

*Report and Index of
Underway Marine Geophysical Data*

SOJOURN EXPEDITION

LEG 1

(SOJN01MV)

R/V MELVILLE

(Issued November 1996)

Ports:

San Diego, California (8 September 1996)

to

Papeete, Tahiti (21 October 1996)

Chief Scientist:

Daniel Scheirer, Brown University

Resident Marine Technician - Ron Comer

Computer Technician - Ron Moe

Seabeam/UW Processor - Andrew Goodwillie

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

**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 if collected on the cruise leg.

NOTE: One or more of the underway data types may not be collected on a given cruise 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 on Exabyte or DAT:
 - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
 - b) These same data in a merged ASCII file in the MGD77 Exchange Format.
 - c) SeaBeam depth data (binary, Sun byte order) in SIO Swath Bathymetry Format. (*)
 - 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) Echosounder records - 3.5 kHz frequency.
 - d) Magnetometer records.
 - e) Seismic reflection profiler records.

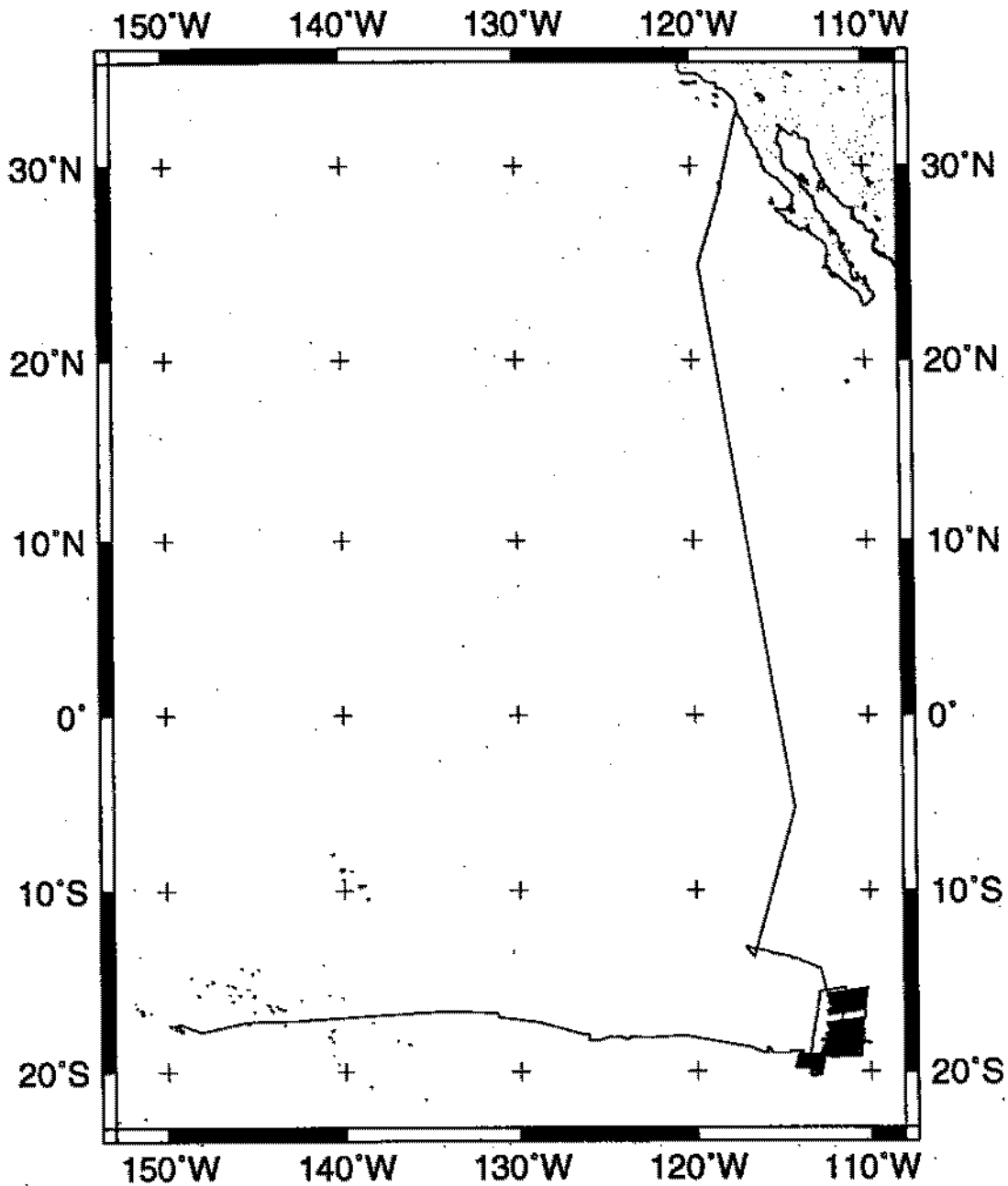
3. Navigation listing with times and positions of fixes and course and speed changes.

4. Plots:

- a) Copies of archived track plots.
- b) Copies of archived SeaBeam contour plots.
- c) Custom plots in Mercator projection:
 - 1) Track plots.
 - 2) SeaBeam depth contour plots.
 - 3) Depth, magnetic or gravity values printed or profiled along track.

(*) R/V Revelle Seabeam 2100 data available in SB2100 vendor format only, as of October 1996

rev10/96



SOJOURN EXPEDITION LEG 1

CHIEF SCIENTIST: Daniel Scheirer, Brown University

PORTS: San Diego, Calif. - Papeete, Tahiti

DATES: 8 September - 21 October 1996

SHIP: R/V Melville

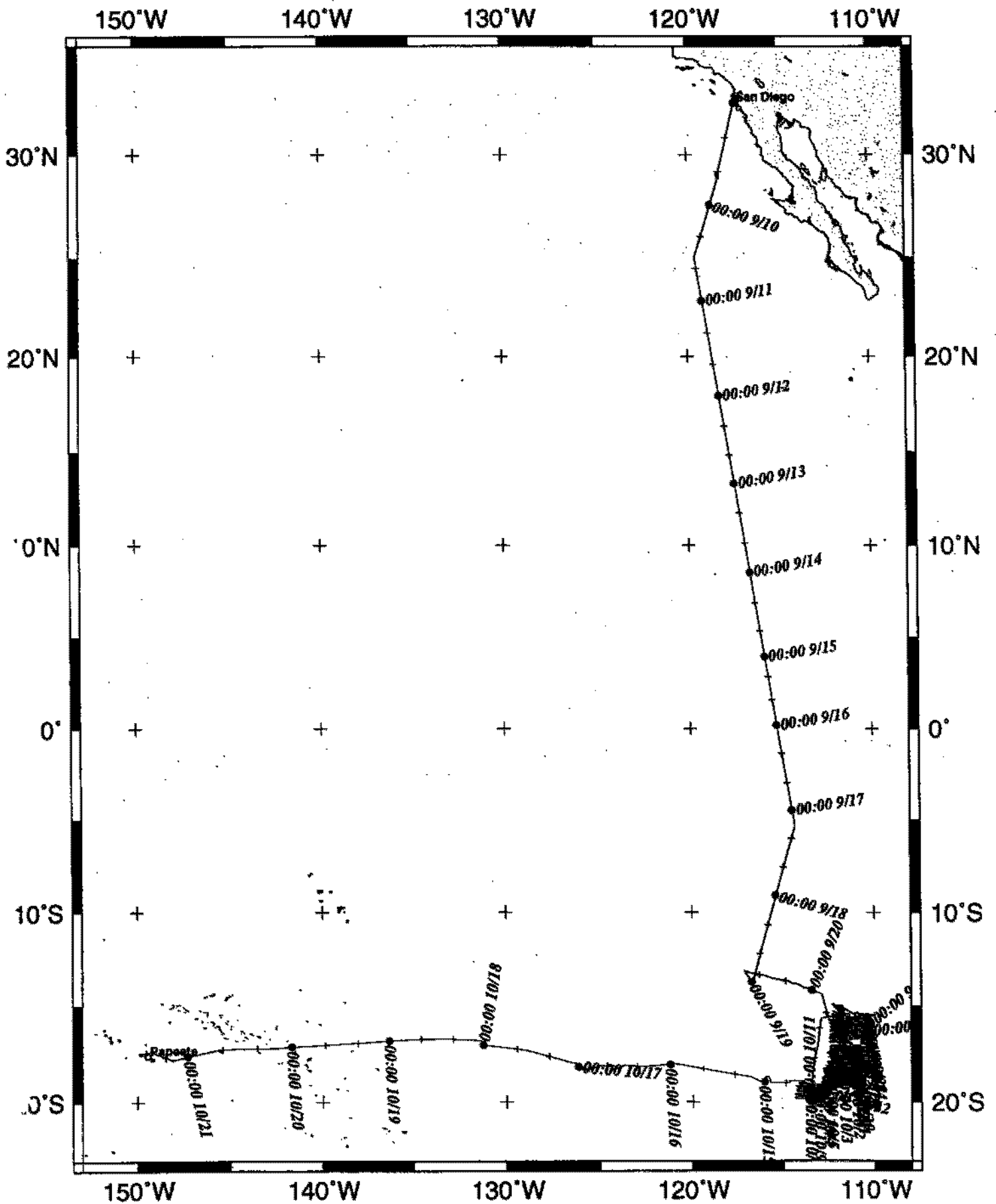
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 11613 miles Magnetics - 11150 miles

