

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

**KIWI EXPEDITION**

**LEG 12**

**(KIWI12RR)**

**R/V Revelle**

**(Issued July 1998)**

**Ports:**

Pago Pago, American Samoa (9 May 1998)

to

Honolulu, Hawaii (29 May 1998)

**Chief Scientist:**

Bruce Luyendyk, Univ. of Calif. Santa Barbara  
email: luyendyk@quake.crustal.ucsb.edu

No Resident Marine Technician on board

Dan Jacobson, Computer Technician  
No SeaBeam/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.

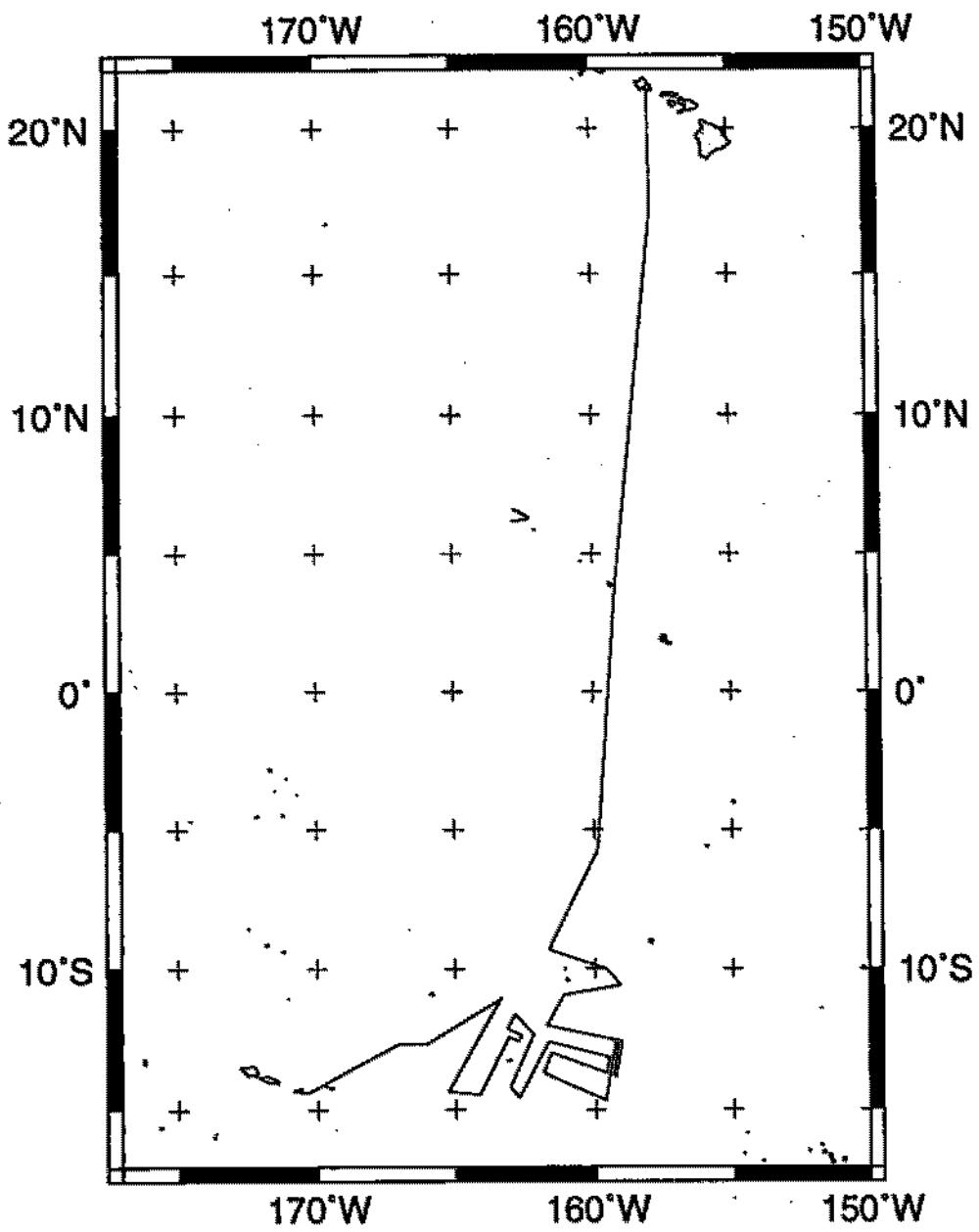
**Track Charts** - annotated with dates and hour ticks.

**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](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 12

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**CHIEF SCIENTIST:** Bruce Luyendyk, U. C. Santa Barbara

