.1	12,0N 140.4E	33KM	4.9 W CAROLINE IS	WEL 62
	MNG	EP	Z	06 34 02			
DEC 18	09	48	23.0	10,6S 161.5E	52KM	5.1 SOLOMON IS	WEL 33
	GNZ	EP	Z	09 54 42			
	MNG	EP	Z	09 54 49			
	MJZ	EP	ZNE	09 55 06			
	MNW	EP	Z	09 55 15			
DEC 19	22	44	53.5	25,7S 179.8E	457KM	4.1 S OF FIJI	WEL 16
	ECZ	EP	Z	22 47 33			
		ES	Z	49 37			
	GNZ	EP	Z	22 47 42			
		ES	Z	50 00			
	MNG	EP	Z	22 48 03			
		ES	Z	50 41			
DEC 20	12	24	14.3	2,9S 129.8E	52KM	5.6 CERAM	WEL 56
	MNG	EP	Z	12 33 46			
DEC 20	12	26	54.6	21,1S 63.2W	586KM	5.7 SANTIAGO	WEL 98
	MNG	P	Z	12 39 12			
		E*PP	Z	41 18			
		ESKS	Z	48 53			
	WEL	E*PP	Z	12 41 18			
		EPP	Z	43 09			
		SKS	ZNE	48 51			
		ESP	ZE	50 55			
	MJZ	P	Z	12 39 15			
		*PP	Z	41 19			
	KRP	EP	Z	12 39 19			
		E*PP	Z	41 25			
		ESKS	Z	48 55			
		PKKP	Z	56 06			

DATE	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
				H M S	DIR	LOG <sub>a</sub> /T AZ TZ AN TN	WEL MAG
DEC 20	13	07	46.6	25,6N 142.6E	29KM	5.0 VOLCANO IS	WEL 73
	KRP	EP	Z	13 18 58			
	MNG	EP	Z	13 19 12			
DEC 20	16	20	04.7	7,1S 126.0E	427KM	5.4 BANDA SEA	WEL 55
	MSZ	P	Z	16 28 35			
		PCP	Z	29 40			
	MJZ	P	ZNE	16 28 43			
		E*PP	Z	30 02			
	KRP	P	Z	16 28 50			
		EPCP	Z	29 48			
		E*PP	Z	30 19			
	WEL	P	Z	16 28 53			
		*PP	Z	30 23			
DEC 20	18	39	41.5	14,5N 122.1E	40KM	5.3 PHILIPPINE IS	WEL 74
	MNG	EP	Z	18 51 12			
	MNW	EP	Z	18 51 13			
	ECZ	EP	Z	18 51 15			
	WEL	EP	Z	18 51 17			
DEC 21	08	52	00.4	20,0S 169.7E	249KM	5.8 NEW HEBRIDES	WEL 22
	KRP	EP	Z	08 56 00			
		ES	E	59 25			
		ESCP	Z	09 03 33			
	ECZ	EP	Z	08 56 09			
		ES	Z	59 33			
	WEL	P	Z	08 56 32			
		ES	ZNE	09 00 14			
		ESCP	Z	03 38			
		SCS	E	07 20			
		E*PP	Z	08 57 04			
	MJZ	EP	Z	08 56 55			
		SCP	Z	09 03 45			
	CIZ	EP	Z	08 57 17			
DEC 21	11	38	00.5	6,0N 126.1E	34KM	5.5 PHILIPPINE IS	WEL 65
	MSZ	EP	Z	11 48 25			
	MNW	EP	Z	11 48 29			
	MJZ	EP	Z	11 48 31			
DEC 23	01	11	15.1	17,8S 178.5W	560KM	5.1 FIJI	WEL 24
	GNZ	EP	Z	01 15 20			
	MNG	EP	Z	01 15 37			
		ES	Z	19 15			
	MJZ	EP	Z	01 16 15			
	MNW	EP	Z	01 16 40			
DEC 23	15	50	22.7	7,2S 148.3E	63KM	6.1 E NEW GUINEA	WEL 41
	TUA	EP	Z	15 58 00			
	WEL	EP	ZNE	15 58 03			
		EPCP	Z	16 00 10			











DEC 31 TUA EP Z 23 00 23  
 MSZ EP Z 23 01 04

DEC 31 MNG EP Z 23 37 53

DEC 31 MNG EP Z 23 44 06  
 MJZ EP Z 23 44 30  
 MSZ EP Z 23 44 33  
 ROX EP Z 23 44 41

## READINGS FROM PACIFIC AND ANTARCTIC STATIONS

This second section of the list collects the data from stations of the Network in the South Pacific and in Antarctica in a similar way to that in the list for stations within New Zealand. In addition, distances to the individual stations and values of  $\log_{10} A/T$  for short-period vertical instruments are tabulated.

JAN 01 SUV EP Z 09 36 30  
 E Z 52  
 E(S) Z 37 09

JAN 01 RAO IP Z 10 23 05,4U

JAN 01 H M S EPICENTRE DEPTH MAG  
 12 24 30.3 9.8S 154.7E 33KM 5.6 D ENTRECASTEAUX IS  
 H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG  
 AFI EP Z 12 31 04 33  
 SBA EP? Z 12 35 32 68  
 EL ZNE 56

JAN 01 SBA IP ZNE 13 14 03,0U

JAN 02 H M S EPICENTRE DEPTH MAG  
 03 33 54.7 16.0S 174.0W 113KM 4.9 TONGA  
 H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG  
 AFI IP ZNE 03 34 42,2U 3  
 ES ZNE 35 12  
 SUV EP Z 03 35 50 8  
 RAR P ZE 03 37 16 14 -0.87  
 ES ZNE 39 59  
 ET ZNE 51 14  
 SBA EP Z 03 44 11 63

JAN 02 H M S EPICENTRE DEPTH MAG  
 04 04 43.0 31.4N 138.2E 368KM 5.2 S OF HONSHU JAPAN  
 H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG  
 AFI EP Z 04 14 51 66 -0.60  
 SBA E(PP) Z 04 25 07 110 4 6  
 E(PS) N 29 34 6,7

JAN 02 H M S EPICENTRE DEPTH MAG  
 14 47 06.5 16.6S 172.3W 33KM 4.9 SAMOA  
 H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG  
 AFI EP Z 14 47 47 3  
 ES NE 48 18  
 ET ZNE 50 52  
 RAR EP ZNE 14 49 53 13  
 ES ZNE 52 10  
 EL ZNE 31  
 SBA EP Z 14 57 23 62 10 8 17 8 15 9

JAN 02 H M S EPICENTRE DEPTH MAG  
 18 41 56.1 23.4S 179.9W 523KM 5.1 S OF FIJI  
 H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG  
 RAO EP Z 18 43 33,5 6  
 AFI EP ZNE 18 44 34 12  
 ES ZNE 46 42  
 RAR EP? Z 18 45 39 19  
 SBA P ZNE 18 50 39,5 55

JAN 02 AFI EP Z 22 25 15  
 ES NE 35

JAN 03 H M S EPICENTRE DEPTH MAG  
 00 42 02 23:1S 179.1E 566KM 5.0 S OF FIJI  
 H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG  
 AFI EP Z 00 44 44 13  
 ES NE 46 55

JAN 03 AFI IP Z 08 47 47 U  
 ES NE 48 07



	H	M	S	EPICENTRE	DEPTH	MAG											
JAN 03	13	33	34.6	20:6S 178.4W	569KM	4.9	FIJI										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
SUV	EP	Z	13 34 56														
AFI	EP	ZNE	13 35 41														
	ES	ZNE	37 20														
	ET	ZNE	40 55														
RAR	EP	Z	13 37 06														5.7
	ET	ZNE	52 25														
SBA	P	Z	13 42 35.4														
	ES	E	49 50														
JAN 03	15	44	44.8	18:9S 169.4E	247KM	5.4	NEW HEBRIDES										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
SUV	EP	Z	15 46 46														
	E	Z	47 04														
AFI	EP	Z	15 48 49														
	E*PP	Z	49 27														
SBA	EP	Z	15 54 20														
	E*PP	Z	55 12														
JAN 03	23	48	53	11:3S 166.2E	172KM	4.3	SANTA CRUZ IS										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
SBA	EP	Z	23 59 27														
JAN 04	SUV	EP	Z	08 29 40													
	AFI	EP	Z	08 29 49													
	ES	NE	31 03														
JAN 04	12	48	13.4	15:3S 70.9W	184KM	5.4	SOUTHERN PERU										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
SBA	EP	Z	13 00 13														
JAN 05	07	48	29.6	20:1S 175.8W	233KM	4.7	TONGA										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
SUV	P	Z	07 49 54														
AFI	EP	Z	07 50 04														
	ES	ZNE	51 17														
RAR	P	ZE	07 51 51.5														
	ET	ZNE	08 06 01														
JAN 05	AFI	EP	ZNE	17 47 03													
	ES	ZNE	24														
	ET	ZNE	49 07														
JAN 06	RAO	IP	Z	05 34 53.0													
JAN 06	AFI	EP	Z	16 59 39													
	ES	ZNE	59														
JAN 06	AFI	EP	Z	17 19 22													
	ES	ZNE	52														
JAN 06	AFI	EP	ZNE	23 51 01													
	ES	ZNE	24														
JAN 07	AFI	EP	Z	01 08 34													
	ES	NE	09 02														

	H	M	S	EPICENTRE	DEPTH	MAG											
JAN 07	14	57	43.7	5:2S 152.6E	47KM	5.3	NEW BRITAIN										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
SBA	P	ZNE	15 09 10.5														
JAN 07	20	17	14	62:6S 155.6E	33KM	5.8	BALLENY IS										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
SBA	P	ZNE	20 20 52.2														
	E(PP)	Z	22 39														
	ES	ZNE	23 21														
	ELQ	NE	36														
	ELR	ZNE	24 34														
AFI	ES	ZNE	20 34 16														
	ESSS	E	39 36														
	EL	ZN	41 48														
	EL	Z	43 42														
JAN 08	04	07	41.3	25:4S 179.1W	387KM	4.7	S OF FIJI										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
RAO	IP	Z	04 08 53.2D														
	E	Z	09 46														
	ES	Z	54														
SUV	EP	Z	04 09 33														
AFI	EP	Z	04 10 30														
	ES	NE	12 47														
RAR	EP	Z	04 11 29														
	ET	ZNE	27 21														
JAN 08	09	21	20	20:3S 177.7W	469KM	4.0	FIJI										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
RAO	EP?	Z	09 23 17														
AFI	EP	Z	09 23 22														
	ES	NE	24 55														
RAR	ES	ZN	09 27 22														
JAN 08	RAO	EP	Z	09 29 36													
JAN 08	AFI	EP	Z	10 48 37													
	ES	NE	49 29														
JAN 08	AFI	EP	Z	13 08 56													
JAN 08	RAO	P	Z	14 34 22.5													
	E(S)	Z	41														
JAN 08	RAO	EP	Z	16 52 49													
	E(S)	Z	53 06														
JAN 09	12	08	24.7	56:9S 158.9E	33KM		MACQUARIE IS										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
SBA	EP	Z	12 13 14														
	ES	ZNE	17 29														
	ELQ	NE	19 19														
	ELR	Z	20 15														
JAN 09	23	23	09.8	32:2S 179.6W	179KM	3.9	S OF KERMADEC IS										
				H M S	DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
RAO	EP	Z	23 23 51														
	ES	Z	24 40														
JAN 09	AFI	EP	Z	23 23 21													



		ES	NE	37					
JAN 10	SBA	E(P) EL	ZN 07 57 09 ZNE 08 00 45						3 12 6 10
JAN 10		H M S 16 12 14.7	EPICENTRE 6.6S 154.6E	DEPTH 64KM	MAG 5.9	SOLOMON IS			
	AFI	ESSS EL	H M S ZNE 16 27 06 ZE 28 18	DIR DIS 34	LG=A/T	AZ TZ	AN TN	AE TE	MAG
JAN 10	AFI	I ES	ZNE 17 39 19.5U ZNE 36						
JAN 10	AFI	E	N 20 13 30						
JAN 11	RAO	EP	Z 03 21 34.5						
JAN 11		H M S 14 16 32.3	EPICENTRE 33.7N 137.1E	DEPTH 33KM	MAG 5.6	NEAR S HONSHU			
	AFI	ES EL	H M S ZNE 14 36 46 ZNE 47 24	DIR DIS 68	LG=A/T	AZ TZ	AN TN	AE TE	MAG
JAN 11	AFI	ES	ZNE 17 04 42						
JAN 11	AFI	EP ES	Z 23 52 34 NE 53 03						
JAN 12	AFI	EP ES	Z 09 34 28 NE 48						
JAN 12		H M S 11 49 23	EPICENTRE 20.7S 178.4W	DEPTH 548KM	MAG 4.4	FIJI			
	SUV	EP	H M S Z 11 50 48	DIR DIS 4	LG=A/T	AZ TZ	AN TN	AE TE	MAG
	AFI	EP ES	Z 11 51 34 ZNE 53 15	9					
JAN 12	SUV	EP	Z 17 33 10.5						
JAN 12	AFI	EP ES ET	Z 23 48 47 NE 49 35 ZNE 53 06						
	SUV	EP	Z 23 51 25						
JAN 13		H M S 05 53 49	EPICENTRE 18.0S 178.4W	DEPTH 621KM	MAG 4.4	FIJI			
	AFI	EP ES	H M S Z 05 55 44 ZNE 57 17	DIR DIS 8	LG=A/T	AZ TZ	AN TN	AE TE	MAG
JAN 13	AFI	EP ES	Z 08 14 53 NE 16 24						
JAN 13		H M S 10 41 11.7	EPICENTRE 52.9N 172.0E	DEPTH 17KM	MAG 5.6	ALEUTIAN IS			
	AFI	ES ESSS EL EL	H M S ZN 11 01 12 E 08 54 ZN 11 48 E 13 00	DIR DIS 68	LG=A/T	AZ TZ	AN TN	AE TE	MAG
JAN 13	AFI	EP ES	ZNE 14 27 15 ZNE 53						

		H M S	EPICENTRE	DEPTH	MAG					
JAN 13		23 42 47	15.3S 173.8W	89KM	4.6	TONGA				
	AFI	IP ES ET	H M S ZN 23 43 25.2U ZNE 50	DIR DIS 2	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	RAR	EP ES ET	ZNE 45 30 Z 23 46 08 ZNE 48 45 ZNE 24 00 05	15						
JAN 14	AFI	EP	Z 04 42 07							
JAN 14	AFI	EP ES	Z 17 51 31 ZNE 53 15		-0.51					
JAN 14		H M S 20 41 04.2	EPICENTRE 17.4S 166.6E	DEPTH 10KM	MAG 5.4	NEW HEBRIDES				
	SUV	EP	H M S Z 20 43 48	DIR DIS 11	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	RAO	EP E ES	Z 20 45 15 Z 28 Z 48 44	18						
	AFI	EP ES EL	Z 20 45 50 ZNE 50 00 ZE 51 10	21	-0.51				5.8	
	SBA	P EL	ZN 20 51 16.3 Z 21 11 26	60	-0.63				6.6	
JAN 15	RAO	IP ES	Z 03 43 27.4D Z 39		0.76					
JAN 15		H M S 03 57 40	EPICENTRE 19.1S 174.3W	DEPTH 33KM	MAG 4.7	TONGA				
	AFI	EP ES ET	H M S ZNE 03 59 03 ZNE 04 00 00 ZNE 03 34	DIR DIS 6	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	SUV	EP	Z 03 59 30	7						
	RAR	P ES ET	ZNE 04 00 53 ZNE 03 14 ZNE 14 51	14	-0.66					
JAN 15	AFI	EP ES	Z 05 41 26 ZNE 42 23							
JAN 15		H M S 10 56 35	EPICENTRE 20.3S 174.4W	DEPTH 33KM	MAG 4.7	TONGA				
	AFI	EP ES ET	H M S ZNE 10 58 14 ZNE 59 30 ZNE 11 05 05	DIR DIS 7	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	RAR	EP ES ET	ZNE 10 59 41 ZNE 11 02 03 ZNE 13 18	14						
JAN 15	AFI	IP ES	Z 12 29 07.5U ZNE 53							
JAN 15		H M S 11 59 58.9	EPICENTRE 59.5N 144.6W	DEPTH 33KM	MAG 5.3	GULF OF ALASKA				
	AFI	E(SS)	H M S ZN 12 35 06	DIR DIS 76	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	SBA	EPP EPPP	Z 12 22 03 Z 25 15	140						
		E(SS) E(L)	NE 39 19 ZNE 13 07							



H M S		EPICENTRE		DEPTH	MAG											
H M S		H M S		H M S		DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
JAN 15	19 29 36	33.5S	69.8W	50KM	5.5	CHILE-ARGENTINA BORDER										
	SBA EP	Z	19 40 07		64											
	ELQ	NE	54													
	ELR	ZNE	57													
JAN 15	20 41 56	18.9S	178.6W	600KM	3.9	FIJI										
	SUV EP	Z	20 43 23		3											
	AFI EP	Z	20 44 04		8											
	RAR E(P)	Z	20 46 48		18											
JAN 15	21 56 30	32.3S	178.2W	33KM	4.2	S OF KERMADEC IS										
	RAO EP	Z	21 57 11		3											
	ES	Z	45													
JAN 16	SBA EP	ZNE	00 14 23		-0.17											
	ES	ZNE	18 39			29 20	23 16	14 15								
	EL	ZNE	19			28 12	32 15									
	AFI EP	Z	00 18 03		-0.98											
	ES	ZNE	25 00													
	E	E	28 48													
	E	ZN	29 19													
	EL	ZNE	30 30													
JAN 16	21 45 48.7	17.4S	176.8W	359KM	4.3	FIJI										
	SUV EP	Z	21 47 05		5	-0.25										
	AFI EP	ZNE	21 47 19		6	-0.57										
	ES	ZNE	48 27													
JAN 17	RAO EP	Z	02 13 45													
	ES	Z	14 05													
	RAR EP	Z	02 16 29													
JAN 17	RAO EP	Z	03 27 23													
	ES	Z	36													
JAN 17	AFI IP	Z	03 42 54	U	-0.56											
	ES	ZNE	43 10													
JAN 17	AFI IP	Z	03 46 15.3U		-0.06											
	ES	ZNE	32													
JAN 17	17 50 00.8	20.9S	178.5W	561KM	5.6	FIJI										
	SUV EP	Z	17 51 25		4											
	E	Z	52 10													
	ES	Z	32													
	E	Z	39													
	RAO EP	Z	17 52 02		8											
	ES	Z	53 45													
	AFI IP	ZNE	17 52 11.3U		9	0.51										
	ES	ZNE	53 54													
	RAR EP	ZNE	17 53 34		17	-0.65										
	E(S)	ZNE	57 41													
	ET	ZNE	18 08 55													

H M S		EPICENTRE		DEPTH	MAG											
H M S		H M S		H M S		DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
JAN 17	23 57 59	19.0S	175.5W	196KM	3.8	TONGA										
	AFI EP	Z	23 59 59		6											
	ES	NE	24 00 30													
JAN 18	03 56 11	17.2S	178.7W	539KM	4.0	FIJI										
	AFI EP	ZNE	03 58 03		7											
JAN 18	AFI IP	ZNE	05 39 49	U												
	ES	ZNE	40 08													
JAN 18	06 27 15.0	18.8S	177.6W	389KM	5.3	FIJI										
	AFI IP	ZNE	06 29 01	U	7											
	IS	ZNE	30 22													
	RAO EP	Z	06 29 35		10											
	ES	Z	31 33													
	RAR IP	ZNE	06 30 51.0U		17											
	E(S)	ZNE	33 38													
	E	N	34 06													
	ET	ZNE	45 41													
	SBA EP	ZNE	06 36 43		60	-0.58										
JAN 18	20 19 24.7	2.6S	138.8E	47KM	5.4	WEST NEW GUINEA										
	SBA EP	ZN	20 31 14		77											
	ELQ	E	56 36													
	ELR	Z	21 00 29													
JAN 19	04 44 31.1	17.8S	17.4W	83KM	5.2	NEAR COAST OF PERU										
	SBA EP	Z	04 56 13		85											
JAN 19	AFI EP	Z	06 06 04													
	ES	NE	49													
JAN 19	13 46 01.6	20.8S	178.4W	582KM	5.1	FIJI										
	SUV EP	Z	13 47 28		4											
	RAO EP	Z	13 48 08		8											
	ES	Z	49 51													
	AFI EP	ZNE	13 48 13		9	-0.38										
	ES	ZNE	49 55													
JAN 19	AFI EP	Z	16 45 03													
	ES	NE	42													
	ET	ZNE	48 07													
JAN 20	04 27 44.4	15.2S	168.1E	23KM	5.5	NEW HEBRIDES										
	SUV EP	Z	04 30 15		10											
	RAO EP	Z	04 32 11		19											
	AFI EP	Z	04 32 16		20											
	ES	NE	36 07													
	EL	ZE	37 00													
	RAR ES	ZNE	04 39 17		31											
	ESS	E	41 18													
	EL	ZE	42 22													











	H	M	S	EPICENTRE	DEPTH	MAG									
				H M S	KM		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
JAN 30	09	16	55	33:7S 179.3W	49KM					S	OF	KERMADEC	IS		
	RAO	EP	S	Z 09 18 02	5										
				Z 09 18 02	5										
				Z 09 18 02	5										
JAN 31	14	01	24.3	24:9S 64.4W	35KM	5.7				ARGENTINA					
	SBA	EP		Z 14 12 52	73										
		ES		E 22 09											
		E(SS)		NE 27 34											
		E(LQ)		N 34 40											
		E(LR)		ZNE 38 31											
FEB 01	00	15	09	52:3S 5.0W	33KM					S	ATLANTIC	RIDGE			
	SBA	ES		N 00 31 26	50										
		ELQ		NE 35 17											
		ELR		ZNE 38 26											
FEB 01	17	56	24.6	23:3S 179.8E	545KM	4.7				S	OF	FIJI			
	AFI	EP		Z 17 58 31	12										
		ES		E 18 01 15											
FEB 02	05	34	05.2	17:9S 173.0W	59KM	5.2				TONGA					
	AFI	EP		Z 05 34 49	4										
		ES		ZNE 35 27											
		ET		ZNE 38 30											
	SUV	EP		Z 05 36 10	8										
	SBA	EP		Z 05 44 16	61										
		ES		E 52 45											
		ELQ		NE 58 15											
		ELR		ZNE 06 03 15											
FEB 02	17	10	33.9	21:6S 176.6W	226KM	4.2				FIJI					
	SUV	EP		Z 17 12 05	6										
	AFI	EP		Z 17 12 23	9										
		ES		NE 13 54											
	RAO	ES		Z 17 13 49	8										
FEB 03	02	11	57.5	20:9S 178.3W	489KM	4.6				FIJI					
	SUV	P		Z 02 13 17.5	4										
	AFI	EP		Z 02 13 53	9										
		ES		ZNE 15 32											
FEB 03	05	48	10.1	0:1N 123.5E	165KM	6.0				NORTHERN	CELEBES				
	AFI	EP		Z 05 58 29	66	-0.68									
	SBA	EP		Z 06 00 10	81										
		ES		ZNE 10 10											
		EPS		ZNE 11 22											
		ELQ		NE 21 29											
		ELR		ZNE 25 25											
FEB 03	AFI	IP		Z 11 28 54	U										

	ES	ZNE	29	10											
FEB 03	AFI	IP	Z	22 27 35.5D	-0.05										
		ES		ZNE 54											
FEB 03	AFI	EP	Z	22 55 04											
		ES		NE 23											
		ET		ZNE 57 05											
FEB 04	AFI	EP	Z	00 50 50											
		ES		NE 51 10											
		ET		ZNE 52 40											
FEB 04	AFI	EP	ZNE	03 41 58	0.36										
		ES		ZNE 42 50											
	RAR	E(P)	Z	03 44 44											
		ET		ZNE 58 41											
FEB 04	04	02	58.1	15:4S 173.5W	143KM	4.7				TONGA					
	AFI	IP	ZNE	04 03 13.5D	2	0.58									
		ES		ZNE 24											
	RAR	EP	ZNE	04 06 05	14										
		ES		ZNE 08 33											
		EL		E 09 22											
		EL		Z 09 22											
		ET		ZNE 19 52											
	SBA	EP?	Z	04 13 16	63										
		EL		ZNE 33 31											
FEB 04	AFI	EP	Z	04 12 42											
		ES		NE 13 02											
		ET		ZNE 14 42											
FEB 04	AFI	EP	Z	04 27 43											
		ES		NE 28 03											
		ET		ZNE 29 41											
FEB 04	05	04	21.7	21:5S 174.1W	7KM	4.5				TONGA					
	AFI	EP	Z	05 06 13	8										
		ES		NE 07 31											
		EL		ZNE 08 12											
		ET		ZNE 13 57											
	RAO	P	Z	05 06 27	8										
		ES		Z 07 59											
	RAR	P	ZNE	05 07 25	13										
		ES		ZNE 09 38											
		ELQ		N 47											
		ELR		ZE 10 19											
		ET		ZNE 22 09											
	SBA	EP	ZN	05 14 44	57										
		ES		NE 22 17											
		E(SKS)		E 24 12											
		ELQ		NE 29 40											
		ELR		ZNE 32 15											
FEB 04	AFI	EP	Z	05 30 46											
		ES		NE 31 06											
		ET		ZNE 32 37											
FEB 04	09	51	08.7	21:3S 174.5W	115KM	4.0				TONGA					
	SUV	EP	Z	09 52 54	7										



		Z	H M S	EPICENTRE	DEPTH	MAG							
AFI	EP	Z	09 52 46			8							
	ES	NE	54 05										
	ET	ZNE	10 00 20										
RAR	EP	ZNE	09 53 59			14							
	ES	ZNE	56 15										
	ET	ZNE	10 08 35										
FEB 04		H M S	EPICENTRE	DEPTH	MAG								
		10 39 11.1	15.9S 167.9W	179KM	5.9	NEW HEBRIDES							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
AFI	EP	Z	10 43 28			4							
	ES	ZNE	47 00										
RAR	EP	ZNE	10 45 13			9							
	EPP	ZE	46 16										
	ES	ZNE	50 08										
	ELQ	N	51 53										
	ELR	ZE	52 27										
SUV	EP	Z	10 41 37			13							
RAO	EP	Z	10 43 17			16							
SBA	IP	ZNE	10 49 15.0US	63	-0.07	9 7 5 7				6.7			
	EPP	Z	51 24										
	EPPP	Z	53 21										
	ES	ZNE	57 29				10 10	24 12		6.6			
	EL	ZNE	11 04 39										
FEB 04		H M S	EPICENTRE	DEPTH	MAG								
		15 36 34.0	21.3S 174.3W	55KM	4.9	TONGA							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
AFI	EP	Z	15 38 18			8							
	ES	NE	39 30										
	EL	ZNE	40 14										
	ET	ZNE	45 17										
SUV	EP	Z	15 38 26			8							
RAO	EP	Z	15 38 35			9							
	ES	Z	40 07										
RAR	P	ZNE	15 39 31			14							
	ES	ZNE	41 43										
	ELQ	N	42 00				50 10			31 9			
	ELR	ZE	32										
	ET	ZNE	53 47										
SBA	EP	Z	15 46 16			57							
	ES	NE	54 25										
	ELQ	NE	16 01 49										
	ELR	ZNE	05 34										
FEB 04		H M S	EPICENTRE	DEPTH	MAG								
		20 44 55.8	45.9S 123.0E	33KM	5.2	S OF AUSTRALIA							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
SBA	ES	NE	20 57 38			36							
	EL	ZNE	21 02 04										
FEB 04		AFI	EP	ZNE	23 02 51								
	ES	ZNE	03 11										
FEB 05		H M S	EPICENTRE	DEPTH	MAG								
		02 01 45.5	39.1N 21.7E	22KM	5.6	GREECE							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
SBA	EP?	Z	02 21 12			139							
	ELQ	NE	03 03 13										
	ELR	ZNE	10 15										
AFI	IPKP	Z	02 21 43.1U			152							
	EL	ZN	03 14 05										
FEB 05		AFI	EP	Z	02 04 29								
	ES	NE	47										

		Z	H M S	EPICENTRE	DEPTH	MAG							
FEB 05			16 16 01.9	50.0N 155.4E	104KM	5.9	KURILE IS						
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
AFI	EP	Z	16 27 02			70							
	EL	ZNE	47 12										
RAR	EP?	Z	16 28 09			81							
FEB 05		H M S	EPICENTRE	DEPTH	MAG								
		17 10 26.3	15.0S 172.8W	50KM	4.6	SAMOA IS							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
AFI	IP	Z	17 10 52			U	1	-0.17					
	ES	ZNE	11 12										
FEB 05		AFI	EP	Z	19 30 50								
	ES	ZNE	32 25										
FEB 05		AFI	EP	Z	21 07 39								
	ES	NE	43										
FEB 05		H M S	EPICENTRE	DEPTH	MAG								
		23 14 25.7	7.1S 155.3E	72KM	4.9	SOLOMON IS							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
AFI	EP	ZNE	23 20 54			33							
FEB 06		RAR	EP	ZNE	09 26 49								
	ES	ZNE	29 10										
	ET	ZNE	41 04										
FEB 06		H M S	EPICENTRE	DEPTH	MAG								
		09 52 33.4	56.8S 25.5W	33KM	5.5	SOUTH SANDWICH IS							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
SBA	EP	Z	10 00 49			45							
	E(PS)	N	06 25										
	ELQ	E	11 36										
	ELR	ZNE	18 30										
FEB 06		AFI	IP	Z	13 12 42								
	ES	NE	59										
FEB 06		H M S	EPICENTRE	DEPTH	MAG								
		14 24 59.8	22.2S 179.4W	562KM	3.8	S OF FIJI IS							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
SUV	P	Z	14 26 30.5			5							
AFI	IP	ZNE	14 27 29.1D			11	-0.55						
	ES	ZNE	44 44										
FEB 06		AFI	EP	ZNE	18 30 14								
	ES	NE	42										
	ET	ZNE	32 44										
FEB 07		AFI	EP	Z	01 38 00								
	ES	NE	23										
FEB 07		H M S	EPICENTRE	DEPTH	MAG								
		04 26 10.6	29.9N 67.7E	10KM	6.0	WEST PAKISTAN							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE						
SBA	ESP	Z	04 56 29			121							
	ESS	E	05 03 32										
	ESSS	E	07 54										
	ELQ	NE	17 32										
	ELR	ZNE	23 14										
AFI	ESS	NE	05 03 12			123							
	ESSS	NE	06 30										
	EL	ZNE	16 12										
RAR	ESS	NE	05 05 29			137							
	EL	ZE	39 04										



H M S	EPICENTRE	DEPTH	MAG	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG
FEB 07 17 00 18.5	13.4S 172.8E	619KM	4.2	NEW	HEBRIDES			
AFI EP	ZNE 17 03 27		15	-0.57				
FEB 07 AFI EP	Z 20 49 21							
IS	NE 53							
FEB 07 AFI EP	Z 21 16 54		-0.73					
ES	NE 19 07							
FEB 08 10 02 10.6	21.2S 178.6W	544KM	5.3	FIJI IS				
RAO P	Z 10 04 06		8					
ES	Z 05 38							
AFI IP	Z 10 04 21.8U		10					
ES	ZNE 06 05							
RAR IP	ZE 10 05 44.4U		18					
FEB 08 AFI IP	Z 17 34 00.2U							
ES	ZNE 25							
FEB 08 AFI IP	Z 18 50 37 D		-0.90					
IS	NE 51 10							
FEB 09 AFI IP	Z 02 14 24.2							
IS	ZNE 30.4							
FEB 09 04 40 27.1	56.6S 25.5W	21KM	5.9	S SANDWICH IS				
SBA IP	ZNE 04 48 47.9U		46	-0.55	7 10	6 9	14 12	6.5
ES	ZNE 55 22							6.5
ESS	N 58 34							
ESS	ZE 48				8 9		21 20	
ELR	ZNE 05 01 55				34 19	37 19	23 16	
RAR ESKS	NE 05 04 29		93					
EPS	N 06 15							
E	Z 08 47							
E(SS)	ZE 11 20							
ELQ	E 17 43							
ELR	ZNE 23							
AFI ESKS	ZN 05 05 05		104					
ES	ZN 08 05							
ESS	NE 13 24							
ESSS	ZE 17 30							
E	ZN 21 24							
EL	Z 26 30							
EL	ZN 28 19							
FEB 09 07 18 47.8	9.8S 116.4E	35KM	5.8	SUMBAWA IS				
AFI EP	ZNE 07 30 03		70					
SBA EP	ZNE 07 30 14		73					
FEB 09 09 53 30.8	26.0S 177.7W	170KM	4.7	S OF FIJI IS				
RAO EP	Z 09 54 22		3					
ES	Z 55 05							
SUV EP	Z 09 55 33		9					
AFI EP	Z 09 56 24		13					
ES	NE 58 36							
ET	ZNE 10 09 53							

RAR E(P)	ZE	09 58 19	17
ES	NE	10 00 25	
ET	ZNE	12 39	
FEB 09 AFI EP	Z	19 24 52	
ES	NE	25 44	
FEB 09 19 56 51.9	56.6S 25.5W	33KM	
S SANDWICH IS			
SBA EP	Z	20 05 09	46
ELQ	E	15 52	
ELR	ZNE	19 40	
FEB 09 AFI EP	Z	22 01 39	
ES	ZNE	02 25	
FEB 10 01 24 11.8	29.8S 178.6W	9KM	4.6
KERMADEC IS			
RAO IP	Z	01 24 27.6D	1
SUV EP	Z	01 27 13	12
AFI ES	E	01 31 19	17
EL	ZNE	32 18	
RAR EP	ZNE	01 28 44	19
EL	ZNE	32 25	
ET	ZNE	47 08	
FEB 10 01 59 26.4	30.0S 178.3W	24KM	4.5
KERMADEC IS			
RAO IP	Z	01 59 40.6U	1
ES	Z	45	
FEB 10 05 29 13.6	31.1N 141.6E	33KM	5.3
S OF HONSHU JAPAN			
AFI ES	NE	05 48 18	63
ESSS	NE	55 30	
EL	Z	59 18	
FEB 10 14 21 11.2	20.8N 146.3E	46KM	6.2
MARIANA IS			
SUV EP	Z	14 30 04	50
AFI EP	Z	14 30 31	54
ES	ZNE	38 06	-0.30
E	ZNE	40 24	
ESSS	ZNE	43 19	
EL	ZNE	46 06	
RAR IP	ZNE	14 32 03.8U	67
ES	ZNE	41 02	-0.73
E	N	42 37	
ELQ	NE	48 42	
ELR	ZNE	51 19	
SBA EPP	Z	14 38 39	99
ESKS	ZNE	45 23	
ES	E	46 40	
EPS	ZN	47 42	
ESS	ZNE	52 05	
ESSS	ZNE	58 38	
ELQ	NE	15 00 56	4 13
ELR	ZNE	05 19	







H	M	S	EPICENTRE	DEPTH	MAG							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG				
FEB 15	22	14	45.1	26.5S 178.2E	617KM	4.9	S OF FIJI IS					
RAO	IP	Z	22 16 04.3U		4							
SUV	EP	Z	22 16 47		8							
AFI	EP	Z	22 17 56		16	-0.21				6.0		
	ES	ZNE	20 33									
SBA	EP	Z	22 22 59		52	-0.42				6.1		
FEB 15	22	34	07.2	26.4S 178.3E	617KM	5.9	S OF FIJI IS					
RAO	IP	Z	22 35 36.0D		4							
SUV	IP	Z	22 36 09 U		8							
AFI	EP	Z	22 37 18		16	0.48				6.6		
	ES	ZNE	39 52									
RAR	IP	ZNE	22 38 08.1D		21	-0.43				6.0		
SBA	IP	ZNE	22 42 21.1U		52	0.31				6.8		
	ES	ZNE	46 54									
FEB 16	03	18	27.7	17.7S 168.0E	34KM	6.5	NEW HEBRIDES					
SUV	EP	Z	03 20 56		10							
	I(*PP)	Z	21 05 U									
RAO	EP	Z	03 22 28		17	0.86				7.0		
AFI	EP	ZNE	03 22 56		20	1.36				7.6		
	ES	ZNE	26 46									
	EL	ZE	28 00									
RAR	IP	ZNE	03 24 40.0U		31	-0.40	12	9		6.5		
	PP	ZE	25 40				13	8		6.8		
	EPCP	Z	27 35									
	E	E	40						10	8		
	ES	ZNE	29 15				10	8		6.7		
	E(SS)	E	31 25						14	12		
	ELR	ZE	32 44						142	25		
SBA	IP	ZNE	03 28 35.0UW		60	0.79	100	24		7.5		
	EPP	Z	30 46									
	ES	ZNE	36 46				11	7	25	8		
	ESS	ZNE	40 29							7.0		
	ESSS	ZNE	43 45									
	ELR	ZNE	46 32				31	24	28	24		
									28	18		
FEB 16	23	37	13.2	18.2S 173.7W	103KM	5.0	TONGA IS					
AFI	EP	ZNE	23 38 11		5							
	ES	ZNE	44									
RAR	P	ZNE	23 40 13.4		13	-0.49						
	E	E	42 08									
	ES	ZNE	31									
	ET	ZNE	53 41									
RAO	ES	Z	23 41 52		12							
SBA	P	Z	23 47 15.3		60							
FEB 17	01	12	47	17.5S 177.5W	434KM	4.0	FIJI IS					
AFI	EP	Z	01 14 17		7							
	ES	ZNE	15 33									
FEB 17	02	09	40.7	19.2S 177.2W	349KM	4.9	FIJI IS					
AFI	EP	Z	02 11 26		7							
	ES	NE	12 50									

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

H	M	S	EPICENTRE	DEPTH	MAG							
			H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG				
FEB 17	11	22	24	32.2S 78.9E	7KM	6.4	MID-INDIAN RISE					
SBA	P	ZNE	11 57 55.1		58	-0.55	12	6				
	EPP	Z	59 54									
	ES	ZNE	12 06 04									
	ESS	ZNE	09 50						7	10		
	ELQ	NE	12 13						30	8		
	ELR	ZNE	15 54									
RAR	E(PS)	ZE	12 15 10		103				25	24		
	E(SS)	ZE	20 59						21	20		
	ELQ	E	31 13						34	22		
	ELR	ZE	35 40									
FEB 17	12	43	01.1	32.1S 79.0E	33KM	5.6	AMSTERDAM-NATURALISTE RIDGE					
SBA	EP	ZNE	12 52 54		58							
FEB 17	18	20	32.4	23.5S 179.9W	544KM	5.5	S OF FIJI IS					
RAO	IP	Z	18 22 12.0D		6							
	ES	Z	23 24									
AFI	IP	Z	18 23 11.3D		12	-0.38						
	ES	ZNE	25 20									
SBA	P	Z	18 29 14		55	-0.98				5.4		
FEB 18	01	31	16	21.3S 178.3W	476KM	4.3	FIJI					
AFI	EP	Z	01 31 16									
	ES	ZNE	52									
FEB 18	04	58	46.6	6.7N 123.9E	50KM	5.4	PHILIPPINE IS					
SUV	EP	Z	05 00 09		4							
FEB 18	06	59	03.9	6.7N 123.9E	50KM	5.4	PHILIPPINE IS					
AFI	ES	ZNE	07 19 04		67							
	ESSS	ZNE	26 36									
	EL	ZE	30 30									
FEB 18	09	42	05.3U	17.9S 178.5W	583KM	4.5	FIJI IS					
AFI	IP	Z	09 42 05.3U									
	ES	ZNE	25									
FEB 19	04	39	49	17.9S 178.5W	583KM	4.5	FIJI IS					
AFI	EP	Z	04 39 49									
	ES	NE	40 05									
FEB 19	21	48	23	17.9S 178.5W	583KM	4.5	FIJI IS					
AFI	EP	Z	21 48 23									
	ES	NE	49 06									
FEB 20	06	11	54.5	17.9S 178.5W	583KM	4.5	FIJI IS					
SUV	EP	Z	06 13 11		3							
AFI	EP	Z	06 13 47		8							
	ES	ZNE	15 18									
FEB 20	20	04	02.9	25.9S 178.7W	294KM	4.7	S OF FIJI IS					
RAO	EP?	Z	20 05 12		3							