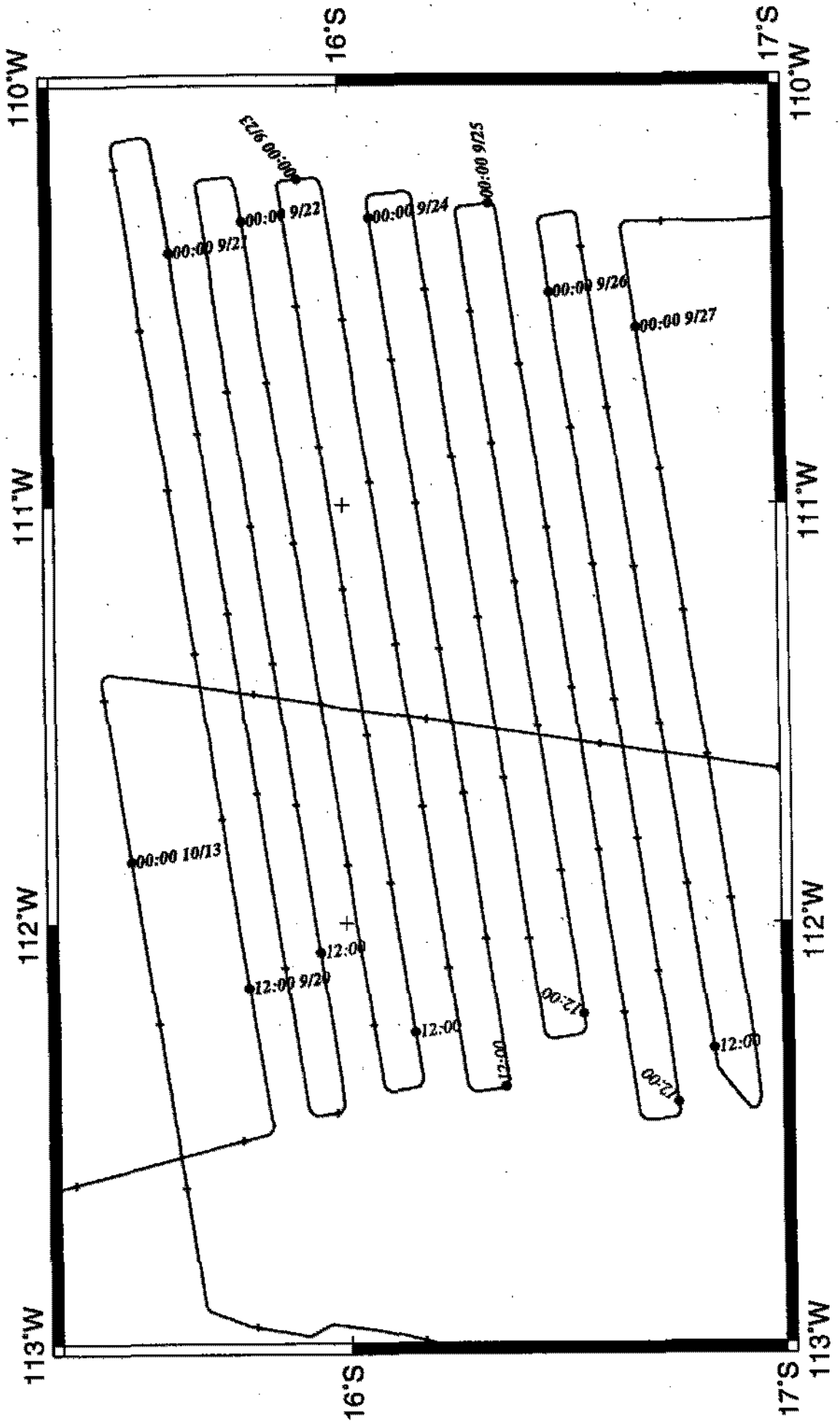
Bathymetry - 11173 miles Seismic Reflection - none collected

