

**REPORT AND INDEX OF  
UNDERWAY MARINE GEOPHYSICAL DATA**

**KIWI EXPEDITION**

**LEG 9**

**(KIWI09RR)**

**R/V Revelle**

**(Issued August 1998)**

**Ports:**

Lyttelton, New Zealand (13 February 1998)

to

Lyttelton, New Zealand (19 March 1998)

**Chief Scientist:**

Wilford Gardner, Texas A&M University  
email:wgardner@tamu.edu

Tammy Koonce, Resident Marine Technician  
Marc Silver, Computer Technician

Post-Cruise Processing and Report Preparation by the  
Geological Data Center, Scripps Institution of Oceanography  
La Jolla, California 92093-0223  
GDC email:gdcinfo@gdcmp1.ucsd.edu

**NOTE: This is an index of underway geophysical data edited and processed  
after the completion of the cruise leg and is intended primarily for informal  
use within the institution. This document is not to be reproduced or  
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the Geological Data Center, Scripps Institution of Oceanography, La Jolla,  
California 92093-0223**

GDC Cruise I.D.# 276

**REPORT AND INDEX OF NAVIGATION  
AND UNDERWAY GEOPHYSICAL DATA**

Processed by the Geological Data Center  
Scripps Institution of Oceanography

**Contents:**

**Index Chart** - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

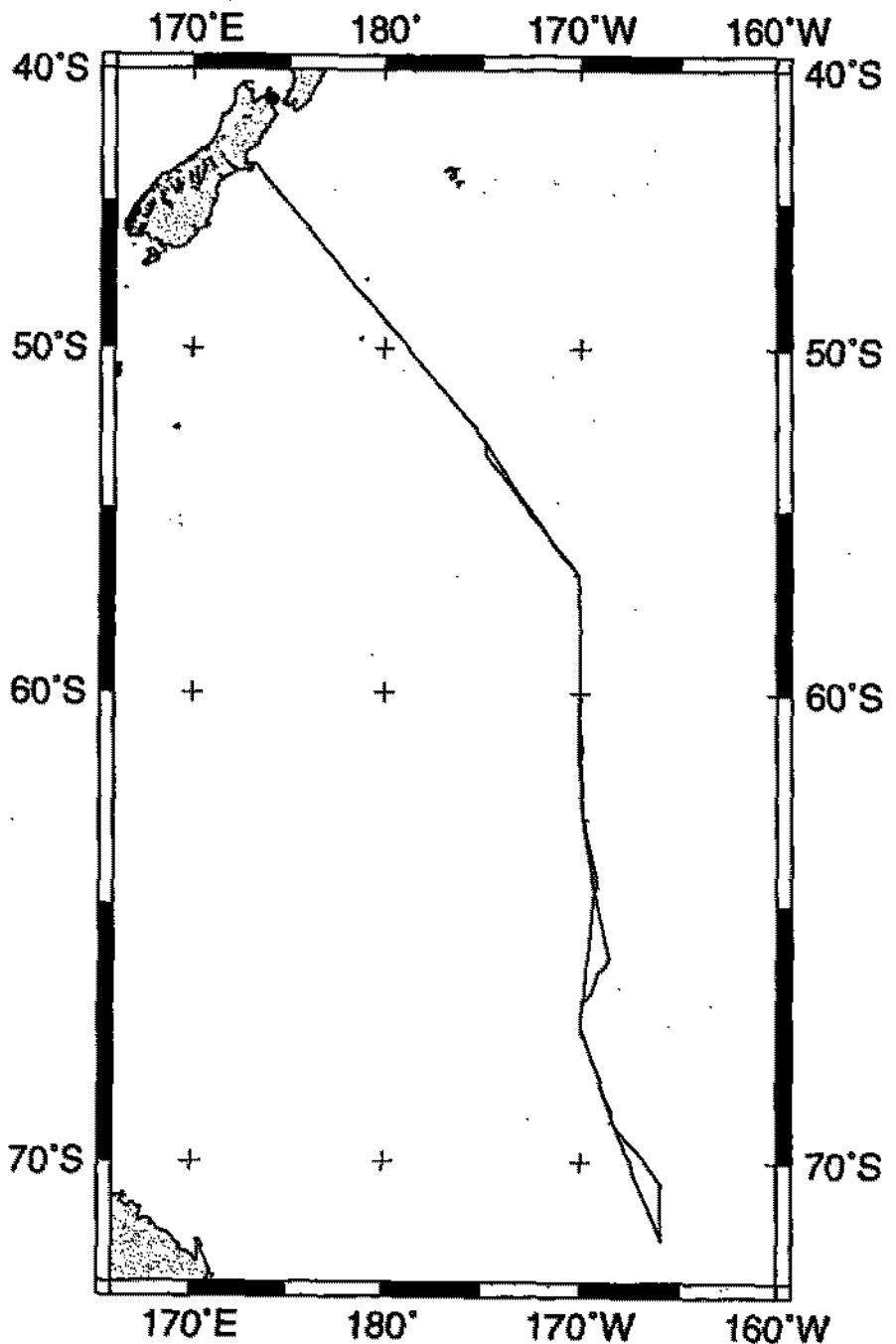
**Track Charts** - annotated with dates and hour ticks.

**Profiles** - depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

**Sample Index** - list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines collected on the leg.

**NOTE:** One or more of the underway data types may not be collected on a given leg. For information on the availability and reproduction costs of data in the following forms, contact S.M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223. Phone: (619)534-2752, FAX: (619)534-6500, Internet email: [ssmith@ucsd.edu](mailto:ssmith@ucsd.edu)

1. Files via ftp or on 8mm (Exabyte) and 4mm (DAT) magnetic tape:
  - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
  - b) Above data in a single merged ASCII file in the MGD77 Exchange Format.
  - c) SeaBeam depth data (binary, Sun byte order)
  - d) SeaBeam Sidescan data.
2. Microfilm (35 mm flowfilm) or hard copies of:
  - a) Underway watch log book.
  - b) SeaBeam vertical beam profile/Sidescan records.
  - c) 3.5 kHz and 12 kHz echosounder records.
  - d) Seismic reflection profiler records.
3. Navigation listing with times and positions of fixes and course and speed changes.
4. Custom plots in Mercator projection:
  - a) Track plots.
  - b) SeaBeam depth contour plots.
  - c) Depth, magnetic or gravity values printed or profiled along track.



#### **KIWI EXPEDITION LEG 09**

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**CHIEF SCIENTIST:** Wilford Gardner, Texas A&M University

**PORTS:** Lyttelton - Lyttelton, New Zealand

**DATES:** 13 February - 19 March 1998

**SHIP:** R/V Revelle

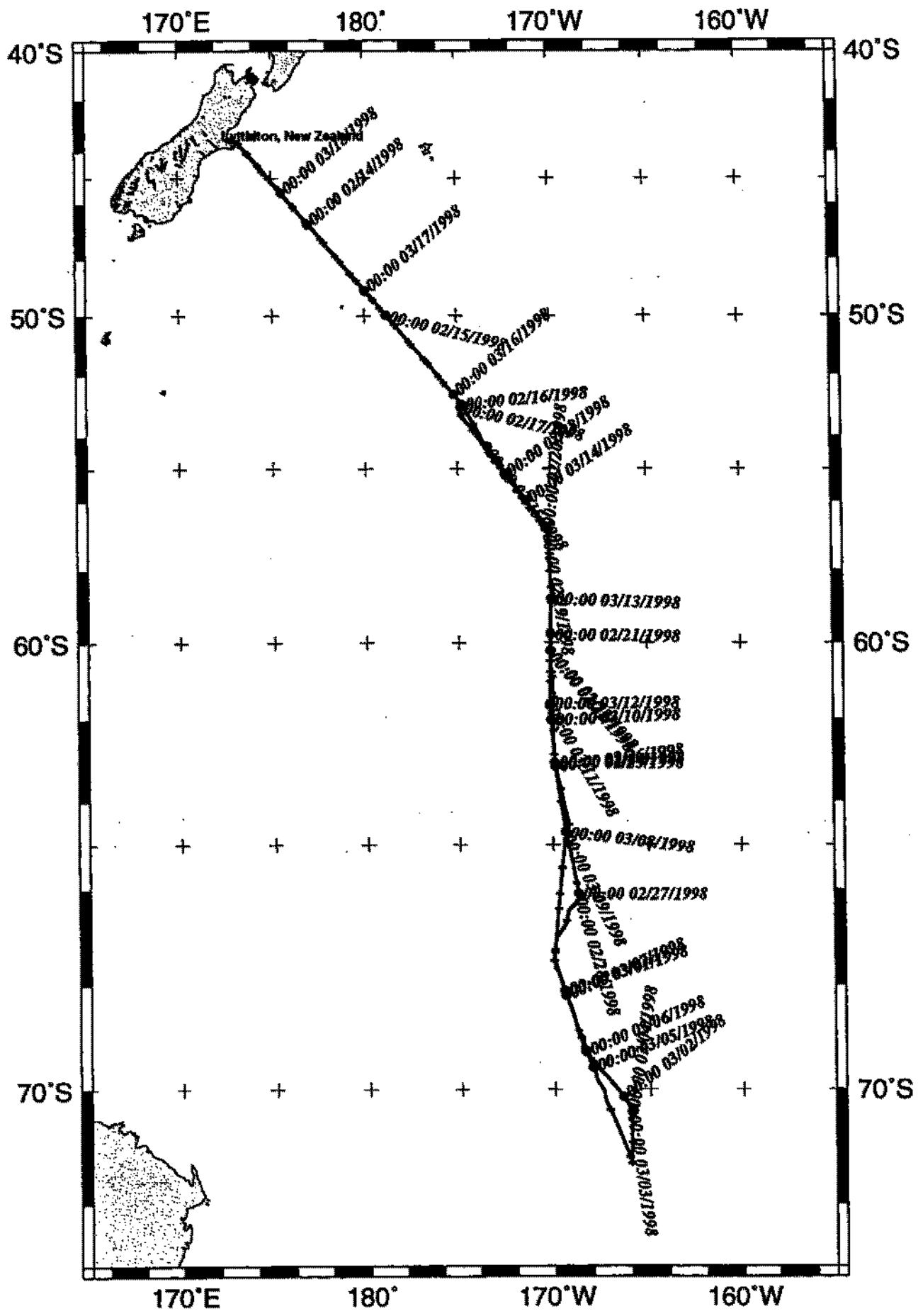
#### **TOTAL MILEAGE OF UNDERWAY DATA COLLECTED**

Cruise - 4052 miles      Magnetics - none collected

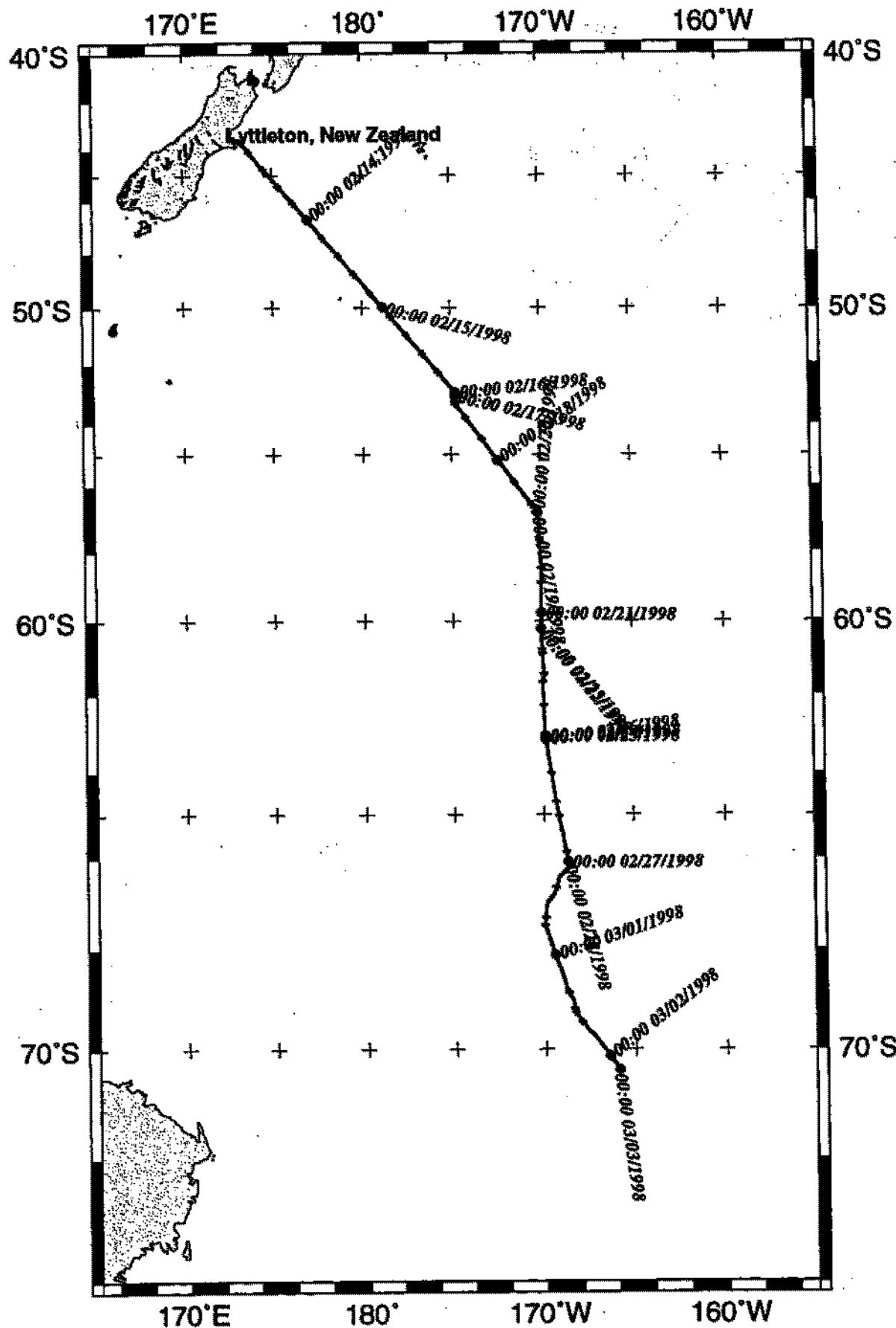
Bathymetry - 605 miles      Seismic Reflection - none collected

