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New Zealand Department of Scientific and Industrial Research
GEOPHYSICS DIVISION

NEW ZEALAND
SEISMOLOGICAL
REPORT
1964

SEISMOLOGICAL OBSERVATORY BULLETIN
E-145



A. R. SHEARER, GOVERNMENT PRINTER, WELLINGTON, NEW ZEALAND—1964



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SEISMOLOGICAL OBSERVATORY, WELLINGTON,
NEW ZEALAND

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

The Superintendent,
Seismological Observatory,
P.O. Box 8005,
Wellington, New Zealand.

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SCIENTIFIC STAFF 1964

WELLINGTON

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R.D. Adams, M.A., M.Sc. (N.Z.); Ph.D. (Cantab.).
(from August).

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Technical Officers: M.A. Lowry; R.H. Orr.

Technicians: A.M. Crowther; A.M. Day; C.M. Fisher;
J.A. Macdonald; R.C. Martindale;
R.D. Maunder.

APIA

Observer-in-Charge: P.J. Milne, B.Sc.
Observer/Technician: I. Anapu.

RAOUL ISLAND

Observer: I.P. Johnson.

HALLETT

Observer: N.M. Ridgway.

SCOTT BASE

Observer: D.R. Miller, B.Sc. (Hons.) (Nott.)

INTRODUCTION

The New Zealand Seismological Report for 1964 differs in both content and arrangement from its predecessors. The changes that have been made result from the growth of the recording network, the introduction of electronic computing, and changes in the requirements of the international seismological centres. Its aim is still to summarise the standard measurements carried out at the Seismological Observatory, Wellington, and to provide a connected account of New Zealand earthquakes that will be of general use and interest.

The first section of the Report deals with the present recording network, the positions of the individual stations, and the characteristics of the instruments at each station. Stations are now identified by the three-letter station codes allotted by the U.S. Coast and Geodetic Survey. These designations are coming into international use and seemed likely to displace the old two-letter codes previously used in the Report.

The next two sections are concerned in the main with New Zealand earthquakes. First comes a descriptive account of shocks which by reason of their size, position, or relationship to other activity are considered of special importance. It is followed by a list of epicentres and origin times and particulars of the phase arrivals at the different recording stations. The epicentre calculations and the tabulation of these data are now carried out by electronic computer, which makes it possible to list all the relevant data, and to calculate the differences between the observed times of arrival and those computed on the basis of the adopted origin and the standard travel-time tables. However, it is no longer possible to incorporate the data for the larger shocks in the distant earthquake lists as was done in the past, and it will be necessary for readers to peruse both sections of the Report before they can conclude that a given earthquake was not recorded in New Zealand. The felt earthquake data follow the established pattern, but are now placed with the New Zealand station readings rather than at the end, as in previous Reports.

The station readings for distant earthquakes can now be listed by computer, and the record amplitudes reduced to true ground movement. The distance and azimuth of the epicentre from Wellington is also calculated. In 1964, only the N.Z. Stations and the Scott Base readings have been treated in this way, the other stations being listed as in previous years. In 1965, the readings will be presented in two lists, one for the stations within New Zealand, and the other for the rest.

The Report concludes with a list of research papers published by members of the staff, details of observatory publications and exchange agreements, and maps of epicentres and felt intensity distribution. It is hoped that the changes made in this issue will add to the usefulness of the Report, and eventually reduce delays in publication.

STATIONS OF THE NEW ZEALAND NETWORK

THE NETWORK IN 1964

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

During 1964, changes were made at two stations, one new station was opened, and an existing station was closed. Early in the year, a fire at Hallett badly damaged the station, established as a joint NZ/USA venture for the International Geophysical Year. The original seismograms were lost, but preliminary readings had been radioed to Wellington and are included in this Report. The obsolescent Milne-Shaw seismographs at Auckland and Suva were replaced, the former by a Willmore MkI instrument with a photo-cell amplifier and a pen-recorder, which is on display to the public in the Auckland Museum, and can be used to obtain rapid information about shocks of immediate interest. The new Suva instrument is a Willmore MkII with conventional photographic recording. The new station at East Cape, which has a similar instrument, will improve the azimuthal distribution of stations recording many North Island earthquakes.

INDEX OF THREE-LETTER STATION CODES

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

Afiomalu	AFI	Gisborne	GNZ	Roxburgh	ROX
Apia	API	Hallett	HLL	Scott Base	SBA
Auckland	AUC	Kaimata	KAI	Suva	SUV
Bunnythorpe	BUN	Karapiro	KRP	Tarata	TNZ
Chateau	CNZ	Monowai	MNW	Tongariro	TON
Cobb River	COB	Onerahi	ONE	Tuai	TUA
East Cape	ECZ	Raoul Island	RAO	Wairakei	WNZ
Gebbies Pass	GPZ			Wellington	WEL

STATION POSITIONS

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INDEX OF STATION POSITIONS

STN	LATITUDE			LONGITUDE			ALT M	GEOCENTRIC DIRECTION COSINES					
	D	M	S	D	M	S		A	B	C			
AFI	13	54	34 S	171	46	38 W	706	-0.961	070	-0.138	883	-0.238	862
API	13	48.4	S	171	47.5	W	2	-0.961	484	-0.138	980	-0.237	132
AUC	36	51	36 S	174	46	41 E	79	-0.798	711	+0.072	996	-0.597	271
BUN	40	17.0	S	175	38.1	E	60	-0.762	783	+0.058	225	-0.644	027
CNZ	39	12	00 S	175	32	51 E	1116	-0.774	682	+0.060	322	-0.629	467
COB	41	05	16 S	172	44	02 E	213	-0.749	824	+0.095	603	-0.654	694
ECZ	37	41	37 S	178	32	46 E	40	-0.793	026	+0.020	128	-0.608	855
GNZ	38	38	39 S	178	01	21 E	30	-0.782	622	+0.027	021	-0.621	911
GPZ	43	41	47 S	172	38	40 E	225	-0.719	365	+0.092	861	-0.688	397
HLL	72	18.8	S	170	12.5	E	3	-0.301	223	+0.051	985	-0.952	135
KAI	42	31	33 S	171	24	31 E	82	-0.730	944	+0.110	432	-0.673	443
KRP	37	55	30 S	175	32	15 E	64	-0.788	423	+0.061	530	-0.612	049
MNW	45	46	49 S	167	37	07 E	155	-0.683	548	+0.150	055	-0.714	315
ONE	35	46	33 S	174	21	45 E	30	-0.809	242	+0.079	881	-0.582	020
RAO	29	15.1	S	177	55.1	W	110	-0.873	304	-0.031	743	-0.486	140
ROX	45	28.5	S	169	18.9	E	106	-0.691	421	+0.130	458	-0.710	575
SBA	77	51	01 S	166	45	22 E	38	-0.206	194	+0.048	529	-0.977	307
SUV	18	08	56 S	178	27	26 E	6	-0.950	524	+0.025	601	-0.309	595
TNZ	39	11	14 S	174	22	49 E	123	-0.773	432	+0.076	103	-0.629	249
TON	39	12	10 S	175	32	17 E	1120	-0.774	642	+0.060	447	-0.629	505
TUA	38	48	29 S	177	09	02 E	274	-0.780	343	+0.038	839	-0.624	145
WEL	41	17	10 S	174	46	06 E	122	-0.750	478	+0.068	739	-0.657	311
WNZ	38	37	53 S	176	06	10 E	350	-0.781	416	+0.053	234	-0.621	736

STATION INSTRUMENTATION AND LITHOLOGY

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

	Instrument	Compt	T_0	T_g	Damping	Magnification
AFI	AFIAMALU					
	World-Wide Standard Station					
	Foundation: Basaltic lava flows.					
	Benioff	ZNE	1.0	0.75		12500 at 1.0 sec
	Press-Ewing	ZNE	30	100		750 at 30 sec
API	APIA					
	Foundation: Coral sand on Recent and Pleistocene basalt.					
	Wood-Anderson	NE	0.8		crit	2050
AUC	AUCKLAND					
	Foundation: Volcanic beds on Tertiary sandstone and mudstone.					
	Milne-Shaw					
	until 1964 Nov	N	10		20:1	150
	Willmore I (photo-cell amplifier used with pen-and-ink recorder)	Z	1	2		7600 at 0.8 sec
BUN	BUNNYTHORPE					
	Strong motion station without automatic time signal recording.					
	Foundation: Gravels, silts, and sands.					
	Imamura	Z	2		5:1	1
		NE	8		5:1	1
CNZ	CHATEAU					
	This station is operated primarily for volcanological research, and is under the control of the Geophysical Survey. Records are made available to the Observatory for seismological study.					
	Foundation: Volcanic ash and lava.					
	Willmore I	Z	1.0	0.25		41900 at 0.2 sec
COB	COBB RIVER					
	Foundation: Schist.					
	Wood-Anderson	E	0.8		crit	2800
ECZ	EAST CAPE					
	Station opened 1964 July.					
	Foundation: Mudstone and Sandstone.					
	Willmore II	Z	1.0	0.25		3700 at 0.3 sec
GNZ	GISBORNE					
	Foundation: Alluvium on Tertiary mudstone.					
	Willmore I	Z	1.0	0.25		8900 at 0.3 sec
GPZ	GEBBIES PASS					
	Foundation: Rhyolite.					
	Wood-Anderson	N	0.8		crit	2800

INSTRUMENTATION AND LITHOLOGY

HLL	HALLETT					
	World-Wide Standard Station					
	Station closed in 1964 Feb after damage by fire.					
	Foundation: Frozen gravel-spit.					
	Benioff	ZNE	1.0	0.75		6250 (summer)
						50000 (winter)
	Press-Ewing	ZNE	30	100		750 (summer)
						1500 (winter)
KAI	KAIMATA					
	Foundation: Moraine and river gravels over Tertiary mudstone and sandstone.					
	Wood-Anderson	X	0.8		crit	2800
	This instrument is oriented so that the X component lies north-east.					
KRP	KARAPIRO					
	Foundation: Greywacke.					
	Willmore I	Z	1.0	0.25		37300 at 0.25 sec
MNW	MONOWAI					
	Foundation: Tertiary sandstone.					
	Willmore II					
	until 1964 Sep	Z	1.0	0.25		18200 at 0.25 sec
	from 1964 Sep	Z	1.0	0.25		28800 at 0.25 sec
ONE	ONERAHI					
	Foundation: Basalt.					
	Wood-Anderson	E	0.8		crit	2800
RAO	RAOUL ISLAND					
	Foundation: Volcanic rock.					
	Willmore I (This instrument recorded on 35mm film. Magnification given is for display on a film viewer enlarging 8 times.)					
	until 1964 Dec	Z	1.0	0.25		9400 at 0.2 sec
	Willmore II					
	from 1964 Dec	Z	1.0	0.25		4800 at 0.25 sec
ROX	ROXBURGH					
	Foundation: Chlorite schist.					
	Willmore I	Z	1.0	0.25		12100 at 0.25 sec
	Galitzin	Z	12	12		200 approx.
		NE	24	24		300 approx.
SBA	SCOTT BASE					
	World-Wide Standard Station					
	Foundation: Frozen basaltic debris resting on lava-flows.					
	Benioff	ZNE	1.0	0.75		6250 (summer)
						25000 (winter)
	Press-Ewing	ZNE	30	100		750 (summer)
						1500 (winter)
SUV	SUVA					
	Foundation: Hard, fine-grained calcareous marl.					
	Milne-Shaw					
	until 1964 Feb	N	12		20:1	250
	Willmore II					
	from 1964 Feb	Z	1.0	0.25		6500 at 0.2 sec

TNZ	TARATA	Foundation: Pliocene mudstone.					
	Willmore I	Z	1.0	0.25		2300 at 0.67 sec	
TON	TONGARIRO	Foundation: Volcanic ash and lava.					
	Wood-Anderson	X	0.8		crit	2800	
	This instrument is oriented so that the X component lies north-west.						
TUA	TUAI	Foundation: Thick Tertiary sandstone and mudstone.					
	Willmore I	Z	1.0	0.25		3900 at 0.25 sec	
WEL	WELLINGTON	World-Wide Standard Station Foundation: Greywacke.					
	Benioff	ZNE	1.0	0.75		6250 at 1.0 sec	
	Press-Ewing	Z	30	100		1500 at 30 sec	
		NE	30	100		375 at 30 sec	
	Willmore I	Z	1.0	0.25		20100 at 0.25 sec	
	Wood-Anderson	NE	0.8		crit	1400	
	Inamura	Z	1		5:1	1	
		NE	4		5:1	4	
WNZ	WAIRAKEI	Foundation: Pumice breccia.					
	Willmore I	Z	1.0	0.25		300 approx.	

TIMING ARRANGEMENTS

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

PRINCIPAL NEW ZEALAND EARTHQUAKES IN 1964

The year 1964 is unremarkable for large earthquakes, but unusual in the number and vigour of its earthquake swarms. Swarms are generally described as groups of related earthquakes, usually small, occurring in a short space of time and in a limited region, without an obvious principal event. The first of these was active in January and to a lesser extent throughout the year. Shocks 64/6a, 6b, 7, 13, 21, 22, and 23 all had shallow origins close to Mayor Island. Their magnitudes range from about $3\frac{1}{2}$ to 4. Most of them were felt at Maketu, and a few at Tauranga on the Bay of Plenty coast, with intensities possibly up to MM4. As is usual with swarms, other shocks were reported felt at about the same time, but cannot be instrumentally confirmed.

Throughout the year, small felt shocks were reported from Ngakuru, in the Whirinaki Valley, some 15 miles south of Rotorua. Shocks that could not be confirmed instrumentally have previously been reported from this district. However, epicentres were obtained for a shock of intensity MM4 reported on March 29 (64/93), which had a magnitude of 3.0; also for a series in July (64/218a, 219, 219a, 219b, 219c, 222, and 230) and again in December (64/403); but not for these in early and late November. The largest of these shocks was about magnitude 4. The epicentres of the early shocks lie systematically to the north of the felt area and are close to Rotorua, which did not report them. The December shocks are close to the northern limits of the important Taupo swarm discussed below, and not clearly distinguishable from it. Although there is little scatter in longitude, the latitudes of the epicentres assigned to shocks felt at Ngakuru scatter by about half a degree. It seems unlikely that all of this scatter is real. The apparent association with repeated deep activity from approximately the same epicentre but with focal depths between 200 and 300 km (64/238, 330, 331, 374, 382, 383, and 536) also calls for remark.

The six shocks felt at Opunake on August 16, 17, and 18 also seem to be of swarm type. Epicentres have been obtained for five of them (64/256, 258, 260, 260a, and 261). Magnitudes range from 2.9 to 3.8.

The interest in these three swarms is largely seismological, but the swarm that began in the Wairakei-Taupo area in December quickly came to the notice of the general public. Before the onset of the swarm, the seismograph at Wairakei had recorded an average of five or ten shocks a month originating within 15 miles of the station. Between December 3 and December 12, the number of such shocks rose to a maximum of about 35 in a three-hour period. The decline continued until the end of the year, but minor resurgences later took place, and conditions could not be considered quiescent until 1967 April or later. About the time of maximum, the largest shocks, which had magnitudes of about $4\frac{1}{2}$, were producing intensities up to about MM5 in Wairakei and Taupo. Although the shocks became most frequent about December 12, the largest shocks took place at the time of a secondary peak on December 21. Felt reports were confined to an area that includes Mangakino, Atiamuri, and all of Lake Taupo except the southern tip. A map showing the macroseismic area has been published by G.A. Eiby (Bulletin Volcanologique, Tom XXIX, 1966, p.64). The instrumentally determined epicentres are mainly concentrated in the western bay of the Lake and to the north of it. No significant damage was reported during the swarm, but the great number of shocks resulted in fairly general apprehension, heightened by the fact that in 1922 conspicuous faulting and some spectacular changes in the level of the lake shore accompanied a similar swarm.

The most important shallow earthquake in the immediate vicinity of New Zealand occurred on March 8 (64/72), and was centred off the west coast of

the South Island near Big Bay. This shock, of magnitude 6.3, was the largest since the magnitude 7.0 one in the same region in May 1960. No damage resulted, but the intensity reached MM5 or more over most of western Otago and southern Westland. The felt area extended over the whole of those provinces, and to Southland and the southern parts of Canterbury.

Further shocks occurred in Northland, following an outbreak in 1963 after a period of about half a century of almost complete quiescence. The shock of April 11 (64/105) had a magnitude of 3.9 and produced intensities of up to MM6 in the district around Kaeo, Otangaroa, and Totara North. The other shocks (64/34a, 106a, 108a, 108b, and 120a) were all small, with magnitudes below 3.

Two moderately large deep shocks occurred in the Bay of Plenty, on February 22 (64/52) and May 24 (64/158). The magnitudes were 5.9 and 5.8, and the focal depths 275 km and 188 km respectively. Neither gave rise to felt intensities above MM4, but the felt area in both cases extended south to Wellington.

The earthquake on September 12 (64/307) was the largest in the region to the south of New Zealand. It was felt not only on Stewart Island and in Southland, but also on Campbell Island. It had a magnitude of 6.8 and was centred 200 miles southwest of the South Island. On November 8 an earthquake of magnitude 6.7 (64/376) was more extensively felt in Southland, but not on Campbell Island although it was somewhat further to the south than the shock in September.

Large earthquakes in the south of New Zealand occurred near Lake Manapouri on April 15 (64/109) and at the northern end of Lake Te Anau on May 2 (64/124). Both were felt, but not more strongly than MM4. Their magnitudes were 5.2 and 5.0. The earthquakes on August 15 and 16 (64/252 and 254) were also magnitude 5.0, and were felt at Lake Manapouri. The shock felt in Stewart Island on October 6 (64/326) was also of magnitude 5.0 and had an epicentre to the west of the Island.

No exceptionally deep earthquakes occurred under New Zealand itself, but the Kermadec Trench region to the northeast of East Cape, as is usual, provided several shocks with depths greater than 400 km, for example those on September 5 (64/301), October 15 (64/342), and December 30 (64/551). None of these shocks was felt.

Two events beyond New Zealand had local effects. The magnitude 8½ earthquake in Alaska on March 28, the world's largest in recent years, set up a tsunami (seismic sea wave) that caused some minor damage at the head of Lyttelton Harbour.

In late November, a volcanic eruption from the Green Lake on Raoul Island in the Kermadec group caused the island to be evacuated from November 23 until December 6, with a consequent interruption of recording at the seismograph station. Before the eruption, the seismograph recorded many small earthquakes, the largest, on November 13, having a magnitude of 5.7. In the initial stages (about November 10) some 80 earthquakes an hour were being recorded, but the number fell between then and the time of the principal eruption, believed to have been phreatic in character, on November 20. An account has been published by J. Healy and others (Nature, Vol. 205, pp. 743-5, 1965) and the seismological aspects discussed in more detail by R.D. Adams and R.R. Dibble (N.Z. J. Geol. Geophys. 10 (6), 1967).

INSTRUMENTALLY DETERMINED ORIGINS

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

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

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

REF NUM		ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 001	JAN 01	09 58 39.1	41.35S	176.46E	48	4.0	1.7	13	8
002	02	04 47 12.6	46.29S	165.54E	33 R	4.6	1.0	7	4
003	02	09 29 50.0	44.65S	167.77E	33 R	3.9	1.3	6	4
004	03	18 11 35.5	34.74S	177.22W	283	5.4	2.1	7	5
005	06	14 30 30.8	32.20S	179.54W	195	5.4	4.4	8	6
006	07	18 11 37.0	41.49S	172.22E	12 R	3.5	1.4	12	7
007	09	18 18 18.0	37.32S	176.25E	33 R	3.3	0.5	5	3
008	09	21 47 11.5	42.29S	174.13E	12 R	4.9	1.7	18	10
009	10	10 09 19.9	38.03S	177.84E	126	4.4	3.0	12	7
010	11	04 56 35.3	40.69S	174.35E	33 R	4.1	1.9	11	8
011	11	07 27 08.0	44.46S	168.55E	33 R	3.7	3.8	7	4
012	11	10 28 08.0	39.66S	174.10E	212	4.1	1.4	9	6
013	11	13 09 19.7	37.47S	176.26E	33 R	3.6	1.2	11	5
014	11	15 54 47.4	48.84S	164.25E	33 R	4.3	0.3	4	2
015	12	02 11 17.9	38.77S	179.93E	33 R	4.1	1.2	8	5
016	13	12 13 38.6	36.94S	177.44E	33 R	4.1	1.5	10	7
017	15	04 53 20.1	37.99S	177.58E	33 R	3.7	1.9	5	3
018	15	12 14 20.3	38.38S	178.10E	33 R	3.6	1.6	5	3
019	15	14 47 24.4	40.42S	176.43E	12 R	4.4	2.0	23	9
020	15	22 07 24.2	44.61S	167.92E	33 R	4.5	1.9	7	4
021	17	10 43 17.2	37.41S	176.27E	33 R	3.8	0.4	5	4
022	17	13 08 21.1	37.41S	176.30E	33 R	4.0	1.6	7	4
023	17	14 03 05.7	37.01S	175.77E	33 R	3.2	0.9	4	4
024	18	10 06 13.7	36.90S	177.51E	283	4.5	2.1	14	10
025	18	12 18 48.6	39.31S	175.32E	152	3.7	1.5	13	9
026	19	23 17 11.0	41.33S	174.91E	33 R	3.1	3.1	6	4
027	20	19 23 37.2	44.90S	167.75E	33 R	4.3	1.2	8	5
028	22	20 43 11.6	37.70S	177.44E	33 R	4.1	2.8	13	9
029	23	01 28 28.2	38.54S	178.03E	112	4.0	2.1	8	8
030	28	10 49 33.1	38.88S	176.04E	154	3.9	1.2	12	9
031	29	04 00 30.6	33.28S	179.84W	451	5.4	1.5	12	9
032	30	21 08 56.1	39.09S	176.01E	126	4.4	1.1	13	9
033	31	15 00 54.1	39.78S	174.27E	193	4.3	1.6	15	9
034	FEB 01	20 56 03.0	39.34S	174.78E	227	4.3	1.2	17	12
035	03	18 48 02.0	38.95S	175.76E	12 R	2.9	1.5	14	7
036	04	02 18 18.6	40.42S	174.38E	12 R	3.7	1.7	22	9
037	04	15 47 56.3	40.17S	175.13E	12 R	3.7	1.7	19	10
038	06	14 32 17.5	39.59S	175.79E	12 R	4.2	1.2	10	12
039	07	14 45 52.2	34.14S	177.31W	305	5.3	0.6	8	9
040	08	21 18 56.3	32.48S	177.48W	144	5.3	3.3	12	10
041	09	08 33 58.4	40.48S	173.38E	191	4.5	1.5	15	8
042	09	15 42 43.6	40.16S	176.84E	12 R	3.7	2.2	21	10
043	10	10 56 03.7	39.32S	177.42E	12 R	4.1	2.0	21	10
044	12	10 03 36.5	40.29S	173.45E	183	3.6	2.2	8	8
045	12	14 42 09.2	35.15S	179.28W	448	4.7	2.5	9	8
046	12	18 41 56.3	40.89S	175.14E	12 R	4.2	1.9	24	12
047	12	20 39 04.8	41.53S	172.85E	114	4.2	1.7	16	11
048	16	10 45 10.7	38.70S	176.07E	177	3.8	1.5	7	6
049	18	15 51 13.2	38.61S	175.77E	173	4.2	1.1	17	11
050	20	00 54 28.4	40.36S	174.05E	110	4.0	1.4	15	9

REF NUM		ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 051	FEB 21	17 26 21.6	39.18S	177.23E	12 R	4.2	1.9	22	11
052	22	01 47 35.9	37.35S	176.47E	275	5.9	1.4	22	13
053	22	14 14 43.0	36.51S	177.82E	275	4.1	1.6	20	12
054	25	10 53 30.5	38.56S	175.82E	200	3.7	2.2	15	9
055	27	06 38 55.5	36.99S	178.66E	12 R	4.0	2.3	14	9
056	27	14 02 10.1	39.03S	175.71E	12 R	3.2	1.7	12	8
057	28	02 14 26.7	35.93S	179.50E	200	4.6	1.7	11	9
058	28	10 33 10.7	40.78S	174.36E	12 R	3.5	2.2	13	7
059	28	15 54 07.1	42.35S	174.10E	12 R	3.9	2.9	28	11
060	28	16 49 06.6	35.87S	179.45E	204	4.3	0.9	11	9
061	28	16 51 27.5	42.22S	173.87E	12 R	3.4	1.7	15	6
062	29	08 52 49.9	39.77S	175.40E	12 R	3.6	2.0	21	10
063	29	10 23 02.8	37.61S	179.67E	12 R	3.9	1.4	16	11
064	MAR 01	15 00 16.2	38.68S	176.72E	12 R	3.4	2.5	13	8
065	01	17 48 54.5	38.20S	175.94E	33 R	2.9	1.0	4	3
066	02	15 48 27.0	41.45S	172.04E	12 R	4.0	1.2	16	8
067	03	08 21 38.0	38.80S	176.10E	33 R	2.9	R	0	4
068	03	08 24 33.0	38.80S	176.10E	33 R	2.4	R	0	5
069	04	04 11 47.3	38.64S	175.80E	180	4.0	1.8	19	9
070	04	23 42 01.5	38.72S	176.86E	12 R	2.9	2.5	4	4
071	05	18 42 39.3	37.97S	176.52E	187	3.7	1.4	10	7
072	08	01 35 47.8	44.32S	167.76E	12 R	6.4	2.7	23	14
073	09	00 35 26.1	45.33S	167.53E	33 R	4.4	0.9	8	6
074	09	11 52 14.5	45.08S	167.74E	33 R	4.0	0.5	6	4
075	10	06 09 28.3	40.07S	174.27E	94	3.4	1.4	10	7
076	11	08 23 15.3	38.28S	176.32E	179	3.9	1.2	7	6
077	13	17 10 29.8	39.69S	175.61E	33 R	4.0	2.0	17	9
078	16	09 37 28.3	48.09S	166.75E	33 R	4.2	2.7	4	4
079	18	04 18 52.9	41.79S	174.44E	12 R	4.1	2.4	17	9
080	19	13 46 01.5	38.33S	176.44E	231	4.0	0.9	12	7
081	19	14 01 20.5	32.65S	177.80W	505	5.5	1.3	7	5
082	19	18 23 40.6	39.08S	175.98E	189	4.0	1.7	11	7
083	20	01 25 43.3	38.56S	178.17E	33 R	3.7	0.1	4	2
084	20	04 04 32.8	38.59S	178.11E	33 R	3.5	0.3	4	2
085	23	22 02 51.0	40.05S	175.54E	33 R	3.3	0.7	6	4
086	24	07 01 57.1	38.30S	176.27E	182	4.0	1.2	12	9
087	26	08 10 19.6	47.54S	165.81E	33 R	4.1	5.1	5	3
088	26	15 51 07.7	40.15S	174.93E	33 R	4.3	2.1	17	9
089	28	02 28 42.0	38.22S	176.19E	210	4.6	1.2	12	10
090	28	03 38 52.4	46.43S	166.54E	33 R	4.4	2.7	5	3
091	28	10 06 52.7	44.51S	166.22E	33 R	4.4	17.0	4	3
092	28	20 25 02.8	44.28S	168.76E	33 R	4.0	1.2	10	6
093	29	08 57 17.1	38.18S	176.37E	33 R	3.0	ND	3	2
094	29	09 01 20.7	44.39S	167.77E	33 R	4.1	0.9	9	5
095	31	05 55 32.9	41.91S	174.17E	33 R	3.9	1.9	14	7
096	31	09 32 34.0	42.34S	173.13E	33 R	3.2	1.6	11	6
097	31	22 47 32.9	40.85S	172.90E	12 R	2.9	2.4	6	5
098	APR 02	19 56 20.4	47.21S	166.06E	33 R	4.9	2.6	10	8
099	04	14 35 57.8	38.02S	176.80E	209	4.0	2.0	9	6
100	05	20 15 11.9	38.73S	175.71E	186	4.5	2.2	15	10

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 101	APR 06 06 05 32.3	39.66S	174.28E	232	4.3	1.7	14	9
102	07 19 54 07.2	41.73S	171.50E	12 R	2.7	1.2	8	3
103	09 10 55 58.7	39.21S	174.82E	219	3.9	1.5	10	6
104	10 09 56 25.6	38.22S	176.51E	193	4.0	2.4	14	8
105	11 14 45 00.5	35.11S	173.94E	12 R	3.9	3.0	15	9
106	11 21 22 05.8	35.39S	178.59E	332	4.9	1.6	12	8
107	12 11 10 49.9	34.11S	179.37W	259	6.7	2.5	18	10
108	14 04 32 11.6	38.09S	176.59E	182	4.7	1.7	17	10
109	15 15 02 31.7	45.49S	167.35E	33 R	5.2	1.8	18	11
110	15 16 52 25.2	37.71S	177.71E	12 R	5.0	2.2	19	10
111	16 07 44 52.1	37.45S	177.29E	179	4.3	0.6	9	6
112	16 19 15 48.1	32.25S	179.37W	345	5.2	2.9	7	5
113	19 02 51 18.5	41.14S	173.72E	12 R	3.9	1.9	19	7
114	19 05 18 48.1	37.42S	177.35E	206	4.4	2.1	13	9
115	21 13 46 07.6	39.28S	178.43E	12 R	3.9	1.1	19	10
116	22 17 29 41.4	37.51S	177.55E	155	4.7	0.6	15	10
117	23 08 04 31.4	40.87S	175.94E	12 R	3.0	2.0	15	6
118	23 11 46 53.6	31.54S	177.30W	269	5.5	7.0	9	7
119	24 08 05 12.7	37.56S	176.63E	297	4.3	1.4	17	11
120	24 09 05 43.4	38.40S	175.68E	204	4.1	2.0	13	9
121	27 09 20 19.8	41.46S	175.26E	12 R	3.4	1.2	11	6
122	27 09 47 10.6	41.37S	175.17E	12 R	3.3	2.4	10	5
123	29 08 46 30.7	38.89S	175.88E	167	3.7	1.8	8	8
124	MAY 02 02 27 59.9	45.05S	167.64E	33 R	5.0	1.1	12	7
125	02 07 17 36.3	37.87S	177.67E	139	4.5	1.3	10	7
126	02 10 06 11.0	37.38S	176.14E	33 R	3.6	1.4	5	4
127	03 12 38 13.4	41.07S	175.42E	12 R	4.0	2.1	16	8
128	04 21 04 47.2	44.86S	167.36E	33 R	4.1	0.0	4	3
129	05 18 03 28.3	39.24S	175.04E	186	5.1	1.9	24	14
130	06 20 31 28.5	32.83S	177.48W	255	5.5	5.1	11	10
131	07 00 45 00.4	38.67S	176.39E	63	4.2	2.4	12	10
132	07 16 31 19.8	38.94S	175.82E	12 R	3.5	1.8	11	9
133	08 11 47 13.9	41.60S	173.46E	33 R	4.8	0.9	22	13
134	08 22 54 38.3	37.55S	179.14E	111	4.4	1.4	8	8
135	09 02 39 09.4	38.82S	175.82E	33 R	3.4	2.8	9	9
136	09 07 11 47.9	39.19S	174.97E	214	4.2	1.5	14	9
137	10 17 23 14.3	39.34S	175.00E	153	5.0	1.8	20	11
138	11 08 32 55.1	36.35S	177.86E	275	4.5	0.8	8	6
139	12 01 57 19.2	38.01S	176.11E	227	4.6	1.6	17	11
140	13 13 24 53.7	44.87S	167.37E	33 R	4.1	1.4	6	4
141	15 01 56 45.6	39.23S	175.27E	33 R	3.3	1.0	7	4
142	16 04 24 26.5	38.51S	175.82E	188	4.2	1.7	13	9
143	17 07 03 06.0	37.58S	176.80E	307	4.7	1.2	15	9
144	19 22 43 52.0	35.10S	178.10W	33 R	4.6	0.7	4	5
145	19 22 55 41.1	35.51S	179.79W	33 R	4.4	8.9	4	5
146	20 06 06 20.7	35.65S	179.79W	100	5.4	1.8	13	11
147	20 06 18 30.2	35.40S	178.92W	223	4.9	1.6	6	6
148	20 12 33 16.3	41.52S	172.91E	102	4.6	2.6	22	13
149	20 19 29 21.2	39.26S	175.77E	12 R	3.3	0.9	6	7
150	20 22 23 53.6	35.65S	178.64E	33 R	4.5	4.9	8	9

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 151	MAY 21 07 14 48.9	34.94S	178.01W	33 R	4.6	ND	3	6
152	21 07 26 19.4	35.73S	179.53W	33 R	4.9	1.6	11	9
153	21 11 06 05.2	44.48S	167.62E	33 R	4.5	1.9	7	5
154	22 00 26 52.8	35.44S	179.89W	69	5.2	2.8	12	11
155	22 00 31 56.4	35.52S	178.69W	215	4.9	0.5	6	6
156	23 09 53 35.8	37.37S	178.85E	107	4.3	3.3	7	7
157	23 20 08 55.7	49.43S	163.99E	64	4.9	1.1	7	6
158	24 22 22 27.1	37.08S	177.44E	208	5.8	2.6	20	13
159	25 17 40 16.0	37.19S	177.68E	33 R	4.8	1.7	16	12
160	27 09 44 48.7	41.23S	173.41E	90	4.0	1.9	13	9
161	29 01 07 08.9	35.51S	178.91E	236	4.8	2.1	15	11
162	30 17 48 08.2	37.20S	178.19E	33 R	4.1	2.0	15	9
163	JUN 01 03 46 23.6	40.44S	178.73E	12 R	4.1	1.7	19	9
164	01 07 06 17.1	37.46S	177.27E	12 R	4.0	3.0	19	9
165	01 14 19 00.4	44.83S	167.66E	33 R	3.8	1.2	6	3
166	02 07 21 06.7	37.76S	176.29E	325	4.2	1.3	7	5
167	02 19 41 38.7	44.69S	167.86E	12 R	4.4	2.4	14	5
168	03 01 24 20.1	40.11S	175.05E	12 R	3.7	0.6	13	7
169	03 10 08 53.9	41.18S	175.40E	12 R	4.4	1.4	16	8
170	03 19 40 45.4	49.34S	163.67E	33 R	4.2	0.1	4	2
171	04 23 05 12.1	41.30S	175.10E	12 R	3.3	2.5	12	8
172	04 23 50 14.9	39.36S	176.02E	33 R	3.3	1.0	9	5
173	05 05 12 51.1	37.91S	179.45E	113	4.4	2.2	18	13
174	05 12 29 57.1	38.59S	179.85W	132	4.2	0.8	6	7
175	05 12 43 37.2	37.54S	177.68E	33 R	4.0	0.6	4	3
176	05 23 04 05.6	39.12S	175.17E	223	4.1	1.3	11	7
177	06 13 05 54.8	43.87S	170.53E	33 R	3.3	2.9	7	4
178	07 20 41 57.7	44.23S	170.93E	33 R	3.3	1.7	10	4
179	08 14 10 42.3	38.27S	176.34E	188	3.9	2.4	15	9
180	08 14 52 39.3	46.02S	168.07E	12 R	3.7	1.0	8	4
181	09 07 31 45.3	41.56S	172.25E	12 R	4.4	2.4	31	12
182	10 17 27 17.0	40.93S	177.10E	12 R	3.9	2.3	32	10
183	11 10 48 33.6	40.82S	177.11E	12 R	4.0	2.3	28	8
184	12 08 47 30.7	40.01S	178.44E	33 R	4.2	2.3	14	6
185	12 17 57 50.9	40.05S	178.09E	12 R	4.3	2.9	19	10
186	14 00 13 58.1	41.36S	172.32E	12 R	3.5	1.7	21	8
187	14 00 47 14.4	40.83S	174.53E	12 R	3.8	2.0	26	11
188	15 01 40 05.2	40.28S	178.75E	33 R	4.5	1.4	19	11
189	15 06 16 28.4	40.09S	174.79E	12 R	3.9	1.0	25	10
190	15 10 58 39.5	45.12S	167.64E	12 R	4.8	1.8	23	13
191	15 11 39 15.2	45.11S	167.40E	12 R	4.1	1.6	14	10
192	16 18 43 55.7	39.23S	177.33E	12 R	4.0	1.5	27	10
193	16 22 31 09.3	42.03S	172.82E	12 R	3.7	2.3	28	11
194	17 07 07 06.7	38.55S	175.98E	33 R	3.1	1.8	9	6
195	20 02 32 16.4	36.05S	179.45E	205	4.8	1.8	17	11
196	21 10 28 21.0	39.20S	179.64E	12 R	4.0	1.6	15	8
197	24 11 08 29.7	36.75S	178.36E	33 R	3.9	2.5	16	9
198	24 11 37 56.4	44.91S	167.70E	12 R	4.8	2.0	23	11
199	26 08 21 11.9	38.02S	178.40E	33 R	4.4	2.5	17	8
200	27 01 15 38.9	38.86S	176.42E	12 R	3.7	2.1	20	9

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 201	JUN 28 05 29 47.7	44.35S	167.84E	12 R	3.8	1.1	13	5
202	28 14 07 17.7	42.59S	173.34E	12 R	3.3	2.6	16	7
203	29 18 27 35.4	37.93S	176.94E	33 R	3.2	0.3	5	2
204	30 14 02 20.6	39.22S	175.19E	240	3.5	1.6	15	9
205	JUL 01 05 20 08.9	38.87S	178.22E	47	4.4	2.6	12	9
206	01 10 44 17.9	38.90S	177.81E	33 R	3.1	0.9	5	3
207	03 18 25 20.6	38.70S	176.11E	12 R	2.9	2.2	6	5
208	05 14 48 33.4	38.25S	176.00E	221	4.2	1.6	14	9
209	07 03 55 39.9	44.22S	168.64E	33 R	4.0	0.8	8	4
210	07 14 56 55.8	35.03S	179.18E	300	4.7	0.8	10	9
211	07 22 31 01.7	40.47S	176.53E	33 R	4.1	1.7	14	9
212	08 06 26 05.7	38.08S	176.46E	261	4.1	2.0	12	9
213	10 12 34 46.3	41.86S	171.54E	33 R	3.2	1.3	7	4
214	10 12 56 27.5	38.91S	175.45E	180	4.5	1.7	19	12
215	12 17 46 59.4	39.23S	175.08E	220	4.2	2.0	16	9
216	14 01 10 58.1	40.43S	179.85W	33 R	4.2	1.1	14	8
217	14 23 11 44.4	32.67S	178.92W	33 R	5.3	4.5	8	9
218	16 02 52 57.0	40.79S	176.07E	33 R	4.2	2.0	12	8
219	16 13 26 07.4	38.27S	176.13E	33 R	3.9	2.2	7	5
220	17 15 06 24.2	40.51S	176.43E	33 R	3.5	1.5	6	5
221	18 00 31 12.8	41.32S	175.09E	33 R	3.8	0.7	9	5
222	18 04 43 44.7	38.21S	176.08E	33 R	3.5	2.7	4	4
223	20 10 22 53.3	35.87S	179.85W	33 R	5.2	2.5	14	10
224	20 22 43 02.7	36.04S	179.89W	33 R	5.2	4.5	11	10
225	20 22 55 46.1	34.83S	179.25W	226	5.2	1.8	7	7
226	21 09 12 58.4	41.34S	175.02E	12 R	3.8	2.1	15	8
227	21 10 33 39.7	37.97S	177.31E	12 R	4.5	2.8	20	10
228	22 00 07 34.8	33.25S	179.90E	309	5.0	2.2	14	10
229	22 17 43 31.6	44.59S	168.22E	33 R	4.6	1.7	12	7
230	22 22 18 33.0	38.70S	176.10E	33 R	2.6	R	0	5
231	23 15 27 06.0	37.07S	177.07E	267	4.3	1.1	12	8
232	25 08 59 35.0	41.19S	175.29E	33 R	4.0	1.7	13	9
233	27 08 47 14.5	35.19S	178.91E	311	4.6	1.8	15	10
234	29 14 25 53.0	41.25S	174.13E	74	4.5	1.2	12	10
235	29 21 31 54.6	46.21S	166.82E	33 R	4.3	1.8	6	3
236	30 03 16 28.5	49.38S	164.53E	33 R	4.8	0.3	6	5
237	30 05 57 57.4	37.58S	175.68E	12 R	4.0	1.4	17	8
238	31 10 58 57.9	38.04S	176.21E	259	4.4	1.1	16	10
239	AUG 02 18 54 58.0	38.94S	176.01E	123	3.4	1.9	7	7
240	05 11 05 59.6	32.37S	179.37W	288	7.0	2.8	20	13
241	06 08 35 03.5	38.52S	176.05E	33 R	2.9	0.6	4	3
242	08 22 10 29.2	41.12S	175.70E	12 R	3.8	1.8	16	7
243	10 05 24 50.0	39.58S	177.34E	33 R	3.8	1.8	13	6
244	11 09 10 22.4	40.77S	173.25E	233	3.6	1.7	11	8
245	11 14 21 57.1	35.36S	179.65E	12 R	4.3	1.8	18	8
246	11 17 41 40.1	38.08S	176.57E	185	3.8	1.1	9	6
247	11 19 44 56.9	44.62S	168.29E	12 R	4.1	1.7	15	5
248	12 09 27 05.1	40.19S	175.06E	112	4.7	1.0	20	12
249	13 09 01 38.6	41.54S	173.71E	12 R	3.1	1.5	12	6
250	13 12 52 53.6	37.15S	177.44E	12 R	4.2	1.5	19	7

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 251	AUG 15 07 32 08.5	40.18S	175.05E	49	3.0	0.8	7	4
252	15 19 37 59.0	45.08S	167.17E	33 R	5.0	1.2	16	10
253	15 22 03 38.3	38.55S	179.20E	12 R	4.3	1.8	19	7
254	16 00 42 33.1	44.97S	167.68E	33 R	5.0	1.7	20	10
255	16 02 53 34.1	44.09S	167.82E	33 R	3.6	1.1	4	3
256	16 10 59 19.7	39.36S	173.77E	12 R	3.5	1.9	13	7
257	16 12 51 46.1	38.36S	176.05E	236	3.9	1.4	15	9
258	16 19 12 09.8	39.23S	173.56E	12 R	2.9	1.5	8	3
259	16 23 11 16.3	37.92S	178.06E	146	4.6	2.2	17	11
260	17 09 01 26.9	39.37S	173.53E	33 R	2.9	ND	3	2
261	18 06 38 22.5	39.45S	173.84E	12 R	3.8	1.8	18	7
262	19 10 38 23.5	40.64S	174.41E	96	3.8	1.9	10	6
263	19 10 54 16.6	38.25S	176.01E	213	4.5	2.0	14	9
264	21 13 16 08.5	37.53S	178.27E	193	4.2	1.9	14	9
265	21 18 47 11.4	44.87S	167.39E	33 R	4.2	1.5	7	4
266	22 05 57 57.0	40.55S	173.24E	195	3.4	2.3	7	6
267	22 06 20 24.7	40.13S	175.75E	12 R	3.7	1.8	18	8
268	23 08 39 31.8	41.92S	173.95E	12 R	3.8	2.1	25	9
269	24 02 37 17.5	37.40S	177.11E	258	4.2	1.4	16	10
270	24 13 06 18.4	38.51S	176.11E	189	3.5	2.4	13	8
271	24 13 07 39.7	38.79S	177.94E	12 R	4.7	2.2	27	10
272	24 13 09 50.8	38.98S	178.05E	33 R	3.8	0.1	4	2
273	24 13 10 27.8	38.98S	178.05E	33 R	3.6	0.1	4	2
274	24 13 12 24.7	38.83S	177.88E	33 R	4.4	1.7	19	10
275	24 13 22 08.0	38.90S	177.92E	33 R	3.4	1.7	10	5
276	24 13 32 09.6	33.01S	179.38W	33 R	4.7	3.6	16	10
277	25 02 01 44.6	38.94S	178.09E	33 R	3.3	0.1	4	2
278	25 02 37 12.0	42.10S	178.40E	33 R	3.9	R	0	5
279	25 02 37 16.7	39.00S	178.13E	33 R	3.8	0.4	4	2
280	25 10 29 54.8	40.39S	173.56E	216	3.7	1.4	15	9
281	25 22 43 47.0	41.36S	172.63E	199	4.0	1.2	15	8
282	25 23 52 56.2	40.58S	176.17E	12 R	4.5	1.3	24	11
283	27 06 58 16.3	37.71S	177.65E	159	4.3	2.4	14	11
284	27 07 34 19.6	39.24S	179.82E	33 R	4.4	1.5	17	11
285	28 16 32 57.7	37.57S	176.41E	243	4.9	1.0	18	11
286	29 07 28 23.9	40.56S	176.36E	12 R	3.8	1.4	24	10
287	29 10 51 40.4	38.86S	178.41E	12 R	4.2	2.0	24	9
288	29 10 54 54.2	38.98S	178.47E	12 R	3.3	1.4	6	3
289	29 13 06 41.9	38.23S	176.14E	220	3.6	1.3	12	9
290	29 16 03 59.4	38.90S	178.47E	12 R	3.3	2.7	11	5
291	29 20 05 58.3	38.92S	178.41E	12 R	3.7	2.9	8	3
292	30 09 34 31.9	38.89S	176.37E	89	3.7	1.6	12	11
293	30 19 36 40.6	40.02S	178.79E	12 R	4.4	2.0	35	12
294	31 19 03 04.5	41.01S	176.01E	12 R	3.7	2.1	21	9
295	31 23 33 40.4	39.50S	177.64E	12 R	4.0	2.0	18	7
296	SEP 02 10 15 27.0	33.94S	178.25E	33 R	4.6	1.7	6	6
297	02 10 57 02.8	38.70S	175.97E	33 R	2.9	1.4	4	3
298	03 06 12 43.6	38.92S	175.83E	186	4.5	1.8	13	8
299	04 07 37 05.4	44.64S	168.11E	33 R	4.9	1.4	15	10
300	04 18 20 51.1	40.26S	173.22E	204	4.3	1.4	10	10

REF NUM		ORIGIN TIME			LAT	LONG	DEPTH	MAG	S E	NUM	NUM
		H	M	S	DEG	DEG	KM	SEC	OBS	STN	
64/ 301	SEP 05	02	17	17.0	32.60S	179.72W	448	6.2	2.6	21	12
302	06	23	42	12.5	40.56S	173.52E	163	4.7	1.7	18	11
303	08	23	31	59.3	39.59S	176.22E	12 R	4.2	2.4	18	10
304	11	16	27	14.9	38.53S	175.85E	210	4.2	0.9	7	9
305	11	21	05	22.9	40.09S	174.96E	12 R	3.9	3.2	15	9
306	12	19	51	30.6	39.50S	175.87E	12 R	4.2	1.6	12	8
307	12	22	07	05.2	49.23S	164.61E	33 R	6.8	2.5	17	14
308	12	22	42	41.0	37.44S	177.25E	275	4.4	1.6	15	10
309	16	10	20	30.6	41.66S	174.25E	33 R	3.4	1.9	10	8
310	17	01	04	02.9	40.56S	173.48E	146	4.0	2.2	20	11
311	17	06	29	34.4	40.07S	175.08E	33 R	3.6	2.3	9	8
312	17	07	53	25.1	33.53S	179.87W	33 R	4.3	1.2	6	5
313	18	20	43	23.5	37.97S	176.20E	318	4.3	1.2	10	7
314	20	11	33	21.7	34.48S	176.26W	166	5.3	ND	4	6
315	21	14	12	28.1	39.10S	175.26E	12 R	3.8	1.9	13	10
316	22	00	13	46.0	40.96S	174.86E	12 R	3.9	2.1	11	8
317	23	03	08	33.0	38.60S	178.18E	33 R	3.3	3.0	4	4
318	23	18	22	45.8	38.64S	176.01E	12 R	3.7	3.1	4	4
319	24	15	14	20.8	38.46S	175.98E	33 R	3.2	1.7	6	5
320	25	11	03	05.8	41.70S	171.52E	33 R	4.3	1.5	17	7
321	OCT 02	03	19	14.0	49.89S	164.90E	33 R	4.4	0.6	5	3
322	02	10	32	53.1	47.86S	163.57E	236	4.3	0.6	5	3
323	04	09	21	00.7	38.70S	175.73E	12 R	3.4	2.5	8	5
324	04	16	43	35.0	38.67S	178.14E	101	4.8	2.0	13	8
325	05	09	32	24.6	38.10S	177.26E	33 R	3.8	3.1	9	7
326	06	01	34	42.0	47.62S	164.58E	99	5.0	1.3	8	5
327	06	21	39	22.9	40.71S	174.23E	119	4.7	2.1	14	9
328	07	03	44	36.4	39.01S	175.53E	142	4.4	1.6	15	9
329	07	22	02	38.3	42.08S	174.36E	33 R	4.0	4.2	9	5
330	08	22	48	34.0	38.13S	176.01E	300	5.3	0.9	19	10
331	09	03	34	01.9	38.24S	176.00E	203	4.0	1.6	10	7
332	09	22	00	19.6	49.73S	164.43E	33 R	4.7	1.3	7	4
333	11	08	33	50.2	33.79S	178.91W	33 R	4.8	3.9	10	8
334	11	15	46	15.1	49.61S	164.46E	33 R	4.4	1.9	6	4
335	13	17	29	28.7	38.54S	175.62E	12 R	3.2	1.2	6	3
336	13	19	12	45.7	37.84S	176.34E	221	4.1	1.2	9	7
337	14	02	02	59.2	37.86S	177.10E	33 R	4.1	4.4	12	7
338	14	02	21	32.9	44.93S	166.04E	33 R	4.7	1.2	7	6
339	14	16	59	52.3	41.94S	171.76E	12 R	3.4	1.0	10	5
340	14	20	05	47.6	38.35S	176.23E	144	4.3	1.6	14	9
341	15	05	43	50.0	38.66S	175.77E	12 R	3.6	1.3	11	6
342	15	11	05	11.9	32.88S	179.59W	439	5.7	1.3	10	7
343	15	16	25	13.7	40.28S	173.52E	194	4.1	2.0	12	8
344	15	19	08	09.9	38.51S	176.04E	162	4.5	1.5	12	8
345	17	12	39	21.0	50.00S	165.00E	33 R	4.5	R	0	4
346	18	00	10	21.7	40.78S	173.51E	153	4.0	2.1	15	9
347	20	07	43	53.0	45.79S	168.43E	160	4.9	0.5	11	7
348	20	17	11	52.7	38.61S	175.83E	33 R	3.4	1.3	7	4
349	20	20	17	33.4	38.95S	175.88E	162	4.2	1.8	12	8
350	21	05	02	34.9	38.69S	175.79E	12 R	3.5	0.6	7	4

REF NUM		ORIGIN TIME			LAT	LONG	DEPTH	MAG	S E	NUM	NUM
		H	M	S	DEG	DEG	KM	SEC	OBS	STN	
64/ 351	OCT 22	07	44	27.2	44.91S	167.89E	90	4.7	2.6	14	8
352	22	08	04	24.0	38.57S	175.81E	12 R	3.4	1.3	9	5
353	23	17	25	22.6	40.60S	174.63E	120	4.4	2.6	16	11
354	24	10	58	29.6	38.65S	175.78E	12 R	3.4	0.3	8	6
355	24	15	37	44.8	49.50S	164.61E	33 R	4.6	2.2	6	4
356	25	14	56	06.1	44.90S	167.61E	80	4.4	1.9	9	5
357	26	03	02	56.3	40.33S	173.53E	182	3.8	2.2	10	7
358	26	18	00	49.8	38.91S	175.43E	240	4.2	0.8	8	6
359	27	00	40	46.1	37.16S	177.52E	249	5.2	1.9	19	11
360	27	10	29	33.4	38.61S	175.69E	12 R	2.8	2.1	6	4
361	30	04	54	09.0	42.30S	171.63E	12 R	2.7	1.8	5	3
362	30	06	55	34.6	38.67S	175.74E	178	3.8	1.7	16	10
363	NOV 01	13	51	28.5	39.19S	175.46E	139	3.6	1.6	13	8
364	01	17	00	05.0	41.91S	174.09E	12 R	3.6	1.4	21	7
365	01	21	16	59.5	38.57S	175.94E	180	3.7	2.2	14	8
366	01	22	12	42.2	37.65S	177.49E	209	4.4	1.6	19	11
367	02	12	00	26.8	40.51S	174.34E	100	4.0	2.0	17	10
368	02	17	49	49.8	41.88S	174.66E	12 R	3.8	2.6	32	11
369	02	17	51	24.8	41.91S	174.58E	12 R	3.2	1.5	9	6
370	03	10	07	41.7	36.35S	179.52E	291	4.1	0.9	10	7
371	05	11	43	18.7	42.49S	172.85E	12 R	3.3	1.4	21	8
372	05	12	16	21.2	38.59S	177.46E	12 R	4.4	2.1	36	13
373	05	14	12	19.3	33.84S	179.43W	355	4.8	1.2	15	12
374	07	08	24	09.4	38.32S	176.11E	210	4.4	1.7	24	14
375	07	20	45	01.5	45.32S	171.99E	33 R	4.2	2.3	17	9
376	08	02	43	52.9	49.93S	164.30E	33 R	6.7	4.2	20	13
377	09	17	52	05.8	50.16S	164.67E	33 R	4.2	0.1	4	2
378	11	20	21	06.8	39.40S	178.19E	12 R	4.6	1.6	34	13
379	12	00	28	24.3	37.67S	176.49E	12 R	3.3	0.7	9	4
380	12	07	13	04.9	38.76S	175.71E	170	3.5	1.6	11	9
381	13	10	34	35.7	38.95S	176.00E	12 R	3.8	1.5	18	8
382	13	17	36	16.5	38.26S	176.21E	250	4.1	1.1	12	8
383	14	05	52	22.7	38.16S	176.39E	237	4.0	1.1	15	11
384	15	00	53	50.0	39.61S	174.25E	242	3.9	1.3	14	8
385	15	09	21	16.6	40.65S	176.66E	12 R	4.0	1.5	34	9
386	18	11	16	18.2	40.90S	174.02E	121	3.7	1.3	10	8
387	20	07	02	44.0	39.26S	176.86E	12 R	4.8	1.8	36	14
388	20	08	53	24.5	35.71S	178.48E	293	4.2	1.2	12	8
389	20	09	49	45.7	37.22S	177.08E	280	4.2	1.0	11	8
390	20	21	20	19.2	39.23S	176.02E	80	4.2	1.8	16	12
391	21	04	22	02.3	45.99S	166.48E	12 R	4.3	0.8	7	4
392	22	00	23	48.2	40.05S	176.93E	12 R	3.7	2.0	12	8
393	22	08	36	32.2	38.29S	177.00E	33 R	3.7	1.9	19	10
394	22	09	05	33.3	38.64S	175.84E	190	4.1	1.3	19	12
395	23	06	33	30.0	40.68S	176.49E	12 R	3.6	2.1	20	9
396	23	11	33	12.1	39.22S	174.87E	229	4.0	1.5	21	13
397	25	15	38	29.2	40.61S	174.34E	116	3.7	1.0	14	9
398	28	20	19	24.0	38.60S	176.10E	12 R	2.6	R	0	2
399	29	10	14	36.4	38.37S	176.07E	214	3.5	1.3	11	8
400	DEC 04	08	01	09.0	36.56S	180.00E	162	4.6	1.2	10	10

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 401	DEC 04 12 20 51.3	38.70S	175.82E	12 R	3.3	1.3	7	5
402	05 03 13 24.3	38.66S	175.82E	12 R	3.6	0.6	11	5
403	06 03 36 41.1	38.18S	176.37E	12 R	3.4	1.7	4	5
404	06 07 25 58.1	40.06S	175.04E	33 R	3.9	0.9	10	7
405	06 07 26 10.1	40.08S	175.17E	33 R	3.7	1.4	8	6
406	06 15 06 52.1	40.07S	175.11E	33 R	4.2	1.6	17	10
407	06 15 15 48.2	40.06S	175.17E	33 R	3.4	1.3	12	7
408	07 08 24 43.6	38.63S	175.77E	12 R	3.0	0.6	6	4
409	07 14 23 43.5	38.72S	175.78E	12 R	3.4	1.3	11	7
410	07 19 02 47.0	38.71S	175.83E	12 R	3.8	0.5	12	8
411	07 20 24 28.0	38.71S	175.83E	12 R	3.6	1.1	13	8
412	08 07 56 24.8	38.72S	175.86E	12 R	3.4	0.7	11	6
413	08 17 22 19.0	38.71S	175.87E	12 R	3.6	0.6	8	5
414	08 19 45 09.1	38.64S	175.85E	12 R	3.5	0.9	7	5
415	09 00 56 08.4	38.66S	175.84E	12 R	3.8	0.6	8	5
416	09 12 38 38.4	38.74S	175.94E	12 R	3.3	0.7	5	5
417	09 12 40 37.2	38.81S	175.86E	12 R	3.3	0.9	7	5
418	09 13 27 20.8	38.67S	175.83E	12 R	3.9	0.7	12	8
419	09 21 45 08.5	38.64S	175.81E	12 R	3.3	1.0	8	4
420	10 01 02 30.0	38.65S	175.80E	12 R	3.2	1.2	10	6
421	10 11 39 12.1	38.53S	175.49E	168	4.5	2.1	22	14
422	10 14 59 43.9	38.59S	175.90E	12 R	3.4	0.8	8	5
423	10 15 24 24.4	38.64S	175.79E	12 R	3.2	1.3	5	3
424	11 04 24 34.9	38.65S	175.75E	12 R	3.4	0.6	8	5
425	11 18 39 28.2	38.59S	175.72E	12 R	3.0	ND	3	5
426	11 18 46 16.7	38.70S	175.88E	12 R	4.1	0.7	10	9
427	11 19 09 59.0	38.59S	175.78E	12 R	3.0	ND	3	5
428	11 21 04 01.1	38.72S	175.82E	12 R	3.9	0.6	12	7
429	11 23 38 39.9	38.73S	175.80E	12 R	4.1	0.7	11	7
430	12 00 32 10.6	38.65S	175.85E	12 R	3.7	0.5	11	7
431	12 09 39 01.3	38.69S	175.88E	12 R	4.0	1.1	8	6
432	12 13 28 39.7	38.64S	175.87E	12 R	4.1	0.6	8	6
433	12 14 04 07.6	38.72S	175.77E	12 R	3.8	0.8	11	7
434	12 14 05 23.9	38.73S	175.77E	12 R	4.5	0.5	8	7
435	12 14 06 13.4	38.80S	175.83E	12 R	4.5	0.5	6	6
436	12 19 03 10.5	33.39S	179.08W	335	5.2	0.7	13	10
437	12 23 09 57.5	38.71S	175.81E	12 R	3.6	0.2	8	6
438	12 23 43 11.7	38.68S	175.83E	12 R	4.0	0.6	7	6
439	13 00 13 32.8	35.09S	177.37W	280	5.3	2.4	12	11
440	13 00 26 28.2	38.68S	175.81E	12 R	3.8	0.5	10	6
441	13 08 08 42.7	38.70S	175.80E	12 R	3.7	0.7	7	5
442	13 10 23 39.6	38.79S	175.77E	12 R	4.2	0.5	10	7
443	13 11 26 45.2	38.68S	175.82E	12 R	3.6	0.6	11	7
444	13 12 46 25.3	38.71S	175.83E	12 R	4.2	0.6	11	7
445	13 13 47 34.6	38.69S	175.83E	12 R	3.5	0.7	8	6
446	13 13 48 53.7	38.65S	175.84E	12 R	3.7	0.4	10	6
447	13 18 31 23.8	38.67S	175.81E	12 R	3.9	0.8	10	6
448	13 20 02 41.4	38.69S	175.84E	12 R	3.3	0.9	8	6
449	13 21 23 47.3	38.69S	175.78E	12 R	3.4	1.5	9	6
450	13 22 36 13.8	38.70S	175.87E	12 R	3.8	0.8	9	6

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 451	DEC 13 22 36 46.9	38.63S	175.91E	12 R	3.8	1.1	8	5
452	14 01 45 47.9	38.71S	175.81E	12 R	3.8	0.4	11	7
453	14 04 33 43.0	38.73S	175.84E	12 R	3.9	0.5	8	6
454	14 08 05 24.3	38.69S	175.83E	12 R	3.8	0.8	7	6
455	14 08 20 21.8	38.66S	175.84E	12 R	3.8	0.9	8	6
456	14 14 26 27.8	38.69S	175.83E	12 R	4.1	0.5	10	6
457	14 16 07 38.2	38.69S	175.82E	12 R	3.6	0.6	11	6
458	14 17 13 09.9	38.72S	175.84E	12 R	3.9	0.6	10	6
459	14 18 05 44.3	38.65S	175.76E	12 R	3.8	0.9	8	5
460	14 20 43 55.2	38.65S	175.85E	12 R	3.3	0.7	8	5
461	14 23 19 40.2	38.68S	175.87E	12 R	3.6	1.0	11	6
462	14 23 22 32.4	38.72S	175.82E	12 R	3.8	1.1	8	6
463	15 00 12 42.7	38.72S	175.84E	12 R	4.1	0.5	9	6
464	15 00 15 45.0	38.72S	175.87E	12 R	3.5	0.5	10	5
465	15 05 07 28.6	38.51S	175.81E	12 R	3.5	0.8	9	6
466	15 07 00 47.1	38.66S	175.85E	12 R	3.4	0.6	8	5
467	15 07 24 55.9	38.64S	175.86E	12 R	3.5	1.1	10	6
468	15 10 59 31.3	38.70S	175.82E	12 R	3.5	0.8	10	6
469	15 11 33 12.9	38.68S	175.79E	12 R	3.4	0.7	10	6
470	15 12 02 09.6	38.69S	175.82E	12 R	4.0	0.3	8	7
471	15 12 21 40.2	38.76S	175.41E	287	4.1	1.7	16	11
472	15 14 00 31.0	38.68S	175.86E	12 R	4.2	0.8	7	7
473	15 15 28 02.1	38.68S	175.80E	12 R	3.7	0.6	9	6
474	15 16 53 51.8	38.71S	175.81E	12 R	3.5	0.5	10	6
475	15 18 58 13.8	38.68S	175.81E	12 R	4.2	0.5	9	6
476	15 19 37 01.6	38.73S	175.85E	12 R	3.5	1.1	9	6
477	15 19 40 19.2	38.66S	175.85E	12 R	3.3	0.9	7	6
478	15 19 44 34.2	38.67S	175.84E	12 R	3.7	1.2	9	6
479	15 20 00 28.5	38.68S	175.85E	12 R	4.4	1.0	8	6
480	16 00 59 19.8	38.68S	175.81E	12 R	3.6	0.8	9	6
481	16 01 13 01.1	38.70S	175.84E	12 R	3.6	0.8	9	6
482	16 02 12 20.4	33.76S	178.82W	358	4.8	2.2	8	6
483	16 15 20 56.6	38.70S	175.84E	12 R	3.9	0.5	10	6
484	16 16 49 19.9	38.68S	175.83E	12 R	3.5	0.8	10	6
485	16 17 30 32.9	38.71S	175.79E	12 R	3.8	0.5	9	6
486	16 21 39 57.9	38.68S	175.88E	12 R	3.4	1.5	7	6
487	16 22 13 07.0	38.70S	175.84E	12 R	3.8	0.3	9	6
488	17 04 20 52.3	38.73S	175.84E	12 R	4.0	0.3	9	5
489	17 17 11 10.0	35.21S	178.93W	255	4.6	2.4	10	10
490	17 20 49 27.2	40.12S	175.22E	33 R	3.8	1.0	14	9
491	18 01 50 05.3	35.12S	179.12W	258	4.6	0.9	10	7
492	18 16 56 09.9	38.72S	175.82E	12 R	3.2	0.5	9	6
493	18 23 13 38.1	38.67S	175.85E	12 R	3.7	0.8	8	6
494	18 23 19 54.6	38.67S	175.85E	12 R	4.1	0.4	9	6
495	18 23 22 53.9	38.68S	175.87E	12 R	3.7	0.8	7	6
496	19 06 18 07.1	34.98S	179.86E	349	4.6	1.3	14	9
497	19 06 41 22.6	33.06S	178.75W	205	6.2	3.8	22	14
498	20 04 28 21.8	45.15S	167.00E	33 R	4.2	1.9	8	5
499	20 17 49 28.4	38.70S	175.83E	12 R	4.1	0.8	10	7
500	20 21 09 20.9	38.70S	175.84E	12 R	3.7	0.4	8	6

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 501	DEC 20 21 18 02.2	38.69S	175.83E	12 R	4.1	0.2	9	6
502	20 22 09 59.5	38.66S	175.84E	12 R	3.9	1.1	8	6
503	20 22 55 26.4	38.66S	175.84E	12 R	3.6	0.8	8	6
504	20 23 49 11.1	38.71S	175.84E	12 R	4.5	0.8	9	6
505	21 00 38 55.5	38.72S	175.86E	12 R	4.1	0.8	8	6
506	21 01 50 04.7	38.70S	175.81E	12 R	4.6	0.3	9	6
507	21 01 55 30.4	38.69S	175.85E	12 R	3.6	0.9	5	6
508	21 09 07 28.0	38.68S	175.78E	12 R	4.5	0.9	8	6
509	21 09 18 13.1	38.64S	175.84E	12 R	3.7	0.8	11	6
510	21 12 11 24.5	38.64S	175.86E	12 R	3.8	1.0	10	6
511	21 14 55 05.3	38.67S	175.80E	12 R	4.4	1.1	10	6
512	21 17 00 36.8	38.69S	175.81E	12 R	3.8	0.6	9	6
513	21 17 34 02.9	38.69S	175.80E	12 R	3.6	0.3	10	6
514	21 17 44 27.8	38.69S	175.83E	12 R	3.6	0.5	9	6
515	21 20 07 42.6	38.70S	175.80E	12 R	3.8	0.4	8	6
516	22 01 55 30.1	38.69S	175.83E	12 R	4.1	0.7	8	6
517	22 06 18 26.7	38.67S	176.27E	12 R	2.5	0.8	7	4
518	22 10 34 49.0	38.69S	175.86E	12 R	3.7	0.5	9	6
519	22 20 15 40.2	38.68S	175.85E	12 R	4.4	1.1	7	6
520	22 20 20 12.2	38.69S	175.86E	12 R	3.7	0.6	7	6
521	22 21 45 43.6	38.67S	175.84E	12 R	4.3	0.3	7	6
522	22 22 41 19.3	38.73S	175.82E	12 R	3.5	0.3	7	6
523	23 12 09 56.4	38.69S	175.85E	12 R	3.5	0.3	6	5
524	24 05 57 19.1	38.65S	175.84E	12 R	4.3	0.6	11	6
525	24 10 24 16.2	38.68S	175.89E	12 R	3.6	0.3	9	6
526	24 15 11 03.2	38.70S	175.79E	12 R	4.0	0.3	7	6
527	24 15 50 27.3	38.70S	175.79E	12 R	3.9	0.2	8	6
528	24 17 50 12.6	38.69S	175.81E	12 R	3.9	0.5	5	5
529	25 15 40 19.6	38.73S	175.81E	12 R	4.0	0.4	7	5
530	25 20 09 50.9	38.73S	175.80E	12 R	4.5	1.0	12	7
531	25 20 10 26.6	38.69S	175.89E	12 R	4.5	0.6	4	6
532	25 20 17 54.3	38.69S	175.82E	12 R	4.2	0.8	7	5
533	27 08 21 10.7	34.22S	179.13E	144	4.3	1.5	9	8
534	27 11 49 23.3	40.11S	175.11E	33 R	3.7	1.1	12	8
535	27 23 15 03.7	38.72S	175.83E	12 R	3.9	0.4	9	6
536	28 02 46 20.6	38.21S	176.09E	212	4.4	1.9	15	9
537	28 05 41 43.3	38.67S	175.87E	12 R	3.7	1.5	10	7
538	28 05 48 33.0	38.70S	175.83E	12 R	3.8	1.0	9	7
539	28 07 49 56.3	38.71S	175.84E	12 R	3.6	0.4	9	7
540	28 09 20 16.9	38.73S	175.79E	12 R	3.4	0.7	9	7
541	28 10 03 55.1	38.77S	175.80E	12 R	3.2	ND	3	3
542	28 10 03 57.2	38.75S	175.78E	12 R	4.2	0.8	7	6
543	28 10 04 04.0	38.80S	175.75E	12 R	4.6	0.5	8	6
544	28 13 22 48.4	38.70S	175.76E	12 R	4.1	1.3	9	7
545	28 13 24 01.0	38.73S	175.82E	12 R	4.0	0.4	8	6
546	28 16 57 41.5	38.72S	175.83E	12 R	3.9	0.6	9	7
547	29 14 24 52.2	44.58S	167.41E	33 R	3.9	3.7	5	3
548	30 04 44 22.1	39.52S	177.24E	33 R	4.3	1.5	12	9
549	30 10 30 11.9	38.66S	175.80E	12 R	4.4	1.2	18	11
550	30 13 08 00.1	38.86S	178.41E	60	4.3	2.3	13	10

REF NUM	ORIGIN TIME H M S	LAT DEG	LONG DEG	DEPTH KM	MAG	S E SEC	NUM OBS	NUM STN
64/ 551	DEC 30 16 04 26.8	31.83S	177.62W	555	1.2		6	7
552	30 16 12 52.2	38.72S	175.83E	12 R	3.7	0.6	7	6
553	30 16 35 23.8	33.55S	179.23W	239	4.7	0.7	6	9
554	30 22 39 08.5	38.73S	175.83E	12 R	4.4	0.5	7	6
555	31 07 13 56.0	38.72S	175.84E	12 R	3.8	0.5	10	6
556	31 08 22 41.5	38.71S	175.80E	12 R	3.8	0.7	8	6
557	31 13 09 14.8	38.71S	175.83E	12 R	3.9	0.9	9	6
558	31 17 05 10.6	35.91S	178.81E	203	4.1	0.8	10	9
559	31 17 56 30.7	38.70S	175.82E	12 R	3.7	0.6	8	6
560	31 21 28 40.3	38.73S	175.84E	12 R	3.9	0.3	7	6

SUPPLEMENTARY LOCAL EARTHQUAKE ORIGINS

The existence of the following shocks has been confirmed, but their small magnitude or unfavourable position has resulted in the data being insufficient for an epicentre solution by computer. The focal depth is given as S (shallow) when crustal phases are present in the records, and as N (normal) when there are no crustal phases and no other indication of focal depth.

004a	Jan 05	04 33 53	41.9S	176.2E	N	3.1
006a	09	17 59 03	37.4S	176.3E	S	-
006b	09	18 10 17	37.4S	176.3E	S	-
034a	Feb 02	10 41	35 S	173½ E	N	2
034b	02	21 42	38½ S	176 E	N	-
034c	02	21 51	38½ S	176 E	N	-
070a	Mar 04	23 42.7	Near Wairakei (41)			
070b	04	23 43.9	Near Wairakei (41)			
070c	04	23 55.1	Near Wairakei (41)			
097a	Apr 02	02 29.9	Near Wellington (68)			←2
106a	12	02 44 30	35.0S	173.8E	S	3.0
108a	14	17 59.6	Near Totara North (6)			2
108b	15	12 01.0	Near Totara North (6)			2½
120a	25	01 07.6	Near Totara North (6)			-
131a	May 07	10 07.7	Near Wairakei (41)			
131b	07	16 22 14	38.8S	175.8E	S	3.0
155a	22	01 53.0	Near Wairakei (41)			
155b	22	01 54.8	Near Wairakei (41)			
155c	22	02 02.2	Near Wairakei (41)			
199a	Jun 26	11 02.2	Near Oponae (35)			3
218a	Jul 16	11 37	Near Ngakuru (33)			-
219a	16	13 40	Near Ngakuru (33)			-
219b	16	16 27	Near Ngakuru (33)			-
219c	16	18 55	Near Ngakuru (33)			-
237a	30	19 58 37	37.6S	175.8E	S	3.0
260a	Aug 17	20 10.3	Near Opunake (41)			2.7
296a	Sep 02	10 55 13	38.6S	176.1E	S	←3
296b	02	10 55 27	38.6S	176.1E	S	←3
296c	02	10 56 05	38.5S	176.0E	S	3±
296d	02	10 56 53	38.6S	176.1E	S	←3
312a	18	20 39.0	Near Otangaroa (6)			-
316a	22	04 42 30	38.5S	176.1E	S	3.2
317a	23	18 15 30±	38½ S	176 E	S?	3±
317b	23	18 22 44	38.6S	176.0E	S	3.6
399a	Dec 03	23 20 -	Near Wairakei (41)			-
399b	03	23 28 -	Near Wairakei (41)			-
400a	04	11 50 -	Near Wairakei (41)			-
400b	04	11 55 -	Near Wairakei (41)			-
504a	20	23 52 -	Near Wairakei (41)			-

STATION READINGS FOR NEW ZEALAND EARTHQUAKES

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

The earthquake origins are determined using the phases Pn, P* and Pg, and the corresponding S phases. In computing travel times, it is assumed that the New Zealand crust is 33 km thick, and is divided into two uniform layers by a discontinuity at a depth of 12 km. Above the discontinuity the velocities of P and S are 5.5 and 3.3 km/sec respectively (Pg and Sg) and below it they are 6.3 and 3.7 km/sec (P* and S*). Travel times for Pn and Sn waves, which travel in the mantle, are derived from the Jeffreys-Bullen "Seismological Tables" (British Assn. for the Advancement of Science, 1958), but modified by multiplying the times by 0.96. Several studies have shown that times in the table are too great to fit New Zealand observations. The result of applying this correction is to raise the adopted Pn velocity from about 7.8 to 8.1 km/sec, and the Sn velocity from about 4.4 to 4.6 km/sec. These values are close to those reported.

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

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

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

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

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

EXPLANATION OF DATA

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

The standard error is derived from the equation

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

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

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

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

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

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

		H	M	S					64/ 001				
JAN 01		09 58	39.1	41.35S	176.46E	48 KM	SE	1.7	AVG MAG	4.0			
		+-	1.0	0.07	0.07	30							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WEL	P	09 59	01.5			0.4	1.28	272	4.0				
	S		16.5			-1.0							
	E		26										
CNZ	P	09 59	16			1.2	2.26	342	4.3	3.2			
	E		27.5										
TUA	EP	09 59	19			-0.7	2.59	12	4.0	4.3			
	ES		48			-2.4							
TNZ	EP	09 59	23.5			2.5	2.69	323	3.9	4.2			
	E		33										
	E		37										
	E		54										
COB	EP	09 59	24			1.0	2.83	274	4.0				
	ES		56			-0.3							
	E	10 00	15										
KRP	EP	09 59	31.5			-0.8	3.50	348	3.4	4.1			
	E		42										
	E		49										
	E	10 00	35										
GPZ	EP	09 59	35			0.2	3.67	229	4.3				
	S	10 00	16			-1.2							
KAI	EP?	09 59	41			2.3	3.95	251	4.3				
	ES	10 00	23			-1.3							
		H	M	S					64/ 002				
JAN 02		04 47	12.6	46.29S	165.54E	33 KM	SE	1.0	AVG MAG	4.6			
		+-	1.5	0.11	0.10	R							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
MNH	IPN	04 47	35.6	D		-1.2	1.53	71					
ROX	PN	04 47	55			1.3	2.76	74	4.9	4.6			
	ESN		48 25			0.1							
KAI	ESN	04 49	35			0.2	5.64	50	4.5				
GPZ	EPN	04 48	33			-0.2	5.66	65	4.5				
	EP*		51			0.2							
	E		55										
	ESN	49 35				-0.4							
		H	M	S					64/ 003				
JAN 02		09 29	50.0	44.65S	167.77E	33 KM	SE	1.3	AVG MAG	3.9			
		+-	1.3	0.05	0.06	R							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
MNH	P*	09 30	10			-1.0	1.14	185	4.2	3.9			
	S*		28			1.5							
ROX	EP*	09 30	14			-1.0	1.37	128	3.7	3.9			
	S*		33			-0.5							
KAI	ES*	09 31	34			0.2	3.39	53	3.9				
GPZ	ES*	09 31	42			0.8	3.64	77	3.5				
		H	M	S					64/ 004				
JAN 03		18 11	35.5	34.74S	177.22W	283 KM	SE	2.1	AVG MAG	5.4			
		+-	3.5	0.47	0.53	65							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
KRP	P	18 13	10.5			-2.4	6.65	239					
CNZ	EP	18 13	22.5			1.6	7.30	230					
	ES		14 45			1.3							
WEL	EP?	18 13	44			0.9	9.09	222	5.5				
	S		15 22			-1.6							
KAI	ES	18 16	25			0.6	11.80	225	5.3				
GPZ	ES	18 16	26			-0.4	11.89	218	5.4				
		H	M	S					64/ 005				
JAN 06		14 30	30.8	32.20S	179.54W	195 KM	SE	4.4	AVG MAG	5.4			
		+-	7.1	0.46	1.20	116							

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
GNZ	EP	14 32	14			5.8	6.73	197					
	ES		33 24			-0.2							
KRP	EP?	14 32	11			-0.6	6.99	214					
	E		16										
TUA	EP	14 32	08			-5.3	7.12	201					
	ES		33 34			0.6							
WEL	S	14 34	42			-2.0	10.15	205	5.5				
	ELR		36 24										
KAI	ES	14 35	43			3.1	12.56	212	5.3				
GPZ	ES	14 35	49			-1.3	13.02	206	5.5				
		H	M	S					64/ 006				
JAN 07		18 11	37.0	41.49S	172.22E	12 KM	SE	1.4	AVG MAG	3.5			
		+-	0.6	0.04	0.06	R							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
COB	P*	18 11	45			-2.7	0.56	44					
KAI	P*	18 11	58			-0.5	1.19	210	3.5				
	S		12 16			0.3							
WEL	SN	18 12	32			-0.5	1.93	85	3.4				
GPZ	E(P)	18 12	15			2.1	2.22	172	3.3				
	ESN		39			-0.5							
TNZ	E(P*)	18 12	26			-0.6	2.84	36		3.8	3.6		
	E(S*)		13 06			2.1							
CNZ	E(P)	18 12	29			-0.3	3.42	49		3.4	3.7		
	EP*		37			0.3							
	ES*		13 22			0.4							
KRP	E(PN)	18 12	42			-0.3	4.39	37		3.4			
	E		13 01										
		H	M	S					64/ 007				
JAN 09		18 18	18.0	37.32S	176.25E	33 KM	SE	0.5	AVG MAG	3.3			
		+-	0.7	0.04	0.02	R							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
KRP	P*	18 18	34.3			0.3	0.83	223					
	S*		45			-0.5							
GNZ	EP*	18 18	52			-0.3	1.92	134		3.5			
CNZ	EP*	18 18	53			0.2	1.96	196		2.9	2.6		
	ES*		19 19			0.2							
		H	M	S					64/ 008				
JAN 09		21 47	11.5	42.29S	174.13E	12 KM	SE	1.7	AVG MAG	4.9			
		+-	0.6	0.05	0.06	R							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WEL	P*	21 47	30.7	DSW		-0.8	1.10	26	5.0				
	S*		45			-1.4							
GPZ	(P*)	21 47	41.8			-1.3	1.78	217	4.5				
	E(S*)		48 05			-1.7							
KAI	PN	21 47	45			0.2	2.03	262	5.2				
	ES*		48 15			0.7							
TNZ	PN	21 48	01			1.5	3.10	4		5.0	5.6		
	EP*		07			1.3							
	ES*		44			-2.4							
CNZ	PN	21 48	00.8			-0.8	3.26	20		5.4			
	EP*		10			1.5							
TUA	E(P)	21 48	18			4.2	4.17	34		4.3			
	I		31										
	E		49 07										
	E		29										
KRP	PN	21 48	17.5			-0.6	4.49	14		5.4			
	P*		29.5			0.1							
	ESN		49 09			0.0							
GNZ	PN	21 48	19			-1.9	4.69	40		4.5	5.3		
	I		44										
ROX	EPN	21 48	22			0.7	4.72	226		4.3			
	EP*		39			5.6*							
	E		52										

H M S		39.31S 175.32E		152 KM	SE	1.5	64/ 025			
+ - 1.0		0.06 0.05		8			AVG MAG	3.7		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
JAN 18	12 18 48.6		0.7	0.20	57	3.0				
TON	EP		-1.1							
TNZ	P		1.3	0.74	280		3.6	3.3		
KRP	EP		-0.5	1.40	7		2.9			
TUA	E		1.51	71						
MEL	P		1.7	2.02	192	4.2				
GNZ	P		1.4	2.21	73		4.0	3.8		
COB	EP		0.6	2.66	227	4.2				
KAI	ES		-2.4	4.37	221	4.1				
GPZ	EP		-0.5	4.82	204	4.6				
	S		-5.0*							
H M S		41.33S 174.91E		33 KM	SE	3.1	64/ 026			
+ - 2.9		0.14 0.14		R			AVG MAG	3.1		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
JAN 19	23 17 11.0		-1.7	0.11	291	3.0				
WEL	IP*		-2.1							
COB	ES*		2.1	1.66	278	3.1				
TON	EP*?		3.4	2.18	13					
TNZ	ES*		0.6							
	E		-2.4	2.18	349			3.3		
H M S		44.90S 167.75E		33 KM	SE	1.2	64/ 027			
+ - 0.9		0.03 0.05		R			AVG MAG	4.3		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
JAN 20	19 23 37.2		-1.1	0.88	186		4.1	4.3		
MNH	P*		0.7							
ROX	IP*		-0.5	1.24	118		4.1	4.6		
KAI	SN		0.2							
GPZ	E(PN)		0.9	3.56	49	4.1				
COB	SN		1.6	3.71	73	4.2				
	ESN		-0.9							
	E		-0.8	5.28	45	4.6				
H M S		37.70S 177.44E		33 KM	SE	2.8	64/ 028			
+ - 2.6		0.12 0.09		R			AVG MAG	4.1		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
JAN 22	20 43 11.6		-0.3	1.05	154		4.2	4.5		
GNZ	IP*		0.5							
TUA	P*		0.0	1.13	191		3.8	4.1		
KRP	E(P*)		2.1							
GNZ	P*		1.9	1.92	261	3.0				
TON	EP*		-2.1	2.11	224	3.9	3.9	3.9		
WEL	P*		-1.2	2.12	224	3.4				
HEL	SN		-2.3							
COB	ES*		-0.7	4.14	209	4.5				
	ES		0.4							
	E		0.2							
	S		11.2*	4.98	226	4.6				

H M S		38.54S 178.03E		112 KM	SE	2.1	64/ 029			
+ - 2.7		0.17 0.14		18			AVG MAG	4.0		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
JAN 23	01 28 28.2		-0.5	0.10	184					
GNZ	IP		0.1	0.74	249		4.0	4.1		
TUA	EP		-0.0							
GNZ	EP		-0.4	2.05	251		3.3			
TON	EP		1.5	2.06	250	3.4				
KRP	EP		-1.2							
WEL	ES		2.9	3.72	221	4.3				
COB	ES		4.81	236						
GPZ	S		-2.4	6.56	217	4.7				
H M S		38.88S 176.04E		154 KM	SE	1.2	64/ 030			
+ - 1.1		0.06 0.05		10			AVG MAG	3.9		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
JAN 28	10 49 33.1		1.0	0.90	230		3.8			
GNZ	P		0.9	0.51	230	2.9				
TON	EP		0.7	0.87	86		4.2	4.1		
TUA	P		-0.9							
KRP	EP		-1.6	1.03	337	3.3				
TNZ	EP		1.0	1.33	256	3.7				
GNZ	P		1.1	1.56	82	4.2	3.8			
WEL	P		0.8	2.60	202	4.1				
COB	S		-0.2							
GPZ	EP		-0.6	3.37	228	4.4				
	S		-1.4	5.45	207	4.6				
	S		-3.6*							
H M S		33.28S 179.84W		451 KM	SE	1.5	64/ 031			
+ - 1.7		0.19 0.28		13			AVG MAG	5.4		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
JAN 29	04 00 30.6		0.7	5.63	197					
GNZ	S		-1.3	6.04	203					
TUA	EP		-16.7*							
GNZ	P		-1.3	6.99	211					
TON	ES		-0.9							
TNZ	EP		-0.1	7.00	211	5.2				
WEL	EP		1.9	7.52	217					
COB	S		-0.7	9.08	207	5.6				
KAI	ES		1.9							
GPZ	EP		-0.4	9.79	215	5.6				
	S		0.6	11.53	214	5.5				
	S		1.4	11.95	207	5.8				
	S		-1.8							
H M S		39.09S 176.01E		126 KM	SE	1.1	64/ 032			
+ - 0.8		0.06 0.04		7			AVG MAG	4.4		
	H M S									
JAN 30	21 08 56.1									
	S									

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
CNZ	IP	21	09	14.5	U	0.2	0.38	252			
	E			28							
TON	P	21	09	14.8		0.4	0.38	252	3.5		
	S			27.5		-0.8					
TUA	P	21	09	17.5		-0.8	0.93	73		4.3	
	E			34							
TNZ	P	21	09	22.5		0.6	1.27	265		3.8	3.8
	S			41.5		0.1					
GNZ	IP	21	09	26.8	D	0.9	1.63	75		5.1	4.7
	S			48		-0.6					
	I			50							
WEL	P	21	09	37		1.6	2.40	203	4.3		
	S			10 06		0.8					
COB	S	21	10	25		0.6	3.21	230	4.6		
KAI	S	21	11	03		-1.9	4.90	224	4.7		
GPZ	P	21	10	12.5		-1.1	5.25	208	4.9		
	S			11 10		-3.5*					
JAN 31	H M S	15 00	54.1							64/ 033	
	+-	1.1								4.3	
	H M S	39.78S	174.27E		193 KM	SE	1.6			AVG MAG	4.3
		0.07	0.08		9						
TNZ	P	15	01	21.5		0.5	0.60	8		3.8	3.7
	S			42.5		0.7					
TON	P	15	01	25		0.6	1.14	60	4.0		
	S			46		-1.9					
CNZ	IP	15	01	24.8	D	0.4	1.15	60		4.3	4.1
	S			46		-2.0					
WEL	P	15	01	30.5		2.6	1.55	166	4.3		
	S			55.7		1.6					
COB	P	15	01	31		1.1	1.75	221	4.1		
	S			58		0.5					
TUA	P	15	01	37.8		0.5	2.44	67		4.4	
	E			02 08							
GNZ	P	15	01	45		-0.5	3.13	70		4.8	
	E			02 21							
KAI	EP?	15	01	58		8.1*	3.49	217	4.3		
	S			02 31		-1.9					
GPZ	P	15	01	57		-0.4	4.09	197	5.4		
	S			02 44.5		-1.9					
FEB 01	H M S	20 56	03.0							64/ 034	
	+-	0.8								4.3	
	H M S	39.34S	174.78E		227 KM	SE	1.2			AVG MAG	4.3
		0.05	0.06		6						
TNZ	EP	20	56	34	U	1.0	0.35	297			
	E(S)			57		0.9					
	E			57 01							
CNZ	IP	20	56	34.5	D	0.7	0.61	77		3.9	3.9
	E			54							
	E(S)			57		-0.7					
	E			57 02							
	E			09							
KRP	EP	20	56	39		-0.7	1.54	23		3.8	
	E			53							
TUA	EP	20	56	43		-0.2	1.92	75		4.1	4.3
	E			57 09							
	E(S)			13		-1.2					
WEL	IP	20	56	45	D	1.7	1.94	180	4.5		
	E			46							
	E			57 15							
	ES			16		1.5					
COB	EP?	20	56	47		-0.3	2.34	221	4.3		
	E			48							
	ES			57 21		-0.6					
GNZ	P	20	56	50	D	-0.3	2.62	76		4.3	4.5

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
	E			57 18							
	E			22							
	E			29							
KAI	E	20	57	13			4.08	218	4.5		
	E			15							
	ES?			55		-2.2					
	E			57							
GPZ	EP	20	57	15		0.9	4.63	200	5.3		
	ES			58 08		-1.4					
ROX	E	20	57	46			7.34	212			
	E			59 10							
MNH	E	20	59	29			8.32	217			
	E(S)			34		0.4					
MNH	E	20	58	00			8.32	217			
	E			02							
	E			23							
	E(S)			59 34		0.4					
FEB 03	H M S	18 48	02.0							64/ 035	
	+-	0.4								2.9	
	H M S	38.95S	175.76E		12 KM	SE	1.5			AVG MAG	2.9
		0.03	0.02		R						
CNZ	I(P*)	18	48	08.0	U	-0.2	0.30	214			
	E			10							
TON	E(P*)	18	48	08		-0.3	0.30	215	2.5		
	E			10							
	E(S*)			13		0.2					
KRP	EP	18	48	20		-2.3	1.04	350			
	E(PG)			23		-0.3					
	E(SG)			37		-0.4					
TUA	E(P*)	18	48	23		1.2	1.09	83			
	E(S*)			39		2.5					
TNZ	E(P*)	18	48	24		2.0	1.10	258			3.3
	E(PG)			25		0.6					
	E			30							
	E(SG)			40		0.6					
GNZ	E(PG)	18	48	38		-0.3	1.79	81			
	E			43							
	E(SG)			49 01		-1.5					
	E			10							
WEL	E(SG)	18	49	23		-1.7	2.45	198			
FEB 04	H M S	02 18	18.6							64/ 036	
	+-	0.4								3.7	
	H M S	40.42S	174.38E		12 KM	SE	1.7			AVG MAG	3.7
		0.02	0.03		R						
WEL	IP	02	18	35.0	U	-2.2	0.92	162		3.7	4.5
	E(PG)			37		-0.3					
	ES			46		-4.9*					
	E(S*)			48		0.2					
	E(SG)			50		0.3					
TNZ	EP?	02	18	40		-1.3	1.23	360			3.9
	S			56.7		-1.4					
	I			19 40.7							
COB	EP	02	18	42.5		-1.3	1.42	241	3.8		
	E(PG)			47		-0.4					
	S			19 00.5		-2.0					
	E(S*)			03		0.1					
TON	EP	02	18	44		-0.9	1.50	37	3.5		
	ES			19 03		-1.4					
	E			17							
CNZ	P	02	18	44	D	-1.0	1.51	37		3.9	3.0
	E			19 06							
KRP	EP	02	19	01		0.6	2.64	20			3.0
	EP*			06		1.1					
	E(S)			26		-5.8*					
	E(S*)			43		3.3					

TUA	EP*	02 19 08		2.6	2.67	54				3.5
	E	10								
	EPG	12		-0.7						
	ES*	40		-0.6						
KAI	ES	02 19 42		0.2	3.07	226		3.9		
	E(SG)	20 06		3.9						
GNZ	E(S)	02 19 49		1.1	3.33	59				3.6
FEB 04										
	H M S	40.17S	175.13E	12 KM	SE	1.7		AVG MAG		64/ 037
	+-	0.03	0.04	R				3.7		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
TON	EP	15 48 16		-0.2	1.01	18		3.5		
	E	21								
	E(SG)	30		-0.7						
	E(S)	31		0.2						
CNZ	IP	15 48 15.8	D	-0.5	1.02	18				
	E	32								
TNZ	EP	15 48 17.5		-0.4	1.14	329				4.1
	EP*	20		3.0						
	ES	33		-0.8						
	E	45								
WEL	P	15 48 16.5		-1.5	1.15	194		3.8		4.3
	ES	31		-3.0						
COB	EP?	15 48 30		0.2	2.04	243		3.4		
	E	31								
	ES	53		-1.5						
	E	57								
TUA	EP*	15 48 35		2.2	2.07	50		3.7		
KRP	E(P*)	15 48 37		0.8	2.26	8				3.1
	E(S*)	49 05		-1.0						
	E(SG)	11		-1.7						
	E	48 39								
GNZ	EP*	15 48 43		-0.8	2.71	57				3.5
	EPG	53		1.9						
	E(S*)	49 20		0.6						
KAI	E	15 49 39			3.66	229		4.0		
	E(SG)	50 03		3.3						
GPZ	ES	15 49 37		-4.6*	3.98	207				
	E	44								
FEB 06										
	H M S	39.59S	175.79E	12 KM	SE	1.2		AVG MAG		64/ 038
	+-	0.04	0.04	R				4.2		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
CNZ	IP	14 32 30.8	D	0.3	0.43	334				
TON	EP	14 32 31		0.5	0.43	333		4.0		
	E	34								
	S	38.5		-1.4						
TNZ	IP	14 32 39.7	U	0.3	1.16	290				4.1
	E	45								
	E	53								
	ES	55		-0.5						
TUA	E	14 32 43			1.31	54				
	E	45								
	E	56.5								
	E	33 05								
KRP	E	14 32 45			1.67	353				3.8
	E	52								
	E	33 01								
	E	17								
	E	24								
	E	49								
WEL	P	14 32 48	D	-0.6	1.87	204		4.1		
	E	52								
	E	33 05								
	ES	10		-1.5						

GNZ	E	17								
	E	31								
	EP	14 32 51		0.9	1.98	62				4.3
	E	33 03								
	E	18								
	E	33								
COB	EP	14 33 01		-0.1	2.77	236		4.4		
	E	03								
	E	24								
	ES	36		2.1						
	E	49								
	E	58								
ONE	E	14 33 18			3.97	343				
	E	32								
	E	48								
	E	34 23								
KAI	E	14 34 00			4.42	227		4.3		
	E	12								
	E	18								
GPZ	E	14 33 38			4.73	209		4.6		
	E	43								
	E(S)	34 13		-7.8*						
	E	14								
	E	16								
	E	33								
ROX	E	14 35 41			7.58	217				
FEB 07										
	H M S	34.14S	177.31W	305 KM	SE	0.6		AVG MAG		64/ 039
	+-	0.07	0.10	16				5.3		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
GNZ	EP	14 47 21		0.4	5.87	219				
TUA	EP	14 47 27		-0.7	6.45	222				
	ES	48 43		0.4						
ONE	E(P)	14 47 35		0.3	7.03	254				
CNZ	EP	14 47 42		-0.2	7.64	227				
	E	48 00								
	E	49 07								
TON	E	14 47 55			7.65	227		4.9		
	ES	49 08		-0.8						
TNZ	E	14 48 01			8.36	231				
	E	07								
WEL	ES	14 49 50		0.4	9.50	219		5.3		
COB	ES	14 50 12		0.1	10.51	226		5.9		
KAI	E	14 50 59			12.18	223		5.0		
FEB 08										
	H M S	32.48S	177.48W	144 KM	SE	3.3		AVG MAG		64/ 040
	+-	0.32	0.42	55				5.3		
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S		
GNZ	P	21 20 39		-0.5	7.16	210				
	E	21 00								
	E	58								
ONE	EP	21 20 44		-0.3	7.52	242				
TUA	EP	21 20 45		-1.5	7.68	213				
	E	56								
	E	21 58								
	E(S)	22 14		1.7						
KRP	E(P)	21 20 48		-1.2	7.88	225				
	E	21 05								
	E(S)	22 20		2.8						
CNZ	EP	21 21 00		-1.0	8.77	218				
	E	06								
	E	25								
	E(S)	22 39		0.5						
TON	E	21 21 10			8.78	218		5.3		
	ES	22 40		1.4						

TNZ	E(P)	21 21 08		-1.3	9.40	222															
	E	11																			
	E	15																			
WEL	E	21 21 32			10.76	213															
	E	22 12																			
	E(S)	59		-26.5*																	
	E	23 02																			
	E	49																			
	EL	24 30																			
KAI	E(S)	21 24 20		-6.1	13.34	218	5.3														
MNH	E(P)	21 22 59		5.5	17.57	217															
FEB 09	H M S	08 33 58.4	40.48S	173.38E	191 KM	SE	1.5	AVG MAG	4.5											64/ 041	
		+ 0.8	0.06	0.07	9																
	H M S	08 34			DIR	RES	DIST	AZ	W-A	W P	W S										
WEL	IP	08 34	32.0	USE	2.1	1.32	128	5.2													
	E	50																			
	E	52																			
	S	54		-0.3																	
TNZ	IP	08 34	33	D	1.4	1.51	31				4.3										
	E	55																			
	E(S)	57		-0.3																	
	E	58																			
	E	35 07																			
TON	EP	08 34	39		1.4	2.10	53	4.3													
	ES	35 08		0.1																	
	E	12																			
	E	46																			
KAI	P	08 34	44	SW	1.5	2.52	215	5.4													
	S	35 15		-1.4																	
KRP	E	08 35	02			3.06	34				2.8										
	ES	26		-1.7																	
	E	38																			
TUA	E(P)	08 34	54		1.5	3.36	61				4.5										
	E	35 26																			
	ES	34		-0.3																	
GNZ	EP	08 35	01		0.1	4.03	64				4.7	4.9									
	I	03																			
	E	43																			
	E(S)	47		-2.3																	
	E	48																			
MNH	EP?	08 35	36.0	U	-0.3	6.76	217														
	I	36.4																			
	E	36 48																			
	ES	51		-1.5																	
FEB 09	H M S	15 42 43.6	40.16S	176.84E	12 KM	SE	2.2	AVG MAG	3.7												64/ 042
		+ 0.9	0.04	0.05	R																
	H M S	15 43			DIR	RES	DIST	AZ	W-A	W P	W S										
TUA	P	15 43	07.5		-0.7	1.37	10														
	ES	23		-3.3																	
CNZ	IP	15 43	07.8	U	-0.5	1.38	313														
	E	22																			
TON	EP	15 43	07.8		-0.5	1.38	313	3.5													
	E(PG)	15		3.4																	
	E	17																			
	E	21																			
	ES	23		-3.7																	
	E(SG)	34		3.7																	
GNZ	EP	15 43	13		-0.4	1.77	32				4.1										
	E	27																			
	E	29																			
	E	31																			
	E(S)	37		1.6																	
GNZ	E	15 43	50			1.77	32														

WEL	EP	15 43 16		0.4	1.94	234	3.4														
	E(PG)	25		2.2																	
	E	29																			
	ES	39		-0.2																	
	E	58																			
TNZ	EP	15 43 18		-0.2	2.13	296		4.1	3.8												
	EP*	23		1.9																	
	EPG	26		-0.7																	
	E	29																			
	ES	43		-0.9																	
	E(S*)	46		-3.3																	
	E(SG)	50		-5.5*																	
KRP	EP	15 43 22		-0.6	2.45	335		2.8													
	EP*	30		3.4																	
KAI	ES	15 44 46		-0.7	4.72	238		4.1													
MNH	ES	15 46 23		-0.7	8.79	227															
FEB 10	H M S	10 56 03.7	39.32S	177.42E	12 KM	SE	2.0	AVG MAG	4.1												64/ 043
		+ 1.0	0.04	0.05	R																
	H M S	10 56			DIR	RES	DIST	AZ	W-A	W P	W S										
TUA	I(P*)	10 56	14.0	D	-0.2	0.55	338				4.6	4.7									
	E(S*)	20		-1.9																	
GNZ	E(P*)	10 56	21		2.2	0.82	35				4.4	4.5									
	E	22																			
	E	24																			
	E	27																			
	E(SG)	39		7.3*																	
CNZ	IP	10 56	29	D	-0.4																

FEB 16		H	M	S	38.70S	176.07E	177 KM	SE	1.5	AVG MAG	3.8	64/ 048
		+	-	2.5	0.12	0.13	19					
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
CNZ	P	10	45	35.5	D	-0.6	0.64	219		3.1		
TUA	EP	10	45	38		0.8	0.85	97			3.8	
	ES			57		-0.7						
GNZ	E	10	45	44			1.53	88			3.8	
	E			46 00								
	E			06								
MEL	EP	10	45	58		0.9	2.77	201		4.3		
	ES			46 34		1.2						
COB	ES	10	46	49		0.1	3.50	226		3.7		
GPZ	E	10	47	35			5.62	206		4.1		
	ES			36		-1.7						

FEB 18		H	M	S	38.61S	175.77E	173 KM	SE	1.1	AVG MAG	4.2	64/ 049
		+	-	0.7	0.03	0.03	6					
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
WNZ	EP?	15	51	36		-0.5	0.26	94				
	E			37								
	E			39								
CNZ	P	15	51	39	U	1.2	0.61	197			3.7	
	E			52 07								
TON	EP	15	51	39		1.2	0.62	197		3.2		
	E			43								
	E(S)			58		1.2						
	E			52 10								
KRP	IP	15	51	38	U	-0.4	0.71	345			4.3 4.0	
	E			43								
	E			53.5								
	E(S)			56		-1.8						
TUA	P	15	51	41		-0.1	1.10	101			4.3 4.8	
	E			50								
	E			55								
	E			57								
	S			52 02		-0.6						
TNZ	P	15	51	44	U	1.8	1.23	242			4.0 3.5	
	E			51								
	E(S)			52 09		4.3*						
GNZ	P	15	51	47.5		0.0	1.76	92			4.4 4.7	
	E			56								
	E			52 04								
	E			09								
	E			11								
	E(S)			14		0.0						
MEL	P	15	52	00	D	0.6	2.78	196			4.7	
	E			13								
	E			27								
	S			34		-1.0						
	E			36								
ONE	EP	15	52	03		0.3	3.05	338				
COB	EP	15	52	06.5		-0.6	3.40	222			4.6	
	E			47								
	E(S)			49		0.3						
KAI	ES	15	53	27		-1.5	5.13	219			4.6	
	E			34								

FEB 20		H	M	S	40.36S	174.05E	110 KM	SE	1.4	AVG MAG	4.0	64/ 051
		+	-	0.9	0.04	0.04	10					
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
MEL	IP	00	54	52.0	U	1.3	1.07	150		3.9		
	S			55 07.2		-0.4						
TNZ	P	00	54	53.5	D	1.2	1.20	12			3.7 4.1	

		H	M	S	58 06							
		+	-		09							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
	E(S)			11								
	E			13								
	E			30								
COB	P	00	54	54	W	1.3	1.24	234		5.3		
	E			55 05								
	S			12							1.0	
TON	E	00	55	00			1.63	45				
	E			02								
	E			08								
	E(S)			19		0.0						
	E			21.5								
	E			43								
CNZ	EP	00	54	59		1.6	1.64	45			3.8	
	E			55 02								
	E			14								
	E			23								
KRP	EP	00	55	11		-0.3	2.69	26			3.6 3.8	
	E			35								
	ES			43		-0.7						
TUA	E(S)	00	55	47		-0.5	2.85	58			3.6	
KAI	E	00	55	19			2.94	222		4.1		
	S			47		-2.5						
GNZ	E(P)	00	55	23		0.6	3.52	62			4.1	
	E			55								
	ES			56 02		-1.4						

FEB 21		H	M	S	39.18S	177.23E	12 KM	SE	1.9	AVG MAG	4.2	64/ 051
		+	-	0.8	0.03	0.06	R					
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
TUA	I(P*)	17	26	29.5	D	0.4	0.38	350				
	E(S*)			35		0.5						
GNZ	I(P*)	17	26	38	D	1.4	0.81	49			4.8	
	E			44.5								
	E			57								
CNZ	IP	17	26	45.0	U	-0.4	1.31	269				
TON	EP	17	26	45		-0.4	1.32	268			4.0	
	E(P*)			48		2.8						
	E			54								
	ES			27 03		-0.1						
KRP	EP	17	26	51.5		-0.6	1.83	313			3.9 3.7	
	EP*			54		0.1						
	E(PG)			56		-2.6						
	E(SG)			27 23		-0.2						
TNZ	EP	17	26	58		0.6	2.22	269			4.1 3.9	
	E(P*)			27 02		1.4						
	E			50								
MEL	IP	17	27	03.0	D	-2.9	2.83	221			4.0 4.4	
	EP*			12		1.0						
	EPG			17		-1.8						
	ES			37		-2.2						
	E(SG)			28 01		4.1						
COB	EP	17	27	19		-1.8	3.94	240			4.0	
	E			27								
	EP*			32		1.9						
	E(S*)			28 17		-4.6*						
KAI	E(S)	17	28	45		0.7	5.54	231			4.3	
	E			53								
GPZ	S	17	28	42.5		-5.1*	5.68	216			4.5	
MNH	E(S)	17	30	21		-1.9	9.69	224				
	E			26								

FEB 22		H	M	S	37.35S	176.47E	275 KM	SE	1.4	AVG MAG	5.9	64/ 052
		+	-	0.9	0.04	0.07	7					
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	

GNZ	P	18 43 11.6	0.7	1.37	120	4.3	4.2													
	S	34	-1.3																	
CNZ	EP	18 43 13	1.4	1.45	211	2.9	2.9													
	ES	38	1.4																	
TON	ES	18 43 38	1.3	1.45	211	3.0														
WEL	P	18 43 36	-0.0	3.58	202	4.3														
	S	44 19	-0.8																	
COB	ES	18 44 34	-1.4	4.27	222															
GPZ	ES	18 45 21	-4.5*	6.43	206	4.6														
64/ 071																				
MAR 08	H M S	01 35 47.8	44.32S	167.76E	12 KM	SE	2.7	AVG MAG	6.4											
		+ 1.4	0.06	0.10	R															
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S											
MNW	P*	01 36 14.7		0.8	1.47	184														
	I	15.8																		
ROX	IP*	01 36 16	USE	-0.2	1.60	137														
	S*	36		-1.5																
KAI	PN	01 36 36.7		-0.4	3.20	57														
	I(PG)	50		-2.6																
GPZ	EPN	01 36 40		-2.1	3.58	82	6.2													
	IP*	54		3.9																
	S*	37 41		4.0																
COB	PN	01 36 58.0		-1.7	4.88	50	6.4													
	SN	37 53		-1.8																
WEL	IPN	01 37 12	U	-2.3	5.98	62	6.3													
	I	18																		
	ESN	38 17		-4.0																
	E	33																		
	E	36																		
	E	53																		
TNZ	EPN	01 37 30		0.2	7.13	46														
	E	37																		
	EP*	56		5.2																
CNZ	EPN	01 37 37		-1.0	7.75	51														
	I	40																		
	E	38 54																		
WNZ	E(P*)	01 37 53		5.7	8.45	51														
	E(P*)	38 12		-1.5																
	E	39 07																		
	E	25																		
KRP	PN	01 37 50		-0.2	8.67	45														
	I	38 09																		
	E	39 37																		
TUA	EPN	01 37 54.5		0.8	8.93	55														
	E	38 00.5																		
	E	14																		
	E	39 42																		
GNZ	EPN	01 37 59		-2.9	9.56	57														
	E	38 05																		
	E	15																		
	ESN	39 47		0.9																
ONE	EPN	01 38 08		1.4	9.92	33	6.5													
	E	14																		
	SN	39 54		-0.4																
MCO	EP*	01 38 56		-12.8*	11.68	206														
64/ 072																				
MAR 09	H M S	00 35 26.1	45.33S	167.53E	33 KM	SE	0.9	AVG MAG	4.4											
		+ 0.8	0.03	0.05	R															
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S											
MNW	IP*	00 35 36		0.0	0.46	173														
	ES*	43		-0.1																
ROX	P*	00 35 48		-1.2	1.26	97	4.1	4.3												
	S*	36 07		0.7																
KAI	EPN	00 36 25		1.4	3.96	46	4.4													
	E	28																		

GPZ	SN	37 15		7.3*																
	E	00 36 22			4.00	68	4.2													
	ESN	39																		
COB	E	37 09		0.2																
	E	00 36 48			5.69	44	4.8													
	E(SN)	37 49		-0.6																
	E	54																		
WEL	ESN	00 38 12		-0.4	6.64	55	4.6													
64/ 074																				
MAR 09	H M S	11 52 14.5	45.08S	167.74E	33 KM	SE	0.5	AVG MAG	4.0											
		+ 0.6	0.02	0.02	R															
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S											
MNW	IP*	11 52 28		-0.5	0.71	187	4.2													
	S*	39		0.5																
ROX	P*	11 52 36		-0.2	1.18	110	3.7	4.2												
	S*	52		-0.2																
KAI	E	11 53 30			3.68	47														
GPZ	E(SN)	11 53 52		0.3	3.78	70														
	E(S*)	54 10		0.1																
64/ 075																				
MAR 10	H M S	06 09 28.3	40.07S	174.27E	94 KM	SE	1.4	AVG MAG	3.4											
		+ 1.0	0.04	0.06	14															
	H M S		DIR	RES	DIST	AZ	W-A	W P	W S											
TNZ	E	06 09 54			0.88	6														
	ES	10 02		0.4																
WEL	EP?	06 09 33		-19.1*	1.28	163	3.4													
	S	10 10		0.1																
TON	EP	06 09 52		-0.4	1.31	49	3.2													
	S	10 10		-0.5																
CNZ	P	06 09 53		0.5	1.31	49	3.6	3.7												
	S	10 11		0.4																
COB	E(P)	06 09 58		2.5	1.55															

		TUA	ES*	08 57 46	-0.0	0.87	136	3.3	3.2					
			E	58 09										
		H M S		44.39S 167.77E	33 KM	SE	0.9	AVG MAG	4.1	64/ 098				
MAR 29		09 01 20.7		0.03 0.04	R									
		+- 0.8			DIR	RES	DIST	AZ	W-A	W P	W S			
	MNM	P*		09 01 45		-1.1	1.40	184		4.1	4.2			
		S*		02 06		1.1								
	ROX	P*		09 01 48		-0.6	1.55	135		3.8	4.1			
		S*		02 09		-0.4								
	KAI	EP*		09 02 18		0.5	3.24	56		4.0				
		S*		02 59		-1.0								
	GPZ	EP*		09 02 24		0.6	3.59	81		3.9				
		E		49										
		ES*		03 11		0.6								
	COB	ESN		09 03 31		5.2*	4.93	50		4.3				
		ES*		51		0.4								
		H M S		41.91S 174.17E	33 KM	SE	1.9	AVG MAG	3.9	64/ 098				
MAR 31		05 55 32.9		0.04 0.06	R									
		+- 0.7			DIR	RES	DIST	AZ	W-A	W P	W S			
	WEL	P*		05 55 47.8		-0.0	0.77	36		3.8				
		S*		59.5		0.9								
	COB	P*		05 55 58		0.4	1.36	307		3.4				
		ES*		56 17		1.1								
	GPZ	EP*		05 56 10		-0.2	2.11	212		3.6				
		S*		37		-1.1								
	KAI	E		05 56 13			2.14	252						
		E		45										
	TNZ	E(P)		05 56 12		-1.6	2.73	3		3.9	3.7			
		EP*		20		-0.9								
		ES*		56		-0.8								
		E		57 10										
	CNZ	EPN		05 56 19		3.0	2.91	22		4.5	4.2			
		I(P*)		23		-0.9								
		S*		57 09		6.9*								
	KRP	EPN		05 56 36		3.4	4.12	15		4.2	4.0			
		EP*		45		0.4								
		ES*		57 35		-3.5								
		H M S		42.34S 173.13E	33 KM	SE	1.6	AVG MAG	3.2	64/ 098				
MAR 31		09 32 34.0		0.03 0.04	R									
		+- 0.6			DIR	RES	DIST	AZ	W-A	W P	W S			
	COB	EP?		09 32 55		0.1	1.29	346		3.2				
		S		33 10.5		-0.1								
	KAI	EP*		09 32 58		0.5	1.29	261		3.1				
		S*		33 15		0.0								
	GPZ	EP*		09 32 59		-0.4	1.40	195		3.0				
		S*		33 18		-0.2								
	WEL	EP*		09 33 03		0.0	1.61	50		3.1				
		ES		30		11.6*								
	TNZ	E(P*)		09 33 34		2.4	3.29	17			3.5			
		ES*		34 12		-2.8								
	CNZ	EP*		09 33 36		-1.5	3.63	31		3.4	3.2			
		ES*		34 27		2.0								
		H M S		40.85S 172.90E	12 KM	SE	2.4	AVG MAG	2.9	64/ 098				
MAR 31		22 47 32.9		0.07 0.08	R									
		+- 1.3			DIR	RES	DIST	AZ	W-A	W P	W S			
	COB	P*		22 47 37.5		-1.0	0.27	208		2.9				
		S*		41		-1.5								
	WEL	ES*		22 48 20		1.0	1.48	108		2.6				
	KAI	ES*		22 48 37		2.0	2.01	213		2.9				

		TNZ	ES*	22 48 37	1.8	2.02	35	3.3						
		CNZ	ES*	22 48 51	-2.3	2.62	52	3.0						
		H M S		47.21S 166.06E	33 KM	SE	2.6	AVG MAG	4.9	64/ 098				
APR 02		19 56 20.4		0.32 0.23	R									
		+- 3.1			DIR	RES	DIST	AZ	W-A	W P	W S			
	MNM	P		19 56 45.5		-2.7	1.79	38						
		E(S)		57 12		2.9								
	ROX	EP		19 57 00.5		-2.1	2.84	54		4.8	5.0			
		E		02										
		E		31										
		E(S)		35		0.2								
		E(S*)		49		1.3								
	GPZ	E		19 57 55			5.81	55						
		E		58 40										
		E		59 13										
		E		46										
	KAI	E(P)		19 57 48		2.1	6.03	41		5.0				
		E		58 12										
		E(S)		50		-2.0								
		E		59 33										
	COB	E(P)		19 58 09		-0.4	7.77	40		4.9				
		ES		59 31		-2.7								
	TNZ	E(P)		19 58 43		3.3	10.05	40						
		E		20 00 36										
	CNZ	E		19 59 00			10.58	44						
	KRP	E		19 59 05			11.60	40						
		E		24										
		E		20 01 24										
		H M S		38.02S 176.80E	209 KM	SE	2.0	AVG MAG	4.0	64/ 099				
APR 04		14 35 57.8		0.12 0.09	R									
		+- 2.6			DIR	RES	DIST	AZ	W-A	W P	W S			
	KRP	IP		14 36 25.8	U	-2.9	1.00	275		4.3				
	GNZ	P		14 36 31		1.3	1.15	123		4.0				
		E(S)		54		-0.5								
		E		37 00										
		E		05										
		E		08										
	TNZ	EP		14 36 41		1.3	2.22	238		3.5	3.2			
		E(S)		37 14		2.0								
		E		17										
	WEL	P?		14 36 57		1.1	3.62	205		4.3				
		ES		37 40		-0.8								
	COB	ES		14 37 57		-0.8	4.39	224		4.0				
	GPZ	ES		14 38 45		-0.7	6.48	208		4.8				
		H M S		38.73S 175.71E	186 KM	SE	2.2	AVG MAG	4.5	64/ 100				
APR 05		20 15 11.9		0.11 0.09	R									
		+- 1.8			DIR	RES	DIST	AZ	W-A	W P	W S			
	CNZ	P		20 15 38.7	U	1.3	0.48	195						
		E		16 02										
	KRP	IP		20 15 38.2	U	-0.9	0.82	350		4.7	4.0			
		S		58		-2.2								
	TNZ	IP		20 15 43.7	U	2.4	1.13	246		4.2				
		E		48.5										
		E		16 06										
		E		11										
	GNZ	P		20 15 47.3		-0.4	1.81	88		4.3	4.7			
		E		16 06.5										
		S		14.5		-0.8								
	WEL	P		20 15 59.2	D	1.9	2.65	196		4.7				
		E		16 24										
		S		34.5		2.3								

COB	E	20 16 17		3.28	223	4.8														
	E	23																		
	S	47		1.4																
KAI	E	20 16 34.5		5.00	219	4.8														
	S	17 23		-1.7																
GPZ	EP	20 16 32.5		-0.2	5.47	204														
	E	37																		
	E	17 13																		
	E	32																		
	S	33.5		-2.0																
ROX	ES	20 18 37		-3.8	8.24	213														
MNW	EP	20 17 25		2.7	9.25	218														
	S	19 04.5		0.3																
	E	07																		
APR 06	H M S	06 05 32.3	39.66S 174.28E	232 KM	SE	1.7	AVG MAG	4.3												
		+ 1.2	0.08 0.08	12																
	H M S	06 06 03.5		0.3	0.48	9														
TNZ	EP	06 06 21.5																		
	E	26																		
WEL	IP	06 06 13.0	U	2.4	1.66	167	4.0													
	S	41		0.9																
COB	EP	06 06 13.5		1.3	1.85	219	4.2													
	S	42.5		-0.5																
KRP	P	06 06 12.8	D	-0.8	2.00	30	3.8													
TUA	EP	06 06 19		1.5	2.39	70	4.0	4.1												
	E	50																		
	E(S)	52		-0.5																
GNZ	P	06 06 26		0.9	3.08	72	4.7	4.4												
	ES	07 03		-3.1																
KAI	S	06 07 15		-1.5	3.59	216	4.2													
GPZ	EP	06 06 40		1.6	4.21	196	5.0													
	ES	07 29		-0.8																
MNW	ES	06 08 50		-1.7	7.83	217														
APR 07	H M S	19 54 07.2	41.73S 171.50E	12 KM	SE	1.2	AVG MAG	2.7												
		+ 1.3	0.04 0.07	R																
	H M S	19 54 22		0.1	0.80	185	2.9													
KAI	E(P*)	19 54 26																		
	E	32		-0.9																
	E(S*)	34		-0.4																
	E(SG)	34																		
COB	E(S*)	19 54 42		-0.6	1.13	56	2.6													
GPZ	E(P*)	19 54 47		2.1	2.14	157	2.7													
	ES	55 07		-0.7																
	ES*	14		0.9																
	SG	19		-0.4																
APR 09	H M S	10 55 58.7	39.21S 174.82E	219 KM	SE	1.5	AVG MAG	3.9												
		+ 1.4	0.07 0.10	11																
	H M S	10 56 29		1.4	0.34	275														
TNZ	EP	10 56 49.5		-0.4																
	S	52.5																		
KRP	EP	10 56 33		-0.5	1.40	24	3.5													
WEL	EP	10 56 42		2.4	2.07	181	3.7													
	ES	57 12		0.8																
COB	ES	10 57 18		-0.5	2.46	220	3.7													
GNZ	P	10 56 45		0.2	2.56	78														
	ES	57 19		-1.6																
GPZ	EP?	10 57 11		-0.2	4.77	199	4.5													
	E	13																		
	ES	58 06		-1.6																

APR 10	H M S	09 56 25.6	38.22S 176.51E	193 KM	SE	2.4	AVG MAG	4.0												
		+ 2.3	0.11 0.08	15																
	H M S	09 56 54.5		1.1	0.77	140														
TUA	EP	09 56 57.14																		
	E	15.5		0.6																
KRP	IP	09 56 53	D	-0.6	0.82	290	4.0	3.6												
	ES	57 12		-3.4																
	E	21																		
GNZ	EP	09 56 58		1.2	1.26	110	3.9	4.3												
	E	57 04																		
	E	16																		
	E(S)	19		-2.0																
	E	43																		
TNZ	EP	09 57 06		2.8	1.93	239	3.7	3.1												
	E(S)	36		3.8																
WEL	P	09 57 20.2		0.5	3.35	203	4.1													
	E	58 01																		
	E(S)	03		1.6																
COB	ES	09 58 17		-0.9	4.09	224	3.9													
KAI	ES	09 58 55		-2.4	5.81	221	4.4													
GPZ	EP	09 57 56		-0.2	6.21	207	4.5													
	S	59 04.5		-2.2																
APR 11	H M S	14 45 00.5	35.11S 173.94E	12 KM	SE	3.0	AVG MAG	3.9												
		+ 2.9	0.13 0.12	R																
	H M S	14 45 13.3		-2.4	0.75	153	3.8													
ONE	EPG	14 45 14																		
	E	15																		
	E(S)	28		-1.1																
	ESG	31		5.1																
KRP	EP*	14 45 53		-1.4	3.09	156	4.1	3.9												
	E	54																		
	EPG	46 01		-1.9																
	E(SG)	55		10.4*																
	E	47 36																		

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ	IP	05	19	22.6	U	1.5	1.33	157		5.3	4.6
	E			44							
	S			47.5		0.8					
TUA	EP	05	19	22.5	D	0.9	1.40	186		4.4	4.7
	E			38							
	E			40							
	E			43							
	ES			45		-2.6					
KRP	IP	05	19	23.1	D	0.4	1.53	250		4.5	
	E			32							
	E			37							
	E			42							
	E			53							
TON	E	05	19	37			2.28	218		3.6	
	ES			20 03		0.1					
ONE	EP	05	19	38		0.5	2.91	303		3.4	
	ES			20 14		-1.8					
TNZ	EP	05	19	40		2.3	2.93	232		3.9	3.6
	E(S)			20 19		2.8					
WEL	EP	05	19	54.5		-0.6	4.35	207		5.1	
	ES			20 44		-3.0					
KAI	ES	05	21	43		-1.3	6.84	220		4.7	
GPZ	E	05	20	32			7.22	208		4.9	
	ES			21 48		-5.1*					
	E			58							
APR 21	H M S	13	46	07.6							64/ 115
	+ -	1.1									3.9
	H M S	39.28S		178.43E			12 KM	SE	1.1		AVG MAG
		0.03		0.07			R				
GNZ	IP*	13	46	21.2	U	0.4	0.71	333			
TUA	IP*	13	46	25.5		-2.0	1.10	295			
	E(S*)			32		-10.4*					
CNZ	EP	13	46	43.5		-0.2	2.24	271		3.9	
	EP*			47		-0.0					
	EPG			53		0.1					
TON	EP*	13	46	48		0.9	2.25	271		3.5	
	PG			53.5		0.4					
	ES			47 11		0.3					
KRP	EP	13	46	49.0		-0.4	2.64	300		3.8	3.5
	P*			52.5		-1.3					
	EPG			47 02		1.0					
	E(S)			21		0.3					
TNZ	EP	13	46	57		0.9	3.15	270		3.8	
	E			47 10							
WEL	EP	13	47	02		1.8	3.44	233		3.9	
	PG			14.5		-2.8					
	E			25							
	ES			40		0.1					
	E			44							
COB	ES	13	48	11		0.3	4.72	246		3.9	
GPZ	ES	13	48	46		0.1	6.19	223		4.2	
KAI	ES	13	48	47		0.2	6.23	236		4.5	
APR 22	H M S	17	29	41.4							64/ 111
	+ -	0.4									4.7
	H M S	37.51S		177.55E			155 KM	SE	0.6		AVG MAG
		0.02		0.02			3				
GNZ	IP	17	30	09	U	0.5	1.19	162		5.2	5.2
	E			20							
	E(S)			29		-0.4					
	E			41							
TUA	EP	17	30	10.3		0.4	1.34	193			5.0
	E			15							
	E			23							
	E			27							

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
	E(S)			32							0.2
	E			37							
KRP	IP	17	30	13.8	D	0.6	1.65	255			4.4
	E(S)			37		-0.6					
TNZ	EP	17	30	32	D	2.4*	3.00	235			4.5
ONE	EP	17	30	30.5		-0.3	3.09	303		3.7	
	E			45							
	E(S)			31 09		0.4					
	E			37							
WEL	EP	17	30	46		-1.1	4.35	209		4.9	
	ES			31 38		0.3					
COB	E(P)	17	30	57.5		-0.4	5.17	225		4.6	
	ES			31 57		-0.2					
KAI	E	17	31	25			6.88	221		4.9	
	ES			32 38		-0.1					
GPZ	E	17	31	25			7.22	210		5.0	
	E			32 42							
	ES			47		0.8					
MNW	EP	17	32	16.5		-0.1	11.11	219			
APR 23	H M S	08	04	31.4							64/ 117
	+ -	1.6									3.0
	H M S	40.87S		175.94E			12 KM	SE	2.0		AVG MAG
		0.05		0.08			R				
WEL	EP*	08	04	47		-2.1	0.98	245		2.7	
	E(PG)			54		2.8					
	E(S*)			05 00		-2.3					
	E(SG)			04		-0.4					
TON	E	08	05	11			1.69	350		2.8	
	E(SN)			21		-0.5					
CNZ	E(P*)	08	05	02		0.5	1.70	350			3.2
	E(PG)			06		0.2					
	E(S*)			21		-3.0					
TNZ	EP*?	08	05	09		1.2	2.07	324			3.0
	E(PG)			13		-0.2					
	E(SG)			42		0.9					
	E			53							
COB	ES	08	05	38		-1.1	2.43	264		3.0	
	S*			48.5		2.3					
KRP	E(P*)	08	05	26		2.9	2.96	354		3.2	
	EPG			30		-1.3					
APR 23	H M S	11	46	53.6							64/ 118
	+ -	8.7									5.5
	H M S	31.54S		177.30W			269 KM	SE	7.0		AVG MAG
		0.65		1.26			149				
RAO	EP	11	47	40		-1.0	2.35	347			
	ES			48 08		-10.0					
GNZ	E(P)	11	48	52		3.7	8.05	207			
	E			50 18							
ONE	EP	11	48	53		3.7	8.13	236			
TUA	P	11	48	57		2.4	8.55	211			
	E			50 24							
	E(S)			30		0.4					
KRP	EP	11	48	58		1.9	8.67	221			
	E			50 36							
WEL	ES	11	51	31		-8.0	11.63	211		5.7	
GPZ	E	11	51	53			14.50	210		5.3	
	E			52 01							
	E(S)			36		-6.6					
	E			39							
APR 24	H M S	08	05	12.7							64/ 119
	+ -	1.1									4.3
	H M S	37.56S		176.63E			297 KM	SE	1.4		AVG MAG
		0.06		0.07			7				

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KRP	IP	08 05	52.5		U	-0.2	0.94	247		4.1	3.3
	E(S)	06 25				1.1					
TUA	IP	08 05	55		D	0.2	1.31	162		4.9	4.4
	ES	06 26				-1.4					
GNZ	IP	08 05	57		U	0.7	1.54	135		5.2	4.7
	E	06 26									
	E(S)	29				-1.0					
CNZ	IP	08 05	59.5			1.2	1.85	207		3.6	3.2
	E	06 16									
	E(S)	34				0.2					
TON	EP	08 06	00			1.7	1.85	207			
	E	39									
TNZ	EP	08 06	04.5			1.6	2.40	227		4.3	3.3
	E	29									
	E(S)	47				4.9*					
ONE	EP	08 06	02			-2.3	2.55	314			
WEL	EP?	08 06	18.5			-0.6	3.99	201	4.7		
	E	20									
	ES	07 12				0.9					
COB	E	08 06	37				4.64	219	4.4		
	ES	07 23				-1.2					
KAI	ES	08 07	59			-2.1	6.37	217	4.6		
GPZ	EP	08 06	53			0.3	6.84	205	4.9		
	E	08 10									
	E(S)	12				0.9					
											64/ 121
APR 24		H M S									
		09 05 43.4	38.40S	175.68E			204 KM	SE 2.0		AVG MAG	4.1
		+ - 1.7	0.05	0.07							
			H M S		DIR	RES	DIST	AZ	W-A	W P	W S
KRP	EP	09 06	13		D	1.9	0.49	347			
	E(S)	33				0.6					4.1
TUA	E	09 06	18				1.22	110			
	ES	38				-2.1					
TNZ	EP	09 06	19			3.1	1.28	232		3.3	
	E	41									
	E	45									
GNZ	EP	09 06	23			1.9	1.85	98		4.3	4.3
	E	44									
	E(S)	49				-1.1					
ONE	E(S)	09 07	07			-2.3	2.83	338	3.4		
WEL	P	09 06	35			1.6	2.96	193	4.2		
	E	07 05									
	ES	12				-0.1					
COB	S	09 07	23.5			-0.2	3.51	219	4.3		
KAI	ES?	09 08	02			-0.7	5.25	217	4.5		
	E	11									
GPZ	EP	09 07	08			-0.4	5.76	202	4.7		
	E	08 10									
	E(S)	12				-2.5					
											64/ 121
APR 27		H M S									
		09 20 19.8	41.46S	175.26E			12 KM	SE 1.2		AVG MAG	3.4
		+ - 0.8	0.03	0.04							
			H M S		DIR	RES	DIST	AZ	W-A	W P	W S
WEL	IPG	09 20	29.5		DNE	1.1	0.41	295		3.8	
	SG	35				0.9					
COB	E(PG)	09 20	59			-0.1	1.94	280		3.0	
	E	21 03									
	ES	14				-1.5					
	ES*	19				-0.8					
TON	E(SN)	09 21	25			1.6	2.26	6	3.2		
TNZ	E(P)	09 20	58			0.3	2.37	343			3.3
	E	21 11									
	ES*	28				-4.7*					
	ESG	40				0.3					