Sea Beam - 11173 miles Gravity - 11413 miles

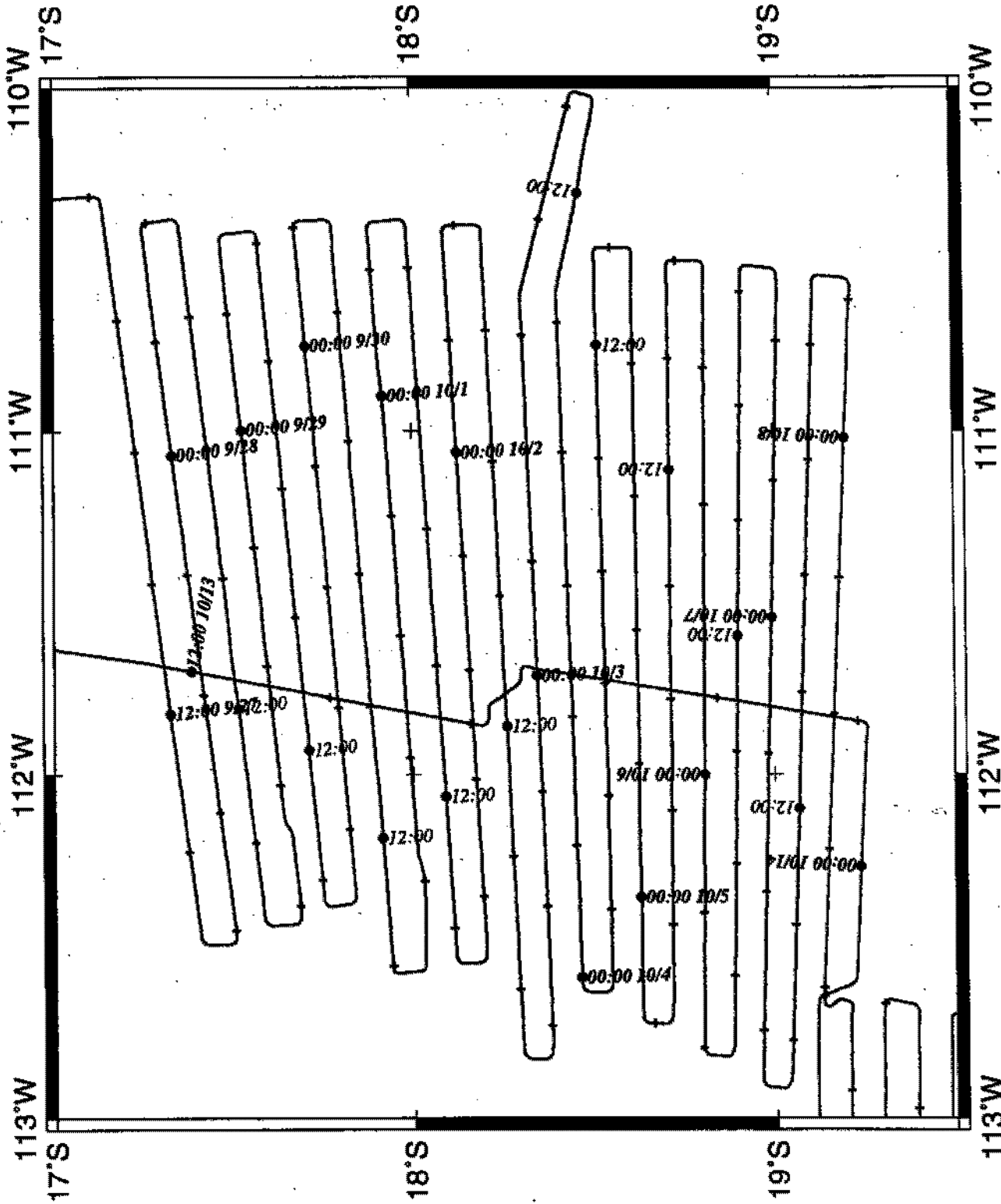
R/V Melville Sojourn Expedition Leg 01



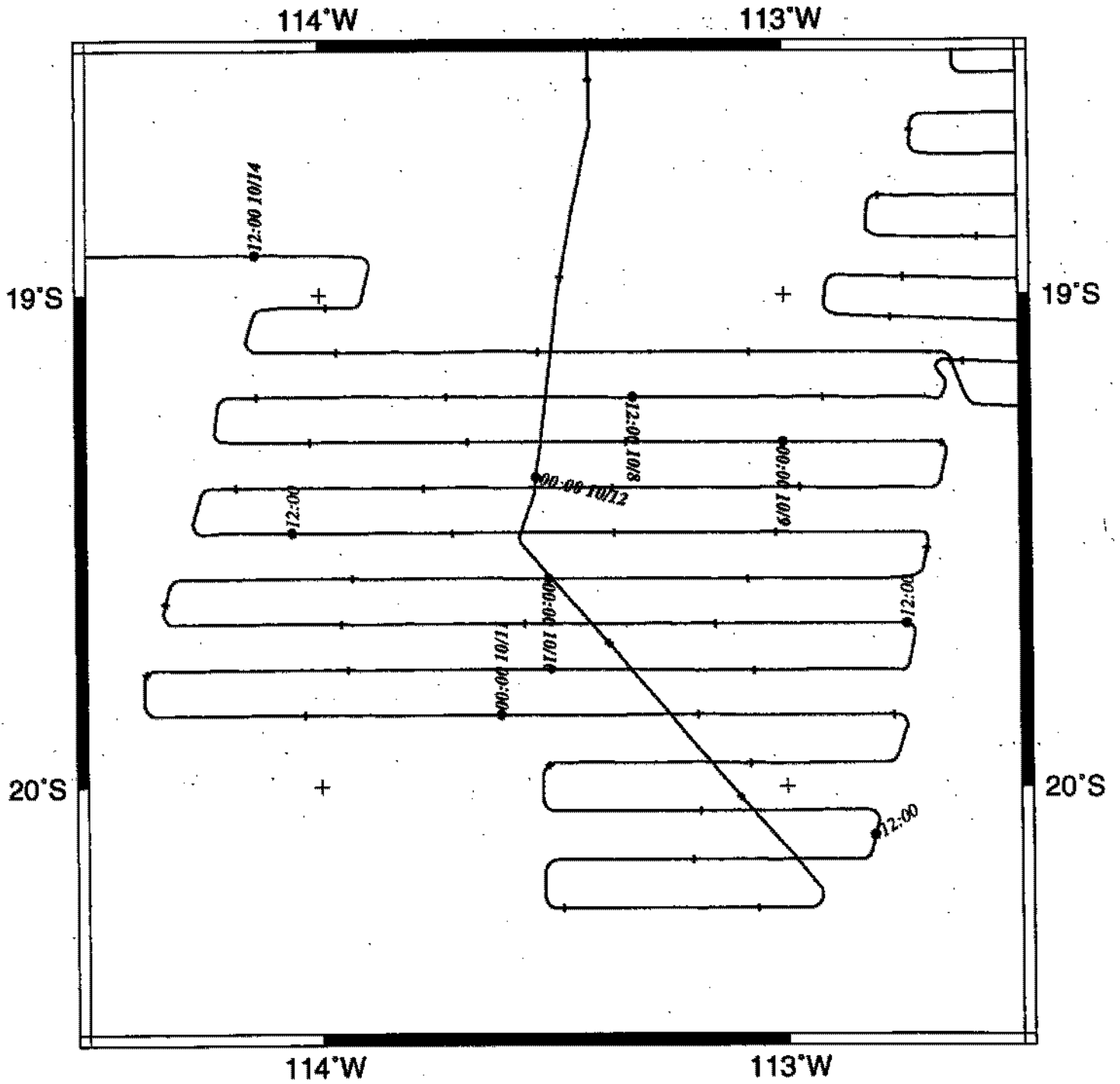
SOJN01MV Survey A



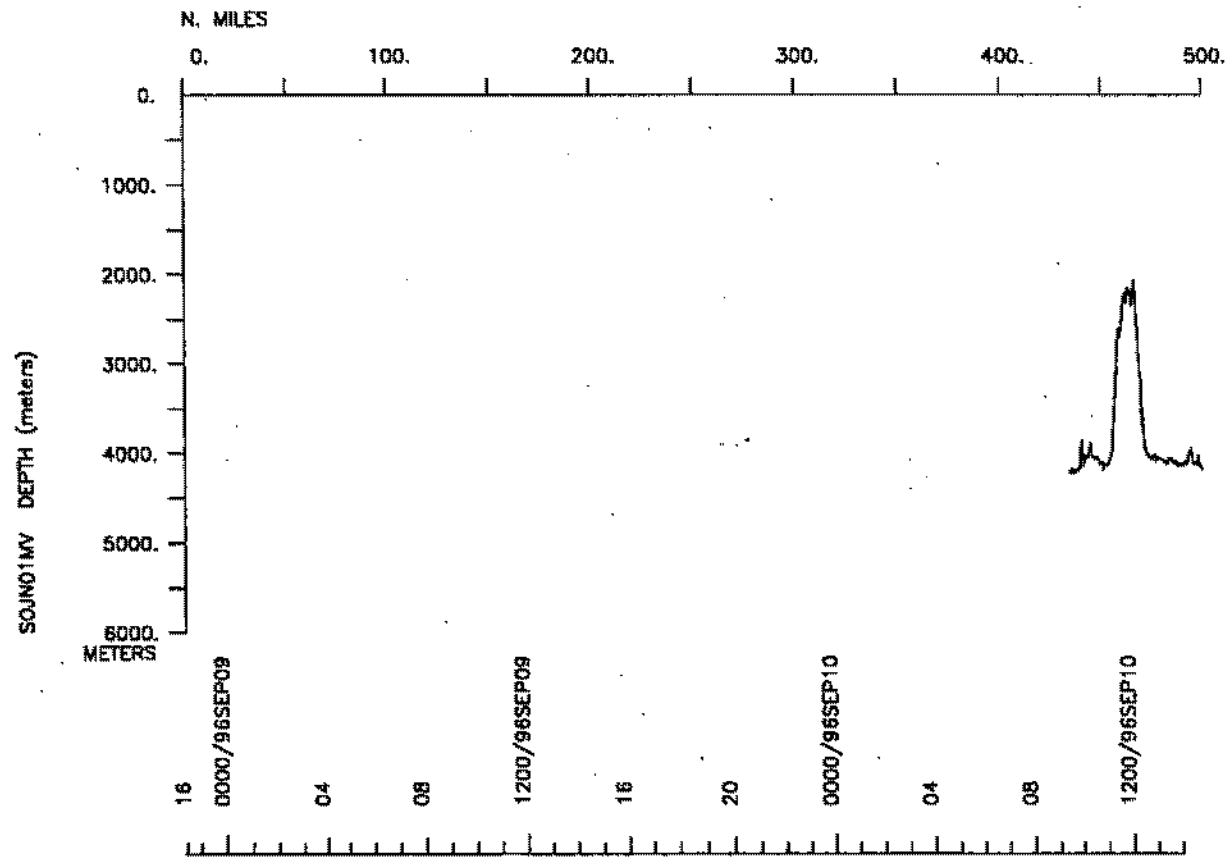
