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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° 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Seismologists urgently requiring unpublished New Zealand data may apply to the Observatory.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.

The Reports for 1993 and 1994 are still in preparation and will be published when the aftershock sequences for the 1993 Secretary Island earthquake (1993 Aug 10) and the Arthur's Pass earthquake (1994 June 18) have been analysed.

D E Maunder
Editor

STAFF IN 1996

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STAFF IN 1996

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Raoul Island

Observer:	G Hedley

Scott Base

Observers:	D Hornstein
	R Holland

NEW ZEALAND SEISMICITY IN 1996

This was a quiet year throughout New Zealand for earthquakes. In each of the previous three years a large earthquake with thousands of aftershocks has occurred. In comparison 1996 had no shallow earthquakes larger than magnitude 5.8.

The most damaging earthquakes occurred near Hanmer in the South Island on August 29 (Event 96/9187) M_L 5.7 and September 19 (Event 96/9880) M_L 5.8. The main damage caused by these events was to contents of dwellings in Hanmer. Small aftershocks continued for the rest of the year, disturbing local residents.

A magnitude 6.4 earthquake on September 25 (Event 96/10175) and a smaller event on May 26 (Event 96/6004) M_L 5.8, were centred in northern Taranaki. These events, both nearly 220km deep, were felt widely from Taranaki to Wellington, with no reported damage. On February 28 (Event 96/2279) a large earthquake 114km deep and M_L 6.2 occurred near Lake Te Anau. Although it was felt widely throughout the lower South Island, there was minor damage close to the epicentre only. On September 27 (Event 96/10271) a deeper earthquake also of magnitude 6.2, located under the North Island, was felt from Christchurch to Auckland. This shock caused no significant damage either because of its 220km depth.

Two earthquakes occurred in southern Hawkes Bay, the first on April 7 (Event 96/4189) magnitude 4.9 with a depth of 27km and the other on October 5 (Event 96/10514) M_L 5.1 and 52km deep. Although felt over a large area, neither event was sufficiently large or shallow to cause significant damage. A moderate earthquake of magnitude 5.1 on May 31 (Event 96/6170) occurred 10km east of Levin, and was felt as far away as Christchurch. It had a depth of 36km, so again was not significantly damaging. On December 22 (Event 96/12826), a magnitude 5.3 earthquake occurred near Palmerston North. The depth was 80km, so again little damage was reported.

Small swarms of shallow (5km deep) earthquakes occurred near Kawerau between March 16 and 18 (largest M_L 2.8) and on July 21 (largest M_L 4.1). Also a series of earthquakes centred near Bainham were recorded on June 12. The largest of these (Event 96/6618) was M_L 4.5.

Mt Ruapehu erupted for a second time within a year on June 17. As was the case for the 1995 eruption, there was little associated seismic activity. Only small earthquakes and volcanic tremor associated with the actual eruption occurred near the crater.

Reference:

Principal Earthquakes in New Zealand in 1996. T H Webb. *Bulletin of the New Zealand National Society for Earthquake Engineering, Vol 30(1)*:1.

INSTRUMENTATION IN 1996

By the end of 1996, the New Zealand network consisted of 33 digital stations (22 three-component and 11 single component), 4 analogue stations (excluding the stations from regional networks that record visually as well as digitally), 7 regional networks and an IRIS system. We also received analogue records from 3 stations outside New Zealand (RAO, RAR, SBA and VNDA). As well, a temporary network in the Central Volcanic Region operated during the year.

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 the IRIS system 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 are used 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 (Equipment for the Automatic 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 has superseded SNARE. HBN, CYN and the backup for WLN networks are still recorded on SNARE. Not included in the current re-equipment programme are instruments owned by organisations other than IGNS. In 1996, organisations cooperating in continuous or ad hoc seismic monitoring were: the Universities of Auckland and Wellington and Taranaki Civil Defence.

INSTRUMENTAL CHANGES IN 1996

Two new 3-component stations of the National network, Alexandra (AXZ) and Mavora Lakes (MLZ), were installed early in March. These stations have Mark Products L4-3D instruments with EARSS digital recorders. Alexandra replaces the Clyde network which was closed at the end of April. Mavora Lakes will help improve the locations of earthquakes in the Fiordland region.

The station at Pongaroa (PGZ) was closed in June and replaced in July by Birch Farm (BFZ). Birch Farm is a 3-component station with a Mark Products L4-3D seismometer and an EARSS digital recorder.

During May, Milford Sound (MSZ) was moved slightly and the 3-component instrument replaced by a single component vertical seismometer.

The two horizontal components at Puketiti (PUZ), which had not been recording since September 1995 were reinstated in July.

Te Kiri Rd (TKEZ), a station of the Taranaki network was replaced at the end of March by a single-component vertical instrument at Newall Rd (NWEZ).

The Clyde network was closed at the end of April. Funding for this network ceased in September 1995 and there was no maintainance carried out after this, so some of the stations were inoperative during the last months of their existence.

The Taupo network (closed in 1992) was reactivated in August. The network consists of four stations. Hinemaiaia (HATZ) and Rangitukia (RATZ) were reinstalled, and Waihaha (WATZ) and Whakaroa (WHTZ) are new sites. These stations have short-period vertical seismometers and the signals are recorded at Wairakei on a 16-channel EARSS digital recorder. Hinemaiaia (HATZ) reopened in 1994 and was recorded with the Bay of Plenty network until August.

A fourth station, Otara (OTAZ), was added to the Auckland Volcano-Seismic network in September.

The Hawkes Bay network operated intermittently during 1996. (Mid April to late June, August to mid October, November to early December).

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 d	m	s		LONGITUDE d	m	s		ALT m
	SEISMIC RESEARCH OBSERVATORY									
SNZO	South Karori	41	18	37	S	174	42	17	E	-10
	STANDARD NETWORK									
AUC	Auckland	36	51	36	S	174	46	41	E	79
AXZ	Alexandra (from March)	45	16	02	S	169	19	52	E	260
BFZ	Birch Farm (from July)	40	40	54	S	176	14	46	E	318
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
DCZ	Deep Cove	45	28	42	S	167	09	15	E	20
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	43	42	59.5	S	169	16	10	E	-50
LTZ	Lake Taylor	42	46	58	S	172	16	08	E	640
MLZ	Mavora Lakes (from March)	45	20	52	S	168	10	22	E	640
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	31.5	S	167	55	39	E	90
NOZ	North Gisborne	38	37	05	S	178	02	12	E	60
NRZ	Ngariki	39	20	15	S	173	55	59	E	250
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 (until June)	40	37	08	S	176	16	25	E	0
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

SBA	Scott Base (until November)	77	51	01	S	166	45	22	E	38
SIZ	Stewart Island	46	52	30	S	168	07	59	E	60
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
VNDA	Vanda (from November)	77	30	50.2	S	161	50	44.2	E	-2
WCZ	Waipu Caves	35	56	28	S	174	20	40	E	140
WEL	Wellington	41	17	10	S	174	46	06	E	122
WHZ	Wether Hill	45	53	41	S	167	56	51	E	320
WLZ	Whitehall	37	52	12	S	175	35	46	E	190
WVZ	Waitaha Valley	43	04	35	S	170	44	10	E	75

AUCKLAND VOLCANO-SEISMIC NETWORK

MKAZ	Moumoukai	37	06	41.1	S	175	09	59.6	E	120
MTAZ	Motutapu	36	47	17.3	S	174	54	36.2	E	60
OTAZ	Otara (from September)	36	57	04	S	174	55	29	E	140
WTAZ	Waiatarua	36	56	03.1	S	174	34	26.0	E	340

BAY OF PLENTY VOLCANO-SEISMIC NETWORK

EDRZ	Edgecumbe	38	06	27.5	S	176	44	17	E	780
HARZ	Haroharo	38	05	28	S	176	30	07	E	740
HATZ	Hinemaiaia (until August)	38	53	32	S	176	05	31	E	492
LIRZ	Lichensteins Road	38	00	18	S	176	23	03	E	340
MARZ	Manawahe	37	59	12	S	176	40	28	E	480
PARZ	Papamoa	37	44	01	S	176	17	24	E	180
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

TARANAKI VOLCANO-SEISMIC NETWORK

DFE	Dawson Falls	39	19	39	S	174	06	13	E	880
NEZ	North Egmont	39	16	19	S	174	05	44	E	920
NRZ	Ngariki	39	20	15	S	173	55	59	E	250
NWEZ	Newall Rd (from April)	39	16	30	S	173	52	00	E	230
PKE	Puketiti	39	11	44	S	173	59	14	E	485
TKEZ	Kiri Road (from April)	39	23	22	S	174	00	27	E	330

TAUPO VOLCANO-SEISMIC NETWORK

HATZ	Hinemaiaia	38	57	32	S	176	05	31	E	492
RATZ	Rangitukia	38	52	07	S	175	46	16	E	649
WATZ	Waihaha	38	42	35	S	175	43	58.5	E	520
WHTZ	Whakaroa	38	40	04	S	175	57	27	E	780

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
KAVZ	Karewarewa	39	05	55	S	175	38	45	E	1200
MGZ	Maungaku	39	00	07	S	175	32	20	E	806
NGZ	Ngaruhoe	39	10	37	S	175	36	04	E	806
TUVZ	Tukino	39	16	09	S	175	39	13	E	1410

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
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_o, 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.

	Instrument	Compt.	To	Damping	Magnification
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
AXZ	ALEXANDRA (from March) Foundation: Schist. Mark Products L4-3D (with EARSS digital gain-ranging recorder).				
		ZNE	1.0		
BFZ	BIRCH FARM (from July) Foundation: Greywacke 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 Foundation: Greywacke. Mark Products L4-C (with EARSS digital gain-ranging recorder)				
		Z	1.0		
CHR	CHRISTCHURCH Foundation: Alluvial sands, silts and gravels. Willmore II (with Kinemetrics VR-1 pen-recorder).				
		Z	1.0		
DCZ	DEEP COVE Foundation: Granite. Mark Products L4-3D (with EARSS digital gain-ranging recorder)				
		ZNE	1.0		
DSZ	DENNISTON NORTH Foundation: Upper Precambrian greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder)				
		ZNE	1.0		

	Instrument	Compt.	To	Damping	Magnification
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 EARSS digital gain-ranging 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-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		
MLZ	MAVORA LAKES (from March) Foundation: Greywacke. Mark Products L4-3D (with EARSS digital gain-ranging recorder).	ZNE	1.0		
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 Foundation: Greywacke. 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		
	Replaced in May by Mark Products L4-C (with EARSS gain-ranging recorder)	Z	1.0		

	Instrument	Compt.	To	Damping	Magnification
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		
ODZ	OTAHUA DOWNS				
	Foundation: Greywacke.				
	Mark Products L4-3D (with EARSS digital gain-ranging recorder)				
		ZNE	1.0		
OIZ	OIO				
	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 (until June)				
	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 Kinemetrics VR-1 pen-recorder).				
		Z	1.0		4 800 at 0.25s
RAR	RAROTONGA (World-Wide Standard Station)				
	Foundation: Basalt.				
	Benioff	ZNE	1.0		6 250 at 1.0s
	Signal also recorded by EARSS digital event recorder tuned to trigger on T-waves.				
	Press-Ewing	Z	15		375 at 15s
	GeoTech KS36000i broad band seismometer recorded on IRIS-2 digital recording system.				

	Instrument	Compt.	To	Damping	Magnification
RTY	ROTOITI Foundation: Glacial gravels. Mark Products L4-C (with Kinemetrics VR-1 pen-recorder).				
		Z	1.0		Uncertain
SBA	SCOTT BASE (World-Wide Standard Station) Foundation: Frozen basaltic debris resting on lava flows.				
	Benioff	ZNE	1.0		12 500-50 000 at 1.0s according to season
	Press-Ewing	ZNE	15		750 at 15s
SIZ	STEWART ISLAND Foundation: Granite Mark Products L4-C (with EARSS digital gain-ranging recorder).				
		Z	1.0		
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 Kinemetrics 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		
VNDA	VANDA (from November) Foundation: Granite gneiss intruded by quartz porphyry dykes. GeoTech K53 6000i broadband 3-D seismometer recorded at Scott Base				
		Z	1.0		
		ZNE	15		
WCZ	WAIPU CAVES Foundation: Limestone. Mark Products L4-C (with EARSS digital gain-ranging recorder).				
		Z	1.0		

	Instrument	Compt.	To	Damping	Magnification
WEL	WELLINGTON (World-Wide Standard Station)				
	Foundation: Greywacke.				
	Benioff	Z	1.0		6 250 at 1.0s
	Press-Ewing	ZNE	15		375 at 15s
	Imamura	Z	1	5:1	2
		NE	4	5:1	2
	Kinemetrics force-balance accelerometer (with EARSS digital gain-ranging recorder).				
		ZNE	1.0		
WHZ	WETHER HILL				
	Foundation: Greywacke.				
	Mark Products L4-3D (with EARSS digital gain-ranging recorder)				
		ZNE	1.0		
WLZ	WHITEHALL				
	Foundation: Jurassic Greywacke.				
	Mark Products L4-3D (with EARSS digital gain-ranging recorder)				
		ZNE	1.0		
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

AUCKLAND VOLCANO-SEISMIC NETWORK

This network has been installed in Auckland to monitor seismic activity associated with volcanic and tectonic processes in the Auckland volcanic region and is operated by Auckland Regional Council in conjunction with IGNS Wairakei and the University of Auckland. The instruments are single component L4-C seismometers telemetered to an EARSS digital recorder, and are also recorded on VR1 visual recorders.

Code	Station	Component	Foundation
MKAZ	Moumoukai	Z	Greywacke
MTAZ	Motuapu	Z	Jurassic mudstone
OTAZ	Otara	Z	Sandstone
WTAZ	Waiatarua	Z	Miocene volcanoclastics

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. Hinemaiaia (HATZ) was recorded with the Taupo Network from August.

Data from these stations are telemetered to a 16-channel EARSS at Rotorua and also Wairakei. Selected stations are also recorded on VR-1 pen-and-ink visual recorders. The seismometers are Mark Products L4-C (1 hz) short-period vertical seismometers.

Code	Station	Component	Lithology
EDRZ	Edgecumbe	Z	Andesite
HARZ	Haroharo	Z	Rhyolite
HATZ	Hinemaiaia	Z	Ignimbrite
LIRZ	Lichensteins Rd	Z	Rotoiti breccia
MARZ	Manawahe	Z	Andesite
PARZ	Papamoa	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. This network was closed in April.

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. One of the stations, usually Wakarara (WAHZ) is also recorded on a VR-1 pen-on-ink visual recorder.

Code	Station	Component(s)	Foundation
HNH	Havelock North	ZNE (High gain)	Greywacke gravel
		ZNE (Low gain)	" "
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

TARANAKI VOLCANO-SEISMIC NETWORK

This network is operated by the Taranaki Civil Defence and IGNS Wairakei to monitor volcanic activity around Taranaki volcano. The stations are single component L4-C seismometers telemetered to a 16-channel EARSS recorder at New Plymouth. NRZ (Ngariki) is also part of the New Zealand Seismic Network. In April, Newall Rd (NWEZ) replaced Kiri Rd (TKEZ) which was closed at the end of March.

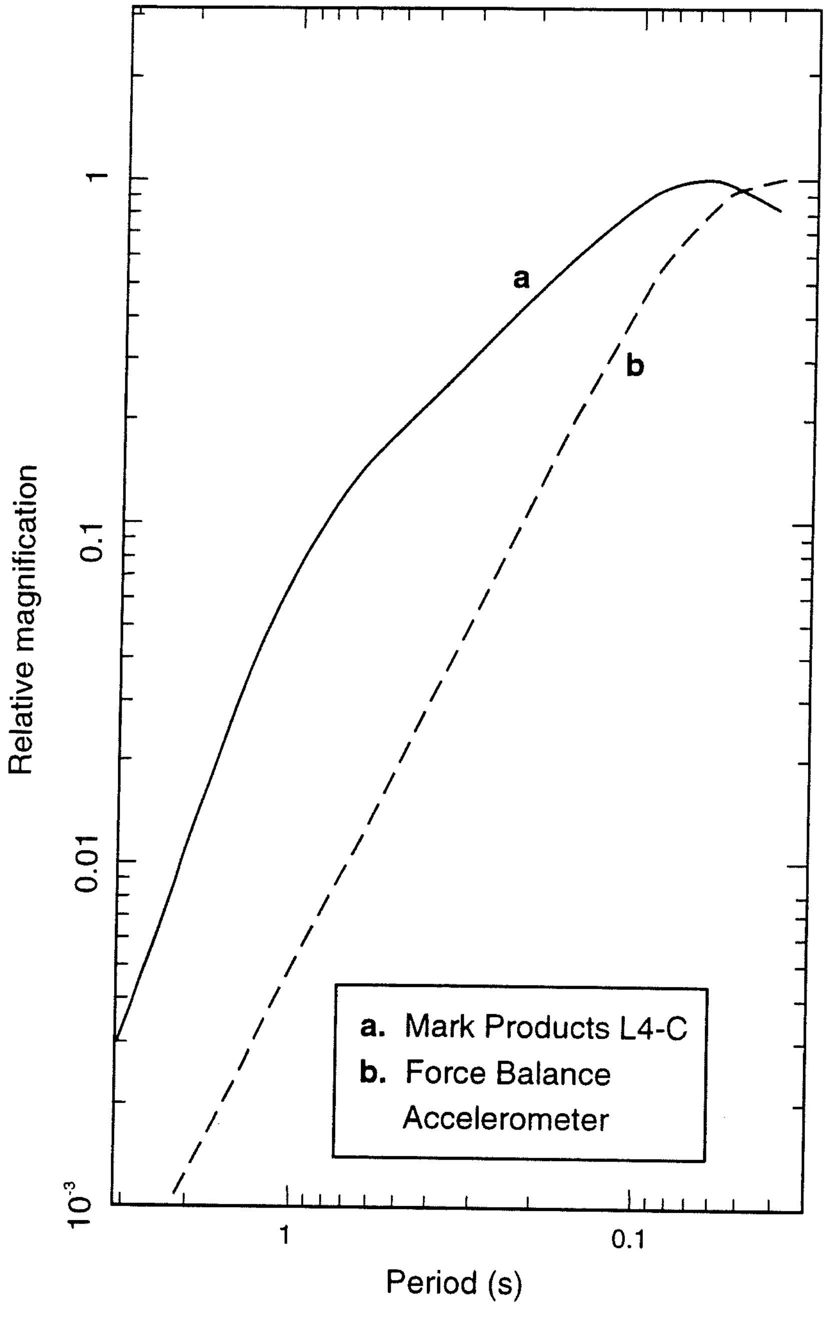
Code	Station	Component(s)	Foundation
DFE	Dawson Falls	Z	Volcanic ash
NEZ	North Egmont	Z	Volcanic ash
NRZ	Ngariki	Z	Andesite
NWEZ	Newall Rd	Z	Andesite
PKE	Pukeiti	Z	Andesite
TKEZ	Kiri Rd	Z	Opunake lahars

RUAPEHU VOLCANO MONITORING NETWORK

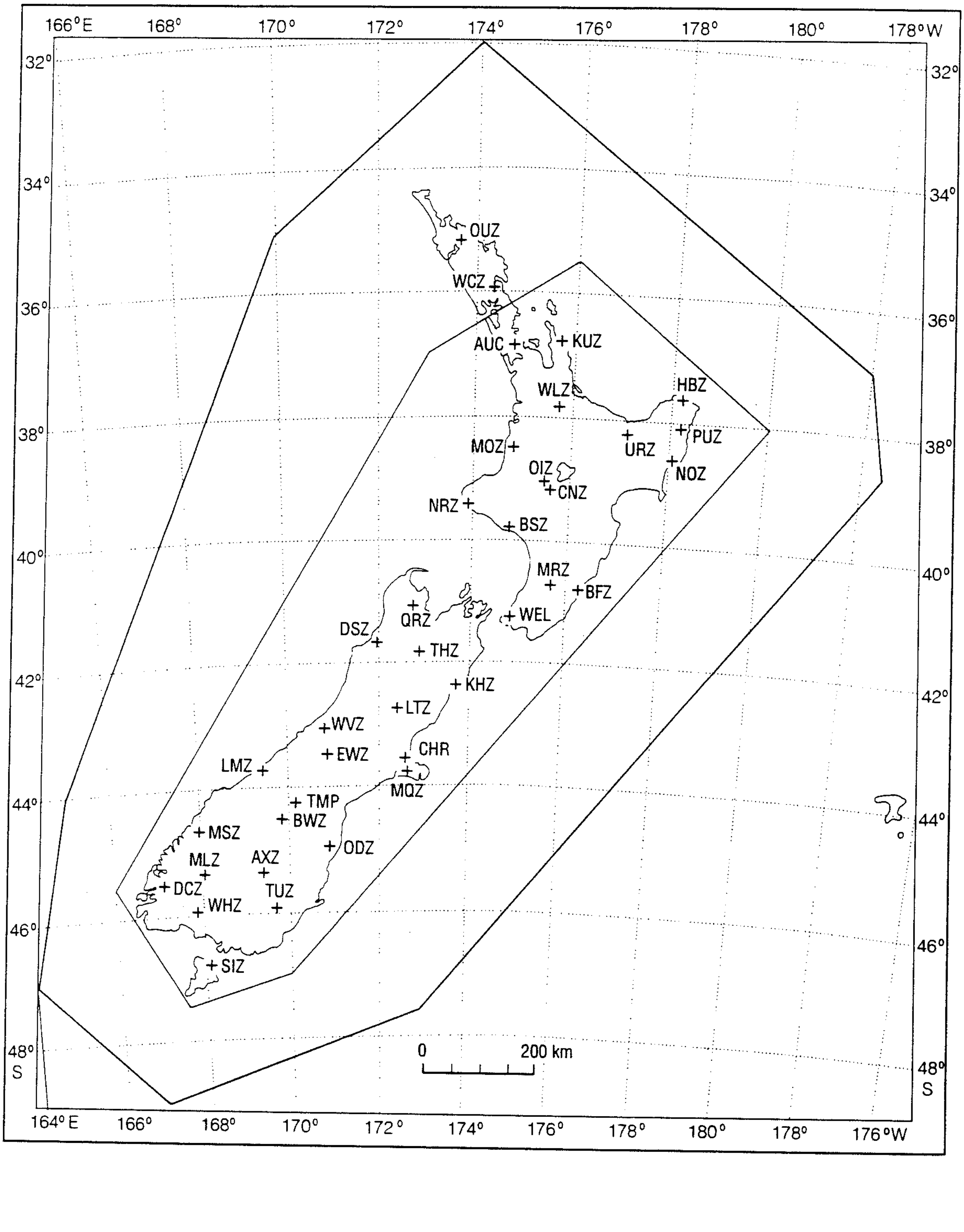
This temporary network was installed around Ruapehu to monitor the volcanic activity after the mountain began erupting in mid September. The instruments are three component short period seismometers recorded on EARSS digital recorders. The station codes are unofficial.

CODE	NAME	LATITUDE d	m	s		LONGITUDE d	m	s		ALT m
CSCV	Christiana Ski Club	39	16	50	S	175	36	48	E	1690
ERUV	Erua	39	14	00	S	175	21	55	E	760
EXPV	Express	39	15	19	S	175	33	53	E	2030
GIAV	Giant	39	17	59	S	175	32	55	E	2070
KARV	Karioi	39	27	13	S	175	34	25	E	710
MIDV	Middle Road	39	19	24	S	175	21	04	E	730
MOAV	Moawhango	39	24	30	S	175	45	11	E	850
OAKV	Ohakune	39	23	03	S	175	26	14	E	720
SWRV	Swamp Road	39	21	21	S	175	37	10	E	1100
TONV	Tongariro River	39	13	58	S	175	46	43	E	860
TOPV	Top of the Bruce	39	14	04	S	175	32	36	E	1480
TURV	Turoa	39	19	15	S	175	30	10	E	1250

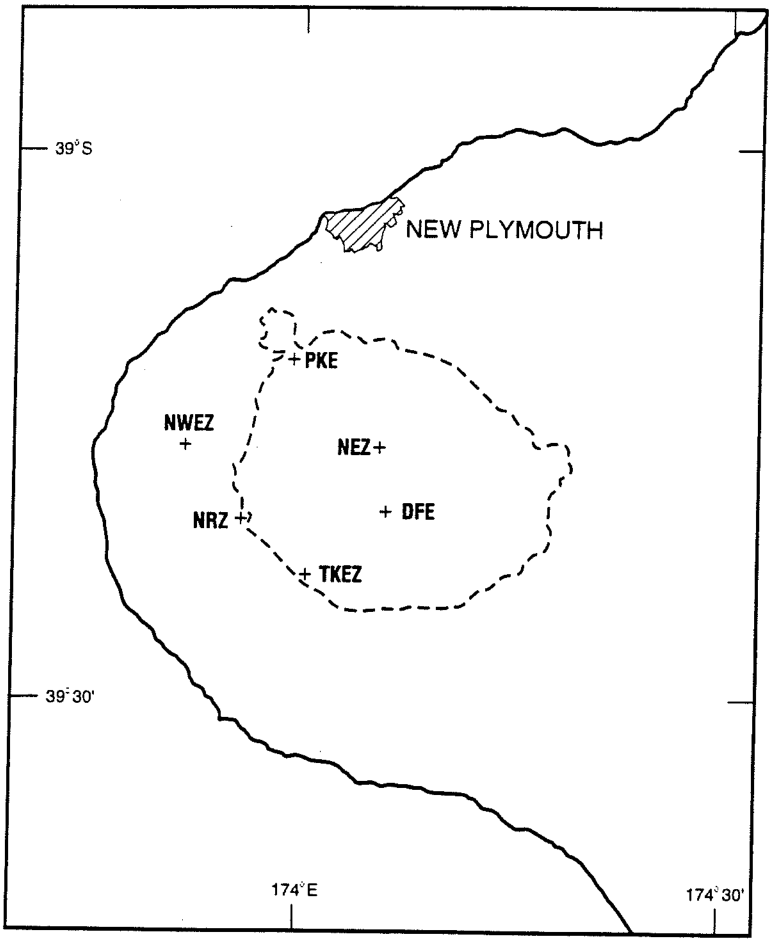
EARSS RESPONSE



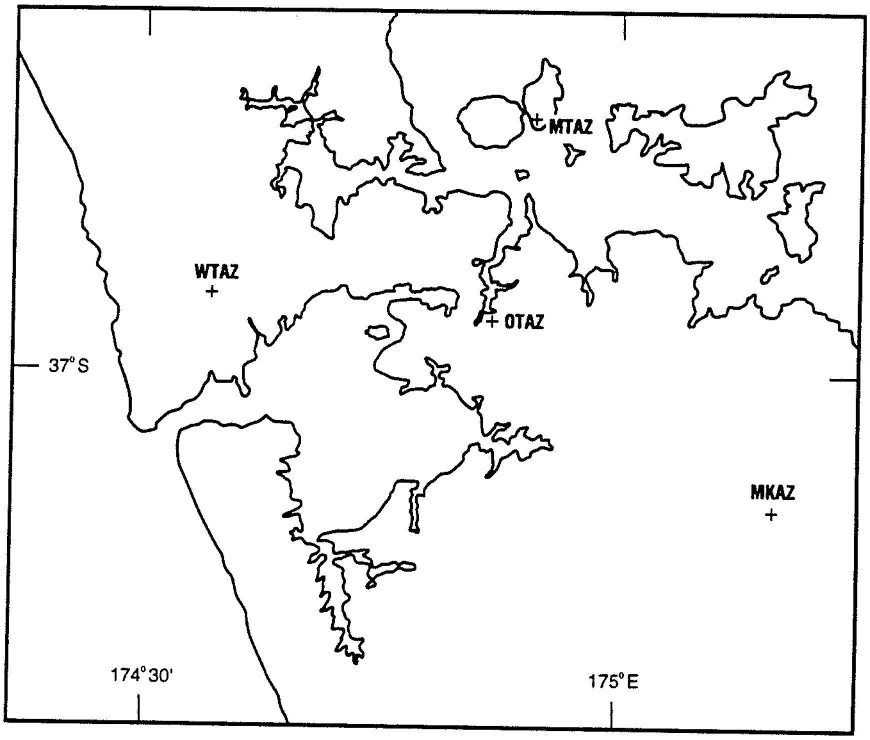
Period response curve of L4-C seismometers with EARSS recorders.



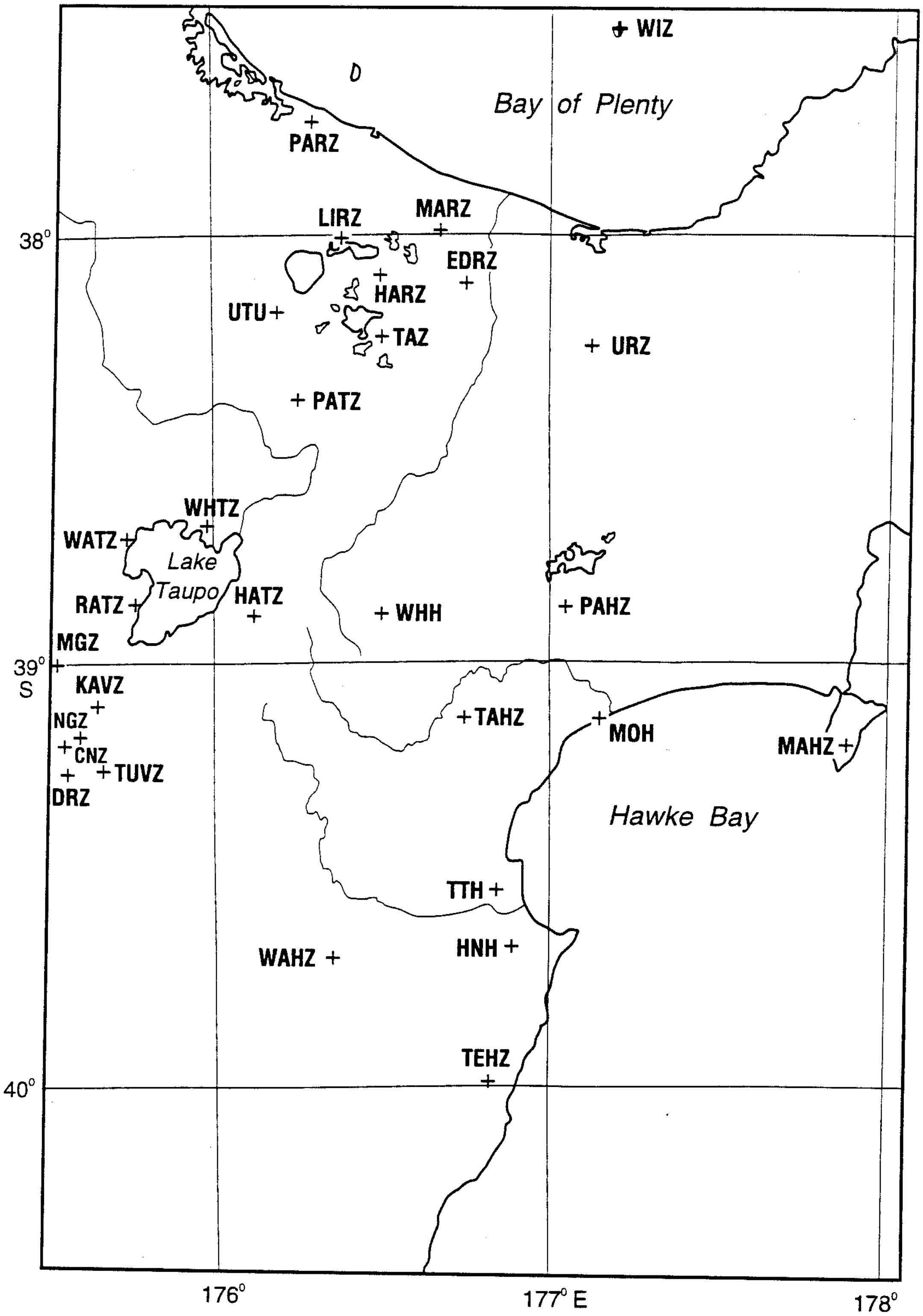
Stations of the National Seismograph Network. Some stations that are too closely spaced to show on this scale are shown instead on the map of the Volcanic and Hawke's Bay Networks. The inner and outer polygons define areas where accuracy of epicentre locations is considered reliable, less reliable and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



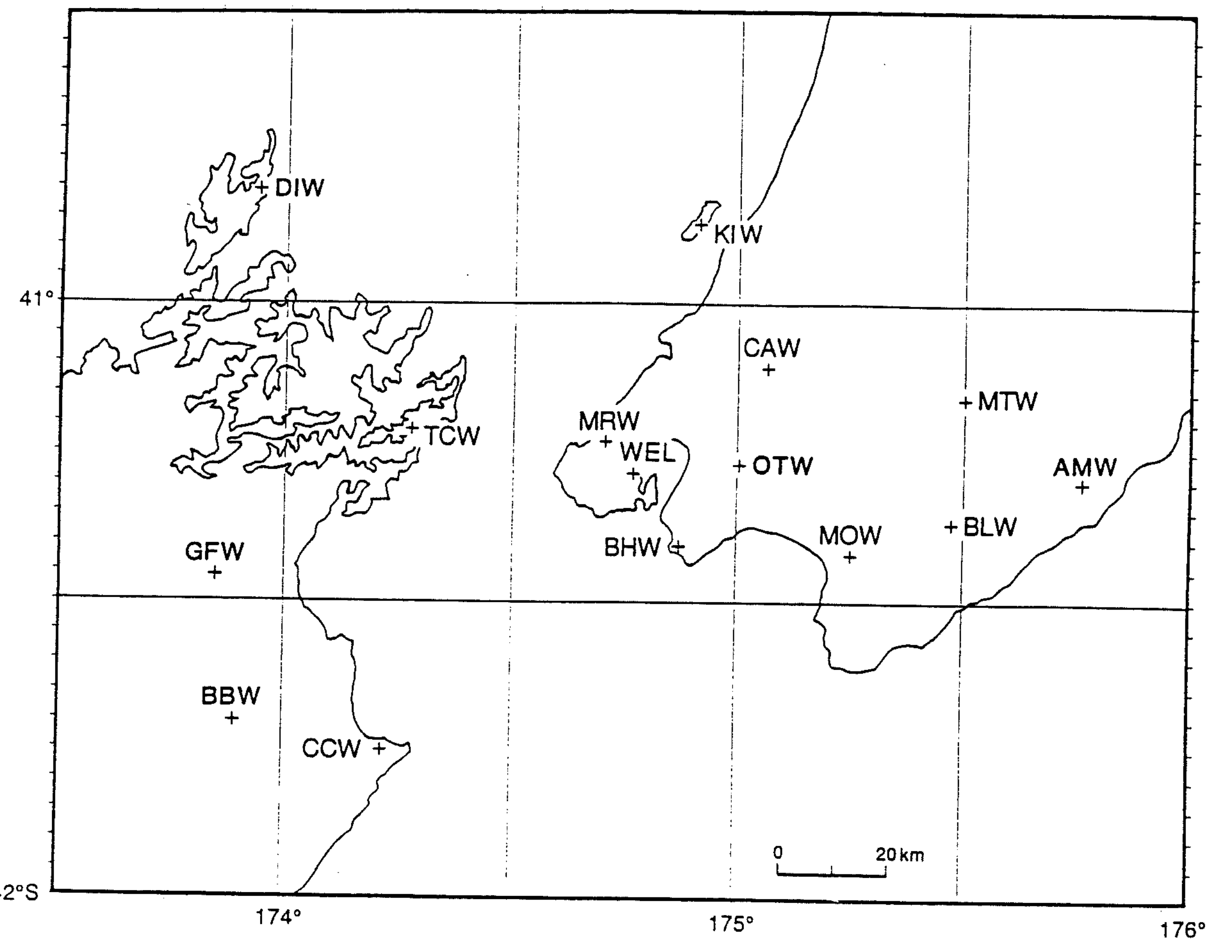
Stations of the Taranaki Volcanic Network.



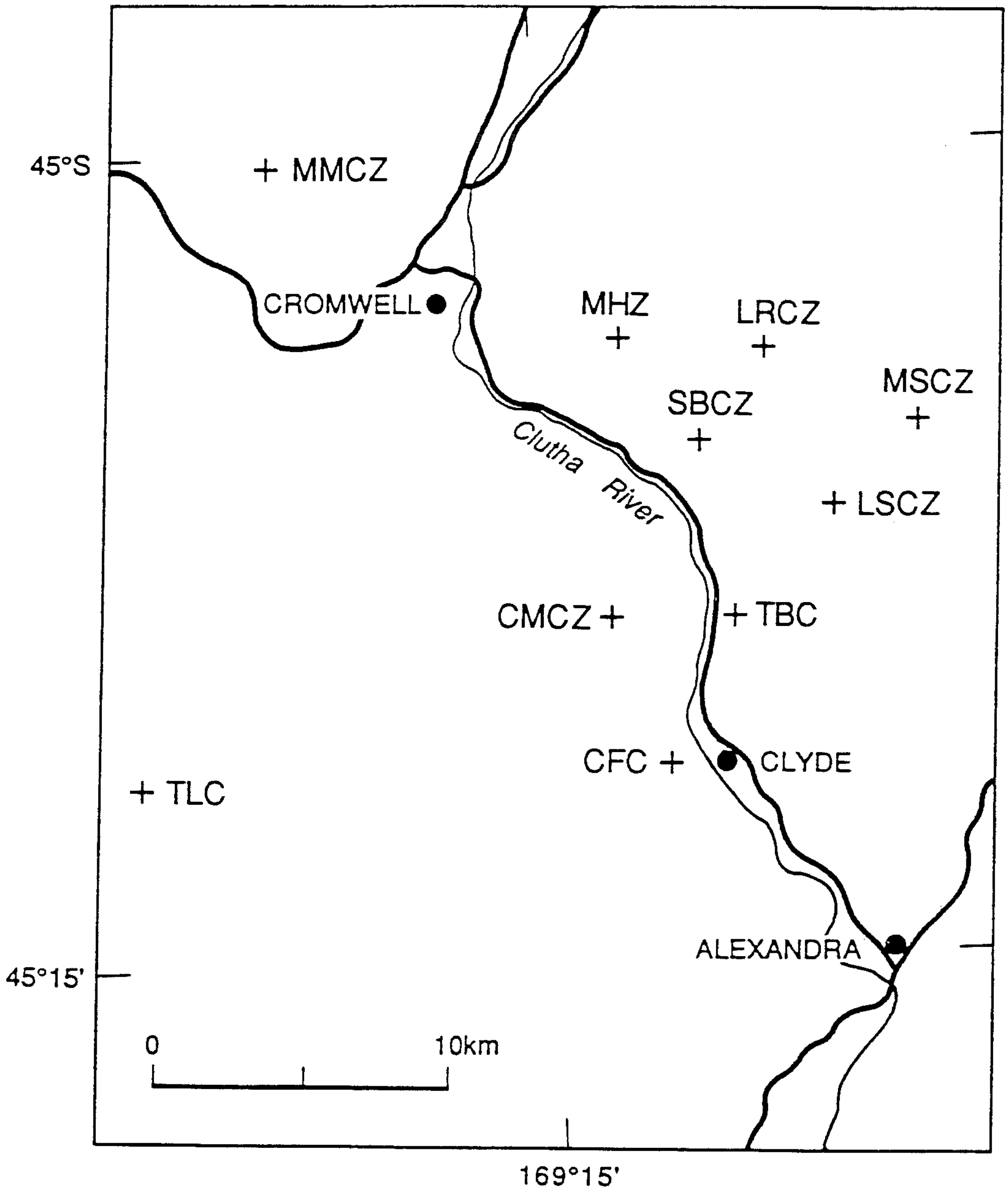
Stations of the Auckland Volcanic Network.



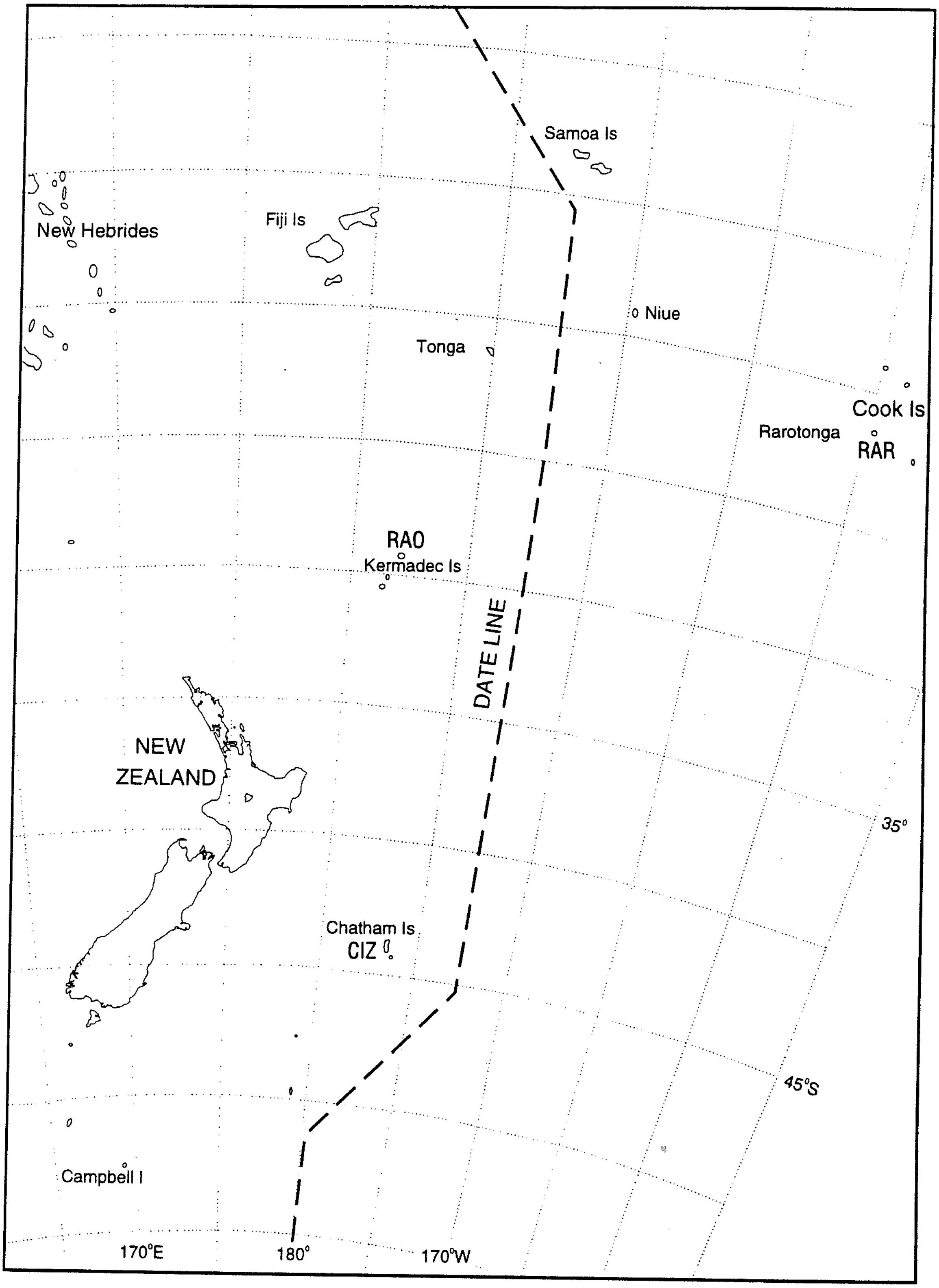
Stations of the Volcanic and Hawke's Bay Networks. Other stations lying within the boundaries of the map are also shown.



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



The Clyde Network monitors seismic activity around the Clyde Dam (closed in April).



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 1996 Daylight Time was in effect until 02h NZST on March 16th, and from 02h NZST on October 6th 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 22, 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.
				(in clockwise order)	
New Zealand Standard	0.0	5.5	3.3		
	12.0	6.5	3.7		
	33.0	8.1	4.6		
Wellington	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		
Taupo	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		
Clyde	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

$$A = A_0 R^{-N} \exp(-\alpha R)$$

where A is an amplitude recorded at an epicentral distance R, A_0 is a calibration function, N is a geometric spreading factor and α 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 α 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 33), α takes values of 0.8 deg^{-1} for P waves and 1.05 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) α increasing with focal depth, and (iii) stations in the North Island not used, because of variations of the coefficients N and α. Milford Sound (MSZ), Wether Hill (WHZ), 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 32 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 WHZ, 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 Kinemetrics force-balance accelerometer (see Map, page 33). 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.

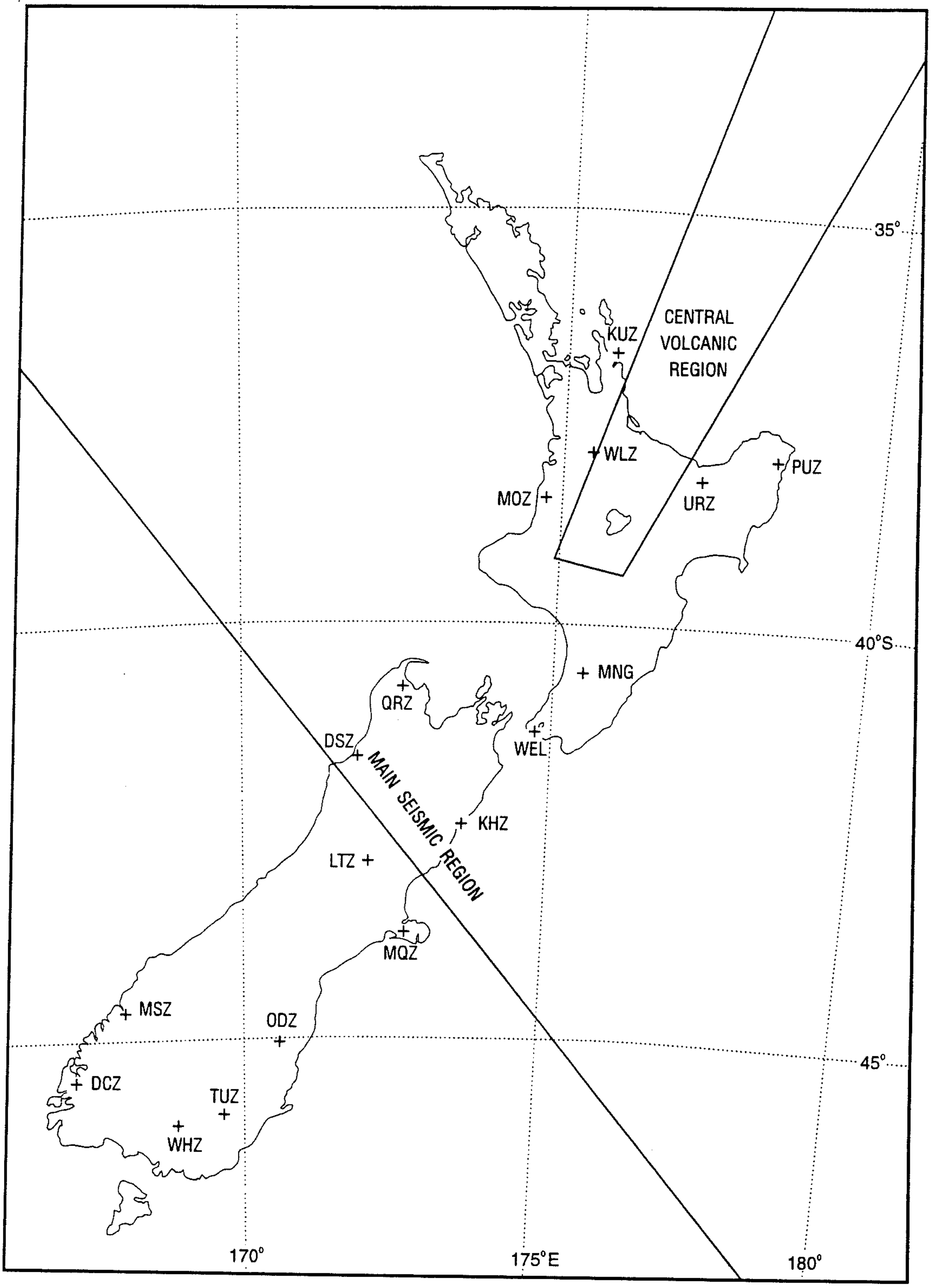
Maximum amplitudes are also picked off vertical traces for both telemetered and non-telemetered stations. This is necessary to obtain readings for small events. For very small events, traces are high-pass filtered to enable an amplitude to be picked. Magnitudes are unable to be calculated for only a 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 ($H \leq 33$ km)	Correction ($H > 33$ km)
DCZ	H	Fiordland only		+0.59
DCZ	H	All shallow	+0.60	
DSZ	H	Fiordland only		+0.22
DSZ	H	All shallow	+0.22	
KHZ	H		+0.43	+0.33
KUZ	H		+0.36	
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	N		0.00	0.00
WEL	E		+0.09	+0.09
WHZ	H	Fiordland only		+0.35
WHZ	H	All shallow	+0.19	
WLZ	H	All shallow	+0.30	

H refers to horizontal seismometers, either N/S or E/W.
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 synthetic Wood-Anderson 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,

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

where r_i is the ith 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° from Wellington.

96/2
JAN 01 0010 26.3s 39.23S 174.86E 224km M=3.8
0.3 0.01 0.02 3
Rsd 0.1s 26ph/21stn Dmin 44km Az.gap 161°
Corr. -0.071 16M/16stn Msd 0.3 6↑ 3↓

96/14
JAN 01 0526 50.3s 38.66S 177.93E 39km M=3.8
0.2 0.01 0.01 4
Rsd 0.2s 21ph/18stn Dmin 10km Az.gap 120°
Corr. -0.105 8M/6stn Msd 0.4 3↑ 1↓
Felt Gisborne (45).

96/22
JAN 01 0807 19.7s 38.66S 177.93E 33km M=3.7
0.4 0.04 0.03 3
Rsd 0.3s 17ph/13stn Dmin 10km Az.gap 158°
Corr. -0.755 20M/18stn Msd 0.4 1↑
Felt Gisborne (45) MM4.

96/44
JAN 01 2035 49.1s 37.10S 177.98E 102km M=3.7
1.2 0.05 0.06 13
Rsd 0.6s 10ph/9stn Dmin 62km Az.gap 232°
Corr. 0.391 5M/5stn Msd 0.1

96/87
JAN 03 0429 00.6s 38.46S 176.11E 171km M=3.5
0.5 0.10 0.08 5
Rsd 0.2s 12ph/9stn Dmin 78km Az.gap 205°
Corr. -0.963 11M/10stn Msd 0.3

96/88
JAN 03 0551 30.1s 42.96S 171.84E 5km M=3.8
0.1 0.01 0.01 R
Rsd 0.2s 19ph/10stn Dmin 40km Az.gap 97°
Corr. -0.209 25M/18stn Msd 0.3 2↑ 2↓

96/93
JAN 03 0853 32.9s 45.11S 167.43E 94km M=3.8
0.3 0.01 0.02 3
Rsd 0.1s 16ph/10stn Dmin 45km Az.gap 190°
Corr. -0.537 8M/4stn Msd 0.1 1↑ 7↓

96/107
JAN 03 1754 05.7s 40.39S 174.24E 104km M=4.0
0.3 0.01 0.01 3
Rsd 0.2s 41ph/31stn Dmin 53km Az.gap 96°
Corr. 0.053 25M/20stn Msd 0.2 4↑ 5↓

96/114
JAN 03 2238 4.2s 38.30S 176.17E 171km M=4.8
0.2 0.01 0.01 2
Rsd 0.2s 51ph/42stn Dmin 12km Az.gap 54°
Corr. -0.088 8M/4stn Msd 0.3 23↑ 15↓

96/121
JAN 04 0729 35.4s 41.64S 175.39E 24km M=4.2
0.2 0.01 0.01 1
Rsd 0.1s 22ph/17stn Dmin 27km Az.gap 183°
Corr. -0.482 18M/9stn Msd 0.2 4↑ 5↓

96/126
JAN 04 0807 31.8s 35.93S 178.25E 226km M=4.0
0.7 0.08 0.10 9
Rsd 0.2s 13ph/9stn Dmin 186km Az.gap 330°
Corr. -0.694 6M/6stn Msd 0.2

96/137
JAN 04 1049 18.7s 36.87S 176.97E 253km M=3.7
0.5 0.07 0.05 5
Rsd 0.2s 9ph/6stn Dmin 143km Az.gap 280°
Corr. -0.684 5M/5stn Msd 0.1

96/147
JAN 04 1710 55.2s 38.85S 175.78E 116km M=4.1
0.2 0.01 0.01 1
Rsd 0.2s 37ph/28stn Dmin 27km Az.gap 109°
Corr. -0.275 27M/23stn Msd 0.2 13↑ 3↓

96/150
JAN 04 2045 32.0s 38.77S 175.29E 215km M=3.9
0.4 0.03 0.03 3
Rsd 0.3s 26ph/16stn Dmin 32km Az.gap 121°
Corr. -0.260 19M/19stn Msd 0.2 4↑ 1↓

96/170
JAN 05 0503 39.6s 36.83S 176.56E 270km M=3.9
0.4 0.03 0.04 4
Rsd 0.1s 15ph/12stn Dmin 167km Az.gap 263°
Corr. -0.803 16M/16stn Msd 0.2

96/172
JAN 05 0719 06.1s 36.85S 176.94E 263km M=4.2
1.0 0.07 0.05 9
Rsd 0.3s 13ph/12stn Dmin 110km Az.gap 209°
Corr. 0.381 23M/19stn Msd 0.2 1↑

96/182
JAN 05 1423 36.9s 37.76S 179.20E 23km M=3.6
0.3 0.02 0.02 2
Rsd 0.1s 9ph/6stn Dmin 81km Az.gap 295°
Corr. -0.270 20M/18stn Msd 0.2 1↑ 1↓

96/183
JAN 05 1454 33.3s 38.10S 176.13E 158km M=4.0
0.4 0.02 0.02 3
Rsd 0.2s 30ph/27stn Dmin 33km Az.gap 81°
Corr. -0.202 23M/21stn Msd 0.2 1↑

96/202
JAN 05 1933 05.2s 45.40S 166.82E 17km M=4.2
0.3 0.01 0.01 1
Rsd 0.1s 16ph/11stn Dmin 27km Az.gap 255°
Corr. -0.407 8M/4stn Msd 0.2 1↓

96/221
JAN 06 0345 09.6s 42.58S 172.55E 5km M=3.7
0.1 0.01 0.01 R
Rsd 0.2s 17ph/14stn Dmin 32km Az.gap 98°
Corr. -0.535 9M/5stn Msd 0.2 1↑

96/259
JAN 06 2216 17.8s 43.68S 169.59E 12km M=2.6
0.2 0.01 0.02 R
Rsd 0.1s 14ph/9stn Dmin 104km Az.gap 226°
Corr. -0.797 8M/8stn Msd 0.4
Felt Mahitahi (104) MM4.

96/262
JAN 06 2325 55.1s 43.00S 171.84E 5km M=3.8
0.1 0.00 0.00 R
Rsd 0.1s 17ph/10stn Dmin 43km Az.gap 95°
Corr. -0.264 8M/4stn Msd 0.2 1↑ 3↓

96/278
JAN 07 0629 40.4s 36.32S 178.74E 229km M=3.8
1.6 0.13 0.13 12
Rsd 0.4s 11ph/9stn Dmin 148km Az.gap 318°
Corr. -0.560 8M/8stn Msd 0.3

96/329
JAN 08 1608 22.7s 40.53S 176.45E 35km M=3.6
0.2 0.01 0.02 5
Rsd 0.3s 37ph/31stn Dmin 18km Az.gap 181°
Corr. -0.453 22M/20stn Msd 0.2 3↑ 1↓
Felt Dannevirke (63).

96/344
JAN 08 2015 50.0s 37.02S 178.82W 33km M=4.1
0.7 0.06 0.05 R
Rsd 0.2s 10ph/6stn Dmin 263km Az.gap 327°
Corr. -0.429 15M/14stn Msd 0.2

96/350
JAN 08 2226 55.5s 38.35S 175.98E 154km M=3.6
0.3 0.03 0.02 3
Rsd 0.2s 14ph/12stn Dmin 82km Az.gap 216°
Corr. -0.739 20M/19stn Msd 0.3

96/355
JAN 09 0058 45.0s 38.76S 175.90E 142km M=3.5
0.4 0.04 0.03 3
Rsd 0.1s 12ph/9stn Dmin 53km Az.gap 207°
Corr. -0.887 13M/13stn Msd 0.4 1↑

96/380
JAN 09 1619 10.1s 41.02S 172.47E 5km M=3.7
0.1 01.01 0.01 R
Rsd 0.2s 21ph/15stn Dmin 22km Az.gap 153°
Corr. -0.382 9M/5stn Msd 0.2 1↑

96/434
JAN 10 1431 35.6s 40.53S 173.42E 149km M=4.6
0.3 0.01 0.01 3
Rsd 0.2s 45ph/31stn Dmin 52km Az.gap 128°
Corr. 0.051 30M/25stn Msd 0.3 13↑ 7↓

96/444
JAN 10 1938 21.7s 43.63S 169.59E 12km M=2.7
0.1 0.01 0.01 R
Rsd 0.2s 11ph/9stn Dmin 103km Az.gap 174°
Corr. -0.737 10M/10stn Msd 0.4
Felt Mahitahi (104) MM4.

96/445
JAN 10 2051 32.1s 41.32S 174.01E 56km M=3.8
0.1 0.01 0.01 2
Rsd 0.2s 32ph/22stn Dmin 21km Az.gap 62°
Corr. -0.273 20M/15stn Msd 0.2 5↑ 6↓
Felt Fighting Bay (78) MM4.

96/460
JAN 11 1031 59.4s 37.83S 176.39E 157km M=3.6
0.4 0.05 0.03 3
Rsd 0.1s 11ph/8stn Dmin 80km Az.gap 229°
Corr. -0.827 16M/16stn Msd 0.2

96/481
JAN 11 1929 48.5s 37.11S 177.43E 5km M=3.9
0.3 0.02 0.02 R
Rsd 0.2s 9ph/7stn Dmin 52km Az.gap 192°
Corr. 0.192 9M/6stn Msd 0.3

96/501
JAN 12 1337 26.4s 38.89S 176.14E 95km M=3.6
0.4 0.02 0.02 4
Rsd 0.3s 19ph/16stn Dmin 4km Az.gap 97°
Corr. -0.800 16M/15stn Msd 0.2 1↓

96/512
JAN 12 2027 07.6s 37.60S 176.65E 192km M=4.2
0.4 0.02 0.02 3
Rsd 0.2s 14ph/13stn Dmin 43km Az.gap 133°
Corr. 0.163 15M/14stn Msd 0.3 1↑

96/523
JAN 13 0052 23.3s 41.38S 173.42E 112km M=4.2
0.3 0.02 0.01 3
Rsd 0.3s 35ph/23stn Dmin 35km Az.gap 62°
Corr. -0.409 21M/18stn Msd 0.2 9↑ 4↓

96/529
JAN 13 0700 53.5s 35.54S 178.70E 238km M=4.2
0.4 0.07 0.07 7
Rsd 0.1s 11ph/5stn Dmin 231km Az.gap 343°
Corr. -0.517 6M/5stn Msd 0.2

96/532
JAN 13 0752 40.3s 45.18S 167.48E 113km M=4.9
0.3 0.01 0.01 2
Rsd 0.2s 21ph/13stn Dmin 41km Az.gap 174°
Corr. -0.078 10M/5stn Msd 0.1 3↑ 4↓

96/534
JAN 13 1023 48.5s 37.01S 176.43E 229km M=3.9
0.4 0.04 0.05 4
Rsd 0.1s 14ph/12stn Dmin 151km Az.gap 263°
Corr. -0.862 9M/9stn Msd 0.2

96/539
JAN 13 1451 59.9s 35.58S 178.67E 238km M=4.0
0.6 0.07 0.07 4
Rsd 0.2s 7ph/4stn Dmin 226km Az.gap 343°
Corr. -0.578 4M/4stn Msd 0.2

96/552
JAN 14 0632 37.6s 45.12S 167.54E 122km M=4.0
0.3 0.01 0.01 2
Rsd 0.2s 21ph/14stn Dmin 49km Az.gap 174°
Corr. -0.263 8M/4stn Msd 0.2 7↑ 4↓

96/558
JAN 14 0937 10.7s 37.55S 176.36E 213km M=4.3
0.3 0.06 0.04 3
Rsd 0.1s 10ph/8stn Dmin 103km Az.gap 231°
Corr. -0.813 22M/18stn Msd 0.2 1↑

96/565
JAN 14 1826 22.2s 38.48S 176.15E 123km M=4.2
0.3 0.01 0.01 2
Rsd 0.2s 26ph/24stn Dmin 15km Az.gap 102°
Corr. -0.677 21M/17stn Msd 0.3 2↑ 2↓

96/589
JAN 15 1242 15.6s 39.35S 177.22E 33km M=4.0
0.2 0.02 0.01 R
Rsd 0.2s 25ph/19stn Dmin 108km Az.gap 168°
Corr. -0.572 47M/41stn Msd 0.3 2↑ 4↓
Felt Patoka (52) MM4.

96/646
JAN 16 1647 17.3s 37.68S 176.02E 187km M=3.7
0.9 0.07 0.09 7
Rsd 0.4s 9ph/6stn Dmin 115km Az.gap 277°
Corr. -0.826 5M/5stn Msd 0.2 1↑

96/653
JAN 16 2100 26.3s 40.93S 172.87E 220km M=4.3
0.4 0.02 0.02 3
Rsd 0.2s 34ph/26stn Dmin 31km Az.gap 96°
Corr. -0.288 23M/18stn Msd 0.2 5↑ 2↓

96/663
JAN 17 1046 53.4s 38.53S 176.08E 5km M=2.9
0.1 0.01 0.01 R
Rsd 0.3s 8ph/6stn Dmin 23km Az.gap 106°
Corr. -0.394 7M/7stn Msd 0.2 1↑
Felt Reporoa (33) MM4.

96/665
JAN 17 1252 22.0s 36.62S 176.76E 265km M=3.6
0.8 0.10 0.11 8
Rsd 0.4s 9ph/7stn Dmin 174km Az.gap 274°
Corr. -0.817 3M/3stn Msd 0.1

96/667
JAN 17 1432 06.9s 38.52S 175.94E 161km M=3.7
0.7 0.03 0.03 7
Rsd 0.4s 15ph/13stn Dmin 78km Az.gap 153°
Corr. -0.615 14M/12stn Msd 0.2 1↑ 1↓

96/671
JAN 17 1639 11.0s 36.98S 177.48E 150km M=4.1
0.4 0.04 0.03 5
Rsd 0.2s 12ph/8stn Dmin 100km Az.gap 259°
Corr. -0.571 16M/14stn Msd 0.2 1↓

96/677
JAN 17 1856 31.1s 45.30S 167.24E 68km M=3.8
0.2 0.01 0.01 2
Rsd 0.1s 15ph/10stn Dmin 86km Az.gap 239°
Corr. 0.023 8M/4stn Msd 0.2 1↓

96/685
JAN 18 1153 19.7s 38.90S 175.09E 213km M=4.2
0.9 0.04 0.03 8
Rsd 0.3s 21ph/17stn Dmin 50km Az.gap 94°
Corr. -0.204 24M/19stn Msd 0.2 5↑ 1↓

96/720
JAN 19 2121 37.5s 37.74S 179.62E 12km M=4.4
2.1 0.05 0.15 R
Rsd 0.2s 10ph/10stn Dmin 118km Az.gap 288°
Corr. 0.768 33M/29stn Msd 0.3 1↑ 1↓

96/727
JAN 20 0255 57.2s 40.71S 176.43E 31km M=3.8
0.3 0.02 0.03 2
Rsd 0.2s 21ph/18stn Dmin 16km Az.gap 189°
Corr. 0.289 36M/32stn Msd 0.2 1↑

96/734
JAN 20 0555 43.8s 37.02S 177.67E 129km M=4.4
0.5 0.03 0.02 6
Rsd 0.2s 14ph/13stn Dmin 71km Az.gap 220°
Corr. 0.066 23M/19stn Msd 0.2

96/739
JAN 20 1010 09.6s 42.13S 172.91E 5km M=3.7
0.1 0.01 0.01 R
Rsd 0.3s 24ph/21stn Dmin 41km Az.gap 68°
Corr. -0.126 12M/7stn Msd 0.2 1↑

96/745
JAN 20 1534 15.8s 38.98S 175.43E 162km M=3.7
0.8 0.02 0.03 7
Rsd 0.3s 17ph/15stn Dmin 26km Az.gap 108°
Corr. -0.273 18M/16stn Msd 0.2 1↑

96/759
JAN 20 2021 12.4s 36.58S 176.93E 250km M=3.8
1.9 0.19 0.17 14
Rsd 0.4s 6ph/5stn Dmin 167km Az.gap 299°
Corr. -0.794 4M/4stn Msd 0.2

96/784
JAN 21 1043 20.9s 38.49S 175.88E 166km M=4.2
0.3 0.02 0.01 3
Rsd 0.2s 21ph/18stn Dmin 80km Az.gap 89°
Corr. -0.299 22M/20stn Msd 0.3 5↑ 4↓

96/806
JAN 21 2200 59.3s 37.35S 179.45E 7km M=4.4
0.1 0.01 0.01 1
Rsd 0.0s 16ph/12stn Dmin 105km Az.gap 289°
Corr. -0.310 29M/24stn Msd 0.3

96/807
JAN 21 2243 49.3s 37.53S 179.48E 12km M=3.5
1.3 0.10 0.07 R
Rsd 0.6s 8ph/4stn Dmin 104km Az.gap 318°
Corr. 0.092 4M/4stn Msd 0.2

96/811
JAN 22 0201 25.4s 37.91S 176.07E 206km M=3.9
0.6 0.07 0.04 5
Rsd 0.2s 11ph/10stn Dmin 54km Az.gap 238°
Corr. -0.642 17M/15stn Msd 0.3

96/821
JAN 22 0546 29.5s 45.12S 167.41E 82km M=3.6
0.3 0.01 0.01 2
Rsd 0.1s 19ph/14stn Dmin 43km Az.gap 193°
Corr. -0.384 8M/4stn Msd 0.2 1↑ 6↓

96/843
JAN 23 0333 53.3s 38.36S 176.43E 193km M=3.5
0.9 0.05 0.39 13
Rsd 0.2s 12ph/9stn Dmin 107km Az.gap 335°
Corr. -0.796 1M/1stn Msd 0.0

96/847
JAN 23 0716 02.6s 45.06S 167.45E 92km M=3.6
0.2 0.01 0.01 2
Rsd 0.2s 20ph/13stn Dmin 51km Az.gap 194°
Corr. -0.301 20M/14stn Msd 0.2 1↑ 6↓

96/850
JAN 23 0824 10.0s 37.98S 175.23E 12km M=3.6
0.3 0.02 0.01 R
Rsd 0.1s 9ph/5stn Dmin 168km Az.gap 274°
Corr. -0.806 2M/2stn Msd 0.3 1↑
Poor station coverage.

96/863
JAN 23 1303 18.0s 37.61S 179.22E 12km M=3.7
0.9 0.03 0.07 R
Rsd 0.2s 11ph/8stn Dmin 81km Az.gap 311°
Corr. 0.339 10M/9stn Msd 0.2

96/865
JAN 23 1452 39.6s 38.52S 175.57E 212km M=3.6
1.0 0.04 0.04 8
Rsd 0.3s 12ph/9stn Dmin 53km Az.gap 167°
Corr. -0.317 3M/3stn Msd 0.1 1↑

96/893
JAN 24 1019 26.2s 39.20S 174.86E 222km M=4.2
0.6 0.02 0.02 5
Rsd 0.2s 25ph/22stn Dmin 63km Az.gap 144°
Corr. 0.199 19M/17stn Msd 0.3 1↑

96/900
JAN 24 1744 25.7s 44.04S 169.43E 5km M=4.4
0.1 0.01 0.01 R
Rsd 0.1s 23ph/16stn Dmin 65km Az.gap 158°
Corr. -0.320 16M/8stn Msd 0.2 4↑ 2↓
Felt Mahitahi (104) MM4.

96/910
JAN 25 0004 05.8s 8.57S 177.91E 47km M=3.5
0.4 0.02 0.01 4
Rsd 0.2s 11ph/7stn Dmin 13km Az.gap 103°
Corr. -0.416 7M/5stn Msd 0.3 1↑

96/913
JAN 25 0332 44.1s 36.99S 177.31E 140km M=3.9
1.5 0.14 0.11 12
Rsd 0.5s 8ph/5stn Dmin 111km Az.gap 288°
Corr. -0.808 9M/5stn Msd 0.2

96/918
JAN 25 0719 54.2s 38.06S 179.18E 12km M=3.7
0.8 0.03 0.05 R
Rsd 0.4s 9ph/5stn Dmin 81km Az.gap 295°
Corr. 0.149 7M/5stn Msd 0.3 1↑

96/928
JAN 25 1541 4.1s 8.71S 175.39E 222km M=4.3
0.6 0.05 0.03 5
Rsd 0.3s 23ph/17stn Dmin 35km Az.gap 128°
Corr. -0.449 23M/19stn Msd 0.2 4↑ 6↓

96/947
JAN 26 1010 28.5s 40.10S 179.64E 12km M=3.6
0.8 0.03 0.06 R
Rsd 0.3s 8ph/6stn Dmin 299km Az.gap 298°
Corr. -0.314 2M/2stn Msd 0.2 1↓
Poor station coverage.

96/961
JAN 27 0325 04.0s 37.92S 175.58E 173km M=3.7
0.9 0.08 0.12 12
Rsd 0.5s 10ph/5stn Dmin 140km Az.gap 266°
Corr. -0.872 4M/4stn Msd 0.1 1↑
Poor station coverage.

96/985
JAN 27 1429 59.9s 43.25S 170.38E 0km M=2.6
0.3 0.01 0.02 R
Rsd 0.1s 6ph/3stn Dmin 35km Az.gap 268°
Corr. -0.194 3M/3stn Msd 0.3 1↓
Felt Mahitahi (104) MM4, quarry blast.

96/988
JAN 27 1553 58.9s 41.26S 174.81E 29km M=3.6
0.1 0.01 0.01 1
Rsd 0.2s 31ph/23stn Dmin 4km Az.gap 56°
Corr. -0.310 30M/24stn Msd 0.2 7↑ 4↓
Felt Wellington (68) MM4.

