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### **POSTAL SERVICE**

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Correspondents are asked to note that surface mails from Europe and the Americas are infrequent, and that articles not sent by airmail may take four or five months to reach us.

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## INTRODUCTION

The form of this Report follows lines established in recent years. The main list of regional shocks contains only earthquakes of magnitude 3.5 or greater located within  $10^{\circ}$  of Wellington, and smaller earthquakes known to have been felt in New Zealand. Many other earthquakes have however been assigned serial numbers, so the serials of the shocks listed are often not consecutive.

Phase data are not published here, but are instead sent to the International Seismological Centre, and appear in their bulletins, which constitute the only medium now in use for routine reporting of arrival time observations made in New Zealand. The lists of origin coordinates and magnitudes include sufficient supplementary information for assessment of the quality of the data on which they are based.

There is also a list of origins of earthquakes in the Wellington area with magnitudes of 2.0 or more. This list gives less information on the quality of individual determinations, but the density of recording stations in the area, and their easy accessibility for maintenance ensure that errors are small.

Seismologists urgently requiring unpublished New Zealand data may apply to the Observatory. Historic data are also available but unless a two-way information exchange is involved it is the Observatory's practice to make a charge for recovery of this material. Definitive origins for local earthquakes are usually available within a few months of their occurrence.

Until June 1992, the Seismological Observatory was part of the Department of Scientific and Industrial Research (DSIR). On 1 July 1992 the DSIR ceased to exist and the Seismological Observatory is now part of the Institute of Geological & Nuclear Sciences Limited. Observatory procedures have remained unchanged.

D E Maunder  
editor

## STAFF IN 1992

### Wellington

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## STAFF IN 1992

### **Wairakei**

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Technician: D Keen

### **Christchurch**

Technical Officer: T J O'Neill, NZCC

### **Rarotonga**

Observer in Charge: R Taia

### **Raoul Island**

Observer: G Simpson

### **Scott Base**

Observers: G Avery  
M Patton

## NEW ZEALAND SEISMICITY IN 1992

The pattern of earthquakes in New Zealand during 1992 was a little unusual, in that the latter half of the year was very quiet. There were 12 events of  $M_L$  5.0 and greater, at depths of 40 km or less, but only three of these were in the July-December period, the largest only 5.3. In contrast, the nine shallow shocks in the first half of the year included one of  $M_L$  6.1 and five others of  $M_L$  5.5 or greater. The deeper shocks were more spread throughout the year: five in the first half and eight in the second half.

The largest earthquake of the year occurred on May 27 (Event 92/5856), and was centred 30 km south-west of Blenheim. Its local magnitude was 6.7, although a comparison with teleseismic observations of this event demonstrates a difficulty which has become apparent with magnitudes of deep earthquakes, in that the body wave magnitude  $M_s$  assigned by the U.S. National Earthquake Information Center was only 5.8. The discrepancy is apparently due to the inadequate procedures currently being used at the Observatory for modelling the propagation of energy from deep earthquakes. The question is under study. The effects were not severe, because the focal depth was 84 km. The earthquake was felt from Huntly in the north to Dunedin in the south, most strongly in Nelson and Blenheim where many shops had goods thrown from shelves and there were some instances of minor damage. Intensity MM VI has been assigned in those two localities.

Tall buildings in Wellington swayed for at least a minute. A more surprising report came from the Awatere Valley, indicating that the earthquake was "barely felt" there. It seems that this particular location was close to a node of the radiation pattern from the focus, so ground motion was very modest compared with that in Blenheim, not far away.

On March 2 there was an earthquake of  $M_L$  5.8 in southern Hawke's Bay (Event 92/1727), between Weber and Porangahau, then another on July 31 (92/8330) of  $M_L$  5.2 and centred between Weber and Pahiatua. Intensities reached MM V on March 2 and MM IV on July 31. These shocks appear to have been part of the continuing Weber sequence, which began with two in 1990 February and May, causing damage in Dannevirke and the nearby area. The sequence has continued since then, but mostly at a low level with only the occasional shock being felt. This sequence is somewhat unusual in its length, especially as the 1992 events were two years after the main shock. The Observatory is continuing surveillance of the area with its permanent network of seismographs. The catalogue for the

month of March contains 363 aftershocks within 30 km of the March 2 epicentre.

Three earthquakes in the Bay of Plenty were felt strongly on shore, especially in Whakatane, Tauranga and Waihi: event 92/2754 ( $M_L$  5.7) on March 25, 92/6640 ( $M_L$  6.1) and 92/6644 (5.6) on June 21. Intensities reached MM VI at Waihi on March 25 and at Tauranga on June 21.

A sequence of earthquakes began on March 30, just to the west of Arthur's Pass. The largest two were 92/3075 ( $M_L$  5.8) on March 30 and 92/3506 ( $M_L$  5.2) on April 1. Intensities reached MM V at Lake Kaniere and Erewhon Station on March 30. The catalogue contained 574 events in the succeeding four days, with magnitudes down to 2.0. This contrasts sharply with the 27 May event in Marlborough (focal depth 84 km) for which only eight aftershocks were recorded.

On May 16 and 17 there were three earthquakes off Tokomaru Bay, to the north of Gisborne: events 92/5272 ( $M_L$  5.6), 92/5277 ( $M_L$  5.2) and 92/5315 ( $M_L$  5.2). Intensities reached MM V on shore.

Other shallow earthquakes of magnitude 5.0 and greater occurred 150 km off Castlepoint on March 22 (event 92/2617,  $M_L$  5.1) and near Harihari on the West Coast on November 27 (92/11670,  $M_L$  5.3).

Apart from the May 27 event, deep earthquakes exceeding magnitude 5.0 occurred near Te Kuiti at a depth of 233 km on January 15 (event 92/383,  $M_L$  5.3); 222 km deep beneath north-eastern Taranaki on Feb 5 (92/947,  $M_L$  5.1); 30 km south-west of Hawera at 122 km on February 18 (92/1380,  $M_L$  5.9); 57 km beneath southern Hawke's Bay on March 13 (92/2349,  $M_L$  5.0); 296 km deep below Tauranga on August 9 (92/8539,  $M_L$  5.3); 100 km north of Nelson and 237 km deep on August 10 (92/8550,  $M_L$  5.1); 189 km deep in the Rotorua area on September 16 (92/9536,  $M_L$  5.0); 168 km below Rotorua on September 29 (92/9912,  $M_L$  5.3); 190 km beneath central Taranaki on October 20 (92/10453,  $M_L$  5.0); 100 km north of East Cape and 181 km deep on November 4 (92/10863,  $M_L$  5.1); just west of National Park on December 12 at a depth of 161 km (92/12124,  $M_L$  5.7), and 277 km deep beneath Tauranga on December 27 (92/12558,  $M_L$  6.0). None of these caused intensities exceeding MM IV, because of their focal depths.

W D Smith

## INSTRUMENTATION IN 1992

By the end of 1992, the New Zealand digital network consisted of 31 digital stations (11 with single component instruments and the rest 3-component), 7 analogue stations and 5 regional networks: Bay of Plenty, Tongariro, Hawkes Bay, Wellington and Clyde. The Taupo network was closed by the end of October.

The change from visual records, needing to be changed daily, to digital tapes which run for a week has meant that it has been possible to install instruments at seismically quieter sites. Those analogue stations left are used to add data to a few poorly determined epicentres and as displays in museums or other public areas. Continuous recording by WWSSN and IRIS seismographs for the registration of teleseisms and the use of pen-recorders at some sites for immediate inspection of large events continued.

Two types of event-recording system have been developed by the Observatory. The older system, SNARE (Seismic

Network Automatic Recording Equipment) is a 16-channel system which relies on a combination of spectral analysis of seismometer outputs and coincidence detection to trigger recording by the whole network. EARSS (Automatic Equipment for the Recording of Seismograph Signals) was developed from SNARE as a single station system which can operate unattended for at least a week. Because it is a single station system it relies solely on a frequency-spectrum algorithm for event detection. An improvement on SNARE is the introduction of automatic magnification adjustment ("gain-ranging") to allow faithful recording of large-amplitude wave-forms. A 16-channel version of EARSS is under development and will eventually supersede SNARE. Not included in the current re-equipment programme are instruments owned by organisations other than IGNS. In 1992, organisations cooperating in continuous or ad hoc seismic monitoring were: the Universities of Auckland and Wellington, and the Electricity Corporation of New Zealand.

## CHANGES TO THE NETWORKS IN 1992

A new station of the New Zealand network, Mangatainoka River (MRZ), with EARSS recorder was installed during April. This instrument was originally a short period vertical Mark Products L4-C which was replaced by a 3-component Mark Products L4-3D seismometer a month later.

The station at Raurimu (RUZ) was closed in May and replaced by a 3 component station at Oio (OIZ) during September.

The Wellington (WEL) NS and EW Wood Anderson instruments were removed in March.

The single component seismometer at Lake Moeraki (LMZ) was replaced, in October, by a 3-component Mark Products L4-3D instrument. The station was moved slightly in November and placed down a 50m borehole. The station at Milford Sound (MSZ) was also moved slightly during this month.

Wainui Dam (WDW), a station in the Wellington network, was replaced by Orongorongo Valley (OTW) in July.

Three new stations were installed in the Rotorua area; Haroharo (HARZ), Lichensteins Road (LIRZ) and Manawahe (MARZ). Their signals are telemetered to Rotorua and recorded on an EARSS recorder. These stations have short-period vertical Mark Products L4-C instruments.

In June 1992, in preparation for the installation of network covering the Taranaki volcanic area, North Egmont (NEZ) was moved slightly and stopped recording. It will form part of the Taranaki network and the signal will be telemetered to a 16 channel EARSS recorder in New Plymouth. This network will be operated and the data analysed by the Taranaki Civil Defence and Auckland University.

The visual station at Rotoiti (RTY) was inoperative for most of the year. The recorder drum motor was replaced in mid December and recording recommenced.

The DWWSSN station at Raratonga (RAR) was replaced by an IRIS system in February. In April the SRO at South Karori (SNZO) was also replaced by an IRIS.

## INDEX OF STATION CODES AND POSITIONS

The growth in numbers of seismograph stations in recent years has been so great that it is not always possible to find short mnemonic codes that are unique in the world.

Nearly all the codes used below are recognised and used by the United States NEIS and by ISC, but some of those for stations in the telemetered networks may not be.

CODE	NAME	LATITUDE			LONGITUDE			ALT m
		d	m	s	d	m	s	

### SEISMIC RESEARCH OBSERVATORY

SNZO	South Karori	41	18	37	S	174	42	17	E	-10
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### STANDARD NETWORK

AUC	Auckland	36	51	36	S	174	46	41	E	79
BCZ	Braida Crags	46	00	24	S	167	50	23	E	120
BSZ	Bushy Park	39	47	55	S	174	55	52	E	150
BWZ	Berwen	44	31	54	S	169	52	59	E	500
CHR	Christchurch	43	31	58	S	172	37	36	E	8
CIZ	Chatham Islands	43	57	18	S	176	33	56	W	45
CNZ	Chateau	39	12	00	S	175	32	51	E	1116
DCZ	Deep Cove	45	28	42	S	167	09	15	E	20
DRZ	Dome Shelter	39	16	35	S	175	33	49	E	2600
DSZ	Denniston North	41	44	49	S	171	48	09	E	630
EWZ	Erewhon	43	30	42	S	170	51	09	E	650
HBZ	Hicks Bay	37	35	57	S	178	18	05	E	0
KHZ	Kahutara	42	25	05	S	173	32	25	E	70
KUZ	Kuaotunu	36	44	50	S	175	43	12	E	40
LMZ	Lake Moeraki (from November)	43	43	06	S	169	16	14	E	10
		43	42	59.5	S	169	16	10	E	-50
LTZ	Lake Taylor	42	46	58	S	172	16	08	E	640
MGZ	Maungaku	39	00	07	S	175	32	20	E	806
MNG	Mangahao	40	37	07	S	175	28	55	E	396
MOZ	Mahoenui	38	30	21	S	174	48	11	E	160
MQZ	McQueen's Valley	43	42	28	S	172	39	08	E	60
MRZ	Mangatainoka River	40	39	45	S	175	34	45	E	320
MSZ	Milford Sound	44	40	14	S	167	55	01	E	38
	(from November)	44	40	31.5	S	167	55	39	E	90
NEZ	North Egmont	39	16	22	S	174	05	46	E	920
NGZ	Ngauruhoe	39	10	37	S	175	36	04	E	806
NOZ	North Gisborne	38	37	05	S	178	02	12	E	60
NRZ	Ngariki	39	20	15	S	173	55	59	E	250
OBZ	Oban	46	54	18	S	168	06	55	E	26
ODZ	Otahua Downs	45	02	43	S	170	38	40	E	270
OIZ	Oio	39	02	48	S	175	23	33	E	470

OUZ	Omahuta	35	13	17	S	173	35	46	E	40
PGZ	Pongaroa	40	37	08	S	176	16	25	E	-40
PUZ	Puketiti	38	04	24	S	178	15	26	E	420
QRZ	Quartz Range	40	49	39	S	172	31	44	E	260
RAO	Raoul Island	29	15	06	S	177	55	06	W	110
RAR	Rarotonga	21	12	45	S	159	46	24	W	28
RTY	Rotoiti	41	48	27	S	172	50	35	E	635
RUZ	Raurimu	39	07	37	S	175	20	16	E	450
SBA	Scott Base	77	51	01	S	166	45	22	E	38
SIZ	Stewart Island	46	52	30	S	168	07	59	E	60
TAZ	Tarawera	38	13	59	S	176	30	28	E	1037
THZ	Top House	41	45	50	S	172	54	13	E	760
TMP	Tomahawk Gully	44	18	54	S	170	07	12	E	720
TUZ	Tuapeka	45	57	22	S	169	37	56	E	110
URZ	Urewera	38	15	37	S	177	06	37	E	100
UTU	Utuhina	38	10	39	S	176	11	32	E	410
WCZ	Waipu Caves	35	56	28	S	174	20	40	E	140
WEL	Wellington	41	17	10	S	174	46	06	E	122
WIZ	White Island	37	31	42	S	177	11	21	E	40
WLZ	Whitehall	37	52	12	S	175	35	46	E	190
WVZ	Waitaha Valley	43	04	35	S	170	44	10	E	75

## BAY OF PLENTY VOLCANO-SEISMIC NETWORK

HARZ	Haroharo	38	05	28	S	176	30	07	E	740
LIRZ	Lichensteins Road	38	00	18	S	176	23	03	E	340
MARZ	Manawahe	37	59	12	S	176	40	28	E	480
PATZ	Paeroa	38	22	53	S	176	15	30	E	940
TAZ	Tarawera	38	13	59	S	176	30	28	E	1037
UTU	Utuhina	38	10	39	S	176	11	32	E	410
WIZ	White Island	37	31	42	S	177	11	21	E	40

## CLYDE NETWORK (Electricorp)

CFC	Cairnmuir Flats	45	11	03	S	169	17	32	E	576
CMCZ	Cairnmuir Mts	45	08	57	S	169	16	30	E	1039
LRCZ	Leaning Rock	45	03	55	S	169	20	46	E	1533
LSCZ	Lilico Spur	45	06	59	S	169	22	09	E	759
MHZ	Mt Horn	45	03	44	S	169	16	46	E	1127
MMCZ	Mount Michael	45	00	13	S	169	07	53	E	1163
MSCZ	Moutere Station	45	05	35	S	169	24	42	E	701
SBCZ	Sonora Basin	45	05	32	S	169	18	40	E	801
TBC	Trig B	45	08	47	S	169	19	49	E	619
TLC	Trig L	45	11	29	S	169	04	17	E	1393

## HAWKES BAY NETWORK

HNH	Havelock North	39	39	55	S	176	52	52	E	10
MAHZ	Mahia	39	11	18	S	177	52	51	E	336
MOH	Mohaka	39	07	57	S	177	08	52	E	245
PAHZ	Panekirikiri	38	51	33	S	177	03	15	E	563
TAHZ	Taraponui	39	08	09	S	176	44	25	E	1297
TEHZ	Te Atua	39	59	22	S	176	48	40	E	407
TTH	Taradale Trig	39	32	29	S	176	49	34	E	120
WAHZ	Wakarara	39	41	57	S	176	21	19	E	657
WHH	Whakatau	38	53	04	S	176	29	42	E	921

## TAUPO NETWORK

OH1	Ohaaki 1	38	32	41	S	176	18	27	E	295
OH2	Ohaaki 2	38	30	42	S	176	18	10	E	300
OH3	Ohaaki 3	38	31	59	S	176	19	34	E	300
OH4	Ohaaki 4	38	32	41	S	176	19	09	E	300

## TONGARIRO VOLCANO-SEISMIC NETWORK

CNZ	Chateau	39	12	00	S	175	32	51	E	1116
DRZ	Dome Shelter	39	16	35	S	175	33	49	E	2600
KETZ	Ketetahi	39	06	02	S	175	39	06	E	1208
MGZ	Maungaku	39	00	07	S	175	32	20	E	806
NGZ	Ngaruhoe	39	10	37	S	175	36	04	E	806

## WELLINGTON NETWORK

AMW	Mt Adams	41	18	34	S	175	45	39	E	400
BBW	Blackbirch	41	42	45	S	173	52	42	E	250
BHW	Baring Head	41	24	33	S	174	52	17	E	10
BLW	Big Hill	41	22	07	S	175	28	29	E	340
CAW	Cannon Point	41	06	32	S	175	04	04	E	330
CCW	Cape Campbell	41	45	03	S	174	13	01	E	216
DIW	D'Urville Island	40	48	08	S	173	55	19	E	460
GFW	Glenfield	41	27	24	S	173	49	51	E	230
KIW	Kapiti Island	40	51	50	S	174	54	42	E	320
MOW	Moikau	41	25	18	S	175	15	07	E	430
MRW	Makara Radio	41	13	57	S	174	42	18	E	235
MTW	Mount Morrison	41	09	34	S	175	30	07	E	282
OTW	Orongorongo Valley	41	16	39	S	175	00	15	E	230
TCW	Tory Channel	41	12	48	S	174	16	33	E	150
WDW	Wainui Dam	41	16	07	S	174	59	37	E	130
WEL	Wellington	41	17	10	S	174	46	06	E	122

## INSTRUMENTATION AND LITHOLOGY

### STANDARD NETWORK AND CONTRIBUTING STATIONS

Stations are listed in alphabetical order of their abbreviations. Pendulum period,  $T_0$ , is given in seconds. Damping when not listed, may be assumed to be critical. Magnifications listed are for the period of maximum response, except for World-Wide Standard Station

instruments, where the magnifications are given at the conventional periods of 1.0 and 15 seconds. Response curve for Mark Products L4-C seismographs and an EARSS system is shown at the end of this section.

	<b>Instrument</b>	<b>Compt.</b>	<b>To</b>	<b>Damping</b>	<b>Magnification</b>
AUC	AUCKLAND				
	Foundation: Volcanic beds on Tertiary sandstone and mudstone. Willmore II (with Kinematics VR-1 pen-recorder).	Z	1.0		3 800 at 0.25s
BCZ	BRAIDA CRAGS				
	Foundation: Limestone. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
BSZ	BUSHY PARK				
	Foundation: Quaternary marine sediments. Mark Products L4-C (with EARSS digital gain-ranging recorder).	Z	1.0		
BWZ	BERWEN (from February)				
	Foundation: Greywacke. Mark Products L4-C (with EARSS digital gain-ranging recorder)	Z	1.0		
CHR	CHRISTCHURCH				
	Willmore II (with Kinematics VR-1 pen-recorder).	Z	1.0		
CIZ	CHATHAM ISLANDS				
	Foundation: Clay over basalt. Willmore II (with Kinematics VR-1 pen-recorder).	Z	1.0		4 440 at 0.20s
CNZ	CHATEAU				
	Foundation: Volcanic ash and Lava. Mark Products L4-C (telemetered to Kinematics VR-1 pen-recorder and to EARSS digital recorder).	Z	1.0		Variable
DCZ	DEEP COVE (from May)				
	Foundation: Granite. Mark Products L4-3D (with EARSS digital gain-ranging recorder)	ZNE	1.0		

	<b>Instrument</b>	<b>Compt.</b>	<b>To</b>	<b>Damping</b>	<b>Magnification</b>
DRZ	DOME SHELTER (Department of Conservation) Foundation: Recent andesitic ash. Mark Products L4-C (High and low magnifications, telemetered to Kinematics VR-1 pen-recorders and high magnification to EARSS digital recorder).	Z	1.0		Variable
DSZ	DENNISTON NORTH Foundation: Upper Precambrian greywacke Mark Products L4-C (with EARSS digital gain-ranging recorder)	Z	1.0		
EWZ	EREWHON Foundation: Triassic greywacke. Mark Products L4-C (with EARSS digital gain-ranging recorder)	Z	1.0		
HBZ	HICKS BAY Foundation: Consolidated conglomerate. Mark Products L4-C in borehole (with Kinematics VR-1 pen-recorder and EARSS digital recorder).	Z	1.0		67 500 at 0.10s
KHZ	KAHUTARA Foundation: Jurassic greywacke Mark Products L4-3D (with EARSS digital gain-ranging recorder)	ZNE	1.0		
KUZ	KUAOTUNU Foundation: Greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
LMZ	LAKE MOERAKI Foundation: Precambrian Greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
	Replaced in November by Mark Products L4-C (with EARSS digital gain-ranging recorder).	Z	1.0		
LTZ	LAKE TAYLOR Foundation: Triassic Greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
MGZ	MAUNGAKU (Department of Conservation) Foundation: Quaternary andesite. Mark Products L4-C (telemetered to Kinematics VR-1 pen-recorder and to EARSS digital recorder).	Z	1.0		Variable
MNG	MANGAHAO Foundation: Greywacke Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		

	<b>Instrument</b>	<b>Compt.</b>	<b>To</b>	<b>Damping</b>	<b>Magnification</b>
MOZ	MAHOENUI Foundation: Jurassic Greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
MQZ	McQUEEN'S VALLEY Foundation: Miocene Volcanics. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
MRZ	MANGATAINOKA (from May) Foundation: Greywacke. Mark Products L4-C, replaced in June by Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
MSZ	MILFORD SOUND Foundation: Gneiss. Mark Products L4-3D (with EARSS digital gain-ranging recorder)	ZNE	1.0		
NEZ	NORTH EGMONT (until June) Foundation: Volcanic ash. Mark Products L4-C (with Kinematics VR-1 pen-recorder).	Z	1.0	25 100 at	0.10s
NGZ	NGAURUHOE Foundation: Recent volcanic flows. Mark Products L4-C (telemetered to Kinematics VR-1 pen-recorder and to EARSS digital recorder).	Z	1.0		Variable
NOZ	NORTH GISBORNE Foundation: Upper Miocene Siltstone. Mark Products L4-C (with EARSS digital gain-ranging recorder).	Z	1.0		
NRZ	NGARIKI Foundation: Andesite. Mark Products L4-C (with EARSS digital gain-ranging recorder).	Z	1.0		
OBZ	OBAN Foundation: Weathered granite. Mark Products L4-C (with Kinematics VR-1 pen-recorder).	Z	1.0	12 000 at	1.0s
ODZ	OTAHUA DOWNS Foundation: Greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		

	<b>Instrument</b>	<b>Compt.</b>	<b>To</b>	<b>Damping</b>	<b>Magnification</b>
OIZ	OIO (from Sept) Foundation: Tertiary Sandstone. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
OUZ	OMAHUTA Foundation: Greywacke. Mark Products L4-C (with EARSS digital gain-ranging recorder)	Z	1.0		
PGZ	PONGAROA Foundation: Tertiary Sediments Mark Products L4-C in borehole (with EARSS digital gain-ranging recorder).	Z	1.0		
PUZ	PUKETITI Foundation: Cretaceous Greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
QRZ	QUARTZ RANGE Foundation: Golden Bay Schist. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
RAO	RAOUL ISLAND Foundation: Volcanic rock. Willmore II (with Kinematics VR-1 pen-recorder).	Z	1.0		4 800 at 0.25s
RAR	RAROTONGA (World-Wide Standard Station) Foundation: Basalt. Benioff ZNE 1.0 Signal also recorded by EARSS digital event recorder tuned to trigger on T-waves.				6 250 at 1.0s
	Press-Ewing Z 15 GeoTech KS36000i broad band seismometer recorded on IRIS-2 digital recording system.				375 at 15s
RTY	ROTOITI Foundation: Glacial gravels. Mark Products L4-C (with Kinematics VR-1 pen-recorder).	Z	1.0		Uncertain
RUZ	RAURIMU (until May) Foundation: Limestone. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
SBA	SCOTT BASE (World-Wide Standard Station) Foundation: Frozen basaltic debris resting on lava flows. Benioff ZNE 1.0 Press-Ewing ZNE 15				12 500-50 000 at 1.0s according to season 750 at 15s
SIZ	STEWART ISLAND Foundation: Granite Mark Products L4-C (with EARSS digital gain-ranging recorder).	Z	1.0		

	<b>Instrument</b>	<b>Compt.</b>	<b>To</b>	<b>Damping</b>	<b>Magnification</b>
TAZ	TARAWERA Foundation: Rhyolite lava. Mark Products L4-C (telemetered to Kinematics VR-1 pen-recorder and to EARSS digital recorder).	Z	1.0		Variable
THZ	TOPHOUSE Foundation: Permian Greywacke. Willmore II (with EARSS digital gain-ranging recorder).	ZNE	1.0		
TMP	TOMAHAWK GULLY Foundation: Mesozoic Greywacke Mark Products L4-C (telemetered to separate Kinematics VR-1 pen-recorders).	Z	1.0	750 000 at 0.20s	
		N	1.0	100 000 at 0.20s	
TUZ	TUAPEKA Foundation: Haast Schist. Mark Products L4-3D (with EARSS digital gain-ranging recorder)	ZNE	1.0		
URZ	UREWERA Foundation: Greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
UTU	UTUHINA Foundation: Ignimbrite. Mark Products L4-C (telemetered to Kinematics VR-1 pen-recorder and to EARSS digital recorder).	Z	1.0		Variable
WCZ	WAIPU CAVES Foundation: Greywacke. Mark Products L4-C (with EARSS digital gain-ranging recorder).	Z	1.0		
WEL	WELLINGTON (World-Wide Standard Station) Foundation: Greywacke. Benioff Z 1.0 6 250 at 1.0s Press-Ewing ZNE 15 375 at 15s Wood-Anderson (until March) NE 0.80 crit. 1 400 at 0.8s Imamura Z 1 5:1 2 NE 4 5:1 2 Kinematics force-balance accelerometer (with EARSS digital gain-ranging recorder). ZNE 1.0				
WIZ	WHITE ISLAND Foundation: Recent andesite. Mark Products L4-C (Telemetered to Kinematics VR-1 pen-recorder).	Z	1.0		Variable

	<b>Instrument</b>	<b>Compt.</b>	<b>To</b>	<b>Damping</b>	<b>Magnification</b>
WLZ	WHITEHALL Foundation: Jurassic Greywacke. Willmore II                    Z                1.0 Willmore I                    NE               1.0 (with EARSS digital gain-ranging recorder).				
WVZ	WAITAHA VALLEY Foundation: Granite. Mark Products L4-3D (with EARSS digital gain-ranging recorder). ZNE                        1.0				

## BROADBAND IRIS STATION

This station is sponsored by the United States Geological Survey. A three-component GeoTech KS36000i BD broadband seismometer sealed in a gas-filled capsule is located in a borehole 165 mm in diameter and about 100 m deep, at a quiet site several kilometres from the Observatory. The ground surface there is 88 m above, and the seismometer 10 m below, sea level. The lithological foundation is Jurassic-Permian Greywacke. Both digital and analogue recordings are made from the three long-

period and the vertical component short-period outputs. The digital signal is recorded by an IRIS-2 system. Paper analogue records are archived by the Observatory, but the digital tape records of detected events are held by the USGS. The recorder is at the observatory site in Kelburn, and the signals are transmitted to it by landline.

Magnifications given below are for the analogue recorder.

Code	Station	Component	Magnification
SNZO	South Karori	ZNE Z	1 500 at 15s 6 250 at 1.0s

## BAY OF PLENTY VOLCANO-SEISMIC NETWORK

This network is operated by the Volcanology Programme in conjunction with the Seismological Observatory and monitors seismic activity associated with volcano, geothermal and tectonic processes in the northern portion of the Taupo Volcanic Zone. Data from 6 of the 7 stations are recorded on two 3-channel EARSS at Rotorua.

Tarawera (TAZ) and Utuhina (UTU) and the seventh station, White Island (WIZ), are recorded on VR-1 pen-and-ink visual recorders as part of the New Zealand network. The seismometers are Mark Products L4-C (1 hz) short-period vertical seismometers.

Code	Station	Component	Magnification
HARZ	Haroharo	Z	Rhyolite
LIRZ	Lichensteins Rd	Z	Rotoiti breccia
MARZ	Manawahe	Z	Andesite
PATZ	Paeroa	Z	Ignimbrite
TAZ	Tarawera	Z	Ryolite lava
UTU	Utuhina	Z	Ignimbrite
WIZ	White Island	Z	Recent Andesite

## CLYDE NETWORK

A network of seismometers has been installed near Clyde to collect data on the prevailing level of microseismicity in the area of the dam now being constructed on the Clutha River. The network operated by the Electricity Corporation of New Zealand, is used to monitor any changes in local seismicity associated with the use of the lake for the generation of electricity. The system records all detected seismic events in digital form, on magnetic tape. Tapes are interpreted and retained at the Observatory where they are

available for other seismological use. Clyde network stations are linked by radio telemetry to a multi-channel SNARE (Seismic Network Automatic Recording Equipment), which both detects and records seismic events, at Clyde. The seismometers are Mark Products L4-C or L4-3D instruments with a natural period of one second and the lithological foundation at all stations is Schist. Recorded waveforms can be displayed on a monitor screen at any required scale.

Code	Station	Component
CFC	Cairnmuir Flats	Z
CMCZ	Cairnmuir Mountains	ZNE
LRCZ	Leaning Rock	Z
LSCZ	Lilico Spur	Z
MMCZ	Mount Michael	Z
MHZ	Mount Horn	Z
MSCZ	Moutere Station	Z
SBCZ	Sonora Basin	Z
TBC	Trig B (formerly Clyde)	Z
TLC	Trig L	Z

## HAWKES BAY NETWORK

The Hawke's Bay network has been installed to monitor seismicity in an area which has not only some potential for hydro-electric power generation, but also a history of severe

earthquakes. Havelock North produces high- and low-gain records from a three-component seismometer. The network records on a SNARE System in Havelock North.

Code	Station	Component(s)	Foundation
HNH	Havelock North	ZNE (High gain) ZNE (Low gain)	Greywacke gravel " "
MAHZ	Mahia	Z	Mudstone
MOH	Mohaka	Z	Dune Sand
PAHZ	Panekirikiri	Z	Pumice Tuff
TAHZ	Taraponui	Z	Limestone
TEHZ	Te Atua	Z	Limestone
TTH	Taradale Trig	Z	Calcareous mudstone
WAHZ	Wakarara	Z	Greywacke
WHH	Whakatau	Z	Ignimbrite

## TAUPO NETWORK

This network is intended to monitor volcanic and geothermal activity in the Taupo Volcanic Region. Although relatively quiet in historic times, (the 1886 Tarawera eruption notwithstanding), the geological record shows that the Region has been the scene of larger-scale

activity at a number of times in the more distant past. The network records on a SNARE system at Wairakei. Station codes OH1 - OH4 are not internationally recognised. All the stations of this network were closed by end of October 1992.

<b>Code</b>	<b>Station</b>	<b>Component(s)</b>	<b>Foundation</b>
OH1	Ohaaki 1	Z	Pumice
OH2	Ohaaki 2	Z	Pumice
OH3	Ohaaki 3	Z	Pumice
OH4	Ohaaki 4	Z	Pumice

## TONGARIRO VOLCANO-SEISMIC NETWORK

This network is operated jointly by the Volcanology programme and the Seismological Observatory to monitor seismic activity associated with volcanic and tectonic processes about Tongariro Volcanic Centre. Five stations form the network, with CNZ, DRZ and NGZ being recorded on a 3-channel EARSS, and all others on VR-1

pen-and-ink visual recorders. KETZ originally formed part of the Taupo network and little data was obtained from this station in 1992. The other four stations are also part of the New Zealand network. The instruments at all sites are Mark Products L4-C short-period vertical seismometers.

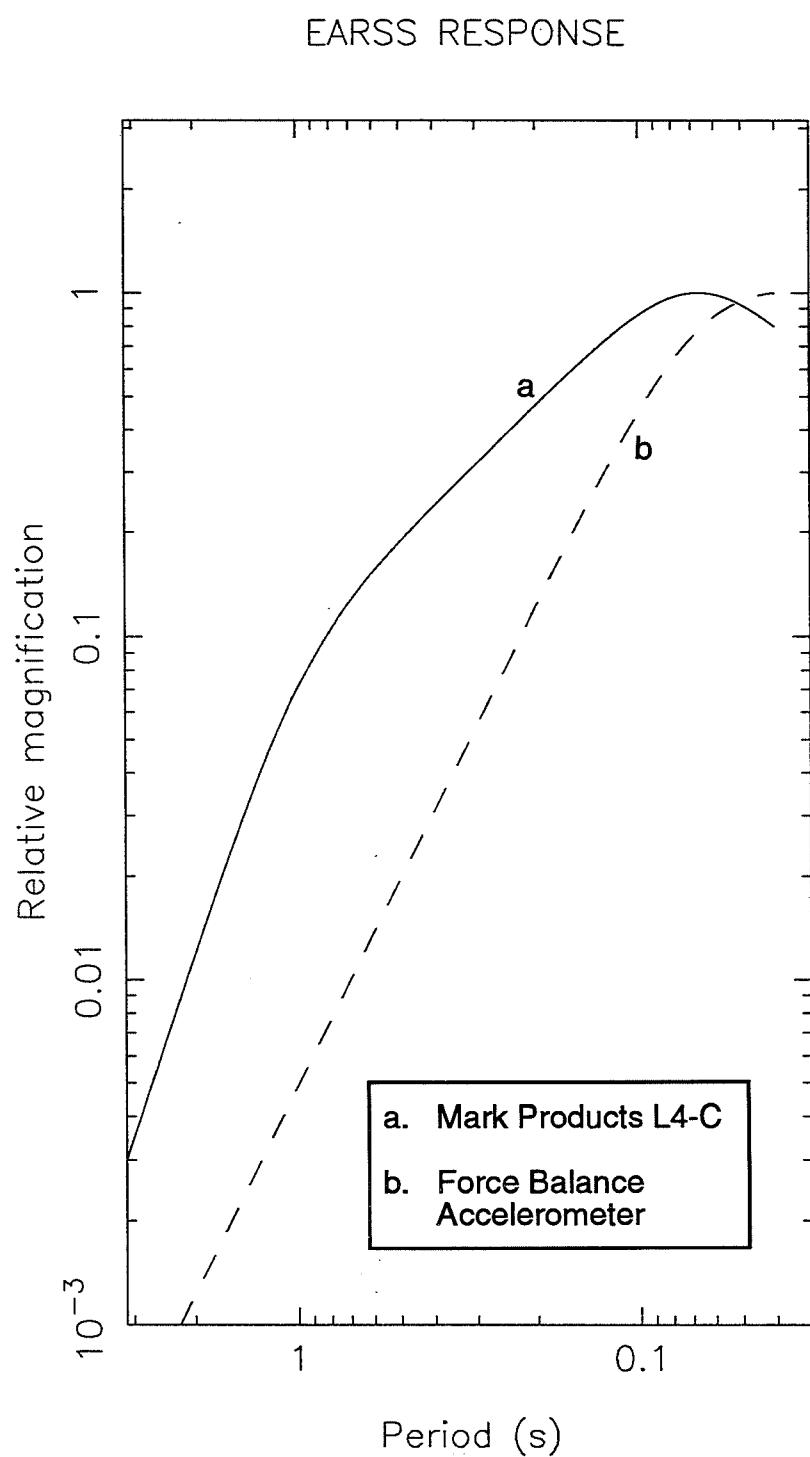
<b>Code</b>	<b>Station</b>	<b>Component(s)</b>	<b>Foundation</b>
CNZ	Chateau	Z	Andesitic ash
DRZ	Dome Shelter	Z	Andesite ash
KETZ	Ketetahi	Z	Andesite lava
MGZ	Maungaku	Z	Andesite
NGZ	Ngaruhoe	Z	Andesite lava

## WELLINGTON NETWORK

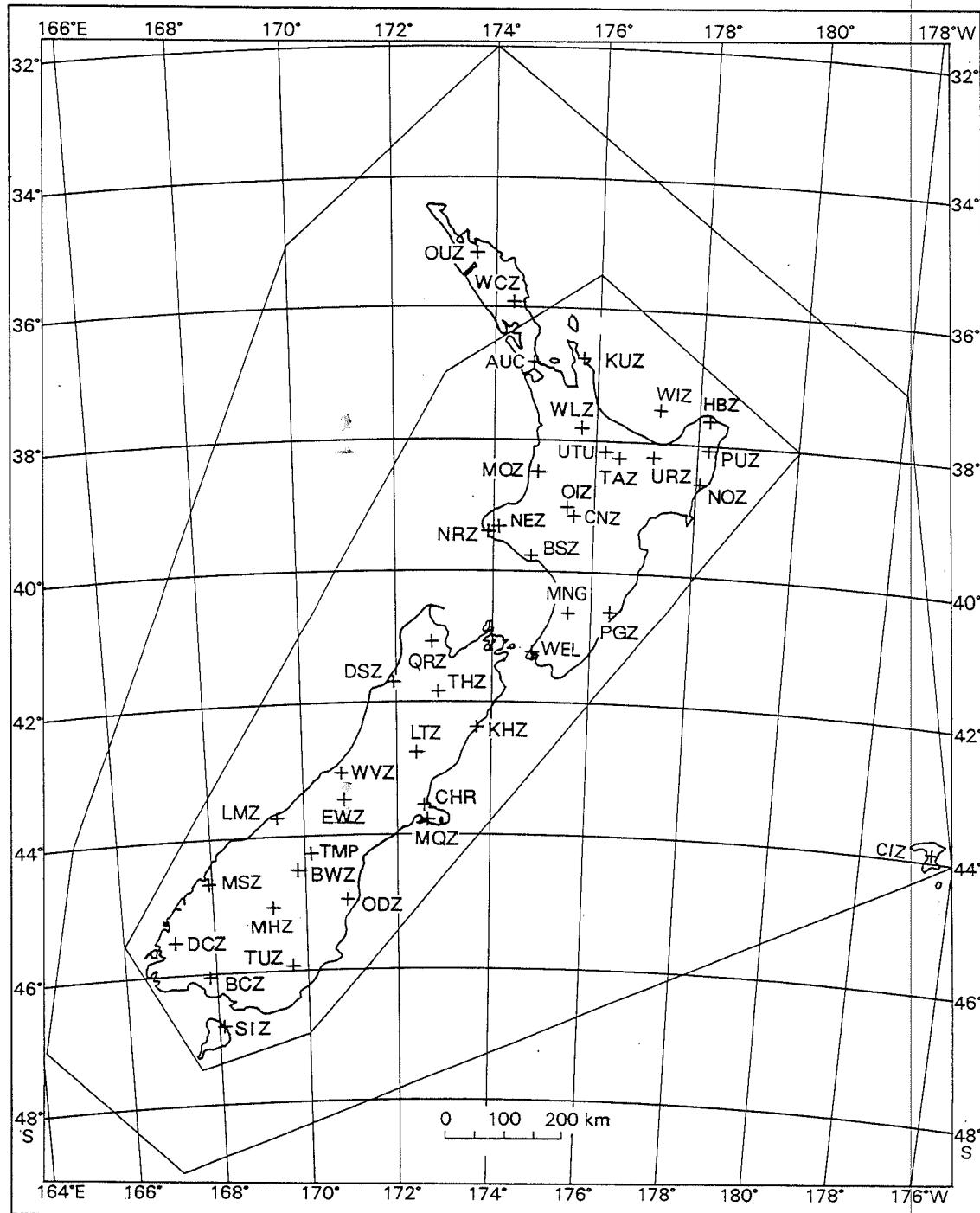
The stations of the Wellington network are linked by radio or land-line to a common SNARE event-detecting and recording system at the Observatory at Kelburn. The instrument at WEL is a Kinematics force balance accelerometer and the seismometer at MRW is a Mark Products L4-3D. The seismometers for the rest of the network are Mark Products L4-C instruments with a

period of 1.0 second. SNARE records are made on magnetic tape and may be displayed on a monitor screen at any required magnification. The MRW vertical component is also transmitted to a heated stylus recorder. The lithological foundation at most stations is Jurassic-Permian Greywacke. The exceptions are BBW (schist), CCW (Miocene sandstone) and DIW (Granodiorite).

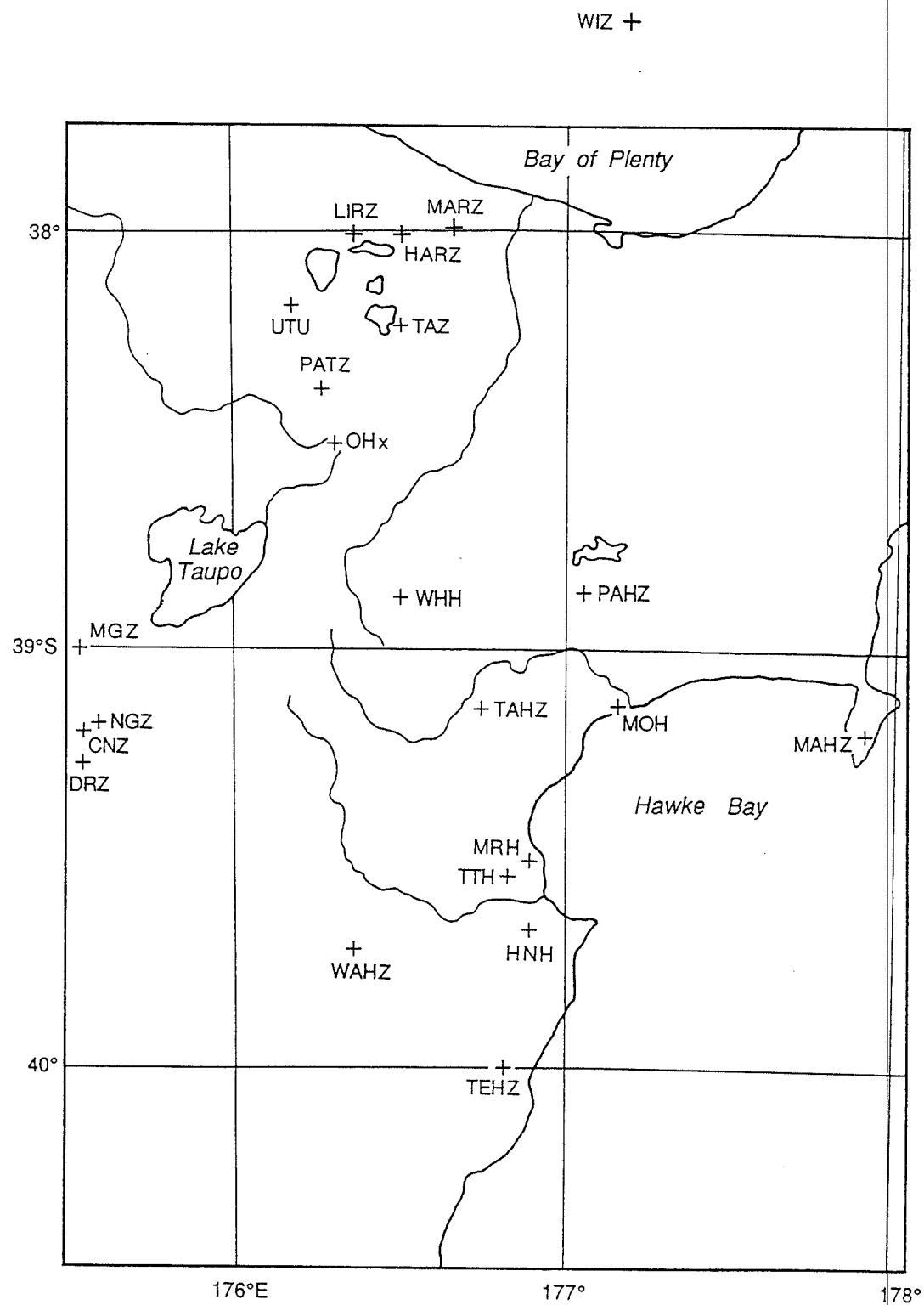
Code	Station	Component(s)
AMW	Mt Adams	Z
BBW	Blackbirch	Z
BHW	Baring Head	Z
BLW	Big Hill	Z
CAW	Cannon Point	Z
CCW	Cape Campbell	Z
DIW	D'Urville Island	Z
GFW	Glenfield	Z
KIW	Kapiti Island	Z
MOW	Moikau	Z
MRW	Makara Radio	ZNE
MTW	Mount Morrison	Z
OTW	Orongorongo Valley	Z
TCW	Tory Channel	Z
WDW	Wainui Dam	Z
WEL	Wellington	ZNE



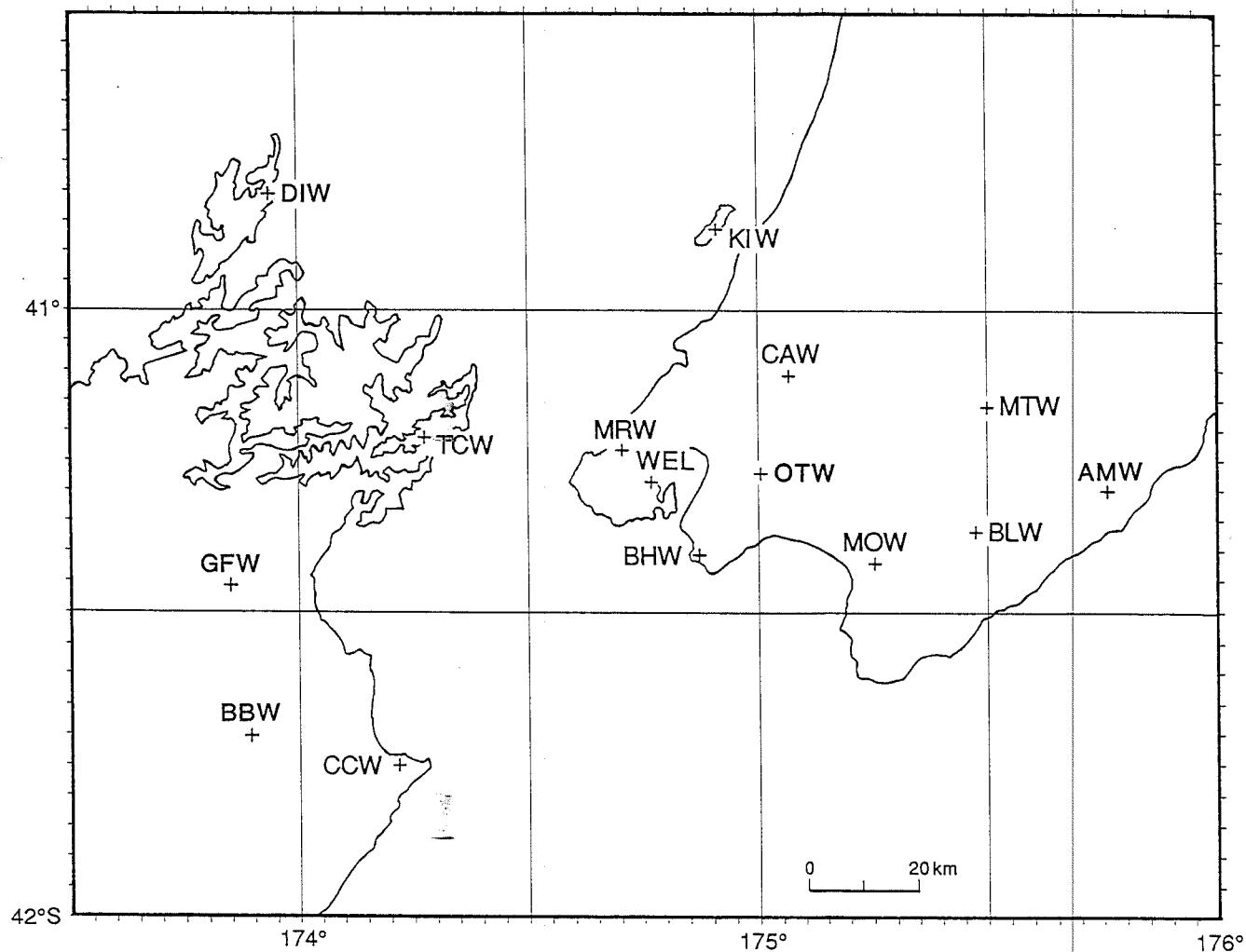
Period response curve of L4C seismometers with EARSS recorders.



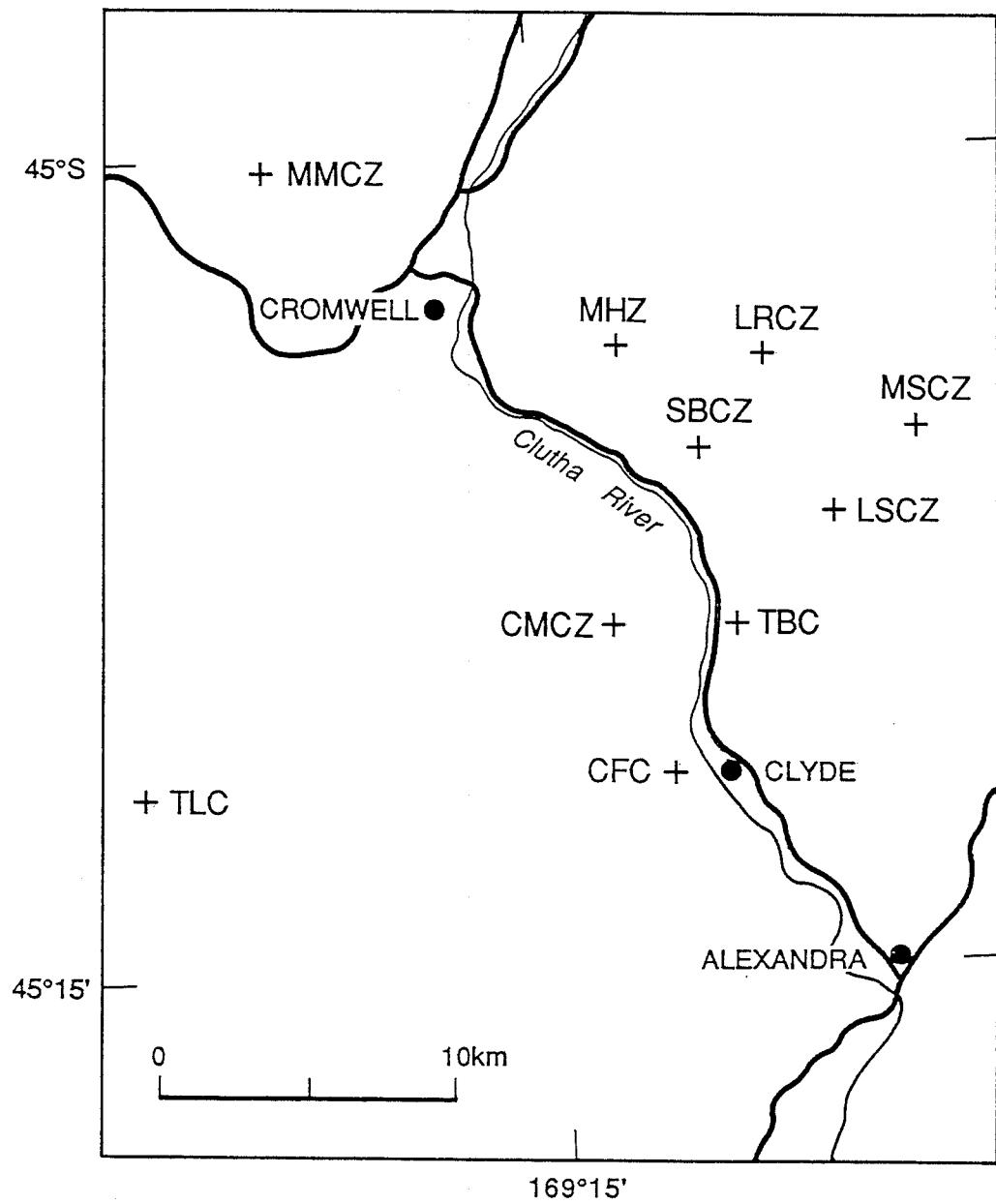
Stations of the National Seismograph Network. Some stations that are too closely spaced to show on this scale are shown instead on the map of the Volcanic and Hawke's Bay Networks. The inner and outer polygons define areas where accuracy of epicentre locations is considered reliable, less reliable and inadequate.



Stations of the Volcanic and Hawke's Bay Networks. Other stations lying within the boundaries of the map are also shown.

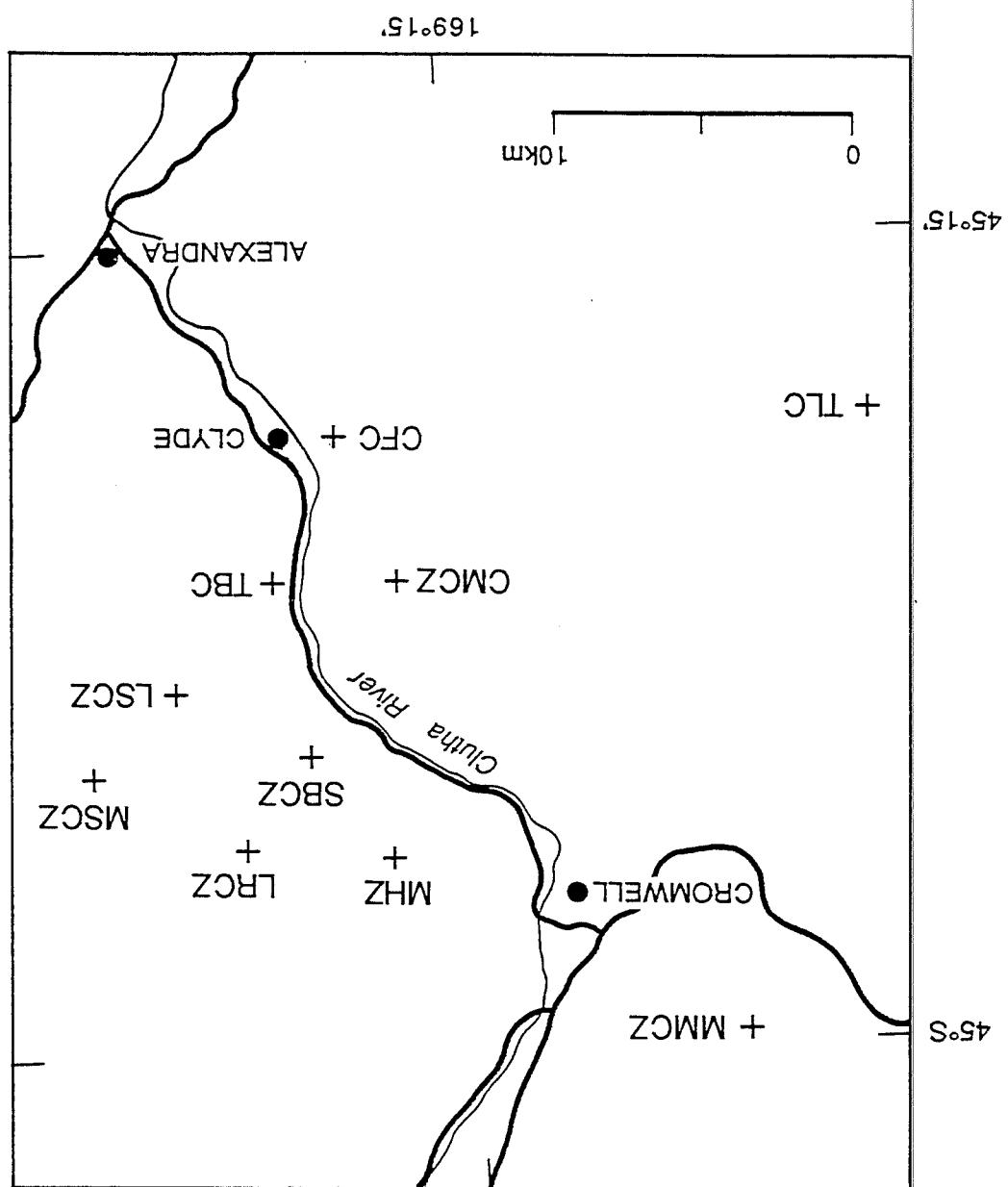


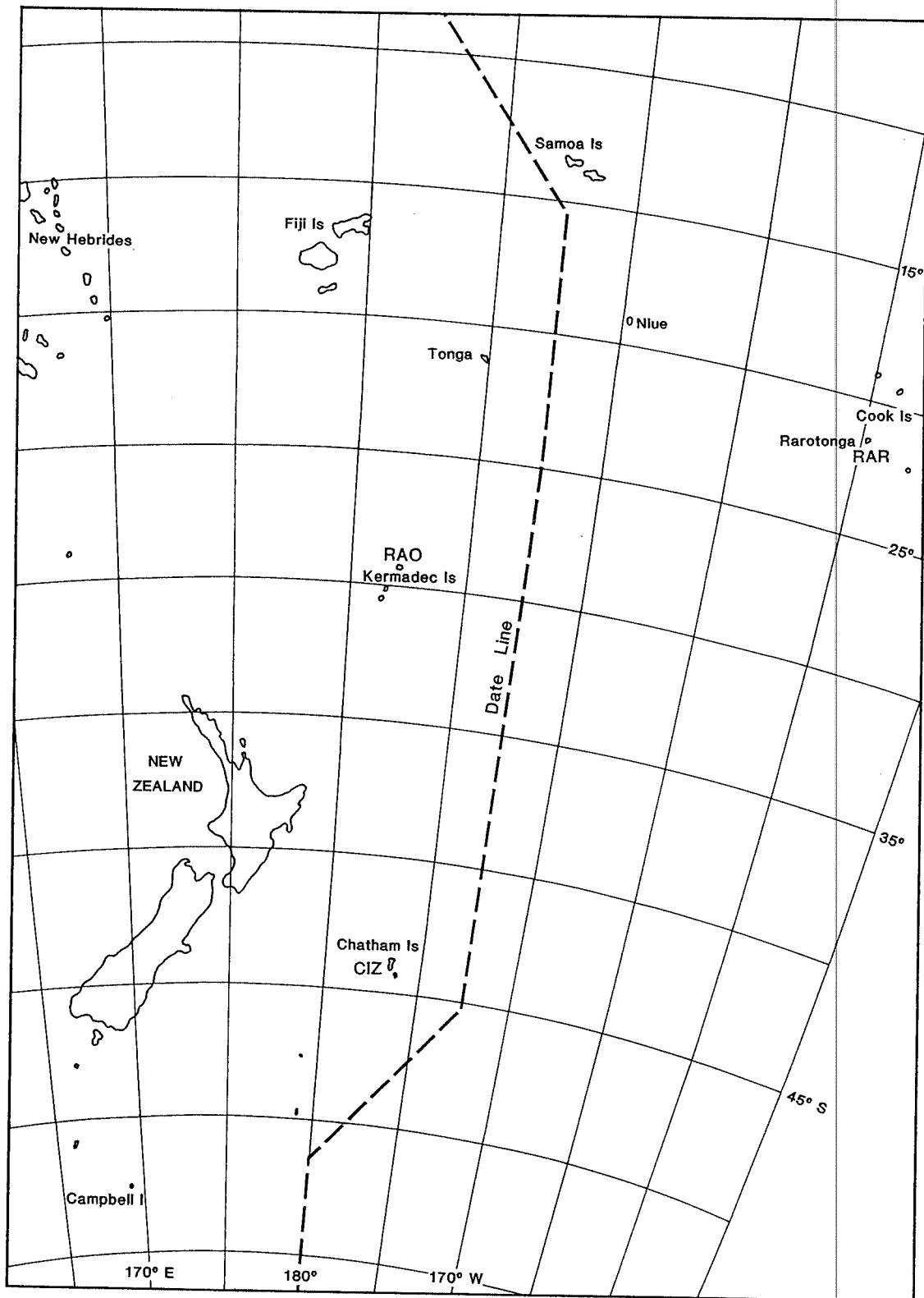
The Wellington Network includes stations on both sides of Cook Strait.



The Clyde Network monitors seismic activity around the Clyde Dam.

The Clyde Network monitors seismic activity around the Clyde Dam.





Pacific Island Stations.

## TIMING ARRANGEMENTS

Unless stated otherwise, times in this Report are given in Universal Time (U.T. or, more strictly, U.T.C., which is basically atomically kept time, adjusted when necessary by one second steps ("leap seconds") to agree with the astronomically determined time known as UT1). For most seismological and civil purposes this may be regarded as the Mean Solar Time of the Greenwich meridian.

On paper seismograms made by the national network, minute marks, derived from quartz crystal clocks of high stability, appear on records as abrupt trace deflections of about two seconds duration. Radio time signals also operate the trace deflector so that the relationship between the locally generated minute marks and Universal Time can be established. In most cases the radio signals are those of the New Zealand Time Service, transmitted hourly through the stations of Radio New Zealand, but in areas where local reception is bad, a time signal broadcast from overseas may be used. It is estimated that the total error in time-signal recording resulting from signal transmission and delay in operation of the trace deflector should never exceed 30 milliseconds.

SNARE and EARSS instruments are also equipped with high stability clocks and radio receivers tuned to pick up Time Service signals. A software routine establishes a clock drift rate and applies a correcting signal calculated to bring the clock smoothly into synchronism with the time signals (which are usually received hourly). The difference between internally kept time and Time Service times is recorded and a correction applied by CUSP interactive

display software to the phase onset times chosen by analysts. Corrected arrival times are expressed to a precision of one hundredth of a second, usually with an accuracy of a few hundredths, but errors of almost a tenth of a second have occasionally been detected.

Stations of the World-Wide Standard Seismograph Network have the timing arrangements usual at such stations. At other stations beyond New Zealand, time signals originating from the national Time Service or some other reliable time service are used.

It is sometimes desirable to know the local civil time at which an earthquake occurred. The times now used for civil purposes in New Zealand (except the Chatham Islands) are New Zealand Standard Time, and New Zealand Daylight Time, which are defined in the Time Act, 1974. New Zealand Standard Time is 12 hours, and New Zealand Daylight Time 13 hours, ahead of U.T. The period of Daylight Time is specified by Order in Council, as provided by the Act, and in 1992 Daylight Time was in effect until 02h NZST on March 15th, and from 02h NZST on October 4th until the end of the year.

The time observed in the Chatham Islands is 45 minutes in advance of that currently in use in New Zealand. New Zealand Standard Time is observed at Scott Base, in Fiji and on Raoul Island. Times kept elsewhere in the South Pacific are set by the governments of the respective countries. Those used in places which sometimes report earthquakes to the Observatory are listed below.

Western Samoa	11h 00m behind U.T.
Niue	11h 00m behind U.T.
Rarotonga	10h 00m behind U.T.
Tonga	13h 00m ahead of U.T.
Norfolk Island	11h 30m ahead of U.T.
French Polynesia	10h 00m behind U.T.

Note that Western Samoa, Niue, Rarotonga and French Polynesia are on the opposite side of the International Date Line from New Zealand.

## ORIGIN INFORMATION

### CONTENT

This section contains origin times, epicentres, focal depths, and magnitudes of earthquakes in the New Zealand region that the Observatory has located from instrumental data, together with indicators of the quality of the data used.

In the areas within the inner and outer polygons outlined on the map on page 20, the Observatory attempts to determine origins for all shallow earthquakes of  $M_L$  3.5 or more, and

all shocks of  $M_L$  4.0 or more, respectively. (Origins are regarded as shallow if their depth is less than 60 km.) Origins are also calculated for smaller or more distant earthquakes reported to have been felt in New Zealand. Weak shocks felt during earthquake swarms do not automatically get this individual attention, but an origin is found for at least one shock in any sequence giving rise to felt reports.

### DETERMINATION OF ORIGINS

Earthquake origins are determined using P & S phases or first-arriving crustal P & S phases. Four different velocity/depth structures are used to calculate travel-times of rays passing through and immediately beneath the crust in different parts of the country (see table below). Beneath the "Moho" defined by these models, velocities are

smoothly merged with those of the Jeffreys-Bullen Tables (British Association for the Advancement of Science, 1958). The Standard velocity model is used to calculate crustal velocities beneath all regions except those defined in the following table.

MODEL	UPPER DEPTH BOUNDARY (km)	Vp (km/s)	Vs (km/s)	CORNERS OF REGION	
				Lat.	Long.
<b>New Zealand Standard</b>	0.0	5.5	3.3	(in clockwise order)	
	12.0	6.5	3.7		
	33.0	8.1	4.6		
<b>Wellington</b>	0.0	4.40	2.54	41.0 S	178.0 E
	0.4	5.63	3.16	43.5 S	175.0 E
	5.0	5.77	3.49	42.0 S	173.0 E
	15.0	6.39	3.50	39.7 S	175.7 E
	25.0	6.79	3.92		
	35.0	8.07	4.80		
	45.0	8.77	4.86		
<b>Taupo</b>	0.0	3.00	1.70	35.6 S	180.0 E
	2.0	5.30	3.00	38.0 S	177.5 E
	5.0	6.00	3.50	39.7 S	175.7 E
	15.0	7.40	4.30	39.0 S	175.0 E
	33.0	7.78	4.39	37.0 S	176.0 E
	65.0	7.94	4.51	34.6 S	178.5 E
	96.4	8.08	4.52		
<b>Clyde</b>	0.0	4.4	2.6	45.5 S	172.0 E
	0.5	6.0	3.3	49.0 S	167.0 E
	12.0	6.5	3.7	44.5 S	168.0 E
	33.0	8.1	4.6	44.0 S	169.0 E

Seismograms are displayed on high-resolution graphics monitor screens under the control of CUSP (Caltech-USGS Seismic Processor) interactive software, for an analyst to select phase onset times by positioning a cursor on the trace. The analyst also selects the amplitude maximum to be used in magnitude calculations. Whenever possible, locations are based exclusively on times of first-arriving P and S phases.

Weights are initially assigned to phase arrival times by analysts according to the precision of the measurement. The weight of readings is further modified by the location program, which, after each iteration, weights the residuals used to adjust the trial origin. The procedure (see Jeffreys, H., 1939: Probability Theory, Cambridge University Press) greatly reduces the weight given to phases with residuals greater than three standard errors.

In general, all four coordinates 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 restricted to some chosen depth. This is most commonly done for crustal earthquakes. Unless there is a station within 25 km of a shock in the upper crust, or within 50 km of a shock in the lower crust, a nominal depth of either 12 or 33 km is usually assigned, according to the crustal phases present and the goodness of fit of the resulting solution. Less often, the depth is restricted to a smaller value, particularly when the strengths of locally reported felt intensities indicate an uncommonly shallow focus. The letter R printed after the depth in the lists which follow indicates a restriction for any of the foregoing reasons. There are also times when data not suitable for input to the location program (e.g. overseas PKP readings), indicate the depth of focus; in such cases the depth is similarly fixed and the restriction shown by following the depth by the letter G (to indicate intervention by a Geophysicist). When convergence of the location program fails for lack of enough data, both epicentre and depth are

fixed at values consistent with the available information, and computation limited to finding a compatible origin time. Such doubly-restricted origins have the letters RR printed after the depth.

In routine origin determinations, sufficient of the stations nearest to the epicentre are read to ensure that there will be enough data for a satisfactory solution. When enough near observations are available, arrival times recorded at stations more distant from the epicentre are excluded from the calculations. Observatory analysts are free to completely reject data which they think to be unreliable, or to assign a low initial weight to it in the location program's procedure for minimising mean residuals. (See earlier details of how the weights are used).

In using the results in this section, it is essential to keep in mind that the positions of earthquakes with epicentres outside the network of seismograph stations can be very uncertain, even though the mean residual is small. With the aim of helping the reader to assess the reliability of the results presented here, the positional relationships between an epicentre, and the stations which recorded the data used to find it, are given after the calculated origin coordinates. Similarly, the number of magnitude estimates contributing to the mean value, and an indication of their scatter, are also shown.

The solutions presented here are in all cases based upon uniform procedures applied to laterally homogeneous models. Because well-established local models have been used to calculate the origins of shocks within the Wellington and Clyde Networks, systematic errors in these areas should be smaller than in other parts of the country.

The extensive development of CUSP software necessary to adapt it for use in New Zealand was undertaken by Dr T Webb and Dr E Smith.

## MAGNITUDES

The magnitudes assigned to local earthquakes are intended to be the values of  $M_L$  as originally defined by C.F. Richter (Bull. Seism. Soc. Am. 25: 1-32, 1935), but his procedure for performing the magnitude calculation at other than the standard distance of 100 km has been modified, to take account of the observed characteristics of energy propagation in New Zealand, including the effect of focal depth (Haines, A.J., Bull. Seism. Soc. Am. 71: 275-94, 1981).

For stations more than 100 km away from the epicentre, an amplitude-distance relationship of the form

$$A = A_o R^{-N} \exp(-\alpha R)$$

where  $A$  is an amplitude recorded at an epicentral distance  $R$ ,  $A_o$  is a calibration function,  $N$  is a geometric spreading factor and  $\alpha$  is an inelastic attenuation coefficient, has been found appropriate for all parts of the country.

For all New Zealand crustal earthquakes  $N$  is 2 and  $\alpha$  generally takes a value close to 0. With these values, the relationship describes head-wave propagation with no attenuation. In the Central Volcanic Region, however, (see Map, page 32),  $\alpha$  takes values of  $0.8 \text{ deg}^{-1}$  for P waves and  $1.05 \text{ deg}^{-1}$  for S waves. Adjustments are therefore made according to the distance travelled in the volcanic region.

For deep earthquakes in the Main Seismic Region the same parameters as for crustal earthquakes apply ( $N = 2$ ,  $\alpha = 0$ ), provided that (i)  $R$  now measures the slant distance from the focus to the base of the crust, and (ii) stations to the west of the volcanic region or south of the Main Seismic Region are not used, because the structure there necessitates different spreading and attenuation terms.

For deep earthquakes in Fiordland the same amplitude-distance relationship is used, with (i)  $N$  given the value 1 (body wave propagation), (ii)  $\alpha$  increasing with focal depth, and (iii) stations in the North Island not used, because of variations of the coefficients  $N$  and  $\alpha$ . Milford Sound (MSZ), Braida Crags (BCZ), and Deep Cove (DCZ) should ideally be excluded for the same reason, but as they are sometimes the only stations from which any estimate of magnitude can be made, they are used when necessary, with  $N = 2$  and  $\alpha = 0$ .

For stations closer than 100 km to the epicentre, the formula

$$M_A = \log_{10} A + 1.0 \log_{10} R + 0.0029 R + K$$

developed by R. Robinson (Pageoph 125: 579-596, 1987) is used, where  $A$  is the maximum digital count,  $R$  is the slant distance from the station to the earthquake focus (in kilometres) and  $K$  is a station correction allowing for site factors.

Empirical corrections are applied to allow for differences in site effects. They are made in such a manner as to give the most consistent estimates of magnitude from the different stations, and their absolute level is adjusted to give a standard Wood-Anderson instrument at Wellington a zero correction, a procedure that can be justified on *a priori* grounds and provides a smooth connection with previously published New Zealand magnitudes. Station corrections (see Table on page 29 for synthetic Wood-Anderson values) are added to the individual estimates of magnitude, which are then averaged.

The amplitudes on which magnitude calculations are based are no longer published, but the number of measurements and the number of stations contributing to the average magnitude are listed (e.g. "5M/4stn" appearing in a data summary indicates that 5 amplitude measurements of records from 4 stations were used to compute an average).

The definitive local magnitude is finally calculated as a weighted average of all station estimates. Estimates from stations at distances less than 100 km are given half weight, as are stations BCZ, DCZ, and MSZ for deep earthquakes in Fiordland. When 8 or more synthetic Wood-Anderson readings are available, magnitudes derived from vertical component amplitudes are given zero weight.

## CALCULATION OF AMPLITUDES

Synthetic Wood-Anderson seismograms are computed for all horizontal components at non-telemetered EARSS stations having Mark Products L4-C 1Hz seismometers or, in the case of WEL, a Kinematics force-balance accelerometer (see Map, page 30). The Wood-Anderson gain used is 2080. The maximum amplitude for each computed trace is picked automatically, but can be updated by the analyst. Only amplitudes exceeding a pre-determined level for each station are given weight in the calculations to avoid amplitudes being picked from micro-seismic noise.

Maximum amplitudes are also picked off vertical traces for both telemetered and non-telemetered stations. This is necessary to obtain readings for small events. For very small events, traces are high-pass filtered to enable an amplitude to be picked. Magnitudes are unable to be calculated for only a few small deep events for which no east coast station has been triggered.

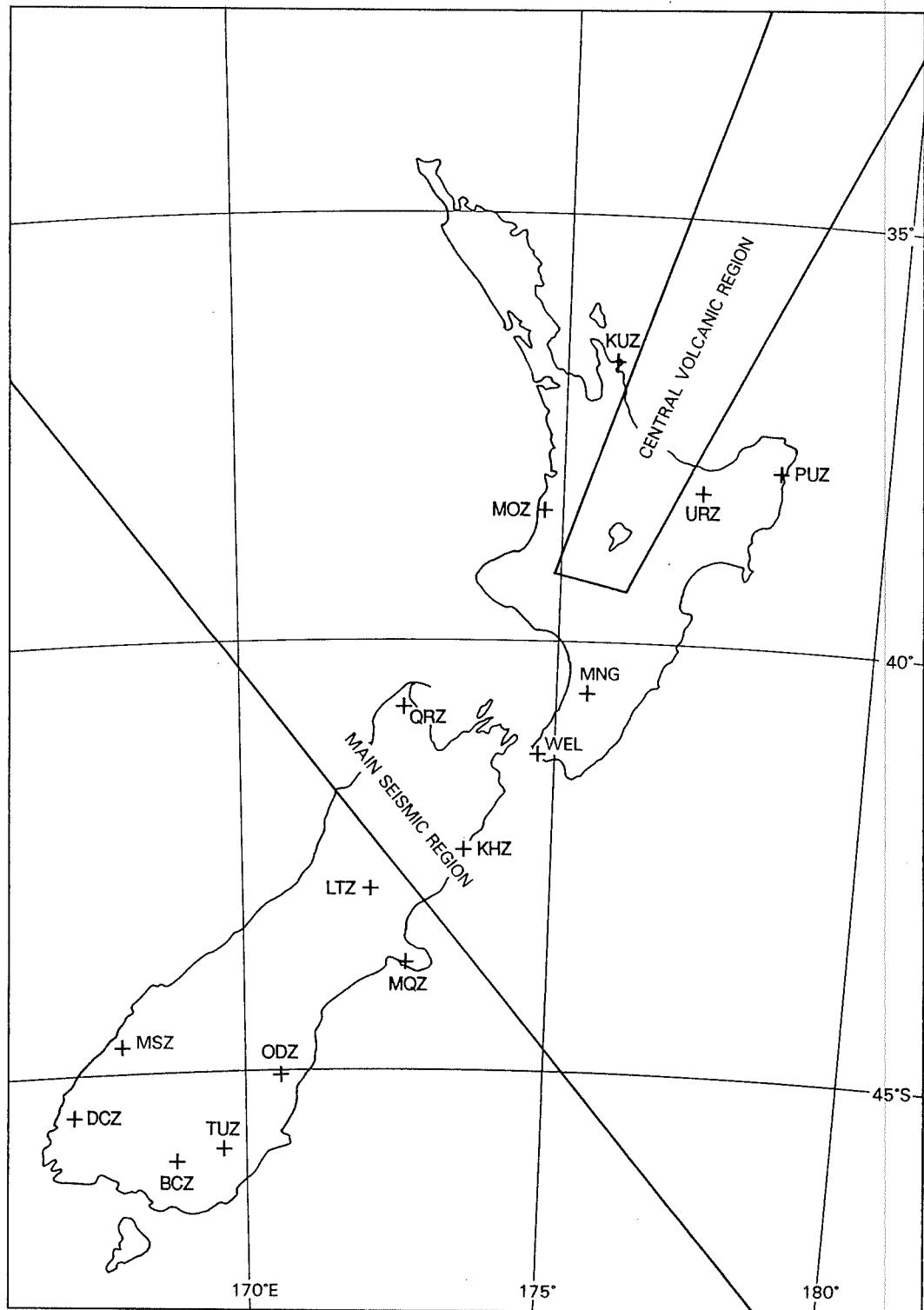
Note that there are usually two horizontal seismograms for each 3-component station, so that synthetic Wood-Anderson values tend to dominate the average magnitude.

**Magnitude corrections for the two classes of focal depth, for earthquakes recorded on synthetic Wood-Anderson seismograms.**

Station	Component	Correction (H_33 km)	Correction (H>33 km)
BCZ	E Fiordland only		+0.36
BCZ	E All shallow	+0.18	
DCZ	H Fiordland only		+0.59
DCZ	H All shallow	+0.60	
KHZ	H	+0.43	
KUZ	H	+0.36	+0.33
LTZ	H	+0.59	
MNG	H	+0.51	+0.45
MOZ	H	+0.36	
MQZ	H	+0.46	
MSZ	H Fiordland only		+0.21
MSZ	H All shallow	+0.35	
ODZ	H	+0.45	
PUZ	H	+0.29	+0.57
QRZ	H	+0.35	
TUZ	H	+0.31	
URZ	H	+0.35	+0.67
WEL	P, Q	+0.30	+0.30
WEL	N	0.00	0.00
WEL	E	+0.09	+0.09

H refers to horizontal seismometers, either N/S or E/W.

P, Q refer to the Wood-Anderson seismograph operated at WEL at a gain of 1400. Note that WEL E needs a slight empirical correction to agree with the N component and with the standard Wood-Anderson instrument.



Stations and regions used for determination of magnitudes from digital records.

## DATA FROM THE NATIONAL NETWORK

### LAYOUT

The first entry for each earthquake is the reference number, used throughout the Report. The second line gives the origin coordinates and the magnitude and the third line shows, beneath each of the coordinates in line two, its standard error. Where depth has been restricted, the letter R or G in place of the standard error indicates the fact. The fourth line starts with Rsd, the standard deviation of residuals, an indication of how well the adopted origin reconciles the available data with the earth models used by the location program. Formally,

$$Rsd = \left[ \sum_{i=1}^n \{ (w_i r_i / 100)^2 / (n-m) \} \right]^{1/2}$$

where  $r_i$  is the  $i$ th residual,  $w_i$  its weight,  $n$  the number of readings and  $m$  the number of parameters determined (4 for unrestricted depth, 3 when depth is restricted.) When the number of readings used and the number of parameters are the same, the standard errors and Rsd are not defined. This is shown by the letters ND. The remainder of the fourth line and most of the fifth line present information indicating to the reader the degree of constraint on the adopted origin. Xph/Ystn shows that  $X$  phases from  $Y$  stations were used in the determination of the origin. (All phases given non-zero weight are counted but stations which failed to provide such a phase are not). Dmin is the distance from the epicentre to the nearest of these  $Y$  stations and Az. gap is the greatest

angular gap in their distribution about the epicentre.

Corr. is the correlation coefficient of the errors in latitude and longitude. It may be used to construct an epicentral confidence region. (See Flinn, E.A., 1965, "Confidence regions and error determinations for seismic event locations". Rev. Geophys. 3: 156-185.) pM/Qstn shows that  $p$  magnitude estimates from phases recorded at  $Q$  stations contributed to the average value shown on line two. Msd is the standard deviation of the magnitude estimates.

The numbers of upward and downward first motions recorded are indicated at the end of line five.

Additional information may be appended to the above. This usually consists of a short summary of the places where a shock has been felt and the intensities there, but may include other comments. Further details of reports received by the Observatory concerning the effects of earthquakes and the intensities assessed from these observations appear in later sections of this Report.

The telemetered networks all detect earthquakes of very small magnitude in their respective regions. These are all located and the data are held in the Observatory's archives. The following list, however, contains only those events which were of magnitude 3.5 or greater, or were reported felt. Smaller events have been excluded, as have events located more than  $10^\circ$  from Wellington.

JAN 01 0020 02.7s 37.03S 176.63E 210km M=3.6	92/2	JAN 04 1723 48.4s 41.32S 172.74E 169km M=3.7	92/86
1.2 0.14 0.16 9		0.3 0.01 0.02 2	
Rsd 0.5s 7ph/5stn Dmin 142km Az.gap 274°		Rsd 0.3s 27ph/18stn Dmin 51km Az.gap 103°	
Corr. -0.816 4M/4stn Msd 0.1		Corr. -0.214 12M/12stn Msd 0.2 ↑↓ 2↓	
JAN 01 0711 43.2s 38.76S 175.73E 120km M=3.8	92/7	JAN 04 2236 35.0s 37.98S 175.98E 167km M=3.6	92/91
0.3 0.02 0.02 3		0.2 0.01 0.02 2	
Rsd 0.2s 15ph/11stn Dmin 53km Az.gap 101°		Rsd 0.1s 16ph/14stn Dmin 104km Az.gap 147°	
Corr. -0.260 14M/13stn Msd 0.3		Corr. 0.355 10M/10stn Msd 0.2	
JAN 01 1725 01.7s 43.60S 169.57E 5km M=3.1	92/20	JAN 05 0235 21.4s 41.19S 172.56E 5km M=3.5	92/98
0.1 0.01 0.01 R		0.2 0.02 0.02 R	
Rsd 0.1s 17ph/12stn Dmin 27km Az.gap 161°		Rsd 0.4s 20ph/15stn Dmin 41km Az.gap 130°	
Corr. -0.559 11M/10stn Msd 0.2		Corr. -0.152 27M/23stn Msd 0.2 ↑3↓	
Felt Mahitahi (104) MM4.			
JAN 02 0927 37.2s 45.14S 167.47E 123km M=3.5	92/30	JAN 05 1004 42.3s 41.30S 172.76E 154km M=4.5	92/105
0.3 0.02 0.02 2		0.3 0.02 0.02 3	
Rsd 0.2s 24ph/14stn Dmin 44km Az.gap 179°		Rsd 0.3s 33ph/21stn Dmin 53km Az.gap 102°	
Corr. -0.324 14M/12stn Msd 0.2 ↓		Corr. -0.311 8M/3stn Msd 0.2 9↑3↓	
JAN 02 2337 31.3s 38.35S 175.97E 187km M=4.8	92/43	JAN 06 0923 52.2s 41.03S 172.84E 175km M=3.5	92/127
0.5 0.02 0.03 4		0.4 0.02 0.02 3	
Rsd 0.3s 26ph/14stn Dmin 63km Az.gap 76°		Rsd 0.3s 29ph/18stn Dmin 35km Az.gap 83°	
Corr. 0.303 10M/4stn Msd 0.2 15↑4↓		Corr. -0.064 13M/13stn Msd 0.2 1↑3↓	
JAN 03 0915 57.5s 37.28S 177.49E 118km M=3.6	92/53	JAN 06 1056 37.3s 39.06S 175.44E 149km M=3.7	92/129
0.1 0.01 0.01 1		0.4 0.01 0.02 3	
Rsd 0.1s 7ph/5stn Dmin 80km Az.gap 255°		Rsd 0.3s 22ph/14stn Dmin 12km Az.gap 101°	
Corr. -0.684 10M/10stn Msd 0.2 ↓		Corr. -0.279 15M/15stn Msd 0.2 5↑1↓	
JAN 03 1429 40.2s 36.76S 177.36E 182km M=3.6	92/57	JAN 07 0632 39.7s 39.73S 174.28E 117km M=3.8	92/147
1.2 0.12 0.15 9		0.4 0.01 0.02 4	
Rsd 0.5s 10ph/8stn Dmin 125km Az.gap 294°		Rsd 0.3s 32ph/22stn Dmin 53km Az.gap 95°	
Corr. -0.781 9M/9stn Msd 0.2		Corr. 0.054 14M/13stn Msd 0.3 9↑1↓	
JAN 03 1729 18.9s 43.76S 169.55E 5km M=2.9	92/58	JAN 07 0812 17.3s 40.32S 173.45E 155km M=4.4	92/149
0.2 0.01 0.01 R		0.3 0.01 0.01 3	
Rsd 0.2s 14ph/11stn Dmin 23km Az.gap 119°		Rsd 0.2s 35ph/23stn Dmin 67km Az.gap 147°	
Corr. 0.207 15M/15stn Msd 0.2 ↓		Corr. -0.058 21M/19stn Msd 0.2 5↑3↓	
Felt Mahitahi (104) MM4.			
JAN 04 0328 00.3s 38.59S 178.07E 31km M=4.9	92/71	JAN 07 1116 22.2s 38.71S 175.91E 145km M=3.6	92/153
0.2 0.01 0.03 3		0.8 0.06 0.06 4	
Rsd 0.2s 19ph/16stn Dmin 5km Az.gap 129°		Rsd 0.3s 13ph/7stn Dmin 59km Az.gap 195°	
Corr. -0.547 20M/9stn Msd 0.2 1↑4↓		Corr. -0.867 12M/12stn Msd 0.1	
Felt Gisborne (44,45) MM4.			