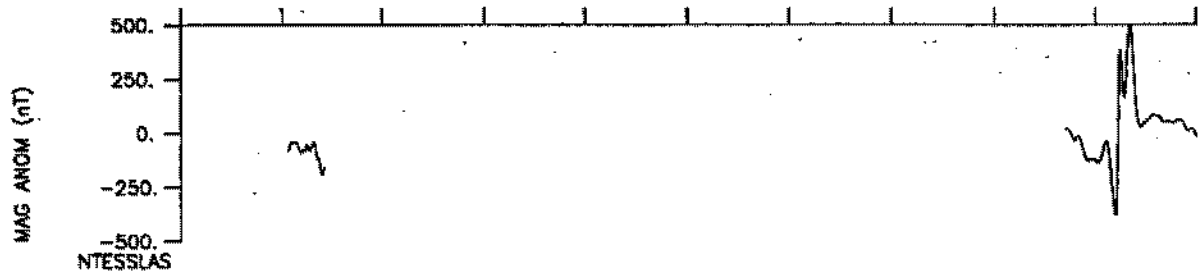
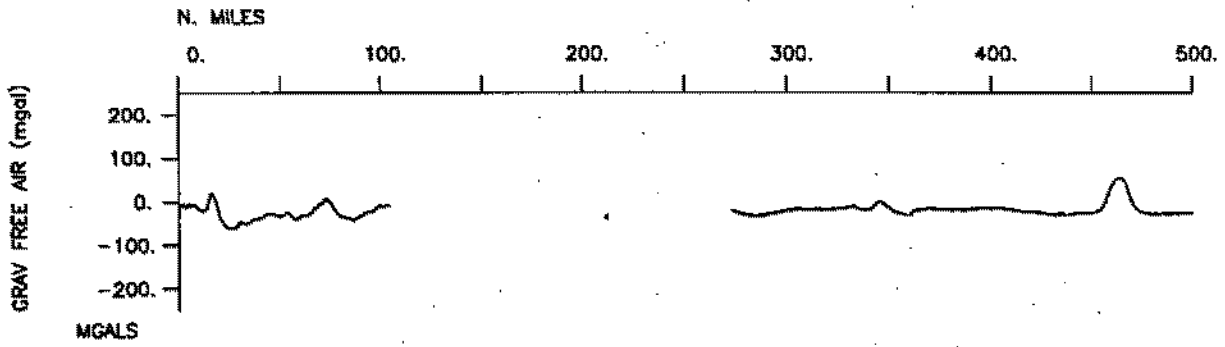
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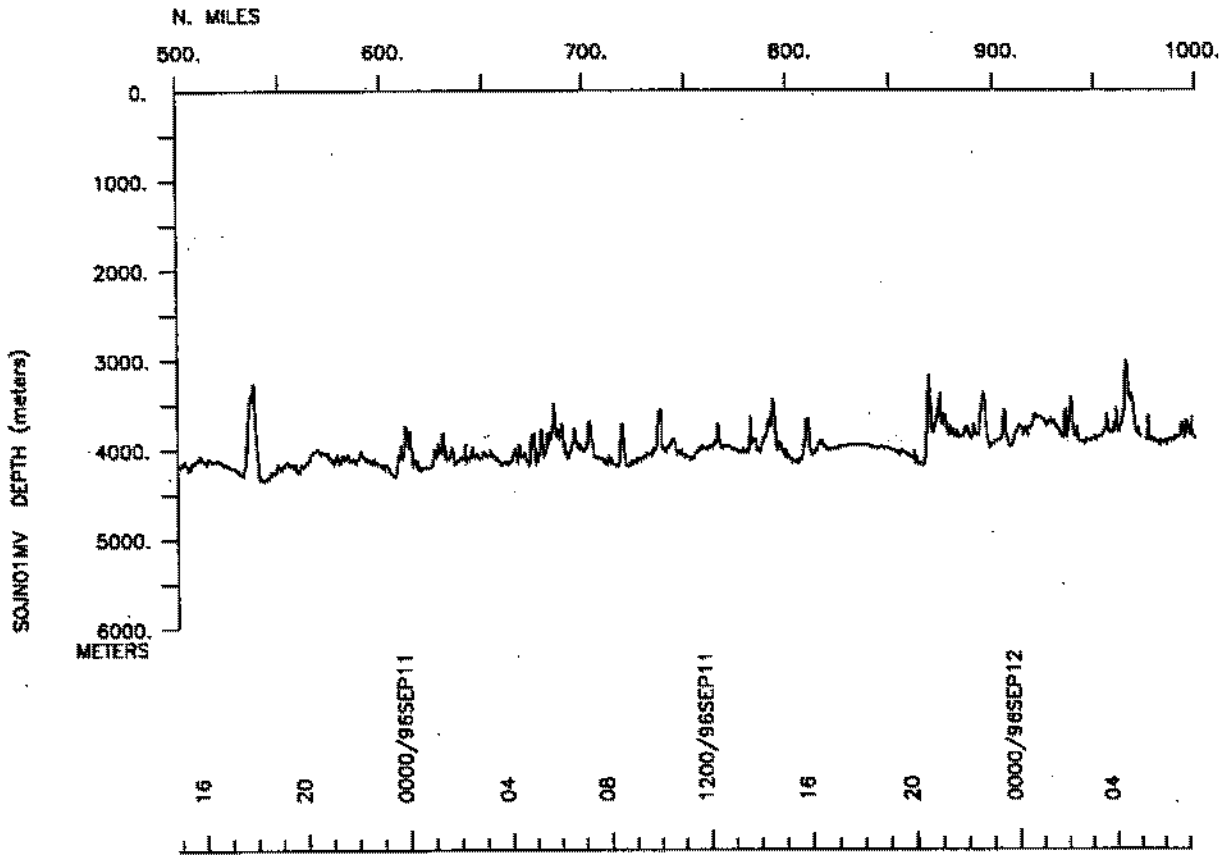
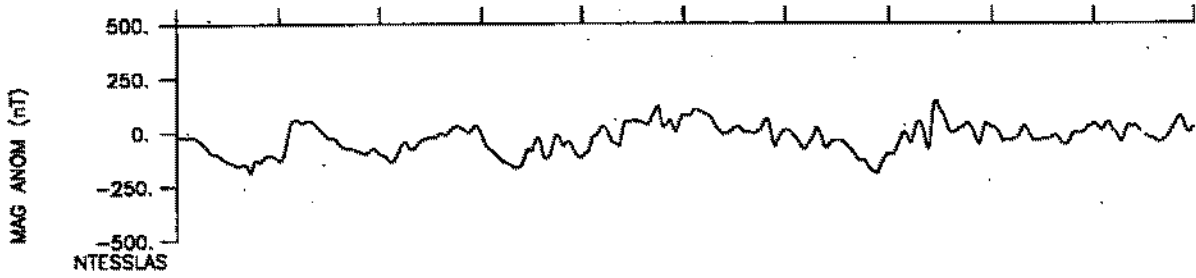
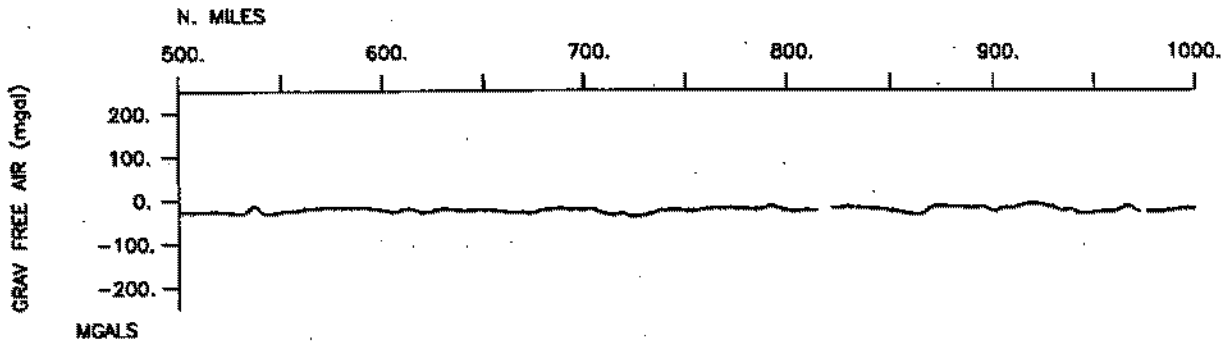


