

*Report and Index of  
Underway Marine Geophysical Data*

**SOJOURN EXPEDITION**

**LEG 4**

**(SOJN04MV)**

**R/V MELVILLE**

**(Issued April 1997)**

**Ports:**

Cape Town, South Africa (8 January 1997)

to

Fremantle, Australia (14 February 1997)

**Chief Scientist:**

Thomas Whitworth, Texas A&M University

Resident Marine Technician - Tammy Koonce

Computer Technician - Ron Moe

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

Data Collection and Processing Funded by  
NSF OCE94-00707

**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*

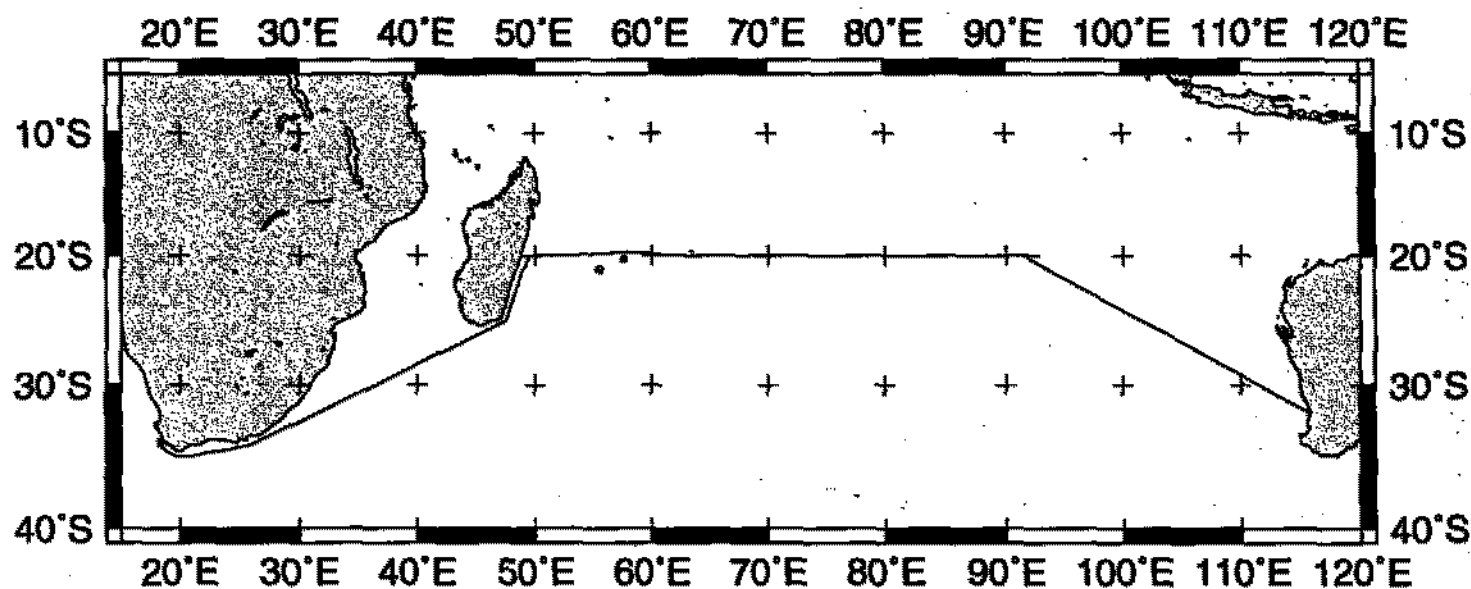
**GDC CRUISE I.D.# 269**

### **SeaBeam 2000 Data Collected in Ancillary Mode**

In the absence of funding for SeaBeam operations on this leg, SeaBeam data were collected 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 SeaBeam data remain proprietary to the SIO Shipboard Technical Support Group, *not the chief scientist.*