Sea Beam - 605 miles      Gravity - none collected

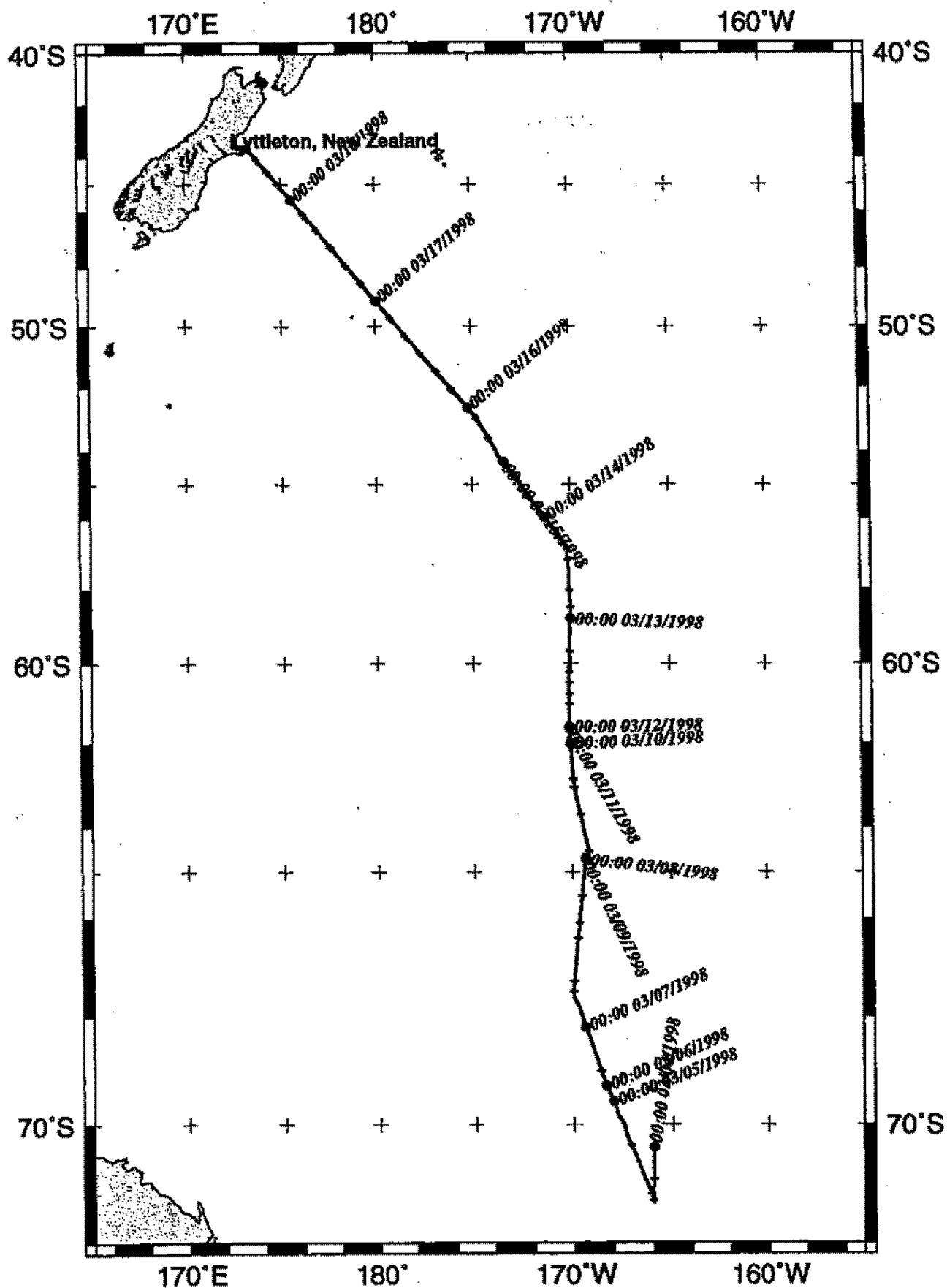
# KIWI09RR Track

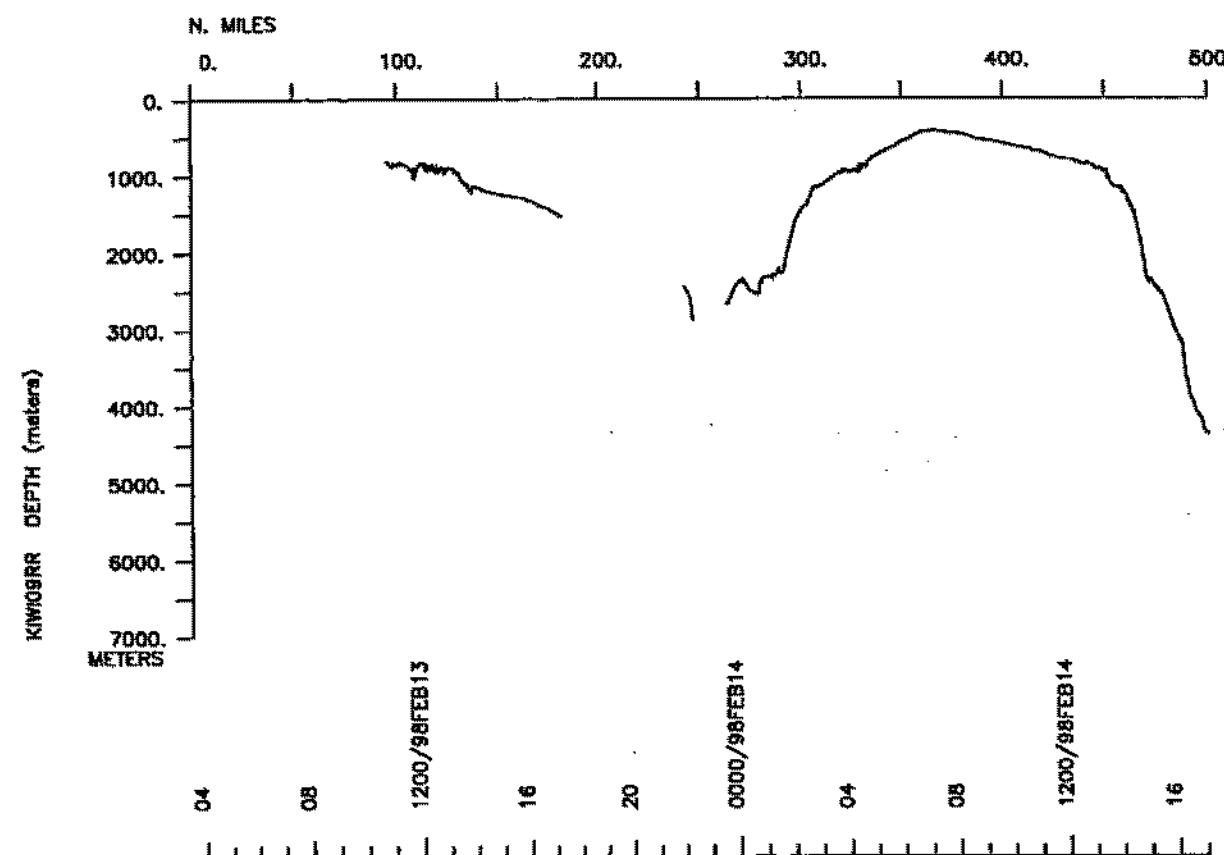
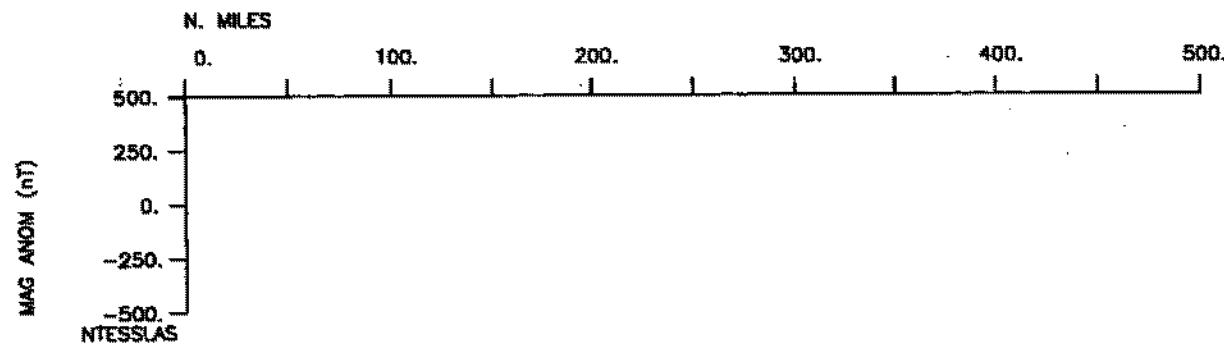
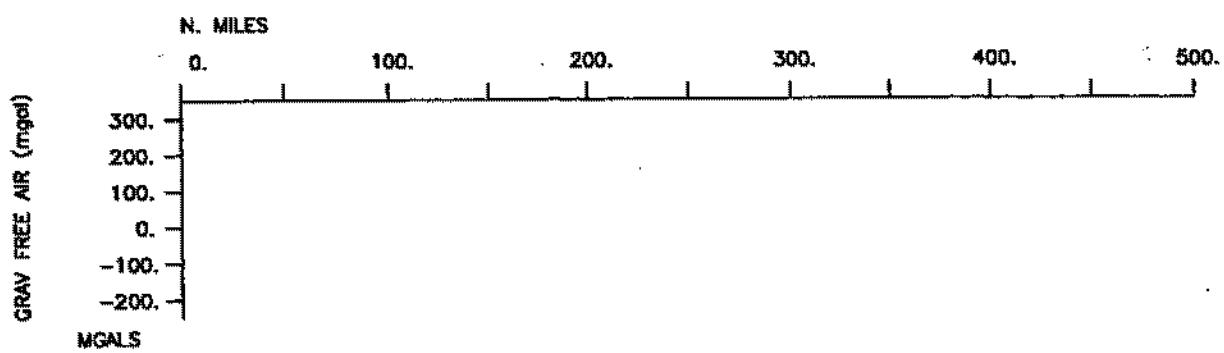


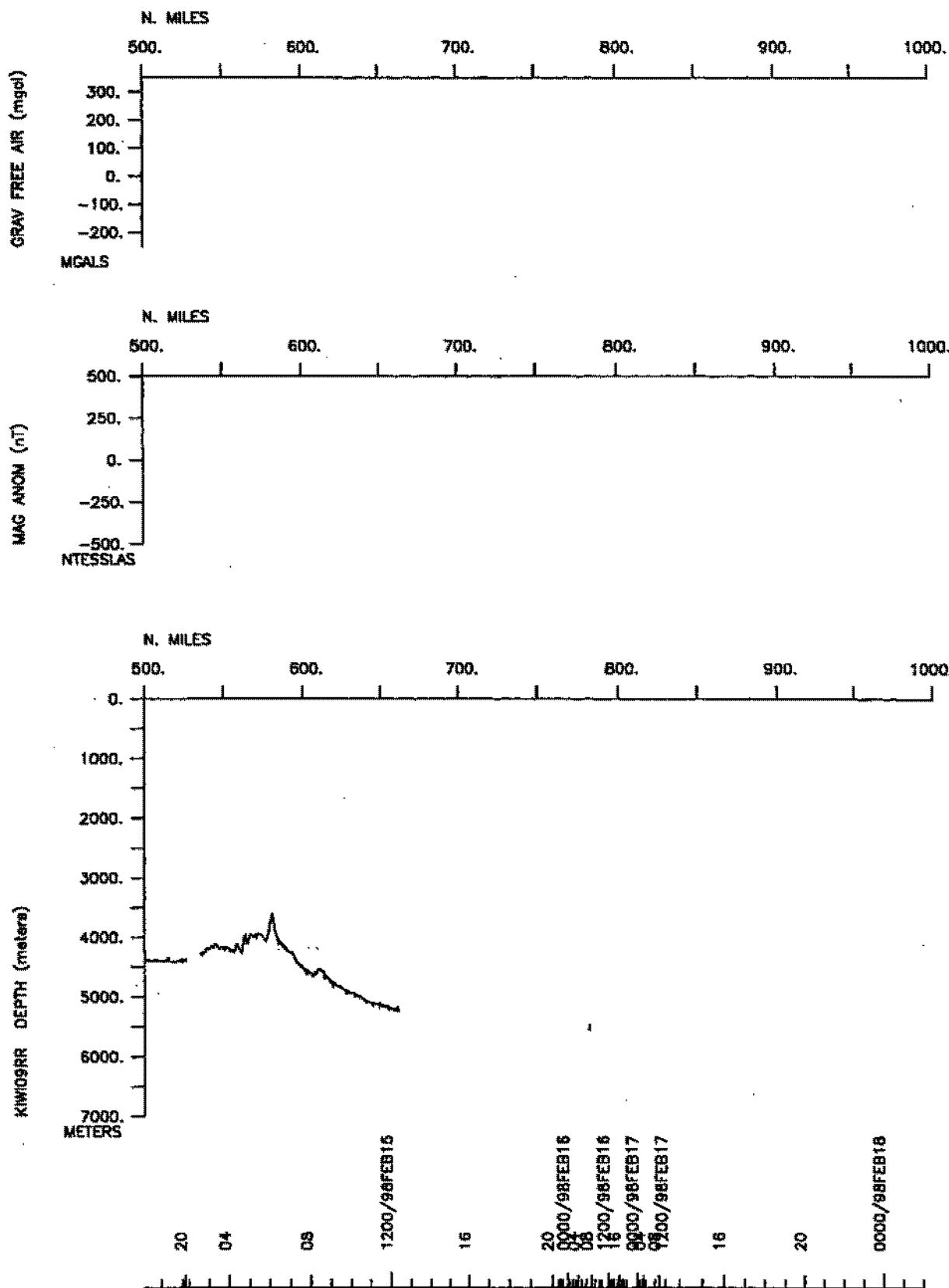
# KIWI09RR Begin Track

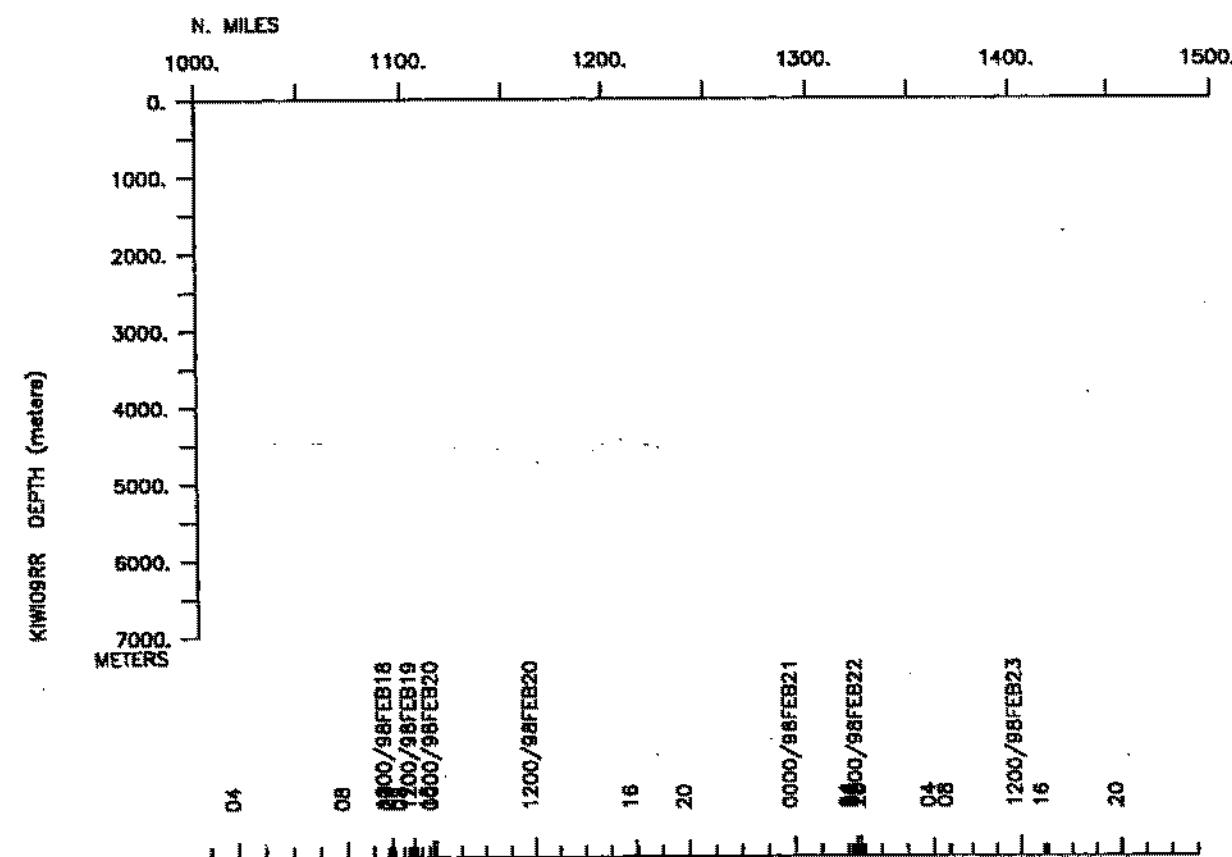
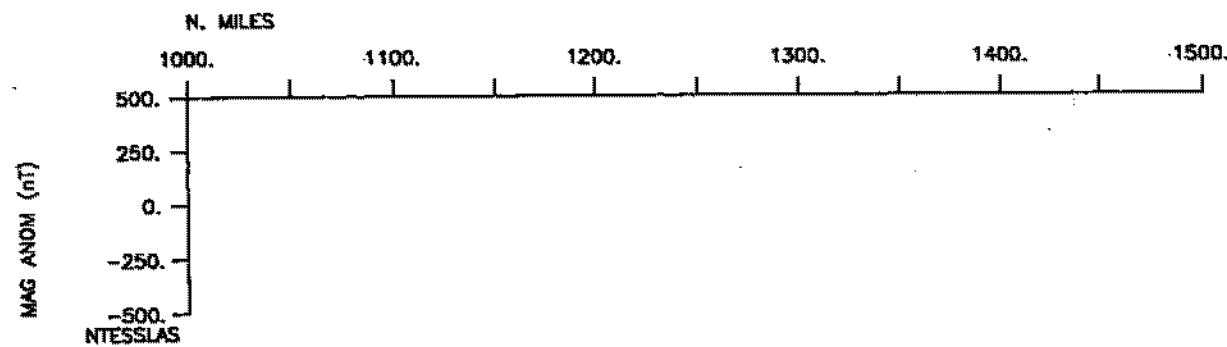
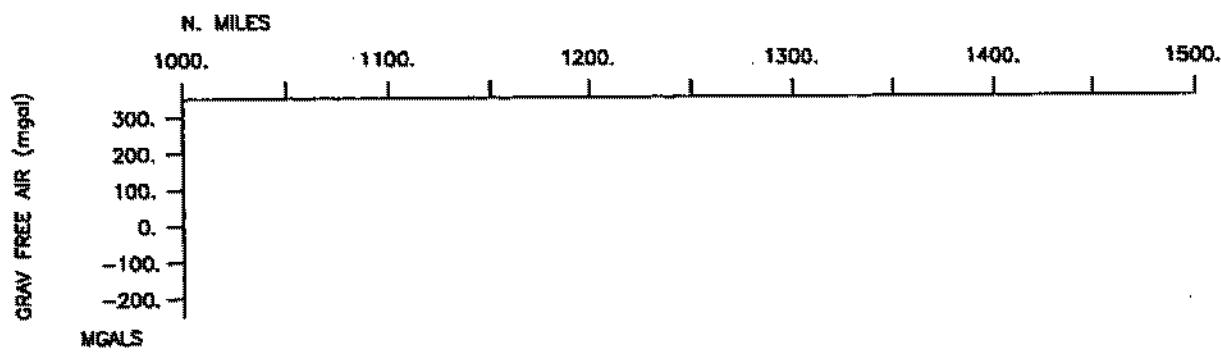