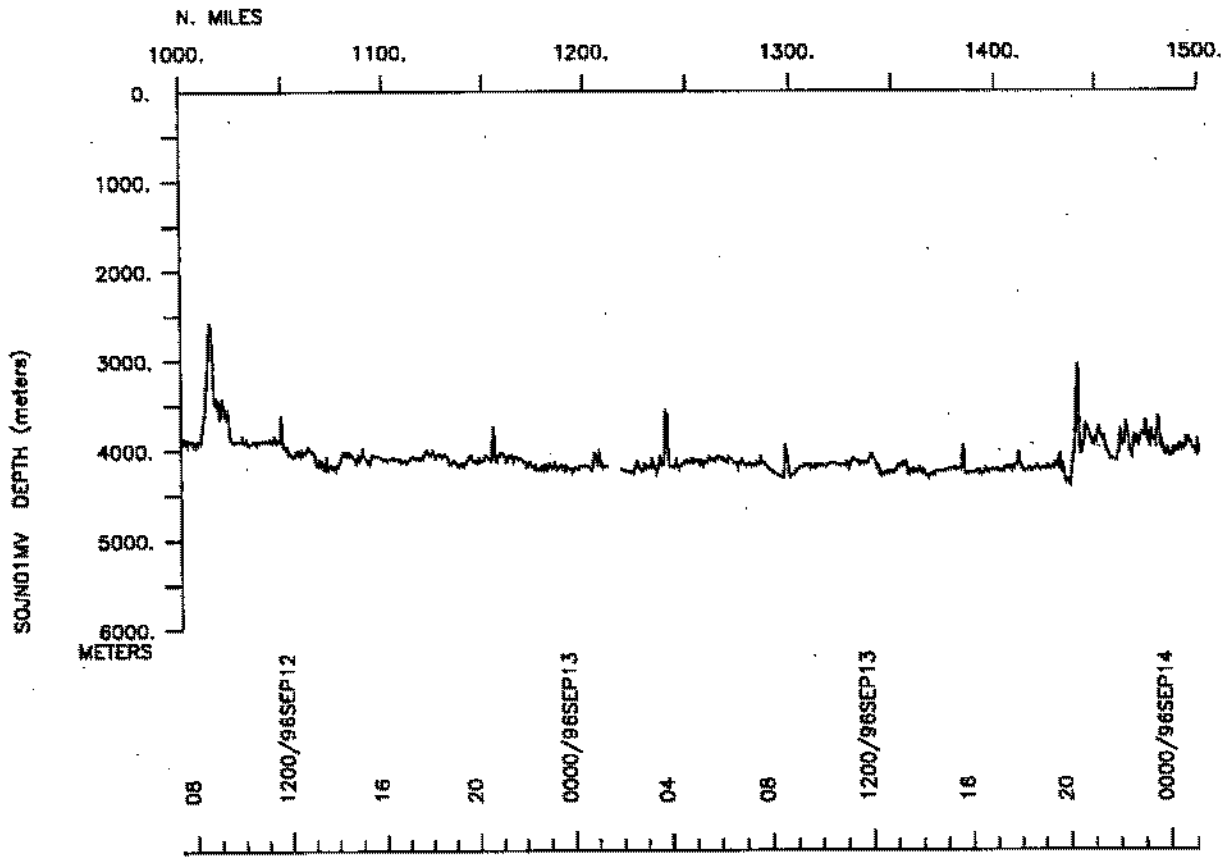
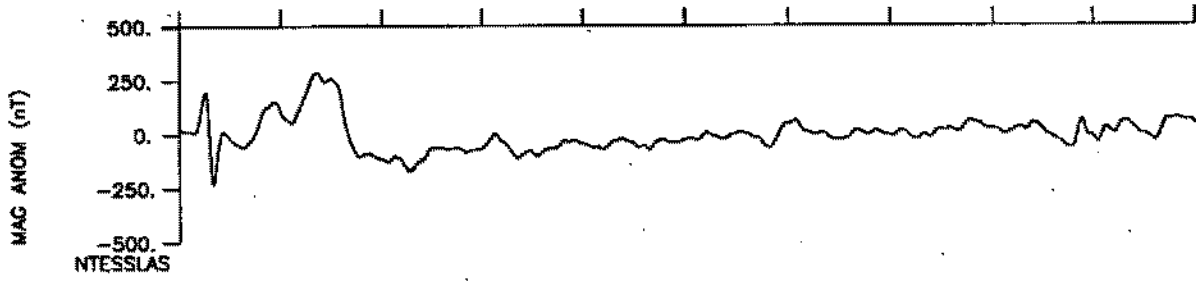
SOJN01MV Survey C