GPZ	ES	09 21	41			0.5	2.95	220		3.2	
KRP	EP*	09 21	20			-1.4	3.54	4		3.4	3.5
	E	25									
	ES*	22 07				-0.8					
											64/ 122
APR 27		H M S									
		09 47 10.6	41.37S	175.17E			12 KM	SE 2.4		AVG MAG	3.3
		+ - 2.6	0.09	0.09							
			H M S		DIR	RES	DIST	AZ	W-A	W P	W S
WEL	IPG	09 47	18		DNE	0.7	0.31	286		3.5	
	SG	23.5				1.7					
COB	E(PG)	09 47	47.5			-0.7	1.86	278		3.0	
	ES	48 03				-1.4					
	ES*	08				-0.1					
TNZ	E(P)	09 47	46.5			-0.6	2.27	344			3.5
	E	53									
	ES*	48 16				-4.4					
	ESG	30				2.9					
GPZ	E	09 48	29				2.98	218		3.2	
	E	31									
KRP	E(P*)	09 48	13			2.2	3.46	5		3.4	3.3
	E	08									
	E	50									
	ES*	56				-0.1					
											64/ 123
APR 29		H M S									
		08 46 30.7	38.89S	175.88E			167 KM	SE 1.8		AVG MAG	3.7
		+ - 1.9	0.09	0.09							
			H M S		DIR	RES	DIST	AZ	W-A	W P	W S
TON	E	08 46	56				0.41	220		3.3	
	ES	47 11				-0.5					
	E	17									
TUA	E(P)	08 46	58			0.8	1.00	86			4.2
	E	47 12									
	ES	17				-0.6					
KRP	IP	08 46	56		D	-1.2	1.00	344		4.1	3.2
	E	47 15									
	E	24									
TNZ	EP	08 47	00			1.0	1.20	255			3.4
	E	22									
	E	31									
GNZ	E	08 47	06				1.69	82			
	E	13.5									
	E	28									
	E	34									
WEL	E	08 47	16				2.54	199		3.9	
	ES	49				2.2					
COB	ES	08 48	03			0.3	3.26	227		3.9	
GPZ	ES	08 48	50			-1.9	5.38	206		4.0	
											64/ 124
MAY 02		H M S									
		02 27 59.9	45.05S	167.64E			33 KM	SE 1.1		AVG MAG	5.0
		+ - 0.6	0.03	0.04							
			H M S		DIR	RES	DIST	AZ	W-A	W P	W S
MNW	IP*	02 28	14			-0.2	0.73	181			
	ES*	25				0.5					
ROX	IP*	02 28	22.3			-0.6	1.26	110			
	S*	40				0.1					
GPZ	EPN	02 28	54			-1.8	3.84	71		4.7	
	I	57									
	E	29 35									
	ISN	40				1.4					
COB	EPN	02 29	17			-0.5	5.44	45		5.0	
	SN	30 18				0.6					
WEL	EP	02 29	30			-0.9	6.43	57		5.2	
	S	30 40				-1.0					
TNZ	EPN	02 29	49			0.9	7.71	43			

		H	M	S	RES	DIST	AZ	W-A	W P	W S	AVG MAG
KRP		02	30	10	1.3	9.26	42				5.3*
ESN		31	17								5.3*
EPN		02	30	10	1.3	9.26	42				5.3*
E		18									5.3*
E		32	15								5.3*
MAY 02		07	17	36.3	0.07	0.06	9				64/ 125
GNZ		IP	07	17	59.0	U	0.2	0.82	160	4.7	5.1
E		18	08								4.5
S		15									4.5
TUA		P	07	18	01		0.5	1.02	203	4.5	4.6
S		20									4.2
KRP		IP	07	18	06.8	D	-0.8	1.69	268	4.2	3.6
S		20									4.0
TNZ		ES	07	18	25		-0.4	2.89	242	4.0	
(P)		31									4.6
WEL		E	07	18	29		-0.3	4.08	212	4.6	
P		29									4.4
S		19	26				0.1	4.99	228	4.4	
COB		ES	07	19	46		-1.5	4.99	228	4.4	
GPZ		ES	07	20	29		-5.9*	6.95	212	4.8	
MAY 02		10	06	11.0	0.21	0.07	R				64/ 121
KRP		P*	10	06	25		-0.2	0.72	221	3.7	3.8
S*		36					0.5				3.6
TUA		EP*	10	06	39		-1.3	1.63	151	3.5	3.3
GNZ		(P*)	10	06	47		1.3	1.95	131	3.5	3.3
E		58									3.6
TNZ		EP*	10	06	51		-0.2	2.27	217	3.7	3.8
MAY 03		12	38	13.4	0.05	0.06	R				64/ 127
WEL		IP*	12	38	24.7	DE	1.0	0.54	246	4.0	
S*		33.2					1.9				4.0
COB		EP*	12	38	48		-1.2	2.03	269	3.8	
ESN		39	11				-0.3				4.0
E		14									4.2
TNZ		P	12	38	47		0.2	2.04	337	4.0	4.2
S*		39	16				-0.4				4.0
TUA		EP*	12	39	01		1.7	2.62	31	4.0	
KRP		EPN	12	38	59		-2.8	3.14	2	4.3	4.1
IP*		39	07				-1.2				3.9
ES*		50					0.6				3.9
GNZ		EPN	12	39	02		0.1	3.14	40	3.9	
EP*		10					1.7				3.7
E		28									3.7
GPZ		EP*	12	39	12		0.5	3.33	217	3.7	
ESN		40					-3.0				3.8
KAI		EPG?	12	39	18		-2.8	3.33	243	3.8	
ESN		47					4.0				4.1
E		40	13								4.1
MAY 04		21	04	47.2	0.00	0.00	R				64/ 120
MNH		IP	21	05	03.3		-0.0	0.94	169	4.2	4.1
S		15.2					-0.0				4.2
ROX		P	21	05	11.2		0.0	1.51	115	4.2	4.0
S		29.3					0.0				4.0
GPZ		E	21	06	25			3.97	75	3.97	75

		H	M	S	RES	DIST	AZ	W-A	W P	W S	AVG MAG
MAY 05		18	03	28.3	0.07	0.07	8				64/ 129
TON		EP	18	03	54.8	DIR	1.3	0.39	85	4.7	5.1
IS		04	13				0.0				5.1
CNZ		IP	18	03	54.2	U	0.6	0.40	85	4.7	5.1
S		04	12				-1.0				5.1
TNZ		P	18	03	54.6	U	0.6	0.51	276	4.6	4.8
WNZ		P	18	03	57		0.0	1.03	54	5.0	4.8
(S)		04	22				2.8				4.6
KRP		IP	18	03	59.0	D	-0.8	1.37	17	4.6	4.5
ES		04	21				-3.2				4.5
TUA		IP	18	04	03.7	D	0.7	1.70	76	5.2	5.5
S		29					-0.8				5.5
WEL		IP	18	04	09.1	USE	2.4	2.06	186	5.3	
S		37					0.6				5.3
GNZ		IP	18	04	10.8		0.2	2.40	77	5.5	5.7
E		33									5.7
S		41					-2.3				5.3
COB		EP	18	04	14		1.5	2.55	223	5.3	
S		46.5					-0.1				5.3
ONE		E	18	04	14			3.50	351	4.0	
E		43									4.0
KAI		EP	18	04	38		4.1	4.28	219	5.5	
S		05	23				-1.6				5.5
GPZ		P	18	04	42		1.5	4.80	201	6.0	
S		05	33.3				-3.2				6.0
ROX		P	18	05	16		-0.3	7.53	212		
S		06	35				-5.6*				212
MNH		EP	18	05	28		-1.3	8.53	218		
S		07	02				-1.9				218
MAY 06		20	31	28.5	0.33	0.75	93				64/ 130
RAO		EP	20	32	27		-1.3	3.59	354		5.5
ES		33	13				-1.8				5.5
GNZ		EP	20	33	12		4.0	6.85	211		
E		31									211
ONE		EP	20	33	23		8.6	7.36	244		
TUA		P	20	33	19		4.2	7.38	215		
S		34	37				-1.0				215
KRP		EP	20	33	11		-6.9	7.63	226		
E		29									226
TNZ		E	20	33	49			9.14	224		
E		34	03								224
WEL		E	20	35	26			10.46	214	5.9	
S		44					-3.8				5.9
COB		LR	20	36	36		0.8	11.35	221	5.4	
S		09					-1.5	13.06	219	5.3	
KAI		ES	20	36	45		-1.2	13.32	213	5.5	
GPZ		ES	20	36	51		-1.2	13.32	213	5.5	
MAY 07		00	45	00.4	0.07	0.07	24				64/ 131
WNZ		P	00	45	11		0.0	0.23	280		4.2
TUA		IP	00	45	14.1	D	-0.2	0.61	103		4.2
E		20									4.2
E		29									4.1
CNZ		P	00	45	17.0		-0.1	0.85	231		4.7
TON		EP	00	45	18		0.8	0.85	231	3.1	3.5

		H	M	S	DIR	RES	DIST	AZ	W-A	W	P	H	S
KRP	IP	17	23	44.0	D	-0.2	1.47	17	4.8	4.9			
	S		24	05		-2.0			5.0	5.0			
TUA	P	17	23	48.2	D	1.0	1.76	73					
	S		24	09.5		-3.0							
WEL	IP	17	23	52.3	USE	2.9	1.96	185	4.8	4.4			
	S		24	18		1.5							
GNZ	P	17	23	56.1	D	0.5	2.46	75	5.5	5.6			
	S		24	27		-0.2							
ONE	ES	17	24	11		0.9	3.59	352	4.5				
	S			53		0.0							
KAI	EP	17	24	20		2.1	4.19	219	5.4				
	S		25	06		-0.9							
GPZ	EP	17	24	25		0.3	4.70	201	5.8				
	S		25	16		-2.9							
ROX	EP?	17	25	01		-0.1	7.43	213					
	S		26	19		-5.4*							
MNW	EP	17	25	14		-0.4	8.43	218					
	S		26	46		-2.1							
													64/ 131
MAY 11	H M S	08	32	55.1			36.35S	177.86E	275 KM	SE	0.8	AVG MAG	4.5
	+ -			1.4			0.04	0.08	10				
GNZ	P	08	33	42.8	U	0.2	2.29	177					
	S		34	19		-0.6							
KRP	EP	08	33	44.6		0.7	2.43	229					
	S		08	33	48	-0.5	2.89	280					
ONE	EP	08	33	48		0.3	3.38	212					
	S		08	33	54								
WEL	IP	08	34	17.9	U	-0.2	5.49	205	4.7				
	S		35	24		0.9							
GPZ	S	08	36	26		-0.7	8.35	207	5.1				
													64/ 139
MAY 12	H M S	01	57	19.2			38.01S	176.11E	227 KM	SE	1.6	AVG MAG	4.6
	+ -			1.1			0.05	0.06	8				
KRP	IP	01	57	49.2	U	-0.3	0.46	281					
	S		58	12.7		-0.2							
TUA	P	01	57	53		0.1	1.14	134					
	S		58	18		-1.1							
GNZ	IP	01	57	56.8		3.0	1.26	200					
	S		01	57	55.5	1.7	1.27	200	3.6				
TON	P	01	57	55.5		0.3							
	S		58	21		0.2	1.63	113	4.9	5.1			
GNZ	IP	01	57	57.0	D	-0.8							
	S		58	25		2.8	1.79	229					
TNZ	P	01	58	00.9		0.3	2.63	327	3.7				
	S		01	58	07	-2.5							
ONE	EP	01	58	41		0.3	3.43	197	4.8				
	S		01	58	59	-0.6							
WEL	P	01	58	16.0		-0.3	4.03	219	4.7				
	S		01	59	12	-4.0*	5.76	217	4.9				
COB	ES	01	59	47		-0.8	6.25	204	5.4				
KAI	ES	01	58	50		-2.2							
GPZ	EP	02	00	00									
													64/ 141
MAY 13	H M S	13	24	53.7			44.87S	167.37E	33 KM	SE	1.4	AVG MAG	4.1
	+ -			1.6			0.06	0.09	R				
MNW	IP	13	25	09.0	U	-0.6	0.92	169					
	S			21		-0.4							
ROX	P	13	25	19		1.5	1.50	114					
	S			36		0.5							
GPZ	ES	13	26	34		-1.5	3.97	75	3.9				
	S		13	27	12	0.4	5.46	48	4.1				

		H	M	S	DIR	RES	DIST	AZ	W-A	W	P	H	S
MAY 15	H M S	01	56	45.6			39.23S	175.27E	33 KM	SE	1.0	AVG MAG	3.3
	+ -			0.5			0.04	0.02	R				
TON	P*	01	56	52.8	DIR	0.6	0.21	82	2.9				
	S*			57.5		0.6							
GNZ	P	01	56	52		-0.7	0.22	81					
	E			57									
TNZ	P*	01	56	58.3		-1.0	0.69	274				3.4	3.5
	S*			57		0.9							
KRP	P*	01	57	09		-0.8	1.33	9				3.3	3.4
	ES*			28		0.4							
	E			31									
													64/ 142
MAY 16	H M S	04	24	26.5			38.51S	175.82E	188 KM	SE	1.7	AVG MAG	4.2
	+ -			1.5			0.07	0.06	11				
KRP	IP	04	24	53.1	U	0.2	0.62	339					
	S		25	11		-2.2							
TON	E	04	24	55				0.73	197				
TUA	EP	04	24	57		1.2	1.09	106					
	ES			25		-0.5							
TNZ	EP	04	25	00		2.3	1.31	238				3.6	3.3
	ES			23		1.2							
GNZ	EP	04	25	03		1.3	1.73	95				4.2	4.5
	E			20									
WEL	IS			28		-0.8							
	P	04	25	16.0		1.1	2.89	196	4.5				
	S			52		-0.2							
COB	S	04	26	06		0.6	3.50	222	4.4				
KAI	ES	04	26	43		-1.8	5.23	219	4.5				
GPZ	EP	04	25	48		-2.6	5.71	204	4.8				
	S			26		-4.9*							
													64/ 143
MAY 17	H M S	07	03	06.0			37.58S	176.80E	307 KM	SE	1.2	AVG MAG	4.7
	+ -			0.9			0.05	0.06	6				
KRP	IP	07	03	47.0	U	-0.5	1.06	251					
	ES			04		0.0							
TUA	P	07	03	49.5	U	0.8	1.25	167				5.0	4.7
	S			04		-1.8							
GNZ	IP	07	03	50.1	U	0.4	1.43	138				5.2	5.1
	S			04		0.3							
GNZ	P	07	03	53		0.2	1.89	211					
	S			07		0.3	2.48	229				4.5	3.8
TNZ	P	07	03	58		3.0*							
	ES			04		-1.4	2.66	312					
ONE	EP	07	03	58		0.1	4.02	202	5.0				
WEL	P	07	04	13.3		0.2							
	S			05		0.2							
COB	EP?	07	04	22		1.1	4.71	221	4.9				
	ES			05		-2.6							
GPZ	EP	07	04	47		0.4	6.87	206	5.4				
	S			06		-0.5							
													64/ 144
MAY 19	H M S	22	43	52.0			35.10S	178.10W	33 KM	SE	0.7	AVG MAG	4.6
	+ -			1.8			0.06	0.15	R				
GNZ	EP	22	45	00		0.3	4.71	220					
	E			18									
	E			48									
KRP	P	22	45	14.5		-0.6	5.84	239					
	I			23									
ONE	EP	22	45	20		0.3	6.19	262					

		E		32			7.25 234				
		E		43			0.0 8.34 220		5.2		
		E		19							
MAY 19	H M S	22 55	41.1	35.51S	179.79W	33 KM	SE	8.9	AVG MAG	4.4	
	+-	19.0		1.06	1.93					64/ 145	
	H M S	22 56	32			DIR	RES	DIST	AZ	W-A W P W S	
	GNZ	EP					-1.5	3.58	209	4.2	
	KRP	P					-5.4	4.46	236	4.1	
	ONE	I						4.77	265		
	TNZ	E					6.9	5.92	230	4.4	
	WEL	EP					-0.1	7.18	215	4.9	
	WEL	ES									
MAY 20	H M S	06 06	20.7	35.65S	179.79W	100 KM	SE	1.8	AVG MAG	5.4	
	+-	1.8		0.12	0.16					64/ 146	
	H M S	06 07	12			DIR	RES	DIST	AZ	W-A W P W S	
	GNZ	P					-1.8	3.46	210	5.3	
	KRP	P					-1.4	4.38	237	5.0	
	ONE	P					-0.5	4.76	267		
	CNZ	P					0.5	5.13	225		
	TNZ	EP					1.0	5.82	231	5.1	
	WEL	E					0.9	7.06	216	5.9	
	WEL	EP					1.7				
	COB	ES					1.9	7.99	225	5.3	
	KAI	ES					-1.2	9.68	222	5.4	
	GPZ	E(P)					2.3	9.92	214	5.8	
	ROX	S					-2.8				
	ROX	EP					-0.4	12.83	217		
	MNW	E					-0.2	13.89	219		
	MNW	EP									
MAY 20	H M S	06 18	30.2	35.40S	178.92W	223 KM	SE	1.6	AVG MAG	4.9	
	+-	5.6		0.13	0.41					64/ 147	
	H M S	06 19	34			DIR	RES	DIST	AZ	W-A W P W S	
	GNZ	P					-0.2	4.06	216	4.7	
	KRP	P					-1.3	5.12	239	4.4	
	ONE	E					0.0	5.49	264		
	TNZ	EP					1.5	6.54	233		
	WEL	E					0.7	7.69	218	5.1	
	GPZ	ES					-0.8	10.53	216	5.2	
MAY 20	H M S	12 33	16.3	41.52S	172.91E	102 KM	SE	2.6	AVG MAG	4.6	
	+-	0.8		0.06	0.08					64/ 148	
	H M S	12 33	32.8			DIR	RES	DIST	AZ	W-A W P W S	
	COB	IP					-1.3	0.45	343	4.7	
	WEL	IP					0.4	1.42	81	5.3	
	KAI	S					-0.5	1.7	1.50	228	4.6
	GPZ	S					1.1	2.18	185	4.8	
	TNZ	IS					0.6	2.59	26	4.8	
	TNZ	IP					-0.5	2.59	26	4.8	
	TON	S					-1.4				
	TON	EP					1.1	3.06	42	4.7	

		E		41			1.1			
		E		05			1.0 3.07 42		4.9	
		E		17			-1.4 4.12 30			
	CNZ	P								
	KRP	P								
	TUA	ES								
	ROX	P								
	ROX	EP								
	GNZ	S								
	GNZ	P								
	MNH	EP								
	ONE	S								
	ONE	E(P)								
	ONE	ES								
MAY 20	H M S	19 29	21.2	39.26S	175.77E	12 KM	SE	0.9	AVG MAG	3.3
	+-	0.8		0.07	0.02					64/ 149
	H M S	19 29	25.0			DIR	RES	DIST	AZ	W-A W P W S
	CNZ	IPG					-0.5	0.18	289	
	TON	EPG					-0.6	0.19	287	2.3
	TNZ	ESG					-0.6			
	KRP	PG					1.1	1.08	273	3.1
	GNZ	EPG					0.5	1.34	352	3.3
	WEL	E					0.1	1.86	71	4.0
	GPZ	E						2.17	200	3.3
	GPZ	E						5.02	207	3.9
MAY 20	H M S	22 23	53.6	35.65S	178.64E	33 KM	SE	4.9	AVG MAG	4.5
	+-	8.1		0.27	0.70					64/ 150
	H M S	22 23	57			DIR	RES	DIST	AZ	W-A W P W S
	GNZ	E					3.03	189		4.1 4.7
	KRP	P					-4.1	3.37	227	4.5 4.1
	ONE	EP					0.3	3.49	267	
	CNZ	EP					4.0	4.31	214	4.1
	TON	EP?					4.9	4.32	214	4.4
	TNZ	E					-4.9	4.89	223	4.7 3.9
	WEL	I						6.39	207	5.1
	COB	ES					4.3	7.14	219	4.8
	GPZ	ES					-4.5	9.26	208	5.2
MAY 21	H M S	07 14	48.9	34.94S	178.01W	33 KM	SE	ND	AVG MAG	4.6
	+-	0.8		0.06	0.08					64/ 151
	H M S	07 15	59			DIR	RES	DIST	AZ	W-A W P W S
	GNZ	EP					0.0	4.88	220	4.4
	KRP	EP					0.0	6.00	238	4.2
	ONE	EP					0.0	6.29	260	
	TNZ	E						7.42	233	
	WEL	E						8.52	220	5.2
	GPZ	E						11.34	217	

MAY 21		H	M	S	35.73S	179.53W	33 KM	SE	1.6	AVG MAG	64/ 152		
		+	-	1.6	0.09	0.12	R	RES	DIST	AZ	W-A	W P	W S
GNZ	PN	07	27	12				1.3	3.50	213		5.1	
	EP*			20				-0.6					
TUA	EPN	07	27	20				1.8	4.05	220		4.9	4.5
KRP	PN	07	27	24.7	U			0.1	4.52	240			
	I			30									
	E			28									
	E			27									
ONE	PN	07	27	30				-0.7	4.97	268			
TNZ	EPN	07	27	44				0.2	5.94	233		5.0	4.0
	E			54									
	ES*			29				0.1					
WEL	E	07	28	15				-2.6	7.12	217		5.5	
	I(P*)			20				-1.9					
	S			29									
	E			30									
	LR			31									
COB	S	07	29	41				0.7	8.09	226		5.0	
	E			30									
KAI	E	07	30	21					9.77	223			
	E			58									
GPZ	EP	07	28	47				9.3*	9.97	215		5.4	
	ES			30				-2.1					
MAY 21		H	M	S	44.48S	167.62E	33 KM	SE	1.9	AVG MAG	64/ 151		
		+	-	1.8	0.06	0.09	R	RES	DIST	AZ	W-A	W P	W S
MNW	P*	11	06	29.0				0.1	1.30	180		5.1	4.7
	ES*			47				0.5					
ROX	P*	11	06	33.9				0.5	1.56	130		4.4	5.0
	S*			53				-1.3					
KAI	E	11	07	10				2.3	3.38	56		4.0	
	S*			51									
GPZ	E	11	07	15				0.5	3.71	80		4.0	
	ES*			59									
COB	E	11	07	25					5.07	50		4.3	
	ESN			08				-2.7					
MAY 22		H	M	S	35.44S	179.89W	69 KM	SE	2.8	AVG MAG	64/ 154		
		+	-	2.9	0.19	0.25	R	RES	DIST	AZ	W-A	W P	W S
GNZ	PN	00	27	45				-2.7	3.60	207		5.0	5.3
	I			48									
	I			28									
KRP	PN	00	27	58				-1.2	4.43	235		5.0	4.7
	I			28									
	E			29									
WNZ	E	00	28	03					4.52	224			
	E			16									
ONE	PN	00	28	02				-0.8	4.69	264			
	E			14									
	E			23									
TNZ	PN	00	28	19				-0.5	5.90	229		4.9	
WEL	E(P)	00	28	41				3.6	7.19	214		5.6	
	E			46									
	ES			30				1.7					
	ELQ			32									
	ELR			58									
COB	E(P)	00	28	59				9.2*	8.08	224		5.2	
	ES			30				1.5					
KAI	EP?	00	29	17				4.0	9.79	221		5.3	

MAY 21		H	M	S	35.52S	178.69W	215 KM	SE	0.5	AVG MAG	64/ 155		
		+	-	1.6	0.04	0.12	R	RES	DIST	AZ	W-A	W P	W S
GNZ	P	00	33	00				-0.2	4.07	219		4.7	4.4
	E			45									
	E			47									
ONE	EP	00	33	20				-0.2	5.66	265			
TNZ	EP	00	33	33				0.5	6.62	234			
WEL	ES	00	35	13				0.2	7.71	220		5.1	
KAI	ES	00	36	15				0.1	10.40	225		5.2	
GPZ	ES	00	36	18				-0.3	10.54	217		5.2	
MAY 23		H <td>M <td>S <th>37.37S</th> <th>178.85E</th> <th>107 KM</th> <th>SE</th> <th>3.3</th> <th>AVG MAG</th> <th>64/ 156</th> </td></td>	M <td>S <th>37.37S</th> <th>178.85E</th> <th>107 KM</th> <th>SE</th> <th>3.3</th> <th>AVG MAG</th> <th>64/ 156</th> </td>	S <th>37.37S</th> <th>178.85E</th> <th>107 KM</th> <th>SE</th> <th>3.3</th> <th>AVG MAG</th> <th>64/ 156</th>	37.37S	178.85E	107 KM	SE	3.3	AVG MAG	64/ 156		
		+	-	4.5	0.18	0.28	R <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
GNZ	P	09	54	03				0.8	1.43	207		4.0	4.2
	E			08									
	E			30									
KRP	P	09	54	18.6				0.0	2.69	257		4.2	3.6
	ES			49				-1.7					
ONE	EP	09	54	35				-0.6	3.95	292			
TNZ	EP	09	54	37				1.2	3.96	241		4.1	
WEL	E	09	55	00					5.03	218		4.8	
COB	ES	09	56	16				3.8	6.03	230		4.3	
GPZ	ES	09	56	54				-3.6	7.89	215		5.1	
MAY 23		H <td>M <td>S <th>49.43S</th> <th>163.99E</th> <th>64 KM</th> <th>SE</th> <th>1.1</th> <th>AVG MAG</th> <th>64/ 157</th> </td></td>	M <td>S <th>49.43S</th> <th>163.99E</th> <th>64 KM</th> <th>SE</th> <th>1.1</th> <th>AVG MAG</th> <th>64/ 157</th> </td>	S <th>49.43S</th> <th>163.99E</th> <th>64 KM</th> <th>SE</th> <th>1.1</th> <th>AVG MAG</th> <th>64/ 157</th>	49.43S	163.99E	64 KM	SE	1.1	AVG MAG	64/ 157		
		+	-	1.6	0.19	0.26	R <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
MNW	P	20	10	02				0.3	4.40	35		5.0	4.7
	S			52				-0.1					
ROX	EP	20	10	14				-0.9	5.36	44		4.7	4.8
	ES			11				1.0					
GPZ	EP	20	10	55				-0.4	8.27	49		5.1	
	E			12									
KAI	ES	20	12	36				-0.8	8.62	40		4.9	
COB	EP	20	11	25				1.0	10.37	40			
	ELQ			15									
WEL	ELQ	20	15	00					11.12	47			
MAY 24		H <td>M <td>S <th>37.08S</th> <th>177.44E</th> <th>208 KM</th> <th>SE</th> <th>2.6</th> <th>AVG MAG</th> <th>64/ 158</th> </td></td>	M <td>S <th>37.08S</th> <th>177.44E</th> <th>208 KM</th> <th>SE</th> <th>2.6</th> <th>AVG MAG</th> <th>64/ 158</th> </td>	S <th>37.08S</th> <th>177.44E</th> <th>208 KM</th> <th>SE</th> <th>2.6</th> <th>AVG MAG</th> <th>64/ 158</th>	37.08S	177.44E	208 KM	SE	2.6	AVG MAG	64/ 158		
		+	-	2.0	0.09	0.12	R <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
GNZ	IP	22	23	00.0	U			-3.0	1.63	164		6.0	
KRP	P	22	23	06.1				2.2	1.73	240		5.4	
WNZ	P	22	23	05.7				0.4	1.88	214		5.5	
CNZ	P	22	23	13.4				0.4	2.59	215			
TON	EP	22	23	13.5				0.4	2.60	215		5.5	
	I			19									
	S			50				1.3					
ONE	P	22	23	14.0				-1.4	2.80	297		5.0	
	ES			51				-1.8					
TNZ	P	22	23	23.1				3.1	3.20	228		5.3	
	I			26									
WEL	P	22	23	38.0				-0.4	4.69	205		6.4	

		H	M	S	RES	DIST	AZ	W-A	W P	W S	AVG MAG
JUN 01	KAI E	03	48	56	1.5	5.88	247	4.4			4.0
											64/10
JUN 01	H M S	37.46S	177.27E		12 KM	SE	3.0				4.0
	+-	2.2		0.11							4.0
GNZ	P*	07	06	37.2	D	-3.7	1.33	154			4.1
	E			51							4.3
TUA	ES+	07	01								3.8
	EP*	07	06	41		-0.3	1.35	184			3.9
KRP	EPG	07	06	45		0.5					3.5
	ESG	07	06	16		3.2					3.1
CNZ	P	07	06	40.7	D	-2.0	1.45	251			3.5
	ES	07	06	19		4.3					3.5
TNZ	EP	07	06	53		0.2	2.20	217			3.7
	EP*	07	01			5.1					3.9
WEL	P	07	07	02.3		0.5	2.85	232			3.6
	E			46							4.5
COB	EPN	07	07	25		4.0	4.29	206			4.3
	EP*	07	07	33		1.4					4.6
KAI	ES	07	08	28		-2.6					4.3
	EP?	07	07	50		-0.1	5.05	223			4.6
GPZ	S	07	09	13		-4.4	6.77	220			4.7
	ES	07	09	16		-2.7					4.7
JUN 01	H M S	44.83S	167.66E		33 KM	SE	1.2				3.8
	+-	1.2		0.05							3.8
MNW	P	14	19	16.5	D	-0.2	0.95	182			3.7
	S			28.6		-0.1					4.1
ROX	EP?	14	19	22		0.0	1.33	119			4.0
	I			22.4							3.5
KAI	E(S)	14	20	34		0.2	3.56	51			3.5
	E			38		1.5					3.5
JUN 02	H M S	37.76S	176.29E		325 KM	SE	1.3				4.2
	+-	2.3		0.10							4.2
KRP	E(P)	07	21	49		0.4	0.62	255			3.5
	EP	07	21	53.5		0.1	1.62	123			4.0
WEL	E	07	22	29		-0.9					4.5
	EP	07	22	12		0.3	3.71	198			4.5
KAI	ES	07	23	04		1.4					4.3
	ES	07	23	48		-1.5	6.05	217			4.3
GPZ	ES	07	24	00		0.1	6.54	204			4.9
											64/10
JUN 02	H M S	44.69S	167.86E		12 KM	SE	2.4				4.4
	+-	1.4		0.05							4.4
MNW	P	19	41	59.5		-0.2	1.11	189			4.4
	E(S)			42		1.7					4.4

		H	M	S	RES	DIST	AZ	W-A	W P	W S	AVG MAG
ROX	P	19	42	01.8		-0.5	1.30	128			4.1
	I			02.7							4.5
KAI	ES			19		-0.7					4.3
	ESG	19	42	39		-0.5					4.3
GPZ	E			43		1.7	3.36	51			4.3
	E(S)			43		-3.9					4.3
COB	E			11							4.3
	E(S*)			23		1.7					4.3
WEL	E	19	42	35			3.58	76			4.3
	EP*			40							4.3
KAI	EP?			42		1.0					4.3
	E(PG)			48		-3.1					4.3
GPZ	E(S)			43		0.8					4.3
	E(S*)			30		2.1					4.3
COB	ES	19	43	47		-3.2	5.07	47			4.3
	E(S*)			44		3.2					4.3
JUN 03	H M S	40.11S	175.05E		12 KM	SE	0.6				3.7
	+-	0.2		0.01							3.7
TON	P*	01	24	38		-0.0	0.98	23			3.4
	E(S*)			51		-0.3					3.4
WEL	EP*	01	24	39		-0.3	1.06	330			3.5
	E(PG)			43		1.4					3.9
KAI	S*			53.5		0.0					3.8
	P*	01	24	42		0.3	1.20	190			3.8
COB	ES	01	25	18		0.2	2.02	240			3.6
	ES	01	25	22		0.3					3.6
KRP	P*	01	24	59.5	D	-0.5	2.21	10			3.6
	ES			25		-0.2					3.9
KAI	E(SG)			34		-0.7					3.8
	E	01	25	49			3.66	227			3.8
GPZ	ES*			26		-0.7					3.6
	ES?	01	26	04		-2.1*	4.01	206			3.6
JUN 03	H M S	41.18S	175.40E		12 KM	SE	1.4				4.4
	+-	0.7		0.04							4.4
WEL	P	10	09	08		0.5	0.49	257			4.2
	ES			15		-2.4					4.2
COB	EP	10	09	29		1.9	2.02	272			4.5
	S			52.5		0.9					4.7
GNZ	EP	10	09	29.5		0.7	2.14	338			4.7
	EPG			36		-1.3					4.1
KAI	ES	10	09	48		-0.5	3.24	39			4.1
	E(P)			54		4.3*					4.1
GPZ	E			10		-1.1					4.4
	E(S)			20							4.4
KRP	E			11							4.4
	E(S)			10		-0.2	3.24	218			4.4
WEL	E			23							4.5
	EP	10	09	45		1.1	3.25	2			4.5
KAI	EP*			47		0.3					4.9
	EPG			51		-1.8					4.9
MNW	ES*			58		1.6					4.3
	E	10	09	55			3.27	244			4.3
GPZ	E			10							4.3
	ES			23		0.9					4.3
KAI	ESG			43		-1.3					4.3
	ES	10	11	59		0.5	7.29	228			4.3

		H	M	S	40.09S	174.79E	12 KM	SE	1.0	AVG MAG 3.9			
		+ - 0.2			0.02	0.02	R	RES	DIST	AZ	W-A	W P	W S
GPZ	EP	01	41	27									
	E			32									
	ES			42 26				-2.5		5.96	245	4.8	
KAI	E	01	41	34									
	ES			42 34				-1.1					
	E			43									
MNH	E(S)	01	44	15				7.6*	9.83	232			
64/ 18													
JUN 15	H M S	06	16	28.4	40.09S	174.79E	12 KM	SE	1.0	AVG MAG 3.9			
	+ - 0.2			0.02	0.02	R	RES	DIST	AZ	W-A	W P	W S	
TNZ	P	06	16	48				0.5	0.96	341			
	E(S)			17 01				-0.6					
	E			03									
TON	EP	06	16	48.5				-0.3	1.06	33	3.5		
	EPG			50				0.1					
	E			54									
	ES			17 03				-1.0					
CNZ	P	06	16	48.7				-0.2	1.07	34			
	P*			49.5				1.8					
	ESG			17 05				0.4					
WEL	EP	06	16	51				0.4	1.19	181	3.6		
	ES			17 05				-2.0					
COB	EP	06	16	59.5				0.2	1.85	237	3.7		
	ES			17 22				-0.0					
TUA	E(P*)	06	17	07				-0.7	2.24	56	4.3	4.1	
	E			08.5									
	ES*			38				0.8					
	ESG			45				1.2					
KRP	EP	06	17	04				-0.5	2.24	15	3.9	4.1	
	PG			12.5				-1.3					
	E(S)			31				-0.4					
	E			44									
GNZ	E(P)	06	17	13.5				-0.1	2.90	61	4.1	4.1	
	EP*?			20				1.0					
	EPG			28				1.0					
	ES			44				-3.7*					
	E(SG)			18 04				-2.0					
KAI	EP	06	17	23				1.1	3.52	225	3.9		
	E(S)			59				-3.4*					
	E			18 08				0.5	3.94	203	4.3		
GPZ	EP	06	17	28				0.2					
	EP*			37									
	E			18 06									
64/ 18													
JUN 15	H M S	10	58	39.5	45.12S	167.64E	12 KM	SE	1.8	AVG MAG 4.8			
	+ - 0.9			0.04	0.06	R	RES	DIST	AZ	W-A	W P	W S	
MNH	IP	10	58	54.1				-0.9	0.66	181	4.8	4.8	
	E(S)			59 04				-2.4					
ROX	IP	10	59	03.8				1.4	1.24	107	4.5	4.8	
	EPG			06				1.4					
	E			09									
	S			14.5				1.8					
	E			21.0				1.6	3.76	48	4.7		
KAI	E(P)	10	59	38				1.6					
	E			11 00 04				0.5					
	E(S)			20									
	E			22.5									
GPZ	EP	10	59	37				-0.7	3.86	70	4.4		
	E			11 00 06				0.1					
	ES			22				-4.2					
	E(S*)			33									
	E			53									
COB	EP	10	59	58.5				-1.1	5.49	45	4.9		

WEL	ES	11	00	59										
	E(P)	11	00	15							6.46	56	4.7	
	E(P*)			31							-0.3			
	ES			01 24							-0.4			
TNZ	EP	11	00	31							1.0	7.76	43	
	S			01 56.5							1.3			
	E			02 05										
TON	E	11	00	42							8.33	48	5.1	
	E			57										
	E			01 46							7.3*			
	E(S)			02 16							1.5	8.33	48	
CNZ	EP?	11	00	39										
	E			42										
	E			48										
	E			01 13.5							6.1*			
	E(S)			02 15										
	E			19										
KRP	EP	11	00	50							-0.4	9.31	42	
	E			01 14										
	E			02 00										
	E(S)			30							-2.0			
	E			39										
TUA	E	11	01	12							9.48	52		
	E(S)			02 39							3.0			
GNZ	E	11	02	43								10.09	54	
	E(S)			50							-0.2			
	E			03 09										
	E			12										
ONE	ES	11	03	02							-1.2	10.64	31	5.2
64/ 191														
JUN 15	H M S	11	39	15.2	45.11S	167.40E	12 KM	SE	1.6	AVG MAG 4.1				
	+ - 1.4			0.04	0.09	R	RES	DIST	AZ	W-A	W P	W S		
MNH	P?	11	39	30.2				-0.8	0.69	167	4.1	4.2		
	E			31										
	S			42.5							-0.1			
ROX	EP?	11	39	41							0.8	1.40	106	2.9 3.9
	E(PG)			46							2.4			
	S			58.2							-0.5			
KAI	EPG	11	40	33							-0.8	3.89	50	4.2
	E(S)			58							-0.1			
	E			59.5										
GPZ	EP	11	40	15							-0.5	4.02	71	3.6
	E			34										
	E(S)			59							-2.4			
	E			41 03										
	ES*			09							-8.7*			
COB	E(S)	11	41	38							-1.6	5.61	46	4.7
WEL	ES	11	42	02							-1.3	6.60	57	4.6
TNZ	E	11	41	24								7.87	44	
	E(S)			42 34							0.5			
	E			42										
TON	E(S)	11	42	50							2.8	8.45	49	4.6
	E			54										
CNZ	E	11	41	20								8.46	49	
	E(S)			42 49							1.6			
	E			55										
ONE	E	11	43	44								10.72	32	
64/ 192														
JUN 16	H M S	18	43	55.7	39.23S	177.33E	12 KM	SE	1.5	AVG MAG 4.0				
	+ - 0.5			0.03	0.03	R	RES	DIST	AZ	W-A	W P	W S		
TUA	IP*	18	44	04.8				0.4	0.45	342				
	E(S*)			10							-0.8			
	E			14.5										

GNZ	IP*	18 44 10.3	D	-0.1	0.80	43	4.2	4.5
	E	18						
	E(S*)	22		0.7				
	ESG	24		1.2				
	E	40						
WNZ	EP?	18 44 17.5		0.4	1.13	302	4.4	
	E(S*)	31		-0.3				
	E	42						
GNZ	EP	18 44 20.2		-0.3	1.39	271	4.0	4.1
	EP*	22		1.5				
	E(PG)	24		0.2				
	E	29.5						
	E	33.5						
	E(S)	38		-0.9				
	E	47						
TON	E(P*)	18 44 23.5		2.9	1.39	271	3.3	
	E(PG)	26		2.0				
	E	30						
	ES	37		-2.0				
	ES*	41		1.8				
	SG	43.5		0.7				
KRP	EP	18 44 25		-2.5	1.92	312	4.2	
	E	28.5						
	EP*	30		0.4				
	EPG	32		-2.5				
	E	47						
	E	45 04						
TNZ	EP?	18 44 33		0.4	2.29	270	3.6	3.5
	E	35						
	EPG	43		0.9				
	E	51						
	ES	45 01		1.0				
	E(SG)	22		8.9*				
HEL	EP?	18 44 39		-1.2	2.84	223	3.7	
	EPG?	54		0.8				
	ES	45 14		0.3				
	E	42						
ONE	E	18 45 01			4.18	325	3.6	
	E	30						
	E	38						
	ES?	44		-1.7				
GPZ	S	18 46 18.5		-3.3	5.68	217	4.3	
	E	37						
								64/ 15
JUN 16	H M S	22 31 09.3	42.03S	172.82E	12 KM	SE	2.3	AVG MAG 3.7
		0.5	0.04	0.05	R			
					DIR	RES	DIST	AZ
COB	P	22 31 27.5				-0.8	0.95	356
	ES	40				-2.3		
KAI	P	22 31 31				-0.1	1.16	244
	ES	46				-1.2		
HEL	EP	22 31 36				-1.4	1.64	63
	P*	38.5				0.1		
	ES	56				-2.1		
	E(S*)	32 01				0.8		
GPZ	EP	22 31 36.5				-1.3	1.66	184
	S	56.5				-2.2		
	E(S*)	32 02				1.0		
TNZ	P	22 31 57				0.0	3.08	23
	EPG	32 12				0.3		
	ES	33				0.2		
TON	E	22 32 08					3.50	37
	E	39						
	E	46				3.0		
	E(S)	51						
	ESG	33 08				0.6		

CNZ	EP?	22 32 06	D	3.3	3.51	37	3.7	3.9
	E	08						
	E(S)	46		2.9				
	E(S*)	59		2.6				
	ESG	33 06		-1.6				
KRP	P	22 32 17		-0.5	4.60	28	3.1	3.0
	E(P*)	34		4.8				
	ES	33 08		-1.6				
	E(S*)	25		-4.3				
	ESG	45		0.5				
TUA	ES*	22 33 24		-5.6*	4.61	47	3.7	3.8
GNZ	EP*	22 32 41		1.3	5.22	51	3.7	3.9
	E(S)	33 20		-4.4				
	E	34 07						
MNH	ES	22 33 29		2.5	5.31	223		3.8
								64/ 194
JUN 17	H M S	07 07 06.7	38.55S	175.98E	33 KM	SE	1.8	AVG MAG 3.1
		0.7	0.04	0.05	R			
					DIR	RES	DIST	AZ
								W-A
KRP	EP	07 07 18				-1.8	0.72	331
	E(P*)	20				-0.8		
	E(S*)	33				2.0		
CNZ	EP	07 07 18				-2.0	0.73	208
	E	20.5						2.6
	E	27						
	E	34						
	E	36						
	E	44						
TON	E	07 07 26					0.74	208
	E(S*)	33		1.4				2.2
TUA	EP	07 07 23		-0.0	0.95	106		3.6
	E	50						3.2
TNZ	E(P*)	07 07 31		-1.2	1.40	243		3.4
	ES*	52		1.0				2.8
	E	55						
GNZ	E(P*)	07 07 37		1.5	1.60	94		3.6
	E	08 08						3.2
								64/ 195
JUN 20	H M S	02 32 16.4	36.05S	179.45E	205 KM	SE	1.8	AVG MAG 4.8
		1.6	0.07	0.10	15			
					DIR	RES	DIST	AZ
								W-A
GNZ	P	02 33 04				-0.8	2.83	203
	E	37						5.8
	ES	40				-2.3		5.3
	E	44						
TUA	EP	02 33 11				0.6	3.31	213
	E	52.5						5.5
	E(S)	54				1.8		5.2
	E	34 10						
KRP	P	02 33 14				-0.6	3.65	238
	ES	59				-0.6		4.9
ONE	EP	02 33 20				-0.7	4.14	272
	E	50						4.0
	E(S)	34 09				-1.5		
	E	31						
CNZ	P	02 33 25	U	0.9	4.42	223		4.7
	E	29						4.0
	E	37						
	E	40						
	E(S)	34 20				3.4		
TON	EP	02 33 25.5				1.3	4.42	223
	E	30						4.4
	E	37						
	E	40						
	E	49						

GPZ	EP	14 03 35.5	0.5	4.86	202	4.6				
	ES	04 32	-0.9							
64/ 20										
JUL 01	H M S	38.87S	178.22E	47 KM	SE	2.6	AVG MAG	4.4		
	+-	0.15	0.18	41						
	H M S	05 20 17.2	U	-1.0	0.28	326				
GNZ	IP	05 20 25		0.3	0.84	274				
TUA	P	05 20 44		1.6	2.11	260	4.3			
CNZ	P	05 20 53					4.1			
KRP	I	05 20 42		-3.3	2.31	293				
	P	05 20 49								
	I	21 00								
TNZ	E	05 20 57		1.8	3.01	263	4.0	3.8		
	P	21 21								
	E	32		1.7						
WEL	ES	05 21 03.0		-0.3	3.58	227	4.7			
	P	05 21 47		2.2						
	S	05 22 14		-0.5	4.76	241	4.7			
COB	S	05 22 51		-2.8	6.33	233	4.8			
KAI	ES	05 21 46		3.3	6.39	219	4.9			
GPZ	E(P)	22 52		-3.2						
	ES									
64/ 20										
JUL 01	H M S	38.90S	177.81E	33 KM	SE	0.9	AVG MAG	3.1		
	+-	0.14	0.06	R						
	H M S	10 44 25.0	U	-0.5	0.30	33				
GNZ	IP*	10 44 31		0.0						
	S*	10 44 29		0.2	0.53	279				
TUA	P*	10 44 36		-0.7						
	ES*	10 44 55		0.9	2.03	298	3.1			
	P*	45 05								
64/ 20										
JUL 03	H M S	38.70S	176.11E	12 KM	SE	2.2	AVG MAG	2.9		
	+-	0.05	0.11	R						
	H M S	18 25 24.0		0.8	0.07	358				
WNZ	PG	18 25 34		-0.1	0.66	221	2.3			
CNZ	PG	18 25 41		-2.1						
	SG	50								
KRP	PG	18 25 40		1.2	0.90	330	2.9	2.8		
	SG	49		-2.0						
	E	56								
TNZ	E	18 25 53			1.43	250				
	ESG	26 11		2.1						
GNZ	E	18 25 58			1.50	88	3.5			
64/ 20										
JUL 05	H M S	38.25S	176.00E	221 KM	SE	1.6	AVG MAG	4.2		
	+-	0.08	0.06	9						
	H M S	14 49 02		-0.9	0.49	311				
KRP	EP	14 49 24		-1.8						
	ES	14 49 07.2		1.7	1.01	201	3.8	3.5		
CNZ	IP	14 49 33		2.5						
	S	14 49 06		0.2	1.06	122	4.0	4.2		
TUA	P	14 49 29		-2.0						
	ES	14 49 12		2.2	1.58	233	4.4			
TNZ	P	14 49 11		0.7	1.63	105	4.5	4.6		
GNZ	P	14 49 39		0.1						
	ES	42								
WEL	I	14 49 27		0.3	3.18	197	4.4			
	P	50 08		0.0						
COB	S	14 50 20		-1.0	3.79	221	4.3			

KAI	ES	14 50 55		-4.6*	5.53	218	4.4			
GPZ	EP	14 50 01		-0.7	6.00	204	4.7			
	S	51 09		-1.5						
64/ 209										
JUL 07	H M S	44.22S	168.64E	33 KM	SE	0.8	AVG MAG	4.0		
	+-	0.03	0.03	R						
	H M S	03 56 04		-0.4	1.35	159	4.2	4.7		
ROX	P*	03 56 22		-0.6						
	S*	03 56 10		-0.8	1.72	204	4.0	3.9		
MNW	P*	03 56 35		1.3						
	S*	03 56 26		-0.4	2.64	51	3.7			
KAI	EP*	57 01		-0.1						
	ES*	03 56 32		0.4	2.94	81	3.8			
GPZ	EP*	57 11		0.7						
	ES*									
64/ 210										
JUL 07	H M S	35.03S	179.18E	300 KM	SE	0.8	AVG MAG	4.7		
	+-	0.05	0.10	11						
	H M S	14 58 02		-0.6	4.01	258				
ONE	P	14 58 03		-0.7	4.11	203	4.4	4.5		
TUA	P	14 58 57		0.2						
	ES	14 58 04		0.1	4.12	224	4.6			
KRP	P	14 58 16		1.2	5.08	214	4.0			
CNZ	P	14 58 26		4.4*	5.65	221	4.2			
TNZ	EP	59 20								
	E	14 58 40		0.2	7.15	208	5.3			
WEL	EP	15 00 01		-0.3						
	S	15 00 18		0.1	7.90	218	5.0			
COB	ES	15 00 57		0.7	9.64	217	5.1			
KAI	ES	15 01 04		-0.9	10.02	208	5.3			
GPZ	ES									
64/ 211										
JUL 07	H M S	40.47S	176.53E	33 KM	SE	1.7	AVG MAG	4.1		
	+-	0.04	0.05	R						
	H M S	22 31 28.0		-0.4	1.47	329	4.4			
CNZ	P*	22 31 26		-0.5	1.57	238	3.8			
WEL	EPN	34								
	EPG	49		-2.0						
	S*	22 31 29		0.4	1.72	16	4.2	4.3		
TUA	PN	44								
	E	50		1.1						
	ESN	32 06								
	E	22 31 37		-1.9	2.09	307	3.9	4.1		
TNZ	EP*	41								
	E	32 06		-0.6						
	ES*	22 31 33		-1.5	2.15	33	3.7	4.3		
GNZ	EPN	51								
	E	32 26								
	E	22 31 42		0.6	2.65	343	4.4	3.9		
KRP	EPN	50		1.6						
	IP*	32 23		-0.3						
	ES*	22 31 59			2.95	257	4.0			
COB	EPG	32 04								
	E	26								
	E	33		0.7						
GPZ	ES*	22 32 16		-1.2	4.33	221	4.2			
	EP*	57		4.6*						
	ESN	22 32 22			4.36	240	4.2			
KAI	E	57		3.9						
	ESN									
64/ 212										
JUL 08	H M S	38.08S	176.46E	261 KM	SE	2.0	AVG MAG	4.1		
	+-	0.12	0.12	16						

		H	M	S	DIR	RES	DIST	AZ	W-A	W	P	M	S
KRP	P	06	26	38		-2.8	0.74	282				3.6	
TUA	P	06	26	42		0.4	0.91	143				4.1	
CNZ	P	06	26	45		0.8	1.33	212				3.2	3.2
	E(S)		27	16		2.1							
GNZ	P	06	26	45.5		1.1	1.35	115				4.5	4.3
	S		27	12		-2.2							
TNZ	EP	06	26	50		1.0	1.97	235				3.8	
	E		27	24									
WEL	P?	06	27	07		2.7	3.46	202				4.5	
	S		50			0.1							
COB	ES	06	28	04		-0.3	4.16	223				4.4	
KAI	ES	06	28	40		-1.6	5.88	219				4.5	
GPZ	ES	06	28	50		-1.1	6.31	206				4.8	
													64/21
JUL 10		H	M	S									
		12	34	46.3		41.86S	171.54E	33 KM	SE	1.3		AVG MAG	3.2
						0.04	0.06						
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W</th> <th>P</th> <th>M</th> <th>S</th>	RES	DIST	AZ	W-A	W	P	M	S
KAI	EP	12	34	58		-0.8	0.67	188				3.1	
	S		35	07		-0.9							
COB	EP	12	35	06		0.2	1.19	50				3.2	
	S		21			0.6							
GPZ	EP*	12	35	24		1.9	2.01	156				3.1	
	E		49			0.3							
	E		52										
WEL	ES*	12	36	02		-1.1	2.49	78				3.2	
													64/29
JUL 10		H	M	S									
		12	56	27.5		38.91S	175.45E	180 KM	SE	1.7		AVG MAG	4.5
						0.04	0.05						
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W</th> <th>P</th> <th>M</th> <th>S</th>	RES	DIST	AZ	W-A	W	P	M	S
CNZ	IP	12	56	53.4		1.7	0.30	165					
	S		57	11		0.6							
TNZ	P	12	56	56		1.6	0.88	251				3.8	4.1
	S		57	15		-0.3							
KRP	IP	12	56	53	U	-2.2	0.98	4				4.9	
TUA	P	12	56	59		0.9	1.33	86				4.1	4.5
	S		57	20		-1.8							
GNZ	IP	12	57	05.0	U	-0.2	2.03	83				5.0	5.1
	E		28.5										
	I		31.5										
WEL	P	12	57	11.8		2.0	2.43	192				4.7	
	S		43			0.6							
COB	EP?	12	57	18		1.1	3.02	223				4.6	
	S		55			0.1							
ONE	EP	12	57	20		0.3	3.24	344				4.1	
	S		59			-0.9							
KAI	EP	12	57	41		2.2	4.74	219				4.7	
	S		58	32		-2.1							
GPZ	EP	12	57	45		-0.2	5.23	203				5.1	
	S		58	42		-3.4							
RDX	ES	12	59	45		-5.5*	7.99	213					
MNW	ES	13	00	14		0.1	8.98	218					
													64/22
JUL 12		H	M	S									
		17	46	59.4		39.23S	175.08E	220 KM	SE	2.0		AVG MAG	4.2
						0.08	0.08						
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W</th> <th>P</th> <th>M</th> <th>S</th>	RES	DIST	AZ	W-A	W	P	M	S
CNZ	IP	17	47	30.4		1.9	0.36	85					
	S		54			3.0							
TNZ	P	17	47	30		0.9	0.55	275				3.8	3.7
	E		54										
KRP	IP	17	47	33	D	-0.9	1.35	15				4.0	3.8
	S		58			-2.7							
TUA	P	17	47	38		-1.4	1.67	76				4.2	4.1
	E(S)		48	04		-1.3							

		H	M	S	DIR	RES	DIST	AZ	W-A	W	P	M	S
WEL	P	17	47	42		1.6	2.07	187				4.6	
	S		48	12		-0.0							
GNZ	P	17	47	45		1.6	2.37	77				4.3	4.5
	(S)		48	15		-2.6							
COB	EP	17	47	46		0.2	2.58	223				4.7	
	S		48	21		-0.8							
KAI	ES	17	48	57		-1.2	4.31	219				4.4	
GPZ	E(P)	17	48	14		1.4	4.82	202				5.0	
	ES		49	07		-2.6							
													64/216
JUL 14		H	M	S									
		01	10	58.1		40.43S	179.85W	33 KM	SE	1.1		AVG MAG	4.2
						0.03	0.06						
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W</th> <th>P</th> <th>M</th> <th>S</th>	RES	DIST	AZ	W-A	W	P	M	S
GNZ	PN	01	11	34		-0.5	2.42	317				4.1	4.1
	P*		41			0.1							
	SN		12	02		-0.2							
TUA	PN	01	11	42		1.9	2.82	304				4.2	4.0
	IP*		47			-0.7							
	ESN		12	12		-0.0							
CNZ	PN?	01	11	56		3.3*	3.75	288				3.5	3.7
	EP*		12	02		-1.5							
	SN		35			0.4							
WEL	EPN	01	11	59		0.5	4.17	256				4.5	
	SN		12	43		-1.8							
TNZ	ESN	01	12	56		0.5	4.61	284				3.7	
COB	ESN	01	13	22		0.9	5.67	261				4.7	
GPZ	ESN	01	13	40		-0.2	6.47	237				4.7	
	E		47										
KAI	ESN	01	13	51		0.7	6.89	249				4.6	
													64/217
JUL 14		H	M	S									
		23	11	44.4		32.67S	178.92W	33 KM	SE	4.5		AVG MAG	5.3
						1.57	1.46						
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W</th> <th>P</th> <th>M</th> <th>S</th>	RES	DIST	AZ	W-A	W	P	M	S
ONE	P	23	13	11		-3.5	6.36	239					
GNZ	P	23	13	11		-4.7	6.45	202					
TUA	I	23	13	20		-1.7	6.90	206					
	EP		30										
	I		48										
KRP	P	23	13	19		-3.0	6.92	219					
CNZ	P	23	13	35		-0.1	7.90	213					
TNZ	EP	23	13	43		0.4	8.47	218					
WEL	EP	23	14	05		2.5	9.96	209					
	LR		16	18									
GPZ	E	23	16	33			12.84	209				5.3	
MNW	EP	23	15	35		7.0	16.70	215					
													64/218
JUL 16		H	M	S									
		02	52	57.0		40.79S	176.07E	33 KM	SE	2.0		AVG MAG	4.2
						0.09	0.09						
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W</th> <th>P</th> <th>M</th> <th>S</th>	RES	DIST	AZ	W-A	W	P	M	S
WEL	P*	02	53	16.8		-0.6	1.10	243				4.0	
	S*		31			-1.4							
CNZ	PN	02	53	22.2	U	-0.5	1.64	346				4.2	
TNZ	EPN	02	53	29		0.5	2.06	321				4.2	4.1
	I		37										

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
COB	S	09	11	17.8		0.2	0.51	231	3.9				
WEL	EP	09	10	58.5		0.9	1.26	115	3.9				
	ES		11	26		1.2							
TNZ	EP?	09	11	00.5		-1.5	1.80	29			3.1		
	S			32.5		-0.1							
KAI	EP	09	11	06		-0.1	2.23	218	3.5				
	E			15									
	ES			39		-0.9							
	E			48									
GPZ	S	09	11	53.5		-0.3	2.96	189	3.8				
KRP	EP?	09	11	21		2.7	3.35	33		3.3			
TUA	ES	09	12	04		-2.6	3.59	58			3.7		
GNZ	E	09	12	17			4.25	62			3.8		
	ES			21		0.3							
											64/ 20		
AUG 11		14	21	57.1			35.36S	179.65E	12 KM	SE	1.8	AVG MAG	4.3
							0.05	0.09	R				
ECZ	EP	14	22	39		2.3	2.49	201			4.1		
	E(PG)			47		-0.6							
	E			23									
	E(S*)			15		1.3							
	ESG			21		-0.2							
	E			35									
GNZ	EP	14	22	49.5		-1.3	3.53	201			4.6	4.4	
	E(P*)			23		6.4*							
	E(PG)			11		2.5							
	E(S*)			43		-1.8							
TUA	EP	14	22	56.5		-0.4	3.98	209			4.4	4.3	
	E			23									
	E(PG)			17		-0.6							
	E			50									
	E(S*)			24		2.6							
KRP	EP	14	23	00.2	U	0.6	4.18	231			4.2		
	E			04									
	E(PG)			24		2.3							
	E			24									
ONE	EP	14	23	01		-0.7	4.33	263			4.0		
	E(P*)			11		-1.3							
	ES			52		1.2							
TNZ	E	14	23	28			5.68	226			4.5	3.8	
	EPG			50		-1.9							
	E			24									
WEL	E	14	24	48			7.05	212			4.7		
	E(S)			55		-0.9							
GPZ	E	14	24	26			9.92	211			4.8		
	ES			26		-3.0							
	E			20									
													64/ 20
AUG 11		17	41	40.1			38.08S	176.57E	185 KM	SE	1.1	AVG MAG	3.8
							0.06	0.05	8				
KRP	IP	17	42	07.5	D	0.1	0.83	280			3.6	3.1	
	E			11									
	ES			28		-0.4							
TUA	P	17	42	08		0.5	0.86	148			3.9	3.4	
	E			25									
	ES			29		0.3							
GNZ	IP	17	42	11	U	0.3	1.27	117			4.4	4.1	
	E			30.5									
	S			33.5		-0.9							
TNZ	E	17	42	19			2.04	237					
WEL	P	17	42	36		0.3	3.50	203			3.9		
	E			43									

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
GPZ	ES			20							1.4		
	E	17	44	21			6.35	207			4.3		
	ES			23		-1.5							
												64/ 247	
AUG 11		19	44	56.9			44.62S	168.29E	12 KM	SE	1.7	AVG MAG	4.1
							0.03	0.05	R				
ROX	IP	19	45	18.9	U	0.7	1.12	140			3.7	4.4	
	E(PG)			22		2.3							
	S			33.5		-0.4							
	E(SG)			35		0.2							
MNH	IP	19	45	19.1	U	-0.8	1.25	202			4.3	4.3	
	E			34.1									
	E(S)			35		-1.9							
KAI	EP	19	45	46.5		1.8	3.09	48			3.8		
	E			46									
	S			22.5		2.0							
	E(SG)			41		-0.1							
GPZ	EP	19	45	48		0.9	3.27	75					
	E(P*)			55		1.0							
	E(PG)			46		0.3							
	E			20.5		-0.5							
	S			24.5		-2.9							
	E(S*)			34		-2.2							
COB	ES	19	47	00			4.81	44			4.3		
													64/ 248
AUG 12		09	27	05.1			40.19S	175.06E	112 KM	SE	1.0	AVG MAG	4.7
							0.02	0.02	5				
TON													
WEL	IP	09	27	29.6	USE	1.5	1.11	192			3.6		
	ES			46		0.5							
	E			53									
TNZ	IP	09	27	29.1	U	0.7	1.14	332			5.0	5.2	
	E			43									
	ES			45		-1.0							
COB	EP	09	27	39.5		1.0	1.98	243			4.9		
	E			44									
	ES			28		-0.5							
TUA	EP	09	27	41		0.6	2.13	50				4.7	
	E			46									
	E			49									
	E			57									
	E			28		0.7							
	S			07.5									
	E			21									
KRP	IP	09	27	43	U	0.4	2.30	9			5.1	4.6	
	E			51									
	E			28									
	ES			10		-0.8							
	E			28									
GNZ	IP	09	27	48.7	D	-0.4	2.77	57			4.9	4.9	
	E			28									
	E			16									
	E(S)			22		-0.2							
	E			40									
KAI	E	09	28	07			3.60	229			4.9		
	E			13									
	E			26									
	E			40									
	E(S)			41		-1.3							
ECZ	EP?	09	28	01		-0.4	3.69	49				4.2	
	E			13									
	E			19									
	E			23									

	H	M	S														
GNZ	ES?	19	42	20		6.9*	10.33	55									
ONE	E(P)	19	40	30		2.1	10.78	33	5.4								
	E		42	20													
	ES		24			0.3											
	E		32														
AUG 15		H	M	S													64/ 251
		22	03	38.3	38.55S	179.20E	12 KM	SE	1.8	AVG MAG	4.1						
					0.04	0.06	R										
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S				
GNZ	P*	22	03	58			U	2.7	0.93	264		4.9	5.1				
	ES*		04	10				2.1									
	E			32													
ECZ	P*	22	03	58			U	1.5	1.00	329		4.6	4.7				
	ES*		04	10				0.1									
	E			19													
TUA	EP	22	04	06				-0.3	1.63	260		4.6	4.7				
	EP*			07				-0.3									
	E(PG)			10				-1.3									
	E(S*)			30				1.1									
	ESG			32				-1.3									
TON								2.93	256	3.8							
KRP	EP	22	04	23				-1.4	2.95	281		4.0	3.7				
	EP*			29				-0.9									
	E(PG)			36				-2.1									
	E(S)			58				-1.0									
	ES*		05	08				-0.7									
TNZ	EP	22	04	38				2.1	3.82	259		3.9	3.1				
	E(PG)			53				-2.6									
	E(S*)		05	38				3.3									
WEL	ES	22	05	33				-0.0	4.37	230		4.0					
GPZ	ES	22	06	38				-1.2	7.14	222		4.4					
AUG 16		H	M	S													64/ 251
		00	42	33.1	44.97S	167.68E	33 KM	SE	1.7	AVG MAG	5.1						
					0.03	0.05	R										
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S				
MNW	IP	00	42	47.2			U	-0.3	0.82	183		5.1	4.8				
	E			55													
	E(S)			58				-0.1									
ROX	IP	00	42	53.8			D	0.2	1.26	114		4.9	4.9				
	P*			54.8				-1.3									
	E			59													
	S*		43	11				2.0									
	E			14.5				1.4									
KAI	EP	00	43	25				-1.2	3.64	49		5.0					
	E			32													
	ES		44	09				2.1									
GPZ	EP	00	43	26.5				-1.7	3.78	72		5.2					
	ES		44	09				-1.4									
COB	E(P)	00	43	49				-0.6	5.36	45		5.0					
	ES		44	48				-0.6									
WEL	EP	00	44	02				-1.0	6.35	57		5.0					
	E			20													
	ES		45	10				-2.4									
TNZ	EP	00	44	20.5				0.4	7.62	43							
	E			29													
	E(S)		43	47				4.2*									
KRP	EP	00	44	41				0.2	9.17	43							
	E			51													
	E			58													
	E		45	19													
GNZ	E	00	46	35				-1.9	9.97	54							
	E(S)			39				0.3									
ONE	EP	00	45	01				2.8	10.49	31							
	ES		46	54				3.0									

	H	M	S														
AUG 16		02	53	34.1	44.09S	167.82E	33 KM	SE	1.1	AVG MAG	3.6						64/ 255
					0.11	0.08	R										
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S				
MNW	P	02	54	00				-0.6	1.70	185		3.6	3.8				
	ES			21				0.4									
ROX	EP?	02	54	02				0.6	1.75	143		3.5	3.5				
	S			21.5				-0.4									
KAI	E	02	55	21					3.05	60		3.5					
AUG 16		H	M	S													64/ 256
		10	59	19.7	39.36S	173.77E	12 KM	SE	1.9	AVG MAG	3.5						
					0.05	0.07	R										
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S				
TNZ	EP*	10	59	31				1.6	0.50	70		3.2	3.4				
	E			37													
	E(S*)			39				2.5									
	E			48													
TON									1.38	84		3.5					
COB	E(S)	11	00	14				-0.4	1.90	204		3.2					
	E(S*)			18				-0.4									
	E			32													
KRP	E(P)	10	59	53				0.5	1.99	44			3.9				
	EP*			58				3.1									
	ES		11	00	14			-2.7									
	ES*			19				-2.3									
	E(SG)			26				-1.0									
	E			35													
WEL	E(P*)	10	59	55.8				-0.4	2.07	159		3.7					
	E		11	00	00												
	E			07													
	E			13													
	E(S*)			22				-1.5									
	E			30													
	E			36													
ONE	E	11	01	03					3.61	8		3.5					
KAI	E	11	00	48					3.63	209		3.8					
	E			01													
	ES*			11				0.5									
GPZ	ES	11	01	16				0.7	4.41	191		3.7					
AUG 16		H	M	S													64/ 257
		12	51	46.1	38.36S	176.05E	236 KM	SE	1.4	AVG MAG	3.9						
					0.06	0											

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	AVG MAG
AUG 16	KAI ES	12 54	10			-1.5	5.47	219		4.4		
	GPZ ES	12 54	21			-0.8	5.92	205		4.7		
AUG 16		19 12	09.8									64/28
			1.6									2.1
AUG 16	TNZ EP*	19 12	22			0.2	0.64	86		2.6	2.1	
	E		28									
AUG 16	KRP EP?	19 12	42			-1.0	2.03	51		3.0	3.1	
	EP*		47			1.5						
AUG 16	EPG		52			1.2						
	ES	13 05				-2.6						
AUG 16	ESSG		19			0.8						
	E		26									
AUG 16	WEL ES	19 13	13			0.0	2.25	156		3.1		
												64/28
AUG 16		23 11	16.3									4.8
			1.8									4.8
AUG 16	ECZ IP	23 11	36.8			-0.3	0.45	60				
	ES		51			-2.0						
AUG 16	GNZ IP	23 11	40.2	D		1.6	0.72	182		5.3	4.1	
	ES		56			0.2						
AUG 16	TUA IP	23 11	43.8	D		1.7	1.14	218		4.7	4.1	
	E		57									
AUG 16	KRP IP	23 11	52.4	U		1.0	1.99	269		4.6	3.1	
	E		55									
AUG 16	ES		12 13			-1.3						
	ES		17			-1.3						
AUG 16	TNZ EP	23 12	09.8			3.7	3.15	245			3.1	
	E		22									
AUG 16	ES		48			3.8						
	ES	23 12	18			-2.1	3.65	305		3.6		
AUG 16	WEL EP	23 12	20.9			-0.8	4.21	216		5.0		
	E		23									
AUG 16	ES		13 01			-0.2						
	ES		09			0.6	5.19	231		4.6		
AUG 16	COB ES	23 13	33			-2.5	6.86	226		4.8		
	KAI ES	23 14	10			-2.5	7.08	214		5.2		
AUG 16	GPZ E	23 13	03			-2.8						
	E		14 15			-2.8						
AUG 16	ES		24			-1.3	11.05	221				
	ES	23 15	51			-1.3	11.05	221				
AUG 17		09 01	26.9									64/28
			ND									2.1
AUG 17	KRP E	09 02	13			-0.0	2.13	48				
	E(S)		24			-0.0						
AUG 17	E(S*)		33			-0.0						
	E		46			-0.0						
AUG 17	WEL ES*	09 02	33			-0.0	2.13	154		3.0		
												64/28
AUG 18		06 38	22.5									3.1
			0.5									3.1
AUG 18	TNZ P*	06 38	32.6			0.6	0.50	58				
	E		38									

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	AVG MAG
AUG 19	E(S*)			41								2.0
	E			48								
AUG 19	COB E(P*)	06 38	55			-0.0	1.84	207		3.3		
	E		39 13									
AUG 19	ES		16			0.1						
	ES*		18			-1.4						
AUG 19	WEL E(SG)	06 38	57.3	D		0.1	1.97	159		3.8		
	EP*?		57.8									
AUG 19	E		39 02									
	E		09									
AUG 19	E(S*)		23			-0.2						
	E		25									
AUG 19	KRP E(P)	06 38	54			-1.6	2.02	42		3.8	4.2	
	E(P*)		57			-1.1						
AUG 19	E		59.5									
	E(PG)		39 02			-1.4						
AUG 19	E		15			-1.1						
	ES		19									
AUG 19	KAI EP*?	06 39	23			-1.8	3.58	210		3.9		
	E(PG)		38			3.1						
AUG 19	E(S)		56			-2.0						
	E(S*)		40 10			-1.7						
AUG 19	ONE ES	06 40	03			2.3	3.69	7		3.5		
	GPZ ES	06 40	17			0.8	4.33	192		4.0		
AUG 19		10 38	23.5									64/262
			1.3									3.8
AUG 19	WEL P	10 38	42.5	U		1.7	0.70	157		3.7		
	S		54			0.0						
AUG 19	COB EP	10 38	49.5			1.2	1.34	250		3.9		
	S		39 06.5			-0.2						
AUG 19	TNZ EP	10 38	50			0.3	1.46	359		3.8	3.9	
	E		39 02.5									
AUG 19	ES		07			-2.2						
	E		11									
AUG 19	KRP EP	10 39	09			0.8	2.85	18		3.6	3.7	
	E		18									
AUG 19	E		26									
	E		38									
AUG 19	KAI E	10 39	39			0.3						
	E		42									
AUG 19	GPZ ES	10 39	50			1.3	2.93	229		3.5		
	ES		45			-3.2	3.32	203		4.1		
AUG 19		10 54	16.6									64/263
			1.4									4.5
AUG 19	KRP IP	10 54	45	D		-0.3	0.50	311				
	E(S)		55 05			-2.5						
AUG 19	TNZ P	10 54	55.0	U		2.6	1.58	233		4.7	4.0	
	E		58									
AUG 19	GNZ E(S)	10 54	54	D		3.9	1.63	105			5.0	
	P		58 04									
AUG 19	E		12.5									
	S		19.5			-1.4						
AUG 19	E		44.5									
	E		25									
AUG 19	ECZ P	10 54	58			0.8	2.08	75		4.4	4.5	
	E		58 20									

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
ONE	E	10	53	28			2.80	331	3.7			
	E			42		-0.8						
WEL	ES	10	53	11		1.5	3.18	197	4.7			
	ES			50		-0.5						
COB	ES	10	56	03		-0.7	3.80	221	4.3			
KAI	E	10	53	48			5.53	218	4.8			
	E			56								
	E(S)			41		-1.6						
	E			54								
GPZ	EP	10	53	44.5		-0.4	6.01	204	5.2			
	E			56								
	ES			52		-1.6						
	E			53								
AUG 21		13	16	08.5			37.53S	178.27E	193 KM	SE	1.9	AVG MAG 4.1
				2.0			0.11	0.12	12			64/267
ECZ	EP	13	16	33.9		-0.4	0.27	126				
	E			38								
	E			47								
	E(S)			52		-2.1						
	E			17								
GNZ	EP	13	16	41.0		2.4	1.13	190		4.4	4.1	
	E			53								
	E			58.5								
	S			17		2.0						
	E			13								
TUA	EP	13	16	43		0.7	1.55	214		3.5	4.1	
	E			46								
	ES			17		-1.4						
	E			10								
KRP	IP	13	16	46.6	D	-2.4	2.20	259		4.4		
	E			53								
TNZ	EP	13	17	06		1.9	3.48	240		3.9	3.1	
	E			43								
	E(S)			50		2.9						
WEL	EP	13	17	18.9		0.2	4.63	215		4.6		
	ES			18		-1.0						
	E(S)			13		-0.8	5.57	229				
COB	E(S)	13	18	34		-1.1	7.25	224		4.4		
KAI	E(S)	13	19	13			7.49	213		4.5		
GPZ	E	13	19	15								
	E(S)			19		-0.9						
AUG 21		18	47	11.4			44.87S	167.39E	33 KM	SE	1.5	AVG MAG 4.1
				1.8			0.08	0.10	R			64/268
MNW	IP	18	47	27.1	U	-0.2	0.92	170		4.3	4.1	
	E			37								
	E(S)			38		-1.1						
ROX	IP	18	47	36.4	D	1.3	1.49	115		4.1	4.1	
	E			43								
	E			53								
	E(S)			54		1.1						
	E			56								
KAI	E	18	48	55			3.74	53				
GPZ	EP	18	48	10		1.1	3.95	75		3.6		
	EP*			20		-0.4						
	ES			51		-1.9						
	E			56								
AUG 22		05	57	57.0			40.55S	173.24E	195 KM	SE	2.3	AVG MAG 3.1
				2.9			0.09	0.14	21			

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
COB	ES	05	58	46		0.6	0.66	216	3.2			
WEL	P	05	58	32.6	U	3.3	1.37	123	3.4			
	S			53.5		-0.8						
TNZ	ES	05	58	58		-0.3	1.62	33			3.1	
	E			59								
	E			10								
	E			26								
KAI	ES	05	59	13		-0.0	2.41	214	3.8			
KRP	E	05	59	06			3.17	35			2.9	
	E			24								
	E(S)			28		-1.0						
GPZ	S	05	59	27.5		-1.7	3.17	188	4.3			
AUG 22		06	20	24.7			40.13S	175.75E	12 KM	SE	1.8	AVG MAG 3.7
				0.5			0.03	0.03	R			64/267
WEL	P	06	20	49		-0.3	1.37	213	3.5			
	S			21		-1.1						
	E(SG)			14		2.9						
TNZ	P	06	20	49.0		-0.9	1.42	311		3.8	3.7	
	EPG			54		0.5						
	E			59								
	E(S)			21		-1.6						
	E(S*)			09		0.0						
TUA	EP*	06	20	53.5		-1.6	1.71	40		3.6	3.5	
	E(S)			21		-5.2*						
	ES*			18		0.2						
KRP	EP	06	20	59.8		-0.7	2.21	356		3.9	3.5	
	E			21								
	EPG			14		4.5						
	ESG			39		-0.3						
GNZ	E(PG)	06	21	13		1.6	2.31	51		3.6	3.6	
	E(S)			28		-1.3						
COB	EPG	06	21	15		-0.0	2.48	246	3.5			
	ES			34		0.3						
	ESG			49		0.5						
KAI	ES	06	22	09		-2.6	4.05	232	3.9			
GPZ	ES	06	22	11		-5.3*	4.24	212	4.0			
AUG 23		08	39	31.8			41.92S	173.95E	12 KM	SE	2.1	AVG MAG 3.8
				0.6			0.04	0.04	R			64/268
WEL	P*	08	39	46.0	UNE	-2.0	0.88	45	4.1			
	E(PG)			51		1.2						
	S*			58.5		-1.4						
COB	EP*	08	39	54		0.0	1.23	312	3.0			
	S*			40		0.0						
KAI	E(PG)	08	40	12		0.1	1.98	251	3.5			
	E			15								
	E(SG)			38		-0.7						
	E			45								
GPZ	E(P)	08	40	04		-1.0	2.02	208	3.1			
	E(PG)			13		0.3						
	E			21								
	ES*			33		-1.2						
	E			35.5								
TNZ	E(P)	08	40	17		1.9	2.75	7		4.0	3.9	
	EPG			30		2.6						
	ES			50		2.4						
	ES*			55		-1.1						
	E			41								
	E			16								
TON	E(P*)	08	40	23		-0.7	2.97	25	4.1			
	E(S*)			41		-2.7						

		H	M	S																					
AUG 24		13	10	27.8	38.98S	178.05E	33 KM	SE	0.1																64/ 276
				+ 0.2	0.01	0.01	R																		AVG MAG 3.8
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S											
	GNZ		P		13	10	36	U	-0.1	0.33	357														
			E(S)				42		0.0																
	TUA		P		13	10	41		0.1	0.72	283				3.8	3.4									
			S				50.5		-0.0																
AUG 24		13	12	24.7	38.83S	177.88E	33 KM	SE	1.7																64/ 276
				+ 0.7	0.03	0.05	R																		AVG MAG 4.4
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S											
	GNZ		IP		13	12	30.9	U	-0.9	0.22	31														
			E				34																		
			E(S)				38		1.2																
	TUA		P		13	12	35.9		0.2	0.57	272				5.3	5.1									
			IS				45		1.3																
	ECZ		EP		13	12	44.0		-1.1	1.25	25														
	TON									1.86	258				3.9										
	KRP		EP		13	12	54.5	U	-1.6	2.05	295				4.3	4.1									
			E				58																		
			EP*				13	01	-0.1																
			E(S)				13		-6.8*																
			E				28																		
	TNZ		P		13	13	08.0		2.4	2.75	262														
			EP*				15		2.0																
			E				24																		
			E(S*)				55		5.8*																
	WEL		EP		13	13	14		-0.9	3.42	223				4.3										
			E				33																		
			E				46																		
			E(S)				55		1.8																
			E(S*)				14	08	-1.4																
			E				29																		
			E				31																		
			E				37																		
	ONE		E		13	13	43			4.14	316														
			E(S)				14	12	1.2																
			E(S*)				29		-2.0																
	COB		EP		13	13	30		-0.3	4.55	239				4.2										
			E				50																		
			ES				14	23	2.4																
			ES*				40		-3.2																
	KAI		E		13	14	25			6.15	231				4.6										
			ES				59		-0.1																
	GPZ		E		13	14	08			6.25	217				4.5										
			ES				15	01	-0.7																
			E				06																		
AUG 24		13	22	08.0	38.90S	177.92E	33 KM	SE	1.7																64/ 276
				+ 1.4	0.09	0.06	R																		AVG MAG 3.4
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S											
	GNZ		IP*		13	22	14	U	-1.2	0.27	18														
			E(S*)				18		-2.4																
			E				21																		
			E				25																		
	TUA		IP		13	22	19.8	D	0.3	0.61	279				4.1	4.3									
			S				29.8		1.9																
	ECZ		E(P)		13	22	29		-0.1	1.30	22				3.4	3.1									
			E(P*)				32		0.3																
			E(S*)				52		2.7																
	KRP		P*		13	22	45		-0.4	2.11	297				3.0	2.4									
			E(S*)				23	12	-1.4																
	TNZ		EP*		13	22	57		0.3	2.77	263				3.4										

		H	M	S																						
AUG 24		13	32	09.6	33.01S	179.38W	33 KM	SE	3.6																	64/ 276
				+ 1.4	0.14	0.29	R																			AVG MAG 4.7
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S												
	RAO		EP		13	33	03		-4.0	3.95	19															
			ES				53		2.0																	
	ECZ		EP		13	33	21		0.0	4.97	199				4.6	4.4										
			ES				34	21	5.2																	
	ONE		EP		13	33	39		6.1	5.86	240				4.1											
			E				58																			
			E(S*)				34	59	-8.7*																	
	GNZ		EP		13	33	34		-0.9	6.01	200															
			E				43																			
			E(S)				34	05																		
			E				43		2.3																	
	KRP		EP		13	33	42.5		2.0	6.42	219															
			E				48																			
			E				55																			
			E				34	17																		
			E(S*)				35	22	-2.5																	
	TUA		EP		13	33	39		-1.7	6.44	205															
			E				41																			
			ES				34	52	1.0																	
			E(S*)				35	26	1.1																	
	TNZ		E(P)		13	34	04		2.8	7.97	218															
			E				13																			
			E				39																			
			E				39	58																		
	WEL		EP?		13	34	17		-4.5	9.49	208				5.2											
			ES				36	00	-3.9																	
			E				09																			
	KAI		ES?		13	36	57		-4.9	11.97	215				5.0											
			E				37	15																		
	GPZ		E		13	37	05			12.36	208				5.0											
AUG 25		02	01	44.6	38.94S	178.09E	33 KM	SE	0.1																	64/ 277
				+ 0.2	0.02	0.01	R																			AVG MAG 3.3
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S												
	GNZ		IP		02	01	52.5	U	0.1	0.30	349															
			E(S)				58		-0.0																	

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	M S
GNZ	IP	02	37	25	U	-0.2	0.36	346			
	S			31.5		0.1					
TUA	EP	02	37	31	D	0.2	0.79	284		3.8	3.1
	ES			41		-0.1					
AUG 25		H	M	S							64/ 111
		10	29	54.8			40.39S	173.56E	216 KM	SE 1.4	AVG MAG 3.7
							0.05	0.06	8		
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>M S</th>	RES	DIST	AZ	W-A	W P	M S
COB	P	10	30	27.9		2.0	0.94	222		3.6	
	S			50		-0.1					
WEL	P	10	30	30.8		2.5	1.28	135		4.1	
	E			44							
	E			48							
	S			55		0.7					
TNZ	E(P)	10	30	29		0.1	1.36	28		3.4	3.1
	E(S)			54		-1.4					
	E			57							
	E			31 03							
KAI	E	10	30	45			2.68	216		3.8	
	ES			31 18		-0.7					
KRP	EP	10	30	44.0		-0.6	2.90	33		3.4	3.1
	E			59							
	E(S)			31 24		0.8					
TUA	EP	10	30	48.8		0.8	3.19	61		3.8	3.7
	E(S)			31 28		-1.1					
	E			30							
GPZ	E	10	30	55			3.37	191		4.4	
	E			31 29.5							
	E(S)			31		-2.0					
GNZ	EP	10	30	56.2		0.1	3.87	65		4.3	3.7
	E(S)			31 39		-4.5*					
ECZ	P	10	31	06.5		-0.2	4.72	57		4.1	3.1
	E(S)			32 02		-0.6					
AUG 25		H	M	S							64/ 111
		22	43	47.0			41.36S	172.63E	199 KM	SE 1.2	AVG MAG 4.1
							0.05	0.06	7		
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>M S</th>	RES	DIST	AZ	W-A	W P	M S
COB	EP	22	44	14.9		1.4	0.28	16		4.3	
	S			34.1		0.2					
KAI	P	22	44	22		1.3	1.48	218		4.0	
	E			31							
	S			46		-0.7					
	E			53							
WEL	IP	22	44	23.5	UW	1.6	1.61	88		4.2	
	ES			49		0.2					
GPZ	EP	22	44	30.0		0.6	2.33	180		3.8	
	E			58							
	S			45 00.7		-1.4					
	E			21							
TNZ	EP	22	44	31.5		-0.4	2.55	32		3.5	3.1
	E			40							
	S			45 04.5		-2.1					
	E			08							
	E			17							
TON	KRP	22	44	51.0		0.4	3.09	47		4.1	
	EP?	22	44	53		-0.2	4.10	34			
	E			54.5			4.30	55			
	ES			45 44		-0.4					
ROX	EP	22	45	00			4.77	209			3.1
GNZ	E			53		-1.4	4.95	59		4.0	4.1
	E(S)			46 00		0.9					

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	M S
AUG 25		23	52	56.2			40.58S	176.17E	12 KM	SE 1.3	AVG MAG 4.5
							0.02	0.03	R		
							0.5				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	M S
WEL	IP	23	53	20.7	U	1.1	1.28	236		4.6	
	E			32							
	S			37.2		0.3					
	E			54							
TON	IP	23	53	27.9	D	-0.2	1.46	340		4.1	
TUA	E			39			1.92	23			4.4 4.5
	S			50.5		-1.1					
	E			54 08							
WNZ	E(PG)	23	53	35		-0.6	1.95	358			4.6 4.7
	E(SG)			54 01		-0.9					
TNZ	P	23	53	28.3	U	-0.3	1.96	315			4.8 4.7
	E(PG)			36		0.1					
	E			47							
	ES			51		-1.4					
	E			53							
GNZ	EP	23	53	34.4		-0.2	2.40	37			4.3 4.7
	E			51							
	E			57							
	E(S)			54 04		0.8					
COB	E(PG)	23	53	49		-1.0	2.66	258			4.3
	ES			54 08		-1.8					
	E(S*)			21		3.3*					
KRP	EP	23	53	37.9		-0.9	2.70	349			4.7 4.2
	E			39							
	E(P*)			46		2.5					
	E			58							
	E(SG)			54 27		-0.2					
KAI	EP*	23	54	09		2.1	4.07	240			4.6
	E			14							
	EPG			17		-1.5					
	S			42		-1.6					
GPZ	E(P)	23	53	58.7		1.5	4.07	219			5.2
	E(PG)			54 15		-3.5*					
	E			30							
	E			37							
	I			40.7							
	ES			42		-1.6					
ONE	EP	23	54	11		1.2	5.00	343			3.9
	ES			55 07		0.9					
MNH	ES?	23	56	20		-0.6	8.13	227			
	E			24							
AUG 27		H	M	S							64/ 283
		06	58	16.3			37.71S	177.65E	159 KM	SE 2.4	AVG MAG 4.3
							0.12	0.09	17		
							2.5				
		H	M	S	DIR	RES	DIST	AZ	W-A	W S	
ECZ	IP	06	58	39.0	U	-1.0	0.71	89		4.4 4.4	
	ES			56		-2.2					
	E			59 02.5							
GNZ	IP	06	58	43.3	D	1.4	0.98	163			4.7 4.9
	E			52							
	ES			59 03		1.4					
	E			11							
TUA	EP	06	58	45.2		1.6	1.17	200			4.4 4.1
	E			49.5							
	E			59 33							
	E			35							
KRP	IP	06	58	49.7	U	0.9	1.69	262			4.6 3.7
	E			57							
	E(S)			59 11		-2.9					
CNZ	E	06	58	58			2.23	227			3.6 3.6

		H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S
	E	59	00.5										
	E	25											
	E	34											
TNZ	EP	06 59	07.8			3.6	2.96	239		4.0	3.5		
	E	14											
	E	31											
	E	50											
WEL	EP	06 59	21.2			0.8	4.21	211		4.8			
	I	07 00	08.6										
	ES	10				0.3							
	E	11											
COB	ES	07 00	32			1.7	5.09	227					
KAI	ES	07 01	11			0.2	6.78	223		4.8			
	E	13											
GPZ	ES	07 01	15			-2.9	7.09	211		4.9			
ROX	ES	07 02	23			-3.1	9.96	216					
	H	M	S										64/20
AUG 27	07 34	19.6	39.24S	179.82E	33 KM	SE	1.5			AVG MAG	4.4		
		1.2	0.04	0.06	R								
	H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W</th> <th>P</th> <th>W</th> <th>S</th>	RES	DIST	AZ	W-A	W	P	W	S	
GNZ	IP	07 34	43.5	U	-0.2	1.52	292		4.7	4.8			
	E	52											
	E	56.5											
	E(S)	35	02			0.1							
	ES+	06				-1.5							
	E	08											
ECZ	EP	07 34	47.0	D	-1.1	1.84	327		4.3				
	E	56											
	E	35	03										
TUA	EP	07 34	52.0			-0.0	2.12	281		4.4	4.8		
	E	59											
	I	35	08.0										
	E	04											
	E(S)	15				-1.5							
CNZ	IP	07 35	10.6			2.2	3.32	269		4.0	4.3		
	E	35											
	E(S)	47				1.3							
	E	55											
KRP	I(P)	07 35	12.2	D	-0.1	3.60	290		3.6	3.7			
	E	20											
	E	42											
	E	46											
	E	49											
TNZ	EP	07 35	22.5			1.7	4.23	269		3.7	4.1		
	E	36	05										
	E(S)	10				2.3							
	E	23											
WEL	EP	07 35	22.0			-0.8	4.37	240		5.1			
	E	36	05										
	ES	11				-0.3							
COB	E	07 36	06			5.73	249		4.7				
	ES	45				0.8							
	E	37	01										
GPZ	E	07 36	14			6.99	228		5.1				
	ES	37	12			-2.2							
KAI	E(S)	07 37	17			-1.5	7.17	240		5.1			
	E	20											
ROX	E(P)	07 36	42.5			4.8*	9.96	228					
	E(S)	38	26			1.0							
	E	29											
	H	M	S										64/20
AUG 28	16 32	57.7	37.97S	176.41E	243 KM	SE	1.0			AVG MAG	4.1		
		0.7	0.03	0.03	5								

		H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S
KRP	IP	16 33	32.0			1.0	0.77	243		4.9	3.8		
	E(S)	57				0.1							
TUA	IP	16 33	35.4	U	0.7	1.36	155			5.1	5.3		
	E	58											
	E	34	02.5										
	E	04.5											
GNZ	IP	16 33	37.8	U	0.8	1.66	130			5.9	5.8		
	E	34	02										
	S	06.5				-0.8							
ECZ	IP	16 33	37.0	U	-0.3	1.70	95			5.2	5.3		
	E	59											
	E	34	06										
	E(S)	07				-0.9							
CNZ	IP	16 33	39.2	U	1.4	1.76	202			4.1	4.2		
	E	34	09										
	E	13											
ONE	EP	16 33	44.0			-0.1	2.43	317		3.6			
	E	45											
	E	52											
	ES	34	19			-1.1							
	E	31											
WEL	EP?	16 34	01.0	D	0.2	3.92	198		5.3				
	I	01.4											
	E	42											
	E	49											
	E(S)	50				0.3							
COB	ES	16 35	03			0.4	4.52	218		5.1			
KAI	E	16 34	38			6.26	216		5.1				
	E	35	39.5										
	E(S)	42				0.6							
GPZ	EP	16 34	35.5			-0.3	6.75	204		5.4			
	E	35	49										
	E(S)	51				-1.5							
ROX	EP?	16 35	12			1.0	9.51	212					
	E	16											
	E	18											
	E	23											
	E	36	52										
	E(S)	54				-1.6							
	H	M	S										64/286
AUG 29	07 28	23.9	40.56S	176.36E	12 KM	SE	1.4			AVG MAG	3.8		
		0.5	0.03	0.03	R								
	H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W</th> <th>P</th> <th>W</th> <th>S</th>	RES	DIST	AZ	W-A	W	P	W	S	
WEL	EP	07 28	50.0			1.1	1.40	238		3.4			
	E	58.5											
	E	29	00.5										
	E	05											
	S	07.5				0.0							
	E	22											
	E	27											
CNZ	IP	07 28	48.0	U	-2.1	1.50	335			4.3	4.2		
	ES	29	04			-5.6*							
TUA	EP	07 28	54.8			-0.0	1.86	20		3.8	3.9		
	EPG	29	04			2.5							
	ES	17				-0.7							
	E	38											
TNZ	P	07 28	57.0			-0.4	2.05	312		4.1	3.9		
	P*	29	02			2.0							
	E	15											
	E(S)	20				-2.2							
	E	35											
GNZ	EP	07 29	01			0.0	2.31	34		3.8	3.8		
	E(PG)	10				-0.6							
	E	20											
	E	25											

	E(S)	27		-2.6																
	E(SG)	36		-0.2																
	E	48																		
KRP	EP?	23 34 15		-2.1	2.28	313														3.8 3.5
	EP*	21		0.5																
	E(S)	45		0.6																
	ESG	58		0.7																
TNZ	E(P)	23 34 22		1.1	2.55	276														3.9 3.4
	E(P*)	30		4.9																
	PG	34.5		2.5																
	E(SG)	35 07		0.6																
WEL	ES	23 34 58		-0.1	2.83	230														3.6
GPZ	ES	23 36 03		-2.0	5.62	220														4.0
	H M S																			64/28
SEP 02	10 15 27.0	33.94S	178.25E		33 KM	SE	1.7													AVG MAG 4.1
	+ 2.6	0.17	0.38		R															
	H M S				DIR	RES	DIST	AZ	W-A	W P	W S									
ONE	E	10 16 37					3.68	239												4.2
KRP	I	10 16 39.8					4.54	208												
TUA	P	10 16 36.5		-1.3	4.94	190														
	ES	17 33		0.7																
CNZ	EP	10 16 50		2.2	5.68	202														3.9
WEL	EP	10 17 16		-0.8	7.84	200														5.2
	ES	18 42		0.3																
GPZ	ES	10 19 48		-1.0	10.67	202														5.2
	H M S																			64/27
SEP 02	10 57 02.8	38.70S	175.97E		33 KM	SE	1.4													AVG MAG 2.8
	+ 2.6	0.22	0.17		R															
	H M S				DIR	RES	DIST	AZ	W-A	W P	W S									
WNZ	EP*	10 57 09					0.4	0.12	54											
	S*	11.5		-1.2																
KRP	ES	10 57 29		0.3	0.85	336														2.4
TUA	ES?	10 57 31		0.4	0.93	97														3.3
	H M S																			64/26
SEP 03	06 12 43.6	38.92S	175.83E		186 KM	SE	1.8													AVG MAG 4.3
	+ 1.5	0.10	0.08		11															
	H M S				DIR	RES	DIST	AZ	W-A	W P	W S									
CNZ	IP	06 13 09.9		1.2	0.36	218														
	ES	29		0.9																
KRP	IP	06 13 10.0	D	-2.2	1.02	347														4.2
TUA	EP	06 13 12.5		0.2	1.03	84														4.0 4.3
	E	19																		
	ES	33		-1.5																
	E	53																		
GNZ	IP	06 13 19.0	D	0.4	1.73	82														4.3 4.4
	ES	45		-0.6																
WEL	IP	06 13 29.9	DSE	2.6	2.51	199														4.9
	ES	14 02		1.1																
COB	ES	06 14 17		0.9	3.22	227														4.7
KAI	ES	06 14 52		-2.8	4.93	222														4.6
GPZ	EP	06 14 04		1.1	5.34	206														5.1
	ES	15 03		-1.4																
	H M S																			64/25
SEP 04	07 37 05.4	44.64S	168.11E		33 KM	SE	1.4													AVG MAG 4.1
	+ 0.8	0.04	0.06		R															
	H M S				DIR	RES	DIST	AZ	W-A	W P	W S									
MNW	IPN	07 37 24.9	U	-0.1	1.19	197														
ROX	IPN	07 37 24.7	D	-0.3	1.19	135														5.0
	ESN	40		0.3																5.2
KAI	E	07 37 46			3.20	50														4.6
	EP*?	38 02		0.6																
	ES*	43		-0.4																
GPZ	EPN	07 37 54		-1.3	3.40	75														4.7

	EP*	38 06		1.1																
	E(S*)	48		-1.4																
COB	EPN	07 38 15		-1.0	4.92	45														4.6
	ESN	39 09		-1.2																
WEL	E	07 38 35			5.92	58														4.7
	ESN	39 38		3.5																
TNZ	EPN	07 38 46		-0.5	7.18	43														
TON	E	07 39 01			7.76	48														5.0
	ESN	40 23		4.7*																
CNZ	EPN	07 38 56		1.7	7.76	48														
	ESN?	40 18		-0.5																
KRP	EPN	07 39 07		-0.2	8.73	42														
	H M S																			64/300
SEP 04	18 20 51.1	40.26S	173.22E		204 KM	SE	1.4													AVG MAG 4.3
	+ 1.3	0.10	0.13		15															
	H M S				DIR	RES	DIST	AZ	W-A	W P	W S									
COB	P	18 21 22			1.2	0.91	204	3.9												
	E	42																		
TNZ	P	18 21 25		0.6	1.40	40														3.6 4.4
	E	46																		
WEL	IP	18 21 25.8	USE	-0.1	1.56	132														4.7
	E	44																		
	E	47.5																		
TON	P	18 21 31		0.0	2.07	60														4.4
	E	57																		
CNZ	P	18 21 30.9		-0.2	2.08	60														3.9 4.5
	E	54																		
KAI	E	18 21 41			2.64	210														4.9
	S	22 11.2		-1.9			</													

		H	M	S														
WEL	EP	22	09	35.2	UE	2.4	10.69	46										
	ES	11	27			-0.6												
	EL	12	18															
TNZ	EP	22	09	53		0.0	12.24	38										
	ES	12	15			11.3*												
CNZ	EP	22	10	04		4.8	12.72	42										
	E	12	28															
WNZ	E	22	10	23			13.43	42										
TUA	EP	22	10	15		2.6	13.76	45										
	E	12	46															
	E	12	46															
KRP	EP	22	10	12		-0.6	13.78	39										
	E	13	17															
GNZ	EP	22	10	20		0.8	14.31	47										
	E	12	58															
ONE	EP	22	10	33		2.2	15.23	32										
	E	14	09															
SEP 12	H M S	22	42	41.0														
	+	-		1.4														
	H M S	22	43	19.5														
ECZ	EP	22	43	19.5		0.2	1.06	104										
	E	49																
GNZ	IP	22	43	22.1	D	0.9	1.35	153										
	E	47																
	ES	53				1.0												
TUA	EP	22	43	21		-0.3	1.37	183										
	ES	50				-2.3												
KRP	IP	22	43	18.9	U	-2.9	1.44	250										
	E	49																
CNZ	EP	22	43	28		0.3	2.21	217										
	ES	44	06			1.9												
TNZ	EP	22	43	35		1.0	2.85	231										
	ES	44	17			1.7												
WEL	EP	22	43	50.5		0.6	4.30	206	5.1	3.4								
	ES	44	43			-0.7												
COB	ES	22	44	58		-1.7	5.06	222	5.0									
KAI	E	22	45	23			6.78	220	5.0									
GPZ	EP	22	44	26		1.3	7.16	208	5.2									
	ES	45	45			-1.1												
SEP 16	H M S	10	20	30.6														
	+	-		0.8														
	H M S	10	20	39.8														
WEL	IP	10	20	39.8		-1.4	0.54	46	3.9									
	ES	47				-1.9												
COB	EP	10	20	49.5		-1.9	1.28	296	3.5									
	ES	21	05			-2.0												
KAI	ES	10	21	33		1.6	2.28	247	3.3									
	E	38																
GPZ	ES	10	21	33		0.0	2.35	210	3.1									
TNZ	ES	10	21	38		1.9	2.48	2										
TON	E	10	21	31			2.65	22										
CNZ	EP	10	21	12		1.8	2.65	22	3.5	3.3								
	ES	41				0.7												
KRP	EP*?	10	21	39		1.0	3.86	15	3.3									
SEP 17	H M S	01	04	02.9														
	+	-		1.0														
	H M S	01	04	28														
COB	EP	01	04	28		2.3	0.77	227	3.7									
	ES	44				0.8												
WEL	EP	01	04	32		2.4	1.22	127	3.5									
	ES	50				-0.1												

		H	M	S														
TNZ	IP	01	04	34.6	U	1.6	1.54	27										
	ES	55				-1.0												
TON	EP	01	04	40		0.8	2.09	50	4.4									
	ES	05	04			-3.1												
CNZ	IP	01	04	40.3		1.0	2.09	50										
	ES	05	08			0.8												
KAI	EP?	01	04	47		2.5	2.50	218	3.9									
	ES	05	15			-1.3												
KRP	EP	01	04	52		0.1	3.08	32										
	E	05	02															
	ES	25				-4.3												
	E	44																
GPZ	EP	01	04	54		0.7	3.19	191	4.9									
	ES	05	29			-2.9												
TUA	EP	01	04	57		1.8	3.33	59										
	E	05	24															
	ES	35				-0.2												
GNZ	EP	01	05	05		1.1	4.00	63										
	E	43																
ROX	ES?	01	06	30		-3.2	5.78	210										
SEP 17	H M S	06	29	34.4														
	+	-		0.9														
	H M S	06	29	48.4														
CNZ	IP	06	29	48.4	U	-2.3	0.94	23										
	ES	30	00			-2.6												
TNZ	EP	06	29	51		-0.9	1.04	329										
	ES	30	06			1.1												
WEL	EP	06	29	54		-0.6	1.24	191	3.1									
	ES	30	10			0.2												
TUA	EP	06	30	08		2.2	2.04	53										
	E	36																
COB	ES	06	30	29		-0.6	2.05	240	3.1									
KRP	EP	06	30	11		3.5	2.17	10										
	E	37																
KAI	E	06	31	23			3.69	227	3.5									
GPZ	E	06	31	15			4.05	206	3.6									
SEP 17	H M S	07	53	25.1														
	+	-		2.2														
	H M S	07	54	41														

SEP 20		H M S	34.48S	176.26W	166 KM	SE ND	AVG MAG	64/30		
		ND	ND	ND	ND	ND	ND	W-A	W P	W S
GNZ	EP	11 34 52				0.0	6.20	226		
	E	36 05								
TUA	E	11 35 03					6.83	229		
	E	36 20								
KRP	E	11 35 21					7.47	240		
WEL	ES	11 37 28				-0.0	9.82	224	5.5	
KAI	ES	11 38 32				0.0	12.55	227	5.0	
GPZ	E(S)	11 38 33				0.0	12.60	220	5.3	
	E	41								
SEP 21		H M S	39.10S	175.26E	12 KM	SE 1.9	AVG MAG	64/30		
		+- 0.6	0.04	0.04	R	R	R	W-A	W P	W S
CNZ	E(P*)	14 12 34.7				1.3	0.25	115		
	E	42								
TNZ	E(P*)	14 12 42				1.1	0.69	262	3.9	3.4
	E(S*)	53				2.6				
WNZ	E	14 12 50				0.81	55		3.9	4.1
	ESG?	58				2.5				
KRP	IPN	14 12 48.2				-2.1	1.19	11		4.1
	ESN	13 04				-2.7				
TUA	EP*?	14 12 55				0.1	1.50	80	3.7	
	EPG	58				-0.6				
GNZ	E(PG)	14 13 13				0.3	2.21	79	4.0	
WEL	EP*	14 13 08				0.9	2.22	190	3.5	
	ES*	36				-0.4				
COB	ES*	14 13 53				-0.1	2.77	223	3.5	
KAI	ESN	14 14 20				-5.9*	4.50	219	3.7	
GPZ	ESN	14 14 35				-2.8	5.00	202	3.9	
SEP 22		H M S	40.96S	174.86E	12 KM	SE 2.1	AVG MAG	64/30		
		+- 0.8	0.06	0.07	R	R	R	W-A	W P	W S
WEL	IPG	00 13 55.5				2.3	0.34	192	3.7	
	E	14 02								
COB	E(P*)	00 14 17				2.3	1.62	265	3.5	
	ES	35				0.7				
TNZ	EP	00 14 16				-0.3	1.81	348	4.2	
CNZ	P	00 14 15.7				-1.0	1.83	17	4.2	4.1
	ESG	50				2.1				
KAI	E(PG)	00 14 46				-1.1	3.02	238	3.7	
	ES	15 06				-2.0				
KRP	EP	00 14 31				-2.5	3.07	10	4.1	
	E	43								
GPZ	E	00 14 27					3.19	210	4.0	
	S	15 06.5				-5.6*				
GNZ	EP*?	00 14 46				1.5	3.36	48	4.0	
	E(PG)	52				-1.9				
SEP 23		H M S	38.60S	178.18E	33 KM	SE 3.0	AVG MAG	64/30		
		+- 7.3	0.30	0.55	R	R	R	W-A	W P	W S
GNZ	IP*	03 08 37.6				-1.2	0.13	252		
	E	44								
ECZ	ES	03 09 00				-1.5	0.95	18	3.3	
CNZ	EP	03 09 05				-0.6	2.14	253	3.3	
KRP	EP	03 09 08.5				2.2	2.19	287		

SEP 23		H M S	38.64S	176.01E	12 KM	SE 3.1	AVG MAG	64/318		
		+- 1.6	0.16	0.10	R	R	R	W-A	W P	W S
WNZ	IPG	18 22 46.0				-2.4	0.07	86		
KRP	IPG	18 23 02.2				0.0	0.80	332	3.6	
TNZ	EPG	18 23 14.5				0.6	1.39	246	3.5	
GNZ	EPG	18 23 19.5				1.8	1.57	91	3.8	
SEP 24		H M S	38.46S	175.98E	33 KM	SE 1.7	AVG MAG	64/319		
		+- 0.9	0.09	0.07	R	R	R	W-A	W P	W S
WNZ	EP	15 14 26				-1.6	0.19	151		
	E	27								
KRP	EP	15 14 33				0.2	0.64	327	3.4	
TON	EP	15 14 37.5				2.3	0.82	205		
TUA	EP	15 14 37.5				0.0	0.98	111	3.0	
TNZ	EP	15 14 44				0.2	1.44	239	3.4	3.1
	ES?	15 00				-1.2				
SEP 25		H M S	41.70S	171.52E	33 KM	SE 1.5	AVG MAG	64/320		
		+- 0.9	0.03	0.06	R	R	R	W-A	W P	W S
KAI	P*	11 03 20.8				-1.0	0.83	186	4.6	
	I	31.7								
	S*	33.2				-0.1				
COB	IP*	11 03 23.8				-2.4	1.10	56	4.6	
	S*	38				-3.2				
GPZ	EPN	11 03 38.5				-0.2	2.16	158	4.1	
	P*	45				0.9				
	ESN	04 04				0.5				
	ES*	12				-0.7				
WEL	PN	11 03 44				1.0	2.47	81	4.3	
	IP*	49				-0.5				
	ESN	04 14				2.8				
	ES*	22				-0.1				
TNZ	EPN	11 03 56				1.2	3.33	42	4.0	4.2
	EP*	04 05				0.9				
	I	29.5								
	ES*	49				1.2				
TUA	EP	11 04 25				4.9*	5.19	58	4.4	4.3
	E	47								
	ESN	05 17				-0.2				
GNZ	EP*	11 04 47				-0.1	5.84	61	4.3	
	E	05 13								
OCT 02		H M S	49.89S	164.90E	33 KM	SE 0.6	AVG MAG	64/321		
		+- 1.2	0.09	0.09	R	R	R	W-A	W P	W S
MNW	P	03 20 19				0.1	4.50	25	4.6	4.3
	ES	21 09				0.3				
ROX	EP	03 20 30				-0.1	5.33	36	4.2	4.2
	ES	21 28				-0.7				
GPZ	ES	03 22 37				0.5	8.16	44	4.9	
OCT 02		H M S	47.86S	163.57E	236 KM	SE 0.6	AVG MAG	64/322		
		+- 1.1	0.37	0.21	R	R	R	W-A	W P	W S
MNW	P	10 33 51				0.4	3.47	55	4.6	4.2
	ES	34 35				-0.2				
ROX	P	10 34 04				-0.4	4.62	61	4.2	3.9
	ES	39 00				0.2				

		H	M	S		R	RES	DIST	AZ	W-A	W P	W S
	GPZ ES	10	36	07	0.0	7.59	60	4.8				
OCT 04	09 21 00.7	38.70S	175.73E	12 KM	SE	2.5		AVG MAG	3.4			
	+ - 1.0	0.06	0.05									
	WNZ PG	09 21 09			1.8	0.30	78					
	KRP IPG	09 21 15.9			-0.8	0.79	349			3.7	3.4	
	TUA EPG	09 21 22			-1.4	1.12	96			3.4	3.3	
	TNZ EPG	09 21 24			-0.1	1.16	245			3.4	2.8	
	WEL EPG	09 21 56			0.9	2.69	196					
OCT 04	16 43 35.0	38.67S	178.14E	101 KM	SE	2.0		AVG MAG	4.8			
	+ - 2.0	0.10	0.12	11								
	GNZ P	16 43 48.0			-1.2	0.09	285					
	TUA IP	16 43 52.8			-0.7	0.78	259			5.1	4.8	
	ECZ KRP EP	16 44 12			1.5	2.18	289			4.7	5.1	
	TNZ P	16 44 21.0			-0.5	2.97	259			4.0		
	WEL P	16 44 30			-1.1	3.68	224			4.8		
	COB ES	16 45 41			-0.4	4.81	238			4.7		
	KAI ES	16 46 18			-2.6	6.41	231			4.8		
	GPZ EP	16 45 12			2.3	6.51	218			4.9		
OCT 05	09 32 24.6	38.10S	177.26E	33 KM	SE	3.1		AVG MAG	3.8			
	+ - 1.9	0.13	0.09									
	TUA EP	09 32 38			0.4	0.71	187			3.6	3.7	
	GNZ P	09 32 35.8			-3.1	0.80	132			3.5	4.1	
	ECZ KRP P	09 32 44.8			-1.9	1.38	277			3.9	4.2	
	TNZ E(P)	09 33 04			1.8	2.50	244			3.7		
	WEL E(P)	09 33 24			5.2	3.72	210			4.2		
	COB E(S)	09 34 36			14.4*	4.60	228			3.9		
	GPZ ES	09 35 06			-3.6	6.59	211			4.6		
OCT 06	01 34 42.0	47.62S	164.58E	99 KM	SE	1.3		AVG MAG	5.1			
	+ - 1.9	0.17	0.17	17								
	MNH P	01 35 27.0			1.2	2.78	50			5.0	5.3	
	ROX P	01 35 41			-0.2	3.91	58			4.4	5.1	
	GPZ EP	01 36 21			-0.9	6.88	58			4.8		

		H	M	S		R	RES	DIST	AZ	W-A	W P	W S
	KAI ES	01	37	44	1.3	7.02	46	5.1				
	COB ES	01	38	24	-1.2	8.76	45	5.3				
OCT 06	21 39 22.9	40.71S	174.23E	119 KM	SE	2.1		AVG MAG	4.7			
	+ - 0.9	0.07	0.07	13								
	WEL IP	21 39 45.3			2.8	0.70	145			4.3		
	COB IP	21 39 48.1			0.8	1.19	251			4.8		
	TNZ P	21 39 51.8			0.6	1.53	4			4.9		
	KAI EP	21 40 11			3.7	2.78	228			4.5		
	TUA EP	21 40 09			-1.9	2.95	51			4.7	4.4	
	KRP P	21 40 10.3			0.5	2.97	20			5.0	4.9	
	GPZ EP	21 40 14			1.2	3.20	201			5.1		
	GNZ P	21 40 17.1			-0.8	3.59	56			4.9	4.7	
	ECZ P	21 40 30			-0.4	4.51	49			4.2		
OCT 07	03 44 36.4	39.01S	175.53E	142 KM	SE	1.6		AVG MAG	4.4			
	+ - 1.1	0.05	0.05	12								
	TNZ P	03 45 02.2			2.4	0.91	259			4.4		
	KRP P	03 45 02.0			0.6	1.08	0			4.2	3.8	
	TUA P	03 45 04.2			0.8	1.28	81			4.1	4.1	
	GNZ IP	03 45 12.8			1.6	1.98	80			5.1	4.8	
	WEL P	03 45 16.9			1.1	2.35	194			4.2		
	ECZ P	03 45 21			0.4	2.71	62			4.4	4.2	
	COB EP	03 45 25			0.9	2.98	225			4.3		
	KAI ES	03 46 38			-2.8	4.70	220			4.6		
	GPZ EP	03 45 51			-1.7	5.16	204			5.2		
OCT 07	22 02 38.3	42.08S	174.36E	33 KM	SE	4.2		AVG MAG	4.0			
	+ - 1.9	0.10	0.14									
	WEL P*	22 02 51.0			-3.6	0.85	21			4.0		
	COB P*	22 03 06			-0.6	1.57	308			3.7		
	GPZ EP*	22 03 15			-0.2	2.05	217			3.4		
	TUA EP*	22 03 49			2.7	3.90	34			4.3		
	KRP P*	22 03 54			1.8	4.24	13			4.3	4.5	

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
ROX	P	02	22	09		0.2	2.38	104			4.1
	ES			36		-0.0					
KAI	E	02	22	55			4.57	60	4.5		
	ES			23 31		1.7					
	E			40							
GPZ	P	02	22	43		-0.2	4.90	78			
COB	E	02	23	06			6.23	54	4.8		
	ES			24 08		-1.3					
WEL	ES	02	24	35		-1.0	7.35	63	4.9		
TNZ	ES	02	25	03		0.7	8.45	50			
OCT 14		H	M	S							64/ 32
		16	59	52.3	41.94S	171.76E	12 KM	SE	1.0	AVG MAG	3.4
		+-		0.5	0.02	0.04	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KAI	P*	17	00	04		-0.3	0.64	204	3.5		
	S*			13		-0.2					
COB	P*	17	00	14		1.4	1.12	41	3.6		
	S*			29		1.2					
GPZ	EPG	17	00	30		-0.2	1.87	160	3.0		
	S*			51		0.8					
WEL	EPN	17	00	29		-0.9	2.35	75	3.3		
	S*			01 04		-0.6					
TNZ	EPG	17	01	01		-0.1	3.40	37			3.4
	ESG			46		-1.0					
	E			57							
OCT 14		H	M	S							64/ 34
		20	05	47.6	38.35S	176.23E	144 KM	SE	1.6	AVG MAG	4.3
		+-		1.2	0.07	0.05	10				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KRP	P	20	06	09.8		0.2	0.69	308		3.8	3.4
	ES			25		-1.5					
TUA	P	20	06	13		2.2	0.86	123		4.3	4.4
	S			29		0.3					
GNZ	P	20	06	17.2		0.7	1.44	102		4.2	4.8
	S			38		-0.5					
TNZ	P	20	06	22		3.1	1.67	239		4.1	3.7
	E			49							
ECZ	IP	20	06	22.0	U	-0.0	1.94	71		4.7	4.2
	S			47		-1.5					
WEL	P	20	06	38		0.7	3.14	200	4.7		
	S			07 15		-0.4					
COB	S	20	07	32		0.3	3.84	223	4.5		
KAI	ES	20	08	11		-1.6	5.56	220	4.4		
GPZ	EP	20	07	13		-2.0	5.99	206	5.1		
	S			08 18		-4.9*					
OCT 15		H	M	S							64/ 34
		05	43	50.0	38.66S	175.77E	12 KM	SE	1.3	AVG MAG	3.4
		+-		0.4	0.02	0.02	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
HNZ	PG	05	43	55.0		-0.7	0.26	83			
	SG			59.0		-0.5					
	I			44 05							
KRP	IPG	05	44	05.0	U	-0.5	0.76	346		4.0	3.4
	SG			16		0.2					
TUA	PG	05	44	11		-1.1	1.09	98		3.5	3.4
	ESG			28		1.2					
TNZ	PG	05	44	14.5		0.0	1.21	244		3.9	3.4
	E			35							
GNZ	EPG	05	44	26		0.3	1.76	90		3.6	3.4
	E			45 01							
WEL	(P)	05	44	35		2.0	2.73	196	3.6		
	ES*			45 15		1.2					
	ESG			20		-2.2					

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
OCT 15		11	05	11.9	32.88S	179.59W	439 KM	SE	1.3	AVG MAG	5.7
		+-		1.5	0.15	0.26	13				64/ 342
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
GNZ	P	11	06	46		-1.4	6.07	198			
	I			51							
	ES			08 03		0.3					
KRP	P	11	06	51		-0.1	6.41	217			
TNZ	P	11	07	10		2.0	7.96	216			
WEL	P	11	07	25		-0.4	9.52	207	5.8		
	S			09 12		0.8					
COB	ES	11	09	24		-1.6	10.23	215	5.5		
KAI	ES	11	10	01		-0.1	11.97	214	5.5		
GPZ	EP?	11	07	57		-0.2	12.39	207	5.8		
	ES			10 10		0.6					
OCT 15		H	M	S							64/ 343
		16	25	13.7	40.28S	173.52E	194 KM	SE	2.0	AVG MAG	4.1
		+-		1.5	0.08	0.10	14				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
COB	P	16	25	45.3		2.2	1.01	216	4.0		
	S			26 06		0.2					
TNZ	P	16	25	46.5		1.3	1.28	31		4.0	
	E			26 09							
WEL	P	16	25	49.0		2.9	1.38	137	3.9		
	S			28 11		-0.1					
KAI	E	16	26	08			2.75	215	4.2		
	S			35		-2.0					
KRP	E	16	26	12			2.82	34		3.7	3.4
	ES			36		-2.6					
TUA	P	16	26	06		0.4	3.17	63		4.2	4.3
	ES			45		-0.6					
GPZ	EP	16	26	10		0.6	3.48	191	4.6		
	S			50		-2.4					
GNZ	P	16	26	14		0.0	3.85	66		4.3	4.4
	ES			55		-5.6*					
OCT 15		H	M	S							64/ 344
		19	08	09.9	38.51S	176.04E	162 KM	SE	1.5	AVG MAG	4.5
		+-		1.5	0.06	0.05	12				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
KRP	IP	19	08	33.7		-0.2	0.71	326		4.7	4.0
	IS			51		-1.4					
TUA	P	19	08	36	U	0.7	0.92	109		4.9	4.5
	S			55		0.1					
TNZ	P	19	08	43		2.8	1.46	242		3.8	
GNZ	IP	19	08	41.2		-0.1	1.56	95		4.8	4.6
	ES			09 05		-0.5					
WEL	P	19	08	58		0.4	2.94	199	4.6		
	ES			09 35		0.8					
COB	ES	19	09	50		0.4	3.62	224	4.5		
KAI	ES	19	10	29		-0.8	5.34	220	4.5		
GPZ	S	19	10	38		-2.2	5.77	205	4.9		
OCT 17		H	M	S							64/ 345
		12	39	21.0	50.00S	165.00E	33 KM	SE	ND	AVG MAG	4.5
					R	R	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
MNW											
ROX	EP	12	40	38		0.2*	4.57	24		4.6	4.5
	ES			41 37		-0.0*	5.38	34		4.3	4.2
GPZ	EP	12	41	18		2.3*	8.20	43			
	E			42 41							
KAI	ES	12	43	07		10.7*	8.69	33	4.9		
WEL	EL	12	46	00			11.07	42			

OCT 18		H M S	40.78S	173.51E	153 KM	SE	2.1	AVG MAG	64/34
		+ -	0.05	0.07	11			4.1	
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
COB	P	00 10 45.9		1.5	0.66	242	3.6		
	S	11 00.9		-1.0					
WEL	P	00 10 49.9		2.3	1.08	118	4.5		
	S	11 07.2		-0.3					
TNZ	P	00 10 54.2		-0.0	1.73	23		4.0	3.7
	ES	11 17		-2.3					
KAI	EP?	00 11 04		2.4	2.35	221	4.2		
	S	33		0.9					
GPZ	EP	00 11 12		2.3	2.98	192	4.8		
	S	45		-1.3					
KRP	ES	00 11 54		1.3	3.26	30			3.1
TUA	EP	00 11 16		0.6	3.43	56		4.1	4.1
	ES	56		-0.6					
GNZ	P	00 11 22		-2.0	4.09	60		4.1	4.1
	ES	12 04		-7.9*					
ROX	(S)	00 12 44		-3.8	5.60	212			3.1
OCT 20		H M S	45.79S	168.43E	160 KM	SE	0.5	AVG MAG	64/34
		+ -	0.04	0.05	3			4.1	
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
ROX	IP	07 44 16.7	D	-0.1	0.70	64			4.9
	(S)	35		-0.1					
GPZ	EP	07 44 50		0.0	3.66	57	4.4		
	E	45 17							
	E	29							
	ES	34		0.2					
KAI	EP	07 44 53		-0.1	3.90	34	4.8		
	S	45 40		0.7					
COB	E	07 45 18			5.65	35	5.1		
	E	46 16							
	ES	20		-0.4					
WEL	ES	07 46 39		-0.2	6.44	48	5.0		
TNZ	E	07 45 50			7.93	36			
	ES	47 14		-0.8					
KRP	EP	07 46 07		0.2	9.48	36			
	E	16							
	ES	47 52		0.5					
OCT 20		H M S	38.61S	175.83E	33 KM	SE	1.3	AVG MAG	64/34
		+ -	0.04	0.03	R			3.4	
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EP*	17 11 58.0		-1.3	0.22	95			
	I	12 00.5							
KRP	IP*	17 12 06.3	U	-0.6	0.72	342		3.7	3.4
	S*	18		0.8					
TUA	EP*	17 12 12		-0.3	1.05	101		3.4	3.1
	ES*	28		1.3					
TNZ	P*	17 12 15		-0.9	1.27	243		3.5	3.1
	ES*	34		1.0					
OCT 20		H M S	38.95S	175.88E	162 KM	SE	1.8	AVG MAG	64/34
		+ -	0.08	0.07	16			4.1	
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	P	20 18 01		1.6	1.00	82		4.1	4.1
	S	18		-1.5					
KRP	P	20 17 58.2	D	-1.7	1.06	345		4.0	3.1
	E	18 22							
TNZ	P	20 18 02.7		1.5	1.19	258		3.9	3.4
	E	20							

GNZ	P	20 18 07.2	D	0.9	1.70	80		5.1	4.2
	ES	31		-0.6					
WEL	P	20 18 17.3		1.8	2.49	200	4.0		
	S	49		1.3					
COB	ES	20 19 05		0.8	3.22	228	4.5		
KAI	ES	20 19 42		-1.7	4.93	222	4.4		
GPZ	P	20 18 52		-0.2	5.33	206	4.6		
	ES	19 51		-2.2					
OCT 21		H M S	38.69S	175.79E	12 KM	SE	0.6	AVG MAG	64/350
		+ -	0.02	0.01	R			3.5	
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	05 02 41		0.5	0.26	76			
	ISG	44		-0.2					
KRP	IPG	05 02 50.5		-0.5	0.79	346		3.8	3.5
	ISG	03 02		0.2					
TUA	E	05 03 02			1.07	97		3.4	3.3
	ESG	11		-0.2					
TNZ	EPG	05 03 00		0.7	1.20	245		3.6	3.3
	ESG	15		-0.5					
OCT 22		H M S	44.91S	167.89E	90 KM	SE	2.6	AVG MAG	64/351
		+ -	0.19	0.12	45			4.7	
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
MNH	P	07 44 45		-1.0	0.90	192		4.7	
	S	58		-2.3					
ROX	P	07 44 51		1.8	1.16	120		4.3	4.7
	S	45 07		1.2					
KAI	EP	07 45 24		3.5	3.49	48	4.4		
	S	46 03		2.1					
GPZ	EP	07 45 23		0.6	3.62	72	4.5		
	S	46 03		-1.2					
COB	EP	07 45 44		-0.2	5.21	45	5.0		
	S	46 41		-2.6					
WEL	ES	07 47 04		-3.8	6.20	57	5.0		
TON	E	07 46 30			8.05	48	5.0		
	ES	47 55		1.7					
KRP	P	07 46 39		2.5	9.03	42			
	ES	48 15		-2.3					
OCT 22		H M S	38.57S	175.81E	12 KM	SE	1.3	AVG MAG	64/352
		+ -	0.03	0.03	R			3.4	
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	08 04 30		0.7	0.24	104			
	ISG	34		1.1					
TON	EPG	08 04 37		-0.6	0.66	198	3.0		
	SG	45		-1.7					
KRP	P	08 04 39.3		-0.4	0.68	342		3.9	3.3
	S	50.5		-0.7					
TUA	EP?	08 04 44		-0.7	1.08	103		3.5	3.5
	E(SG)	05 07		6.5*					
TNZ	EPG	08 04 50		0.2	1.27	241		3.5	3.2
	ESG	05 09		2.1					
OCT 23		H M S	40.60S	174.63E	120 KM	SE	2.6	AVG MAG	64/353
		+ -	0.06	0.09	14			4.4	
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WEL	IP	17 25 45.2		3.0	0.70	171	4.6		
	S	58		0.8					
TNZ	P	17 25 50.7		1.0	1.42	352		4.0	4.3
	S	26 09		-1.2					
COB	IP	17 25 51.5	W	0.7	1.52	251	4.7		
	S	26 10		-2.1					

		E(SG)		58	-0.8				
GPZ		EP*		39	1.9	1.58	152	2.7	
		ES*		57	-1.1				
OCT 30	H M S	38.67S	175.74E	178 KM	SE	1.7	AVG MAG	64/ 34	
	06 55	34.6	0.07	0.06	9		3.8		
	+-	1.3							
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
CNZ	IP	06 56 01	1.5	0.55	196		3.6	3.2	
	ES	19	0.4						
TON	ES	06 56 19	0.3	0.55	197	2.9			
KRP	IP	06 56 00.4	U	-0.2	0.76	348		4.1 3.2	
	ES	18	-2.8						
TUA	EP	06 56 04	0.9	1.11	97		3.9	3.9	
	ES	25	-0.2						
TNZ	P	06 56 06.5	2.8	1.18	244		3.7		
GNZ	P	06 56 10.4	0.9	1.79	90		4.1	3.7	
	ES	35	-1.5						
WEL	P	06 56 22.1	1.8	2.71	196	4.0			
	S	56	0.5						
COB	ES	06 57 10	0.9	3.34	223	4.1			
KAI	ES	06 57 47	-1.6	5.07	219	4.3			
GPZ	EP	06 56 55	-1.2	5.53	204	4.4			
	ES	57 57	-2.5						
NOV 01	H M S	39.19S	175.46E	139 KM	SE	1.6	AVG MAG	64/ 34	
	13 51	28.5	0.05	0.05	9		3.4		
	+-	1.1							
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
CNZ	P	13 51 48	U	0.6	0.07	98			
	E	59							
	ES	52 01	-0.7						
TNZ	EP	13 51 53	1.9	0.84	270		3.1	3.1	
	E	52 06							
	E(S)	09	0.6						
KRP	P	13 51 56	0.9	1.27	3		3.5	3.1	
	ES	52 13	-2.5						
GNZ	EP	13 52 05	0.8	2.07	76		3.8	3.4	
	E	09							
	ES	31	-0.5						
	E	35							
WEL	EP	13 52 07	1.6	2.16	194	3.8			
	ES	34	0.5						
COB	ES	13 52 49	0.3	2.82	227	3.7			
KAI	S	13 53 27.5	-1.3	4.53	221	4.1			
GPZ	ES	13 53 37	-2.3	4.97	204	4.2			
NOV 01	H M S	41.91S	174.09E	12 KM	SE	1.4	AVG MAG	64/ 34	
	17 00	05.0	0.03	0.03	R		3.4		
	+-	0.5							
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
WEL	P*	17 00 20.9	D	1.0	0.80	39	3.8		
	E	32							
	S*	32.5	1.7						
COB	EP	17 00 28	-0.9	1.31	308	3.2			
	E(P*)	30	1.4						
	ES	45	-1.5						
GPZ	EP	17 00 39	0.0	2.08	210	3.6			
	EPG	46	-1.1						
	ES	01 02	-2.0						
	E	20							
KAI	EPG	17 00 48	0.7	2.09	252	3.1			
	E	54							
	S	01 04.5	0.2						
	ES*	09	-0.4						
	ESG	18	2.5						
TNZ	EP*	17 00 54	1.1	2.73	5	3.7	3.4		

	EPG	59	-1.3						
	E	01 06							
	E(SG)	36	-1.2						
	E	52							
CNZ	EP	17 00 51	0.3	2.93	23		3.8	3.7	
	EP*	01 00	3.8*						
	E(SG)	44	0.3						
KRP	EP*	17 01 16	-0.9	4.13	16		3.7	3.6	
	E	20							
	E(PG)	31	2.4						
	E(S)	53	-1.0						
	E(SG)	02 23	-1.4						
NOV 01	H M S	38.57S	175.94E	180 KM	SE	2.2	AVG MAG	64/ 365	
	21 16	59.5	0.08	0.07	12		3.7		
	+-	1.9							
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
CNZ	P	21 17 27	1.6	0.70	206		3.2	3.2	
	ES	45	-0.4						
KRP	EP	21 17 25.5	D	-0.1	0.72	334		4.1 3.2	
	ES	42	-3.7						
TUA	EP	21 17 29	1.8	0.98	104		3.9	4.1	
	ES	49	0.4						
TNZ	EP	21 17 32.5	2.1	1.36	243		3.3	3.0	
	E(S)	57	2.6						
	E	18 10							
GNZ	ES	21 17 58	-1.0	1.63	93			4.0	
WEL	EP	21 17 48	0.9	2.86	198	4.0			
	ES	18 24	0.3						
COB	S	21 18 37.5	-0.7	3.52	224	4.0			
GPZ	EP	21 18 23.0	-0.2	5.69	205	4.1			
	S	19 24.5	-3.7						
NOV 01	H M S	37.65S	177.49E	209 KM	SE	1.6	AVG MAG	64/ 366	
	22 12	42.2	0.06	0.06	8		4.4		
	+-	1.1							
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	E(P)	22 13 12	-0.0	0.84	93		4.3	4.3	
	E	15							
	E	24							
	E	30							
	E(S)	34	-1.2						
GNZ	EP	22 13 15	1.5	1.07	157		4.7	4.8	
	E	21							
	E	30							
	E	33							
	ES	39	1.2						
TUA	EP	22 13 15.5	1.2	1.18	193		4.4	4.3	
	E	17							
	E	30.5							
	E	35							
	E(S)	37	-2.3						
KRP	IP	22 13 15.5	U	-2.1	1.57	260		4.4 4.2	
	E	24							
	E(S)	37	-8.0*						
CNZ	EP	22 13 24	0.5	2.17	224		4.5	4.0	
	E	25							
	E	31							
	E(S)	55	-0.3						
	E	14 00							
	E	04							
TNZ	EP	22 13 33.5	D	2.0	2.88	237		4.3 3.7	
	E	43							
	E(S)	14 12	2.3						
ONE	EP	22 13 34	-0.4	3.14	306				
	E	37							
WEL	EP	22 13 48.5	1.2	4.20	209	4.5			

