### REPORT AND INDEX OF UNDERWAY MARINE GEOPHYSICAL DATA

### KIWI EXPEDITION

LEG 6

(KIWIOGRR)

R/V Revelle

(Issued April 1998)

#### Ports:

Lyttleton, New Zealand (20 October 1997)

to

Lyttleton, New Zealand (24 November 1997)

### **Chief Scientist:**

Tim Cowles, Oregon State University

Robert Wilson, Resident Marine Technician Marc Silver, Computer Technician NoSeaBeam/UW Processor on board

Post-Cruise Processing and Report Preparation by the Geological Data Center, Scripps Institution of Oceanography La Jolla, California 92093-0223

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 distributed outside Scripps without prior approval of the chief scientist or 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

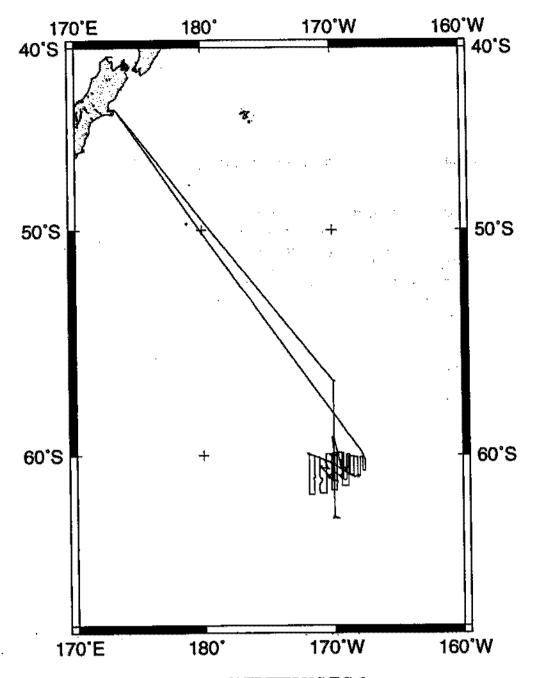
- 1. Files via Itp or on 8mm (Exabyte) and 4mm (DAT) magnetic tape:
  - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
  - b) Above data in a single merged ASCII file in the MGD77 Exchange Format.
  - c) SeaBeam depth data (binary, Sun byte order)
  - d) 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.
- 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.

### Sea Beam Data Collected in Ancillary Mode

In the absence of funding for collecting multi-beam data on this leg, Sea Beam data were collected by SIO/STS in ancillary mode. In this mode of operation, no Hardware Technician or SB/Underway Processor were on board and the types of realtime records and post-processed data products are reduced from those available under the fully funded mode.

The Sea Beam data remain proprietary to the SIO Shipboard Technical Support Group, not the chief scientist.