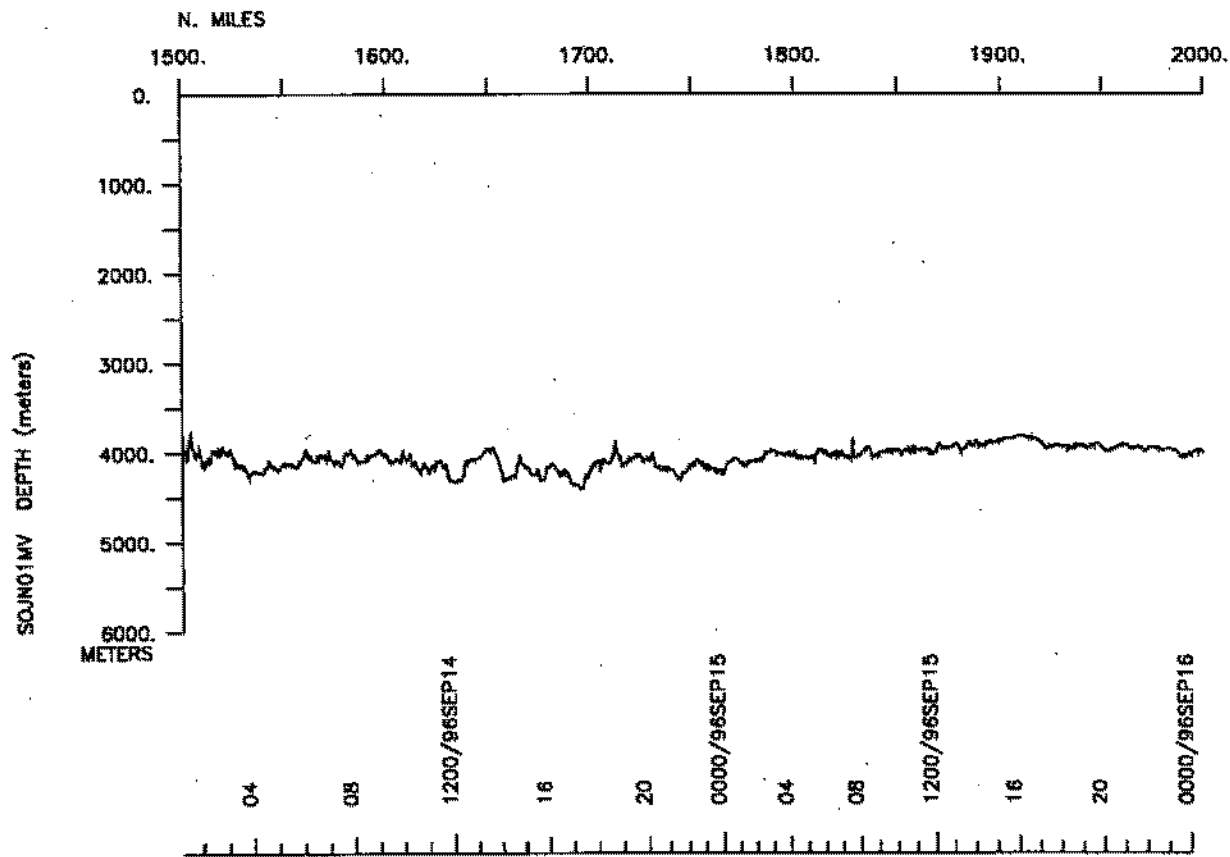
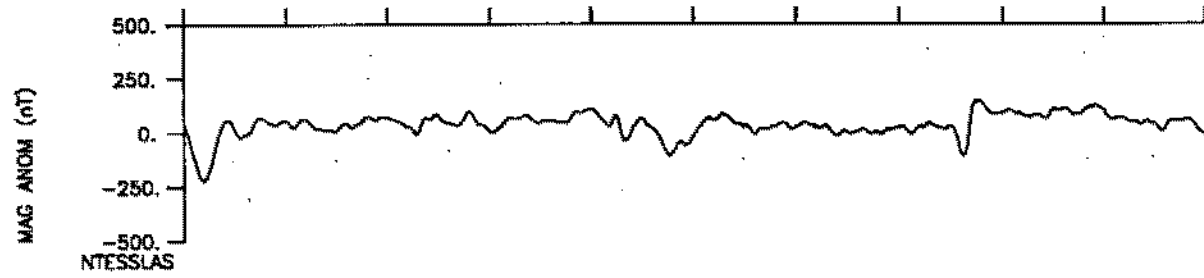
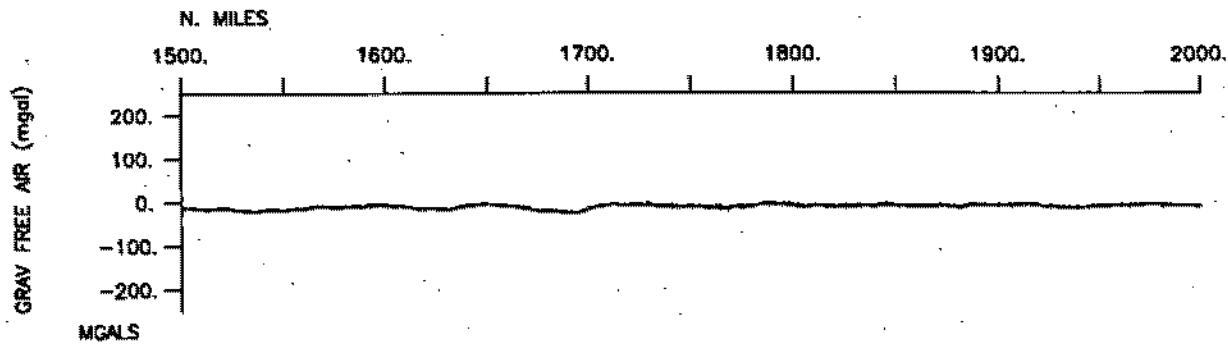