		H	M	S															
	E			14	07														
	E				37														
	ES				39				1.2										
	E			15	09														
COB	EP			22	13	58			0.1	5.04	226		4.6						
	ES?				14	56			-0.7										
KAI	E(S)			22	15	33			-3.0	6.74	222		4.6						
GPZ	EP			22	14	24			-0.1	7.07	210		4.9						
	E				28														
	E			15	40														
	S				42.5				-1.2										
NOV 02		H	M	S															
		12	00	26.8	40.51S	174.34E	100	KM	SE	2.0			AVG MAG	4.1					
					0.04	0.05	12												
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S					
WEL	EP			12	00	46.5			0.6	0.84	158		3.6						
	E(S)				01	00			-0.3										
	E				02														
TNZ	P			12	00	53.0	U		1.5	1.32	1		4.1	4.1					
	E				58														
	E				01	03													
	E(S)				09				-1.0										
	E				13														
COB	EP			12	00	52.5			0.6	1.35	244		4.0						
	S				01	10.5			-0.2										
CNZ	P			12	00	56	D		1.1	1.60	36		4.1	4.1					
	E				01	09			0.2										
	ES				16														
	E				24														
KRP	P			12	01	11.0			1.0	2.74	20		4.1	4.1					
	E				19														
	S				41.5				-1.0										
	E				50														
TUA	EP			12	01	15			4.8	2.75	53		3.9	3.1					
	E				22														
	E				38														
	E(S)				54				11.2*										
KAI	E			12	01	17			2.99	227	3.9								
	E				29														
	E				45														
	ES				50				1.5										
	E				02	08													
GNZ	P			12	01	17.5			-1.5	3.40	58		3.8	4.1					
	E				48.5														
	E				53.5														
	E(S)				57				-1.5										
	E				02	06													
GPZ	EP			12	01	19			-0.4	3.43	201		4.2						
	E				37.5														
	E				54.5														
	ES				56				-3.2										
ONE	ES			12	02	29			-2.1	4.72	0		4.1						
	E				54														
NOV 02		H	M	S															
		17	49	49.8	41.88S	174.66E	12	KM	SE	2.6			AVG MAG	3.1					
					0.04	0.05													
					H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S					
WEL	P*			17	50	01.0	U		-0.1	0.60	7		3.8						
	E				08														
	E(S*)				10				0.6										
	E(SG)				12				1.8										
COB	EP			17	50	17.0			-1.1	1.65	298		3.5						
	I				17.4														
	S				38.5				-0.5										
	E(S*)				41				-0.1										

	ESG				48				2.4										
GPZ	EP			17	50	25.5			-1.9	2.35	219		3.7						
	EP*				33				1.9										
	PG				40.5				3.2										
	ES				53				-2.4										
	ES*				51	03			1.0										
	E				28														
KAI	EP*			17	50	35			1.2	2.50	254		3.9						
	EPG				38				-2.5										
	E(S)				56				-3.7										
	E				51	01													
	ES*				08				1.3										
	ESG				11				-3.3										
	E				27														
TNZ	EP*			17	50	38			0.9	2.70	355		3.9	3.8					
	EPG				45				0.6										
	E				54														
	E(SG)				51	17			-3.8										
CNZ	EP*			17	50	38			-0.1	2.76	14								
	E				36														
	EPG				42				-3.6										
	E(S*)				51	11			-3.4										
	E				19														
	ESG				25				2.2										
TUA	EPG			17	51	03			0.2	3.61	33		3.7	3.7					
	E				21														
	SG				56				4.6										
KRP	E			17	50	56				4.00	10		3.9	3.7					
	E				51	03													
	EPG				09				-1.8										
	E(S)				37				1.4										
	E				48														
	E				59														
	E				52	14													
GNZ	ES			17	51	35			-3.6	4.13									

CNZ	EP	10 08 49	-1.6	4.24	227	3.7							
TON	E	10 08 50		4.25	227								
TNZ	E(P)	10 09 00	1.2	4.96	234	3.8							
WEL	EP	10 09 12.5	-0.8	6.17	216	4.3							
	E(S)	10 25	-0.2										
GPZ	E(P)	10 09 49	0.4	9.03	214								
	E(S)	11 29	0.5										
64/ 373													
NOV 05	H M S	42.49S 172.85E	12 KM	SE	1.4	AVG MAG	3.1						
	+-	0.4											
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S					
KAI	EP*	11 43 39	1.0	1.06	268	3.0							
	ES	52	-2.4										
	ES*	54	1.7										
GPZ	EP	11 43 40.0	-1.2	1.21	187	3.0							
	E(P*)	42	1.4										
	ES	57	-0.9										
COB	EP	11 43 42	-1.8	1.40	357	3.2							
	ES	44 00	-2.3										
	E(S*)	02	-0.6										
WEL	EP*	11 43 52	0.2	1.87	51	3.2							
	E(S*)	44 17	0.4										
	E(SG)	20	-1.9										
	E	25											
TNZ	EP	11 44 13	1.0	3.50	20	3.6	3.6						
	EP*	22	2.3										
	ES	54	1.7										
	ES*	45 10	4.4*										
TON	EP*	11 44 26	0.0	3.87	33	3.5							
	ES*	45 17	0.4										
	E	35											
CNZ	EP*	11 44 25.5	-0.6	3.87	33	3.6	3.3						
	E(S)	45 01	-0.3										
	E	23											
KRP	EP	11 44 33	0.7	5.00	25	3.5							
	E(PG)	45 01	1.1										
64/ 373													
NOV 05	H M S	38.59S 177.46E	12 KM	SE	2.1	AVG MAG	4.4						
	+-	0.4											
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S					
GNZ	IPG	12 16 33.5	U	3.1	0.44	97							
	E(SG)	40	3.4										
	E	50											
ECZ	IP	12 16 40.5	D	-3.6	1.24	44	4.9	4.4					
	EPG	46	-0.4										
	ES	59	-2.0										
	ESG	17 05	1.8										
CNZ	P	12 16 49.1	D	0.2	1.61	247	4.3	4.4					
	E(PG)	54	0.2										
	E	17 03											
	E(S)	09	-0.4										
TON	P	12 16 49	0.0	1.62	247	3.8							
	EP*	52	2.1										
	E	17 01											
	ES	10	0.5										
KRP	P	12 16 48.6	D	-0.9	1.65	293	3.9	3.5					
	EP*	52	1.5										
	ES	17 09	-1.4										
	ES*	16	3.5										
TNZ	P	12 17 01.6		1.1	2.47	255	4.4	4.3					
	EP*	06	1.4										
	E(S)	33	3.1										
	ESG	44	-0.6										
AUC	P	12 17 04	D	-0.3	2.74	308	4.0	3.8					
	S	36	-0.8										

WEL	P	12 17 09.8	D	-3.2	3.39	217	5.0						
	P*	19.5		-0.8									
	E	42											
	ES	50		-2.2									
	ES*	18 07		2.2									
ONE	EP	12 17 17		-0.8	3.75	318	4.0						
	E	20											
	ES	18 00		-0.7									
COB	E(PG)	12 17 50		-0.3	4.41	234	4.6						
	E	37											
	ES	18 16		-0.7									
	E(S*)	40		4.7									
KAI	E	12 17 54			6.05	228	5.1						
	EP*	18 04		-1.9									
	E	52											
	E(S)	55		-1.2									
GPZ	EP	12 17 48		-3.5	6.26	214	5.4						
	E(P*)	18 06		-3.3									
	E	54											
	ES	56		-5.0*									
ROX	EP	12 18 30		-0.1	9.16	219							
	ES	20 05		-5.1*									
64/ 373													
NOV 05	H M S	33.84S 179.43W	355 KM	SE	1.2	AVG MAG	4.8						
	+-	1.1											
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S					
ECZ	EP	14 13 30.5		-0.4	4.18	203	4.2	4.6					
	E	14 23											
	E	26											
	E	30											
GNZ	EP	14 13 42		-0.0	5.22	202	4.6	4.9					
	E	44											
	E	14 30											
	E	43											
ONE	EP	14 13 44		-0.7	5.46	248							
TUA	EP	14 13 47		-0.2	5.67	208	4.4	4.8					
	E	14 51											
	E	57											
	E	15 00											
KRP	P	14 13 48.0		-0.2	5.77	224	4.3						
	E	14 31											
	E	51											
CNZ	EP	14 13 59		-0.1	6.70	216							
	ES	15 19		1.6									
TON	EP?	14 13 59		-0.1	6.71	216	4.7						
	ES	15 18		0.4									
TNZ	EP	14 14 08		2.0	7.30	221							
	E	10											
	E(S)	15 40		10.0*									
WEL	EP	14 14 21.5		-1.6	8.74	210	5.6						
	S	15 59.5		-1.3									
COB	ES	14 16 17		-1.0	9.54	218	5.3						
KAI	E	14 16 53			11.27	217							
GPZ	E(P)	14 14 59		1.5	11.61	210	5.6						
	E	15 05											
	E	10											
	ES	17 03		0.2									
64/ 374													
NOV 07	H M S	38.32S 176.11E	210 KM	SE	1.7	AVG MAG	4.4						
	+-	0.8											
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S					
KRP	IP	08 24 09.4		0.6	0.60	311	4.6	3.8					
	ES	59		-1.4									
TUA	IP	08 24 42	U	2.0	0.95	121	4.7	4.6					
	ES	25 04		0.3									

STATION	IP	08 24 41.5	U	1.3	0.99	207	4.4	3.1
CNZ	EP	25 03.5						
	E(S)	05		0.9				
	E	11						
TON	EP	08 24 41.5		1.2	0.99	207	3.5	
	S	25 04.5		0.3				
GNZ	IP	08 24 45.2	U	0.7	1.53	103	5.2	5.1
	E	25 07						
	ES	11		-0.7				
TNZ	P	08 24 47.4	U	2.2	1.61	237	3.9	3.1
	E	25 25						
	E	36						
AUC	EP?	08 24 47		-0.0	1.80	323	3.5	
ECZ	EP	08 24 48		-1.2	2.02	73	4.0	4.1
	E	25 53						
	ES	17		-2.8				
ONE	EP	08 24 59.1		0.2	2.90	331	3.7	
	ES	25 36		-1.2				
	E	52						
WEL	EP	08 25 02.3	U	0.6	3.14	199	4.8	
	E	15.5						
	ES	42		-0.2				
COB	E(P)	08 25 11.5		1.9	3.80	222	5.4	
	E	32						
	ES	36		-20.3*				
KAI	ES	08 26 32		-3.2	5.53	219	5.6	
	GPZ	08 25 37.4		0.2	5.98	205	5.0	
MNH	EP	08 26 43		-2.6				
	E(P)	08 26 29		2.8	9.77	218		
	S	28 11.5		-1.9				
NOV 07	H M S	20 45 01.5						64/35
		+	1.5					
	H M S	45.32S	171.99E	33 KM	SE	2.3	AVG MAG	4.3
		0.08	0.08	R				
GPZ	EP	20 45 29		1.1	1.69	16	4.1	
	EP*	34		2.2				
	S	46.5		-1.3				
ROX	EP	20 45 31		0.3	1.89	264	4.6	4.3
	EP*	35		-0.2				
	ES	54		1.3				
KAI	EP	20 45 46		2.6	2.82	351	3.8	
	EP*	52		0.9				
	E	46 14						
MNH	E(S)	19		3.7				
	E(S*)	26		-2.2				
	EP	20 45 48		0.7	3.10	260	4.5	4.1
COB	EP*	57		1.1				
	ES	46 21		-1.3				
	E	34						
WEL	ES	20 46 58		7.5*	4.26	8	3.8	
	ES	20 46 54		-2.4	4.51	28	4.0	
	ES?	20 47 49		7.6*	6.38	17		
TON	E(S)	20 47 44		-4.0	6.65	25	4.3	
GNZ	E	20 47 53			6.66	25		

NOV 08	H M S	49.93S	164.30E	33 KM	SE	4.2	AVG MAG	64/376
	02 43 52.9	0.42	0.52	R			6.7	
	+	2.0						
MNH	EP	02 44 55.5		-5.2	4.71	30	6.1	
	E	49 00						
	E	25						
ROX	EP	02 45 07		-5.6	5.59	39		
	E	10						
	E	21						
MCO	EP	02 45 14		0.9	5.63	214		
	GPZ	02 45 47.5		-3.5	8.46	46	7.1	
	E	48.5						
COB	EP	02 46 17		-2.8	10.63	37	6.9	
	E	21						
	ES	48 07		-7.0				
WEL	EP	02 46 30.0	D	1.2	11.32	44	6.9	
	E	36						
	E	47 31						
TNZ	EP	02 46 51.5		2.2	12.91	37		
	E	47 00						
	E	30						
TON	E(S)	49 11		4.0				
	E	39						
	E	51 29						
CNZ	EP?	02 47 02			13.37	41	7.0	
	E	35						
	E(S)	49 19		1.5				
KRP	EP?	02 46 54.8	U	-0.4	13.37	41		
	E	47 01.8						
	E	14						
GNZ	EP	02 47 09		0.2	14.45	38		
	E	34						
	E	51						
AUC	EP	02 47 19		4.2	14.93	46		
	E	49 43		0.7				
	E	50 11						
ONE	EP	02 47 13	D	-3.9	15.10	34		
	E	25						
	E	49 59						
NOV 09	H M S	17 52 05.8						64/377
	+	0.2						
	H M S	50.16S	164.67E	33 KM	SE	0.1	AVG MAG	4.2
		0.02	0.02	R				
MNH	P	17 53 15		0.1	4.81	25	4.6	4.2
	ES	54 08		-0.0				
	E							

NOV 11	ROX	EP?	17 53 26	-0.1	5.64	35	4.2	4.1
		E	28					
		E(S)	54 28	0.0				
		H M S					64/ 37	
		20 21 06.8	39.40S 178.19E	12 KM	SE	1.6	AVG MAG	4.1
		+ - 0.8	0.03 0.04	R				
		H M S						
		20 21 23.6	DIR RES DIST AZ	U	0.1	0.76	350	
	GNZ	IP	29					
		E	29					
	TUA	IP	20 21 25.0	-1.5	1.00	306		4.8
		E	33					
	CNZ	IP	20 21 40.8	D	0.3	2.06	275	4.7 4.7
		E(PG)	51		2.4			
		S	22 05.5	0.0				
		ES*	11	0.6				
	TON	EP	20 21 40.8	0.2	2.07	274		
		E(P*)	43	-0.3				
		E	48					
		E(PG)	51	2.3				
		E	22 01					
		S	06.5	0.9				
		ES*	10	-0.7				
	KRP	P	20 21 45.1	D	-2.2	2.55	304	4.5 4.5
		PG	57.5	-0.8				
		E	22 05					
	TNZ	P	20 21 53.3	D	0.3	2.97	273	4.5 4.3
		EP*	59	0.3				
		E(S)	22 23	-4.8*				
		ES*	39	1.4				
	WEL	EP?	20 21 55.9	-0.5	3.23	233		4.8
		I	56.6					
		EP*	22 05	1.9				
		E	26					
		ES	33	-0.8				
		E(SG)	54	-1.7				
	AUC	EP	20 22 02	-0.7	3.70	312		4.2 3.1
		EPG	21	-0.6				
		E(S)	44	-1.1				
	COB	E(P)	20 22 13	-0.7	4.51	246		4.7
		EP*	29	4.0				
		EPG	39	1.0				
		ES	23 02	-2.7				
		E(S*)	29	5.1*				
	ONE	EP	20 22 17	0.4	4.72	319		4.1
		EPG	44	1.7				
		E(S)	23 08	-2.0				
	GPZ	EP	20 22 36	2.6	5.98	222		5.2
		E	23 37					
		ES	40	-0.1				
	KAI	S	20 23 37.5	-3.4	6.01	236		5.0
		E	39.5					
	ROX	E(S)	20 24 50	-0.5	8.94	224		
		H M S					64/ 37	
		00 28 24.3	37.67S 176.49E	12 KM	SE	0.7	AVG MAG	3.3
		+ - 0.8	0.05 0.02	R				
		H M S						
		00 28 38.8	DIR RES DIST AZ	U	-0.1	0.79	251	3.5 3.1
	KRP	P*	41	0.5				
		E(PG)	44					
		E	49	-0.8				
		ES*	51	-0.2				
		E(SG)	51	-0.2				
	TUA	E(P*)	00 28 47.5	0.8	1.25	155		3.1 3.1
		E(S*)	29 03	-0.5				
		E(PG)	00 28 55	-0.8	1.55	129		3.5 3.1
		E(SG)	29 22	5.3*				

NOV 12	CNZ	E(P*)	00 28 55	0.6	1.69	206	2.8	
		EPG	59	0.4				
		H M S					64/ 380	
		07 13 04.9	38.76S 175.71E	170 KM	SE	1.6	AVG MAG	3.5
		+ - 1.6	0.08 0.07	R				
		H M S						
		07 13 30.3	DIR RES DIST AZ	U	1.7	0.46	197	
	CNZ	P	35					
		E	48					
		E	59					
	TON	EP	07 13 30		1.4	0.46	197	2.7
		E	32					
		ES	47	0.2				
	KRP	IP	07 13 30.5	D	-0.2	0.85	351	3.6 2.9
		E	33					
		ES	49	-1.6				
		E	50					
	TNZ	E	07 13 35			1.12	248	3.2
	TUA	E	07 13 33.5			1.12	93	3.4 3.9
		E	48					
		E	53					
	GNZ	EP	07 13 40		0.4	1.81	87	3.6 3.6
		E	14 02.5					
		E(S)	05	-1.3				
	WEL	EP	07 13 50.5		1.3	2.62	196	3.7
		ES	14 24	0.8				
	COB	ES	07 14 37	-0.2	3.26	224		3.6
	GPZ	ES	07 15 25	-2.6	5.44	204		4.0
		H M S					64/ 381	
		10 34 35.7	38.95S 176.00E	12 KM	SE	1.5	AVG MAG	3.8
		+ - 0.4	0.03 0.03	R				
		H M S						
		10 34 40.2	DIR RES DIST AZ		-2.1	0.32	15	
	WNZ	EP*	42					
		E	47	-0.1				
		E(S*)	51.5					
	TON	P*	10 34 43		-1.3	0.44	234	3.2
		E(PG)	44	-0.8				
		S*	49.5	-1.0				
		E(SG)	53	2.1				
	TUA	IP*	10 34 52.5	U	0.2	0.91	82	4.1 4.1
		S*	35 05.3	0.6				
	TNZ	EP	10 34 59.0		-0.1	1.28	259	3.7 3.5
		E	35 05					
		E(S)	18	1.6				
		E	20					
		E	22					
		E	26					
	GNZ	E(P*)	10 35 06.5		2.2	1.61	80	4.2 3.8
		E	12					
		E(S*)	26	0.2				
		SG	35.5	5.4*				
	WEL	EP*	10 35 19		-0.9	2.52	202	3.6
		E	20.5					
		EPG	24	-2.7				
		E	28					
		ES*	53	-0.1				
		E	56					
	COB	EP*	10 35 34		0.9	3.29	228	3.5
		E	58					
		ES*	36 18	1.7				
		E	22					
		E	30					
	GPZ	ES	10 36 54		-0.4	5.37	207	4.0

NOV 13	H M S			38.26S	176.21E	250 KM	SE	1.1	64/ 385			
	17 36	16.5	0.08						0.05	7	AVG MAG	4.1
	+- 1.3			H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
TUA	EP	17 36	51.8			0.5	0.92	127		3.8	4.2	
	E		54.5									
	E		37 13									
	E		18			-0.5						
TON	ES	17 36	53				1.08	209	3.2			
	E		37 20			-0.0						
	E		57									
GNZ	EP	17 36	54.8	D		-0.3	1.48	106			4.4	
	E		37 01.5									
	E		15									
	E		19									
	E		22									
	E		24			-0.7						
TNZ	P	17 36	57.2	D		0.4	1.70	237			4.2	3.4
	E		37 00									
	E		28			0.1						
WEL	EP	17 37	13			1.1	3.22	200	4.3			
	E		56									
	E		57			2.1						
COB	ES	17 38	08			-0.6	3.89	222	4.2			
KAI	ES	17 38	45			-1.1	5.62	219	4.1			
GPZ	ES	17 38	55			-1.0	6.06	205	4.7			
NOV 14	H M S			38.16S	176.39E	237 KM	SE	1.1	64/ 385			
	05 52	22.7	0.06						0.06	8	AVG MAG	4.1
	+- 1.0			H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
KRP	IP	05 52	53	U		-2.0	0.71	289			4.2	
TUA	EP	05 52	56.5			-0.7	0.88	138			3.8	4.1
	E		53 20			-1.6						
CNZ	P	05 52	58			-0.0	1.23	212			3.5	3.1
	E		53 04									
	E(S)		27			1.6						
	E		30									
TON	E	05 53	00				1.24	212				
	E		07									
	E		21									
	E		31									
GNZ	P	05 52	59.9			0.8	1.37	111			4.1	4.1
	E		53 19.5									
	E		25.5									
	E(S)		27			-0.2						
ECZ	EP	05 53	02			-0.3	1.77	75			4.0	3.1
	E(S)		33			0.1						
TNZ	EP	05 53	04.5			1.3	1.88	236			3.9	
	E		38									
WEL	EP	05 53	19.9	D		0.9	3.37	201	4.1			
	E		54 03			0.4						
	E		04									
COB	E(S)	05 54	17			-0.3	4.06	223	3.9			
	E		19									
KAI	ES	05 54	55			-0.5	5.79	220	4.9			
	E		55 19									
	E		21									
GPZ	ES	05 55	04			-1.1	6.21	206	4.6			
NOV 15	H M S			39.61S	174.25E	242 KM	SE	1.3	64/ 385			
	00 53	50.0	0.06						0.06	8	AVG MAG	3.3
	+- 1.1			H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
TNZ	P	00 54	23.0	D		1.1	0.44	13				
	E		47			0.3						

TON	E		50.5									
	EP	00 54	24.5			-0.3	1.08	68	3.6			
	E		50			-1.9						
	E		51.5									
WEL	EP	00 54	31.2			1.6	1.72	167	4.0			
	E		59									
	E		55 02			1.8						
COB	EP	00 54	31.8			0.9	1.87	218	3.7			
	E		55 02			-0.6						
TUA	ES	00 55	12			0.5	2.39	71			3.9	
GNZ	E	00 55	15				3.09	73			4.2	
	E		24			-0.9						
KAI	EP	00 54	49			-0.4	3.62	216	3.7			
	E		55 35			-0.6						
GPZ	EP	00 54	57			0.1	4.25	196	4.1			
	S		55 47.5			-1.5						
NOV 15	H M S			40.64S	176.65E	12 KM	SE	1.6	64/ 385			
	09 21	16.8	0.02						0.03	R	AVG MAG	4.0
	+- 0.5			H M S	DIR	RES	DIST	AZ	W-A	W P	W S	
WEL	EP	09 21	43.5			-0.5	1.57	245	3.6			
	EPG		51			2.4						
	E		55									
	E		22 00									
	E		03			-1.1						
	ESG		08			-1.8						
	E		17									
CNZ	IP	09 21	45.2	U		-0.1	1.67	329			4.5	4.4
	E(PG)		50			-0.6						
	E		22 06			-0.3						
TON	EP	09 21	45			-0.3	1.67	329	3.9			
	EP*		47			0.5						
	EPG		51			0.4						
	E		59.5									
	E		22 05			-1.3						
	ES*		10			1.4						
TUA	EP	09 21	47	D		-0.9	1.87	12			3.9	4.1
	EPG		56			1.3						
	E		22 10			-0.9						
	E		16			1.4						
	E		28									
GNZ	EP	09 21	52.5			-0.7	2.26	28			3.7	4.1
	EP*		55			-1.5						
	E(PG)		22 05			2.5						
	E		14									
	E(S)		20			-0.2						
	E(S*)		23			-3.3						
TNZ	EP	09 21	54			0.6	2.27	309			4.3	4.1
	EP*		58			1.2						
	EPG		22 01			-1.8						
	E		27			0.3						
	ESG		33			-0.4						
KRP	EP	09 22	01			-0.4	2.84	342			4.0	4.1
	EP*		08			1.4						
	E		11									
	E		28									
	E(SG)		53			0.3						
COB	E(P*)	09 22	13			3.7	3.00	260	3.8			
	E		37			-1.4						
	E		49			0.2						
GPZ	E(P*)	09 22	35			4.1	4.26	223	3.7			
	E		23 07			-1.9						
KAI	E(PG)	09 22	45			-0.0	4.36	243	3.7			
	E		23 09			-2.2						
	E(S*)		21			-8.5*						

NOV 18	H M S			40.90S	174.02E	121 KM	SE	1.3	64/ 388					
	11 16	18.2							AVG MAG	3.7				
	+- 0.9			0.03	0.05									
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S						
WEL	P	11 16 39	U	1.2	0.68	125	3.9							
	E	49												
	ES	52		-0.7										
COB	EP	11 16 42		1.5	0.99	259	4.0							
	E	45												
	ES	57		-0.5										
TON	E	11 17 09			2.06	35	3.4							
	E	19												
CNZ	EP?	11 16 53		0.0	2.06	35	3.5	3.1						
	E	54												
	E	17 03												
	E	12												
	ES	20		0.8										
	E	26												
GPZ	E	11 17 39			2.97	200								
	ES	40		-0.8										
TUA	E	11 17 43			3.19	50		3.1						
	ES	46		0.3										
KRP	EP	11 17 08		-0.0	3.20	22	3.6	3.4						
	E	34												
	ES	44		-1.9										
GNZ	ES	11 17 53		-7.9*	3.82	55		3.7						

NOV 20	H M S			39.26S	176.86E	12 KM	SE	1.8	64/ 388					
	07 02	44.0							AVG MAG	4.1				
	+- 0.4			0.02	0.03									
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S						
TUA	P*	07 02 55		1.3	0.51	27								
WNZ	EP*	07 03 01		1.2	0.86	317	5.1	5.4						
	E	06												
	E(S*)	14		2.5										
	ES	16		0.9										
CNZ	P	07 03 04.2		0.3	1.02	273								
TON	IP	07 03 04.2	U	0.3	1.02	273	3.8							
	E	10												
	ES	18		-0.7										
	E	30												
GNZ	IP	07 03 03.8	D	-1.2	1.10	56	5.4	5.1						
	E(PG)	08		1.7										
	E	11.5												
	E(SG)	28		6.8*										
	E	32												
KRP	P	07 03 12	U	-0.7	1.69	322	4.9	4.7						
	EP*	15		1.1										
	EPG	18		-0.2										
	E(S)	33		-0.9										
	E(SG)	41		0.0										
	E	47												
ECZ	EP	07 03 17.5		-0.1	2.05	41	4.4	4.1						
	I	19												
	E(PG)	25		-0.5										
	E	29												
	ES	33												
	E	41		-1.4										
WEL	E(P)	07 03 24.5		-0.3	2.58	218	4.9							
	E	28												
	EP*	32		2.9										
	E(PG)	39		2.9										
	E(S)	54		-1.6										
	E(SG)	04 12		1.2										
AUC	EP	07 03 29		-0.4	2.91	325	3.8	3.1						
	EPG	39		-3.8										

NOV 20	H M S			35.71S	178.48E	293 KM	SE	1.2	64/ 388					
	08 53	24.5							AVG MAG	4.2				
	+- 1.4			0.08	0.09									
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S						
ECZ	EP	08 54 11.5		0.8	1.98	179								
	E	40												
	ES	48		1.2										
GNZ	IP	08 54 18.8	D	-0.9	2.96	187		5.0	4.9					
	ES	55 03		0.2										
KRP	EP	08 54 22		-0.6	3.24	226		3.5	3.2					
	ES	55 07		-0.9										
TUA	EP	08 54 22		-1.0	3.27	199		3.8	4.2					
	E(S)	55 07		-1.6										
	E	10												
CNZ	EP	08 54 34		1.0	4.20	213			3.7					
	E	55 34												
TON	E(S)	08 55 28		1.3	4.20	213		3.9						
	E	40												
WEL	ES	08 56 10		-0.7	6.29	206		4.9						
	E	19												
COB	ES	08 56 28		1.3	7.01	218		4.6						

NOV 20	H M S			37.22S	177.08E	280 KM	SE	1.0	64/ 389					
	09 49	45.7							AVG MAG	4.2				
	+- 1.2			0.07	0.08									
	H M S	DIR	RES	DIST	AZ	W-A	W P	W S						
KRP	EP	09 50 26		-0.8	1.41	240		3.7						
TUA	P	09 50 28.0	U	0.1	1.58	178		4.5	4.0					
	ES	51 00		-0.4										
GNZ	IP	09 50 28	U	0.0	1.60	153		4.8	4.4					
	ES	51 00		-0.6										
	E	05												
CNZ	P	09 50 34.5		0.8	2.31	211			3.9					
	E	51 15												
TON	EP	09 50 34.5		0.7	2.32	211		3.7						
	ES	51 12		0.7										
WEL	ES	09 51 53		1.4	4.44	203		4.4						
COB	ES	09 52 05		-1.2	5.13	220		4.2						
GPZ	ES	09 52 53		-0.7	7.29	206		4.5						

NOV 20		H	M	S	39.23S 176.02E		80 KM	SE	1.8	AVG MAG 4.2	
		+- 0.7			0.05 0.05		10			64/ 393	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
CNZ	IP	21	20	33	D	0.7	0.37	274			
TON	P	21	20	32.8	SE	0.4	0.37	273	3.8		
	S			41		-1.3					
WNZ	E	21	20	41			0.60	6			4.4
	E(S)			44		-1.6					
	E			47							
TUA	P	21	20	38.7	D	0.4	0.97	65		4.5	4.4
	E			46		1.3					
	ES			54		0.4	1.35	344		3.8	4.2
KRP	P	21	20	43.7							
	E			59		-0.2					
	ES			01							
	E			05							
GNZ	P	21	20	47.3		0.0	1.67	70		4.4	4.1
	E			53							
	E			57							
	E			19							
	E			23							
WEL	EP	21	20	54.8		-0.6	2.27	205		4.1	
	E			04							
	E			08		-0.4					
	ES			22							
	E			32		-0.4	2.50	53		4.8	4.1
ECZ	EP	21	20	58.5							
	E			11							
	E			47							
COB	EP	21	21	09		1.5	3.13	233		4.2	
	E			46							
	E(S)			48		4.2					
	E			51							
KAI	E	21	21	39			4.80	225		4.1	
	E			22							
	E			23							
GPZ	EP?	21	21	34		-1.2	5.13	208		4.2	
	E			53							
	E			22							
	E			14							
	E			25							
	E(S)			28		-5.7*					
MNW	ES?	21	24	06		-3.4	9.02	221			
NOV 21		H	M	S	45.99S 166.48E		12 KM	SE	0.8	AVG MAG 4.1	
		+- 1.1			0.07 0.05		R			64/ 393	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
MNW	IP*	04	22	16.5	D	-0.9	0.82	76		4.6	4.1
	ES*			28		-0.7					
ROX	EP	04	22	36		0.1	2.05	76		4.6	4.1
	PG			44.5		0.7					
	S			23		0.8					
	E			11							
GPZ	EP	04	23	15		-0.1	4.95	65		3.9	
	E			35							
	E			24							
KAI	ES?	04	24	11		0.1	4.95	47		4.2	
NOV 22		H	M	S	40.05S 176.93E		12 KM	SE	2.0	AVG MAG 3.7	
		+- 1.0			0.06 0.07		R			64/ 393	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	EP	00	24	11		-0.2	1.25	8			
	ES			25		-3.3					
CNZ	EP	00	24	13	D	0.3	1.36	308		3.7	

TON	E	00	24	15					1.37	308	3.0
	EPG			19		3.1					
	ES			29		-1.9					
GNZ	EP*	00	24	20		2.6			1.64	31	3.4 3.7
	ES*			39		-0.2					
	ESG			44		0.3					
WEL	S	00	24	47.5		0.9			2.05	232	3.7
COB	ES	00	25	19		0.7			3.36	251	3.5
KAI	ES	00	25	54		-0.0			4.84	237	4.1
GPZ	ES	00	25	52		-2.2			4.84	220	4.3
NOV 22		H	M	S	38.29S 177.00E		33 KM	SE	1.9	AVG MAG 3.7	
		+- 0.8			0.04 0.03		R			64/ 393	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	P	08	36	42.9		0.2	0.53	167		3.8	3.9
	ES			51		0.8					
	ES*			53		1.9					
GNZ	EP	08	36	46.9		-0.6	0.87	114		4.0	4.1
	E			49							
	E			53							
	E(S*)			37		-0.1					
KRP	P	08	36	51.7	D	-0.4	1.21	287		3.2	3.0
	E(P*)			54		-0.5					
	ES			37		0.9					
	E(S*)			12		1.0					
CNZ	EP	08	36	55.5		0.1	1.45	231		3.5	3.2
	E			37							
	E(S*)			20		1.9					
TON	EP	08	36	56		0.5	1.46	231		2.8	
	E(S*)			37		1.7					
TNZ	EP	08	37	07		0.8	2.24	246		3.6	
	E(S*)			38		-3.5					
WEL	E(P*)	08	37	28		-4.6	3.45	209		4.0	
	S			38		-1.0					
	ES*			16		-1.8					
COB	E	08	38	30			4.32	228		3.8	
KAI	ES	08	39	06		2.7	6.01	224		4.1	
GPZ	ES	08	39	05		-5.9*	6.32	210		4.2	
NOV 22		H	M	S	38.64S 175.84E		190 KM	SE	1.3	AVG MAG 4.1	
		+- 0.8			0.05 0.04		6			64/ 394	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
CNZ	EP	09	06	01.0	U	1.2	0.60	202		4.0	3.6
	E			06							
	E			28							
TON	EP	09	06	01		1.1	0.61	203		3.1	
	E(S)			20		-0.4					
	E			23							
KRP	IP	09	06	00.0	U	-0.6	0.76	341		4.4	3.8
	E			18							
	E(S)			20		-1.7					
TUA	P	09	06	03.0	U	0.6	1.03	100		4.4	4.4
	E			20							
	ES			24		-1.0					
	E			26							
TNZ	P	09	06	04.8	U	0.5	1.26	244		4.0	3.3
	E			07.5							
	E(S)			30		1.7					
GNZ	EP	09	06	09.0	U	0.6	1.71	91		4.3	4.4
	E			18							
	E			27							
	E			32							
	ES			35		-0.4					
WEL	IP	09	06	21.0	D	0.7	2.77	197		4.6	
	E			56							

COB	ES	09 06 58	1.5																
	E	09 06 41		3.42	223	4.3													
	ES	07 10	-0.4																
KAI	ES	09 07 48	-1.5	5.14	220	4.5													
GPZ	EP	09 06 54.5	-1.4	5.59	205	4.7													
	E	07 57																	
	S	58.2	-1.8																
ROX	ES	09 09 02	-3.3*	8.38	213														
MNW	E(P)	09 07 47	1.6	9.38	218														
	S	09 28.5	-0.3																
	H M S																		
NOV 23	06 33 30.0	40.68S	176.49E	12 KM	SE	2.1													
	+ - 1.0	0.04	0.05	R															
	H M S			DIR	RES	DIST	AZ	W-A	W P	W S									
WEL	P	06 33 56.0	D	0.5	1.44	244	3.6												
	E	34 03.5																	
	ES	13	-1.4																
	E	15																	
	ES*	17	2.1																
	E	25																	
	E	27																	
CNZ	P	06 33 58.0	-0.1	1.64	334														
	ES	34 17	-1.9																
	ES*	21	0.0																
TON	EP	06 33 58	-0.1	1.64	333	3.2													
	ES	34 16	-2.9																
TUA	E	06 34 12		1.93	16														
	ES	20	-5.6*																
	E(SG)	40	4.7																
TNZ	EP	06 34 07	1.4	2.20	312														
	E(P*)	09	0.3																
	ES	34	2.0																
	E(SG)	44	-0.3																
GNZ	E(S*)	06 34 39	-3.2	2.35	31														
KRP	E(P)	06 34 15	0.5	2.84	345														
	E(P*)	20	0.2																
	E	22																	
	ES*	56	-1.1																
	E	59																	
	E	35 21																	
COB	EP*	06 34 23	2.7	2.88	261	3.3													
	ES	47	-1.9																
GPZ	ES	06 35 18	-1.4	4.15	222	3.6													
	H M S																		
NOV 23	11 33 12.1	39.22S	174.87E	229 KM	SE	1.5													
	+ - 0.8	0.06	0.06	R															
	H M S			DIR	RES	DIST	AZ	W-A	W P	W S									
TNZ	P	11 33 44.0	1.6	0.38	275														
	E	47																	
	ES	34 07	1.2																
	E	08																	
TON	E	11 33 46		0.52	88	3.4													
	E(S)	34 06	-0.5																
	E	12																	
CNZ	P	11 33 44.5	D	1.7	0.52	88													
	E	53																	
	E	34 06																	
	ES	08	1.5																
	E	20																	
KRP	P	11 33 47.5	D	-0.4	1.40	22													
	E	55																	
	ES	34 13	-2.6																
TUA	EP	11 33 52	0.5	1.82	78														
	E(S)	34 21	-0.9																
	E	29																	

WEL	P	11 33 55	1.2	2.06	182	4.2													
	ES	34 27	1.0																
COB	EP	11 33 58.5	0.5	2.48	221	4.1													
	S	34 32.5	-1.1																
GNZ	EP	11 33 59.2	0.7	2.52	78														
	E	34 32																	
	E(S)	34	-0.5																
	E	38																	
ECZ	EP	11 34 07	0.2	3.26	63														
	I	08																	
	E(S)	48	-1.2																
KAI	ES	11 35 07	-2.5	4.22	217	4.4													
GPZ	E(P)	11 34 25.5	0.5	4.77	200	4.9													
	S	35 19.5	-2.2																
ROX	E(S)	11 36 20	-3.4*	7.48	212														
MNW	E(S)	11 36 47	1.1	8.46	217														
	H M S																		
NOV 25	15 38 29.2	40.61S	174.34E	116 KM	SE	1.0													
	+ - 0.6	0.03	0.03	R															
	H M S			DIR	RES	DIST	AZ	W-A	W P	W S									
WEL	P	15 38 50.5	U	1.6	0.75	155	4.0												
	ES	39 04	0.1																
COB	EP	15 38 55.5	0.7	1.31	248	3.9													
	ES	39 13	-1.1																
TNZ	P	15 38 56.5	0.5	1.42	1														
	E	39 13																	
	E(S)	17	0.7																
TON	E	15 39 01		1.68	34														
	ES	21	-0.4																
CNZ	P	15 38 59	-0.1	1.68	34														
	E	39 11																	
	ES	21	-0.6																
KRP	EP	15 39 14	-0.2	2.84	19														
	E	15																	

		P*	29.0	-1.5													
		IS*	58	-1.2													
		I	08 02														
	GNZ	EPN	15 07 33.5	1.5	2.67	59		4.4									
		E	44														
		E	50														
	AUC	E	15 07 54		3.21	355		3.2									
	KAI				3.71	227		4.3									
	GPZ	E	15 07 48		4.06	206		4.5									
		SN	08 34														
	ONE	E	15 08 04	-2.2	4.33	352		4.0									
		E	12														
DEC 06		H M S	40.06S	175.17E	33 KM	SE	1.3	AVG MAG	3.1								
		+-	0.4	0.04													
	TON	EP*	15 16 05	-0.5	0.91	19		3.0									
		S*	17	-1.0													
	TNZ	EP*	15 16 08	0.0	1.07	325		3.4									
		S*	24	1.4													
	WEL	IP*	15 16 09.8	-1.4	1.26	194		3.3									
		S	26	1.9													
	TUA	EP*	15 16 25	1.5	1.98	51											
	COB	EP*	15 16 24	-1.8	2.12	240		3.1									
		ES	45	0.1													
	KRP	EP*	15 16 26	-0.4	2.15	8		3.4									
		IS*	55	0.1													
		E	59														
	GPZ	ESN	15 17 33	0.1	4.09	207		3.6									
DEC 07		H M S	38.63S	175.77E	12 KM	SE	0.6	AVG MAG	3.1								
		+-	0.3	0.01													
	WNZ	EPG	08 24 49.5	0.1	0.26	91											
		I	51.0														
	CNZ	EPG	08 24 56	0.1	0.60	197		2.6									
		E	25 05														
	KRP	PG	08 24 57.7	-0.7	0.72	345		3.2									
		SG	25 08.8	0.5													
	TNZ	EPG	08 25 08	-0.3	1.22	242		3.0									
		ESG	25	0.2													
DEC 07		H M S	38.72S	175.78E	12 KM	SE	1.3	AVG MAG	3.1								
		+-	0.4	0.02													
	WNZ	PG	14 23 51	1.7	0.27	71											
		ISG	55	1.8													
	CNZ	PG	14 23 55.0	0.8	0.52	201		2.8									
		I	57.7														
	TON	E	14 23 56		0.52	201		2.5									
		ESG	24 01	-0.5													
	KRP	IPG	14 23 59.0	-1.1	0.81	346		4.1									
		ESG	24 11	-0.2													
	TUA	EPG	14 24 05.5	0.1	1.07	95		3.5									
		ESG	18	-1.9													
	TNZ	EPG	14 24 07.8	0.1	1.19	246		3.4									
		I	10.0														
		E	26.0														
	GNZ	EPG	14 24 19	-0.1	1.75	88		3.4									
		ESG	42	-0.8													
DEC 07		H M S	38.71S	175.83E	12 KM	SE	0.5	AVG MAG	3.1								
		+-	0.1	0.01													

		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	19 02 52.0		-0.1	0.23	69			
	SG	55.1		-0.4					
CNZ	PG	19 02 58.0		0.0	0.53	204		3.2	
	I	03 01							
	E	05							
TON	EPG	19 02 58		-0.1	0.54	205		3.0	
	SG	03 06		0.5					
KRP	IPG	19 03 03.2	U	-0.5	0.82	344		4.5	4.1
	I	05.9							
	SG	15.5		0.6					
TUA	EPG	19 03 08		-0.1	1.04	96		3.9	4.0
	I	09.1							
	I	22.0							
	I	30.1							
TNZ	PG	19 03 12.0		0.2	1.22	247		4.1	3.7
	I	14.7							
	ESG	28		-0.4					
GNZ	E(PG)	19 03 22.5		0.7	1.72	88		4.0	
	I	26							
WEL	EP*	19 03 34		-0.2	2.70	197		3.6	
	E	04 16							
	COB				3.36	224		3.5	
DEC 07		H M S	38.71S	175.83E	12 KM	SE	1.1	AVG MAG	3.6
		+-	0.3	0.02	0.02				
WNZ	PG	20 24 33.9		0.9	0.22	70			
	I	36.1							
	SG	37.7		1.3					
CNZ	PG	20 24 39.0		-0.1	0.54	204			
TON	EPG	20 24 39		-0.2	0.54	205		2.7	
	ESG	47		0.3					
KRP	IPG	20 24 43.3	D	-1.3	0.82	343		3.8	4.0
	I(SG)	56		0.3					
TUA	PG	20 24 47.7		-1.3	1.04	96		3.8	3.6
	I	48.8							
	E	50.5							
	E	58							
	ESG	25 02		-1.0					
TNZ	EPG	20 24 51.7		-1.2	1.23	247		3.7	3.7
	I	52.8							
	E(SG)	25 11		1.5					
GNZ	EPG	20 25 04		1.3	1.72	89		3.7	
WEL	EP*	20 25 15		-0.3	2.70	197		3.3	
DEC 08		H M S	38.72S	175.86E	12 KM	SE	0.7	AVG MAG	3.4
		+-	0.2	0.01	0.01				
WNZ	PG	07 56 29.2		-0.4	0.21	65			
	I	30.2							
	SG	33.5		0.7					
TON	EPG	07 56 37		1.1	0.54	207		2.4	
	ESG	43		-0.4					
KRP	IP*	07 56 41.0	U	0.9	0.83	342		3.9	3.7
	IS*	51		-0.5					
	ISG	53		-0.1					
TUA	EPG	07 56 45.0		-0.4	1.02	95		3.5	3.6
	I	46.8							
	SG	59.0		-0.2					
TNZ	EPG	07 56 49.0		-0.9	1.24	248		3.5	3.5
	I	51.6							
GNZ	I(SG)	57 07		0.3					
	E	07 57 03			1.70	88		3.4	
	E	09							

DEC 08		H	M	S	38.71S	175.87E	12 KM	SE	0.6	AVG MAG	64/ 417
		+	-	0.2	0.02	0.01	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	17	22	23.8		0.2	0.20	67			
	I			24.8							
	SG			27.3		0.7					
KRP	IPG	17	22	35.0	U	-0.8	0.82	342	4.0	3.1	
	I			45.3							
	SG			47.3		0.3					
TUA	EPG	17	22	39.0		-0.5	1.01	96	3.5	3.1	
	I			40.8							
	SG			53.0		-0.1					
TNZ	EPG	17	22	44.0		-0.4	1.25	247	3.6	3.1	
	I			45.9							
	ESG			23 02		0.6					
GNZ	E	17	22	56			1.69	88		3.4	
	E			23 22							
DEC 08		H	M	S	38.64S	175.85E	12 KM	SE	0.9	AVG MAG	64/ 418
		+	-	0.4	0.02	0.02	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	19	45	14.0		0.4	0.20	88			
	I			14.8							
	SG			16.2		-0.4					
KRP	IPG	19	45	24.1	U	-0.4	0.75	341	3.5	3.5	
	I			35		0.3					
	ISG			39							
TUA	E	19	45	28			1.03	100	3.5	3.4	
	E			43							
TNZ	EPG	19	45	33.5		-1.4	1.27	244	3.5	3.1	
	E			36.2							
	E(SG)			53		0.9					
GNZ	EPG	19	45	44		0.5	1.70	91		3.4	
DEC 09		H	M	S	38.66S	175.84E	12 KM	SE	0.6	AVG MAG	64/ 419
		+	-	0.2	0.02	0.01	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	00	56	13.4		0.3	0.21	81			
	SG			17.2		0.9					
KRP	PG	00	56	24.1		-0.2	0.78	342	4.0	4.1	
	SG			34.8		-0.1					
	I			36.2							
TUA	EPG	00	56	28.5		-0.9	1.03	98	3.7	3.1	
	I			30.0							
	SG			43.2		-0.2					
TNZ	EPG	00	56	34.0		0.1	1.25	245	3.6	3.1	
	E			35.0							
	SG			51.0		0.2					
	I			53.8							
	I			58.0							
GNZ	E	00	56	48			1.71	90			
DEC 09		H	M	S	38.74S	175.94E	12 KM	SE	0.7	AVG MAG	64/ 420
		+	-	0.3	0.02	0.02	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	12	38	43.0		0.7	0.16	50			
	I			46.9							
CNZ	EPG	12	38	50		0.1	0.56	213	3.1		
	I			52							
KRP	PG	12	38	55.7		-0.4	0.87	338	3.3	3.1	
	ESG			39 08		0.1					
	I			11.8							

TUA	EPG	12	38	57.2		-0.5	0.95	95		3.5	
	E			59.0							
TNZ	E	12	39	03				1.30	249	3.5	3.2
	E			23							
DEC 09		H	M	S	38.81S	175.86E	12 KM	SE	0.9	AVG MAG	64/ 417
		+	-	0.4	0.03	0.02	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	12	40	43.2		0.4	0.26	48			
	SG			46.9		0.3					
CNZ	EP	12	40	49.2		-1.2	0.46	211			
	I			51.0							
KRP	EP	12	40	55.3		-0.5	0.91	344	3.2	3.1	
	ESG			41 08		-0.2					
	E			11.5							
TUA	EPG	12	40	57.8		0.1	1.01	91		3.3	
	E			59.2							
TNZ	EPG	12	41	03		1.2	1.21	251	3.5	3.1	
	E			22							
DEC 09		H	M	S	38.67S	175.83E	12 KM	SE	0.7	AVG MAG	64/ 418
		+	-	0.2	0.01	0.01	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	13	27	26.3		0.6	0.21	79			
	I			30.7							
	I			31.7							
CNZ	PG	13	27	32.8		0.2	0.57	203	3.8		
	E			36.0							
KRP	IPG	13	27	37.0		0.3	0.78	343	4.4	4.3	
	SG			47.0		-0.4					
	E			50.2							
TUA	PG	13	27	41.7		-0.2	1.04	98	3.8	4.0	
	SG			56.2		0.2					
TNZ	PG	13	27	45.8		-0.3	1.24	245		3.9	
	SG			28 04		1.1					
GNZ	EPG	13	27	55		-0.5	1.71	90	3.9	3.5	
	E			59							
	E			28 24							
WEL	EP*	13	28	12		3.3*	2.74	197	3.6		
	ES*			45		0.3					
	E			51							
COB	EP*	13	28	20		0.1	3.39	224	3.9		
	ES*			29 03		-1.4					
DEC 09		H	M	S	38.64S	175.81E	12 KM	SE	1.0	AVG MAG	64/ 419
		+	-	0.4	0.02	0.02	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	21	45	14.4		0.8	0.23	87			
	I			15.8							
	SG			18.2		1.2					
KRP	IPG	21	45	23.2	U	-0.5	0.75	343	3.4	3.3	
	ESG			34		0.1					
TUA	EPG	21	45	30		-0.0	1.06	99	3.4	3.3	
	ESG			43		-1.4					
TNZ	PG	21	45	33.0		-0.6	1.24	244	3.5	3.2	
	SG			51.0		0.6					
DEC 10		H	M	S	38.65S	175.80E	12 KM	SE	1.2	AVG MAG	64/ 420
		+	-	0.4	0.02	0.02	R				
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	01	02	30.0		-0.1	0.24	85			
	E			37.8							
	SG			38.8		-0.0					

CNZ	PG	01 02 40.2	-1.7	0.58	200	2.9	2.5														
	I	43.0																			
	I	50																			
TON	ESG	01 02 43		0.58	200	2.5															
	E	49	-1.0																		
KRP	PG	01 02 44.8	-0.6	0.76	344	3.7	3.7														
	SG	55	-0.7																		
TUA	E(PG)	01 02 53	1.3	1.07	99	3.5	3.5														
	E	03 03																			
	ESG	06	-0.2																		
TNZ	P	01 02 54	1.4	1.23	244	3.3	3.3														
	ES	03 11	1.6																		
DEC 10	H M S	11 39 12.1	38.53S	175.49E	168 KM	SE	2.1	AVG MAG	4.5										64/ 42		
	+-	0.9	0.04	0.06	9																
	H M S	11 39 37.1	DIR	RES	DIST	AZ	W-A	W P	W S												
KRP	IP	54	D	1.0	0.60	4		4.7	4.1												
	S	54		-0.6																	
CNZ	P	11 39 38.2		1.7	0.67	176		4.0													
TON	P	11 39 38		1.4	0.68	167	3.3														
	ES	56		0.6																	
TNZ	P	11 39 40.9		1.4	1.09	232		4.1	3.1												
	S	40 02		1.4																	
TUA	P	11 39 41.7		0.0	1.33	103		4.5	4.1												
	E	59																			
	E	40 01		1.0	1.76	341															
AUC	EP	11 39 47		0.2	1.99	94		4.6	5.1												
GNZ	P	11 39 48.7	U																		
	ES	40 15		-1.6																	
ECZ	P	11 39 55		-0.3	2.55	72		4.3	4.1												
	ES	40 27		-1.4																	
WEL	P	11 39 57.7		-0.9	2.81	191	5.1														
	S	40 32		-2.2																	
ONE	E	11 40 02			2.89	341	3.6														
	ES	33		-2.9																	
COB	E(P)	11 40 07		2.0	3.32	219	4.8														
	S	44		-1.6																	
KAI	E(P)	11 40 30		2.5	5.06	217	4.8														
	S	41 22		-3.8																	
GPZ	S	11 41 30.5		-7.8*	5.59	202	5.4														
MNH	E(P)	11 41 28		4.4	9.31	216															
	ES	43 04		-2.4																	
DEC 10	H M S	14 59 43.9	38.59S	175.90E	12 KM	SE	0.8	AVG MAG	3.4											64/ 42	
	+-	0.3	0.02	0.02	R																
	H M S	14 59 48.0	DIR	RES	DIST	AZ	W-A	W P	W S												
WNZ	PG	50.9		0.1	0.16	104															
	SG	50.9		0.4																	
KRP	IPG	14 59 58.1	U	-0.6	0.72	337		3.4	3.1												
	ESG	15 00 09		0.4																	
TUA	EPG	15 00 03.0		-1.3	1.00	103		3.5	3.3												
	E	17.0																			
TNZ	EP	15 00 07.5		-0.4	1.33	243		3.5	3.1												
	I	08.3		0.5																	
	S	26.2		0.9	1.66	92		3.7													
GNZ	E(PG)	15 00 18.5																			
DEC 10	H M S	15 24 24.4	38.64S	175.79E	12 KM	SE	1.3	AVG MAG	3.1												64/ 42
	+-	0.7	0.04	0.04	R																
	H M S	15 24 30.2	DIR	RES	DIST	AZ	W-A	W P	W S												
WNZ	EPG	31.6		0.4	0.24	89															
	I	31.6																			
KRP	PG	15 24 39.0		-0.5	0.74	344		3.1	3.1												
	SG	50.0		0.4																	

TNZ	EPG	15 24 48	-1.3	1.23	243	3.5	3.2														
	ESG	25 07	1.0																		
DEC 11	H M S	04 24 34.9	38.65S	175.75E	12 KM	SE	0.6	AVG MAG	3.4											64/ 424	
	+-	0.2	0.01	0.01	R																
	H M S	04 24 40.8	DIR	RES	DIST	AZ	W-A	W P	W S												
WNZ	PG	42.6		-0.1	0.28	87															
	I	42.6																			
TON	EPG	04 24 47		0.2	0.58	196	2.6														
	ESG	54		-0.8																	
KRP	PG	04 24 49.5		-0.5	0.74	347		3.5	3.7												
	ISG	25 00		-0.0																	
	I	02.0																			
TUA	EPG	04 24 58		0.6	1.11	99		3.6													
TNZ	EPG	04 24 59		-0.1	1.20	243		3.5	3.4												
	I	25 01																			
	ESG	16		0.7																	
DEC 11	H M S	18 39 28.2	38.59S	175.72E	12 KM	SE	ND	AVG MAG	3.0												64/ 425
	ND	ND																			
	H M S	18 39 34.7	DIR	RES	DIST	AZ	W-A	W P	W S												
WNZ	PG	35.1		-0.0	0.30	98															
	I	35.1																			
CNZ	EPG	18 39 41		-0.0	0.62	193		2.8													
TON	E	18 39 46			0.63	193															
KRP	PG	18 39 42.2		-0.0	0.68	348		2.9	2.9												
	I	52.8																			
TUA	E	18 39 47			1.14	101		3.4													
DEC 11	H M S	18 46 16.7	38.70S	175.88E	12 KM	SE	0.7	AVG MAG	4.1												64/ 426
	+-	0.3	0.02	0.02	R																
	H M S	18 46 21.3	DIR	RES	DIST	AZ	W-A	W P	W S												

DEC 11		H	M	S	38.72S	175.82E	12 KM	SE	0.6	AVG MAG	64/ 432		
		+	-	0.2	0.01	0.01	R						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	PG	21	04	06.3		-0.2	0.24	69					
	ISG			11		1.0							
CNZ	P	21	04	14		-1.0	0.52	204		3.8			
TON	EPG?	21	04	12		-0.1	0.53	204		2.9			
	E			14									
	SG			20		0.6							
KRP	IPG	21	04	18.0	U	0.1	0.82	344		4.4	4.3		
	ISG			29		-0.1							
TUA	EPG	21	04	22.0		-0.4	1.05	95		4.1	4.1		
	SG			36.0		-0.6							
TNZ	PG	21	04	26.2		0.4	1.21	247		3.1			
	I			45									
GNZ	PG	21	04	35.8		-0.3	1.73	88		4.1	3.7		
	ESG			05 00		0.5							
WEL							2.69	197		3.7			
COB							3.35	224		3.8			
DEC 11		H	M	S	38.73S	175.80E	12 KM	SE	0.7	AVG MAG	64/ 431		
		+	-	0.2	0.01	0.01	R						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	IPG	23	38	46.0	D	0.4	0.26	67					
	I			50.0									
CNZ	PG	23	38	49		-1.3	0.50	202		3.9			
TON	EPG	23	38	50		-0.4	0.51	203		3.2			
	SG			58		0.5							
KRP	IPG	23	38	56.6		-0.3	0.83	346		4.5	4.5		
	ESG			39 08		-0.2							
TUA	EPG	23	39	01.0		-0.5	1.06	94		4.3	4.1		
	ESG			16		-0.1							
TNZ	PG	23	39	04.2		0.1	1.19	247		4.3	4.1		
	ESG			21		0.8							
GNZ	EPG	23	39	16.0		0.7	1.75	88		4.1			
	I			19.0									
WEL							2.67	197		3.8			
COB							3.33	224		3.8			
DEC 12		H	M	S	38.65S	175.85E	12 KM	SE	0.5	AVG MAG	64/ 430		
		+	-	0.2	0.01	0.01	R						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	PG	00	32	15.5		0.3	0.20	85					
	SG			19.0		0.8							
CNZ	PG	00	32	23		0.1	0.60	203		3.6			
TON	EPG	00	32	23		-0.0	0.60	204		2.5			
	ESG			31		-0.3							
KRP	IPG	00	32	26.7		0.5	0.76	341		4.1	3.1		
	E(SG)			36		-0.6							
TUA	PG	00	32	31.0		-0.5	1.03	99		3.9	3.7		
	ESG			45		-0.5							
TNZ	EPG	00	32	36.0		-0.3	1.27	245		3.8	3.7		
	ESG			54		0.6							
GNZ	EPG	00	32	47		1.9*	1.70	91		3.8			
	E			50									
DEC 12		H	M	S	38.69S	175.88E	12 KM	SE	1.1	AVG MAG	64/ 433		
		+	-	0.4	0.04	0.02	R						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	PG	09	39	05.9		0.2	0.19	72					
	I			10.2									
CNZ	PG	09	39	13.1		0.0	0.57	207		3.3	3.7		

DEC 11		H	M	S	38.64S	175.87E	12 KM	SE	0.6	AVG MAG	64/ 432		
		+	-	0.2	0.02	0.01	R						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	PG	13	28	44.0		0.0	0.18	89					
	SG			46.8		-0.0							
CNZ	PG	13	28	52.2		-0.2	0.62	204		3.7	3.7		
	E			29 02.8									
KRP	IPG	13	28	55.2		0.0	0.76	340		4.5	4.4		
	I			29 09									
TUA	P	13	28	59.8		0.2	1.02	100		4.4			
	I			29 02.0									
TNZ	PG	13	29	04.8		-1.0	1.29	244		3.8	3.7		
	I			06.5									
	ESG			24		0.8							
	E			40									
GNZ	EPG	13	29	14.0		0.1	1.69	91		4.4	4.1		
	I			17									
	E			43									
DEC 12		H	M	S	38.72S	175.77E	12 KM	SE	0.8	AVG MAG	64/ 433		
		+	-	0.3	0.01	0.01	R						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	PG	14	04	13.8		0.2	0.28	71					
	SG			17.8		0.2							
CNZ	PG	14	04	18.7		0.6	0.51	200		3.5			
	E			23.5									
TON	(PG)	14	04	18.4		0.2	0.51	200		2.9			
	SG			24.7		-0.6							
KRP	IPG	14	04	24.4		0.2	0.82	347		4.0	4.3		
	SG			34.8		-0.5							
TUA	PG	14	04	29.4		-0.2	1.08	95		4.1	3.8		
	E			32.3									
	ESG			43		-1.3							
TNZ	PG	14	04	31.4		-0.1	1.18	246		4.0	3.6		
	E			49									
GNZ	EPG	14	04	44.9		1.5	1.77	88		4.1			
	E			47									
WEL							2.68	196		3.6			
COB							3.32	224		3.8			
DEC 12		H	M	S	38.73S	175.77E	12 KM	SE	0.5	AVG MAG	64/ 434		
		+	-	0.2	0.02	0.01	R						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	PG	14	05	30.3		0.3	0.28	69					
	I			33.0									
CNZ	PG	14	05	34.0		-0.1	0.49	200					
	I			39.5		0.5							
TON	E	14	05	39.2			0.50	201		3.8			
	I			45									
KRP	PG	14	05	41.1		0.3	0.83	347		4.7			
	SG			54.6		2.6*							
TUA	PG	14	05	45.9		-0.1	1.09	94		5.0	4.6		

		51							
	E								
	ESG	06 01		0.3					
TNZ	PG	14 05 47.2		-0.5	1.17	247		4.7	4.1
	E	06 11							
GNZ	PG	14 05 59.0		-0.7	1.77	88		5.0	
	I	06 11							
WEL					2.66	196		3.9	
COB					3.31	224		4.0	
KAI					5.03	220		4.6	
GPZ					5.48	204		4.3	
64/ 438									
DEC 12	H M S	14 06 13.4	38.80S	175.83E	12 KM	SE	0.5	AVG MAG	4.5
	+-	0.3	0.02	0.01	R				
	H M S				DIR	RES	DIST	AZ	W-A W P W S
WNZ	PG	14 06 19.5				0.1	0.28	52	
TON	E	14 06 32					0.46	209	3.8
KRP	PG	14 06 31.3				-0.5	0.90	345	4.7
	SG					0.2			
TUA	PG	14 06 35.0				0.6	1.04	91	4.8 4.5
	ESG					-0.4			
TNZ	EPG	14 06 37.5				-0.0	1.19	251	4.9
	I								
GNZ	E	14 06 54					1.73	85	5.0
WEL							2.61	198	4.2
COB							3.29	225	4.1
KAI							5.01	221	4.6
GPZ							5.44	205	4.5
64/ 439									
DEC 12	H M S	19 03 10.5	33.39S	179.08W	335 KM	SE	0.7	AVG MAG	5.2
	+-	0.8	0.08	0.12	9				
	H M S				DIR	RES	DIST	AZ	W-A W P W S
GNZ	P	19 04 39				0.6	5.74	203	4.6 4.1
	ES	05 47				-0.5			
TUA	EP	19 04 44				0.1	6.21	208	
	ES	05 58				0.8			
KRP	EP	19 04 45				0.1	6.30	223	
CNZ	EP	19 04 55				-1.1	7.24	215	
	ES	06 22				2.9*			
TON	ES	19 06 19				-0.2	7.25	215	4.8
TNZ	EP	19 05 04				0.9	7.83	221	
WEL	P	19 05 20				-0.6	9.28	210	5.7
	S	07 03				-0.2			
COB	ES	19 07 20				-0.7	10.07	218	5.5
KAI	ES	19 07 59				0.7	11.80	217	5.3
GPZ	ES	19 08 06				0.2	12.15	210	5.5
64/ 440									
DEC 12	H M S	23 09 57.5	38.71S	175.81E	12 KM	SE	0.2	AVG MAG	3.8
	+-	0.1	0.00	0.00	R				
	H M S				DIR	RES	DIST	AZ	W-A W P W S
WNZ	PG	23 10 02.9				0.1	0.24	72	
	SG					-0.1			
CNZ	PG	23 10 08.5				-0.1	0.54	203	3.3 3.1
	I								
	E	09.1							
TON		26					0.54	203	2.8
KRP	PG	23 10 13.8				-0.2	0.81	344	3.9 4.1
	SG					0.2			
TUA	PG	23 10 18.8				-0.1	1.05	96	3.8 3.1
	SG					0.2			
TNZ	EPG	23 10 22.3				0.1	1.22	246	3.6 3.5
	E	42.8							
GNZ	EPG	23 10 34.8				2.2*	1.73	89	3.8

		64/ 438							
DEC 12	H M S	23 43 11.7	38.68S	175.83E	12 KM	SE	0.6	AVG MAG	4.0
	+-	0.3	0.02	0.02	R				
	H M S				DIR	RES	DIST	AZ	W-A W P W S
WNZ	(PG)	23 43 17.4				0.8	0.22	78	
	SG					-0.7			
	I								
CNZ	PG	23 43 23.5				0.2	0.57	203	
TON							0.57	203	3.1
KRP	PG	23 43 27.8				0.0	0.79	343	4.3 4.4
	I								
		41.5							
TUA	PG	23 43 32.5				-0.4	1.04	98	4.3
TNZ	PG	23 43 36.5				-0.4	1.24	245	4.2 3.9
	E(SG)					3.4*			
GNZ	EPG	23 43 47.0				0.5	1.72	90	4.2 3.6
	I								
	E	50.0							
		44 13							
64/ 439									
DEC 13	H M S	00 13 32.8	35.09S	177.37W	280 KM	SE	2.4	AVG MAG	5.3
	+-	3.1	0.22	0.29	32				
	H M S				DIR	RES	DIST	AZ	W-A W P W S
ECZ	EP	00 14 40				-0.7	4.19	231	
GNZ	P	00 14 50.5				-1.0	5.12	225	4.8
TUA	P	00 14 59.0				-0.1	5.74	228	5.1 5.0
	S	16 10				3.4			
ONE	P	00 15 14.8				3.0	6.78	262	
CNZ	E	00 15 20					6.98	232	
	ES	16 32				-2.0			
TON	ES	00 16 33				-1.2	6.99	232	5.1
TNZ	EP?	00 15 22				-1.9	7.75	236	
WEL	E	00 15 56					8.75	223	5.7
	S	17 14				0.7			
COB	ES	00 17 35				-2.6	9.83	230	5.5
KAI	ES	00 18 14				-0.5	11.47	226	5.4
GPZ	ES	00 18 19				2.9	11.54	219	5.4
64/ 440									
DEC 13	H M S	00 26 28.2	38.68S	175.81E	12 KM	SE	0.5	AVG MAG	3.8
	+-	0.2	0.01	0.01	R				
	H M S				DIR	RES	DIST	AZ	W-A W P W S
WNZ	IPG	00 26 33.2				-0.2	0.23	78	
	SG					0.7			
CNZ	PG	00 26 39.2				-0.5	0.56	202	3.6
	I								
	I	41.0							
		49							
TON							0.56	202	2.9
KRP	IPG	00 26 44.0				-0.2	0.78	344	4.2 4.1
	SG					-0.1			
TUA	PG	00 26 49.0				-0.6	1.05	97	3.8 3.7
	ESG	27 04				0.1			
TNZ	PG	00 26 52.7				-0.3	1.22	245	3.9 4.0
	SG					0.8			
	I								
	I	11.4							
GNZ	EPG	00 27 03.5				0.3	1.73	89	3.8
64/ 441									
DEC 13	H M S	08 08 42.7	38.70S	175.80E	12 KM	SE	0.7	AVG MAG	3.7
	+-	0.4	0.02	0.02	R				
	H M S				DIR	RES	DIST	AZ	W-A W P W S
WNZ	PG	08 08 46.8				-1.3	0.24	74	
	I								
CNZ	EPG	08 08 53.8				-0.0	0.54	202	3.4
	E								
		59.4							
TON							0.55	202	2.9
KRP	PG	08 08 59.2				0.2	0.80	345	4.3 4.0

		H	M	S		R	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	ISG	09	10		0.1								
	EPG	08	09	04.5	0.3	1.06	96				3.8	3.7	
	SG			19.0	0.5								
GNZ	PG	08	09	18.0	0.1	1.74	89				3.6		
	E			22.0									
DEC 13		10	23	39.6	38.79S	175.77E	12 KM	SE	0.5		AVG MAG	4.2	64/ 40
				0.2	0.01	0.01	R						
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	10	23	46.1				0.0	0.30	58			
	I			51.2									
CNZ	PG	10	23	48.7				-0.1	0.44	203			
TON	EPG	10	23	49.0				0.1	0.45	204	3.4		
	SG			55.8				0.7					
KRP	PG	10	23	57.1				-0.5	0.89	348		4.1	4.2
	SG			24 10.4				0.8					
TUA	PG	10	24	01.6				0.2	1.08	91		4.1	
	E			11.8									
TNZ	PG	10	24	03.0				-0.0	1.15	250		4.6	4.3
	SG			18.0				-0.6					
GNZ	EPG	10	24	14.8				-0.5	1.77	86		4.4	
DEC 13		11	26	45.2	38.68S	175.82E	12 KM	SE	0.6		AVG MAG	3.6	64/ 40
				0.2	0.01	0.01	R						
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	11	26	50.2				-0.1	0.22	78			
	SG			54.3				0.7					
CNZ	PG	11	26	56.5				-0.3	0.56	202		3.0	
	I			58.5									
TON	EPG	11	26	57				0.0	0.57	203	2.9		
	SG			27 04				-0.8					
KRP	PG	11	27	01.1				-0.1	0.78	343		4.1	3.9
	SG			11.4				-0.5					
TUA	EPG	11	27	07.0				0.5	1.05	98		3.7	3.6
	SG			20.3				-0.4					
TNZ	PG	11	27	10.3				0.0	1.23	245		3.8	3.7
	SG			28.0				1.0					
GNZ	PG	11	27	23.5				3.4*	1.72	90			
DEC 13		12	46	25.3	38.71S	175.83E	12 KM	SE	0.6		AVG MAG	4.2	64/ 40
				0.2	0.02	0.01	R						
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	12	46	30.8			U	0.3	0.23	70			
	SG			34.8				0.9					
CNZ	PG	12	46	36.2				-0.1	0.53	204		3.8	
TON	EPG	12	46	36.5				0.0	0.54	205	3.2		
	SG			43.8				-0.1					
KRP	IPG	12	46	41.4			U	-0.6	0.82	344		4.5	4.1
	I			57.0									
TUA	PG	12	46	45.9				-0.6	1.04	96		4.4	3.8
	ESG			47 00				-0.5					
TNZ	PG	12	46	49.7				-0.5	1.22	247		4.5	4.3
	SG			47 07.5				0.8					
GNZ	EPG	12	47	00.5				0.3	1.72	88		4.4	
	I			09.0									
DEC 13		13	47	34.6	38.69S	175.83E	12 KM	SE	0.7		AVG MAG	3.5	64/ 40
				0.3	0.02	0.01	R						
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	13	47	40.3				0.8	0.22	74			
	SG			42.8				0.0					
CNZ	PG	13	47	45.7				-0.3	0.55	204		3.2	3.1
	E			49.5									

		H	M	S		R	DIR	RES	DIST	AZ	W-A	W P	W S
TON	E				55.5						0.56	204	2.7
KRP	IPG	13	47	50.4				-0.5	0.80	343		4.0	3.9
	I			48 03.7									
TUA	PG	13	47	54.9				-0.7	1.04	97		3.8	3.7
	SG			48 09.2				-0.4					
TNZ	PG	13	48	00.0				0.3	1.24	246		3.6	3.5
	E			17									
GNZ	EPG	13	48	10				0.7	1.71	89		3.8	
DEC 13		13	48	53.7	38.65S	175.84E	12 KM	SE	0.4		AVG MAG	3.7	64/ 446
				0.2	0.01	0.01	R						
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	13	48	58.3				-0.1	0.21	84			
	SG			49 02.0				0.4					
CNZ	PG	13	49	05.3				-0.6	0.59	203		3.2	3.5
	SG			14.5				0.5					
TON	PG	13	49	09.4				0.0	0.60	203	2.7		
KRP	PG	13	49	09.4				0.0	0.77	342		4.2	4.1
	I			22.4									
TUA	PG	13	49	14.2				-0.6	1.04	99		4.1	3.8
	SG			28.7				-0.1					
TNZ	PG	13	49	19.2				-0.1	1.26	245		3.8	
	SG			36.4				0.1					
GNZ	EPG	13	49	28.8				0.5	1.71	90		4.3	
DEC 13		18	31	23.8	38.67S	175.81E	12 KM	SE	0.8		AVG MAG	3.9	64/ 447
				0.2	0.02	0.01	R						
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	18	31	29.0				0.0	0.23	81			
	SG			33.2				0.8					
CNZ	PG	18	31	34.8				-0.7	0.57	201		3.5	3.7
	E			41									
TON	PG	18	31	39.3				-0.2	0.58	201	3.2		
KRP	PG	18	31	39.3				-0.2	0.77	344		4.3	4.0
	SG			49.9				-0.1					
TUA	PG	18	31	44.0				-1.3	1.06	98		3.9	3.8
	ESG			32 00				0.4					
TNZ	PG	18	31	48.6				-0.1	1.23	245		4.1	4.3
	SG			32 06.3				0.9					
GNZ	EPG	18	31	59.3				0.4	1.73	90		3.9	
DEC 13		20	02	41.4	38.69S	175.84E	12 KM	SE	0.9		AVG MAG	3.3	64/ 448
				0.3	0.02	0.02	R						
		H	M	S			DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	20	02	47.8				1.7	0.21	74			
	I			50.3									
CNZ	PG	20	02	52.4				-0.5	0.56	204		3.1	3.0
	E			03 04.2									
TON	PG	20	02	57.9				0.2	0.57	205	2.3		
KRP	IPG	20	02	57.9				0.2	0.80	342		3.9	3.6
	SG			03 07.9				-0.7					
TUA	EPG	20	03	02.0				-0.3	1.03	97		3.5	3.4
	SG			15.5				-0.7					
TNZ	EPG	20	03	06.3				-0.3	1.25	246		3.5	3.4
	E			07.2									
	SG			24.0				0.5					
GNZ	E	20	03	18.7					1.71	89		3.6	
DEC 13		21	23	47.3	38.69S	175.78E	12 KM	SE	1.5		AVG MAG	3.4	64/ 449
				0.6	0.03	0.03	R						

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	21	23	54.0		0.9	0.26	77			
	SG			58.0		1.1					
CNZ	PG	21	23	58.2		-0.3	0.54	199		3.1	
TON							0.54	200	2.4		
KRP	IPG	21	24	03.3	U	-0.1	0.79	346		3.8	3.8
	SG			13.4		-0.7					
TUA	EPG	21	24	07.8		-1.5	1.08	97		3.8	3.6
	SG			22.0		-1.9					
TNZ	EPG	21	24	12.0		0.4	1.20	245		3.8	3.1
	E			13.0							
	E			29.8							
GNZ	EPG	21	24	25		2.0	1.76	89		3.6	
64/48											
DEC 13		H	M	S						AVG MAG	3.8
		22	36	13.8		38.70S	175.87E	12 KM	SE	0.8	
						0.02	0.01	R			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	SG	22	36	21.5		0.2	0.20	71			
CNZ	PG	22	36	25.1		-0.2	0.56	206		3.4	
KRP	PG	22	36	29.3		-1.0	0.81	341		4.0	4.2
	SG			41.9		0.5					
TUA	PG	22	36	33.7		-0.6	1.01	97		3.9	3.7
	SG			47.8		-0.2					
TNZ	PG	22	36	38.8		-0.5	1.26	247		3.6	3.5
	SG			57.0		0.7					
GNZ	PG	22	36	49.0		1.0	1.69	89		4.0	
	E			51.0							
64/48											
DEC 13		H	M	S						AVG MAG	3.8
		22	36	46.9		38.63S	175.91E	12 KM	SE	1.1	
						0.03	0.02	R			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	(PG)	22	36	50.0		-0.7	0.15	91			
	SG			53.7		0.5					
KRP	PG	22	37	01.3		-1.1	0.76	337		3.9	3.9
	SG			13.4		0.7					
TUA	P	22	37	05.8		-0.6	0.99	101		3.9	3.7
	S			20.0		-0.8					
TNZ	S	22	37	28.8		0.4	1.31	245			3.5
GNZ	PG	22	37	22.0		1.5	1.66	91		4.0	
	E			23.8							
64/48											
DEC 14		H	M	S						AVG MAG	3.8
		01	45	47.9		38.71S	175.81E	12 KM	SE	0.4	
						0.01	0.01	R			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	01	45	53.3		0.1	0.24	72			
	SG			57.4		0.7					
CNZ	PG	01	45	59.2		0.3	0.53	203		3.7	3.6
	SG			46 06.2		-0.1					
TON	E	01	46	00			0.54	203	3.0		
	ESG			06		-0.5					
KRP	IPG	01	46	04.3		-0.1	0.81	344		4.3	4.2
	SG			15.1		-0.4					
TUA	EPG	01	46	09.0		-0.2	1.05	96		3.9	4.1
	I			10.2							
	SG			23.3		-0.2					
TNZ	EPG	01	46	13.2		0.6	1.22	246		3.8	3.7
	I			15.0							
	SG			31.0		2.0*					
GNZ	E	01	46	27.0			1.73	89		3.8	3.7
	ESG			46		-0.3					
64/48											
DEC 14		H	M	S						AVG MAG	3.8
		04	33	43.0		38.73S	175.84E	12 KM	SE	0.5	
						0.01	0.01	R			

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	04	33	48.2		0.0	0.23	63			
	SG			51.9		0.3					
CNZ	PG	04	33	54.0		0.2	0.52	206		3.8	3.8
	E			34 03.5							
KRP	PG	04	33	59.7		-0.5	0.84	343		4.4	4.1
	ESG			34 12		0.3					
TUA	PG	04	34	03.2		-0.7	1.03	95		4.0	3.7
	E			05.0							
	SG			18.0		0.2					
TNZ	PG	04	34	08.0		0.1	1.23	248		3.8	3.9
	E			10.0							
	E			26.8							
GNZ	E	04	34	21.0			1.71	88		3.9	3.6
	E			46							
64/454											
DEC 14		H	M	S						AVG MAG	3.8
		08	05	24.3		38.69S	175.83E	12 KM	SE	0.8	
						0.03	0.02	R			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	08	05	29.5		0.2	0.22	74			
	I			33.2							
CNZ	PG	08	05	35.6		-0.1	0.55	203		3.5	
KRP	IPG	08	05	40.3		-0.3	0.80	343		4.3	
	E			50.9							
TUA	EPG	08	05	44.6		-0.8	1.04	97		4.0	3.9
	SG			59.1		-0.4					
TNZ	EPG	08	05	49.4		0.1	1.23	246		3.7	3.2
	E			50.4							
	E			06 07.2							
GNZ	PG	08	06	00.3		1.2	1.72	89		3.9	
64/454											
DEC 14		H	M	S						AVG MAG	3.8
		08	20	21.8		38.66S	175.84E	12 KM	SE	0.9	
						0.03	0.02	R			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	IPG	08	20	26.4		-0.2	0.21	81			
	SG			30.2		0.5					
CNZ	PG	08	20	33.5		-0.3	0.58	203		3.7	
	I			45.2							
KRP	PG	08	20	37.2	U	-0.4	0.77	342		4.2	4.3
	E			49.3							
TUA	PG	08	20	41.8		-1.1	1.04	98		3.8	3.4
	E			21 00.6							
TNZ	P	08	20	46.2		1.4	1.25	245		3.5	3.6
	SG			21 03.7		-0.4					
GNZ	EPG	08	20	56.9		0.5	1.71	90		3.9	
	E			58.7							
64/456											
DEC 14		H	M	S						AVG MAG	4.1
		14	26	27.8		38.69S	175.83E	12 KM	SE	0.5	
						0.01	0.01	R			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	IPG	14	26	33.1		0.3	0.23	74			
	SG			37.2		1.0					
CNZ	IPG	14	26	39.0		-0.1	0.55	203		3.9	
	SG			47.0		0.3					
KRP	IPG	14	26	44.0		-0.1	0.80	343		4.5	4.3
	SG			54.9		-0.1					
TUA	EPG	14	26	48.7		-0.3	1.04	97		4.0	4.0
	I			49.9							
	SG			27 02.7		-0.4					
TNZ	EPG	14	26	52.8		0.0	1.23	246		4.3	4.0
	I			55.3							
	SG			27 11.6		2.2*					
GNZ	EPG	14	27	02.0		-0.6	1.72	89		4.1	
	E			06.0							

E		29													
H	M	S													
DEC 14	16 07	38.2	38.69S	175.82E	12 KM	SE	0.6	AVG MAG	3.6	64/45					
	+-	0.2	0.01	0.01	R										
			H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S	
WNZ	PG	16 07	43.5				0.2	0.23	75						
	SG		47.2				0.6								
CNZ	PG	16 07	49.2				-0.4	0.55	203	3.2	3.4				
	SG		56.7				-0.5								
KRP	IPG	16 07	54.2				-0.3	0.80	343	4.1	3.9				
	S		08 07.6				-0.3								
TUA	EPG	16 07	59.3				-0.1	1.04	97	4.0	3.6				
	ESG		08 14				0.4								
TNZ	EPG	16 08	03.0				-0.2	1.23	246	3.8	3.5				
	E		05.0												
	E		07.8												
	SG		21.0				1.2								
GNZ	EPG	16 08	12.4				-0.7	1.72	89	3.6	3.4				
	E		18												
	E		40												
DEC 14	17 13	09.9	38.72S	175.84E	12 KM	SE	0.6	AVG MAG	3.9	64/45					
	+-	0.2	0.01	0.01	R										
			H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S	
WNZ	IPG	17 13	15.1				0.3	0.22	67						
	SG		18.3				0.2								
CNZ	IPG	17 13	21.2				0.3	0.53	205	3.4					
	I		26.4												
KRP	IPG	17 13	25.9	U			-0.8	0.83	343	4.2	4.1				
	SG		38.5				0.5								
TUA	PG	17 13	30.2				-0.5	1.03	95	3.7	3.7				
	SG		44.5				-0.1								
TNZ	EPG	17 13	34.3				-0.6	1.23	247	4.0	3.7				
	E		36.3												
	ESG		52				0.4								
GNZ	EPG	17 13	45.0				0.5	1.71	88	3.8					
	E		46.2												
DEC 14	18 05	44.3	38.65S	175.76E	12 KM	SE	0.9	AVG MAG	3.4	64/45					
	+-	0.3	0.02	0.02	R										
			H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S	
WNZ	IPG	18 05	55.0	D			-1.0	0.57	196	3.8					
	E		06 06.0												
TON	IPG	18 05	59.3				-0.3	0.75	347	2.9	4.1	4.1			
KRP	SG		06 09.8				0.0								
TUA	P*	18 06	04.0				-0.3	1.10	98	4.1	3.8				
	PG		08.0				1.3								
	E		24.0												
TNZ	EPG	18 06	08.2				-0.4	1.20	243	3.9	3.4				
	E		09.5												
	SG		25.8				1.0								
GNZ	EPG	18 06	20.0				-0.3	1.78	90	3.9	3.4				
	E		49												
DEC 14	20 43	55.2	38.65S	175.85E	12 KM	SE	0.7	AVG MAG	3.1	64/45					
	+-	0.3	0.02	0.01	R										
			H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S	
WNZ	SG	20 44	02.2				-0.5	0.20	86						
	I		05.0												
CNZ	PG	20 44	07.0				-0.5	0.60	203	3.0	3.1				
	E		10.0												

H	M	S													
TON	SG		16.1				0.3			0.61	204	2.6			
KRP	PG	20 44	11.0				0.3	0.76	341	3.9	3.5				
	I		14.8												
	I		21.3												
TUA	EPG	20 44	16.2				0.1	1.03	99	3.3	3.4				
	SG		30.5				0.5								
TNZ	PG	20 44	20.0				-0.9	1.27	244	3.6	3.4				
	E		22.0												
	SG		38.7				0.6								
DEC 14	23 19	40.2	38.68S	175.87E	12 KM	SE	1.0	AVG MAG	3.6	64/461					
	+-	0.3	0.02	0.01	R										
			H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S	
WNZ	PG	23 19	44.4				-0.2	0.19	76						
	SG		47.8				0.3								
CNZ	PG	23 19	51.0				-1.1	0.58	206	3.3	3.3				
	E		53.0												
	SG		20 01.0				1.0								
KRP	IPG	23 19	55.8				-0.6	0.80	341	3.7	4.0				
	SG		20 07.8				0.5								
TUA	PG	23 19	59.9				-0.8	1.01	98	3.9	3.6				
	SG		20 14.0				-0.4								
TNZ	PG	23 20	05.0				-0.9	1.27	246	3.6	3.5				
	SG		23.5				0.5								
GNZ	PG	23 20	16.0				1.6	1.69	90						
	E		45												
DEC 14	23 22	32.4	38.72S	175.82E	12 KM	SE	1.1	AVG MAG	3.8	64/462					
	+-	0.4	0.03	0.02	R										
			H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S	
WNZ	PG	23 22	37.3				-0.3	0.24	68						
	E		39.4												
	I		40.8												
CNZ	PG	23 22	43.4				0.2	0.53	204	3.7	3.6				
	E		47.0												
	E		54.1												
TON	IPG	23 22	48.2				-1.0	0.53	205	2.9	4.0	4.2			
KRP	SG		23 01.0				0.7	0.82	344	4.0	4.2				
TUA	PG	23 22	52.2				-1.3	1.04	95	4.1	3.8				
	E		56.0												
	SG		23 07.8				0.1								
TNZ	EPG	23 22	57.2				0.1	1.22	247	3.8	3.7				
	E		23 16.3												
GNZ	EPG	23 23	08.8				1.5	1.72	88	4.1	3.7				
	I		10.8												
	E		37												
DEC 15	00 12	42.7	38.72S	175.84E	12 KM	SE	0.5	AVG MAG	4.1	64/463					
	+-	0.2	0.01	0.01	R										
			H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S	
WNZ	IPG	00 12	47.9				0.2	0.22	66						
	I		49.9												
	SG		51.2				0.2								
CNZ	IPG	00 12	54.1	D			0.5	0.53	206						
TON	IPG	00 12	59.2	U											

		I	26.2						
GNZ		EPG	00 13	16.5	-0.8	1.71	88	4.0 4.0	
		E	20.5						
		E	50						
DEC 15		H M S	38.72S 175.87E		12 KM	SE	0.5	AVG MAG 3.5	
		+-	0.01 0.01		R				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ		EPG	00 15	50.2	0.5	0.20	65		
		E	51.4						
		SG	52.8						
		E	54.0						
CNZ		PG	00 15	56.3	0.0	0.54	207	3.4 3.3	
		I	59.3						
		SG	16 03.3						
TON		IPG	00 16	01.2	U	-0.8	0.83	342	4.1 3.9
		SG	13.5						
TUA		PG	00 16	05.3	-0.2	1.01	96	3.5 3.7	
		SG	19.2						
TNZ		EPG	00 16	10.1	-0.3	1.25	248	3.7 3.4	
		E	12.2						
		SG	28.2						
DEC 15		H M S	38.51S 175.81E		12 KM	SE	0.8	AVG MAG 3.5	
		+-	0.02 0.01		R				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ		EPG	05 07	34.2	-0.1	0.26	119		
		SG	39.0						
KRP		PG	05 07	42.1	0.8	0.62	340	3.3 3.5	
		SG	49.2						
CNZ		PG	05 07	42.2	-1.2	0.72	196	3.2 3.8	
		E	47.2						
TON		IPG	05 07	50.7	-0.1	1.09	106	3.5 3.7	
		SG	08 05.3						
TNZ		PG	05 07	55.0	-0.1	1.31	238	3.6 3.7	
		SG	08 13.5						
GNZ		E	05 08	08	0.7	1.74	95	3.6	
DEC 15		H M S	38.66S 175.85E		12 KM	SE	0.6	AVG MAG 3.4	
		+-	0.01 0.01		R				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ		SG	07 00	54.0	-0.7	0.20	83		
		E	56.2						
		I	57.2						
CNZ		PG	07 00	59.0	-0.3	0.59	204	3.3	
		E	01 01.0						
TON		PG	07 01	03.2	0.3	0.60	204	2.7	
		SG	13.3						
TUA		EPG	07 01	07.8	-0.2	1.03	99	3.3 3.4	
		SG	22.8						
TNZ		EPG	07 01	12.5	-0.3	1.26	245	3.5 3.5	
		E	14.5						
		SG	30.2						
DEC 15		H M S	38.64S 175.86E		12 KM	SE	1.1	AVG MAG 3.5	
		+-	0.02 0.02		R				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ		SG	07 25	01.8	-1.5	0.19	87		
		E	05.0						
		I	06.0						

		I	14.8						
TON		EPG	07 25	08.0	-0.5	0.61	204	2.7	
		SG	16.3						
KRP		IPG	07 25	12.2	U	0.8	0.76	341	3.9 3.9
		SG	21.0						
TUA		EPG	07 25	16.2	-0.5	1.03	100	3.5 3.7	
		I	19.3						
		S	32.2						
TNZ		EPG	07 25	21.2	1.6	1.27	244	3.5 3.6	
		E	23.0						
		SG	40.0						
		E	48.0						
GNZ		E	07 25	35.0	0.8	1.70	91	3.6 3.5	
		SG	54.0						
DEC 15		H M S	38.70S 175.82E		12 KM	SE	0.8	AVG MAG 3.5	
		+-	0.01 0.01		R				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ		EPG	10 59	36.7	0.3	0.23	72		
		I	38.3						
		SG	41.0						
CNZ		PG	10 59	41.9	-0.5	0.54	203	3.5 3.3	
		I	44.3						
		ESG	50						
TON		PG	10 59	46.8	-0.9	0.55	204	2.7	
		I	57.0						
		ESG	59						
TUA		EPG	10 59	52.5	-0.0	1.05	96	3.7 3.4	
		SG	11 00 06.0						
TNZ		EPG	10 59	55.5	-0.6	1.22	246	3.7 3.5	
		E	58.0						
		SG	11 00 13.5						
GNZ		E	11 00	10	0.9	1.72	89	3.4	
DEC 15		H M S	38.68S 175.79E		12 KM	SE	0.7	AVG MAG 3.4	
		+-	0.01 0.01		R				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ		PG	11 33	18.7	0.3	0.25	78		
		I	20.8						
		SG	23.0						
CNZ		PG	11 33	23.8	-0.4	0.55	200	3.3 3.3	
		I	27.2						
		SG	32.0						
TON		PG	11 33	29.0	0.2	0.56	201	2.7	
		SG	39.0						
TUA		EPG	11 33	35.0	-0.5	1.07	97	3.5 3.7	
		ESG	48						
TNZ		EPG	11 33	37.5	-1.1	1.21	245	3.8 3.4	
		I	40.0						
		E	55						
GNZ		EPG	11 33	48	-0.3	1.75	89	3.4	
DEC 15		H M S	38.69S 175.82E		12 KM	SE	0.3	AVG MAG 4.0	
		+-	0.01 0.01		R				
		H M S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ		PG	12 02	15.0	0.3	0.23	76		
CNZ		IPG	12 02	21.4	D	0.3	0.56	203	3.5 3.8
		I	25.4						
TON		EPG	12 02	21.1	-0.1	0.56	203	3.3	
		SG	29.1						
		E	34.5						
KRP		IPG	12 02	25.9	0.1	0.79	343	4.5 4.5	

		H	M	S	38.76S	175.41E	287 KM	SE	1.7	AVG MAG	4.1
		+-		1.3	0.10	0.10	9			64/ 474	4.1
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	I PG	12	02	39.1							
TNZ	I PG	12	02	30.5		-0.4	1.05	97			4.1
	I			34.3		-0.3	1.23	246			4.4 4.3
	I			36.8							
	I			53.0							
GNZ	EPG	12	02	44.5		-0.0	1.72	89			4.0
DEC 15		12	21	40.2							
CNZ	P S	12	22	18.4		1.1	0.45	166			
	S			46.2		-0.1					
TON	ES	12	22	46		-0.3	0.45	167			3.6
KRP	P	12	22	17.9		-0.7	0.84	7			
TNZ	EP	12	22	18		-0.9	0.91	242			3.7 3.4
	E			50							
TUA	P	12	22	22.8		1.2	1.36	92			4.1 4.1
	S			55.7		2.2					
GNZ	P	12	22	27.2		0.8	2.05	87			4.0 4.1
	S			58.5		-4.0					
WEL	P	12	22	32.4		1.2	2.57	191			4.5
	S			23 13.0		2.1					
ECZ	P?	12	22	32.0		-0.4	2.69	68			3.9
COB	EP	12	22	36		-0.5	3.10	221			4.2
	E(S)			23 10		-10.3*					
KAI	ES	12	23	53		-2.0	4.84	218			4.3
GPZ	EP	12	23	02		0.1	5.35	202			4.7
	S			24 06		0.1					
DEC 15		14	00	31.0							
WNZ	PG	14	00	36.4		0.8	0.20	76			
	I			38.0							
	I			41.2							
CNZ	PG	14	00	42.0		-0.8	0.57	205			
	E			49.5							
TON	E	14	00	43.7			0.58	205			3.3
	E			45.7							
	E			53							
KRP	PG	14	00	46.8		-0.4	0.79	341			4.5 4.5
	I			59.1							
TUA	PG	14	00	52.0		0.2	1.02	98			4.3 4.2
	E			53.2							
TNZ	PG	14	00	56.3		-0.3	1.26	246			4.3 4.2
	E			58.2							
	SG			01 14.4		0.8					
GNZ	PG	14	01	05.0		-0.4	1.70	89			4.4
	E			07.8							
DEC 15		15	28	02.1							
WNZ	PG	15	28	07.8		0.3	0.25	78			
	I			09.9							
	I			12.0							
CNZ	PG	15	28	13.1		-0.3	0.55	200			3.6 3.4
	E			16.1							
	SG			21.3		0.3					
TON	PG						0.56	201			2.7
KRP	IPG	15	28	18.2		0.2	0.78	345			4.0 4.1
	I			21.5							
	SG			28.5		-0.2					
	I			32.2							

		H	M	S	38.71S	175.81E	12 KM	SE	0.5	AVG MAG	3.5
		+-		0.2	0.01	0.01	R			64/ 474	3.5
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
TUA	EPG	15	28	23.0							4.0 3.8
	I			25.0							
	SG			37.7		-0.5					
TNZ	EPG	15	28	26.5		-0.2	1.21	245			4.0
	I			29.0							
GNZ	EPG	15	28	38.5		1.1	1.74	89			3.8 3.6
	E			40							
	ESG			29 03		2.1*					
DEC 15		16	53	51.8							
WNZ	PG	16	53	57.0		-0.1	0.24	72			
	E			59.0							
	SG			54 00.8		0.2					
CNZ	PG	16	54	02.9		0.1	0.53	203			2.8 3.4
	I			36.0							
	E			41.3							
TON	PG						0.54	203			2.6
KRP	PG	16	54	08.0		-0.3	0.81	344			3.8 3.9
	I			12.0							
	E(S)			22		0.2					
TUA	EPG	16	54	12.2		-0.9	1.05	96			3.8 3.7
	E			15.0							
	SG			27.3		-0.1					
TNZ	EPG	16	54	16.2		-0.2	1.21	246			3.8 3.4
	E			19.0							
	SG			33.0		0.1					
GNZ	EPG	16	54	27.8		1.0	1.73	89			3.6 3.4
	E			29.5							
	E			52							
DEC 15		18	58	13.8							
WNZ	PG	18	58	19.5		0.5	0.23	78			
	SG			22.1		-0.3					
	E			23.9							
CNZ	PG	18	58	25.0	U	-0.3	0.56	202			4.2
TON	PG				U	0.2	0.56	202			3.3
KRP	IPG	18	58	30.0	U	0.2	0.79	344			4.2 4.5
	S			42.8		-0.5					
TUA	PG	18	58	35.0		-0.2	1.05	97			4.4 4.3
	SG			49.1		-0.4					
TNZ	PG	18	58	38.8		0.1	1.23	245			4.5 4.1
	I			41.8							
	E			57.8							
GNZ	EPG	18	58	49.5		0.7	1.73	89			4.2
	I			51.2							
DEC 15		19	37	01.6							
WNZ	E(PG)	19	37	07.0		0.5	0.22	64			
	SG			09.0		-0.8					
	I			11.0							
CNZ	PG	19	37	12.2		-0.3	0.53	207			3.5 3.3
	SG			19.2		-0.6					
TON	PG						0.54	207			2.5
KRP	PG	19	37	17.4		-1.3	0.84	343			3.7 3.8
	SG			30.6		0.5					
TUA	EPG	19	37	21.8		-0.5	1.02	95			3.8 3.7
	E			23.9							
	SG			37.0		0.9					

DEC 16		H	M	S	38.68S	175.83E	12 KM	SE	0.8	AVG MAG	64/488		
		+	-	0.2	0.01	0.01	R	DIR	RES	DIST	AZ	W-A	W P W S
WNZ	PG	16	49	25.4					0.6	0.22	78		
	SG			29.0					0.8				
CNZ	PG	16	49	30.3					-1.2	0.57	202	3.5	3.4
	I			36.0									
	SG			40.0					0.7				
TON										0.57	203	2.6	
KRP	PG	16	49	36.0					0.1	0.78	343	3.9	3.4
	SG			46.3					-0.3				
TUA	PG	16	49	40.2					-0.9	1.04	98	3.5	3.4
	I			42.0									
	SG			55.0					-0.2				
TNZ	PG	16	49	45					0.0	1.24	245	3.8	3.5
	SG			50.02					0.3				
GNZ	E	16	50	59						1.72	90	3.9	
DEC 16		H	M	S	38.71S	175.79E	12 KM	SE	0.5	AVG MAG	64/488		
		+	-	0.2	0.01	0.01	R	DIR	RES	DIST	AZ	W-A	W P W S
WNZ	IPG	17	30	38.8					0.3	0.26	73		
	SG			42.8					0.5				
CNZ	PG	17	30	44.0					0.2	0.53	201	3.8	
	E			47.2									
TON										0.53	201	2.8	
KRP	PG	17	30	49.1					-0.2	0.80	346	4.0	4.1
	SG			31 00.2					-0.0				
TUA	PG	17	30	54.9					0.3	1.07	96	4.1	3.4
	E			55.3									
	SG			31 08.3					-0.9				
TNZ	PG	17	30	57					-0.2	1.20	246	4.1	3.7
	SG			31 15					1.6*				
GNZ	EPG	17	31	08.4					0.0	1.75	89	3.9	
DEC 16		H	M	S	38.68S	175.88E	12 KM	SE	1.5	AVG MAG	64/488		
		+	-	0.6	0.05	0.03	R	DIR	RES	DIST	AZ	W-A	W P W S
WNZ	PG	21	40	02.2					0.0	0.18	73		
	I			06.4									
CNZ	PG	21	40	08.0					-1.8	0.58	207	3.1	3.3
	E			18.0									
TON										0.58	207	2.7	
KRP	IPG	21	40	13.7					-0.6	0.80	340	3.9	3.4
	E			30.2									
TUA	EPG	21	40	17.3					-1.0	1.00	98	3.6	3.3
	SG			33.0					1.2				
TNZ	EP	21	40	22					0.7	1.27	246	3.7	3.4
	S			40					1.5				
GNZ	E	21	40	35.0						1.68	89	3.7	
DEC 16		H	M	S	38.70S	175.84E	12 KM	SE	0.3	AVG MAG	64/488		
		+	-	0.1	0.01	0.00	R	DIR	RES	DIST	AZ	W-A	W P W S
WNZ	PG	22	13	12.0					0.1	0.22	71		
	I			16.2									
CNZ	IPG	22	13	18.1					-0.1	0.55	204	3.5	3.4
	I			28.5									
TON										0.55	205	2.9	
KRP	IPG	22	13	23.2					-0.4	0.81	343	4.1	4.1
	SG			34.8					0.2				
TUA	PG	22	13	27.7					-0.3	1.03	96	4.0	3.4

	SG			42.0					0.1				
TNZ	PG	22	13	32					-0.0	1.23	247	4.0	4.0
	SG			49					0.2				
GNZ	E(PG)	22	13	44.0					2.3*	1.71	89	4.0	3.5
	SG			14 05.0					0.2				
DEC 17		H	M	S	38.73S	175.84E	12 KM	SE	0.3	AVG MAG	64/488		
		+	-	0.1	0.01	0.01	R	DIR	RES	DIST	AZ	W-A	W P W S
WNZ	IPG	04	20	57.2					-0.1	0.23	64		
	SG			21 01.0					0.3				
CNZ	PG	04	21	03.0					-0.0	0.52	206	3.4	3.7
	SG			13.0					2.8*				
TON										0.53	207	3.1	
KRP	IPG	04	21	09.0					-0.4	0.84	343	4.5	4.3
	SG			21.0					0.2				
TUA	PG	04	21	12.9					-0.2	1.03	95	4.4	3.9
	SG			27.2					0.2				
TNZ	PG	04	21	16.8					-0.4	1.23	248	4.2	4.2
	SG			34.2					0.4				
DEC 17		H	M	S	35.21S	178.93W	255 KM	SE	2.4	AVG MAG	64/489		
		+	-	3.9	0.18	0.35	R	DIR	RES	DIST	AZ	W-A	W P W S
ECZ	EP	17	12	05					-0.5	3.20	219	4.2	4.3
	E			42									
	ES			50					1.4				
TUA	P	17	12	23					-0.7	4.76	220	4.4	4.5
	S			13 21					-0.1				
KRP	EP	17	12	27					-2.1	5.21	237	4.4	
ONE	EP	17	12	35					2.3	5.50	262		
CNZ	E	17	12	38						5.94	226	3.5	3.8
	E			50									
TNZ	E	17	12	54						6.65	231		
WEL	ES	17	14	28					-1.6	7.83	217	5.3	
	EL			16 00									
COB	S	17	14	49					-2.6	8.80	226	5.1	
KAI	ES	17	15	30					0.1	10.48	223	5.2	
GPZ	E	17	13	56						10.68	215	5.4	
	S			15 38					3.7				
DEC 17		H	M	S	40.12S	175.22E	33 KM	SE	1.0	AVG MAG	64/490		
		+	-	0.3	0.02	0.03	R	DIR	RES	DIST	AZ	W-A	W P W S
TON	P*	20	49	45.2					-0.1	0.94	15	3.5	
	S*			57.5					-0.7				
CNZ	P*	20	49	45.0					-0.3	0.95	16	3.8	4.1
	ES*			59					0.6				
TNZ	P*	20	49	47.5					-0.6	1.13	325	3.4	3.8
	S*			50 04					0.4				
WEL	P*	20	49	50.0					0.4	1.22	196	3.7	
	S*			50 06					-0.1				
TUA	EP*	20	50	04					1.4	1.99	49	3.9	3.8
	E			38									
COB	EP*	20	50	04					-1.0	2.13	242	3.5	
	SN			26					1.8				
KRP	P*	20	50	06.0					-0.3	2.20	7	3.9	3.9
	S*			35.0					-0.4				
KAI	ESN	20	51	08					4.3*	3.74	229	3.8	
GPZ	ESN	20	51	10					-1.3	4.06	207	3.9	
DEC 18		H	M	S	35.12S	179.12W	258 KM	SE	0.9	AVG MAG	64/491		
		+	-	1.2	0.11	0.16	R	DIR	RES	DIST	AZ	W-A	W P W S

		H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S
ECZ	EP	01	51	01		0.3	3.19	216		4.1	4.2		
	ES			45		1.2							
GNZ	P	01	51	12		-0.3	4.20	212		4.4	4.4		
	S			52 03		-1.4							
TUA	P	01	51	19		0.3	4.74	218		4.4	4.4		
	S			52 16		-0.0							
KRP	P	01	51	23		-0.5	5.13	235		4.1			
HEL	ES	01	53	24		-0.5	7.81	216	5.2				
COB	ES	01	53	46		0.1	8.76	225	5.1				
GPZ	ES	01	54	30		0.8	10.67	214	5.4				
64/ 495													
DEC 18		H	M	S						AVG MAG			
		16	56	09.9			38.72S	175.82E	12 KM	SE	0.5		
				0.2			0.01	0.01	R				
							H	M	S	DIR	RES	DIST	AZ
	WNZ	E	16	56	17.3				0.24	68			
		SG			19.0						0.4		
	CNZ	PG	16	56	21.0				0.3	0.53	204		2.8 2.9
		SG			28.0						0.1		
	TON									0.53	205		2.3
	KRP	PG	16	56	26.2				-0.5	0.82	344		3.9 3.5
		SG			38.3						0.4		
	TUA	EPG	16	56	31.0				-0.1	1.04	95		3.3 3.4
		SG			45.5						0.3		
	TNZ	EPG	16	56	34.5				-0.1	1.22	247		3.5 3.2
		SG			53.0						2.0*		
	GNZ	EPG	16	56	44				-0.8	1.72	88		3.4
64/ 496													
DEC 18		H	M	S						AVG MAG			
		23	13	38.1			38.67S	175.85E	12 KM	SE	0.8		
				0.3			0.02	0.01	R				
							H	M	S	DIR	RES	DIST	AZ
	WNZ	E	23	13	42.8					0.20	78		
		SG			45.0						-0.8		
		I			47.8								
	CNZ	PG	23	13	50.0				0.1	0.58	204		3.7
		E			53.0								
	TON									0.58	205		2.8
	KRP	PG	23	13	54.0				-0.1	0.79	342		4.0 3.9
		S			14 07.8						0.3		
	TUA	EPG	23	13	58.3				-0.6	1.03	98		3.8 3.7
		E			14 00.0								
		S			14.0						1.2		
	TNZ	PG	23	14	04.1				0.6	1.26	245		3.8 3.8
		SG			19.9						-0.6		
	GNZ	EPG	23	14	15.5				3.0*	1.70	90		3.8 3.4
		E			18.8								
		E			41.0								
64/ 497													
DEC 18		H	M	S						AVG MAG			
		23	19	54.6			38.67S	175.85E	12 KM	SE	0.4		
				0.1			0.01	0.01	R				
							H	M	S	DIR	RES	DIST	AZ
	WNZ	PG	23	19	59.5					0.2	0.20	78	
		I			20 01.3								
		SG			02.8						0.4		
	CNZ	PG	23	20	06.2				-0.3	0.58	204		3.7
		I			09.8								
		SG			14.8						0.4		
	TON									0.58	204		3.4
	KRP	IPG	23	20	11.0				U	0.4	0.79	342	4.7
		S			23.8						-0.3		
	TUA	PG	23	20	15.0				-0.5	1.03	98		4.6
	TNZ	EPG	23	20	19.9				-0.2	1.25	245		4.1 3.4
		I			22.0								
		E			39.8								

		H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W	S
GNZ	EPG	23	20	28.8		-0.3	1.70	90		1.70	90		4.8
WEL							2.74	197		3.8			
ONE							3.13	337		4.0			
COB							3.40	224		4.0			
KAI							5.12	220		4.2			
64/ 495													
DEC 18		H	M	S						AVG MAG			
		23	22	53.9			38.68S	175.87E	12 KM	SE	0.8		
				0.3			0.03	0.01	R				
							H	M	S	DIR	RES	DIST	AZ
	WNZ	SG	23	23	00.8					-0.3	0.19	76	
		I			02.0								
	CNZ	EPG	23	23	05.0					-0.8	0.58	206	3.3 3.4
		E			10.0								
		E			15								
	TON									0.59	206		2.8
	KRP	PG	23	23	10.1				-0.0	0.80	341		4.0 4.2
		I			21.8								
		I			24.0								
	TUA	EPG	23	23	13.8				-0.6	1.01	98		3.8 3.9
		E			14.9								
		SG			29.0						1.0		
	TNZ	PG	23	23	19.8				0.2	1.27	246		3.7 3.7
		SG			37.3						0.5		
	GNZ	E	23	23	33					1.68	90		4.0 3.6
		E			56								
64/ 496													
DEC 19		H	M	S						AVG MAG			
		06	18	07.1			34.98S	179.86E	349 KM	SE	1.3		
				1.3			0.12	0.18	13				
							H	M	S	DIR	RES	DIST	AZ
	ECZ	P	06	19	06.8					0.9	2.90	201	4.5 4.9
		E			47								
		S			52					-0.0			
	GNZ	P	06	19	16.0					0.2	3.94	201	4.7 5.1
		ES			20 08					-1.8			
	TUA	EP	06	19	21					0.4	4.39	209	4.3 4.7
		ES			20 19					0.8			
	KRP	EP	06	19	21					-1.3	4.55	229	3.9
	CNZ	EP	06	19	32					-0.1	5.44	218	3.5 3.8
		ES			20 41					2.2			
	TNZ	EP	06	19	40					0.8	6.06	225	
	WEL	S	06	19	55.0					-0.6	7.46	211	5.5
		S			21 20					-1.0			
	COB	ES	06	21	37					-1.6	8.29	221	5.1
	GPZ	ES	06	22	24					1.1	10.33	210	5.4
64/ 497													
DEC 19		H	M	S						AVG MAG			
		06	41	22.6			33.06S	178.75W	205 KM	SE	3.8		
				2.1			0.17	0.40	31				
							H	M	S	DIR	RES	DIST	AZ
	RAO	P	06	42	22						-1.4	3.86	11
		S			43 05						-5.5		
	ECZ	P	06	42	42.1					2.7	5.13	205	3.4 5.5
		S			43 37						-2.0		
	GNZ	P	06	42	52.0					-0.7	6.16	204	
		S			44 00.5						-2.4		
	ONE	P	06	42	58.8					4.2	6.30	243	
	TUA	P	06	43	01.2					2.4	6.63	209	
		ES			44 15						1.1		
	KRP	P	06	43	03.7					3.6	6.73		

		E	39				
		E	44 59				
WEL	P	06 43 39.0		0.3	9.70	210	7.0
		ES	45 21	-4.3			
COB	ES	06 45 40		-4.0	10.51	218	6.3
KAI	ES	06 46 18		-5.9	12.23	217	6.4
GPZ	EP	06 44 16		0.6	12.57	210	7.1
		S	46 26	-5.7			
MNW	EP	06 45 08		4.4	16.47	216	
		ES	47 59	-0.3			
		H M S					64/48
DEC 20	04 28 21.8	45.15S	167.00E	33 KM	SE	1.9	AVG MAG 4.1
		+ -	0.05	0.12	R		
		H M S		DIR	RES	DIST	AZ
MNW	IP*	04 28 36.1		D	-0.6	0.77	146
		S*	49.8		2.3		
ROX	P*	04 28 49.5			-2.1	1.66	102
		S*	29 12		-1.8		
KAI	ES*	04 30 29			1.4	4.12	52
GPZ	EPN	04 29 24			0.1	4.29	72
		ESN	30 13		1.5		
COB	ESN	04 30 48			-0.7	5.83	48
		H M S					64/49
DEC 20	17 49 28.4	38.70S	175.83E	12 KM	SE	0.8	AVG MAG 4.1
		+ -	0.02	0.02	R		
		H M S		DIR	RES	DIST	AZ
WNZ	PG	17 49 33.6			0.1	0.23	73
		E	35.4		0.6		
		SG	37.5		0.3	0.55	203
CNZ	PG	17 49 40.0			-0.2		
		ESG	47		-0.0	0.81	344
KRP	IPG	17 49 44.8			-0.6	1.04	96
		E	58.5				
TUA	EPG	17 49 49.0			1.0		
		I	50.3		0.1	1.23	246
TNZ	EPG	17 49 53.4					
		E	55.6				
GNZ	EPG	17 50 01.8			-1.5	1.72	89
		E	04.0				
WEL	P*	17 50 16.0			0.1	2.71	197
		E	21.0				
COB						3.37	224
		H M S					64/50
DEC 20	21 09 20.9	38.70S	175.84E	12 KM	SE	0.4	AVG MAG 3.7
		+ -	0.01	0.01	R		
		H M S		DIR	RES	DIST	AZ
WNZ	E	21 09 26.5				0.22	73
		E	27.0				
		E	29.7				
CNZ	PG	21 09 32.8			0.5	0.55	204
		E	46				
TON	PG	21 09 37.3			0.0	0.56	205
KRP	SG				0.2	0.80	343
		E	48.4				
		E	50.3				
TUA	PG	21 09 41.8			-0.0	1.03	97
		I	44.7				
		SG	56.0		0.2		
TNZ	EPG	21 09 46.1			0.1	1.24	246
		SG	10 02.3		-0.4		
		E	05.4				

GNZ	EPG	21 09 55.0			-0.5	1.71	89	3.8
		E	59.0					
		H M S						64/501
DEC 20	21 18 02.2	38.69S	175.83E	12 KM	SE	0.2	AVG MAG 4.1	
		+ -	0.00	0.00	R			
		H M S		DIR	RES	DIST	AZ	
WNZ	(PG)	21 18 08.3			1.2*	0.22	74	
		SG	10.3		-0.1			
		E	12.0					
CNZ	PG	21 18 13.8			0.2	0.55	203	
		E	27.6					
TON	IPG	21 18 18.3			-0.2	0.56	204	
KRP	SG				0.2	0.80	343	
		PG	29.5					
TUA	PG	21 18 23.5			0.2	1.04	97	
		SG	37.2		-0.1			
TNZ	PG	21 18 27.1			-0.1	1.23	246	
		I	29.5					
		SG	43.8		-0.1			
GNZ	EPG	21 18 37.0			0.1	1.72	89	
		E	42.0					
		H M S					64/502	
DEC 20	22 09 59.5	38.66S	175.84E	12 KM	SE	1.1	AVG MAG 3.9	
		+ -	0.04	0.02	R			
		H M S		DIR	RES	DIST	AZ	
WNZ	SG	22 10 07.4			0.1	0.20	82	
		E	11.7					
		E	14.5					
CNZ	PG	22 10 11.0			-0.5	0.59	203	
		E	25.5					
TON	PG	22 10 15.0				0.59	204	
KRP	PG				-0.3	0.77	342	
		E	31.8					
		E	35.0					
TUA	EPG	22 10 20.3			-0.2	1.03	99	
		E	22.0					
		E	40.0					
TNZ	EPG	22 10 24.3			-0.7	1.26	245	
		E	26.2					
		SG	42.8		0.8			
GNZ	PG	22 10 36.0			1.9	1.71	90	
		E	40.8					
		S*	51.3		-1.1			
		H M S					64/503	
DEC 20	22 55 26.4	38.66S	175.84E	12 KM	SE	0.8	AVG MAG 3.6	
		+ -	0.02	0.02	R			
		H M S		DIR	RES	DIST	AZ	
WNZ	E	22 55 32.0				0.21	81	
		SG	35.0		0.8			
CNZ	EPG	22 55 38.8			0.4	0.58	203	
		I	40.8					
KRP	PG	22 55 42.2			-0.0	0.78	342	
		SG	53.0		0.2			
TUA	EPG	22 55 47.0			-0.4	1.03	98	
		SG	56 02.0		0.6			
TNZ	EPG	22 55 51.8			-0.0	1.25	245	
		E	54.0					
		E	56 12.0					
GNZ	EPG	22 55 59.5			-1.5	1.71	90	
		E	56 04					
		E	27					

DEC 20		H	M	S	38.71S	175.84E	12 KM	SE	0.8	AVG MAG	64/ 501
		+	-	0.3	0.02	0.01	R			4.5	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	23	49	16.1		-0.0	0.22	68			
	I			20.2							
CNZ	IPG	23	49	21.3	D	-0.9	0.54	205		4.2	
KRP	IPG	23	49	27.0	U	-0.9	0.82	343		4.6	
	SG			39.5		0.4					
TUA	PG	23	49	31.8		-0.3	1.03	96		4.6	4.5
	SG			46.3		0.3					
TNZ	EPG	23	49	35.6		-0.5	1.23	247		4.6	4.1
	I			38.0							
	SG			54.0		1.2					
GNZ	E	23	49	43.8			1.71	88			
	PG			46.5		0.7					
	E			50 14							
DEC 21		H	M	S	38.72S	175.86E	12 KM	SE	0.8	AVG MAG	64/ 501
		+	-	0.3	0.02	0.02	R			4.1	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	IPG	00	39	01.2	D	0.9	0.21	65			
	I			05.0							
	I			06.4							
CNZ	IPG	00	39	07.2	D	0.7	0.54	207		4.0	4.0
	E			17.8							
TON	IPG	00	39	11.9	U	-0.6	0.83	342		2.9	4.7
KRP	SG			24.2		0.4					
TUA	PG	00	39	16.0		-0.1	1.01	95		4.1	4.2
	SG			29.8		-0.0					
TNZ	PG	00	39	20.1		-0.6	1.24	248		4.3	4.0
	I			22.9							
	I			39.4							
GNZ	EPG	00	39	29.0		-0.8	1.70	88		4.1	3.9
	E			34.8							
	E			57							
DEC 21		H	M	S	38.70S	175.81E	12 KM	SE	0.3	AVG MAG	64/ 501
		+	-	0.1	0.01	0.00	R			4.0	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	01	50	10.2		0.1	0.24	73			
	SG			14.0		0.4					
	E			16.3							
CNZ	PG	01	50	15.7		-0.0	0.54	202		3.7	
TON	IPG	01	50	21.0	U	-0.1	0.81	345		4.7	4.5
KRP	SG			32.0		-0.1					
TUA	EPG	01	50	25.7		-0.5	1.06	96		5.1	4.0
	I			26.9							
	SG			40.4		-0.1					
TNZ	PG	01	50	29.5		0.2	1.21	246		5.0	4.5
	I			31.9							
	E			48.4							
GNZ	EP*?	01	50	37.8		2.3*	1.74	89		4.8	4.0
	PG			39.9		0.0					
	E			51 12							
DEC 21		H	M	S	38.69S	175.85E	12 KM	SE	0.9	AVG MAG	64/ 501
		+	-	0.5	0.03	0.02	R			3.4	
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	SG	01	55	38.5		0.3	0.21	73			
CNZ	E	01	55	44.2			0.56	205		3.5	

TON									0.57	205	2.5		
KRP	PG	01	55	45.8		-1.0	0.80	342		3.9	4.1		
	SG			58.3		0.6							
TUA	EPG	01	55	51		-0.2	1.02	97		3.7	4.2		
	E			56 04									
TNZ	EPG	01	55	56		0.3	1.25	246		3.7	3.5		
	E			56 13									
GNZ	E	01	56	11			1.70	89		3.6			
DEC 21		H	M	S	38.68S	175.78E	12 KM	SE	0.9	AVG MAG	64/ 508		
		+	-	0.4	0.03	0.02	R			4.5			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	EPG	09	07	32.9		-0.7	0.26	79					
	SG			36.8		-0.6							
	I			37.8									
CNZ	PG	09	07	39.2		-0.1	0.55	199		4.3			
	I			41.9									
	E			53.0									
TON	PG	09	07	43.9	U	0.1	0.56	200		3.6			
KRP	E			57.4			0.78	346		4.6	4.6		
TUA	EP	09	07	48.3		-0.4	1.08	97		4.6			
	I			49.8									
TNZ	EPG	09	07	52.2		-0.2	1.20	245		4.6			
	I			54.8									
GNZ	EP*	09	08	00.8		1.7	1.76	90		4.6	4.8		
	PG			03.7		0.2							
	I			15.7									
DEC 21		H	M	S	38.64S	175.84E	12 KM	SE	0.8	AVG MAG	64/ 509		
		+	-	0.3	0.02	0.01	R			3.7			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	EPG	09	18	18.1		-0.2	0.21	88					
	SG			20.2		-0.9							
	E			22.1									
CNZ	EPG	09	18	24.6		-0.9	0.60	202		3.3	3.5		
	E			30.9									
	E			34.6									
TON	IPG	09	18	28.5		0.0	0.61	202		2.9			
KRP	S			41.5		-0.4	0.75	342		4.2	4.2		
TUA	EPG	09	18	34.0		-0.3	1.04	100		4.0	3.7		
	I			36.0									
	SG			48.2		-0.3							
TNZ	PG	09	18	38.2		-0.5	1.26	244		3.8	3.6		
	SG			56.8		1.1							
GNZ	PG	09	18	49.0		1.2	1.71	91		3.9	3.6		
	SG			19 11.8		0.8							
DEC 21		H	M	S	38.64S	175.86E	12 KM	SE	1.0	AVG MAG	64/ 510		
		+	-	0.3	0.03	0.02	R			3.8			
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S		
WNZ	IP*	12	11	27.9	U	-0.9	0.19	87					
	S*			31.4		-0.4							
CNZ	IP*	12	11	34.6	D	-1.4	0.61	204		3.4	3.5		
	E			38.9									
TON	P*	12	11	39.0		0.4	0.61	204		3.0			
KRP	S*			48.8		-0.3	0.76	340		4.1	3.8		
TUA	P*	12	11	43.0		-0.1	1.02	100		4.2	3.9		
	I			44.8									
	S*			58.0		1.2							
TNZ	P*	12	11	47.0		-0.5	1.28	244		4.1	3.9		
	I			48.5									

		S*		12 05.9		1.3							
GNZ		EP*		12 11 55.2		0.7		1.69		91		4.0	
		E		57.8									
DEC 21	H M S	38.67S	175.80E	12 KM	SE	1.1	AVG MAG	4.1	64/ 511				
	+ -	0.4											
	H M S	0.04	0.02	DIR	RES	DIST	AZ	W-A	W P	W S			
WNZ	IPG	14 55 10.5				0.24	82						
	I	14 55 14.5											
CNZ	EPG	14 55 16.1		-0.9	0.57	200		4.1	4.1				
	E	21.4											
TUA	PG	14 55 21.0		0.0	0.57	201	3.6	4.5	4.4				
KRP	E	34.5			0.77	344							
TUA	PG	14 55 26.0		-1.0	1.07	98		4.5	4.4				
	E	33.5											
TNZ	SG	42.5		1.0				4.6	4.4				
	PG	14 55 29.2		-0.9	1.22	244							
	E	32.2											
	SG	48.2		1.6									
GNZ	EP*	14 55 36.7		0.5	1.74	90		4.7	4.2				
	PG	39.7		-0.9									
	I	42.0											
	S*	56 00.2		0.9									
DEC 21	H M S	38.69S	175.81E	12 KM	SE	0.6	AVG MAG	3.8	64/ 511				
	+ -	0.3											
	H M S	0.02	0.01	DIR	RES	DIST	AZ	W-A	W P	W S			
WNZ	PG	17 00 42.4		0.3	0.24	75							
	I	46.7											
CNZ	PG	17 00 48.0		-0.0	0.54	202		3.3	3.6				
	E	54.4											
KRP	IPG	17 00 52.9	U	-0.2	0.80	344		4.2	4.0				
	SG	01 03.9		-0.0									
TUA	EPG	17 00 58.0		-0.3	1.05	97		3.8	3.7				
	E	59.3											
	ESG	01 12		-0.5				3.8	4.0				
TNZ	PG	17 01 01.5		-0.0	1.22	246							
	SG	19.2		1.2									
	I	20.4											
GNZ	E(PG)	17 01 12.7		0.8	1.73	89		3.8					
DEC 21	H M S	38.69S	175.80E	12 KM	SE	0.3	AVG MAG	3.4	64/ 511				
	+ -	0.1											
	H M S	0.01	0.00	DIR	RES	DIST	AZ	W-A	W P	W S			
WNZ	PG	17 34 08.6		0.3	0.24	77							
	SG	12.3		0.4									
	I	13.5											
CNZ	IPG	17 34 14.1	D	-0.1	0.55	201		3.4					
	E	19.4											
KRP	IPG	17 34 19.1		0.1	0.79	345		4.0					
	SG	29.6		-0.2									
TUA	EPG	17 34 24.0		-0.5	1.06	97		3.5					
	E	25.7											
	SG	39.0		0.1									
TNZ	EPG	17 34 27.7		0.2	1.21	245		3.5					
	E	29.0											
	SG	44.0		0.1									
GNZ	EPG	17 34 38.0		-0.2	1.74	89							
	E	40.2											

		S*		12 05.9		1.3							
GNZ		EP*		12 11 55.2		0.7		1.69		91		4.0	
		E		57.8									
DEC 21	H M S	38.69S	175.83E	12 KM	SE	0.5	AVG MAG	3.6	64/ 514				
	+ -	0.2											
	H M S	0.02	0.01	DIR	RES	DIST	AZ	W-A	W P	W S			
WNZ	PG	17 44 33.4		0.7	0.22	74							
	I	37.5											
CNZ	IPG	17 44 39.1	D	-0.1	0.55	204		3.2	3.3				
	E	45.3											
KRP	IPG	17 44 44.0		-0.1	0.80	343		3.9	3.9				
	E	54.9											
	I	58.4											
TUA	EPG	17 44 48.2		-0.6	1.04	97		3.7	3.6				
	SG	45 03.2		0.3									
TNZ	EPG	17 44 52.3		-0.6	1.24	246		3.7	3.8				
	SG	45 10.2		0.6									
	I	11.4											
GNZ	EPG	17 45 02.2		-0.3	1.71	89		3.8	3.5				
	E	05.2											
	ES*	21		0.1									
DEC 21	H M S	38.70S	175.80E	12 KM	SE	0.4	AVG MAG	3.8	64/ 515				
	+ -	0.2											
	H M S	0.01	0.01	DIR	RES	DIST	AZ	W-A	W P	W S			
WNZ	PG	20 07 48.4		0.3	0.25	74							
	I	52.2											
	I	53.2											
CNZ	IPG	20 07 54.1		0.5	0.53	201		3.7					
	SG	08 00.5		-0.5									
KRP	IPG	20 07 58.5	U	-0.5	0.80	345		4.1	3.0				
	SG	08 10.0		0.1									
TUA	PG	20 08 03.9		-0.3	1.06	96		4.2	3.9				
	E	05.2											
	E	26											
TNZ	EPG	20 08 07.4		0.3	1.21	246		4.0	3.7				
	E	10.3											
	E	26.5											
GNZ	EPG	20 08 18.1		0.2	1.74	89		4.0					
	E	20.2											
DEC 22	H M S	38.69S	175.83E	12 KM	SE	0.7	AVG MAG	4.1	64/ 516				
	+ -	0.3											
	H M S	0.03	0.01	DIR	RES	DIST	AZ	W-A	W P	W S			
WNZ	PG	01 55 35.9		0.7	0.23	74							
	E	40.2											
CNZ	PG	01 55 41.5		0.0	0.55	203		3.6					
	E	50.8											
KRP	IPG	01 55 46.2	U	-0.3	0.80	343		4.4	4.4				
	E	56.4											
TUA	PG	01 55 50.8		-0.5	1.04	97		4.2	3.8				
	SG	56 05.0		-0.5									
TNZ	PG	01 55 54.3		-0.8	1.23	246		4.2	4.2				
	I	58.5											
	SG	56 12.3		0.6									
GNZ	I	13.4											
	E	01 56 03		0.8	1.72	89		4.2	3.8				
	PG	05.8											
	E	31.0											
DEC 22	H M S	38.67S	176.27E	12 KM	SE	0.8	AVG MAG	2.5	64/ 517				
	+ -	0.3											
	H M S	0.03	0.02	DIR	RES	DIST	AZ	W-A	W P	W S			
WNZ	PG	06 18 30.6		0.4	0.13	285							
	SG	32.7		0.2									

		H	M	S			DIR	RES	DIST	AZ	W-A	W	P	W	S
TUA	EPG	06	18	42	0.9	0.70	102				2.8	3.1			
	ESG			50	-0.7										
	E			19 08											
CNZ	EPG	06	18	43	0.5	0.77	226				1.9	2.2			
	SG			52.4	-0.6										
	E			19 01.8											
KRP	PG	06	18	45.0	-0.7	0.94	322								
64/ 511															
DEC 22		H	M	S							AVG MAG				
		10	34	49.0	38.69S	175.86E	12 KM	SE	0.5		3.7				
				0.2	0.02	0.01	R								
					H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W
WNZ	PG	10	34	53.4	-0.2	0.20	73								
	SG			57.0	0.4										
CNZ	PG	10	35	01.0	0.4	0.57	205				3.3	3.2			
	E			11.8											
TON									0.57	206	2.8				
KRP	IPG	10	35	05.4	0.0	0.80	341				4.2	4.2			
	I			17.8											
TUA	PG	10	35	09.0	-0.6	1.02	97				3.7	3.8			
	I			12.1											
	SG			23.2	-0.2										
TNZ	PG	10	35	14.0	-0.5	1.26	246				3.9	3.7			
	I			15.8											
	SG			31.7	0.2										
GNZ	EPG	10	35	23.8	0.5	1.69	89				3.8	3.4			
	E			25.8											
	E			55											
64/ 510															
DEC 22		H	M	S							AVG MAG				
		20	15	40.2	38.68S	175.85E	12 KM	SE	1.1		4.4				
				0.5	0.04	0.03	R								
					H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W
WNZ	I	20	15	45.2	-0.8										
	SG			47.2											
CNZ	PG	20	15	51.4	-0.6	0.57	204				3.9	4.5			
TON						0.58	204								
KRP	PG	20	15	56.0	U	-0.3	342				4.7	4.7			
	E			16 08.2											
TUA	PG	20	16	00.2	-0.9	1.03	98				4.7	4.4			
TNZ	PG	20	16	06.0	0.4	1.25	246								
	E			21.2											
GNZ	EP*	20	16	11.4	1.0	1.70	90								
	PG			16.0	1.3										
	I			23.3											
	E			45											
COB									3.40	224	4.0				
GPZ									5.56	205	4.5				
64/ 510															
DEC 22		H	M	S							AVG MAG				
		20	20	12.2	38.69S	175.86E	12 KM	SE	0.6		3.7				
				0.2	0.02	0.01	R								
					H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W
WNZ	I	20	20	17.8	0.4										
	SG			20.3											
	E			22.0											
CNZ	PG	20	20	23.3	-0.6	0.57	205				3.2	3.4			
	SG			31.4	-0.3										
KRP	PG	20	20	28.0	-0.5	0.80	342				3.7	3.8			
	E			41.6											
TUA	EPG	20	20	33.0	0.1	1.02	97				3.9	3.7			
	I			34.4											
	E			48.2											
TNZ	EPG	20	20	37.8	0.1	1.25	246				4.0	3.4			
	I			39.8											
	SG			55.4	0.8										
GNZ	E	20	20	49		1.70	89				4.2				