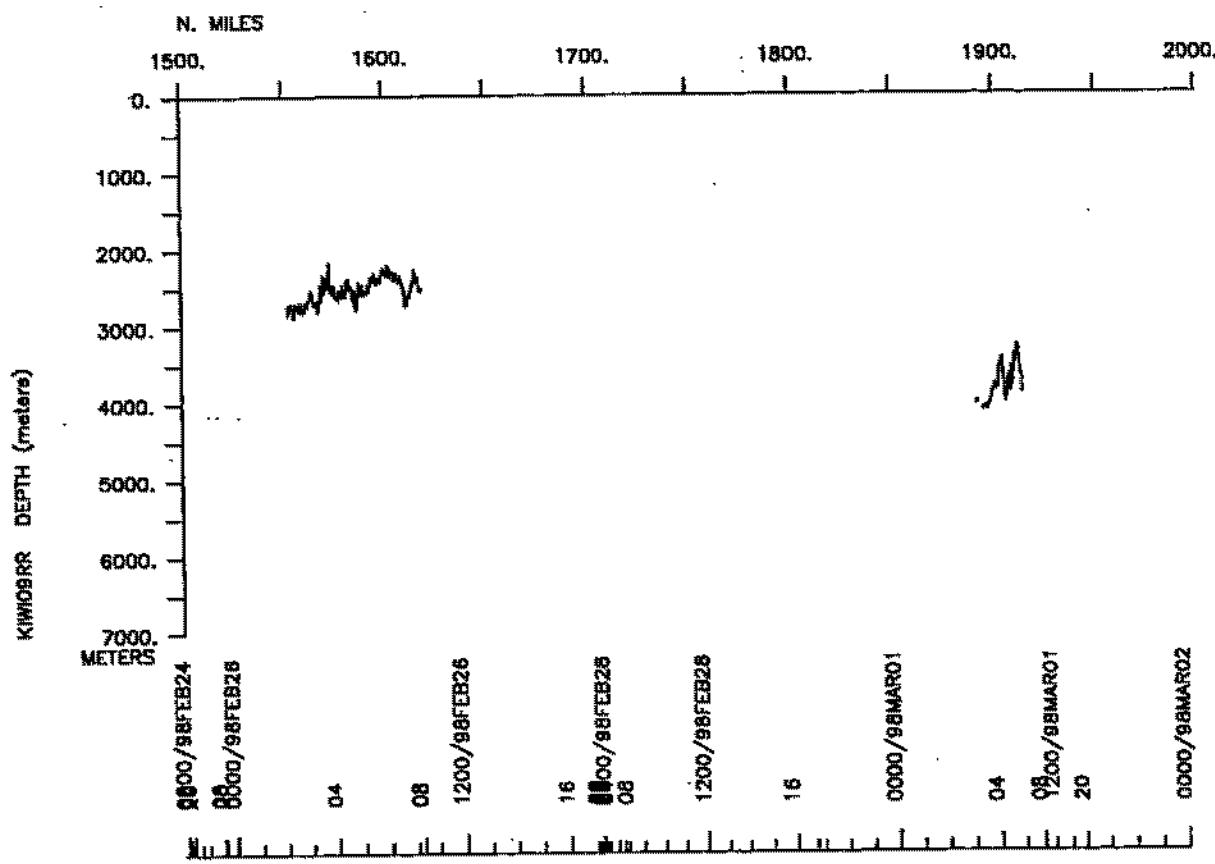
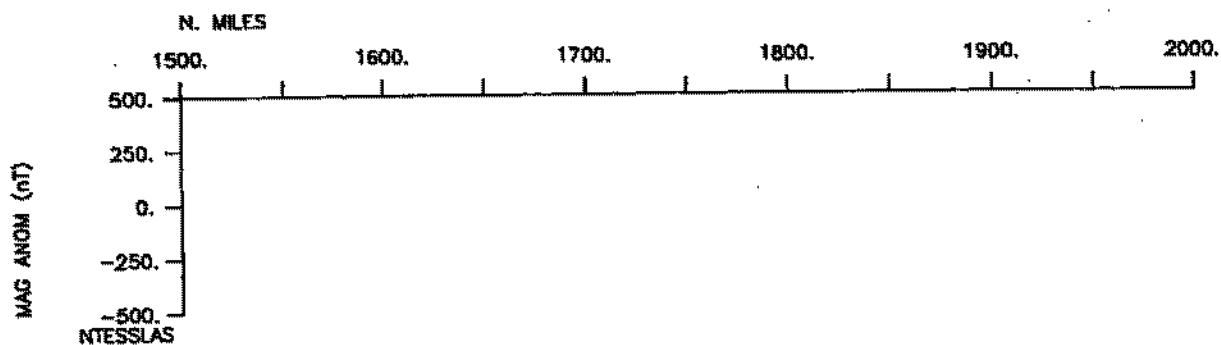
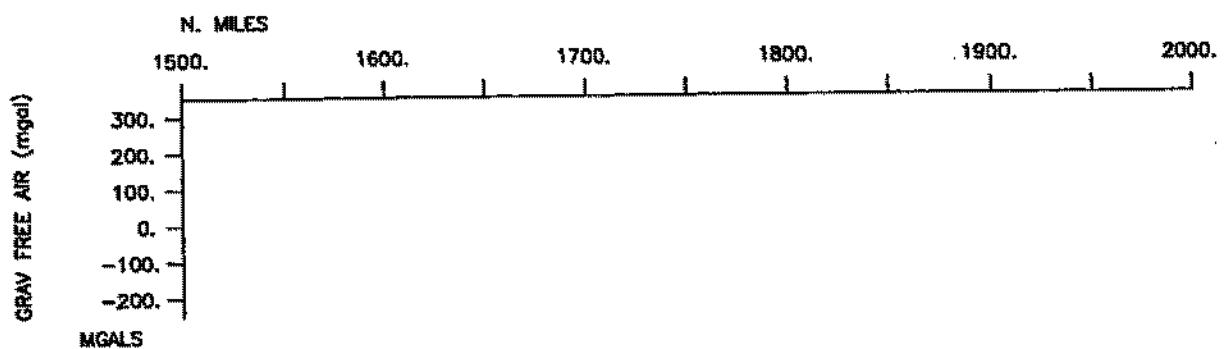
# KIWI09RR End Track

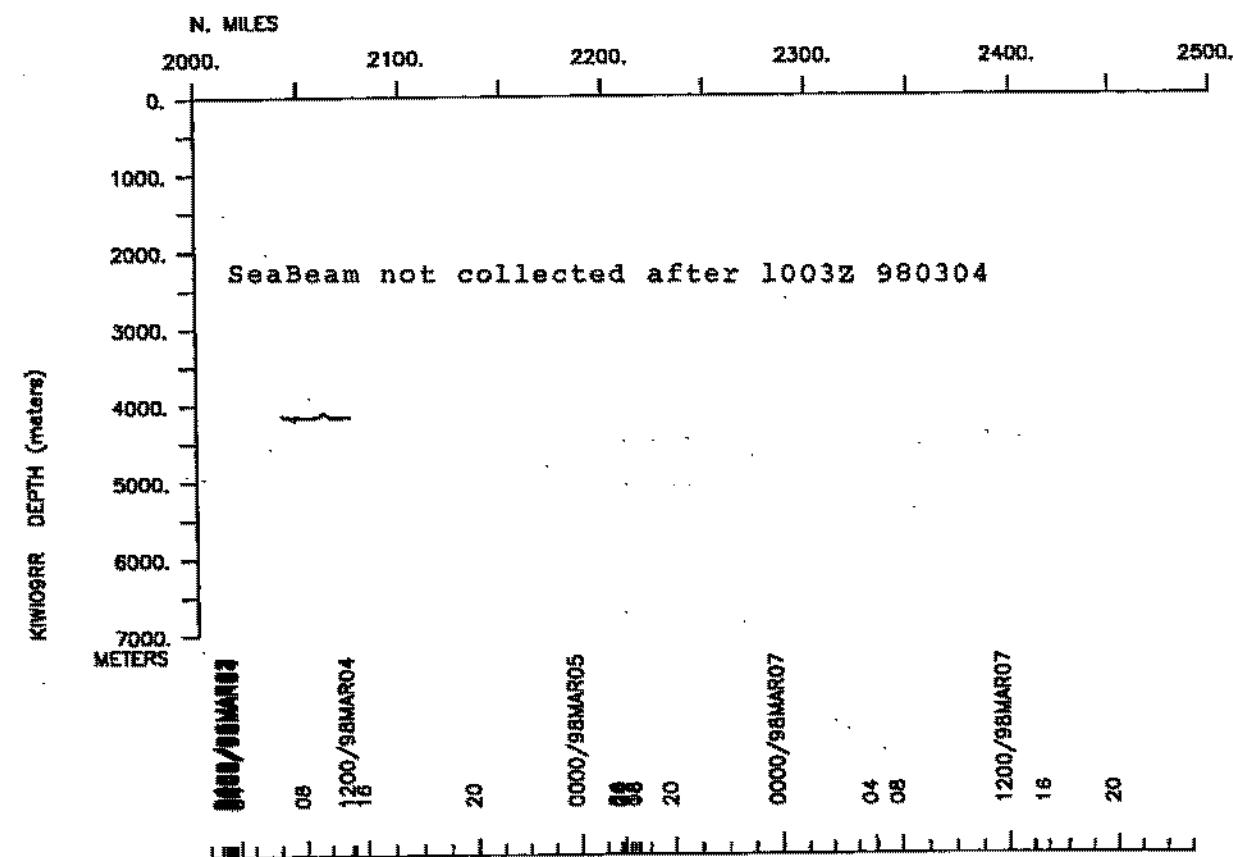
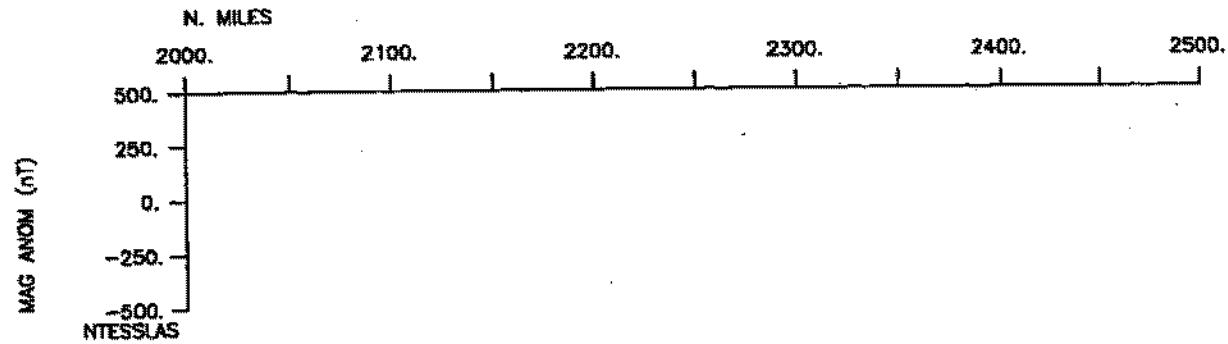
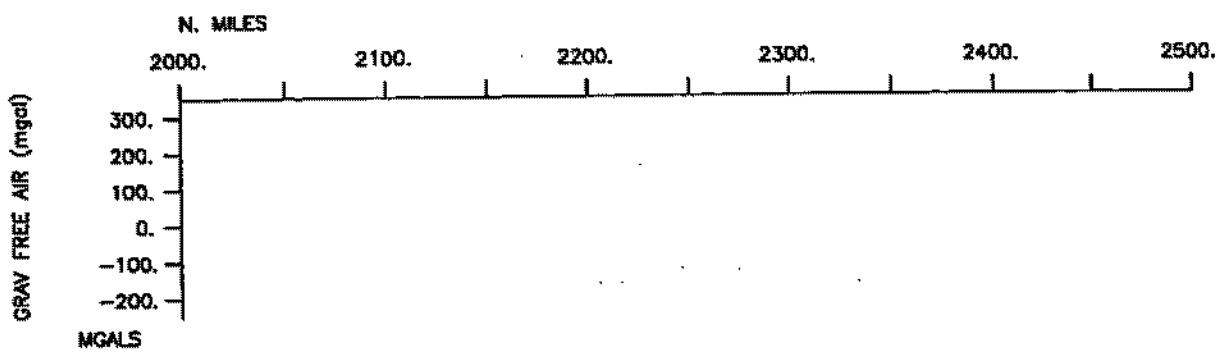












**S.I.O. SAMPLE INDEX**

**KIWI EXPEDITION**

**LEG 9**

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R/V Revelle

(Issued August 1998)

**Ports:**

Lyttelton, New Zealand (13 February 1998)

to

Lyttelton, New Zealand (19 March 1998)

**Chief Scientist:**

Wilford Gardner, Woods Hole

*The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident marine technician and processed on shore by the S.I.O. Geological Data Center shortly after the completion of the cruise leg.*

*Positions are interpolated on the basis of sample time by comparison to a single, edited navigation file. Samples beginning at one time and position and ending at another are entered on two consecutive lines. Disposition and sample type are represented by three and four character codes to permit future computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)*