**PORTS:** Pago Pago, Amer. Samoa - Honolulu, Hawaii

**DATES:** 09 - 29 May 1998

**SHIP:** R/V Revelle

### TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 4527 miles

Magnetics - 2677 miles

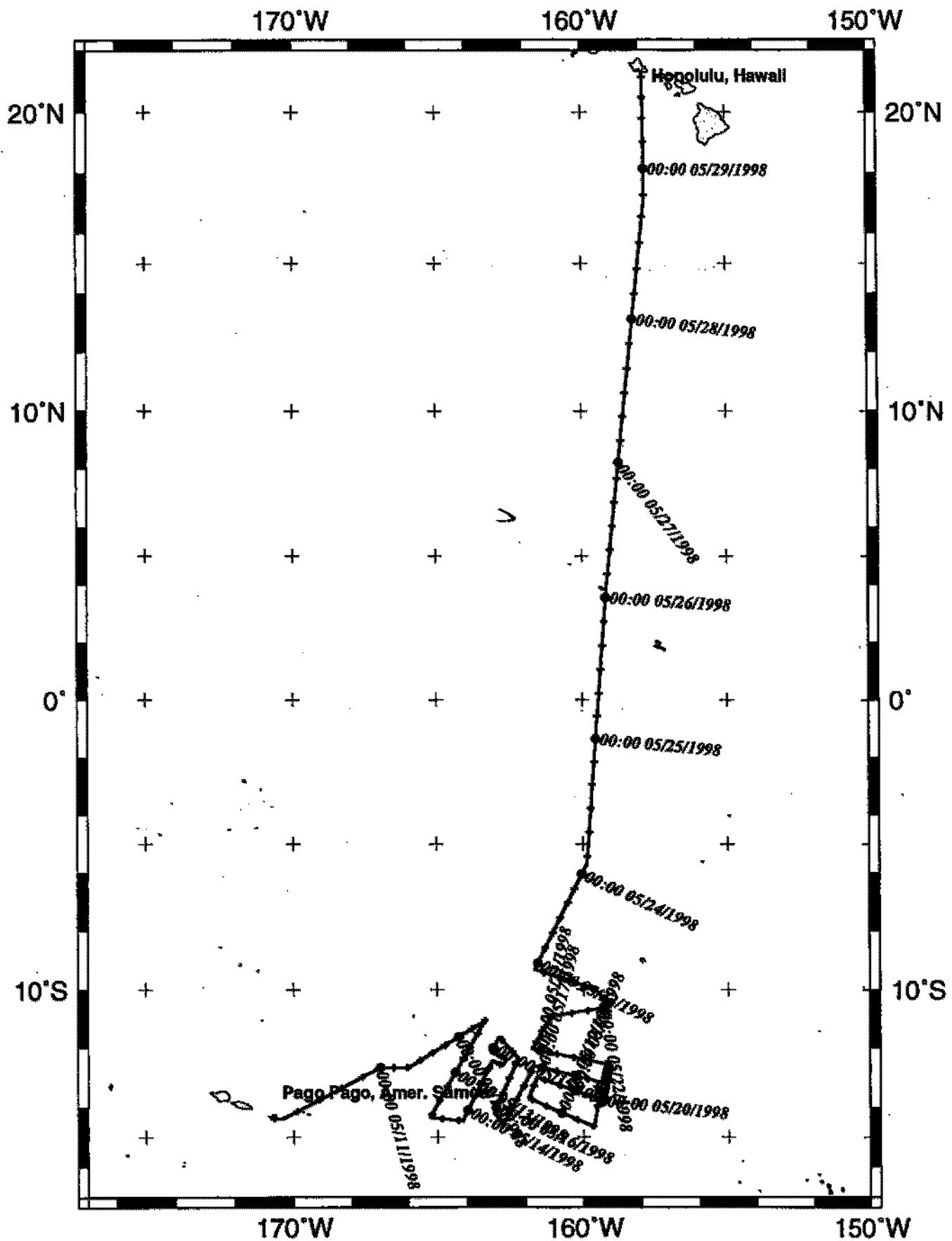
Bathymetry - 4452 miles