May 1993



#### **SOJOURN EXPEDITION LEG 4**

**CHIEF SCIENTIST:** Thomas Whitworth, Texas A & M University

**PORTS:** Cape Town, South Africa - Fremantle, Australia

**DATES:** 8 January - 14 February 1997

**SHIP:** R/V Melville

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

**Cruise - 6867 miles**

**Magnetics - none collected**

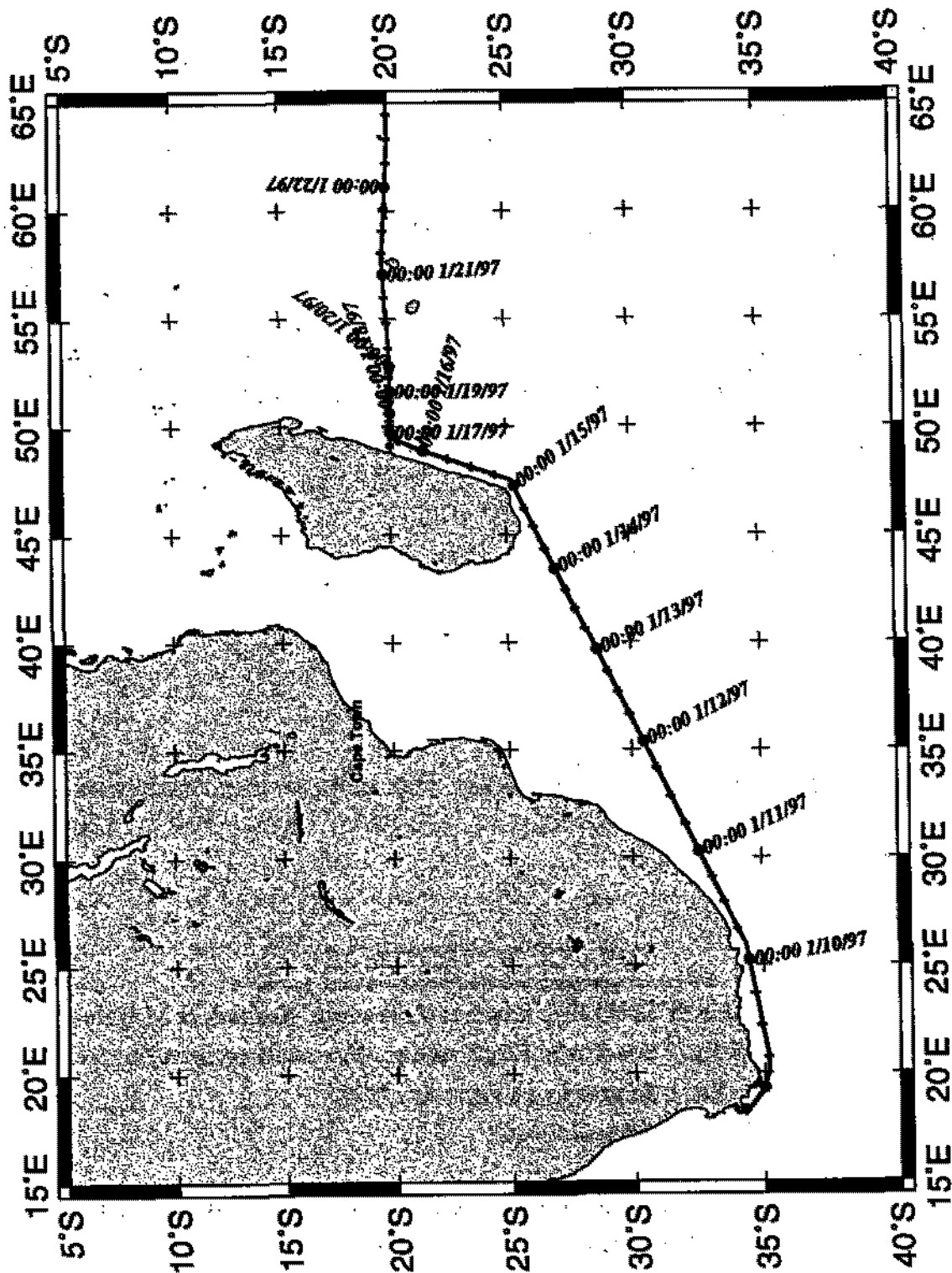
**Bathymetry - 6465 miles**

**Seismic Reflection - none collected**

**Sea Beam - 6465 miles**

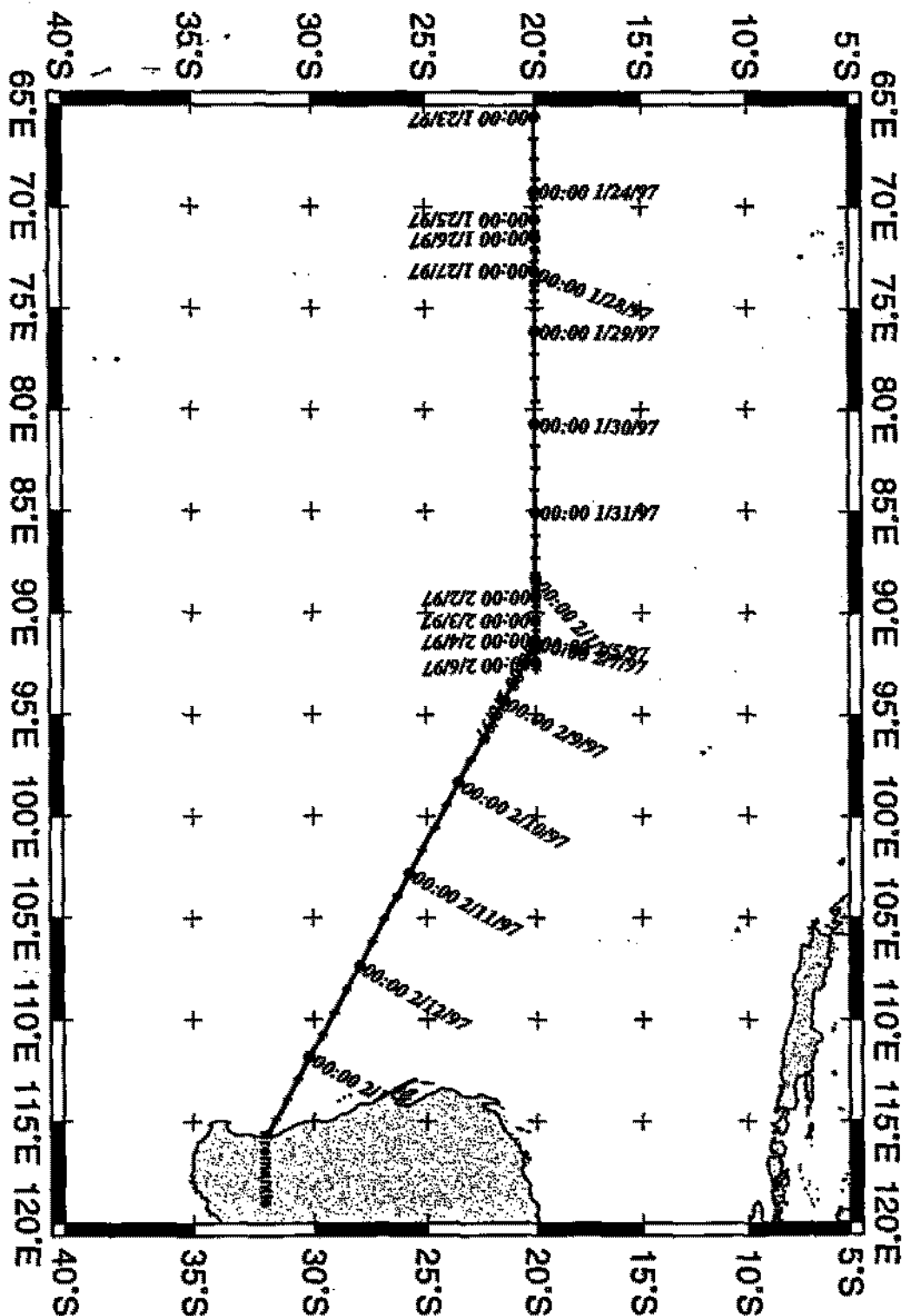
**Gravity - 4232 miles**

# SOJN04MV Track begin



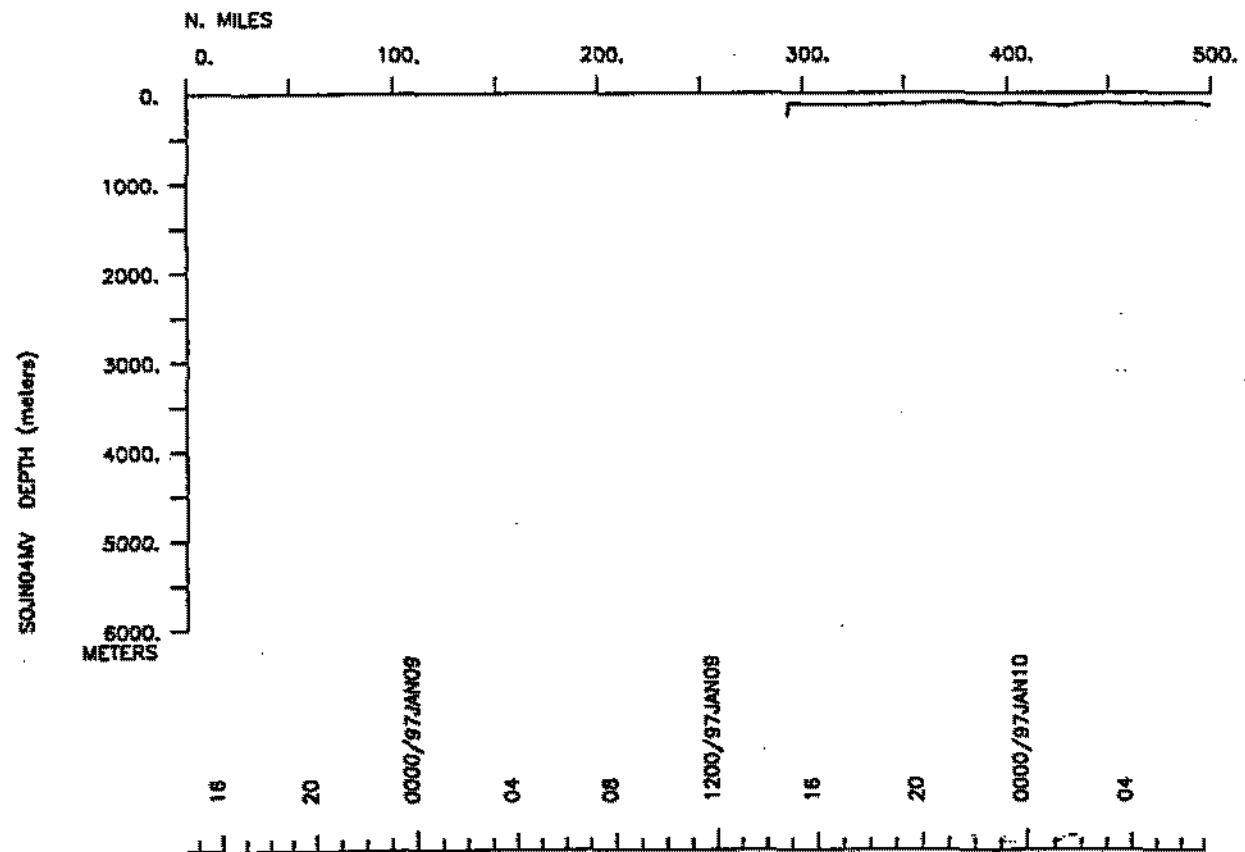
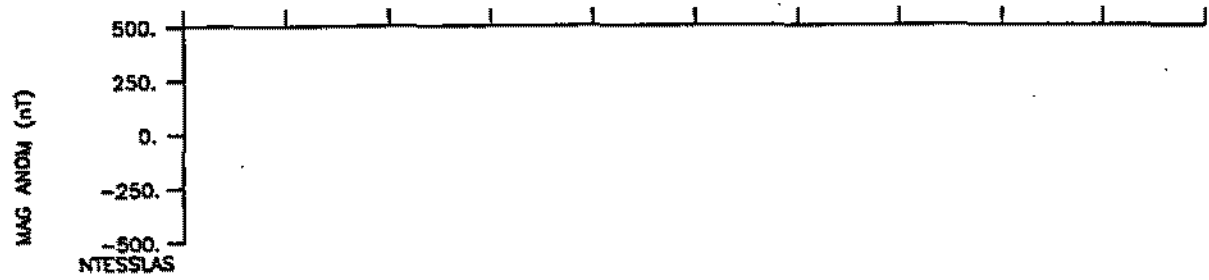
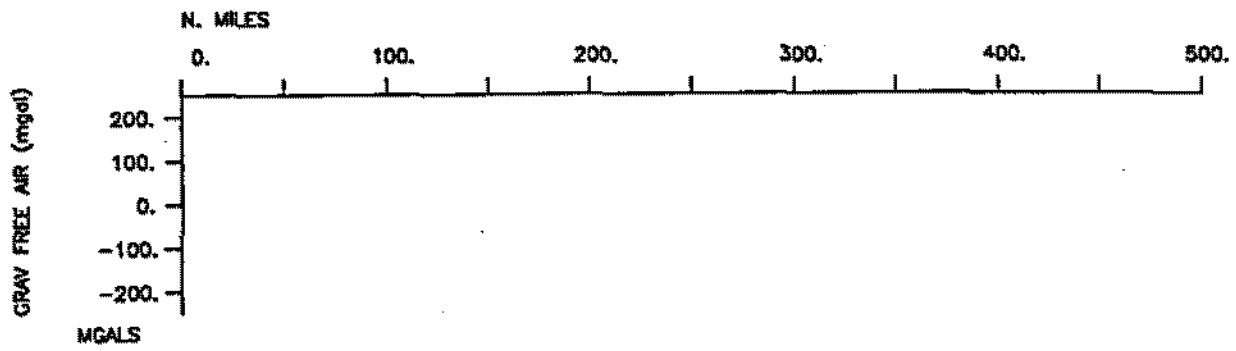
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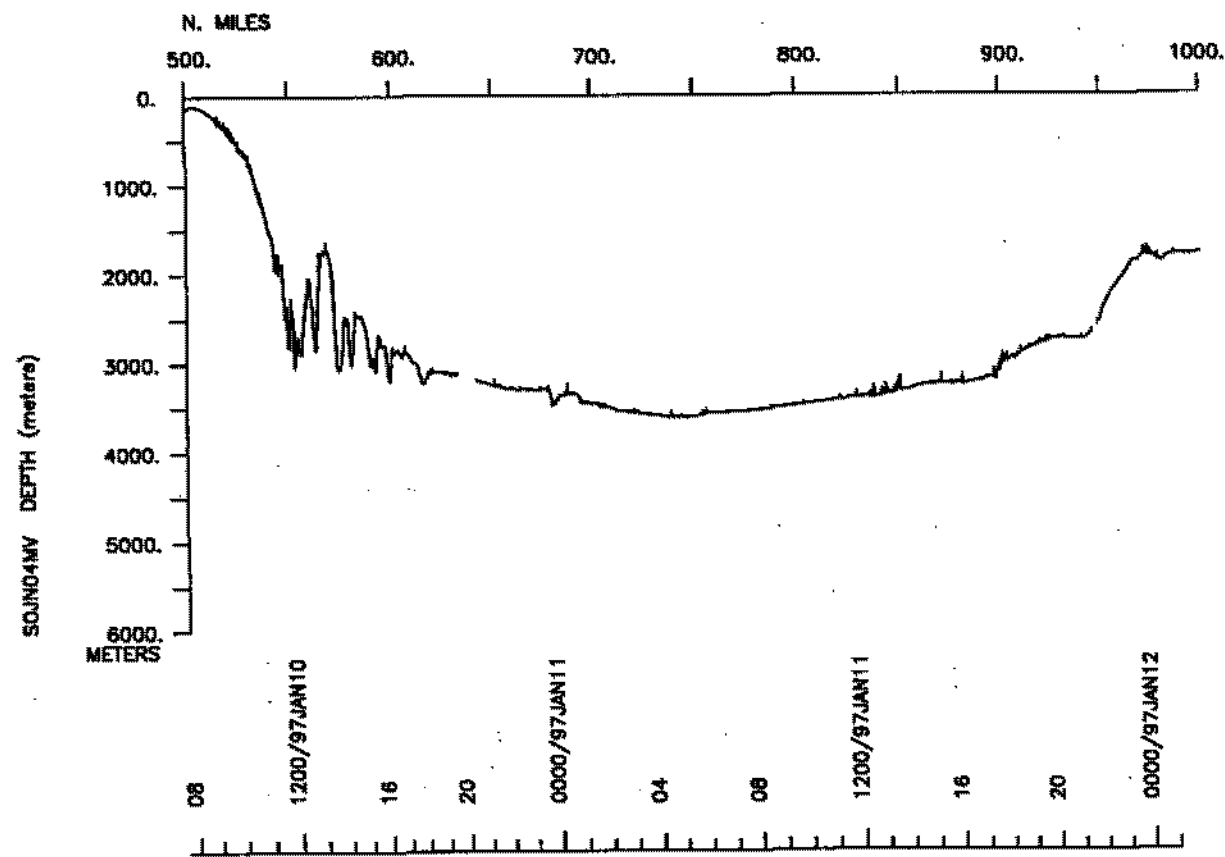
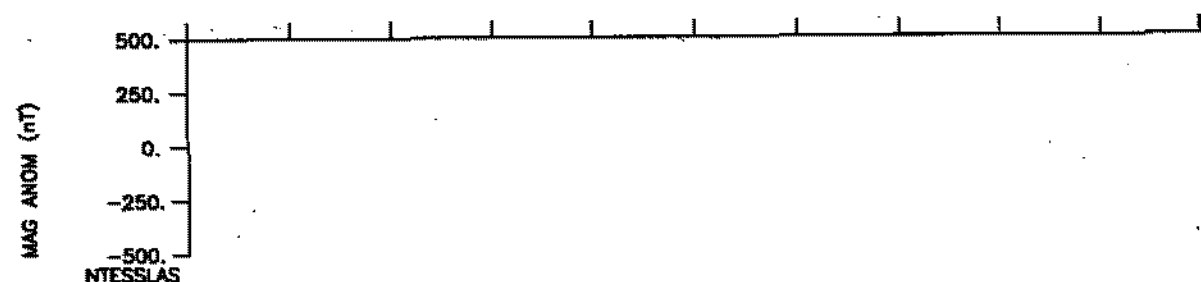
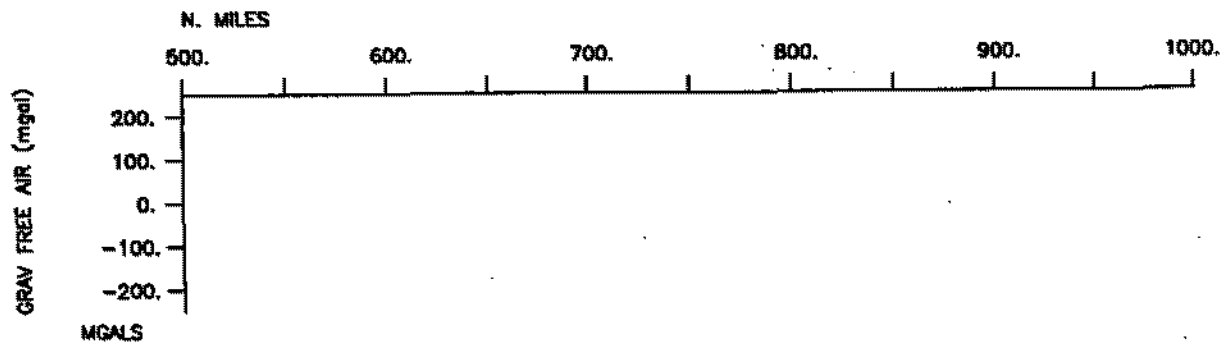
# SOJN04MV Track End