JAN 07 2354	49.2s	40.49S	173.36E	148km	M=3.7	92/176	JAN 11 0058	20.4s	37.38S	179.76E	33km	M=4.3	92/262
Rsd 0.2s	0.3	0.01	0.01	3	Az.gap 139°		Rsd 0.2s	0.6	0.04	0.05	R		
Corr. -0.031	15M/13stn	Msd 0.2		2↑ 1↓			Corr. 0.247	16ph/11stn	Dmin 131km	Az.gap 290°			
JAN 08 0944	16.9s	40.23S	173.92E	126km	M=4.2	92/184	JAN 11 0923	06.6s	37.92S	176.11E	175km	M=4.0	92/275
Rsd 0.2s	0.3	0.01	0.01	3	Az.gap 121°		Rsd 0.1s	0.3	0.03	0.01	2	Az.gap 200°	
Corr. -0.097	21M/17stn	Msd 0.2		5↑ 3↓			Corr. -0.058	11ph/9stn	Dmin 96km	Az.gap 200°			
JAN 08 1413	30.3s	40.43S	173.89E	113km	M=3.6	92/186	JAN 11 1217	49.8s	35.87S	178.22E	165km	M=3.9	92/281
Rsd 0.2s	0.3	0.01	0.01	3	Az.gap 132°		Rsd 0.2s	0.4	0.04	0.07	7	Az.gap 325°	
Corr. -0.247	36ph/21stn	Dmin 41km	Msd 0.2	3↑ 1↓			Corr. -0.293	11ph/7stn	Dmin 192km	Az.gap 325°			
JAN 08 1444	24.5s	47.47S	165.40E	33km	M=4.7	92/187	JAN 11 1746	21.9s	44.48S	171.01E	12km	M=3.7	92/287
Rsd 0.2s	0.5	0.03	0.04	R			Rsd 0.3s	0.1	0.01	0.02	R		
Corr. 0.061	15ph/11stn	Dmin 218km	Msd 0.2	2↑ 2↓	Az.gap 319°		Corr. -0.582	25ph/15stn	Dmin 69km	Az.gap 148°			
JAN 08 2042	00.2s	43.48S	171.08E	12km	M=4.0	92/195	JAN 11 1941	08.5s	36.79S	176.52E	285km	M=3.6	92/292
Rsd 0.1s	0.1	0.01	0.01	R	Az.gap 89°		Rsd 0.2s	0.6	0.07	0.11	8	Az.gap 279°	
Corr. 0.013	26ph/17stn	Dmin 19km	Msd 0.2	7↑ 3↓			Corr. -0.906	10ph/8stn	Dmin 172km	Az.gap 279°			
JAN 08 2123	05.7s	39.66S	174.44E	108km	M=3.5	92/199	JAN 12 0557	50.6s	36.79S	176.95E	252km	M=3.6	92/301
Rsd 0.2s	0.3	0.01	0.02	4	Az.gap 143°		Rsd 0.1s	0.4	0.02	0.03	3	Az.gap 243°	
Corr. -0.118	30ph/20stn	Dmin 45km	Msd 0.1	6↑ 1↓			Corr. 0.093	10ph/7stn	Dmin 110km	Az.gap 243°			
JAN 09 1519	15.0s	37.10S	177.43E	149km	M=4.0	92/223	JAN 12 1935	30.9s	37.52S	179.58E	5km	M=4.0	92/311
Rsd 0.4s	0.7	0.04	0.04	7	Az.gap 202°		Rsd 0.1s	0.2	0.02	0.02	R		
Corr. 0.334	11ph/10stn	Dmin 95km	Msd 0.2	2↑ 2↓			Corr. -0.115	12ph/6stn	Dmin 114km	Az.gap 296°			
JAN 09 2241	05.2s	38.18S	176.13E	143km	M=3.6	92/231	JAN 12 2054	05.2s	39.29S	174.62E	209km	M=4.5	92/313
Rsd 0.3s	0.7	0.05	0.04	4	Az.gap 244°		Rsd 0.2s	0.5	0.02	0.04	4	Az.gap 105°	
Corr. -0.629	12ph/9stn	Dmin 84km	Msd 0.2	1↑			Corr. -0.305	28ph/22stn	Dmin 59km	Az.gap 105°			
JAN 10 0930	52.9s	38.84S	178.28E	52km	M=4.0	92/239	JAN 13 0803	43.8s	37.02S	179.88W	33km	M=3.5	92/326
Rsd 0.1s	0.1	0.01	0.01	1	Az.gap 216°		Rsd 0.3s	0.8	0.05	0.07	R		
Corr. -0.617	14ph/9stn	Dmin 32km	Msd 0.2	1↑ 1↓			Corr. -0.182	8ph/5stn	Dmin 174km	Az.gap 312°			
JAN 10 1427	40.2s	39.36S	175.40E	87km	M=3.5	92/246	JAN 13 0808	09.1s	40.32S	174.21E	113km	M=4.6	92/327
Rsd 0.2s	0.2	0.01	0.01	3	Az.gap 91°		Rsd 0.2s	0.3	0.01	0.01	3	Az.gap 100°	
Corr. -0.030	36ph/24stn	Dmin 27km	Msd 0.3	1↓			Corr. -0.034	31ph/23stn	Dmin 59km	Az.gap 100°			
							Felt Palmerston North (62).				8↑ 7↓		

JAN 13 0907	57.8s	35.30S	178.76E	220km	M=3.9	92/328	JAN 18 0218	07.9s	38.49S	175.68E	233km	M=3.6	92/462
Rsd 0.2s	6ph/4stn	Dmin 258km	Az.gap 344°				Rsd 0.2s	16ph/14stn	Dmin 272km	Az.gap 314°			
Corr. 0.229	2M/2stn	Msd 0.1					Corr. 0.424	10M/10stn	Msd 0.2	No data from close stations.			
JAN 13 0957	41.4s	37.06S	179.88W	33km	M=3.7	92/329	JAN 18 0345	15.3s	38.50S	175.87E	144km	M=3.7	92/466
Rsd 0.4s	9ph/5stn	Dmin 172km	Az.gap 312°				Rsd 0.2s	16ph/13stn	Dmin 84km	Az.gap 157°			
Corr. -0.216	6M/4stn	Msd 0.1					Corr. -0.445	15M/15stn	Msd 0.2				
JAN 13 1327	50.4s	39.75S	173.95E	207km	M=4.0	92/335	JAN 18 0731	30.9s	38.69S	176.15E	33km	M=3.1	92/470
Rsd 0.3s	21ph/15stn	Dmin 84km	Az.gap 163°				Rsd 0.1s	6ph/5stn	Dmin 35km	Az.gap 219°			
Corr. -0.391	17M/16stn	Msd 0.3					Corr. -0.617	6M/6stn	Msd 0.4	Felt Waihora Rd (40) MM4.			
JAN 13 1819	02.9s	37.87S	175.94E	190km	M=3.6	92/343	JAN 18 0746	54.8s	38.29S	175.67E	225km	M=3.6	92/471
Rsd 0.1s	11ph/7stn	Dmin 112km	Az.gap 272°				Rsd 0.0s	11ph/10stn	Dmin 99km	Az.gap 259°			
Corr. -0.461	9M/9stn	Msd 0.2					Corr. -0.750	7M/7stn	Msd 0.1				
JAN 13 2010	24.4s	38.26S	178.42E	5km	M=4.2	92/345	JAN 18 1433	46.6s	39.09S	175.57E	202km	M=3.7	92/479
Rsd 0.3s	13ph/10stn	Dmin 26km	Az.gap 213°				Rsd 0.1s	16ph/11stn	Dmin 20km	Az.gap 157°			
Corr. 0.210	31M/27stn	Msd 0.2	2↑ 1↓				Corr. -0.863	7M/7stn	Msd 0.2				
JAN 14 1524	43.3s	38.04S	176.55E	136km	M=4.0	92/361	JAN 19 1209	56.7s	36.35S	177.61E	230km	M=3.9	92/502
Rsd 0.2s	11ph/7stn	Dmin 22km	Az.gap 112°				Rsd 0.4s	8ph/5stn	Dmin 152km	Az.gap 309°			
Corr. -0.042	14M/13stn	Msd 0.4	1↑				Corr. -0.867	6M/6stn	Msd 0.1				
JAN 15 0210	28.4s	45.03S	167.55E	86km	M=3.9	92/373	JAN 19 1434	45.0s	35.87S	178.11E	201km	M=4.0	92/507
Rsd 0.2s	25ph/16stn	Dmin 49km	Az.gap 184°				Rsd 0.0s	4ph/3stn	Dmin 192km	Az.gap 327°			
Corr. -0.424	9M/5stn	Msd 0.1	10↑ 3↓				Corr. -0.926	4M/4stn	Msd 0.1				
JAN 15 0614	57.2s	38.60S	175.35E	233km	M=5.3	92/383	JAN 19 1629	15.8s	39.24S	178.63E	33km	M=3.8	92/509
Rsd 0.2s	35ph/28stn	Dmin 49km	Az.gap 87°				Rsd 0.1s	11ph/9stn	Dmin 65km	Az.gap 232°			
Corr. -0.258	10M/4stn	Msd 0.2	10↑ 5↓				Corr. -0.641	25M/21stn	Msd 0.2				
Felt Patoka (52) MM4.													
JAN 16 1706	00.4s	36.92S	177.31E	198km	M=4.0	92/420	JAN 19 1805	50.0s	40.92S	173.08E	153km	M=3.6	92/512
Rsd 0.1s	13ph/9stn	Dmin 116km	Az.gap 214°				Rsd 0.2s	30ph/19stn	Dmin 48km	Az.gap 130°			
Corr. 0.625	17M/14stn	Msd 0.2	1↑				Corr. -0.219	13M/13stn	Msd 0.2				
JAN 16 1724	31.5s	38.25S	177.28E	53km	M=4.0	92/422	JAN 19 2028	29.2s	36.67S	177.47E	185km	M=3.9	92/514
Rsd 0.2s	33ph/25stn	Dmin 15km	Az.gap 91°				Rsd 0.2s	5ph/3stn	Dmin 127km	Az.gap 297°			
Corr. 0.197	26M/22stn	Msd 0.2	6↑ 5↓				Corr. -0.684	10M/8stn	Msd 0.2				

JAN 19 2205 13.0s	36.83S	177.51E	167km	M=4.2	92/515	JAN 23 1337 00.9s	37.78S	176.96E	5km	M=3.8	92/614
0.5	0.03	0.03	6			0.4	0.03	0.03	R		
Rsd 0.2s	13ph/9stn	Dmin 110km	Az.gap 228°			Rsd 0.5s	12ph/9stn	Dmin 55km	Az.gap 176°		
Corr. 0.457	24M/20stn	Msd 0.2	1↑			Corr. -0.003	14M/10stn	Msd 0.2	1↑		
JAN 20 1207 28.2s	47.40S	165.67E	33km	M=3.5	92/532	JAN 23 2100 32.6s	37.54S	179.43E	12km	M=3.8	92/622
0.6	0.04	0.05	R			0.9	0.06	0.08	R		
Rsd 0.2s	13ph/8stn	Dmin 196km	Az.gap 315°			Rsd 0.5s	10ph/7stn	Dmin 100km	Az.gap 318°		
Corr. 0.015	11M/11stn	Msd 0.2				Corr. -0.283	7M/5stn	Msd 0.2	1↑		
JAN 20 1245 31.7s	35.19S	179.10E	252km	M=4.1	92/534	JAN 23 2206 32.5s	40.48S	174.31E	88km	M=3.9	92/625
0.4	0.05	0.04	6			0.3	0.01	0.02	4		
Rsd 0.1s	12ph/11stn	Dmin 277km	Az.gap 314°			Rsd 0.3s	28ph/22stn	Dmin 49km	Az.gap 91°		
Corr. 0.003	9M/9stn	Msd 0.2				Corr. -0.057	14M/12stn	Msd 0.3	11↑ 2↓		
JAN 21 0716 09.5s	38.38S	175.98E	187km	M=3.8	92/559	JAN 24 0102 07.1s	48.89S	164.60E	12km	M=4.7	92/627
0.5	0.03	0.06	5			0.4	0.02	0.03	R		
Rsd 0.2s	19ph/13stn	Dmin 100km	Az.gap 217°			Rsd 0.1s	17ph/14stn	Dmin 346km	Az.gap 337°		
Corr. -0.766	14M/12stn	Msd 0.1				Corr. 0.574	9M/5stn	Msd 0.1	1↑		
JAN 21 1846 23.1s	38.70S	176.05E	126km	M=3.8	92/567	JAN 24 1355 32.7s	36.58S	177.24E	230km	M=4.5	92/636
0.4	0.02	0.02	4			0.6	0.04	0.04	6		
Rsd 0.2s	15ph/10stn	Dmin 40km	Az.gap 107°			Rsd 0.3s	14ph/8stn	Dmin 148km	Az.gap 216°		
Corr. -0.559	17M/16stn	Msd 0.3	1↑ 3↓			Corr. 0.494	11M/6stn	Msd 0.2	1↑		
JAN 22 0752 35.2s	38.28S	176.37E	159km	M=4.0	92/578	JAN 25 0344 56.0s	39.71S	174.15E	164km	M=4.3	92/651
0.5	0.03	0.02	4			0.3	0.01	0.02	3		
Rsd 0.2s	10ph/6stn	Dmin 65km	Az.gap 189°			Rsd 0.2s	30ph/18stn	Dmin 68km	Az.gap 155°		
Corr. -0.073	15M/14stn	Msd 0.4	1↑			Corr. -0.114	19M/15stn	Msd 0.2	1↑		
JAN 22 2337 30.9s	38.08S	175.63E	303km	M=3.6	92/597	JAN 25 0654 02.3s	38.30S	176.05E	154km	M=4.0	92/656
0.4	0.06	0.08	8			0.4	0.02	0.02	3		
Rsd 0.1s	11ph/8stn	Dmin 219km	Az.gap 246°			Rsd 0.2s	15ph/10stn	Dmin 62km	Az.gap 109°		
Corr. -0.957	8M/8stn	Msd 0.2				Corr. -0.144	21M/16stn	Msd 0.2	1↑		
JAN 23 0314 13.5s	47.41S	165.51E	33km	M=4.1	92/602	JAN 25 1910 31.1s	38.99S	175.86E	221km	M=3.6	92/665
0.3	0.02	0.03	R			0.5	0.03	0.04	4		
Rsd 0.1s	18ph/12stn	Dmin 208km	Az.gap 317°			Rsd 0.1s	16ph/12stn	Dmin 31km	Az.gap 181°		
Corr. -0.095	23M/16stn	Msd 0.2	1↑ 1↓			Corr. -0.836	7M/7stn	Msd 0.2	1↑		
JAN 23 0435 03.8s	40.53S	173.38E	158km	M=4.0	92/604	JAN 26 0956 15.0s	45.19S	167.38E	76km	M=4.1	92/681
0.3	0.01	0.01	3			0.3	0.01	0.02	2		
Rsd 0.2s	36ph/24stn	Dmin 54km	Az.gap 135°			Rsd 0.2s	25ph/15stn	Dmin 36km	Az.gap 188°		
Corr. -0.217	16M/14stn	Msd 0.3	4↑ 1↓			Corr. -0.322	9M/5stn	Msd 0.2	2↑ 8↓		
JAN 23 0634 20.7s	38.15S	175.96E	275km	M=4.2	92/607	JAN 26 1737 50.0s	40.54S	174.75E	58km	M=3.5	92/688
0.4	0.02	0.04	3			0.2	0.01	0.01	3		
Rsd 0.2s	18ph/12stn	Dmin 101km	Az.gap 186°			Rsd 0.2s	29ph/18stn	Dmin 38km	Az.gap 72°		
Corr. -0.523	18M/16stn	Msd 0.2				Corr. -0.238	12M/10stn	Msd 0.2	1↑		

JAN 28 0107	47.4s	38.32S	176.43E	144km	M=3.6	92/720	JAN 30 2145	36.6s	37.40S	176.81E	169km	M=3.9	92/809
	0.3	0.01	0.01	3				0.8	0.03	0.03	8		
Rsd 0.2s	16ph/12stn	Dmin 62km	Az.gap 85°				Rsd 0.2s	13ph/11stn	Dmin 96km	Az.gap 154°			
Corr. 0.216	13M/13stn	Msd 0.3	1↓				Corr. 0.598	21M/21stn	Msd 0.2				
JAN 28 0227	56.9s	36.02S	179.89E	272km	M=4.0	92/723	JAN 31 1422	59.7s	36.46S	177.92E	107km	M=3.7	92/833
	0.6	0.04	0.07	4				0.6	0.07	0.06	9		
Rsd 0.1s	10ph/8stn	Dmin 225km	Az.gap 332°				Rsd 0.2s	6ph/4stn	Dmin 131km	Az.gap 325°			
Corr. -0.555	8M/8stn	Msd 0.2					Corr. -0.633	5M/4stn	Msd 0.3				
JAN 28 1825	18.6s	37.25S	176.95E	175km	M=4.0	92/742	JAN 31 1818	26.1s	37.71S	179.70E	12km	M=4.1	92/841
	0.8	0.04	0.05	9				0.3	0.02	0.03	R		
Rsd 0.4s	12ph/10stn	Dmin 123km	Az.gap 167°				Rsd 0.1s	12ph/8stn	Dmin 124km	Az.gap 305°			
Corr. 0.479	19M/17stn	Msd 0.2	1↑				Corr. 0.134	26M/22stn	Msd 0.2	1↑			
JAN 28 1852	42.5s	39.96S	175.09E	14km	M=3.7	92/744	JAN 31 1827	14.2s	37.50S	176.43E	220km	M=3.8	92/842
	0.2	0.01	0.02	3				0.4	0.04	0.04	3		
Rsd 0.3s	26ph/19stn	Dmin 22km	Az.gap 80°				Rsd 0.2s	10ph/5stn	Dmin 103km	Az.gap 149°			
Corr. 0.271	33M/29stn	Msd 0.2	1↑				Corr. 0.691	14M/13stn	Msd 0.3	1↑			
Felt Wanganui (57) MM4.													
JAN 28 1943	06.0s	38.95S	175.05E	220km	M=4.4	92/745	JAN 31 1923	60.0s	36.72S	177.16E	235km	M=3.8	92/843
	0.4	0.02	0.04	3				0.2	0.02	0.02	2		
Rsd 0.2s	26ph/20stn	Dmin 32km	Az.gap 111°				Rsd 0.1s	10ph/6stn	Dmin 128km	Az.gap 226°			
Corr. 0.198	20M/18stn	Msd 0.3	1↑ 1↓				Corr. 0.781	5M/5stn	Msd 0.2	1↑			
JAN 29 0511	37.7s	43.00S	172.83E	25km	M=3.7	92/753	FEB 01 0421	19.2s	45.22S	167.44E	116km	M=4.3	92/849
	0.0	0.00	0.01	1				0.4	0.02	0.03	3		
Rsd 0.1s	23ph/12stn	Dmin 52km	Az.gap 140°				Rsd 0.2s	22ph/14stn	Dmin 35km	Az.gap 173°			
Corr. 0.082	26M/20stn	Msd 0.2	4↑ 1↓				Corr. -0.436	25M/18stn	Msd 0.2	1↑ 1↓			
JAN 29 2211	12.4s	37.17S	177.89E	5km	M=3.8	92/776	FEB 01 0636	21.0s	37.98S	175.95E	171km	M=3.8	92/852
	1.1	0.11	0.12	R				0.6	0.05	0.08	4		
Rsd 0.6s	10ph/7stn	Dmin 60km	Az.gap 210°				Rsd 0.3s	16ph/10stn	Dmin 106km	Az.gap 234°			
Corr. 0.953	11M/9stn	Msd 0.2	1↓				Corr. -0.875	14M/13stn	Msd 0.3	1↑ 1↓			
JAN 30 0334	08.8s	41.00S	172.88E	193km	M=3.5	92/785	FEB 01 0937	45.2s	40.30S	173.84E	144km	M=3.7	92/856
	0.4	0.03	0.03	3				0.3	0.02	0.02	3		
Rsd 0.3s	26ph/16stn	Dmin 35km	Az.gap 135°				Rsd 0.3s	25ph/17stn	Dmin 56km	Az.gap 178°			
Corr. -0.180	9M/9stn	Msd 0.3	1↑				Corr. -0.121	9M/9stn	Msd 0.3	1↑			
JAN 30 1708	34.0s	36.95S	177.00E	251km	M=4.5	92/802	FEB 02 1539	56.5s	35.70S	178.60E	228km	M=3.7	92/889
	0.5	0.04	0.04	3				1.3	0.17	0.26	12		
Rsd 0.2s	17ph/12stn	Dmin 116km	Az.gap 188°				Rsd 0.3s	6ph/4stn	Dmin 212km	Az.gap 341°			
Corr. 0.750	25M/21stn	Msd 0.2	2↑ 1↓				Corr. -0.891	2M/2stn	Msd 0.1				
JAN 30 1810	55.0s	37.08S	177.35E	218km	M=3.9	92/804	FEB 02 2259	35.6s	37.54S	177.92E	59km	M=3.9	92/901
	0.5	0.06	0.09	7				0.4	0.02	0.02	5		
Rsd 0.2s	10ph/6stn	Dmin 103km	Az.gap 268°				Rsd 0.2s	10ph/6stn	Dmin 34km	Az.gap 162°			
Corr. -0.633	12M/12stn	Msd 0.3					Corr. -0.254	15M/11stn	Msd 0.3	1↑ 3↓			

<b>FEB 03 0825</b>	<b>36.9s</b>	<b>40.38S</b>	<b>174.72E</b>	<b>75km</b>	<b>M=3.7</b>	92/907	<b>FEB 05 0615</b>	<b>53.3s</b>	<b>39.13S</b>	<b>174.83E</b>	<b>222km</b>	<b>M=5.1</b>	92/947
Rsd 0.2s	0.2	0.01	0.01	3			Rsd 0.3s	0.3	0.02	0.02	3		
Corr. -0.395	30ph/23stn	Dmin 56km	Az.gap 76°				Corr. -0.083	49ph/36stn	Dmin 44km	Az.gap 100°			
	13M/10stn	Msd 0.2	5↑ 2↓					10M/5stn	Msd 0.2	5↑ 3↓			
<b>FEB 03 1720</b>	<b>26.8s</b>	<b>44.70S</b>	<b>167.86E</b>	<b>76km</b>	<b>M=4.1</b>	92/913	<b>FEB 05 1235</b>	<b>23.5s</b>	<b>37.69S</b>	<b>179.51E</b>	<b>33km</b>	<b>M=3.6</b>	92/954
Rsd 0.2s	0.4	0.02	0.02	3			Rsd 0.3s	0.8	0.03	0.07	R		
Corr. -0.414	19ph/13stn	Dmin 5km	Az.gap 190°				Corr. 0.266	8ph/5stn	Dmin 107km	Az.gap 305°			
	8M/4stn	Msd 0.3	2↑ 8↓					6M/4stn	Msd 0.2	1↑			
<b>FEB 03 1922</b>	<b>38.9s</b>	<b>35.37S</b>	<b>179.15E</b>	<b>241km</b>	<b>M=4.5</b>	92/916	<b>FEB 05 2046</b>	<b>21.3s</b>	<b>38.56S</b>	<b>175.92E</b>	<b>186km</b>	<b>M=3.8</b>	92/965
Rsd 0.1s	0.5	0.07	0.07	11			Rsd 0.2s	0.5	0.02	0.05	4		
Corr. -0.402	10ph/9stn	Dmin 259km	Az.gap 328°				Corr. -0.496	19ph/16stn	Dmin 74km	Az.gap 136°			
	15M/14stn	Msd 0.3						10M/10stn	Msd 0.3				
<b>FEB 03 2036</b>	<b>04.0s</b>	<b>41.63S</b>	<b>173.67E</b>	<b>48km</b>	<b>M=4.0</b>	92/918	<b>FEB 06 0221</b>	<b>01.5s</b>	<b>37.90S</b>	<b>176.23E</b>	<b>201km</b>	<b>M=3.6</b>	92/969
Rsd 0.3s	0.1	0.01	0.01	3			Rsd 0.3s	0.7	0.05	0.07	6		
Corr. -0.264	27ph/21stn	Dmin 23km	Az.gap 80°				Corr. -0.664	10ph/7stn	Dmin 87km	Az.gap 253°			
	17M/12stn	Msd 0.1	4↑ 12↓					9M/9stn	Msd 0.1	1↑			
<b>FEB 04 0240</b>	<b>37.2s</b>	<b>36.64S</b>	<b>177.93E</b>	<b>141km</b>	<b>M=3.9</b>	92/921	<b>FEB 06 0227</b>	<b>15.4s</b>	<b>41.76S</b>	<b>172.65E</b>	<b>79km</b>	<b>M=3.6</b>	92/970
Rsd 0.4s	0.9	0.06	0.06	10			Rsd 0.3s	0.2	0.01	0.02	3		
Corr. 0.393	7ph/4stn	Dmin 111km	Az.gap 257°				Corr. -0.176	18ph/13stn	Dmin 21km	Az.gap 84°			
	3M/3stn	Msd 0.2	1↓					13M/11stn	Msd 0.2	2↑ 2↓			
<b>FEB 04 0612</b>	<b>57.0s</b>	<b>38.38S</b>	<b>176.02E</b>	<b>165km</b>	<b>M=4.3</b>	92/926	<b>FEB 06 0543</b>	<b>21.3s</b>	<b>38.52S</b>	<b>175.63E</b>	<b>144km</b>	<b>M=4.1</b>	92/977
Rsd 0.3s	0.6	0.03	0.03	5			Rsd 0.3s	0.9	0.05	0.04	7		
Corr. -0.055	29ph/22stn	Dmin 68km	Az.gap 75°				Corr. -0.703	20ph/16stn	Dmin 54km	Az.gap 202°			
	26M/22stn	Msd 0.3	14↑ 4↓					25M/22stn	Msd 0.3	1↑			
<b>FEB 04 1133</b>	<b>41.8s</b>	<b>39.21S</b>	<b>174.74E</b>	<b>211km</b>	<b>M=4.3</b>	92/930	<b>FEB 06 1000</b>	<b>32.8s</b>	<b>39.82S</b>	<b>176.97E</b>	<b>40km</b>	<b>M=3.8</b>	92/986
Rsd 0.3s	0.4	0.02	0.04	3			Rsd 0.2s	0.2	0.01	0.02	1		
Corr. -0.121	38ph/30stn	Dmin 52km	Az.gap 106°				Corr. -0.633	36ph/27stn	Dmin 19km	Az.gap 179°			
	26M/23stn	Msd 0.2	16↑ 8↓					26M/21stn	Msd 0.3	1↓			
<b>FEB 04 1220</b>	<b>53.2s</b>	<b>36.75S</b>	<b>179.29E</b>	<b>12km</b>	<b>M=3.6</b>	92/931	<b>FEB 06 2211</b>	<b>18.9s</b>	<b>38.57S</b>	<b>175.72E</b>	<b>172km</b>	<b>M=3.8</b>	92/1002
Rsd 0.2s	0.8	0.05	0.08	R			Rsd 0.3s	0.8	0.04	0.03	7		
Corr. -0.428	7ph/5stn	Dmin 129km	Az.gap 299°				Corr. -0.146	17ph/14stn	Dmin 51km	Az.gap 160°			
	5M/5stn	Msd 0.2						22M/20stn	Msd 0.3	4↑ 1↓			
<b>FEB 04 2139</b>	<b>17.7s</b>	<b>34.88S</b>	<b>178.23E</b>	<b>292km</b>	<b>M=4.2</b>	92/937	<b>FEB 07 0150</b>	<b>08.6s</b>	<b>38.89S</b>	<b>175.57E</b>	<b>209km</b>	<b>M=3.6</b>	92/1004
Rsd 0.1s	0.4	0.08	0.26	6			Rsd 0.3s	0.7	0.03	0.06	6		
Corr. -0.965	10ph/8stn	Dmin 388km	Az.gap 350°				Corr. -0.641	18ph/13stn	Dmin 32km	Az.gap 194°			
	7M/7stn	Msd 0.1						11M/11stn	Msd 0.3	1↑			
<b>FEB 05 0110</b>	<b>13.4s</b>	<b>38.01S</b>	<b>176.13E</b>	<b>176km</b>	<b>M=3.9</b>	92/940	<b>FEB 07 0155</b>	<b>15.8s</b>	<b>38.47S</b>	<b>175.74E</b>	<b>136km</b>	<b>M=3.5</b>	92/1005
Rsd 0.2s	0.4	0.03	0.02	3			Rsd 0.6s	1.2	0.07	0.08	12		
Corr. -0.177	17ph/15stn	Dmin 90km	Az.gap 193°				Corr. -0.820	20ph/14stn	Dmin 62km	Az.gap 203°			
	23M/20stn	Msd 0.1	2↑ 1↓					15M/14stn	Msd 0.3				

FEB 07 0512	38.1s	38.99S	175.69E		92/1015	FEB 11 0218	20.0s	35.68S	178.33E	255km	M=3.7
	0.1	0.01	0.01	R			0.5	0.07	0.12	4	
Rsd 0.3s	37ph/31stn	Dmin 13km	Az.gap 41°			Rsd 0.1s	7ph/4stn	Dmin 306km	Az.gap 339°		
Corr. -0.101	42M/36stn	Msd 0.2	1↑ 1↓			Corr. -0.801	2M/2stn	Msd 0.0			
Felt Omori (41) MM4.											
FEB 07 0647	25.4s	44.95S	167.39E		92/1023	FEB 11 1056	35.8s	37.49S	177.30E	102km	M=4.3
	0.3	0.02	0.02	R			0.2	0.01	0.01	3	
Rsd 0.1s	17ph/13stn	Dmin 60km	Az.gap 206°			Rsd 0.1s	23ph/19stn	Dmin 87km	Az.gap 158°		
Corr. -0.918	15M/13stn	Msd 0.2	1↓			Corr. 0.250	27M/21stn	Msd 0.2	3↑ 3↓		
ODZ P is an automatic pick, no records.											
FEB 07 1926	48.0s	36.89S	177.57E		92/1044	FEB 11 1847	45.0s	37.75S	179.96E	33km	M=3.8
	0.4	0.03	0.03	4			0.4	0.03	0.04	R	
Rsd 0.2s	18ph/13stn	Dmin 102km	Az.gap 226°			Rsd 0.2s	17ph/13stn	Dmin 147km	Az.gap 297°		
Corr. 0.396	12M/5stn	Msd 0.2	1↑ 6↓			Corr. 0.072	11M/11stn	Msd 0.2			
FEB 07 2041	34.9s	37.93S	176.48E		92/1047	FEB 12 1947	03.9s	40.41S	176.57E	41km	M=3.8
	0.2	0.04	0.02	2			0.1	0.01	0.02	2	
Rsd 0.2s	14ph/10stn	Dmin 67km	Az.gap 192°			Rsd 0.2s	31ph/25stn	Dmin 34km	Az.gap 190°		
Corr. -0.676	17M/15stn	Msd 0.2	1↑ 1↓			Corr. -0.570	21M/18stn	Msd 0.2	1↑		
FEB 08 0745	22.4s	40.18S	173.57E		92/1060	FEB 13 0905	49.5s	38.59S	175.96E	156km	M=3.8
	0.3	0.02	0.02	3			0.4	0.02	0.03	3	
Rsd 0.2s	32ph/20stn	Dmin 75km	Az.gap 147°			Rsd 0.3s	24ph/16stn	Dmin 73km	Az.gap 155°		
Corr. -0.057	16M/13stn	Msd 0.3	5↑ 1↓			Corr. -0.432	13M/12stn	Msd 0.3	3↑ 1↓		
FEB 09 1257	26.9s	44.84S	167.64E		92/1136	FEB 13 1049	37.1s	42.45S	174.82E	33km	M=4.3
	0.2	0.01	0.01	2			0.3	0.02	0.02	4	
Rsd 0.2s	23ph/13stn	Dmin 29km	Az.gap 195°			Rsd 0.2s	36ph/21stn	Dmin 92km	Az.gap 191°		
Corr. -0.625	8M/5stn	Msd 0.3	3↑ 6↓			Corr. -0.648	14M/6stn	Msd 0.3	15↑ 5↓		
FEB 09 1804	58.2s	37.21S	177.64E		92/1146	FEB 13 1724	32.6s	37.45S	177.42E	167km	M=3.7
	0.4	0.02	0.02	8			1.1	0.07	0.07	9	
Rsd 0.1s	10ph/6stn	Dmin 73km	Az.gap 201°			Rsd 0.5s	12ph/9stn	Dmin 80km	Az.gap 221°		
Corr. -0.332	13M/9stn	Msd 0.2				Corr. -0.242	8M/8stn	Msd 0.1			
FEB 10 0552	35.2s	39.21S	174.79E		92/1157	FEB 13 2012	04.8s	37.49S	176.57E	199km	M=3.6
	0.5	0.02	0.03	4			0.4	0.02	0.05	3	
Rsd 0.1s	22ph/18stn	Dmin 66km	Az.gap 169°			Rsd 0.2s	9ph/7stn	Dmin 98km	Az.gap 178°		
Corr. 0.169	14M/12stn	Msd 0.2	1↑			Corr. 0.734	8M/8stn	Msd 0.2	1↑		
FEB 10 1325	01.8s	37.54S	176.55E		92/1166	FEB 13 2316	05.6s	40.35S	173.20E	5km	M=4.3
	0.3	0.03	0.02	3			0.1	0.01	0.01	R	
Rsd 0.2s	16ph/12stn	Dmin 92km	Az.gap 133°			Rsd 0.2s	30ph/22stn	Dmin 77km	Az.gap 145°		
Corr. 0.301	17M/17stn	Msd 0.2	1↓			Corr. -0.447	13M/6stn	Msd 0.2	1↓		
FEB 10 2317	49.7s	39.42S	176.10E		92/1178	Felt Marahau Beach (75) MM4.					
	0.1	0.01	0.01	2							
Rsd 0.2s	42ph/29stn	Dmin 38km	Az.gap 81°								
Corr. -0.212	20M/15stn	Msd 0.2	2↑ 3↓								
FEB 14 0444	49.6s	37.52S	177.27E		92/1281	FEB 14 0444	49.6s	37.52S	177.27E	127km	M=3.8
	0.2	0.02	0.01	2							
Rsd 0.1s	17ph/12stn	Dmin 84km	Az.gap 155°			Rsd 0.1s	17ph/12stn	Dmin 84km	Az.gap 155°		
Corr. 0.221	17M/16stn	Msd 0.2	1↓			Corr. 0.221	17M/16stn	Msd 0.2	1↓		

<b>FEB 14</b>	<b>0559</b>	<b>29.3s</b>	<b>45.12S</b>	<b>167.34E</b>	<b>99km</b>	<b>M=3.7</b>	<b>92/1286</b>
		0.3	0.01	0.02	2		
Rsd 0.2s		20ph/11stn	Dmin 42km	Az.gap 203°			
Corr. -0.498		16M/11stn	Msd 0.1	7↑ 2↓			
							<b>92/1355</b>
<b>FEB 14</b>	<b>1453</b>	<b>17.0s</b>	<b>38.37S</b>	<b>176.27E</b>	<b>127km</b>	<b>M=3.7</b>	<b>92/1288</b>
		0.4	0.02	0.02	4		
Rsd 0.3s		23ph/17stn	Dmin 61km	Az.gap 80°			
Corr. 0.085		16M/14stn	Msd 0.2	2↑ 1↓			
							<b>92/1367</b>
<b>FEB 15</b>	<b>1451</b>	<b>09.2s</b>	<b>38.00S</b>	<b>176.60E</b>	<b>147km</b>	<b>M=3.9</b>	<b>92/1312</b>
		0.3	0.01	0.02	2		
Rsd 0.2s		24ph/18stn	Dmin 27km	Az.gap 104°			
Corr. -0.010		26M/20stn	Msd 0.2	1↑			
							<b>92/1369</b>
<b>FEB 16</b>	<b>1100</b>	<b>56.3s</b>	<b>39.62S</b>	<b>174.26E</b>	<b>197km</b>	<b>M=4.5</b>	<b>92/1328</b>
		0.3	0.01	0.03	3		
Rsd 0.2s		43ph/33stn	Dmin 43km	Az.gap 92°			
Corr. -0.143		10M/4stn	Msd 0.2	1↑			
							<b>92/1374</b>
<b>FEB 16</b>	<b>2011</b>	<b>31.4s</b>	<b>42.19S</b>	<b>172.23E</b>	<b>12km</b>	<b>M=3.5</b>	<b>92/1335</b>
		0.1	0.01	0.02	R		
Rsd 0.3s		15ph/8stn	Dmin 61km	Az.gap 100°			
Corr. -0.184		20M/14stn	Msd 0.2	1↓			
							<b>92/1377</b>
<b>FEB 18</b>	<b>0006</b>	<b>42.3s</b>	<b>37.39S</b>	<b>176.79E</b>	<b>219km</b>	<b>M=4.4</b>	<b>92/1378</b>
		0.3	0.02	0.02	3		
Rsd 0.2s		21ph/17stn	Dmin 97km	Az.gap 153°			
Corr. 0.193		28M/24stn	Msd 0.2	1↑			
							<b>92/1380</b>
<b>FEB 18</b>	<b>0544</b>	<b>18.1s</b>	<b>37.58S</b>	<b>175.97E</b>	<b>290km</b>	<b>M=3.6</b>	<b>92/1335</b>
		0.3	0.05	0.04	6		
Rsd 0.1s		8ph/7stn	Dmin 341km	Az.gap 329°			
Corr. -0.371		4M/4stn	Msd 0.1				
							<b>92/1384</b>
<b>FEB 18</b>	<b>1027</b>	<b>11.3s</b>	<b>39.91S</b>	<b>174.02E</b>	<b>122km</b>	<b>M=5.9</b>	<b>92/1384</b>
		0.3	0.01	0.01	3		
Rsd 0.2s		39ph/32stn	Dmin 64km	Az.gap 122°			
Corr. -0.143		10M/5stn	Msd 0.2	15↑ 10↓			
							Felt from Uruti (47) to Kahutara (90), max. int. MM4.
<b>FEB 17</b>	<b>0450</b>	<b>55.8s</b>	<b>35.32S</b>	<b>177.97E</b>	<b>265km</b>	<b>M=4.1</b>	<b>92/1345</b>
		1.1	0.10	0.15	10		
Rsd 0.2s		13ph/11stn	Dmin 255km	Az.gap 328°			
Corr. -0.738		9M/8stn	Msd 0.2				
<b>FEB 17</b>	<b>0844</b>	<b>48.7s</b>	<b>40.45S</b>	<b>176.26E</b>	<b>45km</b>	<b>M=4.4</b>	<b>92/1349</b>
		0.1	0.01	0.01	2		
Rsd 0.2s		41ph/35stn	Dmin 19km	Az.gap 133°			
Corr. -0.563		9M/4stn	Msd 0.1	4↑ 4↓			
							Felt from Moawhango (58) to Aramoana (64), max. int. MM4.
<b>FEB 17</b>	<b>0949</b>	<b>55.8s</b>	<b>38.08S</b>	<b>177.92E</b>	<b>50km</b>	<b>M=3.7</b>	<b>92/1352</b>
		0.2	0.01	0.01	2		
Rsd 0.2s		17ph/10stn	Dmin 29km	Az.gap 86°			
Corr. -0.237		15M/11stn	Msd 0.3				
<b>FEB 17</b>	<b>1037</b>	<b>24.9s</b>	<b>38.38S</b>	<b>177.17E</b>	<b>41km</b>	<b>M=3.6</b>	<b>92/1354</b>
		0.1	0.01	0.01	2		
Rsd 0.2s		27ph/21stn	Dmin 14km	Az.gap 69°			
Corr. -0.131		20M/16stn	Msd 0.3	1↓			
<b>FEB 18</b>	<b>1533</b>	<b>26.2s</b>	<b>36.55S</b>	<b>177.15E</b>	<b>186km</b>	<b>M=3.5</b>	<b>92/1387</b>
		2.1	0.17	0.24	20		
Rsd 0.6s		6ph/4stn	Dmin 155km	Az.gap 302°			
Corr. -0.801		3M/3stn	Msd 0.2				
<b>FEB 19</b>	<b>0601</b>	<b>56.5s</b>	<b>39.51S</b>	<b>174.56E</b>	<b>153km</b>	<b>M=3.6</b>	<b>92/1400</b>
		0.4	0.01	0.04	5		
Rsd 0.2s		22ph/17stn	Dmin 80km	Az.gap 142°			
Corr. 0.068		14M/12stn	Msd 0.2				
<b>FEB 19</b>	<b>1927</b>	<b>13.6s</b>	<b>36.71S</b>	<b>177.39E</b>	<b>175km</b>	<b>M=3.6</b>	<b>92/1409</b>
		0.4	0.03	0.05	3		
Rsd 0.1s		5ph/3stn	Dmin 128km	Az.gap 313°			
Corr. -0.621		3M/3stn	Msd 0.2				

<b>FEB 19</b>	<b>2148</b>	<b>36.8s</b>	<b>39.75S</b>	<b>174.18E</b>	<b>108km</b>	<b>M=3.5</b>	92/1412
		0.2	0.01	0.01	3		
Rsd 0.2s		33ph/22stn	Dmin 51km	Az.gap 106°			
Corr. -0.140		15M/13stn	Msd 0.3	1↑ 1↓			
							92/1465
<b>FEB 22</b>	<b>0221</b>	<b>13.9s</b>	<b>39.29S</b>	<b>177.06E</b>	<b>14km</b>	<b>M=4.3</b>	
		0.1	0.00	0.01	1		
Rsd 0.1s		34ph/29stn	Dmin 19km	Az.gap 146°			
Corr. -0.322		14M/7stn	Msd 0.3	6↑ 6↓			
							Felt Patoka (52) MM4.
							92/1417
<b>FEB 19</b>	<b>2357</b>	<b>47.4s</b>	<b>35.10S</b>	<b>177.32E</b>	<b>193km</b>	<b>M=3.8</b>	
		0.6	0.06	0.13	9		
Rsd 0.1s		11ph/9stn	Dmin 291km	Az.gap 322°			
Corr. -0.918		5M/5stn	Msd 0.2				
							92/1467
<b>FEB 20</b>	<b>0145</b>	<b>29.4s</b>	<b>40.75S</b>	<b>174.45E</b>	<b>74km</b>	<b>M=4.1</b>	
		0.1	0.01	0.01	2		
Rsd 0.2s		38ph/26stn	Dmin 41km	Az.gap 78°			
Corr. -0.212		8M/3stn	Msd 0.1	4↑ 3↓			
							92/1418
<b>FEB 20</b>	<b>0506</b>	<b>05.5s</b>	<b>39.28S</b>	<b>174.87E</b>	<b>217km</b>	<b>M=3.8</b>	
		0.1	0.01	0.02	1		
Rsd 0.0s		16ph/12stn	Dmin 58km	Az.gap 147°			
Corr. -0.081		16M/14stn	Msd 0.2				
							92/1478
<b>FEB 22</b>	<b>1024</b>	<b>33.1s</b>	<b>40.17S</b>	<b>173.56E</b>	<b>156km</b>	<b>M=3.6</b>	
		0.4	0.02	0.02	3		
Rsd 0.2s		28ph/18stn	Dmin 77km	Az.gap 183°			
Corr. -0.214		14M/13stn	Msd 0.4	3↑ 1↓			
							92/1480
<b>FEB 22</b>	<b>1129</b>	<b>44.7s</b>	<b>37.57S</b>	<b>176.48E</b>	<b>181km</b>	<b>M=3.9</b>	
		0.5	0.03	0.04	5		
Rsd 0.3s		12ph/10stn	Dmin 85km	Az.gap 129°			
Corr. 0.320		14M/14stn	Msd 0.2	1↓			
							92/1499
<b>FEB 23</b>	<b>1314</b>	<b>51.4s</b>	<b>38.38S</b>	<b>176.14E</b>	<b>5km</b>	<b>M=2.6</b>	
		0.1	0.01	0.01	R		
Rsd 0.2s		14ph/10stn	Dmin 10km	Az.gap 74°			
Corr. 0.151		7M/7stn	Msd 0.3	1↓			
							Felt Ngakuru (33).
							92/1546
<b>FEB 25</b>	<b>1008</b>	<b>54.0s</b>	<b>37.58S</b>	<b>178.02E</b>	<b>60km</b>	<b>M=3.8</b>	
		0.2	0.01	0.01	3		
Rsd 0.1s		10ph/6stn	Dmin 25km	Az.gap 161°			
Corr. -0.316		8M/4stn	Msd 0.2	1↑			
							92/1555
<b>FEB 25</b>	<b>1905</b>	<b>30.9s</b>	<b>38.95S</b>	<b>176.95E</b>	<b>56km</b>	<b>M=3.5</b>	
		0.2	0.01	0.01	2		
Rsd 0.2s		25ph/22stn	Dmin 13km	Az.gap 99°			
Corr. -0.025		19M/17stn	Msd 0.2	1↑ 4↓			
							92/1564
<b>FEB 26</b>	<b>0005</b>	<b>35.9s</b>	<b>38.63S</b>	<b>174.68E</b>	<b>568km</b>	<b>M=4.4</b>	
		0.4	0.06	0.09	4		
Rsd 0.2s		23ph/18stn	Dmin 80km	Az.gap 215°			
Corr. -0.773		16M/14stn	Msd 0.2				
							92/1569
<b>FEB 26</b>	<b>0221</b>	<b>46.4s</b>	<b>36.24S</b>	<b>178.65E</b>	<b>235km</b>	<b>M=3.6</b>	
		1.7	0.25	0.33	9		
Rsd 0.3s		11ph/9stn	Dmin 154km	Az.gap 339°			
Corr. -0.848		7M/7stn	Msd 0.1				
							92/1574
<b>FEB 26</b>	<b>0627</b>	<b>43.8s</b>	<b>37.00S</b>	<b>176.96E</b>	<b>192km</b>	<b>M=3.9</b>	
		0.6	0.04	0.05	6		
Rsd 0.2s		7ph/5stn	Dmin 114km	Az.gap 196°			
Corr. 0.213		12M/12stn	Msd 0.2				

FEB 26 0913 04.8s	39.69S	174.05E	246km	M=4.1	92/1578	FEB 28 0659 46.4s	39.92S	174.01E	111km	M=4.1	92/1623
0.4	0.02	0.03	3			0.2	0.01	0.01	3		
Rsd 0.2s	37ph/24stn	Dmin 40km	Az.gap 120°			Rsd 0.2s	40ph/23stn	Dmin 73km	Az.gap 152°		
Corr. -0.254	26M/23stn	Msd 0.3	3↑ 1↓			Corr. -0.313	8M/3stn	Msd 0.2	6↑ 6↓		
FEB 26 1213 57.8s	40.02S	176.78E	49km	M=3.6	92/1582	FEB 28 0810 59.1s	40.05S	175.13E	17km	M=3.7	92/1624
0.1	0.01	0.02	2			0.1	0.00	0.01	2		
Rsd 0.2s	33ph/25stn	Dmin 5km	Az.gap 171°			Rsd 0.2s	35ph/25stn	Dmin 33km	Az.gap 81°		
Corr. -0.590	20M/19stn	Msd 0.4				Corr. -0.207	31M/26stn	Msd 0.2	5↑ 1↓		
FEB 26 1338 09.9s	36.25S	177.84E	223km	M=4.9	92/1584	Felt Wanganui (57) MM4.					
0.5	0.04	0.04	5								
Rsd 0.3s	21ph/18stn	Dmin 156km	Az.gap 250°								
Corr. 0.574	10M/4stn	Msd 0.2	1↑								
FEB 26 2221 32.1s	38.11S	176.28E	141km	M=4.0	92/1591	FEB 28 1006 01.9s	38.66S	175.44E	167km	M=3.8	92/1627
0.3	0.01	0.02	3			0.4	0.03	0.05	5		
Rsd 0.3s	20ph/16stn	Dmin 65km	Az.gap 91°			Rsd 0.3s	19ph/13stn	Dmin 152km	Az.gap 225°		
Corr. 0.076	25M/21stn	Msd 0.3	4↑ 2↓			Corr. -0.828	10M/10stn	Msd 0.2			
FEB 27 0442 30.0s	37.79S	176.74E	154km	M=3.7	92/1595	FEB 28 1457 00.2s	35.24S	179.18E	261km	M=3.8	92/1632
0.4	0.02	0.03	3			0.4	0.05	0.07	4		
Rsd 0.2s	12ph/9stn	Dmin 61km	Az.gap 120°			Rsd 0.1s	7ph/4stn	Dmin 273km	Az.gap 346°		
Corr. 0.500	11M/11stn	Msd 0.1	2↑ 1↓			Corr. -0.879	2M/2stn	Msd 0.1			
FEB 27 1126 22.7s	40.45S	176.38E	32km	M=4.2	92/1602	FEB 28 1528 22.1s	38.97S	175.22E	205km	M=3.6	92/1634
0.1	0.01	0.02	1			0.9	0.07	0.15	12		
Rsd 0.2s	32ph/29stn	Dmin 21km	Az.gap 169°			Rsd 0.4s	16ph/12stn	Dmin 39km	Az.gap 198°		
Corr. -0.527	14M/6stn	Msd 0.2	5↑ 2↓			Corr. -0.891	9M/9stn	Msd 0.3			
Felt from Moawhango (58), MM4 to Masterton (66).						Felt Dunedin area (144,153), maximum intensity MM4.					
FEB 27 1817 40.6s	38.63S	175.78E	142km	M=3.7	92/1606	FEB 28 1612 32.3s	45.88S	170.57E	12km	M=3.5	92/1635
0.3	0.02	0.02	3			0.5	0.03	0.04	R		
Rsd 0.1s	13ph/9stn	Dmin 62km	Az.gap 209°			Rsd 0.3s	16ph/12stn	Dmin 74km	Az.gap 234°		
Corr. -0.750	14M/13stn	Msd 0.3				Corr. -0.785	15M/11stn	Msd 0.1	1↓		
FEB 27 2118 52.4s	40.18S	173.55E	164km	M=3.6	92/1608	Felt Dunedin area (144,153), maximum intensity MM4.					
0.6	0.07	0.03	6								
Rsd 0.3s	15ph/10stn	Dmin 76km	Az.gap 237°								
Corr. 0.126	4M/4stn	Msd 0.2	1↑ 1↓								
FEB 27 2253 11.8s	46.69S	165.62E	33km	M=3.9	92/1611	FEB 29 0628 07.2s	37.46S	176.33E	202km	M=3.5	92/1647
0.8	0.03	0.09	R			0.5	0.04	0.05	3		
Rsd 0.3s	15ph/11stn	Dmin 181km	Az.gap 305°			Rsd 0.2s	13ph/10stn	Dmin 112km	Az.gap 282°		
Corr. 0.201	15M/12stn	Msd 0.1				Corr. -0.688	7M/7stn	Msd 0.3			
FEB 28 0202 03.0s	46.70S	165.54E	33km	M=3.6	92/1617	Felt Dunedin area (144,153), maximum intensity MM4.					
1.0	0.05	0.09	R								
Rsd 0.3s	10ph/5stn	Dmin 185km	Az.gap 303°								
Corr. 0.188	9M/6stn	Msd 0.1									
MAR 01 0314 19.0s	40.15S	174.91E	12km	M=3.7	92/1681						
0.1	0.00	0.01	R								
Rsd 0.2s	31ph/24stn	Dmin 39km	Az.gap 108°								
Corr. -0.295	33M/27stn	Msd 0.2	3↑ 3↓								
Felt Wanganui (57) MM4.											

MAR 01 1650	41.9s	37.57S	177.46E	116km	M=3.9	92/1705	MAR 03 0703	11.9s	36.27S	178.03E	198km	M=4.9	92/1871
Rsd 0.1s	0.2	0.01	0.01	1			0.5	0.03	0.03	5			
Corr. -0.029	20ph/15stn	Dmin 75km	Az.gap 195°				Rsd 0.3s	35ph/24stn	Dmin 149km	Az.gap 276°			
	22M/20stn	Msd 0.2	1↑ 1↓				Corr. 0.479	30M/24stn	Msd 0.3	6↑ 1↓			
MAR 01 1933	36.8s	43.24S	173.73E	33km	M=4.0	92/1709	MAR 03 0924	46.8s	38.14S	176.26E	3km	M=2.8	92/1887
Rsd 0.3s	0.2	0.02	0.02	R			0.1	0.00	0.00	1			
Corr. -0.617	25ph/19stn	Dmin 93km	Az.gap 187°				Rsd 0.1s	11ph/7stn	Dmin 7km	Az.gap 117°			
	11M/6stn	Msd 0.2	2↑ 1↓				Corr. 0.432	6M/6stn	Msd 0.2	1↑			
MAR 02 0242	19.4s	40.39S	176.46E	19km	M=3.9	92/1714	Felt Rotorua (33) MM4 and Lake Tarawera (33).						
Rsd 0.2s	0.2	0.01	0.02	2			MAR 03 1559	06.9s	38.31S	176.15E	170km	M=4.3	92/1900
Corr. -0.566	32ph/27stn	Dmin 30km	Az.gap 175°				0.4	0.02	0.02	3			
	9M/4stn	Msd 0.2	5↑ 2↓				Rsd 0.3s	31ph/23stn	Dmin 12km	Az.gap 56°			
MAR 02 0905	56.9s	40.43S	176.60E	37km	M=5.8	92/1727	Corr. 0.092	29M/24stn	Msd 0.2	10↑ 1↓			
Rsd 0.2s	0.1	0.01	0.01	5			MAR 03 2333	52.4s	39.49S	175.64E	72km	M=3.8	92/1912
Corr. -0.590	46ph/41stn	Dmin 34km	Az.gap 177°				0.2	0.01	0.01	3			
	10M/4stn	Msd 0.2	13↑ 23↓				Rsd 0.3s	37ph/27stn	Dmin 25km	Az.gap 50°			
Felt from central North Island to Nelson, max. int. MM5.							Corr. -0.115	26M/21stn	Msd 0.3	1↑			
MAR 02 1126	11.1s	40.40S	176.53E	40km	M=4.0	92/1792	MAR 03 2339	52.3s	37.39S	176.24E	174km	M=3.6	92/1913
Rsd 0.1s	0.1	0.01	0.02	2			0.6	0.04	0.09	6			
Corr. -0.746	33ph/29stn	Dmin 33km	Az.gap 179°				Rsd 0.2s	9ph/7stn	Dmin 123km	Az.gap 305°			
	23M/20stn	Msd 0.1	2↑ 5↓				Corr. -0.578	3M/3stn	Msd 0.3	1↓			
MAR 02 1648	31.2s	39.04S	177.84E	62km	M=3.6	92/1825	MAR 04 0603	02.9s	39.60S	177.83E	45km	M=4.7	92/1929
Rsd 0.2s	0.2	0.01	0.02	3			0.2	0.01	0.02	4			
Corr. -0.621	21ph/15stn	Dmin 16km	Az.gap 147°				Rsd 0.2s	30ph/27stn	Dmin 46km	Az.gap 208°			
	22M/20stn	Msd 0.1	4↑ 1↓				Corr. -0.467	12M/5stn	Msd 0.3	4↑ 5↓			
MAR 03 0406	46.4s	44.89S	168.36E	12km	M=3.5	92/1858	Felt Hawkes Bay (53,60), maximum intensity MM4.						
Rsd 0.1s	0.0	0.01	0.00	R			MAR 04 0658	56.9s	37.77S	177.55E	51km	M=3.6	92/1938
Corr. 0.471	22ph/17stn	Dmin 42km	Az.gap 109°				0.2	0.02	0.01	5			
	21M/15stn	Msd 0.2	1↓				Rsd 0.2s	18ph/10stn	Dmin 67km	Az.gap 130°			
Felt Earnslaw Stn (121) MM4.							Corr. -0.041	14M/9stn	Msd 0.2	1↑ 4↓			
MAR 03 0411	38.1s	40.42S	176.54E	38km	M=3.7	92/1860	MAR 04 1709	28.9s	40.42S	176.50E	39km	M=3.6	92/1962
Rsd 0.2s	0.1	0.01	0.02	1			0.1	0.01	0.01	1			
Corr. -0.471	31ph/27stn	Dmin 7km	Az.gap 187°				Rsd 0.2s	33ph/26stn	Dmin 4km	Az.gap 180°			
	24M/19stn	Msd 0.2	2↑ 6↓				Corr. -0.648	22M/17stn	Msd 0.2	3↑ 2↓			
MAR 03 0431	02.7s	38.08S	176.25E	151km	M=3.7	92/1861	MAR 05 0044	22.9s	38.34S	176.07E	156km	M=3.5	92/1983
Rsd 0.1s	0.3	0.03	0.03	2			1.1	0.06	0.04	7			
Corr. -0.676	15ph/10stn	Dmin 62km	Az.gap 142°				Rsd 0.2s	11ph/10stn	Dmin 92km	Az.gap 212°			
	19M/19stn	Msd 0.3	1↑				Corr. -0.144	8M/8stn	Msd 0.2	1↑			
MAR 03 0658	48.5s	42.04S	175.10E	34km	M=3.7	92/1870	MAR 05 1142	24.0s	36.36S	178.01E	224km	M=3.6	92/2012
Rsd 0.1s	0.1	0.01	0.01	1			2.0	0.73	1.77	31			
Corr. -0.590	37ph/23stn	Dmin 70km	Az.gap 185°				Rsd 0.5s	9ph/6stn	Dmin 225km	Az.gap 353°			
	8M/3stn	Msd 0.1	3↑ 12↓				Corr. -0.984	3M/3stn	Msd 0.2				

MAR 05 1827 38.8s 45.38S 167.04E	92/2034	69km M=3.6	Rsd 0.1s 0.3 0.01 0.02 2 Corr. -0.174 19M/14stn Dmin 13km 1↓ ODZ P is an automatic pick, no records.	MAR 08 0501 31.2s 38.67S 175.49E	92/2160	213km M=4.0	0.7 0.02 0.03 6 Rsd 0.2s 19ph/14stn Dmin 52km Az.gap 138° Corr. -0.117 23M/21stn Msd 0.3 1↑
MAR 05 2236 49.1s 45.16S 166.83E	92/2045	12km M=4.7	Rsd 0.1s 0.3 0.01 0.03 2 Corr. 0.160 11M/6stn Dmin 43km 1↓ ODZ P is an automatic pick, no records.	Rsd 0.2s 0.5 0.02 0.04 2 Corr. -0.738 10ph/8stn Dmin 47km Az.gap 231° Msd 0.2 1↑	92/2171	27km M=3.7	
MAR 05 2335 09.4s 45.19S 166.85E	92/2046	12km M=4.5	Rsd 0.1s 0.3 0.01 0.03 2 Corr. 0.008 9M/5stn Dmin 39km 1↓ ODZ P is an automatic pick, no records.	Rsd 0.2s 0.3 0.01 0.03 R Corr. -0.049 13ph/10stn Dmin 47km Az.gap 214° Msd 0.2 1↑	92/2172	12km M=3.7	
MAR 06 0256 12.1s 37.65S 176.91E	92/2049	137km M=3.6	Rsd 0.2s 0.2 0.01 0.02 2 Corr. 0.551 13ph/10stn Dmin 70km 1↓ ODZ P is an automatic pick, no records.	Rsd 0.2s 0.7 0.04 0.03 5 Corr. -0.656 16ph/13stn Dmin 85km Az.gap 199° Msd 0.2 1↑	92/2178	152km M=3.6	
MAR 06 0822 06.6s 36.61S 177.62E	92/2064	221km M=3.5	Rsd 0.2s 0.6 0.08 0.09 5 Corr. -0.773 11ph/8stn Dmin 172km Az.gap 319° Msd 0.2	Rsd 0.2s 0.5 0.03 0.04 8 Corr. 0.110 7ph/4stn Dmin 89km Az.gap 261° Msd 0.2 1↓	92/2185	81km M=3.7	
MAR 06 1157 53.7s 35.39S 179.02E	92/2077	211km M=4.5	Rsd 0.1s 0.5 0.07 0.06 12 Corr. -0.527 10ph/6stn Dmin 254km Az.gap 327° Msd 0.4	Rsd 0.1s 0.6 0.04 0.05 R Corr. -0.057 14ph/10stn Dmin 237km Az.gap 322° Msd 0.1	92/2186	33km M=3.5	
MAR 06 1636 21.1s 36.56S 177.35E	92/2091	209km M=3.7	Rsd 0.0s 0.1 0.02 0.02 2 Corr. -0.252 8ph/4stn Dmin 143km Az.gap 305° Msd 0.3 1↓	Rsd 0.1s 1.3 0.10 0.11 10 Corr. -0.613 10ph/5stn Dmin 84km Az.gap 252° Msd 0.2	92/2194	149km M=3.6	
MAR 07 1046 44.0s 37.95S 176.14E	92/2125	170km M=3.8	Rsd 0.2s 0.3 0.03 0.02 3 Corr. -0.516 16ph/14stn Dmin 92km Az.gap 197° Msd 0.2 5↑ 1↓	Rsd 0.1s 0.3 0.02 0.03 3 Corr. -0.574 17ph/11stn Dmin 112km Az.gap 243° Msd 0.2 1↓	92/2223	149km M=3.6	
MAR 07 1428 08.2s 39.29S 176.12E	92/2131	73km M=4.9	Rsd 0.3s 0.2 0.01 0.01 2 Corr. 0.068 56ph/42stn Dmin 44km Az.gap 36° Msd 0.2 13↑ 6↓ KUZ and ODZ Ps are automatic picks, no records.	Rsd 0.3s 0.6 0.03 0.02 5 Corr. -0.149 27ph/23stn Dmin 70km Az.gap 80° Msd 0.2 2↑ 5↓	92/2238	176km M=4.3	
MAR 10 0904 10.3s 36.15S 177.66E	92/2243	232km M=3.9	Rsd 0.3s 0.2 0.01 0.01 2 Corr. -0.773 10ph/7stn Dmin 170km Az.gap 321° Msd 0.2 1↓	Rsd 0.3s 1.2 0.12 0.16 11 Corr. -0.773 4M/4stn Dmin 170km Az.gap 321° Msd 0.2 1↓	92/2243	232km M=3.9	

MAR	10	2310	56.6s	39.88S	174.52E	131km	M=4.2	92/2261
		0.2	0.01	0.01		3		
Rsd	0.2s	43ph/33stn	Dmin 37km		Az.gap 83°			
Corr.	-0.171	8M/4stn	Msd 0.3		11↑ 9↓			
								92/2266
MAR	11	0136	03.6s	37.47S	177.19E	135km	M=3.6	
		0.2	0.02	0.01		2		
Rsd	0.1s	7ph/4stn	Dmin 88km		Az.gap 274°			
Corr.	-0.504	4M/4stn	Msd 0.1					
								92/2269
MAR	11	0246	32.7s	35.90S	175.30E	33km	M=3.8	
		0.2	0.02	0.02		R		
Rsd	0.1s	5ph/3stn	Dmin 86km		Az.gap 251°			
Corr.	0.945	4M/2stn	Msd 0.2					
								92/2279
MAR	11	0834	27.7s	37.25S	177.14E	5km	M=3.7	
		0.3	0.03	0.03		R		
Rsd	0.4s	9ph/6stn	Dmin 110km		Az.gap 178°			
Corr.	0.582	13M/9stn	Msd 0.2					
								92/2282
MAR	11	1113	04.6s	36.70S	177.60E	179km	M=4.1	
		0.9	0.04	0.04		8		
Rsd	0.3s	20ph/18stn	Dmin 117km		Az.gap 240°			
Corr.	0.539	19M/17stn	Msd 0.1		1↑ 1↓			
								92/2284
MAR	11	1305	31.9s	38.25S	176.04E	157km	M=3.6	
		0.4	0.03	0.03		3		
Rsd	0.1s	14ph/9stn	Dmin 94km		Az.gap 219°			
Corr.	-0.543	18M/17stn	Msd 0.3		1↑ 3↓			
								92/2293
MAR	11	2131	23.1s	39.92S	176.17E	68km	M=4.2	
		0.2	0.01	0.01		3		
Rsd	0.3s	41ph/32stn	Dmin 29km		Az.gap 58°			
Corr.	-0.106	8M/3stn	Msd 0.1		6↑ 1↓			
Felt	Dannevirke	(63).						
								92/2301
MAR	12	0034	44.3s	38.15S	176.24E	5km	M=3.0	
		0.1	0.01	0.01		R		
Rsd	0.2s	7ph/6stn	Dmin 5km		Az.gap 160°			
Corr.	0.420	6M/6stn	Msd 0.3		1↓			
Felt	Rotorua	(33) MM4.						
								92/2305
MAR	12	0150	06.3s	38.72S	175.65E	119km	M=3.7	
		0.6	0.02	0.02		5		
Rsd	0.3s	31ph/22stn	Dmin 51km		Az.gap 136°			
Corr.	-0.218	22M/20stn	Msd 0.2		3↑ 1↓			
								92/2308
MAR	12	0418	49.3s	37.17S	176.92E	228km	M=4.2	
		0.3	0.02	0.02		3		
Rsd	0.1s	14ph/11stn	Dmin 117km		Az.gap 177°			
Corr.	0.547	18M/18stn	Msd 0.2					
								92/2309
MAR	14	0441	40.6s	45.20S	166.89E	12km	M=3.8	
		0.5	0.01	0.04		R		
Rsd	0.1s	19ph/15stn	Dmin 36km		Az.gap 255°			
Corr.	-0.205	24M/18stn	Msd 0.1		1↓			
								92/2349
MAR	13	0630	59.6s	40.26S	176.49E	57km	M=5.0	
		0.1	0.01	0.01		1		
Rsd	0.2s	51ph/43stn	Dmin 11km		Az.gap 138°			
Corr.	-0.723	10M/5stn	Msd 0.1		11↑ 8↓			
Felt	Hawkes Bay	(52,60)	and Palmerston North	(62)	MM4,			
					also Wellington	(68).		
								92/2354
MAR	13	0834	44.5s	41.98S	171.69E	8km	M=3.7	
		0.3	0.01	0.02		3		
Rsd	0.3s	20ph/9stn	Dmin 28km		Az.gap 155°			
Corr.	-0.439	23M/18stn	Msd 0.2		1↑ 3↓			
Felt	Te Wharau River	(86).						
								92/2359
MAR	13	1145	09.1s	37.62S	179.08E	24km	M=3.7	
		0.2	0.01	0.01		1		
Rsd	0.1s	13ph/7stn	Dmin 68km		Az.gap 288°			
Corr.	-0.602	10M/8stn	Msd 0.2		1↑ 2↓			
								92/2363
MAR	13	1640	08.4s	36.76S	178.24E	69km	M=3.9	
		0.4	0.02	0.02		4		
Rsd	0.2s	13ph/9stn	Dmin 94km		Az.gap 267°			
Corr.	0.672	13M/9stn	Msd 0.3					
								92/2384
MAR	14	0441	40.6s	45.20S	166.89E	12km	M=3.8	
		0.5	0.01	0.04		R		
Rsd	0.1s	19ph/15stn	Dmin 36km		Az.gap 255°			
Corr.	-0.205	24M/18stn	Msd 0.1		1↓			
								92/2393
MAR	14	0818	53.3s	37.95S	176.48E	154km	M=3.6	
		0.4	0.02	0.03		4		
Rsd	0.2s	11ph/9stn	Dmin 66km		Az.gap 146°			
Corr.	0.404	6M/5stn	Msd 0.3					
								92/2399
MAR	14	1113	01.3s	39.09S	175.17E	204km	M=3.7	
		0.8	0.04	0.06		7		
Rsd	0.2s	15ph/11stn	Dmin 81km		Az.gap 193°			
Corr.	-0.656	11M/11stn	Msd 0.2		1↑			

MAR 14 1654 22.5s	39.70S	174.22E	175km	M=3.8	92/2409	MAR 18 0030 06.5s	38.01S	176.38E	162km	M=3.8	92/2485
0.5	0.01	0.03	4			0.3	0.01	0.03	3		
Rsd 0.3s	32ph/22stn	Dmin 47km	Az.gap 100°			Rsd 0.2s	16ph/10stn	Dmin 70km	Az.gap 99°		
Corr. -0.092	22M/19stn	Msd 0.2	4↑ 1↓			Corr. -0.079	10M/7stn	Msd 0.2	1↑		
MAR 15 1055 09.8s	38.54S	175.84E	151km	M=4.1	92/2429	MAR 18 0033 29.4s	42.07S	172.98E	80km	M=3.5	92/2486
0.7	0.03	0.03	6			0.2	0.01	0.01	2		
Rsd 0.3s	27ph/19stn	Dmin 69km	Az.gap 153°			Rsd 0.3s	30ph/17stn	Dmin 35km	Az.gap 74°		
Corr. -0.332	27M/23stn	Msd 0.2	6↑ 1↓			Corr. -0.307	15M/12stn	Msd 0.2	1↑ 2↓		
MAR 15 1640 36.3s	40.52S	173.33E	167km	M=3.5	92/2439	MAR 18 0312 31.9s	38.30S	176.36E	6km	M=2.8	92/2490
0.2	0.01	0.01	2			0.1	0.01	0.01	2		
Rsd 0.2s	37ph/24stn	Dmin 59km	Az.gap 166°			Rsd 0.2s	12ph/9stn	Dmin 13km	Az.gap 110°		
Corr. -0.227	12M/11stn	Msd 0.2	3↑ 2↓			Corr. 0.073	5M/5stn	Msd 0.3	1↑		
MAR 15 2317 33.5s	38.82S	176.10E	94km	M=3.7	92/2443	Felt Rotomahana (33) MM3.					
0.3	0.01	0.01	4								
Rsd 0.2s	19ph/11stn	Dmin 59km	Az.gap 87°								
Corr. -0.238	10M/8stn	Msd 0.2	1↓								
MAR 16 1434 38.3s	37.86S	176.36E	157km	M=4.0	92/2455	MAR 18 0327 51.9s	40.42S	176.50E	42km	M=4.4	92/2492
0.3	0.02	0.03	3			0.1	0.01	0.01	1		
Rsd 0.2s	15ph/11stn	Dmin 67km	Az.gap 106°			Rsd 0.2s	43ph/37stn	Dmin 5km	Az.gap 167°		
Corr. 0.234	11M/10stn	Msd 0.3	1↓			Corr. -0.566	8M/4stn	Msd 0.1	3↑ 5↓		
MAR 16 2321 31.6s	35.22S	178.97E	168km	M=6.1	92/2459	Felt southern Hawkes Bay (60), Palmerston North (62) and Dannevirke (63).					
0.8	0.07	0.06	14								
Rsd 0.3s	17ph/15stn	Dmin 271km	Az.gap 293°								
Corr. 0.707	10M/5stn	Msd 0.4	1↓								
MAR 17 0641 52.8s	40.38S	173.47E	179km	M=3.8	92/2463	MAR 18 1120 04.6s	38.91S	178.28E	28km	M=3.5	92/2509
0.4	0.03	0.02	3			0.2	0.01	0.02	1		
Rsd 0.2s	18ph/10stn	Dmin 61km	Az.gap 222°			Rsd 0.1s	16ph/12stn	Dmin 39km	Az.gap 217°		
Corr. -0.176	9M/7stn	Msd 0.2	1↑			Corr. -0.801	21M/16stn	Msd 0.2	1↑		
MAR 17 0703 39.7s	37.73S	177.57E	51km	M=3.8	92/2464	MAR 18 1224 22.7s	36.50S	178.58E	102km	M=4.4	92/2511
0.2	0.01	0.01	3			0.7	0.06	0.05	12		
Rsd 0.1s	13ph/7stn	Dmin 66km	Az.gap 134°			Rsd 0.3s	14ph/7stn	Dmin 124km	Az.gap 286°		
Corr. -0.008	12M/8stn	Msd 0.2	1↑ 1↓			Corr. 0.475	13M/7stn	Msd 0.3	1↑ 1↓		
MAR 17 1717 41.1s	40.47S	176.35E	32km	M=4.2	92/2476	MAR 18 1324 24.6s	37.80S	176.76E	151km	M=3.9	92/2513
0.1	0.01	0.02	1			0.4	0.02	0.02	3		
Rsd 0.2s	40ph/33stn	Dmin 11km	Az.gap 122°			Rsd 0.3s	25ph/17stn	Dmin 53km	Az.gap 120°		
Corr. -0.613	12M/6stn	Msd 0.3	9↑ 2↓			Corr. 0.094	19M/17stn	Msd 0.2	3↑ 2↓		
Felt Mt Vernon (60), Palmerston North (62) and Dannevirke (63).											
MAR 17 2327 41.9s	40.88S	175.42E	42km	M=3.6	92/2483	MAR 18 1502 32.0s	37.88S	175.84E	191km	M=3.6	92/2516
0.1	0.01	0.01	2			0.6	0.06	0.14	10		
Rsd 0.3s	32ph/23stn	Dmin 29km	Az.gap 86°			Rsd 0.3s	10ph/6stn	Dmin 119km	Az.gap 272°		
Corr. -0.373	15M/12stn	Msd 0.2	5↑ 4↓			Corr. -0.820	2M/2stn	Msd 0.5			

MAR 19 0350	17.5s	38.92S	175.20E	209km	M=3.6	92/2534	MAR 21 1612	26.4s	37.72S	178.01E	76km	M=3.6	92/2604
	0.5	0.02	0.05	5				0.2	0.01	0.01	2		
Rsd 0.1s	17ph/9stn	Dmin 100km	Az.gap 201°				Rsd 0.1s	11ph/5stn	Dmin 29km	Az.gap 125°			
Corr. -0.766	13M/12stn	Msd 0.3	1↑				Corr. -0.400	5M/4stn	Msd 0.1	1↑			
MAR 20 0748	26.1s	38.27S	176.20E	154km	M=3.7	92/2566	MAR 22 0140	20.6s	41.25S	177.95E	33km	M=5.1	92/2617
	0.6	0.05	0.06	5				0.4	0.01	0.04	R		
Rsd 0.4s	12ph/8stn	Dmin 80km	Az.gap 211°				Rsd 0.1s	23ph/21stn	Dmin 152km	Az.gap 225°			
Corr. -0.707	5M/5stn	Msd 0.1	1↑ 1↓				Corr. -0.727	24M/12stn	Msd 0.2	4↑ 3↓			
MAR 20 0828	15.1s	37.11S	177.46E	141km	M=3.9	92/2568	MAR 22 1530	55.3s	35.74S	178.20E	238km	M=4.0	92/2635
	0.4	0.03	0.02	5				0.4	0.03	0.03	4		
Rsd 0.2s	7ph/5stn	Dmin 92km	Az.gap 202°				Rsd 0.1s	10ph/8stn	Dmin 207km	Az.gap 295°			
Corr. 0.328	11M/9stn	Msd 0.2	1↓				Corr. 0.109	6M/6stn	Msd 0.2	1↓			
MAR 20 0857	09.8s	37.50S	179.98E	33km	M=3.9	92/2569	MAR 23 1506	50.0s	42.19S	173.43E	59km	M=4.1	92/2671
	0.4	0.05	0.04	R				0.1	0.01	0.01	2		
Rsd 0.1s	13ph/10stn	Dmin 149km	Az.gap 295°				Rsd 0.2s	34ph/22stn	Dmin 27km	Az.gap 96°			
Corr. -0.291	15M/11stn	Msd 0.2					Corr. -0.344	15M/12stn	Msd 0.2	1↑			
MAR 21 0220	59.7s	36.35S	177.59E	248km	M=4.0	92/2582	MAR 24 0525	24.6s	38.62S	175.99E	124km	M=3.7	92/2687
	1.0	0.07	0.10	8				1.0	0.04	0.07	9		
Rsd 0.3s	5ph/4stn	Dmin 173km	Az.gap 276°				Rsd 0.3s	20ph/13stn	Dmin 96km	Az.gap 237°			
Corr. 0.539	2M/2stn	Msd 0.1					Corr. -0.793	11M/10stn	Msd 0.4	1↑			
MAR 21 0239	04.8s	37.54S	179.61E	12km	M=3.7	92/2583	MAR 24 0918	43.7s	37.75S	175.94E	213km	M=3.6	92/2693
	0.7	0.04	0.05	R				0.4	0.03	0.05	3		
Rsd 0.3s	8ph/5stn	Dmin 116km	Az.gap 306°				Rsd 0.1s	15ph/11stn	Dmin 118km	Az.gap 271°			
Corr. 0.118	8M/4stn	Msd 0.2					Corr. -0.789	10M/10stn	Msd 0.3	1↑			
MAR 21 0710	19.2s	39.39S	179.68E	33km	M=4.2	92/2589	MAR 24 1125	28.0s	35.35S	179.02E	231km	M=3.8	92/2698
	0.6	0.02	0.05	R				0.8	0.11	0.11	18		
Rsd 0.3s	25ph/19stn	Dmin 157km	Az.gap 260°				Rsd 0.3s	7ph/4stn	Dmin 258km	Az.gap 312°			
Corr. 0.052	35M/30stn	Msd 0.2	1↑				Corr. 0.727	3M/3stn	Msd 0.0				
MAR 21 1002	36.4s	37.61S	179.76E	12km	M=4.2	92/2593	MAR 24 1340	26.3s	37.37S	177.26E	130km	M=3.9	92/2703
	0.3	0.02	0.02	R				0.0	0.00	0.00	0		
Rsd 0.1s	14ph/12stn	Dmin 129km	Az.gap 295°				Rsd 0.0s	8ph/5stn	Dmin 95km	Az.gap 170°			
Corr. -0.027	28M/22stn	Msd 0.1	1↓				Corr. 0.063	5M/4stn	Msd 0.3	1↑			
MAR 21 1013	22.8s	37.51S	179.78E	33km	M=3.6	92/2595	MAR 24 1511	23.8s	42.08S	172.95E	79km	M=3.7	92/2710
	0.5	0.03	0.05	R				0.2	0.01	0.01	2		
Rsd 0.2s	7ph/5stn	Dmin 131km	Az.gap 309°				Rsd 0.2s	35ph/21stn	Dmin 35km	Az.gap 65°			
Corr. -0.149	6M/4stn	Msd 0.2					Corr. -0.107	17M/12stn	Msd 0.1	3↑ 2↓			
MAR 21 1534	01.7s	37.54S	179.89E	33km	M=3.6	92/2603	MAR 24 2106	16.5s	37.74S	176.61E	152km	M=4.2	92/2718
	0.7	0.04	0.06	R				0.2	0.01	0.01	2		
Rsd 0.2s	11ph/8stn	Dmin 140km	Az.gap 299°				Rsd 0.2s	21ph/17stn	Dmin 72km	Az.gap 121°			
Corr. -0.155	7M/6stn	Msd 0.1					Corr. 0.019	26M/23stn	Msd 0.3	8↑ 1↓			

MAR 25 0347	09.1s	37.01S	176.93E	213km	M=4.1	92/2724	MAR 25 1853	46.8s	35.39S	178.31E	33km	M=4.5	92/2792
	0.3	0.03	0.03	3				1.2	0.07	0.09	R		
Rsd 0.1s	10ph/6stn	Dmin 112km	Az.gap 194°				Rsd 0.5s	12ph/9stn	Dmin 246km	Az.gap 281°			
Corr. 0.668	12M/11stn	Msd 0.3	1↓				Corr. 0.445	10M/8stn	Msd 0.3				
MAR 25 1238	35.6s	37.86S	178.58E	5km	M=3.5	92/2740	MAR 25 1900	19.4s	38.66S	175.82E	136km	M=3.7	92/2793
	0.5	0.01	0.04	R				0.8	0.03	0.03	8		
Rsd 0.4s	11ph/6stn	Dmin 37km	Az.gap 249°				Rsd 0.3s	21ph/15stn	Dmin 64km	Az.gap 148°			
Corr. -0.268	11M/7stn	Msd 0.1	1↑				Corr. -0.013	19M/17stn	Msd 0.2	1↑			
MAR 25 1649	26.1s	35.38S	178.40E	12km	M=4.4	92/2753	MAR 25 2029	25.8s	37.23S	177.09E	5km	M=3.7	92/2807
	0.8	0.04	0.05	R				0.4	0.04	0.03	R		
Rsd 0.2s	12ph/10stn	Dmin 247km	Az.gap 283°				Rsd 0.5s	12ph/8stn	Dmin 114km	Az.gap 172°			
Corr. 0.465	12M/10stn	Msd 0.4					Corr. 0.520	13M/9stn	Msd 0.2				
MAR 25 1727	31.9s	37.25S	177.21E	12km	M=5.7	92/2754	MAR 25 2109	23.6s	37.29S	177.10E	5km	M=3.5	92/2810
	0.2	0.02	0.01	R				0.3	0.03	0.02	R		
Rsd 0.2s	27ph/21stn	Dmin 105km	Az.gap 173°				Rsd 0.4s	8ph/6stn	Dmin 108km	Az.gap 172°			
Corr. 0.406	20M/10stn	Msd 0.3	1↑				Corr. 0.412	5M/5stn	Msd 0.2				
Felt Bay of Plenty to Cape Runaway, max. int. MM6 at Waihi (21).													
MAR 25 1730	23.7s	37.24S	177.13E	12km	M=3.9	92/2756	MAR 25 2109	40.3s	37.48S	177.14E	5km	M=3.5	92/2811
	0.3	0.02	0.02	R				0.3	0.03	0.03	R		
Rsd 0.4s	13ph/8stn	Dmin 111km	Az.gap 172°				Rsd 0.4s	6ph/5stn	Dmin 86km	Az.gap 156°			
Corr. 0.422	19M/13stn	Msd 1.0					Corr. 0.486	7M/5stn	Msd 0.3				
MAR 25 1731	49.0s	37.25S	177.17E	12km	M=3.8	92/2757	MAR 25 2127	52.0s	38.09S	175.76E	5km	M=3.6	92/2815
	0.3	0.03	0.02	R				0.3	0.02	0.03	R		
Rsd 0.4s	10ph/6stn	Dmin 107km	Az.gap 179°				Rsd 0.1s	6ph/3stn	Dmin 120km	Az.gap 252°			
Corr. 0.381	9M/5stn	Msd 0.2					Corr. 0.891	2M/2stn	Msd 0.3				
MAR 25 1736	31.6s	37.33S	176.99E	12km	M=3.6	92/2761	MAR 25 2151	07.5s	37.26S	177.08E	12km	M=4.0	92/2819
	0.4	0.03	0.04	R				0.3	0.02	0.02	R		
Rsd 0.3s	7ph/5stn	Dmin 104km	Az.gap 188°				Rsd 0.3s	16ph/11stn	Dmin 111km	Az.gap 170°			
Corr. 0.594	7M/4stn	Msd 0.3					Corr. 0.465	12M/10stn	Msd 0.1	1↓			
MAR 25 1752	32.2s	37.24S	177.18E	5km	M=3.9	92/2768	MAR 25 2154	47.9s	37.22S	177.13E	12km	M=4.1	92/2820
	0.3	0.02	0.02	R				0.1	0.01	0.01	R		
Rsd 0.3s	10ph/8stn	Dmin 107km	Az.gap 180°				Rsd 0.1s	17ph/11stn	Dmin 111km	Az.gap 173°			
Corr. 0.408	15M/10stn	Msd 0.2					Corr. 0.566	20M/15stn	Msd 0.3	1↑			
MAR 25 1753	15.9s	37.33S	177.14E	5km	M=3.6	92/2769	MAR 26 0049	20.1s	37.22S	177.12E	5km	M=3.9	92/2836
	0.2	0.02	0.02	R				0.3	0.03	0.02	R		
Rsd 0.1s	7ph/6stn	Dmin 103km	Az.gap 165°				Rsd 0.4s	14ph/9stn	Dmin 113km	Az.gap 179°			
Corr. 0.190	12M/8stn	Msd 0.2					Corr. 0.447	15M/9stn	Msd 0.2				
MAR 25 1817	47.6s	37.22S	177.12E	12km	M=3.7	92/2780	MAR 26 0053	00.7s	37.30S	177.08E	5km	M=3.6	92/2837
	0.4	0.04	0.03	R				0.2	0.02	0.01	R		
Rsd 0.5s	11ph/8stn	Dmin 113km	Az.gap 173°				Rsd 0.2s	13ph/6stn	Dmin 106km	Az.gap 170°			
Corr. 0.512	15M/10stn	Msd 0.2					Corr. 0.563	10M/7stn	Msd 0.3				

MAR 26 0053	40.6s	37.04S	177.21E	175km	M=3.8	92/2838	MAR 26 1302	25.4s	37.13S	177.33E	12km	M=3.8	92/2897
	0.1	0.01	0.01	2				0.9	0.08	0.07	R		
Rsd 0.1s	10ph/5stn		Dmin 115km	Az.gap 283°			Rsd 0.6s	8ph/6stn		Dmin 101km	Az.gap 195°		
Corr. -0.248	5M/5stn	Msd 0.3					Corr. 0.609	14M/8stn	Msd 0.3				
MAR 26 0251	17.2s	37.23S	177.10E	12km	M=4.1	92/2850	MAR 26 1308	22.0s	37.24S	177.14E	12km	M=3.5	92/2899
	0.3	0.02	0.02	R				0.4	0.04	0.03	R		
Rsd 0.3s	14ph/8stn		Dmin 114km	Az.gap 178°			Rsd 0.4s	9ph/7stn		Dmin 110km	Az.gap 178°		
Corr. 0.570	16M/10stn	Msd 0.3					Corr. 0.422	9M/8stn	Msd 0.2				
MAR 26 0252	54.2s	37.22S	177.12E	12km	M=3.9	92/2851	MAR 26 1322	29.1s	44.97S	167.46E	67km	M=3.5	92/2904
	0.2	0.02	0.02	R				0.3	0.01	0.02	2		
Rsd 0.2s	14ph/8stn		Dmin 113km	Az.gap 173°			Rsd 0.1s	14ph/7stn		Dmin 50km	Az.gap 201°		
Corr. 0.582	16M/10stn	Msd 0.2					Corr. -0.754	13M/9stn	Msd 0.2		1↑ 1↓		No readings from Clyde Network.
MAR 26 0422	12.2s	37.28S	177.05E	5km	M=3.8	92/2858	MAR 26 1325	38.7s	37.29S	177.07E	12km	M=4.6	92/2905
	0.3	0.03	0.03	R				0.3	0.03	0.02	R		
Rsd 0.4s	14ph/9stn		Dmin 108km	Az.gap 172°			Rsd 0.3s	17ph/15stn		Dmin 108km	Az.gap 167°		
Corr. 0.539	14M/9stn	Msd 0.2					Corr. 0.637	8M/4stn	Msd 0.2		1↑		
MAR 26 0502	24.8s	37.23S	177.12E	5km	M=3.8	92/2860	MAR 26 1330	08.8s	37.06S	177.08E	5km	M=4.0	92/2906
	0.3	0.03	0.03	R				0.8	0.06	0.02	R		
Rsd 0.3s	10ph/8stn		Dmin 112km	Az.gap 179°			Rsd 0.3s	11ph/7stn		Dmin 124km	Az.gap 244°		
Corr. 0.730	14M/8stn	Msd 0.3	1↑				Corr. 0.114	10M/8stn	Msd 0.3				
MAR 26 0633	12.9s	37.25S	177.08E	5km	M=4.2	92/2864	MAR 26 1337	47.2s	37.18S	177.08E	5km	M=3.6	92/2907
	0.4	0.03	0.03	R				0.4	0.03	0.02	R		
Rsd 0.6s	15ph/10stn		Dmin 112km	Az.gap 170°			Rsd 0.3s	13ph/9stn		Dmin 118km	Az.gap 183°		
Corr. 0.479	16M/10stn	Msd 0.2					Corr. 0.012	12M/9stn	Msd 0.1				
MAR 26 0716	57.9s	37.23S	177.12E	12km	M=3.9	92/2867	MAR 26 1407	06.6s	37.26S	177.10E	12km	M=3.7	92/2909
	0.2	0.02	0.02	R				0.3	0.03	0.02	R		
Rsd 0.3s	12ph/9stn		Dmin 112km	Az.gap 173°			Rsd 0.4s	16ph/11stn		Dmin 111km	Az.gap 170°		
Corr. 0.688	16M/10stn	Msd 0.2					Corr. 0.311	16M/10stn	Msd 0.2		1↓		
MAR 26 1105	41.6s	37.25S	177.12E	5km	M=3.9	92/2884	MAR 26 1417	11.7s	35.69S	178.58E	272km	M=3.8	92/2914
	0.2	0.01	0.01	R				0.5	0.09	0.17	7		
Rsd 0.2s	20ph/11stn		Dmin 111km	Az.gap 171°			Rsd 0.2s	10ph/8stn		Dmin 214km	Az.gap 339°		
Corr. 0.508	16M/10stn	Msd 0.2					Corr. -0.875	6M/6stn	Msd 0.1				
MAR 26 1249	50.9s	37.22S	177.13E	12km	M=4.1	92/2892	MAR 26 1742	20.5s	35.36S	178.67E	33km	M=3.6	92/2929
	0.2	0.03	0.02	R				0.6	0.03	0.04	R		
Rsd 0.3s	13ph/10stn		Dmin 112km	Az.gap 173°			Rsd 0.2s	7ph/3stn		Dmin 307km	Az.gap 324°		
Corr. 0.641	18M/12stn	Msd 0.3					Corr. 0.172	3M/3stn	Msd 0.2				
MAR 26 1301	56.2s	37.23S	177.12E	12km	M=4.0	92/2896	MAR 26 1909	20.9s	35.39S	178.43E	12km	M=4.1	92/2931
	0.3	0.02	0.03	R				1.2	0.07	0.08	R		
Rsd 0.3s	15ph/11stn		Dmin 112km	Az.gap 173°			Rsd 0.5s	10ph/5stn		Dmin 287km	Az.gap 305°		
Corr. 0.570	12M/10stn	Msd 0.1					Corr. 0.309	6M/6stn	Msd 0.4				

MAR 26 2013	36.5s	36.60S	177.52E	197km	M=4.2	92/2938	MAR 27 0825	44.5s	37.27S	177.08E	5km	M=3.7	92/2968
Rsd 0.1s	0.3	0.02	0.02	3			Rsd 0.3s	0.2	0.02	0.02	R		
Corr. 0.357	26M/21stn	Dmin 131km	Az.gap 244°				Corr. 0.594	16ph/10stn	Dmin 110km	Az.gap 169°			
		Msd 0.3	1↓					15M/9stn	Msd 0.2	2↑ 1↓			
MAR 26 2138	52.5s	37.29S	177.08E	12km	M=3.6	92/2942	MAR 27 0904	59.2s	37.26S	177.19E	12km	M=3.5	92/2970
Rsd 0.4s	0.4	0.03	0.04	R			Rsd 0.4s	0.4	0.03	0.03	R		
Corr. 0.605	11ph/8stn	Dmin 108km	Az.gap 167°				Corr. 0.621	7ph/5stn	Dmin 105km	Az.gap 178°			
	13M/9stn	Msd 0.2						14M/10stn	Msd 0.2				
MAR 26 2159	13.1s	37.29S	177.16E	12km	M=3.6	92/2944	MAR 27 0907	58.5s	38.61S	175.57E	266km	M=3.5	92/2971
Rsd 0.4s	0.3	0.03	0.03	R			Rsd 0.2s	0.7	0.04	0.05	5		
Corr. 0.590	8ph/6stn	Dmin 107km	Az.gap 174°				Corr. -0.467	11ph/9stn	Dmin 61km	Az.gap 224°			
	10M/7stn	Msd 0.5						5M/5stn	Msd 0.2	1↓			
MAR 26 2315	48.9s	37.20S	177.23E	12km	M=4.2	92/2946	MAR 27 1048	04.5s	38.60S	175.85E	156km	M=3.8	92/2981
Rsd 0.4s	0.3	0.04	0.03	R			Rsd 0.2s	0.4	0.02	0.02	3		
Corr. 0.625	11ph/9stn	Dmin 105km	Az.gap 177°				Corr. -0.410	21ph/15stn	Dmin 68km	Az.gap 147°			
	16M/10stn	Msd 0.2						17M/15stn	Msd 0.2	1↑ 5↓			
MAR 26 2328	24.8s	37.24S	177.21E	12km	M=3.9	92/2948	MAR 27 1400	29.9s	39.30S	175.15E	12km	M=3.6	92/2983
Rsd 0.3s	0.2	0.03	0.02	R			Rsd 0.3s	0.2	0.01	0.02	R		
Corr. 0.621	10ph/8stn	Dmin 105km	Az.gap 173°				Corr. -0.400	25ph/19stn	Dmin 25km	Az.gap 109°			
	15M/9stn	Msd 0.2						28M/24stn	Msd 0.3	3↑ 2↓			
MAR 26 2331	26.0s	37.29S	177.11E	12km	M=3.6	92/2949	MAR 27 1525	22.8s	35.34S	178.76E	33km	M=3.8	92/2985
Rsd 0.5s	1.1	0.09	0.06	R			Rsd 0.4s	4.1	0.21	0.31	R		
Corr. -0.385	8ph/7stn	Dmin 108km	Az.gap 224°				Corr. 0.730	4ph/3stn	Dmin 315km	Az.gap 325°			
	13M/9stn	Msd 0.2						3M/3stn	Msd 0.5	Poorly recorded.			
MAR 27 0241	06.1s	37.21S	177.21E	12km	M=4.6	92/2958	MAR 27 2137	26.8s	37.30S	177.06E	12km	M=4.5	92/2995
Rsd 0.3s	0.3	0.02	0.02	R			Rsd 0.6s	0.4	0.04	0.03	R		
Corr. 0.609	11ph/8stn	Dmin 106km	Az.gap 176°				Corr. 0.531	10ph/9stn	Dmin 107km	Az.gap 166°			
	8M/4stn	Msd 0.2						8M/4stn	Msd 0.3	1↓			
MAR 27 0334	35.9s	37.26S	177.17E	5km	M=3.7	92/2961	MAR 28 0059	41.9s	35.49S	177.80E	256km	M=4.2	92/3004
Rsd 0.3s	0.2	0.02	0.02	R			Rsd 0.1s	0.4	0.06	0.09	5		
Corr. 0.365	11ph/7stn	Dmin 107km	Az.gap 178°				Corr. -0.910	12ph/10stn	Dmin 313km	Az.gap 335°			
	8M/4stn	Msd 0.2						5M/4stn	Msd 0.5	1↓			
MAR 27 0357	02.3s	37.24S	177.13E	5km	M=4.7	92/2964	MAR 28 0408	58.0s	37.27S	177.16E	12km	M=3.5	92/3010
Rsd 0.2s	0.2	0.02	0.01	R			Rsd 0.1s	0.1	0.01	0.01	R		
Corr. 0.539	23ph/16stn	Dmin 111km	Az.gap 172°				Corr. 0.465	7ph/5stn	Dmin 108km	Az.gap 176°			
	8M/4stn	Msd 0.2	1↑ 1↓					9M/5stn	Msd 0.2	1↑			
Felt Waihi (21) MM4.													
MAR 27 0434	10.5s	37.77S	178.01E	71km	M=4.1	92/2965	MAR 28 0627	31.4s	37.27S	177.12E	12km	M=4.0	92/3012
Rsd 0.2s	0.3	0.02	0.02	2			Rsd 0.5s	0.4	0.04	0.03	R		
Corr. 0.175	18ph/12stn	Dmin 32km	Az.gap 114°				Corr. 0.543	12ph/9stn	Dmin 110km	Az.gap 170°			
	22M/19stn	Msd 0.2	2↑ 2↓					16M/10stn	Msd 0.3				

MAR 28 0835	16.7s	39.29S	175.14E	16km	M=3.5	92/3017			92/3076
	0.2	0.01	0.02	3					
Rsd 0.3s	24ph/18stn	Dmin 25km	Az.gap 109°						
Corr. 0.289	19M/16stn	Msd 0.3	2↑ 1↓						
						92/3021			
MAR 28 0948	31.3s	35.97S	178.14E	238km	M=3.7				92/3085
	1.0	0.11	0.17	9					
Rsd 0.2s	7ph/4stn	Dmin 181km	Az.gap 332°						
Corr. -0.891	4M/4stn	Msd 0.2							
						92/3043			
MAR 29 0927	39.7s	38.24S	176.19E	158km	M=3.7				92/3086
	0.4	0.03	0.02	3					
Rsd 0.3s	13ph/10stn	Dmin 80km	Az.gap 174°						
Corr. -0.453	10M/9stn	Msd 0.2	1↑						
						92/3044			
MAR 29 1110	00.6s	40.20S	173.55E	168km	M=3.6				92/3098
	0.5	0.02	0.02	5					
Rsd 0.3s	23ph/17stn	Dmin 74km	Az.gap 159°						
Corr. -0.275	9M/9stn	Msd 0.2	1↑						
						92/3053			
MAR 29 1846	26.6s	37.79S	176.07E	236km	M=4.2				92/3139
	0.4	0.02	0.04	3					
Rsd 0.2s	14ph/12stn	Dmin 106km	Az.gap 124°						
Corr. 0.480	21M/19stn	Msd 0.2							
						92/3055			
MAR 29 1929	34.4s	37.24S	177.22E	12km	M=4.0				92/3205
	0.5	0.01	0.01	4					
Rsd 0.2s	9ph/5stn	Dmin 104km	Az.gap 181°						
Corr. 0.447	13M/7stn	Msd 0.1				Felt Tauranga (26).			
						92/3067			
MAR 30 0235	25.8s	36.52S	177.07E	210km	M=3.9				92/3278
	0.8	0.08	0.09	5					
Rsd 0.2s	11ph/7stn	Dmin 163km	Az.gap 294°						
Corr. -0.816	5M/5stn	Msd 0.3	1↓						
						92/3073			
MAR 30 0557	56.4s	36.45S	177.20E	12km	M=4.4				92/3316
	1.1	0.10	0.04	R					
Rsd 0.4s	8ph/6stn	Dmin 136km	Az.gap 247°						
Corr. 0.742	13M/7stn	Msd 0.2							
						92/3075			
MAR 30 0702	52.4s	43.05S	171.23E	5km	M=5.8				92/3338
	0.2	0.02	0.01	R					
Rsd 0.2s	14ph/11stn	Dmin 40km	Az.gap 113°						
Corr. -0.202	29M/15stn	Msd 0.2	1↓						
						Felt throughout much of the South Island, maximum intensity MM5 at Lake Kaniere (92) and Erewhon (106).			