		I(P)		Z	17.6						
	AFI	EP	Z	20 07 07	14	-0.90					
		ES	NE	09 24							
FEB 20	AFI	IP	Z	21 59 47	U						
		ES	NE	22 00 11							
		H M S		EPICENTRE		DEPTH	MAG				
FEB 21				55.7S	26.9W	33KM	6.1	SOUTH SANDWICH IS			
	SBA	EP	Z	00 30 57	46	-0.34					
		ELR	ZNE	45 20							
		H M S		EPICENTRE		DEPTH	MAG				
FEB 21				55.7S	26.7W	6KM	5.9	SOUTH SANDWICH IS			
	SBA	EP	ZN	00 36 57	46						
		H M S		EPICENTRE		DEPTH	MAG				
FEB 21	AFI	E	NE	01 06 18	88						
		EL	ZNE	10 30							
		H M S		EPICENTRE		DEPTH	MAG				
FEB 21				7.0N	124.2E	82KM	5.2	PHILIPPINE IS			
	SBA	EP	Z	09 43 05	88						
		H M S		EPICENTRE		DEPTH	MAG				
FEB 21	AFI	EP	Z	13 18 35	81						
		ES	NE	19 05							
		H M S		EPICENTRE		DEPTH	MAG				
FEB 21				0.1N	123.6E	191KM	5.2	NORTHERN CELEBES			
	SBA	EP	Z	16 57 14	81						
		H M S		EPICENTRE		DEPTH	MAG				
FEB 22				60.5S	26.8W	33KM	5.4	SOUTH SANDWICH IS			
	SBA	EP	Z	00 25 19	42						
		H M S		EPICENTRE		DEPTH	MAG				
FEB 22				5.4S	151.5E	44KM	6.1	NEW BRITAIN			
	SUV	EP	Z	05 08 41	29						
	AFI	EP	Z	05 09 47	37	-0.54					
		E	E	10 46							
		ES	ZNE	15 32							
		EL	ZN	18 13							
		EL	ZE	20 36							
	RAO	EP	Z	05 09 50	37						
	RAR	IP	ZNE	05 11 27.6U	50	-0.44					
		EPPP	ZE	13 29							
		ES	ZNE	18 40	25	12	20	11	34	9	7.1
		E(PS)	NE	20 12							
		E(SS)	ZNE	21 16							
		EL	ZNE	22 23							
	SBA	IP	ZNE	05 14 06.0U	73	0.25					
		EPP	ZN	17 00							
		EPPP	ZN	18 30							
		ES	ZNE	23 27							
		E	Z	27 39							
		ESS	NE	28 04							
		EL	ZNE	31 50							
		ELR	ZNE	37							

		H M S		EPICENTRE		DEPTH	MAG					
FEB 22				13 07 18.9	24.2S	68.3W	33KM	5.0	CHILE-ARGENTINA BORDER			
	SBA	EP	Z	13 18 40								
		H M S		EPICENTRE		DEPTH	MAG					
FEB 22				18 18 36.3	5.6S	151.4E	55KM	5.5	NEW BRITAIN			
	AFI	EP	ZNE	18 31 36								
		ESS	NE	34 19								
		EL	ZE	36 06								
FEB 23	AFI	EP	Z	07 53 20								
		ES	NE	37								
		ET	ZNE	55 14								
FEB 23	AFI	EP	Z	08 54 04								
		ES	NE	55 01								
		H M S		EPICENTRE		DEPTH	MAG					
FEB 23				11 06 16.9	18.5S	177.7W	605KM	3.3	FIJI IS			
	AFI	EP	Z	11 08 09								
		ES	NE	09 40								
FEB 23	AFI	EP	Z	11 59 26								
		ES	NE	12 00 05								
		H M S		EPICENTRE		DEPTH	MAG					
FEB 23				16 31 58.1	16.8S	172.5W	33KM	4.4	SAMOA IS			
	AFI	EP	Z	16 32 43								
		ES	NE	33 14								
		ET	ZNE	35 45								
	RAR	EP	Z	16 34 51	13							
FEB 24	AFI	EP	Z	08 31 14								
		ES	NE	40								
		ET	ZNE	33 47								
FEB 24	AFI	EP	Z	17 57 22								
		ES	NE	58 03								
		H M S		EPICENTRE		DEPTH	MAG					
FEB 24				20 08 56.8	6.1S	147.5E	57KM	5.8	E NEW GUINEA			
	AFI	EP	ZNE	20 16 35								
	RAR	EP	ZE	20 18 12	41	-0.51						
	SBA	EP	Z	20 20 33	53							
		ES	E	29 49	72							
		EL	ZNE	44 30								
FEB 24	AFI	IP	Z	20 25 42	U	-0.83						
		ES	NE	26 08								
		H M S		EPICENTRE		DEPTH	MAG					
FEB 25				02 45 11	37.2S	95.3W	33KM	5.3	S PACIFIC OCEAN			
	SBA	EP	ZNE	02 54 46	56							
		H M S		EPICENTRE		DEPTH	MAG					
FEB 25				04 50 48	16.5S	174.0W	187KM	3.6	TONGA IS			
	AFI	IP	Z	04 51 25	U	3						
		ES	NE	52 00								
	RAR	EP	ZE	04 53 53	14							



ES	ZNE	56 24							
ET	ZNE	05 07 17							
H M S	EPICENTRE	DEPTH	MAG						
FEB 25 13 06 06.1	24.9S 179.7E	495KM	4.4	S OF FIJI IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
RAO EP	Z	13 07 33	5						
FEB 25 AFI EP	Z	16 11 57							
ES	NE	12 58							
ET	ZNE	18 22							
RAR EP	ZNE	16 13 19							
ES?	NE	15 34							
H M S	EPICENTRE	DEPTH	MAG						
FEB 25 22 50 54.0	15.3S 173.2W	93KM	5.1	TONGA IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
AFI IP	Z	22 51 10	D	2	0.27				
SUV EP	Z	22 52 59	8						
RAR P	ZNE	22 53 55.0	14						
ES	ZNE	56 26							
EL	ZE	42							
ET	ZNE	23 06							
RAO EP	Z	22 54 19	15						
ES	Z	56 57							
SBA EP	ZN	23 01 18	63						
ES	ZNE	09 57							
EL	ZNE	18 42							
H M S	EPICENTRE	DEPTH	MAG						
FEB 25 23 22 11	15.1S 172.9W	33KM	4.2	SAMOA IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
AFI EP	ZNE	23 22 35	2	-0.30					
ES	NE	23 00							
RAR P	ZNE	23 25 20	14						
ET	ZNE	39							
H M S	EPICENTRE	DEPTH	MAG						
FEB 25 23 46 10	14.0S 173.5W	33KM	3.9	SAMOA IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
AFI EP	Z	23 46 30	2	0.14					
ES	NE	54							
RAR EP	Z	23 49 15	15						
ET	ZNE	24 03 25							
FEB 26 RAO IP	Z	00 13 38.2							
ES	Z	47							
AFI EP	Z	00 17 04	-0.85						
ES	NE	22							
H M S	EPICENTRE	DEPTH	MAG						
FEB 26 02 49 10.5	21.4S 174.8W	134KM	4.2	TONGA IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
SUV EP	Z	02 50 54	7						
AFI EP	Z	02 50 54	8						
ES	NE	52 11							
ET	ZNE	58 42							
RAO EP	Z	02 50 55	8						
ES	Z	52 24							
RAR EP	Z	02 52 01	14						
ES	ZNE	54 26							
FEB 26 AFI EP	Z	04 03 01							
ES	NE	21							
FEB 26 AFI EP	Z	05 43 39							
ES	NE	57							

ET	ZNE	45 20							
H M S	EPICENTRE	DEPTH	MAG						
FEB 26 08 23 04.6	23.3S 179.4E	577KM	4.1	S OF FIJI IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
RAO EP	Z	08 24 26	6						
H M S	EPICENTRE	DEPTH	MAG						
FEB 26 08 27 29	14.7S 173.0W	33KM	4.3	SAMOA IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
AFI EP	Z	08 27 51	1						
ES	NE	28 10							
FEB 26 AFI EP	Z	09 39 59							
ES	NE	40 17							
FEB 26 AFI EP	ZNE	10 00 35							
ES	ZNE	43							
ET	ZNE	01 52							
FEB 26 AFI EP	ZNE	10 48 16							
ES	ZNE	35							
FEB 26 AFI EP	ZNE	10 50 07							
ES	ZNE	25							
H M S	EPICENTRE	DEPTH	MAG						
FEB 26 11 21 56.9	15.4S 173.4W	129KM	5.1	TONGA IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
AFI IP	Z	11 22 10.3D	2						
ES	ZE	28							
SUV EP	Z	11 23 56	8						
RAR EP	ZNE	11 25 01	14						
ES	NE	27 34							
EL	Z	28 04							
ET	ZNE	38 55							
FEB 26 AFI IP	Z	12 21 03 D	-0.93						
ES	NE	19							
FEB 26 AFI IP	Z	13 02 18 D	-0.13						
ES	NE	36							
H M S	EPICENTRE	DEPTH	MAG						
FEB 26 13 34 43	15.7S 173.0W	27KM	4.4	SAMOA IS					
	H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE TE MAG	
AFI EP	Z	13 35 18	2						
ES	NE	45							
ET	ZNE	37 34							
FEB 26 AFI IP	Z	14 27 59							
ES	NE	28 35							
FEB 26 AFI EP	Z	19 39 33							
ES	NE	40 21							
FEB 26 AFI EP	Z	21 55 04	-0.81						
ES	NE	56 16							
FEB 27 AFI EP	Z	08 56 51							
FEB 27 AFI EP	Z	11 18 23							
ES	NE	40							
ET	ZNE	20 05							
FEB 27 AFI EP	Z	13 54 13							
ES	NE	32							



DATE	STATION	EP	Z	H	M	S	EPICENTRE	DEPTH	MAG	LOCATION
FEB 27	AFI	EP	Z 14 29 22							
		ES	NE 30 25							
FEB 27				16	26	36.9	30.7S 179.5E	497KM	4.9	KERMADEC IS
	RAO	I(P)	Z 16 27 47.0							
		EP?	Z 44							
		ES	Z 28 43							
	AFI	EP	Z 16 30 23					19		
		ES	NE 33 31							
	RAR	EP	ZNE 16 30 43					21		
FEB 27	AFI	EP	Z 16 59 09							
		ES	NE 29							
		ET	ZNE 17 00 40							
FEB 27				20	44	59.2	18.9N 102.6W	93KM	5.8	MICHOACAN, MEXICO
	AFI	EP	Z 20 56 47					76		
FEB 28				01	57	33.2	21.9S 176.4W	171KM	4.0	FIJI IS
	AFI	EP	Z 01 59 37					9		
		ES	NE 02 01 00							
		ET	ZNE 08 44							
	RAR	EP	ZNE 02 00 57					15		
		ES	ZNE 03 35							
		ET	ZNE 15 24							
FEB 28				02	02	13.5	43.8N 139.6E	224KM	5.7	E SEA OF JAPAN
	SBA	EPKP	Z 02 21 09					123		
FEB 28	AFI	EP	Z 02 13 17							
		E(S)	NE 15 00							
FEB 28	AFI	EP	Z 10 04 40							
		ES	NE 05 00							
		ET	ZNE 07 26							
FEB 28	AFI	IP	Z 17 06 34.9D							
		ES	NE 45							
FEB 28				17	53	20.2	21.7S 170.5E	109KM	5.3	LOYALTY IS
	AFI	EP	Z 17 57 30					19 -0.38		
FEB 28	AFI	EP	Z 17 53 38							
		ES	NE 57							
FEB 28	AFI	EP	Z 20 24 45							
		ES	NE 25 03							
FEB 28				21	38	52.8	26.0S 70.4W	68KM	5.7	NEAR NORTH CHILE
	SBA	IP	ZNE 21 50 07.6D					71 -0.49		
		ES	NE 59 22							
FEB 28	AFI	EP	Z 22 41 24							
		ES	NE 43 20							

DATE	STATION	EP	Z	H	M	S	EPICENTRE	DEPTH	MAG	LOCATION
	RAR	EP	Z 22 42 14							
		ES	ZNE 44 49							
		ET	ZNE 56 41							
MAR 01				12	47	28.2	33.6S 179.3W	38KM	4.2	S OF KERMADEC IS
	RAO	EP	Z 12 48 32					4		
		ES	Z 49 23							
	RAR	EP	Z 12 52 09					21		
		ES	ZE 55 51							
		ET	ZNE 13 13 23							
	AFI	EP	Z 12 52 10					21		
MAR 01				15	45	23.5	25.3S 178.5E	547KM	4.3	SOUTH OF FIJI
	AFI	EP	Z 15 48 26					15		
MAR 01	AFI	EP	Z 21 34 25							
		ES	NE 35 56							
MAR 02	AFI	EP	Z 00 31 33					56		
		ES	NE 56							
MAR 02	AFI	EP	Z 21 26 09							
		ES	NE 27 45							
MAR 03	RAO	P	Z 11 54 29.5							
		ES	Z 52							
MAR 03				21	29	35.9	20.5S 178.7W	608KM	4.7	FIJI
	SUV	EP	Z 21 31 00					4		
	AFI	EP	Z 21 31 34					9		
		ES	NE 33 23							
MAR 03	SUV	EP	Z 22 29 45							
	AFI	EP	ZNE 22 30 25					-0.43		
		ES	NE 32 06							
MAR 04				01	41	46.3	18.0S 178.3W	534KM	3.7	FIJI
	AFI	EP	Z 01 43 05					7		
		ES	NE 44 53							
	RAR	EP	Z 01 45 24					18		
MAR 04				03	47	44.4	25.3S 178.9W	370KM	4.5	SOUTH OF FIJI
	RAO	IP	Z 03 48 55.3					4		
		ES	Z 49 50							
	RAR	EP	Z 03 51 31					18		
MAR 04				08	04	59	28.3S 178.0W	121KM	4.1	KERMADEC IS
	RAO	P	Z 08 05 21.4					1		
		ES	Z 43							
MAR 04	SUV	EP	Z 10 26 05							
MAR 04	AFI	EP	Z 11 24 28							
		ES	NE 25 58							







		ES	ZNE	22 19				
RAO	EP	Z	01 18 32	21				
RAR	EP	Z	01 20 17	33	-0.62			6.2
	ES	ZNE	25 21					11 13 6.3
	ESS	ZNE	27 25					11 12
	EL	ZNE	28	45 22 19 24	64 21			
H M S		EPICENTRE		DEPTH	MAG			
MAR 08	05 41 03.5	1.8N	126.3E	27KM	5.9	MOLUCCA PASSAGE		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
AFI	EP	Z	05 51 32	63	-0.51			6.7
	ES	ZNE	59 59					
	ESS	N	06 04 22					
	EL	N	07 36					
	EL	E	08 43					
	EL	Z	10 00					
RAR	EP	ZE	05 52 43	76				
	ES	ZE	06 02 35					
	ESS	Z	07 20					
	ELQ	N	13 05					
	ELR	ZE	16 40					
MAR 08	AFI	EP	Z	18 51 03				
	ES	ZNE	39					
H M S		EPICENTRE		DEPTH	MAG			
MAR 08	20 46 11.4	20.0S	68.9W	112KM	5.7	CHILE-BOLIVIA BORDER		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
RAR	IP	ZE	20 58 30.8U	84	-1.33			5.6
MAR 08	AFI	EP	Z	21 19 13				
	ES	ZNE	20 02					
H M S		EPICENTRE		DEPTH	MAG			
MAR 08	23 15 47	22.0S	175.0W	50KM	4.6	TONGA IS.		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
SUV	EP	Z	23 17 37	7				
RAO	EP	Z	23 17 39	8				
	ES	Z	19 01					
AFI	EP	Z	23 17 42	9				
	ES	ZNE	19 35					
	ET	ZNE	25 04					
RAR	EP	ZNE	23 18 55	14	-0.82			
	ES	ZNE	21 11					
	ET	ZNE	32 57					
MAR 09	AFI	EP	Z	01 32 41				
	ES	NE	33 34					
MAR 09	AFI	EP	Z	03 28 27				
	ES	NE	29 05					
	ET	ZNE	31 43					
MAR 09	RAO	E(P)	Z	05 55 09				
MAR 09	RAO	E(P)	Z	05 58 23				
MAR 09	AFI	EP	Z	09 32 03				
	ES	NE	35					
MAR 09	AFI	EP	Z	09 43 03				
				-0.73				
H M S		EPICENTRE		DEPTH	MAG			
MAR 09	15 43 11.3	55.2S	126.8W	33KM	4.8	EASTER IS CORD.		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
RAR	ES	E	15 57 21	42				
	ESS	E	59 39					

		ELQ	NE	16 01 16				
	ELR	ZNE	03 00	26 8	6 10			26 8
H M S		EPICENTRE		DEPTH	MAG			
MAR 09	16 54 31	18.6S	177.7W	561KM		FIJI IS		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
AFI	EP	Z	16 56 23	7				
	ES	NE	57 49					
MAR 09	AFI	IP	Z	18 42 37.5U				
	ES	NE	57					
MAR 09	AFI	IP	Z	18 47 21 U				
	ES	NE	41					
H M S		EPICENTRE		DEPTH	MAG			
MAR 10	04 26 19.7	32.2N	137.6E	382KM	5.6	S OF HONSHU, JAPAN		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
AFI	EP	ZNE	04 36 33	67	-0.45			6.3
RAR	P	ZE	04 37 51.0	80				
MAR 10	AFI	IP	Z	05 31 51.3D				
	ES	ZNE	32 09					
H M S		EPICENTRE		DEPTH	MAG			
MAR 10	07 01 20.3	38.5S	175.8E	161KM	4.8	NORTH IS. N.Z.		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
AFI	EP	Z	07 06 44	27				
RAR	EP	ZE	07 06 49	27				
MAR 10	AFI	IP	Z	09 59 29.5U				
	ES	ZNE	48	-0.33				
H M S		EPICENTRE		DEPTH	MAG			
MAR 10	12 15 19.4	19.3S	177.0W	320KM	5.5	FIJI IS		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
AFI	IP	Z	12 17 00.2U	7				
	ES	ZNE	18 19					
	ET	ZNE	22 20					
RAO	EP	Z	12 17 35	10				
	E	Z	58					
	ES	Z	19 23					
RAR	EP	ZNE	12 18 51	16				
	ES	ZNE	21 49					
	ET	ZNE	32					11 11
SBA	EP	Z	12 24 50	59			5.8	
H M S		EPICENTRE		DEPTH	MAG			
MAR 11	01 48 35.1	19.6S	69.3W	111KM	5.4	NORTHERN CHILE		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
RAR	IP	Z	02 00 55.6U	84				
MAR 11	AFI	EP	Z	02 11 22				
	ES	NE	55					
H M S		EPICENTRE		DEPTH	MAG			
MAR 11	07 54 17.1	55.2S	126.6W	33KM	5.3	EASTER IS CORD.		
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE TE MAG
SBA	E(S)	N	08 05 54	32				
	E	E	06 27					
	E(SS)	N	07 39					
	EL	ZE	08 35					
RAR	ESS	NE	08 11 45	42				
	EL	ZNE	13 29					
AFI	ESS	NE	08 15 42	54				
	EL	ZN	18 13					



H M S		EPICENTRE	DEPTH	MAG						
H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
MAR 12	01 05 33.3	30.9S 178.5W	84KM	5.3	KERMADEC IS					
RAO	IP	Z 01 06 02.0D	2							
	ES	Z 01 08 25	13							
SUV	EP	Z 01 08 36	13							
AFI	EP	Z 01 09 30	18							
	ES	NE 12 33	19							
RAR	EP	ZNE 01 09 52	19							
	ES	ZNE 12 13	9 10	6,3						
	ET	ZNE 26 23								
H M S		EPICENTRE	DEPTH	MAG						
MAR 12	12 09 05	30.3S 178.9W	210KM	4.8	KERMADEC IS					
RAO	P	Z 12 09 38.5	1							
AFI	EP	Z 12 12 50	18 -0.52	5,8						
	ES	NE 15 55								
	ET	ZNE 27 04								
RAR	P	ZNE 12 13 17.5	19 -1.12	5,3						
	ES	NE 16 53								
H M S		EPICENTRE	DEPTH	MAG						
MAR 12	14 19 36	15.0S 173.6W	19KM	4.9	SAMOA					
AFI	IP	ZNE 14 20 03 D	2 -0.31							
	ES	ZNE 20								
H M S		EPICENTRE	DEPTH	MAG						
MAR 12	14 26 58	15.6S 173.0W	33KM	5.2	TONGA					
AFI	IP	ZNE 14 27 24 D	2 -0.41							
	ES	ZNE 50								
RAR	EP	Z 14 30 14	14							
	ET	ZNE 44 09								
H M S		EPICENTRE	DEPTH	MAG						
MAR 12	15 35 35.9	22.6S 176.6W	66KM	4.9	SOUTH OF FIJI					
RAO	EP	Z 15 37 20	7							
	ES	Z 15 37 35	10							
AFI	EP	Z 15 37 56	16							
	ES	NE 39 34								
RAR	ES	ZNE 15 42 04								
H M S		EPICENTRE	DEPTH	MAG						
MAR 12	16 31 20.6	24.4N 122.6E	48KM		TAIWAN					
AFI	EP	ZNE 16 42 57	74 -0.48	6,5						
	EPCP	ZNE 43 17								
	IPPP	ZNE 48 47								
	IS	ZNE 52 20								
	ESSS	NE 17 00 36								
RAO	EP	Z 16 43 20	78							
	EPP	Z 46 15								
RAR	P	ZNE 16 44 08.8	88 -0.07	30 17	46 16					7,4
	EPP	ZE 48 17	22 9						7,6	
	E	ZE 53 22								
	ESKS	ZNE 54 41								
	E(SS)	ZN 17 00 16								
	ESSS	ZNE 04 22								
	EL	ZNE 07 30								
SBA	P	ZNE 16 45 29	105							
	PKP	ZNE 49 44								
	SKS	ZNE 56 10	20 14	79 16					69 15	
	ELQ	NE 17 15								

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

ELR		ZNE	20							
H M S		EPICENTRE	DEPTH	MAG						
H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
MAR 13	17 58 34.5	55.5S 126.5W	33KM	5.5	EASTER IS CORD.					
SBA	EP	Z 18 05 05.5	32							
	ELQ	NE 12 05								
	ELR	ZNE 13 00								
RAR	EP	Z 18 06 06	42	6 11	9 10	9 10				
	ELQ	E 15 50								
	ELR	ZNE 17 20	12 9	22 7	50 8					
MAR 13	AFI	IP	Z 18 18 30.6							
	ES	ZNE 50								
H M S		EPICENTRE	DEPTH	MAG						
MAR 13	18 40 40.9	20.9S 175.5W	66KM	5.2	TONGA IS					
AFI	EP	ZNE 18 42 27	8							
	ES	ZNE 43 48								
	ET	ZNE 49 14								
RAO	EP	Z 18 42 42	9							
	ES	Z 44 13								
RAR	P	ZNE 18 43 55.8	15 -0.59							
	ES	ZNE 46 19								
	ET	ZNE 57 45								
H M S		EPICENTRE	DEPTH	MAG						
MAR 13	21 47 52	20.5S 175.4W	31KM	4.7	TONGA IS					
AFI	EP	Z 21 49 41	7							
	ES	ZNE 51 01								
RAR	EP	Z 21 51 12	15							
	ET	ZNE 22 05 13								
SBA	EP?	Z 21 57 42	58							
MAR 13	RAO	P	Z 22 52 39.5	0.81						
H M S		EPICENTRE	DEPTH	MAG						
MAR 14	14 04 22.1	30.9S 179.9W	396KM		KERMADEC IS					
RAO	EP?	Z 14 05 25	2							
	ES	Z 06 06								
AFI	EP	Z 14 08 13	18 -0.38	5,9						
	ES	NE 11 20								
RAR	EP	Z 14 08 29	20							
MAR 14	AFI	EP	Z 20 31 16							
	ES	NE 32 54								
H M S		EPICENTRE	DEPTH	MAG						
MAR 14	21 57 42.5	0.5N 125.5E	37KM	5.4	MOLUCCA PASSAGE					
SBA	EP	Z 22 09 57	81							
H M S		EPICENTRE	DEPTH	MAG						
MAR 15	16 10 25.4	22.1S 179.4W	591KM	4.8	SOUTH OF FIJI					
AFI	IP	Z 16 12 51.3D	11 -0.57							
	ES	NE 14 44								
H M S		EPICENTRE	DEPTH	MAG						
MAR 15	16 32 36	25.1S 179.8E	503KM	4.2	SOUTH OF FIJI					
AFI	EP	Z 16 35 25	14							
	ES	NE 37 42								



H M S		EPICENTRE		DEPTH	MAG							
H M S		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG								
MAR 15	23 44 27.6	18:0S	178.2W	606KM	4.5	FIJI IS						
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG								
SUV	EP	Z	23 45 51.	3								
AFI	EP	Z	23 46 21	7	-0.58							
	ES	NE	47 50									
RAR	EP	Z	23 47 56	18								
MAR 16	12 13 01.7	21:2S	174.3W	60KM	5.4	TONGA IS						
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG								
AFI	EP	ZNE	12 14 42	8								
	ES	NE	16 00									
	EL	ZN	17 00									
	ET	ZNE	21 47									
SUV	EP	Z	12 14 52	7								
RAO	EP	Z	12 15 02	9								
	ES	Z	16 42									
RAR	P	ZNE	12 16 01.5	14	-0.58							
	ES	ZNE	18 19									
	EL	ZNE	19 10	22	9	53	9					
	ET	ZNE	29 35									
SBA	P	Z	12 22 47.0	57								
	EPP	Z	25 36									
	ES	NE	30 53									
	ELQ	N	40 25									
	ELR	ZNE	42 20									
MAR 16	AFI	IP	Z	14 46 05	U							
	ES	NE	25									
MAR 16	AFI	EP	ZNE	22 13 04								
	ES	ZNE	45									
	ET	ZNE	16 03									
MAR 17	07 50 22	14.5S	172.8W	33KM	4.4	SAMOA IS						
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG								
AFI	EP	ZNE	07 50 38.4	1	0.02							
	ES	ZNE	54									
RAR	EP?	ZE	07 53 07	14								
MAR 17	AFI	EP	Z	08 49 01.								
	ES	NE	21									
MAR 17	15 50 33.1	21:1S	179.2W	639KM	6.2	FIJI IS						
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG								
SUV	IP	Z	15 51 59	4								
	ES	Z	53 09									
	EPCP	Z	58 10									
	ESCS	Z	16 04 04									
RAO	IP	Z	15 52 34.5D	8								
	ES	Z	54 05									
	EPCP	Z	57 50									
	ESCS	Z	16 04 06									
AFI	EP	ZNE	15 52 50	10								
	ES	ZNE	54 40									
RAR	IP	ZNE	15 54 08.1UE	18	0.31	26	10	27	13	6.6		
	ES	ZNE	56 19	15	10	30	8	6.3				
	EL	ZNE	58 12									
	ET	ZNE	16 08 50									
SBA	IP	ZNE	15 59 24.8D	57	0.01							
	(SCP)	Z	16 03 09									
MAR 17	AFI	EP	Z	16 10 57								

H M S		EPICENTRE		DEPTH	MAG						
H M S		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG							
MAR 18	AFI	EP	ZNE	01 48 10							
	ES	ZNE	34								
MAR 18	09 19 11.3	20:3S	177.8W	519KM	3.9	FIJI IS					
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG							
AFI	EP	Z	09 21 09	9							
	ES	NE	22 42								
MAR 18	AFI	EP	Z	15 59 50							
	ES	NE	16 00 17								
	ET	ZNE	02 18								
MAR 18	AFI	EP	Z	18 19 29							
	ES	ZNE	20 31								
MAR 18	20 46 20.9	20:6S	169.6E	89KM	5.0	NEW HEBRIDES					
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG							
AFI	IP	Z	20 50 36	D	19						
SBA	IP	Z	20 57 00.9D	57							
MAR 19	AFI	EP	Z	13 20 53							
	ES	NE	21 13								
MAR 19	13 42 27.4	9:3S	159.1E	33KM	5.4	SOLOMON IS					
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG							
AFI	ESS	NE	13 54 30	29							
	EL	ZE	56 05								
MAR 19	14 51 52.7	52:7S	19.8E	33KM	5.2	SW OF AFRICA					
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG							
SBA	EP	Z	15 00 30.5	48							
	ES?	N	07 10								
	EL	NE	14 30								
	EL	ZN	15 30								
MAR 19	16 29 09.7	24:5S	180.0W	500KM	4.7	S OF FIJI					
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG							
RAO	EP	Z	16 30 40	5							
	ES	Z	31 50								
AFI	EP	ZNE	16 31 56	13							
	ES	ZNE	34 12								
MAR 19	17 09 04.8	52:8S	20.1E	33KM	5.1	SOUTH OF AFRICA					
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG							
SBA	IP	Z	17 17 42.9U	48							
	EPCP	Z	19 12								
	E	Z	21 07								
MAR 19	17 16 41.2	52:8S	19.9E	33KM	5.4	SW OF AFRICA					
		H M S		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG							
SBA	IP	ZNE	17 25 19.6D	48	-0.58						
	EPCP	Z	27 14								
	ES	ZNE	32 21								
	EL	ZNE	35								











AFI	ES	Z	08 15																	
	EP	ZNE	04 06 53	9																
	ES	ZNE	08 12																	
	ET	ZNE	17 35																	
RAR	IP	ZNE	04 08 13,6U	15	-0.58															5,7
	ES	ZNE	11 11																	
	ET	ZNE	19 17																	
SBA	P	ZNE	04 14 25,1	57	-0.69															6,1
MAR 24	AFI	EP	ZNE	04 30 13																
	ES	ZNE	47																	
	H M S	EPICENTRE	DEPTH	MAG																
MAR 24	08 27 51,4	13;7S 166.8E	45KM	5,8	NEW HEBRIDES															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
AFI	EP	ZNE	08 32 32	21																
	ES	NE	36 44																	
	EL	ZE	38 00																	
RAO	EP	Z	08 32 35	21																
RAR	EP?	Z	08 34 23	33																
	EL	ZE	44 00																	
SBA	P	ZNE	08 38 23,0	64	-0.74															6,4
	EL	ZN	58 30																	
	H M S	EPICENTRE	DEPTH	MAG																
MAR 24	13 35 03.2	19;5S 168.5E	16KM		NEW HEBRIDES															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
SBA	EP	ZNE	13 44 11	58																
	H M S	EPICENTRE	DEPTH	MAG																
MAR 24	16 47 04.2	19;1S 175.9W	280KM	4,5	TONGA IS															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
SUV	EP	Z	16 48 26	5																
AFI	EP	Z	16 48 27	7																
	ES	ZNE	49 31																	
RAR	EP	Z	16 50 22	15																
MAR 24	AFI	EP	Z	19 09 25																
	ES	NE	10 35																	
	H M S	EPICENTRE	DEPTH	MAG																
MAR 24	20 02 28.6	9;1S 113.5E	63KM	5,1	SOUTH OF JAVA															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
SBA	EP	Z	20 14 07	74																
MAR 24	AFI	EP	Z	20 28 23																
	ES	ZNE	51																	
MAR 24	AFI	EP	Z	21 19 23																
	ES	ZNE	20 19																	
	H M S	EPICENTRE	DEPTH	MAG																
MAR 24	22 08 11.5	19;7S 176.0W	257KM	4,5	TONGA IS															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
SUV	EP	Z	22 09 34	5																
AFI	EP	ZNE	22 09 42	7																
	ES	ZNE	10 52																	
RAO	S	Z	22 12 07	10																
RAR	EP	Z	22 11 20	15																
	ET	ZNE	25 50																	
SBA	EP	Z	22 17 45,5	59																
MAR 25	RAO	EP	Z	06 13 16																

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	H M S	EPICENTRE	DEPTH	MAG																
MAR 25	11 17 59,4	8;1S 121.7E	33KM	5,1	FLORES IS															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
SBA	EP?	Z	11 29 32	73																
	H M S	EPICENTRE	DEPTH	MAG																
MAR 25	12 01 06,5	21;3S 174.2W	44KM	4,5	TONGA															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
RAO	ES	Z	12 04 42	9																
RAR	EP	ZNE	12 04 07	13																
	ES	NE	06 31																	
MAR 25	AFI	EP	Z	12 02 51																
	ES	ZNE	04 10																	
	ET	ZNE	10 25																	
MAR 25	AFI	EP	Z	12 14 44																
	ES	NE	15 15																	
	ET	ZNE	18 16																	
	H M S	EPICENTRE	DEPTH	MAG																
MAR 25	12 56 23,7	58;8S 25.2W	25KM	4,8	S SANDWICH IS															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
SBA	IP	Z	13 04 27,7D	43																
	EL	ZN	21																	
MAR 25	AFI	EP	Z	16 00 53																
	ES	NE	01 11																	
MAR 26	AFI	EP	Z	00 18 58																
	ES	NE	19 25																	
MAR 26	AFI	EP	ZNE	06 17 53																
	ES	ZNE	18 11																	
	H M S	EPICENTRE	DEPTH	MAG																
MAR 26	15 19 03,8	37;7N 115.1E	33KM	5,5	NORTHEASTERN CHINA															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
AFI	ES	N	15 42 24	86																
	EL	NE	54 30																	
	EL	Z	58 54																	
	EL	ZNE	16 00 54																	
	H M S	EPICENTRE	DEPTH	MAG																
MAR 26	22 13 22,2	5;7S 149.3E	111KM	5,1	NEW BRITAIN															
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG														
SBA	EP	ZNE	22 24 41	73																
	H M S	EPICENTRE	DEPTH	MAG																
MAR 26	22 41 31	18;9S 174.5W	153KM	4,2	TONGA															
	H M S	DIR DIS LG=A/T																		



	H	M	S	EPICENTRE	DEPTH	MAG									
MAR 27	05	43	49.5	55.5S 1.5W	22KM	5.1	BOUVET IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	P	Z	05 52 19.5		47									
MAR 27	RAO	IP	Z	05 51 22.0D		1.14									
		S	Z			35									
MAR 27	AFI	IP	ZNE	21 33 45.7D											
		S	ZNE			53									
MAR 28	AFI	EP	Z	02 52 54											
		ES	NE	53 40											
MAR 28	04	44	12.0	32.1S 78.9E	33KM	5.4	MID-INDIAN RISE								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP	ZN	04 54 07		58									
MAR 28	AFI	EP	Z	11 03 06											
		ES	NE	04 24											
MAR 28	15	46	07.0	17.4N 145.7E	201KM	5.7	MARIANA IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP	ZNE	15 55 00		52									
	RAR	EP	Z	15 56 34		66									
MAR 28	AFI	E	NE	15 59 18											
		E	N	16 02 06											
		EL	ZE	11 00											
MAR 28	19	12	29	21.1S 174.4W	80KM	4.1	TONGA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	RAR	EP	Z	19 15 21		14									
		E(S)	NE	17 45											
MAR 29	02	08	44.6	32.0S 178.6W	12KM	4.7	KERMADEC IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	RAO	EP	Z	02 09 30		3									
		ES	Z	10 04											
	SBA	EP	Z	02 18 16		46									
MAR 29	02	17	39.0	23.7N 142.1E	82KM	6.1	VOLCANO IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SUV	EP	Z	02 27 02		55									
	AFI	EP	Z	02 27 29		59									
		ES	ZNE	35 22											
		ESSS	ZNE	41 30											
		EL	ZNE	44 12											
	RAR	P	ZE	02 28 57		72									
		EL	ZNE	50 35											
MAR 29	AFI	EP	Z	05 55 20											
		ES	ZNE	49											
		ET	ZNE	57 30											
MAR 29	SUV	EP	Z	10 25 51											
MAR 29	10	42	15.2	20.0S 175.4W	97KM	5.2	TONGA IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP	ZNE	10 43 49		7									

	ES	ZNE	44 57												
RAO	EP?	Z	10 44 30		9										
	ES	Z	46 10												
RAR	P	ZNE	10 45 31.1		15 -0.55										
	ES	ZNE	47 55												
	ET	ZNE	59 21												
SBA	IP	ZNE	10 52 05.0U		59 -0.76										6.4
MAR 29	AFI	IP	Z	12 30 45.5D		-0.90									
	ES	NE	31 36												
MAR 29	16	23	02	16.1S 172.8W	7KM	4.5	SAMOA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP	ZNE	16 23 43		2									
		ES	ZNE	24 09											
		ET	ZNE	25 43											
MAR 30	01	34	34	17.6S 179.0W	541KM	3.6	FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	E(P)	Z	01 36 25		8									
MAR 30	AFI	EP	Z	06 52 35											
		ES	NE	54											
		ET	ZNE	54 22											
MAR 30	11	29	55.7	16.6S 177.2W	393KM	4.2	FIJI IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP	Z	11 31 26		6 -1.03									
		ES	NE	32 40											
MAR 30	12	40	01.0	49.8N 129.7W	33KM	5.3	VANCOUVER IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	ES	N	13 01 07		73									
		EL	ZN	11 54											
MAR 30	13	09	20	19.5S 175.6W	205KM	4.4	TONGA IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP	ZNE	13 10 54		7									
		ES	ZNE	12 03											
MAR 30	13	13	45.7	4.7S 153.0E	78KM	4.6	NEW IRELAND								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP	Z	13 25 14		73									
MAR 30	20	40	44.1	32.5S 178.0W	16KM	4.8	S OF KERMADEC IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	RAO	EP	Z	20 41 31		3									
		ES	Z	42 07											
	AFI	EP	Z	20 48 07		19									
		ES	N	48 46											
		EL	N	50 00											
MAR 30	RAO	EP	Z	21 34 13											
		ES	Z	49											
MAR 31	05	05	54.7	17.3S 167.8E	34KM	5.2	NEW HEBRIDES								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SUV	EP	Z	05 08 24		10									
	AFI	EP	ZNE	05 10 27		U 20									











H	M	S	EPICENTRE	DEPTH	MAG	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
APR 06	19	45	22.3S 171.5E	121KM	5.1												
			H M S														
			Z 19 17 35														
			E 43														
			Z 19 49 49		18												
			ZNE 53 12														
			ZNE 19 55 14.0U		56												
			Z 37														
APR 06	19	52	21.5S 170.2E	61KM	5.4												
			H M S														
			Z 20 02 03.0		56												
APR 06	21	53	9.0N 126.4E	50KM	5.4												
			H M S														
			ZNE 22 06 03		90												
APR 06	22	28	56.5N 154.5W	33KM	5.5												
			H M S														
			ZNE 22 57 04.5		136												
APR 06	22	56	9.4S 107.9E	44KM	5.1												
			H M S														
			ZNE 23 07 44		75												
APR 07	00	14	1.8S 134.2E	36KM	5.0												
			H M S														
			Z 00 24 24		55												
			ZNE 43 36														
APR 07			ZNE 02 14 23														
APR 07	05	02	15.6S 174.4W	38KM	4.9												
			H M S														
			Z 05 03 35.2D		3												
			ZNE 04 06														
			ZNE 06 17														
			Z 05 06 15		15												
			E 08 43														
			NE 55														
			ZNE 09 30									17	18		9	11	
			ZNE 21 33														
			Z 05 13 24.5		63												
APR 07	09	42	26.2N 127.4E	45KM	5.8												
			H M S														
			Z 09 53 49		71												
			ZNE 10 01 04		106												
APR 07	11	51	20.5S 177.7W	478KM	3.8												
			H M S														
			Z 11 53 52		9												
			Z 54 53														
			Z 11 53 30		9												
			ZNE 55 04														
APR 07			ZNE 12 12 30.5														

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

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H	M	S	EPICENTRE	DEPTH	MAG	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 07	14	36	24.1S 175.2W	56KM	5.2											
			H M S													
			Z 14 38 32		8											
			Z 14 38 52		11											
			NE 40 39													
			ET 48 07													
			ZNE 14 39 44		15											
			ZNE 41 09													
			N 42 30													
			ZNE 43 25													
			ZNE 54 41													
			ZNE 14 45 58.3D		54											
APR 07			Z 19 18 01													
			NE 20 11													
APR 08	01	46	51.3N 157.8E	48KM	6.0											
			H M S													
			Z 01 58 04													
			ZNE 02 07 00													
			ZN 11 30													
			ZNE 14 46													
			ZNE 18 20													
			Z 01 59 12		81											
			ZNE 02 09 07													
			ZNE 23 14													
APR 08	02	41	9.1S 158.3E	73KM	4.9											
			H M S													
			Z 02 52 39.5		69											
APR 08	05	24	51.3N 157.9E	48KM	5.3											
			H M S													
			Z 05 43 49.1U		129											
APR 08	05	52	52.7N 33.3W	31KM	5.3											
			H M S													
			Z 06 12 33		154											
			ZNE 16 11													
APR 08	07	15	20.3S 174.1W	121KM	3.9											
			H M S													
			Z 07 17 15		7											
			NE 18 21													
			ZNE 23 39													
			ZN 07 18 40.5		13											
			ZN 20 49													
			Z 07 25 42		58											
APR 08			ZNE 09 38 39													
			NE 41 11													
APR 08	10	32	8.1S 156.3E	19KM	5.1											
			H M S													
			Z 10 43 22		70											