		H	M	S			DIR	RES	DIST	AZ	W-A	W	P	W	S
DEC 22		21	45	43.6	38.67S	175.84E	12 KM	SE	0.3		AVG MAG				64/ 521
				0.1	0.01	0.01	R				4.3				
					H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W
WNZ	EPG	21	45	48.8	0.3	0.21	79								
	SG			51.2	-0.5										
CNZ	PG	21	45	55.4	-0.0	0.57	203				4.2				
KRP	PG	21	45	59.6	0.0	0.78	342				4.5				
	E			46 12.2											
TUA	PG	21	46	05.0	0.3	1.04	98				4.4	4.6			
	E			21.2											
TNZ	PG	21	46	08.8	-0.1	1.25	245				4.6				
	SG			25.8	0.0										
WEL	P*	21	46	35.0	3.4*	2.74	197				4.1				
COB											3.39	224	4.0		
GPZ											5.57	205	4.3		
64/ 522															
DEC 22		H	M	S							AVG MAG				
		22	41	19.3	38.73S	175.82E	12 KM	SE	0.3		3.5				
				0.1	0.01	0.01	R								
					H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W
WNZ	(PG)	22	41	25.0	0.3	0.24	66								
	SG			28.4	0.1										
CNZ	PG	22	41	30.0	0.0	0.51	204				2.5				
	E			35.0											
KRP	PG	22	41	36.2	-0.1	0.83	345				3.8				
	I			49.2											
TUA	EPG	22	41	40.0	-0.5	1.04	95				3.8				
	SG			54.8	0.1										
TNZ	EPG	22	41	44.0	0.1	1.21	248				3.8				
	E			42 06.2											
	E			08.9											
GNZ	E	22	41	55.8						1.73	88				
	E			42 25.0											
64/ 523															
DEC 23		H	M	S							AVG MAG				
		12	09	56.4	38.69S	175.85E	12 KM	SE	0.3		3.5				
				0.1	0.01	0.01	R								
					H	M	S	DIR	RES	DIST	AZ	W-A	W	P	W
WNZ	SG	12	10	04.0	-0.3	0.21	74								
	I			06.4											
KRP	PG	12	10	13.0	0.2	0.80	342				3.6	3.6			
	I			27.0											
TUA	EPG	12	10	17.4	0.1	1.03	97				3.5	3.4			
	SG			31.4	0.2										
TNZ	EPG	12	10	21.4	-0.4	1.25	246				3.6	3.5			
	SG			38.8	0.2										
GNZ	E	12	10	35.2		1.70	89								
64/ 524															
DEC 24		H	M	S							AVG MAG				

		E		54.3											
		I		58.4											
		E		58 23.4											
WEL		H M S		38.68S		175.89E		12 KM		SE 0.3		AVG MAG		64/ 528	
COB		+- 0.1		0.01		0.00		R							
DEC 24		10 24 16.2		0.01		0.00		R				3.41 224 3.9			
		H M S		H M S		DIR		RES		DIST		AZ		W-A W P W S	
WNZ		EPG		10 24 20.7				0.3		0.18		74			
		SG		22.7				-0.5							
		E		24.7											
CNZ		PG		10 24 28.2				0.0		0.58		207		3.1 3.1	
		E		30.3											
		E		37.2											
KRP		IPG		10 24 32.4		U		-0.2		0.80		340		3.8 4.1	
		SG		43.8				0.2							
TUA		PG		10 24 36.4				-0.1		1.00		98		3.7 3.5	
		SG		50.3				0.3							
TNZ		PG		10 24 42.0				-0.2		1.28		246		3.7 3.5	
		SG		59.5				0.1							
GNZ		PG		10 24 51.6				1.5*		1.67		89		3.9	
		E		53.4											
DEC 24		H M S		38.70S		175.79E		12 KM		SE 0.3		AVG MAG		64/ 528	
		+- 0.1		0.01		0.01		R							
		H M S		H M S		DIR		RES		DIST		AZ		W-A W P W S	
WNZ		PG		15 11 08.3				-0.4		0.25		74			
		SG		12.6				0.2							
CNZ		PG		15 11 14.2				0.0		0.53		201		4.1	
		E		17.8											
		E		24.5											
KRP		PG		15 11 19.6		U		0.1		0.80		345		4.2 4.1	
		E		32.0											
TUA		PG		15 11 25.0				0.2		1.07		96		4.0 4.1	
		E		27.0											
		E		43.0											
TNZ		EPG		15 11 27.6				-0.0		1.20		246		4.3 3.7	
		E		28.8											
		E		46.6											
GNZ		EPG		15 11 38.4				-0.1		1.74		89		4.0 3.7	
		E		40.4											
		E		12 32											
WEL															
COB												2.70 197 3.6		3.35 224 3.8	
DEC 24		H M S		38.70S		175.79E		12 KM		SE 0.2		AVG MAG		64/ 528	
		+- 0.1		0.01		0.00		R							
		H M S		H M S		DIR		RES		DIST		AZ		W-A W P W S	
WNZ		PG		15 50 32.6				-0.3		0.26		75			
		SG		36.6				-0.0							
CNZ		PG		15 50 38.2				-0.1		0.54		200		3.7	
		E		40.8											
		E		47.2											
KRP		PG		15 50 43.6				0.1		0.80		346		4.1 4.1	
		SG		55.8				1.5*							
TUA		PG		15 50 49.1				0.0		1.07		96		4.0 4.1	
		E		51.7											
		SG		51 03.9				0.3							
TNZ		EPG		15 50 51.8				0.1		1.20		246		4.3 3.7	
		E		53.9											
		E		51 10.2											
GNZ		EPG		15 51 02.6				-0.1		1.75		89		3.9	
		E		04.6											

				2.70 197 3.6											
				3.35 224 3.8											
WEL		H M S		38.69S		175.81E		12 KM		SE 0.5		AVG MAG		64/ 528	
COB		+- 0.3		0.03		0.02		R							
DEC 24		17 50 12.6		0.03		0.02		R							
		H M S		H M S		DIR		RES		DIST		AZ		W-A W P W S	
WNZ		PG		17 50 18.0				0.1		0.24		75			
		I		22.0											
KRP		PG		17 50 28.8				-0.0		0.80		344		4.3 4.2	
		E		41.6											
TUA		EP		17 50 33.5				0.5		1.06		97		3.9 3.9	
		E		36.1											
		E		48.8											
		E		56.3											
TNZ		EPG		17 50 37.2				-0.1		1.22		246			
		I		39.3											
		E		55.4											
GNZ		EPG		17 50 47.2				-0.5		1.73		89		3.9 3.7	
		E		50.0											
		E		51 34.2											
WEL															
COB												2.71 197 3.6		3.36 224 3.8	
DEC 25		H M S		38.73S		175.81E		12 KM		SE 0.4		AVG MAG		64/ 529	
		+- 0.2		0.01		0.01		R							
		H M S		H M S		DIR		RES		DIST		AZ		W-A W P W S	
WNZ		PG		15 40 25.2				0.1		0.25		66			
		SG		28.4				-0.3							
KRP		IPG		15 40 36.0				-0.6		0.83		345		4.3 4.2	
		SG		48.4				0.5							
TUA		PG		15 40 40.8				-0.1		1.05		95		3.9 4.0	
		E		43.0											
		SG		55.4				0.3							
TNZ		PG		15 40 44.2				0.1		1.21		247		4.2	
		E		46.8											
GNZ		E		15 40 56.2						1.73		88		3.9 3.6	
		E		41 23											
COB												3.34 224 3.8			
DEC 25		H M S		38.73S		175.80E		12 KM		SE 1.0		AVG MAG		64/ 530	
		+- 0.5		0.03		0.02		R							
		H M S		H M S		DIR		RES		DIST		AZ		W-A W P W S	
WNZ		PG		20 09 56.3				-0.3		0.26		67			
		E		58.1											
		SG		59.8				-0.6							
KRP		IPG		20 10 06.0		U		-1.9		0.83		346		4.7	
		IPG		20 10 12.0				-0.5		1.06		94		4.7 4.7	
		ESG		27				0.1							
		E		34											
TNZ		PG		20 10 14.6				-0.5		1.19		247		4.6 4.7	
		E		34.2											
GNZ		P*		20 10 22.7				0.8		1.75		88		4.7 4.9	
		PG		27.0				0.7							
		E		59											
ECZ		EP*		20 10 33.0				-0.1		2.40		65		3.8 4.0	
		E		46											
WEL															
ONE		EP*		20 10 48				1.8		2.67 197		4.2			
		EPG		55				0.1		3.17 338					
		ESG		11 38				0.4							
		E		43											
COB												3.33 224 4.0			

		H	M	S			12 KM	SE	0.6	64/ 50		
DEC 25		20	10	26.6	38.69S	175.89E	R			AVG MAG	4.5	
		+-		0.3	0.02	0.01						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
WNZ	E	20	10	32.0		0.4	0.18	72				
	SG			34.0								
KRP	E(SG)	20	10	54		-0.1	0.81	340				
TUA	EPG	20	10	46.4		-0.4	0.99	97		4.7	4.1	
	E			11 03								
	E			08								
TNZ	E	20	10	55				1.28	247	4.9	4.1	
	ESG			11 10		0.1						
GNZ	E	20	11	28				1.67	89		4.1	
ONE	E	20	12	19				3.15	337	4.2		
	E			25								

		H	M	S			12 KM	SE	0.8	64/ 50		
DEC 25		20	17	54.3	38.69S	175.82E	R			AVG MAG	4.0	
		+-		0.4	0.02	0.02						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
WNZ	(PG)	20	18	00.0		0.6	0.23	74				
	I			03.1								
	E			05.1								
	E			09.0								
KRP	IPG	20	18	10.9	U	0.3	0.80	344		4.1	4.1	
	E(SG)			21		-0.5						
TUA	PG	20	18	15.0		-0.5	1.05	97		4.2	3.1	
	E			18.2								
	SG			29.0		-0.7						
TNZ	EPG	20	18	19.0		-0.1	1.23	246		4.1	4.1	
	E			37.5								
GNZ	PG	20	18	30.2		1.0	1.72	89			3.1	
	E			32.0								
WEL								2.71	197	4.2		
COB								3.37	224	4.1		
KAI								5.09	220	4.6		
GPZ								5.54	205	4.5		

		H	M	S			144 KM	SE	1.5	64/ 50		
DEC 27		08	21	10.7	34.22S	179.13E	41			AVG MAG	4.0	
		+-		2.7	0.17	0.09						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
ECZ	P	08	22	05		-0.1	3.50	188				
	E			12								
	E			57								
	E			23 01								
ONE	EP	08	22	14		-0.5	4.21	247		4.2		
	ES			23 03		-0.5						
GNZ	EP	08	22	16.5		-1.9	4.51	191		4.6	4.1	
	E			24								
	E			23 17								
KRP	P	08	22	23.0		1.9	4.70	217		4.4	3.1	
	E			33								
	E			57								
TUA	EP	08	22	23		0.0	4.85	199		4.6	4.1	
	I			31								
	E			23 04								
CNZ	EP	08	22	36		1.1	5.74	209		4.1	3.4	
	E			23 52								
TON	S	08	24	32		1.0	5.75	209		4.4		
WEL	S	08	24	32		1.0	7.85	205		5.2		
GPZ	ES	08	25	38		-1.1	10.72	206				

		H	M	S			33 KM	SE	1.1	64/ 50		
DEC 27		11	49	23.3	40.11S	175.11E	R			AVG MAG	3.7	
		+-		0.4	0.02	0.04						

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
TON							0.97	20	3.4			
CNZ	IP*	11	49	41.2	U	-0.6	0.97	21		3.9	4.0	
	S			52.5		0.3						
	I			55.0								
TNZ	EP*	11	49	43.0		-0.3	1.08	329		3.5	3.5	
	S*			59.8		1.7						
WEL	P*	11	49	46.3		0.9	1.20	192	3.5			
	S*			50 02		0.3						
TUA	EP*	11	50	00.0		0.3	2.05	51		3.7	3.7	
	E			34.0								
COB	EP*	11	49	59.8		-0.0	2.05	241	3.3			
	S*			50 22		-5.0*						
KRP	P*	11	50	02.0		-0.5	2.21	9		3.5	4.0	
	S*			29.9		-1.8						
	E			34.0								
GNZ	EP*	11	50	12		1.3	2.69	58		3.7		
	E			22								
KAI							3.68	228	3.8			
GPZ	ES	11	51	05		-1.5	4.02	206	4.1			

		H	M	S			12 KM	SE	0.4	64/ 535		
DEC 27		23	15	03.7	38.72S	175.83E	R			AVG MAG	3.9	
		+-		0.1	0.01	0.01						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
WNZ	IPG	23	15	09.0	U	0.1	0.23	68				
	SG			12.7		0.4						
CNZ	PG	23	15	14.8	D	0.3	0.53	204		3.2	3.5	
	SG			22.0		0.3						
	I			24.0								
KRP	IPG	23	15	20.3		-0.2	0.83	344		4.4	4.3	
	I			22.5								
	ESG			32		0.2						
TUA	EPG	23	15	24.2		-0.6	1.04	95		4.1	4.1	
	I			26.4								
	SG			38.8		-0.1						
TNZ	EPG	23	15	28.0		-0.4	1.22	247		4.3	3.4	
	I			30.8								
	E			46.8								
GNZ	PG	23	15	40.4		1.9*	1.72	88		4.1		

		H	M	S			212 KM	SE	1.9	64/ 536		
DEC 28		02	46	20.6	38.21S	176.09E	11			AVG MAG	4.4	
		+-		1.6	0.09	0.07						
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S	
KRP	IP	02	46	49.2	U	-0.1	0.52	303		4.0	3.8	
	S			47 08.8		-2.5						
TUA	P	02	46	52.6		0.7	1.03	126		4.3	4.9	
	S			47 14.7		-1.5						
CNZ	IP	02	46	54.0	U	1.7	1.08	203		4.1	3.5	
	S			47 19.2		2.4						
TON							1.08	203	3.5			
GNZ	P	02	46	56.2		-0.1	1.58	107		4.8	4.9	
	E			47 18.6								
	S			23.2		-0.7						
TNZ	P	02	46	59.6		2.6	1.66	233		4.4		
	E			47 09.6								
WEL	IP	02	47	15.4		1.2	3.24	198	4.4			
	S			57.0		1.3						
COB	ES	02	48	09		-0.2	3.87	221	4.4			
KAI	S	02	48	46		-2.2	5.60	218	4.7			
GPZ	EP	02	47	49		-0.7	6.07	204	5.2			
	ES			48 57		-2.0						

		H	M	S			12 KM	SE	1.5	64/ 537		
DEC 28		05	41	43.3	38.67S	175.87E	R			AVG MAG	3.7	
		+-		0.6	0.05	0.03						

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	05	41	47.4		-0.2	0.19	79			
	SG			50.0		-0.5					
CNZ	PG	05	41	53.3		-2.1	0.59	205		3.6	3.1
	E			42 02.0							
KRP	PG	05	41	59.0		-0.3	0.78	340		3.7	3.1
	E			42 03.0							
TUA	EPG	05	42	03.6		-0.3	1.01	98		3.8	3.1
	E			13.0							
TNZ	EPG	05	42	07.5		-1.6	1.27	245		4.0	3.1
	I			09.2							
GNZ	PG	05	42	18.6		1.1	1.69	90		3.8	3.5
	E			26.4							
WEL	P*	05	42	32.4		0.9	2.75	198	3.6		
	I			43.4							
COB							3.42	224	3.9		
64/ 53											
DEC 28		H	M	S						AVG MAG	3.1
		05	48	33.0							
				0.4							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	(PG)	05	48	38.6		0.6	0.22	72			
	I			42.0							
CNZ	PG	05	48	44.2		-0.1	0.55	204		3.5	3.5
	SG			49 03.0							
KRP	IPG	05	48	49.0		-0.5	0.81	343		4.0	4.1
	E			50.6							
TUA	PG	05	48	53.6		-0.4	1.04	96		3.9	3.1
	I			54.8							
TNZ	SG	05	48	07.8		-0.3				3.9	3.5
	PG	05	48	57.6		-0.4	1.23	246			
GNZ	I			49 01.1							
	SG			15.0		0.3					
WEL	E	05	49	10.4			1.71	89	3.6		
	EP*	05	49	22.4		1.9	2.71	197	3.6		
COB							3.37	224	3.5		
64/ 53											
DEC 28		H	M	S						AVG MAG	3.1
		07	49	56.3							
				0.1							
		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	07	50	01.4		0.1	0.22	69			
	E			03.6							
CNZ	SG			05.2		0.5				3.2	3.1
	PG	07	50	07.2		-0.1	0.54	205			
KRP	I			12.4							
	I			17.2						3.8	3.1
TUA	PG	07	50	12.8		-0.2	0.82	343			
	SG			24.2		-0.0				3.5	
TNZ	EPG	07	50	17.0		-0.3	1.03	96			
	E			19.2						3.8	3.1
GNZ	EPG	07	50	20.8		-0.4	1.23	247			
	I			22.6							
WEL	SG			38.4		0.6				3.6	
	E	07	50	35		-0.1	1.71	88	3.6		
COB	ESG			54		-0.1	2.70	197	3.6		
	EP*	07	50	46.8		3.3*	3.36	224	3.5		

		H	M	S	DIR	RES	DIST	AZ	W-A	W P	W S
DEC 28	09 20	16.9	38.73S	175.79E	12 KM	SE	0.7			AVG MAG	3.4
		0.3	0.01	0.01	R						
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
WNZ	EPG	09	20	22.6		0.0	0.26	68			
	E			25.6							
CNZ	PG	09	20	27.4		0.1	0.51	202		3.2	3.2
	E			37.3							
KRP	PG	09	20	33.8		0.0	0.83	346		3.6	3.5
	SG			44.8		-0.3					
TUA	EPG	09	20	38.6		0.1	1.06	95		3.5	3.5
	SG			51.8		-1.1					
TNZ	EPG	09	20	41.0		-0.1	1.19	247		3.7	3.1
	I			43.2							
GNZ	PG	09	20	53.6		1.4	1.75	88		3.4	
	E			59.8							
WEL	ESG	09	21	46.8		-0.2	2.67	197	3.3		
	E			55.3							
64/ 540											
DEC 28		H	M	S						AVG MAG	3.2
		10	03	55.1							
				ND							
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
CNZ	IPG	10	04	05.0		-0.0	0.48	205			
	IPG	10	04	12.8		-0.0	0.87	346		3.0	
TNZ	EPG	10	04	19.2		0.0	1.18	249		3.4	
64/ 541											
DEC 28		H	M	S						AVG MAG	4.2
		10	03	57.2							
				0.3							
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
WNZ	(PG)	10	04	03.6		0.3	0.28	64			
	E			08.4							
CNZ	IPG	10	04	07.0		-0.2	0.48	202			
	IPG	10	04	14.2		-0.3	0.85	347		4.1	
TUA	PG	10	04	18.0		-1.0	1.07	93		4.1	
	E			19.4							
TNZ	IPG	10	04	21.2		0.2	1.17	248		4.3	
	P*	10	04	29.4		1.0	1.76	87		4.2	
GNZ	PG			32.8		-0.0					
64/ 542											
DEC 28		H	M	S						AVG MAG	4.6
		10	04	04.0							
				0.2							
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
WNZ	PG	10	04	10.4		-0.5	0.32	59			
	I			13.4							
CNZ	SG			15.6		0.1					
	PG	10	04	13.0		-0.0	0.43	201			
KRP	IPG	10	04	22.0		-0.1	0.89	349		4.6	4.6
	SG			34.2		0.1					
TUA	PG	10	04	25.7		-0.6	1.10	91		4.6	
	PG	10	04	27.1		0.0	1.13	250		5.7	4.6
GNZ	E			45.0							
	PG	10	04	41.1		0.9	1.79	86		4.3	
WEL	COB						2.60	197	4.1		
	KAI						3.26	224	4.1		
COB							4.98	220	4.5		
64/ 543											
DEC 28		H	M	S						AVG MAG	4.1
		13	22	48.4							
				0.5							
		H	M	S	DIR <th>RES</th> <th>DIST</th> <th>AZ</th> <th>W-A</th> <th>W P</th> <th>W S</th>	RES	DIST	AZ	W-A	W P	W S
WNZ	E	13	22	55.0			0.27	76			
	I			59.0							

		H	M	S	38.86S	178.41E	60 KM	SE	2.3	AVG MAG	4.1			
		+	-		0.12	0.13	18					W-A	W P	W S
		H	M	S	DIR	RES	DIST	AZ						
KAI	E	10	31	37										
	E			50										
	E			32										
GPZ														
DEC 30		13	08	00.1										
				1.9										
GNZ	IP	13	08	12.3										
	S			18.0										
	P			20.2										
TUA	S	13	08	20.2										
	P			32.4										
ECZ	P	13	08	20.0										
	I			21.4										
	E			35.2										
	E			37.0										
CNZ	EP	13	08	38.2										
	E			45.0										
	I			51.2										
	ES			09 02										
KRP	P	13	08	36.2										
	I			43.8										
	I			55.0										
	E			09 09										
TNZ	EP	13	08	51.0										
	E			09 06										
WEL	E	13	09	10										
	E			42										
COB	S	13	09	32										
	E			10 09										
	ES			13 10 45										
KAI	ES	13	10	45										
GPZ	S	13	10	46										
DEC 30		16	04	26.8										
				47.7										
ECZ	EP	16	06	13										
	E			07 16										
GNZ	EP	16	06	21										
	I			28										
	I			39										
ONE	EP	16	06	23										
TUA	EP	16	06	28										
	E			37										
KRP	P	16	06	27.8										
	I			34.0										
CNZ	EP	16	06	38										
	E			48										
TNZ	E	16	06	50										
	E			57										
DEC 30		16	12	52.2										
				0.2										
WNZ	E	16	12	58.0										
	SG			13 00.0										
	E			01.8										
CNZ	PG	16	13	03.2										
	I			12.4										
KRP	IPG	16	13	08.8										
	SG			20.6										
TUA	EPG	16	13	13.0										
	E			15.5										
	ESG			28										

		H	M	S	33.55S	179.23W	239 KM	SE	0.7	AVG MAG	4.7			
		+	-		0.73	0.73	70					W-A	W P	W S
		H	M	S	DIR	RES	DIST	AZ						
TNZ	EPG	16	13	16.9										
	I			19.0										
	E(SG)			37										
GNZ	E	16	13	29.5										
	E			14 02										
DEC 30		16	35	23.8										
				13.6										
ECZ	EP	16	36	33.5										
	E			40.0										
	E			37 43										
GNZ	EP	16	36	47										
	E			56										
ONE	EP	16	36	49										
TUA	EP	16	36	53										
	E			58										
	E			38 07										
KRP	P	16	36	53.8										
	I			59.5										
CNZ	EP	16	37	05										
	I			10										
	I			15										
TNZ	E	16	37	20										
	E			24										
WEL	EL	16	40	42										
COB	E	16	37	50										
DEC 30		22	39	08.5										
				0.2										
WNZ	PG	22	39	14.0										
	I			16.2										
	I			20.8										
CNZ	IPG	22	39	19.6										
KRP	IPG	22	39	25.6										
	I			38.7										
TUA	PG	22	39	29.0										
	I			30.2										
	SG			44.0										
TNZ	PG	22	39	33.0										
	I			36.4										
	E			51.7										
GNZ	EPG	22	39	42.8										
	E			46.4										
	E			46.4										
ONE														
COB														
KAI														
GPZ														
DEC 31		07	13	56.0										
				0.2										
WNZ	PG	07	14	01.2										
	SG			05.0										
CNZ	PG	07	14	07.0										
	SG			14.5										
KRP	PG	07	14	12.8										
	I			26.0										
TUA	EPG	07	14	16.5										
	SG			31.0										
TNZ	PG	07	14	20.2										
	I			22.4										

		H	M	S	38.0	0.4	1.71	88	3.8	3.5
GNZ	SG	07	14		38.0	0.4	1.71	88	3.8	3.5
	E				33.8					
	ESG				53	-0.7				
DEC 31		H	M	S	38.71S	175.80E	12 KM	SE	0.7	AVG MAG 3.4
		08	22	41.5	0.02	0.01	R			
							DIR	RES	DIST	AZ
										W-A W P W S
WNZ	EPG	08	22	46.8			-0.2	0.25	72	
	I			48.4						
	I			50.8						
CNZ	PG	08	22	52.2			-0.2	0.53	202	3.5 3.4
	SG			23 00.0			0.3			
KRP	PG	08	22	58.0			0.0	0.81	345	3.9 4.1
	I			23 11.4						
TUA	EPG	08	23	02.4			-0.6	1.06	96	3.8 3.4
	I			05.0						
	I			17.0			-0.4			
TNZ	SG	08	23	05.8			-0.2	1.21	246	4.0 3.8
	PG			07.8						
	I			23.6						
	I									
GNZ	EPG	08	23	18			1.3	1.74	89	3.9
DEC 31		H	M	S	38.71S	175.83E	12 KM	SE	0.9	AVG MAG 3.8
		13	09	14.8	0.02	0.02	R			
							DIR	RES	DIST	AZ
										W-A W P W S
WNZ	(PG)	13	09	20.2			0.4	0.23	70	
	E			24.0						
CNZ	PG	13	09	25.2			-0.6	0.54	204	3.6 3.7
	SG			33.4			0.2			
KRP	PG	13	09	31.1			-0.3	0.82	344	4.1 4.2
	E			34.6						
	I			45.2						
TUA	PG	13	09	35.0			-0.8	1.04	96	3.9 3.7
	E			37.6						
	SG			49.5			-0.4			
TNZ	PG	13	09	39.0			-0.7	1.23	247	3.9 4.1
	I			41.0						
	I			57.0			0.7			
GNZ	EPG	13	09	51			1.5	1.72	88	3.8
	E			10 00						
DEC 31		H	M	S	35.91S	178.81E	203 KM	SE	0.8	AVG MAG 4.1
		17	05	10.6	0.05	0.07	10			
							DIR	RES	DIST	AZ
										W-A W P W S
ECZ	P	17	05	48			0.4	1.80	187	4.0 4.3
	S			06 17			0.8			
GNZ	EP	17	05	58			-0.7	2.80	193	4.2 4.1
	S			06 35			-0.8			
TUA	EP	17	06	03			-0.1	3.18	204	4.1 4.3
	S			44			0.4			
KRP	P	17	06	04.8			0.3	3.30	231	3.8
	ES			17 06 49			-0.9	3.47	218	4.1
WNZ	EP	17	06	08			-0.3	3.61	271	3.6 3.4
ONE	EP	17	06	24			8.6*	4.19	217	
CNZ	EP	17	06	24						
	E			07 16						
TNZ	E	17	06	27				4.80	226	4.1
	ES			17 08 12			0.9	7.03	221	4.8
COB	ES	17	08	12						
DEC 31		H	M	S	38.70S	175.82E	12 KM	SE	0.6	AVG MAG 3.7
		17	56	30.7	0.02	0.01	R			
							DIR	RES	DIST	AZ
										W-A W P W S
WNZ	EPG	17	56	35.8			-0.0	0.23	73	
	E			40.0						

CNZ	PG	17	56	41.8			-0.2	0.55	203	3.5	3.6
	SG			49.2			-0.3				
KRP	PG	17	56	47.0			-0.1	0.80	344	3.9	3.8
	E			57 01.0							
TUA	EPG	17	56	51.4			-0.5	1.04	96	3.7	3.6
	E			53.4							
	SG			57 06.8			0.7				
TNZ	EPG	17	56	55.2			-0.4	1.23	246	4.0	3.9
	E			57.6							
	SG			57 13.0			0.8				
GNZ	E	17	57	08.0				1.72	89	3.8	3.6
	E			40							
DEC 31		H	M	S	38.73S	175.84E	12 KM	SE	0.3	AVG MAG 3.9	
		21	28	40.3	0.01	0.01	R				
							DIR	RES	DIST	AZ	
										W-A W P W S	
WNZ	I(PG)	21	28	45.8			0.4	0.23	65		
	I			50.0							
CNZ	PG	21	28	51.2			0.1	0.52	206	3.7	3.7
	E			29 03.2							
KRP	PG	21	28	57.2			-0.1	0.83	343	4.0	4.0
	E			29 28.8							
TUA	PG	21	29	00.8			-0.4	1.03	95	4.0	4.1
	E			02.0							
	SG			15.2			0.0				
TNZ	PG	21	29	05.2			0.0	1.23	248	4.1	3.8
	E			27.4							
GNZ	EPG	21	29	15.0			0.0	1.71	88	4.1	3.7
	E			18.0							
	I			19.6							
	E			43							

FELT EARTHQUAKES

THE FELT REPORTING SYSTEM

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

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

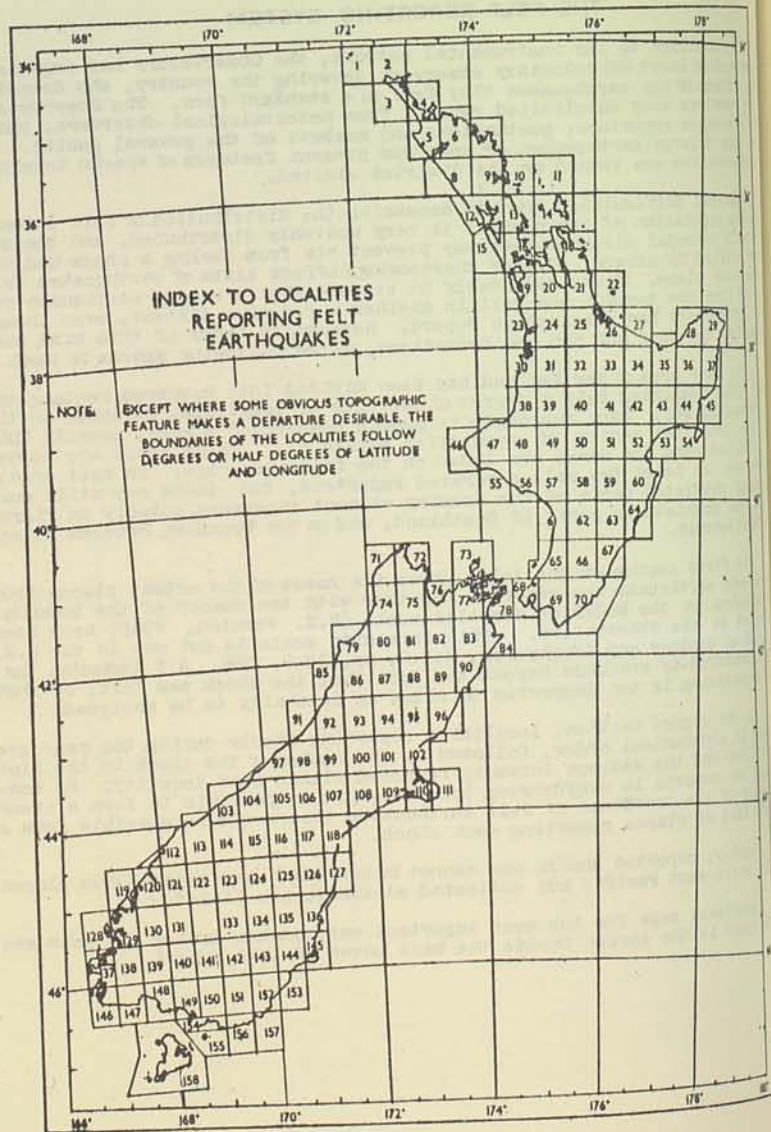
The land area of New Zealand has been divided into numbered rectangles, with sides measuring half a degree of latitude or longitude, as shown on the accompanying map. Each rectangle is given a number and a name, usually that of the principal centre of population within it. These areas are termed 'localities',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

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

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

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

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



LIST OF REPORTING LOCALITIES

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

PLACES REPORTING FELT EARTHQUAKES

64/4a	Jan	5d MM5	04h 33m Westport (79)
64/6	Jan	7d MM4	18h 11m Murchison (80)
64/6a	Jan	9d MM3	17h 59m Maketu (26)
64/6b	Jan	9d MM4	18h 10m Maketu (26)
64/7	Jan	9d MM3	18h 18m Maketu (26)
64/8	Jan	9d MM3 MM2 "slight" ?	21h 47m Wellington (68) Kelburn (68) Wanganui (57) Woodbourne (77)
64/10	Jan	11d MM3	04h 56m Khandallah (68)
64/13	Jan	11d MM4	13h 09m Maketu (26)
64/19	Jan	15d MM4 MM3	14h 47m Te Uri (63); Eketahuna (66); Te Kōpi (70). Palmerston North (62); Pongaroa (67).
64/21	Jan	17d MM4	10h 43m Maketu, Tauranga (26).
64/22	Jan	17d MM4	13h 08m Maketu, Tauranga (26).
64/23	Jan	17d MM2	14h 03m Tauranga (26)
64/26	Jan	19d MM3	23h 17m York Bay (68)
64/34a	Feb	2d MM4	10h 41m Otangaroa, Totara North (6).
64/34b	Feb	2d MM4 MM3	21h 42m Geyser Valley (41) Wairakei (41)
64/34c	Feb	2d MM4	21h 51m Geyser Valley (41)
64/35	Feb	3d MM4	18h 48m Tokaanu, Turangi (40)
64/36	Feb	4d MM3	02h 18m Okoia (57)
64/37	Feb	4d MM4	15h 57m Karioi (50); Okoia (57).
64/38	Feb	6d MM4	14h 32m Raetihi (49); Karioi (50); Mangaweka (58).

64/42	Feb	9d MM4 MM3	15h 42m Patoka (52) Waipawa (60)
64/43	Feb	10d MM4 MM3	10h 46m Wairoa (53) Patoka (52)
64/46	Feb	12d MM4 MM3	18h 41m Okoia (57); Waikanae Beach (65); Kelburn, Paekakariki Hill (68). Day's Bay, Lower Hutt (68).
64/50	Feb	20d MM4	00h 54m Tarakohe (72)
64/51	Feb	21d MM4	17h 26m Ardkeen, Wairoa (53).
64/52	Feb	22d MM4 MM3 MM2 ?	01h 47m Wairoa (53) Waipawa (60) York Bay (68) Napier (52); Eastbourne, Lowry Bay (68).
64/58	Feb	28d MM2	10h 33m Wellington (68)
64/65	Mar	1d MM3	17h 48m Rotorua (33)
64/66	Mar	2d MM4	15h 48m Westport (79); Mangles Valley (80).
64/67	Mar	3d MM3	08h 21m Wairakei (41)
64/68	Mar	3d MM4 MM3	08h 24m Taupo (41) Wairakei (41)
64/70	Mar	4d MM4 ?	23h 42m Wairakei (2 reports) (41) Taupo (41)
64/70a	Mar	4d MM4	23h 43m Wairakei (41)
64/70b	Mar	4d MM4	23h 44m Wairakei (41)
64/70c	Mar	4d MM4	23h 55m Wairakei (2 reports) (41)
64/72	Mar	8d MM6 MM5	01h 35m (See Isoseismal Map.) Milford Sound (120); Lake Marian (121). Whataroa (97); Haast (2 reports), Haast Beach (103); Bruce Bay (104); Godley Peaks Stn., Lake Tekapo (105); Brady Creek, Hunter Valley, Makarora, Minaret Stn., Lake Wanaka (114); Lake Ohau (115); Cascade Creek, Earnslaw, Glenorchy, Lake Marian (121); Arrowtown, Skippers (122); Mt. Aspiring Stn., Glendhu Bay (2 reports), Hawea Flat, Luggate, Tarras, Wanaka (two reports) (123); Te Anau (2 reports) (130); Garston, Kingston, Queenstown (132); Cromwell (133); Monowai

				(2 reports) (139); Dipton (140); Moa Flat (142); Clifden (148); Hedgehope (150). MM4 Barrytown (85); Ross (91); Kowhitirangi (80); Waitaha Valley (98); Mahitahi (104); Albany Cave (117); Milford Sound (120); Otiako-Kaitiaki (124); Livingstone (125); Te Anau (130); Gibbstown, Queenstown (132); Alexandra, Corroy's Gully, Cromwell (133); Becks, Laufer (2 reports), Matakau (134); Naseby, Waipiata (2 reports) (135); Palmerston (136); Eastern Bush, Manapouri, Mossburn (139); Eyre Creek, Lumsden, Mossburn (140); Athol, Otama, Kaweku (141); Edievale, Kaeo, Roxburgh (2 reports), Waikaka (142); Waipori Falls (143); Outram (144); Otatau, Te Tui (148); Gummies Bush (149); Gore (2 reports), Waimumu (150); Benio (151); Awarua (154). MM3 Blackball (85); Hokitika (91); Oamaru (136); Waikaka (141); Berwick, Dunedin (144); Dunedin (145); Puysegur Point (146); Centre Island (148); Otapiri, Invercargill, Riverton (149); Clarendon (153); Waipapa Point (154). MM2 Kumara (92); Mesopotamia (106); Waiho Downs (126). "Not felt" reports were received from observatories in localities 79, 80, 86, 87, 91, 93, 94, 101, 106, 108-111, 117, 118, 123, 125-127, 133, 136, 140, 143-145, 148-154, 156.
64/77	Mar	13d MM4	17h 10m Ohakune, Okoia (57); Mangaweka (58).	
64/79	Mar	18d MM4	04h 18m Wellington (68)	
64/85	Mar	23d MM4	22h 02m Okoia (57)	
64/88	Mar	26d MM4	15h 51m Uruti (38); Waitotara (56); Okoia, Wanganui (57); Wellington (68).	
64/93	Mar	29d MM4	08h 57m Ngakuru (33)	
64/95	Mar	31d "sharp jolt"	05h 55m Cape Campbell (84)	
64/96	Mar	31d MM4	09h 32m Molesworth (89)	
64/97	Mar	31d MM4	22h 47m Tarakohe (72)	
64/97a	Apr	2d ?	02h 29m Wellington (68)	
64/102	Apr	7d MM4	19h 54m Westport (79)	
64/105	Apr	11d MM6 MM5 MM4 MM3	14h 45m Totara North (6) Kaeo, Otangaroa (6). Fairburns (5); Okaihau, Omahuta, Tau's Falls (6); Paihia (7). Awanui (5)	

64/106a	Apr	12d MM4	02h 44m Kaitaia (5); Kaeo, Otangaroa, Totara North (6).
64/107	Apr	12d MM4 MM3 MM2	11h 10m Lake Okataina (33); Whatatutu (36); Ihuraua (66). Waipawa (60); Wellington (3 reports) (68); Te Kopi (70). Gisborne (44); Patoka (52).
64/108a	Apr	14d MM4 ?	17h 59m Otangaroa, Totara North (6). Kaeo (6)
64/108b	Apr	15d MM4	12h 01m Totara North (6)
64/109	Apr	15d MM4 ?	15h 02m Deep Cove (129); Eastern Bush, Manapouri (139); Nightcaps (140). Monowai (139)
64/110	Apr	15d MM5 MM4	16h 50m Opotiki (35) Cape Runaway (29); Whatatutu (36); Tokomaru Bay, Tolaga Bay (37).
64/115	Apr	21d MM4	13h 46m Gisborne (44); Wairoa (53).
64/117	Apr	23d MM4	08h 04m Ihuraua (66)
64/120a	Apr	25d MM5	01h 07m Totara North (6)
64/121	Apr	27d MM3	09h 20m Lower Hutt, Waterloo (68).
64/122	Apr	27d MM3	09h 47m Lower Hutt (68)
64/124	May	2d MM4	02h 27m Manapouri, Monowai (139); Clarendon (153).
64/126	May	2d MM3	10h 06m Maketu (26)
64/127	May	3d MM4	12h 38m Masterton, Te Kopi (70).
64/129	May	5d MM3 MM2	18h 03m Ihuraua (66), Wellington (68). Dannevirke (63)
64/131a	May	7d MM4	10h 07m Wairakei (41)
64/131b	May	7d MM3	16h 22m Turangi (40)
64/132	May	7d MM4	16h 31m Turangi (40)
64/133	May	8d MM4	11h 47m Wellington (68); Collingwood (72); Tadmor

				(75); Blenheim (77); Port Underwood (78); Arnaud (81); Leatham (82). Wellington (68); Allandale (110). Woodbourne (77) Nelson (76)
64/135	May	9d MM4	02h 39m Turangi (40)	
64/137	May	10d MM4	17h 23m Te Kopī (70)	
64/141	May	15d MM4	01h 56m Ohakune (49)	
64/148	May	20d MM4 MM2 "sharp"	12h 33m Mangles Valley (80) Murchison (80) Westport (79)	
64/155a	May	22d MM5 MM4	01h 55m Wairakei (41) Taupo, Wairakei (41).	
64/155b	May	22d MM3	01h 55m Taupo, Wairakei (41).	
64/155c	May	22d MM4 MM3	02h 05m Taupo, Wairakei (41). Taupo	
64/158	May	24d MM4 MM3 MM2	22h 25m Opotiki (35); Tokomaru Bay, Tolaga Bay (71) Wairoa (53); Te Whanga (70). Kohurau (51); Dannevirke (63). Napier (52); Wellington (68).	
64/169	Jun	3d MM4 MM3	10h 10m Okōia (57); Paraparaumu (65); Upper Hutt (68). Ponatahi (70)	
64/178	Jun	7d MM4	20h 41m Burkes Pass (117)	
64/181	Jun	9d MM4 MM3	07h 31m Westport (79) Tadmor (75)	
64/190	Jun	15d MM3-4 MM3	10h 58m Manapouri (139) Kingston (132)	
64/192	Jun	16d MM4	18h 43m Wairoa (53)	
64/194	Jun	17d MM4	07h 07m Taupo (41)	
64/198	Jun	24d "slight"	11h 37m Manapouri (139)	
64/199a	Jun	26d "very severe"	11h 02m Oponae (35)	
64/203	Jun	29d "moderate"	18h 27m Oponae (35)	

64/207	Jul	3d MM4	18h 25m Wairakei (41)
64/213	Jul	10d MM4	12h 34m Westport (79)
64/218	Jul	16d MM4	02h 52m Eketahuna (2 reports) (66)
64/218a	Jul	16d MM4	11h 37m Ngakuru (33)
64/219	Jul	16d MM6	13h 26m Whakamaru (32); Ngakuru (33).
64/219a	Jul	16d MM4	13h 40m Ngakuru (33)
64/219b	Jul	16d MM5	16h 27m Ngakuru (33)
64/219c	Jul	16d MM4	18h 55m Ngakuru (33)
64/220	Jul	17d MM3	15h 06m Waipawa (60)
64/221	Jul	18d MM4	00h 30m Eastbourne (68)
64/222	Jul	18d MM5	04h 43m Ngakuru (33)
64/226	Jul	21d MM4 MM3 "strong"	09h 12m Kelburn, Naenae, Wainuiomata (2 reports), York Bay (68); Wairongomai (69). Lower Hutt (68) Newtown (68)
64/227	Jul	21d MM3	10h 33m Cape Runaway (29)
64/230	Jul	22d MM4 MM3	22h 18m Wairakei (2 reports) (41) Wairakei (41)
64/232	Jul	25d MM4	08h 59m Featherston, Wairongomai (69); Masterton, Ponatahi (70).
64/234	Jul	29d MM4	14h 25m Kelburn (68); Collingwood (72); Port Under- wood (78); Blenheim (83).
64/237	Jul	30d MM4 MM3 "chimney down"	05h 57m Hoeotainui (20); Tairua, Waihi (21); Katikati (25); Tauranga (26). Coromandel (18); Maketu (26). Te Aroha (25) Tokoroa (32)
64/237a	Jul	30d ?	19h 58m Te Aroha, Waihou (25).
64/239	Aug	2d MM3	18h 54m Waipawa (60)

64/240	Aug	5d MM5 MM4	11h 05m Paeroa, Waihi Beach (21). Hikutaia, Komata, Maratoto Valley, Paeroa, Waihi (21); Maungahaunui, Whatatutu (36); Tokomaru Bay, Tolaga Bay (37); Gisborne (45); Patoka (52); Waipawa (60); Eketahuna, Masterton (66). MM3 ? Whitanga (18); Kelburn (68). Nelson (76)
64/241	Aug	6d MM4 MM3	08h 35m Wairakei (3 reports) (41) Otaranga (41)
64/248	Aug	12d MM4 MM3 ?	09h 27m Tarata (47); Purangi (48); Ohakune (49); Okeore, Okoia (57); Eketahuna (66). Stokes Valley (68) New Plymouth (47); Chateau (50); Hawera (51)
64/249	Aug	13d MM4	09h 01m Ocean Bay (78)
64/252	Aug	15d MM4	19h 37m Manapouri (139)
64/253	Aug	15d MM4	22h 03m Tokomaru Bay (37)
64/254	Aug	16d MM3 ?	00h 42m Minaret Stn. (114); Manapouri (139). Monowai (139)
64/256	Aug	16d	10h 59m Opunake (46)
64/258	Aug	16d	19h 12m Opunake (46)
64/260	Aug	17d ?	09h 01m Opunake (46)
64/260a	Aug	17d ?	20h 10m Opunake (46)
64/261	Aug	18d ?	06h 38m Opunake (46)
64/267	Aug	22d MM3	06h 20m Okoia (57)
64/271	Aug	24d MM4	13h 07m Whatatutu (36); Gisborne (2 reports) (45); Wairoa (53).
64/274	Aug	24d MM4 MM3 ?	13h 12m Gisborne (45) Gisborne (45) Whatatutu (36)
64/282	Aug	25d MM4	23h 52m Okoia (57); Hunterville, Table Flat (58); Bunnythorpe (62); Dannevirke (63); Eketahuna (66); Ponatahi, Te Kopi (70).
64/286	Aug	29d MM4	07h 28m Dannevirke, Te Uri (63).

64/287	Aug	29d MM4	10h 52m Gisborne (45)
64/296a	Sep	2d MM3	10h 55m 13s Otaranga, Wairakei (41)
64/296b	Sep	2d MM3	10h 55m 27s Wairakei (41)
64/296c	Sep	2d MM4 MM5	10h 56m 05s Wairakei (41) Otaranga (41)
64/296d	Sep	2d MM3	10h 56m 53s Otaranga, Wairakei (41)
64/297	Sep	2d MM4 MM3	10h 57m Wairakei (41) Otaranga (41)
64/299	Sep	4d MM3	07h 37m Barnslaw Stn. (121)
64/302	Sep	6d MM4 MM2	23h 42m Manaroa (78) Wellington (2 reports) (68)
64/303	Sep	8d MM4	23h 32m Ohakune (57)
64/307	Sep	12d MM3 MM2	22h 07m Awarua (154); Quarry Hills (156) Invercargill (149); Halfmoon Bay (158); Campbell Is. (-).
64/309	Sep	16d MM4	10h 20m Manaroa, Ocean Bay (78).
64/311	Sep	17d MM4	06h 29m Okoia (57)
64/312a	Sep	18d MM4	20h 39m Otangaroa (6)
64/315	Sep	21d ?	14h 12m Kakahi (39)
64/316	Sep	22d MM4 ?	00h 13m Lower Hutt, Paekakariki Hill (68). Karehana Bay, Plimmerton, Stokes Valley (68).
64/316a	Sep	22d MM3	04h 42m Reporoa (33).
64/317a	Sep	23d ?	18h 15m Taupo (41)
64/317b	Sep	23d ?	18h 22m Taupo (41)
64/318	Sep	23d MM4 MM3	18h 23m Wairakei (4 reports) (41) Taupo (2 reports) (41)
64/319	Sep	24d MM3	15h 14m Taupo (41)

64/320	Sep	25d MM5 MM4	11h 03m Westport (2 reports) (79) Mangles Valley (80); Maimai (86); Kaitiaki
64/324	Oct	4d MM3	16h 43m Cape Runaway (28)
64/326	Oct	6d MM3	01h 34m Halfmoon Bay (158)
64/327	Oct	6d MM4	21h 39m Tarakohe (72)
64/339	Oct	14d MM4 MM1	16h 59m Westport (79) Westport (79)
64/341	Oct	15d MM3	05h 43m Taupo, Wairakei (41)
64/347	Oct	20d MM3	07h 43m Manapouri (139)
64/350	Oct	21d MM4	05h 02m Taupo (41)
64/352	Oct	22d MM4	08h 04m Taupo (3 reports) (41)
64/353	Oct	23d MM4	17h 25m Collingwood (72)
64/354	Oct	24d MM4	10h 58m Acacia Bay, Taupo (41).
64/360	Oct	27d MM4	10h 59m Taupo (41)
64/361	Oct	30d MM4	04h 54m Blackball (85)
64/372	Nov	5d MM4	12h 16m Opotiki (35); Gisborne (45).
64/376	Nov	8d MM4 MM3-4 MM2	02h 44m Gummies Bush, Riverton (149); Awarua, Hillside Hills, Waimahaka (154); Halfmoon Bay (158); Invercargill (149) Manapouri (139); Centre Is. (148).
64/378	Nov	11d MM4	20h 21m Kohurau (51)
64/379	Nov	12d MM4	00h 28m Maketu (26)
64/381	Nov	13d MM4	10h 34m Turangi (40)
64/387	Nov	20d MM4 MM3	07h 02m Kohurau (51); Napier, Patoka (2 reports) (52); Apiti (58); Waipawa (60). Tutira (52)
64/390	Nov	20d MM3	21h 20m Kohurau (51)

64/395	Nov	23d MM3	06h 33m Dannevirke (63)
64/398	Nov	28d MM4	20h 19m Wairakei (2 reports) (41)
64/399a	Dec	3d MM4	23h 20m Wairakei (2 reports) (41)
64/399b	Dec	3d MM3	23h 28m Wairakei (41)
64/400a	Dec	4d MM3	11h 50m Wairakei (41)
64/400b	Dec	4d MM3	11h 55m Wairakei (41)
64/403	Dec	6d MM3	03h 36m Lake Okataina (33)
64/404	Dec	6d MM4	07h 25m Waitotara, Wanganui (56); Okoia (57).
64/406	Dec	6d MM4	15h 06m Waitotara, Wanganui (56); Ohakune, Okoia (57).
64/407	Dec	6d MM3	15d 15m Wanganui (56)
64/408	Dec	7d MM4	08h 24m Taupo (41)
64/409	Dec	7d MM4	14h 23m Taupo, Wairakei (41)
64/410	Dec	7d MM4	19h 02m Taupo (2 reports), Wairakei (3 reports) (41).
64/413	Dec	8d MM4	17h 22m Wairakei (41)
64/423	Dec	10d MM4	15h 25m Ngakuru (33)
64/426	Dec	11d MM4	18h 46m Whakamaru (32)
64/427	Dec	11d MM4	19h 09m Whakamaru (32)
64/428	Dec	11d MM2	21h 04m Whakamaru (32)
64/433	Dec	12d MM4	14h 04m Tokaanu (40)
64/445	Dec	13d MM4	13h 47m South Acacia Bay (41)
64/447	Dec	13d MM4	18h 31m Taupo (41)
64/449	Dec	13d MM4	21h 23m Wairakei (41)

64/450	Dec	13d MM5	22h 36m Wairakei (2 reports) (41)
64/454	Dec	14d MM4	08h 05m Taupo (41)
64/455	Dec	14d MM4	08h 28m Taupo (41)
64/456	Dec	14d MM4	14h 26m Taupo (41)
64/458	Dec	14d MM4	17h 13m Taupo (41)
64/459	Dec	14d MM4	18h 05m Taupo (41)
64/460	Dec	14d MM4	20h 43m Wairakei (41)
64/461	Dec	14d MM4	23h 19m Wairakei (41)
64/462	Dec	14d MM4-5	23h 22m Wairakei (41)
64/463	Dec	15d MM4	00h 12m Wairakei (41)
64/472	Dec	15d MM4	14h 00m Taupo (41)
64/479	Dec	15d MM4 ?	20h 00m Taupo (2 reports), Wairakei (2 reports) (4) Owhango (39)
64/483	Dec	16d MM4	15h 20m Taupo (41)
64/488	Dec	17d MM4-5	04h 20m Wairakei (41)
64/494	Dec	18d MM4	23h 19m Wairakei (41)
64/496	Dec	19d MM3	06h 18m Whenuapai (16) Note: Identification of felt report with earthquake is doubtful in the absence of reports.
64/499	Dec	20d MM4	17h 49m Wairakei (41)
64/500	Dec	20d MM4	21h 10m Taupo, Wairakei (41).
64/501	Dec	20d MM4	21h 18m Taupo, Wairakei (2 reports) (41).
64/502	Dec	20d MM3	22h 09m Wairakei (41)
64/504	Dec	20d MM4	23h 49m Taupo (41)

64/504a	Dec	20d MM4	23h 52m Wairakei (41)
64/505	Dec	21d MM4	00h 38m Taupo, Wairakei (2 reports) (41).
64/506	Dec	21d MM5 MM4	01h 50m Wairakei (41) Wairakei (41)
64/508	Dec	21d MM4	09h 07m Taupo (41)
64/509	Dec	21d MM4	09h 18m Taupo (41)
64/510	Dec	21d MM4	12h 11m Taupo (41)
64/511	Dec	21d MM4	14h 55m Taupo (41)
64/512	Dec	21d MM4	17h 00m Ongarue (39)
64/519	Dec	22d MM4	20h 15m Taupo (41)
64/520	Dec	22d MM2 "sharp"	20h 20m Putaruru (32) Owhango (39)
64/521	Dec	22d MM4	21h 45m Wairakei (41)
64/530	Dec	25d "sharp"	20h 09m Owhango (39)
64/531	Dec	25d "sharp"	20h 10m Owhango (39)
64/534	Dec	27d MM4	11h 49m Okola, Wanganui (57).
64/541	Dec	28d MM4 "sharp" "slight"	10h 03m Tokaanu, Turangi (40). Owhango (39) Hinemaimai Dam (41)
64/548	Dec	30d MM4	04h 44m Kohurau (51); Patoka, Napier (2 reports) (52).
64/549	Dec	30d "sharp"	10h 30m Owhango (39)
64/550	Dec	30d MM4	13h 09m Gisborne (45)

EARTHQUAKES FELT IN STANDARD LOCALITIES

Localities within which earthquakes were felt in 1964 are listed in alphabetical order, preceded by its number on the reference map. The figure following the name of the locality is the number of the epicentre, followed by the maximum intensity (in brackets) reported within the district covered by the locality name. The instrumental magnitude may be found from the epicentre list, and the places that actually reported the shock from the table of "Places Reporting Felt Earthquakes".

133	Alexandra	72 (5)
122	Arrowtown	72 (5)
16	Auckland	496 (3, Doubtful report)
83	Awatere	234 (4)
77	Blenheim	8 (?), 133 (4),
154	Bluff	72 (4), 307 (3), 376 (4)
104	Bruce Bay	72 (5)
84	Cape Campbell	95 (?)
46	Cape Egmont	256 (?), 258 (?), 260 (?), 260a(?), 261 (?)
67	Castlepoint	19 (3)
151	Clinton	72 (4)
110	Christchurch	133 (3)
63	Dannevirke	19 (4), 282 (4)
129	Doubtful Sound	109 (4)
145	Dunedin	72 (3)
117	Fairlie	72 (4), 178 (4)
69	Featherston	226 (4), 232 (4)
45	Gisborne	274 (4), 287 (4), 372 (4), 550 (4)
81	Glenhope	133 (4)
121	Glenorchy	72 (6), 299 (3)
150	Gore	72 (5)
85	Greymouth	85 (4)
103	Haast	72 (5)
98	Hari Hari	72 (4)
60	Hastings	42 (3), 52 (3), 220 (3), 239 (3), 240 (4), 387 (4)
55	Hawera	248 (?)

91	Hokitika	72 (4)
149	Invercargill	72 (4), 307 (2), 376 (4)
6	Kaikohē	34a(4), 105 (6), 106a(4), 108a(4), 108b(4), 120a(5)
5	Kaitiā	105 (4), 106a(4)
51	Kaweka	158 (3), 378 (4), 387 (4), 390 (3), 548 (4)
132	Kingston	72 (5)
125	Kurow	72 (4)
115	Lake Ohau	72 (5)
143	Lawrence	72 (4)
114	Makaroha	72 (5)
70	Martinborough	19 (4), 107 (4), 127 (4), 137 (4), 158 (4), 169 (3), 232 (4), 282 (4)
66	Masterton	19 (4), 107 (4), 117 (4), 240 (4), 248 (4), 282 (4)
25	Matamata	237 (4), 237a(?)
20	Mercer	237 (4)
120	Milford Sound	72 (6)
38	Mokau	88 (4)
139	Monowai	72 (5), 109 (4), 190 (3-4), 198 (?), 252 (4), 154 (3), 347 (3), 376 (2)
140	Mossburn	72 (5), 109 (4)
36	Motu	107 (4), 110 (4), 240 (4), 271 (4)
75	Motueka	133 (4)
105	Mount Cook	72 (5)
80	Murchison	6 (4), 148 (4), 320 (4)
52	Napier	42 (4), 43(3), 52 (?), 107 (2), 158 (2), 387 (4), 548 (4)
76	Nelson	133 (?), 240 (?)
136	Oamaru	72 (4), 141 (4)
49	Ohakune	38 (4)
35	Opotiki	372 (4)
144	Outram	72 (4)
62	Palmerston North	282 (4)
78	Picton	133 (4), 234 (4)
134	Poolburn	72 (4)

146	Puyssegur Point	72 (3)			
135	Ranfurlly	72 (4)			
86	Reefton	320 (4)			
33	Rotorua	65 (3),	222 (5)		
142	Roxburgh	72 (5)			
124	St. Bathans	72 (4)			
159	Stewart Is.	307 (2),	326 (3),	376 (4)	
58	Taihape	38 (4),	282 (4)		
72	Takaka	50 (4),	77 (4),	97 (4),	133 (4),
		234 (4),	353 (4)		
156	Takakopa	307 (4)			
39	Taumarunui	315 (?),	479 (?),	512 (4),	520 (?),
		530 (?),	531 (?),	541 (?),	549 (?),
41	Taupo	34b(4),	34c(4),	67 (3),	68 (4),
		70 (4),	70a(4),	70b(4),	70c(4),
		131a(4),	155a(5),	155b(5),	155c(4),
		194 (4),	207 (4),	230 (4),	237 (4),
		241 (4),	296a(3),	296b(3),	296c(4),
		296d(3),	297 (4),	341 (3),	350 (4),
		352 (4),	354 (4),	360 (4),	398 (4),
		399a(4),	399b(3),	400a(3),	400b(3),
		408 (4),	409 (4),	410 (4),	413 (4),
		445 (4),	447 (4),	449 (4),	450 (5),
		454 (4),	455 (4),	456 (4),	458 (4),
		459 (4),	460 (4),	461 (4),	462 (4-5),
		463 (4),	472 (4),	479 (4),	483 (4),
		488 (4-5),	494 (4),	499 (4),	500 (4),
		501 (4),	502 (3),	504 (4),	504a(4),
		505 (4),	506 (5),	508 (4),	509 (4),
		510 (4),	511 (4),	519 (4),	521 (4),
		541 (?)			
26	Tauranga	6a(3),	6b(4),	7 (3),	13 (4),
		21 (4),	22 (4),	23 (2),	126 (3),
		379 (4)			
130	Te Anau	72 (5)			
106	Tekapo	72 (2)			
21	Thames	237 (4),	240 (5)		
40	Tokaanu	35 (4),	131b(3),	132 (4),	135 (4),
		381 (4),	433 (2),	541 (4)	
11	Tokoroa	219 (6),	237 (?),	426 (4),	427 (4),
		428 (2),	520 (2)		
37	Tolaga Bay	158 (4),	240 (4),	253 (4)	
43	Tuai	51 (4)			
148	Tuatapere	72 (5),	376 (2)		
153	Waiholā	72 (3),	124 (4)		

141	Waikāia	72 (4)			
82	Wairau	133 (4)			
53	Wairoa	43 (4),	51 (4),	52 (4),	115 (4),
		158 (4),	192 (4),	271 (4)	
123	Wanaka	72 (5)			
57	Wanganui	8 (?),	36 (3),	37 (4),	46 (4),
		77 (4),	85 (4),	88 (4),	248 (4),
		267 (3),	282 (4),	303 (4),	311 (4),
		404 (4),	406 (4),	534 (4)	
56	Waverley	88 (4),	404 (4),	406 (4),	407 (3)
68	Wellington	8 (3),	10 (3),	26 (3),	46 (4),
		52 (2),	58 (2),	79 (4),	88 (4),
		97a(?),	107 (3),	121 (3),	129 (3),
		133 (3),	158 (4),	169 (4),	221 (4),
		226 (4),	234 (4),	240 (3),	248 (3),
		302 (2),	316 (4)		
79	Westport	4a(5),	66 (4),	102 (4),	213 (4),
		320 (5),	339 (4)		
44	Whakapūnaki	115 (4)			
48	Whangamōmona	248 (4)			

UNCONFIRMED REPORTS

The following shocks reported to have been felt cannot be confirmed either by an instrumental record or by an independent report.

Jan	4d	09h15m	Shelly Beach (15)	"three distinct shocks"
	9	16 20	Totara North (6)	MM4
	9	18 44	Maketu (26)	MM3
	16	02 48	Dannevirke (63)	MM4
Feb	22	03 00	Ardkeen (43)	MM4
Mar	18	09 15	Mangles Valley (80)	MM3
	22	18 30	Totara North (6)	MM3
	22	20 30	Totara North (6)	MM4
	22	23 ?	Ngakuru (33)	MM4
	24	09 24	Patoka (52)	MM3
	28	04 00	Ngakuru (33)	MM4
	28	11 55	Dawson's Falls (47)	MM3
Apr	12	18 33	Walton (25)	MM4
	15	11 40	Totara North (6)	MM5
	15	14 30±	Opotiki (35)	MM4
	26	05 08	Totara North (6)	MM4
	28	09 25	Ngakuru (33)	MM4
May	3	13 50	Westport (79)	"slight"
Jun	22	12 35	Manapouri (139)	"slight"
	26	07 30	Westport (79)	MM4
	26	15 15	Westport (79)	MM4
Jul	16	11 20	Ngakuru (33)	"imperceptible" (sic)
	16	11 33	Ngakuru (33)	MM4
	16	21 02	Ngakuru (33)	MM5
	16	21		
	17	00 to	Ngakuru (33)	"Groups of gentle move-

			ments. Only those at rest disturbed. Intermittent vibration of liquid in vessels."
Jul	17d	18h05m	Ngakuru (33)
	18	07 24	Ngakuru (33)
	18	08 45	Ngakuru (33)
	18	11	Ngakuru (33)
	18	11+	Ngakuru (33)
	22	09 45	Ngakuru (33)
	25	10 40	Ngakuru (33)
	25	14 45	Ngakuru (33)
Aug	10	06 27	Patoka (52)
	17	12	Opunake (46)
	17	20 10	Opunake (46)
Oct	31	00 to 08	Guthrie-Ngakuru (33)
Nov	1	05 40	Guthrie-Ngakuru (33)
			"Also three or four light tremors during the afternoon."
Nov	2	18±	Guthrie-Ngakuru (33)
	3	08 00	Guthrie-Ngakuru (33)
	4	02 45	Guthrie-Ngakuru (33)
	5	01 05	Maketu (26)
	5	04 20	Maketu (26)
	14	09 20	Wairere (66)
	21	03 00	Guthrie-Ngakuru (33)
	21	04 55	Kotemaori (53)
	22	10 35	Ngakuru (33)
Dec	1	11 20	Lower Hutt (68)
	5	to 12	Guthrie-Ngakuru (33)
	8	to 23	Guthrie-Ngakuru (33)
	6	04	Lake Okataina (33)
	6	06 40	Uruti (38)
	7	10 50	Taupo (41)
	9	03 22	Ngakuru (33)
	9	10 07	Ngakuru (33)
	10 to 14		Huinga Farm, Owhango (39)
	10	12 05	Ngakuru (33)
	13	13 30	South Acacia Bay (41)
	13	14 28	Taupo (41)
	13	17	Taupo (41)
	14	06 22	Taupo (41)
	14	08 12	Taupo (41)
	14	13 28	South Acacia Bay (41)
	15	01 48	Wairakei (41)
	15	04 35	Wairakei (41)
	15	08 30	Taupo (41)
	16	07 30 to 10 00	Guthrie-Ngakuru (33)
	16	13 10	Taupo (41)
	19	22 52	Huinga Farm, Owhango (39)
	20	17 30	Taupo (41)
	20	17 58	Taupo (41)
			(Possibly refers to 64/499.)
	20	23 54	Wairakei (41)
	21	01 06	Wairakei (41)
	21	14 10	Ongarue (39)
	22	23 50	Wairakei (41)
	22	23 53	Wairakei (41)
	25	13 27	Patoka (51)

FELT EARTHQUAKES REPORTED FROM OUTSIDE NEW ZEALAND

The Observatory sometimes receives reports of felt earthquakes from islands in the south west Pacific and other places beyond the limits of its systematic reporting network. The following reports were received during 1964.

Feb	22d	20h45m	Raoul Is.	MM4
Apr	15	05 00	Pitcairn Is.	MM4
Jun	4	09 14	Nandi Area and Yasawa Group, Fiji	?
	9	10 53	Niuafo'ou	MM4
Jul	9	11 23	Tonga	"light tremor"
Nov	11	06 44	Raoul Is.	?
	13	22 00	Raoul Is.	MM7
Dec	13	09 12	Raoul Is.	MM2
	17	09 13	Raoul Is.	MM3
	17	10 30	Nukualofa, Tonga	MM1
	22	06 07	Keppel Is.	"slight"
	24	11 44	Raoul Is.	MM3
	31	06 07	Raoul Is.	MM3

STATION READINGS OF DISTANT EARTHQUAKES

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

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

Periods are given in seconds, and amplitudes in microns. These are written out by the computer, using a stored polynomial approximation to the response curve of the seismometer concerned. The magnitudes are the 'unified magnitude' $m = \log_{10} A/T + Q$, defined by Gutenberg and Richter (Annali di Geofisica 9: 1-15, 1956). No station correction is applied. Only the vertical component recordings of P or PP, and the horizontal components of P, PP or S are used. The value printed on the right is the mean of separate determinations for all the components whose amplitude and period data are given on the line.

The Scott Base section of the report is also prepared by computer, in addition to the data given for New Zealand stations lists values of A/T for the short period vertical component, and the corresponding magnitudes. This format will be used for all stations in 1965.

Data for the remaining stations are given in the same form as in previous years.

DISTANT EARTHQUAKES - N.Z. STATIONS

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		H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
						WEL		MAG	
JAN 01	12 21	55.4	6.8S 129.8E	96KM	5.7				
			H M S	DIR	AZ TZ	AN	TN	AE	TE
	KRP	EP	Z						
		E	Z						
	CNZ	EP	Z						
		E	Z						
	WEL	ELR	Z						
	ROX	ELQ	E						
JAN 01	14 18	53.9	4.3S 105.9W	33KM	4.6				
			H M S	DIR	AZ TZ	AN	TN	AE	TE
	WEL	ELR	Z						
	ROX	ELQ	E						
JAN 01	15 49	47.9	55.9S 27.1W	33KM	5.4				
			H M S	DIR	AZ TZ	AN	TN	AE	TE
	KRP	EP	Z						
	CNZ	EP	Z						
JAN 01	17 26	43.5	45.4N 151.9E	45KM	5.6				
			H M S	DIR	AZ TZ	AN	TN	AE	TE
	WEL	EP	Z						
		SKS	Z						
		PS	Z						
		ESS	Z						
		LR	Z						
	ROX	SKS	NE						
		S	NE						
		LQ	NE						
JAN 01	20 02	32.5	3.2S 139.7E	33KM	6.3				
			H M S	DIR	AZ TZ	AN	TN	AE	TE
	KRP	EP	Z						
	WEL	LR	Z						
JAN 02									
	WEL	ELR	Z						
JAN 02	19 15	23.9	8.4S 157.1E	33KM	5.5				
			H M S	DIR	AZ TZ	AN	TN	AE	TE
	CNZ	EP	Z						
	WEL	S	Z						
		ELR	Z						
	ROX	ES	NE						
		ELQ	NE						
JAN 03	00 59	33.8	8.5S 157.4E	61KM	4.8				
			H M S	DIR	AZ TZ	AN	TN	AE	TE
	WEL	ELR	Z						
JAN 03	21 24	56.3	20.4S 178.2W	520KM	5.3				
			H M S	DIR	AZ TZ	AN	TN	AE	TE
	KRP	P	Z						
	CNZ	P	Z						
	WEL	P	ZNE						
		S	ZNE						

		LR		Z		25 48		6 20			
	GNZ	EP	Z	04	20	44					
		ES	Z		22	30					
	CNZ	EP	Z	04	20	46					
		ES	Z		23	06					
	ROX	ELR	ZNE	04	27	42					
JAN 14		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		10 20 10.3	28.1S 178.1W		195KM	4.5			WEL 20		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	GNZ	S	Z	10	24	23					
	CNZ	EP	Z	10	22	03					
		ES	Z		24	58					
	WEL	S	ZNE	10	25	41					
JAN 14		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		15 38 13.8	5.2S 150.8E		169KM	5.6			WEL 32		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP	EP	Z	15	45	32					
	CNZ	P	Z	15	45	38.9					
		PCS	Z		51	14					
	GNZ	P	Z	15	45	44.5					
		E(S)	Z		52	48					
	WEL	IP	ZNE	15	45	48					
		PP	Z		47	31					
		S	ZNE		51	51					
		E	ZNE		56	00					
		LR	ZNE		58	00					
	MNH	P	Z	15	45	58					
	ROX	P	Z	15	46	00					
JAN 15		GNZ	P	Z	18	44	40				
JAN 15		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		18 46 32.9	28.4S 178.4W		211KM	4.7			WEL 31		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP	EP	Z	18	48	12					
		E	Z		15						
		E	Z		50						
	ONE	P	E	18	48	48					
	GNZ	P	Z	18	48	49.5					
		E	Z		55						
		S	Z		50	45					
	WEL	EP	ZNE	18	49	34					
		S	ZNE		51	58					
JAN 15		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		21 36 05.0	29.1N 140.8E		70KM	6.4			WEL 81		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP	EP	Z	21	47	37					
	GNZ	P	Z	21	47	45					
	WEL	P	ZNE	21	47	50					
		ES	Z		57	30					
		SS	Z	22	02	30					
		LR	Z		11	18					
	ROX	P	Z	21	47	57					
		S	E		57	48					
		ELQ	NE	22	09	00					
	MNH	P	Z	21	47	59					
JAN 15		GNZ	EP	Z	23	29	44				
		I	Z		48	5					
		ES	Z		30	53					
	TUA	EP	Z	23	29	52					
		ES	Z		31	00					
	WEL	S	NE	23	32	09					

		H M S		EPICENTRE		DEPTH	MAG			DIST (DEG)	
JAN 17		02 54 26.8	21.6S 169.9E		33KM					WEL 20	
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	GNZ	P	Z	02	58	40.5					
	WEL	IP	Z	02	58	58					5.6
		S	ZNE	03	02	46					5.6
		LR	Z		04	38					
	ROX	EP	Z	02	59	47					
		S	NE	03	02	55					5.9
		LQ	NE		05	18					
		ELR	ZNE		07	30					
JAN 17		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		09 32 51.6	11.4S 162.4E		33KM	4.7			WEL 32		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL	LR	Z	09	52	00					
JAN 17		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		17 13 30.3	10.8S 167.7E		114KM				WEL 31		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL	ELR	Z	17	30	30					
JAN 18		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		07 10 21.9	32.5S 103.7W		33KM	4.5			WEL 64		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL	ES	ZE	07	29	18					
		LR	ZNE		38	12					
JAN 18		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		12 04 40.0	23.1N 120.5E		33KM	5.9			WEL 81		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL	IP	Z	12	16	52					
		S	ZNE		27	12					
		PS	ZE		28	32					
		SS	Z		32	00					
		LQ	NE		40	00					
		LR	ZE		44	00					
	ROX	P	Z	12	16	54					
		S	NE		27	03					
		PS	NE			32					
		ESS	NE			32					
	MNH	P	Z	12	16	55					
	GNZ	EP	Z	12	16	57					
JAN 18		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		18 44 05.0	25.1S 176.9W		33KM	4.6			WEL 18		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	GNZ	EP	Z	18	47	28					
		E	Z		49	44					
		E(S)	Z		50	02					
	WEL	ELR	Z	18	53	00					
JAN 19		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		06 49 55.9	58.6S 25.1W		33KM				WEL 79		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL	P	Z	07	02	08					5.4
		ELR	Z		27	00					
JAN 19		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)		
		07 00 03.3	9.2S 158.2E		32KM	5.7			WEL 35		
			H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL	ELR	Z	07	17	00					

	H	M	S	EPICENTRE	DEPTH	MAG								
JAN 24	22	44	00.6	7.1S 106.0E	94KM	5.5								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	CNZ	P	Z	22 55 02.5										
		*PP	Z	21										
	WEL	ELR	Z	23 19 00										
JAN 25	07	04	32.8	22.6S 179.7W	600KM	5.1								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	CNZ	EP	Z	07 07 59										
JAN 25	12	09	08.8	28.3S 176.5W	17KM	4.5								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	GNZ	EP	Z	12 11 52										
		ES	Z	13 50										
	ONE	EP	E	12 11 56										
	WEL	E	Z	12 17 16										
		ELR	Z	18 36										
JAN 25	21	46	55.6	22.6S 179.9W	350KM	4.4								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	KRP	P	Z	21 50 21										
JAN 25	22	09	00.8	5.3S 153.2E	42KM	4.8								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	GNZ	EP	Z	22 16 40										
JAN 25	23	07	29.3	20.8S 178.8W	580KM	4.5								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	KRP	P	Z	23 11 04.1										
	GNZ	P	Z	23 11 06										
JAN 26	09	09	33.9	16.3S 71.7W	116KM	6.1								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	WEL	P	Z	09 22 46										
		PP	Z	25 36										
		SKS	Z	35 16										
		LR	Z	53 00										
	GNZ	P	Z	09 22 47.2										
		E	Z	58										
JAN 27	01	12	23.5	0.0N 17.9W	33KM	5.3								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	WEL	ELR	Z	02 28 00										
JAN 27	02	46	33.4	60.9S 155.2E	33KM									
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	MNH	P	Z	02 50 30.5										
	ROX	ELQ	NE	02 55 00										
	WEL	ELR	ZNE	02 57 30										
JAN 27	WEL	P	ZN	05 43 40.2										
		E	Z	44										
JAN 27	15	36	56.2	10.6S 166.1E	165KM	4.3								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	CNZ	EP	Z	15 42 40										
	GNZ	P	Z	15 42 47										

	H	M	S	EPICENTRE	DEPTH	MAG								
JAN 28	05	43	22.1	6.3S 148.7E	33KM	5.1								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	CNZ	P	Z	05 51 01										
	GNZ	P	Z	05 51 09										
	WEL	EP	Z	05 51 16							1	20		5.0
		EPP	Z	53 12										5.2
		ELR	Z	06 00 36								3	25	
JAN 28	14	09	17.1	36.5N 70.9E	207KM	6.1								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	MNH	P	Z	14 27 41										
		*PP	Z	28 33										
	ROX	EPKP	Z	14 27 44										
		ESS	E	46 00								12	40	
	CNZ	PKP	Z	14 27 45.5										
		E	Z	28 12										
		E	Z	30 00										
			Z	37 46										
	KRP	EPKP	Z	14 27 46										
	WEL	PKP	ZNE	14 27 46.5 U										
		*PPKP	ZNE	28 40										
		IPKS	ZNE	30 12										
		SKS	ZNE	40 12										
		ESS	ZE	46 00										
		LR	ZE	15 08 00										
	GNZ	PKP	Z	14 27 50										
JAN 30	GNZ	EP	Z	03 15 27										
		I	Z	31										
		ES	Z	16 36										
		E	Z	44										
	TUA	EP	Z	03 15 33										
		ES	Z	16 51										
	WEL	S	NE	03 17 50										
	COB	S	E	03 18 03										
	GPZ	EP	N	03 16 37										
		S	N	18 48										
JAN 30	12	39	23.8	1.7N 99.6E	133KM	5.4								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	CNZ	P	Z	12 51 20										
		E	Z	31										
JAN 31	WEL	ELR	Z	04 50 36										
JAN 31	WEL	ELR	Z	22 00 00										
FEB 01	01	47	52.1	51.8N 170.8W	34KM	5.2								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	WEL	LR	Z	02 31 00										
FEB 01	13	17	03.7	11.3S 162.1E	50KM	4.6								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	WEL	LR	Z	13 37 00										
FEB 02	02	48	17.0	19.9S 177.4W	334KM	4.1								
				H M S	DIR	AZ TZ	AN	TN	AE	TE				
	CNZ	EP	Z	02 57 37										

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
				H M S	DIR	AZ TZ	AN	TN	AE TE MAG
FEB 02	05	41	13.0	21.9S 169.5E	33KM				WEL 91
				H M S					MAG
	WEL	LR		ZNE 05 50 00					
	ROX	LQ		E 05 52 00					
FEB 02	06	58	16.5	39.1N 114.2W	33KM				
				H M S					
	WEL	LR		Z 07 20 00					
FEB 02	08	54	48.3	24.2N 122.6E	28KM	5.0			
				H M S					
	CNZ	EP?		Z 09 06 57					
		E		Z 09 07 00					
	GNZ	EP?		Z 09 07 00					
		E		Z 09 07 04					
		E		Z 09 07 11					
	WEL	E(S)		Z 09 17 06					
		ESP		Z 09 18 00					
		EL		Z 09 33 00		1 23			
	ROX	EP		Z 09 07 11					
		E(S)		Z 09 17 16					
		E(SS)		Z 09 22 00					
		EL		Z 09 34 30					
FEB 02	WEL	EL		Z 11 19 00					
FEB 03	ROX	E(S)		Z 08 19 16					
		E(L)		Z 08 17 24					
	MNW	P		Z 08 17 43					
		E(S)		Z 08 18 35					
		E		Z 08 18 40					
FEB 03	08	43	36.3	31.5N 114.2W	14KM	4.6			
				H M S					
	WEL	E(L)		Z 09 34 00					
FEB 03	WEL	E(L)		Z 15 48 00					
FEB 03	WEL	E(L)		Z 19 38 00					
		EL		Z 19 41 00					
FEB 03	20	05	47.6	23.2S 179.8W	509KM	4.4			
				H M S					
	KRP	E(P)		Z 20 09 01					
	GNZ	EP		Z 20 09 03					
		ES		Z 20 11 42					
	CNZ	EP		Z 20 09 10					
		E(S)		Z 20 12 01					
	TNZ	EP?		Z 20 09 12					
		E		Z 20 09 15					
	WEL	P		Z 20 09 31					
		E		ZE 20 12 33					
		E(S)		N 20 12 35					
	MNW	EP		Z 20 10 28					
FEB 03	23	12	26.7	31.0N 114.3W	14KM	4.8			
				H M S					
	WEL	EL		Z 23 47 00					

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
				H M S	DIR	AZ TZ	AN	TN	AE TE MAG
FEB 04	10	02	21.4	48.2N 154.4E	40KM	4.8			WEL 91
				H M S					MAG
	WEL	EL		Z 10 45 00					
FEB 04	WEL	EL?		Z 15 33 00					
FEB 05	WEL	EL		Z 01 36 00					
FEB 05	11	18	16.3	30.4S 177.9W	114KM	4.9			WEL 12
				H M S					MAG
	GNZ	EP		Z 11 20 23					
		E		Z 11 21 48					
		E		Z 11 22 00					
		E		Z 11 22 05					
	TUA	S		Z 11 22 18					
	CNZ	E?		Z 11 20 46					
		E		Z 11 20 48					
		E(S)		Z 11 22 47					
	TNZ	E(P)		Z 11 20 57					
		ES		Z 11 23 07					
	WEL	E		Z 11 21 19					
		E		ZNE 23 22					
		E(S)		ZNE 24					
FEB 05	11	30	15.7	36.5N 141.0E	46KM	5.4			WEL 83
				H M S					MAG
	WEL	E(P)		Z 11 42 48					
		E		Z 11 45 06					
		E(PP)		Z 11 52					
		E(SS)		Z 11 58 00					
		ESSS		Z 12 02 00					
		E		Z 12 05 00					
	ROX	E(SKS)		ZE 11 09 00		5 20			
		ELQ		N 11 53 16					
		E		E 12 06 00					
		EL		NE 12 00			3 22	4 22	
		E		ZNE 46 57			3 18	6 18	
FEB 05	11	35	18.6	19.7S 179.8W	414KM	5.5			WEL 22
				H M S					MAG
	GNZ	EP		Z 11 39 12					
		E		Z 11 42 15					
		E(S)		Z 11 42 23					
		E		Z 11 42 24					
	KRP	EP		Z 11 39 13					
	TUA	EP		Z 11 39 16					
		ES		Z 11 42 31					
	CNZ	EP		Z 11 39 22					
		ES		Z 11 42 40					
		E		Z 11 45 48					
	TNZ	EP		Z 11 39 26					
	WEL	P		Z 11 39 40					
		E		Z 11 41 50					
		E(S)		E 43 15					
		E		N 43 17					
	ROX	P		Z 11 40 29					
		E(*PP)		Z 11 41 52					
	MNW	IP		Z 11 40 36					
		E(*PP)		Z 11 42 00					
		E		Z 11 42 06					

DATE	H	M	S	EPICENTRE		DEPTH	MAG	DIST (DEG)							
				H	S			WEL	AN	TN	AE	TE	MAG		
FEB 05	12	48	40.9	16.6S	179.6W	475KM	4.0								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				GNZ	EP	Z	12	52	50						
FEB 05	16	15	08.1	3.8S	141.3E	110KM	4.5								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				CNZ	P	Z	16	23	32						
				TUA	EP	Z	16	23	36						
				MNW	EP	Z	16	23	37						
				GNZ	EP	Z	16	23	40						
				ROX	EP	Z	16	23	44						
				WEL	EL	Z	16	39	00						
FEB 05	16	21	50.3	3.7S	140.0E	55KM									
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				GNZ	E?	Z	16	30	07						
					E?	Z			45						
					E?	Z			54						
				CNZ	EP	Z	16	30	26						
				WEL	EP?	Z	16	30	36						
FEB 06						Z	02	39	00						
FEB 06						Z	08	30	00						
FEB 06	13	07	25.2	55.7N	155.8W	33KM	5.6								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				WEL	EP	Z	13	21	08						
					E	Z			31	24					
				ESKS	NE	E			40						
				ES	E				32	49					
				ESP	ZN				34	06					
				ESS	ZN				39	20					
				ESSS	N				44	00					
				ELQ	NE				49	00					
				ELR	ZNE				55	00			40	26	
				ROX	ESKS	N	13	32	04						
					E				33	28					
				ESP	N				35	03					
				ESS	NE				40	00					
				ELQ	NE				51	00					
				EL	ZNE		14	00	00						
				EPP?	N				25	38					
				E	N				51						
FEB 06	13	13	45.2	55.8N	155.9W	33KM	5.4								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				WEL	E(P)	Z	13	27	30						
FEB 06	15	19	38.1	10.5S	120.7E	43KM	4.9								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				COB	EP?	E	15	29	08						
					E				10						
				TNZ	E(P)	Z	15	29	13						
				GPZ	EP?	N	15	29	13						
				WEL	EP	Z	15	29	17						
					E				36						
				CNZ	E	Z	15	29	39						

DATE	H	M	S	EPICENTRE		DEPTH	MAG	DIST (DEG)							
				H	S			WEL	AN	TN	AE	TE	MAG		
FEB 06	20	32	54.9	33.5S	178.4W	33KM	5.0								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				GNZ	EP	Z	20	34	23						
					E				55						
					E				35	32					
				TUA	EP	Z	20	34	30						
					ES	Z			35	45					
				KRP	E	Z	20	34	39						
					E				35	04					
				ONE	EP?	E	20	34	31						
					E				33						
					E				42						
				CNZ	EP	Z	20	34	44						
					E				58						
					E(S)	Z			36	09					
					E				15						
					E				28						
				TNZ	EP	Z	20	34	53						
				WEL	ES	ZNE	20	36	52						
					EL	E			38	00					
				GPZ	E	N	20	35	34						
					ES	N			37	57					
					E	N			38	10					
				MNH	E(P)	Z	20	36	46						
FEB 07	06	31	21.8	5.8S	154.0E	77KM	4.6								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				CNZ	P	Z	06	38	39.5						
				TUA	EP	Z	06	38	42						
				GNZ	EP	Z	06	38	45						
				WEL	EP	Z	06	38	49						
FEB 07	09	34	27.2	14.8S	167.5E	159KM	4.4								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				CNZ	EP	Z	09	39	43						
					E				54						
				WEL	E?	Z	09	40	19						
				ROX	P	Z	09	40	28						
				MNW	EP	Z	09	40	31						
FEB 07						Z	11	04	34						
FEB 07						Z	11	04	35						
FEB 07						Z	11	31	35						
						Z	11	31	54						
FEB 07	12	58	53.6	39.8N	142.8E	45KM	5.4								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				TNZ	EP	Z	13	11	21						
				CNZ	EP	Z	13	11	22						
FEB 07						E	14	44	00						
FEB 08	00	29	48.0	19.0S	180.0E	600KM	4.0								
				H	S	DIR	AZ	TZ	AN	TN	AE	TE			
				GNZ	E(P)	Z	00	33	41						
FEB 08						Z	00	38	00						
					E				39	00					

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
FEB 08	09 55 59.9	9.2N 126.2E	57KM	5.7	
		H M S	DIR	AZ TZ	AN TN AE TE
	WEL EL	Z 10 29 00			
FEB 08	11 17 46.5	52.3N 175.6E	60KM	5.4	
		H M S	DIR	AZ TZ	AN TN AE TE
	GNZ EP	Z 11 30 41			
	CNZ EP	Z 11 30 42			
	TNZ EP	Z 11 30 44			
	WEL EL	Z 12 01 00			
	ROX EL	NE 12 04 00			
FEB 08					
	WEL EL	Z 17 46 00			
	MNW E	Z 17 39 40			
	E	Z 43			
FEB 08	18 54 51.2	28.4S 62.6E	33KM		
		H M S	DIR	AZ TZ	AN TN AE TE
	WEL EL	Z 19 36 00			
FEB 09	02 00 07.3	16.5S 179.2W	480KM	5.3	
		H M S	DIR	AZ TZ	AN TN AE TE
	ONE EP	E 02 04 11			
	ES	E 07 35			
	KRP EP	Z 02 04 26			
	GNZ EP	Z 02 04 26			
	E(S)	Z 08 00			
	E	Z 02			
	E	Z 10 58			
	TUA EP	Z 02 04 34			
	TNZ EP	Z 02 04 39			
	WEL EP	Z 02 04 53			
	E	Z 06 24			
	E	E 08 47			
	E(S)	E 52			
	E	Z 11 06			
	ROX E	NE 02 12 54			
	MNW P	Z 02 05 47			
	E	Z 07 18			
	E	Z 24			
	E?	Z 10 20			
FEB 10	09 56 44.9	20.9S 178.6W	575KM	4.6	
		H M S	DIR	AZ TZ	AN TN AE TE
	KRP EP	Z 10 00 21			
	GNZ EP	Z 10 00 22			
	E	Z 03 19			
	CNZ EP	Z 10 00 30			
	E?	Z 02 40			
	TNZ EP	Z 10 00 35			
	E	Z 01 04			
	WEL EP	Z 10 00 49			
	MNW P	Z 10 01 46			
FEB 10	17 27 07.2	6.1S 104.1E	126KM	5.5	
		H M S	DIR	AZ TZ	AN TN AE TE
	CNZ EP	Z 17 38 33			
	E(+PP)	Z 57			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
FEB 10	17 27 58.2	6.1S 104.1E	33KM	5.5	
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	MNW E(P)	Z 17 38 51			
	E	Z 39 06			
	ROX EL	E 18 03 00			
	WEL EL	Z 18 04 00			
	CNZ P	Z 17 39 19.5 D			
	E	Z 33			
	E	Z 47			
FEB 10	23 45 58.4	59.8S 150.3E	33KM		
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	MNW EP	Z 23 50 05			
	ROX EP	Z 23 50 19			
	EL	ZNE 54 00			2 20
	WEL EL	ZNE 23 57 00			
	CNZ EP?	Z 23 51 25			
FEB 11	03 49 10.6	27.9N 128.0E	78KM	4.8	
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	ROX EP	Z 04 01 25			
FEB 11	18 21 05.5	15.9S 173.1W	33KM	5.2	
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	GNZ EP	Z 18 26 16			
	WEL EL	ZNE 18 34 00			
	ROX EL	E 18 36 00			
	MNW EP	Z 18 27 53			
FEB 11	21 29 52.4	10.2S 161.3E	95KM	5.0	
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	CNZ EP	Z 21 36 08			
	ROX EP	Z 21 36 41			
	MNW EP	Z 21 36 44			
FEB 12					
	GNZ E?	Z 07 25 00			
	E?	Z 11			
	E	Z 23			
	TUA E(P)	Z 07 25 06			
	CNZ E?	Z 07 25 23			
	E?	Z 30			
	E	Z 39			
	E	Z 52			
	WEL ES	E 07 27 25			
	EL	Z 29 00			
	GPZ ES	N 07 28 33			
FEB 12					
	WEL EL	Z 10 22 00			
FEB 12	20 31 53.2	3.5S 146.6E	33KM	5.4	
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	WEL EP?	Z 20 40 04			
	E	Z 14			
	MAX	ZE 59 00			
	TUA EP	Z 20 40 05			
	GNZ EP	Z 20 40 07			
	ROX ES	ZNE 20 47 02			
	ESS	N 51 00			
	EL	ZNE 52 00			
	MNW EP	Z 20 40 17			9 18 8 20

FEB 17	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
	16 43 06.9			22.6S 179.3E				547KM	4.9	WEL	AN	TN
				H M S		DIR	AZ TZ					
	GNZ	EP	Z	16 46 26								
		ES	Z	16 49 06								
	TUA	ES	Z	16 49 10								
	CNZ	E	Z	16 46 02								
		E(P)	Z	16 49 36								
	WEL	E	Z	16 49 58								
		E	ZE	50 02								
	MNW	EP?	Z	16 47 47								
		E	Z	16 47 49								
FEB 18	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
01 31 21.8			16.2S 166.4E		77KM			4.8	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	ONE	E	E	01 36 01								
	CNZ	EP	Z	01 36 34								
	GNZ	IP	Z	01 36 35		U						
	WEL	EL	Z	01 43 00								
	ROX	EP	Z	01 37 17		U						
		EL	E	44 30							2 20	
	MNW	E(P)	Z	01 37 19								
		E(*PP)	Z	01 37 30								
FEB 18	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
04 42 47.7			15.5S 175.0W		289KM			4.8	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	CNZ	EP	Z	04 47 48								
	ROX	E(P)	Z	04 48 55								
	MNW	EP	Z	04 49 02								
FEB 18	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
04 45 42.0			14.2N 146.5E		78KM			5.0	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	CNZ	EP	Z	04 55 38								
	WEL	EP?	Z	04 55 46								
		EL	Z	05 16 00							1 20	
FEB 18	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
10 35 20.1			10.3S 161.2E		73KM			4.9	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	KRP	E?	Z	10 41 23								
		E	Z	10 41 28								
	CNZ	EP	Z	10 41 37								
	GNZ	E(P)	Z	10 41 43								
	WEL	EL	Z	10 51 00								
	ROX	E(P)	Z	10 42 13								
		EL	NE	53 00							1 20	1 22
	MNW	EP	Z	10 42 13								
FEB 18	ROX	EL	E	13 10 00								
	WEL	EL	Z	13 13 00								
FEB 18	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
19 09 35.1			23.5S 179.2W		361KM			4.0	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	KRP	EP	Z	19 12 51								
	GNZ	EP	Z	19 12 51								
		E	Z	15 53								
		ES	Z	15 35								
	CNZ	E(P)	Z	19 13 07								
	WEL	EP	Z	19 13 26								

FEB 18	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
	22 45 35.1			14.2S 174.9W				33KM	4.6	WEL	AN	TN
				H M S		DIR	AZ TZ					
	GNZ	EP	Z	22 50 40								
	KRP	P	Z	22 50 41								
		E	Z	53								
	CNZ	E(P)	Z	22 50 44								
FEB 19	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
09 15 29.4			9.6S 107.3E		48KM			5.0	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	KRP	EP	Z	03 16 20								
		E	Z	27								
	WEL	EL	Z	09 48 00								
	ROX	EL	E	09 50 00								
FEB 19	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
15 25 58.9			21.4S 70.7W		80KM			5.2	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	WEL	L	ZE	16 09 00								
FEB 19	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
23 49 45.2			18.7S 169.2E		207KM			4.7	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	KRP	EP	Z	23 54 03								
	CNZ	EP	Z	23 54 14								
	GNZ	EP	Z	23 54 15								
	WEL	EP	Z	23 54 33								
FEB 20	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
08 35 36.2			46.6N 152.5E		50KM			4.8	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	KRP	E	Z	08 48 32								
FEB 20	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
09 06 59.0			17.7S 178.8W		604KM			3.8	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	KRP	E(P)	Z	09 11 01								
	GNZ	EP	Z	09 11 01								
FEB 20	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
09 53 51.1			44.6N 150.0E		50KM			5.2	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	KRP	EP?	Z	10 06 22								
		E	Z	25								
		E	Z	37								
	WEL	E(SKS)	Z	10 17 18								
		ESP	Z	18 32								
		EL	Z	37 00								
	ROX	EL	E	10 42 00							1 22	
FEB 20	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)				
12 03 18.7			14.5N 93.0W		49KM			4.4	WEL	AN	TN	AE TE
				H M S		DIR	AZ TZ					
	WEL	EL	Z	12 50 00								
	ROX	EL	E	12 55 00								

DATE	H M S			EPICENTRE		DEPTH	MAG		DIST (DEG)					
				H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
FEB 20	18	22	15.5	17.2S	179.0W	585KM	3.9							
	KRP	EP	Z	18	26	19								
	GNZ	EP	Z	18	26	20								
	TNZ	E	Z	18	26	42								
	WEL	EP?	Z	18	26	45								
	ROX	E(P)	Z	18	27	31								
		E	Z				34.5							
	MNW	E(P)	Z	18	27	41								
FEB 20	WEL	EL	Z	21	36	00								
FEB 22	08	50	35.0	30.1S	177.3W	33KM	5.1							
	GNZ	EP	Z	08	52	48								
		E	Z			52								
		E	Z			53	09							
		E	Z			22								
		E(S)	Z			54	37							
	ONE	E(P)	E	08	52	56								
		E	E			53	10							
	TUA	E(P)	Z	08	52	56								
		E(S)	Z			54	48							
	KRP	EP	Z	08	52	58.5								
		E	Z			53	12							
		E	Z			18								
		E	Z			29								
		E	Z			54	52							
	CNZ	E(P)	Z	08	53	15								
		E	Z			28								
		E	Z			55	22							
		E	Z			37								
		E	Z			56	02							
	TON	E	Y	08	53	49								
		E(S)	Y			55	15							
	TNZ	E(P)	Z	08	53	24								
		E	Z			27								
		E	Z			54	00							
	WEL	E(P)	Z	08	53	50								
		E	ZNE			55	54							
		ES	ZNE			57								
		L	Z			58	00		1	22				
	COB	E(P)	E	08	53	57								
		ES	E			56	15							
	KA1	EP	X	08	54	18								
		ES	X			56	53							
	GPZ	EP	N	08	54	20								
		ES	N			56	59							
	ROX	EP	Z	08	54	50								
		E(S)	Z			58	10							
		L	NE	09	00	00				1	22		1	22
	MNW	EP?	Z	08	55	01								
		E	Z			03								
		E(S)	Z			58	32							
FEB 22	16	04	35.6	30.1N	138.8E	411KM	4.8							
	KRP	P	Z	16	15	39.5	U							
	CNZ	EP	Z	16	15	45								

DATE	H M S			EPICENTRE		DEPTH	MAG		DIST (DEG)					
				H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
FEB 22	17	50	56.2	48.9N	154.9E	60KM	5.3							
	WEL	L	Z	18	35	00								
FEB 22	21	16	27.5	24.1N	123.2E	48KM	5.2							
	KRP	E(P)	Z	21	28	31								
FEB 23	12	26	40.4	15.4S	173.8W	96KM	4.6							
	KRP	EP	Z	12	31	51								
	GNZ	EP	Z	12	31	51								
	TNZ	EP	Z	12	32	07								
	WEL	E	Z	12	32	23.5								
FEB 24	WEL	EL?	Z	00	19	00								
FEB 24	05	02	13.5	24.8S	179.7W	290KM	4.4							
	KRP	EP?	Z	05	05	27								
		E	Z			29								
		E	Z			06	02							
	TUA	E(S)	Z	05	07	55								
	WEL	EP?	Z	05	06	02								
		E	Z			08	47							
		E	E			54								
FEB 24	14	51	46.2	15.5S	174.0W	87KM	4.5							
	GNZ	EP	Z	14	56	56								
	KRP	EP	Z	14	56	57								
	TUA	EP	Z	14	56	59								
	CNZ	EP	Z	14	57	07								
	TNZ	EP	Z	14	57	11								
		E	Z			48								
	ROX	EP	Z	14	58	14								
	MNW	EP	Z	14	58	22								
FEB 24	16	18	17.8	31.6S	177.8W	377KM								
	ONE	EP	E	16	20	08								
		ES	E			21	24							
	GNZ	EP	Z	16	20	10								
		E(S)	Z			21	25							
		E	Z			29								
	KRP	EP	Z	16	20	15								
		E	Z			17								
		E	Z			21	21							
		E	Z			44								
	TUA	E(P)	Z	16	20	15								
		E	Z			19								
		E(S)	Z			21	38							
		E	Z			42								
	CNZ	EP?	Z	16	20	24								
		E	Z			26								
		E	Z			53								
		E	Z			22	02							
	TON	ES	Y	16	22	00								
	WEL	EP	Z	16	20	50								
		ES	ZNE			22	40							

		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	KM		WEL	TE	MAG
FEB 24	GPZ E(P) ES ROX ES	N 16 21 25 N 23 41 Z 16 24 41	244KM	4.7			
			DIR	AZ TZ	AN TN	AE TE	
FEB 25	KRP EP	Z 20 03 42					
FEB 25	H M S WEL EL ROX EL MNH EP	EPICENTRE H M S Z 01 15 00 N 01 18 00 Z 00 46 39	33KM	6.7			
FEB 25	H M S WEL EL ROX EL	EPICENTRE H M S Z 03 02 00 E 03 04 00	81KM				
FEB 25	H M S ROX E(SS)	EPICENTRE H M S NE 03 24 00	33KM				
FEB 25	H M S KRP EP MNH EP	EPICENTRE H M S Z 04 15 50 Z 04 17 18	374KM	4.8			
FEB 25	H M S CNZ E(P) WEL EL	EPICENTRE H M S Z 15 26 07 Z 15 39 00	42KM	5.0			
FEB 25	H M S WEL EL	EPICENTRE H M S Z 21 27 00	16KM	4.7			
FEB 25	MNH E(P) WEL EL ROX EL	Z 21 44 10 Z 21 51 00 NE 21 48 30					
FEB 25	H M S ONE E(P) E KRP EP? E E GNZ E E E TUA E E ES CNZ E(P) E E(S) WEL EP? E E	EPICENTRE H M S E 23 25 42 E 27 51 Z 23 25 46 Z 50 Z 58 Z 23 25 59 Z 26 10 Z 27 14 Z 23 25 45 Z 26 11 Z 27 27 Z 23 26 12 Z 27 Z 28 04 Z 23 26 39 Z 41 N 28 33	51KM	4.8			

		EPICENTRE	DEPTH	MAG	DIST (DEG)		
H M S		H M S	KM		WEL	TE	MAG
FEB 25	ES EL ROX E(P) EL	E . 35 ZNE 30 00 Z 23 27 40 E 32 00					1 23
FEB 25	H M S KRP P E GNZ EP E E TUA E(P) E(S) CNZ EP E(S) E WEL E(S) E	EPICENTRE H M S Z 23 34 20 Z 36 42 Z 23 34 20 Z 36 34 Z 38 Z 23 34 21 Z 36 40 Z 23 34 30 Z 36 54 Z 37 06 E 23 37 39 NE 43	296KM	4.5			
FEB 26	H M S ROX E EL	EPICENTRE H M S NE 08 59 04 Z 35	33KM	4.8			
FEB 26	H M S KRP EP GNZ E TUA E WEL E? ROX E(P) E(*PP)	EPICENTRE H M S Z 18 24 48 Z 18 25 22 Z 18 24 56 Z 18 25 22 Z 18 24 54 Z 25 17	132KM	5.3			
FEB 26	H M S KRP EP E E GNZ P E(S) WEL E? E ROX E EL	EPICENTRE H M S Z 21 21 31 Z 22 22 Z 45 Z 21 21 32 Z 24 47 Z 21 22 03 Z 08 Z 21 23 02 E 30 00	33KM	5.0			
FEB 26	H M S WEL EL	EPICENTRE H M S Z 23 26 00	64KM	4.7			3 18 6 18
FEB 27	H M S WEL EL	EPICENTRE H M S Z 03 30 00	33KM				
FEB 27	H M S KRP P CNZ EP	EPICENTRE H M S Z 06 36 43 Z 06 36 50	37KM	5.2			

H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)		
H M S		H M S		DIR	AZ TZ	AN TN	AE TE	MAG
FEB 27	11 35 32.4	18.9N	104.0W	33KM	4.5			
	WEL EL	Z	12 20 00					
FEB 27	WEL L	Z	15 15 00					
FEB 27	15 10 48.8	21.7N	94.4E	102KM	6.4			
	MNW EP	Z	15 23 58					
	ROX EP	Z	15 24 01.5					
	ESKS	NE	35 04					
	ESS	NE	42 00					
	E(SSS)	N	47 30					
	EL	N	50 00				2 21	
	EL	NE	56 00					
	KRP EP	Z	15 24 08					
	CNZ P	Z	15 24 10	U				
	WEL EP	Z	15 24 10					
	EPP	Z	28 03					
	E	Z	47					
	E(S)	N	35 12					
	EPS	ZNE	37 00					
	ESS	ZNE	42 00					
	EL	ZNE	51 00					
	EL	Z	57 00					
	GPZ EP	N	15 24 15					
FEB 28	WEL EL	Z	06 48 00					
FEB 28	15 11 00.8	24.4S	179.9E	590KM	4.3			
	KRP P	Z	15 14 00.5					
	GNZ EP	Z	15 14 01					
	E	Z	16 33					
	E	Z	35					
	E	Z	41					
	CNZ EP	Z	15 14 10					
	E	Z	16 53					
	WEL EP	Z	15 14 28					
	E	Z	30					
	ES	ZNE	17 26					
	MNW EP	Z	15 15 26					
FEB 28	17 47 05.9	18.2N	94.3E	43KM	5.3			
	KRP EP	Z	18 00 24					
	E*PP	Z	36					
	CNZ EP	Z	18 00 25					
	E*PP	Z	36					
	WEL EL	ZN	18 30 00					
	ROX EL	E	18 36 00					
FEB 28	20 46 00.1	13.3N	144.7E	33KM	5.2			
	KRP E(P)	Z	20 56 06					
FEB 29	07 27 31.9	15.5S	178.7W	407KM	4.0			
	KRP EP	Z	07 32 05					
	GNZ P?	Z	07 37 07					

H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)		
H M S		H M S		DIR	AZ TZ	AN TN	AE TE	MAG
FEB 29	07 51 55.1	38.2S	74.5W	33KM	4.2			
	WEL EL	Z	08 34 00					
FEB 29	15 20 12.8	34.8N	171.7E	34KM	5.1			
	KRP EP	Z	15 32 14					
	CNZ E(P)	Z	15 32 20					
	WEL E(S)	NE	15 42 38					
	EL	E	54 00			1 18		
	EL	Z	59 00					
	ROX EL	E	15 57 00					
FEB 29	18 24 20.4	15.0S	167.4E	110KM				
	KRP EP	Z	18 29 27					
	CNZ EP	Z	18 29 28					
FEB 29	20 13 41.6	18.2S	172.8W	33KM	5.1			
	GNZ E(P)	Z	20 18 29					
	E	Z	39					
	E(S)	Z	22 25					
	KRP EP	Z	20 18 36					
	E	Z	38					
	TUA E(P)	Z	20 18 37					
	E(S)	Z	22 31					
	CNZ EP	Z	20 18 45					
	E	Z	50					
	ES	Z	23 01					
	TNZ EP	Z	20 18 55					
	WEL EP	Z	20 19 05					
	E	Z	23 35					
	E(S)	ZNE	39					
	EL	Z	25 00			1 24		
	ROX E(P)	Z	20 20 09					
	EL	E	30 00					
	MNW EP	Z	20 20 12					
FEB 29	23 49 40.8	8.5S	112.7E	73KM	5.8			
	MNW P	Z	23 59 41					
	E	Z	24 00 23					
	ROX EP	Z	23 59 46					
	E(PCS)	E	24 04 18					
	ES	NE	07 54					
	ESS	E	12 00					
	ESSS	N	14 30					
	EL	E	18 00				1 20	
	COB EP	E	23 59 55					
	TNZ EP	Z	24 00 01					
	WEL P	Z	24 00 04	D				
	EPCP	Z	36					
	EPP	Z	02 24					
	PCS	Z	04 51					
	ES	ZNE	08 26					
	E	E	10 10					
	ESS	E	12 36					
	E(SSS)	ZN	15 48					
	EL	ZE	19 00			1 20		
	KRP P	Z	24 00 05.5	D			1 20	
	E(*PP)	Z	23					

	ES	ZNE	10 32					
	LQ	ZNE	13 44	5 25	7 40	8 40		
	LR	ZNE	16 06	10 28	4 30	6 30		
	MNW P	Z	19 04 53					
	ROX EP	Z	19 04 54					
	LQ	NE	14 30	9 22	7 24	7 26		
MAR 06	H M S	EPICENTRE	19.5S 174.5E	DEPTH	MAG		DIST (DEG)	
	20 42 55.8	56KM	4.6				WEL 42	
	KRP P	Z	20 47 09.5	DIR	AZ TZ	AN TN	AE TE	MAG
	CNZ P	Z	20 47 25.0					
	WEL ELR	Z	20 53 40					
MAR 06	H M S	EPICENTRE	19.7S 70.5W	DEPTH	MAG		DIST (DEG)	
	21 05 50.2	50KM	5.3				WEL 61	
	WEL ELR	Z	21 50 00	DIR	AZ TZ	AN TN	AE TE	MAG
MAR 06	KRP EP	Z	23 55 02					
	E	Z	23 55 09					
MAR 06	H M S	EPICENTRE	22.9S 173.1E	DEPTH	MAG		DIST (DEG)	
	23 51 28.5	54KM	4.6				WEL 51	
	CNZ EP	Z	23 55 18	DIR	AZ TZ	AN TN	AE TE	MAG
	GNZ P	Z	23 55 20					
	WEL EP	Z	23 55 39		2 5			
	ELR	Z	24 00 18		2 30			
MAR 07	H M S	EPICENTRE	21.4S 179.3W	DEPTH	MAG		DIST (DEG)	
	01 46 21.1	593KM	4.1				WEL 21	
	KRP P	Z	01 49 50	DIR	AZ TZ	AN TN	AE TE	MAG
	GNZ P	Z	01 49 52					
MAR 07	H M S	EPICENTRE	20.2S 177.8W	DEPTH	MAG		DIST (DEG)	
	03 34 25.2	481KM	4.2				WEL 22	
	KRP EP	Z	03 38 14	DIR	AZ TZ	AN TN	AE TE	MAG
MAR 07	H M S	EPICENTRE	3.5S 97.1E	DEPTH	MAG		DIST (DEG)	
	07 25 03.9	82KM	5.3				WEL 23	
	KRP EP	Z	07 37 24	DIR	AZ TZ	AN TN	AE TE	MAG
	WEL ELR	Z	08 07 00					
MAR 07	WEL ELR	Z	11 18 00					
MAR 07	H M S	EPICENTRE	5.6S 152.7E	DEPTH	MAG		DIST (DEG)	
	21 06 06.9	62KM	4.8				WEL 24	
	WEL ELR	Z	21 26 00	DIR	AZ TZ	AN TN	AE TE	MAG
MAR 07	H M S	EPICENTRE	19.9S 177.9W	DEPTH	MAG		DIST (DEG)	
	23 13 25.4	534KM	5.4				WEL 25	
	GNZ EP	Z	23 17 14	DIR	AZ TZ	AN TN	AE TE	MAG
	KRP P	Z	23 17 14.0					
	CNZ P	Z	23 17 30					
	WEL P	Z	23 17 43					
MAR 08	ROX ELQ	NE	11 58 10			4 16		
	ELR	Z	59 00		3 14			
	WEL EP	Z	11 57 18		1 12			
	ES	ZNE	12 00 36					
	ELQ	ZNE	01 32		2 33			
	LR	Z	02 58		5 14	7 14		

	CNZ EP	Z	11 57 51					
MAR 06	H M S	EPICENTRE	4.6S 152.6E	DEPTH	MAG		DIST (DEG)	
	17 51 06.5	69KM	4.7				WEL 42	
	KRP P	Z	17 58 30.5	DIR	AZ TZ	AN TN	AE TE	MAG
	CNZ EP	Z	17 58 40					
	GNZ EP	Z	17 58 45					
MAR 10	H M S	EPICENTRE	1.9N 127.5E	DEPTH	MAG		DIST (DEG)	
	13 59 54.8	117KM	5.6				WEL 61	
	MNW P	Z	14 09 45	DIR	AZ TZ	AN TN	AE TE	MAG
	(PCP)	Z	10 15					
	KRP P	Z	14 09 47					
	(PCP)	Z	10 16					
	ROX EP	Z	14 09 51					
	GNZ P	Z	14 10 02					
	WEL ES	Z	14 18 00					
	ELR	ZNE	25		6 48		5 48	
MAR 11	H M S	EPICENTRE	1.8N 127.1E	DEPTH	MAG		DIST (DEG)	
	01 06 00.4	58KM	5.6				WEL 61	
	MNW P	Z	01 15 57	DIR	AZ TZ	AN TN	AE TE	MAG
	KRP IP	Z	01 16 01.0					
	ROX EP	Z	01 16 03					
	WEL IP	ZNE	01 16 07.0					
	ELR	Z	35 20		4 44			
	GNZ P	Z	01 16 13					
MAR 12	H M S	EPICENTRE	22.9S 179.2W	DEPTH	MAG		DIST (DEG)	
	04 30 21.1	378KM	4.6				WEL 19	
	GNZ P	Z	04 33 45	DIR	AZ TZ	AN TN	AE TE	MAG
	ES	Z	36 24					
MAR 12	H M S	EPICENTRE	13.5N 122.9W	DEPTH	MAG		DIST (DEG)	
	22 32 56.7	33KM	5.3				WEL 79	
	WEL ELR	Z	23 07 00	DIR	AZ TZ	AN TN	AE TE	MAG
MAR 13	H M S	EPICENTRE	4.1S 105.1W	DEPTH	MAG		DIST (DEG)	
	04 26 23.5	33KM	4.6				WEL 80	
	WEL ELR	Z	05 03 00	DIR	AZ TZ	AN TN	AE TE	MAG
MAR 14	H M S	EPICENTRE	20.6S 178.5W	DEPTH	MAG		DIST (DEG)	
	11 44 53.8	561KM	4.7				WEL 21	
	KRP P	Z	11 48 32.3	DIR	AZ TZ	AN TN	AE TE	MAG
	GNZ P	Z	11 48 34					
MAR 14	H M S	EPICENTRE	20.6S 178.2W	DEPTH	MAG		DIST (DEG)	
	12 16 53.4	260KM	4.1				WEL 21	
	KRP EP	Z	12 20 44	DIR	AZ TZ	AN TN	AE TE	MAG
MAR 14	H M S	EPICENTRE	13.7S 172.3E	DEPTH	MAG		DIST (DEG)	
	15 05 54.4	611KM	5.1				WEL 28	
	KRP IP	Z	15 10 26.2	DIR	AZ TZ	AN TN	AE TE	MAG
	GNZ P	Z	15 10 33					
	WEL P	ZNE	15 10 52					
	ROX P	Z	15 11 29					
	MNW P	Z	15 11 33					

DATE	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
								WEL	AE	TE	MAG
MAR 15	22	30	26.0	36.2N	7.6W	27KM	6.2				
	ROX	EPP		NE	22 55 44						
		SKKS		N	23 02 06				5	12	
		SKSP		N	06 32						
		ESS		NE	16 50				2	18	5 13
		ELQ		E	48 00						9 32
		LR		ZN	24 00 00				22	18	19 19
	WEL	EPKP		Z	22 50 09				6	9	
		IPKP		Z	36			U			
		EPKP2		Z	52 00				3	20	
		PP		Z	55 58				4	20	
		PCPPKP		Z	59 21				4	20	
		SS		E	23 17 00						11 24
		LR		Z	54 40				31	23	22 25
	KRP	EPKP2		Z	22 52 19						10 25
		PCPPKP		Z	59 37						
MAR 16	08	44	32.8	44.8N	146.8E	140KM	5.7				
				H M S							
	KRP	P		Z	08 57 47						
MAR 16	14	58	23.4	11.5S	166.1E	69KM	4.8				
				H M S							
	KRP	EP		Z	15 04 05						
		CNZ		Z	15 04 16						
		WEL	ELR	ZNE	15 13 00						
MAR 16	18	59	27.9	9.6S	166.4E	33KM	4.5				
				H M S							
	WEL	ELR		Z	19 15 00						
MAR 16	WEL	ELQ		ZNE	19 23 00						
	ROX	ELQ		NE	19 25 36						
MAR 16	21	39	42.5	20.6S	178.7W	578KM	4.9				
				H M S							
	GNZ	P		Z	21 43 22						
		S		Z	46 17						
	CNZ	P		Z	21 43 30						
		S		Z	46 37						
	KRP	EIP		Z	21 43 30.2			U			
	WEL	P		Z	21 43 49						
MAR 17	05	01	56.8	8.9S	108.8W	33KM	4.5				
				H M S							
	WEL	ELR		Z	05 36 00						
MAR 17	18	05	52.2	15.8S	173.3W	33KM	4.6				
				H M S							
	KRP	EP		Z	18 11 04						
	WEL	ELQ		NE	18 17 30						
		LR		Z	20 54				3	20	
	ROX	ELQ		NE	18 21 00						
MAR 18	00	10	34.8	17.3S	175.1W	268KM	4.8				
				H M S							
	KRP	P		Z	00 15 13						
	GNZ	P		Z	00 15 13						

DATE	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
								WEL	AE	TE	MAG
MAR 18	GNZ	EP		Z	02 32 17						
		E		Z	33 05						
	TUA	EP		Z	02 32 22						
		E		Z	24						
		E		Z	33						
		ES		Z	33 15						
	ONE	P		E	02 32 24						
	KRP	EP		Z	02 32 26						
	WEL	ES		NE	02 34 26						
MAR 18	04	37	26.9	52.5N	153.6E	440KM	5.6				
				H M S							
	KRP	P		Z	04 49 49						
	WEL	ELR		Z	05 21 00						
MAR 18	05	17	13.2	20.2S	178.4W	566KM	3.9				
				H M S							
	KRP	P		Z	05 20 56.0						
	GNZ	P		Z	05 20 57.5						
MAR 19	04	45	50.9	21.9S	179.5E	613KM	4.7				
				H M S							
	GNZ	P		Z	04 49 14						
		ES		Z	52 05						
	CNZ	P		Z	04 49 22						
MAR 19	08	43	40.5	20.3S	178.3W	504KM	4.5				
				H M S							
	GNZ	P		Z	08 47 26.5						
	CNZ	P		Z	08 47 34						
MAR 19	WEL	EL		Z	10 38 00						
MAR 19	21	44	03.8	15.1S	172.6W	33KM	5.6				
				H M S							
	GNZ	EP		Z	21 49 24						
		ES		Z	53 58						
	KRP	EP		Z	21 49 25						
		I		Z	28						
	WEL	P		Z	21 49 53						
		LR		ZNE	57 30				3	16	
	ROX	EP		Z	21 50 54				26	16	
		LQ		NE	59 32						
		ELR		Z	22 02 04						
									12	17	11 24 28 32
MAR 20	01	16	12.8	62.2S	155.8E	33KM					
				H M S							
	MNW	EP		Z	01 20 22						
	ROX	LR		NE	01 25 00						
	WEL	ES		ZE	01 25 41						
		ELR		ZNE	27 36						
									1	20	
									6	32	
MAR 20	18	55	10.8	7.0S	115.2E	121KM	5.4				
				H M S							
	KRP	EP		Z	19 05 25						

DATE	H M S	EPICENTRE	DEPTH	MAG	DIR			AN	TN	AE	TE	DIST (DEG)
					AZ	TZ						
MAR 20	19 15 16.3	19.8S 173.6W	33KM	4.7								
		H M S										
	GNZ EP	Z 19 19 54										
	KRP EP	Z 19 19 56										
	WEL ELR	Z 19 29 00										
MAR 21	WEL ELR	Z 00 06 00										
MAR 21	03 42 19.6	6.4S 127.9E	367KM	5.4								
		H M S										
	MNH IP	Z 03 50 55.0 U										
	ROX EP	Z 03 50 59										
	SCP	Z 55 26										
	S	ZNE 98 00		5 16			7 20				19 24	
	*SS	NE 04 00 09					10 28					
	ELQ	NE 04 00					35 28				16 18	
	KRP IP	Z 03 51 05.0 U										
	SCP	Z 55 34										
	ES	Z 58 10										
	WEL IP	ZNE 03 51 09.1 USE		5 22								
	S	ZNE 58 15		10 28			15 16				17 44	
	*SS	ZNE 04 00 16										
	LQ	NE 04 39		12 22			22 28				10 21	
	GNZ P	Z 03 51 18.0 U										
	ES	Z 58 40										
MAR 21	15 08 14.3	18.7N 103.1W	83KM	5.0								
		H M S										
	WEL ESP	Z 15 34 10		1 20								
	ELR	ZE 52 00		1 26								
MAR 21	16 27 11.7	27.6S 177.2W	33KM	5.6								
		H M S										
	GNZ EP	Z 16 29 54										
	E	Z 30 08										
	E	Z 32 01										
	ONE EP	E 16 29 57										
	E	E 30 06										
	KRP EP	Z 16 30 00										
	I	Z 10										
	I	Z 17										
	I	Z 36										
	WEL EP	ZNE 16 30 48										
	S	ZNE 33 18										
	ELR	ZE 34 24		4 36								
MAR 22	05 32 07.7	2.7S 126.4E	33KM	5.1								
		H M S										
	KRP EP	Z 05 41 51										
	WEL ELR	Z 06 00 00										
MAR 22	08 35 06.4	35.7S 72.9W	33KM	5.1								
		H M S										
	KRP EP	Z 08 47 40										
	WEL ES	ZE 08 57 38		1 16								
	ELR	ZNE 09 12 30		2 26								
	ROX ELQ	NE 09 12 00										
MAR 22	WEL EL	Z 15 10 00										

DATE	H M S	EPICENTRE	DEPTH	MAG	DIR			AN	TN	AE	TE	DIST (DEG)
					AZ	TZ						
MAR 23	00 45 01.5	20.2S 176.5W	33KM	4.4								
		H M S										
	KRP EP	Z 00 50 19										
MAR 23	09 17 47.3	31.8S 179.5E	464KM	4.2								
		H M S										
	ONE S	E 09 19 22										
	GNZ P	Z 09 19 30										
	I	Z 32.0										
	S	Z 20 52										
	KRP P	Z 09 19 32.4										
	I	Z 33.4										
MAR 23	22 41 15.8	17.6S 123.2E	33KM									
		H M S										
	KRP EP	Z 22 50 13										
	GNZ EP	Z 22 50 22										
MAR 25	11 33 48.4	19.7S 175.9W	170KM	4.6								
		H M S										
	GNZ P	Z 11 38 00.8										
	ES	Z 41 28										
	KRP P	Z 11 38 08										
	WEL ES	NE 11 42 38										
MAR 25	15 32 26.0	20.1S 168.8E	33KM	4.7								
		H M S										
	KRP P	Z 15 36 45										
	GNZ EP	Z 15 37 00										
	WEL ELR	Z 15 43 00										
MAR 26	02 04 20.2	11.2N 142.0E	33KM	4.9								
		H M S										
	WEL ES	Z 02 22 16		2 24								
	ELR	Z 33 15		13 24								
	ROX ELQ	ZNE 02 36 00										
MAR 26	12 15 47.4	6.8S 129.3E	156KM	5.3								
		H M S										
	MNH EP	Z 12 24 35										
	WEL ELR	Z 12 42 00										
	KRP P	Z 12 24 44										
	GNZ EP	Z 12 24 55										
MAR 26	13 29 56.2	4.4S 104.7W	33KM	4.9								
		H M S										
	WEL ELR	ZNE 14 06 20										
	ROX ELR	ZNE 14 10 00										
MAR 27	20 22 10.6	23.7S 179.9E	520KM	5.0								
		H M S										
	ONE P	E 20 25 02										
	S	E 27 23										
	KRP P	Z 20 25 17										
	I	Z 21										
	S	Z 27 54										
	I	Z 30 39										
	I	Z 45										

DATE	H M S	EPICENTRE		DEPTH	MAG	DIST (DEG)		AN	TN	AE	TE	MAG
		WEL	LR			WEL	LR					
MAR 29	16 40 57.9	59.7N	147.0W	15KM	5.6							
		H M S		DIR	AZ	TZ						
		WEL	ELR	ZNE	17 30 00							
		ROX	ELR	NE	17 35 00							
MAR 29	17 53 02.2	59.9N	146.1W	15KM	5.0							
		H M S		DIR	AZ	TZ						
		WEL	ELR	Z	18 54 00							
MAR 29	21 40 32.7	6.7S	155.1E	68KM	5.3							
		H M S		DIR	AZ	TZ						
		KRP	P	Z	21 47 30.8							
			IPCP	Z	49 56.0							
			*PPCP	Z	50 06							
		CNZ	P	Z	21 47 40							
		TUA	P	Z	21 47 43							
			PCP	Z	58							
		GNZ	P	Z	21 47 45.0							
			*PP	Z	59							
			E	Z	48 12							
		WEL	SS	Z	21 56 44			3 20				
			LR	Z	58 21			7 23		5 20		
		MNH	EP	Z	21 48 06					5 34	10 40	
		ROX	ELQ	NE	21 58 00					11 20	7 20	
			LR	ZNE	22 01 00			9 20				
MAR 30	02 18 06.3	56.6N	152.9W	25KM	5.8							
		H M S		DIR	AZ	TZ						
		WEL	EP	Z	02 32 08			3 6				
			PP	Z	36 20			3 16				
			SKS	Z	42 40			4 24				
			S	E	43 48					4 20	11	
			PS	Z	44 59			5 24				
			ESS	Z	50 30			6 32				
			LR	ZNE	03 06 00			27 24		19 22	5 24	
		ROX	SKS	N	02 43 04					7 20		
			(SKKS)	E	44 33					13 20		
			PS	N	46 08					8 20		
			SS	NE	51 44					7 20	4 20	
			ELQ	E	03 02 30					15 37		
			ELR	ZN	12 00			15 20		21 22		
MAR 30		GNZ	P	Z	06 26 57							
		KRP	EP	Z	06 26 58							
MAR 30	07 09 34.0	59.9N	145.7W	15KM	5.6							
		H M S		DIR	AZ	TZ						
		WEL	ESS	Z	07 43 36			2 36				
			LR	Z	58 30			10 20		7 20	4 10	
		ROX	ELR	ZNE	08 04 00			15 20		11 20		
MAR 30	13 03 34.9	56.5N	152.7W	20KM	5.3							
		H M S		DIR	AZ	TZ						
		WEL	EL	Z	13 51 00							
MAR 30	16 09 28.4	56.6N	152.1W	25KM	5.5							
		H M S		DIR	AZ	TZ						
		WEL	ELR	Z	16 57 00							

DATE	H M S	EPICENTRE		DEPTH	MAG	DIST (DEG)		AN	TN	AE	TE	MAG
		WEL	LR			WEL	LR					
MAR 30	18 42 03.4	24.2S	176.4W	33KM	4.6							
		H M S		DIR	AZ	TZ						
		WEL	LR	ZNE	18 50 40							
		ROX	ELQ	NE	18 54 00							
MAR 31	00 14 11.7	45.3N	151.0E	60KM	5.3							
		H M S		DIR	AZ	TZ						
		KRP	EP	Z	00 26 51							
		WEL	ESKS	Z	00 37 28							
			PS	Z	38 52			2 18				
			ELR	Z	55 00			5 24		3 18	4 20	
		ROX	S	NE	00 38 00					3 18		6.2
			ELR	NE	01 00 00							
MAR 31	09 01 30.2	50.8N	130.2W	15KM	5.6							
		H M S		DIR	AZ	TZ						
		WEL	LR	ZNE	09 48 30							
		ROX	ELR	ZNE	09 54 00							
MAR 31		WEL	ELR	Z	12 41 00							
MAR 31	17 04 39.0	17.7S	178.8W	540KM	4.4							
		H M S		DIR	AZ	TZ						
		KRP	IP	Z	17 08 44.2							
			E	Z	10 02							
		GNZ	P	Z	17 08 46							
			ES	Z	12 05							
		WEL	P	ZNE	17 09 12.5							
		ROX	P	Z	17 09 59							
		MNH	P	Z	17 10 07							
APR 01	03 23 17.2	57.2N	151.3W	25KM	5.1							
		H M S		DIR	AZ	TZ						
		WEL	EL	Z	04 11 00							
APR 01	04 32 40.7	58.7N	150.1W	20KM	4.8							
		H M S		DIR	AZ	TZ						
		WEL	E(L)	Z	05 43 00							
APR 01	17 38 00.5	17.4S	168.9E	227KM	4.4							
		H M S		DIR	AZ	TZ						
		TUA	P	Z	17 42 45							
		GNZ	EP	Z	17 42 45							
		CNZ	E(P)	Z	17 42 46							
APR 02	01 11 54.7	5.9N	95.7E	132KM	5.2							
		H M S		DIR	AZ	TZ						
		MNH	EP	Z	01 24 02							
			EPP	Z	27 12							
		ROX	E(P)	Z	01 24 06							
			E	N	34 24							
			E	N	32							
			ESS	NE	40 00							
			EL	NE	47 00							
			EL	ZE	51 00					75 20		
		WEL	EP	Z	01 24 21							
			EPP	Z	27 41							
			E(SKS)	ZE	34 43							
			E(S)	ZN	51							

		ESP	N	13 56						
		ESS	NE	19 36						
		ESSS	NE	24 00						
		EL	E	30 00	7	19	5	19		
		EL	ZNE	41 00						
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 04	18 18 01.7	19.7S 175.3W	57KM	4.8						WEL 18
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	TNZ E(P)	Z	18 22 48							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 04	17 59 43.3	56.4N 154.5W	25KM	5.5						WEL 11
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	WEL EMAX	ZE	18 50 00							
	ROX EMAX	N	18 50 00							
	EMAX	E	52 00							
APR 04	ROX MAX	N	20 06 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 04	21 38 14.0	10.5N 122.1E	33KM	5.1						WEL 7
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	21 49 32							
	WEL EL	Z	22 13 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 04	22 16 54.5	59.4N 145.2W	10KM	5.1						WEL 11
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	WEL EL	Z	23 07 00							
	ROX E(L)	N	23 14 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 05	01 22 13.3	56.2N 153.5W	25KM	5.4						WEL 11
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	WEL ESP	Z	01 49 08							
	ESS	Z	55 00							
	EL	ZE	02 10 00	8	22					5 22
	ROX E	E	01 48 37							
	ESP	N	50 00							
	ESS	NE	56 00							
	ELQ	E	02 07 00							
	EL	N	13 00			6	21			3 21
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 05	02 36 10.8	60.1N 145.8W	15KM	4.9						WEL 11
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	ROX EL	E	03 27 00							
	E(L)	N	37 00							
	WEL E(L)	Z	03 36 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 05	11 18 38.9	41.9S 83.7W	33KM	5.3						WEL 7
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP E?	Z	11 30 10							
	WEL EL	Z	11 51 00							
	ROX EL	NE	11 52 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 05	19 28 18.1	60.2N 146.7W	15KM	5.8						WEL 11
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	WEL E(L)	Z	20 19 00							
	ROX E(L)	N	20 26 00							

		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 06	01 22 44.2	23.4S 180.0E	568KM	4.5						WEL 18
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	MNW EP	Z	01 27 18.5							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 06	02 34 36.7	19.0S 175.5W	177KM	4.2						WEL 24
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	TNZ E?	Z	02 39 25							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 06	ROX EL	N	07 47 00							
	WEL E(L)	Z	07 52 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 06	WEL EL	ZNE	22 47 00							
	ROX EL	Z	22 50 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 06	22 57 53.3	57.1N 153.3W	15KM	4.2						WEL 102
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	WEL E(L)	Z	23 41 00							
	E(L)	Z	24 02 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 06	23 43 01.7	5.1S 154.0E	116KM	4.8						WEL 41
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	23 50 12							
	E+PP	Z	35							
	TUA EP	Z	23 50 23.5							
	E+PP	Z	48							
	GNZ EP	Z	23 50 26							
	E+PP	Z	51							
	WEL EP	Z	23 50 32							
	ROX EP	Z	23 50 46							
	MNW EP	Z	23 50 44							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 07	01 43 28.7	58.5N 154.5W	30KM	5.1						WEL 103
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	WEL EL	Z	02 33 00							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 07	08 57 08.2	12.2S 167.1E	260KM	4.7						WEL 30
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	WEL EP	Z	09 02 52							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 07	13 18 18.9	0.1N 123.2E	150KM	6.3						WEL 62
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	MNW EP	Z	13 28 12							
	E+PP	Z	45							
	TNZ E(P)	Z	13 28 18							
	WEL EP	Z	13 28 25							
	TUA EP	Z	13 28 29.5							
	E+PP	Z	29 06							
	GNZ EP	Z	13 28 33							
	ROX E	Z	13 28 36							
		H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 08	04 56 53.2	9.7N 125.6E	126KM	5.0						WEL 68
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	05 07 32							
	E	Z	09 04							
	MNW EP	Z	05 07 33							
	TUA EP	Z	05 07 41							

