

**Report and Index of  
Underway Marine Geophysical Data**

**Seaweed Expedition**

**Leg 3**

**(SEAW03RR)**

**R/V Revelle**

**(Issued November 2001)**

**Ports:**

Hilo, Hawaii (25 February 2001)

to

Honolulu, Hawaii (25 March 2001)

**Chief Scientist:** Christian deMoustier  
Scripps Institution of Oceanography  
cdemoustier@ucsd.edu

Computer Techs – Jim Charters & John Chatwood  
No Resident Marine Tech on board

Post-Cruise processing and report preparation by the  
Shipboard Technical Support Group,  
Scripps Institution of Oceanography  
La Jolla, CA 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 Shipboard Technical Support, Scripps Institution of Oceanography, La Jolla, California 92093-0223.*

STS Cruise ID# 296

**Report and Index of Navigation  
and Underway Geophysical Data**

Processed by the Shipboard Technical Support Group  
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

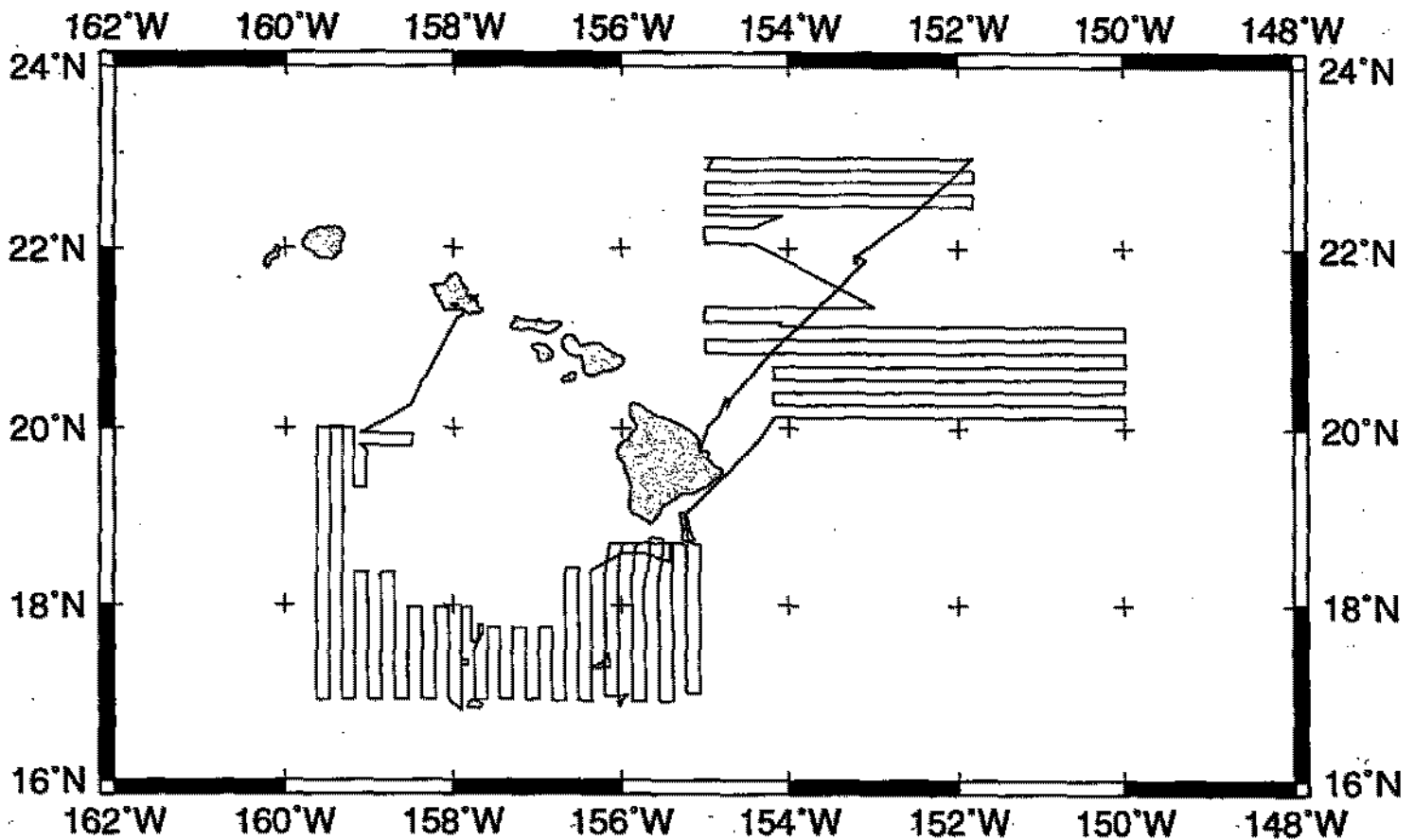
**Profiles** – depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

**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:**

For information on the availability of this current digital data as well as archived digital data contact Stephen P. Miller, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0220 Phone: (858)534-1898, internet email: [spmiller@ucsd.edu](mailto:spmiller@ucsd.edu); or his Website: <http://SIOExplorer@ucsd.edu>

Rev 6/2001



**SEA WEED EXPEDITION LEG 3 (SEAW03RR)**

**CHIEF SCIENTIST:** Christian de Moustier, Scripps Institution

**PORTS:** Hilo - Honolulu, Hawaii

**DATES:** 25 February - 25 March 2001

**SHIP:** R/V Revelle

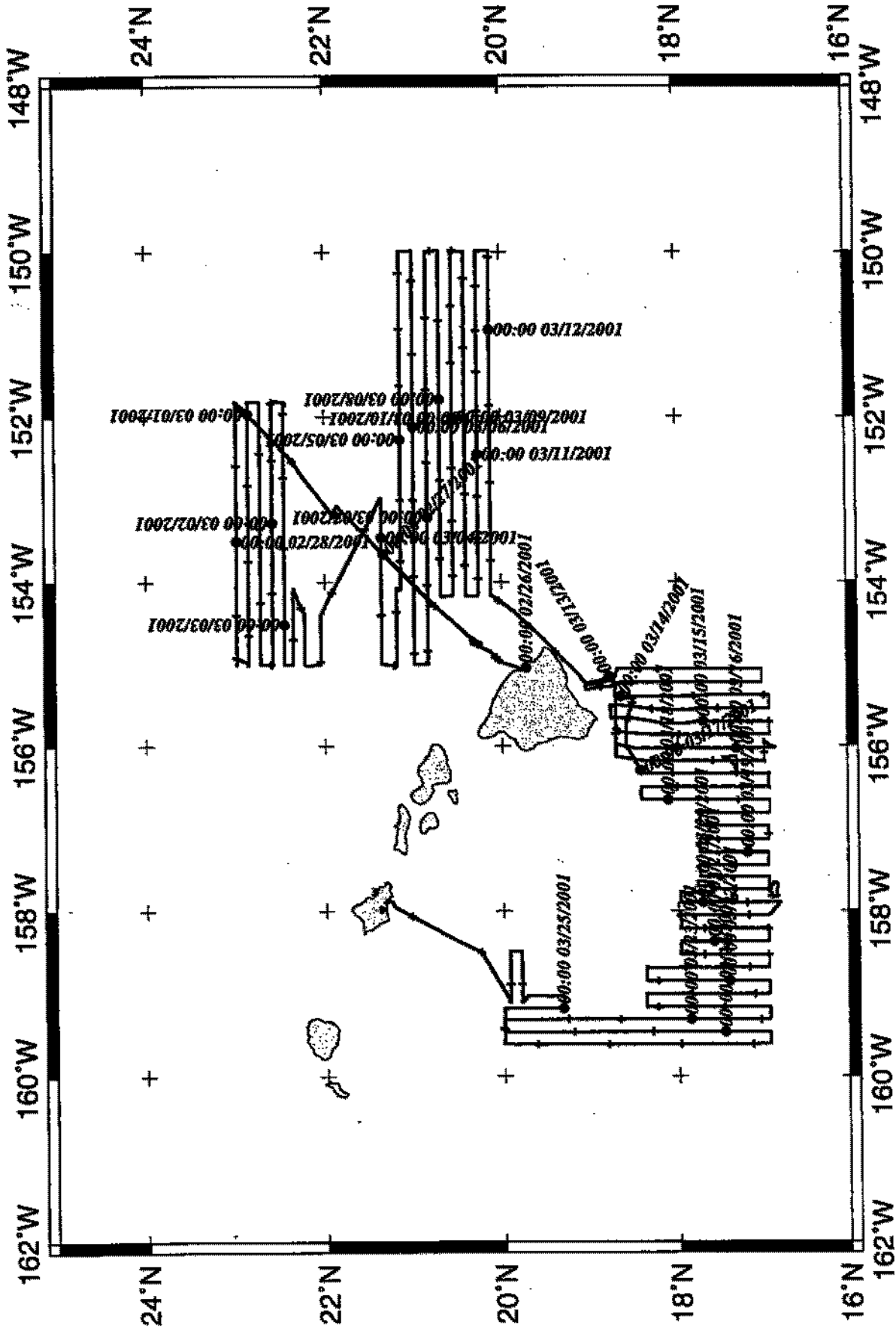
**TOTAL MILEAGE OF UNDERWAY DATA COLLECTED**

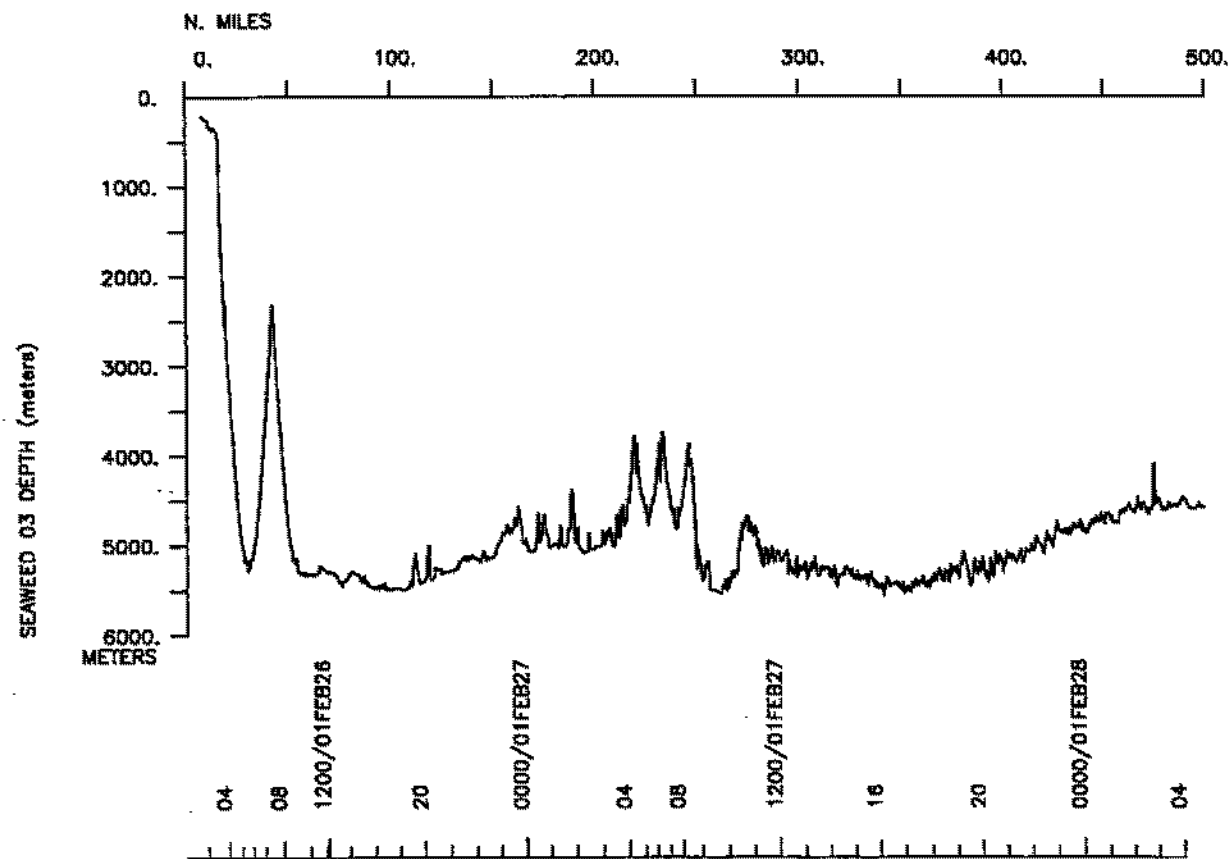
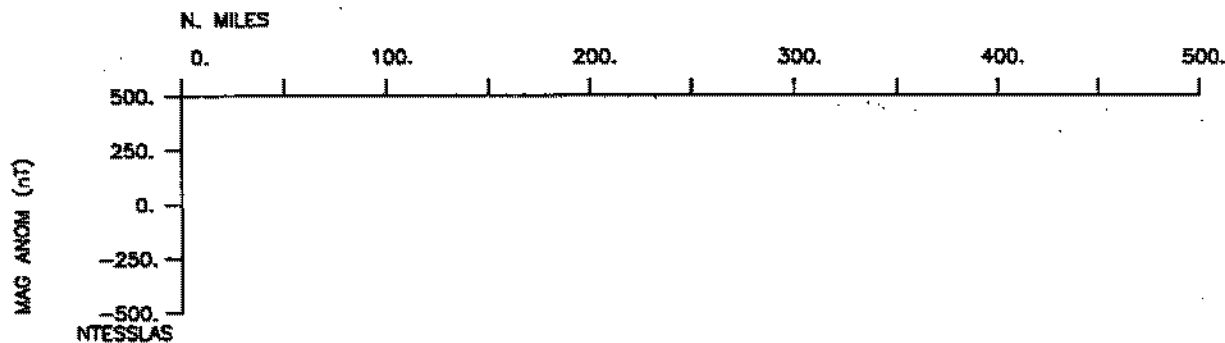
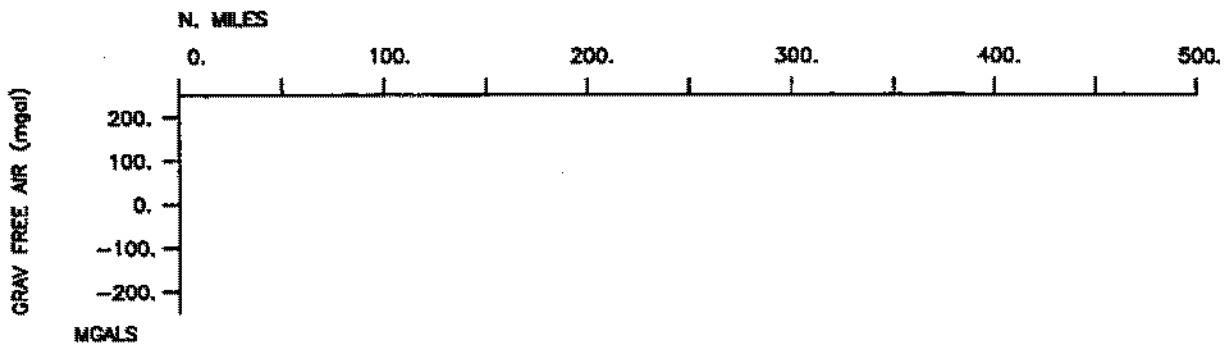
**Cruise-7418 miles**                      **Magnetics-none collected**