MAR 31 0244	29.3s	43.03S	171.21E	5km	M=3.6	92/3355	APR 01 1417	40.1s	36.20S	179.35W	12km	M=3.5	92/3485
Rsd 0.1s	0.1	0.01	0.01	R			0.2	0.01	0.02	R			
Corr. -0.297	15ph/10stn	Dmin 39km	Az.gap 117°				Rsd 0.1s	6ph/4stn	Dmin 261km	Az.gap 324°			
	27M/22stn	Msd 0.3	2↑ 1↓				Corr. -0.465	3M/3stn	Msd 0.0				
MAR 31 0823	58.9s	34.83S	177.82E	33km	M=3.9	92/3383	APR 01 1538	15.8s	40.52S	173.42E	157km	M=4.3	92/3488
	2.7	0.17	0.35	R			0.2	0.01	0.01	2			
Rsd 0.3s	5ph/3stn	Dmin 311km	Az.gap 343°				Rsd 0.2s	41ph/29stn	Dmin 53km	Az.gap 134°			
Corr. -0.898	1M/1stn	Msd N.D.					Corr. -0.211	25M/20stn	Msd 0.2	2↑ 4↓			
MAR 31 1305	48.3s	39.68S	174.36E	110km	M=4.0	92/3407	APR 01 2050	51.4s	36.72S	177.29E	228km	M=3.6	92/3499
	0.2	0.01	0.02	3			0.9	0.10	0.15	11			
Rsd 0.2s	40ph/29stn	Dmin 51km	Az.gap 86°				Rsd 0.3s	9ph/4stn	Dmin 171km	Az.gap 312°			
Corr. -0.228	27M/22stn	Msd 0.3	4↑ 2↓				Corr. -0.809	2M/2stn	Msd 0.0				
MAR 31 1418	03.5s	37.23S	177.15E	12km	M=3.7	92/3416	APR 01 2257	40.4s	43.02S	171.20E	5km	M=5.2	92/3506
	0.2	0.02	0.02	R			0.1	0.01	0.01	R			
Rsd 0.2s	13ph/9stn	Dmin 110km	Az.gap 179°				Rsd 0.1s	11ph/10stn	Dmin 38km	Az.gap 118°			
Corr. 0.719	17M/12stn	Msd 0.2					Corr. -0.410	27M/14stn	Msd 0.2	4↑ 1↓			
APR 01 0154	07.4s	36.66S	176.35E	176km	M=3.8	92/3455							92/3507
	0.4	0.06	0.11	17			0.1	0.01	0.01	R			
Rsd 0.1s	11ph/5stn	Dmin 231km	Az.gap 293°				Rsd 0.1s	6ph/5stn	Dmin 38km	Az.gap 136°			
Corr. -0.895	3M/3stn	Msd 0.4					Corr. -0.426	2M/2stn	Msd 0.1				
APR 01 0545	35.8s	45.05S	167.44E	84km	M=4.2	92/3466	APR 01 2259	10.0s	43.04S	171.20E	5km	M=3.9	92/3508
	0.4	0.02	0.03	2			0.2	R	R	R			
Rsd 0.1s	22ph/16stn	Dmin 51km	Az.gap 197°				Rsd 0.2s	2ph/2stn	Dmin 39km	Az.gap 243°			
Corr. -0.621	9M/5stn	Msd 0.2	1↓				Corr. 0.000	3M/3stn	Msd 0.2				
APR 01 0555	26.4s	43.03S	171.23E	5km	M=4.0	92/3467	APR 01 2259	15.3s	43.03S	171.21E	5km	M=4.2	92/3509
	0.1	0.01	0.01	R			0.1	0.01	0.01	R			
Rsd 0.1s	17ph/11stn	Dmin 40km	Az.gap 117°				Rsd 0.2s	9ph/8stn	Dmin 38km	Az.gap 116°			
Corr. -0.371	11M/6stn	Msd 0.2	1↓				Corr. -0.547	15M/9stn	Msd 0.2				
APR 01 0833	06.8s	37.30S	177.10E	5km	M=3.0	92/3470	APR 01 2309	50.5s	43.04S	171.20E	5km	M=3.9	92/3516
	0.2	0.01	0.01	R			0.1	0.01	0.01	R			
Rsd 0.1s	11ph/5stn	Dmin 106km	Az.gap 172°				Rsd 0.1s	11ph/10stn	Dmin 38km	Az.gap 115°			
Corr. 0.490	5M/5stn	Msd 0.2					Corr. -0.457	24M/19stn	Msd 0.2	1↑ 2↓			
	Felt Waihi (21) MM4.												
APR 01 1224	44.7s	40.26S	173.53E	168km	M=4.0	92/3480	APR 01 2315	09.6s	43.03S	171.20E	5km	M=3.9	92/3519
	0.3	0.01	0.01	2			0.2	0.01	0.01	3			
Rsd 0.2s	36ph/25stn	Dmin 69km	Az.gap 146°				Rsd 0.1s	12ph/11stn	Dmin 38km	Az.gap 116°			
Corr. -0.178	21M/19stn	Msd 0.2	1↑				Corr. -0.289	9M/5stn	Msd 0.1	2↑ 1↓			
APR 01 1410	45.3s	37.23S	177.16E	5km	M=3.5	92/3483	APR 01 2317	38.1s	43.02S	171.20E	5km	M=3.5	92/3520
	0.2	0.02	0.02	R			0.1	0.01	0.01	R			
Rsd 0.3s	9ph/6stn	Dmin 109km	Az.gap 180°				Rsd 0.2s	12ph/11stn	Dmin 39km	Az.gap 118°			
Corr. 0.586	12M/9stn	Msd 0.2	1↑				Corr. -0.340	19M/17stn	Msd 0.3	2↑ 1↓			

APR 01 2332	<b>10.4s</b>	<b>43.05S</b>	<b>171.19E</b>	5km	M=3.5	92/3526	APR 03 1535	<b>01.0s</b>	<b>37.31S</b>	<b>177.04E</b>	5km	M=3.6	92/3646
Rsd 0.1s	0.1	0.01	0.01	R			Rsd 0.2s	0.1	0.01	0.01	R		
Corr. -0.215	12ph/11stn	Dmin 37km	Az.gap 115°	1↓			Corr. 0.471	8ph/5stn	Dmin 105km	Az.gap 168°			
18M/16stn	Msd 0.2						Corr. 0.471	7M/5stn	Msd 0.2				
APR 01 2354	<b>38.1s</b>	<b>43.04S</b>	<b>171.21E</b>	5km	M=4.3	92/3530	APR 03 1538	<b>29.4s</b>	<b>37.50S</b>	<b>177.00E</b>	5km	M=3.6	92/3647
Rsd 0.1s	0.1	0.01	0.01	R			Rsd 0.3s	0.2	0.02	0.02	R		
Corr. -0.342	22ph/12stn	Dmin 39km	Az.gap 116°	6↑ 3↓			Corr. 0.566	11ph/5stn	Dmin 85km	Az.gap 150°			
17M/9stn	Msd 0.2						Corr. 0.566	11M/5stn	Msd 0.3				
APR 02 0405	<b>15.3s</b>	<b>38.93S</b>	<b>176.95E</b>	56km	M=4.1	92/3549	APR 03 1547	<b>15.7s</b>	<b>37.37S</b>	<b>177.10E</b>	5km	M=3.5	92/3649
Rsd 0.3s	0.2	0.01	0.02	2			Rsd 0.5s	0.6	0.05	0.04	R		
Corr. 0.238	42ph/33stn	Dmin 12km	Az.gap 114°	2↑ 3↓			Corr. 0.414	13ph/9stn	Dmin 98km	Az.gap 165°			
24M/18stn	Msd 0.2						Corr. 0.414	10M/8stn	Msd 0.2				
APR 02 0738	<b>09.9s</b>	<b>40.35S</b>	<b>174.07E</b>	96km	M=3.6	92/3564	APR 03 1552	<b>46.6s</b>	<b>37.42S</b>	<b>177.09E</b>	5km	M=3.7	92/3651
Rsd 0.2s	0.3	0.01	0.02	5			Rsd 0.2s	0.2	0.01	0.01	R		
Corr. -0.004	33ph/26stn	Dmin 52km	Az.gap 107°	2↑ 2↓			Corr. 0.467	13ph/7stn	Dmin 93km	Az.gap 160°			
16M/13stn	Msd 0.2						Corr. 0.467	13M/8stn	Msd 0.2				
APR 02 1002	<b>51.2s</b>	<b>37.24S</b>	<b>177.22E</b>	5km	M=3.9	92/3572	APR 03 1553	<b>25.2s</b>	<b>37.52S</b>	<b>177.09E</b>	25km	M=4.1	92/3652
Rsd 0.3s	0.2	0.02	0.02	R			Rsd 0.3s	0.4	0.02	0.02	4		
Corr. 0.551	13ph/7stn	Dmin 32km	Az.gap 181°	2↑ 2↓			Corr. -0.194	16ph/10stn	Dmin 83km	Az.gap 150°			
12M/6stn	Msd 0.2						Corr. -0.194	13M/8stn	Msd 0.3				
APR 02 1823	<b>27.2s</b>	<b>38.43S</b>	<b>176.63E</b>	157km	M=3.5	92/3591	APR 03 1555	<b>22.2s</b>	<b>37.43S</b>	<b>176.93E</b>	12km	M=3.7	92/3653
Rsd 0.5s	1.4	0.03	0.11	16			Rsd 0.1s	0.3	0.02	0.01	R		
Corr. -0.195	7ph/5stn	Dmin 46km	Az.gap 134°	16			Corr. -0.142	5ph/3stn	Dmin 94km	Az.gap 312°			
2M/2stn	Msd 0.3						Corr. -0.142	1M/1stn	Msd N.D.				
APR 02 1823	<b>36.0s</b>	<b>37.20S</b>	<b>177.20E</b>	5km	M=3.8	92/3592	APR 03 1606	<b>52.9s</b>	<b>37.42S</b>	<b>177.04E</b>	12km	M=4.0	92/3659
Rsd 0.3s	0.3	0.02	0.02	R			Rsd 0.5s	0.5	0.04	0.04	R		
Corr. 0.441	14ph/8stn	Dmin 37km	Az.gap 185°	16			Corr. 0.348	11ph/9stn	Dmin 93km	Az.gap 158°			
14M/9stn	Msd 0.2						Corr. 0.348	16M/10stn	Msd 0.2				
APR 03 0132	<b>08.2s</b>	<b>37.11S</b>	<b>177.31E</b>	5km	M=3.6	92/3607	APR 03 1607	<b>04.7s</b>	<b>37.48S</b>	<b>177.07E</b>	12km	M=4.0	92/3660
Rsd 0.4s	0.5	0.03	0.04	R			Rsd 0.7s	0.8	0.07	0.10	R		
Corr. 0.504	9ph/5stn	Dmin 103km	Az.gap 197°	16			Corr. 0.738	7ph/3stn	Dmin 87km	Az.gap 179°			
10M/5stn	Msd 0.1						Corr. 0.738	8M/4stn	Msd 0.3				
APR 03 0412	<b>56.7s</b>	<b>37.25S</b>	<b>177.22E</b>	5km	M=3.6	92/3614	Poor solution, in coda of another event.						
Rsd 0.2s	0.2	0.01	0.01	R									
Corr. 0.391	10ph/6stn	Dmin 31km	Az.gap 180°	16									
10M/5stn	Msd 0.2												
APR 03 1438	<b>12.9s</b>	<b>37.29S</b>	<b>177.11E</b>	12km	M=3.8	92/3640	APR 03 1840	<b>33.2s</b>	<b>37.47S</b>	<b>177.03E</b>	5km	M=4.1	92/3698
Rsd 0.2s	0.2	0.02	0.02	R			Rsd 0.1s	0.1	0.01	0.01	R		
Corr. 0.516	12ph/7stn	Dmin 108km	Az.gap 173°	16			Corr. 0.498	12ph/10stn	Dmin 88km	Az.gap 154°			
13M/7stn	Msd 0.2						Corr. 0.498	17M/11stn	Msd 0.2	1↑			
APR 03 1842	<b>44.1s</b>	<b>37.48S</b>	<b>176.96E</b>	5km	M=3.6	92/3699							
Rsd 0.3s	0.3	0.03	0.02	R									
Corr. 0.484	11ph/6stn	Dmin 88km	Az.gap 151°	16									
12M/6stn	Msd 0.2						Corr. 0.484	12M/6stn	Msd 0.2				

APR 03 1904	06.9s	37.49S	176.97E	5km	M=3.6	92/3702	APR 05 1039	10.5s	36.28S	177.31E	217km	M=3.7	92/3806
	0.6	0.05	0.03	R				0.3	0.07	0.03	7		
Rsd 0.4s	7ph/5stn	Dmin 86km	Az.gap 206°				Rsd 0.1s	5ph/3stn	Dmin 216km	Az.gap 333°			
Corr. -0.198	11M/7stn	Msd 0.2					Corr. -0.155	3M/3stn	Msd 0.2				
APR 04 0042	55.1s	39.59S	174.49E	202km	M=3.5	92/3730	APR 05 1522	25.4s	38.36S	176.86E	68km	M=3.9	92/3817
	0.4	0.02	0.03	3				0.1	0.01	0.01	2		
Rsd 0.1s	14ph/9stn	Dmin 44km	Az.gap 188°				Rsd 0.2s	25ph/20stn	Dmin 24km	Az.gap 87°			
Corr. -0.020	8M/7stn	Msd 0.2					Corr. 0.013	25M/19stn	Msd 0.2	1↑ 3↓			
APR 04 0814	34.4s	38.29S	176.23E	110km	M=3.6	92/3741	APR 05 1549	23.5s	37.34S	176.55E	326km	M=4.8	92/3818
	0.5	0.03	0.02	5				0.4	0.05	0.05	4		
Rsd 0.1s	13ph/10stn	Dmin 70km	Az.gap 229°				Rsd 0.2s	17ph/14stn	Dmin 98km	Az.gap 150°			
Corr. -0.316	12M/12stn	Msd 0.2	1↑				Corr. 0.205	8M/4stn	Msd 0.2	1↑			
APR 04 0933	58.9s	40.82S	175.96E	27km	M=3.7	92/3744	APR 06 0220	11.4s	35.98S	178.20E	241km	M=4.1	92/3839
	0.1	0.01	0.02	2				0.8	0.12	0.12	8		
Rsd 0.3s	24ph/20stn	Dmin 35km	Az.gap 147°				Rsd 0.1s	10ph/7stn	Dmin 233km	Az.gap 325°			
Corr. -0.590	29M/26stn	Msd 0.2	1↑				Corr. -0.703	14M/13stn	Msd 0.3				
APR 04 1311	07.2s	36.51S	177.57E	119km	M=4.2	92/3754	APR 06 0503	47.9s	47.41S	165.21E	33km	M=3.8	92/3845
	0.8	0.06	0.05	13				0.5	0.04	0.04	R		
Rsd 0.2s	7ph/4stn	Dmin 137km	Az.gap 252°				Rsd 0.2s	15ph/11stn	Dmin 228km	Az.gap 318°			
Corr. 0.605	5M/3stn	Msd 0.4					Corr. 0.180	17M/13stn	Msd 0.2				
APR 04 1334	25.5s	36.50S	177.44E	141km	M=4.2	92/3756	APR 06 0537	02.2s	40.24S	173.52E	163km	M=4.4	92/3846
	0.1	0.01	0.00	1				0.3	0.01	0.01	2		
Rsd 0.0s	5ph/3stn	Dmin 145km	Az.gap 259°				Rsd 0.2s	45ph/28stn	Dmin 72km	Az.gap 148°			
Corr. 0.738	5M/3stn	Msd 0.4					Corr. -0.099	27M/22stn	Msd 0.2	4↑ 9↓			
APR 04 1446	01.6s	38.50S	175.92E	162km	M=3.9	92/3761	APR 06 0723	09.4s	39.51S	175.63E	5km	M=3.6	92/3850
	0.4	0.02	0.02	3				0.1	0.01	0.01	R		
Rsd 0.2s	30ph/19stn	Dmin 75km	Az.gap 70°				Rsd 0.3s	36ph/30stn	Dmin 27km	Az.gap 50°			
Corr. -0.303	19M/17stn	Msd 0.2	1↑ 3↓				Corr. 0.359	32M/29stn	Msd 0.3	3↑ 1↓			
APR 04 1717	20.4s	38.79S	175.98E	127km	M=4.1	92/3766	APR 06 0749	30.5s	39.45S	174.41E	248km	M=3.6	92/3856
	0.5	0.02	0.02	4				0.4	0.02	0.05	4		
Rsd 0.2s	31ph/19stn	Dmin 54km	Az.gap 64°				Rsd 0.2s	22ph/17stn	Dmin 59km	Az.gap 200°			
Corr. 0.009	24M/20stn	Msd 0.3	2↑ 6↓				Corr. -0.283	12M/10stn	Msd 0.2				
APR 04 1852	56.9s	37.45S	177.03E	12km	M=3.7	92/3767	APR 06 1003	14.9s	38.18S	175.57E	229km	M=3.8	92/3859
	0.2	0.02	0.02	R				0.5	0.03	0.06	5		
Rsd 0.2s	11ph/8stn	Dmin 91km	Az.gap 156°				Rsd 0.2s	18ph/14stn	Dmin 135km	Az.gap 233°			
Corr. 0.613	15M/10stn	Msd 0.2					Corr. -0.684	11M/10stn	Msd 0.1				
APR 05 0215	05.0s	40.46S	176.69E	24km	M=3.7	92/3780	APR 08 0446	19.3s	35.93S	177.60E	5km	M=4.0	92/3939
	0.2	0.01	0.02	1				0.2	0.01	0.02	R		
Rsd 0.2s	29ph/21stn	Dmin 18km	Az.gap 191°				Rsd 0.1s	7ph/4stn	Dmin 196km	Az.gap 323°			
Corr. -0.648	25M/23stn	Msd 0.2	1↑				Corr. 0.069	5M/4stn	Msd 0.2				

								92/3952								92/4011
APR	08	1459	35.7s	38.30S	175.83E	174km	M=4.1		APR	10	0524	10.1s	36.47S	178.19E	166km	M=4.2
			0.6	0.02	0.02	6						0.3	0.02	0.03	3	
Rsd	0.2s	18ph/17stn	Dmin	87km	Az.gap	102°		Rsd	0.1s	11ph/9stn	Dmin	126km	Az.gap	274°		
Corr.	0.233	22M/19stn	Msd	0.2	1↑			Corr.	0.676	14M/12stn	Msd	0.3	1↑	1↓		
							92/3955									92/4023
APR	08	1729	18.3s	36.68S	176.09E	33km	M=4.8		APR	10	0959	32.3s	37.69S	177.66E	77km	M=3.7
			0.6	0.04	0.02	R						0.2	0.01	0.02	3	
Rsd	0.1s	11ph/9stn	Dmin	247km	Az.gap	292°		Rsd	0.1s	17ph/14stn	Dmin	58km	Az.gap	139°		
Corr.	0.090	5M/3stn	Msd	0.7	1↓			Corr.	0.008	20M/18stn	Msd	0.3	1↑	1↓		
							92/3958									92/4038
APR	08	2220	30.7s	41.26S	174.31E	60km	M=3.8		APR	10	1858	31.0s	40.42S	176.76E	23km	M=4.0
			0.0	0.01	0.00	1						0.2	0.01	0.02	2	
Rsd	0.1s	37ph/24stn	Dmin	7km	Az.gap	103°		Rsd	0.2s	28ph/23stn	Dmin	30km	Az.gap	191°		
Corr.	-0.400	14M/10stn	Msd	0.5	1↑			Corr.	-0.602	38M/33stn	Msd	0.2	2↑	4↓		
							92/3963									92/4044
APR	09	0242	22.2s	37.25S	176.58E	230km	M=4.0		APR	10	2129	37.6s	37.38S	177.08E	5km	M=3.9
			0.6	0.05	0.09	9						0.4	0.05	0.05	R	
Rsd	0.2s	13ph/10stn	Dmin	157km	Az.gap	261°		Rsd	0.4s	7ph/6stn	Dmin	20km	Az.gap	163°		
Corr.	-0.770	12M/10stn	Msd	0.3				Corr.	0.785	10M/6stn	Msd	0.2	1↑			
							92/3970									92/4048
APR	09	0721	30.1s	37.28S	177.95E	154km	M=3.7		APR	11	0202	34.3s	35.57S	179.30E	33km	M=4.4
			0.6	0.03	0.37	11						0.7	0.04	0.04	R	
Rsd	0.1s	6ph/3stn	Dmin	47km	Az.gap	322°		Rsd	0.2s	11ph/8stn	Dmin	243km	Az.gap	311°		
Corr.	-0.891	4M/3stn	Msd	0.4				Corr.	0.516	23M/19stn	Msd	0.3				
							92/3980									92/4050
APR	09	1252	08.2s	36.16S	179.90W	12km	M=3.6		APR	11	0406	22.8s	37.03S	176.71E	278km	M=4.2
			0.4	0.01	0.04	R						0.8	0.03	0.03	7	
Rsd	0.1s	6ph/4stn	Dmin	226km	Az.gap	314°		Rsd	0.2s	11ph/10stn	Dmin	93km	Az.gap	184°		
Corr.	0.001	5M/4stn	Msd	0.5				Corr.	0.258	16M/15stn	Msd	0.3				
							92/3982									92/4052
APR	09	1341	46.6s	38.28S	175.79E	140km	M=3.6		APR	11	0448	31.4s	36.90S	177.00E	172km	M=3.7
			0.8	0.10	0.13	20						0.8	0.10	0.20	23	
Rsd	0.4s	17ph/14stn	Dmin	218km	Az.gap	244°		Rsd	0.3s	8ph/4stn	Dmin	139km	Az.gap	288°		
Corr.	-0.887	9M/8stn	Msd	0.5	1↑			Corr.	-0.902	3M/3stn	Msd	0.2				
							92/3987									92/4053
APR	09	1540	14.8s	47.67S	165.67E	33km	M=3.6		APR	11	0526	54.5s	38.56S	175.83E	159km	M=3.7
			3.2	0.23	0.36	R						0.5	0.03	0.03	4	
Rsd	0.7s	4ph/3stn	Dmin	248km	Az.gap	329°		Rsd	0.1s	13ph/10stn	Dmin	71km	Az.gap	209°		
Corr.	-0.164	2M/2stn	Msd	0.3				Corr.	-0.256	10M/10stn	Msd	0.2	1↑			
							92/4007									92/4054
APR	10	0238	57.3s	47.35S	165.28E	33km	M=3.7		APR	11	0530	55.1s	42.07S	172.87E	73km	M=4.1
			0.6	0.04	0.05	R						0.2	0.01	0.02	2	
Rsd	0.2s	11ph/8stn	Dmin	221km	Az.gap	317°		Rsd	0.2s	32ph/20stn	Dmin	34km	Az.gap	61°		
Corr.	0.314	14M/11stn	Msd	0.3				Corr.	-0.159	17M/12stn	Msd	0.3	3↑	2↓		
							92/4008									92/4063
APR	10	0335	47.2s	37.86S	176.91E	149km	M=4.8		APR	11	1228	25.9s	37.38S	179.04E	71km	M=3.7
			0.3	0.02	0.01	2						1.5	0.07	0.15	11	
Rsd	0.2s	32ph/22stn	Dmin	44km	Az.gap	75°		Rsd	0.5s	10ph/7stn	Dmin	70km	Az.gap	290°		
Corr.	0.171	27M/21stn	Msd	0.3	10↑	4↓		Corr.	0.365	6M/4stn	Msd	0.2				

							92/4064						92/4105		
APR	11	1339	51.6s	42.05S	174.14E	15km	M=3.6	APR	12	2137	17.2s	38.10S	176.34E	160km	M=4.9
			0.2	0.01	0.02	2					0.5	0.02	0.02	4	
Rsd	0.2s	26ph/20stn	Dmin	34km	Az.gap	154°	Rsd	0.2s	28ph/25stn	Dmin	16km	Az.gap	93°		
Corr.	-0.680	10M/5stn	Msd	0.1	1↑ 1↓		Corr.	0.134	8M/4stn	Msd	0.2	14↑ 1↓			
						92/4078								92/4113	
APR	11	2305	40.2s	41.47S	174.46E	43km	M=3.4	APR	13	0003	49.4s	38.25S	176.04E	172km	M=3.5
			0.1	0.01	0.01	1					1.0	0.02	0.04	12	
Rsd	0.2s	35ph/21stn	Dmin	32km	Az.gap	124°	Rsd	0.4s	22ph/17stn	Dmin	111km	Az.gap	138°		
Corr.	-0.416	13M/10stn	Msd	0.2	4↑ 5↓		Corr.	-0.256	16M/15stn	Msd	0.3	1↑			
Felt	Fighting Bay	(78)	MM4.												
						92/4081								92/4131	
APR	12	0407	31.9s	37.29S	177.14E	118km	M=3.9	APR	13	0910	28.3s	35.81S	177.34E	203km	M=4.1
			0.7	0.03	0.02	8					0.9	0.08	0.14	19	
Rsd	0.2s	12ph/8stn	Dmin	109km	Az.gap	174°	Rsd	0.3s	10ph/6stn	Dmin	265km	Az.gap	317°		
Corr.	0.324	5M/3stn	Msd	0.3			Corr.	-0.699	4M/3stn	Msd	0.6	1↓			
						92/4082								92/4139	
APR	12	0447	29.9s	37.17S	177.22E	5km	M=3.7	APR	13	1350	19.2s	41.70S	174.32E	14km	M=4.8
			0.4	0.04	0.03	R					0.1	0.01	0.01	2	
Rsd	0.4s	11ph/6stn	Dmin	40km	Az.gap	188°	Rsd	0.2s	28ph/22stn	Dmin	10km	Az.gap	152°		
Corr.	0.598	8M/5stn	Msd	0.1			Corr.	-0.539	16M/8stn	Msd	0.3	8↑ 6↓			
Felt	Blenheim	(77)	MM4.												
						92/4084								92/4140	
APR	12	0631	14.4s	35.43S	178.40E	272km	M=3.6	APR	13	1401	36.9s	41.73S	174.35E	11km	M=3.6
			1.2	0.33	0.66	28					0.2	0.01	0.01	1	
Rsd	0.2s	8ph/7stn	Dmin	294km	Az.gap	336°	Rsd	0.2s	26ph/19stn	Dmin	12km	Az.gap	155°		
Corr.	-0.969	6M/6stn	Msd	0.2			Corr.	-0.703	8M/4stn	Msd	0.4	6↑ 4↓			
						92/4086								92/4155	
APR	12	0828	17.6s	40.44S	174.33E	91km	M=3.5	APR	14	0046	01.1s	41.71S	174.30E	20km	M=3.7
			0.3	0.01	0.01	3					0.1	0.01	0.01	3	
Rsd	0.3s	36ph/24stn	Dmin	52km	Az.gap	91°	Rsd	0.2s	25ph/20stn	Dmin	9km	Az.gap	142°		
Corr.	-0.076	13M/10stn	Msd	0.3	1↑		Corr.	-0.555	8M/4stn	Msd	0.3	2↑ 2↓			
						92/4091								92/4185	
APR	12	1142	27.8s	45.16S	167.49E	115km	M=3.9	APR	14	1643	04.8s	38.77S	175.73E	157km	M=3.6
			0.3	0.01	0.02	2					0.2	0.02	0.02	2	
Rsd	0.2s	26ph/17stn	Dmin	43km	Az.gap	176°	Rsd	0.1s	17ph/12stn	Dmin	47km	Az.gap	192°		
Corr.	-0.248	25M/18stn	Msd	0.2	4↑ 3↓		Corr.	-0.605	15M/13stn	Msd	0.3	1↑			
						92/4094								92/4188	
APR	12	1310	11.9s	36.76S	178.67E	202km	M=4.0	APR	14	2138	05.9s	41.71S	174.30E	19km	M=4.2
			0.9	0.09	0.10	6					0.1	0.01	0.01	2	
Rsd	0.2s	7ph/6stn	Dmin	99km	Az.gap	327°	Rsd	0.3s	23ph/19stn	Dmin	8km	Az.gap	141°		
Corr.	-0.617	4M/3stn	Msd	0.5			Corr.	-0.547	10M/5stn	Msd	0.3	5↑ 6↓			
						92/4096								92/4189	
APR	12	1319	00.2s	39.44S	177.66E	39km	M=3.5	APR	14	2139	20.0s	41.72S	174.32E	20km	M=4.1
			0.5	0.02	0.04	10					0.2	0.01	0.01	3	
Rsd	0.3s	13ph/12stn	Dmin	34km	Az.gap	193°	Rsd	0.3s	20ph/17stn	Dmin	9km	Az.gap	152°		
Corr.	-0.211	7M/7stn	Msd	0.3	1↓		Corr.	-0.582	10M/5stn	Msd	0.3	3↑ 2↓			
						92/4097								92/4205	
APR	12	1550	05.3s	37.29S	177.24E	158km	M=4.0	APR	15	0631	13.8s	39.89S	176.99E	38km	M=3.6
			0.6	0.03	0.03	6					0.2	0.01	0.02	2	
Rsd	0.2s	11ph/9stn	Dmin	100km	Az.gap	176°	Rsd	0.2s	37ph/27stn	Dmin	19km	Az.gap	180°		
Corr.	0.535	18M/16stn	Msd	0.2	1↑		Corr.	-0.648	22M/19stn	Msd	0.3	1↑ 1↓			



APR 19	1529	40.1s	36.79S	176.84E	33km	M=4.1	92/4396	APR 22	2008	49.4s	40.23S	174.02E	108km M=3.5	92/4498
Rsd 0.1s	0.2	0.01	0.01	R	Dmin 190km	Az.gap 299°		Rsd 0.3s	0.3	0.01	0.01	3		
Corr. -0.363	6M/5stn		Msd 0.3	1↑				Corr. -0.158	35ph/22stn	Dmin 64km	Az.gap 114°			
APR 19	1540	28.0s	41.27S	174.99E	25km	M=3.5	92/4397	APR 24	0902	25.6s	35.03S	178.73E	255km M=4.1	92/4528
Rsd 0.1s	0.1	0.01	0.01	1	Dmin 19km	Az.gap 95°		Rsd 0.1s	0.5	0.03	0.05	7		
Corr. -0.171	22ph/19stn		Msd 0.2	4↑ 4↓				Corr. 0.153	13ph/9stn	Dmin 288km	Az.gap 313°			
	20M/16stn		Msd 0.2						10M/9stn	Msd 0.3				
	Felt Wellington (68) and Greytown (69).													
APR 19	1803	09.6s	38.25S	176.22E	174km	M=4.7	92/4403	APR 24	0943	55.2s	39.84S	174.84E	89km M=3.9	92/4530
Rsd 0.2s	0.4	0.02	0.02	4	Dmin 8km	Az.gap 84°		Rsd 0.1s	0.1	0.00	0.01	2		
Corr. 0.120	25ph/21stn		Msd 0.3	11↑ 2↓				Corr. -0.053	31ph/24stn	Dmin 9km	Az.gap 68°			
APR 20	0345	13.5s	37.65S	177.66E	90km	M=3.5	92/4416	APR 24	1254	56.9s	37.36S	177.81E	103km M=3.6	92/4536
Rsd 0.4s	1.0	0.04	0.05	11	Dmin 57km	Az.gap 182°		Rsd 0.1s	0.2	0.01	0.01	2		
Corr. 0.453	10ph/6stn		Msd 0.3	1↑				Corr. 0.539	13ph/10stn	Dmin 51km	Az.gap 192°			
APR 20	1156	15.7s	36.73S	177.45E	12km	M=3.9	92/4429	APR 24	1302	36.4s	37.85S	176.57E	155km M=3.9	92/4537
Rsd 0.3s	0.6	0.05	0.04	R	Dmin 92km	Az.gap 233°		Rsd 0.2s	0.4	0.02	0.01	4		
Corr. 0.688	10ph/7stn		Msd 0.4					Corr. -0.097	17ph/13stn	Dmin 43km	Az.gap 112°			
APR 20	2313	60.0s	38.58S	175.77E	165km	M=4.0	92/4444							
Rsd 0.1s	0.3	0.02	0.02	3	Dmin 68km	Az.gap 161°		Rsd 0.1s	0.3	0.01	0.03	3	92/4555	
Corr. 0.500	16ph/11stn		Msd 0.3	1↑				Corr. -0.153	20ph/13stn	Dmin 65km	Az.gap 72°			
APR 21	1255	06.4s	35.59S	178.71E	188km	M=4.4	92/4460	APR 25	0735	04.6s	44.60S	168.17E	77km M=4.6	92/4562
Rsd 0.1s	0.4	0.04	0.04	7	Dmin 226km	Az.gap 304°		Rsd 0.2s	0.4	0.03	0.02	3		
Corr. 0.730	12ph/10stn		Msd 0.2					Corr. 0.002	26ph/17stn	Dmin 20km	Az.gap 154°			
APR 21	1341	28.7s	36.78S	177.95E	107km	M=4.7	92/4461							
Rsd 0.2s	0.8	0.04	0.03	7	Dmin 96km	Az.gap 251°		Rsd 0.2s	11ph/9stn	Dmin 78km	Az.gap 122°		92/4567	
Corr. 0.871	19ph/17stn		Msd 0.3	1↑				Corr. 0.295	10M/8stn	Msd 0.2				
APR 22	0232	10.5s	39.18S	175.50E	102km	M=3.9	92/4471	APR 25	1423	35.2s	36.37S	176.57E	12km M=4.2	92/4570
Rsd 0.2s	0.2	0.01	0.01	2	Dmin 4km	Az.gap 60°		Rsd 0.3s	0.7	0.05	0.04	R		
Corr. 0.077	27ph/21stn		Msd 0.3	3↑ 1↓				Corr. -0.033	11ph/7stn	Dmin 241km	Az.gap 306°			
APR 22	1435	49.4s	37.08S	177.96E	69km	M=3.7	92/4489	APR 26	1242	17.5s	37.33S	177.14E	5km M=3.8	92/4592
Rsd 0.2s	0.5	0.03	0.03	5	Dmin 65km	Az.gap 232°		Rsd 0.4s	0.3	0.03	0.04	R		
Corr. 0.641	11ph/9stn		Msd 0.3	1↓				Corr. 0.672	6ph/5stn	Dmin 22km	Az.gap 170°			



APR	30	2253	30.3s	36.98S	177.04E	206km	M=3.8	92/4803
			0.7	0.04	0.05	6		
Rsd	0.2s	12ph/9stn	Dmin	120km	Az.gap	217°		
Corr.	0.244	11M/10stn	Msd	0.3				
								92/4816
MAY	01	0648	04.0s	40.08S	176.92E	57km	M=3.9	92/4816
			0.2	0.01	0.02	6		
Rsd	0.2s	32ph/28stn	Dmin	13km	Az.gap	184°		
Corr.	-0.389	18M/14stn	Msd	0.2	3↑	6↓		
								Hawkes Bay net Ps are automatic picks, no records.
MAY	01	0845	03.9s	42.12S	173.07E	12km	M=4.4	92/4818
			0.1	0.01	0.01	R		
Rsd	0.2s	27ph/20stn	Dmin	42km	Az.gap	62°		
Corr.	-0.054	12M/6stn	Msd	0.2	5↑	1↓		
								Felt St Arnaud (81) MM4.
MAY	01	1457	08.0s	37.71S	176.86E	163km	M=4.3	92/4829
			0.3	0.02	0.01	3		
Rsd	0.2s	24ph/16stn	Dmin	66km	Az.gap	129°		
Corr.	0.410	20M/15stn	Msd	0.3	1↑			
MAY	01	1751	12.5s	37.21S	177.12E	5km	M=3.7	92/4836
			0.3	0.03	0.03	R		
Rsd	0.3s	11ph/9stn	Dmin	36km	Az.gap	181°		
Corr.	0.777	14M/10stn	Msd	0.2	1↑			
								WHH P is an automatic pick, no records.
MAY	01	1813	59.0s	35.73S	178.28E	223km	M=3.8	92/4837
			1.0	0.05	0.07	9		
Rsd	0.2s	11ph/8stn	Dmin	207km	Az.gap	297°		
Corr.	0.531	5M/5stn	Msd	0.2				
MAY	01	1839	06.9s	38.65S	175.77E	165km	M=3.6	92/4843
			0.2	0.01	0.02	1		
Rsd	0.0s	16ph/14stn	Dmin	60km	Az.gap	304°		
Corr.	-0.369	7M/7stn	Msd	0.3	1↑			
MAY	01	1854	56.8s	37.83S	175.33E	254km	M=3.6	92/4846
			0.4	0.11	0.08	15		
Rsd	0.1s	14ph/10stn	Dmin	310km	Az.gap	321°		
Corr.	-0.404	6M/5stn	Msd	0.2				
MAY	02	0039	53.2s	37.60S	178.32E	48km	M=3.7	92/4847
			0.1	0.00	0.01	1		
Rsd	0.0s	7ph/4stn	Dmin	2km	Az.gap	254°		
Corr.	0.594	5M/3stn	Msd	0.2	1↑			
MAY	02	0048	12.5s	37.60S	178.41E	49km	M=4.1	92/4848
			0.2	0.01	0.02	1		
Rsd	0.1s	13ph/8stn	Dmin	10km	Az.gap	264°		
Corr.	0.578	16M/13stn	Msd	0.3	1↑			
								Hawkes Bay net Ps are automatic picks, no records.
MAY	02	0844	58.4s	35.23S	179.01E	194km	M=4.8	92/4862
			0.8	0.07	0.06	13		
Rsd	0.2s	11ph/10stn	Dmin	271km	Az.gap	313°		
Corr.	0.563	18M/14stn	Msd	0.3	1↑			
MAY	02	1304	26.1s	38.02S	175.78E	282km	M=4.0	92/4869
			0.7	0.08	0.11	10		
Rsd	0.3s	18ph/14stn	Dmin	208km	Az.gap	231°		
Corr.	-0.895	10M/8stn	Msd	0.3	1↓			
MAY	02	1438	44.9s	38.34S	175.82E	181km	M=4.3	92/4871
			0.3	0.01	0.03	3		
Rsd	0.2s	18ph/13stn	Dmin	56km	Az.gap	115°		
Corr.	-0.099	19M/15stn	Msd	0.2	1↑			
MAY	03	0340	31.2s	40.17S	175.26E	12km	M=3.8	92/4896
			0.1	0.00	0.01	R		
Rsd	0.2s	28ph/22stn	Dmin	50km	Az.gap	60°		
Corr.	-0.194	25M/22stn	Msd	0.3	2↑	7↓		
								Felt western Manawatu area (61,62) MM4.
MAY	03	0412	08.5s	40.46S	173.34E	160km	M=4.0	92/4897
			0.3	0.01	0.01	3		
Rsd	0.2s	36ph/22stn	Dmin	63km	Az.gap	143°		
Corr.	-0.129	15M/12stn	Msd	0.2	5↑	3↓		
MAY	04	0410	45.8s	38.19S	179.12E	16km	M=3.9	92/4929
			0.3	0.01	0.02	2		
Rsd	0.1s	12ph/8stn	Dmin	77km	Az.gap	267°		
Corr.	-0.248	17M/14stn	Msd	0.3	1↑			
MAY	04	0648	57.0s	37.36S	176.73E	262km	M=4.1	92/4938
			1.0	0.04	0.04	9		
Rsd	0.3s	14ph/13stn	Dmin	98km	Az.gap	154°		
Corr.	0.314	16M/13stn	Msd	0.3	1↑			
MAY	04	1205	34.4s	40.10S	176.91E	53km	M=3.6	92/4943
			0.3	0.01	0.04	6		
Rsd	0.2s	27ph/20stn	Dmin	15km	Az.gap	187°		
Corr.	-0.183	17M/13stn	Msd	0.3	3↑	1↓		

MAY 04 1224	33.9s	43.53S	170.57E	5km	M=2.2	92/4944	MAY 05 2218	05.0s	40.02S	176.91E	33km	M=3.7	92/5007
	0.2	0.01	0.02	R				0.2	0.01	0.02	2		
Rsd 0.2s	5ph/3stn	Dmin 23km	Az.gap 169°				Rsd 0.2s	30ph/24stn	Dmin 9km	Az.gap 182°			
Corr. 0.072	3M/3stn	Msd 0.3	1↓				Corr. -0.477	31M/28stn	Msd 0.2	1↓			
Felt Erewhon Stn (106) MM4.													
MAY 04 1511	53.4s	37.30S	177.55E	107km	M=4.0	92/4945	MAY 06 0652	51.0s	36.46S	177.50E	12km	M=3.9	92/5015
	0.5	0.02	0.02	5				1.5	0.12	0.06	R		
Rsd 0.2s	15ph/11stn	Dmin 74km	Az.gap 187°				Rsd 0.6s	8ph/6stn	Dmin 145km	Az.gap 253°			
Corr. 0.273	18M/14stn	Msd 0.2	4↑ 1↓				Corr. 0.746	10M/8stn	Msd 0.3				
MAY 04 2256	05.3s	37.58S	179.45E	106km	M=3.8	92/4961	MAY 06 0821	46.3s	41.29S	174.82E	30km	M=3.5	92/5017
	0.3	0.03	0.07	4				0.1	0.01	0.01	1		
Rsd 0.1s	8ph/5stn	Dmin 101km	Az.gap 314°				Rsd 0.2s	23ph/18stn	Dmin 4km	Az.gap 101°			
Corr. -0.781	6M/4stn	Msd 0.3	1↑				Corr. -0.006	21M/18stn	Msd 0.2	4↑ 3↓			
MAY 05 0454	25.7s	38.60S	176.01E	5km	M=2.7	92/4971	MAY 06 2038	11.0s	44.39S	167.91E	12km	M=4.9	92/5033
	0.1	0.01	0.01	R				0.2	0.01	0.02	R		
Rsd 0.2s	14ph/9stn	Dmin 8km	Az.gap 92°				Rsd 0.1s	24ph/18stn	Dmin 31km	Az.gap 195°			
Corr. -0.100	11M/11stn	Msd 0.4					Corr. -0.684	15M/8stn	Msd 0.2	2↑ 6↓			
Felt Waihora Rd (40) MM3.													
MAY 05 0635	57.7s	38.58S	176.01E	5km	M=3.1	92/4976	MAY 06 2238	28.4s	45.24S	166.95E	24km	M=3.8	92/5035
	0.1	0.01	0.01	R				0.6	0.01	0.05	2		
Rsd 0.2s	18ph/13stn	Dmin 10km	Az.gap 70°				Rsd 0.2s	27ph/17stn	Dmin 30km	Az.gap 253°			
Corr. -0.330	11M/11stn	Msd 0.5	1↑				Corr. -0.400	8M/5stn	Msd 0.1	1↑ 4↓			
Felt Oruanui Rd (41) MM4. Hawkes Bay net Ps are automatic picks, no records.													
MAY 05 0749	51.4s	38.09S	176.35E	165km	M=4.2	92/4979	MAY 06 2253	00.6s	38.70S	175.96E	156km	M=3.6	92/5037
	0.4	0.02	0.02	4				0.6	0.04	0.05	4		
Rsd 0.2s	19ph/15stn	Dmin 71km	Az.gap 94°				Rsd 0.2s	12ph/7stn	Dmin 61km	Az.gap 191°			
Corr. -0.189	14M/13stn	Msd 0.3	4↑ 1↓				Corr. -0.400	13M/11stn	Msd 0.2	1↑			
Hawkes Bay net Ps are automatic picks, no records.													
MAY 05 0807	02.6s	38.60S	176.01E	5km	M=2.1	92/4980	MAY 06 2350	09.0s	38.06S	176.46E	162km	M=4.0	92/5038
	0.1	0.01	0.01	R				0.4	0.02	0.02	3		
Rsd 0.1s	10ph/7stn	Dmin 8km	Az.gap 93°				Rsd 0.2s	18ph/13stn	Dmin 19km	Az.gap 97°			
Corr. 0.015	6M/6stn	Msd 0.5					Corr. -0.097	17M/14stn	Msd 0.3				
Felt Taupo (41).													
MAY 05 1057	54.5s	39.30S	175.07E	24km	M=3.8	92/4985	MAY 07 0701	23.0s	37.21S	176.80E	197km	M=4.5	92/5045
	0.1	0.01	0.01	1				0.5	0.02	0.01	4		
Rsd 0.2s	24ph/19stn	Dmin 30km	Az.gap 78°				Rsd 0.1s	16ph/15stn	Dmin 109km	Az.gap 170°			
Corr. 0.167	30M/25stn	Msd 0.2	2↑ 1↓				Corr. 0.523	21M/17stn	Msd 0.2	1↑ 6↓			
Hawkes Bay net Ps are automatic picks, no records.													
MAY 05 1212	34.3s	39.21S	174.92E	215km	M=3.7	92/4987	MAY 07 1516	11.1s	37.48S	178.73E	28km	M=3.7	92/5051
	0.6	0.02	0.07	5				0.3	0.01	0.03	1		
Rsd 0.2s	17ph/14stn	Dmin 54km	Az.gap 219°				Rsd 0.1s	10ph/6stn	Dmin 40km	Az.gap 286°			
Corr. -0.416	11M/10stn	Msd 0.2	1↑				Corr. 0.416	6M/4stn	Msd 0.3				

MAY 07 1721	36.8s	37.49S	178.65E	29km	M=3.6	92/5054	MAY 10 0720	44.4s	38.73S	175.24E	223km	M=4.0	92/5098
Rsd 0.1s	0.2	0.01	0.02	1			0.4	0.02	0.06	3			
Corr. 0.707	9ph/7stn	Dmin 33km	Az.gap 276°				Rsd 0.2s	18ph/13stn	Dmin 45km	Az.gap 79°			
	8M/6stn	Msd 0.1	1↑ 1↓				Corr. -0.065	21M/19stn	Msd 0.2	5↑ 1↓			
MAY 08 0503	33.7s	38.63S	175.86E	156km	M=3.7	92/5065	MAY 10 1118	03.4s	38.74S	175.73E	167km	M=3.9	92/5100
Rsd 0.2s	0.6	0.02	0.03	5			0.5	0.02	0.04	5			
Corr. -0.193	22ph/16stn	Dmin 72km	Az.gap 145°				Rsd 0.3s	21ph/16stn	Dmin 49km	Az.gap 133°			
	15M/13stn	Msd 0.2					Corr. -0.275	13M/10stn	Msd 0.2	1↓			
MAY 08 1612	17.0s	38.11S	176.23E	154km	M=3.8	92/5071	MAY 10 1344	31.8s	40.05S	173.73E	163km	M=3.7	92/5103
Rsd 0.1s	0.4	0.02	0.01	4			0.5	0.02	0.02	5			
Corr. -0.750	12ph/10stn	Dmin 122km	Az.gap 219°				Rsd 0.3s	26ph/20stn	Dmin 81km	Az.gap 144°			
	14M/13stn	Msd 0.1					Corr. -0.119	12M/10stn	Msd 0.3	1↓			
MAY 08 1708	15.6s	36.06S	179.05E	267km	M=4.2	92/5072	MAY 10 2127	03.4s	37.02S	175.73E	33km	M=4.3	92/5111
Rsd 0.3s	1.2	0.37	0.59	15			0.4	0.02	0.03	R			
Corr. -0.969	10ph/7stn	Dmin 234km	Az.gap 344°				Rsd 0.1s	11ph/9stn	Dmin 237km	Az.gap 272°			
	7M/5stn	Msd 0.2					Corr. -0.793	6M/5stn	Msd 0.5				
MAY 09 0240	19.6s	43.33S	170.37E	5km	M=3.5	92/5076	MAY 11 0708	56.2s	37.70S	179.73E	33km	M=3.9	92/5124
Rsd 0.2s	0.3	0.02	0.03	R			0.6	0.03	0.05	R			
Corr. -0.762	17ph/14stn	Dmin 41km	Az.gap 149°				Rsd 0.2s	12ph/8stn	Dmin 127km	Az.gap 301°			
	15M/14stn	Msd 0.2	1↓				Corr. -0.271	9M/6stn	Msd 0.3	1↑			
MAY 09 0721	02.8s	37.72S	176.44E	157km	M=3.7	92/5079	MAY 11 0950	49.9s	36.51S	177.26E	235km	M=3.9	92/5128
Rsd 0.3s	1.1	0.03	0.04	12			0.2	0.08	0.12	12			
Corr. 0.216	12ph/9stn	Dmin 126km	Az.gap 135°				Rsd 0.0s	13ph/11stn	Dmin 244km	Az.gap 319°			
	9M/8stn	Msd 0.2	1↑				Corr. -0.992	7M/6stn	Msd 0.3				
MAY 09 0815	47.2s	40.49S	174.92E	45km	M=3.8	92/5080	MAY 11 1838	08.2s	39.72S	174.05E	136km	M=3.5	92/5136
Rsd 0.3s	0.1	0.01	0.02	6			0.3	0.01	0.02	4			
Corr. -0.226	27ph/21stn	Dmin 42km	Az.gap 98°				Rsd 0.2s	26ph/18stn	Dmin 76km	Az.gap 160°			
	15M/12stn	Msd 0.2	3↑ 1↓				Corr. -0.373	13M/11stn	Msd 0.2	1↑			
MAY 09 1158	12.0s	41.30S	172.80E	150km	M=3.7	92/5081	MAY 11 1943	11.2s	38.17S	175.69E	209km	M=4.1	92/5137
Rsd 0.3s	0.4	0.02	0.02	3			0.4	0.04	0.03	4			
Corr. -0.328	26ph/15stn	Dmin 52km	Az.gap 98°				Rsd 0.1s	16ph/13stn	Dmin 105km	Az.gap 213°			
	10M/8stn	Msd 0.2	2↑ 1↓				Corr. -0.363	23M/20stn	Msd 0.1				
MAY 09 2329	00.7s	45.28S	167.27E	71km	M=4.3	92/5091	MAY 12 1644	46.7s	36.75S	177.37E	153km	M=3.7	92/5151
Rsd 0.2s	0.4	0.01	0.03	3			0.5	0.10	0.11	12			
Corr. -0.054	22ph/15stn	Dmin 23km	Az.gap 194°				Rsd 0.1s	5ph/3stn	Dmin 166km	Az.gap 324°			
	10M/6stn	Msd 0.2	2↑ 5↓				Corr. -0.652	3M/3stn	Msd 0.2				
MAY 10 0327	49.6s	39.14S	174.91E	219km	M=4.2	92/5096	MAY 13 0940	41.4s	38.62S	176.14E	97km	M=3.6	92/5168
Rsd 0.3s	0.4	0.02	0.04	3			0.4	0.02	0.01	5			
Corr. -0.135	30ph/24stn	Dmin 37km	Az.gap 127°				Rsd 0.2s	17ph/12stn	Dmin 77km	Az.gap 144°			
	22M/19stn	Msd 0.2	3↑ 1↓				Corr. -0.050	18M/17stn	Msd 0.2	1↑			

<b>MAY 13 1206</b>	<b>32.9s</b>	<b>45.04S</b>	<b>167.54E</b>	<b>129km</b>	<b>M=3.9</b>	<b>92/5172</b>	<b>MAY 16 1758</b>	<b>50.8s</b>	<b>38.24S</b>	<b>178.34E</b>	<b>20km</b>	<b>M=4.6</b>	<b>92/5273</b>				
						0.4 0.02 0.03 3											
Rsd 0.2s	21ph/15stn	Dmin 51km	Az.gap 185°	<b>MAY 14 1239</b>	<b>49.4s</b>	<b>39.66S</b>	<b>176.35E</b>	<b>36km</b>	<b>M=3.6</b>	<b>92/5200</b>	<b>MAY 16 1804</b>	<b>03.5s</b>	<b>38.27S</b>	<b>178.30E</b>	<b>21km</b>	<b>M=5.2</b>	<b>92/5277</b>
Corr. -0.396	20M/14stn	Msd 0.2	3↑ 1↓								Rsd 0.2s	12ph/9stn	Dmin 20km	Az.gap 204°	3	2	
Rsd 0.3s	35ph/31stn	Dmin 5km	Az.gap 48°	<b>MAY 14 1353</b>	<b>12.8s</b>	<b>37.68S</b>	<b>175.53E</b>	<b>259km</b>	<b>M=3.7</b>	<b>92/5203</b>	<b>MAY 16 1811</b>	<b>24.0s</b>	<b>38.30S</b>	<b>178.27E</b>	<b>19km</b>	<b>M=3.7</b>	<b>92/5281</b>
Corr. -0.099	20M/17stn	Msd 0.2	1↑ 1↓								Rsd 0.1s	15ph/13stn	Dmin 22km	Az.gap 200°	2	1↓	
Rsd 0.1s	10ph/9stn	Dmin 153km	Az.gap 252°	<b>MAY 15 0019</b>	<b>25.6s</b>	<b>38.47S</b>	<b>176.14E</b>	<b>136km</b>	<b>M=3.6</b>	<b>92/5209</b>	<b>MAY 16 1821</b>	<b>14.1s</b>	<b>38.27S</b>	<b>178.22E</b>	<b>22km</b>	<b>M=3.7</b>	<b>92/5285</b>
Corr. -0.969	4M/3stn	Msd 0.5									Rsd 0.1s	13ph/10stn	Dmin 25km	Az.gap 208°	3	1↓	
Rsd 0.3s	15ph/11stn	Dmin 88km	Az.gap 212°	<b>MAY 15 0351</b>	<b>16.6s</b>	<b>42.16S</b>	<b>172.35E</b>	<b>77km</b>	<b>M=3.9</b>	<b>92/5212</b>	<b>MAY 16 1822</b>	<b>40.1s</b>	<b>38.21S</b>	<b>178.35E</b>	<b>27km</b>	<b>M=3.7</b>	<b>92/5286</b>
Corr. 0.363	6M/4stn	Msd 0.3									Rsd 0.2s	12ph/10stn	Dmin 22km	Az.gap 187°	5	1↑ 2↓	
Rsd 0.3s	24ph/15stn	Dmin 63km	Az.gap 81°	<b>MAY 15 1613</b>	<b>36.9s</b>	<b>37.87S</b>	<b>175.69E</b>	<b>190km</b>	<b>M=3.7</b>	<b>92/5228</b>	<b>MAY 16 1829</b>	<b>40.4s</b>	<b>38.27S</b>	<b>178.32E</b>	<b>18km</b>	<b>M=4.5</b>	<b>92/5289</b>
Corr. -0.204	13M/9stn	Msd 0.3	4↑ 1↓								Rsd 0.2s	11ph/7stn	Dmin 17km	Az.gap 215°	3	1↓	
Rsd 0.1s	23ph/15stn	Dmin 132km	Az.gap 236°	<b>MAY 16 0216</b>	<b>28.4s</b>	<b>39.50S</b>	<b>174.68E</b>	<b>146km</b>	<b>M=3.8</b>	<b>92/5239</b>	<b>MAY 16 1838</b>	<b>27.6s</b>	<b>38.18S</b>	<b>178.21E</b>	<b>22km</b>	<b>M=3.7</b>	<b>92/5290</b>
Corr. -0.855	11M/10stn	Msd 0.2									Rsd 0.2s	15ph/13stn	Dmin 22km	Az.gap 201°	4	1↑ 2↓	
Rsd 0.3s	28ph/21stn	Dmin 39km	Az.gap 135°	<b>MAY 16 0606</b>	<b>30.6s</b>	<b>38.61S</b>	<b>175.91E</b>	<b>166km</b>	<b>M=3.5</b>	<b>92/5246</b>	<b>MAY 16 2022</b>	<b>43.9s</b>	<b>38.27S</b>	<b>178.37E</b>	<b>15km</b>	<b>M=3.9</b>	<b>92/5301</b>
Corr. 0.058	13M/11stn	Msd 0.3	6↑ 3↓								Rsd 0.2s	11ph/8stn	Dmin 12km	Az.gap 178°	6↑ 3↓	1↑	
Rsd 0.2s	17ph/14stn	Dmin 68km	Az.gap 209°	<b>MAY 16 1018</b>	<b>28.8s</b>	<b>38.60S</b>	<b>175.96E</b>	<b>146km</b>	<b>M=4.1</b>	<b>92/5260</b>	<b>MAY 17 0106</b>	<b>55.9s</b>	<b>38.25S</b>	<b>178.37E</b>	<b>18km</b>	<b>M=5.2</b>	<b>92/5315</b>
Corr. 0.652	14M/12stn	Msd 0.3	1↑								Rsd 0.3s	11ph/9stn	Dmin 24km	Az.gap 208°	3	7	
Rsd 0.2s	27ph/17stn	Dmin 71km	Az.gap 68°	<b>MAY 16 1757</b>	<b>13.5s</b>	<b>38.23S</b>	<b>178.37E</b>	<b>24km</b>	<b>M=5.6</b>	<b>92/5272</b>	<b>MAY 17 0122</b>	<b>06.0s</b>	<b>38.14S</b>	<b>178.37E</b>	<b>23km</b>	<b>M=3.6</b>	<b>92/5327</b>
Corr. 0.067	20M/18stn	Msd 0.4	9↑ 1↓								Rsd 0.3s	18ph/16stn	Dmin 22km	Az.gap 153°	2	4↑ 2↓	
Rsd 0.2s	27ph/17stn	Dmin 71km	Az.gap 153°	<b>MAY 16 1757</b>	<b>13.5s</b>	<b>38.23S</b>	<b>178.37E</b>	<b>24km</b>	<b>M=5.6</b>	<b>92/5272</b>	<b>MAY 17 0122</b>	<b>06.0s</b>	<b>38.14S</b>	<b>178.37E</b>	<b>23km</b>	<b>M=3.6</b>	<b>92/5327</b>
Corr. 0.067	20M/18stn	Msd 0.4	3↑ 2↓								Rsd 0.3s	10ph/7stn	Dmin 13km	Az.gap 215°	2	1↓	
Felt Opotiki (35) to Gisborne (45), maximum intensity MM5 at Rukuhanga Stn (29).				Corr. -0.067	12M/7stn	Msd 0.3				Rsd 0.3s	12M/7stn	Msd 0.3		1↓			

<b>MAY 17 0212 40.8s 40.20S 173.98E</b>	Rsd 0.2s Corr. -0.299	0.2 18M/15stn	0.01 Msd 0.3	0.01 Az.gap 141° 2 5↑ 2↓	<b>92/5332</b>	<b>MAY 19 0054 13.7s 47.45S 165.58E</b>	33km	<b>M=4.0</b>	<b>92/5506</b>
									R
									Dmin 202km Az.gap 315° Corr. 0.229 20M/14stn Msd 0.2
<b>MAY 17 0435 48.1s 38.15S 178.30E</b>	Rsd 0.3s Corr. -0.457	0.3 11M/7stn	0.01 Msd 0.3	0.04 Az.gap 203° R 1↑ 1↓	<b>92/5340</b>	<b>MAY 19 0718 49.4s 36.86S 179.87E</b>	33km	<b>M=4.1</b>	<b>92/5518</b>
									R
									Dmin 162km Az.gap 298° Rsd 0.4s 12ph/10stn Corr. -0.137 12M/8stn Msd 0.2
<b>MAY 17 0629 44.7s 38.31S 178.35E</b>	Rsd 0.3s Corr. -0.695	0.4 21M/16stn	0.02 Msd 0.2	0.05 Az.gap 221° R 1↑ 2↓	<b>92/5360</b>	<b>MAY 19 1006 22.3s 38.17S 178.34E</b>	18km	<b>M=3.8</b>	<b>92/5529</b>
									4
									Rsd 0.3s 10ph/8stn Corr. -0.455 11M/7stn Msd 0.2 1↑ 1↓
<b>MAY 17 0904 45.0s 40.25S 176.41E</b>	Rsd 0.1s Corr. -0.570	0.1 8M/4stn	0.01 Msd 0.2	0.01 Az.gap 146° 1 5↑ 1↓	<b>92/5375</b>	<b>MAY 19 1614 27.3s 35.83S 178.27E</b>	223km	<b>M=4.0</b>	<b>92/5543</b>
									10
									Rsd 0.2s 10ph/8stn Corr. -0.867 12M/12stn Msd 0.2
<b>MAY 17 1217 42.3s 37.51S 177.33E</b>	Rsd 0.2s Corr. -0.112	0.3 16M/14stn	0.02 Msd 0.2	0.01 Az.gap 202° 3	<b>92/5393</b>	<b>MAY 19 1615 26.0s 37.76S 175.44E</b>	143km	<b>M=3.6</b>	<b>92/5544</b>
									14
									Rsd 0.2s 14ph/11stn Corr. -0.941 11M/11stn Msd 0.2
<b>MAY 17 2033 06.5s 38.18S 178.41E</b>	Rsd 0.3s Corr. -0.084	0.5 10M/6stn	0.02 Msd 0.2	0.06 Az.gap 221° 3 1↓	<b>92/5429</b>	<b>MAY 19 2102 45.7s 39.62S 175.52E</b>	75km	<b>M=3.6</b>	<b>92/5547</b>
									3
									Rsd 0.2s 28ph/19stn Corr. 0.250 16M/14stn Msd 0.2 1↓
<b>MAY 17 2105 23.3s 38.28S 178.40E</b>	Rsd 0.3s Corr. -0.494	0.4 17M/13stn	0.02 Msd 0.3	0.04 Az.gap 211° 6 2↑ 1↓	<b>92/5430</b>	<b>MAY 19 2147 51.1s 38.18S 178.24E</b>	20km	<b>M=3.7</b>	<b>92/5549</b>
									9
									Rsd 0.4s 9ph/7stn Corr. -0.824 15M/11stn Msd 0.2 1↓
<b>MAY 17 2322 22.1s 44.43S 168.58E</b>	Rsd 0.2s Corr. -0.183	0.1 19M/14stn	0.01 Msd 0.2	0.01 Az.gap 153° R 1↑ 2↓	<b>92/5439</b>	<b>MAY 20 0059 50.2s 38.51S 176.53E</b>	169km	<b>M=3.7</b>	<b>92/5555</b>
									10
									Rsd 0.3s 11ph/8stn Corr. -0.961 6M/6stn Msd 0.2
<b>MAY 18 2112 15.2s 38.08S 175.81E</b>	Rsd 0.2s Corr. -0.108	0.4 17M/15stn	0.02 Msd 0.1	0.04 Az.gap 147° 5 1↑	<b>92/5503</b>	<b>MAY 20 0454 27.5s 37.79S 175.93E</b>	271km	<b>M=4.0</b>	<b>92/5560</b>
									9
									Rsd 0.2s 21ph/15stn Corr. -0.816 9M/7stn Msd 0.2
<b>MAY 18 2157 40.9s 42.22S 173.77E</b>	Rsd 0.2s Corr. -0.656	0.1 10M/5stn	0.01 Msd 0.3	0.01 Az.gap 150° R 5↑ 5↓	<b>92/5504</b>	<b>MAY 20 1928 29.4s 35.38S 178.90E</b>	201km	<b>M=4.7</b>	<b>92/5585</b>
									11
									Rsd 0.2s 14ph/11stn Corr. 0.504 24M/20stn Msd 0.2

MAY 21 0520 30.8s	44.09S	170.74E	5km	M=4.1	92/5597	MAY 23 0326 02.0s	45.10S	167.41E	89km	M=4.1	92/5672
0.1	0.01	0.01	R			0.3	0.01	0.02	2		
Rsd 0.2s	23ph/16stn	Dmin 65km	Az.gap 109°			Rsd 0.2s	26ph/16stn	Dmin 46km	Az.gap 195°		
Corr. -0.488	10M/5stn	Msd 0.1	1↓			Corr. -0.480	9M/5stn	Msd 0.2	2↑ 5↓		
MAY 21 1738 38.4s	37.52S	178.38E	60km	M=4.0	92/5615	MAY 23 2042 54.1s	36.32S	177.34E	227km	M=3.6	92/5709
0.3	0.01	0.03	2			0.5	0.09	0.15	14		
Rsd 0.1s	14ph/10stn	Dmin 12km	Az.gap 261°			Rsd 0.2s	9ph/4stn	Dmin 211km	Az.gap 320°		
Corr. 0.412	20M/16stn	Msd 0.3	1↑			Corr. -0.914	3M/3stn	Msd 0.2			
MAY 21 2119 27.2s	41.00S	175.58E	28km	M=3.5	92/5621	MAY 23 2350 23.0s	37.65S	176.26E	141km	M=3.6	92/5715
0.1	0.00	0.01	1			0.1	0.02	0.03	3		
Rsd 0.1s	16ph/11stn	Dmin 37km	Az.gap 103°			Rsd 0.1s	13ph/10stn	Dmin 101km	Az.gap 246°		
Corr. -0.052	9M/7stn	Msd 0.2	4↑ 3↓			Corr. -0.941	9M/6stn	Msd 0.3			
MAY 22 0305 19.0s	38.22S	176.27E	153km	M=4.2	92/5628	MAY 24 0330 13.6s	34.82S	178.96E	312km	M=4.3	92/5719
0.4	0.02	0.02	4			0.5	0.18	0.38	18		
Rsd 0.2s	21ph/15stn	Dmin 74km	Az.gap 174°			Rsd 0.2s	10ph/6stn	Dmin 314km	Az.gap 346°		
Corr. 0.105	28M/23stn	Msd 0.3	1↑			Corr. -0.973	7M/4stn	Msd 0.4			
MAY 22 0546 51.5s	35.45S	178.78E	264km	M=4.1	92/5632	MAY 24 0533 14.3s	37.75S	179.09E	25km	M=4.2	92/5721
0.3	0.02	0.04	2			0.4	0.02	0.03	3		
Rsd 0.1s	10ph/9stn	Dmin 243km	Az.gap 289°			Rsd 0.2s	17ph/15stn	Dmin 72km	Az.gap 279°		
Corr. 0.027	7M/5stn	Msd 0.5				Corr. -0.153	36M/30stn	Msd 0.2	1↑		
MAY 22 0857 11.1s	38.25S	178.35E	18km	M=3.7	92/5637	MAY 24 0553 08.1s	37.73S	179.11E	24km	M=3.9	92/5722
0.6	0.03	0.11	6			0.4	0.01	0.03	3		
Rsd 0.4s	7ph/5stn	Dmin 21km	Az.gap 218°			Rsd 0.1s	13ph/11stn	Dmin 73km	Az.gap 284°		
Corr. -0.738	10M/6stn	Msd 0.1				Corr. -0.512	24M/18stn	Msd 0.2	1↑		
MAY 22 1124 22.5s	38.19S	178.39E	20km	M=3.5	92/5644	MAY 24 1130 27.6s	44.59S	168.02E	89km	M=3.5	92/5728
0.6	0.03	0.09	4			0.4	0.02	0.03	3		
Rsd 0.5s	9ph/6stn	Dmin 18km	Az.gap 220°			Rsd 0.2s	25ph/18stn	Dmin 12km	Az.gap 188°		
Corr. -0.439	10M/6stn	Msd 0.1	1↓			Corr. -0.164	17M/15stn	Msd 0.2	1↓		
MAY 22 1248 09.1s	37.21S	177.67E	118km	M=3.9	92/5648	MAY 24 1304 19.2s	37.62S	176.45E	299km	M=3.7	92/5733
0.4	0.02	0.02	4			0.5	0.09	0.07	11		
Rsd 0.1s	11ph/9stn	Dmin 71km	Az.gap 202°			Rsd 0.2s	14ph/10stn	Dmin 300km	Az.gap 332°		
Corr. 0.352	18M/16stn	Msd 0.2				Corr. -0.625	5M/4stn	Msd 0.2			
MAY 22 1620 57.9s	38.61S	175.77E	157km	M=3.6	92/5656	MAY 24 2158 16.3s	38.46S	176.33E	233km	M=3.8	92/5748
0.7	0.03	0.04	6			0.2	0.08	0.09	9		
Rsd 0.2s	20ph/14stn	Dmin 65km	Az.gap 211°			Rsd 0.0s	8ph/6stn	Dmin 251km	Az.gap 349°		
Corr. -0.342	20M/18stn	Msd 0.2				Corr. -0.021	4M/2stn	Msd 0.1	1↑		
MAY 23 0151 00.7s	38.83S	175.18E	255km	M=3.5	92/5667	MAY 24 2237 35.6s	38.14S	178.34E	18km	M=3.6	92/5749
0.6	0.07	0.08	7			0.6	0.03	0.08	7		
Rsd 0.3s	15ph/10stn	Dmin 109km	Az.gap 224°			Rsd 0.5s	7ph/5stn	Dmin 11km	Az.gap 210°		
Corr. -0.262	7M/7stn	Msd 0.2				Corr. -0.396	10M/6stn	Msd 0.2	1↓		

MAY 24 2347	18.6s	38.36S	176.35E	152km	M=3.6	92/5750		MAY 27 0702	42.6s	45.17S	167.39E	111km	M=3.8	92/5838
Rsd 0.3s	1.0	0.05	0.15	9				Rsd 0.1s	0.3	0.01	0.02	2		
Corr. 0.021	10ph/6stn	Dmin 67km	Az.gap 225°					Corr. -0.363	28ph/17stn	Dmin 38km	Az.gap 189°			
	10M/7stn	Msd 0.3						Corr. 0.21	21M/14stn	Msd 0.2	1↑			
MAY 25 0427	55.4s	47.42S	165.16E	33km	M=4.0	92/5756		MAY 27 0926	44.2s	37.80S	179.63W	33km	M=3.5	92/5844
Rsd 0.2s	0.7	0.04	0.06	R				Rsd 0.3s	0.7	0.06	0.06	R		
Corr. 0.367	17ph/13stn	Dmin 231km	Az.gap 319°					Corr. -0.241	8ph/5stn	Dmin 189km	Az.gap 331°			
Rsd 0.2s	19M/13stn	Msd 0.2							3M/2stn	Msd 0.5				
MAY 25 0757	07.7s	36.19S	176.56E	33km	M=4.5	92/5760		MAY 27 2230	36.1s	41.61S	173.65E	84km	M=6.7	92/5856
Rsd 0.1s	0.2	0.01	0.05	R				Rsd 0.1s	0.1	0.01	0.01	1		
Corr. -0.314	12ph/10stn	Dmin 235km	Az.gap 329°					Corr. -0.167	31ph/25stn	Dmin 22km	Az.gap 66°			
Rsd 0.1s	6M/5stn	Msd 0.3						Corr. 0.367	8M/4stn	Msd 0.3	11↑ 16↓			
MAY 25 1254	35.6s	47.52S	165.20E	33km	M=3.6	92/5767								
Rsd 0.3s	0.8	0.05	0.07	R										
Corr. 0.158	18ph/12stn	Dmin 231km	Az.gap 320°											
Rsd 0.3s	10M/10stn	Msd 0.2	1↑											
MAY 25 1317	15.9s	45.52S	167.10E	92km	M=4.2	92/5768		MAY 29 0240	59.7s	36.81S	176.29E	247km	M=3.9	92/5885
Rsd 0.2s	0.4	0.02	0.03	3				Rsd 0.0s	0.3	0.02	0.09	4		
Corr. 0.005	22ph/13stn	Dmin 7km	Az.gap 242°					Corr. -0.590	10ph/7stn	Dmin 177km	Az.gap 315°			
Rsd 0.2s	9M/5stn	Msd 0.2	4↑ 4↓						6M/4stn	Msd 0.4				
MAY 26 0137	21.6s	37.98S	175.88E	193km	M=4.0	92/5791		MAY 29 0629	02.9s	38.12S	178.47E	21km	M=3.7	92/5890
Rsd 0.2s	1.5	0.09	0.06	12				Rsd 0.1s	0.3	0.01	0.03	1		
Corr. -0.703	15ph/13stn	Dmin 113km	Az.gap 219°					Corr. 0.379	8ph/6stn	Dmin 19km	Az.gap 273°			
Rsd 0.2s	22M/20stn	Msd 0.2						Corr. 0.379	10M/6stn	Msd 0.2				
MAY 26 1238	17.1s	38.16S	178.36E	20km	M=3.6	92/5809		MAY 29 1136	04.2s	36.58S	179.83E	33km	M=4.2	92/5900
Rsd 0.3s	0.4	0.02	0.06	R				Rsd 0.2s	0.4	0.02	0.03	R		
Corr. -0.190	6ph/4stn	Dmin 13km	Az.gap 214°					Corr. 0.084	12ph/10stn	Dmin 177km	Az.gap 308°			
Rsd 0.3s	10M/6stn	Msd 0.2	1↓						16M/12stn	Msd 0.2				
MAY 26 1714	03.4s	40.40S	174.26E	99km	M=3.5	92/5816		MAY 29 1406	15.7s	41.61S	173.67E	80km	M=3.9	92/5902
Rsd 0.3s	0.3	0.01	0.01	3				Rsd 0.2s	0.2	0.01	0.01	2		
Corr. -0.094	37ph/21stn	Dmin 53km	Az.gap 96°					Corr. -0.174	38ph/25stn	Dmin 21km	Az.gap 64°			
Rsd 0.3s	15M/12stn	Msd 0.3	7↑ 1↓					Corr. 0.21	17M/12stn	Msd 0.2	1↑ 5↓			
MAY 26 1951	38.4s	38.49S	175.85E	182km	M=3.6	92/5821		MAY 29 1656	15.3s	36.10S	178.14E	204km	M=3.8	92/5910
Rsd 0.0s	0.1	0.01	0.02	1				Rsd 0.3s	0.9	0.23	0.33	26		
Corr. 0.287	19ph/14stn	Dmin 79km	Az.gap 310°					Corr. -0.930	8ph/5stn	Dmin 219km	Az.gap 333°			
Rsd 0.0s	7M/7stn	Msd 0.4	1↑						3M/2stn	Msd 0.4				
MAY 27 0048	37.9s	38.07S	177.47E	86km	M=4.0	92/5825		MAY 29 2114	44.9s	38.22S	175.90E	156km	M=3.6	92/5920
Rsd 0.1s	0.3	0.02	0.02	3				Rsd 0.3s	0.7	0.05	0.10	8		
Corr. -0.180	17ph/15stn	Dmin 38km	Az.gap 102°					Corr. -0.820	13ph/6stn	Dmin 106km	Az.gap 243°			
Rsd 0.1s	26M/21stn	Msd 0.2	1↓					Corr. 0.21	11M/10stn	Msd 0.2				
MAY 30 0416	36.9s	38.06S	176.99E	78km	M=3.5	92/5929		MAY 30 1656	15.3s	36.10S	178.14E	204km	M=3.8	92/5930
Rsd 0.2s	0.2	0.02	0.01	3				Rsd 0.3s	0.9	0.23	0.33	26		
Corr. 0.289	10ph/7stn	Dmin 25km	Az.gap 129°					Corr. -0.930	8ph/5stn	Dmin 219km	Az.gap 333°			
Rsd 0.2s	9M/5stn	Msd 0.4							3M/2stn	Msd 0.4				

MAY 30 0852	50.4s	44.10S	168.34E	5km	M=3.6	92/5934	JUN 02 1337	49.3s	37.19S	177.13E	12km	M=4.5	92/6059
Rsd 0.2s	0.2	0.01	0.02	R			0.5	0.04	0.02				
Corr. -0.707	22ph/17stn	Dmin 72km	Az.gap 194°				Rsd 0.4s	15ph/13stn	Dmin 113km	Az.gap 171°			
	19M/16stn	Msd 0.2					Corr. 0.147	8M/4stn	Msd 0.2	1↑ 2↓			
MAY 30 1224	47.9s	37.33S	178.17E	88km	M=4.4	92/5939	JUN 02 1526	29.1s	38.77S	175.86E	111km	M=3.8	92/6068
Rsd 0.1s	0.2	0.01	0.01	1			0.3	0.01	0.02	4			
Corr. 0.198	20ph/15stn	Dmin 32km	Az.gap 226°				Rsd 0.2s	30ph/22stn	Dmin 51km	Az.gap 71°			
	27M/21stn	Msd 0.2	2↑ 1↓				Corr. 0.037	20M/19stn	Msd 0.2	1↑			
MAY 30 1250	41.3s	36.69S	178.06E	111km	M=3.9	92/5940	JUN 02 1922	20.1s	38.15S	178.30E	20km	M=3.6	92/6072
Rsd 0.2s	0.4	0.03	0.04	5			0.2	0.01	0.03				
Corr. 0.777	11ph/9stn	Dmin 155km	Az.gap 265°				Rsd 0.2s	13ph/9stn	Dmin 9km	Az.gap 204°			
	19M/15stn	Msd 0.2					Corr. -0.559	14M/10stn	Msd 0.2	1↑ 1↓			
MAY 30 1807	39.8s	36.18S	177.04E	194km	M=3.7	92/5952	JUN 02 2112	43.3s	37.16S	177.69E	24km	M=3.8	92/6074
Rsd 0.2s	0.6	0.12	0.17	19			0.5	0.04	0.04	5			
Corr. -0.926	7ph/5stn	Dmin 231km	Az.gap 318°				Rsd 0.2s	10ph/8stn	Dmin 73km	Az.gap 273°			
	2M/2stn	Msd 0.2	1↑				Corr. 0.451	19M/15stn	Msd 0.2	1↑ 1↓			
MAY 30 2144	18.4s	38.49S	178.96E	20km	M=3.9	92/5960	JUN 03 0837	25.7s	36.97S	177.69E	103km	M=3.7	92/6089
Rsd 0.3s	1.0	0.03	0.08	R			1.5	0.08	0.09	17			
Corr. 0.707	16ph/14stn	Dmin 77km	Az.gap 273°				Rsd 0.6s	11ph/9stn	Dmin 89km	Az.gap 225°			
	34M/30stn	Msd 0.2	1↑				Corr. 0.672	10M/8stn	Msd 0.2				
MAY 31 1759	14.5s	36.46S	179.56E	33km	M=4.3	92/5994	JUN 03 0957	02.7s	36.30S	176.49E	146km	M=3.6	92/6092
Rsd 0.2s	1.0	0.06	0.07	R			2.8	0.53	0.77	157			
Corr. 0.777	14ph/12stn	Dmin 169km	Az.gap 283°				Rsd 0.7s	5ph/5stn	Dmin 224km	Az.gap 313°			
	31M/27stn	Msd 0.2					Corr. -0.941	3M/3stn	Msd 0.4				
JUN 01 2235	53.1s	37.75S	177.59E	67km	M=4.2	92/6038	JUN 03 1912	16.8s	38.14S	178.30E	21km	M=3.7	92/6102
Rsd 0.1s	0.3	0.02	0.02	4			0.6	0.03	0.09	3			
Corr. -0.230	14ph/12stn	Dmin 65km	Az.gap 132°				Rsd 0.6s	8ph/6stn	Dmin 8km	Az.gap 204°			
	24M/20stn	Msd 0.2	1↑ 1↓				Corr. -0.398	11M/7stn	Msd 0.2	1↓			
JUN 01 2344	30.7s	38.05S	176.38E	161km	M=3.8	92/6040	JUN 04 0832	45.7s	38.41S	176.06E	158km	M=4.2	92/6129
Rsd 0.2s	0.5	0.03	0.02	5			0.4	0.02	0.02	4			
Corr. -0.482	16ph/12stn	Dmin 38km	Az.gap 185°				Rsd 0.3s	20ph/16stn	Dmin 72km	Az.gap 75°			
	21M/19stn	Msd 0.2					Corr. 0.085	22M/20stn	Msd 0.3	8↑ 2↓			
JUN 02 0327	55.7s	36.91S	177.02E	195km	M=3.8	92/6044	JUN 04 1243	50.6s	41.13S	174.48E	40km	M=3.7	92/6134
Rsd 0.3s	0.7	0.09	0.10	10			0.1	0.01	0.01	1			
Corr. -0.645	10ph/9stn	Dmin 137km	Az.gap 273°				Rsd 0.1s	33ph/27stn	Dmin 19km	Az.gap 63°			
	17M/17stn	Msd 0.2					Corr. 0.020	14M/13stn	Msd 0.2	6↑ 6↓			
	Felt Kelburn (68).												
JUN 02 1326	44.9s	37.24S	177.14E	12km	M=4.2	92/6058	JUN 04 1919	55.1s	37.69S	176.20E	172km	M=3.5	92/6142
Rsd 0.4s	0.3	0.03	0.02	R			0.9	0.12	0.19	19			
Corr. 0.357	13ph/11stn	Dmin 110km	Az.gap 173°				Rsd 0.4s	10ph/8stn	Dmin 102km	Az.gap 250°			
	22M/16stn	Msd 0.2	1↑				Corr. -0.941	4M/4stn	Msd 0.1				

JUN 05 0400	22.2s	40.06S	177.04E	47km	M=3.5	92/6153	JUN 09 2247	09.8s	38.38S	174.46E	17km	M=3.6	92/6317
Rsd 0.2s	0.3	0.01	0.04	3			Rsd 0.1s	0.3	0.01	0.02	2		
Corr. -0.441	28ph/22stn	Dmin 21km	Az.gap 216°				Corr. -0.715	10ph/6stn	Dmin 33km	Az.gap 209°			
	19M/19stn	Msd 0.2	1↑ 1↓					14M/12stn	Msd 0.2	1↓			
JUN 05 1643	30.1s	36.41S	178.77E	265km	M=4.0	92/6182	JUN 10 0543	53.9s	36.85S	176.34E	227km	M=3.6	92/6327
Rsd 0.3s	1.1	0.37	0.48	17			Rsd 0.1s	0.4	0.06	0.12	13		
Corr. -0.910	7ph/5stn	Dmin 190km	Az.gap 339°				Corr. -0.949	11ph/10stn	Dmin 217km	Az.gap 289°			
	4M/3stn	Msd 0.5						5M/5stn	Msd 0.3				
JUN 06 0401	58.8s	39.09S	175.39E	136km	M=3.7	92/6191	JUN 10 1417	44.7s	36.85S	176.16E	160km	M=3.7	92/6335
Rsd 0.2s	0.5	0.04	0.04	5			Rsd 0.1s	0.7	0.12	0.21	27		
Corr. -0.338	23ph/17stn	Dmin 88km	Az.gap 188°				Corr. -0.984	13ph/11stn	Dmin 177km	Az.gap 302°			
	12M/12stn	Msd 0.2	1↑ 5↓					9M/8stn	Msd 0.4				
JUN 06 1227	30.3s	37.51S	177.01E	12km	M=3.6	92/6196	JUN 10 2137	23.9s	36.35S	177.94E	223km	M=3.9	92/6344
Rsd 0.5s	0.4	0.04	0.03	R			Rsd 0.3s	0.9	0.13	0.24	14		
Corr. -0.004	10ph/8stn	Dmin 84km	Az.gap 149°				Corr. -0.785	7ph/5stn	Dmin 142km	Az.gap 324°			
	12M/8stn	Msd 0.2						5M/4stn	Msd 0.2				
JUN 07 0018	37.9s	41.31S	172.79E	142km	M=3.6	92/6210	JUN 10 2251	30.5s	39.52S	174.44E	201km	M=4.2	92/6346
Rsd 0.3s	0.3	0.01	0.02	3			Rsd 0.2s	0.4	0.02	0.03	4		
Corr. -0.076	27ph/18stn	Dmin 51km	Az.gap 99°				Corr. 0.260	24ph/19stn	Dmin 48km	Az.gap 81°			
	9M/9stn	Msd 0.2	1↑					18M/16stn	Msd 0.2	13↑ 4↓			
JUN 07 1156	31.7s	38.65S	177.83E	37km	M=3.8	92/6223	JUN 10 2332	01.3s	42.24S	173.76E	39km	M=3.6	92/6348
Rsd 0.2s	0.3	0.03	0.03	6			Rsd 0.2s	0.1	0.01	0.01	2		
Corr. -0.711	10ph/9stn	Dmin 18km	Az.gap 135°				Corr. -0.383	31ph/21stn	Dmin 27km	Az.gap 150°			
	7M/3stn	Msd 0.1	1↑ 1↓					16M/12stn	Msd 0.3	3↑ 5↓			
JUN 07 1157	56.6s	38.66S	177.86E	43km	M=3.7	92/6224	JUN 11 0506	10.1s	41.77S	171.98E	5km	M=3.7	92/6353
Rsd 0.3s	0.3	0.03	0.04	5			Rsd 0.3s	0.2	0.01	0.01	R		
Corr. -0.637	9ph/8stn	Dmin 16km	Az.gap 144°				Corr. 0.007	21ph/13stn	Dmin 15km	Az.gap 105°			
	7M/3stn	Msd 0.2	1↑					27M/22stn	Msd 0.2	2↑ 2↓			
JUN 09 0424	33.7s	38.31S	176.06E	150km	M=3.9	92/6285	JUN 12 1344	12.1s	42.67S	171.90E	14km	M=4.0	92/6386
Rsd 0.3s	0.5	0.02	0.02	5			Rsd 0.2s	0.2	0.01	0.01	4		
Corr. 0.120	14ph/12stn	Dmin 92km	Az.gap 92°				Corr. -0.156	14ph/10stn	Dmin 33km	Az.gap 111°			
	20M/19stn	Msd 0.3	1↑					10M/5stn	Msd 0.3	1↑ 1↓			
JUN 09 0531	39.0s	36.66S	177.50E	179km	M=4.0	92/6288	JUN 12 2252	47.2s	39.15S	174.90E	213km	M=4.5	92/6392
Rsd 0.3s	0.6	0.04	0.06	6			Rsd 0.2s	0.3	0.01	0.02	2		
Corr. 0.361	10ph/9stn	Dmin 126km	Az.gap 240°				Corr. 0.328	40ph/29stn	Dmin 56km	Az.gap 98°			
	17M/17stn	Msd 0.2	1↑					8M/4stn	Msd 0.3	8↑ 3↓			
JUN 09 0757	48.0s	35.87S	177.18E	187km	M=3.8	92/6293	JUN 13 0031	22.2s	38.36S	176.23E	128km	M=3.7	92/6394
Rsd 0.2s	1.1	0.08	0.22	27			Rsd 0.2s	0.9	0.09	0.09	6		
Corr. -0.672	7ph/6stn	Dmin 216km	Az.gap 314°				Corr. -0.891	11ph/9stn	Dmin 63km	Az.gap 225°			
	5M/5stn	Msd 0.2						19M/17stn	Msd 0.4	1↑			

JUN 14 0123 25.7s	38.25S	175.68E	309km	M=3.6	92/6412	JUN 16 1511 59.3s	35.60S	178.46E	206km	M=4.0	92/6466
0.7	0.12	0.07	14			0.6	0.10	0.10	18		
Rsd 0.2s	12ph/9stn	Dmin 268km	Az.gap 320°			Rsd 0.2s	8ph/6stn	Dmin 223km	Az.gap 302°		
Corr. -0.034	6M/6stn	Msd 0.3				Corr. 0.914	7M/6stn	Msd 0.4			
JUN 14 0209 30.8s	40.24S	173.45E	159km	M=3.5	92/6413	JUN 16 2230 25.0s	45.01S	167.54E	85km	M=3.7	92/6475
0.3	0.02	0.02	3			0.4	0.02	0.03	4		
Rsd 0.2s	26ph/17stn	Dmin 74km	Az.gap 162°			Rsd 0.2s	16ph/11stn	Dmin 48km	Az.gap 190°		
Corr. -0.289	13M/11stn	Msd 0.2	1↓			Corr. -0.566	19M/12stn	Msd 0.2	1↑ 1↓		
JUN 14 0548 48.0s	35.46S	178.81E	148km	M=4.5	92/6418	JUN 16 2324 03.5s	37.48S	179.77E	12km	M=4.0	92/6478
1.1	0.09	0.08	19			0.3	0.03	0.03	R		
Rsd 0.2s	12ph/10stn	Dmin 242km	Az.gap 308°			Rsd 0.2s	13ph/11stn	Dmin 130km	Az.gap 291°		
Corr. 0.691	28M/22stn	Msd 0.3	1↓			Corr. -0.258	20M/14stn	Msd 0.2			
JUN 14 0602 36.1s	38.14S	176.27E	4km	M=2.6	92/6419	JUN 17 0022 39.7s	38.02S	175.95E	188km	M=3.8	92/6481
0.4	0.02	0.02	5			0.4	0.01	0.03	5		
Rsd 0.3s	7ph/5stn	Dmin 23km	Az.gap 119°			Rsd 0.2s	16ph/13stn	Dmin 105km	Az.gap 141°		
Corr. 0.617	4M/4stn	Msd 0.3	1↑			Corr. -0.024	19M/17stn	Msd 0.2			
Felt Rotorua (33) MM4.											
JUN 14 1413 07.6s	37.47S	175.63E	257km	M=3.5	92/6427	JUN 17 1443 21.0s	36.03S	178.82E	25km	M=3.7	92/6491
0.5	0.07	0.13	9			0.3	0.02	0.03	5		
Rsd 0.1s	11ph/8stn	Dmin 157km	Az.gap 289°			Rsd 0.1s	8ph/6stn	Dmin 180km	Az.gap 299°		
Corr. -0.645	5M/5stn	Msd 0.1				Corr. 0.766	6M/6stn	Msd 0.4	1↓		
JUN 14 1953 42.7s	38.78S	177.67E	42km	M=3.9	92/6434	JUN 17 1619 48.0s	38.36S	177.20E	52km	M=4.0	92/6494
0.3	0.02	0.02	7			0.2	0.01	0.01	4		
Rsd 0.3s	13ph/11stn	Dmin 37km	Az.gap 98°			Rsd 0.2s	26ph/22stn	Dmin 13km	Az.gap 83°		
Corr. -0.531	12M/8stn	Msd 0.4	1↓			Corr. 0.180	22M/18stn	Msd 0.3	2↑ 1↓		
JUN 15 0138 47.1s	39.77S	178.53E	33km	M=4.2	92/6441	JUN 17 2047 25.1s	37.22S	177.21E	5km	M=3.6	92/6498
0.5	0.03	0.04	R			0.3	0.02	0.02	R		
Rsd 0.2s	17ph/14stn	Dmin 85km	Az.gap 230°			Rsd 0.3s	13ph/10stn	Dmin 34km	Az.gap 183°		
Corr. -0.746	8M/4stn	Msd 0.2	2↑ 3↓			Corr. 0.469	10M/6stn	Msd 0.1			
JUN 15 0608 21.5s	36.15S	178.45E	250km	M=4.2	92/6443	JUN 18 0301 47.0s	37.59S	176.21E	286km	M=3.9	92/6509
0.6	0.06	0.10	R			0.2	0.05	0.03	6		
Rsd 0.2s	8ph/6stn	Dmin 161km	Az.gap 338°			Rsd 0.0s	8ph/7stn	Dmin 342km	Az.gap 341°		
Corr. -0.598	6M/4stn	Msd 0.5				Corr. -0.301	5M/3stn	Msd 0.3			
JUN 15 1010 55.9s	36.92S	176.94E	239km	M=4.0	92/6444	JUN 18 0315 08.4s	36.73S	177.17E	213km	M=4.0	92/6511
0.2	0.01	0.01	2			0.9	0.05	0.06	8		
Rsd 0.1s	11ph/8stn	Dmin 110km	Az.gap 204°			Rsd 0.4s	11ph/10stn	Dmin 130km	Az.gap 225°		
Corr. 0.563	9M/7stn	Msd 0.3				Corr. 0.496	9M/8stn	Msd 0.2			
JUN 15 1413 17.9s	45.01S	167.49E	114km	M=3.5	92/6447	JUN 18 0347 40.6s	39.65S	174.07E	211km	M=4.5	92/6512
0.4	0.02	0.03	3			0.6	0.02	0.03	5		
Rsd 0.3s	19ph/11stn	Dmin 51km	Az.gap 196°			Rsd 0.2s	29ph/25stn	Dmin 37km	Az.gap 116°		
Corr. -0.520	15M/10stn	Msd 0.1	1↑ 1↓			Corr. -0.058	23M/20stn	Msd 0.3	4↑ 2↓		

JUN	18	1032	26.4s	47.36S	165.32E	12km	M=4.5	92/6521
			1.3	0.11	0.14	R		
Rsd	0.4s		10ph/8stn	Dmin 244km	Az.gap 329°			
Corr.	-0.226	9M/5stn		Msd 0.1	1↑			
								92/6529
JUN	18	1304	28.9s	37.48S	176.30E	208km	M=3.8	
			0.6	0.08	0.15	14		
Rsd	0.3s		10ph/6stn	Dmin 112km	Az.gap 245°			
Corr.	-0.816	13M/12stn		Msd 0.2				
								92/6538
JUN	18	1712	18.0s	37.92S	176.18E	173km	M=3.7	
			0.6	0.05	0.07	10		
Rsd	0.3s		13ph/9stn	Dmin 90km	Az.gap 233°			
Corr.	-0.844	11M/11stn		Msd 0.2	1↑			
								92/6551
JUN	18	2323	59.4s	36.57S	175.09E	33km	M=4.1	
			0.3	0.02	0.03	R		
Rsd	0.1s		7ph/5stn	Dmin 259km	Az.gap 306°			
Corr.	0.447	6M/4stn		Msd 0.5				
								92/6553
JUN	19	0158	59.5s	35.91S	178.17E	196km	M=4.0	
			0.3	0.04	0.07	5		
Rsd	0.1s		10ph/8stn	Dmin 188km	Az.gap 323°			
Corr.	-0.504	14M/13stn		Msd 0.3				
								92/6561
JUN	19	0926	30.1s	40.61S	174.94E	5km	M=4.4	
			0.1	0.01	0.01	R		
Rsd	0.2s		31ph/25stn	Dmin 28km	Az.gap 66°			
Corr.	-0.295	14M/7stn		Msd 0.2	4↑ 13↓			
						Felt Wanganui (57) to Waikanae (65), max. int. MM4.		
								92/6575
JUN	19	1358	48.7s	36.19S	177.82E	177km	M=3.6	
			0.2	0.02	0.04	3		
Rsd	0.0s		6ph/5stn	Dmin 163km	Az.gap 329°			
Corr.	-0.863	3M/3stn		Msd 0.1				
								92/6576
JUN	19	1518	03.4s	38.55S	176.21E	154km	M=3.8	
			0.9	0.05	0.06	8		
Rsd	0.4s		10ph/8stn	Dmin 85km	Az.gap 211°			
Corr.	-0.455	14M/13stn		Msd 0.4	1↑			
								92/6582
JUN	19	2212	39.8s	38.53S	179.43E	5km	M=4.3	
			0.5	0.03	0.04	R		
Rsd	0.2s		11ph/11stn	Dmin 115km	Az.gap 283°			
Corr.	0.270	26M/20stn		Msd 0.3	1↑			
								92/6590
JUN	20	0438	54.4s	37.99S	176.49E	243km	M=3.7	
			0.7	0.02	0.08	5		
Rsd	0.2s		10ph/5stn	Dmin 62km	Az.gap 145°			
Corr.	0.230	12M/11stn		Msd 0.3				
								92/6602
JUN	20	1144	15.4s	38.29S	177.63E	69km	M=3.5	
						0.3	0.02	0.01
Rsd	0.1s		7ph/5stn		Dmin 45km	4		
Corr.	0.040	5M/3stn		Msd 0.1	1↑			
								92/6617
JUN	21	0105	38.4s	37.81S	176.19E	195km	M=3.8	
						0.6	0.03	0.04
Rsd	0.3s		11ph/9stn		Dmin 53km	6		
Corr.	0.365	20M/17stn		Msd 0.1				
								92/6619
JUN	21	0431	08.4s	37.32S	177.55E	278km	M=3.7	
						1.0	0.27	0.38
Rsd	0.3s		6ph/4stn		Dmin 104km	11		
Corr.	-0.961	4M/3stn		Msd 0.4				
								92/6625
JUN	21	0631	22.6s	37.91S	176.35E	190km	M=4.0	
						0.6	0.03	0.03
Rsd	0.2s		19ph/18stn		Dmin 11km	5		
Corr.	0.176	22M/20stn		Msd 0.2				
								92/6627
JUN	21	1056	59.3s	45.01S	167.51E	95km	M=4.3	
						0.5	0.02	0.04
Rsd	0.2s		18ph/13stn		Dmin 50km	3		
Corr.	-0.352	22M/15stn		Msd 0.2	3↑ 9↓			
								92/6633
JUN	21	1221	34.2s	38.20S	175.93E	162km	M=3.8	
						0.4	0.01	0.03
Rsd	0.1s		15ph/12stn		Dmin 91km	4		
Corr.	0.377	22M/20stn		Msd 0.2	1↑			
								92/6640
JUN	21	1743	09.4s	37.58S	176.87E	5km	M=6.1	
						0.2	0.01	0.02
Rsd	0.3s		28ph/24stn		Dmin 28km	R		
Corr.	0.122	25M/13stn		Msd 0.3				
								Felt Auckland (16) to Picton (78), maximum intensity MM 6 at Tauranga (26).
								92/6641
JUN	21	1744	52.2s	37.69S	176.83E	12km	M=3.5	
						0.8	0.04	0.02
Rsd	0.4s		11ph/10stn		Dmin 35km	7		
Corr.	0.203	6M/6stn		Msd 0.4				
								92/6643
JUN	21	1747	12.7s	37.62S	176.82E	5km	M=4.6	
						0.1	0.01	0.01
Rsd	0.2s		18ph/14stn		Dmin 34km	R		
Corr.	-0.326	16M/10stn		Msd 0.2				
								92/6644
JUN	21	1747	39.3s	37.70S	176.81E	5km	M=5.6	
						0.2	0.02	0.01
Rsd	0.2s		24ph/19stn		Dmin 39km	R		
Corr.	-0.049	14M/8stn		Msd 0.3				
								Felt Bay of Plenty, MM3 at Rotorua (33) and Opotiki (35).