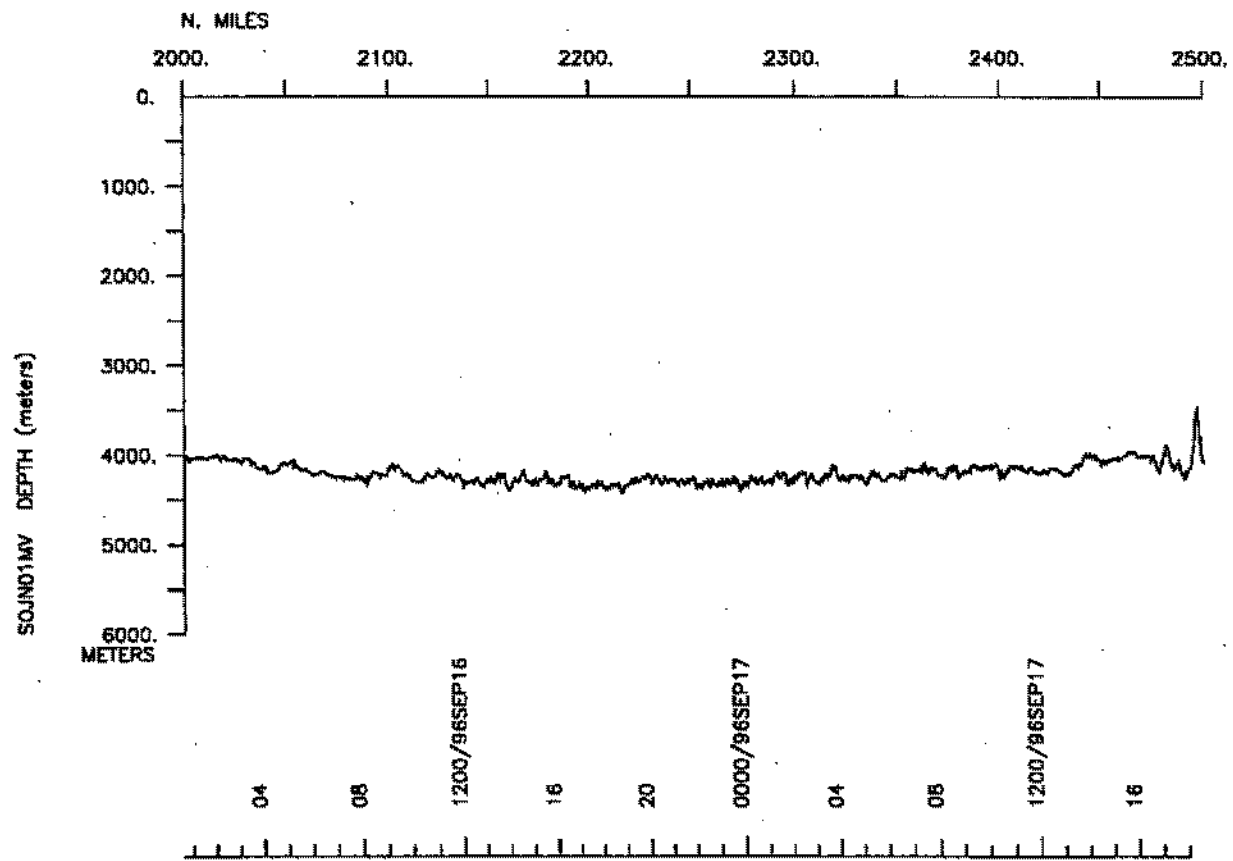
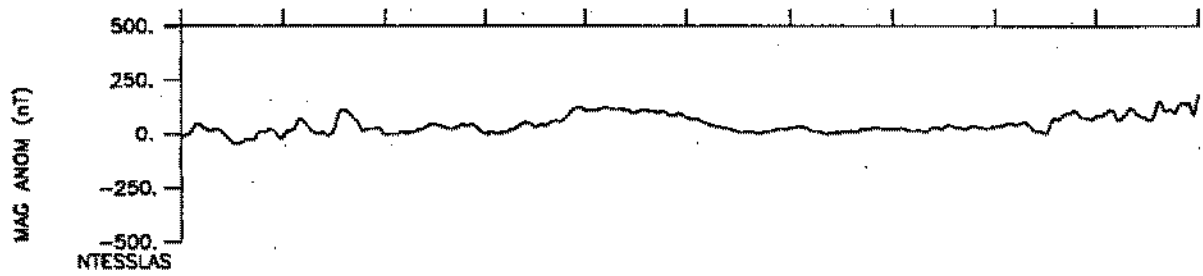
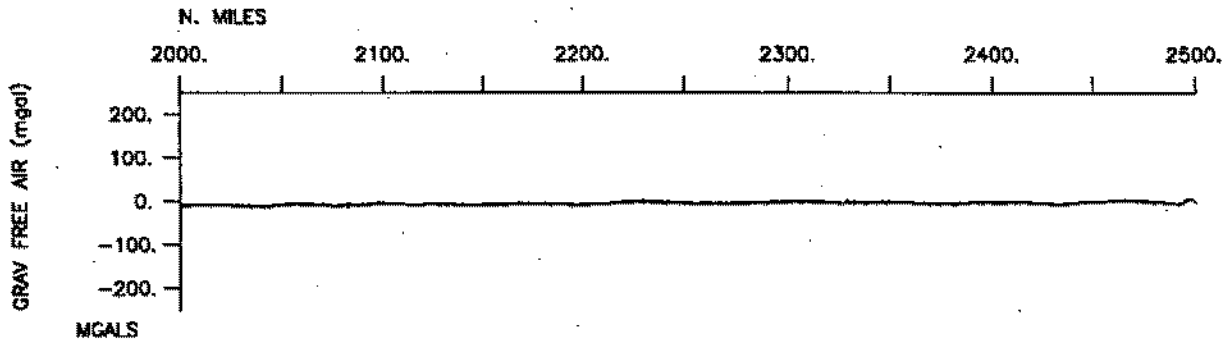
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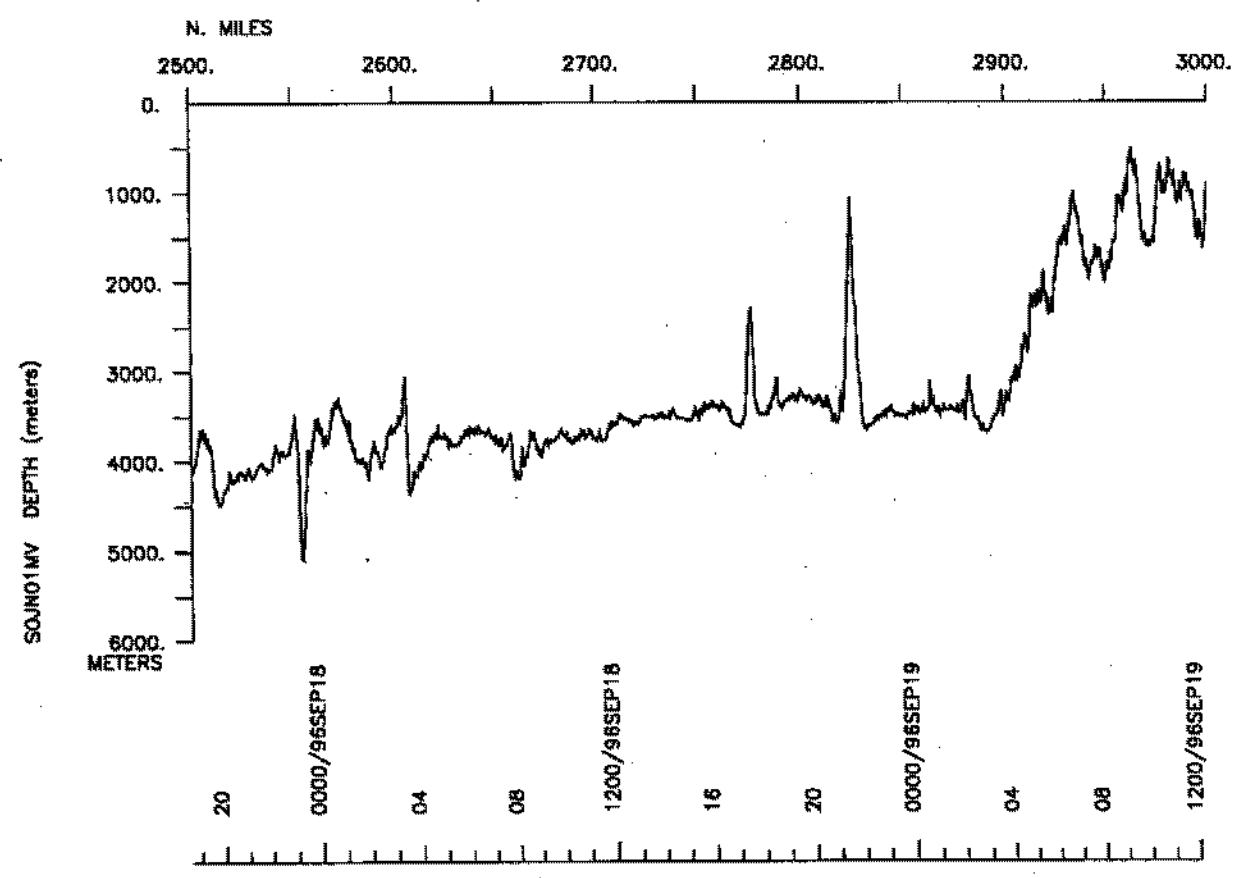
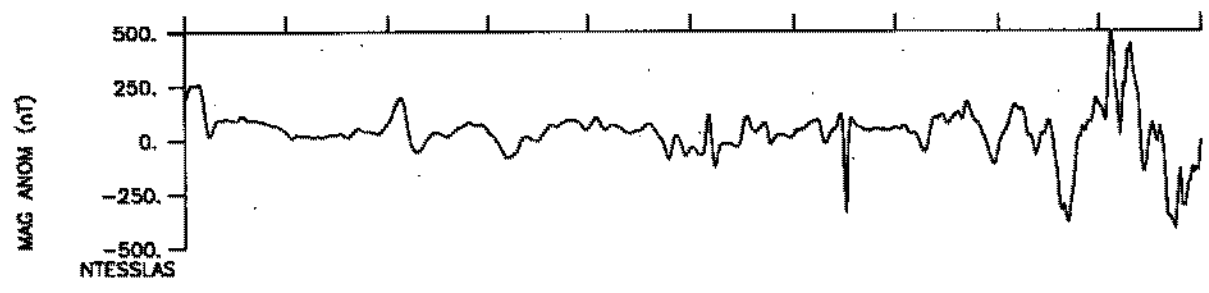
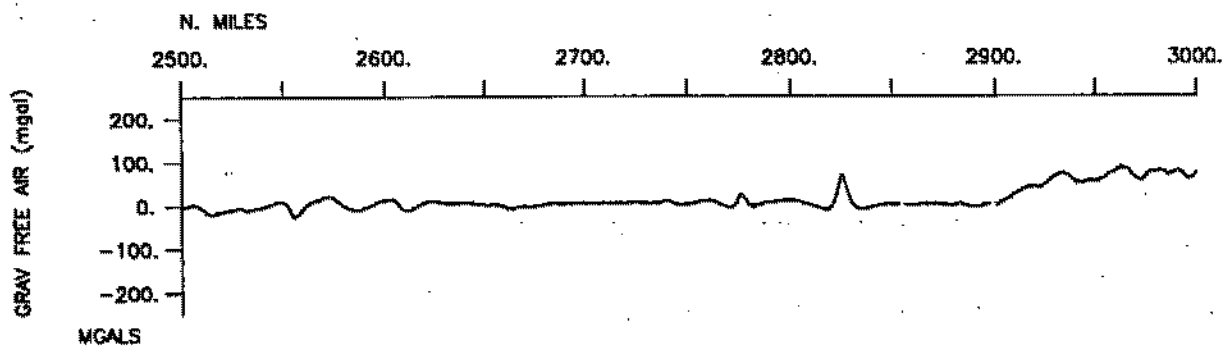