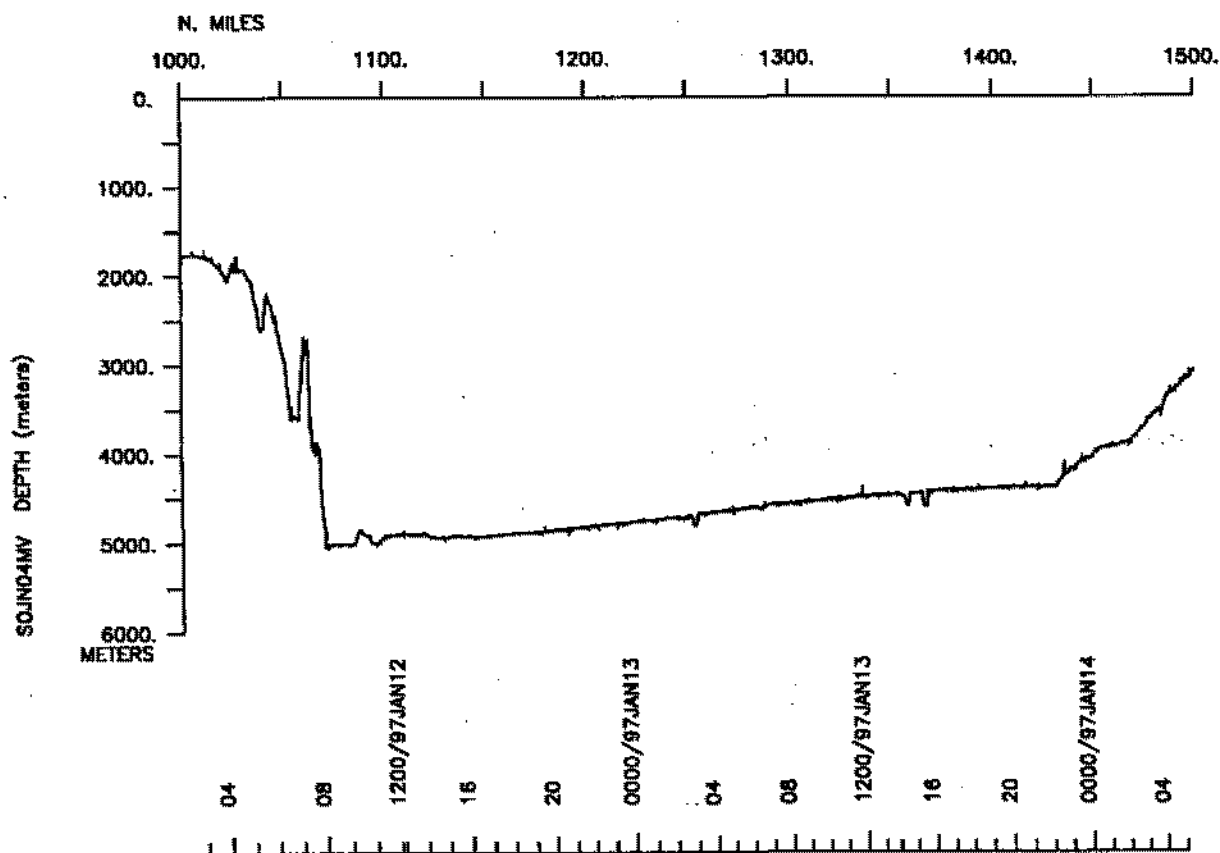
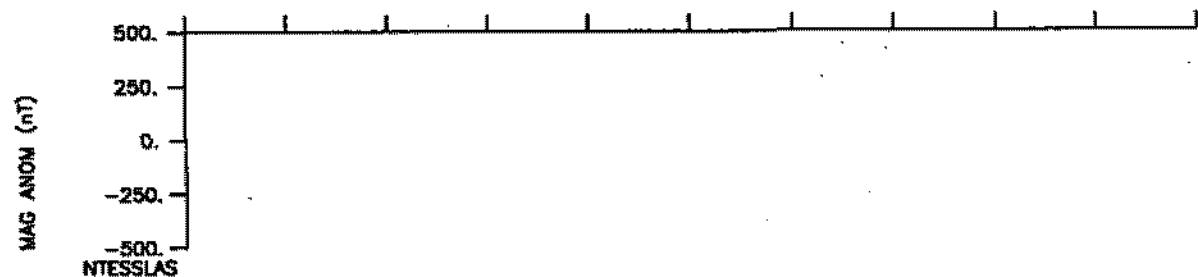
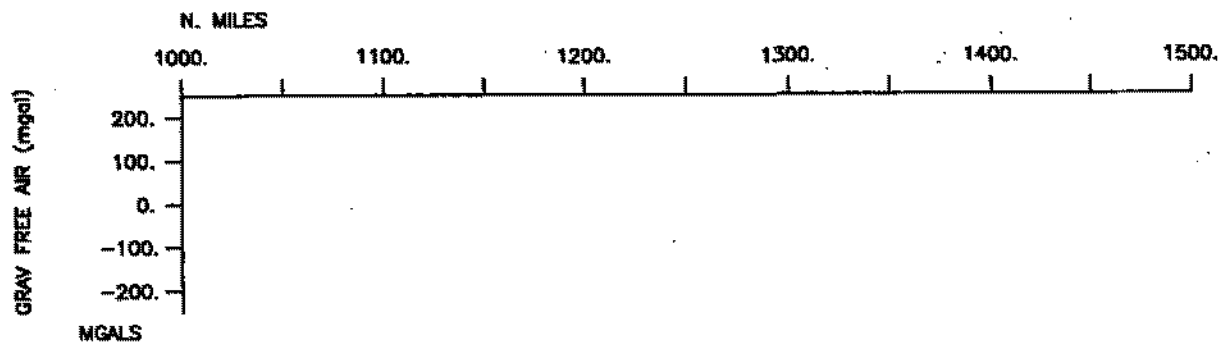


GMT Apr 7 16:29

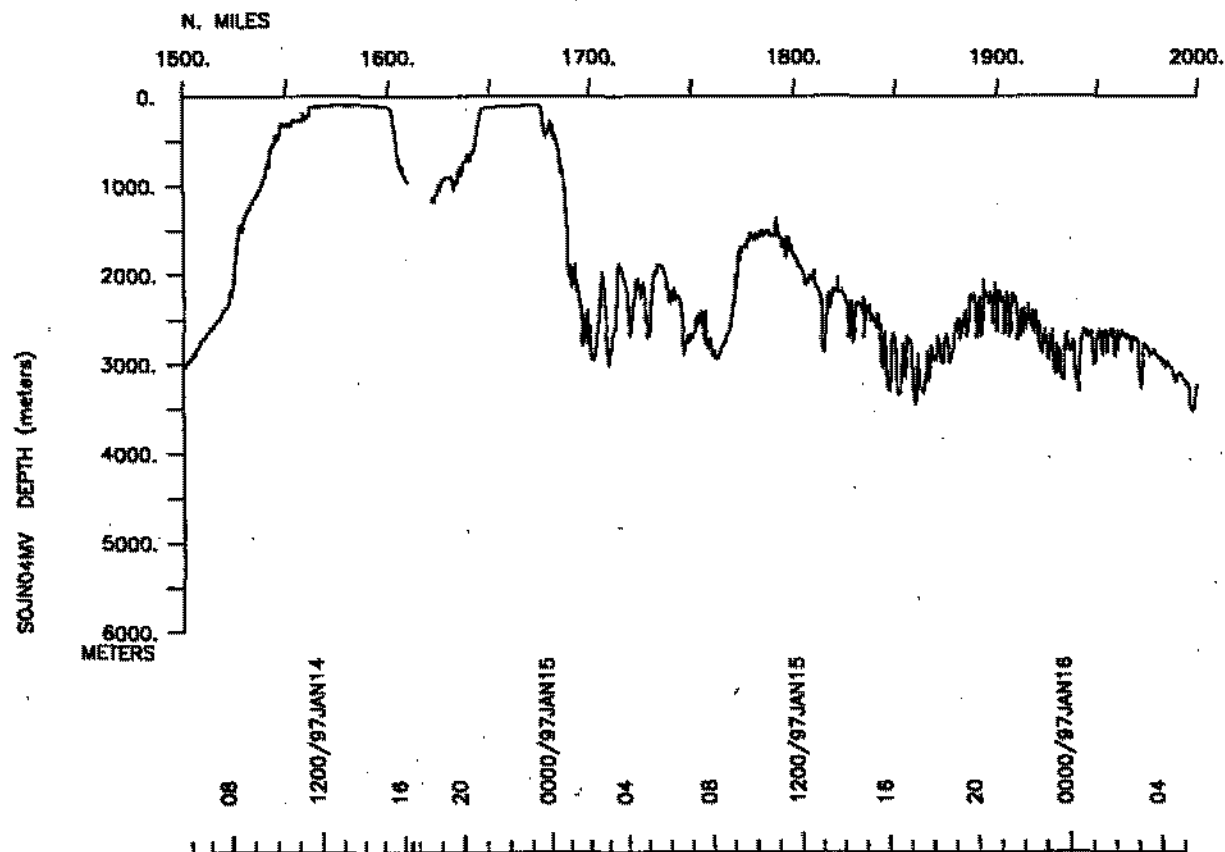
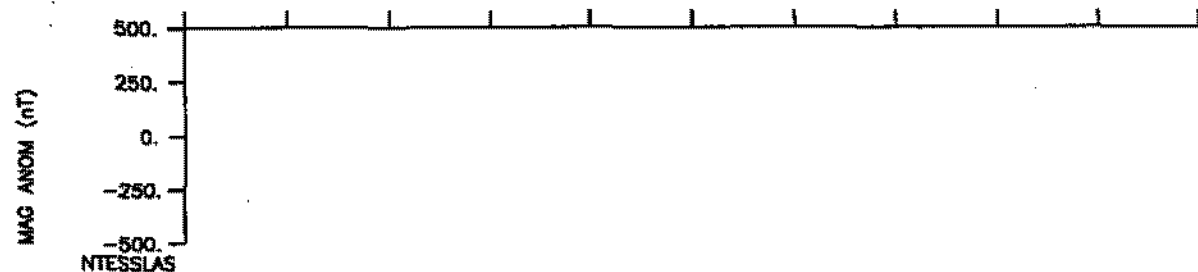
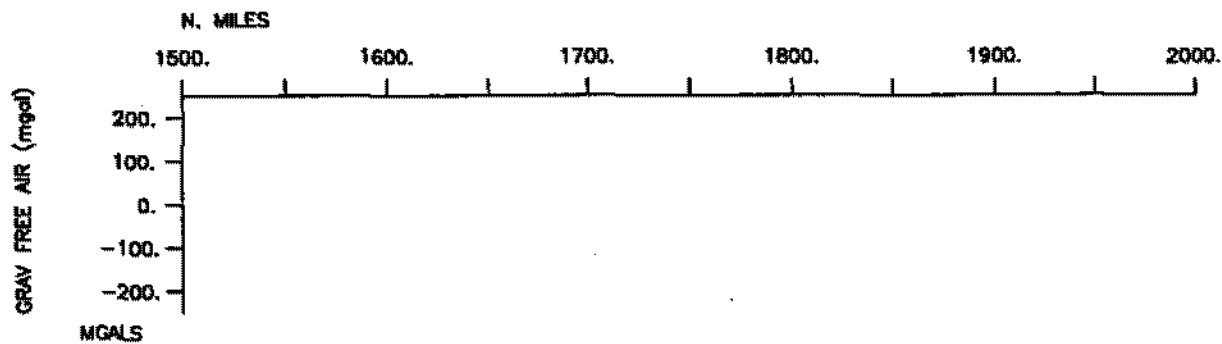
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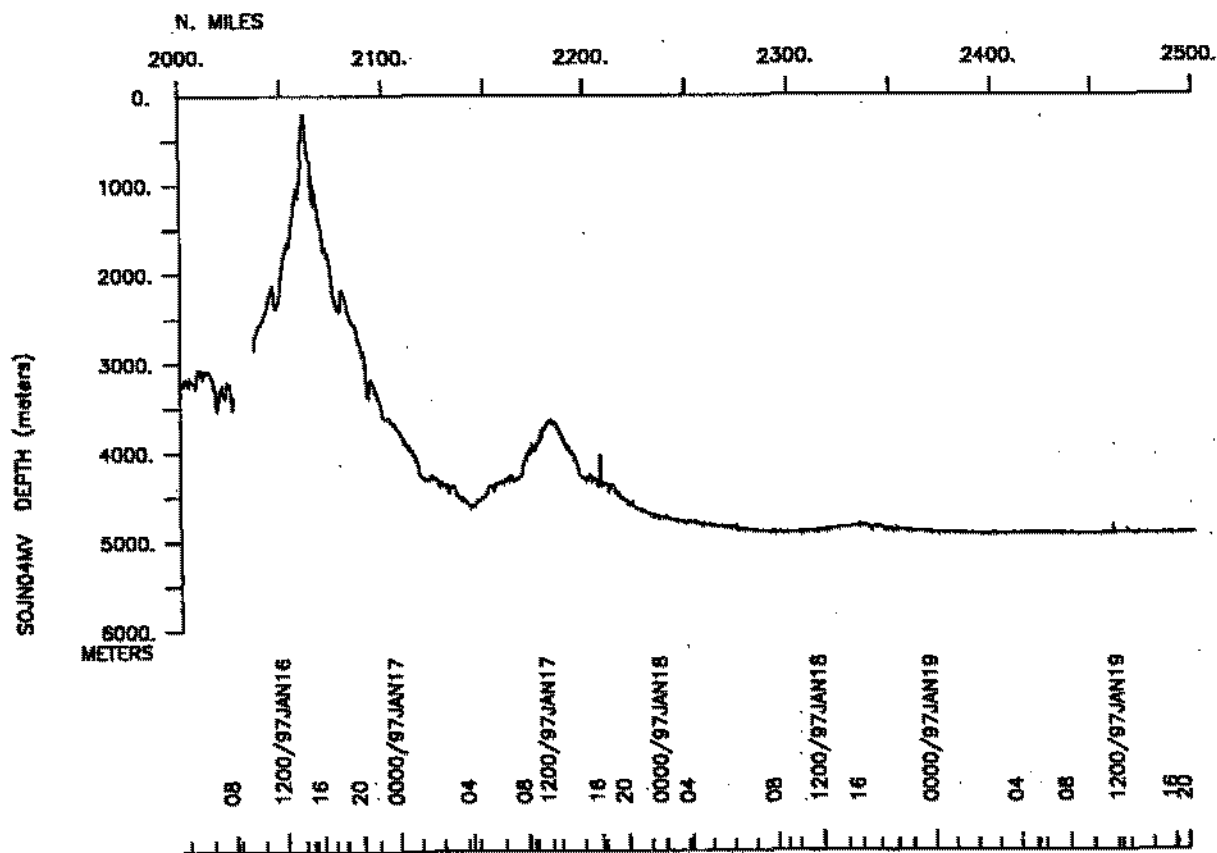
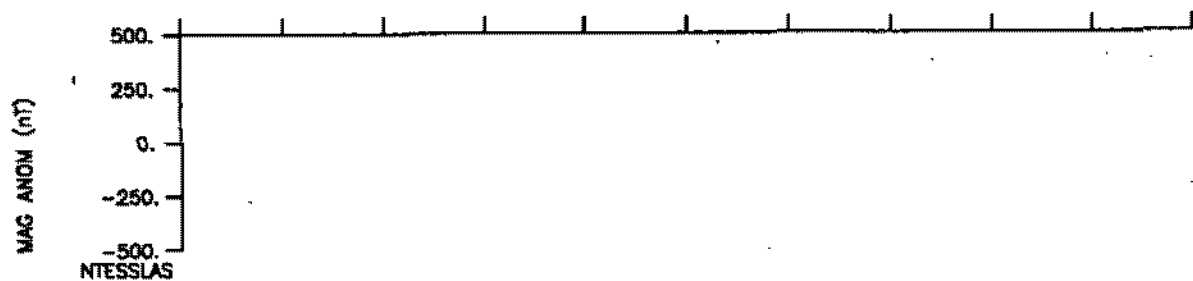
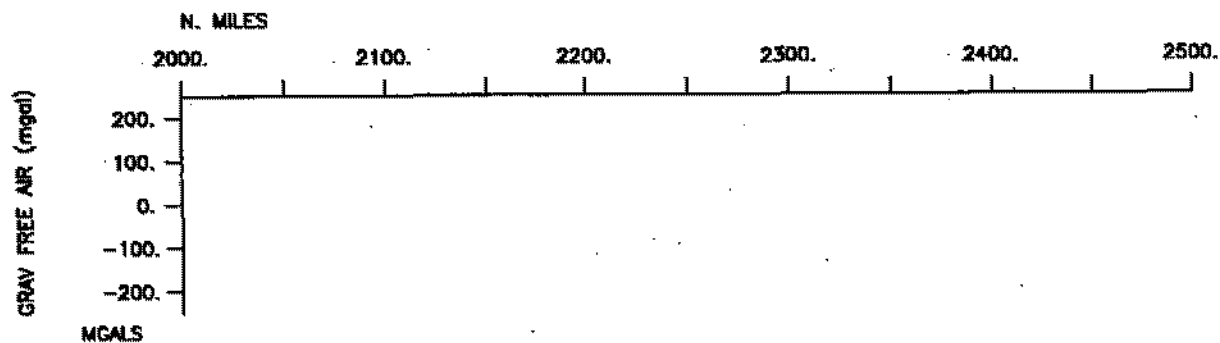