Seismic Reflection - 1830 miles

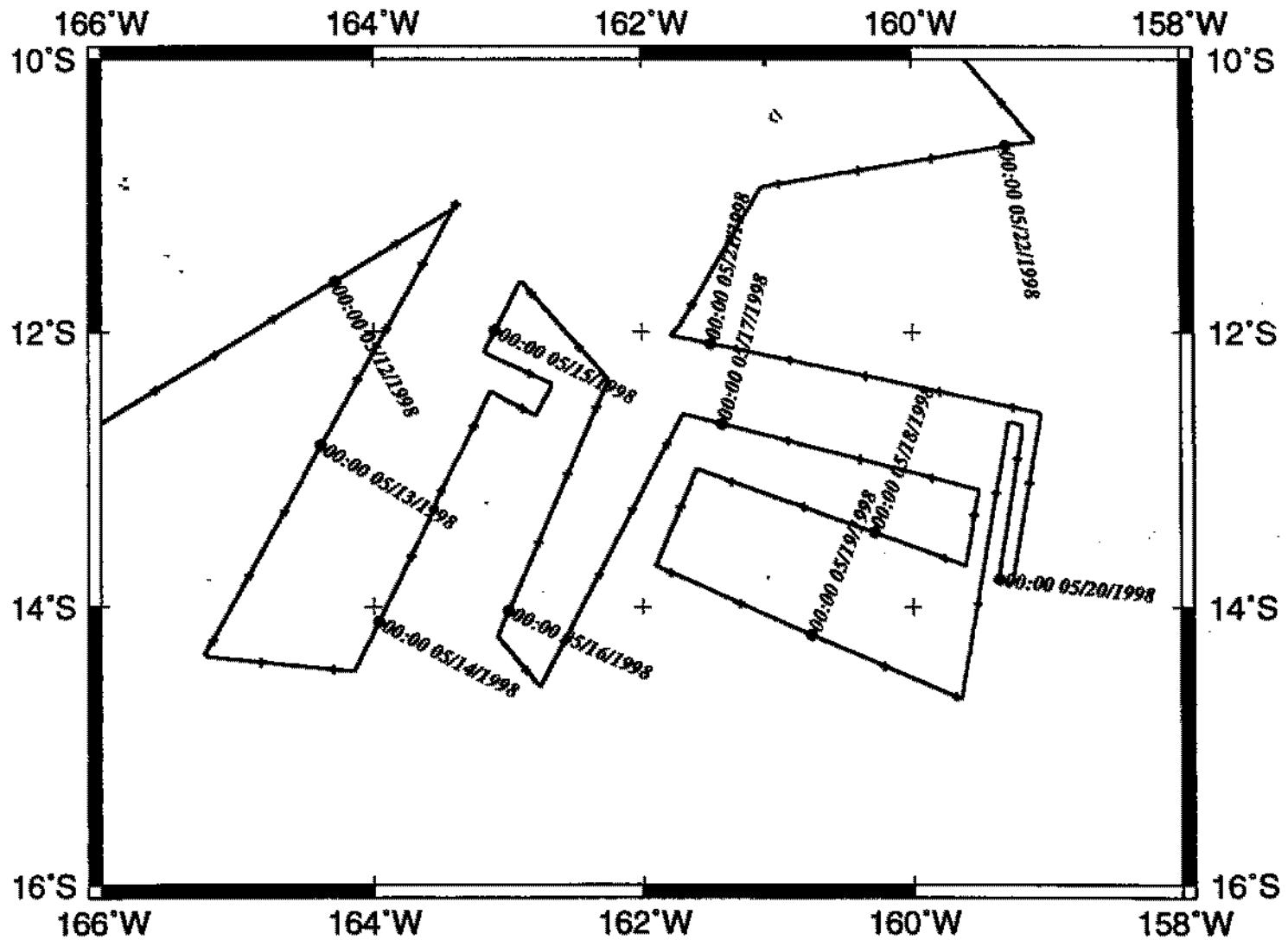
Sea Beam - 4452 miles

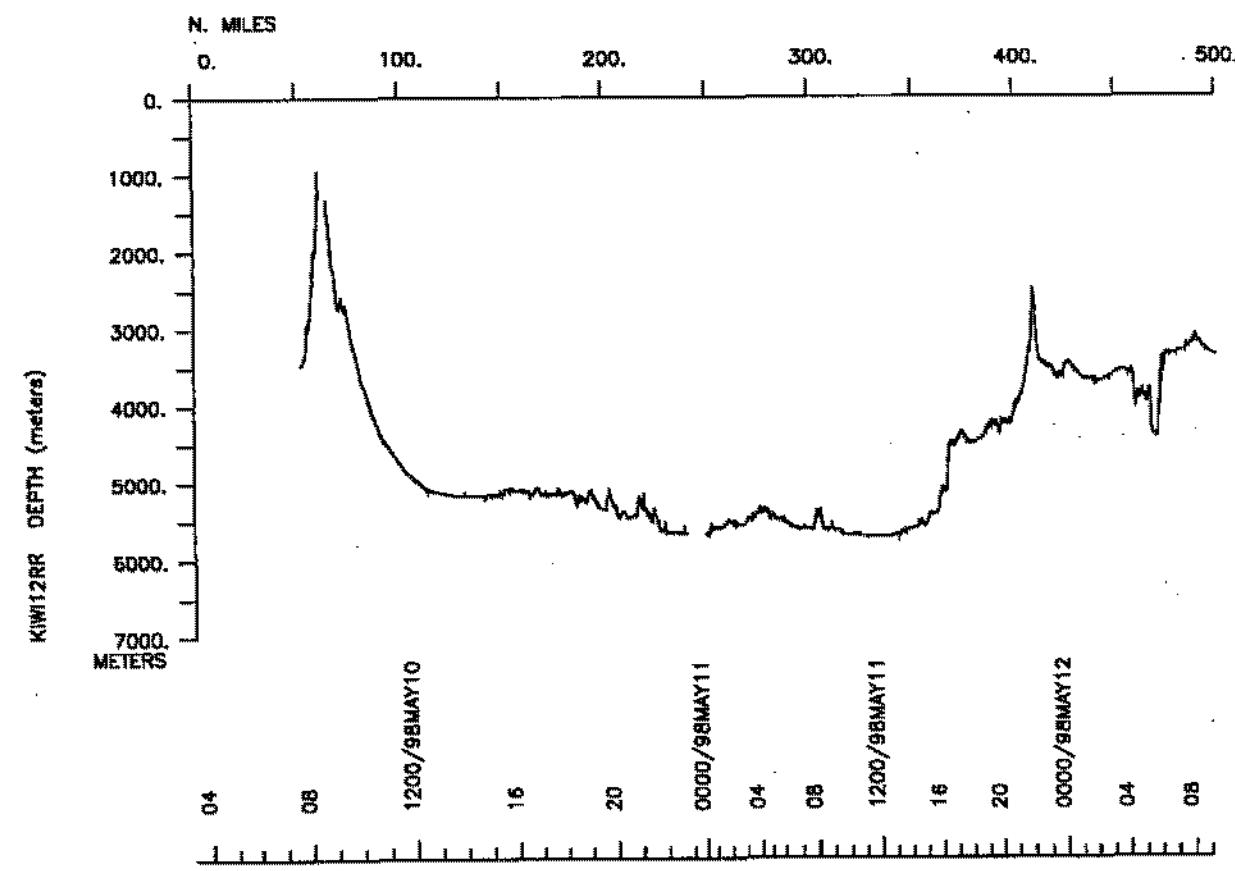
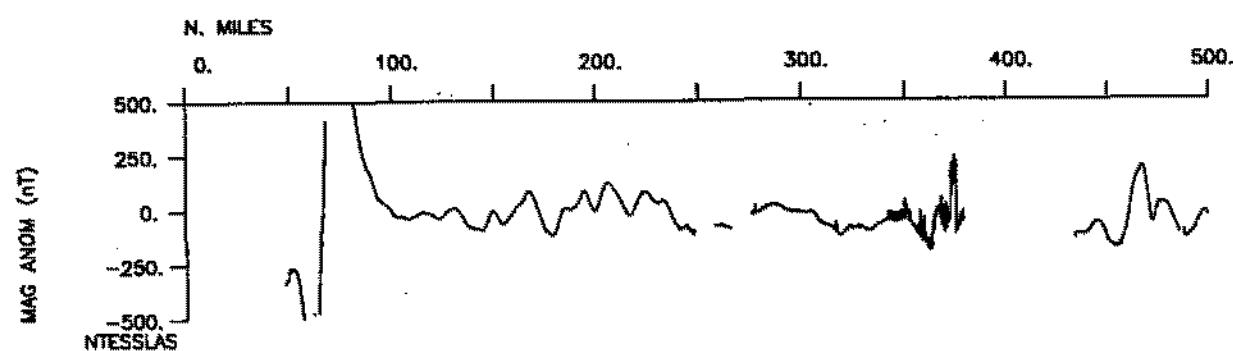
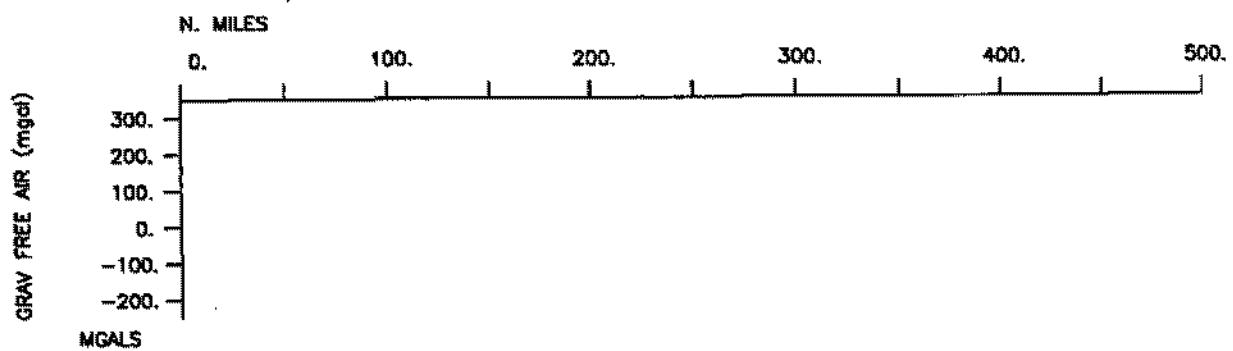
Gravity - none collected