96/990
JAN 27 1713 30.3s 38.17S 177.93E 47km M=4.0
0.4 0.02 0.02 6
Rsd 0.3s 12ph/8stn Dmin 31km Az.gap 99°
Corr. -0.335 6M/4stn Msd 0.2 1↑ 1↓

96/991
JAN 27 1722 54.7s 38.93S 175.22E 226km M=3.8
0.6 0.02 0.06 5
Rsd 0.2s 16ph/14stn Dmin 43km Az.gap 262°
Corr. -0.101 8M/7stn Msd 0.3 1↑

96/994
JAN 27 1757 53.5s 37.28S 176.84E 191km M=4.7
0.7 0.05 0.04 6
Rsd 0.4s 23ph/20stn Dmin 41km Az.gap 163°
Corr. 0.441 25M/19stn Msd 0.2 2↑ 1↓

96/996
JAN 27 1927 50.2s 37.93S 179.45E 12km M=3.8
0.8 0.04 0.04 R
Rsd 0.3s 11ph/6stn Dmin 106km Az.gap 293°
Corr. 0.381 7M/6stn Msd 0.2

96/999
JAN 28 0108 36.4s 37.38S 176.56E 201km M=4.0
0.3 0.02 0.02 3
Rsd 0.2s 11ph/8stn Dmin 109km Az.gap 152°
Corr. 0.507 17M/15stn Msd 0.2

96/1003
JAN 28 0325 32.3s 39.90S 179.76W 12km M=4.6
0.7 0.04 0.04 R
Rsd 0.3s 26ph/21stn Dmin 237km Az.gap 263°
Corr. -0.202 49M/43stn Msd 0.2

96/1005
JAN 28 0437 12.8s 39.13S 175.43E 147km M=3.7
0.7 0.03 0.03 5
Rsd 0.3s 23ph/19stn Dmin 13km Az.gap 89°
Corr. -0.481 13M/13stn Msd 0.2 1↑

96/1039
JAN 29 0345 58.7s 39.86S 177.11E 33km M=3.8
0.2 0.01 0.02 R
Rsd 0.1s 22ph/19stn Dmin 110km Az.gap 219°
Corr. -0.719 31M/29stn Msd 0.3 1↑

96/1059
JAN 29 1547 23.4s 38.50S 175.93E 162km M=4.6
0.6 0.02 0.02 5
Rsd 0.3s 26ph/22stn Dmin 31km Az.gap 68°
Corr. -0.379 23M/17stn Msd 0.2 3↑ 5↓

96/1079
JAN 30 0255 20.4s 36.66S 177.34E 159km M=3.6
0.6 0.08 0.06 8
Rsd 0.3s 6ph/3stn Dmin 135km Az.gap 315°
Corr. -0.711 4M/4stn Msd 0.5

96/1081
JAN 30 0408 53.1s 37.91S 179.19E 12km M=4.2
0.5 0.02 0.03 R
Rsd 0.2s 13ph/11stn Dmin 84km Az.gap 282°
Corr. 0.213 31M/27stn Msd 0.6 1↑

96/1083
JAN 30 0522 47.9s 37.87S 179.32E 12km M=4.1
0.5 0.02 0.03 R
Rsd 0.2s 11ph/10stn Dmin 95km Az.gap 284°
Corr. 0.406 31M/27stn Msd 0.2 1↑ 2↓

96/1085
JAN 30 0642 04.5s 37.85S 179.44E 33km M=3.5
1.6 0.06 0.12 R
Rsd 0.6s 9ph/7stn Dmin 104km Az.gap 301°
Corr. 0.005 7M/7stn Msd 0.3

96/1106
JAN 30 1925 27.7s 45.21S 167.29E 85km M=3.6
0.2 0.01 0.01 2
Rsd 0.1s 14ph/11stn Dmin 31km Az.gap 201°
Corr. -0.307 17M/11stn Msd 0.2 1↓

96/1139
JAN 31 1844 53.8s 44.52S 167.77E 9km M=3.5
0.6 0.03 0.02 2
Rsd 0.2s 15ph/11stn Dmin 21km Az.gap 222°
Corr. -0.788 21M/15stn Msd 0.3 1↑ 3↓

96/1144
JAN 31 2047 54.0s 37.97S 176.63E 141km M=4.0
0.2 0.01 0.01 2
Rsd 0.2s 27ph/23stn Dmin 5km Az.gap 94°
Corr. -0.155 20M/16stn Msd 0.2 3↑ 1↓

96/1178
FEB 01 0725 05.4s 37.91S 178.14E 51km M=3.9
0.3 0.01 0.01 3
Rsd 0.1s 20ph/16stn Dmin 21km Az.gap 128°
Corr. 0.266 18M/16stn Msd 0.3 2↑ 1↓

96/1182
FEB 01 0857 53.3s 41.46S 173.97E 46km M=3.4
0.1 0.01 0.01 2
Rsd 0.2s 29ph/23stn Dmin 12km Az.gap 60°
Corr. -0.325 19M/16stn Msd 0.2 9↑ 2↓
Felt Pelorus Sound (77) MM6.

96/1191
FEB 01 1313 47.4s 38.40S 176.11E 149km M=3.9
0.4 0.03 0.01 3
Rsd 0.2s 22ph/17stn Dmin 14km Az.gap 113°
Corr. -0.616 23M/19stn Msd 0.2

96/1198
FEB 01 1656 37.7s 37.09S 177.45E 141km M=4.1
0.5 0.03 0.02 6
Rsd 0.2s 14ph/12stn Dmin 54km Az.gap 204°
Corr. 0.415 14M/12stn Msd 0.3 2↑ 3↓

96/1201
FEB 01 2040 07.0s 37.55S 177.18E 12km M=4.0
0.3 0.02 0.02 R
Rsd 0.4s 16ph/15stn Dmin 3km Az.gap 76°
Corr. -0.064 20M/16stn Msd 0.3 3↑ 1↓

96/1204
FEB 01 2126 35.1s 36.68S 177.25E 199km M=3.8
1.4 0.12 0.12 11
Rsd 0.5s 10ph/8stn Dmin 139km Az.gap 293°
Corr. -0.754 8M/8stn Msd 0.2 1↓

96/1217
FEB 02 0516 31.2s 43.35S 172.74E 24km M=3.5
0.1 0.00 0.01 1
Rsd 0.1s 13ph/8stn Dmin 40km Az.gap 150°
Corr. 0.258 22M/17stn Msd 0.2 1↑

96/1229
FEB 02 1441 38.1s 44.84S 167.66E 79km M=3.7
0.3 0.02 0.02 2
Rsd 0.2s 17ph/11stn Dmin 28km Az.gap 194°
Corr. -0.702 19M/15stn Msd 0.2 1↓

96/1230
FEB 02 1506 56.3s 40.32S 173.45E 161km M=3.7
0.2 0.01 0.01 2
Rsd 0.2s 38ph/29stn Dmin 67km Az.gap 146°
Corr. 0.021 15M/14stn Msd 0.3 1↑

96/1235
FEB 02 1756 11.4s 38.49S 175.73E 129km M=3.5
0.5 0.07 0.04 4
Rsd 0.2s 10ph/8stn Dmin 59km Az.gap 213°
Corr. -0.947 13M/12stn Msd 0.2

96/1237
FEB 02 1853 31.9s 40.67S 175.78E 27km M=3.6
0.2 0.01 0.01 1
Rsd 0.3s 25ph/20stn Dmin 17km Az.gap 100°
Corr. -0.095 27M/23stn Msd 0.3 3↑ 2↓

96/1238
FEB 02 1856 01.5s 38.11S 178.95E 29km M=3.5
0.3 0.01 0.02 2
Rsd 0.1s 11ph/7stn Dmin 61km Az.gap 265°
Corr. -0.038 6M/6stn Msd 0.2 1↓

96/1242
FEB 02 2246 25.3s 37.12S 176.82E 211km M=3.8
0.3 0.03 0.02 3
Rsd 0.1s 9ph/6stn Dmin 106km Az.gap 181°
Corr. 0.700 14M/14stn Msd 0.3

96/1272
FEB 03 1821 51.0s 37.79S 175.74E 259km M=4.0
0.4 0.04 0.05 4
Rsd 0.1s 10ph/9stn Dmin 131km Az.gap 227°
Corr. -0.783 18M/16stn Msd 0.2

96/1286
FEB 04 0302 52.0s 39.71S 174.48E 168km M=3.7
0.5 0.02 0.04 5
Rsd 0.3s 21ph/17stn Dmin 40km Az.gap 175°
Corr. -0.377 15M/14stn Msd 0.2 3↑ 1↓

96/1310
FEB 05 0325 26.3s 36.05S 179.71E 12km M=3.6
0.3 0.03 0.04 R
Rsd 0.1s 5ph/3stn Dmin 213km Az.gap 346°
Corr. -0.532 2M/2stn Msd 0.1

96/1314
FEB 05 0533 58.2s 45.10S 167.37E 88km M=4.5
0.3 0.01 0.02 2
Rsd 0.1s 19ph/14stn Dmin 44km Az.gap 200°
Corr. -0.408 10M/5stn Msd 0.3 1↑ 6↓

96/1327
FEB 05 1237 44.8s 38.64S 177.93E 46km M=3.7
0.6 0.04 0.03 6
Rsd 0.2s 11ph/10stn Dmin 9km Az.gap 136°
Corr. -0.782 5M/5stn Msd 0.2 2↑ 1↓

96/1331
FEB 05 1718 42.8s 40.53S 173.87E 119km M=4.1
0.2 0.01 0.01 2
Rsd 0.2s 42ph/32stn Dmin 31km Az.gap 111°
Corr. 0.147 22M/17stn Msd 0.2 4↑ 3↓

96/1333
FEB 05 1743 16.8s 39.78S 176.94E 44km M=3.7
0.2 0.01 0.01 6
Rsd 0.2s 31ph/26stn Dmin 51km Az.gap 173°
Corr. -0.154 18M/16stn Msd 0.2 3↑ 2↓
Felt Hastings (60).

96/1338
FEB 05 1949 09.5s 36.82S 178.78E 12km M=4.0
0.6 0.03 0.04 R
Rsd 0.1s 12ph/11stn Dmin 97km Az.gap 276°
Corr. 0.854 10M/9stn Msd 0.4

96/1347
FEB 05 2318 51.3s 39.42S 174.77E 20km M=4.3
0.1 0.01 0.00 1
Rsd 0.3s 43ph/35stn Dmin 44km Az.gap 64°
Corr. -0.212 16M/8stn Msd 0.2 5↑ 2↓
Felt Purangi (47) to Sanson (61), MM4.

96/1378
FEB 06 1100 59.6s 37.01S 176.57E 33km M=3.9
0.5 0.04 0.02 R
Rsd 0.2s 9ph/8stn Dmin 167km Az.gap 276°
Corr. -0.560 6M/6stn Msd 0.2
Poor station coverage.

96/1400
FEB 07 0926 32.4s 38.63S 175.81E 196km M=3.6
0.1 0.03 0.02 4
Rsd 0.0s 12ph/10stn Dmin 225km Az.gap 332°
Corr. -0.768 6M/6stn Msd 0.2 1↑ 1↓
Poor station coverage.

96/1414
FEB 07 1747 21.9s 37.50S 177.05E 5km M=3.8
0.3 0.02 0.01 R
Rsd 0.4s 17ph/13stn Dmin 13km Az.gap 151°
Corr. -0.030 17M/15stn Msd 0.3 1↑

96/1417
FEB 07 1805 44.6s 37.47S 177.06E 5km M=4.0
0.2 0.02 0.01 R
Rsd 0.3s 20ph/16stn Dmin 13km Az.gap 155°
Corr. 0.196 13M/12stn Msd 0.3 1↑ 1↓

96/1419
FEB 07 1832 40.1s 37.58S 177.84E 59km M=3.7
0.5 0.03 0.04 7
Rsd 0.4s 7ph/5stn Dmin 40km Az.gap 154°
Corr. 0.617 3M/3stn Msd 0.2 1↑

96/1437
FEB 08 0502 58.9s 40.36S 174.37E 91km M=3.6
0.2 0.01 0.01 3
Rsd 0.3s 31ph/20stn Dmin 62km Az.gap 120°
Corr. -0.181 15M/13stn Msd 0.3 5↑ 2↓

96/1445
FEB 08 1254 33.0s 37.52S 179.53E 12km M=3.6
1.1 0.06 0.08 R
Rsd 0.5s 7ph/6stn Dmin 109km Az.gap 297°
Corr. -0.438 4M/4stn Msd 0.3

96/1456
FEB 08 2123 57.9s 45.18S 167.32E 58km M=3.5
0.3 0.01 0.01 2
Rsd 0.1s 16ph/11stn Dmin 35km Az.gap 200°
Corr. -0.353 20M/14stn Msd 0.2 1↓

96/1522
FEB 10 1341 21.9s 37.20S 177.48E 138km M=3.7
0.7 0.04 0.02 6
Rsd 0.2s 11ph/10stn Dmin 85km Az.gap 235°
Corr. 0.297 4M/4stn Msd 0.2 1↑ 1↓

96/1527
FEB 10 1537 03.0s 45.31S 167.12E 74km M=3.6
0.2 0.01 0.01 1
Rsd 0.1s 15ph/11stn Dmin 18km Az.gap 231°
Corr. -0.047 19M/13stn Msd 0.2 1↑ 3↓

96/1535
FEB 10 1722 00.7s 40.88S 172.53E 12km M=4.1
0.2 0.01 0.02 R
Rsd 0.2s 21ph/18stn Dmin 6km Az.gap 150°
Corr. 0.181 14M/7stn Msd 0.2 1↑
Felt Collingwood (72) MM4.

96/1596
FEB 11 0657 08.2s 39.03S 175.16E 161km M=3.6
0.3 0.02 0.04 2
Rsd 0.1s 21ph/16stn Dmin 20km Az.gap 123°
Corr. 0.707 11M/11stn Msd 0.3 1↑ 1↓

96/1601
FEB 11 0801 40.9s 40.01S 176.74E 72km M=3.7
0.2 0.01 0.01 3
Rsd 0.1s 26ph/23stn Dmin 78km Az.gap 174°
Corr. -0.521 15M/13stn Msd 0.2 1↑

96/1605
FEB 11 1036 34.1s 37.05S 177.75E 77km M=3.7
0.1 0.01 0.01 2
Rsd 0.1s 11ph/10stn Dmin 72km Az.gap 221°
Corr. 0.617 3M/3stn Msd 0.1

96/1615
FEB 11 1510 56.3s 41.07S 172.99E 149km M=4.2
0.4 0.02 0.02 3
Rsd 0.3s 31ph/24stn Dmin 47km Az.gap 78°
Corr. -0.305 21M/16stn Msd 0.3 8↑ 1↓

96/1634
FEB 12 1121 41.8s 37.79S 176.16E 309km M=4.0
0.3 0.02 0.02 3
Rsd 0.1s 17ph/16stn Dmin 145km Az.gap 258°
Corr. -0.417 11M/11stn Msd 0.2 1↑ 2↓

96/1663
FEB 13 0320 51.7s 35.97S 179.19E 12km M=4.2
0.6 0.03 0.03 R
Rsd 0.1s 11ph/9stn Dmin 197km Az.gap 323°
Corr. 0.516 22M/21stn Msd 0.2 1↓

96/1678
FEB 13 1106 09.4s 41.10S 174.94E 34km M=3.3
0.1 0.01 0.01 1
Rsd 0.2s 23ph/18stn Dmin 11km Az.gap 64°
Corr. -0.205 18M/15stn Msd 0.2 6↑ 3↓
Felt Paekakariki (65) to Upper Hutt (69).

96/1684
FEB 13 1351 15.7s 43.24S 172.58E 12km M=3.4
0.1 0.00 0.01 R
Rsd 0.1s 13ph/10stn Dmin 53km Az.gap 132°
Corr. -0.020 20M/14stn Msd 0.3 1↑
Felt Rangiora (102) and Christchurch (110).

96/1685
FEB 13 1353 10.0s 38.69S 175.85E 189km M=3.5
0.5 0.02 0.04 4
Rsd 0.2s 11ph/10stn Dmin 44km Az.gap 312°
Corr. 0.144 1M/1stn Msd 0.0 1↓

96/1686
FEB 13 1507 38.0s 38.46S 175.90E 192km M=3.7
0.7 0.03 0.06 7
Rsd 0.1s 12ph/10stn Dmin 84km Az.gap 267°
Corr. 0.594 7M/7stn Msd 0.3 1↑

96/1720
FEB 14 1254 14.1s 38.89S 175.55E 179km M=3.6
0.2 0.01 0.01 2
Rsd 0.1s 14ph/12stn Dmin 35km Az.gap 191°
Corr. -0.688 13M/13stn Msd 0.3

96/1723
FEB 14 1521 08.3s 35.82S 179.78E 163km M=4.2
0.8 0.09 0.06 14
Rsd 0.3s 11ph/8stn Dmin 237km Az.gap 329°
Corr. 0.135 4M/4stn Msd 0.2

96/1738
FEB 15 0443 56.2s 38.03S 176.18E 152km M=3.7
0.7 0.01 0.01 8
Rsd 0.1s 11ph/9stn Dmin 121km Az.gap 98°
Corr. 0.054 13M/13stn Msd 0.2

96/1740
FEB 15 0654 37.7s 8.61S 175.21E 280km M=3.7
0.2 0.01 0.05 2
Rsd 0.0s 13ph/8stn Dmin 72km Az.gap 294°
Corr. -0.462 8M/8stn Msd 0.2

96/1755
FEB 15 1744 24.4s 41.20S 172.53E 5km M=3.9
0.2 0.01 0.01 R
Rsd 0.4s 19ph/14stn Dmin 42km Az.gap 135°
Corr. -0.208 8M/5stn Msd 0.6 1↑ 2↓

96/1761
FEB 15 2024 52.3s 45.11S 167.52E 112km M=3.6
0.4 0.02 0.02 3
Rsd 0.2s 19ph/13stn Dmin 49km Az.gap 178°
Corr. -0.322 20M/13stn Msd 0.3 1↓

96/1781
FEB 16 0508 34.3s 38.11S 176.19E 155km M=3.8
0.6 0.03 0.02 5
Rsd 0.2s 18ph/17stn Dmin 27km Az.gap 75°
Corr. -0.462 13M/12stn Msd 0.2 1↑

96/1793
FEB 16 1134 48.4s 38.91S 175.47E 119km M=3.8
0.3 0.01 0.01 3
Rsd 0.2s 24ph/20stn Dmin 12km Az.gap 65°
Corr. 0.291 13M/11stn Msd 0.3 3↑ 5↓

96/1798
FEB 16 1545 15.7s 36.76S 177.00E 320km M=3.8
2.5 0.08 0.02 19
Rsd 0.1s 11ph/11stn Dmin 139km Az.gap 278°
Corr. -0.270 8M/8stn Msd 0.3

96/1800
FEB 16 1757 13.5s 36.66S 177.74E 33km M=3.6
1.3 0.10 0.13 R
Rsd 0.4s 5ph/3stn Dmin 115km Az.gap 342°
Corr. 0.530 3M/3stn Msd 0.4

96/1811
FEB 17 0100 40.0s 38.48S 175.87E 165km M=3.7
0.1 0.01 0.01 1
Rsd 0.0s 14ph/11stn Dmin 65km Az.gap 91°
Corr. -0.338 9M/7stn Msd 0.3 1↑ 1↓

96/1812
FEB 17 0347 22.6s 38.42S 175.89E 162km M=3.7
0.7 0.03 0.03 7
Rsd 0.2s 15ph/13stn Dmin 72km Az.gap 163°
Corr. -0.605 12M/11stn Msd 0.2

96/1823
FEB 17 1027 40.9s 41.32S 173.19E 90km M=4.1
0.4 0.01 0.01 4
Rsd 0.3s 26ph/16stn Dmin 55km Az.gap 67°
Corr. -0.099 17M/12stn Msd 0.2 4↑ 2↓

96/1844
FEB 18 0119 13.2s 45.26S 166.78E 12km M=3.9
0.4 0.01 0.02 R
Rsd 0.2s 17ph/14stn Dmin 37km Az.gap 265°
Corr. 0.049 10M/5stn Msd 0.2 1↓

96/1852
FEB 18 0939 31.7s 38.07S 176.89E 92km M=4.4
0.2 0.01 0.01 2
Rsd 0.2s 26ph/23stn Dmin 13km Az.gap 69°
Corr. -0.224 14M/12stn Msd 0.2 1↓

96/1868
FEB 19 0104 49.2s 40.45S 173.34E 150km M=4.0
0.3 0.01 0.01 3
Rsd 0.2s 32ph/24stn Dmin 63km Az.gap 144°
Corr. 0.013 13M/11stn Msd 0.3 5↑ 3↓

96/1873
FEB 19 0736 12.5s 41.35S 172.59E 195km M=3.9
0.4 0.02 0.02 3
Rsd 0.3s 25ph/16stn Dmin 53km Az.gap 119°
Corr. -0.209 13M/11stn Msd 0.2 6↑ 1↓

96/1875
FEB 19 0922 12.7s 37.16S 176.77E 224km M=4.3
0.6 0.03 0.02 5
Rsd 0.1s 18ph/16stn Dmin 55km Az.gap 174°
Corr. 0.057 14M/12stn Msd 0.3 2↑ 2↓

96/1880
FEB 19 1811 11.3s 39.68S 174.30E 164km M=3.7
0.7 0.02 0.04 7
Rsd 0.4s 20ph/15stn Dmin 56km Az.gap 150°
Corr. -0.359 10M/10stn Msd 0.3 1↑

96/1883
FEB 19 2011 47.5s 37.54S 175.63E 5km M=4.1
0.1 0.01 0.01 R
Rsd 0.2s 22ph/15stn Dmin 36km Az.gap 147°
Corr. -0.047 9M/5stn Msd 0.3 1↑
Felt Waihi district (21), maximum intensity MM5.

96/1889
FEB 20 0049 51.9s 39.73S 174.52E 112km M=4.3
0.3 0.01 0.01 3
Rsd 0.2s 38ph/31stn Dmin 36km Az.gap 76°
Corr. -0.271 8M/4stn Msd 0.3 10↑ 8↓

96/1890
FEB 20 0105 46.6s 38.54S 176.13E 213km M=3.8
0.4 0.03 0.05 4
Rsd 0.1s 11ph/9stn Dmin 84km Az.gap 217°
Corr. -0.811 2M/2stn Msd 0.3

96/1908
FEB 20 1343 32.4s 37.95S 176.70E 116km M=4.0
0.3 0.01 0.01 2
Rsd 0.2s 22ph/20stn Dmin 4km Az.gap 76°
Corr. 0.029 9M/6stn Msd 0.2 1↑ 1↓

96/1937
FEB 21 2003 51.3s 44.94S 167.50E 77km M=3.8
0.2 0.01 0.01 2
Rsd 0.1s 17ph/13stn Dmin 45km Az.gap 201°
Corr. -0.639 10M/5stn Msd 0.2 3↑ 3↓

96/1957
FEB 22 0435 58.6s 38.86S 177.66E 55km M=3.8
0.3 0.02 0.02 5
Rsd 0.3s 20ph/17stn Dmin 42km Az.gap 170°
Corr. -0.225 10M/6stn Msd 0.3 1↑

96/1959
FEB 22 0522 13.6s 38.85S 177.64E 44km M=3.7
0.2 0.01 0.01 6
Rsd 0.2s 16ph/14stn Dmin 43km Az.gap 157°
Corr. -0.276 10M/7stn Msd 0.4 1↑

96/1961
FEB 22 0709 19.6s 36.84S 176.92E 224km M=3.8
0.3 0.04 0.03 3
Rsd 0.1s 12ph/9stn Dmin 149km Az.gap 268°
Corr. -0.625 9M/9stn Msd 0.2 1↑

96/1987
FEB 22 2241 43.7s 36.03S 179.13E 12km M=3.7
0.6 0.04 0.04 R
Rsd 0.2s 5ph/4stn Dmin 190km Az.gap 323°
Corr. 0.112 4M/4stn Msd 0.5

96/2014
FEB 23 1934 34.9s 35.54S 179.32E 12km M=4.1
0.6 0.04 0.05 R
Rsd 0.2s 7ph/5stn Dmin 246km Az.gap 327°
Corr. 0.120 5M/5stn Msd 0.4

96/2150
FEB 26 0505 52.1s 37.57S 179.95W 33km M=3.6
0.9 0.07 0.07 R
Rsd 0.4s 8ph/5stn Dmin 154km Az.gap 319°
Corr. -0.235 7M/6stn Msd 0.3

96/2162
FEB 26 0821 57.8s 38.42S 176.24E 158km M=4.0
0.3 0.01 0.01 3
Rsd 0.1s 15ph/12stn Dmin 78km Az.gap 120°
Corr. 0.029 14M/13stn Msd 0.3 4↑ 2↓

96/2196
FEB 27 0625 30.0s 37.16S 178.06E 30km M=4.0
0.3 0.02 0.01 2
Rsd 0.1s 16ph/11stn Dmin 53km Az.gap 234°
Corr. 0.675 32M/28stn Msd 0.2 1↓

96/2214
FEB 27 1110 26.1s 38.02S 176.37E 202km M=3.8
1.5 0.11 0.18 12
Rsd 0.6s 10ph/7stn Dmin 70km Az.gap 259°
Corr. -0.595 5M/3stn Msd 0.3

96/2216
FEB 27 1238 18.5s 37.07S 177.73E 65km M=3.6
0.7 0.06 0.03 8
Rsd 0.2s 5ph/4stn Dmin 78km Az.gap 297°
Corr. -0.711 6M/4stn Msd 0.2

96/2252
FEB 28 0501 12.8s 38.00S 176.49E 146km M=4.3
0.2 0.01 0.01 2
Rsd 0.2s 31ph/25stn Dmin 10km Az.gap 76°
Corr. 0.022 22M/18stn Msd 0.2 1↓

96/2279
FEB 28 1423 10.9s 45.06S 167.41E 114km M=6.2
0.4 0.02 0.02 2
Rsd 0.2s 18ph/14stn Dmin 49km Az.gap 192°
Corr. -0.344 14M/8stn Msd 0.4 3↑ 8↓
Felt widely throughout lower South Island, max. int. MM5 at Te Anau Downs (130) and Monowai (139).

96/2301
FEB 28 2327 08.3s 38.43S 177.86E 43km M=3.5
0.4 0.02 0.02 6
Rsd 0.3s 13ph/10stn Dmin 25km Az.gap 103°
Corr. -0.430 7M/5stn Msd 0.3 1↑

96/2317
FEB 29 0506 56.3s 36.95S 176.64E 240km M=4.0
0.7 0.07 0.09 7
Rsd 0.3s 10ph/6stn Dmin 151km Az.gap 274°
Corr. -0.733 6M/5stn Msd 0.3

96/2330
FEB 29 1055 40.1s 37.01S 179.70E 12km M=3.5
0.9 0.05 0.06 R
Rsd 0.3s 7ph/5stn Dmin 140km Az.gap 305°
Corr. 0.146 4M/4stn Msd 0.2

96/2346
FEB 29 1430 12.6s 44.83S 175.13E 33km M=4.3
0.3 0.02 0.02 R
Rsd 0.2s 33ph/27stn Dmin 234km Az.gap 225°
Corr. -0.604 12M/7stn Msd 0.2 1↑ 1↓

96/2350
FEB 29 1525 25.7s 37.15S 177.50E 128km M=4.1
0.4 0.02 0.01 5
Rsd 0.2s 15ph/12stn Dmin 50km Az.gap 200°
Corr. 0.419 18M/16stn Msd 0.3 1↑

96/2361
FEB 29 1837 57.4s 37.52S 177.22E 78km M=3.6
0.6 0.04 0.04 10
Rsd 0.6s 10ph/9stn Dmin 83km Az.gap 154°
Corr. 0.130 8M/5stn Msd 0.2 1↑ 1↓

96/2364
FEB 29 1913 38.6s 37.92S 179.16E 33km M=3.9
0.6 0.03 0.04 R
Rsd 0.3s 11ph/8stn Dmin 81km Az.gap 289°
Corr. 0.236 8M/8stn Msd 0.2 1↑ 1↓

96/2365
FEB 29 1914 10.9s 38.01S 178.98E 12km M=4.1
0.8 0.02 0.05 R
Rsd 0.3s 11ph/8stn Dmin 64km Az.gap 275°
Corr. -0.001 24M/20stn Msd 0.2

96/2382
MAR 01 0038 54.9s 37.06S 179.62E 12km M=4.0
1.0 0.04 0.07 R
Rsd 0.3s 7ph/6stn Dmin 131km Az.gap 303°
Corr. 0.452 10M/8stn Msd 0.2

96/2394
MAR 01 0416 30.2s 37.75S 177.82E 44km M=4.7
0.2 0.01 0.01 3
Rsd 0.1s 25ph/21stn Dmin 46km Az.gap 129°
Corr. 0.465 23M/19stn Msd 0.2 3↑ 1↓

96/2397
MAR 01 0700 13.1s 38.54S 178.02E 24km M=4.2
0.2 0.02 0.02 2
Rsd 0.2s 16ph/14stn Dmin 9km Az.gap 160°
Corr. 0.209 25M/21stn Msd 0.3
Felt Ormond (44) MM4.

96/2409
MAR 01 1104 10.2s 45.13S 167.44E 111km M=3.8
0.4 0.02 0.02 3
Rsd 0.2s 16ph/12stn Dmin 44km Az.gap 188°
Corr. -0.176 8M/4stn Msd 0.1 1↓

96/2428
MAR 01 1747 26.7s 9.34S 174.86E 147km M=3.7
0.4 0.01 0.02 3
Rsd 0.2s 22ph/18stn Dmin 51km Az.gap 206°
Corr. -0.217 17M/17stn Msd 0.3 5↑ 1↓

96/2436
MAR 01 2354 12.2s 40.37S 173.54E 195km M=4.0
0.4 0.02 0.02 4
Rsd 0.2s 29ph/20stn Dmin 57km Az.gap 186°
Corr. -0.573 21M/19stn Msd 0.2 6↑ 3↓

96/2437
MAR 02 0527 49.0s 43.03S 171.85E 5km M=3.7
0.1 0.01 0.01 R
Rsd 0.1s 14ph/9stn Dmin 44km Az.gap 92°
Corr. -0.315 8M/4stn Msd 0.2 3↑ 2↓

96/2446
MAR 02 1218 54.9s 35.17S 178.59E 12km M=3.8
0.7 0.04 0.04 R
Rsd 0.3s 8ph/6stn Dmin 271km Az.gap 305°
Corr. 0.619 4M/4stn Msd 0.4

96/2468
MAR 03 0145 37.1s 38.61S 175.84E 160km M=3.8
0.7 0.04 0.04 6
Rsd 0.3s 17ph/15stn Dmin 51km Az.gap 211°
Corr. -0.805 17M/16stn Msd 0.2 5↑ 4↓

96/2472
MAR 03 0329 18.9s 37.40S 178.20E 56km M=3.8
0.4 0.02 0.02 3
Rsd 0.2s 10ph/7stn Dmin 24km Az.gap 290°
Corr. -0.200 6M/4stn Msd 0.1 1↑

96/2487
MAR 03 0953 13.6s 38.77S 178.74E 47km M=4.5
0.7 0.05 0.04 7
Rsd 0.2s 13ph/11stn Dmin 64km Az.gap 238°
Corr. -0.754 19M/15stn Msd 0.3

96/2539
MAR 04 0041 14.8s 41.19S 178.45E 12km M=3.9
0.6 0.04 0.04 R
Rsd 0.3s 24ph/21stn Dmin 194km Az.gap 240°
Corr. -0.861 37M/33stn Msd 0.3

96/2567
MAR 04 0604 35.9s 37.55S 177.13E 152km M=3.6
0.9 0.08 0.06 6
Rsd 0.5s 9ph/6stn Dmin 79km Az.gap 246°
Corr. -0.693 7M/6stn Msd 0.2 1↓

96/2619
MAR 04 2328 06.4s 42.98S 171.84E 5km M=3.6
0.1 0.01 0.01 R
Rsd 0.2s 15ph/9stn Dmin 42km Az.gap 96°
Corr. -0.157 8M/4stn Msd 0.2 1↑

96/2644
MAR 05 1929 24.4s 37.28S 177.25E 85km M=3.7
0.5 0.02 0.02 5
Rsd 0.2s 8ph/5stn Dmin 28km Az.gap 270°
Corr. -0.319 5M/4stn Msd 0.3

96/2645
MAR 05 1950 21.8s 44.80S 168.71E 5km M=2.7
0.2 0.02 0.01 R
Rsd 0.4s 19ph/11stn Dmin 53km Az.gap 151°
Corr. 0.483 13M/13stn Msd 0.2 1↓
Felt Branches (122).

96/2657
MAR 06 0503 54.0s 38.36S 176.02E 184km M=3.9
0.6 0.02 0.02 6
Rsd 0.3s 14ph/12stn Dmin 66km Az.gap 102°
Corr. -0.289 14M/14stn Msd 0.3 1↑

96/2659
MAR 06 0533 40.0s 46.00S 166.93E 104km M=3.6
0.3 0.02 0.02 2
Rsd 0.1s 17ph/12stn Dmin 61km Az.gap 286°
Corr. 0.423 21M/14stn Msd 0.2 1↑

96/2670
MAR 06 1209 04.2s 38.62S 175.68E 197km M=3.7
0.4 0.02 0.03 3
Rsd 0.1s 15ph/13stn Dmin 65km Az.gap 212°
Corr. 0.160 16M/14stn Msd 0.1

96/2835
MAR 07 1355 44.9s 35.82S 179.12E 152km M=4.1
0.4 0.07 0.04 9
Rsd 0.2s 8ph/6stn Dmin 261km Az.gap 338°
Corr. -0.625 3M/3stn Msd 0.1

96/2846
MAR 07 1550 39.7s 37.56S 177.36E 69km M=3.7
0.2 0.02 0.01 4
Rsd 0.3s 13ph/10stn Dmin 81km Az.gap 152°
Corr. 0.078 12M/10stn Msd 0.2 1↑ 3↓

96/2870
MAR 07 2327 59.6s 39.84S 174.08E 207km M=3.7
0.3 0.01 0.02 3
Rsd 0.2s 28ph/22stn Dmin 51km Az.gap 131°
Corr. -0.160 13M/13stn Msd 0.3 1↑

96/2898
MAR 08 0612 44.6s 38.23S 176.54E 5km M=3.8
0.2 0.02 0.01 R
Rsd 0.3s 11ph/10stn Dmin 3km Az.gap 91°
Corr. -0.302 8M/5stn Msd 0.4 1↑

96/2905
MAR 08 0716 38.3s 38.52S 175.88E 167km M=4.4
0.3 0.01 0.01 2
Rsd 0.2s 29ph/25stn Dmin 37km Az.gap 61°
Corr. -0.248 24M/18stn Msd 0.3 9↑ 8↓

96/3008
MAR 09 0519 14.5s 35.48S 178.39E 302km M=4.2
0.2 0.02 0.04 2
Rsd 0.0s 11ph/9stn Dmin 288km Az.gap 332°
Corr. -0.761 3M/3stn Msd 0.1

96/3010
MAR 09 0710 01.9s 45.25S 167.29E 80km M=4.0
0.2 0.01 0.01 2
Rsd 0.2s 21ph/15stn Dmin 27km Az.gap 195°
Corr. -0.228 10M/5stn Msd 0.2 1↑ 7↓

96/3027
MAR 09 1020 51.0s 39.11S 174.96E 229km M=4.3
0.5 0.02 0.02 4
Rsd 0.2s 35ph/29stn Dmin 52km Az.gap 85°
Corr. -0.250 22M/18stn Msd 0.1 9↑ 4↓

96/3028
MAR 09 1026 01.2s 36.17S 177.66E 203km M=3.9
0.5 0.06 0.05 6
Rsd 0.2s 10ph/6stn Dmin 169km Az.gap 312°
Corr. -0.580 4M/4stn Msd 0.2

96/3041
MAR 09 1406 55.2s 38.13S 176.21E 168km M=3.8
0.3 0.02 0.01 3
Rsd 0.1s 11ph/10stn Dmin 81km Az.gap 93°
Corr. -0.163 18M/17stn Msd 0.2 1↑

96/3063
MAR 10 0026 31.3s 38.33S 176.21E 165km M=4.1
0.4 0.02 0.02 4
Rsd 0.2s 19ph/15stn Dmin 75km Az.gap 81°
Corr. -0.170 19M/16stn Msd 0.3 4↑ 7↓

96/3089
MAR 10 0754 42.7s 37.11S 176.33E 327km M=3.8
0.4 0.04 0.06 3
Rsd 0.1s 14ph/12stn Dmin 145km Az.gap 251°
Corr. -0.801 13M/13stn Msd 0.2

96/3107
MAR 10 1418 47.0s 36.57S 177.65E 12km M=3.6
1.6 0.10 0.07 R
Rsd 0.6s 8ph/4stn Dmin 128km Az.gap 312°
Corr. 0.150 5M/5stn Msd 0.1

96/3109
MAR 10 1802 21.8s 40.19S 173.60E 157km M=3.7
0.4 0.01 0.02 4
Rsd 0.3s 25ph/20stn Dmin 74km Az.gap 145°
Corr. -0.209 17M/15stn Msd 0.3 2↑ 2↓

96/3114
MAR 10 2053 35.9s 36.08S 178.05E 195km M=4.0
0.3 0.03 0.03 3
Rsd 0.1s 6ph/4stn Dmin 171km Az.gap 334°
Corr. -0.479 4M/4stn Msd 0.3 1↑

96/3120
MAR 10 2223 31.1s 38.43S 175.91E 190km M=4.1
0.7 0.03 0.02 6
Rsd 0.3s 14ph/12stn Dmin 68km Az.gap 104°
Corr. -0.271 15M/11stn Msd 0.2 1↑

96/3128
MAR 11 0857 22.2s 39.60S 174.19E 215km M=3.8
0.6 0.03 0.04 6
Rsd 0.3s 22ph/17stn Dmin 68km Az.gap 158°
Corr. -0.375 16M/16stn Msd 0.3 1↓

96/3139
MAR 11 1332 46.0s 36.89S 177.10E 202km M=3.7
1.2 0.13 0.10 6
Rsd 0.3s 7ph/5stn Dmin 152km Az.gap 312°
Corr. -0.694 4M/4stn Msd 0.3
Poor station coverage.

96/3144
MAR 11 1930 14.7s 38.14S 176.39E 139km M=3.6
0.3 0.05 0.03 3
Rsd 0.1s 10ph/8stn Dmin 65km Az.gap 230°
Corr. -0.901 8M/7stn Msd 0.3 1↑

96/3156
MAR 12 0316 51.2s 37.69S 179.37E 12km M=3.8
0.8 0.04 0.05 R
Rsd 0.3s 11ph/8stn Dmin 95km Az.gap 301°
Corr. -0.209 10M/8stn Msd 0.2 1↓

96/3170
MAR 12 0729 59.7s 36.64S 177.27E 222km M=4.8
1.1 0.06 0.05 9
Rsd 0.2s 11ph/9stn Dmin 139km Az.gap 234°
Corr. 0.649 23M/18stn Msd 0.2

96/3180
MAR 12 1202 18.2s 39.50S 174.21E 254km M=3.7
0.5 0.02 0.03 4
Rsd 0.2s 24ph/20stn Dmin 70km Az.gap 161°
Corr. -0.464 16M/16stn Msd 0.2 1↑ 1↓

96/3201
MAR 12 2002 51.9s 38.53S 176.03E 165km M=3.6
0.6 0.03 0.03 6
Rsd 0.2s 10ph/6stn Dmin 81km Az.gap 224°
Corr. -0.624 5M/4stn Msd 0.1

96/3203
MAR 12 2259 57.0s 38.46S 178.47E 26km M=4.1
0.3 0.01 0.02 1
Rsd 0.1s 16ph/13stn Dmin 42km Az.gap 224°
Corr. -0.617 40M/36stn Msd 0.2 1↑ 1↓

96/3213
MAR 13 0353 31.4s 41.23S 172.70E 199km M=3.9
0.4 0.03 0.02 3
Rsd 0.3s 25ph/18stn Dmin 47km Az.gap 110°
Corr. -0.318 14M/13stn Msd 0.2 3↑ 1↓

96/3235
MAR 13 1436 30.6s 34.96S 178.63E 271km M=4.0
0.5 0.06 0.08 5
Rsd 0.1s 10ph/6stn Dmin 294km Az.gap 333°
Corr. -0.485 9M/9stn Msd 0.4

96/3241
MAR 13 1845 28.5s 40.51S 174.82E 22km M=4.1
0.3 0.01 0.01 4
Rsd 0.3s 31ph/26stn Dmin 67km Az.gap 72°
Corr. -0.253 10M/5stn Msd 0.1 2↑ 5↓
Felt Wanganui (57) to Paekakariki (65), max. int. MM4.

96/3260
MAR 14 1153 22.5s 36.39S 177.08E 5km M=3.6
0.7 0.04 0.03 R
Rsd 0.3s 8ph/3stn Dmin 129km Az.gap 287°
Corr. 0.544 5M/3stn Msd 0.3

96/3266
MAR 14 1709 18.9s 39.12S 174.97E 220km M=4.8
0.4 0.02 0.02 4
Rsd 0.2s 36ph/31stn Dmin 50km Az.gap 84°
Corr. -0.404 23M/17stn Msd 0.2 4↑ 10↓

96/3273
MAR 14 1944 58.0s 36.39S 176.65E 5km M=3.9
3.1 0.13 0.26 R
Rsd 0.7s 4ph/3stn Dmin 199km Az.gap 324°
Corr. -0.578 3M/3stn Msd 0.3

96/3292
MAR 15 1142 41.8s 37.59S 176.03E 196km M=3.6
0.6 0.05 0.06 5
Rsd 0.2s 12ph/10stn Dmin 121km Az.gap 248°
Corr. -0.907 5M/5stn Msd 0.3

96/3294
MAR 15 1218 44.9s 39.04S 175.39E 205km M=3.9
0.5 0.02 0.03 4
Rsd 0.2s 19ph/16stn Dmin 22km Az.gap 190°
Corr. -0.640 16M/15stn Msd 0.2 1↑

96/3323
MAR 16 1238 22.8s 38.06S 176.69E 5km M=2.7
0.2 0.01 0.01 R
Rsd 0.3s 10ph/7stn Dmin 7km Az.gap 92°
Corr. 0.143 6M/6stn Msd 0.2 1↓
Felt Kawerau (34), one of the largest of a swarm.

96/3328
MAR 16 1613 08.7s 39.00S 175.01E 195km M=3.7
0.8 0.03 0.04 8
Rsd 0.3s 13ph/13stn Dmin 89km Az.gap 200°
Corr. -0.819 11M/11stn Msd 0.3 1↑

96/3333
MAR 16 1954 06.5s 36.77S 177.10E 235km M=4.2
0.6 0.03 0.03 5
Rsd 0.2s 10ph/8stn Dmin 123km Az.gap 220°
Corr. 0.578 16M/14stn Msd 0.1 1↑

96/3336
MAR 16 2019 51.6s 37.85S 178.75E 45km M=3.7
0.3 0.01 0.02 4
Rsd 0.2s 7ph/4stn Dmin 48km Az.gap 271°
Corr. 0.021 5M/4stn Msd 0.2 1↑

96/3342
MAR 17 0304 01.7s 39.18S 174.70E 221km M=3.5
0.9 0.09 0.05 9
Rsd 0.3s 14ph/12stn Dmin 181km Az.gap 291°
Corr. 0.157 5M/5stn Msd 0.1 1↓
Poor station coverage.

96/3362
MAR 18 0642 29.1s 41.65S 174.29E 11km M=4.1
0.2 0.01 0.01 2
Rsd 0.3s 26ph/20stn Dmin 13km Az.gap 137°
Corr. -0.452 11M/6stn Msd 0.1 6↑ 7↓

96/3371
MAR 18 1547 05.3s 38.08S 176.74E 5km M=2.8
0.1 0.01 0.01 R
Rsd 0.2s 10ph/6stn Dmin 4km Az.gap 151°
Corr. 0.432 5M/5stn Msd 0.2 1↑
Felt Kawerau (34), one of the largest of a swarm occurring between 16th and 18th.

96/3374
MAR 18 1754 54.4s 36.28S 179.87E 12km M=3.8
0.1 0.01 0.02 R
Rsd 0.0s 6ph/3stn Dmin 203km Az.gap 348°
Corr. -0.661 5M/4stn Msd 0.3

96/3390
MAR 19 0839 29.7s 36.96S 179.65E 12km M=3.8
0.9 0.05 0.07 R
Rsd 0.4s 8ph/5stn Dmin 139km Az.gap 304°
Corr. 0.006 4M/4stn Msd 0.3 1↑

96/3396
MAR 19 1209 55.5s 36.52S 179.72E 12km M=3.7
0.5 0.05 0.05 R
Rsd 0.1s 5ph/3stn Dmin 216km Az.gap 343°
Corr. -0.500 4M/3stn Msd 0.3

96/3417
MAR 20 0103 00.9s 37.12S 177.47E 135km M=4.0
0.6 0.03 0.02 7
Rsd 0.3s 12ph/10stn Dmin 90km Az.gap 202°
Corr. 0.280 12M/9stn Msd 0.2 1↑ 1↓

96/3421
MAR 20 0118 57.0s 40.53S 175.52E 11km M=3.5
0.2 0.01 0.01 2
Rsd 0.2s 25ph/23stn Dmin 16km Az.gap 94°
Corr. -0.553 22M/19stn Msd0.3 2↑ 2↓
Felt Palmerston North (62).

96/3435
MAR 20 0944 16.4s 40.79S 176.36E 23km M=3.8
0.2 0.01 0.01 1
Rsd 0.2s 25ph/20stn Dmin 20km Az.gap 209°
Corr. -0.174 29M/26stn Msd 0.2 3↑ 2↓

96/3439
MAR 20 1310 15.2s 35.28S 177.13E 33km M=4.1
1.0 0.06 0.09 R
Rsd 0.3s 4ph/3stn Dmin 278km Az.gap 338°
Corr. 0.230 2M/2stn Msd 0.5.

96/3474
MAR 21 0711 01.7s 38.31S 176.00E 177km M=3.6
0.8 0.06 0.04 6
Rsd 0.3s 11ph/9stn Dmin 86km Az.gap 221°
Corr. -0.715 13M/11stn Msd 0.2 1↑

96/3481
MAR 21 1129 31.2s 37.89S 177.28E 71km M=4.1
0.1 0.01 0.01 1
Rsd 0.1s 24ph/20stn Dmin 41km Az.gap 82°
Corr. 0.186 19M/15stn Msd 0.2 6↑ 3↓

96/3482
MAR 21 1141 50.4s 36.82S 177.50E 154km M=3.8
0.4 0.03 0.03 3
Rsd 0.1s 8ph/6stn Dmin 83km Az.gap 294°
Corr. -0.638 7M/7stn Msd 0.4 2↑ 1↓

96/3503
MAR 22 0314 08.7s 38.51S 176.25E 170km M=3.7
0.4 0.03 0.03 4
Rsd 0.1s 12ph/8stn Dmin 80km Az.gap 213°
Corr. -0.708 9M/7stn Msd 0.2 1↓

96/3509
MAR 22 0938 56.1s 44.79S 167.17E 5km M=5.1
0.6 0.02 0.03 R
Rsd 0.3s 19ph/14stn Dmin 62km Az.gap 224°
Corr. -0.841 19M/10stn Msd 0.2 5↑ 1↓
Felt Mahitahi (104) to Manapouri (138) MM4.

96/3514
MAR 22 0952 44.1s 44.77S 167.21E 5km M=4.7
0.7 0.03 0.03 R
Rsd 0.4s 21ph/15stn Dmin 58km Az.gap 222°
Corr. -0.838 16M/9stn Msd 0.1 3↑ 5↓

96/3535
MAR 22 1737 24.3s 40.24S 174.30E 86km M=4.0
0.2 0.01 0.01 4
Rsd 0.2s 33ph/27stn Dmin 70km Az.gap 101°
Corr. -0.216 20M/15stn Msd 0.3 4↑ 1↓

96/3543
MAR 22 2120 46.4s 38.27S 175.97E 213km M=4.6
0.7 0.05 0.03 5
Rsd 0.3s 17ph/15stn Dmin 55km Az.gap 108°
Corr. -0.362 22M/17stn Msd 0.2 7↑ 2↓

96/3583
MAR 23 2240 49.1s 37.04S 177.16E 190km M=3.5
1.0 0.11 0.10 6
Rsd 0.4s 10ph/8stn Dmin 119km Az.gap 276°
Corr. -0.801 4M/4stn Msd 0.2

96/3588
MAR 24 0302 08.2s 39.09S 175.01E 224km M=4.1
0.2 0.01 0.01 1
Rsd 0.1s 26ph/22stn Dmin 47km Az.gap 159°
Corr. 0.153 18M/17stn Msd 0.3 5↑ 4↓

96/3593
MAR 24 0612 31.7s 38.55S 175.89E 158km M=4.2
0.6 0.02 0.02 5
Rsd 0.2s 21ph/18stn Dmin 37km Az.gap 68°
Corr. -0.170 22M/18stn Msd 0.2 1↑

96/3596
MAR 24 0654 16.5s 42.99S 171.88E 5km M=4.1
0.1 0.00 0.01 R
Rsd 0.1s 15ph/11stn Dmin 102km Az.gap 109°
Corr. 0.094 15M/8stn Msd 0.2 1↑ 2↓

96/3638
MAR 25 0514 59.2s 38.03S 176.59E 130km M=3.8
0.2 0.02 0.01 2
Rsd 0.1s 10ph/9stn Dmin 52km Az.gap 182°
Corr. -0.608 15M/15stn Msd 0.3 1↑

96/3644
MAR 25 1034 42.3s 38.51S 175.99E 167km M=3.8
0.4 0.02 0.02 4
Rsd 0.2s 17ph/13stn Dmin 67km Az.gap 106°
Corr. -0.401 16M/16stn Msd 0.3 1↑

96/3661
MAR 25 2150 02.7s 45.10S 167.48E 80km M=4.0
0.2 0.01 0.01 2
Rsd 0.2s 22ph/16stn Dmin 48km Az.gap 185°
Corr. -0.325 8M/4stn Msd 0.2 1↑ 1↓

96/3667
MAR 26 0038 31.2s 36.43S 179.89E 12km M=4.2
0.2 0.01 0.01 R
Rsd 0.1s 10ph/9stn Dmin 192km Az.gap 310°
Corr. 0.387 19M/16stn Msd 0.3

96/3668
MAR 26 0054 53.7s 36.45S 179.90E 12km M=4.0
0.6 0.04 0.04 R
Rsd 0.2s 12ph/9stn Dmin 191km Az.gap 314°
Corr. -0.001 13M/11stn Msd 0.3

96/3680
MAR 26 0801 42.6s 36.43S 179.91W 33km M=3.9
0.5 0.03 0.04 R
Rsd 0.2s 11ph/8stn Dmin 205km Az.gap 329°
Corr. -0.210 11M/9stn Msd 0.3

96/3712
MAR 26 1954 51.8s 41.60S 179.27W 12km M=3.8
0.5 0.02 0.03 R
Rsd 0.2s 12ph/6stn Dmin 403km Az.gap 308°
Corr. -0.380 9M/9stn Msd 0.3

96/3719
MAR 27 0002 56.1s 38.73S 176.16E 174km M=3.5
1.1 0.06 0.10 10
Rsd 0.4s 6ph/4stn Dmin 69km Az.gap 194°
Corr. -0.812 7M/5stn Msd 0.2.

96/3728
MAR 27 0928 22.3s 35.84S 178.19E 165km M=3.6
0.0 0.00 0.00 0
Rsd 0.0s 4ph/3stn Dmin 196km Az.gap 338°
Corr. -0.373 5M/4stn Msd 0.4

96/3731
MAR 27 1025 42.0s 42.56S 173.93E 12km M=4.0
0.1 0.01 0.01 R
Rsd 0.2s 24ph/20stn Dmin 36km Az.gap 171°
Corr. -0.323 13M/7stn Msd 0.3 3↑ 3↓

96/3749
MAR 27 1742 42.2s 36.65S 179.82W 33km M=4.2
1.8 0.14 0.15 R
Rsd 0.7s 9ph/7stn Dmin 197km Az.gap 330°
Corr. -0.410 12M/10stn Msd 0.3 1↓

96/3753
MAR 27 1954 50.5s 36.90S 179.73W 33km M=3.9
1.3 0.11 0.12 R
Rsd 0.4s 7ph/5stn Dmin 191km Az.gap 336°
Corr. -0.530 6M/4stn Msd 0.3.

96/3754
MAR 27 2011 44.0s 36.45S 179.89E 12km M=3.9
0.3 0.04 0.03 R
Rsd 0.1s 6ph/3stn Dmin 190km Az.gap 348°
Corr. -0.690 5M/3stn Msd 0.3.

96/3759
MAR 27 2254 34.5s 36.49S 179.91E 12km M=4.4
0.2 0.01 0.02 R
Rsd 0.1s 9ph/6stn Dmin 189km Az.gap 315°
Corr. -0.031 8M/6stn Msd 0.7

96/3799
MAR 28 2028 55.3s 37.64S 176.04E 282km M=3.6
0.2 0.06 0.07 6
Rsd 0.0s 11ph/9stn Dmin 201km Az.gap 262°
Corr. -0.982 8M/8stn Msd 0.2
Poor station coverage.

96/3805
MAR 28 2243 07.0s 35.81S 178.12E 220km M=3.9
1.3 0.17 0.20 15
Rsd 0.5s 10ph/8stn Dmin 199km Az.gap 322°
Corr. -0.728 5M/5stn Msd 0.2

96/3809
MAR 29 0200 16.6s 39.75S 177.00E 30km M=3.7
0.4 0.01 0.01 4
Rsd 0.2s 25ph/22stn Dmin 56km Az.gap 175°
Corr. -0.464 34M/30stn Msd 0.3 1↓
Felt Hawkes Bay.

96/3810
MAR 29 0256 01.9s 41.05S 174.44E 60km M=3.7
0.1 0.01 0.01 2
Rsd 0.2s 28ph/22stn Dmin 23km Az.gap 64°
Corr. -0.244 16M/13stn Msd 0.2 1↑ 4↓
Felt Titahi Bay (65).

96/3832
MAR 29 1630 20.1s 38.18S 178.34E 5km M=3.9
0.4 0.02 0.03 R
Rsd 0.3s 14ph/13stn Dmin 13km Az.gap 211°
Corr. -0.673 33M/29stn Msd 0.2 1↑

96/3912
MAR 31 2235 25.8s 38.38S 176.06E 153km M=4.7
0.4 0.02 0.01 3
Rsd 0.2s 28ph/25stn Dmin 18km Az.gap 77°
Corr. -0.441 19M/16stn Msd 0.2 1↓

96/3944
APR 01 1131 38.8s 38.59S 175.77E 162km M=4.8
0.3 0.01 0.01 3
Rsd 0.1s 30ph/26stn Dmin 44km Az.gap 73°
Corr. -0.305 22M/17stn Msd 0.3 8↑ 3↓

96/3954
APR 01 1419 12.2s 44.88S 167.53E 56km M=3.8
0.3 0.01 0.01 3
Rsd 0.2s 21ph/15stn Dmin 39km Az.gap 200°
Corr. -0.644 9M/5stn Msd 0.3 2↑ 7↓↑

96/3976
APR 02 0041 26.6s 43.95S 168.96E 5km M=3.5
0.2 0.01 0.01 R
Rsd 0.2s 18ph/14stn Dmin 36km Az.gap 177°
Corr. -0.545 18M/16stn Msd 0.3 1↓

96/3980
APR 02 0218 25.4s 35.55S 178.69E 12km M=3.9
0.5 0.08 0.47 R
Rsd 0.1s 6ph/3stn Dmin 230km Az.gap 359°
Corr. -0.903 3M/3stn Msd 0.5

96/3998
APR 03 0328 52.7s 38.16S 178.54E 12km M=3.5
0.5 0.02 0.03 R
Rsd 0.4s 5ph/3stn Dmin 27km Az.gap 240°
Corr. -0.149 3M/3stn Msd 0.1 1↑

96/3999
APR 03 0554 47.4s 38.11S 175.92E 234km M=4.3
0.6 0.01 0.02 6
Rsd 0.2s 26ph/21stn Dmin 122km Az.gap 130°
Corr. -0.353 19M/17stn Msd 0.2

96/4006
APR 03 1221 07.6s 45.01S 174.08E 33km M=3.8
0.4 0.02 0.03 R
Rsd 0.3s 25ph/17stn Dmin 184km Az.gap 228°
Corr. -0.580 19M/19stn Msd 0.2

96/4008
APR 03 1611 14.2s 40.10S 176.75E 77km M=3.9
0.3 0.01 0.02 4
Rsd 0.2s 29ph/26stn Dmin 71km Az.gap 177°
Corr. -0.181 16M/14stn Msd 0.2 4↑ 6↓

96/4012
APR 03 1708 48.7s 40.31S 176.16E 64km M=4.1
0.2 0.01 0.02 3
Rsd 0.2s 37ph/33stn Dmin 36km Az.gap 123°
Corr. -0.245 19M/17stn Msd 0.3 4↑ 5↓
Felt Moawhango (58) MM4 and Dannevirke (63).

96/4028
APR 04 0522 44.2s 45.21S 166.19E 12km M=4.4
0.3 0.02 0.02 R
Rsd 0.2s 17ph/13stn Dmin 81km Az.gap 265°
Corr. 0.412 10M/5stn Msd 0.3 2↑ 4↓

96/4042
APR 04 2358 39.0s 38.84S 178.14E 30km M=3.7
0.9 0.06 0.04 2
Rsd 0.3s 11ph/9stn Dmin 26km Az.gap 280°
Corr. -0.821 9M/9stn Msd 0.2 1↓

96/4047
APR 05 0247 10.8s 37.41S 177.55E 166km M=3.6
0.6 0.03 0.23 14
Rsd 0.1s 5ph/3stn Dmin 70km Az.gap 305°
Corr. -0.817 3M/3stn Msd 0.1 1↑ 1↓

96/4049
APR 05 0505 49.0s 45.03S 167.52E 110km M=3.5
0.3 0.03 0.02 3
Rsd 0.2s 21ph/14stn Dmin 57km Az.gap 224°
Corr. -0.346 15M/13stn Msd 0.1 1↑ 3↓

96/4054
APR 05 0646 05.3s 38.93S 175.26E 212km M=3.6
0.4 0.02 0.06 4
Rsd 0.2s 20ph/16stn Dmin 25km Az.gap 147°
Corr. -0.329 17M/17stn Msd 0.2

96/4077
APR 05 2238 12.4s 37.68S 179.29E 12km M=3.5
0.3 0.01 0.02 R
Rsd 0.1s 5ph/4stn Dmin 87km Az.gap 310°
Corr. 0.001 3M/3stn Msd 0.4 1↑ 1↓

96/4137
APR 06 1520 47.5s 43.25S 170.77E 5km M=3.5
0.1 0.01 0.01 R
Rsd 0.1s 18ph/13stn Dmin 30km Az.gap 143°
Corr. 0.168 14M/14stn Msd 0.5 1↑

96/4138
APR 06 1657 17.0s 39.46S 176.50E 76km M=3.8
0.3 0.01 0.01 5
Rsd 0.2s 28ph/21stn Dmin 84km Az.gap 134°
Corr. -0.028 19M/17stn Msd 0.2 4↑ 3↓

96/4145
APR 06 2121 50.1s 40.32S 173.49E 155km M=3.8
0.3 0.01 0.01 3
Rsd 0.2s 35ph/30stn Dmin 65km Az.gap 141°
Corr. -0.060 19M/17stn Msd 0.2 6↑ 3↓

96/4172
APR 07 0702 25.9s 37.93S 176.49E 186km M=3.7
0.6 0.02 0.02 5
Rsd 0.2s 16ph/12stn Dmin 79km Az.gap 164°
Corr. -0.288 18M/16stn Msd 0.2 1↑

96/4175
APR 07 0844 34.0s 38.44S 174.45E 16km M=3.7
0.2 0.01 0.01 2
Rsd 0.2s 24ph/19stn Dmin 31km Az.gap 153°
Corr. -0.502 36M/33stn Msd 0.3 1↓

96/4183
APR 07 1329 47.7s 45.05S 167.46E 109km M=4.7
0.4 0.02 0.02 2
Rsd 0.2s 21ph/15stn Dmin 52km Az.gap 195°
Corr. -0.366 18M/12stn Msd 0.2 5↑ 8↓

96/4186
APR 07 1510 01.7s 40.19S 174.89E 22km M=3.7
0.1 0.01 0.01 2
Rsd 0.3s 39ph/31stn Dmin 43km Az.gap 69°
Corr. 0.398 36M/33stn Msd 0.4 5↑ 3↓

96/4189
APR 07 1552 31.3s 40.66S 176.40E 27km M=4.9
0.2 0.01 0.01 1
Rsd 0.2s 32ph/27stn Dmin 12km Az.gap 185°
Corr. -0.176 12M/6stn Msd 0.2 5↑ 1↓
Felt Waipukurau (63) to Waikanae (65), max. intensity MM4 at Masterton (66).

96/4190
APR 07 1555 34.2s 40.68S 176.33E 27km M=3.5
0.2 0.01 0.02 1
Rsd 0.2s 27ph/23stn Dmin 7km Az.gap 181°
Corr. -0.245 32M/30stn Msd 0.3 2↑ 1↓

96/4194
APR 07 1658 11.3s 37.61S 179.24E 33km M=3.6
0.7 0.03 0.05 R
Rsd 0.2s 10ph/8stn Dmin 83km Az.gap 296°
Corr. 0.420 9M/9stn Msd 0.2 1↑ 1↓

96/4197
APR 07 1753 43.2s 38.33S 176.04E 158km M=3.7
0.6 0.02 0.02 6
Rsd 0.1s 13ph/13stn Dmin 20km Az.gap 118°
Corr. -0.531 15M/15stn Msd 0.2 1↑

96/4200
APR 07 2004 57.1s 37.04S 177.50E 204km M=3.9
1.3 0.07 0.05 11
Rsd 0.3s 9ph/8stn Dmin 94km Az.gap 275°
Corr. -0.238 13M/13stn Msd 0.3 1↑

96/4246
APR 08 1809 06.9s 35.16S 178.35E 274km M=4.3
0.4 0.09 0.19 9
Rsd 0.1s 16ph/13stn Dmin 270km Az.gap 330°
Corr. -0.945 12M/12stn Msd 0.2

96/4248
APR 08 2002 44.9s 40.64S 176.37E 27km M=4.0
0.3 0.01 0.03 2
Rsd 0.3s 25ph/23stn Dmin 8km Az.gap 181°
Corr. -0.466 27M/24stn Msd 0.2 2↑ 1↓
Felt Feilding (62), Pukewhinau and Weber (63).

96/4258
APR 09 1031 26.2s 45.03S 167.44E 119km M=3.9
0.4 0.02 0.02 3
Rsd 0.2s 18ph/13stn Dmin 53km Az.gap 201°
Corr. -0.202 19M/14stn Msd 0.3 1↓

96/4265
APR 09 1349 51.9s 38.43S 176.17E 193km M=3.7
0.7 0.04 0.04 7
Rsd 0.3s 20ph/16stn Dmin 142km Az.gap 243°
Corr. -0.596 9M/9stn Msd 0.3

96/4279
APR 10 0235 44.4s 43.00S 171.45E 12km M=4.2
0.1 0.01 0.01 R
Rsd 0.1s 13ph/10stn Dmin 75km Az.gap 127°
Corr. 0.001 12M/6stn Msd 0.2 1↑

96/4291
APR 10 1035 41.8s 37.37S 176.79E 197km M=4.0
0.8 0.06 0.03 8
Rsd 0.2s 9ph/7stn Dmin 119km Az.gap 219°
Corr. -0.253 18M/17stn Msd 0.2

96/4295
APR 10 1328 05.5s 45.08S 167.46E 91km M=3.7
0.3 0.01 0.01 2
Rsd 0.2s 20ph/14stn Dmin 50km Az.gap 192°
Corr. -0.147 19M/12stn Msd 0.2 2↑ 8↓

96/4299
APR 10 1431 22.0s 43.21S 171.98E 12km M=3.6
0.2 0.02 0.01 R
Rsd 0.3s 11ph/8stn Dmin 77km Az.gap 120°
Corr. -0.280 10M/8stn Msd 0.2 1↓

96/4301
APR 10 1601 30.6s 37.87S 179.02E 12km M=3.7
1.4 0.04 0.08 R
Rsd 0.5s 10ph/6stn Dmin 70km Az.gap 282°
Corr. 0.018 16M/15stn Msd 0.3

96/4364
APR 12 0458 19.4s 37.45S 177.25E 142km M=4.0
0.3 0.04 0.01 3
Rsd 0.2s 19ph/15stn Dmin 78km Az.gap 208°
Corr. 0.048 16M/16stn Msd 0.3 1↓

96/4370
APR 12 1035 08.4s 42.95S 171.88E 12km M=4.3
0.1 0.01 0.01 R
Rsd 0.3s 22ph/20stn Dmin 105km Az.gap 126°
Corr. -0.278 11M/6stn Msd 0.2 1↑ 3↓

96/4375
APR 12 1417 15.5s 35.45S 178.92E 217km M=4.1
0.3 0.04 0.02 7
Rsd 0.1s 12ph/11stn Dmin 245km Az.gap 324°
Corr. -0.187 11M/11stn Msd 0.2

96/4376
APR 12 1419 50.0s 37.06S 177.83E 118km M=3.5
0.4 0.03 0.03 4
Rsd 0.1s 10ph/7stn Dmin 73km Az.gap 261°
Corr. 0.010 7M/7stn Msd 0.2

96/4395
APR 13 0118 11.0s 38.42S 175.82E 181km M=4.1
0.2 0.01 0.01 2
Rsd 0.1s 23ph/17stn Dmin 38km Az.gap 79°
Corr. -0.313 20M/18stn Msd 0.2 1↑ 4↓

96/4396
APR 13 0131 41.8s 40.49S 174.58E 77km M=3.9
0.2 0.01 0.01 3
Rsd 0.2s 31ph/26stn Dmin 50km Az.gap 79°
Corr. -0.117 21M/18stn Msd 0.2 3↑ 6↓

96/4399
APR 13 0422 37.1s 38.30S 175.99E 189km M=4.7
0.3 0.01 0.01 3
Rsd 0.1s 29ph/27stn Dmin 23km Az.gap 65°
Corr. -0.141 22M/19stn Msd 0.3 9↑ 6↓

96/4405
APR 13 0749 41.5s 45.10S 167.53E 112km M=4.5
0.4 0.02 0.02 4
Rsd 0.2s 21ph/15stn Dmin 51km Az.gap 179°
Corr. 0.202 8M/4stn Msd 0.1 11↑ 1↓

96/4406
APR 13 0814 43.1s 36.89S 177.03E 140km M=3.5
1.3 0.11 0.20 31
Rsd 0.3s 6ph/4stn Dmin 138km Az.gap 289°
Corr. -0.585 4M/4stn Msd 0.2

96/4408
APR 13 1022 40.1s 36.52S 177.57E 12km M=3.9
4.4 0.36 0.13 R
Rsd 0.9s 5ph/4stn Dmin 136km Az.gap 283°
Corr. 0.838 4M/4stn Msd 0.3

96/4412
APR 13 1126 00.8s 38.21S 176.10E 181km M=4.0
0.4 0.02 0.01 3
Rsd 0.1s 13ph/12stn Dmin 58km Az.gap 120°
Corr. -0.481 17M/16stn Msd 0.3 3↑ 1↓

96/4423
APR 13 1743 52.1s 37.56S 177.10E 5km M=3.6
0.4 0.05 0.02 R
Rsd 0.6s 10ph/7stn Dmin 61km Az.gap 198°
Corr. -0.203 10M/10stn Msd 0.3 1↑

96/4424
APR 13 1752 23.2s 37.48S 177.16E 12km M=3.9
0.6 0.06 0.02 R
Rsd 0.5s 11ph/8stn Dmin 79km Az.gap 206°
Corr. -0.197 4M/4stn Msd 0.2

96/4427
APR 13 1806 57.8s 36.93S 177.22E 33km M=3.8
1.4 0.12 0.07 R
Rsd 0.6s 6ph/4stn Dmin 121km Az.gap 254°
Corr. 0.465 4M/4stn Msd 0.2

96/4429
APR 13 1858 51.0s 37.49S 177.13E 33km M=3.7
1.0 0.12 0.04 R
Rsd 0.8s 5ph/4stn Dmin 104km Az.gap 205°
Corr. -0.118 4M/4stn Msd 0.2

96/4432
APR 13 2117 34.3s 37.31S 177.15E 33km M=3.6
1.0 0.11 0.03 R
Rsd 0.4s 5ph/4stn Dmin 107km Az.gap 223°
Corr. 0.082 4M/4stn Msd 0.3

96/4433
APR 13 2141 12.3s 38.58S 179.08E 12km M=3.7
3.0 0.09 0.18 R
Rsd 0.8s 4ph/3stn Dmin 91km Az.gap 299°
Corr. -0.651 3M/3stn Msd 0.1

96/4438
APR 13 2316 01.1s 38.51S 175.82E 181km M=3.6
0.8 0.02 0.05 7
Rsd 0.3s 13ph/10stn Dmin 74km Az.gap 138°
Corr. -0.102 13M/12stn Msd 0.2 1↑ 1↓

96/4443
APR 14 0451 43.1s 40.38S 176.86E 45km M=3.7
0.6 0.02 0.05 5
Rsd 0.2s 25ph/20stn Dmin 56km Az.gap 196°
Corr. -0.614 15M/13stn Msd 0.2 1↑ 1↓
Felt Acacia Bay (41) MM4.

96/4447
APR 14 0736 23.5s 42.06S 172.97E 81km M=3.6
0.3 0.01 0.02 3
Rsd 0.3s 27ph/17stn Dmin 33km Az.gap 136°
Corr. 0.079 19M/15stn Msd 0.4 3↑ 1↓

96/4457
APR 14 1955 42.5s 40.07S 176.50E 53km M=4.3
0.2 0.01 0.02 4
Rsd 0.2s 36ph/29stn Dmin 43km Az.gap 157°
Corr. -0.229 22M/17stn Msd 0.4 7↑ 6↓

96/4465
APR 15 0117 03.5s 38.91S 175.84E 98km M=3.5
0.5 0.01 0.03 5
Rsd 0.1s 17ph/15stn Dmin 27km Az.gap 101°
Corr. -0.272 17M/15stn Msd 0.1

96/4470
APR 15 0830 49.2s 41.25S 172.64E 208km M=3.6
0.3 0.02 0.02 2
Rsd 0.1s 14ph/11stn Dmin 48km Az.gap 190°
Corr. 0.403 5M/5stn Msd 0.1

96/4473
APR 15 0955 49.3s 39.02S 177.86E 75km M=3.8
0.3 0.02 0.03 4
Rsd 0.2s 14ph/9stn Dmin 47km Az.gap 196°
Corr. -0.794 4M/4stn Msd 0.2 1↑ 1↓

96/4474
APR 15 1122 49.1s 37.30S 177.49E 121km M=4.3
0.6 0.04 0.02 6
Rsd 0.2s 12ph/10stn Dmin 79km Az.gap 226°
Corr. 0.205 16M/14stn Msd 0.2 2↑ 2↓

96/4482
APR 15 1926 18.5s 36.32S 176.79E 143km M=3.9
1.6 0.15 0.24 48
Rsd 0.4s 6ph/5stn Dmin 196km Az.gap 296°
Corr. -0.760 4M/4stn Msd 0.3 1↑

96/4485
APR 15 2355 46.1s 37.84S 176.18E 189km M=3.6
0.5 0.04 0.06 10
Rsd 0.1s 12ph/11stn Dmin 184km Az.gap 239°
Corr. -0.909 6M/6stn Msd 0.3

96/4491
APR 16 0415 44.8s 37.22S 177.45E 132km M=4.0
0.4 0.03 0.01 4
Rsd 0.2s 13ph/10stn Dmin 87km Az.gap 233°
Corr. -0.085 21M/19stn Msd 0.2 1↓

96/4506
APR 16 1107 39.8s 43.00S 171.39E 12km M=3.3
0.1 0.01 0.02 R
Rsd 0.2s 14ph/11stn Dmin 72km Az.gap 158°
Corr. -0.689 13M/13stn Msd 0.4 1↑
Felt Westport (79).

96/4516
APR 16 1502 01.3s 40.16S 173.69E 193km M=4.6
0.3 0.01 0.01 3
Rsd 0.2s 40ph/32stn Dmin 75km Az.gap 137°
Corr. 0.037 8M/4stn Msd 0.5 6↑ 10↓

96/4521
APR 16 1746 45.4s 37.42S 177.19E 134km M=4.2
0.3 0.02 0.01 4
Rsd 0.2s 26ph/24stn Dmin 78km Az.gap 163°
Corr. 0.429 26M/22stn Msd 0.2 1↑ 1↓

96/4524
APR 16 2104 01.4s 40.38S 174.00E 88km M=3.7
0.3 0.01 0.01 4
Rsd 0.3s 29ph/24stn Dmin 47km Az.gap 107°
Corr. 0.083 17M/14stn Msd 0.3 1↓

96/4526
APR 16 2233 43.0s 38.07S 176.05E 166km M=3.6
0.4 0.03 0.02 4
Rsd 0.2s 14ph/13stn Dmin 95km Az.gap 226°
Corr. -0.507 15M/15stn Msd 0.2 1↑

96/4527
APR 17 0120 15.5s 36.54S 177.55E 177km M=3.5
1.3 0.14 0.14 13
Rsd 0.6s 7ph/4stn Dmin 135km Az.gap 311°
Corr. -0.618 4M/4stn Msd 0.3

96/4542
APR 17 1032 06.6s 36.90S 176.92E 233km M=3.5
1.0 0.10 0.09 6
Rsd 0.3s 9ph/7stn Dmin 152km Az.gap 318°
Corr. -0.649 3M/3stn Msd 0.0
Poor station coverage.