May 1998



## KIWI EXPEDITION LEG 6

CHIEF SCIENTIST: Tim Cowles, Oregon State University

PORTS: Lyttelton - Lyttelton, New Zealand

DATES: 20 October - 24 November 1997

SHIP: R/V Revelle

### TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 4900 miles

Magnetics - none collected

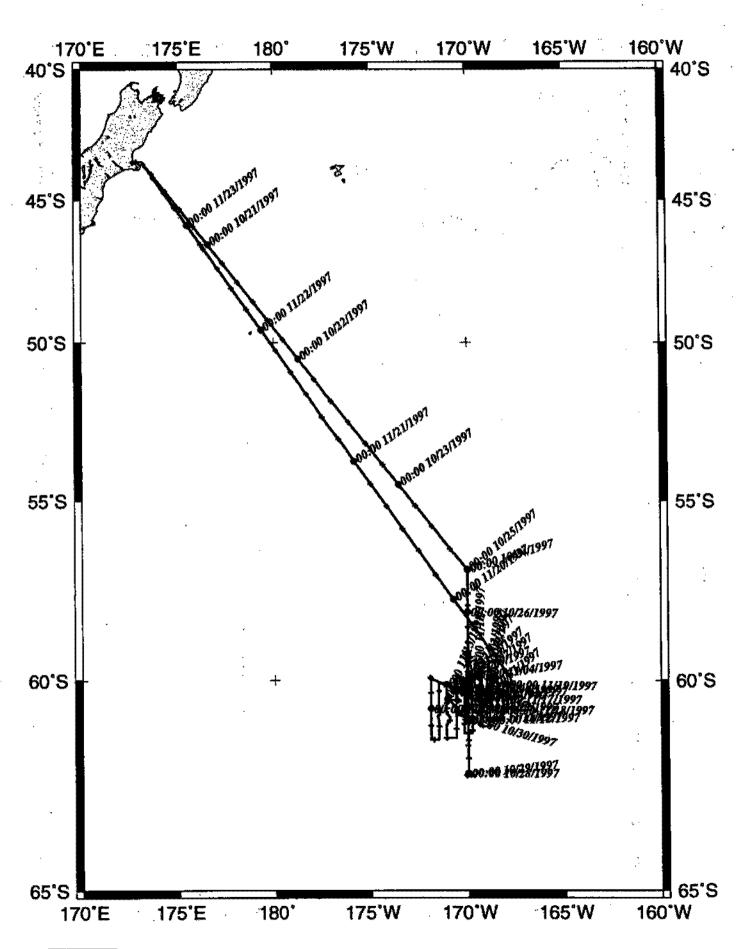
Bathymetry - 2125 miles

Seismic Reflection - none collected

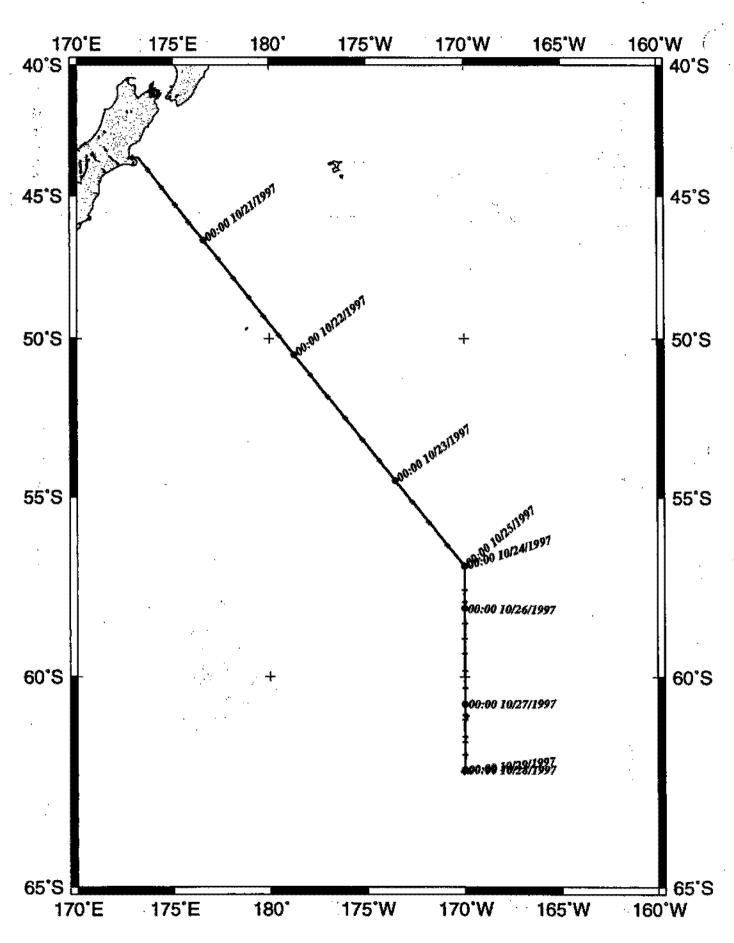
Sea Beam - 2125 miles

Gravity - none collected

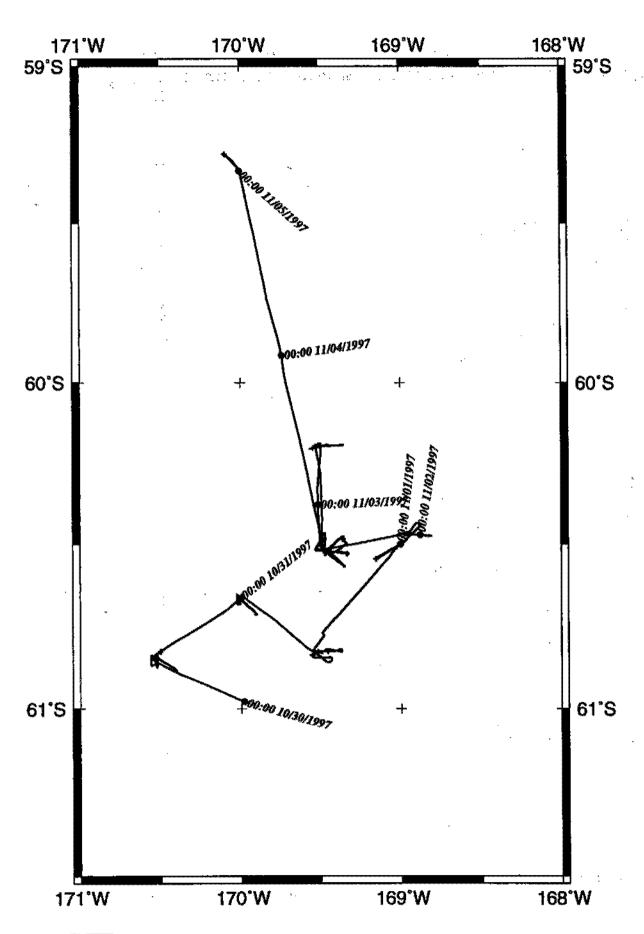
## KIWI06RR Track



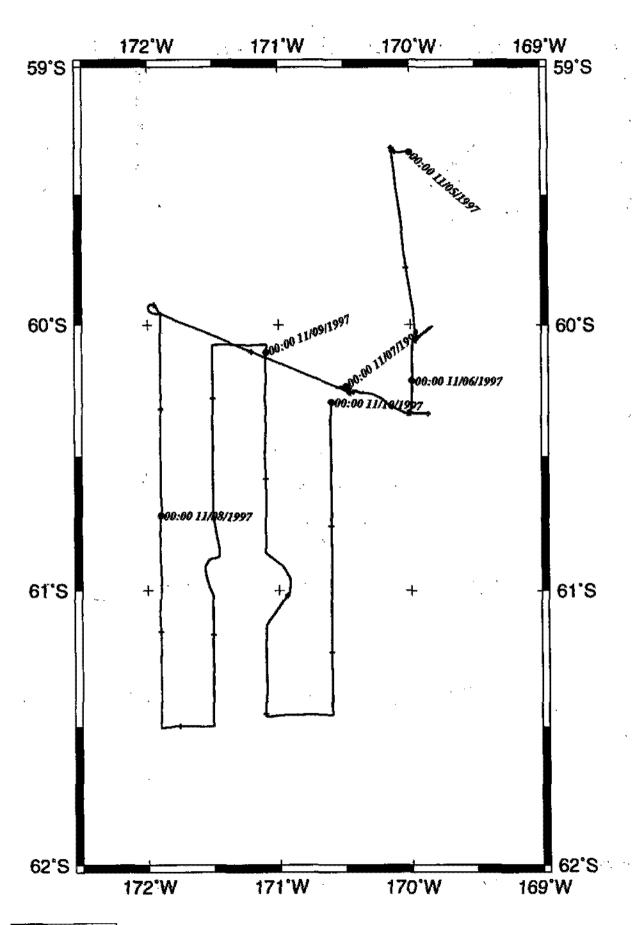
## KIWI06RR Oct21-Oct29



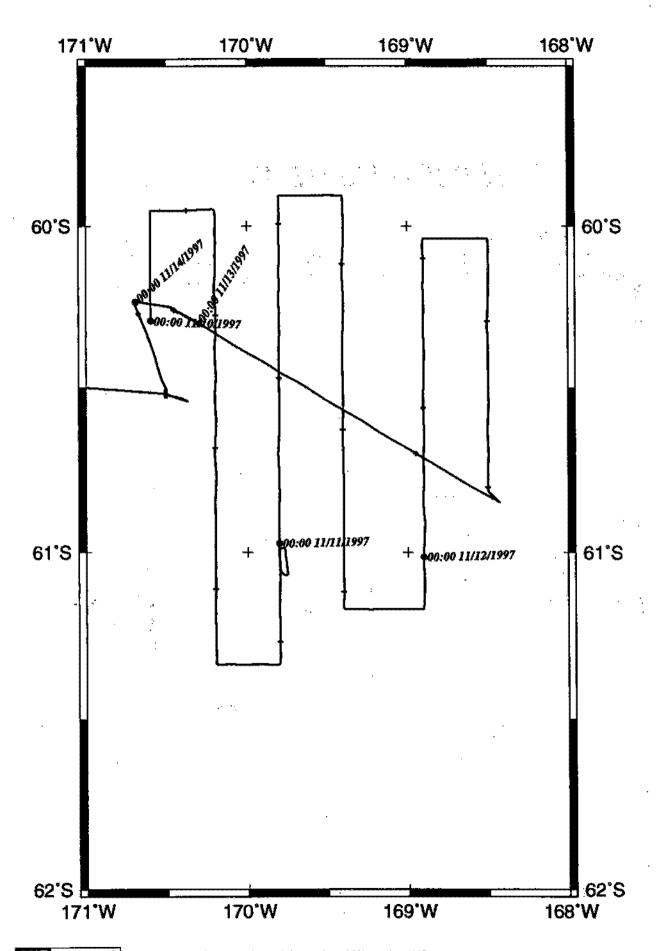
# KIWI06RR Oct30-Nov04



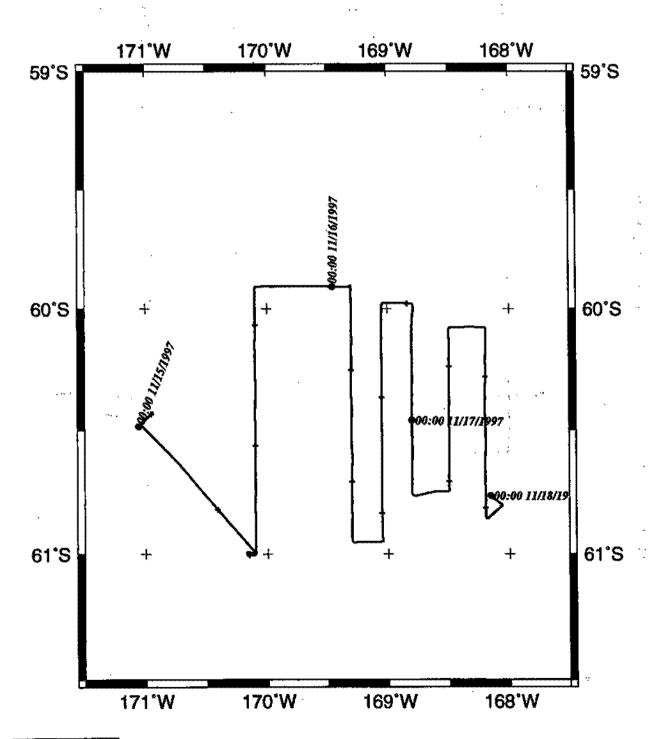
# **KIWI06RR Nov05-09**



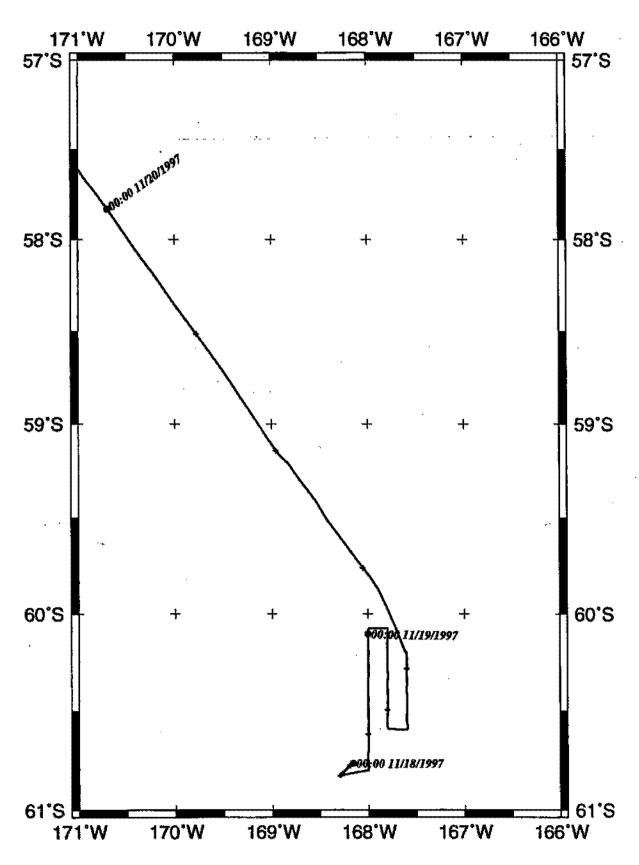
## KIWI06RR Nov10-14

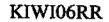


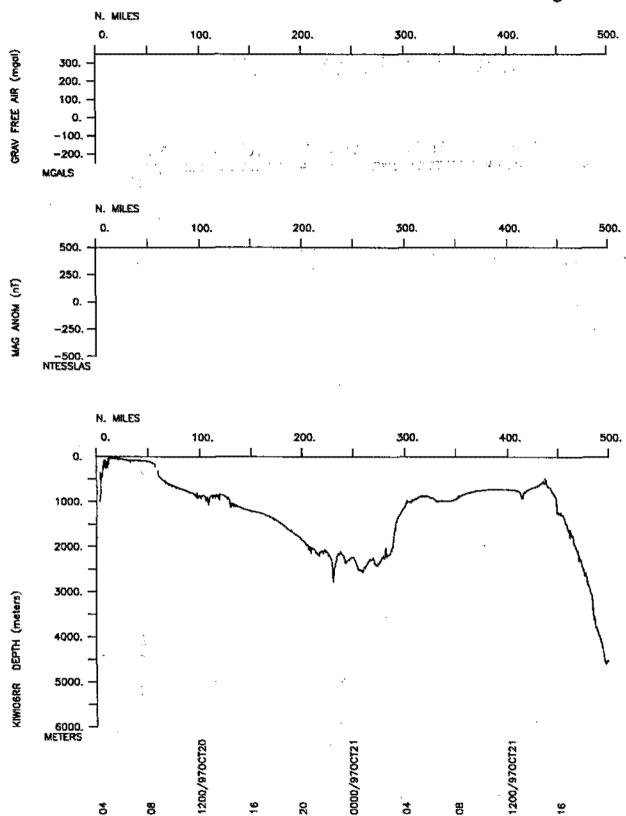
# **KIWI06RR Nov15.17**



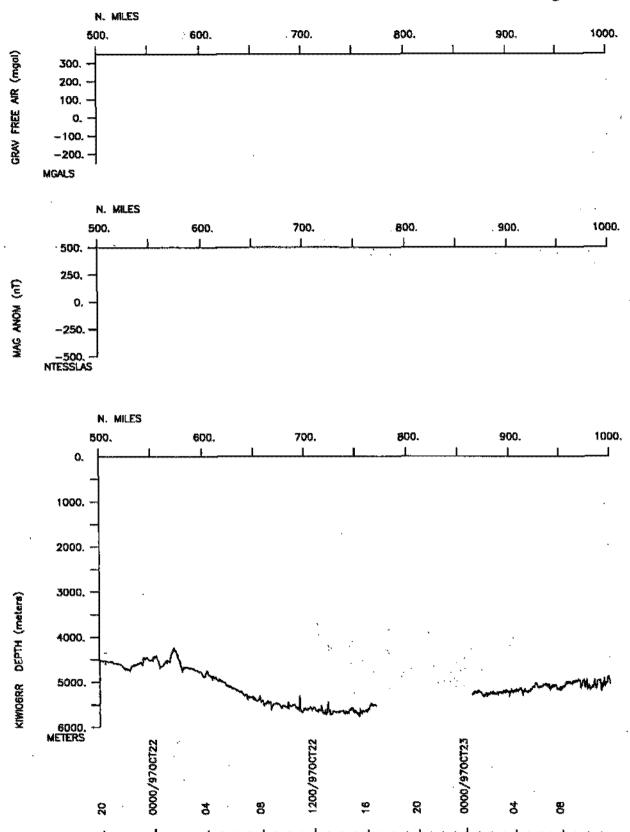
# **KIWI06RR Nov18-20**

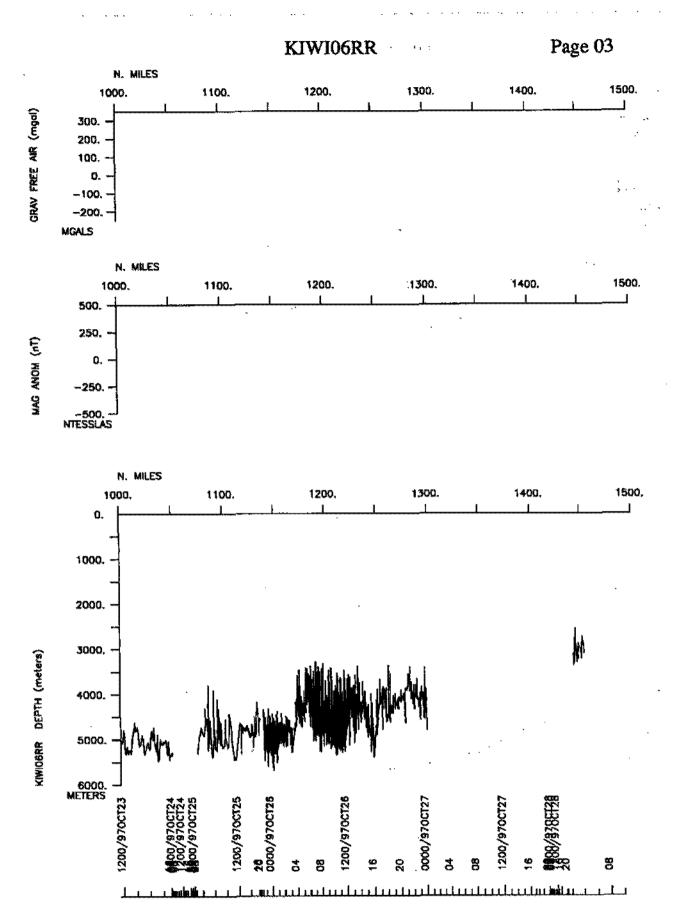


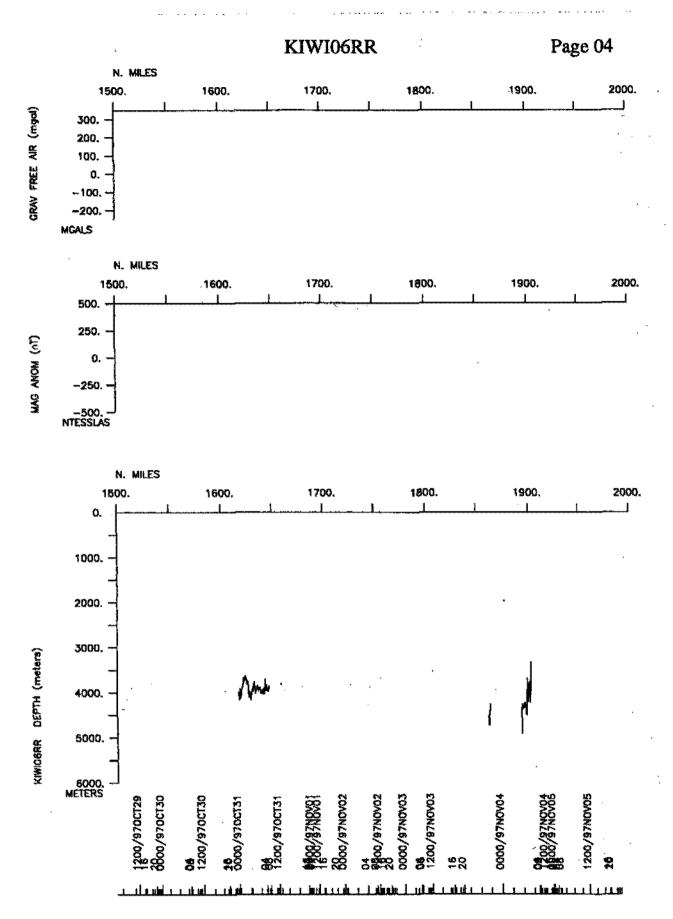


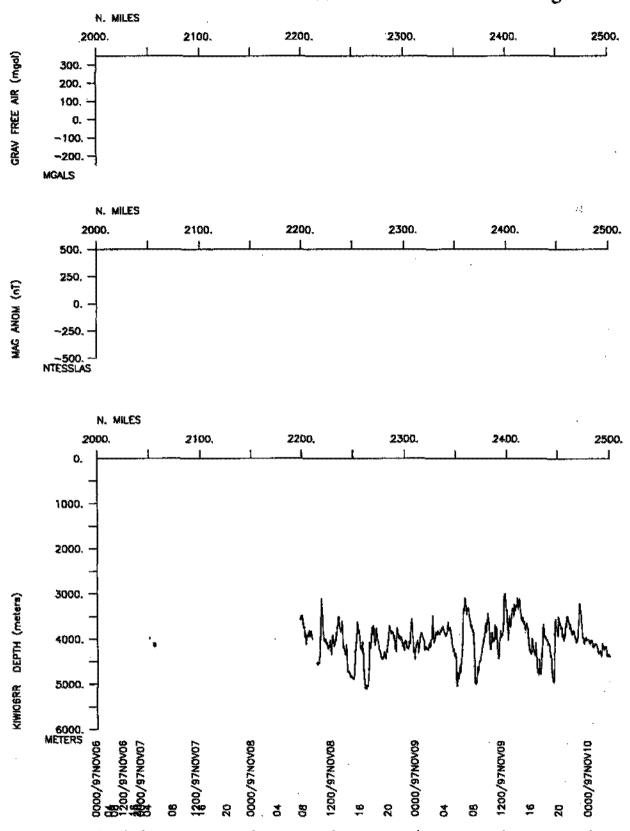