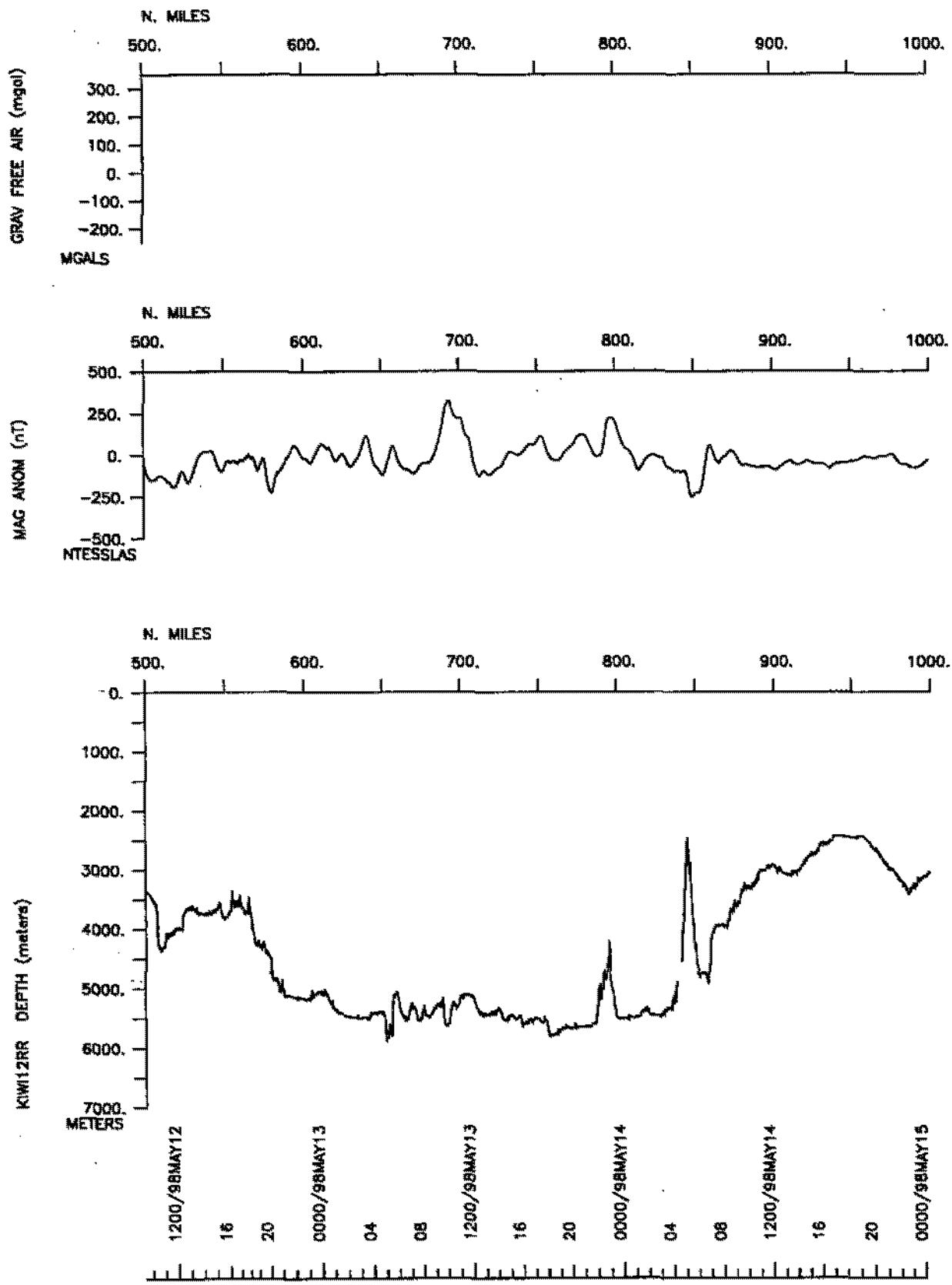
# KIWI12RR Track

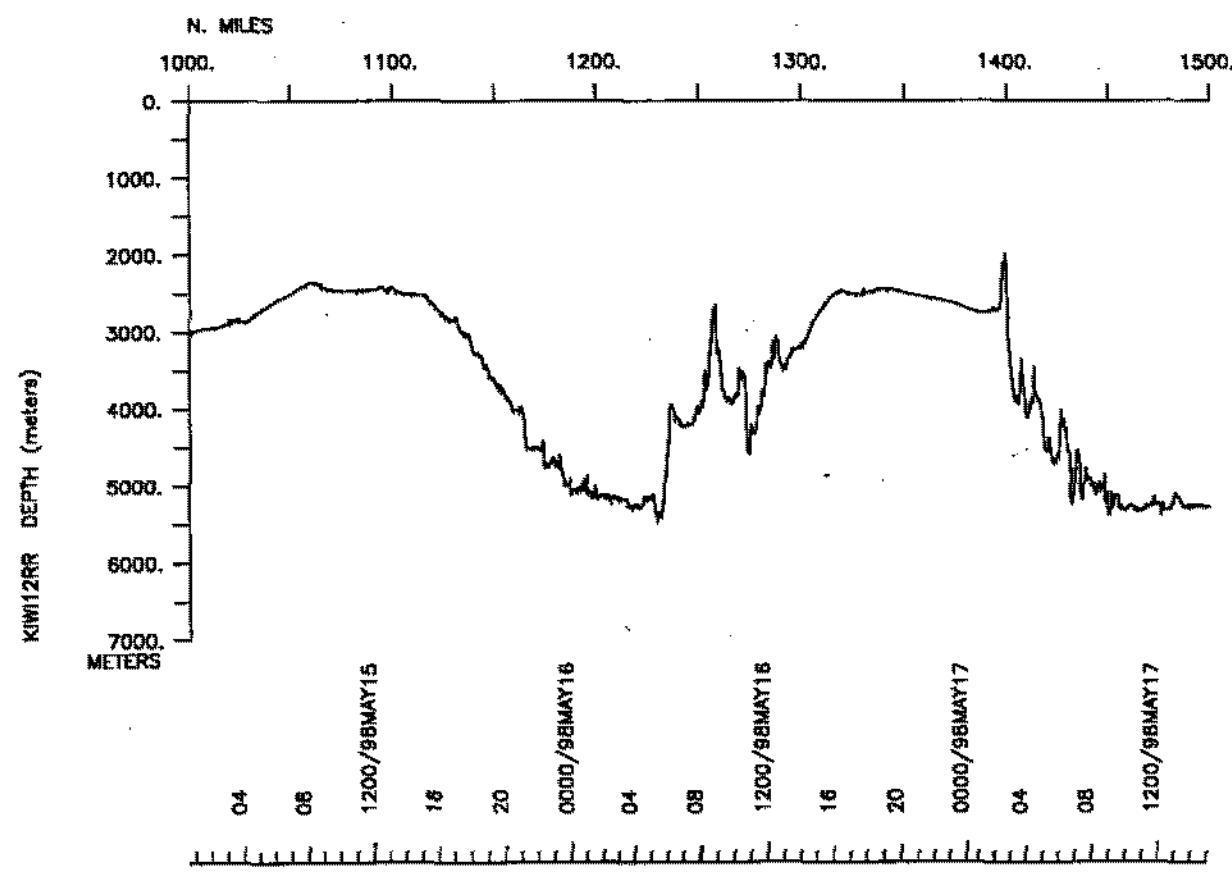
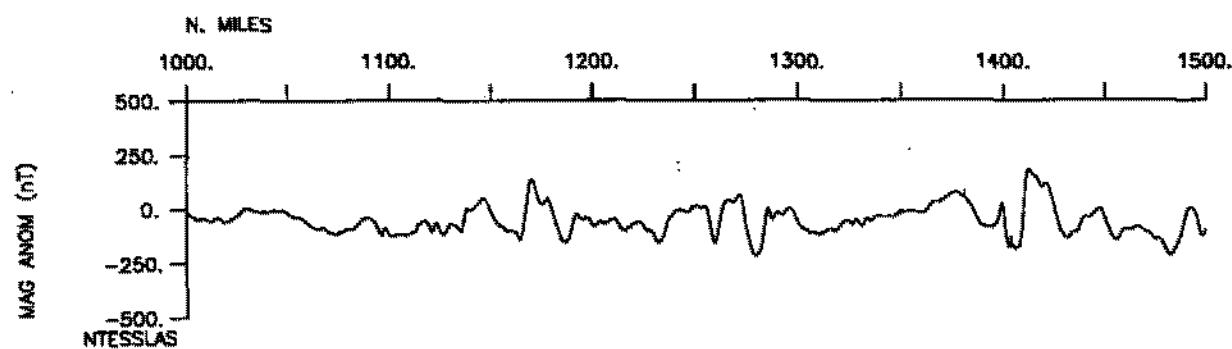
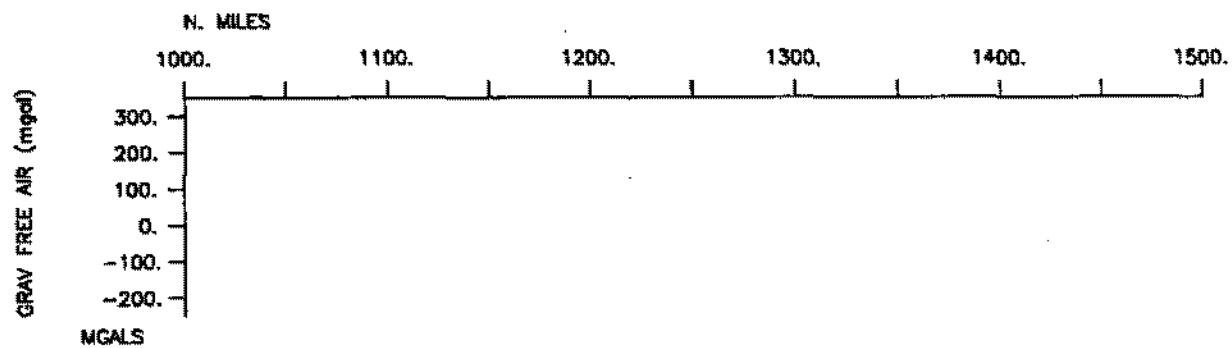