96/4544
APR 17 1130 15.8s 37.61S 179.45E 33km M=4.6
0.3 0.01 0.02 R
Rsd 0.1s 23ph/19stn Dmin 102km Az.gap 293°
Corr. 0.189 47M/41stn Msd 0.2 1↑ 2↓

96/4546
APR 17 1150 25.3s 38.30S 175.98E 154km M=3.8
0.5 0.03 0.02 4
Rsd 0.2s 17ph/15stn Dmin 87km Az.gap 204°
Corr. -0.518 19M/19stn Msd 0.3 2↑ 1↓

96/4556
APR 17 1631 20.8s 42.00S 174.04E 18km M=4.2
0.3 0.02 0.01 3
Rsd 0.3s 26ph/20stn Dmin 31km Az.gap 147°
Corr. -0.281 9M/5stn Msd 0.1 2↑ 7↓
Felt Ward (84) MM4.

96/4573
APR 17 2351 38.4s 36.79S 177.45E 178km M=4.1
0.4 0.04 0.03 3
Rsd 0.2s 13ph/11stn Dmin 117km Az.gap 288°
Corr. -0.573 17M/17stn Msd 0.2 3↑ 1↓

96/4591
APR 18 1508 44.5s 45.82S 166.71E 12km M=3.9
0.2 0.00 0.01 R
Rsd 0.1s 10ph/6stn Dmin 53km Az.gap 306°
Corr. 0.239 20M/14stn Msd 0.3 1↑ 1↓

96/4609
APR 19 0443 40.3s 37.75S 176.15E 275km M=4.5
0.6 0.04 0.05 5
Rsd 0.2s 24ph/18stn Dmin 13km Az.gap 120°
Corr. -0.192 23M/19stn Msd 0.2 1↓

96/4620
APR 19 1057 48.6s 38.13S 176.38E 151km M=4.8
0.3 0.01 0.02 3
Rsd 0.2s 37ph/32stn Dmin 12km Az.gap 57°
Corr. 0.326 28M/23stn Msd 0.2 12↑ 7↓

96/4627
APR 19 1447 02.0s 37.90S 176.16E 156km M=3.7
0.8 0.05 0.07 5
Rsd 0.3s 10ph/8stn Dmin 92km Az.gap 252°
Corr. -0.791 8M/8stn Msd 0.1 1↑

96/4628
APR 19 1526 27.7s 37.70S 176.09E 197km M=3.6
0.5 0.04 0.06 4
Rsd 0.2s 13ph/9stn Dmin 109km Az.gap 243°
Corr. -0.742 10M/10stn Msd 0.2
Poor station coverage.

96/4635
APR 19 1718 42.4s 40.65S 176.46E 24km M=3.5
0.3 0.02 0.02 2
Rsd 0.3s 21ph/16stn Dmin 16km Az.gap 200°
Corr. -0.751 24M/22stn Msd 0.2 4↑ 1↓

96/4636
APR 19 1719 43.7s 40.66S 176.41E 26km M=4.0
0.2 0.01 0.02 2
Rsd 0.3s 31ph/27stn Dmin 12km Az.gap 185°
Corr. -0.644 37M/33stn Msd 0.2 3↑ 1↓
Felt Pukewhinau (63).

96/4640
APR 19 2040 26.5s 38.05S 176.41E 143km M=3.9
0.3 0.02 0.01 3
Rsd 0.2s 19ph/16stn Dmin 39km Az.gap 148°
Corr. -0.063 20M/17stn Msd 0.2 3↑ 1↓

96/4644
APR 19 2347 37.5s 38.36S 176.02E 151km M=3.7
0.6 0.03 0.03 5
Rsd 0.3s 12ph/9stn Dmin 96km Az.gap 234°
Corr. -0.312 14M/14stn Msd 0.4 1↓

96/4663
APR 20 1701 12.3s 42.01S 173.13E 53km M=3.8
0.2 0.01 0.01 3
Rsd 0.2s 23ph/18stn Dmin 34km Az.gap 120°
Corr. -0.149 16M/13stn Msd 0.2 1↑ 2↓

96/4717
APR 21 2303 07.6s 38.07S 176.56E 144km M=4.7
0.2 0.01 0.01 2
Rsd 0.2s 38ph/32stn Dmin 6km Az.gap 70°
Corr. 0.363 25M/21stn Msd 0.2 3↑ 6↓

96/4738
APR 22 0932 59.9s 36.95S 177.03E 189km M=3.5
0.2 0.03 0.02 2
Rsd 0.1s 7ph/4stn Dmin 133km Az.gap 275°
Corr. -0.149 11M/11stn Msd 0.3

96/4745
APR 22 1403 59.6s 40.07S 176.37E 71km M=4.3
0.2 0.01 0.01 2
Rsd 0.2s 32ph/26stn Dmin 38km Az.gap 111°
Corr. -0.200 25M/20stn Msd 0.3 3↑ 3↓
Felt Waipukurau to Dannevirke (63).

96/4748
APR 22 1556 32.0s 37.24S 176.83E 227km M=5.0
0.6 0.04 0.04 5
Rsd 0.2s 24ph/22stn Dmin 45km Az.gap 169°
Corr. 0.497 24M/19stn Msd 0.2 6↑ 2↓

96/4752
APR 22 1840 50.2s 41.21S 172.77E 191km M=3.8
0.4 0.02 0.02 3
Rsd 0.2s 20ph/16stn Dmin 47km Az.gap 120°
Corr. 0.130 14M/12stn Msd 0.2 6↑ 1↓

96/4760
APR 22 2149 43.3s 40.19S 173.61E 158km M=4.2
0.3 0.01 0.01 3
Rsd 0.2s 34ph/28stn Dmin 73km Az.gap 140°
Corr. 0.001 21M/18stn Msd 0.3 7↑ 4↓

96/4764
APR 22 2307 54.8s 36.89S 177.64E 160km M=4.0
0.6 0.04 0.03 5
Rsd 0.2s 15ph/12stn Dmin 98km Az.gap 287°
Corr. -0.069 16M/16stn Msd 0.4 1↑

96/4797
APR 23 1347 14.4s 38.70S 175.42E 226km M=3.6
0.9 0.05 0.05 7
Rsd 0.3s 15ph/13stn Dmin 48km Az.gap 229°
Corr. -0.172 18M/18stn Msd 0.2

96/4799
APR 23 1441 02.1s 45.38S 167.20E 96km M=4.0
0.4 0.02 0.02 3
Rsd 0.2s 18ph/13stn Dmin 10km Az.gap 196°
Corr. 0.019 8M/4stn Msd 0.1 5↑ 3↓

96/4804
APR 23 1827 06.9s 42.27S 177.59E 33km M=3.6
0.9 0.07 0.06 R
Rsd 0.1s 15ph/10stn Dmin 186km Az.gap 242°
Corr. 0.322 23M/23stn Msd 0.3

96/4806
APR 23 1851 44.7s 37.39S 179.06E 12km M=3.5
1.5 0.07 0.10 R
Rsd 0.6s 7ph/4stn Dmin 71km Az.gap 322°
Corr. -0.058 5M/4stn Msd 0.2 1↑

96/4815
APR 23 2214 44.6s 37.88S 176.11E 152km M=3.8
0.6 0.05 0.08 6
Rsd 0.3s 12ph/8stn Dmin 98km Az.gap 240°
Corr. -0.803 6M/5stn Msd 0.2 1↑

96/4821
APR 24 0036 00.3s 38.67S 176.09E 111km M=3.7
0.5 0.01 0.01 5
Rsd 0.2s 26ph/25stn Dmin 35km Az.gap 99°
Corr. -0.290 4M/4stn Msd 0.4 2↑ 1↓

96/4822
APR 24 0036 11.8s 39.24S 176.04E 67km M=3.9
0.2 0.01 0.01 3
Rsd 0.3s 37ph/31stn Dmin 34km Az.gap 64°
Corr. -0.221 23M/19stn Msd 0.3 1↑

96/4849
APR 24 0832 42.5s 40.14S 173.56E 167km M=3.7
0.5 0.02 0.02 5
Rsd 0.2s 28ph/26stn Dmin 80km Az.gap 185°
Corr. -0.284 17M/17stn Msd 0.3 5↑ 2↓

96/4865
APR 24 1750 12.5s 40.55S 173.54E 146km M=3.7
0.3 0.01 0.01 3
Rsd 0.2s 36ph/28stn Dmin 43km Az.gap 121°
Corr. 0.135 17M/16stn Msd 0.2 9↑ 3↓

96/4871
APR 24 2042 10.1s 41.21S 172.75E 189km M=3.9
0.3 0.02 0.02 2
Rsd 0.2s 25ph/18stn Dmin 46km Az.gap 121°
Corr. 0.116 18M/15stn Msd 0.6 10↑ 1↓

96/4886
APR 25 0144 01.4s 36.92S 177.09E 171km M=3.8
1.0 0.08 0.08 6
Rsd 0.3s 10ph/9stn Dmin 131km Az.gap 280°
Corr. -0.797 4M/4stn Msd 0.3 1↑

96/4906
APR 25 0752 45.8s 38.05S 176.72E 5km M=2.9
0.1 0.01 0.01 R
Rsd 0.3s 14ph/9stn Dmin 7km Az.gap 88°
Corr. 0.135 9M/7stn Msd 0.2 4↑ 1↓
Felt Kawerau (34) MM5.

96/4933
APR 25 1421 23.4s 38.30S 175.98E 167km M=3.7
0.4 0.02 0.02 3
Rsd 0.1s 14ph/11stn Dmin 87km Az.gap 237°
Corr. 0.096 16M/16stn Msd 0.4 1↑

96/4938
APR 25 1620 38.8s 37.86S 179.80E 12km M=5.2
0.4 0.02 0.02 R
Rsd 0.1s 28ph/26stn Dmin 135km Az.gap 292°
Corr. 0.593 18M/9stn Msd 0.3

96/4948
APR 25 1831 00.2s 36.59S 177.84E 161km M=4.1
1.3 0.05 0.06 12
Rsd 0.4s 10ph/7stn Dmin 119km Az.gap 256°
Corr. 0.357 7M/5stn Msd 0.2

96/4952
APR 25 2046 04.5s 37.81S 179.66E 12km M=3.7
0.4 0.02 0.02 R
Rsd 0.2s 16ph/12stn Dmin 122km Az.gap 306°
Corr. 0.030 11M/9stn Msd 0.2

96/4957
APR 25 2221 50.3s 37.96S 179.99E 33km M=3.9
1.6 0.06 0.11 R
Rsd 0.7s 8ph/6stn Dmin 153km Az.gap 301°
Corr. -0.173 9M/6stn Msd 0.3

96/4960
APR 25 2242 11.5s 37.57S 176.21E 163km M=3.6
1.0 0.08 0.10 8
Rsd 0.5s 10ph/7stn Dmin 110km Az.gap 249°
Corr. -0.839 10M/8stn Msd 0.2

96/4961
APR 25 2324 35.8s 37.85S 179.65E 12km M=4.0
0.7 0.03 0.05 R
Rsd 0.2s 11ph/8stn Dmin 122km Az.gap 297°
Corr. 0.162 22M/19stn Msd 0.3

96/4991
APR 26 1051 36.2s 37.91S 177.04E 98km M=4.8
0.2 0.01 0.01 2
Rsd 0.2s 31ph/26stn Dmin 34km Az.gap 60°
Corr. 0.359 28M/23stn Msd 0.2 6↑ 10↓
Felt Opotiki (35) MM3.

96/4992
APR 26 1101 33.6s 45.50S 167.22E 106km M=3.7
0.3 0.02 0.02 2
Rsd 0.2s 17ph/12stn Dmin 7km Az.gap 151°
Corr. -0.184 17M/13stn Msd 0.2 1↓

96/5029
APR 27 1112 27.9s 38.33S 175.82E 182km M=3.5
0.5 0.03 0.03 4
Rsd 0.2s 16ph/12stn Dmin 78km Az.gap 240°
Corr. -0.423 16M/16stn Msd 0.3 1↑
Poor station coverage.

96/5040
APR 27 1440 50.8s 41.26S 172.82E 146km M=3.7
0.4 0.02 0.02 3
Rsd 0.2s 20ph/15stn Dmin 54km Az.gap 131°
Corr. 0.273 15M/13stn Msd 1.3 1↑

96/5068
APR 27 2304 48.7s 38.53S 175.43E 214km M=3.6
1.9 0.10 0.07 14
Rsd 0.4s 15ph/13stn Dmin 73km Az.gap 237°
Corr. -0.625 14M/14stn Msd 0.2 1↑ 1↓

96/5069
APR 27 2320 09.9s 41.77S 173.55E 67km M=3.7
0.3 0.02 0.01 4
Rsd 0.2s 25ph/19stn Dmin 28km Az.gap 111°
Corr. 0.375 15M/12stn Msd 0.3 2↑ 7↓

96/5083
APR 28 0605 59.6s 47.81S 165.21E 12km M=3.6
0.7 0.05 0.05 R
Rsd 0.4s 11ph/6stn Dmin 244km Az.gap 324°
Corr. -0.178 4M/4stn Msd 0.2

96/5092
APR 28 1053 13.4s 38.00S 178.04E 12km M=3.5
0.2 0.01 0.01 R
Rsd 0.3s 13ph/11stn Dmin 21km Az.gap 85°
Corr. -0.221 18M/16stn Msd 0.2 2↑ 2↓

96/5102
APR 28 1652 40.7s 40.27S 173.51E 205km M=4.2
0.4 0.01 0.02 4
Rsd 0.2s 36ph/29stn Dmin 68km Az.gap 142°
Corr. 0.012 23M/20stn Msd 0.2 5↑ 6↓

96/5116
APR 29 0243 38.3s 38.18S 175.90E 272km M=4.0
0.9 0.06 0.10 8
Rsd 0.3s 16ph/14stn Dmin 106km Az.gap 223°
Corr. -0.669 14M/12stn Msd 0.2 1↑

96/5125
APR 29 0814 00.4s 39.67S 174.25E 190km M=4.1
0.5 0.02 0.03 4
Rsd 0.3s 27ph/22stn Dmin 60km Az.gap 187°
Corr. -0.466 21M/19stn Msd 0.2 3↑ 2↓

96/5140
APR 29 2005 08.7s 38.91S 175.13E 238km M=4.0
0.7 0.05 0.03 5
Rsd 0.3s 27ph/23stn Dmin 28km Az.gap 171°
Corr. -0.203 20M/18stn Msd 0.2

96/5143
APR 29 2209 38.6s 38.71S 178.59E 28km M=3.5
1.0 0.05 0.05 4
Rsd 0.4s 8ph/4stn Dmin 49km Az.gap 293°
Corr. -0.633 4M/4stn Msd 0.3 1↓

96/5170
APR 30 1509 40.7s 37.70S 176.42E 182km M=3.8
0.4 0.03 0.02 3
Rsd 0.2s 18ph/16stn Dmin 75km Az.gap 192°
Corr. 0.003 13M/12stn Msd 0.2 1↑

96/5173
APR 30 1659 54.4s 36.09S 177.59E 212km M=3.7
0.4 0.04 0.04 6
Rsd 0.1s 6ph/4stn Dmin 179km Az.gap 329°
Corr. -0.428 4M/4stn Msd 0.2

96/5174
APR 30 1720 38.4s 37.59S 176.09E 190km M=3.6
1.0 0.07 0.08 6
Rsd 0.3s 9ph/8stn Dmin 116km Az.gap 250°
Corr. -0.819 8M/8stn Msd 0.3

96/5176
APR 30 1847 58.7s 39.30S 175.01E 141km M=4.5
0.3 0.01 0.01 3
Rsd 0.2s 41ph/35stn Dmin 43km Az.gap 101°
Corr. -0.018 25M/21stn Msd 0.3 6↑ 6↓

96/5188
MAY 01 0440 37.7s 40.44S 176.85E 48km M=4.4
0.2 0.01 0.02 3
Rsd 0.2s 31ph/24stn Dmin 50km Az.gap 195°
Corr. -0.623 25M/20stn Msd 0.3 4↑ 1↓

96/5192
MAY 01 0711 09.2s 41.35S 172.44E 5km M=3.6
0.6 0.02 0.04 R
Rsd 0.3s 15ph/11stn Dmin 59km Az.gap 159°
Corr. 0.831 17M/15stn Msd 0.3 1↑ 2↓

96/5195
MAY 01 0952 39.5s 37.19S 176.79E 324km M=4.9
0.6 0.05 0.04 5
Rsd 0.2s 23ph/22stn Dmin 52km Az.gap 172°
Corr. 0.511 8M/4stn Msd 0.2 12↑ 3↓

96/5202
MAY 01 1431 30.6s 39.92S 174.41E 119km M=3.7
0.4 0.01 0.02 4
Rsd 0.3s 28ph/22stn Dmin 47km Az.gap 94°
Corr. 0.442 13M/11stn Msd 0.2 3↑ 1↓

96/5208
MAY 01 1854 37.8s 40.44S 176.91E 34km M=3.5
0.4 0.02 0.04 5
Rsd 0.3s 21ph/17stn Dmin 50km Az.gap 219°
Corr. -0.643 18M/16stn Msd 0.2 2↑ 1↓

96/5209
MAY 01 1903 50.6s 37.50S 179.41E 12km M=4.0
0.5 0.03 0.03 R
Rsd 0.2s 6ph/4stn Dmin 98km Az.gap 321°
Corr. 0.223 8M/6stn Msd 0.2

96/5211
MAY 01 2155 22.9s 38.21S 176.20E 149km M=3.6
0.4 0.02 0.02 3
Rsd 0.2s 8ph/6stn Dmin 80km Az.gap 228°
Corr. -0.240 9M/8stn Msd 0.3 1↓

96/5215
MAY 02 0654 17.8s 40.51S 174.43E 85km M=3.6
0.2 0.01 0.01 4
Rsd 0.3s 37ph/29stn Dmin 54km Az.gap 83°
Corr. 0.028 18M/16stn Msd 0.3 7↑ 4↓

96/5217
MAY 02 0807 48.0s 37.65S 177.06E 143km M=3.5
0.6 0.05 0.04 3
Rsd 0.3s 11ph/7stn Dmin 67km Az.gap 266°
Corr. -0.708 12M/10stn Msd 0.1 1↑ 1↓

96/5236
MAY 02 1850 38.6s 38.68S 177.42E 67km M=3.9
0.4 0.02 0.02 5
Rsd 0.2s 12ph/10stn Dmin 54km Az.gap 91°
Corr. -0.276 22M/18stn Msd 0.2 2↑ 2↓

96/5237
MAY 02 1906 55.9s 36.92S 176.58E 202km M=3.7
0.6 0.06 0.12 6
Rsd 0.2s 13ph/10stn Dmin 156km Az.gap 321°
Corr. -0.733 12M/12stn Msd 0.2

96/5239
MAY 02 2036 37.3s 38.10S 175.55E 139km M=3.6
0.9 0.06 0.11 15
Rsd 0.3s 12ph/10stn Dmin 138km Az.gap 259°
Corr. -0.775 10M/10stn Msd 0.5 1↑
Poor station coverage.

96/5249
MAY 03 0437 46.4s 37.45S 177.82E 60km M=4.2
0.3 0.02 0.01 2
Rsd 0.1s 24ph/19stn Dmin 46km Az.gap 180°
Corr. 0.643 22M/18stn Msd 0.2 1↓

96/5259
MAY 03 1135 13.0s 38.39S 175.51E 261km M=3.9
1.6 0.10 0.07 12
Rsd 0.4s 14ph/12stn Dmin 74km Az.gap 223°
Corr. -0.572 15M/14stn Msd 0.2 1↓

96/5262
MAY 03 1402 21.5s 37.14S 176.67E 224km M=3.9
0.7 0.06 0.06 6
Rsd 0.3s 14ph/11stn Dmin 131km Az.gap 250°
Corr. -0.601 18M/18stn Msd 0.3

96/5264
MAY 03 1625 24.7s 39.27S 174.98E 139km M=3.6
0.3 0.01 0.02 3
Rsd 0.2s 28ph/21stn Dmin 44km Az.gap 185°
Corr. -0.068 19M/17stn Msd 0.2 3↑ 1↓

96/5268
MAY 03 1733 32.2s 36.56S 178.32E 109km M=3.9
0.9 0.04 0.05 13
Rsd 0.3s 9ph/6stn Dmin 115km Az.gap 277°
Corr. 0.399 7M/5stn Msd 0.2

96/5277
MAY 04 0008 37.4s 38.20S 176.27E 143km M=4.2
0.2 0.01 0.01 2
Rsd 0.2s 32ph/26stn Dmin 7km Az.gap 73°
Corr. 0.080 26M/22stn Msd 0.2 4↑ 1↓

96/5315
MAY 04 1857 03.1s 36.92S 177.50E 157km M=4.3
0.6 0.04 0.03 6
Rsd 0.2s 14ph/11stn Dmin 73km Az.gap 260°
Corr. 0.100 24M/21stn Msd 0.2 3↑ 3↓

96/5323
MAY 05 0013 25.0s 36.57S 177.60E 234km M=5.4
0.4 0.04 0.03 3
Rsd 0.1s 23ph/17stn Dmin 112km Az.gap 248°
Corr. 0.599 8M/4stn Msd 0.2 3↑ 1↓

96/5328
MAY 05 0136 19.9s 37.88S 176.50E 242km M=3.8
0.4 0.04 0.07 3
Rsd 0.1s 12ph/11stn Dmin 68km Az.gap 272°
Corr. -0.724 8M/7stn Msd 0.3

96/5333
MAY 05 0527 27.2s 38.04S 176.45E 154km M=3.8
0.5 0.02 0.02 4
Rsd 0.3s 23ph/19stn Dmin 21km Az.gap 149°
Corr. -0.197 21M/19stn Msd 0.2 1↑ 3↓

96/5361
MAY 05 1929 24.0s 37.11S 176.93E 233km M=4.3
0.5 0.07 0.03 5
Rsd 0.2s 19ph/14stn Dmin 100km Az.gap 241°
Corr. 0.036 24M/20stn Msd 0.2 1↓

96/5368
MAY 06 0439 31.7s 37.63S 177.04E 139km M=4.0
0.2 0.01 0.01 2
Rsd 0.1s 15ph/11stn Dmin 70km Az.gap 138°
Corr. 0.228 19M/17stn Msd 0.2 1↑

96/5393
MAY 06 1746 02.7s 41.05S 174.91E 56km M=3.6
0.1 0.01 0.01 1
Rsd 0.2s 40ph/30stn Dmin 15km Az.gap 47°
Corr. -0.228 22M/19stn Msd 0.2 6↑ 4↓

96/5403
MAY 07 0004 49.1s 39.66S 174.30E 217km M=3.9
0.5 0.03 0.05 5
Rsd 0.3s 24ph/20stn Dmin 56km Az.gap 182°
Corr. -0.581 16M/14stn Msd 0.3 1↑ 1↓

96/5404
MAY 07 0045 42.0s 39.04S 173.92E 5km M=3.6
0.2 0.01 0.01 R
Rsd 0.2s 22ph/18stn Dmin 18km Az.gap 182°
Corr. -0.574 30M/26stn Msd 0.3 1↓
Felt New Plymouth (47) MM3 and Okato (46).

96/5408
MAY 07 0438 33.4s 38.80S 175.99E 94km M=3.9
0.3 0.01 0.01 3
Rsd 0.2s 31ph/26stn Dmin 14km Az.gap 84°
Corr. -0.469 24M/20stn Msd 0.3 6↑ 5↓

96/5414
MAY 07 0755 45.0s 40.86S 175.82E 28km M=3.8
0.1 0.01 0.01 1
Rsd 0.2s 25ph/18stn Dmin 30km Az.gap 143°
Corr. -0.529 38M/32stn Msd 0.2 6↑ 3↓

96/5425
MAY 07 1428 52.7s 37.01S 177.33E 174km M=3.8
0.8 0.08 0.06 5
Rsd 0.3s 11ph/9stn Dmin 109km Az.gap 276°
Corr. -0.738 16M/16stn Msd 0.2 1↑

96/5440
MAY 08 0152 02.2s 37.88S 176.14E 221km M=3.7
2.5 0.15 0.16 23
Rsd 0.4s 13ph/12stn Dmin 155km Az.gap 316°
Corr. -0.469 11M/11stn Msd 0.2
Poor station coverage.

96/5442
MAY 08 0219 42.8s 39.00S 174.89E 219km M=4.4
0.6 0.02 0.02 5
Rsd 0.2s 32ph/28stn Dmin 44km Az.gap 141°
Corr. -0.146 27M/23stn Msd 0.2 7↑ 5↓

96/5443
MAY 08 0233 08.4s 37.77S 176.12E 176km M=3.5
0.4 0.02 0.03 2
Rsd 0.1s 10ph/9stn Dmin 103km Az.gap 249°
Corr. -0.827 5M/5stn Msd 0.1

96/5450
MAY 08 1034 41.3s 39.00S 178.06E 48km M=4.8
0.2 0.01 0.01 2
Rsd 0.1s 27ph/25stn Dmin 26km Az.gap 206°
Corr. -0.365 24M/18stn Msd 0.3 4↑ 3↓
Felt Ormond (44) and Gisborne (45), MM4.

96/5451
MAY 08 1040 09.5s 39.06S 178.10E 54km M=3.7
0.4 0.02 0.03 5
Rsd 0.3s 16ph/13stn Dmin 24km Az.gap 220°
Corr. -0.436 16M/12stn Msd 0.2 3↑ 2↓

96/5454
MAY 08 1518 03.0s 38.10S 176.56E 137km M=3.8
0.4 0.02 0.02 3
Rsd 0.3s 19ph/15stn Dmin 51km Az.gap 143°
Corr. -0.132 11M/10stn Msd 0.2 1↑

96/5476
MAY 09 1417 35.6s 38.20S 176.27E 155km M=4.3
0.3 0.02 0.01 3
Rsd 0.3s 33ph/27stn Dmin 7km Az.gap 63°
Corr. -0.076 28M/24stn Msd 0.2 5↑ 1↓

96/5487
MAY 10 0559 38.5s 38.08S 176.76E 5km M=3.0
0.2 0.01 0.01 R
Rsd 0.3s 13ph/9stn Dmin 4km Az.gap 85°
Corr. 0.310 13M/11stn Msd 0.2 2↑ 1↓
Felt strongly in Kawerau (34). Minor tremors felt during preceding days.

96/5490
MAY 10 0634 52.3s 38.62S 175.37E 202km M=3.6
1.0 0.05 0.04 9
Rsd 0.4s 15ph/13stn Dmin 48km Az.gap 212°
Corr. -0.425 19M/19stn Msd 0.2 1↑ 1↓

96/5491
MAY 10 0830 39.3s 42.81S 171.80E 12km M=3.6
0.2 0.01 0.02 R
Rsd 0.3s 17ph/14stn Dmin 110km Az.gap 152°
Corr. -0.277 21M/18stn Msd 0.2 1↑ 1↓

96/5520
MAY 11 0013 29.3s 37.83S 179.71E 12km M=4.0
0.3 0.01 0.02 R
Rsd 0.1s 17ph/14stn Dmin 127km Az.gap 302°
Corr. 0.203 26M/22stn Msd 0.2 1↓

96/5521
MAY 11 0130 37.4s 38.47S 175.97E 188km M=3.5
0.5 0.03 0.03 4
Rsd 0.2s 11ph/8stn Dmin 85km Az.gap 268°
Corr. -0.351 6M/6stn Msd 0.2

96/5527
MAY 11 1021 27.3s 37.50S 176.63E 197km M=4.1
0.4 0.03 0.02 3
Rsd 0.2s 30ph/23stn Dmin 39km Az.gap 209°
Corr. 0.150 28M/24stn Msd 0.3 1↑

96/5547
MAY 12 0018 15.0s 39.78S 177.04E 41km M=4.0
0.2 0.01 0.01 2
Rsd 0.2s 39ph/31stn Dmin 18km Az.gap 164°
Corr. -0.471 26M/22stn Msd 0.2 2↑ 3↓
Felt Napier (60) MM4.

96/5579
MAY 12 1647 07.8s 44.94S 167.55E 82km M=3.7
0.4 0.02 0.02 4
Rsd 0.2s 13ph/8stn Dmin 42km Az.gap 195°
Corr. -0.489 14M/7stn Msd 0.2 1↑ 2↓

96/5588
MAY 13 0406 48.8s 37.10S 177.07E 193km M=4.4
0.4 0.03 0.02 3
Rsd 0.2s 21ph/18stn Dmin 99km Az.gap 189°
Corr. 0.569 23M/19stn Msd 0.2 4↑ 2↓

96/5600
MAY 13 1423 48.5s 36.78S 176.91E 203km M=3.7
0.4 0.04 0.04 5
Rsd 0.2s 9ph/8stn Dmin 153km Az.gap 276°
Corr. -0.517 13M/13stn Msd 0.2

96/5605
MAY 13 1714 24.3s 45.13S 167.48E 118km M=3.7
0.6 0.03 0.03 5
Rsd 0.4s 11ph/7stn Dmin 45km Az.gap 203°
Corr. -0.138 11M/7stn Msd 0.2 1↓

96/5607
MAY 13 1846 44.5s 38.24S 175.91E 156km M=3.9
0.6 0.05 0.02 4
Rsd 0.3s 21ph/19stn Dmin 91km Az.gap 195°
Corr. -0.508 21M/21stn Msd 0.3 1↑ 2↓

96/5659
MAY 16 0112 36.6s 36.67S 176.90E 276km M=3.9
0.3 0.03 0.04 3
Rsd 0.1s 5ph/3stn Dmin 161km Az.gap 316°
Corr. -0.540 3M/3stn Msd 0.3

96/5660
MAY 16 0247 57.5s 45.11S 167.38E 62km M=4.4
0.3 0.01 0.02 3
Rsd 0.1s 13ph/8stn Dmin 44km Az.gap 198°
Corr. -0.266 10M/5stn Msd 0.2 3↑ 2↓

96/5671
MAY 16 1032 31.2s 36.24S 177.89E 182km M=3.8
0.4 0.05 0.06 5
Rsd 0.1s 11ph/8stn Dmin 155km Az.gap 327°
Corr. -0.595 4M/4stn Msd 0.2

96/5693
MAY 17 1150 42.0s 39.21S 175.11E 140km M=3.5
0.5 0.02 0.02 3
Rsd 0.2s 23ph/20stn Dmin 38km Az.gap 188°
Corr. -0.519 16M/16stn Msd 0.2 4↑ 2↓

96/5695
MAY 17 1404 43.3s 35.75S 178.92E 241km M=4.1
0.7 0.09 0.09 8
Rsd 0.3s 8ph/5stn Dmin 213km Az.gap 343°
Corr. -0.529 4M/4stn Msd 0.2 1↑ 1↓

96/5696
MAY 17 1407 51.9s 36.62S 176.90E 282km M=3.6
0.0 0.00 0.00 0
Rsd 0.0s 4ph/3stn Dmin 165km Az.gap 318°
Corr. -0.094 3M/3stn Msd 0.3

96/5713
MAY 17 2037 26.3s 43.02S 171.38E 12km M=3.9
0.1 0.01 0.01 R
Rsd 0.1s 10ph/7stn Dmin 69km Az.gap 152°
Corr. -0.541 14M/8stn Msd 0.2 1↓

96/5720
MAY 17 2358 03.2s 37.10S 177.27E 161km M=3.7
1.0 0.05 0.04 10
Rsd 0.4s 7ph/6stn Dmin 107km Az.gap 197°
Corr. 0.540 4M/4stn Msd 0.1

96/5725
MAY 18 0249 38.4s 45.17S 167.39E 94km M=3.8
0.5 0.02 0.02 4
Rsd 0.2s 12ph/8stn Dmin 38km Az.gap 189°
Corr. 0.011 8M/4stn Msd 0.2 2↑ 2↓

96/5741
MAY 18 1207 37.8s 41.77S 174.42E 50km M=3.6
0.1 0.01 0.01 2
Rsd 0.2s 21ph/17stn Dmin 17km Az.gap 147°
Corr. -0.212 17M/16stn Msd 0.2 3↑ 4↓

96/5753
MAY 18 1659 19.4s 38.52S 175.80E 158km M=3.9
0.5 0.02 0.02 4
Rsd 0.3s 28ph/24stn Dmin 43km Az.gap 135°
Corr. -0.267 23M/22stn Msd 0.2 1↑ 3↓

96/5766
MAY 18 2213 59.8s 38.25S 176.27E 160km M=4.7
0.4 0.01 0.02 3
Rsd 0.2s 34ph/30stn Dmin 10km Az.gap 64°
Corr. 0.016 27M/24stn Msd 0.2 9↑ 7↓

96/5768
MAY 19 0007 14.8s 40.07S 176.92E 36km M=4.1
0.2 0.01 0.02 3
Rsd 0.2s 34ph/28stn Dmin 13km Az.gap 174°
Corr. -0.411 21M/19stn Msd 0.2 2↑ 2↓
Felt Napier (60) to Porongahau (64).

96/5795
MAY 19 1154 11.1s 37.88S 177.29E 69km M=4.1
0.1 0.01 0.01 1
Rsd 0.1s 32ph/26stn Dmin 40km Az.gap 84°
Corr. 0.070 23M/21stn Msd 0.3 3↑ 3↓

96/5803
MAY 19 1813 42.2s 35.84S 178.25E 187km M=3.6
0.4 0.06 0.05 7
Rsd 0.1s 5ph/3stn Dmin 196km Az.gap 339°
Corr. -0.657 3M/3stn Msd 0.1

96/5818
MAY 20 0037 55.6s 36.77S 176.48E 209km M=3.6
1.8 0.17 0.13 12
Rsd 0.5s 9ph/8stn Dmin 175km Az.gap 306°
Corr. -0.611 6M/6stn Msd 0.2

96/5820
MAY 20 0244 58.7s 35.80S 177.89E 194km M=3.6
0.4 0.11 0.07 13
Rsd 0.1s 5ph/3stn Dmin 203km Az.gap 336°
Corr. -0.860 2M/2stn Msd 0.4

96/5839
MAY 20 1617 29.5s 38.42S 176.04E 160km M=4.2
0.5 0.02 0.02 5
Rsd 0.3s 30ph/26stn Dmin 20km Az.gap 88°
Corr. -0.205 21M/19stn Msd 0.3 7↑ 4↓

96/5854
MAY 21 0459 06.0s 37.25S 177.11E 128km M=3.6
1.1 0.12 0.09 8
Rsd 0.4s 6ph/5stn Dmin 112km Az.gap 272°
Corr. -0.791 3M/3stn Msd 0.2

96/5855
MAY 21 0533 59.2s 45.17S 167.39E 115km M=3.7
0.4 0.03 0.02 3
Rsd 0.2s 13ph/6stn Dmin 38km Az.gap 239°
Corr. 0.291 9M/5stn Msd 0.3

96/5861
MAY 21 0843 18.4s 39.52S 174.50E 136km M=3.5
0.5 0.02 0.02 4
Rsd 0.2s 21ph/19stn Dmin 48km Az.gap 187°
Corr. -0.535 16M/14stn Msd 0.2 2↑ 3↓

96/5864
MAY 21 0941 39.6s 42.40S 172.64E 33km M=3.9
0.2 0.01 0.01 R
Rsd 0.1s 16ph/13stn Dmin 74km Az.gap 128°
Corr. 0.234 8M/5stn Msd 0.4 1↑
Felt Maruia (87) MM3.

96/5866
MAY 21 1107 52.4s 35.95S 178.05E 222km M=3.6
0.3 0.03 0.03 4
Rsd 0.1s 6ph/3stn Dmin 184km Az.gap 335°
Corr. -0.241 3M/3stn Msd 0.2

96/5867
MAY 21 1159 47.1s 41.68S 174.20E 31km M=3.5
0.1 0.01 0.01 1
Rsd 0.2s 28ph/18stn Dmin 8km Az.gap 100°
Corr. -0.565 22M/17stn Msd 0.2 1↑ 5↓

96/5870
MAY 21 1403 56.2s 41.67S 174.19E 32kmM=3.6
0.1 0.01 0.01 1
Rsd 0.2s 24ph/19stn Dmin 9km Az.gap 95°
Corr. -0.521 23M/18stn Msd 0.5 2↑ 9↓

96/5873
MAY 21 1730 48.5s 38.51S 175.72E 148km M=3.8
0.5 0.03 0.02 4
Rsd 0.2s 17ph/14stn Dmin 57km Az.gap 216°
Corr. -0.441 23M/21stn Msd 0.2

96/5879
MAY 22 0008 03.8s 40.48S 173.47E 154km M=3.5
0.4 0.01 0.01 4
Rsd 0.2s 27ph/21stn Dmin 53km Az.gap 130°
Corr. 0.049 10M/9stn Msd 0.2 1↑ 4↓

96/5883
MAY 22 0956 40.8s 38.34S 177.65E 66km M=3.7
0.3 0.01 0.01 3
Rsd 0.2s 23ph/21stn Dmin 46km Az.gap 71°
Corr. 0.281 15M/12stn Msd 0.2 3↑ 2↓

96/5886
MAY 22 1118 02.0s 40.22S 173.63E 145km M=4.2
0.3 0.01 0.01 3
Rsd 0.2s 30ph/24stn Dmin 70km Az.gap 142°
Corr. -0.104 21M/17stn Msd 0.3 7↑ 7↓

96/5890
MAY 22 1356 08.0s 38.70S 175.76E 197km M=3.6
0.4 0.08 0.04 8
Rsd 0.1s 8ph/6stn Dmin 218km Az.gap 343°
Corr. 0.142 5M/5stn Msd 0.2
Poor station coverage.

96/5894
MAY 22 1526 55.5s 38.38S 177.74E 29km M=4.0
0.1 0.01 0.01 2
Rsd 0.3s 27ph/23stn Dmin 37km Az.gap 82°
Corr. 0.149 40M/34stn Msd 0.3 1↑ 1↓

96/5895
MAY 22 1528 07.5s 40.37S 173.47E 179km M=3.6
0.6 0.04 0.03 5
Rsd 0.3s 17ph/11stn Dmin 61km Az.gap 172°
Corr. -0.352 5M/5stn Msd 0.2

96/5918
MAY 23 1226 31.6s 38.89S 176.12E 82km M=3.9
0.3 0.01 0.01 4
Rsd 0.2s 28ph/25stn Dmin 52km Az.gap 79°
Corr. -0.342 22M/19stn Msd 0.2 2↑ 2↓

96/5919
MAY 23 1316 26.9s 36.64S 177.20E 226km M=4.1
0.3 0.04 0.03 3
Rsd 0.1s 12ph/9stn Dmin 145km Az.gap 278°
Corr. -0.614 22M/22stn Msd 0.2

96/5951
MAY 24 1916 13.4s 42.73S 175.03E 33km M=3.8
0.3 0.02 0.01 R
Rsd 0.2s 23ph/15stn Dmin 127km Az.gap 198°
Corr. -0.351 27M/24stn Msd 0.3 3↑ 2↓

96/5956
MAY 24 2122 52.9s 37.96S 175.72E 245km M=3.9
0.8 0.08 0.08 7
Rsd 0.3s 16ph/14stn Dmin 127km Az.gap 221°
Corr. -0.835 18M/18stn Msd 0.2

96/5958
MAY 24 2127 22.1s 37.64S 179.38E 12km M=3.5
0.5 0.03 0.03 R
Rsd 0.2s 6ph/3stn Dmin 96km Az.gap 331°
Corr. -0.132 3M/3stn Msd 0.2

96/5963
MAY 24 2217 23.9s 35.81S 178.12E 152km M=3.9
0.6 0.07 0.06 11
Rsd 0.2s 6ph/4stn Dmin 199km Az.gap 337°
Corr. -0.118 4M/4stn Msd 0.2

96/5968
MAY 25 0606 52.3s 37.94S 176.69E 139km M=3.9
0.4 0.02 0.02 4
Rsd 0.3s 16ph/13stn Dmin 51km Az.gap 160°
Corr. -0.181 17M/15stn Msd 0.2 2↑ 1↓

96/5975
MAY 25 0940 37.3s 36.72S 177.27E 194km M=3.7
0.3 0.02 0.02 2
Rsd 0.1s 5ph/4stn Dmin 134km Az.gap 312°
Corr. -0.471 4M/4stn Msd 0.3

96/5982
MAY 25 1408 39.6s 40.33S 173.43E 179km M=3.9
0.3 0.01 0.01 3
Rsd 0.2s 28ph/23stn Dmin 67km Az.gap 144°
Corr. 0.054 15M/13stn Msd 0.2 1↑

96/5989
MAY 25 2250 32.6s 40.61S 176.45E 44km M=3.7
0.2 0.02 0.02 5
Rsd 0.2s 21ph/17stn Dmin 74km Az.gap 193°
Corr. -0.710 20M/18stn Msd 0.2 1↑

96/6004
MAY 26 1013 02.0s 39.03S 174.96E 218km M=5.8
0.3 0.01 0.01 3
Rsd 0.2s 55ph/42stn Dmin 37km Az.gap 94°
Corr. -0.217 8M/4stn Msd 0.3 15↑ 15↓
Felt southern North Island, maximum intensity MM4.

96/6005
MAY 26 1209 59.3s 47.20S 165.09E 12km M=3.9
0.4 0.03 0.03 R
Rsd 0.2s 12ph/6stn Dmin 234km Az.gap 318°
Corr. 0.032 10M/5stn Msd 0.2

96/6007
MAY 26 1334 55.1s 38.02S 176.01E 180km M=3.6
0.8 0.05 0.03 6
Rsd 0.3s 10ph/8stn Dmin 40km Az.gap 144°
Corr. -0.163 15M/15stn Msd 0.2 1↑

96/6016
MAY 27 0359 35.3s 45.10S 167.35E 105km M=3.6
0.3 0.02 0.02 2
Rsd 0.1s 12ph/6stn Dmin 44km Az.gap 250°
Corr. 0.255 9M/5stn Msd 0.2 2↑ 2↓

96/6017
MAY 27 0555 29.5s 39.78S 176.70E 52km M=4.2
0.1 0.01 0.01 2
Rsd 0.2s 36ph/31stn Dmin 20km Az.gap 100°
Corr. -0.547 8M/4stn Msd 0.3 7↑ 3↓

96/6020
MAY 27 0614 31.0s 38.86S 176.03E 94km M=3.9
0.3 0.01 0.01 3
Rsd 0.2s 25ph/22stn Dmin 45km Az.gap 92°
Corr. 0.176 25M/21stn Msd 0.3 4↑ 1↓

96/6034
MAY 27 1918 03.8s 45.10S 167.41E 88km M=3.9
0.3 0.02 0.01 2
Rsd 0.1s 11ph/6stn Dmin 46km Az.gap 213°
Corr. -0.033 8M/4stn Msd 0.1 1↓

96/6055
MAY 28 1352 56.1s 37.89S 177.64E 29km M=3.6
0.1 0.02 0.01 3
Rsd 0.3s 15ph/12stn Dmin 57km Az.gap 106°
Corr. -0.236 15M/12stn Msd 0.3 1↑ 1↓

96/6064
MAY 28 2224 02.5s 37.97S 176.23E 185km M=4.0
0.4 0.02 0.02 4
Rsd 0.2s 22ph/17stn Dmin 57km Az.gap 97°
Corr. -0.111 23M/19stn Msd 0.3 3↑ 2↓

96/6082
MAY 29 1242 02.9s 40.67S 175.63E 27km M=4.2
0.1 0.01 0.01 2
Rsd 0.3s 34ph/29stn Dmin 5km Az.gap 87°
Corr. -0.449 10M/6stn Msd 0.4 1↑ 3↓
Felt Palmerston North (62) and Pukewhinau (63).

96/6085
MAY 29 1453 12.8s 47.28S 165.96E 5km M=3.9
0.8 0.05 0.05 R
Rsd 0.4s 10ph/5stn Dmin 171km Az.gap 309°
Corr. 0.251 11M/5stn Msd 0.1

96/6098
MAY 30 0316 37.4s 35.81S 177.96E 168km M=4.0
0.6 0.07 0.67 31
Rsd 0.1s 5ph/3stn Dmin 200km Az.gap 352°
Corr. -0.963 3M/3stn Msd 0.2

96/6113
MAY 30 1202 01.0s 37.74S 179.17E 23km M=4.0
0.3 0.01 0.02 1
Rsd 0.1s 16ph/14stn Dmin 78km Az.gap 286°
Corr. 0.168 21M/15stn Msd 0.3 1↓

96/6114
MAY 30 1256 41.1s 38.76S 178.04E 35km M=3.6
0.3 0.03 0.01 2
Rsd 0.2s 8ph/4stn Dmin 16km Az.gap 290°
Corr. -0.449 6M/4stn Msd 0.2 1↑

96/6116
MAY 30 1426 07.2s 37.89S 176.51E 162km M=4.1
0.4 0.02 0.01 3
Rsd 0.2s 18ph/14stn Dmin 67km Az.gap 168°
Corr. -0.232 24M/20stn Msd 0.2 1↑

96/6125
MAY 30 1932 19.9s 42.09S 174.10E 12km M=4.1
0.2 0.02 0.01 R
Rsd 0.3s 17ph/13stn Dmin 59km Az.gap 174°
Corr. -0.678 22M/18stn Msd 0.4 1↑

96/6170
MAY 31 2331 13.9s 40.68S 175.39E 36km M=5.1
0.1 0.01 0.01 2
Rsd 0.2s 37ph/34stn Dmin 16km Az.gap 71°
Corr. -0.162 16M/12stn Msd 0.4 5↑ 5↓
Felt Taumarunui (39) to Christchurch (110), maximum intensity MM4.

96/6171
MAY 31 2334 19.0s 39.23S 177.31E 41km M=3.5
0.3 0.02 0.03 4
Rsd 0.4s 15ph/12stn Dmin 18km Az.gap 164°
Corr. -0.415 10M/8stn Msd 0.3 1↓

96/6177
JUN 01 0538 00.7s 40.38S 173.40E 175km M=4.2
0.4 0.01 0.02 4
Rsd 0.2s 30ph/27stn Dmin 65km Az.gap 142°
Corr. -0.028 20M/15stn Msd 0.3 1↑

96/6182
JUN 01 1228 10.7s 38.28S 176.25E 164km M=3.9
0.9 0.07 0.06 7
Rsd 0.4s 10ph/8stn Dmin 75km Az.gap 210°
Corr. -0.772 7M/5stn Msd 0.3 1↑

96/6186
JUN 01 1508 38.8s 38.23S 175.51E 259km M=3.8
0.5 0.05 0.08 7
Rsd 0.2s 15ph/12stn Dmin 140km Az.gap 231°
Corr. -0.882 7M/7stn Msd 0.3
Poor station coverage.

96/6187
JUN 01 1527 15.4s 40.56S 173.46E 143km M=4.2
0.3 0.01 0.01 3
Rsd 0.2s 33ph/27stn Dmin 47km Az.gap 125°
Corr. 0.101 20M/16stn Msd 0.3 5↑ 5↓

96/6191
JUN 02 0129 56.1s 37.59S 178.33E 49km M=3.8
0.2 0.01 0.01 1
Rsd 0.1s 7ph/5stn Dmin 2km Az.gap 255°
Corr. 0.293 6M/4stn Msd 0.3 1↑

96/6197
JUN 02 0544 09.6s 37.70S 177.68E 175km M=3.5
2.4 0.17 0.23 11
Rsd 0.7s 6ph/4stn Dmin 80km Az.gap 332°
Corr. -0.103 1M/1stn Msd 0.0
Poor station coverage.

96/6198
JUN 02 0638 22.8s 35.78S 178.50E 256km M=3.9
0.7 0.11 0.10 8
Rsd 0.2s 5ph/3stn Dmin 255km Az.gap 341°
Corr. -0.741 2M/2stn Msd 0.1
Poor station coverage.

96/6205
JUN 02 1219 50.3s 37.50S 177.05E 177km M=3.7
0.8 0.05 0.03 7
Rsd 0.3s 11ph/10stn Dmin 85km Az.gap 229°
Corr. -0.075 9M/8stn Msd 0.3 1↑

96/6220
JUN 03 0001 37.3s 42.41S 173.80E 34km M=4.5
0.3 0.01 0.03 5
Rsd 0.1s 18ph/12stn Dmin 138km Az.gap 158°
Corr. -0.336 18M/15stn Msd 0.3 8↑ 2↓

96/6223
JUN 03 0148 53.0s 37.64S 177.41E 69km M=3.8
0.2 0.01 0.01 2
Rsd 0.2s 27ph/23stn Dmin 23km Az.gap 144°
Corr. 0.018 18M/15stn Msd 0.2 1↑ 1↓

96/6229
JUN 03 0755 58.9s 42.97S 171.90E 12km M=4.5
0.1 0.01 0.01 R
Rsd 0.2s 19ph/14stn Dmin 102km Az.gap 122°
Corr. -0.338 12M/7stn Msd 0.1 1↓
Felt Christchurch (110).

96/6230
JUN 03 0924 12.8s 37.70S 179.39E 12km M=3.7
1.6 0.06 0.10 R
Rsd 0.7s 6ph/5stn Dmin 97km Az.gap 297°
Corr. -0.031 4M/4stn Msd 0.4

96/6247
JUN 03 2219 41.2s 37.78S 176.38E 183km M=3.6
1.2 0.17 0.16 25
Rsd 0.4s 8ph/5stn Dmin 164km Az.gap 291°
Corr. -0.918 3M/3stn Msd 0.1
Poor station coverage.

96/6248
JUN 03 2241 01.0s 37.52S 179.40E 12km M=3.8
0.3 0.02 0.02 R
Rsd 0.1s 9ph/7stn Dmin 97km Az.gap 291°
Corr. 0.280 4M/4stn Msd 0.4 1↓

96/6251
JUN 04 0105 08.5s 41.20S 173.84E 64km M=3.7
0.2 0.02 0.01 3
Rsd 0.2s 25ph/19stn Dmin 28km Az.gap 80°
Corr. 0.289 13M/11stn Msd 0.1 3↑ 1↓

96/6253
JUN 04 0339 29.1s 37.00S 176.91E 191km M=3.7
1.6 0.11 0.20 27
Rsd 0.5s 10ph/7stn Dmin 140km Az.gap 284°
Corr. -0.706 13M/13stn Msd 0.4
Poor station coverage.

96/6258
JUN 04 0747 55.9s 37.55S 179.33E 12km M=3.7
0.3 0.02 0.02 R
Rsd 0.1s 11ph/8stn Dmin 91km Az.gap 292°
Corr. 0.050 10M/8stn Msd 0.2

96/6259
JUN 04 0758 41.5s 37.52S 179.41E 12km M=3.9
0.2 0.01 0.01 R
Rsd 0.1s 13ph/10stn Dmin 98km Az.gap 285°
Corr. 0.079 17M/15stn Msd 0.4

96/6260
JUN 04 0807 01.4s 37.55S 179.40E 12km M=4.2
0.3 0.02 0.02 R
Rsd 0.1s 18ph/15stn Dmin 98km Az.gap 286°
Corr. 0.133 37M/32stn Msd 0.2

96/6261
JUN 04 0955 16.9s 37.98S 176.31E 154km M=3.8
0.3 0.01 0.02 3
Rsd 0.2s 18ph/13stn Dmin 76km Az.gap 114°
Corr. -0.101 16M/16stn Msd 0.3 1↑

96/6281
JUN 04 1930 14.5s 35.67S 179.30W 170km M=4.2
1.0 0.05 0.08 17
Rsd 0.3s 9ph/8stn Dmin 303km Az.gap 321°
Corr. -0.088 3M/3stn Msd 0.3

96/6347
JUN 05 2231 00.3s 37.22S 179.19E 12km M=3.6
1.4 0.10 0.10 R
Rsd 0.5s 6ph/4stn Dmin 90km Az.gap 331°
Corr. -0.383 5M/4stn Msd 0.3

96/6349
JUN 05 2251 57.0s 37.37S 177.40E 117km M=3.7
0.6 0.05 0.04 4
Rsd 0.2s 10ph/8stn Dmin 84km Az.gap 265°
Corr. -0.787 6M/6stn Msd 0.2 1↓

96/6358
JUN 06 0711 16.1s 35.88S 179.66E 137km M=4.1
0.5 0.05 0.05 18
Rsd 0.2s 11ph/10stn Dmin 226km Az.gap 311°
Corr. 0.537 6M/6stn Msd 0.4

96/6368
JUN 06 1024 31.9s 45.19S 167.32E 70km M=4.0
0.3 0.02 0.01 2
Rsd 0.2s 13ph/8stn Dmin 34km Az.gap 201°
Corr. -0.217 8M/4stn Msd 0.3 1↓

96/6401
JUN 07 0544 26.8s 38.26S 175.89E 136km M=3.6
1.0 0.06 0.03 7
Rsd 0.3s 15ph/13stn Dmin 88km Az.gap 245°
Corr. -0.647 15M/14stn Msd 0.2 1↓

96/6403
JUN 07 0622 13.6s 40.90S 172.70E 5km M=3.8
0.2 0.03 0.01 R
Rsd 0.2s 17ph/14stn Dmin 16km Az.gap 91°
Corr. 0.820 30M/24stn Msd 0.2 1↑ 1↓
Felt Golden Bay and Takaka (72) probably the largest of several felt during the next 10 days.

96/6420
JUN 07 1704 57.0s 38.29S 176.08E 152km M=3.8
0.3 0.02 0.01 2
Rsd 0.2s 17ph/12stn Dmin 90km Az.gap 233°
Corr. -0.484 18M/18stn Msd 0.3

96/6423
JUN 07 1812 58.0s 41.44S 172.20E 5km M=4.3
0.1 0.01 0.01 R
Rsd 0.1s 16ph/13stn Dmin 47km Az.gap 154°
Corr. -0.705 13M/8stn Msd 0.3 1↑
Felt Westport (79).

96/6428
JUN 07 2010 37.2s 36.59S 177.43E 5km M=3.6
0.6 0.04 0.02 R
Rsd 0.2s 6ph/4stn Dmin 107km Az.gap 264°
Corr. 0.795 5M/3stn Msd 0.6

96/6441
JUN 08 0114 07.4s 37.62S 179.33E 12km M=3.7
0.4 0.02 0.02 R
Rsd 0.1s 17ph/15stn Dmin 91km Az.gap 290°
Corr. 0.445 16M/13stn Msd 0.3

96/6462
JUN 08 0933 49.2s 36.71S 177.47E 231km M=3.5
0.4 0.05 0.04 2
Rsd 0.1s 6ph/4stn Dmin 175km Az.gap 327°
Corr. -0.536 2M/2stn Msd 0.0 1↑
Poor station coverage.

96/6465
JUN 08 1207 22.2s 40.94S 172.82E 227km M=3.5
0.5 0.03 0.03 3
Rsd 0.2s 15ph/11stn Dmin 28km Az.gap 138°
Corr. -0.267 11M/11stn Msd 0.2 2↑ 1↓

96/6472
JUN 08 1520 10.9s 37.77S 176.72E 137km M=3.5
0.1 0.01 0.01 1
Rsd 0.0s 5ph/3stn Dmin 64km Az.gap 295°
Corr. -0.442 3M/3stn Msd 0.2 1↑

96/6513
JUN 09 0019 23.1s 38.93S 175.55E 143km M=3.7
0.8 0.02 0.03 7
Rsd 0.1s 6ph/5stn Dmin 28km Az.gap 301°
Corr. -0.196 3M/3stn Msd 0.7 1↑

96/6514
JUN 09 0028 45.7s 39.28S 174.84E 220km M=3.7
0.6 0.02 0.03 5
Rsd 0.2s 20ph/18stn Dmin 58km Az.gap 193°
Corr. -0.534 15M/15stn Msd 0.2

96/6521
JUN 09 1201 33.2s 38.11S 176.13E 150km M=3.8
0.5 0.04 0.02 3
Rsd 0.2s 11ph/8stn Dmin 87km Az.gap 223°
Corr. -0.625 12M/12stn Msd 0.3 1↑ 1↓

96/6532
JUN 09 2158 19.2s 37.55S 177.37E 69km M=3.7
0.4 0.03 0.02 4
Rsd 0.3s 12ph/10stn Dmin 78km Az.gap 197°
Corr. -0.374 5M/3stn Msd 0.1 1↓

96/6533
JUN 09 2238 58.4s 39.11S 175.06E 199km M=3.6
0.2 0.01 0.02 2
Rsd 0.1s 7ph/5stn Dmin 44km Az.gap 293°
Corr. -0.128 2M/2stn Msd 0.1

96/6534
JUN 09 2332 15.4s 45.02S 167.57E 108km M=3.5
0.5 0.03 0.02 4
Rsd 0.3s 13ph/8stn Dmin 59km Az.gap 220°
Corr. -0.197 9M/6stn Msd 0.2 1↓

96/6547
JUN 10 0800 44.9s 36.72S 177.11E 154km M=3.5
0.7 0.08 0.08 6
Rsd 0.2s 10ph/7stn Dmin 144km Az.gap 297°
Corr. -0.893 6M/6stn Msd 0.1

96/6570
JUN 10 2148 01.3s 37.32S 177.37E 5km M=3.9
0.3 0.02 0.01 R
Rsd 0.3s 7ph/4stn Dmin 28km Az.gap 178°
Corr. 0.387 5M/3stn Msd 0.6

96/6618
JUN 12 1115 10.6s 41.03S 173.93E 83km M=4.5
0.2 0.01 0.01 3
Rsd 0.2s 30ph/27stn Dmin 25km Az.gap 132°
Corr. -0.190 18M/14stn Msd 0.4 6↑ 1↓
Felt Wellington (68) to Bainham (72).

96/6627
JUN 13 0135 47.0s 40.77S 172.77E 12km M=4.0
0.6 0.03 0.05 R
Rsd 0.3s 18ph/16stn Dmin 97km Az.gap 168°
Corr. 0.080 26M/21stn Msd 0.2 1↑

96/6632
JUN 13 0505 59.2s 40.46S 175.91E 35km M=4.0
0.1 0.01 0.01 1
Rsd 0.2s 31ph/25stn Dmin 35km Az.gap 82°
Corr. -0.197 17M/15stn Msd 0.2 2↑ 2↓

96/6671
JUN 14 0611 42.5s 37.57S 176.26E 233km M=4.6
1.3 0.04 0.03 10
Rsd 0.1s 23ph/20stn Dmin 18km Az.gap 131°
Corr. -0.525 19M/17stn Msd 0.2 5↑ 1↓

96/6683
JUN 14 1011 48.7s 47.86S 166.39E 12km M=3.9
0.2 0.01 0.01 R
Rsd 0.1s 11ph/7stn Dmin 171km Az.gap 322°
Corr. 0.133 6M/5stn Msd 0.2 1↓

96/6686
JUN 14 1158 49.1s 38.02S 178.12E 72km M=4.1
0.3 0.01 0.02 4
Rsd 0.1s 20ph/18stn Dmin 49km Az.gap 167°
Corr. 0.555 18M/16stn Msd 0.2 1↑

96/6687
JUN 14 1528 06.8s 37.19S 176.86E 256km M=3.9
2.1 0.02 0.04 20
Rsd 0.2s 14ph/14stn Dmin 136km Az.gap 169°
Corr. 0.715 16M/16stn Msd 0.2

96/6710
JUN 15 2239 05.7s 38.77S 175.62E 132km M=3.7
0.5 0.03 0.02 3
Rsd 0.2s 15ph/13stn Dmin 37km Az.gap 209°
Corr. -0.415 19M/17stn Msd 0.2 1↓

96/6712
JUN 16 0056 40.7s 36.29S 179.99E 33km M=5.0
2.8 0.16 0.14 R
Rsd 0.3s 12ph/11stn Dmin 209km Az.gap 296°
Corr. 0.870 23M/17stn Msd 0.2

96/6717
JUN 16 0253 30.5s 38.91S 175.47E 142km M=3.7
0.2 0.02 0.02 2
Rsd 0.1s 17ph/13stn Dmin 12km Az.gap 214°
Corr. 0.644 12M/10stn Msd 0.2 1↑

96/6722
JUN 16 0907 34.6s 37.36S 176.64E 12km M=3.5
1.7 0.13 0.07 R
Rsd 0.8s 5ph/3stn Dmin 149km Az.gap 267°
Corr. -0.644 3M/3stn Msd 0.2
Poor station coverage.

96/6735
JUN 16 2140 17.2s 39.95S 176.52E 25km M=3.6
0.2 0.01 0.02 2
Rsd 0.3s 20ph/16stn Dmin 31km Az.gap 151°
Corr. -0.344 22M/18stn Msd 0.3

96/6756
JUN 17 0754 25.6s 37.34S 177.83E 92km M=4.3
0.4 0.02 0.02 3
Rsd 0.2s 19ph/15stn Dmin 51km Az.gap 196°
Corr. 0.495 21M/19stn Msd 0.3 1↓

96/6827
JUN 17 1940 58.5s 39.19S 175.96E 68km M=3.6
0.3 0.02 0.02 3
Rsd 0.2s 18ph/16stn Dmin 28km Az.gap 113°
Corr. -0.423 14M/12stn Msd 0.2 1↑

96/6865
JUN 18 1126 52.7s 36.93S 177.68E 33km M=3.8
0.5 0.04 0.03 R
Rsd 0.5s 9ph/6stn Dmin 93km Az.gap 215°
Corr. 0.561 11M/7stn Msd 0.3 1↑

96/6872
JUN 18 1433 11.5s 36.94S 178.66W 33km M=3.9
1.0 0.09 0.06 R
Rsd 0.3s 8ph/4stn Dmin 279km Az.gap 335°
Corr. -0.257 4M/4stn Msd 0.2

96/6879
JUN 18 1631 27.6s 37.51S 177.21E 135km M=3.9
0.3 0.02 0.02 3
Rsd 0.2s 11ph/9stn Dmin 84km Az.gap 234°
Corr. -0.652 20M/18stn Msd 0.2 1↓

96/6889
JUN 18 2006 19.1s 42.53S 173.74E 24km M=4.2
0.2 0.01 0.02 2
Rsd 0.2s 21ph/17stn Dmin 21km Az.gap 165°
Corr. -0.877 9M/5stn Msd 0.1 2↑ 3↓
Felt Kaikoura (90).

96/6890
JUN 18 2007 59.2s 38.43S 177.94E 66km M=4.7
0.3 0.01 0.02 3
Rsd 0.2s 23ph/21stn Dmin 23km Az.gap 140°
Corr. 0.451 23M/17stn Msd 0.2 3↑ 1↓
Felt Ormond (44) MM4 and Gisborne (45).

96/6909
JUN 19 0705 55.3s 35.67S 179.28E 12km M=3.6
0.3 0.02 0.03 R
Rsd 0.1s 6ph/3stn Dmin 231km Az.gap 345°
Corr. -0.589 3M/3stn Msd 0.3

96/6911
JUN 19 0847 31.5s 37.42S 176.81E 171km M=3.7
0.3 0.03 0.03 3
Rsd 0.1s 16ph/11stn Dmin 97km Az.gap 247°
Corr. -0.554 17M/17stn Msd 0.2

96/6929
JUN 19 2225 28.6s 39.53S 176.83E 42km M=3.5
0.3 0.02 0.02 3
Rsd 0.4s 20ph/15stn Dmin 1km Az.gap 116°
Corr. -0.542 6M/5stn Msd 0.4 3↑ 1↓

96/6950
JUN 20 1509 08.7s 38.17S 176.30E 153km M=4.4
0.5 0.02 0.02 4
Rsd 0.3s 27ph/23stn Dmin 9km Az.gap 82°
Corr. 0.103 24M/19stn Msd 0.3 2↑

96/6951
JUN 20 1730 11.0s 45.19S 167.37E 75km M=5.1
0.3 0.02 0.01 3
Rsd 0.2s 14ph/9stn Dmin 35km Az.gap 183°
Corr. 0.119 10M/5stn Msd 0.3 3↑ 4↓
Felt Fiordland, Queenstown (132) and Dunedin (144), maximum intensity MM4.

96/6971
JUN 21 0817 34.4s 38.10S 175.93E 153km M=3.7
0.6 0.04 0.04 5
Rsd 0.3s 12ph/9stn Dmin 105km Az.gap 255°
Corr. -0.466 18M/18stn Msd 0.3 1↑ 2↓

96/6981
JUN 21 2201 53.3s 38.72S 175.80E 179km M=3.5
0.5 0.09 0.16 13
Rsd 0.2s 11ph/8stn Dmin 119km Az.gap 292°
Corr. -0.938 6M/5stn Msd 0.2
Poor station coverage.

96/6999
JUN 22 2101 30.8s 38.63S 175.73E 120km M=4.6
0.2 0.01 0.01 2
Rsd 0.2s 33ph/26stn Dmin 45km Az.gap 113°
Corr. -0.501 26M/20stn Msd 0.2 2↑ 2↓

96/7003
JUN 22 2246 05.2s 36.84S 177.62E 136km M=4.7
0.4 0.04 0.04 3
Rsd 0.1s 17ph/13stn Dmin 85km Az.gap 242°
Corr. 0.609 8M/4stn Msd 0.1

96/7005
JUN 23 0118 56.4s 36.95S 177.42E 140km M=4.3
0.4 0.03 0.04 5
Rsd 0.1s 8ph/6stn Dmin 148km Az.gap 315°
Corr. 0.051 18M/14stn Msd 0.3 1↑

96/7021
JUN 23 2052 59.0s 41.40S 172.74E 182km M=4.0
0.3 0.02 0.02 3
Rsd 0.2s 30ph/21stn Dmin 92km Az.gap 170°
Corr. -0.757 16M/13stn Msd 0.2 1↑

96/7035
JUN 24 0737 25.1s 38.74S 179.15W 33km M=3.8
1.1 0.06 0.07 R
Rsd 0.5s 9ph/5stn Dmin 331km Az.gap 321°
Corr. 0.018 8M/7stn Msd 0.2
Unreliable location, poor station coverage.

96/7038
JUN 24 1415 50.3s 40.22S 173.64E 166km M=4.8
0.4 0.01 0.02 4
Rsd 0.2s 34ph/29stn Dmin 69km Az.gap 146°
Corr. 0.197 8M/4stn Msd 0.2 11↑ 7↓

96/7059
JUN 25 1147 43.7s 37.24S 176.72E 253km M=4.7
0.7 0.06 0.07 6
Rsd 0.2s 20ph/18stn Dmin 52km Az.gap 187°
Corr. 0.533 26M/21stn Msd 0.2 1↑

96/7069
JUN 26 0000 06.6s 41.71S 172.26E 95km M=3.5
0.3 0.01 0.02 4
Rsd 0.2s 15ph/11stn Dmin 101km Az.gap 148°
Corr. -0.149 9M/9stn Msd 0.2 3↑ 1↓

96/7071
JUN 26 0059 07.2s 41.33S 173.00E 112km M=3.6
0.5 0.02 0.02 5
Rsd 0.3s 23ph/18stn Dmin 68km Az.gap 121°
Corr. -0.101 13M/12stn Msd 0.2 1↑

96/7094
JUN 27 0334 39.7s 38.43S 177.50E 78km M=5.3
0.3 0.01 0.01 3
Rsd 0.2s 17ph/12stn Dmin 39km Az.gap 78°
Corr. -0.142 19M/14stn Msd 0.3 4↑ 5↓
Felt Bay of Plenty to Taupo, maximum intensity MM4.

96/7098
JUN 27 0557 18.4s 45.29S 165.82E 5km M=4.0
0.5 0.02 0.03 R
Rsd 0.2s 11ph/7stn Dmin 107km Az.gap 275°
Corr. -0.050 8M/4stn Msd 0.2 1↓

96/7118
JUN 27 2330 20.5s 39.23S 177.86E 52km M=3.6
0.3 0.01 0.02 3
Rsd 0.2s 18ph/17stn Dmin 5km Az.gap 198°
Corr. -0.620 17M/14stn Msd 0.2 1↓

96/7121
JUN 28 0013 44.0s 45.88S 166.91E 88km M=3.5
0.3 0.01 0.02 2
Rsd 0.1s 10ph/6stn Dmin 49km Az.gap 243°
Corr. 0.100 9M/5stn Msd 0.2 1↑ 1↓

96/7124
JUN 28 0135 57.7s 37.97S 175.78E 250km M=3.9
1.5 0.11 0.13 13
Rsd 0.5s 17ph/14stn Dmin 121km Az.gap 246°
Corr. -0.740 15M/13stn Msd 0.3

96/7135
JUN 28 1037 16.5s 39.11S 174.92E 23km M=4.7
0.1 0.01 0.01 1
Rsd 0.1s 30ph/28stn Dmin 42km Az.gap 99°
Corr. -0.414 17M/9stn Msd 0.2 2↑ 5↓
Felt Raglan (23) to Sanson (61), maximum intensity MM5 at Uruti (38).

96/7144
JUN 28 1544 22.4s 42.49S 175.55E 12km M=3.5
0.5 0.03 0.03 R
Rsd 0.2s 17ph/10stn Dmin 121km Az.gap 215°
Corr. -0.762 24M/20stn Msd 0.3 1↑

96/7146
JUN 28 1821 27.1s 36.42S 177.51E 224km M=3.6
0.9 0.09 0.07 8
Rsd 0.3s 5ph/3stn Dmin 207km Az.gap 330°
Corr. -0.228 2M/2stn Msd 0.1 1↑
Poor station coverage.

96/7149
JUN 28 2035 03.9s 37.62S 176.17E 166km M=3.9
0.2 0.03 0.02 2
Rsd 0.1s 14ph/10stn Dmin 109km Az.gap 247°
Corr. -0.791 17M/15stn Msd 0.2 1↑

96/7162
JUN 29 1004 39.3s 36.73S 177.05E 197km M=3.7
1.0 0.12 0.09 9
Rsd 0.3s 6ph/3stn Dmin 147km Az.gap 313°
Corr. -0.414 3M/3stn Msd 0.4

96/7180
JUN 30 1326 26.5s 37.32S 177.22E 138km M=3.6
0.1 0.01 0.01 1
Rsd 0.0s 5ph/3stn Dmin 101km Az.gap 283°
Corr. -0.735 3M/3stn Msd 0.2

96/7183
JUN 30 1732 48.4s 38.18S 175.88E 260km M=3.6
2.3 0.17 0.21 19
Rsd 0.9s 9ph/7stn Dmin 108km Az.gap 253°
Corr. -0.816 7M/7stn Msd 0.1
Poor station coverage.

96/7184
JUN 30 1752 16.8s 36.30S 179.32E 12km M=4.0
1.5 0.08 0.09 R
Rsd 0.6s 6ph/4stn Dmin 171km Az.gap 303°
Corr. 0.524 8M/6stn Msd 0.1

96/7190
JUL 01 0007 55.8s 37.64S 177.24E 123km M=3.8
0.2 0.01 0.01 1
Rsd 0.1s 5ph/3stn Dmin 69km Az.gap 258°
Corr. -0.627 3M/3stn Msd 0.1 1↑ 1↓

96/7193
JUL 01 0641 14.0s 40.16S 176.72E 52km M=4.8
0.2 0.01 0.01 4
Rsd 0.2s 39ph/34stn Dmin 56km Az.gap 169°
Corr. -0.497 8M/4stn Msd 0.4 1↑
Felt Hawkes Bay (52,60) MM4.

96/7216
JUL 01 2323 21.6s 38.86S 177.00E 64km M=3.7
0.2 0.01 0.01 2
Rsd 0.2s 25ph/20stn Dmin 5km Az.gap 42°
Corr. -0.200 21M/17stn Msd 0.3 4↑ 2↓

96/7218
JUL 02 0037 59.9s 43.99S 169.60E 5km M=3.5
0.1 0.00 0.01 R
Rsd 0.1s 13ph/8stn Dmin 40km Az.gap 84°
Corr. -0.103 10M/8stn Msd 0.3 1↑

96/7223
JUL 02 0250 10.2s 40.76S 172.35E 12km M=3.7
0.4 0.02 0.02 R
Rsd 0.1s 18ph/12stn Dmin 17km Az.gap 208°
Corr. 0.141 20M/18stn Msd 0.2 1↑

96/7225
JUL 02 0319 58.1s 41.55S 174.50E 12km M=3.5
0.1 0.01 0.01 R
Rsd 0.2s 28ph/19stn Dmin 33km Az.gap 142°
Corr. -0.510 25M/20stn Msd 0.2 4↑ 4↓

96/7230
JUL 02 0946 50.6s 42.07S 174.04E 14km M=4.4
0.3 0.02 0.01 3
Rsd 0.4s 29ph/20stn Dmin 38km Az.gap 154°
Corr. -0.559 16M/8stn Msd 0.3 8↑ 5↓
Felt Ward (90).