JUN 21 1800	52.6s	37.60S	176.94E	5km	M=4.4	92/6647	JUN 21 1813	43.4s	37.66S	176.90E	5km	M=3.8	92/6658
	0.3	0.02	0.02	R				0.5	0.03	0.05	R		
Rsd 0.4s	22ph/17stn	Dmin 24km	Az.gap 119°				Rsd 0.5s	11ph/7stn	Dmin 30km	Az.gap 105°			
Corr. -0.069	8M/4stn	Msd 0.1					Corr. 0.122	6M/4stn	Msd 0.1				
JUN 21 1801	57.4s	37.63S	176.83E	5km	M=3.7	92/6648	JUN 21 1814	25.3s	37.71S	176.99E	5km	M=3.6	92/6659
	0.2	0.02	0.01	R				0.3	0.03	0.02	R		
Rsd 0.3s	17ph/13stn	Dmin 33km	Az.gap 117°				Rsd 0.3s	11ph/8stn	Dmin 27km	Az.gap 164°			
Corr. -0.063	13M/9stn	Msd 0.2					Corr. -0.594	8M/4stn	Msd 0.2				
JUN 21 1804	05.1s	37.66S	176.85E	12km	M=3.5	92/6650	JUN 21 1815	52.8s	37.63S	176.88E	5km	M=3.6	92/6660
	0.6	0.08	0.08	R				0.2	0.01	0.01	R		
Rsd 0.6s	8ph/5stn	Dmin 70km	Az.gap 154°				Rsd 0.2s	15ph/11stn	Dmin 30km	Az.gap 115°			
Corr. 0.844	9M/5stn	Msd 0.2					Corr. -0.249	15M/9stn	Msd 0.2				
JUN 21 1804	19.9s	37.58S	176.99E	12km	M=3.6	92/6651	JUN 21 1816	16.2s	37.75S	176.86E	5km	M=3.7	92/6661
	0.5	0.07	0.06	R				0.1	0.01	0.01	R		
Rsd 0.4s	6ph/4stn	Dmin 76km	Az.gap 142°				Rsd 0.1s	17ph/13stn	Dmin 31km	Az.gap 94°			
Corr. 0.848	9M/5stn	Msd 0.2					Corr. -0.322	14M/10stn	Msd 0.3				
JUN 21 1805	22.6s	37.65S	176.85E	12km	M=3.7	92/6652	JUN 21 1819	08.4s	37.57S	176.93E	12km	M=3.6	92/6666
	0.6	0.07	0.06	R				0.4	0.04	0.04	R		
Rsd 0.5s	8ph/5stn	Dmin 72km	Az.gap 154°				Rsd 0.5s	9ph/6stn	Dmin 78km	Az.gap 142°			
Corr. 0.805	9M/5stn	Msd 0.2					Corr. 0.617	10M/7stn	Msd 0.3				
JUN 21 1808	45.5s	37.56S	176.98E	5km	M=3.5	92/6653	JUN 21 1819	19.8s	37.58S	176.96E	12km	M=3.7	92/6667
	0.1	0.01	0.01	R				0.2	0.03	0.03	R		
Rsd 0.2s	13ph/8stn	Dmin 18km	Az.gap 131°				Rsd 0.4s	9ph/6stn	Dmin 108km	Az.gap 141°			
Corr. 0.227	4M/4stn	Msd 0.2					Corr. 0.656	9M/7stn	Msd 0.3				
JUN 21 1809	29.9s	37.57S	176.91E	5km	M=4.3	92/6654	JUN 21 1820	40.8s	37.62S	176.96E	5km	M=4.0	92/6668
	0.3	0.03	0.02	R				0.2	0.02	0.02	R		
Rsd 0.4s	23ph/21stn	Dmin 25km	Az.gap 129°				Rsd 0.3s	15ph/13stn	Dmin 23km	Az.gap 112°			
Corr. -0.285	10M/6stn	Msd 0.2					Corr. 0.108	21M/16stn	Msd 0.2				
JUN 21 1810	58.7s	37.57S	177.03E	5km	M=3.8	92/6655	JUN 21 1821	22.2s	37.77S	176.86E	5km	M=3.6	92/6669
	0.5	0.04	0.03	R				0.1	0.01	0.01	R		
Rsd 0.6s	12ph/9stn	Dmin 15km	Az.gap 144°				Rsd 0.1s	16ph/11stn	Dmin 29km	Az.gap 124°			
Corr. 0.019	10M/6stn	Msd 0.2					Corr. -0.130	11M/9stn	Msd 0.2				
JUN 21 1811	55.3s	37.68S	176.92E	5km	M=3.6	92/6656	JUN 21 1828	41.4s	37.75S	177.01E	5km	M=3.7	92/6674
	0.3	0.03	0.03	R				0.2	0.02	0.01	R		
Rsd 0.6s	12ph/9stn	Dmin 29km	Az.gap 101°				Rsd 0.2s	18ph/15stn	Dmin 39km	Az.gap 128°			
Corr. -0.543	9M/6stn	Msd 0.2					Corr. -0.273	17M/13stn	Msd 0.2				
JUN 21 1813	18.1s	37.72S	176.84E	5km	M=3.5	92/6657	JUN 21 1842	06.4s	37.63S	176.89E	5km	M=3.5	92/6684
	0.2	0.02	0.03	R				0.2	0.02	0.02	R		
Rsd 0.2s	6ph/6stn	Dmin 34km	Az.gap 185°				Rsd 0.3s	10ph/8stn	Dmin 29km	Az.gap 114°			
Corr. -0.863	5M/3stn	Msd 0.2					Corr. -0.555	5M/4stn	Msd 0.1				

JUN 21 1842	28.0s	37.57S	176.87E	5km	M=4.1	92/6685	JUN 21 1926	20.7s	37.64S	176.93E	5km	M=3.6	92/6704
	0.3	0.02	0.02	R				0.1	0.01	0.01	R		
Rsd 0.3s	11ph/8stn	Dmin 28km	Az.gap 131°				Rsd 0.2s	13ph/10stn	Dmin 26km	Az.gap 109°			
Corr. -0.426	8M/5stn	Msd 0.2					Corr. -0.155	7M/5stn	Msd 0.2				
JUN 21 1847	03.8s	37.60S	176.92E	5km	M=4.3	92/6686	JUN 21 1929	56.3s	37.61S	176.91E	5km	M=3.6	92/6705
	0.2	0.02	0.02	R				1.2	0.03	0.02	11		
Rsd 0.4s	20ph/16stn	Dmin 25km	Az.gap 121°				Rsd 0.3s	14ph/11stn	Dmin 26km	Az.gap 119°			
Corr. -0.038	8M/4stn	Msd 0.1					Corr. -0.490	10M/8stn	Msd 0.2				
JUN 21 1852	33.4s	37.70S	176.80E	5km	M=3.5	92/6688	JUN 21 1931	30.9s	37.66S	176.83E	5km	M=3.9	92/6706
	0.2	0.02	0.02	R				0.2	0.02	0.01	R		
Rsd 0.3s	14ph/10stn	Dmin 34km	Az.gap 129°				Rsd 0.3s	14ph/12stn	Dmin 35km	Az.gap 109°			
Corr. -0.085	7M/7stn	Msd 0.3					Corr. -0.486	10M/7stn	Msd 0.2				
JUN 21 1903	58.1s	37.58S	177.09E	5km	M=3.8	92/6693	JUN 21 1932	37.8s	37.59S	176.87E	5km	M=3.5	92/6707
	0.3	0.03	0.02	R				0.6	0.05	0.04	R		
Rsd 0.3s	14ph/10stn	Dmin 11km	Az.gap 144°				Rsd 0.5s	9ph/7stn	Dmin 48km	Az.gap 139°			
Corr. -0.036	8M/8stn	Msd 0.4					Corr. -0.377	4M/4stn	Msd 0.2				
JUN 21 1906	28.8s	37.55S	176.94E	5km	M=4.2	92/6695	JUN 21 1936	00.9s	37.71S	176.83E	5km	M=3.7	92/6709
	0.4	0.04	0.02	R				0.1	0.01	0.01	R		
Rsd 0.5s	19ph/15stn	Dmin 22km	Az.gap 134°				Rsd 0.2s	15ph/12stn	Dmin 34km	Az.gap 101°			
Corr. -0.219	21M/17stn	Msd 0.2					Corr. -0.594	12M/9stn	Msd 0.2				
JUN 21 1908	54.4s	37.60S	176.96E	5km	M=3.5	92/6696	JUN 21 1938	02.2s	37.59S	176.96E	9km	M=3.7	92/6710
	0.2	0.02	0.02	R				0.5	0.02	0.02	5		
Rsd 0.3s	14ph/10stn	Dmin 22km	Az.gap 119°				Rsd 0.3s	14ph/11stn	Dmin 22km	Az.gap 120°			
Corr. -0.383	9M/7stn	Msd 0.2					Corr. -0.030	9M/8stn	Msd 0.3				
JUN 21 1913	10.5s	37.60S	176.98E	5km	M=4.3	92/6698	JUN 21 1938	42.3s	37.73S	176.83E	5km	M=3.5	92/6711
	0.1	0.01	0.01	R				0.2	0.01	0.02	R		
Rsd 0.2s	18ph/15stn	Dmin 20km	Az.gap 117°				Rsd 0.3s	12ph/10stn	Dmin 31km	Az.gap 97°			
Corr. -0.297	8M/4stn	Msd 0.2					Corr. -0.291	4M/4stn	Msd 0.2				
JUN 21 1914	55.9s	37.59S	176.95E	5km	M=3.7	92/6699	JUN 21 1939	01.6s	37.61S	176.89E	5km	M=3.7	92/6712
	0.3	0.03	0.03	R				0.2	0.01	0.01	R		
Rsd 0.2s	8ph/6stn	Dmin 22km	Az.gap 206°				Rsd 0.2s	10ph/7stn	Dmin 46km	Az.gap 138°			
Corr. -0.855	2M/2stn	Msd 0.1					Corr. 0.079	9M/7stn	Msd 0.2				
JUN 21 1917	57.3s	37.43S	176.95E	12km	M=3.6	92/6701	JUN 21 1947	40.5s	37.61S	176.95E	1km	M=3.6	92/6714
	0.5	0.09	0.08	R				0.3	0.02	0.01	2		
Rsd 0.4s	5ph/4stn	Dmin 121km	Az.gap 160°				Rsd 0.3s	16ph/12stn	Dmin 23km	Az.gap 115°			
Corr. 0.805	4M/4stn	Msd 0.2					Corr. -0.005	15M/13stn	Msd 0.2				
JUN 21 1924	20.4s	37.56S	176.96E	5km	M=4.0	92/6703	JUN 21 2009	55.5s	37.61S	176.97E	5km	M=3.6	92/6721
	0.2	0.02	0.01	R				0.2	0.02	0.01	R		
Rsd 0.3s	18ph/15stn	Dmin 54km	Az.gap 144°				Rsd 0.3s	16ph/11stn	Dmin 21km	Az.gap 116°			
Corr. -0.020	19M/15stn	Msd 0.2					Corr. 0.020	15M/13stn	Msd 0.2				

JUN 21 2022	<b>59.6s</b>	<b>44.33S</b>	<b>166.87E</b>	200km	M=4.4	92/6725	JUN 21 2052	<b>59.8s</b>	<b>37.55S</b>	<b>176.93E</b>	5km	M=3.5	92/6744
Rsd 0.1s	0.6	0.06	0.08	R			Rsd 0.3s	0.3	0.02	0.02	R		
Corr. -0.762	10ph/10stn	Dmin 92km	Az.gap 277°				Corr. 0.088	13ph/9stn	Dmin 23km	Az.gap 136°			
	16M/14stn	Msd 0.4	1↑					9M/7stn	Msd 0.2				
JUN 21 2035	<b>12.4s</b>	<b>37.65S</b>	<b>176.84E</b>	5km	M=4.2	92/6732	JUN 21 2054	<b>08.2s</b>	<b>37.52S</b>	<b>176.99E</b>	5km	M=4.1	92/6745
Rsd 0.4s	0.3	0.02	0.02	R			Rsd 0.3s	0.2	0.02	0.01	R		
Corr. -0.116	20ph/17stn	Dmin 33km	Az.gap 111°				Corr. -0.291	17ph/12stn	Dmin 17km	Az.gap 145°			
	8M/4stn	Msd 0.1	1↑					13M/9stn	Msd 0.2				
JUN 21 2039	<b>38.3s</b>	<b>37.53S</b>	<b>176.97E</b>	5km	M=4.5	92/6733	JUN 21 2055	<b>42.5s</b>	<b>37.57S</b>	<b>177.01E</b>	5km	M=3.6	92/6746
Rsd 0.3s	0.2	0.02	0.01	R			Rsd 0.2s	0.2	0.02	0.02	R		
Corr. -0.018	22ph/16stn	Dmin 19km	Az.gap 144°				Corr. -0.566	11ph/8stn	Dmin 16km	Az.gap 125°			
	8M/4stn	Msd 0.2						8M/6stn	Msd 0.2				
JUN 21 2040	<b>25.9s</b>	<b>37.58S</b>	<b>177.07E</b>	5km	M=4.0	92/6734	JUN 21 2056	<b>10.3s</b>	<b>37.64S</b>	<b>176.97E</b>	5km	M=4.0	92/6747
Rsd 0.2s	0.2	0.02	0.01	R			Rsd 0.3s	0.2	0.02	0.02	R		
Corr. -0.424	13ph/11stn	Dmin 12km	Az.gap 115°				Corr. -0.121	13ph/10stn	Dmin 23km	Az.gap 106°			
	7M/6stn	Msd 0.3						11M/8stn	Msd 0.2				
JUN 21 2047	<b>17.7s</b>	<b>37.61S</b>	<b>177.04E</b>	5km	M=3.8	92/6737	JUN 21 2103	<b>37.9s</b>	<b>37.72S</b>	<b>176.95E</b>	12km	M=3.7	92/6748
Rsd 0.4s	0.4	0.03	0.02	R			Rsd 0.1s	0.1	0.02	0.02	R		
Corr. -0.527	16ph/13stn	Dmin 16km	Az.gap 105°				Corr. 0.832	7ph/4stn	Dmin 120km	Az.gap 177°			
	18M/15stn	Msd 0.3						5M/5stn	Msd 0.2				
JUN 21 2048	<b>02.9s</b>	<b>37.68S</b>	<b>176.82E</b>	5km	M=3.6	92/6738	JUN 21 2108	<b>44.0s</b>	<b>37.62S</b>	<b>176.94E</b>	5km	M=3.6	92/6752
Rsd 0.4s	0.3	0.02	0.03	R			Rsd 0.3s	0.3	0.03	0.02	R		
Corr. -0.492	10ph/9stn	Dmin 36km	Az.gap 106°				Corr. -0.314	14ph/11stn	Dmin 25km	Az.gap 115°			
	10M/10stn	Msd 0.2	1↑					11M/9stn	Msd 0.2				
JUN 21 2049	<b>36.7s</b>	<b>37.60S</b>	<b>176.97E</b>	5km	M=4.1	92/6740	JUN 21 2111	<b>38.2s</b>	<b>37.74S</b>	<b>176.85E</b>	5km	M=3.8	92/6755
Rsd 0.2s	0.1	0.01	0.01	R			Rsd 0.3s	0.3	0.02	0.01	R		
Corr. -0.242	20ph/17stn	Dmin 21km	Az.gap 117°				Corr. -0.346	19ph/16stn	Dmin 32km	Az.gap 127°			
	8M/4stn	Msd 0.2						14M/14stn	Msd 0.2				
JUN 21 2050	<b>06.3s</b>	<b>37.59S</b>	<b>176.97E</b>	5km	M=4.0	92/6741	JUN 21 2111	<b>59.4s</b>	<b>37.59S</b>	<b>177.01E</b>	5km	M=4.5	92/6756
Rsd 0.4s	0.7	0.07	0.04	R			Rsd 0.2s	0.3	0.03	0.02	R		
Corr. -0.723	11ph/9stn	Dmin 20km	Az.gap 124°				Corr. -0.578	18ph/15stn	Dmin 17km	Az.gap 116°			
	8M/8stn	Msd 0.3						22M/17stn	Msd 0.3				
JUN 21 2051	<b>08.9s</b>	<b>37.54S</b>	<b>176.96E</b>	5km	M=3.8	92/6742	JUN 21 2116	<b>37.6s</b>	<b>37.58S</b>	<b>177.07E</b>	5km	M=3.6	92/6758
Rsd 0.3s	0.3	0.03	0.02	R			Rsd 0.2s	0.1	0.01	0.01	R		
Corr. -0.313	16ph/12stn	Dmin 20km	Az.gap 138°				Corr. -0.352	12ph/10stn	Dmin 12km	Az.gap 114°			
	9M/9stn	Msd 0.3						6M/4stn	Msd 0.2				
JUN 21 2051	<b>57.7s</b>	<b>37.59S</b>	<b>176.92E</b>	5km	M=3.7	92/6743	JUN 21 2145	<b>05.5s</b>	<b>37.68S</b>	<b>176.83E</b>	5km	M=3.7	92/6764
Rsd 0.4s	0.3	0.02	0.02	R			Rsd 0.4s	0.2	0.02	0.01	R		
Corr. -0.242	16ph/12stn	Dmin 24km	Az.gap 123°				Corr. -0.439	18ph/14stn	Dmin 36km	Az.gap 106°			
	16M/14stn	Msd 0.2						18M/15stn	Msd 0.2				

JUN 21 2159	30.9s	37.56S	176.96E	5km	M=4.3	92/6767	JUN 22 0216	37.5s	37.79S	177.19E	5km	M=3.6	92/6833
	0.2	0.02	0.01	R				0.2	0.02	0.02	R		
Rsd 0.3s	21ph/17stn	Dmin 20km	Az.gap 131°				Rsd 0.3s	10ph/8stn	Dmin 29km	Az.gap 109°			
Corr. 0.044	20M/14stn	Msd 0.3					Corr. -0.152	5M/5stn	Msd 0.2				
JUN 21 2232	37.3s	37.49S	176.99E	5km	M=3.6	92/6776	JUN 22 0219	01.6s	37.57S	177.05E	5km	M=4.0	92/6835
	0.2	0.02	0.01	R				0.3	0.02	0.02	R		
Rsd 0.2s	14ph/11stn	Dmin 18km	Az.gap 150°				Rsd 0.5s	19ph/14stn	Dmin 13km	Az.gap 122°			
Corr. -0.127	11M/9stn	Msd 0.2					Corr. -0.045	9M/6stn	Msd 0.1				
JUN 21 2243	15.8s	37.66S	176.89E	5km	M=4.1	92/6781	JUN 22 0219	56.5s	37.57S	177.03E	5km	M=4.0	92/6836
	0.2	0.02	0.01	R				0.3	0.03	0.02	R		
Rsd 0.3s	21ph/14stn	Dmin 30km	Az.gap 107°				Rsd 0.4s	11ph/9stn	Dmin 15km	Az.gap 123°			
Corr. -0.117	22M/16stn	Msd 0.2					Corr. -0.084	8M/5stn	Msd 0.1				
JUN 21 2249	42.2s	37.64S	176.82E	5km	M=4.0	92/6784	JUN 22 0228	09.6s	37.54S	177.03E	5km	M=4.5	92/6842
	0.2	0.02	0.02	R				0.2	0.02	0.01	R		
Rsd 0.3s	22ph/16stn	Dmin 35km	Az.gap 114°				Rsd 0.3s	25ph/22stn	Dmin 14km	Az.gap 140°			
Corr. -0.019	19M/15stn	Msd 0.2					Corr. 0.112	24M/18stn	Msd 0.2				
JUN 21 2312	55.0s	37.59S	176.99E	5km	M=4.1	92/6793	JUN 22 0228	57.7s	37.77S	177.06E	5km	M=3.7	92/6843
	0.1	0.01	0.01	R				0.4	0.05	0.02	R		
Rsd 0.2s	17ph/14stn	Dmin 19km	Az.gap 118°				Rsd 0.2s	10ph/8stn	Dmin 42km	Az.gap 195°			
Corr. -0.091	17M/14stn	Msd 0.4					Corr. -0.656	5M/5stn	Msd 0.2				
JUN 22 0008	23.8s	37.48S	177.05E	5km	M=4.2	92/6806	JUN 22 0236	17.1s	37.59S	177.00E	5km	M=3.7	92/6845
	0.3	0.02	0.01	R				0.4	0.04	0.02	R		
Rsd 0.3s	21ph/16stn	Dmin 13km	Az.gap 153°				Rsd 0.5s	16ph/12stn	Dmin 18km	Az.gap 117°			
Corr. -0.023	21M/17stn	Msd 0.3					Corr. -0.311	6M/6stn	Msd 0.3				
JUN 22 0020	13.7s	37.59S	176.91E	5km	M=3.9	92/6809	JUN 22 0236	48.5s	37.71S	177.05E	5km	M=3.6	92/6846
	0.3	0.02	0.02	R				0.3	0.03	0.01	R		
Rsd 0.3s	11ph/8stn	Dmin 49km	Az.gap 164°				Rsd 0.3s	14ph/9stn	Dmin 45km	Az.gap 159°			
Corr. 0.273	7M/5stn	Msd 0.3					Corr. -0.047	8M/6stn	Msd 0.2				
JUN 22 0208	31.1s	37.55S	177.04E	5km	M=4.2	92/6827	JUN 22 0244	16.9s	37.53S	176.91E	5km	M=3.5	92/6848
	0.3	0.02	0.01	R				0.4	0.03	0.02	R		
Rsd 0.3s	20ph/16stn	Dmin 13km	Az.gap 134°				Rsd 0.4s	18ph/13stn	Dmin 25km	Az.gap 140°			
Corr. -0.273	22M/16stn	Msd 0.2	1↑				Corr. -0.017	10M/8stn	Msd 0.2				
JUN 22 0213	58.3s	37.54S	177.01E	5km	M=4.5	92/6830	JUN 22 0251	13.8s	37.68S	177.03E	5km	M=4.2	92/6850
	0.3	0.02	0.01	R				0.2	0.02	0.01	R		
Rsd 0.2s	22ph/19stn	Dmin 16km	Az.gap 138°				Rsd 0.2s	22ph/15stn	Dmin 22km	Az.gap 135°			
Corr. -0.301	31M/27stn	Msd 0.3					Corr. 0.042	21M/17stn	Msd 0.2				
JUN 22 0215	53.2s	37.73S	177.08E	5km	M=3.6	92/6831	JUN 22 0257	16.6s	37.56S	177.02E	5km	M=3.7	92/6851
	0.2	0.03	0.01	R				0.4	0.04	0.02	R		
Rsd 0.2s	13ph/12stn	Dmin 45km	Az.gap 180°				Rsd 0.5s	16ph/13stn	Dmin 15km	Az.gap 131°			
Corr. -0.617	5M/5stn	Msd 0.1					Corr. -0.270	10M/8stn	Msd 0.2				

JUN 22 0318	04.4s	37.62S	177.06E	5km	M=3.5	92/6856	JUN 22 1404	57.2s	37.53S	177.05E	5km	M=4.1	92/6950
	0.2	0.02	0.01	R				0.2	0.02	0.01	R		
Rsd 0.4s	13ph/10stn	Dmin 15km	Az.gap 99°				Rsd 0.3s	18ph/15stn	Dmin 12km	Az.gap 143°			
Corr. -0.211	9M/7stn	Msd 0.3					Corr. 0.172	20M/15stn	Msd 0.3				
JUN 22 0319	58.2s	37.61S	176.95E	5km	M=3.8	92/6857	JUN 22 1417	31.7s	37.69S	176.85E	5km	M=3.6	92/6955
	0.2	0.01	0.01	R				0.2	0.01	0.01	R		
Rsd 0.3s	18ph/14stn	Dmin 23km	Az.gap 114°				Rsd 0.3s	17ph/13stn	Dmin 36km	Az.gap 130°			
Corr. 0.117	18M/14stn	Msd 0.2					Corr. 0.148	9M/9stn	Msd 0.2	1↑			
JUN 22 0628	35.8s	37.56S	177.03E	5km	M=3.7	92/6886	JUN 22 1455	40.2s	37.57S	177.04E	5km	M=4.7	92/6961
	0.2	0.02	0.01	R				0.2	0.02	0.01	R		
Rsd 0.3s	22ph/15stn	Dmin 15km	Az.gap 127°				Rsd 0.3s	22ph/18stn	Dmin 14km	Az.gap 120°			
Corr. -0.160	15M/13stn	Msd 0.2					Corr. -0.001	8M/4stn	Msd 0.3				
JUN 22 0923	42.4s	37.55S	177.01E	5km	M=3.5	92/6913	JUN 22 1457	47.8s	37.66S	176.97E	5km	M=3.5	92/6962
	0.2	0.02	0.02	R				0.3	0.02	0.02	R		
Rsd 0.4s	16ph/11stn	Dmin 16km	Az.gap 136°				Rsd 0.3s	10ph/7stn	Dmin 45km	Az.gap 135°			
Corr. -0.137	8M/8stn	Msd 0.2					Corr. -0.033	4M/4stn	Msd 0.4				
JUN 22 1119	45.9s	37.67S	176.81E	5km	M=3.9	92/6930	JUN 22 1504	35.3s	37.55S	177.05E	5km	M=4.2	92/6967
	0.2	0.01	0.01	R				0.1	0.01	0.01	R		
Rsd 0.3s	28ph/17stn	Dmin 37km	Az.gap 109°				Rsd 0.2s	21ph/15stn	Dmin 59km	Az.gap 147°			
Corr. -0.092	19M/14stn	Msd 0.2					Corr. 0.233	20M/14stn	Msd 0.2				
JUN 22 1236	41.2s	37.67S	176.82E	5km	M=3.8	92/6936	JUN 22 1515	02.5s	37.49S	177.06E	5km	M=3.8	92/6970
	0.2	0.01	0.01	R				0.2	0.02	0.02	R		
Rsd 0.2s	25ph/17stn	Dmin 36km	Az.gap 108°				Rsd 0.4s	17ph/13stn	Dmin 12km	Az.gap 151°			
Corr. -0.463	17M/13stn	Msd 0.2	1↑				Corr. 0.256	11M/8stn	Msd 0.2				
JUN 22 1259	26.1s	37.60S	176.88E	5km	M=3.5	92/6938	JUN 22 1534	01.0s	37.91S	176.89E	5km	M=3.5	92/6978
	0.2	0.02	0.01	R				0.4	0.04	0.02	R		
Rsd 0.3s	22ph/13stn	Dmin 29km	Az.gap 123°				Rsd 0.5s	12ph/6stn	Dmin 20km	Az.gap 138°			
Corr. -0.195	8M/8stn	Msd 0.3					Corr. -0.042	3M/3stn	Msd 0.1				
JUN 22 1347	56.4s	37.53S	177.06E	5km	M=4.9	92/6943	JUN 22 1709	41.1s	37.64S	176.75E	5km	M=3.7	92/6996
	0.2	0.02	0.01	R				0.2	0.02	0.02	R		
Rsd 0.4s	22ph/18stn	Dmin 11km	Az.gap 141°				Rsd 0.4s	17ph/12stn	Dmin 39km	Az.gap 115°			
Corr. 0.007	8M/4stn	Msd 0.2	1↑				Corr. -0.064	7M/7stn	Msd 0.2	1↑			
JUN 22 1349	56.4s	37.61S	177.08E	5km	M=3.8	92/6944	JUN 22 2211	06.9s	37.58S	176.92E	5km	M=4.2	92/7016
	0.2	0.02	0.01	R				0.2	0.02	0.02	R		
Rsd 0.3s	20ph/14stn	Dmin 55km	Az.gap 142°				Rsd 0.4s	17ph/15stn	Dmin 25km	Az.gap 125°			
Corr. -0.133	8M/6stn	Msd 0.4					Corr. 0.058	8M/4stn	Msd 0.1				
JUN 22 1400	43.3s	37.55S	177.14E	5km	M=3.6	92/6949	JUN 22 2322	40.6s	37.65S	176.84E	5km	M=3.6	92/7022
	0.2	0.02	0.02	R				0.2	0.01	0.01	R		
Rsd 0.4s	13ph/9stn	Dmin 5km	Az.gap 118°				Rsd 0.3s	17ph/12stn	Dmin 34km	Az.gap 112°			
Corr. -0.180	9M/7stn	Msd 0.2					Corr. -0.222	11M/8stn	Msd 0.2				

JUN 22 2333	24.7s	37.58S	176.85E	5km	M=4.0	92/7023	JUN 24 0349	22.8s	39.13S	175.17E	179km	M=3.7	92/7111
Rsd 0.4s	0.3	0.03	0.02	R	Az.gap 126°		Rsd 0.1s	0.2	0.02	0.02	2		
Corr. -0.539	15ph/12stn	Dmin 31km	Msd 0.2				Corr. -0.118	20ph/17stn	Dmin 77km	Az.gap 209°			
	12M/8stn	Msd 0.2					Corr. -0.118	14M/12stn	Msd 0.3	1↑			
JUN 23 0017	19.8s	37.62S	176.92E	5km	M=3.6	92/7027	JUN 24 1210	28.1s	37.20S	176.56E	254km	M=3.8	92/7123
Rsd 0.4s	0.2	0.02	0.02	R	Az.gap 116°		Rsd 0.3s	1.3	0.10	0.18	19		
Corr. -0.609	13ph/10stn	Dmin 26km	Msd 0.2				Corr. -0.934	12ph/10stn	Dmin 161km	Az.gap 263°			
	8M/6stn	Msd 0.2						8M/8stn	Msd 0.3				
JUN 23 0522	53.7s	37.53S	177.04E	5km	M=3.6	92/7037	JUN 24 1321	18.6s	37.65S	176.96E	5km	M=3.5	92/7127
Rsd 0.4s	0.3	0.02	0.02	R	Az.gap 142°		Rsd 0.3s	0.3	0.03	0.02	R		
Corr. -0.157	16ph/12stn	Dmin 14km	Msd 0.2				Corr. -0.512	15ph/11stn	Dmin 25km	Az.gap 108°			
	10M/8stn	Msd 0.2						9M/7stn	Msd 0.2				
JUN 23 0652	01.7s	39.18S	174.85E	261km	M=3.5	92/7044	JUN 24 1337	47.1s	37.65S	176.96E	5km	M=4.1	92/7129
Rsd 0.1s	0.4	0.08	0.05	7	Az.gap 294°		Rsd 0.4s	0.4	0.03	0.02	R		
Corr. -0.613	17ph/11stn	Dmin 69km	Msd 0.2	1↑			Corr. -0.430	19ph/15stn	Dmin 24km	Az.gap 109°			
	8M/7stn	Msd 0.2						13M/11stn	Msd 0.3				
JUN 23 0821	57.3s	37.65S	176.81E	5km	M=3.6	92/7048	JUN 24 1338	42.6s	37.71S	176.83E	5km	M=3.5	92/7130
Rsd 0.3s	0.2	0.02	0.02	R	Az.gap 112°		Rsd 0.3s	0.2	0.02	0.02	R		
Corr. -0.551	13ph/9stn	Dmin 36km	Msd 0.3	1↓			Corr. -0.699	13ph/8stn	Dmin 33km	Az.gap 156°			
	9M/7stn	Msd 0.3						5M/4stn	Msd 0.2				
JUN 23 1017	49.6s	38.79S	178.20E	28km	M=4.1	92/7057	JUN 24 1342	19.7s	37.64S	176.93E	5km	M=3.7	92/7131
Rsd 0.2s	0.6	0.03	0.04	2	Az.gap 215°		Rsd 0.3s	0.3	0.03	0.01	R		
Corr. -0.840	18ph/16stn	Dmin 24km	Msd 0.3	2↑ 1↓			Corr. -0.625	16ph/12stn	Dmin 26km	Az.gap 115°			
Felt Ormond (44)	28M/24stn	Msd 0.3						9M/7stn	Msd 0.2				
JUN 23 1834	26.1s	37.65S	177.00E	5km	M=3.8	92/7083	JUN 24 1412	52.3s	37.95S	176.26E	189km	M=3.9	92/7134
Rsd 0.5s	0.4	0.04	0.02	R	Az.gap 101°		Rsd 0.4s	1.0	0.09	0.15	18		
Corr. -0.535	15ph/12stn	Dmin 22km	Msd 0.2				Corr. -0.930	14ph/10stn	Dmin 123km	Az.gap 234°			
	12M/10stn	Msd 0.2						17M/17stn	Msd 0.3				
JUN 23 2226	58.3s	37.60S	176.83E	5km	M=4.4	92/7097	JUN 24 1808	52.0s	39.18S	175.16E	141km	M=4.3	92/7140
Rsd 0.3s	0.4	0.03	0.02	R	Az.gap 182°		Rsd 0.2s	0.4	0.01	0.02	4		
Corr. -0.504	18ph/14stn	Dmin 32km	Msd 0.3	1↑			Corr. 0.009	31ph/25stn	Dmin 38km	Az.gap 77°			
Felt Pukehina (27).	16M/11stn	Msd 0.3						25M/19stn	Msd 0.2	1↑			
JUN 24 0218	57.0s	37.83S	176.78E	5km	M=3.5	92/7105	JUN 24 1949	05.2s	37.64S	176.88E	5km	M=3.7	92/7143
Rsd 0.2s	0.2	0.02	0.01	R	Az.gap 140°		Rsd 0.2s	0.2	0.02	0.01	R		
Corr. -0.436	13ph/9stn	Dmin 20km	Msd 0.2				Corr. -0.656	13ph/9stn	Dmin 30km	Az.gap 116°			
	8M/6stn	Msd 0.2						9M/7stn	Msd 0.2				
JUN 24 0318	32.5s	37.70S	176.87E	5km	M=3.9	92/7108	JUN 24 2154	18.0s	41.62S	174.27E	7km	M=3.7	92/7149
Rsd 0.2s	0.2	0.02	0.01	R	Az.gap 107°		Rsd 0.2s	0.1	0.01	0.01	2		
Corr. -0.648	17ph/13stn	Dmin 34km	Msd 0.2	1↑			Corr. -0.535	26ph/21stn	Dmin 15km	Az.gap 123°			
	14M/11stn	Msd 0.2						9M/5stn	Msd 0.1	4↑ 2↓			

JUN 24 2223	28.0s	37.64S	176.95E	5km	M=3.9	92/7150	JUN 26 1008	37.0s	44.56S	169.62E	5km	M=4.1	92/7228
Rsd 0.3s	0.2	0.02	0.02	R	Az.gap 108°		Rsd 0.2s	0.2	0.01	0.01	R	Az.gap 126°	
Corr. -0.490	15ph/13stn	Dmin 25km					Corr. -0.164	21ph/14stn	Dmin 21km			1↑ 7↓	
11M/9stn	Msd 0.2						8M/4stn	Msd 0.2					
JUN 24 2335	03.9s	37.60S	176.84E	12km	M=4.2	92/7153	JUN 26 1455	00.5s	37.66S	176.95E	5km	M=3.7	92/7246
Rsd 0.3s	0.2	0.02	0.01	R	Az.gap 123°		Rsd 0.5s	0.3	0.02	0.02	R	Az.gap 103°	
Corr. 0.099	17ph/15stn	Dmin 32km					Corr. -0.128	23ph/17stn	Dmin 26km			1↑	
9M/5stn	Msd 0.1						20M/15stn	Msd 0.2					
JUN 25 0046	13.2s	38.29S	176.42E	5km	M=3.1	92/7155	JUN 26 2008	50.0s	38.13S	176.07E	157km	M=3.9	92/7263
Rsd 0.1s	0.0	0.00	0.00	R	Az.gap 148°		Rsd 0.2s	0.4	0.02	0.03	4	Az.gap 99°	
Corr. -0.136	10ph/6stn	Dmin 10km					Corr. 0.077	12ph/10stn	Dmin 92km			1↑	
3M/3stn	Msd 0.3						Msd 0.2						
Felt Waimangu (33).													
JUN 25 0444	33.3s	38.71S	175.86E	134km	M=4.6	92/7163	JUN 27 1528	29.5s	37.19S	176.86E	215km	M=3.7	92/7309
Rsd 0.3s	0.4	0.02	0.02	4	Az.gap 53°		Rsd 0.2s	0.5	0.04	0.07	5	Az.gap 283°	
Corr. -0.065	38ph/24stn	Dmin 43km					Corr. -0.641	12ph/8stn	Dmin 121km				
10M/5stn	Msd 0.3						Msd 0.2						
JUN 25 0707	32.4s	37.47S	179.98E	33km	M=4.1	92/7168	JUN 27 1630	36.2s	37.69S	176.79E	5km	M=3.7	92/7312
Rsd 0.2s	0.6	0.05	0.05	R	Az.gap 293°		Rsd 0.4s	0.2	0.02	0.02	R	Az.gap 107°	
Corr. -0.041	11ph/6stn	Dmin 149km					Corr. -0.041	21ph/16stn	Dmin 35km			1↑	
11M/9stn	Msd 0.5						Msd 0.3						
Depth uncertain.													
JUN 25 0921	32.1s	38.13S	175.33E	170km	M=3.6	92/7174	JUN 27 2315	09.4s	38.88S	177.97E	46km	M=3.9	92/7328
Rsd 0.2s	0.5	0.04	0.11	13	Az.gap 262°		Rsd 0.2s	0.4	0.02	0.03	5	Az.gap 177°	
Corr. -0.895	14ph/9stn	Dmin 157km					Corr. -0.602	17ph/16stn	Dmin 30km			1↑	
8M/6stn	Msd 0.2						Msd 0.2						
JUN 25 1444	34.0s	38.64S	175.86E	161km	M=3.6	92/7184	JUN 28 0233	24.9s	40.43S	176.41E	30km	M=3.9	92/7337
Rsd 0.3s	0.7	0.02	0.03	6	Az.gap 150°		Rsd 0.2s	0.1	0.01	0.01	1	Az.gap 166°	
Corr. -0.159	14ph/8stn	Dmin 64km					Corr. -0.629	36ph/28stn	Dmin 19km			3↑ 7↓	
14M/13stn	Msd 0.2						Msd 0.2						
JUN 25 1912	16.0s	37.71S	176.84E	5km	M=3.6	92/7197	JUN 28 0803	04.1s	37.04S	176.90E	217km	M=3.7	92/7343
Rsd 0.5s	0.3	0.02	0.02	R	Az.gap 99°		Rsd 0.1s	0.3	0.01	0.02	2	Az.gap 207°	
Corr. -0.430	17ph/11stn	Dmin 34km					Corr. 0.586	11ph/8stn	Dmin 110km				
8M/6stn	Msd 0.3						12M/12stn	Msd 0.2					
JUN 25 2125	13.3s	36.91S	177.43E	151km	M=3.6	92/7203	JUN 28 1739	38.9s	37.64S	176.97E	5km	M=4.1	92/7365
Rsd 0.1s	0.3	0.06	0.03	6	Az.gap 320°		Rsd 0.4s	0.3	0.02	0.02	R	Az.gap 106°	
Corr. -0.289	5ph/3stn	Dmin 148km					Corr. -0.009	26ph/22stn	Dmin 23km			1↑	
2M/2stn	Msd 0.1						Msd 0.2						
JUN 26 0407	29.6s	38.65S	175.79E	138km	M=4.1	92/7213	JUN 28 1741	44.0s	37.69S	176.97E	5km	M=3.1	92/7367
Rsd 0.4s	0.7	0.04	0.03	6	Az.gap 143°		Rsd 0.5s	0.2	0.02	0.02	R	Az.gap 93°	
Corr. -0.229	20ph/14stn	Dmin 66km					Corr. -0.332	17ph/12stn	Dmin 26km			Felt Otamarakau (27) MM5.	
28M/23stn	Msd 0.2						Msd 0.2						

JUN 28 1837	43.8s	37.06S	177.56E	142km	M=3.8	92/7373	JUN 28 2259	10.3s	38.32S	176.19E	5km	M=2.5	92/7430
	0.5	0.05	0.03	6				0.1	0.01	0.01	R		
Rsd 0.3s	10ph/5stn	Dmin 89km	Az.gap 251°				Rsd 0.2s	12ph/9stn	Dmin 9km			Az.gap 102°	
Corr. -0.285	16M/12stn	Msd 0.2	1↑				Corr. 0.365	6M/6stn	Msd 0.3			Felt Ngakuru (33) MM4.	
JUN 28 1912	31.4s	38.33S	176.17E	5km	M=3.0	92/7386	JUN 29 1138	26.6s	39.00S	177.45E	46km	M=3.6	92/7519
	0.2	0.01	0.01	R				0.3	0.01	0.02	7		
Rsd 0.2s	10ph/7stn	Dmin 9km	Az.gap 133°				Rsd 0.2s	12ph/10stn	Dmin 43km			Az.gap 95°	
Corr. 0.287	6M/6stn	Msd 0.2					Corr. -0.097	9M/6stn	Msd 0.3			1↑	
Felt Waimangu (33).													
JUN 28 1913	07.2s	38.31S	176.19E	5km	M=2.9	92/7387	JUN 30 0354	06.0s	37.63S	176.79E	5km	M=3.8	92/7535
	0.1	0.00	0.01	R				0.2	0.02	0.02	R		
Rsd 0.1s	10ph/9stn	Dmin 9km	Az.gap 104°				Rsd 0.3s	20ph/14stn	Dmin 37km			Az.gap 116°	
Corr. 0.373	4M/4stn	Msd 0.2					Corr. -0.359	17M/11stn	Msd 0.2				
Felt Waimangu (33).													
JUN 28 1914	42.3s	38.31S	176.15E	5km	M=3.0	92/7388	JUN 30 1239	34.0s	40.45S	173.45E	139km	M=3.8	92/7544
	0.2	0.01	0.01	R				0.3	0.01	0.02	3		
Rsd 0.2s	9ph/6stn	Dmin 12km	Az.gap 129°				Rsd 0.2s	26ph/19stn	Dmin 56km			Az.gap 138°	
Corr. 0.217	3M/3stn	Msd 0.1					Corr. -0.039	17M/15stn	Msd 0.3			1↑	
Felt Ngakuru (33) MM4, Waimangu (33).													
JUN 28 1918	33.7s	38.32S	176.18E	5km	M=3.0	92/7390	JUN 30 1519	06.0s	37.72S	176.98E	5km	M=4.0	92/7548
	0.1	0.01	0.01	R				0.2	0.02	0.01	R		
Rsd 0.2s	15ph/12stn	Dmin 9km	Az.gap 104°				Rsd 0.3s	16ph/12stn	Dmin 28km			Az.gap 88°	
Corr. 0.365	12M/12stn	Msd 0.2					Corr. -0.422	22M/16stn	Msd 0.3			1↑	
Felt Ngakuru (33) MM4, Waimangu (33).													
JUN 28 1929	25.8s	38.31S	176.19E	5km	M=3.0	92/7395	JUL 01 0007	20.6s	40.37S	176.10E	50km	M=3.6	92/7560
	0.1	0.01	0.01	R				0.1	0.01	0.01	1		
Rsd 0.2s	9ph/6stn	Dmin 10km	Az.gap 115°				Rsd 0.2s	32ph/23stn	Dmin 14km			Az.gap 89°	
Corr. 0.346	5M/5stn	Msd 0.3					Corr. -0.594	22M/18stn	Msd 0.4			5↑ 3↓	
Felt Ngakuru (33) MM4, Waimangu (33).													
JUN 28 1937	43.6s	38.31S	176.19E	5km	M=3.6	92/7397	JUL 01 0013	41.8s	37.50S	177.20E	135km	M=4.5	92/7561
	0.1	0.00	0.01	R				0.4	0.02	0.02	3		
Rsd 0.1s	15ph/14stn	Dmin 10km	Az.gap 84°				Rsd 0.2s	31ph/25stn	Dmin 4km			Az.gap 150°	
Corr. -0.009	20M/16stn	Msd 0.3					Corr. 0.291	8M/4stn	Msd 0.2			9↑ 5↓	
Felt Ngakuru (33) MM4, Rotorua, Waimangu (33). Largest of many events felt in Rotorua area.													
JUN 28 2210	25.8s	38.35S	176.19E	5km	M=2.8	92/7419	JUL 01 0923	53.4s	37.73S	176.82E	5km	M=3.6	92/7582
	0.3	0.02	0.02	R				0.1	0.01	0.01	R		
Rsd 0.3s	8ph/5stn	Dmin 7km	Az.gap 136°				Rsd 0.3s	21ph/13stn	Dmin 31km			Az.gap 98°	
Corr. -0.250	4M/4stn	Msd 0.1					Corr. -0.221	12M/9stn	Msd 0.2			1↑	
Felt Ngakuru (33) MM4.													
JUN 28 2212	44.1s	38.30S	176.21E	5km	M=3.1	92/7421	JUL 01 1908	48.8s	41.26S	172.57E	207km	M=3.6	92/7598
	0.1	0.00	0.01	R				0.4	0.02	0.03	3		
Rsd 0.1s	7ph/5stn	Dmin 10km	Az.gap 104°				Rsd 0.2s	28ph/18stn	Dmin 48km			Az.gap 126°	
Corr. 0.238	3M/3stn	Msd 0.2	1↑				Corr. -0.131	9M/9stn	Msd 0.4			1↑	
Felt Ngakuru (33) MM4.													
JUL 01 2233	39.4s	37.73S	176.85E	5km	M=3.7	92/7604	JUL 01 2233	39.4s	37.73S	176.85E	5km	M=3.7	
	0.2	0.01	0.01	R				0.2	0.01	0.01	R		
Rsd 0.3s	20ph/14stn	Dmin 32km					Rsd 0.3s	17M/13stn	Msd 0.2			Az.gap 96°	
Corr. -0.264	17M/13stn	Msd 0.2					Corr. -0.264	17M/13stn	Msd 0.2			1↑	

JUL 02 0153	36.5s	37.70S	176.82E	5km	M=4.0	92/7612	JUL 04 1121	52.6s	37.52S	176.62E	177km	M=4.0	92/7692
Rsd 0.2s	0.2	0.01	0.01	R	Az.gap 103°		Rsd 0.3s	0.7	0.03	0.03	6		
Corr. 0.001	21ph/16stn	Dmin 35km		1↑			Corr. 0.412	11ph/10stn	Dmin 93km	Az.gap 137°			
	16M/12stn	Msd 0.2						19M/17stn	Msd 0.2	1↑ 3↓			
JUL 03 0159	17.9s	38.14S	178.36E	22km	M=3.5	92/7639	JUL 04 1732	22.0s	35.57S	178.50E	201km	M=3.9	92/7696
Rsd 0.3s	0.4	0.02	0.03	2	Az.gap 213°		Rsd 0.2s	0.9	0.12	0.11	25		
Corr. -0.103	8ph/4stn	Dmin 12km		1↑ 2↓			Corr. 0.918	6ph/4stn	Dmin 278km	Az.gap 302°			
	8M/4stn	Msd 0.3						3M/3stn	Msd 0.1	1↑			
JUL 03 0357	31.4s	37.72S	176.79E	5km	M=3.6	92/7643	JUL 04 1733	35.4s	39.04S	175.01E	209km	M=3.7	92/7697
Rsd 0.4s	0.2	0.02	0.02	R	Az.gap 101°		Rsd 0.1s	0.3	0.02	0.03	3		
Corr. -0.307	22ph/16stn	Dmin 32km		1↑			Corr. 0.088	17ph/14stn	Dmin 53km	Az.gap 217°			
	14M/12stn	Msd 0.1						8M/8stn	Msd 0.3	1↑			
JUL 03 0656	16.9s	37.74S	176.93E	5km	M=3.7	92/7647	JUL 06 0325	49.0s	39.39S	177.42E	72km	M=4.1	92/7733
Rsd 0.4s	0.3	0.03	0.02	R	Az.gap 127°		Rsd 0.2s	0.2	0.01	0.02	3		
Corr. -0.148	17ph/13stn	Dmin 33km		1↑ 1↓			Corr. -0.467	36ph/26stn	Dmin 37km	Az.gap 153°			
	18M/13stn	Msd 0.2						26M/20stn	Msd 0.3	4↑ 1↓			
JUL 03 0729	49.2s	38.18S	176.11E	169km	M=4.4	92/7651	JUL 06 1546	45.5s	38.11S	176.29E	12km	M=2.0	92/7750
Rsd 0.3s	0.4	0.02	0.02	3	Az.gap 62°		Rsd 0.1s	0.1	0.01	0.01	R		
Corr. 0.177	24ph/18stn	Dmin 31km		6↑ 1↓			Corr. 0.059	9ph/6stn	Dmin 14km	Az.gap 107°			
	8M/4stn	Msd 0.2						2M/2stn	Msd 0.2	Felt Rotorua (33) MM4.			
JUL 03 1129	30.0s	37.36S	177.22E	154km	M=3.8	92/7657	JUL 06 1905	52.1s	37.82S	177.58E	50km	M=4.9	92/7755
Rsd 0.5s	0.9	0.04	0.06	8	Az.gap 170°		Rsd 0.2s	0.2	0.01	0.01	2		
Corr. 0.391	8ph/6stn	Dmin 99km		1↑			Corr. 0.085	26ph/23stn	Dmin 47km	Az.gap 115°			
	4M/4stn	Msd 0.2						8M/4stn	Msd 0.2	7↑ 4↓			
	Felt Opotiki (35) MM3.												
JUL 03 1603	57.3s	37.49S	177.38E	120km	M=4.0	92/7662	JUL 07 0633	59.3s	36.07S	175.26E	12km	M=3.6	92/7769
Rsd 0.2s	0.4	0.02	0.02	5	Az.gap 159°		Rsd 0.3s	0.4	0.03	0.03	R		
Corr. 0.235	18ph/16stn	Dmin 82km		1↑			Corr. 0.781	10ph/7stn	Dmin 84km	Az.gap 189°			
	21M/19stn	Msd 0.2						2M/2stn	Msd 0.3	1↓			
JUL 03 2228	37.2s	37.41S	176.69E	143km	M=3.6	92/7673	JUL 07 2316	24.8s	39.65S	174.42E	214km	M=3.7	92/7788
Rsd 0.4s	1.0	0.05	0.06	8	Az.gap 149°		Rsd 0.1s	0.3	0.03	0.02	3		
Corr. 0.492	10ph/5stn	Dmin 101km		1↑			Corr. -0.203	16ph/12stn	Dmin 135km	Az.gap 223°			
	5M/5stn	Msd 0.2						9M/9stn	Msd 0.2				
JUL 03 2254	08.8s	37.75S	176.80E	5km	M=4.1	92/7674	JUL 08 0155	39.4s	36.91S	177.34E	214km	M=4.0	92/7789
Rsd 0.4s	0.2	0.02	0.02	R	Az.gap 96°		Rsd 0.3s	0.7	0.07	0.08	6		
Corr. 0.195	24ph/18stn	Dmin 29km		1↓			Corr. -0.508	9ph/4stn	Dmin 151km	Az.gap 314°			
	23M/16stn	Msd 0.2						3M/3stn	Msd 0.1				
JUL 04 0408	09.0s	39.50S	177.68E	67km	M=3.7	92/7681	JUL 08 1225	27.7s	39.06S	174.40E	593km	M=4.9	92/7798
Rsd 0.2s	0.2	0.01	0.02	3	Az.gap 193°		Rsd 0.1s	0.6	0.04	0.08	6		
Corr. -0.703	30ph/18stn	Dmin 39km		6↑ 2↓			Corr. -0.182	32ph/24stn	Dmin 51km	Az.gap 127°			
	25M/21stn	Msd 0.2						19M/15stn	Msd 0.2	1↑			

JUL	08	1509	42.9s	40.16S	174.29E	87km	M=3.8	92/7801
			0.3	0.01	0.01	4		
Rsd	0.2s		31ph/24stn	Dmin 68km	Az.gap 99°			
Corr.	0.111	14M/11stn	Msd 0.3	1↑				
								92/7879
JUL	11	1236	27.9s	47.77S	165.72E	33km	M=3.7	
			0.5	0.03	0.05	R		
Rsd	0.2s		17ph/11stn	Dmin 208km	Az.gap 325°			
Corr.	-0.080	9M/9stn	Msd 0.2	1↓				
								92/7887
JUL	08	1544	00.2s	39.54S	174.41E	204km	M=3.6	92/7802
			0.4	0.03	0.03	4		
Rsd	0.2s	20ph/16stn	Dmin 53km	Az.gap 191°				
Corr.	-0.246	9M/8stn	Msd 0.2					
								92/7809
JUL	09	0012	49.2s	40.18S	173.70E	163km	M=3.9	92/7904
			0.4	0.02	0.02	4		
Rsd	0.2s	30ph/21stn	Dmin 71km	Az.gap 182°				
Corr.	-0.216	17M/14stn	Msd 0.3	6↑ 1↓				
								92/7915
JUL	09	0855	48.8s	38.32S	176.08E	145km	M=4.0	92/7822
			0.7	0.03	0.03	6		
Rsd	0.2s	13ph/9stn	Dmin 91km	Az.gap 187°				
Corr.	0.396	16M/12stn	Msd 0.3	1↑				
								92/7924
JUL	09	2005	52.6s	37.10S	177.36E	150km	M=3.6	92/7827
			0.1	0.01	0.01	1		
Rsd	0.1s	8ph/4stn	Dmin 100km	Az.gap 278°				
Corr.	-0.361	10M/9stn	Msd 0.1					
								92/7925
JUL	10	0640	56.8s	38.38S	175.60E	133km	M=3.5	92/7839
			0.4	0.03	0.07	8		
Rsd	0.4s	20ph/14stn	Dmin 133km	Az.gap 237°				
Corr.	-0.816	8M/8stn	Msd 0.2	1↓				
								92/7931
JUL	10	1229	30.3s	37.77S	176.71E	144km	M=3.7	92/7847
			0.6	0.05	0.06	4		
Rsd	0.2s	11ph/6stn	Dmin 54km	Az.gap 237°				
Corr.	-0.369	9M/9stn	Msd 0.3	1↑				
								92/7933
JUL	11	0536	16.3s	37.32S	178.08E	79km	M=3.9	92/7874
			0.3	0.02	0.02	4		
Rsd	0.2s	11ph/7stn	Dmin 37km	Az.gap 254°				
Corr.	-0.136	8M/4stn	Msd 0.1	1↑				
								92/7944
JUL	11	0727	48.9s	39.19S	173.71E	12km	M=3.5	92/7875
			0.7	0.01	0.04	6		
Rsd	0.2s	22ph/14stn	Dmin 25km	Az.gap 203°				
Corr.	0.014	20M/16stn	Msd 0.2	1↓				
								92/7945
JUL	11	0827	17.0s	38.50S	177.98E	64km	M=4.2	92/7877
			0.2	0.01	0.02	2		
Rsd	0.2s	20ph/14stn	Dmin 14km	Az.gap 131°				
Corr.	-0.139	23M/19stn	Msd 0.2	3↑ 6↓				

JUL 13 1723	13.0s	39.87S	177.22E	26km	M=3.6	92/7962	JUL 17 0026	11.3s	37.10S	177.31E	163km	M=4.1	92/8035
Rsd 0.2s	0.2	0.01	0.02	1	Az.gap 180°		Rsd 0.2s	0.5	0.06	0.03	6		
Corr. -0.668	25ph/22stn	Dmin 37km					Corr. 0.303	13ph/9stn	Dmin 104km		Az.gap 242°		
	33M/29stn	Msd 0.3					Corr. 0.303	24M/20stn	Msd 0.3		1↑		
JUL 15 0612	34.0s	37.72S	176.97E	5km	M=3.7	92/7996	JUL 17 0244	39.4s	38.42S	178.83E	26km	M=3.6	92/8040
Rsd 0.4s	0.2	0.02	0.02	R	Az.gap 94°		Rsd 0.1s	0.4	0.01	0.03	3		
Corr. -0.418	19ph/15stn	Dmin 28km		1↑			Corr. -0.369	12ph/10stn	Dmin 64km		Az.gap 249°		
	17M/13stn	Msd 0.2					Corr. 0.301	26M/24stn	Msd 0.2		1↑ 1↓		
JUL 15 0657	44.2s	38.13S	176.29E	150km	M=3.8	92/7997	JUL 18 1441	49.2s	39.25S	174.83E	178km	M=3.8	92/8082
Rsd 0.3s	0.6	0.04	0.03	5	Az.gap 206°		Rsd 0.3s	0.5	0.02	0.04	4		
Corr. -0.234	16ph/14stn	Dmin 23km		1↑			Corr. 0.301	26ph/17stn	Dmin 62km		Az.gap 96°		
	22M/18stn	Msd 0.3					Corr. 0.301	24M/22stn	Msd 0.2		6↑ 1↓		
JUL 15 1224	01.5s	37.16S	177.35E	160km	M=4.0	92/8001	JUL 19 1653	10.4s	37.19S	176.61E	249km	M=4.0	92/8106
Rsd 0.1s	0.3	0.03	0.01	3	Az.gap 237°		Rsd 0.1s	0.3	0.06	0.05	4		
Corr. 0.022	14ph/11stn	Dmin 97km		1↑			Corr. -0.551	12ph/8stn	Dmin 127km		Az.gap 273°		
	21M/19stn	Msd 0.2					Corr. 0.551	8M/8stn	Msd 0.3		1↑		
JUL 15 1231	43.6s	38.35S	176.28E	135km	M=4.0	92/8002	JUL 19 2039	28.4s	40.36S	174.84E	30km	M=4.2	92/8108
Rsd 0.3s	0.6	0.02	0.02	5	Az.gap 68°		Rsd 0.2s	0.2	0.01	0.01	3		
Corr. 0.141	18ph/15stn	Dmin 39km		5↑ 3↓			Corr. 0.074	35ph/24stn	Dmin 57km		Az.gap 71°		
	24M/20stn	Msd 0.4					Corr. 0.074	11M/6stn	Msd 0.3		1↑		Felt Wanganui (57) to Otaki (65), maximum intensity MM4.
JUL 15 1538	04.6s	40.26S	176.25E	68km	M=3.7	92/8006	JUL 20 1022	43.9s	36.90S	176.93E	217km	M=3.7	92/8115
Rsd 0.2s	0.2	0.01	0.02	3	Az.gap 139°		Rsd 0.2s	0.4	0.05	0.05	4		
Corr. -0.734	30ph/23stn	Dmin 40km		5↑ 4↓			Corr. -0.389	12ph/7stn	Dmin 144km		Az.gap 282°		
	21M/19stn	Msd 0.2					Corr. -0.389	9M/9stn	Msd 0.3		1↑		
JUL 16 0104	20.3s	39.18S	176.17E	70km	M=3.6	92/8009	JUL 20 1126	56.5s	36.30S	178.44E	211km	M=3.8	92/8117
Rsd 0.3s	0.4	0.01	0.01	5	Az.gap 63°		Rsd 0.2s	0.6	0.10	0.11	9		
Corr. -0.087	27ph/21stn	Dmin 49km		2↑ 2↓			Corr. -0.512	11ph/5stn	Dmin 198km		Az.gap 337°		
	22M/18stn	Msd 0.2					Corr. -0.512	5M/4stn	Msd 0.3				
JUL 16 0818	49.0s	37.42S	176.29E	163km	M=3.7	92/8017	JUL 20 1150	54.0s	41.19S	172.66E	0km	M=3.5	92/8119
Rsd 0.3s	0.9	0.08	0.14	7	Az.gap 288°		Rsd 0.3s	0.2	0.01	0.02	R		
Corr. -0.467	11ph/8stn	Dmin 118km					Corr. 0.523	19ph/12stn	Dmin 42km		Az.gap 155°		
	15M/15stn	Msd 0.3					Corr. 0.523	21M/15stn	Msd 0.2		1↓		
JUL 16 1431	56.2s	38.07S	176.17E	142km	M=3.6	92/8026	JUL 21 0711	39.8s	37.83S	177.55E	52km	M=3.9	92/8141
Rsd 0.1s	0.4	0.03	0.05	2	Az.gap 210°		Rsd 0.2s	0.3	0.02	0.01	4		
Corr. -0.754	11ph/9stn	Dmin 85km					Corr. 0.182	19ph/15stn	Dmin 62km		Az.gap 124°		
	16M/16stn	Msd 0.2					Corr. 0.182	21M/17stn	Msd 0.2		1↑ 3↓		
JUL 16 1709	00.1s	38.72S	176.45E	62km	M=3.6	92/8028	JUL 22 1353	03.1s	38.13S	176.27E	5km	M=3.2	92/8155
Rsd 0.2s	0.2	0.01	0.01	2	Az.gap 44°		Rsd 0.2s	0.1	0.00	0.01	R		
Corr. 0.112	31ph/25stn	Dmin 19km					Corr. -0.056	11ph/8stn	Dmin 17km		Az.gap 69°		
	19M/17stn	Msd 0.2					Corr. -0.056	5M/5stn	Msd 0.3		1↑		Felt Rotorua (33) MM4.

JUL 23	1430	23.2s	38.15S	178.63E	37km	M=3.7	92/8176	JUL 26	0803	49.3s	38.97S	177.22E	31km	M=3.8	92/8226
Rsd 0.1s	0.1	0.00	0.01	1	Az.gap 242°		Rsd 0.2s	0.1	0.01	0.01	2	Az.gap 86°			
Corr. -0.438	12ph/8stn	Dmin 33km					Corr. -0.052	27ph/25stn	Dmin 19km						
	9M/5stn	Msd 0.1	1↓					28M/24stn	Msd 0.2	1↑ 5↓					
JUL 24	0403	29.2s	38.33S	175.74E	162km	M=3.9	92/8182	JUL 26	0922	23.9s	41.16S	175.49E	32km	M=4.4	92/8232
Rsd 0.2s	0.5	0.02	0.03	5	Az.gap 135°		Rsd 0.2s	0.1	0.01	0.02	1	Az.gap 109°			
Corr. -0.146	14ph/10stn	Dmin 95km					Corr. -0.660	26ph/21stn	Dmin 1km						
	14M/14stn	Msd 0.2	2↑ 2↓					13M/8stn	Msd 0.3	7↑ 10↓					
JUL 24	0453	14.5s	41.30S	173.04E	97km	M=3.7	92/8183	JUL 26	1853	58.8s	39.14S	175.09E	264km	M=3.9	92/8243
Rsd 0.3s	0.4	0.01	0.02	4	Az.gap 117°		Rsd 0.1s	0.4	0.02	0.03	4	Az.gap 191°			
Corr. -0.080	20ph/12stn	Dmin 52km					Corr. -0.436	15ph/11stn	Dmin 75km						
	7M/7stn	Msd 0.3	2↑ 1↓					11M/11stn	Msd 0.2	1↑ 1↓					
JUL 24	1253	33.6s	37.11S	177.44E	175km	M=3.6	92/8187	JUL 26	1929	21.5s	38.70S	178.39E	26km	M=3.8	92/8244
Rsd 0.3s	0.6	0.08	0.06	6	Az.gap 310°		Rsd 0.1s	0.4	0.02	0.04	2	Az.gap 223°			
Corr. -0.258	8ph/4stn	Dmin 129km					Corr. -0.824	12ph/10stn	Dmin 33km						
	3M/3stn	Msd 0.2	1↑					19M/15stn	Msd 0.2						
JUL 24	1913	51.1s	38.07S	176.58E	134km	M=3.6	92/8190	JUL 26	2316	58.0s	41.78S	172.62E	81km	M=3.7	92/8245
Rsd 0.4s	0.9	0.06	0.08	6	Az.gap 260°		Rsd 0.2s	0.2	0.01	0.02	2	Az.gap 128°			
Corr. -0.629	13ph/9stn	Dmin 51km					Corr. -0.091	24ph/16stn	Dmin 24km						
	4M/4stn	Msd 0.2	1↑					10M/8stn	Msd 0.3	1↑ 1↓					
JUL 24	2041	51.5s	42.65S	172.98E	45km	M=4.3	92/8193	JUL 28	0152	51.2s	36.88S	179.24W	33km	M=5.1	92/8262
Rsd 0.2s	0.2	0.01	0.02	4	Az.gap 132°		Rsd 0.4s	2.0	0.11	0.19	R	Az.gap 241°			
Corr. -0.508	25ph/17stn	Dmin 53km					Corr. 0.060	16ph/14stn	Dmin 232km						
	19M/15stn	Msd 0.3	1↑ 1↓					12M/6stn	Msd 0.1						
JUL 25	0617	31.2s	38.60S	175.92E	181km	M=3.8	92/8203	JUL 28	0602	18.9s	37.48S	178.47E	72km	M=4.2	92/8266
Rsd 0.1s	1.1	0.06	0.05	8	Az.gap 309°		Rsd 0.1s	0.2	0.01	0.02	2	Az.gap 267°			
Corr. 0.028	14ph/12stn	Dmin 69km					Corr. 0.113	20ph/14stn	Dmin 20km						
	5M/5stn	Msd 0.3						24M/20stn	Msd 0.2	1↑ 4↓					
JUL 25	0919	48.6s	37.54S	177.16E	144km	M=3.8	92/8206	JUL 28	1647	35.4s	41.26S	172.73E	180km	M=3.7	92/8272
Rsd 0.2s	0.3	0.02	0.02	3	Az.gap 150°		Rsd 0.2s	0.3	0.01	0.02	2	Az.gap 149°			
Corr. 0.194	20ph/14stn	Dmin 81km					Corr. -0.047	33ph/19stn	Dmin 51km						
	18M/16stn	Msd 0.2	1↑					11M/11stn	Msd 0.3	7↑ 1↓					
JUL 25	1236	25.8s	41.04S	177.85E	33km	M=3.6	92/8210	JUL 28	1758	52.6s	36.56S	177.22E	202km	M=3.9	92/8275
Rsd 0.2s	0.6	0.04	0.06	R	Az.gap 230°		Rsd 0.1s	0.2	0.03	0.04	3	Az.gap 295°			
Corr. -0.891	13ph/10stn	Dmin 157km					Corr. -0.527	12ph/8stn	Dmin 150km						
	10M/10stn	Msd 0.2						8M/8stn	Msd 0.2	3↑ 1↓					
JUL 26	0301	37.6s	38.35S	175.94E	167km	M=4.2	92/8221	JUL 29	0606	25.8s	38.33S	175.43E	174km	M=3.6	92/8284
Rsd 0.2s	0.6	0.03	0.03	5	Az.gap 104°		Rsd 0.3s	0.5	0.04	0.09	9	Az.gap 226°			
Corr. 0.406	17ph/13stn	Dmin 61km					Corr. -0.777	20ph/15stn	Dmin 147km						
	21M/20stn	Msd 0.3	9↑ 1↓					14M/14stn	Msd 0.2						

JUL 29	<b>1634</b>	<b>42.7s</b>	<b>37.94S</b>	<b>175.94E</b>	<b>173km</b>	<b>M=3.7</b>	92/8293	AUG 01	<b>0433</b>	<b>04.5s</b>	<b>37.63S</b>	<b>176.82E</b>	<b>12km</b>	<b>M=3.9</b>	92/8345
Rsd 0.1s	0.6	0.03	0.05	4				0.2	0.02	0.02			R		
Corr. -0.641	11ph/8stn	Dmin 108km	Az.gap 244°				Rsd 0.4s	17ph/15stn	Dmin 34km	Az.gap 115°					
	17M/16stn	Msd 0.2	2↑ 1↓				Corr. 0.189	19M/13stn	Msd 0.2	2↑ 1↓					
JUL 29	<b>1743</b>	<b>09.1s</b>	<b>38.88S</b>	<b>176.13E</b>	<b>86km</b>	<b>M=3.6</b>	92/8294	AUG 01	<b>0913</b>	<b>48.9s</b>	<b>38.72S</b>	<b>175.55E</b>	<b>187km</b>	<b>M=3.7</b>	92/8358
Rsd 0.3s	0.3	0.01	0.01	4			0.3	0.05	0.08	9					
Corr. -0.116	25ph/17stn	Dmin 32km	Az.gap 102°				Rsd 0.2s	22ph/16stn	Dmin 187km	Az.gap 201°					
	19M/17stn	Msd 0.2	2↑ 2↓				Corr. -0.953	12M/12stn	Msd 0.3						
JUL 29	<b>2216</b>	<b>55.2s</b>	<b>35.41S</b>	<b>178.94E</b>	<b>249km</b>	<b>M=4.1</b>	92/8299	AUG 01	<b>0957</b>	<b>18.2s</b>	<b>36.48S</b>	<b>178.57E</b>	<b>33km</b>	<b>M=3.6</b>	92/8361
Rsd 0.1s	0.2	0.04	0.05	4			0.8	0.05	0.07	R					
Corr. -0.516	12ph/8stn	Dmin 249km	Az.gap 342°				Rsd 0.5s	8ph/5stn	Dmin 127km	Az.gap 287°					
	5M/5stn	Msd 0.2					Corr. 0.471	6M/5stn	Msd 0.2						
JUL 30	<b>1026</b>	<b>33.2s</b>	<b>41.53S</b>	<b>172.97E</b>	<b>93km</b>	<b>M=3.8</b>	92/8305	AUG 01	<b>1753</b>	<b>27.8s</b>	<b>39.60S</b>	<b>174.78E</b>	<b>104km</b>	<b>M=3.7</b>	92/8373
Rsd 0.3s	0.4	0.01	0.02	4			0.3	0.01	0.01	3					
Corr. -0.049	28ph/20stn	Dmin 72km	Az.gap 78°				Rsd 0.2s	20ph/15stn	Dmin 25km	Az.gap 125°					
	14M/10stn	Msd 0.2	2↑ 3↓				Corr. 0.036	16M/13stn	Msd 0.2	1↑					
JUL 30	<b>1812</b>	<b>18.7s</b>	<b>37.50S</b>	<b>178.22E</b>	<b>57km</b>	<b>M=4.1</b>	92/8309	AUG 01	<b>1916</b>	<b>18.8s</b>	<b>40.54S</b>	<b>176.11E</b>	<b>38km</b>	<b>M=4.1</b>	92/8375
Rsd 0.1s	0.2	0.01	0.01	2			0.1	0.01	0.01	1					
Corr. 0.061	17ph/10stn	Dmin 13km	Az.gap 204°				Rsd 0.1s	27ph/20stn	Dmin 16km	Az.gap 110°					
	20M/16stn	Msd 0.2					Corr. -0.578	23M/18stn	Msd 0.2	5↑ 3↓					
JUL 30	<b>2212</b>	<b>59.4s</b>	<b>44.35S</b>	<b>168.13E</b>	<b>5km</b>	<b>M=4.5</b>	92/8311								92/8377
Rsd 0.1s	0.2	0.01	0.01	R			0.2	0.01	0.02	2					
Corr. -0.789	20ph/14stn	Dmin 40km	Az.gap 200°				Rsd 0.2s	23ph/18stn	Dmin 24km	Az.gap 137°					
	10M/6stn	Msd 0.2	1↑ 8↓				Corr. -0.003	8M/4stn	Msd 0.3	3↑ 2↓					
JUL 31	<b>0128</b>	<b>23.5s</b>	<b>40.61S</b>	<b>173.82E</b>	<b>87km</b>	<b>M=4.0</b>	92/8312	AUG 02	<b>0149</b>	<b>22.0s</b>	<b>37.29S</b>	<b>175.47E</b>	<b>193km</b>	<b>M=3.8</b>	92/8378
Rsd 0.3s	0.3	0.01	0.01	5			0.5	0.03	0.05	5					
Corr. -0.079	37ph/25stn	Dmin 22km	Az.gap 107°				Rsd 0.1s	9ph/7stn	Dmin 64km	Az.gap 183°					
	16M/12stn	Msd 0.3	7↑ 3↓				Corr. 0.703	10M/10stn	Msd 0.2	1↑					
JUL 31	<b>1411</b>	<b>23.6s</b>	<b>40.59S</b>	<b>176.14E</b>	<b>36km</b>	<b>M=5.2</b>	92/8330	AUG 02	<b>0324</b>	<b>44.7s</b>	<b>38.46S</b>	<b>176.81E</b>	<b>64km</b>	<b>M=3.8</b>	92/8381
Rsd 0.2s	0.1	0.01	0.01	2			0.2	0.01	0.01	2					
Corr. -0.395	41ph/35stn	Dmin 11km	Az.gap 89°				Rsd 0.2s	27ph/24stn	Dmin 34km	Az.gap 63°					
	8M/4stn	Msd 0.3	7↑ 7↓				Corr. 0.127	17M/11stn	Msd 0.2	1↑					
	Felt Hawkes Bay and lower North Island, max. int. MM4.														
AUG 01	<b>0231</b>	<b>12.2s</b>	<b>40.97S</b>	<b>175.46E</b>	<b>25km</b>	<b>M=3.6</b>	92/8342	AUG 02	<b>1500</b>	<b>24.5s</b>	<b>37.16S</b>	<b>177.31E</b>	<b>171km</b>	<b>M=4.1</b>	92/8390
Rsd 0.2s	0.1	0.01	0.01	1			0.8	0.05	0.04	8					
Corr. -0.213	27ph/19stn	Dmin 22km	Az.gap 109°				Rsd 0.3s	15ph/9stn	Dmin 101km	Az.gap 193°					
	22M/19stn	Msd 0.2	3↑ 2↓				Corr. 0.451	20M/17stn	Msd 0.2	1↓					
AUG 01	<b>0328</b>	<b>00.2s</b>	<b>40.41S</b>	<b>173.86E</b>	<b>127km</b>	<b>M=3.9</b>	92/8344	AUG 02	<b>2123</b>	<b>59.9s</b>	<b>36.60S</b>	<b>177.24E</b>	<b>224km</b>	<b>M=4.1</b>	92/8397
Rsd 0.2s	0.3	0.01	0.02	3			1.2	0.11	0.21	18					
Corr. 0.029	29ph/22stn	Dmin 44km	Az.gap 116°				Rsd 0.4s	10ph/7stn	Dmin 145km	Az.gap 288°					
	20M/15stn	Msd 0.2	2↑ 2↓				Corr. -0.738	11M/11stn	Msd 0.1						

AUG 03 0223	29.6s	38.29S	177.69E	50km	M=3.9	92/8401	AUG 04 2126	07.7s	38.85S	175.24E	215km	M=3.9	92/8443
Rsd 0.2s	0.2	0.01	0.01	3			Rsd 0.3s	0.9	0.04	0.05	8		
Corr. -0.035	19ph/15stn	Dmin 48km	Az.gap 76°				Corr. -0.248	15ph/11stn	Dmin 47km	Az.gap 197°			
	21M/17stn	Msd 0.2	2↑ 2↓					17M/15stn	Msd 0.3	1↓			
AUG 03 0536	05.1s	37.73S	176.44E	157km	M=3.7	92/8403	AUG 05 0746	27.2s	35.95S	179.84W	98km	M=5.0	92/8450
Rsd 0.1s	0.3	0.01	0.02	3			Rsd 0.2s	0.8	0.05	0.06	R		
Corr. 0.566	11ph/9stn	Dmin 83km	Az.gap 125°				Corr. 0.332	18ph/15stn	Dmin 247km	Az.gap 313°			
	12M/12stn	Msd 0.2	1↓					8M/4stn	Msd 0.2	1↓			
AUG 03 0615	23.2s	41.30S	172.64E	192km	M=3.8	92/8404	AUG 05 1244	27.4s	37.65S	176.41E	188km	M=4.4	92/8455
Rsd 0.2s	0.3	0.02	0.02	3			Rsd 0.2s	0.4	0.03	0.03	4		
Corr. -0.227	32ph/21stn	Dmin 54km	Az.gap 116°				Corr. 0.430	18ph/13stn	Dmin 76km	Az.gap 121°			
	12M/12stn	Msd 0.2	1↑					24M/18stn	Msd 0.2	1↑			
AUG 03 0643	16.8s	45.78S	167.11E	5km	M=3.6	92/8405	AUG 06 0517	45.1s	38.53S	175.99E	205km	M=3.5	92/8465
Rsd 0.3s	0.3	0.01	0.03	R			Rsd 0.1s	0.8	0.19	0.13	21		
Corr. 0.241	20ph/13stn	Dmin 62km	Az.gap 240°				Corr. 0.129	11ph/9stn	Dmin 236km	Az.gap 342°			
	15M/12stn	Msd 0.2						6M/6stn	Msd 0.3				
AUG 03 1058	41.5s	35.76S	178.57E	229km	M=4.4	92/8410	AUG 06 0843	12.2s	37.54S	176.74E	232km	M=3.6	92/8472
Rsd 0.3s	0.6	0.09	0.07	12			Rsd 0.1s	0.3	0.04	0.07	6		
Corr. 0.311	11ph/8stn	Dmin 205km	Az.gap 300°				Corr. -0.945	9ph/8stn	Dmin 165km	Az.gap 290°			
	16M/16stn	Msd 0.2						3M/3stn	Msd 0.1				
AUG 03 1347	43.8s	39.74S	174.17E	198km	M=4.0	92/8412	AUG 06 1222	51.1s	35.69S	177.74E	291km	M=3.9	92/8476
Rsd 0.2s	0.3	0.01	0.03	3			Rsd 0.5s	1.4	0.15	0.27	20		
Corr. -0.246	31ph/23stn	Dmin 65km	Az.gap 189°				Corr. -0.797	9ph/6stn	Dmin 217km	Az.gap 328°			
	24M/21stn	Msd 0.2	1↑					3M/3stn	Msd 0.0				
AUG 04 0430	12.4s	39.97S	174.58E	114km	M=4.1	92/8426	AUG 06 1405	35.1s	38.55S	176.12E	131km	M=3.8	92/8479
Rsd 0.2s	0.3	0.01	0.02	3			Rsd 0.3s	0.7	0.03	0.03	6		
Corr. -0.377	35ph/30stn	Dmin 36km	Az.gap 81°				Corr. 0.172	22ph/16stn	Dmin 49km	Az.gap 111°			
	23M/18stn	Msd 0.3	8↑ 3↓					22M/19stn	Msd 0.2	1↓			
AUG 04 0808	06.7s	38.76S	175.87E	190km	M=3.5	92/8430	AUG 06 1552	11.7s	38.05S	176.08E	184km	M=3.6	92/8481
Rsd 0.1s	0.2	0.04	0.04	5			Rsd 0.2s	0.6	0.04	0.06	5		
Corr. -0.793	11ph/8stn	Dmin 176km	Az.gap 323°				Corr. -0.699	11ph/10stn	Dmin 93km	Az.gap 225°			
	4M/4stn	Msd 0.2	1↑					14M/14stn	Msd 0.2				
AUG 04 1852	22.2s	39.95S	176.21E	28km	M=3.8	92/8438	AUG 06 1743	13.0s	38.98S	174.95E	228km	M=4.9	92/8486
Rsd 0.3s	0.1	0.01	0.02	2			Rsd 0.2s	0.4	0.01	0.03	3		
Corr. -0.330	25ph/22stn	Dmin 30km	Az.gap 79°				Corr. -0.115	42ph/33stn	Dmin 57km	Az.gap 129°			
	28M/26stn	Msd 0.2	2↑ 2↓					8M/4stn	Msd 0.2	11↑ 4↓			
AUG 04 1859	06.8s	40.15S	173.64E	169km	M=3.8	92/8439	AUG 08 0044	53.3s	36.84S	178.77E	5km	M=3.9	92/8500
Rsd 0.2s	0.3	0.02	0.02	3			Rsd 0.2s	0.5	0.02	0.04	R		
Corr. -0.285	31ph/18stn	Dmin 76km	Az.gap 187°				Corr. 0.395	12ph/6stn	Dmin 94km	Az.gap 287°			
	13M/11stn	Msd 0.2	1↑ 1↓					10M/6stn	Msd 0.2				

AUG 08 0051	50.4s	36.86S	178.83E	5km	M=3.7	92/8501	AUG 10 1039	35.4s	40.49S	173.19E	237km	M=5.1	92/8550
	0.3	0.01	0.03	R				0.4	0.02	0.02	3		
Rsd 0.2s	12ph/8stn	Dmin 94km	Az.gap 287°				Rsd 0.2s	31ph/26stn	Dmin 67km	Az.gap 151°			
Corr. 0.052	11M/7stn	Msd 0.2	1↑				Corr. -0.170	8M/4stn	Msd 0.2	6↑ 1↓			
AUG 08 0108	04.8s	31.20S	179.94E	395km	M=7.1	92/8502	AUG 10 2316	16.1s	37.49S	179.27E	22km	M=4.9	92/8558
	0.1	R	R	R				0.6	0.03	0.04	5		
Rsd 0.6s	27ph/24stn	Dmin 726km	Az.gap 339°				Rsd 0.2s	24ph/19stn	Dmin 87km	Az.gap 231°			
Corr. 0.000	8M/4stn	Msd 0.3	1↑				Corr. -0.223	9M/5stn	Msd 0.2	1↑ 1↓			
Felt Gisborne (45), Mt Vernon (60) and Kapiti coast (65), maximum intensity MM4 at Mt Vernon.													
AUG 08 1237	14.4s	38.96S	177.53E	56km	M=4.3	92/8512	AUG 11 0403	48.5s	38.37S	176.24E	189km	M=3.5	92/8564
	0.2	0.01	0.02	3				0.3	0.03	0.07	3		
Rsd 0.2s	30ph/23stn	Dmin 39km	Az.gap 81°				Rsd 0.1s	12ph/10stn	Dmin 148km	Az.gap 329°			
Corr. -0.357	8M/4stn	Msd 0.3	2↓				Corr. -0.816	5M/5stn	Msd 0.3				
AUG 08 1435	12.0s	37.13S	178.48E	25km	M=3.8	92/8513	AUG 11 0742	55.8s	39.17S	175.66E	90km	M=3.5	92/8570
	0.2	0.01	0.02	2				0.2	0.01	0.02	2		
Rsd 0.1s	11ph/5stn	Dmin 54km	Az.gap 272°				Rsd 0.2s	36ph/26stn	Dmin 5km	Az.gap 105°			
Corr. 0.134	9M/5stn	Msd 0.2					Corr. -0.559	21M/19stn	Msd 0.2	1↑			
AUG 09 1050	53.1s	37.73S	176.82E	5km	M=3.7	92/8528	AUG 11 1400	18.7s	37.49S	177.29E	143km	M=4.5	92/8580
	0.2	0.02	0.02	R				0.3	0.02	0.02	2		
Rsd 0.5s	19ph/13stn	Dmin 49km	Az.gap 126°				Rsd 0.2s	27ph/19stn	Dmin 10km	Az.gap 158°			
Corr. 0.226	17M/13stn	Msd 0.1	1↑				Corr. 0.439	26M/20stn	Msd 0.3	1↑			
AUG 09 1427	14.4s	36.71S	177.39E	268km	M=3.9	92/8530	AUG 11 2227	03.6s	38.19S	175.80E	154km	M=3.8	92/8587
	0.3	0.06	0.10	7				0.5	0.04	0.05	4		
Rsd 0.1s	9ph/6stn	Dmin 169km	Az.gap 300°				Rsd 0.2s	17ph/11stn	Dmin 98km	Az.gap 231°			
Corr. -0.883	7M/7stn	Msd 0.2					Corr. -0.605	19M/17stn	Msd 0.2				
AUG 09 1735	16.3s	38.78S	175.92E	120km	M=3.7	92/8533	AUG 12 2137	22.8s	38.62S	175.87E	144km	M=3.7	92/8607
	0.7	0.02	0.03	8				0.9	0.06	0.08	9		
Rsd 0.4s	22ph/15stn	Dmin 52km	Az.gap 113°				Rsd 0.3s	13ph/9stn	Dmin 66km	Az.gap 218°			
Corr. -0.171	20M/18stn	Msd 0.2	10↑ 2↓				Corr. -0.535	7M/7stn	Msd 0.2	1↑			
AUG 09 1940	36.1s	38.62S	177.49E	62km	M=4.8	92/8536	AUG 12 2255	09.8s	38.49S	176.00E	155km	M=4.0	92/8613
	0.2	0.01	0.01	2				0.4	0.02	0.02	4		
Rsd 0.2s	29ph/24stn	Dmin 46km	Az.gap 52°				Rsd 0.3s	28ph/20stn	Dmin 61km	Az.gap 118°			
Corr. -0.028	8M/4stn	Msd 0.2	9↑ 18↓				Corr. 0.036	26M/22stn	Msd 0.2	1↑			
Felt Gisborne (45).													
AUG 09 2358	00.1s	37.78S	176.20E	296km	M=5.3	92/8539	AUG 13 0706	02.0s	37.29S	177.49E	123km	M=3.8	92/8622
	0.6	0.05	0.06	4				0.1	0.01	0.00	1		
Rsd 0.3s	26ph/22stn	Dmin 30km	Az.gap 94°				Rsd 0.0s	14ph/10stn	Dmin 80km	Az.gap 228°			
Corr. 0.207	8M/4stn	Msd 0.2	9↑ 1↓				Corr. -0.279	20M/16stn	Msd 0.2	1↓			
AUG 10 0832	49.1s	38.51S	176.30E	118km	M=4.2	92/8548	AUG 13 0743	13.0s	37.52S	178.88E	22km	M=3.6	92/8624
	0.5	0.01	0.02	4				0.2	0.01	0.02	1		
Rsd 0.3s	31ph/24stn	Dmin 15km	Az.gap 89°				Rsd 0.1s	11ph/5stn	Dmin 52km	Az.gap 285°			
Corr. 0.299	8M/4stn	Msd 0.1	6↑ 2↓				Corr. 0.163	12M/8stn	Msd 0.1	1↑			

AUG 13 0949	06.5s	38.49S	175.74E	139km	M=3.6	92/8628	AUG 16 1512	08.2s	39.14S	174.80E	222km	M=3.5	92/8690
	0.6	0.02	0.04	6				0.4	0.02	0.04	4		
Rsd 0.2s	17ph/12stn	Dmin 77km	Az.gap 146°				Rsd 0.2s	13ph/8stn	Dmin 65km	Az.gap 246°			
Corr. -0.220	21M/17stn	Msd 0.3	1↑				Corr. -0.516	7M/7stn	Msd 0.1				
AUG 13 1518	38.5s	41.26S	172.61E	214km	M=3.7	92/8631	AUG 16 1804	31.0s	40.44S	173.36E	158km	M=4.6	92/8694
	0.2	0.01	0.02	2				0.3	0.01	0.01	3		
Rsd 0.2s	35ph/23stn	Dmin 49km	Az.gap 121°				Rsd 0.2s	30ph/24stn	Dmin 62km	Az.gap 143°			
Corr. -0.069	9M/9stn	Msd 0.4	1↑				Corr. -0.102	9M/5stn	Msd 0.2	4↑ 4↓			Felt Wellington (68).
AUG 13 1807	05.7s	37.10S	176.50E	309km	M=4.2	92/8632	AUG 16 1833	33.3s	39.23S	173.73E	5km	M=3.7	92/8695
	0.4	0.06	0.06	3				0.3	0.02	0.02	R		
Rsd 0.2s	15ph/11stn	Dmin 139km	Az.gap 251°				Rsd 0.1s	17ph/13stn	Dmin 22km	Az.gap 183°			
Corr. -0.727	15M/15stn	Msd 0.2					Corr. -0.320	18M/16stn	Msd 0.2				
AUG 14 0527	36.2s	38.89S	178.82E	33km	M=3.6	92/8639	AUG 16 2217	57.9s	38.14S	176.86E	79km	M=3.6	92/8699
	1.3	0.06	0.11	R				0.2	0.01	0.01	3		
Rsd 0.7s	9ph/6stn	Dmin 75km	Az.gap 240°				Rsd 0.2s	11ph/9stn	Dmin 26km	Az.gap 140°			
Corr. -0.566	6M/4stn	Msd 0.3	1↑				Corr. -0.039	15M/12stn	Msd 0.2	1↑			
AUG 14 1403	41.5s	37.18S	177.41E	132km	M=3.7	92/8649	AUG 16 2302	30.1s	37.11S	177.44E	126km	M=3.9	92/8701
	0.0	0.00	0.00	0				0.4	0.02	0.02	4		
Rsd 0.0s	5ph/3stn	Dmin 92km	Az.gap 289°				Rsd 0.2s	11ph/8stn	Dmin 94km	Az.gap 202°			
Corr. -0.707	3M/3stn	Msd 0.3					Corr. 0.373	11M/8stn	Msd 0.2	1↓			
AUG 15 0023	46.3s	45.37S	167.17E	101km	M=3.8	92/8654	AUG 17 0759	59.1s	39.88S	173.90E	131km	M=3.5	92/8710
	0.3	0.01	0.02	2				0.3	0.01	0.01	3		
Rsd 0.2s	21ph/14stn	Dmin 11km	Az.gap 209°				Rsd 0.2s	31ph/20stn	Dmin 89km	Az.gap 194°			
Corr. -0.305	8M/5stn	Msd 0.1	2↑ 5↓				Corr. -0.320	10M/10stn	Msd 0.3	1↑			
AUG 15 2100	57.4s	35.89S	179.31W	33km	M=4.5	92/8675	AUG 17 1404	39.8s	39.23S	173.75E	5km	M=3.6	92/8720
	0.7	0.05	0.05	R				0.3	0.02	0.02	R		
Rsd 0.2s	14ph/10stn	Dmin 285km	Az.gap 319°				Rsd 0.1s	17ph/12stn	Dmin 19km	Az.gap 238°			
Corr. 0.002	30M/26stn	Msd 0.2					Corr. 0.105	15M/13stn	Msd 0.2	1↑			
AUG 15 2135	47.0s	36.99S	176.65E	292km	M=4.1	92/8676	AUG 18 0214	57.8s	38.49S	175.82E	205km	M=3.6	92/8733
	0.5	0.03	0.04	5				0.3	0.02	0.03	4		
Rsd 0.2s	13ph/11stn	Dmin 87km	Az.gap 188°				Rsd 0.1s	21ph/15stn	Dmin 79km	Az.gap 309°			
Corr. 0.008	18M/17stn	Msd 0.2					Corr. 0.152	8M/8stn	Msd 0.3	1↑			
AUG 15 2221	18.1s	38.21S	176.27E	160km	M=4.1	92/8677	AUG 18 0317	54.0s	37.89S	176.82E	136km	M=3.6	92/8734
	0.5	0.02	0.03	4				0.5	0.04	0.03	3		
Rsd 0.3s	20ph/14stn	Dmin 71km	Az.gap 103°				Rsd 0.2s	15ph/12stn	Dmin 17km	Az.gap 209°			
Corr. 0.234	23M/19stn	Msd 0.2	1↑				Corr. 0.273	15M/15stn	Msd 0.1	1↑			
AUG 15 2324	11.3s	38.52S	176.48E	104km	M=3.5	92/8678	AUG 18 0945	41.6s	39.24S	173.76E	9km	M=4.3	92/8741
	0.4	0.03	0.03	4				0.4	0.02	0.02	2		
Rsd 0.3s	16ph/10stn	Dmin 62km	Az.gap 191°				Rsd 0.2s	16ph/12stn	Dmin 19km	Az.gap 158°			
Corr. -0.727	16M/14stn	Msd 0.1	1↑				Corr. -0.594	8M/4stn	Msd 0.3	1↑			Felt New Plymouth (47). Several aftershocks recorded only at NRZ.