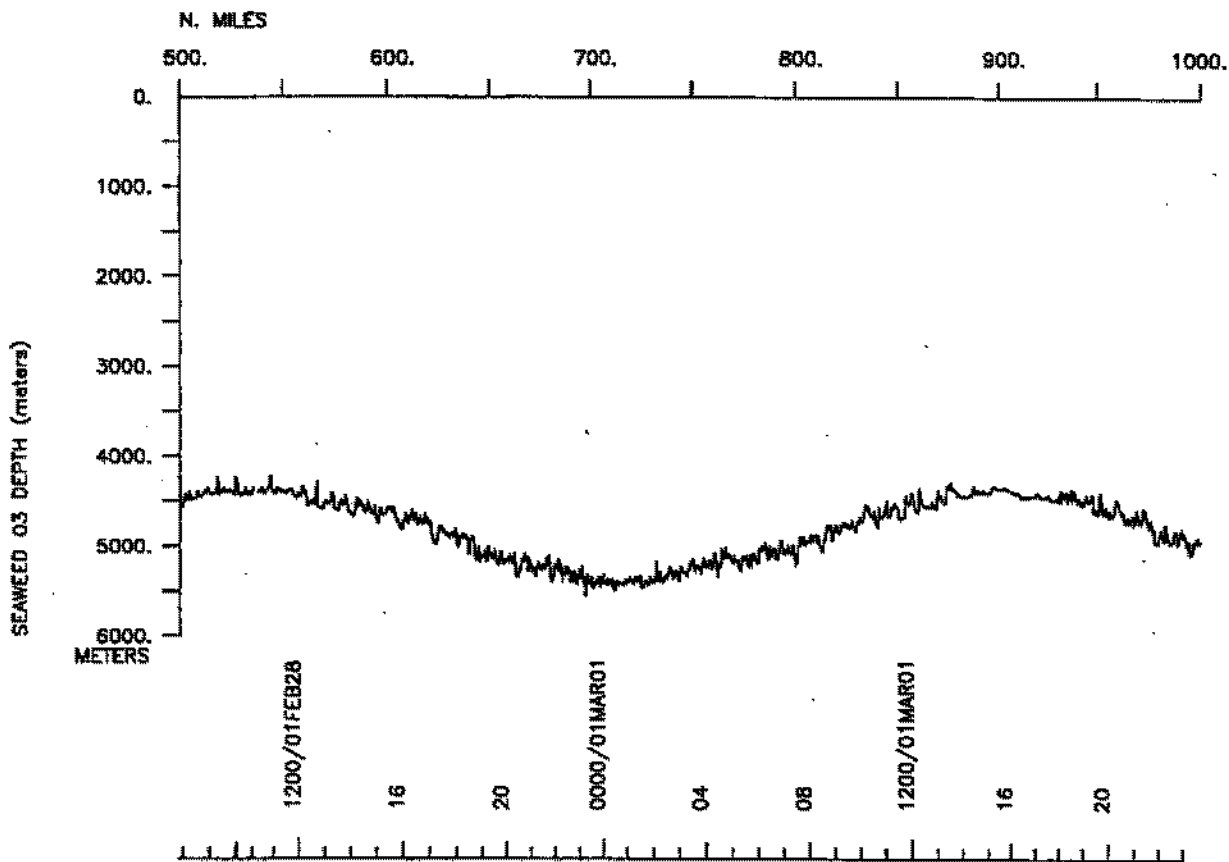
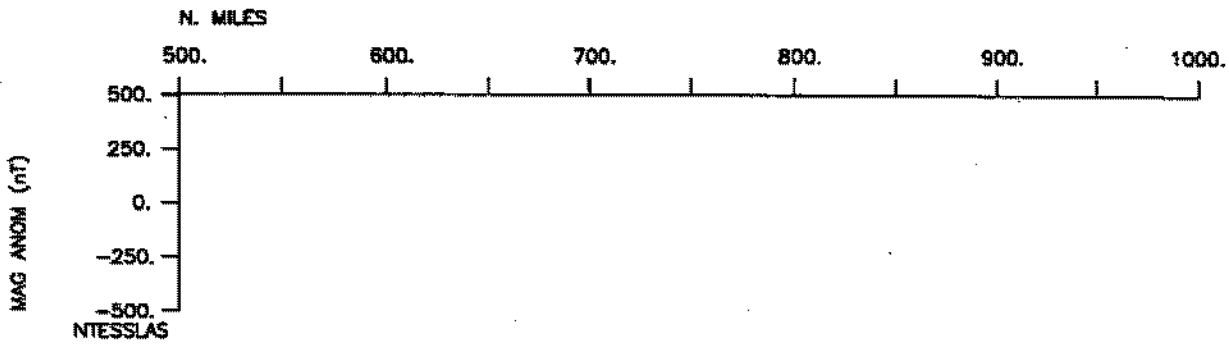
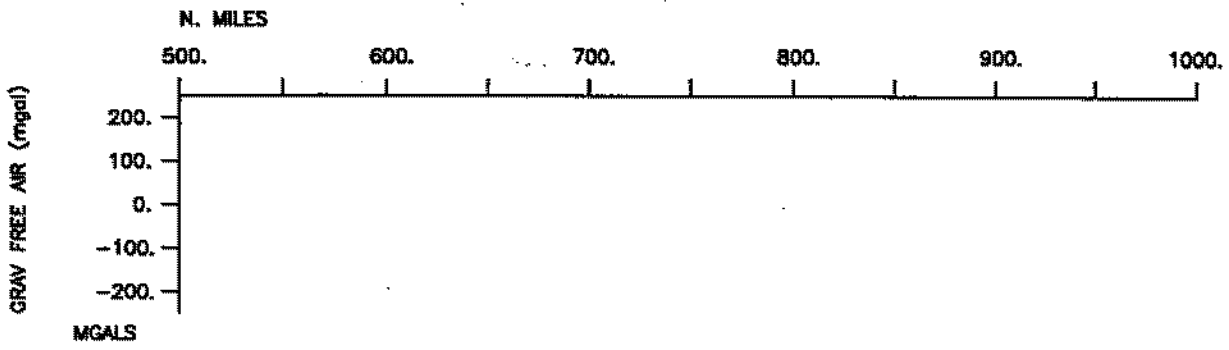
**Bathymetry-7410 miles**              **Seismic Reflection-none collected**

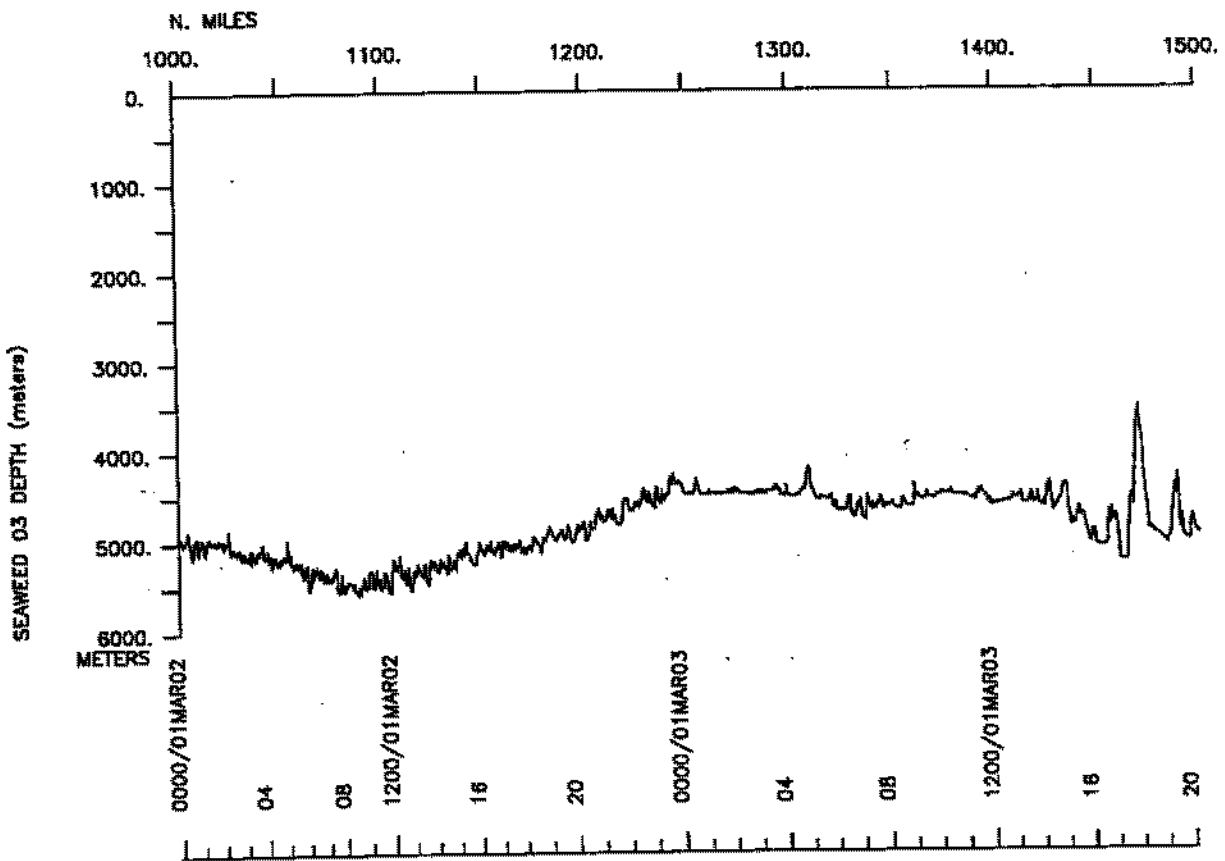
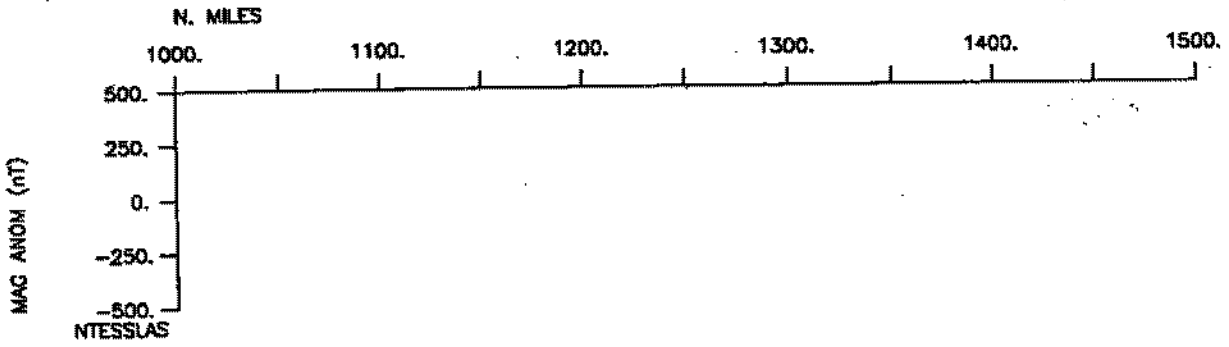
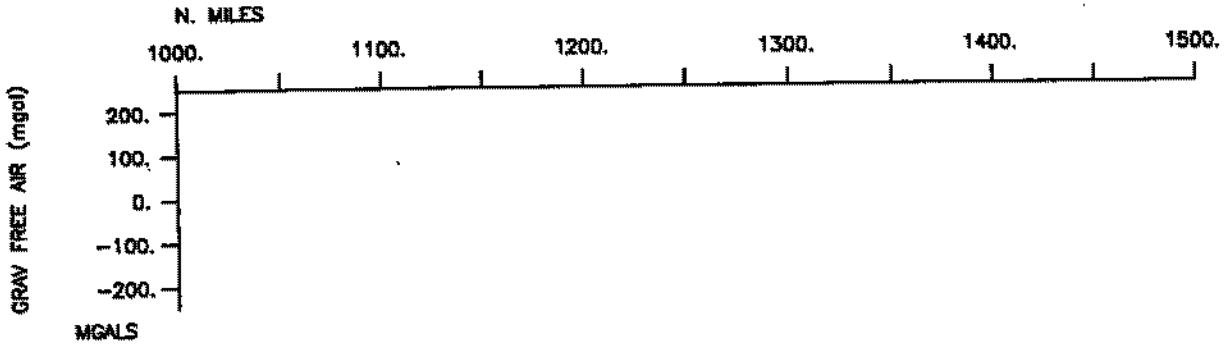
**Sea Beam-7410 miles**                **Gravity-none collected**