DATE	H	M	S	EPICENTRE		DEPTH	MAG	LOCATION											
				DIR	DIS			LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG				
APR 16	01	27	13.5	56;9N	153.6W	23KM	5.7	KODIAK IS											
	AFI	EP	Z	01	38	39		72											
		ES	ZNE			48	00												
		ESSS	ZE			55	54												
		EL	ZN			59	30												
	RAR	EP	ZNE	01	39	13		78											
		EPP	E			42	23												
		E(PPP)	E			44	32												
		ES	ZNE			48	29												
		E	NE			52	21												
		E(SS)	ZN			54	00												
		E(SSS)	ZE			57	28												
		ELQ	E			59	17												
		ELR	ZNE	02	02	40			14	19	14	20							
	SBA	EPKP	ZN	01	46	32		137											
		ELQ	E			02	29												
		ELR	ZNE			30													
APR 16	02	24	33.6	0;1S	123.0E	207KM	5.2	NORTHERN CELEBES											
	SBA	IP	ZNE	02	36	29,3D		81											
APR 16	AFI	EP	Z	10	40	21													
		ES	NE			41	08												
APR 16	15	23	28.5	21;2S	178.5W	500KM	5.3	FIJI											
	SUV	EP	Z	15	24	48		4											
	AFI	IP	Z	15	25	36,5U		10	0.42										
		ES	NE			27	20												
		ET	ZNE			31	43												
	RAO	EP?	Z	15	26	48		8											
	RAR	P	ZNE	15	27	04		17	-0.43										6.1
		ES	ZNE			30	49												
		ET	ZNE			42	12												
	SBA	IP	ZNE	15	32	29,9U		57	-1.15										5.3
		(*PP)	ZNE			34	12												
APR 16	AFI	EP	Z	22	17	44													
		ES	NE			18	34												
APR 16	AFI	EP	Z	23	11	54													
		ES	NE			12	29												
		ET	ZNE			15	10												
APR 17	00	35	09.0	18;0S	178.4W	599KM	3.9	FIJI											
	AFI	EP	ZNE	00	37	03		8											
		ES	ZNE			38	31												
	SBA	P	Z	00	44	20,5		60											
APR 17	02	14	58.5	17;9S	178.3W	555KM	3.5	FIJI											
	AFI	EP	ZNE	02	16	51		7											
		ES	NE			18	15												
APR 17	AFI	EP	Z	04	46	59													
		ES	NE			47	55												
APR 17	AFI	EP	Z	06	19	45													

DATE	H	M	S	EPICENTRE		DEPTH	MAG	LOCATION											
				DIR	DIS			LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG				
APR 17	06	38	05.6	15;2S	173.1W	33KM	4.8	TONGA											
	AFI	IP	ZNE	06	38	30		D	2	0.07									
		ES	ZNE			50													
	RAR	P	ZNE	06	41	23		14											
		ES	ZNE			44	08												
		EL	ZNE			45								17	11	11	11		
		ET	ZNE			54	25												
APR 17	AFI	EP	Z	06	54	45													
		ES	ZNE			55	04												
		ET	ZNE			56	32												
APR 17	AFI	EP	Z	10	24	20													
		ES	NE			48													
		ET	ZNE			26	59												
APR 17	13	09	52.7	26;0S	178.4E	650KM	4.7	S OF FIJI											
	RAO	EP	Z	13	11	26,2D		5											
		ES?	Z			12	43												
	AFI	EP	Z	13	13	01		15											
		ES	NE			15	32												
	SBA	IP	Z	13	18	09,4U		52	-1.43										5.0
APR 17	AFI	EP	Z	21	08	59													
		ES	ZNE			09	18												
APR 18	SBA	P	ZNE	00	27	09													
APR 18	SBA	P	ZNE	08	29	34,5													
APR 18	09	08	12.7	10;6S	161.6E	32KM	4.7	SOLOMON IS											
	SBA	P	ZNE	09	19	06,4		67											
APR 18	10	34	06	20;1S	178.3W	559KM	4.4	FIJI											
	SUV	EP	Z	10	35	32		4											
	AFI	EP	Z	10	36	13		9	-1.07										
		ES	NE			37	52												
	SBA	P	Z	10	43	10,2		58											
APR 18	AFI	EP	Z	11	36	16													
		AA	AA			AA													
APR 18	AFI	EP	Z	11	56	03													
		ES	NE			20													
APR 18	AFI	IP	Z	17	31	23,7U													
		ES	NE			44													
APR 19	01	03	46	16;2S	167.1E	57KM		NEW HEBRIDES											
	SBA	EP	ZN	01	14	07		62											



H M S	EPICENTRE	DEPTH	MAG	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG
APR 19 07 18 34.1	28:0S 178.1W	215KM	4.1	KERMADEC IS
RAO IP	Z 07 19 07,3D		1	
AFI EP	Z 07 21 53		15	
RAR EP	Z 07 22 27,5		18	
SBA P	ZNE 07 27 12,1		50	
APR 19 09 48 08	19:7S 175.9W	149KM		TONGA
AFI EP	Z 09 49 49		7 -0.98	
RAR EP	Z 09 51 38		15	
SBA P	Z 09 57 56,7		59	
APR 19 19 28 27.5	7:9S 130.0E	12KM	4.9	TANIMBAR IS
SBA EP	ZNE 19 39 56		72	
APR 19 22 18 20	20:3S 179.5W	591KM	4.4	FIJI
AFI EP	Z 22 20 36		10	
SBA IP	Z 22 27 13,8U		58	
APR 19 22 51 00.9	31:7S 179.5W	169KM	4.5	KERMADEC IS
RAO EP	Z 22 51 47		3	
SBA IP	Z 23 00 44,1U		47	
APR 20 02 32 51.8	18:8N 146.9E	23KM	5.0	MARIANA IS
AFI ES	ZN 02 49 33		52	
RAR E(SP)	Z 02 53 17		66	
SBA EP?	Z 02 46 28		97	
APR 20 05 09 54	21:1S 175.1W	40KM	4.1	TONGA
RAR P	ZNE 05 13 16		U 14	
APR 20 06 00 37.2	18:9N 146.8E	16KM	5.1	MARIANA IS
AFI ES	ZN 06 17 18		52	

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

H M S	EPICENTRE	DEPTH	MAG	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG
APR 20 16 26 21.8	18:8N 147.0E	50KM	5.3	MARIANA IS
AFI EP	Z 16 35 23		52	
RAR EP	ZE 16 37 03		66	
SBA EP	Z 16 39 51		97	
APR 20 16 42 06.0	41:7N 48.2E	36KM	5.4	EASTERN CAUCASUS
SBA EPKP	ZNE 17 01 21		136	
APR 20 RAR P	ZNE 17 01 53			
APR 20 AFI EP	Z 20 10 56			
APR 20 AFI EP	Z 22 10 34			
APR 20 AFI EP	Z 22 49 27			
APR 21 AFI EP	ZNE 02 42 14			
APR 21 AFI EP	Z 04 44 23			
RAR EP	ZN 04 46 33			
APR 21 AFI EP	Z 06 45 53			
RAR EP	Z 06 48 05			
APR 21 AFI EP	Z 07 51 04			
RAR EP?	Z 07 53 34,5			
APR 21 08 47 47.2	18:8N 169.4E	245KM	4.4	NEW HEBRIDES
SBA P	NE 08 57 22		96	
APR 21 15 45 23.0	35:7N 142.0E	29KM	5.2	NEAR E HONSHU, JAPAN
AFI ES	ZNE 16 05 00		66	
RAR EP?	Z 15 56 43		79	



		ELQ	E	22 15						
		ELR	ZNE	24 30						
SBA		EPKP	Z	16 05 05	114					
H M S		EPICENTRE		DEPTH	MAG					
APR 21	16 05 54		20.8S	174.1W	33KM	4.5	TONGA			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
AFI	EP	ZNE	16 07 33	7						
	ES	ZNE	08 46							
RAR	EP	ZNE	16 08 53	13						
	ES	ZNE	11 06							
SBA	EP	Z	16 15 47	58						
	ES	ZNE	24 39							
H M S		EPICENTRE		DEPTH	MAG					
APR 21	16 12 45.0		20.4S	178.0W	511KM	4.5	FIJI			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
SUV	EP	Z	16 14 05	4						
AFI	EP	ZNE	16 14 34	9						
	ES	ZNE	16 19							
RAO	EP	Z	16 14 47	9						
	ES	Z	16 30							
RAR	EP?	Z	16 17 15	17						
SBA	P	Z	16 21 50.9	58						
APR 21	AFI	IP	Z	19 05 09						
	ES	ZNE	31							
H M S		EPICENTRE		DEPTH	MAG					
APR 21	22 45 17.9		4.5S	152.0E	118KM	4.7	NEW BRITAIN			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
SBA	P	ZN	22 56 40.5	74						
H M S		EPICENTRE		DEPTH	MAG					
APR 22	03 06 32.3		37.8S	73.4W	16KM	5.5	NEAR CENTRAL CHILE			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
SBA	P	ZNE	03 16 33.5	59						
	ES	ZNE	25 46							
ELQ	ELR	NE	31 32							
	Z	32								
RAR	EP	Z	03 18 16	75						
	ES	NE	28 21							
EL	EL	ZNE	41							
AFI	ES	NE	03 29 49	88						
	ESS	N	36 06							
	EL	ZNE	47 00							
APR 22	RAR	EP	ZNE	05 28 30						
	E(S)	ZN	30 39							
	E	E	43							
H M S		EPICENTRE		DEPTH	MAG					
APR 22	08 07 14.3		23.0S	176.3W	94KM	4.4	S OF FIJI			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
AFI	EP	Z	08 09 29	10						
	ES	NE	11 09							
RAR	EP	ZNE	08 10 46	15						
	ES	ZNE	13 23							
	ET	ZNE	25 43							
SBA	P	ZNE	08 16 43.9	56						
H M S		EPICENTRE		DEPTH	MAG					
APR 22	12 17 36.3		60.6S	25.4W	33KM	5.6	S SANDWICH IS			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
SBA	IP	ZNE	12 25 24.3U	42						
	EL	Z	34 40							

H M S		EPICENTRE		DEPTH	MAG					
APR 22	16 55 11.2		18.0S	178.4W	584KM	4.1	FIJI			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
SUV	EP	Z	16 56 26	3						
AFI	EP	Z	16 57 02	8						
	ES	NE	58 30							
RAR	EP	Z	16 58 48	18						
SBA	P	Z	17 04 27.8	60						
H M S		EPICENTRE		DEPTH	MAG					
APR 22	23 27 20.5		57.4N	152.3W	26KM	5.9	KODIAK IS			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
RAR	IP	ZE	23 39 21	UE	79					
	E(S)	ZN	49 12							
	ESS	N	51 11	14	5					
	ELQ	NE	24 05							
	ELR	ZNE	06 15							
SBA	PKP	Z	23 46 38	137						
	E(SKP)	Z	49 28							
H M S		EPICENTRE		DEPTH	MAG					
APR 23	00 09 34.1		0.9S	122.4E	40KM	6.0	NORTHERN CELEBES			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
SUV	EP	Z	00 19 31	58						
AFI	EP	Z	00 20 29.4	66	-0.46					
	ES	ZNE	29 24							
	ESS	E	34 15							
	EL	ZN	36 42							
RAR	EP	ZNE	00 21 39	78	13	8				
	ES	ZNE	31 38							
	ESP	Z	32 19							
	EPS	N	36							
	ESS	NE	36 12							
	E(SSS)	N	40 37							
	EL	ZN	42 45							
	ELR	ZNE	47 30							
SBA	P	ZNE	00 21 40.8	80						
	I	ZNE	48.8	6	9					
	EL	ZNE	42	28	19	27	18	18	19	
H M S		EPICENTRE		DEPTH	MAG					
APR 23	03 28 24.6		23.8S	175.7W	53KM	5.0	TONGA			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
SUV	EP	Z	03 30 21	8						
AFI	EP	Z	03 30 42	11						
	ES	ZNE	32 33							
	EL	ZNE	33 18							
	ET	ZNE	41 14							
RAR	P	ZNE	03 31 41	15	-0.63					
	ES	ZNE	34 09							
	EL	ZNE	35 35							
APR 23	AFI	EP	Z	05 21 36						
	ES	ZNE	22 34							
H M S		EPICENTRE		DEPTH	MAG					
APR 23	05 45 53.3		23.4S	179.8W	508KM	4.6	S OF FIJI			
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG
RAO	EP	Z	05 47 31	6						
	ES	Z	48 39							
AFI	EP	Z	05 48 26	12						
	ES	ZNE	50 33							
RAR	EP?	Z	05 49 39.5	19						
SBA	EP	N	05 54 39	55						



H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 23	06 49 39.0	41.6S	174.3E	19KM	5.8								
COOK STRAIT, N Z													
AFI	EPP	Z	06 56 55		30								
	ES	E	07 01 06										
	E(L)	ZN	02 30										
RAR	EP	Z	06 55 51		30								
	ES	ZNE	07 01 13										
	ESS	ZNE	03 20										
	ELR	ZNE	05										
SBA	P	ZNE	06 56 47		36								
	ES	ZNE	07 02 17										
	ELQ	NE	05 20										
	ELR	ZNE	07 00										
MINOR DAMAGE AT WELLINGTON SEDDON AND BLENHEIM													
3 14 3 13 2 13													
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 23	08 56 46.1	0.5S	122.2E	82KM	5.9								
NORTHERN CELEBES													
SUV	EP	Z	09 06 33		58								
AFI	EP	Z	09 07 32		67	0.01							7.0
	ES	ZNE	16 32										
	ESS	N	20 30										
	ESSS	N	24 00										
	EL	N	28 30										
	EL	ZE	29 30										
RAR	EP	Z	09 08 44		79								
	S	N	18 49										
	ESS	N	23 50										
SBA	EP	ZNE	09 08 54		81								
	ES	ZNE	19 01										
	EPS	NE	20 17										
	E(SS)	NE	23 32										
	EL	NE	28 00										
	EL	ZNE	29 10										
4 19 3 18 3 18													
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 23	14 19 47.1	0.3S	122.3E	107KM	5.0								
NORTHERN CELEBES													
SBA	E(P)	NE	14 32 05		81								
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 23	18 20 55	23.7S	175.8W	97KM	4.6								
TONGA													
AFI	EP	Z	18 23 09		10								
	ES	NE	24 55										
	EL	NE	25 49										
RAR	EP	ZNE	18 24 05		15								
	ES	ZNE	26 37										
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 24	03 28 50.5	12.8S	169.5E	660KM	4.5								
SANTA CRUZ IS													
AFI	EP	Z	03 32 27		18	-0.60							5.6
SBA	(S)	NE	03 45 27.4		65								
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 24	07 02 24.1	21.1S	179.2W	641KM	4.6								
FIJI													
SUV	P	Z	07 03 50		4								
RAO	EP	Z	07 04 24		8								
	ES	Z	06 01										
AFI	EP	Z	07 04 39		10								
	ES	NE	06 30										
SBA	P	ZNE	07 11 14.9		57	-1.47							4.8
APR 24	AFI	IP	Z	10 20 55.5U									

ES		ZNE		21 15									
APR 24	AFI	EP	Z	19 42 24									
		ES	ZNE	43 12									
APR 24	SBA	P	Z	20 08 05.1									
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 25	02 10 15.2	22.0S	68.5W	115KM	4.5								
CHILE-BOLIVIA BORDER													
SBA	P	Z	02 21 50.5		75								
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 25	04 32 29	42.3S	75.6W	33KM	4.9								
OFF COAST OF S CHILE													
SBA	EP	Z	04 41 55		54								
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 25	08 34 06.3	19.0S	175.1W	223KM	4.2								
TONGA													
AFI	EP	ZNE	08 35 21		6								
	ES	ZNE	36 15										
SBA	EP	Z	08 43 49		60								
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 25	10 41 58.6	21.0S	178.7W	560KM	5.2								
FIJI													
SUV	IP	Z	10 43 21.6U		4								
RAO	EP	Z	10 43 59		8								
	E	Z	45 20										
	ES	Z	36										
AFI	EP	Z	10 44 10		10								
	ES	NE	45 55										
RAR	P	ZNE	10 45 34		18	-0.57							
	ES?	E	48 14										
SBA	IP	ZNE	10 50 56.0D		57	-1.20							
	S	E	58 17										
APR 25	AFI	EP	ZNE	15 48 39									
	ES	ZNE	57										
APR 25	AFI	EP	ZNE	16 57 51									
	ES	ZNE	58 11										
APR 25	AFI	EP	Z	18 44 11									
	ES	ZNE	45 05										
APR 25	AFI	EP	ZNE	20 09 41									
	ES	ZNE	10 06										
APR 26	AFI	EP	Z	04 24 12									
	ES	NE	35										
	ET	ZNE	26 12										
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 26	14 00 03.6	22.9S	70.9W	22KM	4.1								
NEAR COAST OF N CHILE													
SBA	EP	ZNE	14 11 24		74								
H M S		EPICENTRE		DEPTH	MAG								
H M S		H M S		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
APR 26	14 55 20.2	14.6S	167.6E	91KM									
NEW HEBRIDES													
SBA	P	ZNE	15 05 39.7		63	-1.43							



DATE	H	M	S	EPICENTRE	DEPTH	MAG	LOCATION	STATION	AE	TE	MAG
APR 26	19	34	02.9	20,0S 178.3W	590KM	4.7	FIJI				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SUV	EP		Z 19 35 27		4					
	AFI	EP		ZNE 19 36 05		9					
		ES		ZNE 37 45							
	SBA	IP		Z 19 43 05,1U		58					5,1
APR 26	23	07	50	20,8S 178.6W	594KM	4.2	FIJI				
	SUV	EP		Z 23 08 47		4					
	AFI	EP		ZNE 23 09 35		9					
		ES		ZNE 11 10							
	RAR	EP?		Z 23 11 08		18					
	SBA	P		ZN 23 16 44,6		58					
APR 27	03	59	56	7,2S 128.7E	138KM		BANDA SEA				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SBA	EP		ZNE 04 11 12		73					
APR 27	10	58	33	0,2N 98.9E	63KM	4.8	NORTHERN SUMATRA				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SBA	EP		Z 11 11 14,5		86					
APR 27	21	33	17.8	25,1S 179.8E	499KM	4.7	S OF FIJI				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	RAO	EP		Z 21 34 40		5					
		IP		Z 40,8D							
		ES		Z 35 40							
	AFI	EP		Z 21 36 08		14					
		ES		NE 38 25							
	RAR	EP		Z 21 37 07		19					
	SBA	P		ZE 21 41 50,7		53					5,2
APR 27	22	47	14	29,6S 178.1W	33KM	4.4	KERMADEC IS				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	RAO	IP		Z 22 47 51,5D		0					
		S		Z 48 05							
APR 28	00	17	50.8	21,8S 179.2W	596KM	4.7	FIJI				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	AFI	EP		ZNE 00 20 11		11					
		ES		ZNE 22 02							
	SBA	IP		ZNE 00 26 39,9U		57					4,9
APR 28	01	15	36.0	49,0S 164.2E	14KM	5.6	AUCKLAND IS				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SBA	IP		ZNE 01 21 37,1D		29					5,4
		ES		Z 26 29							
		ES		N 37							
		ELQ		E 28 15							
		ELR		ZNE 29 03							
APR 28	09	01	41	5,9S 104.4E	33KM		SOUTHERN SUMATRA				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SBA	EP		Z 09 13 26,5		79					
APR 28	AFI	EP		ZNE 11 53 43							

DATE	H	M	S	EPICENTRE	DEPTH	MAG	LOCATION	STATION	AE	TE	MAG
APR 28	RAO	IP		Z 12 46 45,0D							
		ES		Z 47 02							
APR 28	13	55	16	14,1S 167.7E	180KM		NEW HEBRIDES				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SBA	EP		Z 14 05 30		64					
APR 28	SBA	E(P)		ZNE 15 06 22							
		E		ZNE 07 33							
		E		Z 08 04							
		E		N 19							
		E		E 26							
		E		ZNE 09 29							
		E		ZNE 38							
APR 28	16	56	21.3	19,4S 173.4W	36KM	5.1	TONGA				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	AFI	EP		ZNE 16 57 36		6					
		ES		ZNE 58 32							
		EL		E 38							
		EL		ZN 50							
	RAO	EP		Z 17 00 45		11					
	RAR	P		ZNE 16 59 13		UN					13 -0.30
		ES		ZNE 17 01 24							
		ELR		ZNE 02							
	SBA	EP		ZNE 17 06 23		59					43 16 103 10 136 9
		ES		ZNE 15 41							
		ELQ		NE 22							
		ELR		ZNE 24 30							
APR 28	AFI	EP		ZNE 17 02 34							
		ES		NE 03 05							
		ES		Z 11							
APR 28	17	13	34.5	19,2S 173.6W	56KM	5.1	TONGA				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	AFI	EP		ZNE 17 14 47		6					
		ES		ZNE 15 40							
		ET		ZNE 19 39							
	RAO	ES		Z 17 17 58		11					
	RAR	P		ZNE 17 16 24,5		13					-0.23
		ES		ZNE 18 40							
	SBA	P		ZNE 17 23 25,4		59					
		ES?		E 32 42							
		ELQ		NE 39 20							
APR 28	21	29	47	18,9S 169.5E	240KM	4.3	NEW HEBRIDES				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SBA	EP?		Z 21 39 54		59					
APR 29	01	46	42.2	53,9N 157.6W	28KM	5.1	SOUTH OF ALASKA				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SBA	EPKP		ZN 02 05 53		133					
APR 29	03	32	20.7	35,3S 70.7W	97KM	4.6	CHILE-ARGENTINA BORDER				
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE	TE	MAG
	SBA	EP		Z 03 42 25		62					
APR 29	AFI	IP		Z 12 32 08,4							



		ES	NE	29						
APR 29	AFI EP	Z	15 49 01							
	ES	NE	50 29							
	H M S	EPICENTRE		DEPTH	MAG					
APR 30	04 53 41	16,2S	167.0E	37KM	5.2	NEW HEBRIDES				
	SBA IP	Z	05 03 38,1D	62	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
APR 30	AFI EP	ZNE	16 36 34							
	ES	ZNE	57							
APR 30	AFI EP	Z	19 09 36							
	ES	NE	10 19							
	E(L)	E	24							
	ET	ZNE	14 12							
APR 30	AFI E(S)	E	19 10 42							
	H M S	EPICENTRE		DEPTH	MAG					
MAY 01	01 09 57.1	10,2S	161.2E	71KM	5.2	SOLOMON IS				
	SBA EP	ZNE	01 20 48,5	68	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
MAY 01	AFI EP	Z	06 57 27							
	ES	NE	46							
	H M S	EPICENTRE		DEPTH	MAG					
MAY 01	07 02 00.2	23,8S	176.9W	114KM	4.5	S OF FIJI				
	RAO EP	Z	07 02 53	6	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
	ES	Z	03 40							
	AFI EP	Z	07 04 35	11	-1.03					
	ES	NE	06 36							
MAY 01	AFI EP	Z	07 31 06							
	ES	ZNE	24							
	H M S	EPICENTRE		DEPTH	MAG					
MAY 01	10 50 52.8	4,5S	153.5E	102KM	4.8	S PACIFIC OCEAN				
	SBA EP	ZNE	11 02 18	74	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
	H M S	EPICENTRE		DEPTH	MAG					
MAY 01	12 57 12.2	3,6S	143.0E	21KM	4.7	N OF NEW GUINEA				
	SBA EP	ZNE	13 08 51	75	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
	H M S	EPICENTRE		DEPTH	MAG					
MAY 01	13 14 47.4	3,5S	143.0E	33KM	4.6	N OF NEW GUINEA				
	SBA EP	ZNE	13 26 31	75	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
	H M S	EPICENTRE		DEPTH	MAG					
MAY 01	16 22 56.3	8,5S	74.3W	165KM	5.7	PERU-BRAZIL BORDER				
	SBA EP	ZNE	16 35 28,0	88	-0.95					
	E+PP	ZNE	36 09,5							
	ES	ZNE	46 00,0							
	ESS	N	51 50							
	ELQ	NE	58 45							
	AFI EP	Z	16 36 07	95	5 8 6,7					
	ES	ZNE	46 24							
	ESS	ZNE	53 12							
	EL	N	17 02 12							
	EL	E	03 36							

		EL	ZE	06 24						
	H M S	EPICENTRE		DEPTH	MAG					
MAY 02	09 52 48.5	6,0S	149.7E	52KM	5.2	NEW BRITAIN				
	AFI EP	Z	10 00 09	39	-0.68					
	ES	ZNE	06 11							
	ESS	Z	08 48							
	ESSS	NE	09 00							
	EL	ZE	12 00							
	SBA EP	ZNE	10 04 11	72						
	ES	ZNE	13 35,2							
	ESSS	ZNE	21 00							
	ELQ	ZNE	26 47							
	ELR	ZNE	29 53							
	H M S	EPICENTRE		DEPTH	MAG					
MAY 02	10 53 28.4	18,0S	170.3W	537KM	4.9	FIJI				
	SUV EP	Z	10 54 46	3	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
	AFI EP	ZNE	10 55 21	7						
	ES	ZNE	56 49							
	SBA EP	Z	11 02 47,3	60						
	EPCP	Z	04 38,5							
	H M S	EPICENTRE		DEPTH	MAG					
MAY 02	16 39 44.4	8,6S	114.9E	103KM	5.0	BALI IS				
	SBA EP	ZNE	16 51 11,5	74	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
MAY 03	AFI IP	ZNE	00 24 44,5							
	ES	ZNE	25 09							
MAY 03	AFI IP	Z	05 46 19,1							
	ES	ZNE	32							
MAY 03	AFI EP	Z	13 49 33							
	ES	ZNE	51							
	ET	ZNE	51 29							
MAY 04	AFI EP	ZNE	01 49 01							
	ES	ZNE	44							
MAY 04	SBA EP	ZNE	05 51 46							
	H M S	EPICENTRE		DEPTH	MAG					
MAY 04	07 46 41.2	15,4S	174.9W	240KM	4.6	TONGA				
	AFI IP	ZNE	07 47 37,2D	3	0.46					
	ES	ZNE	40 14							
	SBA IP	ZNE	07 56 46,0D	63	-1.23					
	AFI EP	Z	10 46 27							
	ES	NE	47 05							
	EL	NE	48 00							
	ET	ZNE	50 10							
	H M S	EPICENTRE		DEPTH	MAG					
MAY 04	16 53 17.6	62,6S	159.1E	33KM		BALLENY IS				
	SBA EP	ZNE	16 56 57,0	16	DIR DIS LG=A/T AZ TZ AN TN AE TE MAG					
	ES	ZNE	17 00 42							
	ELR	ZNE	02 50							
							4 12			



H M S		EPICENTRE		DEPTH	MAG						
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
MAY 04	20 19 02.8	16.0S	173.9W	107KM	5.0	TONGA					
	AFI IP	ZNE	20 19 48.1U		3	-0.07					
	ES	ZNE	20 20								
	SUV EP	Z	20 20 59		8						
	SBA IP	ZNE	20 29 28.2U		63						
MAY 04	AFI EP	Z	22 14 46								
	ES	ZNE	15 14								
	ET	ZNE	17 00								
MAY 05	AFI EP	ZNE	01 00 59								
	ES	ZNE	01 21								
	ET	ZNE	03 19								
MAY 05	AFI EP	ZNE	07 27 10								
	ES	ZNE	15 44								
	ET	ZNE	29 20								
MAY 05	AFI EP	Z	09 50 30								
	ES	NE	51								
MAY 05	AFI EP	ZNE	11 21 46								
	ES	ZNE	22 11								
	ET	ZNE	23 52								
MAY 05	AFI EP	Z	11 31 42								
	ES	NE	32 05								
	ET	ZNE	33 43								
MAY 05	14 21 22.7	24.4N	122.6E	60KM	5.7	TAIWAN					
	AFI EP	Z	14 33 01		74	-0.60					
	ES	ZE	42 32								
	ESS	ZE	47 20								
	EL	Z	52 49								
	EL	ZE	55 30								
	SBA EPP	ZNE	14 39 50		105						
MAY 05	15 23 36	21.7S	179.3W	604KM	4.7	FIJI					
	SUV P	Z	15 25 01		4						
	AFI EP	Z	15 25 59		11						
	ES	NE	27 50								
	SBA IP	ZNE	15 32 25.0		57	-1.41					
MAY 05	SBA IP	ZNE	19 57 55.0D			-0.86					
MAY 05	SBA EP	ZNE	21 12 35								
MAY 06	AFI EP	ZNE	02 30 27								
	ES	ZNE	54								
MAY 06	07 14 13.5	25.0S	179.6E	488KM	5.3	S OF FIJI					
	RAO IP	Z	07 15 43		5						
	ES	Z	16 56								
	SUV EP	Z	07 16 00		7						
	AFI IP	ZNE	07 17 09		14	-0.21					
	ES	NE	19 25								
MAY 06	SBA EP	ZNE	19 09 29								

H M S		EPICENTRE		DEPTH	MAG						
H M S		DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
MAY 06	19 44 56.2	21.8S	178.3W	401KM	3.2	FIJI					
	AFI EP	Z	19 47 06		10						
	ES	ZNE	48 47								
MAY 06	19 53 47.0	19.4S	173.7W	112KM	4.9	TONGA					
	AFI EP	ZNE	19 54 55		6						
	ES	ZNE	55 50								
	EL	E	56 52								
	ET	ZNE	59 52								
	SBA EP	ZNE	20 03 43.5		59						
MAY 06	AFI EP	ZNE	22 26 40								
	ES	ZNE	27 00								
MAY 07	05 10 07.7	22.1S	179.5E	600KM	4.2	S OF FIJI					
	AFI EP	ZNE	05 12 39		12						
	ES	NE	14 40								
MAY 07	AFI EP	Z	05 57 14								
	ES	NE	52								
	EL	E	58 50								
	ET	ZNE	06 00 52								
MAY 07	09 48 03.0	0.7S	122.2E	43KM	5.6	NORTHERN CELEBES					
	SBA EP	ZNE	10 00 19.5		81						
MAY 07	11 08 53.0	22.3S	177.0W	303KM	4.4	S OF FIJI					
	SUV EP	Z	11 10 22		6						
	AFI EP	ZNE	11 11 09		10						
	ES	ZNE	12 45								
MAY 07	13 08 16.0	37.8N	27.9E	12KM	5.2	TURKEY					
	AFI EPKP	Z	13 28 11		150						
MAY 07	AFI EP	Z	15 15 06			-0.90					
MAY 07	SBA EP	ZNE	23 14 11.5			-1.01					
MAY 08	SBA EP	ZNE	04 25 42			-1.11					
	ES	ZNE	29 43			1 20					
MAY 08	11 16 53.1	21.6S	177.5W	343KM	4.1	FIJI					
	AFI EP	Z	11 19 04		9						
	ES	NE	20 39								
MAY 08	AFI EP	Z	19 48 57								
	ES	NE	49 46								
	ET	ZNE	53 49								
MAY 08	SBA EP	ZNE	21 49 00			-1.01					



H M S	EPICENTRE	DEPTH	MAG	DIR DIS LG A/T AZ TZ AN TN AE TE MAG
MAY 09 00 42 55.6	34.5N 26.5E	33KM	5.5	CRETE
SBA EPKP EL	ZNE 01 02 11.2		133	
	ZNE 47 16			
MAY 09 RAO EP	Z 05 13 12			
ES	Z 14 27			
MAY 09 10 00 33.3	13.2S 166.6E	205KM	5.0	NEW HEBRIDES
SBA EP	ZNE 10 10 51.2		65	
MAY 09 15 15 14	15.5S 174.6W	59KM	4.7	TONGA
AFI IP	ZNE 15 15 52	D	3 -0.17	
ES	ZNE 16 17			
ET	ZNE 18 45			
SBA EP	ZNE 15 25 37.5		63	
MAY 09 AFI EP	ZNE 15 38 31		-0.98	
E(T)	ZNE 41 21			
MAY 09 SBA EP	ZNE 16 32 32.0			
MAY 09 16 33 13.1	15.3S 173.9W	33KM	4.2	TONGA
AFI EP	ZNE 16 33 51		2 -0.51	
ET	ZNE 36 39			
MAY 09 AFI IP	ZNE 16 51 10	U	-0.51	
ET	ZNE 54 00			
MAY 09 AFI EP	ZNE 16 59 45		-0.98	
E(T)	ZNE 17 02 40			
MAY 09 18 12 35.2	15.5S 174.0W	33KM	4.3	TONGA
AFI IP	ZNE 18 13 15.8U		3 -0.34	
ES	ZNE 45			
ET	ZNE 16 00			
MAY 09 AFI EP	ZNE 19 51 44			
E(T)	ZNE 54 30			
MAY 09 20 06 18.3	15.4S 175.2W	70KM	4.6	TONGA
AFI IP	Z 20 06 59	D	4 -1.03	
ES	NE 07 36			
ET	ZNE 09 52			
SBA EP	ZNE 20 16 41.5D		63	
MAY 09 AFI EP	Z 20 44 53			
E(T)	ZNE 46 40			
MAY 09 21 13 31.1	42.1S 87.6E	33KM	4.6	SE INDIAN RISE
SBA EP	ZNE 21 21 53		47	
EL	ZNE 36 10			

H M S	EPICENTRE	DEPTH	MAG	DIR DIS LG A/T AZ TZ AN TN AE TE MAG
MAY 09 21 30 41.4	15.1S 174.6W	35KM	4.8	TONGA
AFI IP	ZNE 21 31 20.5D		3 0.27	
ES	NE 49			
ET	ZNE 34 07			
SBA EP	ZN 21 41 09		63	
MAY 10 05 32 26.7	16.5S 167.3E	33KM	4.8	NEW HEBRIDES
SBA EP	ZNE 05 42 43		61	
MAY 09 23 08 23.9	15.1S 174.6W	59KM	4.3	TONGA
AFI IP	ZNE 23 08 59.5D		3 0.17	
ES	ZNE 09 25			
ET	ZNE 11 39			
MAY 10 AFI EP	ZNE 02 50 40.9		-0.92	
ES	ZNE 53 25			
MAY 10 AFI EP	ZNE 03 11 10			
ES	ZNE 13 45			
MAY 10 AFI EP	ZNE 03 36 21			
ES	ZNE 50			
ET	ZNE 39 06			
MAY 10 AFI EP	ZNE 04 14 43		-0.68	
ES	NE 15 14			
ET	ZNE 17 29			
MAY 10 AFI IP	ZNE 06 29 05	U	-0.16	
ES	ZNE 36			
ET	ZNE 31 42			
MAY 10 AFI EP	Z 09 02 30			
E(S)	NE 03 03			
ET	ZNE 05 10			
MAY 10 AFI EP	ZNE 10 05 02		-0.73	
ET	ZNE 07 44			
MAY 10 AFI EP	ZNE 11 18 27			
AT	ZAA AA AA			
MAY 10 RAO EP	Z 13 06 45			
ES	Z 07 03			
AFI EP	Z 13 08 43			
ES	NE 10 05			
ET	ZNE 12 15			
SBA EP	ZNE 13 17 19.2			
MAY 10 AFI IP	ZNE 15 16 19	U	-0.45	
ET	ZNE 19 14			
MAY 10 20 22 23.4	15.3S 173.7W	33KM	4.7	TONGA
AFI IP	Z 20 22 59	D	2 0.17	
ES	NE 23 25			
ET	ZNE 25 29			
MAY 10 AFI EP	ZNE 21 05 15		-0.84	



		ET	ZNE	07 53		
MAY 10	AFI IP	Z	21 59 33,5D	0.13		
	ES	NE	22 00 02			
	ET	ZNE	02 10			
MAY 10	AFI IP	Z	23 10 43,5U	-0.68		
	ES	NE	11 14			
	ET	ZNE	13 15			
MAY 10	AFI EP	Z	23 16 28			
	ES	NE	17 09			
	ET	ZNE	19 06			
MAY 11	AFI IP	Z	01 20 10 D	0.42		
	ES	ZNE	38			
	ET	ZNE	22 48			
MAY 11	AFI IP	ZNE	02 34 48,2D	-0.08		
	ET	ZNE	37 21			
MAY 11	AFI EP	ZNE	03 06 42			
	ET	NE	09 15			
MAY 11	H M S	EPICENTRE	DEPTH	MAG		
	03 49 14.2	56.0S 27.5W	89KM	5.7	SANDWICH IS	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	SBA IP	ZNE	03 57 31,0D	46	-0.96	6,0
MAY 11	AFI EP	ZNE	08 44 45			
	ET	ZNE	47 21			
MAY 11	AFI EP	ZNE	09 55 41	-0.16		
	ET	ZNE	58 13			
MAY 11	AFI IP	ZNE	10 47 49 U	-0.21		
	ES	ZNE	48 15			
	ET	ZNE	50 15			
MAY 11	AFI EP	Z	11 31 21			
	ES	NE	52			
	ET	ZNE	33 55			
MAY 11	SBA EP	ZNE	11 49 40			
MAY 11	H M S	EPICENTRE	DEPTH	MAG		
	14 17 34.1	48:9N 156.2E	13KM	5.8	KURILE IS	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	AFI ES	Z	14 37 42	69		
	ESS	E	42 00			
	ESSS	E	44 00			
	EL	Z	48 30			
	SBA EPKP	ZNE	14 36 38	127		
MAY 11	SBA EPKP	ZNE	14 45 42			
MAY 11	AFI EP	ZNE	14 58 45	-0.93		
	ET	ZNE	15 01 52			
MAY 11	AFI EP	ZNE	18 06 12	-0.77		
	ET	ZNE	09 03			
MAY 11	H M S	EPICENTRE	DEPTH	MAG		
	20 58 19.7	21,8S 176.9W	222KM	4.7	FIJI	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	AFI EP	ZNE	21 00 20	9		
	ES	ZNE	01 52			

MAY 11	AFI IP	ZNE	21 57 04,5U	-0.65	
	ET	ZNE	22 00 05		
MAY 11	SBA EPKP	ZNE	21 58 37 D		
	H M S	EPICENTRE	DEPTH	MAG	
	23 21 47.9	30,7S 179.5W	329KM	4.4	KERMADEC IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	SUV EP	Z	23 24 37	13	
	AFI IP	ZNE	23 25 35 U	18	-0.29
	ES	NE	28 29		5,9
	SBA IP	ZNE	23 29 57,0U	48	-0.93
					5,5
	H M S	EPICENTRE	DEPTH	MAG	
	01 17 04.7	21,3S 179.6W	609KM	4.1	FIJI
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	SUV EP	Z	01 18 29	4	
MAY 12	AFI EP	ZNE	03 08 45	-1.12	
	ES	NE	10 20		
	ET	ZNE	11 14		
MAY 12	AFI EP	ZNE	04 31 49	-1.12	
MAY 12	AFI EP	ZNE	04 34 12	-0.51	
	ET	ZNE	37 10		
MAY 12	SBA EP	ZNE	04 52 11		
	H M S	EPICENTRE	DEPTH	MAG	
	08 16 59.7	20,7S 168.9E	69KM	4.1	LOYALTY IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	SBA EP	Z	08 26 42	57	
MAY 12	SBA EP	ZNE	09 42 47	-1.41	
	H M S	EPICENTRE	DEPTH	MAG	
	11 49 41.3	65.4S 179.7W	33KM		S PACIFIC CORDILLERA
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	SBA EP	ZNE	11 52 45,0U	13	
	ES	ZNE	55 35		
	EL	ZNE	57 00		
	AFI EL	Z	12 13 12	52	
MAY 12	SBA EP	ZNE	12 47 14	-1.23	
MAY 12	RAO EP	Z	15 25 43		
	ES	Z	26 07		
MAY 12	AFI EP	Z	15 53 19		
	ES	NE	54 25		
MAY 12	AFI EP	ZNE	16 03 40	-0.68	
	ET	ZNE	06 37		
MAY 13	AFI IP	ZNE	03 11 41 U	-0.21	
	ET	ZNE	14 14		
MAY 13	SUV EP	Z	04 22 48		
	E(+PP)	Z	23 17		
MAY 13	SBA EP	ZNE	04 41 31,5		



	H	M	S	EPICENTRE	DEPTH	MAG									
MAY 13	05	02	14.7	7.2S 146.3E	177KM	4.8	NEW GUINEA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				ZNE	05 11 50		71								
MAY 13	AFI	EP		Z	06 55 32										
		ES		NE			52								
MAY 13	AFI	EP		ZNE	10 21 15										
		ET		ZNE			24 16								
MAY 13	10	50	49.7	15.8S 174.9W	70KM	4.3	TONGA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				ZNE	10 51 30		4								
				ZNE			54 37								
MAY 13	12	49	03.3	15.7S 175.9W	178KM	4.2	TONGA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				Z	12 49 32.5D		4 -0.60								
				E			50 19								
				ET			54 39								
MAY 13	AFI	EP		Z	13 12 12										
		ES		E			13 02								
		ET		ZNE			15 16								
MAY 13	AFI	IP		Z	19 08 53.7D		0.09								
		ET		ZNE			11 48								
MAY 13	19	29	47.0	19.6S 175.8W	244KM	4.2	TONGA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				ZNE	19 31 15		7								
				NE			32 23								
				E(T)			35 48								
MAY 14	09	04	45.9	19.7S 177.6W	392KM	4.1	FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				ZNE	09 06 42		8								
				ZNE			08 22								
MAY 14	AFI	EP		Z	10 48 42										
		ES		NE			50 16								
MAY 14	AFI	EP		ZNE	16 17 44										
		ES		ZNE			18 54								
MAY 14	16	35	09.4	19.5S 177.7W	322KM	4.3	FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				Z	16 37 03		8								
				NE			38 25								
MAY 14	17	03	56.5	34.2N 138.9E	33KM	4.9	HONSHU JAPAN								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				Z	17 14 45		67								
				ZE			30 42								
MAY 14	19	37	30.9	15.5S 175.1W	33KM	4.7	TONGA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				ZNE	19 38 17		4 -0.38								