**GDC Cruise I.D.# 276**

## \*\*\*\* Ports \*\*\*

0300 130298	LGPT B Lyttelton, N.Z.	GDC 43-36.00S 172-43.00E f	KIWI09RR
2000 180398	LGPT E Lyttelton, N.Z.	GDC 43-36.00S 172-43.00E f	KIWI09RR

## \*\*\*\* Personnel \*\*\*

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS TAMU	Gardner,W.	Chief Scientist	Texas A&M Univ.	KIWI09RR
PESP UHI	Measures,C.	Scientist	University of Hawaii	KIWI09RR
PEST UHI	Selph,K.	Grad Student	U. of Rhode Island	KIWI09RR
PESP OSU	Nelson,D.	Scientist	Oregon State Univ.	KIWI09RR
PESP LDEO	Marra,J.	Scientist	Lamont-Doherty	KIWI09RR
PESP WHOI	Sosik,H.	Scientist	Woods Hole	KIWI09RR
PESP URI	Dickson,M.	Scientist	U. of Rhode Island	KIWI09RR
PESP SIO	Reynolds,R.	Scientist	Scripps Institution	KIWI09RR
PESP SIO	Wieland	Technician	Scripps Institution	KIWI09RR
PESP WHOI	Olson,R.	Scientist	Woods Hole	KIWI09RR
PEXN SIX	Rossini,P.	Scientist	Inst Marine Geo ITAL	KIWI09RR
PESP LDEO	Anderson,H.	Scientist	Lamont-Doherty	KIWI09RR
PESP LDEO	Breger,L.	Scientist	Lamont-Doherty	KIWI09RR
PESP SIX	Hiscock,M.	Technician	Duke University	KIWI09RR
PESP SIX	Masserini,R.	Technician	Univ.of So.Florida	KIWI09RR
PESP SIX	Castle,D.	Technician	Univ.of Delaware	KIWI09RR
PESP LDEO	Mace,B.	Technician	Lamont-Doherty	KIWI09RR
PESP WHOI	Crossin,G.	Technician	Woods Hole	KIWI09RR
PESP WHOI	Andrews,J.	Technician	Woods Hole	KIWI09RR
PESP SIX	Peterson,J.	Scientist	LUMCON	KIWI09RR
PESP TAMU	Gundersen,J.	Technician	Texas A&M Univ.	KIWI09RR
PESP SIX	Cook,M.	Technician	No.Carolina State	KIWI09RR
PESP TAMU	Quiroz,E.	Technician	Texas A&M Univ.	KIWI09RR
PESP LDEO	Rubin,S.	Scientist	Lamont-Doherty	KIWI09RR
PESP OSU	Arrington,J.	Technician	Oregon State Univ.	KIWI09RR
PEXN TAMU	Searson,S.	Technician	Texas A&M Univ.	KIWI09RR
PESP URI	Orchardo,J.	Scientist	U. of Rhode Island	KIWI09RR
PECT SCG	Silver,M.	Computer Tech	Scripps Institution	KIWI09RR
PEMT ODF	Hiller,S.	Electronics tech	Scripps Institution	KIWI09RR
PEMT ODF	Williams,B.	Odf Tech	Scripps Institution	KIWI09RR
PESP UHI	Nolla,H.	Technician	University of Hawaii	KIWI09RR
PESP TAMU	Guffy,D.	Nutrient Tech	Texas A&M Univ.	KIWI09RR
PESP SIX	Urban-rch,J.	Scientist	LUMCON	KIWI09RR
PESP SIX	Quinby,H.	Scientist	VA Inst. of Mar.Sci.	KIWI09RR
PESP SIX	White,A.	Technician	Univ. of Tennessee	KIWI09RR
PESP UWA	Krogsland,K.	Nutrient Tech	Univ. of Washington	KIWI09RR
PERT STS	Koonce,T.	Resident Tech	Scripps Institution	KIWI09RR

## \*\*\*\* NOTES \*\*\*

#An 'X' in the (B)egin/(E)nd column following the sample code indicates no sample or data recovered. A 'C' indicates continuation of data collection from before the beginning or after the end of a particular leg. (Moored bottom instruments, for example.) The number appearing in the columns between the sample identifier and the disposition code, for many sample entries, is the water depth in corrected meters.

#GMT DDMMYY	SAMP	B SAMPLE	DISP	P	CRUISE	
#TIME DATE TZ	CODE E	IDENTIFIER	CODE	LATITUDE	LONGITUDE	C LEG-SHIP

\*\*\*\* Underway Data Curator - S. M. Smith ext. 42752 \*\*\*

\*\*\*\* Log Books \*\*\*

1958 140298	LBSC	B Hydro data log(NCS)	SIX	49-59.19S	178-49.56W	g	KIWI09RR
2132 150398	LBSC	E Hydro data log(NCS)	SIX	52-58.09S	174-43.62W	g	KIWI09RR

\*\*\*\* SeaBeam (vertical beam & sidescan) No analog records \*\*\*

0300 130298	0 MBSR	B vbeam&sscan	GDC	43-36.40S	172-43.18E	g	KIWI09RR
2000 180398	0 MBSR	E vbeam&sscan	GDC	43-36.37S	172-43.21E	g	KIWI09RR

\*\*\*\* Echo Sounder Records \*\*\*

0300 130298	0 DPRT	B 12khz depth rec-01	GDC	43-36.40S	172-43.18E	g	KIWI09RR
2000 180398	0 DPRT	E 12khz depth rec-01	GDC	43-36.37S	172-43.21E	g	KIWI09RR

\*\*\*\* Continuous Surface Water Sample \*\*\*

\*\*\*\* Sample split between ODF (SIO) & University of Washington \*\*\*

0300 130298	0 CSXX	B Underway water samp	UWA	43-36.40S	172-43.18E	g	KIWI09RR
0200 170398	0 CSXX	E TSONI P	UWA	48-50.07S	179-39.43E	g	KIWI09RR

\*\*\*\* Acoustic Doppler Current Profiler \*\*\*

0300 130298	0 ADCP	B ADCP	GDC	43-36.40S	172-43.18E	g	KIWI09RR
2000 180398	0 ADCP	E ADCP	GDC	43-36.37S	172-43.21E	g	KIWI09RR

\*\*\*\* Continuous Surface Water Sample - Towed Pump \*\*\*

0300 130298	0 CSTV	B Trace Metal Tow pump UHI	UHI	43-36.40S	172-43.18E	g	KIWI09RR
1948 150398	0 CSTV	E towed bet. stas.	UHI	52-57.99S	174-43.81W	g	KIWI09RR

\*\*\*\* Conductivity, Temperature, Depth \*\*\*

\*\*\*\* Each sample was split between ODF (SIO) and No. Carolina State (SIX) \*\*\*

1958 140298	TDCT	B CTD FLOUROMETER XMIT	SIX	49-59.19S	178-49.56W	g	KIWI09RR	
2036 140298	TDCT	E 24 BTL	400M	SIX	49-59.19S	178-49.56W	g	KIWI09RR
2038 150298	TDCT	B CTD	SIO	52-58.06S	174-44.03W	g	KIWI09RR	
2128 150298	TDCT	E 24 BTL	400M	SIO	52-58.41S	174-43.93W	g	KIWI09RR
0035 160298	TDCT	B CTD	SIX	52-58.10S	174-44.00W	g	KIWI09RR	
0115 160298	TDCT	E 24 BTL	400M	SIX	52-58.93S	174-43.94W	g	KIWI09RR
0256 160298	TDCT	B CTD	SIO	52-58.08S	174-43.91W	g	KIWI09RR	
0345 160298	TDCT	E 24 BTL	400M	SIO	52-58.97S	174-43.69W	g	KIWI09RR
0845 160298	TDCT	B CTD	SIX	52-59.85S	174-43.59W	g	KIWI09RR	
0930 160298	TDCT	E 24 BTL	400M	SIX	53-01.20S	174-43.21W	g	KIWI09RR
1158 160298	TDCT	B CTD	SIO	52-58.32S	174-43.98W	g	KIWI09RR	
1348 160298	TDCT	E 24 BTL	2000M	SIO	53-00.81S	174-43.63W	g	KIWI09RR

#	GMT DDMYY	SAMP	B SAMPLE	DISP	P	CRUISE	
#	TIME DATE	TZ	CODE E IDENTIFIER	CODE	LATITUDE	LONGITUDE	C LEG-SHIP
	1458 160298		TDCT B CTD	SIX	52-58.01S	174-43.90W	g KIWI09RR
	1543 160298		TDCT E 24 BTL	400M SIX	52-58.37S	174-43.62W	g KIWI09RR
	1647 160298		TDCT B CTD	SIO	52-57.97S	174-43.94W	g KIWI09RR
	1715 160298		TDCT E 24 BTL	400M SIO	52-58.01S	174-43.92W	g KIWI09RR
	1917 160298		TDCT B CTD	SIX	52-58.01S	174-43.92W	g KIWI09RR
	1957 160298		TDCT E 24 BTL	400M SIX	52-58.16S	174-44.01W	g KIWI09RR
	2109 160298		TDCT B CTD	SIO	52-57.92S	174-43.88W	g KIWI09RR
	2152 160298		TDCT E 24 BTL	400M SIO	52-58.54S	174-44.41W	g KIWI09RR
	0007 170298		TDCT B CTD	SIX	53-04.56S	174-46.16W	g KIWI09RR
	0503 170298		TDCT E 24 BTL	5400M SIX	53-08.58S	174-47.48W	g KIWI09RR
	0704 170298		TDCT B CTD	SIO	53-14.13S	174-46.43W	g KIWI09RR
	0742 170298		TDCT E 24 BTL	400M SIO	53-15.28S	174-46.05W	g KIWI09RR
	0910 170298		TDCT B CTD	SIX	53-20.78S	174-45.09W	g KIWI09RR
	0946 170298		TDCT E 24 BTL	400M SIX	53-20.78S	174-45.00W	g KIWI09RR
	1043 180298		TDCT B CTD	SIO	56-51.00S	170-09.99W	g KIWI09RR
	1130 180298		TDCT E 24 BTL	400M SIO	56-50.99S	170-09.98W	g KIWI09RR
	1656 180298		TDCT B CTD	SIX	56-51.00S	170-09.98W	g KIWI09RR
	1743 180298		TDCT E 24 BTL	400M SIX	56-50.99S	170-09.97W	g KIWI09RR
	2025 180298		TDCT B CTD	SIO	56-50.99S	170-09.98W	g KIWI09RR
	2105 180298		TDCT E 24 BTL	400M SIO	56-50.99S	170-09.98W	g KIWI09RR
	0106 190298		TDCT B CTD	SIX	56-51.00S	170-10.01W	g KIWI09RR
	0306 190298		TDCT E 24 BTL	2000M SIX	56-50.98S	170-09.98W	g KIWI09RR
	0449 190298		TDCT B CTD	SIO	56-51.01S	170-10.01W	g KIWI09RR
	0548 190298		TDCT E 24 BTL	400M SIO	56-50.95S	170-09.98W	g KIWI09RR
	1557 190298		TDCT B CTD	SIX	56-51.00S	170-10.00W	g KIWI09RR
	2116 190298		TDCT E 24 BTL	4950M SIX	56-50.98S	170-10.01W	g KIWI09RR
	0320 200298		TDCT B CTD	SIO	56-50.88S	170-09.81W	g KIWI09RR
	0412 200298		TDCT E 24 BTL	400M SIO	56-50.88S	170-09.80W	g KIWI09RR
	0630 200298		TDCT B CTD	SIX	56-50.93S	170-09.90W	g KIWI09RR
	0722 200298		TDCT E 24 BTL	400M SIX	56-50.93S	170-09.90W	g KIWI09RR
	1610 200298		TDCT B CTD	SIO	58-30.00S	170-00.01W	g KIWI09RR
	1657 200298		TDCT E 24 BTL	400M SIO	58-30.00S	169-59.98W	g KIWI09RR
	0328 210298		TDCT B CTD	SIX	60-13.99S	170-04.01W	g KIWI09RR
	0515 210298		TDCT E 24 BTL	2000M SIX	60-14.00S	170-03.99W	g KIWI09RR
	0850 210298		TDCT B CTD	SIO	60-14.00S	170-04.00W	g KIWI09RR
	0930 210298		TDCT E 24 BTL	400M SIO	60-14.00S	170-04.00W	g KIWI09RR
	1651 210298		TDCT B CTD	SIX	60-14.00S	170-04.00W	g KIWI09RR
	1741 210298		TDCT E 24 BTL	400M SIX	60-13.99S	170-04.00W	g KIWI09RR

#GMT DDMMYY	SAMP	B SAMPLE	DISP	P CRUISE		
#TIME DATE TZ	CODE	IDENTIFIER	CODE	LATITUDE	LONGITUDE	c LEG-SHIP
#-----	-----	-----	-----	-----	-----	-----
2352 210298	TDCT B	CTD	SIO	60-14.00S	170-03.99W	g KIWI09RR
0040 220298	TDCT E	24 BTL	400M SIO	60-13.99S	170-04.00W	g KIWI09RR
0830 220298	TDCT B	CTD	SIX	60-14.00S	170-04.00W	g KIWI09RR
0919 220298	TDCT E	24 BTL	400M SIX	60-13.99S	170-03.99W	g KIWI09RR
1337 220298	TDCT B	CTD	SIO	60-14.00S	170-04.00W	g KIWI09RR
1811 220298	TDCT E	24 BTL	3900M SIO	60-14.00S	170-04.00W	g KIWI09RR
2126 220298	TDCT B	CTD	SIX	60-14.00S	170-04.00W	g KIWI09RR
2215 220298	TDCT E	24 BTL	400M SIX	60-13.99S	170-03.99W	g KIWI09RR
2324 220298	TDCT B	CTD	SIO	60-13.99S	170-03.99W	g KIWI09RR
0012 230298	TDCT E	24 BTL	400M SIO	60-14.00S	170-03.99W	g KIWI09RR
0509 230298	TDCT B	CTD	SIX	60-54.99S	169-59.98W	g KIWI09RR
0606 230298	TDCT E	24 BTL	400M SIX	60-55.00S	170-00.00W	g KIWI09RR
1336 230298	TDCT B	CTD	SIO	61-40.00S	170-00.00W	g KIWI09RR
1434 230298	TDCT E	24 BTL	400M SIO	61-39.99S	170-00.00W	g KIWI09RR
0212 240298	TDCT B	CTD	SIX	63-04.97S	169-52.96W	g KIWI09RR
0355 240298	TDCT E	24 BTL	2000M SIX	63-04.96S	169-52.89W	g KIWI09RR
1627 240298	TDCT B	CTD	SIO	63-05.01S	169-52.85W	g KIWI09RR
1711 240298	TDCT E	24 BTL	400M SIO	63-05.00S	169-52.99W	g KIWI09RR
2235 240298	TDCT B	CTD	SIX	63-05.00S	169-53.00W	g KIWI09RR
2310 240298	TDCT E	24 BTL	400M SIX	63-05.00S	169-53.00W	g KIWI09RR
0101 250298	TDCT B	CTD	SIO	63-05.00S	169-53.00W	g KIWI09RR
0147 250298	TDCT E	24 BTL	400M SIO	63-05.00S	169-53.00W	g KIWI09RR
0330 250298	TDCT B	CTD	SIX	63-05.00S	169-52.99W	g KIWI09RR
0420 250298	TDCT E	24 BTL	400M SIX	63-05.00S	169-53.00W	g KIWI09RR
0810 250298	TDCT B	CTD	SIO	63-04.98S	169-52.98W	g KIWI09RR
0853 250298	TDCT E	24 BTL	400M SIO	63-04.99S	169-52.98W	g KIWI09RR
0943 250298	TDCT B	CTD	SIX	63-04.99S	169-52.99W	g KIWI09RR
1024 250298	TDCT E	24 BTL	400M SIX	63-04.99S	169-52.99W	g KIWI09RR
1153 250298	TDCT B	CTD	SIO	63-04.99S	169-52.99W	g KIWI09RR
1418 250298	TDCT E	24 BTL	2945M SIO	63-05.00S	169-52.99W	g KIWI09RR
1757 250298	TDCT B	CTD	SIX	63-04.99S	169-52.99W	g KIWI09RR
1823 250298	TDCT E	24 BTL	400M SIX	63-04.99S	169-52.99W	g KIWI09RR
2037 250298	TDCT B	CTD	SIO	63-04.99S	169-52.99W	g KIWI09RR
2120 250298	TDCT E	24 BTL	400M SIO	63-05.00S	169-52.99W	g KIWI09RR
0735 260298	TDCT B	CTD	SIX	64-42.00S	169-19.97W	g KIWI09RR
0823 260298	TDCT E	24 BTL	400M SIX	64-42.00S	169-19.98W	g KIWI09RR
1933 260298	TDCT B	CTD	SIO	66-05.99S	168-40.29W	g KIWI09RR
2014 260298	TDCT E	24 BTL	400M SIO	66-05.99S	168-40.29W	g KIWI09RR
0118 270298	TDCT B	CTD	SIX	66-05.99S	168-40.29W	g KIWI09RR
0216 270298	TDCT E	24 BTL	400M SIX	66-06.00S	168-40.29W	g KIWI09RR