H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 08 08 08 11.8		6.8S 68.9E	33KM	6.0	WEL 97					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
ROX	EL	NE 08 54 00								
WEL	E	Z 09 06 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 08 10 58 09.1		45.8N 150.8E	40KM	5.5	WEL 89					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	E?	Z 11 10 48								
	E?	Z 11 11 00								
ROX	ESKS	NE 11 22 24								
	EL	E 37 00				3	23		5	21
	EL	N 40 00								
WEL	ESKS	N 11 21 30								
	ESP	Z 23 00								
	ESS	ZN 27 30								
	EL	ZE 35 00			6	22		4	22	6
	EL	ZNE 40 00								
	E?	Z 12 11 06								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 08 17 00 28.0		31.5S 179.0W	33KM	5.5	WEL 11					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
ONE	E(P)	E 17 02 12								
GNZ	EP	Z 17 02 18								
	E	Z 20								
	E	Z 23								
	ES	Z 03 45								
	E	Z 03 49								
KRP	EP	Z 17 02 24								
	I	Z 25								
TUA	EP	Z 17 02 24								
	E	Z 26								
	ES	Z 03 54								
TNZ	EP	Z 17 02 42								
WEL	P	Z 17 02 57								
	ES	NE 04 52								
	ES	E 17 05 07								
	ES	X 17 05 43								
GPZ	E(P)	N 17 03 31								
	ES	N 05 52								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 08 19 50 16.8		60.4N 145.9W	10KM	5.3	WEL 104					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
WEL	EL	Z 20 41 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 08 23 50 37.2		21.9S 178.2W	323KM	4.2	WEL 21					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
GNZ	EP	Z 23 54 17								
	E?	Z 57 17								
TNZ	EP	Z 23 54 34								
	E	Z 57 05								
	E	Z 08								
WEL	EP	Z 23 54 49								

H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 09 04 15 23.0		13.5N 89.9W	89KM	5.0	WEL 103					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
WEL	EL	Z 05 03 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 09 21 54 42.1		18.5S 71.5W	39KM	5.2	WEL 95					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
WEL	EL	Z 22 38 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 10 01 18 00.2		58.4N 150.6W	15KM	5.5	WEL 103					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
WEL	EL	Z 01 57 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 10 04 44 08.0		15.7S 172.8W	32KM	4.2	WEL 28					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
GNZ	EP	Z 04 49 24								
KRP	EP	Z 04 49 27								
TUA	E(P)	Z 04 49 29								
MNW	EP	Z 04 50 53								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 10 13 10 05.4		13.5N 144.9E	101KM	5.4	WEL 61					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z 13 19 54								
TUA	E	Z 13 20 04								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 10 19 05 52.6		57.6N 148.2W	15KM	5.2	WEL 103					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
WEL	EL	Z 19 55 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 10 21 44 06.7		60.1N 153.7W	10KM	5.6	WEL 104					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
WEL	EL	Z 22 32 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 10 WEL EL										
		Z 00 05 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 11 01 04 30.2		29.0S 178.9W	302KM	5.3	WEL 13					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
GNZ	EP	Z 01 06 46								
	E	Z 08 31								
	ES	Z 31								
KRP	EP	Z 01 06 50								
	E	Z 53								
	E	Z 07 30								
TUA	E(P)	Z 01 06 53								
	E	Z 08 40								
	E(S)	Z 47								
TNZ	EP	Z 01 07 11								
	E	Z 09 24								
WEL	EP	Z 01 07 25								
	ES	ZNE 09 47								
ROX	EP	Z 01 08 37								
	ES	Z 11 47								
	E	NE 14 00								
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
APR 11 06 11 02.1		25.2N 124.4E	74KM	5.0	WEL 81					
		H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z 06 23 00								

	H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 11	09 23 51.5	56.4N 152.2W	33KM	4.6					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL EL	Z 10 12 00							
APR 11	12 16 41.1	56.6N 151.0W	20KM	4.8					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL EL	Z 13 05 00							
APR 11	16 00 42.8	40.5N 25.0W	33KM	5.1					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	ROX EPKP	Z 16 20 53							
	KRP EPKP	Z 16 21 07							
	E	Z 17 15 00							0 22
	WEL EL	Z 17 15 00							
	EL	Z 26 00							
APR 12	01 24 31.2	56.6N 152.2W	22KM	5.6					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL E(S)	E 01 50 04							
	ESP	Z 51 22							
	ESS	Z 57 00							
	L	NE 02 06 00			7 21	4 21			3 20
	EL	ZNE 10 00							
	ROX ESKS	N 01 49 24							
	E	E 50 56							
	ESP	N 52 30							4 20
	L	E 02 10 00							3 20
	EL	N 15 00							
APR 12	ROX EL?	N 03 33 00							3 19
	WEL E(L)	Z 03 36 00							4 20
									5 20
APR 12	06 00 46.4	13.6S 166.0E	33KM	5.0					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	TNZ E(P)	Z 06 06 26							
	TUA P	Z 06 06 27							
	WEL EL	ZE 06 15 00							1 28
	ROX EP	Z 06 07 09							
	E	Z 26							1 18
	EL	E 16 00							
APR 12	12 48 02.2	56.6N 151.3W	33KM	5.1					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL EL	Z 13 35 00							0 28
APR 13	00 57 43.5	0.1N 123.0E	97KM	5.4					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	TUA EP	Z 01 08 00							
APR 13	03 02 46.3	23.7S 179.0W	360KM	4.5					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	GNZ EP?	Z 03 06 02							
	E	Z 03 06 02							03.5
	E	Z 06							
	E(S)	Z 08 47							
	E	Z 51							
	KRP P	Z 03 06 03							U
	TUA EP	Z 03 06 03							
	E	Z 09							

	E(S)	Z	08 50						
	E	Z	09 02						
	E	Z	31						
	WEL EP	Z	03 06 37						
	E(S)	ZNE	09 43						
APR 13	06 23 34.1	19.9S 177.7W	574KM	4.4					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP P	Z 06 27 24							
	GNZ EP	Z 06 27 25							
	ES	Z 30 31							
	E	Z 50							
	TUA EP	Z 06 27 26							
	ES	Z 30 29							
	WEL EP	Z 06 27 52							
	ROX EP	Z 06 28 40							
APR 13	08 30 03.6	45.3N 18.1E	33KM	5.4					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP E	Z 08 50 49							
	E	Z 51 23							
	WEL EL	Z 09 49 00							
APR 13	08 45 24.6	22.3N 142.1E	309KM	5.1					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP P	Z 08 55 50							
	TUA EP	Z 08 55 57							
	GNZ EP	Z 08 55 59							
	WEL EP	Z 08 56 04							
	ROX EP	Z 08 56 15							
APR 13	WEL 1?	NE 10 15 30							
APR 13	11 26 52.1	6.9N 126.6E	110KM						
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP EP?	Z 11 37 13							
	TUA EP	Z 11 37 22							
APR 13	12 25 36.0	59.4N 143.9W	40KM	4.9					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL EL	NE 13 09 00							2 20
	EL	ZNE 14 00							
	ROX EL	N 13 18 00							1 20
APR 13	14 05 00.0	57.6N 151.2W	25KM	5.5					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP E	Z 14 19 24.5							
	WEL E(L)	ZE 15 03 00							
APR 13	16 14 06.3	56.6N 152.1W	33KM	5.1					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL EL	Z 17 03 00							
APR 13	21 25 33.0	57.5N 153.9W	30KM	5.5					
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	WEL EL	Z 22 14 00							

	H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 13	21 43 16.5	59.4N 143.1W	33KM	5.1	DIR	AZ	TZ	AN TN	AE TE MAG
	WEL EL	Z 22 36 00							
APR 14	01 04 28.8	49.4N 155.5E	60KM	5.2	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP EP	Z 01 17 17							
	WEL EL	Z 01 48 00		0 24					
APR 14	02 28 25.2	15.8S 177.0W	362KM	4.1	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP EP	Z 02 32 59							
	MNH P	Z 02 34 23		U					
APR 14	05 01 59.1	41.0S 80.0E	33KM		DIR	AZ	TZ	AN TN	AE TE MAG
	ROX EL	NE 05 28 00							
	WEL EL	Z 05 33 00		0 20					
APR 14	08 58 41.9	17.5S 167.9E	33KM	4.6	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP EP	Z 09 03 28							
	TUA EP	Z 09 03 43							
	GNZ EP	Z 09 03 45							
	WEL EP?	Z 09 03 55							
	E	Z 04 02							
	E	E 08 16							
	EL	ZNE 09 00		6 15				8 15	9 19
	ROX E(S)	E 09 09 13							
	ESS	N 10 30							
	EL	E 11 00						5 22	5 23
	EL	ZN 13 00							
APR 14	KRP EP	Z 09 22 28							
APR 14	KRP EP	Z 09 25 01.5							
	GNZ EP?	Z 09 25 19							
	TUA E(P)	Z 09 25 20							
	WEL E(P)	Z 09 25 34							
APR 14	WEL EP?	Z 16 27 42							
APR 14	16 18 54.0	8.6S 117.3E	58KM	5.3	DIR	AZ	TZ	AN TN	AE TE MAG
	MNH P	Z 16 28 34							
	ROX EP	Z 16 28 40							
	E	Z 29 02							
	E	Z 30							
	TNZ EP	Z 16 28 53							
	WEL EP	Z 16 28 55							
	EL	Z 45 00		0 22					
	KRP EP	Z 16 28 56							
	TUA EP	Z 16 29 05							
APR 14	22 46 25.3	19.8S 176.7W	235KM	4.3	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP EP	Z 22 50 30							
	TUA E(S)	Z 22 53 59							
	TNZ EP	Z 22 50 48							

	H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
APR 14	22 55 31.3	58.0N 152.6W	30KM	5.4	DIR	AZ	TZ	AN TN	AE TE MAG
	WEL E(SSS)	Z 23 34 00							
	E(L)	Z 40 00					2 22		
	EL	Z 43 00							
	ROX EL	E 23 40 00						1 21	
	E(L)	NE 50 00							
APR 15	00 58 14.6	17.8S 178.3W	450KM	4.0	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP E(P)	Z 01 02 30							
	TUA E	Z 01 03 29							
	WEL E?	Z 01 08 16							
	E(L)	Z 12 00		0 18					
APR 15	15 30 47.1	56.5N 154.4W	35KM	5.5	DIR	AZ	TZ	AN TN	AE TE MAG
	WEL E(SKS)	Z 15 55 12							
	ESP	Z 57 36							
	ESS	Z 16 03 00							
	ESSS	Z 07 00							
	E?	Z 15 00							
	EL	ZNE 18 00							
	ROX ESKS	N 15 55 54						7 21	8 20
	E(S)	E 57 06							
	ESP	N 58 42							
	ESS	E 16 04 00							
	ESSS	E 09 00							
	EL	NE 16 00						2 21	3 21
APR 15	16 35 57.5	21.7N 88.0E	36KM	5.5	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP EP	Z 16 49 46							
	WEL E(L)	Z 17 29 00							
	ROX MAX	N 17 53 00						1 19	
APR 15	KRP EP	Z 18 00 31							
APR 15	21 35 18.2	19.7S 175.6W	172KM	4.2	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP EP	Z 21 39 37							
	E	Z 46							
APR 16	01 04 34.5	37.0N 142.7E	38KM	5.1	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP E(P)	Z 01 16 45							
	WEL ESP	Z 01 28 00							
	ESS	Z 32 00							
	EL	Z 43 00							
	ROX MAX	E 01 58 00						1 23	
									1 19
APR 16	02 35 48.9	21.5S 170.5E	110KM	4.6	DIR	AZ	TZ	AN TN	AE TE MAG
	KRP EP	Z 02 39 41							
	GNZ P	Z 02 39 55							
	TUA EP	Z 02 39 56							
	WEL EP	Z 02 40 14							
	E(L)	Z 43 54							
	ROX EP	Z 02 40 54						2 19	
	E(*PP)	Z 41 20							

EL	E	45 00					2 20
APR 16	WEL E(L)	Z 07 10 00					
	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
APR 16	11 45 36.9	23.8S 180.0E	530KM	4.5	WEL 101		
	H M S	H M S	DIR	AZ TZ	AN TN	AE TE MAG	
	GNZ EP	Z 11 48 45					
	E	Z 47					
	E(S)	Z 51 19					
	KRP EP	Z 11 48 46					
	TUA E(P)	Z 11 48 50					
	E	Z 51 55					
	TNZ E(P)	Z 11 49 03					
	WEL ES	ZNE 11 52 13					
	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
APR 16	13 43 08.9	52.1N 169.4W	33KM	4.9	WEL 101		
	H M S	H M S	DIR	AZ TZ	AN TN	AE TE MAG	
	KRP EP	Z 13 56 09					
	E	Z 13					
	WEL MAX	Z 14 38 00		1 18	1 18		
	MAX	N 39 00					
	ROX MAX	N 14 39 00			1 18		
	MAX	N 45 00					
	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
APR 16	14 05 14.9	7.0S 155.7E	78KM	5.4	WEL 101		
	H M S	H M S	DIR	AZ TZ	AN TN	AE TE MAG	
	KRP P	Z 14 12 08					
	E*PP	Z 20					
	E(PCP)	Z 14 35					
	E(*PPCP)	Z 46					
	GNZ P	Z 14 12 21					
	E*PP	Z 34					
	WEL EP	Z 14 12 28					
	E(*PP)	Z 42					
	E	Z 17 04					
	EL	ZN 18 30					
	EL	Z 23 00					
	MNW EP	Z 14 12 43					
	E	Z 13 05					
	ROX E(P)	Z 14 12 46					
	E	Z 15 01					
	EL	NE 22 00			2 21	2 20	
APR 16	WEL EL	Z 16 07 00					
	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
APR 16	19 26 57.4	56.4N 152.9W	30KM	5.5	WEL 101		
	H M S	H M S	DIR	AZ TZ	AN TN	AE TE MAG	
	WEL EP	Z 19 40 48					
	EPP	Z 45 00					
	ESKS	ZN 51 18					
	ES	E 52 30					
	ESP	ZN 54 00					
	ESS	N 59 00					
	EL	NE 20 09 00		11 24	5 23	5 24	
	EL	ZNE 15 00					
	ROX ESKS	N 19 51 50					
	E(S)	E 53 12				6 20	
	ESP	N 54 48			3 18		
	ESS	NE 20 00 30					
	ESSS	E 04 00					
	EL	NE 11 00			8 20	6 20	

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
APR 16 20 12 36.8	56.6N 152.8W	33KM	5.0	WEL 101				
	H M S	DIR	AZ TZ	AN TN	AE TE	MAG		
	WEL MAX	Z 21 49 00			5 20			
	ROX MAX	E 21 48 00			4 20	2 20		
	MAX	N 50 00			2 19	1 19		
	H M S <th>EPICENTRE</th> <th>DEPTH</th> <th>MAG</th> <th colspan="4">DIST (DEG)</th>	EPICENTRE	DEPTH	MAG	DIST (DEG)			
APR 17 02 58 27.0	36.7N 140.5E	68KM	4.9	WEL 84				
	H M S	DIR	AZ TZ	AN TN	AE TE	MAG		
	KRP E	Z 03 11 02						
	H M S <th>EPICENTRE</th> <th>DEPTH</th> <th>MAG</th> <th colspan="4">DIST (DEG)</th>	EPICENTRE	DEPTH	MAG	DIST (DEG)			
APR 17 04 49 30.5	56.4N 152.9W	25KM	5.3	WEL 101				
	H M S	DIR	AZ TZ	AN TN	AE TE	MAG		
	WEL ESKS	Z 05 14 00						
	ESP	Z 16 30						
	ESS	Z 22 00						
	E(L)	Z 36 00			3 21			
	EL	Z 37 00						
	ROX E(S)	E 05 16 00						
	ESP	N 17 30						
	ESS	N 23 00						
	ESSS	E 27 00						
	EL	E 34 30			3 20	1 20		
	EL	NE 41 00						
	EL	NE 44 30						
	H M S <th>EPICENTRE</th> <th>DEPTH</th> <th>MAG</th> <th colspan="4">DIST (DEG)</th>	EPICENTRE	DEPTH	MAG	DIST (DEG)			
APR 17 06 00 00.2	6.6S 154.9E	85KM	5.4	WEL 39				
	H M S	DIR	AZ TZ	AN TN	AE TE	MAG		
	KRP IP	Z 06 06 58						
	EPCP	Z 09 21						
	E	Z 33						
	E?	Z 11 37						
	E	Z 13 05						
	TNZ EP	Z 06 07 03						
	E(PCP)	Z 09 20						
	E	Z 35						
	TUA EP	Z 06 07 10						
	E(PCP)	Z 09 24						
	E	Z 36						
	E	Z 13 06						
	GNZ P	Z 06 07 11.5 U						
	E(*PP)	Z 26						
	E(S)	Z 13 02						
	WEL EP	Z 06 07 18						
	E(SS)	ZNE 16 12						
	EL	Z 18 00			8 24			
	ROX E(L)	NE 06 17 00			8 20	6 21		
	EL	NE 20 00						
	MNW P	Z 06 07 31.5 U						
	H M S <th>EPICENTRE</th> <th>DEPTH</th> <th>MAG</th> <th colspan="4">DIST (DEG)</th>	EPICENTRE	DEPTH	MAG	DIST (DEG)			
APR 17 09 09 07.8	57.7N 151.4W	20KM	5.4	WEL 103				
	H M S	DIR	AZ TZ	AN TN	AE TE	MAG		
	WEL EL	Z 09 58 00						
	ROX E(L)	NE 10 06 00						
	H M S <th>EPICENTRE</th> <th>DEPTH</th> <th>MAG</th> <th colspan="4">DIST (DEG)</th>	EPICENTRE	DEPTH	MAG	DIST (DEG)			
APR 17 14 44 20.8	16.2S 167.7E	65KM	4.2	WEL 26				
	H M S	DIR	AZ TZ	AN TN	AE TE	MAG		
	KRP EP	Z 14 49 22						
	TUA E(P)	Z 14 49 33						

		GNZ E(P)	Z	14 49 35								
		WEL EL	Z	14 56 30								
		ROX EL	E	14 57 30								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 18	05 27 44.6		45.5N	151.1E	33KM	5.3			WEL 81			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		KRP E	Z	05 40 24								
		E	Z	05 44								
		WEL ESP	Z	05 52 18								
		EL	Z	06 09 00			2	18	1	18		
		ROX EL	NE	06 15 00								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 18	05 55 40.5		45.4N	151.5E	33KM	4.9			WEL 81			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		WEL MAX	Z	06 52 00								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 18	07 47 03.3		57.4N	149.8W	30KM	5.1			WEL 111			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		WEL EL	Z	08 37 00								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 18	17 56 16.2		15.0S	174.3W	90KM	4.2			WEL 78			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		KRP EP	Z	18 01 29								
		MNW EP	Z	18 02 54								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 18	20 08 17.7		56.1N	153.7W	15KM	4.9			WEL 111			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		WEL EL	Z	20 55 00								
		ROX ESS	E	20 42 42								
		E(L)	N	21 11 00			1	20				
		WEL EL	Z	22 22 00								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 19	03 44 55.2		55.1S	128.5W	33KM	4.5			WEL 81			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		KRP EP	Z	03 52 29								
		WEL ES	Z	03 58 06			1	35				
		EL	NE	04 01 00								
		EL	Z	03 00								
		ROX ES	E	03 58 30			1	21	54			
		E	NE	04 01 30								
		E	E	03 00								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 19	03 56 13.7		15.4S	173.7W	51KM	4.2			WEL 81			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		GNZ EP	Z	04 01 28								
		KRP P	Z	04 01 29								
		TUA EP	Z	04 01 32								
		TNZ EP	Z	04 01 45								
		WEL E(P)	Z	04 02 00								
		EL	Z	10 00								
		ROX EL	E	04 12 00								
		MNW EP	Z	04 02 54								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 19	05 13 01.6		41.7S	83.9W	33KM	5.5			WEL 81			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		KRP EP	Z	05 24 26								
		E	Z	05 38								
		E	Z	05 59								
		WEL E(S)	ZNE	05 33 34								

		EL	Z	04 01 00								
		MNW P	Z	03 41 42								
		KAI EP	X	03 41 45								
		E(S)	X	48 47								
		E	X	58								
		ROX EP	ZNE	03 41 48	DNW	10	4					
		E	Z	42 08								
		ES	NE	49 00			8	10	9	10	6.6	
		ESS	ZNE	53 00			25	20	43	21		
		EL	NE	55 00			179	20	70	19	211	20
		GPZ EP?	N	03 41 50								
		E	N	52								
		E(S)	N	49 09								
		WEL IP	Z	03 41 50	D							
		E(S)	ZNE	48 54								
		ESS	ZNE	53 00								
		EL	ZNE	55 00			> 60	23	105	20	174	17
		TUA EP	Z	03 41 52.5	U							
		GNZ EP	Z	03 41 56								
		E	Z	42 17								
		E	Z	45 48								
		E	Z	49 40								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 23	07 03 21.6		60.8S	19.8W	33KM	5.4			WEL 78			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		KRP EP	Z	07 15 32								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 23	10 32 47.9		6.6S	155.1E	60KM	5.3			WEL 39			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		KRP P	Z	10 39 46								
		EPCP	Z	42 11								
		E(*PPCP)	Z	21								
		E(SCP)	Z	45 55								
		TNZ EP	Z	10 39 51								
		CNZ P	Z	10 39 56	U							
		E	Z	40 00								
		TUA EP	Z	10 39 59								
		EPCP	Z	42 13								
		GNZ E(P)	Z	10 40 01								
		WEL EL	Z	10 51 00								
		ROX EL	N	10 54 00								
		KRP EP	Z	13 23 01								
		KRP EPKP	Z	14 43 23								
		E	Z	47								
		E	Z	59								
		E	Z	44 26								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 23	14 23 43.2		36.9N	37.9E	57KM	4.8			WEL 146			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		KRP EPKP	Z	14 43 23								
		E	Z	44 48								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 23	21 08 42.0		52.7N	160.9E	33KM	4.8			WEL 94			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		WEL EL	Z	21 55 00								
		H M S	EPICENTRE		DEPTH	MAG			DIST (DEG)			
APR 24	00 42 33.9		52.7N	160.9E	33KM	4.9			WEL 94			
		H M S			DIR	AZ TZ	AN	TN	AE	TE	MA	
		KRP E(P)	Z	00 55 57								
		TNZ E?	Z	01 12 38								

DATE	H M S	EPICENTRE			DEPTH	MAG	DIST				
		H M S	DIR	AZ TZ			AN TN	AE TE	WEL		
APR 22	19 37 53.2	16.1S	173.4W	33KM	5.0						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	KRP EP	Z	19 43 02								
	GNZ E(P)	Z	19 43 04								
	TNZ EP?	Z	19 43 19								
	E	Z	19 43 25								
	WEL EL	ZE	19 51 00								
APR 22	20 00 22.8	15.5S	167.5E	123KM	5.0						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	KRP IP	Z	20 05 23	U							
	E(+PP)	Z	49								
	EPCS	Z	12 34								
	TNZ P	Z	20 05 32	U							
	TUA EP	Z	20 05 33	U							
	E	Z	34								
	ES	Z	09 50								
	GNZ EP	Z	20 05 34								
	E(S)	Z	09 48								
	WEL EP	Z	20 05 49								
	ES	E	10 16								
	E(SS)	Z	11 00								
	ROX EP	Z	20 06 20	U							
	E?	Z	09 20								
	E(SS)	E	14 00								
	MAX	E	15 00								
	MNW EP	Z	20 06 22.5								
APR 22	23 04 13.8	13.2S	167.1E	218KM	4.0						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	KRP P	Z	23 07 25	U							
	TUA EP	Z	23 09 35								
	GNZ EP	Z	23 09 38								
	WEL EP?	Z	23 09 50								
	ROX EP	Z	23 10 23								
APR 23	01 31 40.3	6.7S	155.0E	72KM	5.0						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	KRP P	Z	01 38 37.5	U							
	EPCP	Z	41 02								
	E(+PPCP)	Z	11								
	TUA EP	Z	01 38 50								
	E	Z	40 59								
	E(PCP)	Z	41 05								
	GNZ EP	Z	01 38 51								
	WEL EL	Z	01 50 00								
	ROX EL	N	01 54 00								
	MNW E(P)	Z	01 39 11								
APR 23	01 51 10.6	32.1N	138.7E	33KM	4.8						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	KRP EP	Z	02 03 07								
APR 23	03 32 50.3	5.3S	134.0E	33KM	6.4						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	COB EP	E	03 41 41.5								
	ES	E	48 50								
	EL	E	58 00								
	TNZ EP	Z	03 41 42								
	KRP P	Z	03 41 42	D							
	E	Z	42 00								

DATE	H M S	EPICENTRE			DEPTH	MAG	DIST (DEG)				
		H M S	DIR	AZ TZ			AN TN	AE TE	WEL		
APR 24	19 50 22.3	51.7N	176.9W	50KM	4.6						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	WEL E(L)	Z	20 40 00								
APR 25	03 48 35.8	37.3S	94.5W	33KM							
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	WEL E?	Z	04 10 36								
	EL	Z	19 00						1	20	
APR 25	KRP EP	Z	05 41 27								
APR 25	05 36 42.2	6.7S	155.0E	72KM	5.1						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	KRP EP	Z	05 43 39								
	E(PCP)	Z	46 03								
	E	Z	14								
	E(PCP)	Z	49 47								
	WEL EL	Z	05 55 00								
	ROX EL	N	05 58 00								
APR 25	KRP EP	Z	06 35 25								
	E	Z	28								
	TNZ E	Z	06 35 47								
	WEL EL	Z	06 43 00								
APR 25	KRP EP	Z	07 22 49								
APR 25	18 37 58.1	24.4N	125.3E	33KM	5.3						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	KRP EP?	Z	18 49 55								
	E	Z	50 02								
	E	Z	26								
	ONE E(P)	E	18 49 59								
	GNZ EP	Z	18 50 03								
	WEL L	Z	19 19 00								
	ROX EP?	Z	19 50 04								
	E	Z	06								
	MNW E(P)	Z	19 50 03								
APR 25	KRP EP	Z	23 31 08								
APR 26	13 59 27.7	5.8S	105.0E	90KM	5.6						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	ROX E(P)	Z	14 10 18								
	KRP EP	Z	14 10 38								
	GNZ EP	Z	14 10 49								
	WEL EL	Z	14 33 00								
APR 26	14 52 07.6	20.6S	178.0W	490KM	5.1						
		H M S		DIR	AZ TZ	AN TN	AE TE	WEL			
	KRP EP	Z	14 55 48								
	E	Z	50								
	E(S)	Z	59 09								
	GNZ EP	Z	14 55 51								
	E	Z	58 58								
	E(S)	Z	59 03								
	ESCS	Z	15 06 29								
	TUA EP	Z	14 55 52								
	E	Z	58 58								
	E(S)	Z	59 08								
	ESCS	Z	15 06 26								

		Z		EPICENTRE		DEPTH		MAG		DIST (DEG)	
TNZ	EP	Z	14 56 05								
	E?	Z	15 06 03								
WEL	EP	Z	14 56 25								
	ES	ZNE	59 42								
ROX	EP	Z	14 57 10								
MNW	EP	Z	14 57 18								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 26	22 17 02.2	28.1S	178.2W	37KM	4.1						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	EP	Z	22 19 53								
WEL	EL	Z	22 24 00								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 26	22 34 48.6	60.4S	24.6W	33KM	4.8						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	EP	Z	22 46 58								
WEL	EL	Z	23 14 00								
ROX	EL	NE	23 27 00								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 26	KRP EP	Z	23 36 44								
	E	Z	50								
	WEL EL	Z	23 41 00								
	ROX EL	NE	23 44 00								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 27	01 37 12.1	0.3S	98.1E	33KM	5.3						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	EP?	Z	01 49 18								
	E	Z	23								
	E	Z	32								
WEL	EL	Z	02 18 00								
ROX	EL	E	02 22 00								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 27	06 44 25.1	60.1S	151.0E	33KM	5.0						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
ROX	E	Z	06 48 00.5								
	EP	ZNE	39	N	14 7	14	9	6	9	6.3	
	ES	NE	52 03							64 20	6.3
	EL	ZN	53 00			129	16	123	17		
MNW	EP	Z	06 48 28								
	E	Z	39								
KRP	E	Z	06 49 03								
	E	Z	19								
	EP?	Z	59								
	EL	Z	58 00								
WEL	IP	ZNE	06 49 39	UNE	9 8	3	8	3	8	6.1	
	E	ZNE	50								
	ES	NE	54 00								
	E(SS)	ZE	48								
	EL	ZN	55 30			> 60	20	171	20	63	20
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 27	14 36 18.2	19.8S	170.1E	274KM							
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	EP?	Z	14 42 07								
	E	Z	09								
	E	Z	10								
	E	Z	12								
TUA	EP	Z	14 42 11.5								
GNZ	EP	Z	14 42 16								
	E	Z	42								

		H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)	
APR 28	14 55 25.5	11.9S	166.2E	42KM	4.2						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	EP?	Z	15 01 10								
	E	Z	30								
WEL	E?	Z	15 01 44								
	E?	Z	09 30								
	EL	Z	12 00			1	18				
GPZ	E	N	15 01 57								
ROX	EP	Z	15 02 03								
	MAX	E	14 00							1	18
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 28	15 11 30.4	12.3S	166.1E	72KM							
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
ROX	EP?	Z	15 18 02								
	E	Z	07								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 28	19 33 33.5	16.6S	70.0W	116KM	4.2						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
WEL	E(L)	Z	20 41 00								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 29	07 21 30.2	7.2S	155.7E	78KM	5.2						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	E(P)	Z	07 28 22								
GNZ	E(P)	Z	07 28 37								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 29	17 37 43.1	58.2S	15.7W	33KM	5.6						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	EP?	Z	17 50 04								
	E	Z	09								
	E	Z	19								
APR 29	GNZ EP	Z	18 58 22.5								
	E	Z	36								
	E	Z	45								
KRP	EP	Z	18 58 29								
	E	Z	59 11								
TUA	E(P)	Z	18 58 31								
WEL	E(L)	Z	19 02 18								
APR 29	GNZ EP	Z	19 10 13								
	E	Z	33								
KRP	EP	Z	19 10 19								
TUA	EP	Z	19 10 19								
	E	Z	27								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 30	03 41 42.3	15.5S	174.7W	224KM	4.2						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	P	Z	03 46 39								
GNZ	EP	Z	03 46 39								
MNW	EP	Z	03 48 04								
H M S		EPICENTRE		DEPTH		MAG		DIST (DEG)			
APR 30	04 49 48.0	19.7S	177.8W	339KM	4.0						
		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG	
KRP	EP	Z	04 53 48								
GNZ	EP	Z	04 53 51								
	ES	Z	57 05								

	H	M	S	EPICENTRE	DEPTH	MAG				DIST (DEG)
				H M S	KM		DIR	AZ	TZ	AN TN AE TE
APR 30	08	06	23.5	56.2S 27.6W	88KM	4.9				
	KRP	EP?	Z	08 18 42						
		E	Z	45						
APR 30	16	03	31.4	4.6S 153.2E	78KM	5.2				
	KRP	EP	Z	16 10 54						
		E(*PP)	Z	11 06						
		E(PCP)	Z	13 19						
		E(SCP)	Z	16 47						
		E(PCS)	Z	17 10						
	TUA	EP	Z	16 11 03						
		E	Z	24						
	GNZ	EP	Z	16 11 06						
		E	Z	27						
	WEL	E(S)	Z	16 17 12						
		ESS	Z	20 00				16	24	
		EL	Z	23 00						
		E	Z	17 11 11						
		E	Z	26						
	MNW	EP?	Z	16 11 23						
		E	Z	25						
		E	Z	41						
	ROX	EP	Z	16 11 32						
		E	Z	49						
		ES	N	17 46						
		ESS	NE	21 00						
		EL	NE	24 00					17	30 10 32
APR 30	21	37	04.3	12.5S 165.1E	33KM	4.0				
	WEL	EL	Z	21 54 00						
MAY 01	06	01	55.4	60.5N 145.6W	20KM	5.4				
	WEL	ELR	Z	06 52 00						
MAY 01	16	06	12.0	14.3S 167.1E	95KM					
	KRP	EP	Z	16 11 24						
MAY 01	23	47	35.3	32.3S 179.5W	33KM	4.8				
	GNZ	EP	Z	23 49 09						
	KRP	EP	Z	23 49 17						
	WEL	ES	NE	23 51 46				5	16	7 20 3 14
		LR	ZNE	53 12						
	ROX	ELQ	NE	23 56 42						
		LR	ZNE	57 00						
MAY 02	10	56	00.2	14.9S 167.3E	108KM	4.0				
	KRP	P	Z	11 01 08						
	GNZ	EP	Z	11 01 21						
MAY 02	WEL	EL	Z	12 03 00						

	H	M	S	EPICENTRE	DEPTH	MAG				DIST (DEG)
				H M S	KM		DIR	AZ	TZ	AN TN AE TE
MAY 02	16	11	00.2	45.5N 150.3E	35KM	5.7				
	KRP	EP	Z	16 23 38						
	WEL	P	Z	16 23 52						
		EPP	Z	27 36				2	20	
		SKS	ZNE	34 16				4	20	9 20 7 12
		PS	ZNE	35 50				8	18	7 26 3 30
		SS	ZN	40 33				9	28	10 24
		LQ	E	48 00						13 44
		ELR	ZNE	51 30				17	24	8 24 8 24
	ROX	SKS	NE	16 34 40				4	14	2 15
		IS	ZNE	35 16						12 15 9 12 6.9
		ELQ	E	50 00						10 30
		LR	ZNE	57 00				12	21	13 22 12 22
MAY 02	16	33	47.9	27.3S 178.9W	369KM	4.5				
	GNZ	EP	Z	16 36 22						
		ES	Z	38 26						
	KRP	P	Z	16 36 27.0						
	WEL	S	ZNE	16 39 38						
MAY 02	KRP	EP	Z	23 31 55						
		E	Z	32 46						
		I	Z	33 09						
MAY 03	WEL	EL	Z	13 50 00						
MAY 04	WEL	EL	Z	04 30 00						
MAY 04	WEL	EL	Z	12 27 00						
MAY 04	KRP	P	Z	15 44 13						
		E	Z	42						
MAY 04	17	05	19.8	55.8S 4.4W	33KM	5.4				
	KRP	EP	Z	17 18 02						
	ROX	ELQ	E	17 38 00						
	WEL	ELR	Z	17 45 00						
MAY 04	ROX	ELQ	ZNE	20 56 00						
	WEL	ELR	Z	20 57 00						
MAY 04	ROX	ELQ	NE	21 28 00						
	WEL	ELR	Z	21 29 36						
MAY 04	KRP	E	Z	21 52 08						
	GNZ	E	Z	21 52 08						
		E	Z	15						
	TUA	E	Z	21 51 51						
	TNZ	E	Z	21 51 59						
	WEL	ES	NE	21 52 00						
MAY 04	TUA	E	Z	22 18 11						
	TNZ	E	Z	22 18 21						
		I	Z	27						
	GNZ	E	Z	22 18 23						
		E	Z	45						
	KRP	E	Z	22 18 26						
		E	Z	36						
	WEL	S	ZNE	22 18 25						
	COB	ES	E	22 19 02						
	GPZ	ES	N	22 19 26						

MAY 04		WEL ELR	Z	23 12 44									
MAY 05		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)			
		08 44 59.1	9.0S	156.6E	33KM	5.1				WEL 88			
		KRP P	Z	08 51 37	DIR	AZ TZ	AN	TN	AE	TE	MAG		
		WEL ELR	Z	09 02 00									
		ROX ELR	ZNE	09 04 00									
MAY 05		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)			
		11 12 52.4	55.8S	4.3W	33KM					WEL 81			
		WEL ELR	Z	11 53 00	DIR	AZ TZ	AN	TN	AE	TE	MAG		
MAY 05		WEL EL	Z	16 32 00									
MAY 06		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)			
		04 27 02.4	60.7S	25.2W	33KM					WEL 77			
		WEL ELR	Z	05 07 00	DIR	AZ TZ	AN	TN	AE	TE	MAG		
MAY 06		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)			
		08 10 47.5	11.1S	162.2E	40KM	5.1				WEL 32			
		WEL P	Z	08 17 12	DIR	AZ TZ	AN	TN	AE	TE	MAG		
		EPP S	ZN	18 22									
		LQ	NE	22 20									
		LR	ZN	24 24									
		ROX S	NE	26 04									
		ELQ	E	26 02									
		MAX	ZNE	32 00									
MAY 06		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)			
		15 26 35.5	56.7N	152.1W	15KM	5.4				WEL 113			
		WEL ELR	Z	16 13 00	DIR	AZ TZ	AN	TN	AE	TE	MAG		
MAY 07		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)			
		00 34 57.2	18.2S	176.6W	300KM	5.4				WEL 24			
		KRP P	Z	00 39 16	DIR	AZ TZ	AN	TN	AE	TE	MAG		
		GNZ P	Z	00 39 18									
		ES	Z	42 55									
		MNW P	Z	00 40 42									
MAY 07		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)			
		04 02 28.7	51.6N	177.3W	25KM	5.0				WEL 13			
		WEL ELR	Z	04 49 00	DIR	AZ TZ	AN	TN	AE	TE	MAG		
MAY 07		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)			
		05 45 29.5	4.0S	34.9E	33KM	6.4				WEL 173			
		ROX PS	ZNE	06 15 05	DIR	AZ TZ	AN	TN	AE	TE	MAG		
		LQ	NE	40 00									
		MAX	ZNE	43 00									
		WEL PKP	Z	06 04 23									
		PP	Z	05 50									
		ESKS	ZNE	11 20									
		PS	ZNE	15 50									
		SS	Z	22 00									
		ESSS	ZE	26 38									
		LQ	NE	36 00									
		LR	ZNE	42 00									
		KRP EPKP	Z	06 04 28									
		GNZ	Z	06 04 31									

MAY 07		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)				
		07 58 14.3	40.4N	139.0E	33KM	6.2				WEL 88				
		KRP P	Z	08 10 48.0	DIR	AZ TZ	AN	TN	AE	TE	MAG			
		I	Z	08 10 55										
		GNZ EP	Z	08 10 53										
		GNZ E(P)	Z	08 10 54										
		WEL IP	ZNE	08 11 00	U	13 9								
		PP	Z	14 26										
		SKS	ZE	21 27										
		S	ZNE	42										
		PS	ZNE	22 36										
		IPPS	ZN	23 16										
		SS	ZNE	27 44										
		SSS	ZNE	30 44										
		LQ	NE	35 00										
		LR	ZN	38 30	>	67 34	77	38						
		MNW EP	Z	08 11 09										
		ROX EP	ZNE	08 11 11										
		S	NE	22 06										
		PS	NE	23 11										
		ESS	NE	28 00										
		ELQ	ZNE	35 00										
MAY 07		KRP P	Z	08 33 46										
		MNW P	Z	08 34 08										
MAY 07		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)				
		11 11 04.9	30.6N	137.7E	469KM	5.1				WEL 79				
		KRP P	Z	11 22 09	DIR	AZ TZ	AN	TN	AE	TE	MAG			
MAY 07		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)				
		20 12 49.3	40.5N	139.0E	33KM	5.9				WEL 88				
		KRP P	Z	20 25 24	DIR	AZ TZ	AN	TN	AE	TE	MAG			
		WEL P	Z	20 25 36										
		S	ZNE	36 23										
		PS	Z	37 18										
		I	Z	56										
		ESS	ZN	42 00										
		LQ	NE	49 00										
		LR	ZN	53 30										
		MNW EP	Z	20 25 48										
		ROX EP	Z	20 25 48										
		ESKS	N	36 15										
		S	NE	50										
		PS	NE	37 46										
		ELQ	NE	54 00										
MAY 07		H M S	EPICENTRE		DEPTH	MAG				DIST (DEG)				
		23 12 21.3	32.9S	178.3W	33KM	4.4				WEL 10				
		GNZ EP	Z	23 13 55	DIR	AZ TZ	AN	TN	AE	TE	MAG			
		I	Z	14 05										
		S	Z	15 08										
		KRP EP	Z	23 14 04										
		E	Z	14										
		ONE EP	E	23 14 06										
		S	E	14										
		WEL S	ZNE	23 16 27										
		LR	ZNE	18 00										
		ROX ELQ	NE	23 20 00										
MAY 08		KRP EP	Z	02 49 21										
		WEL S	NE	02 51 32										
		ELR	Z	53 00										

		EPICENTRE		DEPTH	MAG	DIST (DEG)			
		H M S	H M S	KM		WEL	AE	TE	MAG
MAY 13	GNZ EP	Z	08 29 45						
	ES	Z	31 02						
	ONE EP	E	08 30 02						
	KRP EP	Z	08 30 08						
	E	Z	20						
MAY 13	ONE EP	E	09 52 29						
	GNZ EP	Z	09 52 14						
	ES	Z	53 30						
	KRP EP	Z	09 52 19						
MAY 13	H M S	EPICENTRE		DEPTH	MAG	DIST (DEG)			
	11 06 16.4	21.8S	179.6W	578KM	4.6	WEL	AE	TE	MAG
	KRP EP	Z	11 09 41						
MAY 13	GPZ EP	N	11 27 54						
	E	N	28 35						
	S	N	29 12						
	KRP EP	Z	11 28 06						
	E	Z	16						
	ONE EP	E	11 28 07						
	WEL S	NE	11 30 26						
	ELR	Z	32 00		2 20				
MAY 13	GNZ EP	Z	15 19 52						
	E	Z	21 10						
	ONE EP	E	15 20 01						
	KRP EP	Z	15 20 05						
	E	Z	17						
	WEL S	NE	15 22 26						
MAY 13	GNZ EP	Z	16 52 03						
	E	Z	14						
	ES	Z	53 18						
	ONE EP	E	16 52 10						
	E	E	17						
	KRP EP	Z	16 52 14						
	E	Z	26						
	WEL S	ZNE	16 54 36						
MAY 13	ONE EP	E	16 54 29						
	KRP EP	Z	16 54 44						
	WEL S	NE	16 56 56						
MAY 13	H M S	EPICENTRE		DEPTH	MAG	DIST (DEG)			
	16 42 48.3	32.7S	178.6W	33KM	5.1	WEL	AE	TE	MAG
	GNZ EP	Z	16 44 22						
	I	Z	31						
	E	Z	45 39						
	KRP P	Z	16 44 29						
	CNZ P	Z	16 44 32						
	I	Z	44						
	WEL S	ZNE	16 46 53						
	LR	Z	48 00		15 20				
	MNW EP	Z	16 46 43						
	ROX LQ	NE	16 51 00						
MAY 13	GNZ EP	Z	17 34 39						
	E	Z	45						
	ES	Z	35 55						
	ONE EP	E	17 34 52						
	KRP EP	Z	17 34 55						
	E	Z	35 06						
	WEL S	ZNE	17 37 13						

		EPICENTRE		DEPTH	MAG	DIST (DEG)			
		H M S	H M S	KM		WEL	AE	TE	MAG
MAY 13	20 37 53.8	32.4S	178.3W	70KM	4.9				
	GNZ EP	Z	20 39 27						
	E	Z	31						
	E	Z	40 38						
	ONE EP	E	20 39 34						
	E	E	38						
	KRP EP	Z	20 39 37						
	E	Z	49						
	WEL S	ZNE	20 42 04						
	ELR	ZNE	43 43		20 16				
	ROX EP	Z	20 41 37						
	ELQ	NE	46 30						
	MNW EP	Z	20 41 48						
MAY 13	GNZ EP	Z	20 44 35						
	E	Z	45 48						
	WEL S	ZNE	20 47 07						
MAY 13	GNZ EP	Z	22 38 09						
	ONE E(P)	E	22 38 17						
	KRP EP	Z	22 38 20						
MAY 14	00 52 09.8	33.3S	178.3W	33KM	4.5				
	GNZ EP	Z	00 53 45						
	E	Z	55						
	KRP EP	Z	00 54 00						
	ONE EP	E	00 54 07						
	WEL ES	NE	00 56 18						
MAY 14	01 05 47.6	32.9S	178.8W	309KM	4.6				
	GNZ EP	Z	01 06 52						
	ES	Z	08 06						
	KRP EP	Z	01 06 58						
	E	Z	07 13						
	ONE EP	E	01 07 01						
	E	E	11						
	WEL S	ZNE	01 09 24						
	LR	ZNE	11 12		7 18				
MAY 14	02 30 32.2	4.5S	152.9E	32KM	4.9				
	KRP IP	Z	02 38 00.2						
	PCP	Z	40 08						
	GNZ P	Z	02 38 14						
	WEL P	Z	02 38 20						
	ELR	Z	51 00						
	MNW EP	Z	02 38 32						
MAY 14	GNZ EP	Z	06 09 17						
	E	Z	10 35						
MAY 14	GNZ EP	Z	12 25 37						
	E	Z	26 50						
	KRP EP	Z	12 25 48						
	E	Z	26 00						
	ONE EP	E	12 25 49						
	WEL ES	NE	12 28 09						

MAY	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
					WEL	AE	TE
MAY 14	13 23 29.0	32.5S 178.2W	29KM	4.4			
	GNZ EP	Z 13 25 07					
	E	Z 09					
	I	Z 36					
	S	Z 26 31					
	ONE EP	E 13 25 16					
	KRP EP	Z 13 25 18					
	E	Z 31					
	WEL S	ZNE 13 27 45					
	ELR	Z 29 00					
MAY 14	20 01 01.0	21.3S 179.3W	606KM	4.7			
	GNZ P	Z 20 04 22					
	ES	Z 07 18					
	KRP P	Z 20 04 30					
	MNW P	Z 20 05 54.5					
MAY 15	GNZ P	Z 07 24 07					
MAY 15	GNZ P	Z 10 17 19.8					
MAY 15	10 50 20.6	3.5S 149.1E	44KM	4.7			
	WEL ES	ZNE 11 05 04					
	LQ	E 10 00					
	LR	ZNE 11 16	14 20	13 18			
	ROX ES	NE 11 05 24					
	ELQ	NE 12 00			3 24		3 22
MAY 15	GNZ P	Z 19 11 11					
MAY 16	GNZ EP	Z 08 19 42					
	E	Z 54					
MAY 16	GNZ EP	Z 12 40 36					
	E	Z 48					
	KRP EP	Z 12 40 40					
	E	Z 41 00					
	WEL S	ZNE 12 43 11					
	ELR	Z 45 00			3 19		
MAY 16	16 07 46.2	32.8S 178.3W	33KM	5.4			
	GNZ EP	Z 16 09 18					
	E(S)	Z 10 29					
	ONE EP	E 16 09 28					
	E	E 33					
	E	E 51					
	KRP EP	Z 16 09 31					
	I	Z 45					
	CNZ EP	Z 16 09 50					
	E	Z 10 02					
	WEL EP	Z 16 10 09					
	E	NE 22					
	S	ZNE 11 51					
	LQ	NE 12 36			48 24		34 36
	LR	ZNE 13 24			82 22		96 22
	MNW EP	Z 16 11 40			> 60 20		
	ROX ES	NE 16 14 40					4 15
	LQ	NE 15 50					39 26
	LR	ZE 17 40					50 14

MAY	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
					WEL	AE	TE
MAY 16	WEL S	ZNE 16 14 55					
	MNW EP	Z 16 14 37					
MAY 16	WEL S	ZNE 16 16 04					
MAY 16	GNZ EP	Z 16 15 33					
	KRP EP	Z 16 15 47					
	WEL S	ZNE 16 18 05					
MAY 16	GNZ EP	Z 16 55 29					
	KRP EP	Z 16 55 38					
	E	Z 51					
	WEL S	ZNE 16 58 02					
MAY 17	GNZ EP	Z 01 14 01					
	S	Z 15 16					
	KRP EP	Z 01 14 12					
	E	Z 25					
	WEL S	ZNE 01 16 34					
	ELR	ZNE 18 00			6 19		6 18
	ROX ELQ	NE 01 21 00					4 18
MAY 17	11 15 03.7	19.5S 176.7W	266KM	4.3			
	KRP P	Z 11 19 16					
MAY 17	ONE EP	E 17 01 14					
	KRP P	Z 17 01 29					
	GNZ P	Z 17 01 31					
	ES	Z 03 59					
MAY 17	17 05 24.8	33.2S 178.4W	33KM	4.6			
	GNZ EP	Z 17 06 53					
	E	Z 07 10					
	ES	Z 08 07					
	ONE EP?	E 17 07 02					
	E	E 11					
	KRP EP	Z 17 07 05					
	I	Z 15					
	WEL S	ZNE 17 09 24					
	LR	ZNE 10 56			10 16		7 16
	MNW EP	Z 17 09 16					5 16
	ROX ELQ	NE 17 13 00					
MAY 17	18 25 55.6	33.3S 178.3W	59KM				
	GNZ EP	Z 18 27 22					
	ONE EP	E 18 27 30					
	KRP EP	Z 18 27 32					
	E	Z 42					
	WEL S	ZNE 18 29 50					
	MNW EP	Z 18 29 44					
MAY 17	GNZ EP	Z 23 08 07					
	ES	Z 09 28					
	KRP EP	Z 23 08 18					
	WEL S	ZNE 23 10 48					
MAY 18	GNZ P	Z 00 46 28					

MAY 29	H M S			EPICENTRE		DEPTH 120KM	MAG 5.7	DIST (DEG)					
	15	33	05.5	56.3S	28.0W			WEL	81	AE	TE	MAG	
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
	CNZ	P	Z	15	45	16							
	KRP	P	Z	15	45	22							
MAY 29	H M S			EPICENTRE		DEPTH 614KM	MAG 5.4	DIST (DEG)					
	18	35	02.3	26.2S	178.3E			WEL	15	AE	TE	MAG	
	ONE	P	E	18	37	26							
	KRP	IP	Z	18	37	41.3	U						
	GNZ	P	Z	18	37	44							
		S	Z		39	56							
	WEL	P	ZNE	18	38	12.8							
		S	ZNE		40	47							
	MNW	P	Z	18	39	08							
MAY 29	H M S			EPICENTRE		DEPTH 605KM	MAG 3.9	DIST (DEG)					
	18	42	19.3	26.2S	178.3E			WEL	15	AE	TE	MAG	
	ONE	P	E	18	44	45							
	KRP	P	Z	18	44	59							
	GNZ	P	Z	18	45	01							
		S	Z		47	12							
	WEL	EP	ZNE	18	45	30							
		S	ZNE		48	08							
	MNW	P	Z	18	46	25.5							
MAY 29	H M S			EPICENTRE		DEPTH 613KM	MAG 4.1	DIST (DEG)					
	19	01	57.0	26.1S	178.3E			WEL	15	AE	TE	MAG	
	ONE	EP	E	19	04	22							
	KRP	P	Z	19	04	36							
	GNZ	P	Z	19	04	40							
		S	Z		06	52							
	WEL	EP	ZNE	19	05	07							
		S	Z		07	43							
	MNW	P	Z	19	06	03							
MAY 29	H M S			EPICENTRE		DEPTH 33KM	MAG 5.1	DIST (DEG)					
	20	09	00.6	0.5S	134.7E			WEL	54	AE	TE	MAG	
	KRP	EP	Z	20	18	20							
	WEL	ELR	Z	20	39	00							
MAY 30	H M S			EPICENTRE		DEPTH 49KM	MAG 5.4	DIST (DEG)					
	14	30	45.3	36.2N	141.1E			WEL	81	AE	TE	MAG	
	KRP	EP	Z	14	42	53							
	WEL	EP	Z	14	43	09	1	12					
		S	ZNE		53	19			3	12			2
		PS	ZN		54	09			1	24			2
		ESS	ZNE		58	48			2	18			4
		ELQ	NE		15	05			5	40			6
		LR	ZN		09	31			7	32			6
	ROX	ES	NE		14	53							
		ELQ	E		15	06							
MAY 30	H M S			EPICENTRE		DEPTH 91KM	MAG 5.3	DIST (DEG)					
	17	23	17.3	9.3N	126.4E			WEL	67	AE	TE	MAG	
	KRP	EP	Z	17	33	54							

MAY 31	H M S			EPICENTRE		DEPTH 48KM	MAG 6.3	DIST (DEG)					
	00	40	36.4	43.5N	146.8E			WEL	88	AE	TE	MAG	
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP	EP	Z	00	53	09							
	EPP	Z			56	25							
	CNZ	P	Z	00	53	17							
	EPP	Z			56	39							
	GNZ	E(P)	Z	00	53	19							
	WEL	IP	ZNE	00	53	23.2	U		7	20		4	30
	PP	Z			56	51			5	24			6.5
	SKS	ZNE	01	03	43				18	26		50	28
	PS	ZNE	05	12					16	24		26	28
	ESS	ZNE	09	47					14	24		6	18
	LQ	NE	16	44					47	48		67	58
	LR	ZNE	21	10					> 60	22		51	24
	MNW	EP	Z	00	53	36							
	EPP	Z			57	14							
	ROX	EP	ZNE	00	53	38							
	SKS	ZNE	01	04	12							12	20
	S	ZNE			37				124	14		33	16
	SS	ZNE	10	09					6	12		15	20
	ELQ	E	18	30								10	16
	LR	ZNE	23	00					73	24		71	24
													68
MAY 31	H M S			EPICENTRE		DEPTH 73KM	MAG 5.0	DIST (DEG)					
	17	15	26.8	13.6S	172.1E			WEL	28	AE	TE	MAG	
	KRP	EP	Z	17	20	39							
	CNZ	P	Z	17	20	51							
	WEL	P	ZN	17	21	04							
		PP	Z			56							
		S	ZNE		25	48							
		LR	ZN		28	36							
	ROX	EP	Z	17	21	45							
		S	NE		27	00							
		ELQ	E		29	20							
		ELR	ZN		31	00							
MAY 31	H M S			EPICENTRE		DEPTH 111KM	MAG 4.6	DIST (DEG)					
	18	34	15.5	13.3S	171.8E			WEL	28	AE	TE	MAG	
	KRP	EP	Z	18	39	26							
		E	Z			53							
MAY 31	H M S			EPICENTRE		DEPTH 176KM	MAG 5.2	DIST (DEG)					
	06	05	07.6	14.6S	167.4E			WEL	27	AE	TE	MAG	
	KRP	EP	Z	06	10	10							
		E	Z			35							
	CNZ	EP	Z	06	10	21							
		E	Z			11							
	GNZ	EP	Z	06	10	30							

JUN 08	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	04 22 30.1	51.6N	175.9W	27KM	4.9			WEL 93			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP	EP	Z	04 35 38							
JUN 08	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	15 48 00.0	4.9S	151.3E	221KM	5.1			WEL 42			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP	EP	Z	15 55 13							
	CNZ	EP	Z	15 55 20							
	TUA	EP	Z	15 55 25							
	GNZ	E(P)	Z	15 55 27							
JUN 08	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	18 14 08	18 14 13	18 15 17	18 14 08	18 14 13			18 15 17			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	CNZ	E(P)	Z	18 14 08							
	KRP	EP	Z	18 14 13							
	WEL	E	Z	18 15 17							
		E(L)	Z	24 00							
JUN 08	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	22 53 21.7	17.7N	145.7E	163KM	5.4			WEL 65			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP	P	Z	23 03 27							
		E*PP	Z	57							
	CNZ	EP	Z	23 03 33							
	GNZ	EP	Z	23 03 36							
		E*PP	Z	04 03							
	WEL	EP	Z	23 03 42							
		E	ZE	07 26							
	MNW	EP	Z	23 03 52							
JUN 09	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	04 22 59.8	35.4S	105.9W	33KM	4.8			WEL 61			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	WEL	EL	Z	04 50 00							
JUN 09	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	12 39 44	12 39 47	12 39 55	12 39 44	12 39 47			12 39 55			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	GNZ	E(P)	Z	12 39 44							
		E	Z	47							
		E	Z	41 55							
		E	Z	42 00							
		E	Z	59							
	KRP	P	Z	12 39 46							
JUN 09	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	14 32 22	14 32 18	14 32 26	14 32 22	14 32 18			14 32 26			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	ONE	EP	E	14 32 22							
		E	E	33 18							
	GNZ	EP	Z	14 32 26							
		E	Z	36							
		E	Z	45							
		E	Z	33 03							
		E(S)	Z	31							
	KRP	P	Z	14 32 32		U					
	TUA	EP	Z	14 32 33							
		E	Z	42							
	CNZ	EP	Z	14 32 48							
	TNZ	EP	Z	14 32 56							
	WEL	E(S)	NE	14 34 51							
		EL	Z	36 00			2	20			
	COB	E	E	14 33 29							
	ROX	EL	E	14 38 00							
JUN 09	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	15 02 21.6	19.2S	177.6W	556KM	4.6			WEL 21			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP	P	Z	15 06 15							
	GNZ	EP	Z	15 06 16							

JUN 10	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	08 54 36.0	31.3S	178.4W	400KM	5.9			WEL 11			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	RAO	EP	Z	08 55 34							
		E	Z	55							
		E	Z	56 03.5							
		E	Z	06							
		E	Z	10							
		E(S)	Z	16							
	ONE	EP	E	08 56 26							
		E	E	52							
		E	E	57 10							
		ES	E	51							
	GNZ	EP	Z	08 56 30		U					
		E	Z	36							
		E	Z	50							
		E	Z	57 51							
		ES	Z	59							
		E	Z	58 05							
	KRP	P	Z	08 56 36		U					
		E	Z	38							
		E	Z	57 45							
		E	Z	58 14							
		E	Z	20							
	TUA	EP	Z	08 56 36							
		E	Z	39							
		E	Z	57 47							
		E	Z	58							
		E	Z	58 06							
		E(S)	Z	09							
		E	Z	22							
	CNZ	EP?	Z	08 56 47							
		E	Z	49							
		E(S)	Z	58 25							
		E	Z	32							
		E	Z	44							
	TNZ	EP	Z	08 56 56							
		E	Z	57 18							
		E	Z	58 14							
		E(S)	Z	47							
		E	Z	55							
	WEL	EP	Z	08 57 10							
		E	Z	59 05							
		ES	NE	08							
		E	ZNE	11							
	COB	ES	E	08 59 24							
	KAI	EP?	X	08 57 43							
		ES	X	09 00 02							
		E	X	11							
	GPZ	EP?	N	08 57 43							
		E	N	48.5							
		ES	N	09 00 10							
	MNW	E	Z	09 01 45							
JUN 10	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)			
	19 13 52.0	18.0S	167.9E	47KM	5.3			WEL 24			
	H M S			DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP	P	Z	19 18 34		U					
		E(*PP)	Z	45							
	TUA	EP	Z	19 18 47							
	GNZ	EP	Z	19 18 48							
	CNZ	EP	Z	19 18 49							
	WEL	E(P)	Z	19 19 07							
	ROX	EL	E	19 26 00							

JUN 10	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
								WEL	TE	MAG
	22	16	44.8	5.0N	127.4E	146KM	5.5			
	KRP	EP	Z	22	26	50				
		E	Z		27	06				
		E	Z			16				
	MNW	EP	Z	22	26	50				
	TNZ	E(P)	Z	22	26	53				
		E	Z		27	17				
	CNZ	EP	Z	22	26	55				
		E	Z		27	18				
	ROX	EP	Z	22	26	55				
		ES	NE		35	12				
		E	NE		42	18				
		EL	E		45	30				
	WEL	EP	Z	22	27	00				
		ES	Z		35	30				
		ESS	ZNE		39	54				
		EL	ZNE		44	00				
	GNZ	E	Z	22	27	06				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	01	05	20.2	19.5S	175.4W	272KM	4.5			
	KRP	EP	Z	01	09	29				
		E	Z			50				
	GNZ	E	Z	01	09	33				
	CNZ	E?	Z	01	10	04				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	10	26	16.8	2.2S	141.2E	67KM				
	KRP	EP	Z	10	34	50				
		E	Z			59				
	GNZ	E	Z	10	35	04				
	WEL	EL	ZNE	10	50	00				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	10	55	06.2	56.0S	27.3W	33KM	5.8			
	KRP	EP	Z	11	07	33				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	13	19	44.0	1.9S	141.0E	40KM	5.3			
	KRP	EP	Z	13	28	30				
		E	Z		31	14				
	GNZ	E(P)	Z	13	28	45				
	WEL	EL	Z	13	43	00				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	15	20	48.4	2.0S	141.2E	33KM	5.7			
	KRP	EP	Z	15	29	24				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	17	01	48.5	2.0S	140.8E	18KM				
	KRP	EP	Z	17	10	28				
	TNZ	E(P)	Z	17	10	31				
	MNW	EP	Z	17	10	41				
		E	Z			51				
	GNZ	EP?	Z	17	10	42				
		E	Z			45				
	WEL	EP	Z	17	10	45				
		ES	ZNE		17	47				
		ESS	ZNE		21	50				

JUN 10	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
								WEL	TE	MAG
	22	16	44.8	5.0N	127.4E	146KM	5.5			
	ROX	EP?	Z	22	26	50				
		E	Z		27	06				
		E	Z			16				
	MNW	EP	Z	22	26	50				
	TNZ	E(P)	Z	22	26	53				
		E	Z		27	17				
	CNZ	EP	Z	22	26	55				
		E	Z		27	18				
	ROX	EP	Z	22	26	55				
		ES	NE		35	12				
		E	NE		42	18				
		EL	E		45	30				
	WEL	EP	Z	22	27	00				
		ES	Z		35	30				
		ESS	ZNE		39	54				
		EL	ZNE		44	00				
	GNZ	E	Z	22	27	06				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	01	05	20.2	19.5S	175.4W	272KM	4.5			
	KRP	EP	Z	01	09	29				
		E	Z			50				
	GNZ	E	Z	01	09	33				
	CNZ	E?	Z	01	10	04				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	10	26	16.8	2.2S	141.2E	67KM				
	KRP	EP	Z	10	34	50				
		E	Z			59				
	GNZ	E	Z	10	35	04				
	WEL	EL	ZNE	10	50	00				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	10	55	06.2	56.0S	27.3W	33KM	5.8			
	KRP	EP	Z	11	07	33				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	13	19	44.0	1.9S	141.0E	40KM	5.3			
	KRP	EP	Z	13	28	30				
		E	Z		31	14				
	GNZ	E(P)	Z	13	28	45				
	WEL	EL	Z	13	43	00				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	15	20	48.4	2.0S	141.2E	33KM	5.7			
	KRP	EP	Z	15	29	24				
JUN 11	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)		
	17	01	48.5	2.0S	140.8E	18KM				
	KRP	EP	Z	17	10	28				
	TNZ	E(P)	Z	17	10	31				
	MNW	EP	Z	17	10	41				
		E	Z			51				
	GNZ	EP?	Z	17	10	42				
		E	Z			45				
	WEL	EP	Z	17	10	45				
		ES	ZNE		17	47				
		ESS	ZNE		21	50				

DATE	STATION	TIME	EPICENTRE		DEPTH	MAG	DIR			AN	TN	AE	TE	MAG
			H M S	NE			W	AZ	TZ					
JUN 12	ESCS	26 05												
	ROX EP	Z 18 16 13			80KM	5.1								
	I(PCS)	Z 22 39												
JUN 13	MNW P	Z 18 16 21												
	H M S	EPICENTRE	DEPTH	MAG										
	22 47 47.2	6.6S 154.7E	80KM	5.1										
JUN 13	KRP EP	Z 22 54 46												
	CNZ E(P)	Z 22 54 54												
	WEL EL	Z 23 07 00												
JUN 13	H M S	EPICENTRE	DEPTH	MAG										
	04 20 53.5	53.6N 172.1E	33KM	5.1										
	WEL EL	Z 05 04 00												
JUN 13	ROX EL	N 05 07 00												
	H M S	EPICENTRE	DEPTH	MAG										
	05 04 23.5	1.9S 141.2E	33KM	5.9										
JUN 13	KRP EP	Z 05 13 00												
	MNW E(P)	Z 05 13 24												
	WEL EL	Z 05 28 00												
JUN 13	ROX MAX	N 05 34 00												
	ROX E(L)	NE 08 18 24												
	WEL EL	Z 08 22 00												
JUN 13	H M S	EPICENTRE	DEPTH	MAG										
	08 23 45.6	10.0N 93.0E	33KM	6.1										
	MNW EP	Z 08 36 27												
JUN 13	ROX EP	Z 08 36 33												
	H M S	EPICENTRE	DEPTH	MAG										
	11 14 26.5	27.3S 178.0W	34KM	4.8										
JUN 13	TUA E(P)	Z 11 17 09												
	E(S)	Z 11 19 20												
	CNZ E	Z 11 17 33												
JUN 13	WEL ES	ZN 11 20 31												
	EL	ZNE 21 30												
	ROX EL	NE 11 24 00												
JUN 13	MNW EP	Z 11 19 12												
	H M S	EPICENTRE	DEPTH	MAG										
	14 01 40.2	3.9S 154.3E	474KM	5.5										
JUN 13	KRP EP	Z 14 08 26												
	EPCP	Z 10 24												
	E(S)	Z 13 30												
JUN 13	CNZ IP	Z 14 08 35												
	WEL EP	Z 14 08 44												
	E	ZN 49												
JUN 13	MNW EP	Z 14 08 59												
	ROX EP	Z 14 09 00												
	WEL EL	ZNE 15 59 00												
JUN 13	ROX EL	NE 16 02 00												
	H M S	EPICENTRE	DEPTH	MAG										
	22 31 53.5	27.6S 178.3W	94KM	5.2										
JUN 13	KRP EP	Z 22 34 33												
	GNZ EP	Z 22 34 48												
	ES	Z 36 35												
JUN 13	CNZ E(P)	Z 22 34 49												

DATE	STATION	TIME	EPICENTRE		DEPTH	MAG	DIR			AN	TN	AE	TE	MAG
			H M S	NE			W	AZ	TZ					
JUN 12	WEL EP	Z 22 35 15												
	E	Z 36 00												
	ES	E 37 50												
JUN 13	EL	ZNE 39 00												
	ROX EP	Z 22 36 29												
	EL	ZNE 40 00												
JUN 13	MNW EP	Z 22 36 34												
	H M S	EPICENTRE	DEPTH	MAG										
	23 46 44.5	19.3S 176.5W	285KM	4.4										
JUN 13	GNZ EP	Z 23 50 59												
	E(S)	Z 54 27												
	H M S	EPICENTRE	DEPTH	MAG										
JUN 14	01 19 57.7	27.5S 177.5W	33KM	4.5										
	GNZ E	Z 01 23 16												
	E	Z 24 47												
JUN 14	E(S)	Z 25 00												
	WEL E	Z 01 23 44												
	E	Z 24 39												
JUN 14	ES	ZNE 26 03												
	EL	ZE 27 00												
	ROX EL	NE 01 29 00												
JUN 14	CNZ E?	Z 05 15 26												
	E?	Z 17 48												
	GNZ E	Z 05 16 47												
JUN 14	ES	Z 18 24												
	WEL E	ZNE 05 19 40												
	EL	ZE 21 00												
JUN 14	ROX EL	NE 05 23 00												
	H M S	EPICENTRE	DEPTH	MAG										
	12 15 31.3	38.0N 38.5E	8KM											
JUN 14	ROX E(PKP)	Z 12 35 12												
	EL	E 13 31 00												
	KRP EPKP	Z 12 35 15												
JUN 14	CNZ E(PKP)	Z 12 35 15												
	E	Z 46												
	WEL EPKP	Z 12 35 15												
JUN 14	EL	Z 13 12 00												
	GNZ E(PKP)	Z 12 35 22												
	H M S	EPICENTRE	DEPTH	MAG										
JUN 15	00 05 31.1	5.4N 97.0E	33KM	5.5										
	MNW EP	Z 00 17 43												
	ROX E(P)	Z 00 17 49												
JUN 15	E	Z 18 35												
	ES	NE 28 02												
	E	E 34 00												
JUN 15	EL	ZNE 39 00												
	CNZ EP	Z 00 18 03												
	KRP EP	Z 00 18 05												
JUN 15	WEL EP	Z 00 18 06												
	ES	ZNE 28 24												
	ESS	Z 35 00												
JUN 15	ESS	Z 38 00												
	E(S)	ZNE 41 00												
	EL	ZE 48 00												
JUN 15	GNZ EP	Z 00 18 14												

H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 15	02 05 37.1	17.4S	174.9W	148KM	4.5					
	GNZ EP	Z	02 10 22							
	TNZ EP	Z	02 10 39							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR <th>AZ TZ</th> <th>AN</th> <th>TN</th> <th>AE</th> <th>TE</th> <th>MAG</th>	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	04 01 44.3	38.3N	139.1E	57KM	6.1					
	KRP EP	Z	04 14 05							
	EPP	Z	17 24							
	E(SKS)	Z	25 01							
	E(PPS)	Z	26 25							
	EL	Z	45 00							
	CNZ E(P)	Z	04 14 12							
	EPP	Z	17 30							
	TNZ E(P)	Z	04 14 12							
	GNZ EP	Z	04 14 13							
	E	Z	18							
	E	Z	29							
	EPP	Z	17 46							
	WEL EP	Z	04 14 18	U						
	E(PCP)	Z	22							
	E(PP)	N	17 40							
	E	Z	45		> 60	24	142	22	101	23
	ESKS	N	25 06							
	E	E	26 00							
	ESS	NE	30 00							
	ESSS	N	34 00							
	ELQ	NE	37 00							
	ELR	ZNE	41 42							
	ROX EP	Z	04 14 30		33	10	18	16	10	12
	E	ZNE	35							
	EPP	ZN	18 10							
	E(SKS)	Z	24 54							
	E(S)	NE	25 12				68	23		
	ESS	ZNE	31 00							
	ESSS	ZN	35 00							
	EL	ZNE	38 00		75	20	95	22	89	22
	MNW E(P)	Z	04 14 40							
JUN 16	KRP EP	Z	04 16 53							
	WEL EP	Z	04 17 08							
JUN 16	KRP E(P)	Z	04 18 56							
JUN 16	KRP E(P)	Z	04 20 34							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR <th>AZ TZ</th> <th>AN</th> <th>TN</th> <th>AE</th> <th>TE</th> <th>MAG</th>	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	04 17 38.0	38.9N	139.1E	13KM	5.5					
	KRP EP	Z	04 30 06	U						
	CNZ EP	Z	04 30 10							
	ROX EP	Z	04 30 30							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR <th>AZ TZ</th> <th>AN</th> <th>TN</th> <th>AE</th> <th>TE</th> <th>MAG</th>	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	04 35 30.2	38.5N	138.7E	33KM	5.6					
	KRP EP	Z	04 47 55							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR <th>AZ TZ</th> <th>AN</th> <th>TN</th> <th>AE</th> <th>TE</th> <th>MAG</th>	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	04 46 37.9	39.0N	139.1E	33KM	5.4					
	KRP EP	Z	04 59 02							
	CNZ EP	Z	04 59 07							
JUN 16	KRP, E	Z	05 00 51							

H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	04 53 08.8	38.5N	138.7E	20KM						
	KRP EP	Z	05 05 36							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	04 58 46.0	38.7N	138.9E	33KM	4.9					
	KRP EP	Z	05 11 12							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	05 22 09.3	38.7N	139.1E	15KM	4.8					
	KRP EP	Z	05 34 36							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	05 39 24.5	38.8N	139.0E	35KM	4.9					
	KRP EP	Z	05 51 48							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	05 46 37.8	38.5N	138.9E	33KM	4.7					
	KRP E(P)	Z	05 59 02							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	06 17 07.8	38.4N	138.9E	28KM	5.1					
	KRP EP	Z	06 29 33							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	06 53 05.0	38.7N	139.0E	15KM	5.6					
	KRP EP	Z	07 05 33.5							
	CNZ EP	Z	07 05 38							
	GNZ E(P)	Z	07 05 43							
	WEL EP	Z	07 05 49							
	ROX EP	Z	07 05 56							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	07 09 00.7	38.3N	139.0E	33KM	4.9					
	KRP E(P)	Z	07 21 25							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	07 14 57.1	38.5N	139.2E	16KM	5.9					
	KRP EP	Z	07 27 23							
	CNZ EP	Z	07 27 29							
	E	Z	36							
	GNZ EP	Z	07 27 30							
	WEL EP	Z	07 27 36							
	ROX E(P)	Z	07 27 51							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	07 17 21.5	38.8N	139.1E	20KM	5.1					
	KRP EP	Z	07 29 46							
H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUN 16	GNZ EP	Z	07 36 44							
	E	Z	51							
	KRP EP	Z	07 36 57							

	H	M	S	EPICENTRE	DEPTH	MAG				DIST (DEG)
				H M S	DIR	AZ TZ	AN TN	AE TE		WEL
JUN 16	07	51	10.4	38.4N 138.9E	15KM	4.9				28
				H M S						MAG
				08 03 37						
				KRP EP	Z					
JUN 16	08	15	14.2	38.8N 138.8E	15KM	4.7				28
				H M S						MAG
				08 27 44						
				KRP E(P)	Z					
JUN 16	08	34	08.7	22.0S 175.8W	33KM	4.6				22
				H M S						MAG
				08 38 08						
				GNZ EP	Z					
				E(S)	Z					
				08 41 22						
				KRP EP	Z					
				08 38 12						
				MNW EP	Z					
JUN 16										
				KRP EP	Z					
				09 01 09						
				GNZ E	Z					
				09 01 24						
JUN 16	09	00	41.6	20.0S 170.2E	33KM	4.5				22
				H M S						MAG
				09 04 57						
				KRP EP	Z					
				09 05 14						
				GNZ E	Z					
JUN 16	09	10	22.1	38.4N 139.1E	33KM	4.7				28
				H M S						MAG
				09 22 46						
				KRP EP	Z					
JUN 16	09	56	46.1	17.3S 178.7W	502KM	4.3				28
				H M S						MAG
				10 01 00						
				KRP EP	Z					
				10 01 01						
				GNZ EP	Z					
JUN 16	11	16	03.1	2.0S 141.1E	13KM	5.9				28
				H M S						MAG
				11 24 42						
				KRP P	Z					
				11 24 46						
				CNZ EP	Z					
				E	Z					
				49						
				MNW EP	Z					
				11 24 55						
				GNZ E(P)	Z					
				11 24 56						
				WEL EL	ZN					
				11 40 00						
				ROX E	E					
				11 36 22						
				EL	E					
				41 00						
JUN 16	11	43	05.6	38.6N 138.8E	15KM	4.8				28
				H M S						MAG
				11 55 33						
				KRP EP	Z					
JUN 16	17	23	30.4	5.8S 154.0E	60KM	5.7				28
				H M S						MAG
				17 30 40						
				KRP EP	Z					
				17 30 49						
				CNZ E(P)	Z					
				17 34 54						
				GNZ EP	Z					
				E	Z					
				31 21						
				WEL EL	Z					
				17 43 00						
JUN 16										
				CNZ E(P)	Z					
				18 22 14						

	H	M	S	EPICENTRE	DEPTH	MAG				DIST (DEG)
				H M S	DIR	AZ TZ	AN TN	AE TE		WEL
JUN 16	22	03	14.3	15.3S 172.8W	33KM	4.7				28
				H M S						MAG
				22 08 32						
				KRP EP	Z					
				22 08 32						
				GNZ EP	Z					
				22 08 42						
				CNZ E(P)	Z					
				E	Z					
				48						
				MNW EP	Z					
				22 09 59						
				WEL EL	Z					
				22 16 00						
JUN 17	07	48	58.5	19.6S 169.0E	58KM	4.5				22
				H M S						MAG
				07 53 20						
				KRP EP	Z					
				07 53 32						
				TNZ EP	Z					
				07 53 34						
				CNZ EP	Z					
				E	Z					
				38						
				GNZ EP	Z					
				07 53 35						
JUN 17	15	10	44.3	38.7N 139.0E	27KM	5.0				28
				H M S						MAG
				15 23 11						
				KRP EP	Z					
				15 23 15						
				CNZ EP?	Z					
JUN 17										
				KRP EP	Z					
				15 39 08						
				GNZ EP	Z					
				15 39 09						
				CNZ EP	Z					
				15 39 18						
				TNZ EP	Z					
				15 39 23						
				MNW EP	Z					
				15 40 32						
JUN 17										
				GNZ E(P)	Z					
				E	Z					
				06 01						
				E	Z					
				23						
				E(S)	Z					
				07 08						
				E	Z					
				10						
				TUA EP?	Z					
				17 05 57.5						
				E	Z					
				59						
				ES	Z					
				07 19						
				CNZ E	Z					
				17 06 41						
				WEL E(S)	E					
				17 08 28						
				E	N					
				36						
				GPZ ES	N					
				17 09 34						
JUN 17	22	17	37.9	23.8S 179.7W	504KM	4.8				18
				H M S						MAG
				22 20 46						
				KRP EP	Z					
				23 23						
				GNZ EP	Z					
				22 20 49						
				E(S)	Z					
				23 22						
				E	Z					
				26						
				CNZ EP	Z					
				22 20 59						
				E(S)	Z					
				23 43						
				WEL EP	Z					
				22 21 18						
				E(S)	ZNE					
				24 17						
				MNW EP	Z					
				22 22 16						
JUN 18										
				CNZ EP	Z					
				16 23 04						
				WEL EL	Z					
				16 34 00</						

MAX		N	59 00			1 18		
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)	WEL	TE MAG
JUN 18	20 33 53.3		39.3S 74.7W	26KM	5.3			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	WEL EL	Z	21 07 00					
	ROX EL	E	21 12 00					
JUN 19	10 05 36.4		38.8N 139.3E	30KM	5.6			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	KRP EP?	Z	10 18 00					
	E	Z	03					
	WEL EL	Z	10 45 00					
	MNW E(P)	Z	10 18 28					
JUN 19	10 34 33.6		22.6N 121.0E	33KM	5.2			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	KRP E(P)	Z	10 46 45					
	CNZ E(P)	Z	10 46 47					
	MNW EP	Z	10 46 49					
	ROX E(P)	Z	10 46 51					
	WEL EL	Z	11 15 00					
JUN 20	09 59 08.9		19.9S 174.1W	33KM	4.7			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	KRP EP	Z	10 03 38					
	WEL EL	Z	10 10 30					
	ROX EL	NE	10 14 00					
JUN 20	11 12 38.4		3.4S 139.7E	33KM	5.8			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	KRP EP	Z	11 21 20					
JUN 20	12 31 49.7		21.2S 179.2W	600KM	4.4			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	KRP EP	Z	12 35 18					
JUN 20	16 06 44.3		3.3S 142.4E	33KM	5.5			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	KRP EP	Z	16 15 06					
	WEL EL	Z	16 34 00					
JUN 20	17 12 15.2		18.5N 105.5W	28KM	5.5			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	WEL EL	Z	17 55 00					
JUN 20	WEL EL	Z	23 14 00					
JUN 21	01 33 11.2		51.0N 157.0E	51KM	5.7			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	KRP EP	Z	01 45 58					
	E(*PP)	Z	46 13					
	WEL EL	Z	02 16 00					
JUN 21	03 32 58.0		31.5S 179.0W	450KM	5.6			
			H M S	DIR	AZ TZ	AN TN	AE	TE MAG
	RAO EP	Z	03 34 01					
	E	Z	10					
	E	Z	46					

ES	Z	51						
E	Z	55						
E	Z	35 18						
ONE	EP	E	03 34 42					
	E	Z	36 05					
KRP	EP	Z	03 34 46					
	E	Z	35 19					
	E(S)	Z	36 11					
	E	Z	29					
GNZ	EP	Z	03 34 49					
	E	Z	50					
	E	Z	35 31					
	E	Z	36 10					
	E(S)	Z	14					
	E	Z	19					
TUA	EP	Z	03 34 53.5					
	E	Z	55					
	E(S)	Z	36 23					
	E	Z	26					
	E	Z	44					
TON	EP	Y	03 35 05					
	E	Y	18					
	ES	Y	36 42					
	E	Y	52					
TNZ	EP	Z	03 35 09					
	E	Z	10					
	E(S)	Z	36 59					
WEL	EP	ZNE	03 35 26					
	ES	NE	37 21					
	E	ZNE	24					
COB	ES	E	03 37 37					
KAI	E	X	03 35 57					
	ES	X	38 10					
	E	X	22					
GPZ	EP	N	03 35 59					
	ES	N	38 20					
	E	N	23					
ROX	EP?	Z	03 36 30					
MNW	ES?	Z	03 39 51					
JUN 21	WEL EL	Z	22 03 00					
	ROX EL	E	22 07 00					
JUN 21	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)	WEL	TE MAG	
	22 21 22.7	16.3S 178.0E	18KM	5.0				
		H M S	DIR	AZ TZ	AN TN	AE	TE MAG	
	KRP EP	Z	22 26 14					
	GNZ E(P)	Z	22 26 15					
	TNZ E(P)	Z	22 26 30					
	WEL EP	Z	22 26 51					
	EL	ZNE	32 00					
	ROX EP	Z	22 27 35					
	EL	ZNE	34 00					
	MNW E(P)	Z	22 27 45					
JUN 21	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)	WEL	TE MAG	
	22 55 59.9	20.8S 175.6E	33KM	4.7				
		H M S	DIR	AZ TZ	AN TN	AE	TE MAG	
	GNZ E?	Z	23 01 07					
	E?	Z	59					
	WEL E	Z	23 01 29					
	TNZ E	Z	23 01 52					
JUN 22	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)	WEL	TE MAG	
	00 16 27.4	15.7S 172.8W	33KM	5.1				
		H M S	DIR	AZ TZ	AN TN	AE	TE MAG	
	GNZ EP?	Z	00 21 38					
	E	Z	42					

		EPICENTRE		DEPTH	MAG	DIST (DEG)		
		H	M	S	KM	WEL	AE	TE
KRP	E(P)	Z	00	21 45				
TNZ	EP	Z	00	22 00				
WEL	EP	Z	00	22 08				
	E	Z		27 40				
	EL	ZNE		29 00	9	18		10 20
ROX	EP?	Z	00	22 35				
	E	Z		38				
	EL	ZNE		31 00		8	17	6 17
MNW	E	Z	00	23 17				
JUN 22 03 03 37.9		10.4S 161.1E		70KM	5.4			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
CNZ	EP?	Z	03	09 51				
TNZ	EP	Z	03	09 53				
WEL	EP?	Z	03	09 57				
	E	Z		10 07				U
	E(*PP)	Z		27				
	E	Z		11 29				
	ES	ZN		15 42				
	E(SS)	ZE		17 44				
	EL	ZNE		19 00	11	30		7 24 8 30
GNZ	EP	Z	03	09 58				
	E(*PP)	Z		10 19				
ROX	EP	Z	03	10 31				
	E	Z		11 33				
	E	N		16 20				
	E	NE		18 42				
	EL	NE		20 24				6 20 6 19
MNW	P	Z	03	10 31				
JUN 22 07 30 59.5		18.0S 167.6E		33KM	4.7			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
WEL	EL	Z	07	45 00				
ROX	EL	NE	07	48 00				
JUN 22 13 40 02.8		25.1S 177.4W		121KM	5.1			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
ROX	E	Z	13	45 38				
GNZ	E?	Z	13	45 44				
	E(S)	Z		57				
TNZ	E(S)	Z	13	46 37				
WEL	ES?	Z	13	46 58				
	E	Z		47 02				
	E	Z		06				
JUN 22 21 23 33.6		13.6N 120.3E		56KM	6.5			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
WEL	EL	Z	21	59 00				
JUN 23 01 26 37.0		43.3N 146.1E		77KM	6.2			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
KRP	EP	Z	01	39 08				
	EPP	Z		42 23				
TNZ	EP	Z	01	39 12				
CNZ	E(P)	Z	01	39 16				
	EPP	Z		42 34				
WEL	IP	Z	01	39 21				
	EPP	Z		42 29				
	ESKS	ZNE		49 36				
	ES	ZNE		50 02				
	ESS	ZE		55 36				20 20 13 17
	L	ZNE		02 02 00				
GNZ	E	Z	01	39 26				

		EPICENTRE		DEPTH	MAG	DIST (DEG)		
		H	M	S	KM	WEL	AE	TE
ROX	P	ZNE	01	39 35				7.2
	E(*PP)	Z		56				
	EPP	ZNE		43 10				7.3
	ESKS	ZNE		49 59				
	ES	ZNE		50 30				36 17 20 16 7.1
	ESS	NE		56 24				13 16 16 23
	ELQ	E	02	03 00				
	ELR	ZNE		08 00				16 18 13 18 13 18
MNW	E(P)	Z	01	39 35				
	EPP	Z		43 10				
JUN 23 09 18 56.2		18.4S 173.6W		33KM	4.5			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
KRP	EP	Z	09	23 47				
WEL	EL	Z	09	34 00				
ROX	EL	NE	09	34 00				
JUN 23 09 46 00	ROX	EL	NE	09 46 00				
	WEL	E(L)	Z	09 58 00				
JUN 23 17 01 20.9		18.9S 175.8W		204KM	4.3			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
GNZ	EP	Z	17	05 51				
	E(S)	Z		08 41				
KRP	EP	Z	17	05 55				
	E	Z		57				U
	E	Z		08 09				
CNZ	E(P)	Z	17	06 03				
TNZ	EP	Z	17	06 08				
JUN 23 19 10 11.4		3.0N 126.6E		33KM	5.3			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
MNW	E(P)	Z	19	20 23				
KRP	EP	Z	19	20 26				
WEL	EL	Z	19	40 00				
JUN 24 05 10 56.0		33.0S 177.0W		33KM	5.1			
		H M S		DIR	AZ TZ	AN	TN	AE TE MAG
RAO	E?	Z	05	11 57				
	ES	Z		12 39				
	E	Z		44				
GNZ	EP	Z	05	12 34				
	E	Z		36				
	E	Z		45				
	E(S)	Z		13 47				
TUA	EP	Z	05	12 40				
	E	Z		53				
	ES	Z		14 00				
ONE	EP?	E	05	12 43				
	E	E		46				
	E(S)	E		14 04				
KRP	EP	Z	05	12 45				
	E	Z		13 00				
	E	Z		07				
CNZ	E?	Z	05	12 54				
	E	Z		13 05				
	E(S)	Z		14 24				
TON	E	Y	05	13 15				
	E(S)	Y		14 22				
	E	Y		27				
TNZ	E(P)	Z	05	13 08				
	E	Z		19				
WEL	ES	ZNE	05	15 04				
	EL	Z		17 00				0 20

		MNH E Z 05 15 07									
		KAI ES X 05 16 06									
		GPZ ES N 05 16 08									
		ROX EL NE 05 19 30									
		H M S		EPICENTRE		DEPTH MAG		DIST (DEG)			
JUN 24		14 59 58.7	7.1S	155.6E	123KM	5.0					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	CNZ	EP	Z	15 06 55							
	MNW	EP	Z	15 07 21							
	ROX	EP	Z	15 07 23							
JUN 24	WEL	EL	Z	21 31 00							
			H M S								
JUN 25		11 53 03.2	12.2S	165.6E	86KM						
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	WEL	EL	Z	12 10 00							
JUN 26	WEL	E	NE	05 31 25							
		E	ZNE	34							
			H M S								
JUN 26		13 10 28.9	12.6S	169.4E	648KM	4.9					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	KRP	EP	Z	13 15 12							
	TUA	EP	Z	13 15 21							
	TNZ	E(P)	Z	13 15 23							
	WEL	EP	ZNE	13 15 38							
		E	E	19 38							
		E(S)	E	43							
			H M S								
JUN 26		13 32 52.3	9.2S	158.9E	17KM	5.6					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	KRP	EP	Z	13 39 19							
	CNZ	EP	Z	13 39 30							
	TUA	EP	Z	13 39 33							
	MNW	EP	Z	13 40 03							
	W&L	ΔL	ZN	ΔΔ ΔΔ ΔΔ							
	ROX	EL	NE	13 50 00							
			H M S								
JUN 27		11 44 21.4	20.2S	178.9W	603KM	4.5					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	KRP	P	Z	11 47 57							
	CNZ	EP	Z	11 48 07							
	WEL	EP	Z	11 48 24							
JUN 27	KRP	E(P)	Z	14 10 42							
		E	Z	45							
	TUA	E(P)	Z	14 10 44							
		E	Z	50							
		E(S)	Z	12 25							
		E	Z	29							
		E	Z	40							
	CNZ	EP	Z	14 10 53							
		E	Z	11 36							
		E	Z	12 31							
		E	Z	43							
		E(S)	Z	49							
		E	Z	58.5							
	TNZ	E(P)	Z	14 11 02							
		E(S)	Z	13 03							
		E	Z	09							
	WEL	EP	Z	14 11 16							
		ES	ZNE	13 29							
	COB	ES	E	14 13 43							

		KAI ES X 14 14 19									
		GPZ E N 14 11 51									
		ES N 14 27									
		E N 30									
		H M S		EPICENTRE		DEPTH MAG		DIST (DEG)			
JUN 27		16 43 47.0	11.5S	13.8W	33KM	4.7					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	WEL	EL	ZNE	17 43 00							
			H M S								
JUN 28		12 51 34.6	1.7S	149.6E	7KM	6.4					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	KRP	EP	Z	12 59 38							
		E	Z	13 01 27							
	TNZ	E(P)	Z	12 59 42							
	CNZ	EP	Z	12 59 45							
	GNZ	EP	Z	12 59 50							
	WEL	EP?	Z	12 59 52							
		E	Z	58							
		E	Z	13 00 06							
		E(PP)	Z	01 02							
		ES	NE	06 32							
		EL	ZNE	10 00							
	MNW	EP	Z	13 00 05					22 17	42 32	38 30
		E	Z	01 21							
		E(PP)	Z	54							
	ROX	EP	Z	13 00 09							
		E(PP)	N	02 00							
		E	NE	05 00							
		ES	NE	07 00							
		EL	ZNE	10 24					12 20	22 21	35 20
			H M S								
JUN 28		14 52 08.4	13.2S	167.1E	215KM	5.4					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	KRP	EP	Z	14 57 23							
	TNZ	EP	Z	14 57 29							
	GNZ	EP	Z	14 57 30							
	CNZ	EP	Z	14 57 32							
	WEL	EP	ZNE	14 57 45							
		ES	ZNE	15 02 20							
	ROX	P	Z	14 58 15.5							
	MNW	EP	Z	14 58 19							
JUN 28	WEL	EL	Z	15 35 00							
	ROX	EL	NE	15 32 00							
	MNW	EP	Z	15 27 50							
JUN 28	CNZ	EP	Z	17 51 35							
			H M S								
JUN 28		17 27 59.8	4.0N	32.4W	33KM	5.3					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	WEL	E(SSS)	ZN	18 13 00							
		EL	ZNE	32 00							
									2 27		
			H M S								
JUN 28		23 45 37.9	30.7S	178.0W	29KM	4.2					
			H M S		DIR	AZ TZ	AN TN	AE TE	MAG		
	TUA	E(P)	Z	23 47 44							
		E	Z	59							
		E(S)	Z	49 22							
	KRP	E(P)	Z	23 47 54							
	GNZ	E	Z	23 47 52							
		E(S)	Z	49 11							
	WEL	ES	ZNE	23 50 28							
		EL	Z	52 00							

	ROX	ESKS	NE	00	00	12	10	15	6	20			
	ELQ	NE	22	00			12	22	10	20			
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)		
JUL 05	23 39 10.3	44.7N 149.6E	48KM	5.6							WEL 20		
	KRP EP	Z 23 52 01	DIR	AZ TZ	AN TN	AE TE					MAG		
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)		
JUL 06	02 14 36.0	26.2N 110.4W	33KM	5.4							WEL 16		
	WEL ESKS	ZNE 02 39 32	DIR	AZ TZ	AN TN	AE TE					MAG		
	ESS	ZNE 46 00											
	ELR	ZNE 54 48		28	22	17	22	11	32				
	ROX ELQ	N 02 57 00				13	34						
	ELR	ZNE 03 02 00		31	22	18	22	26	21				
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)		
JUL 06	07 22 11.7	18.3N 100.4W	100KM	6.3							WEL 18		
	KRP EP	Z 07 35 33	DIR	AZ TZ	AN TN	AE TE					MAG		
	EPP	Z 39 21											
	CNZ EP	Z 07 35 33											
	E	Z 51											
	WEL IP	ZNE 07 35 42	D	15	32						7.1		
	PP	Z 39 50		12	30						7.1		
	EPPP	Z 42 16		7	34								
	SKS	ZNE 46 02		9	12	67	58	24	32				
	PS	ZN 48 30		73	48	18	26						
	ESS	ZNE 53 20				34	36	53	32				
	ELQ	NE 08 01 48				83	56	68	64				
	ELR	ZNE 07 00				43	30	89	28				
	ROX SKS	NE 07 46 42				6	19	16	19				
	PS	NE 49 20				18	26	47	23				
	ESS	NE 54 58				31	28	61	32				
	LQ	NE 08 04 40				97	40						
	ELR	ZNE 09 30				27	25	46	26				
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)		
JUL 06	09 47 26.0	18.0S 174.7W	80KM	4.4							WEL 25		
	KRP P	Z 09 52 13	DIR	AZ TZ	AN TN	AE TE					MAG		
	CNZ E(P)	Z 09 52 26											
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)		
JUL 06	10 06 02.3	6.3S 154.7E	49KM	6.4							WEL 31		
	KRP P	Z 10 13 06	DIR	AZ TZ	AN TN	AE TE					MAG		
	CNZ P	Z 10 13 15											
	MNW EP	Z 10 13 38											
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)		
JUL 06	12 34 35.8	17.8S 167.5E	33KM	4.3							WEL 24		
	KRP EP	Z 12 39 23	DIR	AZ TZ	AN TN	AE TE					MAG		
	CNZ E(P)	Z 12 39 48											
	WEL ELR	ZNE 12 48 00											
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)		
JUL 06	14 19 46.3	6.9S 129.6E	100KM	5.8							WEL 35		
	MNW P	Z 14 28 37	DIR	AZ TZ	AN TN	AE TE					MAG		
	PCP	Z 29 52											
	KRP P	Z 14 28 45											
	*PP	Z 29 18											
	PCP	Z 58											
	CNZ P	Z 14 28 48											
	WEL P	Z 14 28 50.5											

	ELR	ZE	49	00	2	22										
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 06	19 50 42.1	21.2S 173.8E	22KM	4.8							WEL 20					
	KRP EP	Z 19 54 38	DIR	AZ TZ	AN TN	AE TE					MAG					
	CNZ P	Z 19 54 54														
	WEL P	Z 19 55 17														
	MAX	ZNE 20 03 00									8	16	4	18	7	18
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 07	07 39 04.2	23.6S 179.9W	462KM	5.5							WEL 18					
	KRP P	Z 07 42 14.8	DIR	AZ TZ	AN TN	AE TE					MAG					
	ES	Z 44 52														
	CNZ P	Z 07 42 29														
	ES	Z 45 08														
	WEL P	ZNE 07 42 48														
	E	NE 45 43														
	S	ZNE 47														
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 07	14 16 56.1	20.1S 178.0W	617KM								WEL 22					
	KRP P	Z 14 20 40.0	DIR	AZ TZ	AN TN	AE TE					MAG					
	CNZ EP	Z 14 20 50														
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 07	16 28 42.9	11.2S 163.2E	13KM	5.1							WEL 32					
	WEL ELR	Z 16 45 30	DIR	AZ TZ	AN TN	AE TE					MAG					
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 07	19 49 16.0	16.1S 174.7W	33KM	4.3							WEL 27					
	KRP EP	Z 19 54 28	DIR	AZ TZ	AN TN	AE TE					MAG					
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 07	21 31 37.1	17.3S 178.7W	574KM								WEL 25					
	KRP P	Z 21 35 42	DIR	AZ TZ	AN TN	AE TE					MAG					
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 08	01 35 02.5	15.3S 173.1W	33KM	4.8							WEL 28					
	GNZ EP	Z 01 40 19	DIR	AZ TZ	AN TN	AE TE					MAG					
	KRP P	Z 01 40 27														
	WEL ELR	Z 01 49 00														
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 08	07 45 48.6	3.2N 128.4E	50KM	5.5							WEL 61					
	KRP P	Z 07 55 50	DIR	AZ TZ	AN TN	AE TE					MAG					
	E	Z 56 07														
	MNW EP	Z 07 55 51														
	GNZ EP	Z 07 56 05														
	WEL ELR	Z 08 18 00														
	H M S	EPICENTRE	DEPTH	MAG							DIST (DEG)					
JUL 08	11 49 23.7	6.4S 154.8E	73KM	5.1							WEL 39					
	KRP P	Z 11 56 23	DIR	AZ TZ	AN TN	AE TE					MAG					
	CNZ P	Z 11 56 34														
	GNZ P	Z 11 56 39														
	MNW EP	Z 11 57 59														

JUL 08	H M S			EPICENTRE		DEPTH 165KM	MAG 6.5	DIST (DEG)					
	11 55 39.1	5.5S	129.8E	DIR	AZ			TZ	AN	TN	AE	TE	MAG
MNW	P	Z	12 04 31										
	I	Z	12 04 35										
KRP	P	Z	12 04 33			U							
	E	Z	05 22										
	SCP	Z	09 21										
ROX	P	Z	12 04 38										
	I	Z	05 41										
	I	Z	05 00										
	I	Z	05 23										
	SCP	Z	09 26										
	S	ZNE	11 46				8 14		18 18		30 22	6.1	
	SS	NE	16 58						58 21		32 19		
	ELR	Z	25 00				26 20						
CNZ	P	Z	12 04 41										
	SCP	Z	09 25										
WEL	P	ZNE	12 04 43.8				5 8				34 20	18 16	6.1
	S	NE	11 58						209 68		12 20		
	LQ	NE	17 36										
GNZ	P	Z	12 04 51.5										
	I	Z	05 54										
JUL 09	H M S			EPICENTRE		DEPTH 53KM	MAG 5.5	DIST (DEG)					
05 47 09.2	15.4N	119.8E	DIR	AZ	TZ			AN	TN	AE	TE	MAG	
KRP	EP	Z	05 58 43										
ROX	EP	Z	05 58 52										
GNZ	EP	Z	05 58 55										
WEL	EL	Z	06 24 00										
JUL 09	H M S			EPICENTRE		DEPTH 43KM	MAG 5.7	DIST (DEG)					
11 22 05.4	23.3S	175.7W	DIR	AZ	TZ			AN	TN	AE	TE	MAG	
KRP	EP	Z	11 25 54										
	E	Z	11 25 58										
WEL	P	ZNE	11 26 32				5 27					5.1	
	ES	ZNE	29 52										
	LR	ZNE	31 00				46 30		51 30		53 24		
ROX	EP	ZNE	11 27 30						26 34		53 26		
	LQ	NE	33 40										
	LR	Z	36 00				26 20						
MNW	P	Z	11 27 35										
	I	Z	11 27 39										
JUL 09	H M S			EPICENTRE		DEPTH 49KM	MAG 5.0	DIST (DEG)					
12 02 11.9	34.2N	140.9E	DIR	AZ	TZ			AN	TN	AE	TE	MAG	
KRP	EP	Z	12 14 10										
JUL 09	H M S			EPICENTRE		DEPTH 121KM	MAG 6.6	DIST (DEG)					
16 39 49.3	15.5S	167.6E	DIR	AZ	TZ			AN	TN	AE	TE	MAG	
KRP	IP	Z	16 44 48			U							
	ISCP	Z	16 45 59										
GNZ	P	Z	16 45 00										
WEL	P	ZNE	16 45 15			U	> 62 18		79 28		20 28	6.4	
	S	ZNE	49 40						136 28		87 16	6.1	
	LQ	E	51 00								>> 48		
	SCP	Z	52 07										
	SCS	ZNE	55 54										
ROX	P	ZNE	16 45 46			U	102 6		72 7		17 6	6.2	
	S	ZNE	49 38						100 18		77 14	6.1	
	LQ	NE	54 00						251 44		>> 52		
MNW	P	Z	16 45 47										

JUL 11	H M S			EPICENTRE		DEPTH 58KM	MAG 5.1	DIST (DEG)				
	01 36 16.3	7.3S	148.0E	DIR	AZ			TZ	AN	TN	AE	TE
KRP	EP	Z	01 43 41									
JUL 11	H M S			EPICENTRE		DEPTH 215KM	MAG 4.2	DIST (DEG)				
05 53 53.4	23.8S	177.4W	DIR	AZ	TZ			AN	TN	AE	TE	MAG
GNZ	EP	Z	05 57 18									
	ES	Z	06 00 57									
WEL	S	Z	06 01 06									
JUL 11	H M S			EPICENTRE		DEPTH 33KM	MAG 4.4	DIST (DEG)				
06 40 45.6	11.7S	166.6E	DIR	AZ	TZ			AN	TN	AE	TE	MAG
KRP	EP	Z	06 46 31									
JUL 11	H M S			EPICENTRE		DEPTH 143KM	MAG 4.6	DIST (DEG)				
06 48 14.5	19.3S	169.6E	DIR	AZ	TZ			AN	TN	AE	TE	MAG
KRP	P	Z	06 52 31									
JUL 11	H M S			EPICENTRE		DEPTH 33KM	MAG 4.7	DIST (DEG)				
17 07 38.9	16.9S	172.8W	DIR	AZ	TZ			AN	TN	AE	TE	MAG
GNZ	EP	Z	17 12 44									
KRP	P	Z	17 12 47									
JUL 11	H M S			EPICENTRE		DEPTH 143KM	MAG 4.5	DIST (DEG)				
17 32 16.8	15.5S	167.7E	DIR	AZ	TZ			AN	TN	AE	TE	MAG
KRP	P	Z	17 37 15.0									
JUL 12	H M S			EPICENTRE		DEPTH 13KM	MAG 6.0	DIST (DEG)				
01 45 25.6	38.6N	139.2E	DIR	AZ	TZ			AN	TN	AE	TE	MAG
CNZ	P	Z	01 58 03									
WEL	EPS	Z	02 09 52									
	LR	Z	25 00						1 20		2 36	
JUL 13	H M S			EPICENTRE		DEPTH 575KM	MAG 4.9	DIST (DEG)				
01 14 33.5	20.7S	178.7W	DIR	AZ	TZ			AN	TN	AE	TE	MAG
GNZ	EP	Z	01 18 14									
JUL 13	H M S			EPICENTRE		DEPTH 424KM	MAG 4.5	DIST (DEG)				
10 03 45.3	25.0S	179.9W	DIR	AZ	TZ			AN	TN	AE	TE	MAG
GNZ	EP	Z	10 06 50									
	ES	Z	09 16									
JUL 15	H M S			EPICENTRE		DEPTH 130KM	MAG 4.7	DIST (DEG)				
08 24 56.5	11.3S	166.1E	DIR	AZ	TZ			AN	TN	AE	TE	MAG
GNZ	EP	Z	08 30 47									
JUL 17	H M S			EPICENTRE		DEPTH 150KM	MAG 5.4	DIST (DEG)				
02 34 26.9	38.2N	23.7E	DIR	AZ	TZ			AN	TN	AE	TE	MAG
MNW	PKP	Z	02 54 04.4									
GNZ	PKP	Z	02 54 08									
CNZ	PKP	Z	02 54 39									

JUL 24	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
	10 54 52.5			13.1N 145.0E				43KM	5.6	WEL 41			
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
	KRP	P	Z	11	04	45							
	GNZ	EP	Z	11	04	53							
	WEL	P	ZNE	11	05	00							
	MNW	P	Z	11	05	10							
JUL 24	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
13 25 18.3			47.0N 153.7E		33KM			5.7	WEL 91				
	WEL	ESKS	ZN	13	48	44							
		EPS	Z	49	56								
		ESS	ZN	54	58								
		ELQ	NE	14	04	00			4	36	6	36	
		ELR	ZNE	06	00				6	24	5	20	
JUL 24	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
13 47 48.6			6.6S 154.8E		62KM			5.6	WEL 31				
	GNZ	EP	Z	13	55	02							
	ROX	EP	Z	13	55	24							
JUL 24	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
17 02 49.2			47.1N 153.6E		33KM			5.8	WEL 91				
	WEL	P	Z	17	15	49							
		EPP	Z	19	08								
		ESKS	ZNE	26	08				3	16	6	18	3
		EPS	ZN	27	44				4	36	5	26	
		ESS	ZN	32	30								
		ELQ	NE	40	00						8	44	7
		LR	ZNE	44	00				19	26	13	24	6
	ROX	ESKS	NE	17	26	36			3	12	2	10	
		ES	NE	27	15				7	13	6	15	6.7
		ELR	Z	50	00								
JUL 25	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
12 20 22.2			19.9S 176.2W		205KM			5.3	WEL 25				
	GNZ	EP	Z	12	24	35							
		ES	Z	27	57								
	KRP	P	Z	12	24	36							
	CNZ	EP	Z	12	24	44							
		ES	Z	28	31								
	WEL	EP	ZN	12	25	07							
		I	ZNE	11									
		ES	ZNE	28	57								
	ROX	EP	Z	12	26	02							
JUL 25	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
18 18 08.9			17.1S 172.9W		33KM			4.6	WEL 25				
	KRP	P	Z	18	23	13							
	CNZ	EP	Z	18	23	24							
JUL 25	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
19 31 07.0			27.9S 70.9W		26KM			6.1	WEL 81				
	WEL	P	Z	19	44	02							
		E	Z	53	28								
		SKS	ZNE	54	26					5	28	10	12
		PS	Z	55	20								
		ESS	ZNE	20	00	44							
		LQ	N	07	36						11	32	
		LR	ZNE	11	48						11	32	
	CNZ	P	Z	19	44	03							

KRP	P	Z	19	44	07								
ROX	ESKS	NE	19	54	29				4	27	8	24	
	ESS	NE	20	01	00						5	20	
	ELR	ZNE	12	00					9	18	4	22	7
JUL 25	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
21 29 33.2			2.9N 128.2E		22KM			5.1	WEL 61				
	CNZ	EP	Z	21	40	01							
JUL 26	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
06 28 32.7			23.4S 180.0E		555KM			4.9	WEL 18				
	CNZ	EP	Z	06	31	53							
		ES	Z	34	38								
	WEL	ES	ZNE	06	35	08							
JUL 28	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
10 46 00.6			16.0S 172.9W		33KM			4.6	WEL 27				
	KRP	EP	Z	10	51	20							
JUL 28	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
12 22 43.0			51.3S 139.3E		34KM				WEL 26				
	ROX	P	Z	12	27	21							
JUL 28	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
18 40 04.3			51.2S 139.0E		33KM			5.3	WEL 26				
	MNW	EP	Z	18	44	32							
	ROX	P	ZNE	18	44	41			5	14	3	15	6
		S	ZNE	48	33				16	12	92	18	6.6
		ELR	Z	49	45				26	13			
	WEL	P	Z	18	45	37			5	12			6.0
		ES	ZNE	50	08				7	24	32	16	19
		ELQ	NE	51	00						148	36	73
		MAX	ZNE	53	00				26	20	108	16	60
	KRP	EP	Z	18	46	08							
	GNZ	EP	Z	18	46	09							
JUL 28	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
19 50 08.9			15.1S 167.7E		123KM				WEL 27				
	KRP	P	Z	19	55	13							
JUL 28	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
21 38 43.5			14.3N 96.2E		33KM			5.5	WEL 91				
	KRP	P	Z	21	51	45							
	WEL	P	Z	21	51	46					2	5	6.8
		ESKS	NE	22	02	16							
		ESS	ZE	08	24						3	7	3
		LR	ZNE	22	10						2	20	6
	ROX	ESKS	E	22	02	26					31	23	26
		ESS	E	08	12								4
													26
JUL 29	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
02 18 09									WEL 81				
	KRP	P	Z	02	18	09							
JUL 29	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
10 33 25									WEL 81				
	WEL	EP	Z	10	33	25							
		S	ZNE	35	22								
	ECZ	EP	Z	10	32	34							
		ES	Z	33	46								
	GNZ	EP	Z	10	32	40							
		ES	Z	34	02								
	ONE	EP	E	10	32	44							
	KRP	EP	Z	10	32	46							

H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
JUL 30	01 22 10.1	17.7S	178.2W	643KM	4.3					
KRP	P	Z	01 26 10.7							
GNZ	P	Z	01 26 12							
WEL	P	Z	01 26 38							
JUL 30	05 16 03.3	11.1N	86.2W	42KM	5.7					
WEL	P	Z	05 34 30							
	PS	Z	43 22		1	24				
	ESS	ZE	49 32		2	32				2 20
	ELR	ZNE	06 04 00		2	22				
JUL 30	13 12 54.3	6.0S	154.4E	79KM						
KRP	P	Z	13 19 59							
GNZ	P	Z	13 20 13							
JUL 30	18 15 20.1	1.4S	149.2E	90KM	4.7					
KRP	EP	Z	18 23 15							
JUL 31	02 36 40.0	50.0S	164.0E	33KM	4.9					
MNW	IP	Z	02 37 52.0							
	S	Z	38 47							
ROX	P	Z	02 38 04.0							
	S	Z	39 10							
GPZ	EP	N	02 38 45							
	E	N	40 11							
	E	N	31							
KAI	E	X	02 39 00							
	ES	X	40 33							
JUL 31	04 05 06.2	44.6N	151.6E	53KM	5.5					
KRP	EP	Z	04 17 40							
JUL 31	05 52 18.8	6.1S	149.4E	63KM	5.9					
KRP	P	Z	05 59 46.5							
	PCP	Z	06 01 52							
	SCP	Z	05 45							
GNZ	P	Z	06 00 02							
WEL	P	ZNE	06 00 03		11	25	9	28	6	28
	PP	ZNE	01 56		7	14				6.1
	S	ZNE	06 16		38	44	52	28	45	32
	LR	ZNE	09 32		> 61	28	145	34	185	38
ROX	EP	ZNE	06 00 20		3	8	6	22	4	24
	ES	ZNE	06 37		5	14	26	24	27	22
	LQ	NE	10 00				24	24	32	26
	ELR	Z	12 30		25	24				
JUL 31	06 26 36.7	25.7S	179.6W	429KM						
ONE	P	E	06 29 13							
	ES	E	31 23							
GNZ	P	Z	06 29 25							
	ES	Z	31 48							

H M S		EPICENTRE		DEPTH	MAG	DIST (DEG)				
H M S		H M S		DIR	AZ TZ	AN	TN	AE	TE	MAG
AUG 01	01 22 10.1	17.7S	178.2W	643KM	4.3					
KRP	P	Z	06 29 26.8							
	ES	Z	31 58							
WEL	EP	ZNE	06 30 02							
	ES	ZNE	32 48							
AUG 01	05 16 03.3	11.1N	86.2W	42KM	5.7					
WEL	EL	Z	00 48 00							
AUG 01	08 36 16.9	56.2N	149.9W	31KM	5.4					
KRP	EP	Z	16 53 42							
AUG 02	07 03 11.4	3.8S	123.2E	37KM	5.4					
	H M S									
KRP	EP	Z	07 13 06							
AUG 02	08 36 16.9	56.2N	149.9W	31KM	5.4					
WEL	EL	Z	09 23 00							
AUG 03	01 48 23.3	19.8N	70.7W	7KM	5.2					
	H M S									
WEL	ESSS	Z	02 27 00							
	EL	Z	43 00							
AUG 03	07 44 44.3	22.6N	121.3E	33KM	5.4					
KRP	EP	Z	07 56 47							
WEL	E(PS)	Z	08 08 00							
	EL	Z	23 00							
ROX	EP	Z	07 56 56							
AUG 04	03 36 42.0	2.5S	139.8E	33KM	5.7					
KRP	EP	Z	03 45 20							
AUG 04	17 24 29.2	46.5N	151.1E	101KM	5.9					
KRP	EP?	Z	17 36 53							
	E	Z	37 05							
GNZ	E(P)	Z	17 37 11							
WEL	EP	Z	17 37 18							
	EL	Z	18 06 00							
AUG 05	01 47 39.1	17.8S	176.4W	16KM	4.9					
WEL	EL	Z	01 59 00							
AUG 05	22 23 13.0	41.1S	74.9W	33KM	5.1					
WEL	P	Z	22 35 00							
	ES	Z	44 36							
	EPS	Z	45 18							
	ESS	Z	49 00							
	EL	Z	58 00							
ROX	EP	Z	22 35 00							
	E(S)	NE	44 48							
	E(PS)	NE	45 36							
	EL	NE	55 00							
GNZ	EP	Z	22 35 01.5							
	E	Z	12							
MNW	P	Z	22 35 03.5							
KRP	P	Z	22 35 11.0							

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 06	02 33 39.5	31.5N 129.9E	197KM	5.5	WEL 85
	KRP EP	Z 02 45 30	DIR	AZ TZ	AN TN AE TE MAG
AUG 06	13 41 36.5	4.2S 140.5E	50KM		WEL 49
	KRP EP?	Z 13 50 01	DIR	AZ TZ	AN TN AE TE MAG
	E	Z 04			
AUG 06	17 03 28.9	22.5S 179.5W	504KM	5.3	WEL 19
	GNZ EP	Z 17 06 51	DIR	AZ TZ	AN TN AE TE MAG
	E(S)	Z 09 38			
	KRP P	Z 17 06 51.5 D			
	WEL P	Z 17 07 21.0 D			
	E	Z 10 28			
	ES	NE 31			
	ROX EP	Z 17 08 10.5			
	E	Z 17			
	ESCP	Z 14 16			
	MNW EP?	Z 17 08 17	U		
	E	Z 17.5 D			
AUG 06	18 24 50.5	56.9N 152.1W	39KM	5.6	WEL 100
	WEL EL	Z 19 12 00	DIR	AZ TZ	AN TN AE TE MAG
AUG 07	15 31 18.0	14.0N 91.9W	89KM	5.0	WEL 100
	WEL EL	Z 16 18 00	DIR	AZ TZ	AN TN AE TE MAG
AUG 08	14 59 41.2	31.7N 140.2E	110KM	5.7	WEL 77
	KRP EP	Z 15 11 22	DIR	AZ TZ	AN TN AE TE MAG
	WEL EP	Z 15 11 33			
	ROX EP	Z 15 11 46			
AUG 08	15 45 10.9	12.5N 87.8W	63KM	5.8	WEL 114
	WEL EL	Z 16 33 00	DIR	AZ TZ	AN TN AE TE MAG
AUG 08	18 42 59.0	20.9S 176.7W	354KM	4.5	WEL 22
	KRP E(P)	Z 18 46 44	DIR	AZ TZ	AN TN AE TE MAG
AUG 08	20 59 43.6	17.9S 175.0W	193KM	4.8	WEL 25
	KRP P	Z 21 04 25	DIR	AZ TZ	AN TN AE TE MAG
	TNZ EP	Z 21 04 40			
AUG 09	01 48 12.8	17.8S 178.6W	537KM	5.6	WEL 24
	KRP EP	Z 01 52 17	DIR	AZ TZ	AN TN AE TE MAG

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 09	06 31 29.3	17.1S 173.1W	33KM	4.5	WEL 26
	KRP E(P)	Z 06 36 34	DIR	AZ TZ	AN TN AE TE MAG
	E	Z 45			
AUG 10	14 44 40.1	14.1S 166.7E	44KM		WEL 28
	KRP EP	Z 14 50 03	DIR	AZ TZ	AN TN AE TE MAG
AUG 10	21 40 10.4	6.2S 154.5E	105KM	5.7	WEL 39
	KRP EP	Z 21 47 09	DIR	AZ TZ	AN TN AE TE MAG
	TNZ EP	Z 21 47 16			
	E	Z 27			
	MNW EP	Z 21 47 43			
	ROX E(P)	Z 21 47 45			
	EL	NE 22 00 00			1 22
	WEL EL	Z 21 58 00			
AUG 11	05 49 58.7	18.0S 176.9W	329KM	4.3	WEL 24
	KRP EP	Z 05 54 19	DIR	AZ TZ	AN TN AE TE MAG
AUG 11	12 32 00.2	14.7S 167.8E	140KM	4.7	WEL 27
	KRP EP?	Z 12 37 07	DIR	AZ TZ	AN TN AE TE MAG
	I	Z 09	U		
AUG 12	06 51 49.9	48.9N 153.7E	127KM	5.6	WEL 92
	KRP EP	Z 07 04 28.5	DIR	AZ TZ	AN TN AE TE MAG
	E	Z 08 45			
	E	Z 09 10			
	WEL EP	Z 07 04 48			
AUG 13	00 31 14.1	5.4S 154.3E	383KM	6.0	WEL 40
	ONE ES	E 00 42 47	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 00 37 56.5			
	EPCP	Z 40 04			
	ES	Z 43 16			
	TNZ EP	Z 00 38 01			
	E	Z 03	U		
	EPCP	Z 40 06			
	ES	Z 43 19			
	ECZ EP?	Z 00 38 04			
	E	Z 06			
	E(S)	Z 43 32			
	E(PCS)	Z 49			
	TUA P	Z 00 38 08.0			
	EPCP	Z 40 08			
	E	Z 43 21			
	E(S)	Z 36			
	E	Z 47			
	ESCS	Z 47 35			
	GNZ EP	Z 00 38 09			
	E	Z 43 23			
	E(S)	Z 39			
	E(PCS)	Z 47			
	COB EP	E 00 38 09.5			

DATE	H	M	S	EPICENTRE		DEPTH	MAG	DIR	AZ	TZ	AN	TN	DIST (DEG)				
				WEL	TE								AE	TE	MAG		
AUG 30	08	47	34.7	5.0S	144.5E	93KM	5.8										
				H	M	S											
	KRP	EP	Z	08	55	31		D									
	CNZ	EP	Z	08	55	38											
	WEL	EP	Z	08	55	44											
		E	Z			49											
		MAX	Z	09	15	00				0	18						
	MNH	EP	Z	08	55	46											
	ROX	EP	Z	08	55	49											
AUG 30	17	55	17.0	9.8S	159.1E	35KM	4.8										
				H	M	S											
	KRP	EP	Z	18	01	40											
AUG 30	KRP	EP	Z	18	21	27											
AUG 30	WEL	EL	Z	20	43	00											
AUG 30	20	37	09.2	13.6S	172.4E	33KM	4.9										
				H	M	S											
	KRP	EP	Z	20	42	26											
		E	Z			43											
	CNZ	EP	Z	20	42	42											
		E	Z			43											
	WEL	EL	Z	20	50	00											
	ROX	EL	NE	20	52	00											
AUG 30	21	44	56.9	19.9S	176.0W	253KM	5.6										
				H	M	S											
	KRP	EP	Z	21	49	05											
		E	Z			51											
		E	Z			52											
	CNZ	EP	Z	21	49	15											
		E	Z			52											
		E	Z			53											
	TNZ	EP	Z	21	49	21											
	WEL	EP	Z	21	49	36											
		E	Z			53											
		ES	ZNE			36											
	ROX	EP	Z	21	50	30											
		E	Z			33											
	MNH	EP	Z	21	50	34											
		E	Z			41											
AUG 30	22	30	24.8	13.7S	172.5E	33KM											
				H	M	S											
	KRP	EP	Z	22	35	42											
	CNZ	E	Z	22	35	54											
		E	Z			36											
	WEL	EL	Z	22	43	00											
AUG 31	02	14	20.3	35.2S	106.0W	33KM	5.2										
				H	M	S											
	KRP	EP	Z	02	24	31											
	CNZ	E(P)	Z	02	24	32											
	WEL	ES	Z	02	33	00											
		ESS	Z			37											
		EL	ZE			42											
	ROX	ES	E	02	33	30											
		EL	NE			43											

DATE	H	M	S	EPICENTRE		DEPTH	MAG	DIR	AZ	TZ	AN	TN	DIST (DEG)				
				WEL	TE								AE	TE	MAG		
SEP 03	KRP	E	Z	10	21	09											
		E	Z			22											
	WEL	EL	Z	10	29	00											
SEP 04	10	34	13.1	4.0S	131.4E	33KM	5.9										
				H	M	S											
	KRP	IP	Z	10	43	26.3											
	CNZ	EP	Z	10	43	30											
	WEL	EP	Z	10	43	33											
		EPP	Z			45											
		ES	NE			51											
		ELQ	NE			57											
		LR	Z			59											
	ROX	EP	Z	10	43	38											
		ES	NE			50											
		ELQ	NE			56											
		ELR	ZNE			59											
SEP 04	14	50	33.5	24.3S	179.1E	548KM											
				H	M	S											
	GNZ	EP	Z	14	53	34											
		ES	Z			56											
	KRP	EP	Z	14	53	35											
	WEL	EP	ZNE	14	54	06											
		ES	ZNE			56											
SEP 04	17	10	28.4	3.9S	131.5E	33KM	4.8										
				H	M	S											
	KRP	EP	Z	17	19	41											
	WEL	EL	Z	17	37	00											
SEP 05	02	53	50.6	5.8S	154.0E	69KM	6.4										
				H	M	S											
	KRP	IP	Z	03	01	00											
		E(PCP)	Z			03											
		ES	Z			07											
	CNZ	IP	Z	03	01	09.0											
	WEL	IP	ZNE	03	01	20.4											
		EPP	ZE			02											
		ES	ZNE			07											
		ELQ	ZNE			10											
		ELR	Z			12											
	ROX	EP	ZNE	03	01	35											
		EPP	ZNE			03											
		ES	ZNE			07											
		ELQ	NE			11											
		ELR	ZNE			13											
SEP 05	04	09	51.6	6.0S	153.8E	81KM	4.8										
				H	M	S											
	KRP	EP	Z	04	16	57											
	GNZ	EP	Z	04	17	12											
SEP 05	07	27	21.0	5.9S	153.7E	106KM	4.6										
				H	M	S											
	KRP	EP	Z	07	34	25											
	GNZ	EP	Z	07	34	41											
SEP 06	KRP	EP	Z	02	34	49											
	GNZ	EP	Z	02	34	50											

SEP 06	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	03 27 47.9	17.8S 168.2E	33KM	4.8	WEL 24
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 03 32 30			
	GNZ EP	Z 03 32 47			
	WEL E(S)	Z 03 37 25			
	EL	ZN 39 00		3 28	
SEP 06	09 21 22.4	20.3S 178.9W	621KM	4.2	WEL 22
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 09 25 01			
	GNZ EP	Z 09 25 02			
	WEL EP	Z 09 25 29			
SEP 06	11 15 27.9	6.0S 153.7E	90KM	4.5	WEL 40
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 11 22 33			
	GNZ EP	Z 11 22 47			
	E	Z 49			
	WEL EL	Z 11 34 00			
SEP 06	18 41 01.8	10.0N 140.2E	33KM	5.1	WEL 60
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 18 50 54			
	GNZ EP	Z 18 51 06			
	WEL EP	Z 18 51 07.5		2 5	6.1
	ES	Z 59 36			
	ESSS	Z 19 06 12		2 28	
	ELR	Z 11 00		3 22	
	ROX EP	Z 18 51 14			
	E(LQ)	NE 19 07 00			
SEP 06	18 57 20.4	7.1N 93.7E	46KM	5.2	WEL 68
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 19 10 24			
SEP 06	20 34 22.2	4.7S 144.8E	76KM	5.7	WEL 45
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	GNZ EP	Z 20 42 36			
SEP 08	05 55 18.7	20.5S 176.2W	33KM	4.5	WEL 22
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 05 59 42			
SEP 08	07 54 57.9	5.8N 126.1E	177KM	5.4	WEL 65
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 08 05 10			
	MNW EP	Z 08 05 11			
SEP 08	11 15 35.1	17.4S 173.5W	33KM	5.0	WEL 26
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	GNZ EP	Z 11 20 32			
	KRP IP	Z 11 20 33.2			
SEP 08	13 40 03.5	29.6N 142.0E	77KM	5.6	WEL 77
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 13 51 32			

SEP 08	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
	14 09 19.2	23.8S 177.5W	213KM	4.7	WEL 19
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 14 12 44			
	WEL EL	Z 14 18 30			
SEP 08	17 05 23.4	20.4S 178.3W	539KM	5.4	WEL 22
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	GNZ EP	Z 17 09 05			
	KRP IP	Z 17 09 06.0		D	
	WEL EP	ZNE 17 09 34			
SEP 10	17 37 08.7	33.0S 69.4W	80KM	5.4	WEL 85
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 17 49 49			
SEP 11	11 04 39.0	26.4S 177.8W	217KM	4.7	WEL 16
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	GNZ EP	Z 11 07 04			
	ES	Z 09 35			
	KRP EP	Z 11 08 30			
	CNZ ES	Z 11 10 07			
	WEL ES	ZNE 11 10 50			
SEP 12	10 48 19.2	24.7S 170.5E	33KM	4.0	WEL 17
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 10 51 30			
	E	Z 31			
	GNZ EP	Z 10 51 54.5			
	E	Z 52 03			
	WEL EL	Z 10 56 00			
SEP 12	12 43 19.0	4.4S 144.0E	120KM	6.3	WEL 46
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP IP	Z 12 51 18.2			
	E(*PP)	Z 42			
	ESCP	Z 56 44			
	WEL EP	ZNE 12 51 32			
	ES	ZNE 58 06		17 17	11 12 7 8 6.5
	E	ZNE 13 02 00			
	ELR	Z 04 54		7 38	
	GNZ EP	Z 12 51 32.5			
	E?	Z 57 03			
	ES	Z 58 09			
	ROX EP	Z 12 51 35			
	ES	NE 58 14			
SEP 12	15 19 22.3	17.4S 179.9W	561KM	5.8	WEL 24
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 15 23 26			
	E(*PP)	Z 24 46			
	GNZ EP	Z 15 23 29			
	ES	Z 26 51			
	WEL EP	Z 15 23 54			
	E	Z 26 38			
	ES	ZNE 27 29			
	ROX EP	Z 15 24 39			
	E(*PP)	Z 26 21			
	ES	Z 28 46			
	MNW EP	Z 15 24 45			
	E(*PP)	Z 26 23			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 15	18 37 10.1	6.6S 146.8E	59KM	5.1	WEL 43
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	TUA EP	Z 18 45 01			
	GNZ EP	Z 18 45 03			
SEP 16	05 20 46.1	5.9S 152.0E	29KM	6.2	WEL 41
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP E(P)	Z 05 28 22			
	GNZ EP	Z 05 28 23			
	WEL EL	Z 05 40 00			
SEP 16	20 47 16.0	16.1S 176.5W	352KM	5.1	WEL 24
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP IP	Z 20 51 50.6			
	GNZ EP	Z 20 51 51			
	MNW EP	Z 20 53 14			
SEP 17	06 59 37.8	26.5S 176.4W	33KM	4.8	WEL 14
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	GNZ EP	Z 07 02 51			
	ES	Z 07 04 52			
	KRP EP	Z 07 02 54			
	WEL EL	Z 07 08 00			
SEP 17	15 06 13.8	12.8S 168.9E	622KM	4.5	WEL 21
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP IP	Z 15 10 57.7			
	GNZ EP	Z 15 11 06.5			
	WEL EP	ZNE 15 11 23			
	ROX EP	Z 15 11 55.5			
SEP 19	05 08 15.1	15.3N 94.0W	42KM	5.3	WEL 101
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	WEL ESP	Z 06 35 08			
	ESS	Z 06 40 12			
	E(L)	Z 06 54 00		2 28	
SEP 19	21 34 10.2	22.1S 177.6W	251KM	4.4	WEL 21
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 21 37 54			
	GNZ EP	Z 21 37 56			
	ES	Z 21 40 52			
SEP 20	04 33 29.4	49.6S 116.2W	33KM	5.2	WEL 41
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	WEL EP	Z 04 42 12		1 26	
	ES	ZNE 49 03		2 22	
	E(L)	ZNE 53 00			3 30
	ELR	ZNE 55 18		10 28	4 28
	ROX ES	NE 04 49 30			7 24
	ELR	ZNE 55 00			4 6
					3 14
SEP 20	14 36 05.3	30.0N 138.1E	454KM	4.9	WEL 79
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP IP	Z 14 47 06.7		D	
	GNZ EP	Z 14 47 14			
	WEL EP	Z 14 47 18.5			
	ROX EP	Z 14 47 28.5			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 21	04 23 19.7	21.8S 179.6W	609KM	5.4	WEL 20
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP IP	Z 04 26 42.7		U	
	E	Z 04 29 50			
	GNZ EP	Z 04 26 43			
	ES	Z 04 29 26			
	WEL EP	ZNE 04 27 11			
	ES	ZNE 30 13			
	ROX EP	Z 04 27 59			
	ES	Z 04 31 52			
	ESCP	Z 04 33 55			
SEP 21	12 01 46.6	17.8S 167.3E	33KM	5.1	WEL 24
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 12 06 33			
	GNZ EP	Z 12 06 50			
	WEL EL	Z 12 18 00		3 13	
	ROX EP	Z 12 07 33			
SEP 21	16 57 36.2	19.9S 178.5W	512KM	4.5	WEL 22
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	KRP EP	Z 17 01 18			
	GNZ EP	Z 17 01 19.5			
SEP 21	18 10 51.6	30.1S 179.5W	319KM	5.2	WEL 12
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	GNZ EP	Z 18 12 55			
	ES	Z 18 14 32			
	KRP EP	Z 18 12 59			
	WEL EP	ZNE 18 13 35			
	ES	ZNE 15 44			
	ROX ES	Z 18 17 43			
SEP 23	17 35 41.0	49.0S 165.0W	33KM	5.0	WEL 16
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	GPZ E(P)	N 17 37 30			
	E?	N 17 38 47			
	MNW IP	Z 17 36 37.1		D	
	E	Z 17 37 20			
	KAI E?	X 17 37 45			
	E(S)	X 17 39 06			
	ROX EP	Z 17 36 48			
	E	Z 17 37 47			
SEP 25	23 27 49.7	30.7S 179.9W	424KM	5.3	WEL 11
		H M S	DIR	AZ TZ	AN TN AE TE MAG
	ECZ EP	Z 23 29 37			
	ES	Z 23 30 57			
	GNZ EP	Z 23 29 44			
	I	Z 23 49.5			
	E?	Z 31 13			
	ES	Z 31 22			
	KRP EP	Z 23 29 50.5			
	WEL EP	ZNE 23 30 21			
	E(S)	ZNE 32 20			
	ES	ZNE 25			
	ROX ES	Z 23 34 21			