	ES	NE	39 00												
	ET	NE	41 20												
	SBA	EP	Z	19 46 57			63								
MAY 15	AFI	EP	ZNE	08 11 01											
		ES	ZNE				32								
MAY 15	AFI	EP	ZNE	12 46 52											
		ES	ZNE				47 12								
MAY 15	14	46	06.5	51.5N 178.4W	31KM	5.8	ALEUTIAN IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				Z	14 56 54		65								
				ZE			15 05 23								
				ESS			09 22								
				ESSS			12 32								
				EL			15 22								
	SBA	EPKP	ZNE	15 05 12	U	129									
		EPKS	ZNE				08 30								
		EL	ZNE				49 25								
MAY 15	AFI	EP	Z	15 31 23											
		ES	NE				32 26								
MAY 16	02	46	42.4	6.9S 129.4W	212KM	5.9	BANDA SEA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				Z	02 56 20		42								
				ZNE			57 03								
	SBA	EP	ZNE	02 57 53			78								
		EPP	Z				03 00 38								
MAY 16	SBA	EP	ZNE	08 00 03.5											
		ES	ZNE				38								
MAY 16	AFI	EP	Z	13 17 50											
MAY 16	14	51	00.6	15.8S 174.1W	117KM	4.2	TONGA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				ZNE	14 51 47.5U		3								
				ZNE			52 19								
MAY 17	AFI	IP	Z	07 04 12.6U			-0.57								
		E(S)	NE				05 24								
MAY 17	AFI	IP	ZNE	09 06 27	U										
		ES	ZNE				07 00								
MAY 17	16	58	17.0	44.0S 75.2W	33KM	5.9	SOUTH CHILE								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				ZNE	17 07 11.0U		53 -0.98								
				ZNE			08 43								
MAY 17	AFI	EP	Z	21 31 15											
		ES	NE				32 02								
MAY 17	AFI	EP	Z	22 10 29											
		ES	NE				11 20								
		ET	ZNE				15 12								
MAY 18	23	58	20.5	29.5S 176.7W	33KM		KERMADEC IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN	TN	AE	TE	MAG			
				RAO	IP	Z	23 58 39.3D								
							1								



		ES	Z	51						
	AFI	EP	Z	24 02 07	16					
		ES	NE	04 42						
		ET	ZNE	17 50						
	SBA	EP	ZNE	24 07 09,0	49					
		H M S		EPICENTRE	DEPTH	MAG				
MAY 18	03 41 17.9	20.7S	174.4W	33KM	4.1	TONGA				
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG	
	AFI	EP	Z	03 43 02	7					
		ES	NE	44 12						
		H M S		EPICENTRE	DEPTH	MAG				
MAY 19	07 06 26.8	54.1N	164.1E	29KM	5.8	UNIMAK IS				
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG	
	AFI	ES	ZE	07 26 20	71					
		ESS	ZE	30 15						
		ESSS	ZE	34 00						
		EL	ZN	37 00						
	SBA	EPP	ZNE	07 29 03,5D	132					
		H M S		EPICENTRE	DEPTH	MAG				
MAY 19	11 56 23.8	29.7S	177.0W	26KM	4.3	KERMADEC IS				
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG	
	RAO	IP	Z	11 56 40,4D	1					
		ES	Z	57 03						
	AFI	EP	Z	12 00 25	16					
		ES	NE	02 55						
		ET	ZNE	15 15						
	SBA	EP	ZNE	12 05 11	49					
MAY 19	AFI	EP	ZNE	19 53 38						
		ES	ZNE	54 14						
		H M S		EPICENTRE	DEPTH	MAG				
MAY 19	23 08 04.8	19.4S	168.6E	212KM	4.9	NEW HEBRIDES				
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG	
	SBA	IP	ZNE	23 17 54,2D	58					
MAY 20	AFI	IP	ZNE	07 30 35,6U	0.04					
		ES	ZNE	31 54						
		ET	NE	33 32						
		H M S		EPICENTRE	DEPTH	MAG				
MAY 20	09 14 49.2	13.9N	146.1E	66KM	6.0	S OF MARIANA IS				
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG	
	AFI	EP	Z	09 23 34	50					
		ES	ZE	30 44						
		EL	Z	37 00						
		EL	NE	39 19						
	SBA	EP	ZNE	09 28 54,2D	92	-1.23	6.3			
MAY 20	SBA	EP	ZNE	11 01 20	-1.23					
		H M S		EPICENTRE	DEPTH	MAG				
MAY 21	08 08 30.6	24.3S	179.8W	519KM	5.1	S OF FIJI				
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG	
	RAO	EP	Z	08 10 00	5					
		ES	Z	11 09						
	SUV	EP	Z	08 10 11	6					
	AFI	EP	Z	08 11 14	13					
		ES	NE	13 25						
	SBA	IP	ZN	08 19 09,5D	54					

		H M S	EPICENTRE	DEPTH	MAG						
MAY 21	10 50 59.8	20.9S	175.3W	75KM	5.1	TONGA					
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG		
	SUV	EP	Z	10 52 42	6						
	AFI	EP	ZNE	10 52 45	8						
		ES	ZNE	54 03							
		ET	ZNE	58 10							
	SBA	EP	Z	11 00 46,0D	58						
MAY 21	AFI	EP	ZNE	16 03 19							
		ES	ZNE	39							
		H M S		EPICENTRE	DEPTH	MAG					
MAY 21	22 39 14.8	19.1S	169.5E	238KM	5.0	NEW HEBRIDES					
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG		
	SUV	EP	Z	22 41 17	9						
	SBA	EP	Z	22 48 50,5	59						
MAY 21	AFI	EP	Z	23 43 34							
		ES	NE	44 15							
	SBA	EP	Z	24 03 09,5							
		H M S		EPICENTRE	DEPTH	MAG					
MAY 21	23 53 50.7	18.0S	178.4W	555KM	5.1	FIJI					
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG		
	AFI	EP	ZNE	23 55 45	8						
		ES	ZNE	57 14							
MAY 22	AFI	IP	ZNE	01 30 37	D	-0.52					
		ES	ZNE	31 31							
		H M S		EPICENTRE	DEPTH	MAG					
MAY 22	02 52 12.7	7.4S	155.5W	83KM	5.6	SOLOMON IS					
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG		
	AFI	EP	Z	02 58 37	17	-0.54	5.6				
		EL	ZE	07 24							
	SBA	EP	ZN	03 03 22,5D	73						
MAY 22	AFI	E(P)	Z	09 16 07							
		ES	NE	17 41							
MAY 22	AFI	EP	Z	12 22 18							
		ES	NE	50							
		H M S		EPICENTRE	DEPTH	MAG					
MAY 23	00 02 49.5	7.4S	155.8W	111KM	5.4	SOLOMON IS					
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG		
	AFI	EP	ZNE	00 09 11	17						
		H M S		EPICENTRE	DEPTH	MAG					
MAY 23	02 14 17.1	20.4S	173.6W	33KM	4.6	TONGA					
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG		
	AFI	EP	Z	02 15 45	7						
		ES	NE	16 48							
		ET	ZNE	22 05							
		H M S		EPICENTRE	DEPTH	MAG					
MAY 23	05 58 54.7	16.0S	174.5W	33KM	4.8	TONGA					
		H M S		DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG		
	AFI	IP	ZNE	05 59 40	D	3	0.43				
		ES	NE	06 00 11							
		ET	ZNE	02 38							
	SBA	EP	ZN	06 09 21,5D	63						



	H	M	S	EPICENTRE	DEPTH	MAG									
MAY 23	07	47	28.3	16.6S 173.2E	33KM	4.8	TONGA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		ZNE 07 48 11		3									
		ES		ZNE 51 19											
	SBA	EP		ZN 07 57 47		62									
MAY 23	14	22	32.5	13.8N 146.4E	39KM	5.9	S OF MARIANA IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 14 31 45		50									
		ES		ZE 38 30											
		EL		Z 44 49											
		EL		E 47 00											
	SBA	EP		ZNE 14 35 42		92									
MAY 23	SBA	EP		ZNE 18 11 59											
MAY 23	AFI	EP		Z 18 32 34											
MAY 23	AFI	IP		Z 22 34 13											
		ES		ZNE 38											
MAY 24	AFI	IP		ZNE 05 25 29											
		IS		ZNE 49											
MAY 24	07	19	31.8	54.3S 2.8E	33KM	5.1	BOUVET IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP		ZNE 07 28 16.0D		48									
		ES		N 35 16						1 15				5.6	
		EL		Z 42 17											
MAY 24	15	29	12.4	25.6S 177.4W	112KM	5.3	S OF FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	RAO	EP		Z 15 31 12		4									
		E		Z 25											
		E		Z 41											
		ES		Z 59											
	SUV	EP		Z 15 31 15		8									
	AFI	EP		ZNE 15 32 03		13									
		ES		ZNE 34 10											
		ET		ZNE 41 00											
	SBA	EP		ZNE 15 38 20.5		53									
MAY 24	20	51	03.0	2.3S 77.9W	33KM	4.3	PERU-ECUADOR BORDER								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		ZNE 21 00 02		93	-1.08								6.5
MAY 24	SBA	IP		ZNE 23 08 24.9D		-1.41									
MAY 25	AFI	EP		Z 07 08 29											
		ES		NE 10 11											
MAY 25	08	28	58.6	6.4S 131.1E	39KM	5.8	TANIMBAR IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 08 38 44		57									
	SBA	EP		NE 08 40 32		74									
MAY 25	AFI	EP		Z 11 25 03											
		ES		NE 40											

	H	M	S	EPICENTRE	DEPTH	MAG									
MAY 25	12	07	04.8	21.6S 169.9E	35KM	5.5	LOYALTY IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SUV	EP		Z 12 09 17		9									
	AFI	EP		ZNE 12 11 25		19	-0.11								6.1
		E*PP		Z 37											
		ES		ZNE 14 04											
		EL		Z 15 25											
	SBA	EP		NE 12 16 46		56									
MAY 25	13	20	56.2	52.9S 160.0E	33KM	6.6	MACQUARIE IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP		ZNE 13 26 23		25		9 7							6.5
		EPP		NE 27 34						2 10					6.1
		ES		ZNE 31 10.5											
		ELQ		ZNE 32 45				32 27							
		ELR		ZNE 33 50				54 15							
	AFI	EP		ZNE 13 29 08		45	-0.11								6.7
		ES		ZE 35 32											
		EL		Z 38 36											
MAY 25	13	59	04.8	26.1S 180.0W	432KM	4.3	S OF FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 14 02 11		14	-0.86								
		ES		NE 04 37											
MAY 25	AFI	EP		Z 15 12 44											
		ES		NE 13 16											
		ET		ZNE 15 44											
MAY 26	00	21	51.2	17.5S 178.6W	514KM	4.4	FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 00 23 44		7									
		ES		NE 25 22											
MAY 26	AFI	EP		Z 11 19 41											
		IS		NE 20 27											
MAY 26	11	58	56.3	30.5S 177.6W	33KM	4.3	KERMADEC IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	RAO	IP		Z 11 59 17.0U		1									
		ES		Z 33											
MAY 26	12	21	47.9	17.6S 176.7W	33KM	4.6	FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 12 23 12		6									
		ES		E 24 20											
	SBA	EP		Z 12 32 05		61									
MAY 26	12	26	23.8	25.5S 179.8W	455KM	5.0	S OF FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	RAO	IP		Z 12 27 41.8D		4									
		ES		Z 28 40											
	SUV	P		Z 12 28 17		7									
	AFI	EP		Z 12 29 19		14	-0.51								
		ES		ZNE 31 40											
	SBA	IP		ZNE 12 34 57.5		53	-1.22								5.2
MAY 26	SBA	EP		ZNE 14 17 07											



H M S		EPICENTRE	DEPTH	MAG							
MAY 26	18 30 07.4	21:2S 176.9W	230KM	5.4	FIJI						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SUV	EP	Z 18 31 32		5							
AFI	EP	ZNE 18 32 07		9							
	E	ZNE 21									
	ES	ZNE 33 33									
SBA	IP	ZNE 18 39 33,5D		57							
H M S		EPICENTRE	DEPTH	MAG							
MAY 26	22 02 16.5	15:1S 173.4W	33KM	4.0	TONGA						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AFI	IP	Z 22 02 48		2							
	ES	ZNE 03 09									
H M S		EPICENTRE	DEPTH	MAG							
MAY 26	23 12 52.9	25:4S 179.7E	525KM	4.6	S OF FIJI						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SUV	EP	Z 23 14 41		7							
AFI	EP	ZNE 23 15 45		14	-0.68						
	ES	ZNE 18 05									
MAY 27	AFI	EP	Z 01 48 02		-0.98						
		E(S)	ZE 49 23								
MAY 27	AFI	EP	ZE 05 58 01		-0.98						
MAY 27	AFI	EP	ZNE 20 13 58								
		ES	ZNE 14 13								
MAY 27	RAO	EP	Z 23 14 14								
		ES	Z 15 17								
H M S		EPICENTRE	DEPTH	MAG							
MAY 28	02 09 53.4	22:2S 179.6W	600KM	4.9	S OF FIJI						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SUV	EP	Z 02 11 21		4							
RAO	EP	Z 02 11 43		7							
	ES	Z 2 13 13									
AFI	EP	ZNE 0 1 19		11							
	ES	ZNE 14 14									
SBA	EP	Z 02 18 40		56							
MAY 28	AFI	EP	Z 04 06 27								
		IS	NE 54								
		ET	ZNE 08 31								
MAY 28	AFI	EP	ZNE 08 19 36								
		ES	ZNE 20 24								
H M S		EPICENTRE	DEPTH	MAG							
MAY 28	19 58 07.9	15:3S 174.9E	246KM	4.1	TONGA						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AFI	IP	ZE 19 59 04,6D		13	-3.93						
	ES	ZNE 46									
H M S		EPICENTRE	DEPTH	MAG							
MAY 28	22 23 45.3	4:4S 153.4E	122KM		NEW IRELAND						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SBA	IP	ZNE 22 35 08		D	74						
MAY 28	AFI	IP	Z 23 32 58								
		ES	ZNE 33 23								

H M S		EPICENTRE	DEPTH	MAG							
MAY 29	08 30 29.6	15:0S 172.8W	33KM	4.4	SAMOA						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AFI	IP	ZNE 08 30 54,1U		1							
		ES	ZNE 31 11								
MAY 29	AFI	IP	Z 09 18 54								
		ES	ZNE 19 14								
H M S		EPICENTRE	DEPTH	MAG							
MAY 29	13 44 32.9	21:6S 178.7W	516KM	5.2	FIJI						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SUV	EP	Z 13 45 55		4							
	ES	Z 47 05									
RAO	EP	Z 13 46 26		8							
	ES	Z 47 55									
AFI	EP	ZNE 13 46 45		10							
	ES	ZNE 48 30									
SBA	EP	ZNE 13 53 31		57	-0.86						
MAY 30	SBA	EP	ZNE 02 31 59								
MAY 30	AFI	EP	Z 03 57 10		-0.48						
		ES	ZNE 58 58								
MAY 30	SBA	EP	ZNE 10 03 22								
MAY 30	AFI	EP	ZNE 14 17 08								
		ES	ZNE 28								
H M S		EPICENTRE	DEPTH	MAG							
MAY 30	19 15 30.7	16:8S 177.4W	380KM	4.2	FIJI						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AFI	EP	Z 19 17 05		6							
		ES	Z 18 29								
H M S		EPICENTRE	DEPTH	MAG							
MAY 30	19 20 36.2	15:2S 174.1W	74KM	4.6	TONGA						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AFI	IP	Z 19 21 15,9D		3							
		S	ZNE 41								
MAY 30	AFI	EP	ZNE 23 30 15								
		ES	ZNE 46								
MAY 31	AFI	EP	Z 15 14 33								
		ES	NE 58								
H M S		EPICENTRE	DEPTH	MAG							
JUN 01	10 14 43.2	13:8S 166.6E	48KM	5.5	NEW HEBRIDES						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AFI	EP	Z 10 19 25		21	-0.38						
	E	E 21 30									
	ES	ZE 23 24									
	EL	Z 24 48									
	EL	E 25 12									
RAR	EP	Z 10 21 17		33							
SBA	IP	ZNE 10 25 13,1U		64	-1.20						
H M S		EPICENTRE	DEPTH	MAG							
JUN 01	11 47 33.1	23:4S 174.9W	24KM	5.9	TONGA						
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SUV	EP	Z 11 49 36		8							
RAO	EP	Z 11 49 06		6							
	ES	Z 50 19									
AFI	EP	ZNE 11 49 50		10							



		ES	ZNE	51	30						
		EL	E	52	00						
		EL	ZN		32	20 9 31 8					
		ET	ZNE	59	04						
RAR	IP	ZNE	11	50	46	U	14	0.17			
		ES	ZNE	53	05						
		EL	Z	54	20						
SBA	IP	ZNE	11	57	50.00	55	-0.63	6.5			
		ES	NE	12	05	02					
		ESS	NE	08	54						
		ELQ	ZNE	13	13						
		ELR	Z	15	15						
H M S		EPICENTRE		DEPTH		MAG					
JUN 01	12 34 33.5	15.2S 167.2E		93KM		5.6 NEW HEBRIDES					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		SUV	EP	Z	12 37 19	11					
		AFI	EP	Z	12 39 05	20	-0.38	5.8			
		RAR	EP	Z	12 40 51	32					
		SBA	IP	ZNE	12 44 50.10	63	-0.77	6.3			
JUN 01	AFI EP	Z	14 53 57								
		E(S)	ZNE	57	26						
H M S		EPICENTRE		DEPTH		MAG					
JUN 01	22 52 01.9	56.4S 28.3W		33KM		S SANDWICH IS					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		SBA	IP	ZNE	23 00 20.00	46					
H M S		EPICENTRE		DEPTH		MAG					
JUN 02	03 14 17.3	23.7S 174.9W		45KM		4.5 TONGA					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		AFI	EP	Z	03 16 19	10					
		ES	ZNE	18	14						
		ET	ZNE	25	53						
		RAR	EP	ZNE	03 17 23	14					
H M S		EPICENTRE		DEPTH		MAG					
JUN 02	03 27 53.3	51.1N 176.0E		41KM		6.0 ALEUTIAN IS					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		SBA	IPKP	ZNE	03 46 55.20	129					
H M S		EPICENTRE		DEPTH		MAG					
JUN 02	07 08 08.4	0.0N 123.2E		185KM		5.8 N CELEBES					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		AFI	EP	Z	07 18 35	66					
		SBA	IP	ZNE	07 20 05.9	81					
H M S		EPICENTRE		DEPTH		MAG					
JUN 02	07 42 09.3	36.8S 179.6W		33KM		E OF NORTH IS NZ					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		RAO	EP	Z	07 44 00	8					
		ES	Z	45	13						
		AFI	EP	Z	07 47 19	24					
JUN 02	AFI IP	Z	15 29 31								
		IS	ZNE	52							
H M S		EPICENTRE		DEPTH		MAG					
JUN 02	16 53 56.6	18.6S 173.4W		33KM		5.0 TONGA					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		AFI	EP	Z	16 55 07	5					
		ES	ZNE	56	00						
		EL	E	13	22 12						
		EL	Z	23	7 10						
		EL	N	50	17 9						
		ET	ZNE	59	45						

RAR	EP	ZNE	16	56	43	13					
		E	E	57	22						
		EL	ZNE	59	22						
SBA	EP	ZNE	17	04	03	60					
JUN 03	SBA P	ZNE	17	52	44						
H M S		EPICENTRE		DEPTH		MAG					
JUN 04	08 35 15.4	14.8S 171.2E		660KM		4.6 NEW HEBRIDES					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		SUV	EP	Z	08 37 29	8					
		RAR	EP	Z	08 40 21	28					
		SBA	IP	ZNE	08 44 43.20	63					
JUN 04	SBA IP	ZNE	14	45	01.20						
H M S		EPICENTRE		DEPTH		MAG					
JUN 04	14 51 25.2	23.6S 174.8W		12KM		4.6 TONGA					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		RAR	EP	ZNE	14 54 45	14					
		E(S)	NE	57	15						
H M S		EPICENTRE		DEPTH		MAG					
JUN 04	21 38 16.3	29.9S 178.8W		214KM		4.2 KERMADEC IS					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		RAO	EP	Z	21 38 43	1					
		ES	Z	39	07						
H M S		EPICENTRE		DEPTH		MAG					
JUN 04	23 48 17.8	46.5N 152.5E		27KM		5.9 KURILE IS					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		SBA	PKP	ZNE	24 07 14.70	124					
		E(SKKS)	N	26	09						
H M S		EPICENTRE		DEPTH		MAG					
JUN 06	01 45 45.3	14.9S 167.8E		37KM		5.5 NEW HEBRIDES					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		SUV	EP	Z	01 48 18	11					
		SBA	IP	ZNE	01 56 09.70	63					
H M S		EPICENTRE		DEPTH		MAG					
JUN 06	07 46 16.2	36.3N 71.2E		225KM		6.3 AFGHANISTAN-USSR BORDER					
		H M S		DIR DIS		LG=A/T AZ TZ AN TN AE TE MAG					
		SBA	EPKP	ZNE	08 04 47	126					
		IPKP	ZNE	52	20						
		I-PPKP	ZNE	05	50.0						
		PP	ZE	06	49						
		SKP	ZE	08	04						
		ESKS	E	11	45						
		PS	E	16	35						
		EPPS	ZNE	18	07						
		E	ZNE	19	32						
		E(SCSPKP)	Z	20	33						
		ESKKS	E	21	50						
		ESS	NE	23	56						
		ELQ	N	39	08						
		ELR	Z	45	22						
RAR	EPKP	Z	08 05 12	133							
		E	Z	07	37						
		E(PP)	ZNE	08	13						
		E(PKS)	NE	09	36						
		EPPP	Z	11	16						
		E(SKS)	N	12	53						
		EPS	NE	18	40						
		EPPS	ZNE	20	55						
		EL	E	45							











H	M	S	EPICENTRE	DEPTH	MAG							
			H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
JUN 16	08	31	22:2S 179.4W	568KM	4.5	S OF FIJI						
	SUV	EP	Z 08 33 06		5							
	AFI	EP	Z 08 34 02		11							
		ES	NE 35 53									
JUN 16	10	45	14:9S 173.2W	33KM	4.5	SAMOA						
	AFI	IP	ZNE 10 45 51.9D		2							
		IS	ZNE 46 10									
	RAR	EP	Z 10 48 43		14							
		ET	ZNE 11 03 03									
JUN 16	AFI	EP	Z 14 09 05									
		ES	NE 10 05									
JUN 16	14	31	10:2S 160.9E	38KM	5.1	SOLOMON IS						
	AFI	ES	ZN 14 42 00		27							
		EL	N 54									
		EL	ZE 43 24									
	SBA	EP	ZNE 14 42 24		68							
JUN 16	14	49	17:6S 178.9W	473KM	4.1	FIJI						
	SUV	EP	Z 14 51 14		3							
	AFI	EP	Z 14 51 52		8							
		ES	NE 53 26									
JUN 16	19	27	18:9S 177.6W	548KM	4.3	FIJI						
	AFI	EP	Z 19 29 47		7							
		ES	NE 31 13									
JUN 16	AFI	EP	Z 21 57 26									
		ES	NE 58 03									
JUN 16	22	30	26:2S 70.8E	33KM	5.1	S INDIAN OCEAN						
	SBA	EP	ZNE 22 40 48		66							
JUN 17	00	45	10:3S 160.8E	33KM	5.5	SOLOMON IS						
	AFI	ES	NE 00 56 30		27							
		EL	Z 57 06									
	SBA	P	ZNE 00 55 58		68							
JUN 17	06	50	18:6S 178.2W	479KM	4.4	FIJI						
	AFI	EP	Z 06 52 19		8							
		ES	NE 53 47									
JUN 17	AFI	IP	Z 07 19 40.4D									
		ES	NE 20 13									

H	M	S	EPICENTRE	DEPTH	MAG							
			H M S	DIR DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG
JUN 17	10	04	21:9S 178.8W	544KM	4.8	FIJI						
	SUV	EP	Z 10 05 29		5							
JUN 17	13	20	22:0S 179.8E	539KM	4.9	S OF FIJI						
	SUV	P	Z 13 21 58		4							
	AFI	IP	Z 13 23 01.2D		11							
		ES	NE 25 02									
	SBA	IP	ZNE 13 29 20.8U		56							
JUN 17	15	06	6:2S 146.7E	77KM	5.4	E NEW GUINEA						
	SBA	P	ZNE 15 17 47		72							
JUN 17	22	26	10:2S 161.0E	33KM	5.6	SOLOMON IS						
	AFI	EP	Z 22 31 28		27							
		ES	ZN 36 46									
		EL	ZNE 38 48									
		P	ZNE 37 00									
JUN 18	AFI	E(S)	ZNE 12 49 28									
		EL	ZNE 53 36									
JUN 18	15	46	18:1S 178.3W	586KM	4.2	FIJI						
	AFI	EP	Z 15 48 13		8							
		ES	NE 49 14									
JUN 18	AFI	EP	ZNE 16 12 40									
		ES	ZNE 13 12									
JUN 18	AFI	EP	Z 16 39 04									
		ES	ZNE 21									
JUN 18	19	15	3:3S 143.2E	17KM	5.2	NEAR N NEW GUINEA						
	AFI	ES	ZN 19 30 54		46							
		ESS	N 34 00									
		ESSS	Z 35 00									
		EL	ZE 37 18									
	SBA	P	ZNE 19 27 08		76							
JUN 18	21	54	18:4S 175.6W	282KM	4.5	TONGA						
	AFI	EP	Z 21 56 06		6							
		ES	ZNE 57 06									
	RAR	EP	Z 21 58 07		15							
JUN 19	07	52	8:8S 149.5E	54KM	5.4	E NEW GUINEA						
	AFI	EP	Z 07 59 45		38	-0.19						6.6
		ES	ZE 08 05 42									
		EL	N 08 30									
		EL	ZE 09 42									
	RAR	EP?	Z 08 01 19		50							
	SBA	EP	Z 08 03 26		70							



		I	ZNE	35,50					
JUN 19	AFI EP ES		ZNE 10 15 32						
			ZNE 50						
		H M S	EPICENTRE	DEPTH	MAG				
JUN 20	04 45 33.6	11:1S 166.9E	121KM 4.3	SANTA CRUZ IS					
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	SBA EP	ZNE 04 56 14	67						
		H M S	EPICENTRE	DEPTH	MAG				
JUN 20	08 52 02.9	16:2S 173.1W	33KM 4.8	TONGA					
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI EP	Z 08 52 40	3						
	ES	NE 53 14							
	ET	ZNE 55 24							
	RAR EP?	Z 08 55 17	14						
	E	Z 26							
	ES	ZNE 57 53							
	EL	ZNE 58		18	7	25	7	26	8
		H M S	EPICENTRE	DEPTH	MAG				
JUN 20	19 08 57.1	20:5S 174.1W	33KM 4.5	TONGA					
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI EP	Z 19 10 35	7						
	ES	NE 11 55							
	EL	ZNE 12 15							
	ET	ZNE 17 43							
	RAR EP	ZNE 19 11 55	13						
	ES	ZNE 14 05							
	ELQ	NE 20							
	ELR	ZNE 15 19		7	7	31	9	14	7
	SBA EP	ZNE 19 18 50	58						
		H M S	EPICENTRE	DEPTH	MAG				
JUN 20	22 00 08.3	10:8S 161.4E	33KM 5.0	SOLOMON IS					
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	SBA EP	ZNE 22 11 05	67						
	AFI ES	ZN 22 11 30	26						
	EL	E 12 15							
		H M S	EPICENTRE	DEPTH	MAG				
JUN 20	AFI EP ES ET	ZNE 22 09 20							
		ZNE 40							
		ZNE 11 19							
		H M S	EPICENTRE	DEPTH	MAG				
JUN 21	00 43 13.5	10:9S 165.3E	25KM 5.3	SANTA CRUZ IS					
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	SUV EP	Z 00 46 48	15						
	AFI EP	Z 00 48 13	23						
	ES	ZNE 92 15							
	EL	ZE 54 34							
	RAR ES	ZN 00 55 43	35						
	ELQ	N 57 44							
	ELR	ZNE 58 35							
	SBA EP	ZNE 00 54 06	67						
	I	ZNE 07,4							
	EL	Z 01 11 08							
		H M S	EPICENTRE	DEPTH	MAG				
JUN 21	07 11 54.3	20:2S 174.3W	33KM 4.8	TONGA					
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI EP	Z 07 13 27	7						
	ES	NE 14 29							
	EL	ZNE 15 20							
	ET	ZNE 20 07							
	RAR EP	ZNE 07 14 50	14						

		ES	N	17 16						
		ES	ZE	29						
		EL	ZNE	18	7	8	29	7	20	8
		H M S	EPICENTRE	DEPTH	MAG					
JUN 21	11 27 53.3	20:3S 177.0W	251KM 3.8	FIJI						
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	Z 11 29 48	8							
	ES	NE 31 09								
		H M S	EPICENTRE	DEPTH	MAG					
JUN 21	12 59 00.1	57:9S 25.7W	15KM 5.4	S SANDWICH IS						
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA IP	ZNE 13 07 11,9U	44							
	ES	ZN 12 42								
		H M S	EPICENTRE	DEPTH	MAG					
JUN 21	AFI EP	Z 13 18 32								
	ES	NE 19 00								
		H M S	EPICENTRE	DEPTH	MAG					
JUN 21	13 32 48.8	5:2S 144.6E	42KM 5.5	NEW GUINEA						
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EP	ZNE 13 45 20	74							
		H M S	EPICENTRE	DEPTH	MAG					
JUN 21	19 20 27.1	11:9S 166.2E	68KM 5.5	SANTA CRUZ IS						
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SUV EP	Z 19 23 44	13							
	SBA IP	ZNE 19 31 07,6D	66							
		H M S	EPICENTRE	DEPTH	MAG					
JUN 21	23 37 31.3	56:0S 27.8W	112KM 5.1	S SANDWICH IS						
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA IP	ZNE 23 45 46,9D	46 -1.07							
		H M S	EPICENTRE	DEPTH	MAG					
JUN 22	01 49 52.8	17:5S 167.2E	13KM 5.1	NEW HEBRIDES						
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	Z 01 54 32	21							
	ES	ZN 59 12								
	EL	ZE 02 00 12								
	SBA EP	ZNE 02 00 12	60							
		H M S	EPICENTRE	DEPTH	MAG					
JUN 22	02 00 23.3	23:9S 179.7E	649KM 4.1	S OF FIJI						
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	Z 02 03 01	13							
	ES	NE 05 03								
		H M S	EPICENTRE	DEPTH	MAG					
JUN 22	07 11 00.8	14:7N 92.1W	87KM 5.1	NEAR CHIAPAS, MEXICO						
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI ES	E 07 35 30	84							
	EL	Z 49 30								
		H M S	EPICENTRE	DEPTH	MAG					
JUN 22	RAO E(P) E(S)	Z 11 10 14								
		Z 12 12								
		H M S	EPICENTRE	DEPTH	MAG					
JUN 22	AFI EP	ZNE 13 25 02								
	ES	ZNE 20								
		H M S	EPICENTRE	DEPTH	MAG					
JUN 22	AFI EP	ZNE 16 08 11								
	ES	ZNE 27								



H M S		EPICENTRE		DEPTH MAG								
JUN 22 20 29 03.6		7.2S 124.6E		507KM 6.1		BANDA SEA						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
SUV	EP	Z	20 37 38		53							
	E	Z	42 11									
	EL	Z	44									
AFI	EP	ZNE	20 38 29		63							
	EPCP	Z	35									
	E*PP	ZNE	40 29									
	EPP	ZE	41 12									
	ES	ZN	46 22									
	E	E	57									
	E	N	47 56									
	ESS	NE	49 50									
	E	Z	50 00									
	ESSS	ZN	53 18									
SBA	IP	ZNE	20 39 47.2D		74		0.22				6.8	
	S	ZNE	48 44					47	6	23	9 7.1	
RAR	P	ZNE	20 39 43.8		74		0.32				6.9	
	PCP	ZNE	53									
	E(*PP)	Z	41 42									
	EPP	ZNE	42 19									
	ES	ZNE	48 26					25	13		6.7	
	E	E	22 51 18									
	ESS	N	53 10									
H M S		EPICENTRE		DEPTH MAG								
JUN 22 20 29 03.6		7.2S 124.6E		507KM 6.1		BANDA SEA						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
RAO	E(P)	Z	20 38 13		58							
	E	Z	40 33									
JUN 23	AFI	EP	ZNE	02 32 04								
		ES	ZNE	24								
JUN 23	SUV	EP	Z	07 28 49								
	AFI	EP	Z	07 29 30								
		ES	NE	31 02								
JUN 23	RAO	EP	Z	18 02 44.8D								
H M S		EPICENTRE		DEPTH MAG								
JUN 24 08 17 49.1		26.7S 177.34		146KM 5.3		S OF FIJI						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
RAO	EP	Z	08 18 32		3							
	E	Z	47									
	ES	Z	19 04									
	AFI	EP	ZNE	08 20 52		14						
		ES	ZNE	23 11								
		ET	ZNE	31 09								
	RAR	EP	ZNE	08 21 37		17						
		ES	ZNE	24 25.5								
		ET	ZNE	36 50								
	SBA	IP	ZNE	08 26 45.1U		52		-0.68			6.2	
JUN 24	AFI	IP	Z	10 06 29								
JUN 24	AFI	IP	ZNE	15 34 32		D						
		ES	ZNE	59								
H M S		EPICENTRE		DEPTH MAG								
JUN 25 18 38 35.7		5.0S 151.4E		127KM 5.6		NEW BRITAIN						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
AFI	EP	Z	18 45 37		37							
JUN 26	AFI	EP	Z	04 29 42								

H M S		EPICENTRE		DEPTH MAG								
JUN 26 06 49 17.6		21.2S 174.3W		33KM 5.0		TONGA						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
AFI	EP	Z	06 51 02		8							
	ES	NE	52 20									
	EL	ZNE	53 00									
	ET	ZNE	58 18									
RAO	EP	Z	06 52 58		9							
RAR	EP	ZNE	06 52 15		14							
	ES	ZNE	55 30									
	EL	ZNE	53									
SBA	EP	ZNE	06 59 07		57			9	9	25	9 15 9	
JUN 26	SBA	IP	ZNE	08 14 01.0D							-0.98	
JUN 26	AFI	EP	Z	23 32 35								
	ES	ZNE	54									
JUN 26	AFI	EP	ZNE	23 40 07								
	ES	ZNE	25									
H M S		EPICENTRE		DEPTH MAG								
JUN 27 06 28 05.2		21.4S 170.0E		43KM 4.9		LOYALTY IS						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
AFI	EP	Z	06 32 35		19							
JUN 27	AFI	EP	Z	08 14 49								
	ES	ZNE	15 25									
H M S		EPICENTRE		DEPTH MAG								
JUN 27 08 38 45.8		22.7S 175.8W		60KM 5.3		TONGA						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
SUV	EP	Z	08 40 34		7							
RAO	EP	Z	08 40 25		7							
	ES	Z	41 40									
	AFI	EP	Z	08 40 54		10						
	ES	ZNE	42 29									
	EL	ZNE	42									
	ET	ZNE	48 07									
	RAR	EP	ZNE	08 42 05		15						
	ES	ZNE	31									
	EL	ZE	45 13									
	ET	ZNE	56 40									
SBA	IP	ZNE	08 48 21.3U		56							
H M S		EPICENTRE		DEPTH MAG								
JUN 27 10 16 08.8		38.8S 175.2E		233KM 6.1		NORTH IS NZ						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
SUV	EP	Z	10 20 31		21							
H M S		EPICENTRE		DEPTH MAG								
JUN 27 10 41 08.6		29.7N 80.9W		37KM 6.1		NEPAL-INDIA BORDER						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
AFI	ES	N	11 07 43		98							
	ES	ZE	09 42									
	E(SS)	N	15 42									
SBA	EPP	ZE	11 01 17		123							
	ELQ	NE	29 04									
	ELR	Z	35 20									
H M S		EPICENTRE		DEPTH MAG								
JUN 27 10 49 50.0		29.8N 80.7E		33KM 5.8		NEPAL-INDIA BORDER						
		H M S		DIR DIS LG=A/T		AZ TZ		AN TN		AE TE MAG		
SBA	EPP	ZNE	11 10 54		118							
	ELQ	NE	40 43									







H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG <sub>A</sub> /T	AZ	TZ	AN	TN	AE	TE	MAG
JUN 30	07 49 42.4	5.7S 146.8E	61KM	4.7	E NEW GUINEA				
SBA	EP	Z 08 01 05	73						
H M S		EPICENTRE	DEPTH	MAG					
JUN 30	12 27 41.9	9.6N 126.7E	44KM	5.4	PHILIPPINE IS				
AFI	ES	NE 12 47 25	65						
	EL	Z 32							
		ZNE 57 54							
JUN 30	AFI	EP	Z 12 56 47						
	ES	NE 58 24							
JUN 30	AFI	EP	Z 13 58 09						
	ES	NE 59 03							
JUN 30	SBA	E(P)	ZNE 15 17 27						
	I	ZNE 41.30							
H M S		EPICENTRE	DEPTH	MAG					
JUN 30	16 57 23.4	15.5S 177.3W	33KM	4.9	FIJI				
AFI	EP	Z 16 58 41	6						
	ES	ZNE 59 40							
	RAR	EP	ZNE 17 02 22	18					
	E(S)	ZNE 05 24							
	SBA	EP	ZNE 17 07 49	63					
JUN 30	AFI	EP	Z 19 20 55						
	E(S)	NE 23 17							
JUN 30	AFI	EP	Z 22 26 31	0.07					
JUL 01	AFI	IP	ZNE 01 20 33.7						
	ES	ZNE 21 00							
H M S		EPICENTRE	DEPTH	MAG					
JUL 01	05 42 49.0	17.7S 178.7W	556KM	3.9	FIJI				
SUV	EP	Z 05 44 05	3						
AFI	EP	ZNE 05 44 42	8 -0.71						
	ES	ZNE 46 12							
	RAR	EP?	Z 05 46 30	18					
	SBA	P	Z 05 52 03	61					
H M S		EPICENTRE	DEPTH	MAG					
JUL 01	05 50 38.8	24.8N 122.4E	109KM	6.2	TAIWAN				
SUV	EP	Z 06 01 37	69						
AFI	EP	Z 06 02 10	75 0.59						
	EPCP	Z 36							
	ES	ZNE 11 44							
	ESCS	NE 12 25							
	E	Z 13 00							
	ESS	ZNE 16 24							
	ESSS	NE 20 00							
	ELQ	ZNE 22 00							
	ELR	ZNE 24 43							
RAR	IP	Z 06 03 21.20	88 -0.15						
	ES	E 13 50							
	E	N 14 50							
	EL	E 24 55							
	EL	NE 27 25							
	EL	Z 07 01 30							

SBA	P	ZE	06 04 33	106					
	EPP	Z	08 52		4	8			
	E	NE	09 22						
	EPPP	ZNE	11 19						
	E(SP)	Z	13 43						
	ESKS	ZNE	15 09						
	ESKKS	NE	16 15						
	E(PKKP)	ZNE	20 15						
	ESS	NE	23 41						
	ESSS	E	27 35						
	ELQ	E	33 45						
	ELR	ZNE	41						
H M S		EPICENTRE	DEPTH	MAG					
JUL 01	10 21 52.5	3.1S 129.5E	63KM	5.3	CERAM				
SBA	P	ZNE 10 33 41	77						
JUL 01	AFI	IP	Z 11 18 54	U	-0.88				
	ES	ZNE 19 15							
H M S		EPICENTRE	DEPTH	MAG					
JUL 01	19 20 26.6	23.8S 179.9E	555KM	4.0	SOUTH OF FIJI				
AFI	EP	Z 19 23 05	13 -0.33						
	ES	ZNE 25 15							
	RAR	EP	Z 19 24 03	19					
	SBA	EP	ZN 19 29 04	54					
JUL 02	RAO	E(P)	Z 00 18 52						
	E(P)	Z	55						
JUL 02	AFI	EP	ZNE 23 05 00						
	ES	ZNE 24							
H M S		EPICENTRE	DEPTH	MAG					
JUL 03	04 09 34.2	21.2S 174.2W	69KM	4.9	TONGA				
AFI	EP	ZNE 04 11 14	8						
	ES	ZNE 12 31							
	EL	ZNE 13 05							
	ET	ZNE 18 23							
SUV	EP	Z 04 11 25	8						
RAO	EP	Z 04 11 30	9						
	E	Z 12 05							
	ES	Z 09							
	RAR	EP	ZNE 04 12 31	13					
	ES	ZNE 14 43.5							
	ELQ	NE 52							
	ELR	ZNE 15 10							
SBA	EP	ZNE 04 19 13	57	32	10	91	10	49	9
	ES	E 27 23							
	ELQ	NE 34 30							
	ELR	ZNE 37 40							
JUL 03	SBA	IP	ZNE 17 45 53.50						
JUL 04	AFI	EP	Z 01 12 02.5						
	ES	NE 25							
H M S		EPICENTRE	DEPTH	MAG					
JUL 04	02 43 12.1	18.3S 178.0W	573KM	3.4	FIJI				
RAR	EP	Z 02 46 12	17						