#GMT DDMMYY #TIME DATE	SAMP B SAMPLE TZ CODE E IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	P CRUISE C LEG-SHIP
0353 270298	TDCT B CTD	SIO	66-05.99S	168-40.29W	g KIWI09RR
0603 270298	TDCT E 24 BTL	2756M SIO	66-06.00S	168-40.30W	g KIWI09RR
0849 270298	TDCT B CTD	SIX	66-05.99S	168-40.29W	g KIWI09RR
0938 270298	TDCT E 24 BTL	400M SIX	66-06.00S	168-40.30W	g KIWI09RR
1652 270298	TDCT B CTD	SIO	66-06.02S	168-40.38W	g KIWI09RR
1742 270298	TDCT E 24 BTL	400M SIO	66-05.98S	168-40.31W	g KIWI09RR
2248 270298	TDCT B CTD	SIX	66-05.99S	168-40.30W	g KIWI09RR
2332 270298	TDCT E 24 BTL	400M SIX	66-05.99S	168-40.29W	g KIWI09RR
0352 280298	TDCT B CTD	SIO	66-05.99S	168-40.34W	g KIWI09RR
0433 280298	TDCT E 24 BTL	400M SIO	66-05.99S	168-40.31W	g KIWI09RR
1908 280298	TDCT B CTD	SIX	67-30.00S	170-00.02W	g KIWI09RR
1950 280298	TDCT E 24 BTL	400M SIX	67-29.99S	170-00.00W	g KIWI09RR
0512 010398	TDCT B CTD	SIO	69-04.74S	168-27.89W	g KIWI09RR
0609 010398	TDCT E 24 BTL	400M SIO	69-04.74S	168-27.87W	g KIWI09RR
0927 010398	TDCT B CTD	SIX	69-18.04S	168-22.54W	g KIWI09RR
1003 010398	TDCT E 24 BTL	400M SIX	69-17.88S	168-22.19W	g KIWI09RR
0504 020398	TDCT B CTD	SIO	70-24.05S	165-54.86W	g KIWI09RR
0650 020398	TDCT E 24 BTL	2000M SIO	70-24.05S	165-54.86W	g KIWI09RR
1654 020398	TDCT B CTD	SIX	70-24.01S	165-54.89W	g KIWI09RR
1742 020398	TDCT E 24 BTL	400M SIX	70-24.01S	165-54.88W	g KIWI09RR
0001 030398	TDCT B CTD	SIO	70-24.01S	165-54.87W	g KIWI09RR
0046 030398	TDCT E 24 BTL	400M SIO	70-24.01S	165-54.89W	g KIWI09RR
0458 030398	TDCT B CTD	SIX	70-24.01S	165-54.89W	g KIWI09RR
0549 030398	TDCT E 24 BTL	400M SIX	70-24.00S	165-54.91W	g KIWI09RR
0856 030398	TDCT B CTD	SIO	70-24.01S	165-54.88W	g KIWI09RR
0935 030398	TDCT E 24 BTL	400M SIO	70-24.01S	165-54.86W	g KIWI09RR
1910 030398	TDCT B CTD	SIX	70-24.45S	165-55.48W	g KIWI09RR
2001 030398	TDCT E 24 BTL	400M SIX	70-24.45S	165-55.47W	g KIWI09RR
2204 030398	TDCT B CTD	SIO	70-24.61S	165-57.23W	g KIWI09RR
0107 040398	TDCT E 24 BTL	4100M SIO	70-24.61S	165-57.23W	g KIWI09RR
1009 040398	TDCT B CTD	SIX	71-18.94S	166-00.51W	g KIWI09RR
1057 040398	TDCT E 24 BTL	400M SIX	71-18.94S	166-00.49W	g KIWI09RR
0244 050398	TDCT B CTD	SIO	69-17.99S	168-22.00W	g KIWI09RR
0426 050398	TDCT E 24 BTL	2000M SIO	69-17.99S	168-22.00W	g KIWI09RR
0829 050398	TDCT B CTD	SIX	69-17.99S	168-22.03W	g KIWI09RR
0910 050398	TDCT E 24 BTL	400M SIX	69-17.99S	168-21.99W	g KIWI09RR
1415 050398	TDCT B CTD	SIO	69-18.00S	168-22.00W	g KIWI09RR
1450 050398	TDCT E 24 BTL	400M SIO	69-18.00S	168-21.99W	g KIWI09RR
1536 050398	TDCT B CTD	SIX	69-18.00S	168-21.99W	g KIWI09RR
1626 050398	TDCT E 24 BTL	400M SIX	69-17.99S	168-22.00W	g KIWI09RR

#GMT DDMMYY	SAMP	B SAMPLE	DISP	p	CRUISE		
#TIME DATE TZ	CODE	IDENTIFIER	CODE	LATITUDE	LONGITUDE	c	LEG-SHIP
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1900 050398	TDCT B	CTD	SIO	69-18.00S	168-22.00W	g	KIWI09RR
1938 050398	TDCT E	24 BTL	400M SIO	69-17.99S	168-22.00W	g	KIWI09RR
2101 050398	TDCT B	CTD	SIX	69-18.00S	168-21.99W	g	KIWI09RR
2140 050398	TDCT E	24 BTL	400M SIX	69-18.00S	168-22.00W	g	KIWI09RR
0253 060398	TDCT B	CTD	SIO	69-18.00S	168-22.00W	g	KIWI09RR
0338 060398	TDCT E	24 BTL	400M SIO	69-17.99S	168-21.99W	g	KIWI09RR
0916 060398	TDCT B	CTD	SIX	69-17.99S	168-21.99W	g	KIWI09RR
0943 060398	TDCT E	24 BTL	400M SIX	69-18.00S	168-21.99W	g	KIWI09RR
1136 060398	TDCT B	CTD	SIO	69-18.00S	168-21.99W	g	KIWI09RR
1459 060398	TDCT E	24 BTL	4140M SIO	69-18.00S	168-22.00W	g	KIWI09RR
1752 060398	TDCT B	CTD	SIX	69-17.73S	168-21.89W	g	KIWI09RR
1836 060398	TDCT E	24 BTL	400M SIX	69-17.75S	168-21.97W	g	KIWI09RR
0353 070398	TDCT B	CTD	SIO	67-30.02S	169-59.99W	g	KIWI09RR
0437 070398	TDCT E	24 BTL	400M SIO	67-30.01S	169-59.97W	g	KIWI09RR
0547 070398	TDCT B	CTD	SIX	67-29.99S	170-00.01W	g	KIWI09RR
0627 070398	TDCT E	24 BTL	400M SIX	67-30.00S	170-00.00W	g	KIWI09RR
1342 070398	TDCT B	CTD	SIO	67-06.001	169-40.30W	g	KIWI09RR
1431 070398	TDCT E	24 BTL	400M SIO	66-05.99S	169-40.30W	g	KIWI09RR
1613 070398	TDCT B	CTD	SIX	66-06.00S	169-40.30W	g	KIWI09RR
1659 070398	TDCT E	24 BTL	400M SIX	66-06.00S	169-40.30W	g	KIWI09RR
0018 080398	TDCT B	CTD	SIO	64-42.00S	169-19.95W	g	KIWI09RR
0054 080398	TDCT E	24 BTL	400M SIO	64-42.00S	169-19.99W	g	KIWI09RR
0224 080398	TDCT B	CTD	SIX	64-42.00S	169-20.01W	g	KIWI09RR
0305 080398	TDCT E	24 BTL	400M SIX	64-41.99S	169-20.00W	g	KIWI09RR
0902 080398	TDCT B	CTD	SIO	64-42.00S	169-20.00W	g	KIWI09RR
0944 080398	TDCT E	24 BTL	400M SIO	64-42.00S	169-20.00W	g	KIWI09RR
0150 080398	TDCT B	CTD	SIX	64-42.00S	169-19.98W	g	KIWI09RR
0327 080398	TDCT B	24 BTL	2000M SIX	64-42.00S	169-20.00W	g	KIWI09RR
1411 080398	TDCT B	CTD	SIO	64-41.99S	169-19.99W	g	KIWI09RR
1450 080398	TDCT E	24 BTL	400M SIO	64-42.00S	169-20.00W	g	KIWI09RR
1857 080398	TDCT B	CTD	SIX	64-41.99S	169-19.98W	g	KIWI09RR
1935 080398	TDCT E	24 BTL	400M SIX	64-41.99S	169-19.99W	g	KIWI09RR
2200 080398	TDCT B	CTD	SIO	64-41.99S	169-19.97W	g	KIWI09RR
2238 080398	TDCT E	24 BTL	400M SIO	64-41.99S	169-19.99W	g	KIWI09RR
0040 090398	TDCT B	CTD	SIX	64-41.99S	169-19.98W	g	KIWI09RR
0125 090398	TDCT E	24 BTL	400M SIX	64-41.99S	169-19.98W	g	KIWI09RR
0437 090398	TDCT B	CTD	SIO	64-41.99S	169-19.99W	g	KIWI09RR
0620 090398	TDCT E	24 BTL	2000M SIO	64-42.00S	169-20.00W	g	KIWI09RR
1533 090398	TDCT B	CTD	SIX	63-04.99S	169-53.00W	g	KIWI09RR
1620 090398	TDCT E	24 BTL	400M SIX	63-05.00S	169-53.00W	g	KIWI09RR

#	GMT DDMMYY	SAMP	B SAMPLE	DISP	CRUISE			
#	TIME DATE	TZ	CODE	IDENTIFIER	CODE	LATITUDE	LONGITUDE	P LEG-SHIP
	0201 100398		TDCT B CTD	SIO	61-39.99S	170-05.99W	g	KIWI09RR
	0244 100398		TDCT E 24 BTL	400M SIO	61-39.99S	170-06.00W	g	KIWI09RR
	0432 100398		TDCT B CTD	SIX	61-40.00S	170-05.99W	g	KIWI09RR
	0514 100398		TDCT E 24 BTL	400M SIX	61-40.00S	170-06.00W	g	KIWI09RR
	0859 100398		TDCT B CTD	SIO	61-39.94S	170-05.90W	g	KIWI09RR
	0936 100398		TDCT E 24 BTL	400M SIO	61-39.90S	170-05.93W	g	KIWI09RR
	1600 100398		TDCT B CTD	SIX	61-40.00S	170-06.01W	g	KIWI09RR
	1747 100398		TDCT E 24 BTL	2000M SIX	61-40.00S	170-06.00W	g	KIWI09RR
	2215 100398		TDCT B CTD	SIO	61-40.00S	170-06.00W	g	KIWI09RR
	2248 100398		TDCT E 24 BTL	400M SIO	61-40.00S	170-06.00W	g	KIWI09RR
	0100 110398		TDCT B CTD	SIX	61-40.00S	170-06.00W	g	KIWI09RR
	0142 110398		TDCT E 24 BTL	400M SIX	61-40.00S	170-06.00W	g	KIWI09RR
	0900 110398		TDCT B CTD	SIO	61-40.00S	170-05.99W	g	KIWI09RR
	0945 110398		TDCT E 24 BTL	400M SIO	61-40.00S	170-05.99W	g	KIWI09RR
	1125 110398		TDCT B CTD	SIX	61-40.00S	170-05.99W	g	KIWI09RR
	1415 110398		TDCT E 24 BTL	3399M SIX	61-40.00S	170-05.99W	g	KIWI09RR
	0155 120398		TDCT B CTD	SIO	61-15.00S	170-05.99W	g	KIWI09RR
	0253 120398		TDCT E 24 BTL	400M SIO	61-14.99S	170-05.99W	g	KIWI09RR
	0408 120398		TDCT B CTD	SIX	61-02.50S	170-06.00W	g	KIWI09RR
	0506 120398		TDCT E 24 BTL	400M SIX	61-02.50S	170-06.00W	g	KIWI09RR
	0606 120398		TDCT B CTD	SIO	60-54.95S	170-05.93W	g	KIWI09RR
	0700 120398		TDCT E 24 BTL	400M SIO	60-55.00S	170-05.99W	g	KIWI09RR
	0802 120398		TDCT B CTD	SIX	60-48.01S	170-05.96W	g	KIWI09RR
	0904 120398		TDCT E 24 BTL	400M SIX	60-48.01S	170-05.97W	g	KIWI09RR
	1008 120398		TDCT B CTD	SIO	60-39.99S	170-06.00W	g	KIWI09RR
	1108 120398		TDCT E 24 BTL	400M SIO	60-39.99S	170-05.98W	g	KIWI09RR
	1322 120398		TDCT B CTD	SIX	60-13.99S	170-05.99W	g	KIWI09RR
	1411 120398		TDCT E 24 BTL	400M SIX	60-13.99S	170-05.99W	g	KIWI09RR
	0445 130398		TDCT B CTD	SIO	58-29.99S	170-00.00W	g	KIWI09RR
	0535 130398		TDCT E 24 BTL	400M SIO	58-30.02S	170-00.01W	g	KIWI09RR
	1400 130398		TDCT B CTD	SIX	56-50.99S	170-10.00W	g	KIWI09RR
	1445 130398		TDCT E 24 BTL	400M SIX	56-51.00S	170-09.99W	g	KIWI09RR
	1215 140398		TDCT B CTD	SIO	54-19.99S	173-19.99W	g	KIWI09RR
	1301 140398		TDCT E 24 BTL	400M SIO	54-20.00S	173-19.99W	g	KIWI09RR
	1926 140398		TDCT B CTD	SIX	54-19.99S	173-20.00W	g	KIWI09RR
	2013 140398		TDCT E 24 BTL	400M SIX	54-19.99S	173-19.99W	g	KIWI09RR
	0004 150398		TDCT B CTD	SIO	54-19.99S	173-20.00W	g	KIWI09RR
	0105 150398		TDCT E 24 BTL	400M SIO	54-19.99S	173-19.99W	g	KIWI09RR

#GMT DDMMYY	SAMP	B SAMPLE	DISP	P CRUISE		
#TIME DATE TZ	CODE	IDENTIFIER	CODE	LATITUDE	LONGITUDE	C LEG-SHIP
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0655 150398	TDCT	B CTD	SIX	54-23.76S	173-17.90W	g KIWI09RR
1131 150398	TDCT	E 24 BTL	5070M SIX	54-23.77S	173-17.90W	g KIWI09RR
1948 150398	TDCT	B CTD	SIO	52-57.98S	174-43.79W	g KIWI09RR
2046 150398	TDCT	E 24 BTL	400M SIO	52-58.07S	174-43.64W	g KIWI09RR