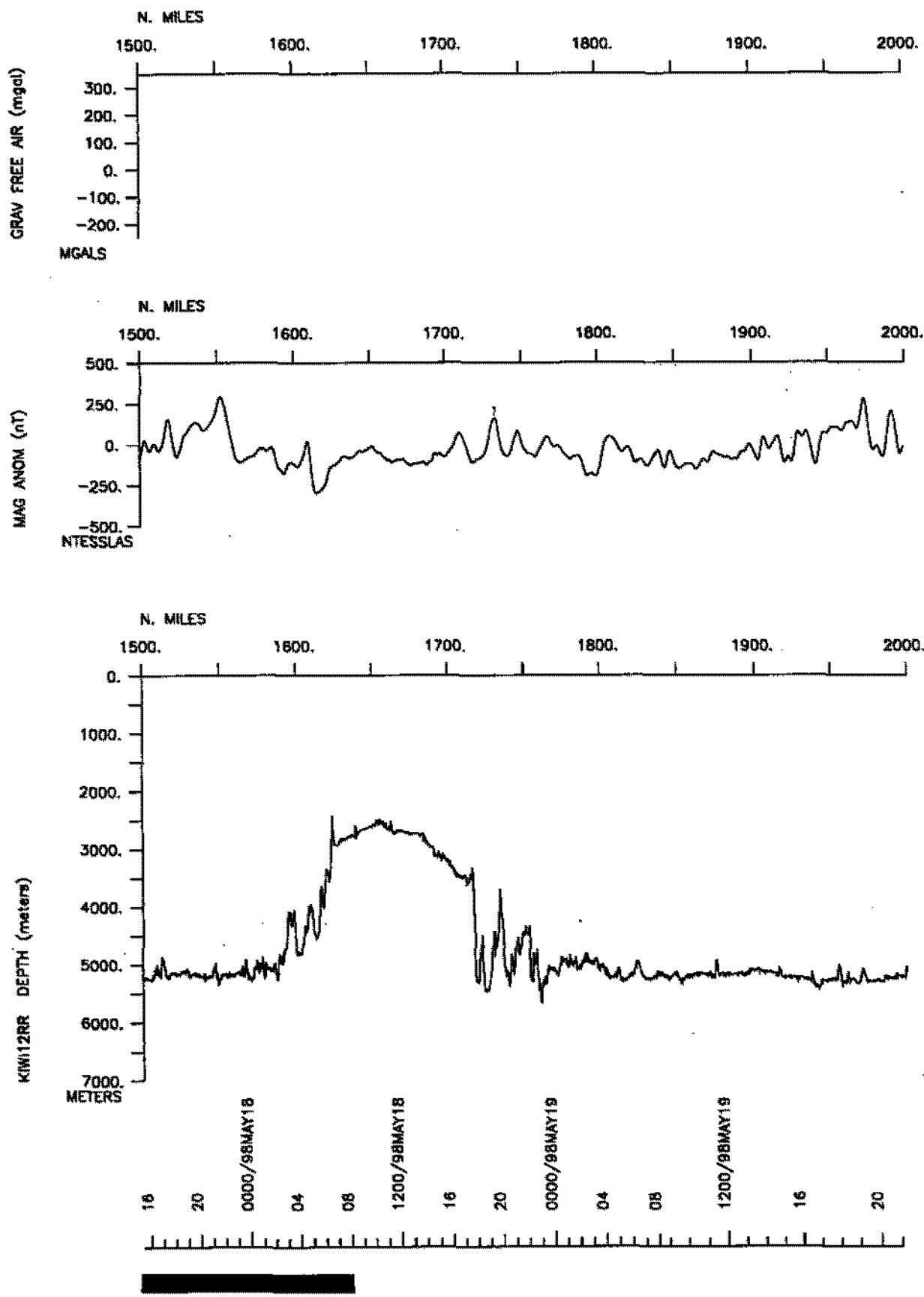
## Survey Area

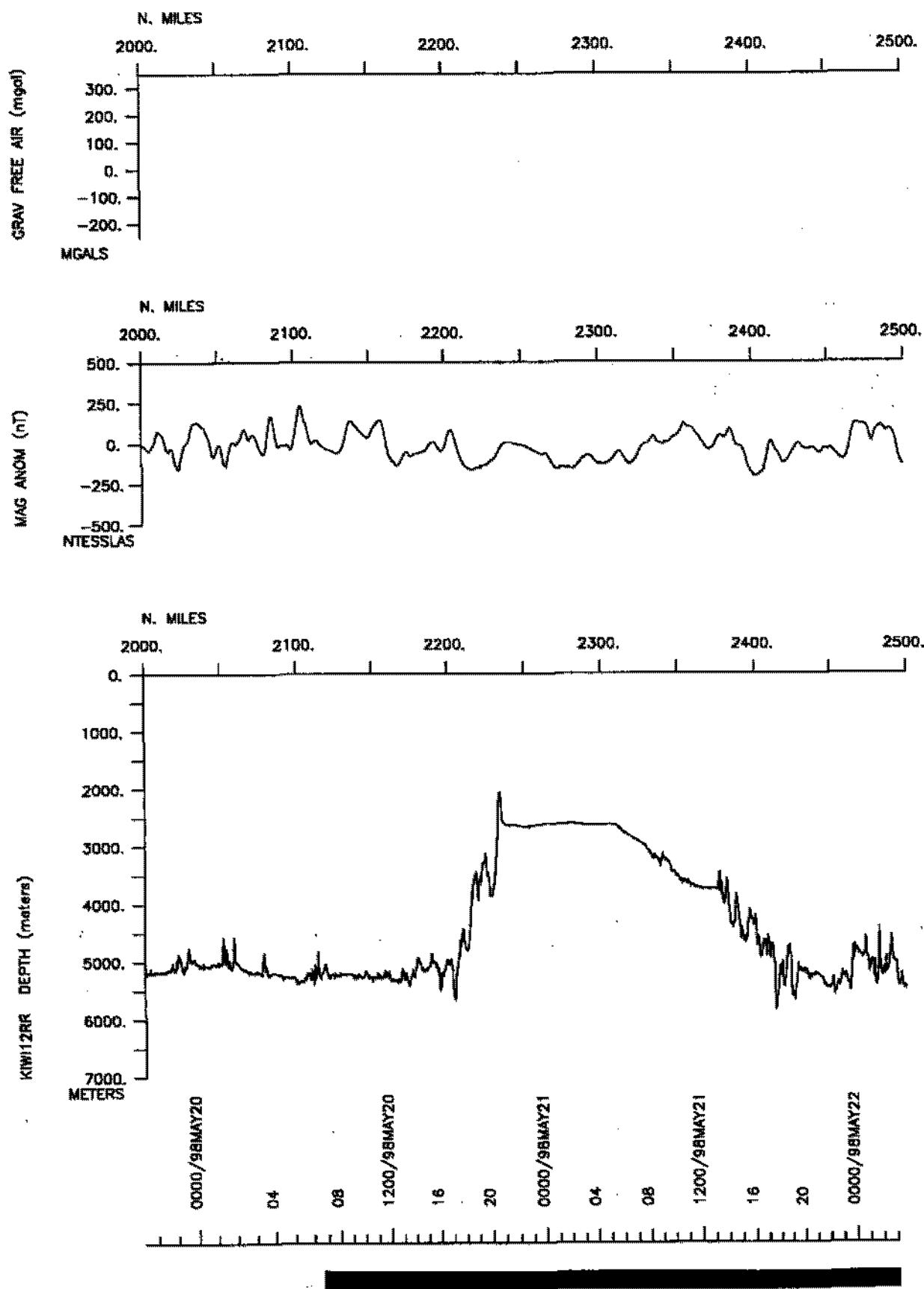


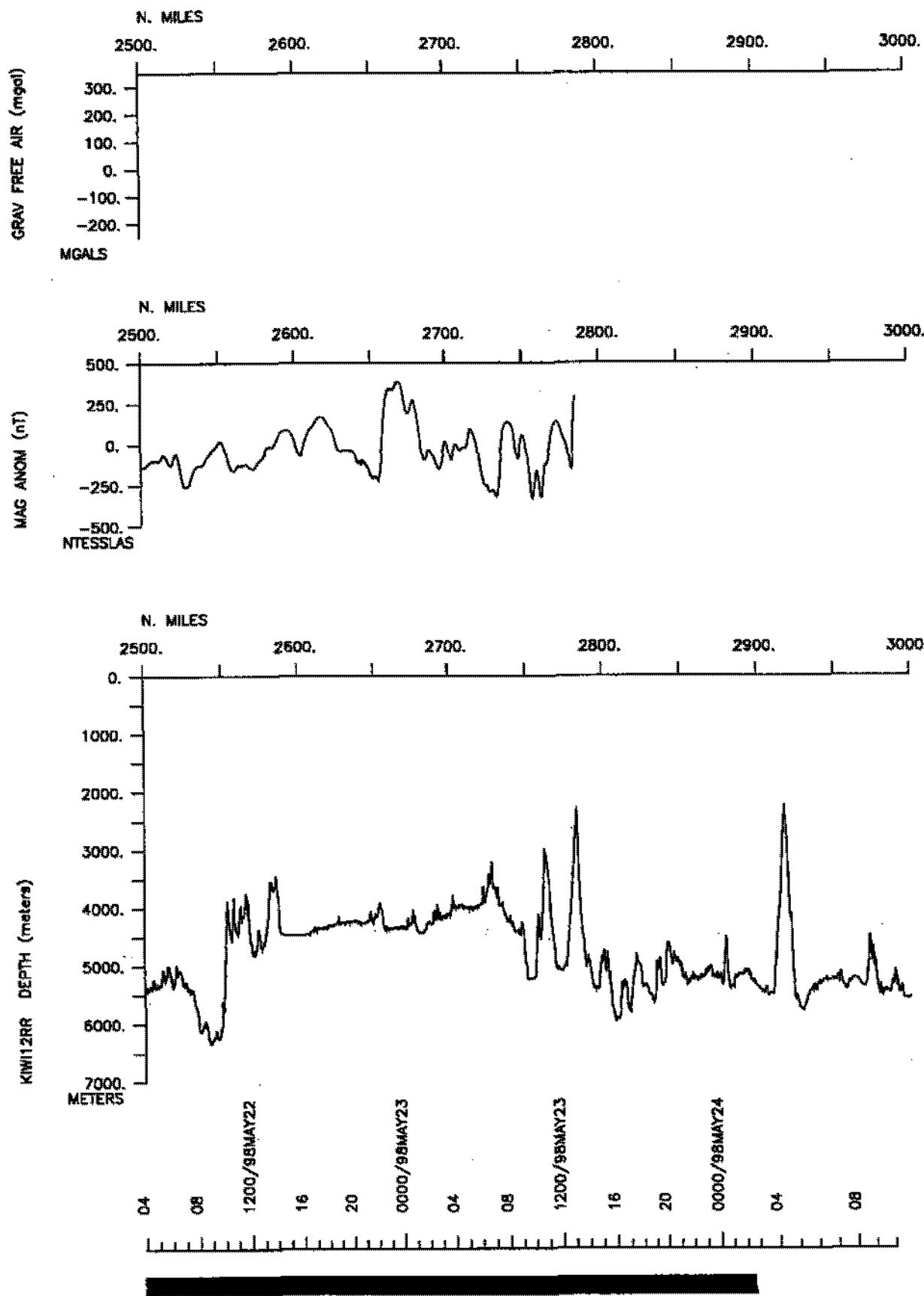