H M S		EPICENTRE	DEPTH	MAG						
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG				
JUL 04	02 55 37.2	51.8N 176.4E	37KM	5.5	ALEUTIAN IS					
SBA	IPKP	ZNE 03 14 43,5U	130							
JUL 04	07 14 02.8	18.5S 178.2W	488KM	3.2	FIJI					
AFI	IP	Z 07 15 49 U	8							
RAR	EP	ZNE 17 12	18							
SBA	EP	Z 07 17 41	60							
JUL 04	07 22 25.5	22.2S 179.5W	601KM	4.4	SOUTH OF FIJI					
RAO	EP	Z 07 24 17	7							
AFI	IP	Z 07 24 51,3D	11 -0.51							
RAR	EP	ZNE 26 47	18 -0.90	5,5						
SBA	P	Z 07 31 12,8	56							
JUL 04	12 15 26.5	37.5N 24.7W	20KM	5.4	AZORES IS					
SBA	PKP	Z 12 34 53,7U	139							
JUL 04	AFI	IP	Z 12 57 59 U							
	ES	ZNE 58 22								
JUL 04	AFI	EP	ZNE 15 24 08							
	ES	ZNE 31								
JUL 04	18 33 37.1	51.9N 179.8E	15KM	6.0	ALEUTIAN IS					
AFI	EP	Z 18 44 24	66							
	ES	ZNE 53 14								
	ESS	NE 57 22								
	ELQ	NE 19 00 14								
	ELR	ZN 03 00								
RAR	EP	ZNE 18 45 26,5	75							
	E(PCP)	Z 35								
	EPP	Z 48 12								
	ES	ZNE 55 07								
	ELQ	NE 19 03 30								
	ELR	ZNE 04 15	120 21 143 21 33 22							
RAO	EP	Z 18 45 57	81							
SBA	EPKP	Z 18 52 44	130	4 5						
	E	ZNE 55								
	EPP	NE 53 34								
	E	Z 55 00								
	E	Z 56 04								
	EPKS	NE 18								
	E(SKP)	Z 21								
	E(PPP)	Z 57 01								
	E	E 51								
	ESKS	E 19 00 11								
	E	N 02 02								
	E(PKKP)Z	30								
	E	NE 03 37								
	E	ZN 04 16								
	ESP	ZN 05 29								
	EL	ZNE 32								

H M S		EPICENTRE	DEPTH	MAG						
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG				
JUL 04	18 50 22.6	51.4N 179.5W	36KM	5.0	ALEUTIAN IS					
SBA	E(PKP)	Z 19 09 51	129							
	E	ZE 24 35								
JUL 05	02 21 43.8	52.2N 178.4W	66KM	4.9	ALEUTIAN IS					
SBA	EPKP	Z 02 40 52	130							
	EPKP	ZNE 41 05								
	E	ZNE 44 21								
JUL 05	03 22 45.5	15.1S 175.0W	252KM	5.0	TONGA					
AFI	IP	ZNE 03 23 42	D 3							
	ES	ZNE 24 20								
SUV	EP	Z 03 24 31	7							
RAR	IP	ZNE 03 26 13,6D	16 -0.66	5,7						
	E(S)	NE 29 19								
SBA	IP	ZNE 03 32 50,9D	63 -1.23	5,5						
JUL 05	03 48 44.8	17.8S 178.7W	516KM	4.0	FIJI					
SUV	EP	Z 03 50 03	3							
AFI	EP	ZNE 03 50 39	8							
	ES	NE 52 15								
SBA	IP	ZNE 03 58 05,7D	61 -1.33	5,2						
JUL 05	05 09 04.7	37.6N 24.7W	19KM	5.1	AZORES IS					
SBA	EPKP	Z 05 28 32	139							
JUL 05	SBA	IP	ZNE 05 12 05,7D							
	E	ZNE 22								
JUL 05	09 24 53.5	4.2S 133.1E	33KM	5.0	WEST NEW GUINEA					
SBA	EP	Z 09 36 39,5	76 -1.56	5,5						
JUL 05	SBA	EP	ZNE 14 04 51							
	E(LQ)	N 08 30								
	E(LR)	ZE 09 32								
JUL 05	AFI	EP	Z 19 02 55							
	ES	ZNE 03 30								
JUL 05	AFI	EP	Z 19 30 58							
	ES	ZNE 31 30								
JUL 05	23 50 17.8	15.8S 75.8W	39KM	4.8	NEAR COAST OF PERU					
SBA	EP	Z 24 02 29	80							
	E	E 03 07								
JUL 06	00 05 53.2	15.5S 75.6W	26KM	5.0	NEAR COAST OF PERU					
SBA	IP	ZNE 00 18 07,6U	81 -1.52	5,6						
	ELQ	N 40								
	ELR	ZNE 44								



	H	M	S	EPICENTRE	DEPTH	MAG									
JUL 06	01	33	21	13.7S 166.4E	33KM	4.8	NEW HEBRIDES								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
SBA	EP			Z 01 44 04		64									
	E(S)			ZNE 53 02											
JUL 06	04	52	09.2	60.4S 26.7W	45KM	4.8	S SANDWICH IS								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
SBA	EP			Z 04 59 43		42									
	E+PP			Z 57											
	EPCP			Z 05 01 38											
JUL 06				ZNE 13 54 21		-1.31									
	L			ZNE 58 50											
JUL 06	19	23	38.1	4.4S 104.9W	34KM	4.7	N EASTER IS CORDILLERA								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
SBA	EP			Z 19 36 13		85									
JUL 06	20	21	42.3	25.8N 128.0E	13KM	5.1	RYUKYU IS								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
SBA	E(PKP)			Z 20 40 14		106									
JUL 06	22	41	53.2	32.1S 180.0E	323KM	4.6	S OF KERMADEC IS								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
RAO	E(P)			Z 22 42 54		3									
	(P)			Z 56											
	E			Z 43 10											
	ES			Z 44											
SUV	EP			Z 22 45 00		14									
AFI	EP			Z 22 45 57		20									
	ES			ZNE 49 25											
SBA	IP			ZNE 22 49 48,8U		46									5,2
JUL 07	AFI	EP		ZNE 00 57 11											
	ES			ZNE 31											
JUL 07	AFI	EP		ZNE 13 02 58											
	ES			ZNE 03 30											
JUL 07	AFI	IP		Z 14 23 44,8U											
	ES			ZNE 24 25											
JUL 07	SBA	EP		Z 16 29 11											
	E			ZNE 22											
JUL 07	17	15	07.8	6.1S 154.0E	76KM		SOLOMON IS								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
SBA	EP			Z 17 26 12		72									
JUL 07	AFI	EP		ZNE 21 22 13											
	ES			ZNE 34											
JUL 07	23	22	04.7	18.1S 173.5W	15KM	5.0	TONGA								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
AFI	EP			ZNE 23 23 12		4									
	ES			ZNE 24 00											
	ET			ZNE 25 55											
SUV	EP			Z 23 24 01		8									
RAR	EP			ZNE 23 25 06		13									

	H	M	S	EPICENTRE	DEPTH	MAG									
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
SBA	P			ZNE 23 32 17,3		61									-1.43 5,8
JUL 08	01	37	54.1	6.8S 130.2E	93KM	5.3	BANDA SEA								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
SBA	EP			ZNE 01 49 13		74									
JUL 08	AFI	EP		Z 13 38 56											
	ES			ZNE 39 16											
JUL 08	22	12	27.6	19.0S 174.5W	33KM	5.2	TONGA								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
AFI	EP			Z 22 13 51		6									
	ES			NE 14 47											
	ET			ZNE 18 40											
SUV	EP			Z 22 14 19		7									
RAR	IP			ZNE 22 15 40,7U		14									-0.13
	ES			ZNE 18 04											
	ET			ZNE 29 19											
SBA	EP			Z 22 22 31		60									
	E(+PP)			Z 47											
JUL 09	SBA	EP		ZNE 02 31 19											
	E(S)			ZNE 53											
	E			Z 32 16											
	E			NE 25											
JUL 09	AFI	IP		Z 03 23 57		D									
	ES			NE 24 10											
JUL 09	07	51	44.7	33.1S 179.0W	31KM	4.8	S OF KERMADEC IS								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
RAO	EP			Z 07 52 44		4									
	S			Z 53 24											
AFI	EP			Z 07 56 23		20									
	ES			NE 59 50											
	EL			ZN 08 01 12											
	ET			ZNE 15 41											
RAR	EP			Z 07 56 30		21									
SBA	IP			ZNE 08 00 04,0U		45									
	E			Z 01 41											
JUL 09	14	14	41.0	20.2S 178.4W	553KM	4.3	FIJI								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
SUV	EP			Z 14 16 07		4									
AFI	IP			Z 14 16 48,2U		9									-0.33
	ES			ZNE 18 26											
SBA	P			Z 14 23 45		58									-1.13 5,2
JUL 09	16	07	39.4	17.5S 178.6W	527KM	3.7	FIJI								
							DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE TE MAG
AFI	EP			ZNE 16 09 31		7									
	ES			NE 11 04											
SBA	EP			Z 16 17 03		61									
JUL 10	AFI	EP		Z 01 10 14											
	E(S)			NE 12 13											



H	M	S	EPICENTRE	DEPTH	MAG	LOC
JUL 10	01 22 02.8	17.4S 178.7W	530KM	4.0		FIJI
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
SUV	EP	Z	01 23 20	3		
AFI	IP	Z	01 23 55.4D	8	0.05	
	ES	ZNE	25 20			
SBA	P	ZNE	01 31 26	61	-1.23	5.3
JUL 10	01 50 02.4	24.7S 180.0W	443KM	4.1		SOUTH OF FIJI
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
AFI	EP	Z	01 52 58	13		
	ES	NE	55 14			
SBA	IP	Z	01 58 41.8D	54	-1.38	5.0
JUL 10	03 02 38.3	43.2N 29.0W	33KM	4.1		N ATLANTIC RIDGE
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
SBA	E(PKP)	Z	03 22 12	145		
JUL 10	06 56 37.1	21.1S 68.8W	129KM	4.1		CHILE-BOLIVIA BORDER
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
SBA	EP	Z	07 08 14	76		
JUL 10	10 00 39.2	30.4S 177.8W	44KM	5.4		KERMADEC IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
RAO	IP	Z	10 00 55.5D	1		
	S	Z	01 11			
SUV	EP	Z	10 03 47	13		
AFI	EP	ZNE	10 04 32	17		
	ES	ZNE	07 23			
	EL	ZNE	08 00			
	ET	ZNE	18 11			
SBA	IP	ZNE	10 09 17.6U	48	-0.57	6.4
	EPCP	Z	10 33			
	EPP	Z	11 13			
	ES	ZNE	16 21			
	ESS	ZNE	19 17			
	ELQ	NE	22 19			1 16
	ELR	ZNE	23 10			
JUL 10	RAO	EP	Z	10 09 29		
	ES	Z	40			
JUL 10	16 12 41.5	24.2N 125.2E	27KM	5.8		SW RYUKYU IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
AFI	EP	Z	16 24 14	72		
	ES	ZNE	33 30			
	ESS	ZE	38 00			
	E	N	42 32			
	EL	ZNE	45 42			
SBA	EPKP	ZNE	16 31 03	105		
	EPP	Z	18			
	EPPP	Z	34 15			
	ESKS	NE	37 23			
	ES	NE	38 39			
	E(PKKS)	N	45 21			
	ESS	ZNE	46 00			
	ESSS	NE	50 10			
	ELQ	NE	56 09			
	ELR	ZNE	59 13			
JUL 11	AFI	EP	Z	18 21 47		

H	M	S	EPICENTRE	DEPTH	MAG	LOC
JUL 11	22 45 52.0	19.3S 173.4W	8KM	5.3		TONGA
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
AFI	EP	Z	22 47 11	6		
	E	Z	29			
	ES	NE	48 12			
	EL	NE	49 04			
	ET	ZNE	52 07			
SUV	EP	Z	22 47 55	8		
RAO	EP	Z	22 48 27	11		
	ES	Z	50 15			
RAR	P	ZNE	23 48 49.4	13	0.05	
	E	Z	49 00			
	ES	ZNE	51 04			
	EL	ZNE	30			
	ET	ZNE	59 15			
SBA	P	ZNE	22 55 56.8	59	-0.85	6.3
	ES	NE	23 04 13			4 11 6.2
	ELQ	NE	10 25			
	ELR	ZNE	13 35			
JUL 12	06 52 31	30.5S 177.9W	33KM	4.1		KERMADEC IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
RAO	P	Z	06 52 51	1		
	S	Z	53 01			
RAR	EP	Z	06 56 44	19		
SBA	EP	Z	07 01 08	48		
JUL 12	08 01 36.2	21.3S 68.8W	94KM	4.9		CHILE-BOLIVIA BORDER
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
SBA	P	ZNE	08 13 16.2	76	-1.30	5.6
JUL 12	AFI	IP	Z	16 15 32		
	ES	ZNE	53			
JUL 12	17 37 26.3	21.6S 170.5E	116KM	5.2		LOYALTY IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
AFI	EP	Z	17 41 35	19		
	ES	NE	44 12			
SBA	P	Z	17 46 57.6	56		
	E=PP	ZNE	47 21			
JUL 12	18 53 10.4	44.6N 37.3E	46KM	5.7		WESTERN CAUCASUS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
SBA	EPKP	ZNE	19 12 30	141		
	PKP	Z	39.5			
	ESKP	Z	16 25			
JUL 12	21 39 58.1	20.6S 174.4W	33KM	4.6		TONGA
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE MAG
AFI	EP	Z	21 41 39	7		
	ES	ZNE	42 50			
	EL	ZNE	43 05			
	ET	ZNE	48 45			
RAR	EP	ZNE	21 42 57	14		
	ES	ZNE	45 11			
SBA	P	ZNE	21 49 49.5	58		
JUL 13	AFI	EP	Z	00 25 05		
	ES	NE	26 03			



	EL	NE	27 05						
	ET	ZNE	30 00						
	RAR P	ZNE	00 26 40,5						-0.78
JUL 13	SBA IP	ZNE	00 44 35,8U						-1.33
	H M S	EPICENTRE	DEPTH	MAG					
JUL 13	04 03 21.4	19.1S 169.5E	270KM	4.4	NEW HEBRIDES				
	SBA IP	Z	04 12 53 D	59	-1.38				5.2
	H M S	EPICENTRE	DEPTH	MAG					
JUL 13	05 47 43.7	28.0S 177.6W	115KM	5.1	KERMADEC IS				
	RAO IP	Z	05 48 10,0D	1					
	AFI EP	Z	05 51 03	15					
	ES	NE	53 36						
	ET	ZNE	06 02 28						
	RAR EP	ZNE	05 51 41	18					
	ES	ZNE	54 37						
	ET	ZNE	06 04 55						
	SBA IP	ZNE	05 56 33,0U	50	-0.76				6.2
	H M S	EPICENTRE	DEPTH	MAG					
JUL 13	06 46 55.6	23.3S 179.9E	537KM	4.6	SOUTH OF FIJI				
	RAO EP	Z	06 48 37	6					
	AFI EP	ZNE	06 49 33 D	12	-0.68				
	ES	ZNE	51 37						
	RAR EP	ZNE	06 50 42	19					
	SBA IP	ZNE	06 55 38,2U	55	-0.95				5.5
	EPCP	Z	57 28,5						
JUL 13	AFI EP	Z	06 53 47						
	ES	NE	54 05						
JUL 13	SBA EP	Z	06 59 35,5						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 13	09 03 13	18.7S 172.3W	33KM	4.2	TONGA				
	AFI EP	Z	09 04 20	5					
	ES	NE	05 04						
	ET	ZNE	08 50						
	RAR IP	ZNE	09 05 03,8D	12					
JUL 13	AFI EP	Z	09 06 01						
	ES	NE	21						
JUL 13	SBA E(S)	ZNE	10 03 52						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 13	11 35 39.6	41.6S 80.1E	33KM	5.1	MID-INDIAN RISE				
	SBA P	Z	11 44 25,3	49					
	ES	E	51 44						
	ELQ	N	58 25						
	ELR	ZNE	12 01						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 13	14 40 27.4	0.1S 122.9E	135KM	5.4	NORTHERN CELEBES				
	AFI EP	Z	14 51 03	66	-0.59				6.4
	SBA IP	ZNE	14 52 29,6U	81	-1.13				5.7
	EPCP	Z	33						

	E*PP	Z	53 10						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 13	21 02 52.4	22.4S 171.6E	110KM	4.7	LOYALTY IS				
	SBA P	Z	21 12 19,1	56					
JUL 14	SBA EP	Z	00 56 07						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 14	01 49 36.4	23.2S 70.3W	42KM	4.7	NEAR COAST OF N CHILE				
	SBA EP	Z	02 01 10	74					
	E*PP	Z	20						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 14	07 24 06.4	15.1S 174.3W	192KM	4.5	TONGA				
	RAR P	Z	07 27 21,6D	15					
	SBA P	Z	07 34 18,1D	63					
	H M S	EPICENTRE	DEPTH	MAG					
JUL 14	18 07 04.6	53.1N 171.0E	33KM	5.1	ALEUTIAN IS				
	SBA EPKP	ZN	18 26 11	131					
	H M S	EPICENTRE	DEPTH	MAG					
JUL 14	18 08 46	53.1N 170.9E	33KM	4.9	ALEUTIAN IS				
	SBA EPKP	Z	18 27 53	131					
	H M S	EPICENTRE	DEPTH	MAG					
JUL 14	20 00 01.0	52.9S 27.6E	23KM	5.3	SOUTH OF AFRICA				
	SBA P	ZNE	20 08 33,6U	47	-1.05				5.9
	ES	NE	15 33						
	EL	Z	24 30						
	EL	NE	25						
JUL 15	AFI EP	Z	06 53 49						
	ES	ZNE	54 14						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 15	07 59 58.8	16.9N 61.5W	66KM	5.3	LEEMARD IS				
	SBA EPKP	Z	08 18 33	115					
	H M S	EPICENTRE	DEPTH	MAG					
JUL 15	08 37 35.5	20.2S 178.6W	613KM	4.2	FIJI				
	SUV EP	Z	08 38 59	3					
	AFI EP	ZNE	08 41 22	9					
	SBA IP	ZNE	08 46 34,1U	58	-1.15				5.2
JUL 15	SBA EP	Z	20 39 03						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 16	00 34 35.6	0.4N 121.5E	169KM	5.2	NORTHERN CELEBES				
	SBA P	ZNE	00 46 36,9U	82					
JUL 16	SBA EP	Z	03 55 47						
	H M S	EPICENTRE	DEPTH	MAG					
JUL 16	07 19 55.4	10.9S 165.9E	66KM	5.1	SANTA CRUZ IS				
	AFI EP	Z	07 24 42	22					







JUL 20	H M S			EPICENTRE			DEPTH	MAG	SOUTH SANDWICH IS								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	04	30	24.1	56.3S	25.1W		33KM	4.8									
	SBA	P	Z	04	38	46			46								
JUL 20	AFI	EP	Z	05	10	20											
		ES	NE			40											
JUL 20	AFI	IP	Z	08	57	46.6U		-0.73									
		ES	NE			58 05											
JUL 20	H M S			EPICENTRE			DEPTH	MAG	N EASTER IS CORDILLERA								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	13	22	53.8	13.3S	111.5W		32KM	4.8									
	RAR	EP?	Z	13	32	36		47									
		EPCP	Z			33 21											
		EL	ZNE			44 30											
	AFI	ESSS	N	13	47	38		58									
		EL	ZE			49 50											
	SBA	EP	Z	13	34	34		75									
		ES	N			44 13											
		ELQ	N			54 42											
		ELR	ZNE			59 00											
JUL 20	AFI	EP	Z	15	27	24											
		ES	NE			45											
JUL 20	H M S			EPICENTRE			DEPTH	MAG	NEAR CENTRAL CHILE								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	19	58	45.9	38.1S	73.6W		33KM	4.9									
	SBA	EP	Z	20	08	35		59									
		E(*PP)	Z			41											
		EL	ZNE			32											
JUL 20	SBA	P	ZNE	22	28	07.4D		-1.23									
		E(S)	ZNE			37											
JUL 21	H M S			EPICENTRE			DEPTH	MAG	MACQUARIE IS								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	03	33	09.1	52.7S	160.5E		33KM	5.5									
	SBA	P	ZNE	03	38	34.8		25 -0.85									
		PCP	ZN			42 07											
		ES	ZNE			43 12			2 10	2 10	4 11	5.6					
		EL	ZNE			44			9 14	7 13	19 12						
	RAR	P	ZNE	03	41	14.1D		44									
		E(S)	ZN			48 12											
		EL	E			51 10											
JUL 21	H M S			EPICENTRE			DEPTH	MAG	SOLOMON IS								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	05	23	51.5	5.0S	154.3E		421KM	4.6									
	RAR	P	ZNE	05	31	47.6		47									
	SBA	EP	ZNE	05	34	39		73 -1.33									5.4
JUL 21	H M S			EPICENTRE			DEPTH	MAG	N EASTER IS CORDILLERA								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	05	32	19.0	3.9S	104.5W		33KM	5.0									
	RAR	EP	Z	05	42	15		56									
	SBA	EP	Z	05	44	53		86									
JUL 21	H M S			EPICENTRE			DEPTH	MAG	MACQUARIE IS								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	05	49	58.8	52.7S	160.5E		10KM	5.1									
	SBA	IP	Z	05	55	27.7U		25									
		ELQ	E	06	01	29											
		ELR	ZN			02											

JUL 21	H M S			EPICENTRE			DEPTH	MAG	FIJI								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	18	30	15.3	17.8S	178.6W		592KM	5.7									
	SUV	EP	Z	18	31	34		3									
		ES	Z			32 40											
		EL	Z			34 30											
	AFI	IP	Z	18	32	09.2D		8									
		ES	NE			33 39											
		ET	ZNE			38 32											
	RAO	EP	Z	18	32	46		11									
		ES	Z			34 39											
	RAR	IP	ZNE	18	33	52.3D		18 -0.15									6.3
		ES	ZNE			36 51											
		ET	ZNE			48 10											
	SBA	IP	ZNE	18	39	31.0U		61 -0.64									5.7
		EPCP	Z			40 14											
		*PP	ZNE			41 25.3											
		E(PPP)	ZN			42 32											
		ES	ZNE			47 07											
		E(SS)	ZNE			50 37											
JUL 22	AFI	E(P)	Z	02	13	24											
		ES	NE			14 42											
JUL 22	H M S			EPICENTRE			DEPTH	MAG	N SINKIANG CHINA								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	03	40	00.1	42.9N	84.5E		33KM	5.0									
	SBA	PKP	Z	03	59	03.2		130									
JUL 22	AFI	E(S)	NE	07	37	19											
JUL 22	H M S			EPICENTRE			DEPTH	MAG	NEW HEBRIDES								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	07	41	42.6	18.3S	167.1E		33KM	4.9									
	AFI	EP	Z	07	46	19		21									
	RAR	EP	Z	07	47	12.5		31									
	SBA	IP	ZN	07	51	45.1U		60 -1.41									5.8
JUL 22	H M S			EPICENTRE			DEPTH	MAG	NEW HEBRIDES								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	08	25	55.1	16.0S	168.0E		190KM	5.1									
	SUV	EP	Z	08	28	19		10									
	RAO	P	Z	08	30	04		18									
		*PP	Z			31											
	AFI	EP	Z	08	30	12		20									
		ES	ZNE			33 50											
	RAR	P	ZNE	08	32	37.6		31									
	SBA	IP	ZNE	08	35	55.6USE		62 -0.41									6.4
		E(PCP)	Z			36 39											
JUL 22	AFI	E(P)	Z	09	49	47											
JUL 22	H M S			EPICENTRE			DEPTH	MAG	ALEUTIAN IS								
	H M S			H M S					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE
	10	17	23.0	51.7N	173.5W		55KM	5.4									
	AFI	EP	Z	10	28	07		65									
		ES	ZNE			36 47											
		ESSS	E			44 00											
		EL	ZN			46 30											
	RAR	EP	Z	10	28	58		74									
		E(S)	ZNE			37 23											
		EL	ZN			50 35											



		SBA	EPKP	Z	10 36 22	130						
			SKP	Z	39 47,9							
JUL 22	AFI	EP	ES	Z	13 00 03							
				NE	46							
		H M S	EPICENTRE		DEPTH	MAG						
JUL 22	13 05 47.6	64.4S	175.5E	33KM			BALLENY IS					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	SBA	IP	ZNE	13 08 57,3U	14	-0.56						
		EL	ZNE	12 00			3 16	6 11	8 12			
		EPCP	Z	14 15								
JUL 22	AFI	EP	ES	Z	14 05 15							
				NE	41							
				ZNE	07 15							
JUL 22	AFI	EP	ES	Z	21 37 25							
				NE	38 00							
		H M S	EPICENTRE		DEPTH	MAG						
JUL 23	10 16 47.8	12.2S	165.9E	52KM			SANTA CRUZ IS					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	SBA	EP	Z	10 27 23	66	-1.35					5,8	
		H M S	EPICENTRE		DEPTH	MAG						
JUL 23	14 31 51.4	51.7N	173.5W	55KM	5.3		ALEUTIAN IS					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	AFI	ES	ZN	14 51 00	65							
		EL	ZN	15 01 00								
	SBA	EPKP?	Z	14 54 10	130							
		EPKP	ZNE	15								
JUL 23	AFI	EP	ES	Z	19 44 21							
				NE	54							
		H M S	EPICENTRE		DEPTH	MAG						
JUL 23	22 48 15.6	12.0S	166.2E	49KM	4.9		SANTA CRUZ IS					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	SBA	P	ZNE	22 58 57,7U	66	-1.10					6,0	
		H M S	EPICENTRE		DEPTH	MAG						
JUL 24	04 13 52.5	33.7S	179.1E	256KM			S OF KERMADEC IS					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	RAO	EP	Z	04 15 48	5							
		SBA	EP	Z	04 21 43	45						
		H M S	EPICENTRE		DEPTH	MAG						
JUL 24	06 29 15.9	33.4S	178.4W	23KM	4.4		S OF KERMADEC IS					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	RAO	EP	Z	06 30 20	4							
		SBA	EP	Z	06 37 41	45						
JUL 24	SBA	P	ZNE	06 29 37,6		-0.54	2 8					
		E	NE	44								
		EL	ZN	02 30			5 22	4 22				
		EL	E	03 00								
JUL 24	SBA	P	Z	07 51 57		-1.11						
		ES	NE	52 30								
		H M S	EPICENTRE		DEPTH	MAG						
JUL 24	08 52 12.1	16.2S	172.7W	33KM	4.6		SAMOA					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	AFI	EP	Z	08 52 48	2							
		ES	NE	53 15								
		EL	Z	32								

		ET	ZNE	55 16								
RAR	P	ZNE	08 55 11,0	13								
		ES	ZNE	57 20								
		EL	ZNE	51								
SBA	P	ZNE	09 02 33,3D	63	46	8	41	10				
		ES	E	11 06								
		ELQ	NE	20 50								
		ELR	ZNE	22 25								
		H M S	EPICENTRE		DEPTH	MAG						
JUL 24	14 00 02.7	21.6S	169.4E	33KM			LOYALTY IS					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	SBA	EP	Z	14 09 42	56							
		H M S	EPICENTRE		DEPTH	MAG						
JUL 24	17 18 19.1	20.4S	175.8W	124KM	5.1		TONGA					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	SUV	EP	Z	17 19 54	6							
		AFI	EP	Z	17 20 01	8						
		ES	NE	21 16								
		ET	ZNE	25 32								
	RAO	EP	Z	17 20 26	9							
		S	Z	22 04								
	RAR	EP	ZNE	17 21 41	15	-0.50						
		ES	ZNE	24 14								
		ET	ZNE	34								
	SBA	P	ZNE	17 28 02,0D	58	-1.15						
		ES	E	36 03								
		FELT										
JUL 25	AFI	EP	Z	03 42 16								
		ES	ZNE	38								
		H M S	EPICENTRE		DEPTH	MAG						
JUL 25	10 51 52.5	32.4S	179.7W	333KM	4.4		S OF KERMADEC IS					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	RAO	EP	Z	10 53 31	3							
		AFI	EP	Z	10 56 03	20						
		SBA	EP	Z	10 59 46,5	46						
JUL 25	SBA	E	N	12 35 33								
		EL	NE	37 35								
		EL	Z	38 35								
		H M S	EPICENTRE		DEPTH	MAG						
JUL 25	13 09 11.1	37.9S	177.7E	57KM	4.2		E OF NORTH IS NZ					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	SBA	IP	Z	13 16 47,1D	40	-1.45						
JUL 25	AFI	IP	Z	16 16 49 D								
		ES	ZNE	17 12								
		H M S	EPICENTRE		DEPTH	MAG						
JUL 25	20 50 36.1	6.0S	150.7E	56KM	4.5		NEW BRITAIN					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	SBA	P	ZNE	21 02 05,5U	72							
		H M S	EPICENTRE		DEPTH	MAG						
JUL 26	01 44 01.3	6.1S	129.0E	298KM	5.0		BANDA SEA					
		H M S	DIR DIS LG=A/T		AZ	TZ	AN	TN	AE	TE	MAG	
	SBA	P	Z	01 55 08,5	74							
JUL 26	SBA	EP	ZNE	03 03 16								
JUL 26	SBA	EP?	Z	05 19 16,5								
		E	ZNE	21								
		EL	ZNE	23 00								
					2	9	4	11				



		H M S	EPICENTRE	DEPTH	MAG							
		H M S	DIR DIS LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
JUL 26		05 44 32	18.0S 178.4W	608KM	4.3	FIJI						
	AFI EP	Z	05 46 26		8	-0.38						
	RAR EP	Z	05 48 05.5		18							
	SBA EP	Z	05 53 45		60							
JUL 26		06 26 39	3.9S 103.6W	33K	4.5	N EASTER IS CORDILLERA						
	SBA EP	Z	06 39 28		86							
JUL 26		09 24 55.2	15.0S 167.3E	120KM		NEW HEBRIDES						
	SBA EP	Z	09 35 10		63	-1.52					5.5	
JUL 26	AFI EP	Z	09 51 01									
	ES	NE	24									
	ET	ZNE	53 28									
JUL 26	SBA P	ZNE	11 52 49.0									
		Z	57									
JUL 26		20 10 24	18.4S 178.2W	601KM	3.8	FIJI						
	AFI EP	Z	20 12 20		8							
	RAR EP	Z	20 13 12		18	-0.40					6.0	
JUL 26		22 39 49.6	27.6S 177.9W	160KM	5.1	KERMADEC IS						
	RAO IP	Z	22 40 20.0D		2							
	ES	Z	41 59									
	SUV EP	Z	22 42 11		10							
	AFI EP	ZNE	22 43 01		15							
	ES	ZNE	45 25									
	ET	ZNE	54 20									
	RAR P	ZNE	22 43 44.1		18	-0.40					5.9	
	ES	ZNE	46 45									
	ET	ZNE	59 13									
	SBA P	ZNE	22 48 39.4		51	-0.94					5.9	
JUL 27		04 48 59.8	24.1S 70.3W	35KM	5.5	NEAR N CHILE						
	SBA IP	ZNE	05 00 29.1U		73	-0.98					6.1	
	ES	ZNE	09 55									
	ELQ	NE	18 39									
	ELR	Z	23 10									
	AFI ESCS	E	05 12 50		95							
	ESS	ZE	20 09									
	E	Z	27 05									
	EL	ZN	29 12									
	EL	ZNE	33 10									
JUL 27		14 49 02.1	32.6N 48.8E	33KM	5.3	WESTERN IRAN						
	SBA EPKP	Z	15 08 12		127							

		H M S	EPICENTRE	DEPTH	MAG							
		H M S	DIR DIS LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
JUL 27		17 01 15.5	13.2S 166.7E	225KM	4.0	NEW HEBRIDES						
	SBA EP	Z	17 11 31		65							
JUL 27	AFI EP	ZNE	17 08 46									
	ES	ZNE	09 20									
JUL 27		17 42 20.1	39.6S 176.6E	11K		NORTH IS NZ						
	SBA EP	Z	17 49 45		39							
JUL 27	AFI EP	Z	19 14 16									
	ES	NE	15 01									
JUL 27	AFI EP	Z	22 16 42.5									
	ES	ZNE	57									
JUL 28	AFI E(P)	Z	00 59 07									
	ES	NE	01 00 12									
JUL 28		01 18 27.1	17.2S 167.7E	13KM	5.1	NEW HEBRIDES						
	AFI EP	Z	01 23 01		20	-0.36					5.8	
	ES	ZN	26 54									
	E	N	27 26									
	EL	ZE	28 13									
	RAR EP	Z	01 24 42		31							
	E(S)	Z	29 34									
	ELQ	N	31 30									
	ELR	ZNE	32 40									
	SBA P	ZNE	01 28 40.6U		61							
	EL	ZNE	55 30									
JUL 28		07 13 19.2	21.0S 179.0W	621KM	4.5	FIJI						
	SUV EP	Z	07 14 45		4							
	AFI EP	Z	07 15 35		10							
	ES	NE	17 23									
	SBA EP	Z	07 22 12		57							
JUL 28		08 15 16.5	2.3S 140.9E	36KM	5.3	NEAR NW NEW GUINEA						
	SBA P	ZNE	08 27 06.4D		77	-1.26					5.8	
JUL 28		09 42 36.6	14.9S 167.4E	140KM	5.3	NEW HEBRIDES						
	SBA EP	ZNE	09 52 50		63	-1.23					5.8	
JUL 28		10 47 52.9	0.2S 124.4E	128KM	5.1	MOLUCCA SEA						
	SBA IP	ZNE	10 59 54.6D		81	-1.52					5.3	
JUL 28		12 07 52.9	29.2S 177.4W	62KM	5.4	KERMADEC IS						
	RAO IP	Z	12 08 05.5D		0							
	S	Z	09 42									
	SUV EP	Z	12 10 41		12							
	RAR P	ZNE	12 11 51.3		18							







		ES	ZNE	42							
AUG 01	AFI EP	Z	17 08 29								
	ES	NE	10 00								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 01		19 45 17.3	19.7S 174.3W	33KM	5.0	TONGA					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	Z	19 46 45		6	-0.82					
	ES	ZNE	47 45								
	ET	ZNE	51 20								
	RAO EP	Z	19 47 39	10							
	ES	Z	49 25								
	RAR EP	ZNE	19 48 21	14							
	ET	ZNE	20 01 05								
AUG 01	SBA EP	ZNE	20 05 04.5								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 01		20 24 17.8	15.3S 173.0W	7KM	4.5	SAMOA					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI IP	ZNE	20 24 49	U	2						
	ES	ZNE	25 03								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 01		20 32 01.3	44.6N 150.4E	24KM	5.2	KURILE IS					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	ZNE	20 42 31	68							
	ES	N	51 42								
	ES	E	52 24								
	ESS	Z	56 10								
	E	N	57 36								
	EL	ZN	21 02 42								
	EL	E	04 00								
AUG 01	RAR EP	ZE	20 41 41								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 01		21 02 59.6	30.0N 68.7E	33KM	6.2	W PAKISTAN					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EPKP	Z	21 21 51	121							
	ESS	ZNE	40 23	25 40							
	ESKS	ZNE	45 30	17 45							
	ELQ	ZNE	52 00	10 15							
	ELR	ZNE	22 00 00	80 55							
	AFI EPKP	Z	21 21 55	122							
	EPP	Z	23 30								
	E	NE	32 12								
	ESS	E	40 12								
	ESS	N	13								
	E(SSP)	Z	40								
	E	E	41 05								
	E	N	44 05								
	ESSS	ZE	45 00								
	RAR ESSS	ZNE	21 48 00	136							
	ELQ	NE	22 00 05								
	ELR	ZE	09 10								
AUG 01	AFI EP	Z	22 19 22								
	ES	ZNE	20 05								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 01		23 35 08.1	55.9S 147.0E	33KM	4.9	W MACQUARIE IS					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EP	ZNE	23 40 13	23							
AUG 02	AFI EP	ZNE	10 50 02								

		ES	ZNE	32							
		H M S	EPICENTRE	DEPTH	MAG						
AUG 02		18 25 22.6	14.0S 165.9E	50KM	5.1	NEW HEBRIDES					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EP	ZNE	18 36 54.0V	64	-1.41						
		H M S	EPICENTRE	DEPTH	MAG						
AUG 02		19 25 29.2	18.5S 177.8W	540KM	4.1	FIJI					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	Z	19 27 21	7	-0.68						
	ES	ZNE	28 50								
	SBA EP	Z	19 34 44	60							
AUG 02	AFI EP	Z	20 49 55								
AUG 02	SBA EP	ZNE	21 05 15								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 02		22 01 28.7	20.7S 176.8W	401KM	4.0	FIJI					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	Z	22 03 29	8							
	ES	ZNE	04 48								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 03		03 12 40.6	52.4S 26.4E	33KM	4.6	S OF AFRICA					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EP	Z	03 21 15	48							
AUG 03	AFI EP	Z	04 14 47								
	ES	NE	15 30								
AUG 03	AFI EP	ZNE	11 41 45								
	ES	ZNE	42 05								
AUG 03	AFI EP	Z	16 00 50								
	ES	NE	02 09								
AUG 03	SBA EP	ZN	16 31 22								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 04		05 42 21.3	7.3S 120.3E	531KM	5.5	FLORES SEA					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA IP	ZNE	05 53 05.0D	74	-0.93						
AUG 04	AFI EP	ZNE	06 03 10								
	ES	ZNE	46								
AUG 04	SBA EP	ZNE	06 10 11.5	-0.63							
AUG 04	AFI EP	Z	09 16 03								
	ES	ZNE	25								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 04		11 56 28.2	18.1S 178.0W	576KM		FIJI					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	Z	11 58 20	7							
	ES	NE	59 50								
		H M S	EPICENTRE	DEPTH	MAG						
AUG 04		15 25 39.9	17.8S 174.8W	239KM	5.1	TONGA					
		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI IP	Z	15 26 51	U	5	-0.39					
	RAR EP	ZE	15 28 56	15							
	SBA IP	Z	15 35 30.5	61							
AUG 04	SBA EP	ZNE	17 46 59.5	-1.11							



AUG 05		SBA EP	ZNE 03 30 25,0	-1.11	
AUG 05		H M S	EPICENTRE	DEPTH	MAG
AUG 05		04 33 07.4	10.9S 162.3E	93KM	5.7 SOLOMON IS
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
AFI EP		Z 04 38 24		25	-0.01 6,4
ES		ZNE 42 50			
E		NE 43 38			
EL		ZE 44 10			
RAO EP		Z 04 38 25		26	
RAR EL		NE 04 48 54		38	
EL		Z 50 15			
SBA EP		ZNE 04 43 52,0		67	-0.44 6,5
EL		ZN 05 06 40			
AUG 05		RAO E	Z 07 17 42		
AUG 05		AFI IP	Z 08 02 00		
ES		ZNE 47			
AUG 05		SBA EP	ZNE 08 38 48		
AUG 05		H M S	EPICENTRE	DEPTH	MAG
AUG 05		19 56 43.0	11.1S 162.6E	66KM	4.9 SOLOMON IS
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
AFI E(SS)		N 20 07 00		25	
EL		ZE 08 13			
AUG 06		H M S	EPICENTRE	DEPTH	MAG
AUG 06		11 24 13.6	23.5S 179.6W	502KM	5.2 S OF FIJI
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
SUV EP		Z 11 25 54		6	
RAO EP		Z 11 25 59		6	
ES		Z 27 10			
AFI EP		Z 11 26 54		12	
ES		ZNE 29 05			
SBA EP		Z 11 32 59		55	
AUG 07		AFI EP	Z 01 38 49		
ES		NE 40 13			
AUG 07		H M S	EPICENTRE	DEPTH	MAG
AUG 07		02 13 05.1	50.6N 171.3W	39KM	6.5 ALEUTIAN IS
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
AFI EP		Z 02 23 39		64	
ES		ZNE 32 14			
ESCS		ZNE 33 34			
ESS		ZNE 35 50			
ESSS		NE 38 10			
ELQ		ZN 39 13			
ELR		ZN 42 04			
RAR EP		Z 02 24 27		72	
IS		NE 33 52			23.11 14 12 7,1
ESS		ZNE 38 15			
ESSS		Z 42 00			
EL		ZN 45 44			
SBA EPKP		ZNE 02 32 03		129	
EPKS		ZNE 35 23,0			
EPPP		Z 36 07,5			
EL		ZNE 03 04 05			
AUG 07		H M S	EPICENTRE	DEPTH	MAG
AUG 07		03 07 16.2	10.6S 161.0E	49KM	5.5 SOLOMON IS
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
SBA IP		ZNE 03 18 03,8U		67	-0.68 6,4