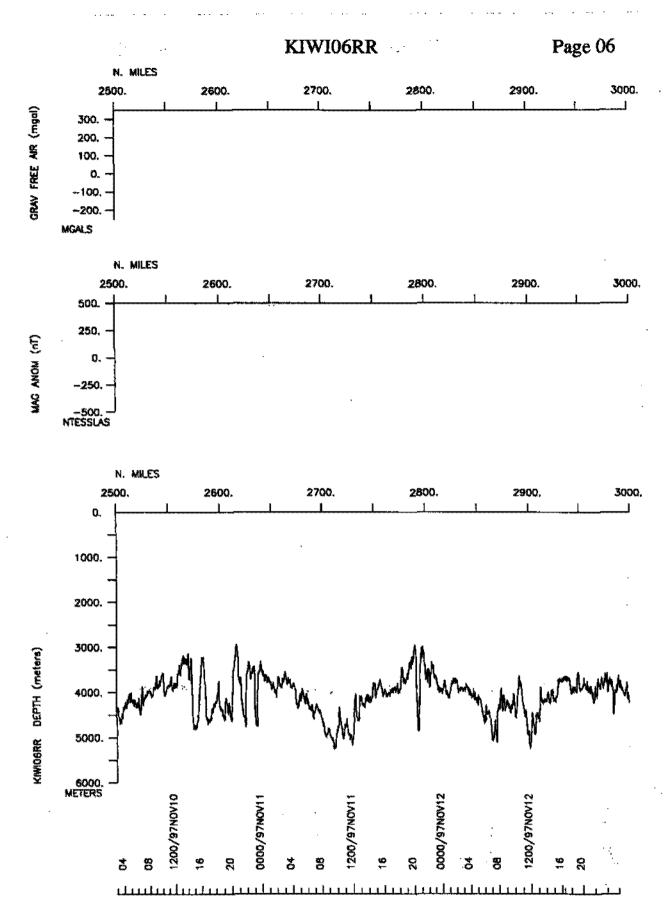


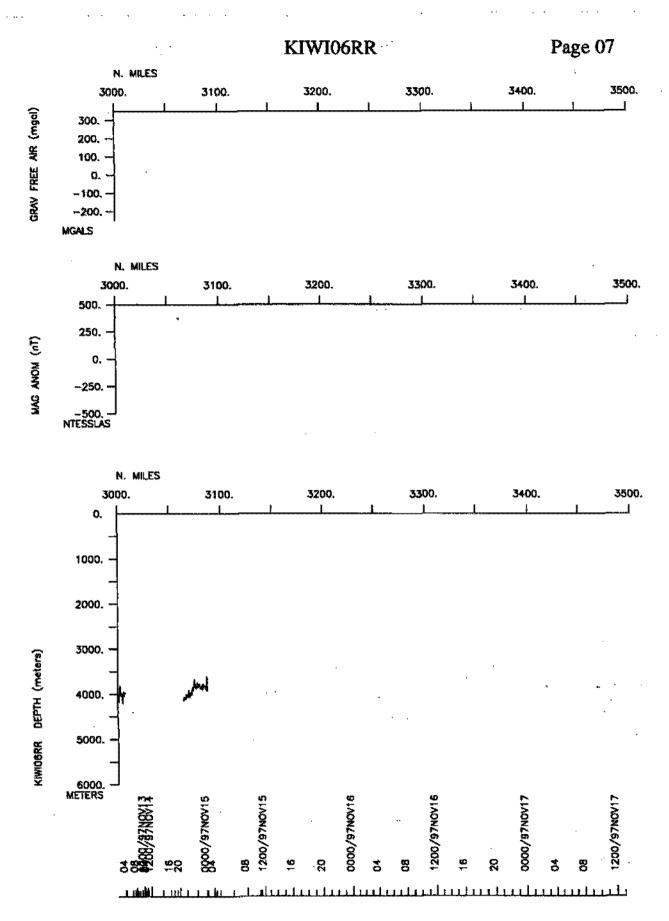












6000. METERS

91/0/87NOV19

3

8

1200/97NOV19

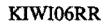
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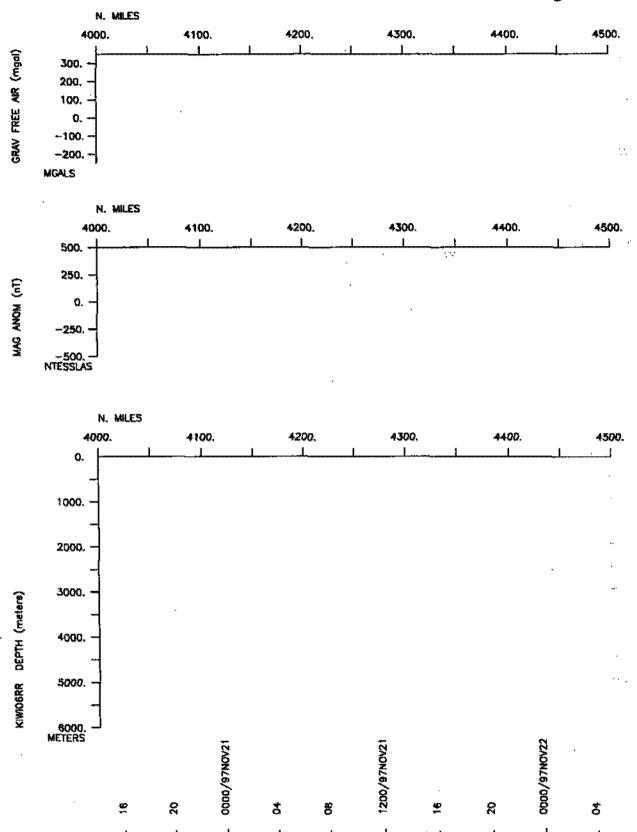
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0000/97NOV20

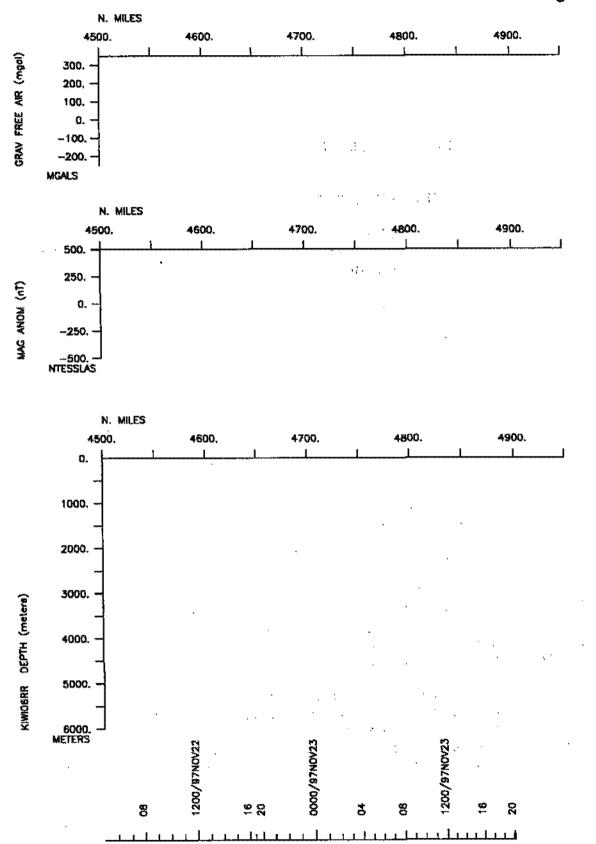
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### S.I.O. SAMPLE INDEX

### KIWI EXPEDITION

LEG 6

(KIWIOGRR)

R/V Revelle

(Issued April 1998)

### Ports:

Lyttleton, New Zealand (20 October 1997) to Lyttleton, New Zealand (24 November 1997)

### Chief Scientist:

Tim Cowles, Oregon State University

The Sample Index is a first level interdisiplinary 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 ***
```

1100 201097 0 LGPT B LYTTLETON, NEW ZEALAND 43-36.00S 172-43.00E f KIWI06RR 0001 241197 0 LGPT E LYTTLETON, NEW ZEALAND 43-36.00S 172-43.00E f KIWI06RR

***	Darer	nnel ***			
#	T. 做T %	********NAME*****	**********	*****AFFILIATION****	**CRID**
#				**************************************	
•		, , ,			