96/7233
JUL 02 0957 04.6s 38.60S 176.89E 81km M=4.2
0.3 0.03 0.02 4
Rsd 0.2s 17ph/14stn Dmin 43km Az.gap 111°
Corr. -0.679 18M/14stn Msd 0.3 1↑ 1↓

96/7235
JUL 02 1238 10.3s 38.81S 175.78E 224km M=4.0
1.0 0.05 0.07 8
Rsd 0.2s 12ph/10stn Dmin 30km Az.gap 190°
Corr. -0.768 13M/11stn Msd 0.2 1↑ 1↓

96/7236
JUL 02 1240 10.2s 37.35S 178.23E 52km M=3.6
1.0 0.08 0.05 6
Rsd 0.4s 5ph/3stn Dmin 28km Az.gap 303°
Corr. -0.243 6M/4stn Msd 0.1 1↓

96/7241
JUL 02 1756 47.3s 37.69S 176.35E 200km M=3.6
0.8 0.08 0.12 R
Rsd 0.4s 10ph/6stn Dmin 92km Az.gap 290°
Corr. -0.844 4M/4stn Msd 0.3
Poor station coverage, unreliable location.

96/7244
JUL 02 2121 21.0s 41.30S 172.66E 179km M=3.7
0.4 0.02 0.02 3
Rsd 0.3s 21ph/15stn Dmin 54km Az.gap 130°
Corr. -0.216 8M/7stn Msd 0.2 4↑ 1↓

96/7248
JUL 03 0024 03.8s 39.63S 174.27E 200km M=4.1
0.4 0.01 0.02 3
Rsd 0.2s 34ph/28stn Dmin 43km Az.gap 91°
Corr. -0.224 21M/17stn Msd 0.2 1↓

96/7252
JUL 03 0433 39.7s 40.71S 176.62E 12km M=3.7
0.2 0.01 0.01 R
Rsd 0.2s 22ph/17stn Dmin 88km Az.gap 224°
Corr. -0.566 21M/19stn Msd 0.2 1↑

96/7256
JUL 03 0803 26.4s 37.82S 175.11E 33km M=4.0
0.5 0.03 0.02 R
Rsd 0.2s 14ph/8stn Dmin 182km Az.gap 269°
Corr. -0.632 10M/8stn Msd 0.3 1↑
Unstable solution - poor station coverage.

96/7266
JUL 04 0225 16.0s 38.29S 176.05E 169km M=3.5
1.5 0.08 0.10 13
Rsd 0.7s 10ph/6stn Dmin 93km Az.gap 234°
Corr. -0.400 6M/6stn Msd 0.3

96/7268
JUL 04 0814 10.8s 39.88S 174.17E 127km M=3.7
0.3 0.01 0.02 3
Rsd 0.3s 32ph/25stn Dmin 64km Az.gap 109°
Corr. -0.368 21M/19stn Msd 0.3 6↑ 1↓

96/7270
JUL 04 0954 38.8s 40.75S 174.59E 54km M=3.7
0.1 0.01 0.01 3
Rsd 0.2s 31ph/26stn Dmin 30km Az.gap 72°
Corr. 0.208 19M/16stn Msd 0.2 3↑ 2↓

96/7272
JUL 04 1144 20.4s 39.71S 174.17E 151km M=3.6
0.7 0.02 0.02 6
Rsd 0.3s 22ph/18stn Dmin 46km Az.gap 104°
Corr. 0.007 13M/12stn Msd 0.3 1↓

96/7274
JUL 04 1247 57.6s 40.48S 174.49E 24km M=3.6
0.2 0.01 0.01 3
Rsd 0.3s 31ph/27stn Dmin 56km Az.gap 82°
Corr. 0.062 30M/26stn Msd 0.2 1↓

96/7286
JUL 04 2203 34.9s 45.06S 167.50E 95km M=4.0
0.6 0.03 0.03 5
Rsd 0.4s 11ph/7stn Dmin 53km Az.gap 187°
Corr. -0.169 12M/6stn Msd 0.2

96/7291
JUL 05 0210 26.6s 43.11S 171.45E 5km M=3.5
0.1 0.01 0.01 R
Rsd 0.3s 11ph/8stn Dmin 58km Az.gap 107°
Corr. -0.212 19M/14stn Msd 0.2 1↑

96/7294
JUL 05 0347 11.2s 36.32S 177.97E 208km M=4.2
1.9 0.17 0.21 16
Rsd 0.7s 7ph/4stn Dmin 145km Az.gap 325°
Corr. -0.758 4M/4stn Msd 0.3

96/7300
JUL 05 1005 06.9s 38.16S 175.34E 125km M=3.8
0.7 0.05 0.07 12
Rsd 0.4s 15ph/12stn Dmin 116km Az.gap 228°
Corr. -0.765 7M/5stn Msd 0.3 1↑

96/7306
JUL 05 1312 46.3s 39.21S 175.38E 0km M=3.8
0.3 0.01 0.01 2
Rsd 0.2s 30ph/24stn Dmin 14km Az.gap 93°
Corr. 0.626 27M/23stn Msd 0.3 4↑ 3↓

96/7315
JUL 05 1754 00.0s 37.68S 176.29E 200km M=3.9
0.3 0.02 0.02 3
Rsd 0.2s 13ph/8stn Dmin 97km Az.gap 130°
Corr. 0.227 22M/19stn Msd 0.2 1↑

96/7325
JUL 05 2200 54.4s 38.47S 175.98E 130km M=3.7
0.8 0.04 0.04 7
Rsd 0.4s 10ph/6stn Dmin 82km Az.gap 219°
Corr. -0.435 11M/11stn Msd 0.2 2↑ 1↓

96/7373
JUL 07 1004 32.5s 35.82S 178.27E 225km M=3.7
0.9 0.14 0.17 8
Rsd 0.3s 8ph/6stn Dmin 197km Az.gap 332°
Corr. -0.897 5M/5stn Msd 0.2

96/7390
JUL 07 1241 44.0s 38.12S 176.71E 173km M=3.6
0.5 0.05 0.04 4
Rsd 0.2s 12ph/11stn Dmin 3km Az.gap 141°
Corr. -0.792 13M/12stn Msd 0.1 2↑ 1↓

96/7393
JUL 07 1329 31.8s 36.67S 177.39E 170km M=4.0
0.4 0.06 0.04 6
Rsd 0.2s 10ph/8stn Dmin 131km Az.gap 281°
Corr. -0.750 13M/13stn Msd 0.2

96/7406
JUL 07 1625 36.4s 38.32S 176.02E 197km M=4.1
0.4 0.09 0.06 3
Rsd 0.2s 15ph/12stn Dmin 68km Az.gap 179°
Corr. -0.927 18M/14stn Msd 0.1 1↑ 1↓

96/7495
JUL 08 1326 42.3s 39.83S 174.02E 190km M=3.6
0.5 0.02 0.03 5
Rsd 0.4s 26ph/20stn Dmin 55km Az.gap 124°
Corr. -0.357 10M/10stn Msd 0.2

96/7567
JUL 09 0641 20.4s 40.14S 174.30E 100km M=4.2
0.2 0.00 0.01 3
Rsd 0.2s 32ph/26stn Dmin 66km Az.gap 97°
Corr. 0.133 8M/5stn Msd 0.5 5↑ 3↓

96/7572
JUL 09 0812 27.2s 38.07S 175.89E 198km M=3.6
0.6 0.05 0.05 4
Rsd 0.2s 15ph/12stn Dmin 109km Az.gap 253°
Corr. -0.659 12M/12stn Msd 0.2 1↑

96/7579
JUL 09 1118 52.3s 36.64S 177.47E 191km M=3.7
0.5 0.05 0.04 6
Rsd 0.2s 10ph/6stn Dmin 173km Az.gap 308°
Corr. -0.368 7M/6stn Msd 0.4

96/7601
JUL 09 2136 22.4s 41.80S 172.71E 82km M=5.0
0.3 0.01 0.02 3
Rsd 0.2s 26ph/19stn Dmin 16km Az.gap 120°
Corr. -0.390 10M/5stn Msd 0.2 5↑ 4↓
Felt Nelson district, Blenheim and Wellington.

96/7608
JUL 10 0028 16.8s 38.80S 174.61E 13km M=3.7
0.1 0.01 0.00 2
Rsd 0.1s 25ph/22stn Dmin 69km Az.gap 125°
Corr. -0.385 27M/23stn Msd 0.3 1↓

96/7612
JUL 10 0333 58.1s 39.12S 174.94E 228km M=4.9
0.4 0.02 0.02 3
Rsd 0.2s 37ph/31stn Dmin 40km Az.gap 87°
Corr. -0.478 10M/5stn Msd 0.3 11↑ 11↓

96/7644
JUL 10 1817 54.9s 38.80S 178.77E 29km M=3.8
0.4 0.02 0.03 3
Rsd 0.1s 11ph/9stn Dmin 67km Az.gap 238°
Corr. -0.298 29M/23stn Msd 0.3 1↓

96/7648
JUL 10 2049 13.4s 41.28S 172.90E 126km M=3.8
0.4 0.01 0.02 3
Rsd 0.2s 27ph/19stn Dmin 54km Az.gap 125°
Corr. -0.092 16M/12stn Msd 0.2 5↑ 6↓

96/7653
JUL 11 0259 04.0s 36.05S 177.68E 204km M=4.1
0.4 0.05 0.05 7
Rsd 0.2s 6ph/4stn Dmin 180km Az.gap 331°
Corr. -0.435 7M/5stn Msd 0.3

96/7654
JUL 11 0402 03.9s 37.14S 177.63E 115km M=3.7
1.3 0.10 0.06 10
Rsd 0.4s 6ph/4stn Dmin 78km Az.gap 291°
Corr. -0.528 3M/3stn Msd 0.3 1↓

96/7657
JUL 11 1027 20.2s 36.92S 177.34E 188km M=4.4
0.5 0.04 0.02 5
Rsd 0.2s 9ph/6stn Dmin 113km Az.gap 257°
Corr. 0.017 19M/14stn Msd 0.4 1↑

96/7666
JUL 11 1251 20.5s 39.01S 175.70E 108km M=3.6
0.3 0.02 0.02 3
Rsd 0.3s 22ph/15stn Dmin 20km Az.gap 104°
Corr. -0.523 16M/12stn Msd 0.4 1↓

96/7691
JUL 12 0918 17.9s 38.19S 176.00E 182km M=3.6
0.5 0.02 0.02 4
Rsd 0.2s 11ph/6stn Dmin 50km Az.gap 141°
Corr. 0.040 13M/11stn Msd 0.2

96/7692
JUL 12 0930 18.1s 40.71S 174.03E 82km M=3.6
0.2 0.01 0.01 3
Rsd 0.2s 28ph/25stn Dmin 14km Az.gap 92°
Corr. 0.331 15M/13stn Msd 0.2 5↑ 5↓

96/7696
JUL 12 1033 52.5s 39.24S 176.30E 47km M=3.5
0.2 0.01 0.01 3
Rsd 0.2s 21ph/19stn Dmin 43km Az.gap 142°
Corr. -0.152 15M/11stn Msd 0.2 1↑ 2↓

96/7753
JUL 14 0007 33.5s 36.00S 178.41E 234km M=3.9
1.1 0.16 0.15 9
Rsd 0.2s 10ph/8stn Dmin 231km Az.gap 331°
Corr. -0.766 5M/4stn Msd 0.4

96/7766
JUL 14 1035 33.8s 38.63S 175.81E 158km M=3.7
0.5 0.04 0.03 4
Rsd 0.3s 17ph/12stn Dmin 59km Az.gap 205°
Corr. -0.808 15M/12stn Msd 0.3 1↑

96/7777
JUL 15 0421 41.2s 36.83S 177.62E 147km M=3.7
0.2 0.02 0.02 3
Rsd 0.1s 8ph/5stn Dmin 105km Az.gap 294°
Corr. -0.480 10M/8stn Msd 0.4 1↑ 1↓

96/7791
JUL 15 0957 53.2s 38.90S 175.36E 204km M=4.0
0.6 0.03 0.03 5
Rsd 0.2s 14ph/9stn Dmin 37km Az.gap 114°
Corr. -0.422 16M/13stn Msd 0.2 1↑

96/7802
JUL 15 1922 16.5s 38.83S 175.31E 263km M=3.8
0.7 0.02 0.03 6
Rsd 0.2s 17ph/15stn Dmin 46km Az.gap 179°
Corr. -0.234 8M/7stn Msd 0.2

96/7803
JUL 15 2100 49.8s 45.21S 167.39E 75km M=4.1
0.5 0.02 0.02 4
Rsd 0.2s 10ph/7stn Dmin 34km Az.gap 183°
Corr. -0.379 11M/7stn Msd 0.2 2↑ 2↓

96/7805
JUL 15 2228 27.6s 37.12S 177.09E 213km M=3.7
1.3 0.13 0.13 11
Rsd 0.6s 7ph/5stn Dmin 120km Az.gap 279°
Corr. -0.673 4M/3stn Msd 0.3

96/7828
JUL 16 1413 57.6s 37.81S 178.67E 22km M=3.6
0.4 0.01 0.03 2
Rsd 0.2s 6ph/4stn Dmin 40km Az.gap 266°
Corr. 0.036 6M/4stn Msd 0.2 1↑

96/7840
JUL 16 1615 45.3s 37.82S 178.47E 21km M=4.2
0.5 0.01 0.05 2
Rsd 0.3s 13ph/11stn Dmin 28km Az.gap 234°
Corr. -0.174 8M/4stn Msd 0.2 1↑

96/7846
JUL 16 2100 42.1s 37.54S 176.42E 208km M=4.1
0.5 0.03 0.02 5
Rsd 0.2s 11ph/9stn Dmin 81km Az.gap 128°
Corr. 0.433 20M/14stn Msd 0.3 4↑ 1↓

96/7913
JUL 18 1924 05.6s 37.60S 176.45E 202km M=4.4
0.7 0.04 0.03 6
Rsd 0.2s 23ph/18stn Dmin 62km Az.gap 118°
Corr. -0.038 22M/16stn Msd 0.2 1↑

96/7994
JUL 20 0205 54.4s 36.35S 179.35E 33km M=4.0
0.9 0.07 0.08 R
Rsd 0.3s 6ph/4stn Dmin 167km Az.gap 342°
Corr. -0.351 6M/4stn Msd 0.3

96/7998
JUL 20 0305 16.3s 41.26S 172.59E 208km M=3.6
0.3 0.01 0.02 2
Rsd 0.1s 20ph/16stn Dmin 49km Az.gap 165°
Corr. 0.027 10M/10stn Msd 0.2 1↑

96/8030
JUL 20 1533 38.4s 40.40S 175.83E 43km M=3.7
0.1 0.01 0.01 2
Rsd 0.2s 31ph/28stn Dmin 36km Az.gap 107°
Corr. -0.045 18M/15stn Msd 0.3 5↑ 4↓

96/8044
JUL 20 1814 53.8s 37.38S 177.35E 5km M=3.6
0.3 0.03 0.02 R
Rsd 0.5s 9ph/7stn Dmin 22km Az.gap 172°
Corr. 0.192 11M/5stn Msd 0.3 1↑

96/8098
JUL 21 0741 56.4s 39.55S 174.18E 210km M=3.8
0.5 0.02 0.03 4
Rsd 0.2s 24ph/18stn Dmin 70km Az.gap 161°
Corr. -0.080 13M/13stn Msd 0.4 1↑

96/8110
JUL 21 1017 09.0s 37.97S 176.50E 5km M=2.8
0.1 0.01 0.00 R
Rsd 0.2s 11ph/7stn Dmin 11km Az.gap 203°
Corr. 0.485 6M/6stn Msd 0.1
Felt Haroharo, Rotoma district and Kawerau (34).

96/8115
JUL 21 1029 14.2s 37.99S 176.49E 5km M=3.6
0.1 0.01 0.00 R
Rsd 0.2s 18ph/11stn Dmin 10km Az.gap 77°
Corr. 0.009 17M/12stn Msd 0.3
Felt Haroharo, Rotoma district and Kawerau (34).

96/8117
JUL 21 1055 05.0s 39.17S 174.80E 215km M=4.1
0.7 0.02 0.02 6
Rsd 0.3s 31ph/26stn Dmin 62km Az.gap 93°
Corr. -0.046 18M/16stn Msd 0.2 1↑ 1↓

96/8124
JUL 21 1427 44.9s 38.00S 176.49E 5km M=3.3
0.1 0.01 0.01 R
Rsd 0.3s 16ph/10stn Dmin 9km Az.gap 76°
Corr. 0.110 13M/9stn Msd 0.2 1↑
Felt Haroharo, Rotoma district and Kawerau (34).

96/8133
JUL 21 1916 22.0s 37.15S 177.50E 89km M=3.8
0.8 0.07 0.05 10
Rsd 0.5s 10ph/5stn Dmin 87km Az.gap 282°
Corr. -0.568 8M/5stn Msd 0.2

96/8144
JUL 21 2233 20.6s 45.94S 164.99E 33km M=3.6
1.7 0.09 0.12 R
Rsd 0.7s 10ph/7stn Dmin 176km Az.gap 307°
Corr. -0.315 5M/5stn Msd 0.3

96/8147
JUL 21 2330 46.1s 38.45S 179.20E 33km M=3.7
0.7 0.03 0.05 R
Rsd 0.4s 9ph/5stn Dmin 93km Az.gap 271°
Corr. 0.200 8M/5stn Msd 0.4 1↑

96/8148
JUL 21 2333 44.6s 38.35S 179.16E 12km M=3.5
0.1 0.00 0.01 R
Rsd 0.0s 4ph/3stn Dmin 85km Az.gap 295°
Corr. -0.118 5M/3stn Msd 0.4 1↑

96/8163
JUL 22 0246 58.4s 37.54S 177.68E 53km M=3.6
0.3 0.02 0.01 5
Rsd 0.2s 6ph/4stn Dmin 55km Az.gap 246°
Corr. -0.542 8M/4stn Msd 0.4 1↓

96/8168
JUL 22 0543 59.3s 36.73S 178.37E 80km M=4.2
0.5 0.03 0.03 4
Rsd 0.2s 13ph/10stn Dmin 96km Az.gap 275°
Corr. 0.733 16M/11stn Msd 0.3 1↓

96/8198
JUL 23 0045 14.5s 39.10S 175.33E 135km M=3.7
0.4 0.01 0.02 3
Rsd 0.1s 20ph/16stn Dmin 22km Az.gap 188°
Corr. 0.002 14M/13stn Msd 0.3

96/8200
JUL 23 0115 20.5s 37.17S 177.41E 12km M=3.7
0.3 0.03 0.02 R
Rsd 0.4s 10ph/6stn Dmin 45km Az.gap 195°
Corr. 0.355 9M/5stn Msd 0.1

96/8249
JUL 24 0840 54.4s 37.61S 176.34E 173km M=3.5
0.6 0.05 0.05 4
Rsd 0.2s 11ph/9stn Dmin 99km Az.gap 281°
Corr. -0.670 5M/5stn Msd 0.2 1↑ 1↓
Poor station coverage.

96/8256
JUL 24 1328 34.2s 39.28S 178.69W 33km M=4.2
0.5 0.04 0.03 R
Rsd 0.2s 11ph/9stn Dmin 293km Az.gap 295°
Corr. 0.130 25M/22stn Msd 0.2

96/8266
JUL 24 1930 37.8s 36.54S 179.46E 12km M=3.6
0.6 0.05 0.05 R
Rsd 0.2s 6ph/4stn Dmin 156km Az.gap 341°
Corr. -0.416 5M/4stn Msd 0.3

96/8269
JUL 24 2105 50.9s 40.54S 173.16E 190km M=3.8
0.4 0.02 0.02 3
Rsd 0.2s 26ph/20stn Dmin 63km Az.gap 148°
Corr. -0.089 14M/12stn Msd 0.2 1↑

96/8272
JUL 24 2353 27.0s 38.11S 175.85E 181km M=3.8
0.0 0.00 0.00 0
Rsd 0.0s 4ph/3stn Dmin 112km Az.gap 329°
Corr. -0.250 4M/3stn Msd 0.4 1↓

96/8281
JUL 25 0700 25.0s 36.55S 176.70E 190km M=4.0
0.7 0.10 0.06 15
Rsd 0.4s 10ph/7stn Dmin 184km Az.gap 283°
Corr. -0.634 15M/13stn Msd 0.3

96/8288
JUL 25 1027 12.4s 42.58S 172.98E 12km M=3.6
0.1 0.01 0.01 R
Rsd 0.2s 22ph/18stn Dmin 50km Az.gap 123°
Corr. -0.513 8M/5stn Msd 0.1 2↑ 3↓

96/8294
JUL 25 1304 52.1s 37.95S 177.54E 61km M=3.6
0.2 0.01 0.01 2
Rsd 0.2s 18ph/12stn Dmin 51km Az.gap 93°
Corr. -0.097 8M/4stn Msd 0.2 1↑ 1↓

96/8308
JUL 26 0416 25.8s 37.42S 179.46E 12km M=3.6
1.5 0.10 0.08 R
Rsd 0.7s 8ph/6stn Dmin 104km Az.gap 319°
Corr. 0.070 8M/5stn Msd 0.1

96/8314
JUL 26 0707 22.3s 37.23S 177.50E 144km M=3.6
0.5 0.05 0.05 4
Rsd 0.2s 9ph/5stn Dmin 81km Az.gap 277°
Corr. -0.801 6M/4stn Msd 0.2

96/8334
JUL 27 0552 20.8s 38.04S 177.15E 74km M=3.9
0.1 0.01 0.01 1
Rsd 0.1s 25ph/18stn Dmin 25km Az.gap 62°
Corr. -0.174 20M/14stn Msd 0.2 1↑

96/8335
JUL 27 0825 51.3s 37.88S 177.55E 49km M=3.7
0.2 0.01 0.01 4
Rsd 0.2s 18ph/11stn Dmin 51km Az.gap 104°
Corr. -0.164 9M/5stn Msd 0.1 1↑ 1↓

96/8339
JUL 27 1200 37.1s 38.76S 175.79E 118km M=3.9
0.3 0.01 0.01 3
Rsd 0.2s 28ph/22stn Dmin 30km Az.gap 62°
Corr. -0.349 19M/16stn Msd 0.2 1↑

96/8346
JUL 27 2040 07.3s 40.95S 172.92E 225km M=3.8
0.4 0.03 0.02 3
Rsd 0.2s 26ph/19stn Dmin 36km Az.gap 114°
Corr. -0.069 12M/12stn Msd 0.2

96/8348
JUL 27 2255 26.0s 37.13S 176.61E 308km M=3.6
0.2 0.03 0.04 2
Rsd 0.1s 11ph/9stn Dmin 133km Az.gap 312°
Corr. -0.806 11M/11stn Msd 0.3
Poor station coverage.

96/8351
JUL 28 0712 26.0s 39.75S 178.70E 33km M=3.9
0.6 0.03 0.04 R
Rsd 0.4s 23ph/16stn Dmin 138km Az.gap 235°
Corr. -0.601 29M/25stn Msd 0.3 1↑

96/8354
JUL 28 0821 04.9s 41.36S 172.41E 5km M=3.5
0.3 0.01 0.02 R
Rsd 0.3s 20ph/12stn Dmin 59km Az.gap 161°
Corr. 0.187 23M/19stn Msd 0.4 1↓

96/8368
JUL 28 2001 32.0s 37.24S 177.20E 180km M=3.5
1.5 0.13 0.11 11
Rsd 0.6s 7ph/5stn Dmin 105km Az.gap 272°
Corr. -0.459 6M/5stn Msd 0.3

96/8370
JUL 28 2321 53.2s 37.57S 179.45E 12km M=3.7
1.1 0.07 0.07 R
Rsd 0.5s 9ph/6stn Dmin 101km Az.gap 293°
Corr. 0.033 10M/6stn Msd 0.2

96/8376
JUL 29 0530 58.1s 38.23S 179.16E 12km M=3.8
0.7 0.04 0.04 R
Rsd 0.5s 9ph/5stn Dmin 81km Az.gap 276°
Corr. 0.203 8M/5stn Msd 0.3 1↑

96/8385
JUL 29 1539 11.1s 40.19S 176.65E 25km M=3.6
0.3 0.01 0.02 3
Rsd 0.2s 26ph/22stn Dmin 60km Az.gap 176°
Corr. -0.487 24M/22stn Msd 0.2

96/8394
JUL 30 0439 51.3s 45.12S 170.52E 12km M=4.0
0.2 0.01 0.02 R
Rsd 0.2s 16ph/10stn Dmin 13km Az.gap 165°
Corr. -0.667 15M/9stn Msd 0.2 1↑ 4↓

96/8397
JUL 30 0558 14.7s 41.86S 174.40E 52km M=3.6
0.1 0.01 0.01 2
Rsd 0.2s 32ph/21stn Dmin 19km Az.gap 152°
Corr. -0.414 16M/11stn Msd 0.2 5↑ 9↓

96/8405
JUL 30 1251 20.9s 37.36S 177.07E 12km M=3.6
0.3 0.02 0.01 R
Rsd 0.1s 10ph/7stn Dmin 112km Az.gap 259°
Corr. -0.343 6M/5stn Msd 0.1 1↑

96/8406
JUL 30 1257 18.3s 39.58S 176.65E 19km M=3.4
0.1 0.01 0.01 2
Rsd 0.3s 20ph/15stn Dmin 16km Az.gap 81°
Corr. -0.003 12M/11stn Msd 0.3 2↑ 1↓
Felt Patoka (52).

96/8409
JUL 30 1512 35.8s 45.15S 167.43E 120km M=3.5
0.4 0.02 0.02 3
Rsd 0.2s 15ph/9stn Dmin 41km Az.gap 186°
Corr. -0.144 8M/6stn Msd 0.1 1↑

96/8418
JUL 30 2137 12.6s 39.78S 174.23E 130km M=3.7
0.4 0.01 0.02 5
Rsd 0.3s 30ph/23stn Dmin 116km Az.gap 149°
Corr. -0.402 13M/12stn Msd 0.2 4↑ 2↓

96/8423
JUL 30 2251 04.7s 37.84S 179.21E 33km M=3.8
0.6 0.03 0.04 R
Rsd 0.3s 10ph/8stn Dmin 85km Az.gap 290°
Corr. 0.176 11M/9stn Msd 0.2 1↑ 1↓

96/8424
JUL 31 0146 00.1s 39.58S 174.15E 187km M=3.6
0.5 0.02 0.02 4
Rsd 0.2s 20ph/16stn Dmin 33km Az.gap 100°
Corr. -0.367 11M/11stn Msd 0.3 3↑ 1↓

96/8434
JUL 31 1006 52.6s 38.07S 176.08E 213km M=4.3
0.6 0.03 0.02 5
Rsd 0.3s 24ph/20stn Dmin 38km Az.gap 122°
Corr. -0.192 20M/17stn Msd 0.3 1↑

96/8438
JUL 31 1929 08.8s 37.97S 178.00E 33km M=3.6
0.4 0.03 0.05 R
Rsd 0.5s 9ph/6stn Dmin 25km Az.gap 179°
Corr. -0.637 7M/5stn Msd 0.3

96/8441
AUG 01 0028 49.2s 36.57S 177.05E 243km M=4.2
0.5 0.06 0.09 9
Rsd 0.2s 12ph/8stn Dmin 159km Az.gap 278°
Corr. -0.782 16M/15stn Msd 0.2

96/8444
AUG 01 0430 33.0s 40.50S 173.51E 145km M=3.6
0.3 0.01 0.01 3
Rsd 0.2s 23ph/17stn Dmin 49km Az.gap 127°
Corr. 0.010 10M/10stn Msd 0.3 1↑ 3↓

96/8449
AUG 01 0832 08.5s 38.66S 175.17E 250km M=4.4
0.7 0.03 0.03 5
Rsd 0.2s 25ph/22stn Dmin 37km Az.gap 130°
Corr. 0.017 23M/20stn Msd 0.2 5↑ 2↓

96/8453
AUG 01 1051 58.6s 37.78S 176.33E 222km M=3.9
0.7 0.03 0.04 7
Rsd 0.2s 13ph/9stn Dmin 66km Az.gap 180°
Corr. -0.146 16M/15stn Msd 0.2

96/8454
AUG 01 1151 45.4s 44.88S 167.48E 115km M=3.8
0.4 0.04 0.02 4
Rsd 0.2s 13ph/8stn Dmin 70km Az.gap 208°
Corr. -0.286 8M/6stn Msd 0.2 1↓

96/8457
AUG 01 1600 42.0s 39.52S 175.95E 48km M=4.2
0.2 0.01 0.01 4
Rsd 0.3s 36ph/32stn Dmin 37km Az.gap 49°
Corr. -0.023 21M/16stn Msd 0.2 3↑ 1↓

96/8463
AUG 01 1947 25.1s 37.10S 177.65E 12km M=4.1
0.9 0.08 0.06 R
Rsd 0.7s 9ph/7stn Dmin 81km Az.gap 202°
Corr. 0.858 8M/5stn Msd 0.2 1↑

96/8473
AUG 02 0405 42.1s 38.66S 175.26E 225km M=4.3
0.4 0.02 0.01 3
Rsd 0.1s 22ph/20stn Dmin 43km Az.gap 85°
Corr. -0.096 22M/19stn Msd 0.3 7↑ 2↓

96/8485
AUG 02 1437 18.7s 38.67S 175.76E 192km M=3.6
0.4 0.01 0.02 4
Rsd 0.1s 14ph/12stn Dmin 58km Az.gap 272°
Corr. -0.007 2M/2stn Msd 0.2

96/8486
AUG 02 1511 13.3s 38.46S 175.97E 160km M=4.1
0.3 0.01 0.01 3
Rsd 0.2s 21ph/16stn Dmin 49km Az.gap 92°
Corr. 0.228 23M/19stn Msd 0.3 1↑

96/8498
AUG 02 1902 09.4s 38.48S 176.34E 205km M=3.5
0.2 0.04 0.07 4
Rsd 0.0s 11ph/10stn Dmin 135km Az.gap 327°
Corr. -0.942 9M/9stn Msd 0.3
Very poor station coverage.

96/8517
AUG 03 1633 09.6s 40.62S 173.12E 227km M=4.0
0.3 0.01 0.01 2
Rsd 0.2s 33ph/24stn Dmin 55km Az.gap 138°
Corr. 0.106 18M/16stn Msd 0.2 8↑ 4↓

96/8529
AUG 04 1408 26.4s 45.30S 167.28E 109km M=3.6
0.6 0.05 0.03 4
Rsd 0.3s 11ph/7stn Dmin 21km Az.gap 220°
Corr. -0.220 6M/5stn Msd 0.3 1↑ 2↓

96/8532
AUG 04 1711 06.1s 37.47S 178.38E 289km M=4.0
1.0 0.21 0.96 9
Rsd 0.2s 6ph/3stn Dmin 16km Az.gap 342°
Corr. -0.848 3M/3stn Msd 0.0

96/8536
AUG 04 2142 26.1s 37.22S 177.95E 114km M=3.8
0.5 0.04 0.07 6
Rsd 0.2s 11ph/7stn Dmin 52km Az.gap 290°
Corr. -0.574 9M/7stn Msd 0.2 1↓

96/8545
AUG 05 1006 42.2s 37.92S 176.43E 187km M=5.1
0.4 0.01 0.01 3
Rsd 0.2s 36ph/30stn Dmin 23km Az.gap 83°
Corr. 0.205 8M/4stn Msd 0.3 1↑ 3↓

96/8555
AUG 05 1650 46.8s 43.00S 172.79E 28km M=3.8
0.2 0.01 0.01 2
Rsd 0.1s 21ph/13stn Dmin 49km Az.gap 138°
Corr. 0.182 11M/7stn Msd 0.2 3↑ 2↓
Felt Waikuku Beach (102).

96/8558
AUG 05 1855 12.9s 38.81S 175.18E 217km M=4.4
0.4 0.02 0.01 3
Rsd 0.2s 29ph/24stn Dmin 32km Az.gap 69°
Corr. -0.163 23M/20stn Msd 0.2 14↑ 6↓

96/8563
AUG 05 2030 52.8s 39.03S 178.65E 12km M=4.0
0.4 0.01 0.03 R
Rsd 0.2s 16ph/14stn Dmin 69km Az.gap 233°
Corr. -0.513 32M/27stn Msd 0.2 3↑ 1↓

96/8564
AUG 05 2256 22.2s 39.05S 178.56E 33km M=4.0
0.2 0.01 0.02 R
Rsd 0.1s 16ph/14stn Dmin 60km Az.gap 230°
Corr. -0.544 8M/4stn Msd 0.2 1↑

96/8567
AUG 06 0226 37.1s 44.21S 168.44E 5km M=4.1
0.3 0.02 0.01 R
Rsd 0.2s 12ph/8stn Dmin 121km Az.gap 188°
Corr. -0.707 8M/4stn Msd 0.1 1↑

96/8581
AUG 06 1129 43.2s 44.89S 167.68E 75km M=4.3
0.4 0.03 0.02 6
Rsd 0.2s 11ph/7stn Dmin 77km Az.gap 180°
Corr. -0.069 12M/6stn Msd 0.2 1↑ 1↓

96/8585
AUG 06 1402 03.4s 36.71S 177.81E 117km M=3.8
0.5 0.05 0.03 6
Rsd 0.2s 8ph/5stn Dmin 108km Az.gap 297°
Corr. -0.517 5M/4stn Msd 0.1

96/8589
AUG 06 1644 39.1s 36.72S 176.60E 200km M=3.9
0.8 0.07 0.07 R
Rsd 0.3s 7ph/4stn Dmin 177km Az.gap 266°
Corr. -0.003 5M/5stn Msd 0.3

96/8647
AUG 08 1731 00.0s 37.19S 177.51E 131km M=4.6
0.3 0.02 0.01 3
Rsd 0.2s 23ph/18stn Dmin 47km Az.gap 188°
Corr. 0.474 27M/21stn Msd 0.3 5↑ 7↓

96/8664
AUG 09 0618 05.7s 37.42S 176.49E 174km M=3.6
0.7 0.05 0.04 5
Rsd 0.2s 10ph/7stn Dmin 108km Az.gap 289°
Corr. -0.284 4M/3stn Msd 0.4

96/8674
AUG 09 1248 13.8s 36.81S 177.06E 192km M=3.6
0.4 0.04 0.03 4
Rsd 0.1s 7ph/4stn Dmin 140km Az.gap 310°
Corr. -0.376 5M/4stn Msd 0.3

96/8677
AUG 09 1620 25.4s 37.66S 179.37E 12km M=3.8
0.7 0.04 0.05 R
Rsd 0.3s 10ph/7stn Dmin 94km Az.gap 292°
Corr. -0.199 8M/6stn Msd 0.3

96/8680
AUG 09 2246 54.9s 38.36S 178.24E 95km M=4.1
1.7 0.09 0.10 13
Rsd 0.5s 9ph/7stn Dmin 32km Az.gap 244°
Corr. -0.151 3M/1stn Msd 0.1 1↓

96/8681
AUG 09 2246 57.2s 38.59S 177.90E 27km M=3.6
0.4 0.03 0.02 4
Rsd 0.5s 9ph/6stn Dmin 12km Az.gap 173°
Corr. -0.446 13M/9stn Msd 0.2 2↑ 1↓

96/8692
AUG 10 0848 45.6s 38.35S 175.77E 158km M=3.7
0.4 0.07 0.16 13
Rsd 0.2s 13ph/9stn Dmin 118km Az.gap 241°
Corr. -0.974 3M/2stn Msd 0.5

96/8695
AUG 10 1257 54.5s 42.02S 172.97E 79km M=3.9
0.2 0.01 0.02 3
Rsd 0.3s 29ph/21stn Dmin 29km Az.gap 118°
Corr. -0.381 18M/13stn Msd 0.2 2↑ 1↓

96/8696
AUG 10 1621 37.2s 37.64S 176.35E 282km M=4.1
0.5 0.10 0.06 6
Rsd 0.2s 11ph/8stn Dmin 96km Az.gap 227°
Corr. -0.839 12M/10stn Msd 0.3 2↑ 1↓

96/8699
AUG 11 0145 42.9s 41.84S 174.76E 33km M=3.6
0.1 0.01 0.01 R
Rsd 0.2s 31ph/21stn Dmin 46km Az.gap 164°
Corr. -0.567 25M/21stn Msd 0.2 1↑

96/8704
AUG 11 0953 23.5s 38.23S 176.12E 168km M=3.7
1.6 0.09 0.09 12
Rsd 0.5s 7ph/5stn Dmin 87km Az.gap 250°
Corr. -0.177 3M/3stn Msd 0.3 1↑

96/8715
AUG 11 1632 38.8s 38.52S 175.30E 173km M=3.5
1.5 0.11 0.12 28
Rsd 0.7s 7ph/4stn Dmin 239km Az.gap 218°
Corr. -0.787 2M/2stn Msd 0.3
Very poor station coverage.

96/8717
AUG 11 2022 47.7s 42.99S 171.35E 5km M=3.6
0.1 0.01 0.00 R
Rsd 0.2s 14ph/9stn Dmin 51km Az.gap 124°
Corr. -0.244 10M/7stn Msd 0.1 2↑ 1↓

96/8718
AUG 11 2151 46.0s 41.75S 174.13E 21km M=3.5
0.1 0.01 0.01 2
Rsd 0.1s 22ph/15stn Dmin 60km Az.gap 137°
Corr. -0.530 10M/6stn Msd 0.3 1↑ 4↓

96/8729
AUG 12 1302 40.5s 37.99S 176.20E 204km M=4.7
0.5 0.02 0.02 4
Rsd 0.2s 34ph/26stn Dmin 21km Az.gap 77°
Corr. -0.096 28M/22stn Msd 0.2 3↑ 2↓

96/8750
AUG 13 0801 32.9s 40.84S 172.70E 5km M=3.5
0.4 0.03 0.02 R
Rsd 0.4s 19ph/16stn Dmin 103km Az.gap 197°
Corr. -0.618 17M/17stn Msd 0.2 1↑

96/8753
AUG 13 0941 41.8s 34.77S 179.60E 212km M=5.9
0.7 0.06 0.05 10
Rsd 0.2s 21ph/20stn Dmin 335km Az.gap 304°
Corr. 0.763 26M/21stn Msd 0.4 1↑ 1↓

96/8758
AUG 13 1355 42.3s 43.72S 178.01E 33km M=4.1
0.3 0.01 0.02 R
Rsd 0.2s 28ph/23stn Dmin 325km Az.gap 245°
Corr. -0.475 23M/21stn Msd 0.3 1↓

96/8764
AUG 13 2118 56.6s 39.67S 174.91E 109km M=3.7
0.2 0.01 0.01 3
Rsd 0.2s 31ph/25stn Dmin 14km Az.gap 94°
Corr. 0.163 16M/14stn Msd 0.2 1↑ 2↓

96/8787
AUG 14 1917 41.7s 36.78S 177.56E 12km M=3.5
0.8 0.05 0.04 R
Rsd 0.6s 9ph/4stn Dmin 113km Az.gap 233°
Corr. 0.733 7M/4stn Msd 0.5

96/8791
AUG 14 2225 20.5s 38.17S 176.49E 126km M=3.8
0.5 0.02 0.02 4
Rsd 0.3s 19ph/16stn Dmin 7km Az.gap 103°
Corr. 0.076 17M/15stn Msd 0.2 1↑ 2↓

96/8792
AUG 14 2244 32.2s 38.77S 175.86E 119km M=3.9
0.4 0.02 0.02 4
Rsd 0.3s 21ph/18stn Dmin 25km Az.gap 94°
Corr. -0.498 14M/10stn Msd 0.4 2↑ 2↓

96/8802
AUG 15 0525 56.5s 43.12S 172.61E 12km M=3.8
0.2 0.01 0.03 R
Rsd 0.1s 6ph/3stn Dmin 46km Az.gap 214°
Corr. 0.965 3M/3stn Msd 1.3 1↓

96/8807
AUG 15 1037 38.5s 45.43S 165.81E 12km M=4.2
0.7 0.05 0.04 R
Rsd 0.3s 11ph/7stn Dmin 105km Az.gap 276°
Corr. -0.512 13M/7stn Msd 0.3 1↓

96/8815
AUG 15 2148 32.7s 36.62S 177.10E 246km M=4.3
0.1 0.01 0.01 1
Rsd 0.0s 11ph/7stn Dmin 152km Az.gap 232°
Corr. 0.319 22M/18stn Msd 0.3 1↓

96/8834
AUG 16 1732 25.4s 38.67S 178.08E 35km M=3.6
0.4 0.03 0.01 3
Rsd 0.2s 6ph/4stn Dmin 6km Az.gap 285°
Corr. -0.689 8M/4stn Msd 0.2 3↑ 1↓

96/8836
AUG 16 1758 18.5s 40.33S 176.18E 46km M=3.6
0.1 0.01 0.01 4
Rsd 0.2s 32ph/28stn Dmin 39km Az.gap 133°
Corr. -0.424 20M/18stn Msd 0.2 2↑ 2↓

96/8868
AUG 17 1108 09.6s 38.09S 176.01E 255km M=3.9
0.9 0.04 0.04 7
Rsd 0.3s 17ph/15stn Dmin 39km Az.gap 130°
Corr. 0.012 20M/17stn Msd 0.2

96/8881
AUG 17 1931 56.4s 39.69S 175.38E 74km M=3.8
0.2 0.01 0.01 3
Rsd 0.2s 38ph/32stn Dmin 41km Az.gap 56°
Corr. 0.181 22M/19stn Msd 0.2

96/8889
AUG 18 0401 33.7s 39.55S 175.75E 63km M=3.9
0.1 0.01 0.01 2
Rsd 0.2s 34ph/26stn Dmin 33km Az.gap 54°
Corr. -0.102 21M/17stn Msd 0.2 3↑ 5↓

96/8901
AUG 18 1232 16.9s 38.67S 175.81E 142km M=3.9
0.4 0.02 0.01 4
Rsd 0.2s 22ph/18stn Dmin 22km Az.gap 80°
Corr. -0.111 23M/19stn Msd 0.3 6↑ 1↓

96/8927
AUG 19 0420 20.5s 36.06S 177.93E 33km M=4.0
2.0 0.12 0.12 R
Rsd 0.7s 8ph/5stn Dmin 174km Az.gap 328°
Corr. -0.119 10M/7stn Msd 0.4

96/8941
AUG 19 1302 01.8s 37.40S 177.53E 100km M=3.6
0.5 0.05 0.02 7
Rsd 0.3s 9ph/6stn Dmin 72km Az.gap 215°
Corr. -0.346 7M/5stn Msd 0.2 1↑ 2↓

96/8949
AUG 19 1907 02.8s 39.34S 175.20E 114km M=3.7
0.2 0.01 0.01 2
Rsd 0.1s 32ph/25stn Dmin 34km Az.gap 107°
Corr. -0.016 18M/17stn Msd 0.2 1↑

96/8955
AUG 19 2254 33.5s 38.86S 175.50E 256km M=3.6
0.8 0.06 0.07 6
Rsd 0.2s 11ph/10stn Dmin 38km Az.gap 213°
Corr. -0.850 9M/8stn Msd 0.5

96/8968
AUG 20 0856 00.1s 38.80S 175.76E 5km M=3.5
0.1 0.01 0.01 R
Rsd 0.4s 20ph/18stn Dmin 7km Az.gap 58°
Corr. -0.336 18M/15stn Msd 0.3 2↑ 2↓

96/8969
AUG 20 1309 23.3s 38.14S 175.98E 154km M=3.6
0.5 0.03 0.08 7
Rsd 0.2s 13ph/10stn Dmin 100km Az.gap 261°
Corr. -0.742 9M/8stn Msd 0.4
Poor station coverage.

96/8971
AUG 20 1431 55.6s 38.78S 175.72E 5km M=3.6
0.1 0.01 0.01 R
Rsd 0.3s 15ph/12stn Dmin 8km Az.gap 77°
Corr. -0.195 15M/12stn Msd 0.2 1↑

96/8973
AUG 20 1514 10.0s 35.14S 178.50E 324km M=4.6
1.1 0.16 0.17 10
Rsd 0.3s 5ph/4stn Dmin 326km Az.gap 342°
Corr. -0.591 3M/2stn Msd 0.4

96/8977
AUG 20 1828 00.5s 41.84S 172.72E 81km M=3.6
0.3 0.01 0.01 3
Rsd 0.3s 26ph/19stn Dmin 17km Az.gap 99°
Corr. -0.292 13M/11stn Msd 0.2 1↑

96/8981
AUG 20 2358 13.4s 37.01S 178.67E 12km M=4.1
0.4 0.01 0.02 R
Rsd 0.1s 15ph/10stn Dmin 73km Az.gap 270°
Corr. 0.559 16M/11stn Msd 0.2

96/8990
AUG 21 1438 05.1s 40.65S 175.43E 44km M=3.5
0.1 0.01 0.01 2
Rsd 0.2s 31ph/25stn Dmin 12km Az.gap 79°
Corr. -0.170 13M/11stn Msd 0.2 1↑ 4↓

96/8996
AUG 21 1631 06.6s 45.07S 167.46E 91km M=3.6
0.3 0.02 0.02 3
Rsd 0.2s 13ph/8stn Dmin 50km Az.gap 191°
Corr. -0.140 10M/5stn Msd 0.2 1↑

96/9006
AUG 22 0805 44.9s 47.58S 165.58E 12km M=4.0
0.6 0.04 0.04 R
Rsd 0.3s 10ph/5stn Dmin 209km Az.gap 319°
Corr. 0.281 5M/4stn Msd 0.2 1↓

96/9013
AUG 22 1218 15.7s 39.05S 175.04E 206km M=3.9
0.4 0.02 0.01 3
Rsd 0.1s 26ph/22stn Dmin 47km Az.gap 166°
Corr. 0.095 14M/14stn Msd 0.3 6↑ 1↓

96/9062
AUG 24 1102 14.6s 35.92S 177.93E 237km M=3.7
0.2 0.04 0.03 4
Rsd 0.1s 5ph/3stn Dmin 189km Az.gap 335°
Corr. -0.753 3M/3stn Msd 0.0

96/9070
AUG 24 1757 47.1s 35.30S 178.53E 279km M=4.0
0.9 0.13 0.18 9
Rsd 0.3s 10ph/8stn Dmin 256km Az.gap 334°
Corr. -0.757 6M/5stn Msd 0.2

96/9087
AUG 25 0527 44.8s 45.09S 167.48E 126km M=3.7
0.5 0.05 0.02 4
Rsd 0.3s 12ph/7stn Dmin 49km Az.gap 207°
Corr. -0.257 10M/6stn Msd 0.2 1↑ 1↓

96/9094
AUG 25 0850 28.3s 35.07S 178.32E 12km M=3.9
0.7 0.05 0.08 R
Rsd 0.2s 6ph/3stn Dmin 281km Az.gap 343°
Corr. -0.270 2M/2stn Msd 0.2

96/9099
AUG 25 1302 34.7s 38.14S 176.08E 155km M=3.7
0.8 0.04 0.03 7
Rsd 0.3s 11ph/10stn Dmin 55km Az.gap 126°
Corr. 0.128 18M/17stn Msd 0.3 1↑ 1↓

96/9101
AUG 25 1331 17.6s 37.30S 176.73E 169km M=3.7
0.3 0.02 0.01 3
Rsd 0.2s 10ph/7stn Dmin 111km Az.gap 159°
Corr. 0.532 13M/12stn Msd 0.4

96/9103
AUG 25 1343 23.8s 38.49S 175.95E 156km M=4.2
0.5 0.02 0.01 4
Rsd 0.2s 32ph/28stn Dmin 20km Az.gap 67°
Corr. -0.133 27M/21stn Msd 0.2 6↑ 3↓

96/9114
AUG 25 1917 42.5s 38.42S 175.94E 166km M=4.3
0.4 0.02 0.01 4
Rsd 0.2s 35ph/29stn Dmin 27km Az.gap 70°
Corr. 0.079 26M/20stn Msd 0.3 6↑ 2↓

96/9119
AUG 25 2125 21.7s 35.43S 179.12E 267km M=4.1
0.5 0.08 0.09 6
Rsd 0.2s 8ph/4stn Dmin 304km Az.gap 345°
Corr. -0.598 6M/4stn Msd 0.4

96/9132
AUG 26 1210 57.0s 45.19S 167.35E 83km M=3.6
0.3 0.03 0.01 2
Rsd 0.2s 12ph/7stn Dmin 35km Az.gap 225°
Corr. -0.407 8M/5stn Msd 0.3 1↑ 1↓

96/9137
AUG 26 1633 35.2s 36.64S 177.31E 174km M=3.8
0.4 0.12 0.04 12
Rsd 0.2s 5ph/3stn Dmin 180km Az.gap 327°
Corr. -0.132 4M/3stn Msd 0.3

96/9142
AUG 26 2024 35.9s 39.77S 177.02E 29km M=3.7
0.2 0.01 0.01 1
Rsd 0.2s 37ph/29stn Dmin 17km Az.gap 177°
Corr. -0.324 33M/29stn Msd 0.3 2↑ 1↓
Felt Napier (60).

96/9145
AUG 26 2151 19.1s 36.85S 177.43E 151km M=3.9
0.3 0.04 0.02 4
Rsd 0.1s 5ph/3stn Dmin 154km Az.gap 322°
Corr. -0.275 4M/3stn Msd 0.5

96/9169
AUG 28 0548 23.0s 38.71S 175.77E 140km M=4.3
0.4 0.02 0.01 4
Rsd 0.3s 39ph/27stn Dmin 3km Az.gap 74°
Corr. -0.062 25M/19stn Msd 0.2 4↑ 1↓

96/9179
AUG 28 1807 54.7s 45.08S 167.52E 109km M=3.5
0.7 0.05 0.03 5
Rsd 0.4s 11ph/6stn Dmin 52km Az.gap 237°
Corr. -0.305 6M/4stn Msd 0.3

96/9181
AUG 28 2209 30.2s 38.38S 175.57E 165km M=3.6
0.6 0.05 0.07 7
Rsd 0.2s 12ph/10stn Dmin 136km Az.gap 242°
Corr. -0.872 5M/4stn Msd 0.2

96/9186
AUG 29 0257 00.8s 36.40S 177.25E 12km M=4.0
0.8 0.06 0.03 R
Rsd 0.4s 9ph/6stn Dmin 142km Az.gap 251°
Corr. 0.630 11M/7stn Msd 0.4

96/9187
AUG 29 0447 02.4s 42.49S 172.79E 10km M=5.7
0.2 0.01 0.01 2
Rsd 0.1s 22ph/17stn Dmin 5km Az.gap 119°
Corr. -0.598 22M/11stn Msd 0.2 3↑ 2↓
Felt Nelson (76) to Paroa (92) and Christchurch (110), maximum intensity MM6 at Hanmer Springs (95).

96/9188
AUG 29 0511 16.2s 37.75S 178.31E 65km M=4.0
0.2 0.01 0.01 2
Rsd 0.2s 16ph/13stn Dmin 17km Az.gap 192°
Corr. 0.068 15M/10stn Msd 0.3 1↓

96/9192
AUG 29 0710 15.6s 45.18S 166.66E 5km M=3.7
0.5 0.02 0.03 R
Rsd 0.3s 10ph/6stn Dmin 50km Az.gap 300°
Corr. 0.072 7M/4stn Msd 0.3 1↓

96/9202
AUG 29 1825 45.1s 42.49S 172.84E 5km M=3.3
0.1 0.01 0.01 R
Rsd 0.2s 16ph/11stn Dmin 57km Az.gap 125°
Corr. -0.492 11M/9stn Msd 0.3 1↑
Felt Waiau (96).

96/9214
AUG 30 0655 06.6s 40.25S 174.25E 84km M=4.2
0.2 0.01 0.01 4
Rsd 0.2s 31ph/25stn Dmin 77km Az.gap 121°
Corr. 0.423 21M/16stn Msd 0.3 2↑ 2↓

96/9217
AUG 30 0816 25.2s 37.75S 175.81E 255km M=3.5
0.5 0.05 0.06 5
Rsd 0.2s 7ph/5stn Dmin 128km Az.gap 263°
Corr. -0.639 4M/4stn Msd 0.1
Poor station coverage.

96/9226
AUG 30 1617 06.3s 37.13S 176.86E 197km M=4.1
0.3 0.02 0.02 3
Rsd 0.1s 15ph/13stn Dmin 111km Az.gap 179°
Corr. 0.504 15M/12stn Msd 0.2 2↑ 3↓

96/9231
AUG 30 1857 00.4s 39.28S 173.84E 12km M=2.7
0.1 0.00 0.01 R
Rsd 0.1s 10ph/6stn Dmin 2km Az.gap 277°
Corr. -0.146 4M/4stn Msd 0.2 3↑ 1↓
Felt New Plymouth (47).

96/9235
AUG 30 2037 14.2s 42.61S 173.94E 12km M=3.9
0.1 0.01 0.01 R
Rsd 0.1s 23ph/14stn Dmin 127km Az.gap 177°
Corr. -0.680 9M/5stn Msd 0.3 1↑ 1↓

96/9241
AUG 30 2340 46.3s 36.26S 177.98E 178km M=4.1
0.4 0.03 0.04 5
Rsd 0.1s 11ph/7stn Dmin 152km Az.gap 302°
Corr. -0.445 10M/9stn Msd 0.3 1↑

96/9245
AUG 31 0041 10.8s 37.44S 177.28E 123km M=3.6
0.6 0.04 0.03 6
Rsd 0.2s 6ph/4stn Dmin 92km Az.gap 272°
Corr. -0.546 5M/4stn Msd 0.1 1↑

96/9255
AUG 31 0733 25.5s 42.45S 172.78E 5km M=4.5
0.1 0.01 0.01 R
Rsd 0.2s 24ph/18stn Dmin 56km Az.gap 121°
Corr. -0.692 16M/9stn Msd 0.2 3↑ 2↓
Felt Waiau (96).

96/9270
AUG 31 1118 34.8s 44.58S 168.47E 5km M=4.9
0.2 0.01 0.01 R
Rsd 0.1s 18ph/10stn Dmin 44km Az.gap 133°
Corr. -0.028 14M/7stn Msd 0.2 1↑
Felt Arthurs Point (122) MM4.

96/9279
AUG 31 1356 13.8s 35.17S 178.94E 207km M=4.2
0.8 0.07 0.07 11
Rsd 0.2s 12ph/9stn Dmin 275km Az.gap 313°
Corr. 0.648 16M/15stn Msd 0.2

96/9282
AUG 31 1611 45.4s 37.78S 175.93E 205km M=3.5
0.6 0.05 0.06 5
Rsd 0.3s 7ph/4stn Dmin 117km Az.gap 260°
Corr. -0.776 4M/4stn Msd 0.1

96/9294
AUG 31 1851 05.6s 39.25S 177.36E 28km M=3.6
0.1 0.01 0.01 1
Rsd 0.3s 26ph/24stn Dmin 22km Az.gap 128°
Corr. -0.424 23M/20stn Msd 0.3 1↑ 1↓

96/9296
AUG 31 1958 48.5s 45.20S 167.37E 117km M=4.2
0.4 0.05 0.02 3
Rsd 0.2s 13ph/7stn Dmin 34km Az.gap 201°
Corr. -0.344 12M/7stn Msd 0.3 1↑ 3↓

96/9331
SEP 01 1112 22.3s 37.24S 176.85E 215km M=4.8
0.4 0.03 0.02 3
Rsd 0.2s 27ph/24stn Dmin 84km Az.gap 166°
Corr. 0.446 8M/4stn Msd 0.3 2↑ 4↓

96/9337
SEP 01 1505 18.0s 47.65S 165.48E 12km M=3.6
0.5 0.03 0.04 R
Rsd 0.2s 11ph/6stn Dmin 219km Az.gap 321°
Corr. -0.066 4M/4stn Msd 0.3

96/9341
SEP 01 2012 54.9s 35.93S 179.43E 12km M=4.1
0.6 0.05 0.06 R
Rsd 0.2s 5ph/3stn Dmin 260km Az.gap 344°
Corr. -0.539 6M/3stn Msd 0.2

96/9347
SEP 02 0635 11.3s 37.98S 177.71E 57km M=3.6
0.3 0.02 0.01 3
Rsd 0.2s 10ph/6stn Dmin 49km Az.gap 142°
Corr. -0.357 8M/5stn Msd 0.2 1↓

96/9348
SEP 02 0811 52.5s 38.07S 176.37E 138km M=3.6
0.6 0.04 0.03 4
Rsd 0.2s 10ph/9stn Dmin 68km Az.gap 260°
Corr. -0.599 6M/6stn Msd 0.3 1↑

96/9355
SEP 02 1618 47.2s 38.44S 177.01E 56km M=3.5
0.2 0.01 0.01 2
Rsd 0.3s 25ph/21stn Dmin 21km Az.gap 68°
Corr. -0.296 14M/10stn Msd 0.4 1↑

96/9364
SEP 02 2259 13.1s 35.79S 179.15E 258km M=4.3
0.6 0.08 0.10 6
Rsd 0.2s 8ph/3stn Dmin 265km Az.gap 344°
Corr. -0.777 4M/3stn Msd 0.2
Poor station coverage.

96/9370
SEP 03 0226 24.8s 41.50S 173.26E 87km M=4.1
0.3 0.03 0.02 3
Rsd 0.1s 29ph/23stn Dmin 42km Az.gap 143°
Corr. -0.806 17M/14stn Msd 0.2 6↑ 9↓

96/9375
SEP 03 0525 27.8s 39.94S 173.75E 167km M=3.7
0.4 0.01 0.02 4
Rsd 0.2s 16ph/13stn Dmin 97km Az.gap 189°
Corr. -0.186 12M/12stn Msd 0.2 3↑ 4↓

96/9382
SEP 03 0938 21.3s 38.86S 175.58E 224km M=3.5
0.6 0.04 0.06 5
Rsd 0.2s 13ph/10stn Dmin 35km Az.gap 211°
Corr. -0.786 11M/10stn Msd 0.3

96/9386
SEP 03 1346 41.8s 42.51S 171.31E 12km M=3.1
0.3 0.02 0.01 R
Rsd 0.2s 11ph/6stn Dmin 78km Az.gap 231°
Corr. -0.519 7M/5stn Msd 0.1 1↑ 1↓
Felt Paroa (92) MM4.

96/9394
SEP 04 0117 34.1s 36.20S 178.94E 114km M=4.8
0.8 0.07 0.06 16
Rsd 0.4s 18ph/12stn Dmin 166km Az.gap 298°
Corr. 0.545 25M/19stn Msd 0.2 1↑ 2↓

96/9400
SEP 04 0754 10.0s 36.38S 178.47E 87km M=4.9
0.6 0.03 0.03 7
Rsd 0.2s 17ph/15stn Dmin 137km Az.gap 286°
Corr. 0.582 28M/22stn Msd 0.3 1↓

96/9407
SEP 04 1914 01.3s 39.29S 173.82E 20km M=2.9
0.6 0.01 0.05 2
Rsd 0.2s 12ph/8stn Dmin 5km Az.gap 228°
Corr. -0.193 14M/14stn Msd 0.1
Felt New Plymouth (47).

96/9408
SEP 04 1929 26.2s 37.06S 177.46E 159km M=4.0
0.4 0.04 0.02 5
Rsd 0.2s 10ph/6stn Dmin 96km Az.gap 247°
Corr. -0.244 22M/18stn Msd 0.2

96/9413
SEP 04 2351 26.6s 42.29S 174.89E 33km M=5.3
0.2 0.01 0.01 R
Rsd 0.1s 23ph/20stn Dmin 81km Az.gap 190°
Corr. -0.828 28M/14stn Msd 0.4 7↑ 1↓
Felt Wellington (68), Kaikoura (90) and Christchurch (110).

96/9419
SEP 05 0210 52.3s 38.06S 176.47E 157km M=4.7
0.4 0.02 0.01 3
Rsd 0.2s 32ph/25stn Dmin 60km Az.gap 98°
Corr. 0.042 10M/5stn Msd 0.2 10↑ 2↓

96/9437
SEP 05 1721 01.7s 36.16S 178.35E 255km M=3.9
0.8 0.12 0.08 7
Rsd 0.2s 6ph/4stn Dmin 213km Az.gap 337°
Corr. -0.483 5M/4stn Msd 0.3

96/9444
SEP 05 1920 55.2s 38.79S 175.23E 226km M=3.9
1.1 0.05 0.05 9
Rsd 0.4s 13ph/10stn Dmin 32km Az.gap 167°
Corr. -0.243 15M/15stn Msd 0.4

96/9447
SEP 05 1956 24.9s 42.18S 174.12E 33km M=4.0
0.1 0.01 0.01 R
Rsd 0.2s 31ph/21stn Dmin 48km Az.gap 160°
Corr. -0.657 12M/7stn Msd 0.4 4↑ 4↓

96/9458
SEP 05 2217 51.3s 38.87S 175.07E 225km M=4.8
0.4 0.02 0.02 3
Rsd 0.2s 34ph/28stn Dmin 34km Az.gap 87°
Corr. 0.006 10M/5stn Msd 0.3 11↑ 3↓

96/9469
SEP 06 0404 24.5s 42.51S 173.75E 21km M=3.6
0.2 0.01 0.01 2
Rsd 0.2s 24ph/18stn Dmin 20km Az.gap 172°
Corr. -0.658 25M/19stn Msd 0.4 1↑ 3↓

96/9476
SEP 06 1013 46.8s 37.88S 176.62E 147km M=3.7
0.3 0.01 0.01 3
Rsd 0.2s 20ph/17stn Dmin 60km Az.gap 111°
Corr. 0.256 24M/21stn Msd 0.2 1↑

96/9490
SEP 06 2029 06.1s 37.01S 176.81E 319km M=4.8
0.5 0.04 0.03 4
Rsd 0.2s 23ph/18stn Dmin 102km Az.gap 179°
Corr. 0.569 28M/22stn Msd 0.3 1↑

96/9496
SEP 07 0009 12.3s 41.19S 173.24E 120km M=3.6
0.4 0.02 0.02 3
Rsd 0.2s 26ph/19stn Dmin 57km Az.gap 180°
Corr. -0.559 15M/14stn Msd 0.2 1↓

96/9514
SEP 07 2323 28.8s 45.13S 167.54E 113km M=3.6
0.5 0.05 0.02 4
Rsd 0.3s 13ph/7stn Dmin 48km Az.gap 212°
Corr. -0.273 6M/4stn Msd 0.2 1↑

96/9527
SEP 08 0858 20.8s 37.88S 177.31E 64km M=3.8
0.2 0.02 0.01 3
Rsd 0.2s 14ph/10stn Dmin 45km Az.gap 122°
Corr. -0.340 25M/21stn Msd 0.2 1↑

96/9537
SEP 08 2208 10.0s 38.50S 175.73E 145km M=3.8
0.6 0.04 0.03 4
Rsd 0.2s 15ph/10stn Dmin 67km Az.gap 232°
Corr. -0.720 19M/15stn Msd 0.2 4↑ 1↓

96/9542
SEP 09 0439 36.1s 43.01S 171.36E 5km M=4.2
0.1 0.01 0.01 R
Rsd 0.1s 10ph/7stn Dmin 52km Az.gap 129°
Corr. -0.615 9M/6stn Msd 0.4 3↑ 1↓

96/9543
SEP 09 0520 48.2s 45.19S 167.51E 106km M=3.7
0.4 0.03 0.02 3
Rsd 0.2s 10ph/6stn Dmin 41km Az.gap 225°
Corr. -0.315 10M/4stn Msd 0.2 1↑

96/9547
SEP 09 1153 25.9s 39.01S 175.38E 225km M=3.6
0.5 0.03 0.04 4
Rsd 0.2s 16ph/11stn Dmin 25km Az.gap 209°
Corr. -0.717 15M/15stn Msd 0.3

96/9554
SEP 09 2139 02.1s 38.97S 173.99E 5km M=3.4
0.2 0.01 0.01 R
Rsd 0.1s 22ph/15stn Dmin 42km Az.gap 223°
Corr. -0.673 18M/14stn Msd 0.5
Felt Opunake (46) and New Plymouth (47) MM4.

96/9564
SEP 10 1115 51.7s 36.43S 177.87E 213km M=4.0
0.7 0.05 0.04 6
Rsd 0.2s 10ph/8stn Dmin 135km Az.gap 292°
Corr. 0.372 10M/8stn Msd 0.3 1↓

96/9580
SEP 10 2203 40.6s 37.86S 176.30E 169km M=4.5
0.3 0.01 0.01 4
Rsd 0.1s 21ph/18stn Dmin 116km Az.gap 121°
Corr. -0.044 25M/21stn Msd 0.2 1↓

96/9581
SEP 10 2301 38.1s 38.99S 175.84E 5km M=3.3
0.2 0.01 0.01 R
Rsd 0.4s 14ph/9stn Dmin 15km Az.gap 145°
Corr. -0.412 11M/7stn Msd 0.2 2↑ 2↓
Felt Motuoapa (40) MM4.

96/9591
SEP 11 0742 20.9s 38.91S 173.91E 5km M=2.3
0.3 0.01 0.02 R
Rsd 0.2s 12ph/7stn Dmin 32km Az.gap 235°
Corr. -0.713 5M/5stn Msd 0.2
Felt Opunake (46) and New Plymouth (47) MM4.

96/9593
SEP 11 0901 52.3s 36.14S 177.33E 12km M=4.1
0.9 0.07 0.03 R
Rsd 0.3s 7ph/5stn Dmin 154km Az.gap 293°
Corr. 0.623 6M/5stn Msd 0.5

96/9596
SEP 11 1600 15.3s 41.17S 176.72E 33km M=4.1
0.2 0.01 0.01 R
Rsd 0.1s 31ph/25stn Dmin 82km Az.gap 202°
Corr. -0.689 8M/5stn Msd 0.3 7↑ 2↓

96/9603
SEP 11 1818 55.2s 37.91S 175.99E 265km M=3.7
1.1 0.14 0.19 18
Rsd 0.3s 14ph/11stn Dmin 140km Az.gap 219°
Corr. -0.961 14M/14stn Msd 0.2
Poor station coverage.

96/9609
SEP 11 1950 12.1s 37.60S 179.69E 12km M=3.9
1.2 0.06 0.08 R
Rsd 0.6s 10ph/5stn Dmin 122km Az.gap 296°
Corr. 0.015 9M/6stn Msd 0.2

96/9621
SEP 12 0222 28.7s 36.97S 177.60E 167km M=3.9
0.5 0.03 0.02 4
Rsd 0.2s 11ph/10stn Dmin 94km Az.gap 258°
Corr. 0.374 17M/15stn Msd 0.3 1↓

96/9654
SEP 12 1552 22.0s 43.58S 169.45E 12km M=3.1
0.2 0.02 0.02 R
Rsd 0.2s 10ph/7stn Dmin 119km Az.gap 176°
Corr. -0.648 7M/7stn Msd 0.2
Felt Mahitahi (104) MM4.

96/9671
SEP 13 0137 22.0s 45.25S 166.92E 12km M=3.5
0.4 0.01 0.02 R
Rsd 0.2s 11ph/6stn Dmin 30km Az.gap 294°
Corr. -0.101 7M/5stn Msd 0.2 1↑

96/9672
SEP 13 0253 07.5s 45.14S 167.47E 88km M=3.8
0.5 0.04 0.02 4
Rsd 0.3s 10ph/6stn Dmin 44km Az.gap 203°
Corr. -0.315 12M/6stn Msd 0.3 1↓

96/9673
SEP 13 0316 48.0s 38.44S 175.87E 154km M=5.1
0.3 0.01 0.01 2
Rsd 0.2s 42ph/34stn Dmin 27km Az.gap 75°
Corr. -0.072 23M/18stn Msd 0.4 16↑ 15↓

96/9685
SEP 13 2213 36.4s 38.00S 176.59E 145km M=3.7
0.5 0.02 0.01 5
Rsd 0.3s 15ph/12stn Dmin 90km Az.gap 153°
Corr. 0.010 18M/18stn Msd 0.3 1↑ 1↓

96/9705
SEP 14 1459 08.2s 35.56S 177.55E 220km M=3.8
0.8 0.10 0.23 19
Rsd 0.1s 12ph/11stn Dmin 236km Az.gap 319°
Corr. -0.782 13M/13stn Msd 0.2

96/9723
SEP 14 1816 41.7s 36.64S 177.12E 12km M=3.6
0.6 0.06 0.02 R
Rsd 0.2s 5ph/3stn Dmin 126km Az.gap 232°
Corr. 0.863 6M/4stn Msd 0.4

96/9724
SEP 14 1817 40.3s 36.71S 177.05E 5km M=4.0
0.5 0.04 0.02 R
Rsd 0.3s 8ph/4stn Dmin 119km Az.gap 251°
Corr. 0.683 6M/4stn Msd 0.4

96/9741
SEP 14 2144 58.9s 37.91S 176.04E 212km M=4.3
0.6 0.02 0.01 5
Rsd 0.1s 22ph/20stn Dmin 40km Az.gap 93°
Corr. -0.028 24M/22stn Msd 0.2

96/9746
SEP 15 0021 30.7s 37.26S 176.80E 185km M=3.9
0.9 0.06 0.04 11
Rsd 0.3s 16ph/14stn Dmin 138km Az.gap 255°
Corr. -0.479 19M/19stn Msd 0.2

96/9770
SEP 15 1222 01.3s 40.14S 174.81E 33km M=4.0
0.1 0.01 0.01 R
Rsd 0.2s 34ph/26stn Dmin 39km Az.gap 71°
Corr. 0.148 10M/5stn Msd 0.2 1↑ 2↓
Felt Wanganui (59).

96/9774
SEP 15 1434 47.4s 43.65S 169.66E 5km M=3.4
0.3 0.02 0.03 R
Rsd 0.3s 12ph/7stn Dmin 98km Az.gap 210°
Corr. -0.788 9M/7stn Msd 0.2
Felt Mahitahi (104) MM4.

96/9785
SEP 16 0416 32.0s 37.22S 176.91E 12km M=3.9
0.8 0.05 0.04 R
Rsd 0.3s 5ph/3stn Dmin 130km Az.gap 321°
Corr. -0.268 3M/3stn Msd 0.2 1↑

96/9802
SEP 17 0336 35.1s 39.25S 176.43E 62km M=3.6
0.2 0.01 0.01 3
Rsd 0.2s 30ph/25stn Dmin 29km Az.gap 51°
Corr. -0.177 21M/17stn Msd 0.3 2↑ 2↓

96/9813
SEP 17 1514 45.4s 43.23S 170.96E 5km M=3.6
0.1 0.01 0.01 R
Rsd 0.1s 10ph/7stn Dmin 33km Az.gap 164°
Corr. -0.704 9M/7stn Msd 0.2 1↑ 1↓

96/9820
SEP 17 1920 32.8s 37.06S 177.42E 5km M=3.6
0.4 0.03 0.02 R
Rsd 0.3s 10ph/7stn Dmin 56km Az.gap 206°
Corr. 0.635 8M/6stn Msd 0.4 1↓

96/9825
SEP 17 2038 55.5s 36.89S 176.74E 300km M=4.1
0.9 0.09 0.07 7
Rsd 0.3s 14ph/12stn Dmin 156km Az.gap 261°
Corr. -0.630 15M/15stn Msd 0.3

96/9828
SEP 18 0216 14.5s 41.72S 174.48E 53km M=3.7
0.1 0.01 0.01 1
Rsd 0.1s 21ph/14stn Dmin 22km Az.gap 145°
Corr. -0.694 14M/9stn Msd 0.3 1↑

96/9832
SEP 18 0744 14.1s 37.32S 176.56E 211km M=3.9
0.5 0.06 0.04 5
Rsd 0.3s 13ph/10stn Dmin 115km Az.gap 241°
Corr. -0.730 13M/13stn Msd 0.2

96/9841
SEP 18 1632 03.0s 37.51S 176.84E 190km M=3.5
0.8 0.09 0.07 6
Rsd 0.4s 9ph/7stn Dmin 87km Az.gap 244°
Corr. -0.812 8M/8stn Msd 0.2

96/9851
SEP 18 2109 16.2s 43.02S 171.85E 5km M=4.1
0.2 0.01 0.01 R
Rsd 0.2s 13ph/7stn Dmin 43km Az.gap 138°
Corr. -0.441 12M/6stn Msd 0.2 1↑ 1↓

96/9857
SEP 19 0030 23.5s 36.24S 179.56W 239km M=4.0
0.7 0.18 0.20 8
Rsd 0.2s 6ph/3stn Dmin 243km Az.gap 347°
Corr. -0.903 3M/3stn Msd 0.2

96/9861
SEP 19 0603 10.3s 38.49S 175.75E 143km M=3.6
0.8 0.04 0.03 6
Rsd 0.3s 11ph/10stn Dmin 42km Az.gap 201°
Corr. -0.654 15M/14stn Msd 0.2 1↑

96/9866
SEP 19 0711 56.8s 41.43S 175.01E 27km M=4.0
0.1 0.01 0.01 1
Rsd 0.2s 28ph/23stn Dmin 12km Az.gap 131°
Corr. -0.163 9M/5stn Msd 0.2 9↑ 3↓
Felt Wellington (68) MM4.