AUG 07 <th>H M S <th>EPICENTRE</th> <th>DEPTH</th> <th>MAG</th> </th>		H M S <th>EPICENTRE</th> <th>DEPTH</th> <th>MAG</th>	EPICENTRE	DEPTH	MAG
AUG 07		13 42 07.8	24.0S 179.9W	537KM	4.7 S OF FIJI
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
RAO IP		Z 13 43 41,0U		6	
ES		Z 44 55			
AFI EP		ZNE 13 44 47		13	-0.33
ES		ZNE 46 53			
SBA EP		Z 13 50 45,5		54	
AUG 07		H M S	EPICENTRE	DEPTH	MAG
AUG 07		15 07 37.0	17.4S 173.5W	33KM	4.5 TONGA
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
AFI EP		Z 15 08 32		4	
ES		ZNE 09 13			
ET		ZNE 12 21			
AUG 07		H M S	EPICENTRE	DEPTH	MAG
AUG 07		17 36 26.7	31.8N 114.5W	33KM	6.3 GULF OF CALIFORNIA
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
RAR ES		NE 17 56 32		68	
ELQ		NE 18 04 00			
ELR		Z 06 42			
AFI ES		ZNE 17 57 04		71	
ESS		ZNE 18 01 30			
ELQ		ZNE 05 30			
ELR		ZNE 08 40			
SBA EPKP		ZNE 17 56 10		119	
AUG 07		AFI EP	Z 18 00 03		
ES		ZE 01 11			
AUG 08		H M S	EPICENTRE	DEPTH	MAG
AUG 08		00 24 27.0	5.7S 133.8E	15KM	AROE IS
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
SBA EP		ZNE 00 36 05		74	
AUG 08		H M S	EPICENTRE	DEPTH	MAG
AUG 08		05 12 10.6	33.8S 179.4W	33KM	4.3 S OF KERMADEC IS
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
RAO EP		Z 05 13 21		5	
ES		Z 14 15			
AUG 08		H M S	EPICENTRE	DEPTH	MAG
AUG 08		07 24 13.8	10.9S 164.3E	16KM	5.3 SANTA CRUZ IS
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
AFI ES		ZNE 07 33 30		24	
ESS		ZNE 34 30			
EL		ZE 35 30			
SBA EP		ZNE 07 35 11		67	
AUG 08		H M S	EPICENTRE	DEPTH	MAG
AUG 08		08 02 45.8	19.3N 108.1W	33KM	5.4 REVILLA GIGEDO IS
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
RAR ES		NE 08 22 13		65	
EL		ZNE 31 50			
AFI ES		ZNE 08 23 23		71	
ESS		N 27 50			
ELQ		NE 31 30			
ELR		ZNE 34 30			
AUG 08		SBA EP	ZNE 09 45 21		
AUG 08		H M S	EPICENTRE	DEPTH	MAG
AUG 08		09 57 29.7	27.7S 69.0W	83KM	5.6 N CHILE
			H M S	DIR DIS	LG=A/T AZ TZ AN TN AE TE MAG
SBA EP		Z 10 08 33,5		70	



DATE	STATION	EPICENTRE	DEPTH	MAG
AUG 08	AFI EP	Z 15 48 23		
	ES	ZNE 46		
AUG 09	RAR EP	Z 01 21 44		
AUG 09	AFI EP	ZNE 15 24 23		
	ES	ZNE 25 11		
AUG 09		H M S EPICENTRE DEPTH MAG		
		17 30 35.9 20.7S 175.3W 33KM 4.9 TONGA		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	SUV EP	Z 17 32 22	6	
	AFI EP	Z 17 32 26	8	
	ES	ZNE 33 42		
	RAR EP	ZE 17 33 59	15	
	ES	ZNE 36 24		
	ET	ZNE 48 03		
	SBA EP	Z 17 40 27	D 58	
AUG 09		H M S EPICENTRE DEPTH MAG		
		22 25 42.3 17.2S 167.5E 33KM 5.2 NEW HEBRIDES		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	AFI EP	ZNE 22 30 16	20	
	E	E 29		
	ES	ZNE 34 19		
	EL	ZN 35 12		
	SBA EP	ZNE 22 35 54.5	61 -1.11	6.1
AUG 09	AFI EP	Z 23 33 44		
	ES	NE 35 23		
	EL	NE 54		
	RAR EP	ZE 23 34 46		
	ES	ZE 37 15		
	ET	ZE 49 53		
	RAO EP	Z 23 35 05		
AUG 10		H M S EPICENTRE DEPTH MAG		
		05 01 09.4 20.1S 175.3W 96KM 5.8 TONGA		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	SUV EP	Z 05 02 51	6	
	AFI EP	Z 05 02 53	7	
	ES	NE 03 50		
	EL	ZNE 04 20		
	RAO IP	Z 05 03 22.5D	9	
	S	Z 05 02		
	RAR EP	ZE 05 04 23	15	
	IP	ZE 25 U		
	IS	NE 06 49		
	IL	N 59		
	ET	ZE 18 14		
	SBA IP	ZNE 05 10 53.0D	58 0.53	7.7
	EPP	Z 12 45		
	ES	ZN 19 00	4 10	
	ELQ	NE 25 25		
	ELR	NE 28 32		
AUG 10	AFI EP	ZNE 08 07 57		
	ES	ZNE 08 32		
AUG 10	AFI EP	Z 11 34 02		
	ES	ZNE 35 09		
	RAO EP	Z 11 34 55		

DATE	STATION	EPICENTRE	DEPTH	MAG
AUG 10		H M S EPICENTRE DEPTH MAG		
		12 33 42.2 5.5S 151.8E 40KM 5.3 NEW BRITAIN		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	AFI EP	Z 12 40 48	37	
	ES	ZNE 46 30		
	ESS	E 48 30		
	EL	ZNE 49 19		
	EL	ZE 50 24		
	RAR ESS	N 12 53 36	49	
	SBA EP	ZNE 12 45 03	73	
	ES	ZNE 54 40		
	EL	ZNE 13 10 39		
AUG 10		H M S EPICENTRE DEPTH MAG		
		16 51 34.3 44.8S 35.4E 33KM 4.7 PRINCE EDWARD IS		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	SBA EP	ZNE 17 01 53.5D	54	
AUG 11		H M S EPICENTRE DEPTH MAG		
		05 12 42.2 19.3S 173.9W 33KM 5.5 TONGA		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	AFI EP	ZNE 05 14 03	6	
	ES	ZNE 54		
	ES	ZNE 15 00		
	EL	NE 20		
	EL	Z 33		
	SUV EP	Z 05 14 39	7	
	RAO EP	Z 05 15 22	11	
	ES	Z 17 04		
	RAR IP	ZE 05 15 41	13 0.17	
	ES	E 17 57		
	EL	N 18 12		
	ET	ZE 28 52		
	SBA IP	ZNE 05 22 44	59 -0.75	6.4
	ES	Z 31 00		
	ELQ	E 38 43		
	ELR	Z 40 38		
AUG 11		H M S EPICENTRE DEPTH MAG		
		08 40 06.1 18.1S 178.3W 573KM 4.2 FIJI		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	AFI EP	Z 08 42 01	8	
	ES	NE 43 32		
AUG 11		H M S EPICENTRE DEPTH MAG		
		08 55 04.9 18.1S 178.4W 580KM 3.5 FIJI		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	AFI EP	Z 08 57 01	8	
	ES	NE 58 33		
AUG 11		H M S EPICENTRE DEPTH MAG		
		10 45 59.6 52.8N 169.7E 61KM 5.3 ALEUTIAN IS		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	SBA EPKP	ZN 11 05 05	130	
	EPKS	Z 08 23		
AUG 11	AFI EP	ZNE 15 47 04	-0.26	
AUG 11		H M S EPICENTRE DEPTH MAG		
		20 39 55.9 23.5S 175.9W 32KM 5.3 TONGA		
		H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG		
	RAO EP	Z 20 41 25	6	
	ES	Z 42 31		
	AFI EP	ZNE 20 42 16	10	
	ES	ZNE 44 03		
	E	E 12		







ES		ZNE	55							
H M S	EPICENTRE		DEPTH	MAG						
AUG 12 19 24 05.6	53.4S	25.4E	33KM	4.9	S OF AFRICA					
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SBA EP	Z	19 32 35.5		47	-0.93		6.0			
	Z	49 37								
AUG 12 AFI EP	ZNE	19 40 53								
ES	ZNE	41 14								
H M S	EPICENTRE		DEPTH	MAG						
AUG 12 20 16 59.8	52.9N	161.6W	31KM	5.6	S OF ALASKA					
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SBA EPKP	ZN	20 36 09		132						
AUG 12 AFI EP	Z	20 49 21								
ES	NE	50 41								
AUG 12 AFI EP	ZNE	21 48 45								
ES	ZNE	49 15								
ET	ZNE	52 13								
AUG 13 AFI EP	Z	00 21 49								
ES	ZNE	22 12								
H M S	EPICENTRE		DEPTH	MAG						
AUG 13 02 24 01.6	22.3S	170.2E	11KM	4.7	LOYALTY IS					
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SBA EP	Z	02 32 40.5		56						
AUG 13 AFI EP	Z	03 58 34								
ES	ZNE	59 13								
ET	ZNE	04 02 17								
H M S	EPICENTRE		DEPTH	MAG						
AUG 13 09 18 36.5	22.3S	170.2E	40KM	4.6	LOYALTY IS					
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
RAR EP	Z	09 24 04		28						
SBA EP	Z	09 28 10		56						
H M S	EPICENTRE		DEPTH	MAG						
AUG 13 12 11 31.2	21.8S	170.6E	33KM	4.7	LOYALTY IS					
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SBA EP	Z	12 21 10.0V		56	-1.41		5.7			
H M S	EPICENTRE		DEPTH	MAG						
AUG 13 19 53 52.5	21.6S	170.8E	33K		LOYALTY IS					
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
SBA EP	Z	20 03 32.8U		56	-1.41		5.7			
AUG 13 RAO EP	Z	21 13 43								
ES	Z	14 03								
AFI EP	Z	21 15 39								
ES	NE	16 00								
H M S	EPICENTRE		DEPTH	MAG						
AUG 14 04 51 04.5	21.9S	170.0E	19KM	5.1	LOYALTY IS					
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AFI ESS	NE	04 59 19		19						
EL	ZN	05 00 24								
RAR ES	N	04 59 55		28						
EL	N	05 02 55								
SBA EP	ZNE	05 00 43.5		56						

H M S	EPICENTRE		DEPTH	MAG					
AUG 14 10 02 47.5	22.1S	170.4E	33KM	4.8	LOYALTY IS				
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	Z	10 12 24		56	-1.41		5.7		
H M S	EPICENTRE		DEPTH	MAG					
AUG 14 11 51 59.6	22.1S	170.3E	33KM		LOYALTY IS				
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	Z	12 01 37.0U		56					
H M S	EPICENTRE		DEPTH	MAG					
AUG 14 21 18 56.4	21.8S	170.1E	38KM		LOYALTY IS				
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	Z	21 28 34		56					
AUG 14 AFI EP	Z	22 58 59							
ES	ZNE	59 33							
H M S	EPICENTRE		DEPTH	MAG					
AUG 14 23 02 42.0	21.2S	179.2W	584KM	4.0	FIJI				
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
AFI EP	Z	23 05 02		10					
H M S	EPICENTRE		DEPTH	MAG					
AUG 15 02 12 47.1	17.7S	178.4W	556KM	4.8	FIJI				
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
SUV EP	Z	02 14 10		3					
AFI EP	Z	02 14 40		7					
ES	NE	16 05							
RAR EP	Z	02 16 23		18					
SBA EP	Z	02 22 05.5		61					
H M S	EPICENTRE		DEPTH	MAG					
AUG 15 02 45 32.3	13.3N	121.3E	14KM		PHILIPPINE IS				
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
AFI ES	ZNE	03 06 25		72					
ESS	ZE	12 20							
ESSS	NE	15 36							
EL	Z	16 49							
RAR ES	N	03 09 22		85					
ESS	N	14 10							
ESSS	N	16 34							
EL	N	21 09							
SBA EP	ZNE	02 59 06		95					
ELQ	NE	03 26 00							
ELR	N	34 00							
AUG 15 SUV EP	Z	07 41 45							
AFI EP	Z	07 42 20							
ES	NE	43 53							
H M S	EPICENTRE		DEPTH	MAG					
AUG 15 12 58 05.7	20.7S	178.9W	570KM	4.7	FIJI				
	H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
SUV EP	Z	12 59 35		4					
AUG 15 AFI EP	Z	13 10 50							
ES	NE	11 49							
AUG 15 AFI EP	Z	13 16 10							
ES	NE	17 24							
AUG 16 AFI EP	Z	01 02 07							
ES	NE	05 41							
ET	ZNE	05 47							
AUG 16 AFI IP	Z	01 12 59		-0.60					



		ES	NE	13 15						
AUG 16	SBA EP	Z	01 26 14							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 16	02 16 19.7	36.4N	70.8E	199KM	5.7	HINDU KUSH REGION				
	SBA EPKP	Z	02 35 00	127						
AUG 16	AFI EP	Z	03 36 17							
	ES	NE	38							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 16	04 43 25.3	30.2N	113.5W	33KM	4.5	GULF OF CALIFORNIA				
	SBA EPP	ZN	05 04 04	117						
AUG 16	AFI EP	Z	04 58 52							
	ES	ZNE	05 02 24							
AUG 16	AFI EP	Z	15 40 38							
	ES	NE	41 03							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 16	17 47 41.9	27.7S	178.2W	192KM	4.9	KERMADEC IS				
	RAO IP	Z	17 48 15.0D	2						
	AFI EP	Z	17 50 57	15						
	ES	NE	53 28							
	ET	ZNE	18 04 20							
	SBA EP	Z	17 56 25	51						
	ES	Z	18 04 36							
	EL	N	11 53	5 30						
	H M S	EPICENTRE		DEPTH	MAG					
AUG 16	18 02 36.1	37.4N	114.2W	33KM	6.1	S NEVADA				
	AFI ES	ZNE	18 23 00	74						
	EL	ZNE	36 35							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 16	19 45 38.7	21.4S	171.3E	36KM	5.3	LOYALTY IS				
	AFI EP	Z	19 49 39	18	-0.17					
	ES	NE	52 58							
	EL	Z	54 19							
	SBA EP	ZNE	19 55 19.9	57	-0.93					
	ES	ZNE	20 03 13							
	ELQ	ZNE	10 17	2 12						
	ELR	ZN	12 25	20 30						
	H M S	EPICENTRE		DEPTH	MAG					
AUG 16	21 25 31.6	19.9S	177.8W	509KM	4.8	FIJI				
	AFI EP	Z	21 27 32	8						
	ES	NE	29 07							
	RAO EP	Z	21 27 46	9						
	ES	Z	29 25							
AUG 16	AFI EP	Z	22 12 54							
	ES	NE	13 20							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 17	00 53 43.2	21.5S	171.2E	51KM	4.7	LOYALTY IS				
	SBA EP	Z	01 03 20.8	56	-1.41					
AUG 17	AFI EP	Z	01 40 20							

		ES	NE	42						
AUG 17	AFI EP	Z	09 21 57							
	ES	NE	22 40							
AUG 17	AFI EP	Z	10 34 37							
	ES	NE	35 13							
	E	ZNE	34							
	ET	ZNE	38 09							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 17	11 52 43.9	7.4S	123.4E	474KM	5.1	BANDA SEA				
	SBA EP	Z	12 03 30.0U	74						
	H M S	EPICENTRE		DEPTH	MAG					
AUG 17	13 17 27.6	14.4S	167.4E	196KM	4.0	NEW HEBRIDES				
	SBA EP	ZNE	13 27 38.5	63	-1.22					
AUG 17	AFI EP	Z	17 56 57							
	ES	NE	57 51							
	ET	ZNE	18 02 38							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 17	19 54 11.2	5.0S	125.2E	538KM	5.4	BANDA SEA				
	AFI EP	Z	20 03 45	63	-0.13					
	SBA IP	ZNE	20 05 02.5U	76	-0.68					
	ES	Z	14 40							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 17	20 58 35.9	52.3N	174.9E	32KM	5.6	ALEUTIAN IS				
	SBA EPKP	ZN	21 17 45	130						
	H M S	EPICENTRE		DEPTH	MAG					
AUG 18	00 05 04.9	1.7S	100.6E	19KM	5.3	S SUMATRA				
	SBA EP	Z	00 17 31.5	83	-1.41					
	H M S	EPICENTRE		DEPTH	MAG					
AUG 18	02 29 43.7	15.8S	172.9W	33KM	4.5	SAMOA				
	AFI EP	Z	02 30 17	2						
	ES	NE	38							
	SBA EP	Z	02 40 07.5	63	-1.23					
AUG 18	AFI EP	Z	07 59 10							
	ES	NE	37							
	ET	ZNE	08 01 52							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 18	10 33 16.5	14.6N	91.7W	76KM	5.9	GUATEMALA				
	AFI EP	Z	10 45 42	84						
	EPP	ZE	49 15							
	EPPP	Z	51 03							
	ES	ZNE	56 03							
	ESS	NE	11 01 32							
	ESSS	Z	05 05							
	ELQ	ZN	08 20							
	ELR	ZNE	11 18							
	SBA ES	E	10 58 00	107						
	ELR	ZE	11 23 00	6 30						



H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 18	14 33 59.8	0.2S 125.1E	56KM	6.3	MOLUCCA SEA				
AFI	EP	Z 14 44 42	64						
SBA	EP	ZNE 14 46 10.0	81	-0.86			6.2		
	ES	ZNE 56 17			6	8	6.8		
	EL	E 15 05 30					4 30		
AUG 18	14 37 52.6	1.0S 125.1E	33KM	6.3	MOLUCCA SEA				
AFI	EP	Z 14 48 25	64	-0.05			7.1		
	EPCP	Z 42							
	ES	ZNE 53 08							
	ESCS	E 54 32							
	ESS	ZNE 57 00							
	EL	ZNE 15 04 24							
SBA	EP	ZNE 14 50 05	80	-0.56			6.6		
	ES	ZNE 15 00 15			3	16	6.2		
	EL	E 09 15							
AUG 18	15 02 19.1	21.7S 169.8E	20KM	5.2	LOYALTY IS				
SBA	EP	ZNE 15 11 57	56						
AUG 18	15 42 42.7	4.3S 138.4E	155KM	5.4	W NEW GUINEA				
SBA	EP	ZNE 15 54 09	75	-0.92			5.9		
	EPCP	ZN 46.5							
AUG 18	SBA	EP	ZNE 15 51 40						
AUG 18	AFI	EP	Z 19 20 23						
	ES	NE 21 27							
	ET	ZNE 25 10							
AUG 18	AFI	EP	ZNE 21 13 58				-0.30		
	E(S)	NE 16 42							
AUG 19	AFI	EP	ZNE 01 03 19						
	ES	ZNE 52							
AUG 19	AFI	E(P)	Z 07 47 10						
	ES	NE 48 30							
AUG 19	AFI	EP	ZNE 08 58 13						
	ES	ZNE 39							
AUG 19	12 22 09.6	39.2N 41.3E	26KM	6.1	TURKEY				
SBA	EPKP	ZNE 12 41 27.0	135						
	EPP	ZE 44 09.5							
	EPKS	Z 13 00 09							
	ELQ	Z 20 00							
	ELR	Z 27 00							
AFI	EPKP	Z 12 41 43	141						
	E(PCP)	ZE 47 05							
	E	NE 51 54							
	E	NE 54 30							
	ESKSP	Z 55 00							
	E	Z 56 30							
	E	NE 57 00							
	ESS	NE 13 03 12							

H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
		ESSS	E	09 00					
		E	N	13 12					
		E	ZE	17 06					
		EL	Z	18 48					
		EL	NE	19 12					
RAO	EPKP	Z	12 41 54	146					
AUG 19	13 39 42.0	19.1S 173.6W	33KM	4.4	TONGA				
AFI	EP	Z 13 40 55	5						
	ES	NE 41 48							
	ET	ZNE 45 53							
AUG 19	13 57 22.9	19.0S 177.4W	566KM		FIJI				
SUV	EP	Z 13 58 47	4						
AFI	EP	Z 13 59 15	7						
	ES	NE 14 00 42							
SBA	EP	Z 14 06 35.8U	59	-1.41			4.9		
AUG 19	AFI	IP	Z 14 53 14				-0.87		
	ES	NE 53							
AUG 19	AFI	EP	Z 21 00 13						
	ES	NE 01 57							
AUG 20	07 43 27.6	3.2S 77.2W	116KM	5.6	PERU-ECUADOR BORDER				
SBA	IP	ZE 07 56 25.7	92	-0.82			6.6		
AUG 20	09 32 31.7	43.1N 140.6E	101KM	5.8	HOKKAIDO JAPAN				
AFI	EP	Z 09 43 35	72	-0.19			6.7		
SBA	IPKP	ZNE 09 51 06.5	122						
	EPP	Z 52 32							
AUG 20	11 59 12.1	39.3N 40.9E	37KM	5.4	TURKEY				
SBA	EPKP	Z 12 18 30	135						
AUG 20	12 01 43.4	39.0N 40.9E	33KM	5.4	TURKEY				
SBA	EPKP	Z 12 21 03	135						
AUG 20	AFI	E	NE 12 41 00						
	E	NE 45 18							
	E	ZE 57 24							
	E	N 59 00							
	E	ZE 13 03 30							
	EL	N 05 05							
	EL	ZE 06 01							
AUG 20	AFI	EP	Z 15 40 33						
	ES	NE 52							
AUG 20	AFI	E	NE 22 30 36						
	EL	Z 31 30							







H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 24	01 51 07.3	30.1S 177.5W	21KM	4.6	KERMADEC IS				
	RAO IP	Z 01 51 34.0D		1					
	ES	Z 01 51 35							
	SBA EP	ZNE 01 59 51.8		48					
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 24	02 20 49.1	19.0S 177.7W	442KM	4.4	FIJI				
	AFI EP	Z 02 22 41		8					
	ES	ZNE 24 05							
	SBA EP	ZNE 02 30 10.5		59 -1.41	5.1				
AUG 24	SBA EP	ZNE 04 11 04							
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 24	07 17 17.8	19.9S 69.2W	100KM	5.5	N CHILE				
	SBA IP	ZNE 07 29 03.5D		77 -0.86	6.0				
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 24	21 24 59.9	20.0S 175.3W	33KM	4.3	TONGA				
	AFI EP	Z 21 26 42		7					
	ES	NE 27 51							
	SBA EP	Z 21 34 36		59					
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 25	11 45 46.0	18.7S 173.9W	59KM	4.7	TONGA				
	AFI EP	Z 11 47 02		5					
	ES	NE 48 03							
	ET	ZNE 51 55							
	RAR EP	ZE 11 48 38		14					
	ES	NE 50 49							
AUG 25	SBA EP	ZNE 20 00 50							
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 25	23 18 50.8	22.4S 68.6W	112KM	5.3	N CHILE				
	SBA EP	ZNE 23 30 23		75					
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 25	23 58 55.7	10.4S 161.7E	32KM	5.2	SOLOMON IS				
	SBA EP	Z 00 09 50.5		67					
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 26	00 51 51	27.5S 177.3W	59KM	5.7	KERMADEC IS				
	RAO IP	Z 00 52 22.0D		2					
	ES	Z 00 55 06		14 0.14					
	AFI EP	ZNE 57 33							
	ES	ZNE 59 30							
	ET	ZNE 01 0 00							
	RAR EP	ZNE 00 55 46		17					
	ES	ZNE 58 33							
	EL	NE 42							
	ET	Z 52							
	SBA EP	ZNE 01 12 03		51 -0.67	6.4				
	ES	NE 08 03							
AUG 26	AFI EP	ZNE 03 08 35							

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

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H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 26	09 06 50.4	22.1S 170.0E	33KM	5.6	LOYALTY IS				
	SUV EP	Z 09 08 59		9					
	AFI EP	Z 09 11 09		19					
	ES	ZNE 14 50							
	ES	N 15 10							
	E	Z 49							
	EL	ZE 16 20							
	RAR ES	ZNE 09 17 26		28					
	ISS	N 18 31							
	EL	ZE 20 19							
	SBA EP	ZNE 09 16 25.5		56 -0.86	6.3				
	ELQ	ZNE 31 12							
	ELR	ZNE 34 05							
AUG 26	SUV EP	Z 13 30 24							
	AFI EP	Z 13 32 37		-0.54					
	ES	NE 36 22							
	EL	Z 37 19							
	RAR EL	N 13 40 00							
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 26	13 32 26.6	22.2S 169.8E	69KM	4.1	LOYALTY IS				
	SUV EP	Z 13 34 34		9					
	SBA EP	Z 13 41 57.8U		56 -1.23	5.9				
AUG 26	AFI EP	ZNE 15 21 21							
	ES	ZNE 52							
AUG 26	SBA EP	ZNE 22 07 22							
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 26	22 24 45.3	23.6S 175.8W	33KM	4.9	TONGA				
	RAO ES	Z 22 27 25		6					
	AFI EP	Z 22 27 06		10					
	ES	NE 28 50							
	EL	ZNE 29 30							
	RAR EP	Z 22 28 05		15					
	ET	ZNE 43 17							
	SBA EP	Z 22 34 27.8		55					
AUG 26	AFI EP	Z 23 16 02							
	ES	NE 53							
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 27	02 36 33.0	3.2N 128.2E	170KM	5.6	N OF HALMAHERA				
	AFI EP	Z 02 46 39		62					
	SBA EP	ZNE 02 48 44		84					
H M S		EPICENTRE	DEPTH	MAG					
H M S		DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
AUG 27	03 02 32.9	23.6S 175.8W	63KM	4.9	TONGA				
	RAO EP	Z 03 03 59		6					
	ES	Z 05 02							
	SUV EP	Z 03 04 27		8					
	AFI EP	Z 03 04 50		10					
	ES	NE 06 37							
	EL	ZNE 07 13							
	RAR IP	ZE 03 05 50		U 15					
	ES	ZNE 08 13							
	EL	NE 10 02							



		ZNE	21 15							
	SBA EP	Z	03 12 01	55						
AUG 27	AFI EP	Z	03 10 27							
	ES	ZNE	53							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 27	04 35 48.0	5.8N	125.9E	119KM	5.5	PHILIPPINE IS				
	SBA EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
		ZNE	04 48 19.5	86						
AUG 27	AFI EP	Z	08 02 35							
	ES	ZNE	03 14							
AUG 27	AFI EP	Z	09 47 19							
	ES	ZNE	44							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 27	10 27 50.0	17.9S	178.4W	550KM	4.6	FIJI				
	SUV EP	Z	10 29 09	3						
	AFI IP	Z	10 29 43	D	8	-0.32				
	ES	NE	31 08							
AUG 27	AFI IP	Z	14 09 31	U						
	ES	ZNE	51							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 28	07 29 34.7	35.8S	178.5E	94KM	5.8	E OF NORTH IS NZ				
	RAO IP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	ES	Z	07 31 20	7						
	AFI EP	Z	07 34 37	23	-0.12					
	ES	NE	38 49							
	ET	ZNE	08 00 10							
	RAR ES	NE	07 38 50	24						
	SBA IP	ZNE	07 37 23.5D	42	-0.75					
	ES	Z	42 45							
	EP	Z	33 37							
AUG 28	AFI E(P)	Z	07 54 57							
	ES	NE	56 20							
	E(T)	ZNE	58 53							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 28	10 03 03.0	4.6S	155.2E	509KM	5.6	SOLOMON IS				
	SUV EP	Z	10 07 59	26						
	AFI EP	Z	10 09 00	34						
	ES	ZE	13 48							
	EL	ZNE	16 18							
	RAR IP	Z	10 10 47.8U	47						
	ES	NE	17 04							
	SBA IP	ZNE	10 13 45.4D	73	-0.25					
	H M S	EPICENTRE		DEPTH	MAG					
AUG 28	13 21 13.5	18.6S	175.6W	179KM	4.7	TONGA				
	AFI EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	ES	Z	13 22 41	6						
	ET	NE	23 41							
	SUV EP	ZNE	26 40							
	RAR EP	Z	13 22 48	6						
	ES	Z	13 24 35	15						
	ET	ZNE	38 53							
	SBA EP	Z	13 31 03	60						
AUG 28	AFI EP	Z	13 40 36							

		ES	NE	57						
AUG 28	AFI IP	Z	14 49 44	U						
	ES	ZNE	50 22							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 28	16 44 26.2	23.5S	179.6E	640KM	4.2	S OF FIJI				
	SUV EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
		Z	16 45 53	5						
AUG 28	SBA EP	ZNE	22 43 12.2							
AUG 29	AFI EP	Z	01 59 30							
	ES	NE	54							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 29	13 10 27.0	65.2S	176.9E	33KM	5.5	BALLENY IS				
	SBA EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	ES	ZNE	13 13 32.5	13	-0.01					
	RAR ES	ZNE	16 30							
	ESS	NE	13 25 30	47						
	ELQ	NE	29 26							
	AFI ES	ZN	31 06							
	ESS	ZNE	13 27 06	52						
	EL	E	31 42							
		ZN	33 36							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 30	08 36 04.5	33.1S	179.2W	43KM	4.5	S OF KERMADEC IS				
	RAO EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	ES	Z	08 36 55	4						
	SBA EP	Z	37 44							
		ZNE	08 44 10.2	45						
	H M S	EPICENTRE		DEPTH	MAG					
AUG 30	13 37 38.7	17.7S	173.3W	33KM	4.8	TONGA				
	AFI EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	ES	Z	13 38 33	4						
	EL	NE	39 10							
	ET	ZNE	40							
	RAR EP	ZNE	42 30							
	ES	Z	13 40 33	13						
	ET	N	43 07							
	SBA EP	ZNE	53 37							
		Z	13 49 52	61						
	H M S	EPICENTRE		DEPTH	MAG					
AUG 30	15 04 01.4	25.5S	179.9W	505KM		S OF FIJI				
	RAO EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	ES	Z	15 05 43	4						
	AFI EP	Z	06 57							
	ES	Z	15 06 43	14						
		NE	08 47							
	H M S	EPICENTRE		DEPTH	MAG					
AUG 30	16 54 38.1	23.9S	179.8W	510KM	4.4	S OF FIJI				
	RAO EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
	ES	Z	16 56 10	6						
	AFI IP	Z	57 20							
	ES	ZNE	16 57 13.1D	12	-0.51					
	SBA EP	ZNE	59 23							
		Z	17 03 19	U	54					
	H M S	EPICENTRE		DEPTH	MAG					
AUG 30	19 42 44.4	3.6N	126.3E	33KM	5.5	TALAUD IS				
	SBA EP	H M S		DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
		ZNE	19 55 14.8	84						



DATE	STATION	EPICENTRE	DEPTH	MAG	LOCATION
AUG 30	AFI EP	Z 20 00 23 NE 01 20			
AUG 30	20 20 54.0	61.3N 147.5W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	36KM 5.9		S ALASKA
	SBA EPKP	ZNE 20 40 16	142		
AUG 30	23 37 19.4	18.7N 107.0W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	54KM 5.3		OFF COAST OF MEXICO
	RAR ES	ZN 23 56 43	65		
	ESSS	N 24 04 24			
	ELQ	ZNE 06 40			
AUG 31	AFI EP	Z 08 47 25		-0.97	
AUG 31	08 46 09	23.2S 173.0W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	33KM		TONGA
	RAO EP	Z 08 47 31	7		
	ES	Z 48 39			
	AFI EP	Z 08 48 29	9		
	ES	NE 50 15			
	EL	ZNE 51 00			
	ET	ZNE 58 58			
	RAR IP	ZE 08 49 27,6U	12		
	ES	E 51 58			
	ET	ZNE 09 04 43			
	RAR AND AFI READINGS ONLY USED TO DETERMINE EPICENTRE				
AUG 31	SBA EP	Z 08 55 36,8			
AUG 31	09 38 17.1	27.0S 176.5W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	58KM 4.7		KERMADEC IS
	RAO IP	Z 09 38 57,0U	3		
	ES	Z 39 31			
	AFI EP	Z 09 41 19	14		
	ES	NE 43 45			
	EL	ZNE 44 30			
	ET	ZNE 53 52			
	RAR EP	Z 09 42 03	16		
	ES	NE 44 41			
	ET	ZNE 58 03			
	SBA EP	Z 09 47 22,5	52		
AUG 31	AFI EP	Z 10 07 02			
	ES	NE 45			
AUG 31	AFI EP	Z 14 04 18			
	ES	NE 39			
SEP 01	03 31 34.1	16.2S 176.2W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	345KM 3.8		FIJI
	EP	Z 03 32 52			
	ES	NE 33 50			
SEP 01	08 57 14.0	0.5S 134.3E H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	66KM 5.1		WESTERN NEW GUINEA
	SBA EP	ZNE 09 09 13	79		

DATE	STATION	EPICENTRE	DEPTH	MAG	LOCATION
SEP 01	15 24 59.2	20.6S 175.4W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	33KM 5.2		TONGA
	SUV EP	Z 15 26 45	6		
	AFI EP	ZNE 15 26 47	7		
	ES	ZNE 28 03			
	RAO EP	Z 15 28 47	9		
	SBA IP	ZNE 15 34 52,7D	58		
SEP 02	07 59 05.7	4.5S 105.9W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	33KM 5.1		N EASTER IS CORDILLERA
	RAR ES	ZE 08 16 30	55		
	EL	N 22 00			
	ELR	ZE 23 30			
	AFI ES	NE 08 18 32	66		
	ES	Z 19 00			
	ESSS	NE 26 16			
	EL	ZE 28 48			
	SBA EP	ZNE 08 11 44	85		
	ELQ	N 35 04			
	ELR	ZE 39 48			
SEP 02	10 15 15.9	3.2S 139.6E H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	33KM 5.2		WESTERN NEW GUINEA
	SBA EP	ZNE 10 27 02	76		
SEP 02	14 34 55.8	2.1N 126.8E H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	116KM 5.1		MOLUCCA PASSAGE
	SBA EP	ZNE 14 47 11	83		
SEP 03	AFI EP	Z 02 44 32			
	ES	NE 45 09			
SEP 03	AFI EP	Z 06 45 22			
	ES	NE 53			
SEP 03	AFI EP	Z 10 57 27			
	ES	NE 58 00			
SEP 03	12 08 39.9	57.0S 25.6W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	33KM 5.3		SFUTH SANDWICH IS
	SBA EP	ZNE 12 16 56	45		
SEP 03	AFI EP	Z 17 23 43			
	ES	NE 24 28			
SEP 03	19 45 47.6	20.7S 178.9W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	600KM 4.7		FIJI
	SUV EP	Z 19 47 14	4		
	AFI EP	Z 19 48 01	10		
	ES	NE 49 45			
	SBA EP	ZNE 19 54 33	58		
SEP 04	05 37 49.7	17.8S 74.0W H M S DIR DIS LG=A/T AZ TZ AN TN AE TE MAG	3KM 5.1		OFF COAST OF PERU
	SBA EP	ZNE 05 49 55	79		



	H	M	S	EPICENTRE	DEPTH	MAG									
SEP 04	09	41	23.8	2,5S 135.8E	39KM	6.0	W	NEW GUINEA							
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	ES		Z 09 57 48		53									
		EL		N 10 03 12											
		EL		Z 04 24											
	SBA	EP		ZNE 09 53 13		77									
		ES		NE 10 03 18											
		ELQ		NE 16 09											
		ELR		ZNE 18 50											
SEP 04	AFI	EP		Z 13 14 00											
		ES		NE 27											
SEP 04	13	28	42.6	16,5S 167.4E	9KM	5.3	NEW	HEBRIDES							
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	IP		ZN 13 39 02,8D		61									
SEP 05	00	08	05.1	21,7S 176.4W	212KM	4.7	FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SUV	EP		Z 00 09 37		6									
		ES		Z 10 48											
	RAO	ES		Z 00 11 20		8									
	AFI	EP		Z 00 10 01		9									
		ES		NE 11 30											
	RAR	EP		ZNE 00 11 34		15	-0.73			5,6					
		ES		NE 14 26											
		ET		ZNE 26 13											
	SBA	EP		ZNE 00 17 31		57									
SEP 05	06	52	51.1	7,5S 155.9E	60KM	5.2	SOLOMON IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP		ZNE 07 03 52		71									
SEP 05	AFI	EP		Z 10 32 17											
		ES		NE 51											
		ET		ZNE 34 40											
SEP 05	11	09	59.7	20,2S 177.6W	488KM	3.9	FIJI								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 11 12 01		8									
		ES		NE 13 35											
	RAR	EP?		Z 11 13 24		17									
SEP 05	11	17	00.5	23,7S 175.8W	33KM	4.6	TONGA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SUV	EP		Z 11 19 00		8									
	AFI	EP		Z 11 19 24		10									
		ES		NE 20 59											
		EL		ZN 22 30											
	RAR	EP		ZNE 11 20 20		15									
	SBA	EP		ZN 11 26 37		55									
SEP 05	SUV	EP		Z 11 54 05											
SEP 05	17	58	31.0	15,9S 167.4E	38KM	5.4	NEW	HEBRIDES							
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 18 03 06		20	-0.54			5,7					
		ES		N 06 48											
		EL		Z 08 18											

	SBA	EP	ZNE	EPICENTRE	DEPTH	MAG									
			18 08 50			62									
SEP 05	23	05	03.4	29,6N 113.9W	33KM	4.4	OFF	CALIFORNIA							
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 23 17 14		71									
SEP 06	AFI	EP		Z 05 26 01											
		ES		NE 22											
SEP 06	16	44	20.2	37,1S 179.5E	45KM		OFF	E COAST NI NZ							
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP		Z 16 52 05		41									
SEP 06	AFI	EP		Z 17 28 10											
		ES		ZNE 37											
		ET		ZNE 30 34											
SEP 06	AFI	EP		ZNE 18 41 53											
		ES		ZNE 42 14											
SEP 06	20	25	06.4	29,4S 112.3W	33KM	5.2	EASTER	ISLAND							
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP		ZNE 20 34 54		60									
SEP 07	05	53	45.7	8,7S 156.5E	52KM	5.3	SOLOMON IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	RAO	EP		Z 05 59 24		32									
	AFI	EP		Z 06 00 07		32	-0.84			6,0					
		ESS		NE 07 36											
		ET		Z 09 00											
SEP 07	AFI	EP		ZNE 06 02 46											
SEP 07	AFI	EP		Z 13 25 34											
		ES		ZNE 54											
SEP 07	15	55	11.5	5,1S 154.7E	77KM	5.5	SOLOMON IS								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 16 01 48		34									
	SBA	EP		ZNE 16 06 34		73									
SEP 07	AFI	EP		Z 16 44 15											
		ES		NE 46 08											
SEP 07	AFI	EP		Z 21 38 15											
		ES		ZNE 35											
SEP 08	02	14	21.9	12,5S 166.7E	128KM	4.7	SANTA	CRUZ IS							
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	AFI	EP		Z 02 18 57		21	-0.79			5,5					
	SBA	EP		ZNE 02 24 52		65									
SEP 08	08	28	52.1	23,5S 66.6W	204KM	5.4	ARGENTINA								
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP		ZNE 08 40 09		74									
SEP 08	10	37	43.2	3,6N 126.3E	65KM	5.1	TALAUD	ISLANDS							
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG					
	SBA	EP		ZNE 10 50 19		84									



	H	M	S	EPICENTRE	DEPTH	MAG									
SEP 08	12	07	49.7	22.5S 10.7E	33KM	5.4	S ATLANTIC RIDGE								
				H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
				ZN	12	19	57	80							
				SBA	EP										
SEP 08	16	37	21.8	19.8S 175.8E	183KM	4.0	TONGA								
				H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
				Z	16	38	55	6							
				SUV	EP										
				Z	16	39	02	7							
				AFI	EP										
				NE	40	13									
				SBA	EP			59							
SEP 08	21	15	52.8	2.4N 128.4E	95KM	6.9	HALMAHERA								
				H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
				Z	21	26	00	61							
				AFI	EP										
				ZE	28	24									
				ES	34	20									
				ESS	38	20									
				ESSS	41	16									
				EL	44	06									
				EL	45	13									
				RAR	Z	21	27	22	74						
				ES	36	54									
				ESS	41	31									
				ELQ	47										
				ELR	51	40									
				SBA	EP	21	28	05	83						
				E(S)	ZNE	38	22								
				ELQ	E	50									
				ELR	ZN	55									
SEP 08	21	17	21.4	21.7S 176.3W	80KM	5.7	FIJI								
				H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
				Z	21	19	01	6							
				SUV	E	20	49								
				Z	21	19	14	8							
				RAO	EP										
				S	Z	20	35								
				AFI	EP	ZNE	21	19	28	9					
				ES	ZNE	20	57								
				RAR	EP	ZNE	21	20	54	15					
				ES	ZNE	23	39								
				EL	ZNE	25	13								
				SBA	EP	ZNE	21	26	59	57					
				ES	NE	34	46								
				ELR	ZN	43	35								
SEP 08	22	58	23.2	18.0S 178.4W	592KM	4.3	FIJI								
				H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
				Z	23	00	13	8							
				AFI	EP										
				ES	NE	01	43								
SEP 09	12	04	30.9	4.2S 102.8E	25KM	5.3	SOUTHERN SUMATRA								
				H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
				ZNE	12	16	43.5	81							
				SBA	EP										
SEP 09	12	34	06.0	19.9S 172.9W	33KM	4.7	TONGA								
				H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN	AE TE	MAG					
				Z	12	35	28	6							
				AFI	EP										
				ES	NE	36	29								
				EL	ZNE	37	19								