PECS	OSU	Cowles, T	Chief Scientist	Oregon State Univ.	KIWIO6RR
PESP	osu	Abbott, M	Scientist	Oregon State Univ. 🦠	KIWIO6RR
PESP	WHOI	Ball, L	Technician	Woods Hole	KIWI06RR
PESP	OSU		Graduate student	Oregon State Univ.	KIWI06RR
PESP	UHI	Brown, S	Graduate student	Univ. of Hawaii Moss Marine Lab.	KIWI06RR
PESP	SIX	Coale, K	Scientist	Moss Marine Lab.	KIWI06RR
PESP	SIX	Cook, M	Technician	North Carolilna St.	
PESP	MHOI	Crossin, G	Technician	Woods Hole	KIWI06RR
PESP	SIO	Cascotti, K	Graduate student	Scripps Institution	KIWI06RR
PESP	UMI	Degler, E	Graduate student	University of Miami	KIWI06RR
PESP	osu	Fayler, L	Scientist	Oregon State Univ.	KIWIO6RR
PEST	UCSB	Franck, V	Scientist	UC Santa Barbara	KIWIO6RR ·
PESP	SIX	Gordon, M	Research assoc.	Moss Marine Lab.	KIWI06RR
PESP	WHOI	Goyet, C	Scientist	Woods Hole	KIWI06RR
PESP	SIO	Gonzales, A	Scientist	Scripps Institution	KIWI06RR
PESP	MHOI	Kirchlechner, T	Scientsit	Woods Hole	KIWI06RR
PESP	UHI	Landry, M	Scientist	Univ. of Hawaii	KIWI06RR
PESP	SIO	Morgan, Stacey	Research asso.	Scripps Institution	KIWI06RR
PECT		Mcdonough, K	Research assist.	Univ. of Hawaii	KIWI06RR