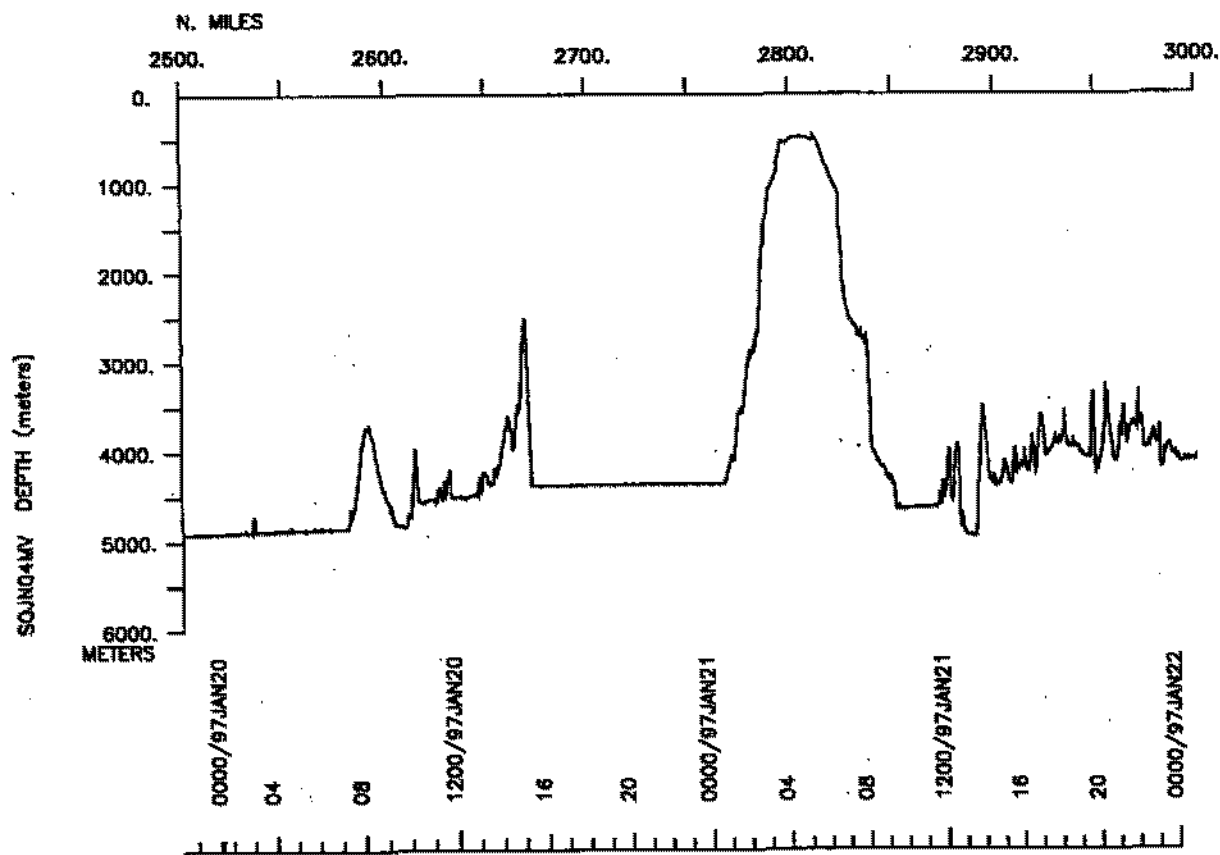
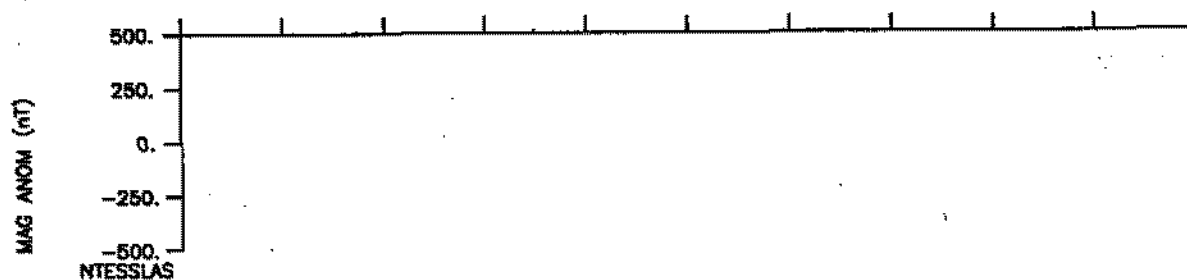
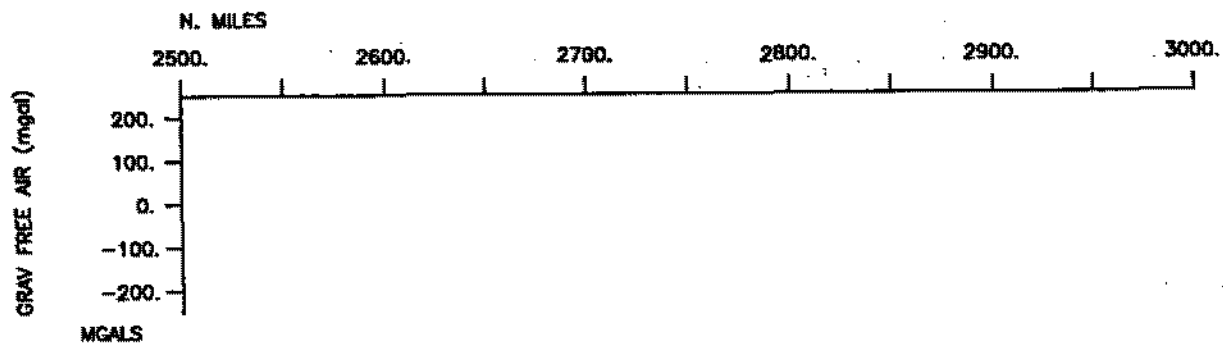


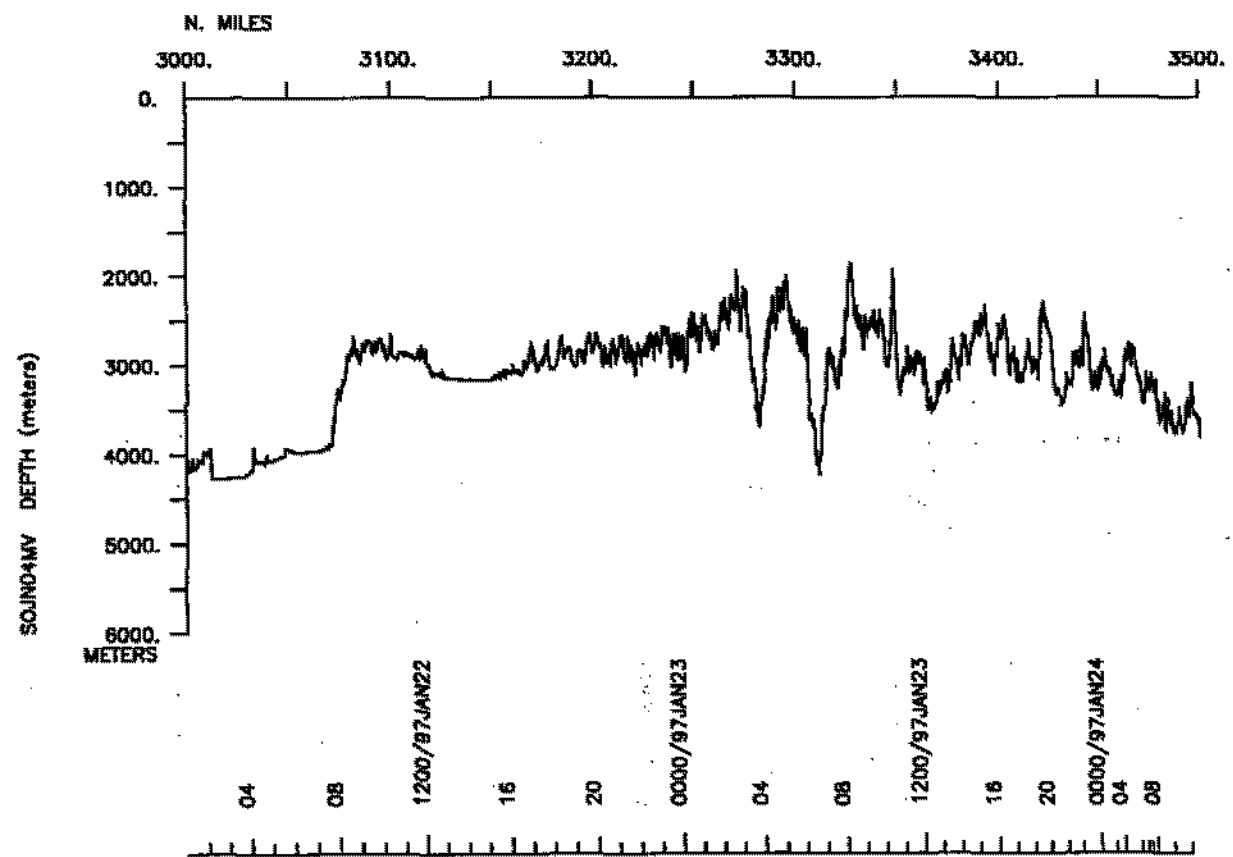
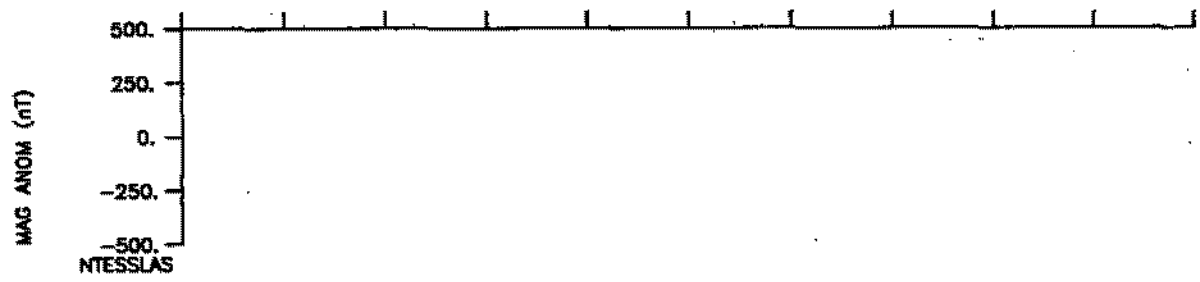
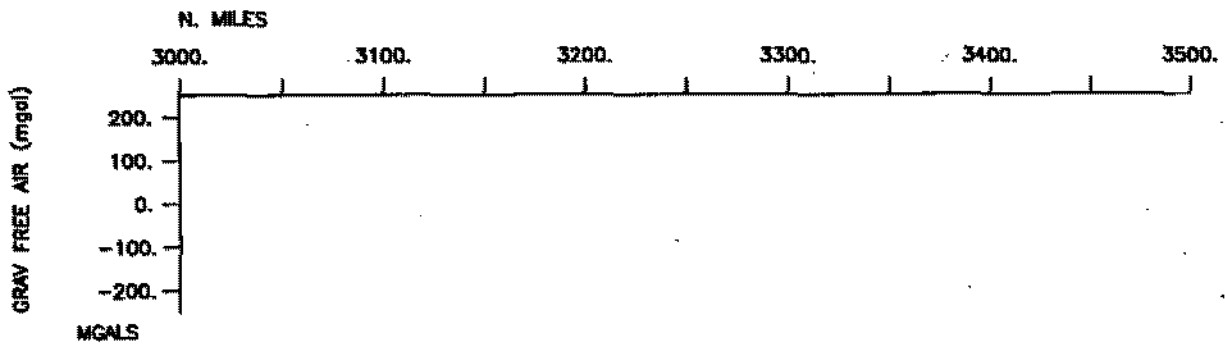