	RAR	EP	ZNE	12	37	02	12
	SBA	EP?	Z	12	44	10	59
SEP 09	AFI	EP	Z	13	02	03	
		ES	ZNE			42	
		ET	ZNE	04	35		
SEP 09		H M S	EPICENTRE	DEPTH	MAG		
		23 13 19.8	17.6S 168.0E	36KM	5.2	NEW HEBRIDES	
			H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN
			Z	23	17	52	20
			SBA	EP	ZNE	23	23
					27.3	60	
SEP 10	AFI	E(S)	ZNE	10	21	30	
		SUV	EP	Z	10	19	13
SEP 10		H M S	EPICENTRE	DEPTH	MAG		
		14 12 46.2	31.7S 72.0W	20KM	4.9	OFF CENTRAL CHILE	
			H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN
			SBA	EP	ZNE	14	23
					29	65	
SEP 10		H M S	EPICENTRE	DEPTH	MAG		
		17 32 03.0	23.3S 179.8E	550KM	5.0	S OF FIJI	
			H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN
			SUV	IP	Z	17	33
			ES	Z	34	53	5
			RAO	EP	Z	17	33
			ES	Z	34	53	6
			AFI	EP	Z	17	34
			ES	NE	36	46	12
			SBA	EP	ZNE	17	40
			EPCP	Z	41	37.2	55
SEP 10		H M S	EPICENTRE	DEPTH	MAG		
		21 40 17.8	27.7S 70.4W	35KM	4.2	NEAR NORTH CHILE	
			H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN
			SBA	EP	ZN	21	51
					25.5	70	
SEP 11		H M S	EPICENTRE	DEPTH	MAG		
		03 49 13.4	58.9S 25.7W	33KM	5.4	S SANDWICH IS	
			H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN
			SBA	EP	ZNE	03	57
					14.5	43	
SEP 11	SUV	EP	Z	07	57	15	
SEP 11	AFI	IP	Z	11	55	10.5	
		ES	ZNE			31	
SEP 11	AFI	EP	Z	21	22	16	
		ES	NE			35	
SEP 11		H M S	EPICENTRE	DEPTH	MAG		
		22 19 07.4	17.5S 177.5W	369KM	4.9	FIJI	
			H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN
			AFI	EP	ZNE	22	20
			ES	ZNE	22	01	7
					-0.51		
SEP 12		H M S	EPICENTRE	DEPTH	MAG		
		00 42 25.5	15.9S 167.0E	62KM	4.9	NEW HEBRIDES	
			H M S	DIR DIS	LG <sub>A</sub> /T	AZ TZ	AN TN
			SBA	EP	ZNE	00	52
					44	62	
SEP 12	AFI	EP	Z	08	14	35	
		ES	NE			57	
SEP 12	AFI	EP	Z	09	31	53	
		ES	NE			32	40











		ZNE	20	21	03	17					
RAR	EP	NE	24	11							
	ES	NE	24	11							
	EL	ZNE	25	20							
SBA	EP	ZNE	20	26	23,1	51					
	EPP?	Z	28	41							
	ES	NE	33	50			3	16	7	14	6,1
	ELQ	E	40	02					3	18	
	ELR	ZN	41	30			4	21	3	21	
H M S		EPICENTRE		DEPTH		MAG					
SEP 17	21 05 26.8	20.7S	176.3W	220KM	4.6	FIJI					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
SUV	EP	Z	21	06	55	6					
RAO	ES	Z	21	09	07	9					
SBA	EP	ZNE	21	14	59	58					
	ES	NE	22	13							
H M S		EPICENTRE		DEPTH		MAG					
SEP 17	23 02 25.2	27.8S	176.9W	75KM	4.4	KERMADEC IS					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
RAO	EP	Z	23	02	53	2					
	ES	Z	03	14							
SBA	EP	ZN	23	11	17	51					
NO RECORDS FOR AFI DUE TO INOPERATIVE CONSOLE											
H M S		EPICENTRE		DEPTH		MAG					
SEP 18	15 14 24.9	60.4S	27.0W	33KM	5.4	SOUTH SANDWICH IS					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
SBA	EP	ZNE	15	22	12	42					
	ES	ZNE	28	35							
	ELQ	NE	31	17							
	EMAX	E	45				26	9			
	E(LR)	ZNE	35	17							
H M S		EPICENTRE		DEPTH		MAG					
SEP 18	17 58 20.1	60.4S	27.1W	38KM	5.5	SOUTH SANDWICH IS					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
SBA	EP	ZNE	18	15	20	42					
	ES	E	20				6	18	6,0		
	EL	ZNE	21								
H M S		EPICENTRE		DEPTH		MAG					
SEP 18	20 43 53.3	27.8N	54.3E	16KM	6.2	SOUTHERN PERSIA					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
SBA	EPP?	Z	21	02	47	122					
	EPP?	Z	04	20							
H M S		EPICENTRE		DEPTH		MAG					
SEP 19	07 02 12.8	20.7S	178.4W	580KM	5.3	FIJI					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
SUV	P	Z	07	03	37	4					
RAO	EP	Z	07	04	11	9					
	ES	Z	07	05	43						
RAR	EP	Z	07	05	45	17					
SBA	EP	ZNE	07	11	11,3	58 -0.53					
H M S		EPICENTRE		DEPTH		MAG					
SEP 20	00 06 11.5	35.6S	104.7W	33KM		S PACIFIC OCEAN					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
SBA	EP?	Z	00	15	43	55					
	ELQ	N	29	41			3	21			
	ELR	ZE	33	55			3	18	3	18	
H M S		EPICENTRE		DEPTH		MAG					
SEP 20	06 37 56.6	18.1S	172.4W	33KM	4.6	TONGA					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
RAR	EP	ZE	06	40	52	12					

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

		ZNE	06	48	17	61					
H M S		EPICENTRE		DEPTH		MAG					
SEP 20	09 24 02.8	60.6S	26.2W	33KM	5.5	SOUTH SANDWICH IS					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
SBA	IP	ZNE	09	31	50,9U	42 -0.26					
	ES	ZN	38	34			4	14	6,5		
	ELR	ZN	43	50			3	20	3	20	6,0
H M S		EPICENTRE		DEPTH		MAG					
SEP 20	17 32 06.9	28.0S	176.6W	69KM	5.1	KERMADEC IS					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
RAO	EP	Z	17	32	35	2					
	ES	Z	17	33	02						
SUV	EP	Z	17	34	39	11					
RAR	EP	ZNE	17	35	46	17					
	ES	ZNE	17	38	31						
	ELQ	NE	39	05							
	ELR	Z	40	25							
SBA	EP	ZNE	17	41	03	51					
	ES	ZNE	48	25			4	14	6,1		
	ESS	E	51	03			3	11			
	ELQ?	NE	54	10			3	18			
	ELR	ZN	57	05			3	20	3	20	
H M S		EPICENTRE		DEPTH		MAG					
SEP 20	18 11 56.5	27.8S	176.7W	80KM	4.5	KERMADEC IS					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
RAO	EP	Z	18	12	25	2					
	ES	Z	18	12	50						
SUV	EP	Z	18	14	26	11					
RAR	EP?	ZNE	18	15	39	17					
SBA	EP	ZNE	18	20	58	51					
H M S		EPICENTRE		DEPTH		MAG					
SEP 20	23 18 14.7	15.6S	172.7W	33KM	4.6	SAMOA					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
RAR	EP	ZNE	23	21	23	13					
SBA	EP	ZN	23	28	41	63					
H M S		EPICENTRE		DEPTH		MAG					
SEP 21	10 49 02.6	16.6S	167.4E	38KM	4.8	NEW HEBRIDES					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
SBA	EP	ZNE	10	59	17	61 -0.57					
H M S		EPICENTRE		DEPTH		MAG					
SEP 21	13 58 39.8	15.9S	168.2E	229KM		NEW HEBRIDES					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
EP		Z	14	08	38						
H M S		EPICENTRE		DEPTH		MAG					
SEP 22	21 35 09.2	17.0S	172.8W	10KM	4.4	SAMOA					
H M S		DIR DIS		LG=A/T		AZ TZ		AN TN		AE TE MAG	
AFI	EP	ZNE	21	35	58	3					
	ES	ZNE	36	16							
	ET	ZNE	39	15							
SUV	EP	Z	21	37	28	8					
RAR	EP	ZNE	21	38	03	13					
	ELQ	NE	40	17							
	ELR	ZNE	41	20							
SBA	EP	ZNE	21	45	32	62					
	ES	ZNE	54	02							
	ELQ	NE	22	03							
	ELR	ZN	05								



	H	M	S	EPICENTRE	DEPTH	MAG													
SEP 23	18	25	53.0	59.5S 26.3W	33KM	5.6													
	SBA	EP		ZNE 18 33 48		43	0.12												6.8
		ES?		N 40 17															
		ELQ		E 43 11															
		ELR		ZN 46 26															
SEP 24	08	57	10.2	12.0N 130.8W	33KM	5.3													
	AFI	EP		Z 09 05 50		48													
SEP 24	16	48	31.7	22.4S 171.6E	127KM	5.1													
	SUV	EP		Z 16 50 21		8													
	AFI	EP		Z 16 52 29		18	-0.68												5.5
		ES		NE 56 18															
	SBA	IP		ZNE 16 57 56.6DV		56	0.12												7.2
SEP 25	06	02	26.4	18.3N 100.8W	60KM	6.1													
	AFI	EP		Z 06 14 13		77													
SEP 25	06	33	18.1	21.4S 170.4E	179KM	4.7													
	RAO	EP		Z 06 36 20		13													
	SBA	EP		Z 06 42 43		57													
SEP 25	08	36	19.4	22.9S 170.5E	33KM	4.9													
	SBA	EP		Z 08 46 49		55													
SEP 25	08	45	58.3	26.6S 179.3E	481KM	4.0													
	RAO	EP		Z 08 47 13		4													
		ES		Z 08 48 17															
	SBA	EP		Z 08 54 22		52													
SEP 26	06	10	08.2	16.0S 175.7W	145KM	4.7													
	AFI	EP		ZNE 06 10 42		4	-0.30												
		ES		ZNE 11 30															
		EL		ZNE 14 08															
	RAR	ES		NE 06 16 10		16													
	SBA	EP		ZNE 06 20 19		62													
		ES		NE 28 55															
		ELR?		ZNE 39															
SEP 27	04	01	39.1	54.4S 6.2E	33KM	4.9													
	SBA	EP		ZNE 04 10 11		47	-0.71												
		ES?		N 17 10															
SEP 27	09	06	31.1	20.7S 178.7W	568KM	4.7													
	AFI	EP		Z 09 08 44		9	-0.84												
		ES		ZNE 10 26															

	H	M	S	EPICENTRE	DEPTH	MAG													
	SBA	EP		ZNE 09 15 30		58	-0.71												
SEP 28	11	49	05.2	14.4S 178.6W	33KM	4.6													
	SUV	P		Z 11 51 00		5													
	AFI	EP		Z 11 51 24		7													
		ES		NE 52 45															
SEP 28	14	00	22.9	27.4N 100.1E	33KM	6.2													
	RAR	ESS		E 14 34 35		108													
		ELR		ZNE 50 12															
	SBA	EPP		ZNE 14 19 46		112													
		ESKKS		N 27 30															
		EPS		ZE 29 15															
		ESS		ZNE 35 05															
		ESSS		E 39 55															
		ELQ		NE 46 05															
		ELR		Z 52 55															
SEP 29	02	44	19.0	19.9S 176.2W	246KM	5.5													
	SUV	IP		Z 02 45 43		5													
		E		Z 46 39															
		ES		Z 54															
	RAO	EP		Z 02 46 26		9													
		ES		Z 48 08															
	RAR	EP		ZNE 02 47 44		15													
		ES		ZNE 50 36															
		ET		ZNE 03 01 58															
	SBA	IP		ZNE 02 53 53.2US		59	-0.12												
		EPCP		Z 54 47															
SEP 29	05	27	42.6	19.9S 176.5W	309KM	3.7													
	SUV	EP		Z 15 29 00		5													
SEP 29	14	54	45.9	8.6S 110.5E	33KM	5.2													
	SBA	EP		ZNE 15 06 24		75													
SEP 30	09	29	11.6	18.3S 69.7W	122KM	5.2													
	SBA	IP		ZNE 09 41 04.9D		79	-0.49												
SEP 30	15	02	17.8	17.4S 172.5W	33KM	4.8													
	RAR	EP		Z 15 05 10		13													
	SBA	EP		Z 15 12 32		61													
SUVA TIMING NOT RELIABLE OCTOBER 1ST TO NOVEMBER 30TH																			
OCT 01	05	46	29.9	10.8S 162.1E	33KM	4.8													
	SBA	P		ZNE 05 57 22		67	-0.90												
OCT 01	SBA	EP		ZNE 18 24 35															
OCT 02	SBA	EP		Z 07 46 03															



E		ZNE	21							
H	M	S	EPICENTRE	DEPTH	MAG					
OCT 02	11 21	44.9	45.7N 26.5E	140KM	5.3	RUMANIA				
SBA	P		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
			ZNE 11 41 02,1D	144	-0.41					
OCT 02	19 42	09.6	53.7S 140.1E	57KM	5.2	W OF MACQUARIE IS				
SBA	EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
			ZNE 19 47 40	26						
OCT 03	SBA	EP	ZNE 12 54 03							
OCT 04	01 44	31.1	11.1S 162.3E	33KM	5.4	SOLOMON IS				
SBA	P		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
			ZNE 01 55 22	67						
OCT 04	SBA	EP	ZNE 05 10 57							
OCT 04	AFI	EP	Z 07 42 50							
			NE 43 25							
OCT 04	SBA	EP	ZNE 09 30 33							
OCT 04	AFI	EP	Z 12 21 10							
			NE 39							
OCT 04	AFI	EP	Z 14 41 38							
			NE 59							
OCT 04	15 59	22.7	53.7S 140.5E	43KM		W OF MACQUARIE IS				
SBA	EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
			ZNE 16 04 54	26						
			E(S) NE 09 34							
			E(LQ) NE 12 00							
			E(LR) ZNE 13 03							
OCT 04	23 37	34.5	26.1S 179.4E	485KM	5.3	S OF FIJI				
RAO	P		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
			Z 23 38 51	4						
			ES Z 39 42							
			AFI EP Z 23 40 37	15	-0.84					
			ES NE 43 03							
OCT 05	10 06	08.1	20.2S 175.6W	195KM	4.5	TONGA				
AFI	EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
			Z 10 07 53	7						
			ES ZNE 09 06							
			ET ZNE 12 13							
			RAR EP ZNE 10 09 38	15						
			ES ZNE 12 18							
			SBA IP ZNE 10 15 45,8U	58	-0.87					
OCT 05	23 23	53.2	52.9S 28.1W	33KM	4.7	S OF AFRICA				
SBA	P		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
			ZNE 23 32 23,0D	49	-0.90					
OCT 06	03 11	03.3	6.2S 146.4E	113KM	5.5	E NEW GUINEA				
AFI	EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG	
			Z 03 18 44	42	-0.60					

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

SBA EP		ZNE	03 22 19	72					
H	M	S	EPICENTRE	DEPTH	MAG				
OCT 06	19 06	15.0	18.4S 175.5W	182KM	3.8	TONGA			
AFI	EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG
			Z 19 07 41	6					
			NE 08 42						
OCT 06	23 49	51.6	17.4S 172.9W	33KM	4.1	TONGA			
AFI	EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG
			ZNE 23 50 40	4					
			ES ZNE 51 19						
			ET ZNE 54 23						
			RAR EP ZNE 23 52 40	13					
OCT 07	15 55	10.8	21.6S 170.5E	161KM	6.4	LOYALTY IS			
RAO	P		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG
			Z 15 58 09	13					
			AFI EP ZNE 15 59 13	19	0.42				
			IS ZNE 16 02 33						
			IL NE 03 23						
			RAR P ZNE 16 00 45	28	-0.66				
			E*PP ZNE 01 20						
			E ZNE 04 29						
			ES N 05 14						
			E(*SS) N 06 05						
			ELR ZE 08 31	88	24				
			SBA IP ZNE 16 04 27,0	56	0.56				
			EPCP Z 05 06						
			EPP ZNE 06 29						
			EPPP Z 07 18						
			E N 10 08						
			ES ZNE 12 06						
			ESS NE 15 39						
			ESSS E 18 50						
			EL ZN 19 00	53	19	61	21	82	19
			PKPKP Z 34 32						
OCT 07	20 55	56.0	61.6N 150.1W	56KM	5.7	S ALASKA			
SBA	EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG
			ZNE 21 15 15	142					
OCT 07	23 04	08.1	4.4S 143.1E	95KM	5.3	NEW GUINEA			
SBA	IP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG
			ZNE 23 15 37,5D	74					
OCT 08	00 12	18.1	16.4S 177.6W	33KM	5.7	FIJI			
AFI	EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG
			ZNE 00 13 41	6					
			ES ZNE 14 45						
			ET ZNE 16 47						
			RAO EP Z 00 15 13	13					
			RAR EP ZNE 00 16 19	18					
			E(S) N 19 13						
			ELR ZE 20 14						
			SBA IP ZNE 00 22 37	62					
			ES ZNE 31 13						
			ESS ZNE 34 55						
			ELQ NE 38 29						
			ELR Z 40 43						







		Z	28 40		
	E	N	36 24		
	EL	E	37 24		
	EL	Z	38 42		
SBA	IP	ZNE 00	17 45,9D	70	
	IS	ZNE	26 00 NW		
	ESS	ZNE	31 06		
	EL	ZE	35 00		
	EL	ZNE	39 06		
RAR	EP	Z 00	18 22	75	
	ES	E	48 46		
	ELQ	N	42 10		
	ELR	ZE	46 08		3 22
	H M S	EPICENTRE	DEPTH	MAG	
OCT 12	04 22 14.0	31.2S 177.8W	14KM	5.2	KERMADEC IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	RAO	IP	Z 04 22 47,0U	2	
		ES	Z	23 11	
	AFI	EP	ZNE 04 26 20	18 -0.15	6,0
		ES	ZNE	29 30	
		ET	ZNE	40 44	
	RAR	EP	ZNE 04 26 37	19	
		ES	ZNE	29 48	
		ELQ	NE	30 09	
		ELR	ZNE	46	6 20 9 20
		ET	ZNE	45 25	
	SBA	EP	ZNE 04 30 49	47 -0.22	6,7
		ES	NE	38 56	
		ELQ	NE	40 49	
		ELR	ZNE	43 58	
OCT 12	SBA	EP	ZNE 07 29 46		
	H M S	EPICENTRE	DEPTH	MAG	
OCT 12	07 56 59.4	11.0S 162.3E	41KM	5.0	SOLOMON IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	AFI	EP	Z 08 02 24	25	
		ES	ZN	07 06	
		ESS	N	08 03	
		EL	ZE	09 15	
	SBA	EP	ZNE 08 07 50	67	
	H M S	EPICENTRE	DEPTH	MAG	
OCT 12	09 38 01.9	21.8S 176.4W	145KM		FIJI
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	RAR	EP	ZE 09 41 29	15	
		ES	ZNE	44 07	
	H M S	EPICENTRE	DEPTH	MAG	
OCT 12	12 38 14.5	24.5S 176.4W	33KM	4.4	S OF FIJI
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	RAR	EP	Z 12 41 53	16	
		ES	ZNE	44 23	
		ET	ZNE	57 25	
	H M S	EPICENTRE	DEPTH	MAG	
OCT 12	15 49 08.4	60.4S 26.5W	33KM	5.1	S SANDWICH IS
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG
	SBA	EP	ZNE 15 56 57	42	
		E	ZNE	16 05 22	
OCT 12	SBA	EP	ZNE 16 26 30		
OCT 12	AFI	E(P)	Z 17 05 03		
		ES	ZNE	06 44	
OCT 13	AFI	EP	ZNE 09 08 48		

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

		IS	ZNE	09 23		
OCT 13	SBA	EP	ZNE 12 56 11			
	H M S	EPICENTRE	DEPTH	MAG		
OCT 13	15 45 15.6	8.8S 74.3W	155KM	5.3	PERU-BRAZIL BORDER	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	SBA	IP	ZNE 15 57 47,5D	87		
	H M S	EPICENTRE	DEPTH	MAG		
OCT 13	17 23 41.9	54.0S 133.9W	33KM	4.9	S PACIFIC CORDILLERA	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	SBA	EP	ZNE 17 30 03	32		
		ELR	ZE	38 03		
	RAR	ELQ	NE 17 40 18	38		
		ELR	Z	42 28		
	H M S	EPICENTRE	DEPTH	MAG		
OCT 13	17 25 50.2	53.9S 133.9W	33KM	4.7	S PACIFIC CORDILLERA	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	SBA	EP	ZNE 17 32 47	32		
		E	NE 17 44 18	50		
		E(L)	Z	45 42		
	H M S	EPICENTRE	DEPTH	MAG		
OCT 13	17 28 40.8	54.0S 133.6W	33KM	4.7	S PACIFIC CORDILLERA	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	SBA	EP	ZNE 17 35 02	32		
OCT 13	AFI	E	ZN 19 04 12			
		EL	ZN	14 12		
	H M S	EPICENTRE	DEPTH	MAG		
OCT 13	19 17 48.0	29.7S 178.1W	155KM		KERMADEC IS	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	RAO	IP	Z 19 18 09,5U	0		
		S	Z	26		
	RAR	E(S)	ZN 19 23 04	19		
		SBA	EP	ZNE 19 26 19	49	
OCT 13	AFI	IP	Z 22 42 37	U		
		ES	ZNE	43 10		
OCT 13	AFI	EP	Z 23 55 55			
		ES	ZNE	56 13		
OCT 14	RAO	IP	Z 02 10 39,5			
		S	Z	52		
	H M S	EPICENTRE	DEPTH	MAG		
OCT 14	02 32 31.8	15.1S 173.5W	33KM	4.8	TONGA	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	RAR	EP	ZNE 02 35 49	14		
		ES	ZNE	38 22		
		EL	ZNE	57		
		ET	ZNE	47 50		
	SBA	EP	ZNE 02 43 05	64		
	H M S	EPICENTRE	DEPTH	MAG		
OCT 14	02 34 34.1	23.2S 179.8W	456KM	4.8	S OF FIJI	
		H M S	DIR DIS LG=A/T	AZ TZ	AN TN AE TE MAG	
	RAO	IP	Z 02 36 12,0U	6		
		ES	Z	37 25		
OCT 14	AFI	EP	Z 12 14 13			
		ES	ZNE	16 02		
OCT 15	SBA	EP	ZNE 07 18 36			



	H	M	S	EPICENTRE	DEPTH	MAG												
OCT 15	08	30	51.3	18.0S 178.4W	576KM	4.8	FIJI											
	AFI	EP		Z	08 32 45	8	0.03											
		ES		ZNE	34 16													
	RAR	EP		ZE	08 34 29	18												
	SBA	EP		ZNE	08 42 05	60												
OCT 15	20	34	53.9	23.6S 175.4W	48KM	4.6	TONGA											
	RAO	EP		Z	20 36 23	.6												
		ES		Z	37 30													
	AFI	EP		Z	20 37 09	10												
		ES		NE	38 50													
		ET		ZNE	47 00													
	RAR	EP		ZNE	20 38 09	15												
		E		ZNE	51													
		ES		ZNE	40 39													
		ELR		ZNE	41 52													
		ET		ZNE	53 07													
	SBA	EP		ZNE	20 44 26	55												
OCT 15	AFI	EP		Z	22 41 37													
		ES		NE	43 20													
	RAR	EP		ZNE	22 42 37													
		ES		ZNE	45 04													
		EL		ZNE	46 20													
OCT 16	06	48	38.6	19.7S 70.4W	45KM	5.0	NEAR N CHILE											
	SBA	EP		ZNE	07 00 32	77												
OCT 16	AFI	EP		ZNE	06 56 54													
		ES		ZNE	57 17													
		ET		ZNE	59 00													
OCT 16	12	55	30.8	56.1S 27.1W	101KM	5.6	SOUTH SANDWICH IS											
	SBA	IP		ZNE	13 03 02	UN	46 0.29											7.2
OCT 16	AFI	EP		Z	16 23 19													
		ES		ZNE	38													
OCT 16	AFI	IP		Z	20 49 53	U												
		ES		ZNE	50 15													
OCT 16	SBA	EP		ZNE	22 57 56													
		E		ZNE	23 01 09													
		E		ZNE	03 58													
		E		ZNE	04 14													
		E		ZNE	06 50													
OCT 17	03	57	51.9	11.1S 166.7E	55KM	4.9	SANTA CRUZ IS											
	AFI	ES		ZNE	04 06 34	21												
		EL		ZNE	08 16													
	SBA	IP		ZNE	04 08 49.8D	67												
OCT 17	07	30	07.1	23.5S 180.0E	497KM	5.1	S OF FIJI											
	RAO	IP		Z	07 31 48.5D	6												

	AFI	EP	Z	H	M	S	EPICENTRE	DEPTH	MAG									
		EL		07	32	50			12	-0.57								
	SBA	IP		NE	34	57												
		E		ZNE	07 38 51.7U	55	-0.07											
				Z	40 42													
OCT 17	10	15	4.6	11.0S 166.7E	55KM	5.5	SANTA CRUZ IS											
	AFI	EP		Z	10 20 23	21												
		ES		NE	24 20													
		E		Z	33													
		EL		ZNE	26 00													
	SBA	IP		ZNE	10 26 13.3U	67												
		ES		NE	36 10													
		ELO		NE	44 09													
		ELR		ZNE	47 37													
OCT 17	AFI	EP		Z	10 45 24													
		ES		NE	47 10													
OCT 17	12	09	23.8	10.9S 166.8E	55KM	4.6	SANTA CRUZ IS											
	AFI	ES		ZNE	12 18 12	21												
		EL		ZNE	19 35													
OCT 17	12	35	59.8	10.4S 161.1E	77KM	5.1	SOLOMON IS											
	AFI	ES		Z	12 46 00	27												
		EL		N	47 00													
		ET		ZE	48 30													
	SBA	IP		ZNE	12 46 49.1U	68	-0.39											6.6
OCT 17	13	48	54.3	11.2S 166.8E	33KM	4.8	SANTA CRUZ IS											
	AFI	ES		ZNE	13 57 35	21												
		EL		ZNE	59 12													
	SBA	EP		ZNE	13 59 44	67												
OCT 17	14	40	42.5	21.0S 175.4W	8KM	4.9	TONGA											
	AFI	EP		Z	14 42 40	8												
		ES		NE	44 00													
		ET		ZNE	48 17													
	RAO	ES		Z	14 44 25	9												
	RAR	EP		ZNE	14 44 12	15												
		ES		ZNE	46 34													
	SBA	IP		ZNE	14 50 30.4D	58												
OCT 17	18	20	07.8	22.3S 179.1E	635KM	5.0	S OF FIJI											
	RAO	EP		Z	18 22 01	7												
		ES		Z	23 27													
	AFI	EP		Z	18 22 40	12	-0.33											
		ES		ZNE	24 43													
	RAR	P		ZE	18 23 55	20												
	SBA	IP		ZNE	18 28 50.3N	56	0.19											6.6
OCT 17	21	41	56.3	10.7S 78.7W	39KM		PERU											
	RAR	EP		ZNE	21 53 55	78												
		EPP		ZNE	57 33													



	ES	ZNE 22 03 25							
	SBA EP	ZNE 21 54 27	85						
	ES	ZNE 22 05 06							
	AFI EP	ZNE 21 54 59	90						
	ES	ZNE 22 05 33							
	H M S	EPICENTRE	DEPTH	MAG					
OCT 17	23 32 37.7	10.6S 78.8W	33KM	5.0	PERU				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EP	ZNE 23 45 19	85						
	AFI EP	Z 23 45 44	90						
	H M S	EPICENTRE	DEPTH	MAG					
OCT 17	23 46 51.6	10.0S 79.6W	46KM	4.9	OFF PERU				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EP	ZNE 23 59 23	85						
	H M S	EPICENTRE	DEPTH	MAG					
OCT 18	02 37 48.2	11.2S 166.8E	52KM	4.7	SANTA CRUZ IS				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI ES	ZNE 02 46 18	21						
	EL	ZNE 48 48							
	SBA IP	ZNE 02 48 35.1D	67						
	H M S	EPICENTRE	DEPTH	MAG					
OCT 18	04 03 09.0	23.2S 179.3E	520KM	4.8	S OF FIJI				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	RAO EP	Z 04 04 57	7						
	ES	Z 06 20							
	AFI EP	ZNE 04 05 53	13	-0.29					
	ES	ZNE 08 03							
	SBA IP	ZNE 04 11 53.3D	55						
	AFI EP	ZNE 07 07 31							
	ES	ZNE 51							
	SBA IP	ZNE 08 38 41.0U							
	H M S	EPICENTRE	DEPTH	MAG					
OCT 18	10 58 41.5	18.0S 178.4W	574KM	4.4	FIJI				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI EP	ZNE 11 00 36	8						
	ES	ZNE 02 05							
	SBA EP	ZNE 11 08 02	60						
	AFI E(S)	NE 12 58 30							
	AFI EP	ZNE 17 26 51							
	ES	ZNE 27 19							
	ET	ZNE 29 12							
	AFI EP	ZNE 19 30 14							
	ES	ZNE 31 03							
	H M S	EPICENTRE	DEPTH	MAG					
OCT 18	20 06 51.4	10.8S 166.8E	33KM	4.8	SANTA CRUZ IS				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EP	ZNE 20 17 42	67						
	H M S	EPICENTRE	DEPTH	MAG					
OCT 18	20 49 51.8	11.1S 166.7E	33KM	4.9	SANTA CRUZ IS				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI ES	ZNE 20 58 30	21						
	EL	ZE 21 00 00							
	SBA EP	ZNE 21 00 44	67						
	SBA EP	ZNE 21 27 07							

	H M S	EPICENTRE	DEPTH	MAG					
OCT 18	22 27 29.0	15.2S 174.0W	62KM	5.5	TONGA				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI IP	Z 22 28 08.5	3						
	ES	ZNE 34	D						
	RAR ES	NE 22 33 40	15						
	AFI EP	ZNE 00 06 45							
	E(S)	ZNE 07 52							
	E(T)	ZNE 12 47							
	H M S	EPICENTRE	DEPTH	MAG					
OCT 19	03 21 24.8	10.8S 166.5E	55KM	4.7	SANTA CRUZ IS				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI ES	ZNE 03 30 06	21						
	EL	ZNE 31 48							
	H M S	EPICENTRE	DEPTH	MAG					
OCT 19	08 01 33.8	1.6S 15.5W	33KM	6.8	V OF ASCENSION IS				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	SBA EP	ZNE 08 15 15	101						
	EPP	ZNE 19 54							
	S	E 27 21							
	ESP	ZN 28 49							
	SS	ZNE 34 11							
	SSS	ZE 38 02							
	E	Z 42 52							
	ESKKS	NE 43 53							
	LQ	ZN 45 18							
	LR	ZNE 49 00							
	RAR EPKP	E 08 18 53	138						
	PP	Z 23 25							8 6
	EPPP	ZE 26 34							
	E	ZE 30 18							6 10
	SKKS	ZNE 36 18							
	ESS	N 42 28							6 20
	SSP	ZE 43 14							8 19
	ESSS	E 47 09							25 24
	ELQ	NE 57 00							6 10
	ELR	ZNE 09 06 47							
	AFI EPKP	Z 08 21 28	152						8 19 14 20 9 20
	E	Z 23 22							
	EPP	ZE 25 30							
	E(SKKS)	Z 33 00							
	ESS	N 45 12							
	ESSP	ZE 50							
	ESSS	Z 49 48							
	EL	ZE 53 30							
	EL	Z 54 18							
	H M S	EPICENTRE	DEPTH	MAG					
OCT 19	11 22 14.7	12.6S 167.2E	219KM	5.1	SANTA CRUZ IS				
	H M S	DIR DIS LG=A/T	AZ TZ	AN TN	AE TE	MAG			
	AFI IP	Z 11 26 39	D						6.1
	AFI EP	Z 15 26 11							
	ES	ZNE 55							
	AFI EP	Z 03 01 36							
	E(S)	ZNE 02 48							
	AFI EP	ZNE 09 31 05							
	ES	ZNE 25							



	H M S	EPICENTRE	DEPTH	MAG	
OCT 20	13 35 50.5	15:58 167.7E	139KM	4.8	NEW HEBRIDES
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	AFI EP	Z 13 40 14		20	
	SBA IP	ZNE 13 45 00	D	62	
OCT 21	AFI EP	Z 05 38 13			
	ES	ZNE 41			
	ET	ZNE 40 20			
OCT 21	AFI EP	Z 08 41 11			
	ES	ZNE 31			
	H M S	EPICENTRE	DEPTH	MAG	
OCT 21	12 39 41.0	27:86 67.5W	73KM	4.7	ARGENTINA
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	SBA EP	ZNE 12 50 46		70	
	H M S	EPICENTRE	DEPTH	MAG	
OCT 21	15 04 44.6	7:18 146.0E	179KM	5.0	E NEW GUINEA
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	SBA EP	Z 15 15 49		72	
OCT 21	SBA E(P)	ZNE 16 28 50			
OCT 21	AFI EP	Z 18 43 23			
	ES	ZNE 43			
OCT 21	AFI EP	Z 22 32 12			
	ES	ZNE 35			
OCT 21	SBA EP	ZNE 22 58 37			
OCT 22	AFI IP	Z 00 05 33	U		
	ES	ZNE 51			
OCT 22	AFI EP	Z 05 11 55			
	ES	ZNE 12 37			
OCT 23	AFI EP	Z 07 21 20			
	ES	ZNE 22 16			
	H M S	EPICENTRE	DEPTH	MAG	
OCT 23	09 15 48.2	6:58 155.2E	34KM	5.0	SOLOMON IS
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	SBA EP	ZNE 09 27 09		72	
OCT 23	AFI EP	ZNE 12 54 19		-0.71	
	ES	ZNE 54			
	H M S	EPICENTRE	DEPTH	MAG	
OCT 23	17 20 00.2	6:38 129.9E	95KM	5.1	BANDA SEA
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	SBA EP	ZNE 17 31 27		74	
OCT 24	AFI EP	ZNE 14 17 41			
	ES	ZNE 18 03			
OCT 24	AFI EP	ZNE 15 26 36			
	ES	ZNE 27 00			
	H M S	EPICENTRE	DEPTH	MAG	
OCT 24	15 37 25.9	30:58 177.2W	25KM	4.6	KERMADEC IS
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	RAO EP	Z 15 37 49		1	
	ES	Z 38 06			

	RAR EP	ZNE 15 41 36		18	
	SBA EP	ZNE 15 46 05		48	
OCT 24	AFI EP	ZNE 17 53 56			
	ES	ZNE 54 14			
	H M S	EPICENTRE	DEPTH	MAG	
OCT 25	00 26 36.5	6:68 147.2E	67KM	5.3	E NEW GUINEA
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	SBA P	ZNE 00 37 53		72	
OCT 25	AFI EP	Z 04 06 07			
	ES	ZNE 45			
OCT 25	AFI EP	ZNE 04 53 10			
	ES	ZNE 27			
	H M S	EPICENTRE	DEPTH	MAG	
OCT 25	07 46 29.9	16:18 172.6W	35KM	4.5	SAMOA
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	AFI EP	ZNE 07 46 53		2	
	ES	ZNE 47 12			
	RAR P	ZNE 07 49 26		13	
	ELQ	NE 52 15			
	SBA EP	Z 07 56 54		63	
	H M S	EPICENTRE	DEPTH	MAG	
OCT 25	12 38 52.3	15:78 177.0W	33KM	4.3	FIJI
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	AFI EP	Z 12 40 08		5	
	ES	ZNE 41 12			
OCT 25	AFI E(P)	Z 12 48 29			
	E(S)	ZNE 49 42			
	H M S	EPICENTRE	DEPTH	MAG	
OCT 25	23 16 00.2	14:68 167.4E	179KM	4.5	NEW HEBRIDES
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	SBA IP	ZNE 23 26 12,20		63	
	H M S	EPICENTRE	DEPTH	MAG	
OCT 26	18 28 54.1	18:48 167.6E	36KM	5.6	NEW HEBRIDES
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	AFI EP	Z 18 33 32		20	
	ES	NE 37 18			
	EL	Z 38 36			
	SBA IP	ZNE 18 38 56,3D		59 -0.69	
	I*PP	ZNE 39 13,1U			6,5
	H M S	EPICENTRE	DEPTH	MAG	
OCT 27	05 57 58.0	73:4N 54.8E	0KM	6.3	NOVAYA ZEMLYA
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	AFI EPKP	Z 06 16 37		115	
	RAR IPKP	Z 06 17 00	D	124	
	SBA IPKP	ZNE 06 18 00,4D		164	
	IPKP	ZNE 54,2D			
	EPP	Z 22 41			
	E	N 23 31			
	H M S	EPICENTRE	DEPTH	MAG	
OCT 27	14 21 04.8	22:2N 145.9E	29KM	6.0	N PACIFIC OCEAN
		H M S	DIR DIS	LG=A/T	AZ TZ AN TN AE TE MAG
	AFI EP	Z 14 30 30		55	
	ES	ZNE 38 10			
	ESSS	N 44 12			
	EL	ZNE 46 12			
	RAO EP	Z 14 31 23		62	



RAR	EP	ZE	14 32 05	68																
	ES	NE	41 24																	
	EL	ZNE	52 03																	
SBA	EPP	ZN	14 39 03	101																
	EPPP	ZN	45 29																	
	E	ZNE	48 02																	
	E(PPS)	ZNE	53 41																	
	ESSS	ZN	15 03 29																	
	ELQ	ZN	08 55																	
OCT 27	AFI	EP	Z	17 57 55																
		ES	ZNE	58 39																
	H M S	EPICENTRE	DEPTH	MAG																
OCT 28	01 41 19.1	9.6S 159.8E	32KM	5.5	SOLOMON IS															
	SBA	EP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
		ELR	Z	01 52 19	68															
			Z	02 14 10																
OCT 28	AFI	EP	Z	20 21 37																
		ES	ZNE	22 13																
		ET	ZNE	24 43																
	H M S	EPICENTRE	DEPTH	MAG																
OCT 28	22 11 47.6	20.1S 168.8E	19KM	5.3	LOYALTY IS															
	AFI	EP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
		ES	Z	22 16 01	20 -0.47															
		EL	ZNE	19 42																
		EL	ZNE	21 13																
	SBA	EP	ZNE	22 21 40	58															
		EL	ZNE	40 01																
	H M S	EPICENTRE	DEPTH	MAG																
OCT 28	23 24 14.5	22.5S 170.9E	25KM	4.9	LOYALTY IS															
	AFI	EP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
			Z	23 28 16	19 -0.98															
	H M S	EPICENTRE	DEPTH	MAG																
OCT 29	02 39 29.4	39.2N 21.2E	20KM	5.7	GREECE															
	SBA	EPKP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
		AFI	ZNE	02 58 51	139															
			ZE	02 59 25	152															
	AFI	EP	Z	05 01 00																
		ES	ZNE	34																
	SBA	EP	ZNE	06 44 50																
	H M S	EPICENTRE	DEPTH	MAG																
OCT 29	07 08 27.8	6.8S 155.7E	67KM	4.6	SOLOMON IS															
	SBA	EP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
			ZNE	07 19 43	71															
	AFI	IP	ZNE	13 34 52,3U																
		S	ZNE	35 05																
	H M S	EPICENTRE	DEPTH	MAG																
OCT 30	00 02 35.0	20.9S 176.4W	292KM	4.5	FIJI															
	AFI	EP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
		ES	ZNE	00 04 17	8															
		ES	ZNE	05 35																
	RAO	EP	Z	00 04 29	8															
		ES	Z	06 07																
	RAR	EP	ZNE	00 05 56	16															
		ES	ZNE	08 42																
	SBA	EP	ZNE	00 12 00	58															

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

OCT 30	09 50 15.4	21.2S 178.8W	503KM	4.4	FIJI															
	AFI	EP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
		ES	Z	09 52 33	10															
			NE	54 23																
OCT 30	AFI	EP	Z	11 32 03																
		ES	ZNE	25																
OCT 30	AFI	EP	Z	17 01 44																
		ES	ZNE	02 04																
OCT 30	AFI	EP	Z	17 23 10																
		ES	NE	36																
OCT 30	AFI	EP	Z	20 48 21																
		ES	ZNE	42																
OCT 30	AFI	EP	ZNE	21 50 40																
		E(S)	ZNE	51 05																
	H M S	EPICENTRE	DEPTH	MAG																
OCT 30	22 22 46.3	31.3S 179.3W	213KM	4.4	KERMADEC IS															
	RAO	EP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
		ES	Z	22 23 30	2															
		ES	Z	24 04																
	AFI	EP	Z	22 26 46	19															
		ES	NE	29 58																
		ET	ZNE	40 13																
	RAR	EP	ZNE	22 27 05	20															
		ES	ZNE	30 45																
	SBA	IP	ZNE	22 31 00,4D	47															
OCT 30	AFI	EP	Z	23 08 50																
		ES	NE	09 32																
		ET	ZNE	12 30																
OCT 31	AFI	EP	ZNE	03 35 23																
		ES	ZNE	43																
	H M S	EPICENTRE	DEPTH	MAG																
OCT 31	08 20 31.2	37.2S 94.5W	33KM	4.2	W CHILE RISE															
	SBA	EP	H M S	DIR DIS LG=A/T AZ TZ	AN TN AE TE MAG															
			ZNE	08 30 07	56															
OCT 31	AFI	EP	ZNE	13 09 56																
		ES	ZNE	10 16																
OCT 31	AFI	IP	ZNE	1																