SEP 26	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
	03	38	32.7	17.7S	173.3W	33KM	5.1						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	P	Z		03	43	21							
GNZ	EP	Z		03	43	28							
	ES	Z											
	EL	Z		03	50	00							
				H M S		DEPTH	MAG						
SEP 26	07	50	18.9	49.0S	164.5E	33KM	5.2						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
ROX	IP	Z		07	51	29.7							
	ES	Z											
GPZ	EP	N		07	52	09							
	E	N											
	E	N											
KAI	E	X		07	52	18							
	ES	X											
COB	EP	E		07	52	38							
	ES	E											
	EL	NE		07	52	50							
	EL	Z											
TNZ	E(P)	Z		07	53	14							4 18
KRP	EP	Z		07	53	29							
GNZ	EP	Z		07	53	40							
	ES	Z											
				H M S		EPICENTRE	DEPTH	MAG					
SEP 26	22	55	14.8	4.9S	153.5E	34KM	5.5						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		23	02	35							
GNZ	EP	Z		23	02	50							
WEL	EP	ZNE		23	02	55.5							
	ES	Z											
	E	Z											
	ELR	Z											1 28
	EP	Z		23	03	08							3 24
				H M S		EPICENTRE	DEPTH	MAG					
SEP 27	06	36	25.3	16.1S	176.0W	332KM	4.5						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		06	41	03							
GNZ	EP	Z		06	41	04							
MNW	EP	Z		06	42	27							
				H M S		EPICENTRE	DEPTH	MAG					
SEP 27	07	53	53.4	2.2N	126.5E	70KM	5.3						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		08	04	01.5							
GNZ	EP	Z		08	04	09							
				H M S		EPICENTRE	DEPTH	MAG					
SEP 27	09	53	36.6	2.3N	126.7E	100KM	5.1						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		10	03	39.5							
GNZ	EP	Z		10	03	50							
				H M S		EPICENTRE	DEPTH	MAG					
SEP 27	13	24	23.9	28.3S	178.3W	220KM	4.2						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
ECZ	E	Z		13	28	13							
	ES	Z											
GNZ	EP	Z		13	26	58							
	E	Z											
WEL	ES	ZNE		13	29	55							

SEP 27	GNZ	EP	Z	13	41	02							
		E	Z			05							
		E	Z			42	34						
		E(S)	Z			37							
				H M S		EPICENTRE	DEPTH	MAG					
SEP 28	12	53	55.1	22.0S	179.4W	548KM	4.1						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
GNZ	EP	Z		12	57	23							
	E(S)	Z		13	00	11.5							
MNW	EP	Z		12	58	46							
				H M S		EPICENTRE	DEPTH	MAG					
SEP 28	20	06	46.0	5.2S	150.5E	224KM	5.5						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
GNZ	EP	Z		20	14	14							
				H M S		EPICENTRE	DEPTH	MAG					
SEP 28	22	01	40.2	5.5S	151.6E	50KM	5.4						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		22	09	04							
GNZ	EP	Z		22	09	18							
				H M S		EPICENTRE	DEPTH	MAG					
SEP 29	05	30	59.5	18.1S	175.4W	197KM	4.8						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		05	35	34							
				H M S		EPICENTRE	DEPTH	MAG					
SEP 29	14	00	14.9	20.4S	174.4W	29KM	5.7						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		14	04	41							
GNZ	EP	Z		14	04	42							
	ES	Z				08	10						
WEL	EP	ZNE		14	05	17.5							
	ES	ZNE				09	19						
	E	ZE				10	42						
	ELR	ZN				12	00						
ROX	EP	Z		14	06	09							
	ES	NE				10	56						
	ELQ	NE				12	48						
	ELR	Z				16	00						
				H M S		EPICENTRE	DEPTH	MAG					
SEP 30	03	47	00.3	22.9S	179.1W	368KM	3.9						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		03	50	29							
GNZ	EP	Z		03	50	29							
	ES	Z				53	17						
				H M S		EPICENTRE	DEPTH	MAG					
SEP 03	16	58	55.4	15.2S	173.5W	33KM	5.1						
				H M S		DIR	AZ	TZ	AN	TN	AE	TE	MAG
KRP	EP	Z		17	04	16							
CHZ	EP	Z		17	04	25							
WEL	ELR	ZNE		17	12	24							
ROX	ELR	NE		17	15	00							
				H M S		EPICENTRE	DEPTH	MAG					
OCT 01	GNZ	EP	Z	20	40	34							
	TUA	P	Z	20	40	40							
	ES	Z				41	56						
WEL	ES	ZNE		20	43	01							

OCT	H M S	EPICENTRE		DEPTH	MAG	DIST (DEG)					
		H M S	H M S			WEL	AE	TE	MAG		
OCT 02	04 31 21.0	23.6S	179.6W	503KM							
		H M S	H M S	DIR	AZ	TZ	AN	TN	AE	TE	MAG
	GNZ P	Z	04 34 34								
	ES	Z	04 37 10								
	KRP EP	Z	04 34 34								
	WEL EP	Z	04 35 04								
	ES	ZNE	38 04								
OCT 02	13 00 39.7	10.5S	162.4E	68KM	6.0						
	KRP EP	Z	13 06 41								
	GNZ P	Z	13 06 54								
	WEL P	ZNE	13 07 04		5	8					6.4
	PP	Z	08 13		8	8	8	7			6.4
	ES	ZNE	12 18		5	20	11	28	7	28	5.9
	ELQ	NE	14 40				27	28	46	36	
	LR	Z	15 55		33	32					
	ROX P	Z	13 07 30				8	20	7	22	6.1
	ES	NE	13 06						24	22	
	ELQ	E	16 00								
OCT 03	01 55 00.2	21.0S	178.5W	547KM	5.0						
	KRP P	Z	01 58 37.8								
	GNZ EP	Z	01 58 38								
OCT 03	16 52 20.7	26.7S	177.7W	134KM	4.5						
	GNZ EP	Z	16 55 18								
	ES	Z	57 19								
	WEL ES	ZNE	16 58 35								
OCT 03	17 02 48.0	18.1S	178.8W	673KM	4.4						
	GNZ EP	Z	17 06 43								
	ES	Z	09 56								
OCT 03	22 41 09.0	20.2S	176.3W	219KM	4.4						
	GNZ EP	Z	22 45 17								
	KRP P	Z	22 45 19								
OCT 05	08 30 15.7	16.7S	173.7W	33KM	5.1						
	GNZ P	Z	08 35 20								
	KRP P	Z	08 35 21								
OCT 05	12 24 06.4	16.6S	174.2W	84KM							
	GNZ EP	Z	12 29 06								
OCT 05	13 12 15.5	22.3S	171.6E	145KM	4.9						
	GNZ P	Z	13 16 07								

OCT	H M S	EPICENTRE		DEPTH	MAG	DIST (DEG)					
		H M S	H M S			WEL	AE	TE	MAG		
OCT 05	13 58 56.9	22.2S	175.8W	33KM	5.1						
	GNZ EP	Z	14 03 55								
	WEL ES	NE	14 07 06								
OCT 06	07 17 57.1	36.2S	100.9W	33KM	5.5						
	WEL EP	Z	07 28 21								
	ES	ZE	36 58								
	ESS	Z	40 52								
	LR	Z	46 40						16	30	
	ROX ES	NE	07 37 29								5 25 6.1
	ELQ	NE	48 00								8 28
OCT 06	14 31 19.2	40.3N	28.2E	10KM	6.0						
	MNW PKP	Z	14 51 09								
	I	Z	18								
	WEL PKP	Z	14 51 12								5 10
	PKP2	Z	38								5 12
	EPP	Z	55 08								4 22
	ELR	ZNE	15 47 00						23	23	20 24 12 23 6.2
	GNZ EPKP	Z	14 51 14								
	ROX EPKP	Z	14 51 18								
	E	Z	31								
	KRP PKP	Z	14 51 20								
	PKP2	Z	36								
OCT 06	19 12 12.0	16.1S	168.6E	21KM	5.4						
	GNZ EP	Z	19 17 22								
OCT 07	01 24 45.2	20.7S	177.8W	328KM	4.4						
	KRP IP	Z	01 28 40.1								
	GNZ EP	Z	01 28 49								
OCT 07	03 52 11.3	6.8S	155.2E	70KM	5.5						
	TUA EP	Z	03 59 22								
OCT 09	21 34 09.2	16.2S	171.9W	33KM	5.8						
	GNZ EP	Z	21 39 25								
	ES	Z	43 45								
	KRP P	Z	21 39 28								
	I	Z	31								
	WEL EP	ZNE	21 39 55								
	ES	ZNE	44 49								
	ELR	ZNE	46 48								3 32
	MNW EP	Z	21 40 51								
	E	Z	41 04								
OCT 10	07 56 40.5	25.2S	180.0E	432KM	3.8						
	GNZ EP	Z	07 59 38								
	ES	Z	08 08 02								
	KRP P	Z	07 59 39								
	WEL S	ZNE	08 02 57								

OCT	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
								WEL	TE	MAG			
10	08	31	07.7	23.8S	179.7W	441KM							
	KRP	P	Z	08	34	22							
	GNZ	EP	Z	08	34	23							
		ES	Z			36	59						
	WEL	P	ZNE	08	34	52							
		ES	ZNE			37	50						
10	17	13	29.8	30.2S	179.3W	294KM							
	GNZ	EP	Z	17	15	35							
		I	Z			41							
		ES	Z			17	14						
	KRP	P	Z	17	15	42							
	WEL	EP	ZNE	17	16	14							
		ES	ZNE			18	25						
11	00	13	13.4	16.2S	168.2E	17KM	5.3						
	KRP	EP	Z	00	18	16							
	GNZ	EP	Z	00	18	27							
11	10	06	44.9	19.1N	156.6W	33KM	5.3						
	KRP	EP	Z	10	17	05							
	GNZ	EP	Z	10	17	06							
	WEL	P	Z	10	17	34							
		ELR	Z			37	00	1	32				
11	10	21	01.1	6.3S	145.7E	138KM	5.0						
	KRP	EP	Z	10	29	06							
11	11	10	33.6	13.6S	166.6E	68KM	5.0						
	KRP	EP	Z	11	15	57							
	GNZ	EP	Z	11	16	19							
	ROX	EP	Z	11	16	51							
11	21	15	03.9	0.6S	121.7E	33KM	6.3						
	ROX	ES	NE	21	33	06		4	18	4	18	16	18
		LQ	NE			40	20						
	KRP	IP	Z	21	25	23.0	U						
	WEL	IP	ZNE	21	25	26.5	U	4	6	8	16		
		S	ZNE			33	55	5	32				
		MAX	Z			52	00						
	GNZ	P	Z	21	25	36							
12	01	48	30.8	21.6S	177.1W	188KM	4.4						
	GNZ	P	Z	01	52	23							
12	15	42	54.7	3.0N	126.7E	59KM	5.9						
	GNZ	EP	Z	15	53	18							
	WEL	EP	Z	15	53	36		1	16				5.4
		ES	ZNE	16	01	26		2	30	4	56	5	32

OCT	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)					
								WEL	TE	MAG			
12	21	55	33.2	31.3S	110.8W	25KM	6.0						
	WEL	EP	Z	22	05	32							
		S	ZNE			13	44	2	28	4	16	4	20
		ELQ	NE			19	52			21	36	6	30
		ELR	ZE			21	00					13	30
	ROX	ES	NE	22	14	23							
		ELR	ZNE			25	00						
13	10	38	59.3	3.3S	149.9E	59KM	5.1						
	KRP	EP	Z	10	46	42							
	GNZ	EP	Z	10	46	52							
		E	Z			47	01						
	WEL	EP	Z	10	47	04							
		EPP	Z			49	00			1	10		5.8
		ES	ZNE			53	32			2	10	3	8
		ELR	Z			59	40						6.1
13	17	20	14.9	32.6S	179.8W	118KM	4.4						
	GNZ	P	Z	17	21	50							
		I	Z			54							
		ES	Z			22	54						
	KRP	EP	Z	17	21	57							
	WEL	EP	ZNE	17	22	33							
		ES	ZNE			24	16						
	GPZ	ES	N	17	25	26							
14	03	04	59.6	33.4N	141.8E	33KM	5.6						
	KRP	EP	Z	03	16	53							
14	03	45	58.0	21.4S	178.5W	481KM	4.5						
	KRP	P	Z	03	49	34.0							
14	12	06	38.1	5.7S	150.5E	89KM	4.0						
	KRP	P	Z	12	14	01.0							
	GNZ	EP	Z	12	14	15							
	WEL	EP	Z	12	14	18							
15	02	07	06.4	6.6S	154.8E	62KM	5.1						
	KRP	P	Z	02	14	07							
	GNZ	P	Z	02	14	20							
16	06	15	31.5	23.6S	177.6W	178KM	5.5						
	GNZ	EP	Z	06	19	02							
	KRP	P	Z	06	19	05.0							
		ES	Z			22	00						
	WEL	P	ZNE	06	19	37				1	20		4.9
		S	ZNE			22	51						

DATE	STATION	TYPE	Z	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)	WEL	TE	MAG
OCT 30	GNZ	P	Z	16	38	11							
	KRP	P	Z	16	38	12							
	CNZ	EP	Z	16	38	24							
NOV 01				02	56	41.4	25.1S 179.7W	459KM	5.0				
	ONE	EP	E	02	59	23							
	GNZ	EP	Z	02	59	39							
		ES	Z	03	02	08							
	TNZ	EP	Z	02	59	53.5							
	WEL	E(P)	Z	03	00	12							
		E(S)	N	03	04								
		E	Z	03	08								
	ROX	E(P)	Z	03	01	03							
					12	26	06.2	3.1N 128.1E	63KM	6.3			
NOV 01	KRP	EP	Z	12	36	07							
		E*PP	Z	12	36	17							
		E(PCS)	Z	12	36	10							
	TNZ	E(P)	Z	12	36	10							
	ROX	EP	Z	12	36	12							
		ES	NE	12	36	12							
		E(L)	NE	12	36	22							
	GNZ	EP	Z	12	36	15							
	CNZ	E(P)	Z	12	36	17							
	WEL	EP	Z	12	36	17							
	E(S)	Z	12	36	17								
	EL	ZNE	12	36	00				4	23			
NOV 01	KRP	EP	Z	12	49	43							
		E	Z	12	50	13							
	GNZ	EP	Z	12	50	08							
	CNZ	EP	Z	12	50	15.5							
WEL	EP	Z	12	50	38								
NOV 01				16	43	40.6	27.3S 178.5W	366KM	4.0				
				16	48	50							
				16	49	27							
NOV 02				08	10	05.5	16.9S 169.7E	255KM	4.7				
	KRP	EP	Z	08	14	47.5							
	CNZ	EP	Z	08	14	59							
NOV 02				18	37	30.0	20.9S 178.2W	604KM	4.4				
	KRP	EP	Z	18	41	08							
NOV 03				12	43	04.7	0.1N 123.7E	149KM	5.4				
	CNZ	E(P)	Z	12	53	04							
		E*PP	Z	12	53	16							
	GNZ	EP	Z	13	01	00							
	WEL	E(S)	Z	13	01	00							
	ROX	E	Z	12	53	30							

DATE	STATION	TYPE	Z	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)	WEL	TE	MAG	
NOV 03				18	28	38.6	1.7S 149.8E	35KM	5.8					
	GNZ	E(P)	Z	18	32	18								
NOV 04				06	27	53.8	16.3S 172.9W	33KM	4.4					
	KRP	EP	Z	06	33	03								
NOV 06				09	53	22.4	44.4N 149.0E	60KM	5.7					
	KRP	E(P)	Z	10	05	56								
	WEL	E(SKS)	ZN	10	16	40				5	24		4	24
		EL	ZN	10	16	40								
	ROX	E(SKS)	NE	10	17	24								
		ELQ	E	10	17	24								
				07	44	05.7	6.5S 148.2E	48KM	5.3					
NOV 07	KRP	EP	Z	07	51	38								
	WEL	EL	Z	08	04	00								
NOV 07				14	49	13.4	45.5N 150.3E	33KM	5.6					
	WEL	EL	Z	15	15	44								
NOV 07				18	37	43.7	0.4S 100.1E	107KM	5.1					
	CNZ	EP	Z	18	49	38								
	KRP	EP	Z	18	49	39								
		E(*PP)	Z	18	49	39								
	WEL	ES	N	18	59	26								
		EL	ZN	19	11	00				9	23			
	ROX	ESS	N	19	06	00								
	ESSS	E	19	06	00									
	EL	E	19	06	00									
				23	41	55.1	19.9S 177.4W	281KM	4.5					
NOV 07	KRP	EP	Z	23	45	47								
	GNZ	EP	Z	23	45	58								
		E	Z	23	45	58								
		E(S)	Z	23	45	58								
	CNZ	EP	N	23	50	09								
	WEL	EP	Z	23	46	28								
		E(S)	N	23	46	28								
		E	Z	23	47	26								
	MNW	EP	Z	23	47	26								
					01	25	35.7	32.2S 178.8W	33KM	4.4				
NOV 08	GNZ	EP	Z	01	27	17								
		ES	Z	01	27	17								
	KRP	EP	Z	01	27	25								
	WEL	E(P)	Z	01	28	00								
		E(S)	ZNE	01	28	00								
		E	ZNE	01	28	00								
NOV 08	MNW	EP	Z	05	32	33								

		ES	Z	33 24					
NOV 08	MNW EP	Z	06 01 05						
	ES	Z	56						
NOV 08	MNW EP	Z	10 17 40						
	ES	Z	18 30						
NOV 08	MNW EP	Z	12 34 54						
	ES	Z	35 46						
NOV 09	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
	18 43 38.6	19.3N 121.0E	33KM	5.0	WEL 70				
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	18 55 29						
	TNZ EP	Z	18 55 30						
	CNZ EP	Z	18 55 32						
	MNW P	Z	18 55 33						
	ROX EP	Z	18 55 37						
	GNZ EP	Z	18 55 39						
NOV 10	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
	12 45 16.3	31.6N 132.3E	169KM	4.7	WEL 82				
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	12 57 31						
NOV 10	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
	16 34 15.5	3.7S 136.6E	14KM	5.4	WEL 90				
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	16 43 11						
	WEL EL	Z	16 58 00						
NOV 11	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
	14 11 05.0	29.4S 178.2W	89KM	4.1	WEL 13				
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	14 13 27						
	GNZ E(S)	Z	14 15 09						
	E	Z	19						
NOV 12	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
	00 55 25.6	33.2S 179.9W	74KM	4.2	WEL 1				
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	ONE EP	E	00 56 39.5						
	GNZ EP	Z	00 56 43						
	E	Z	57 57						
	KRP EP	Z	00 56 50.0 D						
	E	Z	58						
	TUA E(P)	Z	00 56 50						
	AUC EP	Z	00 56 58						
	CNZ EP?	Z	00 57 04 D						
	E	Z	06 U						
	TON E	Y	00 57 13						
	TNZ EP	Z	00 57 15						
	WEL EL	ZN	01 00 00						
	ROX EL	NE	01 03 00						
NOV 12	ONE E(P)	E	01 09 33						
	GNZ EP	Z	01 09 39						
	KRP P	Z	01 09 44 U						
	E	Z	52						
	TUA E(P)	Z	01 09 46						
	CNZ EP	Z	01 09 58						
	TNZ E?	Z	01 10 16						
	E	Z	22						
	WEL EL	ZN	01 13 00						
	ROX MAX	E	01 18 00						

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
NOV 12 01 12 07.7	33.0S 179.7E	8KM	5.2	WEL 9					
	H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG	
ECZ EP	Z	01 13 20							
E	Z	14 23							
E	Z	37							
ET	Z	18 09							
ONE EP	E	01 13 27.4 W							
E(S)	E	14 28							
E	E	15 34							
E	E	21 50							
GNZ EP	Z	01 13 33							
E	Z	40							
E	Z	46							
E	Z	51							
E	Z	14 51							
KRP P	Z	01 13 38.5							
E	Z	47							
TUA EP	Z	01 13 39							
E	Z	46							
ES	Z	14 53							
AUC EP	Z	01 13 42							
CNZ EP?	Z	01 13 51							
E	Z	54.6 D							
E	Z	15 36							
TON E(S)	Y	01 15 24							
E	Y	34							
TNZ EP	Z	01 14 02							
E	Z	04							
WEL E	Z	01 14 36							
E	Z	44							
ES	ZE	15 59							
E	ZNE	16 42							
EL	ZNE	17 00	5	20					
GPZ ES	N	01 17 05							
ROX EL	NE	01 20 00							
NOV 12	ECZ EP	Z	01 31 37						
	ET	Z	36 16						
	ONE EP	E	01 31 45						
	GNZ P	Z	01 31 49						
	E	Z	32 07						
	AUC EP	Z	01 31 51						
	KRP EP	Z	01 31 55						
	E	Z	32 03						
	TUA EP	Z	01 31 56						
	ES	Z	33 15						
	CNZ EP?	Z	01 32 08						
	E	Z	11						
	TNZ EP	Z	01 32 20						
	WEL EL	Z	01 35 00						
	ROX MAX	N	01 39 00						
NOV 12	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
	05 33 28.7	18.2S 176.4W	107KM	5.2	WEL 24				
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	05 38 01						
	WEL EP	Z	05 38 33						
	E(S)	Z	42 38						
	EL	ZNE	44 00	35	23				
	ROX EL	NE	05 46 00						
NOV 12	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
	09 25 54.1	16.7S 174.6W	190KM	4.8	WEL 26				
		H M S	DIR	AZ TZ	AN	TN	AE	TE	MAG
	KRP EP	Z	09 30 44						
	CNZ EP	Z	09 30 52						

WEL EP		Z	09 31 14										
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)									
DIR	AZ	TZ	AN	TN	AE	TE	MAG						
NOV 12	13 21 13.1	29.1S 178.3W	136KM	3.7									
KRP EP	Z	13 23 30											
CNZ E	Z	13 24 05											
WEL EL	Z	13 28 00											
ROX EL	E	13 30 00											
NOV 12	13 57 38.8	36.7N 139.0E	38KM	4.8									
KRP EP?	Z	14 10 14											
NOV 12	KRP EP	Z	19 12 30										
CNZ EP	Z	19 12 48											
WEL EL	Z	19 17 00											
NOV 13	13 28 02.8	7.4S 125.4E	368KM										
TUA EP	Z	13 37 05											
NOV 13	21 57 30.0	29.2S 178.1W	77KM	5.4									
ONE EP	E	21 59 42											
TUA EP	Z	21 59 50											
E	Z	22 00 11											
ES	Z	01 44											
KRP P	Z	21 59 53											
TNZ EP	Z	22 00 16											
WEL EP	Z	22 00 44											
E	ZE	55											
E	E	02 50											
ES	ZN	52											
ROX E(P)	Z	22 01 50											
ES	E	05 36											
EL	ZNE	06 30	7	20				18	20				
NOV 14	16 54 50.7	5.3S 146.8E	228KM	4.3									
KRP P	Z	17 02 20											
WEL EP	Z	17 02 32											
GNZ P	Z	17 02 34											
NOV 15	16 45 44.8	49.5S 163.6E	33KM										
ROX E(S)	ZNE	16 47 58											
EL	ZNE	48 30											
GPZ EP	N	16 47 38											
E(S)	N	49 03											
E	N	51											
WEL E(L)	Z	16 51 00											
CNZ EP	Z	16 48 51											
KRP EP?	Z	16 48 57											
E	Z	49 02											
GNZ E?	Z	16 49 25											
NOV 16	KRP EP	Z	13 36 30										
WEL EL	Z	13 41 00											
ROX EL	E	13 43 00											

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)									
DIR	AZ	TZ	AN	TN	AE	TE	MAG						
NOV 16	22 40 44.0	1.0N 118.8E	33KM	6.7									
WEL EP	Z	22 51 27											
NOV 16	23 05 29.2	15.8S 173.0W	12KM	4.8									
KRP EP	Z	23 10 52											
NOV 17	00 01 17.1	16.3S 173.7W	33KM	5.4									
KRP EP?	Z	00 06 25											
E	Z	35											
WEL EL	Z	00 14 00											
NOV 17	08 15 39.3	5.7S 150.7E	45KM	6.7									
KRP EP	Z	08 23 05											
E(*PP)	Z	14											
E	Z	18											
EPCP	Z	25 16											
E(S)	Z	28 58											
EL	Z	36 00											
CNZ EP	Z	08 23 13											
E*PP	Z	24											
WEL EP	Z	08 23 23											
E*PP	Z	33											
EPCP	ZNE	25 15											
E	ZNE	29 16											
ES	NE	32											
EL	ZNE	32 00											
ROX EP	Z	08 23 37											
E	Z	49											
E	Z	29 14											
ES	NE	52											
EL	NE	33 00											
NOV 17	11 03 06.8	23.4S 179.9W	549KM	5.5									
KRP EP	Z	11 06 16											
E(S)	Z	08 57											
CNZ EP	Z	11 06 28											
E(*PP)	Z	08 20											
ES	Z	09 20											
WEL EP	Z	11 06 48											
E(S)	ZN	09 46											
E	Z	54											
NOV 17	19 00 10.4	12.7N 144.9E	43KM	5.1									
KRP E(P)	Z	19 10 17											
CNZ EP	Z	19 10 22											
WEL EL	Z	19 31 00											
NOV 18	14 34 54.5	6.0S 148.2E	49KM	6.1									
KRP EP	Z	14 42 29											
CNZ EP	Z	14 42 37											
GNZ EP	Z	14 42 44											
WEL EP	Z	14 42 44											
EPP	Z	44 36											

NOV 24	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
		H M S	KM		WEL
		DIR	AZ	TZ	AN TN AE TE MAG
	06 35 14.5	20.2S 179.2W	660KM	4.8	
KRP	P	Z 06 38 52			
GNZ	EP	Z 06 38 54			
MNH	EP	Z 06 40 15			
	10 41 33.5	6.8S 107.4E	125KM	6.0	
MNH	P	Z 10 51 59.5	U		
ROX	EP	Z 10 52 06			
	E(*PP)	Z 10 52 36			
TNZ	EP	Z 10 52 22			
WEL	E(P)	Z 10 52 23			
	E	Z 11 01 12		0 30	
	ES	Z 11 01 12		1 30	
	EL	Z 10 52 26			
KRP	EP	Z 10 52 26			
GNZ	EP	Z 10 52 38			
	12 40 51.4	13.1N 124.7E	5KM	6.1	
KRP	EP	Z 12 52 04			
	E	Z 12 52 08			
MNH	EP?	Z 12 52 04			
	E	Z 12 52 07			
TNZ	EP	Z 12 52 09			
ROX	EP	ZE 12 52 11			1 16 5.1
	S	NE 13 01 25	S		
	E(SCS)	E 02 18			
	ESS	E 06 00			
	ESSS	NE 09 30			
	EL	NE 12 00			
WEL	IP	Z 12 52 14	U		
	S	ZNE 13 01 26		4 20	16 16 5 16 6.7
	E(SCS)	E 02 16			
	ESS	ZNE 06 00			
	ESSS	E 09 30			
	EL	ZE 14 00		17 24	14 24
GNZ	EP	Z 12 52 20			
	12 50 40.2	13.2N 124.9E	97KM	5.0	
KRP	EP	Z 13 01 43			
TNZ	E(P)	Z 13 01 43			
MNH	EP	Z 13 01 45			
ROX	EP	Z 13 01 49			
	13 20 07				
	14 48 47.0	24.6S 179.5W	406KM	4.2	
KRP	EP	Z 14 51 55			
	E	Z 14 51 59			
GNZ	EP	Z 14 51 59			
	E(S)	Z 14 54 33			
TNZ	EP	Z 14 52 13			
	23 51 20.2	23.2S 176.0W	33KM	4.7	
WEL	EL	Z 00 01 00			
ROX	EL	NE 00 04 00			

NOV 25	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
		H M S	KM		WEL
		DIR	AZ	TZ	AN TN AE TE MAG
	08 31 32.9	16.1S 175.1W	302KM	4.7	
GNZ	EP	Z 08 36 15			
KRP	EP	Z 08 36 16			
TNZ	EP	Z 08 36 30			
	09 24 08.9	4.3S 122.2E	610KM	6.2	
MNH	EP	Z 09 33 00			
ROX	ES	N 09 40 14			
	E(L)	NE 47 36			
	EL	E 56 00			
	E	Z 10 33 49			
TNZ	EP	Z 09 33 12			
KRP	EP	Z 09 33 13			
	E*PP	Z 35 29			
	E	Z 36 55			
WEL	EP	Z 09 33 17			
	ES	ZNE 40 38		1 5	5 4 5 4 6.5
	ESS	Z 44 00		0 22	
	EL	Z 54 00		1 22	
GNZ	EP	Z 09 33 26			
	19 35 16.4	5.2S 125.2E	430KM	5.1	
ROX	EL	NE 19 57 00			
WEL	ESS	Z 19 55 24			
	EL	Z 20 00 00			
	02 35 26				
	E	Z 37			
	E	Z 36 28			
	E(S)	Z 35			
GNZ	EP	Z 02 35 38			
	E	Z 56			
	E(S)	Z 36 50			
KRP	EP	Z 02 35 48			
	E	Z 36 10			
TON	E(S)	Y 02 37 28			
TNZ	E	Z 02 36 20			
WEL	ES	NE 02 38 09			
	EL	Z 40 30			
	06 55 25.1	28.0S 177.0W	33KM	4.2	
KRP	EP?	Z 06 58 29			
GNZ	E	Z 07 00 11			
	E	Z 30			
WEL	ES	NE 07 01 28			
	10 21 07.2	24.9N 122.0E	33KM	5.4	
KRP	EP	Z 10 33 17			
CNZ	EP	Z 10 33 21			
MNH	EP	Z 10 33 22			
ROX	EP	Z 10 33 26			
	E(S)	NE 44 00			
	ESS	NE 49 00			
	ESSS	NE 53 00			
	EL	NE 11 00 30			2 20 2 20

DATE	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
	H	M	S	EPICENTRE	DEPTH	MAG			WEL	AE	TE	MAG
DEC 03	08	16	55.4	6.1S	150.6E	35KM	4.7					
	KRP	EP	Z	08	24	22						
	GNZ	EP	Z	08	24	37						
DEC 04	15	48	43.4	6.4S	150.7E	19KM	5.2					
	KRP	EP	Z	15	56	07						
	GNZ	EP	Z	15	56	23						
	WEL	EP	Z	15	56	27	4	8			6.2	
	EPP	S	ZN	58	03		4	10			6.1	
			ZNE	16	02	35			3	8	3	10
			LQ	05	44		4	14			3	16
			LR	07	56		13	20			12	20
	ROX	ES	NE	16	02	57					3	8
		ELQ	E	09	00						3	24
		MAX	NE	12	00						4	14
DEC 05	05	14	39.6	20.9S	178.5W	529KM	5.2					
	KRP	P	Z	05	18	17.8						
	GNZ	EP	Z	05	18	20						
DEC 06	04	27	15.5	2.3S	138.3E	33KM	5.0					
	KRP	EP	Z	04	36	04						
	GNZ	EP	Z	04	36	20						
DEC 06	05	41	06.9	18.0S	178.5W	551KM	5.6					
	KRP	EP	Z	05	45	11						
DEC 07	08	58	43.8	35.4S	151.3E	54KM	5.8					
	KRP	P	Z	09	06	08.0						
		PCP	Z	08	16							
	GNZ	P	Z	09	06	23.0						
		*PP	Z	37								
		I	Z	45							5.1	
	WEL	EP	Z	09	06	27	3	26				
		PP	Z	08	14		3	14				
		S	Z	12	24		9	50				
		SS	Z	15	50		17	48				
		ELR	Z	18	30		22	22				
DEC 07	15	43	29.7	5.1S	145.9E	219KM						
	KRP	P	Z	15	51	06						
DEC 08	17	49	46.3	34.7N	139.2E	31KM	5.2					
	KRP	P	Z	18	01	52						
DEC 09	06	19	33.3	19.5S	176.9W	290KM	3.8					
	KRP	P	Z	06	23	41.0						

DATE	H M S			EPICENTRE			DEPTH	MAG	DIST (DEG)			
	H	M	S	EPICENTRE	DEPTH	MAG			WEL	AE	TE	MAG
DEC 09	11	22	22.1	35.1S	109.7W	33KM	4.7					
	WEL	ES	Z	11	40	00						
		ELR	Z	48	15							
DEC 09	ECZ	EP	Z	13	40	26						
	KRP	EP	Z	13	40	38						
		I	Z	43								
	GNZ	EP	Z	13	40	54						
DEC 09	13	35	42.4	27.5S	63.2W	586KM	5.9					
	WEL	EP	Z	13	47	55						
		*PP	Z	50	02		1	16				
		SKS	ZNE	57	33				3	6	4	6
		SP	Z	59	30		2	20				
	GNZ	P	Z	13	47	59						
		*PP	Z	50	05							
	EPKPP	Z	14	05	27							
	MNW	EP	Z	13	47	59						
		*PP	Z	50	05							
	KRP	P	Z	13	48	03.2						
		*PP	Z	50	09.0							
		I	Z	27.8								
		PKPP	Z	14	05	10						
DEC 10	15	10	25.6	36.5S	110.5W	33KM	5.3					
	WEL	P	Z	15	20	08						
		S	ZE	28	12		4	20			6	20
		LQ	N	34	04				5	26		6
		LR	ZE	36	08		14	22			11	26
	KRP	P	Z	15	20	12						
	ROX	ES	E	15	28	40					5	18
												6.0
DEC 10	15	11	05.5	40.4N	138.9E	33KM	6.0					
	KRP	P	Z	15	23	39.8						
		E	Z	49.5								
	GNZ	EP	Z	15	23	46						
	WEL	P	Z	15	23	51	3	10				
	MNW	P	Z	15	24	01						
	ROX	EP	Z	15	24	04						
DEC 11	16	04	58.2	38.9N	130.0E	550KM	5.6					
	KRP	P	Z	16	16	47.9						
	GNZ	P	Z	16	16	54						
DEC 12	02	19	52.2	15.0S	173.8W	33KM	5.0					
	GNZ	EP	Z	02	26	13.2						
DEC 12	07	20	00.0	6.9S	150.6E	33KM	5.9					
	KRP	EP	Z	07	27	16						
	GNZ	EP	Z	07	27	33						
	WEL	EP	Z	07	27	38						
		PP	Z	29	10		2	12				
		ES	NE	33	34				2	28	2	24
												5.7
												5.5

		E 56 10				2 14			
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 23	05	46	59.4S 26.9W	33KM	6.0	WEL	7E		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	Z	05 58 57						
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 23	10	16	23.6S 179.0W	33KM	4.9	WEL	1E		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
KRP	P	Z	10 20 22						
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 24	18	45	4.4S 153.1E	93KM	6.1	WEL	4E		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
KRP	P	Z	18 53 06.8	D					
	E*PP	Z	28.2	U					
	EPCP	Z	55 15.0						
	ESCP	Z	58 59.5						
CNZ	P	Z	18 53 20.0						
	E*PP	Z	41.3						
WEL	P	ZNE	18 53 24						
	ES	ZN	59 36		2	36			
	ESS	ZNE	19 02 36		3	32			
	ELR	Z	05 28		5	25			
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 24	19	25	3.9N 96.9E	141KM	5.4	WEL	6E		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	Z	19 38 09						
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 27	17	43	12.9N 125.4E	33KM		WEL	7E		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
KRP	P	Z	17 54 27.5						
	E	Z	51						
MNW	EP	Z	17 54 31						
CNZ	P	Z	17 54 32.0						
	E	Z	53.0						
WEL	EP	Z	17 54 35		2	7			6.2
	ES	ZNE	18 03 42				4	8	2 8 6.4
	EPS	E	04 44						3 8
	ELR	Z	16 30		2	30			
ROX	ES	N	18 03 48				2	10	6.1
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 28	11	22	31.0S 177.0W	33KM		WEL	1E		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
GNZ	EP	Z	11 25 05						
	ES	Z	26 51						
KRP	EP	Z	11 25 12						
ONE	EP	E	11 25 03						
WEL	EP	ZNE	11 25 49						
	ES	ZNE	28 02						
COB	ES	E	11 28 18						
KAI	ES	X	11 28 56						
GPZ	ES	N	11 29 05						
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 28	16	16	22.1S 179.6W	611KM		WEL	2E		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
ONE	P	E	16 19 17.4						
	E	E	21 51						
	IS	E	55						
KRP	IP	Z	16 19 30.3	D					
	S	Z	22 19						
	EPCP	Z	23 41						
	ESCP	Z	26 24.0						

		GNZ P Z 16 19 31.8							
		ES Z 22 17							
		ESCP Z 26 27.0							
		ESCS Z 30 04							
		TNZ EP Z 16 19 44.8							
		I Z 47.4							
		ES Z 22 46							
		ESCP Z 26 27							
		WEL IP ZNE 16 19 59.2 U							
		*SP ZN 22 36				4		11	
		S ZNE 23 04							
		SCP ZNE 26 33						33 38 5.8	
		ISCS ZNE 30 14 S							
		I*SSCS NE 34 28 NW				28 14		20 14	
		COB EP E 16 20 03				23 14		18 16	
		E E 06							
		ES E 23 10							
		ESCS E 30 09							
		KAI P X 16 20 19.8							
		I X 27.0							
		ES X 23 38							
		ESCS X 30 18							
		GPZ P N 16 20 25.8							
		ES N 23 27							
		I N 24 08.5							
		ESCP N 26 44							
		CNZ EP Z 16 20 38.8							
		I Z 42.0 U							
		ES Z 22 38							
		SCP Z 26 27							
		ESCS Z 30 09							
		ROX P ZN 16 20 48.0				4 12		4 15	
		E*SP ZNE 23 32				10 18		6 14	
		SCP Z 26 46						3 14	
		*SSCS NE 34 56				9 17		9 15	
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 29	22	59	17.2S 178.7W	493KM	4.9	WEL	25		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	Z	23 03 33.2						
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 29	23	22	6.2S 155.5E	50KM	5.2	WEL	39		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
KRP	EP	Z	23 29 49						
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 30	13	15	16.7S 175.0W	33KM	4.8	WEL	26		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
KRP	P	Z	13 20 44						
CNZ	EP	Z	13 20 59						
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 30	13	19	62.6S 165.8E	33KM	5.2	WEL	22		
		H M S		DIR	AZ	TZ	AN	TN	AE TE MAG
MNW	EP	Z	13 23 45						
ROX	EP	Z	13 23 47						
	ELR	ZN	28 00		9	16			5.8
WEL	P	Z	13 24 41		49	21	4	22	
	S	ZE	28 54						
CNZ	P	ZNE	30 00		2	22			8 15 5.8
	LR	Z	13 25 02		20	30			9 20
	E	Z	23						
KRP	P	Z	13 25 13.5						

DEC 30	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)							
	15	27	25.8	31.3N	138.8E			261KM	5.4	WEL 79	AE	TE	MAG		
	KRP	IP	Z	15	38	51.8		DIR	AZ	TZ	AN	TN	AE	TE	MAG
	CNZ	P	Z	15	38	57.0									
	GNZ	P	Z	15	38	58.5									
	MNW	EP	Z	15	39	12									

DEC 30	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)							
	21	30	58.6	23.3S	179.9W			547KM	5.2	WEL 14	AE	TE	MAG		
	KRP	P	Z	21	34	08.6		DIR	AZ	TZ	AN	TN	AE	TE	MAG
		ES	Z			36 50									
		SCP	Z			41 20									
	GNZ	P	Z	21	34	10.4									
		ES	Z			36 47									
		SCP	Z			41 23.0									
	CNZ	P	Z	21	34	19									
		ES	Z			37 03									
		SCP	Z			41 22									
	WEL	EP	NE	21	34	40									
		ES	NE			37 40									
	ROX	EP	Z	21	35	29.0									

DEC 31	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)							
	17	45	04	17	45			20	17	45	22.6	47 48	17 45 29		
	ONE	EP	E	17	45	04									
	KRP	P	Z	17	45	20									
	GNZ	EP	Z	17	45	22.6									
		ES	Z			47 48									
	CNZ	EP	Z	17	45	29									

DEC 31	H M S			EPICENTRE		DEPTH	MAG	DIST (DEG)							
	23	13	30.9	4.6S	153.0E			77KM	5.1	WEL 41	AE	TE	MAG		
	KRP	P	Z	23	20	52.5		DIR	AZ	TZ	AN	TN	AE	TE	MAG
		EPCP	Z			23 02.5									
	GNZ	EP	Z	23	21	01									

AFIAMALU

Trace amplitudes are in millimeters, read directly from the photographic paper records.

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JAN 1	eS	ZN	17	46	34			
	eSSS	Z			54.4			
	eL	ZN			56.0			
2	eS	Z	19	27.0				
	eL	ZN			30.0			
2	eP	Z	23	44	03			
	IS	NE			58			
3	eP	Z	00	47	03			
	IS	NE			58			
4	eS	NE	03	58	08			
	eP	ZNE	10	14	53	1.5	1.5	1.4
5	eS	NE			17 05			1.5
	eT	ZNE			26 05			1.9
	IS	NE	12	39	39.6			
5	IS	NE			40 14			
	eS	ZNE	16	42	50			
5	eL	NE			47.7			
	eL	Z			48.6			
	eS	ZNE	00	14	50			
6	eSS	ZNE			21 24			
	e	Z			25 10			
	eL	Z			37.4			
6	IP	Z	00	46	36			
	IS	NE			57			
6	IP	Z	06	05	55	1.9	2.9	
	eIP	Z	06	24	41			
6	eS	NE			26 16			
	e(P)	Z	11	24	52			
6	eS	NE			26 01			
	eS	Z	05	35	22			
7	eL	ZNE			40.7			
	e	ZN	13	27.0				
7	eP	Z	22	01	42			
	IS	NE			02 01			
7	eP	ZNE	23	13	40			
	IS	E			14 32			
	eT	ZNE			18 31			
8	eP	Z	08	33	08			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JAN	eS eT	E ZE	53 36 20					
8	iP iS	ZE E	11 52 09 24.5					
8	eP iS eT	Z E ZE	11 59 58 12 01 00.1 04 49					
8	eL eL	N Z	23 00 00 04.2					
9	eS eSS eSSS eL	ZN ZN ZN ZN	18 51 50 55 46 59 36 19 02.5					
10	iP eS	Z ZNE	02 49 56 50 23					
10	eP eS eSS eSSS eL	Z ZNE Z ZN ZNE	05 02 12 11 08 14 48 19 00 22.3					
10	iP eS	Z ZNE	07 26 00 47	1.2	0.8			
10	iP iS	ZE NE	16 53 25.5 54 06	8.2	2.0		3.9	2.0
10	eL	ZNE	17 28.2					
10	eP	Z	22 02 32					
10	iP eS	Z NE	22 18 32 53					
11	iP iS	ZNE NE	06 40 18.7 35	7.8	1.9	6.3	1.9	2.6 1.5
11	e(L)	E	07 30.8					
11	eS	N	09 31 50					
11	eP eS	Z NE	17 53 13 54 43					
12	eP eS eT	Z NE ZNE	00 02 24 04 44 16 20					
12	iP eS eL eL	Z ZE ZE ZNE	06 11 03.3 20 04 27 50 30.2					
12	iP epP	Z Z	11 20 47.3 21 33					
13	iP eS	Z NE	13 34 39 35 47					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JAN 13	eL	ZE	17 55.5					
13	iP eS	Z ZN	18 53 59.9 58 00	1.3	2.0			
14	eP eS eL eT	Z ZNE E ZNE	04 21 08 23 36 23.8 34 17					
14	iP iS	Z NE	10 11 19 45					
14	eP eS eT	Z ZNE ZNE	10 23 35 26 12 37 07					
14	eP e epP eS ePcS eSS	Z Z Z NE Z NE	15 45 17 50 46 04 51 00 05 54 00					
14	eP eS eT	Z NE ZNE	19 07 10 36 10 00					
14	eP iS	Z NE	20 23 31 51					
14	eP eS	Z NE	22 22 02 26					
15	eL eL	Z N	02 54.7 56.0					
15	eP eS eT	ZN ZNE ZNE	18 50 01 52 43 19 03 30	3.6	2.0	1.4	2.0	
15	eP eS	Z ZNE	19 15 56 16 49					
15	iP iPcP eS eSS eSSS eLq eLr	Z Z ZN ZN ZNE ZNE ZN	21 46 25 42 54 48 58 39 22 01 24 04.0 07.2					
15	eP eS	Z Z	23 07 14 08 56					
16	iP iS	Z NE	08 45 40.7 46 15					
16	eP eS	Z NE	11 47 04 48 56					
17	eP eS eL eL	Z E ZN ZE	02 58 48 03 01 44 02.3 05 50					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JAN 17	eP Z	03 18 20						
17	eP ZE	09 38 18	0.6	2.1				
17	eP Z	12 17 00	1.5	1.0				
18	iP ZE	11 39 37						
	iS NE	57						
18	eP Z	12 16 24	1.0	2.0				
	iPcP Z	29	4.1	2.0				
	ePP Z	19 26						
	eS ZNE	26 04						
	eSS ZNE	31 00						
	eSSS ZE	34 14						
	eLq NE	36 06						
	eLr ZNE	38.7						
18	iP Z	12 45 17.4						
	eS ZNE	32						
18	eP Z	18 46 55						
	eS NE	49 00						
	eT ZNE	58 37						
19	eL ZE	07 14.4						
19	eP Z	11 56 21						
	eS NE	53						
	eT ZNE	59 22						
19	eP Z	23 23 56						
	eS NE	24 42						
19	iP ZNE	23 25 01	5.3	1.3	6.2	1.5	4.5	1.5
	iS NE	26 29						
20	iP Z	17 12 43.2	13.0	2.1				
	i Z	57						
	iPp ZNE	13 26						
	iS ZNE	16 08						
	iPcS Z	20 28	1.5	2.2				
20	eP Z	23 10 19						
	eS NE	13 11						
	eT ZNE	25 05						
21	eP Z	07 25 51						
21	iP Z	08 40 32						
	eS NE	43 05						
21	iP Z	09 39 58						
	eS NE	41 57						
22	iP Z	20 42 27.4	2.5	1.5				
	iS NE	57						
22	iP Z	22 20 48						
	iS NE	21 36						
23	iP ZE	00 04 32	1.8	2.4				
	iS ZE	08 28						
	iL ZE	09 18						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JAN 23	iP Z	02 51 20.6	0.7	2.0				
23	iP Z	14 48 10.7						
	iS NE	40						
24	iP Z	00 07 57						
	iS NE	08 28						
24	iP Z	15 17 28.5						
	eS NE	50						
24	iP Z	17 28 37	1.0	1.9				
24	iP Z	19 55 21	3.5	1.8				
24	eP Z	21 14 31						
	eS Z	16 03						
24	eP Z	21 47 32						
25	iP Z	01 28 48.3	0.5	1.9				
	iS NE	30 21.8						
25	iP Z	03 41 15.2						
	iS NE	42						
25	eP Z	07 07 06						
	iS NE	08 59						
25	iP Z	23 09 44						
	iS NE	11 30						
26	eP Z	09 22 50						
	ePP Z	26 46						
	eSKS E	33 20						
	eS N	34 04						
	e ZE	35 30						
	eL Z	48.4						
	eL ZE	54.2						
27	e(P) Z	02 16 06						
	eS NE	58						
27	eL ZN	03 13.1						
27	eP Z	20 22 14	0.7	1.9				
28	iP Z	05 50 51	1.4	2.0				
	eSS ZNE	59 52						
	eL ZE	06 02.0						
28	iP Z	06 19 14	1.2	1.5				
	eS NE	20 50						
28	iP Z	07 31 02.5	0.7	0.9				
	eS NE	32 31						
28	eP Z	10 45 50						
	eS NE	47 31						
28	iPKP Z	14 27 45.1	3.0	2.0				
	iPKP Z	28 36	1.0	2.2				
	iPP Z	29 03.2						
	eSPP Z	31 00						
	eS NE	36.3						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JAN	ePPS Z	38 34						
	ePSKS E	39 40						
	eSS ZNE	45 14						
30	eP Z	07 39 48						
	eS NE	41 47						
FEB 1	1P Z	18 04 42	1.3	1.0				
	1S NE	05 03						
2	1P Z	01 56 36						
	eS NE	57 09						
2	eP Z	02 50 12						
	eS NE	51 37						
2	1P Z	07 19 35.4						
	1S NE	54.3						
2	eS NE	09 16.0						
	eL ZNE	28.8						
2	eP ZNE	11 27 13	1.2	1.9	1.6	1.8	1.5	1.4
	e NE	50						
	e(S) NE	30 39						
2	1P Z	17 47 58						
2	1P Z	23 45 24.2						
	1S ZNE	40						
3	1P Z	14 47 14						
	1S NE	33.4						
3	1P Z	20 08 26.6	7.4	1.6				
	eS NE	10 34						
4	1P Z	05 22 50.3						
	1S NE	23 27						
5	1P Z	09 52 23.2	2.0	1.3				
	1S NE	58						
5	1P Z	11 37 32.8						
	1S NE	39 14						
5	eS ZNE	11 50 06						
	eSSS ZNE	57 34						
	eL ZNE	12 00.5						
5	1P Z	12 36 20						
	1S NE	52						
5	eP Z	12 50 39						
6	eP Z	12 08 20						
	eS NE	09 49						
6	eP Z	13 18 40						
	ePP Z	20 20						
	ePPP Z	22 50						
	1S NE	27 55						
	eSS ZNE	32 10						
	eSSS E	35 40						
	eL ZN	36 44						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
FEB	eL ZN	39 24						
6	eP Z	13 25 33						
6	eP Z	20 37 24						
7	eP Z	00 45 44						
	eS NE	46 13						
7	eL ZNE	13 29.6						
7	eP Z	20 42 14	0.5	0.9				
8	eP Z	00 31 49	0.5	2.0				
8	eS NE	10 14.6						
	eL ZNE	26.4						
8	eP Z	11 28 32	0.5	1.9				
	ePcP Z	29 18						
	eL ZN	47.7						
8	1P Z	16 43 10	1.5	1.0				
	eS NE	50						
9	1P Z	02 02 00.6	4.2	1.9				
	eS NE	03 26						
9	e(P) Z	06 27 20	0.5	1.7				
9	eP Z	17 47 40						
	eS NE	48 30						
10	e1P ZNE	09 58 59	3.0	1.9	2.5	1.9	2.9	2.0
	1S NE	10 00 43.3						
10	1P Z	11 10 51						
	eS NE	11 56						
	eT ZNE	17 04						
10	eP Z	13 32 54						
	eS NE	35 02						
10	ipPcP Z	17 40 23.5	0.6	2.1				
11	1P Z	02 35 54	1.4	1.0				
	eS NE	37 05						
	eT ZNE	42 07						
11	1P Z	13 44 46.2	0.5	1.2				
11	1P Z	18 21 41.5	3.5	1.8				
	1S NE	22 10						
11	eP Z	20 43 42						
	eS NE	45 24						
11	1P Z	20 52 16.7	0.5	0.8				
	eS NE	45						
	eT ZNE	54 50						
12	eP ZNE	01 36 55						
	1S ZNE	37 22						
12	eP Z	20 39 47						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
FEB	eS ZN	46 10						
	eSS Z	47 42						
	eSSS ZN	49 32						
	eL Z	51 48						
12	1P ZE	22 34 39.1	7.4	2.0				
	1S NE	35 10					11.2	2.0
12	eP Z	23 28 19						
	1S NE	41						
13	eS ZE	03 40 06						
	eL Z	43.7						
	eL NE	45.5						
13	1P Z	03 56 02.2						
13	1P Z	04 07 11						
13	1P Z	04 25 17						
	e NE	28 00						
13	1P Z	08 18 29	1.1	1.4				
	eS NE	58						
	eT ZNE	21 09						
13	e(S) NE	10 45.4						
	e N	47.5						
13	eP Z	11 12 34						
	e NE	15 25						
13	eP Z	11 43 26						
	eS NE	44 18						
	eT ZNE	48 10						
14	e(P) ZE	04 22 11						
14	1P Z	06 30 02						
	1 E	23						
14	eP Z	16 36 51						
	1S ZNE	42 30						
	1SSS ZNE	45 18						
	1L ZE	47 00						
15	1P Z	14 02 03.3	2.5	1.3				
	eS NE	03 30						
15	eL ZNE	22 16.7						
16	1P Z	21 41 35.2	1.0	2.0				
	e Z	47.3						
	e N	50.0						
	eL Z	51.5						
17	e(P) Z	06 02 28						
17	eP Z	16 45 47						
	eS NE	47 51						
17	1P Z	22 45 19.5						
	1S NE	38						
18	1P ZE	04 43 48.7	13.8	2.0				9.5

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
FEB	1S NE	44 35						
18	e(P) Z	06 02 04						
18	1P Z	09 12 52.8						
	eS NE	13 38						
18	eP Z	10 40 54	0.5	2.0				
	eS NE	46 34						
	eL Z	48.0						
18	eP Z	19 12 16						
	eS NE	14 19						
18	1P ZNE	22 46 22	14.7	1.2				
	1S NE	54						
19	eP Z	11 17 40						
	eS NE	18 31						
	eT ZNE	22 30						
20	eL ZN	10 25.2						
21	1P Z	14 53 05.7						
	1S NE	28						
21	eP Z	15 07 54						
	1 NE	08 15						
	1 NE	09 00						
22	eP Z	01 52 39						
	1 NE	48						
22	eP Z	08 54 24						
	eS NE	57 12						
	eT ZNE	09 09 14						
22	1P ZNE	12 27 20.3	36.0	1.6	13.2	2.0	10.2	2.0
	1S NE	46						
23	1P Z	22 45 52.5						
	eS NE	46 10						
24	1P Z	14 52 28.5						
	1S ZN	55						
25	1(P) Z	13 25 07	1.0	1.2				
25	eP Z	23 27 25						
	eS NE	30 24						
	eL ZN	31.3						
25	eP Z	23 34 30						
	eS NE	36 50						
26	1P Z	21 18 49.2						
	eS NE	20 05						
26	eP Z	23 15 50	0.5	1.9				
27	eS ZE	15 36 54						
	eSS N	42 30						
	eLq N	52.0						
	eLr ZE	56.3						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
FEB 28	i(P) Z	09 03 51.7						
28	eP Z	15 13 40						
29	iP Z	09 14 18.6						
	eS NE	36						
29	iP ZNE	07 29 15	7.4	1.9	7.8	2.0	3.5	1.5
29	eS NE	15 39.5						
	eSSS E	47.3						
	eL ZNE	49.7						
29	iP Z	20 14 46						
	iS NE	15 34						
	eT ZNE	19 50						
MAR 1	iP Z	00 01 12	3.5	2.2				
2	eL ZNE	12 21.4						
2	eIP ZN	19 34 04						
	eS ZNE	35 03						
3	iP Z	01 26 10.3						
	eS NE	27 38						
3	eP Z	15 16 10						
	eS NE	19 09						
3	e Z	16 02 30						
	eL ZNE	06.0						
3	e ZNE	17 22.3						
3	iP Z	17 49 57.7	2.5	2.0				
	i Z	50 19						
3	iP Z	23 13 04.6						
	iS NE	37						
4	iP Z	20 11 23.8						
	eS NE	52						
4	iP Z	21 48 08.9	0.5	0.9				
	iS NE	56						
4	iP Z	23 35 56.3	2.5	1.0				
	iS NE	37 04						
5	iP Z	02 14 55						
5	eL E	06 37.2						
	eL ZNE	39.2						
5	iP Z	10 11 05	1.1	2.2				
	eS N	15 36						
	e ZNE	16 32						
5	iP Z	15 16 55	2.7	0.8				
	iS NE	17 14						
5	iP Z	20 32 37						
	iS NE	33 08						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAR 5	e(P) Z	20 48 39						
	eS NE	50 03						
6	e(P) Z	17 18 18						
6	iP Z	18 52 34						
	eS NE	53 17						
6	eP Z	19 03 56	0.5	1.9				
	eS ZN	09.2						
	eSS N	11 41						
	e Z	12.0						
	eL ZN	13.1						
6	eP Z	19 30 09						
6	iP Z	20 46 17						
7	iP Z	01 48 43.5	1.0	1.3				
	eS NE	50 34						
7	eP Z	03 36 28						
	iS NE	38 00						
7	iP Z	03 43 58						
	eS NE	44 17						
7	eP Z	08 48 46						
	iS NE	49 12						
7	iP Z	20 34 59.5						
	iS NE	35 34						
7	eIP Z	23 15 27	3.1	1.8				
	iS NE	17 02						
8	eP Z	01 42 34	0.5	1.8				
	eS NE	48.2						
	eL ZNE	51.9						
8	iP Z	07 32 03						
	eS NE	23						
8	eP Z	18 15 10						
	eS NE	16 07						
8	eP Z	21 32 05						
9	eP Z	10 26 23						
	eS NE	28 31						
9	eIP Z	12 13 56	0.5	1.0				
10	iP Z	05 11 52.9						
	eS NE	12 56						
10	eP Z	14 10 07						
	ePcP Z	51						
	eS NE	18 28						
	eSS N	23 14						
	eSSS N	25.8						
	eL ZNE	29.0						
10	eP Z	14 46 12						
	iS NE	47 04.5						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAR 10	eP Z	23 20 06						
11	iP Z	01 16 21.5						
12	eP Z	02 40 03						
	eS NE	41 39						
12	iPcP Z	04 07 55	0.5	2.0				
12	iP ZNE	04 10 31.4						
	iS NE	53						
12	eP Z	04 32 56						
	eS NE	34 57						
	eT ZNE	47 50						
12	eP Z	06 52 23						
	iS NE	55						
12	eP Z	09 13 01						
	iS NE	24						
12	eP Z	10 39 31						
	eS NE	41 27						
12	iP Z	17 20 09.5						
	eS NE	50						
12	eP Z	18 35 23	0.5	1.5				
12	eP Z	18 51 34						
	eS NE	52 06						
12	iP Z	20 04 58.5						
	eS NE	05 17						
12	eP Z	22 44 15	0.5	2.1				
	e(SSS)N	23 02 10						
	eL Z	05.4						
12	iP ZNE	23 06 07						
	iS NE	39						
13	eSSS N	04 53.7						
	eL Z	56.0						
13	iP Z	06 20 57	1.5	2.1				
13	eP ZN	08 41 24	0.5	2.0	0.5	1.8		
13	eP Z	12 55 23						
	eS NE	56 35						
14	eP Z	05 12 42						
	iS NE	13 32						
14	iP ZNE	11 47 05.2	4.1	1.8	2.2	1.8	1.7	1.3
	iS ZNE	48 47						
14	eP Z	12 19 01						
	eS NE	20 36						
14	e(s) N	12 50.0						
14	iP ZNE	15 09 07	9.8	2.1	2.8	2.4	4.0	2.3

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAR	eS N	11 30						
15	eP ZNE	21 38 44						
15	iPKP Z	22 50 19.8	0.9	2.3				
	ePP Z	54 10						
	eSKS Z	57 36						
	e Z	23 02.6						
	e ZN	06.7						
	ePPPS ZN	09 24						
	e ZN	12 30						
	eSSS ZN	19 30						
	e ZN	22 56						
	e ZN	33.0						
	eLq ZN	38.2						
	eLr ZN	44.0						
16	eP Z	02 40 07						
	iS NE	27						
16	iP Z	02 51 52						
	iS NE	52 28.4						
16	iP Z	05 11 10.2	0.5	1.9				
16	iP Z	08 51 09						
	iS NE	35						
16	eP Z	15 03 10						
	iP Z	23.6						
	eS ZNE	07 12						
	eSS Z	08 44						
16	eS NE	19 08 00						
16	eP Z	19 18 31						
	e Z	50						
	eS NE	22 00						
16	iP Z	20 04 18						
	iS NE	50						
16	iP Z	21 41 54.7	1.5	1.4				
	iS NE	43 38						
16	iP Z	23 26 16.7						
	iS NE	27 02						
17	eP Z	10 21 07						
	eS NE	22 18						
17	iP Z	15 05 11	2.3	1.0				
	iS ZNE	42						
17	eP Z	17 49 17	0.5	1.8				
	i Z	24						
	eS NE	52 02	1.4	2.0				
17	iP Z	17 55 49.4	0.5	1.8				
	eS NE	58 29						
17	iP ZNE	18 06 23	9.8	2.0	8.1	1.9	10.0	2.0
	i ZNE	54						
	iS ZNE	09 01						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAR 17	1P eS	ZNE NE	20 01 28.7 04 03	1.5	2.0	1.5	1.9	1.2 1.9
17	1P 1S	ZNE NE	21 23 46.9 24 06					
18	1P 1S	ZNE NE	00 11 46.9 12 40	16.4	1.5	11.0	1.8	7.7 2.0
18	eP eS	Z NE	01 29 35 30 33					
18	1P epP ePP eScS eS e	Z Z Z ZNE N ZNE	04 48 09 49 30 50 24 57 00 59 42 05 07 10					
18	1P eS	Z NE	05 19 21 21 01	1.5	1.2			
19	1P 1S	ZNE NE	04 48 24.1 50 24	2.0	1.5	1.0	1.8	0.6 1.8
19	1P 1S	ZNE NE	08 45 47.4 47 24.5	2.7	1.8	1.0	1.5	1.0 2.0
19	1P	ZNE	21 44 22					
19	1P 1S	Z E	23 17 42.6 58					
20	eP eS	Z E	01 31 09 49					
20	eS eL	ZN ZN	01 33.2 42.6					
20	eP eS	Z ZE	01 36 45 38 03					
20	eP	Z	04 28 24					
20	1P eS	Z ZE	13 53 07.7 38					
20	1P 1S	Z E	16 52 58 53 17					
20	eP eS e	Z E ZE	19 16 44 17 55 18.5					
20	eP 1S	Z N	19 22 02 24					
20	eP eS eL	Z N N	23 58 23 59 51 00 00.3					
21	eP eS	Z ZNE	01 50 10 24					
21	1P	ZE	03 51 50.3					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAR	1S i i 1sS i eSSS	NE Z N E N ZNE	59 36 46 04 01 14 02 04 03 26 06 26					
21	eP 1S	Z NE	04 16 57 17 21					
21	eP eS	Z NE	09 41 44 43 17					
21	1P 1S	ZNE ZNE	10 57 48.2 58 19	7.9	1.2			
21	eL	ZNE	15 42.2					
21	eP eS eT	Z NE ZNE	16 30 31 33 03 42 29					
22	eS eSS eL	ZN ZN ZNE	08 59 00 04 54 15.9					
22	eP eS	Z NE	12 08 47 10 03					
22	eP 1S	Z NE	22 52 15 33					
23	1P 1S	Z NE	00 46 55 47 48	2.7	1.2			
23	eP 1S	Z NE	05 23 15 33.2					
23	1P eS	Z ZNE	09 21 44 25 03					
23	1P eS	Z NE	22 30 26 31 10					
24	1P eS	Z NE	00 29 05.3 30 34					
24	1P eS	Z NE	05 32 45.5 33 08					
25	eP eS	Z NE	11 35 29 36 37					
25	1P e	Z ZE	15 36 53 42 10					
26	eP eS	Z NE	01 44 55 46 21					
26	eS eSSS eL	ZE NE ZNE	02 21 00 26 00 28.1					
26	eS eL	NE ZE	13 49 50 14 00.0					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAR 27	eP Z eS NE	02 07 36 53						
27	i(P) Z iS NE	02 09 07 59						
27	eP Z iS NE	05 54 40 58						
27	iP Z e ZNE iS NE	20 24 52 26 30 27 02	1.0	0.8				
28	iP Z i ZNE i ZNE iT ZNE	03 48 08 45 58 49 10 05 08 13					7.7	0.5
28	iP Z	05 05 51.8						
28	iP Z	06 55 25						
28	iP Z	07 22 07						
28	iP Z	09 12 24						
28	iP Z	10 47 03.2						
28	iP Z iPcP Z	11 40 50 41 24	5.3	2.3				
28	iP Z	12 32 10						
28	iP Z	14 59 31.3						
28	iP Z	15 01 06						
28	iP Z	17 23 41						
28	iP Z eS ZNE eSS NE eSSS Z e E eL ZN	20 40 53.5 50 32 55 30 59 04 21 00.0 03.2						
29	eL ZN	01 44.5						
29	eP Z eL ZN	04 24 10 54.1						
29	iP Z eS ZNE eSS ZE eL ZNE	06 16 12.3 25 20 29 40 36.7						
29	eL ZN	08 25.2						
29	iP Z	15 44 17						
29	eS ZNE eL ZN	17 02 48 15.2						
29	eP Z	21 47 04	1.2	2.0				

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAR	eS ZN eL Z	52 30 56.2						
30	iP Z e Z eS ZNE eSS ZNE e N eSSS ZE e N eL ZN	02 29 36.4 36 08 38 52 43 08 45 00 46 42 47 56 50.6						
30	iP Z iS NE	06 23 32 24 24						
30	eS ZNE eSS ZN eSSS ZNE eL ZNE	07 31.1 35.5 39.6 43.7						
30	eL ZNE	13 36.0						
30	eS ZNE eL ZNE	16 30.2 42.0						
30	eP Z eS NE iT ZNE	18 44 39 46 35 55 06						
30	eL ZN	18 47.1						
31	eS ZNE	00 34 06						
31	iP ZNE	17 06 32	4.7	2.0	3.6	2.0	4.0	2.0
MAR 1	eL ZN	03 56.1						
1	iP Z iS NE	06 12 13.3 29						
1	iP Z iS NE	14 16 45 17 06						
2	iP Z eS NE	01 17 51.9 20 06	1.8	1.6				
2	ePcP Z ePP Z e Z eSKS ZE eS N e Z eSS ZNE eSSS NE eL N eL E	01 25 18 28 50 33 12 35 32 36 24 37 26 42.2 46.1 49.5 52.2						
2	iP Z iS NE	11 29 30 30 04						
2	iP Z eS NE eSS N eL N eL ZE	16 07 21 15 54 23.2 25.6 27.0						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
APR 2	1P 1S	Z NE	19 41 25.4 46					
2	eL	Z	23 09.3					
3	eS	NE	04 36 50					
3	eP eS eT	Z NE ZNE	08 51 09 53 32 09 06 08	0.4	1.5			
3	eL	ZN	09 21.1					
3	eP	Z	19 12 49	0.5	2.0			
3	1P 1S	Z NE	20 54 12.8 55 00.3	0.5	1.0			
3	eP eS eLq eLr	Z ZN ZNE ZNE	22 45 40 55 30 23 06.1 08.2	0.4	1.4			
3	1P 1S	ZNE NE	23 20 37 21 02	7.1	1.5	4.6	1.8	3.6 1.9
4	1P eS	Z NE	01 21 02.6 22 10	0.5	1.0			
4	eP eS eSS eSSS eL	Z N ZN E ZNE	05 05 49 15 30 20 20 25.2 28.2					
4	eP eS eSS eSSS e eL eT	Z ZNE E E N ZN ZNE	08 51 55 09 01 10 05 54 09.4 10.0 13.0 10 10 14					
4	1P eS eSSS eL eT	Z N ZNE ZN ZNE	09 22 20.3 32 20 40.2 43.2 10 40 45	0.5	1.9			
4	eP eS	Z NE	17 30 42 31 54					
4	eP 1S eSS eSSS e eL	Z NE ZNE E ZN ZN	17 57 32 18 06 48 11 00 14.3 15.4 18.2	0.5	2.0			
4	eP	Z	18 11 09	0.4	2.0			
4	eP 1S eT	Z NE ZNE	18 19 40 20 47 24 42					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
APR 4	eL	ZN	22 51.1					
5	eP eS eSS eSSS e eL eT	Z ZNE ZN N NE ZN ZNE	01 33 40 42 52 46 36 49 28 51 24 54.7 02 51 25	0.6	2.1			
5	eP	Z	01 53 04					
5	eP eS eT	Z NE ZNE	02 22 02 20 23 40					
5	1P 1S eT	Z NE ZNE	04 34 23 37 35 55	1.7	1.4			
5	eP 1S	Z NE	07 53 10 53					
5	eL	ZN	11 55.2					
5	eP eL	Z ZN	19 40 09 20 02.8					
5	eP	Z	22 26 21					
6	1P eS	Z NE	01 25 26 27 23	0.3	1.2			
6	eP 1S	Z NE	02 36 08 37 11					
6	1P 1S	Z NE	04 36 29 48	5.0	1.0			
6	1P 1S	Z NE	04 51 38 52 00					
6	1P 1S	Z NE	06 08 59.8 09 13					
6	1P 1S	Z NE	07 14 59 15 17					
6	eP e(s)	Z NE	13 55 33 56 38					
6	e(s)	NE	22 03 00					
6	1S	NE	22 37 38					
6	1P 1	Z ZNE	22 58 53 59 06					
6	e(s)	ZNE	59 59					
6	eS	NE	23 31 08					
6	eS	NE	23 55 00					
7	eP eS	Z NE	11 25 47 26 58					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
APR 7	1P Z	13 28 52	1.3	2.4				
7	eL Z	18 35.3						
8	1P Z	04 13 11.3						
	1S NE	28						
8	eL Z	09 03.3						
8	eS ZN	11 18 14						
	eSS Z	22.3						
	eSSS ZNE	26.0						
	eL ZNE	29.0						
8	1P Z	14 53 57	1.6	1.0				
	1 Z	54 19						
8	eP Z	23 52 57						
	eS NE	54 46						
9	eP Z	02 00 12						
	eS NE	40						
9	1P Z	21 22 39						
	1S NE	59						
10	1P ZN	04 44 40.6						
	1S ZNE	45 01						
10	1P Z	21 55 52.3	2.0	2.0				
11	1P ZN	01 08 01						
	eS ZNE	10 44						
	eT ZNE	20 42						
11	1P Z	07 38 46.2						
	eS ZNE	39 13						
12	eP Z	01 35 59						
	eS ZNE	45 12						
	eSS Z	49 44						
	eSSS E	53.5						
	e N	54.0						
	eL ZN	57.0						
12	eP Z	06 05 48	0.7	2.0				
	eS Z	09 38						
	eSS N	10 08						
	eL Z	11.3						
12	eL ZN	10 08.4						
12	eP Z	10 54 02						
	1S NE	30						
12	1P ZNE	11 15 32.2	4.2	2.0	2.5	2.0	1.1	2.0
	eS ZNE	19 12						
	eT ZNE	35 00						
12	eP Z	11 51 26						
	eS NE	51						
12	eS ZN	13 09.5						
	eL ZN	26.6						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
12	eL ZN	17 56.7						
12	1P Z	20 41 05	1.0	1.5				
13	eP ZNE	03 05 27	2.0	1.3				
	eS NE	07 29						
13	1P Z	06 25 32.5	1.5	0.8				
	eS ZNE	27 05						
13	e1P Z	08 01 28	1.9	1.1				
	eS ZNE	02 16						
13	ePKP Z	08 49 48						
	eL Z	09 39.2						
13	1P Z	11 32 52.2						
	1S NE	33 12						
13	eS NE	12 48 10						
	eSS E	56.4						
	eL ZN	13 00.0						
13	eP Z	14 16 35						
	eL ZN	38.0						
13	eL ZN	16 47 30						
13	eL ZN	21 58.4						
13	eL ZN	22 17.5						
14	eL ZN	01 36.4						
14	1P Z	02 29 50.2						
	eS NE	30 55						
14	1P Z	09 03 14.8	0.5	2.0				
	eS ZNE	07 10						
	eL ZE	08 10						
14	1P Z	10 46 15.3						
	eS NE	47 55						
14	eL ZN	16 30.4						
14	eP Z	22 48 13						
	eS NE	49 33						
14	eP Z	23 07 03						
	eL ZN	28.3						
15	1P Z	03 08 31.8						
	1S NE	09 03						
15	eP Z	05 43 08						
15	eP Z	15 42 09						
	eS ZE	51 26						
	eSSS E	59.3						
	eL ZN	16 02.8						
15	eP Z	16 57 52						
	e ZNE	59 48						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
APR 15	iP	Z	21 10 53					
	iS	NE	58					
15	eP	ZN	21 36 56					
	eS	ZNE	38 05					
15	eP	Z	23 07 00					
	eS	NE	34					
	eT	ZNE	10 22					
16	eS	ZN	01 24.3					
	eL	ZN	34.5					
16	eP	Z	02 06 47					
	eS	NE	07 34					
16	iP	Z	02 39 58	2.2	1.9			
	eS	NE	43 50					
16	eP	Z	11 48 20					
	eS	NE	50 25					
16	eS	N	14 02.8					
	eL	ZNE	10.1					
16	iP	Z	14 11 41					
16	eP	Z	19 38 19					
	eS	ZNE	47 36					
	eSSS	N	54 38					
	eL	NE	56 30					
16	eL	ZN	59.2					
	eP	Z	22 28 21					
17	eS	NE	30 33					
	eP	Z	05 00 57					
17	eS	ZNE	10 10					
	eSSS	E	18.4					
	eL	ZN	22.0					
17	iP	Z	06 06 30.6	0.5	1.1			
	eS	ZE	12 00					
	eSS	ZNE	14.0					
	eL	ZE	16.0					
17	eP	Z	09 20 37	0.5	2.0			
	eL	N	39.0					
	eL	ZN	43.0					
18	eS	N	05 47 42					
	eL	ZN	58.0					
18	eL	ZN	08 31.2					
18	eP	Z	12 04 48					
	eS	NE	05 28					
18	iP	ZE	17 56 58.2	13.2	1.2		2.5	1.8
	iS	NE	57 25					
18	iP	Z	18 35 29.7					
18	eS	ZN	20 37 00					
	e(SS)	ZN	41.1					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
18	eL	ZN	48.5					
19	iP	ZNE	03 56 50					
	iS	NE	57 13					
19	eSS	NE	04 05.9					
	eL	ZNE	08.2					
19	eS	ZNE	05 35 08					
	eL	ZNE	49.1					
19	eP	Z	08 40 08					
19	iP	Z	14 04 45					
19	eP	Z	14 25 29					
	eS	ZNE	36 00					
	eSS	ZNE	42 18					
	eSS	ZE	45 40					
	eLq	ZNE	48 56					
19	eLr	ZNE	51 40					
	iP	Z	12 08 46	1.3	2.1			
20	eS	ZNE	18 28					
	eSSS	E	28.3					
	eL	ZNE	32.0					
20	iP	Z	14 16 58					
	iS	NE	17 48					
20	eP	Z	15 31 43	1.4	2.0			
20	eL	ZN	16 53.8					
21	iP	Z	02 29 47.6					
	iS	NE	30 03.6					
21	eL	ZN	05 36.6					
21	iP	Z	16 35 21.5					
	iS	NE	57					
21	iP	Z	21 49 20.4	2.6	1.9			
	eS	NE	52 41					
22	iP	Z	02 24 02.8					
	iS	NE	24.8					
22	eP	Z	13 26 48					
	eS	NE	27 06					
22	iP	Z	19 38 33					
	eS	NE	39 05					
22	eP	Z	20 04 48	3.0	2.0			
	iP	ZE	05 25					
	eS	NE	08 16					
22	eP	Z	23 08 37					
23	iP	ZE	03 42 15	5.5	2.0			
	ePP	ZE	44 20					
	eS	ZNE	49 44					
	eSS	ZN	53 30					
	iSSS	N	55 51					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
APR	iL ZE	58 56						
23	eP Z eS NE	03 54 47 55 13						
23	eP Z eL ZE	10 39 20 48.7						
23	eP Z eS NE eT ZNE	13 20 04 21 12 26 42						
23	iP Z	13 34 42.9						
24	eP Z eS NE	03 20 17 21 53						
24	eL ZNE	04 23.5						
24	iP ZE iPP ZE iPcS Z eS ZNE iSS ZNE iL ZE iL ZE	06 04 11 06 12 09 40 10 30 14 00 17 36 19 12	8.0	2.0			5.5	2.0
24	eP ZE	06 17 35	0.6	2.0				
24	eP Z iS NE	09 37 27 38 07						
24	eP Z eS NE	10 06 44 07 58	0.4	1.0				
24	eP Z eS NE	10 37 31 39 03						
24	eP Z eS NE	11 15 45 17 28						
24	eS ZE	15 03 16						
24	iP Z iS NE	17 19 40.4 20 22						
25	e ZNE eL ZNE	05 41 14 52.8						
25	e(L) ZE	06 34.7						
25	eP Z iS NE	14 17 02 20						
25	iP Z iS NE	14 55 45 56 31.3						
26	iP Z iS NE	02 22 25.3 39						
26	iP Z eS NE	09 25 14 26 13						
26	iP Z	14 11 42						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
26	iP Z iS NE	14 44 10.4 35.6	4.5	1.0				
26	iP ZNE iS ZNE	14 54 12 55 48.4	14.1	1.3	8.7	1.6	6.0	1.9
26	eP Z e(L) ZE	22 00 58 24.1						
26	eL ZNE	23 39.7						
27	iP Z iS NE	02 45 00 19						
27	eP Z eS ZNE eSS NE eSSS ZNE eL ZN	06 53 40 07 01 28 05 04 07 08 09 45						
28	eL Z eL ZE	15 04.5 05.6						
28	iP Z iS NE	20 02 01 30						
28	iP Z	22 27 25						
28	eP Z eS NE	23 31 25 32 57						
29	iP Z eS NE	01 40 47.5 42 16	1.3	0.9				
29	ePKP Z	04 41 00						
29	iP ZN iS NE	06 52 13.8 34	8.3	0.7				
29	iP Z	07 27 57.6	0.6	2.0				
29	eIP Z eS NE	09 22 29 54						
29	eIP Z eS NE	17 21 38 23 06						
30	iP Z eS NE	02 32 30 33 04						
30	iP ZNE iS NE	03 42 37 43 17	10.0	2.0	5.5	2.0	6.0	2.0
30	iP Z iS NE	04 51 44.8 53 12.3	2.0	2.0				
30	eP Z epP Z eS ZNE eSS ZNE eL ZE	16 10 29 44 16 00 18.2 20.2						
30	eL ZNE	18 01.2						
30	eSS ZN	19 12.2						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
APR 30	eS ZN	21 46.2						
MAY 1	eS NE	06 23.4						
	eL ZN	37.1						
1	iP Z	11 13 45						
	eS NE	14 00						
1	eL ZNE	23 56.5						
2	eP Z	15 11 32						
	eS NE	12 00						
2	eP Z	16 22 00						
	iS ZNE	31 00						
	eSS ZN	34 42						
	eSSS ZE	38.3						
	eL ZNE	41.7						
2	iP Z	16 37 00						
	eS NE	39 29						
2	eP Z	16 41 31						
	eS NE	42 00						
	eT ZNE	44 11						
2	eP Z	16 53 49						
	eS NE	55 36						
2	eP Z	21 58 18						
	eS NE	40						
	e(T) ZNE	22 00 11						
2	iP Z	22 14 51						
	iS NE	15 22						
3	eP Z	04 45 06						
	eS NE	46 37						
3	iP Z	14 11 13.4						
	iS NE	48						
4	iP Z	15 35 44.4						
	iS NE	36 04						
4	eP Z	15 39 51						
	iS E	40 27						
	eT ZNE	42 56						
4	eL Z	17 54.3						
4	eP Z	21 57 22						
	iS NE	58 02.3						
5	eL ZN	08 32.6						
5	eSS ZN	08 58.6						
	eL ZE	09 00.0						
5	eP Z	12 22 46						
	eS NE	24 50						
5	eP Z	21 04 31						
	iS NE	05 00.6						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
6	iP Z	05 09 07.4	0.5	1.7				
	eS NE	10 46						
6	eL ZN	05 13.6						
6	iP ZE	08 16 15	3.2	2.2	1.4	2.0		
	eS ZNE	20 42						
	iL N	21 46						
6	iP ZN	08 53 02.2						
	e(S) N	54 10						
6	eP Z	15 38 05						
	eS ZNE	47 20						
	eSSS E	55.7						
	eL ZN	59.3						
6	iP Z	15 55 16						
	iS NE	37						
6	eP Z	17 11 20						
	iS NE	12 26.3						
6	eP Z	20 36 07						
	eS NE	39 27						
7	iP ZNE	00 36 29.2	11.4	2.0	9.4	2.0	7.7	2.0
	eS NE	37 39						
7	ePKP Z	06 05 15	3.3	2.3				
	ePP Z	08.3						
	e E	15 42						
	eSKSP Z	18 54						
	e Z	24 16						
	e NE	27 50						
	eSSS ZNE	32 25						
	eL ZNE	44.5						
	eL ZNE	48.0						
7	iP Z	07 20 08.6						
	iS NE	26						
7	iP ZN	08 09 29						
	iPP ZN	12 18						
	eS ZNE	18 40						
	iSS Z	23 26						
	iSSS NE	26 50						
	iL NE	27 52						
	iL ZNE	29 32						
7	eP Z	20 24 06	1.1	2.0				
	eS ZNE	33 18						
	eSS Z	38 04						
	eSSS ZNE	41.4						
	eL E	42 34						
	eL ZNE	44.2						
7	eP Z	23 01 42						
	eS NE	03 14						
7	eP Z	23 16 49	0.5	2.0				
	eS NE	20 11						
8	eP Z	02 02 58						
	eS NE	04 53						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAY 8	eP Z	03 12 07						
	eS NE	14 30						
8	eP Z	03 40 26	0.5	2.0				
	eS E	44 10						
8	eP Z	04 00 31						
	S NE	02 15						
8	e	ZN 04 08.0						
8	eP Z	04 08 26						
	eS NE	09 45						
8	eP Z	12 10 06						
	eS NE	11 16						
8	iP Z	13 24 55.2						
	iS NE	25 07						
8	eP Z	16 04 30						
	iS NE	05 03						
8	eP Z	16 33 20						
	eS ZNE	42 40						
	eSS Z	47.0						
	eSSS E	50.8						
eL ZN	54.0							
8	eL ZN	22 09.7						
8	iP Z	23 21 36						
	iS NE	22 02						
9	eS ZNE	00 00 22						
	e E	07.2						
	eSSS ZN	08.0						
	eL ZN	09.9						
9	eLq E	02 29.5						
	eLr ZN	32.2						
9	eP Z	12 15 00						
	eS NE	16 25						
	eL ZNE	17.0						
	eT ZNE	23 02						
9	iP Z	18 21 01.3	1.4	2.0				
	eS ZNE	25 10						
	eL ZNE	26.4						
9	iP Z	21 14 01.3	0.9	2.3				
	eL ZN	22.7						
11	iP Z	02 55 14.4	1.0	1.2				
	eS NE	57 04						
11	eP Z	05 32 05						
	eS NE	34 21						
11	iP Z	09 14 39	0.7	1.0				
	eS NE	15 49						
11	eP Z	14 41 14						
	eS NE	42 52						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
11	eL ZNE	43 08						
11	iP Z	20 39 12						
	iS NE	54						
12	iP Z	01 41 10	3.1	2.1				
	eS NE	43 40						
12	eP Z	06 47 29						
	eS NE	49 19						
12	eP Z	10 03 58						
	eS NE	05 00						
	eT ZNE	10 10						
12	iP Z	14 15 16						
	iS NE	37						
12	iP Z	18 18 36						
	eS NE	19 45						
	eL ZN	20.0						
	eT ZNE	25 00						
12	eL Z	18 49.2						
12	eP Z	21 37 35						
	eS NE	38 19						
13	eP Z	00 03 53						
	eS NE	05 38						
13	eP ZNE	00 08 11	1.0	2.0	1.2	2.0		
	eS ZNE	09 16						
13	iP Z	01 36 41.4						
	iS NE	37 21						
13	iP Z	05 29 53	4.4	2.0				
	eS NE	33 18						
13	iP Z	11 08 43	2.0	1.5				
	eS NE	10 37						
13	eP Z	16 47 13						
	eS NE	50 38						
13	iP Z	20 42 13.4	1.0	1.9				
	eS NE	45 28						
14	iP Z	01 08 13.1						
eS NE	09 41							
14	iP Z	01 09 56.5	1.5	2.2				
	eS NE	13 04						
14	eP Z	09 56 20						
	eS NE	57 21						
14	iP ZNE	20 03 22	9.3	1.9	4.0	1.9	3.0	1.9
	eS NE	05 13						
15	iP Z	06 35 52						
	iS NE	36 15						
15	eS NE	11 04 08						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAY	eSSS ZNE eL ZE	07 12 09.0						
16	eP Z eS NE eL ZN	16 12 13 15 52 17.6						
16	e(P) Z	16 14 19						
17	eL E eL ZN	01 24.0 25.6						
17	eS N eL ZN	05 02 00 11.8						
17	eP Z eS NE	11 16 49 18 08						
17	eP Z eS NE eL ZNE	17 09 56 13 40 15.3						
17	ePPPS ZN eSS NE eSSS ZNE e ZN eL ZE eL N	20 01 50 06 20 11 10 21 30 29.0 30.0						
18	eP Z IS NE eT ZNE	14 13 57 15 18 21 29						
18	e(L) Z	18 18.7						
18	1P Z	23 01 48						
19	1P Z IS NE	02 09 17 35	4.5	0.9				
19	eL ZN	11 10.2						
19	eS ZNE e ZE eSSS ZN eL Z eL ZE	23 27 16 28 52 33 31 37 22 45.2						
21	eLq Z eLr ZN	16 06 46 09.7						
21	eP Z IS NE	17 07 00 31						
22	eS ZNE eL NE	00 35.2 37.6						
22	e(L) ZNE	02 18.7						
22	eP Z IS NE	10 34 24 54						
22	eL ZN	13 20.3						
22	eP Z	15 01 46						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
21	eS NE eT ZNE	02 28 05 18						
22	1P Z eS NE	17 33 35.2 35 07	0.7	1.3				
23	eP Z IS NE	07 31 31 32 18						
23	1P Z	11 32 22	0.5	1.8				
23	1P Z IS NE	12 29 44.6 30 03						
23	eP Z IS NE	12 36 36 37 09						
23	1P Z	17 42 03	1.0	1.2				
24	eP Z IS NE eT ZNE	04 15 05 16 32 23 12						
24	eS ZNE eSSS ZNE eL ZNE	10 51 10 58 26 11 01.0						
24	eP Z IS NE	20 34 31 35 58						
24	eP Z eS NE	22 27 39 29 27						
25	eP Z eS ZNE	05 03 46 06 37						
25	1P ZE IS NE	08 33 48.4 34 32						
25	eSSS ZN eL Z	20 24.5 30.0						
26	eP Z eS NE	08 06 12 08 15						
26	eP Z e Z ePP ZNE eS ZNE 1PKKP Z ISS ZNE ISSS ZNE 1L E 1L E	11 13 13 16 24 17 26 24 18 28 59 32 06 36 16 39 46 42 40	0.5	2.0				
26	eP NE IS NE	23 31 09 30	0.1					
27	eS Z eSS Z eSSS Z eL Z	01 23.7 29.0 33.6 39.0						
27	1P NE eS NE	07 07 57 10 10	0.8	1.9	1.3	1.9		

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
MAY 27	eL ZN	07 18.0						
27	eP NE eS NE	09 00 08 02 24						
27	eP NE i NE iS NE eT NE	11 21 36 50 22 20 26 09						
27	eP NE eS NE	13 27 57 29 15						
27	eP NE eS NE eT NE	15 50 05 51 22 57 50						
27	eP NE eS NE e(T) NE	18 47 13 48 26 55 06						
27	eP NE eS NE e(T) NE	19 06 14 07 37 14 04						
28	eP Z eS NE	03 58 56 04 00 13						
29	e1P Z iS NE	06 01 39 57						
29	eP Z eS NE	12 27 08 28 32						
29	eP Z eS NE	18 38 11 40 44	2.0	2.0				
29	eP Z eS NE	18 45 30 47 44						
29	eP Z eS NE	19 05 08 07 40						
31	e ZNE	02 05 49						
31	eP Z eS NE	13 58 41 14 00 35						
31	iP Z iS NE	15 45 43 52						
31	eP Z	17 19 07						
JUN 1	iP Z	06 09 34.7	4.0	2.0				
1	iP Z	13 19 15	1.0	2.1				
1	iP Z iS NE	19 58 46 58						
1	eP Z e(s) NE	23 16 51 17 28						
2	iP Z iS NE	03 48 44 49 02						

No	Phase	h m s	Az	Tz	An	Tn	Ae	Te
2	eP Z iS NE	04 03 46 04 37						
2	eS N	08 47 16						
2	eP Z	23 17 16						
3	iP Z iS NE	06 57 00 19						
3	eP Z iS NE	10 14 43 15 06						
3	eP Z iS NE	20 06 34 57						
3	iP Z iS NE	11 59 40.5 53						
3	iP Z iS NE	12 55 30 48						
3	eP Z iS NE eT ZNE	17 55 30 56 23 18 00 30	2.0					
4	eP Z iS NE	00 19 33 20 02						
4	eS E eL ZE	04 50.6 05 04.0						
4	eP Z eS ZNE eSS ZNE eL ZE	11 24 30 30 20 33.4 34.6	0.5	2.0				
4	iP Z eS NE	11 54 58.9 55 57	1.6	1.0				
5	eP Z eS NE eT ZNE	01 06 20 08 25 18 02						
5	eP Z eS NE eL Z	09 16 08 17 55 18.4	0.7	2.0				
5	eL Z	10 25.7						
5	eP Z eS NE	14 34 14 35 24						
5	eP Z eS NE eT ZNE	16 37 07 51 40 35						
5	eL Z	22 40 26						
6	eP Z iS NE	00 18 46 19 22						
6	iP Z eS ZE eSSS E	19 17 22 25 10 30 48	1.7	2.5				

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUN	eL ZE	32.6						
6	iP Z iS NE	21 18 05.4 29						
7	eP Z eS NE eT ZNE	08 22 13 23 00 27 00						
7	iP Z iS NE	10 09 28.1 10 03						
7	eP Z iS NE eL ZNE eT ZNE	13 09 04 51 10.0 13 26						
7	eP Z eS NE eT ZNE	16 49 49 50 38 54 53						
7	eS ZN eL ZN	20 54.1 21 02.2						
8	eP Z iS NE	02 29 11 31 09	0.7	1.9				
8	iP Z eS NE	16 49 25.1 50 21						
8	eL ZE	18 13.8						
8	iP Z	23 02 18						
9	iP Z iS NE	00 29 50.9 30 10						
9	eP Z eS NE	03 56 58 58 58	1.0	0.8				
9	iP Z iS NE	05 59 43 06 00 02	2.9	1.8				
9	iP ZNE iS NE	08 01 24 40	3.5	1.9	1.6	1.8	1.1	1.9
9	iP Z iS NE	15 04 17.2 05 48	1.3	1.0				
9	iP Z iS NE	19 51 05.8 26	2.5	0.8				
10	iP Z iS NE	07 42 31 48						
10	iP Z iS NE	10 57 30.8 59 04						
10	eP Z eS NE eT ZNE	11 24 15 58 29 04						
10	iP Z eS N eL ZE	19 18 23.3 22.0 23 46	2.0	2.2				

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUN 10	iP Z ePcP Z eS NE eSS E eSSS NE eL NE	22 27 06 28 35 30 38.4 42.5 45.0	1.0	2.0				
11	iS NE	01 07 30						
11	iP Z iS NE	14 14 55 15 44						
11	eP Z eS E eSS N eL E	17 10 32 17 40 21.4 24.2						
12	iP Z iS NE	09 01 52 02 19						
12	eP Z eS NE	10 17 38 19 32						
12	eP Z eS E eSS E eL E eL E	10 58 45 11 05 56 09.6 12.3 16.6						
12	iP Z iS NE	18 15 28 18 05						
13	iP Z eS E eL E	11 17 47 21 00 21.7	1.0	2.0				
13	e(s) E	15 59 28						
13	eP Z eS NE iL E	22 35 04 37 32 39 04						
13	eP Z iS NE	23 48 27 49 42						
14	iP Z eS NE iL E	01 23 17 26 34 27 12						
14	e(s) NE iL E	05 20 00 58						
14	eP Z iS NE	19 53 27 54 21.1						
15	eS NE eSS NE eL NE	00 30 00 38 10 50.7						
15	iP Z iS NE	02 06 46 07 32						
15	eP Z iS NE	06 13 31 14 05						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUN 16	iP	Z	04 12 48.2					
	iPcP	ZN	13 04					
	i	E	09					
	iPP	NE	15 46					
	iS	NE	22 00					
	iSS	NE	26 08					
16	iP	Z	08 01 50					
	iS	NE	02 24					
16	eP	Z	08 36 16					
	eS	NE	37 49					
16	iP	Z	09 58 38					
	eS	NE	10 00 11					
16	eL	NE	11 39.3					
16	eP	Z	11 49 01					
	iS	NE	20					
16	iP	Z	18 40 07	0.8	1.5			
	eS	NE	42 32					
16	iP	ZNE	22 03 39					
	iS	NE	58					
17	eP	Z	13 26 11					
	iS	NE	45					
17	iP	ZN	22 20 19	2.5	1.5	1.4	2.0	
	eS	NE	22 24					
18	eL	N	18 37.5					
	eL	E	38.6					
18	eP	Z	21 24 27					
	iS	NE	25 21					
19	iP	Z	00 09 11	0.6	1.4			
	eS	NE	10 58					
19	eP	Z	04 50 14					
	iS	NE	48					
19	iP	Z	11 17 18					
	iS	NE	18 08					
20	iP	ZE	04 48 34.2					
	iS	NE	55					
20	eP	Z	10 00 40					
	iS	NE	01 44					
	eT	ZNE	07 13					
20	iP	Z	12 34 10	0.5	1.9			
	eS	NE	36 04					
21	iP	Z	19 04 07					
	iS	NE	25					
21	eP	ZE	22 23 49					0.7 2.0
	eS	NE	25 40					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUN 21	eP	ZNE	22 59 15.7				0.9	1.9
	eS	NE	23 00 46					
22	iP	Z	00 16 56.3	1.5	0.8			
	iS	NE	17 22					
22	iP	Z	03 09 12	0.9	2.0			
	eS	NE	13 44					
22	eL	NE	14.0					
	eIP	ZNE	07 44 43	5.7	1.5	2.0	1.8	1.8 1.8
22	eS	NE	46 31					
	eIP	Z	13 42 53					
22	eS	NE	44 56					
	iP	ZNE	01 37 34.1	1.5	2.1	1.2	2.0	1.2 2.0
23	eS	NE	46 32					
	eSS	E	51 22					
	eSSS	NE	54 24					
	iL	NE	57 16					
23	e(P)	Z	02 52 06					
	i	NE	51					
23	eP	Z	09 20 05					
	eS	NE	21 00					
	eT	ZNE	24 50					
23	eP	Z	09 31 37					
	eS	NE	32 00					
	eT	ZNE	34 00					
23	iP	Z	17 03 01	2.0	1.9			
	eS	NE	04 08					
23	iP	Z	19 53 41.2					
	eS	NE	54 18					
24	eP	Z	00 02 32					
	eS	NE	48					
24	iP	Z	11 01 05.2					
	eS	NE	25					
24	iP	Z	11 18 50.5	1.3	2.0			
25	eP	Z	11 04 24					
	eS	NE	06 08					
25	iP	Z	14 19 38	0.9	1.2			
26	eP	Z	02 51 44					
	eS	NE	52 26					
26	eP	Z	07 38 39					
	iS	NE	39 11					
26	eP	Z	13 14 07	1.0	1.9			
	eL	E	46.8					
27	iP	Z	11 30 03.7					
	eS	NE	23					
27	iP	Z	11 46 31	0.9	1.9			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUN	iS	NE	48	18				
28	eP	Z	12	59	15			
	eS	NE	13	05	20			
	eSS	NE	08	20				
	eL	NE	10	08				
	eL	E	11	30				
28	iP	Z	14	46	19	3.5	0.9	
	eS	NE		44				
28	iP	Z	14	56	32.4	2.5	1.9	
28	eSS	E	18	09.3				
	eL	E		33.8				
28	eL	N	19	43.8				
29	eP	Z	07	13	04			
	eS	NE		49				
	eT	ZNE	16	40				
29	eL	N	07	58.0				
29	eP	Z	10	35	27			
	eS	NE		36	04			
29	iP	Z	12	38	05.3			
	iS	NE		25				
30	eP	ZNE	05	31	10			
	eS	NE		34	03			
30	eP	Z	10	16	14			
	i	N		24				
	eS	NE		17	22			
	eT	ZNE		22	38			
30	iP	Z	10	28	02.5			
	eS	NE		29	37			
30	eP	Z	13	57	09	3.9	2.5	
	eS	NE	14	06	00			
	eSS	NE		09.2				
	eSSS	N		13.6				
	eL	E		18.6				
30	eS	E	16	07.7				
	eL	NE		19.2				
30	eP	Z	17	55	35			
30	eP	Z	22	17	10	0.5	1.8	
JUL	1	iP	Z	09	01	02.2	1.9	1.0
	iS	ZNE		22.3				
1	eL	N	10	18.3				
1	eP	Z	21	18	16			
	iS	NE		40				
2	eP	Z	22	11	22			
	eS	NE		12	33			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
3	eP	Z	06	45	12			
	iS	NE		58				
3	iP	Z	07	36	43.8			
	iS	NE		37	15			
3	eP	Z	09	26	13			
	iS	NE		27				
4	eS	ZNE	11	05.6				
	eSS	ZNE		09.4				
5	iP	Z	03	34	22.3			
	iS	NE		40.2				
5	eL	Z	03	51.2				
5	eP	Z	06	27	46			
	iS	NE		28	41			
	eT	ZNE		31	18			
5	eS	ZNE	19	28	40			
	eSS	ZNE		32.8				
	eSSS	NE		37.0				
	eL	ZNE		40.2				
5	iP	ZNE	20	47	50.7	13.5	1.2	
	iS	NE		48	21			
5	eS	ZNE	23	56	00			
	eSSS	ZNE	00	03.1				
	eL	ZNE		06.4				
6	eP	Z	02	25	54			
	eS	ZNE		35	20			
	e	Z		39.2				
	eSS	NE		41.0				
	eL	Z		47.0				
6	eP	Z	07	33	56			
	iPcP	Z		34	16			
	ePP	ZNE		37	10			
	iS	ZNE		43	48			
	eSS	ZNE		48	30			
	eSSS	ZNE		52	10			
	eLq	ZNE		54	42			
	eLr	ZNE		57	00			
6	iP	Z	09	48	40.2			
	iS	NE		49	30			
6	iP	Z	14	29	30.8	2.0	2.0	
6	iP	Z	15	27	55			
	iS	NE		28	17			
6	eP	Z	19	54	40	0.7	2.0	
	eS	N		57	19			
	eL	ZNE		58.0				
6	eP	Z	23	10	56			
	eS	NE		11	20			
	eT	ZNE		13	23			
7	eP	Z	03	01	15			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUL	1S	NE						37
7	iP	Z	07 41 48	1.8	1.3			
	eS	NE	43 54					
7	iP	ZN	09 08 05					
	iS	NE	25					
7	iP	Z	14 19 01.4					
	iS	NE	20 40					
7	eP	Z	14 52 07					
	eS	NE	33					
	eT	ZNE	54 29					
7	eL	ZNE	16 38.5					
7	iP	Z	19 50 10					
	iS	NE	43					
7	iP	Z	21 33 31					
	eS	NE	35 02					
8	eP	Z	01 35 32					
	eS	ZNE	42					
8	eS	NE	08 04.5					
	eSS	N	08.2					
	eSSS	N	11.6					
	eL	ZNE	15.0					
8	eP	Z	10 07 48					
	iS	NE	08 25					
8	eS	ZNE	12 01.1					
	eSS	ZNE	03.2					
8	iP	ZE	12 05 18	4.0	2.0			
	iS	ZNE	13 06					
	e	N	14 12					
	iSS	N	16 16					
	eL	ZNE	19.2					
8	iP	Z	13 24 16.5					
	iS	NE	42					
8	iP	Z	15 26 03					
	eS	NE	27 30					
9	eP	Z	03 00 34					
	iS	NE	59					
9	eL	ZNE	06 21.8					
9	iP	Z	08 45 20.2					
	iS	NE	41					
9	iP	Z	11 24 21.3	1.4	1.8			
	i	ZNE	29					
	eS	ZNE	26 00					
	eT	ZNE	33 18					
9	eP	Z	12 12 59					
9	iP	ZNE	16 44 16					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUL	1S	ZNE	47 44					
9	iP	Z	17 45 36					
	iS	NE	53					
9	eP	Z	21 52 26					
9	eS	NE	23 30 28					
10	eP	Z	02 42 40					
	iS	NE	43 28					
10	eP	Z	04 46 20					
	eS	NE	37					
10	eP	Z	13 08 18					
	eS	NE	09 12					
	eT	ZNE	13 07					
10	eP	Z	21 18 03					
	eS	NE	19 25					
	eT	ZNE	25 47					
10	eP	Z	23 43 20					
	e(S)	NE	44 21					
11	eP	Z	01 43 47					
	eL	N	53.8					
11	iP	Z	05 56 27	2.3	1.2			
	iS	NE	58 16					
11	iP	Z	07 48 54.8					
	iS	NE	49 12					
11	eL	ZN	10 19.0					
11	iP	Z	10 55 52.2					
	iS	NE	56 11					
11	eP	Z	14 22 15					
	iS	NE	23 05.3					
11	eP	Z	17 08 24					
	eS	NE	58					
	eT	ZNE	11 28					
11	iP	Z	18 40 14.2					
	iS	NE	32					
11	eS	ZNE	20 48 40					
	eSS	ZNE	52 14					
	eL	ZNE	59 52					
11	iP	Z	23 48 55					
	iS	NE	49 15					
12	iP	Z	01 56 36	1.2	2.7			
	eS	ZNE	02 05 56					
	eSS	ZN	10 20					
	eSSS	ZN	13 44					
	eL	ZN	16.6					
12	eP	Z	06 18 18					
	eS	NE	49					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUL 12	1P eS	Z NE 09 51 50 52 10						
13	eP eS	Z NE 01 16 47 18 32	1.2	2.0				
13	1P eS	Z NE 10 06 42 09 04	0.9	1.5				
13	eS	ZNE 10 16.5						
13	1P	ZNE 14 57 41.1	0.9	1.9	0.9	2.0	1.3	2.0
13	eP 1S	Z NE 18 00 04 32						
14	eP eS	Z NE 02 19 38 55						
14	1P 1S	ZNE NE 18 04 30 57.5	3.7	1.0	2.0	1.5		
14	eL	ZNE 23 21.5						
15	eP eS eT	Z NE ZNE 06 56 45 57 20 07 00 10						
15	eP	Z 08 29 39						
16	eP	Z 11 29 09						
17	1PKP e e eL	Z Z ZN ZN 02 54 06.1 57.5 03 04.5 11.3	3.0	2.0				
17	1P eS	ZN NE 04 57 50 05 00 07	1.7	1.5	1.0	1.6		
17	1P eS	Z NE 14 56 32 58 08	1.4	1.0				
17	eP eS	Z NE 19 11 59 13 54	2.0	1.5				
17	eP eS	Z NE 22 22 26 57						
17	eL eL	N ZN 23 22.6 25.3						
18	eP 1S	Z NE 00 11 20 40						
18	ePKP	Z 04 00 38	1.0	2.0				
18	1P 1S	Z NE 04 50 59 51 19						
18	1P	Z 17 33 11	2.0	1.9				
18	1P eS	Z NE 19 20 14.6 34						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUL 18	1P eS	Z NE 21 03 40 05 14	2.0	2.0				
18	1P 1S	ZNE NE 23 03 42 04 24						
19	1P 1S	Z NE 02 27 44 28 01						
19	1P	Z 06 54 45.3	2.0	2.0				
19	1P eS	Z NE 07 34 29.5 35 02						
19	1P 1S	ZNE ZNE 13 40 36.4 57						
19	1P 1S	Z NE 14 02 24.8 43	3.5	0.8				
19	1P 1S	Z NE 16 46 12.5 50	2.5	1.0				
20	eP eS eL	Z NE ZNE 10 27 43 31 52 34.0	1.0	1.7				
20	eS eSSS eL	N N ZE 19 10.6 18.2 21.1						
20	eP eS eSS eL eL	Z ZNE ZN ZN E 22 47 46 51 58 53.5 23 03.5 04.5	0.8	2.1				
20	1P 1S	Z NE 23 26 24 48						
21	eS eSS eL	NE N ZNE 01 30 18 37.0 39.7						
21	eP eS	Z ZNE 02 51 43 55 04						
21	1P 1S eT	Z ZNE NE ZNE 03 51 50 52 54 07 04 02 08						
21	1P 1S	Z NE 09 21 01 16						
21	eS eSS eSSS eL	E E N Z 13 34.2 37.4 41.5 45.4						
21	eL	ZNE 21 17.1						
22	eL	ZNE 07 47.4						
22	eP	Z 10 17 10						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUL	eS	NE						36
	eT	ZNE						19 30
22	eP	Z	10 42					40
	iS	NE						43 12
22	eP	Z	12 13					03
	iS	NE						21
22	iP	Z	12 21					45.5
	eS	NE						23 18
	eL	ZNE						24 12
22	iP	Z	14 39					31.3
	iS	NE						51
23	eP	Z	05 08					45
	eS	NE						09 18
23	iP	Z	11 59					37
	iS	NE						58
24	eP	Z	07 01	0.5	1.9			50
	eS	ZNE						10 46
	eSS	ZNE						14 00
	eSSS	ZNE						18 12
	eL	ZNE						21 10
24	iP	Z	08 23	0.5	1.5			38
	eS	ZNE						32 42
	eSS	ZNE						36 14
	eSSS	ZNE						40 00
	eL	ZNE						43 00
24	iP	Z	11 04	1.0	2.0			08.5
24	eS	ZN	12 56					00
	eL	ZN						13 06.5
24	eS	ZN	13 45					16
	eSSS	E						52.7
	eL	ZN						55.6
	eL	ZNE						14 02.5
24	iP	Z	13 54	1.5	2.0			23.4
24	iP	Z	16 39	2.5	2.0			33.6
	e	NE						40 42
	e(L)	Z						17 05.8
24	eS	ZNE	17 22					48
	eSS	ZNE						26 00
	eSSS	ZNE						30 00
	eL	ZNE						33.2
24	eP	Z	21 01					55
	eS	NE						03 47
25	iP	Z	03 54	1.8	1.9			43.7
	eS	NE						57 21
25	eP	Z	04 46					22.6
	eS	NE						49 03
25	eP	Z	05 24					05

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
25	iS	ZNE						23
	iP	Z	07 08					08
25	eS	NE						27
	iP	Z	10 12					36.3
25	eS	NE						13 24
	iP	Z	11 58					15
25	iS	NE						29
	eIP	ZNE	12 22					07
25	iS	NE						23 20
	eP	Z	14 49					01
25	iS	NE						41
	eT	ZNE						52 30
25	eP	Z	18 18					57
	iS	NE						19 38
	eT	ZNE						22 37
25	ePcP	Z	19 44					18
	ePPP	Z						48.3
	eS	ZNE						54 50
	eS	ZNE						56 44
	eSS	ZNE	20 01					44
	eL	ZN						08.2
25	eL	ZNE						13 46
	eP	Z	06 31	1.0	2.0			14
25	eS	NE						33 17
	eP	Z	08 13					31
25	iS	NE						51
	iP	Z	08 29					27.4
25	iS	ZNE						45
	e	Z	08 49					4
25	eL	ZN						50.8
	eP	Z	00 41					13
27	eS	ZNE						44
	eT	ZNE						44 25
27	eP	Z	02 28	0.7	1.0			46
	eS	ZNE						29 17
	eT	ZNE						32 04
27	iP	Z	21 02	1.2	0.9			26.7
	iS	NE						03 37
27	eS	Z	23 20					6
	eL	Z						31.1
28	eP	Z	08 43					12
	eS	NE						51
	eT	ZNE						46 47
28	eP	Z	10 24					48
	eS	NE						25 19
	eT	ZNE						28 02
28	eP	ZN	10 46					31

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
JUL	1S NE	55						
28	eP Z	18 49 28						
	ePP Z	51 34						
	eS ZNE	57 10						
	eSS ZNE	19 00 20						
	eSSS ZNE	02 40						
	eL ZNE	05.5						
28	1P Z	21 07 37						
	e ZNE	50						
	eS ZNE	08 02						
	eT ZNE	09 56						
28	eS Z	22 03.4						
	eSS ZN	09.2						
	eSSS ZN	13.4						
	eL ZN	19.0						
29	eP Z	18 17 13						
	1S NE	31.4						
29	e(L) Z	22 08.3						
30	1P Z	00 39 25.4						
	1S NE	45						
30	1P ZNE	01 24 04.3	6.7	2.0	1.2	2.0	1.5	2.0
	eS NE	25 37						
30	e1P Z	04 03 05						
	1S ZNE	32						
	eT ZNE	05 23						
30	eS ZE	05 39 30						
	eL N	52.3						
	eL ZNE	56.3						
30	1P Z	08 38 48						
	1S NE	39 13						
30	1P Z	14 21 17.2						
	eS ZNE	32						
30	1P Z	15 44 04						
	1S ZNE	19						
31	eP ZNE	05 59 40	2.0	1.9				
	ePP ZNE	06 01 25						
	eS ZNE	05 24						
	eSS ZNE	08 20						
	eL ZNE	10 24						
31	1P Z	06 29 31.2	1.0	0.8				
	1S NE	31 50						
31	1P Z	06 34 29						
	1S NE	48						
	eT ZNE	36 20						
AUG 1	eP Z	02 29 33						
	1S NE	31 17						
1	eP Z	03 26 15						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
1	1P Z	05 41 39						
	1S NE	55						
1	1P Z	06 07 31	1.0	1.9				
1	1P Z	12 36 38						
	1S NE	58						
1	eP Z	16 49 28						
	eS NE	50 07						
	eT ZNE	53 11						
2	eP Z	06 39 10						
	1S ZNE	59						
2	eS ZN	08 57.4						
	eL E	09 06.1						
	eL ZN	08.5						
2	1P Z	12 21 26						
	1S NE	51						
3	1P ZNE	01 49 07.2	6.5	1.1	3.5	1.5	1.5	1.7
	1S NE	30						
3	eL ZE	02 40.0						
3	1P Z	04 19 17.8	1.5	1.4				
	1S NE	56						
3	eS ZE	08 06.7						
3	eP ZNE	10 17 15						
4	1P ZNE	12 39 07.3						
	1S ZNE	42						
4	eP Z	16 29 44						
	1S NE	30 05						
4	1P Z	17 35 24	1.0	2.5				
	eS NE	44 24						
	eL ZNE	55.2						
5	eP Z	01 49 07	0.7	2.0				
	eS ZNE	50 02						
5	1P Z	09 34 34	2.0	1.1				
	e NE	35 15						
5	1P Z	09 49 57	1.7	1.8				
5	1P ZNE	11 10 12.5	2.5	2.3				
	eS ZNE	13 27						
5	ePP Z	11 17 37						
5	1P Z	22 35 52.6	0.6	2.0				
	ePP Z	39 12						
	e Z	42 28						
	eS ZNE	46 10						
	eSS ZNE	51 30						
	eL NE	58 16						
	eL ZNE	23 02.2						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
AUG 6	eP 1S	Z NE	10 43 31 50					
6	eP	Z	13 50 16					
6	1P 1S	Z NE	17 06 01 07 58.5					
6	eS eSSS eL	NE E ZN	18 45 30 53.4 57.2					
6	eSS	ZNE	23 52.7					
7	eP	Z	02 16 45					
7	eP 1S	Z NE	03 23 17 42					
7	1P 1S	Z NE	17 32 05 23	3.0	1.3			
7	1P 1S	Z NE	22 30 40.7 31 02	2.0	0.8			
8	eP eS eT	Z NE ZNE	09 23 21 46 25 43					
8	1P 1S	Z NE	09 29 56.3 30 42.7	1.2	1.1			
8	eP eS	Z NE	10 29 02 56					
8	eP eL	Z ZNE	15 10 09 28.5					
8	eP eS eL	Z NE ZNE	15 57 53 16 08 20 24.4					
8	eP 1S e	Z NE ZNE	18 42 39 57 45 49					
8	1P 1S	ZE ZNE	21 00 54.6 01 45	8.5	1.0			
9	1P eS	Z NE	01 50 07 51 38	2.0	2.0			
9	eP eS eT	Z ZNE ZNE	06 32 19 59 35 43					
9	e1P 1S	Z NE	15 40 39 55					
9	eP eS eT	Z NE ZNE	22 13 52 14 31 17 17					
10	eL	Z	02 01.2					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
AUG 10	eSS eL	N ZE	21 53.7 56.2					
11	1P 1S	Z NE	05 51 34 52 44.5	3.0	1.0			
11	1P 1S	Z NE	12 17 45 18 04					
11	eP eS eT	Z NE ZNE	13 55 07 42 58 43					
12	eP eS eT	Z NE ZNE	07 04 49 05 15 08 08					
12	e(P) 1S	Z NE	20 39 56 40 48					
13	e1P 1 1S 1PcS 1aS 1SS	Z ZN ZNE Z Z NE	00 37 29 41 31.2 42 30 43 07 44 40 45 13	3.5	2.0			
13	1P 1S	Z NE	10 11 25 12 13	2.5	1.0			
13	1P 1S	Z NE	10 50 31 52 02	1.5	0.8			
14	eSSS	ZNE	21 57.3					
15	1P 1S	Z NE	15 47 36 44					
15	1P 1S	Z NE	16 05 00.2 16					
15	eP eS	Z NE	17 58 46 59 26					
16	1P 1S	ZNE ZNE	19 42 03.3 58	3.5	2.0			
17	1P 1S	ZNE NE	11 46 58 48 31	5.5	2.0			
17	1P 1S	Z NE	13 47 04 40					
17	e(s)	NE	15 20.0					
17	eP eS	Z NE	22 05 18 07 08					
18	eP ePP eS eS eSS eLq eLr	Z Z E ZNE ZNE ZNE ZNE	04 58 14 05 01 54 08.5 10 46 14 36 22.5 27.3	1.0	2.8			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
AUG 18	eP eS	Z NE	09 09 50 10 26					
18	1P eS	Z NE	21 53 00 57					
19	1P eS	Z NE	06 34 36 51					
19	1P eS	Z NE	07 56 05 57 44	0.7	1.2			
19	1P eS	Z NE	09 02 15.5 03 00					
19	1P eS	Z NE	10 12 39.8 13 00					
19	eP 1S	Z NE	15 21 39 22 08					
19	1P 1S	Z NE	19 27 43.6 28 37					
20	eL	Z	13 34.8					
20	1P 1S	Z NE	13 50 16 40					
21	eL	ZE	03 35.6					
22	1P	Z	02 14 09	1.0	1.0			
22	1P 1S	Z NE	06 38 28.7 39 09					
22	1P 1S	ZNE NE	08 36 05.8 41	14.7	1.5			
22	eP	Z	20 15 23	1.0	1.8			
23	eL	Z	00 35.2					
23	1P eS eSSS eL	Z ZNE ZNE ZE	15 31 24 37 18 40 22 42.5	1.2	1.9			
23	1P 1S	Z NE	22 09 42.3 10 07					
24	eP eS	Z NE	02 03 16 04 27					
24	eP eS	Z NE	10 52 52 53 08					
24	eS eL	N ZN	22 19.0 31.9					
25	1P 1S	ZNE NE	05 42 51 43 24					
25	1P	Z	05 53 40					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
AUG 25	eP eS	Z NE	11 05 04 06 27					
25	eP ePP eSKS eS eS eSS e eL eL	Z ZN NE E N N ZE NE ZN	14 00 55 04 48 11 18 12 20 13 40 18.0 19.1 25.0 32.3					
25	1P 1S	Z NE	17 41 37 42 21					
25	eP e	Z NE	21 05 20 33					
26	1P eS	Z NE	19 33 48.4 35 30	1.0	1.0			
26	1P 1S	Z NE	20 08 43 09 03					
27	1P 1S	Z NE	05 29 30.9 47					
27	1P eS	Z NE	07 54 46.2 55 24	2.0	1.0			
27	eP e(s)	Z NE	21 56 49 59 13					
27	eP eS	Z ZNE	23 50 23 51 54					
28	eP eS	Z NE	04 24 29 26 15					
28	1P 1S	ZN NE	04 37 30.3 39 05.8	3.9	1.5	3.5	1.9	
28	eP eS	Z NE	08 26 24 27 12					
28	1P	Z	11 24 24.4	1.0	1.0			
28	eP eS	Z NE	17 09 11 56					
28	1P 1S	Z NE	17 24 31.4 54.3					
29	eP eS	Z NE	00 34 44 35 22					
29	eP eS	Z NE	11 21 49 22 37					
29	eP eS eL eT	Z NE ZNE ZNE	17 28 36 29 48 30.4 35 45					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
AUG 29	1P 1S	ZNE NE	21 37 08 22					
30	1P 1S	Z ZNE	08 12 44 13 30	3.4	1.2			
30	1P	Z	08 55 35.2	1.0	2.0			
30	1P 1S	Z NE	10 28 41 29 00					
30	1P 1S	Z NE	11 46 13 32					
30	eP eS	Z NE	13 11 29 13 20					
30	eL	ZNE	20 44.2					
30	1P 1S	Z ZNE	21 46 35 47 48					
31	eSSS eL	E ZE	02 41.0 42.0					
31	1P 1S	Z NE	08 54 41 59					
SEP 1	1P 1S	Z NE	11 01 09.2 33					
1	1P 1S	ZNE NE	15 47 09.5 26					
1	eP eS	Z NE	18 35 43 36 35					
2	1P	Z	21 36 49.5	1.0	1.9			
3	eP 1S	Z NE	06 06 25 45					
3	eP 1S	Z NE	07 18 52 19 20					
3	e(S)	ZNE	10 23.7					
3	1P 1S	Z NE	10 41 47 42 24					
3	1P eS	Z NE	12 59 13.4 13 00 41					
3	eP eS	Z NE	16 44 00 45 06					
3	1P 1S	ZNE ZNE	16 59 26.9 44					
3	1P eS	Z NE	20 51 03.9 52 54	0.9	1.8			
4	1P eS eSS	Z ZNE ZN	10 43 57.8 51 52 55 48					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
4P	eSSS eL	N ZE	58.2 11 01.3					
4	eP eS	Z ZNE	14 53 26 55 49					
5	1P 1S	Z NE	00 48 14 36					
5	1P i eS	ZN ZN ZNE	02 21 19 23 24 43					
5	1P ipP eS eSS eL	ZE Z ZNE ZNE ZE	03 00 33 50 06 18 08 14 09.6	2.7	4.0			
5	1P eL	Z ZNE	13 06 44.8 36.0	1.0	2.1			
6	1P 1S	Z NE	00 02 37 52					
6	1P eS	Z NE	02 18 33.4 20 53					
6	eP 1S eT	Z NE ZNE	02 30 26 31 03 33 32					
6	1P eS	Z NE	03 32 18 35 52	1.2	2.0			
6	1P e	Z NE	09 23 34.7 25 20	0.5	1.0			
6	1P eS eL	Z ZNE NE	18 50 28 57 54 19 03.2	0.5	2.1			
6	1P 1S	Z NE	21 52 54.3 53 13					
7	eP eS	Z NE	02 35 52 36 48					
8	eP eS	Z NE	05 57 12 58 46					
8	1P	Z	08 05 21	1.0	2.2			
8	eP 1S eT	Z NE ZNE	11 16 32 17 12 20 10					
8	eP	Z	13 44 20					
8	eP eS	Z NE	14 11 55 14 16	0.4	1.9			
8	1P 1S	Z ZNE	17 07 29.7 09 08	1.7	2.0			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
SEP 8	1P	Z	22 44	16.5				
	1S	NE		36				
9	1P	Z	04 55	47				
	1S	NE		56 17				
9	1P	Z	16 15	28	1.0	2.0		
10	eP	Z	07 06	07	0.7	1.1		
	eS	NE		07 26				
10	1P	Z	17 39	27.7				
	1S	NE		54				
10	1P	Z	21 25	38				
	eS	NE		26 12				
	eT	ZNE		29 06				
11	eP	Z	11 07	43	1.4	1.1		
	eS	NE		10 05				
11	1P	Z	15 09	36	1.2	1.9		
11	1P	Z	15 58	09.5	7.7	1.0		
	1S	NE		44				
12	eP	Z	02 34	40				
	eS	N		35 36				
12	1P	Z	12 51	21.4				
	ipP	Z		47.7				
	eS	NE		57 48				
	eScS	ZNE	13 01	18				
eL	ZNE		04.6					
12	1P	ZN	15 21	27	1.9	1.8	1.5	1.8
	eS	NE		23 04				
12	1P	ZN	15 47	40				
	1S	NE		48 00				
12	1P	ZNE	22 14	37	2.2	2.0		
	1S	ZNE		20 40				
	1SS	NE		23 52				
	1L	Z		24 58				
13	1P	Z	08 47	17				
	eS	NE		44				
	eT	ZNE		49 35				
13	1P	Z	11 05	47	3.5	2.0		
	1S	NE		07 14				
13	1P	Z	12 43	36.2	1.5	1.1		
	eS	NE		44 57				
13	1P	Z	15 52	56	2.5	1.5		
	1S	NE		53 24				
14	1P	Z	11 44	12.5	2.5	1.0		
	1S	NE		32				
14	eL	Z	14 11	2				
14	1P	Z	22 22	32				

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
15	1S	NE		52				
	1P	Z	01 01	15.4	2.0	1.8		
eS	ZNE		02 06					
	eT	ZNE		05 05				
15	eS	ZNE	01 32	24				
15	e	Z	11 35	12	1.0	2.1		
15	eP	Z	11 46	20				
	eS	NE		48 00				
15	1P	ZN	12 44	44.8				
	1S	NE		45 14				
15	1P	Z	13 13	26.7				
	1S	NE		53				
15	eP	Z	15 43	06	0.4	0.2		
	eS	ZE		53 38				
	1S	N		54 30				
	e	ZE		55 50				
	eL	N		58.8				
eL	NE		16 01.0					
15	1P	Z	23 48	54.7				
	1S	NE		49 24				
16	eP	Z	02 02	10				
	ePP	Z		05 30				
	eS	ZNE		12 08				
	e	Z		15.3				
	e	E		16.6				
	eSS	N		17.4				
eL	ZN		25.4					
16	eL	ZNE	05 40	8				
16	eP	Z	08 04	20				
	eS	NE		59				
16	eP	Z	11 51	32				
	eS	NE		59				
	eT	ZNE		53 51				
16	eP	Z	13 41	51				
	eS	NE		42 09				
	eT	ZNE		44 12				
16	eP	Z	13 45	56				
	eS	NE		47 46				
16	eP	Z	16 20	10				
	eS	NE		35				
	eT	ZNE		22 20				
16	1P	Z	20 48	37.2	7.6	1.8		
	eS	ZNE		49 38				
17	eP	Z	05 05	29				
	eS	ZNE		44				
17	eP	Z	07 02	40	1.0	1.1		
	eS	NE		04 54				