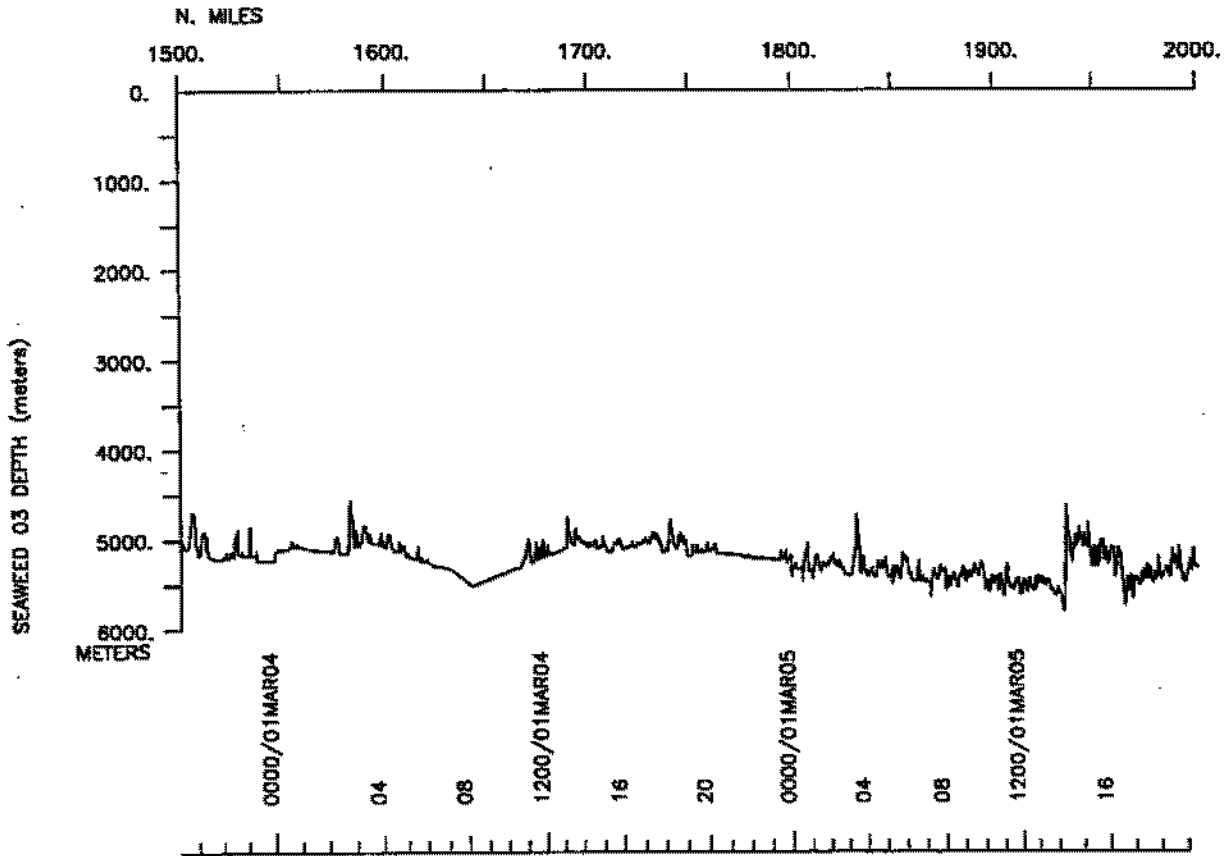
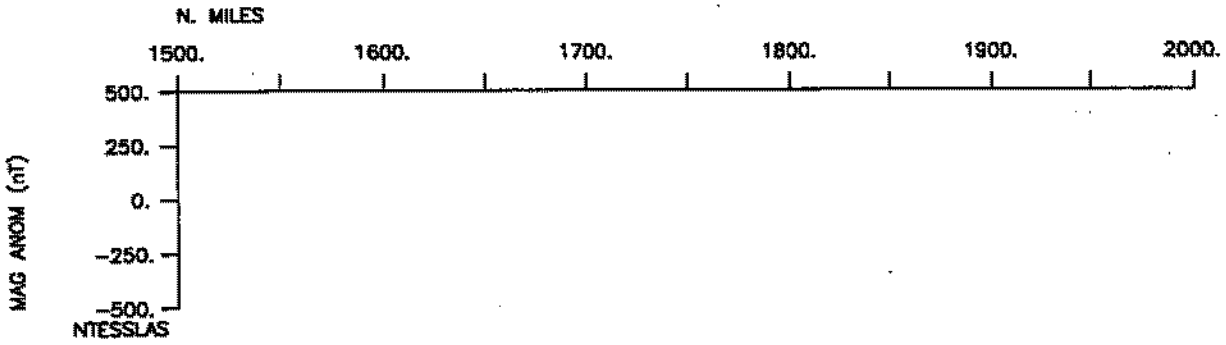
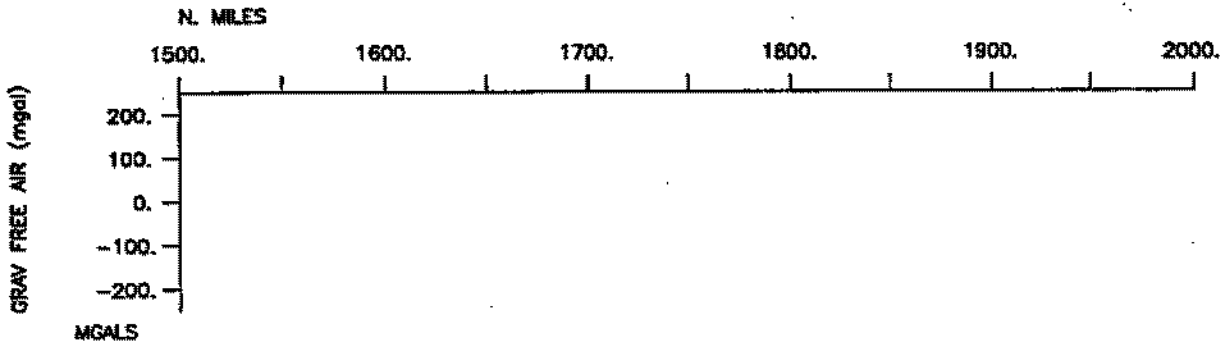
# SEAWEED-RR leg 3 Track



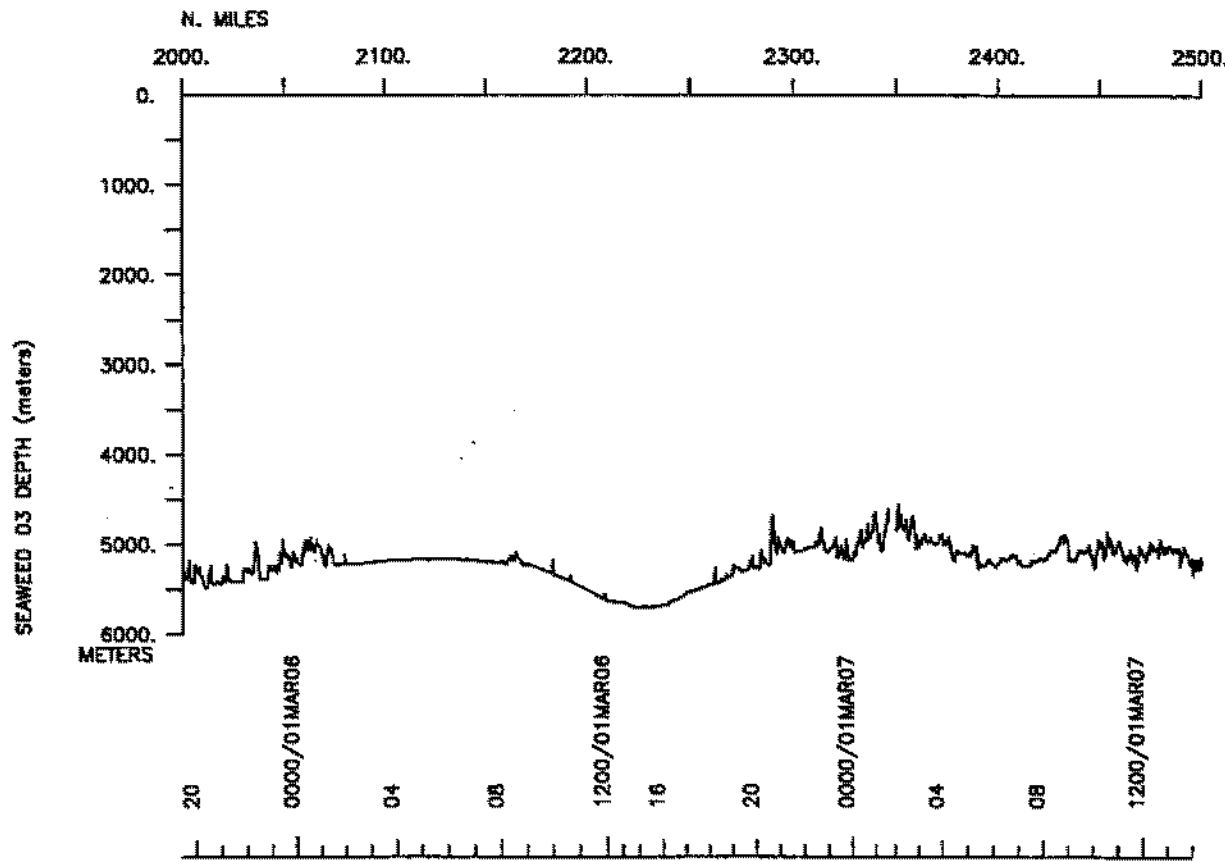
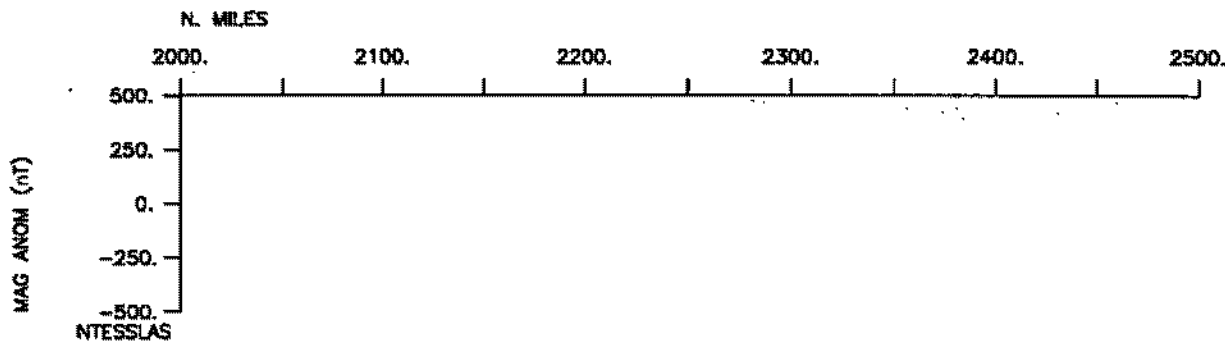
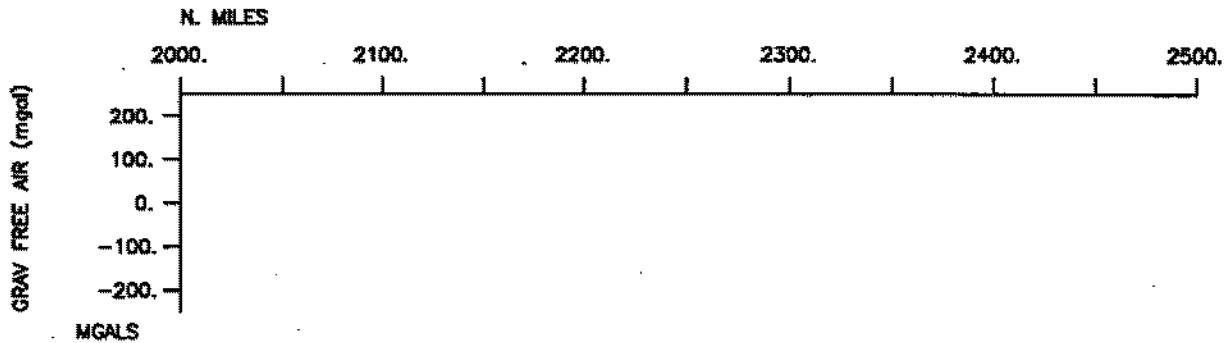


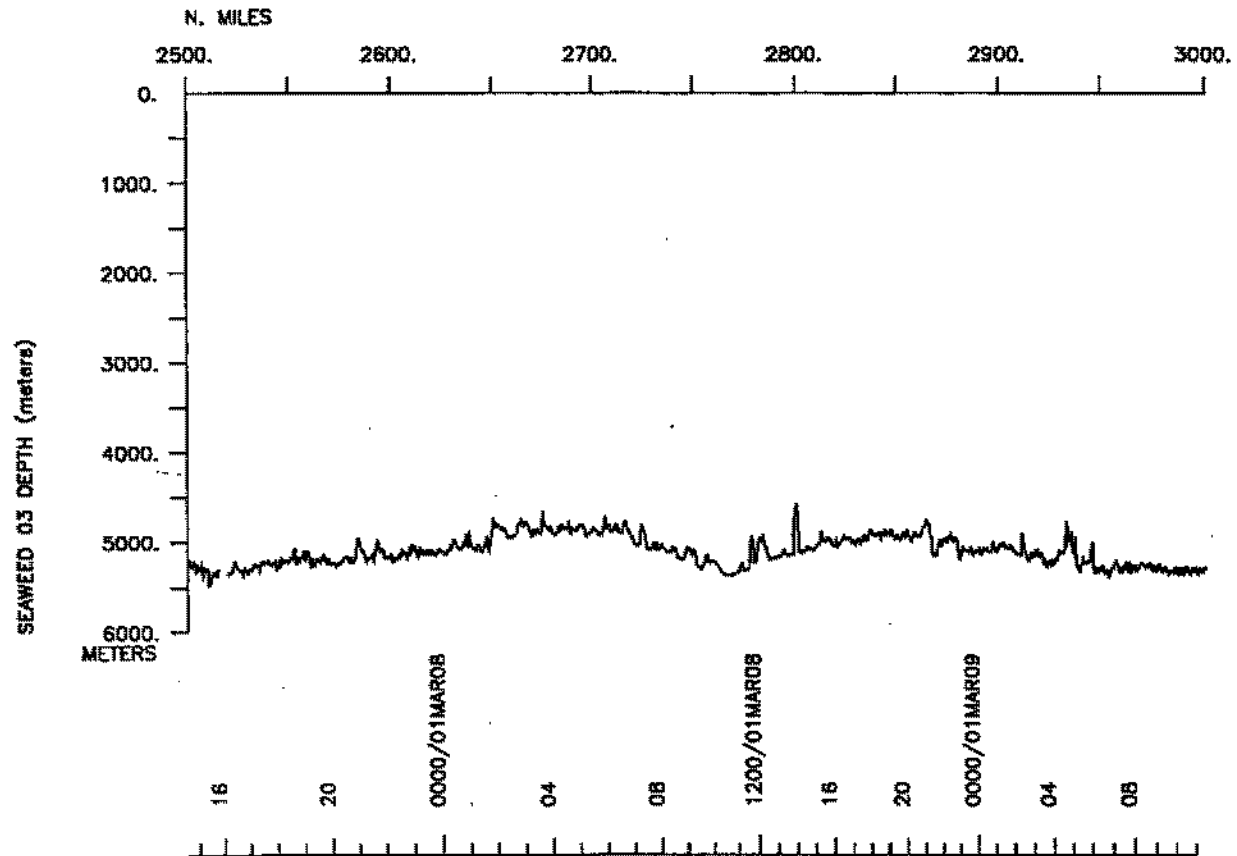
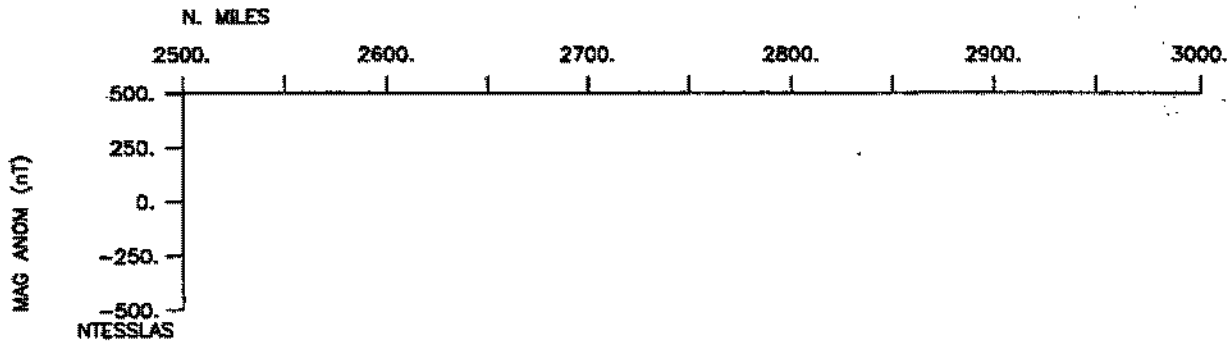
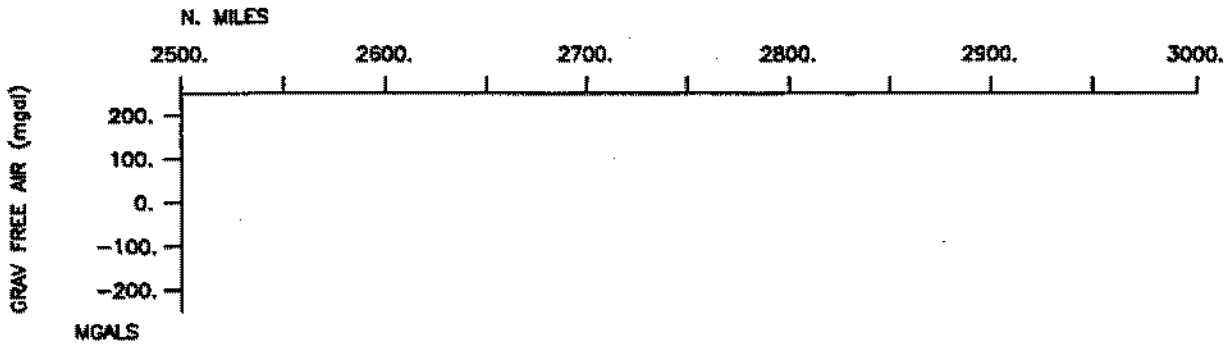