96/9868
SEP 19 0715 11.3s 41.43S 175.01E 26km M=3.7
0.1 0.01 0.01 1
Rsd 0.2s 26ph/22stn Dmin 12km Az.gap 130°
Corr. -0.263 28M/23stn Msd 0.3 1↑ 2↓
Felt Wellington (68) MM4.

96/9876
SEP 19 0910 18.2s 41.87S 172.28E 5km M=3.7
0.1 0.01 0.01 R
Rsd 0.1s 25ph/17stn Dmin 53km Az.gap 158°
Corr. -0.380 9M/6stn Msd 0.3 1↓

96/9880
SEP 19 1216 34.4s 42.48S 172.82E 11km M=5.8
0.2 0.01 0.01 2
Rsd 0.2s 24ph/20stn Dmin 5km Az.gap 118°
Corr. -0.443 26M/13stn Msd 0.3 9↑ 3↓
Felt Westport (79) to Christchurch (110), maximum intensity MM6 at Hanmer (95).

96/9914
SEP 19 1355 18.5s 40.47S 176.46E 33km M=3.8
0.2 0.01 0.02 R
Rsd 0.3s 28ph/25stn Dmin 78km Az.gap 190°
Corr. -0.570 31M/27stn Msd 0.3

96/9930
SEP 19 1755 14.6s 37.76S 178.70E 26km M=3.6
0.1 0.00 0.01 0
Rsd 0.1s 6ph/4stn Dmin 40km Az.gap 274°
Corr. 0.182 5M/4stn Msd 0.3 1↑

96/9932
SEP 19 1825 51.7s 42.44S 172.78E 19km M=2.6
0.3 0.03 0.01 3
Rsd 0.1s 6ph/3stn Dmin 57km Az.gap 220°
Corr. -0.937 3M/3stn Msd 0.3 1↑ 1↓
Felt Mahitahi (104) MM 4.

96/9945
SEP 20 0135 01.4s 38.37S 176.35E 152km M=3.6
0.4 0.04 0.03 3
Rsd 0.2s 11ph/8stn Dmin 68km Az.gap 196°
Corr. -0.849 13M/10stn Msd 0.2 1↑ 1↓

96/9969
SEP 20 1836 34.0s 38.47S 175.87E 171km M=3.5
0.7 0.06 0.13 6
Rsd 0.1s 11ph/8stn Dmin 29km Az.gap 329°
Corr. -0.314 11M/9stn Msd 0.2

96/9975
SEP 20 2234 25.8s 45.11S 167.46E 116km M=4.0
0.4 0.03 0.02 3
Rsd 0.2s 15ph/8stn Dmin 46km Az.gap 192°
Corr. -0.207 8M/4stn Msd 0.1

96/9976
SEP 21 0214 31.0s 45.13S 167.43E 77km M=4.1
0.3 0.02 0.01 2
Rsd 0.2s 14ph/8stn Dmin 44km Az.gap 193°
Corr. -0.307 9M/5stn Msd 0.2 1↑

96/10009
SEP 21 1724 21.3s 37.42S 176.65E 190km M=3.6
0.6 0.08 0.03 4
Rsd 0.2s 10ph/9stn Dmin 102km Az.gap 267°
Corr. -0.557 11M/11stn Msd 0.2

96/10043
SEP 22 1642 57.1s 37.64S 177.40E 113km M=3.8
0.2 0.02 0.01 3
Rsd 0.1s 15ph/13stn Dmin 74km Az.gap 217°
Corr. -0.591 14M/12stn Msd 0.2 2↑ 3↓

96/10049
SEP 22 2012 37.8s 40.66S 173.18E 185km M=3.8
0.5 0.02 0.02 4
Rsd 0.3s 23ph/16stn Dmin 58km Az.gap 130°
Corr. -0.194 10M/8stn Msd 0.2 7↑ 2↓

96/10050
SEP 22 2124 37.7s 45.09S 167.45E 78km M=3.7
0.3 0.02 0.01 3
Rsd 0.2s 14ph/9stn Dmin 48km Az.gap 194°
Corr. -0.199 18M/12stn Msd 0.2 2↑ 3↓

96/10092
SEP 23 2254 22.3s 37.55S 176.46E 215km M=4.6
0.6 0.03 0.03 5
Rsd 0.2s 22ph/19stn Dmin 52km Az.gap 128°
Corr. 0.337 16M/12stn Msd 0.2

96/10093
SEP 23 2254 47.9s 37.08S 176.89E 248km M=4.1
0.5 0.02 0.04 3
Rsd 0.2s 11ph/7stn Dmin 111km Az.gap 204°
Corr. 0.113 6M/6stn Msd 0.2

96/10101
SEP 24 1013 36.1s 43.20S 170.92E 5km M=4.6
0.1 0.00 0.01 R
Rsd 0.1s 14ph/11stn Dmin 20km Az.gap 74°
Corr. 0.079 24M/12stn Msd 0.2 1↓
Felt Kowhitirangi (92) and Whataroa (97) MM3.

96/10102
SEP 24 1017 33.8s 43.21S 170.92E 4km M=3.5
0.1 0.00 0.01 1
Rsd 0.1s 17ph/11stn Dmin 21km Az.gap 74°
Corr. 0.013 18M/15stn Msd 0.4 1↑ 2↓

96/10166
SEP 25 0548 02.6s 36.97S 177.64E 133km M=3.8
0.4 0.02 0.02 6
Rsd 0.2s 8ph/5stn Dmin 92km Az.gap 223°
Corr. 0.605 5M/4stn Msd 0.5 1↑

96/10175
SEP 25 1035 17.8s 39.06S 174.91E 213km M=6.4
0.4 0.02 0.02 4
Rsd 0.2s 36ph/30stn Dmin 42km Az.gap 101°
Corr. -0.467 10M/5stn Msd 0.2 25↑ 16↓
Felt Patoka (52) to Christchurch (110), maximum intensity MM4.

96/10212
SEP 26 0700 24.9s 43.20S 170.91E 6km M=3.7
0.1 0.01 0.01 1
Rsd 0.2s 16ph/10stn Dmin 20km Az.gap 74°
Corr. -0.027 17M/13stn Msd 0.2 1↓

96/10225
SEP 26 0938 03.2s 43.23S 170.81E 5km M=3.5
0.1 0.00 0.01 R
Rsd 0.1s 18ph/10stn Dmin 18km Az.gap 95°
Corr. -0.003 16M/13stn Msd 0.3 2↑ 1↓

96/10270
SEP 27 1242 15.3s 40.13S 176.26E 70km M=3.6
0.2 0.01 0.01 3
Rsd 0.3s 37ph/30stn Dmin 48km Az.gap 127°
Corr. -0.338 26M/22stn Msd 0.3 1↑ 1↓

96/10271
SEP 27 1354 19.0s 39.84S 174.69E 14km M=4.9
0.1 0.01 0.01 3
Rsd 0.2s 39ph/32stn Dmin 21km Az.gap 72°
Corr. -0.164 24M/13stn Msd 0.3 4↑ 1↓
Felt Taranaki to Wellington, maximum intensity MM4.

96/10274
SEP 27 1558 45.6s 38.89S 178.01E 38km M=3.5
0.6 0.04 0.03 4
Rsd 0.3s 10ph/7stn Dmin 30km Az.gap 276°
Corr. -0.562 8M/4stn Msd 0.2 2↑ 1↓

96/10277
SEP 27 2034 21.2s 44.94S 167.56E 83km M=3.6
0.2 0.01 0.01 2
Rsd 0.1s 14ph/9stn Dmin 66km Az.gap 197°
Corr. -0.317 10M/7stn Msd 0.2 1↑ 3↓

96/10282
SEP 28 0016 38.4s 37.60S 177.13E 133km M=3.6
0.4 0.03 0.03 3
Rsd 0.2s 8ph/6stn Dmin 73km Az.gap 237°
Corr. -0.647 11M/11stn Msd 0.2

96/10283
SEP 28 0034 46.6s 36.41S 179.48W 256km M=4.1
0.7 0.20 0.05 21
Rsd 0.1s 7ph/3stn Dmin 273km Az.gap 338°
Corr. -0.249 3M/2stn Msd 0.4

96/10287
SEP 28 0303 27.9s 36.63S 176.86E 156km M=3.6
0.3 0.05 0.10 7
Rsd 0.1s 12ph/10stn Dmin 182km Az.gap 334°
Corr. -0.806 4M/4stn Msd 0.2

96/10305
SEP 28 1710 25.3s 42.51S 172.84E 5km M=3.9
0.1 0.01 0.01 R
Rsd 0.2s 21ph/15stn Dmin 59km Az.gap 106°
Corr. -0.124 11M/6stn Msd 0.2 1↓
Felt Hanmer (95).

96/10308
SEP 28 1754 15.5s 38.34S 175.84E 175km M=3.6
0.9 0.05 0.03 7
Rsd 0.3s 13ph/12stn Dmin 59km Az.gap 240°
Corr. -0.472 13M/11stn Msd 0.2 1↑

96/10311
SEP 28 1932 38.6s 42.52S 172.85E 5km M=4.2
0.1 0.01 0.01 R
Rsd 0.2s 19ph/15stn Dmin 58km Az.gap 108°
Corr. -0.103 16M/8stn Msd 0.3 1↑ 1↓
Felt Hanmer (95).

96/10320
SEP 29 0340 40.3s 40.01S 174.42E 108km M=4.1
0.2 0.00 0.01 3
Rsd 0.2s 39ph/32stn Dmin 50km Az.gap 90°
Corr. -0.103 23M/18stn Msd 0.3

96/10349
SEP 30 0608 25.4s 43.19S 170.94E 5km M=3.6
0.1 0.00 0.01 R
Rsd 0.1s 13ph/8stn Dmin 36km Az.gap 138°
Corr. -0.396 11M/11stn Msd 0.3 1↓

96/10366
SEP 30 1817 40.9s 38.63S 175.68E 149km M=3.6
0.4 0.02 0.02 3
Rsd 0.2s 21ph/20stn Dmin 11km Az.gap 203°
Corr. -0.372 17M/14stn Msd 0.3 1↑ 1↓

96/10375
OCT 01 0826 12.3s 45.09S 167.44E 96km M=4.0
0.3 0.02 0.01 2
Rsd 0.2s 15ph/9stn Dmin 48km Az.gap 192°
Corr. -0.301 14M/7stn Msd 0.3 1↓

96/10384
OCT 01 1800 42.2s 37.68S 179.36E 12km M=4.1
0.5 0.03 0.03 R
Rsd 0.2s 11ph/8stn Dmin 94km Az.gap 290°
Corr. 0.274 18M/12stn Msd 0.2 1↓

96/10385
OCT 01 1820 02.2s 38.30S 176.32E 164km M=3.9
1.3 0.07 0.07 10
Rsd 0.4s 12ph/9stn Dmin 70km Az.gap 227°
Corr. -0.424 7M/6stn Msd 0.4 1↑

96/10403
OCT 02 1053 02.2s 42.48S 172.78E 12km M=3.1
0.1 0.01 0.01 R
Rsd 0.3s 12ph/6stn Dmin 54km Az.gap 100°
Corr. -0.264 8M/6stn Msd 0.2 1↑ 1↓
Felt Hanmer (95).

96/10407
OCT 02 1509 20.3s 42.47S 172.84E 5km M=3.1
0.1 0.01 0.01 R
Rsd 0.3s 12ph/8stn Dmin 58km Az.gap 101°
Corr. -0.169 9M/7stn Msd 0.3 1↑ 1↓
Felt Hanmer (95).

96/10416
OCT 02 1919 24.7s 37.03S 179.49E 12km M=3.5
0.2 0.01 0.02 R
Rsd 0.1s 8ph/5stn Dmin 123km Az.gap 301°
Corr. -0.187 6M/5stn Msd 0.2

96/10420
OCT 02 2208 34.7s 40.65S 174.77E 24km M=3.8
0.2 0.01 0.01 2
Rsd 0.3s 36ph/29stn Dmin 27km Az.gap 70°
Corr. -0.189 8M/5stn Msd 0.3 2↑ 5↓

96/10434
OCT 03 0843 24.3s 45.40S 167.17E 97km M=3.8
0.4 0.03 0.02 3
Rsd 0.2s 13ph/8stn Dmin 8km Az.gap 209°
Corr. -0.148 13M/9stn Msd 0.2 2↑ 1↓

96/10446
OCT 03 1807 56.9s 38.54S 175.71E 162km M=3.8
0.7 0.02 0.03 6
Rsd 0.2s 20ph/17stn Dmin 18km Az.gap 215°
Corr. -0.242 20M/17stn Msd 0.1 4↑ 4↓

96/10447
OCT 03 1852 41.4s 36.73S 179.50E 33km M=3.7
1.4 0.08 0.09 R
Rsd 0.6s 9ph/6stn Dmin 144km Az.gap 302°
Corr. 0.369 9M/6stn Msd 0.3

96/10452
OCT 03 2216 57.0s 36.82S 177.82E 136km M=4.0
0.4 0.02 0.02 3
Rsd 0.1s 14ph/11stn Dmin 96km Az.gap 242°
Corr. 0.870 13M/8stn Msd 0.2 1↑

96/10457
OCT 04 0313 13.8s 37.40S 177.03E 156km M=3.8
0.4 0.03 0.03 4
Rsd 0.2s 6ph/4stn Dmin 95km Az.gap 285°
Corr. -0.359 6M/5stn Msd 0.2 1↑ 1↓

96/10458
OCT 04 0515 31.7s 37.84S 175.99E 166km M=3.7
0.4 0.03 0.05 3
Rsd 0.1s 11ph/8stn Dmin 108km Az.gap 239°
Corr. -0.473 15M/13stn Msd 0.3 1↑

96/10459
OCT 04 0708 43.8s 37.16S 176.74E 241km M=4.5
0.6 0.04 0.03 6
Rsd 0.2s 21ph/19stn Dmin 92km Az.gap 174°
Corr. 0.418 24M/18stn Msd 0.2

96/10477
OCT 04 2239 03.8s 37.07S 177.23E 207km M=5.4
0.4 0.03 0.02 3
Rsd 0.1s 28ph/23stn Dmin 51km Az.gap 198°
Corr. 0.479 10M/5stn Msd 0.2 1↑

96/10507
OCT 05 1638 43.5s 38.33S 175.80E 165km M=3.5
0.5 0.03 0.03 4
Rsd 0.2s 12ph/9stn Dmin 96km Az.gap 210°
Corr. -0.489 15M/15stn Msd 0.3

96/10514
OCT 05 2121 36.3s 40.37S 176.49E 52km M=5.1
0.1 0.01 0.01 1
Rsd 0.1s 43ph/38stn Dmin 40km Az.gap 167°
Corr. -0.690 9M/5stn Msd 0.3 2↑ 2↓
Felt Napier (60) to Waitarere Beach (65), maximum intensity MM4.

96/10516
OCT 05 2228 34.7s 36.60S 178.98E 12km M=4.0
0.5 0.02 0.03 R
Rsd 0.2s 12ph/9stn Dmin 127km Az.gap 294°
Corr. 0.405 18M/14stn Msd 0.5

96/10517
OCT 05 2248 58.0s 41.28S 172.62E 214km M=3.7
0.4 0.02 0.02 3
Rsd 0.2s 26ph/20stn Dmin 50km Az.gap 119°
Corr. -0.149 13M/12stn Msd 0.2 1↑

96/10527
OCT 06 0710 21.4s 39.12S 174.86E 229km M=3.6
0.4 0.02 0.03 3
Rsd 0.2s 17ph/15stn Dmin 60km Az.gap 196°
Corr. -0.279 15M/14stn Msd 0.2 1↑ 1↓

96/10541
OCT 07 0006 44.7s 42.49S 172.76E 12km M=3.7
0.1 0.01 0.01 R
Rsd 0.2s 19ph/15stn Dmin 52km Az.gap 101°
Corr. -0.351 8M/4stn Msd 0.3 2↑ 1↓

96/10546
OCT 07 0653 52.4s 37.61S 177.15E 130km M=3.8
0.4 0.04 0.03 4
Rsd 0.2s 6ph/4stn Dmin 72km Az.gap 266°
Corr. -0.496 7M/4stn Msd 0.2 1↑

96/10562
OCT 08 0250 17.1s 42.21S 173.18E 67km M=4.1
0.2 0.01 0.01 2
Rsd 0.2s 28ph/20stn Dmin 37km Az.gap 66°
Corr. -0.335 23M/17stn Msd 0.3 5↑ 1↓

96/10563
OCT 08 0450 09.5s 37.57S 176.57E 178km M=3.8
0.8 0.07 0.05 6
Rsd 0.3s 10ph/7stn Dmin 91km Az.gap 266°
Corr. -0.525 9M/8stn Msd 0.1 1↑

96/10566
OCT 08 0819 41.7s 38.50S 176.13E 104km M=3.7
0.3 0.02 0.01 3
Rsd 0.2s 18ph/11stn Dmin 17km Az.gap 176°
Corr. -0.593 15M/11stn Msd 0.2

96/10569
OCT 08 1014 37.2s 42.54S 172.86E 5km M=4.6
0.1 0.01 0.01 R
Rsd 0.2s 25ph/17stn Dmin 56km Az.gap 110°
Corr. -0.436 21M/12stn Msd 0.3 1↑

96/10571
OCT 08 1151 21.5s 40.06S 176.50E 58km M=3.6
0.2 0.01 0.02 3
Rsd 0.3s 32ph/20stn Dmin 42km Az.gap 157°
Corr. -0.400 17M/14stn Msd 0.2 1↑ 1↓

96/10574
OCT 08 1717 48.4s 41.74S 172.39E 5km M=3.7
0.1 0.01 0.01 R
Rsd 0.2s 19ph/14stn Dmin 43km Az.gap 139°
Corr. -0.081 23M/17stn Msd 0.3

96/10576
OCT 08 1801 37.5s 36.74S 177.20E 194km M=3.8
0.6 0.05 0.05 4
Rsd 0.2s 12ph/7stn Dmin 88km Az.gap 284°
Corr. -0.006 17M/16stn Msd 0.3

96/10577
OCT 08 1954 31.1s 43.72S 170.70E 5km M=4.1
0.2 0.01 0.01 R
Rsd 0.3s 15ph/9stn Dmin 26km Az.gap 92°
Corr. -0.306 14M/8stn Msd 0.2 2↑ 2↓
Felt South Canterbury.

96/10578
OCT 08 2100 19.6s 39.27S 176.23E 79km M=3.5
0.3 0.01 0.01 3
Rsd 0.3s 17ph/11stn Dmin 49km Az.gap 106°
Corr. -0.086 9M/8stn Msd 0.3 1↑

96/10591
OCT 09 1307 08.6s 39.34S 176.37E 80km M=3.6
0.2 0.01 0.01 3
Rsd 0.2s 33ph/26stn Dmin 40km Az.gap 54°
Corr. -0.280 14M/12stn Msd 0.2 3↑ 3↓

96/10592
OCT 09 1350 32.0s 37.33S 177.05E 143km M=3.9
0.3 0.01 0.01 3
Rsd 0.1s 15ph/13stn Dmin 103km Az.gap 168°
Corr. 0.521 17M/15stn Msd 0.2 1↑ 3↓

96/10599
OCT 09 1915 15.5s 37.81S 175.90E 188km M=3.9
0.6 0.05 0.03 5
Rsd 0.2s 19ph/17stn Dmin 117km Az.gap 219°
Corr. -0.721 19M/18stn Msd 0.2

96/10630
OCT 10 2202 48.8s 39.61S 175.36E 84km M=3.5
0.2 0.01 0.01 3
Rsd 0.2s 31ph/23stn Dmin 41km Az.gap 79°
Corr. -0.373 17M/15stn Msd 0.4 4↑ 4↓

96/10636
OCT 11 0252 19.9s 42.70S 172.48E 5km M=3.9
0.1 0.01 0.01 R
Rsd 0.2s 21ph/13stn Dmin 20km Az.gap 108°
Corr. -0.703 9M/5stn Msd 0.4 1↑

96/10641
OCT 11 0339 23.9s 37.28S 178.13E 85km M=4.2
0.4 0.02 0.02 3
Rsd 0.2s 21ph/17stn Dmin 38km Az.gap 231°
Corr. 0.637 20M/17stn Msd 0.3 1↑ 1↓

96/10661
OCT 12 0023 30.6s 41.71S 171.95E 5km M=3.8
0.2 0.01 0.02 R
Rsd 0.2s 19ph/15stn Dmin 80km Az.gap 174°
Corr. -0.147 10M/5stn Msd 0.1 1↑ 1↓

96/10673
OCT 12 1435 53.7s 41.76S 171.98E 5km M=3.7
0.2 0.01 0.02 R
Rsd 0.3s 16ph/9stn Dmin 77km Az.gap 169°
Corr. -0.243 20M/15stn Msd 0.3

96/10676
OCT 12 1839 11.1s 46.13S 166.55E 5km M=3.9
0.6 0.02 0.04 R
Rsd 0.3s 14ph/8stn Dmin 88km Az.gap 268°
Corr. 0.143 12M/6stn Msd 0.2

96/10678
OCT 13 0120 59.6s 35.60S 178.62E 208km M=4.5
0.2 0.02 0.02 3
Rsd 0.1s 12ph/9stn Dmin 224km Az.gap 304°
Corr. 0.763 22M/18stn Msd 0.2

96/10683
OCT 13 1058 41.2s 38.62S 178.03E 61km M=3.7
0.4 0.02 0.02 3
Rsd 0.1s 12ph/8stn Dmin 0km Az.gap 126°
Corr. -0.750 7M/4stn Msd 0.2 1↑ 1↓

96/10688
OCT 13 1801 01.5s 39.69S 174.48E 122km M=4.0
0.4 0.01 0.02 4
Rsd 0.3s 24ph/17stn Dmin 40km Az.gap 99°
Corr. -0.001 14M/12stn Msd 0.2 2↑ 1↓

96/10689
OCT 13 1823 35.6s 36.76S 176.62E 241km M=4.2
0.9 0.11 0.16 21
Rsd 0.3s 15ph/11stn Dmin 175km Az.gap 265°
Corr. -0.909 15M/12stn Msd 0.3 1↑

96/10703
OCT 14 0842 08.9s 36.89S 177.00E 222km M=4.3
0.6 0.04 0.04 6
Rsd 0.2s 11ph/6stn Dmin 115km Az.gap 208°
Corr. 0.690 18M/14stn Msd 0.2

96/10705
OCT 14 1247 49.1s 37.88S 174.43E 5km M=3.7
0.3 0.01 0.03 R
Rsd 0.3s 19ph/15stn Dmin 77km Az.gap 174°
Corr. -0.141 19M/15stn Msd 0.4 1↑

96/10722
OCT 15 0047 17.6s 39.03S 175.48E 140km M=3.7
0.7 0.03 0.03 5
Rsd 0.3s 16ph/12stn Dmin 8km Az.gap 106°
Corr. -0.249 14M/12stn Msd 0.2

96/10723
OCT 15 0102 52.7s 37.42S 177.41E 121km M=3.7
0.2 0.02 0.01 2
Rsd 0.1s 8ph/4stn Dmin 81km Az.gap 268°
Corr. -0.615 7M/5stn Msd 0.1

96/10735
OCT 15 0825 43.0s 38.75S 175.34E 211km M=3.9
0.6 0.05 0.04 5
Rsd 0.3s 14ph/10stn Dmin 33km Az.gap 125°
Corr. -0.538 13M/12stn Msd 0.4 6↑ 3↓

96/10743
OCT 15 1233 34.9s 38.78S 178.93E 12km M=3.9
1.0 0.03 0.07 R
Rsd 0.4s 11ph/9stn Dmin 80km Az.gap 245°
Corr. -0.473 8M/6stn Msd 0.2 1↑

96/10745
OCT 15 1417 16.8s 37.13S 176.82E 233km M=3.8
0.5 0.08 0.05 5
Rsd 0.3s 10ph/8stn Dmin 128km Az.gap 264°
Corr. -0.818 5M/5stn Msd 0.2 1↑

96/10750
OCT 15 1729 23.1s 39.66S 174.14E 203km M=3.8
0.6 0.02 0.04 5
Rsd 0.4s 28ph/22stn Dmin 69km Az.gap 158°
Corr. -0.452 14M/13stn Msd 0.4 1↑ 1↓

96/10755
OCT 15 2035 39.5s 44.30S 168.91E 5km M=4.9
0.2 0.01 0.01 R
Rsd 0.2s 17ph/10stn Dmin 71km Az.gap 158°
Corr. -0.253 19M/10stn Msd 0.2 1↑ 2↓
Felt Mt Aspiring (113) MM4, Wanaka (123) and Queenstown (132).

96/10767
OCT 16 0041 48.8s 36.38S 177.63E 215km M=4.1
0.7 0.10 0.09 10
Rsd 0.4s 7ph/4stn Dmin 148km Az.gap 324°
Corr. -0.524 5M/4stn Msd 0.2

96/10768
OCT 16 0042 23.0s 40.25S 173.93E 101km M=3.6
0.3 0.01 0.01 4
Rsd 0.3s 28ph/19stn Dmin 61km Az.gap 140°
Corr. -0.379 11M/11stn Msd 0.3 3↑ 4↓

96/10775
OCT 16 0418 26.5s 38.49S 175.79E 179km M=3.8
1.3 0.04 0.03 12
Rsd 0.2s 13ph/12stn Dmin 25km Az.gap 158°
Corr. -0.039 13M/10stn Msd 0.2 1↑

96/10818
OCT 17 0604 14.6s 38.63S 176.02E 5km M=2.5
0.1 0.00 0.00 R
Rsd 0.2s 19ph/14stn Dmin 7km Az.gap 99°
Corr. -0.390 10M/10stn Msd 0.3 1↑
Felt Acacia Bay (41) MM4.

96/10835
OCT 17 2110 48.9s 39.74S 176.61E 29km M=3.7
0.2 0.01 0.02 2
Rsd 0.3s 28ph/22stn Dmin 22km Az.gap 181°
Corr. -0.103 20M/16stn Msd 0.4 1↑

96/10850
OCT 18 0839 02.8s 37.38S 177.31E 5km M=3.7
0.3 0.02 0.01 R
Rsd 0.4s 12ph/9stn Dmin 20km Az.gap 170°
Corr. 0.123 18M/13stn Msd 0.4 1↑

96/10902
OCT 18 2315 48.4s 39.77S 177.04E 16km M=3.6
0.3 0.01 0.02 3
Rsd 0.3s 24ph/18stn Dmin 59km Az.gap 180°
Corr. -0.402 17M/16stn Msd 0.4 1↑

96/10919
OCT 19 0819 27.2s 43.48S 171.63E 15km M=3.2
0.1 0.01 0.00 2
Rsd 0.1s 12ph/6stn Dmin 63km Az.gap 96°
Corr. -0.156 10M/6stn Msd 0.2 1↑ 1↓
Felt Lake Coleridge (100) MM4.

96/10929
OCT 19 2140 02.3s 35.54S 179.50E 138km M=4.0
0.5 0.08 0.06 17
Rsd 0.1s 8ph/4stn Dmin 252km Az.gap 345°
Corr. -0.227 5M/4stn Msd 0.3

96/10947
OCT 20 1515 40.1s 37.27S 176.47E 253km M=3.5
0.5 0.06 0.06 3
Rsd 0.2s 11ph/9stn Dmin 124km Az.gap 258°
Corr. -0.857 5M/5stn Msd 0.3

96/10952
OCT 20 1924 34.8s 37.29S 177.75E 33km M=3.7
0.2 0.02 0.02 R
Rsd 0.2s 13ph/9stn Dmin 60km Az.gap 197°
Corr. 0.698 14M/8stn Msd 0.3 1↑ 3↓

96/10958
OCT 21 0614 25.8s 41.29S 172.62E 207km M=3.6
0.6 0.03 0.03 4
Rsd 0.3s 17ph/13stn Dmin 52km Az.gap 161°
Corr. -0.301 10M/10stn Msd 0.2 1↑ 1↓

96/10963
OCT 21 1319 12.6s 37.90S 176.08E 175km M=3.9
0.3 0.04 0.02 3
Rsd 0.1s 8ph/6stn Dmin 99km Az.gap 236°
Corr. -0.880 5M/4stn Msd 0.2

96/10966
OCT 21 1549 34.4s 37.87S 174.33E 12km M=3.8
0.7 0.01 0.07 R
Rsd 0.3s 12ph/10stn Dmin 81km Az.gap 234°
Corr. 0.649 12M/8stn Msd 0.4 1↑

96/10967
OCT 21 1712 17.1s 37.57S 176.41E 272km M=4.2
0.4 0.07 0.03 4
Rsd 0.2s 14ph/12stn Dmin 98km Az.gap 219°
Corr. -0.701 17M/14stn Msd 0.2 1↓

96/10969
OCT 21 2052 32.0s 37.89S 174.18E 12km M=3.8
0.4 0.01 0.04 R
Rsd 0.2s 15ph/11stn Dmin 87km Az.gap 223°
Corr. 0.198 16M/11stn Msd 0.4

96/10976
OCT 22 0059 33.4s 37.96S 176.69E 154km M=4.6
0.4 0.02 0.01 3
Rsd 0.2s 27ph/22stn Dmin 3km Az.gap 75°
Corr. -0.192 8M/4stn Msd 0.2 8↑ 3↓

96/10987
OCT 22 0832 12.3s 36.11S 178.03E 185km M=3.5
0.3 0.04 0.03 4
Rsd 0.1s 5ph/4stn Dmin 167km Az.gap 333°
Corr. -0.746 3M/3stn Msd 0.2

96/10996
OCT 22 1634 00.6s 37.83S 179.34E 16km M=3.8
0.3 0.01 0.01 1
Rsd 0.1s 14ph/11stn Dmin 95km Az.gap 289°
Corr. 0.291 12M/9stn Msd 0.2

96/10998
OCT 22 1936 03.7s 38.93S 177.63E 50km M=3.6
0.4 0.02 0.02 9
Rsd 0.2s 20ph/18stn Dmin 49km Az.gap 164°
Corr. -0.148 18M/12stn Msd 0.4

96/10999
OCT 22 2014 18.4s 39.27S 174.82E 207km M=3.8
0.6 0.03 0.05 5
Rsd 0.2s 18ph/15stn Dmin 55km Az.gap 193°
Corr. 0.217 10M/8stn Msd 0.4

96/11001
OCT 22 2113 02.0s 38.60S 175.95E 134km M=3.6
0.1 0.01 0.01 1
Rsd 0.0s 7ph/4stn Dmin 108km Az.gap 234°
Corr. -0.955 6M/4stn Msd 0.3
Poor station coverage.

96/11002
OCT 22 2121 59.6s 37.78S 176.41E 173km M=3.5
0.6 0.08 0.11 5
Rsd 0.2s 7ph/3stn Dmin 82km Az.gap 252°
Corr. -0.967 4M/3stn Msd 0.3

96/11006
OCT 23 0024 18.5s 38.35S 175.99E 158km M=3.9
0.3 0.02 0.01 2
Rsd 0.1s 20ph/17stn Dmin 46km Az.gap 168°
Corr. -0.503 13M/11stn Msd 0.2 1↓

96/11028
OCT 23 1717 31.0s 38.13S 176.29E 156km M=3.7
0.3 0.03 0.02 3
Rsd 0.2s 12ph/11stn Dmin 73km Az.gap 180°
Corr. -0.631 11M/10stn Msd 0.2 1↓

96/11049
OCT 24 0130 43.8s 36.40S 177.24E 238km M=3.7
1.6 0.17 0.16 13
Rsd 0.5s 10ph/8stn Dmin 163km Az.gap 303°
Corr. -0.788 6M/6stn Msd 0.2

96/11055
OCT 24 0645 20.1s 39.41S 174.73E 23km M=4.1
0.1 0.01 0.00 1
Rsd 0.2s 32ph/25stn Dmin 47km Az.gap 65°
Corr. -0.163 12M/6stn Msd 0.2 6↑ 6↓
Felt Tongahoe Valley (55).

96/11072
OCT 24 1847 21.9s 35.64S 178.79E 145km M=3.9
0.3 0.07 0.04 13
Rsd 0.1s 5ph/3stn Dmin 222km Az.gap 343°
Corr. -0.829 4M/3stn Msd 0.5

96/11075
OCT 24 2156 39.9s 39.70S 174.64E 112km M=3.5
0.3 0.01 0.01 3
Rsd 0.3s 28ph/20stn Dmin 27km Az.gap 68°
Corr. 0.352 12M/10stn Msd 0.3 1↑

96/11080
OCT 25 0303 07.3s 40.31S 175.06E 12km M=4.3
0.1 0.01 0.01 R
Rsd 0.5s 33ph/27stn Dmin 58km Az.gap 64°
Corr. 0.022 14M/8stn Msd 0.2 4↑ 2↓
Felt Foxton-Shannon Highway (61) MM4.

96/11090
OCT 25 1028 29.8s 38.67S 175.90E 154km M=5.4
0.3 0.02 0.01 2
Rsd 0.2s 41ph/33stn Dmin 5km Az.gap 57°
Corr. -0.467 10M/5stn Msd 0.3 22↑ 15↓

96/11098
OCT 25 1707 33.8s 39.25S 175.07E 27km M=3.8
0.1 0.01 0.01 1
Rsd 0.2s 29ph/26stn Dmin 36km Az.gap 70°
Corr. 0.004 28M/22stn Msd 0.3 7↑ 2↓

96/11105
OCT 25 2235 26.8s 38.22S 176.64E 150km M=3.6
0.6 0.04 0.03 4
Rsd 0.2s 11ph/8stn Dmin 42km Az.gap 222°
Corr. -0.451 9M/9stn Msd 0.2 1↑

96/11108
OCT 26 0114 55.6s 38.05S 176.23E 199km M=3.6
1.0 0.06 0.06 8
Rsd 0.5s 10ph/5stn Dmin 81km Az.gap 254°
Corr. -0.625 3M/3stn Msd 0.1 1↑

96/11114
OCT 26 0546 55.7s 36.18S 177.48E 224km M=4.2
0.9 0.11 0.12 10
Rsd 0.3s 9ph/6stn Dmin 174km Az.gap 317°
Corr. -0.740 7M/5stn Msd 0.3

96/11127
OCT 26 1337 27.6s 37.03S 176.83E 234km M=3.9
0.3 0.02 0.01 2
Rsd 0.1s 12ph/10stn Dmin 104km Az.gap 189°
Corr. 0.335 15M/13stn Msd 0.2

96/11129
OCT 26 1500 59.1s 41.00S 172.90E 184km M=3.6
0.4 0.02 0.02 2
Rsd 0.3s 27ph/18stn Dmin 37km Az.gap 106°
Corr. -0.169 13M/13stn Msd 0.3 2↑ 1↓

96/11136
OCT 26 2356 52.0s 35.94S 179.71E 5km M=3.9
0.9 0.04 0.07 R
Rsd 0.3s 8ph/5stn Dmin 223km Az.gap 311°
Corr. 0.296 6M/5stn Msd 0.4

96/11141
OCT 27 0404 55.5s 38.08S 176.13E 165km M=3.7
0.2 0.03 0.01 2
Rsd 0.2s 17ph/11stn Dmin 88km Az.gap 188°
Corr. -0.682 17M/14stn Msd 0.3

96/11144
OCT 27 0718 11.9s 38.68S 175.97E 151km M=3.5
0.7 0.04 0.04 6
Rsd 0.2s 11ph/8stn Dmin 27km Az.gap 199°
Corr. -0.680 4M/2stn Msd 0.3

96/11154
OCT 27 1601 35.6s 39.11S 174.86E 228km M=4.3
0.5 0.02 0.03 4
Rsd 0.2s 30ph/22stn Dmin 46km Az.gap 104°
Corr. 0.004 18M/14stn Msd 0.3 8↑ 4↓

96/11166
OCT 27 2328 31.7s 38.92S 175.83E 105km M=3.6
0.4 0.03 0.03 4
Rsd 0.2s 18ph/13stn Dmin 8km Az.gap 100°
Corr. -0.793 17M/14stn Msd 0.4 3↑ 1↓

96/11180
OCT 28 1155 05.8s 37.85S 179.33E 20km M=3.5
0.2 0.01 0.01 1
Rsd 0.1s 7ph/4stn Dmin 95km Az.gap 306°
Corr. 0.154 6M/4stn Msd 0.3

96/11197
OCT 29 0516 30.2s 37.05S 177.60E 135km M=3.7
0.6 0.06 0.04 6
Rsd 0.3s 9ph/7stn Dmin 87km Az.gap 276°
Corr. -0.611 14M/11stn Msd 0.2

96/11198
OCT 29 0536 42.0s 37.56S 171.27E 12km M=4.1
0.6 0.03 0.05 R
Rsd 0.5s 23ph/19stn Dmin 306km Az.gap 235°
Corr. -0.424 17M/16stn Msd 0.3
In a very unusual location.

96/11219
OCT 29 1334 44.3s 37.38S 176.64E 218km M=3.8
0.6 0.07 0.05 5
Rsd 0.2s 10ph/8stn Dmin 106km Az.gap 249°
Corr. -0.606 6M/4stn Msd 0.4

96/11239
OCT 30 0036 24.1s 35.74S 179.49E 12km M=4.1
0.5 0.05 0.05 R
Rsd 0.2s 8ph/5stn Dmin 232km Az.gap 346°
Corr. -0.488 8M/6stn Msd 0.5

96/11241
OCT 30 0251 22.4s 45.17S 167.37E 119km M=3.7
0.5 0.03 0.02 4
Rsd 0.3s 13ph/8stn Dmin 38km Az.gap 224°
Corr. -0.218 7M/5stn Msd 0.2 1↓

96/11246
OCT 30 1120 19.2s 38.03S 179.31E 12km M=3.7
1.1 0.05 0.07 R
Rsd 0.6s 10ph/8stn Dmin 93km Az.gap 283°
Corr. 0.433 14M/11stn Msd 0.2 1↑ 1↓

96/11248
OCT 30 1155 37.6s 44.38S 168.30E 12km M=3.7
0.2 0.02 0.02 R
Rsd 0.3s 12ph/9stn Dmin 107km Az.gap 187°
Corr. -0.571 15M/8stn Msd 0.2 1↑ 1↓

96/11252
OCT 30 2045 27.1s 37.58S 178.35E 48km M=3.9
0.1 0.00 0.01 1
Rsd 0.0s 11ph/8stn Dmin 5km Az.gap 253°
Corr. 0.199 7M/3stn Msd 0.3 1↑

96/11257
OCT 30 2315 57.3s 35.08S 178.42E 315km M=4.3
0.6 0.06 0.06 3
Rsd 0.1s 11ph/8stn Dmin 332km Az.gap 334°
Corr. 0.096 8M/8stn Msd 0.4

96/11258
OCT 31 0108 22.6s 37.22S 177.00E 212km M=4.0
0.4 0.03 0.02 3
Rsd 0.2s 12ph/6stn Dmin 116km Az.gap 176°
Corr. 0.666 12M/7stn Msd 0.2 1↑

96/11295
NOV 01 0611 54.9s 37.39S 179.68W 33km M=3.7
1.0 0.09 0.07 R
Rsd 0.4s 7ph/5stn Dmin 180km Az.gap 325°
Corr. -0.124 3M/3stn Msd 0.1

96/11307
NOV 01 1917 54.0s 39.24S 175.04E 198km M=3.7
0.5 0.02 0.03 5
Rsd 0.1s 15ph/13stn Dmin 44km Az.gap 189°
Corr. 0.048 7M/7stn Msd 0.3 1↑

96/11317
NOV 01 2346 19.7s 45.23S 166.89E 12km M=4.6
0.5 0.02 0.03 R
Rsd 0.3s 13ph/8stn Dmin 34km Az.gap 252°
Corr. -0.042 10M/6stn Msd 0.1 1↓
Felt Manapouri (138) MM4.

96/11332
NOV 02 1246 48.4s 37.54S 176.39E 215km M=4.2
0.4 0.02 0.02 3
Rsd 0.1s 17ph/14stn Dmin 102km Az.gap 127°
Corr. 0.057 19M/15stn Msd 0.2

96/11333
NOV 02 1344 13.2s 39.49S 174.44E 223km M=4.2
0.6 0.02 0.03 5
Rsd 0.3s 32ph/26stn Dmin 34km Az.gap 66°
Corr. 0.013 15M/14stn Msd 0.2 4↑ 2↓

96/11345
NOV 02 2153 40.7s 41.37S 173.14E 108km M=4.3
0.4 0.01 0.02 4
Rsd 0.2s 28ph/21stn Dmin 58km Az.gap 90°
Corr. -0.263 15M/12stn Msd 0.3 1↑ 6↓

96/11347
NOV 02 2202 27.7s 37.95S 179.19E 18km M=4.0
0.1 0.01 0.01 1
Rsd 0.0s 12ph/9stn Dmin 83km Az.gap 281°
Corr. -0.374 37M/33stn Msd 0.3 1↑ 1↓

96/11364
NOV 03 0533 52.7s 39.16S 175.63E 98km M=4.3
0.2 0.01 0.01 2
Rsd 0.2s 43ph/35stn Dmin 3km Az.gap 88°
Corr. -0.429 20M/15stn Msd 0.3 9↑ 12↓

96/11376
NOV 03 0932 16.4s 37.26S 179.00E 5km M=3.8
0.5 0.04 0.02 R
Rsd 0.2s 10ph/6stn Dmin 72km Az.gap 331°
Corr. -0.079 10M/7stn Msd 0.2 1↓

96/11380
NOV 03 1133 52.8s 33.85S 176.40E 33km M=4.5
2.3 0.15 0.23 R
Rsd 0.6s 8ph/6stn Dmin 493km Az.gap 339°
Corr. 0.378 5M/5stn Msd 0.5

96/11395
NOV 03 1731 12.2s 45.34S 166.91E 12km M=3.6
0.5 0.02 0.03 R
Rsd 0.2s 11ph/7stn Dmin 24km Az.gap 252°
Corr. 0.061 16M/10stn Msd 0.3 1↓

96/11416
NOV 04 1234 14.0s 40.08S 174.18E 98km M=3.8
0.3 0.01 0.01 3
Rsd 0.2s 36ph/30stn Dmin 72km Az.gap 104°
Corr. 0.030 14M/12stn Msd 0.3 1↓

96/11449
NOV 05 0644 25.0s 36.90S 177.24E 202km M=3.5
0.7 0.06 0.06 5
Rsd 0.2s 6ph/4stn Dmin 151km Az.gap 321°
Corr. -0.663 3M/3stn Msd 0.1

96/11451
NOV 05 0941 34.4s 31.16S 180.00E 369km M=7.3
0.4 R R R
Rsd 1.8s 25ph/23stn Dmin 731km Az.gap 328°
Corr. R 8M/4stn Msd 0.3 1↑
Felt Opotiki (35) to Wellington (68).

96/11452
NOV 05 1027 41.1s 41.23S 174.66E 43km M=3.6
0.1 0.01 0.01 1
Rsd 0.1s 33ph/24stn Dmin 4km Az.gap 71°
Corr. -0.531 14M/13stn Msd 0.2 6↑ 5↓
Felt Wellington (68).

96/11456
NOV 05 1226 28.7s 38.34S 178.59E 26km M=3.7
0.3 0.01 0.02 1
Rsd 0.2s 11ph/7stn Dmin 42km Az.gap 255°
Corr. -0.446 22M/18stn Msd 0.2 1↑

96/11464
NOV 05 1935 36.4s 39.09S 177.00E 67km M=4.4
0.2 0.01 0.01 3
Rsd 0.2s 35ph/29stn Dmin 14km Az.gap 77°
Corr. -0.557 19M/15stn Msd 0.2 9↑ 5↓
Felt Patoka (52) MM4.

96/11471
NOV 05 2303 04.8s 40.53S 177.04E 33km M=3.7
0.3 0.01 0.02 R
Rsd 0.2s 22ph/16stn Dmin 70km Az.gap 202°
Corr. -0.406 22M/21stn Msd 0.4 2↑ 6↓

96/11474
NOV 06 0145 25.4s 39.81S 177.02E 36km M=3.7
0.2 0.02 0.02 9
Rsd 0.3s 26ph/21stn Dmin 20km Az.gap 180°
Corr. -0.454 14M/12stn Msd 0.3 1↑ 2↓

96/11478
NOV 06 0608 43.0s 38.09S 176.09E 161km M=3.8
0.4 0.07 0.04 3
Rsd 0.1s 13ph/10stn Dmin 75km Az.gap 226°
Corr. -0.908 16M/16stn Msd 0.2 1↑

96/11489
NOV 06 1433 26.7s 39.34S 179.06E 33km M=3.8
0.4 0.02 0.03 R
Rsd 0.2s 11ph/7stn Dmin 119km Az.gap 245°
Corr. -0.314 18M/17stn Msd 0.2

96/11491
NOV 06 1523 44.2s 38.78S 178.98E 12km M=3.6
1.2 0.05 0.07 R
Rsd 0.5s 6ph/4stn Dmin 84km Az.gap 307°
Corr. -0.454 8M/4stn Msd 0.2 1↑

96/11495
NOV 06 1819 56.4s 35.45S 179.29E 181km M=4.0
0.4 0.06 0.04 8
Rsd 0.2s 8ph/5stn Dmin 254km Az.gap 329°
Corr. -0.215 16M/14stn Msd 0.4

96/11506
NOV 07 0129 38.6s 39.71S 174.31E 213km M=3.6
0.4 0.06 0.03 5
Rsd 0.2s 17ph/13stn Dmin 126km Az.gap 254°
Corr. 0.031 11M/10stn Msd 0.4

96/11507
NOV 07 0155 27.8s 44.54S 168.29E 5km M=3.9
0.2 0.01 0.01 R
Rsd 0.2s 16ph/9stn Dmin 90km Az.gap 180°
Corr. -0.438 14M/8stn Msd 0.3 2↑ 1↓

96/11513
NOV 07 0735 36.0s 36.11S 178.70E 12km M=3.5
0.5 0.04 0.04 R
Rsd 0.2s 6ph/4stn Dmin 169km Az.gap 340°
Corr. -0.353 6M/4stn Msd 0.5

96/11515
NOV 07 0741 09.2s 41.14S 173.50E 95km M=3.9
0.3 0.01 0.01 3
Rsd 0.2s 27ph/21stn Dmin 45km Az.gap 77°
Corr. -0.081 17M/14stn Msd 0.3 6↑ 6↓
Felt Abel Tasman Park (72) MM4.

96/11523
NOV 07 1255 04.9s 40.12S 173.65E 162km M=3.6
0.5 0.01 0.02 5
Rsd 0.2s 27ph/24stn Dmin 80km Az.gap 146°
Corr. -0.188 10M/10stn Msd 0.3 1↑ 3↓

96/11528
NOV 07 1407 08.0s 38.87S 176.11E 90km M=3.8
0.2 0.01 0.01 2
Rsd 0.3s 37ph/25stn Dmin 3km Az.gap 86°
Corr. -0.390 21M/17stn Msd 0.2 2↑ 5↓

96/11529
NOV 07 1440 12.1s 39.10S 174.39E 5km M=4.1
0.1 0.01 0.00 R
Rsd 0.2s 32ph/29stn Dmin 32km Az.gap 106°
Corr. -0.655 13M/7stn Msd 0.4 4↑ 2↓
Felt North Taranaki, MM4 at Purangi (47).

96/11538
NOV 07 2306 00.4s 41.29S 175.25E 29km M=3.7
0.1 0.01 0.01 1
Rsd 0.2s 30ph/21stn Dmin 14km Az.gap 88°
Corr. -0.378 26M/21stn Msd 0.3 7↑ 7↓

96/11565
NOV 08 0805 30.0s 37.40S 177.41E 124km M=3.5
0.3 0.03 0.02 3
Rsd 0.2s 11ph/9stn Dmin 82km Az.gap 225°
Corr. -0.601 10M/8stn Msd 0.1 2↑ 1↓

96/11575
NOV 08 1403 43.9s 37.53S 179.28E 12km M=3.6
0.4 0.02 0.03 R
Rsd 0.2s 7ph/5stn Dmin 86km Az.gap 317°
Corr. -0.049 3M/1stn Msd 0.2

96/11584
NOV 08 1711 28.6s 37.59S 176.67E 233km M=4.5
0.6 0.05 0.03 5
Rsd 0.3s 26ph/22stn Dmin 44km Az.gap 140°
Corr. -0.127 24M/20stn Msd 0.3 2↑ 1↓

96/11591
NOV 08 1846 39.8s 42.49S 172.83E 5km M=3.5
0.1 0.01 0.01 R
Rsd 0.2s 19ph/15stn Dmin 56km Az.gap 117°
Corr. -0.530 28M/22stn Msd 0.3 1↑ 1↓

96/11613
NOV 09 0344 35.7s 37.22S 176.75E 219km M=4.2
0.4 0.03 0.02 4
Rsd 0.2s 26ph/22stn Dmin 86km Az.gap 165°
Corr. 0.499 25M/21stn Msd 0.2

96/11629
NOV 09 1017 42.3s 45.44S 167.08E 69km M=3.9
0.2 0.01 0.02 2
Rsd 0.1s 12ph/7stn Dmin 6km Az.gap 250°
Corr. 0.064 17M/10stn Msd 0.2 2↑ 3↓

96/11653
NOV 09 1618 48.1s 37.30S 176.16E 316km M=3.6
0.2 0.03 0.03 2
Rsd 0.1s 11ph/9stn Dmin 136km Az.gap 286°
Corr. -0.777 6M/6stn Msd 0.2

96/11662
NOV 09 1917 42.4s 40.04S 177.02E 19km M=3.7
0.4 0.01 0.02 3
Rsd 0.2s 30ph/25stn Dmin 68km Az.gap 188°
Corr. -0.421 33M/31stn Msd 0.4 1↓

96/11667
NOV 10 0153 00.2s 35.71S 179.24E 101km M=4.3
0.3 0.08 0.07 19
Rsd 0.1s 9ph/6stn Dmin 277km Az.gap 337°
Corr. -0.942 7M/5stn Msd 0.4

96/11692
NOV 10 1547 30.5s 39.56S 174.62E 130km M=4.2
0.3 0.01 0.01 3
Rsd 0.3s 45ph/35stn Dmin 38km Az.gap 62°
Corr. -0.178 18M/17stn Msd 0.2 5↑ 3↓

96/11705
NOV 10 2218 02.0s 37.80S 176.93E 113km M=4.3
0.3 0.02 0.01 2
Rsd 0.2s 31ph/26stn Dmin 30km Az.gap 130°
Corr. -0.029 22M/18stn Msd 0.2 2↑ 4↓

96/11730
NOV 11 1544 55.1s 36.31S 178.72E 125km M=3.9
0.4 0.06 0.06 9
Rsd 0.1s 7ph/4stn Dmin 148km Az.gap 329°
Corr. -0.794 4M/3stn Msd 0.3

96/11734
NOV 12 0158 40.6s 39.37S 176.14E 82km M=4.2
0.3 0.01 0.01 3
Rsd 0.4s 45ph/34stn Dmin 41km Az.gap 36°
Corr. 0.023 19M/16stn Msd 0.2 5↑ 2↓

96/11736
NOV 12 0310 35.8s 41.38S 176.39E 29km M=4.8
0.3 0.01 0.01 2
Rsd 0.1s 24ph/18stn Dmin 53km Az.gap 196°
Corr. -0.647 23M/12stn Msd 0.2 1↑
Felt Masterton (66), Lower Hutt and Wellington (68), MM4.

96/11737
NOV 12 0532 51.1s 41.28S 175.26E 30km M=4.2
0.1 0.01 0.01 1
Rsd 0.2s 23ph/17stn Dmin 16km Az.gap 86°
Corr. -0.363 10M/6stn Msd 0.3 5↑ 5↓
Felt Hutt Valley (68,69), MM4 and Wellington (68).

96/11745
NOV 12 0650 49.1s 38.99S 174.01E 5km M=3.5
0.1 0.01 0.01 R
Rsd 0.2s 15ph/10stn Dmin 23km Az.gap 207°
Corr. -0.781 12M/10stn Msd 0.6 1↓
Felt New Plymouth (47).

96/11746
NOV 12 0733 52.0s 38.87S 175.11E 211km M=5.0
0.3 0.02 0.01 3
Rsd 0.2s 40ph/32stn Dmin 31km Az.gap 77°
Corr. -0.244 8M/4stn Msd 0.3 19↑ 12↓

96/11749
NOV 12 1154 49.1s 34.96S 178.67E 12km M=4.1
1.2 0.09 0.14 R
Rsd 0.3s 5ph/3stn Dmin 294km Az.gap 346°
Corr. -0.296 4M/3stn Msd 0.5

96/11750
NOV 12 1409 51.7s 38.26S 175.46E 127km M=3.5
0.8 0.09 0.15 19
Rsd 0.5s 16ph/12stn Dmin 145km Az.gap 233°
Corr. -0.947 6M/6stn Msd 0.5
Poor station coverage.

96/11751
NOV 12 1537 27.1s 40.89S 173.03E 180km M=3.6
0.6 0.03 0.02 5
Rsd 0.3s 20ph/15stn Dmin 43km Az.gap 125°
Corr. -0.126 11M/11stn Msd 0.2

96/11764
NOV 13 0131 56.5s 38.29S 175.93E 201km M=4.3
0.6 0.03 0.02 5
Rsd 0.3s 21ph/17stn Dmin 58km Az.gap 103°
Corr. -0.077 22M/20stn Msd 0.2

96/11769
NOV 13 1024 07.9s 45.11S 167.48E 87km M=3.9
0.3 0.03 0.01 3
Rsd 0.2s 12ph/7stn Dmin 48km Az.gap 206°
Corr. -0.305 13M/6stn Msd 0.3 1↓

96/11770
NOV 13 1051 46.8s 40.14S 174.88E 12km M=3.5
0.1 0.01 0.01 R
Rsd 0.3s 30ph/22stn Dmin 81km Az.gap 131°
Corr. -0.413 26M/24stn Msd 0.4 1↑

96/11780
NOV 13 1843 58.9s 37.67S 177.64E 62km M=3.9
0.2 0.02 0.01 3
Rsd 0.2s 17ph/15stn Dmin 59km Az.gap 178°
Corr. -0.238 11M/7stn Msd 0.2 2↑ 1↓

96/11785
NOV 13 2143 35.3s 39.61S 176.87E 32km M=3.8
0.2 0.01 0.01 2
Rsd 0.3s 33ph/26stn Dmin 6km Az.gap 111°
Corr. -0.290 28M/24stn Msd 0.3 4↑ 4↓

96/11788
NOV 14 0009 05.8s 35.40S 178.96E 253km M=4.2
0.6 0.06 0.04 9
Rsd 0.1s 10ph/8stn Dmin 251km Az.gap 325°
Corr. -0.013 16M/16stn Msd 0.5

96/11792
NOV 14 0323 39.9s 47.34S 164.80E 33km M=3.9
0.5 0.03 0.04 R
Rsd 0.2s 12ph/6stn Dmin 258km Az.gap 322°
Corr. -0.081 6M/4stn Msd 0.5

96/11798
NOV 14 0856 47.9s 38.03S 175.87E 153km M=3.5
0.8 0.06 0.10 8
Rsd 0.4s 11ph/7stn Dmin 112km Az.gap 253°
Corr. -0.819 7M/7stn Msd 0.3 1↑
Poor station coverage.

96/11805
NOV 14 1214 56.4s 36.38S 179.94E 5km M=4.0
0.4 0.02 0.03 R
Rsd 0.1s 7ph/4stn Dmin 200km Az.gap 332°
Corr. -0.269 8M/4stn Msd 0.2

96/11807
NOV 14 1422 03.2s 47.31S 165.07E 12km M=3.8
0.4 0.03 0.02 R
Rsd 0.1s 11ph/7stn Dmin 237km Az.gap 320°
Corr. 0.083 10M/6stn Msd 0.4

96/11814
NOV 15 0005 39.9s 38.57S 175.83E 159km M=3.8
0.9 0.04 0.03 9
Rsd 0.5s 18ph/15stn Dmin 70km Az.gap 150°
Corr. -0.449 16M/14stn Msd 0.3 3↑ 1↓

96/11826
NOV 15 0737 30.6s 37.84S 176.05E 269km M=3.6
0.9 0.05 0.07 7
Rsd 0.2s 10ph/9stn Dmin 104km Az.gap 268°
Corr. -0.474 9M/9stn Msd 0.3 1↓
Very poor station coverage.

96/11827
NOV 15 0801 19.1s 38.07S 176.75E 5km M=2.7
0.2 0.01 0.01 R
Rsd 0.3s 6ph/4stn Dmin 5km Az.gap 163°
Corr. 0.211 3M/3stn Msd 0.2 1↑
Felt Kawerau (34).

96/11841
NOV 16 0157 31.1s 38.08S 176.73E 5km M=3.0
0.1 0.01 0.01 R
Rsd 0.2s 6ph/4stn Dmin 3km Az.gap 147°
Corr. 0.362 10M/7stn Msd 0.3 2↑ 1↓
Felt Kawerau (34).

96/11854
NOV 16 1054 41.4s 38.07S 176.45E 156km M=4.2
0.3 0.02 0.01 3
Rsd 0.2s 33ph/28stn Dmin 19km Az.gap 138°
Corr. -0.071 22M/19stn Msd 0.3 3↑ 2↓

96/11863
NOV 16 2000 33.9s 38.26S 175.88E 176km M=3.7
0.6 0.04 0.03 4
Rsd 0.2s 11ph/9stn Dmin 51km Az.gap 240°
Corr. -0.656 13M/12stn Msd 0.3

96/11865
NOV 16 2255 11.0s 44.96S 167.56E 127km M=3.6
0.4 0.04 0.02 4
Rsd 0.2s 14ph/7stn Dmin 65km Az.gap 244°
Corr. -0.216 4M/4stn Msd 0.2 1↑

96/11871
NOV 17 0442 22.7s 38.74S 175.06E 200km M=3.6
0.6 0.04 0.05 8
Rsd 0.3s 17ph/13stn Dmin 155km Az.gap 227°
Corr. -0.863 10M/10stn Msd 0.2
Poor station coverage.

96/11876
NOV 17 0902 22.1s 40.69S 174.54E 68km M=3.5
0.2 0.01 0.01 3
Rsd 0.2s 33ph/23stn Dmin 37km Az.gap 84°
Corr. -0.006 17M/17stn Msd 0.4 4↑ 1↓

96/11878
NOV 17 0946 30.2s 41.59S 174.33E 27km M=3.8
0.1 0.01 0.01 1
Rsd 0.2s 25ph/19stn Dmin 20km Az.gap 132°
Corr. -0.297 24M/18stn Msd 0.3 3↑ 4↓

96/11890
NOV 17 1657 33.2s 35.67S 179.36E 33km M=3.9
0.6 0.04 0.07 R
Rsd 0.2s 5ph/3stn Dmin 284km Az.gap 344°
Corr. -0.483 5M/4stn Msd 0.3

96/11894
NOV 17 1938 12.5s 37.17S 177.17E 169km M=3.7
1.5 0.14 0.13 9
Rsd 0.6s 7ph/5stn Dmin 111km Az.gap 277°
Corr. -0.718 5M/4stn Msd 0.4

96/11901
NOV 18 0237 10.5s 36.91S 177.49E 166km M=3.5
0.4 0.04 0.03 4
Rsd 0.2s 11ph/8stn Dmin 105km Az.gap 296°
Corr. -0.431 8M/7stn Msd 0.3

96/11930
NOV 19 1750 35.3s 35.36S 178.65E 12km M=3.8
0.9 0.06 0.10 R
Rsd 0.3s 7ph/3stn Dmin 303km Az.gap 343°
Corr. -0.382 2M/2stn Msd 0.3
Poor station coverage.

96/11944
NOV 20 1248 18.4s 38.94S 175.88E 117km M=3.6
0.3 0.02 0.01 3
Rsd 0.2s 19ph/15stn Dmin 41km Az.gap 155°
Corr. -0.657 9M/9stn Msd 0.2 2↑ 1↓

96/11946
NOV 20 1359 56.7s 40.09S 174.86E 12km M=3.6
0.1 0.01 0.01 R
Rsd 0.3s 19ph/16stn Dmin 86km Az.gap 133°
Corr. -0.305 17M/15stn Msd 0.2 1↑

96/11949
NOV 20 1726 02.2s 37.18S 177.46E 141km M=4.6
0.5 0.04 0.02 5
Rsd 0.2s 12ph/10stn Dmin 45km Az.gap 187°
Corr. -0.019 17M/13stn Msd 0.2 1↑

96/11956
NOV 20 2329 24.7s 37.19S 176.75E 213km M=4.4
0.6 0.04 0.02 6
Rsd 0.3s 11ph/9stn Dmin 123km Az.gap 167°
Corr. 0.490 14M/12stn Msd 0.2 1↑

96/11959
NOV 21 0040 54.0s 39.52S 176.99E 12km M=3.9
0.2 0.01 0.01 R
Rsd 0.2s 19ph/15stn Dmin 58km Az.gap 181°
Corr. -0.519 21M/15stn Msd 0.2 1↑

96/11962
NOV 21 0622 37.0s 37.57S 179.39E 33km M=4.2
0.4 0.02 0.03 R
Rsd 0.2s 11ph/8stn Dmin 96km Az.gap 288°
Corr. 0.002 16M/12stn Msd 0.2 1↓

96/11976
NOV 22 0256 11.3s 41.08S 174.69E 31km M=3.8
0.1 0.01 0.01 1
Rsd 0.1s 19ph/17stn Dmin 17km Az.gap 66°
Corr. -0.182 23M/18stn Msd 0.3 5↑ 6↓
Felt Kelburn (68).

96/11999
NOV 22 1533 08.9s 38.06S 175.42E 265km M=4.4
0.3 0.07 0.03 4
Rsd 0.1s 13ph/10stn Dmin 110km Az.gap 216°
Corr. -0.898 18M/15stn Msd 0.1

96/12016
NOV 23 0249 35.3s 38.88S 175.60E 235km M=3.6
0.6 0.05 0.05 4
Rsd 0.2s 13ph/10stn Dmin 26km Az.gap 200°
Corr. -0.866 10M/10stn Msd 0.2 2↑ 1↓

96/12028
NOV 23 1953 23.1s 41.03S 174.79E 33km M=4.6
0.1 0.01 0.01 R
Rsd 0.2s 22ph/20stn Dmin 21km Az.gap 57°
Corr. -0.053 15M/8stn Msd 0.2 7↑ 7↓
Felt Waitarere Beach (65), MM4 and Wellington (68).

96/12041
NOV 24 0155 04.3s 36.71S 177.83E 12km M=3.7
0.9 0.06 0.06 R
Rsd 0.6s 8ph/5stn Dmin 108km Az.gap 233°
Corr. 0.439 5M/3stn Msd 0.2

96/12062
NOV 25 0246 44.5s 40.62S 175.09E 29km M=3.7
0.1 0.01 0.01 2
Rsd 0.2s 27ph/21stn Dmin 31km Az.gap 126°
Corr. -0.117 24M/20stn Msd 0.3 1↑

96/12076
NOV 25 1335 33.1s 37.79S 179.42E 12km M=3.6
0.3 0.02 0.02 R
Rsd 0.1s 6ph/4stn Dmin 101km Az.gap 311°
Corr. -0.014 5M/5stn Msd 0.2

96/12089
NOV 25 1928 40.1s 42.23S 173.06E 63km M=3.6
0.3 0.01 0.02 5
Rsd 0.3s 20ph/14stn Dmin 53km Az.gap 125°
Corr. -0.643 9M/9stn Msd 0.3 1↑

96/12101
NOV 26 0423 15.4s 38.38S 176.02E 150km M=3.8
0.4 0.03 0.02 3
Rsd 0.2s 18ph/13stn Dmin 44km Az.gap 165°
Corr. -0.405 10M/10stn Msd 0.3 2↑ 2↓

96/12105
NOV 26 0700 09.0s 41.95S 173.43E 19km M=4.2
0.1 0.01 0.01 1
Rsd 0.2s 24ph/17stn Dmin 48km Az.gap 99°
Corr. -0.283 13M/7stn Msd 0.2 1↑ 8↓

96/12110
NOV 26 1330 36.1s 35.81S 178.30E 209km M=3.7
0.4 0.06 0.05 9
Rsd 0.2s 6ph/4stn Dmin 199km Az.gap 339°
Corr. -0.586 4M/4stn Msd 0.2

96/12115
NOV 26 1701 18.8s 45.02S 167.51E 58km M=4.4
0.3 0.02 0.01 4
Rsd 0.2s 13ph/8stn Dmin 57km Az.gap 183°
Corr. -0.285 10M/5stn Msd 0.2 2↑ 2↓
Felt Manapouri (138).

96/12137
NOV 27 0936 12.8s 41.32S 172.56E 199km M=3.8
0.4 0.03 0.02 3
Rsd 0.3s 27ph/20stn Dmin 58km Az.gap 176°
Corr. -0.349 13M/13stn Msd 0.2 5↑ 3↓

96/12166
NOV 28 0331 03.6s 38.62S 176.17E 108km M=3.8
0.3 0.01 0.01 2
Rsd 0.2s 35ph/28stn Dmin 28km Az.gap 86°
Corr. -0.448 18M/18stn Msd 0.2 2↑ 1↓

96/12169
NOV 28 0525 20.7s 40.89S 172.73E 5km M=3.6
0.4 0.03 0.02 R
Rsd 0.3s 11ph/8stn Dmin 98km Az.gap 199°
Corr. -0.631 23M/21stn Msd 0.4

96/12180
NOV 28 1946 59.2s 40.82S 176.52E 12km M=3.6
0.3 0.02 0.02 R
Rsd 0.2s 14ph/12stn Dmin 81km Az.gap 230°
Corr. -0.643 13M/11stn Msd 0.6 1↓

96/12183
NOV 29 0253 58.8s 42.56S 173.72E 5km M=3.7
0.6 0.02 0.05 R
Rsd 0.5s 9ph/7stn Dmin 21km Az.gap 252°
Corr. 0.295 8M/4stn Msd 0.3 1↓

96/12184
NOV 29 0254 20.7s 42.52S 173.73E 5km M=3.6
0.9 0.03 0.06 R
Rsd 0.6s 6ph/4stn Dmin 19km Az.gap 252°
Corr. 0.333 4M/2stn Msd 0.1 1↑

96/12186
NOV 29 0757 37.5s 47.15S 166.05E 33km M=4.3
0.5 0.03 0.03 R
Rsd 0.2s 10ph/6stn Dmin 161km Az.gap 305°
Corr. 0.381 8M/4stn Msd 0.2 1↑

96/12188
NOV 29 0930 06.8s 40.28S 173.69E 216km M=3.5
0.5 0.05 0.03 3
Rsd 0.2s 16ph/12stn Dmin 61km Az.gap 279°
Corr. -0.495 3M/3stn Msd 0.3

96/12198
NOV 29 2326 04.4s 39.20S 174.85E 218km M=4.1
0.5 0.02 0.02 4
Rsd 0.2s 32ph/28stn Dmin 50km Az.gap 87°
Corr. -0.033 18M/18stn Msd 0.2 1↑

96/12200
NOV 30 0010 53.0s 37.35S 178.62E 31km M=3.7
0.6 0.02 0.04 2
Rsd 0.3s 10ph/7stn Dmin 39km Az.gap 269°
Corr. 0.419 11M/7stn Msd 0.3

96/12206
NOV 30 0823 18.1s 35.97S 178.73E 135km M=4.4
0.7 0.08 0.06 15
Rsd 0.2s 13ph/9stn Dmin 185km Az.gap 281°
Corr. 0.614 25M/21stn Msd 0.2

96/12219
NOV 30 1849 30.7s 41.21S 174.94E 41km M=3.5
0.1 0.01 0.01 1
Rsd 0.1s 22ph/19stn Dmin 9km Az.gap 58°
Corr. -0.213 15M/14stn Msd 0.2 5↑ 2↓
Felt Lower Hutt (68) MM3 and Wellington (68).

96/12223
NOV 30 2331 03.0s 37.86S 179.53E 12km M=3.7
1.3 0.07 0.08 R
Rsd 0.6s 8ph/7stn Dmin 112km Az.gap 302°
Corr. 0.321 12M/8stn Msd 0.2 1↓

96/12240
DEC 01 1540 58.2s 35.60S 178.49E 212km M=3.9
1.0 0.28 0.12 40
Rsd 0.4s 6ph/4stn Dmin 223km Az.gap 342°
Corr. 0.074 4M/4stn Msd 0.1

96/12241
DEC 01 1655 49.6s 38.70S 175.79E 178km M=3.6
0.9 0.05 0.05 8
Rsd 0.4s 15ph/12stn Dmin 56km Az.gap 214°
Corr. -0.770 6M/6stn Msd 0.4 1↓

96/12242
DEC 01 1938 32.4s 37.83S 175.91E 152km M=3.6
2.1 0.24 0.42 31
Rsd 0.7s 6ph/4stn Dmin 116km Az.gap 259°
Corr. -0.945 4M/4stn Msd 0.2
Poor station coverage.