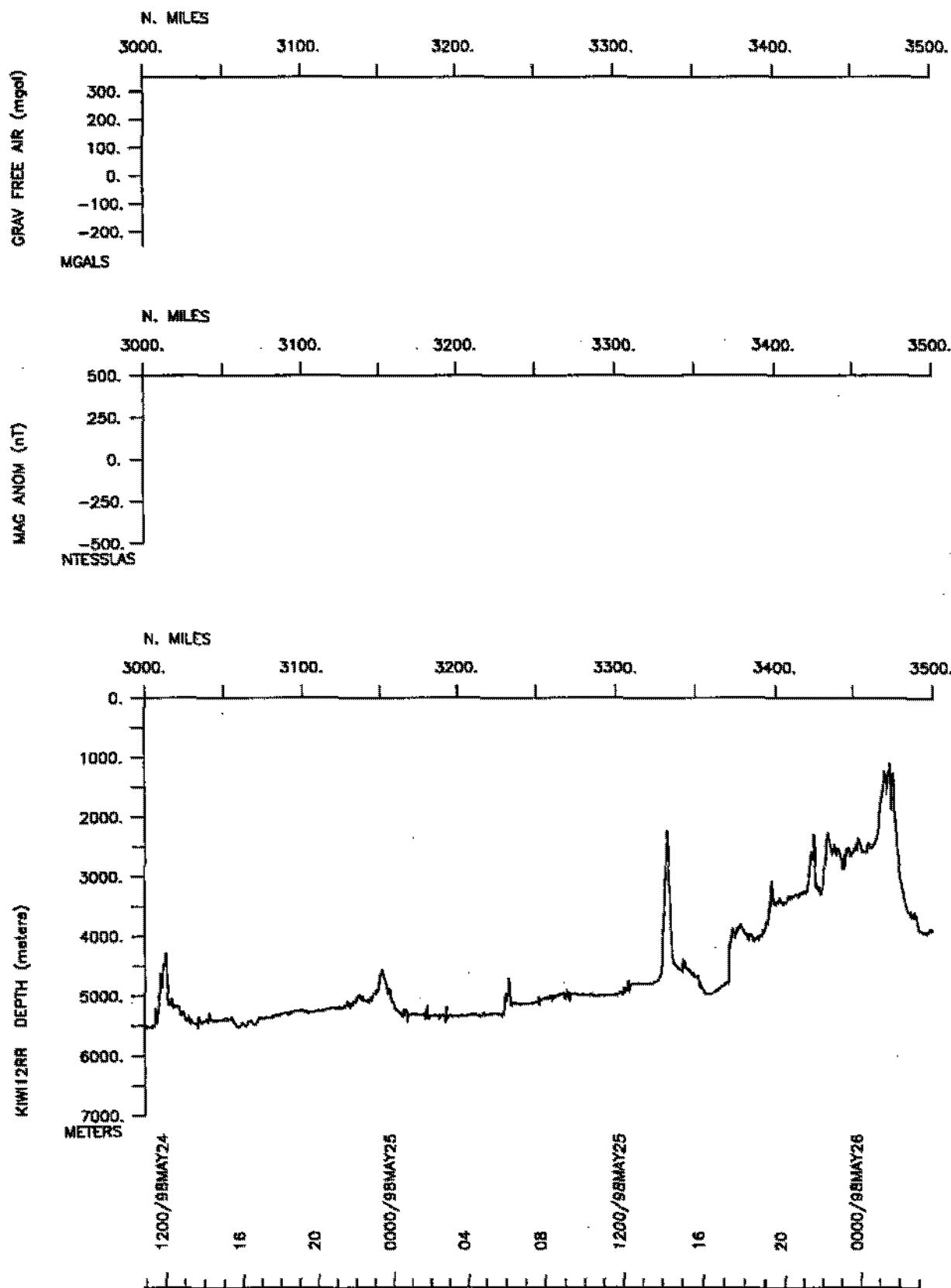


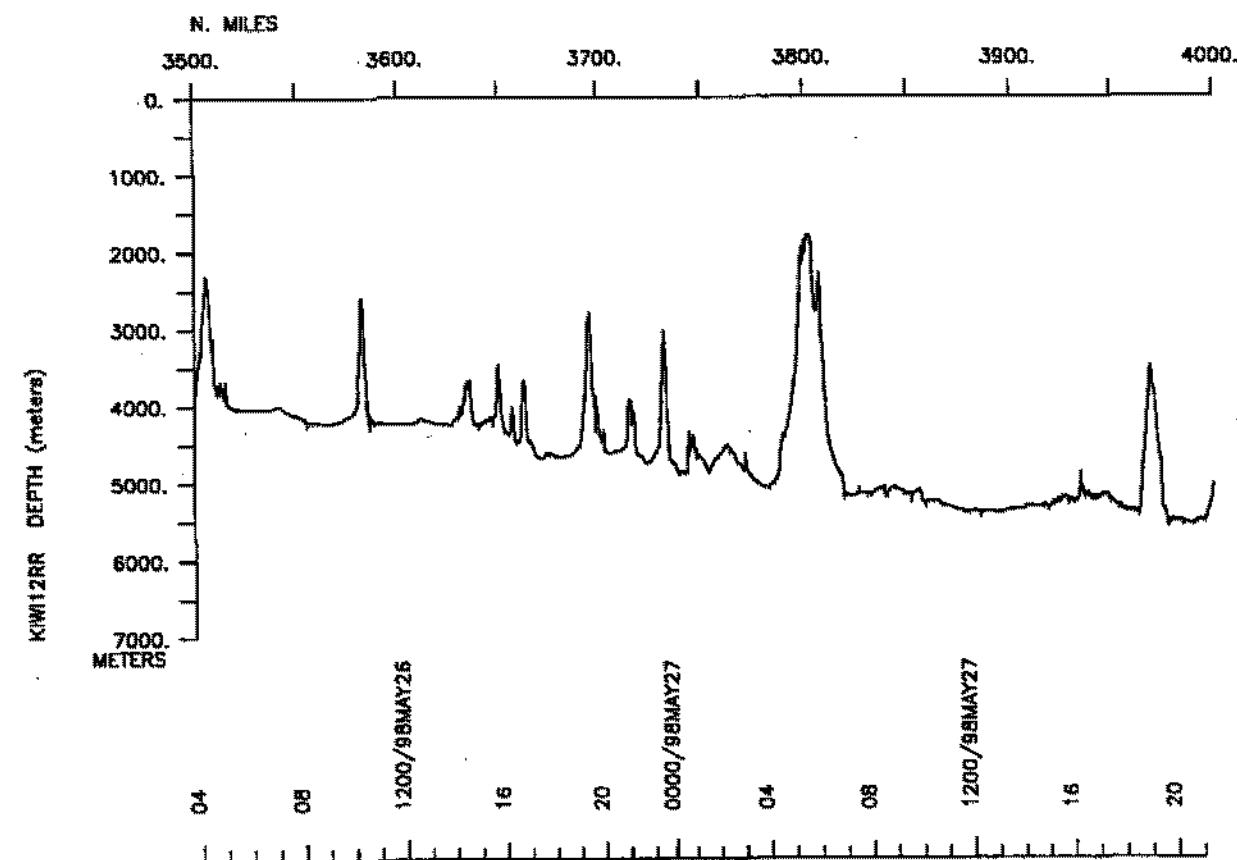
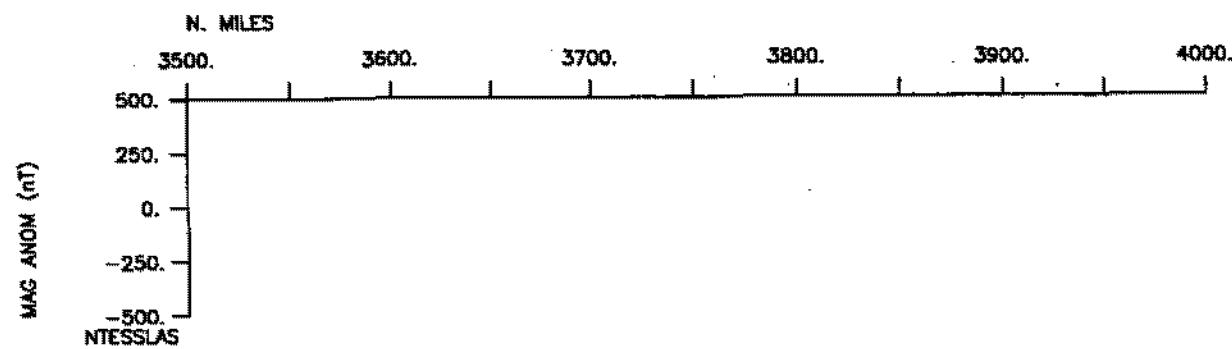
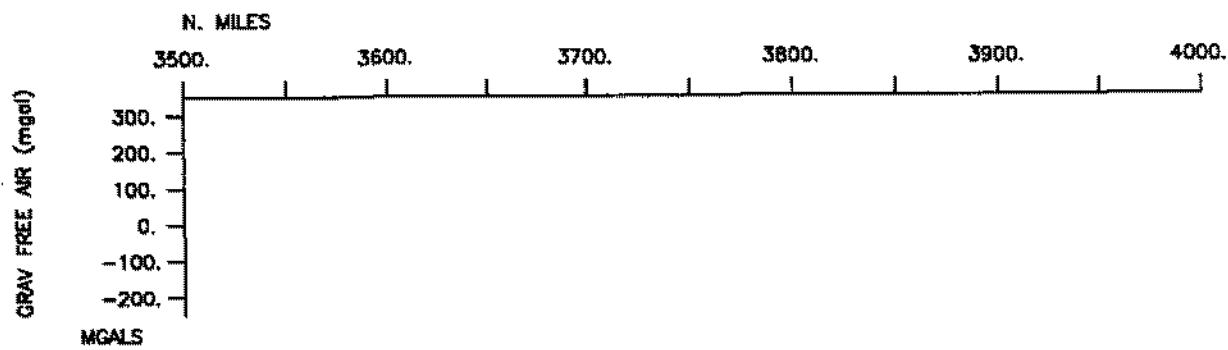