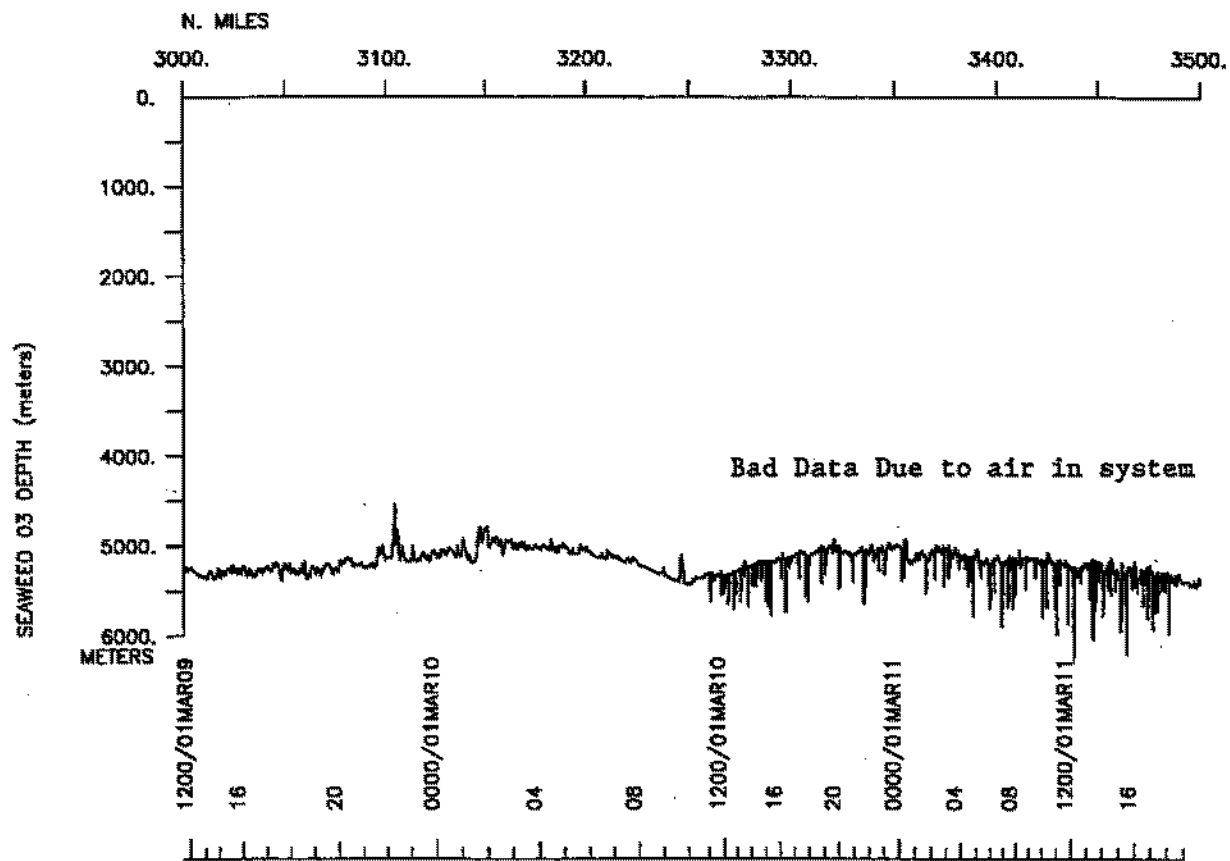
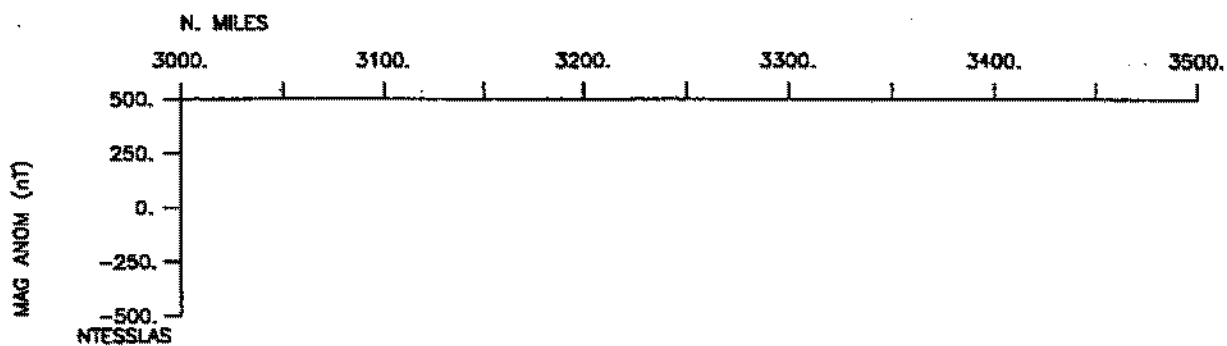
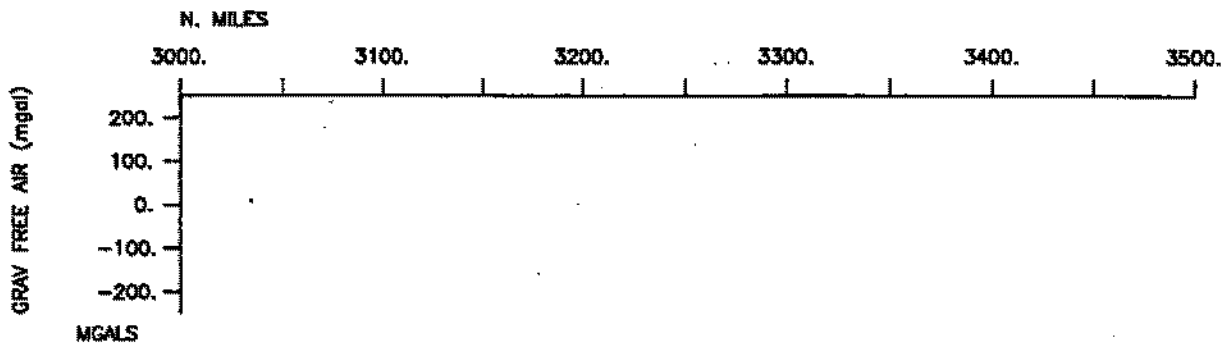


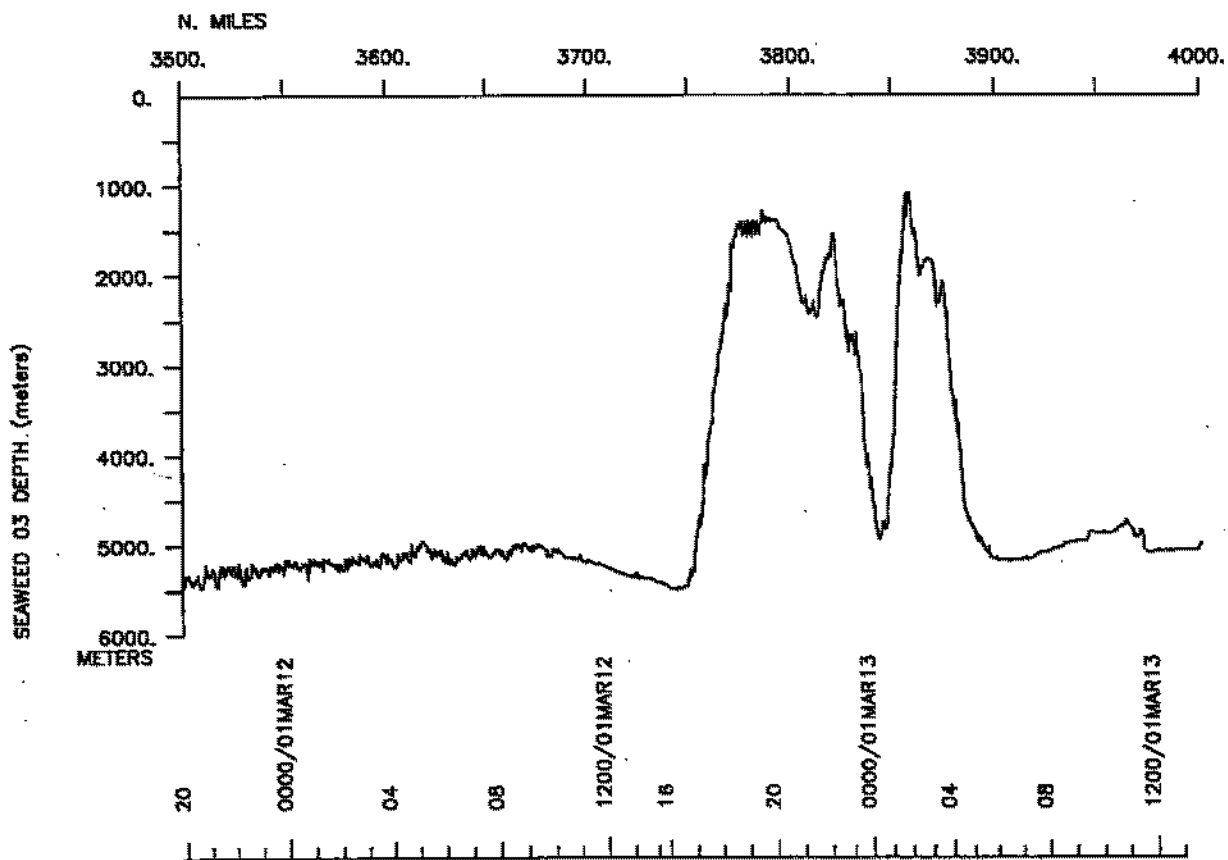
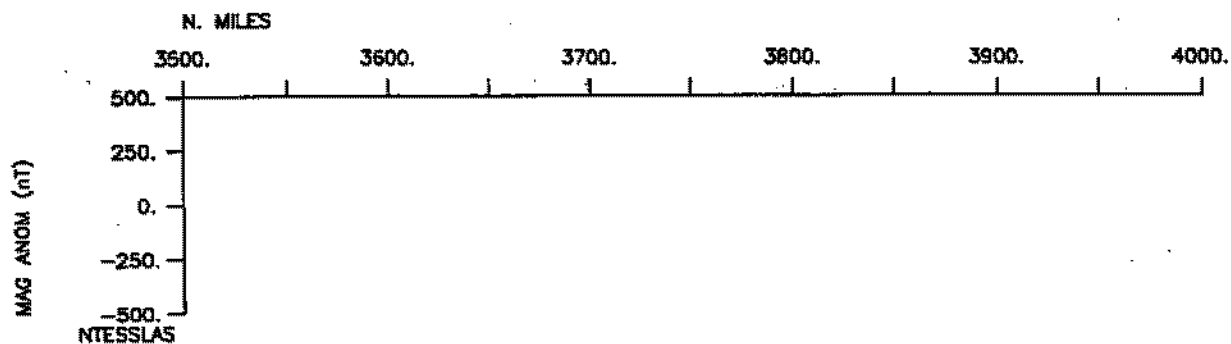
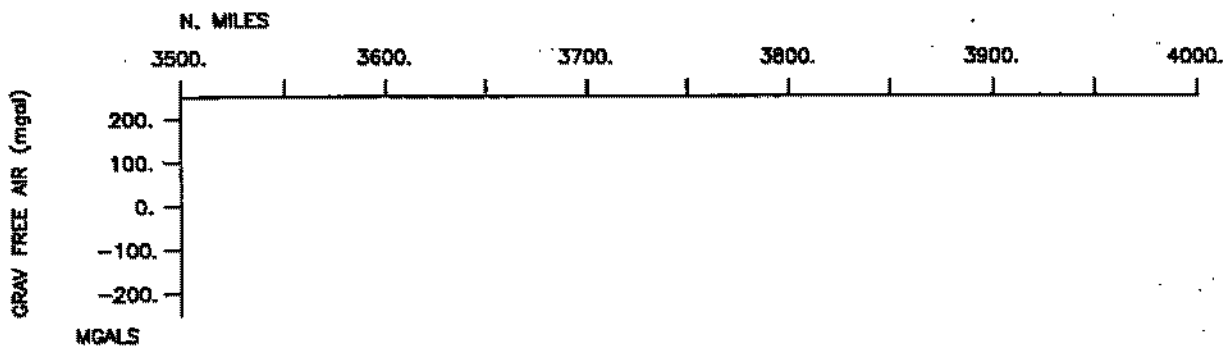