96/12243
DEC 01 1943 17.6s 39.05S 174.88E 197km M=3.9
0.4 0.02 0.02 4
Rsd 0.2s 29ph/22stn Dmin 44km Az.gap 146°
Corr. 0.202 18M/18stn Msd 0.3 1↑

96/12256
DEC 02 1207 32.8s 37.28S 177.46E 132km M=3.6
0.7 0.04 0.02 6
Rsd 0.3s 11ph/9stn Dmin 82km Az.gap 227°
Corr. 0.295 16M/16stn Msd 0.3

96/12261
DEC 02 1359 31.8s 44.50S 169.56E 12km M=3.6
0.2 0.01 0.01 R
Rsd 0.2s 15ph/8stn Dmin 87km Az.gap 164°
Corr. -0.256 12M/6stn Msd 0.2 1↑ 1↓

96/12265
DEC 02 1914 29.6s 41.97S 173.86E 12km M=4.2
0.2 0.01 0.01 R
Rsd 0.3s 17ph/15stn Dmin 28km Az.gap 141°
Corr. -0.481 15M/9stn Msd 0.2 5↑ 5↓

96/12269
DEC 03 0227 32.3s 41.17S 173.25E 109km M=3.8
0.4 0.03 0.02 5
Rsd 0.3s 18ph/15stn Dmin 58km Az.gap 156°
Corr. -0.595 14M/11stn Msd 0.3 1↑ 2↓

96/12278
DEC 03 1129 02.8s 38.83S 175.17E 219km M=4.6
0.3 0.02 0.02 3
Rsd 0.1s 38ph/33stn Dmin 31km Az.gap 76°
Corr. -0.206 9M/5stn Msd 0.2 1↑

96/12290
DEC 03 2224 01.4s 37.96S 177.66E 80km M=4.2
0.3 0.01 0.01 3
Rsd 0.2s 25ph/22stn Dmin 54km Az.gap 96°
Corr. 0.406 21M/15stn Msd 0.2 4↑ 3↓

96/12295
DEC 04 0248 54.3s 38.99S 175.50E 132km M=3.5
1.0 0.05 0.05 8
Rsd 0.5s 9ph/7stn Dmin 11km Az.gap 246°
Corr. 0.062 5M/4stn Msd 0.2

96/12306
DEC 04 1144 47.3s 37.37S 176.04E 257km M=3.8
0.5 0.09 0.06 6
Rsd 0.1s 15ph/13stn Dmin 136km Az.gap 253°
Corr. -0.669 18M/17stn Msd 0.3 1↑

96/12314
DEC 04 1816 40.8s 45.03S 167.50E 88km M=3.8
0.3 0.03 0.01 3
Rsd 0.2s 14ph/8stn Dmin 56km Az.gap 196°
Corr. -0.255 18M/11stn Msd 0.2 2↑ 1↓

96/12315
DEC 04 1836 56.9s 35.23S 179.07E 213km M=4.1
0.3 0.03 0.08 4
Rsd 0.1s 11ph/8stn Dmin 272km Az.gap 338°
Corr. -0.549 17M/16stn Msd 0.3

96/12320
DEC 04 2115 24.6s 38.43S 176.10E 140km M=4.1
0.3 0.01 0.01 3
Rsd 0.2s 35ph/30stn Dmin 15km Az.gap 59°
Corr. -0.017 24M/20stn Msd 0.2 1↑

96/12326
DEC 04 2219 10.0s 45.03S 167.35E 25km M=3.9
0.2 0.01 0.01 1
Rsd 0.1s 14ph/8stn Dmin 51km Az.gap 209°
Corr. -0.426 13M/7stn Msd 0.3 1↓

96/12353
DEC 05 2034 05.9s 36.29S 179.34W 33km M=3.7
0.4 0.07 0.06 R
Rsd 0.1s 6ph/3stn Dmin 256km Az.gap 351°
Corr. -0.847 4M/3stn Msd 0.5

96/12355
DEC 05 2149 44.8s 39.52S 174.56E 127km M=3.8
0.4 0.01 0.01 4
Rsd 0.3s 33ph/28stn Dmin 45km Az.gap 69°
Corr. -0.343 15M/13stn Msd 0.3 4↑ 7↓

96/12362
DEC 06 0645 55.4s 37.03S 178.43E 93km M=3.7
0.0 0.00 0.00 0
Rsd 0.0s 5ph/3stn Dmin 117km Az.gap 327°
Corr. -0.087 3M/3stn Msd 0.4 1↓

96/12372
DEC 06 1337 08.0s 38.57S 175.73E 187km M=3.5
0.2 0.01 0.02 2
Rsd 0.0s 12ph/10stn Dmin 72km Az.gap 326°
Corr. 0.090 7M/7stn Msd 0.3 1↓

96/12375
DEC 06 1548 16.9s 38.32S 176.01E 176km M=3.9
0.5 0.03 0.02 4
Rsd 0.2s 20ph/17stn Dmin 49km Az.gap 93°
Corr. -0.360 20M/15stn Msd 0.2 1↑

96/12409
DEC 07 1010 16.1s 38.04S 176.64E 147km M=3.8
0.4 0.02 0.02 3
Rsd 0.2s 20ph/18stn Dmin 7km Az.gap 68°
Corr. -0.130 16M/15stn Msd 0.2 1↑

96/12430
DEC 08 0431 15.6s 38.69S 175.96E 140km M=3.5
0.9 0.06 0.05 7
Rsd 0.2s 12ph/9stn Dmin 50km Az.gap 198°
Corr. -0.895 10M/7stn Msd 0.4 1↑

96/12434
DEC 08 0554 12.4s 38.31S 176.01E 160km M=3.7
0.5 0.04 0.02 4
Rsd 0.2s 12ph/11stn Dmin 51km Az.gap 189°
Corr. -0.613 14M/13stn Msd 0.2 1↑

96/12439
DEC 08 1015 53.1s 37.23S 176.57E 284km M=3.6
1.1 0.10 0.13 9
Rsd 0.4s 10ph/6stn Dmin 124km Az.gap 298°
Corr. -0.740 3M/3stn Msd 0.1

96/12450
DEC 08 1631 53.0s 36.08S 177.70E 264km M=4.2
1.0 0.11 0.14 12
Rsd 0.4s 8ph/5stn Dmin 227km Az.gap 329°
Corr. -0.665 6M/4stn Msd 0.4

96/12468
DEC 09 0438 06.7s 40.54S 173.60E 117km M=4.0
0.3 0.01 0.01 4
Rsd 0.2s 39ph/29stn Dmin 40km Az.gap 141°
Corr. 0.075 15M/12stn Msd 0.2 5↑ 6↓

96/12491
DEC 09 2322 58.6s 40.23S 176.73E 25km M=4.3
0.2 0.01 0.02 3
Rsd 0.2s 37ph/30stn Dmin 67km Az.gap 181°
Corr. -0.498 13M/8stn Msd 0.3 1↑
Felt Mt Vernon (60) MM4.

96/12493
DEC 10 0157 59.4s 40.56S 175.93E 31km M=4.0
0.1 0.01 0.01 1
Rsd 0.1s 30ph/25stn Dmin 32km Az.gap 148°
Corr. -0.442 38M/32stn Msd 0.3 1↑ 2↓

96/12496
DEC 10 0420 16.9s 40.02S 176.94E 27km M=3.8
0.3 0.01 0.01 3
Rsd 0.1s 21ph/17stn Dmin 62km Az.gap 184°
Corr. -0.703 24M/20stn Msd 0.3 1↑

96/12503
DEC 10 1133 40.6s 38.48S 178.84E 27km M=3.6
0.3 0.01 0.02 2
Rsd 0.2s 14ph/11stn Dmin 68km Az.gap 246°
Corr. -0.346 13M/11stn Msd 0.3 1↑

96/12506
DEC 10 1742 09.6s 38.74S 175.80E 140km M=4.0
0.5 0.02 0.02 4
Rsd 0.3s 24ph/19stn Dmin 6km Az.gap 57°
Corr. -0.527 17M/15stn Msd 0.3 7↑ 5↓

96/12516
DEC 11 0000 48.2s 39.11S 174.82E 211km M=3.9
0.8 0.04 0.03 6
Rsd 0.2s 19ph/17stn Dmin 50km Az.gap 158°
Corr. -0.204 11M/10stn Msd 0.2 1↑

96/12518
DEC 11 0311 02.4s 40.89S 175.73E 25km M=3.6
0.2 0.01 0.01 1
Rsd 0.2s 19ph/16stn Dmin 28km Az.gap 179°
Corr. -0.103 26M/21stn Msd 0.3 1↓

96/12523
DEC 11 0833 27.6s 40.02S 173.88E 213km M=3.8
0.4 0.01 0.02 4
Rsd 0.2s 27ph/25stn Dmin 76km Az.gap 137°
Corr. 0.039 14M/14stn Msd 0.3 1↓

96/12526
DEC 11 0931 58.4s 42.31S 172.68E 5km M=4.6
0.2 0.01 0.01 R
Rsd 0.2s 21ph/18stn Dmin 63km Az.gap 81°
Corr. -0.379 21M/11stn Msd 0.2 3↑ 2↓

96/12571
DEC 13 0254 59.2s 36.09S 178.58E 147km M=3.9
3.9 0.24 0.15 20
Rsd 0.3s 9ph/8stn Dmin 169km Az.gap 315°
Corr. 0.828 7M/7stn Msd 0.2

96/12574
DEC 13 0342 04.0s 37.84S 176.54E 144km M=3.6
0.4 0.03 0.04 3
Rsd 0.2s 7ph/4stn Dmin 69km Az.gap 247°
Corr. -0.774 4M/4stn Msd 0.2
Poor station coverage.

96/12598
DEC 13 1949 21.2s 39.87S 176.72E 26km M=3.5
0.3 0.01 0.02 3
Rsd 0.2s 23ph/20stn Dmin 37km Az.gap 196°
Corr. -0.133 23M/19stn Msd 0.4 1↑

96/12599
DEC 13 2129 29.5s 38.45S 176.06E 145km M=4.3
0.4 0.02 0.01 3
Rsd 0.2s 28ph/23stn Dmin 19km Az.gap 80°
Corr. -0.373 21M/15stn Msd 0.2 5↑ 3↓

96/12606
DEC 14 0429 33.3s 40.67S 175.69E 53km M=4.2
0.1 0.01 0.01 2
Rsd 0.2s 31ph/27stn Dmin 9km Az.gap 133°
Corr. -0.381 8M/5stn Msd 0.3 2↑ 6↓
Felt Waitarere Beach (65) MM4.

96/12609
DEC 14 0844 45.3s 38.71S 175.86E 169km M=3.5
0.5 0.03 0.06 4
Rsd 0.2s 15ph/13stn Dmin 29km Az.gap 269°
Corr. -0.255 8M/8stn Msd 0.3 1↑

96/12612
DEC 14 1153 52.0s 43.50S 172.76E 12km M=3.5
0.2 0.01 0.02 R
Rsd 0.2s 14ph/9stn Dmin 25km Az.gap 173°
Corr. -0.226 11M/8stn Msd 0.2
Felt Christchurch (110).

96/12614
DEC 14 1524 55.1s 36.57S 177.04E 209km M=3.5
0.2 0.05 0.02 4
Rsd 0.1s 5ph/3stn Dmin 188km Az.gap 329°
Corr. 0.022 4M/4stn Msd 0.2

96/12617
DEC 14 1916 51.1s 42.26S 172.66E 5km M=3.6
0.1 0.01 0.01 R
Rsd 0.2s 20ph/17stn Dmin 59km Az.gap 76°
Corr. -0.107 8M/5stn Msd 0.4 2↑ 2↓

96/12645
DEC 15 2313 16.4s 40.31S 178.80E 12km M=5.5
0.7 0.03 0.06 R
Rsd 0.6s 44ph/37stn Dmin 200km Az.gap 235°
Corr. -0.763 29M/15stn Msd 0.3 3↑ 10↓

96/12656
DEC 16 0928 18.0s 36.42S 179.39W 12km M=4.5
0.5 0.04 0.03 R
Rsd 0.2s 13ph/9stn Dmin 278km Az.gap 329°
Corr. -0.085 26M/19stn Msd 0.3

96/12675
DEC 16 2225 47.4s 40.91S 176.88E 12km M=4.2
0.4 0.02 0.03 R
Rsd 0.3s 23ph/16stn Dmin 104km Az.gap 204°
Corr. -0.302 34M/29stn Msd 0.3 1↑ 5↓

96/12687
DEC 17 1356 27.5s 37.88S 176.74E 142km M=3.8
0.3 0.02 0.01 3
Rsd 0.2s 18ph/15stn Dmin 13km Az.gap 166°
Corr. -0.348 8M/8stn Msd 0.2 3↑ 1↓

96/12691
DEC 17 2139 29.7s 46.16S 166.92E 116km M=3.9
0.4 0.04 0.03 4
Rsd 0.2s 12ph/7stn Dmin 79km Az.gap 288°
Corr. 0.427 15M/8stn Msd 0.2 2↑ 1↓

96/12709
DEC 18 1124 39.9s 36.55S 177.83E 160km M=4.1
0.8 0.06 0.04 12
Rsd 0.4s 9ph/6stn Dmin 124km Az.gap 239°
Corr. 0.404 11M/7stn Msd 0.3

96/12718
DEC 18 1837 00.3s 36.34S 177.99E 33km M=3.8
2.0 0.14 0.08 R
Rsd 0.4s 5ph/4stn Dmin 143km Az.gap 329°
Corr. -0.449 8M/4stn Msd 0.3

96/12720
DEC 18 2021 56.4s 40.22S 174.98E 12km M=3.8
0.1 0.01 0.01 R
Rsd 0.4s 31ph/27stn Dmin 71km Az.gap 101°
Corr. -0.052 27M/21stn Msd 0.4 1↑

96/12725
DEC 19 0412 47.3s 40.91S 175.45E 22km M=3.7
0.1 0.01 0.01 1
Rsd 0.1s 25ph/19stn Dmin 28km Az.gap 127°
Corr. -0.197 24M/20stn Msd 0.3 1↑ 2↓
Felt Masterton (66).

96/12731
DEC 19 1036 45.3s 38.79S 175.99E 120km M=3.6
0.4 0.01 0.02 4
Rsd 0.2s 18ph/14stn Dmin 14km Az.gap 88°
Corr. -0.211 14M/12stn Msd 0.3

96/12737
DEC 19 2247 30.7s 36.35S 179.77W 12km M=4.0
0.4 0.05 0.04 R
Rsd 0.1s 6ph/3stn Dmin 221km Az.gap 346°
Corr. -0.680 5M/3stn Msd 0.3

96/12740
DEC 20 0145 30.8s 37.40S 179.08E 86km M=3.6
0.3 0.03 0.15 13
Rsd 0.1s 7ph/4stn Dmin 72km Az.gap 322°
Corr. -0.726 6M/4stn Msd 0.3

96/12745
DEC 20 0917 37.7s 45.42S 167.08E 86km M=3.8
0.7 0.03 0.05 5
Rsd 0.3s 9ph/7stn Dmin 8km Az.gap 284°
Corr. 0.267 10M/5stn Msd 0.1 3↑ 2↓

96/12750
DEC 20 1544 49.1s 39.49S 175.66E 30km M=4.0
0.1 0.01 0.02 1
Rsd 0.2s 28ph/25stn Dmin 25km Az.gap 112°
Corr. 0.641 32M/27stn Msd 0.3 1↑
Felt Moawhango (58) and Marton (61), MM4.

96/12753
DEC 20 1653 24.1s 36.42S 179.55W 12km M=4.0
0.1 0.01 0.01 R
Rsd 0.0s 5ph/3stn Dmin 232km Az.gap 345°
Corr. -0.831 5M/3stn Msd 0.1

96/12762
DEC 21 0753 54.4s 40.12S 174.40E 104km M=3.6
0.3 0.01 0.01 3
Rsd 0.2s 29ph/24stn Dmin 85km Az.gap 104°
Corr. 0.056 14M/12stn Msd 0.3 5↑ 2↓

96/12768
DEC 21 1004 09.8s 37.24S 177.31E 188km M=4.0
1.1 0.05 0.04 10
Rsd 0.4s 14ph/11stn Dmin 97km Az.gap 229°
Corr. 0.085 13M/10stn Msd 0.2

96/12771
DEC 21 1218 47.8s 36.14S 179.87E 167km M=4.2
0.3 0.04 0.05 3
Rsd 0.1s 7ph/5stn Dmin 214km Az.gap 350°
Corr. -0.875 7M/4stn Msd 0.2

96/12772
DEC 21 1243 39.4s 36.22S 179.95E 183km M=4.1
0.2 0.03 0.08 5
Rsd 0.0s 7ph/4stn Dmin 212km Az.gap 349°
Corr. -0.830 8M/5stn Msd 0.3

96/12773
DEC 21 1255 26.1s 36.77S 177.22E 199km M=4.4
0.8 0.04 0.04 9
Rsd 0.2s 13ph/12stn Dmin 133km Az.gap 205°
Corr. 0.144 16M/13stn Msd 0.2 1↓

96/12774
DEC 21 1257 25.1s 36.31S 179.93E 181km M=4.3
0.5 0.08 0.12 5
Rsd 0.1s 8ph/6stn Dmin 203km Az.gap 348°
Corr. -0.917 5M/3stn Msd 0.2
Poor station coverage.

96/12786
DEC 21 2338 53.2s 40.36S 174.69E 98km M=3.5
0.1 0.00 0.01 2
Rsd 0.1s 27ph/22stn Dmin 59km Az.gap 97°
Corr. 0.021 13M/11stn Msd 0.3 1↓

96/12788
DEC 22 0020 57.6s 38.48S 175.90E 165km M=3.7
0.4 0.01 0.01 3
Rsd 0.1s 23ph/19stn Dmin 22km Az.gap 73°
Corr. -0.442 18M/15stn Msd 0.4 1↑

96/12800
DEC 22 0633 07.4s 45.03S 167.48E 95km M=3.5
0.4 0.02 0.02 4
Rsd 0.2s 12ph/7stn Dmin 55km Az.gap 197°
Corr. -0.060 10M/7stn Msd 0.2 1↑ 2↓

96/12803
DEC 22 0856 19.2s 39.50S 174.38E 206km M=4.4
0.5 0.02 0.02 5
Rsd 0.3s 35ph/30stn Dmin 35km Az.gap 75°
Corr. -0.149 22M/16stn Msd 0.3 4↑ 1↓

96/12818
DEC 22 1711 42.5s 42.93S 171.91E 5km M=4.7
0.1 0.01 0.01 R
Rsd 0.2s 18ph/12stn Dmin 34km Az.gap 96°
Corr. -0.175 20M/11stn Msd 0.2 3↑ 3↓

96/12824
DEC 22 1844 24.1s 36.05S 179.92W 12km M=4.0
0.4 0.04 0.05 R
Rsd 0.1s 6ph/3stn Dmin 234km Az.gap 350°
Corr. -0.744 4M/3stn Msd 0.3

96/12826
DEC 22 1921 46.0s 40.02S 175.71E 65km M=5.3
0.2 0.01 0.01 4
Rsd 0.2s 41ph/37stn Dmin 66km Az.gap 121°
Corr. -0.037 8M/4stn Msd 0.2 4↑ 2↓
Felt Taranaki (47) to Wellington (68), MM4.

96/12835
DEC 22 2341 46.6s 45.23S 167.33E 113km M=3.6
0.8 0.06 0.04 6
Rsd 0.5s 9ph/5stn Dmin 30km Az.gap 222°
Corr. 0.060 5M/4stn Msd 0.4 2↑ 2↓

96/12846
DEC 23 0351 32.3s 37.40S 176.54E 217km M=4.4
0.3 0.03 0.01 3
Rsd 0.1s 12ph/9stn Dmin 97km Az.gap 150°
Corr. 0.861 18M/14stn Msd 0.2 1↑ 3↓

96/12847
DEC 23 0403 15.4s 38.47S 175.77E 189km M=4.0
1.3 0.04 0.04 12
Rsd 0.4s 16ph/13stn Dmin 80km Az.gap 160°
Corr. -0.521 17M/14stn Msd 0.2

96/12853
DEC 23 1014 20.4s 37.62S 177.14E 159km M=3.6
1.2 0.05 0.04 11
Rsd 0.5s 10ph/7stn Dmin 102km Az.gap 190°
Corr. 0.054 6M/5stn Msd 0.2

96/12855
DEC 23 1121 17.9s 38.12S 176.10E 191km M=3.7
1.1 0.06 0.08 18
Rsd 0.3s 15ph/12stn Dmin 178km Az.gap 222°
Corr. -0.904 11M/10stn Msd 0.2 1↓
Poor station coverage.

96/12910
DEC 24 2232 35.8s 37.58S 179.00E 12km M=3.6
0.5 0.02 0.03 R
Rsd 0.2s 7ph/4stn Dmin 61km Az.gap 284°
Corr. 0.016 6M/4stn Msd 0.2

96/12952
DEC 25 1154 14.2s 36.70S 177.50E 159km M=4.7
0.5 0.04 0.03 6
Rsd 0.1s 17ph/14stn Dmin 123km Az.gap 238°
Corr. 0.001 22M/16stn Msd 0.3

96/12953
DEC 25 1156 05.0s 38.75S 175.50E 175km M=3.7
0.3 0.02 0.01 2
Rsd 0.1s 24ph/20stn Dmin 27km Az.gap 77°
Corr. 0.011 15M/15stn Msd 0.3

96/12984
DEC 26 0254 39.3s 38.18S 176.36E 158km M=3.6
1.9 0.04 0.13 13
Rsd 0.1s 9ph/9stn Dmin 65km Az.gap 319°
Corr. 0.407 5M/5stn Msd 0.2

96/13028
DEC 26 1737 48.5s 35.23S 178.95E 249km M=4.7
0.4 0.05 0.03 8
Rsd 0.1s 18ph/17stn Dmin 269km Az.gap 326°
Corr. -0.157 18M/15stn Msd 0.2

96/13043
DEC 26 2301 31.0s 39.17S 175.25E 137km M=3.8
0.3 0.01 0.01 2
Rsd 0.2s 28ph/21stn Dmin 18km Az.gap 65°
Corr. -0.101 6M/5stn Msd 0.3 1↑

96/13076
DEC 27 0927 54.7s 38.54S 175.79E 174km M=4.4
0.4 0.02 0.02 3
Rsd 0.2s 22ph/16stn Dmin 20km Az.gap 78°
Corr. 0.073 20M/16stn Msd 0.3 6↑ 3↓

96/13080
DEC 27 1209 29.0s 37.84S 176.72E 143km M=3.5
0.5 0.05 0.09 15
Rsd 0.2s 7ph/4stn Dmin 142km Az.gap 242°
Corr. -0.927 3M/3stn Msd 0.2
Poor station coverage.

96/13093
DEC 27 1759 46.1s 44.99S 166.91E 12km M=3.7
0.5 0.02 0.03 R
Rsd 0.3s 12ph/7stn Dmin 56km Az.gap 249°
Corr. -0.239 11M/7stn Msd 0.2 1↑ 3↓

96/13113
DEC 28 0447 55.1s 40.94S 175.49E 24km M=3.7
0.1 0.01 0.01 2
Rsd 0.2s 24ph/19stn Dmin 24km Az.gap 85°
Corr. -0.428 21M/19stn Msd 0.3 1↑

96/13127
DEC 28 0951 04.1s 38.23S 175.96E 211km M=4.5
0.3 0.02 0.02 3
Rsd 0.2s 26ph/21stn Dmin 21km Az.gap 104°
Corr. -0.424 14M/13stn Msd 0.3 4↑ 4↓

96/13139
DEC 28 1228 41.0s 35.16S 179.12E 187km M=4.0
0.9 0.12 0.08 25
Rsd 0.2s 10ph/9stn Dmin 280km Az.gap 327°
Corr. -0.310 8M/7stn Msd 0.3

96/13156
DEC 28 1803 53.8s 38.18S 175.84E 202km M=4.4
0.3 0.01 0.01 2
Rsd 0.1s 26ph/22stn Dmin 31km Az.gap 101°
Corr. 0.257 17M/15stn Msd 0.2

96/13161
DEC 28 1935 44.0s 38.76S 175.18E 242km M=3.6
0.4 0.02 0.04 3
Rsd 0.1s 17ph/14stn Dmin 43km Az.gap 154°
Corr. 0.319 11M/11stn Msd 0.2

96/13168
DEC 28 2209 44.9s 40.34S 176.89E 12km M=3.5
0.5 0.01 0.03 R
Rsd 0.2s 9ph/6stn Dmin 66km Az.gap 267°
Corr. -0.743 3M/3stn Msd 0.1

96/13185
DEC 29 0640 41.5s 38.52S 175.45E 5km M=3.8
0.1 0.01 0.01 R
Rsd 0.4s 25ph/18stn Dmin 32km Az.gap 80°
Corr. 0.124 31M/25stn Msd 0.4 6↑ 1↓
Felt Waihora Rd (40) MM4.

96/13200
DEC 29 1503 53.9s 43.14S 173.25E 20km M=4.2
0.1 0.00 0.00 1
Rsd 0.1s 19ph/16stn Dmin 80km Az.gap 174°
Corr. -0.550 14M/8stn Msd 0.2 2↑ 4↓
Felt Christchurch (110).

96/13209
DEC 30 0022 28.8s 42.55S 173.76E 20km M=4.2
0.2 0.01 0.01 1
Rsd 0.1s 25ph/17stn Dmin 23km Az.gap 169°
Corr. -0.657 10M/6stn Msd 0.4 5↑ 9↓

96/13217
DEC 30 1231 29.0s 38.96S 176.22E 70km M=3.7
0.3 0.02 0.01 4
Rsd 0.2s 13ph/10stn Dmin 13km Az.gap 158°
Corr. -0.102 1M/1stn Msd 0.0 1↑ 1↓

96/13219
DEC 30 1413 54.8s 38.21S 176.06E 197km M=3.5
0.6 0.02 0.02 6
Rsd 0.2s 12ph/11stn Dmin 59km Az.gap 150°
Corr. -0.100 6M/6stn Msd 0.2

96/13224
DEC 30 1953 38.9s 45.19S 166.77E 12km M=3.6
0.4 0.02 0.02 R
Rsd 0.2s 13ph/7stn Dmin 43km Az.gap 273°
Corr. 0.026 11M/7stn Msd 0.2 1↓

96/13242
DEC 31 0724 59.6s 35.62S 179.58E 131km M=4.4
0.8 0.08 0.06 16
Rsd 0.2s 11ph/10stn Dmin 247km Az.gap 328°
Corr. 0.405 5M/3stn Msd 0.3

96/13254
DEC 31 1310 25.0s 39.82S 174.06E 150km M=3.8
0.4 0.02 0.04 4
Rsd 0.2s 26ph/21stn Dmin 110km Az.gap 189°
Corr. -0.778 10M/10stn Msd 0.3 4↑ 1↓

96/13268
DEC 31 2031 59.1s 39.79S 174.61E 103km M=4.2
0.4 0.01 0.01 5
Rsd 0.2s 26ph/24stn Dmin 67km Az.gap 86°
Corr. -0.493 12M/11stn Msd 0.3 4↑ 5↓

LISTS OF ORIGINS AND MAGNITUDE DETERMINATIONS

HIGHER MAGNITUDE EARTHQUAKES

A chronological list of 1996 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 34 and NP phases from NS recording stations have been used to determine the origins.

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
2279	FEB 28	1423 10.9	45.06S	167.41E	114	6.2F	0.2	18	14
3509	MAR 22	0938 56.1	44.79S	167.17E	5R	5.1F	0.3	19	14
4748	APR 22	1556 32.0	37.24S	176.83E	227	5.0	0.2	24	22
4938	APR 25	1620 38.8	37.86S	179.80E	12R	5.2	0.1	28	26
5323	MAY 05	0013 25.0	36.57S	177.60E	234	5.4	0.1	23	17
6004	MAY 26	1013 2.0	39.03S	174.96E	218	5.8F	0.2	55	42
6170	MAY 31	2331 13.9	40.68S	175.39E	36	5.1F	0.2	37	34
6712	JUN 16	0056 40.7	36.29S	179.99E	33R	5.0	0.3	12	11
6951	JUN 20	1730 11.0	45.19S	167.37E	75	5.1F	0.2	14	9
7094	JUN 27	0334 39.7	38.43S	177.50E	78	5.3F	0.2	17	12
7601	JUL 09	2136 22.4	41.80S	172.71E	82	5.0F	0.2	26	19
8545	AUG 05	1006 42.2	37.92S	176.43E	187	5.1	0.2	36	30
8753	AUG 13	0941 41.8	34.77S	179.60E	212	5.9	0.2	21	20
9187	AUG 29	0447 2.4	42.49S	172.79E	10	5.7F	0.1	22	17
9413	SEP 04	2351 26.6	42.29S	174.89E	33R	5.3F	0.1	23	20
9673	SEP 13	0316 48.0	38.44S	175.87E	154	5.1	0.2	42	34
9880	SEP 19	1216 34.4	42.48S	172.82E	11	5.8F	0.2	24	20
10175	SEP 25	1035 17.8	39.06S	174.91E	213	6.4F	0.2	36	30
10477	OCT 04	2239 3.8	37.07S	177.23E	207	5.4	0.1	28	23
10514	OCT 05	2121 36.3	40.37S	176.49E	52	5.1F	0.1	43	38
11090	OCT 25	1028 29.8	38.67S	175.90E	154	5.4	0.2	41	33
11451	NOV 05	0941 34.4	31.16S	180.00W	369R	7.3F	1.8	25	23
11746	NOV 12	0733 52.0	38.87S	175.11E	211	5.0	0.2	40	32
12645	DEC 15	2313 16.4	40.31S	178.80E	12R	5.5	0.6	44	37
12826	DEC 22	1921 46.0	40.02S	175.71E	65	5.3F	0.2	41	37

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 34 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 29.

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
007	JAN 01	0232 41.5	40.84S	175.16E	27	2.6	0.3	21	14
009	JAN 01	0313 49.0	40.78S	174.23E	58	2.0	0.3	9	6
013	JAN 01	0519 12.7	41.58S	174.42E	18	2.1	0.2	14	7
018	JAN 01	0631 26.3	41.49S	173.90E	44	2.6	0.1	16	10
021	JAN 01	0755 26.7	41.04S	174.57E	38	2.8	0.2	23	15
028	JAN 01	1030 4.3	41.24S	174.14E	49	2.4	0.1	12	8
029	JAN 01	1147 15.1	40.65S	174.81E	31	2.7	0.3	29	20
031	JAN 01	1331 2.7	41.44S	175.43E	26	2.2	0.2	18	10
038	JAN 01	1651 28.1	41.68S	174.19E	12R	2.6	0.3	17	14
039	JAN 01	1656 37.0	41.68S	174.18E	12R	2.5	0.3	17	15
042	JAN 01	1800 55.0	41.69S	174.19E	12R	2.7	0.3	17	14
047	JAN 01	2141 30.1	40.91S	175.56E	28	2.1	0.2	7	6
084	JAN 03	0043 28.8	41.06S	175.21E	26	2.5	0.1	14	8
089	JAN 03	0553 41.0	40.87S	174.76E	12R	3.0	0.3	23	17
116	JAN 04	0037 25.1	40.95S	174.10E	57	2.5	0.2	12	6
118	JAN 04	0500 28.6	41.64S	175.32E	11	2.2	0.3	15	11
121	JAN 04	0729 35.4	41.64S	175.39E	24	4.2	0.1	22	17
122	JAN 04	0732 25.1	41.59S	175.34E	18	2.2	0.3	15	9
123	JAN 04	0737 22.0	41.56S	175.33E	19	2.1	0.3	13	9
124	JAN 04	0742 41.4	41.54S	175.33E	21	2.4	0.3	16	12
127	JAN 04	0818 16.1	41.65S	175.34E	9	2.0	0.2	9	6
128	JAN 04	0833 5.0	41.57S	175.33E	21	2.1	0.3	16	10
131	JAN 04	0931 19.5	40.69S	175.51E	29	2.4	0.3	15	9
135	JAN 04	1028 15.0	41.64S	175.33E	22	3.4	0.2	23	14
136	JAN 04	1043 23.5	41.64S	175.37E	22	2.8	0.3	16	12

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138	JAN 04	1121 0.6	41.61S	174.01E	42	2.5	0.3	18	12
139	JAN 04	1244 5.2	41.56S	175.34E	21	2.5	0.3	17	11
140	JAN 04	1336 0.8	41.27S	175.25E	27	2.7	0.2	17	12
145	JAN 04	1551 21.7	41.55S	175.34E	23	2.7	0.3	14	11
155	JAN 05	0001 11.4	41.54S	175.33E	21	2.3	0.4	14	10
156	JAN 05	0007 23.2	40.91S	175.73E	28	2.2	0.2	11	8
173	JAN 05	0728 17.4	41.55S	175.30E	17	2.0	0.4	9	7
206	JAN 05	2139 50.2	41.63S	174.67E	31	2.8	0.2	16	13
209	JAN 05	2235 43.0	41.63S	174.13E	25	2.4	0.3	13	11
213	JAN 05	2328 6.0	41.53S	175.33E	20	2.2	0.3	12	9
218	JAN 06	0118 38.7	40.69S	174.56E	35	2.5	0.2	12	10
219	JAN 06	0201 22.1	40.98S	175.49E	22	3.1	0.3	21	18
226	JAN 06	0846 16.2	40.59S	175.68E	30	2.4	0.3	13	12
229	JAN 06	1013 36.4	41.51S	175.33E	21	2.4	0.4	11	8
234	JAN 06	1054 11.7	41.75S	173.75E	32	2.3	0.2	9	4
242	JAN 06	1406 29.5	41.06S	174.42E	63	2.3	0.1	12	9
253	JAN 06	1756 10.2	40.63S	175.83E	51	2.2	0.2	6	3
257	JAN 06	2208 9.5	40.97S	175.49E	26	2.2	0.1	15	10
258	JAN 06	2211 2.7	41.64S	175.32E	5R	2.0	0.2	11	8
261	JAN 06	2304 52.6	40.89S	174.77E	8	2.6	0.2	17	12
268	JAN 07	0322 0.7	41.03S	175.28E	13	2.5	0.2	16	12
280	JAN 07	0812 5.5	41.09S	175.48E	30	2.0	0.1	12	9
289	JAN 07	1539 4.6	40.82S	174.95E	35	2.2	0.2	12	9
291	JAN 07	1616 8.5	41.33S	174.62E	29	2.3	0.1	13	11
294	JAN 07	1710 8.1	41.40S	174.55E	28	2.7	0.2	22	15
304	JAN 07	2150 50.8	40.85S	174.71E	50	2.4	0.1	10	6
308	JAN 07	2227 28.0	41.33S	174.03E	55	2.8	0.2	24	17
317	JAN 08	0707 54.6	40.51S	173.97E	84	2.7	0.3	17	12
328	JAN 08	1528 28.5	40.68S	173.94E	83	2.1	0.1	11	8
340	JAN 08	1944 28.3	40.55S	174.88E	62	2.0	0.1	6	5
342	JAN 08	1945 30.9	41.56S	175.34E	19	2.4	0.2	16	11
343	JAN 08	2006 25.6	40.63S	175.89E	22	2.1	0.2	13	10
356	JAN 09	0106 48.0	41.16S	174.55E	34	2.6	0.1	19	14
357	JAN 09	0131 51.6	40.79S	175.05E	14	2.6	0.2	22	15
366	JAN 09	0757 29.5	41.60S	174.31E	12R	2.5	0.3	17	14
369	JAN 09	0915 59.2	41.54S	175.32E	20	2.2	0.3	13	11
399	JAN 09	2327 57.4	41.64S	175.39E	23	3.3	0.2	22	17
410	JAN 10	0554 42.4	41.56S	175.32E	19	2.2	0.3	16	11
411	JAN 10	0625 17.4	41.56S	175.34E	20	2.3	0.3	15	10
417	JAN 10	0759 48.3	40.55S	174.13E	89	2.4	0.2	15	9
419	JAN 10	0820 27.4	41.56S	175.33E	19	2.4	0.3	15	10
431	JAN 10	1213 55.9	40.55S	174.75E	50	2.2	0.1	9	7
432	JAN 10	1412 27.8	40.54S	174.67E	30	2.0	0.2	10	7
445	JAN 10	2051 32.1	41.32S	174.01E	56	3.8F	0.2	32	22
447	JAN 11	0022 33.7	41.44S	174.02E	58	2.4	0.2	13	7

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464	JAN 11	1408 14.8	41.40S	175.30E	15	2.0	0.2	18	11
487	JAN 12	0028 17.0	40.58S	173.96E	70	2.6	0.2	15	12
488	JAN 12	0142 33.4	41.59S	174.16E	14	2.0	0.1	13	8
492	JAN 12	0508 51.1	41.63S	175.34E	21	2.8	0.3	20	14
496	JAN 12	1027 55.4	41.42S	173.71E	76	2.7	0.2	17	12
513	JAN 12	2028 12.1	40.88S	175.67E	26	2.1	0.1	6	5
521	JAN 13	0026 8.5	41.21S	174.68E	51	2.6	0.1	11	6
537	JAN 13	1358 26.4	40.61S	174.59E	19	2.2	0.2	11	8
546	JAN 13	2228 48.5	41.14S	173.98E	51	2.3	0.1	10	7
550	JAN 14	0116 55.2	40.67S	174.07E	81	2.1	0.2	13	7
641	JAN 16	1547 49.3	41.61S	174.98E	31	2.9	0.1	26	17
651	JAN 16	1821 39.5	40.58S	175.72E	30	2.3	0.1	17	12
660	JAN 17	0035 16.1	40.70S	175.50E	29	2.4	0.1	12	10
661	JAN 17	0752 13.1	41.53S	175.32E	15	2.5	0.3	12	11
673	JAN 17	1736 14.5	40.66S	174.83E	109	2.4	0.1	7	3
690	JAN 18	1303 2.6	40.56S	173.52E	143	3.2	0.3	20	15
692	JAN 18	1502 1.9	41.81S	174.22E	12	2.2	0.3	17	12
707	JAN 19	0313 25.6	40.64S	175.51E	30	2.0	0.2	11	7
708	JAN 19	0400 30.0	41.88S	174.74E	30	2.5	0.1	12	7
730	JAN 20	0433 41.6	40.90S	175.80E	30	2.2	0.2	13	9
733	JAN 20	0540 59.0	40.90S	175.78E	29	2.3	0.2	11	9
747	JAN 20	1554 16.0	41.07S	175.48E	8	2.5	0.2	17	14
751	JAN 20	1808 5.1	40.95S	175.42E	24	2.3	0.2	13	11
752	JAN 20	1808 19.6	40.95S	175.41E	20	2.8	0.3	15	11
753	JAN 20	1810 51.3	40.95S	175.41E	22	2.2	0.2	11	9
756	JAN 20	1853 8.2	41.59S	174.99E	31	2.4	0.1	12	10
765	JAN 21	0303 37.2	40.90S	175.66E	29	2.2	0.2	13	10
777	JAN 21	0656 20.2	40.61S	175.32E	32	2.3	0.2	16	9
778	JAN 21	0812 35.6	40.73S	174.59E	37	2.1	0.2	12	7
781	JAN 21	0949 6.7	41.15S	175.83E	33	2.1	0.2	11	8
788	JAN 21	1312 48.3	40.96S	175.64E	24	2.1	0.1	14	10
791	JAN 21	1441 17.9	41.02S	174.67E	33	2.7	0.2	26	20
826	JAN 22	0949 46.5	40.71S	174.74E	39	2.5	0.2	15	10
839	JAN 22	1946 0.2	41.27S	175.34E	20	2.5	0.1	18	12
841	JAN 22	2223 52.5	40.75S	174.48E	69	2.6	0.1	11	7
854	JAN 23	1103 42.4	41.46S	174.24E	17	2.7	0.3	22	17
868	JAN 23	1632 19.2	40.78S	175.10E	29	2.5	0.2	13	11
875	JAN 23	2224 16.8	40.89S	175.37E	32	2.0	0.1	10	6
880	JAN 24	0308 36.0	41.00S	174.90E	30	3.2	0.2	18	15
894	JAN 24	1055 0.1	41.60S	174.33E	6	2.5	0.3	19	14
898	JAN 24	1536 56.7	40.54S	174.28E	67	2.1	0.2	10	6
908	JAN 24	2131 46.5	41.15S	174.68E	54	2.6	0.2	10	5
915	JAN 25	0626 40.6	40.60S	173.57E	106	2.7	0.2	9	5
921	JAN 25	0958 49.8	41.52S	175.33E	20	2.3	0.3	14	9
959	JAN 27	0143 51.9	41.28S	175.31E	26	3.4	0.1	22	16

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963	JAN 27	0416 29.7	40.90S	175.90E	31	2.5	0.3	10	8
972	JAN 27	1005 46.8	40.89S	175.81E	30	2.5	0.2	12	10
988	JAN 27	1553 58.9	41.26S	174.81E	29	3.6F	0.2	31	23
1002	JAN 28	0318 10.3	40.90S	175.63E	29	2.1	0.2	15	9
1009	JAN 28	0622 34.1	40.55S	175.22E	33	2.3	0.2	7	6
1011	JAN 28	0654 7.8	40.88S	175.12E	33	2.6	0.2	16	13
1016	JAN 28	0941 42.5	40.52S	173.82E	102	2.7	0.2	16	14
1031	JAN 28	2240 2.9	40.88S	175.22E	22	2.3	0.3	15	8
1042	JAN 29	0558 20.8	41.58S	173.54E	67	2.8	0.3	21	15
1061	JAN 29	1714 50.8	41.37S	173.66E	84	2.6	0.3	20	12
1069	JAN 29	2009 10.3	40.97S	174.61E	53	2.1	0.1	7	5
1071	JAN 29	2043 45.4	40.78S	173.58E	97	2.7	0.2	17	11
1073	JAN 29	2216 57.5	40.94S	174.48E	65	2.2	0.1	8	7
1087	JAN 30	0739 25.8	41.48S	174.28E	33R	2.7	0.2	19	14
1104	JAN 30	1853 25.8	41.02S	174.53E	39	2.6	0.1	17	15
1108	JAN 30	2151 41.7	41.70S	174.21E	28	3.5	0.3	34	21
1109	JAN 30	2242 38.8	41.67S	174.20E	29	2.5	0.2	13	11
1111	JAN 31	0203 55.4	41.64S	174.64E	28	2.9	0.2	25	18
1132	JAN 31	1604 56.4	40.98S	174.07E	59	2.2	0.3	14	8
1140	JAN 31	1929 23.7	40.83S	174.73E	42	2.1	0.1	10	7
1151	JAN 31	2341 45.7	40.86S	175.76E	29	2.0	0.1	7	5
1159	FEB 01	0130 43.1	41.32S	174.81E	22	2.0	0.1	13	9
1167	FEB 01	0419 29.6	41.63S	174.60E	27	2.0	0.1	10	6
1172	FEB 01	0523 44.8	41.74S	174.21E	11	2.8	0.3	23	19
1175	FEB 01	0558 12.4	41.11S	174.88E	28	2.4	0.1	14	11
1181	FEB 01	0846 49.4	40.92S	174.94E	35	2.1	0.1	12	9
1182	FEB 01	0857 53.3	41.46S	173.97E	46	3.4F	0.2	29	23
1192	FEB 01	1333 33.9	40.86S	174.67E	34	2.1	0.2	13	10
1210	FEB 02	0107 53.3	40.59S	174.65E	30	2.0	0.1	8	5
1214	FEB 02	0359 39.4	41.31S	173.83E	79	2.6	0.2	9	7
1237	FEB 02	1853 31.9	40.67S	175.78E	27	3.6	0.3	25	20
1239	FEB 02	2008 31.5	41.22S	175.00E	31	2.3	0.1	12	10
1244	FEB 02	2302 46.2	40.51S	175.91E	42	2.9	0.1	13	11
1245	FEB 02	2345 16.0	40.66S	174.48E	71	2.4	0.1	5	4
1246	FEB 03	0215 11.7	41.33S	174.72E	50	2.5	0.1	13	10
1258	FEB 03	0840 31.4	40.76S	174.91E	33	2.4	0.1	12	9
1261	FEB 03	0941 50.0	40.58S	174.29E	62	2.1	0.2	9	5
1268	FEB 03	1515 38.7	41.30S	175.18E	24	2.3	0.1	13	10
1269	FEB 03	1552 43.1	41.74S	173.68E	21	2.6	0.2	7	4
1270	FEB 03	1610 51.4	40.63S	174.81E	29	2.0	0.1	7	6
1275	FEB 03	2011 5.6	40.57S	174.64E	30	2.0	0.1	8	6
1276	FEB 03	2015 56.2	41.28S	174.83E	29	2.1	0.1	11	8
1277	FEB 03	2102 6.6	41.61S	174.28E	5R	2.5	0.3	16	14
1292	FEB 04	1321 39.1	41.68S	174.33E	20	2.4	0.2	16	12
1293	FEB 04	1347 37.6	41.22S	174.51E	34	2.6	0.1	13	11

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1304	FEB 05	0045 6.8	41.36S	174.66E	19	2.2	0.2	14	10
1306	FEB 05	0102 23.7	41.52S	175.46E	30	2.4	0.1	14	10
1323	FEB 05	0826 21.9	40.86S	174.76E	17	2.1	0.2	9	5
1331	FEB 05	1718 42.8	40.53S	173.87E	119	4.1	0.2	42	32
1332	FEB 05	1720 48.1	41.61S	175.33E	17	2.0	0.3	15	9
1351	FEB 06	0152 51.9	41.29S	175.31E	29	2.1	0.1	14	10
1356	FEB 06	0413 23.4	41.77S	173.55E	45	2.7	0.3	20	13
1364	FEB 06	0555 33.9	41.96S	173.99E	18	2.8	0.3	16	13
1369	FEB 06	0722 0.4	40.55S	174.00E	113	2.5	0.1	9	6
1376	FEB 06	1036 18.4	41.76S	174.31E	5R	2.7	0.4	17	14
1379	FEB 06	1119 22.2	41.85S	173.97E	10	2.2	0.2	9	7
1388	FEB 06	2037 26.8	41.05S	174.72E	45	2.5	0.1	12	10
1390	FEB 07	0112 34.0	41.60S	173.60E	12R	2.4	0.1	6	3
1393	FEB 07	0351 35.9	41.56S	174.45E	12R	2.4	0.5	14	11
1397	FEB 07	0535 18.1	41.52S	174.39E	12R	2.9	0.2	20	15
1404	FEB 07	1208 18.2	41.76S	173.75E	23	2.5	0.2	8	5
1426	FEB 07	2308 58.2	41.11S	174.03E	55	3.0	0.2	19	14
1428	FEB 07	2343 10.8	41.95S	174.14E	12R	2.4	0.3	13	11
1430	FEB 08	0100 41.1	41.08S	174.84E	33	3.0	0.2	22	18
1435	FEB 08	0444 52.5	41.54S	174.41E	9	3.0	0.3	22	18
1485	FEB 09	2042 47.6	40.82S	173.63E	96	2.8	0.3	16	11
1494	FEB 10	0217 8.5	40.64S	175.62E	31	2.2	0.2	14	9
1502	FEB 10	0628 41.7	40.85S	175.28E	56	2.6	0.1	12	9
1511	FEB 10	1036 11.8	40.50S	174.32E	30	2.1	0.1	7	5
1529	FEB 10	1606 20.1	40.80S	174.31E	52	2.1	0.2	10	7
1538	FEB 10	2026 58.3	40.81S	174.65E	49	3.0	0.2	22	17
1595	FEB 11	0644 16.3	41.60S	174.78E	31	2.0	0.1	9	7
1622	FEB 11	2211 19.4	40.65S	173.94E	110	2.4	0.1	8	6
1632	FEB 12	0810 50.6	41.67S	174.74E	18	2.2	0.2	9	7
1653	FEB 12	2118 50.6	40.77S	174.96E	39	2.2	0.1	10	7
1659	FEB 12	2311 12.2	40.87S	174.77E	17	2.3	0.3	14	11
1670	FEB 13	0709 15.8	41.84S	173.90E	41	2.0	0.3	6	4
1677	FEB 13	1034 49.2	41.01S	175.36E	27	2.3	0.1	15	9
1678	FEB 13	1106 9.4	41.10S	174.94E	34	3.3F	0.2	23	18
1683	FEB 13	1325 53.5	41.28S	175.31E	28	2.3	0.1	16	10
1700	FEB 13	2019 39.4	41.09S	174.97E	31	2.6	0.2	15	12
1710	FEB 14	0001 11.6	41.01S	175.14E	25	2.1	0.3	9	7
1724	FEB 14	1540 11.8	40.89S	175.69E	27	2.4	0.1	12	9
1731	FEB 14	2139 48.8	41.29S	175.31E	29	2.4	0.1	14	11
1733	FEB 14	2301 32.4	41.60S	174.25E	19	2.3	0.2	15	12
1736	FEB 15	0133 47.7	41.76S	173.68E	42	2.6	0.3	13	10
1749	FEB 15	1321 37.8	40.90S	175.98E	22	2.7	0.2	9	7
1750	FEB 15	1404 54.9	41.48S	174.19E	52	2.4	0.1	7	5
1754	FEB 15	1735 51.4	40.91S	175.52E	21	3.1	0.3	18	14
1794	FEB 16	1144 47.8	41.12S	173.58E	85	2.8	0.3	16	12

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1810	FEB	16	2334	55.0	41.45S	173.72E	63	2.5	0.2	13	10
1814	FEB	17	0406	1.5	40.92S	174.93E	33	2.5	0.1	10	8
1816	FEB	17	0425	29.5	40.89S	174.54E	55	2.4	0.2	9	7
1821	FEB	17	0951	47.9	41.15S	174.72E	58	2.9	0.1	12	9
1824	FEB	17	1122	27.5	41.43S	173.77E	50	2.4	0.2	16	11
1836	FEB	17	1859	27.5	40.75S	175.88E	26	2.1	0.2	11	5
1840	FEB	17	2139	47.3	40.79S	174.60E	74	3.3	0.3	31	22
1851	FEB	18	0853	18.5	41.27S	174.30E	34	2.1	0.2	8	5
1853	FEB	18	1036	7.5	41.08S	175.34E	26	2.5	0.2	9	7
1862	FEB	18	1420	33.6	40.95S	175.49E	28	2.2	0.1	9	6
1864	FEB	18	1843	55.0	41.14S	174.02E	54	2.5	0.1	8	5
1865	FEB	18	2113	22.1	41.82S	173.92E	27	2.6	0.2	13	9
1871	FEB	19	0440	42.9	40.61S	175.88E	49	2.9	0.1	11	9
1886	FEB	19	2238	39.7	40.66S	174.92E	11	3.0	0.2	23	18
1893	FEB	20	0332	58.9	40.64S	174.95E	12R	2.2	0.3	11	7
1901	FEB	20	1001	53.1	40.82S	174.69E	51	2.0	0.1	7	5
1905	FEB	20	1122	53.5	40.75S	175.65E	44	2.5	0.2	7	4
1907	FEB	20	1216	13.8	41.27S	175.32E	28	2.3	0.2	7	4
1915	FEB	20	2216	9.7	40.92S	174.77E	66	2.0	0.1	8	5
1916	FEB	21	0038	30.6	40.66S	174.93E	14	2.4	0.2	10	7
1928	FEB	21	1218	11.4	40.50S	174.02E	102	2.4	0.1	9	6
1944	FEB	21	2137	4.5	41.57S	175.38E	12R	2.0	0.1	9	6
1949	FEB	21	2347	3.1	41.62S	175.43E	12R	2.5	0.1	12	7
1955	FEB	22	0401	23.6	41.73S	174.30E	52	2.5	0.2	6	4
1958	FEB	22	0504	42.2	41.22S	175.19E	32	2.5	0.1	12	7
1989	FEB	23	0013	21.5	41.88S	174.33E	5R	2.5	0.3	13	9
2000	FEB	23	1006	5.2	41.30S	174.26E	36	2.1	0.1	9	7
2006	FEB	23	1211	22.4	41.30S	175.34E	29	2.1	0.2	10	6
2011	FEB	23	1443	9.0	41.09S	175.04E	31	2.3	0.1	9	6
2015	FEB	23	1948	16.0	41.98S	174.58E	12R	2.2	0.1	6	3
2018	FEB	23	2333	17.5	41.93S	174.01E	24	2.8	0.2	20	13
2019	FEB	24	0008	8.1	41.69S	174.55E	27	2.7	0.2	13	8
2109	FEB	25	1000	19.4	41.63S	173.88E	10	2.1	0.1	10	7
2119	FEB	25	1316	58.3	40.95S	175.82E	15	2.5	0.4	9	6
2180	FEB	26	2218	5.5	41.21S	174.56E	38	3.2	0.2	23	19
2221	FEB	27	1342	14.3	41.51S	173.52E	64	2.6	0.2	15	10
2224	FEB	27	1531	20.9	41.28S	174.99E	24	2.4	0.1	18	12
2278	FEB	28	1357	38.0	40.55S	174.31E	87	2.3	0.2	10	8
2310	FEB	29	0130	58.7	41.71S	174.61E	29	2.0	0.1	11	8
2325	FEB	29	0916	16.5	41.68S	174.62E	34	2.6	0.1	17	14
2327	FEB	29	0943	12.6	42.00S	173.88E	16	2.5	0.2	13	9
2328	FEB	29	1037	27.4	41.14S	174.42E	65	2.4	0.1	9	6
2334	FEB	29	1141	27.0	40.91S	174.82E	70	2.9	0.1	22	17
2337	FEB	29	1204	29.2	41.21S	174.79E	33	2.5	0.2	17	12
2353	FEB	29	1534	28.4	41.96S	174.15E	22	2.6	0.3	18	13

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2376	FEB 29	2311 16.0	40.95S	174.36E	44	2.2	0.2	11	8
2378	MAR 01	0019 18.2	40.86S	174.76E	16	2.6	0.3	16	13
2384	MAR 01	0058 27.2	41.14S	175.19E	13	2.0	0.1	16	10
2389	MAR 01	0205 43.6	41.66S	174.22E	10	2.7	0.3	22	18
2400	MAR 01	0736 52.1	41.51S	174.40E	12R	2.0	0.1	11	8
2402	MAR 01	0757 30.5	40.56S	175.19E	33	2.0	0.1	9	6
2404	MAR 01	0818 1.8	41.62S	174.28E	15	2.2	0.3	15	10
2412	MAR 01	1213 2.0	40.94S	175.51E	28	2.0	0.1	13	9
2426	MAR 01	1736 4.4	40.57S	175.88E	34	2.4	0.2	13	12
2430	MAR 01	1910 24.0	41.05S	174.16E	161	2.2	0.3	7	4
2438	MAR 02	0547 32.4	41.51S	174.50E	33	2.9	0.1	17	14
2443	MAR 02	1048 3.1	41.14S	175.36E	26	2.2	0.1	12	8
2448	MAR 02	1450 57.4	40.58S	174.38E	66	2.2	0.2	9	6
2490	MAR 03	1017 24.5	41.04S	173.96E	55	2.1	0.2	9	5
2505	MAR 03	1429 13.3	40.93S	175.36E	33	2.5	0.1	14	10
2607	MAR 04	1657 18.3	41.92S	174.00E	12R	2.0	0.1	8	5
2612	MAR 04	1954 3.1	40.86S	175.72E	22	2.2	0.1	8	6
2622	MAR 05	0050 2.9	40.78S	175.33E	30	2.2	0.1	12	9
2627	MAR 05	0258 24.0	41.33S	174.85E	29	2.0	0.1	11	7
2629	MAR 05	0342 5.1	42.00S	173.92E	21	2.2	0.2	14	10
2631	MAR 05	0455 45.5	41.29S	175.24E	46	2.0	0.1	9	6
2632	MAR 05	0510 47.4	41.92S	174.02E	12R	2.8	0.3	16	13
2634	MAR 05	1135 26.5	41.41S	174.40E	32	2.1	0.1	14	11
2646	MAR 05	1952 15.7	41.52S	173.85E	48	2.1	0.2	8	5
2648	MAR 05	2136 25.3	41.79S	174.17E	11	2.2	0.1	11	8
2653	MAR 06	0128 57.5	40.86S	175.59E	21	2.7	0.2	16	11
2658	MAR 06	0517 36.8	41.81S	174.66E	27	2.3	0.2	13	9
2662	MAR 06	0743 23.0	40.72S	174.73E	34	2.3	0.2	12	8
2681	MAR 06	1636 42.8	41.07S	174.82E	30	2.1	0.2	11	8
2684	MAR 06	1650 19.7	41.80S	174.17E	17	3.3	0.3	21	16
2721	MAR 06	2011 58.4	40.50S	175.91E	42	2.7	0.1	11	8
2772	MAR 07	0312 21.9	41.25S	175.33E	27	2.1	0.1	13	9
2817	MAR 07	0902 47.2	41.46S	174.96E	26	2.5	0.1	17	12
2832	MAR 07	1238 27.9	41.29S	173.50E	107	2.5	0.4	9	5
2866	MAR 07	2245 32.1	40.79S	175.11E	30	2.1	0.1	7	5
2933	MAR 08	1334 39.7	41.12S	174.57E	47	2.2	0.1	11	7
2935	MAR 08	1343 25.6	41.59S	175.14E	22	2.6	0.3	17	13
2937	MAR 08	1346 8.7	41.55S	175.13E	20	2.3	0.2	15	11
2938	MAR 08	1349 46.6	41.58S	175.14E	20	2.0	0.2	18	10
2939	MAR 08	1351 4.9	41.61S	175.14E	22	3.0	0.3	19	15
2941	MAR 08	1408 51.8	41.57S	175.15E	20	2.1	0.2	16	10
2946	MAR 08	1434 19.7	41.57S	175.14E	21	2.1	0.2	20	11
2959	MAR 08	1710 52.7	41.33S	173.73E	59	2.6	0.2	12	9
2960	MAR 08	1815 8.0	40.50S	175.62E	61	2.1	0.1	11	7
2966	MAR 08	1926 22.9	40.64S	175.49E	30	2.6	0.2	14	10

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2969	MAR 08	1951 11.2	41.56S	175.14E	17	2.4	0.2	13	9
2990	MAR 09	0024 34.7	40.93S	175.92E	31	3.2	0.2	17	12
2991	MAR 09	0039 39.0	41.36S	173.72E	64	3.2	0.2	22	16
3021	MAR 09	0903 58.5	40.81S	175.12E	28	2.7	0.2	17	12
3064	MAR 10	0029 41.4	40.86S	174.75E	16	2.2	0.2	10	6
3065	MAR 10	0046 45.2	40.57S	173.81E	139	2.9	0.3	10	7
3077	MAR 10	0617 2.8	40.91S	175.45E	24	3.0	0.2	22	17
3081	MAR 10	0632 0.2	40.81S	174.64E	45	3.1	0.2	26	20
3084	MAR 10	0650 28.8	40.87S	174.77E	18	2.6	0.2	14	10
3086	MAR 10	0717 48.8	40.78S	174.60E	44	2.0	0.0	6	3
3103	MAR 10	1147 21.2	40.82S	174.60E	59	2.1	0.1	9	6
3111	MAR 10	1936 55.7	41.67S	174.28E	12R	2.4	0.2	12	9
3117	MAR 10	2134 4.8	41.62S	174.14E	16	2.4	0.1	11	7
3124	MAR 11	0450 58.7	41.29S	174.81E	26	2.3	0.2	13	9
3131	MAR 11	0949 16.4	40.90S	175.73E	29	2.0	0.1	9	6
3132	MAR 11	1006 18.0	40.61S	175.48E	30	2.0	0.1	9	6
3137	MAR 11	1234 56.3	41.67S	174.26E	12R	2.7	0.2	20	15
3142	MAR 11	1730 11.2	41.26S	175.00E	28	2.0	0.0	6	3
3159	MAR 12	0435 48.4	40.74S	175.28E	30	2.0	0.2	9	6
3204	MAR 12	2314 38.9	40.95S	175.08E	29	2.2	0.2	11	7
3221	MAR 13	0837 38.3	41.34S	174.53E	59	2.0	0.1	8	5
3226	MAR 13	1003 33.9	41.11S	175.36E	27	2.2	0.1	10	8
3232	MAR 13	1317 16.3	40.71S	175.48E	26	3.3	0.3	26	24
3237	MAR 13	1507 50.1	40.90S	174.97E	32	2.5	0.2	15	10
3241	MAR 13	1845 28.5	40.51S	174.82E	22	4.1F	0.3	31	26
3249	MAR 14	0430 6.2	40.85S	174.73E	5R	3.0	0.3	18	15
3256	MAR 14	0952 30.2	41.55S	174.79E	29	2.6	0.2	16	13
3258	MAR 14	1120 52.4	40.50S	174.78E	18	2.9	0.2	15	11
3268	MAR 14	1840 37.3	41.07S	173.97E	57	2.8	0.2	8	7
3280	MAR 14	2345 19.5	40.95S	173.80E	73	3.0	0.2	18	11
3286	MAR 15	0603 16.1	40.68S	174.94E	20	2.5	0.2	12	8
3293	MAR 15	1202 25.6	41.75S	174.15E	12R	2.2	0.2	9	6
3295	MAR 15	1242 4.3	41.00S	174.09E	52	2.5	0.2	9	6
3310	MAR 16	0308 16.5	41.32S	174.87E	39	2.2	0.0	9	7
3316	MAR 16	0847 6.1	41.61S	174.14E	12R	2.1	0.2	10	7
3318	MAR 16	0948 23.0	40.95S	175.49E	17	2.0	0.2	9	7
3319	MAR 16	1044 40.1	41.81S	175.29E	31	2.7	0.1	13	9
3322	MAR 16	1148 19.2	40.93S	175.52E	29	2.2	0.2	12	7
3324	MAR 16	1432 25.3	41.11S	174.00E	53	2.8	0.3	14	12
3329	MAR 16	1628 5.7	40.90S	175.91E	32	2.6	0.2	8	7
3332	MAR 16	1902 8.7	41.62S	175.34E	11	2.2	0.2	7	6
3337	MAR 16	2100 48.7	40.82S	174.84E	42	3.0	0.2	14	9
3338	MAR 17	0005 52.6	41.29S	175.30E	28	2.1	0.1	9	6
3345	MAR 17	0521 7.4	41.65S	174.58E	34	2.3	0.2	12	9
3351	MAR 17	1117 40.9	40.78S	174.80E	13	3.0	0.4	22	19

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3360	MAR 18	0146 27.8	40.71S	173.53E	110	2.5	0.1	6	3
3362	MAR 18	0642 29.1	41.65S	174.29E	11	4.1	0.3	26	20
3364	MAR 18	0839 43.3	41.65S	174.29E	5R	2.9	0.3	21	16
3391	MAR 19	0904 52.3	41.39S	175.08E	29	2.5	0.2	16	10
3392	MAR 19	1007 51.3	41.26S	175.29E	19	2.6	0.2	15	10
3409	MAR 19	1935 7.8	41.71S	174.38E	30	2.5	0.1	13	10
3416	MAR 20	0050 45.5	40.52S	174.77E	30	2.6	0.3	14	11
3419	MAR 20	0106 2.0	40.94S	175.50E	28	2.7	0.2	11	9
3421	MAR 20	0118 57.0	40.53S	175.52E	11	3.5F	0.2	25	23
3428	MAR 20	0345 42.2	41.70S	174.40E	12R	3.2	0.2	24	19
3436	MAR 20	0947 49.8	40.53S	174.33E	62	2.4	0.3	15	10
3453	MAR 20	1954 29.4	40.56S	175.91E	30	2.7	0.1	7	5
3454	MAR 20	2022 9.8	40.85S	175.86E	27	2.0	0.1	7	5
3457	MAR 20	2121 55.2	41.77S	174.22E	9	2.2	0.3	9	7
3458	MAR 20	2137 34.6	41.27S	175.24E	25	2.2	0.1	13	9
3463	MAR 20	2344 29.5	40.61S	175.57E	32	2.3	0.1	6	4
3465	MAR 21	0046 56.9	41.35S	174.75E	28	2.4	0.0	5	3
3469	MAR 21	0438 16.5	41.11S	173.65E	62	2.1	0.2	8	5
3470	MAR 21	0446 28.8	41.76S	174.26E	9	2.2	0.4	15	10
3471	MAR 21	0448 27.4	41.83S	173.85E	31	2.6	0.3	22	14
3486	MAR 21	1318 35.4	41.58S	174.33E	27	2.6	0.2	20	15
3499	MAR 21	2114 13.8	41.93S	174.10E	5R	2.4	0.2	11	8
3502	MAR 22	0148 24.3	41.23S	175.23E	17	2.1	0.2	11	8
3504	MAR 22	0441 2.6	41.41S	173.68E	82	2.2	0.2	7	5
3522	MAR 22	1111 23.0	41.93S	174.02E	19	2.6	0.3	21	15
3547	MAR 22	2231 25.2	40.54S	174.66E	30	2.3	0.2	10	7
3567	MAR 23	1237 34.9	41.29S	173.96E	54	3.2	0.3	19	13
3568	MAR 23	1243 5.2	41.65S	174.27E	16	2.1	0.3	13	10
3572	MAR 23	1609 16.6	41.81S	174.03E	26	2.6	0.2	17	12
3585	MAR 24	0031 41.1	41.04S	174.19E	53	2.4	0.2	10	7
3620	MAR 24	1706 33.8	41.52S	174.59E	14	2.3	0.2	16	13
3646	MAR 25	1358 27.8	40.82S	175.24E	24	2.0	0.2	8	6
3651	MAR 25	1605 49.7	40.72S	175.11E	5R	2.1	0.4	9	7
3652	MAR 25	1654 35.1	40.61S	174.58E	12R	2.2	0.5	10	8
3654	MAR 25	1846 40.1	41.28S	174.98E	27	2.0	0.0	7	6
3666	MAR 26	0018 38.7	40.96S	174.77E	62	2.4	0.2	13	11
3669	MAR 26	0101 17.9	40.54S	174.06E	60	2.9	0.5	23	18
3671	MAR 26	0150 56.8	40.54S	174.99E	33	2.2	0.2	8	5
3682	MAR 26	0814 29.6	40.63S	175.48E	34	2.6	0.4	16	14
3687	MAR 26	1519 9.5	40.72S	174.57E	57	2.4	0.1	9	7
3708	MAR 26	1807 38.0	40.72S	174.16E	68	2.9	0.3	12	9
3744	MAR 27	1419 42.9	41.12S	174.71E	31	2.4	0.2	16	13
3751	MAR 27	1809 56.7	41.11S	173.98E	68	3.0	0.2	24	15
3764	MAR 28	0019 38.4	41.27S	174.38E	37	2.5	0.3	14	11
3767	MAR 28	0205 21.0	41.51S	175.39E	21	2.9	0.2	18	13

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3768	MAR 28	0242 57.8	41.50S	175.36E	22	2.9	0.3	18	13
3769	MAR 28	0433 31.5	41.16S	174.99E	29	2.5	0.1	6	3
3778	MAR 28	1112 14.5	41.49S	175.36E	20	2.4	0.3	19	13
3812	MAR 29	0256 1.9	41.05S	174.44E	60	3.7F	0.2	28	22
3819	MAR 29	0633 29.8	40.90S	175.75E	30	2.4	0.2	15	10
3820	MAR 29	0637 44.4	40.56S	174.10E	98	2.3	0.2	12	8
3839	MAR 29	2046 55.2	40.68S	174.40E	78	2.4	0.2	12	9
3842	MAR 29	2234 9.0	40.67S	175.00E	5R	2.6	0.2	17	12
3844	MAR 29	2322 23.6	40.52S	174.64E	12R	2.7	0.2	14	10
3857	MAR 30	0821 51.0	40.51S	173.56E	142	2.4	0.3	9	7
3871	MAR 30	2059 48.9	40.90S	175.72E	30	3.2	0.2	16	12
3879	MAR 31	0338 19.9	40.66S	174.23E	86	2.4	0.1	8	5
3882	MAR 31	0506 57.5	40.90S	175.71E	29	2.6	0.2	17	11
3885	MAR 31	0751 4.7	41.60S	175.43E	25	2.4	0.3	13	9
3886	MAR 31	0949 56.7	41.22S	175.29E	25	2.1	0.1	11	8
3891	MAR 31	1144 14.9	41.60S	175.45E	25	2.3	0.2	15	10
3898	MAR 31	1235 24.3	41.59S	175.43E	24	2.6	0.3	12	9
3901	MAR 31	1358 35.5	41.64S	175.45E	12R	2.1	0.4	11	8
3902	MAR 31	1448 49.5	41.39S	175.09E	27	2.0	0.1	9	6
3905	MAR 31	1534 10.5	40.87S	175.00E	51	2.6	0.2	12	10
3913	MAR 31	2317 27.5	41.42S	174.08E	38	3.0	0.3	22	15
3932	APR 01	0725 47.4	41.63S	175.48E	27	3.1	0.3	20	13
3958	APR 01	1451 36.8	40.64S	174.56E	45	2.1	0.2	11	6
3970	APR 01	2039 24.1	41.85S	174.35E	31	2.2	0.2	9	7
3977	APR 02	0058 3.3	40.71S	174.74E	5R	2.0	0.3	8	5
3981	APR 02	0733 4.9	41.28S	174.35E	36	2.2	0.2	11	7
3995	APR 02	2009 13.2	41.01S	174.73E	31	2.0	0.2	8	5
4005	APR 03	1158 3.3	41.38S	174.41E	13	2.2	0.2	10	7
4041	APR 04	2341 20.9	41.27S	175.23E	27	2.9	0.2	24	14
4056	APR 05	0803 50.3	41.66S	174.55E	33	2.5	0.2	22	17
4057	APR 05	0832 49.5	40.94S	173.80E	67	2.1	0.1	12	8
4079	APR 06	0023 50.9	40.66S	175.77E	27	2.1	0.2	13	8
4094	APR 06	0707 21.8	41.16S	173.76E	62	2.3	0.2	11	6
4095	APR 06	0711 10.8	41.19S	175.05E	18	2.1	0.2	15	13
4102	APR 06	0804 43.8	40.96S	173.94E	78	2.2	0.2	9	7
4127	APR 06	1133 31.8	41.56S	174.13E	5R	2.7	0.3	22	17
4129	APR 06	1156 54.0	40.53S	174.81E	62	2.1	0.1	9	5
4131	APR 06	1320 17.0	41.66S	174.96E	29	2.5	0.3	13	10
4143	APR 06	2038 14.2	41.97S	174.01E	12R	2.0	0.2	9	6
4164	APR 07	0300 9.9	41.03S	174.08E	58	2.1	0.2	11	7
4170	APR 07	0641 4.0	40.86S	175.81E	31	2.1	0.1	11	8
4188	APR 07	1542 37.1	40.74S	173.84E	82	2.3	0.4	19	14
4199	APR 07	1932 53.0	41.34S	174.63E	28	2.1	0.2	17	13
4234	APR 08	1029 46.4	41.74S	174.02E	31	2.2	0.3	17	11
4240	APR 08	1209 8.6	41.91S	174.06E	17	2.3	0.3	15	11

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4243	APR 08	1658 6.4	40.61S	174.67E	24	2.3	0.2	12	8
4249	APR 08	2019 37.6	41.50S	174.46E	19	2.1	0.1	14	11
4253	APR 09	0206 44.3	41.91S	174.06E	12R	2.7	0.2	14	12
4259	APR 09	1031 40.1	41.51S	174.44E	34	2.8	0.3	19	15
4261	APR 09	1127 40.6	40.71S	173.50E	133	2.9	0.3	16	13
4272	APR 09	1726 3.8	41.91S	174.07E	12R	2.2	0.2	14	10
4274	APR 09	2040 12.4	40.63S	175.88E	36	2.5	0.1	8	3
4275	APR 09	2102 8.7	41.91S	174.08E	12R	2.2	0.1	12	9
4288	APR 10	0933 23.5	41.11S	174.21E	53	2.1	0.2	11	8
4292	APR 10	1104 44.9	40.52S	174.64E	12R	2.1	0.2	10	8
4305	APR 10	2039 23.7	41.38S	174.65E	18	2.3	0.2	20	13
4338	APR 11	1709 17.8	41.92S	174.08E	12R	2.3	0.3	16	12
4340	APR 11	1725 42.9	41.92S	174.08E	12R	2.4	0.3	16	13
4341	APR 11	1911 33.0	41.92S	174.07E	18	2.2	0.3	15	12
4342	APR 11	1930 43.2	41.92S	174.07E	12R	2.8	0.2	17	12
4343	APR 11	1931 54.9	41.94S	174.10E	12R	2.0	0.1	12	10
4344	APR 11	1949 8.7	41.91S	174.07E	12R	2.4	0.2	16	13
4345	APR 11	2107 50.1	41.16S	174.24E	50	2.2	0.2	10	6
4346	APR 11	2224 19.9	41.92S	174.06E	12R	2.5	0.2	15	12
4347	APR 11	2224 51.8	41.92S	174.06E	12R	2.1	0.3	12	9
4352	APR 12	0118 20.8	41.72S	173.99E	34	2.0	0.2	10	6
4353	APR 12	0129 56.6	41.28S	175.35E	20	2.4	0.1	23	15
4358	APR 12	0219 37.4	41.14S	174.30E	45	2.1	0.1	11	7
4362	APR 12	0332 48.7	40.98S	175.59E	30	2.9	0.2	24	15
4381	APR 12	1659 39.3	41.92S	174.08E	12R	2.4	0.3	14	12
4382	APR 12	1709 26.3	41.93S	174.08E	12	2.3	0.2	13	10
4383	APR 12	1710 10.4	41.91S	174.06E	12R	2.3	0.2	12	10
4401	APR 13	0606 41.7	41.73S	173.76E	12R	2.6	0.3	15	11
4414	APR 13	1343 41.1	41.09S	174.83E	58	2.6	0.1	14	10
4430	APR 13	1914 57.1	41.40S	174.01E	39	2.5	0.3	15	10
4431	APR 13	2056 44.1	41.16S	175.06E	20	2.2	0.1	10	9
4439	APR 14	0016 53.7	41.92S	174.09E	12R	2.5	0.2	14	11
4440	APR 14	0030 24.1	41.92S	174.09E	12R	3.2	0.3	19	16
4441	APR 14	0031 20.9	41.92S	174.08E	12R	3.0	0.4	19	17
4442	APR 14	0045 11.3	41.92S	174.09E	12R	2.3	0.2	10	8
4448	APR 14	0903 7.0	41.92S	174.05E	12R	2.2	0.2	13	10
4449	APR 14	0939 37.4	40.68S	174.40E	76	2.4	0.2	11	6
4450	APR 14	1058 55.0	40.78S	175.32E	28	2.6	0.2	16	12
4455	APR 14	1746 0.4	40.96S	174.53E	56	2.9	0.1	15	12
4458	APR 14	2020 47.3	41.93S	174.02E	20	3.0	0.3	23	17
4469	APR 15	0649 55.6	40.86S	173.85E	67	2.4	0.3	10	8
4471	APR 15	0846 27.6	41.33S	173.66E	86	3.0	0.3	17	13
4476	APR 15	1243 42.4	41.06S	174.49E	61	2.1	0.1	8	6
4477	APR 15	1247 36.7	41.92S	174.06E	16	2.5	0.4	13	11
4480	APR 15	1528 58.4	41.91S	174.05E	12R	2.7	0.2	14	11