\*\*\*\* Geochemical Samples - Thorium Pumps \*\*\*

2106 140298	GCXX	B Thorium pumps	WHO	49-59.19S	178-49.56W	g KIWI09RR
2150 140298	GCXX	E Thorium pumps	WHO	49-59.21S	178-49.56W	g KIWI09RR
0415 160298	GCXX	B Thorium pumps	WHO	52-58.06S	174-44.03W	g KIWI09RR
0644 160298	GCXX	E Thorium pumps	WHO	53-00.24S	174-45.17W	g KIWI09RR
2350 190298	GCXX	B Thorium Pumps	WHO	56-50.88S	170-09.80W	g KIWI09RR
0251 200298	GCXX	E Thorium Pumps	WHO	56-50.88S	170-09.80W	g KIWI09RR
0132 220298	GCXX	B Thorium Pumps	WHO	60-13.99S	170-03.99W	g KIWI09RR
0454 220298	GCXX	E Thorium Pumps	WHO	60-13.99S	170-04.00W	g KIWI09RR
0604 240298	GCXX	B Thorium Pumps	WHO	63-04.99S	169-53.00W	g KIWI09RR
0949 240298	GCXX	E Thorium pumps	WHO	63-04.99S	169-53.00W	g KIWI09RR
2356 270298	GCXX	B Thorium Pumps	WHO	66-05.99S	168-40.34W	g KIWI09RR
0340 280298	GCXX	E Thorium Pumps	WHO	66-06.00S	168-40.26W	g KIWI09RR
0100 030398	GCXX	B Thorium Pumps	WHO	70-24.01S	165-54.88W	g KIWI09RR
0448 030398	GCXX	E Thorium Pumps	WHO	70-24.01S	165-54.89W	g KIWI09RR
2330 050398	GCXX	B Thorium Pumps	WHO	69-17.99S	168-22.01W	g KIWI09RR
0241 060398	GCXX	E Thorium Pumps	WHO	69-18.00S	168-22.00W	g KIWI09RR
0315 080398	GCXX	B Thorium Pumps	WHO	64-41.99S	169-20.01W	g KIWI09RR
0633 080398	GCXX	E Thorium pumps	WHO	64-42.00S	169-20.00W	g KIWI09RR
0151 110398	GCXX	B Thorium Pumps	WHO	61-40.00S	170-06.00W	g KIWI09RR
0514 110398	GCXX	E Thorium Pumps	WHO	61-40.00S	170-05.99W	g KIWI09RR
2000 110398	GCXX	B Thorium pumps	WHO	61-39.99S	170-06.00W	g KIWI09RR
2337 110398	GCXX	E Thorium Pumps	WHO	61-39.99S	170-06.00W	g KIWI09RR
0113 150398	GCXX	B Thorium Pumps	WHO	54-19.99S	173-20.00W	g KIWI09RR
0448 150398	GCXX	E Thorium pumps	WHO	54-19.99S	173-19.99W	g KIWI09RR

\*\*\*\* Open Nets - LUMCON \*\*\*

2204 140298	ON1M	B Vertical net Net	SIX	49-59.20S	178-49.56W	g KIWI09RR
2224 140298	ON1M	E LIVE STUDIES	200M SIX	49-59.20S	178-49.56W	g KIWI09RR
2223 150298	ON1M	B Vertical Net Tow	SIX	52-58.53S	174-43.99W	g KIWI09RR
2255 150298	ON1M	E LIVE STUDIES	200M SIX	52-59.05S	174-44.04W	g KIWI09RR
1000 160298	ON1M	B Net Net	SIX	53-00.12S	174-43.48W	g KIWI09RR
1030 160298	ON1M	E LIVE STUDIES	200M SIX	53-00.70S	174-43.23W	g KIWI09RR
0958 170298	ON1M	B Vertical net Net	SIX	53-20.78S	174-45.00W	g KIWI09RR
1027 170298	ON1M	E LIVE STUDIES	200M SIX	53-20.78S	174-44.99W	g KIWI09RR
2343 180298	ON1M	B Live Net Tow	SIX	56-50.94S	170-09.80W	g KIWI09RR
0013 190298	ON1M	E LIVE STUDIES	200M SIX	56-50.95S	170-09.81W	g KIWI09RR

#GMT DDMMYY	SAMP B SAMPLE	DISP	P CRUISE		
#TIME DATE TZ	CODE E IDENTIFIER	CODE	LATITUDE	LONGITUDE	c LEG-SHIP
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2210 190298	ON1M B Live Net Tow	SIX	56-50.00S	170-09.99W	g KIWI09RR
2248 190298	ON1M E LIVE STUDIES	200M SIX	56-50.87S	170-09.80W	g KIWI09RR
0950 210298	ON1M B Vertical net Net	SIX	60-14.00S	170-03.99W	g KIWI09RR
1020 210298	ON1M E LIVE STUDIES	200M SIX	60-14.00S	170-04.00W	g KIWI09RR
2150 210298	ON1M B Vertical net Net	SIX	60-14.00S	170-04.00W	g KIWI09RR
2223 210298	ON1M E LIVE STUDIES	200M SIX	60-13.99S	170-03.99W	g KIWI09RR
0930 220298	ON1M B Vertical net Net	SIX	60-13.99S	170-03.98W	g KIWI09RR
1000 220298	ON1M E LIVE STUDIES	200M SIX	60-14.00S	170-04.00W	g KIWI09RR
2358 240298	ON1M B Live Net Tow	SIX	63-05.00S	169-53.00W	g KIWI09RR
0030 250298	ON1M E LIVE STUDIES	200M SIX	63-05.00S	169-53.00W	g KIWI09RR
1037 250298	ON1M B Vertical net Net	SIX	63-04.99S	169-52.99W	g KIWI09RR
1112 250298	ON1M E LIVE STUDIES	200M SIX	63-04.99S	169-52.99W	g KIWI09RR
2200 250298	ON1M B Vertical net Net	SIX	63-05.00S	169-53.00W	g KIWI09RR
2236 250298	ON1M E LIVE STUDIES	200M SIX	63-04.99S	169-52.99W	g KIWI09RR
2219 260298	ON1M B Vertical Net Tow	SIX	66-05.99S	168-40.29W	g KIWI09RR
2251 260298	ON1M E LIVE STUDIES	200M SIX	66-05.99S	168-40.29W	g KIWI09RR
1026 270298	ON1M B Vertical net Net	SIX	66-06.00S	168-40.30W	g KIWI09RR
1059 270298	ON1M E LIVE STUDIES	200M SIX	66-06.00S	168-40.30W	g KIWI09RR
1026 010398	ON1M B Vertical Net Tow	SIX	69-17.81S	168-22.03W	g KIWI09RR
1046 010398	ON1M E LIVE STUDIES	200M SIX	69-17.76S	168-21.96W	g KIWI09RR
1010 020398	ON1M B Vertical net Net	SIX	70-24.04S	165-54.95W	g KIWI09RR
1035 020398	ON1M E LIVE STUDIES	200M SIX	70-24.05S	165-54.85W	g KIWI09RR
2157 020398	ON1M B Vertical net Net	SIX	70-24.02S	165-54.75W	g KIWI09RR
2227 020398	ON1M E LIVE STUDIES	200M SIX	70-24.01S	165-54.88W	g KIWI09RR
0947 030398	ON1M B Vertical net Net	SIX	70-24.01S	165-54.90W	g KIWI09RR
1016 030398	ON1M E LIVE STUDIES	200M SIX	70-24.01S	165-54.85W	g KIWI09RR
1110 040398	ON1M B Vertical	SIX	71-18.94S	166-00.49W	g KIWI09RR
1140 040398	ON1M E LIVE STUDIES	200M SIX	71-18.94S	166-00.49W	g KIWI09RR
0956 050398	ON1M B Vertical net Net	SIX	69-18.00S	168-21.99W	g KIWI09RR
1025 050398	ON1M E LIVE STUDIES	200M SIX	69-18.00S	168-22.00W	g KIWI09RR
2150 050398	ON1M B Vertical net Net	SIX	69-18.00S	168-22.00W	g KIWI09RR
2222 050398	ON1M E LIVE STUDIES	200M SIX	69-18.00S	168-21.99W	g KIWI09RR
0956 060398	ON1M B Vertical net Net	SIX	69-18.00S	168-22.10W	g KIWI09RR
1026 050398	ON1M E LIVE STUDIES	200M SIX	69-17.99S	168-22.01W	g KIWI09RR
1026 080398	ON1M B Vertical net Net	SIX	64-42.00S	169-19.99W	g KIWI09RR
1100 080398	ON1M E LIVE STUDIES	200M SIX	64-41.99S	169-20.00W	g KIWI09RR
2318 080398	ON1M B Verical Net Tow	SIX	64-41.99S	169-20.00W	g KIWI09RR
2349 080398	ON1M E LIVE STUDIES	200M SIX	64-41.99S	169-19.99W	g KIWI09RR
0951 100398	ON1M B Vertical net Net	SIX	61-39.94S	170-05.96W	g KIWI09RR
1024 100398	ON1M E LIVE STUDIES	200M SIX	61-40.00S	170-05.99W	g KIWI09RR

#GMT DDMNYY #TIME DATE	SAMP B SAMPLE TZ CODE E IDENTIFIER	DISP CODE	P CRUISE LATITUDE	LONGITUDE	C LEG-SHIP
2255 100398	ON1M B Vertical Net Tow	SIX	61-40.00S	170-05.99W	g KIWI09RR
2315 100398	ON1M E LIVE STUDIES	200M SIX	61-40.00S	170-06.00W	g KIWI09RR
1000 110398	ON1M B Vertical net Net	SIX	61-39.99S	170-05.99W	g KIWI09RR
1030 110398	ON1M E LIVE STUDIES	200M SIX	61-39.99S	170-06.00W	g KIWI09RR
1311 140398	ON1M B Vertical Net Tow	SIX	54-19.99S	173-19.99W	g KIWI09RR
1345 140398	ON1M E LIVE STUDIES	200M SIX	54-20.00S	173-20.00W	g KIWI09RR
<b>**** OPTICS ***</b>					
2258 140298	OPXX B MER Optical Package	SIO	49-59.19S	178-49.56W	g KIWI09RR
2327 140298	OPXX E Optical Package	SIO	49-59.19S	178-49.56W	g KIWI09RR
0133 160298	OPXX B Optical Package	SIO	52-58.15S	174-43.96W	g KIWI09RR
0208 160298	OPXX E Optical Package	SIO	52-58.99S	174-44.02W	g KIWI09RR
2223 160298	OPXX B Optical Package	SIO	52-58.01S	174-44.27W	g KIWI09RR
2249 160298	OPXX E Optical Package	SIO	52-58.47S	174-44.54W	g KIWI09RR
1142 180298	OPXX B Optical Package	SIO	56-50.99S	170-09.98W	g KIWI09RR
1159 180298	OPXX E Optical Package	SIO	56-50.98S	170-09.97W	g KIWI09RR
1210 210298	OPXX B Optical Package	SIO	60-14.00S	170-03.99W	g KIWI09RR
1238 210298	OPXX E Optical Package	SIO	60-14.00S	170-03.99W	g KIWI09RR
2014 210298	OPXX B Optical package	SIO	60-14.00S	170-04.00W	g KIWI09RR
2047 210298	OPXX E Optical package	SIO	60-14.00S	170-04.00W	g KIWI09RR
0920 220298	OPXX B Optical package	SIO	60-13.99S	170-03.99W	g KIWI09RR
2049 220298	OPXX E Optical package	SIO	60-14.00S	170-04.00W	g KIWI09RR
1953 240298	OPXX B Optical package	SIO	63-04.93S	169-52.99W	g KIWI09RR
2015 240298	OPXX E Optical package	SIO	63-05.00S	169-52.99W	g KIWI09RR
0158 250298	OPXX B Optical Package	SIO	63-05.00S	169-53.00W	g KIWI09RR
0220 250298	OPXX E Optical Package	SIO	63-05.00S	169-52.99W	g KIWI09RR
1910 250298	OPXX B Optical package	SIO	63-04.99S	169-52.99W	g KIWI09RR
1950 250298	OPXX E Optical package	SIO	63-04.99S	169-52.99W	g KIWI09RR
2031 260298	OPXX B Optical package	SIO	66-05.99S	168-40.29W	g KIWI09RR
2103 260298	OPXX E Optical package	SIO	66-05.99S	168-40.29W	g KIWI09RR
0021 270298	OPXX B Optical Package	SIO	66-05.99S	168-40.29W	g KIWI09RR
0059 270298	OPXX E Optical Package	SIO	66-05.99S	168-40.29W	g KIWI09RR
2154 270298	OPXX B Optical package	SIO	66-05.99S	168-40.29W	g KIWI09RR
2229 270298	OPXX E Optical package	SIO	66-05.99S	168-40.30W	g KIWI09RR
2000 020398	OPXX B Optical package	SIO	70-24.02S	165-54.86W	g KIWI09RR
2034 020398	OPXX E Optical package	SIO	70-24.02S	165-54.85W	g KIWI09RR
2010 030398	OPXX B Optical package	SIO	70-24.45S	165-55.47W	g KIWI09RR
2040 030398	OPXX E Optical package	SIO	70-24.45S	165-55.46W	g KIWI09RR

#	GMT DDMMYY	SAMP B SAMPLE TIME DATE TZ CODE E IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	P c	CRUISE LEG-SHIP
1247	040398	OPXX B Optical Package	SIO	71-18.42S	165-57.44W	g	KIWI09RR
1313	040398	OPXX E Optical Package	SIO	71-18.42S	165-57.44W	g	KIWI09RR
0720	050398	OPXX B Optical package	SIO	69-18.00S	168-22.00W	g	KIWI09RR
0746	050398	OPXX E Optical package	SIO	69-18.00S	168-21.99W	g	KIWI09RR
1958	050398	OPXX B Optical package	SIO	69-18.00S	168-21.99W	g	KIWI09RR
2031	050398	OPXX E Optical package	SIO	69-18.00S	168-22.04W	g	KIWI09RR
1654	060398	OPXX B Optics Package	SIO	69-17.74S	168-21.90W	g	KIWI09RR
1724	060398	OPXX E Optics	SIO	69-17.74S	168-21.92W	g	KIWI09RR
0109	080398	OPXX B Optical Package	SIO	64-41.99S	169-19.99W	g	KIWI09RR
0144	080398	OPXX E Optical Package	SIO	64-41.99S	169-19.99W	g	KIWI09RR
1948	080398	OPXX B Optical package	SIO	64-41.97S	169-20.00W	g	KIWI09RR
2027	080398	OPXX E Optical package	SIO	64-41.98S	169-19.99W	g	KIWI09RR
0324	100398	OPXX B Optical Package	SIO	61-40.00S	170-06.00W	g	KIWI09RR
0355	100398	OPXX E Optical Package	SIO	61-40.00S	170-05.99W	g	KIWI09RR
2009	100398	OPXX B Optical package	SIO	61-40.00S	170-06.02W	g	KIWI09RR
2042	100398	OPXX E Optical package	SIO	61-39.98S	170-05.84W	g	KIWI09RR
0800	110398	OPXX B Optical package	SIO	61-40.00S	170-06.00W	g	KIWI09RR
0821	110398	OPXX E Optical package	SIO	61-39.99S	170-05.99W	g	KIWI09RR
2028	140298	OPXX B Optical package	SIO	54-19.99S	173-20.00W	g	KIWI09RR
2056	140298	OPXX E Optical package	SIO	54-19.99S	173-20.00W	g	KIWI09RR
0413	230298	OPXX Optics Drifter #1	OSU	60-49.87S	170-00.36W	g	KIWI09RR
0430	230298	OPXX Optics Drifter #2	OSU	60-53.26S	170-00.11W	g	KIWI09RR
1654	060398	OPXX B Optics Package	SIO	69-17.74S	168-21.90W	g	KIWI09RR
<b>**** Hydrographic Casts ***</b>							
<b>**** Each sample split between OSU &amp; UHI ***</b>							
2359	140298	HCGF B TRACE METAL Rosette	OSU	49-59.20S	178-49.56W	g	KIWI09RR
0023	150298	HCGF E 8 BTL	150M OSU	49-59.20S	178-49.56W	g	KIWI09RR
1330	180298	HCGF B TM Rosette	UHI	56-51.00S	170-09.99W	g	KIWI09RR
1422	180298	HCGF E 8 BTL	150M UHI	56-51.00S	170-09.98W	g	KIWI09RR
1540	180298	HCGF B TM Rosette	OSU	56-51.00S	170-09.98W	g	KIWI09RR
1615	180298	HCGF E 8 BTL	150M OSU	56-51.00S	170-09.98W	g	KIWI09RR
2127	180298	HCGF B TM Rosette	UHI	56-50.99S	170-09.98W	g	KIWI09RR
2152	180298	HCGF E 8 BTL	150M UHI	56-51.00S	170-09.98W	g	KIWI09RR
2138	190298	HCGF B TM Rosette	OSU	56-51.00S	170-10.00W	g	KIWI09RR
2205	190298	HCGF E 8 BTL	150M OSU	56-51.00S	170-09.99W	g	KIWI09RR
1712	200298	HCGF B TM Rosette	UHI	58-30.00S	169-59.98W	g	KIWI09RR
1753	200298	HCGF E 8 BTL	150M UHI	58-30.00S	169-59.98W	g	KIWI09RR