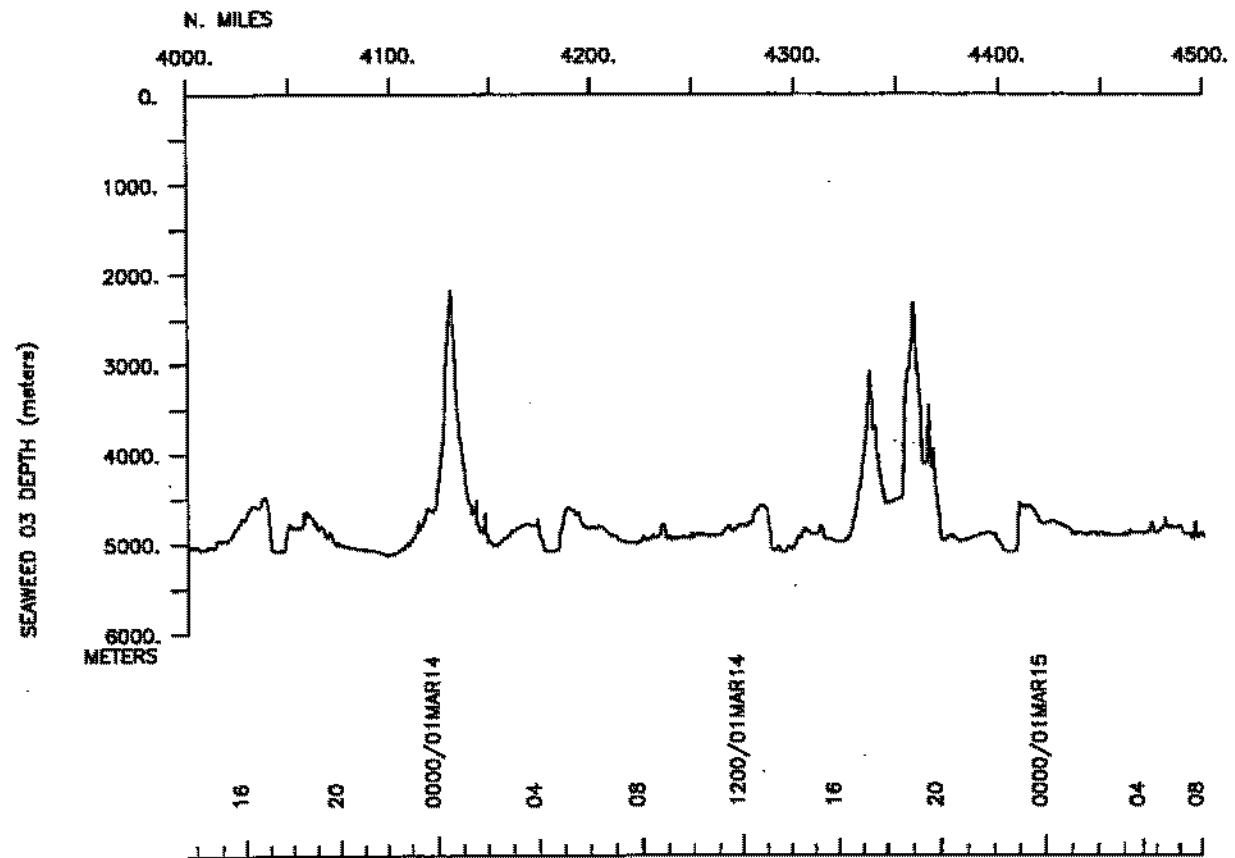
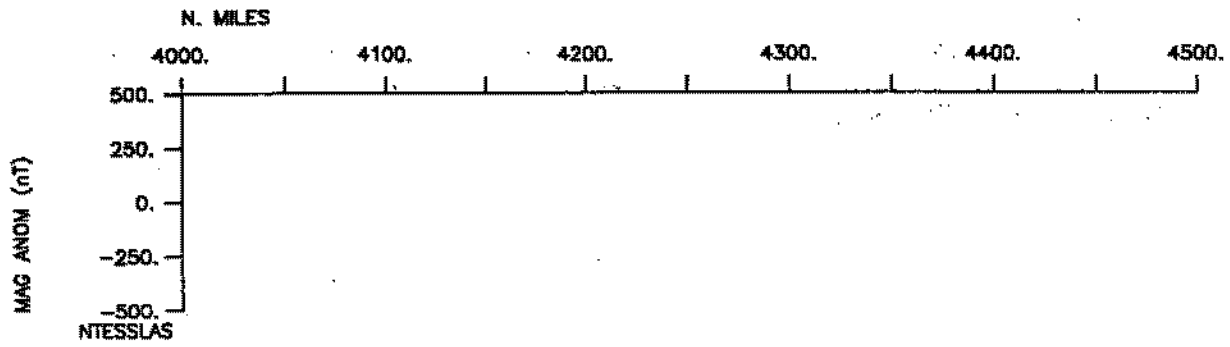
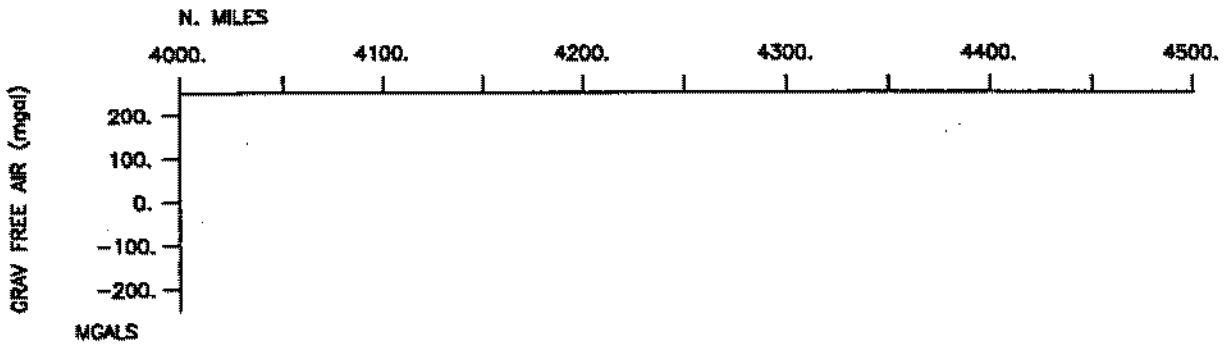


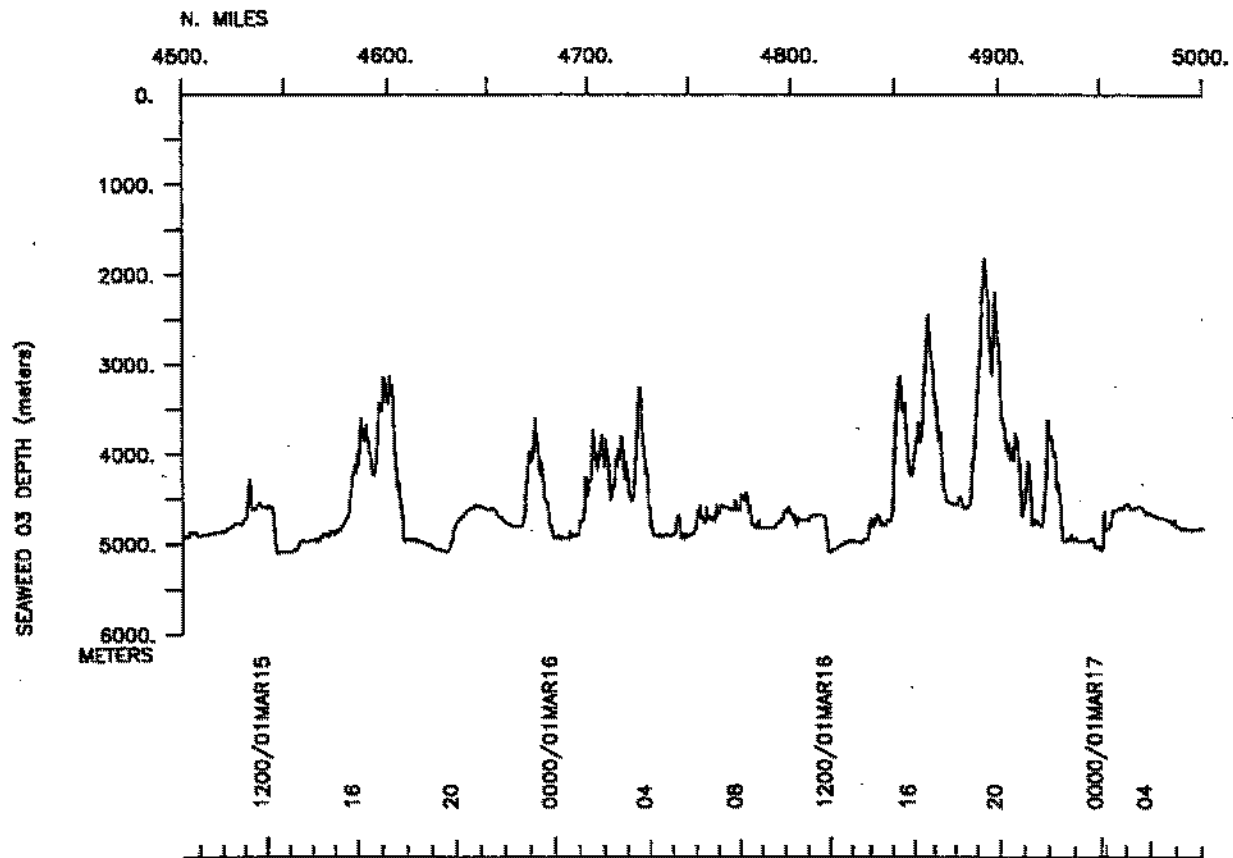
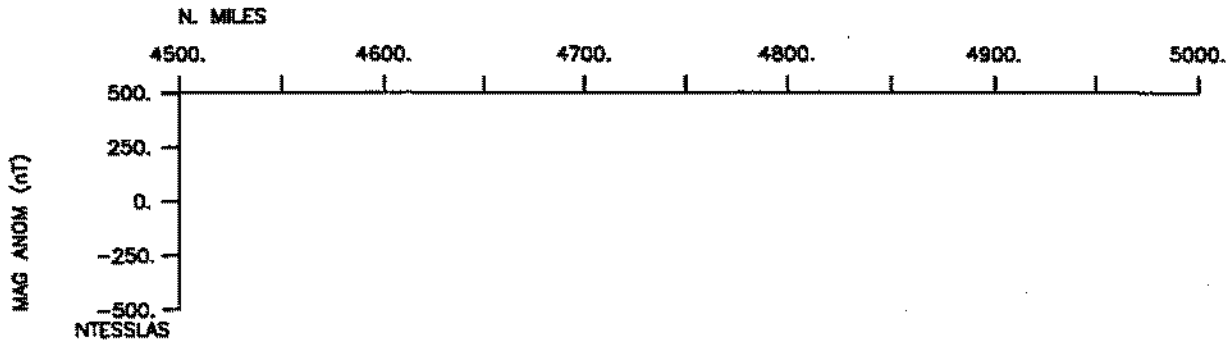
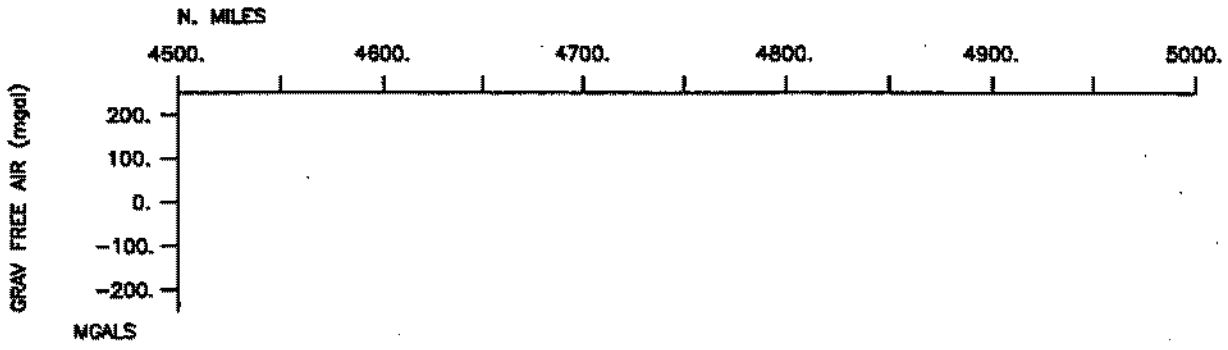