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
4486	APR 16	0001 39.8	41.28S	174.79E	53	2.6	0.2	17	13
4492	APR 16	0546 41.1	41.05S	173.53E	5R	2.5	0.3	14	9
4495	APR 16	0646 17.1	41.11S	174.68E	59	3.4	0.2	34	27
4503	APR 16	1039 19.8	40.80S	174.34E	72	2.9	0.3	19	14
4508	APR 16	1227 37.6	41.82S	174.28E	11	2.3	0.4	14	12
4534	APR 17	0454 57.4	40.80S	174.33E	74	3.2	0.3	27	23
4556	APR 17	1631 20.8	42.00S	174.04E	18	4.2F	0.3	26	20
4557	APR 17	1645 55.1	41.96S	174.04E	12R	2.3	0.3	13	9
4561	APR 17	1836 53.2	41.94S	174.09E	12R	2.3	0.2	13	9
4563	APR 17	2016 56.2	42.00S	174.07E	12R	2.3	0.3	11	9
4571	APR 17	2304 9.9	42.00S	173.96E	13	2.1	0.2	10	7
4577	APR 18	0051 31.2	41.83S	174.15E	12R	2.5	0.3	15	11
4586	APR 18	0853 36.5	41.68S	174.29E	12R	2.0	0.2	11	7
4592	APR 18	1516 10.8	40.99S	173.96E	50	2.4	0.3	16	10
4600	APR 18	1743 49.1	40.88S	175.22E	25	2.1	0.2	10	8
4606	APR 18	2236 27.3	41.92S	174.02E	18	2.4	0.3	14	10
4611	APR 19	0534 43.0	40.68S	175.00E	5R	3.2	0.3	31	24
4629	APR 19	1531 32.3	41.23S	174.50E	37	2.7	0.2	20	15
4643	APR 19	2254 57.7	40.72S	174.89E	24	2.0	0.2	10	6
4645	APR 20	0223 33.2	41.90S	174.05E	12R	2.5	0.2	13	10
4652	APR 20	1013 26.2	41.06S	174.88E	29	3.1	0.3	23	18
4653	APR 20	1013 37.0	41.13S	174.87E	28	2.9	0.2	8	5
4654	APR 20	1015 6.1	41.07S	174.87E	29	2.6	0.2	19	15
4655	APR 20	1015 22.0	41.13S	174.86E	29	2.0	0.3	10	8
4656	APR 20	1036 13.3	41.10S	174.86E	29	2.4	0.1	14	11
4671	APR 20	2300 2.3	41.28S	173.68E	51	2.2	0.3	10	7
4672	APR 20	2303 26.8	41.12S	175.57E	22	2.5	0.2	22	14
4688	APR 21	0640 51.8	40.87S	175.58E	33R	2.0	0.2	6	5
4692	APR 21	0843 42.7	40.88S	175.53E	25	2.4	0.2	11	8
4698	APR 21	1319 31.8	41.35S	174.83E	28	2.0	0.2	10	6
4705	APR 21	1543 48.1	40.95S	175.56E	29	2.4	0.2	15	9
4740	APR 22	1058 51.5	40.52S	173.75E	90	2.4	0.2	16	10
4743	APR 22	1339 1.7	40.95S	174.67E	50	2.1	0.2	8	4
4766	APR 23	0031 58.5	41.08S	174.66E	58	2.7	0.1	13	12
4770	APR 23	0310 22.4	41.53S	174.65E	41	2.5	0.2	10	8
4782	APR 23	0847 25.8	40.70S	174.89E	23	2.2	0.2	11	8
4784	APR 23	0912 26.8	41.74S	174.51E	30	2.2	0.1	12	9
4790	APR 23	1159 26.3	41.01S	174.20E	54	2.2	0.3	13	9
4863	APR 24	1652 57.9	41.39S	173.80E	50	2.3	0.1	15	9
4865	APR 24	1750 12.5	40.55S	173.54E	146	3.7	0.2	36	28
4874	APR 24	2212 22.7	41.32S	175.15E	26	2.0	0.1	13	9
4894	APR 25	0328 12.0	40.76S	174.72E	5R	2.3	0.2	14	10
4913	APR 25	0846 50.8	40.69S	175.49E	28	2.3	0.2	20	14
4916	APR 25	0923 57.4	40.65S	173.98E	76	2.4	0.3	15	10
4955	APR 25	2129 30.6	40.62S	175.47E	30	2.2	0.2	11	8

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
4969	APR 26	0053 42.8	40.57S	175.88E	33R	2.4	0.1	6	3
4978	APR 26	0532 28.3	40.76S	175.19E	32	2.7	0.2	20	16
5001	APR 26	1800 32.7	41.00S	175.90E	21	2.1	0.3	13	9
5002	APR 26	1801 53.3	41.00S	175.90E	21	2.3	0.2	14	11
5043	APR 27	1544 22.3	40.61S	173.80E	209	2.4	0.5	8	6
5069	APR 27	2320 9.9	41.77S	173.55E	67	3.7	0.2	25	19
5075	APR 28	0359 51.9	41.36S	173.73E	89	2.1	0.1	10	5
5089	APR 28	1015 20.8	40.83S	175.79E	30	2.6	0.2	14	11
5096	APR 28	1237 25.3	40.65S	175.74E	5R	2.1	0.3	10	6
5108	APR 28	2133 6.5	40.86S	175.11E	37	2.8	0.2	13	8
5114	APR 29	0110 17.5	40.93S	174.60E	58	2.1	0.1	9	6
5120	APR 29	0505 19.7	41.31S	174.40E	36	2.3	0.1	6	3
5122	APR 29	0652 32.2	41.01S	175.61E	25	2.1	0.1	11	8
5126	APR 29	0923 48.1	41.28S	174.51E	34	2.1	0.2	8	7
5131	APR 29	1254 22.7	41.51S	174.27E	59	2.5	0.1	14	9
5138	APR 29	1916 25.7	40.84S	174.88E	47	2.6	0.2	12	9
5168	APR 30	1321 43.8	41.01S	175.63E	26	2.1	0.1	9	6
5178	APR 30	2010 35.0	41.12S	174.76E	31	2.4	0.1	15	9
5187	MAY 01	0438 13.8	40.52S	175.90E	50	2.8	0.1	9	5
5189	MAY 01	0558 33.2	41.16S	174.62E	32	2.2	0.1	9	7
5190	MAY 01	0600 54.5	40.60S	175.91E	34	2.3	0.2	6	3
5201	MAY 01	1409 39.3	41.18S	174.68E	37	3.0	0.2	19	15
5206	MAY 01	1730 32.5	41.11S	175.98E	12R	2.5	0.1	6	3
5213	MAY 02	0220 46.2	40.77S	174.70E	36	2.2	0.1	9	6
5215	MAY 02	0654 17.8	40.51S	174.43E	85	3.6	0.3	37	29
5216	MAY 02	0726 43.6	40.85S	174.72E	15	2.1	0.3	10	7
5224	MAY 02	1223 59.9	41.29S	175.01E	27	2.6	0.1	15	12
5227	MAY 02	1321 57.0	41.29S	175.31E	28	2.3	0.2	14	10
5233	MAY 02	1602 30.6	40.52S	174.78E	12R	2.4	0.2	13	10
5238	MAY 02	2009 27.5	41.18S	174.60E	54	2.4	0.2	8	7
5241	MAY 02	2158 57.3	41.65S	174.62E	30	2.1	0.2	7	6
5244	MAY 02	2315 43.2	41.59S	174.33E	27	2.5	0.2	20	14
5245	MAY 03	0110 5.2	40.72S	174.81E	36	2.5	0.1	11	8
5251	MAY 03	0716 24.9	40.52S	174.98E	30	2.3	0.1	7	4
5260	MAY 03	1159 32.7	40.60S	175.94E	58	3.2	0.1	6	3
5269	MAY 03	1804 17.8	41.48S	174.65E	51	2.2	0.1	14	9
5288	MAY 04	0821 44.7	41.12S	174.98E	27	2.0	0.1	11	8
5289	MAY 04	0836 37.1	41.40S	173.84E	51	2.4	0.3	11	7
5291	MAY 04	0950 36.8	40.74S	175.89E	31	2.2	0.1	6	5
5294	MAY 04	1136 6.7	40.86S	174.56E	67	2.7	0.2	16	12
5297	MAY 04	1212 22.3	41.18S	174.62E	56	2.3	0.1	10	7
5305	MAY 04	1546 40.8	41.63S	174.35E	21	2.8	0.2	19	13
5310	MAY 04	1620 48.9	41.54S	174.31E	34	2.1	0.1	8	4
5319	MAY 04	2227 9.3	41.63S	174.31E	9	2.7	0.2	24	16
5321	MAY 04	2307 34.8	41.46S	174.34E	5R	2.2	0.3	16	11

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5325	MAY 05	0037 33.9	40.96S	175.61E	25	2.3	0.2	13	8
5329	MAY 05	0235 35.3	41.15S	174.65E	32	2.0	0.1	9	7
5331	MAY 05	0423 39.3	41.02S	174.53E	62	3.3	0.1	25	18
5337	MAY 05	0638 51.8	40.99S	174.60E	58	2.4	0.1	9	7
5354	MAY 05	1711 13.1	41.85S	173.69E	47	2.1	0.2	9	6
5358	MAY 05	1849 1.5	40.60S	174.19E	66	2.3	0.3	11	8
5364	MAY 06	0036 12.5	40.67S	174.95E	5R	2.0	0.2	13	8
5369	MAY 06	0505 44.4	40.54S	173.65E	98	2.4	0.3	12	8
5393	MAY 06	1746 2.7	41.05S	174.91E	56	3.6	0.2	40	30
5414	MAY 07	0755 45.0	40.86S	175.82E	28	3.8	0.2	25	18
5415	MAY 07	0757 36.7	40.86S	175.76E	28	3.2	0.3	21	17
5419	MAY 07	1119 29.6	41.60S	173.50E	67	3.0	0.2	19	13
5421	MAY 07	1139 34.7	40.75S	174.13E	68	2.5	0.3	9	7
5432	MAY 07	1816 23.9	40.58S	174.61E	12R	2.3	0.3	12	9
5434	MAY 07	1953 25.8	40.50S	174.46E	81	2.6	0.1	9	7
5441	MAY 08	0204 6.1	40.55S	174.86E	12R	3.1	0.2	14	10
5445	MAY 08	0331 38.3	40.95S	174.09E	42	2.2	0.2	7	5
5460	MAY 08	2002 8.7	40.74S	174.10E	95	2.2	0.1	11	7
5461	MAY 08	2011 22.5	40.51S	174.66E	20	2.8	0.3	23	18
5464	MAY 08	2147 19.1	40.80S	175.18E	34	2.3	0.1	11	7
5467	MAY 09	0249 14.7	40.75S	174.40E	43	2.1	0.1	11	7
5468	MAY 09	0511 17.1	40.74S	174.62E	68	2.3	0.1	10	8
5471	MAY 09	0936 7.6	41.58S	173.68E	54	2.8	0.3	21	13
5479	MAY 09	1842 26.3	41.68S	174.29E	12R	2.1	0.5	13	9
5482	MAY 09	2230 13.6	41.11S	174.61E	32	2.2	0.3	14	10
5497	MAY 10	1124 17.2	40.71S	174.42E	69	3.0	0.2	25	20
5505	MAY 10	1332 30.6	41.37S	174.37E	58	2.5	0.2	15	11
5512	MAY 10	1603 19.1	41.76S	174.15E	33	2.2	0.2	10	7
5515	MAY 10	2100 17.5	40.79S	175.33E	25	2.2	0.2	9	7
5523	MAY 11	0605 37.0	40.85S	175.72E	32	2.7	0.2	14	12
5526	MAY 11	1009 18.3	41.29S	174.72E	32	2.1	0.2	14	11
5539	MAY 11	1713 32.3	41.72S	173.79E	12R	2.5	0.2	21	14
5578	MAY 12	1640 35.0	41.11S	175.40E	23	2.2	0.2	12	9
5580	MAY 12	1737 36.9	40.90S	175.71E	29	2.9	0.2	16	12
5581	MAY 12	2206 59.5	41.41S	175.04E	28	2.5	0.1	16	11
5583	MAY 12	2343 0.0	41.23S	175.24E	28	2.4	0.2	13	10
5592	MAY 13	0509 25.7	41.01S	174.70E	33	2.2	0.1	13	9
5596	MAY 13	0902 33.8	41.75S	174.51E	34	2.3	0.1	11	8
5602	MAY 13	1521 26.8	41.24S	174.70E	37	2.6	0.2	16	12
5616	MAY 14	0333 35.7	41.31S	174.13E	37	2.4	0.2	11	8
5644	MAY 15	0655 48.9	41.04S	174.91E	55	2.1	0.1	10	8
5651	MAY 15	1532 31.1	41.17S	174.81E	52	2.1	0.3	9	7
5657	MAY 15	2357 7.7	41.62S	174.66E	33	2.5	0.1	8	7
5658	MAY 16	0016 38.5	41.16S	173.78E	63	2.7	0.2	11	8
5661	MAY 16	0418 55.1	41.34S	173.71E	78	2.9	0.3	12	8

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5675	MAY 16	1459 47.2	40.82S	174.69E	5R	2.2	0.2	9	8
5682	MAY 17	0332 9.6	41.76S	174.56E	31	2.1	0.1	8	5
5686	MAY 17	0716 42.8	41.60S	173.91E	43	2.0	0.1	8	6
5710	MAY 17	1853 54.1	41.22S	174.66E	34	2.3	0.1	8	7
5712	MAY 17	1945 58.8	40.60S	175.48E	28	2.6	0.4	19	15
5735	MAY 18	0938 57.1	41.56S	173.80E	50	2.7	0.2	14	10
5741	MAY 18	1207 37.8	41.77S	174.42E	50	3.6	0.2	21	17
5746	MAY 18	1417 3.9	40.62S	174.58E	55	2.0	0.3	9	6
5758	MAY 18	2034 39.3	41.15S	175.09E	5R	2.3	0.2	19	14
5777	MAY 19	0210 45.4	41.11S	174.73E	55	2.1	0.0	8	5
5779	MAY 19	0358 51.5	40.77S	174.30E	63	2.8	0.3	13	10
5786	MAY 19	0712 18.8	41.22S	173.67E	74	2.7	0.2	18	12
5791	MAY 19	0915 47.8	40.97S	174.53E	51	2.6	0.1	18	11
5800	MAY 19	1428 19.1	41.18S	174.65E	51	2.8	0.2	17	14
5806	MAY 19	2033 23.3	41.04S	175.55E	29	2.3	0.2	10	8
5834	MAY 20	1324 45.4	41.74S	173.67E	54	2.4	0.1	9	5
5838	MAY 20	1559 34.9	41.14S	173.98E	53	2.1	0.1	9	6
5843	MAY 20	1734 18.7	41.15S	174.33E	66	2.1	0.0	7	4
5846	MAY 20	1851 20.8	41.50S	173.77E	53	2.6	0.2	10	7
5848	MAY 20	1922 56.2	40.70S	174.99E	12R	2.0	0.2	7	5
5849	MAY 20	2305 15.4	40.58S	174.63E	27	2.0	0.1	9	7
5867	MAY 21	1159 47.1	41.68S	174.20E	31	3.5	0.2	28	18
5868	MAY 21	1209 1.0	41.70S	174.15E	34	2.4	0.1	13	9
5869	MAY 21	1346 18.3	41.08S	175.11E	24	2.4	0.2	16	11
5870	MAY 21	1403 56.2	41.67S	174.19E	32	3.6	0.2	24	19
5881	MAY 22	0255 36.7	41.65S	174.25E	9	2.6	0.2	19	15
5882	MAY 22	0731 16.2	41.34S	174.62E	30	2.4	0.2	18	12
5906	MAY 23	0448 31.1	40.54S	174.13E	92	3.2	0.2	20	13
5929	MAY 23	1817 3.1	40.66S	174.07E	106	2.5	0.2	5	4
5933	MAY 23	2328 24.4	41.25S	174.89E	26	2.1	0.3	7	5
5943	MAY 24	1410 42.9	41.00S	174.24E	78	2.2	0.2	7	5
5947	MAY 24	1545 1.6	41.18S	174.65E	42	2.0	0.4	6	5
5974	MAY 25	0815 36.7	40.57S	174.13E	66	2.8	0.3	16	12
5979	MAY 25	1150 30.7	41.59S	174.66E	33	2.5	0.1	13	10
5985	MAY 25	2015 23.6	41.19S	173.78E	44	2.2	0.3	14	9
5998	MAY 26	0522 15.6	40.51S	173.87E	89	3.0	0.3	13	8
6001	MAY 26	0746 41.3	41.23S	174.68E	33	2.6	0.1	19	12
6003	MAY 26	0901 21.9	41.18S	173.53E	77	2.4	0.1	12	7
6009	MAY 26	1725 34.9	41.39S	174.64E	23	2.2	0.2	13	8
6012	MAY 26	2021 19.5	40.57S	174.62E	30	2.0	0.0	6	5
6039	MAY 27	2318 43.3	41.28S	175.17E	5R	2.2	0.1	18	12
6043	MAY 28	0517 10.7	41.44S	174.10E	44	3.3	0.2	26	19
6049	MAY 28	0841 50.8	41.75S	174.41E	28	2.7	0.2	23	16
6069	MAY 29	0107 17.6	40.85S	174.22E	54	2.1	0.2	8	6
6071	MAY 29	0302 55.3	40.88S	175.80E	27	3.0	0.3	15	13

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6081	MAY 29	0941 6.9	41.92S	174.09E	12R	2.7	0.3	12	11
6082	MAY 29	1242 2.9	40.67S	175.63E	27	4.2F	0.3	34	29
6083	MAY 29	1323 6.5	40.68S	175.59E	28	2.8	0.4	6	3
6084	MAY 29	1338 57.6	41.54S	173.95E	15	2.2	0.2	12	9
6089	MAY 29	1650 46.3	40.74S	175.04E	5R	3.0	0.3	26	22
6094	MAY 29	2031 59.5	40.58S	174.18E	78	2.5	0.4	9	6
6096	MAY 29	2232 55.3	40.64S	175.62E	24	2.5	0.1	8	6
6101	MAY 30	0406 44.9	41.15S	174.80E	33	2.3	0.1	11	8
6102	MAY 30	0442 0.6	40.85S	174.68E	64	2.0	0.1	8	5
6108	MAY 30	0731 39.1	41.40S	174.54E	32	2.0	0.2	12	7
6112	MAY 30	0926 57.0	40.70S	175.51E	31	2.9	0.2	13	11
6138	MAY 31	0025 18.3	40.94S	175.00E	30	3.1	0.3	17	15
6144	MAY 31	0435 26.6	40.50S	174.64E	29	2.3	0.0	6	5
6170	MAY 31	2331 13.9	40.68S	175.39E	36	5.1F	0.2	37	34
6172	MAY 31	2356 7.7	40.65S	175.31E	29	2.8	0.2	20	15
6190	JUN 01	2202 10.0	40.97S	174.65E	60	2.8	0.2	11	9
6195	JUN 02	0410 56.9	41.68S	174.23E	12R	3.2	0.4	15	12
6199	JUN 02	0704 10.9	40.68S	173.94E	80	2.7	0.2	12	8
6232	JUN 03	1204 37.3	41.27S	175.23E	27	2.0	0.1	14	10
6241	JUN 03	1858 53.5	40.78S	174.98E	56	2.0	0.1	12	8
6251	JUN 04	0105 8.5	41.20S	173.84E	64	3.7	0.2	25	19
6256	JUN 04	0533 8.0	40.76S	174.14E	65	2.2	0.2	10	7
6284	JUN 04	2142 22.1	40.80S	175.70E	5R	2.8	0.2	18	14
6309	JUN 05	0510 27.7	41.68S	174.31E	20	3.2	0.2	16	14
6314	JUN 05	0911 4.6	41.73S	173.50E	44	2.6	0.2	13	8
6351	JUN 05	2349 39.5	41.72S	174.29E	12R	2.7	0.3	11	10
6355	JUN 06	0407 41.5	41.59S	174.45E	12R	3.2	0.3	11	8
6397	JUN 07	0218 42.4	41.37S	173.92E	50	2.1	0.2	8	5
6413	JUN 07	1226 37.8	41.02S	175.44E	34	2.0	0.1	9	6
6436	JUN 07	2328 59.6	40.57S	174.07E	69	2.6	0.2	15	9
6453	JUN 08	0633 27.0	41.62S	174.41E	21	2.5	0.1	19	13
6455	JUN 08	0718 7.6	40.66S	175.89E	28	2.5	0.4	20	15
6526	JUN 09	1753 52.8	40.58S	174.22E	64	2.9	0.3	18	13
6552	JUN 10	0943 56.2	40.61S	175.74E	32	2.6	0.2	9	6
6553	JUN 10	1054 59.0	41.69S	174.26E	32	3.0	0.3	19	14
6558	JUN 10	1354 39.6	40.72S	174.52E	51	2.9	0.2	16	11
6566	JUN 10	1610 11.4	41.66S	174.18E	32	2.6	0.2	20	14
6583	JUN 11	0528 58.9	41.23S	173.81E	69	2.9	0.3	12	8
6586	JUN 11	0744 41.7	41.25S	174.02E	59	2.1	0.0	6	4
6594	JUN 11	1527 34.6	40.69S	174.54E	51	2.8	0.2	13	10
6604	JUN 11	2305 37.6	41.92S	174.06E	18	2.8	0.3	14	12
6606	JUN 12	0048 33.1	41.44S	174.23E	22	2.1	0.3	11	9
6611	JUN 12	0347 1.4	41.42S	174.26E	60	2.2	0.3	9	7
6615	JUN 12	0840 23.0	41.92S	174.06E	18	2.9	0.4	15	12
6618	JUN 12	1115 10.6	41.03S	173.93E	83	4.5F	0.2	30	27

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6619	JUN 12	1133 20.3	40.99S	173.80E	73	2.4	0.3	11	6
6625	JUN 12	1800 41.5	40.90S	175.05E	29	2.0	0.1	6	4
6664	JUN 14	0129 39.5	40.94S	173.91E	66	2.2	0.2	8	5
6675	JUN 14	0755 13.2	41.19S	174.78E	30	3.1	0.2	25	19
6676	JUN 14	0756 27.9	41.19S	174.80E	27	3.2	0.5	19	16
6680	JUN 14	0924 18.3	41.18S	174.79E	27	2.0	0.1	10	9
6698	JUN 15	0333 54.4	40.62S	174.43E	78	3.4	0.2	27	20
6708	JUN 15	2042 47.0	40.85S	174.72E	44	3.0	0.2	17	11
6711	JUN 16	0038 28.1	41.26S	173.82E	82	3.1	0.2	20	13
6714	JUN 16	0114 53.1	40.56S	175.39E	5R	2.3	0.5	14	11
6720	JUN 16	0713 54.5	41.03S	174.53E	39	2.2	0.2	13	9
6729	JUN 16	1606 56.9	40.53S	173.83E	136	3.2	0.2	14	11
6759	JUN 17	0933 19.8	40.72S	175.85E	32	2.4	0.2	8	7
6844	JUN 18	0522 6.5	40.68S	174.16E	67	2.8	0.2	12	9
6846	JUN 18	0659 0.4	41.28S	174.86E	21	2.9	0.2	16	14
6892	JUN 18	2018 58.4	40.90S	174.70E	5R	2.8	0.4	19	15
6898	JUN 19	0000 32.2	40.60S	175.75E	30	2.2	0.3	7	5
6900	JUN 19	0354 2.9	40.54S	174.30E	41	2.2	0.3	11	8
6913	JUN 19	1126 55.8	41.23S	173.55E	78	2.3	0.2	14	9
6919	JUN 19	1407 41.4	41.02S	174.73E	32	2.6	0.2	21	15
6924	JUN 19	1909 50.8	41.29S	174.87E	21	2.9	0.2	27	16
6928	JUN 19	2220 57.9	41.24S	173.61E	75	2.3	0.2	8	5
6943	JUN 20	0910 52.9	41.15S	175.11E	10	2.4	0.2	16	12
6959	JUN 20	2138 34.4	41.62S	174.67E	29	2.4	0.2	14	10
6969	JUN 21	0644 16.4	40.75S	174.66E	45	3.0	0.3	19	17
6975	JUN 21	1511 6.0	40.82S	175.62E	21	2.0	0.2	8	6
6979	JUN 21	2015 18.1	40.59S	175.52E	10	2.3	0.4	9	6
6985	JUN 22	0031 34.1	41.12S	174.00E	71	2.3	0.1	9	6
6989	JUN 22	0426 15.7	41.73S	174.60E	29	2.6	0.2	15	12
6990	JUN 22	0558 50.3	41.05S	175.36E	28	2.4	0.1	14	10
6991	JUN 22	0603 10.2	41.03S	174.95E	53	2.1	0.1	7	5
7000	JUN 22	2111 30.1	41.17S	175.72E	20	2.0	0.2	14	9
7002	JUN 22	2239 58.8	41.55S	173.94E	15	3.0	0.3	20	15
7006	JUN 23	0203 42.8	40.63S	175.49E	29	2.2	0.2	13	8
7017	JUN 23	1302 25.3	40.65S	175.32E	31	3.4	0.2	30	22
7019	JUN 23	1713 43.4	41.20S	173.67E	92	2.6	0.2	16	11
7026	JUN 23	2303 42.2	40.66S	173.90E	103	3.0	0.2	16	11
7027	JUN 24	0112 53.1	40.53S	174.64E	28	2.2	0.3	13	8
7036	JUN 24	0927 46.3	40.91S	174.13E	58	2.7	0.2	20	13
7045	JUN 24	1816 50.1	41.22S	173.63E	98	3.1	0.2	20	15
7048	JUN 24	2044 36.6	41.31S	174.61E	31	3.1	0.2	19	13
7052	JUN 25	0319 18.7	40.82S	175.52E	24	2.1	0.2	9	7
7053	JUN 25	0423 24.4	40.93S	174.62E	67	2.0	0.2	11	7
7061	JUN 25	1416 48.0	41.18S	173.65E	98	2.9	0.2	15	12
7076	JUN 26	0636 32.4	40.76S	173.70E	101	2.7	0.2	9	7

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7084	JUN 26	1614 53.7	41.98S	173.85E	12R	2.3	0.2	10	7
7102	JUN 27	0844 16.4	41.69S	174.22E	28	2.9	0.3	25	17
7119	JUN 27	2344 31.8	40.58S	174.61E	28	2.0	0.1	11	8
7120	JUN 27	2359 27.2	40.86S	175.31E	25	2.9	0.2	23	18
7123	JUN 28	0050 22.8	41.29S	175.20E	22	2.2	0.1	12	10
7139	JUN 28	1209 54.6	41.28S	175.21E	22	2.5	0.1	12	10
7159	JUN 29	0704 53.7	40.82S	175.35E	27	3.0	0.2	20	14
7174	JUN 30	0518 17.7	41.58S	174.08E	5R	2.4	0.2	13	10
7176	JUN 30	1049 54.6	40.80S	175.71E	40	2.9	0.1	9	7
7177	JUN 30	1109 37.9	40.72S	174.89E	36	2.8	0.1	14	12
7188	JUN 30	2205 54.7	40.85S	174.74E	16	2.1	0.2	10	6
7196	JUL 01	0935 43.6	40.52S	174.69E	77	2.3	0.1	11	9
7198	JUL 01	1032 22.3	41.14S	174.33E	32	2.2	0.1	16	10
7215	JUL 01	2254 1.0	41.01S	174.81E	30	2.6	0.1	16	9
7219	JUL 02	0118 5.6	41.15S	175.09E	5R	2.2	0.2	11	8
7225	JUL 02	0319 58.1	41.55S	174.50E	12R	3.5	0.2	28	19
7229	JUL 02	0728 36.7	40.54S	174.65E	28	2.2	0.4	11	8
7232	JUL 02	0956 8.9	40.54S	174.11E	73	2.9	0.2	13	10
7240	JUL 02	1734 9.3	40.94S	175.68E	20	3.2	0.4	14	10
7250	JUL 03	0139 3.1	40.81S	175.80E	26	2.2	0.2	8	4
7251	JUL 03	0256 37.5	40.89S	174.66E	58	3.1	0.2	17	10
7260	JUL 03	1736 49.5	41.86S	173.99E	18	2.4	0.3	10	8
7264	JUL 03	2320 43.0	40.78S	174.51E	73	2.2	0.1	8	4
7270	JUL 04	0954 38.8	40.75S	174.59E	54	3.7	0.2	31	26
7273	JUL 04	1218 15.2	41.24S	174.31E	44	2.9	0.3	21	17
7280	JUL 04	1807 38.5	40.89S	175.27E	29	2.3	0.1	9	7
7282	JUL 04	1900 40.5	41.53S	174.42E	54	2.2	0.1	9	8
7292	JUL 05	0210 32.1	41.74S	174.49E	30	2.4	0.2	16	13
7298	JUL 05	0557 56.1	41.20S	173.77E	54	2.0	0.3	8	6
7301	JUL 05	1017 51.5	40.99S	174.57E	62	2.5	0.2	16	11
7304	JUL 05	1216 20.6	40.79S	174.62E	44	2.1	0.1	11	7
7307	JUL 05	1417 56.8	40.89S	174.78E	36	2.3	0.1	18	12
7327	JUL 05	2310 36.2	40.99S	175.62E	28	2.6	0.1	11	8
7334	JUL 06	0257 5.5	40.90S	175.70E	27	2.6	0.1	11	7
7337	JUL 06	0504 48.2	40.62S	175.89E	31	2.9	0.3	18	15
7339	JUL 06	0728 24.4	41.76S	174.51E	31	2.5	0.2	14	10
7343	JUL 06	1057 36.6	40.71S	175.04E	5R	2.2	0.2	12	8
7344	JUL 06	1059 40.0	41.16S	175.71E	20	2.1	0.2	13	8
7345	JUL 06	1100 53.1	40.75S	175.04E	5R	3.3	0.3	28	26
7349	JUL 06	1407 11.0	41.41S	174.62E	16	2.6	0.3	19	15
7362	JUL 07	0016 16.0	41.09S	173.99E	51	2.8	0.2	18	12
7374	JUL 07	1021 5.0	40.53S	174.10E	65	2.0	0.3	8	6
7419	JUL 07	1743 25.6	40.99S	175.57E	22	2.1	0.1	11	8
7431	JUL 07	1905 22.8	40.83S	175.80E	28	2.0	0.2	12	8
7450	JUL 07	2243 38.2	41.89S	174.20E	12R	3.2	0.4	20	15

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7467	JUL 08	0150 28.4	41.34S	174.88E	33	2.1	0.1	10	8
7570	JUL 09	0727 1.9	41.14S	173.63E	98	2.3	0.1	9	5
7582	JUL 09	1212 26.1	41.18S	174.78E	29	2.4	0.1	21	14
7604	JUL 09	2153 10.3	40.90S	175.81E	31	2.3	0.1	11	7
7606	JUL 09	2335 18.0	41.71S	174.20E	9	2.3	0.3	15	10
7620	JUL 10	0553 6.1	41.18S	174.01E	53	2.5	0.2	16	11
7635	JUL 10	1350 8.5	41.36S	175.57E	16	2.2	0.1	12	9
7647	JUL 10	2046 9.3	40.95S	175.42E	23	2.0	0.3	10	7
7667	JUL 11	1315 5.9	41.48S	174.39E	20	2.0	0.2	13	9
7672	JUL 11	1518 40.9	40.90S	175.79E	29	2.4	0.3	12	10
7676	JUL 11	1946 20.7	41.66S	174.67E	45	2.8	0.2	19	13
7679	JUL 11	2144 46.4	41.28S	174.14E	35	2.1	0.2	13	10
7692	JUL 12	0930 18.1	40.71S	174.03E	82	3.6	0.2	28	25
7694	JUL 12	0950 46.4	40.53S	174.66E	25	2.1	0.2	14	8
7706	JUL 12	1821 27.1	40.51S	174.78E	24	2.2	0.2	7	5
7713	JUL 13	0024 16.6	41.66S	174.24E	5R	2.7	0.3	21	15
7717	JUL 13	0301 52.1	40.74S	175.88E	34	3.3	0.2	24	20
7727	JUL 13	0819 49.0	41.09S	173.71E	72	2.3	0.1	9	7
7731	JUL 13	0848 19.9	40.87S	175.74E	28	2.2	0.1	12	7
7734	JUL 13	1108 8.1	40.54S	174.66E	29	2.3	0.3	11	7
7740	JUL 13	1323 5.6	41.10S	174.08E	42	2.6	0.4	21	16
7757	JUL 14	0301 9.0	40.53S	175.40E	32	2.2	0.2	7	6
7759	JUL 14	0515 21.5	40.88S	174.78E	18	2.1	0.2	11	6
7767	JUL 14	1150 3.4	40.92S	174.99E	35	2.2	0.2	14	8
7770	JUL 14	1543 40.8	40.88S	174.97E	56	2.7	0.1	15	11
7774	JUL 15	0213 42.5	40.57S	175.11E	33	2.8	0.2	17	12
7778	JUL 15	0446 8.0	40.96S	174.56E	50	2.3	0.1	10	7
7797	JUL 15	1439 21.4	40.89S	175.80E	31	2.4	0.3	13	9
7810	JUL 16	0909 49.6	41.66S	174.95E	28	2.6	0.3	17	12
7856	JUL 17	0311 52.5	41.05S	174.52E	62	2.6	0.1	12	10
7862	JUL 17	0610 1.8	41.40S	174.07E	12R	2.2	0.3	12	10
7870	JUL 17	1137 43.8	41.68S	173.93E	11	2.2	0.2	9	6
7871	JUL 17	1144 49.1	40.62S	174.10E	74	2.3	0.2	11	9
7876	JUL 17	1957 51.9	41.05S	174.48E	64	3.1	0.2	22	17
7881	JUL 18	0038 50.3	41.28S	175.12E	25	2.9	0.2	18	14
7882	JUL 18	0137 45.1	41.41S	175.02E	26	2.0	0.0	10	9
7888	JUL 18	0453 15.4	40.83S	175.26E	30	2.4	0.2	12	10
7896	JUL 18	1112 29.2	41.27S	174.38E	38	3.0	0.2	25	17
7900	JUL 18	1504 20.4	41.36S	174.01E	48	2.6	0.1	14	11
7928	JUL 19	0704 10.8	40.87S	174.77E	45	2.7	0.3	19	12
7935	JUL 19	1142 24.5	41.75S	174.56E	27	2.2	0.2	19	13
7940	JUL 19	1317 22.3	41.12S	174.63E	32	2.2	0.2	15	12
7942	JUL 19	1532 19.9	41.75S	174.56E	27	2.1	0.2	11	10
7944	JUL 19	1829 24.4	40.84S	174.68E	15	2.0	0.2	10	8
7962	JUL 19	2038 40.5	40.59S	174.46E	50	2.0	0.2	9	7

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8007	JUL 20	0536 54.3	40.84S	175.79E	28	2.2	0.3	10	8
8075	JUL 21	0156 41.6	40.79S	174.01E	70	3.4	0.3	28	24
8094	JUL 21	0627 7.3	40.87S	174.76E	17	2.3	0.3	13	11
8101	JUL 21	0839 1.7	40.93S	175.26E	31	2.1	0.1	13	8
8122	JUL 21	1423 18.9	41.41S	174.09E	38	2.0	0.1	8	6
8125	JUL 21	1451 16.6	41.17S	173.87E	57	2.4	0.3	14	8
8127	JUL 21	1506 55.0	41.16S	173.63E	80	2.9	0.3	19	15
8184	JUL 22	1338 49.9	41.75S	174.41E	28	2.8	0.2	18	14
8185	JUL 22	1511 25.9	41.16S	173.89E	63	2.8	0.3	22	17
8187	JUL 22	1738 56.7	40.51S	173.77E	81	2.3	0.2	10	8
8188	JUL 22	1918 2.7	40.86S	175.16E	33	2.1	0.2	7	5
8201	JUL 23	0127 32.4	40.54S	174.65E	30	2.1	0.3	10	6
8231	JUL 23	1605 6.4	41.27S	175.31E	33	3.1	0.2	17	13
8246	JUL 24	0753 53.3	40.86S	175.82E	32	2.4	0.2	12	8
8248	JUL 24	0803 48.5	41.34S	174.99E	25	2.1	0.0	9	7
8251	JUL 24	1017 40.1	40.78S	175.06E	34	2.2	0.1	6	5
8259	JUL 24	1603 39.6	41.53S	174.26E	12R	2.0	0.2	12	8
8264	JUL 24	1827 28.7	40.57S	173.67E	116	2.8	0.2	16	12
8265	JUL 24	1923 43.3	40.64S	175.33E	31	2.6	0.2	17	13
8298	JUL 25	1720 22.3	41.32S	174.39E	12R	2.5	0.2	17	13
8301	JUL 25	2138 24.2	41.37S	175.11E	30	2.0	0.1	10	7
8302	JUL 25	2139 30.1	41.38S	175.11E	28	2.4	0.2	20	13
8304	JUL 26	0049 2.0	41.06S	174.73E	42	2.1	0.1	11	9
8317	JUL 26	1005 45.1	40.74S	175.06E	35	2.1	0.1	11	8
8319	JUL 26	1007 3.3	40.78S	175.10E	31	2.4	0.2	12	9
8321	JUL 26	1440 46.4	40.97S	175.43E	20	2.2	0.2	13	9
8322	JUL 26	1504 24.4	40.78S	175.09E	29	2.5	0.2	15	10
8323	JUL 26	1554 41.5	40.78S	175.09E	31	3.2	0.2	23	16
8325	JUL 26	1658 47.5	40.78S	175.11E	30	2.8	0.2	18	14
8330	JUL 27	0149 24.1	40.78S	175.10E	30	2.4	0.1	14	10
8331	JUL 27	0408 39.2	40.90S	175.27E	24	2.4	0.2	14	12
8343	JUL 27	1613 10.8	41.67S	174.30E	30	3.5	0.2	28	20
8347	JUL 27	2205 24.1	41.64S	174.27E	30	2.4	0.2	23	16
8350	JUL 28	0557 32.7	41.07S	174.73E	52	2.0	0.1	10	9
8352	JUL 28	0730 17.9	40.79S	175.10E	30	2.0	0.1	16	10
8369	JUL 28	2241 56.7	40.50S	173.92E	74	3.3	0.1	16	12
8372	JUL 29	0049 38.4	41.94S	173.84E	32	2.5	0.2	18	13
8379	JUL 29	1024 23.0	41.65S	174.60E	30	2.2	0.2	15	11
8389	JUL 29	1727 2.6	41.15S	174.45E	38	2.0	0.1	12	7
8392	JUL 29	2248 35.5	40.89S	175.76E	30	2.3	0.2	11	7
8397	JUL 30	0558 14.7	41.86S	174.40E	52	3.6	0.2	32	21
8398	JUL 30	0939 40.3	40.60S	175.63E	33	3.4	0.2	22	18
8407	JUL 30	1300 7.1	40.94S	175.20E	31	2.2	0.1	12	8
8411	JUL 30	1527 42.3	40.86S	175.04E	37	3.1	0.2	16	11
8416	JUL 30	1959 26.0	40.79S	175.10E	30	2.8	0.1	19	12

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8421	JUL 30	2239 1.8	41.04S	175.43E	24	2.5	0.1	14	9
8444	AUG 01	0430 33.0	40.50S	173.51E	145	3.6	0.2	23	17
8446	AUG 01	0720 27.2	40.68S	174.54E	5R	2.3	0.1	12	8
8447	AUG 01	0730 5.3	40.81S	175.66E	24	2.3	0.2	18	10
8448	AUG 01	0809 57.5	41.28S	175.29E	28	2.5	0.2	14	10
8451	AUG 01	0916 44.5	41.63S	174.79E	27	2.4	0.2	18	13
8460	AUG 01	1736 52.0	41.68S	174.61E	30	3.1	0.2	19	15
8462	AUG 01	1913 29.6	40.84S	175.80E	29	2.5	0.3	12	10
8464	AUG 01	2133 18.8	41.67S	174.59E	32	2.9	0.2	17	13
8467	AUG 02	0019 16.6	40.85S	174.54E	22	2.0	0.1	8	6
8469	AUG 02	0317 41.4	41.54S	173.51E	76	2.6	0.3	15	11
8475	AUG 02	0415 43.0	40.95S	175.91E	29	2.0	0.2	13	9
8497	AUG 02	1833 46.9	41.75S	174.16E	12R	2.9	0.3	21	18
8509	AUG 03	0909 54.9	41.64S	173.95E	10	2.6	0.3	22	16
8513	AUG 03	1132 12.0	40.64S	174.26E	63	2.5	0.3	15	10
8520	AUG 03	2130 29.2	40.79S	175.10E	29	2.6	0.2	17	13
8526	AUG 04	1146 29.2	40.92S	174.96E	33	3.0	0.1	19	13
8540	AUG 05	0236 56.8	40.98S	174.72E	32	2.3	0.1	16	11
8544	AUG 05	1005 57.4	40.78S	175.09E	30	2.5	0.2	18	13
8546	AUG 05	1011 46.1	41.40S	175.01E	24	2.6	0.1	20	13
8547	AUG 05	1148 40.8	40.58S	175.11E	32	2.2	0.1	14	9
8548	AUG 05	1151 11.1	41.39S	175.01E	24	2.9	0.1	21	13
8552	AUG 05	1326 13.6	40.51S	175.92E	59	2.8	0.2	17	12
8556	AUG 05	1733 27.0	40.87S	175.12E	36	2.2	0.2	10	7
8569	AUG 06	0441 33.8	40.91S	175.48E	18	3.4	0.2	28	23
8570	AUG 06	0448 33.9	40.92S	175.49E	21	2.9	0.3	21	16
8590	AUG 06	1702 4.6	41.29S	174.86E	28	2.4	0.2	13	11
8592	AUG 06	1758 21.0	40.69S	174.38E	51	2.1	0.1	9	6
8597	AUG 07	0331 59.6	41.11S	175.86E	29	2.6	0.2	12	10
8607	AUG 07	1036 53.9	40.96S	174.75E	66	2.7	0.2	21	14
8612	AUG 07	1345 41.6	40.53S	174.65E	28	2.0	0.3	14	9
8623	AUG 08	0152 58.9	41.93S	173.68E	33R	2.6	0.5	15	9
8629	AUG 08	0621 33.2	40.94S	173.84E	89	2.5	0.3	13	10
8630	AUG 08	0710 7.1	41.18S	174.53E	35	2.1	0.2	13	10
8632	AUG 08	0724 29.1	41.45S	174.34E	10	2.5	0.3	22	15
8637	AUG 08	1123 10.1	41.45S	174.48E	57	2.3	0.1	13	9
8640	AUG 08	1319 38.9	41.72S	174.25E	29	2.2	0.2	11	8
8653	AUG 08	2317 19.0	41.37S	175.61E	14	2.0	0.3	13	9
8660	AUG 09	0432 0.1	41.44S	175.65E	19	3.1	0.2	25	17
8662	AUG 09	0546 59.9	40.78S	174.92E	59	2.1	0.1	9	5
8669	AUG 09	1122 43.3	41.65S	174.38E	5R	2.5	0.3	21	17
8671	AUG 09	1153 46.9	41.64S	174.37E	5R	2.2	0.3	17	12
8678	AUG 09	1731 20.1	41.13S	174.00E	53	2.6	0.2	14	9
8679	AUG 09	1749 4.2	40.87S	175.73E	31	2.5	0.2	11	8
8687	AUG 10	0423 31.0	40.63S	175.32E	33R	2.7	0.1	11	9

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8688	AUG 10	0519 28.1	41.60S	174.34E	12R	3.5	0.2	28	20
8699	AUG 11	0145 42.9	41.84S	174.76E	33R	3.6	0.2	31	21
8707	AUG 11	1117 34.8	41.37S	174.91E	11	2.4	0.1	13	9
8710	AUG 11	1257 13.7	41.60S	174.05E	20	2.1	0.3	10	7
8712	AUG 11	1349 56.3	40.52S	173.83E	93	3.0	0.3	17	10
8718	AUG 11	2151 46.0	41.75S	174.13E	21	3.5	0.1	22	15
8724	AUG 12	0831 0.3	41.03S	174.33E	66	2.4	0.1	16	11
8730	AUG 12	1359 42.0	41.61S	174.12E	12R	2.0	0.2	14	9
8739	AUG 12	2214 7.0	40.91S	173.62E	92	2.7	0.3	17	10
8751	AUG 13	0812 1.7	40.81S	175.11E	28	2.8	0.3	22	19
8761	AUG 13	1603 10.9	40.74S	175.07E	36	2.3	0.2	10	8
8763	AUG 13	2107 27.3	41.34S	174.46E	12R	2.1	0.3	8	6
8766	AUG 13	2150 22.3	40.76S	175.08E	35	2.5	0.1	10	6
8778	AUG 14	1015 5.1	41.71S	174.19E	14	2.2	0.3	13	11
8788	AUG 14	2009 11.1	41.02S	175.43E	29	2.1	0.1	9	7
8797	AUG 15	0230 2.2	40.95S	175.53E	30	2.4	0.1	15	9
8803	AUG 15	0617 20.8	40.65S	175.50E	30	2.5	0.1	12	10
8811	AUG 15	1816 30.7	41.03S	174.82E	56	2.4	0.1	9	8
8812	AUG 15	1948 26.0	41.26S	174.98E	23	2.3	0.1	10	8
8813	AUG 15	2008 52.5	41.27S	174.98E	23	2.7	0.1	19	14
8835	AUG 16	1736 32.9	41.58S	174.33E	12R	2.1	0.1	12	9
8839	AUG 16	1855 50.1	41.61S	174.35E	12R	3.0	0.2	21	18
8841	AUG 16	1928 19.4	41.17S	174.63E	32	2.4	0.2	16	13
8842	AUG 16	2025 30.4	41.74S	174.49E	32	2.4	0.2	16	13
8844	AUG 16	2120 16.5	41.60S	174.33E	14	2.0	0.1	12	9
8845	AUG 16	2145 4.7	40.58S	174.39E	75	2.6	0.2	12	9
8847	AUG 16	2238 4.2	40.90S	174.76E	61	2.0	0.0	8	6
8853	AUG 17	0157 46.1	41.77S	174.50E	28	3.4	0.2	27	21
8862	AUG 17	0530 11.9	40.89S	175.70E	26	2.3	0.2	13	9
8866	AUG 17	0713 5.9	41.40S	174.39E	41	2.1	0.2	13	10
8874	AUG 17	1439 13.5	41.77S	174.50E	28	2.4	0.2	16	13
8876	AUG 17	1654 29.0	40.90S	174.99E	30	2.3	0.2	15	11
8877	AUG 17	1809 23.6	40.72S	174.94E	37	2.5	0.1	16	13
8887	AUG 18	0317 31.6	40.64S	175.71E	31	2.2	0.1	10	6
8893	AUG 18	0628 28.1	41.25S	174.60E	54	2.3	0.1	11	10
8909	AUG 18	1443 38.4	40.91S	174.85E	49	2.5	0.1	18	14
8915	AUG 18	2026 3.8	40.54S	174.65E	29	2.1	0.2	12	9
8930	AUG 19	0546 19.8	41.58S	174.33E	12	2.4	0.2	16	13
8933	AUG 19	0802 18.7	40.70S	175.37E	33	2.2	0.2	10	7
8954	AUG 19	2226 36.1	40.99S	175.45E	28	2.3	0.1	11	9
8967	AUG 20	0817 23.5	40.97S	175.12E	38	2.1	0.1	10	8
8970	AUG 20	1320 12.4	41.00S	174.78E	63	2.1	0.1	6	4
8979	AUG 20	2105 22.1	41.67S	175.00E	32	2.2	0.1	10	7
8986	AUG 21	1034 24.2	41.13S	175.14E	18	2.0	0.1	14	8
8990	AUG 21	1438 5.1	40.65S	175.43E	44	3.5	0.2	31	25

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8999	AUG 22	0142 19.4	40.89S	175.69E	27	2.2	0.2	12	9
9002	AUG 22	0456 7.0	41.11S	174.19E	53	2.5	0.1	18	13
9018	AUG 22	1816 38.3	40.61S	174.63E	27	2.0	0.1	9	7
9031	AUG 23	0748 7.9	40.61S	174.31E	60	2.2	0.3	9	6
9032	AUG 23	0825 59.9	41.55S	175.30E	21	2.3	0.3	13	9
9033	AUG 23	0858 16.5	41.83S	174.10E	12R	2.0	0.3	11	7
9034	AUG 23	0906 4.4	40.58S	174.83E	24	2.1	0.3	16	10
9035	AUG 23	0938 4.3	40.55S	174.49E	52	3.1	0.3	26	19
9038	AUG 23	1212 35.7	40.54S	175.58E	32	2.2	0.2	11	7
9046	AUG 23	2239 15.7	41.99S	174.05E	11	2.2	0.1	12	9
9060	AUG 24	0927 1.3	40.66S	175.58E	26	2.3	0.3	12	9
9071	AUG 24	1813 40.1	40.83S	175.06E	34	2.4	0.1	12	8
9075	AUG 24	2118 32.9	40.63S	175.31E	31	2.4	0.2	15	12
9076	AUG 24	2133 26.9	41.42S	174.96E	30	2.7	0.1	19	13
9081	AUG 25	0138 27.6	40.64S	175.31E	29	2.3	0.1	16	10
9091	AUG 25	0731 37.1	41.42S	174.97E	28	2.1	0.1	14	10
9097	AUG 25	1147 19.1	41.92S	173.72E	37	2.9	0.3	21	16
9107	AUG 25	1515 36.0	41.69S	174.59E	29	2.0	0.0	8	7
9154	AUG 27	0822 46.8	40.81S	174.99E	34	3.0	0.2	25	18
9161	AUG 27	1225 47.1	40.75S	173.50E	112	3.3	0.3	18	15
9163	AUG 27	1250 27.8	41.08S	175.48E	20	2.3	0.2	12	9
9165	AUG 27	1646 43.1	40.74S	174.21E	64	2.2	0.2	10	7
9178	AUG 28	1453 18.4	41.03S	174.90E	30	2.0	0.1	14	8
9199	AUG 29	1342 30.4	40.77S	174.46E	75	2.7	0.1	7	5
9205	AUG 29	1959 19.1	41.35S	175.80E	16	2.0	0.1	10	5
9207	AUG 29	2031 37.8	40.86S	175.51E	23	2.2	0.2	7	5
9223	AUG 30	1450 1.1	40.88S	174.88E	39	2.7	0.2	19	14
9248	AUG 31	0148 13.3	40.59S	175.30E	32	2.5	0.1	14	10
9253	AUG 31	0450 5.4	41.09S	174.18E	59	2.9	0.2	17	13
9254	AUG 31	0542 42.8	40.57S	174.71E	38	2.2	0.1	7	5
9258	AUG 31	0831 22.7	41.29S	175.25E	29	3.0	0.2	22	15
9260	AUG 31	0833 28.1	40.53S	174.57E	12R	2.0	0.2	15	10
9297	AUG 31	2019 20.9	41.65S	174.28E	12	3.1	0.2	23	18
9299	AUG 31	2033 14.4	40.59S	175.46E	30	3.3	0.2	20	17
9303	AUG 31	2121 39.4	41.05S	173.59E	106	2.7	0.2	12	9
9312	SEP 01	0246 50.6	41.54S	175.35E	21	2.6	0.2	17	12
9324	SEP 01	0631 53.4	41.71S	174.25E	18	2.5	0.3	19	14
9329	SEP 01	0921 1.7	40.81S	175.75E	28	2.0	0.2	9	6
9332	SEP 01	1143 0.1	40.70S	173.91E	85	2.9	0.3	18	13
9333	SEP 01	1217 27.3	40.91S	175.07E	32	2.5	0.2	16	12
9344	SEP 02	0205 40.2	40.90S	175.47E	29	2.0	0.1	14	9
9353	SEP 02	1453 54.9	40.80S	175.10E	30	2.8	0.2	22	16
9379	SEP 03	0804 49.5	40.58S	173.73E	144	3.3	0.2	21	16
9380	SEP 03	0822 31.2	40.51S	174.70E	18	2.4	0.3	12	9
9383	SEP 03	1231 55.8	40.92S	175.68E	25	2.7	0.3	18	14

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9391	SEP 03	1730 33.8	41.56S	174.19E	5R	2.6	0.3	16	13
9392	SEP 03	2258 52.3	40.98S	174.75E	56	2.8	0.1	18	14
9398	SEP 04	0703 8.8	41.18S	175.33E	27	2.4	0.1	15	11
9401	SEP 04	1230 8.1	40.84S	174.62E	35	2.7	0.3	17	13
9410	SEP 04	2307 25.4	41.34S	175.12E	9	2.1	0.1	16	11
9459	SEP 05	2307 9.4	41.96S	173.90E	12	2.4	0.3	15	12
9484	SEP 06	1614 11.8	41.48S	175.59E	27	2.2	0.2	18	12
9506	SEP 07	1025 16.7	41.06S	173.94E	55	2.2	0.3	11	8
9509	SEP 07	1754 49.2	40.60S	174.74E	34	2.2	0.2	12	9
9512	SEP 07	2115 21.1	40.99S	175.55E	27	2.2	0.1	12	8
9519	SEP 08	0356 13.2	40.84S	175.67E	23	2.0	0.2	12	9
9524	SEP 08	0817 3.5	41.12S	175.37E	29	2.6	0.2	19	13
9535	SEP 08	1805 19.4	41.12S	175.38E	28	2.7	0.2	17	10
9538	SEP 09	0016 43.1	41.82S	174.07E	12R	2.7	0.2	13	11
9540	SEP 09	0406 31.2	41.08S	175.42E	31	2.2	0.1	9	7
9557	SEP 10	0510 31.7	40.78S	175.40E	23	2.7	0.2	17	14
9558	SEP 10	0523 40.0	40.76S	174.63E	10	2.1	0.1	8	6
9590	SEP 11	0737 51.6	41.30S	174.96E	29	2.2	0.2	19	13
9594	SEP 11	0953 28.2	41.61S	173.53E	61	2.4	0.2	14	10
9599	SEP 11	1738 19.0	41.92S	174.06E	12R	3.3	0.3	19	16
9600	SEP 11	1739 19.8	41.92S	174.08E	12R	2.6	0.2	16	13
9601	SEP 11	1739 46.2	41.92S	174.07E	12R	2.8	0.2	16	14
9602	SEP 11	1807 46.5	41.94S	174.08E	12R	3.0	0.3	20	16
9615	SEP 11	2229 29.4	41.21S	175.06E	29	2.4	0.2	18	13
9618	SEP 12	0137 40.4	41.90S	174.07E	12R	2.3	0.3	14	11
9619	SEP 12	0157 8.1	41.92S	174.09E	12R	3.1	0.3	23	17
9623	SEP 12	0250 2.5	41.28S	175.24E	26	2.5	0.3	16	13
9626	SEP 12	0338 15.0	41.92S	174.08E	12R	3.4	0.4	23	19
9628	SEP 12	0349 23.9	41.91S	174.06E	12R	2.0	0.2	12	9
9630	SEP 12	0434 57.6	41.92S	174.08E	12R	2.8	0.3	17	15
9631	SEP 12	0435 7.8	41.90S	174.06E	12R	3.0	0.2	16	12
9636	SEP 12	0929 27.3	41.91S	174.07E	12R	2.4	0.3	17	12
9637	SEP 12	0930 3.3	41.88S	174.04E	18	2.0	0.2	17	12
9639	SEP 12	0939 5.5	41.92S	174.06E	12R	2.2	0.3	17	13
9647	SEP 12	1236 48.9	41.05S	174.78E	56	2.4	0.1	16	12
9653	SEP 12	1523 29.4	41.90S	174.05E	17	2.0	0.3	14	11
9661	SEP 12	1854 18.4	41.91S	174.06E	16	2.3	0.3	19	14
9662	SEP 12	1857 48.7	41.91S	174.06E	17	2.5	0.3	19	14
9674	SEP 13	0406 16.1	40.93S	174.94E	34	2.2	0.1	11	8
9676	SEP 13	0538 5.0	41.03S	174.86E	49	2.2	0.2	12	9
9681	SEP 13	1337 43.9	41.29S	175.30E	27	2.1	0.1	15	10
9693	SEP 14	0924 3.0	40.69S	175.48E	25	2.3	0.2	14	9
9728	SEP 14	1944 45.5	41.57S	175.47E	25	2.5	0.3	13	9
9760	SEP 15	0654 5.1	41.59S	174.70E	25	2.0	0.1	10	7
9769	SEP 15	1217 6.6	41.89S	174.04E	17	2.3	0.3	15	12

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9778	SEP	15	1813	18.8	41.63S	174.28E	5R	2.4	0.2	15	11
9780	SEP	15	1918	5.2	40.83S	175.31E	27	2.5	0.2	15	12
9801	SEP	17	0134	6.7	41.60S	174.33E	25	2.2	0.2	12	9
9808	SEP	17	0921	12.7	41.67S	174.20E	5R	2.0	0.3	11	8
9809	SEP	17	0926	34.6	41.17S	174.65E	37	2.3	0.2	12	8
9818	SEP	17	1601	32.1	41.63S	174.74E	26	2.5	0.3	15	11
9827	SEP	18	0050	44.9	40.55S	174.21E	5R	2.5	0.1	9	6
9828	SEP	18	0216	14.5	41.72S	174.48E	53	3.7	0.1	21	14
9829	SEP	18	0324	34.4	40.58S	174.04E	81	2.9	0.2	15	12
9848	SEP	18	2010	34.4	41.58S	174.16E	5R	2.2	0.3	14	11
9854	SEP	18	2246	23.6	40.57S	175.15E	31	2.5	0.2	14	9
9863	SEP	19	0619	19.1	41.32S	174.37E	60	2.4	0.1	11	9
9866	SEP	19	0711	56.8	41.43S	175.01E	27	4.0F	0.2	28	23
9867	SEP	19	0715	4.6	41.44S	175.00E	26	2.7	0.2	21	18
9868	SEP	19	0715	11.3	41.43S	175.01E	26	3.7F	0.2	26	22
9872	SEP	19	0815	18.7	41.29S	174.13E	45	2.9	0.2	20	15
9877	SEP	19	0916	27.3	41.42S	175.00E	27	2.6	0.1	20	14
9919	SEP	19	1436	1.2	41.79S	174.35E	26	2.1	0.2	17	13
9936	SEP	19	1938	54.2	41.77S	174.34E	23	2.0	0.1	9	7
9953	SEP	20	0259	26.6	41.44S	175.01E	25	3.2	0.2	26	18
9989	SEP	21	0603	57.2	41.94S	175.08E	35	2.4	0.1	13	8
10005	SEP	21	1122	41.7	41.83S	174.30E	41	2.2	0.1	7	5
10011	SEP	21	1754	37.8	41.07S	175.46E	29	2.4	0.2	13	7
10025	SEP	22	0207	57.1	41.42S	175.00E	27	2.6	0.1	13	10
10030	SEP	22	0603	35.4	41.42S	175.00E	26	2.7	0.1	14	9
10031	SEP	22	0754	54.9	40.89S	175.47E	31	2.1	0.1	9	6
10033	SEP	22	0836	33.3	41.41S	175.01E	28	2.3	0.1	14	10
10037	SEP	22	0948	57.2	40.81S	175.67E	25	2.2	0.1	9	6
10041	SEP	22	1116	33.7	40.50S	174.14E	12R	2.3	0.5	6	3
10051	SEP	22	2327	33.7	40.56S	174.03E	74	2.9	0.1	14	9
10066	SEP	23	0352	52.4	40.72S	174.62E	12R	2.6	0.2	9	5
10069	SEP	23	0622	54.6	41.02S	174.89E	31	2.5	0.1	10	5
10070	SEP	23	0639	58.1	40.83S	175.31E	26	3.2	0.3	21	15
10073	SEP	23	0936	8.7	41.04S	173.64E	100	2.9	0.3	10	5
10083	SEP	23	1323	3.6	41.40S	174.11E	31	2.7	0.2	14	9
10089	SEP	23	2121	55.4	41.51S	173.69E	52	2.4	0.1	11	8
10091	SEP	23	2153	36.4	41.61S	174.11E	9	2.4	0.2	15	10
10115	SEP	24	1230	47.4	41.16S	173.90E	53	2.3	0.2	7	5
10131	SEP	24	1501	1.2	41.27S	175.23E	29	2.8	0.1	16	8
10140	SEP	24	1627	42.3	40.81S	175.32E	28	2.6	0.1	10	7
10152	SEP	24	2229	14.8	41.18S	175.31E	27	2.0	0.1	9	5
10161	SEP	25	0422	0.8	40.57S	175.69E	34	2.4	0.2	10	6
10167	SEP	25	0548	37.4	41.18S	175.30E	26	2.0	0.0	7	4
10186	SEP	25	1528	50.2	41.62S	174.59E	34	2.0	0.2	10	8
10190	SEP	25	1711	59.5	41.59S	174.21E	5R	2.9	0.3	17	14

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
10195	SEP 25	1957 59.0	41.65S	174.90E	29	2.2	0.1	12	9
10201	SEP 26	0012 34.7	40.83S	175.13E	31	3.4	0.3	24	18
10203	SEP 26	0145 7.0	40.78S	175.10E	29	2.3	0.1	11	7
10233	SEP 26	1249 11.3	40.76S	175.08E	34	2.0	0.1	9	7
10237	SEP 26	1433 37.6	40.81S	175.66E	24	2.2	0.2	12	8
10246	SEP 26	1751 55.5	40.60S	174.21E	70	2.9	0.4	23	16
10249	SEP 26	2009 36.1	41.39S	174.80E	31	2.4	0.2	15	11
10260	SEP 26	2252 52.5	40.97S	175.61E	29	2.3	0.2	10	7
10264	SEP 27	0132 40.0	40.82S	175.66E	25	2.2	0.2	10	8
10265	SEP 27	0221 33.7	40.89S	175.70E	28	2.1	0.0	10	6
10266	SEP 27	0229 58.6	41.65S	174.90E	24	2.2	0.0	8	6
10269	SEP 27	1226 54.5	40.88S	174.76E	17	2.0	0.2	10	7
10281	SEP 27	2340 21.2	40.64S	174.76E	33	3.0	0.2	23	20
10290	SEP 28	0459 16.4	40.78S	175.11E	29	2.3	0.1	12	8
10298	SEP 28	1337 18.2	41.47S	173.67E	63	3.5	0.2	22	18
10300	SEP 28	1532 44.2	41.27S	175.22E	28	2.1	0.1	13	8
10337	SEP 29	1935 52.8	41.12S	175.35E	23	2.2	0.1	11	8
10339	SEP 29	2057 12.0	41.01S	175.39E	32	2.0	0.1	10	5
10370	SEP 30	2234 7.8	41.09S	173.99E	45	2.5	0.1	7	4
10371	OCT 01	0207 41.5	40.57S	175.86E	29	3.0	0.2	16	12
10372	OCT 01	0332 0.5	40.52S	174.55E	77	3.3	0.1	19	14
10376	OCT 01	0827 33.3	41.08S	174.82E	56	2.5	0.2	15	10
10379	OCT 01	1121 51.7	41.46S	174.45E	21	2.1	0.2	9	8
10380	OCT 01	1144 56.5	41.71S	174.26E	16	2.8	0.3	16	12
10390	OCT 01	2029 55.5	41.76S	173.64E	50	2.6	0.1	6	4
10410	OCT 02	1539 25.0	41.34S	173.77E	61	2.8	0.3	22	15
10412	OCT 02	1643 40.1	41.75S	174.30E	22	2.0	0.2	14	9
10420	OCT 02	2208 34.7	40.65S	174.77E	24	3.8	0.3	36	29
10423	OCT 03	0223 3.6	40.95S	174.66E	58	2.9	0.2	20	16
10448	OCT 03	1935 29.5	40.57S	174.16E	85	3.0	0.3	19	12
10454	OCT 04	0102 52.8	41.65S	175.21E	26	2.3	0.3	10	7
10456	OCT 04	0156 14.8	40.93S	174.75E	53	2.8	0.1	12	10
10473	OCT 04	1752 31.3	40.84S	174.41E	53	2.3	0.2	12	9
10518	OCT 06	0124 15.4	41.16S	174.59E	56	2.3	0.1	15	9
10519	OCT 06	0242 34.7	40.82S	174.81E	40	2.1	0.2	13	8
10525	OCT 06	0646 15.1	40.58S	175.74E	65	2.4	0.2	6	3
10531	OCT 06	1038 22.4	40.63S	174.73E	21	3.1	0.3	23	17
10540	OCT 06	2150 18.5	40.84S	173.66E	108	3.1	0.3	17	13
10575	OCT 08	1750 16.1	40.52S	174.39E	47	2.1	0.2	9	6
10580	OCT 08	2155 47.0	41.42S	175.00E	25	2.6	0.1	19	11
10582	OCT 09	0251 45.3	41.56S	173.66E	73	2.8	0.2	9	8
10594	OCT 09	1440 56.0	41.88S	174.10E	29	2.8	0.2	17	12
10597	OCT 09	1817 3.5	40.96S	174.59E	66	2.3	0.1	11	8
10605	OCT 09	2301 44.7	40.58S	173.82E	92	2.7	0.3	14	9
10606	OCT 09	2324 32.9	41.78S	174.35E	29	2.7	0.3	15	12

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
10609	OCT 10	0259 39.7	40.51S	174.27E	81	2.3	0.2	9	7
10617	OCT 10	1145 35.7	41.75S	174.54E	32	2.7	0.1	21	14
10623	OCT 10	1622 45.4	41.34S	173.95E	49	2.3	0.2	12	9
10635	OCT 11	0210 10.9	41.57S	173.97E	11	3.0	0.2	20	14
10638	OCT 11	0303 39.8	40.81S	175.12E	29	3.0	0.3	23	17
10642	OCT 11	0350 5.2	40.75S	175.07E	34	2.2	0.2	8	6
10652	OCT 11	1521 45.7	40.89S	175.83E	26	3.4	0.2	23	16
10681	OCT 13	0412 22.3	40.96S	175.39E	25	2.6	0.3	19	12
10684	OCT 13	1535 30.1	40.95S	174.67E	17	2.1	0.3	12	7
10686	OCT 13	1559 31.5	40.51S	175.86E	32	3.2	0.2	22	17
10690	OCT 13	1849 6.7	40.96S	175.09E	28	2.7	0.2	12	10
10698	OCT 14	0804 6.5	41.39S	174.64E	17	2.0	0.3	10	9
10709	OCT 14	1548 34.8	40.90S	175.72E	26	2.0	0.1	7	5
10714	OCT 14	1909 35.0	40.57S	174.23E	64	2.7	0.2	14	11
10729	OCT 15	0536 36.8	40.52S	175.99E	29	2.1	0.2	12	8
10737	OCT 15	0846 7.5	41.28S	175.27E	22	2.2	0.1	9	7
10742	OCT 15	1210 4.9	40.83S	175.82E	28	2.3	0.3	13	8
10765	OCT 16	0018 57.0	40.95S	174.52E	49	2.0	0.3	9	7
10776	OCT 16	0637 50.2	40.69S	174.51E	70	2.6	0.2	16	9
10783	OCT 16	1012 24.7	41.11S	174.68E	35	3.1	0.2	23	16
10784	OCT 16	1019 39.2	40.72S	175.52E	27	3.4	0.3	26	20
10790	OCT 16	1228 12.8	41.18S	173.98E	55	2.1	0.2	13	9
10797	OCT 16	1527 41.2	40.80S	174.62E	46	2.0	0.2	8	6
10800	OCT 16	1736 37.9	41.77S	173.82E	9	2.6	0.3	13	10
10823	OCT 17	1010 42.9	40.60S	175.89E	32	2.6	0.2	19	11
10842	OCT 18	0422 7.5	41.66S	175.34E	29	2.4	0.2	9	7
10849	OCT 18	0828 59.6	40.71S	174.33E	53	2.4	0.2	11	7
10865	OCT 18	0959 5.6	40.65S	174.04E	90	2.8	0.2	14	8
10897	OCT 18	1942 28.1	41.14S	175.01E	21	2.1	0.1	11	7
10926	OCT 19	2039 55.2	40.66S	174.59E	77	2.8	0.2	17	13
10927	OCT 19	2104 4.4	41.03S	174.72E	62	2.3	0.1	12	8
10932	OCT 20	0052 33.6	41.03S	174.27E	49	2.6	0.1	13	9
10934	OCT 20	0558 2.1	40.56S	175.99E	30	3.3	0.2	20	18
10955	OCT 20	2200 7.0	40.99S	175.40E	11	2.6	0.1	12	10
10956	OCT 20	2356 6.4	40.71S	175.54E	28	2.4	0.1	11	8
10959	OCT 21	0950 23.7	41.69S	174.51E	30	2.6	0.2	16	12
10960	OCT 21	1124 47.6	40.50S	175.72E	32	2.6	0.3	11	8
10962	OCT 21	1201 31.2	41.32S	174.83E	28	2.4	0.1	14	11
10965	OCT 21	1530 49.9	41.29S	175.33E	42	2.1	0.1	6	5
10977	OCT 22	0134 21.5	40.69S	175.48E	24	2.7	0.2	10	7
10985	OCT 22	0656 48.1	40.55S	175.12E	12R	2.8	0.2	14	11
11009	OCT 23	0144 12.4	40.66S	175.46E	33	2.2	0.3	8	7
11033	OCT 23	2055 34.4	41.61S	174.14E	14	2.1	0.1	11	8
11048	OCT 24	0113 11.1	40.96S	175.50E	12R	2.5	0.3	13	8
11052	OCT 24	0249 2.0	41.16S	174.65E	31	2.4	0.2	15	10