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
SEP	eT ZNE	15 15						
17	1P ZE	12 01 06.2	3.0	2.0			2.5	2.0
17	eP Z	12 54 28						
	eS NE	56 09						
18	eL ZNE	14 17.2						
18	1P Z	20 00 42						
	eS NE	01 01						
19	e NE	05 30.8						
	eS NE	42.5						
	eL ZE	45.3						
19	1P Z	10 08 48.6	1.0	1.8				
19	1P Z	15 57 21						
	1S NE	38 09						
19	eP Z	21 36 28	0.4	0.8				
	eS NE	38 09						
20	1P Z	00 26 33						
	1S NE	53						
20	eSSS ZE	04 51 22						
	eL E	57.2						
	eL Z	58.2						
20	eP Z	08 50 16						
	1S NE	51 11						
20	1P Z	14 46 01						
21	eP Z	03 43 38						
	1S NE	51						
21	1P ZNE	04 25 44	13.5	1.5	5.0	1.8	4.0	1.9
	1S ZNE	27 39						
	e ZNE	32 33						
21	eP Z	05 10 53						
	1S NE	11 12						
21	1P Z	05 47 34	1.5	2.0				
21	1P Z	11 27 10.6						
	1S NE	36						
21	eP Z	13 23 05						
	1S NE	27						
21	1P Z	16 59 42	0.4	1.3				
	eS NE	17 01 21						
21	1P Z	18 14 38	1.0	2.0				
	eS NE	17 39						
21	eP Z	21 24 38						
	1S NE	58						
21	1P Z	23 18 39	1.5	0.4				
	1S NE	20 14						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
22	1P ZNE	07 28 53						
	1S N	29 13						
23	eP Z	02 50 26						
	eS ZNE	51 16						
23	eP Z	03 03 06						
	1S NE	40						
	eT ZNE	06 15						
23	eP Z	04 51 38						
	eS NE	52 12						
	eT ZNE	54 58						
23	ePcP Z	05 11 08						
	eS ZNE	19 40						
	eSS Z	23 54						
	eL E	27.2						
	eL ZN	30.2						
23	eP Z	10 27 22						
	eS NE	53						
	eT ZNE	30 38						
23	1P Z	10 50 16.2						
	1S NE	52						
	e ZNE	52 31						
	e ZNE	53 43						
	e ZNE	55 22						
24	1P ZN	02 45 53						
	1S NE	46 00						
24	eP Z	05 04 37						
	eS NE	05 04						
	eT ZNE	07 18						
24	eP Z	05 29 42						
	eS NE	30 09						
	eT ZNE	32 19						
24	eP Z	08 09 24						
	eS NE	10 10						
24	eL Z	09 32.5						
24	eP Z	18 13 36						
	eS NE	14 18						
	eT ZNE	17 40						
24	eP Z	20 34 00						
	eS ZNE	18						
24	eP Z	20 57 10						
	eS ZNE	55						
	eT ZNE	59 30						
24	e(P) Z	21 01 01						
	e(S) ZNE	15						
24	eP Z	22 31 02						
	1S NE	24						
25	1P Z	13 44 08						
	eS NE	31						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
SEP 25	eS	ZNE 16 01 50						
	eL	ZN 11.2						
25	eP	Z 17 10 02						
	IS	NE 23						
25	IP	Z 22 45 43						
	eS	NE 46 02						
25	IP	ZNE 23 31 35.3	17.5	2.0	10.4	2.0	7.0	1.8
	IS	NE 34 41						
	ePcs	Z 38 44						
26	eP	Z 02 59 00						
	eS	ZNE 25						
26	eP	Z 03 39 26						
	eS	NE 40 05						
	eT	ZNE 43 00						
26	eP	Z 16 51 21						
	eS	NE 52 53						
26	eP	Z 17 29 17						
	eS	NE 30 52						
26	eS	Z 23 07.7						
	eSS	Z 10.4						
	eL	Z 12.0						
27	eP	Z 00 42 11						
	eS	NE 38						
	eT	ZNE 44 46						
27	IP	ZNE 06 37 41	1.9	1.5	1.4	1.6	2.0	1.4
	eS	ZNE 38 37						
27	eP	Z 13 27 53						
	eS	ZNE 30 25						
27	eS	ZNE 16 11 34						
	eSSS	E 19.7						
	eL	ZN 23.8						
27	eP	Z 16 19 23						
	IS	NE 50						
27	IP	Z 17 20 08.5						
	eS	NE 21 03						
28	eP	Z 12 56 22						
	eS	NE 58 18						
28	IP	Z 16 27 50.7						
	eS	NE 28 24						
28	eP	Z 18 13 54						
	eS	NE 14 35						
	eT	ZNE 17 14						
28	eP	Z 19 39 39						
	eS	NE 40 05						
29	IP	Z 05 32 20.5	1.0	1.9				
	eS	ZNE 33 17						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
29	IP	Z 07 08 54.2	3.7	0.9				
	eS	NE 09 13						
29	eP	Z 08 31 25						
	eS	NE 32 05						
	eT	ZNE 35 05						
29	eP	Z 14 01 51						
	eS	ZNE 03 02						
	eT	ZNE 08 27						
29	eP	Z 15 38 28						
	eS	ZNE 39 03						
	eT	ZNE 41 54						
29	eP	Z 16 17 57						
	eS	NE 18 27						
	eT	ZNE 20 36						
29	IP	Z 17 58 44						
	IS	NE 59 02						
29	eP	ZN 22 50 25						
	eS	NE 52 28						
30	eP	Z 03 49 35						
	eS	NE 51 30						
30	eP	Z 08 50 58						
	IS	NE 51 52						
30	IP	Z 11 45 35						
	eS	NE 47 10						
30	IP	Z 12 42 13.3	1.2	1.0				
	eS	NE 43 42						
30	IP	Z 17 41 30.6						
31	eP	Z 01 55 06						
	eS	NE 52						
1	IP	Z 06 37 07.2	6.0	1.0				
	eS	NE 44						
1	eP	Z 12 35 38						
	eS	NE 36 05						
	eT	ZNE 38 10						
1	eP	Z 13 34 08						
	eS	NE 36						
	eT	ZNE 36 43						
1	IP	Z 16 11 47						
	IS	NE 12 29						
1	eP	Z 16 13 35						
	eS	NE 14 02						
	eT	ZNE 16 06						
2	eIP	ZNE 04 34 02	2.5	2.0	1.7	1.7	2.0	1.9
	eS	NE 36 08						
2	e	NE 09 57.3						
	eS	NE 58.2						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
OCT	eL ZE	10 00.0						
2	1P Z	13 06 03.5	2.0	2.5				
	1S N	10 30						
	1L ZNE	11 28						
3	1P Z	01 47 28.3						
	eS ZNE	50						
3	1P Z	01 57 14	1.5	1.9				
	1S NE	58 58						
3	eP Z	09 36 02						
3	eP Z	16 55 33						
	eS NE	57 51						
3	1P Z	17 04 40.2	5.5	2.0				
	eS NE	06 14						
3	eP Z	21 15 50						
	eS NE	16 20						
	eT ZNE	18 37						
3	eS N	22 09.7						
	eL ZE	12.0						
3	1P Z	22 42 57.6	2.0	1.0				
	1S NE	44 14						
4	e ZNE	00 57.2						
	e(L) ZNE	01 03.2						
4	1P Z	05 17 01						
	1S NE	23						
4	1P Z	05 35 24						
	eS NE	36 29						
4	e1P Z	12 29 30						
	eS NE	31 00						
5	eL Z	04 06.6						
5	1P Z	06 25 45.3	3.2	1.2				
	eS NE	27 03						
5	eP Z	08 26 27						
	eS NE	58						
5	1P Z	08 31 03	3.9	2.0				
	e ZNE	28						
	1S ZNE	50						
5	1P Z	12 25 01.2						
	1S NE	38						
5	eP Z	13 11 17						
	eS NE	49						
5	eP Z	14 01 06						
	eS ZNE	02 37						
	eL ZNE	03.2						
	eT ZNE	09 10						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
5	eL ZN	22 41.0						
6	eL ZNE	06 45.8						
6	eS ZNE	07 37 32						
	eSS ZNE	41.6						
	eSSS NE	45 14						
	eL Z	46 00						
	eL ZNE	48.0						
6	1PKP Z	14 49 45	0.8	2.1				
	1PKP Z	49	1.0	2.0				
6	1PKP Z	14 51 06						
	ePP Z	54 40						
	ePPP Z	57 10						
	eSKGP ZNE	15 05 00						
	e Z	07 30						
	eSKKS NE	08 30						
	e Z	12 06						
	eSS ZNE	14 00						
	eSSP N	15 00						
	e Z	19 00						
	eSSS NE	38						
	e N	25 40						
	e E	28 00						
	e NE	30.3						
	e E	32.3						
	e N	34 10						
	e ZN	38 50						
	e ZNE	40 40						
	e E	45 14						
	e ZE	48 00						
	e ZNE	51.2						
6	eP Z	19 16 42						
	eS N	20 12						
	eL Z	21.3						
6	1P Z	23 41 49.4	1.5	2.0				
7	eP Z	01 26 50						
	eS ZNE	28 24						
7	eP Z	03 58 43						
7	eP Z	04 04 10						
	eS ZNE	23						
7	1P Z	12 10 37						
	eS NE	56						
7	eP Z	15 14 28						
	eS NE	45						
7	1P Z	15 36 05						
	1S NE	24						
7	eP Z	21 22 33						
	eS NE	23 50						
	eT ZNE	29 49						
8	eP Z	03 16 59						
	1S NE	17 53						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te	
OCT 8	1P	Z							
	1S	NE							05 45 28 52
8	1P	Z							
	eS	NE							12 48 29 49 21
8	eP	Z							
	eS	NE							19 56 40 57 58
	eL	ZN							58.3
8	eP	Z							
	e	ZNE							21 10 43 11.3
	e(s)	ZNE							14 03
9	eP	Z							
	eS	NE							08 45 45 47 15
9	1P	Z							
	1S	NE							08 52 36 55
9	1P	Z							
9	1P	ZNE							
	1S	NE							12 52 45.2 21 34 42 35 08
10	eP	Z	0.9	1.9					
	eS	NE							07 59 39 01 57
10	eP	Z	0.6	1.9					
	eS	ZNE							08 33 53 36 02
	eP	Z							17 17 18 20 19
10	eP	Z							
	eS	NE							19 16 05
10	eP	Z							
	eL	ZN							19 50 40 20 14.5
10	eL	ZN							
10	eL	ZN							
11	eP	Z							
11	eP	Z							
	eS	NE							00 17 45 02 09 18 53
11	1P	Z							
	i	NE							05 58 36 49
	1S	ZNE							59 43
11	eP	Z	0.4	2.1					
	eSS	E							10 13 44 21 00
	eL	ZNE							22.2
11	1P	ZNE	1.5	2.5					
	eS	ZNE							11 15 14 19 08
	eL	ZE							20 40
11	eP	Z	0.5	0.8					
	e(s)	NE							11 40 04 42 50
11	eP	Z							
11	1P	Z	1.1	2.0					
	eS	ZNE							20 56 31 21 25 58 35 00

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te	
11	eSS	Z							
	eL	ZE							39 30 47 50
11	eP	Z							
	1S	NE							23 58 44 59 28
12	eP	Z							
	eS	NE							01 50 40 52 11
12	eP	Z							
	eS	NE							05 36 51 37 13
12	eP	Z	0.5	2.0					
	eS	NE							09 23 22 34 20
	eL	Z							35.5
	eL	N							36.2
12	eP	Z							
	eS	NE							14 42 38 43 20
12	eP	Z	1.0	2.0					
	eS	ZNE							15 53 22 16 01 50
	eSS	ZE							06.2
	eL	ZNE							08.7
12	eP	Z	1.0	2.0					
	eS	ZNE							20 21 22
12	eS	ZNE							
	eSS	Z							22 13 38 17 22
	eSSS	NE							20 10
	eL	ZE							22 00
13	e(P)	Z							
	eS	NE							05 49 17 50 52
13	eP	Z	0.5	2.0					
	eS	ZNE							10 46 27 55 20
	eL	ZE							57.3
13	eP	Z							
13	1P	Z							
	1S	NE							18 16 33 19 08 53 09 14
13	1P	Z							
	eS	NE							21 57 57 58 18
14	eS	E							
	eSSS	E							03 24 16 31.4
	eL	ZNE							34.0
14	1P	Z	1.1	0.9					
	eS	NE							03 48 15 50 03
14	eP	Z							
	eS	NE							13 27 57 28 36
	eT	ZNE							31 58
15	1P	Z							
	eS	NE							17 34 09.8 52
15	eP	Z							
	eS	ZNE							20 37 48 46 50
	eL	ZNE							57.0

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
OCT 16	eP Z eS NE	00 13 30 54						
16	iP Z iS NE	00 35 37 55						
16	eP Z eS NE eT ZNE	05 56 14 33 58 42						
16	eiP Z eS NE	06 18 06 19 57	3.0	1.0				
16	e ZNE	07 04.0						
16	eP Z eS ZN eS E eSSS ZN i E eL ZNE	07 10 38 19 36 46 27 12 42 30.0						
16	eS ZNE eL ZNE eL ZN	08 38 26 46.2 48.8						
16	eS ZNE eSSS E eL ZN	09 38 20 46 18 48 38						
17	iP Z eS Z eSS NE eL Z	01 45 04.4 50 30 53.0 54.0						
17	eP Z	03 28 35						
17	eP Z eS ZNE	05 59 55 06 03 10	1.0	1.8				
17	eS E eSSS N eL Z	10 10.3 11.0 11.9						
17	eP Z eS ZNE	10 58 32 58						
17	eP Z	15 10 58						
17	iP Z eS ZNE	16 04 22.9 06 00	2.0	1.8				
17	eP Z eS NE	20 34 32 35 05						
18	iP Z iPcP Z iP Z eS ZNE eS E iSS Z eL ZNE eL ZNE	12 42 02.4 34 44 08 49 52 53.1 54 09 57.0 59.7						
18	eP Z	13 10 49						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
18	eP Z eS NE	13 30 07 32						
18	eP Z eS NE	13 41 05 52						
18	iP Z iS NE	20 04 30 05 15	4.0	1.9				
18	eP Z	21 19 02						
18	eP Z eS NE	22 33 47 35 30	2.0	2.0				
18	eP Z eS ZNE	23 32 45 59						
19	eP Z eS NE	04 20 04 21 35						
19	eP Z eS NE	06 03 51 04 10						
19	eP Z eS NE	08 53 10 55 25	1.0	1.1				
19	iP Z i Z eS NE	21 16 26.6 33 17 36	2.0	2.0				
20	eP Z eS NE	00 50 40 51 43						
20	eP Z eS ZNE	10 07 21 09 28						
21	iP Z iS NE	02 02 05.3 33						
21	e ZNE eSS Z e E eL N eL Z	07 56 38 08 05.6 11.8 12.8 14.3						
21	eP Z eS NE	07 58 16 54						
21	e(P) Z	08 01 52						
21	iP Z iS NE	09 50 14.7 36						
21	e(P) Z e(S) NE	13 54 04 57 08						
21	e(L) NE	14 40.3						
21	iP Z eS NE	20 55 48.4 56 48	0.9	1.5				
21	iP Z iS NE	20 57 25.5 45						
21	eS E	23 33 34						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
OCT	eS	NE	34	48				
	eSS	NE	41	32				
	eSSS	N	45	16				
	e	NE	47	12				
	e	NE	51	10				
	eL	Z	54.3					
	eL	ZE	57.5					
22	eL	ZNE	10	25.0				
22	1P	Z	18	08 07.3				
	eS	NE		25				
23	eP	Z	01	46 42				
	eS	NE		47 07				
	eT	ZNE		49 08				
23	ePKP	Z	02	14 50				
	ePP	ZE		16 06				
	eSKS	E		21 43				
	eS	ZE		25 50				
	eS	ZE		27 12				
	eSS	ZE		32 50				
	eL	E		44.0				
	eL	E		46 26				
eL	ZE		51.0					
23	eP	Z	09	42 39				
	eS	ZNE		45 18				
23	eP	Z	16	06 47				
	eS	NE		07 16				
23	eL	ZNE	21	37.3				
24	eP	Z	03	44 43				
	eS	NE		45 03				
24	eP	Z	16	53 17				
	eS	NE		48				
25	eP	Z	00	41 54				
	eS	NE		42 53				
25	1P	ZNE	10	02 15.5				
	eS	NE		34				
25	eP	Z	12	11 15				
	e	ZNE		33				
	eS	ZNE		13 08				
26	1P	Z	03	42 27.7				
	1S	NE		48				
26	eP	Z	14	33 22	1.0	2.1		
	eS	NE		42 10				
	eL	N		49.3				
	eL	ZNE		52.8				
26	1P	Z	18	54 29.2				
	1S	NE		52				
27	eP	Z	20	03 33				
	eS	NE		05 58				
	eL	ZNE		06.7				

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
27	eT	ZNE		16 22				
27	eSS	ZN	21	52.2				
	eL	ZNE	22	02.3				
28	1P	Z	05	50 09.4	1.0	2.0		
	eS	NE		51 12				
	eS	Z		36				
28	1P	Z	21	36 00.7				
	1S	NE		21				
29	eP	Z	00	08 23				
	1S	NE		43				
30	eL	ZE	02	38.4				
30	eP	Z	16	35 34				
	eS	ZNE		36 44				
31	eP	Z	04	18 43				
	eS	ZNE		20 23				
31	1P	ZNE	08	50 50				
	eS	NE		51 24				
31	eP	Z	00	48 00				
1	eP	Z	02	59 30	1.2	1.4		
1	eL	ZE	10	31.2				
1	eP	Z	12	36 23	1.4	2.0		
	eS	ZNE		44 44				
	eSS	ZN		48.7				
	eSSS	ZNE		51.4				
eL	ZE		55.2					
1	eP	Z	13	25 30				
	eS	NE		56				
1	eP	Z	16	46 57				
	eS	ZNE		49 17				
1	1P	Z	19	00 53.6				
2	1P	Z	07	04 39.9	1.5	2.0		
	eS	ZNE		14.2				
	eSS	ZNE		21.5				
	eL	ZNE		30.9				
2	eP	Z	13	28 37				
	1S	NE		29 20				
2	eP	Z	18	39 31				
	eS	ZNE		41 17				
3	eP	Z	05	31 04				
	eS	NE		28				
	e	ZNE		33 22				
3	eP	Z	09	06 29				
	eS	ZNE		56				
3	eL	Z	15	25.7				

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
NOV 3	eL Z	18 48.3						
4	iP Z eS ZNE	06 28 32 29 01						
4	eP Z eS NE	07 59 48 08 00 16						
4	eP Z eS NE	17 13 15 14 02						
5	eP Z eS NE	02 55 21 39						
5	eP Z	04 27 08	1.5	1.9				
5	iP Z eS NE	06 02 08.5 29						
5	eL ZN eL E	07 24.2 25.0						
5	eP Z eS NE eL ZNE eT ZNE	09 09 09 10 15 11.1 15 25						
5	eP Z iS NE	11 58 57 59 18						
5	eS NE	15 51 16						
6	eP Z eS ZNE eSSS E eL ZNE	10 04 22 13.5 21.0 23.5						
7	eL ZE	08 03.5						
7	eL ZN	15 20.3						
7	eS Z eSS Z eL Z	19 01.2 07.6 20.2						
7	eP Z eS NE	23 43 50 45 17						
8	eP ZNE ePP ZNE eS ZNE eSS ZNE eL ZN	02 51 34 53 12 57 44 03 00 40 04 14	1.0	1.5				
8	eP Z eS NE	04 32 37 34 08						
8	eP Z eS NE	07 03 19 04 03						
8	eP Z eS NE	08 31 43 59						
8	eP Z eS NE	14 48 14 49 14						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
NOV	eT ZNE	54 20						
6	eP Z eS NE	18 57 25 59 11						
8	eP Z eS NE	21 43 44 44 07						
9	eP Z eS NE	15 30 38 31 12						
9	eL Z	19 17.5						
9	eP Z eS NE	20 12 00 13 25						
9	eP Z eS NE	20 29 59 30 15						
9	eP Z eS NE	21 16 16 17 39	0.9	1.5				
9	eP Z	23 37 40						
10	e(P) Z	04 24 55						
11	e(L) ZE	03 38.2						
11	eL NE eL Z	08 33.3 36.2						
11	eP Z eS NE	11 21 49 23 42						
11	eL ZN	13 49.5						
11	eL NE	14 19.0						
11	eL NE	15 55.5						
11	eL ZNE	17 16.9						
11	eL ZN	18 52.5						
11	eL ZN	19 40.4						
12	eL ZNE	01 21.3						
12	eP Z iS NE	05 34 39 35 44	1.0	2.1				
12	eP Z eS NE	07 54 05 41						
12	iP ZNE eS ZNE	09 26 55.3 27 34						
12	eP Z eS NE	09 47 11 54						
12	e(L) Z	23 51.0						
13	eL ZNE	00 09.8						
13	eS ZNE	00 38.2						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
NOV 13	1P eS	ZNE NE	14 26 06.5 24					
13	eP eS	Z NE	15 17 23 18 53					
13	eP eS eT	Z NE ZNE	20 00 33 03 07 16 45					
13	eP eS eL eT	Z NE ZNE ZNE	22 01 07 03 56 04.3 16 00	1.1	2.0			
14	eP eS	Z NE	03 54 26 55 13					
14	eP eS eSSS eL	Z ZNE ZN ZNE	04 07 37 17.3 25.0 28.3					
14	eL	ZNE	13 25.4					
14	1P eS	Z NE	21 25 36 58					
15	eP	Z	01 15 41					
15	eP eS eT	Z NE ZNE	04 06 31 08 28 18 05					
15	eP eS	Z NE	07 24 03 25 34	2.0	1.9			
15	1P eS	Z ZNE	07 28 18.6 38	1.5	0.9			
15	1P eS	Z NE	08 04 36.6 54	10.0	1.0			
15	eS eS eL	E ZN ZNE	16 13.7 14.2 26.5					
15	1P eS	Z ZNE	18 05 11.2 51	2.4	0.9			
15	eP eS	Z NE	20 30 11 32 23					
16	eP eS	Z ZNE	05 52 44 53 00					
16	eP 1S	Z NE	06 03 39 59					
16	eP eS	Z NE	07 33 45 34 04					
16	eP eS	Z NE	11 23 46 24 03					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
16	eP eS	Z NE	21 21 54 22 26					
16	1P eS	Z NE	23 03 39 04 00					
16	1P eS	ZNE ZN	23 06 06.5 28					
17	1P e eS	Z ZN ZN	00 02 01.2 23 36					
17	1P 1S	ZNE N	05 27 10.5 20		5.2	0.7		
17	eP eS eL eT	Z ZE ZN ZE	08 10 42 12 23 13.4 20 17					
17	1P 1S 1L	Z ZN ZN	08 22 53 28 44 31 30	10.0	2.0			
17	eP eS eScP	Z ZE ZE	11 05 33 07 40 12 33	1.5	1.5			
17	eS eL	ZN ZN	19 16 24 22.7					
18	1P eS	Z E	12 09 50 10 33	3.0	1.1			
18	1P eS eSS eL	Z ZN ZN Z	14 42 27.5 48 32 50 40 54.0					
18	eP eS eL e eT	Z ZE ZN ZE ZE	22 22 33 23 45 24.0 27 47 29 00					
18	eP eS eT	Z E ZE	23 36 37 37 48 43 04					
19	1P 1S	Z ZE	03 30 40.5 59					
19	1P 1S	Z E	04 34 25 35 07	3.2	0.8			
19	eSSS eL	NE NE	16 01 58 04.0					
19	eP eS	Z NE	20 17 18 44					
19	1P eS 1L	Z ZNE ZNE	23 42 24.8 48 14 51 08	4.5	2.5			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
NOV 20	eP Z	00 02 26	0.8	2.0				
20	eP Z	10 31 00						
	IS NE	32						
20	eP Z	13 01 52						
	eS NE	03 26						
20	eP Z	15 02 15						
	eS NE	30						
20	eP Z	16 41 35						
	e(S) NE	43 51						
20	eP Z	23 47 56						
	eS NE	48 44						
	eT ZNE	52 10						
21	eL NE	00 01.2						
	eL ZNE	03.5						
21	eP Z	00 45 05						
	eS NE	50						
21	eP Z	08 45 05						
	eS NE	42						
21	eP Z	15 44 35						
	eS NE	46 57						
	eL E	47.9						
	eT ZNE	57 02						
21	eL ZNE	15 56.8						
21	eP Z	18 52 12	0.5	1.1				
	eS NE	54 02						
22	eP Z	00 13 12						
	eS NE	14 10						
	eT ZNE	19 50						
22	iP Z	02 40 24	1.5	2.0				
	eS NE	41 53						
22	eP ZNE	02 45 02	1.2	2.1	1.1	2.0	1.2	2.0
	eS ZNE	48 16						
22	iP ZE	05 53 47.7	1.0	2.2			0.9	2.0
	eL ZE	06 05.6						
24	eP Z	06 37 30						
	eS NE	39 13						
24	eP Z	09 21 26						
	eS NE	46						
24	eP Z	10 14 29						
	eS NE	15 04						
24	eP Z	10 53 30	2.5	2.0				
24	eP Z	12 52 02						
	eS ZNE	13 01 00						
	eSSS NE	08 48						
	iL Z	12 28						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
NOV	eL NE	36						
	iL ZNE	18 26						
24	eP Z	13 17 26						
	eS NE	18 05						
24	eP Z	14 51 39						
	eS NE	53 53						
24	eP Z	19 48 36						
	eS NE	49 21						
24	eP Z	23 53 42						
	eS NE	55 25						
25	iP Z	08 32 38.7	3.2	1.0				
	IS ZNE	33 27						
25	eL Z	13 17.0						
26	eS NE	10 42 40						
	eS Z	43 36						
	eL ZE	53 14						
	eL ZE	55 56						
26	eP Z	21 12 31						
	IS NE	48						
27	iP Z	09 42 23						
	IS NE	56						
27	eP Z	10 43 08						
	eS NE	44 03						
27	eP Z	11 40 16						
	eS NE	44						
	e NE	50						
28	eP Z	11 02 55						
	eS NE	04 52						
28	eP Z	11 47 18						
	eS NE	48 42						
29	e(P) Z	01 42 27						
	eS NE	43 55						
29	eP Z	02 53 05						
	eS NE	30						
	e ZNE	55 08						
29	eP Z	03 24 01						
	eS NE	26						
29	eP Z	06 35 49						
	eS ZNE	36 07						
29	eP Z	07 39 19						
	eS ZNE	38						
29	eP Z	09 35 43						
	eS ZNE	36 01						
29	eP Z	09 43 52						
	eS NE	44 12						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
NOV 30	eP eS	Z ZNE	02 33 56 34 38					
30	1P eS	Z NE	07 45 31.6 47 21	0.6	1.9			
30	ePP eS e eSS eSSS e eL eL	Z N Z N ZN ZN N N ZN	12 44 54 52.3 53.2 55.2 59 06 02.6 04 56 07.2 12.0					
30	eP eS	Z NE	14 07 49 08 11					
30	eP eS	Z NE	16 10 20 12 32	1.5	1.4			
30	1P eS	Z NE	18 55 51.7 58 02	2.0	1.6			
DEC 1	1P eS	Z NE	04 47 58 48 25	3.0	0.8			
1	eP eS	Z ZN	04 54 50 55 36					
1	1P eS	ZNE NE	05 26 07 27 06					
1	eP eS eT	Z NE ZNE	11 51 07 54 05 12 08 13					
2	eP eS	Z ZNE	06 37 56 38 45					
2	eL	Z	10 23.0					
2	eP eS	Z NE	11 35 40 37 10					
2	eL	ZN	13 49.6					
2	eP eS	Z NE	15 22 08 23 37					
3	eL	ZNE	04 45.3					
3	eP eS	Z NE	19 15 45 18 32	1.0	1.9			
3	eP eS	Z NE	19 25 54 28 40	0.5	1.1			
3	eP	Z	21 03 28	0.5	2.0			
3	eP	Z	22 35 49					
4	eP eS	Z ZNE	00 39 33 40 05	3.2	2.0			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
DEC 4	eT eL	ZNE ZNE	42 20 02 27.5					
4	eP eS	Z NE	09 37 10 53					
4	eP eS eT	Z NE ZNE	10 20 58 21 33 25 08					
4	eP eS eL eL	Z ZNE ZNE ZE	15 56 07 16 01 48 04 44 06.2					
5	1P eS	Z NE	05 16 53 18 35	3.6	1.9			
6	1P eS	Z NE	01 53 32.5 51					
6	e(S) eL	NE Z	02 55 04 56.5					
6	eL	ZNE	04 51.5					
6	eP eS	Z NE	05 43 02 44 31	4.3	1.7			
6	eP eS	Z NE	07 24 07 25 05					
6	eP eS e(T)	Z NE ZNE	08 11 25 52 14 44					
6	e(P) eP eS eL eL	Z ZNE ZNE N Z	08 16 29 46 17 54 18 06 19 08					
6	eP eS eT	Z NE ZNE	23 31 08 27 33 14					
7	eP eS eSSS eL eL	Z ZE N ZE ZE	09 05 53 11 34 14 26 34 16 20	2.0	2.0			
7	eL	Z	19 35.3					
8	eP eS	Z NE	15 11 29 12 02					
8	eS eSSS eL	NE NE ZNE	18 09.8 17.2 20.0					
9	eP eS	Z NE	06 21 20 22 40					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te	
DEC 9	eS	ZNE	11 40 24						
	eL	ZNE	48.7						
9	eSKS	NE	13 58 10						
	eSP	ZNE	14 00 34						
	esS	NE	03.3						
	esSS	ZNE	09 54						
	eL	Z	16.3						
	eL	Z	21.6						
10	eP	Z	03 19 26						
	eS	NE	45						
10	eP	Z	11 28 54						
	eS	NE	30 27						
10	eP	Z	15 22 20	1.5	2.0				
	e	ZNE	28 36						
	eS	ZNE	31 42						
	e	E	34 56						
	e	N	35 10						
	eSS	ZNE	37 00						
	eL	NE	40 37						
	eL	ZNE	43 00						
	11	eP	Z	06 13 21					
		eS	NE	43					
11	eP	Z	06 51 19						
	eS	NE	54						
11	eP	Z	16 15 47						
11	1P	Z	19 03 56.5						
	1S	NE	04 16						
12	eP	Z	02 20 25						
	1S	NE	52						
12	eP	Z	07 27 14						
	eS	ZNE	32 55						
	eSSS	ZNE	36 00						
	eL	ZE	38.0						
12	eP	Z	12 54 10						
	1S	NE	55 00						
12	1P	Z	19 47 40	3.6	2.0				
	eS	NE	49 43						
	eT	ZNE	57 51						
12	eP	Z	22 17 22						
	eS	NE	18 32						
	eT	ZNE	24 04						
12	eL	Z	23 28.0						
13	eP	Z	00 18 25	1.5	2.0				
	eS	NE	24 10						
	eL	Z	25.2						
13	1P	Z	13 21 44.3						
	1S	NE	22 05						
14	eL	ZNE	02 51.0						

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
15	1P	Z	01 17 18					
	1S	NE	37					
15	eL	ZE	12 51.4					
15	1P	Z	22 16 41					
	eS	NE	17 00					
16	eL	ZE	02 41.8					
16	eL	ZNE	03 25.5					
16	eP	Z	13 41 07					
	1S	NE	27					
16	eP	ZN	19 22 27	1.0	1.1	1.5	1.2	
	eS	ZNE	23 44					
	eL	E	24.0					
16	1P	Z	22 53 27					
	1S	NE	48					
17	eL	ZN	05 49.5					
17	eP	Z	10 30 33	2.0	1.2			
	eS	NE	31 52					
18	eS	ZNE	00 03 36					
	eL	ZNE	13.6					
18	eP	Z	07 10 58					
18	1P	Z	09 41 05	1.5	1.8			
	eP	Z	20 48 21					
eS	NE	49 16						
19	eP	Z	06 45 53					
	e	NE	46 11					
	eS	ZNE	49 18					
19	e(P)	ZN	23 30 34					
20	eP	Z	08 34 30	1.0	1.8			
20	1P	ZNE	11 28 33.3	10.7	1.8	6.0	1.9	5.0 1.9
	1S	ZNE	30 05					
20	1P	ZNE	12 12 28	8.0	1.3	5.0	1.8	4.0 1.9
	1S	NE	46					
20	1P	Z	17 36 18.9	5.8	0.9			
	eS	NE	40					
21	eP	ZNE	01 35 10	1.3	1.9	0.6	1.8	1.5 2.0
	eS	ZNE	36 44					
21	eP	Z	14 18 39					
21	eP	Z	16 35 07					
	e(S)	NE	37 19					
21	eP	Z	18 15 43					
	eS	NE	16 11					
	eT	ZNE	18 24					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
DEC 22	eP eS	Z ZNE	02 33 19 35 06					
22	eP eS	Z NE	06 07 22 40					
22	eP eS	Z NE	11 35 10 29					
22	eP i eS	ZE Z ZNE	12 00 35 41 02 32	1.0 2.5	2.0 1.9		1.5	2.0
22	eP eS	Z NE	12 08 37 09 27	2.3	1.0			
22	eL eL	E ZNE	21 23.6 26.0					
23	eP eS e	Z NE ZNE	06 53 16 44 55 40					
23	1P 1S	Z NE	14 14 40 15 14	2.2	1.0			
23	1P 1S	Z NE	15 44 17.2 36					
23	eP eS	Z NE	17 25 19 51					
23	eL	Z	20 21.3					
24	eP eL	ZNE ZNE	18 53 01 19 01.0					
24	1P eS	ZNE NE	18 54 29 48					
24	eP eS	Z NE	23 51 23 53 36					
25	1P 1S	Z NE	03 17 19.8 38	8.0	1.0			
25	eP eS	Z NE	04 27 52 28 10					
25	eP eS	Z NE	08 09 55 10 15					
25	eP eS	Z NE	13 02 30 50					
25	eP eS	Z NE	15 18 28 20 00					
25	1P eS	Z NE	20 51 02.4 20	4.5	1.5			
26	eP eS	Z NE	04 59 17 05 00 53	2.1	1.2			
26	1P	Z	14 41 33.5	2.5	2.0			

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
DEC	eS eL eL	NE E ZN	50 38 58.7 15 02.2					
26	1P 1S	Z NE	18 38 53.8 39 26					
26	eP 1S	Z NE	22 08 14 34					
27	eP eS	Z NE	00 26 11 40					
27	eP eS	Z NE	09 47 16 35					
27	eP eSSS eL	Z N ZNE	17 54 20 18 11 42 14.3	1.3	2.6			
28	1P eS	ZNE ZNE	04 53 15.2 31					
28	eP eS	Z ZNE	15 57 01 33					
28	1P eS	Z ZNE	16 18 35.9 20 30	5.0	2.0			
28	eP eS	Z NE	16 58 48 59 30					
29	eP eS	Z NE	01 42 31 43 05					
29	eP eS	Z NE	09 30 24 31 13					
29	1P eS	ZNE ZNE	23 01 14 02 42	3.0	2.0	1.9	1.9	2.0 2.0
30	1P eS	Z NE	03 31 21 35					
30	eP e eS eT	Z E ZNE ZNE	13 16 56 17 04 18 00 21 00					
30	eL	ZE	13 35 26					
30	eSS eL	E ZN	13 38.8 43.0					
30	eP	Z	15 37 42	3.4	1.7			
30	eP eS eScP ePcS	Z NE Z Z	21 33 34 35 36 40 25 41 18					
31	eP eS eT	Z NE ZNE	06 42 02 34 45 04					

Date	Phase	h m s	Az	Tz	An	Tn	Ae	Te
DEC 31	eP	Z 11 25 28						
	eS	ZNE 26 02						
	eT	ZNE 28 23						
31	eP	Z 17 45 20	2.0	2.0				
	eS	NE 47 42						

SUVA

Amplitudes are given in millimetres, read directly from the records of the vertical component Willmore seismograph.

Date	Phase	h m s	Az	Date	Phase	h m s	Az
JAN 3	eP	21 25 58		MAR 5	eP	10 09 40	1.0
FEB 18	1P	04 44 30 u	11.2	6	eP	20 43 49½ u	1.5
18	eP	10 39 47	0.7	6	eP	23 53 05	1.6
18	eP	19 11 13	1.7	7	eP	23 14 51	7.2
20	eP	09 08 14	1.5	9	eP	19 21 36	5.5
20	eP	18 23 23½	2.0	10	eP	07 58 38	0.6
23	1P	12 28 41½ u	2.0	11	eP	01 15 29½	0.4
23	eP	13 41 43	0.7	12	eP	04 31 56	0.8
24	eP	14 53 44½	1.2	12	eP	10 38 35 u	2.0
26	eP	21 19 04½ u	4.0	12	eP	21 15 32½	0.7
28	P	16 14 41½	1.0	eS	54	1.5	
28	1P	17 05 47.6 u	1.5	13	ePn	04 25 05	0.7
28	eP	19 27 46	1.4	eP*	13	1.0	
29	eP	20 15 50	1.5	eSn	34	3.7	
29	eP	20 44 52	1.0	13	eP	06 20 20½	0.4
eS	45 03	2.0	13	eP	12 55 14	0.5	
MAR 1	eP	00 00 10	1.5	14	eP	22 49 53½	0.6
2	eP	19 34 23	6.0	16	eP	15 01 31½	0.8
3	eP	01 25 38	1.5	e	42½		
3	eP	16 00 11½	2.0	16	1P	17 43 17.8 u	3.6
3	eP	17 16 17	1.2	16	1P	17 43 17.8 u	3.6
4	eP	09 32 17½	0.5	16	eP	19 17 59½	0.3
4	eP	10 14 57	11	16	eP	21 41 08	3.0
				16	eP	23 30 44½	1.1

Date	Phase	h m s	Az	Date	Phase	h m s	Az
MAR 17	e(P)	21 35 58	0.5	APR 4	eP?	09 22 57½	
e	36 32	0.5	e(P)	23 03			
18	eP	00 12 13	1.1	4	eP	17 58 05	0.2
18	eP	04 48 16	0.5	4	eP	18 19 45	
18	eP	05 18 37½	0.3	6	eP	02 36 11½	1.0
19	eP	04 47 20		6	eP	10 19 13	2.0
iP	21	d	6.0	6	eP	22 35 46	0.7
eS	48 34.5	1.0		7	eP	15 49 09	1.2
19	1P	06 50 38.1	7.2	8	eP	12 50 15½	3.7
eS	43	1.0		e	45	6.5	
19	eP	08 45 05.2	0.9	8	eP	19 29 55	0.2
19	e(P)	08 45 59	0.9	8	eP	21 35 01	0.2
19	eP	21 46 24½	1.2	eS	25	0.8	
21	eP	03 50 45	1.0	e	32	1.1	
21	eP	16 29 38	0.8	9	eP	00 02 11½	0.7
23	eP?	07 38 37		9	eP	05 47 23½	1.0
e(P)	40	1.0		11	1P	01 07 03.0 d	1.0
eS	39 05½	3.0		i	04.0 u	1.3	
23	eP	09 20 41½	<0.2	12	eP	11 14 33	1.5
25	eP	11 35 21½	0.9	13	eP	03 04 21½	3.0
25	eP	15 34 44½	0.2	13	eP	06 24 59	1.5
25	eP	16 38 41	3.0	13	eP	11 26 17½	0.5
eS	39 14	8.0		e(S)	42	1.3	
27	1P	20 23 46.0 d	4.5	13	e(P)	11 28 05	0.5
eS	25 06½	1.2		14	eP	00 09 05	0.4
28	eP	03 48 45½	4.5	14	eP	09 01 19	0.6
28	eP	11 39 50½	0.7	14	eP	20 45 41½	0.5
e(P)	40 27½	0.4		14	eP	22 47 47	1.0
29	eP	21 45 55	0.6	15	1P	11 24 37.8 d	1.5
31	eP	17 05 54½	0.5	15	eP	22 01 50	0.9
APR 2	eP	01 24 22½		16	eP	03 02 49½	0.4
2	eP	16 06 27		16	eP	14 34 42	0.4
2	eP	21 34 00½		17	eP	01 46 18	1.0
3	eP	01 58 08	0.7	eS	24½	3.2	
3	eP	08 24 59½	0.7	17	eP	06 05 33	0.5
3	eP	19 10 59	0.4	18	eP	17 58 17½	
4	eP	01 20 57	0.5				

Date	Phase	h	m	s	Az	Date	Phase	h	m	s	Az
APR 18	eP e(S)	19	53	54 54 24	0.3 0.5	MAY 7	1P eS	00	36	17 37 20	d 7.0 0.5
19	eP	03	58	16½	0.5	7	ePKP?	06	04	55	<0.2
19	eP	14	25	19		7	eP eP'P'	08	09	18 37 31	0.7 <0.2
19	eP	16	43	23½	2.0	7	eP	20	23	53	0.3
22	eP	19	40	03	0.1	7	eP	23	15	50	0.2
22	eP e	20	02	58 03 06	0.2 2.2	8	eP	03	39	27	0.2
22	eP	23	07	04	0.1	8	eP	04	01	54	0.2
23	eP	03	41	07	0.7	9	eP	12	15	00	0.3
24	eP	03	19	37	1.5	9	eP	18	19	23	0.5
24	eP	06	03	00½	2.0	9	eP	21	12	47	0.3
25	eP e eS	05	37	04 08 38	2.0 7.5 15	11	eP	14	40(59)		1.5
25	eP e eS	06	31	02 08 36	1.7 11 21	11	eP	22	17	17	0.4
25	eP eS	06	47	35½ 48 10	2.5 4.0	12	1P	01	39	56	0.8
25	eP	07	02	24½	1.5	12	eP	10	04	24	0.4
25	eP eS	07	18	26 19 01½	2.5 4.0	12	e? e(P) e	11	39	52 40 07 32	0.3 1.0 1.6
25	eP	08	09	24	0.6	12	e	11	47	13	0.7
26	1P	14	53	29.1 u	11	12	eP	18	19	04	1.0
26	eP	14	53	39	9.0	13	e(P)	00	08	18	1.0
28	eP	14	58	38½	0.5	13	eP	05	29	01	1.1
28	1P	15	55	15½ u	2.2	13	1P eS	11	07	46 08 57	u 14 2.2
29	eP	19	12	01	0.3	13	eP	16	46	17	0.4
30	eP eS	04	51	04½ 52 03	0.6 0.7	13	eP	20	41	29	0.3
MAY 1	eP	23	51	00	0.5	14	eP	20	02	30	1.0
2	eP eS	16	36	00 37 55	1.0 0.3	15	eP	23	25	34	0.9
3	eP	10	25	30	0.4	16	eP	10	10	08	0.8
5	eP	08	50	02	0.3	16	eP	13	54	55	0.5
6	eP	08	14	45	0.3	16	eP	16	11	18	0.5
6	eP	20	35	06	0.3	17	eP e(S)	01	53	18 43	0.5 0.9
						17	1P	11	16	28	1.4
						17	eP	17	00	14	0.8

Date	Phase	h	m	s	Az	Date	Phase	h	m	s	Az
17	e	17	05	37	2.0	MAY	eS*			23	
20	eP	06	08	55	0.3	30	eP	14	41	29	0.2
20	eP	16	56	13	4.5	31	eP epP	00	51	32 50	0.5 0.7
23	eP e(S)	04	50	44 10	1.0 1.3	31	eP	17	17	10	0.7
24	eP	04	15	08	1.1	31	1P e(S)	19	46	02 44	6.5 3.5
24	1P	09	55	49	10	JUN 1	eP eS	04	07	52 08 39	2.0 4.5
24	eP	20	33	54	0.6	1	eP	06	07	53	0.4
25	1P	08	34	33	d 1.0	1	eP	13	18	53	0.3
26	eP e? ePP eS	11	12	54 16 04 17 22 23 34	0.4 0.2 0.3 0.2	2	eP	23	15	29	0.3
26	e(P)	21	02	59	1.1	3	eP e(S)	08	14	10 46	0.5 0.8
26	eP e eS	21	21	37 54 22 06	1.3 1.5 7.0	3	eP eS	13	21	26 22 01	1.9 3.5
26	e(P)	21	57	18	0.9	3	eP	17	35	55	0.5
26	e(P)	22	59	35	1.5	3	eP	17	56	14	0.3
27	eP	08	59	09	0.2	3	eP eS	18	55	04 40	1.2 2.7
27	eP	11	22	28	0.2	4	eP?	00	19	10	0.2
27	eP	15	50	10	0.3	4	eP	11	55	30	1.0
28	e(P) e(S)	02	39	56 23	0.5 2.4	5	eP	01	05	34	0.3
28	ePn eSn eS*	03	14	26 54 15 06	0.6 1.8 3.5	5	1P Felt:	09	13	47	u Nandi and Yasawa.
28	eS	03	59	36	0.3	5	eP eS	09	17	48 18 15	1.0 1.3
28	1P e	05	21	52 22 02	u 1.0 0.5	5	1P e(S)	16	25	00 30	u 19 26
28	ePn eSn eS*	06	24	02 29 41	0.3 0.5 1.0	5	eP eS	16	35	21 47	0.5 1.0
29	eP eS	12	26	35 27 41	0.8 0.7	5	eP eS	16	42	53 43 24	1.2 1.2
29	1P	18	37	02	u 1.0	6	1P e(S)	18	15	41 16 15	u 16.5 31
29	eP	18	44	19	0.3	7	1P	13	09	52	d 0.5
29	eP	19	03	56	0.3	7	1P e(S)	16	46	52 47 30	u 16.5 19.2
30	ePn eSn	05	36	45 37 12		7	1P e	19	44	08 26	u 5.2

Date	Phase	h	m	s	Az	Date	Phase	h	m	s	Az
JUN	e(S)			41	9.2	JUN 30	1P	10	16	44	d 0.6
8	1P	02	28	16	u 2.5	30	1P	13	56	15	d 0.7
9	1P	03	56	11	u 1.1	JUL 2	1P	22	11	12	u 1.4
9	1P	15	03	47	d 0.8		e?			39	0.5
10	1P	04	08	35	d 3.5	5	ePn	14	11	50	0.5
10	eP	19	16	30	0.8		eP*			58	0.8
11	1P	13	45	24	d 1.7		eSn			12 25	1.1
12	eP	18	14	16	1.0	6	eP	07	34	52	0.6
13	eP	11	16	57	0.8	6	eP	19	51	58	0.5
13	1P	23	48	06	u 2.7		eS			53 01	0.5
14	1P	01	22	28	u 0.8		eLr			54.6	0.6
14	1P	15	28	33	u 2.8	7	1P	07	40	44	d 4.2
15	1P	02	07	22	d 0.8		i			53	u 2.1
15	eP	20	12	07	0.5		eS			42 01	0.9
	e(S)			41	1.2	7	1P	14	18	21	u 3.0
16	eP	04	12	34	2.0	8	1P	12	04	12	u 1.0
16	eP	08	36	00	0.6	8	eP	15	25	28	0.5
16	eP	09	58	03	0.5	9	1Pn	11	24	00	u 6.3
	eS			16	0.6		1P*			29	d 4.1
16	eP	17	36	22	1.0	9	1P	16	42	26	d 16.4
17	eP	01	54	45	1.7		e?			43 02	10
	e(S)			55 15	4.0		e(L)			44	5.7
17	1P	22	18	13	d 3.5	11	1P	05	55	36	d 4.0
20	eP	12	33	18	0.4	13	1P	01	16	00	d 0.9
20	1P	23	04	49	d 0.8		e			10	0.6
21	1P	22	21	52	u 36	14	eP	23	16	03	0.5
22	eP	00	18	37	0.7	15	1P	00	25	49	u 6.8
22	e	03	07	53	0.5		e?			26 02	11.6
22	1P	07	44	58	u 0.5	15	eP	08	28	13	0.4
22	1P	13	42	04	d 2.7	17	1P	04	56	41	d 8.0
22	1P	20	59	49	u 13	17	1P	19	11	13	u 0.9
	e(S)			21 00 24	20.5	19	eP	06	52	20	0.3
23	eP	01	37	31	1.0	20	eP	22	47	00	
28	eP	14	55	01	0.5	20	eP	22	59	32	0.5
30	1P	05	30	14	d 3.1	21	1P	03	50	59	d 27

Date	Phase	h	m	s	Az	Date	Phase	h	m	s	Az
17	1P	21	02	19	u 1.5	AUG 29	1P	17	28	53	0.4
17	eP	21	14	57	1.3	30	1P	06	13	25	d 1.2
	e(S)			15 23	2.2	30	1P	21	46	21	u
17	eP	05	58	40	0.5	SEP 5	e?	02	59	57	0.5
17	1P	06	28	29	8.8	6	1P	09	22	49	u
17	e	02	18	45	1.2	12	1P	15	20	39	5.0
17	1P	02	28	46	u 0.6		eS			21 40	2.0
17	1P	09	49	46	d 0.5	12	eP	22	13	40	0.9
17	1P	11	09	13	d 8.5	13	1P	12	43	06	d 1.3
	eS			11 57	1.5	15	eP	12	46	20	0.8
	eSS			12 18	0.7	15	eP	15	42	22	0.5
17	1P	17	05	03	2.0		ePP			45 50	0.3
	e(S)			36	1.0	16	1P	13	44	58	u 1.3
17	1P	02	16	52	d 0.8	16	1P	20	48	43	d 3.5
17	1P!	12	38	57		19	1P	10	08	02	u 1.6
17	1P	16	52	10	u 3.3	21	1P	04	24	48	u 13
	e?			47	4.0		eS			26 00	2.0
17	1P	05	51	19	1.0		e			27 07	1.0
17	eP	00	36	27	1.0	21	1P	18	13	40	u 1.6
	eScP			42 41	0.5		e			45	1.0
17	1P	19	42	31	d 1.1	21	1P	23	18	01	u 2.5
17	1P	11	46	24	1.8	25	eP	23	30	32	2.1
17	1P	15	16	46	u 2.7		eS			32 18	0.7
	e			17 25	4.5	26	eP	03	40	39	0.5
	e			18 36	1.2	28	1P	12	55	24	d 3.2
17	1P	22	04	35	u 0.7	29	1P	14	02	08	2.3
17	1P	08	56	54	u 1.5		eS			03 42	1.0
	e?			57 35	1.6	30	1P	03	48	34	u 0.6
17	eP	10	04	00	1.0	OCT 2	eP	13	04	36	1.1
	eS			33	2.4	3	eP	17	04	05	2.5
17	1P	02	03	12	d 1.0	4	1P	12	29	00	u 0.5
17	eP	21	04	11	0.5	5	1P	08	32	19	d 0.4
17	1P	19	33	05	u 1.4	5	1P	12	26	00	d 0.4
	eS			34 13	0.4	5	eP	13	14	04	0.5
17	eP	07	55	59	0.5	5	eP	14	00	45	0.9
17	eP	23	49	58	0.5	6	ePKP	14	51	03	0.5
17	1P	04	36	51	u 4.0						
17	1P	14	43	56	d 0.7						

Date	Phase	h	m	s	Az
OCT 6	eP	19	14	34	0.5
7	1P	01	26	08	2.2
9	1P	21	36	29	0.6
10	eP	08	32	50	0.4
10	1P	17	17	44	u 1.0
	e(s)	18	30		1.5
11	eP	11	13	34	0.5
11	1P	21	24	58	u
12	1P	01	50	02	d 1.0
13	1P	03	16	31	d 0.6
13	eP	18	14	21	0.4
16	1P	06	17	16	d 9.5
17	eP	01	44	10	0.5
17	eP	05	57	46	0.5
17	eP	10	04	50	0.5
18	eP	12	41	01	3.7
	eS	47	59		0.5
18	1P	22	33	00	u
19	1P	08	52	07	u
19	eP	21	16	18	1.1
20	1P	00	50	54	d 2.1
22	eP	14	56	33	1.0
	eS	56			1.8
25	1P	12	10	22	
26	eP	14	32	25	0.3
27	eP	20	02	54	0.5
28	eP	05	51	1/2	0.4
28	eP	19	10	43	1.9
30	1P	16	32	27	u 1.0
31	1P	09	16	29	d 2.4
	eS	54			5.0
NOV 1	1P	02	58	28	d 1.0
2	1P	18	38	50	u 0.5
2	1P	22	14	37	u 10.9
11	1P	11	21	05	u 1.4

Date	Phase	h	m	s	Az
NOV 13	eP	22	00	08	0.5
17	eP	00	03	21	0.4
17	eP	08	21	43	0.7
17	1P	11	04	41	u 3.0
	eS	05	57		2.1
	e	06	25		1.9
18	eP	22	22	59	4.0
19	eP	23	41		0.7
21	eP	15	43	57	0.5
22	1P	02	39	49	1.0
22	1P	02	42	52	1.8
23	eP	07	55	16	0.8
	eS	50			1.2
24	1P	06	36	43	
28	eP	01	58	20	0.5
	eS	50			1.5
30	1P	07	44	44	u 1.0
30	eP	16	09	10	0.6
30	1P	18	54	47	d 1.1
DEC 1	eP	04	54	52	8.0
1	eP	05	25	23	2.0
1	eP	14	06	03	1.1
5	eP	05	42	26	1.2
9	eP	15	20	35	0.5
10	eP	15	22	09	0.5
11	eP	05	30	16	0.9
12	eP	19	47	26	0.9
12	1P	22	17	48	d 0.9
13	eP	00	17	10	0.4
16	eP	19	22	15	0.5
17	eP	10	30	32	0.9
20	1P	11	27	56	2.5
21	eP	01	34	32	2.1
22	eP	02	32	24	1.8
22	1P	11	59	37	u 4.5
	eS	12	00	47	0.8
14	1P	03	18	03	u 8.0
14	eP	19	38	18	
15	eP	18	50	18	0.6
16	eP	04	22	09	
16	eP	04	58	36 1/2	0.4
17	eP	15	41	15	0.7
17	eP	15	44	25	0.7
17	eP	16	46	01	0.6
17	eP	17	53	35	
DEC 27	eP	20	06	37	0.6
27	eP	23	28	55	0.4
28	1P	16	17	38 1/2	d 23
29	eP	23	00	42	0.5
29	eP	23	49	34	3.4
	eS	50	05		8.5
30	eP	16	08	15	0.5
30	eP	16	38	41	0.7
30	eP	21	32	31	1.9
	eS	33	50		0.8
31	eP	17	18	14	

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Amplitudes are given in millimetres, read directly from the records of the film recorder until Dec 6, when a paper recorder was substituted.

Date	Phase	h	m	s	Az
JAN 25	eP	12	09	38	9.0
29	eP	13	09	34	5.0
	eS	54			10
FEB 5	1P	11	18	39.9	d
5	eP	11	36	35	6.0
	eS	38	21		5.0
6	eP	20	33	49	4.0
8	eP	00	29	14	6.0
	eS	48			
8	eP	05	24	33	4.0
	eS	25	05		12
8	eP	11	33	43	6.0
	eS	34	05		
10	eP	18	20	15	4.0
	eS	27			
13	eP	04	50	49	8.0
	eS	51	03		27
14	eP	18	36	55	1.5
1	1P	05	14	52	11
	S	15	14		37
5	eP	10	12	42	15
	eS	13	07		50
		23			
13	P	06	04	57	>>
14	P	04	18	16	28
	S	42			
14	1P	10	20	42	u 21
	S	21	03		35
15	1P	18	47	04.3	>>
14	1P	04	14	50	d 17
	eS	15	00		
18	eP	18	45	06	10
	eS	52			21
20	1P	00	16	05.0	u
	eS	15			>>
20	eP	17	11	50	4.0
20	1P	23	06	42.0	d >>
20	eP	06	46	40	

Date	Phase	h	m	s	Az	Date	Phase	h	m	s	Az
FEB 15	eP	14	03	55	3.5	MAR	eS	48	37		5.0
16	eP	09	32	19	3.5	16	P	19	14	17	7.0
16	iP	10	06	21.0 u	>>	16	eP	19	15	26	11
18	eP	01	48	07	6.0	eS	53	39			
18	eP	05	57	03	6.0	19	eP	04	47	43	3.0
eS	33 $\frac{1}{2}$	22				eS	49	25		4.5	
20	eP	10	26	27.6 u		21	iP	16	27	43.0 d	>>
eS	31					21	e(P)	20	18	36	2.0
eS	37					22	eP	20	39	21	11
22	eP	08	17	41	8.5	eS	31				
eS	18	09			16	22	eP	20	41(34)		5.5
22	iP!	08	50	47.6	>>	eS	45	24			
25	eP	15	47	14	3.0	23	P	02	27	15	7.5
eS	40				9.0	S	26				
25	iP	23	23	45.1 u	>>	25	eP	04	19	20	11
S	59				>>	eS	43			35	
26	eP	21	19	13		25	eP	13	05	16	5.0
28	eP	06	07	20	14	eS	32				
eS	36					27	iP	20	23	46.2 u	10
28	eP	13	09	40		eS	25	02		14	
eS	10	00				e	28	12		5.0	
29	eP	02	09	27	6.0	e(PcP)	29	05		4.5	
eS	56				14	28	eP	03	49	52	5.0
MAR 2	eP	19	35	10	8.0	APR 3	iP	08	47	53.7 d	>>
S	37	05			42.5	5	iP	18	05	58.3 d	
e(PcP)	40	52			4.0	5	P	22	23	05	2.0
3	iP	15	12	33	1.5	5	eP	22	23	09	
1	45				>>	eS	19				
4	eP	06	10	13	2.0	11	iP	01	05	14.6 d	>>
eS	11	10			6.0	12	iP	11	12	06.4 u	
7	eP	23	15	36	3.0	eS	13	03			
eS	17	27			3.0	15	eP	16	00	37	1.5
8	eP	03	17	00	4.5	17	iP	06	06	35.6 d	3.0
eS	28				5.0	19	iP	20	57	15.0 d	
12	eP	04	32	03	6.0	22	P	20	04	42	2.0
eS	33	08				23	eP	11	47	40	
12	eP	10	58	11	5.0	eS	48	08			
eS	23				>>	24	iP	06	04	02.9 d	5.5
12	eP	18	21	35	7.0	26	iP	01	42	33.0 u	
e	44				14						
eS	22	00			24						
14	eP	11	46	56	2.5						

Date	Phase	h	m	s	Az	Date	Phase	h	m	s	Az
15	eP	13	00	32		MAY	eS			25	
eS	56					12	eP	18	19	25	2.0
16	eP	14	54	08		13	eP	05	26	15	
eS	55	35				eS	59				
16	iP	22	17	23.4 d		13	eP	07	28	18	2.0
16	iP	23	34	13.1 d		eS	29	04			3.0
19	P	19	09	27		13	eP	08	11	53	1.5
19	eP	23	48	23	2.0	eS	12	39			3.0
eS	49	11			4.0	13	eP	08	28	45	1.5
21	iP	16	34	44	d	13	eP	09	51	19	
21	eP	09	21	02		eS	57				
eS	50					13	eP	11	08	09	
21	eP	20	32	27		eS	09	43			
eS	33	13				13	eP	11	27	12	1.5
21	eP	23	13	14	2.5	eS	54				3.0
eS	59				5.0	13	eP	13	23	36	
21	eP	02	53	19		13	eP	15	19	21	
eS	37	30				13	eP	16	43	39	
21	eP	03	58	55		eS	44	21			
eS	59	17				13	eP	16	51	26	
21	eP	04	11	30		eS	52	01			
eS	30					13	eP	16	53	38	
21	eP	05	10	42		eS	54	20			
eS	22	19	21.0 d			13	eP	17	33	52	
21	eP	12	16	23	2.0	eS	34	35			
eS	50					13	eP	22	36	35	
21	eP	00	10	30		14	eP	13	24	18	
eS	11	11			1.5	eS	58				
21	iP	05	30	45.5 u	2.0	15	iP	10	47	25.2 d	>>
eS	31	55				17	eP	06	56	19	
21	eP	14	40	44	0.2	17	eP	17	06	23	
eS	41	55			5.0	eS	07	11			
21	iP	01	39	27.7 d	1.5	17	eP	18	27	12	
eS	40	39			1.5	17	eP	23	07	10	
21	eP	06	47	04	1.0	eS	44				
eS	48	21			1.5	18	eP	14	14	09	
21	P	10	04	46	1.0	eS	15	39			
S	06	34			1.5	20	eP	04	54	02	
21	eP	13	33	06		eS	24				
						20	eP	05	34	51	1.5
						eS	35	28			3.0

Date	Phase	h	m	s	Az	Date	Phase	h	m	s	Az
MAY 20	eP eS	06	07	35 08 44		JUN	eS			25	08
22	eP	00	28	12		14	1P	01	20	19.2 d	>>
23	eP eS	12	19	01 42		14	eP S	04	20	03 28	
24	eP eS	04	14	52 16 14		14	1P	05	14	00.7 d	
25	eP eS	04	59	59 00 12		17	1P eS	22	19	12.5 d 20 29	
27	eP eS	08	57	57 58 40		22	eP eS	13	41	14 42 06	
29	eP	18	36	32		28	eP eS	23	46	02 20	
29	eP	18	42	51		JUL 1	1P!	16	04	45.0	
29	eP	19	03	27		7	P eS	07	40	45 42 01	0.9 0.6
JUN 4	eP eS	00	16	30 17 12	2.5 6.5	8	1P eS	04	20	41.5 d 21 00	
5	eP eS	01	04	46 05 20		9	eP eS	11	23	33 45 24 42	
8	eP eS	02	28	41 30 10		9	eP	16	44	09	
8	eP eS	05	33	29 54		12	1P	13	33	22.6 d	
9	eP eS	03	55	44 56 21		13	eP eS	10	05	17 06 25	
9	eP	14	32	16	3.0	20	eP eS	10	24	19 25 24	
9	eP eS	21	07	20 08 42		21	eP eS	02	48	53 49 53	
10	eP e e eS	08	55	34 56 03 06 16		21	1P	03	49	50.0 d	>>
12	P S	18	13	45 14 57		23	eP eS	16	40	41 41 07	
13	1P	11	14	46.5 u		26	eP	06	30	09	
13	eP eS	15	02	00 31		31	P eS	06	27	51 28 48	5.0 5.5
13	P	15	52	22		AUG 5	1P!	11	06	55.5	>>
13	P	22	32	08		6	1P 1 1S	17	05	19.0 d 21.9 d 06 44.4 u	11
13	eP eS	22	20	12 22 00		10	1P	07	31	04.9 d	
13	eP	23	24	35		20	1P	08	32	57.2 u	
						21	1P!	18	07	58.0	

Date	Phase	h	m	s	Az	Date	Phase	h	m	s	Az
24	eP eS	02	03	49 05 30	4.5	SEP 16	P S	07	47	15 32	8.0
24	1P S	21	28	20.5 u 48.5		17	1P	07	00	23	d 12
26	eP	01	03	08	3.0	21	1P S	04	25	12 26 45	d 12 12
27	1P S	12	30	31 44	d 8.0 24	21	1P S	18	11	44 12 17	d 11 45
31	eP S	11	23	01 25	4.0 12	24	P	20	21	49	4.0
31	P S	15	31	15 38	9.0 12	25	e1P S?	23	28	45 29 39	d,u >70
31	1P S	15	37	08 29	u 19 20	27	1P S?	13	24	56 25 16	u 15 >25
31	P	18	19	01	6.0	29	eP eS	14	02	32 04(09)	4.0 5.0
4	P	04	25	53	d	OCT 1	eP S	20	39	02 45	9.0
4	eP	14	52	10	5.0	2	1P	04	33	02	d 5.0
5	eP eS	02	18	27 19 10	12 40	2	eP	13	06	12	
5	eP	03	00	39	5.0	3	1P	16	53	11	
6	eP eS	09	23	33 25 22	2.5	3	eP e(S)	22	43	19 45 00	4.0 4.7
6	P S	19	45	39 51	5.0 30+	5	(S)	14	02	04	5.0
8	eP	13	43	21	2.0	9	eP 1S	21	37	22 39 54	u 3.3
8	eP	14	10	30	3.0	9	P?	22	19	34	
8	eP	14	13	51	2.0	10	eP eS	07	58	07 59 14	2.6
8	eP	17	09	13	3.0	10	P S	08	32	48 34 02	4.3
10	P S	05	02	02 15	10 30+	10	P S	23	06	32 46	u 5.0 25
11	1P S	10	45	54 46 06	d 8.0 30+	10	eP e(S)	17	14	24 15 02	u 12 5.0
11	1P eS	11	05	29 06 06	d 18 35	12	eP eS	01	50	25 51 56	2.8
12	1P PcP	12	51	12 53 00	d 3.5	13	S	17	22	00	3.1
12	eP eS	15	21	58 24 04	5.0 7.0	15	e(S)	11	07	04	
13	eP S	15	14	16 40	4.0 32	15	1P S	23	38	30 52	27
						17	(S)	05	58	37	2.8
						18	eS e	12	41	32 43.7	2.3

Date	Phase	h m s	Az	Date	Phase	h m s	Az
OCT 18	1P S	17 47 44 53	d 30	DEC 13	eP eS	00 14 38 15 24	1.3 3.2
18	eP eS	22 33 56 35 51	4.4	13	1P eS	09 12 27 40	u 8.0
18	1P	22 43 23	2.8	13	1P eS	09 31 36 48	d
21	1P	21 26 24	4.0	16	S	19 23 42	1.5
23	1P eS?	09 39 27 44	d >>	18	1P	03 44 43	d
23	1P S	10 27 04 13	d 4.1 25	18	1P	08 39 13	u
27	eP	20 00 56	4.0+	19	1P S	06 42 22 43 05	u 5.0 10
NOV 1	eP eS	02 58 09 59 05	2.5 5.0	19	1P S	14 31 48 32 19	u 1.0 5.0
1	1P S	16 44 23 58	d 12	20	1P eS	11 28 42 30 25	u 2.0 1.5
5	P S	20 23 51 24 01	3.4 27+	24	P	23 50 14	2.5
8	eP (P*) eS	01 26 17 24 51	1.0 3.6 10	25	P S	10 46 30 47(10)	3.0
At 03h 52m on Nov 10, a swarm of local earthquakes started, masking all other activity. Following an eruption of steam and mud from the Green Lake at 17h 56m on Nov 20, the island was evacuated from Nov 23 until Dec 6.							
DEC 10	1P	07 32 30		28	P 1	16 17 59 18 02	
12	eP eS	19 45 49 46 35		30	P	16 36 05	u 1.7
				30	P	18 24 51	
				30	P S	21 32 37 34(00)	
				31	1P	06 09 14	

HALLETT

Original seismograms recorded at Hallett were lost as a result of fire at the base early in February. The readings printed below are preliminary ones sent by radio to Wellington. In the absence of the seismograms it has not been possible to revise them. Some may be defective as a result of errors in radio transmission, but they are printed as received.

Date	Phase	h m s	Date	Phase	h m s
JAN 2	eP eP eP	03 46 51 19 25 18 22 53 14	JAN	eP eP	21 53 23 21 55 52
3	1P	09 25 42	4	eP eP	02 46 11 11 38 29

Phase	h m s	Date	Phase	h m s
eP	17 52 47	JAN 16	e eP	09 27 18 11 01 40
5 eP eP eP	10 20 45 13 32 08 18 44 17		eP iP eP	12 22 43 20 35 10 23 19 52
6 1P eP	10 33 53 20 13 07	17	eP 1P iP e	00 12 37 11 13 26 19 39 20 22 01 07
7 eP eP	05 22 17 09 34 12	FEB 2	eP iP eP	11 17 34 15 2-07 19 04 19
8 eP iP iP	03 45 46 17 28 33 22 43 41	3	eP eP eL	05 02 41 07 37 03 13 12 06
9 eP eP eP	09 34 27 18 31 04 16 43 14	4	eP	22 11 57
10 eP eP iP	05 09 25 16 59 56 22 15 07	5	eP eP	11 48 56 16 35 31
11 eP eP eP	04 22 35 10 29 27 21 16 16	6	eP	22 54 25
12 eP e iP eP eP	04 22 26 10 24 07 18 17 44 16 19 06 21 22 28	7	eP eP iP	07 36 17 11 23 56 23 14 27
13 e 14 e eP	18 59 12 15 20 19 17 34 39	8	eP eP	11 38 35 14 43 37
15 e	07 57 19	9	eP eP iP eP	05 02 00 09 17 45 13 22 52 14 23 09
		10	eP eP	05 57 36 14 23 15

SCOTT BASE

The Readings for Scott Base have been tabulated by computer. In addition the data given for stations inside New Zealand, values of $\log_{10} A/T$ for short period vertical component are given. In 1965 and subsequent years, the format will be used for all distant readings.

	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
JAN 01	12	21	55.4	6.8S 129.8E	96KM	5.7	BANDA SEA	SBA 74
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 12 33 20				
				ZNE 34 04				
				E(PCP)				
JAN 01	15	49	47.9	55.9S 27.1W	33KM	5.4	S SANDWICH IS	SBA 46
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 15 58 12		-1.56		5.3
JAN 01	17	26	43.5	45.4N 151.9E	45KM	5.6	KURILE IS	SBA 123
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EPP		ZN 17 47 12				
		EPS		N 57 41				
		ESS		NE 18 03 07				
		E		N 13 07				
		ELR		ZNE 24 12			3 19 3 19	
JAN 01	20	02	32.5	3.2S 139.7E	33KM	6.3	WEST NEW GUINEA	SBA 76
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 20 14 18		-1.13		5.9
		ELR		ZN 40 58				
JAN 02	19	15	23.9	8.4S 157.1E	33KM	5.5	SOLOMON IS	SBA 70
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 19 26 33		-1.50		5.7
		E		ZNE 40				
		S		E 35 48				
		E(LQ)		NE 43 57				
		ELR		N 49 36				
JAN 03	07	14	54.2	7.1S 129.0E	157KM		BANDA SEA	SCA 73
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	E(*PP)		ZNE 07 26 54				
JAN 03	21	24	56.3	20.4S 178.2W	520KM	5.3	FIJI IS	SBA 58
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 21 34 01.8 U		-1.13		5.3
		*PP		Z 35 53				
JAN 03	21	48	05.6	53.0S 21.2E	33KM		S CF AFRICA	SBA 48
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 21 56 40		-1.37		5.6
		ES		N 22 03 42			1 24 1 24	
		ELR		ZNE 11 06				
JAN 04	03	41	22.6	3.4S 149.2E	33KM	4.3	BISHARCK SEA	SBA 75
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	ES		NE 04 02 44				
		ELR		ZNE 16 46				
JAN 05	10	11	53.0	26.6S 175.7W	31KM	5.1	S CF TONGA IS	SBA 52
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 10 21 14		-1.33		5.7
		E*PP		ZNE 25				
		EPCP		Z 22 27			2 10	5.9
		ES		N 28 45				

	ELR	ZNE	36 50					
	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
15	16	25	52.6	61.4S 154.9E	33KM		BALLENY IS	SBA 17
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 16 29 45		USE	7 14	5.7
		ES		ZNE 32 42				
		ELR		ZN 33 53			48 19 53 17	
		ELQ		E 08				
		MAX		E 35 42				163 11
	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
15	18	33	54.7	8.0S 74.5W	150KM	5.2	PERU-BRAZIL BORDER	SBA 88
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	P		Z 18 46 30.5		-1.48		5.5
		E*PP		ZNE 47 10				
	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
15	23	46	10.7	52.3S 28.6E	33KM		S OF AFRICA	SBA 48
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 23 54 45.0		-0.39		6.6
		PP		ZNE 56 37			12 7	6.9
		S		ZNE 24 01 38			25 20	6.7
		ESS		ZNE 04 50			17 16	
		LR		ZNE 08 07			35 23 39 18 42 16	
	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
16	23	45	23.4	50.9N 157.3E	33KM	5.6	KURILE IS	SBA 129
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EPP		ZN 24 06 30				
		SKKS		N 13 29				
		ESP		Z 16 38				
		ESS		NE 23 40				
		ESSS		Z 28 21				
		LD		E 38 30				
		ELR		ZNE 45 00			5 29 4 27	
	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
17	02	08	19.1	56.8S 147.7E	33KM		W CF MACQUARIE IS	SBA 22
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	ES		ZNE 02 17 18				
		ELR		ZNE 19 22			4 9 7 8	
	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
17	05	18	24.5	58.8S 149.4E	33KM		W CF MACQUARIE IS	SBA 20
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		NE 05 22 54			3 14	5.4
		E		ZNE 23 00				
		ES		NE 26 30				
		E		ZNE 47				
		ELR		Z 27 49			9 30	
		EMAX		ZNE 32			14 9 22 10 57 8	
	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
17	10	40	42.9	3.0S 139.0E	47KM	5.0	W NEW GUINEA	SBA 76
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	IP		ZN 10 52 29.1 U		-1.23		5.8
		ELR		ZNE 11 18				
	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
17	12	32	54.5	56.8S 26.1W	33KM	5.6	S SANDWICH IS	SBA 45
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 12 41 14				
		ES		NE 47 56				
		ESS		ZNE 51 09				
		ELQ		E 56			4 22	
		ELR		ZNE 56 51				

	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)	
JAN 07	15 06 47	15.2S 167.2E	99KM		NEW HEBRIDES IS	SBA 63	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA EP	ZNE 15 16 36		-1.50		5.6	
JAN 08	04 23 46.3	5.0S 144.3E	72KM	5.1	NEW GUINEA	SBA 74	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA E(P)	Z 04 35 11					
	E*PP	Z	35				
JAN 08	22 30 49.7	3.7S 119.4E	90KM	5.2	CELEBES	SBA 78	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA EP	ZNE 22 42 42					
	ES	ZNE	52 40		3 6	6.3	
	ESSS	N	23 01 40				
	ELR	ZE	09 34				
	MAX	ZE	18				
					3 17	1 17	
		8 KILLED EXTENSIVE DAMAGE AT PINRANG					
JAN 09	18 31 52.4	45.5N 150.9E	40KM	5.6	KURILE IS	SBA 123	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA EPKP	Z 18 50 46					
	EPP	ZN	52 36				
	ESP	ZNE 19 02 32					
	EPPS	ZNE	04 12				
	ESS	NE	09 14				
	LQ	E	23 18			8 44	
	ELR	ZNE	29 10		4 26	4 24	
	ELQ	ZNE	10		4 26	4 24	
JAN 10	04 50 53.4	42.0N 142.6E	33KM	5.5	HOKKAIDO	SBA 120	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA EPS	ZN 05 21 06					
	ESS	NE	27 36				
	ELR	ZNE	47 54		3 29		
JAN 10	16 52 36.2	15.4S 175.0W	33KM	5.0	TONGA IS	SBA 63	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA EP	Z 17 03 11		-1.50		5.7	
JAN 10	21 52 47.6	6.9S 129.4E	117KM	5.5	BANDA SEA	SBA 74	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA IP	ZNE 22 04 08.9 D		-1.43		5.4	
JAN 11							
	SBA IP	ZNE 04 23 13.8 D		-0.81			
	ELR	ZNE	27 00				
JAN 11	06 39 55	15.1S 172.9W	33KM	4.2	SAMOA IS	SBA 64	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA EP	Z 06 50 28		-1.65		5.5	
JAN 11	09 24 15.6	14.1S 169.6E	33KM	4.9	NEW HEBRIDES IS	SBA 64	
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG	
	SBA EP	Z 09 34 45		-1.82		5.3	

	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
111	22 02 03	8.6S 123.4E	70KM	5.5	FLORES IS	SBA 73
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 22 13 25				
112	11 13 19.6	5.4S 146.8E	229KM	5.6	E NEW GUINEA	SBA 73
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 11 24 27.1 U		-0.70		6.1
112	12 36 18.7	56.0S 27.6W	33KM	5.5	S SANDWICH IS	SBA 46
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 12 44 42.3 U		-0.98		5.9
		ZNE	45 11			
113	18 49 09.8	11.6S 166.2E	59KM	5.2	SANTA CRUZ IS	SBA 66
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 18 59 53.8 D				
114						
	SBA EP	Z 04 20 58				
	E	ZNE	21 03			
114	04 17 50.5	28.8S 176.2W	89KM	4.7	KERMADEC IS	SBA 50
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 04 26 51		-1.30		5.8
	ES	NE	34 05			
	ELR	ZNE	41 46			
114	08 24 47	3.1S 104.5E	344KM	4.9	SOUTHERN SUMATRA	SBA 81
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 08 36 25		-1.73		5.2
114	15 38 13.8	5.2S 150.8E	169KM	5.6	NEW BRITAIN	SBA 73
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 15 49 28.5 D		-0.52		6.3
	I*PP	ZNE	50 05.4 U			
	IS	ZNE	58 46			
	IPS	ZNE	59 21		10 9	4 10 6.5
	ESS	ZNE	16 03 20			
	E		10 10			
	ELR	ZN	12 29		5 54	
115	18 46 32.9	28.4S 178.4W	211KM	4.7	KERMADEC IS	SBA 50
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 18 55 06.9		-1.03		5.5
115	21 36 05.0	29.1N 140.8E	70KM	6.4	S CF HONSHU	SBA 108
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPP	Z 21 54 50				
	ESP	ZNE	22 03 58			
	ESS	ZNE	09 48			
	ESSS	ZN	13 41			
	ELQ	NE	20 21			3 42
	ELR	ZN	27 21		4 32	4 28
118	12 04 40.0	23.1N 120.5E	33KM	5.9	TAIWAN	SBA 104
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPP	Z 12 22 56				

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
		NE 32 17			
		ZNE 37 52			
		ESSS ZN 42 24		4 32 6 38	
		ELQ NE 47 54		7 52 8 50	
		ELR ZNE 53 18		11 30 8 29 8 26	
		110 KILLED 479 INJURED			
JAN 19	06 49 55.9	58.6S 25.1W	33KM		
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZN 06 57 59			
		ELQ ZN 07 10 53			
JAN 19	23 23 05.4	18.6S 177.0W	521KM	4.5	FIJI IS
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		Z 23 32 23			
JAN 20	00 15 48.4	30.2S 177.8W	35KM	4.4	KERMADEC IS
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		Z 00 24 31			
JAN 20	17 08 37.4	20.7S 169.9E	141KM	6.1	NEW HEBRIDES IS
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZNE 17 18 11	D	0.05	11 10 6.9
		E*PP Z 46			
		IS ZNE 25 58			
		E*SS Z 27 06			
		ESS Z 30 16			
		ELQ Z 32 41			
		ELR Z 35 10			65 17
JAN 20	23 06 26.2	30.0S 177.9W	44KM	5.1	KERMADEC IS
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZNE 23 15 06		-1.26	
JAN 22	23 59 43.6	13.7S 165.9E	33KM	6.0	NEW HEBRIDES IS
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		Z 24 10 13		-1.28	9 10 6.4
		E*PP ZNE 24			
		EPP Z 13 04			4 10 6.9
		ES ZNE 19 01			8 12 11 10 6.7
		ESS Z 22 52			
		I E 23 21			
		ELR ZNE 30 22			14 18 11 18 12 14
JAN 24	02 40 00.1	4.2S 154.2E	416KM	4.3	SOLOMON IS
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZN 02 50 53		-1.43	
JAN 24	15 17 03.0	15.0S 173.1W	33KM	4.5	TONGA IS
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		Z 15 27 33			
JAN 24	17 17 45.5	38.7N 129.4E	542KM	5.3	SEA OF JAPAN
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZNE 17 35 30			
		E(PP) ZNE 36 56			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
		21.7S 176.2W	32KM	4.8	FIJI IS
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		Z 21 22 05		-1.65	
		SBA EP			5.5
		H M S	EPICENTRE	DEPTH	MAG
		22 44 01	7.1S 106.0E	94KM	5.5
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZNE 22 55 45			
		E Z 56 02			
		H M S	EPICENTRE	DEPTH	MAG
		09 09 33.9	16.3S 71.7W	116KM	6.1
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZNE 09 21 35.1	D	-0.17	31 4
		SBA IP			7.1
		E*PP ZNE 22 08			
		PP ZNE 24 36			5 7 7.0
		IS ZNE 31 35			13 10 7.1
		ESS N 37 20			
		ELQ NE 43 17			
		LR ZNE 46 56			14 38 7 40 10 38
		4 INJURED			
		H M S	EPICENTRE	DEPTH	MAG
		02 46 33.4	60.9S 155.2E	33KM	
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZNE 02 51 05		-1.50	
		SBA EP			
		ELQ NE 53 20			
		LR ZNE 54 12			4 32
		H M S	EPICENTRE	DEPTH	MAG
		05 43 22.1	6.3S 148.7E	33KM	5.1
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZNE 05 54 46			
		SBA EP			
		ES ZN 06 04 11			
		ELQ ZN 12 43			
		ELR ZNE 17 42			3 18
		H M S	EPICENTRE	DEPTH	MAG
		14 09 17.1	36.5N 70.9E	207KM	6.1
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		ZNE 14 27 55.9			
		SBA PKP			
		*PPKP Z 28 48			
		(+SPP) ZE 30 39			
		PS ZE 39 34			
		PPS Z 41 07			
		SCSPKP ZE 42 32			
		I Z 45 56			
		SS NE 46 50			
		ESSS ZNE 51 14			
		ELQ E 15 00 18			
		ELR ZN 08 17			17 88
		H M S	EPICENTRE	DEPTH	MAG
		11 18 16.3	30.4S 177.9W	114KM	4.9
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		Z 11 26 54		-1.03	
		SBA P			
		H M S	EPICENTRE	DEPTH	MAG
		11 30 16.2	36.4N 140.9E	52KM	5.4
		H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
		N 11 55 05			
		SBA E(SKS) ZNE 59 06			
		E(PS) NE 12 05 48			
		ESS NE 17 06			
		ELQ NE 17 06			
		ELR ZNE 26 22			3 34 3 34 4 56

	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
FEB 05	11	35	18.6	19.7S 179.8W	414KM	5.5	FIJI IS	SBA 59
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 11 44 36		-0.76		5.7
		E(PCS)		ZNE 49 20				
		ES		NE 52 08			5 7	6.2
FEB 06	13	07	25.2	55.7N 155.8W	33KM	5.6	S OF ALASKA	SBA 135
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 13 26 42				
		EPP		ZN 29 24				
		ISKP		ZNE 30 14	U		25 21	
		ESKKS		ZNE 36 15				
		SKSP		ZN 39 18				
		I		ZN 42 33			12 25	
		ESS		ZNE 47 28				
		ESSS		ZNE 52 32				
		ELQ		NE 14 02 06				
		EL		Z 05 00				24 58
		MAX		ZNE 15 09			31 20 19 20	29 18
FEB 07	09	34	27.2	14.8S 167.5E	159KM	4.4	NEW HEBRIDES	SBA 63
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 09 44 40		-1.35		5.6
FEB 08	18	54	51.2	28.4S 62.6E	33KM		INDIAN OCEAN RISE	SBA 65
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EL		ZE 19 26 30				
FEB 09	02	00	07.3	16.5S 179.2W	480KM	5.3	FIJI IS	SBA 62
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	P		Z 02 09 41		-0.85		5.8
		*PP		Z 11 28				
FEB 10	23	45	58.4	59.8S 150.3E	33KM		W OF MACQUARIE IS	SBA 19
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	S		N 23 54 04				
		EL		ZNE 55 30				
FEB 12	20	31	53.2	3.5S 146.6E	33KM	5.4	BISMARCK SEA	SBA 75
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 20 43 49				
		S		ZNE 53 15				
		SS		ZN 57 50			13 58	27 52
		LQ		NE 21 03 52			8 30	5 24
		LR		ZN 07 25				
FEB 12	22	33	59.2	15.3S 174.4W	33KM	5.0	TONGA IS	SBA 63
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 22 44 33				
		S		NE 53 10				
		LQ		NE 23 00 24			4 19	4 18
		LR		ZNE 03 02				
FEB 13				NE 10 36 46				
		LQ		NE 38 08				
		ELR		Z 39 40				

	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
	16	29	45.0	5.1S 151.7E	55KM	6.0	NEW BRITAIN REGION	SBA 73
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 16 41 12		-0.59		6.2
		ES		ZNE 50 37			7 33	8 18
		ESS		ZNE 55 10			10 37	6.5
		ESSS		ZNE 58 46				
		ELR		ZN 17 03 54				
	01	47	32.1	36.9S 176.9E	203KM	5.1	N ISLAND, N Z	SBA 41
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	P		Z 01 54 58		-0.99		5.5
	08	50	35.0	30.1S 177.3W	33KM	5.1	KERMADEC IS REGION	SBA 48
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 08 59 22		-1.65		5.3
		I		ZNE 26				
	00	34	32.0	44.7S 37.5E	33KM	6.7	PRINCE EDWARD IS	SBA 54
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	PS		E 00 51 45				
		ELR		ZNE 59 57				
	19	32	41.7	18.9S 174.8W	105KM	5.3	TONGA ISLAND	SBA 60
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 19 42 37.4	D	-0.96		6.2
		(*PP)		ZN 43 11				
		S		E 50 43				
		(*SS)		NE 51 45				
		ELQ		ZE 57 28				
		ELR		ZN 20 00 09				
	21	39	31.0	4.8N 125.5E	77KM	4.9	TALAUD IS	SBA 86
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 21 52 01				
	22	34	06.3	6.8S 129.8E	108KM	5.2	BANDA SEA	SBA 74
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 22 45 29				
	06	00	41.3	45.2S 96.4E	40KM	5.5	S E INDIAN RISE	SBA 42
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		ZE 06 08 32				
		ES		ZE 14 58				5 11
		ELQ		ZN 18 23				6.2
		ELR		ZNE 20 27			8 20	7 17
							12 20	
	10	05	37.2	11.2S 162.2E	38KM	5.1	SOLOMON IS	SBA 67
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 10 16 27				
		S		E 25 26				
		ELR		ZNE 36 46				
	20	31	57.4	16.4S 173.0W	33KM	4.7	TONGA IS	SBA 62
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 20 42 25				

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAR 06	18 57 16.1	6.1S 154.4E	74KM	5.8 SOLOMON IS	SBA 72
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA ELR	Z 19 31 07			
MAR 08	01 35 48.1	44.0S 168.4E	33KM	5.6 S ISLAND NZ	SBA 34
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	NE 01 42 38			
	ES	ZE 48 09			
	ELQ	ZNE 50 29			
	ELR	ZNE 52 03		18 17 18 16	17 16
MAR 10	13 59 54.8	1.9N 127.5E	117KM	5.6 HALMAHERA	SBA 82
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 14 12 06		-0.82	6.1
	ELR	ZNE 39 28		3 52	
MAR 10	23 10 24.4	6.8S 129.4E	141KM	5.1 BANDA SEA	SBA 74
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 23 21 42		-1.83	5.0
MAR 11	01 06 00.4	1.8N 127.1E	58KM	5.6 HALMAHERA	SBA 82
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 01 18 17.7		-0.54	6.6
	S	NE 28 30			
	ELQ	NE 41 09			
	ELR	Z 46 03			
MAR 14		ZE 02 57 08		-1.78	
MAR 14	15 05 54.4	13.7S 172.3E	611KM	5.1 NEW HEBRIDES IS	SBA 64
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 15 15 32.0 U		-1.12	5.4
	*PP	Z 17 35			
MAR 15	03 18 14	1.2N 126.2E	43KM	MOLUCCA PASSAGE	SBA 82
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 03 30 30		-1.63	5.5
MAR 15	22 30 26.0	36.2N 7.6W	27KM	6.2 GIBRALTAR STRAITS	SBA 138
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 22 49 43			
	ESS	Z 23 10 46			
	ELQ	NE 26 50			
	ELR	ZNE 33 32			
MAR 16	14 58 23.4	11.5S 166.1E	69KM	4.8 SANTA CRUZ IS	SBA 66
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	Z 15 09 05.8		-1.48	5.6
MAR 16	21 39 42.5	20.6S 178.7W	578KM	4.9 FIJI IS	SBA 58
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 21 48 40		-1.23	5.1

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
19	00 10 35	17.3S 175.1W	268KM	4.8 TONGA IS	SBA 61
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	Z 00 20 25.8		-1.47	5.2
19	04 37 26.9	52.5N 153.6E	440KM	5.6 N W OF KURILE IS	SBA 130
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPP	Z 04 58 10			
	ISKP	ZNE 29.3 U		11 6	
	I	Z 05 01 36		9 4	
	ESS	E 15 08			
	PHASE RECORDED AT 05 01 36 IS LITTLE SSKP				
19	04 45 50.9	21.9S 179.5E	613KM	4.7 S OF FIJI IS	SBA 56
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 04 54 38.0 U		-1.13	5.2
19	08 43 40.5	20.3S 178.3W	504KM	4.5 FIJI IS REGION	SBA 58
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 08 52 46.8 U		-1.47	5.0
19	09 42 34.9	14.7N 56.3E	33KM	ARABIAN SEA	SBA 109
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA ELQ	ZNE 10 33 29		5 19 1 18	3 18
19	21 44 03.8	15.1S 172.6W	33KM	5.6 SAMOA IS REGION	SBA 64
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 21 54 33		-1.19	6.0
	ES	ZNE 22 03 16			
	ELQ	E 09 46			
	ELR	Z 12 30		7 24 7 21	
	EPKPPKP	Z 23 33			
19	06 55 28.1	2.0S 79.7W	71KM	5.3 NEAR ECUADOR	SBA 93
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	Z 07 08 34.9			
19	18 55 10.8	7.0S 115.2E	121KM	5.4 BALI SEA	SBA 76
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 19 06 45			
	E*PP	ZNE 07 18			
19	19 15 16.3	19.8S 173.6W	33KM	4.7 TONGA IS	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 19 25 14		-1.83	5.4
19	03 42 19.6	6.4S 127.9E	367KM	6.8 BANDA SEA	SBA 74
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 03 53 18.8 UE		-0.27 9 11	6.5
	*PP	ZNE 54 37			
	S	ZNE 04 02 22			
	ELQ	ZNE 12 22			
	LR	Z 16 07			
	EPKPPKP	Z 20 33			
	ESKPPKP	Z 23 31			
	PKP(3)	Z 40 26		18 36 19 46	
	E	Z 43 30			
	PHASE RECORDED AT 04 43 30 IS SKPPKPPKP				

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAR 21	16	27	11.7	27.6S 177.2W	33KM	5.6 KERMADEC IS	SBA 51
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 16 36 12.8		-0.74	6.3
		I		ZNE 16.0			
		I*PP		ZNE 28.0			
MAR 22	05	32	07.7	2.7S 126.4E	33KM	5.1 CERAM SEA	SBA 76
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 05 44 04			
MAR 22	07	05	39.7	5.5S 77.1W	147KM	5.1 NORTHERN PERU	SBA 90
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 07 18 22		-1.63	5.5
MAR 22	08	35	06.4	35.7S 72.9W	33KM	5.1 CENTRAL CHILE	SBA 61
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 08 45 21		-1.26	5.9
		EL		NE 09 08 39			
		PKPPKP		Z 14 40			
MAR 23	01	02	36.1	9.3S 108.2W	50KM	S CF JAVA	SBA 80
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 01 14 13			
JAN 23	22	41	15.8	17.6S 123.2E	33KM	WESTERN AUSTRALIA	SBA 64
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 22 51 46		-1.65	5.5
MAR 25	11	33	48.4	19.7S 175.9W	170KM	4.6 TONGA IS	SBA 59
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 11 43 32		-1.73	5.2
MAR 25	15	32	26.0	20.1S 168.8E	33KM	4.7 LOYALTY IS	SBA 58
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 15 42 17		-1.71	5.5
MAR 26	02	04	20.2	11.3N 142.0E	33KM	4.9 S CF MARIANA IS	SBA 90
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 02 17 24			
		ELR		ZN 47 46		3 34	
MAR 26	12	15	47	6.8S 129.3E	156KM	5.3 BANDA SEA	SBA 74
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 12 27 05		-1.41	5.4
MAR 26	13	29	56.2	4.4S 104.7W	33KM	4.9 NORTHERN EASTER IS	SBA 85
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 13 42 32		-1.65	5.6
MAR 27	08	01	30.5	11.5S 166.2E	93KM	4.5 SANTA CRUZ IS	SBA 66
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		Z 08 12 11		-1.71	5.3

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAR 27	20	22	10.6	23.7S 179.9E	520KM	5.0 S CF FIJI IS	SBA 55
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 20 30 52.0		U	
MAR 28	03	36	14.2	61.0N 147.8W	33KM	8.5 SOUTHERN ALASKA	SBA 141
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZNE 03 55 40			
MAR 28	06	53	35.6	58.8N 149.5W	20KM	5.7 GULF OF ALASKA	SBA 139
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 07 13 04			
MAR 28	07	10	21.4	58.8N 149.5W	20KM	6.1 GULF OF ALASKA	SBA 139
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZN 07 29 47			
MAR 28	10	35	38.9	57.2N 152.4W	33KM	6.0 KODIAK IS REGION	SBA 137
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	E(PKP)		Z 10 54 40			
		EPKP?		ZN 58			
MAR 28	11	08	26.0	60.1N 148.4W	15KM	5.7 KENAI PENINSULA	SBA 140
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	E(PKP)		ZNE 11 29 10			
MAR 28	11	30	09.8	0.5N 122.3E	140KM	5.8 NORTHERN CELEBES	SBA 82
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 11 42 14.0		U	6.4
MAR 28	12	20	49.8	56.5N 154.0W	25KM	6.1 KODIAK IS REGION	SBA 136
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	E(PKP)		Z 12 40 02			
		EPKP?		Z 09			
MAR 28	14	47	37.1	60.4N 146.5W	10KM	5.7 SOUTHERN ALASKA	SBA 141
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 15 07 04			
MAR 28	14	49	13.7	60.4N 147.1W	10KM	5.8 SOUTHERN ALASKA	SBA 141
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZNE 15 08 45			
MAR 28	20	29	08.6	59.8N 148.7W	40KM	5.8 KENAI PENINSULA	SBA 140
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZNE 20 48 30			
MAR 29	02	29	33.7	57.5N 151.3W	20KM	5.6 KODIAK IS REGION	SBA 138
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 01 48 58			
MAR 29	06	04	44.5	56.1N 154.3W	30KM	5.6 KODIAK IS REGION	SBA 136
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 06 24 05			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
				60.0N 148.6W	20KM	5.3	KENAI PENINSULA
MAR 29	10	08	02.4				SBA 140
				59.7N 147.0W	15KM	5.6	GULF OF ALASKA
MAR 29	16	40	57.9				SBA 140
				6.7S 155.1E	68KM	5.3	SOLOMON IS
MAR 29	21	40	32.7				SBA 71
				56.6N 152.9W	25KM	5.8	KODIAK IS REGION
MAR 30	02	18	06.3				SBA 136
				59.9N 145.7W	15KM	5.6	GULF OF ALASKA
MAR 30	07	09	34.0				SBA 141
				58.7N 149.6W	25KM	5.3	GULF OF ALASKA
MAR 30	15	07	49.3				SBA 139
				24.2S 176.4W	33KM	4.6	S OF FIJI IS
MAR 30	18	42	03.4				SBA 54
				45.3N 151.0E	60KM	5.3	KURILE IS
MAR 31	00	14	11.7				SBA 123

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
				50.8N 130.2W	15KM		NEAR VANCOUVER IS
				17.7S 178.8W	540KM	4.4	FIJI IS REGION
				58.2N 150.3W	20KM	5.2	GULF OF ALASKA
				5.8N 95.6E	33KM	6.7	NORTHERN SUMATRA
				5.8N 95.7E	108KM	5.1	NORTHERN SUMATRA
				25.8S 13.8W	33KM	5.0	S ATLANTIC OCEAN
				6.9S 125.5E	485KM	4.8	BANDA SEA
				2.0N 125.6E	82KM	5.0	TALAUD IS
				58.8N 149.6W	20KM	5.4	OF ALASKA
				5.8N 125.8E	179KM	5.7	PHILIPPINE IS
				3.9N 96.6E	52KM	6.1	NORTHERN SUMATRA

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 03	08 47 34.8	27.9S 178.1W	33KM	4.8 KERMADEC IS	SBA 51
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 08 56 33		-1.40	5.6
APR 03	09 04 33.5	4.9S 152.1E	82KM	4.8 NEW BRITAIN REGION	SBA 73
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 09 15 57		-1.71	5.2
APR 03	08 54 01.7	14.9S 167.1E	95KM	4.9 NEW HEBRIDES IS	SBA 63
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 19 18 33		-1.41	5.7
APR 03	22 33 42.2	61.6N 147.6W	40KM	5.7 SOUTHERN ALASKA	SBA 142
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 22 53 06			
APR 04	04 54 01.7	60.1N 146.7W	40KM	5.6 SOUTHERN ALASKA	SBA 141
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP?	Z 05 13 23			
	EPKP	ZNE 29			
	ESSS	ZNE 40 26			
	ELR	ZNE 59 08		7 19	
APR 04	08 40 29.8	56.5N 152.6W	15KM	5.3 KODIAK IS REGION	SBA 136
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 08 59 53			
	ELR	ZNE 09 43 12		3 20	
APR 04	09 10 55.1	56.9N 152.7W	15KM	5.9 KODIAK IS REGION	SBA 137
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA PKP	ZNE 09 30 17			
	SKP	Z 33 49			
APR 04	17 46 08.6	56.3N 154.4W	25KM	5.7 KODIAK IS REGION	SBA 136
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 18 05 28			
	*PPKP	ZNE 37			
	SKP	ZNE 08 57			
	PKS	NE 09 11			
	SKKP	Z 17 52			
	SS	NE 26 14			
	ESSS	ZN 31 26			
	ELQ	E 41 08			
	ELR	ZNE 49 58		20 18	
APR 04	17 59 43.3	56.3N 154.4W	25KM	5.7 KODIAK IS REGION	SBA 136
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E	ZNE 18 21 06		5 7	
	SKP	ZE 22 31			
APR 04	18 18 02	19.7S 175.3W	57KM	4.8 TONGA IS	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	Z 18 27 57		-1.73	5.5

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
PR 14	21 38 14.0	10.5N 122.1E	33KM	5.3 PHILIPPINE IS	SBA 92
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E(*PP)	ZNE 21 51 30			
PR 14	22 16 54.5	59.4N 145.2W	10KM	5.1 GULF OF ALASKA	SBA 140
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA ELR	ZNE 23 25 53		3 18	
PR 15	01 22 13.3	56.2N 153.5W	25KM	5.4 KODIAK IS REGION	SBA 136
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 01 41 29			
	SKP	Z 45 04			
	ESS	ZNE 02 02 22			
	ESSS	ZN 06 58			
	ELQ	E 18 23			
	ELR	ZNE 24 29		8 19	
PR 15	01 41 45.0	56.2N 153.3W	35KM	5.2 KODIAK IS REGION	SBA 136
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E(PKP)	Z 02 01 05			
PR 15	11 18 38.9	41.9S 83.7W	33KM	5.3 WEST CHILE RISE	SBA 53
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 11 27 57		-0.98	6.1
	ELR	ZNE 43 35		3 22	
PR 15	19 28 18.1	60.2N 146.7W	15KM	5.8 SOUTHERN ALASKA	SBA 141
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 19 47 40			
PR 15	22 22 45.0	28.1S 178.2W	31KM	4.5 KERMADEC IS	SBA 50
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 22 31 41			
PR 16	01 22 44.2	23.4S 180.0E	568KM	4.5 S CF FIJI IS	SBA 55
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 01 31 23		-1.82	4.6
PR 16	07 13 27			-1.33	1 18
	EL	Z 32 10			
PR 16	23 43 01.7	5.1S 154.0E	116KM	4.8 SOLOMON IS	SBA 73
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	Z 23 54 21		-0.98	5.9
PR 17	10 53 31			-1.53	1 22
	EL	ZNE 11 06 24			
PR 17	13 18 18.9	0.1N 123.2E	150KM	6.3 NORTHERN CELEBES	SBA 81
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 13 30 20.1 U		-1.63	5.2
	E*PP	ZNE 31 01			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 08	19 33 19.0	59.6N 147.0W	15KM	5.1 GULF OF ALASKA	SBA 140
	SBA EPKP	Z 19 52 50	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	E	ZNE 54 05			
APR 08	08 08 11.8	6.8S 68.9E	33KM	6.0 CHAGOS ARCHIPELAGO	SBA 85
	SBA EP	ZN 08 20 49	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 08	19 50 16.8	60.4N 145.9W	10KM	5.3 SOUTHERN ALASKA	SBA 141
	SBA EPKP	Z 20 09 47	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 09	13 06 15.2	59.6N 146.1W	15KM	5.1 GULF OF ALASKA	SBA 140
	SBA EPKP	Z 13 25 41	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 09	21 54 42.1	18.5S 71.5W	39KM	5.2 NEAR N CHILE	SBA 78
	SBA EP	Z 22 06 42	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 10	01 08 00.2	58.4N 150.6W	15KM	5.5 GULF OF ALASKA	SBA 138
	SBA EPKP	Z 01 27 26	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 11	01 04 30.2	29.0S 178.9W	302KM	5.3 KERMADEC IS REGION	SBA 49
	SBA P	ZNE 01 12 53	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	*PP	ZN 13 59		-0.99	5.5
APR 12	01 24 31.2	56.6N 152.2W	22KM	5.6 KODIAK IS REGION	SBA 137
	SBA EPKP	ZNE 01 43 40	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	PKP	ZNE 45			
	EPKP	ZN 53			
	EPP	Z 46 39			
	ESKP	ZNE 47 22			
	ESS	NE 02 04 50			
	ESSS	ZNE 09 28			
	ELQ	NE 21 04			
	ELR	ZN 27 07			
				8 17	
APR 12	02 33 39	26.5S 113.7W	33KM	4.6 EASTER IS REGION	SBA 62
	SBA EP	ZNE 02 44 03	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 12	SBA EP	ZNE 05 41 09		-1.93	
APR 12	06 00 46.4	13.6S 166.0E	33KM	5.0 NEW HEBRIDES IS	SBA 64
	SBA P	ZNE 06 11 21	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	I	ZE 38		-1.58	5.6

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 12	11 10 54.8	33.9S 179.8W	89KM	5.4 S OF KERMADEC IS	SBA 44
	SBA IP	ZNE 11 19 00.2 U	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	IPCP	ZNE 20 40.8		-0.78	6.1
	ISCP	Z 24 19.9			
	S	NE 25 34			
	E(SS)	NE 28 47			
APR 13	03 02 46.3	23.7S 179.0W	360KM	4.5 S OF FIJI IS	SBA 55
	SBA IP	ZNE 03 11 42.0 U	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
				-1.56	4.9
APR 13	06 23 34.1	19.5S 177.7W	574KM	4.4 FIJI IS REGION	SBA 59
	SBA EP	ZNE 06 32 41	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	E*PP	Z 34 37		-1.41	4.9
APR 13	08 30 03.6	45.3N 18.1E	33KM	5.4 YUGOSLAVIA	SBA 145
	SBA IPKP	ZNE 08 49 38.1 U	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SKP	ZNE 52 59			
	EL	Z 09 44 49			
APR 13	11 24 04	7.1S 129.2E	126KM	BANDA SEA	SBA 73
	SBA EP	Z 11 35 24	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 13	12 25 36.0	59.4N 143.9W	40KM	4.9 GULF OF ALASKA	SBA 140
	SBA E(PKP)	ZNE 12 45 09	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	ELR	ZNE 13 30 03		4 20	
APR 13	14 05 00.0	57.6N 151.2W	25KM	5.5 KODIAK IS REGION	SBA 138
	SBA EPKP	Z 14 24 22	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	E	ZNE 55			
APR 13	21 25 33.0	57.5N 153.9W	30KM	5.5 KODIAK IS REGION	SBA 137
	SBA EPKP	ZNE 21 44 54	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 14	01 04 28.8	49.4N 155.5E	60KM	5.2 KURILE IS	SBA 127
	SBA EPKP	Z 01 23 27	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
APR 14	SBA P	ZNE 04 15 25		-1.65	
	E(L)	ZN 18 42			
APR 14	05 01 59.1	41.0S 80.8E	33KM	MID INDIAN RISE	SBA 49
	SBA EP	Z 05 10 52	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	E	ZNE 11 10			
	S	ZE 18 03			
	ELR	ZNE 24 46		4 22 3 22 5 19	

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 14	08 58 41.9	17.5S 167.9E	33KM	4.6 NEW HEBRIDES IS	SBA 60
	SBA P	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	S	ZNE 09 08 50			-1.56 5.6
	ELQ	E 17 10			
	ELR	E 24 55			
		ZN 27 22			
APR 15	15 02 28	45.2S 167.0E	33KM	4.9 S ISLAND NZ	SBA 33
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 15 09 02			-1.60 5.2
APR 15	16 52 26.0	37.7S 177.5E	41KM	5.5 E CF N ISLAND NZ	SBA 41
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 17 00 05			
APR 16	02 35 48.9	21.5S 170.5E	110KM	4.6 LOYALTY IS REGION	SBA 56
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 02 45 20			-1.52 5.6
APR 16	14 05 14.9	7.0S 155.7E	78KM	5.4 SOLOMON IS	SBA 71
	SBA P	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 14 16 28			-1.34 5.6
APR 16	19 26 57.4	56.4N 152.9W	30KM	5.5 KODIAK IS REGION	SBA 136
	SBA SKP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	E(PPS)	Z 19 49 47			5 20
	ELR	ZN 20 01 12			10 18
		ZNE 29 52			
APR 17	04 49 30.5	56.4N 152.9W	25KM	5.3 KODIAK IS REGION	SBA 136
	SBA E(*PPKP)	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	ELR	Z 05 08 57			5 20
		ZN 53 52			
APR 17	06 00 00.2	6.6S 154.9E	85KM	5.4 SOLOMON IS	SBA 71
	SBA IP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 06 11 14.2 U			-1.23 5.7
APR 17	09 09 07.8	57.7N 151.4W	20KM	5.4 KODIAK IS REGION	SBA 136
	SBA EPKP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 09 28 32			
APR 17	14 44 20.8	16.2S 167.7E	65KM	4.2 NEW HEBRIDES IS	SBA 62
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 14 54 36			
APR 19	03 44 55	55.1S 128.5W	33KM	4.5 S PACIFIC CORD	SBA 32
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	LQ	ZNE 03 51 15			-1.52 5.3
	LR	NE 57 57			9 28
		Z 59 05			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 19	03 56 13.7	15.4S 173.7W	51KM	4.2 TONGA IS	SBA 63
	SBA IP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 04 06 40.0 U			-1.41 5.7
APR 19	05 13 01.6	41.7S 83.9W	33KM	5.5 W CHILE RISE	SBA 53
	SBA E?	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	IP	Z 05 22 17			-0.76 6.3
	ELR	ZNE 21.0 U			
		ZNE 37 30			7 24
APR 19	08 35 31.6	17.7S 167.8E	15KM	4.6 NEW HEBRIDES IS	SBA 60
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 08 45 40			-1.95 5.3
APR 19	14 12 21.9	60.5S 58.3W	33KM	5.4 S SHETLAND IS	SBA 39
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	ES	ZNE 14 19 47			-0.98 5.8
	ELQ	ZE 25 59			
	LR	ZNE 28 38			
		NE 29 56			
		ZNE 31 18			37 27 35 17 40 19
APR 19	19 41 31.3	13.8S 75.3W	96KM	4.4 PERU	SBA 82
	SBA P	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	(*SP)	ZNE 19 53 44			-1.68 5.3
		Z 54 17			
APR 19	21 34 16.5	7.3S 128.3E	130KM	5.1 BANDA SEA	SBA 73
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 21 45 35			
APR 20	10 51 13	22.9S 69.2W	78KM	4.6 NORTHERN CHILE	SBA 74
	SBA IP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 11 02 45.2 D			-1.60 5.3
APR 20	11 56 41.6	61.4N 147.3W	30KM	5.7 SOUTHERN ALASKA	SBA 142
	SBA EPKP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	E(SKKP)	ZNE 12 16 05			
	ELR	Z 27 19			5 18
		ZE 13 02 45			
APR 20	22 30 38.0	4.2S 102.1E	33KM	5.3 SOUTHERN SUMATRA	SBA 81
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	E*PP	Z 22 42 51			
		ZNE 43 02			
APR 21	05 01 35.7	61.5N 147.4W	40KM	5.4 SOUTHERN ALASKA	SBA 142
	SBA EPKP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 05 20 56			
APR 22	19 37 53.2	16.1S 173.4W	33KM	5.0 TONGA IS	SBA 63
	SBA EP	H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZN 19 48 16			-1.83 5.3

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 22	20	00	22.8	15.5S 167.5E	123KM	5.0 NEW HEBRIDES IS	SBA 62
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA IP				ZNE 20 10 34.6 U		-0.67	6.4
APR 22	23	04	13.8	13.2S 167.1E	218KM	4.0 NEW HEBRIDES IS	SBA 65
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA IP				ZNE 23 14 30.0 U		-1.45	5.3
APR 23	01	31	40.3	6.7S 155.0E	72KM	5.0 SOLOMON IS	SBA 71
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				ZN 01 42 53			
APR 23	03	32	50.3	5.3S 134.0E	33KM	6.4 ARCE IS REGION	SBA 75
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA IP				ZNE 03 44 27.9 D		-0.94 18 10	6.6
				Z 47 11			
				S 54 05		16 13 21 12	7.1
				ESS 58 42			
				E(LQ) 04 02 45			
				ELR 06 44		69 21 65 21 37 21	
APR 23	07	03	21.6	60.8S 19.8W	33KM	5.4 SW ATLANTIC OCEAN	SBA 42
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA P				ZNE 07 11 08		-1.56	5.2
APR 23	10	32	47.9	6.6S 155.1E	60KM	5.3 SOLOMON IS	SBA 71
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				ZNE 10 44 03		-1.57	5.4
APR 24	05	56	10.1	5.1S 144.2E	106KM	6.3 NEW GUINEA	SBA 74
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				ZNE 06 07 34		-0.92	6.0
				Z 08 00			
				ES 17 03			
				EPS 16 34			
				ESS 22 15			
				E 26 08			
				ELQ 27 28		48 60	
				ELR 31 39		47 48	
APR 25	03	48	36	37.3S 94.5W	33KM	4.5 W CHILE RISE	SBA 56
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				ZNE 03 58 09		-1.73	5.4
APR 25							
SBA EP				ZNE 18 56 21		-1.93	
APR 26	13	59	27.7	5.8S 105.0E	90KM	5.6 SUNDA STRAIT	SBA 79
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA P				Z 14 11 19		-1.83	5.1
				PCP NE 31			
APR 26	14	52	07.6	20.6S 178.0W	490KM	5.1 FIJI IS REGION	SBA 58
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA IP				ZNE 15 01 12.6 U		-1.35	5.1
				Z 02 52			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 26	22	17	02.2	28.1S 178.2W	37KM	4.1 KERMADEC IS	SBA 50
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA E(P)				Z 22 26 05			
APR 26	22	34	48.6	60.4S 24.6W	33KM	4.8 S SANDWICH IS	SBA 42
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				ZNE 22 42 37		-1.74	5.0
				EPCP ZNE 44 37			
APR 27							
SBA P				ZNE 01 49 51		-2.13	
APR 26							
SBA EP				ZNE 23 42 49		-1.28	
APR 27	01	37	12.1	0.3N 98.1E	33KM	5.3 NORTHERN SUMATRA	SBA 86
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
APR 24							
SBA EP				Z 20 41 57		-1.93	
APR 27	04	21	15.9	8.6S 148.1E	110KM	4.5 E NEW GUINEA	SBA 70
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
EP				ZNE 04 32 17			
APR 27	06	44	25.1	60.1S 151.0E	33KM	5.0 W OF MACQUARIE IS	SBA 19
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				ZE 06 48 36		8 13	5.8
				E 41			
				ELQ NE 52 03		50 46 56 27	
				ELR Z 46		26 15	
APR 27	14	36	18.2	19.8S 170.1E	274KM	NEW HEBRIDES IS	SBA 58
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				Z 14 45 47		-1.95	4.6
APR 28	14	55	25.5	11.9S 166.2E	42KM	4.2 SANTA CRUZ IS	SBA 66
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA IP				ZNE 15 06 09.1		-1.45	5.7
APR 28	15	11	30.4	12.3S 166.1E	72KM	SANTA CRUZ IS	SBA 66
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				Z 15 22 08		-1.93	5.1
APR 28	15	52	10.0	12.3S 165.5E	33KM	SANTA CRUZ IS	SBA 66
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				ZN 16 02 47		-1.95	5.2
APR 29	00	44	43.8	32.4S 71.1W	79KM	4.5 NEAR CENTRAL CHILE	SBA 65
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				ZNE 00 55 16			
APR 29	04	08	01.2	3.4S 77.7W	56KM	4.3 PERU ECUADOR	SBA 92
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA EP				Z 04 21 06		-2.11	5.4

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
APR 29	04	21	06.7	39.3N 23.7E	33KM	5.1 AEGEAN SEA	SBA 138
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	Z	04 40 29				
	EPP	Z	43 26				
APR 29	05	47	45	12.8S 167.1E	150KM	4.1 SANTA CRUZ IS	SBA 65
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	05 58 13			-1.95	5.0
APR 29	07	21	30.2	7.2S 155.7E	78KM	5.2 SOLOMON IS	SBA 71
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	07 32 41				
APR 29	17	37	43.1	58.2S 15.7W	33KM	5.6 SW ATLANTIC OCEAN	SBA 44
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	17 45 49			-1.57	5.3
APR 30	16	03	31.4	4.6S 153.2E	78KM	5.2 NEW IRELAND REGION	SBA 74
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	16 14 58			-1.83	5.1
	E	ZNE	15 04				
	E(*PP)	Z	22				
APR 30	19	03	08.0	11.8S 166.0E	40KM	SANTA CRUZ IS	SBA 66
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	19 13 51				
APR 30	21	37	04	12.5S 165.1E	33KM	4.0 SANTA CRUZ IS	SBA 65
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZN	21 47 39			-1.82	5.3
MAY 01	06	01	55.4	60.5N 145.6W	20KM	5.4 SOUTHERN ALASKA	SBA 141
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	Z	06 21 21				
MAY 01	16	06	12	14.3S 167.1E	95KM	NEW HEBRIDES IS	SBA 64
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P	Z	16 16 33			-1.73	5.3
MAY 02	05	15	51.1	4.0S 102.8E	106KM	5.4 SOUTHERN SUMATRA	SBA 81
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	05 27 54			-1.93	5.0
MAY 02	10	56	00.2	14.9S 167.3E	108KM	4.0 NEW HEBRIDES IS	SBA 63
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	11 06 17			-1.81	5.3
MAY 02	11	21	30.2	29.7S 61.4E	33KM	INDIAN RISE	SBA 64
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	11 32 08				

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
12	16	11	00.2	45.5N 150.3E	35KM	5.7 KURILE IS	SBA 123
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	ZNE	16 29 53				
	SKP	Z	33 26				
	PKKP	Z	39 46				
	PCPPKP	Z	43 40				
	ESS	NE	48 32				
	E	N	49 01				
	ELQ	E	17 02 31				
	ELR	ZNE	07 28				
12	21	01	44.8	8.6S 110.4E	102KM	JAVA	SBA 75
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P	ZNE	21 13 14			-1.95	4.9
13	04	43	12.4	17.9S 178.3W	569KM	3.9 FIJI IS REGION	SBA 60
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	04 52 29				
14	SBA	EP	ZNE	04 22 12		-1.78	
	EL	ZNE	26 24				
14	SBA	EP	ZN	12 20 04			
	E	ZE	13				
	EL	Z	23 35				
14	12	04	46.1	58.2N 152.3W	30KM	5.3 KODIAK IS REGION	SBA 138
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	E*PP	Z	12 24 19				
14	SBA	EP	ZNE	17 11 41		-1.68	
14	17	05	20	55.8S 4.4W	33KM	5.4 S ATLANTIC RIDGE	SBA 46
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	17 13 46			-1.23	5.7
	ES	NE	20 34				
	E	E	21 54				
	SS	ZNE	23 55				18 25
	ELR	ZNE	26 54				7 16
14	SBA	EP	ZNE	20 50 03		-2.11	
	I	Z	08.9				
	I	ZNE	19.0				
	EL	ZNE	53 18				
14	SBA	EP	ZNE	21 22 30			
	E	Z	41				
	EL	ZNE	25 32				
15	03	26	46.1	17.7S 68.9W	33KM	4.9 BOLIVIA	SBA 80
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	03 38 53			-1.93	5.2
15	11	12	52	55.8S 4.3W	33KM	S ATLANTIC RIDGE	SBA 46
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	11 21 17			-1.60	5.3

	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
MAY 06	04	27	02.4	60.7S 25.2W	33KM		S SANDWICH IS	SBA 41
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	(SS)	E	04 43 52				8 25
	ELR		ZNE	48 13				
MAY 06	08	10	47.5	11.1S 162.2E	40KM	5.1	SOLOMON IS	SBA 67
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	S	NE	08 30 35				7 10 6.7
	ELQ		E	38 18				
	ELR		ZNE	41 56			6 16	
MAY 06	15	26	35.5	56.7N 152.1W	15KM	5.4	KODIAK IS REGION	SBA 137
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	ELR	ZNE	16 30 38				
MAY 06	20	31	35	32.9S 178.6W	33KM		KERMADEC IS	SBA 46
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EP	ZNE	20 39 59		-1.48		5.4
	ELR		ZNE	53 50				
MAY 07	00	34	57.2	18.2S 176.6W	300KM	5.4	FIJI IS REGION	SBA 60
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	IP	ZNE	00 44 36.0	D	-1.28		5.3
MAY 07	03	49	53.8	4.6S 153.5E	53KM	4.6	NEW IRELAND REGION	SBA 74
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	*PP	ZNE	04 01 43				
MAY 07	05	45	29.5	4.0S 34.9E	33KM	6.4	TANGANYIKA	SBA 94
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	IP	ZNE	05 58 47.2	U	-0.85		6.7
	S		ZNE	06 09 24				
	PS		ZNE	11 16				
	SS		N	16 24				
	ESSS		NE	19 43				
	ELQ		NE	23 23				
	ELR		ZNE	27 12			33 22 26 22	29 18
MAY 07	07	58	14.3	40.4N 139.0E	33KM	6.2	NEAR HONSHU JAPAN	SBA 119
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	IPKP	ZNE	08 17 00.4	U			
	ESKS		N	23 57				
	EPP		ZNE	18 14			13 8	7.5
	EPKPP		Z	27 17				
	PS		ZNE	28 12				
	ESS		ZNE	34 36				
	ELQ		NE	48 15				34 68
	ELR		ZNE	54 36			36 39 22 34	
MAY 07	11	11	04.9	30.6N 137.7E	469KM	5.1	S CF HONSHU JAPAN	SBA 110
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	PKP	ZN	11 28 42				
MAY 07	20	12	49.3	40.5N 139.0E	33KM	5.9	NEAR HONSHU JAPAN	SBA 119
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA	EPKP	ZNE	20 31 36				

	ZNE							
EPP	ZNE	33 03				4 8		7.0
EPKPP	Z	41 53						
EPS	ZN	42 48						
ESS	NE	49 47						
ELQ	NE	21 03 30						
ELR	ZNE	09 14				5 28		
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
03 35 59.9	32.7S 178.3W	40KM	4.5	S CF	KERMADEC IS	SBA	46	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	EP	ZNE	03 44 20					
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
03 57 50.1	33.1S 178.3W	47KM	4.3	S CF	KERMADEC IS	SBA	45	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	EP	ZNE	04 06 08		-1.81			5.0
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
04 10 31.9	32.8S 178.4W	33KM	4.0	S CF	KERMADEC IS	SBA	46	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	EP	Z	04 18 53					
SBA	EP	Z	05 18 21					
SBA	EP	ZNE	14 36 48		-1.93			
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
16 21 49.8	56.7N 154.0W	25KM	5.3	KODIAK IS	REGION	SBA	136	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	EPKP	Z	16 41 12					
ELR	ZNE	17 24 18						
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
20 36 54.1	24.2S 69.3W	78KM	4.9	NORTHERN	CHILE	SBA	73	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	P	ZNE	20 48 17		-1.60			5.3
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
21 34 40.6	60.8N 143.6W	35KM	5.4	SOUTHERN	ALASKA	SBA	142	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	EPKP	Z	21 54 04					
(PKP)	ZN	11						
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
21 45 47	1.7N 126.5E	33KM	4.7	MOLUCCA	PASSAGE	SBA	82	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	IP	ZNE	21 58 09.6	U	-1.58			5.6
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
02 02 28.8	52.2N 169.6W	25KM	5.1	FOX IS	ALEUTIAN IS	SBA	131	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	EP	ZN	02 21 38		-2.13			
E	ZE	22 38						
E(SKP)	Z	25 24						
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
12 13 04.9	21.6S 174.6W	33KM	4.5	TONGA IS		SBA	57	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	EP	Z	12 22 50		-1.95			5.2
H M S	EPICENTRE	DEPTH	MAG					DIST (DEG)
13 48 05.3	8.1N 123.2E	60KM	5.7	PHILIPPINE IS		SBA	89	
	H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE	MAG		
SBA	EP	ZNE	14 00 54					

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAY 09	15 10 12.1	40.7N 139.0E	25KM	5.1 NEAR HONSHU JAPAN	SBA 119
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EPKP	Z 15 28 57		
MAY 09	18 16 17.5	13.7S 166.6E	41KM	5.0 NEW HEBRIDES IS	SBA 64
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA IP	ZNE 18 26 49.2 U	-1.07	6.1
		(*SP)	Z 27 08		
MAY 09	21 07 41.6	9.2S 156.7E	26KM	5.4 SOLOMON IS	SBA 69
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA P	ZNE 21 18 46	-1.12	6.1
MAY 10	06 27 45.6	4.6S 153.2E	77KM	4.6 NEW IRELAND REGION	SBA 74
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA P	ZNE 06 39 14	-1.71	5.2
MAY 10	07 50 44	1.6N 126.3E	33KM	5.6 MOLUCCA PASSAGE	SBA 82
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	ZNE 08 03 05	-2.13	5.1
MAY 11	05 29 16.6	24.6S 179.9E	515KM	4.8 S CF FIJI IS	SBA 54
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA P	ZNE 05 37 51	-1.41	5.0
		E+PP	ZNE 39 33		
MAY 11	14 39 04	22.5S 175.8W	50KM	5.3 TONGA IS REGION	SBA 56
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA IP	ZNE 14 48 39.0 U	-1.35	5.8
MAY 11	14 57 16.6	4.3N 127.9E	60KM	5.7 TALAUD IS	SBA 85
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA IP	ZNE 15 09 45.0	-1.52	5.6
MAY 11	16 53 39.1	6.4N 124.0E	567KM	5.2 PHILIPPINE IS	SBA 87
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	Z 17 05 28		
MAY 11	20 38 11.5	17.1S 174.4W	104KM	4.2 TONGA IS	SBA 61
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA P	ZN 20 48 19	-1.83	5.3
MAY 12			ZE 01 24 35	-1.95	
MAY 12	01 37 59.5	26.2S 178.3E	607KM	4.6 S CF FIJI IS	SBA 52
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA P	ZNE 01 46 15.7	-1.08	5.4
MAY 12	10 02 27.1	19.9S 173.9W	33KM	5.1 TONGA IS	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	ZNE 10 12 24	-1.22	6.0

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
12	18 17 07.7	19.9S 173.9W	33KM	5.5 TONGA IS	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	ZNE 18 27 04	-0.88	6.3
13	00 07 01.8	14.8S 176.7W	33KM	4.7 FIJI IS REGION	SBA 64
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	ZNE 00 17 37	-1.78	5.4
13	05 25 26.1	32.8S 178.3W	33KM	5.3 S CF KERMADEC IS	SBA 46
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA IP	ZNE 05 33 45.1 U	-0.98	5.9
		EPS	ZE 40 37		
		ESS	ZE 43 48		
		ELR	ZNE 48 40		16 18
13	08 11 00	33.1S 178.0W	15KM	4.4 S CF KERMADEC IS	SBA 45
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	Z 08 19 21		
13	11 06 16.4	21.8S 179.6W	578KM	4.6 FIJI IS REGION	SBA 56
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	ZNE 11 15 05	-1.95	4.4
13	16 42 48.3	32.7S 178.6W	33KM	5.1 S CF KERMADEC IS	SBA 46
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA P	ZNE 16 51 09	-1.29	5.6
13			ZNE 16 58 51	-1.81	
13	20 37 54	32.4S 178.3W	70KM	4.9 S CF KERMADEC IS	SBA 46
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	ZNE 20 46 14	-1.48	5.5
14	01 05 47.6	32.9S 178.8W	309KM	4.6 S CF KERMADEC IS	SBA 46
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA P	ZNE 01 13 38	-1.68	4.7
14	02 30 32.2	4.5S 152.9E	32KM	4.9 NEW BRITAIN REGION	SBA 74
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA P	ZNE 02 42 05	-1.23	5.8
14	20 01 01.0	21.3S 179.3W	606KM	4.7 FIJI IS REGION	SBA 57
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA IP	ZNE 20 09 52.0	-1.50	4.8
15	10 50 21	3.5S 149.1E	44KM	4.7 BISMARCK SEA	SBA 75
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	ZNE 11 02 04	-1.90	5.1
		ELR	Z 25 55		3 20
15	14 02 41	57.1S 58.9W	33KM	4.9 SCOTIA SEA	SBA 42
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		SBA EP	Z 14 10 36		

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAY 16	01 58 36.4	10.5S 161.9E	33KM	5.1 SOLOMON IS	SBA 67
	SBA EP	Z 02 09 30		LOG _A /T AZ TZ AN TN	AE TE MAG
MAY 16	08 38 54.0	36.3N 71.5E	122KM	5.3 AFGHANISTAN-USSR	SBA 126
	SBA EPKP	Z 08 57 43		LOG _A /T AZ TZ AN TN	AE TE MAG
MAY 16	14 33 17	13.6S 165.6E	62KM	4.6 NEW HEBRIDES IS	SBA 64
	SBA EP	ZN 14 43 47		LOG _A /T AZ TZ AN TN	AE TE MAG
MAY 16	14 44 54	57.6N 151.0W	33KM	5.4 KODIAK IS REGION	SBA 138
	SBA EPKP	ZN 15 04 17		LOG _A /T AZ TZ AN TN	AE TE MAG
MAY 16	16 07 46.2	32.8S 178.3W	33KM	5.4 S CF KERMADEC IS	SBA 46
	SBA P	ZNE 16 16 05		LOG _A /T AZ TZ AN TN	AE TE MAG
	E	NE 26			
	ES	E 22 49			
	EL	ZNE 26 56			
MAY 17	SBA EP	ZNE 01 20 50			-1.93
MAY 17	04 41 44	53.9N 159.7W	33KM	5.5 S OF ALASKA	SBA 133
	SBA EPKP	Z 05 00 56		LOG _A /T AZ TZ AN TN	AE TE MAG
MAY 17	17 05 24.8	33.2S 178.4W	33KM	4.6 S CF KERMADEC IS	SBA 45
	SBA E(P)	ZNE 17 13 47		LOG _A /T AZ TZ AN TN	AE TE MAG
MAY 17	19 26 20.6	35.2N 35.9W	33KM	5.6 N ATLANTIC RIDGE	SBA 136
	SBA EPKP	Z 19 45 41		LOG _A /T AZ TZ AN TN	AE TE MAG
	ELR	Z 20 28 48			27 30
MAY 18	14 12 10.1	21.2S 174.5W	33KM	5.6 TONGA IS	SBA 57
	SBA P	ZNE 14 21 58		LOG _A /T AZ TZ AN TN	AE TE MAG
MAY 18	SBA EP	ZNE 18 43 20			-0.80
MAY 19	23 03 41.8	0.7S 80.2W	54KM	5.4 NEAR ECUADOR	SBA 94
	SBA EP	ZNE 23 16 56		LOG _A /T AZ TZ AN TN	AE TE MAG
	ES	N 18 12			
	ESP	Z 29 24			
	SS	NE 34 35			
	ESSS	Z 37 52			
	ELR	ZNE 47 15			8 21 11 20

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
12	04 53 30.3	31.4S 178.2W	33KM	4.8 KERMADEC IS	SBA 47
	SBA EP	ZNE 05 02 05		LOG _A /T AZ TZ AN TN	AE TE MAG
	EPCP	Z 03 37			-1.29 5.6
13	06 01 14.8	2.7S 139.3E	61KM	5.8 NEAR W NEW GUINEA	SBA 76
	SBA IP	ZNE 06 13 00.6 U		LOG _A /T AZ TZ AN TN	AE TE MAG
	E(PS)	NE 24 12			
	ELR	ZNE 38 29			5 26 6.6
12	15 36 01.5	59.0N 153.5W	15KM	5.3 SOUTHERN ALASKA	SBA 139
	SBA EPKP	ZNE 15 55 24		LOG _A /T AZ TZ AN TN	AE TE MAG
	ESKP	ZNE 59 01			
12	00 26 44.8	34.7S 179.6W	58KM	4.5 S CF KERMADEC IS	SBA 44
	SBA EP	ZNE 00 34 46		LOG _A /T AZ TZ AN TN	AE TE MAG
12	SBA EP	ZNE 01 54 22			-1.93
12	04 59 26.2	20.3S 169.4E	144KM	4.7 NEW HEBRIDES IS	SBA 58
	SBA IP	ZNE 05 09 02.9 D		LOG _A /T AZ TZ AN TN	AE TE MAG
13	11 22 33.3	28.6N 139.4E	409KM	5.1 BONIN IS REGION	SBA 107
	SBA PKP	Z 11 40 13		LOG _A /T AZ TZ AN TN	AE TE MAG
13	SBA EP	ZNE 13 43 03			-1.82
13	21 31 03.4	18.4S 69.2W	128KM	4.7 NORTHERN CHILE	SBA 79
	SBA EP	Z 21 42 55		LOG _A /T AZ TZ AN TN	AE TE MAG
14	04 13 05.3	22.6S 174.1W	33KM	5.7 TONGA IS REGION	SBA 56
	SBA IP	ZNE 04 22 45.0 D		LOG _A /T AZ TZ AN TN	AE TE MAG
14	10 31 24.1	34.3N 141.1E	33KM	5.2 E CF HONSHU JAPAN	SBA 113
	SBA EPKP	ZNE 10 50 00		LOG _A /T AZ TZ AN TN	AE TE MAG
	EPP	ZNE 49			
14	18 01 34.8	23.2S 71.6W	33KM	4.5 OFF NORTHERN CHILE	SBA 74
	SBA P	ZNE 18 13 07		LOG _A /T AZ TZ AN TN	AE TE MAG
14	20 32 36.3	19.1S 177.9W	441KM	3.6 FIJI IS REGION	SBA 59
				LOG _A /T AZ TZ AN TN	AE TE MAG

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
MAY 24	20	57	38.3	15.9S 167.6E	29KM	4.4 NEW HEBRIDES IS	SBA 62
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 21 07 58			
MAY 24	22	22	27.6	37.0S 177.8E	149KM	4.8 E CF NORTH IS NZ	SBA 41
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 22 30 02			
MAY 25	04	59	39.6	30.6S 178.0W	33KM	4.3 KERMADEC IS REGION	SBA 48
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 05 08 18		-1.81	5.1
MAY 25	08	32	49.0	15.7S 174.9W	269KM	4.5 TONGA IS	SBA 63
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 08 42 48		-1.65	5.1
MAY 25	19	44	07.0	9.1S 88.9E	33KM	5.5 S INDIAN OCEAN	SBA 79
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 19 56 08		-0.82	6.3
MAY 26	09	40	57.9	16.5N 145.9E	94KM	5.5 MARIANA IS	SBA 95
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 09 54 10			
MAY 26	10	59	12.3	56.2S 27.8W	120KM	5.9 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 11 07 23.9 U			
MAY 26	12	23	28	56.1S 27.7W	149KM	5.4 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 12 31 38		-1.41	5.3
MAY 26	15	42	34.0	56.1S 27.4W	82KM	5.4 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 15 50 49		-1.93	5.0
MAY 26	23	43	26	56.1S 26.6W	153KM	5.2 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 23 51 36.8 U		-1.63	5.1
MAY 27	00	56	42.5	56.1S 27.6W	105KM	5.6 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 01 04 57.3 U		0.10	7.0
		SCP		Z 10 12			
		ES		ZNE 11 34			
		ESS		ZE 14 58			
		ELR		ZNE 18 24			
MAY 27		SBA	P	ZNE 02 47 15		-1.82	
MAY 27	06	30	57.7	56.2S 27.4W	116KM	5.8 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 06 39 11.0 U		-0.41	6.5
		SCP		Z 44 27			

	ELR	Z	52 54	EPICENTRE	DEPTH	MAG	DIST (DEG)
M 27	09	50	03	55.9S 27.4W	52KM	5.8 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 09 58 24		-1.60	5.3
M 27	11	20	26.8	18.4S 173.1W	33KM	4.6 TONGA IS	SBA 60
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 11 30 35		-1.93	5.3
M 27	15	48	17.3	21.0S 174.5W	33KM	4.1 TONGA IS	SBA 58
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 15 58 04			
M 27	19	02	02.4	56.4S 28.4W	61KM	6.0 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		Z 19 10 22		-0.96	5.9
		E		Z 14 12			
M 27		SBA	P	ZNE 23 45 05		-1.71	
M 28		SBA	P	ZNE 01 57 54		-1.58	
M 28	03	57	19.0	16.8S 177.7W	388KM	4.4 FIJI IS REGION	SBA 62
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		Z 04 06 48		-1.95	4.7
M 28	12	49	57.5	13.4S 74.9W	103KM	5.2 PERU	SBA 83
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 13 02 13		-1.71	5.2
		E		Z 51			
M 28	16	18	04.2	58.3N 150.6W	25KM	5.4 GULF OF ALASKA	SBA 138
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 16 37 29			
M 28	23	28	27.9	1.6N 127.2E	103KM	6.3 HALMAHERA	SBA 82
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 23 40 38.9 U		-1.23	5.7
M 29	05	35	10.6	32.4S 67.3W	132KM	4.4 MENDOZA ARGENTINA	SBA 65
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 05 45 42		-2.13	4.9
M 29	07	22	01.2	21.9S 171.5E	33KM	LOYALTY IS REGION	SBA 56
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 07 31 43			
M 29	09	04	27.1	56.2S 27.7W	33KM	5.8 S SANDWICH IS	SBA 46
				H M S DIR		LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		Z 09 12 49.0 U		-1.29	5.6
		(SCP)		ZN 18 04			