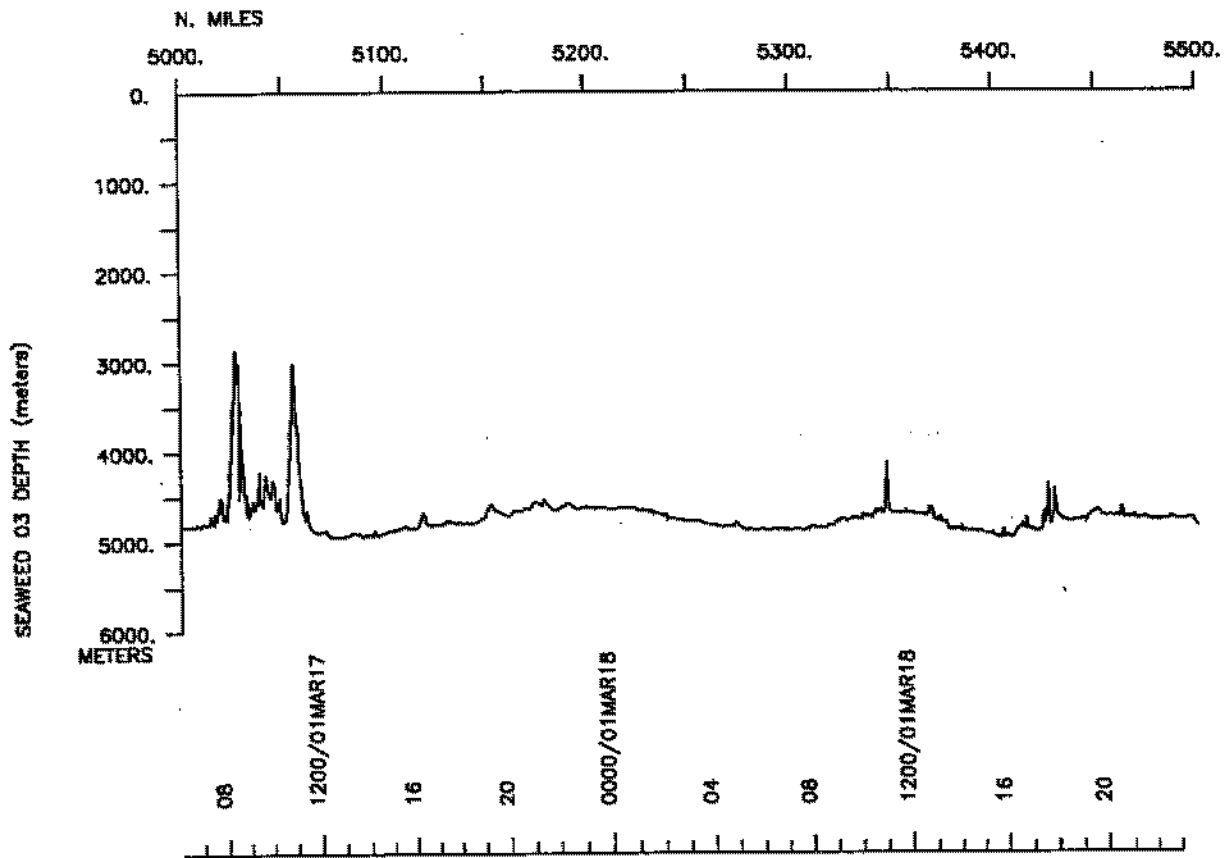
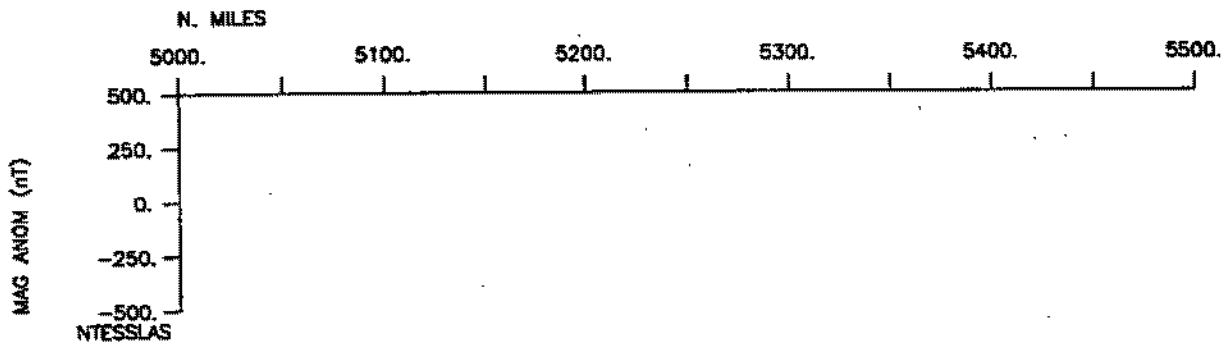
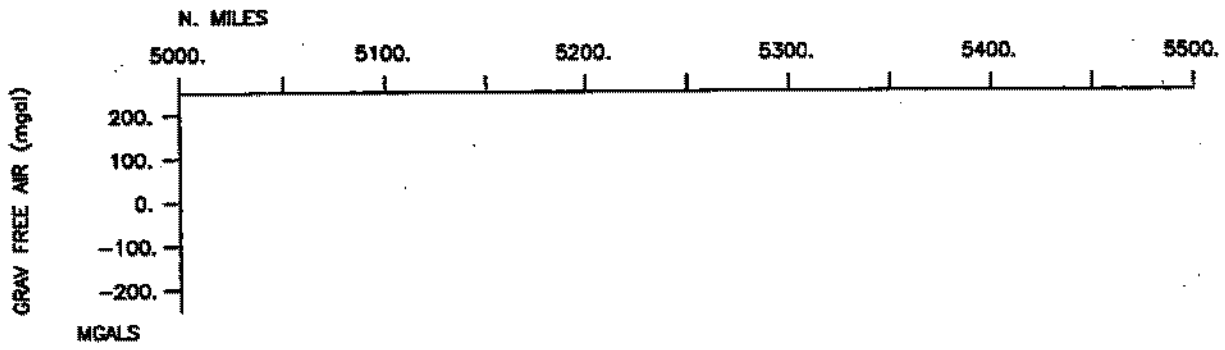


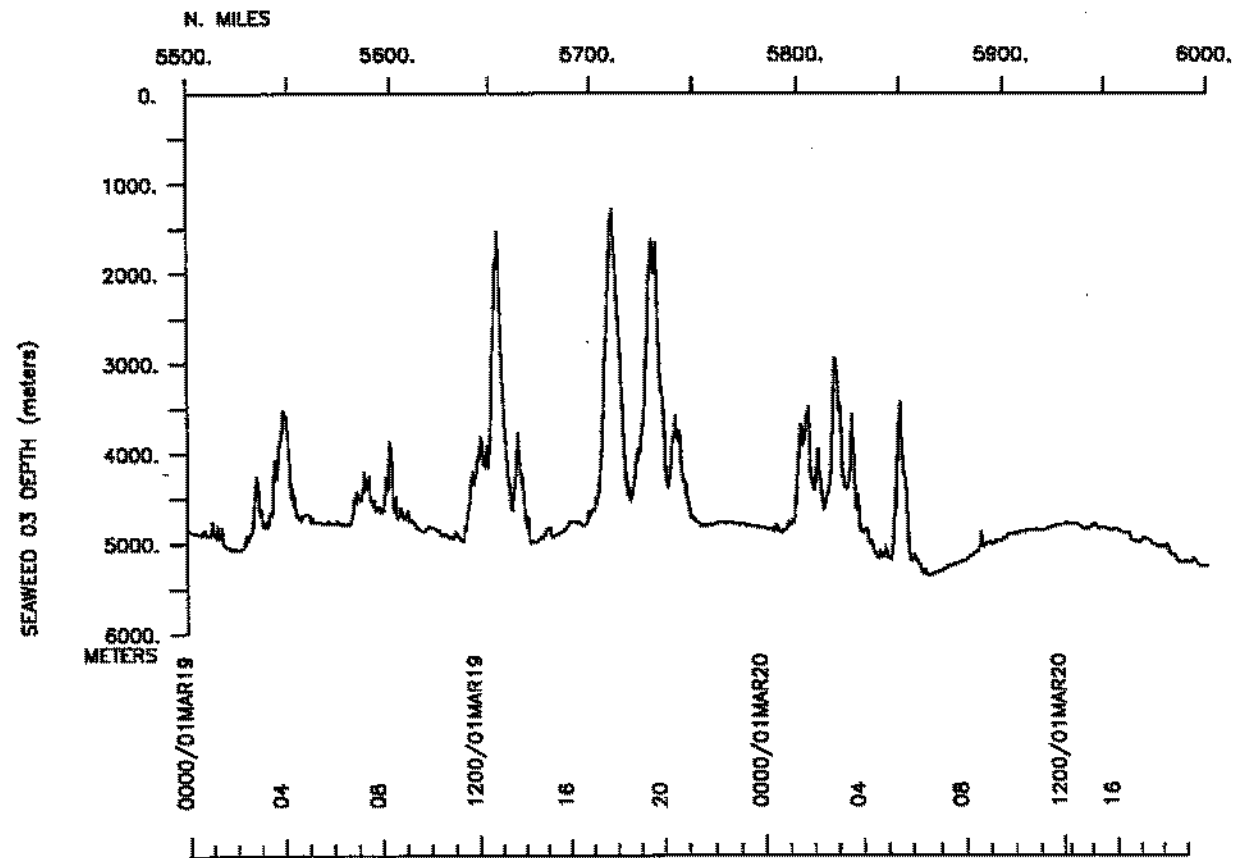
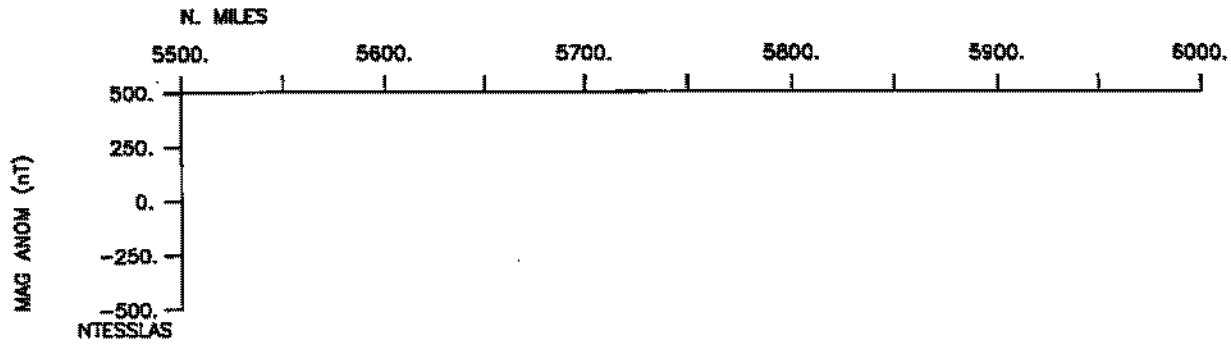
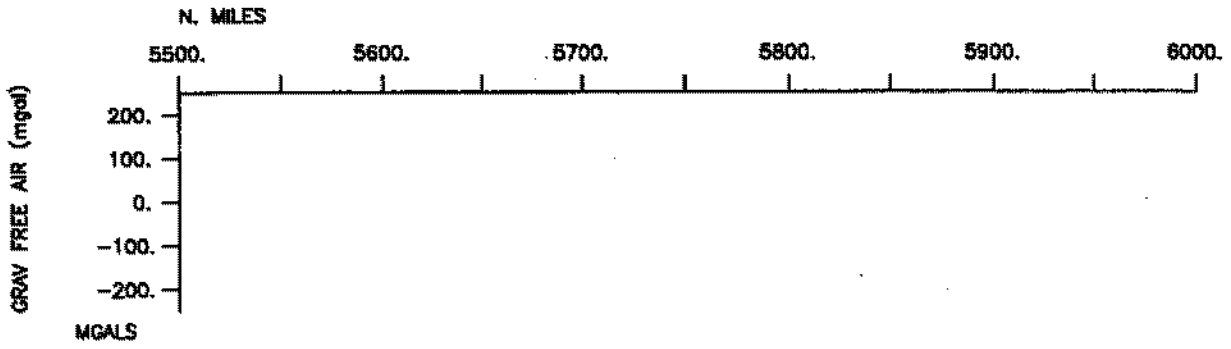




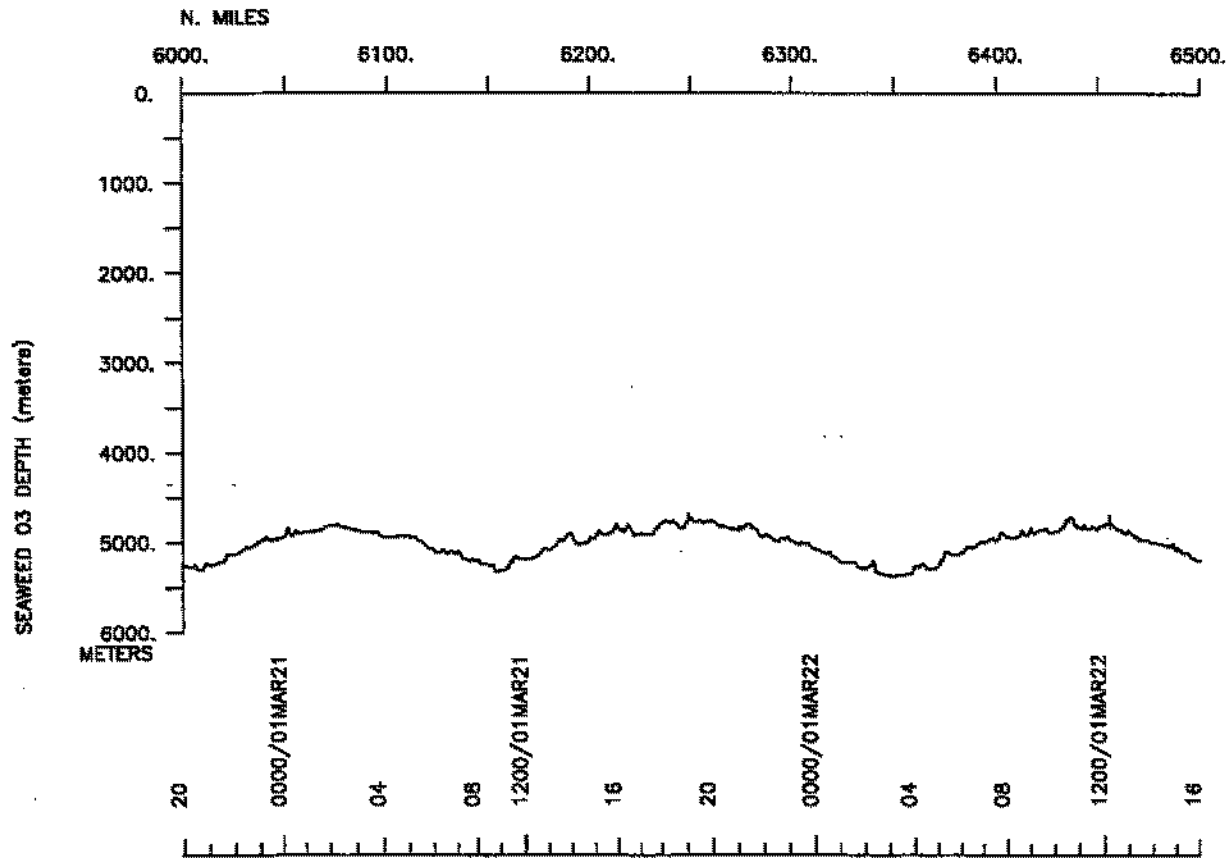
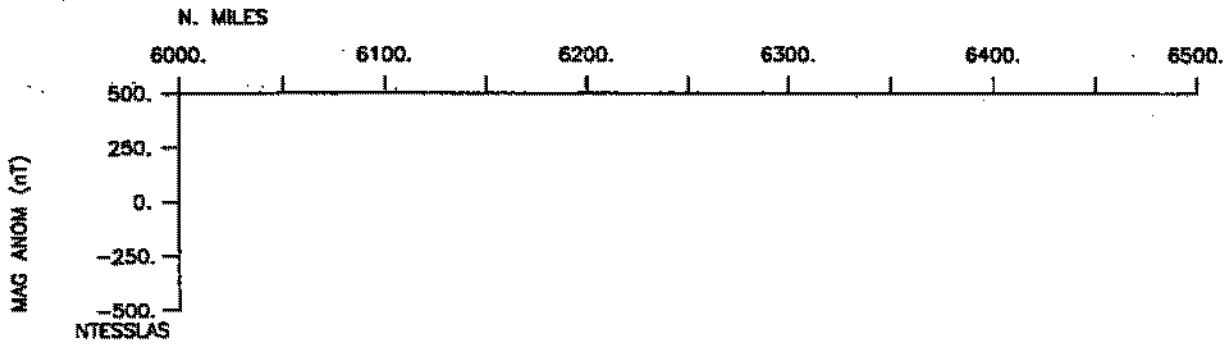
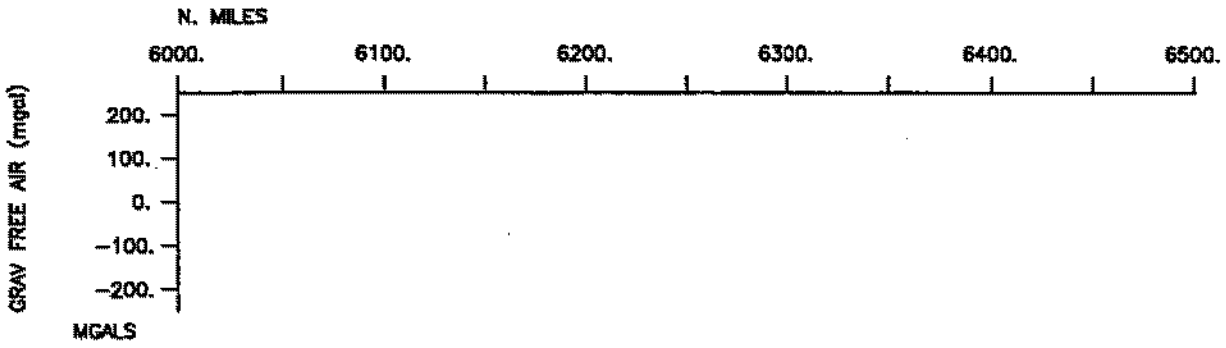