AUG 18 1005 03.5s	39.23S	173.73E	5km	M=4.2	92/8742	AUG 19 0924 38.6s	37.71S	177.01E	5km	M=3.5	92/8782
0.4	0.03	0.02	R			0.2	0.02	0.02	R		
Rsd 0.2s	12ph/10stn	Dmin 21km	Az.gap 159°			Rsd 0.4s	12ph/10stn	Dmin 26km	Az.gap 90°		
Corr. -0.226	34M/28stn	Msd 0.2	1↑			Corr. -0.373	11M/7stn	Msd 0.2	1↑		
Felt New Plymouth (47).											
AUG 18 1452 37.5s	41.27S	175.25E	29km	M=3.9	92/8754	AUG 19 0934 14.3s	37.74S	176.99E	5km	M=3.8	92/8783
0.1	0.01	0.01	1			0.2	0.02	0.01	R		
Rsd 0.2s	32ph/25stn	Dmin 16km	Az.gap 59°			Rsd 0.3s	16ph/13stn	Dmin 29km	Az.gap 89°		
Corr. -0.404	22M/17stn	Msd 0.3	9↑ 7↓			Corr. -0.186	16M/12stn	Msd 0.1	1↓		
Felt Otaki (65) to Wellington (68), max. int. MM4.											
AUG 18 1658 54.3s	40.17S	174.73E	17km	M=4.1	92/8759	AUG 19 2015 58.8s	38.03S	176.39E	162km	M=3.8	92/8793
0.2	0.01	0.02	3			0.7	0.05	0.10	5		
Rsd 0.3s	31ph/23stn	Dmin 45km	Az.gap 75°			Rsd 0.3s	15ph/10stn	Dmin 69km	Az.gap 227°		
Corr. -0.377	34M/29stn	Msd 0.3	2↑ 1↓			Corr. -0.824	16M/14stn	Msd 0.2	1↑		
Felt Wanganui (57) MM4 and Otaki (65).											
AUG 18 1855 39.1s	37.59S	177.20E	138km	M=3.9	92/8762	AUG 20 0031 35.3s	37.71S	177.00E	5km	M=4.1	92/8797
0.2	0.02	0.01	2			0.2	0.02	0.02	R		
Rsd 0.1s	16ph/12stn	Dmin 75km	Az.gap 228°			Rsd 0.3s	19ph/16stn	Dmin 26km	Az.gap 86°		
Corr. -0.535	20M/18stn	Msd 0.2	1↑			Corr. -0.367	20M/14stn	Msd 0.2			
AUG 18 2124 40.9s	40.18S	174.75E	19km	M=3.6	92/8764	AUG 20 0621 11.0s	39.08S	174.93E	216km	M=3.8	92/8808
0.2	0.01	0.02	3			0.2	0.01	0.02	2		
Rsd 0.3s	30ph/24stn	Dmin 45km	Az.gap 75°			Rsd 0.1s	24ph/19stn	Dmin 55km	Az.gap 235°		
Corr. -0.075	21M/18stn	Msd 0.2	1↑			Corr. 0.057	14M/12stn	Msd 0.2	1↑		
AUG 19 0100 11.2s	38.90S	177.06E	51km	M=4.3	92/8768	AUG 20 1319 07.5s	38.26S	175.55E	169km	M=3.6	92/8812
0.1	0.00	0.01	1			0.3	0.03	0.06	4		
Rsd 0.1s	29ph/25stn	Dmin 5km	Az.gap 44°			Rsd 0.2s	18ph/12stn	Dmin 136km	Az.gap 226°		
Corr. -0.059	8M/4stn	Msd 0.3	1↑ 7↓			Corr. -0.930	10M/10stn	Msd 0.2			
Felt Patoka (52) MM4 and Napier (60).											
AUG 19 0520 12.0s	41.53S	173.36E	92km	M=4.0	92/8776	AUG 21 1241 37.3s	38.20S	176.52E	125km	M=3.6	92/8834
0.2	0.01	0.01	2			0.2	0.01	0.01	2		
Rsd 0.3s	39ph/22stn	Dmin 40km	Az.gap 72°			Rsd 0.2s	22ph/16stn	Dmin 12km	Az.gap 77°		
Corr. -0.293	18M/13stn	Msd 0.2	2↑ 2↓			Corr. 0.014	12M/10stn	Msd 0.2	1↑		
AUG 19 0616 05.3s	38.07S	175.95E	158km	M=3.7	92/8777	AUG 21 1739 55.8s	45.11S	167.48E	108km	M=4.7	92/8839
0.7	0.05	0.07	4			0.3	0.01	0.02	2		
Rsd 0.2s	13ph/10stn	Dmin 104km	Az.gap 233°			Rsd 0.1s	24ph/14stn	Dmin 60km	Az.gap 226°		
Corr. -0.672	17M/17stn	Msd 0.2	1↑			Corr. -0.166	9M/5stn	Msd 0.1	3↑ 11↓		
AUG 19 0918 05.6s	37.72S	176.97E	5km	M=3.8	92/8781	AUG 22 0251 37.6s	41.77S	171.94E	12km	M=3.7	92/8847
0.3	0.02	0.02	R			0.2	0.01	0.02	R		
Rsd 0.3s	13ph/11stn	Dmin 29km	Az.gap 93°			Rsd 0.2s	19ph/12stn	Dmin 12km	Az.gap 101°		
Corr. -0.324	15M/11stn	Msd 0.1	1↑			Corr. 0.005	17M/12stn	Msd 0.2	1↑ 1↓		
AUG 19 0918 05.6s	37.72S	176.97E	R			AUG 22 0706 15.8s	37.71S	176.78E	12km	M=4.3	92/8851
0.3	0.02	0.02				0.2	0.02	0.01	R		
Rsd 0.3s	13ph/11stn	Dmin 29km				Rsd 0.3s	22ph/17stn	Dmin 32km	Az.gap 103°		
Corr. -0.324	15M/11stn	Msd 0.1	1↑			Corr. -0.059	23M/17stn	Msd 0.3	1↑		

AUG 22 0708	04.4s	37.74S	176.83E	8km	M=3.0	92/8852	AUG 23 2317	19.9s	35.40S	178.75E	33km	M=4.3	92/8906
Rsd 0.2s	0.3	0.01	0.01	3	Az.gap 104°		Rsd 0.6s	1.5	0.09	0.11	R		
Corr. 0.523	4M/3stn		Dmin 30km				Corr. 0.420	9ph/6stn		Dmin 247km	Az.gap 289°		
Felt Otamarakau (27) MM3.	4M/3stn	Msd 0.2		1↑			Corr. 0.420	11M/9stn	Msd 0.3				
AUG 22 0852	39.1s	38.92S	175.49E	115km	M=3.7	92/8856	AUG 24 1543	54.3s	37.62S	177.17E	123km	M=3.7	92/8925
Rsd 0.2s	0.5	0.01	0.03	6	Az.gap 136°		Rsd 0.3s	0.6	0.03	0.03	7		
Corr. -0.121	24ph/17stn		Dmin 31km				Corr. 0.396	11ph/9stn		Dmin 60km	Az.gap 143°		
18M/16stn	Msd 0.4			4↑ 1↓			Msd 0.1			1↑ 1↓			
AUG 22 1029	19.3s	38.41S	178.89E	28km	M=3.8	92/8858	AUG 24 1741	56.6s	38.05S	175.65E	187km	M=3.6	92/8930
Rsd 0.1s	0.4	0.03	0.03	3	Az.gap 250°		Rsd 0.4s	0.9	0.06	0.13	10		
Corr. -0.061	13ph/8stn		Dmin 66km				Corr. -0.871	18ph/14stn		Dmin 130km	Az.gap 238°		
19M/15stn	Msd 0.2			1↑ 1↓			Msd 0.1			1↑			
AUG 22 1051	20.0s	37.36S	176.37E	246km	M=3.6	92/8859	AUG 25 1128	25.6s	37.52S	177.07E	12km	M=4.7	92/8950
Rsd 0.2s	0.6	0.09	0.17	6	Az.gap 286°		Rsd 0.3s	0.2	0.02	0.02	R		
Corr. -0.805	14ph/10stn		Dmin 120km				Corr. 0.475	22ph/20stn		Dmin 11km	Az.gap 149°		
3M/3stn	Msd 0.1						Msd 0.3			1↑			
AUG 22 1525	12.0s	38.43S	179.00E	20km	M=3.7	92/8866	AUG 25 1135	10.7s	37.79S	177.02E	44km	M=3.5	92/8952
Rsd 0.1s	0.3	0.01	0.03	1	Az.gap 262°		Rsd 0.5s	1.0	0.09	0.05	25		
Corr. -0.107	11ph/6stn		Dmin 77km				Corr. 0.691	6ph/5stn		Dmin 38km	Az.gap 125°		
10M/6stn	Msd 0.1						Msd 0.5						
AUG 22 2029	16.0s	36.02S	178.34E	243km	M=3.9	92/8871	AUG 25 1354	45.8s	37.50S	177.26E	112km	M=4.6	92/8962
Rsd 0.1s	0.7	0.10	0.23	3	Az.gap 345°		Rsd 0.1s	0.2	0.02	0.02	2		
Corr. -0.844	11ph/8stn		Dmin 272km				Corr. 0.664	20ph/15stn		Dmin 7km	Az.gap 154°		
4M/4stn	Msd 0.3						Msd 0.2			3↑ 1↓			
AUG 23 1127	53.5s	39.56S	175.56E	5km	M=3.5	92/8886	AUG 26 0545	55.6s	41.32S	172.61E	189km	M=3.6	92/8982
Rsd 0.3s	0.1	0.01	0.02	R	Az.gap 79°		Rsd 0.2s	0.3	0.01	0.02	2		
Corr. 0.029	22ph/17stn		Dmin 39km				Corr. -0.031	27ph/15stn		Dmin 55km	Az.gap 163°		
13M/12stn	Msd 0.3			1↑ 3↓			Msd 0.3			1↑			
AUG 23 1449	33.8s	36.61S	177.30E	5km	M=3.7	92/8893	AUG 26 1550	34.0s	37.64S	177.12E	12km	M=3.5	92/8991
Rsd 0.8s	1.2	0.08	0.07	R	Az.gap 238°		Rsd 0.4s	0.3	0.02	0.04	R		
Corr. 0.629	9ph/4stn		Dmin 141km				Corr. -0.114	10ph/7stn		Dmin 14km	Az.gap 93°		
4M/4stn	Msd 0.1						Msd 0.3			1↑			
AUG 23 2031	12.2s	37.35S	176.58E	248km	M=4.2	92/8903	AUG 26 1836	40.8s	36.78S	176.87E	263km	M=4.1	92/8993
Rsd 0.1s	0.2	0.02	0.02	2	Az.gap 150°		Rsd 0.1s	0.4	0.05	0.05	3		
Corr. 0.555	15ph/11stn		Dmin 102km				Corr. -0.385	13ph/11stn		Dmin 165km	Az.gap 295°		
19M/18stn	Msd 0.2			6↑ 2↓			Msd 0.2						
AUG 23 2228	43.0s	38.00S	176.20E	176km	M=4.8	92/8905	AUG 26 2104	22.1s	39.83S	174.17E	191km	M=3.5	92/8995
Rsd 0.2s	0.6	0.03	0.03	5	Az.gap 152°		Rsd 0.1s	0.3	0.02	0.02	3		
Corr. 0.320	25ph/20stn		Dmin 16km				Corr. -0.348	15ph/11stn		Dmin 65km	Az.gap 251°		
8M/4stn	Msd 0.3			4↑ 9↓			Msd 0.2						

AUG 27 0511	38.4s	37.57S	177.11E	5km	M=3.8	92/9003	AUG 28 2327	22.0s	37.03S	177.27E	305km	M=3.8	92/9064
	0.2	0.02	0.02	R				0.3	0.03	0.16	8		
Rsd 0.3s	17ph/13stn	Dmin 8km	Az.gap 108°				Rsd 0.1s	8ph/6stn	Dmin 280km	Az.gap 342°			
Corr. -0.023	19M/15stn	Msd 0.4	1↑ 1↓				Corr. -0.443	3M/3stn	Msd 0.0				
AUG 27 1337	53.7s	38.44S	175.75E	130km	M=3.5	92/9016	AUG 29 0538	55.4s	40.80S	172.81E	11km	M=3.7	92/9073
	0.9	0.04	0.07	8				0.3	0.01	0.02	3		
Rsd 0.3s	12ph/7stn	Dmin 83km	Az.gap 249°				Rsd 0.2s	27ph/19stn	Dmin 24km	Az.gap 129°			
Corr. -0.609	4M/2stn	Msd 0.3					Corr. -0.322	26M/21stn	Msd 0.2	1↓			
AUG 27 1810	20.3s	37.89S	176.53E	150km	M=3.9	92/9020	AUG 29 0954	06.8s	42.51S	173.00E	5km	M=3.5	92/9082
	0.8	0.06	0.06	6				0.1	0.01	0.02	R		
Rsd 0.3s	10ph/8stn	Dmin 38km	Az.gap 268°				Rsd 0.3s	28ph/16stn	Dmin 67km	Az.gap 133°			
Corr. -0.170	11M/9stn	Msd 0.3	1↑				Corr. -0.453	21M/17stn	Msd 0.2	3↑ 2↓			
AUG 27 1811	51.2s	37.79S	177.30E	62km	M=3.7	92/9021	AUG 29 1448	51.7s	38.13S	176.22E	155km	M=4.2	92/9086
	0.1	0.01	0.01	1				0.4	0.02	0.02	3		
Rsd 0.1s	11ph/9stn	Dmin 55km	Az.gap 196°				Rsd 0.3s	26ph/22stn	Dmin 6km	Az.gap 72°			
Corr. 0.309	13M/11stn	Msd 0.1	1↑				Corr. 0.104	23M/19stn	Msd 0.2	9↑ 3↓			
AUG 28 0238	50.2s	38.54S	176.13E	194km	M=3.7	92/9029	AUG 29 1634	25.2s	37.72S	176.88E	5km	M=3.8	92/9088
	0.4	0.13	0.05	15				0.4	0.03	0.03	R		
Rsd 0.1s	11ph/9stn	Dmin 238km	Az.gap 339°				Rsd 0.4s	16ph/14stn	Dmin 35km	Az.gap 95°			
Corr. 0.126	6M/4stn	Msd 0.2	1↑				Corr. 0.009	19M/15stn	Msd 0.3	4↑ 1↓			
AUG 28 0311	31.8s	36.98S	177.58E	132km	M=4.6	92/9030	AUG 29 2057	10.8s	37.16S	177.24E	180km	M=4.1	92/9094
	0.4	0.03	0.03	5				0.8	0.04	0.05	7		
Rsd 0.2s	16ph/11stn	Dmin 70km	Az.gap 250°				Rsd 0.4s	12ph/10stn	Dmin 106km	Az.gap 180°			
Corr. 0.447	23M/18stn	Msd 0.2	1↑ 1↓				Corr. 0.404	11M/9stn	Msd 0.3	1↑			
AUG 28 0330	13.0s	38.85S	175.49E	198km	M=4.3	92/9031	AUG 30 0525	15.9s	41.71S	172.92E	95km	M=3.8	92/9102
	1.2	0.05	0.07	10				0.3	0.02	0.02	3		
Rsd 0.3s	13ph/10stn	Dmin 38km	Az.gap 198°				Rsd 0.3s	32ph/22stn	Dmin 6km	Az.gap 96°			
Corr. -0.416	19M/15stn	Msd 0.3	1↑				Corr. -0.379	11M/11stn	Msd 0.4	1↑ 2↓			
AUG 28 0519	26.7s	37.29S	177.81E	47km	M=3.8	92/9032	AUG 30 1004	07.9s	37.85S	177.24E	67km	M=4.0	92/9104
	0.3	0.01	0.02	8				0.2	0.01	0.01	2		
Rsd 0.2s	10ph/6stn	Dmin 56km	Az.gap 202°				Rsd 0.1s	20ph/15stn	Dmin 36km	Az.gap 82°			
Corr. -0.024	5M/3stn	Msd 0.2	1↑				Corr. 0.328	16M/14stn	Msd 0.2				
AUG 28 0854	30.6s	38.26S	176.42E	5km	M=2.7	92/9036	AUG 30 1920	32.8s	43.18S	171.12E	5km	M=3.6	92/9114
	0.0	0.00	0.00	R				0.1	0.00	0.00	R		
Rsd 0.1s	15ph/12stn	Dmin 8km	Az.gap 106°				Rsd 0.1s	19ph/9stn	Dmin 33km	Az.gap 89°			
Corr. -0.275	5M/4stn	Msd 0.3	1↑				Corr. -0.010	14M/12stn	Msd 0.2	1↑ 2↓			
Felt Lake Tarawera (33).													
AUG 28 2125	27.9s	38.70S	175.90E	136km	M=4.0	92/9058	AUG 30 2014	04.4s	38.65S	175.99E	108km	M=3.8	92/9115
	0.5	0.02	0.03	5				0.4	0.01	0.02	5		
Rsd 0.3s	23ph/15stn	Dmin 47km	Az.gap 128°				Rsd 0.2s	21ph/15stn	Dmin 37km	Az.gap 92°			
Corr. -0.230	17M/15stn	Msd 0.3	1↑ 1↓				Corr. -0.092	7M/4stn	Msd 0.1				

AUG 30	2331	38.9s	42.40S	173.10E	5km	M=3.8	92/9118		92/9263
		0.1	0.01	0.01	R			0.5	0.02
Rsd 0.2s	30ph/20stn	Dmin 73km		Az.gap 132°			0.03	5	
Corr. -0.408	10M/5stn	Msd 0.2		1↑ 1↓					
AUG 31	1136	11.3s	40.31S	173.97E	113km	M=3.7	92/9128		92/9285
		0.3	0.02	0.01	3		0.4	0.02	
Rsd 0.3s	36ph/23stn	Dmin 55km		Az.gap 164°			0.04	4	
Corr. -0.232	15M/13stn	Msd 0.3		4↑ 1↓					
SEP 01	0342	03.7s	39.49S	174.50E	254km	M=4.0	92/9142		92/9288
		0.4	0.02	0.04	4		0.6	0.03	
Rsd 0.2s	33ph/26stn	Dmin 50km		Az.gap 192°			0.04	6	
Corr. -0.455	18M/16stn	Msd 0.2		3↑ 2↓					
SEP 01	0748	49.1s	37.91S	176.01E	174km	M=3.6	92/9145		92/9291
		0.5	0.04	0.09	12		0.4	0.02	
Rsd 0.2s	19ph/14stn	Dmin 194km		Az.gap 232°			0.02	4	
Corr. -0.949	8M/8stn	Msd 0.1							
SEP 02	1030	05.4s	37.61S	176.84E	5km	M=3.7	92/9167		92/9292
		0.2	0.02	0.02	R		0.2	0.01	
Rsd 0.4s	12ph/10stn	Dmin 32km		Az.gap 119°			0.02	R	
Corr. -0.285	7M/6stn	Msd 0.3							
SEP 03	0015	07.8s	41.41S	172.50E	198km	M=3.6	92/9176		92/9303
		0.4	0.02	0.03	3		0.2	0.01	
Rsd 0.2s	23ph/18stn	Dmin 51km		Az.gap 125°			0.02	R	
Corr. -0.412	9M/9stn	Msd 0.4		1↑					
SEP 04	0746	15.8s	38.86S	175.94E	111km	M=3.6	92/9223		92/9305
		0.5	0.02	0.03	5		0.1	0.01	
Rsd 0.3s	22ph/17stn	Dmin 46km		Az.gap 210°			0.01	2	
Corr. -0.229	13M/13stn	Msd 0.3		1↑					
SEP 04	1127	58.9s	38.36S	175.76E	186km	M=3.7	92/9228		92/9317
		0.9	0.06	0.04	7		2.7	0.16	
Rsd 0.2s	13ph/11stn	Dmin 86km		Az.gap 247°			0.11	18	
Corr. -0.233	16M/15stn	Msd 0.3		1↑					
SEP 05	1117	12.3s	38.10S	176.10E	197km	M=3.5	92/9254		92/9319
		0.7	0.01	0.03	6		0.7	0.06	
Rsd 0.1s	10ph/7stn	Dmin 51km		Az.gap 169°			0.11	6	
Corr. -0.146	8M/8stn	Msd 0.1							
SEP 05	1801	10.4s	38.29S	176.06E	177km	M=3.7	92/9261		92/9347
		0.4	0.03	0.05	6		1.6	0.14	
Rsd 0.2s	25ph/21stn	Dmin 107km		Az.gap 204°			0.21	19	
Corr. -0.852	15M/15stn	Msd 0.3							
SEP 07	1930	48.4s	38.06S	175.92E	176km	M=3.7			
							0.7	0.06	
Rsd 0.4s	15ph/11stn	Dmin 106km		Az.gap 228°			0.11	6	
Corr. -0.844	13M/13stn	Msd 0.3		1↑					
SEP 08	1639	11.9s	37.82S	179.38E	26km	M=4.0			
							1.6	0.14	
Rsd 0.3s	13ph/12stn	Dmin 98km		Az.gap 290°			0.21	19	
Corr. 0.883	27M/25stn	Msd 0.2		1↑					

SEP 08 2158	27.2s	36.89S	176.49E	293km	M=4.0	92/9353	SEP 12 0130	00.0s	37.88S	176.16E	171km	M=3.7	92/9430
Rsd 0.4s	1.4	0.06	0.10	11	Az.gap 194°		Rsd 0.1s	0.4	0.04	0.07	3		
Corr. -0.352	8M/8stn	Dmin 70km	Msd 0.2	1↑			Corr. -0.742	14ph/10stn	Dmin 94km	Az.gap 274°			
								7M/7stn	Msd 0.3	1↑			
SEP 09 1721	16.2s	39.16S	174.90E	213km	M=3.8	92/9369	SEP 12 0645	23.2s	39.19S	174.92E	5km	M=3.7	92/9439
	0.3	0.02	0.03	3				0.1	0.01	0.01	R		
Rsd 0.1s	22ph/17stn	Dmin 56km	Az.gap 206°				Rsd 0.2s	29ph/21stn	Dmin 54km	Az.gap 116°			
Corr. -0.369	18M/16stn	Msd 0.2					Corr. -0.283	28M/25stn	Msd 0.2	3↑ 1↓			
SEP 09 2025	01.3s	40.43S	174.36E	92km	M=3.7	92/9377	SEP 13 1648	21.6s	45.08S	167.51E	53km	M=3.7	92/9480
	0.3	0.01	0.02	4				0.2	0.01	0.02	3		
Rsd 0.3s	27ph/22stn	Dmin 56km	Az.gap 89°				Rsd 0.1s	22ph/15stn	Dmin 55km	Az.gap 229°			
Corr. -0.258	17M/14stn	Msd 0.3	9↑ 1↓				Corr. -0.145	15M/11stn	Msd 0.2	1↓			
SEP 10 1456	43.6s	39.66S	175.56E	19km	M=3.5	92/9391	SEP 14 0509	13.6s	37.92S	176.32E	167km	M=4.2	92/9489
	0.1	0.01	0.01	2				0.4	0.02	0.03	4		
Rsd 0.2s	25ph/20stn	Dmin 51km	Az.gap 75°				Rsd 0.3s	15ph/12stn	Dmin 64km	Az.gap 101°			
Corr. -0.256	23M/21stn	Msd 0.2	2↑ 1↓				Corr. 0.371	24M/20stn	Msd 0.3	1↓			
Felt Moawhango (58) MM4.													
SEP 10 2308	26.8s	37.30S	177.77E	95km	M=3.9	92/9400	SEP 14 0542	17.0s	40.17S	173.62E	170km	M=3.9	92/9491
	0.4	0.02	0.03	5				0.4	0.03	0.02	4		
Rsd 0.2s	10ph/8stn	Dmin 57km	Az.gap 197°				Rsd 0.2s	26ph/20stn	Dmin 75km	Az.gap 187°			
Corr. 0.447	9M/7stn	Msd 0.2	1↓				Corr. -0.079	13M/11stn	Msd 0.3	1↑			
SEP 11 0136	48.1s	41.36S	172.97E	114km	M=4.7	92/9403	SEP 15 0146	16.6s	38.22S	175.91E	158km	M=3.7	92/9512
	0.3	0.01	0.02	3				0.8	0.04	0.07	6		
Rsd 0.2s	36ph/24stn	Dmin 46km	Az.gap 82°				Rsd 0.2s	12ph/9stn	Dmin 90km	Az.gap 243°			
Corr. -0.154	19M/16stn	Msd 0.2	14↑ 5↓				Corr. -0.523	18M/18stn	Msd 0.2	1↑			
Felt Cook Strait region (68,75,76,78), max. int. MM3.													
SEP 11 1152	21.2s	36.20S	176.50E	12km	M=4.7	92/9413	SEP 15 1557	21.7s	36.74S	177.26E	264km	M=4.4	92/9524
	0.6	0.04	0.05	R				0.8	0.05	0.04	7		
Rsd 0.2s	9ph/7stn	Dmin 301km	Az.gap 319°				Rsd 0.2s	15ph/14stn	Dmin 133km	Az.gap 227°			
Corr. -0.566	2M/2stn	Msd 0.0					Corr. 0.220	23M/19stn	Msd 0.2	1↑			
SEP 11 1521	33.0s	38.38S	176.01E	149km	M=3.8	92/9415	SEP 15 2027	15.2s	36.71S	177.49E	183km	M=4.3	92/9527
	0.7	0.03	0.05	6				0.5	0.04	0.05	5		
Rsd 0.3s	12ph/8stn	Dmin 95km	Az.gap 139°				Rsd 0.2s	10ph/9stn	Dmin 158km	Az.gap 259°			
Corr. -0.301	15M/15stn	Msd 0.3					Corr. 0.500	17M/15stn	Msd 0.3				
SEP 11 1706	04.5s	42.99S	171.28E	5km	M=3.8	92/9418	SEP 16 0540	24.3s	38.01S	176.13E	189km	M=5.0	92/9536
	0.1	0.01	0.01	R				0.4	0.02	0.03	3		
Rsd 0.1s	19ph/10stn	Dmin 45km	Az.gap 120°				Rsd 0.2s	33ph/24stn	Dmin 19km	Az.gap 102°			
Corr. -0.313	9M/6stn	Msd 0.2	1↓				Corr. 0.361	24M/19stn	Msd 0.2				
Felt Hokitika (91).													
SEP 11 1746	44.7s	45.09S	167.53E	81km	M=4.0	92/9419	SEP 17 0008	59.6s	38.50S	175.85E	170km	M=3.7	92/9552
	0.3	0.01	0.02	2				0.7	0.03	0.05	6		
Rsd 0.1s	21ph/13stn	Dmin 56km	Az.gap 227°				Rsd 0.3s	18ph/12stn	Dmin 79km	Az.gap 228°			
Corr. 0.046	19M/12stn	Msd 0.2	1↑				Corr. -0.434	10M/8stn	Msd 0.3				

SEP 17 0040 00.2s 39.01S 175.43E	152km M=3.6	92/9553	SEP 18 2227 51.5s 38.14S 176.25E	158km M=3.7	92/9616
0.8 0.03 0.05	7		0.8 0.05 0.08	6	
Rsd 0.3s 18ph/12stn Dmin 24km	Az.gap 209°		Rsd 0.3s 8ph/6stn Dmin 77km	Az.gap 248°	
Corr. 0.061 10M/10stn Msd 0.3	1↑		Corr. -0.412 9M/9stn Msd 0.3	3↑ 2↓	
SEP 17 0626 08.2s 38.49S 176.07E	155km M=3.8	92/9565	SEP 19 0758 27.1s 37.17S 176.62E	198km M=3.6	92/9627
0.9 0.05 0.08	7		0.1 0.01 0.01	1	
Rsd 0.4s 14ph/10stn Dmin 87km	Az.gap 207°		Rsd 0.0s 14ph/9stn Dmin 128km	Az.gap 303°	
Corr. -0.754 7M/7stn Msd 0.2	1↑		Corr. -0.664 6M/6stn Msd 0.2		
SEP 17 0940 13.3s 35.38S 178.97E	267km M=4.5	92/9568	SEP 19 1054 18.7s 38.40S 176.89E	5km M=4.1	92/9634
0.8 0.03 0.04	7		0.1 0.01 0.01	R	
Rsd 0.1s 11ph/11stn Dmin 329km	Az.gap 311°		Rsd 0.2s 28ph/25stn Dmin 24km	Az.gap 61°	
Corr. 0.236 11M/10stn Msd 0.1			Corr. -0.318 32M/28stn Msd 0.2	7↑ 6↓	
SEP 17 1020 24.9s 39.16S 173.78E	5km M=3.7	92/9570	SEP 19 1322 29.8s 40.43S 173.34E	194km M=3.9	92/9637
0.2 0.01 0.02	R		0.3 0.02 0.02	3	
Rsd 0.1s 24ph/16stn Dmin 24km	Az.gap 183°		Rsd 0.2s 27ph/21stn Dmin 64km	Az.gap 178°	
Corr. 0.287 22M/20stn Msd 0.2	1↓		Corr. -0.177 21M/18stn Msd 0.2	1↑	
SEP 17 1211 47.8s 39.17S 173.75E	5km M=3.7	92/9573	SEP 19 1937 56.3s 38.95S 175.65E	122km M=4.2	92/9647
0.3 0.02 0.02	R		0.4 0.01 0.02	3	
Rsd 0.1s 23ph/16stn Dmin 24km	Az.gap 184°		Rsd 0.4s 42ph/28stn Dmin 25km	Az.gap 55°	
Corr. -0.445 22M/20stn Msd 0.3	1↓		Corr. -0.038 24M/20stn Msd 0.2	15↑ 4↓	
SEP 17 1355 07.7s 38.11S 175.98E	141km M=3.6	92/9580	SEP 20 0301 16.3s 38.49S 175.97E	171km M=3.6	92/9654
0.4 0.03 0.06	3		0.8 0.02 0.05	8	
Rsd 0.2s 16ph/10stn Dmin 100km	Az.gap 257°		Rsd 0.3s 19ph/14stn Dmin 76km	Az.gap 141°	
Corr. -0.852 7M/7stn Msd 0.3	1↑		Corr. 0.040 12M/12stn Msd 0.2		
SEP 17 1539 43.9s 39.12S 175.36E	151km M=3.6	92/9583	SEP 20 0413 00.6s 37.29S 177.83E	52km M=4.3	92/9657
0.7 0.02 0.04	6		0.3 0.02 0.02	3	
Rsd 0.3s 28ph/19stn Dmin 18km	Az.gap 160°		Rsd 0.1s 21ph/16stn Dmin 54km	Az.gap 195°	
Corr. -0.059 15M/13stn Msd 0.2			Corr. 0.275 24M/21stn Msd 0.3	1↑ 1↓	
SEP 18 0941 14.1s 41.25S 172.78E	169km M=3.7	92/9596	SEP 20 0716 21.5s 38.88S 175.67E	5km M=3.7	92/9661
0.4 0.02 0.02	3		0.2 0.01 0.02	R	
Rsd 0.3s 28ph/19stn Dmin 52km	Az.gap 100°		Rsd 0.5s 25ph/19stn Dmin 30km	Az.gap 58°	
Corr. -0.330 14M/12stn Msd 0.2	3↑ 1↓		Corr. -0.198 30M/28stn Msd 0.3	1↑	
Corr. Waihura Rd (40), Omori (41) MM4.					
SEP 18 1446 50.9s 36.70S 178.07E	177km M=3.7	92/9603	SEP 20 1028 06.8s 37.75S 177.19E	134km M=3.6	92/9665
1.2 0.12 0.16	19		0.5 0.04 0.05	5	
Rsd 0.4s 11ph/6stn Dmin 193km	Az.gap 273°		Rsd 0.4s 8ph/5stn Dmin 57km	Az.gap 193°	
Corr. 0.863 2M/2stn Msd 0.3			Corr. 0.539 2M/2stn Msd 0.0	1↑	
SEP 18 1528 09.9s 36.99S 176.78E	288km M=4.4	92/9608	SEP 20 1309 28.1s 37.85S 179.77W	119km M=3.9	92/9670
0.7 0.05 0.07	6		0.5 0.03 0.06	11	
Rsd 0.2s 15ph/14stn Dmin 98km	Az.gap 223°		Rsd 0.2s 11ph/6stn Dmin 210km	Az.gap 296°	
Corr. 0.313 22M/18stn Msd 0.3	5↑ 1↓		Corr. 0.034 10M/10stn Msd 0.2		

SEP	20	1520	27.6s	37.04S	177.18E	5km	M=3.6	92/9673	SEP	24	1934	46.5s	38.41S	176.00E	205km	M=3.5	92/9796
			0.2	0.02	0.02	R					1.0	0.05	0.11	11			
Rsd	0.2s	13ph/8stn	Dmin	54km	Az.gap	198°			Rsd	0.3s	14ph/11stn	Dmin	96km	Az.gap	222°		
Corr.	0.504	9M/7stn	Msd	0.1					Corr.	-0.840	5M/5stn	Msd	0.1				
SEP	21	1055	42.7s	36.62S	177.12E	248km	M=4.1	92/9693	SEP	26	0647	02.4s	39.22S	175.03E	133km	M=3.8	92/9828
			0.3	0.01	0.02	2					0.4	0.01	0.02	3			
Rsd	0.1s	10ph/8stn	Dmin	126km	Az.gap	233°			Rsd	0.2s	23ph/17stn	Dmin	36km	Az.gap	84°		
Corr.	0.539	14M/14stn	Msd	0.2					Corr.	0.303	19M/17stn	Msd	0.3	6↑ 1↓			
SEP	21	2242	31.8s	38.32S	177.70E	62km	M=3.9	92/9707	SEP	27	0242	05.0s	42.72S	171.82E	5km	M=4.2	92/9844
			0.1	0.01	0.01	1					0.2	0.01	0.01	R			
Rsd	0.1s	28ph/23stn	Dmin	44km	Az.gap	104°			Rsd	0.2s	12ph/9stn	Dmin	38km	Az.gap	114°		
Corr.	0.484	21M/19stn	Msd	0.2	1↓				Corr.	-0.042	12M/6stn	Msd	0.1	1↑		Felt Arthur's Pass, Otira (93) max MM4.	
SEP	21	2309	00.6s	36.23S	177.93E	234km	M=4.6	92/9708	SEP	27	1454	48.7s	37.91S	176.16E	165km	M=3.8	92/9862
			0.7	0.04	0.03	6					0.5	0.03	0.10	5			
Rsd	0.2s	15ph/11stn	Dmin	155km	Az.gap	253°			Rsd	0.2s	12ph/6stn	Dmin	92km	Az.gap	277°		
Corr.	0.473	22M/18stn	Msd	0.3	4↑ 1↓				Corr.	-0.645	4M/4stn	Msd	0.1	1↑			
SEP	22	1005	16.1s	38.75S	175.35E	196km	M=3.9	92/9720	SEP	27	1802	27.9s	38.00S	176.36E	169km	M=4.3	92/9868
			1.1	0.04	0.06	9					0.4	0.02	0.02	3			
Rsd	0.4s	18ph/12stn	Dmin	53km	Az.gap	200°			Rsd	0.3s	21ph/12stn	Dmin	68km	Az.gap	98°		
Corr.	-0.424	13M/13stn	Msd	0.3	3↑ 1↓				Corr.	0.105	20M/16stn	Msd	0.2	1↑ 1↓			
SEP	23	0058	14.2s	39.32S	174.84E	187km	M=3.6	92/9740	SEP	27	2314	07.1s	39.72S	177.04E	47km	M=4.0	92/9872
			0.3	0.01	0.03	3					0.2	0.01	0.03	2			
Rsd	0.1s	16ph/11stn	Dmin	54km	Az.gap	207°			Rsd	0.2s	31ph/24stn	Dmin	15km	Az.gap	177°		
Corr.	0.028	9M/8stn	Msd	0.2					Corr.	-0.738	20M/15stn	Msd	0.2	2↑ 1↓			
SEP	23	1241	53.3s	42.92S	171.02E	11km	M=2.8	92/9765	SEP	28	1117	19.2s	37.90S	176.61E	139km	M=4.3	92/9881
			0.5	0.02	0.02	5					0.3	0.02	0.02	2			
Rsd	0.2s	9ph/7stn	Dmin	30km	Az.gap	150°			Rsd	0.2s	17ph/13stn	Dmin	59km	Az.gap	110°		
Corr.	-0.621	4M/4stn	Msd	0.3	1↑				Corr.	0.262	20M/16stn	Msd	0.2	1↑			
Felt Hokitika (91).																	
SEP	24	0608	01.7s	39.95S	176.22E	27km	M=4.3	92/9781	SEP	28	1122	21.3s	41.36S	173.29E	90km	M=3.8	92/9882
			0.1	0.01	0.02	2					0.4	0.02	0.02	4			
Rsd	0.3s	37ph/29stn	Dmin	30km	Az.gap	116°			Rsd	0.3s	25ph/20stn	Dmin	46km	Az.gap	62°		
Corr.	-0.243	11M/6stn	Msd	0.1	1↑ 2↓				Corr.	0.071	13M/10stn	Msd	0.3	2↑ 4↓			
SEP	24	1921	31.3s	36.28S	178.00E	191km	M=4.0	92/9794	SEP	28	1416	31.3s	36.06S	177.96E	226km	M=3.9	92/9886
			1.1	0.04	0.04	10					0.1	0.02	0.02	3			
Rsd	0.2s	10ph/6stn	Dmin	149km	Az.gap	275°			Rsd	0.0s	12ph/10stn	Dmin	215km	Az.gap	290°		
Corr.	0.539	7M/7stn	Msd	0.2					Corr.	0.922	3M/3stn	Msd	0.3				
SEP	24	1927	56.8s	37.06S	177.07E	193km	M=4.4	92/9795	SEP	28	1739	12.8s	40.36S	173.44E	216km	M=3.5	92/9893
			0.7	0.05	0.05	5					0.4	0.03	0.02	3			
Rsd	0.2s	15ph/13stn	Dmin	125km	Az.gap	183°			Rsd	0.2s	23ph/15stn	Dmin	64km	Az.gap	188°		
Corr.	0.598	22M/19stn	Msd	0.2					Corr.	-0.139	9M/8stn	Msd	0.2	1↑			

SEP 28	1820	47.4s	37.04S	177.25E	186km	M=4.1	92/9899	OCT 02	1413	40.7s	40.05S	175.16E	22km	M=3.8	92/10019
Rsd 0.1s		0.2	0.01	0.01	2			0.2	0.01	0.02		2			
Corr. 0.473		9ph/6stn	Dmin 112km	Az.gap 201°				Rsd 0.3s	34ph/27stn	Dmin 34km		Az.gap 77°			
		13M/11stn	Msd 0.2				Corr. -0.122	29M/24stn	Msd 0.3		2↑ 1↓	Felt Wanganui (57) MM4.			
SEP 28	2210	08.1s	37.81S	176.78E	145km	M=3.9	92/9904	OCT 03	0331	13.4s	37.19S	177.50E	124km	M=3.7	92/10030
Rsd 0.3s		0.5	0.03	0.03	3			0.2	0.01	0.01		3			
Corr. 0.395		20ph/13stn	Dmin 53km	Az.gap 169°				Rsd 0.1s	6ph/4stn	Dmin 85km		Az.gap 196°			
		14M/11stn	Msd 0.2	2↑ 1↓			Corr. -0.014	5M/3stn	Msd 0.1		1↑				
SEP 29	0216	10.9s	38.13S	176.10E	252km	M=3.5	92/9908	OCT 03	0431	47.7s	37.13S	177.67E	82km	M=3.9	92/10031
Rsd 0.1s		0.3	0.03	0.04	4			0.3	0.02	0.02		2			
Corr. -0.613		13ph/10stn	Dmin 176km	Az.gap 320°				Rsd 0.1s	12ph/10stn	Dmin 76km		Az.gap 270°			
		5M/5stn	Msd 0.1				Corr. -0.816	14M/12stn	Msd 0.2		1↓				
SEP 29	0649	43.8s	38.17S	176.18E	168km	M=5.3	92/9912	OCT 03	0506	44.3s	35.94S	178.38E	203km	M=4.1	92/10032
Rsd 0.2s		0.4	0.02	0.02	3			1.1	0.07	0.09		11			
Corr. 0.299		38ph/27stn	Dmin 1km	Az.gap 59°				Rsd 0.3s	11ph/10stn	Dmin 185km		Az.gap 293°			
		16M/11stn	Msd 0.3	12↑ 1↓			Corr. 0.099	7M/6stn	Msd 0.2						
SEP 29	1253	39.2s	36.62S	177.03E	5km	M=4.5	92/9920	OCT 05	0112	29.8s	39.20S	176.38E	82km	M=4.2	92/10073
Rsd 0.3s		0.6	0.04	0.03	R			0.2	0.01	0.01		2			
Corr. 0.703		13ph/10stn	Dmin 102km	Az.gap 198°				Rsd 0.2s	36ph/28stn	Dmin 32km		Az.gap 44°			
		9M/6stn	Msd 0.2				Corr. -0.029	24M/19stn	Msd 0.3		5↑ 3↓				
SEP 29	1938	37.1s	41.29S	172.75E	152km	M=3.9	92/9930	OCT 05	0143	47.1s	37.00S	176.82E	240km	M=3.9	92/10074
Rsd 0.3s		0.4	0.02	0.02	3			1.0	0.10	0.16		12			
Corr. -0.199		30ph/20stn	Dmin 54km	Az.gap 103°				Rsd 0.5s	10ph/9stn	Dmin 142km		Az.gap 276°			
		14M/11stn	Msd 0.2	1↑			Corr. -0.840	10M/10stn	Msd 0.2						
SEP 30	0920	38.2s	37.39S	179.52E	5km	M=4.1	92/9948	OCT 05	2015	38.5s	44.42S	168.05E	12km	M=4.3	92/10095
Rsd 0.1s		0.4	0.05	0.02	R			0.3	0.01	0.01		2			
Corr. -0.034		13ph/10stn	Dmin 110km	Az.gap 287°				Rsd 0.1s	21ph/16stn	Dmin 30km		Az.gap 193°			
		29M/27stn	Msd 0.2				Corr. -0.473	8M/5stn	Msd 0.1		2↑ 5↓				
SEP 30	2354	21.1s	37.26S	177.73E	20km	M=4.0	92/9968	OCT 05	2053	37.9s	44.67S	168.15E	77km	M=3.8	92/10096
Rsd 0.2s		0.3	0.03	0.02	R			0.4	0.03	0.02		3			
Corr. 0.309		18ph/12stn	Dmin 57km	Az.gap 187°				Rsd 0.3s	25ph/16stn	Dmin 18km		Az.gap 131°			
		32M/28stn	Msd 0.2	1↑ 1↓			Corr. -0.022	23M/17stn	Msd 0.2		2↑ 8↓				
OCT 01	0850	19.9s	38.10S	175.71E	33km	M=4.2	92/9982	OCT 06	0712	01.6s	37.76S	175.71E	252km	M=3.8	92/10105
Rsd 0.1s		0.3	0.02	0.02	R			0.7	0.05	0.08		9			
Corr. -0.809		7ph/3stn	Dmin 211km	Az.gap 282°				Rsd 0.2s	13ph/12stn	Dmin 142km		Az.gap 292°			
		1M/1stn	Msd N.D.	1↓			Corr. -0.684	10M/10stn	Msd 0.2						
OCT 02	1148	53.7s	37.73S	176.18E	161km	M=3.6	92/10017	OCT 06	1631	28.8s	39.54S	174.30E	189km	M=4.4	92/10114
Rsd 0.4s		0.9	0.07	0.12	9			0.5	0.01	0.03		4			
Corr. -0.438		9ph/7stn	Dmin 100km	Az.gap 277°				Rsd 0.2s	35ph/26stn	Dmin 39km		Az.gap 80°			
		2M/2stn	Msd 0.2	1↑			Corr. -0.233	23M/20stn	Msd 0.3		1↑ 3↓				

OCT 07 0007	48.3s	37.23S	179.57E	33km	M=3.8	92/10121
	1.2	0.05	0.09	R.		
Rsd 0.5s	9ph/5stn	Dmin 120km	Az.gap 297°			
Corr. -0.326	5M/5stn	Msd 0.2				
						92/10201
OCT 07 0701	09.9s	41.36S	172.25E	5km	M=3.7	92/10128
	0.1	0.01	0.01	R		
Rsd 0.2s	16ph/13stn	Dmin 57km	Az.gap 160°			
Corr. -0.324	21M/15stn	Msd 0.2	1↑ 1↓			
						92/10219
OCT 07 0940	24.5s	38.45S	176.01E	153km	M=4.6	92/10129
	0.5	0.02	0.02	4		
Rsd 0.3s	30ph/23stn	Dmin 23km	Az.gap 65°			
Corr. 0.279	26M/21stn	Msd 0.3	18↑ 5↓			
						92/10225
OCT 07 0944	23.5s	36.58S	177.61E	213km	M=4.7	92/10130
	0.7	0.03	0.04	6		
Rsd 0.3s	20ph/18stn	Dmin 129km	Az.gap 229°			
Corr. 0.531	27M/22stn	Msd 0.3	9↑ 4↓			
						92/10233
OCT 07 1035	45.0s	37.21S	177.31E	208km	M=3.5	92/10132
	2.0	0.15	0.23	14		
Rsd 0.8s	8ph/6stn	Dmin 98km	Az.gap 188°			
Corr. -0.551	4M/4stn	Msd 0.1				
						92/10241
OCT 07 1454	21.7s	38.12S	176.26E	158km	M=4.4	92/10134
	0.4	0.02	0.02	3		
Rsd 0.3s	32ph/23stn	Dmin 16km	Az.gap 59°			
Corr. -0.056	25M/21stn	Msd 0.2	5↑ 3↓			
						92/10252
OCT 07 2313	31.0s	38.39S	177.85E	65km	M=3.7	92/10153
	0.1	0.01	0.01	2		
Rsd 0.1s	18ph/16stn	Dmin 30km	Az.gap 124°			
Corr. -0.171	20M/18stn	Msd 0.2	1↑			
						92/10255
OCT 08 1626	01.9s	39.01S	175.10E	191km	M=3.6	92/10181
	1.3	0.04	0.06	10		
Rsd 0.3s	14ph/12stn	Dmin 44km	Az.gap 195°			
Corr. -0.283	16M/16stn	Msd 0.3	1↑			
						92/10264
OCT 08 2016	57.4s	42.30S	173.70E	33km	M=3.5	92/10186
	0.3	0.01	0.03	4		
Rsd 0.2s	12ph/7stn	Dmin 67km	Az.gap 195°			
Corr. -0.208	8M/6stn	Msd 0.2				
						92/10269
OCT 09 0733	01.0s	44.76S	167.27E	5km	M=3.2	92/10198
	0.4	0.02	0.02	R		
Rsd 0.2s	24ph/15stn	Dmin 53km	Az.gap 254°			
Corr. -0.871	15M/15stn	Msd 0.2	1↓			
Felt Queenstown (132) MM4.						

OCT 12	0752	40.3s	47.75S	165.49E	33km	M=3.9	92/10270
		0.6	0.03	0.06	R		
Rsd 0.2s		23ph/14stn	Dmin 222km	Az.gap 322°			
Corr. -0.078	15M/13stn	Msd 0.1					
OCT 13	0520	25.6s	37.59S	178.34E	49km	M=3.8	92/10285
		0.2	0.01	0.01	1		
Rsd 0.1s	8ph/4stn	Dmin 3km	Az.gap 262°				
Corr. 0.074	5M/3stn	Msd 0.2	1↑				
OCT 13	1452	49.1s	37.69S	176.97E	5km	M=3.9	92/10289
		0.3	0.02	0.02	R		
Rsd 0.3s	14ph/12stn	Dmin 42km	Az.gap 132°				
Corr. 0.015	19M/16stn	Msd 0.3	1↑				
OCT 13	2131	57.4s	38.99S	178.04E	46km	M=4.0	92/10293
		0.4	0.01	0.03	4		
Rsd 0.1s	12ph/11stn	Dmin 26km	Az.gap 203°				
Corr. -0.531	21M/17stn	Msd 0.2	1↑				
OCT 13	2358	24.9s	37.71S	176.96E	12km	M=3.9	92/10296
		0.7	0.05	0.03	R		
Rsd 0.3s	14ph/11stn	Dmin 40km	Az.gap 183°				
Corr. 0.605	15M/11stn	Msd 0.2	1↑				
OCT 14	0506	52.5s	38.14S	176.33E	190km	M=3.7	92/10305
		0.4	0.03	0.14	5		
Rsd 0.2s	9ph/5stn	Dmin 70km	Az.gap 266°				
Corr. -0.809	5M/4stn	Msd 0.2					
OCT 14	0626	24.2s	38.62S	177.86E	86km	M=3.5	92/10309
		0.8	0.04	0.05	7		
Rsd 0.6s	9ph/5stn	Dmin 16km	Az.gap 127°				
Corr. -0.183	5M/4stn	Msd 0.2	1↑				
OCT 14	0845	27.4s	42.72S	171.71E	12km	M=3.5	92/10311
		0.2	0.01	0.01	R		
Rsd 0.3s	14ph/9stn	Dmin 47km	Az.gap 121°				
Corr. -0.273	21M/17stn	Msd 0.3					
OCT 14	1707	12.0s	37.54S	177.60E	101km	M=4.2	92/10316
		0.4	0.02	0.02	4		
Rsd 0.2s	13ph/9stn	Dmin 36km	Az.gap 159°				
Corr. -0.004	9M/7stn	Msd 0.1	1↑				
OCT 15	0655	22.7s	38.52S	177.92E	40km	M=3.5	92/10332
		0.1	0.01	0.00	1		
Rsd 0.0s	6ph/3stn	Dmin 15km	Az.gap 155°				
Corr. -0.430	3M/3stn	Msd 0.4					
OCT 15	1532	28.4s	38.45S	175.92E	150km	M=3.9	92/10352
		0.4	0.02	0.02	3		
Rsd 0.3s	25ph/19stn	Dmin 30km	Az.gap 71°				
Corr. -0.050	20M/18stn	Msd 0.3	1↑ 1↓				
OCT 15	2350	41.6s	39.69S	174.19E	191km	M=3.6	92/10361
		0.4	0.01	0.03	4		
Rsd 0.1s	17ph/13stn	Dmin 125km	Az.gap 235°				
Corr. -0.496	9M/7stn	Msd 0.2	1↑				
OCT 16	0630	59.2s	38.61S	177.44E	59km	M=3.6	92/10369
		0.2	0.01	0.01	2		
Rsd 0.1s	20ph/17stn	Dmin 43km	Az.gap 71°				
Corr. 0.547	16M/14stn	Msd 0.3	1↓				
OCT 16	1732	06.2s	37.62S	177.15E	126km	M=3.8	92/10379
		0.2	0.01	0.01	2		
Rsd 0.1s	14ph/12stn	Dmin 71km	Az.gap 142°				
Corr. 0.279	17M/15stn	Msd 0.2	1↑				
OCT 16	2241	39.1s	38.64S	175.75E	140km	M=3.5	92/10382
		0.3	0.01	0.02	3		
Rsd 0.2s	12ph/9stn	Dmin 61km	Az.gap 143°				
Corr. -0.328	12M/12stn	Msd 0.3	1↑ 2↓				
OCT 17	0012	40.7s	40.63S	173.37E	147km	M=3.5	92/10387
		0.3	0.01	0.02	3		
Rsd 0.3s	26ph/19stn	Dmin 50km	Az.gap 127°				
Corr. -0.102	11M/11stn	Msd 0.2	4↑ 2↓				
OCT 17	0635	33.0s	35.45S	178.92E	233km	M=4.0	92/10393
		1.6	0.27	0.36	8		
Rsd 0.3s	10ph/8stn	Dmin 244km	Az.gap 341°				
Corr. -0.934	5M/5stn	Msd 0.3					
OCT 17	1720	17.6s	36.61S	177.78E	171km	M=3.8	92/10400
		0.2	0.01	0.02	2		
Rsd 0.1s	7ph/4stn	Dmin 119km	Az.gap 252°				
Corr. 0.050	3M/3stn	Msd 0.3					
OCT 17	2050	39.7s	37.59S	176.48E	193km	M=4.2	92/10404
		0.5	0.02	0.03	4		
Rsd 0.2s	19ph/16stn	Dmin 84km	Az.gap 127°				
Corr. 0.177	24M/21stn	Msd 0.3	1↑				
OCT 17	2326	08.6s	40.57S	174.83E	60km	M=4.1	92/10406
		0.2	0.01	0.01	4		
Rsd 0.2s	33ph/25stn	Dmin 33km	Az.gap 70°				
Corr. -0.359	21M/18stn	Msd 0.2	1↑				

OCT 18 1241	43.5s	40.43S	173.37E	153km	M=4.3	92/10414	OCT 20 1453	18.1s	38.18S	176.25E	157km	M=3.7	92/10456
Rsd 0.2s	0.4	0.01	0.02	4	Az.gap 144°		Rsd 0.3s	0.6	0.03	0.04	6	Az.gap 114°	
Corr. -0.104	26ph/22stn	Dmin 63km					Corr. 0.130	15ph/10stn	Dmin 67km				
	23M/20stn	Msd 0.2		1↑				17M/17stn	Msd 0.4				
OCT 18 1407	30.3s	39.49S	174.43E	136km	M=3.6	92/10415	OCT 20 1603	21.5s	37.80S	178.61E	12km	M=3.7	92/10459
Rsd 0.2s	0.3	0.01	0.02	3	Az.gap 86°		Rsd 0.2s	0.5	0.02	0.04	R	Az.gap 259°	
Corr. -0.007	37ph/21stn	Dmin 46km					Corr. 0.520	10ph/6stn	Dmin 35km				
	12M/11stn	Msd 0.2		1↑				10M/8stn	Msd 0.2				1↑
OCT 18 1629	14.2s	37.12S	176.92E	231km	M=4.2	92/10419	OCT 21 1244	50.2s	42.23S	172.77E	5km	M=3.8	92/10478
Rsd 0.2s	0.4	0.04	0.05	3	Az.gap 175°		Rsd 0.2s	0.1	0.01	0.01	R	Az.gap 99°	
Corr. 0.621	20ph/16stn	Dmin 99km					Corr. -0.241	21ph/17stn	Dmin 53km				2↑ 3↓
	23M/21stn	Msd 0.2		1↑				25M/20stn	Msd 0.2				
OCT 18 2221	26.7s	38.00S	176.39E	156km	M=3.9	92/10420	OCT 21 1744	14.9s	38.49S	176.12E	5km	M=3.1	92/10483
Rsd 0.3s	0.5	0.04	0.04	3	Az.gap 222°		Rsd 0.3s	0.1	0.01	0.01	R	Az.gap 78°	
Corr. -0.146	15ph/12stn	Dmin 28km					Corr. -0.110	17ph/15stn	Dmin 16km				1↑ 3↓
	20M/18stn	Msd 0.2		1↑ 1↓				14M/13stn	Msd 0.3				
OCT 19 0340	49.6s	38.50S	175.79E	119km	M=3.5	92/10426	OCT 21 1813	14.7s	38.50S	176.12E	5km	M=3.3	92/10484
Rsd 0.3s	0.7	0.04	0.04	6	Az.gap 219°		Rsd 0.3s	0.1	0.01	0.01	R	Az.gap 76°	
Corr. -0.734	16ph/13stn	Dmin 75km					Corr. -0.109	19ph/15stn	Dmin 16km				1↓
	20M/19stn	Msd 0.3		1↑				15M/14stn	Msd 0.3				
OCT 19 0508	17.6s	38.36S	176.05E	142km	M=3.5	92/10429	OCT 22 1252	21.6s	39.78S	174.49E	212km	M=3.6	92/10496
Rsd 0.5s	1.5	0.11	0.22	10	Az.gap 230°		Rsd 0.1s	0.3	0.04	0.03	3	Az.gap 189°	
Corr. -0.867	11ph/9stn	Dmin 70km					Corr. -0.648	21ph/13stn	Dmin 124km				1↑
	14M/14stn	Msd 0.3						15M/13stn	Msd 0.2				
OCT 20 0025	06.8s	39.60S	174.33E	216km	M=3.6	92/10447	OCT 22 2357	30.1s	36.75S	178.19E	33km	M=3.6	92/10504
Rsd 0.3s	0.8	0.03	0.07	8	Az.gap 206°		Rsd 0.5s	0.8	0.04	0.07	R	Az.gap 275°	
Corr. -0.420	15ph/14stn	Dmin 57km					Corr. 0.447	8ph/4stn	Dmin 192km				1↓
	9M/8stn	Msd 0.1						5M/3stn	Msd 0.2				
OCT 20 0104	36.0s	38.25S	176.14E	151km	M=4.2	92/10448	OCT 23 0123	45.8s	37.74S	177.53E	45km	M=3.6	92/10505
Rsd 0.3s	0.4	0.02	0.02	4	Az.gap 83°		Rsd 0.2s	0.2	0.01	0.01	5	Az.gap 133°	
Corr. 0.049	23ph/17stn	Dmin 64km					Corr. -0.065	11ph/8stn	Dmin 69km				1↑ 1↓
	25M/21stn	Msd 0.2		4↑ 1↓				10M/8stn	Msd 0.2				
OCT 20 0535	55.6s	35.41S	179.09E	135km	M=4.5	92/10452	OCT 23 0421	34.7s	36.82S	177.03E	12km	M=4.4	92/10510
Rsd 0.3s	1.1	0.08	0.08	28	Az.gap 311°		Rsd 0.4s	0.6	0.04	0.04	R	Az.gap 225°	
Corr. 0.389	10ph/8stn	Dmin 253km					Corr. 0.789	11ph/9stn	Dmin 117km				
	21M/19stn	Msd 0.2						13M/8stn	Msd 0.2				
OCT 20 1306	50.3s	39.39S	174.50E	190km	M=5.0	92/10453	OCT 23 0634	15.3s	37.79S	177.58E	47km	M=4.2	92/10513
Rsd 0.2s	0.3	0.01	0.02	3	Az.gap 98°		Rsd 0.1s	0.3	0.02	0.01	8	Az.gap 127°	
Corr. -0.073	39ph/28stn	Dmin 49km					Corr. 0.095	18ph/17stn	Dmin 67km				2↑ 3↓
	8M/4stn	Msd 0.2		7↑ 5↓				22M/20stn	Msd 0.2				

OCT 23 0843	00.8s	36.08S	177.25E	293km	M=4.1	92/10517	OCT 27 0608	03.0s	43.16S	171.36E	12km	M=3.7	92/10618
Rsd 0.5s	1.2	0.14	0.28	13			Rsd 0.2s	0.3	0.01	0.01	4		
Corr. -0.738	9ph/6stn	Dmin 243km	Az.gap 318°				Corr. 0.019	16ph/9stn	Dmin 52km	Az.gap 92°			
	3M/3stn	Msd 0.2	1↑					26M/19stn	Msd 0.2	1↑ 2↓			
OCT 23 1049	18.2s	41.64S	178.29E	33km	M=4.0	92/10518	OCT 27 0741	45.7s	37.76S	177.97E	70km	M=3.8	92/10619
Rsd 0.4s	0.6	0.04	0.05	R			Rsd 0.1s	0.2	0.02	0.02	4		
Corr. -0.730	31ph/25stn	Dmin 204km	Az.gap 240°				Corr. 0.680	18ph/13stn	Dmin 94km	Az.gap 238°			
	32M/31stn	Msd 0.3						19M/17stn	Msd 0.2	1↓			
OCT 23 1523	44.4s	36.93S	177.74E	134km	M=4.3	92/10526	OCT 27 1104	53.4s	37.28S	176.66E	230km	M=3.9	92/10628
Rsd 0.3s	0.7	0.04	0.05	8			Rsd 0.3s	0.9	0.04	0.08	7		
Corr. 0.695	16ph/13stn	Dmin 158km	Az.gap 256°				Corr. 0.475	12ph/9stn	Dmin 103km	Az.gap 159°			
	22M/19stn	Msd 0.3	1↓					18M/18stn	Msd 0.3	1↑			
OCT 24 0814	00.8s	38.07S	176.86E	154km	M=3.6	92/10543	OCT 28 0944	23.8s	45.28S	167.19E	91km	M=4.7	92/10658
Rsd 0.2s	0.4	0.03	0.07	3			Rsd 0.2s	0.4	0.02	0.03	3		
Corr. -0.520	8ph/4stn	Dmin 30km	Az.gap 272°				Corr. -0.229	19ph/14stn	Dmin 21km	Az.gap 205°			
	9M/9stn	Msd 0.1	1↑					21M/14stn	Msd 0.2	4↑ 8↓			
OCT 24 1713	49.8s	40.44S	176.49E	24km	M=3.9	92/10554	OCT 28 1615	16.2s	35.96S	178.99E	99km	M=4.3	92/10669
Rsd 0.2s	0.2	0.01	0.02	1			Rsd 0.2s	0.4	0.03	0.03	14		
Corr. -0.703	39ph/28stn	Dmin 25km	Az.gap 190°				Corr. 0.461	12ph/8stn	Dmin 192km	Az.gap 286°			
	30M/25stn	Msd 0.2	2↑ 1↓					20M/18stn	Msd 0.1				
OCT 24 1945	10.0s	37.31S	177.26E	186km	M=3.6	92/10559	OCT 28 2122	00.5s	36.68S	177.20E	5km	M=4.0	92/10685
Rsd 0.1s	0.3	0.03	0.04	2			Rsd 0.5s	0.6	0.05	0.04	R		
Corr. -0.566	12ph/9stn	Dmin 107km	Az.gap 305°				Corr. 0.676	10ph/9stn	Dmin 94km	Az.gap 209°			
	7M/7stn	Msd 0.1						11M/9stn	Msd 0.2				
OCT 25 1437	12.0s	36.69S	177.13E	5km	M=4.1	92/10586	OCT 30 2106	21.4s	37.61S	177.24E	122km	M=4.0	92/10747
Rsd 0.2s	0.7	0.04	0.04	R			Rsd 0.1s	0.1	0.01	0.01	1		
Corr. 0.883	12ph/9stn	Dmin 126km	Az.gap 232°				Corr. 0.110	13ph/7stn	Dmin 74km	Az.gap 145°			
	8M/6stn	Msd 0.2	1↓					5M/4stn	Msd 0.9	1↑			
OCT 26 1428	52.8s	37.19S	176.64E	300km	M=4.3	92/10608	OCT 31 0124	07.2s	41.42S	173.12E	92km	M=3.7	92/10751
Rsd 0.2s	0.5	0.03	0.05	4			Rsd 0.2s	0.3	0.01	0.01	3		
Corr. 0.398	15ph/12stn	Dmin 95km	Az.gap 203°				Corr. -0.017	35ph/19stn	Dmin 42km	Az.gap 72°			
	21M/17stn	Msd 0.2	1↑					14M/13stn	Msd 0.2	2↑ 4↓			
OCT 26 1839	51.4s	35.94S	178.55E	210km	M=3.9	92/10609	OCT 31 1541	48.2s	44.99S	167.48E	88km	M=3.6	92/10764
Rsd 0.1s	0.3	0.03	0.07	4			Rsd 0.2s	0.4	0.02	0.03	4		
Corr. -0.898	11ph/8stn	Dmin 288km	Az.gap 338°				Corr. -0.432	19ph/15stn	Dmin 59km	Az.gap 200°			
	5M/5stn	Msd 0.2						17M/15stn	Msd 0.2	3↑ 1↓			
OCT 27 0008	24.7s	40.48S	173.95E	109km	M=3.9	92/10614	OCT 31 1942	03.3s	38.42S	175.89E	171km	M=4.5	92/10771
Rsd 0.2s	0.3	0.01	0.01	3			Rsd 0.3s	0.4	0.02	0.02	4		
Corr. 0.018	43ph/24stn	Dmin 36km	Az.gap 107°				Corr. -0.060	37ph/29stn	Dmin 32km	Az.gap 69°			
	18M/13stn	Msd 0.2	10↑ 5↓					28M/23stn	Msd 0.2	7↑ 1↓			

OCT 31	<b>2159</b>	<b>27.3s</b>	<b>38.50S</b>	<b>176.48E</b>	<b>117km</b>	<b>M=3.8</b>	92/10774	NOV 04	<b>1216</b>	<b>26.6s</b>	<b>41.34S</b>	<b>172.34E</b>	<b>5km</b>	<b>M=3.8</b>	92/10860
Rsd 0.3s	0.5	0.02	0.02	5				0.1	0.00	0.01		R			
Corr. 0.277	29ph/22stn	Dmin 23km	Az.gap 42°				Rsd 0.1s	8ph/3stn	Dmin 59km	Az.gap 152°					
	24M/21stn	Msd 0.3	1↑				Corr. 0.025	3M/3stn	Msd 1.5						
NOV 01	<b>0008</b>	<b>39.7s</b>	<b>37.47S</b>	<b>176.09E</b>	<b>292km</b>	<b>M=3.7</b>	92/10777	NOV 04	<b>1401</b>	<b>54.2s</b>	<b>36.43S</b>	<b>178.08E</b>	<b>181km</b>	<b>M=5.1</b>	92/10863
Rsd 0.2s	0.6	0.05	0.08	5				0.7	0.04	0.04	7				
Corr. -0.816	14ph/10stn	Dmin 126km	Az.gap 269°				Rsd 0.4s	21ph/15stn	Dmin 132km	Az.gap 253°					
	8M/8stn	Msd 0.3					Corr. 0.385	25M/21stn	Msd 0.3	1↑					
NOV 01	<b>0205</b>	<b>25.0s</b>	<b>38.94S</b>	<b>175.65E</b>	<b>121km</b>	<b>M=4.0</b>	92/10779	NOV 04	<b>1519</b>	<b>01.5s</b>	<b>35.35S</b>	<b>178.86E</b>	<b>195km</b>	<b>M=4.8</b>	92/10867
Rsd 0.4s	0.4	0.01	0.03	4				0.7	0.04	0.05	7				
Corr. -0.180	34ph/22stn	Dmin 25km	Az.gap 61°				Rsd 0.1s	12ph/10stn	Dmin 254km	Az.gap 311°					
	24M/20stn	Msd 0.2	4↑ 2↓				Corr. 0.727	25M/21stn	Msd 0.3						
NOV 01	<b>1158</b>	<b>40.6s</b>	<b>43.21S</b>	<b>172.15E</b>	<b>14km</b>	<b>M=3.9</b>	92/10788	NOV 04	<b>1542</b>	<b>46.5s</b>	<b>40.89S</b>	<b>172.53E</b>	<b>5km</b>	<b>M=3.9</b>	92/10869
Rsd 0.1s	0.0	0.00	0.00	1				0.2	0.01	0.02	R				
Corr. -0.039	19ph/12stn	Dmin 48km	Az.gap 91°				Rsd 0.2s	20ph/15stn	Dmin 7km	Az.gap 141°					
	10M/5stn	Msd 0.2	2↑ 1↓				Corr. 0.299	10M/5stn	Msd 0.2	1↑					
NOV 02	<b>2143</b>	<b>39.8s</b>	<b>39.20S</b>	<b>174.79E</b>	<b>194km</b>	<b>M=3.8</b>	92/10819	NOV 04	<b>1702</b>	<b>04.6s</b>	<b>38.58S</b>	<b>176.20E</b>	<b>109km</b>	<b>M=3.5</b>	92/10873
Rsd 0.1s	0.3	0.02	0.03	3				0.5	0.02	0.02	4				
Corr. 0.119	23ph/15stn	Dmin 68km	Az.gap 198°				Rsd 0.2s	16ph/11stn	Dmin 42km	Az.gap 193°					
	18M/18stn	Msd 0.3	1↑				Corr. -0.598	16M/14stn	Msd 0.3						
NOV 03	<b>0655</b>	<b>22.0s</b>	<b>38.25S</b>	<b>177.15E</b>	<b>203km</b>	<b>M=3.6</b>	92/10824	NOV 04	<b>1754</b>	<b>04.2s</b>	<b>40.06S</b>	<b>176.96E</b>	<b>49km</b>	<b>M=3.5</b>	92/10875
Rsd 0.1s	0.4	0.17	0.42	4				0.2	0.01	0.03	2				
Corr. -0.992	12ph/8stn	Dmin 3km	Az.gap 310°				Rsd 0.1s	25ph/18stn	Dmin 15km	Az.gap 216°					
	7M/6stn	Msd 0.2	1↑				Corr. -0.809	12M/11stn	Msd 0.3	1↑					
NOV 03	<b>1423</b>	<b>01.0s</b>	<b>37.55S</b>	<b>177.43E</b>	<b>111km</b>	<b>M=3.7</b>	92/10836	NOV 04	<b>1805</b>	<b>58.7s</b>	<b>35.24S</b>	<b>178.58E</b>	<b>224km</b>	<b>M=4.3</b>	92/10876
Rsd 0.1s	0.3	0.02	0.02	3				0.3	0.05	0.05	4				
Corr. 0.129	16ph/14stn	Dmin 21km	Az.gap 154°				Rsd 0.0s	11ph/10stn	Dmin 263km	Az.gap 334°					
	19M/17stn	Msd 0.2	3↑ 1↓				Corr. -0.785	17M/17stn	Msd 0.2						
NOV 03	<b>1741</b>	<b>04.2s</b>	<b>39.39S</b>	<b>179.47E</b>	<b>33km</b>	<b>M=3.6</b>	92/10840	NOV 04	<b>2156</b>	<b>07.5s</b>	<b>37.69S</b>	<b>176.27E</b>	<b>182km</b>	<b>M=3.9</b>	92/10880
Rsd 0.3s	0.7	0.04	0.05	R				0.2	0.01	0.02	2				
Corr. -0.416	11ph/7stn	Dmin 151km	Az.gap 256°				Rsd 0.1s	18ph/14stn	Dmin 97km	Az.gap 112°					
	15M/13stn	Msd 0.2					Corr. 0.320	21M/18stn	Msd 0.3						
NOV 03	<b>2054</b>	<b>27.4s</b>	<b>39.92S</b>	<b>174.35E</b>	<b>12km</b>	<b>M=3.7</b>	92/10843	NOV 05	<b>0104</b>	<b>20.5s</b>	<b>37.10S</b>	<b>176.71E</b>	<b>193km</b>	<b>M=3.7</b>	92/10884
Rsd 0.3s	0.2	0.01	0.02	R				0.7	0.06	0.07	5				
Corr. -0.361	26ph/17stn	Dmin 52km	Az.gap 138°				Rsd 0.2s	10ph/9stn	Dmin 134km	Az.gap 268°					
	24M/22stn	Msd 0.2					Corr. -0.766	13M/13stn	Msd 0.2						
NOV 04	<b>0554</b>	<b>14.3s</b>	<b>40.15S</b>	<b>173.65E</b>	<b>162km</b>	<b>M=3.6</b>	92/10850	NOV 05	<b>0231</b>	<b>19.8s</b>	<b>38.14S</b>	<b>175.76E</b>	<b>155km</b>	<b>M=3.7</b>	92/10886
Rsd 0.2s	0.4	0.02	0.02	4				0.4	0.03	0.07	5				
Corr. -0.208	22ph/16stn	Dmin 76km	Az.gap 180°				Rsd 0.2s	23ph/17stn	Dmin 119km	Az.gap 227°					
	13M/11stn	Msd 0.3	1↑ 1↓				Corr. -0.848	17M/17stn	Msd 0.2	1↑					

NOV 05 0403 01.1s	37.55S	178.91E	33km	M=3.5	92/10888	NOV 07 0048 56.0s	37.15S	175.99E	276km	M=3.7	92/10937				
Rsd 0.5s	1.2	0.06	0.10	R		0.5	0.05	0.07	4						
Corr. 0.355	10ph/6stn	Dmin 54km	Az.gap 287°			Rsd 0.2s	13ph/11stn	Dmin 158km	Az.gap 290°						
	7M/5stn	Msd 0.3				Corr. -0.797	8M/8stn	Msd 0.2	1↑ 1↓						
NOV 05 0628 45.5s	38.24S	176.07E	157km	M=3.6	92/10889	NOV 07 0722 52.4s	38.70S	176.10E	203km	M=3.5	92/10948				
Rsd 0.2s	0.4	0.04	0.14	6		0.2	0.04	0.03	4						
Corr. -0.883	14ph/8stn	Dmin 91km	Az.gap 240°			Rsd 0.0s	11ph/9stn	Dmin 219km	Az.gap 341°						
	7M/7stn	Msd 0.4				Corr. 0.150	6M/6stn	Msd 0.3							
NOV 05 1259 33.6s	37.43S	178.05E	76km	M=3.8	92/10899	NOV 07 0858 35.3s	39.76S	176.83E	28km	M=4.0	92/10952				
Rsd 0.1s	0.3	0.01	0.02	3		0.1	0.01	0.02	1						
Corr. -0.414	12ph/8stn	Dmin 29km	Az.gap 200°			Rsd 0.2s	35ph/29stn	Dmin 12km	Az.gap 151°						
	5M/3stn	Msd 0.1	1↑ 2↓			Corr. -0.486	31M/27stn	Msd 0.2	2↑ 3↓						
NOV 05 2047 01.5s	45.34S	166.88E	23km	M=3.7	92/10904	Felt Patoka (52), Bridge Pa (60) MM4.									
Rsd 0.1s	0.2	0.01	0.02	1											
Corr. 0.436	19ph/13stn	Dmin 26km	Az.gap 270°			Rsd 0.2s	22ph/15stn	Dmin 12km	Az.gap 205°						
	21M/17stn	Msd 0.2	1↑			Corr. -0.249	19M/12stn	Msd 0.1	2↑ 5↓						
NOV 05 2204 15.3s	37.01S	177.64E	137km	M=3.9	92/10906	NOV 08 1828 02.1s	37.96S	177.35E	66km	M=3.5	92/10991				
Rsd 0.1s	0.3	0.02	0.02	3		0.1	0.01	0.01	2						
Corr. 0.361	13ph/9stn	Dmin 88km	Az.gap 207°			Rsd 0.1s	20ph/17stn	Dmin 40km	Az.gap 113°						
	15M/13stn	Msd 0.3				Corr. -0.247	18M/16stn	Msd 0.3	1↑						
NOV 06 0953 57.9s	38.28S	176.13E	170km	M=4.3	92/10919	NOV 09 0554 26.6s	39.29S	174.72E	20km	M=3.9	92/11005				
Rsd 0.3s	0.5	0.02	0.02	4		0.2	0.01	0.02	2						
Corr. -0.028	30ph/23stn	Dmin 13km	Az.gap 57°			Rsd 0.2s	31ph/24stn	Dmin 59km	Az.gap 128°						
	27M/22stn	Msd 0.2	6↑ 2↓			Corr. -0.110	8M/4stn	Msd 0.2	1↑						
NOV 06 1150 32.2s	35.92S	179.36E	258km	M=3.6	92/10921	NOV 09 1147 00.4s	37.18S	177.21E	144km	M=3.7	92/11013				
Rsd 0.1s	0.3	0.06	0.09	3		0.4	0.02	0.02	4						
Corr. -0.941	6ph/4stn	Dmin 209km	Az.gap 350°			Rsd 0.2s	15ph/12stn	Dmin 107km	Az.gap 186°						
	2M/2stn	Msd 0.1				Corr. 0.424	18M/18stn	Msd 0.1	1↑						
NOV 06 1230 34.8s	45.13S	166.77E	22km	M=4.1	92/10923	NOV 09 1832 30.3s	37.32S	177.71E	108km	M=3.7	92/11025				
Rsd 0.1s	0.2	0.01	0.02	1		1.4	0.06	0.04	13						
Corr. -0.095	18ph/13stn	Dmin 48km	Az.gap 255°			Rsd 0.2s	11ph/9stn	Dmin 61km	Az.gap 239°						
	20M/15stn	Msd 0.1	1↓			Corr. 0.234	12M/12stn	Msd 0.1							
NOV 06 1312 50.0s	38.67S	178.68E	52km	M=3.5	92/10924	NOV 09 2256 44.1s	39.55S	178.77E	22km	M=3.6	92/11029				
Rsd 0.1s	0.3	0.02	0.02	3		0.3	0.01	0.03	2						
Corr. -0.555	6ph/3stn	Dmin 57km	Az.gap 292°			Rsd 0.1s	16ph/12stn	Dmin 86km	Az.gap 237°						
	3M/3stn	Msd 0.1				Corr. -0.363	26M/26stn	Msd 0.2	1↑						
NOV 06 1711 47.2s	38.34S	175.70E	184km	M=3.5	92/10928	NOV 10 0034 36.1s	37.27S	179.89E	33km	M=3.6	92/11031				
Rsd 0.3s	0.8	0.12	0.20	25		0.7	0.02	0.07	R						
Corr. -0.977	13ph/11stn	Dmin 243km	Az.gap 227°			Rsd 0.1s	7ph/5stn	Dmin 145km	Az.gap 305°						
	6M/6stn	Msd 0.1				Corr. -0.539	3M/3stn	Msd 0.2							

NOV 10 0406	18.7s	37.95S	176.58E	175km	M=3.6	92/11034	92/11115
Rsd 0.1s	0.2	0.10	0.28	8	Az.gap 290°		
Corr. -0.992	9ph/3stn	Dmin 58km					
	2M/2stn	Msd 0.2					
NOV 10 0650	18.4s	38.87S	175.44E	159km	M=4.0	92/11037	92/11127
Rsd 0.4s	0.6	0.02	0.03	5	Az.gap 78°		
Corr. -0.058	34ph/22stn	Dmin 20km					
	25M/23stn	Msd 0.3					
NOV 11 0718	16.1s	38.60S	178.61E	42km	M=3.6	92/11067	92/11131
Rsd 0.0s	0.0	0.00	0.00	1	Az.gap 232°		
Corr. -0.598	9ph/7stn	Dmin 50km					
	16M/14stn	Msd 0.3					
NOV 11 0837	27.0s	37.47S	176.77E	151km	M=3.7	92/11071	92/11133
Rsd 0.2s	0.3	0.02	0.03	3	Az.gap 147°		
Corr. 0.434	13ph/10stn	Dmin 93km					
	23M/21stn	Msd 0.4					
NOV 11 0920	31.6s	42.31S	172.51E	5km	M=3.5	92/11072	92/11157
Rsd 0.4s	0.2	0.01	0.02	R	Az.gap 77°		
Corr. -0.316	26ph/14stn	Dmin 56km					
	27M/23stn	Msd 0.2					
NOV 11 1207	00.4s	38.94S	176.21E	76km	M=4.7	92/11078	92/11166
Rsd 0.3s	0.2	0.01	0.01	3	Az.gap 42°		
Corr. 0.009	43ph/31stn	Dmin 26km					
	23M/17stn	Msd 0.2					
NOV 12 0015	48.2s	39.63S	174.10E	183km	M=3.6	92/11095	92/11170
Rsd 0.2s	0.4	0.02	0.02	5	Az.gap 204°		
Corr. -0.391	27ph/18stn	Dmin 131km					
	16M/14stn	Msd 0.3					
NOV 12 0203	19.3s	37.67S	177.46E	123km	M=3.6	92/11099	92/11172
Rsd 0.1s	0.4	0.04	0.06	2	Az.gap 237°		
Corr. -0.953	8ph/4stn	Dmin 72km					
	5M/3stn	Msd 0.4					
NOV 12 0623	50.0s	41.21S	172.78E	194km	M=3.9	92/11103	92/11223
Rsd 0.2s	0.3	0.02	0.02	2	Az.gap 99°		
Corr. -0.118	30ph/17stn	Dmin 48km					
	13M/12stn	Msd 0.6					
NOV 12 2102	52.1s	39.74S	174.45E	134km	M=4.3	92/11114	92/11250
Rsd 0.2s	0.3	0.01	0.02	3	Az.gap 140°		
Corr. -0.216	42ph/29stn	Dmin 42km					
	26M/21stn	Msd 0.4					