#GMT #TIME	DDMMYY DATE	SAMP TZ	B SAMPLE CODE	DISP CODE	CRUISE LATITUDE	CRUISE LONGITUDE	P CRUISE C LEG-SHIP
			E IDENTIFIER				
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0227	210298	HCGF	B TM	Rosette	OSU	60-14.00S	170-03.96W g KIWI09RR
0259	210298	HCGF	E 8	BTL	150M OSU	60-14.00S	170-03.98W g KIWI09RR
0718	210298	HCGF	B TM	Rosette	UHI	60-13.99S	170-04.00W g KIWI09RR
0823	210298	HCGF	E 8	BTL	150M UHI	60-14.00S	170-04.00W g KIWI09RR
1300	210298	HCGF	B TM	Rosette	OSU	60-14.00S	170-04.00W g KIWI09RR
1335	210298	HCGF	E 8	BTL	150M OSU	60-14.00S	170-04.00W g KIWI09RR
1442	210298	HCGF	B TM	Rosette	UHI	60-13.99S	170-04.00W g KIWI09RR
1515	210298	HCGF	E 8	BTL	150M UHI	60-14.00S	170-03.98W g KIWI09RR
2110	210298	HCGF	B TM	rosette	OSU	60-14.00S	170-03.98W g KIWI09RR
2139	210298	HCGF	E 8	BTL	150M OSU	60-13.99S	170-04.00W g KIWI09RR
0634	230298	HCGF	B TM	Rosette	UHI	60-55.00S	170-00.00W g KIWI09RR
0721	230298	HCGF	E 8	BTL	150M UHI	60-55.01S	170-00.02W g KIWI09RR
1443	230298	HCGF	B TM	Rosette	OSU	61-40.00S	170-00.00W g KIWI09RR
1518	230298	HCGF	E 8	BTL	150M OSU	61-40.00S	170-00.00W g KIWI09RR
0017	240298	HCGF	B TM	Rosette	UHI	63-04.99S	169-53.00W g KIWI09RR
0052	240298	HCGF	E 8	BTL	150M UHI	63-05.00S	169-53.00W g KIWI09RR
0450	240298	HCGF	B TM	Rosette	OSU	63-05.00S	169-53.00W g KIWI09RR
0521	240298	HCGF	E 8	BTL	150M OSU	63-04.99S	169-52.99W g KIWI09RR
1233	240298	HCGF	B TM	Rosette	UHI	63-05.00S	169-52.99W g KIWI09RR
1259	240298	HCGF	E 8	BTL	150M UHI	63-04.99S	169-52.99W g KIWI09RR
1349	240298	HCGF	B TM	Rosette	OSU	63-04.99S	169-52.99W g KIWI09RR
1422	240298	HCGF	E 8	BTL	150M OSU	63-05.00S	169-52.99W g KIWI09RR
2056	240298	HCGF	B TM	Rosette	UHI	63-05.00S	169-52.99W g KIWI09RR
2136	240298	HCGF	E 8	BTL	150M UHI	63-04.99S	169-53.00W g KIWI09RR
0850	260298	HCGF	B TM	rosette	OSU	64-42.00S	169-19.98W g KIWI09RR
0926	260298	HCGF	E 8	BTL	150M OSU	64-42.00S	169-19.99W g KIWI09RR
1737	260298	HCGF	B TM	Rosette	UHI	66-05.99S	168-40.28W g KIWI09RR
1809	260298	HCGF	E 8	BTL	150M UHI	66-05.99S	168-40.29W g KIWI09RR
2136	260298	HCGF	B TM	Rosette	OSU	66-05.99S	168-40.29W g KIWI09RR
2209	260298	HCGF	E 8	BTL	150M OSU	66-05.99S	168-40.29W g KIWI09RR
1231	270298	HCGF	B TM	Rosette	UHI	66-06.00S	168-40.30W g KIWI09RR
1310	270298	HCGF	E 8	BTL	150M UHI	66-06.00S	168-40.29W g KIWI09RR
1414	270298	HCGF	B TM	Rosette	OSU	66-06.00S	168-40.30W g KIWI09RR
2031	270298	HCGF	B TM	Rosette	OSU	66-05.98S	168-40.31W g KIWI09RR
2104	270298	HCGF	E 8	BTL	150M OSU	66-05.99S	168-40.34W g KIWI09RR
1513	010398	HCGF	B TM	Rosette	UHI	69-17.74S	168-21.94W g KIWI09RR
1600	010398	HCGF	E 8	BTL	150M UHI	69-17.79S	168-22.29W g KIWI09RR
0340	020398	HCGF	B TM	Rosette	OSU	70-24.05S	165-54.86W g KIWI09RR
0433	020398	HCGF	E 8	BTL	150M OSU	70-24.05S	165-54.86W g KIWI09RR

#	GMT DDMMYY	SAMP	B SAMPLE	DISP	P	CRUISE	
#	TIME DATE	TZ	CODE E IDENTIFIER	CODE	LATITUDE	LONGITUDE	C LEG-SHIP
	0900 020398		HCGF B TM rosette	UHI	70-24.05S	165-54.95W	g KIWI09RR
	0926 020398		HCGF E 8 BTL	150M UHI	70-24.05S	165-55.02W	g KIWI09RR
	1226 020398		HCGF B TM Rosette	OSU	70-24.01S	165-54.88W	g KIWI09RR
	1254 020398		HCGF E 8 BTL	150M OSU	70-24.01S	165-54.88W	g KIWI09RR
	1226 020398		HCGF B TM Rosette	OSU	70-24.01S	165-54.88W	g KIWI09RR
	1254 020398		HCGF E 8 BTL	150M OSU	70-24.01S	165-54.88W	g KIWI09RR
	1407 020398		HCGF B TM Rosette	UHI	70-24.00S	165-54.89W	g KIWI09RR
	1436 020398		HCGF E 8 BTL	150M UHI	70-24.01S	165-54.89W	g KIWI09RR
	2101 020398		HCGF B TM Rosette	OSU	70-24.04S	165-54.80W	g KIWI09RR
	2140 020398		HCGF E 8 BTL	150M OSU	70-24.04S	165-54.72W	g KIWI09RR
	0606 030398		HCGF B TM Rosette	URI	70-24.01S	165-54.87W	g KIWI09RR
	0634 030398		HCGF E 8 BTL	150M UHI	70-24.01S	165-54.88W	g KIWI09RR
	1400 030398		HCGF B TM Rosette	OSU	70-24.46S	165-55.47W	g KIWI09RR
	1429 030398		HCGF E 8 BTL	150M OSU	70-24.46S	165-55.48W	g KIWI09RR
	2055 030398		HCGF B TM rosette	UHI	70-24.45S	165-55.46W	g KIWI09RR
	2140 030398		HCGF E 8 BTL	150M UHI	70-24.61S	165-57.24W	g KIWI09RR
	1337 040398		HCGF B TM Rosette	OSU	71-18.42S	165-57.44W	g KIWI09RR
	1407 040398		HCGF E 8 BTL	150M OSU	71-18.42S	165-57.44W	g KIWI09RR
	1455 040398		HCGF B TM Rosette	UHI	71-18.42S	165-57.44W	g KIWI09RR
	1525 040398		HCGF E 8 BTL	150M UHI	71-18.42S	165-57.44W	g KIWI09RR
	0145 050398		HCGF B TM Rosette	OSU	69-18.08S	168-21.80W	g KIWI09RR
	0215 050398		HCGF E 8 BTL	150M OSU	69-18.08S	168-21.84W	g KIWI09RR
	1228 050398		HCGF B TM Rosette	UHI	69-18.00S	168-21.99W	g KIWI09RR
	1257 050398		HCGF E 8 BTL	150M UHI	69-18.01S	168-21.97W	g KIWI09RR
	1228 080398		HCGF B TM Rosette	OSU	64-42.00S	169-20.00W	g KIWI09RR
	1240 080398		HCGF E 8 BTL	150M OSU	64-42.00S	169-19.99W	g KIWI09RR
	2105 080398		HCGF B TM rosette	UHI	64-41.99S	169-19.98W	g KIWI09RR
	2124 080398		HCGF E 8 BTL	150M UHI	64-41.99S	169-19.99W	g KIWI09RR
	1809 090398		HCGF B TM Rosette	OSU	63-04.99S	169-53.00W	g KIWI09RR
	1853 090398		HCGF E 8 BTL	150M OSU	63-04.99S	169-53.00W	g KIWI09RR
	1230 100398		HCGF B TM Rosette	UHI	61-40.01S	170-06.02W	g KIWI09RR
	1258 100398		HCGF E 8 BTL	150M UHI	61-39.99S	170-05.99W	g KIWI09RR
	1351 100398		HCGF B TM Rosette	OSU	61-40.01S	170-06.02W	g KIWI09RR
	1423 100398		HCGF E 8 BTL	150M OSU	61-40.00S	170-06.00W	g KIWI09RR
	2055 100398		HCGF B TM rosette	UHI	61-40.00S	170-05.97W	g KIWI09RR
	2121 100398		HCGF E 8 BTL	150M UHI	61-40.00S	170-06.01W	g KIWI09RR
	1652 120398		HCGF B TM Rosette	OSU	60-13.99S	170-06.00W	g KIWI09RR
	1723 120398		HCGF E 8 BTL	150M OSU	60-13.96S	170-05.99W	g KIWI09RR
	0142 130398		HCGF B TM Rosette	UHI	58-30.00S	170-00.01W	g KIWI09RR
	0219 130398		HCGF E 8 BTL	150M UHI	58-30.00S	170-00.00W	g KIWI09RR
	1719 130398		HCGF B TM Rosette	OSU	56-51.00S	170-09.99W	g KIWI09RR
	1754 130398		HCGF E 8 BTL	150M OSU	56-50.99S	170-09.99W	g KIWI09RR

#	GMT DDMY	SAMP	B SAMPLE	DISP	P	CRUISE	
#	TIME DATE	TZ	CODE E IDENTIFIER	CODE	LATITUDE	LONGITUDE	C LEG-SHIP
#	-----	-----	-----	-----	-----	-----	-----
1500	140398		HCGF B TM Rosette	UHI	54-19.99S	173-20.00W	g KIWI09RR
1532	140398		HCGF E 8 BTL	150M UHI	54-20.00S	173-20.00W	g KIWI09RR
1800	140398		HCGF B TM Rosette	OSU	54-19.99S	173-20.00W	g KIWI09RR
1824	140398		HCGF E 8 BTL	150M OSU	54-19.99S	173-20.00W	g KIWI09RR
2108	140398		HCGF B TM rosette	UHI	54-19.99S	173-20.00W	g KIWI09RR
2135	140398		HCGF E 8 BTL	150M UHI	54-19.99S	173-19.99W	g KIWI09RR

## \*\*\*\* Cameras - Particle and Optic Profiling System \*\*\*

0115	150298	CAXX B POPS	PARTICLE& OPTIC	TAMU	49-59.19S	178-49.56W	g KIWI09RR
0130	150298	CAXX E PROFILING	SYSTEM	TAMU	49-59.20S	178-49.56W	g KIWI09RR
0721	160298	CAXX B POPS		TAMU	52-58.21S	174-44.07W	g KIWI09RR
0745	160298	CAXX E POPS		TAMU	52-58.96S	174-43.83W	g KIWI09RR
0755	160298	CAXX B POPS		TAMU	52-59.31S	174-43.64W	g KIWI09RR
0815	160298	CAXX E POPS		TAMU	52-59.93S	174-43.53W	g KIWI09RR
2001	160298	CAXX B POPS		TAMU	52-58.21S	174-44.05W	g KIWI09RR
2051	160298	CAXX E POPS		TAMU	52-58.12S	174-44.43W	g KIWI09RR
0521	170298	CAXX B POPS		TAMU	53-08.74S	174-47.37W	g KIWI09RR
0601	170298	CAXX E POPS		TAMU	53-09.14S	174-47.13W	g KIWI09RR
1145	170298	CAXX B POPS		TAMU	53-20.78S	174-45.00W	g KIWI09RR
1304	170298	CAXX E POPS		TAMU	53-20.78S	174-45.00W	g KIWI09RR
1907	180298	CAXX B POPS		TAMU	56-50.99S	170-09.97W	g KIWI09RR
1952	180298	CAXX E POPS		TAMU	56-50.99S	170-09.99W	g KIWI09RR
0503	200298	CAXX B POPS		TAMU	56-50.93S	170-09.89W	g KIWI09RR
0614	200298	CAXX E POPS		TAMU	56-50.94S	170-09.88W	g KIWI09RR
0547	210298	CAXX B POPS		TAMU	60-14.00S	170-03.99W	g KIWI09RR
0646	210298	CAXX E POPS		TAMU	60-14.00S	170-03.99W	g KIWI09RR
1901	210298	CAXX B POPS		TAMU	60-14.00S	170-03.99W	g KIWI09RR
1948	210298	CAXX E POPS		TAMU	60-14.00S	170-03.97W	g KIWI09RR
0535	220298	CAXX B POPS		TAMU	60-14.00S	170-03.99W	g KIWI09RR
0646	220298	CAXX E POPS		TAMU	60-13.98S	170-03.95W	g KIWI09RR
0739	230298	CAXX B POPS		TAMU	60-54.98S	169-59.93W	g KIWI09RR
0853	230298	CAXX E POPS		TAMU	60-55.00S	170-00.01W	g KIWI09RR
1530	230298	CAXX B POPS		TAMU	61-40.00S	170-00.00W	g KIWI09RR
1646	230298	CAXX E POPS		TAMU	61-40.00S	170-00.00W	g KIWI09RR