PESP	osu	O'Malley, R	Research assist.	Oregon State Univ.	KIWI06RR
PESP	OSU	Pierce, S	Research assist.	Oregon State Univ.	KIWI06RR
PESP	SIX	Polk, S	Research assist.	Univ. of Tennesse	KIWL06RR
PESP		Richman, J	Scientist	Oregon State Univ.	KIWI06RR
PESP		Root, D	Technician	Oregon State Univ.	KIWI06RR
PESP	NOAA	Mordy, C	Technician	Nat. Ocean&Atmos Ad	KIWI06RR
PERT	SIX	Stilliman, S	Resident assist.	Univ. of Mass.	KIW106RR
Pest		Tanner, S	Research tech.	Moss Marine Lab.	KIWI06RR
Pesp		Vink, S	Scientist	Univ. of Hawaii	KIWI06RR
PESP		Williams, Robert	Technician	Scripps Institution	
PESP		Wingard, C	Technician	Oregon State Univ.	KIWI06RR
PESP		Willis, M	Chief Technician	Oregon State Univ.	KIWI06RR
PESP		Zhu, X	Scientist	University of Miami	
PEST		Kulak, B	Scientist		KIWI06RR
PEST		Meadows, J.	Scientîst	Duke University	KIWI06RR
PESP		Wilson, Robert		Scripps Institution	
	SIO	Silver, Marc	Computer tech.	Scripps Institution	
Pesp	AWU	Realander, M	CTD Technician	Univ. of Washington	KIWI06RR

### #\*\*\* 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.

1143 031097