NOV 13 1326 13.2s	37.30S	177.25E	169km	M=3.6	92/11231	NOV 14 0527 58.9s	37.41S	176.90E	168km	M=4.0	92/11289
0.2	0.02	0.02	1			0.3	0.02	0.02	3		
Rsd 0.1s	12ph/10stn	Dmin 107km	Az.gap 309°			Rsd 0.2s	15ph/13stn	Dmin 96km	Az.gap 155°		
Corr. -0.465	8M/6stn	Msd 0.5				Corr. 0.375	21M/19stn	Msd 0.1	1↑		
NOV 13 1351 15.8s	38.35S	176.13E	5km	M=2.7	92/11239	NOV 14 1007 20.8s	38.35S	176.17E	5km	M=2.6	92/11296
0.1	0.01	0.01	R			0.2	0.02	0.02	R		
Rsd 0.1s	8ph/4stn	Dmin 12km	Az.gap 156°			Rsd 0.4s	11ph/6stn	Dmin 9km	Az.gap 144°		
Corr. 0.313	4M/4stn	Msd 0.2				Corr. 0.277	4M/4stn	Msd 0.2	1↑		
Felt Ngakuru (33).						Felt Ngakuru (33) MM4.					
NOV 13 1404 00.3s	38.45S	176.22E	5km	M=2.7	92/11244	NOV 14 1045 17.1s	37.41S	176.47E	213km	M=3.9	92/11298
1.0	0.05	0.03	R			0.6	0.03	0.05	5		
Rsd 0.3s	7ph/4stn	Dmin 9km	Az.gap 273°			Rsd 0.2s	13ph/10stn	Dmin 99km	Az.gap 140°		
Corr. -0.024	3M/3stn	Msd 0.2				Corr. 0.520	21M/20stn	Msd 0.3			
Felt Ngakuru (33).											
NOV 13 1413 34.3s	38.31S	176.16E	5km	M=2.9	92/11247	NOV 14 1953 00.5s	37.24S	177.84E	92km	M=3.8	92/11308
0.1	0.01	0.01	R			0.1	0.01	0.01	2		
Rsd 0.3s	13ph/9stn	Dmin 12km	Az.gap 87°			Rsd 0.1s	10ph/8stn	Dmin 57km	Az.gap 209°		
Corr. -0.209	6M/5stn	Msd 0.2	1↑			Corr. 0.254	13M/11stn	Msd 0.3	1↓		
Felt Ngakuru (33).											
NOV 13 1723 25.5s	37.81S	177.57E	49km	M=3.6	92/11274	NOV 15 1403 46.8s	35.06S	178.29E	251km	M=4.0	92/11333
0.2	0.01	0.01	3			0.6	0.10	0.15	13		
Rsd 0.2s	11ph/8stn	Dmin 46km	Az.gap 119°			Rsd 0.1s	12ph/5stn	Dmin 371km	Az.gap 337°		
Corr. 0.287	5M/3stn	Msd 0.2				Corr. -0.383	14M/12stn	Msd 0.6			
NOV 13 1809 03.9s	38.32S	176.13E	5km	M=3.3	92/11275	NOV 15 2236 07.5s	36.92S	179.51E	12km	M=3.9	92/11343
0.1	0.01	0.01	R			1.6	0.07	0.13	R		
Rsd 0.2s	18ph/13stn	Dmin 13km	Az.gap 57°			Rsd 0.5s	8ph/5stn	Dmin 131km	Az.gap 292°		
Corr. -0.244	13M/11stn	Msd 0.2				Corr. 0.220	7M/5stn	Msd 0.4			
Felt Ngakuru (33) MM4.											
NOV 14 0241 18.5s	36.85S	176.90E	271km	M=4.4	92/11282	NOV 16 0132 23.8s	44.24S	167.80E	5km	M=3.6	92/11347
0.5	0.03	0.05	4			0.3	0.02	0.03	R		
Rsd 0.2s	16ph/14stn	Dmin 106km	Az.gap 208°			Rsd 0.2s	13ph/12stn	Dmin 131km	Az.gap 211°		
Corr. 0.424	24M/21stn	Msd 0.3				Corr. -0.715	17M/13stn	Msd 0.1			
NOV 14 0324 23.3s	38.34S	176.15E	5km	M=2.8	92/11283	NOV 16 0655 12.8s	37.81S	176.31E	168km	M=3.5	92/11356
0.2	0.01	0.01	R			1.0	0.06	0.08	7		
Rsd 0.2s	13ph/8stn	Dmin 11km	Az.gap 148°			Rsd 0.3s	11ph/10stn	Dmin 86km	Az.gap 232°		
Corr. -0.039	5M/4stn	Msd 0.2				Corr. -0.762	15M/15stn	Msd 0.2			
Felt Ngakuru (33) MM4.											
NOV 14 0349 32.5s	40.65S	174.84E	14km	M=3.5	92/11284	NOV 16 0759 01.0s	39.24S	175.14E	141km	M=3.8	92/11357
0.1	0.01	0.01	1			0.3	0.01	0.03	2		
Rsd 0.2s	37ph/26stn	Dmin 25km	Az.gap 96°			Rsd 0.2s	36ph/25stn	Dmin 31km	Az.gap 174°		
Corr. -0.326	24M/21stn	Msd 0.2	3↑ 2↓			Corr. -0.237	22M/20stn	Msd 0.2	2↑		
NOV 17 1031 38.1s	37.32S	176.54E	227km	M=3.9	92/11392	NOV 17 1031 38.1s	37.32S	176.54E	227km	M=3.9	92/11392
0.4	0.02	0.04	3			0.4	0.02	0.04	3		
Rsd 0.2s	13ph/11stn	Dmin 97km	Az.gap 151°			Rsd 0.2s	13ph/11stn	Dmin 97km	Az.gap 151°		
Corr. 0.305	17M/16stn	Msd 0.2				Corr. 0.305	17M/16stn	Msd 0.2			

NOV 17 1108	57.3s	38.22S	176.13E	147km	M=3.9	92/11394	NOV 20 1654	33.9s	40.09S	174.83E	28km	M=3.7	92/11471
Rsd 0.2s	0.3	0.02	0.02	2			Rsd 0.3s	0.2	0.01	0.02	2		
Corr. -0.194	17ph/13stn	Dmin 81km	Az.gap 133°				Corr. -0.402	36ph/27stn	Dmin 33km	Az.gap 113°			
	21M/20stn	Msd 0.3	1↑					33M/29stn	Msd 0.2	1↑			
NOV 17 1535	41.7s	36.54S	177.36E	168km	M=3.7	92/11396	NOV 21 0044	16.3s	44.56S	167.03E	5km	M=4.3	92/11478
Rsd 0.2s	0.8	0.07	0.10	6			Rsd 0.2s	0.4	0.02	0.03	R		
Corr. -0.855	12ph/6stn	Dmin 145km	Az.gap 299°				Corr. -0.730	20ph/14stn	Dmin 101km	Az.gap 220°			
	9M/9stn	Msd 0.2						8M/5stn	Msd 0.1	1↓			
NOV 18 0457	40.1s	38.63S	175.72E	157km	M=4.2	92/11412	NOV 21 0110	06.9s	41.79S	174.51E	37km	M=3.7	92/11479
Rsd 0.3s	0.4	0.02	0.02	4			Rsd 0.2s	0.1	0.01	0.01	3		
Corr. -0.101	32ph/23stn	Dmin 54km	Az.gap 74°				Corr. -0.594	30ph/22stn	Dmin 52km	Az.gap 152°			
	26M/23stn	Msd 0.3	5↑ 2↓					12M/11stn	Msd 0.2	3↑ 8↓			
NOV 19 0108	43.3s	38.67S	175.25E	232km	M=4.0	92/11426	NOV 21 0111	30.3s	38.35S	176.26E	126km	M=3.9	92/11480
Rsd 0.3s	0.8	0.04	0.04	6			Rsd 0.2s	0.6	0.04	0.03	4		
Corr. -0.178	17ph/11stn	Dmin 43km	Az.gap 141°				Corr. -0.228	20ph/16stn	Dmin 63km	Az.gap 164°			
	18M/16stn	Msd 0.2						20M/17stn	Msd 0.3	1↑			
NOV 19 0435	03.6s	40.57S	173.14E	234km	M=3.6	92/11429	NOV 21 0728	59.6s	40.18S	174.43E	77km	M=3.5	92/11488
Rsd 0.2s	0.3	0.03	0.02	2			Rsd 0.2s	0.2	0.01	0.01	3		
Corr. -0.145	28ph/16stn	Dmin 59km	Az.gap 211°				Corr. -0.432	38ph/22stn	Dmin 61km	Az.gap 125°			
	8M/8stn	Msd 0.2	1↑					20M/17stn	Msd 0.2				
NOV 19 1510	19.8s	39.77S	175.45E	17km	M=3.4	92/11441	NOV 21 2309	13.8s	45.54S	166.98E	64km	M=3.9	92/11505
Rsd 0.3s	0.1	0.01	0.01	2			Rsd 0.1s	0.3	0.01	0.02	1		
Corr. 0.085	28ph/18stn	Dmin 45km	Az.gap 72°				Corr. 0.034	19ph/14stn	Dmin 16km	Az.gap 253°			
Felt Marton (62).	17M/15stn	Msd 0.3	2↑ 3↓					21M/14stn	Msd 0.2	1↓			
NOV 19 2105	53.5s	38.95S	175.70E	109km	M=4.6	92/11447	NOV 22 0400	03.1s	44.61S	168.19E	77km	M=4.2	92/11510
Rsd 0.2s	0.3	0.01	0.02	3			Rsd 0.4s	0.5	0.03	0.03	9		
Corr. -0.303	36ph/24stn	Dmin 26km	Az.gap 54°				Corr. -0.645	28ph/17stn	Dmin 87km	Az.gap 182°			
	27M/22stn	Msd 0.2	7↑ 1↓					8M/5stn	Msd 0.2	1↑ 2↓			
NOV 20 0218	19.5s	39.17S	175.33E	130km	M=3.8	92/11450	NOV 22 1337	08.5s	42.55S	173.16E	40km	M=3.6	92/11514
Rsd 0.3s	0.4	0.02	0.03	3			Rsd 0.2s	0.1	0.01	0.01	3		
Corr. -0.480	31ph/25stn	Dmin 15km	Az.gap 149°				Corr. -0.482	29ph/20stn	Dmin 35km	Az.gap 134°			
	20M/20stn	Msd 0.3	1↑					12M/10stn	Msd 0.3	1↑			
NOV 20 0843	01.9s	41.06S	172.97E	176km	M=4.4	92/11454	NOV 23 0317	35.6s	41.28S	172.88E	133km	M=3.7	92/11531
Rsd 0.2s	0.4	0.02	0.02	3			Rsd 0.3s	0.3	0.01	0.02	3		
Corr. -0.285	30ph/22stn	Dmin 45km	Az.gap 86°				Corr. -0.201	32ph/21stn	Dmin 54km	Az.gap 91°			
	25M/20stn	Msd 0.2	11↑ 3↓					14M/12stn	Msd 0.2	8↑ 1↓			
NOV 20 0936	48.0s	40.36S	173.48E	188km	M=3.6	92/11457	NOV 23 0652	10.1s	37.91S	177.83E	72km	M=3.7	92/11533
Rsd 0.2s	0.3	0.02	0.02	3			Rsd 0.1s	0.2	0.01	0.01	2		
Corr. -0.213	25ph/18stn	Dmin 62km	Az.gap 172°				Corr. -0.076	18ph/14stn	Dmin 54km	Az.gap 117°			
	13M/11stn	Msd 0.2	1↑					16M/14stn	Msd 0.2	1↑ 1↓			

NOV 23 1846	03.4s	36.93S	177.61E	141km	M=4.7	92/11542	NOV 27 2317	49.7s	41.81S	172.65E	78km	M=3.8	92/11684
Rsd 0.2s	0.5	0.03	0.03	6	Az.gap 210°		Rsd 0.2s	0.2	0.01	0.02	2		
Corr. 0.475	16ph/11stn	Dmin 96km					Corr. 0.029	29ph/17stn	Dmin 21km		Az.gap 80°		
	27M/23stn	Msd 0.3	1↓				Corr. -0.029	14M/12stn	Msd 0.2	3↑ 2↓			
NOV 23 2220	22.0s	38.16S	176.00E	161km	M=3.9	92/11552	NOV 28 0417	08.1s	38.22S	175.93E	165km	M=3.8	92/11693
Rsd 0.2s	0.4	0.02	0.03	4	Az.gap 102°		Rsd 0.3s	0.5	0.03	0.02	4		
Corr. 0.090	15ph/12stn	Dmin 91km					Corr. -0.086	21ph/15stn	Dmin 48km	Az.gap 111°			
	17M/15stn	Msd 0.2	1↓				Corr. -0.086	24M/22stn	Msd 0.2				
NOV 24 0148	22.4s	37.57S	177.28E	129km	M=3.5	92/11557	NOV 28 2233	15.0s	37.14S	176.92E	253km	M=4.7	92/11724
Rsd 0.4s	0.7	0.06	0.07	5	Az.gap 249°		Rsd 0.1s	0.4	0.06	0.04	4		
Corr. -0.789	8ph/5stn	Dmin 78km					Corr. 0.385	17ph/15stn	Dmin 126km	Az.gap 238°			
	4M/3stn	Msd 0.2					Corr. 0.385	29M/24stn	Msd 0.2	1↑			
NOV 24 0927	37.2s	36.26S	179.84W	162km	M=4.1	92/11569	NOV 29 0051	26.7s	37.68S	176.21E	189km	M=3.7	92/11730
Rsd 0.7s	2.7	0.15	0.24	25	Az.gap 314°		Rsd 0.1s	0.2	0.03	0.03	2		
Corr. 0.475	6ph/5stn	Dmin 223km					Corr. -0.688	11ph/9stn	Dmin 102km	Az.gap 239°			
	2M/2stn	Msd 0.0					Corr. -0.688	19M/19stn	Msd 0.1	1↑			
NOV 24 2221	17.4s	35.46S	178.70E	303km	M=3.9	92/11585	NOV 29 0313	38.7s	44.68S	167.22E	0km	M=4.5	92/11732
Rsd 0.0s	0.3	0.04	0.10	3	Az.gap 350°		Rsd 0.2s	0.4	0.02	0.02	R		
Corr. -0.902	8ph/7stn	Dmin 342km					Corr. -0.836	21ph/15stn	Dmin 56km	Az.gap 221°			
	5M/5stn	Msd 0.2					Corr. -0.836	11M/6stn	Msd 0.1	3↑ 5↓			
NOV 25 1755	24.4s	37.61S	176.53E	184km	M=4.0	92/11609	NOV 29 1307	06.9s	38.32S	175.81E	176km	M=3.9	92/11744
Rsd 0.3s	0.4	0.03	0.03	3	Az.gap 127°		Rsd 0.2s	0.5	0.03	0.03	4		
Corr. -0.110	19ph/15stn	Dmin 87km					Corr. -0.067	17ph/13stn	Dmin 54km	Az.gap 115°			
	23M/22stn	Msd 0.2	2↑ 1↓				Corr. -0.067	26M/24stn	Msd 0.2	1↑			
NOV 26 0055	53.1s	44.86S	167.35E	50km	M=4.0	92/11617	NOV 29 1336	08.6s	40.15S	174.05E	118km	M=3.9	92/11746
Rsd 0.1s	0.3	0.02	0.02	6	Az.gap 212°		Rsd 0.2s	0.3	0.01	0.02	4		
Corr. -0.163	22ph/15stn	Dmin 69km					Corr. -0.316	37ph/28stn	Dmin 73km	Az.gap 141°			
	19M/12stn	Msd 0.3	6↑ 4↓				Corr. -0.316	24M/22stn	Msd 0.2	6↑ 5↓			
NOV 27 1559	12.5s	43.17S	170.71E	6km	M=5.3	92/11670	NOV 29 1926	44.8s	38.18S	175.68E	168km	M=3.7	92/11751
Rsd 0.1s	0.1	0.01	0.01	1	Az.gap 130°		Rsd 0.1s	0.4	0.03	0.07	5		
Corr. -0.254	27ph/19stn	Dmin 11km					Corr. -0.695	12ph/9stn	Dmin 106km	Az.gap 233°			
	21M/11stn	Msd 0.3	7↑ 3↓				Corr. -0.695	22M/20stn	Msd 0.1				
Felt Westland (79,86,98,104) and Erewhon (106) MM4.													
NOV 27 1842	32.6s	39.62S	174.17E	186km	M=3.9	92/11673	NOV 29 2005	21.9s	38.19S	176.22E	157km	M=3.5	92/11754
Rsd 0.2s	0.3	0.01	0.02	3	Az.gap 158°		Rsd 0.1s	0.4	0.07	0.18	8		
Corr. -0.250	43ph/27stn	Dmin 123km					Corr. -0.980	14ph/10stn	Dmin 78km	Az.gap 250°			
	24M/22stn	Msd 0.2	4↑ 1↓				Corr. -0.980	8M/8stn	Msd 0.3	1↑			
NOV 27 2148	49.8s	40.33S	173.66E	149km	M=3.8	92/11678	NOV 30 0116	43.0s	37.74S	176.14E	112km	M=3.6	92/11760
Rsd 0.2s	0.3	0.02	0.01	3	Az.gap 146°		Rsd 0.1s	0.3	0.04	0.20	18		
Corr. -0.106	42ph/26stn	Dmin 57km					Corr. -0.934	12ph/7stn	Dmin 96km	Az.gap 227°			
	15M/13stn	Msd 0.2	5↑ 1↓				Corr. -0.934	5M/5stn	Msd 0.2	1↑			

NOV 30 0853	34.4s	40.79S	173.33E	149km	M=3.6	92/11764	DEC 01 2327	18.1s	37.11S	177.38E	149km	M=3.9	92/10816
Rsd 0.3s	0.3	0.02	0.02	3				0.3	0.02	0.02	3		
Corr. -0.258	34ph/22stn	Dmin 50km	Az.gap 121°				Rsd 0.1s	11ph/9stn	Dmin 98km	Az.gap 243°			
	14M/13stn	Msd 0.2	4↑ 2↓				Corr. 0.154	20M/20stn	Msd 0.2				
NOV 30 0916	46.8s	41.88S	171.63E	12km	M=3.4	92/11765	DEC 02 0106	00.6s	39.60S	174.45E	219km	M=3.5	92/10819
Rsd 0.1s	0.2	0.01	0.01	1				0.3	0.01	0.04	3		
Corr. -0.609	17ph/11stn	Dmin 20km	Az.gap 184°				Rsd 0.1s	19ph/13stn	Dmin 47km	Az.gap 195°			
	17M/13stn	Msd 0.1	1↑				Corr. -0.418	12M/11stn	Msd 0.2	1↑			
Felt Westport (79) MM4.													
NOV 30 1459	30.6s	41.35S	173.13E	90km	M=4.3	92/11774	DEC 02 1622	57.5s	37.20S	176.64E	217km	M=3.7	92/10834
Rsd 0.2s	0.3	0.01	0.02	3				0.4	0.05	0.05	3		
Corr. 0.043	34ph/21stn	Dmin 49km	Az.gap 71°				Rsd 0.1s	13ph/8stn	Dmin 124km	Az.gap 257°			
	20M/15stn	Msd 0.2	2↑ 5↓				Corr. -0.715	18M/18stn	Msd 0.2				
NOV 30 1524	16.6s	36.23S	177.07E	267km	M=3.7	92/11775	DEC 02 2236	13.9s	39.60S	174.94E	111km	M=4.4	92/10841
Rsd 0.1s	0.5	0.06	0.09	5				0.1	0.00	0.01	1		
Corr. -0.855	12ph/8stn	Dmin 188km	Az.gap 299°				Rsd 0.2s	50ph/33stn	Dmin 22km	Az.gap 118°			
	14M/14stn	Msd 0.2					Corr. -0.167	29M/23stn	Msd 0.3	13↑ 7↓			
NOV 30 2130	52.0s	37.65S	176.14E	157km	M=3.5	92/11786	DEC 04 0059	00.9s	38.23S	176.03E	155km	M=3.7	92/10865
Rsd 0.1s	0.6	0.04	0.07	3				0.4	0.03	0.02	3		
Corr. -0.902	14ph/11stn	Dmin 109km	Az.gap 247°				Rsd 0.2s	16ph/11stn	Dmin 95km	Az.gap 240°			
	12M/12stn	Msd 0.2					Corr. -0.590	17M/15stn	Msd 0.2	1↑			
DEC 01 0636	28.7s	37.06S	177.58E	127km	M=4.8	92/10794	DEC 04 0610	09.6s	38.23S	178.28E	44km	M=3.6	92/10871
Rsd 0.1s	0.2	0.02	0.01	3				0.0	0.00	0.00	1		
Corr. 0.179	20ph/16stn	Dmin 63km	Az.gap 251°				Rsd 0.0s	5ph/3stn	Dmin 48km	Az.gap 205°			
	28M/24stn	Msd 0.2	1↓				Corr. -0.805	4M/3stn	Msd 0.2	2↑ 1↓			
DEC 01 0702	40.5s	44.67S	167.25E	5km	M=3.7	92/10796	DEC 04 0747	10.7s	41.67S	172.06E	5km	M=3.3	92/10873
Rsd 0.2s	0.4	0.02	0.03	R				0.2	0.01	0.01	R		
Corr. -0.820	22ph/16stn	Dmin 54km	Az.gap 222°				Rsd 0.3s	21ph/12stn	Dmin 23km	Az.gap 135°			
	17M/14stn	Msd 0.2					Corr. -0.241	15M/13stn	Msd 0.1	1↓			
DEC 01 0902	42.1s	37.04S	179.31W	33km	M=3.5	92/10799	DEC 04 1238	14.0s	44.35S	168.10E	12km	M=4.0	92/10882
Rsd 0.0s	0.2	0.05	0.04	R				0.2	0.02	0.02	R		
Corr. -0.863	5ph/3stn	Dmin 221km	Az.gap 350°				Rsd 0.2s	20ph/15stn	Dmin 110km	Az.gap 193°			
	2M/2stn	Msd 0.1					Corr. -0.258	23M/17stn	Msd 0.2	1↓			
DEC 01 1823	33.4s	40.39S	176.83E	21km	M=4.4	92/10809	DEC 04 1301	31.8s	42.02S	171.82E	5km	M=4.3	92/10883
Rsd 0.2s	0.2	0.01	0.02	2				0.1	0.01	0.02	R		
Corr. -0.723	40ph/32stn	Dmin 45km	Az.gap 187°				Rsd 0.2s	18ph/10stn	Dmin 30km	Az.gap 131°			
	9M/5stn	Msd 0.2	1↑ 3↓				Corr. -0.246	11M/6stn	Msd 0.2	1↑ 1↓			
DEC 01 2013	21.7s	37.08S	176.35E	243km	M=3.6	92/10814	DEC 04 2145	47.8s	41.95S	171.77E	13km	M=4.4	92/10890
Rsd 0.3s	0.8	0.08	0.12	7				0.2	0.01	0.02	3		
Corr. -0.844	7ph/4stn	Dmin 147km	Az.gap 278°				Rsd 0.3s	23ph/10stn	Dmin 23km	Az.gap 141°			
	3M/3stn	Msd 0.2					Corr. -0.258	10M/5stn	Msd 0.2	1↓			
Felt Westport (79) to Paroa (92) MM4.							Felt Westport (79) to Paroa (92) MM4.						

							92/10895
DEC	05	0051	24.8s	38.63S	177.46E	37km	M=4.3
			0.2	0.01	0.01	5	
Rsd	0.2s	26ph/21stn	Dmin	43km	Az.gap	61°	
Corr.	0.098	23M/20stn	Msd	0.2	2↑	2↓	
							92/10896
DEC	05	0245	04.2s	35.63S	179.60E	126km	M=4.7
			1.3	0.12	0.09	23	
Rsd	0.2s	10ph/8stn	Dmin	248km	Az.gap	297°	
Corr.	0.508	18M/17stn	Msd	0.2			
							92/10900
DEC	05	0439	55.5s	38.60S	175.59E	210km	M=3.6
			0.3	0.02	0.05	3	
Rsd	0.1s	16ph/10stn	Dmin	64km	Az.gap	314°	
Corr.	0.024	6M/6stn	Msd	0.1			
							92/10914
DEC	05	1842	04.2s	38.23S	176.43E	120km	M=4.1
			0.3	0.02	0.01	3	
Rsd	0.2s	28ph/18stn	Dmin	7km	Az.gap	128°	
Corr.	0.004	25M/22stn	Msd	0.2	2↑	5↓	
							92/10917
DEC	05	1939	36.2s	39.66S	174.06E	178km	M=3.6
			0.3	0.01	0.02	3	
Rsd	0.2s	30ph/19stn	Dmin	128km	Az.gap	195°	
Corr.	-0.363	12M/10stn	Msd	0.2	1↑		
							92/10919
DEC	05	2058	47.4s	37.93S	176.42E	163km	M=3.5
			0.4	0.02	0.02	3	
Rsd	0.2s	15ph/8stn	Dmin	71km	Az.gap	163°	
Corr.	0.071	7M/7stn	Msd	0.2			
							92/10921
DEC	05	2318	51.4s	41.97S	171.78E	12km	M=4.3
			0.2	0.01	0.02	R	
Rsd	0.3s	18ph/11stn	Dmin	25km	Az.gap	139°	
Corr.	-0.254	10M/5stn	Msd	0.2	1↓		
Felt Westport (79) MM4.							
							92/10922
DEC	05	2357	29.1s	36.29S	179.84W	33km	M=4.6
			1.0	0.08	0.08	R	
Rsd	0.2s	11ph/10stn	Dmin	220km	Az.gap	292°	
Corr.	0.074	30M/27stn	Msd	0.3			
							92/10926
DEC	06	0419	48.4s	37.46S	176.49E	216km	M=3.7
			0.4	0.04	0.07	3	
Rsd	0.1s	11ph/7stn	Dmin	104km	Az.gap	290°	
Corr.	-0.773	3M/3stn	Msd	0.2			
							92/10932
DEC	06	0758	04.1s	39.16S	174.79E	208km	M=4.4
			0.4	0.02	0.03	3	
Rsd	0.2s	39ph/30stn	Dmin	53km	Az.gap	135°	
Corr.	-0.168	24M/22stn	Msd	0.2	6↑	1↓	
							92/10935
DEC	06	0843	03.5s	38.19S	176.13E	146km	M=3.9
			0.5	0.03	0.02	4	
Rsd	0.2s	18ph/14stn	Dmin	86km	Az.gap	179°	
Corr.	0.059	23M/20stn	Msd	0.2	1↑		
							92/10943
DEC	06	1259	32.4s	40.23S	179.09E	33km	M=3.5
			0.4	0.02	0.04	R	
Rsd	0.2s	15ph/7stn	Dmin	201km	Az.gap	259°	
Corr.	-0.703	7M/7stn	Msd	0.2			
							92/10955
DEC	06	1938	15.2s	38.83S	176.38E	73km	M=3.9
			0.2	0.01	0.01	4	
Rsd	0.2s	34ph/24stn	Dmin	12km	Az.gap	43°	
Corr.	-0.016	26M/23stn	Msd	0.2	1↓		
							92/10961
DEC	06	2329	35.7s	37.97S	178.74E	33km	M=3.9
			0.2	0.01	0.02	R	
Rsd	0.1s	12ph/9stn	Dmin	56km	Az.gap	252°	
Corr.	-0.124	19M/18stn	Msd	0.2			
							92/10969
DEC	07	0715	44.8s	38.14S	176.07E	212km	M=3.9
			0.6	0.04	0.06	4	
Rsd	0.3s	19ph/10stn	Dmin	92km	Az.gap	209°	
Corr.	-0.781	18M/18stn	Msd	0.3	1↑		
							92/10970
DEC	07	0836	14.2s	38.14S	175.64E	161km	M=3.6
			0.5	0.04	0.08	7	
Rsd	0.3s	29ph/19stn	Dmin	130km	Az.gap	230°	
Corr.	-0.797	19M/19stn	Msd	0.2	1↑		
							92/10977
DEC	07	1311	42.3s	43.16S	170.73E	8km	M=3.6
			0.1	0.01	0.01	1	
Rsd	0.1s	20ph/17stn	Dmin	9km	Az.gap	122°	
Corr.	-0.365	30M/28stn	Msd	0.2	1↑		
							92/11002
DEC	08	0829	49.4s	46.32S	166.03E	33km	M=3.8
			0.7	0.02	0.07	R	
Rsd	0.2s	21ph/17stn	Dmin	129km	Az.gap	291°	
Corr.	-0.142	22M/18stn	Msd	0.1	1↓		
							92/11014
DEC	08	1455	17.4s	39.29S	174.69E	199km	M=4.1
			0.3	0.01	0.02	3	
Rsd	0.2s	34ph/27stn	Dmin	60km	Az.gap	157°	
Corr.	-0.051	23M/21stn	Msd	0.2	3↑	1↓	
							92/11031
DEC	08	2301	03.0s	37.66S	177.02E	140km	M=3.8
			0.3	0.03	0.02	2	
Rsd	0.1s	15ph/13stn	Dmin	67km	Az.gap	139°	
Corr.	-0.512	20M/19stn	Msd	0.3			

DEC 09 0539 09.1s 35.98S 179.33E 165km M=4.1	92/11037	DEC 12 0414 40.2s 36.95S 177.50E 197km M=4.2	92/11123
0.5 0.06 0.06 6		0.5 0.04 0.04 4	
Rsd 0.1s 11ph/10stn Dmin 202km Az.gap 335°		Rsd 0.2s 10ph/8stn Dmin 102km Az.gap 258°	
Corr. -0.467 10M/10stn Msd 0.3		Corr. 0.002 20M/19stn Msd 0.2	
DEC 09 0742 53.1s 38.64S 175.40E 260km M=3.5	92/11040	DEC 12 0440 01.0s 39.02S 175.22E 161km M=5.7	92/11124
0.6 0.03 0.05 5		0.3 0.01 0.02 2	
Rsd 0.2s 19ph/14stn Dmin 54km Az.gap 149°		Rsd 0.2s 58ph/38stn Dmin 15km Az.gap 75°	
Corr. -0.527 9M/9stn Msd 0.3		Corr. -0.053 15M/9stn Msd 0.4 14↑ 8↓	
DEC 09 1344 13.6s 37.81S 176.06E 319km M=3.5	92/11052	Felt Palmerston North (62), Raumati (65).	
0.3 0.06 0.07 6			
Rsd 0.1s 12ph/10stn Dmin 195km Az.gap 270°			
Corr. -0.953 6M/6stn Msd 0.4			
DEC 09 1904 04.5s 37.95S 176.28E 145km M=3.5	92/11056	DEC 12 1513 36.5s 38.58S 175.86E 150km M=3.9	92/11139
0.5 0.03 0.05 3		0.5 0.02 0.02 4	
Rsd 0.2s 12ph/8stn Dmin 81km Az.gap 271°		Rsd 0.2s 30ph/18stn Dmin 65km Az.gap 72°	
Corr. -0.488 10M/10stn Msd 0.2		Corr. -0.207 24M/22stn Msd 0.2 1↑	
DEC 10 0236 08.9s 38.71S 178.09E 34km M=3.5	92/11066	DEC 12 2046 50.1s 38.68S 177.94E 43km M=3.7	92/11142
0.2 0.01 0.01 1		0.3 0.02 0.03 3	
Rsd 0.1s 7ph/3stn Dmin 12km Az.gap 291°		Rsd 0.3s 17ph/13stn Dmin 10km Az.gap 135°	
Corr. -0.400 2M/2stn Msd 0.2 1↑		Corr. -0.149 19M/18stn Msd 0.2 1↑	
DEC 10 0642 16.8s 38.66S 175.85E 218km M=3.5	92/11071	DEC 13 0655 24.1s 39.30S 174.58E 154km M=3.6	92/11155
0.4 0.04 0.07 5		0.4 0.01 0.03 3	
Rsd 0.1s 10ph/8stn Dmin 124km Az.gap 314°		Rsd 0.2s 32ph/17stn Dmin 63km Az.gap 148°	
Corr. -0.723 4M/4stn Msd 0.1		Corr. 0.350 13M/12stn Msd 0.3 1↓	
DEC 11 0732 11.6s 35.61S 179.08E 269km M=4.3	92/11097	DEC 13 0800 36.8s 38.48S 176.08E 186km M=3.9	92/11157
1.1 0.14 0.15 9		0.8 0.05 0.07 9	
Rsd 0.2s 13ph/7stn Dmin 232km Az.gap 338°		Rsd 0.4s 24ph/15stn Dmin 137km Az.gap 223°	
Corr. -0.307 14M/14stn Msd 0.2		Corr. -0.715 8M/8stn Msd 0.2 1↑	
DEC 11 1344 24.7s 40.81S 175.13E 41km M=4.0	92/11102	DEC 13 0951 00.2s 39.46S 175.45E 70km M=3.6	92/11162
0.1 0.01 0.01 2		0.2 0.01 0.02 3	
Rsd 0.2s 37ph/27stn Dmin 20km Az.gap 63°		Rsd 0.3s 32ph/25stn Dmin 22km Az.gap 94°	
Corr. -0.398 19M/16stn Msd 0.3 4↑ 4↓		Corr. 0.044 21M/18stn Msd 0.2 1↓	
Felt Paraparaumu (65) MM4 to Lower Hutt (68).			
DEC 11 1706 40.4s 35.71S 178.42E 226km M=4.0	92/11110	DEC 13 1420 11.4s 40.65S 176.01E 29km M=4.1	92/11174
0.6 0.07 0.09 5		0.1 0.01 0.01 1	
Rsd 0.1s 12ph/9stn Dmin 210km Az.gap 332°		Rsd 0.2s 36ph/26stn Dmin 22km Az.gap 128°	
Corr. -0.773 8M/8stn Msd 0.1		Corr. -0.574 9M/5stn Msd 0.1 4↑ 2↓	
DEC 12 0258 54.7s 36.01S 178.27E 181km M=3.9	92/11121	Felt lower North Island, maximum intensity MM4.	
0.4 0.03 0.05 6			
Rsd 0.0s 14ph/7stn Dmin 270km Az.gap 336°			
Corr. -0.785 7M/7stn Msd 0.2			
DEC 13 1738 59.9s 44.86S 167.36E 12km M=3.6	92/11181	DEC 13 1425 49.2s 38.30S 175.85E 186km M=3.8	92/11175
0.4 0.02 0.03 R		0.7 0.06 0.07 4	
Rsd 0.2s 25ph/17stn Dmin 69km Az.gap 215°		Rsd 0.2s 13ph/7stn Dmin 92km Az.gap 224°	
Corr. -0.816 18M/16stn Msd 0.1 1↑		Corr. -0.758 16M/15stn Msd 0.3 1↑	

DEC 13 1841	55.8s	42.00S	171.52E	12km	M=3.6	92/11183	DEC 17 0024	58.5s	38.69S	175.76E	143km	M=3.9	92/11273
	0.1	0.01	0.01	R				0.3	0.02	0.02	2		
Rsd 0.2s	21ph/11stn	Dmin 37km	Az.gap 170°				Rsd 0.2s	27ph/15stn	Dmin 51km	Az.gap 139°			
Corr. -0.305	21M/17stn	Msd 0.2	↑↓				Corr. -0.342	22M/20stn	Msd 0.2	7↑↓			
DEC 14 1356	44.5s	39.64S	174.23E	134km	M=3.8	92/11204	DEC 17 0613	30.4s	38.57S	175.51E	218km	M=3.8	92/11282
	0.3	0.01	0.02	3				0.6	0.04	0.04	4		
Rsd 0.3s	41ph/23stn	Dmin 42km	Az.gap 96°				Rsd 0.2s	14ph/8stn	Dmin 54km	Az.gap 161°			
Corr. -0.117	15M/13stn	Msd 0.2	1↓				Corr. -0.118	15M/13stn	Msd 0.3	1↑			
DEC 14 1403	07.5s	39.97S	174.62E	100km	M=4.0	92/11205	DEC 17 0802	53.5s	36.67S	176.92E	233km	M=3.8	92/11283
	0.2	0.01	0.01	2				0.3	0.03	0.06	2		
Rsd 0.2s	38ph/22stn	Dmin 32km	Az.gap 79°				Rsd 0.1s	10ph/5stn	Dmin 177km	Az.gap 313°			
Corr. -0.020	16M/12stn	Msd 0.2	1↑				Corr. -0.633	8M/8stn	Msd 0.1				
DEC 14 1912	55.3s	34.15S	179.51W	243km	M=6.7	92/11213	DEC 18 0353	26.2s	36.51S	177.64E	206km	M=3.8	92/11304
	0.7	0.06	0.06	12				0.2	0.02	0.03	2		
Rsd 0.1s	17ph/15stn	Dmin 479km	Az.gap 313°				Rsd 0.1s	13ph/9stn	Dmin 200km	Az.gap 319°			
Corr. 0.738	9M/5stn	Msd 0.4	1↑				Corr. -0.547	7M/7stn	Msd 0.3				
Felt Gisborne (44,45), Hawkes Bay (52,60) and Wellington (68), maximum intensity MM4.													
DEC 15 0333	15.8s	38.18S	175.96E	182km	M=3.6	92/11224	DEC 18 1615	37.9s	37.50S	177.07E	250km	M=3.6	92/11317
	0.5	0.10	0.15	17				0.2	0.07	0.10	5		
Rsd 0.1s	9ph/7stn	Dmin 278km	Az.gap 344°				Rsd 0.0s	11ph/9stn	Dmin 151km	Az.gap 297°			
Corr. -0.922	3M/3stn	Msd 0.2					Corr. -0.996	3M/3stn	Msd 0.2				
DEC 15 0817	12.5s	42.78S	171.99E	5km	M=3.6	92/11226	DEC 18 2038	34.1s	39.60S	174.26E	257km	M=4.0	92/11320
	0.1	0.01	0.01	R				0.3	0.02	0.03	3		
Rsd 0.2s	21ph/12stn	Dmin 23km	Az.gap 100°				Rsd 0.2s	28ph/17stn	Dmin 62km	Az.gap 192°			
Corr. -0.210	29M/22stn	Msd 0.2	1↓				Corr. -0.283	21M/19stn	Msd 0.3	1↓			
DEC 16 0737	08.2s	45.04S	167.53E	109km	M=3.7	92/11250	DEC 19 1828	28.5s	37.73S	177.34E	71km	M=3.5	92/11343
	0.5	0.02	0.04	4				0.2	0.01	0.01	3		
Rsd 0.2s	15ph/8stn	Dmin 52km	Az.gap 185°				Rsd 0.2s	18ph/13stn	Dmin 62km	Az.gap 133°			
Corr. -0.203	10M/8stn	Msd 0.2	1↑ 2↓				Corr. 0.193	14M/11stn	Msd 0.3	1↑ 3↓			
DEC 16 1021	22.3s	35.39S	179.41E	236km	M=4.1	92/11255	DEC 20 0231	58.1s	38.23S	175.58E	127km	M=3.5	92/11348
	0.3	0.05	0.04	7				0.1	0.01	0.04	4		
Rsd 0.1s	13ph/7stn	Dmin 265km	Az.gap 328°				Rsd 0.1s	12ph/4stn	Dmin 134km	Az.gap 270°			
Corr. 0.113	15M/14stn	Msd 0.2					Corr. -0.906	2M/2stn	Msd 0.2	1↑			
DEC 16 1116	56.7s	39.44S	174.58E	250km	M=3.8	92/11257	DEC 20 1345	21.2s	47.75S	165.19E	33km	M=4.5	92/11355
	0.4	0.02	0.03	3				0.8	0.05	0.09	R		
Rsd 0.2s	26ph/18stn	Dmin 50km	Az.gap 204°				Rsd 0.3s	18ph/14stn	Dmin 280km	Az.gap 330°			
Corr. -0.277	13M/13stn	Msd 0.2	1↑				Corr. -0.146	21M/16stn	Msd 0.2				
DEC 16 2314	57.2s	38.85S	175.44E	236km	M=3.6	92/11272	DEC 21 0118	09.7s	37.25S	176.26E	200km	M=3.8	92/11369
	0.3	0.02	0.03	2				1.0	0.13	0.08	6		
Rsd 0.1s	18ph/11stn	Dmin 39km	Az.gap 215°				Rsd 0.3s	8ph/5stn	Dmin 135km	Az.gap 254°			
Corr. -0.555	11M/11stn	Msd 0.2	2↑ 1↓				Corr. -0.621	11M/11stn	Msd 0.2				

DEC 21 0754	31.2s	40.20S	173.59E	211km	M=4.5	92/11380	DEC 28 0309	21.8s	36.73S	176.86E	289km	M=3.6	92/11580
Rsd 0.2s	0.4	0.02	0.02	3			Rsd 0.1s	0.3	0.03	0.04	3		
Corr. -0.132	38ph/27stn	Dmin 73km	Az.gap 145°				Corr. -0.660	13ph/9stn	Dmin 171km	Az.gap 292°			
	27M/24stn	Msd 0.2	7↑ 3↓					7M/7stn	Msd 0.2				
DEC 21 1915	32.6s	42.25S	173.52E	39km	M=3.5	92/11385	DEC 28 0548	16.9s	36.63S	177.42E	197km	M=4.7	92/11584
Rsd 0.3s	0.1	0.01	0.01	3			Rsd 0.1s	0.6	0.05	0.04	6		
Corr. -0.426	33ph/21stn	Dmin 19km	Az.gap 116°				Corr. 0.777	11ph/8stn	Dmin 133km	Az.gap 239°			
	15M/12stn	Msd 0.2	3↑ 2↓					28M/23stn	Msd 0.2		1↓		
DEC 22 0059	44.8s	40.92S	176.09E	27km	M=4.0	92/11389	DEC 28 1511	31.1s	39.68S	173.98E	216km	M=3.6	92/11598
Rsd 0.2s	0.2	0.01	0.02	2			Rsd 0.2s	0.5	0.02	0.03	5		
Corr. -0.566	31ph/23stn	Dmin 37km	Az.gap 190°				Corr. -0.387	25ph/19stn	Dmin 83km	Az.gap 165°			
Felt Masterton (66).	37M/31stn	Msd 0.3	4↑ 3↓					14M/12stn	Msd 0.2		1↑		
DEC 22 0548	02.0s	43.00S	171.49E	5km	M=3.0	92/11400	DEC 28 2343	35.7s	38.80S	175.15E	215km	M=3.6	92/11611
Rsd 0.2s	0.1	0.01	0.01	R			Rsd 0.1s	0.3	0.01	0.06	3		
Corr. -0.475	17ph/10stn	Dmin 62km	Az.gap 109°				Corr. 0.328	17ph/11stn	Dmin 34km	Az.gap 117°			
Felt Arthur's Pass (93) MM4.	10M/8stn	Msd 0.2	1↑					13M/13stn	Msd 0.2				
DEC 22 0803	34.8s	37.11S	176.93E	183km	M=3.5	92/11407	DEC 29 0524	03.9s	39.90S	177.04E	47km	M=3.8	92/11617
Rsd 0.2s	0.6	0.06	0.05	5			Rsd 0.2s	0.2	0.01	0.02	2		
Corr. -0.479	11ph/7stn	Dmin 128km	Az.gap 285°				Corr. -0.570	38ph/26stn	Dmin 21km	Az.gap 188°			
	13M/13stn	Msd 0.2						23M/21stn	Msd 0.3	4↑ 3↓			
DEC 22 0852	17.5s	39.48S	174.28E	197km	M=4.8	92/11410	DEC 29 1615	17.7s	38.55S	178.39E	29km	M=3.7	92/11628
Rsd 0.2s	0.3	0.01	0.02	3			Rsd 0.2s	0.3	0.01	0.03	2		
Corr. -0.132	48ph/36stn	Dmin 34km	Az.gap 85°				Corr. -0.496	13ph/10stn	Dmin 32km	Az.gap 216°			
	27M/21stn	Msd 0.3	9↑ 1↓					26M/23stn	Msd 0.2	1↑ 1↓			
DEC 22 1342	41.1s	45.51S	167.03E	74km	M=3.8	92/11417	DEC 29 1740	52.4s	38.89S	175.66E	165km	M=3.7	92/11631
Rsd 0.1s	0.3	0.01	0.02	2			Rsd 0.0s	0.1	0.01	0.01	2		
Corr. 0.243	22ph/15stn	Dmin 11km	Az.gap 271°				Corr. 0.287	15ph/10stn	Dmin 108km	Az.gap 276°			
	23M/18stn	Msd 0.1	1↑ 2↓					11M/9stn	Msd 0.4	1↑			
DEC 22 1848	58.9s	35.31S	178.05E	311km	M=3.9	92/11424	DEC 30 0648	38.3s	38.82S	176.03E	106km	M=3.5	92/11645
Rsd 0.1s	0.4	0.07	0.21	6			Rsd 0.2s	0.4	0.02	0.02	3		
Corr. -0.926	9ph/8stn	Dmin 338km	Az.gap 348°				Corr. -0.498	17ph/9stn	Dmin 54km	Az.gap 129°			
	3M/3stn	Msd 0.1						13M/11stn	Msd 0.2	1↑			
DEC 23 0630	27.4s	39.38S	174.80E	215km	M=3.5	92/11434	DEC 30 1255	31.5s	38.24S	178.94E	20km	M=3.7	92/11647
Rsd 0.1s	0.2	0.01	0.02	2			Rsd 0.2s	0.3	0.01	0.02	2		
Corr. -0.172	19ph/13stn	Dmin 48km	Az.gap 189°				Corr. -0.103	8ph/4stn	Dmin 63km	Az.gap 281°			
	12M/10stn	Msd 0.2	1↑					7M/5stn	Msd 0.1	1↑			
DEC 23 1649	55.0s	37.95S	176.03E	195km	M=3.8	92/11447	DEC 31 0150	32.3s	42.88S	173.06E	33km	M=3.8	92/11655
Rsd 0.1s	0.4	0.04	0.03	3			Rsd 0.1s	0.1	0.00	0.01	R		
Corr. -0.492	16ph/13stn	Dmin 101km	Az.gap 244°				Corr. -0.245	25ph/15stn	Dmin 64km	Az.gap 149°			
	21M/19stn	Msd 0.2	1↑					9M/5stn	Msd 0.2	2↑ 1↓			
DEC 31 2132	46.4s	39.55S	176.75E	70km	M=4.1	92/11673	DEC 31 2132	46.4s	39.55S	176.75E	70km	M=4.1	92/11673
Rsd 0.2s	0.2	0.01	0.02	2			Rsd 0.2s	0.2	0.01	0.02	2		
Corr. -0.367	37ph/28stn	Dmin 6km	Az.gap 55°				Corr. -0.367	24M/21stn	Msd 0.2	3↑ 4↓			

## LISTS OF ORIGINS AND MAGNITUDE DETERMINATIONS

### HIGHER MAGNITUDE EARTHQUAKES

A chronological list of 1992 New Zealand earthquakes of  $M_L \geq 5.0$  follows. A reference number at the beginning of each entry identifies the origin with the instrumental data summary, and also with the listing of non-instrumental data (if there is any) that appears in a later section.

The letter "R" following a depth indicates that the depth was restricted to some likely value because the data did not provide sufficient constraint for the depth to be determined by calculation. Choice of the depth of restriction is usually made on the basis of the crustal phases observed or the predominant depth of shallow earthquakes in the epicentral area. (For sub-crustal earthquakes, depth restriction is seldom necessary.)

The letter "G" after a depth shows that the depth was restricted on the basis of information that could not be used by the location program, such as macroseismic information, overseas PKP observations etc.

The letter "F" following a magnitude indicates that at least one report of the earthquake being felt has been received by the Observatory.

In the following table, Rsd is as defined on page 31 and NP phases from NS recording stations have been used to determine the origins.

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
383	JAN 15	0614 57.2	38.60S	175.35E	233	5.3F	0.2	35	28
947	FEB 05	0615 53.3	39.13S	174.83E	222	5.1	0.3	49	36
1380	FEB 18	1027 11.3	39.91S	174.02E	122	5.9F	0.2	39	32
1727	MAR 02	0905 56.9	40.43S	176.60E	37	5.8F	0.2	46	41
2349	MAR 13	0630 59.6	40.26S	176.49E	57	5.0F	0.2	51	43
2459	MAR 16	2321 31.6	35.22S	178.97E	168	6.1	0.3	17	15
2617	MAR 22	0140 20.6	41.25S	177.95E	33R	5.1	0.1	23	21
2754	MAR 25	1727 31.9	37.25S	177.21E	12R	5.7F	0.2	27	21
3075	MAR 30	0702 52.4	43.05S	171.23E	5R	5.8F	0.2	14	11
3506	APR 01	2257 40.4	43.02S	171.20E	5R	5.2F	0.1	11	10
5272	MAY 16	1757 13.5	38.23S	178.37E	24	5.6F	0.2	19	17
5277	MAY 16	1804 3.5	38.27S	178.30E	21	5.2	0.1	15	13
5315	MAY 17	0106 55.9	38.25S	178.37E	18	5.2F	0.1	18	16
5856	MAY 27	2230 36.1	41.61S	173.65E	84	6.7F	0.1	31	25
6640	JUN 21	1743 9.4	37.58S	176.87E	5R	6.1F	0.3	28	24
6644	JUN 21	1747 39.3	37.70S	176.81E	5R	5.6F	0.2	24	19
8262	JUL 28	0152 51.2	36.88S	179.24W	33R	5.1	0.4	16	14
8330	JUL 31	1411 23.6	40.59S	176.14E	36	5.2F	0.2	41	35
8450	AUG 05	0746 27.2	35.95S	179.84W	98R	5.0	0.2	18	15
8539	AUG 09	2358 0.1	37.78S	176.20E	296	5.3	0.3	26	22
8550	AUG 10	1039 35.4	40.49S	173.19E	237	5.1	0.2	31	26
9536	SEP 16	0540 24.3	38.01S	176.13E	189	5.0	0.2	33	24
9912	SEP 29	0649 43.8	38.17S	176.18E	168	5.3	0.2	38	27
10453	OCT 20	1306 50.3	39.39S	174.50E	190	5.0	0.2	39	28
10863	NOV 04	1401 54.2	36.43S	178.08E	181	5.1	0.4	21	15
11670	NOV 27	1559 12.5	43.17S	170.71E	6	5.3F	0.1	27	19
12124	DEC 12	0440 1.0	39.02S	175.22E	161	5.7F	0.2	58	38
12213	DEC 14	1912 55.3	34.15S	179.51W	243	6.7F	0.1	17	15
12558	DEC 27	0555 15.8	37.89S	176.05E	277	6.0F	0.3	43	29

## WELLINGTON AREA SEISMICITY

Because of its close station spacing and the relative ease with which stations can be reached when repairs or adjustments are necessary, the Wellington Network can be relied on to furnish enough data for determination of earthquake origins in its neighbourhood from smaller events than those needed to achieve the same accuracy in other parts of the country. The following list includes all earthquakes of magnitude ( $M_L$ ) 2.0 or more in the area surrounding Wellington, and includes the earthquakes of magnitude 3.5 or more within the area, which were listed on earlier pages.

The location of earthquakes in the neighbourhood of Wellington is no longer performed separately from the location of regional earthquakes as was done in the past.

The old practice sometimes resulted in earthquakes having two listed origins, one arrived at from use of National Network data and a regional velocity model, and the other from Wellington Network data and a local model. In current practice the local model is merged into the regional model. A map of these epicentres and a cross-section showing their distribution in depth appears in the final section of this Report.

In the following table, Rsd is as defined on page 31 and NP phases from NS recording stations have been used to determine the origins.

The regional velocity model and its boundaries are listed in the table on page 26.

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
009	JAN 01	0831 32.1	40.67S	175.49E	27	3.2	0.2	20	16
010	JAN 01	0833 1.9	40.62S	175.48E	28	2.1	0.2	11	8
012	JAN 01	0957 37.2	40.68S	175.50E	28	3.2	0.2	21	16
015	JAN 01	1222 8.1	41.34S	173.62E	62	2.4	0.2	9	7
017	JAN 01	1410 38.6	41.18S	173.71E	63	2.3	0.2	10	7
021	JAN 01	1951 48.3	40.68S	174.76E	20	2.1	0.1	10	7
022	JAN 01	2257 34.3	40.87S	175.92E	30	2.4	0.2	11	8
024	JAN 02	0037 29.1	41.00S	174.94E	47	2.1	0.1	8	6
035	JAN 02	1445 23.7	41.04S	174.47E	16	2.9	0.3	17	14
037	JAN 02	1641 55.7	41.63S	174.08E	18	2.2	0.1	11	8
042	JAN 02	2132 2.6	40.67S	174.75E	19	2.1	0.0	9	6
045	JAN 03	0137 3.1	41.69S	174.28E	30	2.3	0.2	12	9
047	JAN 03	0242 43.0	40.53S	174.19E	59	2.2	0.2	7	5
051	JAN 03	0855 50.1	41.12S	175.36E	27	2.3	0.1	12	9
052	JAN 03	0910 2.8	40.80S	174.59E	23	2.0	0.0	9	7
069	JAN 04	0255 50.6	41.10S	173.92E	57	2.1	0.1	9	6
070	JAN 04	0256 29.4	40.54S	174.02E	89	2.3	0.2	11	8
072	JAN 04	0536 8.8	41.13S	174.57E	57	2.6	0.1	15	11
074	JAN 04	0739 8.8	40.82S	175.31E	28	2.0	0.1	11	8
076	JAN 04	0903 58.1	40.66S	175.96E	41	2.5	0.3	13	10
085	JAN 04	1555 19.2	41.84S	174.10E	23	2.0	0.2	12	10
087	JAN 04	1825 2.9	41.90S	173.79E	29	2.2	0.2	8	7
090	JAN 04	2020 32.7	40.90S	175.99E	39	3.1	0.2	14	12
096	JAN 05	0207 36.7	40.56S	174.84E	28	2.1	0.1	9	7
110	JAN 05	1522 8.6	41.11S	174.64E	31	2.2	0.1	13	10

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
111	JAN 05	1522 27.9	41.14S	173.51E	86	2.6	0.2	16	7
113	JAN 05	1603 35.7	40.97S	175.49E	25	2.1	0.1	11	9
120	JAN 05	2333 48.4	41.21S	174.58E	53	2.0	0.1	8	6
123	JAN 06	0123 47.1	41.40S	174.91E	23	2.1	0.1	15	11
125	JAN 06	0728 59.0	40.89S	175.18E	35	2.2	0.2	11	9
136	JAN 06	1909 26.9	41.34S	174.35E	62	2.5	0.1	18	12
142	JAN 07	0115 55.6	40.92S	174.66E	14	2.1	0.1	11	6
158	JAN 07	1315 7.3	40.61S	174.42E	68	2.4	0.1	10	6
164	JAN 07	1651 23.2	40.96S	174.52E	32	2.5	0.2	17	11
166	JAN 07	1902 57.1	41.02S	174.74E	56	2.6	0.1	16	12
168	JAN 07	2042 18.8	41.41S	175.34E	17	2.0	0.2	12	9
173	JAN 07	2218 24.4	40.59S	175.74E	51	2.3	0.1	9	7
174	JAN 07	2308 39.0	40.50S	174.26E	86	2.4	0.1	8	7
181	JAN 08	0630 12.2	41.78S	174.51E	31	2.4	0.1	10	7
190	JAN 08	1552 26.3	40.62S	174.40E	72	2.3	0.1	11	8
200	JAN 08	2157 22.7	40.89S	175.24E	22	2.0	0.1	11	9
203	JAN 09	0213 35.7	41.39S	175.91E	9	2.7	0.3	14	11
211	JAN 09	0824 17.9	40.89S	173.95E	83	2.9	0.3	23	14
216	JAN 09	0955 59.9	40.96S	175.60E	27	3.2	0.2	19	13
217	JAN 09	1043 34.5	41.65S	174.34E	22	2.0	0.4	9	6
227	JAN 09	1951 5.0	41.68S	174.92E	29	2.0	0.1	7	5
234	JAN 10	0302 9.0	41.56S	174.93E	33	2.3	0.2	13	10
242	JAN 10	1151 15.9	40.99S	174.73E	56	2.0	0.1	9	7
249	JAN 10	1633 28.9	40.89S	175.29E	25	2.0	0.1	15	11
258	JAN 10	2321 36.4	41.09S	174.77E	32	2.2	0.1	15	11
271	JAN 11	0433 49.3	40.92S	174.71E	17	2.0	0.1	10	6
273	JAN 11	0543 6.4	41.79S	174.37E	50	2.2	0.1	14	12
274	JAN 11	0809 53.0	40.58S	175.07E	12R	2.0	0.2	12	7
284	JAN 11	1525 47.8	41.46S	173.60E	100	2.4	0.0	9	7
285	JAN 11	1641 49.3	41.03S	174.72E	33	2.6	0.1	19	13
288	JAN 11	1755 19.6	40.68S	175.46E	27	2.3	0.2	15	11
291	JAN 11	1932 58.2	40.58S	174.11E	55	2.2	0.3	11	7
305	JAN 12	1028 10.1	41.62S	174.68E	28	2.2	0.2	14	11
307	JAN 12	1319 23.4	40.77S	175.68E	26	2.8	0.2	14	11
308	JAN 12	1423 22.4	40.81S	174.39E	52	2.6	0.2	16	10
310	JAN 12	1532 43.7	40.61S	175.88E	31	2.3	0.2	11	7
312	JAN 12	2037 25.9	40.93S	175.69E	25	3.4	0.2	18	14
318	JAN 13	0247 32.7	41.05S	174.04E	73	2.6	0.2	14	9
330	JAN 13	1007 3.2	41.23S	175.22E	23	2.4	0.1	15	12
341	JAN 13	1707 45.0	40.97S	175.64E	26	2.3	0.1	13	10
348	JAN 13	2124 10.8	41.29S	175.76E	21	2.6	0.2	13	10
352	JAN 14	0212 2.8	40.97S	175.61E	23	2.2	0.2	12	9
357	JAN 14	1252 19.2	41.00S	174.79E	32	2.2	0.1	11	8
358	JAN 14	1257 19.0	41.59S	174.65E	33	2.1	0.1	7	6
362	JAN 14	1627 9.6	40.53S	174.82E	19	2.3	0.2	8	5

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
382	JAN 15	0510 45.6	40.51S	174.84E	19	2.4	0.2	9	6
384	JAN 15	0850 8.1	40.80S	174.76E	40	2.3	0.1	10	8
394	JAN 15	1912 13.0	40.97S	175.46E	28	2.0	0.1	10	7
406	JAN 16	0606 34.0	41.04S	174.12E	55	2.0	0.1	8	6
410	JAN 16	1300 19.7	40.99S	175.96E	34	2.4	0.2	11	9
413	JAN 16	1433 24.7	41.38S	174.19E	65	2.4	0.1	12	10
416	JAN 16	1616 34.3	40.75S	174.95E	36	2.2	0.1	10	7
427	JAN 16	1907 50.1	41.59S	174.36E	34	2.4	0.2	11	8
438	JAN 17	0359 6.4	40.54S	174.83E	21	2.1	0.2	8	5
439	JAN 17	0448 49.7	41.82S	173.87E	52	2.2	0.1	6	4
442	JAN 17	0800 4.1	41.12S	174.60E	35	2.0	0.1	13	10
447	JAN 17	1244 55.6	41.22S	175.29E	24	2.0	0.1	15	9
456	JAN 17	2123 26.8	41.81S	174.57E	27	2.3	0.3	13	11
457	JAN 17	2201 55.9	40.82S	173.82E	105	2.9	0.1	12	10
460	JAN 18	0102 43.5	41.60S	174.65E	33	2.1	0.1	11	8
464	JAN 18	0258 10.6	40.75S	175.03E	35	3.0	0.2	15	11
469	JAN 18	0722 31.7	41.11S	174.11E	47	2.3	0.1	10	7
472	JAN 18	0816 41.3	40.60S	174.49E	78	3.0	0.3	18	14
475	JAN 18	1050 44.9	41.19S	173.85E	57	2.5	0.2	11	7
482	JAN 18	1835 15.1	40.62S	175.02E	12R	2.1	0.2	8	6
491	JAN 19	0203 10.7	40.69S	175.43E	23	2.5	0.2	14	11
492	JAN 19	0208 34.0	41.37S	174.97E	26	2.0	0.0	10	7
493	JAN 19	0342 7.0	40.99S	174.09E	50	2.6	0.4	20	13
506	JAN 19	1428 7.4	41.78S	174.56E	30	2.2	0.2	10	8
508	JAN 19	1557 1.1	41.33S	174.98E	26	2.1	0.1	13	10
516	JAN 20	0000 0.4	41.67S	174.59E	23	2.0	0.1	7	4
518	JAN 20	0124 59.3	41.65S	174.61E	29	2.0	0.3	11	8
519	JAN 20	0411 52.4	40.53S	174.67E	27	2.7	0.3	13	10
527	JAN 20	0920 5.8	41.01S	175.59E	28	2.0	0.1	12	8
528	JAN 20	0935 29.4	41.67S	174.26E	11	2.3	0.2	10	9
533	JAN 20	1207 49.6	41.14S	175.37E	26	2.0	0.1	12	9
539	JAN 20	1613 35.8	41.05S	173.83E	96	2.4	0.3	11	8
553	JAN 21	0253 25.7	40.98S	175.58E	26	2.2	0.1	13	8
560	JAN 21	0913 9.9	41.17S	175.06E	29	2.4	0.2	18	12
565	JAN 21	1809 50.8	41.68S	174.60E	29	2.4	0.2	15	13
571	JAN 21	2257 58.4	41.06S	174.39E	63	2.2	0.1	10	7
581	JAN 22	1129 4.6	40.99S	175.59E	24	2.3	0.2	16	12
603	JAN 23	0426 57.0	41.18S	174.92E	31	2.0	0.1	14	10
606	JAN 23	0620 52.8	41.09S	174.70E	56	2.2	0.1	11	9
629	JAN 24	0133 49.8	41.08S	175.11E	27	2.2	0.2	15	10
632	JAN 24	0702 22.4	40.90S	174.03E	58	2.2	0.2	9	6
633	JAN 24	0830 22.7	41.37S	174.38E	60	2.3	0.1	10	7
637	JAN 24	1433 43.0	41.41S	175.72E	26	2.5	0.1	14	9
639	JAN 24	1643 3.2	41.88S	174.14E	20	2.8	0.3	25	19
642	JAN 24	1840 4.5	40.70S	174.34E	48	3.0	0.2	17	12

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
646	JAN 24	2213 55.8	41.20S	175.26E	31	2.4	0.1	14	9
647	JAN 25	0054 3.7	40.67S	174.50E	44	2.1	0.1	7	4
655	JAN 25	0533 41.4	41.87S	174.01E	38	2.4	0.2	18	11
657	JAN 25	0657 59.4	41.84S	174.12E	14	2.4	0.2	12	9
666	JAN 25	2151 8.5	40.75S	174.81E	38	2.3	0.1	11	8
670	JAN 26	0104 7.5	40.52S	175.69E	33	3.0	0.2	15	12
671	JAN 26	0110 16.6	41.49S	174.93E	41	2.1	0.0	8	6
673	JAN 26	0404 31.3	41.25S	175.33E	28	2.3	0.1	10	8
674	JAN 26	0407 37.0	41.08S	174.73E	52	2.1	0.1	11	9
679	JAN 26	0752 45.5	41.50S	173.63E	53	2.5	0.2	19	12
683	JAN 26	1243 14.7	41.31S	174.51E	53	2.1	0.1	8	5
684	JAN 26	1509 26.3	41.90S	174.64E	33	2.3	0.1	12	7
685	JAN 26	1509 53.3	41.81S	174.04E	40	2.8	0.2	22	17
688	JAN 26	1737 50.0	40.54S	174.75E	58	3.5	0.2	29	18
690	JAN 26	2035 56.2	40.60S	175.58E	29	3.0	0.2	14	10
691	JAN 26	2225 29.1	41.64S	174.03E	40	2.3	0.2	11	9
699	JAN 27	0934 7.6	41.78S	174.36E	27	2.4	0.2	14	10
700	JAN 27	0937 32.6	41.78S	174.37E	27	3.2	0.3	24	16
713	JAN 27	1555 30.4	41.88S	174.80E	61	2.1	0.1	8	6
717	JAN 27	2258 4.5	41.54S	174.61E	28	2.3	0.2	14	11
721	JAN 28	0129 15.5	41.85S	174.29E	12R	2.4	0.3	14	12
729	JAN 28	0624 45.5	40.65S	174.64E	37	2.5	0.1	12	7
735	JAN 28	0833 24.2	41.64S	174.59E	28	2.4	0.1	11	9
737	JAN 28	0947 34.2	40.58S	174.62E	42	2.0	0.2	12	7
738	JAN 28	1246 54.6	41.10S	174.72E	31	3.0	0.1	19	13
746	JAN 28	2026 50.5	40.56S	175.71E	28	2.1	0.2	7	5
764	JAN 29	1324 8.2	41.66S	174.96E	33	2.2	0.2	10	8
765	JAN 29	1337 52.9	41.62S	174.26E	24	2.2	0.2	9	7
767	JAN 29	1405 19.0	41.62S	174.62E	29	2.1	0.1	8	5
768	JAN 29	1530 56.1	40.84S	174.69E	15	2.1	0.2	9	6
769	JAN 29	1547 13.8	41.61S	174.00E	32	2.2	0.1	11	6
780	JAN 30	0151 23.9	41.63S	173.84E	35	2.4	0.3	12	8
786	JAN 30	0437 6.8	41.41S	174.89E	28	2.7	0.1	21	13
803	JAN 30	1757 48.7	41.74S	174.33E	11	2.5	0.3	25	16
812	JAN 30	2349 19.4	41.30S	175.17E	23	2.8	0.2	18	13
813	JAN 31	0015 15.2	41.06S	174.17E	55	2.0	0.1	10	7
827	JAN 31	0957 11.6	40.66S	175.39E	30	2.6	0.2	15	13
834	JAN 31	1424 20.1	40.51S	173.69E	132	3.0	0.2	13	9
839	JAN 31	1653 39.3	41.74S	174.50E	53	2.2	0.1	11	9
847	JAN 31	2233 17.1	40.88S	174.92E	39	2.1	0.1	8	6
850	FEB 01	0519 26.9	41.17S	174.88E	15	2.4	0.3	14	10
857	FEB 01	1019 51.6	41.08S	175.21E	32	2.3	0.2	13	9
858	FEB 01	1123 49.5	41.37S	174.39E	34	2.4	0.2	13	10
862	FEB 01	1335 10.7	41.18S	174.29E	41	2.4	0.2	15	11
864	FEB 01	1558 35.4	40.64S	174.57E	70	2.8	0.1	15	11

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867	FEB 01	1848 21.2	40.81S	173.99E	64	3.2	0.3	25	18
882	FEB 02	0813 58.2	41.70S	174.19E	19	2.2	0.1	5	4
884	FEB 02	0842 32.1	41.64S	174.58E	26	2.3	0.0	7	5
892	FEB 02	1714 33.5	41.66S	174.26E	12R	2.3	0.3	13	10
898	FEB 02	2135 39.0	41.63S	174.16E	31	2.5	0.1	12	9
899	FEB 02	2224 24.8	41.49S	174.67E	51	2.5	0.2	17	13
911	FEB 03	1423 47.6	40.99S	173.50E	5R	2.5	0.3	14	11
917	FEB 03	2016 31.0	41.78S	173.96E	11	2.9	0.4	18	16
918	FEB 03	2036 4.0	41.63S	173.67E	48	4.0	0.3	27	21
920	FEB 04	0048 15.3	41.20S	173.91E	56	2.4	0.1	11	7
925	FEB 04	0602 20.6	41.49S	174.39E	32	2.6	0.2	13	11
927	FEB 04	0829 3.1	41.28S	175.30E	29	2.3	0.1	14	9
935	FEB 04	1556 44.7	40.79S	175.04E	31	2.3	0.2	15	11
946	FEB 05	0555 37.0	40.82S	175.10E	34	2.7	0.2	12	8
951	FEB 05	0949 10.1	40.80S	175.05E	54	2.1	0.1	8	6
953	FEB 05	1222 15.7	40.93S	175.51E	23	2.6	0.1	10	7
955	FEB 05	1250 51.8	40.55S	175.97E	31	2.3	0.2	9	6
958	FEB 05	1442 4.0	40.93S	175.52E	23	2.2	0.1	11	7
964	FEB 05	1918 12.3	41.70S	174.49E	30	2.0	0.1	11	7
967	FEB 05	2338 27.1	40.67S	174.65E	84	2.5	0.3	9	7
973	FEB 06	0420 9.2	41.38S	173.71E	62	2.3	0.2	10	6
979	FEB 06	0550 16.8	41.43S	174.25E	63	2.5	0.0	7	4
981	FEB 06	0641 52.3	41.09S	175.43E	9	2.1	0.2	14	9
982	FEB 06	0716 45.2	40.74S	174.39E	61	3.0	0.2	21	15
987	FEB 06	1052 56.3	40.52S	174.28E	27	2.5	0.1	9	7
989	FEB 06	1314 34.7	41.64S	174.59E	30	2.1	0.1	7	5
993	FEB 06	1633 9.7	41.41S	175.37E	18	2.4	0.1	15	10
998	FEB 06	1920 52.2	41.29S	173.88E	56	2.6	0.1	14	9
1000	FEB 06	2128 49.8	41.14S	174.00E	52	2.5	0.2	16	11
1003	FEB 06	2218 50.9	41.01S	174.58E	53	2.1	0.1	8	6
1028	FEB 07	0836 29.4	41.33S	173.85E	61	2.1	0.2	10	7
1034	FEB 07	1407 19.0	40.84S	174.74E	5R	3.4	0.1	28	21
1036	FEB 07	1704 11.0	41.34S	174.84E	29	2.5	0.1	18	12
1040	FEB 07	1813 52.1	41.20S	173.67E	75	2.6	0.2	13	9
1045	FEB 07	2026 12.3	41.63S	173.51E	76	2.0	0.0	9	6
1050	FEB 07	2343 13.7	40.97S	175.94E	22	2.0	0.1	12	8
1052	FEB 08	0138 32.9	41.34S	175.59E	20	2.2	0.3	12	9
1053	FEB 08	0226 56.1	40.52S	173.83E	110	3.3	0.3	30	19
1055	FEB 08	0254 28.0	40.69S	174.49E	52	2.2	0.3	14	8
1064	FEB 08	1642 36.9	40.71S	175.13E	33	2.0	0.1	14	9
1067	FEB 08	2019 11.0	40.89S	175.23E	25	2.1	0.3	15	10
1068	FEB 08	2128 6.4	40.88S	174.81E	47	2.2	0.1	9	5
1116	FEB 09	0446 36.4	40.86S	174.41E	68	2.3	0.1	12	7
1123	FEB 09	0818 59.4	40.74S	174.54E	71	2.9	0.2	28	21
1137	FEB 09	1258 18.3	40.93S	175.50E	20	2.8	0.2	22	16

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1139	FEB 09	1306 2.9	40.93S	175.47E	15	2.0	0.2	14	10
1147	FEB 09	1954 14.2	41.52S	174.56E	18	2.2	0.1	9	7
1151	FEB 10	0125 3.7	40.80S	175.10E	34	2.0	0.2	13	9
1152	FEB 10	0355 5.7	40.64S	173.79E	89	2.4	0.3	9	5
1164	FEB 10	1247 44.3	40.78S	174.60E	27	2.6	0.2	16	11
1168	FEB 10	1401 48.1	41.00S	174.50E	5R	2.0	0.1	10	5
1171	FEB 10	1712 29.8	41.76S	174.54E	32	2.6	0.2	13	10
1173	FEB 10	1739 31.6	41.03S	174.73E	63	2.4	0.1	14	10
1174	FEB 10	1834 16.9	40.61S	175.71E	30	2.3	0.2	12	8
1177	FEB 10	2213 37.9	40.70S	175.32E	28	2.2	0.2	10	7
1182	FEB 11	0308 34.3	40.94S	175.47E	12	2.6	0.4	15	11
1184	FEB 11	0446 54.1	41.40S	175.02E	26	2.5	0.1	16	11
1195	FEB 11	1308 50.0	40.68S	174.04E	63	2.3	0.2	8	6
1201	FEB 11	1649 16.5	40.55S	174.41E	75	2.2	0.0	6	4
1208	FEB 11	2238 26.1	41.85S	174.54E	29	2.8	0.2	25	15
1209	FEB 11	2241 54.7	40.93S	174.35E	47	2.4	0.4	14	8
1210	FEB 11	2317 22.5	40.64S	175.49E	29	2.3	0.2	11	7
1211	FEB 11	2342 34.2	40.52S	175.94E	50	2.6	0.2	16	12
1217	FEB 12	0444 34.3	41.47S	174.38E	21	2.1	0.2	12	9
1223	FEB 12	0751 9.4	40.72S	175.30E	28	2.5	0.2	13	11
1241	FEB 12	2325 46.3	40.95S	175.65E	25	2.2	0.1	14	10
1245	FEB 13	0320 54.8	41.75S	175.51E	32	2.6	0.1	15	10
1250	FEB 13	0512 6.4	41.03S	174.67E	61	2.5	0.1	14	10
1283	FEB 14	0518 43.2	41.36S	174.21E	37	2.4	0.3	8	5
1287	FEB 14	1154 24.0	41.27S	175.32E	28	2.2	0.1	10	7
1292	FEB 14	1939 32.4	41.01S	175.37E	28	2.9	0.2	19	13
1294	FEB 14	1956 12.0	40.66S	174.44E	56	2.1	0.2	7	6
1301	FEB 14	2347 53.4	40.92S	173.87E	84	2.4	0.0	8	5
1316	FEB 15	1827 43.9	41.03S	175.36E	28	2.0	0.1	8	6
1324	FEB 16	0447 0.2	40.52S	175.13E	32	2.3	0.2	11	7
1329	FEB 16	1111 5.4	41.31S	175.17E	22	2.0	0.1	11	8
1340	FEB 16	2355 45.6	41.51S	175.72E	33R	2.2	0.4	5	4
1343	FEB 17	0355 25.6	40.87S	175.58E	23	2.0	0.2	10	8
1347	FEB 17	0728 27.2	40.90S	174.77E	56	2.0	0.0	8	6
1348	FEB 17	0749 51.3	41.01S	175.54E	22	2.0	0.1	16	10
1351	FEB 17	0949 28.1	40.81S	175.40E	28	2.5	0.1	14	9
1359	FEB 17	1108 23.5	40.50S	174.04E	83	2.4	0.2	8	6
1365	FEB 17	1355 18.7	40.72S	175.36E	29	2.0	0.1	13	9
1371	FEB 17	2117 18.3	40.51S	175.19E	5R	2.7	0.3	21	14
1375	FEB 18	0030 18.5	41.52S	174.16E	19	2.0	0.2	8	4
1376	FEB 18	0450 33.5	41.81S	174.78E	33	2.8	0.1	10	7
1382	FEB 18	1048 25.5	41.01S	175.35E	25	2.5	0.2	13	10
1385	FEB 18	1327 40.0	40.66S	174.90E	13	2.6	0.3	13	8
1386	FEB 18	1416 36.5	40.52S	174.92E	25	2.0	0.2	8	5
1389	FEB 18	1645 57.0	40.54S	173.66E	112	3.0	0.3	20	11

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1390	FEB 18	1719 57.7	40.87S	174.99E	50	2.2	0.1	10	7
1395	FEB 19	0357 54.5	41.30S	175.17E	23	2.5	0.1	16	13
1408	FEB 19	1851 4.4	41.73S	174.51E	27	2.1	0.2	10	8
1410	FEB 19	2033 33.7	40.98S	174.36E	64	2.7	0.1	18	11
1413	FEB 19	2209 26.5	40.72S	174.54E	63	2.8	0.2	29	16
1418	FEB 20	0145 29.4	40.75S	174.45E	74	4.1	0.2	38	26
1419	FEB 20	0208 8.4	40.68S	174.37E	56	2.4	0.2	13	7
1438	FEB 20	2339 29.7	40.51S	174.43E	50	2.3	0.1	11	6
1444	FEB 21	0350 28.1	40.99S	175.55E	24	2.5	0.1	15	11
1446	FEB 21	0723 17.2	41.53S	175.04E	25	3.1	0.1	21	15
1451	FEB 21	1032 15.9	40.91S	175.86E	42	2.3	0.2	13	9
1452	FEB 21	1305 52.8	41.18S	173.87E	59	2.2	0.1	10	7
1453	FEB 21	1412 15.3	41.03S	174.02E	54	2.5	0.3	12	8
1458	FEB 21	2107 41.3	40.92S	175.68E	24	2.3	0.1	16	12
1463	FEB 22	0114 47.8	40.84S	174.63E	40	2.0	0.1	10	8
1474	FEB 22	0812 15.3	40.80S	175.51E	26	2.1	0.1	13	8
1488	FEB 22	2251 48.1	41.04S	175.49E	5R	2.8	0.2	21	17
1493	FEB 23	0801 27.7	40.59S	174.36E	11	2.2	0.2	9	5
1496	FEB 23	1243 34.6	40.90S	175.16E	32	3.0	0.2	19	14
1498	FEB 23	1313 22.4	40.90S	175.16E	32	2.4	0.1	16	11
1501	FEB 23	1759 24.4	40.89S	175.76E	30	2.3	0.1	10	7
1513	FEB 24	0847 40.1	40.58S	175.50E	27	2.6	0.2	19	15
1514	FEB 24	0907 38.5	40.98S	174.60E	56	2.4	0.1	10	8
1515	FEB 24	1048 53.4	40.85S	174.90E	35	2.1	0.1	11	9
1517	FEB 24	1211 46.5	40.61S	175.49E	31	2.0	0.1	7	5
1519	FEB 24	1305 27.4	41.49S	173.50E	57	2.5	0.2	11	7
1520	FEB 24	1519 8.1	40.89S	175.43E	24	2.6	0.1	16	11
1521	FEB 24	1538 3.6	40.91S	175.42E	25	2.2	0.1	12	8
1529	FEB 24	2159 18.8	41.54S	174.54E	19	2.6	0.1	19	14
1530	FEB 24	2233 15.2	41.10S	174.71E	32	2.7	0.1	19	13
1541	FEB 25	0712 41.0	41.67S	174.53E	30	2.1	0.2	9	8
1542	FEB 25	0838 14.7	40.98S	175.31E	18	2.3	0.2	15	11
1543	FEB 25	0851 21.4	41.39S	173.78E	73	2.3	0.1	5	4
1549	FEB 25	1124 9.4	41.11S	173.99E	55	2.6	0.1	13	8
1550	FEB 25	1145 30.8	40.82S	175.55E	5R	2.8	0.3	19	16
1571	FEB 26	0346 36.5	40.92S	174.72E	61	2.4	0.2	16	11
1583	FEB 26	1230 7.0	41.39S	173.81E	60	2.2	0.1	8	5
1587	FEB 26	1733 21.4	41.09S	175.38E	28	2.0	0.1	12	9
1616	FEB 28	0101 4.8	41.57S	174.00E	15	2.3	0.2	9	8
1620	FEB 28	0550 57.8	40.67S	175.51E	28	3.1	0.2	22	18
1625	FEB 28	0825 16.0	41.23S	174.62E	29	2.2	0.1	14	10
1640	FEB 28	2129 58.1	41.67S	174.60E	28	2.5	0.1	10	7
1643	FEB 29	0219 41.1	41.57S	174.66E	30	2.4	0.2	12	10
1650	FEB 29	1013 18.8	40.85S	174.77E	62	2.6	0.1	15	11
1669	FEB 29	1713 46.6	40.93S	174.18E	51	2.2	0.1	14	9

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1671	FEB 29	1751 25.2	40.63S	173.62E	97	2.4	0.3	12	8
1680	MAR 01	0031 57.3	41.23S	175.18E	25	2.1	0.2	16	11
1708	MAR 01	1903 4.0	41.43S	173.52E	109	2.6	0.2	8	6
1833	MAR 02	1840 10.8	40.63S	173.68E	129	2.5	0.1	14	8
1835	MAR 02	1924 26.0	40.94S	173.69E	77	2.8	0.2	19	11
1880	MAR 03	0812 8.3	41.71S	174.49E	31	2.1	0.0	6	4
1893	MAR 03	1043 34.1	40.75S	174.15E	81	2.5	0.2	15	9
1894	MAR 03	1133 35.8	41.92S	173.92E	11	2.2	0.2	9	7
1904	MAR 03	1713 13.4	41.10S	174.89E	29	2.9	0.1	19	13
1910	MAR 03	2303 28.0	41.81S	173.87E	12R	2.2	0.3	9	8
1931	MAR 04	0613 48.4	40.70S	174.23E	48	2.1	0.2	8	5
1952	MAR 04	1123 11.0	40.95S	175.21E	42	2.0	0.1	11	8
1964	MAR 04	1735 17.1	40.58S	174.34E	73	2.3	0.2	15	9
1969	MAR 04	1802 6.3	41.67S	174.29E	5R	2.1	0.3	9	7
1978	MAR 04	2223 34.1	40.69S	175.23E	32	2.3	0.1	11	7
1981	MAR 05	0020 47.4	41.76S	174.41E	5R	2.2	0.2	6	5
1990	MAR 05	0238 17.9	41.37S	173.93E	48	2.8	0.2	23	16
1991	MAR 05	0242 46.8	41.35S	173.86E	47	2.0	0.1	8	5
2033	MAR 05	1753 2.3	40.57S	173.88E	89	2.5	0.2	13	8
2037	MAR 05	1924 49.1	40.62S	175.55E	33	2.0	0.1	8	5
2040	MAR 05	2010 5.6	41.07S	174.44E	5R	2.2	0.1	13	8
2041	MAR 05	2035 27.0	41.09S	174.47E	33	2.1	0.1	11	8
2057	MAR 06	0548 14.5	41.74S	174.42E	2	2.3	0.2	7	6
2059	MAR 06	0658 38.9	41.41S	174.85E	22	2.4	0.3	19	12
2060	MAR 06	0723 28.8	41.14S	175.24E	26	2.3	0.2	16	10
2072	MAR 06	0934 0.0	41.15S	174.45E	42	2.9	0.2	21	14
2075	MAR 06	1138 11.5	41.51S	174.10E	20	2.4	0.3	13	9
2082	MAR 06	1252 19.9	40.69S	174.18E	69	2.7	0.2	23	14
2084	MAR 06	1330 12.8	40.60S	175.14E	31	2.1	0.1	8	5
2085	MAR 06	1419 46.9	40.71S	175.92E	29	2.1	0.1	8	3
2090	MAR 06	1627 21.8	40.90S	175.36E	31	2.2	0.1	13	9
2094	MAR 06	1654 57.4	40.70S	174.96E	34	2.3	0.1	16	11
2097	MAR 06	1712 17.9	41.17S	175.06E	29	2.1	0.2	12	8
2101	MAR 06	1922 23.9	40.95S	174.78E	34	2.1	0.0	15	10
2106	MAR 06	2303 11.8	40.89S	174.90E	35	2.0	0.0	13	9
2118	MAR 07	0537 10.9	41.07S	174.72E	31	2.2	0.1	15	11
2122	MAR 07	0851 6.6	41.10S	173.88E	65	2.3	0.2	9	6
2154	MAR 07	2307 39.0	41.63S	173.62E	56	2.6	0.3	20	13
2155	MAR 07	2345 25.7	40.93S	175.69E	28	2.8	0.2	21	15
2166	MAR 08	0903 38.6	41.46S	174.12E	52	2.2	0.2	6	4
2169	MAR 08	1021 5.4	40.58S	175.09E	62	2.3	0.1	8	6
2195	MAR 09	0401 2.4	40.63S	175.49E	31	2.3	0.1	12	7
2204	MAR 09	1125 26.0	41.10S	174.89E	29	2.9	0.2	21	15
2208	MAR 09	1501 51.5	41.30S	175.17E	23	2.3	0.2	15	11
2210	MAR 09	1528 39.4	41.04S	175.38E	29	2.9	0.3	21	16

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
2221	MAR 09	2208 43.9	41.61S	173.68E	59	2.5	0.1	13	8
2234	MAR 10	0642 25.6	41.31S	175.16E	22	2.4	0.1	14	10
2240	MAR 10	0807 39.0	40.88S	174.76E	40	2.2	0.2	13	8
2253	MAR 10	1830 28.8	40.88S	174.49E	67	2.4	0.1	9	7
2255	MAR 10	1945 30.0	40.88S	176.00E	28	2.6	0.2	19	12
2258	MAR 10	2059 43.1	40.88S	176.00E	30	2.2	0.3	10	6
2260	MAR 10	2231 53.5	41.52S	174.65E	56	3.0	0.2	23	14
2267	MAR 11	0221 21.9	40.88S	176.00E	25	2.4	0.3	19	12
2272	MAR 11	0424 47.4	40.61S	175.49E	31	2.4	0.1	6	4
2276	MAR 11	0728 14.8	40.89S	176.00E	30	2.2	0.2	10	6
2283	MAR 11	1216 3.3	41.58S	174.59E	59	2.3	0.0	8	4
2288	MAR 11	1604 22.0	40.64S	174.44E	48	2.0	0.1	8	5
2303	MAR 12	0128 48.5	41.38S	174.97E	25	2.2	0.1	12	9
2307	MAR 12	0247 40.6	40.70S	174.42E	73	2.6	0.2	17	11
2316	MAR 12	1012 50.3	41.71S	174.53E	28	2.2	0.2	10	7
2318	MAR 12	1207 48.2	41.14S	174.92E	18	2.3	0.2	18	12
2329	MAR 12	1836 27.5	41.66S	174.61E	30	2.5	0.2	13	10
2336	MAR 12	2125 45.6	41.04S	174.52E	51	2.2	0.0	8	6
2339	MAR 13	0051 6.9	41.60S	174.30E	20	2.2	0.2	11	8
2340	MAR 13	0057 2.4	41.59S	174.29E	21	2.4	0.2	12	7
2342	MAR 13	0237 37.0	41.72S	174.52E	32	2.0	0.0	8	5
2345	MAR 13	0406 57.5	41.22S	173.74E	65	2.4	0.1	12	7
2385	MAR 14	0505 34.1	41.80S	174.40E	27	2.3	0.2	12	10
2388	MAR 14	0659 34.0	40.57S	174.98E	5R	2.5	0.2	15	12
2419	MAR 15	0051 48.6	41.19S	174.32E	33	2.5	0.2	13	10
2432	MAR 15	1302 23.7	41.28S	174.84E	28	2.4	0.1	16	11
2437	MAR 15	1456 41.8	40.95S	175.54E	29	2.6	0.2	19	15
2441	MAR 15	2237 42.4	41.72S	174.54E	35	2.6	0.1	9	7
2444	MAR 16	0441 15.2	41.13S	173.86E	55	2.8	0.1	8	4
2451	MAR 16	0946 56.0	41.06S	175.01E	26	2.5	0.1	8	7
2452	MAR 16	1022 26.0	40.55S	174.41E	37	2.3	0.1	6	4
2453	MAR 16	1214 31.0	41.42S	174.62E	25	2.2	0.1	9	6
2483	MAR 17	2327 41.9	40.88S	175.42E	42	3.6	0.3	32	23
2484	MAR 17	2351 59.8	41.73S	173.76E	62	2.3	0.2	7	4
2500	MAR 18	0527 10.5	41.69S	174.52E	29	2.5	0.2	10	8
2502	MAR 18	0639 44.4	41.44S	173.78E	50	3.0	0.3	18	12
2507	MAR 18	0948 25.1	40.69S	174.75E	19	2.1	0.1	7	6
2520	MAR 18	1732 33.8	41.28S	173.72E	58	2.7	0.2	7	5
2521	MAR 18	1759 52.3	40.82S	174.72E	38	2.0	0.0	8	5
2532	MAR 19	0323 14.4	41.36S	174.08E	36	2.6	0.1	15	11
2535	MAR 19	0352 44.4	40.72S	174.56E	36	2.4	0.1	14	10
2539	MAR 19	0553 57.1	41.23S	174.65E	34	2.9	0.2	24	17
2546	MAR 19	0943 25.1	40.97S	175.27E	27	2.1	0.2	13	9
2548	MAR 19	1207 47.2	41.64S	174.39E	3	2.4	0.2	18	12
2565	MAR 20	0653 50.7	41.63S	174.58E	29	2.3	0.0	8	6

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
2570	MAR 20	1127 12.1	41.42S	174.88E	32	2.6	0.1	15	10
2574	MAR 20	1549 2.5	40.97S	175.92E	32	2.2	0.2	11	8
2579	MAR 20	2033 33.9	41.00S	175.58E	27	2.2	0.2	10	8
2588	MAR 21	0536 56.5	40.55S	174.42E	73	2.5	0.1	8	6
2599	MAR 21	1302 26.2	40.61S	175.49E	30	2.7	0.2	20	14
2610	MAR 21	2205 46.2	40.77S	175.46E	26	2.2	0.2	8	6
2611	MAR 21	2211 21.8	41.05S	175.24E	29	2.2	0.2	12	9
2614	MAR 22	0033 28.8	40.86S	174.75E	11	2.0	0.2	9	7
2620	MAR 22	0323 53.7	41.27S	175.00E	25	2.5	0.1	19	13
2621	MAR 22	0502 52.4	41.74S	174.34E	34	2.3	0.2	9	7
2622	MAR 22	0507 11.8	41.23S	174.53E	22	2.4	0.2	19	13
2623	MAR 22	0513 26.7	41.18S	173.75E	72	2.2	0.1	13	7
2624	MAR 22	0539 60.0	40.59S	174.42E	14	2.3	0.1	9	7
2625	MAR 22	0601 46.9	40.71S	174.44E	68	2.4	0.2	9	7
2629	MAR 22	1310 17.1	41.71S	174.09E	22	2.3	0.2	9	6
2630	MAR 22	1315 57.9	41.31S	174.84E	28	2.3	0.1	13	10
2631	MAR 22	1418 7.2	41.65S	174.29E	11	2.1	0.2	7	5
2634	MAR 22	1456 48.0	40.59S	175.80E	32	2.4	0.2	12	9
2649	MAR 22	2349 23.6	41.76S	174.47E	25	2.1	0.2	10	7
2650	MAR 23	0031 37.3	40.92S	175.06E	33	2.9	0.1	20	14
2656	MAR 23	0455 10.6	40.63S	174.36E	9	2.1	0.2	11	7
2661	MAR 23	0853 28.8	41.13S	174.87E	44	2.0	0.1	8	6
2676	MAR 23	1745 21.5	40.54S	175.83E	31	2.3	0.2	8	4
2691	MAR 24	0653 58.1	40.91S	175.48E	24	2.4	0.1	14	10
2700	MAR 24	1140 46.4	40.68S	174.00E	56	2.4	0.1	8	4
2701	MAR 24	1259 57.1	41.41S	175.03E	27	2.2	0.1	17	12
2706	MAR 24	1433 17.3	40.74S	174.43E	48	2.7	0.2	19	13
2707	MAR 24	1500 21.5	41.01S	175.29E	26	2.1	0.1	10	6
2709	MAR 24	1508 20.6	41.85S	174.86E	33	2.8	0.1	20	13
2714	MAR 24	1728 1.2	40.67S	175.51E	28	2.8	0.2	15	15
2715	MAR 24	1728 7.8	40.69S	175.54E	28	2.9	0.3	19	13
2729	MAR 25	0733 6.5	41.11S	174.18E	41	2.5	0.2	12	9
2741	MAR 25	1245 51.0	41.39S	175.01E	28	2.1	0.1	18	11
2748	MAR 25	1504 13.6	40.73S	175.90E	24	2.7	0.4	24	18
2794	MAR 25	1907 58.9	41.46S	174.63E	53	2.3	0.1	9	7
2821	MAR 25	2213 48.6	41.01S	174.90E	48	2.2	0.0	11	8
2827	MAR 25	2302 3.9	41.71S	173.97E	32	2.2	0.3	11	7
2830	MAR 25	2342 31.1	41.62S	174.35E	33	2.2	0.2	12	9
2847	MAR 26	0238 27.4	41.63S	174.23E	5R	2.2	0.3	9	8
2861	MAR 26	0526 58.7	41.08S	174.87E	30	2.9	0.1	18	12
2870	MAR 26	0753 5.3	41.98S	174.73E	29	2.1	0.1	7	5
2876	MAR 26	0849 35.7	41.83S	173.92E	12R	2.0	0.2	8	6
2894	MAR 26	1300 13.5	41.03S	174.02E	55	2.1	0.1	8	5
2910	MAR 26	1410 9.5	41.20S	175.22E	19	2.2	0.3	14	9
2934	MAR 26	1937 12.8	40.80S	174.76E	16	2.5	0.3	18	11