#	GMT DDMMYY	SAMP	B SAMPLE	DISP	p CRUISE		
#	TIME DATE	TZ	CODE E IDENTIFIER	CODE	LATITUDE	LONGITUDE	c LEG-SHIP
	1722 240298		CAXX B POPS	TAMU	63-05.00S	169-52.99W	g KIWI09RR
	1850 240298		CAXX E POPS	TAMU	63-05.00S	169-53.00W	g KIWI09RR
	0439 250298		CAXX B POPS	TAMU	63-05.00S	169-53.00W	g KIWI09RR
	0522 250298		CAXX E POPS	TAMU	63-05.00S	169-53.00W	g KIWI09RR
	1604 250298		CAXX B POPS	TAMU	63-04.99S	169-52.99W	g KIWI09RR
	1622 250298		CAXX E POPS	TAMU	63-04.99S	169-53.00W	g KIWI09RR
	1627 250298		CAXX B POPS	TAMU	63-04.99S	169-53.00W	g KIWI09RR
	1728 250298		CAXX E POPS	TAMU	63-05.00S	169-53.00W	g KIWI09RR
	0935 260298		CAXX B POPS	TAMU	64-42.00S	169-19.98W	g KIWI09RR
	1010 260298		CAXX E POPS	TAMU	64-42.00S	169-19.99W	g KIWI09RR
	1830 260298		CAXX B POPS	TAMU	66-05.99S	168-40.29W	g KIWI09RR
	1901 260298		CAXX E POPS	TAMU	66-05.99S	168-40.29W	g KIWI09RR
	0733 270298		CAXX B POPS	TAMU	66-06.00S	168-40.30W	g KIWI09RR
	0808 270298		CAXX E POPS	TAMU	66-06.00S	168-40.29W	g KIWI09RR
	1907 270298		CAXX B POPS	TAMU	66-05.98S	168-40.30W	g KIWI09RR
	1940 270298		CAXX E POPS	TAMU	66-06.00S	168-40.36W	g KIWI09RR
	0717 020398		CAXX B POPS	TAMU	70-24.06S	165-54.84W	g KIWI09RR
	0754 020398		CAXX E POPS	TAMU	70-24.11S	165-54.68W	g KIWI09RR
	1803 020398		CAXX B POPS	TAMU	70-24.01S	165-54.88W	g KIWI09RR
	1834 020398		CAXX E POPS	TAMU	70-24.01S	165-54.88W	g KIWI09RR
	0708 030398		CAXX B POPS	TAMU	70-24.01S	165-54.88W	g KIWI09RR
	0737 030398		CAXX E POPS	TAMU	70-24.01S	165-54.88W	g KIWI09RR
	1800 030398		CAXX B POPS	TAMU	70-24.45S	165-55.47W	g KIWI09RR
	1831 030398		CAXX E POPS	TAMU	70-24.45S	165-55.47W	g KIWI09RR
	0237 040398		CAXX B POPS	TAMU	70-24.61S	165-57.23W	g KIWI09RR
	0307 040398		CAXX E POPS	TAMU	70-24.61S	165-57.24W	g KIWI09RR
	1417 040398		CAXX B POPS	TAMU	71-18.42S	165-57.44W	g KIWI09RR
	1447 040398		CAXX E POPS	TAMU	71-18.42S	165-57.44W	g KIWI09RR
	0500 050398		CAXX B POPS	TAMU	69-18.00S	168-22.00W	g KIWI09RR
	0531 050398		CAXX E POPS	TAMU	69-18.00S	168-22.00W	g KIWI09RR
	1737 050398		CAXX B POPS	TAMU	69-18.00S	168-22.00W	g KIWI09RR
	1826 050398		CAXX E POPS	TAMU	69-18.00S	168-21.99W	g KIWI09RR
	0713 060398		CAXX B POPS	TAMU	69-17.99S	168-21.99W	g KIWI09RR
	0834 060398		CAXX E POPS	TAMU	69-17.99S	168-21.99W	g KIWI09RR
	1528 060398		CAXX B POPS	TAMU	69-18.00S	168-21.97W	g KIWI09RR
	1601 060398		CAXX E POPS	TAMU	69-18.00S	168-22.00W	g KIWI09RR

#GMT DDMNYY #TIME DATE	SAMP B SAMPLE TZ CODE E IDENTIFIER	DISP CODE	CRUISE LATITUDE	CRUISE LONGITUDE	P C LEG-SHIP
#-----	-----	-----	-----	-----	-----
0450 070398	CAXX B POPS	TAMU	67-29.99S	170-00.01W	g KIWI09RR
0537 070398	CAXX E POPS	TAMU	67-30.00S	170-00.00W	g KIWI09RR
1442 070398	CAXX B POPS	TAMU	66-06.00S	169-40.30W	g KIWI09RR
1602 070398	CAXX E POPS	TAMU	66-06.00S	169-40.30W	g KIWI09RR
0641 080398	CAXX B POPS	TAMU	64-42.00S	169-19.99W	g KIWI09RR
0712 080398	CAXX E POPS	TAMU	64-42.00S	169-20.00W	g KIWI09RR
1628 080398	CAXX B POPS	TAMU	64-41.98S	169-19.93W	g KIWI09RR
1749 080398	CAXX E POPS	TAMU	64-41.99S	169-19.99W	g KIWI09RR
0236 090398	CAXX B POPS	TAMU	64-41.99S	169-19.99W	g KIWI09RR
0355 090398	CAXX E POPS	TAMU	64-41.99S	169-19.99W	g KIWI09RR
1636 090398	CAXX B POPS	TAMU	63-05.00S	169-52.99W	g KIWI09RR
1759 090398	CAXX E POPS	TAMU	63-05.00S	169-52.99W	g KIWI09RR
0638 100398	CAXX B POPS	TAMU	61-40.00S	170-06.00W	g KIWI09RR
0757 100398	CAXX E POPS	TAMU	61-40.00S	170-06.00W	g KIWI09RR
1802 100398	CAXX B POPS	TAMU	61-39.99S	170-05.98W	g KIWI09RR
1833 100398	CAXX E POPS	TAMU	61-40.00S	170-06.01W	g KIWI09RR
1527 110398	CAXX B POPS	TAMU	61-39.99S	170-06.00W	g KIWI09RR
1951 110398	CAXX E POPS	TAMU	61-40.00S	170-06.00W	g KIWI09RR
1442 120398	CAXX B POPS	TAMU	60-14.00S	170-05.99W	g KIWI09RR
1510 120398	CAXX E POPS	TAMU	60-14.00S	170-05.99W	g KIWI09RR
0243 130398	CAXX B POPS	TAMU	58-30.01S	169-59.98W	g KIWI09RR
0405 130398	CAXX E POPS	TAMU	58-30.00S	170-00.00W	g KIWI09RR
0407 130398	CAXX B POPS	TAMU	58-30.00S	170-00.00W	g KIWI09RR
0436 130398	CAXX E POPS	TAMU	58-30.00S	170-00.00W	g KIWI09RR
1559 130398	CAXX B POPS	TAMU	56-50.99S	170-09.99W	g KIWI09RR
1629 130398	CAXX E POPS	TAMU	56-51.00S	170-10.00W	g KIWI09RR
1546 140398	CAXX B POPS	TAMU	54-19.99S	173-19.99W	g KIWI09RR
1615 140398	CAXX E POPS	TAMU	54-20.00S	173-20.00W	g KIWI09RR
0453 150398	CAXX B POPS	TAMU	54-19.99S	173-20.00W	g KIWI09RR
0527 150398	CAXX E POPS	TAMU	54-19.99S	173-19.99W	g KIWI09RR
2055 150398	CAXX B POPS	TAMU	52-58.05S	174-43.75W	g KIWI09RR
2132 150398	CAXX E POPS	TAMU	52-58.09S	174-43.62W	g KIWI09RR

## \*\*\*\* Open Nets - LUMCON \*\*\*\*

2300 150298	ONBG B Bongo Net	SIX	52-59.17S	174-43.99W	g KIWI09RR	
2327 150298	ONBG E Bongo Net	200M	SIX	52-59.78S	174-44.01W	g KIWI09RR
1035 160298	ONBG B Bongo Net	SIX	53-00.85S	174-43.06W	g KIWI09RR	
1104 160298	ONBG E Bongo Net	200M	SIX	53-01.43S	174-42.89W	g KIWI09RR

#	GMT DDMMYY	SAMP	B SAMPLE	DISP	P	CRUISE			
#	TIME DATE	TZ	CODE	IDENTIFIER	CODE	LATITUDE	LONGITUDE	C LEG-SHIP	
	1032 170298		ONBG B	Bongo Net	SIX	53-20.78S	174-44.99W	g KIWI09RR	
	1103 170298		ONBG E	Bongo Net	200M	SIX	53-20.78S	174-45.00W	g KIWI09RR
	0959 180298		ONBG B	Bongo Net	SIX	56-50.99S	170-09.98W	g KIWI09RR	
	1026 180298		ONBG E	Bongo Net	200M	SIX	56-50.99S	170-09.97W	g KIWI09RR
	1435 180298		ONBG B	Bongo Net	SIX	56-50.99S	170-09.98W	g KIWI09RR	
	1508 180298		ONBG E	Bongo Net	200M	SIX	56-50.99S	170-09.99W	g KIWI09RR
	1752 180298		ONBG B	Bongo net	SIX	56-50.99S	170-09.98W	g KIWI09RR	
	1826 180298		ONBG E	Bongo Net	200M	SIX	56-50.99S	170-09.98W	g KIWI09RR
	2305 180298		ONBG B	Bongo Net	SIX	56-50.96S	170-09.79W	g KIWI09RR	
	2337 180298		ONBG E	Bongo Net	200M	SIX	56-50.94S	170-09.78W	g KIWI09RR
	0328 190298		ONBG B	Bongo net	SIX	56-50.99S	170-09.98W	g KIWI09RR	
	0357 190298		ONBG E	Bongo Net	200M	SIX	56-51.00S	170-10.00W	g KIWI09RR
	2254 190298		ONBG B	Bongo Net	SIX	56-50.88S	170-09.80W	g KIWI09RR	
	2320 190298		ONBG E	Bongo Net	200M	SIX	56-50.88S	170-09.81W	g KIWI09RR
	1025 210298		ONBG B	Bongo Net	SIX	60-14.00S	170-04.00W	g KIWI09RR	
	1055 210298		ONBG E	Bongo Net	200M	SIX	60-14.00S	170-04.00W	g KIWI09RR
	2227 210298		ONBG B	Bongo Net	SIX	60-14.00S	170-04.00W	g KIWI09RR	
	2301 210298		ONBG E	Bongo Net	200M	SIX	60-13.99S	170-03.97W	g KIWI09RR
	1005 220298		ONBG B	Bongo Net	SIX	60-14.00S	170-04.00W	g KIWI09RR	
	1035 220298		ONBG E	Bongo Net	200M	SIX	60-13.99S	170-03.99W	g KIWI09RR
	0121 240298		ONBG B	Bongo Net	SIX	63-04.99S	169-52.99W	g KIWI09RR	
	0152 240298		ONBG E	Bongo Net	200M	SIX	63-04.99S	169-53.00W	g KIWI09RR
	0532 240298		ONBG B	Bongo Net	SIX	63-05.00S	169-53.00W	g KIWI09RR	
	0601 240298		ONBG E	Bongo Net	200M	SIX	63-05.00S	169-53.00W	g KIWI09RR
	1115 240298		ONBG B	Bongo Net	SIX	63-05.00S	169-53.00W	g KIWI09RR	
	1147 240298		ONBG E	Bongo Net	200M	SIX	63-04.99S	169-52.99W	g KIWI09RR
	1432 240298		ONBG B	Bongo Net	SIX	63-05.00S	169-52.99W	g KIWI09RR	
	1500 240298		ONBG E	Bongo Net	200M	SIX	63-05.00S	169-52.99W	g KIWI09RR
	1901 240298		ONBG B	Bongo Net	SIX	63-05.00S	169-53.00W	g KIWI09RR	
	1933 240298		ONBG E	Bongo Net	200M	SIX	63-05.00S	169-53.00W	g KIWI09RR
	2322 240298		ONBG B	Bongo Net	SIX	63-05.01S	169-53.00W	g KIWI09RR	
	2353 240298		ONBG E	Bongo Net	200M	SIX	63-05.00S	169-52.99W	g KIWI09RR
	1115 250298		ONBG B	Bongo Net	SIX	63-05.00S	169-53.00W	g KIWI09RR	
	1142 250298		ONBG E	Bongo Net	200M	SIX	63-05.00S	169-53.00W	g KIWI09RR
	2240 250298		ONBG B	Bongo Net	SIX	63-04.99S	169-52.99W	g KIWI09RR	
	2313 250298		ONBG E	Bongo Net	200M	SIX	63-04.99S	169-53.00W	g KIWI09RR
	2255 260298		ONBG B	Bongo Net	SIX	66-05.99S	168-40.29W	g KIWI09RR	
	2325 260298		ONBG E	Bongo Net	200M	SIX	66-05.99S	168-40.29W	g KIWI09RR
	1103 270298		ONBG B	Bongo Net	SIX	66-05.99S	168-40.29W	g KIWI09RR	
	1131 270298		ONBG E	Bongo Net	200M	SIX	66-05.99S	168-40.29W	g KIWI09RR
	1052 010398		ONBG B	Bongo Net	SIX	69-17.75S	168-21.96W	g KIWI09RR	
	1123 010398		ONBG E	Bongo Net	200M	SIX	69-17.72S	168-21.91W	g KIWI09RR

#	GMT DDMMYY	SAMP	B SAMPLE		DISP		p	CRUISE
#	TIME DATE	TZ	CODE	IDENTIFIER	CODE	LATITUDE	LONGITUDE	c LEG-SHIP
	1042 020398		ONBG	B Bongo Net		SIX	70-24.05S	165-54.84W g KIWI09RR
	1112 020398		ONBG	E Bongo Net	200M	SIX	70-24.05S	165-54.86W g KIWI09RR
	2234 020398		ONBG	B Bongo Net		SIX	70-24.01S	165-54.88W g KIWI09RR
	2301 020398		ONBG	E Bongo Net	200M	SIX	70-24.01S	165-54.83W g KIWI09RR
	1036 030398		ONBG	B Bongo Net		SIX	70-24.45S	165-55.46W g KIWI09RR
	1105 030398		ONBG	E Bongo Net	200M	SIX	70-24.45S	165-55.45W g KIWI09RR
	1145 040398		ONBG	B Bongo Net		SIX	71-18.95S	166-00.49W g KIWI09RR
	1220 040398		ONBG	E Bongo Net	200M	SIX	71-18.93S	166-00.40W g KIWI09RR
	1030 050398		ONBG	B Bongo Net		SIX	69-18.00S	168-22.00W g KIWI09RR
	1101 050398		ONBG	E Bongo Net	200M	SIX	69-18.00S	168-21.99W g KIWI09RR
	2227 050398		ONBG	B Bongo Net		SIX	69-18.00S	168-22.00W g KIWI09RR
	2257 050398		ONBG	E Bongo Net	200M	SIX	69-18.00S	168-22.00W g KIWI09RR
	1032 060398		ONBG	B Bongo Net		SIX	69-17.98S	168-22.12W g KIWI09RR
	1058 060398		ONBG	E Bongo Net	200M	SIX	69-17.99S	168-21.98W g KIWI09RR
	1103 080398		ONBG	B Bongo Net		SIX	64-42.00S	169-20.00W g KIWI09RR
	1135 080398		ONBG	E Bongo Net	200M	SIX	64-42.00S	169-19.99W g KIWI09RR
	2355 080398		ONBG	B Bongo Net		SIX	64-41.99S	169-19.99W g KIWI09RR
	0023 090398		ONBG	E Bongo Net	200M	SIX	64-41.99S	169-19.98W g KIWI09RR
	1029 100398		ONBG	B Bongo Net		SIX	61-40.00S	170-06.00W g KIWI09RR
	1053 100398		ONBG	E Bongo Net	200M	SIX	61-40.00S	170-06.00W g KIWI09RR
	1220 100398		ONBG	B Bongo Net		SIX	61-40.00S	170-06.00W g KIWI09RR
	0001 110398		ONBG	E Bongo Net	200M	SIX	61-40.00S	170-05.99W g KIWI09RR
	1036 110398		ONBG	B Bongo Net		SIX	61-39.98S	170-06.01W g KIWI09RR
	1103 110398		ONBG	E Bongo Net	200M	SIX	61-40.00S	170-05.99W g KIWI09RR
	1350 140398		ONBG	B Bongo Net		SIX	54-20.00S	173-20.00W g KIWI09RR
	1421 140398		ONBG	E Bongo Net	200M	SIX	54-20.00S	173-20.00W g KIWI09RR
	2259 140398		ONBG	B Bongo Net		SIX	54-19.99S	173-19.99W g KIWI09RR
	2331 140398		ONBG	E Bongo Net	200M	SIX	54-19.99S	173-20.00W g KIWI09RR