```
p CRUISE
#GMT DDMMYY
              SAMP B SAMPLE
                                           DISP
                                           CODE LATITUDE LONGITUDE C LEG-SHIP
#TIME DATE TZ CODE E IDENTIFIER
**** Underway Data Curator - S. M. Smith ext. 42752 ***
#*** Log Books ***
                                      SIO 44-31.08S 174-11.73E g KIWI06RR
1100 201097 0 LBSC B ODF Ops log
2355 241197 0 LBSC E ODF Ops log
                                            SIO 43-36.36S 172-43.38E g KIWI06RR
1100 201097 0 LBSC B JGOFS So.Ocean log
                                            OSU 44-31.08S 174-11.73E g KIWI06RR
2355 241197 0 LBSC E JGOFS So.Ocean log
                                            OSU 43-36.365 172-43.38E g KIWID6RR
                                            WHOI 44-31.085 174-11.73E g KIWIO6RR
            O LBSC B Organic carbon log
1100 201097
                                            WHOI 43-36.365 172-43.38E g KIWI06RR
2355 241197 0 LBSC E Organic carbon log
0103 251097 0 LBSC B Seasoar log book
                                            OSU 57-00.16S 169-59.60W g KIWI06RR
                                            OSU 60-11.88S 167-36.78W a KIWIO6RR
0913 191197 0 LBSC E Seasoar log book
#*** Sea Beam Records (vertical beam and side scan) ***
#*** Digital SeaBeam data only. No analog records were collected on this leg. *
1145 231297 0 MBSR B SeaBeam data
0145 020198 0 MBSR E SeaBeam data
                                           GDC 43-36.36S 172-43.38E g KIWI06RR
                                                43-36.36S 172-43.38E g KIWI06RR
                                            GDC
#*** Echo Sounder - 3.5 kHz ***
1200 201097 0 DPR3 B 3.5khz PDR r-01
                                            GDC 44-40.85S 174-22.33E g KIWI06RR
1945 221197. 0 DPR3 E 3.5khz PDR r-01
                                            GDC 46-39.34S 176-15.45E g KIWI06RR
#*** Continuous Sample for Metals (Wee Fish) ***
                                            UHI 58-01.98S 169-59.23W g KIWI06RR
2225 251097 0 CSXX B metals sampling
1600 271097 0 CSXX E metals sampling
                                            UHI 62-21.225 169-54.63W g KIWIO6RR
1437 071197. 0 CSXX B metals sampling 1700 121197 0 CSXX E metals sampling
                                            UHI 59-57.48S 171-54.85W g KIWI06RR
                                            UHI 60-50.49S 168-26.96W g KIWIO6RR
                                            UHI 61-00.31S 170-09.29W g KIWIO6RR
1200 151197 0 CSXX B metals sampling
1735 171197 O CSXX E metals sampling
                                            UHI 60-49.15S 168-05.45W g KIWIO6RR
1913 181197 0 CSXX B metals sampling
                                            UHI 60-43.50S 168-00.32W g KIWI06RR
0905 191197 0 CSXX E metals sampling
                                            UHI 60-12.05S 167-36.49W g KIWI06RR
#*** Current Meter Plus Radiometer ***
**** Moorings to be recovered by RVIB Palmer ***
2132 291097 0 CMAB B mooring radiometer 1 OSU 60-59.09S 170-00.80W g KIWIO6RR 0001 241197 0 CMAB C mooring radiometer 1 OSU 43-36.36S 172-43.38E g KIWIO6RR
              0 CMAB B mooring radiometer 9 OSU 60-58.71S 169-59.80W g KIWI06RR
1132 291097
0001 241197 0 CMAB C mooring radiometer 9 OSU 43-36.36S 172-43.38E g KIWI06RR
0036 311097 0 CMAB B mooring radiometer 2 OSU 60-39.45S 170-01.39W g KIWI06RR
0001 241197 0 CMAB C mooring radiometer 2 OSU 43-36.36S 172-43.38E g KIWI06RR
             0 CMAB B mooring radiometer 5 OSU 60-49.57S 169-31.58W g KIWI06RR
1258 311097
             0 CMAB C mooring radiometer 5 OSU 43-36.36S 172-43.38E g KIWI06RR
0001 241197
             0 CMAB B mooring radiometer 8 OSU 43-36.40S 172-43.18E g KIWI06RR
0145 021097
0001 241197 0 CMAB C mooring radiometer 8 OSU 43-36.36S 172-43.38E g KIWI06RR
```

0 CMAB B mooring radiometer 7 OSU 43-36.40S 172-43.18E g KIWI06RR

0001 241197 0 CMAB C mooring radiometer 7 OSU 43-36.36S 172-43.38E g KIWI06RR

```
1643 031097 0 CMAB B mooring radiometer 6 OSU 43-36.40S 172-43.18E g KIWI06RR
0001 241197 0 CMAB C mooring radiometer 6 OSU 43-36.365 172-43.38E g KIWI06RR
2301 051097 0 CMAB B mooring radiometer 4 OSU 43-36.40S 172-43.18E g KIWI06RR
0001 241197 0 CMAB C mooring radiometer 4 OSU 43-36.36S 172-43.38E g KIWI06RR
1115 061097 0 CMAB B mooring radiometer 3 OSU 43-36.40S 172-43.18E g KIWI06RR 0001 241197 0 CMAB C mooring radiometer 3 OSU 43-36.36S 172-43.38E g KIWI06RR
0808 131097 0 CMAB B mooring radiometer11 OSU 43-36.40S 172-43.18E g KIWI06RR
0001 241197 0 CMAB C mooring radiometer11 OSU 43-36.36S 172-43.38E g KIWIO6RR
2012 141097 0 CMAB B mooring radiometer10 OSU 43-36.40S 172-43.18E g KIWI06RR
0001 241197 0 CMAB C mooring radiometer10 OSU 43-36.36S 172-43.38E g KIWI06RR
0531 151097 0 CMAB B mooring radiometer12 OSU 43-36.40S 172-43.18E g KIWI06RR 0001 241197 0 CMAB C mooring radiometer12 OSU 43-36.36S 172-43.38E g KIWI06RR
#*** Thorium Pumps ***
0130 241097 0 PCXX B Thorium Pumps WHOI 57-00.07S 169-59.86W g KIWI06RR 0518 241097 0 PCXX E Thorium pumps WHOI 57-00.09S 169-59.89W g KIWI06RR
0533 281097 0 PCXX B Thorium Pumps
                                                   WHOI 62-19.035 170-00.13W g KIWI06RR
0908 281097 0 PCXX E Thorium pumps
                                                   WHOI 62-19.03S 170-00.14W g KIWI06RR
0400 011197 0 PCXX B Thorium Pumps
                                                    WHOI 60-30.00S 169-00.01W g KIWI06RR
0725 011197 0 PCXX E Thorium pumps
                                                    WHOI 60-30.00S 169-00.01W g KIWI06RR
1755 041197 0 PCXX B Thorium Pumps
2118 041197 0 PCXX E Thorium pumps
                                                    WHOI 59-20.01S 170-00.00W g KIWI06RR
                                                    WHOI 59-20.02S 169-59.98W g KIWI06RR
0748 141197 0 PCXX B Thorium Pumps
                                                    WHOI 60-14.12S 170-41.57W g KIWI06RR
1136 141197 0 PCXX E Thorium pumps
                                                    WHOI 60-14.12S 170-41.57W g KIWIO6RR
0502 181197 0 PCXX B Thorium Pumps
                                                    WHOI 60-46.60S 168-11.53W @ KIWI06RR
0800 181197 0 PCXX E Thorium pumps
                                                    WHOI 60-46.60S 168-11.52W g KIWI06RR
#*** SeaSoar Tows ***
2130 251097 0 TDXX B Seasoar tow #1
                                                OSU 58-00.21S 169-59.89W g KIWI06RR
1735 271097 0 TDXX E Seasoar tow #1
                                                    OSU 62-22.35S 169-42.21W d KIWID6RR
1429 071197 0 TDXX B Seasoar tow #2
1710 121197 0 TDXX E Seasoar tow #2
                                                   OSU 59-57.49S 171-54.43W g KIWIOGRR
                                                    OSU 60-50.80S 168-26.34W g KIWIO6RR
1142 151197 0 TDXX B Seasoar tow #3
                                                   OSU 60-59.55S 170-09.56W g KIWI06RR
1730 171197 0 TDXX E Seasoar tow #3
                                                    OSU 60-49.36S 168-05.92W g KIWI06RR
1811 181197 0 TDXX B Seasoar tow #4
                                                   OSU 60-47.445 168-00.04W g KIWIO6RR
0913 191197 0 TDXX E Seasoar tow #4
                                                   OSU 60-11.88S 167-36.78W g KIWIO6RR
 #*** Hydrocasts - Go Flow Trace Metals ***
#*** HCGF Samples belong to Moss Landing Marine Lab ***
                                                    SIX 57-00.08S 169-59.83W g KIWI06RR
1800 231097 0 HCGF
                                Ί
               0 HCGF
                               I
                                                    SIX 57-00.07S 169-59.86W g KIWIO6RR
0720 241097
                                                   SIX 57-00.16S 169-59.59W G KIWIOGRR SIX 57-00.16S 169-59.60W G KIWIOGRR SIX 57-00.16S 169-59.60W G KIWIOGRR SIX 62-19.05S 170-00.15W G KIWIOGRR SIX 62-19.02S 170-00.12W G KIWIOGRR SIX 62-19.02S 170-00.12W G KIWIOGRR SIX 62-19.04S 170-00.12W G KIWIOGRR SIX 62-19.04S 170-00.08W G KIWIOGRR
0150 251097 0 HCGF
0252 251097 0 HCGF
2026 271097 0 HCGF
0015 281097 0 HCGF
0220 281097 0 HCGF
0425 281097 0 HCGF
                                I
I
I
                                I
                                I
 1812 281097 0 HCGF
                                                   SIX 62-20.45S 170-00.98W g KIWI06RR
                                I
 2300 281097 0 HCGF
                                                   SIX 62-20.45S 170-00.97W g KIWI06RR
                                Ι
                                                   SIX 60-30.00S 169-00.02W g KIWI06RR
 1620 311097 0 HCGF
```