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2945	MAR 26	2207 57.9	40.54S	174.38E	51	2.3	0.2	11	6
2989	MAR 27	1716 56.0	41.71S	174.49E	32	2.2	0.1	8	7
2992	MAR 27	2008 2.1	41.63S	173.59E	53	3.2	0.2	22	19
2993	MAR 27	2125 27.8	40.84S	174.81E	22	2.2	0.2	8	4
3006	MAR 28	0141 38.4	41.33S	175.26E	19	2.1	0.2	11	8
3022	MAR 28	0951 3.2	40.63S	175.81E	33	2.6	0.0	5	3
3046	MAR 29	1234 35.8	40.95S	174.46E	46	2.8	0.3	15	10
3052	MAR 29	1844 51.7	41.97S	174.83E	30	2.5	0.2	9	7
3074	MAR 30	0624 26.4	40.69S	174.98E	5R	2.6	0.2	17	13
3203	MAR 30	0947 3.1	40.85S	175.99E	34	2.0	0.3	10	8
3273	MAR 30	1526 49.5	41.09S	174.07E	57	3.1	0.3	27	18
3311	MAR 30	2038 32.2	41.23S	174.59E	21	2.2	0.1	10	8
3316	MAR 30	2110 5.4	40.97S	174.31E	62	4.3F	0.2	38	31
3356	MAR 31	0250 52.2	40.52S	175.65E	46	2.2	0.2	7	3
3357	MAR 31	0316 21.6	40.68S	174.99E	12	2.4	0.2	14	9
3390	MAR 31	0932 26.8	41.70S	174.93E	28	2.1	0.0	7	4
3397	MAR 31	1116 25.7	40.95S	173.69E	80	2.3	0.2	12	7
3417	MAR 31	1454 34.3	40.94S	175.55E	23	2.8	0.2	24	17
3429	MAR 31	1815 12.8	41.06S	175.47E	12	2.7	0.2	22	17
3450	APR 01	0028 33.3	40.83S	174.73E	17	2.5	0.3	10	5
3471	APR 01	0845 49.7	40.69S	174.02E	59	2.7	0.1	17	9
3472	APR 01	0929 5.2	40.73S	174.02E	66	2.8	0.1	10	6
3478	APR 01	1121 7.5	41.20S	173.95E	53	2.5	0.2	12	7
3500	APR 01	2124 32.2	41.51S	173.62E	65	3.0	0.2	26	16
3547	APR 02	0359 47.1	40.58S	174.79E	5R	2.2	0.3	8	6
3577	APR 02	1130 35.4	40.93S	175.65E	25	2.2	0.2	13	8
3589	APR 02	1611 57.9	40.63S	174.41E	47	2.7	0.2	14	9
3595	APR 02	1950 28.3	41.28S	174.53E	34	2.7	0.1	16	9
3597	APR 02	2057 11.7	40.50S	174.51E	55	2.1	0.2	9	6
3613	APR 03	0405 17.6	40.83S	175.91E	24	3.2	0.3	26	17
3687	APR 03	1738 4.0	41.19S	175.51E	19	2.1	0.1	13	8
3696	APR 03	1818 39.1	41.46S	174.35E	28	2.3	0.1	10	7
3744	APR 04	0933 58.9	40.82S	175.96E	27	3.7	0.3	24	20
3755	APR 04	1311 45.0	41.64S	174.63E	31	2.6	0.2	11	9
3759	APR 04	1403 1.3	41.72S	174.85E	30	2.6	0.2	13	10
3803	APR 05	0959 7.5	40.65S	175.88E	25	2.6	0.3	17	12
3804	APR 05	1003 57.8	40.96S	175.41E	25	2.0	0.1	9	7
3807	APR 05	1041 59.9	40.54S	174.24E	66	2.6	0.2	15	8
3840	APR 06	0220 17.2	41.41S	175.35E	37	2.1	0.1	10	7
3847	APR 06	0543 52.5	40.62S	175.48E	30	2.1	0.1	8	6
3876	APR 06	1704 3.8	40.86S	175.77E	32	2.7	0.2	19	16
3878	APR 06	1727 46.2	41.69S	174.14E	22	2.2	0.2	12	9
3881	APR 06	1956 21.8	40.75S	175.87E	22	2.6	0.3	19	13
3895	APR 07	0126 18.3	40.71S	175.95E	31	2.5	0.2	16	10
3897	APR 07	0402 10.4	40.97S	174.53E	54	2.3	0.1	8	5

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3903	APR 07	0805 5.8	41.41S	175.01E	25	2.1	0.1	12	8
3911	APR 07	1332 26.4	41.68S	173.68E	62	2.3	0.0	7	4
3926	APR 07	1922 3.8	40.67S	175.94E	30	2.4	0.2	12	8
3933	APR 07	2242 44.2	40.53S	175.46E	34	2.4	0.1	11	8
3935	APR 08	0032 4.7	40.64S	174.36E	5R	2.2	0.3	11	7
3953	APR 08	1614 22.7	40.61S	174.72E	22	2.9	0.2	23	18
3958	APR 08	2220 30.7	41.26S	174.31E	60	3.8	0.1	37	24
3964	APR 09	0250 1.7	40.50S	174.68E	30	2.3	0.2	13	8
3976	APR 09	1158 30.7	41.24S	173.94E	56	2.9	0.2	25	17
3984	APR 09	1426 34.0	41.37S	175.12E	26	2.1	0.1	15	10
3997	APR 09	2038 11.9	40.94S	174.56E	37	2.1	0.1	10	8
3998	APR 09	2116 26.7	41.67S	173.56E	48	2.6	0.3	17	11
4027	APR 10	1117 51.2	40.93S	175.99E	32	2.2	0.1	10	8
4028	APR 10	1245 50.6	41.99S	174.03E	16	2.3	0.2	8	6
4031	APR 10	1556 45.7	40.94S	174.73E	58	2.0	0.1	7	4
4034	APR 10	1620 21.9	41.06S	174.83E	53	3.0	0.1	25	18
4056	APR 11	0553 4.0	40.66S	175.52E	29	2.2	0.0	6	4
4067	APR 11	1620 48.8	41.60S	174.35E	24	2.7	0.2	21	15
4068	APR 11	1623 22.8	41.59S	174.32E	24	2.4	0.2	13	9
4074	APR 11	1948 42.0	41.66S	174.30E	9	2.8	0.3	18	15
4078	APR 11	2305 40.2	41.47S	174.46E	43	3.4F	0.2	35	21
4088	APR 12	1013 44.9	40.59S	175.96E	12	2.1	0.2	10	8
4093	APR 12	1309 42.2	40.50S	174.33E	57	2.8	0.2	27	18
4104	APR 12	2002 48.5	41.03S	174.44E	54	2.1	0.0	7	5
4123	APR 13	0400 5.0	40.87S	173.53E	81	2.4	0.2	9	5
4135	APR 13	1305 51.1	41.71S	174.38E	15	2.5	0.2	18	11
4138	APR 13	1350 11.5	41.73S	174.36E	10	2.8	0.3	16	15
4139	APR 13	1350 19.2	41.70S	174.32E	14	4.8F	0.2	28	22
4140	APR 13	1401 36.9	41.73S	174.35E	11	3.6	0.2	26	19
4142	APR 13	1456 32.8	41.73S	174.34E	8	2.4	0.2	12	8
4146	APR 13	1742 4.6	41.74S	174.50E	28	3.0	0.2	24	15
4151	APR 13	2115 10.2	41.73S	174.35E	9	3.2	0.3	25	17
4154	APR 13	2357 13.1	41.60S	174.05E	44	3.2	0.2	25	16
4155	APR 14	0046 1.1	41.71S	174.30E	20	3.7	0.2	25	20
4162	APR 14	0509 45.2	40.60S	175.49E	32	2.3	0.1	11	6
4187	APR 14	1916 38.3	40.75S	175.86E	28	2.5	0.3	15	11
4188	APR 14	2138 5.9	41.71S	174.30E	19	4.2	0.3	23	19
4189	APR 14	2139 20.0	41.72S	174.32E	20	4.1	0.3	20	17
4192	APR 14	2157 33.5	40.87S	174.75E	15	2.2	0.2	10	7
4193	APR 14	2225 2.2	41.71S	174.29E	14	2.1	0.2	17	11
4202	APR 15	0542 10.0	41.60S	174.11E	22	2.1	0.2	14	11
4203	APR 15	0604 4.3	41.02S	174.00E	50	2.0	0.1	7	4
4206	APR 15	0701 4.9	40.64S	175.89E	28	2.1	0.1	11	7
4220	APR 15	1429 41.6	41.85S	174.23E	26	2.2	0.2	17	10
4224	APR 15	1543 3.8	41.71S	174.53E	29	2.3	0.2	14	12

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
4225	APR 15	1604 13.2	41.71S	174.13E	13	2.0	0.2	9	6
4226	APR 15	1638 16.1	40.80S	174.42E	25	2.2	0.2	11	8
4241	APR 16	0318 42.0	40.54S	174.80E	5R	2.7	0.3	14	11
4251	APR 16	0710 24.8	41.06S	175.33E	13	3.6F	0.2	23	21
4252	APR 16	0748 4.7	41.05S	175.32E	13	2.6	0.2	17	15
4255	APR 16	0918 16.4	40.59S	174.85E	12R	2.3	0.2	9	6
4278	APR 16	2245 38.8	40.87S	175.80E	30	2.8	0.2	15	12
4292	APR 17	0512 53.6	41.90S	174.26E	25	2.3	0.2	12	8
4312	APR 17	1329 51.9	41.00S	174.61E	33	2.6	0.1	18	12
4322	APR 17	2105 27.6	41.39S	174.28E	35	2.1	0.1	11	7
4325	APR 17	2149 8.5	40.50S	174.12E	67	2.1	0.2	10	6
4332	APR 18	0116 18.4	41.62S	174.78E	28	2.5	0.2	18	12
4334	APR 18	0220 56.3	41.01S	174.26E	46	2.8	0.2	23	17
4337	APR 18	0706 9.5	40.59S	173.65E	112	2.8	0.4	14	9
4341	APR 18	0845 19.3	40.62S	175.88E	34	2.4	0.2	10	8
4361	APR 18	1729 26.4	40.90S	175.20E	31	2.1	0.2	9	6
4363	APR 18	1818 35.6	41.72S	174.49E	25	2.1	0.2	13	9
4366	APR 18	1853 9.3	40.60S	174.42E	46	2.0	0.1	12	6
4369	APR 18	2154 29.8	41.12S	174.64E	32	2.0	0.1	10	7
4370	APR 18	2158 24.4	41.51S	175.32E	20	2.4	0.3	11	9
4373	APR 18	2215 33.1	41.13S	174.77E	30	2.1	0.1	14	9
4380	APR 19	0313 3.5	41.49S	174.24E	12R	2.7	0.3	13	10
4381	APR 19	0313 21.9	41.21S	173.62E	85	3.1	0.2	16	11
4393	APR 19	1247 36.3	40.84S	174.55E	29	2.4	0.3	12	8
4397	APR 19	1540 28.0	41.27S	174.99E	25	3.5F	0.1	22	19
4398	APR 19	1546 8.2	41.28S	174.99E	24	2.0	0.1	10	7
4408	APR 19	1953 28.1	41.27S	175.00E	24	2.5	0.1	14	10
4409	APR 19	2017 20.5	41.16S	174.13E	47	2.7	0.3	16	10
4415	APR 20	0218 32.6	41.28S	174.99E	24	2.1	0.1	8	6
4432	APR 20	1245 45.2	41.15S	173.53E	89	3.2	0.2	32	16
4443	APR 20	2151 49.5	41.14S	173.89E	61	2.9	0.2	21	14
4453	APR 21	0320 20.6	40.99S	175.60E	24	2.5	0.2	13	10
4462	APR 21	1446 50.0	40.50S	174.44E	86	2.4	0.2	12	8
4463	APR 21	1500 50.9	40.89S	175.48E	28	2.1	0.1	13	8
4469	APR 21	2147 38.3	40.81S	175.09E	36	2.4	0.2	12	7
4474	APR 22	0352 51.9	41.46S	175.72E	25	2.9	0.1	14	11
4476	APR 22	0434 12.2	41.46S	175.73E	25	2.9	0.2	13	10
4488	APR 22	1344 30.1	40.62S	175.47E	33	2.8	0.3	19	15
4490	APR 22	1451 16.6	41.09S	174.69E	61	3.1	0.1	28	18
4491	APR 22	1539 30.6	40.69S	175.87E	28	2.2	0.2	12	8
4493	APR 22	1551 46.9	41.54S	175.39E	20	2.4	0.3	10	8
4504	APR 23	0301 28.1	41.32S	174.76E	62	2.2	0.2	6	4
4507	APR 23	0409 28.1	41.07S	173.70E	57	2.4	0.2	10	8
4512	APR 23	1210 59.9	41.02S	174.85E	52	2.8	0.1	17	10
4517	APR 23	2025 44.9	41.65S	174.20E	1	2.7	0.2	20	16

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
4520	APR 24	0150 21.0	41.11S	173.97E	45	2.0	0.1	7	5
4523	APR 24	0447 23.9	40.83S	174.47E	73	2.1	0.1	10	6
4533	APR 24	1127 17.4	40.56S	174.59E	45	2.2	0.1	12	7
4538	APR 24	1431 48.4	40.56S	173.91E	85	2.0	0.2	10	5
4545	APR 24	1822 11.4	40.70S	175.87E	25	2.0	0.3	12	7
4550	APR 24	2135 40.1	41.73S	174.15E	12R	2.3	0.4	18	14
4552	APR 25	0019 53.5	41.13S	174.72E	58	3.5	0.2	27	23
4560	APR 25	0707 25.9	40.86S	173.75E	86	3.3	0.3	37	22
4561	APR 25	0718 9.3	41.82S	173.51E	38	2.7	0.3	26	16
4563	APR 25	0800 57.9	41.73S	174.51E	28	2.1	0.2	8	6
4564	APR 25	1046 26.8	40.84S	174.72E	18	2.0	0.3	14	8
4574	APR 25	1753 50.2	41.11S	173.68E	78	2.2	0.2	10	7
4576	APR 25	1942 12.0	41.05S	175.26E	23	2.2	0.2	16	10
4582	APR 26	0125 16.1	40.65S	175.48E	30	2.6	0.1	13	9
4585	APR 26	0655 41.8	40.90S	174.91E	57	2.4	0.1	12	9
4589	APR 26	0750 12.2	40.81S	175.31E	28	2.2	0.1	13	9
4593	APR 26	1404 42.9	41.40S	175.06E	26	2.5	0.1	18	11
4602	APR 26	1939 11.2	40.54S	175.14E	33	2.6	0.2	17	14
4608	APR 27	0001 34.8	41.78S	174.46E	5R	2.3	0.1	9	7
4627	APR 27	1322 54.6	41.03S	174.45E	54	2.2	0.0	9	6
4629	APR 27	1447 14.9	41.22S	174.64E	34	2.0	0.1	8	6
4636	APR 27	2215 23.1	40.97S	175.01E	30	2.7	0.2	14	11
4637	APR 27	2220 52.8	41.59S	174.37E	23	2.6	0.3	20	13
4638	APR 27	2239 29.3	40.67S	175.47E	26	2.5	0.2	15	11
4639	APR 27	2315 30.3	41.41S	173.50E	91	3.6	0.3	34	22
4644	APR 28	0314 52.5	41.64S	174.25E	9	2.6	0.3	16	13
4647	APR 28	0512 41.2	41.16S	175.44E	27	2.2	0.1	10	6
4651	APR 28	0556 45.6	40.69S	175.55E	25	3.3	0.2	21	16
4654	APR 28	0741 50.2	41.25S	174.44E	18	2.5	0.1	16	11
4659	APR 28	0929 38.8	41.27S	175.00E	24	2.3	0.1	16	10
4670	APR 28	2326 25.6	41.10S	174.20E	53	2.8	0.2	10	6
4741	APR 29	1416 9.6	41.92S	173.95E	20	2.4	0.2	14	7
4742	APR 29	1435 10.7	41.96S	174.04E	12R	2.6	0.3	18	13
4764	APR 29	2228 38.4	40.84S	174.73E	16	2.3	0.2	10	5
4767	APR 29	2313 55.7	41.32S	175.12E	16	2.1	0.2	11	8
4770	APR 30	0006 17.4	41.66S	174.59E	28	2.2	0.1	9	6
4792	APR 30	1353 1.9	41.44S	174.51E	55	2.3	0.1	13	10
4795	APR 30	1622 17.1	40.74S	174.59E	77	3.6	0.2	31	23
4802	APR 30	2159 30.9	40.76S	175.28E	27	2.8	0.2	18	14
4807	MAY 01	0302 39.0	41.07S	174.69E	61	2.9	0.0	15	10
4809	MAY 01	0318 11.8	41.16S	173.97E	52	2.2	0.1	8	5
4815	MAY 01	0631 59.5	41.26S	175.17E	7	2.1	0.3	12	9
4824	MAY 01	1143 55.4	41.52S	175.33E	21	2.1	0.3	12	9
4830	MAY 01	1505 50.3	41.58S	174.47E	5R	2.1	0.3	18	12
4865	MAY 02	1018 14.3	41.28S	175.00E	24	2.4	0.1	13	9

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
4868	MAY 02	1249 24.4	41.72S	174.62E	28	2.2	0.2	10	7
4872	MAY 02	1601 13.4	40.65S	175.56E	29	2.2	0.1	8	5
4880	MAY 02	1958 6.2	40.63S	174.39E	79	2.4	0.2	17	11
4890	MAY 03	0103 1.4	40.64S	175.53E	29	2.5	0.1	10	8
4893	MAY 03	0321 43.8	41.23S	175.34E	27	2.6	0.2	13	9
4902	MAY 03	0514 3.3	40.56S	175.75E	32	2.4	0.1	11	9
4903	MAY 03	0517 47.0	41.84S	174.05E	20	2.2	0.2	10	7
4906	MAY 03	0844 12.8	40.63S	175.77E	26	2.5	0.2	17	14
4908	MAY 03	1113 6.4	40.85S	174.67E	37	2.0	0.2	13	8
4911	MAY 03	1343 39.2	41.19S	175.25E	31	3.2	0.2	25	16
4922	MAY 03	2143 24.5	41.70S	174.82E	28	2.3	0.2	15	11
4924	MAY 04	0009 16.2	41.67S	174.25E	5R	2.1	0.3	12	9
4926	MAY 04	0134 39.3	41.16S	174.26E	42	2.2	0.1	10	7
4930	MAY 04	0433 57.2	41.20S	175.04E	26	2.5	0.2	16	11
4947	MAY 04	1559 23.9	40.93S	174.67E	56	3.2	0.2	30	23
4948	MAY 04	1600 50.1	40.53S	173.55E	112	2.4	0.2	17	12
4964	MAY 05	0043 2.3	40.66S	174.22E	55	2.4	0.2	12	8
4966	MAY 05	0133 48.4	40.62S	175.48E	30	2.2	0.1	11	8
4984	MAY 05	1042 28.8	41.70S	174.29E	5R	2.2	0.4	12	10
5006	MAY 05	2205 48.2	41.18S	173.63E	76	3.1	0.3	18	13
5013	MAY 06	0258 48.3	40.91S	175.20E	17	2.5	0.3	12	9
5017	MAY 06	0821 46.3	41.29S	174.82E	30	3.5F	0.2	23	18
5023	MAY 06	1228 4.9	41.73S	174.48E	28	2.1	0.2	10	7
5036	MAY 06	2251 7.8	41.29S	175.30E	29	2.4	0.2	14	10
5043	MAY 07	0401 6.6	40.73S	173.65E	91	2.4	0.3	13	8
5047	MAY 07	0913 48.7	41.63S	174.60E	29	2.2	0.1	7	6
5049	MAY 07	1501 14.6	40.99S	175.34E	14	2.1	0.1	8	6
5056	MAY 07	2041 56.3	41.23S	174.50E	36	2.5	0.2	10	8
5058	MAY 07	2122 37.6	40.63S	175.49E	31	2.0	0.0	5	3
5069	MAY 08	1256 26.3	40.91S	175.16E	29	2.0	0.1	9	6
5074	MAY 08	1840 58.9	40.91S	175.52E	24	2.1	0.1	11	7
5082	MAY 09	1525 25.5	40.90S	175.53E	26	2.7	0.1	13	10
5086	MAY 09	2009 5.6	40.80S	174.88E	24	2.2	0.1	7	3
5092	MAY 10	0117 47.1	41.61S	174.79E	27	2.7	0.2	15	9
5094	MAY 10	0253 29.7	41.84S	174.47E	5R	2.4	0.1	7	6
5097	MAY 10	0558 57.6	41.38S	174.63E	22	2.2	0.1	8	6
5106	MAY 10	1655 52.9	40.96S	174.82E	45	2.5	0.1	15	12
5113	MAY 10	2206 3.7	41.89S	174.10E	13	2.4	0.2	15	9
5116	MAY 10	2317 52.4	41.47S	175.57E	27	2.3	0.2	11	8
5120	MAY 11	0321 6.9	41.35S	175.78E	19	2.4	0.1	13	9
5127	MAY 11	0940 54.1	40.78S	174.47E	52	2.8	0.2	22	15
5130	MAY 11	1120 8.4	40.72S	175.03E	32	2.0	0.1	11	8
5134	MAY 11	1617 19.9	40.60S	175.51E	32	2.1	0.1	8	5
5138	MAY 11	2113 26.2	41.08S	174.51E	59	2.2	0.0	7	5
5139	MAY 11	2117 39.3	40.98S	175.63E	26	2.7	0.2	17	12

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
5141	MAY 12	0353 10.8	41.01S	174.74E	54	2.7	0.0	10	8
5142	MAY 12	0353 41.6	41.09S	175.84E	29	2.3	0.1	10	6
5144	MAY 12	0649 29.5	41.11S	174.61E	57	2.2	0.1	9	7
5145	MAY 12	0802 9.4	41.27S	175.24E	29	2.2	0.2	12	8
5149	MAY 12	1433 42.6	40.53S	173.61E	162	2.7	0.1	8	6
5161	MAY 13	0216 59.0	41.80S	174.11E	12	2.3	0.1	11	7
5162	MAY 13	0400 11.4	40.56S	175.71E	31	2.8	0.1	15	12
5167	MAY 13	0821 33.9	41.75S	174.42E	11	2.8	0.3	15	11
5170	MAY 13	1112 46.3	40.64S	175.83E	49	2.2	0.2	8	5
5175	MAY 13	1237 28.3	41.16S	174.68E	38	3.1	0.2	19	12
5177	MAY 13	1443 5.4	40.96S	174.49E	59	2.2	0.1	6	4
5180	MAY 13	1716 51.8	40.56S	174.42E	5R	2.2	0.2	10	6
5192	MAY 14	0719 5.2	40.94S	175.44E	22	2.9	0.2	14	11
5199	MAY 14	1233 12.7	41.13S	174.77E	31	2.0	0.1	9	7
5201	MAY 14	1316 48.2	40.90S	174.94E	48	2.4	0.1	14	8
5204	MAY 14	1420 15.5	40.55S	174.65E	26	3.2	0.2	20	14
5205	MAY 14	1705 53.6	40.97S	175.25E	27	2.3	0.1	7	5
5208	MAY 14	2340 44.5	41.78S	174.46E	5R	2.5	0.2	10	7
5213	MAY 15	0450 43.9	40.63S	173.57E	181	2.9	0.2	8	7
5214	MAY 15	0602 7.9	40.84S	175.20E	29	2.3	0.1	12	9
5215	MAY 15	0721 44.4	40.69S	174.08E	76	3.4	0.2	34	21
5217	MAY 15	0824 15.5	41.18S	174.94E	137	2.9	0.1	6	4
5220	MAY 15	1213 15.7	41.21S	173.67E	73	2.7	0.1	17	9
5221	MAY 15	1246 16.5	41.53S	174.01E	39	2.8	0.2	21	14
5222	MAY 15	1333 30.1	40.53S	174.09E	67	2.0	0.1	8	5
5223	MAY 15	1400 35.1	41.60S	174.67E	30	2.0	0.2	11	8
5225	MAY 15	1523 6.7	40.55S	175.90E	30	2.6	0.2	18	13
5230	MAY 15	1714 15.1	40.89S	175.01E	32	2.0	0.1	9	7
5235	MAY 15	1857 19.0	40.94S	174.11E	50	2.2	0.1	6	5
5238	MAY 15	2332 22.9	41.45S	173.56E	87	2.5	0.1	6	5
5269	MAY 16	1636 48.8	40.90S	175.72E	29	2.0	0.1	11	8
5295	MAY 16	1936 36.0	41.39S	174.09E	39	2.4	0.1	10	7
5352	MAY 17	0512 12.0	41.58S	175.35E	16	2.0	0.2	10	7
5354	MAY 17	0521 10.4	40.72S	174.52E	5R	2.1	0.4	11	8
5361	MAY 17	0641 43.7	41.56S	175.37E	20	2.4	0.3	12	8
5365	MAY 17	0658 4.7	40.88S	175.81E	27	2.7	0.3	18	12
5398	MAY 17	1301 13.2	40.55S	173.75E	94	2.7	0.2	25	13
5401	MAY 17	1340 57.4	40.69S	173.96E	75	2.5	0.2	13	7
5417	MAY 17	1619 50.0	40.53S	174.35E	80	2.3	0.1	8	6
5434	MAY 17	2126 54.5	41.50S	174.48E	20	2.6	0.2	14	10
5445	MAY 18	0051 35.7	41.33S	174.14E	40	2.7	0.3	14	10
5461	MAY 18	0922 18.0	40.77S	174.63E	35	2.2	0.1	11	7
5486	MAY 18	1535 9.5	40.50S	174.99E	40	2.2	0.0	7	4
5500	MAY 18	1929 39.1	41.87S	174.45E	27	2.3	0.1	8	4
5510	MAY 19	0329 13.6	40.66S	174.33E	55	2.5	0.1	8	5

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
5524	MAY 19	0833 24.3	40.60S	174.36E	75	2.5	0.1	7	5
5563	MAY 20	0523 29.4	40.69S	174.97E	2	2.3	0.2	13	9
5573	MAY 20	1129 0.1	40.57S	174.03E	71	2.6	0.2	13	8
5591	MAY 21	0121 4.8	41.19S	173.57E	92	3.4	0.3	26	14
5596	MAY 21	0519 12.0	41.01S	174.55E	34	2.2	0.1	8	5
5611	MAY 21	1456 27.4	41.49S	174.20E	33R	2.1	0.2	12	8
5612	MAY 21	1509 15.1	41.08S	174.91E	29	2.3	0.1	11	8
5617	MAY 21	1824 5.6	40.94S	175.59E	7	2.7	0.3	18	14
5621	MAY 21	2119 27.2	41.00S	175.58E	28	3.5	0.1	16	11
5657	MAY 22	1647 43.8	41.09S	174.30E	82	2.2	0.2	8	5
5671	MAY 23	0304 4.0	41.19S	174.52E	32	2.4	0.2	11	6
5690	MAY 23	1148 34.0	40.92S	174.73E	5R	2.5	0.2	15	10
5695	MAY 23	1519 0.7	41.53S	174.21E	15	2.5	0.1	11	8
5698	MAY 23	1700 12.4	40.69S	174.83E	13	2.0	0.3	12	7
5702	MAY 23	1806 40.7	41.77S	174.46E	7	2.6	0.2	17	11
5703	MAY 23	1827 55.7	40.97S	175.16E	24	2.2	0.2	16	11
5706	MAY 23	2004 24.4	41.17S	173.70E	54	2.3	0.1	9	6
5708	MAY 23	2021 51.8	40.93S	175.51E	20	2.0	0.2	11	7
5717	MAY 24	0207 28.3	41.58S	174.40E	9	2.4	0.2	19	12
5725	MAY 24	1052 15.6	41.59S	173.71E	59	2.3	0.3	9	7
5729	MAY 24	1139 20.4	41.49S	174.42E	17	2.5	0.2	17	11
5732	MAY 24	1259 28.9	40.52S	174.99E	42	2.0	0.0	6	4
5737	MAY 24	1555 56.1	41.33S	173.69E	81	2.6	0.2	19	11
5738	MAY 24	1616 23.2	40.69S	175.03E	5R	2.0	0.2	7	4
5743	MAY 24	1936 38.6	41.77S	174.07E	20	2.4	0.3	12	9
5752	MAY 25	0128 30.3	41.50S	174.24E	5R	2.5	0.2	11	9
5765	MAY 25	1224 55.3	40.51S	174.70E	18	2.7	0.2	23	14
5775	MAY 25	1635 54.9	41.74S	174.49E	22	2.4	0.2	20	13
5776	MAY 25	1640 41.8	41.72S	174.47E	25	2.2	0.1	16	11
5778	MAY 25	1655 29.3	41.67S	174.61E	47	2.3	0.1	15	11
5787	MAY 25	2232 47.9	40.72S	175.23E	29	2.1	0.1	9	6
5795	MAY 26	0315 22.3	41.24S	174.13E	43	2.1	0.2	9	6
5817	MAY 26	1817 10.4	41.85S	173.99E	43	2.9	0.3	31	18
5819	MAY 26	1942 30.5	40.98S	174.19E	47	3.1	0.2	21	14
5824	MAY 27	0047 1.1	41.20S	174.62E	55	2.3	0.1	10	7
5834	MAY 27	0344 56.8	41.20S	174.59E	56	2.6	0.1	19	13
5836	MAY 27	0531 59.6	40.51S	174.30E	80	2.5	0.2	11	8
5840	MAY 27	0736 32.2	41.07S	174.66E	53	3.0	0.1	17	12
5846	MAY 27	1059 25.2	40.64S	174.38E	49	2.4	0.1	12	7
5856	MAY 27	2230 36.1	41.61S	173.65E	84	6.7F	0.1	31	25
5858	MAY 27	2310 51.6	41.49S	174.00E	74	2.4	0.1	11	7
5859	MAY 27	2316 49.2	41.60S	173.66E	79	3.1	0.2	27	17
5861	MAY 28	0059 25.8	41.60S	173.67E	75	3.1	0.2	25	14
5864	MAY 28	0439 24.9	41.59S	173.66E	74	2.7	0.2	14	9
5865	MAY 28	0558 45.5	40.73S	174.01E	75	2.3	0.0	5	4

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5871	MAY 28	1317 51.5	41.08S	175.58E	5R	2.1	0.2	14	11
5872	MAY 28	1402 7.9	40.60S	175.96E	28	2.9	0.3	23	17
5873	MAY 28	1555 49.0	40.67S	174.88E	34	2.3	0.1	14	10
5874	MAY 28	1655 32.7	41.33S	173.69E	68	3.0	0.2	26	18
5896	MAY 29	1012 44.4	41.60S	173.67E	77	2.9	0.2	22	12
5902	MAY 29	1406 15.7	41.61S	173.67E	80	3.9	0.2	38	25
5913	MAY 29	1833 2.0	41.02S	174.88E	45	2.3	0.1	12	9
5921	MAY 29	2135 47.6	41.29S	174.99E	26	2.3	0.1	18	13
5936	MAY 30	1023 18.7	41.30S	174.21E	40	2.4	0.3	16	11
5945	MAY 30	1553 18.9	40.56S	174.80E	208	2.9	0.2	7	4
5958	MAY 30	2113 18.8	40.99S	175.60E	26	2.6	0.1	17	13
5963	MAY 31	0010 13.0	40.51S	175.77E	28	2.3	0.2	16	10
5974	MAY 31	0741 54.5	40.77S	175.25E	28	2.0	0.1	8	6
5975	MAY 31	0811 30.0	41.55S	174.42E	25	2.2	0.2	12	8
5980	MAY 31	0925 32.2	41.17S	174.71E	35	2.1	0.1	12	9
5984	MAY 31	1423 56.6	41.56S	174.43E	17	2.0	0.1	10	7
6003	JUN 01	0048 41.0	40.58S	174.15E	68	2.6	0.3	18	10
6008	JUN 01	0343 15.5	40.57S	174.41E	74	2.4	0.2	13	9
6016	JUN 01	0643 34.2	40.52S	174.01E	84	2.7	0.3	17	10
6026	JUN 01	1027 53.7	40.62S	175.12E	37	2.1	0.0	6	3
6034	JUN 01	1644 49.0	41.39S	175.11E	28	2.2	0.1	20	12
6039	JUN 01	2328 55.6	41.47S	174.36E	11	2.7	0.3	21	16
6042	JUN 02	0150 56.6	41.48S	175.36E	20	2.4	0.3	13	11
6046	JUN 02	0425 55.8	40.83S	174.95E	53	2.0	0.2	7	5
6047	JUN 02	0605 12.1	41.04S	174.58E	59	2.0	0.1	9	7
6055	JUN 02	1141 38.8	41.33S	175.06E	40	2.5	0.0	14	10
6064	JUN 02	1448 0.9	41.05S	174.72E	60	2.7	0.2	23	18
6066	JUN 02	1506 58.9	41.70S	174.34E	5	2.0	0.2	6	4
6073	JUN 02	1956 31.8	40.87S	174.73E	16	2.0	0.1	7	4
6078	JUN 03	0038 15.9	41.14S	175.33E	27	2.3	0.2	12	9
6093	JUN 03	1001 12.1	41.37S	174.94E	30	2.8	0.2	20	16
6096	JUN 03	1244 40.6	40.84S	175.10E	31	2.3	0.1	12	10
6117	JUN 03	2323 52.2	41.09S	174.17E	52	2.3	0.1	10	7
6126	JUN 04	0336 55.6	40.77S	174.87E	36	2.0	0.2	9	6
6128	JUN 04	0448 54.8	41.29S	173.62E	66	2.4	0.1	10	8
6134	JUN 04	1243 50.6	41.13S	174.48E	40	3.7F	0.1	33	27
6135	JUN 04	1311 34.6	41.71S	174.48E	27	2.3	0.1	13	10
6144	JUN 04	2119 15.1	41.11S	175.31E	28	2.1	0.1	11	9
6147	JUN 04	2219 56.9	41.00S	174.22E	52	2.4	0.1	8	6
6156	JUN 05	0432 43.5	41.65S	174.60E	31	2.4	0.1	14	12
6164	JUN 05	0859 29.9	41.15S	174.80E	48	2.0	0.1	8	6
6169	JUN 05	1143 18.8	41.74S	174.58E	26	2.1	0.2	13	10
6174	JUN 05	1306 19.0	41.75S	174.46E	24	2.0	0.1	9	6
6184	JUN 05	1728 28.6	41.79S	174.44E	27	2.2	0.2	11	8
6190	JUN 06	0310 56.0	41.54S	174.37E	3	2.5	0.3	21	15

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6193	JUN 06	0500 4.6	41.09S	174.47E	34	2.0	0.0	6	4
6200	JUN 06	1910 7.9	41.04S	174.21E	52	2.1	0.1	7	4
6209	JUN 07	0016 34.2	40.56S	174.74E	33	2.2	0.1	10	7
6212	JUN 07	0129 44.5	40.98S	174.53E	10	2.1	0.2	8	5
6226	JUN 07	1315 40.3	40.82S	175.12E	31	3.0	0.3	17	14
6233	JUN 07	1631 55.9	41.52S	174.52E	64	2.4	0.3	7	4
6235	JUN 07	1716 58.5	40.60S	174.36E	54	2.2	0.2	5	4
6240	JUN 07	2157 41.1	41.05S	174.84E	51	2.6	0.1	9	8
6245	JUN 07	2240 40.2	41.62S	174.76E	25	2.3	0.1	6	5
6249	JUN 08	0204 7.6	41.59S	174.83E	23	2.0	0.1	9	7
6252	JUN 08	0525 7.1	40.97S	175.47E	15	2.1	0.1	11	9
6253	JUN 08	0535 6.4	41.62S	174.63E	27	2.1	0.1	7	5
6255	JUN 08	0736 4.8	41.36S	173.50E	67	2.6	0.1	18	10
6260	JUN 08	1124 29.1	40.98S	175.27E	27	2.5	0.2	15	12
6261	JUN 08	1149 10.1	41.25S	175.33E	28	2.4	0.1	11	9
6262	JUN 08	1206 20.7	41.58S	173.92E	18	2.3	0.2	18	11
6269	JUN 08	1534 37.6	41.07S	175.98E	32	2.4	0.2	13	10
6272	JUN 08	1647 11.6	40.83S	174.75E	15	2.5	0.2	14	12
6278	JUN 08	2307 27.8	41.92S	174.65E	21	2.6	0.2	17	13
6279	JUN 08	2325 11.4	41.09S	174.47E	35	2.1	0.1	9	7
6280	JUN 09	0044 33.5	41.70S	174.51E	30	2.5	0.2	13	10
6282	JUN 09	0213 26.2	41.21S	175.42E	21	2.0	0.1	10	7
6297	JUN 09	1113 9.5	40.52S	175.74E	29	2.2	0.2	11	8
6310	JUN 09	1903 4.6	41.09S	173.88E	60	2.3	0.1	8	5
6320	JUN 10	0114 37.9	41.63S	173.75E	74	2.7	0.1	12	8
6323	JUN 10	0336 1.5	41.26S	175.19E	11	2.0	0.1	8	6
6325	JUN 10	0434 47.6	40.89S	175.81E	31	2.1	0.1	12	9
6332	JUN 10	0931 29.1	40.89S	175.11E	29	2.1	0.1	11	8
6340	JUN 10	1815 11.9	41.01S	174.19E	47	2.5	0.2	16	11
6341	JUN 10	1941 15.1	41.66S	173.79E	71	2.6	0.1	11	9
6347	JUN 10	2318 13.3	40.56S	174.57E	29	2.2	0.1	8	5
6357	JUN 11	0741 34.4	40.59S	174.28E	85	2.3	0.3	8	6
6372	JUN 11	2353 26.8	41.23S	174.31E	69	2.8	0.2	20	14
6373	JUN 12	0151 10.9	41.41S	175.01E	24	2.1	0.1	10	8
6377	JUN 12	0550 39.9	40.87S	176.00E	25	2.6	0.2	16	12
6390	JUN 12	1945 37.1	40.65S	175.49E	28	2.5	0.3	17	11
6391	JUN 12	2212 1.6	40.62S	174.37E	68	2.4	0.1	10	6
6393	JUN 13	0027 3.1	41.13S	174.66E	32	3.1	0.2	27	19
6395	JUN 13	0041 28.2	40.64S	175.85E	26	2.4	0.0	5	3
6396	JUN 13	0046 54.4	41.13S	174.63E	32	2.0	0.1	8	5
6402	JUN 13	0907 38.5	40.72S	174.64E	61	2.6	0.1	9	7
6404	JUN 13	1215 5.6	41.29S	175.19E	25	2.3	0.1	9	7
6408	JUN 13	1759 50.1	41.99S	173.81E	12R	2.3	0.2	9	5
6415	JUN 14	0334 56.6	40.57S	175.92E	27	2.6	0.2	14	8
6421	JUN 14	0626 23.7	41.99S	174.09E	21	2.5	0.2	14	10

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6426	JUN 14	1352 59.1	41.49S	173.52E	80	3.0	0.3	23	14
6428	JUN 14	1420 10.6	40.85S	175.77E	26	2.2	0.3	15	9
6433	JUN 14	1941 44.5	41.22S	173.89E	49	2.6	0.2	12	8
6445	JUN 15	1037 59.0	41.65S	174.06E	5R	2.2	0.3	11	8
6450	JUN 15	1610 18.1	40.95S	175.58E	9	2.4	0.2	12	9
6451	JUN 15	1943 36.1	40.68S	175.81E	30	2.4	0.2	11	7
6454	JUN 15	2239 19.4	40.97S	175.34E	26	2.2	0.2	11	8
6460	JUN 16	0631 1.2	41.65S	174.59E	28	2.2	0.1	7	4
6472	JUN 16	1857 12.4	41.63S	175.27E	39	2.5	0.0	13	9
6473	JUN 16	1913 15.1	41.83S	174.18E	29	2.6	0.2	19	13
6474	JUN 16	2121 29.6	41.72S	174.50E	32	2.2	0.1	10	6
6487	JUN 17	0803 19.5	41.67S	174.16E	5R	2.4	0.3	13	7
6497	JUN 17	2026 41.7	41.83S	174.55E	30	3.0	0.2	22	15
6505	JUN 17	2329 40.1	41.27S	174.84E	26	2.5	0.1	16	11
6508	JUN 18	0255 8.6	40.78S	174.68E	3	2.3	0.2	12	8
6522	JUN 18	1042 3.6	41.40S	174.95E	31	2.3	0.1	11	9
6524	JUN 18	1059 47.5	41.76S	174.44E	25	2.3	0.1	11	9
6532	JUN 18	1343 47.1	41.29S	175.29E	29	2.4	0.1	10	8
6533	JUN 18	1412 8.7	41.02S	173.80E	70	2.5	0.2	9	6
6544	JUN 18	2048 40.8	41.68S	174.28E	12R	3.2	0.2	25	20
6545	JUN 18	2052 48.3	41.71S	174.26E	17	2.9	0.3	20	17
6548	JUN 18	2223 52.2	41.42S	174.31E	22	2.7	0.2	17	13
6549	JUN 18	2227 9.1	41.41S	174.32E	18	2.6	0.2	15	12
6550	JUN 18	2227 25.4	41.36S	174.36E	17	2.3	0.2	11	8
6554	JUN 19	0318 32.3	41.64S	174.28E	5R	2.2	0.2	11	7
6561	JUN 19	0926 30.1	40.61S	174.94E	5R	4.4F	0.2	31	25
6562	JUN 19	0932 8.9	40.59S	174.93E	5	2.2	0.2	10	6
6563	JUN 19	0951 23.7	40.57S	174.90E	5R	2.1	0.2	11	7
6570	JUN 19	1252 56.9	41.73S	174.51E	26	2.4	0.1	8	6
6584	JUN 20	0141 58.5	41.71S	173.81E	11	2.8	0.3	23	18
6598	JUN 20	0945 19.0	41.37S	174.48E	57	2.4	0.1	9	7
6607	JUN 20	1510 33.0	40.80S	175.21E	31	2.0	0.1	11	8
6611	JUN 20	1804 4.7	41.54S	173.65E	73	2.4	0.2	8	6
6614	JUN 20	2113 35.8	40.59S	174.92E	5R	2.3	0.2	11	7
6615	JUN 20	2320 37.2	41.34S	174.78E	24	2.0	0.1	9	7
6616	JUN 20	2352 29.4	41.06S	175.56E	29	2.1	0.2	10	6
6629	JUN 21	1120 16.1	41.42S	175.03E	27	2.2	0.1	14	9
6631	JUN 21	1151 32.4	41.35S	175.13E	28	2.1	0.1	17	11
6834	JUN 22	0217 44.7	41.01S	174.54E	39	2.1	0.0	6	4
6861	JUN 22	0332 26.6	41.71S	174.32E	14	2.5	0.3	18	14
6868	JUN 22	0414 34.5	41.71S	174.34E	14	3.1	0.3	27	21
6892	JUN 22	0657 48.1	41.12S	174.38E	40	2.3	0.3	13	9
6920	JUN 22	1004 7.9	40.88S	174.94E	41	2.0	0.1	10	6
6935	JUN 22	1225 11.3	41.40S	175.27E	47	2.1	0.1	9	7
7018	JUN 22	2310 49.0	41.28S	173.58E	62	2.3	0.2	11	7

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7034	JUN 23	0429 46.8	40.60S	174.30E	52	2.4	0.3	11	6
7036	JUN 23	0522 48.3	41.64S	174.25E	15	3.0	0.2	23	19
7043	JUN 23	0648 38.2	41.62S	174.27E	8	2.9	0.3	28	20
7066	JUN 23	1412 3.9	41.12S	175.49E	23	2.1	0.2	9	6
7075	JUN 23	1719 16.1	40.57S	174.77E	25	2.4	0.0	6	3
7091	JUN 23	1944 27.1	40.53S	174.69E	16	2.9	0.1	11	5
7092	JUN 23	2007 50.5	40.56S	174.50E	74	3.2	0.2	14	7
7103	JUN 24	0037 45.0	40.60S	174.87E	5R	2.2	0.2	11	7
7106	JUN 24	0251 6.0	40.53S	174.71E	19	2.8	0.2	20	15
7117	JUN 24	0617 25.9	41.05S	173.84E	68	2.8	0.2	12	8
7122	JUN 24	0933 19.6	41.17S	173.96E	79	2.0	0.2	8	6
7137	JUN 24	1521 16.8	41.28S	175.19E	23	2.1	0.1	8	5
7139	JUN 24	1801 54.9	41.67S	174.25E	8	2.5	0.2	15	12
7147	JUN 24	2126 52.1	41.11S	175.35E	25	2.7	0.2	18	11
7149	JUN 24	2154 18.0	41.62S	174.27E	7	3.7	0.2	26	21
7157	JUN 25	0107 27.6	41.57S	174.23E	21	2.4	0.3	12	8
7162	JUN 25	0308 52.3	41.60S	174.26E	5R	3.0	0.2	29	19
7181	JUN 25	1356 29.6	41.59S	174.69E	31	2.3	0.1	13	9
7227	JUN 26	0926 44.6	41.39S	173.93E	48	2.3	0.2	8	5
7232	JUN 26	1047 54.3	41.63S	174.27E	9	3.5	0.2	30	22
7234	JUN 26	1058 15.9	40.56S	174.27E	61	2.5	0.2	11	7
7242	JUN 26	1204 45.6	41.66S	174.52E	48	2.4	0.1	12	8
7244	JUN 26	1304 3.6	40.92S	175.15E	30	2.1	0.2	11	8
7250	JUN 26	1532 28.2	41.13S	174.47E	39	2.8	0.2	16	13
7256	JUN 26	1759 27.4	41.71S	173.94E	17	2.3	0.1	9	8
7271	JUN 27	0054 2.8	41.06S	175.45E	8	2.1	0.1	12	8
7273	JUN 27	0102 12.1	41.60S	174.27E	2	2.2	0.2	8	5
7274	JUN 27	0109 29.1	40.62S	174.90E	34	2.0	0.1	9	5
7279	JUN 27	0313 2.5	40.94S	174.74E	56	2.4	0.1	10	6
7291	JUN 27	0645 5.8	41.76S	173.70E	13	2.6	0.2	16	9
7303	JUN 27	1332 47.8	41.89S	174.45E	29	2.9	0.2	23	16
7315	JUN 27	1700 49.5	40.82S	175.08E	29	3.2	0.3	23	18
7324	JUN 27	2057 55.5	40.62S	174.22E	75	2.7	0.2	11	9
7330	JUN 27	2351 22.4	40.93S	175.52E	25	2.1	0.2	13	9
7334	JUN 28	0126 38.0	41.12S	174.48E	36	2.5	0.2	21	14
7338	JUN 28	0250 5.3	40.79S	175.07E	33	2.2	0.1	8	5
7340	JUN 28	0451 26.3	40.52S	175.73E	39	2.4	0.2	7	3
7341	JUN 28	0603 37.3	40.62S	174.73E	39	3.2	0.2	25	18
7376	JUN 28	1846 28.8	41.76S	174.45E	25	2.2	0.1	11	8
7399	JUN 28	1940 46.2	41.34S	173.76E	79	3.4	0.2	28	19
7417	JUN 28	2200 16.9	41.60S	174.33E	11	2.0	0.2	11	8
7514	JUN 29	0916 20.4	41.49S	174.10E	33	2.5	0.3	15	10
7521	JUN 29	1327 1.6	40.87S	175.77E	33	2.5	0.2	16	10
7536	JUN 30	0437 50.5	40.69S	174.41E	76	2.3	0.2	9	6
7538	JUN 30	0617 28.7	40.87S	174.46E	73	2.1	0.0	10	6

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7540	JUN 30	0944 23.3	41.46S	174.55E	30	2.3	0.1	16	12
7545	JUN 30	1250 12.6	40.81S	175.05E	35	2.0	0.1	7	4
7553	JUN 30	1845 22.8	41.39S	175.10E	24	2.5	0.1	14	7
7554	JUN 30	1951 52.2	41.38S	175.10E	23	2.3	0.1	12	9
7557	JUN 30	2258 34.5	40.76S	173.51E	97	3.0	0.3	18	10
7558	JUN 30	2316 48.0	41.76S	173.70E	14	3.1	0.2	31	20
7563	JUL 01	0107 49.7	41.38S	175.10E	23	2.4	0.1	15	10
7568	JUL 01	0317 38.2	41.79S	174.47E	26	2.7	0.2	20	15
7569	JUL 01	0342 39.3	41.37S	175.09E	22	2.3	0.2	13	9
7572	JUL 01	0412 60.0	41.38S	175.10E	22	2.1	0.1	9	7
7592	JUL 01	1628 24.5	41.59S	174.34E	24	2.9	0.2	31	21
7594	JUL 01	1704 58.3	41.59S	174.33E	24	2.7	0.2	26	18
7595	JUL 01	1709 40.6	41.59S	174.34E	24	2.8	0.2	30	20
7596	JUL 01	1712 45.5	41.59S	174.32E	24	2.0	0.2	10	7
7607	JUL 01	2348 20.8	41.80S	175.05E	28	2.5	0.2	13	9
7618	JUL 02	1001 17.5	40.85S	174.74E	15	2.3	0.3	10	5
7623	JUL 02	1424 34.7	40.83S	175.20E	30	2.3	0.1	12	9
7626	JUL 02	1459 21.4	40.84S	175.82E	24	2.3	0.2	15	10
7627	JUL 02	1525 9.9	40.87S	175.81E	24	2.5	0.2	19	12
7628	JUL 02	1543 19.0	40.87S	175.82E	21	2.2	0.2	17	9
7633	JUL 02	2031 32.9	40.62S	174.79E	10	2.9	0.3	20	14
7634	JUL 02	2049 53.5	40.98S	174.75E	35	2.1	0.0	8	5
7655	JUL 03	0947 29.2	40.79S	175.06E	41	2.2	0.2	9	7
7663	JUL 03	1619 44.9	40.88S	175.92E	24	2.5	0.2	12	8
7671	JUL 03	2046 12.6	41.50S	174.18E	35	2.7	0.2	27	18
7683	JUL 04	0516 37.0	41.60S	174.42E	5R	2.7	0.2	23	15
7694	JUL 04	1353 39.7	41.02S	174.80E	30	2.0	0.1	8	6
7698	JUL 04	1916 51.9	41.19S	174.92E	30	2.2	0.0	8	7
7700	JUL 04	1945 31.5	40.80S	174.79E	16	2.4	0.3	10	8
7702	JUL 04	2133 34.2	40.58S	173.78E	94	2.9	0.3	23	12
7706	JUL 04	2354 38.9	40.67S	174.37E	44	2.5	0.2	15	8
7711	JUL 05	0223 17.1	41.28S	175.33E	16	2.0	0.1	10	8
7714	JUL 05	0602 35.0	41.33S	174.40E	16	2.4	0.3	14	11
7716	JUL 05	0704 19.5	40.90S	174.15E	53	2.2	0.1	8	5
7721	JUL 05	1127 26.0	41.73S	173.95E	41	2.3	0.2	8	5
7727	JUL 05	1625 40.4	41.68S	174.59E	27	2.2	0.2	7	5
7730	JUL 05	2101 2.8	41.33S	174.71E	9	2.5	0.2	15	11
7736	JUL 06	0559 44.7	41.42S	174.11E	5R	2.3	0.3	15	11
7742	JUL 06	1120 33.0	40.76S	174.81E	25	2.3	0.3	11	6
7744	JUL 06	1150 41.9	41.78S	174.36E	28	2.6	0.2	21	16
7762	JUL 07	0113 0.1	41.90S	174.34E	21	2.4	0.1	9	7
7780	JUL 07	1437 39.1	40.64S	173.50E	156	3.2	0.3	20	14
7781	JUL 07	1636 19.2	40.77S	175.34E	30	2.1	0.2	10	7
7782	JUL 07	1936 51.4	41.14S	174.65E	34	2.4	0.1	15	10
7784	JUL 07	2038 55.6	41.24S	175.32E	23	2.4	0.1	11	8

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
7795	JUL 08	1111 37.8	41.29S	174.90E	21	2.2	0.1	13	9
7803	JUL 08	1712 30.6	40.96S	175.25E	25	2.2	0.1	9	7
7804	JUL 08	1715 47.5	40.96S	175.24E	25	2.2	0.2	11	8
7806	JUL 08	2231 30.0	40.90S	175.70E	29	2.2	0.2	13	9
7817	JUL 09	0435 55.7	40.89S	174.75E	13	2.2	0.1	7	4
7835	JUL 10	0338 53.4	40.87S	174.73E	18	2.0	0.1	10	6
7846	JUL 10	1053 13.7	41.13S	174.47E	38	2.6	0.2	19	15
7849	JUL 10	1325 13.6	41.19S	174.14E	50	2.4	0.2	12	8
7859	JUL 10	2042 31.5	40.69S	174.96E	38	2.2	0.1	11	7
7876	JUL 11	0738 45.3	40.83S	175.20E	30	2.2	0.1	13	9
7878	JUL 11	1029 48.2	40.76S	175.08E	55	2.3	0.1	10	6
7891	JUL 11	1935 39.0	40.93S	175.06E	30	2.4	0.2	17	10
7892	JUL 11	2004 26.2	40.94S	175.41E	30	2.0	0.1	12	7
7900	JUL 12	0431 54.4	40.64S	174.35E	48	2.3	0.1	7	5
7926	JUL 12	2020 14.3	40.96S	175.35E	12	2.1	0.2	11	7
7927	JUL 12	2332 6.0	41.18S	173.90E	55	2.2	0.2	14	8
7934	JUL 13	0420 9.5	41.41S	175.00E	27	3.1	0.1	24	15
7935	JUL 13	0422 54.6	41.40S	175.00E	26	2.4	0.2	19	12
7937	JUL 13	0513 56.6	41.31S	174.43E	57	2.0	0.0	6	3
7938	JUL 13	0519 14.0	41.60S	174.62E	29	2.1	0.0	6	5
7939	JUL 13	0525 5.5	40.59S	174.01E	71	3.1	0.3	22	16
7950	JUL 13	0944 53.1	40.88S	174.75E	13	2.0	0.1	7	4
7953	JUL 13	1031 0.7	40.84S	174.70E	54	2.3	0.1	10	5
7964	JUL 13	1901 7.4	40.73S	175.14E	31	2.1	0.1	10	7
7984	JUL 14	1658 15.1	41.21S	175.61E	17	2.2	0.1	11	8
7985	JUL 14	1705 40.0	41.62S	174.36E	2	2.7	0.2	17	14
7986	JUL 14	1820 45.3	41.55S	174.49E	14	3.3	0.1	26	18
7989	JUL 14	2257 41.7	41.32S	174.41E	14	3.4	0.4	23	17
7990	JUL 15	0136 59.7	40.55S	173.67E	103	2.8	0.3	12	7
7991	JUL 15	0216 9.3	41.11S	174.65E	31	2.4	0.2	12	8
7994	JUL 15	0333 12.5	41.39S	174.10E	5R	2.8	0.3	20	15
7998	JUL 15	0904 36.5	40.90S	174.99E	48	2.1	0.1	11	8
8003	JUL 15	1303 3.5	41.08S	174.65E	33	2.2	0.1	15	11
8005	JUL 15	1340 33.3	41.03S	175.22E	35	2.4	0.1	12	8
8029	JUL 16	1736 51.3	40.71S	175.83E	30	2.2	0.1	12	8
8030	JUL 16	1835 49.9	41.13S	175.36E	27	2.1	0.1	11	8
8032	JUL 16	1919 28.4	40.65S	174.91E	33	2.0	0.1	9	7
8045	JUL 17	0805 56.3	41.57S	174.52E	15	2.0	0.2	9	7
8049	JUL 17	1239 31.8	41.20S	174.60E	37	2.1	0.1	12	8
8051	JUL 17	1353 34.5	41.24S	175.55E	18	2.0	0.1	12	7
8059	JUL 17	1918 9.1	40.91S	175.81E	27	2.3	0.3	13	9
8063	JUL 18	0018 2.6	41.28S	175.30E	29	2.0	0.2	13	9
8067	JUL 18	0358 43.9	40.68S	174.79E	35	2.3	0.1	11	7
8069	JUL 18	0528 23.2	40.64S	174.43E	75	2.3	0.2	10	6
8071	JUL 18	1005 1.4	40.91S	175.43E	18	2.3	0.2	11	7

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8073	JUL 18	1012 18.2	40.90S	175.43E	21	2.4	0.1	12	9
8076	JUL 18	1106 51.9	41.10S	175.10E	9	2.0	0.2	10	6
8085	JUL 18	1939 1.8	40.59S	174.50E	46	3.0	0.3	23	13
8088	JUL 18	2249 30.1	40.59S	174.80E	41	2.4	0.2	12	7
8099	JUL 19	0747 24.9	41.74S	174.27E	14	2.4	0.2	9	7
8102	JUL 19	0928 33.1	40.58S	174.70E	69	2.4	0.2	8	4
8110	JUL 20	0158 6.2	40.85S	174.98E	37	2.1	0.1	7	5
8113	JUL 20	0824 37.9	41.08S	175.52E	29	2.1	0.2	11	7
8114	JUL 20	0912 44.8	40.67S	175.49E	27	2.4	0.3	14	10
8121	JUL 20	1254 23.3	41.45S	175.24E	27	2.8	0.2	17	11
8122	JUL 20	1313 10.2	41.35S	174.30E	37	2.3	0.2	10	8
8123	JUL 20	1355 56.5	40.81S	175.20E	32	2.1	0.1	8	6
8125	JUL 20	1618 42.5	41.01S	175.24E	29	2.0	0.1	8	6
8136	JUL 20	2253 48.2	41.00S	175.36E	26	2.1	0.2	10	6
8138	JUL 21	0315 21.8	41.43S	173.82E	55	2.8	0.2	18	14
8140	JUL 21	0327 0.2	40.81S	175.70E	25	2.1	0.1	13	9
8151	JUL 22	0851 43.7	40.89S	175.77E	35	2.5	0.2	9	5
8160	JUL 22	1859 28.2	41.33S	173.87E	58	2.8	0.2	11	7
8163	JUL 23	0200 37.8	41.93S	174.19E	20	2.4	0.3	10	7
8169	JUL 23	0536 23.1	40.96S	174.04E	61	2.6	0.1	8	6
8170	JUL 23	0749 31.7	40.67S	174.22E	50	2.1	0.2	8	6
8172	JUL 23	1029 13.6	41.86S	174.20E	33	2.6	0.2	12	9
8175	JUL 23	1111 22.7	40.75S	175.79E	29	2.3	0.1	8	5
8177	JUL 23	1911 58.3	41.06S	174.60E	34	2.3	0.0	8	6
8178	JUL 23	2355 52.1	40.74S	174.76E	41	2.3	0.1	8	6
8186	JUL 24	1116 11.6	41.07S	174.70E	32	2.2	0.1	10	6
8188	JUL 24	1716 52.8	41.28S	175.29E	29	2.2	0.1	8	6
8192	JUL 24	2031 31.6	40.55S	174.47E	0R	2.4	0.1	9	7
8195	JUL 24	2136 18.5	41.19S	174.71E	34	2.1	0.1	11	8
8204	JUL 25	0654 39.9	41.41S	175.00E	24	2.1	0.1	14	9
8208	JUL 25	1049 43.0	40.78S	175.23E	30	2.2	0.2	10	8
8212	JUL 25	1330 41.1	40.61S	175.48E	27	2.4	0.2	11	6
8214	JUL 25	1600 40.3	40.91S	175.82E	30	2.7	0.2	10	7
8216	JUL 25	1914 32.0	41.50S	175.68E	28	2.5	0.2	6	4
8218	JUL 26	0033 46.3	40.92S	175.71E	23	2.7	0.2	6	4
8223	JUL 26	0416 18.6	41.62S	175.63E	15	2.1	0.1	6	4
8225	JUL 26	0719 0.9	41.01S	175.44E	35	2.1	0.2	8	6
8231	JUL 26	0910 50.1	40.57S	174.64E	26	2.2	0.2	7	6
8232	JUL 26	0922 23.9	41.16S	175.49E	32	4.4F	0.2	26	21
8236	JUL 26	1037 54.8	41.08S	175.19E	26	2.1	0.1	7	6
8241	JUL 26	1308 55.8	41.03S	174.74E	33	2.7	0.1	6	4
8242	JUL 26	1323 8.6	41.13S	175.45E	28	2.4	0.1	7	5
8250	JUL 27	0433 56.2	40.77S	175.05E	32	2.3	0.1	10	8
8251	JUL 27	0448 53.5	41.13S	175.45E	28	2.0	0.1	11	7
8257	JUL 27	1556 28.7	41.60S	173.69E	45	2.6	0.2	14	10

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8258	JUL 27	1619 47.8	41.63S	174.37E	20	2.1	0.2	7	5
8259	JUL 27	1724 52.8	41.13S	175.44E	28	2.6	0.1	14	9
8264	JUL 28	0512 31.3	40.86S	173.83E	146	2.7	0.1	7	4
8281	JUL 29	0408 11.7	41.54S	173.77E	45	2.7	0.3	19	12
8292	JUL 29	1553 34.4	40.89S	174.91E	3	2.0	0.1	9	6
8300	JUL 30	0028 31.5	40.59S	175.67E	26	2.7	0.2	16	10
8307	JUL 30	1124 17.2	41.06S	175.40E	25	2.5	0.2	13	9
8308	JUL 30	1253 28.6	40.89S	175.14E	35	2.1	0.1	6	5
8312	JUL 31	0128 23.5	40.61S	173.82E	87	4.0	0.3	37	25
8313	JUL 31	0157 46.0	41.30S	175.05E	23	2.0	0.0	9	6
8320	JUL 31	0515 59.6	41.03S	174.84E	29	2.0	0.1	8	6
8332	JUL 31	1447 30.8	41.45S	174.57E	29	2.1	0.1	9	7
8335	JUL 31	2221 18.1	41.41S	175.01E	26	2.0	0.1	10	7
8337	AUG 01	0005 12.9	40.99S	174.71E	32	2.6	0.1	12	9
8338	AUG 01	0036 15.6	40.96S	173.72E	93	2.8	0.2	18	10
8339	AUG 01	0134 27.0	40.97S	175.46E	22	3.2	0.2	23	16
8340	AUG 01	0150 55.0	40.97S	175.44E	27	2.1	0.2	9	6
8342	AUG 01	0231 12.2	40.97S	175.46E	25	3.6	0.2	27	19
8348	AUG 01	0716 54.6	40.96S	175.45E	23	2.6	0.2	18	12
8349	AUG 01	0718 27.5	41.01S	174.19E	47	2.1	0.2	9	7
8350	AUG 01	0733 50.8	40.96S	175.45E	27	2.4	0.2	13	9
8352	AUG 01	0807 51.5	41.23S	174.65E	33	2.0	0.1	10	8
8354	AUG 01	0823 9.3	40.99S	175.44E	28	2.1	0.1	9	7
8355	AUG 01	0852 36.7	40.97S	175.43E	18	2.4	0.1	14	10
8360	AUG 01	0939 21.7	40.97S	175.43E	27	2.2	0.3	7	5
8362	AUG 01	1033 53.6	40.89S	175.75E	27	2.4	0.3	13	9
8380	AUG 02	0214 53.1	41.67S	174.33E	5R	2.3	0.2	12	8
8382	AUG 02	0648 57.0	40.80S	175.26E	30	2.2	0.1	10	6
8388	AUG 02	1348 4.8	41.14S	175.44E	25	2.0	0.2	10	6
8398	AUG 02	2203 37.0	40.97S	175.36E	9	2.6	0.2	15	10
8399	AUG 03	0009 7.8	41.14S	174.81E	30	2.3	0.0	10	7
8400	AUG 03	0140 20.3	41.40S	174.37E	35	2.4	0.2	10	8
8408	AUG 03	1009 34.4	40.85S	175.16E	25	2.0	0.2	7	6
8409	AUG 03	1038 55.8	40.63S	174.28E	56	2.2	0.2	7	5
8413	AUG 03	1350 48.3	40.99S	174.48E	44	2.7	0.1	14	12
8414	AUG 03	1353 29.4	41.50S	175.38E	19	3.0	0.3	19	11
8419	AUG 03	1958 2.8	41.30S	175.50E	24	2.6	0.1	12	8
8428	AUG 04	0558 45.2	41.94S	174.03E	24	2.5	0.3	16	11
8462	AUG 06	0136 15.1	41.35S	174.67E	53	2.1	0.1	7	5
8463	AUG 06	0152 43.1	41.25S	175.12E	23	2.1	0.1	10	8
8468	AUG 06	0746 31.6	41.69S	174.14E	22	2.3	0.3	10	8
8471	AUG 06	0841 34.9	41.01S	175.38E	27	2.9	0.3	20	15
8473	AUG 06	0851 1.4	41.17S	174.79E	29	2.1	0.0	9	6
8474	AUG 06	0941 0.6	41.37S	174.99E	27	2.3	0.1	11	9
8484	AUG 06	1730 44.6	41.41S	175.29E	15	2.5	0.2	17	10

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8485	AUG 06	1742 25.1	41.64S	174.32E	12R	2.4	0.2	15	11
8487	AUG 06	1814 40.0	41.17S	174.61E	56	2.1	0.1	10	8
8491	AUG 06	2206 27.6	40.53S	174.14E	88	2.8	0.2	13	7
8494	AUG 07	0657 54.4	40.68S	175.86E	37	2.6	0.1	10	4
8495	AUG 07	0919 42.3	41.69S	174.31E	5R	2.8	0.2	23	18
8496	AUG 07	0928 47.1	41.69S	174.31E	7	2.9	0.2	21	16
8506	AUG 08	0607 9.2	40.53S	174.23E	30	2.5	0.1	6	5
8507	AUG 08	0631 4.2	41.05S	174.12E	72	2.7	0.1	14	11
8522	AUG 09	0536 24.9	40.53S	174.69E	58	3.1	0.2	18	11
8532	AUG 09	1459 41.1	41.70S	174.29E	5R	2.4	0.4	15	12
8540	AUG 10	0043 4.4	40.78S	175.75E	30	2.4	0.2	16	11
8546	AUG 10	0512 16.0	40.86S	175.03E	39	2.7	0.1	15	9
8554	AUG 10	1452 8.5	41.29S	175.30E	29	2.1	0.2	10	8
8555	AUG 10	1654 40.0	41.35S	174.89E	26	2.0	0.1	6	4
8559	AUG 10	2327 22.4	40.85S	175.77E	28	2.2	0.2	9	5
8561	AUG 11	0314 29.6	40.50S	174.48E	5R	2.3	0.2	8	6
8572	AUG 11	0828 0.8	40.89S	175.77E	29	2.3	0.1	19	12
8573	AUG 11	0946 16.3	41.06S	175.33E	23	2.0	0.1	12	9
8583	AUG 11	1638 52.8	41.54S	174.21E	5R	2.3	0.3	10	7
8590	AUG 12	0336 49.0	41.16S	174.66E	30	2.3	0.1	9	7
8595	AUG 12	0936 52.7	41.64S	175.33E	19	2.3	0.2	8	5
8603	AUG 12	1628 0.9	41.01S	175.35E	28	2.2	0.2	12	7
8606	AUG 12	1943 58.3	41.16S	174.62E	32	2.1	0.0	8	6
8618	AUG 13	0250 25.0	41.19S	173.88E	59	2.5	0.2	17	9
8623	AUG 13	0717 27.6	41.41S	174.11E	9	2.4	0.3	18	14
8633	AUG 13	1931 3.1	41.28S	174.67E	48	2.4	0.1	9	7
8636	AUG 14	0030 7.4	40.74S	174.75E	43	2.0	0.1	9	6
8637	AUG 14	0052 46.5	40.56S	175.07E	33	2.2	0.2	9	7
8642	AUG 14	0649 56.5	41.67S	173.88E	39	2.7	0.3	19	14
8644	AUG 14	0811 9.6	40.57S	173.77E	111	2.9	0.3	13	9
8647	AUG 14	0931 1.0	41.07S	174.13E	50	2.8	0.1	8	7
8651	AUG 14	1658 13.2	41.81S	174.87E	32	2.6	0.2	18	15
8653	AUG 15	0000 2.2	40.81S	174.98E	33	2.7	0.2	20	14
8656	AUG 15	0608 47.4	40.92S	174.93E	32	2.5	0.2	12	9
8662	AUG 15	0912 20.5	41.41S	174.94E	28	2.1	0.1	12	8
8669	AUG 15	1624 23.2	40.66S	174.59E	33	2.0	0.3	8	5
8672	AUG 15	1712 13.7	41.44S	174.52E	55	3.0	0.1	20	14
8673	AUG 15	1856 34.2	40.95S	174.84E	33	2.3	0.1	16	10
8682	AUG 16	0231 47.0	40.72S	175.40E	29	2.2	0.1	13	8
8721	AUG 17	1411 10.3	40.84S	174.56E	53	2.5	0.1	16	9
8725	AUG 17	1645 12.7	41.64S	175.31E	1	2.2	0.1	13	8
8738	AUG 18	0709 21.6	41.58S	174.12E	48	2.6	0.2	9	5
8754	AUG 18	1452 37.5	41.27S	175.25E	29	3.9F	0.2	32	25
8755	AUG 18	1529 0.2	41.27S	175.23E	28	2.6	0.2	17	11
8763	AUG 18	1952 29.4	41.27S	175.23E	28	2.4	0.1	18	11

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8778	AUG 19	0638 9.8	40.52S	174.90E	32	2.2	0.1	9	6
8788	AUG 19	1544 52.2	41.70S	174.27E	15	2.0	0.1	11	8
8790	AUG 19	1914 0.8	41.67S	174.56E	33	2.9	0.1	21	13
8791	AUG 19	1924 40.8	41.27S	175.23E	26	2.3	0.1	9	5
8792	AUG 19	1930 17.8	41.25S	174.16E	41	2.9	0.2	25	14
8795	AUG 19	2333 7.9	41.45S	174.98E	22	2.0	0.1	10	8
8807	AUG 20	0520 41.5	40.80S	175.59E	21	2.2	0.2	16	10
8811	AUG 20	1128 17.3	41.26S	173.52E	88	2.7	0.2	19	11
8814	AUG 20	1559 9.1	41.72S	174.38E	29	2.5	0.2	19	13
8828	AUG 21	0634 12.1	41.38S	174.90E	17	2.0	0.2	14	9
8830	AUG 21	1009 55.0	41.16S	174.96E	31	2.0	0.1	11	7
8833	AUG 21	1156 0.1	41.73S	174.52E	33	2.2	0.1	9	6
8836	AUG 21	1603 33.4	41.84S	173.71E	12R	2.8	0.2	10	6
8843	AUG 22	0006 0.7	40.76S	175.97E	32	2.1	0.1	11	4
8846	AUG 22	0209 7.5	41.55S	174.01E	35	2.8	0.3	20	13
8854	AUG 22	0729 56.5	40.77S	173.94E	90	3.2	0.2	27	15
8861	AUG 22	1156 54.1	40.62S	175.52E	61	3.0	0.2	21	13
8863	AUG 22	1410 44.2	41.35S	174.62E	22	2.1	0.1	8	5
8868	AUG 22	1556 10.7	40.83S	174.55E	28	2.2	0.2	12	7
8873	AUG 23	0330 44.4	40.71S	175.35E	30	2.4	0.2	19	10
8874	AUG 23	0331 30.0	41.07S	175.40E	25	2.1	0.2	14	9
8875	AUG 23	0426 40.3	41.30S	174.87E	22	2.1	0.1	14	10
8876	AUG 23	0451 50.1	40.62S	175.49E	31	2.1	0.1	12	6
8879	AUG 23	0831 19.4	40.53S	173.81E	95	2.6	0.2	13	7
8880	AUG 23	0910 46.4	41.13S	175.34E	23	2.5	0.1	19	12
8882	AUG 23	0952 25.2	41.75S	174.54E	30	2.5	0.2	13	10
8885	AUG 23	1055 48.4	41.57S	175.24E	21	2.1	0.2	17	11
8917	AUG 24	1023 8.7	40.88S	174.71E	17	2.1	0.2	10	7
8920	AUG 24	1203 9.9	41.01S	175.48E	22	2.3	0.2	15	11
8923	AUG 24	1336 7.8	41.42S	174.95E	29	2.9	0.2	22	15
8927	AUG 24	1615 21.5	40.61S	175.50E	30	2.2	0.2	8	6
8929	AUG 24	1642 23.2	41.01S	175.48E	23	2.0	0.2	13	9
8932	AUG 24	1927 36.0	41.70S	174.27E	17	2.3	0.2	12	10
8933	AUG 24	2048 24.4	40.67S	173.66E	127	2.6	0.1	10	6
8935	AUG 24	2050 48.8	40.86S	175.27E	29	3.1	0.3	27	19
8936	AUG 24	2117 9.3	40.99S	174.35E	35	2.3	0.2	14	10
8945	AUG 25	0452 43.1	41.04S	175.56E	26	2.2	0.1	13	9
8948	AUG 25	0905 19.1	40.80S	174.58E	28	2.3	0.2	11	6
8965	AUG 25	1614 30.0	41.08S	175.37E	26	2.1	0.2	6	5
8966	AUG 25	1617 47.3	40.52S	175.80E	30	2.6	0.3	14	10
8969	AUG 25	1831 32.3	41.33S	175.36E	13	2.1	0.1	13	9
8970	AUG 25	1832 0.9	41.34S	175.36E	14	2.2	0.1	14	10
8979	AUG 26	0529 45.3	40.86S	175.17E	31	2.5	0.3	16	11
8983	AUG 26	0628 4.5	40.75S	175.72E	24	2.4	0.2	21	12
8985	AUG 26	0706 17.6	41.21S	173.59E	86	3.1	0.2	24	13

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8987	AUG 26	1002 5.9	40.95S	175.95E	29	2.5	0.2	14	8
8988	AUG 26	1217 28.4	40.69S	174.56E	33	2.6	0.1	12	7
8989	AUG 26	1316 58.5	40.89S	175.47E	25	2.3	0.1	13	9
8990	AUG 26	1355 11.2	40.89S	175.49E	29	3.3	0.2	18	15
8992	AUG 26	1749 21.2	41.10S	174.64E	31	2.5	0.1	11	7
9008	AUG 27	0755 36.4	41.54S	174.54E	17	2.8	0.2	21	16
9010	AUG 27	0952 25.8	40.89S	175.71E	27	3.1	0.2	24	19
9012	AUG 27	1210 18.2	41.02S	173.67E	76	2.6	0.2	10	8
9014	AUG 27	1256 40.1	40.96S	175.23E	18	2.1	0.3	12	8
9018	AUG 27	1645 29.0	41.24S	174.58E	54	2.3	0.1	9	7
9022	AUG 27	1922 5.4	40.89S	173.75E	85	3.2	0.2	19	11
9028	AUG 28	0152 6.1	41.73S	174.29E	5R	2.3	0.3	10	7
9040	AUG 28	1227 0.5	40.92S	174.95E	34	2.5	0.2	14	9
9043	AUG 28	1517 19.6	41.32S	174.66E	29	2.1	0.2	10	7
9050	AUG 28	1942 58.3	40.88S	175.70E	28	2.1	0.1	14	8
9060	AUG 28	2242 35.2	41.21S	173.85E	63	2.6	0.2	16	8
9067	AUG 29	0133 41.7	41.13S	174.12E	50	2.1	0.1	7	4
9069	AUG 29	0250 18.4	40.54S	174.21E	61	2.5	0.2	8	5
9075	AUG 29	0602 47.9	40.96S	175.24E	34	2.2	0.2	7	5
9079	AUG 29	0837 50.8	41.17S	175.29E	31	2.4	0.1	14	9
9095	AUG 29	2238 47.3	41.47S	174.46E	17	3.2	0.2	27	21
9101	AUG 30	0428 55.1	41.47S	174.46E	20	2.4	0.2	20	13
9108	AUG 30	1322 21.5	41.46S	174.22E	17	2.3	0.2	16	10
9110	AUG 30	1701 39.5	40.54S	175.72E	32	2.2	0.1	10	4
9120	AUG 31	0148 29.0	41.58S	174.35E	25	3.1	0.2	23	18
9129	AUG 31	1142 45.4	41.50S	175.62E	28	2.6	0.1	12	8
9131	AUG 31	1509 46.9	41.22S	174.64E	59	2.4	0.0	7	4
9144	SEP 01	0744 16.9	40.70S	174.58E	69	2.4	0.2	15	9
9147	SEP 01	1103 18.2	40.86S	174.61E	54	2.4	0.1	14	9
9163	SEP 02	0155 9.3	41.28S	174.97E	25	2.6	0.1	15	10
9169	SEP 02	1236 6.7	41.60S	175.62E	15	2.2	0.1	10	7
9170	SEP 02	1254 40.5	40.83S	174.52E	64	2.3	0.0	5	4
9183	SEP 03	0528 36.8	41.11S	174.95E	28	2.0	0.1	7	6
9187	SEP 03	0620 24.0	40.57S	175.28E	31	2.3	0.1	13	9
9196	SEP 03	1051 27.8	40.73S	174.16E	76	3.3	0.2	33	23
9198	SEP 03	1250 37.4	41.39S	174.63E	22	2.0	0.2	12	7
9207	SEP 03	2106 43.0	41.60S	174.67E	29	2.1	0.2	10	7
9218	SEP 04	0314 12.6	40.56S	175.94E	28	2.3	0.2	16	9
9224	SEP 04	0913 5.6	40.71S	174.45E	73	3.1	0.2	26	18
9229	SEP 04	1240 53.3	41.15S	174.45E	33	2.0	0.1	9	6
9231	SEP 04	1414 34.6	41.11S	174.11E	50	2.2	0.1	14	10
9233	SEP 04	1612 9.5	41.51S	174.94E	28	2.0	0.1	11	8
9234	SEP 04	1748 54.2	40.55S	174.21E	89	2.1	0.1	8	6
9237	SEP 04	1828 53.1	41.36S	174.63E	18	2.1	0.2	13	10
9241	SEP 04	2306 41.2	41.58S	175.05E	29	2.2	0.1	15	10

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9242	SEP 05	0030 15.4	40.61S	174.06E	89	2.9	0.3	17	9
9247	SEP 05	0451 23.9	41.91S	174.23E	17	2.4	0.2	9	7
9249	SEP 05	0455 40.0	41.86S	174.33E	19	2.5	0.3	11	9
9252	SEP 05	0931 40.9	41.85S	174.36E	5R	2.6	0.2	12	10
9253	SEP 05	0936 20.8	40.56S	175.49E	33R	2.1	0.3	8	7
9264	SEP 05	2115 21.2	40.98S	175.42E	22	2.1	0.2	8	6
9265	SEP 05	2314 45.5	41.50S	174.52E	21	2.2	0.2	11	9
9276	SEP 06	1103 30.0	41.74S	174.99E	33R	2.1	0.1	6	4
9279	SEP 06	1202 26.2	41.12S	174.39E	64	2.2	0.1	7	5
9284	SEP 06	1540 36.0	40.79S	175.67E	31	2.3	0.2	17	9
9301	SEP 07	0809 40.0	40.57S	173.56E	121	3.3	0.2	28	17
9305	SEP 07	1051 8.3	40.77S	174.73E	42	3.6	0.2	32	21
9310	SEP 07	1408 57.2	41.63S	174.65E	27	2.3	0.2	13	11
9323	SEP 07	2133 12.4	41.44S	174.98E	27	2.4	0.1	12	10
9324	SEP 07	2357 23.1	41.06S	175.04E	33	2.2	0.2	12	8
9327	SEP 08	0107 42.9	41.26S	175.19E	16	2.0	0.2	13	11
9335	SEP 08	0517 21.9	40.99S	174.81E	63	2.2	0.2	9	7
9337	SEP 08	0529 14.5	40.88S	175.57E	29	2.5	0.1	23	15
9342	SEP 08	1313 57.2	41.78S	174.36E	28	2.3	0.2	11	9
9345	SEP 08	1616 53.9	41.10S	174.85E	27	2.1	0.1	12	8
9350	SEP 08	1850 37.4	41.10S	174.85E	27	2.1	0.1	8	6
9351	SEP 08	1900 45.7	41.04S	174.71E	58	2.1	0.1	8	5
9360	SEP 09	0751 40.6	41.59S	174.69E	31	2.1	0.3	14	11
9365	SEP 09	1547 5.0	40.54S	174.44E	32	2.1	0.1	6	4
9370	SEP 09	1724 8.3	40.80S	173.61E	92	2.7	0.3	16	10
9372	SEP 09	1808 55.4	40.99S	175.62E	28	2.2	0.1	14	8
9379	SEP 10	0011 17.2	41.27S	174.99E	23	2.2	0.1	10	8
9381	SEP 10	0223 51.8	41.32S	174.34E	57	2.5	0.1	15	10
9384	SEP 10	0752 13.8	41.53S	175.35E	21	2.5	0.3	16	12
9396	SEP 10	1918 15.1	40.86S	174.74E	14	2.2	0.3	9	6
9407	SEP 11	0733 8.0	41.03S	174.67E	33	2.3	0.1	14	10
9412	SEP 11	0947 8.6	41.16S	174.48E	40	3.0	0.2	28	17
9414	SEP 11	1229 59.3	40.99S	175.44E	26	2.3	0.1	9	6
9416	SEP 11	1529 35.3	41.47S	174.91E	28	2.4	0.1	14	10
9417	SEP 11	1639 31.6	40.96S	175.44E	25	2.5	0.2	18	12
9420	SEP 11	1850 31.9	40.97S	175.45E	22	3.1	0.3	28	19
9421	SEP 11	1851 46.0	40.96S	175.44E	25	2.4	0.1	18	12
9424	SEP 11	2048 22.3	40.52S	173.90E	85	2.8	0.2	16	9
9431	SEP 12	0151 28.5	40.96S	175.42E	21	2.1	0.2	14	9
9435	SEP 12	0350 8.3	40.50S	174.78E	5R	2.2	0.1	9	6
9442	SEP 12	0956 22.6	41.28S	175.27E	23	2.5	0.1	15	11
9443	SEP 12	0956 34.3	41.30S	175.28E	28	2.4	0.1	13	9
9445	SEP 12	1116 24.7	41.50S	173.51E	60	2.7	0.3	25	15
9450	SEP 12	1326 36.8	40.97S	175.44E	24	2.8	0.2	22	17
9451	SEP 12	1345 13.4	41.61S	174.36E	56	2.1	0.1	9	6

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9453	SEP 12	1427 23.1	41.28S	174.96E	26	2.4	0.1	13	8
9454	SEP 12	1427 31.1	40.96S	175.46E	22	2.3	0.2	11	7
9456	SEP 12	1459 34.9	40.97S	175.44E	25	2.7	0.1	19	12
9459	SEP 12	1720 52.6	40.95S	174.90E	31	2.2	0.1	20	11
9461	SEP 12	1920 0.2	40.70S	173.99E	93	2.3	0.2	11	6
9465	SEP 13	0032 28.9	41.59S	174.86E	29	2.3	0.1	10	8
9467	SEP 13	0221 3.9	41.27S	174.84E	24	2.2	0.1	13	9
9469	SEP 13	0556 32.2	41.10S	173.97E	58	2.2	0.0	7	5
9472	SEP 13	0708 34.5	41.16S	173.67E	45	2.0	0.1	8	6
9474	SEP 13	1029 27.7	40.80S	173.97E	64	2.3	0.1	12	7
9484	SEP 13	2209 20.2	41.54S	174.50E	19	2.1	0.1	7	5
9488	SEP 14	0111 11.3	41.10S	175.52E	36	2.3	0.1	13	9
9492	SEP 14	0608 6.0	41.43S	174.51E	24	2.1	0.3	10	8
9505	SEP 14	1830 29.8	40.51S	174.16E	78	2.9	0.2	27	17
9509	SEP 14	2342 7.0	41.15S	174.64E	32	2.6	0.2	19	13
9526	SEP 15	1917 51.4	40.88S	175.01E	37	2.0	0.1	9	7
9528	SEP 15	2030 3.0	41.15S	175.12E	27	2.0	0.2	12	8
9529	SEP 15	2156 22.9	41.13S	175.32E	28	2.2	0.1	13	9
9532	SEP 16	0240 46.7	41.29S	175.22E	28	2.4	0.2	14	10
9537	SEP 16	0552 30.7	40.97S	174.62E	59	3.0	0.1	19	13
9540	SEP 16	1125 36.7	41.53S	174.16E	35	2.3	0.2	11	7
9543	SEP 16	1632 2.0	41.96S	174.36E	29	2.3	0.1	7	4
9562	SEP 17	0508 2.5	41.27S	175.00E	24	2.9	0.1	19	14
9563	SEP 17	0534 9.8	41.28S	175.00E	24	2.1	0.1	8	6
9567	SEP 17	0929 0.8	41.49S	174.46E	54	2.6	0.1	14	11
9575	SEP 17	1252 37.4	41.06S	174.70E	34	2.3	0.2	13	9
9577	SEP 17	1328 40.7	40.56S	175.10E	42	3.0	0.3	22	17
9581	SEP 17	1428 30.8	41.25S	175.33E	27	2.0	0.2	11	8
9584	SEP 17	1818 17.0	41.68S	174.86E	33	2.4	0.1	11	9
9585	SEP 17	2134 32.3	41.30S	175.00E	24	2.2	0.1	8	6
9586	SEP 18	0019 23.5	41.35S	175.14E	28	2.2	0.1	11	8
9587	SEP 18	0042 54.8	40.96S	175.27E	31	2.0	0.2	11	7
9594	SEP 18	0646 24.6	40.98S	175.68E	30	2.1	0.2	9	7
9600	SEP 18	1250 27.5	41.37S	174.85E	34	3.0	0.2	20	16
9601	SEP 18	1346 5.3	41.01S	173.54E	130	2.8	0.1	12	8
9602	SEP 18	1416 15.8	40.86S	175.17E	28	2.1	0.2	15	10
9611	SEP 18	1758 23.2	41.17S	173.67E	86	2.7	0.3	16	10
9613	SEP 18	1848 23.3	41.71S	174.49E	36	2.0	0.1	5	3
9620	SEP 19	0314 27.0	40.85S	174.30E	23	2.5	0.2	17	9
9624	SEP 19	0527 47.2	40.70S	174.40E	55	2.5	0.2	16	8
9625	SEP 19	0535 16.0	40.50S	174.12E	72	3.2	0.2	28	20
9630	SEP 19	0852 11.1	41.36S	174.84E	32	2.4	0.1	16	10
9633	SEP 19	1036 8.4	41.12S	175.43E	27	2.0	0.1	13	9
9635	SEP 19	1200 50.9	40.65S	174.29E	58	3.0	0.2	13	8
9640	SEP 19	1527 37.3	40.95S	174.63E	35	2.3	0.2	13	9

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9655	SEP 20	0323 11.9	41.42S	174.58E	19	2.2	0.2	17	12
9656	SEP 20	0334 56.9	40.56S	174.10E	59	2.1	0.1	9	6
9680	SEP 20	2117 0.6	40.74S	174.36E	49	2.1	0.1	8	5
9683	SEP 21	0005 34.3	41.16S	175.52E	21	2.8	0.2	24	15
9698	SEP 21	1630 58.0	40.57S	174.46E	29	2.3	0.2	12	8
9701	SEP 21	1749 25.8	40.51S	175.92E	36	2.1	0.1	11	4
9714	SEP 22	0352 33.1	40.88S	174.11E	52	2.6	0.2	11	7
9731	SEP 22	1927 25.7	40.74S	174.74E	41	2.0	0.0	7	4
9735	SEP 22	2236 15.7	40.58S	174.14E	30	2.3	0.1	7	5
9736	SEP 22	2239 28.8	41.29S	174.39E	34	2.6	0.2	12	9
9743	SEP 23	0227 40.6	41.09S	175.43E	30	2.1	0.2	8	6
9746	SEP 23	0306 38.8	40.58S	175.03E	32	2.4	0.2	13	8
9750	SEP 23	0442 53.6	41.10S	174.15E	54	2.3	0.1	8	5
9752	SEP 23	0642 30.7	41.37S	175.11E	28	2.7	0.1	17	12
9753	SEP 23	0644 9.2	41.37S	175.11E	28	2.1	0.1	9	7
9763	SEP 23	1221 30.1	41.68S	174.29E	9	2.6	0.2	15	12
9766	SEP 23	1244 18.5	41.69S	174.29E	12	2.4	0.2	12	8
9767	SEP 23	1328 41.0	41.29S	174.43E	17	2.3	0.3	11	8
9774	SEP 23	1901 59.0	40.85S	175.08E	34	2.1	0.1	6	5
9780	SEP 24	0604 57.6	40.60S	175.86E	32	2.4	0.2	15	9
9784	SEP 24	1010 40.9	40.52S	173.93E	123	2.7	0.1	11	7
9788	SEP 24	1247 5.1	41.64S	174.79E	29	2.7	0.2	17	11
9790	SEP 24	1458 18.1	41.27S	173.87E	56	2.4	0.2	12	8
9797	SEP 24	1951 4.3	41.61S	174.41E	12	2.1	0.2	7	6
9799	SEP 24	2131 32.2	41.16S	174.68E	28	2.6	0.1	14	11
9806	SEP 25	0351 9.2	40.97S	175.50E	22	2.6	0.3	14	10
9807	SEP 25	0412 1.5	41.17S	174.77E	30	2.2	0.1	9	7
9815	SEP 25	1638 18.6	40.64S	174.60E	53	2.8	0.3	12	8
9819	SEP 25	2139 36.2	40.90S	174.83E	57	2.3	0.1	7	5
9820	SEP 25	2223 57.6	41.64S	174.26E	15	2.6	0.2	16	13
9833	SEP 26	1609 34.9	40.51S	175.85E	55	2.6	0.2	11	6
9834	SEP 26	1736 39.2	41.45S	175.94E	30	2.7	0.1	11	7
9836	SEP 26	1905 14.1	40.59S	175.85E	36	2.3	0.2	9	3
9841	SEP 27	0150 48.6	41.56S	174.31E	25	2.3	0.1	11	8
9843	SEP 27	0238 43.7	40.86S	174.68E	5R	2.2	0.1	10	6
9850	SEP 27	0656 51.0	40.95S	175.50E	23	2.2	0.1	13	7
9855	SEP 27	1218 26.1	41.14S	174.61E	58	2.2	0.1	7	5
9857	SEP 27	1342 40.6	41.40S	175.00E	25	2.9	0.1	24	15
9859	SEP 27	1351 14.0	41.41S	174.99E	26	2.3	0.1	10	8
9861	SEP 27	1448 23.8	41.39S	174.98E	25	2.0	0.1	7	5
9863	SEP 27	1505 18.5	41.39S	175.01E	24	2.2	0.2	9	7
9864	SEP 27	1544 29.7	41.40S	174.99E	26	2.6	0.2	17	12
9873	SEP 28	0001 25.5	41.02S	174.53E	20	2.2	0.2	8	5
9876	SEP 28	0632 8.6	41.28S	175.00E	23	2.3	0.1	12	9
9878	SEP 28	0745 9.7	40.56S	174.22E	69	2.8	0.2	18	12