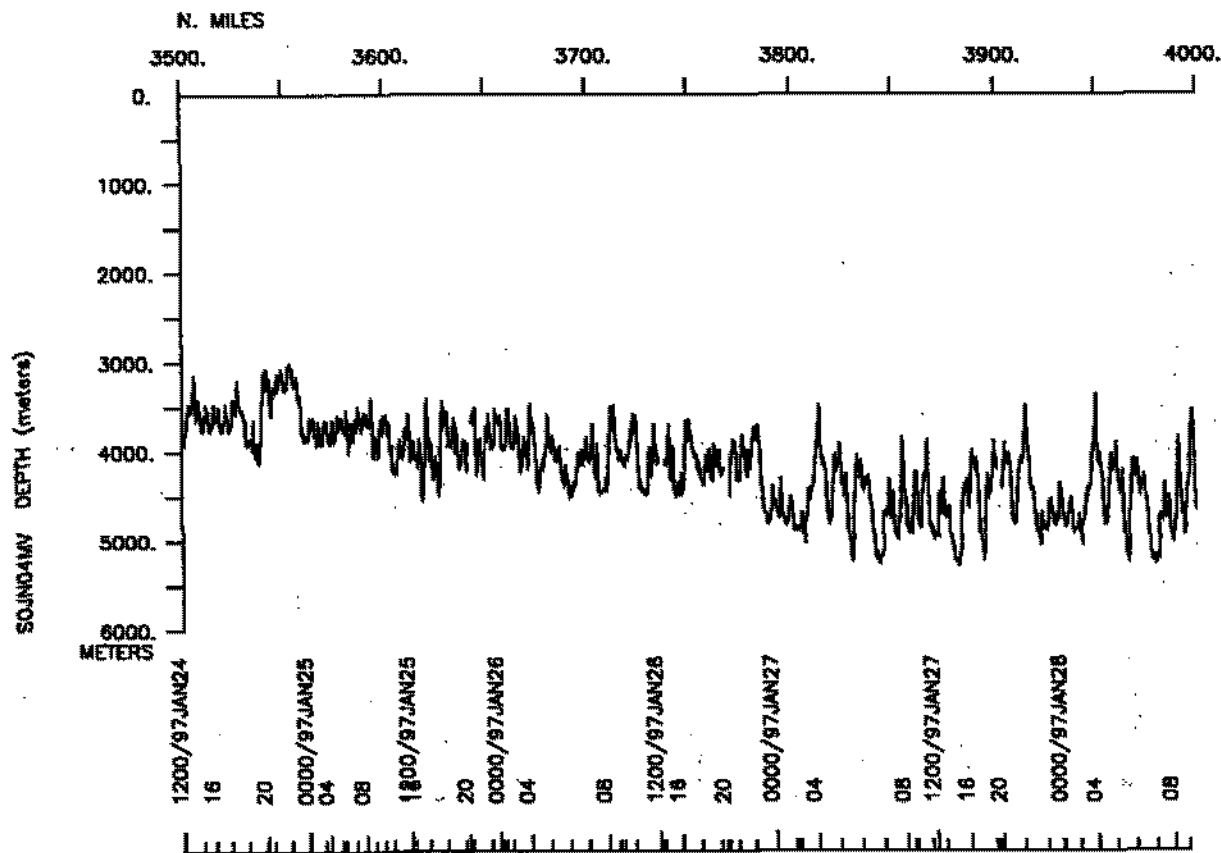
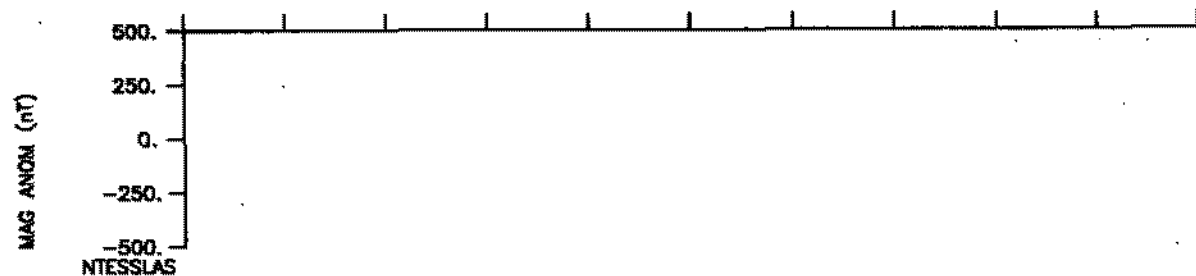
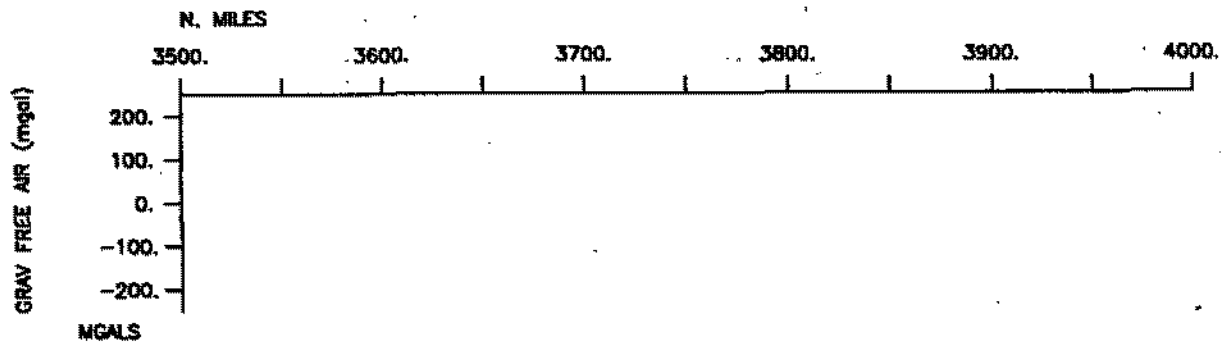


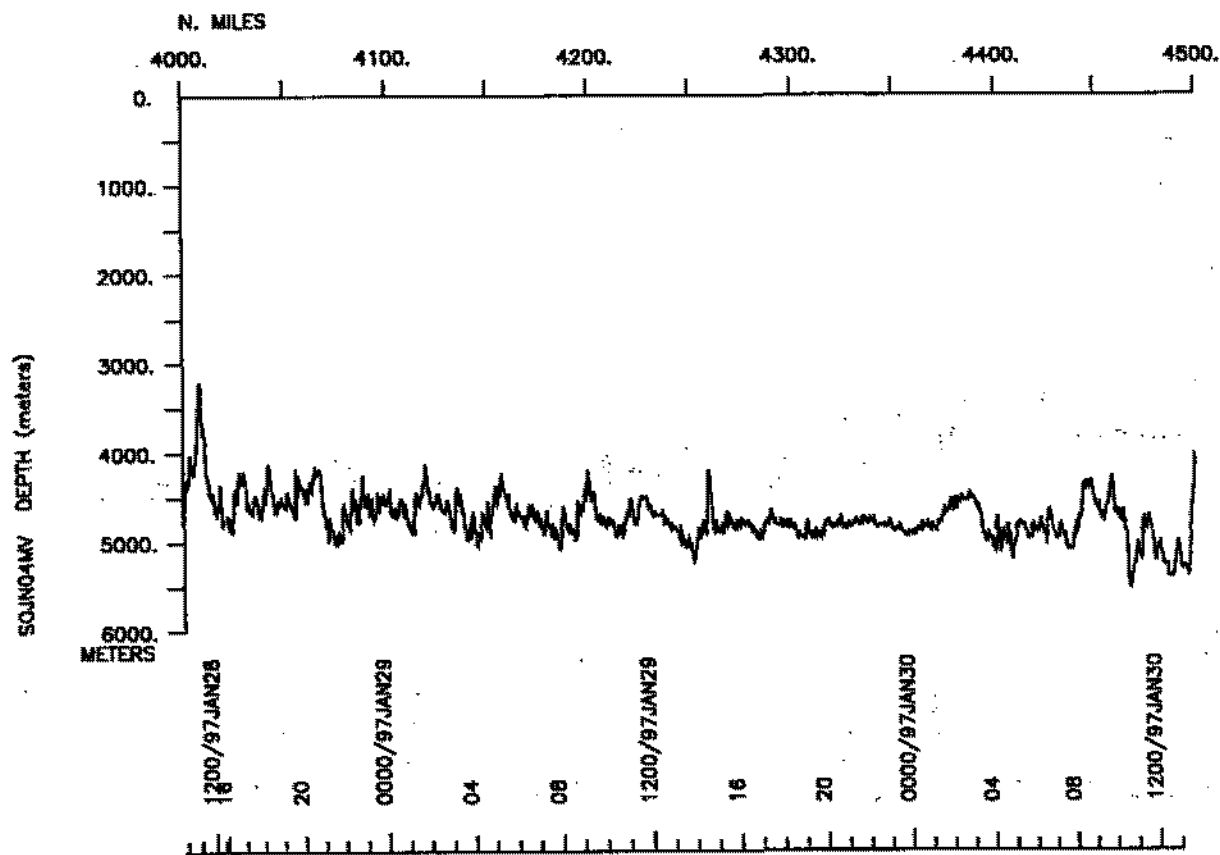
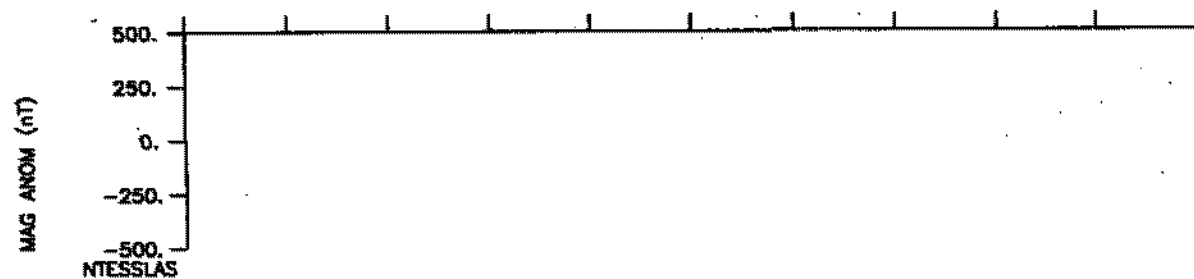
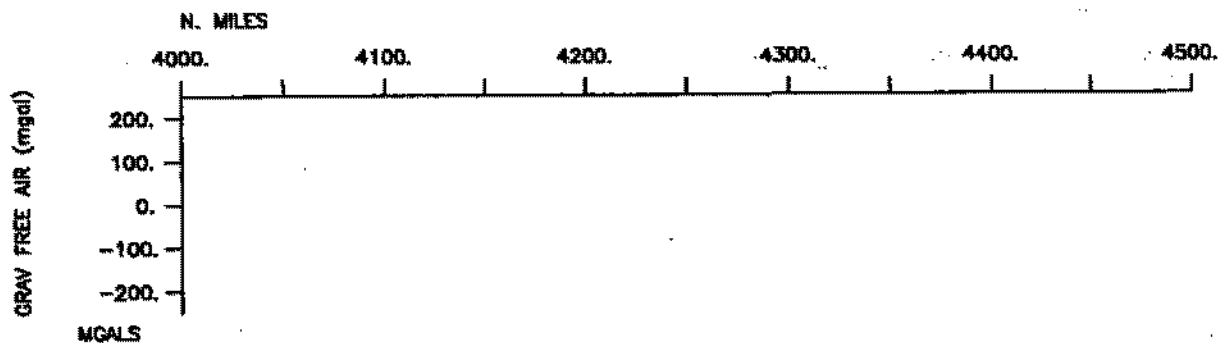