```
1900 311097 0 HCGF I SIX 60-30.00S 169-00.03W g KIWIO6RR 0125 011197 0 HCGF I SIX 60-30.00S 169-00.00W g KIWIO6RR 0734 011197 0 HCGF I SIX 60-30.00S 169-00.01W g KIWIO6RR 0600 041197 0 HCGF I SIX 59-19.99S 169-59.98W g KIWIO6RR 1430 041197 0 HCGF I SIX 59-19.96S 169-59.96W g KIWIO6RR 2350 041197 0 HCGF I SIX 59-18.83S 170-00.01W g KIWIO6RR 0530 051197 0 HCGF I SIX 59-18.83S 170-08.60W g KIWIO6RR 1530 131197 0 HCGF I SIX 60-14.12S 170-41.57W g KIWIO6RR 0150 141197 0 HCGF I SIX 60-14.12S 170-41.57W g KIWIO6RR 0430 141197 0 HCGF I SIX 60-14.12S 170-41.57W g KIWIO6RR 1510 171197 0 HCGF I SIX 60-14.12S 170-41.57W g KIWIO6RR 0430 141197 0 HCGF I SIX 60-14.12S 170-41.57W g KIWIO6RR 0430 141197 0 HCGF I SIX 60-45.95S 168-09.52W g KIWIO6RR 0210 181197 0 HCGF I SIX 60-45.96S 168-09.51W g KIWIO6RR 0440 181197 0 HCGF I SIX 60-46.60S 168-11.52W g KIWIO6RR 1400 181197 0 HCGF I SIX 60-49.66S 168-17.68W g KIWIO6RR 0440 181197 0 HCGF I SIX 60-49.66S 168-17.68W g KIWIO6RR
  #*** Open Nets ***
                                                                              MBRD 62-19.29s 170-00.38W g KIWI06RR
MBRD 62-22.24s 170-05.33W g KIWI06RR
  1000 281097 0 ONBG B Mochness
  1150 281097 0 ONBG E Mochness
  0908 011197 0 ONBG B Mochness MBRD 60-30.01S 168-59.88W g KIWI06RR 1117 011197 0 ONBG E Mochness MBRD 60-32.59S 169-09.06W g KIWI06RR
  1320 011197 0 ONIM B Live tow MBRD 60-30.11S 168-59.74W g KIWI06RR 1343 011197 0 ONIM E Live tow MBRD 60-30.10S 168-59.75W g KIWI06RR
  0845 041197 0 ONBG B Mochness
1040 041197 0 ONBG E Mochness
                                                                               MBRD 59-20.14S 169-59.67W g KIWI06RR
MBRD 59-17.03S 170-05.23W g KIWI06RR
                                                                        MBRD 59-16.87S 170-05.47W g KIWI06RR
MBRD 59-16.86S 170-05.47W g KIWI06RR
  1220 041197 0 ONIM B Live tow
  1240 041197 0 ONIM E Live tow
  0925 131197 0 ONBG B Mochness
1145 131197 0 ONBG E Mochness
                                                                                         MBRD 60-14.99s 170-29.79W g KIWI06RR
                                                                                          MBRD 60-14.14S 170-41.24W g KIWIO6RR
  1250 131197 0 ONIM B Live tow MBRD 60-14.12S 170-41.57W g KIWIO6RR 1305 131197 0 ONIM E Live tow MBRD 60-14.12S 170-41.57W g KIWIO6RR
                                                                              MBRD 60-46.66S 168-11.61W g KIWI06RR
MBRD 60-49.66S 168-17.68W g KIWI06RR
  0935 181197 0 ONBG B Mochness
1135 181197 0 ONBG E Mochness
  1220 181197 0 ONIM B Live tow MBRD 60-49.66S 168-17.69W g KIWI06RR 1240 181197 0 ONIM E Live tow MBRD 60-49.66S 168-17.68W g KIWI06RR
 #*** Conductivity, Temperature, Depth ***
```

0 ACXX

0 ACXX

0 ACXX

0646 161197 0653 161197

0702 161197