		T	ZNE	17 02 22							
NOV 01	AFI IP		ZNE	17 47 28.7U							
	S		ZNE	46							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 01	19 58 03.9		19.4S 177.4W	577KM	3.5	FIJI					
	AFI EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	ES		Z	20 00 00		8					
			NE	01 31							
NOV 02	AFI EP		ZNE	04 19 02							
	ES		ZNE	27							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 02	05 35 51.2		18.3S 178.0W	605KM	3.9	FIJI					
	AFI IP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	ES		Z	05 37 45.5		7	-1.26				
			NE	39 13							
NOV 02	SBA P		ZNE	17 17 23							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 03	03 29 16.3		15.1S 167.4E	153KM	5.0	NEW HEBRIDES IS					
	AFI EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	SBA P		Z	03 33 45		20	-0.48				
			ZNE	03 39 27		63					
	H M S		EPICENTRE	DEPTH	MAG						
NOV 03	13 01 31.4		17.2S 178.6W	494KM	3.4	FIJI					
	AFI EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
			ZE	13 03 23		7	-0.61				
	H M S		EPICENTRE	DEPTH	MAG						
NOV 03	16 24 31.0		19.2N 67.9W	22KM	5.6	MONA PASSAGE					
	AFI ES		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	E(SSP)		E	16 49 23		107					
	EL		ZE	52 38							
	EL		ZE	58 44							
	EL		N	17 10 36							
	EL		ZNE	14 30							
	SBA EPKP		ZNE	16 43 13		116					
	H M S		EPICENTRE	DEPTH	MAG						
NOV 03	21 11 13.9		7.6S 107.9E	15KM	5.1	JAVA					
	SBA EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
			ZNE	21 11 13.9		76					
	H M S		EPICENTRE	DEPTH	MAG						
NOV 04	15 43 09.0		25.9S 178.3E	620KM	4.7	S OF FIJI					
	RAO P		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	ES		Z	15 44 36		5					
	AFI EP		Z	15 45 52							
	ES		ZE	15 46 11		15	-0.43				
	RAR E(PP)		ZNE	15 48 11		21					
NOV 04	AFI EP		ZNE	21 05 36							
	ES		ZNE	06 00							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 05	02 13 51.2		41.8S 80.1E	33KM	5.5	MID-INDIAN RISE					
	SBA EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	ES		ZNE	02 22 13		49					
	ESS		ZNE	29 49							
	ELQ		N	33 36							
			ZNE	36 12							

		ELR	ZNE	37 11							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 05	02 30 15.0		19.2S 169.2E	29KM	5.3	NEW HEBRIDES IS					
	RAO EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI EP		Z	02 33 52		15					
	ES		ZNE	02 34 35		19	-0.15				
	E(L)		ZNE	38 20							
	RAR ELQ		ZNE	39 30							
			N	02 42 05		29					
	H M S		EPICENTRE	DEPTH	MAG						
NOV 05	12 19 48.1		15.8S 174.5W	33KM	4.4	TONGA					
	AFI EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	ES		ZNE	12 20 32		3					
	ET		ZNE	21 10							
			ZNE	23 25							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 05	12 45 13.9		15.3S 175.2W	38KM	5.3	TONGA					
	AFI IP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	RAR P		ZNE	12 45 57		4					
	E		ZNE	12 48 50.5		16					
	E		ZNE	50 11							
	E		ZE	51 09							
	ES		N	51 29							
	ELR?		Z	53 15							
	ET		ZNE	13 04 07							
	SBA EP		Z	12 55 42		63					
	ES		ZNE	13 04 22							
	ESS		ZNE	08 15							
	ELQ		NE	11 12							
	ELR		ZNE	12 26							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 05	13 42 06.5		22.5S 172.9E	65KM	4.9	LOYALTY IS					
	AFI EP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	EP		ZE	13 46 07		17	-0.55				
			ZN	21							
NOV 06	AFI EP		ZNE	00 34 41							
	ES		ZNE	35 12							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 06	14 43 16.6		17.9S 178.5W	548KM	4.8	FIJI					
	AFI IP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	ES		Z	14 45 11.3D		8	-0.31				
	RAO ES		ZNE	46 40							
			Z	14 47 54		11					
NOV 06	AFI EP		ZNE	19 06 02							
	ES		ZNE	20							
	H M S		EPICENTRE	DEPTH	MAG						
NOV 06	19 46 51.7		20.3S 178.5W	408KM	4.1	FIJI					
	AFI IP		H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	ES		Z	19 49 00		9	-0.83				
			ZNE	50 32							
NOV 07	AFI IP		Z	05 29 52							
	ES		ZNE	30 12							
NOV 07	AFI EP		Z	07 15 43							
	ES		NE	16 09							
	ET		ZNE	18 35							
NOV 07	RAR E(P)		ZNE	09 14 50							







	ES	ZNE	57 05						
	ESS	ZE	58 44						
	ELR	ZNE 19	00 20						
SBA	P	ZNE 18	55 21	62	0.00			7.2	
	EPP	Z	57 41						
	ES	ZNE 19	03 47						
	ESS	ZNE	07 23						
	ESSS	N	10 00						
	ELQ	ZNE	11 01						
	ELR	ZN	14 04						
	H M S	EPICENTRE	DEPTH	MAG					
NOV 12	19 32 20.9	18.8S 175.5W	213KM	4.1	TONGA				
	AFI EP	ZNE 19	33 48		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
	ES	ZNE	34 52		6 -0.21				
	RAR EP	ZNE 19	35 46	15					
NOV 12	AFI EP	ZNE 20	35 02						
	ES	ZNE	22						
NOV 12	AFI EP	ZNE 22	10 43						
	ES	ZNE	11 00						
NOV 13	AFI ES	ZNE 05	05 48						
NOV 13	AFI EP	ZNE 15	52 44						
	ES	ZNE	53 43						
NOV 13	AFI EP	ZNE 19	36 44						
	ES	NE	37 20						
NOV 14	AFI EP	Z	08 01 23						
	ES	ZNE	02 02						
NOV 14	AFI EP	Z	15 53 52						
	ES	ZNE	54 36						
	ET	ZNE	57 20						
	H M S	EPICENTRE	DEPTH	MAG					
NOV 15	09 23 34.9	18.2S 173.7W	33KM	4.1	TONGA				
	AFI EP	Z	09 24 44		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
	ES	ZNE	25 34		5				
	ET	ZNE	29 31						
	H M S	EPICENTRE	DEPTH	MAG					
NOV 16	00 54 32.1	18.3S 168.1E	18KM	5.0	NEW HEBRIDES IS				
	AFI EP	Z	00 59 07		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
	ES	ZNE	01 04 19		20				
	SBA EP	ZNE	01 04 40	60					
	H M S	EPICENTRE	DEPTH	MAG					
NOV 16	05 58 30.3	19.5S 176.3W	49K	5.0	FIJI				
	AFI EP	Z	06 00 07		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
	ES	ZNE	01 20		7				
	RAR EP	ZNE 06	02 03	16					
	ES?	N	04 45						
	E(SS)	ZNE	05 22				14 11		
	SBA EP	ZNE 06	08 29	59					
	H M S	EPICENTRE	DEPTH	MAG					
NOV 16	08 08 14.0	13.1S 166.5E	50KM	5.1	NEW HEBRIDES IS				
	AFI IP	Z	08 12 57		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
		U	21 -0.51	5.7					

	ES	ZNE	16 54						
	SBA EP	ZNE 08	18 48	65					
NOV 16	SBA EP	ZNE 17	16 46						
	H M S	EPICENTRE	DEPTH	MAG					
NOV 16	22 55 10.9	33.5S 179.5W	33KM	4.8	S OF KERMADEC IS				
	AFI EP	Z	22 56 18		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
	ES	Z	57 03	21					
	SBA EP	ZNE 23	03 28	45					
	EPCP	ZNE	05 06						
	H M S	EPICENTRE	DEPTH	MAG					
NOV 17	00 33 12.6	19.2S 177.5W	553KM	4.1	FIJI				
	AFI EP	ZNE 00	35 07		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
	ES	ZNE	36 37	8					
NOV 17	AFI EP	ZNE 06	06 03						
	ES	ZNE	35						
	ET	ZNE	08 20						
NOV 17	AFI EP	ZNE 10	40 17						
	ES	ZNE	43						
NOV 17	AFI EP	ZNE 14	25 51						
	ES	ZNE	26 31						
NOV 17	AFI E(P)	Z	17 21 35						
	ES	NE	23 07						
NOV 18	AFI EP	Z	02 58 04						
	ES	ZNE	30						
	ET	ZNE	03 00 25						
	H M S	EPICENTRE	DEPTH	MAG					
NOV 18	09 12 09.9	36.3S 100.7W	33KM	5.1	S PACIFIC OCEAN				
	RAR EP	Z	09 21 23		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
	ES	N	29 09	53					
	ELQ	NE	34 27						
	SBA EP	ZNE 09	21 45	55					
	ES	NE	29 33						
	ELQ	NE	35 36						
	ELR	Z	37 53						
	AFI ES	N	09 31 42	67					
	ESSS	NE	39 30						
	EL	ZNE	42 30						
NOV 18	AFI EP	Z	18 30 08						
	ES	NE	31 38						
NOV 18	AFI EP	Z	19 40 54						
	H M S	EPICENTRE	DEPTH	MAG					
NOV 19	02 32 19.3	17.6S 178.6W	589KM	3.6	FIJI				
	AFI EP	Z	02 34 15		DIR DIS LG=A/T AZ TZ AN TN AE TE MAG				
	ES	NE	35 23	8 -0.51					
NOV 19	AFI EP	ZNE 08	22 42						
	ES	ZNE	53						



	H	M	S	EPICENTRE	DEPTH	MAG						
NOV 19	08	50	09.9	16.1S 168.0E	160KM		NEW HEBRIDES					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	SBA	EP		ZNE 09 00 14		62						
NOV 19	14	50	19.2	5.6S 147.2E	157KM		E NEW GUINEA					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	SBA	EP		ZN 14 59 33		73						
NOV 19	18	20	31.0	10.7S 79.1W	34KM	4.8	OFF PERU					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	SBA	EP		ZNE 18 33 10		85						
NOV 19	AFI	EP		ZNE 19 55 49								
NOV 20	16	47	33.0	55.1S 129.4W	33KM	4.9	S PACIFIC CORDILLERA					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI	EP		Z 16 56 44		53						
		ES		ZNE 17 03 50								
		ESS		NE 08 30								
		EL		Z 10 30								
NOV 21	AFI	EP		ZNE 12 03 46								
		ES		ZNE 04 04								
NOV 21	12	19	27.3	46.7N 152.5E	40KM	5.6	KURIE IS					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI	EP		Z 12 30 25		68						
		EL		ZN 15 50 12								
NOV 21	AFI	IP		Z 17 14 04.5U								
		ES		ZNE 25								
NOV 21	AFI	IP		Z 22 02 30.9U								
		ES		ZNE 55								
NOV 22	AFI	EP		ZNE 01 55 52								
		ES		ZNE 56 12								
NOV 22	AFI	EP		ZNE 04 36 21								
		ES		ZNE 40								
NOV 22	AFI	EP		Z 04 51 21								
		ES		NE 55								
NOV 22	06	29	53.5	48.2N 176.7E	453KM	5.6	SEA OF OKHOTSK					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI	IP		Z 06 40 29.5U		63	-0.29			6.3		
	RAR	P		ZNE 06 41 35		72						
NOV 22	11	58	03.9	26.3S 177.5W	138KM	3.7	S OF FIJI					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	RAO	EP		Z 11 58 50		3						
		ES		Z 59 32								
	AFI	EP		Z 12 00 56		13						
		ES		NE 03 10								
NOV 22	AFI	EP		ZNE 15 04 26								
		ES		ZNE 05 17								
		ET		ZNE 09 10								

	RAR	EP	ZNE	15	06	25						
NOV 22	AFI	EP	Z	19	02	03						
		ES		NE		35						
		ET		ZNE		04 22						
NOV 22	AFI	EP	Z	20	44	56						
		ES		ZNE		45 37						
NOV 23	02	19	13.8	14.9S 166.9E	48KM	5.6	NEW HEBRIDES IS					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI	EP	Z	02	23	54						
		ES		ZE		27 46						
		ESS		NE		28 20						
		EL		ZNE		29 16						
NOV 23	AFI	EP	Z	05	45	03						
		ES		NE		46 46						
	RAR	EP	Z	05	46	19						
		ES		ZNE		48 51						
		ET		ZNE		06 00 49						
NOV 23	AFI	EP	ZNE	08	08	20						
		ES		ZNE		39						
		E		ZNE		10 25						
NOV 23	AFI	EP	Z	08	43	53						
		ES		ZNE		44 23						
NOV 24	07	31	51.8	30.6S 177.9W	11KM	5.0	KERMADEC IS					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	RAO	IP	Z	07	32	15.5U						
	AFI	EP	Z	07	35	55						
		ES		NE		38 50						
		ET		ZNE		53 10						
NOV 23	18	17	59.0	20.1S 177.7W	465KM	4.2	FIJI					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI	IP	Z	18	20	00.5U						
		ES		NE		21 35						
NOV 24	12	59	15.9	25.5S 179.4E	520KM	4.6	S OF FIJI					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	RAO	EP	Z	13	00	36						
		ES		Z		01 44						
	AFI	EP	Z	13	02	12				14		
		ES		NE		04 32						
NOV 24	16	45	47.1	38.3S 92.1W	33KM	4.7	W CHILE RISE					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	SBA	EP	ZNE	16	54	56						
		ES		NE		17 03 57						
		ELQ		N		08 48						
		ELR		ZE		10 44						
	AFI	ES	ZNE	17	06	36				73		
		EL		N		14 43						
		EL		ZNE		16 54						
NOV 25	03	18	54.7	15.6S 179.1E	67KM	4.9	FIJI					
				H M S	DIR DIS	LG=A/T	AZ TZ	AN TN	AE TE	MAG		
	AFI	EP	ZE	03	21	03				9		







DEC	H M S	EPICENTRE	DEPTH	MAG													
					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
DEC 02	09 31 17.6	3.2N 128.1E	92KM	5.8	N												
	AFI EP	Z 09 41 35		62													
	ESSS	ZNE 56 54															
	EL	ZE 10 00 30															
	SBA EP	Z 09 43 39	84														
DEC 02	AFI EP	Z 13 10 37															
	ES	NE 59															
DEC 02	AFI EP	ZNE 17 42 40															
	ES	ZNE 43 00															
DEC 02	AFI IP	Z 18 06 04	D														
	S	ZNE 22															
DEC 03	03 54 04.3	17.7S 177.8W	387KM	4.2	FIJI												
	SUV EP	Z 03 55 19	4														
	AFI EP	Z 03 55 49	7														
	ES	NE 57 07															
DEC 03	05 42 39.6	20.8S 169.8E	77KM	4.6	NEW HEBRIDES												
	AFI EP	ZE 05 46 53	19	-0.78													
	SBA EP	Z 05 52 19.5	57														
DEC 03	AFI EP	Z 07 22 17															
	ES	NE 53															
DEC 03	14 13 25.2	24.7S 179.9E	492KM	5.1	S OF FIJI												
	RAO P	Z 14 14 51	5														
	ES	Z 14 15 49															
	SUV IP	Z 14 15 10.8U	7														
	ES	Z 14 16 37															
	AFI EP	ZNE 14 16 13	13	0.15													
	ES	ZNE 18 29															
	SBA EPCP	Z 14 00 01	54														
DEC 03	AFI IP	Z 19 01 53	U														
	S	ZNE 02 15															
DEC 04	AFI EP	ZNE 13 37 29		-0.61													
	E	ZNE 40 51															
DEC 04	AFI EP	ZNE 15 31 51		-0.55													
	E	ZNE 35 13															
DEC 04	AFI EP	ZNE 17 56 39															
	ES	ZNE 57															
DEC 04	18 02 08.0	15.3S 173.2W	21KM	4.9	TONGA												
	AFI IP	Z 18 02 33	U	2													
	ES	ZNE 54															
	SBA EP	Z 18 12 39	63														

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

DEC	H M S	EPICENTRE	DEPTH	MAG													
					DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG			
DEC 05	04 49 38.9	21.5S 174.7W	33KM	4.8	TONGA												
	AFI EP	Z 04 51 34		8													
	ES	NE 52 56															
	ET	ZNE 59 46															
	RAR EP	ZNE 04 52 42	14														
DEC 05	AFI EP	Z 07 25 30															
	ES	NE 49															
DEC 05	AFI EP	ZNE 08 40 48															
	ES	ZNE 41 40															
DEC 05	AFI EP	Z 09 19 47															
	ES	NE 20 17															
DEC 06	AFI EP	ZNE 03 54 03															
	S	ZNE 35															
DEC 06	AFI IP	Z 05 17 37	U														
	ES	NE 57															
DEC 06	11 07 50.2	18.2S 175.1W	244KM	4.5	TONGA												
	AFI EP	Z 11 09 05		-0.31													
	ES	ZNE 10 01															
	ET	ZNE 14 20															
	SUV ES	Z 11 10 24	6														
	RAO EP	Z 11 12 25	11														
	RAR EP	ZNE 11 11 06	15														
DEC 06	AFI E(P)	ZNE 15 57 10															
DEC 06	AFI EP	ZNE 21 36 02															
	ES	NE 29															
	ET	ZNE 38 17															
DEC 07	SUV EP	Z 00 04 21															
DEC 07	AFI IP	Z 03 54 42	U														
	ES	NE 58															
DEC 07	AFI EP	ZNE 06 44 09															
	ES	ZNE 20															
DEC 07	16 06 59.3	20.8S 178.6W	523KM	4.3	FIJI												
	AFI EP	Z 16 09 14	9														
	ES	ZNE 10 59															
DEC 08	06 21 34.4	15.4S 176.2W	111KM	4.4	FIJI												
	AFI EP	ZNE 06 22 21		-0.29													
	ES	ZNE 23 22															
	ET	ZNE 26 02															
	SBA EP	Z 06 31 52.5	63														
DEC 08	AFI EP	Z 19 17 01															
	ES	ZNE 35															



	H	M	S	EPICENTRE	DEPTH	MAG												
				H M S	KM		DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
DEC 09	00	53	27.5	23.8S 179.8W	499KM	4.3												
				H M S														
	AFI	EP		Z 00 56 05		12												
		ES		ZN 58 10														
		ES		E 14														
DEC 09	01	07	08.4	14.1S 166.6E	53KM	4.4												
				H M S														
	SBA	EP		Z 01 17 37.5		64												
DEC 09	02	00	16.0	21.4S 179.3W	502KM	4.3												
				H M S														
	SUV	EP		Z 02 01 44		4												
		ES		Z 02 02 54														
	RAO	EP		Z 02 02 13		8												
		ES		Z 02 03 38														
	AFI	IP		Z 02 02 37.10		10												
		ES		ZNE 04 26														
	SBA	EP		Z 02 09 14		57												5.9
DEC 09	04	01	29.3	26.2S 178.0E	688KM	4.5												
				H M S														
	RAO	P		Z 04 02 56		5												
		ES		Z 04 04 07														
	AFI	EP		Z 04 04 36		16												5.2
		ES		ZNE 07 10														
	SBA	EP		Z 04 09 40		52												5.8
DEC 09	AFI	EP		ZNE 05 26 39														
		ES		ZNE 27 02														
DEC 09	AFI	EP		Z 08 45 25														
		ES		NE 43														
DEC 09	AFI	EP		Z 16 38 35														
		ES		ZNE 39 06														
DEC 10	AFI	E		ZN 09 16 42														
		EL		ZN 20 00														
DEC 10	10	38	35.6	24.2S 67.9W	91KM	5.4												
				H M S														
	SBA	EP		Z 10 50 00		73												6.6
DEC 10	13	06	32.6	14.3N 92.0W	70KM	5.6												
				H M S														
	RAR	EP		ZE 13 18 15		75												
		ES		ZNE 27 47														
		EL		ZE 40 40														
	AFI	EP		Z 13 18 50		84												
		ES		ZNE 29 16														
		ESS		ZE 34 50														
		ESSS		ZN 38 18														
		ELQ		ZNE 41 05														
		ELR		ZNE 44 12														
	SBA	EP		ZNE 13 20 42		106												
		ES		ZNE 34 17														
		ESS		ZNE 40 10														
		ESSS		ZNE 44 00														
		ELR		ZNE 56 24														

	H	M	S	EPICENTRE	DEPTH	MAG												
				H M S	KM		DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
DEC 10	18	08	14.4	3.6S 145.4E	33KM	5.7												
				H M S														
	AFI	EP		Z 18 16 12		43												
		EPP		Z 17 40														
		ES		ZNE 22 45														
		ESSS		ZNE 26 00														
		EL		ZE 29 00														
	RAR	ES		ZE 18 25 50		56												
		EL		ZNE 35 00														
	SBA	EP		Z 18 20 00		75												
		ES		NE 29 39														
		ELQ		NE 40 27														7 10 6.8
DEC 11	AFI	EP		Z 04 12 43														
DEC 11	19	52	09.4	13.4N 145.8E	59KM	5.4												
				H M S														
	AFI	ES		ZNE 20 08 00		50												
		EL		ZE 14 30														
		EL		N 16 30														
DEC 11	AFI	EP		Z 21 07 45														
		ES		NE 08 16														
DEC 11	21	54	51.7	20.3S 178.2W	495KM	3.9												
				H M S														
	AFI	EP		ZNE 21 57 02		9												
		ES		NE 58 49														
DEC 12	AFI	IP		Z 01 18 45														
		ES		ZNE 19 04														
DEC 12	05	27	18.5	21.6S 179.2W	558KM	4.3												
				H M S														
	SUV	EP		Z 05 28 49		4												
	AFI	EP		Z 05 29 42		10												
		ES		ZNE 31 24														
DEC 13	20	16	54.2	23.5S 179.7W	417KM	4.3												
				H M S														
	AFI	EP		Z 20 19 41		12												
		ES		ZNE 21 43														
DEC 13	AFI	EP		ZNE 20 45 09														
		ES		ZNE 31														
DEC 13	AFI	EP		Z 22 01 12														
		ES		ZNE 44														
DEC 14	11	16	07.6	27.4S 179.0W	296KM	4.5												
				H M S														
	RAO	IP		Z 11 16 37.00		2												
		ES		Z 17 04														
	AFI	EP		Z 11 19 30		15												
		ES		NE 22 17														



		H M S	EPICENTRE	DEPTH	MAG									
DEC 14		21 07 52.1	4,8S 143.9E	74KM	6.0	NEW GUINEA								
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
SUV	EP	Z	21 14 51		36									
AFI	EP	Z	21 15 56		45									
	ES	NE	22 27											
	EL	ZNE	25 30											
SBA	EP	ZNE	21 19 21	74	-0.20									
	ES	ZNE	29 53			6	12							
	ESS	ZNE	34 12											
	ESSS	ZNE	37 45											
	ELR	ZNE	43 15											
DEC 14	AFI	EP	Z	23 53 09										
	ES	NE	28											
DEC 15	AFI	IP	Z	03 47 03	U									
	ES	ZNE	24											
DEC 15	AFI	IP	Z	10 43 21	U									
	ES	ZNE	34											
DEC 15		H M S	EPICENTRE	DEPTH	MAG									
		14 32 20.7	5,5S 147.4E	179KM	5.0	NEW GUINEA								
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
SBA	EP	Z	14 43 32.2		73									
DEC 15	AFI	EP	Z	20 33 28										
	ES	NE	50											
DEC 16		H M S	EPICENTRE	DEPTH	MAG									
		12 50 44.7	19,5S 169.0E	70KM	4.2	NEW HEBRIDES								
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
SBA	EP	Z	13 00 34.8		58									
DEC 16	AFI	E(P)	ZNE	13 55 29										
DEC 16		H M S	EPICENTRE	DEPTH	MAG									
		20 52 13.5	29,6N 81.0E	9KM	5.9	NEPAL								
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
SBA	EPKP	Z	21 11 02		118									
DEC 17	RAO	EP	Z	07 44 22										
	ES	Z	45 26											
	AFI	EP	ZNE	07 45 15	-0.61									
	ES	NE	47 21											
DEC 17	SBA	EP	Z	07 57 24.5										
DEC 17	AFI	EP	ZNE	15 57 15										
	ES	ZNE	34											
DEC 17		H M S	EPICENTRE	DEPTH	MAG									
		17 41 20.4	22,8S 68.9W	105KM	5.1	N CHILE								
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
SBA	EP	Z	17 52 52		75									
DEC 17	AFI	EP	Z	21 18 12										
	ES	ZNE	50											
DEC 18	AFI	EP	Z	05 13 40										
	ES	ZNE	14 30											
	ET	ZNE	18 10											

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

		H M S	EPICENTRE	DEPTH	MAG										
DEC 18		09 48 22.9	10,5S 161.4E	50KM	5.3	SOLOMON IS									
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
AFI	ES	N	09 58 30		26										
	EL	ZE	10 01 05												
SBA	EP	Z	09 59 14.5	67	-0.81										
DEC 18	AFI	EP	Z	14 18 57											
	ES	ZNE	20 05												
DEC 19	AFI	EP	Z	10 42 33											
	ES	ZNE	43 14												
DEC 20		H M S	EPICENTRE	DEPTH	MAG										
		07 55 38.6	18,8N 106.3W	33KM	4.6	OFF MEXICO									
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
AFI	ES	N	08 20 35		72										
	EL	ZNE	26 12												
DEC 20	SBA	E*PP	ZNE	12 39 21.5											
DEC 20		H M S	EPICENTRE	DEPTH	MAG										
		12 26 55.0	26,1S 63.2W	589KM	5.7	ARGENTINA									
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
IP	ZNE	37 23	U	-0.53											
ES	ZNE	46 02													
AFI	ESKS	NE	12 49 24	100											
	ESP	NE	52 00												
	E	NE	55 30												
DEC 20	AFI	IP	ZNE	15 41 29.5D	0.27										
	E	NE	16 00 12												
	EL	ZN	04 05												
DEC 20		H M S	EPICENTRE	DEPTH	MAG										
		16 20 05.8	7,2S 126.1E	441KM	5.4	BANDA SEA									
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
SBA	EP	Z	16 30 55.2U		74										
DEC 20		H M S	EPICENTRE	DEPTH	MAG										
		18 39 40.3	14,3N 122.1E	37KM	5.4	PHILIPPINE IS									
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
AFI	EP	Z	18 51 15		71										
	ES	NE	19 00 06												
	ESS	NE	04 12												
	ESSS	N	08 30												
	EL	ZE	12 12												
SBA	EP	Z	18 53 04	95											
DEC 21		H M S	EPICENTRE	DEPTH	MAG										
		08 52 00.2	20,0S 169.7E	245KM	5.6	NEW HEBRIDES									
			H M S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG	
SUV	EP	Z	08 54 00		8										
RAO	EP	Z	08 55 05		15										
	ES	Z	58 07												
AFI	EP	ZNE	08 56 49	19											
	E	ZNE	57 29												
	ES	ZNE	09 00 04												
	E	ZNE	01 11												
RAR	EP	ZNE	08 57 32.5	29											
	ES	ZE	09 02 04												
	ESS	Z	03 34												
	EL	N	55												
SBA	EP	ZNE	09 01 29.0	58	-0.33										
	EPCP	Z	02 21.5												
	ES	ZNE	09 13												
													7	8	6,



ESSS		ZNE	15 35													
H	M	S	EPICENTRE		DEPTH	MAG										
DEC 21	12 58	19.1	52.1S	14.9E	33KM	4.8	S W OF AFRICA									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	SBA	EP	Z	13	07	05										
DEC 22	AFI	EP	Z	04	53	33										
		ES	NE		54	00										
DEC 22	AFI	EP	Z	19	26	33										
		ES	NE		27	05										
DEC 22	AFI	EP	Z	20	40	43										
		ES	ZNE		41	11										
		ET	ZNE		43	10										
DEC 22	CBZ	EP	Z	23	29	05										
		ES	Z			51										
		E	Z			31	01									
DEC 23	AFI	IP	ZNE	01	13	11	D									-0.07
		ES	NE			14	43									
	RAO	IP	Z	01	13	45.5D										
		ES	Z			15	53									
	SUV	EP	Z	01	12	35										
DEC 23	15 50	20.4	7.1S	148.3E	43KM	6.4	E NEW GUINEA									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	SUV	EP	Z	15	56	40										
	RAO	IP	Z	15	57	41										
	AFI	IP	ZNE	15	57	52	U									6.8
		ES	ZNE		16	03	54									
		ESS	ZNE		07	02										
		EL	ZNE		09	12										
	CBZ	EP	Z	15	59	02										48
	RAR	EP	ZNE	15	59	27.5										52 -0.14
		ES	ZNE		16	06	53									
		ESS	E		10	19										
		ELQ	ZNE		12	30										
		ELR	ZNE		15	47										
	SBA	IP	ZNE	16	01	33.5U										71 0.43
		ES	ZNE		11	02										54 5 7.9
		ELQ	ZNE		19	05										
		ELR	ZNE		23	47										38 35
DEC 24	RAO	EP	Z	06	36	41										
		ES	Z		37	09										
DEC 24	AFI	IP	Z	13	58	01	U									-0.57
DEC 24	AFI	EP	Z	19	25	57										
		ES	ZNE		27	37										
DEC 24	20 44	20.9	16.1S	173.4W	78KM	4.3	TONGA									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	AFI	EP	Z	20	45	03										3
		ES	NE			31										
		ET	ZNE		47	11										
DEC 24	22 28	59.6	59.9N	153.4W	113KM	5.1	S ALASKA									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	AFI	EP	Z	22	40	40										75
DEC 25	AFI	EP	Z	12	29	56										

## DISTANT EARTHQUAKES - OVERSEAS STATIONS

		ES	NE	30 25												
		ET	ZNE	32 28												
DEC 25	12 41	44.3	18.7S	174.8W	175KM	4.1	TONGA									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	AFI	EP	Z	12	43	19										6
		ES	NE		44	15										
		ET	ZNE		47	25										
	SUV	EP	Z	12	43	22										6
DEC 25	AFI	EP	Z	17	13	25										
		ES	NE			57										
DEC 27	05 42	17.2	5.9S	145.4E	79KM	4.8	E NEW GUINEA									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	AFI	EP	Z	05	50	11										43 -0.64
DEC 27	11 51	07.7	24.3S	179.8E	520KM	4.7	S OF FIJI									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	RAO	EP	Z	11	52	39										5
		ES	Z			33	36									
		ET	Z			11	52	48								6
	SUV	EP	Z	11	53	51										13 -0.60
	AFI	EP	NE			56	02									
DEC 27	AFI	IP	Z	15	48	39	U									-1.11
		ES	ZNE		49	20										
		ET	ZNE		52	10										
DEC 27	AFI	EP	Z	18	27	39										
		ES	NE			28	10									
DEC 27	21 26	06.5	21.3S	175.6W	14KM	5.0	TONGA									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	AFI	EP	Z	21	27	59										8
		ES	ZNE		30	00										
	RAR	ES	Z	21	29	52										15
		EL	ZNE		31	02										
DEC 28	08 18	07.4	25.5S	70.7W	47KM	6.9	OFF N CHILE									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	SBA	EP	ZNE	08	29	27.5										72
		ES	ZNE		38	48										
	RAR	EP	ZNE	08	30	15										80
	CBZ	EP	Z	08	30	50										86
	AFI	EP	ZNE	08	31	15										94 -0.10
		EPP	ZNE		35	06										7.5
		ES	ZNE		41	42										
		ESS	ZNE		48	00										
		L	ZE		09	03	19									
DEC 28	AFI	E(P)	Z	08	48	23										-0.29
DEC 28	AFI	EP	Z	08	56	35										-0.26
DEC 28	10 50	42.3	16.1S	172.9W	33KM	4.3	SAMOA									
			H	M	S	DIR	DIS	LG	A/T	AZ	TZ	AN	TN	AE	TE	MAG
	AFI	EP	ZNE	10	51	07										2
		S	ZNE			32										



H	M	S	EPICENTRE	DEPTH	MAG											
			H M S	KM		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG	
DEC 29	11	56	23.0	32,6S 111.8W	33KM	4.9	EASTER IS CORDILLERA									
SBA	ES	E	12 14 03													
	EL	ZNE	22 53													
AFI	ES	ZNE	12 14 12													
	ESSS	ZNE	20 06													
	EL	ZNE	22 30													
DEC 29	22	16	22.7	32,8S 111.7W	33KM	5.4	EASTER IS CORDILLERA									
RAR	ES	ZNE	22 31 05													
	EL	ZNE	36 19													
SBA	EP	Z	22 26 03													
	ES	ZNE	34 02													
	EL	ZNE	42 47													
AFI	ES	ZNE	22 34 12													
	ESSS	Z	37 36													
	EL	NE	40 48													
		ZNE	42 30													
DEC 29	23	16	20.0	60,6S 50.4W	33KM	5.4	SCOTIA SEA									
SBA	EP	Z	23 23 55													
DEC 30	01	00	25.4	17,8S 178.9E	658KM	5.0	FIJI									
SUV	IP	Z	01 01 43,2U													
AFI	IP	Z	01 02 35, D													
	ES	NE	04 21													
RAR	EP	Z	01 04 20													
SBA	EP	Z	01 09 35,2													
DEC 30	04	24	43.1	7,2S 119.9E	601KM	5.2	FLORES SEA									
SBA	IP	Z	04 35 23,0D													
DEC 30	07	09	51.3	24,2S 179.9E	505KM	4.2	S OF FIJI									
AFI	EP	ZNE	07 12 36													
	ES	ZNE	14 48													
DEC 30	09	43	48.2	21,3S 170.3E	63KM	4.6	LOYALTY IS									
AFI	EP	ZNE	09 47 56													
DEC 30	13	14	50.5	17,9S 178.9E	670KM	4.2	FIJI									
AFI	EP	ZNE	13 17 03													
DEC 31	AFI	IP	ZNE 00 05 06,3U													
	ES	ZNE	39													
DEC 31	AFI	EP	Z 01 56 12													
	ES	ZNE	50													
	ET	ZNE	58 57													

H	M	S	EPICENTRE	DEPTH	MAG											
			H M S	KM		DIR	DIS	LG=A/T	AZ	TZ	AN	TN	AE	TE	MAG	
DEC 31	03	21	32.4	17,4S 172.0E	52KM	4.9	NEW HEBRIDES									
SUV	EP	Z	03 23 00													
DEC 31	AFI	EP	Z 03 29 47													
	ES	ZNE	30 43													
DEC 31	AFI	EP	ZNE 03 49 59													
	ES	ZNE	50 24													
DEC 31	18	23	03.9	11,8S 166.5E	33KM	7.7	SANTA CRUZ IS									
SUV	EP	Z	18 26 18													
AFI	EP	ZNE	18 27 51													
	EP	ZNE	28 05													
RAO	EP	Z	18 28 07													
	E	Z	34													
RAR	EP	ZNE	18 29 47													
CBZ	EP	Z	18 30 45													
SBA	EP	ZNE	18 33 49 U													
	ES	NE	42 52.5													
DEC 31	SUV	EP	Z 18 46 41													
DEC 31	AFI	EP	ZE 18 48 08													
DEC 31	18	53	12.5	11,6S 165.9E	33KM	5.0	SANTA CRUZ IS									
SUV	EP	Z	18 56 33													
AFI	EP	ZNE	18 58 03													
	ES	ZE	19 01 28													
RAO	EP	Z	18 58 05													
SBA	EP	ZNE	19 03 58													
DEC 31	AFI	E(P)	ZE 19 04 35													
DEC 31	19	38	29.9	11,6S 166.0E	33KM	5.1	SANTA CRUZ IS									
SUV	EP	Z	19 41 55													
AFI	EP	ZE	19 43 21													
SBA	EP	Z	19 49 17.5													
DEC 31	20	59	44.5	11,6S 166.0E	33KM	5.1	SANTA CRUZ IS									
SUV	EP	Z	21 03 11													
DEC 31	22	15	14.0	11,3S 164.8E	33KM	7.3	SANTA CRUZ IS									
SUV	EP	Z	22 18 39													
AFI	EP	ZE	22 20 09													
RAO	EP	Z	22 20 25													
RAR	EP	ZNE	22 22 02													
SBA	EP	ZNE	22 26 15.5													
	ES	NE	34 54													



## PUBLICATIONS BY STAFF MEMBERS

During 1966 the following papers by members of the Seismological Observatory Staff were published:

- S-134 EIBY, G.A.: "The Modified Mercalli Scale of Earthquake Intensity and its Use in New Zealand".  
N.Z. J. Geol. Geophys. 9: 122-9.  
The nature and use of the Modified Mercalli intensity scale is explained, and the degrees of the scale redefined in terms capable of direct application in New Zealand.
- S-135 EVISON, F.F.: "Polarity of the Earthquake Source".  
Nature 211: 273-5.  
Earthquakes can be classified as dominantly explosive or dominantly implosive. Explosive earthquakes predominate in island chains, active continental margins, and continental hinterlands. Deep focus earthquakes and shallow earthquakes beneath ocean trenches are dilatational. This is in accord with the hypothesis that earthquakes are caused by sudden polymorphic phase transitions.
- S-136 YOUNG, R.M.: "On the Cauchy Problem for the n-Dimensional Wave-Equation".  
Proc. Math. Soc. Edinburgh 15 (ser. II): 29-32.
- S-137 HAMILTON, R.M.: "The Fiordland Earthquake Sequence of 1960 and Seismic Velocities Beneath New Zealand".  
N.Z. J. Geol. Geophys. 9: 224-38.  
The shallow earthquake of magnitude 7.0 which occurred in Fiordland on 24 May 1960 was accompanied by 16 foreshocks and 96 aftershocks of magnitude 4.0 or larger. The number of these earthquakes,  $N$ , having a magnitude  $M$  or larger varies with  $M$  according to the equation  $N = a - bM$ , with  $b = 1.05$ . The frequency of occurrence of aftershocks decreased with time in accordance with Omori's equation. Almost all of the epicentres are the same as that of the main shock; however, considering the accuracy of their location, they could be up to about 15 km away. Estimates of the seismic wave velocities beneath New Zealand are obtained from readings of 15 of the earthquakes. The  $P_n$  velocity of  $8.13 \pm 0.05$  km/sec and the  $S_n$  velocity of  $4.72 \pm 0.03$  km/sec are based on readings at stations near the same azimuth out to  $10^\circ$  epicentral distance. At stations within  $4^\circ$ ,  $P^*$  and  $S^*$  phases are prominent and propagate with velocities of  $6.59 \pm 0.10$  km/sec and  $3.74 \pm 0.11$  km/sec respectively.
- S-138 RANDALL, M.J.: "Seismic Radiation from a Sudden Phase Transition".  
J. Geophys. Res. 71: 5207-5302.  
The hypothesis that sudden phase transition may provide a mechanism for earthquakes is examined mathematically, the model allowing change of shape as well as of density. The basic distortional change gives a radiation pattern like that of the double-couple multipole.
- S-139 EVISON, F.F.: "Earthquake Wave Anomalies in New Zealand".  
Vesic Report on Seismic Wave Anomalies. Univ. of Michigan, Ann.

Arbor. pp. 19-24.

$P_n$  arrival times at New Zealand stations from 500 local earthquakes are analysed by computer. Anomalies are related to station site, epicentral distance, and focal depth.

- S-140 EIBY, G.A.: "Earthquake Swarms and Volcanism in New Zealand".  
Bull. Volcan. 29: 61-74.

The term 'swarm' is used to describe a group of related earthquakes, concentrated in space and time, without an obvious principal event. Large shallow earthquakes are often followed by aftershocks, but the pattern in which aftershocks occur differs in detail from that of a swarm.

Sequences of New Zealand earthquakes that have been called swarms differ markedly from one another. The most vigorous of them, near Taupo in 1922, appears to have been an ordinary tectonic earthquake accompanied by foreshocks and aftershocks, and by surface faulting. No fault movements accompanied the 1964 swarm in the same area. Other localities that have experienced swarms include Great Barrier Island, Matamata, Kawerau, and Opunake. Swarms are considered by some writers to be characteristic of volcanic regions. Although all New Zealand swarms have occurred in areas of Quaternary volcanism, there are still no observations showing what part, if any, volcanism plays in the generation of earthquake swarms.

ADAMS, R.D. and DIBBLE, R.R.: "Seismological Studies of the Raoul Island Eruption 1964".

Bull. Volcan. 29: 5-6.

- E-143 "New Zealand Seismological Report 1962".



## EXCHANGE AGREEMENTS

The Seismological Observatory issues the following series of publications: -

1. E-Bulletins. This consists of the annual "New Zealand Seismological Reports", containing a detailed summary of all standard measurements made at stations of the N.Z. network, lists of epicentres, felt intensity data, and a brief account of the principal earthquakes of the year.
2. S-Bulletins. These are mostly reprints of papers by members of the Observatory Staff, but occasionally it has included material not published elsewhere, such as the Eiby-Muir near-earthquake tables, and a descriptive account of the Observatory and its work issued to conference delegates.
3. A-Bulletins. These are cyclostyled sheets giving preliminary readings from Wellington and a small selection of well-distributed outstations. They are issued fortnightly to observatories and data centres needing rapid access to New Zealand readings, and are not intended to have a wide circulation.

The Observatory will be pleased to consider exchange agreements for any of this material. Stations requesting the A-series normally receive S- and E-series as well, and those requesting the E-series also receive the S-series. This arrangement facilitates mailing procedures.

## LIST OF MAPS

(in pocket inside back cover)

1. Epicentres of Earthquakes in 1966 whose focal depths are less than 40 km.
2. Epicentres of Earthquakes in 1966 whose focal depths are 40 km or greater.
3. Isoseismals of the Gisborne Earthquake of 1966 Mar 4.
4. Isoseismals of the Seddon Earthquake of 1966 Apr 23.