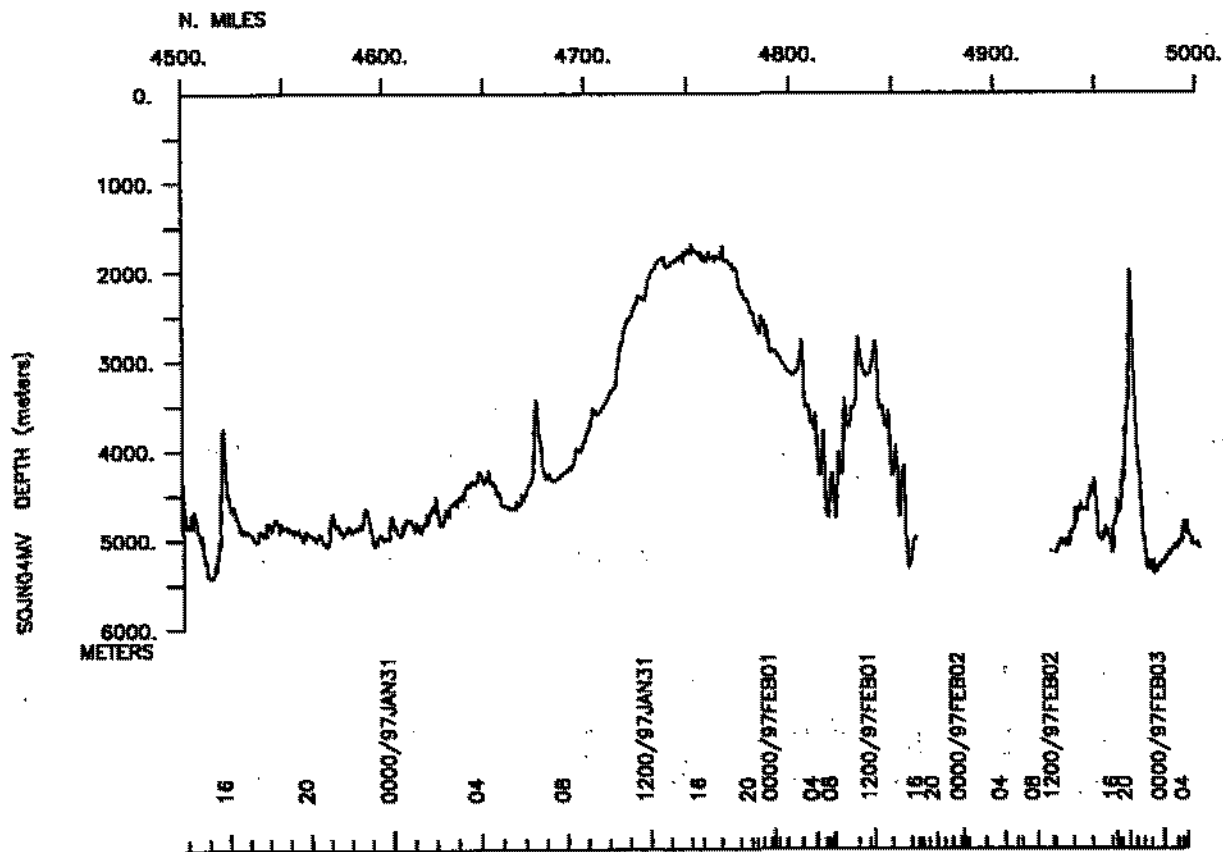
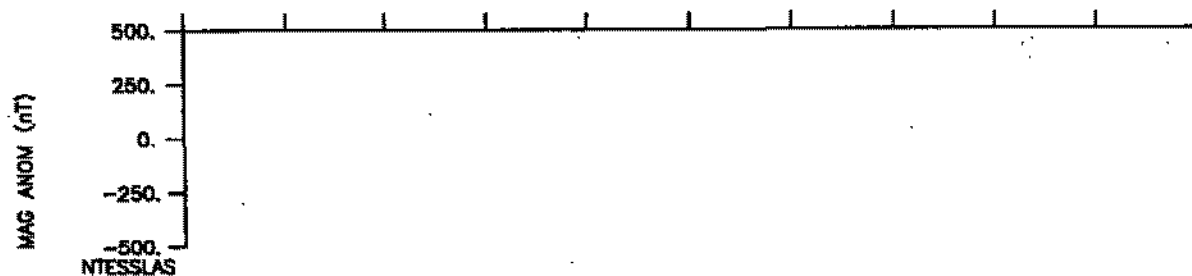
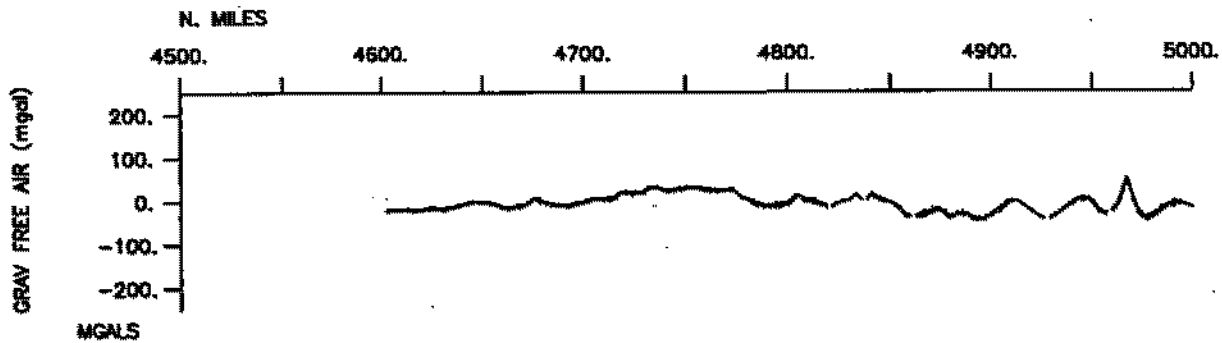


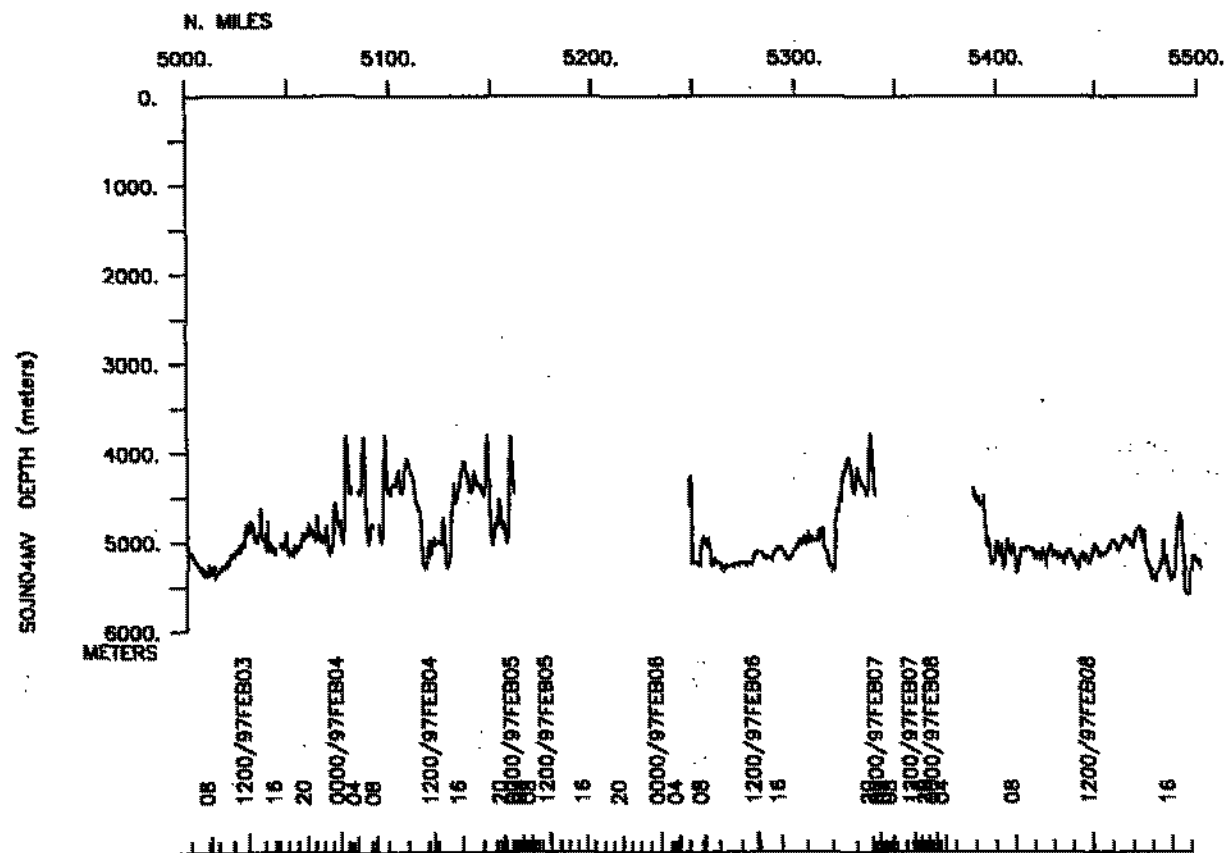
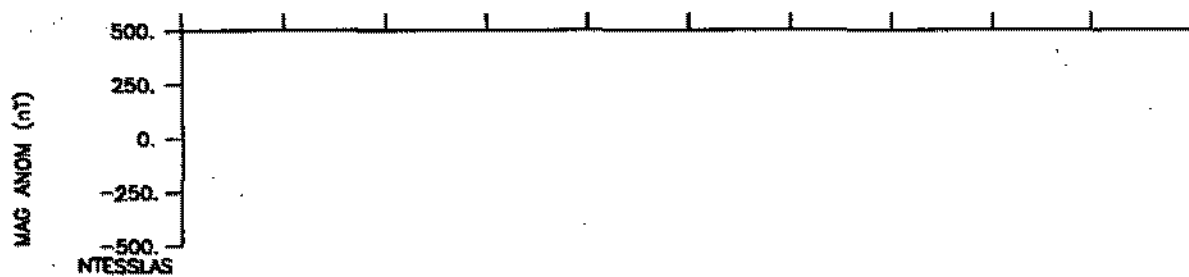