```
24 250M OSU 60-14.12S 170-41.57W g KIWI06RR
2252 131197 0 TDCT
                      TSONIC
             0 TDCT
                                                60-14.10S 170-41.59W g KIWI06RR
0056 141197
                      TSONIC
                                  24
                                       56M OSU
                                                 60-14.12S 170-41.57W g KIWI06RR
                                     100M OSU
                                  24
0310 141197
             0 TDCT
                      TSONIC
                                  24 500M OSU
                                                 60-14.12s 170-41.56W g KIWIO6RR
            0 TDCT
                      TSONIC
0612 141197
                                                 60-31.19S 170-30.60W g KIWIO6RR
1406 141197
            0 TDCT
                      TSONIC
                                  24 3600M OSU
                                                 60-29.09S 171-03.50W g KIWI06RR
2317 141197
             0 TDCT
                                  24 3650M OSU
                      TSONIC
                                                 61-00.005 170-06.00W g KIWI06RR
                                      500M OSU
0939 151197
             0 TDCT
                      TSONIC
                                  24
                                                 60-48.42S 168-03.74W g KIWIO6RR
1830 171197
             O TDCT
                      TSONIC
                                  24
                                       500M OSU
2037 171197
0007 181197
                                                 60-45.95s 168-09.52W g KIWIO6RR
                                       500M OSU
             0 TDCT
                      TSONIC
                                   24
                                                 60-45.96s 168-09.51W g KIWI06RR
                                       250M OSU
                                   24
             0 TDCT
                      TSONIC
                                      100M OSU
                                                 60-45.96S 168-09.51W g KIWI06RR
0323 181197
             0 TDCT
                      TSONIC
                                   24
                                   24 250M OSU
                                                 60-49.66S 168-17.68W g KIWI06RR
1312 181197
             0 TDCT
                      TSONIC
                                  24 2000M OSU
                                                 60-49.66S 168-17.69W g KIWIO6RR
1510 181197
             O TOCT
                      TSONIC
#*** CTDs - Trace Metal Rosettes ***
#*** TDXX belongs to Moss Landing Marine Lab ***
                      Tr.metal rosette150M SIX 57-00.08S 169-59.86W g KIWI06RR
            0 TDXX
0017 241097
             O TDXX
                                                 57-00.08s 170-00.00W g KIWI06RR
                      Tr.metal rosette150M SIX
0600 241097
1456 281097
             0 TDXX
                                                 62-21.95S 170-04.59W g KIWI06RR
                     · Tr.metal rosette150M SIX
                                                 62-20.45s 170-00.96W g KIWI06RR
2202 281097
             0 TDXX
                      Tr.metal rosette150M SIX
                                                 60-30.00s 169-00.02W g KIWI06RR
             0 TDXX
                       Tr.metal rosette150M SIX
2353 311097
                                                 60-30.00s 168-59.97W g KIWIO6RR
                       Tr.metal rosette150M SIX
0316 011197
             0 TDXX
                                                 60-29.99S 168-59.99W g KIWI06RR
             0 TOXX
                       Tr.metal rosette150M SIX
1404 011197
                                                 59-20.00S 170-00.00W g KIWIO6RR
                       Tr.metal rosette150M SIX
1439 041197
             0 TDXX
                       Tr.metal rosette150M SIX 59-19.97S 170-00.03W g KIWI06RR
2319 041197
             0 TDXX
#*** Radiometers - Tethered ***
                                                 57-00.07S 169-59.87W g KIWI06RR
1938 231097 0 ACXX B Tethered radiometer OSU
                                                 57-00.07S 169-59.87W g KIWI06RR
             0 ACXX E Tethered radiometer
                                            OSU
2006 231097
0106 241097
                                            OSU
                                                 57-00.07S 169-59.87W g KIWI06RR
             0 ACXX B Tethered radiometer
                                                 57-00.09S 169-59.86W g KIWIO6RR
0247 241097
             0 ACXX E Tethered radiometer
                                            osu
                                                 62-20.44S 170-00.99W g KIWI06RR
                                            OSU
2026 281097
             O ACXX B Tethered radiometer
                                                 62-20.45s 170-00.97W g KIWIO6RR
2110 281097
             0 ACXX E Tethered radiometer
                                            OSU
2318 281097
                                            osu
                                                 62-20.45s 170-00.97W g KIWI06RR
             0 ACXX B Tethered radiometer
                                                 62-20.45s 170-00.97W g KIWI06RR
0012 291097
             O ACXX E Tethered radiometer
                                            OSU
                                                 60-14.12S 170-41.57W g KIWI06RR
                                            OSU
2318 131197
             0 ACXX B Tethered radiometer
                                            osu
                                                 60-14.07S 170-41.55W g KIWI06RR
             O ACXX E Tethered radiometer
0014 141197
2334 171197 0 ACXX B Tethered radiometer OSU 0031 181197 0 ACXX E Tethered radiometer OSU
                                                 60-45.96S 168-09.51W g KIWI06RR
                                                 60-45.96S 168-09.52W g KIWI06RR
#*** Radiometers - Drifters ***
                       Drifting radiometers OSU 61-02.145 171-29.96W g KIWI06RR
             0 ACXX
1308 081197
                       Drifting radiometers OSU 60-57.90S 171-32.60W g KIWI06RR
1346 081197
             0 ACXX
1423 081197
                       Drifting radiometers OSU 60-53.73S 171-32.46W g KIWI06RR
             0 ACXX
                       Drifting radiometers OSU 60-49.56S 171-27.54W g KIWI06RR
             0 ACXX
1514 081197
                       Drifting radiometers OSU 60-45.94S 171-28.82W g KIWI06RR
1545 081197
             0 ACXX
                                                 60-41.85S 171-30.07W g KIWIO6RR
             0 ACXX
                       Drifting radiometers OSU
1620 081197
                                                  60-45.98S 171-05.85W g KIWI06RR
             0 ACXX
                       Drifting radiometers CSU
 0534 091197
                       Drifting radiometers OSU
                                                  60-50.43s 171-05.91W g KIWI06RR
             0 ACXX
 0611 091197
 0814 091197
                                                  61-02.45s 170-57.99W g KIWIO6RR
             0 ACXX
                       Drifting radiometers OSU
                                                  61-06.27S 171-03.60W g KIWI06RR
                       Drifting radiometers OSU
 0855 091197
              0 ACXX
                                                  60-56.86S 170-06.00W g KIWI06RR
 1253 151197
              0 ACXX
                       Drifting radiometers OSU
                                                  60-54.89S 170-05.99W g KIWI06RR
              0 ACXX
                       Drifting radiometers OSU
 1311 151197
                                                  60-52.79S 170-05.95W g KIWI06RR
                       Drifting radiometers OSU
 1330 151197
              0 ACXX
                                                  60-50.79S 170-06.04W g KIWI06RR
 1347 151197
              0 ACXX
                       Drifting radiometers OSU
                                                  60-48.88S 170-06.09W g KIWI06RR
              0 ACXX
                       Drifting radiometers OSU
 1403 151197
```

Drifting radiometers OSU

Drifting radiometers OSU

Drifting radiometers OSU

60-33.90S 169-18.03W g KIWI06RR

60-34.73S 169-17.92W g KIWI06RR 60-35.80S 169-17.79W g KIWI06RR

	161197		ACXX		radiometers			169-17.67W g	
0719	161197	Ü	ACXX	Drifting	radiometers	osu	60-37.795	169-17.72W g	KIMTOPKK
								*	,
#***	Submerge	ad	Optica	l Profile	er on CTD ***		** - -		
2046	281097	0	TDXX B	Optical	Profiler	osu	62-20.46S	170-00.96W g	KIWIO6RR
	281097			Optical				170-00.97W g	
2000	311097	'n	מ עצרוייה	Ontical	Profiler .	Ogn	: :60-30 Ang	168-59.95W a	TWINT OCOD
	311097			Optical				169-00.00W a	
*****	**************************************	-							************
. 0803	041197	0		Optical	Profiler .	OSU	59-20.00S	169-60.00W g	KIWI06RR
0825	041197	0	TDXX E	Optical	Profiler	osu	59-20.01S	170-00.01W g	KIWI06RR
`21AA	041197	n	א אצמיי	Onticel	Profiler	OSII -	59-20 028	169-59.99W a	KIMIUEBB
	041197			Optical		OSU		169-59.99W a	
		-	-						
2145	131197	0	TDXX B	Optical	Profiler	OSU	60-14.11S	170-41.57W g	KIWI06RR
2200	131197	0	TDXX E	Optical	Profiler	osu	60-14.12S	170-41.57W g	KIWI06RR
Λοσα	181197	n	mnyy t	Optical	Drofiler	veti	EDLAE EDE	168-11.52W g	THUTAGED
	181197			Optical		OSU		168-11.52W g	
U.7U.3	*****	-		,	エーヘアサームと	~~·	A	war wy well M	サンチャム サ ハ ひじパケ