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
9883	SEP 28	1129 55.4	41.29S	175.01E	28	2.4	0.2	16	12
9884	SEP 28	1200 4.9	40.50S	175.08E	40	2.0	0.2	7	5
9888	SEP 28	1517 34.1	41.32S	174.44E	37	2.5	0.2	23	14
9891	SEP 28	1732 22.7	41.57S	175.35E	20	2.4	0.2	18	11
9892	SEP 28	1732 51.0	41.59S	175.37E	19	2.4	0.2	18	11
9902	SEP 28	2010 36.6	41.04S	174.54E	35	2.1	0.1	8	5
9905	SEP 28	2222 58.2	40.59S	173.76E	140	2.6	0.1	9	7
9914	SEP 29	0810 33.0	40.89S	175.92E	28	2.1	0.1	12	7
9915	SEP 29	0943 35.4	40.63S	174.02E	74	2.4	0.2	10	6
9916	SEP 29	1025 59.9	41.29S	174.24E	40	2.1	0.1	10	7
9919	SEP 29	1210 35.6	41.61S	175.37E	21	2.5	0.2	17	11
9922	SEP 29	1532 51.9	41.31S	174.99E	24	2.0	0.1	10	7
9934	SEP 29	2316 17.1	41.06S	174.54E	39	2.1	0.1	9	7
9941	SEP 30	0439 44.6	41.37S	175.06E	27	2.2	0.1	10	8
9954	SEP 30	1439 37.3	41.63S	174.58E	26	2.1	0.1	13	8
9956	SEP 30	1446 59.3	41.37S	174.97E	27	2.5	0.1	19	12
9957	SEP 30	1521 22.3	41.37S	174.97E	25	2.0	0.1	13	10
9959	SEP 30	1743 43.6	41.75S	174.53E	38	2.5	0.1	17	11
9965	SEP 30	2111 19.5	40.54S	174.95E	32	2.3	0.2	10	6
9966	SEP 30	2147 49.8	41.70S	174.61E	25	2.0	0.1	8	5
9970	OCT 01	0205 51.8	41.24S	174.76E	29	2.2	0.1	12	9
9972	OCT 01	0221 39.7	40.88S	175.76E	31	2.4	0.2	15	8
9973	OCT 01	0244 24.0	41.80S	174.13E	11	2.2	0.3	7	5
9977	OCT 01	0451 29.5	40.89S	174.97E	38	2.0	0.1	11	7
9986	OCT 01	1207 21.5	40.91S	174.08E	54	2.7	0.3	16	11
9989	OCT 01	1352 27.7	41.54S	173.53E	82	2.5	0.2	13	10
9990	OCT 01	1426 1.3	40.52S	173.52E	121	3.0	0.2	21	13
9993	OCT 01	1552 25.9	40.62S	175.85E	32	2.3	0.2	16	8
9997	OCT 01	1930 5.4	40.62S	175.50E	32	2.3	0.1	12	7
9998	OCT 01	2143 35.6	41.55S	175.22E	18	2.1	0.2	9	6
9999	OCT 01	2143 58.5	41.57S	175.23E	20	2.0	0.2	10	6
10004	OCT 01	2251 9.7	41.79S	174.37E	27	2.5	0.2	15	11
10005	OCT 02	0021 43.8	41.20S	174.63E	57	2.4	0.1	13	10
10013	OCT 02	0502 28.7	41.18S	173.91E	53	2.7	0.1	9	7
10026	OCT 02	2002 24.3	40.88S	175.21E	30	2.3	0.2	8	7
10027	OCT 02	2013 3.8	40.64S	174.30E	64	3.1	0.2	26	14
10028	OCT 02	2301 9.9	40.60S	173.71E	90	3.4	0.3	27	17
10035	OCT 03	0617 0.4	40.99S	174.84E	32	2.0	0.1	10	6
10039	OCT 03	1051 15.8	41.74S	174.58E	32	2.1	0.1	7	4
10040	OCT 03	1054 46.1	41.01S	174.46E	40	2.7	0.2	21	13
10041	OCT 03	1206 34.0	40.53S	174.43E	55	2.8	0.2	18	11
10045	OCT 03	1249 15.6	41.73S	174.49E	32	2.2	0.2	10	7
10048	OCT 03	1758 19.4	40.66S	175.90E	33	2.7	0.1	14	9
10052	OCT 03	2222 27.3	40.71S	175.86E	22	2.6	0.3	16	9
10055	OCT 04	0345 42.2	41.21S	175.24E	27	2.0	0.1	11	7

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
10058	OCT 04	0808 42.0	40.99S	174.03E	38	2.3	0.3	13	7
10069	OCT 04	1450 39.1	41.15S	173.78E	65	2.3	0.2	9	6
10071	OCT 04	1941 54.0	41.41S	174.47E	32	2.1	0.1	8	6
10075	OCT 05	0244 56.4	41.09S	175.50E	29	2.1	0.1	12	9
10077	OCT 05	0341 14.8	40.58S	174.01E	65	2.4	0.3	8	7
10081	OCT 05	0622 54.3	41.71S	174.25E	9	2.2	0.2	9	8
10088	OCT 05	1518 29.8	41.06S	173.62E	87	3.1	0.2	20	14
10092	OCT 05	1618 39.0	41.07S	173.59E	79	2.4	0.1	11	7
10101	OCT 06	0337 40.4	41.34S	173.52E	66	2.5	0.2	9	7
10102	OCT 06	0340 57.1	41.72S	174.92E	31	2.4	0.2	10	8
10108	OCT 06	1229 27.5	40.93S	175.02E	31	2.5	0.2	16	13
10118	OCT 06	2003 22.0	40.99S	175.58E	26	2.8	0.2	17	12
10123	OCT 07	0345 7.0	41.53S	174.46E	22	2.3	0.2	10	8
10126	OCT 07	0531 25.3	40.92S	175.70E	26	2.3	0.2	14	9
10131	OCT 07	1029 26.1	40.85S	174.84E	63	2.5	0.1	15	11
10138	OCT 07	1559 5.2	41.26S	175.35E	30	3.3	0.2	23	15
10139	OCT 07	1559 38.8	41.25S	175.33E	28	2.4	0.1	12	7
10143	OCT 07	1704 17.8	40.64S	175.02E	18	2.5	0.2	18	14
10144	OCT 07	1705 8.7	40.75S	174.92E	35	2.0	0.0	7	6
10154	OCT 07	2327 50.5	41.33S	173.77E	49	2.5	0.1	9	6
10161	OCT 08	0309 41.6	40.55S	174.67E	67	3.3	0.2	28	20
10163	OCT 08	0404 50.2	41.04S	174.22E	47	2.1	0.1	10	6
10166	OCT 08	0444 45.7	41.69S	174.62E	37	2.3	0.2	10	7
10171	OCT 08	0927 40.8	40.64S	173.85E	84	2.7	0.3	13	8
10175	OCT 08	1248 28.9	41.40S	175.48E	18	2.1	0.2	11	8
10184	OCT 08	2003 39.5	41.54S	174.38E	17	2.1	0.2	9	8
10185	OCT 08	2016 42.6	41.25S	173.83E	66	3.4	0.2	23	19
10189	OCT 08	2322 31.7	41.23S	174.41E	56	2.2	0.0	8	5
10221	OCT 10	0431 49.7	41.02S	174.84E	46	2.3	0.1	11	8
10225	OCT 10	1030 9.4	40.53S	175.78E	38	3.5F	0.2	38	28
10228	OCT 10	1128 50.9	41.52S	174.13E	32	2.6	0.2	21	15
10234	OCT 10	2035 20.9	41.83S	174.54E	29	2.8	0.2	21	14
10235	OCT 10	2158 46.6	40.88S	174.76E	14	2.0	0.2	8	5
10236	OCT 11	0134 57.0	41.08S	174.48E	31	2.2	0.1	10	7
10237	OCT 11	0149 7.6	40.79S	174.83E	5R	2.0	0.2	8	4
10239	OCT 11	0209 13.4	40.98S	175.66E	33R	2.3	0.3	10	7
10243	OCT 11	0514 52.0	40.68S	174.78E	22	2.0	0.2	7	6
10244	OCT 11	0554 2.3	41.60S	173.81E	74	2.2	0.1	7	6
10245	OCT 11	0725 8.7	40.59S	175.72E	30	2.4	0.3	14	10
10247	OCT 11	1026 55.4	41.18S	173.85E	55	2.8	0.2	14	9
10248	OCT 11	1052 1.3	41.65S	174.31E	7	2.5	0.2	15	12
10250	OCT 11	1304 7.8	41.64S	174.60E	30	2.3	0.2	9	7
10253	OCT 11	1359 27.1	40.63S	175.47E	29	2.1	0.1	9	6
10257	OCT 11	1529 24.4	40.67S	173.67E	83	2.4	0.2	12	7
10259	OCT 11	1748 27.2	40.82S	174.25E	55	3.1	0.3	21	14

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
10260	OCT 11	1840 52.9	41.00S	174.79E	31	3.1	0.2	26	20
10272	OCT 12	1024 55.1	40.65S	173.81E	117	2.2	0.3	9	5
10276	OCT 12	1351 4.0	40.90S	175.00E	30	2.1	0.1	15	12
10278	OCT 12	1607 43.2	40.98S	174.49E	39	2.3	0.1	10	8
10282	OCT 12	2251 35.6	40.84S	174.23E	54	2.3	0.1	6	3
10287	OCT 13	1314 56.0	40.52S	174.92E	33	2.7	0.1	11	6
10288	OCT 13	1410 53.9	41.01S	175.62E	28	2.2	0.2	9	7
10299	OCT 14	0134 19.4	40.53S	175.47E	5R	2.5	0.2	8	6
10318	OCT 14	1957 42.4	41.73S	174.50E	34	2.6	0.1	8	6
10321	OCT 14	2116 14.3	41.59S	174.38E	5R	2.8	0.2	19	13
10322	OCT 14	2130 58.6	41.21S	173.81E	58	2.6	0.2	12	7
10323	OCT 14	2131 46.4	41.58S	174.37E	11	3.2	0.2	23	19
10324	OCT 14	2132 22.0	41.57S	174.36E	5R	3.2	0.2	23	17
10328	OCT 15	0238 54.7	41.17S	174.79E	51	2.7	0.1	13	10
10333	OCT 15	1013 56.9	40.73S	174.01E	97	2.6	0.3	12	8
10360	OCT 15	2329 47.0	41.60S	174.63E	29	2.5	0.1	8	6
10362	OCT 16	0006 4.2	41.77S	174.53E	32	2.4	0.1	9	6
10363	OCT 16	0036 36.8	40.89S	174.78E	61	2.3	0.0	7	6
10364	OCT 16	0037 29.5	41.80S	173.76E	45	3.4	0.3	32	18
10365	OCT 16	0039 13.9	41.67S	174.29E	14	2.1	0.1	8	6
10371	OCT 16	0736 10.8	41.01S	174.78E	30	2.0	0.0	10	8
10375	OCT 16	1331 45.0	41.71S	174.49E	30	2.2	0.1	10	8
10376	OCT 16	1344 59.2	41.00S	174.02E	61	2.4	0.1	9	6
10377	OCT 16	1600 6.6	41.45S	175.56E	21	2.0	0.1	11	7
10383	OCT 16	2307 25.9	41.68S	174.26E	5R	2.4	0.1	14	11
10386	OCT 17	0004 56.1	41.67S	174.29E	5R	2.2	0.2	9	6
10394	OCT 17	0750 12.3	40.61S	175.90E	25	2.0	0.2	6	4
10398	OCT 17	1414 24.3	40.53S	174.65E	49	3.2	0.2	32	22
10406	OCT 17	2326 8.6	40.57S	174.83E	60	4.1	0.2	33	25
10422	OCT 18	2300 42.2	40.61S	173.98E	71	2.1	0.2	7	5
10423	OCT 19	0100 23.7	40.91S	173.94E	63	2.5	0.1	12	6
10430	OCT 19	0744 38.3	41.00S	174.55E	56	2.3	0.0	7	5
10431	OCT 19	0800 49.2	41.65S	174.70E	24	2.2	0.1	9	7
10433	OCT 19	1115 56.5	40.61S	175.69E	33	2.4	0.1	6	3
10437	OCT 19	1447 18.0	41.62S	173.62E	57	2.5	0.2	10	6
10438	OCT 19	1448 34.1	41.64S	173.68E	58	2.5	0.2	10	6
10440	OCT 19	1705 45.7	40.56S	174.78E	39	2.6	0.2	11	9
10446	OCT 20	0025 0.4	41.23S	174.45E	33	2.5	0.1	9	7
10451	OCT 20	0510 22.7	41.40S	174.47E	24	2.0	0.2	8	6
10460	OCT 20	1604 14.3	40.77S	175.08E	34	2.7	0.1	13	9
10469	OCT 21	0142 27.2	41.89S	173.91E	18	2.5	0.2	12	9
10473	OCT 21	0417 27.9	41.42S	174.42E	23	2.3	0.1	10	7
10477	OCT 21	1035 2.5	40.62S	175.12E	39	2.9	0.2	23	16
10489	OCT 22	0416 53.6	40.99S	174.41E	53	2.3	0.1	8	6
10493	OCT 22	0958 14.0	40.97S	174.03E	56	2.0	0.1	10	6

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
10498	OCT 22	1436 31.6	41.12S	174.46E	40	2.0	0.1	10	6
10519	OCT 23	1303 57.2	41.05S	175.24E	28	2.0	0.1	11	7
10534	OCT 23	2033 59.0	40.95S	173.71E	74	2.4	0.1	9	6
10536	OCT 23	2138 8.7	41.04S	175.90E	30	2.1	0.1	9	5
10541	OCT 24	0425 6.9	41.81S	174.52E	18	2.4	0.2	11	7
10542	OCT 24	0505 41.3	40.85S	173.58E	88	2.8	0.3	17	9
10544	OCT 24	0837 24.8	41.13S	175.20E	33	2.2	0.1	11	7
10545	OCT 24	0930 49.7	41.47S	174.38E	19	2.6	0.2	17	12
10546	OCT 24	0936 43.3	41.06S	174.41E	65	2.5	0.1	10	7
10548	OCT 24	1125 29.0	41.48S	174.34E	19	2.1	0.3	12	9
10573	OCT 25	0517 0.8	41.32S	174.24E	65	2.3	0.1	10	7
10574	OCT 25	0538 15.2	41.09S	174.19E	68	3.1	0.2	31	18
10576	OCT 25	0737 39.7	41.13S	173.86E	62	2.3	0.1	10	6
10585	OCT 25	1434 45.5	40.92S	175.49E	25	2.1	0.1	13	8
10590	OCT 25	1705 8.8	40.64S	174.79E	25	2.0	0.2	9	7
10599	OCT 26	0215 58.7	41.02S	174.78E	31	2.8	0.1	15	10
10603	OCT 26	0536 6.4	41.85S	173.99E	20	2.6	0.2	11	8
10623	OCT 27	0925 0.2	41.21S	175.19E	25	2.0	0.1	10	7
10629	OCT 27	1124 21.4	40.51S	175.95E	55	2.8	0.2	22	13
10632	OCT 27	1222 54.8	41.50S	174.38E	18	2.2	0.2	13	9
10639	OCT 27	2055 30.4	40.89S	175.49E	24	2.7	0.1	22	14
10642	OCT 27	2358 54.4	40.72S	174.83E	5R	3.1	0.2	28	18
10654	OCT 28	0806 26.7	40.53S	175.95E	52	2.6	0.1	17	9
10659	OCT 28	1200 21.3	41.03S	174.70E	59	2.2	0.1	14	10
10676	OCT 28	1742 59.0	41.65S	174.62E	31	2.7	0.2	20	12
10689	OCT 28	2352 20.8	40.83S	175.68E	25	2.1	0.1	13	8
10693	OCT 29	0224 59.9	40.54S	174.79E	30	2.6	0.2	13	9
10711	OCT 29	2100 53.2	41.40S	173.86E	49	2.3	0.1	11	7
10738	OCT 30	1120 20.2	40.67S	175.86E	37	2.0	0.1	10	4
10739	OCT 30	1209 12.0	41.08S	175.44E	5R	2.5	0.2	23	15
10749	OCT 30	2218 42.0	40.99S	173.78E	66	2.6	0.2	19	11
10755	OCT 31	0825 55.7	40.84S	175.35E	34	2.2	0.2	17	10
10762	OCT 31	1359 49.2	41.76S	173.68E	44	2.6	0.3	20	15
10769	OCT 31	1828 53.0	41.05S	173.52E	93	2.7	0.3	20	13
10773	OCT 31	2143 27.8	40.62S	174.51E	68	2.2	0.2	9	6
10784	NOV 01	0845 41.1	41.02S	174.86E	34	2.6	0.1	22	13
10787	NOV 01	1151 55.2	41.65S	174.64E	31	2.9	0.2	25	15
10789	NOV 01	1229 58.8	40.92S	175.36E	24	2.1	0.2	15	8
10801	NOV 02	0630 12.4	41.64S	174.59E	29	2.3	0.1	13	10
10807	NOV 02	0957 59.8	41.20S	173.63E	75	2.4	0.1	12	7
10810	NOV 02	1011 11.8	41.43S	175.00E	29	3.3	0.2	29	19
10811	NOV 02	1029 29.0	40.89S	175.35E	24	2.0	0.2	12	7
10827	NOV 03	0807 44.2	41.36S	175.75E	23	3.5	0.1	29	19
10845	NOV 03	2335 15.4	41.62S	173.90E	12R	2.6	0.3	21	16
10847	NOV 04	0215 16.2	40.81S	174.73E	5R	2.3	0.2	10	6

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
10849	NOV 04	0552 49.4	40.97S	174.07E	54	2.5	0.1	9	6
10852	NOV 04	0605 33.0	40.96S	174.06E	59	2.5	0.1	10	7
10853	NOV 04	0642 7.3	41.63S	173.91E	11	3.4	0.3	29	20
10854	NOV 04	0755 47.2	40.94S	174.00E	53	2.1	0.1	9	5
10856	NOV 04	0942 54.9	40.74S	174.97E	23	2.6	0.2	17	11
10864	NOV 04	1410 54.7	41.21S	174.52E	33	2.3	0.2	12	9
10868	NOV 04	1522 34.4	40.87S	174.73E	17	2.2	0.0	10	6
10872	NOV 04	1630 1.0	40.99S	174.01E	59	2.2	0.1	9	6
10877	NOV 04	1859 19.5	41.78S	174.47E	5R	2.3	0.2	12	10
10895	NOV 05	0850 19.3	40.57S	174.56E	45	2.1	0.1	7	5
10910	NOV 06	0401 8.5	41.15S	174.64E	31	2.3	0.1	15	11
10917	NOV 06	0814 2.2	41.73S	174.35E	12R	2.2	0.3	10	8
10920	NOV 06	1134 1.3	41.80S	174.30E	18	2.2	0.3	10	9
10925	NOV 06	1323 48.7	40.90S	175.50E	26	2.1	0.1	7	5
10926	NOV 06	1536 36.5	40.79S	175.14E	34	2.0	0.2	8	6
10930	NOV 06	1744 29.4	41.71S	174.31E	14	2.4	0.3	24	16
10938	NOV 07	0052 49.3	40.97S	173.58E	106	3.1	0.3	10	6
10940	NOV 07	0207 19.6	40.73S	173.95E	72	2.3	0.1	10	6
10941	NOV 07	0220 49.4	41.75S	174.24E	18	2.5	0.3	23	17
10942	NOV 07	0319 41.2	41.23S	175.79E	28	3.3	0.2	27	17
10949	NOV 07	0805 20.4	41.00S	173.70E	80	2.9	0.3	32	18
10960	NOV 07	1830 52.8	41.38S	174.31E	33R	2.5	0.3	16	11
10965	NOV 08	0105 48.9	41.53S	174.43E	55	2.5	0.1	23	15
10966	NOV 08	0306 52.3	40.70S	174.48E	64	2.6	0.1	14	8
10971	NOV 08	0810 34.7	41.22S	174.62E	31	2.0	0.2	15	11
10973	NOV 08	0922 5.0	41.17S	173.63E	84	2.7	0.3	21	10
10975	NOV 08	1210 36.1	40.75S	174.70E	23	2.2	0.1	12	8
10983	NOV 08	1528 4.5	40.98S	173.78E	74	2.9	0.2	28	15
11000	NOV 09	0259 57.5	41.75S	174.60E	28	2.0	0.2	12	9
11001	NOV 09	0317 28.7	41.05S	173.85E	62	2.0	0.1	9	5
11004	NOV 09	0411 35.6	41.28S	175.23E	30	3.1	0.2	35	22
11006	NOV 09	0715 1.0	40.79S	174.69E	5R	2.6	0.2	22	16
11012	NOV 09	1046 21.1	40.67S	175.80E	47	3.4	0.2	33	23
11015	NOV 09	1213 7.3	41.77S	174.51E	28	2.2	0.2	12	10
11016	NOV 09	1353 11.4	40.50S	173.96E	107	2.5	0.2	12	9
11021	NOV 09	1636 44.6	41.65S	174.51E	48	2.3	0.2	12	10
11022	NOV 09	1644 4.6	40.61S	174.97E	33	2.0	0.2	11	7
11023	NOV 09	1733 13.9	41.56S	173.73E	48	3.1	0.2	34	20
11024	NOV 09	1737 5.4	41.56S	173.74E	47	2.7	0.2	28	17
11027	NOV 09	2002 42.1	40.83S	173.69E	88	2.9	0.2	24	12
11032	NOV 10	0057 55.8	40.50S	174.99E	27	2.1	0.1	14	7
11035	NOV 10	0457 37.3	40.62S	174.33E	38	2.0	0.0	7	4
11041	NOV 10	0913 15.2	41.59S	174.24E	12R	2.1	0.3	9	6
11053	NOV 10	1928 32.2	41.11S	175.30E	26	2.2	0.1	13	9
11055	NOV 10	2047 27.6	40.99S	173.86E	83	2.3	0.2	11	6

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
11058	NOV 11	0014 17.8	40.67S	173.84E	95	2.6	0.2	19	9
11060	NOV 11	0216 19.5	40.86S	175.63E	26	2.3	0.1	15	10
11061	NOV 11	0459 53.6	41.67S	174.60E	31	3.1	0.2	26	16
11062	NOV 11	0500 24.7	41.67S	174.61E	30	3.0	0.2	17	10
11063	NOV 11	0501 56.6	41.61S	174.61E	29	2.4	0.1	7	5
11080	NOV 11	1246 37.1	40.91S	175.20E	22	2.1	0.2	19	11
11087	NOV 11	1536 4.1	41.09S	174.00E	48	2.2	0.1	10	6
11088	NOV 11	1809 43.3	40.54S	174.15E	79	2.1	0.1	10	5
11110	NOV 12	1738 20.0	41.11S	174.45E	65	2.3	0.1	16	10
11111	NOV 12	1901 40.9	41.22S	173.54E	63	2.4	0.1	12	6
11112	NOV 12	1914 37.7	40.54S	173.81E	91	2.8	0.3	15	8
11126	NOV 13	0337 10.5	41.77S	174.51E	33	2.5	0.1	11	8
11138	NOV 13	0655 41.9	40.65S	174.97E	14	2.1	0.1	14	8
11158	NOV 13	0847 50.0	41.24S	173.92E	79	2.8	0.2	19	9
11208	NOV 13	1227 49.3	41.76S	174.46E	29	2.1	0.1	13	10
11270	NOV 13	1559 4.4	41.02S	175.30E	26	2.8	0.2	29	18
11281	NOV 14	0224 9.9	41.30S	174.44E	22	2.0	0.2	9	6
11284	NOV 14	0349 32.5	40.65S	174.84E	14	3.5	0.2	37	26
11288	NOV 14	0526 40.7	41.20S	175.15E	9	2.4	0.2	18	12
11294	NOV 14	0837 9.3	41.05S	174.79E	31	2.0	0.1	11	8
11299	NOV 14	1221 39.3	40.51S	174.44E	86	3.0	0.2	20	13
11300	NOV 14	1313 52.4	40.61S	175.38E	33	2.1	0.1	8	5
11305	NOV 14	1735 6.0	40.71S	174.32E	46	2.2	0.0	9	5
11320	NOV 15	0537 18.3	41.16S	173.97E	58	2.1	0.2	8	6
11327	NOV 15	0956 46.8	41.37S	173.65E	98	2.5	0.1	10	8
11331	NOV 15	1307 17.0	41.32S	174.59E	36	2.1	0.2	11	8
11339	NOV 15	1639 0.8	41.14S	173.51E	92	2.2	0.2	10	6
11358	NOV 16	0811 18.5	41.15S	175.67E	24	2.2	0.1	16	9
11365	NOV 16	1339 49.5	41.08S	175.80E	25	2.3	0.3	22	14
11373	NOV 16	2010 23.0	40.75S	175.08E	32	2.2	0.2	14	9
11383	NOV 17	0134 19.5	40.55S	174.15E	80	2.5	0.3	18	8
11389	NOV 17	0734 30.0	40.69S	175.42E	27	2.5	0.1	20	12
11404	NOV 17	2306 44.1	40.67S	175.86E	32	2.3	0.1	12	6
11405	NOV 18	0102 10.1	41.41S	174.42E	23	2.0	0.2	8	6
11414	NOV 18	0606 51.6	41.40S	174.51E	53	2.4	0.1	13	7
11420	NOV 18	1848 41.9	41.51S	175.54E	27	2.3	0.1	11	7
11421	NOV 18	1923 59.8	40.76S	174.58E	39	2.7	0.1	18	10
11423	NOV 18	2223 1.3	41.36S	173.78E	61	3.0	0.2	24	15
11430	NOV 19	0445 37.9	41.42S	174.67E	22	2.2	0.2	10	7
11433	NOV 19	1033 10.9	40.73S	174.81E	18	2.2	0.2	14	7
11437	NOV 19	1137 55.7	41.29S	175.74E	20	2.8	0.2	19	14
11439	NOV 19	1229 8.3	41.28S	175.74E	20	2.1	0.1	10	6
11449	NOV 20	0136 22.0	41.51S	173.98E	37	2.8	0.2	21	17
11470	NOV 20	1621 51.6	40.84S	175.76E	30	2.4	0.2	20	12
11479	NOV 21	0110 6.9	41.79S	174.51E	37	3.7	0.2	30	22

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
11486	NOV 21	0441 43.2	41.79S	174.50E	30	2.7	0.2	22	15
11492	NOV 21	1207 44.1	41.15S	173.98E	52	2.3	0.2	13	7
11501	NOV 21	1951 40.3	40.80S	174.74E	5R	2.1	0.2	12	7
11509	NOV 22	0201 50.7	41.02S	174.55E	35	2.0	0.1	9	6
11519	NOV 22	1852 17.2	41.80S	174.03E	21	2.3	0.2	13	10
11522	NOV 22	2031 46.5	40.74S	174.33E	52	2.0	0.1	7	5
11523	NOV 22	2133 54.9	40.52S	174.33E	55	2.5	0.2	10	6
11525	NOV 22	2244 3.2	41.15S	173.95E	53	2.2	0.1	10	6
11526	NOV 22	2252 42.7	40.86S	173.66E	87	2.9	0.2	20	11
11527	NOV 22	2317 33.6	41.00S	175.10E	24	2.3	0.2	16	10
11538	NOV 23	1346 26.3	40.56S	175.89E	29	2.6	0.2	22	13
11540	NOV 23	1616 1.4	41.84S	174.09E	21	2.9	0.2	20	15
11543	NOV 23	1918 18.3	41.23S	175.34E	28	2.5	0.1	17	10
11559	NOV 24	0305 47.5	41.39S	175.36E	15	2.3	0.2	15	10
11560	NOV 24	0434 16.5	41.80S	174.00E	21	2.3	0.3	10	7
11564	NOV 24	0547 14.1	41.82S	174.07E	20	2.6	0.2	20	17
11565	NOV 24	0548 58.5	41.81S	174.06E	20	2.9	0.3	23	19
11575	NOV 24	1325 27.0	41.81S	174.09E	12	2.3	0.2	8	6
11583	NOV 24	2049 12.7	41.45S	174.38E	32	2.6	0.2	21	16
11584	NOV 24	2207 46.0	40.75S	174.36E	60	3.0	0.2	36	20
11587	NOV 25	0052 52.3	41.76S	174.54E	29	2.7	0.2	25	16
11588	NOV 25	0213 3.6	40.52S	174.22E	96	2.9	0.2	13	8
11599	NOV 25	1141 33.8	41.24S	175.19E	25	2.1	0.1	14	10
11604	NOV 25	1459 28.7	41.84S	175.63E	32	2.7	0.1	18	11
11605	NOV 25	1700 38.1	40.66S	174.53E	44	3.1	0.2	27	21
11606	NOV 25	1721 58.6	40.78S	174.26E	55	2.1	0.1	9	6
11616	NOV 26	0051 25.8	41.30S	174.30E	63	2.1	0.1	11	6
11622	NOV 26	0704 37.7	40.63S	174.46E	59	2.6	0.2	14	8
11627	NOV 26	1112 11.6	40.53S	174.82E	27	2.2	0.2	15	9
11636	NOV 26	1618 38.8	41.38S	173.73E	52	2.0	0.0	7	5
11640	NOV 26	2015 57.7	40.61S	175.49E	31	2.3	0.1	14	8
11641	NOV 26	2218 48.8	40.80S	174.39E	44	2.1	0.1	7	5
11648	NOV 27	0246 21.7	41.23S	174.68E	28	2.1	0.1	12	9
11652	NOV 27	0611 46.2	40.66S	175.43E	30	2.1	0.0	11	5
11659	NOV 27	1137 32.4	40.61S	175.47E	33	2.3	0.2	10	7
11663	NOV 27	1319 1.8	40.65S	174.37E	49	2.2	0.1	7	5
11669	NOV 27	1540 35.0	41.62S	174.66E	30	2.2	0.2	14	10
11677	NOV 27	2131 38.1	41.74S	174.48E	27	2.3	0.2	12	10
11679	NOV 27	2201 43.3	41.24S	175.33E	28	2.5	0.1	18	11
11680	NOV 27	2219 18.7	41.52S	173.54E	85	3.0	0.3	31	20
11686	NOV 28	0002 35.1	41.06S	174.82E	32	2.3	0.1	14	10
11691	NOV 28	0159 59.6	41.13S	175.44E	29	2.1	0.2	13	9
11705	NOV 28	0919 43.9	40.75S	175.14E	30	2.3	0.1	17	10
11707	NOV 28	0958 54.4	41.38S	174.59E	30	2.2	0.1	18	12
11718	NOV 28	1858 29.0	41.37S	174.27E	34	2.8	0.2	21	15

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
11729	NOV 29	0024 42.9	40.57S	174.71E	21	2.6	0.2	21	15
11733	NOV 29	0406 48.8	40.84S	175.80E	28	2.2	0.2	17	9
11735	NOV 29	0502 36.6	41.83S	174.55E	30	2.6	0.2	25	17
11740	NOV 29	1108 10.5	40.65S	175.51E	58	2.0	0.1	12	7
11743	NOV 29	1303 3.3	40.86S	174.75E	16	2.0	0.2	17	9
11750	NOV 29	1851 24.8	41.04S	174.55E	62	2.0	0.1	9	5
11762	NOV 30	0719 5.5	41.12S	174.58E	39	2.3	0.2	10	8
11768	NOV 30	1054 19.4	40.52S	174.30E	81	2.6	0.3	20	12
11769	NOV 30	1342 10.4	40.97S	173.69E	75	2.3	0.1	10	7
11772	NOV 30	1400 40.3	41.79S	174.39E	40	2.2	0.2	14	11
11776	NOV 30	1525 59.3	40.95S	175.42E	21	2.8	0.2	29	18
11782	NOV 30	2022 16.5	41.29S	174.94E	27	2.0	0.1	7	5
11785	NOV 30	2120 54.0	40.97S	174.20E	50	2.5	0.2	11	7
11787	NOV 30	2159 14.9	40.64S	174.84E	34	2.0	0.2	10	7
11803	DEC 01	1027 54.5	40.53S	175.96E	24	2.3	0.1	17	8
11825	DEC 02	0906 23.9	40.86S	175.54E	21	2.1	0.2	17	9
11831	DEC 02	1319 15.6	41.61S	173.57E	85	2.8	0.2	26	14
11833	DEC 02	1410 20.0	40.80S	175.83E	28	2.1	0.1	11	4
11837	DEC 02	1800 41.7	40.65S	174.84E	5R	2.7	0.2	16	12
11852	DEC 03	1126 31.0	41.65S	174.33E	30	2.2	0.2	14	10
11864	DEC 03	2123 2.6	40.91S	174.79E	48	2.6	0.1	14	8
11869	DEC 04	0555 38.5	40.96S	175.19E	27	2.3	0.2	17	10
11875	DEC 04	0931 15.6	40.68S	175.96E	35	2.3	0.1	11	4
11878	DEC 04	1132 23.8	40.54S	175.47E	45	2.3	0.2	9	3
11887	DEC 04	1544 29.9	41.09S	174.75E	33	2.2	0.1	11	8
11892	DEC 04	2153 18.0	41.16S	174.64E	32	2.7	0.2	24	15
11898	DEC 05	0358 9.0	41.47S	173.61E	55	2.7	0.1	21	11
11899	DEC 05	0432 23.6	40.78S	174.91E	52	2.4	0.1	8	5
11902	DEC 05	0724 2.5	40.92S	174.91E	46	2.0	0.1	6	4
11904	DEC 05	1044 12.4	41.92S	174.25E	24	2.5	0.2	19	11
11918	DEC 05	2031 41.3	41.62S	173.84E	34	2.5	0.2	21	12
11938	DEC 06	1104 52.4	41.42S	174.01E	41	2.3	0.2	9	7
11958	DEC 06	2046 13.4	40.93S	173.97E	66	3.5	0.2	36	20
11962	DEC 06	2334 14.7	40.63S	174.38E	5R	2.0	0.2	13	7
11973	DEC 07	0924 27.7	40.98S	175.61E	27	3.0	0.1	21	15
11984	DEC 07	2140 27.9	41.19S	175.38E	26	2.1	0.2	14	7
11985	DEC 07	2152 17.3	41.18S	175.23E	26	2.2	0.1	15	10
11988	DEC 07	2240 5.8	40.82S	175.72E	23	2.1	0.2	17	10
11995	DEC 08	0324 32.3	41.33S	173.59E	69	2.2	0.2	13	7
11998	DEC 08	0646 18.8	40.50S	174.54E	5R	2.2	0.3	15	8
12001	DEC 08	0804 25.1	41.70S	174.52E	29	2.1	0.2	11	9
12005	DEC 08	0929 37.2	41.16S	174.89E	31	2.0	0.1	11	7
12009	DEC 08	1024 48.2	41.27S	175.20E	24	2.1	0.1	12	7
12025	DEC 08	2021 23.0	41.81S	174.54E	32	2.3	0.2	17	12
12035	DEC 09	0409 44.9	40.54S	175.85E	27	2.9	0.2	29	18

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
12036	DEC 09	0431 7.5	41.37S	175.11E	25	2.0	0.1	13	9
12045	DEC 09	1139 16.7	41.38S	174.37E	36	2.7	0.2	19	15
12054	DEC 09	1751 37.7	40.71S	174.34E	46	2.1	0.1	8	6
12057	DEC 09	1907 15.0	41.73S	174.47E	30	2.6	0.2	19	15
12060	DEC 09	2005 2.9	40.61S	175.79E	19	2.2	0.3	9	5
12061	DEC 09	2106 35.0	40.95S	175.02E	29	2.1	0.1	12	7
12062	DEC 09	2237 11.1	41.12S	174.63E	54	2.5	0.1	12	10
12084	DEC 10	2004 28.2	41.11S	174.60E	31	3.1	0.2	26	18
12093	DEC 11	0358 37.9	40.55S	175.80E	29	2.2	0.2	14	8
12094	DEC 11	0452 53.3	40.78S	175.13E	29	2.7	0.1	23	14
12096	DEC 11	0541 43.3	41.27S	175.29E	26	2.2	0.1	13	8
12099	DEC 11	1026 38.5	41.01S	175.44E	25	2.3	0.1	16	9
12102	DEC 11	1344 24.7	40.81S	175.13E	41	4.0F	0.2	37	27
12104	DEC 11	1448 41.1	41.83S	174.36E	22	2.4	0.2	17	12
12111	DEC 11	1806 48.4	40.96S	175.15E	30	2.6	0.2	21	15
12113	DEC 11	1847 25.0	40.98S	173.78E	77	2.9	0.2	24	14
12114	DEC 11	2005 41.8	40.82S	175.81E	29	2.1	0.1	15	8
12115	DEC 11	2009 58.3	41.72S	174.44E	28	2.2	0.2	9	7
12116	DEC 11	2118 1.5	40.90S	174.83E	62	2.0	0.2	11	8
12117	DEC 11	2132 29.7	40.99S	175.02E	45	2.6	0.1	16	10
12133	DEC 12	1015 27.9	40.98S	174.52E	57	2.2	0.1	10	6
12140	DEC 12	1551 5.7	40.66S	175.49E	29	2.8	0.2	20	12
12143	DEC 12	2057 49.6	40.85S	175.19E	30	2.1	0.1	9	6
12145	DEC 12	2352 12.8	40.86S	175.14E	32	2.4	0.2	18	11
12147	DEC 13	0053 55.8	41.33S	174.59E	31	2.1	0.2	12	9
12153	DEC 13	0625 52.0	41.66S	174.58E	30	2.0	0.1	7	4
12168	DEC 13	1203 22.3	41.50S	174.39E	19	2.4	0.1	16	12
12169	DEC 13	1203 41.0	41.50S	174.40E	18	2.5	0.2	19	13
12172	DEC 13	1232 48.2	40.75S	174.48E	75	2.2	0.2	8	5
12173	DEC 13	1348 42.9	41.23S	174.56E	57	2.4	0.1	13	8
12176	DEC 13	1427 28.0	40.58S	175.97E	27	2.6	0.2	13	8
12180	DEC 13	1713 16.3	40.59S	175.97E	28	2.3	0.2	16	8
12188	DEC 14	0009 51.0	40.70S	175.32E	29	2.0	0.0	9	5
12192	DEC 14	0132 29.1	41.15S	174.53E	34	2.2	0.1	10	7
12196	DEC 14	0339 40.0	40.56S	174.78E	31	2.0	0.2	11	7
12209	DEC 14	1523 19.0	41.18S	174.59E	39	2.3	0.2	15	11
12216	DEC 14	2234 13.2	40.81S	174.76E	5R	2.1	0.3	12	7
12220	DEC 15	0028 12.9	41.59S	174.35E	16	2.5	0.2	17	11
12221	DEC 15	0029 42.4	41.57S	174.34E	24	2.4	0.2	13	10
12222	DEC 15	0134 36.4	40.65S	175.73E	28	2.2	0.1	13	7
12223	DEC 15	0202 38.6	41.92S	173.95E	16	2.2	0.2	11	9
12229	DEC 15	1038 43.9	40.50S	174.76E	5R	2.0	0.2	10	6
12237	DEC 15	1802 15.0	40.90S	174.96E	37	2.0	0.2	16	10
12246	DEC 16	0601 54.8	41.07S	174.56E	60	2.2	0.1	10	8
12253	DEC 16	0952 49.5	41.87S	174.42E	27	2.0	0.1	7	5

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
12274	DEC 17	0043 36.3	41.61S	174.96E	28	2.2	0.2	10	8
12277	DEC 17	0239 38.3	40.63S	174.75E	25	2.2	0.2	15	8
12300	DEC 18	0302 8.7	41.74S	174.52E	28	2.6	0.2	11	9
12301	DEC 18	0309 53.8	41.73S	174.49E	27	2.3	0.1	8	5
12307	DEC 18	0533 16.3	41.49S	174.12E	35	2.5	0.3	14	7
12309	DEC 18	0703 22.9	41.10S	175.46E	29	2.2	0.2	15	8
12324	DEC 19	0247 30.5	41.13S	174.13E	49	2.5	0.2	14	8
12325	DEC 19	0257 0.5	40.56S	174.75E	68	2.8	0.1	12	7
12328	DEC 19	0628 49.3	41.12S	174.39E	65	2.7	0.1	11	9
12330	DEC 19	1010 15.9	40.54S	175.80E	37	2.1	0.1	10	4
12331	DEC 19	1055 37.6	41.22S	173.95E	49	2.8	0.2	16	11
12333	DEC 19	1245 39.5	40.84S	174.91E	47	2.5	0.2	18	10
12335	DEC 19	1305 28.5	40.89S	175.00E	38	2.1	0.1	18	11
12339	DEC 19	1628 58.3	40.97S	175.60E	29	2.7	0.1	22	12
12341	DEC 19	1730 2.2	40.75S	175.76E	29	2.2	0.2	12	6
12342	DEC 19	1805 29.2	41.44S	174.81E	29	2.3	0.1	23	13
12346	DEC 19	2343 4.9	40.92S	175.54E	20	3.2	0.2	26	17
12356	DEC 20	1421 34.7	40.74S	175.87E	32	2.9	0.1	23	15
12365	DEC 20	2347 2.5	41.80S	174.03E	19	2.1	0.2	12	8
12367	DEC 21	0047 0.9	41.33S	174.17E	40	2.4	0.2	10	7
12382	DEC 21	1401 25.3	40.63S	174.43E	57	2.3	0.2	14	8
12388	DEC 21	2143 23.3	40.60S	174.21E	49	2.4	0.2	10	8
12395	DEC 22	0355 47.0	41.63S	174.21E	13	2.4	0.2	16	12
12396	DEC 22	0404 35.5	40.52S	174.70E	31	2.1	0.1	9	5
12397	DEC 22	0421 26.7	40.88S	175.74E	29	2.1	0.1	12	7
12405	DEC 22	0658 50.1	40.79S	175.06E	34	2.2	0.1	13	8
12408	DEC 22	0803 48.4	41.80S	174.46E	31	2.2	0.1	14	9
12409	DEC 22	0820 46.1	40.95S	175.41E	20	2.4	0.2	17	10
12411	DEC 22	0910 27.6	41.08S	174.18E	50	3.0	0.2	26	18
12412	DEC 22	0931 39.6	40.58S	175.97E	29	2.7	0.2	19	11
12416	DEC 22	1136 33.9	40.64S	173.72E	101	2.3	0.2	10	6
12421	DEC 22	1655 3.9	41.11S	173.50E	92	2.7	0.2	18	10
12422	DEC 22	1820 50.2	40.50S	174.31E	64	2.5	0.2	17	10
12425	DEC 22	1908 0.1	41.63S	173.92E	40	2.4	0.2	14	9
12437	DEC 23	0822 58.7	41.16S	174.09E	52	3.4	0.2	38	24
12440	DEC 23	1218 43.5	41.02S	174.51E	61	2.0	0.1	9	6
12471	DEC 24	1005 7.2	41.24S	174.64E	34	2.2	0.1	15	10
12474	DEC 24	1147 10.5	41.44S	173.52E	63	2.2	0.1	9	6
12482	DEC 24	1427 0.8	40.85S	175.18E	29	2.1	0.1	19	11
12492	DEC 24	1836 44.2	41.09S	173.89E	85	2.0	0.4	9	4
12496	DEC 24	1950 24.2	40.60S	175.99E	24	3.1	0.3	26	17
12526	DEC 25	2022 39.8	40.60S	174.32E	62	2.7	0.2	19	12
12539	DEC 26	0538 51.4	41.03S	174.64E	50	2.1	0.1	8	6
12542	DEC 26	0714 27.6	41.01S	174.31E	17	2.7	0.2	24	13
12551	DEC 26	1959 40.4	40.85S	174.73E	13	2.8	0.2	23	15

NUM	DATE	TIME	LAT	LONG	DEPTH	MAG	Rsd	NP	NS
12561	DEC 27	0802 46.4	40.72S	175.37E	26	2.1	0.1	11	6
12564	DEC 27	1328 31.7	40.62S	175.49E	31	2.0	0.2	6	5
12582	DEC 28	0348 59.7	41.38S	175.04E	25	2.0	0.1	13	8
12591	DEC 28	1024 34.9	40.62S	174.07E	98	2.5	0.2	11	8
12605	DEC 28	1940 8.7	41.39S	175.04E	24	2.1	0.1	15	10
12607	DEC 28	2005 8.4	41.39S	175.04E	25	2.1	0.1	15	10
12608	DEC 28	2025 36.9	41.39S	175.04E	24	2.1	0.0	12	8
12609	DEC 28	2059 14.7	41.02S	173.91E	60	2.9	0.3	15	9
12614	DEC 29	0226 54.5	40.90S	175.52E	23	3.0	0.2	22	14
12618	DEC 29	0709 14.8	40.75S	174.82E	22	2.3	0.2	12	8
12625	DEC 29	1241 45.3	41.28S	175.01E	24	2.4	0.1	15	10
12636	DEC 29	1911 55.9	41.17S	174.93E	26	2.0	0.3	8	5
12637	DEC 29	1923 40.4	41.56S	174.40E	14	2.2	0.2	13	9
12639	DEC 29	2039 0.2	40.67S	174.55E	39	2.4	0.1	7	5
12643	DEC 30	0331 26.9	41.00S	175.57E	28	2.5	0.1	15	9
12651	DEC 30	1502 31.3	40.76S	174.39E	54	2.0	0.2	9	6
12652	DEC 30	1927 42.7	41.01S	175.58E	17	2.1	0.1	13	7
12654	DEC 31	0125 41.6	41.09S	175.31E	23	2.3	0.2	17	11
12656	DEC 31	0302 51.4	41.42S	174.61E	29	2.5	0.2	15	11
12659	DEC 31	0435 39.0	41.12S	173.54E	94	2.4	0.2	10	6
12661	DEC 31	0705 36.3	40.90S	175.49E	30	2.5	0.1	16	10
12664	DEC 31	1138 37.9	40.97S	175.59E	28	2.9	0.2	22	14
12668	DEC 31	1538 24.5	40.62S	174.03E	64	2.2	0.1	9	6
12669	DEC 31	1554 36.0	40.63S	175.74E	31	2.3	0.2	16	8

## NON-INSTRUMENTAL DATA

### THE FELT REPORTING SYSTEM

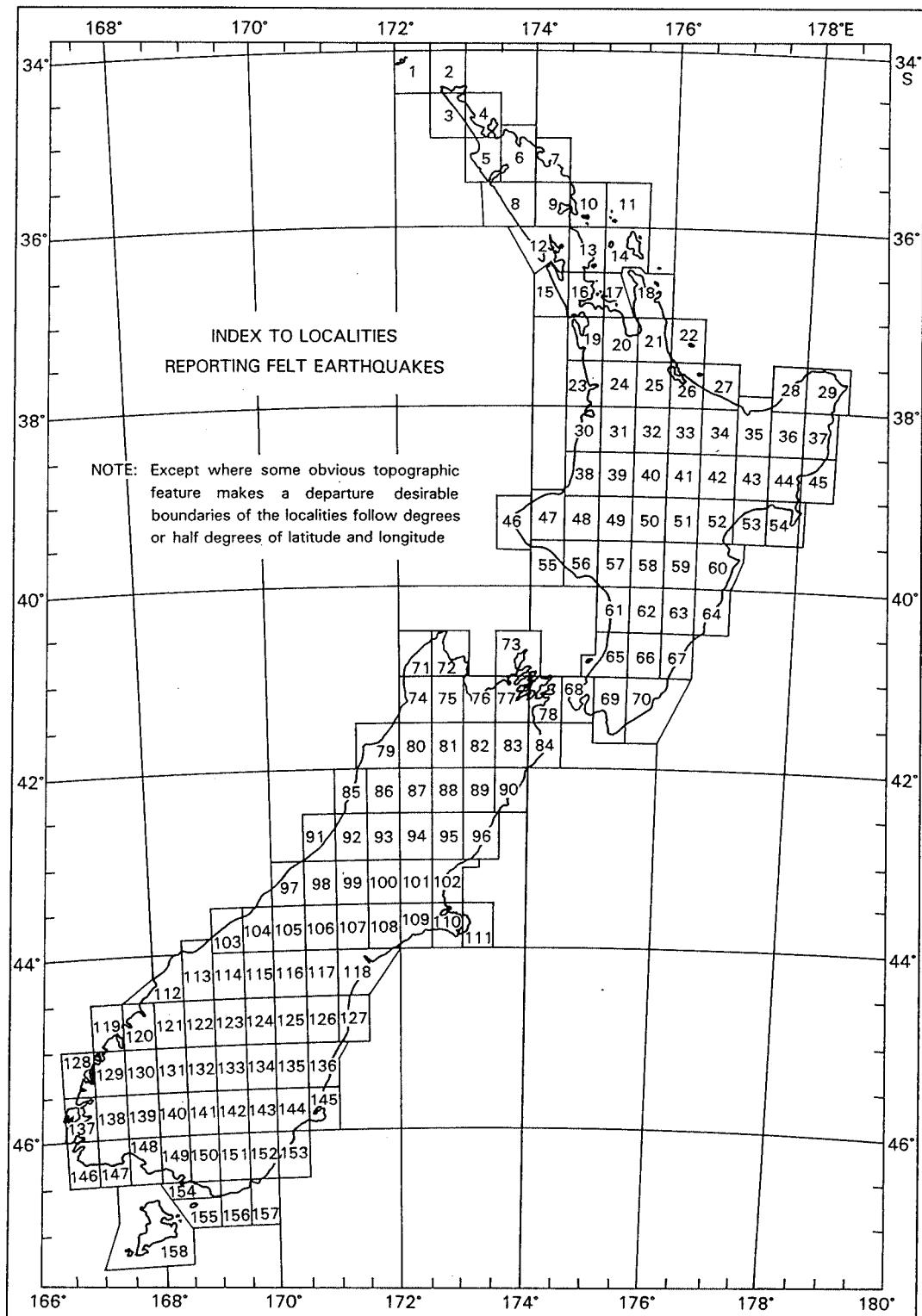
The Observatory has recruited a network of about 600 voluntary observers spread throughout the country, who use a standard form to describe the effects of any earthquake they feel. The Observatory also collects casual reports from newspapers, meteorological observers, postmasters and members of the local public. For large earthquakes, or ones with features of special interest, questionnaires are issued and assessed.

Several difficulties arise in assessing the distribution of felt intensity. The population of the country is very unevenly spread, and the observers' personal circumstances may prevent them from feeling a shock that has been noticed by others. These problems also affect lists of earthquakes felt in particular localities. It may reasonably be assumed that a strong earthquake reported from one township was felt in another nearby, even though the Observatory has received no report. However, an index of this kind must summarise data and not deductions, so the following scheme is used.

The land area of New Zealand has been divided into 'localities', mostly bounded by half-degree lines of latitude and longitude, but varied as necessary to

avoid splitting obvious geographic or structural units (see map overleaf). Each locality has a number and a name, usually that of the principal population centre within it. The names are listed overleaf. In most localities there are at least two well-separated reporters, but there are still some sparsely populated parts of the country without observers, notably in Southland. Felt information is summarised in information lines following the instrumental data in the main list of earthquakes. Modified Mercalli intensities quoted there have been assessed by the Observatory from replies to standard questionnaires. Assessments based on less formal descriptions of intensity are included in the following list, in which the localities which have reported shocks during the year are presented in alphabetical order, each followed by the reference numbers of the shocks felt and their respective maximum reported intensities within that locality. By comparing the reports from neighbouring localities, it is possible to form a truer estimate of the incidence of the felt effects than would be possible from a simple list of places reporting each shock.

A further list records reports received from places in the south-west Pacific.



Standard Reporting Localities.

## STANDARD REPORTING LOCALITIES

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

## EARTHQUAKES FELT IN STANDARD LOCALITIES

Localities within which earthquakes were felt are listed in alphabetical order, each 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. An asterisk (\*) indicates that

the particular intensity was not evaluated from the standard questionnaire. The location of the earthquake, the instrumental magnitude and the actual places at which it was reported felt may be found from the table Summary of Origins and Magnitudes.

93	Arthur's Pass	3075 (4),	9844 (4),	12400 (4).
16	Auckland	6640 (4).		
83	Awatere	76 (4*).		
77	Blenheim	1380 (4),	4139 (4),	5856 (6), 76 (4*).
104	Bruce Bay	20 (4),	58 (4),	3075 (4), 11670 (4).
61	Bulls	1349 (4*), 8232 (3),	1380 (4), 8330 (4).	1727 (4), 4896 (4), 5856 (4), 6561 (4),
67	Castlepoint	8330 (4).		
96	Cheviot	5856 (4).		
110	Christchurch	3075 (4),	110 (4*),	76 (4*).
63	Dannevirke	1349 (4), 5272 (4*),	1602 (4*), 5375 (5*),	2293 (4*), 2349 (4*), 2476 (4*), 2492 (4*), 8330 (4), 8375 (3), 9781 (4*).
129	Doubtful Sound	110 (1).		
145	Dunedin	1635 (4),	76 (4*).	
29	East Cape	5272 (5),	5315 (3).	
69	Featherston	4397 (4*),	8232 (4*).	
97	Franz Josef	3075 (4),	110 (4*).	
45	Gisborne	71 (4*),	5272 (5*),	6640 (4*), 8502 (4*), 8536 (4*), 12213 (4*).
81	Glenhope	4818 (4).		
121	Glenorchy	1858 (4),	4562 (4),	5033 (4).
85	Greymouth	3075 (4),	110 (4*),	3506 (4), 5856 (4).
24	Hamilton	5856 (4*),	6640 (4*).	
98	Hari Hari	11670 (4*).		

60	Hastings	1349 (4), 2492 (4*), 10952 (4),	1727 (5), 5375 (4), 12213 (4*).	68 (4*), 5856 (4),	1929 (4), 8330 (4),	2349 (4), 8502 (4),	2476 (3), 8768 (4*),
55	Hawera	1380 (4*).					
91	Hokitika	3075 (4),	110 (4*),	3506 (4*),	76 (4*),	9418 (4*),	9765 (4*).
90	Kaikoura	1380 (4*),	76 (4*),	11890 (4*).			
132	Kingston	10198 (4).					
92	Kumara	3075 (5),	3076 (4*),	3506 (4),	5856 (4),	11890 (4).	
100	Lake Coleridge	3075 (4),	3506 (4),	5856 (4).			
70	Martinborough	4251 (4*).					
87	Maruia	3075 (4),	5856 (4).				
66	Masterton	1602 (4*),	4251 (4*),	62 (4*),	8330 (4*),	12389 (4*).	
20	Mercer	2754 (3),	6640 (4).				
139	Monowai	10658 (3).					
36	Motu	5272 (5*).					
75	Motueka	1275 (4),	5856 (4),	9403 (3).			
34	Murupara	6640 (5).					
52	Napier	383 (4), 12213 (4).	1465 (4),	2349 (4),	8330 (4),	8768 (4),	10952 (4),
76	Nelson	1380 (4),	68 (4*),	5856 (6),	9403 (4*).		
47	New Plymouth	1380 (4),	1727 (4),	5856 (4),	8741 (4*),	8742 (4*),	9303 (4).
49	Ohakune	1727 (4),	68 (4*).				
35	Opotiki	2754 (4),	5272 (4),	6640 (5),	6644 (3),	7755 (3).	
65	Otaki	1727 (4), 8232 (3), 12124 (4*),	2349 (4*), 8330 (4), 12174 (4*),	3316 (4*), 8502 (4*), 12558 (4).	5856 (5), 8754 (4*),	6561 (4), 8759 (4*),	8108 (4*), 12102 (4),
144	Outram	1635 (4).					
62	Palmerston North	327 (4*), 2476 (4*), 8375 (4),	1349 (4), 2492 (3), 10225 (4*),	1380 (3), 4896 (4), 11441 (4*),	1727 (5), 8108 (4*), 12124 (4*),	68 (4*), 8232 (4*), 12174 (4).	2349 (4), 8330 (4),
78	Picton	3316 (4*),	4078 (4),	5856 (5),	76 (4*),	6640 (3),	9403 (4*).
64	Porangahau	1349 (4),	1727 (4),	4038 (4),	5375 (4).		
116	Pukaki	3075 (1),	110 (4*),	76 (4*).			

19	Pukekohe	6640 (3).					
86	Reefton	2354 (4),	11670 (4*).				
33	Rotorua	1499 (4*), 6640 (4), 7388 (4), 7430 (4), 11127 (4), 11244 (4*),	1887 (4), 6644 (3), 7390 (4), 7750 (4), 11166 (4*), 11247 (4*),	2301 (4), 7155 (5*), 7395 (4), 8155 (4), 11170 (4*), 11275 (4),	2490 (3), 7367 (4*), 7397 (4), 9036 (4*), 11172 (4*), 11283 (4),	2754 (4), 7386 (4*), 7419 (4), 10483 (4*), 11223 (4), 11296 (4).	6419 (4), 7387 (4*), 7421 (4), 10484 (4*), 11239 (4*),
59	Ruahine	744 (4).					
58	Taihape	1349 (4),	1602 (4),	1727 (3),	9391 (4).		
39	Taumarunui	1380 (3),	1727 (3),	5856 (3).			
41	Taupo	1015 (4), 10484 (4*).	3962 (4),	4976 (4),	4980 (4*),	9661 (4),	10483 (4*),
26	Tauranga	2754 (5),	3055 (4*),	6640 (6).			
130	Te Anau	76 (4*).					
28	Te Kaha	2754 (4*),	6640 (3).				
106	Tekapo	3075 (5),	3506 (4),	4944 (4),	11670 (4).		
21	Thames	2754 (6),	2964 (4),	3470 (4),	6640 (5),	6644 (4*).	
40	Tokaanu	470 (4),	4665 (4),	4971 (3),	9661 (4).		
32	Tokoroa	7933 (4),	7944 (4).				
17	Waiheke	6640 (3).					
153	Waihola	1635 (4).					
53	Wairoa	1929 (4*).					
123	Wanaka	110 (1).					
57	Wanganui	744 (4*), 4598 (4*), 8759 (4),	1380 (4), 5856 (4), 10019 (4).	1624 (4), 6561 (4),	1681 (4), 8108 (4),	1727 (5), 8232 (2),	68 (4*), 8330 (4),
68	Wellington	1380 (4), 5017 (4), 8694 (4*),	1727 (4), 5856 (5), 8754 (4),	68 (4*), 62 (4*), 9403 (3),	2349 (3), 6134 (4*), 12102 (4*),	3316 (3), 8232 (4), 12213 (4*),	4397 (4*), 8330 (4), 12558 (4).
79	Westport	3075 (4),	110 (4*),	3506 (4),	5856 (4),	11670 (4),	11765 (4),
		11873 (3),	11883 (4),	11890 (4),	11921 (4).		
44	Whakapunaki	71 (4),	5272 (4),	5315 (4*),	6640 (4),	7057 (4),	12213 (4).
27	Whakatane	6640 (6),	6644 (4*),	7097 (4*),	7365 (4*),	8852 (3),	8950 (4).

## REPORTS FROM OUTSIDE NEW ZEALAND

The Observatory sometimes receives reports of earthquakes felt on islands of the south-west Pacific and other places beyond the limits of its systematic reporting network. Where Modified Mercalli scale

intensities in the list below are shown in quotes, they have been estimated by the reporters, not the Observatory.

DATE	TIME	INTENSITY	PLACE
Feb 26	04h 57m	'felt'	Raoul Island
Mar 30	06h 10m	'MM 3'	Raoul Island
May 11	09h 59m	'felt'	Raoul Island
May 28	09h 27m	'felt'	Raoul Island
Jun 25	06h 31m	'MM 4'	'Raoul Island'
Jul 11	10h 45m	'MM 4'	Raoul Island
Aug 08	13h 09m	'MM 2'	Raoul Island
Aug 18	20h 01m	'MM 3'	Raoul Island
Sep 04	16h 16m	'MM 1'	Raoul Island
Sep 13	00h 06m	'MM 3'	Raoul Island
Oct 08	05h 06m	MM 4	Raoul Island
Oct 17	14h 14m	MM 4	Raoul Island
Oct 18	13h 32m	'MM 3'	Raoul Island
Oct 19	11h 22m	'MM 2'	Raoul Island
Oct 20	17h 13m	MM 4	Raoul Island
Oct 22	09h 05m	MM 4	Raoul Island
Oct 22	23h 09m	MM 5	Raoul Island
Oct 23	01h 18m	MM 4	Raoul Island
Oct 23	01h 58m	MM 4	Raoul Island
Oct 24	08h 19m	MM 5	Raoul Island
Oct 24	11h 50m	MM 5	Raoul Island
Oct 24	13h 45m	MM 4	Raoul Island
Oct 24	17h 13m	MM 3	Raoul Island
Oct 24	23h 01m	MM 5	Raoul Island
Oct 25	00h 30m	MM 4	Raoul Island
Oct 25	07h 24m	MM 4	Raoul Island
Oct 28	13h 31m	MM 4	Raoul Island
Oct 29	15h 28m	MM 4	Raoul Island
Oct 29	20h 37m	'MM 3'	Raoul Island
Nov 08	15h 06m	'MM 3'	Raoul Island

## PUBLICATIONS BY STAFF MEMBERS

The following papers by members of the Seismological Observatory staff were published in 1992.

**Anderson, H., Webb, T., Jackson, J.** Accommodation of the Pacific-Australian plate motion in the South Island. p. 27. In: Nobes, D.C. (ed.) *Geological Society of New Zealand and New Zealand Geophysical Society 1992 joint annual conference, University of Canterbury, 23 November-27 November: programme and abstracts.* 171 p. Geological Society of New Zealand miscellaneous publication 63a.

**Beanland, S., Anderson, H.** The 1968 May 23 Inangahua Earthquake : an integrated geological, geodetic and seismological source model. p. 33. In: Nobes, D.C. (ed.) *Geological Society of New Zealand and New Zealand Geophysical Society 1992 joint annual conference, University of Canterbury, 23 November-27 November : programme and abstracts.* 171 p. Geological Society of New Zealand miscellaneous publication 63a.

**Benites, R., Aki, K., Yomogida, K.** Multiple scattering of SH waves in 2-D media with many cavities. *Pure and applied geophysics* 138(3): 353-390.

The full waveform synthetic seismogram of multiple scattered SH waves by many cylindrical cavities in two-dimensional homogeneous elastic media is computed. We used the so-called "single-layer potential" integral representation of the scattered field and a discretization scheme with line source distribution for each cavity. The total field is the sum of the incident wave plus the field radiated from all sources, each multiplied by an unknown complex constant representing its strength. These constants are determined by imposing the appropriate boundary conditions in the least-squares sense. Here we solve scattering problems involving one, two, four, twelve and fifty cavities regularly distributed in a half-space. The seismograms computed along the free-surface show regions where the incident wave is strongly attenuated, as well as the arrivals of all multiple scattered phases. The accuracy of the method is estimated from the degree of agreement of our solution for one cavity with the corresponding analytical solution, and also from the magnitude of the residual tractions along the boundaries of two cavities separated at various distances. Finally we apply the method to compute the case of fifty cylindrical cavities, each of radius  $a$ , randomly distributed in a region  $80a$  wide by  $30a$  deep in a half-space. The value of scattering loss is obtained from the amplitude decay of the primary wave with distance for wavelengths in the range from  $1.7a$  to  $13.3a$ , using the synthetic seismogram calculated for the same distribution of 50 cavities as above, but in full-space.

**Benites, R., Haines, J.** Modelling the effect of local site conditions on seismic ground motions. p. 67-68. In: Begg, J.G. (ed.) *Recent advances in Wellington earth science : extended abstracts, 8-9 July 1992.* 93 p. NZGS Survey report G 166.

**Bibby, H.M., Haines, A.J.** Electromagnetic modelling with a Riccati equation approach for heterogeneous media. *Eos. Supplement* 73(43): 144.

**Haines, J., Benites, R.** Prediction of ground motions at Ashigara valley using a hybrid method based on the Riccati Matrix Equation (Haines) and the Boundary Integral method. p. 97-98. In: *Proceedings of the International Symposium on the effects of surface geology on seismic motion, March 25-27, 1992, Odawara, Japan. ESG 1992.* 2. 2 v.

The Ashigara Valley, Tokyo, Japan, is a relatively flat sedimentary basin of elongated shape that extends about 12 km in the direction N 30 W, and 4 km across, in the direction of N 60 E. In this paper we present and discuss the results of a two-dimensional modelling of the seismic wave fields, within the basin, using the standard geological structure for the North-South profiles B-B' and C-C' through the two stations KS1 and KS2 at the southern end of the valley (Sawada 1990). Two earthquakes, mainshock and foreshock, whose epicentral distances were within 10 km from the valley were used as input motions for strong and weak motion modeling, respectively.

**Jackson, J., Haines, J., Holt, W.** The horizontal velocity field in the deforming Aegean Sea region determined from the moment tensors of earthquakes. *Journal of geophysical research* 97(B12): 17,657-17,684.

We use the spatial distribution of seismic moment tensors of earthquakes in the Aegean region over the time interval 1909-1983 to recover a continuous horizontal velocity field that describes the overall deformation of the lithosphere at large length scales. The calculated velocity field is dominated by two effects: (1) an E-W right-lateral shear of the eastern Aegean, related to motion on the North Anatolian fault becoming distributed as it enters the Aegean; and (2) a N-S extension, probably related to the sinking of the slab in the Hellenic Trench. The southern part of the central Aegean is found to be moving in a SW direction relative to Europe at a rate of about 30 mm/yr (probably a lower bound, with an error of around  $\pm 10$  mm/yr) and rotating clockwise. In the seismogenic upper crust this velocity field is accommodated by right-lateral strike-slip faults in the eastern Aegean and by normal faults that rotate clockwise in central Greece. A comparison of paleomagnetic declination data with the expected rotation of rigid elongate inclusions in the velocity field shows in

most places an agreement in sense and approximate agreement in rate of rotation. Expected rotation rates of line elements are sometimes too low: probably because our derived velocity field is smoothed and unable to match locally high strain rates. There is only one part of the region where line elements are predicted to rotate in either clockwise or counterclockwise directions, depending on their orientation; this is in western Turkey, which, coincidentally, is the only place where paleomagnetic rotations in both directions have been observed. This coincidence in particular suggests to us that the analogy of rigid elongate inclusions in the velocity field, responding to forces on their bases, may be useful in predicting the senses and approximate rates of rotation of crustal blocks in deforming continental regions. The velocity field we obtain preserves the strike directions of the major faults as directions of zero length change, in spite of considerable smoothing. We use this observation to speculate that the interaction between the upper crust and the rest of the lithosphere beneath it may involve an interplay of effects. On one hand the variation of strength with direction in the crust may control the strike directions of faults that form or become reactivated and may also limit the velocity fields that are allowable. On the other hand, the fault bounded blocks may rotate in the velocity field in response to forces on their bases, which would require the velocity field to change with time if the directions of zero length change are fixed to the blocks.

**Robinson, R., Whitehead, N.E.** Radon variations in the Wellington region, New Zealand, and their relation to earthquakes. 17 p. DSIR Physical Sciences report 52.

Temporal changes in the radon content of ground water and soil gas have been monitored in the Wellington region since early 1978 in order to examine their relation to earthquakes. New Zealand is a region of plate convergence and subduction with a moderate level of seismicity, both crustal and deep. The measurement technique is of the "Track Edge" type and is simple and inexpensive to implement but is subject to several sources of error. The major feature of the data, in the form of monthly mean radon levels, is a large long term rise and fall in level lasting 2½ to 3 years. Data from five sites are well correlated due to this feature but shorter term fluctuations are less well correlated. Effects of changes in the weather are small. The long term radon "anomaly" cannot be convincingly related to any particular earthquake. Nor do earthquakes up to magnitude 5.2 within 100km show any clear effect on the radon level. Despite the lack of clear precursory effects due to specific earthquakes, there are some weak correlations between the radon level and the seismicity as a whole. These correlations, if physically real imply that post-event effects on radon are at least as important as precursory effects. However, it is not certain that the radon level is directly affected by earthquakes at all. It seems likely that the radon level reflects changes in regional strain rate that also monitor the seismicity.

**Smith, W.D.** Global seismic hazard assessment program technical planning meeting [May-June 1992, Italy]. 6 p. Lower Hutt: DSIR Geology & Geophysics.

**Smith, W.D.** How reliable are estimates of earthquake hazard in New Zealand? p. 71. In: Begg, J.G. (ed.) *Recent advances in Wellington earth science: extended abstracts, 8-9 July 1992*. 93 p. NZGS report G 166.

**Smith, W.D.** Principal earthquakes in New Zealand in 1991. *Bulletin of the New Zealand National Society for Earthquake Engineering* 25(1): 1.

A review of significant earthquakes of the year.

**Smith, W.D.** A seismicity anomaly in Cook Strait and deliberations on a possible earthquake prediction, 1986-1988. 79 p. *Institute of Geological & Nuclear Sciences science report 92/12*.

In 1986 a study of New Zealand earthquakes identified a region near Wellington where the b-value had been anomalously high for the period 1981-85. A previous study had suggested that this phenomenon might be a precursor to large earthquakes. Because of the proximity to the city of Wellington, and the likely social sensitivity to the announcement of an earthquake prediction, extensive discussions were held within DSIR, and with scientific colleagues from Victoria University. A decision was taken not to make a public announcement, because it was judged that there was insufficient basis for doing so. Instead, surveillance was intensified over the Cook Strait region. No large earthquakes eventuated, but in 1990 a swarm with maximum magnitude 5.3 occurred very close to the location which had been identified in 1986 as the centre of the anomaly.

**Smith, W.D.** Seismology programme (Event K102). *New Zealand Antarctic record* 12(1): 27.

**Smith, W.D.** A tribute to George Eiby. *Bulletin of the New Zealand National Society for Earthquake Engineering* 25(1): 73.

**Woodward, D.J., Haines, A.J.** Effect of porosity and permeability on seismic reflections from aquifers. *Exploration geophysics* 23(1/2): 453-458.

The variations in synthetic seismic reflection shot records due to different porosities and permeabilities of aquifers imbedded in non-porous rocks are sufficient for seismic techniques to be used to map these parameters using seismic reflection surveys, and thus increase the probability of drilling into productive portions of aquifers. The critical frequency of a water-filled Biot porous solid with the high permeability and porosity associated with gravel aquifers is within the frequency range commonly used in reflection

seismic prospecting. As permeability and porosity vary, the character of the reflections also changes because of changes in the partitioning of energy amongst the reflected and transmitted waves. As the critical frequency is reduced (by decreased porosity or increased permeability) the attenuation of the waves is reduced and reverberation at short offsets is increased. At offsets less than the depth of the aquifer the amplitudes of the reflections are more affected by the permeability than the porosity of the aquifer. Differences in shot records from explosive sources and hammer or vibrator sources (modelled as vertical tractions) are due to the generation of both shear and compressional waves by the latter, whereas in general an

explosive source generates only compressional waves, although shear waves do result from the interaction of the compressional waves with changes in properties of the media and the free surface. This difference in source manifests itself by the presence or absence of shear-wave reflections on the records. If the offset range is great enough (say more than the depth of interest) then these shear-wave reflections will be recorded on vertical as well as horizontal geophones.

E-173 New Zealand Seismological Report 1989.

E.174 New Zealand Seismological Report 1990.

## OBSERVATORY SERVICES

### PUBLICATIONS

The Seismological Observatory issues the following series of publications:

1. E-bulletins. These consist of the 'New Zealand Seismological Reports' containing summaries of the data used for each origin determination, lists of origins, felt intensity data, and brief accounts of the principal earthquakes of the year. They also provide details of the instruments used to record earthquakes and descriptions of Observatory practices.
2. S-bulletins. These are mostly reprints of papers by members of the Observatory staff, but occasionally they have included other material not published elsewhere, such as the Eiby-Muir near-earthquake tables. Their automatic circulation is not now as widespread as it was in the past, but they are usually available from the Observatory on request.

Copies of this material may be purchased from the Observatory. In suitable cases the Observatory may be able to enter into agreements for a free exchange of publications on a continuing basis.

### EARTHQUAKE CATALOGUE

The Observatory has a master file of some tens of thousands of earthquake origins and associated information stored on magnetic tape. From this, lists of earthquakes within particular geographical areas of New Zealand, or in categories defined in other ways, can be made available to researchers. Full details have been published elsewhere (W.D. Smith, 1976: 'A Computer File of New Zealand Earthquakes'; Bulletin of the New Zealand National Society for Earthquake Engineering, Vol. 9, No. 2, pp.136-7, New Zealand journal of geology and geophysics, Vol. 19, No. 3, pp.393-4). Criteria that may be specified are dates, magnitudes, focal depths, intensities and regions bounded in a number of different ways. It is also possible to search

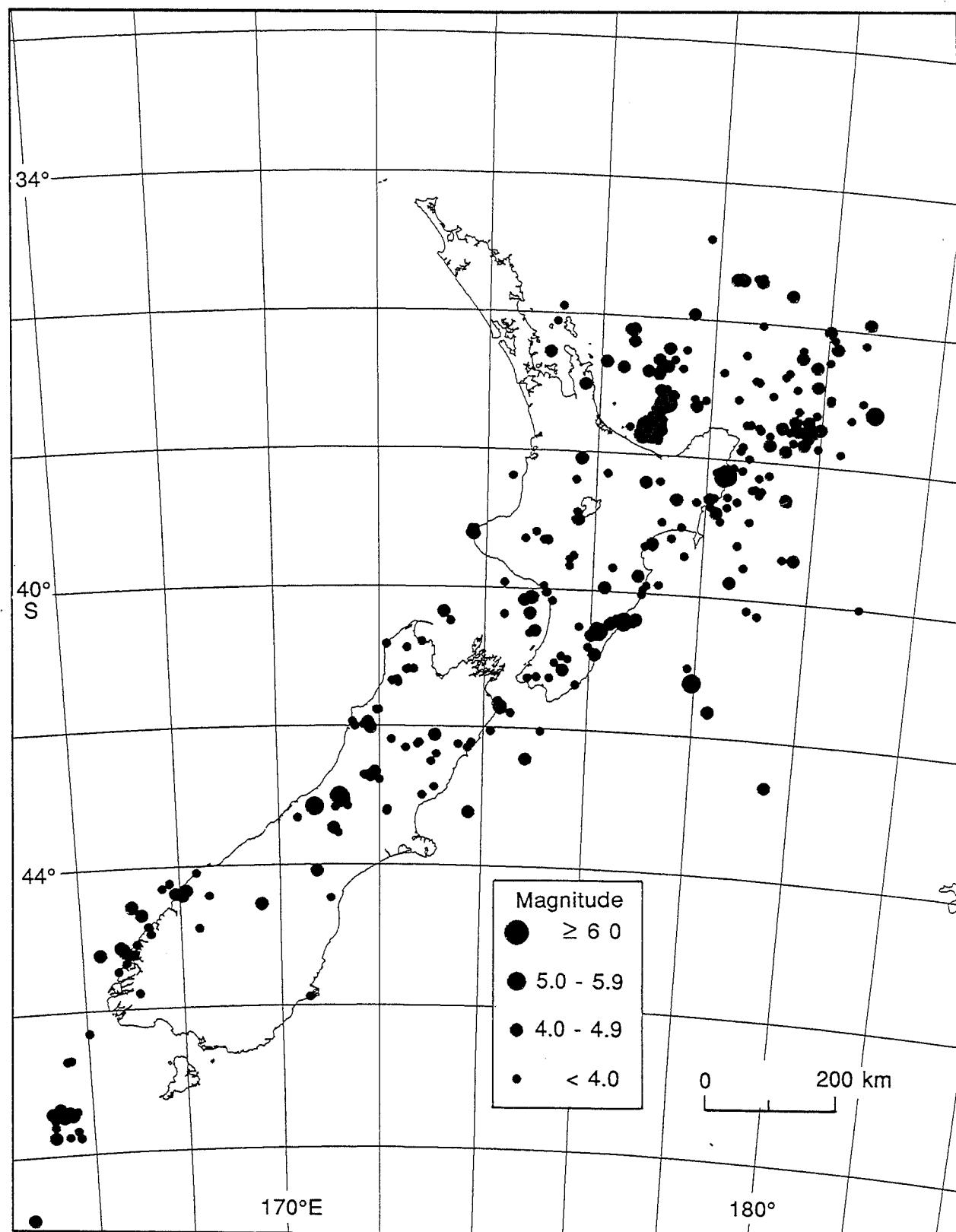
for earthquakes likely to have produced intensities above a specified minimum at a particular place and to list reports of above a given minimum intensity that have originated in a chosen reporting locality. Because of the dangers inherent in the use of incompletely assessed data, it is recommended that users should discuss their search criteria with the Observatory.

Waveforms of earthquakes recorded by digital seismographs are also archived and accessible for further processing by CUSP or other compatible software.

**EPICENTRE MAPS 1992**

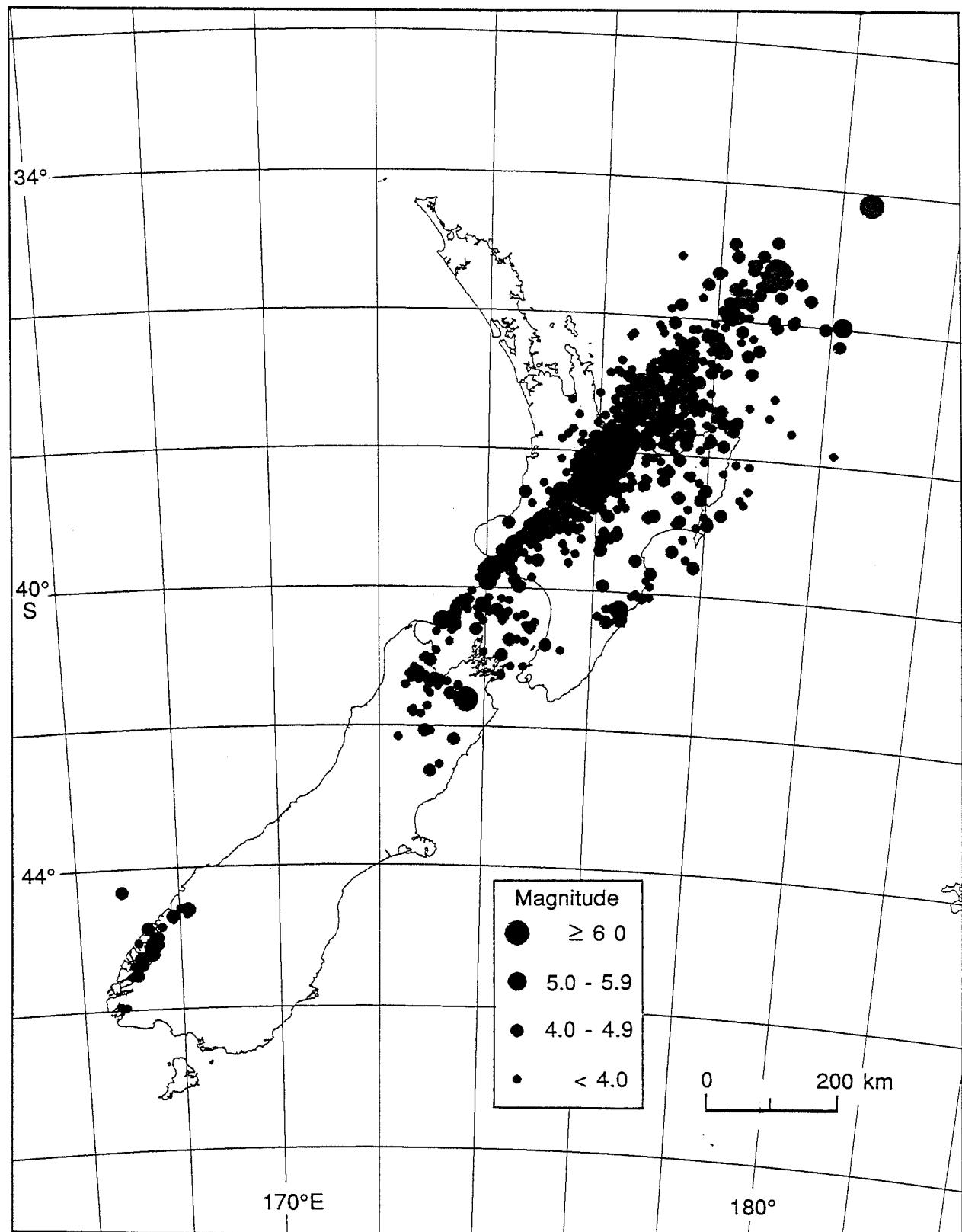
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## REGIONAL SHALLOW EARTHQUAKES



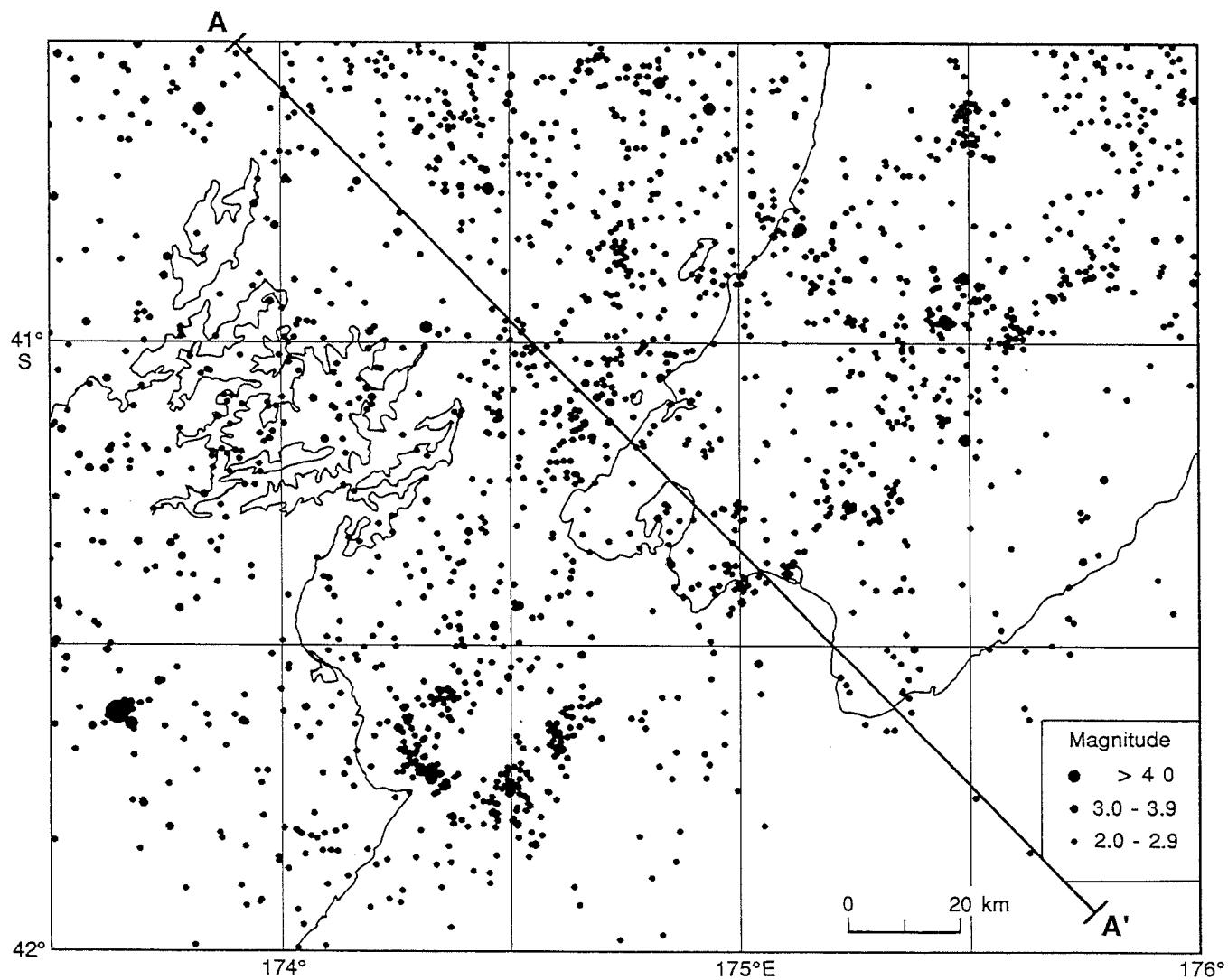
Epicentres of all earthquakes of  $M_L \geq 3.5$  with focal depths less than 40 km. When several shocks have the same epicentre, the largest is shown.

## REGIONAL DEEP EARTHQUAKES

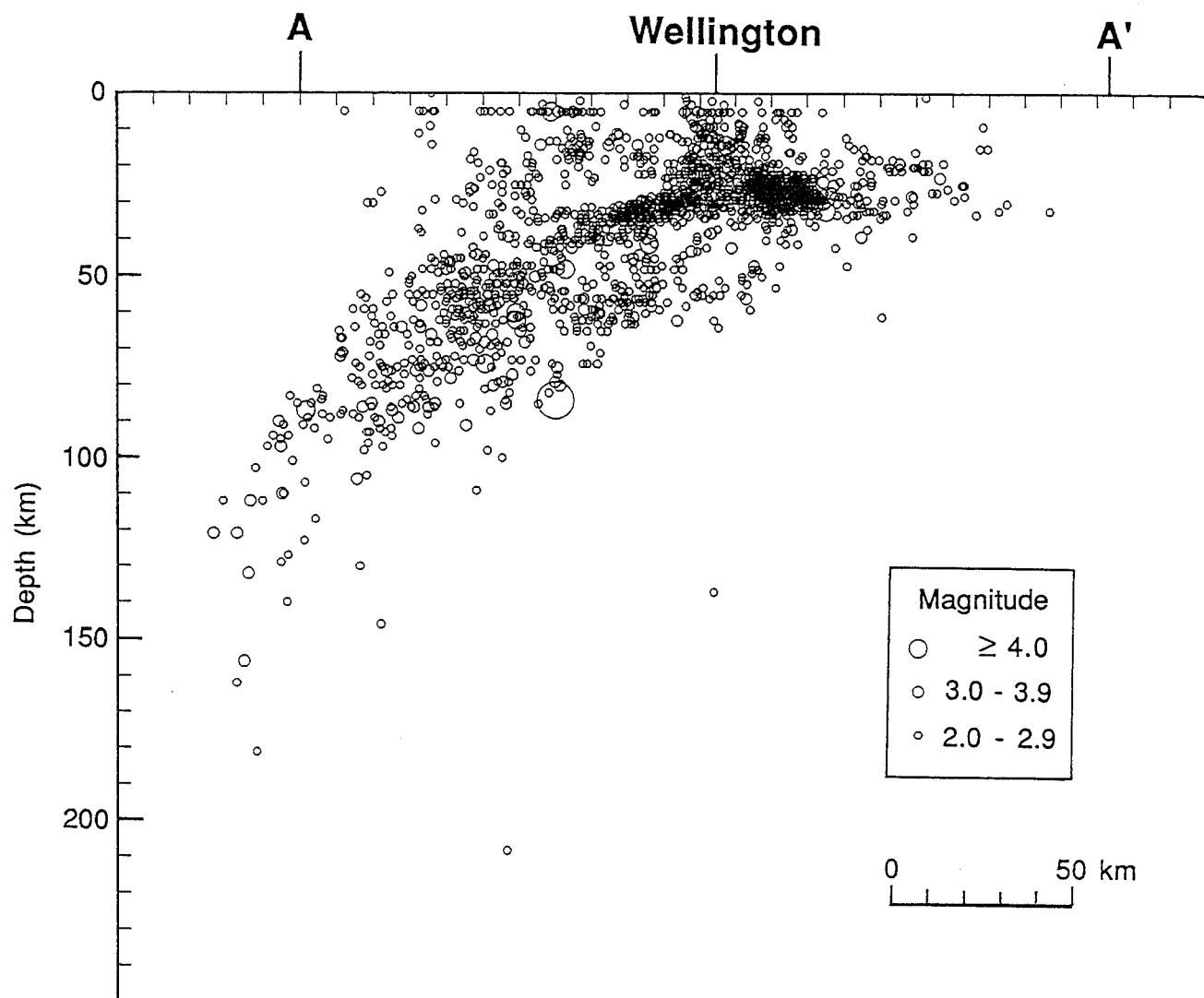


Epicentres of all earthquakes of  $M_L \geq 3.5$  with focal depths of 40 km or more. When several shocks have the same epicentre, the largest is shown.

## WELLINGTON AREA EPICENTRES



Epicentres of all earthquakes of  $M_L \geq 2.0$  in the Wellington area. The distribution of these earthquakes in depth is shown on the next page, where the hypocentres have been projected onto a vertical plane passing through the line A-A'.

**WELLINGTON HYPOCENTRE DEPTHS**

In this diagram, the hypocentres of all shocks mapped on the previous page have been projected onto a vertical plane passing through the line A-A', which is roughly normal to the Pacific/Australian plate boundary.