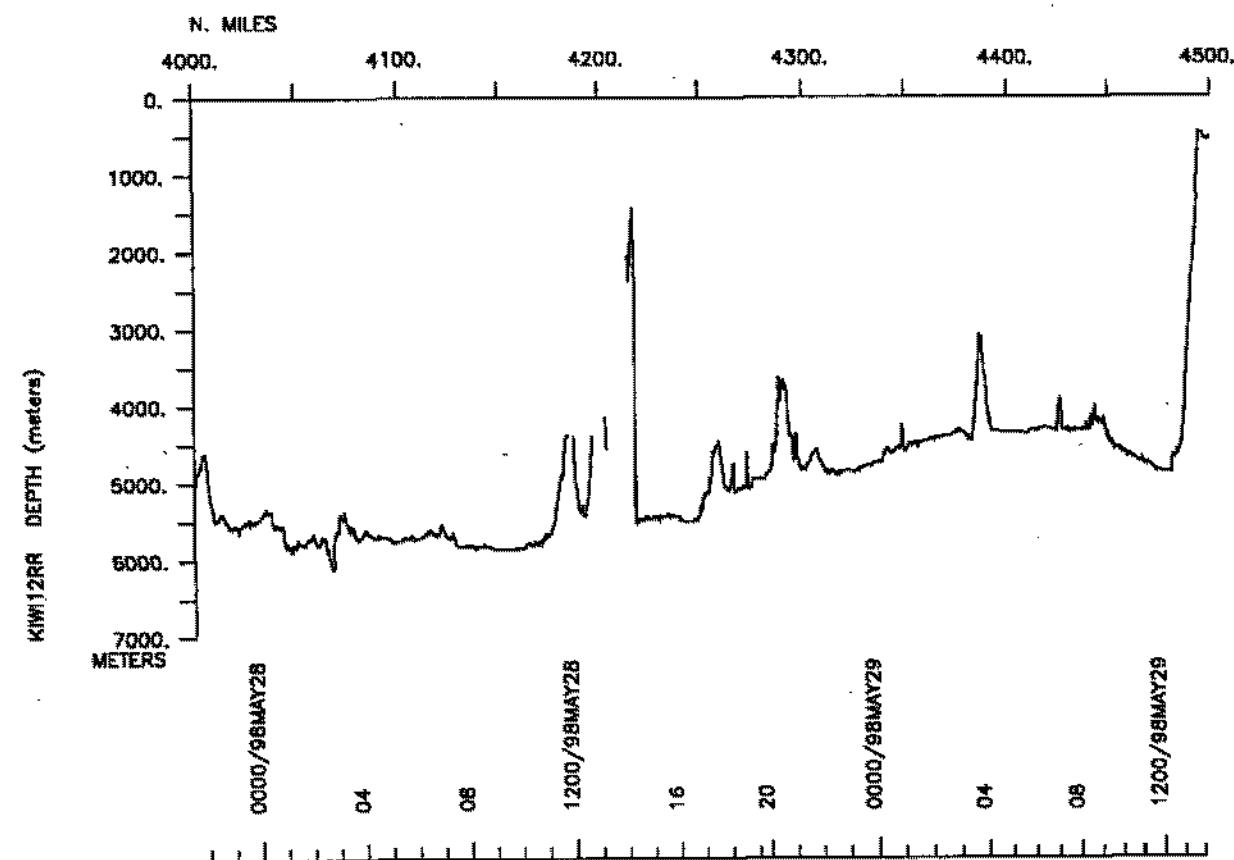
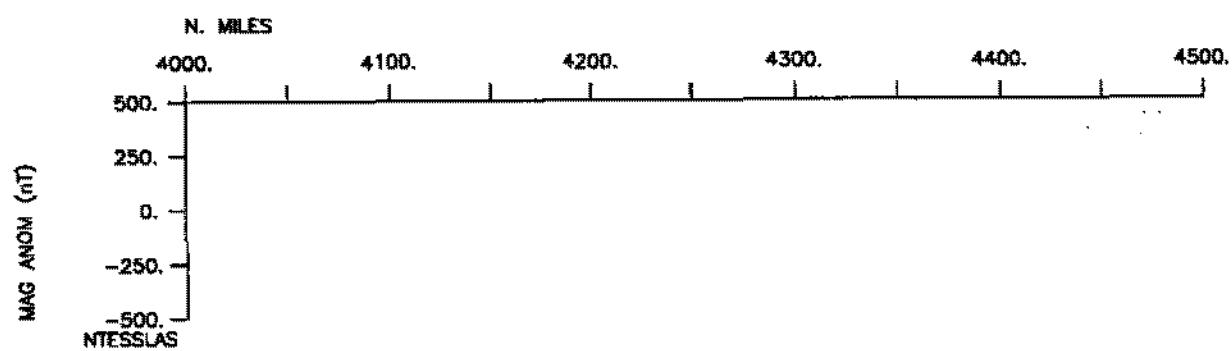
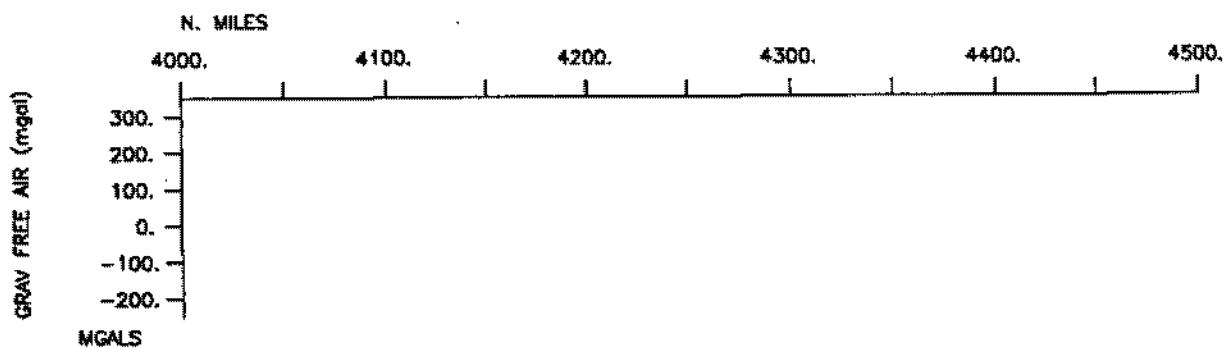


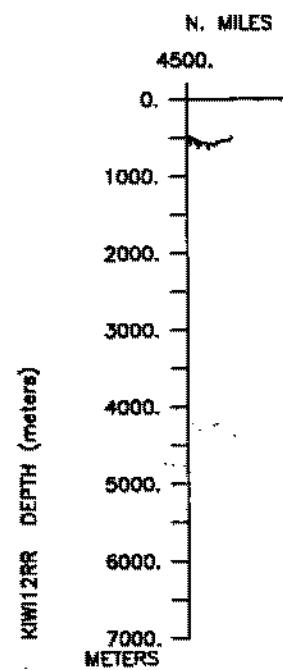
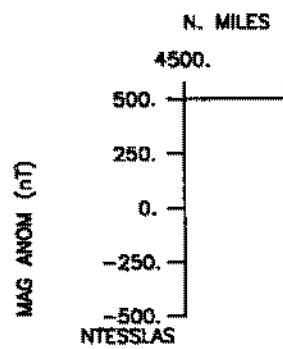
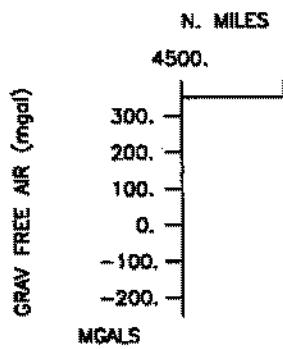












**S.I.O. SAMPLE INDEX**

**KIWI EXPEDITION**

**LEG 12**

**(KIWI12RR)**

R/V Revelle

(Issued July 1998)

**Ports:**

Pago Pago, American Samoa (9 May 1998)

to

Honolulu, Hawaii (29 May 1998)

**Chief Scientist:**

Bruce Luyendyk, Univ. of Calif. Santa Barbara

*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*

Thu Jul 30 13:28:44 1998

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

0300 100598 0	LGPT B Pago Pago, Amer. Samoa	14-17.00S 170-40.00W f	KIWI12RR
1800 290598 0	LGPT E Honolulu, Hawaii	21-18.00N 157-52.00W f	KIWI12RR

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

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
#---				
PECS UCB	Luyendyk, B.	Chief scientist	U.C. Santa Barbara	KIWI12RR
PEST UCB	Alex, C.	Student	U.C. Santa Barbara	KIWI12RR
PEST SIX	Aicher, J.	Student	Am. Samoa CC	KIWI12RR
PESP UCB	Birk, E.	Scientist	U.C. Santa Barbara	KIWI12RR
PESP SIX	Clayton, R.	Scientist	CalTech	KIWI12RR
PEST UCB	Davis, A.	Student	U.C. Santa Barbara	KIWI12RR
PEST SIX	Eisner, L.	Student	CalTech	KIWI12RR
PEST UCB	Evans, C.	Student	U.C. Santa Barbara	KIWI12RR
PEST UCB	Hoganson, T.	Student	U.C. Santa Barbara	KIWI12RR
PECT STS	Jacobson, D.	Computer tech	Scripps Institution	KIWI12RR
PEST SIX	Keller, W.	Student	CalTech	KIWI12RR
PEAT STS	Mogk, S.	Geophys engr	Scripps Institution	KIWI12RR
PEST UCB	Morgan, N.	Student	U.C. Santa Barbara	KIWI12RR
PEST UCB	Powers, K.	Student	U.C. Santa Barbara	KIWI12RR
PEST UCB	Schilla, M	Student	U.C. Santa Barbara	KIWI12RR
PEST SIX	Toliniu, T.	Student	Am. Samoa CC	KIWI12RR
PEST SIX	Venkataraman, A.	Student	CalTech	KIWI12RR

## \*\*\*\* 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 \*\*\*

0300 100598 0	LBUW B Underway watch log	GDC	14-16.58S 170-41.15W g	KIWI12RR
1800 290598 0	LBUW E Underway watch log	GDC	21-18.96N 157-53.18W g	KIWI12RR
0300 100598 0	LBSC B Scientific log	UCB	14-16.58S 170-41.15W g	KIWI12RR
1800 290598 0	LBSC E Scientific log	UCB	21-18.96N 157-53.18W g	KIWI12RR
2352 100598 0	LBSC B Seismic log(CalTech)	SIX	12-40.16S 166-59.94W g	KIWI12RR
0245 240598 0	LBSC E Seismic log(CalTech)	SIX	5-42.37S 159-51.40W g	KIWI12RR