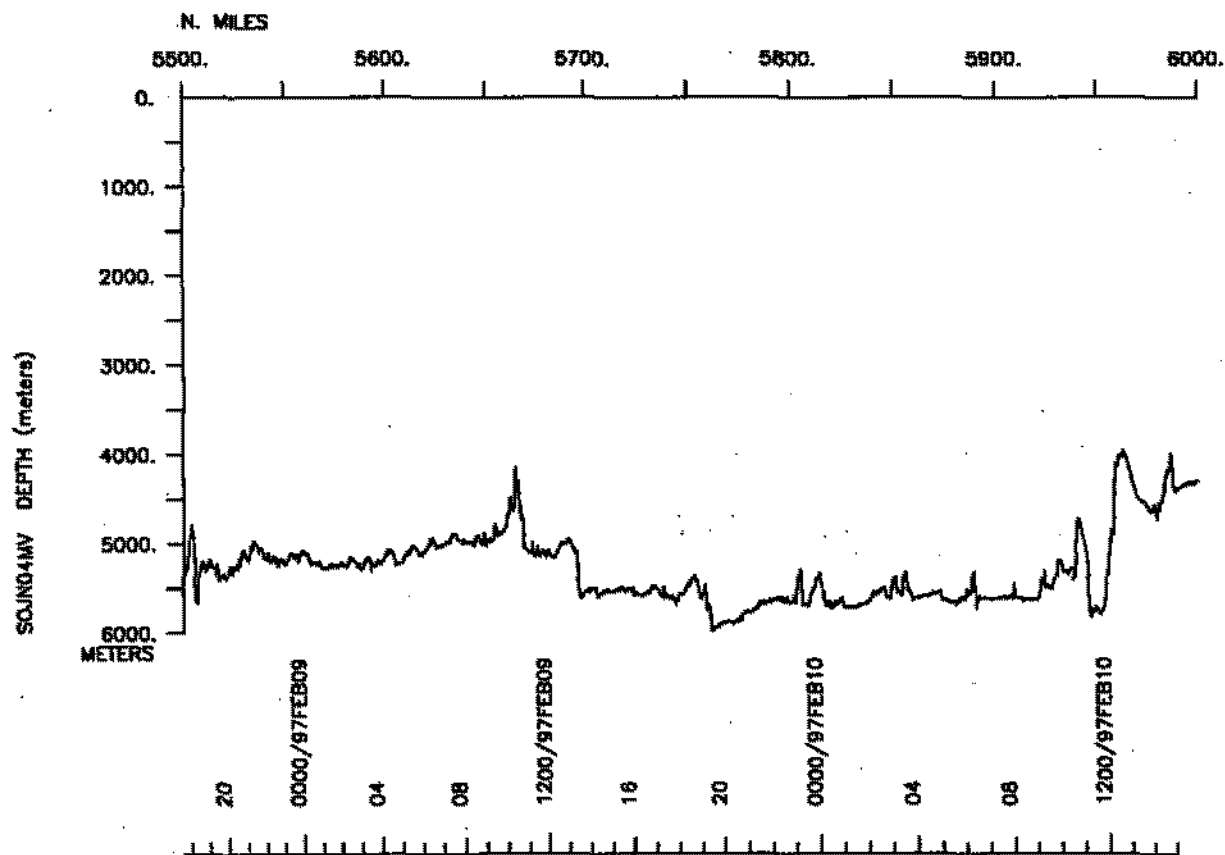
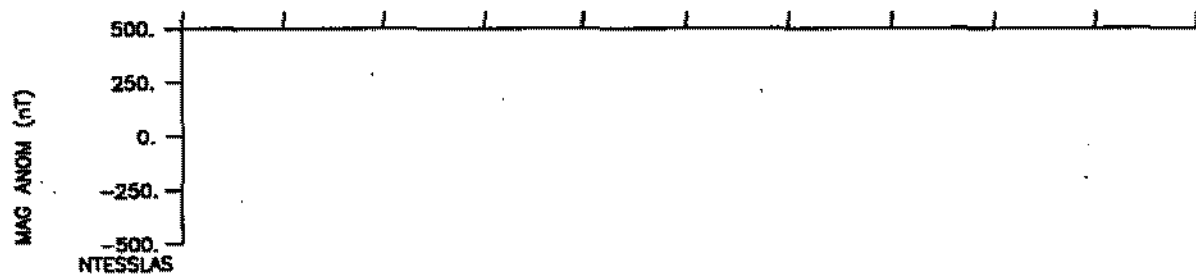
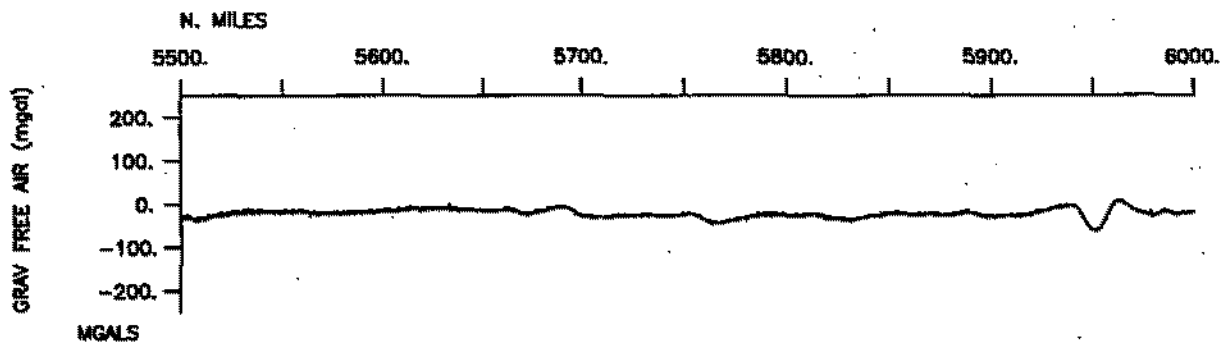


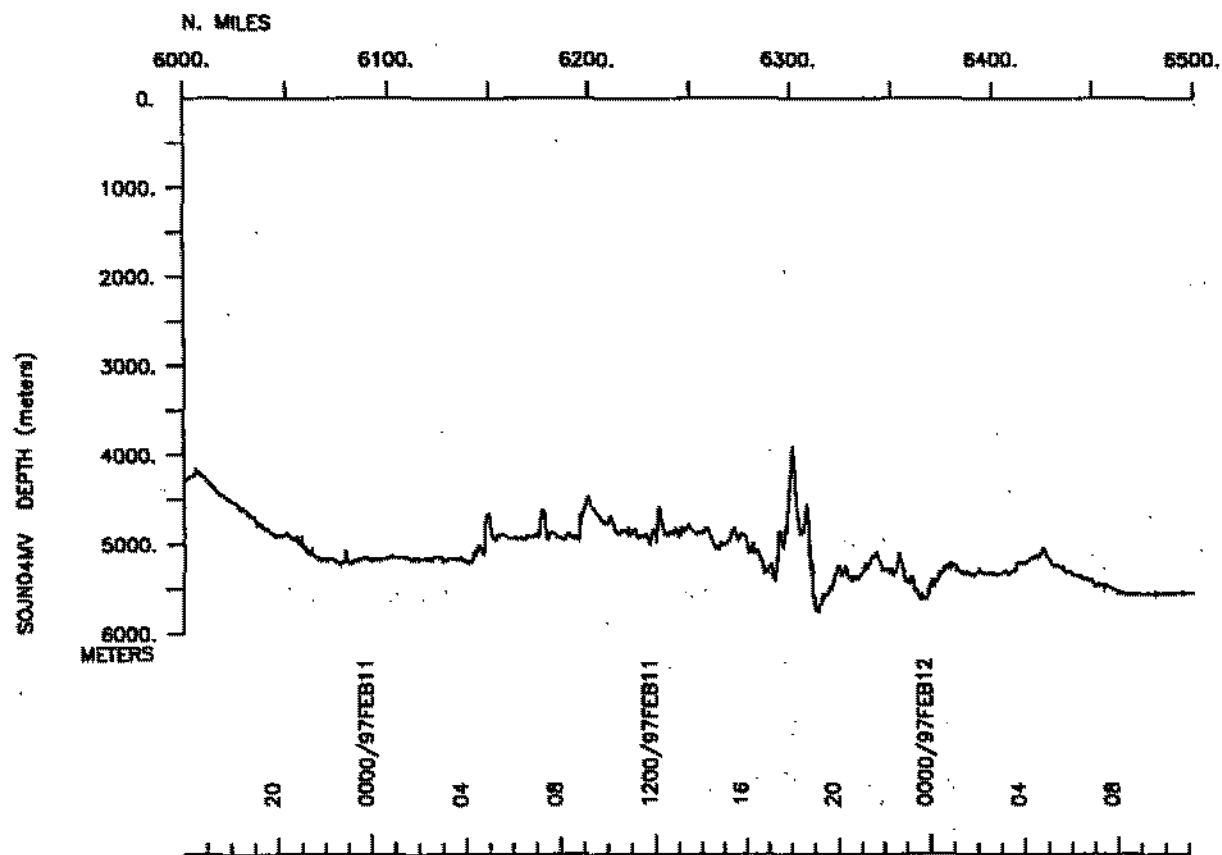
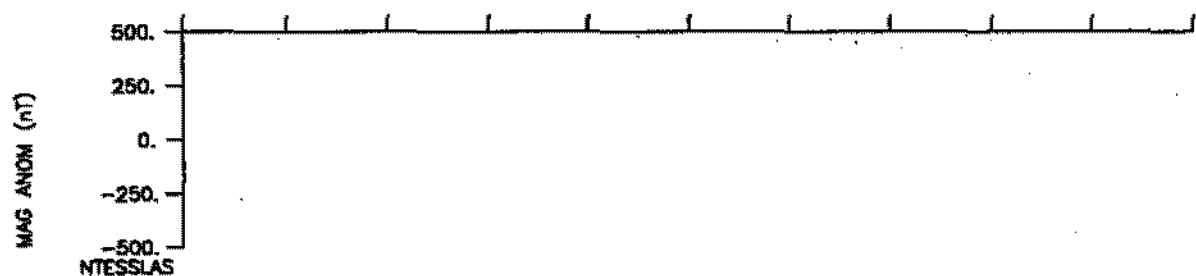


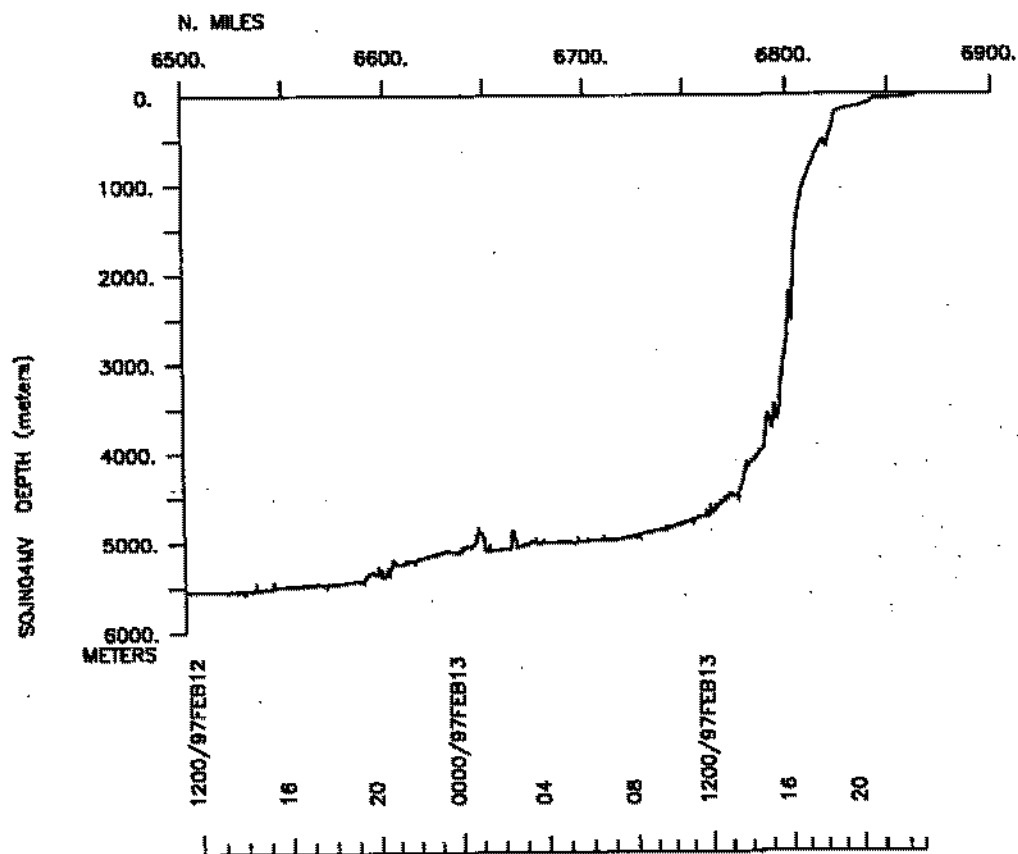
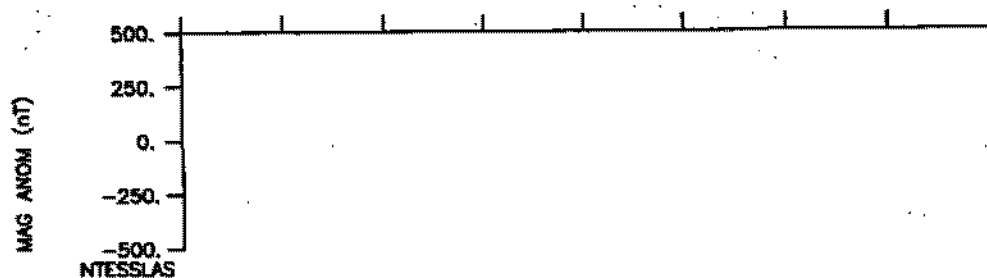
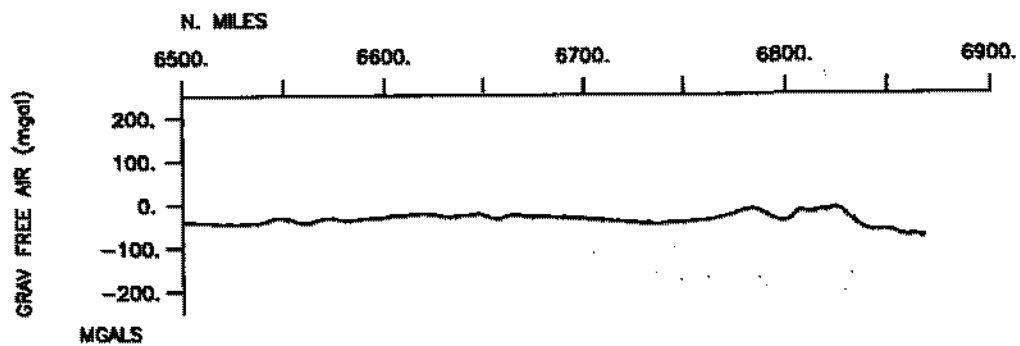












***S.I.O. SAMPLE INDEX***

**SOJOURN EXPEDITION**

**LEG 4**

**(SOJN04MV)**

**R/V Melville**

**(Issued April 1997)**

**Ports:**

**Cape Town, South Africa (8 January 1997)**

**to**

**Fremantle, Australia (14 February 1997)**

**Chief Scientist:**

**Thomas Whitworth (Texas A&M University)**

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.# 269**

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

1418	080197	0	LGPT B Cape Town, So. Africa	33-54.62S	18-26.19E	f	SOJN04MV
0100	140297	0	LGPT E Fremantle, Australia	32-03.00S	115-45.00E	f	SOJN04MV