	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
MAY 29	10 17 34.5	60.2S 146.3W	5KM	5.6	SOUTHERN ALASKA	SBA 23
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 10 37 00				
MAY 29	12 25 16.9	18.6S 177.8W	462KM	4.2	FIJI IS REGION	SBA 60
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	Z 12 34 37		-1.95		4.6
MAY 29	14 45 50	56.1S 27.9W	170KM	5.2	S SANDWICH IS	SBA 46
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 14 53 57		-1.93		4.7
MAY 29	15 33 06	56.3S 28.0W	120KM	5.7	S SANDWICH IS	SBA 46
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 15 41 17.7 U		-0.94		5.9
	AAAA	Z	AA AA			
MAY 29	18 35 02.3	26.2S 178.3E	614KM	5.4	S OF FIJI IS	SBA 52
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 18 43 18.9 U		-0.89		5.6
MAY 29	18 42 19.3	26.2S 178.3E	605KM	3.9	S CF FIJI IS	SBA 52
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 18 50 36.3 U		-1.18		5.3
	E(SCP)	Z	54 36			
MAY 29	19 01 57.0	26.1S 178.3E	613KM	4.1	S CF FIJI IS	SBA 52
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 19 10 13.7 U		-1.23		5.3
MAY 29	20 09 01	0.5S 134.7E	33KM	5.1	W NEW GUINEA	SBA 79
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 20 21 08		-1.61		5.5
MAY 30	14 30 45.3	36.2N 141.1E	49KM	5.4	NEAR HONSHU JAPAN	SBA 115
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 14 49 23				
	ESP	Z	15 00 10			
	ELR	Z	26 58		3 36	
MAY 31	00 40 36.4	43.5N 146.8E	48KM	6.3	KURILE IS	SBA 122
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IPKP	ZNE 00 59 26.0 U				
	(*PPKP)	Z	44			
	EPP	Z	01 01 01			
	SKS	NE	06 26			
	SKKS	N	07 57			
	IPKKP	ZNE	09 27.2 U			
	ESP	ZNE	10 52		12 18	
	(SKKP)	ZNE	13 19			
	ESKKS	Z	16 36			
	ESS	NE	17 30			
	ELQ	NE	31 09			
	ELR	ZNE	37 01		14 22	

	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
MAY 31	10 30 25.0	19.2N 69.4W	83KM	5.0	DOMINICAN REPUBLIC	SBA 116
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 10 47 03.7		-1.63		
MAY 31	17 15 26.8	13.6S 172.1E	73KM	5.0	NEW HEBRIDES IS	SBA 64
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 17 25 56.0 D		-1.14		5.9
	ELR	ZN	46 07		7 36	
MAY 31	18 34 16	13.3S 171.8E	111KM	4.6	NEW HEBRIDES IS	SBA 65
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 18 44 48		-1.50		5.5
MAY 31	06 05 07.6	14.6S 167.4E	176KM	5.2	NEW HEBRIDES IS	SBA 63
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 06 15 19.8		-0.74		6.1
MAY 31	16 09 23.5	59.7N 144.4W	15KM	5.1	GULF OF ALASKA	SBA 141
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 16 28 51				
MAY 31	16 09 23.5	E 16 38 31				
	EL	ZNE	43 50			
MAY 31	23 12 37.8	14.7S 167.0E	82KM	4.7	NEW HEBRIDES IS	SBA 63
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 23 22 59.6 U		-1.17		5.9
MAY 31	00 44 03	55.4S 24.8W	33KM	5.5	S SANDWICH IS	SBA 47
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 00 52 31				
MAY 31	17 54 14.7	18.8S 173.7W	33KM	4.8	TONGA IS	SBA 60
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 18 04 17		-1.08		6.1
MAY 31	00 15 40	33.5S 177.8W	31KM	4.3	S CF KERMADEC IS	SBA 45
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E	ZNE 00 24 15				
MAY 31	10 18 15.3	7.8S 117.6E	47KM	5.2	BALI SEA	SBA 74
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP?	ZNE 10 29 40				
	E	ZNE	57			
MAY 31	11 17 11.8	6.1S 149.9E	54KM		NEW BRITAIN REGION	SBA 72
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 11 28 33		-1.81		5.2
MAY 31	11 53 50	14.7S 176.0W	303KM	3.9	FIJI IS REGION	SBA 64
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 12 03 50.9 U		-1.73		5.0

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUN 04	12 56 02.6	4.9S 134.2E	33KM	4.4	SBA 75
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 13 07 42			
JUN 05	01 03 26	25.6S 176.5W	33KM	4.4	SBA 53
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 01 12 42.1 U		-1.73	5.3
JUN 05	04 08 30.6	56.2S 27.5W	33KM	5.3	SBA 46
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 04 16 50		-2.12	4.7
JUN 05	04 44 48.6	47.8N 27.3W	33KM	4.7	SBA 149
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 05 04 32			
JUN 05	09 13 20.0	16.2S 177.3E	25KM	5.2	SBA 62
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 09 23 33		-1.63	5.6
	E	ZN 29 32			
JUN 05	09 50 35.0	60.4N 146.0W	15KM	5.2	SBA 141
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 10 10 07			
JUN 05				-1.93	
JUN 05	22 06 53.0	58.1N 152.1W	15KM	5.0	SBA 138
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 22 26 14			
	ESKP	Z 29 48			
JUN 06	02 14 18	16.8S 167.4E	41KM	4.4	SBA 61
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 02 24 25			
	E*PP	ZNE 38			
JUN 06				-1.38	
JUN 06	19 07 51.4	26.6S 114.4W	33KM	5.8	SBA 62
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 19 18 07		-1.29	5.9
		Z _{aa} 44 44			
		LQ N 33 37			
		LR ZE 38 30			5 18
	EPKPPKP	ZE 47 23			
JUN 07	08 22 55.9	3.0S 130.3E	33KM	4.8	SBA 77
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 08 34 50		-2.12	5.0
JUN 07	13 07 53.2	18.4S 173.7W	33KM	4.5	SBA 60
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 13 17 57		-1.95	5.2

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUN 07	20 10 15.9	30.4S 67.6W	29KM	5.2	SBA 67
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E(*SP)	ZNE 20 21 23			
	ELQ	NE 37 50			3 40 3 42
	ELR	ZE 42 51			
JUN 07	20 30 55.5	45.3N 150.9E	33KM	5.0	SBA 123
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 20 49 47			
JUN 08	02 26 42.3	22.1S 179.5W	554KM	4.7	SBA 56
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 02 35 32		-1.81	4.6
JUN 08	04 22 30.1	51.6N 175.9W	27KM	4.9	SBA 130
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA ESKP	Z 04 44 56			
JUN 09	15 02 21.6	19.2S 177.6W	556KM	4.6	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 15 11 31		-1.63	4.7
JUN 10	18 26 54.5	9.4S 117.6E	33KM	5.0	SBA 73
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 18 38 21		-1.95	5.1
JUN 10	19 13 52.0	18.0S 167.9E	47KM	5.3	SBA 60
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 19 23 55		-1.35	5.9
JUN 10	22 16 44.8	5.0N 127.4E	146KM	5.5	SBA 85
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 22 29 08		-0.06	21 5 7.0
	ES	ZN 39 27			
	ESS	ZN 45 06			
	ELQ	NE 53 40			18 48
	ELR	ZNE 57 30			
	EPKP(3)	Z 23 15 49			
JUN 10	23 25 09.1	59.1N 153.8W	33KM	5.1	SBA 139
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 23 44 30			
JUN 11	01 05 20.2	19.5S 175.4W	272KM	4.5	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 01 14 54		-1.56	5.1
JUN 11	03 11 56.6	65.5N 168.1W	33KM	4.9	SBA 144
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 03 31 25			
JUN 11	10 26 16.8	2.2S 141.2E	67KM		SBA 77
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 10 38 04.5 D		-1.73	5.3

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUN 11	10 55 06.2	56.0S 27.3W	33KM	5.8 S SANDWICH IS	SBA 46
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 11 03 28		-1.17	5.7
JUN 11	13 19 44.0	1.9S 141.0E	40KM	5.3 NEW GUINEA REGION	SBA 77
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 13 31 36			
JUN 11	15 20 48	2.0S 141.2E	33KM	5.7 NEAR NEW GUINEA	SBA 77
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 15 32 39			
JUN 11	17 01 48.5	2.0S 140.8E	18KM	NEAR W NEW GUINEA	SBA 77
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 17 13 42		-0.92	6.2
	ES	NE 23 33			
	ESS	NE 28 34			
	ELR	ZNE 38 49			9 28 7 26
JUN 11	17 51 51.5	9.2S 89.5E	33KM	S INDIAN OCEAN	SBA 78
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 18 03 49		-1.95	5.2
JUN 11	19 42 12.8	2.1S 141.2E	33KM	NEAR NEW GUINEA	SBA 77
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 19 54 04		-1.65	5.4
JUN 11	21 28 08.2	55.9S 27.7W	135KM	6.1 S SANDWICH IS	SBA 46
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 21 36 21.1 U		-0.65	6.1
	SCP	Z 41 34			
	ES	NE 42 56			
	E(LQ)	E 46 43			
JUN 11	SBA P	ZNE 21 57 31		-1.78	
JUN 12	10 50 09.1	2.1S 141.1E	33KM	5.5 NEAR NEW GUINEA	SBA 77
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 11 01 59		-1.30	13 4 6.5
	ES	ZNE 11 52			
	ESS	Z 16 48			
	ELR	ZNE 27 19			8 28
JUN 12	18 12 20.5	26.5S 178.3E	648KM	5.3 S OF FIJI IS	SBA 52
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 18 20 31		-1.22	5.2
	*PP	Z 22 27			
	IPCP	ZNE 24 31.3 U			
JUN 13	04 20 53.5	53.6N 172.1E	33KM	5.1 ALEUTIAN IS	SBA 131
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 04 40 04			
	ESKP	Z 43 25			
	ELR	ZN 05 21 27			3 40

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUN 13	05 04 23.5	1.9S 141.2E	33KM	5.9 NEW GUINEA REGION	SBA 77
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 05 16 15.1 D		-0.95	6.1
	(*SP)	E 33			
	ELR	ZN 42 46			3 30
JUN 13	SBA P	ZNE 08 10 01		-0.94	
	ES	N 20 16			
	ESS	Z 25 28			
	ELR	ZNE 35 19			3 23
JUN 13	11 14 26.5	27.3S 178.0W	34KM	4.8 KERMADEC IS	SBA 51
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 11 23 22		-1.08	5.9
	ES	NE 30 46			
	ELO	E 35 34			
	ELR	Z 38 10			
JUN 13	14 01 40.2	3.9S 154.3E	474KM	5.5 N CF SOLOMON IS	SBA 74
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 14 12 28.5 D		-1.08	5.6
JUN 13	22 31 53.5	27.6S 178.3W	94KM	5.2 KERMADEC IS	SBA 51
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 22 40 43		-0.80	6.3
	ES	NE 48 04			
	E(SS)	E 52 06			
	ELO	N 53 11			
	ELR	E 55 03			13 15
JUN 13	23 46 44.5	19.3S 176.5W	285KM	4.4 FIJI IS REGION	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 23 56 17.9 U		-1.65	4.9
JUN 14	01 19 57.7	27.5S 177.5W	33KM	4.5 KERMADEC IS	SBA 51
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 01 28 55		-1.57	5.4
JUN 14	12 15 31.3	38.0N 38.5E	8KM	TURKEY	SBA 135
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 12 34 54			
	E	Z 38 22			
	ESS	N 55 23			
	ELR	ZE 13 23 37			3 18
JUN 14	23 56 29.9	56.1S 25.0W	33KM	5.3 S SANDWICH IS	SBA 46
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 00 04 54		-1.17	5.7
JUN 15	00 05 31.1	5.4N 97.0E	33KM	5.5 NORTHERN SUMATRA	SBA 91
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 00 18 34		-0.83	6.6
	SKS	NE 29 06			
	(S)	ZE 38			26 9 7.5
	E	N 42 14			
	E	E 44 06			
	LQ	ZNE 47 44			16 28 13 28 18 17
	LR				

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUN 15	02 05 37.1	17.4S 174.9W	148KM	4.5 TONGA IS	SBA 61
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	Z 02 15 39		-1.71	5.3
JUN 16	04 01 44.3	38.3N 139.1E	57KM	6.1 HONSHU JAPAN	SBA 117
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 04 16 52			
	E	Z 18 44			
	EPKP	ZNE 20 12			
	E	ZNE 43			
	PP	ZNE 21 44			
	ESKKS	Z 28 23			
	ES	Z 29 54			
	EPKKP	ZNE 30 55			
JUN 16	06 53 05.0	38.7N 139.0E	15KM	5.6 HONSHU JAPAN	SBA 118
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 07 11 51			
	EPP	ZNE 13 03			
JUN 16	07 14 57.1	38.5N 139.2E	16KM	5.9 HONSHU JAPAN	SBA 117
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 07 33 43			
	EPP	ZNE 34 47			
JUN 16	08 34 08.7	22.0S 175.8W	33KM	4.6 TONGA IS REGION	SBA 57
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 08 43 50			
	*SP	ZNE 44 04			
JUN 16	09 00 41.6	20.0S 170.2E	33KM	4.5 NEW HEBRIDES	SDA 58
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 09 10 32		-1.95	5.2
JUN 16	11 16 03.1	2.0S 141.1E	13KM	5.9 NEW GUINEA	SBA 77
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 11 27 57		-1.26	5.9
	EPP	Z 30 52			
	ELR	NE 54 57			
JUN 16	17 23 30.4	5.8S 154.0E	60KM	5.7 SOLOMON IS	SBA 72
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 17 34 51		-1.93	5.1
JUN 16	22 03 14	15.3S 172.8W	33KM	4.7 SAMOA IS REGION	SBA 63
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 22 13 42		-1.83	5.3
JUN 17	SBA EP	ZNE 03 09 39		-1.95	
JUN 17	07 48 58.5	19.6S 169.0E	58KM	4.5 NEW HEBRIDES IS	SBA 58
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 07 58 49		-1.95	5.3

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUN 18	20 33 53.3	39.3S 74.7W	26KM	5.3 OFF CENTRAL CHILE	SBA 57
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 20 43 42		-0.71	6.5
	PS	NE 51 52			
	E	Z 52 16			
	LQ	NE 58 24			
JUN 20	09 59 08.9	19.9S 174.1W	33KM	4.7 TONGA IS	SBA 59
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 10 09 04		-1.95	5.2
	ELR	NE 26 32			
JUN 20	12 31 49.7	21.2S 179.2W	600KM	4.4 FIJI IS REGION	SBA 57
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 12 40 43		-1.95	4.4
JUN 21	06 54 46.2	14.9S 173.3W	80KM	5.0 PERU	SBA 82
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 07 06 54.2 D		-1.63	5.4
JUN 21	07 42 55	30.0S 91.6W	33KM	4.7 SE CENTRAL PACIFIC	SBA 63
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 07 53 23		-2.11	5.1
JUN 21	22 21 22.7	16.3S 178.0E	18KM	5.0 FIJI IS	SBA 62
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 22 31 39		-1.63	5.6
	EL	NE 47 29			
JUN 22	00 16 27.4	15.7S 172.8W	33KM	5.1 SAMOA IS REGION	SBA 63
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 00 26 50		-1.12	6.0
	E	ZN 27 19			
	S	NE 35 25			
	SCS	NE 36 48			
JUN 22	03 03 37.9	10.4S 161.1E	70KM	5.4 SOLOMON IS	SBA 68
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 03 14 29		-0.90	6.1
	E(PS)	N 23 39			
	ELR	N 35 10			
	EPKPPKP	Z 43 16			
JUN 22	07 30 59.5	18.0S 172.6E	33KM	4.7 NEW HEBRIDES IS	SBA 60
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 07 41 09		-1.93	5.3
JUN 22	13 40 02.8	25.1S 177.4W	121KM	5.1 S CF FIJI IS	SBA 53
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 13 49 14		-1.81	5.2
JUN 22	14 17 36.5	12.5S 166.7E	143KM	3.8 SANTA CRUZ IS	SBA 65
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 14 28 05.9 U		-1.47	5.5

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUN 23	01	26	37.0	43.3N 146.1E	77KM	6.2	KURILE IS
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	EPKP	ZNE	01 45 24				
	EPP	Z	46 51				
	ESKKS	Z	53 52				
	EPKPP	Z	55 25				
	ESP	Z	56 28				
	E(SKKS)	Z	02 02 31				
	ESS	NE	03 28				
	ELQ	E	17 14				
	ELR	ZNE	22 59				
JUN 23	17	01	28.9	18.9S 175.8W	204KM	4.3	TONGA IS
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	P	Z	17 11 13			-1.56	
JUN 23	19	10	11.4	3.0N 126.6E	33KM	5.3	TALAUD IS
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	19 22 39			-1.81	
JUN 24	14	59	58.7	7.1S 155.6E	123KM	5.0	SOLOMON IS
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	EP	Z	15 11 06				
JUN 26	01	32	51.5	55.9S 27.6W	55KM	5.5	S SANDWICH IS
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	01 41 12			-1.27	
JUN 26	13	10	28.9	12.6S 169.4E	648KM	4.9	SANTA CRUZ IS
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	P	ZNE	13 20 10			-1.81	
JUN 26	13	32	52.3	9.2S 158.9E	17KM	5.6	SOLOMON IS
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	P	ZNE	13 43 56			-1.56	
JUN 27	02	28	57.1	40.4N 77.5E	33KM	5.0	KIRGIZ-SINKIANG
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	EPKP	Z	02 48 03				
JUN 27	11	44	21.4	20.2S 178.9W	603KM	4.5	FIJI IS REGION
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	P	ZNE	11 53 17			-1.82	
JUN 27	16	43	47.0	11.5S 13.8W	33KM	4.7	ASCENSION IS
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	EP	Z	16 56 54				
JUN 28	12	51	34.6	1.7S 149.6E	7KM	6.4	NEW IRELAND REGION
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	13 03 29				
	S	NE	13 19				
	ESS	Z	18 24				
	ESSS	ZE	21 15				
	LQ	NE	24 12				

28 48

	ELR	ZNE	28 05	18 18
JUN 28	14	52	08.4	13.2S 167.1E
				215KM
				5.4
				NEW HEBRIDES
				H M S
				DIR
SBA	P	ZNE	15 02 25	
				-1.06
JUN 28	15	27	10	15.2S 167.1E
				215KM
				5.4
				NEW HEBRIDES
				H M S
				DIR
SBA	P	ZNE	15 27 10	
				-1.65
				8 26
JUN 28	19	09	05.4	58.3N 150.2W
				23KM
				5.5
				GULF OF ALASKA
				H M S
				DIR
SBA	EPKP	ZNE	19 28 30	
JUN 28	23	45	37.9	30.7S 178.0W
				29KM
				4.2
				KERMADEC IS REGION
				H M S
				DIR
SBA	EP	ZNE	23 54 15	
JUN 29	07	12	06	17.5S 173.5W
				33KM
				4.1
				TONGA IS
				H M S
				DIR
SBA	EP	Z	07 22 19	
				-1.93
JUN 29	07	21	32.8	62.7N 152.0W
				33KM
				5.6
				CENTRAL ALASKA
				H M S
				DIR
SBA	EPKP	ZNE	07 41 02	
				44 29
JUN 30	05	27	28.7	29.8S 178.7W
				214KM
				4.5
				KERMADEC IS REGION
				H M S
				DIR
SBA	IP	ZNE	05 35 54.0	
				U
				-0.60
JUN 30	08	51	51.2	6.9S 129.6E
				99KM
				4.9
				BANDA SEA
				H M S
				DIR
SBA	P	ZNE	09 03 16	
				-1.83
JUN 30	10	14	45.8	19.8S 173.9W
				33KM
				4.8
				TONGA IS
				H M S
				DIR
SBA	EP	ZNE	10 24 40	
				-1.81
JUN 30	13	46	21.6	0.8S 122.5E
				36KM
				6.3
				NORTHERN CELEBES
				H M S
				DIR
SBA	EP	ZNE	13 58 32	
				0.34
				65 21 75 18 7.4
				7.5
				54 19 59 24
				7.4
JUN 30	15	48	43	45.9N 150.4E
				33KM
				6.0
				KURILE IS
				H M S
				DIR
SBA	EPKP	Z	16 07 31	
				44
				54
				17 39

	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
JUN 30	17 52 35.6	14.3S 173.6E	607KM	4.3	FIJI IS REGION	SBA 64
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 18 02 10		-1.50		5.0
JUN 30		ZNE 18 43 50		-1.52		
JUN 30	19 47 22.5	0.0N 122.9E	33KM	4.9	NORTHERN CELEBES	SBA 81
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 19 59 36		-1.71		5.5
JUN 30	20 08 28.5	46.6N 144.6E	383KM	5.5	SEA OF OKHOTSK	SBA 125
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 20 26 44				
		E*PPKP	ZNE 28 16			
JUN 30	22 11 38.5	11.1S 162.4E	9KM	4.9	SOLOMON IS	SBA 67
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 22 22 34				
JUN 30	23 14 33	3.0S 122.6E	56KM	5.3	NORTHERN CELEBES	SBA 78
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 23 26 42				
JUL 01	02 47 33.9	46.3N 146.9E	33KM	5.4	NW OF KURILE IS	SBA 124
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 03 06 28				
JUL 01	09 25 55	2.0S 141.2E	33KM		NEW GUINEA	SBA 77
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 09 37 47		-1.26		5.8
JUL 01	13 33 10	1.8N 127.1E	33KM	4.5	HALMAHERA	SBA 82
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 13 45 30.5		-1.65		5.5
JUL 01	20 20 56.6	17.1S 69.1W	147KM	5.1	PERU-BOLIVIA	SBA 80
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 20 32 44		-1.53		5.3
JUL 01	22 49 17.8	14.2S 73.3W	80KM	5.2	PERU	SBA 82
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 23 01 32		-1.37		5.6
JUL 01	23 05 07	10.0S 148.6E	176KM		E NEW GUINEA	SBA 68
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 23 15 40				
JUL 02	05 03 35	1.2N 118.9E	133KM		BORNEO	SBA 83
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 05 15 47		-1.95		4.9

	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
02	12 11 23	1.0N 124.3E	160KM		NORTHERN CELEBES	SBA 82
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 12 23 27		-1.65		5.2
		E	ZNE 45			
02	22 09 37.3	20.2S 175.6W	157KM	4.5	TONGA IS	SBA 58
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 22 19 21		-1.95		5.0
02	22 51 35.9	39.0S 74.6W	33KM	4.7	OFF CENTRAL CHILE	SBA 58
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 23 01 26				
03	01 23 03	6.5S 105.3E	57KM	5.3	SUNDA STRAIT	SBA 78
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 01 34 56		-2.11		4.9
03	21 58 08.1	21.9S 170.1E	45KM		LOYALTY IS REGION	SBA 56
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 22 07 46		-1.65		5.5
04	10 49 28.8	11.7N 144.5E	33KM	6.0	S OF MARIANA IS	SBA 90
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 11 02 29		-1.03		6.4
		ELR	ZNE 31 41			
05	03 14 33.3	60.8N 144.9W	30KM	4.9	SOUTHERN ALASKA	SBA 142
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 03 34 02				
05	19 07 58.2	26.2N 110.2W	33KM	6.0	GULF OF CALIFORNIA	SBA 114
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E	Z 19 27 28				
		EPP	ZNE 36			
		EPS	ZNE 37 09			
		ESS	ZNE 43 31			
		ELQ	N 54 32			
		ELR	ZNE 20 01 12			20 16
05	23 36 01.5	44.8N 149.6E	54KM	5.5	KURILE IS	SBA 123
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 23 54 53				
		ESKP	ZNE 58 14			
		ESKKS	N 24 03 32			
		E	E 04 40			
		ESP	ZNE 06 36			
		ESS	ZNE 13 10			
		ELQ	E 27 20			
06	02 14 36.0	26.2N 110.4W	33KM	5.4	GULF OF CALIFORNIA	SBA 114
		H M S DIR		LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 02 33 17				
		EPP	Z 34 11			
		SP	ZNE 43 26			
		ESS	ZNE 49 26			
		ELQ	N 03 01 13			

		ELR	ZNE	07 45	37 21 11 20 23 19			
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)				
JUL 06 07 22 10.3	18.2N 100.4W	82KM	6.5	GUERRERO MEXICO	SBA	108		
	H M S	DIR	LOG _a /T	AZ	TZ	AN	TN	
SBA E(P)	ZNE 07 37 29							
E(*PP)	Z	52						
EPKP	ZNE	40 15						
PP	ZNE	41 04						
ESKS	NE	46 57						
EPS	E	50 06						
EPKPP	ZNE	51 41						
E(PKKS)	NE	55 36						
ESKKS	Z	59 13						
ELQ	NE	08 07 28						
				64	41	171	36	
36 KILLED, PROPERTY DAMAGE								
JUL 06 09 47 26.0	18.0S 174.7W	80KM	4.4	TONGA IS	SBA	61		
SBA EP	ZNE 09 57 32		-1.95					
JUL 06 10 06 02.3	6.3S 154.7E	49KM	6.4	SOLOMON IS	SBA	72		
SBA EP	ZNE 10 17 21		-1.53					
JUL 06 10 13 45.2	37.1N 71.4E	100KM	5.9	AFGHANISTAN-USSR	SBA	127		
SBA EPKP	Z	10 32 35						
JUL 06 SBA P	ZNE 11 34 49		-0.85					
JUL 06 12 34 35.8	17.8S 167.5E	33KM	4.3	NEW HEBRIDES IS	SBA	60		
SBA EP	ZNE 12 44 42		-1.81					
JUL 06 14 06 32.6	24.2S 69.7W	128KM	4.5	NORTHERN CHILE	SBA	73		
SBA EP	ZNE 14 17 41							
JUL 06 14 19 46.3	6.9S 129.6E	100KM	5.8	BANDA SEA	SBA	73		
SBA IP	ZNE 14 31 09.7 U		-1.20					
E	E	20						
JUL 06 19 50 42.1	21.2S 173.8E	22KM	4.8	NEW HEBRIDES IS	SBA	57		
SBA EP	ZNE 20 00 26		-1.38					
ES	NE	08 27						
ELQ	NE	14 58						
ELR	Z	17 58						
JUL 07 06 44 49.2	8.8S 110.7E	60KM		JAVA	SBA	75		
SBA EP	ZNE 06 56 24		-1.81					
JUL 07 07 39 04.2	23.6S 179.9W	462KM	5.5	S CF FIJI IS	SBA	55		
SBA IP	ZNE 07 47 50.8 U		-0.90					

		PCP	Z	48 44			
		E*PP	Z	49 39			
JUL 07 14 16 56	20.1S 178.0W	617KM	5.1	FIJI IS REGION	SBA	58	
SBA IP	ZNE 14 25 59		-1.58				
JUL 07 16 28 42.9	11.2S 163.2E	13KM	5.1	SOLOMON IS	SBA	67	
SBA EP	ZNE 16 39 32		-1.81				
JUL 08 01 35 02.5	15.3S 173.1W	33KM	4.8	TONGA IS	SBA	63	
SBA EP	ZNE 01 45 26						
JUL 08 07 45 48.6	3.2N 128.4E	50KM	5.5	N CF HALMAHERA	SBA	84	
SBA EP	ZNE 07 58 13		-1.23				
ES	NE	08 08 31					
ELQ	NE	21 09					
ELR	ZNE	27 08					
JUL 08 SBA EP	ZNE 11 13 34		-1.82				
JUL 08 11 49 23.7	6.4S 154.8E	73KM	5.1	SOLOMON IS	SBA	72	
SBA EP	ZNE 12 00 32		-0.99				
JUL 08 11 55 39	5.5S 129.8E	165KM	6.5	BANDA SEA	SBA	75	
SBA EP	ZNE 12 07 02		-0.44				
ES	ZNE	16 20				60	22
ESS	ZNE	21 38					
ELQ	ZNE	26 07					84
ELR	ZNE	31 01				52	23
ESKPPKP	Z	37 30					39
E	Z	57 36					22
PHASE RECORDED AT 12 57 36 IS SKPPKPPKP							
JUL 09 05 47 09.2	15.4N 119.8E	53KM	5.5	PHILIPPINE IS	SBA	97	
SBA EP	ZNE 06 00 37		-1.74				
JUL 09 11 22 05.4	23.3S 175.7W	43KM	5.7	TONGA IS REGION	SBA	55	
SBA IP	ZNE 11 31 37.0		0.36				
ES	ZNE	39 25					
SCS	E	41 28					
SS	ZE	43 07					
ELQ	NE	45 41					
LR	Z	47 05					
PKPPKP	ZNE	12 01 33				18	25
JUL 09 12 02 11.9	34.2N 140.9E	49KM	5.0	HONSHU JAPAN	SBA	113	
SBA EPKP	Z	12 20 45					
E(PP)	Z	21 46					

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUL 09	16	39	49.3	15.5S 167.6E	121KM	6.6	NEW HEBRIDES IS SBA 62
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	IP	ZNE	16 50 00.7	U			
	ES	ZNE	58 04				
	(SCS)	N	59 18				
	ESKKS	ZNE	17 18 04				
	EPKPPK	ZNE	19 00				
	E	Z	27 02				
	E	ZNE	30 46				
	EPKP(3)	Z	37 50				
JUL 09	21	43	46.3	1.8S 141.6E	33KM		NEW GUINEA REGION SBA 77
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	21 55 39				
JUL 10	21	16	26	20.1S 174.2W	33KM	4.6	TONGA IS SBA 59
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP?	ZN	21 26 10			-1.93	5.3
JUL 10	21	48	42.5	8.5S 147.9E	127KM		E NEW GUINEA SBA 70
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP	Z	21 59 44			-1.95	5.0
JUL 11	05	53	53.4	23.8S 177.4W	215KM	4.2	S CF FIJI IS SBA 55
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	IP	ZNE	06 03 03.0	D		-1.52	5.2
JUL 11	06	40	45.6	11.7S 166.6E	33KM	4.4	SANTA CRUZ SBA 66
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP	ZN	06 51 32			-1.93	5.2
JUL 11	09	44	18.7	59.7N 146.1W	33KM	5.3	GULF OF ALASKA SBA 140
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EPKP	Z	10 03 46				
JUL 11	15	35	53.1	5.8N 126.4E	152KM	5.0	PHILIPPINE IS SBA 86
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	15 48 21				
JUL 11	17	07	38.9	16.9S 172.8W	33KM	4.7	SAMOA IS REGION SBA 62
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	17 17 56				
JUL 11	17	32	16.8	15.5S 167.7E	143KM	4.5	NEW HEBRIDES IS SBA 62
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	P	ZNE	17 42 27			-1.93	5.1
	E(*PP)	Z	58				
JUL 11	18	53	15.8	12.2N 141.6E	61KM	4.7	S CF MARIANA IS SBA 91
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	19 06 16			-1.74	5.7

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUL 11	20	25	40.3	59.7N 146.2W	40KM	5.6	GULF OF ALASKA SBA 140
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EPKP (PKP)	Z	20 44 58				
		ZNE	45 07				
JUL 11				ZNE 01 01 12		-1.83	
JUL 12	01	45	25.6	38.6N 139.2E	13KM	6.0	HONSHU JAPAN SBA 117
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EPKP EPP	ZNE	02 04 11				
		ZNE	05 29				
JUL 12				ZNE 13 41 52		-1.93	
JUL 12	16	48	21.7	24.5S 66.9W	164KM	5.1	ARGENTINA SBA 73
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	IP	ZNE	16 59 37.6	D		-1.57	5.2
JUL 12	21	08	52.6	55.9S 27.6W	135KM	5.2	S SANDWICH IS SBA 46
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	P	ZNE	21 17 06			-1.35	5.4
JUL 13	01	14	33.5	20.7S 178.7W	575KM	4.9	FIJI IS REGION SBA 58
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	01 23 31			-1.73	4.6
JUL 13				ZNE 06 03 01		-0.90	
		ZNE	06 42				
JUL 13	06	28	28.4	11.8S 166.0E	66KM	4.5	SANTA CRUZ IS SBA 66
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	P	ZNE	06 39 08			-1.58	5.5
JUL 13	10	03	45.3	25.0S 179.9W	424KM	4.5	S CF FIJI IS SBA 53
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	P	Z	10 12 26			-1.71	4.7
JUL 13	10	08	07.2	15.9S 167.9E	33KM	5.4	NEW HEBRIDES IS SBA 62
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EP	ZNE	10 18 27				
JUL 13	10	58	47.7	23.7N 94.7E	117KM	6.5	BURMA-INDIA BORDER SBA 109
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	EPKP EPKPP	Z	11 17 08				
		Z	28 12				
JUL 13	14	53	27.0	20.9S 169.9E	89KM	5.1	NEW HEBRIDES IS SBA 57
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	IP	ZNE	15 03 05.1	D			
		*PP	Z	27			
JUL 13	16	49	38.8	8.3S 113.7E	153KM		JAVA SBA 75
				H M S	DIR	LOG _{A/T}	AZ TZ AN TN AE TE MAG
SBA	IP	Z	17 01 04.0	U		-1.44	5.4

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUL 13	17	12	01.3	8.0N 126.8E	104KM	4.0 PHILIPPINE IS	SBA 89
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				EP	ZNE 24 45	-1.73	5.4
JUL 13	23	43	48	48.3S 32.0E	33KM	PRINCE EDWARD IS	SBA 51
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	ZNE 23 52 48	-1.56	5.5
				E*PP	ZNE 57		
				ES	NE 24 00 14		
				ELR	NE 08 26		
JUL 14	13	58	28.5	53.3N 159.7E	40KM	5.5 KAMCHATKA	SBA 131
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EPKP	Z 14 17 36		
				ESKP	Z 20 54		
JUL 14							
				SBA EP	Z 15 51 34	-1.90	
JUL 14	18	38	39.1	52.7S 139.4E	36KM	W CF MACQUARIE IS	SBA 27
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	ZNE 18 44 23		
				ELR	ZNE 51 37		
JUL 14	23	12	12.7	34.3S 179.1E	75KM	5.1 S CF KERMADEC IS	SBA 44
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	ZNE 23 20 15	-1.05	5.8
				LR	ZNE 32 44		
JUL 15							
				SBA EP	ZNE 04 08 51	-1.95	
JUL 15	07	26	01.4	52.1N 170.6W	30KM	5.6 ALEUTIAN IS	SBA 130
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EPKP	Z 07 45 10		
JUL 15	08	24	56.5	11.3S 166.1E	130KM	4.7 SANTA CRUZ IS	SBA 67
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA IP	ZNE 08 35 34.2	-1.19	5.8
JUL 16	00	52	51	15.6S 167.6E	125KM	NEW HEBRIDES IS	SBA 62
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	Z 01 03 03		
JUL 16	04	21	05.3	1.5N 126.4E	69KM	MOLUCCA PASSAGE	SBA 82
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	ZNE 04 33 21	-2.11	4.9
JUL 16	04	51	36.5	15.6S 167.7E	121KM	NEW HEBRIDES IS	SBA 62
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	ZNE 05 01 48	-1.93	5.1
				E*PP	Z 02 18		
JUL 16	11	27	05	17.9S 179.5W	625KM	4.2 FIJI IS REGION	SBA 60
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA IP	ZNE 11 36 16.2 D	-1.56	4.8

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUL 17	02	34	26.9	38.2N 23.7E	150KM	5.4 GREECE	SBA 137
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EPKP	ZNE 02 53 20		
				PKP	Z 30		
				PKP	ZNE 34		
				EPP	Z 56 14		
				SKP	ZNE 49		
JUL 17	04	41	05.1	49.3N 158.6E	50KM	5.4 KURILE IS REGION	SBA 127
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EPKP	ZNE 05 00 04		
JUL 17	04	55	00	24.3S 179.6E	495KM	S CF FIJI IS	SBA 54
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA IP	ZNE 05 03 39.2	-1.10	5.3
JUL 17	19	09	16.4	24.3S 177.1W	93KM	4.1 S CF FIJI IS	SBA 54
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA P	ZNE 19 18 35	-1.73	5.4
JUL 17							
				SBA EPKP	ZNE 23 13 36		
				E(*PP)	ZNE 50		
JUL 18	03	40	21.5	36.3N 26.1E	115KM	4.9 DODECANESE IS	SBA 135
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EPKP	Z 03 59 30		
				E	Z 52		
JUL 18							
				SBA EP	ZNE 12 49 14	-1.30	
JUL 18	12	45	47.7	0.2N 123.5E	97KM	5.8 NORTHERN CELEBES	SBA 81
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA IP	ZNE 12 57 55.5 V	-1.20	5.7
JUL 19	06	50	18.9	13.9S 167.2E	198KM	4.6 NEW HEBRIDES IS	SBA 64
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA P	ZNE 07 00 34	-1.56	5.2
				E*PP	Z 01 20		
JUL 19	13	40	06.6	15.1S 173.4W	33KM	4.7 TONGA IS	SBA 64
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	ZNE 13 50 37	-2.13	5.0
JUL 19	15	33	57.6	9.4S 113.0E	80KM	S CF JAVA	SBA 74
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	ZNE 15 45 24	-2.13	4.8
JUL 19	18	10	48.2	7.5N 121.8E	51KM	PHILIPPINE IS	SBA 89
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	ZNE 18 23 39	-1.93	5.4
JUL 20	04	29	28	6.7S 154.6E	78KM	5.0 SOLOMON IS	SBA 71
				H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
				SBA EP	Z 04 40 44		

	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
JUL 20	09 34 22	64.5S 176.7E	33KM		BALLENY IS REGION	SBA 14
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 09 37 32		-1.20		
	EL	ZNE 40 28			11 22	
JUL 20	22 43 15	35.5S 179.7E	223KM	4.9	N ISLAND NZ	SBA 43
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 22 50 52		-1.30		5.1
	ELR	ZNE 23 03 22				
JUL 20	22 56 01	34.4S 179.2E	162KM	5.0	S CF KERMADEC IS	SBA 44
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 23 03 55		-1.60		5.0
	ELR	ZNE 16 24				
JUL 21	02 47 48.6	31.3S 180.0W	433KM	4.0	KERMADEC IS	SBA 47
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 02 55 42		-1.93		4.6
JUL 21	03 48 59.1	26.0S 178.0W	222KM	5.8	S CF FIJI IS	SBA 52
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 03 57 52.4	V	-1.03		5.6
	E*PP	Z 58 36				
	SCP	Z 04 02 37				
	S	ZNE 05 10			16 9 10 11 6.6	
	E	E 06 20			9 13	
	SCS	NE 07 22			4 8 12 9	
	(SS)	NE 08 53				
JUL 21	07 33 19.6	20.0S 69.8W	84KM	4.5	NORTHERN CHILE	SBA 77
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 07 45 07				
JUL 21	09 56 16.6	72.1N 130.2E	33KM	5.4	LAPTEV SEA	SBA 151
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 10 16 07				
JUL 21	13 13 00.2	11.5N 121.9E	34KM		PHILIPPINE IS	SBA 93
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E(P)	ZNE 13 26 22				
	ELR	Z 57 08				
JUL 21	21 01 49.5	4.6S 153.3E	60KM	4.9	NEW IRELAND REGION	SBA 74
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 21 13 18		-1.27		5.7
JUL 22	03 50 51.6	14.3S 167.4E	203KM	4.0	NEW HEBRIDES IS	SBA 64
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 04 01 02		-1.95		4.9
JUL 22	07 04 35	54.2S 132.4W	33KM	4.6	S PACIFIC CORD	SBA 32
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 07 10 53				

	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
JUL 22	07 37 52.4	16.3S 167.7E	6KM		NEW HEBRIDES IS	SBA 62
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 07 48 13		-1.93		5.3
	E	ZNE 22				
JUL 22	08 51 31	4.1N 125.7E	237KM	4.4	TALAUD IS	SBA 85
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 09 03 41				
JUL 23	01 53 11.4	28.8S 70.3W	37KM	4.6	CENTRAL CHILE	SBA 68
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 02 04 11				
JUL 23	19 08 06.6	59.9N 149.2W	55KM	5.4	ALASKA	SBA 140
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 19 27 22				
JUL 23	19 18 56.8	27.8S 66.4W	130KM	5.2	ARGENTINA	SBA 70
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 19 29 57		-1.63		5.3
JUL 24						
	SBA EPKP	E 07 09 52				
JUL 24	08 12 40.0	47.2N 153.8E	33KM	5.9	KURILE IS	SBA 125
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	E 08 31 43				
	ESS	NE 50 23				
	LQ	E 09 04 32				46 32
JUL 24	13 47 48.6	6.6S 154.8E	62KM	5.6	SOLOMON IS	SBA 71
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	E 13 59 05				
	S	NE 14 08 24				
	PS	N 09 10				
	SS	N 13 20				
	ELQ	NE 17 25				
JUL 24	17 02 49.2	47.1N 153.6E	33KM	5.8	KURILE IS	SBA 125
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	E 17 21 50				
	EPP	Z 23 39				
	SKKS	N 30 32				
	PS	N 33 38				
	SS	NE 40 33				
	LQ	E 54 44				17 52
JUL 25	02 24 38.9	1.8N 141.0E	48KM		NEW GUINEA REGION	SBA 81
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 02 36 30		-1.44		5.7
JUL 25	12 20 22.2	19.9S 176.2W	205KM	5.3	FIJI IS REGION	SBA 59
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 12 30 00.7	U	-1.30		5.5

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUL 25	18 18 09	17.1S 172.9W	33KM	4.6 TONGA IS REGION	SBA 62
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 18 28 23			
JUL 25	19 31 07.0	27.9S 70.9W	26KM	6.1 NORTHERN CHILE	SBA 69
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 19 42 14		-0.66	6.5
	S	ZNE 51 22			
	SS	ZE 55 54			
	LQ	NE 59 34			
	LR	ZNE 20 03 26		16 18	
	EPKPPK	ZNE 10 20			
JUL 25	21 29 33.2	2.9N 128.2E	22KM	5.1 HALMAHERA	SBA 83
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 21 41 59		-1.04	6.2
JUL 25	22 47 42.7	9.7S 159.8E	21KM	5.6 SOLOMON IS	SBA 68
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 22 58 44			
JUL 26	06 28 32.7	23.4S 180.0E	555KM	4.9 S CF FIJI IS	SBA 55
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 06 37 13.0 U		-1.25	5.2
	PCP	Z 38 06			
	ESCP	Z 41 13			
JUL 26					
	SBA EP	ZNE 08 36 24		-1.65	
	EL	ZNE 39 37		14 26	
JUL 26	20 24 13.9	4.1N 126.4E	33KM	4.8 TALAUD IS	SBA 85
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 20 36 47			
JUL 27	00 40 26.2	17.0S 172.7W	33KM	4.7 TONGA IS REGION	SBA 62
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	Z 00 50 44			
JUL 27	02 28 00	16.4S 173.8W	33KM	4.5 TONGA IS	SBA 62
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	Z 02 38 20		-2.13	5.0
JUL 27	02 32 45.4	9.2N 126.4E	82KM	PHILIPPINE IS	SBA 90
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	Z 02 45 43			
JUL 27	11 01 13	1.9N 126.3E	67KM	MOLUCCA PASSAGE	SBA 83
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	Z 11 13 30			
	E(PCP)	ZNE 38			
JUL 27	21 00 43.5	20.1S 175.7W	163KM	3.9 TONGA IS	SBA 58
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	Z 21 10 26		-1.95	5.0

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
JUL 28	06 45 46	7.6S 127.3E	257KM	4.9 BANDA SEA	SBA 73
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	Z 06 56 51		-2.13	4.7
JUL 28	08 00 00.3	18.9S 169.4E	237KM	4.8 NEW HEBRIDES IS	SBA 59
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 08 09 37		-1.71	5.0
JUL 28	10 46 00.6	16.0S 172.9W	33KM	4.6 SMOA IS REGION	SBA 63
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	Z 10 56 25		-1.95	5.2
JUL 28	18 40 04.3	51.2S 139.0E	33KM	5.3 S CF AUSTRALIA	SBA 29
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 18 45 59		-0.75	5.8
	ES	NE 50 50			
	LQ	NE 52 06			
	ELR	ZNE 53 41			80 23 105 23
JUL 28	21 38 43.5	14.3N 96.2E	33KM	5.5 ANDAMAN IS REGION	SBA 100
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA E(S)	E 22 04 32			
	ESS	NE 11 08			8 21 17 19
	ELR	NE 25 29			
JUL 29	04 38 59.2	4.0S 128.9E	159KM	4.9 BANDA SEA	SBA 76
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 04 50 32		-1.73	5.1
JUL 30	05 16 03.3	11.1N 86.2W	42KM	5.7 NICARAGUA	SBA 104
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA PPS	E 05 44 31			
	ESS	ZE 49 38			
	ELR	ZE 53 14			
		ZNE 06 05 21			
JUL 30	08 41 54	55.5S 147.3E	33KM	W CF MACQUARIE IS	SBA 23
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	ZE 08 47 09		-1.28	5.1
	ELR	E 54 32			9 10
JUL 30	13 12 54.3	6.0S 154.4E	79KM	SOLOMON IS	SBA 72
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 13 24 12		-1.93	5.0
JUL 31	04 05 06.2	44.6N 151.6E	53KM	5.5 KURILE IS REGION	SBA 123
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 04 23 59			
JUL 31	05 52 18.8	6.1S 149.4E	63KM	5.9 NEW BRITAIN REGION	SBA 72
		H M S	DIR	LOG _{A/T} AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 06 03 40.7		-0.36	6.6
	S	Z 12 58			35 24
	I	NE 13 06			
	ESS	ZNE 17 14			

SSS LR	ZNE	21 16 ZNE 26 08	33 21 37 25						
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
JUL 31 06 26 36.7	25.7S 179.6W	429KM	5.1 S CF FIJI IS	SBA 53					
SBA P	ZNE 06 35 12		-1.71	4.7					
JUL 31 22 08 26.2	4.3S 152.8E	63KM	4.5 NEW BRITAIN REGION	SBA 74					
SBA EP	Z 22 19 59								
AUG 01 02 27 13.6	20.0S 179.8E	553KM	4.4 S CF FIJI IS	SBA 58					
SBA EP	ZNE 02 36 17		-1.93	4.4					
AUG 01 09 52 51.3	5.5S 131.4E	33KM	4.6 BANDA SEA	SBA 75					
SBA EP	ZNE 10 04 30								
AUG 01 13 54 54.8	27.7S 70.9W	118KM	4.5 NORTHERN CHILE	SBA 69					
SBA EP	ZNE 14 05 52		-1.95	5.0					
AUG 01 21 33 28	19.9S 66.0E	33KM	MASCARENE IS	SBA 73					
SBA EP	Z 21 44 55								
E*PP	Z 22 07 52								
ELR									
AUG 01 22 12 04	28.1S 70.4W	33KM	4.4 CENTRAL CHILE	SBA 69					
SBA EP	ZNE 22 23 07								
AUG 02 02 20 19	55.9S 27.7W	86KM	4.9 S SANDWICH IS	SBA 46					
SBA EP	ZN 02 28 38		-1.95	5.0					
AUG 02 07 03 11.4	3.8S 123.2E	37KM	5.4 CELEBES	SBA 77					
SBA EP	ZNE 07 15 04								
AUG 02 08 10 38.7	0.1N 123.9E	110KM	NORTHERN CELEBES	SBA 81					
SBA EP	Z 08 22 43								
AUG 02 08 36 16.9	56.2N 149.9W	31KM	5.4 GULF OF ALASKA	SBA 136					
SBA EPKP	Z 08 55 38								
AUG 02 13 57 45.0	27.5S 70.3W	61KM	4.2 NORTHERN CHILE	SBA 70					
SBA EP	Z 14 08 48								

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
07 44 44.3	22.6N 121.3E	33KM	5.4 TAIWAN REGION	SBA 104
SBA EPKP	ZNE 08 03 07			
ELR	Z 32 20			
03 17 08 11.2	8.3S 118.7E	33KM	SUPBAWA IS REGION	SBA 74
SBA EP	ZNE 17 19 44		-1.95	5.1
04 03 36 42.0	2.5S 139.8E	33KM	W NEW GUINEA	SBA 77
SBA EP	ZNE 03 48 31			
04 SBA EP	ZNE 09 54 29		-1.95	
04 12 38 15.3	15.9S 174.5W	134KM	4.2 TONGA IS	SBA 63
SBA EP	Z 12 48 29		-1.95	5.1
04 SBA EP	ZNE 13 58 28		-1.56	
04 17 24 29.2	46.5N 151.1E	101KM	5.9 KURILE IS	SBA 124
SBA PKP	ZNE 17 43 18			
ELR	Z 18 22 24			
05 01 47 39.1	17.8S 176.4W	16KM	4.9 FIJI IS REGION	SBA 61
SBA EP	Z 01 57 51		-1.95	5.3
05 06 47 27.7	44.4S 72.4W	33KM	4.8 SOUTHERN CHILE	SBA 53
SBA EP	ZNE 06 56 43		-1.95	5.1
05 11 01 16.5	39.0S 74.5W	26KM	5.1 CENTRAL CHILE	SBA 58
SBA EP	ZNE 11 11 08			
05 11 06 02.6	32.1S 179.8E	235KM	5.8 S CF KERMADEC IS	SBA 46
SBA IP	ZNE 11 14 08.8		-0.14	6.3
EPCP	Z 15 38			
SCP	Z 19 07			
ES	E 20 40			
05 22 23 13.0	41.1S 74.9W	33KM	6.1 SOUTHERN CHILE	SBA 56
SBA P	ZNE 22 32 48		-0.21	7.3
ESS	Z 44 24			
ELR	Z 48 45			
EPKPPKP	ZNE 23 02 44			
06 07 12 01.1	9.1S 120.8E	58KM	5.6 SUMBA IS REGION	SBA 73
SBA EP	ZNE 07 23 24		-1.95	5.1

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 06	13	41	36.5	4.2S 140.5E	50KM	W NEW GUINEA	SBA 75
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 13 53 11			
AUG 06	17	03	28.9	22.5S 179.5W	504KM	5.3 S CF FIJI IS	SBA 56
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 17 12 20.3	-1.04		5.4
AUG 06	18	24	50.5	22.5S 179.5W	504KM	5.3 S CF FIJI IS	SBA 56
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 18 44 10			
				Z 47 39			
				Z 19 29 08			
AUG 06	17	03	28.9	22.5S 179.5W	504KM	5.3 S CF FIJI IS	SBA 56
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 17 12 20.3 D	-1.04		5.4
AUG 06	18	24	50.5	56.9N 152.1W	39KM	5.6 KODIAK IS REGION	SBA 137
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 18 44 11			
				Z 47 39			
				Z 19 29 08		3 20	
AUG 06	23	42	45.7	19.2S 167.6E	43KM	5.0 NEW HEBRIDES IS	SBA 59
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 23 52 40	-1.73		5.5
				Z 52			
AUG 07	02	15	04	20.2S 174.6W	29KM	4.4 TONGA IS	SBA 58
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 02 25 00	-1.95		5.2
AUG 08	18	42	59	20.9S 176.7W	354KM	4.5 FIJI IS	SBA 58
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 18 52 14			
				Z 27			
AUG 08	20	59	43.6	17.5S 175.0W	193KM	4.8 TONGA IS	SBA 61
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 21 09 40	-1.95		4.9
AUG 09	05	30	46.9	10.3S 161.3E	85KM	5.0 SOLOMON IS	SBA 68
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 05 41 23			
AUG 09	06	31	29.3	17.1S 173.1W	33KM	4.5 TONGA IS	SBA 62
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 06 41 45			
AUG 09	07	56	26	45.1S 79.2W	33KM	4.5 SOUTHERN CHILE	SBA 51
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 08 05 26			
				Z 19 50			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 09	20	06	36.9	0.3S 125.1E	59KM	5.0 MOLUCCA SEA	SBA 81
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 20 18 46	-1.81		5.3
AUG 10	01	10	12.4	19.1N 67.3W	33KM	5.5 MONA PASSAGE	SBA 116
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 01 28 53			
				Z 02 07 33			
AUG 10	07	34	49.9	16.7S 70.8W	92KM	5.2 SOUTHERN PERU	SBA 80
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 07 46 53	-1.71		5.2
				Z 47 19			
AUG 10	14	44	40.1	14.1S 166.7E	44KM	NEW HEBRIDES IS	SBA 64
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZN 14 55 09	-1.82		5.3
AUG 10	17	52	02.5	45.1N 149.9E	40KM	5.3 KURILE IS	SBA 123
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 18 10 56			
AUG 10	21	40	10.4	6.2S 154.5E	105KM	5.7 SOLOMON IS	SBA 72
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 21 51 24	-1.46		5.4
AUG 11	01	55	25.0	5.8S 154.1E	425KM	5.3 SOLOMON IS	SBA 72
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 02 06 08	-1.73		5.0
AUG 11	05	49	58.7	18.0S 176.9W	329KM	4.3 FIJI IS REGION	SBA 60
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 05 59 37	-2.11		4.5
AUG 11	12	32	00.2	14.7S 167.8E	140KM	4.7 NEW HEBRIDES	SBA 63
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 12 42 17.1 U	-1.83		5.2
AUG 12	06	51	49.9	48.9N 153.7E	127KM	5.6 KURILE IS	SBA 127
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				Z 07 10 38			
AUG 13	00	31	14.1	5.4S 154.3E	383KM	6.0 SOLOMON IS	SBA 73
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 00 42 03	-0.12		6.7
				ZNE 51 00			
				ZNE 01 01 24			
				Z 09 28			31 10 6.9
AUG 13	04	28	23.2	6.0S 130.4E	127KM	5.0 BANDA SEA	SBA 74
				H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
				ZNE 04 39 48	-1.82		5.0
				Z 40 06			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 13	10 48 35	19.3S 177.6W	551KM	4.3 FIJI IS REGION	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 10 57 45		-1.65	4.7
AUG 13	18 26 30.7	10.5S 13.3W	33KM	5.1 ASCENSION IS	SBA 92
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 18 39 38		-1.93	5.6
AUG 14	07 08 55.9	9.8S 123.8E	33KM	TIMOR	SBA 71
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	NE 07 20 18			
AUG 14	21 48 31.2	18.8S 168.2E	26KM	4.6 NEW HEBRIDES IS	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	NE 21 58 31			
AUG 15	03 34 50.8	5.5S 104.1E	33KM	5.2 SOUTHERN SUMATRA	SBA 79
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	NE 03 46 55			
AUG 15	04 10 09.3	4.1S 104.7E	17KM	S SUMATRA	SBA 80
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	NE 04 22 22			
AUG 16	19 40 53.9	15.0S 175.8W	332KM	4.6 TONGA IS	SBA 63
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	NE 19 50 52			
AUG 17	11 45 01.2	18.0S 178.3W	648KM	5.1 FIJI IS	SBA 60
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	NE 11 54 13			
AUG 17	14 54 01.4	42.6N 142.8E	33KM	5.1 HOKKAIDO JAPAN	SBA 121
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E(PKP)	NE 15 13 10			
AUG 17	20 17 26.6	27.8S 70.5W	33KM	4.6 N CHILE	SBA 69
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA E(P)	NE 20 28 49			
AUG 17	22 02 35.1	24.5S 176.8W	33KM	4.5 S CF FIJI IS	SBA 54
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	NE 22 11 59			
AUG 18	04 44 58.0	26.4S 71.5W	8KM	6.4 OFF N CHILE	SBA 71
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 04 56 15.8 UNW		1.03	8.3
		Z 05 05 31			
		Z 10 04			
		EPKPPKP ZNE 24 04			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 19	01 30 57.4	61.2S 27.8W	33KM	S SANDWICH IS	SBA 41
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 01 38 41		-0.75	6.0
AUG 19	09 33 10.0	28.2N 52.6E	50KM	5.6 S IRAN	SBA 122
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 09 52 00			
		Z 10 34 14			3 20
AUG 19	15 20 13.9	28.2N 52.7E	52KM	5.6 S IRAN	SBA 122
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 15 39 05			
		Z 16 20 59			
AUG 20	04 18 01	4.1N 95.4E	93KM	N SUMATRA	SBA 90
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 04 30 53			
AUG 20	05 39 47.7	28.2N 52.6E	52KM	5.5 S IRAN	SBA 122
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 05 58 40			
AUG 20	08 32 43.1	29.7S 177.9W	80KM	4.4 KERMADEC IS	SBA 49
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 08 41 24			
AUG 20	12 48 47.7	37.4S 78.3E	33KM	MID-INDIAN RISE	SBA 53
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 12 58 05		-1.47	5.6
		E 13 05 42			
		ELR ZNE 14 34			4 22
AUG 20	16 17 48.2	60.3S 27.1W	33KM	S SANDWICH IS	SBA 42
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 16 25 37		-1.63	5.1
AUG 21	23 49 13.6	18.7S 169.1E	81KM	NEW HEBRIDES IS	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 23 59 08		-1.81	5.4
AUG 21	23 58 56.6	12.2S 110.5E	35KM	5.3 NW OF AUSTRALIA	SBA 71
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 00 10 17			
AUG 22	05 42 39	34.9S 15.1W	33KM	TRISTAN DA CUNHA	SBA 68
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 05 53 38			
AUG 23	09 35 25.0	4.5S 138.4E	163KM	5.0 W NEW GUINEA	SBA 75
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 09 46 46			
		E*PP ZN 47 26			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 23	13	26	25.4	21.6S 69.6W	71KM	4.2 N CHILE	SBA 76
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZN 13 38 05			
AUG 23	15	24	05.3	6.1S 149.4E	63KM	4.9 NEW BRITAIN	SBA 72
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 15 35 26		-0.99	6.0
		ES		ZNE 44 48			16 9 7.0
		ESS		ZNE 49 20			
		E(SSS)		ZNE 53 05			9 25 9 20
		ELQ		NE 55 02			
		ELR		ZNE 57 53			11 21 8 21 4 21
AUG 24	10	37	23.4	1.5S 78.1W	173KM	5.1 ECUADOR	SBA 94
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZN 10 50 22		-1.71	5.6
AUG 24	17	26	15.1	0.2N 123.8E	127KM	5.4 N CELEBES	SBA 81
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZN 17 38 19.0		-1.18	5.7
AUG 24	21	56	54.2	58.4N 150.3W	22KM	5.8 GULF OF ALASKA	SBA 139
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 22 16 15			
		ELR		Z 23 03 39			
AUG 25	02	56	17	7.0S 129.4E	143KM	5.0 BANDA SEA	SBA 73
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 03 07 36		-1.93	4.9
AUG 25	05	46	12.1	5.4S 147.1E	203KM	5.0 E NEW GUINEA	SBA 73
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZN 05 57 24			
		E(*SP)		Z 58 46			
AUG 25	07	45	47.1	37.6S 73.7W	24KM	4.5 NEAR CENTRAL CHILE	SBA 59
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 07 55 52			
AUG 25	13	47	20.6	78.2N 126.6E	50KM	6.1 SEVERNAYA ZEMLYA	SBA 157
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZNE 14 07 10			
		EPKP2		ZNE 42			
		EPP		Z 11 26			
		E(PPS)		Z 24 44			
AUG 25	21	03	30	19.5S 176.9W	444KM	4.2 FIJI IS	SBA 59
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZN 21 12 45			
AUG 26	03	18	44.1	52.1N 30.1W	33KM	5.4 N ATLANTIC RIDGE	SBA 153
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 03 38 33			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 26	12	59	31.1	0.2N 126.6E	33KM	4.5 HOLUCCA PASSAGE	SBA 81
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 13 11 42		-2.11	5.1
AUG 27	04	45	02.6	5.6S 133.9E	9KM	5.1 AROE IS	SBA 74
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 04 56 42		-1.71	5.5
		PCP		Z 59			
AUG 27				ZNE 06 26 47		-1.71	
AUG 27	07	53	54.8	17.5S 173.0W	33KM	5.3 TONGA IS	SBA 61
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 08 04 07		-1.50	5.7
		E(PS)		NE 12 35			
		ELQ		NE 19 43			
		ELR		ZNE 23 26			
AUG 27	08	27	43	6.5N 123.5E	33KM	5.1 PHILIPPINE IS	SBA 88
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 08 40 20			
AUG 27				ZNE 09 21 28		-1.74	
AUG 27				E 09 31 18			
		ELQ		E 33 32			
		ELR		ZNE 34 39			
AUG 27	11	58	41.3	28.2N 55.7E	69KM	5.1 S IRAN	SBA 122
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		Z 12 17 28			
AUG 27	12	56	46.1	27.5N 55.9E	33KM	5.3 S IRAN	SBA 121
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 13 15 42			
AUG 27	15	37	52	3.0S 103.1E	506KM	S SUMATRA	SBA 82
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 15 49 19			
AUG 27	21	23	38.4	22.7S 172.0E	33KM	LOYALTY IS	SBA 55
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZN 21 33 12		-1.81	5.3
AUG 27	23	48	26.3	21.6S 175.3W	60KM	5.2 TONGA IS	SBA 57
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 23 58 16		-1.78	5.4
AUG 28	04	35	29.3	19.8S 178.2W	580KM	5.4 FIJI IS	SBA 59
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 04 44 33.0 U		-0.61	5.7
		I		Z 45 50			
		E*PP		Z 46 25			
		SCP		Z 48 21			
		EPKPPKP		Z 05 14 10			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 28	08	25	08.9	18.2S 174.6W	70KM	4.4 TONGA IS	SBA 60
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 08 35 14		-1.81	5.4
AUG 28				ZNE 13 34 24		-1.63	
AUG 28	13	22	05	7.6N 95.6E	33KM	5.2 NICOBAR IS	SBA 93
	SBA	EP		ZNE 13 35 15			5.9
AUG 28	14	42	18.5	24.4S 179.8E	549KM	4.9 S OF FIJI IS	SBA 54
	SBA	EP		Z 14 50 52		-1.58	4.8
AUG 29	06	05	24.2	19.3S 66.3W	232KM	5.0 S BOLIVIA	SBA 78
	SBA	EP		ZNE 06 17 02			
AUG 29	12	49	58.3	13.3S 172.4E	33KM	4.9 NEW HEBRIDES IS	SBA 65
	SBA	EP		ZNE 13 00 32		-1.71	5.4
AUG 29	13	25	25.9	13.7S 172.6E	33KM	5.0 NEW HEBRIDES IS	SBA 64
	SBA	EP		ZNE 13 36 00			
AUG 29	17	26	55.5	20.7S 174.1W	33KM	4.4 TONGA IS	SBA 58
	SBA	EP		ZNE 17 36 48		-1.95	5.2
AUG 29				ZNE 21 27 14		-1.81	
				ZNE 29 06			
AUG 29	21	36	50.8	14.9S 172.8W	33KM	4.7 SAMOA IS	SBA 64
	SBA	EP		ZNE 21 47 23		-1.82	5.3
				NE 53			
AUG 30				ZNE 01 08 05			
				Z 09 58			
AUG 30	08	11	42.5	15.8S 174.9W	286KM	4.9 TONGA IS	SBA 63
	SBA	EP		Z 08 21 40		-1.83	4.9
AUG 30	08	47	34.7	5.0S 144.5E	93KM	5.8 NEW GUINEA	SBA 74
	SBA	EP		ZNE 08 59 01		-1.71	5.2
AUG 30	20	37	09.2	13.6S 172.4E	33KM	4.9 NEW HEBRIDES IS	SBA 64
	SBA	EP		ZNE 20 47 44		-1.23	5.9

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
AUG 30	21	44	56.9	19.9S 176.0W	253KM	5.6 FIJI IS	SBA 59
	SBA	IP		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
				ZNE 21 54 30.8		-1.17	5.5
AUG 30	22	30	24.8	13.7S 172.9E	33KM	NEW HEBRIDES IS	SBA 64
	SBA	EP		ZNE 22 40 59		-1.23	5.9
AUG 31	02	14	20.3	35.2S 106.0W	33KM	5.2 EASTER IS CORD	SBA 55
	SBA	EP		ZNE 02 23 52		-1.53	5.6
				N 37 52			
				Z 40 24			
AUG 31	23	20	19.4	52.4N 170.7W	33KM	5.2 ALEUTIAN IS	SBA 131
	SBA	EPKP		ZN 23 39 29			
				Z 42 47			
SEP 01	17	16	40.4	51.2N 170.6W	25KM	5.5 ALEUTIAN IS	SBA 130
	SBA	EPKP		ZNE 17 35 47			
SEP 01	20	48	39	57.2S 147.1E	33KM	W OF MACQUARIE IS	SBA 22
	SBA	EP		ZNE 20 53 30		-1.08	5.2
				ZNE 57 35			
SEP 02	21	32	39.6	18.6S 169.4E	218KM	4.9 NEW HEBRIDES IS	SBA 59
	SBA	P		ZNE 21 42 20		-1.71	5.0
SEP 03				ZNE 06 07 38		-1.17	
				Z 11 24			
SEP 03	10	06	55.9	30.9S 68.4W	113KM	5.1 ARGENTINA	SBA 67
	SBA	EP		ZNE 10 17 36		-1.63	5.3
SEP 03				ZNE 10 26 24		-1.65	
				ZNE 27 29			
				Z 47 02			
SEP 03	11	23	03	28.4S 177.1W	312KM	3.9 KERMADEC IS	SBA 50
	SBA	EP		Z 11 31 30			
				ZNE 40			
SEP 03	12	57	22.3	17.9S 178.0W	567KM	FIJI IS	SBA 60
	SBA	EP		Z 13 06 40		-1.93	4.4
SEP 03	16	58	55.4	15.2S 173.5W	33KM	5.1 TONGA IS	SBA 63
	SBA	IP		ZNE 17 09 25.4 U		-1.58	5.6

ELR	Z	27 50				
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
SEP 03	22 19 23.1	6.4S 128.5E	218KM	BANDA SEA	SBA	74
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA P	ZNE 22 30 39			-1.83		
						5.0
SEP 04	09 36 58.7	18.3S 69.0W	101KM	5.4 N CHILE	SBA	79
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 09 48 53			-1.81		
						5.1
SEP 04	10 34 13.1	4.0S 131.4E	33KM	5.9 BANDA SEA	SBA	76
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA P	ZNE 10 46 00					
ES	ZNE 55 44					
ELQ	E 11 06 52					
ELR	ZNE 11 29				20 20	21 19 17 21
SEP 04	11 39 24.0	17.6S 168.6E	33KM	NEW HEBRIDES IS	SBA	60
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	Z 11 49 34			-1.81		
						5.4
SEP 04	14 50 34	24.3S 179.1E	548KM	S CF FIJI IS	SBA	54
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA P	ZNE 14 59 09			-1.47		
						5.0
SEP 04	16 10 53.0	4.0S 131.5E	37KM	4.7 BANDA SEA	SBA	76
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 16 22 40			-1.82		
						5.2
SEP 04	17 10 28.4	3.9S 131.5E	33KM	4.8 W NEW GUINEA	SBA	76
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA P	ZNE 17 22 17			-1.50		
						5.6
SEP 05	SBA EP	ZNE 02 17 38				-1.95
SEP 05	02 09 21.4	24.4S 68.2W	64KM	4.9 CHILE-ARGENTINA	SBA	73
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 02 20 46			-1.93		
						5.0
SEP 05	02 17 14.4	32.2S 179.5E	397KM	4.6 S CF KERMADEC IS	SBA	46
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA P	ZNE 02 25 03			-1.71		
EPCP	ZNE 26 29					
						4.7
SEP 05	02 53 50.6	5.8S 154.0E	69KM	6.4 SOLOMON IS	SBA	72
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA IP	ZNE 03 05 11.8 U				30 7	
S	ZNE 14 38				15 8	41 12 7.2
SS	ZNE 19 15					
EL	ZNE 23 06				26 17	20 18 11 17
SEP 05	04 09 51.6	6.0S 153.8E	81KM	4.8 NEW BRITAIN	SBA	72
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 04 21 09			-1.93		
						5.0

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)		
SEP 05	07 20 45	33.6S 77.6E	33KM	MID-INDIAN RISE	SBA	57
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 07 30 34					
SEP 05	11 55 37	54.0S 141.1E	33KM	W CF MACQUARIE IS	SBA	26
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 12 01 09			-1.73		
						4.7
SEP 05	18 46 19	53.9S 140.4E	33KM	W CF MACQUARIE IS	SBA	26
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 18 51 50					
SEP 06	03 27 47.9	17.8S 168.2E	33KM	4.8 NEW HEBRIDES IS	SBA	60
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 03 37 52					
SEP 06	03 38 48.8	46.7S 13.5W	33KM	4.8 S ATLANTIC RIDGE	SBA	56
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 03 48 25			-1.30		
						5.8
SEP 06	07 50 12.6	48.1S 104.1E	33KM	SE INDIAN RISE	SBA	38
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 07 57 27			-1.28		
EL	N 08 07 41					
EL	ZE 08 46				3 22	
SEP 06	09 21 22.4	20.3S 178.9W	621KM	4.2 FIJI IS	SBA	58
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA P	ZNE 09 30 20			-1.68		
						4.6
SEP 06	11 15 27.9	6.0S 153.7E	90KM	4.5 NEW BRITAIN	SBA	72
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 11 26 46					
SEP 06	16 13 23.2	21.5S 66.8W	233KM	4.7 S BOLIVIA	SBA	76
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 16 24 49			-1.70		
						5.1
SEP 06	18 41 01.8	10.0N 140.2E	33KM	5.1 W CAROLINE IS	SBA	89
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 18 53 56			-1.57		
						5.8
SEP 06	18 57 20.4	7.1N 93.7E	46KM	5.2 NICOBAR IS	SBA	93
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP?	Z 19 10 35					
E(*SP)	ZN 47					
SEP 06	20 34 22.2	4.7S 144.8E	76KM	5.7 NEW GUINEA	SBA	74
		H M S	DIR	LOG _a /T	AZ TZ	AN TN
SBA EP	ZNE 20 45 52					

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 06	21 05 48	6.0S 107.1W	33KM	5.0 EASTER IS CORD	SBA 83
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 21 18 12		-1.52	5.7
SEP 07	11 29 17.6	4.1S 151.7E	246KM	NEW BRITAIN	SBA 74
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 11 40 29			
	E*PP	Z 41 31			
SEP 07	11 27 15	15.7N 53.3E	33KM	4.6 ARABIAN SEA	SBA 110
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EPKP?	Z 11 45 37			
	ELR	ZNE 12 18 19		4 23 3 20	
SEP 07	15 13 14.1	10.1S 161.1E	38KM	5.0 SOLOMON IS	SBA 68
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 15 24 15		-2.11	5.1
SEP 08	05 55 19	20.5S 176.2W	33KM	4.5 FIJI IS	SBA 58
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 06 05 11		-1.95	5.2
SEP 08	07 54 57.9	5.8N 126.1E	177KM	5.4 PHILIPPINE IS	SBA 86
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 08 07 24		-1.93	5.0
SEP 08	11 15 35	17.4S 173.5W	33KM	5.0 TONGA IS	SBA 61
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 11 25 48		-1.93	5.3
SEP 08	13 41 44.1	24.1S 177.6W	165KM	4.8 S CF FIJI IS	SBA 54
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 13 50 56			
	E	Z 51 12			
SEP 08	14 09 19.2	23.8S 177.5W	213KM	4.7 S CF FIJI IS	SBA 55
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 14 18 27			
	E*PP	Z 19 22			
SEP 08	17 05 23.4	20.4S 178.3W	539KM	5.4 FIJI IS	SBA 58
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 14 21 51		-1.16	5.2
SEP 08	17 05 23.4	20.4S 178.3W	539KM	5.4 FIJI IS	SBA 58
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 17 14 27		-1.30	5.1
SEP 08	20 22 54.2	6.9N 126.4E	33KM	PHILIPPINE IS	SBA 87
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 20 35 43		-2.13	5.2

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
EP 09	05 30 44.7	24.1S 177.1W	33KM	4.2 S CF FIJI IS	SBA 54
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 05 40 13		-1.93	5.2
	(*PP)	ZNE 18.6			
EP 11		Z 04 35 11		-1.60	
	SBA EP	Z 36 04			
EP 11	11 04 39	26.4S 177.8W	217KM	4.7 S CF FIJI IS	SBA 52
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	Z 11 13 28		-1.65	5.0
EP 12	06 30 00	1.7N 127.8E	172KM	HALMAHERA	SBA 82
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 06 42 04		-1.73	5.1
EP 12	10 48 19.2	24.7S 170.5E	33KM	4.0 LOYALTY IS	SBA 53
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 10 57 38			
EP 12	12 43 19.0	4.4S 144.0E	120KM	6.3 NEW GUINEA	SBA 74
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 12 54 46		-0.71	6.1
	E	55 33			
	S	NE 13 04 17			8 9 22 11 6.8
	N	49			10 50
	E	15 47			16 46
	LQ	19 11			
	LR				
EP 12	15 19 22.3	17.4S 179.9W	561KM	5.8 FIJI IS	SBA 61
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 15 28 41		-1.19	5.2
	E*PP	Z 30 39			
	E	ZE 43			
EP 12	22 07 03.2	49.1S 164.2E	33KM	6.9 AUCKLAND IS	SBA 29
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 22 13 03		0.45	7.1
	EPP	N 14 03			
	E	15 29			
	EPCS	N 19 55			
EP 13	00 21 06.7	49.3S 163.7E	33KM	AUCKLAND IS	SBA 29
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 00 27 05		-1.01	5.6
EP 13	11 03 50.0	19.8S 177.7W	357KM	5.2 FIJI IS	SBA 59
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 11 13 13		-1.50	5.0
EP 13	15 07 31.9	49.4S 163.3E	33KM	AUCKLAND IS	SBA 29
		H M S DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 15 13 27		-1.50	5.1

SEP	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
SEP 13	15 52 24	15.8S 172.9W	33KM	4.7	SAMOA IS	SBA 63
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 16 02 47		-1.95		5.2
SEP 14	10 17 46.6	56.7N 157.4W	61KM	5.7	ALASKA	SBA 136
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 10 37 03				
SEP 14	11 58 31	41.9S 89.5W	33KM	4.5	S PACIFIC OCEAN	SBA 52
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 12 07 44				
		ZNE 23 07				
		Z 31 15			2 8	
SEP 14	12 56 32.2	9.5S 111.8E	127KM		S OF JAVA	SBA 74
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 13 07 56		-2.12		4.7
SEP 14	20 40 26.5	45.2N 150.3E	33KM	5.0	KURILE IS	SBA 123
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 20 59 22				
SEP 15	01 00 08.0	15.6S 175.9W	9KM	4.9	TONGA IS	SBA 63
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 01 10 37		-1.73		5.5
SEP 15	05 37 45.4	0.1S 124.6E	33KM	5.3	MOLUCCA SEA	SBA 81
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 05 49 57.7	U	-1.29		5.9
		ZNE 06 00 04				
		ZNE 04 50				
		ZNE 15 58			4 20	
SEP 15	08 57 56.5	56.4S 27.2W	33KM	6.1	S SANDWICH IS	SBA 46
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 09 06 18		-1.65		5.2
SEP 15	11 44 13.7	22.2S 175.2W	33KM	4.7	TONGA IS	SBA 56
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 11 53 52		-1.81		5.3
SEP 15	12 44 12.2	16.0S 172.9W	33KM	5.3	SAMOA IS	SBA 63
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 12 54 36		-1.27		5.9
		ZNE 13 13 10				
SEP 15	13 12 54	15.8S 173.1W	33KM	4.6	TONGA IS	SBA 63
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 13 23 18				
SEP 15	15 29 32.2	8.9N 93.1E	37KM	6.2	NICOBAR IS	SBA 95
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 15 42 54		-1.35		6.2
		Z 43 13				

SEP	H M S	EPICENTRE	DEPTH	MAG		DIST (DEG)
SEP 15	16 13 33	41.6S 73.6W	82KM	4.2	S CHILE	SBA 55
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 16 23 02				
		ZNE 12				
SEP 15	18 37 10.1	6.6S 146.8E	59KM	5.1	E NEW GUINEA	SBA 72
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		Z 18 48 30				
SEP 15	20 23 35.2	54.5S 53.4W	33KM	5.2	S ATLANTIC OCEAN	SBA 46
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 20 31 55		-1.29		5.6
		ZN 38 25				
		ZNE 45 40				
SEP 15	21 00 31.7	58.7S 66.5W	33KM	5.2	DRAKE PASSAGE	SBA 40
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 21 08 06		-1.44		5.3
SEP 16	01 26 26.9	10.9S 93.1E	47KM	5.7	ANDAMAN IS	SBA 76
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 01 39 56		-1.81		5.2
		NE 02 07 42				
		ZNE 13 21			5 22	
SEP 16	01 50 33.9	60.0N 147.1W	29KM	5.5	S ALASKA	SBA 140
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 02 10 00				
		Z 13 36				
		ZNE 53 35				
SEP 16	05 20 46.1	5.9S 152.0E	29KM	6.2	NEW BRITAIN	SBA 72
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 05 32 12		-0.96		6.1
SEP 16	20 47 16.0	16.1S 176.5W	352KM	5.1	FIJI IS	SBA 62
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 20 57 04		-1.82		4.9
SEP 17	06 59 37.8	26.5S 176.4W	33KM	4.8	S CF FIJI IS	SBA 52
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 07 08 46		-1.34		5.7
SEP 17	07 41 13.9	15.6S 72.9W	118KM	5.0	S PERU	SBA 81
		H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
		ZNE 07 53 18		-1.68		5.2

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 17	15	02	00.9	44.5N 31.3W	24KM	5.6 N ATLANTIC RIDGE	SBA 146
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP?	Z	15 21 38				
	IPKP	Z	39.8				
SEP 17	15	06	13.8	12.8S 168.9E	622KM	4.5 SANTA CRUZ IS	SBA 65
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P	ZNE	15 15 55				4.8
							-1.73
SEP 18	13	06	00.2	5.9S 103.4E	86KM	5.3 S SUMATRA	SBA 79
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZN	13 18 05				
SEP 18	13	12	42.3	39.8N 29.7W	20KM	5.5 AZORES IS	SBA 141
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	Z	13 32 08				
SEP 20							
SBA	EP	ZNE	02 43 54				-1.81
SEP 20	04	20	17.6	49.5S 116.2W	33KM	4.5 EASTER IS CORD	SBA 39
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	04 27 51				
SEP 20	04	33	29.4	49.6S 116.2W	33KM	5.2 EASTER IS CORD	SBA 39
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	04 41 03				5.6
	ELQ	N	50 01			23 34	
	ELR	ZE	52 12			11 20	13 19
SEP 20							
SBA	EP	ZNE	22 24 43				-1.81
SEP 21	04	23	19.7	21.8S 179.6W	609KM	5.4 FIJI IS	SBA 56
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	IP	ZNE	04 32 06.8				5.6
	E*PP	Z	34 06				
	ES	NE	39 18				
SEP 21	05	37	48.9	7.0S 129.4E	123KM	5.2 BANDA SEA	SBA 73
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	05 49 11				5.1
SEP 21	08	30	54.4	2.1S 128.3E	36KM	5.7 CERAM SEA	SBA 78
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	08 42 53				5.4
SEP 21	12	01	46.6	17.8S 167.3E	33KM	5.1 NEW HEBRIDES IS	SBA 60
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	12 11 53				5.6
SEP 21	14	17	54.4	36.2S 100.2W	33KM	4.8 S PACIFIC OCEAN	SBA 56
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P	ZNE	14 27 29				5.4
							-1.71

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 21	18	10	51.6	30.1S 179.5W	319KM	5.2 KERMADEC IS	SBA 48
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	18 19 05				4.6
	E(PCP)	Z	20 20				-1.78
SEP 22	09	05	06.4	23.9S 70.7W	33KM	4.7 N CHILE	SBA 73
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	IP	ZNE	09 16 36.7				5.7
							-1.41
SEP 22	20	39	07.0	2.8S 141.0E	84KM	5.7 NEW GUINEA	SBA 76
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	20 50 49				5.0
							-1.95
SEP 23	04	59	47.4	53.6N 163.9W	29KM	5.5 UNIMAK IS	SBA 132
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	ZNE	05 19 16				
	ESKP	Z	22 23				
SEP 23	07	52	39	13.1S 14.8W	33KM	5.0 S ATLANTIC RIDGE	SBA 89
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	08 05 34				5.6
							-1.81
SEP 23	17	18	12.1	5.8N 126.4E	132KM	PHILIPPINE IS	SBA 86
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	17 30 42				5.1
							-1.83
SEP 23	20	39	07.0	2.8S 141.0E	84KM	5.7 NEW GUINEA	SBA 76
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	20 50 49				5.0
							-1.95
SEP 24	09	14	38.6	5.6S 151.8E	35KM	5.3 NEW BRITAIN	SBA 73
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	09 26 06				
SEP 24	13	59	36.8	43.5N 127.5W	14KM	6.1 OFF OREGAN	SBA 127
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	Z	14 18 45				
SEP 25	15	42	17.9	50.3N 176.6E	30KM	5.5 ALEUTIAN IS	SBA 128
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	ZNE	16 01 21				
SEP 25	20	28	33.5	3.8S 139.0E	171KM	5.8 W NEW GUINEA	SBA 75
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	20 40 01				
SEP 25	23	27	49.7	30.7S 179.9W	424KM	5.3 KERMADEC IS	SBA 48
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P	ZNE	23 35 48				5.4
	E	Z	36 15				
	(*PP)	ZNE	37 10				
	SCP	ZNE	40 24				
	ESCS	N	45 08				

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
SEP 26	00 46 02.8	30.1N 80.7E	50KM	6.2 TIBET-INDIA BORDER	SBA 118
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZNE 01 04 46			
	ELR	ZNE 41 59		4 24	
SEP 26	03 38 32.7	17.7S 173.3W	33KM	5.1 TONGA IS	SBA 61
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 03 48 45		-1.58	5.6
	ES	E 57 13			4 9 6.3
	ELR	ZN 04 07 20			
SEP 26	07 50 19	49.0S 164.5E	33KM	5.2 AUCKLAND IS	SBA 29
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 07 56 22		-2.11	4.5
	ELR	ZNE 08 03 48			
SEP 26	22 55 14.8	4.9S 153.5E	34KM	5.5 NEW IRELAND	SBA 73
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 23 06 45		-0.99	6.1
SEP 27	06 36 25.3	16.1S 176.0W	332KM	4.5 FIJI IS	SBA 62
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 06 46 16		-1.82	4.9
SEP 27	07 53 53.4	2.2N 126.5E	70KM	5.3 MOLUCCA PASSAGE	SBA 83
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 08 06 14		-1.95	5.1
SEP 27	09 53 36.6	2.3N 126.7E	100KM	5.1 MOLUCCA PASSAGE	SBA 83
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 10 05 52		-1.28	5.7
SEP 27	13 24 23.9	28.3S 178.3W	220KM	4.2 KERMADEC IS	SBA 50
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	ZN 13 32 59		-1.41	5.1
SEP 27	15 24 17.2	11.3S 116.6E	33KM	5.2 S OF SUMBAWA IS	SBA 71
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 15 35 40			
SEP 27	15 50 54.7	56.6N 152.0W	27KM	5.4 KODIAK IS	SBA 137
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EPKP	ZN 16 10 18			
	ELR	Z 55 16			
SEP 27	22 01 40.2	5.5S 151.6E	50KM	5.4 NEW BRITAIN	SBA 73
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 22 13 06		-1.93	5.1
SEP 27	22 58 29.3	21.4S 68.7W	132KM	5.4 NEW BRITAIN	SBA 76
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZN 23 10 05		-1.87	4.9

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
EP 28	05 39 34.8	40.0S 74.1W	33KM	4.7 S CHILE	SBA 57
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 05 49 18		-1.81	5.3
EP 28	06 51 05.3	36.3N 71.6E	118KM	5.5 AFGHANISTAN-USSR	SBA 126
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA E(=PPKP)	ZN 07 10 23			
EP 28	12 53 55.1	22.0S 179.4W	548KM	4.1 S OF FIJI IS	SBA 56
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA P	ZNE 13 02 47		-1.81	4.6
EP 28	22 39 46	2.5S 138.7E	82KM	4.7 W NEW GUINEA	SBA 77
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA E(P)	Z 22 51 49			
EP 29	05 30 59.5	18.1S 175.4W	197KM	4.8 TONGA IS	SBA 60
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 05 40 51		-1.82	5.0
EP 29	14 00 14.9	20.4S 174.4W	29KM	5.7 TONGA IS	SBA 58
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA IP	ZNE 14 10 10.4 U		-0.42	6.8
	S	ZNE 18 19			
	E	E 20 04			
	LQ	E 25 14			
	LR	ZN 26 58			12 20 11 20
EP 30	03 47 00.3	22.9S 179.1W	368KM	3.9 S OF FIJI IS	SBA 55
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 03 56 01		-1.58	4.9
EP 30	08 23 12.2	32.5S 71.6W	33KM	4.3 CENTRAL CHILE	SBA 65
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 08 33 49			
EP 30	14 46 28.9	11.6S 166.5E	118KM	3.9 SANTA CRUZ IS	SBA 66
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 14 57 06			
OCT 01	02 33 03	10.5S 13.3W	33KM	5.1 ASCENSION IS	SBA 92
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	Z 02 46 11			
OCT 01	02 47 43.7	4.0S 153.5E	128KM	NEW IRELAND	SBA 74
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EP	ZNE 02 59 08		-1.82	5.0
OCT 02	00 58 39.2	51.9N 142.9E	33KM	5.7 SAKHALIN IS	SBA 130
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA EPKP	Z 01 17 47			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 02	04	31	21.0	23.6S 179.6W	503KM	S OF FIJI IS	SBA 55
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 04 40 05		-1.52	4.9
OCT 02	09	47	27.2	10.4S 162.4E	58KM	SOLOMON IS	SBA 67
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		Z 09 58 18			
		E		ZNE 19			
OCT 02	13	00	39.7	10.5S 162.4E	68KM	SOLOMON IS	SBA 67
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 13 11 30		-0.49	6.5
		(*PP)		ZNE 44			
		S		ZNE 20 30			
		ELQ		NE 28 09			
		ELR		Z 29 38			
		EPKPPKP		ZNE 39 55			
						14 17	
OCT 02	16	52	06.4	21.7S 67.7W	49KM	CHILE-BOLIVIA	SBA 76
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 17 03 50		-1.68	5.3
OCT 02	22	23	32.4	59.7N 144.5W	22KM	GULF OF ALASKA	SBA 140
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZN 22 42 52			
OCT 03	01	55	00.2	21.0S 178.5W	547KM	FIJI IS	SBA 57
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZN 02 04 00		-1.95	4.4
OCT 03	13	39	39.9	61.4N 147.1W	48KM	S ALASKA	SBA 142
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZNE 13 59 12			
OCT 03	16	52	20.7	26.7S 177.7W	134KM	S OF FIJI IS	SBA 52
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 17 01 16		-1.63	5.3
OCT 03	22	00	53.8	10.3S 164.5E	66KM	SANTA CRUZ IS	SBA 68
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 17 11 56		-1.27	5.8
OCT 03	22	41	09.0	20.2S 176.3W	219KM	FIJI IS	SBA 58
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 22 50 44.5 D		-1.47	5.3
OCT 04							
	SBA	EP		ZNE 01 46 33			
		ES		NE 51 22			
		ESS		Z 52 52			
		LQ		NE 53 14			
		ELR		Z 54 24			
						15 19	
OCT 04							
	SBA	EP		ZNE 09 26 33		-1.70	
		E(S)		N 32 06			
		EL		ZNE 33 34			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 05	03	35	08.4	42.6N 142.6E	38KM	HOKKAIDO JAPAN	SBA 121
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZN 03 53 57			
OCT 05	08	30	15.7	16.7S 173.7W	33KM	TONGA IS	SBA 62
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 08 40 35.3 U		-1.33	5.8
OCT 05	12	24	06.4	16.6S 174.2W	84KM	TONGA IS	SBA 62
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	IP		ZNE 12 34 20.7 U		-1.35	5.8
OCT 05	13	12	15.5	22.3S 171.6E	145KM	LOYALTY IS	SBA 56
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 13 21 38		-1.58	5.4
OCT 05	13	58	56.9	22.2S 175.8W	33KM	TONGA IS	SBA 56
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	P		ZNE 14 08 38		-1.52	5.6
OCT 06	07	17	57.1	36.2S 100.9W	33KM	S PACIFIC OCEAN	SBA 55
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 07 27 29		-1.44	5.7
		ELQ		N 40 59			21 26
		ELR		Z 43 40			17 28
OCT 06	14	29	55.6	40.2N 28.1E	10KM	TURKEY	SBA 139
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZNE 14 49 24			
OCT 06	14	31	19.2	40.3N 28.2E	10KM	TURKEY	SBA 139
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EPKP		ZNE 14 50 44			
		EPKP		ZNE 56			
		PP		ZE 53 38			
		PKS		NE 54 26			
		PPS		Z 15 06 06			
		ESSS		ZNE 17 14			82 18 56 20 34 18
		ELR		ZNE 37 08			
OCT 06	19	12	12.0	16.1S 168.6E	21KM	NEW HEBRIDES IS	SBA 62
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 19 22 32		-1.57	5.6
OCT 07	01	24	45.2	20.7S 177.8W	328KM	FIJI IS	SBA 58
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 01 34 05		-1.81	4.7
OCT 07	03	52	11.3	6.8S 155.2E	70KM	SOLOMON IS	SBA 71
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
	SBA	EP		ZNE 04 03 26			

	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
OCT 09	21	34	09.2	16.2S 171.9W	33KM	5.8	SAMOA IS	SBA 63
				H M S	DIR	LOG _a /T	AZ TZ AN TN	AE TE MAG
SBA P				ZNE 21 44 32			4 4	6.9
E(PS)				NE 53 13				
ELQ				E 22 00 20				
ELR				ZNE 08 02 17			3 19	
OCT 10	07	56	40.5	25.2S 180.0E	432KM	3.8	S OF FIJI IS	SBA 53
SBA EP				Z 08 05 17				
OCT 10	08	31	07.7	23.8S 179.7W	441KM		S OF FIJI IS	SBA 54
SBA EP				ZNE 08 39 55				4.9
OCT 10	17	13	30	30.2S 179.3W	294KM		KERMADEC IS	SBA 48
SBA EP				Z 17 21 45				
OCT 10	19	38	47.7	60.4N 146.1W	44KM	5.3	S ALASKA	SBA 141
SBA EPKP				Z 19 58 12				
ELR				ZNE 20 52 38				
OCT 10	20	06	39.8	60.5N 145.4W	31KM	5.4	S ALASKA	SBA 141
SBA EPKP				ZNE 20 26 05				
ELR				Z 21 18 04			3 17	
OCT 11	00	13	13.4	16.2S 168.2E	17KM	5.3	NEW HEBRIDES IS	SBA 62
SBA EP				ZNE 00 23 33				5.4
OCT 11	10	21	01.1	6.3S 145.7E	138KM	5.0	NEW GUINEA	SBA 72
SBA EP				Z 10 32 16				
E*PP				ZNE 55				
ELR				ZNE 51 52				
OCT 11	11	10	33.6	13.6S 166.6E	68KM	5.0	NEW HEBRIDES IS	SBA 64
SBA P				ZNE 11 21 03				5.6
E*SP				ZE 25				
OCT 11	14	19	11.5	17.9S 71.5W	35KM	5.2	PERU	SBA 79
SBA EP				ZNE 14 31 16				5.3
OCT 11	20	52	14.0	15.1S 167.6E	241KM		NEW HEBRIDES IS	SBA 63
SBA P				ZNE 21 02 16				5.1

	H	M	S	EPICENTRE	DEPTH	MAG		DIST (DEG)
OCT 11	21	15	03.9	0.6S 121.7E	33KM	6.3	N CELEBES	SBA 81
SBA IP				ZNE 21 27 16.3				7.3
S				ZNE 37 28			12 15	6.7
ESS				ZNE 42 35				
SSS				Z 46 04			9 24	
ELQ				NE 48 43			75 18 61 18	36 34 58 19
LR				ZNE 52 59				
OCT 11	23	33	23.9	6.0N 126.7E	121KM	5.4	PHILIPPINE IS	SBA 87
SBA EP				ZNE 23 43 54				
OCT 12	01	02	03	12.3S 166.7E	35KM		SANTA CRUZ IS	SBA 66
SBA EP				ZN 01 12 44				5.2
OCT 12	SBA EP			ZNE 05 57 06				-1.78
ELR				ZNE 06 11 49				
OCT 12	SBA EP			ZNE 08 37 34				-1.53
ES				N 44 34				
ESS				NE 47 52			4 24 4 24	
ELR				ZNE 51 28				
OCT 12	SBA EP			ZNE 08 39 27				-1.65
OCT 12	SBA EP			ZNE 08 44 03				-1.81
OCT 12	09	14	52.2	55.9S 144.1W	33KM	5.3	S PACIFIC CORD	SBA 28
SBA EP				ZNE 09 20 41				5.1
ES				E 25 32			5 18	2 11 5.4
LQ				NE 26 34			7 25	6 16
ELR				ZE 27 26				
OCT 12	13	55	21.5	14.8S 167.4E	131KM		NEW HEBRIDES IS	SBA 63
SBA P				ZN 14 05 38				5.1
OCT 12	15	42	54.7	3.0N 126.7E	59KM	5.9	TALAUD IS	SBA 84
SBA EP				ZNE 15 55 20				6.2
S				ZNE 16 05 40				
ESS				ZN 10 14			7 30 4 31	
ELQ				NE 17 44				
ELR				ZN 21 51				
OCT 12	21	55	33.2	31.3S 110.8W	25KM	6.0	EASTER IS	SBA 58
SBA EP				ZNE 22 05 26				6.6
S				ZNE 13 34				
ESS				Z 17 26			12 30	29 22
ELQ				N 20 24				
ELR				ZE 22 36				
EPKPPKP				Z 35 11				

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 13	03 13 42	16.3S 174.2W	167KM	4.7 TONGA IS	SBA 62
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZN 03 23 48		-1.65	5.3
OCT 13	05 31 43	1.9N 126.5E	16KM	5.1 MOLUCCA PASSAGE	SBA 83
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZNE 05 44 10			
OCT 13	10 38 59.3	3.3S 149.9E	59KM	5.1 BISMARCK SEA	SBA 75
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZNE 10 50 37		-1.31	5.7
		ES NE 11 00 18			
		ESS Z 04 49			
		ELQ E 10 41			
		ELR ZN 14 14		3 18	
OCT 13	18 12 14.5	22.1S 170.5E	41KM	4.7 LOYALTY IS	SBA 56
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZN 18 21 49		-1.95	5.2
OCT 13	23 02 26	35.8N 71.1E	120KM	5.8 W PAKISTAN	SBA 126
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EPKP		ZNE 23 02 16			
OCT 14					
SBA EP		ZNE 09 47 45		-1.78	
		EL ZNE 10 05 26			
OCT 14	12 06 38.1	5.7S 150.5E	89KM	4.0 NEW BRITAIN	SBA 73
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZN 12 17 59			
OCT 14					
SBA EP		ZNE 21 35 52		-2.11	
OCT 15	02 07 06.4	6.6S 154.8E	62KM	5.1 SOLOMON IS	SBA 71
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZNE 02 18 23			
OCT 15	20 26 53.5	44.7N 149.8E	49KM	5.2 KURILE IS	SBA 123
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EPKP		ZNE 20 45 44			
		ESP ZN 05 33			
		ESS NE 21 04 14			
		ESSS Z 08 09			
		ELR ZNE 23 26			
OCT 15	22 59 43.6	56.8N 151.9W	33KM	5.2 KODIAK IS	SBA 137
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EPKP		ZN 23 19 10			
OCT 16	06 15 31.5	23.6S 177.6W	178KM	5.5 S OF FIJI IS	SBA 55
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZNE 06 24 47		-1.26	5.6
		EPKP Z 25 44			
		S N 32 14		9 10	6.7

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
16	06 59 38.6	44.3N 149.5E	33KM	5.5 KURILE IS	SBA 122
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EPKP		ZNE 07 18 31			6.9
		EPP Z 20 10		5 11	
		ESKS N 25 36			
		ESKKS N 27 08			
		E E 28 18			
		EPS ZN 30 10			
		ESS ZNE 36 28			
		ELQ E 50 44			
		ELR Z 56 52			
16	07 21 42.7	44.2N 149.4E	33KM	5.2 KURILE IS	SBA 122
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EPKP		Z 07 40 38			
16	08 18 28.3	44.6N 149.4E	33KM	5.2 KURILE IS	SBA 123
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EPKP		Z 08 37 20			
		EPKP ZNE 26			
16	09 18 16.6	44.5N 149.1E	33KM	5.4 KURILE IS	SBA 123
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EPKP		Z 09 37 09			
17	01 38 36.0	7.0S 155.8E	58KM	4.7 SOLOMON IS	SBA 71
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA P		ZNE 01 49 50		-1.30	5.7
		ES NE 59 09			
		ESS ZN 02 03 24			
		ELQ E 08 30			
		ELR ZNE 11 15		4 21 4 20	
17	02 00 03.3	59.5N 145.5W	33KM	5.2 GULF OF ALASKA	SBA 140
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EPKP		Z 02 19 21			
17	03 17 28.1	0.7N 119.3E	62KM	5.4 N CELEBES	SBA 82
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA IP		ZNE 03 29 45.7		-1.56	5.5
17	05 55 54.4	22.3S 171.5E	116KM	5.3 LOYALTY IS	SBA 56
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA IP		ZNE 06 05 20.1			
		ES NE 13 06			
		ESS ZN 17 30			
		ELR ZNE 22 09		5 30	
17	08 06 17.2	37.2S 52.2E	33KM	S INDIAN OCEAN	SBA 59
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZNE 08 16 15		-1.28	5.9
		ELR ZNE 35 14			
17	10 02 37	21.8S 170.2E	33KM	LOYALTY IS	SBA 56
		H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA EP		ZNE 10 12 16		-1.83	5.3

ELR		Z	31 46						
H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
OCT 17 15 01 14.0	7.1S 129.4E	117KM	5.5	BANDA SEA	SBA	73			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA IP	ZNE 15 12 35.4	U	-1.63						
OCT 17 18 25 46.8	0.6S 122.2E	152KM	4.9	N CELEBES	SBA	81			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 18 37 46								
OCT 17	SBA EP	ZNE 22 01 54	-1.47						
	EL	ZNE 07 14		2 10					
OCT 18 06 16 35.2	44.4N 149.7E	33KM	5.1	KURILE IS	SBA	122			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EPKP	Z 06 35 29								
OCT 18 09 06 26.0	2.9N 65.7E	33KM	6.3	CARLSBERG RIDGE	SBA	95			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 09 19 54								
	ES	N 31 20							
	ELQ	N 46 45							
	ELR	ZE 51 30							
OCT 18 09 26 57.3	14.4S 167.0E	50KM	4.3	NEW HEBRIDES IS	SBA	63			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZN 09 37 26		-1.93						
OCT 18 12 32 24.1	7.0S 124.0E	574KM	5.8	BANDA SEA	SBA	74			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 12 43 03		-0.52	6 12					
	E*PP	ZNE 45 02							
	ES	ZNE 51 50							
	E*SS	NE 55 19							
	ESS	ZN 56 50							
	ESSS	ZN 13 00 21							
	E(L)	Z 02 46							
	ELR	ZN 09 09							
	EPKPPKP	ZNE 10 27							
	ESKPPKP	Z 12 45							
	EPKP(3)	ZNE 30 09							
	E	Z 32 56							
PHASE AT 13 32 56 IS SKPPKPPKP									
OCT 18 20 03 35	16.4S 174.3W	189KM	4.2	TONGA IS	SBA	62			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	Z 20 13 29								
OCT 18 22 31 37.7	19.4S 179.1W	666KM	4.8	FIJI IS	SBA	59			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA P	ZNE 22 40 38		-1.50						
	E*PP	Z 42 47							
OCT 18 23 52 34.3	5.9S 105.0E	79KM		SURDA STRAIT	SBA	78			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA IP	ZNE 24 04 27.9	D	-1.58						

H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)					
19 08 50 30.4	24.7S 179.6W	475KM	4.3	S OF FIJI IS	SBA	54			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZN 08 59 09		-1.78						
19 13 54 29.4	4.6S 152.9E	70KM	4.9	NEW BRITAIN	SBA	74			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	Z 13 40 57								
19 13 54 29.4	14.4S 166.4E	9KM	4.6	NEW HEBRIDES IS	SBA	63			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 14 05 03		-1.93						
19 21 17 59.8	36.1S 73.5W	33KM	4.9	CENTRAL CHILE	SBA	61			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 21 28 06		-1.61						
20 00 49 05.7	19.6S 174.8W	29KM	5.1	TONGA IS	SBA	59			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 00 59 06		-1.93						
20 00 49 05.7	19.6S 174.8W	29KM	5.1	TONGA IS	SBA	59			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 00 59 06		-1.93						
20 07 38 31.0	44.8N 111.6W	33KM	5.8	HEBGEN LAKE	SBA	132			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EPKP	Z 07 56 40								
20 10 08 46.7	14.1S 166.7E	45KM	4.4	NEW HEBRIDES IS	SBA	64			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 10 19 17		-1.95						
20 11 48 30.9	2.7S 138.9E	99KM		NEW GUINEA	SBA	77			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZNE 12 00 14		-1.95						
20 20 56 59	15.1S 173.0W	33KM	5.0	TONGA IS	SBA	64			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EP	ZN 21 07 28		-1.93						
20 23 09 18.8	28.1N 93.8E	37KM	5.9	INDIA-CHINA BORDER	SBA	114			
	H M S	DIR	LOG _a /T	AZ TZ	AN TN	AE TE	MAG		
SBA EPKP	ZNE 23 28 05								
	SKS	NE 34 48							
	SKKS	E 35 54							
	SP	ZNE 38 13							
	ESS	E 44 32							

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 23	01	56	03.2	19.8N 56.0W	31KM	6.4	N ATLANTIC OCEAN SBA 118
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	ZNE	02 14 49				
	EPP	ZNE	16 09				
	EPKS	N	18 26				
	E(SKKS)	NE	23 58				
	EPKKP	Z	25 07				
	EPS	ZNE	53				
	EPPS	Z	27 31				
	EPCPPKP	Z	28 42				
	ESS	ZNE	32 27				
	ELQ	NE	45 08				
	ELR	ZNE	53 35			16 18 18 22	
OCT 23	06	53	25.1	2.7S 142.1E	33KM	4.6	NEW GUINEA SBA 76
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	07 05 11				
OCT 23	09	39	06.2	28.2S 177.3W	68KM	4.6	KERMADEC IS SBA 50
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P	ZNE	09 48 03			-1.39	5.7
OCT 23	21	06	24.2	44.0N 147.5E	45KM	5.9	KURILE IS SBA 122
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	ZNE	21 25 16				
OCT 24						-1.82	
OCT 24	09	51	27.3	19.1S 169.7E	33KM	5.9	NEW HEBRIDES IS SBA 59
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	10 01 24			-1.71	5.5
OCT 24	22	04	57.5	4.5S 152.9E	49KM	5.8	NEW BRITAIN SBA 74
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	(P)	ZNE	22 16 11			-1.83	5.2
	E	Z	31				
OCT 25	06	25	48.6	2.0S 77.2W	160KM	5.3	PERU-ECUADOR SBA 93
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	06 38 48			-1.53	5.8
OCT 25	10	01	48	15.3S 173.3W	33KM	5.0	TONGA IS SBA 63
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	10 12 18			-1.71	5.5
OCT 25	12	08	46.9	21.7S 179.2W	534KM	5.5	FIJI IS SBA 57
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	IP	ZNE	12 17 42.4			-0.93	5.5
	E*PP	Z	19 41				
	SCP	Z	21 30				
OCT 25	22	56	32.8	2.0S 79.0W	57KM	5.4	ECUADOR SBA 93
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	23 09 43			-1.93	5.6

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
OCT 26	04	05	37.0	49.1S 163.7E	33KM	5.6	AUCKLAND IS SBA 29
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	04 11 35			-1.93	4.7
OCT 26	14	22	57.8	2.2N 126.8E	48KM	6.0	MOLUCCA PASSAGE SBA 83
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	IP	ZNE	14 35 19.4			-1.13	6.0
	ELR	ZNE	15 02 43				1 30
OCT 27	19	46	12.0	47.8N 16.1E	39KM	5.6	AUSTRIA SBA 148
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EPKP	ZNE	20 06 05				
OCT 27	20	00	35	27.6S 176.8W	168KM	4.5	KERMADEC IS SBA 51
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	20 09 28			-1.53	5.2
	ESS	Z	20 28				1 22
	ELR	Z	24 18				
OCT 27	21	24	31.2	45.6S 96.1E	33KM	5.6	SE INDIAN RISE SBA 42
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	21 32 20			-0.72	6.0
	EPP	ZE	34 10				12 7
	S	ZNE	38 46				19 11 11 8
	ESS	ZN	41 59				39 11 6.9
	ELQ	N	42 54				
	ELR	ZNE	44 19				53 17 47 17 79 21
OCT 27	22	36	18	58.5S 66.2W	33KM	5.4	DRAKE PASSAGE SBA 40
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	22 43 54			-0.98	5.8
	S	NE	50 07				
	E	Z	58 28				
	LQ	N	53 01				7 17 8 16 7 16
	ELR	ZNE	55 01				
OCT 28						-1.81	
OCT 29	06	51	46	13.4S 166.6E	43KM	4.9	NEW HEBRIDES IS SBA 64
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZNE	07 02 20			-1.52	5.6
OCT 29	19	09	59	17.8S 168.1E	33KM	4.4	NEW HEBRIDES IS SBA 60
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	19 20 06			-1.95	5.3
OCT 30	02	22	50.0	32.6S 69.9W	92KM	4.2	ARGENTINA SBA 65
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	ZE	02 20 05				
	S	N	27 56				15 42
	LQ	NE	33 52				
	ELR	Z	36 48				
OCT 31	08	50	14.0	14.4S 173.0W	235KM	4.1	SAMOA IS SBA 64
				H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP	Z	09 00 09				

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 01	02 56 41.4	25.1S 179.7W	459KM	5.0 S CF FIJI IS	SBA 53
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA P	Z	03 05 19			
NOV 01	12 26 06.2	3.1N 128.1E	65KM	6.3 N CF HALMAHERA	SBA 84
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA IP	Z	12 38 29.3 U			
S		NE 48 46			
LR		NE 13 01 09			
LQ		Z 06 14			
NOV 01	16 43 41	27.3S 178.5W	366KM	4.0 KERMADEC IS	SBA 51
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	Z	16 52 10			
NOV 02	05 03 52.3	7.5S 128.7E	48KM	4.5 BANDA SEA	SBA 73
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA P	ZNE	05 15 19			
NOV 02	06 50 58.2	4.1S 76.9W	91KM	6.0 N PERU	SBA 91
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA P	Z	07 03 56			
NOV 02	08 10 05.5	16.9S 169.7E	255KM	4.7 NEW HEBRIDES IS	SBA 61
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	Z	08 20 03			
NOV 03	12 43 04.7	0.1N 123.7E	149KM	5.4 N CELEBES	SBA 81
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA IP	ZNE	12 55 06.0 U			
NOV 03	18 28 58.6	1.7S 149.8E	35KM	5.8 NEW IRELAND	SBA 77
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	Z	18 40 51			
NOV 04					
SBA P	ZNE	02 43 14			
NOV 04	21 02 38.7	6.8N 125.4E	70KM	PHILIPPINE IS	SBA 88
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	ZNE	21 15 21			
NOV 05	01 47 42.1	5.1S 146.1E	137KM	E NEW GUINEA	SBA 74
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	ZNE	01 59 07			
NOV 05	04 19 39.5	5.5S 147.2E	197KM	E NEW GUINEA	SBA 73
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	Z	04 30 51			
NOV 05	07 01 15.3	9.2N 142.0E	33KM	4.8 CAROLINE IS	SBA 88
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	ZNE	07 14 07			

	H M S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 05	09 07 32	20.3S 174.0W	15KM	4.7 TONGA IS	SBA 58
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	Z	09 17 29			
NOV 06	09 53 22.4	44.4N 149.0E	60KM	5.7 KURILE IS	SBA 122
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EPKP	ZNE	10 12 13			
NOV 06	13 55 53.7	31.7S 57.4E	33KM	5.9 ATLANTIC RIDGE	SBA 63
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	ZNE	14 06 20			
S		ZNE 15 10			
EL		ZNE 25 48			
NOV 06					
SBA EP	ZN	16 28 46			
NOV 07	18 37 43.7	0.4N 100.1E	107KM	5.1 N SUMATRA	SBA 86
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	ZNE	18 50 13			
ES		NE 19 00 36			
ESS		E 06 41			
ELR		NE 17 06			
NOV 07	23 41 55.1	19.9S 177.4W	281KM	4.5 FIJI IS	SBA 59
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA IP	ZNE	23 51 24.0 D			
NOV 08	02 43 57	49.0S 163.7E	33KM	5.6 AUCKLAND IS	SBA 29
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	ZNE	02 49 57			
S		E 54 50			
LR		E 56 07			
NOV 09	04 44 19.9	7.2S 128.2E	129KM	5.3 BANDA SEA	SBA 73
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	ZNE	04 55 37			
NOV 12	05 33 29	18.2S 176.4W	107KM	5.2 FIJI IS	SBA 60
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA EP	Z	05 43 32			
S		E 51 58			
L		NE 06 01 16			
NOV 13	21 57 30	29.2S 178.1W	77KM	5.4 KERMADEC IS	SBA 49
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA IP	ZNE	22 06 13.0 D			
S		N 13 30			
LR		Z 20 10			
NOV 14	16 54 50.7	5.3S 148.8E	228KM	4.3 E NEW GUINEA	SBA 73
		H M S DIR	LOG _{A/T}	AZ TZ AN TN	AE TE MAG
SBA P	ZNE	17 05 59.3 D			

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 14	19	06	14.6	18.1S 168.0E	5KM	4.4	NEW HEBRIDES IS SBA 60
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				Z	19 16 22		
NOV 15	07	22	08.0	18.0S 178.3W	608KM	4.2	FIJI IS SBA 60
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	07 31 21.2 U		
NOV 15	16	45	44.8	49.5S 163.6E	33KM		AUCKLAND IS SBA 28
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZN	16 51 40		
NOV 16	08	54	09	56.1S 27.5W	163KM	4.9	S SANDWICH IS SBA 46
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	09 02 18		
NOV 16	22	40	44	1.0N 118.8E	33KM	6.7	BORNEO SBA 83
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	22 53 07		
				N	23 03 30		
				ZN	20 38		
NOV 17	00	01	17.1	16.3S 173.7W	33KM	5.4	TONGA IS SBA 62
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	00 11 39		
NOV 17	02	46	35	55.5S 27.9W	115KM	5.0	S SANDWICH IS SBA 47
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				Z	02 54 54		
NOV 17	08	15	39.3	5.7S 150.7E	45KM	6.7	NEW BRITAIN SBA 73
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	08 27 04.3 U	0.30	7.3
				S	36 32		
				PKPPKP	Z	54 43	
NOV 17	11	03	06.8	23.4S 179.9W	549KM	5.5	S OF FIJI IS SBA 55
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	11 11 48.1 U	-1.01	5.4
NOV 18	14	34	54.5	6.0S 148.2E	49KM	6.1	NEW BRITAIN SBA 72
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	14 46 18 U		
				ZNE	55 42	DSW	
				ZNE	15 00 09		
				ZNE	04 14		
				ZNE	08 06		
NOV 18	22	21	01.9	20.2S 174.1W	33KM	5.8	TONGA IS SBA 58
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	22 30 55.7 D		
				ZNE	39 04		
				E	40 56		
				Z	50 29		

	H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 18	23	35	03.9	20.1S 174.3W	33KM	5.1	TONGA IS SBA 59
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				Z	23 44 58		
NOV 19	15	45	31.2	3.4S 150.1E	38KM	5.7	NEW IRELAND SBA 75
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	15 57 11		
NOV 19	23	35	06.0	6.0S 150.8E	3KM	6.0	NEW BRITAIN SBA 72
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	23 46 35		
				ZNE	56 02		
NOV 20	23	55	06.8	6.9S 149.9E	33KM	5.6	NEW BRITAIN SBA 71
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				Z	00 14 25		
NOV 21	02	16	44.5	1.0N 124.0E	248KM	5.8	N CELEBES SBA 82
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	02 28		
				IS	NE 38 36	N	
				ELR	NE 50 00		
				ELQ	ZNE 53 18		
NOV 21	04	01	02.0	1.9N 96.8E	33KM	5.2	OFF N SUMATRA SBA 88
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	04 13 57		
NOV 21	06	19	16.0	14.9S 167.2E	97KM	5.1	NEW HEBRIDES IS SBA 63
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	06 29 35		
NOV 21	12	41	47.8	6.2S 150.5E	43KM	4.9	NEW BRITAIN SBA 72
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	12 52 11		
				S	NE 13 02 41		
				LR	Z	15 05	
NOV 21	15	34	13.2	12.8N 145.2E	35KM	5.2	S OF MARIANA IS SBA 91
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				Z	15 47 20		
				E(PP)	ZN 50 46		
				EL	Z	16 25 52	
NOV 21	22	40	11.6	4.9S 103.6E	33KM	5.4	S SUMATRA SBA 80
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				ZNE	22 52 17		
NOV 22	02	38	29.0	17.9S 178.5W	563KM	5.0	FIJI IS SBA 60
				H M S	DIR	LOG _a /T	AZ TZ AN TN AE TE MAG
				Z	02 47 47		

H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 22	02 40	55.9	22.1S 171.1E	106KM	5.3 LOYALTY IS	SBA 56
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P		ZNE 02 50 23.5			
	(PCP)		Z			
	LQ		Z 03 07 38			
	LR		E 04 42			
NOV 22	04 17	13	8.1S 108.4E	33KM	4.6 JAVA	SBA 76
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P		ZNE 04 28 57			
NOV 22	05 46	33.3	6.2S 150.4E	47KM	5.4 NEW BRITAIN	SBA 72
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	IP		ZNE 05 57 55.2 U			
	S		NE 06 07 35			
	E		ZN 23 08			
NOV 22	09 25	15.8	3.4S 130.7E	33KM	5.4 CERAM	SBA 77
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP		ZNE 09 37 07			
NOV 23	09 01	11.0	6.5S 150.7E	63KM	4.9 NEW BRITAIN	SBA 72
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P		ZNE 09 12 31			
NOV 23	19 45	09.0	56.0S 27.6W	33KM	5.5 S SANDWICH IS	SBA 46
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P		ZNE 19 53 32			
NOV 23	22 15	47.0	0.1S 124.5E	66KM	5.7 MOLUCCA SEA	SBA 81
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P		ZNE 22 27 56			
NOV 24	01 38	49.6	6.3S 150.7E	33KM	5.5 NEW BRITAIN	SBA 72
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	IP		ZNE 01 50 13.1 U			
NOV 24	05 48	32.8	8.2S 122.6E	33KM	5.1 FLORES IS	SBA 73
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P		ZE 06 00 03			
NOV 24	06 35	14.5	20.2S 179.2W	660KM	4.8 FIJI IS	SBA 58
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP		Z 06 44 11			
NOV 24	10 41	33.5	6.8S 107.4E	125KM	6.0 JAVA	SBA 77
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	IP		ZNE 10 53 14.8 U			6.0
NOV 24	12 40	51.4	13.1N 124.7E	5KM	6.1 PHILIPPINE IS	SBA 94
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP		ZNE 12 54 14			
	EPP		NE 58 08			
	ES		NE 13 04 48			

H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)
NOV 25	08 31	32.9	16.1S 175.1W	302KM	4.7 TONGA IS	SBA 62
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP		Z 08 41 27			
NOV 25	09 24	08.9	4.3S 122.2E	610KM	6.2 CELEBES IS	SBA 77
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	IP		ZNE 09 35 02			D
NOV 25	SBA	ES	NE 19 54 50			
			ZNE 58 20			
	ELR		ZNE 59 32			
NOV 26	10 21	07.2	24.9N 122.0E	33KM	5.4 TAIWAN	SBA 106
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	PS		NE 10 49 05			
	SS		ZNE 54 30			
	LQ		ZNE 11 04 20			
	LR		ZNE 07 25			
NOV 28	SBA	IP	ZNE 00 38 42.5 D			
	EL		NE 42 14			
NOV 28	16 41	33.4	7.7S 71.2W	626KM	5.4 W BRAZIL	SBA 89
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP		ZNE 16 53 22			
	EPP		ZNE 55 37			
	ESKS		E 17 02 52			
	ES		E 03 16			
	ESP		E 04 32			
	ESS		N 09 38			
NOV 28	16 49	30.3	8.0S 71.4W	655KM	5.6 W BRAZIL	SBA 89
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP		ZNE 17 01 19			
	EPP		ZNE 03 33			
	ESKS		E 10 48			
	ES		ZNE 11 14			
	ESP		E 12 30			
	ESS		N 17 35			
NOV 29	06 20	10	19.4S 169.2E	324KM	4.9 NEW HEBRIDES IS	SBA 59
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	P		Z 06 29 36			
NOV 29	16 54	25.8	55.5S 26.0W	33KM	5.6 S SANDWICH IS	SBA 47
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP		ZNE 17 02 56			
	E(S)		N 09 46			
	ELR		E 13 20			
NOV 30	12 27	38.6	6.8N 94.8E	33KM	5.7 NICOBAR IS	SBA 93
			H M S	DIR	LOG _a /T AZ TZ AN TN	AE TE MAG
SBA	EP		ZNE 12 40 55			
	EPP		Z 44 29			
	ES		ZNE 51 42			
	ELR		NE 05 08			

ELQ		ZNE 13 10 21		55 19					
H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 01	04	53	18.9S 175.8W	232KM	5.5	TONGA IS		SBA 60	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	P		ZNE 05 03 06		-1.17				
	ES		ZNE 11 04						
	E(SS)		E 14 21						
	ELQ		ZNE 18 05						
DEC 01	11	47	30.9S 177.9W	33KM	4.9	KERMADEC IS		SBA 48	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	EP		Z 11 55 43						
DEC 03	03	50	15.0S 66.8E	46KM	6.1	MID-INDIAN RISE		SBA 78	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	P		ZNE 04 01 55		-0.55				
	E		Z 04 20						
	ES		NE 11 50						
	ELQ		N 22 32						
	ELR		ZN 26 06						
DEC 04	15	48	6.4S 150.7E	19KM	5.2	NEW BRITAIN		SBA 72	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	P		ZN 16 00 09						
	S		ZNE 09 34						
	ESS		Z 14 14						
	ESSS		Z 17 38						
	ELQ		NE 18 01						
	ELR		ZN 22 58						
DEC 06	SBA	EP	ZNE 02 41 30						
		ES	E 46 10						
		ELQ	N 47 16						
		ELR	Z 48 20						
DEC 06	04	27	2.3S 138.3E	33KM	5.0	W NEW GUINEA		SBA 77	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	P		Z 04 39 17						
		ELR	Z 05 03 26						
DEC 06	08	12	23.8S 176.1W	209KM		S CF FIJI IS		SBA 55	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	ES		E 08 29 51						
		EPS	N 30 13						
		ELR	Z 38 02						
DEC 07	08	58	5.4S 151.3E	54KM	5.8	NEW BRITAIN		SBA 73	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	IP		ZN 09 10 09.3						
		EPP	Z 12 54						
		S	ZNE 19 57						
		ESS	ZN 24 00						
		ESSS	E 28 10						
		ELQ	E 29 34						
		ELR	Z 33 21						
DEC 09	13	35	27.5S 63.2W	586KM	5.9	ARGENTINA		SBA 71	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	IP		ZNE 13 46 04.4						

H	M	S	EPICENTRE	DEPTH	MAG	DIST (DEG)			
DEC 10	15	11	40.4N 138.9E	33KM	6.0	E SEA OF JAPAN		SBA 119	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	ES		ZNE 15 27 22						
		ESS	ZNE 31 00						
		ELQ	NE 33 08						
		ELR	Z 35 40						
DEC 13	00	13	34.0S 179.1W	112KM	5.3	S CF KERMADEC IS		SBA 44	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	EP		Z 00 21 56						
		ES	E 28 32						
		ELQ	NE 31 47						
		ELR	Z 33 40						
DEC 13	SBA	E(S)	NE 22 18 27						
		EL	ZNE 22 02						
DEC 14	01	59	54.3S 2.4W	33KM		S ATLANTIC RIDGE		SBA 48	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	EP		ZNE 02 07 43						
		PP	ZN 09 38						
		S	NE 14 42						
		(SS)	E 18 25						
		LQ	E 20 59						
		LR	Z 21 54						
									89 20
DEC 15	05	06	2.3N 126.6E	45KM		MOLUCCA PASSAGE		SBA 83	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	EP		Z 05 18 46						
DEC 15	12	13	14.7N 91.7W	118KM	5.4	GUATEMALA		SBA 107	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	EPP		Z 12 31 54						
		ESKS	E 38 07						
		ESP	ZE 41 11						
		EL	ZE 13 03 08						
DEC 16	03	55	6.0N 125.3E	121KM	5.6	PHILIPPINE IS		SBA 87	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	EP		Z 04 07 51						
DEC 16	19	20	21.8S 175.3W	33KM	5.4	TONGA IS		SBA 57	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	P		Z 19 30 10						
DEC 19	06	41	32.8S 177.6W	203KM	4.4	S CF KERMADEC IS		SBA 46	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	P		Z 06 49 45						
DEC 19	08	30	55.9S 28.0W	33KM		S SANDWICH IS		SBA 46	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	P		Z 08 38 45						
DEC 24	18	45	4.4S 153.1E	93KM	6.1	NEW IRELAND		SBA 74	
			H M S	DIR	LOG _a /T	AZ	TZ	AN	TN
SBA	IP		Z 18 57 12.5		-0.88				
									6.0

		S	ZN	19	06	41						
		ELR	N	16	26							
		ELQ	Z	20	28							
H	M	S	EPICENTRE		DEPTH	MAG				DIST (DEG)		
DEC 27	17	43	21.4	12.9N	125.4E	33KM	5.9	PHILIPPINE IS			SBA 94	
		SBA	P	Z	H M S	DIR	LOG _a A/T	AZ	TZ	AN	TN	
		EL	Z	17	56	37						
			Z	18	23	54						
DEC 28	16	16	11.0	22.1S	179.6W	611KM	6.2	S CF FIJI IS			SBA 56	
		SBA	IP	ZNE	16	24	56.7	DSW				AE TE MAG
			PCP	Z	26	49						
			S	NE	32	11						
			SCS	NE	33	48						
DEC 30	13	19	47.4	62.6S	165.8E	33KM	5.2	BALLENY IS			SBA 15	
		SBA	P	ZNE	13	23	21				AE TE MAG	
			L	ZNE	27	00						
DEC 30	21	30	58.8	23.3S	179.9W	547KM	5.2	S CF FIJI IS			SBA 55	
		SBA	IP	Z	21	39	41.3	UNE				AE TE MAG
DEC 31	23	13	30.9	4.6S	153.0E	77KM	5.1	NEW IRELAND			SBA 74	
		SBA	EP	Z	23	25	02				AE TE MAG	

PUBLICATIONS BY STAFF MEMBERS

During 1964 the following papers by members of the Seismological Observatory Staff were published:

- M23 EIBY, G.A.: "The New Zealand Sub-Crustal Rift".
N.Z. J. Geol. Geophys. 7: 109-33.
The region of deep-focus earthquake activity beneath New Zealand is described with the aid of epicentre maps and vertical cross sections. This region has been called the New Zealand Sub-Crustal Rift. Arguments based principally upon gravity observations suggest that the mean density of the material within the Rift is about 1 per cent less than that of adjacent parts of the mantle. The similarity of the pattern of New Zealand seismicity to that found in other parts of the world is briefly discussed.
- M24 EIBY, G.A.: "Earthquakes in Northland".
N.Z. Engng. 19 (4): 125-9.
The Mangonui earthquake of 1963 Nov 16 and Peria earthquake of 1963 Dec 22 were both responsible for minor damage in a region previously considered aseismic. Photographs and descriptions of damage are given, together with isoseismal maps. The zoning implications of the shocks are discussed.
- M25 ADAMS, R.D.: "Thickness of the Earth's Crust beneath the Pacific-Antarctic Ridge".
N.Z. J. Geol. Geophys. 7: 529-42.
The dispersion of earthquake waves propagated along the Pacific-Antarctic Ridge indicates that the crust is 6-7 km thick beneath the Ridge and slightly thinner beneath the adjacent deep water. Strong Love waves are recorded at Hallett Station from earthquakes on the Pacific-Antarctic Ridge, whereas strong Rayleigh waves are recorded from those on the East Pacific Rise; this difference is attributed to the source rather than to the medium. The structure of the Pacific-Antarctic Ridge appears to be intermediate between those found by other workers for the East Pacific Rise and the Mid-Atlantic Ridge.
- M26 RANDALL, M.J.: "On the Mechanism of Earthquakes".
Bull. Seis. Soc. Amer. 54: 1283-9.
An earthquake may be regarded as resulting from a sudden change in the condition of elastic equilibrium in the Earth. A new form of the general solution of the elastic wave equation relates seismic radiation to displacement from equilibrium. Calculation of the radiation pattern for a proposed mechanism is thus reduced to an elastostatic problem.
- M27 RANDALL, M.J.: "Seismic Energy Generated by a Sudden Volume Change".
Bull. Seis. Soc. Amer. 54: 1291-8.
The recent suggestion that sudden phase transitions may provide a me-

chanism for earthquakes is examined mathematically for the simple case of sudden change of volume. Such a transition, even for a small density change, offers a much more concentrated source of seismic energy than does sudden faulting.

- S-128 ADAMS, R.D.; RANDALL, M.J.: "The Fine Structure of the Earth's Core". Bull. Seis. Soc. Amer. 54: 1299-1313.

Detailed study of arrivals from accurately fixed earthquakes has revealed additional complexity in the travel-time curve for PKP. A notation is introduced in which observations are denoted by P' with a two-letter suffix indicating the branch to which they belong, namely P'AB, P'IJ, P'GH and P'DR. A new velocity solution for the Earth's core has been derived from these observations. This velocity solution differs from those previously suggested in having three discontinuous increases in velocity between the outer and inner core, at levels corresponding to 0.570, 0.455 and 0.362 times the radius of the core. This implies two shells, each between 300 and 400 km thick, surrounding the inner core; in each shell there is a small negative velocity gradient. The outer discontinuity is sufficiently shallow to prevent rays in the outer core from forming a caustic.

- S-129 VERE-JONES, D.; TURNOVSKY, S.; and EIBY, G.A.: "A Statistical Study of Earthquakes in the Main Seismic Region of New Zealand. Part 1 - Time Trends in the Pattern of Recorded Activity".

N.Z. J. Geol. Geophys. 7: 722-44.

Earthquake data from the main seismic region of New Zealand have been examined for trends in the total recorded activity and in its distribution over the region. During the years 1942-61 there has been a continuing increase in the numbers of deep-focus shocks with depths of over 100 km. A more than four-fold increase remains after corrections have been made for changes in the recording network. At the same time there has been a decrease in shallow activity (depths of 100 km or less), chiefly in the number of shocks belonging to swarms or aftershock sequences. Despite these changes, the total rate of earthquake occurrence has remained approximately constant. The latitude of the observed mean epicentre has shown a northerly drift of 8.6 km per year over the period. The three major factors contributing to this drift are the changes in the recording network, the increase in (low-latitude) deep activity, and a smaller drift within the shallow component alone. There is evidence that groups of related deep-focus shocks occur, and that for both deep and shallow shocks, grouping is a more pervasive phenomenon than is commonly supposed.

- S-130 EIBY, G.A.: "The Northland Earthquakes of 1963 November - December and the Seismicity of Northland".

N.Z. J. Geol. Geophys. 7: 745-65.

The earthquakes at Mangonui on 1963 November 16 and at Peria on 1963 December 22 are the first earthquakes in Northland for which it has been possible to determine instrumental epicentres. Details of epicentre, magnitude, and focal depth calculations are given, together with a description of the felt effects, photographs of damage, and isoseismal maps. Earthquakes felt in Northland since 1955 January 1 are listed. The earlier conclusion that this part of New Zealand is aseismic is no longer justified.

- E-141 "New Zealand Seismological Report 1960".

EXCHANGE AGREEMENTS

The Seismological Observatory issues the following series of publications: -

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

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

LIST OF MAPS

(in pocket inside back cover)

1. Epicentres of Earthquakes in 1964 having focal depths less than 40 km.
2. Epicentres of Earthquakes in 1964 having focal depths 40 km or greater.
3. Isoseismals for the Earthquake of 1964 March 8d.

THE DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

*With the Compliments of the
Superintendent,
Seismological Observatory,
Geophysics Division*

*P.O. Box 8005,
Wellington,
New Zealand*

11 E
00
20
40
60
80
100
Kilometres
Scale Miles

A. R. Shearer, Government Printer, Wellington, New Zealand.

MAP 1