#GMT DDMYY	SAMP	B SAMPLE	DISP	p CRUISE		
#TIME DATE	TZ	CODE E IDENTIFIER	CODE	LATITUDE	LONGITUDE	c LEG-SHIP

## \*\*\*\* Sea Beam Records (vertical beam and side scan) \*\*\*

0747 100598	0	MBSR B v.beam&sscan r-01	GDC	14-10.53S	169-55.63W	g KIWI12RR
0230 240598	0	MBSR E v.beam&sscan r-01	GDC	5-43.49S	159-51.87W	g KIWI12RR
0300 240598	0	MBSR B v.beam&sscan r-02	GDC	5-39.94S	159-51.09W	g KIWI12RR
1644 290598	0	MBSR E v.beam&sscan r-02	GDC	21-14.46N	157-52.80W	g KIWI12RR

## \*\*\*\* Echo Sounder Records - Bathy 2000 \*\*\*

0620 100598	0	DPR3 B pdr 3.5khz r-01	GDC	14-18.93S	170-12.30W	g KIWI12RR
0420 210598	0	DPR3 E pdr 3.5khz r-01	GDC	11-45.70S	161-36.41W	g KIWI12RR
0430 210598	0	DPR3 B pdr 3.5khz r-02	GDC	11-44.51S	161-35.69W	g KIWI12RR
0230 240598	0	DPR3 E pdr 3.5khz r-02	GDC	5-43.49S	159-51.87W	g KIWI12RR
0300 240598	0	DPR3 B pdr 3.5khz r-03	GDC	5-39.94S	159-51.09W	g KIWI12RR
1644 290598	0	DPR3 E pdr 3.5khz r-03	GDC	21-14.46N	157-52.80W	g KIWI12RR

## \*\*\*\* Seismic Reflection Records \*\*\*

2352 100598	0	SPRS B GI gun 8sec r-01	GDC	12-40.16S	166-59.94W	g KIWI12RR
0128 140598	0	SPRS E GI gun 8sec r-01	GDC	13-56.20S	163-52.49W	g KIWI12RR
0128 140598	0	SPRS B GI gun 8sec r-02	GDC	13-56.20S	163-52.49W	g KIWI12RR
0755 190598	0	SPRS E GI gun 8sec r-02	GDC	14-38.78S	159-41.16W	g KIWI12RR
0658 200598	0	SPRS B GI gun 8sec r-03	GDC	12-34.52S	159-05.97W	g KIWI12RR
0230 240598	0	SPRS E GI gun 8sec r-03	GDC	5-43.49S	159-51.87W	g KIWI12RR

## \*\*\*\* Magnetics (Earth Total Field) Records \*\*\*

0552 100598	0	MGDR B digital magnetics	GDC	14-21.73S	170-17.74W	g KIWI12RR
1318 230598	0	MGDR E digital magnetics	GDC	7-23.86S	160-41.88W	g KIWI12RR

## \*\*\*\* Seismic Reflection Line \*\*\*

2352 100598	0	SPSL B GI gun SCS/AD 1-01	GDC	12-40.16S	166-59.94W	g KIWI12RR
0742 120598	0	SPSL E GI gun SCS/AD 1-01	GDC	11-06.00S	163-23.99W	g KIWI12RR
0834 120598	0	SPSL B GI gun SCS AD 1-02	GDC	11-06.03S	163-24.02W	g KIWI12RR
1250 130598	0	SPSL E GI gun SCS/AD 1-02	GDC	14-20.52S	165-14.66W	g KIWI12RR
1319 130598	0	SPSL B GI gun SCS AD 1-03	GDC	14-21.90S	165-11.59W	g KIWI12RR
2108 130598	0	SPSL E GI gun SCS/AD 1-03	GDC	14-28.02S	164-08.83W	g KIWI12RR
2109 130598	0	SPSL B GI gun SCS AD 1-04	GDC	14-27.95S	164-08.71W	g KIWI12RR
0300 150598	0	SPSL E GI gun SCS/AD 1-04	GDC	11-38.65S	162-54.71W	g KIWI12RR

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#	GMT DDMY	SAMP	B	SAMPLE	DISP	p	CRUISE		
#	TIME DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE	c LEG-SHIP	
	0301 150598	0	SPSL	B GI gun SCS AD	1-05	GDC	11-38.53S	162-54.65W	g KIWI12RR
	1019 150598	0	SPSL	E GI gun SCS/AD	1-05	GDC	12-20.63S	162-15.33W	g KIWI12RR
	1022 150598	0	SPSL	B GI gun SCS AD	1-06	GDC	12-21.02S	162-15.20W	g KIWI12RR
	2150 160598	0	SPSL	E GI gun SCS/AD	1-06	GDC	12-36.20S	161-41.38W	g KIWI12RR
	2155 160598	0	SPSL	B GI gun SCS AD	1-07	GDC	12-36.34S	161-40.77W	g KIWI12RR
	1508 180598	0	SPSL	E GI gun SCS/AD	1-07	GDC	13-41.43S	161-53.72W	g KIWI12RR
	1509 180598	0	SPSL	B GI gun SCS AD	1-08	GDC	13-41.57S	161-53.73W	g KIWI12RR
	0755 190598	0	SPSL	E GI gun SCS/AD	1-08	GDC	14-38.78S	159-41.16W	g KIWI12RR
	0657 200598	0	SPSL	B GI gun SCS AD	1-09	GDC	12-34.54S	159-05.87W	g KIWI12RR
	0206 210598	0	SPSL	E GI gun SCS/AD	1-09	GDC	12-01.27S	161-46.90W	g KIWI12RR
	0209 210598	0	SPSL	B GI gun SCS AD	1-10	GDC	12-00.91S	161-46.70W	g KIWI12RR
	0700 220598	0	SPSL	E GI gun SCS/AD	1-10	GDC	9-59.94S	159-36.20W	g KIWI12RR
	0701 220598	0	SPSL	B GI gun SCS AD	1-11	GDC	9-59.89S	159-36.33W	g KIWI12RR
	0245 240598	0	SPSL	E GI gun SCS/AD	1-11	GDC	5-42.37S	159-51.40W	g KIWI12RR

#### \*\*\*\* Seismic Buoy \*\*\*

2300 110598	0	SBSD	B SB 1	src=2GIguns	GDC	11-42.14S	164-23.89W	g KIWI12RR
2326 110598	0	SBSD	E SB 1	src=2GIguns	GDC	11-40.36S	164-20.93W	g KIWI12RR
1935 120598	0	SBSD	B SB 2	src=2GIguns	GDC	12-18.11S	164-05.14W	g KIWI12RR
2023 120598	0	SBSD	E SB 2	src=2GIguns	GDC	12-23.81S	164-08.35W	g KIWI12RR
1319 130598	0	SBSD	B SB 3	src=2GIguns	GDC	14-21.90S	165-11.59W	g KIWI12RR
1550 130598	0	SBSD	E SB 3	src=2GIguns	GDC	14-23.95S	164-51.48W	g KIWI12RR
0314 150598	0	SBSD	B SB 4	src=2GIguns	GDC	11-38.64S	162-53.31W	g KIWI12RR
0533 150598	0	SBSD	E SB 4	src=2GIguns	GDC	11-52.27S	162-41.07W	g KIWI12RR
0533 150598	0	SBSD	B SB 5	src=2GIguns	GDC	11-52.27S	162-41.07W	g KIWI12RR
0730 150598	0	SBSD	E SB 5	src=2GIguns	GDC	12-03.89S	162-30.56W	g KIWI12RR
0730 150598	0	SBSD	B SB 6	src=2GIguns	GDC	12-03.89S	162-30.56W	g KIWI12RR
1019 150598	0	SBSD	E SB 6	src=2GIguns	GDC	12-20.63S	162-15.33W	g KIWI12RR
2200 160598	0	SBSD	B SB 7	src=2GIguns	GDC	12-36.48S	161-40.15W	g KIWI12RR
0000 170598	0	SBSD	E SB 7	src=2GIguns	GDC	12-40.38S	161-24.69W	g KIWI12RR
1000 180598	0	SBSD	B SB 8	src=2GIguns	GDC	13-00.81S	161-36.35W	g KIWI12RR
1145 180598	0	SBSD	E SB 8	src=2GIguns	GDC	13-14.49S	161-42.23W	g KIWI12RR

#### # Expendable Bathythermographs \*\*\*

0414 110598	0	BTXP	MK-12 XBT #	49	GDC	12-40.25S	166-30.87W	g KIWI12RR
0857 190598	0	BTXP	MK-12 XBT #	51	GDC	14-35.99S	159-37.52W	g KIWI12RR
0557 200598	0	BTXP	MK-12 XBT #	52	GDC	12-41.82S	159-02.97W	g KIWI12RR
1834 210598	0	BTXP	MK-12 XBT #	53	GDC	10-45.54S	160-02.82W	g KIWI12RR

#

End Sample Index

KIWI12RR