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

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS	TAMU Whitworth, Thomas	Chief Scientist	Texas A&M Univ.	SOJN04MV
PEMT	SIO Boaz, John	Marine Tech	Scripps Institution	SOJN04MV
PESP	OSU Brookstorce, K.	Scientist	Oregon State Univ.	SOJN04MV
PESP	OSU Hevner, R.	Technician	Oregon State Univ.	SOJN04MV
PEET	SIO Hiller, Scott	Technician	Scripps Institution	SOJN04MV
PEMT	SIO Johnson, Mary	Technician	Scripps Institution	SOJN04MV
PESP	WHOI Knapp, G.	Scientist	Woods Hole	SOJN04MV
PEXN	SIX Matthysen, C.	Technician	Univ. of Cape Town	SOJN04MV
PEMT	SIO Morgan, Stacey	Technician	Scripps Institution	SOJN04MV
PESP	OSU Root, D.	Technician	Oregon State Univ.	SOJN04MV
PESP	TAMU Rutz, S.	Scientist	Texas A&M Univ.	SOJN04MV
PESP	OSU Simpkins, J.	Technician	Oregon State Univ.	SOJN04MV
PESP	WHOI Warren, B.	Scientist	Woods Hole	SOJN04MV
PERT	SIO Koonce, Tammy	Resident Tech	Scripps Institution	SOJN04MV
PECT	SIO Moe, Ron	Computer Tech	Scripps Institution	SOJN04MV

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

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

1418	080197	0	MBSR B vbeam&sidescan r-01	GDC	33-54.62S	18-26.19E	g	SOJN04MV
0700	150197	0	MBSR E vbeam&sidescan r-01	GDC	24-21.58S	47-49.08E	g	SOJN04MV
0951	150197	0	MBSR B vbeam&sidescan r-02	GDC	23-53.17S	47-59.48E	g	SOJN04MV
1040	230197	0	MBSR E vbeam&sidescan r-02	GDC	19-59.86S	67-28.04E	g	SOJN04MV
1225	230197	0	MBSR B vbeam&sidescan r-03	GDC	19-59.90S	67-45.28E	g	SOJN04MV
0750	100297	0	MBSR E vbeam&sidescan r-03	GDC	24-16.24S	99-49.13E	g	SOJN04MV
0800	100297	0	MBSR B vbeam&sidescan r-04	GDC	24-17.19S	99-51.03E	g	SOJN04MV
2230	130297	0	MBSR E vbeam&sidescan r-04	GDC	31-56.18S	115-37.25E	g	SOJN04MV

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

1418	080197	0	ADCP B Acoustic Doppler	GDC	33-54.62S	18-26.19E	g	SOJN04MV
1415	130297	0	ADCP E Current Profiler	GDC	31-18.94S	114-18.02E	g	SOJN04MV

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

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

\*\*\* Disposition ODF \*\*\*

1659	140197	0	TDCT	CTD	970m	SIO	25-48.50S	46-06.44E	g	SOJN04MV
1309	160197	0	TDCT	CTD-WOCE-001	204m	SIO	20-00.10S	48-54.94E	g	SOJN04MV
1455	160197	0	TDCT	CTD-WOCE-002	1060m	SIO	20-00.10S	48-59.43E	g	SOJN04MV
1723	160197	0	TDCT	CTD-WOCE-003	2250m	SIO	20-00.02S	49-09.03E	g	SOJN04MV
2057	160197	0	TDCT	CTD-WOCE-004	2850m	SIO	19-59.92S	49-23.37E	g	SOJN04MV
1203	170197	0	TDCT	CTD-WOCE-005	3580m	SIO	20-00.03S	49-37.98E	g	SOJN04MV
1712	170197	0	TDCT	CTD-WOCE-006	4268m	SIO	20-00.04S	50-04.00E	g	SOJN04MV
2306	170197	0	TDCT	CTD-WOCE-007	4680m	SIO	19-60.00S	50-35.98E	g	SOJN04MV
1515	180197	0	TDCT	CTD-WOCE-008	4770m	SIO	20-00.01S	50-59.86E	g	SOJN04MV
2023	180197	0	TDCT	CTD-WOCE-009	4820m	SIO	19-60.00S	51-17.94E	g	SOJN04MV
1142	190197	0	TDCT	CTD-WOCE-010	4848m	SIO	20-00.03S	51-46.90E	g	SOJN04MV
1743	190197	0	TDCT	CTD-WOCE-011	4860m	SIO	19-59.94S	52-15.93E	g	SOJN04MV
2340	190197	0	TDCT	CTD-WOCE-012	4850m	SIO	19-59.95S	52-46.94E	g	SOJN04MV
1957	230197	0	TDCT	CTD-WOCE-013	2559m	SIO	19-59.96S	68-47.89E	g	SOJN04MV
0204	240197	0	TDCT	CTD-WOCW-014	3280m	SIO	20-00.01S	69-21.92E	g	SOJN04MV
1445	240197	0	TDCT	CTD-WOCE-015	3535m	SIO	20-00.02S	69-47.93E	g	SOJN04MV
2020	240197	0	TDCT	CTD-WOCE-016		SIO	19-59.99S	70-14.85E	g	SOJN04MV
0217	250197	0	TDCT	CTD-WOCE-017	3630m	SIO	19-59.97S	70-44.75E	g	SOJN04MV
1433	250197	0	TDCT	CTD-WOCE-018	3990m	SIO	19-59.96S	71-14.95E	g	SOJN04MV
2031	250197	0	TDCT	CTD-WOCE-019	3550m	SIO	19-59.66S	71-42.42E	g	SOJN04MV
1328	260197	0	TDCT	CTD-WOCE-020	4015m	SIO	19-59.99S	72-12.18E	g	SOJN04MV
1950	260197	0	TDCT	CTD-WOCE-021	4263m	SIO	19-59.85S	72-43.62E	g	SOJN04MV
1245	270197	0	TDCT	CTD-WOCE-022	4920m	SIO	20-00.08S	74-10.28E	g	SOJN04MV
1831	270197	0	TDCT	CTD-WOCE-023	4060m	SIO	19-59.98S	73-40.96E	g	SOJN04MV
0022	280197	0	TDCT	CTD-WOCE-024	4670m	SIO	20-00.07S	73-12.57E	g	SOJN04MV
1417	280197	0	TDCT	CTD-WOCE-025	4690m	SIO	20-00.07S	74-44.06E	g	SOJN04MV
1517	310197	0	TDCT	CTD-WOCE-026	1765m	SIO	20-00.09S	87-44.78E	g	SOJN04MV
1926	310197	0	TDCT	CTD-WOCE-027	2305m	SIO	20-00.56S	88-10.04E	g	SOJN04MV
1031	010297	0	TDCT	CTD-WOCE-028	3120m	SIO	20-00.03S	88-30.84E	g	SOJN04MV
1604	010297	0	TDCT	CTD-WOCE-029	4930m	SIO	20-00.37S	88-54.84E	g	SOJN04MV
1016	020297	0	TDCT	CTD-WOCE-030	5090m	SIO	19-59.96S	89-28.04E	g	SOJN04MV
1648	020297	0	TDCT	CTD-WOCE-031	5060m	SIO	19-59.79S	89-59.01E	g	SOJN04MV
0735	030297	0	TDCT	CTD-WOCE-032	5317m	SIO	19-59.75S	90-16.98E	g	SOJN04MV
1523	030297	0	TDCT	CTD-WOCE-033	5085m	SIO	19-59.40S	90-49.15E	g	SOJN04MV
0638	040297	0	TDCT	CTD-WOCE-034	4795m	SIO	19-59.70S	91-19.56E	g	SOJN04MV
1313	040297	0	TDCT	CTD-WOCE-035	4940m	SIO	19-59.98S	91-48.97E	g	SOJN04MV
0728	060297	0	TDCT	CTD-WOCE-036	4890m	SIO	19-59.81S	92-47.85E	g	SOJN04MV
1318	060297	0	TDCT	CTD-WOCE-037	5055m	SIO	20-00.02S	92-21.26E	g	SOJN04MV

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

\*\*\*\* Current Meters \*\*\*\*

\*\*\*\* Recovery of meters deployed by R/V Knorr, April 1995\*\*\*\*

0905	160197	0	CMAB	Rcvrd Mooring 001	OSU	20-00.46S	49-30.22E	g	SOJN04MV
0543	170197	0	CMAB	Rcvrd Mooring 003	OSU	19-59.68S	50-18.48E	g	SOJN04MV
0958	170197	0	CMAB	Rcvrd Mooring 002	OSU	20-00.91S	49-46.45E	g	SOJN04MV
0303	180197	0	CMAB	Rcvrd Mooring 004	OSU	19-58.68S	50-48.32E	g	SOJN04MV
1030	180197	0	CMAB	Rcvrd Mooring 005	OSU	19-58.57S	51-36.63E	g	SOJN04MV
0551	190197	0	CMAB	Rcvrd Mooring 006	OSU	19-59.67S	52-30.70E	g	SOJN04MV
0725	240197	0	CMAB	Rcvrd Mooring 007	OSU	20-00.02S	69-37.80E	g	SOJN04MV
1125	240197	0	CMAB	Rcvrd Mooring 008	OSU	20-00.01S	70-03.78E	g	SOJN04MV
0522	250197	0	CMAB	Rcvrd Mooring 009	OSU	20-00.06S	70-37.81E	g	SOJN04MV
0142	260197	0	CMAB	Rcvrd Mooring 010	OSU	19-59.96S	71-32.16E	g	SOJN04MV
0954	260197	0	CMAB	Rcvrd Mooring 011	OSU	19-59.79S	72-28.85E	g	SOJN04MV
0201	270197	0	CMAB	Rcvrd Mooring 012	OSU	19-59.88S	73-19.35E	g	SOJN04MV
1030	270197	0	CMAB	Rcvrd Mooring 013	OSU	20-00.77S	74-17.88E	g	SOJN04MV
0049	010297	0	CMAB	Rcvrd Mooring 014	OSU	20-00.47S	88-21.19E	g	SOJN04MV
0652	010297	0	CMAB	Rcvrd Mooring 015	OSU	20-00.17S	88-47.39E	g	SOJN04MV
0045	020297	0	CMAB	Rcvrd Mooring 016	OSU	19-59.90S	89-14.38E	g	SOJN04MV
0712	020297	0	CMAB	Rcvrd Mooring 017	OSU	20-01.06S	89-42.99E	g	SOJN04MV
0302	030297	0	CMAB	Rcvrd Mooring 018	OSU	19-59.62S	90-33.51E	g	SOJN04MV
0310	060297	0	CMAB	Rcvrd Mooring 020	OSU	20-00.12S	92-35.21E	g	SOJN04MV
0000	080297	0	CMAB X	Lost Mooring 019	OSU	20-00.25S	91-26.39E	g	SOJN04MV

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

1150	110197	0	BTXP	XBT T-5 t-5\$1.sip	GDC	31-32.10S	32-47.46E	g	SOJN04MV
1148	160197	0	BTXP	XBT T-5 t-5\$2.sip	GDC	20-00.09S	49-07.30E	g	SOJN04MV
1042	170197	0	BTXP	XBT T-5 t-5\$3.sip	GDC	20-00.13S	49-39.19E	g	SOJN04MV
0957	220197	0	BTXP	XBT T-5 t-5\$4.sip	GDC	20-00.06S	62-58.11E	g	SOJN04MV
0822	240197	0	BTXP	XBT T-5 t-5\$5.sip	GDC	20-00.05S	69-43.30E	g	SOJN04MV
0805	290197	0	BTXP	XBT T-5 t-5\$6.sip	GDC	20-00.30S	77-40.48E	g	SOJN04MV
0817	290197	0	BTXP	XBT T-5 t-5\$7.sip	GDC	20-00.39S	77-42.75E	g	SOJN04MV
0830	290197	0	BTXP	XBT T-5 t-5\$8.sip	GDC	20-00.50S	77-45.21E	g	SOJN04MV
0759	310197	0	BTXP	XBT T-5 t-5\$9.sip	GDC	19-59.97S	86-34.94E	g	SOJN04MV
0651	090297	0	BTXP	XBT T-5 t-5\$10.sip	GDC	22-01.78S	95-23.12E	g	SOJN04MV
0532	100297	0	BTXP	XBT T-5 t-5\$11.sip	GDC	24-03.56S	99-22.91E	g	SOJN04MV
0742	110297	0	BTXP	XBT T-5 t-5\$12.sip	GDC	26-29.37S	104-15.99E	g	SOJN04MV
0755	110297	0	BTXP	XBT T-5 t-5\$13.sip	GDC	26-30.58S	104-18.52E	g	SOJN04MV
0531	120297	0	BTXP	XBT T-5 t-5\$14.sip	GDC	28-30.16S	108-24.44E	g	SOJN04MV
0542	120297	0	BTXP	XBT T-5 t-5\$15.sip	GDC	28-31.24S	108-26.48E	g	SOJN04MV
0404	130297	0	BTXP	XBT T-5 t-5\$16.sip	GDC	30-29.35S	112-33.05E	g	SOJN04MV

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End Sample Index

SOJN04MV