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11056	OCT 24	0853 25.0	41.79S	174.07E	21	2.1	0.2	8	7
11057	OCT 24	0948 12.6	40.64S	174.89E	12R	2.9	0.3	17	13
11059	OCT 24	1108 39.2	41.02S	175.24E	29	2.0	0.1	11	6
11095	OCT 25	1450 35.7	41.09S	175.49E	29	2.6	0.3	15	12
11103	OCT 25	1937 25.6	41.68S	175.34E	29	3.0	0.2	15	13
11115	OCT 26	0617 23.4	40.75S	174.63E	11	2.8	0.3	19	13
11139	OCT 27	0148 58.6	41.55S	175.55E	28	2.5	0.2	15	10
11148	OCT 27	1120 20.7	41.08S	173.70E	77	2.5	0.2	13	9
11160	OCT 27	1716 56.3	40.73S	174.38E	61	2.6	0.2	11	8
11162	OCT 27	2005 54.4	41.08S	173.70E	75	2.5	0.2	10	7
11165	OCT 27	2251 33.0	41.61S	174.60E	28	2.1	0.2	14	9
11171	OCT 28	0147 52.2	41.10S	173.97E	51	2.1	0.3	12	8
11172	OCT 28	0430 26.4	40.86S	175.68E	18	2.0	0.2	12	8
11175	OCT 28	0815 59.4	40.86S	175.83E	30	2.4	0.3	13	10
11191	OCT 28	1908 1.1	41.11S	175.86E	31	2.5	0.1	9	6
11214	OCT 29	1225 3.6	41.15S	175.23E	30	2.5	0.3	14	11
11215	OCT 29	1244 31.5	41.54S	174.42E	14	2.1	0.2	14	11
11220	OCT 29	1337 49.7	41.07S	175.39E	24	2.2	0.3	12	8
11260	OCT 31	0341 57.5	40.58S	175.94E	31	2.7	0.3	16	12
11291	NOV 01	0217 30.8	40.60S	175.66E	32	3.0	0.3	12	10
11298	NOV 01	1008 52.6	40.89S	174.47E	45	2.7	0.2	15	12
11331	NOV 02	1055 16.2	40.50S	175.93E	19	2.1	0.3	9	6
11339	NOV 02	1523 51.7	40.55S	174.64E	49	2.1	0.1	9	7
11346	NOV 02	2201 58.4	40.99S	174.16E	53	2.0	0.2	9	7
11356	NOV 03	0313 14.5	41.01S	173.59E	80	2.5	0.2	12	8
11359	NOV 03	0416 54.5	40.92S	174.47E	45	2.4	0.2	11	8
11404	NOV 03	2346 7.3	40.79S	175.11E	31	2.2	0.1	11	7
11415	NOV 04	1143 53.7	41.65S	173.73E	47	3.2	0.2	27	19
11426	NOV 04	2100 55.5	40.62S	175.90E	32	2.9	0.2	13	9
11430	NOV 04	2230 26.3	40.76S	174.50E	27	2.0	0.2	8	6
11433	NOV 04	2311 40.9	40.58S	175.60E	33	2.0	0.2	11	7
11445	NOV 05	0416 58.9	41.16S	174.45E	59	2.0	0.1	10	7
11452	NOV 05	1027 41.1	41.23S	174.66E	43	3.6F	0.1	33	24
11454	NOV 05	1107 11.2	41.20S	174.64E	39	2.5	0.2	16	11
11461	NOV 05	1519 55.6	41.50S	174.89E	29	2.6	0.2	17	12
11473	NOV 05	2356 52.6	40.63S	175.50E	30	2.4	0.1	11	7
11486	NOV 06	1248 39.2	41.79S	174.30E	12R	2.4	0.4	15	13
11493	NOV 06	1628 40.5	41.20S	174.64E	40	2.2	0.1	16	11
11494	NOV 06	1751 0.9	40.68S	175.48E	28	2.6	0.3	20	14
11511	NOV 07	0710 47.6	41.60S	174.43E	17	2.3	0.2	13	10
11515	NOV 07	0741 9.2	41.14S	173.50E	95	3.9F	0.2	27	21
11516	NOV 07	0828 41.6	40.69S	174.31E	56	2.3	0.2	10	9
11525	NOV 07	1308 30.2	41.59S	174.60E	33	2.1	0.2	12	11
11536	NOV 07	2115 53.4	41.35S	174.53E	5R	2.0	0.2	13	8
11537	NOV 07	2128 4.0	40.87S	174.72E	64	2.2	0.1	10	7

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
11538	NOV 07	2306 0.4	41.29S	175.25E	29	3.7	0.2	30	21
11539	NOV 07	2306 27.3	41.26S	175.25E	22	2.7	0.1	12	7
11551	NOV 08	0020 23.3	41.24S	175.24E	24	2.2	0.2	11	7
11552	NOV 08	0022 17.2	41.26S	175.24E	23	2.2	0.1	13	11
11553	NOV 08	0022 18.3	41.26S	175.23E	26	2.6	0.2	9	7
11554	NOV 08	0024 40.4	41.25S	175.24E	23	2.0	0.2	9	6
11555	NOV 08	0056 27.5	41.26S	175.24E	25	2.0	0.1	8	6
11563	NOV 08	0632 58.5	40.92S	174.93E	32	2.2	0.1	12	9
11567	NOV 08	0816 34.2	40.96S	174.12E	61	2.1	0.3	8	7
11590	NOV 08	1741 21.4	41.23S	174.21E	44	3.2	0.2	25	21
11614	NOV 09	0421 52.2	41.28S	175.25E	27	2.7	0.2	20	12
11622	NOV 09	0820 59.3	41.38S	173.84E	56	2.0	0.2	10	8
11625	NOV 09	0903 45.2	41.27S	175.25E	26	2.2	0.1	18	12
11631	NOV 09	1143 15.7	41.69S	174.27E	7	2.2	0.2	13	9
11652	NOV 09	1534 56.1	41.27S	175.25E	26	2.1	0.1	13	7
11654	NOV 09	1622 44.7	40.98S	175.54E	5R	2.9	0.2	21	16
11665	NOV 09	2046 8.2	41.04S	173.92E	62	2.1	0.2	9	6
11671	NOV 10	0620 33.3	40.68S	174.41E	56	2.8	0.2	25	17
11675	NOV 10	0829 49.2	41.27S	175.24E	26	2.5	0.2	18	12
11704	NOV 10	2200 19.2	40.50S	175.39E	41	2.1	0.1	8	5
11714	NOV 11	0401 4.5	41.54S	174.18E	30	3.0	0.3	19	16
11731	NOV 11	1911 47.2	41.63S	174.40E	5R	2.1	0.2	14	10
11737	NOV 12	0532 51.1	41.28S	175.26E	30	4.2F	0.2	23	17
11738	NOV 12	0537 13.7	41.28S	175.23E	27	2.1	0.2	11	8
11739	NOV 12	0537 45.4	41.28S	175.26E	29	2.2	0.1	15	10
11740	NOV 12	0538 0.5	41.27S	175.24E	29	2.8	0.2	18	12
11741	NOV 12	0538 24.4	41.27S	175.24E	28	2.2	0.2	14	9
11742	NOV 12	0539 7.7	41.27S	175.23E	27	2.1	0.2	10	7
11743	NOV 12	0609 34.0	41.25S	175.23E	30	2.5	0.2	16	11
11755	NOV 12	1807 50.5	41.27S	175.25E	27	2.2	0.1	12	8
11759	NOV 12	2121 42.1	40.61S	174.87E	5R	2.6	0.2	14	10
11760	NOV 12	2136 38.4	41.27S	175.25E	29	3.0	0.2	17	11
11767	NOV 13	0534 34.8	41.25S	175.23E	26	2.2	0.1	10	7
11768	NOV 13	0535 37.7	41.27S	175.25E	28	2.7	0.1	16	12
11775	NOV 13	1336 26.5	41.28S	175.25E	28	2.6	0.1	15	11
11778	NOV 13	1630 50.1	41.63S	174.28E	16	2.0	0.2	13	10
11781	NOV 13	2000 56.2	41.18S	173.92E	58	2.6	0.3	10	8
11783	NOV 13	2112 33.5	40.81S	174.88E	33	2.3	0.2	9	7
11784	NOV 13	2114 19.5	41.01S	174.94E	28	2.1	0.1	7	5
11797	NOV 14	0748 3.2	41.28S	175.27E	22	2.2	0.1	9	7
11804	NOV 14	1204 27.4	40.82S	174.60E	51	2.0	0.2	12	9
11812	NOV 14	2345 14.8	41.66S	174.66E	29	2.1	0.3	9	8
11822	NOV 15	0528 36.8	41.05S	175.42E	27	2.3	0.1	10	8
11831	NOV 15	1053 57.6	40.67S	174.86E	16	2.4	0.1	9	7
11836	NOV 15	1726 20.6	41.00S	175.56E	27	2.0	0.1	10	8

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
11845	NOV 16	0537 59.1	40.84S	175.01E	34	2.3	0.1	8	7
11853	NOV 16	1048 33.1	41.28S	174.66E	28	2.2	0.2	15	10
11857	NOV 16	1539 51.6	41.04S	174.76E	57	2.3	0.1	10	9
11860	NOV 16	1748 37.3	41.70S	174.52E	29	2.3	0.2	13	11
11864	NOV 16	2107 36.7	41.39S	173.95E	45	2.8	0.2	19	15
11866	NOV 17	0044 10.3	41.59S	173.92E	17	2.3	0.2	13	10
11867	NOV 17	0123 24.2	41.27S	175.24E	28	3.0	0.2	17	12
11868	NOV 17	0135 14.9	41.27S	175.23E	28	2.0	0.2	11	8
11872	NOV 17	0518 59.5	41.82S	174.85E	33R	3.1	0.2	22	15
11876	NOV 17	0902 22.1	40.69S	174.54E	68	3.5	0.2	33	23
11877	NOV 17	0944 11.6	41.58S	174.32E	25	2.5	0.2	14	12
11878	NOV 17	0946 30.2	41.59S	174.33E	27	3.8	0.2	25	19
11891	NOV 17	1715 31.8	40.50S	173.91E	105	2.3	0.1	10	7
11892	NOV 17	1729 23.9	40.58S	175.85E	30	2.0	0.2	12	7
11910	NOV 18	1312 30.5	40.90S	174.22E	46	2.4	0.3	11	10
11914	NOV 18	1954 59.0	40.62S	175.49E	29	2.6	0.1	12	8
11915	NOV 18	2101 40.0	41.26S	175.24E	26	2.4	0.1	11	8
11919	NOV 18	2301 5.6	40.83S	174.20E	57	3.0	0.1	10	9
11920	NOV 19	0024 56.2	41.17S	173.81E	58	3.0	0.2	12	8
11921	NOV 19	0216 50.8	41.11S	174.79E	55	2.7	0.1	9	6
11929	NOV 19	1744 50.4	40.78S	175.04E	37	2.5	0.1	6	4
11940	NOV 20	0720 13.7	41.50S	174.07E	40	3.0	0.2	10	8
11945	NOV 20	1304 9.5	40.84S	174.93E	33	2.3	0.1	14	9
11952	NOV 20	1834 58.4	40.66S	175.48E	29	2.7	0.3	12	10
11957	NOV 21	0002 59.2	41.25S	174.13E	36	2.1	0.3	10	8
11965	NOV 21	1426 27.1	40.51S	174.50E	12R	2.0	0.3	9	7
11968	NOV 21	1800 13.6	41.20S	175.02E	22	2.3	0.1	14	11
11974	NOV 22	0102 30.2	41.24S	175.20E	25	2.3	0.1	10	8
11976	NOV 22	0256 11.3	41.08S	174.69E	31	3.8F	0.1	19	17
11978	NOV 22	0348 10.7	41.08S	174.69E	31	2.3	0.1	12	10
11985	NOV 22	0803 20.9	41.08S	174.69E	31	2.3	0.1	11	9
11988	NOV 22	0841 57.6	41.08S	174.70E	32	2.8	0.2	15	11
11990	NOV 22	1006 11.9	40.66S	174.85E	32	2.5	0.2	11	8
11993	NOV 22	1246 33.0	41.58S	174.32E	28	2.5	0.2	16	12
11996	NOV 22	1358 9.5	41.26S	175.24E	23	2.1	0.1	9	7
12011	NOV 22	2003 21.2	41.25S	173.94E	73	3.0	0.2	14	11
12013	NOV 22	2023 12.4	41.07S	174.81E	48	2.4	0.2	12	9
12020	NOV 23	1025 5.9	41.08S	174.70E	31	2.4	0.1	14	11
12027	NOV 23	1852 47.2	40.93S	175.15E	32	2.3	0.1	6	5
12028	NOV 23	1953 23.1	41.03S	174.79E	33R	4.6F	0.2	22	20
12029	NOV 23	1957 8.1	40.99S	174.77E	32	2.9	0.2	15	12
12030	NOV 23	2005 17.7	41.00S	174.77E	32	2.6	0.1	12	10
12033	NOV 23	2231 5.9	41.00S	174.78E	31	2.2	0.1	10	7
12034	NOV 23	2241 5.3	40.99S	174.77E	32	2.7	0.1	15	11
12035	NOV 23	2244 10.5	40.99S	174.77E	33	2.1	0.0	6	4

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
12038	NOV 23	2342 51.9	40.99S	174.79E	31	2.0	0.1	9	6
12040	NOV 24	0132 23.6	40.99S	174.78E	32	2.1	0.0	7	5
12043	NOV 24	0641 13.1	41.17S	175.06E	8	2.4	0.2	11	7
12044	NOV 24	0706 19.5	40.69S	173.98E	95	2.8	0.2	11	9
12048	NOV 24	1702 1.6	40.88S	175.70E	33	2.3	0.3	8	7
12050	NOV 24	1828 9.1	40.99S	174.77E	32	2.3	0.1	10	9
12053	NOV 24	2344 48.2	41.00S	174.77E	32	2.4	0.1	12	9
12058	NOV 25	0115 39.8	40.99S	174.78E	31	2.5	0.1	11	9
12062	NOV 25	0246 44.5	40.62S	175.09E	29	3.7	0.2	27	21
12093	NOV 25	2343 49.7	41.40S	174.72E	50	2.2	0.1	11	8
12100	NOV 26	0402 0.0	41.01S	175.68E	11	2.3	0.2	12	8
12103	NOV 26	0559 21.1	40.57S	174.57E	29	2.5	0.3	10	7
12109	NOV 26	1236 5.8	41.11S	175.48E	25	2.4	0.1	11	7
12117	NOV 26	1833 23.5	40.98S	174.78E	34	2.5	0.2	14	10
12125	NOV 27	0422 23.3	40.96S	175.96E	32	2.5	0.2	13	8
12146	NOV 27	1331 48.2	40.61S	174.67E	45	3.1	0.3	33	26
12154	NOV 27	2000 11.5	40.95S	175.56E	27	2.0	0.2	12	8
12160	NOV 27	2201 25.6	40.84S	175.86E	29	2.6	0.3	14	9
12167	NOV 28	0417 30.3	41.25S	173.78E	71	3.5	0.3	20	17
12182	NOV 28	2106 44.6	40.51S	174.21E	96	2.6	0.1	9	7
12190	NOV 29	1053 8.0	40.50S	174.26E	87	2.5	0.2	13	9
12194	NOV 29	1638 41.7	41.16S	174.62E	33	2.4	0.2	17	12
12211	NOV 30	1154 56.9	41.59S	174.65E	30	2.0	0.1	10	8
12212	NOV 30	1204 32.4	41.02S	174.66E	33	2.1	0.1	13	10
12219	NOV 30	1849 30.7	41.21S	174.94E	41	3.5F	0.1	22	19
12221	NOV 30	2021 59.2	40.99S	174.77E	33	2.0	0.2	8	7
12224	DEC 01	0113 41.4	41.20S	174.41E	35	2.2	0.2	9	8
12225	DEC 01	0130 51.8	41.21S	173.67E	79	2.7	0.2	11	8
12236	DEC 01	1048 19.3	41.97S	173.87E	11	2.4	0.2	11	9
12249	DEC 02	0200 9.1	41.02S	174.85E	51	3.0	0.1	15	12
12250	DEC 02	0218 5.8	41.37S	174.91E	29	2.2	0.2	18	12
12264	DEC 02	1716 52.8	40.92S	175.00E	30	2.2	0.1	9	7
12265	DEC 02	1914 29.6	41.97S	173.86E	12R	4.2	0.3	17	15
12267	DEC 02	2251 19.6	41.03S	175.94E	31	2.0	0.2	10	7
12270	DEC 03	0305 43.1	41.54S	174.55E	12R	2.2	0.3	10	9
12272	DEC 03	0633 58.6	40.99S	175.15E	25	2.0	0.2	10	7
12285	DEC 03	2023 20.2	40.62S	174.88E	9	2.8	0.3	16	12
12307	DEC 04	1209 53.3	41.27S	175.25E	26	2.0	0.1	12	8
12329	DEC 05	0136 6.0	40.51S	174.71E	30	2.3	0.2	10	6
12343	DEC 05	1240 19.0	40.99S	174.76E	33	2.0	0.2	12	9
12357	DEC 05	2234 33.6	40.75S	174.74E	19	2.1	0.1	9	6
12368	DEC 06	1207 30.9	41.27S	175.23E	28	2.3	0.2	12	8
12370	DEC 06	1310 19.2	41.37S	174.84E	24	2.4	0.2	15	12
12385	DEC 07	0058 22.0	41.26S	175.24E	31	3.2	0.2	17	13
12386	DEC 07	0058 50.0	41.27S	175.25E	27	2.1	0.1	14	8

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
12389	DEC 07	0117 20.3	41.25S	175.25E	25	2.3	0.1	13	9
12405	DEC 07	0818 54.5	41.27S	175.24E	28	2.5	0.2	17	11
12422	DEC 07	2048 12.5	41.39S	174.21E	35	3.0	0.2	24	16
12423	DEC 07	2229 14.2	40.97S	174.57E	12	2.5	0.2	17	11
12427	DEC 08	0011 17.0	41.19S	175.07E	16	2.7	0.3	18	14
12429	DEC 08	0406 41.7	40.90S	175.68E	28	2.7	0.2	15	11
12453	DEC 08	1820 44.5	41.18S	175.03E	29	2.2	0.2	11	8
12468	DEC 09	0438 6.7	40.54S	173.60E	117	4.0	0.2	39	29
12469	DEC 09	0513 59.0	40.99S	174.38E	61	2.1	0.1	8	6
12470	DEC 09	0537 1.0	40.98S	175.63E	31	2.0	0.1	9	6
12473	DEC 09	0825 43.5	40.63S	173.78E	96	2.5	0.2	10	8
12479	DEC 09	1118 51.5	40.69S	174.05E	72	2.5	0.4	10	8
12480	DEC 09	1136 5.5	40.92S	175.65E	25	3.1	0.3	23	18
12493	DEC 10	0157 59.4	40.56S	175.93E	31	4.0	0.1	30	25
12507	DEC 10	1823 13.5	40.99S	174.77E	32	2.8	0.1	19	15
12512	DEC 10	2313 30.5	41.39S	174.95E	29	2.8	0.2	15	11
12515	DEC 10	2349 56.4	41.35S	175.20E	23	2.6	0.2	11	9
12518	DEC 11	0311 2.4	40.89S	175.73E	25	3.6	0.2	19	16
12519	DEC 11	0528 45.5	40.77S	174.63E	16	2.1	0.2	9	6
12520	DEC 11	0723 8.8	41.26S	175.30E	21	2.3	0.2	8	7
12531	DEC 11	1415 12.2	41.03S	174.53E	53	2.5	0.1	9	8
12538	DEC 11	2313 32.7	40.68S	174.89E	5R	2.2	0.2	12	8
12550	DEC 12	1242 52.7	41.19S	174.30E	34	2.4	0.2	16	11
12561	DEC 12	1953 28.7	41.16S	173.59E	72	2.8	0.2	18	12
12563	DEC 12	2037 53.0	40.75S	174.63E	12R	2.0	0.2	12	8
12569	DEC 13	0043 3.6	40.64S	173.89E	72	2.0	0.2	9	6
12593	DEC 13	1634 7.4	40.58S	175.08E	31	2.8	0.2	16	14
12595	DEC 13	1749 13.3	41.21S	173.73E	66	2.7	0.2	13	10
12596	DEC 13	1751 4.1	41.69S	174.22E	17	2.7	0.2	17	14
12606	DEC 14	0429 33.3	40.67S	175.69E	53	4.2F	0.2	31	27
12607	DEC 14	0606 56.2	40.98S	174.09E	66	2.6	0.2	9	4
12623	DEC 15	0725 51.8	41.32S	174.80E	51	3.3	0.2	23	19
12670	DEC 16	1653 14.2	41.55S	173.69E	49	2.6	0.3	17	12
12682	DEC 17	0939 6.2	40.70S	174.50E	78	2.6	0.2	11	9
12690	DEC 17	2056 57.4	40.78S	175.20E	33	2.3	0.2	7	5
12692	DEC 18	0108 11.8	40.89S	175.05E	40	2.0	0.3	7	6
12707	DEC 18	0949 14.8	40.86S	175.76E	32	2.7	0.2	11	8
12719	DEC 18	1915 12.5	41.23S	175.32E	22	2.4	0.1	9	7
12725	DEC 19	0412 47.3	40.91S	175.45E	22	3.7F	0.1	25	19
12730	DEC 19	1003 45.7	40.99S	175.32E	19	2.1	0.3	9	8
12735	DEC 19	1645 28.8	41.67S	174.17E	10	2.6	0.3	16	13
12761	DEC 21	0514 19.4	40.62S	174.27E	12R	2.5	0.3	11	9
12764	DEC 21	0830 49.6	41.83S	175.55E	29	2.5	0.1	10	9
12766	DEC 21	0906 41.8	41.33S	174.64E	18	2.0	0.2	14	12
12799	DEC 22	0630 37.1	40.59S	174.18E	68	2.6	0.1	11	7

NUM	DATE	TIME	LAT	LONG	DEP	MAG	Rsd	NP	NS
12809	DEC 22	1124 54.9	41.19S	175.64E	19	2.4	0.2	11	8
12810	DEC 22	1158 2.9	41.01S	175.40E	28	2.0	0.2	7	6
12819	DEC 22	1727 34.9	41.38S	174.32E	34	2.0	0.2	11	9
12820	DEC 22	1727 38.9	41.40S	174.32E	34	2.3	0.2	11	9
12832	DEC 22	2313 27.9	41.35S	175.13E	28	2.1	0.1	8	5
12833	DEC 22	2314 14.4	41.29S	175.25E	26	2.7	0.2	13	10
12849	DEC 23	0754 45.2	40.50S	174.79E	43	2.3	0.2	10	7
12851	DEC 23	0959 28.7	41.03S	174.74E	55	2.6	0.1	11	9
12860	DEC 23	1334 12.5	40.79S	174.78E	40	2.6	0.2	15	12
12864	DEC 23	1450 55.0	40.66S	175.48E	30	2.9	0.2	12	9
12868	DEC 23	1833 19.8	40.86S	173.73E	89	2.8	0.2	14	10
12869	DEC 23	1900 10.2	41.01S	175.60E	25	2.4	0.2	6	4
12870	DEC 23	1919 30.7	41.43S	174.69E	16	2.0	0.2	13	10
12885	DEC 24	0852 59.6	41.48S	174.17E	31	2.7	0.2	18	14
12918	DEC 25	0154 44.8	40.54S	174.47E	36	2.3	0.2	16	12
12985	DEC 26	0304 46.3	41.25S	175.38E	13	3.0	0.2	18	13
13026	DEC 26	1722 36.0	41.06S	175.54E	26	2.7	0.2	16	11
13037	DEC 26	2021 17.1	40.93S	175.65E	22	2.0	0.2	16	8
13039	DEC 26	2058 45.5	40.93S	175.66E	22	2.5	0.1	13	8
13070	DEC 27	0816 5.0	41.33S	174.32E	59	2.7	0.2	9	4
13072	DEC 27	0850 32.6	41.27S	175.23E	27	2.0	0.2	9	7
13113	DEC 28	0447 55.1	40.94S	175.49E	24	3.7	0.2	24	19
13115	DEC 28	0540 32.5	41.56S	174.97E	42	2.7	0.2	16	12
13129	DEC 28	1000 12.5	40.69S	175.96E	43	2.6	0.1	10	7
13140	DEC 28	1230 12.1	41.02S	173.89E	78	2.2	0.2	12	7
13198	DEC 29	1435 49.8	40.98S	174.74E	60	2.2	0.1	7	6

TUAMOTU ARCHIPELIGO NUCLEAR EXPLOSIONS

Nuclear explosions at the French nuclear test sites in the Tuamotu Archipelago are often recorded at Rarotonga (RAR). The P-wave is usually not recorded but the T-waves have a rather distinctive signature with a very emergent onset, followed after a few seconds by a more prominent burst of energy which reaches its maximum and decays before the arrival of a smaller "echo" trailing the main energy by some 110 seconds. Although other teleseismic readings from the New Zealand network are published by the International Seismological Centre, these T-wave observations are not.

Because the emergent first arrival cannot always be seen clearly when the explosions are relatively small, the instant of arrival is not recorded here. Instead, an inferred origin time is listed, based on the estimated travel time from the test site to Rarotonga, and indications that it is common practice to detonate tests exactly on the minute.

A means of estimating the magnitudes of the explosions has been devised, based on a comparison of maximum amplitudes of T-waves recorded at Rarotonga with the magnitude estimates from the United States National Earthquake Information Service. (W.D. Smith, 1987: Underground nuclear explosions recorded at Rarotonga: estimation of m_b from T-phase amplitude. Geophys. J. R. Astr. Soc. 90: 35-42). These magnitudes are given, together with the N.E.I.S. An 'F' after the time of a test indicates that it is believed to have been sited at Fangataufa, while all others are thought to have been on Mururoa.

DATE	TIME h m	m_b (T-wave)	m_b (N.E.I.S.)
Jan 27	21 30 F	5.6	5.4

NON-INSTRUMENTAL DATA

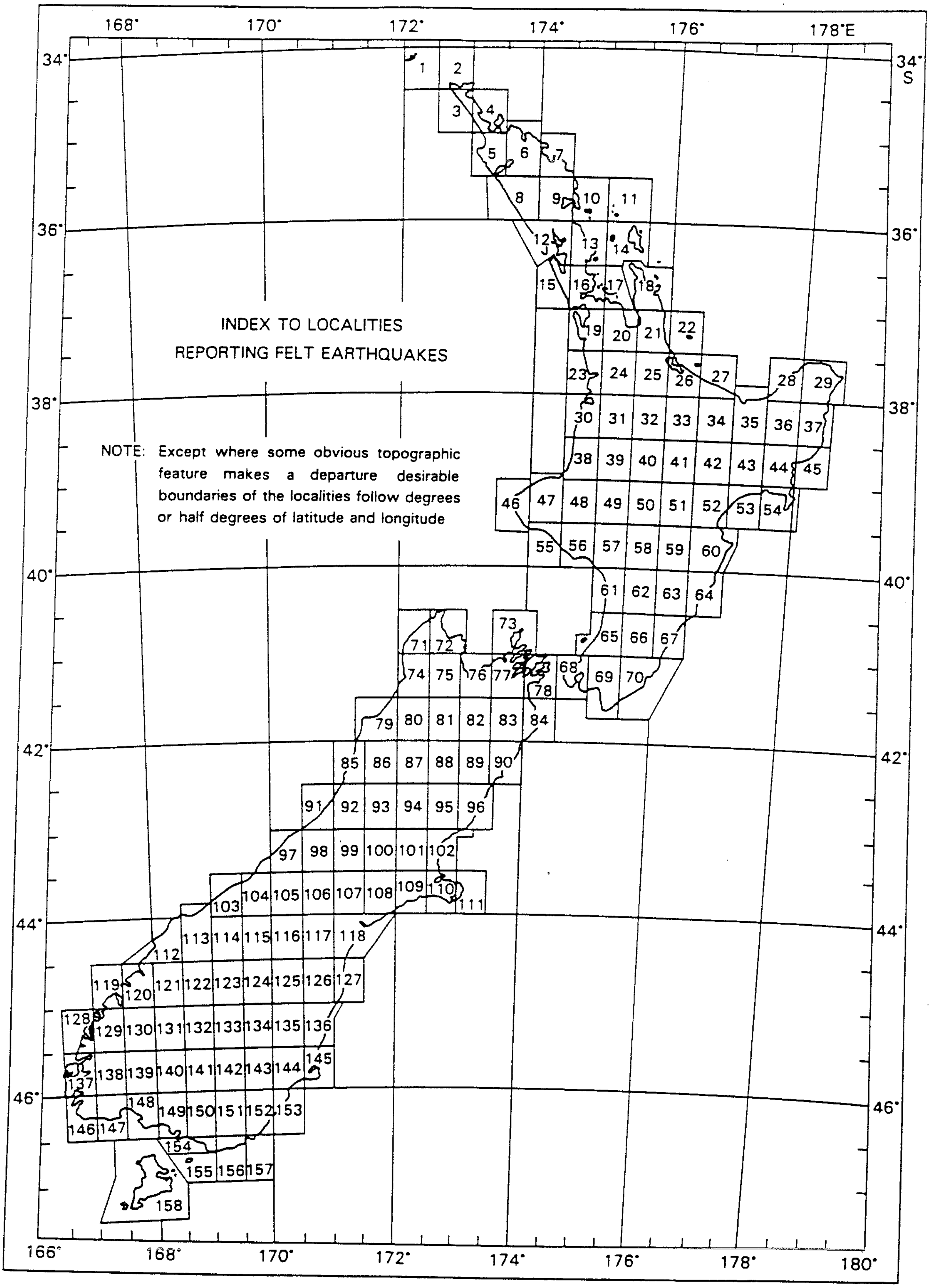
THE FELT REPORTING SYSTEM

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.

16 Auckland 10175 (4*).

21 Thames 1883 (5).

23 Ragland 7135 (4*).

25 Matamata 1883 (4*).

26 Tauranga 1883 (4*).

27 Whakatane 7094 (4*), 8115 (4*).

33 Rotorua 663 (4), 7094 (4).

34 Murupara 3323 (4*), 3371 (4*), 4906 (5), 5487 (5*), 7094 (4*), 8110 (4*), 8115 (4*), 8124 (4*), 11827 (4*), 11841 (4*).

35 Opotiki 4991 (3), 7094 (3), 11451 (3).

38 Mokau 7135 (5).

39 Taumarunui 6170 (4*), 7135 (4), 13185 (4*).

40 Tokaanu 6170 (4), 7094 (3), 7135 (4), 9581 (4), 13185 (4).

41 Taupo 4443 (4), 7094 (4*), 10818 (4).

44 Whakapunaki 2397 (4), 5450 (4), 6890 (4).

45 Gisborne 14 (3*), 22 (4), 5450 (4*), 6890 (4*).

46 Cape Egmont 5404 (4*), 9554 (4*), 9591 (4*).

47 New Plymouth 1347 (4), 5404 (3), 7135 (4), 9231 (4*), 9407 (4*), 9554 (4), 9591 (4*), 10271 (4), 11529 (4), 11745 (4*), 12826 (4).

49 Ohakune 1347 (4), 6170 (4), 7135 (4), 10271 (4), 12826 (4).

50 Chateau 7135 (4*).

52 Napier 589 (4), 6004 (4), 7193 (3), 8406 (4), 10175 (4), 11464 (4), 12826 (4).

55 Hawera 11055 (4*).

56 Waverley 6170 (4), 7135 (4).

57 Wanganui 6170 (4), 9770 (4*), 10175 (4), 10271 (4), 10514 (3), 12826 (4*).

58 Taihape 4012 (4), 6004 (4), 10175 (4), 10271 (4), 10514 (4), 12750 (4), 12826 (4).

59	Ruahine	3241 (4).
60	Hastings	1333 (4*), 3809 (4*), 4189 (4*), 4745 (4*), 5547 (4), 5768 (4*), 7193 (4), 9142 (3), 10175 (4), 10514 (4), 11451 (4*), 12491 (4).
61	Bulls	1347 (4), 3241 (4*), 6004 (4), 6170 (4), 7135 (4), 10175 (4), 10271 (4), 10514 (4), 11080 (4), 12750 (4), 12826 (4).
62	Palmerston North	3421 (4*), 4189 (4*), 4248 (4*), 6082 (4*), 6170 (4), 10175 (4), 10271 (4), 10514 (4), 11451 (4*), 12826 (4).
63	Dannevirke	329 (4*), 4012 (4*), 4189 (4*), 4248 (4*), 4636 (4*), 4745 (4*), 6082 (4*), 6170 (4*), 10175 (4), 10514 (4*), 12491 (4*).
64	Porangahau	5768 (4*).
65	Otaki	1678 (4*), 3241 (4), 3812 (4*), 4189 (4*), 6004 (4), 6170 (4), 10175 (4), 10271 (4), 10514 (4), 11737 (3), 12028 (4), 12606 (4).
66	Masterton	4189 (4), 63 (4*), 11736 (4*), 12725 (4*).
68	Wellington	445 (4*), 988 (4), 1678 (3), 6004 (3), 63 (4*), 6170 (4), 6618 (3), 7601 (4*), 9413 (4*), 9866 (4), 9868 (4), 10175 (4), 10271 (4*), 11451 (4*), 11452 (4), 11736 (4), 11737 (4), 11976 (3), 12028 (4*), 12219 (3), 12826 (4*).
69	Featherston	1678 (4*), 6170 (4*), 11737 (3).
72	Takaka	1535 (4), 6403 (4*), 6618 (4*), 11515 (4).
75	Motueka	7601 (3).
76	Nelson	6618 (4*), 7601 (4*), 9187 (4*).
77	Blenheim	1182 (6), 6170 (4*), 6618 (4*), 7601 (4*), 10175 (4).
78	Picton	445 (4), 6170 (4), 6618 (3), 9880 (4*), 10175 (4).
79	Westport	4506 (4*), 6423 (4*), 9880 (4).
84	Cape Campbell	445 (4*), 4556 (4).
85	Greymouth	9187 (3), 9880 (4*).
87	Maruia	5864 (3), 9187 (4).
88	Hanmer	9187 (6), 9880 (6), 10305 (4*), 10311 (4*), 10403 (4*), 10407 (4*).
90	Kaikoura	6889 (4*), 7230 (4*), 9413 (4*).
92	Kumara	9187 (4), 9386 (4), 10101 (3).
95	Culverden	9187 (4).
96	Cheviot	9202 (4*), 9255 (4*).
97	Franz Josef	2279 (4), 10101 (3).
100	Lake Coleridge	10919 (4).
102	Rangiora	1684 (4*), 8555 (4*), 9880 (4).

104	Bruce Bay	259 (4), 444 (4), 900 (4), 985 (4), 2279 (4), 3509 (4), 9654 (4), 9774 (4), 9932 (4).
110	Christchurch	1684 (4*), 6170 (4*), 6229 (4*), 9187 (4*), 9413 (4*), 9880 (4*), 10175 (4*), 12612 (4*), 13200 (4*).
113	Jackson's Bay	10755 (4).
116	Pukaki	106 (4*).
121	Glenorchy	2279 (4), 6951 (4).
122	Arrowtown	2279 (4), 2645 (4*), 6951 (3), 9270 (4), 10755 (4*).
123	Wanaka	2279 (4), 3509 (4*), 10755 (4*).
124	St Bathans	2279 (4).
130	Te Anau	2279 (5), 118 (4*), 3509 (4*), 6951 (4).
132	Kingston	2279 (4), 3509 (4*), 6951 (4), 10755 (4*).
133	Alexandra	2279 (4), 118 (4*).
138	Pillans Pass	2279 (4), 3509 (4), 6951 (4), 11317 (4), 12115 (4*).
139	Monowai	2279 (5).
144	Outram	2279 (4).
145	Dunedin	2279 (4), 6951 (4*).
148	Tuatapere	2279 (4).
149	Invercargill	2279 (4), 118 (4*).
152	Balclutha	2279 (4).
156	Tahakopa	2279 (4), 118 (4*).

FELT 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
Jan 14	06h 50m	MM 4	Raoul Island
Jan 14	23h 14m	MM 3	Raoul Island
Jan 28	09h 38m	MM 4	Raoul Island
Feb 15	00h 40m	'MM 3'	Raoul Island
Feb 16	12h 12m	'MM 3'	Raoul Island
Mar 14	08h 28m	MM 3	Raoul Island
Apr 19	04h 16m	MM 3	Raoul Island
May 17	06h 24m	MM 3	Raoul Island
Jun 04	02h 16m	MM 3	Raoul Island
Jun 05	07h 05m	'MM 3'	Raoul Island
Jun 15	19h 21m	MM 4	Raoul Island
Jun 30	08h 55m	MM 4	Raoul Island
Jul 03	19h 50m	MM 7	Raoul Island
Jul 03	19h 58m	MM 4	Raoul Island
Jul 03	20h 24m	MM 4	Raoul Island
Jul 03	20h 52m	MM 4	Raoul Island
Jul 03	22h 00m	MM 4	Raoul Island
Jul 03	22h 22m	MM 4	Raoul Island
Jul 04	12h 27m	MM 3	Raoul Island
Jul 05	00h 47m	'MM 2'	Raoul Island
Jul 05	12h 30m	MM 3	Raoul Island
Jul 16	18h 18m	MM 4	Raoul Island
Jul 25	05h 24m	MM 4	Raoul Island
Jul 26	09h 55m	MM 4	Raoul Island
Aug 16	15h 05m	'MM 4'	Raoul Island
Aug 22	22h 12m	MM 5	Raoul Island
Aug 22	22h 32m	MM 3	Raoul Island
Aug 25	14h 50m	'MM 4'	Raoul Island
Aug 28	14h 55m	MM 4	Raoul Island
Sep 05	17h 50m	MM 4	Raoul Island
Sep 07	05h 13m	MM 4	Raoul Island
Oct 05	19h 11m	MM 4	Raoul Island
Oct 14	08h 01m	MM 4	Raoul Island
Dec 18	06h 16m	MM 4	Raoul Island
Dec 20	11h 04m	MM 4	Raoul Island
Dec 30	16h 06m	MM 4	Raoul Island
Dec 31	10h 25m	MM 3	Raoul Island

PUBLICATIONS BY STAFF MEMBERS

The following papers by members of the Seismological Observatory staff were published in 1996.

Abercrombie, R.; Webb, T.H.; Bannister, S.; Robinson, R.; Beavan, J.; Arnadottir, T. The enigma of the Arthurs Pass earthquake. *Abstracts for the AGU Western Pacific Geophysics Meeting, July 23-27, 1996.* W90.

Abercrombie, R.E.; Webb, T.H.; Robinson, R.; Beavan, J.; Arnadottir, T. The 1994 Arthurs Pass earthquake : evidence for significant aseismic slip? *Eos. 77 (46:supplement).* F740.

Abercrombie, R.E. The magnitude-frequency distribution of earthquakes recorded with deep seismometers at Cajon Pass, southern California. *Tectonophysics. 261:* 1-7.

The cumulative *b*-value (the slope of the Gutenberg-Richter relationship between earthquake occurrence rate and magnitude) is commonly found to be constant (~1). Network catalogues, however, reveal a decrease at small magnitudes (<3). Some recent studies have suggested that this decrease in *b*-value is not just an artifact of catalogue incompleteness, but that small earthquakes are really not as numerous as a constant *b*-value extrapolated from larger events would predict. In the Cajon Pass area, southern California, the *b*-value of seismicity recorded by the local network (SCSN) appears to decrease below about M_L 1.6. In order to investigate whether this decrease is real or simply represents the network detection threshold, we use seismicity recorded by the deep (1.5 and 2.5 km) seismometers deployed in the Cajon Pass Scientific Drillhole between April 1992 and October 1994. The maximum amplitudes recorded downhole are compared to SCSN magnitudes for events recorded by the network, to determine the relationship between amplitude and M_L as a function of hypocentral distance from the borehole. Magnitudes are then calculated for 1300 earthquakes which occurred within 40 km of the borehole. Magnitude-frequency curves are calculated for those events within 18 km of the borehole, and a constant *b*-value is observed to M_L 0.5.

Abercrombie, R.E.; Mori, J. Occurrence patterns of foreshocks to large earthquakes in the western United States. *Nature. 381:* 303-307.

Observations of foreshocks preceding large earthquakes provide one of the few well documented cases of premonitory events that are clearly related to a subsequent earthquake. Unfortunately, the apparent randomness of foreshock occurrence - they precede some events and not others - has severely hampered their use in reliable earthquake prediction. Understanding the factors that control foreshock occurrence is critical for determining how large earthquakes initiate and whether reliable short-term prediction will ever be possible. Here we report the results of a comprehensive study of the occurrence patterns of foreshocks to large earthquakes in the western United States. The incidence of foreshocks decreases with increasing depth of the mainshock, and also depends on the mainshock slip orientation. This pattern of occurrence may be explained by a decrease in small-scale crustal heterogeneity with increasing depth, and suggests that increasing normal stress (both regional tectonic stress and lithostatic load) inhibits the occurrence of foreshocks. No relationship is observed between any aspect of foreshock occurrence and the magnitude of the subsequent mainshock, suggesting that the eventual size of the mainshock may be independent of the earthquake nucleation process, or that foreshocks are not part of this process.

Anderson, H.J.; Eberhart-Phillips, D.; Gledhill, K.R.; McEvilly, T.; Uhrhammer, R.; Klosko, E.; Wu, F. South Island earthquakes exposed: the 1995-96 Southern Alps Passive Seismic Experiment. *Geological Society of New Zealand Inc: 1996 annual conference, 26-28 November, University of Otago, Dunedin : programme and abstracts:* 19.

Beanland, S.; Haines, A.J.; Van Dissen, R.J. Kinematic models of active deformation in the North Island, New Zealand, determined from geological strain rates. *Geological Society of New Zealand Inc : 1996 annual conference, 26-28 November, University of Otago, Dunedin : programme and abstracts:* 24-25.

Crampton, J.S.; Haines, A.J. Users' manual for programs HANGLE, HMATCH, and HCURVE for the Fourier shape analysis of two-dimensional outlines. *Institute of Geological & Nuclear Sciences sciences report ; 96/37*: 28 p.

This manual describes the use of three computer programs that are used to perform Fourier shape analysis of two-dimensional outline contours. The programs have been developed for use in morphometric and evolutionary studies in biology and paleontology. They are supplied with the manual and have been compiled for both IBM-compatible and Macintosh personal computers. Program HANGLE outputs the Fourier coefficients derived from one or more input files of digitised outline traces. The Fourier coefficients from many outlines are used as input to multivariate statistical programs (not supplied here). Program HMATCH normalises the Fourier coefficients of each outline for orientation and starting position of the trace, based on properties of the given populatioin of outlines. Program HCURVE performs the inverse Fourier transform and is used to reconstruct outlines from one or more files of Fourier coefficients. The inverse Fourier transform can be used to generate synthetic mean shapes and to visualise patterns and ranges of variation.

Doser, D.J.; Webb, T.H. Large historic (1918-1962) earthquakes in the South Island, New Zealand., *Eos. 77 (46:supplement):* F74.

Downes, G.L. Notices & reviews : New Zealand tragedies earthquakes. *Newsletter / New Zealand Geophysical Society. 45,* 68.

The author reviews the book "New Zealand Tragedies EarthQuakes" by Anna Rogers and Geoff Conly.

Eberhart-Phillips, D.; Anderson, H.J.; Gledhill, K.R. Southern Alps Passive Seismic Experiment, New Zealand, short-period array. *Eos. 77 (46:supplement),* F739.

Gledhill, K.; Savage, M.; Marson, K. Shear-wave splitting measurements in the Southern Alps region, South Island, New Zealand. *Abstracts for the AGU Western Pacific Geophysics Meeting, July 23-27, 1996,* W84.

Gledhill, K.R.; Robinson, R.; Webb, T.H.; Abercrombie, R.E.; Eberhart-Phillips, D. The M_w 6.2 Cass, New Zealand earthquake of 24 November, 1995 : reverse faulting in a strike-slip region. *Eos. 77 (46:supplement),* F740.

Grapes, R.; Downes, G. History never repeats? *New Zealand science monthly. 7(1)*: 5-7.

Researchers study the effects of the 1855 Wairarapa Earthquake to find clues about what may happen next time. New Zealand sits astride the boundary between two converging plates. The stresses created by this convergence are relieved by many small and moderate magnitude earthquakes, and less frequently a large earthquake. Using information from the past earthquake engineers can design structures and services to resist the effects of strong shaking and geologists and seismologists can identify areas susceptible to enhancement of shaking and faulting. Emergency response organisations can better prepare for the time when we may have a large earthquake.

Haines, A.J.; De Hoop, M.V. An invariant imbedding analysis of general wave scattering problems *Journal of mathematical physics. 37(8):* 3854-3881.

The invariant imbedding technique, via the solution of a Riccati-type equation, is modified to calculate the wave fields inside and scattered from a strongly (laterally and vertically) heterogenous, anisotropic inclusion, which may be large but remains compact. The factorization underlying this approach is carried out with respect to direction of average power flow rather than the more conventional factorization with respect to local direction of propagation. The solution of the operator Riccati equation is related to the Dirichlet-to-Neumann map. The formulation is robust in the sense that it can handle a rather extreme range of modal wave speeds, and allows continuous as well as discontinuous medium variations on different (wave) length scales. It also, inherently, takes care of critical-angle phenomena. The algorithm, based on the invariant imbedding approach, yields the internal fields for a full survey of sources and receivers simultaneously. The wave field solution in the inclusion is couple to the external field via a boundary element approach.

Klosko, E.; Wu, F.T.; Eberhart-Phillips, D.; Anderson, H.J.; Gledhill, K.R. A preliminary analysis of seismic anisotropy in New Zealand using a regional broad band network. *Eos. 77 (46:supplement):* F740.

Monov, D.V.; Abercrombie, R.E.; Leary, P.C. Reliable and economical high-temperature deep-borehole seismic recording. *Bulletin of the Seismological Society of America. 86(1A):* 204-211.

Recording earthquakes with borehole seismometers has become increasingly popular in recent years as the advantages in noise reduction and also the distorting effects of near-surface rocks, especially sediments, have become well known. Borehole recording can be extremely complex, involving active sensors, special cables, and downhole electronics. Such installations, however, are often not very reliable at the high temperatures reached in active tectonic areas at depths of 1 km and greater. Here we describe a simple and reliable system for 3-component recording of local earthquakes at single and multiple depths greater than 1.5 km and temperatures up to 120 °C. Our system was designed and developed for experiments in the Cajon Pass Scientific Drillhole of Southern California. The borehole packages are made of titanium with spring-loaded clamping, allowing easy retrieval. Standard seven-conductor oil-well logging cables are used together with a specially designed cablehead. The data recorded have been used for investigating earthquake source scaling, attenuation in the mid-crust, and also near-surface site effects.

Mori, J.; Kanamori, H.; Abercrombie, R.E. Scaling of stress drop and energy from Northridge aftershocks. *Eos. 77 (46:supplement),* F481.

Nothard, S.; McKenzie, D.; Haines, A.J. Jackson, J. Distributed deformation in the subducting lithosphere at Tonga. *Geophysical journal international. 127(2),* 328-338.

In this paper we attempt to apply techniques that have recently been developed to describe distributed deformation on the continents to distributed deformation in subducting lithosphere slabs. We chose a part of the Tonga slab for this study because it has a simple, approximately planar, shape and high seismicity. We then used the spatial distribution of seismic strain rates, based on earthquake centroid-moment-tensor solutions in the interval 1977-1994, to recover a velocity field that describes the seismic deformation in the plane of the slab below a depth of 100 km. Between 100 and ~450 km depth the seismic deformation is dominated by down-dip shortening and slab thickening. Below ~450 km the down-dip shortening seen in the earthquakes is still important, but it is absorbed roughly equally by along-strike extension and by thickening. There is little evidence of along-strike shear at depth. We have more confidence in the pattern of strain rates and velocities that we obtain than in their absolute values. Nevertheless, the rates of down-dip shortening accounted for by seismicity are probably less than half those needed if the whole down-dip component of Pacific-Australia plate convergence is absorbed by shortening in the upper mantle. The style of deformation at the base of the slab is complex and , unlike many regions of distributed continental tectonics, is not easily represented by simple patterns of faulting.

Nothard, S.; McKenzie, D.; Haines, A.J.; Jackson, J. Gaussian curvature and the relationship between the shape and the deformation of the Tonga slab. *Geophysical journal international. 127(2):* 311-327.

We investigate a particular potential cause of deformation within the subducting Tonga slab: that associated with material that moves over a template while remaining in contact with it. In such a situation both the location and the style of deformation within the material depend, in a predictable way, on the shape of the template, and in particular on its Gaussian curvature. We look for such an association in the Tonga slab, using earthquake locations to define the slab shape and their focal mechanisms to indicate the style of deformation. Only in one place, at 25°S and 500-600 km depth, does the style of the faulting in the earthquakes demonstrably correspond with that required by the Gaussian curvature if the slabs were moving over a template. Although the Gaussian curvature in other parts of the slab, particularly near the 'hook' at its northern end, would also require deformation if the slab were moving over a template, the pattern of earthquake mechanisms in those places is not clear enough to confirm the association. Although we are limited by our ability to resolve only the coarsest features (> 300 km) of the slab shape, we reach the important conclusion that deformation in response to motion over a template is not the main cause of the intermediate and deep seismicity in the Tonga slab. Most of the earthquakes, and all the biggest ones, occur where, even if the slab were moving over a template, it would not need to deform to do so. Some other explanation is required for these earthquakes.

Reyners, M. The inner core : the New Zealand connection continues. *Newsletter / New Zealand Geophysical Society. 45:* 44-45.

This article discusses the connection between New Zealand and the discovery and ongoing research that the inner core of the earth spins faster than the earth itself. The 1929 Murchison earthquake provided a Danish scientist with seismological recordings indicating the existence of a solid inner core, with a seismic velocity larger than that of the outer core. Then, in 1996 two researchers, responsible for the discovery that the core spins faster than the earth visited New Zealand to further research their model. To study the differential rotation of the inner core, it is best to use seismic phases travelling in the north-south direction, i.e. seismic sources and receivers should lie at high latitudes. Large nuclear explosions were detonated in the Russian Arctic and these were traced at Scott Base, Antarctica. These recordings are now held at the Seismological Observatory at Kelburn. The researchers spent some productive days at the Observatory scanning these original recordings of core phases from the Soviet blasts. Their model of inner core rotation will be much improved as a result.

Reyners, M.E. 1995 AGU Fall Meeting, San Francisco: *Newsletter / New Zealand Geophysical Society. 43:* 59-61.

The author looks at the current topics discussed at the December 1995 meeting of the American Geophysical Union.

Reyners, M.E.; Robinson, R.; McGinty, P.J. Plate interaction in the northern South Island and southernmost North Island, as illuminated by earthquake focal mechanisms. *New Zealand Geophysical Society 1996 Symposium : Volcanic and extensional processes : Programme and abstracts : 29 - 30 August 1996, GNS Wairakei Research Centre, Wairakei: Taupo* 1 p.

Reyners, M.E.; Hasegawa, A.,(ed) Subduction zones and back arc basins. *Physics of the earth and planetary interiors 93(1/2)*: vi, 137 p.

To provide a forum for discussion of recent research on subduction zones and back arc basins, a two-day symposium was held as part of the 27th General Assembly of IASPEI. For this special issue of "Physics of the earth and planetary interiors", eight contributions were accepted after the review process. The contributions cover a full range of techniques, from broadband seismology through to magnetotelluric methods, and a full range of geographical regions. In particular, exciting new results on the fine structure of subduction in Japan demonstrated the research payoff from investment in modern seismograph networks in the region over recent years.

Robinson, R.; Webb, T.H. AMPRAT and MECHTOOL: programs for determining focal mechanisms of local earthquakes. *Institute of Geological & Nuclear Sciences science report; 96/7* 24 p.

A common problem in determining the focal mechanism of local earthquakes from first motion observations is that there are not enough data to usefully restrain the solution. P to S amplitude ratios can theoretically reduce the range of possible solutions. However, amplitude ratios have a rather checkered history, largely because ratios calculated using simple ray theory assume that the user can reliably identify on the seismograms the various phases (e.g., P, Pn, P*, Pg, S, Sn, S*, Sg, etc) and also that various internal reflections are not important. Detailed waveform modelling is another possibility but requires very accurate locations and velocity model. Also, the theoretical waveforms generated by layered models often don't look much like the real thing if the structure is actually more complex. This is particularly true at higher frequencies. Low pass filtering helps, but only for larger events. Computing theoretical waveforms for complex 3-D velocity models is computationally impractical. Schwartz (1995) introduced the idea of using the envelope of complete theoretical seismograms rather than details of the waveform. This helps by reducing the dependence on fine details and precise timing, while retaining the complete seismogram approach (all phases are included). Experience indicates that low-pass filtered seismograms (4.0 Hz) are useful for events down to about magnitude 2.0. The programs "AMPRAT" and "MECHTOOL" have been developed to apply this approach to the large number of short-period digital seismograms available in New Zealand, particularly from aftershock sequences and other temporary deployments. In addition, they can provide an easy to use interface for determining mechanisms from first motion data only. The purpose of this report is to give detailed instructions on how to use the programs, plus some background information on how they work.

Robinson, R.; Benites, R. Synthetic seismicity models for the Wellington Region, New Zealand: implications for the temporal distribution of large events. *Journal of geophysical research. Solid earth. 101(B12):* 27833-27844.

Our previous synthetic seismicity model for multiple interacting faults in a three-dimensional half-space has been extended and applied to the Wellington region, New Zealand, generating long catalogs of earthquakes for studying the effects of elastic interactions on the temporal distribution of large events. The region is one of oblique plate convergence with the interface between the subducting and overlying plates at an average depth of 22 km. Faults included, besides the subduction thrust, are segments of the four major arc-parallel, strike-slip faults overlying the plate interface. We have used four different models, with geometric and mechanical parameters chosen at random within reasonable ranges, to generate catalogs of 200,000 years duration each. For comparison, each model was rerun with the elastic interactions suppressed. Considering events of magnitude 7.2 or more ("characteristic" events in the sense that they rupture most of the fault plane), the number of short (less than 10 years) interevent times is higher than for the corresponding case with no interactions, for all models but one: the ratio changes from 0.94 to 37.21 (9.46 average). For longer interevent times (10 to 250 years) the relative numbers are in the opposite sense. For still longer interevent times (greater than 250 years), the relative numbers are again mostly higher. Experiments with simple models indicate that this pattern requires both interfault enhancement and inhibition of large events. Mutual enhancement occurs most often between the subduction thrust and the overlying strike-slip faults and between the two segments of the Wellington fault that almost join end to end. Mutual inhibition mostly occurs between the subparallel strike-slip faults.

Sanchez-Sesma, F.J.; Benites, R.; Bielak, J. The assessment of strong ground motion. What lies ahead? *Volume of abstracts of the Eleventh World Conference on Earthquake Engineering:* 1301.

Sanchez-Sesma, F.J.; Benites, R.; Bielak, J. The assessment of strong ground motion : what lies ahead? *Proceedings of the 11th World Conference on Earthquake Engineering. (CD-ROM).*

Advances in both science and technology during the current century have been phenomenal, and have had a profound influence on most aspects of human activity. Perhaps, the main obstacle in our extrapolation to the future is that societies function in a kind of limiting state. That is, within limitations imposed by internal and external factors whose degree of severity varies with time. These constraints determine priorities and policies when planning how to confront natural disasters. In the case of earthquakes, in general, the seismic threat is considered small as compared to other dangers.

Savage, M.K.; Gledhill, K.; Marson, K. Lower crustal anisotropy or dipping isotropic layers? Case studies above the San Andreas and the New Zealand alpine faults. *Posters from the 8th annual IRIS workshop:* 67.

Savage, M.K.; Gledhill, K.; Marson, K. A search for lower crustal anisotropy in strike-slip regions. *Abstracts for the AGU Western Pacific Geophysics Meeting, July 23-27, 1996:* W84.

Webb, T.H. Principal earthquakes in New Zealand in 1995. *Bulletin of the New Zealand National Society for Earthquake Engineering. 29(1):* 56.

1995 was another busy year for earthquakes in New Zealand, continuing the pattern of increased activity since 1990. Large earthquakes occurred in the Marlborough Sounds, Arthurs Pass, Raoul Island and Hawera. There was also seismic activity accompanying the eruption of Mount Ruapehu. The Institute of Geological and Nuclear Sciences operates a seismograph which records French nuclear tests at Mururoa. Between September and December five tests were recorded. There is no relationship between nuclear tests and earthquakes.

Webb, T.H. : Seismicity of the Central Volcanic Region. *New Zealand Geophysical Society 1996 Symposium : Volcanic and extensional processes : Programme and abstracts : 29 - 30 August 1996, GNS Wairakei Research Centre, Wairakei, Taupo:* 1 p.

Yomogida, K.; Benites, R.A. Coda Q as a combination of scattering and intrinsic attenuation : numerical simulations with the boundary integral method. *Pure and applied geophysics.* 148(1/2): 255-268.

Numerical modelling of SH wave seismograms in media whose material properties are prescribed by a random distribution of many perfectly elastic cavities and by intrinsic absorption of seismic energy (anelasticity) demonstrates that the main characteristics of the coda waves, namely amplitude decay and duration, are well described by singly scattered waves in anelastic media rather than by multiply scattered waves in either elastic or anelastic media. We use the Boundary Integral scheme developed by BENITES et al. (1992) to compute the complete wave filed and measure the values of the direct wave Q and coda waves Q in a wide range of frequencies, determining the spatial decay of the direct wave log-amplitude relation and the temporal decay of the coda envelope, respectively. The effects of both intrinsic absorption and pure scattering on the overall attenuation can be quantified separately by computing the Q values for corresponding models with (anelastic) and without (elastic) absorption. For the models considered in this study, the values of coda Q^{-1} values, as established by the single-scattering model of AKI and CHOUET (1975). Also, for the same random model with intrinsic absorption it appears that the singly scattered waves propagate without significant loss of energy as compared with the multiply scattered waves, which are strongly affected by absorption, suggesting its dominant role in the attenuation of coda waves.

Zeng, Y.; Benites, R. Seismic response of multi-layered basin with velocity graduates upon incidence of plane shear waves. *Abstracts for the AGU Western Pacific Geophysics Meeting, July 23-27, 1996*: W90.

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.

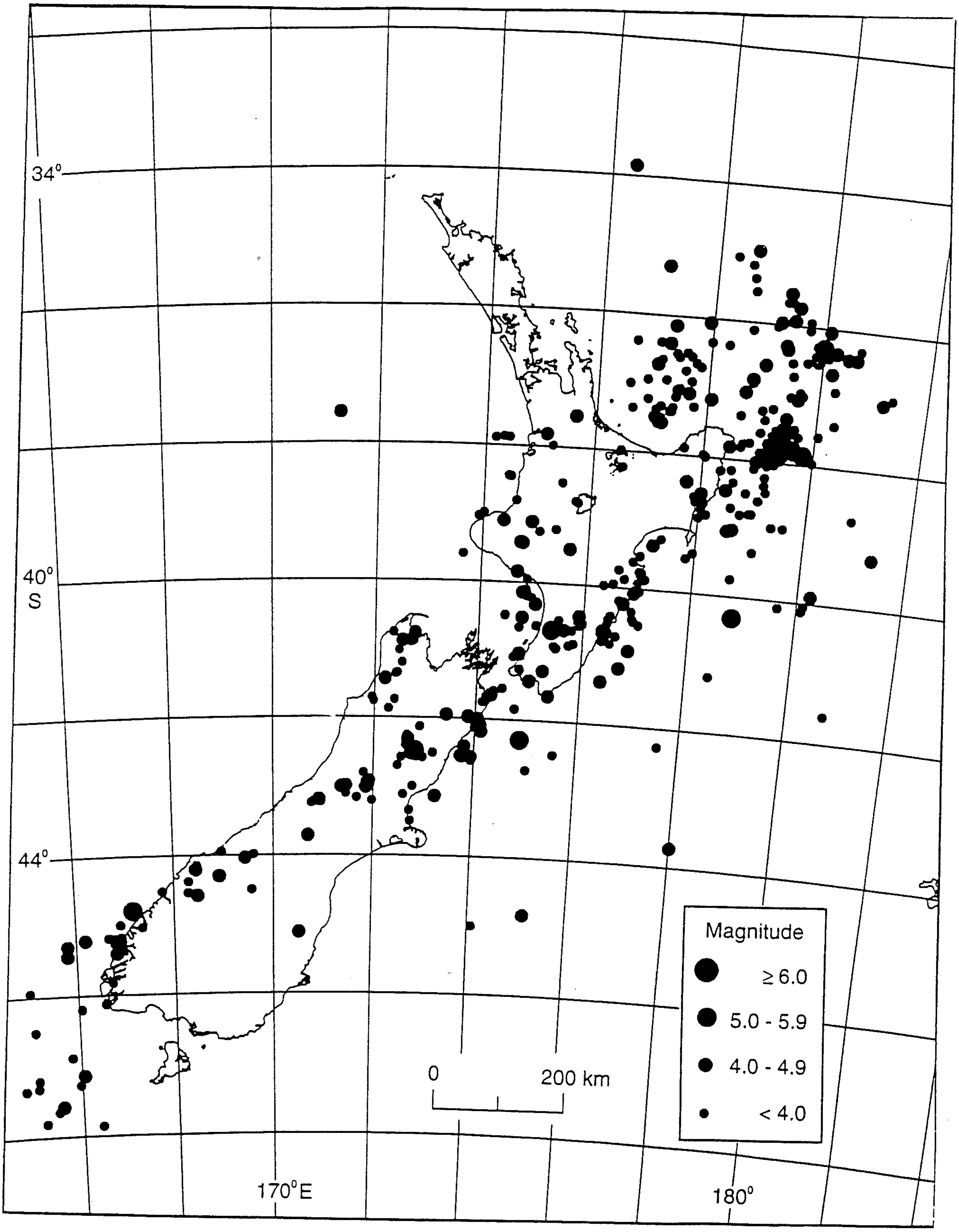
EARTHQUAKE CATALOGUE

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.

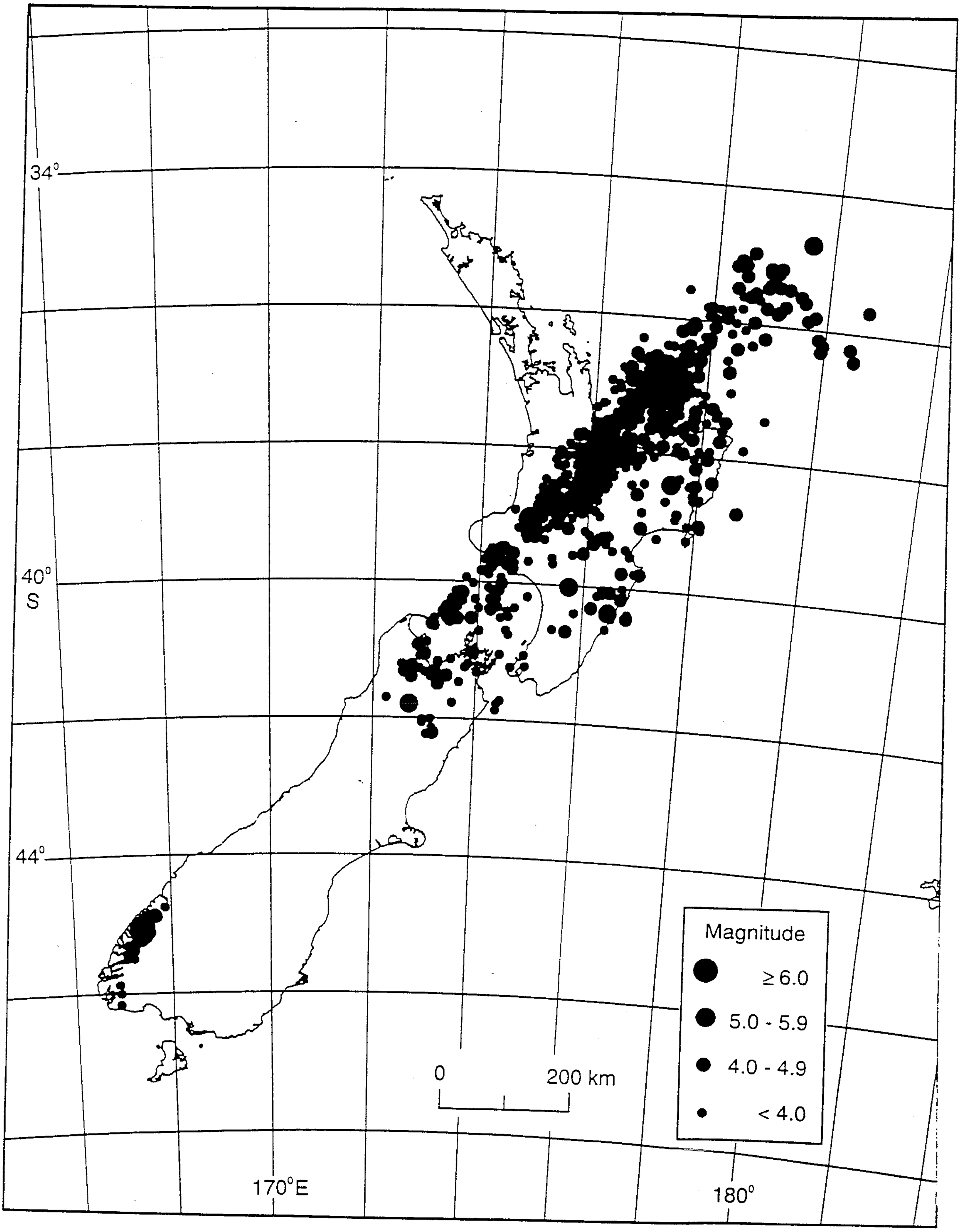
EPICENTRE MAPS 1996

REGIONAL SHALLOW EARTHQUAKES



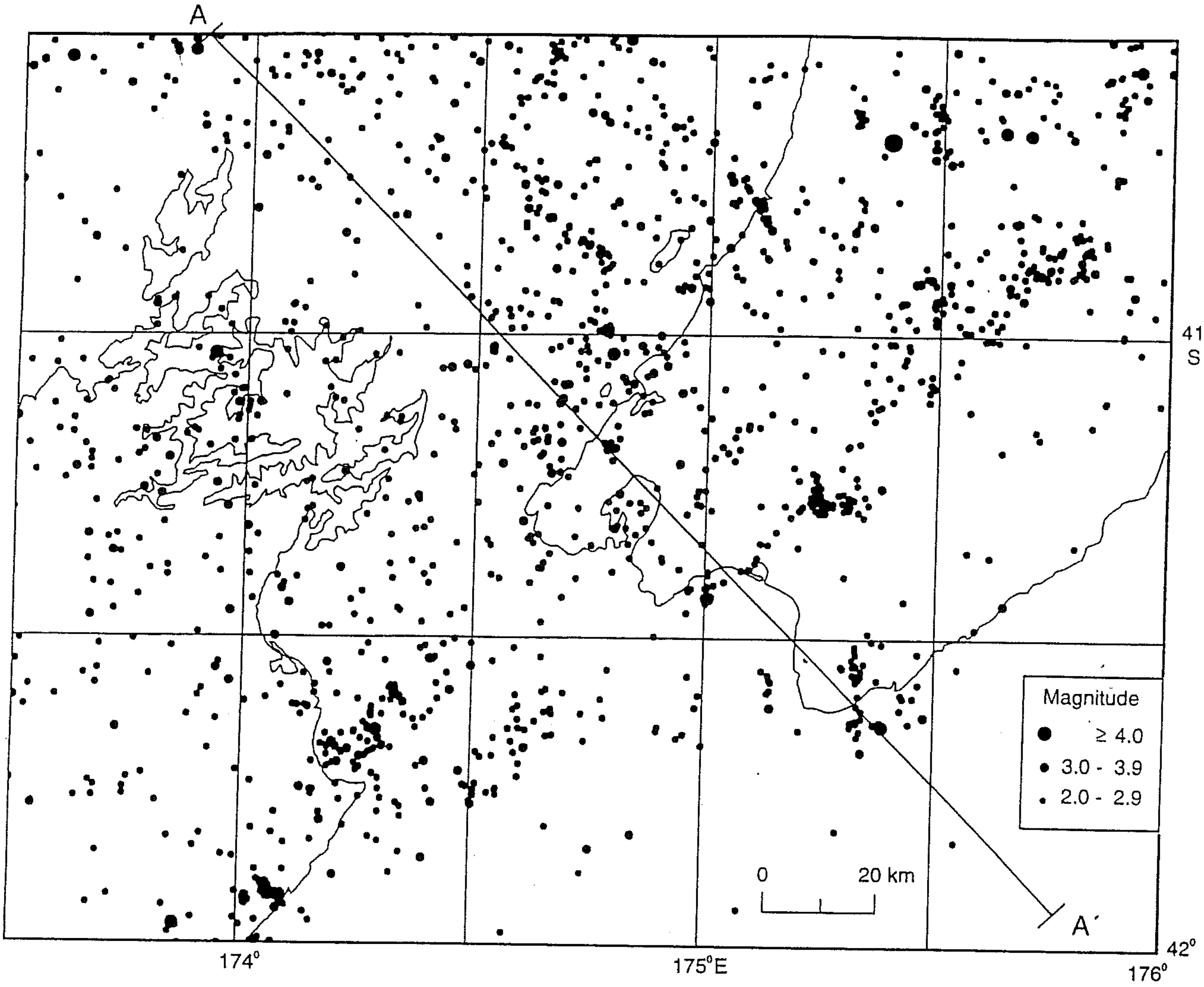
Epicentres of all earthquakes of $M_L \geq 3.5$ with focal depths less than 40 km. When several shocks have the same epicentre, the largest is shown.

REGIONAL DEEP EARTHQUAKES



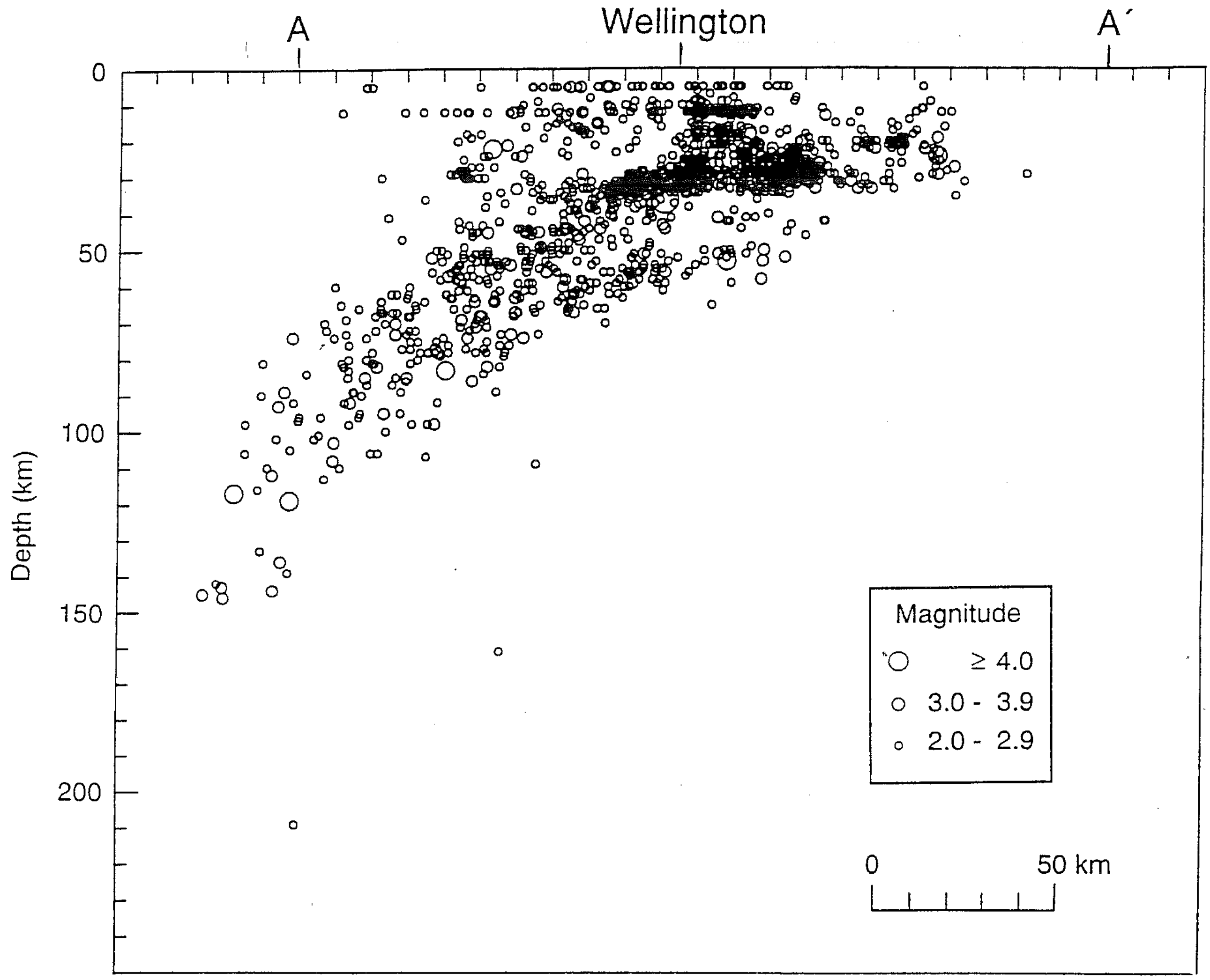
Epicentres of all earthquakes of $M_L \geq 3.5$ with focal depths of 40 km or more. When several shocks have the same epicentre, the largest is shown.

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.