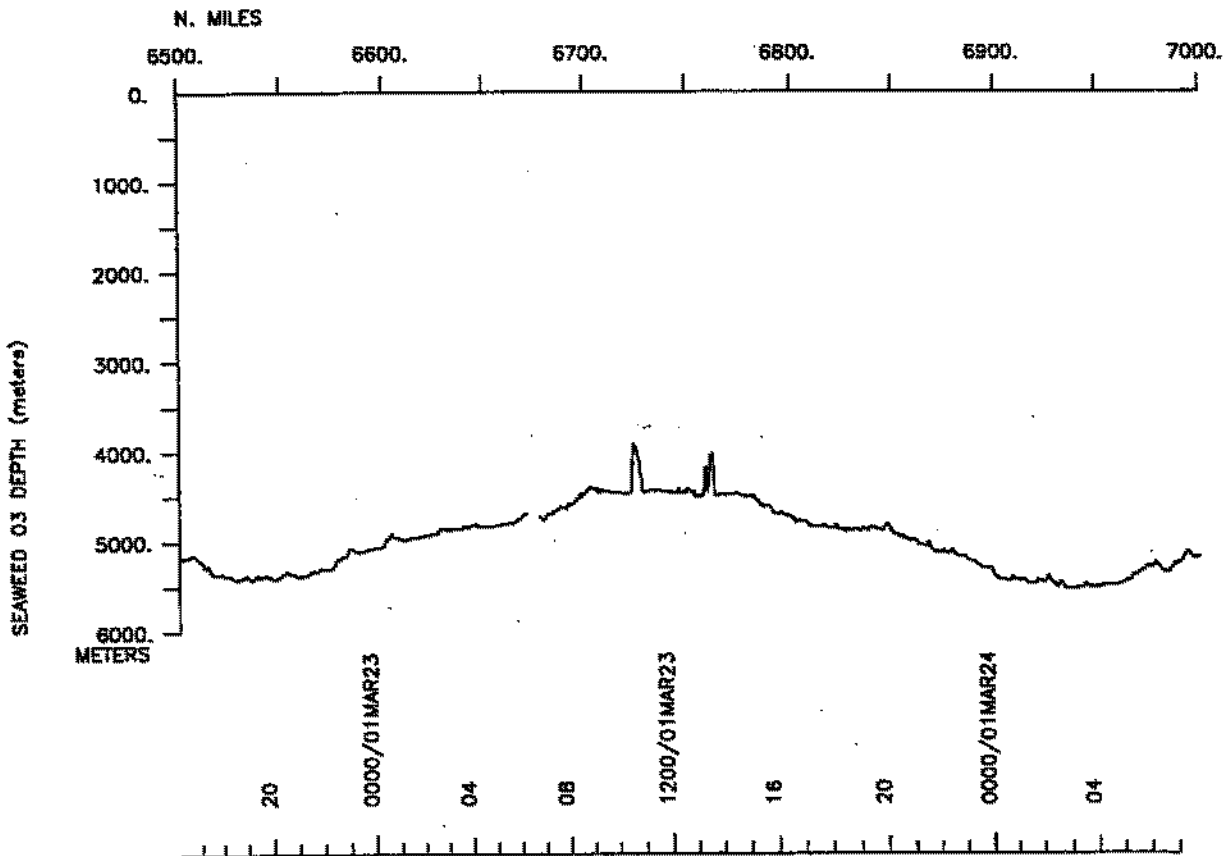
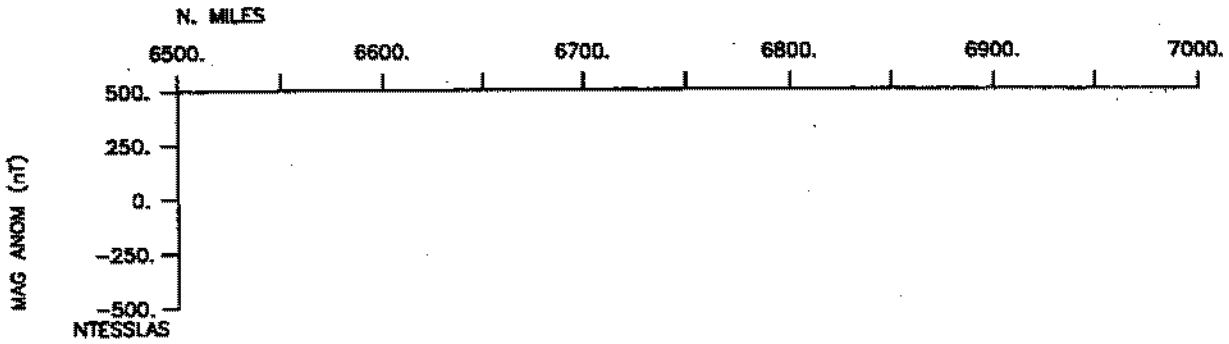
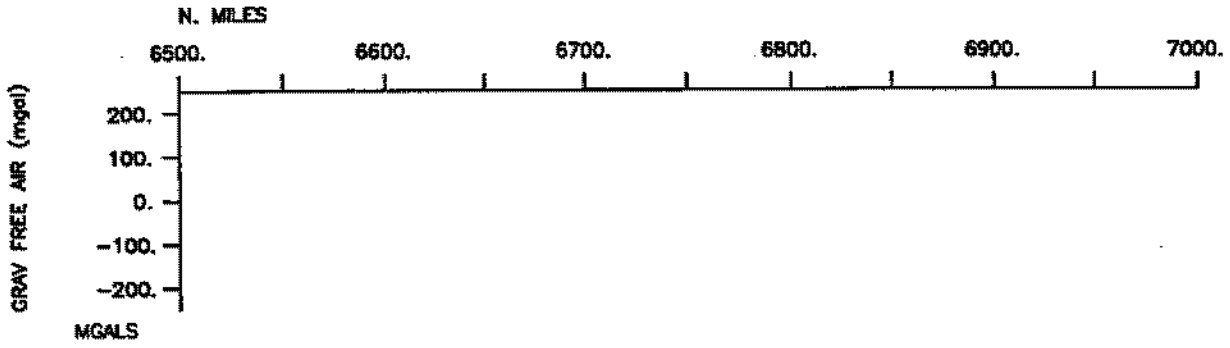


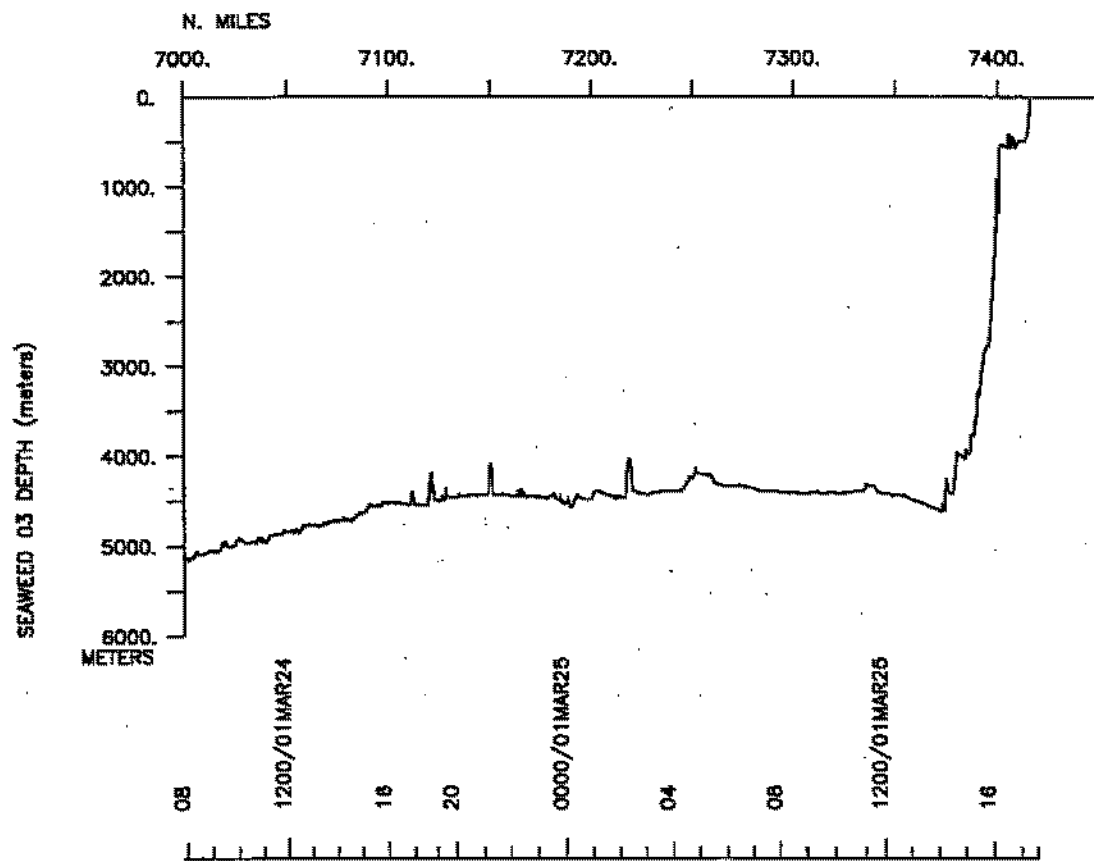
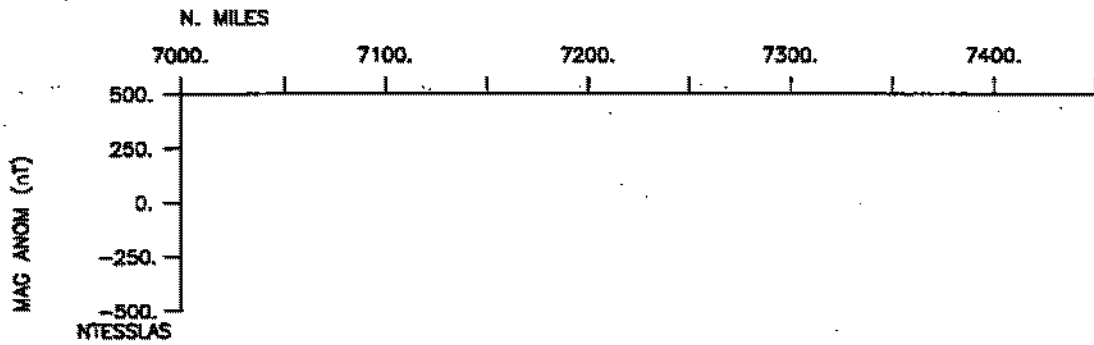
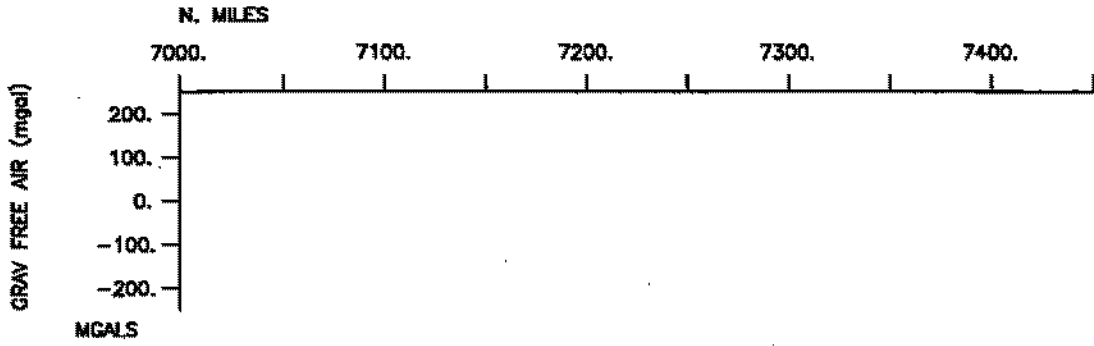












**S.I.O. Sample Index**

**Seaweed Expedition**

**Leg 3**

**(SEAW03RR)**

**R/V Revelle**

**(Issued November 2001)**

**PORTS:**

**Hilo, Hawaii (25 February 2001)**

**to**

**Honolulu, Hawaii (25 March 2001)**

**Chief Scientist: Christian deMoustier**  
**Scripps Institution of Oceanography**

*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. Shipboard Technical Support 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 Shipboard Technical Support Group.)*

**STS Cruise ID# 296**

\*\*\*\* Ports \*\*\*\*

0530 260201 LGPT B Hilo, Hawaii 19-44.00N 155-04.00W f SEAW03RR  
 1800 250301 LGPT E Honolulu, Hawaii 21-18.00N 157-52.00W f SEAW03RR

\*\*\*\* Personnel \*\*\*\*

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS MPL	Chris deMoustier	Chief Scientist	Scripps Institution	SEAW03RR
PECT STS	James Charters	Computer Tech	Scripps Institution	SEAW03RR
PECT STS	John Chatwood	Computer Tech	Scripps Institution	SEAW03RR
PESP STS	Rob Palomares	CTD tech	Scripps Institution	SEAW03RR
PESP STS	Kristin Sanborn	Data Processor	Scripps Institution	SEAW03RR
PESP STS	Mikael LeGleau	Student	Scripps Institution	SEAW03RR
PESP STS	Uta Peckman	Data Processor	Scripps Institution	SEAW03RR
PESP NAVO	Theresa Anoskey	Data Processor	NAVO	SEAW03RR

\*\*\*\* 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 - Shipboard Technical Support Group ext.41899 \*\*\*\*  
 \*\*\*\* Digital Data Curator - Geological Data Center, S.P. Miller, ext.41898 \*\*\*\*

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

0200 260201 0 LBUW B Underway log books STS 19-43.92N 155-03.28W g SEAW03RR  
 1732 050301 0 LBUW E Underway log books STS 20-59.01N 150-41.73W g SEAW03RR

\*\*\*\* MultiBeam Digital Date \*\*\*\*

0246 260201 0 MBSI B SIMRAD multibeam STS 19-50.30N 155-02.82W g SEAW03RR  
 1727 250301 0 MBSI E SIMRAD multibeam STS 21-17.21N 157-52.59W g SEAW03RR

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

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

1021	260201	0	TCTD	B	SeaBird 911+2	bottle	SIO	20-18.92N	154-43.24W	g	SEAW03RR
1235	260201	0	TCTD	E	depth 5410.0		SIO	20-18.92N	154-43.25W	g	SEAW03RR
0720	280201	0	TCTD	B	SeaBird 911+2	bottle	SIO	22-60.00N	154-55.64W	g	SEAW03RR
0818	280201	0	TCTD	E	depth 2020.5		SIO	22-60.00N	154-55.64W	g	SEAW03RR
0800	020301	0	TCTD	B	SeaBird 911+2	bottle	SIO	22-36.00N	151-50.00W	g	SEAW03RR
0951	020301	0	TCTD	E	depth 2020.6		SIO	22-36.00N	151-50.00W	g	SEAW03RR
1242	060301	0	TCTD	B	SeaBird 911+2	bottle	SIO	20-59.11N	155-00.36W	g	SEAW03RR
1409	060301	0	TCTD	E	depth 1513.7		SIO	20-59.11N	155-00.35W	g	SEAW03RR
1247	090301	0	TCTD	B	SeaBird 911+2	bottle	SIO	20-24.03N	149-59.69W	g	SEAW03RR
1416	090301	0	TCTD	E	depth 1514.0		SIO	20-24.03N	149-59.67W	g	SEAW03RR
1358	120301	0	TCTD	B	SeaBird 911+2	bottle	SIO	20-06.71N	154-10.19W	g	SEAW03RR
1523	120301	0	TCTD	E	depth 1514.4		SIO	20-06.71N	154-10.18W	g	SEAW03RR
0349	150301	0	TCTD	B	SeaBird 911+2	bottle	SIO	16-54.48N	155-42.42W	g	SEAW03RR
0513	150301	0	TCTD	E	depth 1509.2		SIO	16-54.48N	155-42.41W	g	SEAW03RR
0018	170301	0	TCTD	B	SeaBird 911+2	bottle	SIO	18-24.40N	156-19.97W	g	SEAW03RR
0143	170301	0	TCTD	E	depth 1513.6		SIO	18-24.36N	156-19.95W	g	SEAW03RR
1203	200301	0	TCTD	B	SeaBird 911+2	bottle	SIO	17-58.44N	158-03.63W	g	SEAW03RR
1335	200301	0	TCTD	E	depth 1512.5		SIO	17-58.44N	158-03.62W	g	SEAW03RR
0759	210301	0	TCTD	B	SeaBird 911+2	bottle	SIO	16-56.01N	158-32.01W	g	SEAW03RR
0859	210301	0	TCTD	E	depth 2018.5		SIO	16-56.00N	158-32.00W	g	SEAW03RR
1757	240301	0	TCTD	B	SeaBird 911+2	bottle	SIO	20-00.59N	159-35.72W	g	SEAW03RR
1918	240301	0	TCTD	E	depth 1513.9		SIO	20-00.57N	159-35.72W	g	SEAW03RR

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

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

0351	260201	0	BTXP	MK12	#154	T-5	GDC	20-01.48N	154-58.58W	g	SEAW03RR
1013	260201	0	BTXP	MK12	#155	T-5	GDC	20-18.93N	154-43.23W	g	SEAW03RR
0509	270201	0	BTXP	MK12	#156	T-5	GDC	21-49.77N	153-13.54W	g	SEAW03RR
1639	270201	0	BTXP	MK12	#157	T-5	GDC	23-00.07N	151-49.63W	g	SEAW03RR
1050	280201	0	BTXP	MK12	#158	T-5	GDC	22-51.99N	154-54.83W	g	SEAW03RR
2136	280201	0	BTXP	MK12	#159	T-5	GDC	22-52.00N	152-28.97W	g	SEAW03RR
0104	010301	0	BTXP	MK12	#160	T-5	GDC	22-47.13N	151-49.17W	g	SEAW03RR
1020	010301	0	BTXP	MK12	#161	T-5	GDC	22-43.98N	153-52.46W	g	SEAW03RR
1710	010301	0	BTXP	MK12	#162	T-5	GDC	22-35.98N	154-46.11W	g	SEAW03RR
1649	020301	0	BTXP	MK12	#163	T-5	GDC	22-27.99N	152-53.71W	g	SEAW03RR
0304	030301	0	BTXP	MK12	#170	T-5	GDC	22-21.98N	154-54.38W	g	SEAW03RR
0700	030301	0	BTXP	MK12	#172	T-5	GDC	22-21.26N	154-06.11W	g	SEAW03RR
2131	030301	0	BTXP	MK12	#173	T-5	GDC	21-23.43N	153-03.69W	g	SEAW03RR
0710	050301	0	BTXP	MK12	#174	T-5	GDC	21-08.02N	151-05.05W	g	SEAW03RR
2047	050301	0	BTXP	MK12	#175	T-5	GDC	20-58.98N	151-25.20W	g	SEAW03RR
0416	060301	0	BTXP	MK12	#178	T-5	GDC	20-59.00N	153-04.41W	g	SEAW03RR
0120	070301	0	BTXP	MK12	#181	T-5	GDC	20-49.99N	152-57.77W	g	SEAW03RR
1547	070301	0	BTXP	MK12	#183	T-5	GDC	20-49.65N	149-59.71W	g	SEAW03RR
0458	080301	0	BTXP	MK12	#185	T-5	GDC	20-40.99N	153-00.44W	g	SEAW03RR
1000	080301	0	BTXP	MK12	#186	T-5	GDC	20-40.54N	154-10.75W	g	SEAW03RR
1703	080301	0	BTXP	MK12	#187	T-5	GDC	20-32.52N	153-05.75W	g	SEAW03RR
1724	080301	0	BTXP	MK12	#191	T-5	GDC	20-32.47N	153-02.33W	g	SEAW03RR
2219	090301	0	BTXP	MK12	#192	T-5	GDC	20-24.00N	151-39.58W	g	SEAW03RR
0636	100301	0	BTXP	MK12	#193	T-5	GDC	20-23.99N	153-30.92W	g	SEAW03RR
1958	100301	0	BTXP	MK12	#198	T-5	GDC	20-15.51N	152-58.63W	g	SEAW03RR

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				P	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#										
1522	110301	0	BTXP	MK12 #203	T-5 GDC	20-15.50N	150-30.38W	g		SEAW03RR
0438	120301	0	BTXP	MK12 #204	T-5 GDC	20-07.02N	152-00.48W	g		SEAW03RR
2217	120301	0	BTXP	MK12 #205	T-5 GDC	19-02.23N	155-14.03W	g		SEAW03RR
1350	130301	0	BTXP	MK12 #206	T-5 GDC	16-59.33N	155-06.48W	g		SEAW03RR
0104	140301	0	BTXP	MK12 #207	T-5 GDC	18-25.54N	155-24.00W	g		SEAW03RR
0125	140301	0	BTXP	MK12 #208	T-5 GDC	18-21.24N	155-24.00W	g		SEAW03RR
1432	140301	0	BTXP	MK12 #209	T-5 GDC	18-00.59N	155-33.83W	g		SEAW03RR
1451	140301	0	BTXP	MK12 #210	T-5 GDC	18-04.21N	155-33.77W	g		SEAW03RR
0100	150301	0	BTXP	MK12 #211 Fast_Deep	GDC	17-29.05N	155-42.48W	g		SEAW03RR
1455	150301	0	BTXP	MK12 #212 Fast_Deep	GDC	18-30.46N	155-50.96W	g		SEAW03RR
2104	150301	0	BTXP	MK12 #213 Fast_Deep	GDC	17-54.38N	156-01.99W	g		SEAW03RR
1434	160301	0	BTXP	MK12 #214 Fast_Deep	GDC	18-41.99N	156-06.07W	g		SEAW03RR
2055	170301	0	BTXP	MK12 #215 Fast_Deep	GDC	18-12.28N	156-30.02W	g		SEAW03RR
0349	180301	0	BTXP	MK12 #216 Fast_Deep	GDC	17-19.28N	156-39.49W	g		SEAW03RR
1051	180301	0	BTXP	MK12 #217 Fast_Deep	GDC	17-44.44N	156-50.51W	g		SEAW03RR
1809	180301	0	BTXP	MK12 #221 Fast_Deep	GDC	17-18.29N	157-08.00W	g		SEAW03RR
0413	190301	0	BTXP	MK12 #223 Fast_Deep	GDC	17-21.48N	157-27.01W	g		SEAW03RR
2128	190301	0	BTXP	MK12 #224 Fast_Deep	GDC	17-50.17N	157-47.01W	g		SEAW03RR
0119	200301	0	BTXP	MK12 #225 Fast_Deep	GDC	17-27.28N	157-54.00W	g		SEAW03RR
0805	200301	0	BTXP	MK12 #226 Fast_Deep	GDC	17-10.65N	158-03.49W	g		SEAW03RR
2012	200301	0	BTXP	MK12 #227 Fast_Deep	GDC	16-55.40N	158-14.85W	g		SEAW03RR
2024	200301	0	BTXP	MK12 #228 Fast_Deep	GDC	16-55.49N	158-17.53W	g		SEAW03RR
0109	210301	0	BTXP	MK12 #229 Fast_Deep	GDC	17-47.81N	158-22.54W	g		SEAW03RR
0532	210301	0	BTXP	MK12 #230 Fast_Deep	GDC	17-22.95N	158-31.98W	g		SEAW03RR
1651	210301	0	BTXP	MK12 #231 Fast_Deep	GDC	18-05.02N	158-41.51W	g		SEAW03RR
0116	220301	0	BTXP	MK12 #232 Fast_Deep	GDC	17-08.64N	158-50.97W	g		SEAW03RR
0649	220301	0	BTXP	MK12 #233 Fast_Deep	GDC	17-37.39N	159-00.51W	g		SEAW03RR
1128	220301	0	BTXP	MK12 #234 Fast_Deep	GDC	18-21.17N	159-09.99W	g		SEAW03RR
1858	220301	0	BTXP	MK12 #235 Fast_Deep	GDC	16-55.50N	159-11.70W	g		SEAW03RR
2357	220301	0	BTXP	MK12 #236 Fast_Deep	GDC	17-51.22N	159-18.99W	g		SEAW03RR
0541	230301	0	BTXP	MK12 #237 Fast_Deep	GDC	19-00.46N	159-19.01W	g		SEAW03RR
0600	230301	0	BTXP	MK12 #238 Fast_Deep	GDC	19-04.26N	159-18.99W	g		SEAW03RR
1134	230301	0	BTXP	MK12 #239 Fast_Deep	GDC	20-00.46N	159-19.85W	g		SEAW03RR
1753	230301	0	BTXP	MK12 #240 Fast_Deep	GDC	18-47.16N	159-28.06W	g		SEAW03RR
0424	240301	0	BTXP	MK12 #241 Fast_Deep	GDC	17-12.34N	159-37.00W	g		SEAW03RR
0011	250301	0	BTXP	MK12 #242 Fast_Deep	GDC	19-19.47N	159-08.79W	g		SEAW03RR
0622	250301	0	BTXP	MK12 #243 Fast_Deep	GDC	19-56.01N	158-30.96W	g		SEAW03RR
1639	250301	0	BTXP	MK12 #244 Fast_Deep	GDC	21-09.45N	157-59.37W	g		SEAW03RR

#\*\*\*

End Sample Index

SEAW03RR

```

# MGD77 header file description and data (Type 4 header; Y2K compliant)
# (lines beginning with # are comments only and do not appear in the header
# record. smsmith, gdcultra 22sep2000
#
# column,1      2      3      4      5      6      7      8
#234567890123456789012345678901234567890123456789012345678901234567890
#|-cruise identifier
#|
#|   -format acronym("MGD77")
#|   -NGDC data center file number(leave blank)
#|   parameter codes
#|   |-----depths      5 = present in file
#|   |-----mags        3 = collected, not in file
#|   |-----grav        1 = no collected
#|   |-----h.r.seis. (3.5 khz)
#|   |-----d.p.seis. (seis. reflection)
#|   |-----file creation date (yyyymmdd)
#|   |-----contributing institution
4SEAW03RRMGD77      5111120010306SCRIPPS INSTITUTION OF OCEANOGRAPHY      01
#|   |-----platform code (ship = 1)
#|   |-----platform type ("SHIP")
#|   |-----chief scientist(s)
#country           |platform name      |SHIP Christian de Moustier      02
USA                R/V Revalle
#project, cruise & leg      |funding
Seaweed Expedition LEG 03      |NAVY      03
#begin date (yyyymmdd)      |end date (yyyymmdd)
#|   |port(city, country)      |port(city, country)
20010225Hilo, Hawaii      20010325Honolulu, Hawaii      04
#navigation instrumentation      |position determination method
TRIMBLE TASMAN P(Y) GPS      LINEAR FIT TO 60 SEC FIXES      05
#bathymetry instrumentation      |additional forms of depth data
SIMRAD EM120      DIGITAL MAG. TAPE      06
#magnetics instrumentation      |additional forms of magnetic data
#gravity instrumentation      |additional forms of gravity data
#seismic instrumentation      |formats of seismic data
# data format description (in Fortran) for seq. no. 10-11
A(I1,A8,F5.2,I4,3I2,F5.3,F8.5,F9.5,I1,F6.4,F6.1,I2,I1,3F6.1,I1,F5.1,F6.0,
F7.1,F6.1,F5.1,A5,A6,I1)
#bathymetry
#digitizing rate(min)
#|   -sampling rate
#|   |-----sound velocity(meters/sec)
#|   |-----dep datum code
#|   |-----interpolation scheme
0101PING IN H2O15000 1 MINUTE VALUES EXTRACTED FROM SEABEAM VERTICAL BEAM      12
#magnetics
#digitizing rate(min)
#|   -sampling rate(sec)
#|   |-----sensor tow dist.(meters)
#|   |-----sensor depth (meters)
#|   |-----horizontal sensor separation(meters)
#|   |-----reference field
#|   |-----method of deriving residual field
#gravity
#| digitizing rate (min)
#|   -sampling rate(sec)
#|   |-----code
#|   |-----theoretical grav. formula(in plain language)
#|   |-----code
#|   |-----reference system (in plain language)
#|   |-----corrections applied
#gravity continued
#| departure base station gravity(mgal)
#|   -departure base station description

```



```

# | | | -arrival base station gravity(mgal)
# | | | | -arrival base stat. description 15
# 10 degree area identifiers
# |no. of area identifiers (col 1-2) . col 3 is blank, then starting with
# column 4 for the next two lines, there are 4 columns separated by
# commas for each area identifiers. 16
#seq. line no's. 18-24 are reserved for additional documentation. 17
PROCESSED BY SHIPBOARD COMPUTER GROUP, SCRIPPS INSTITUTION OF OCEANOGRAPHY 18
DEPTHS CORRECTED FOR 5 METER SHIP DRAFT. 19
NAVIGATION: DR BETWEEN 1 MINUTE INTERVAL GPS FIXES, GPS PRESENT 24 HRS/DAY 20
21
22
23
24

```