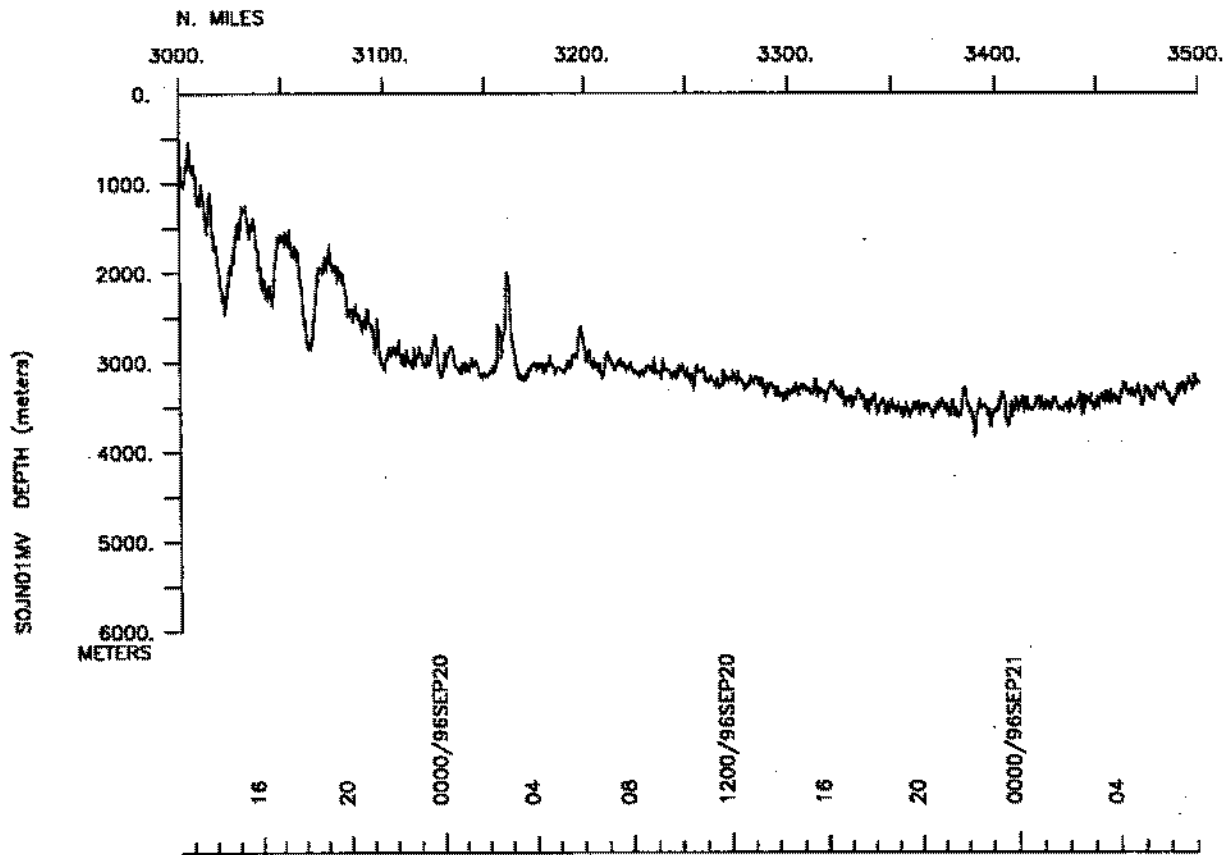
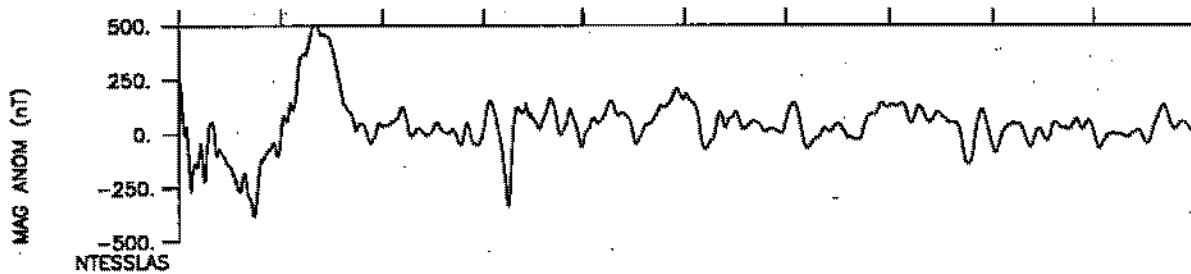
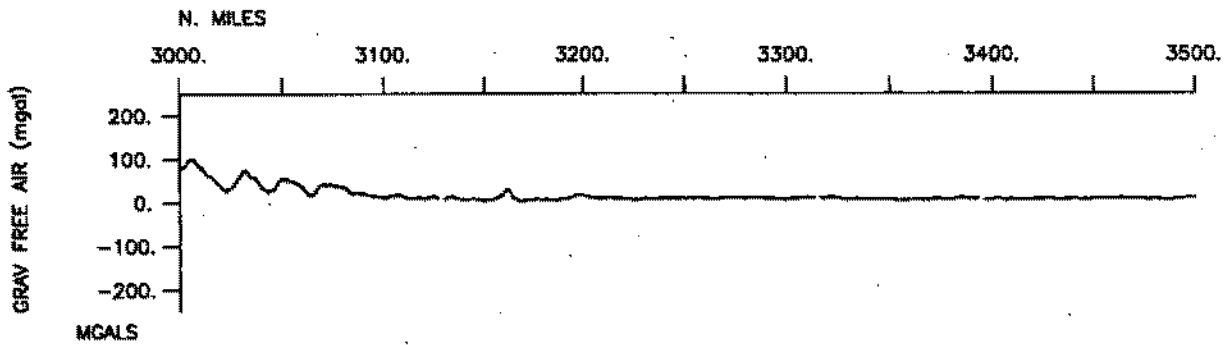


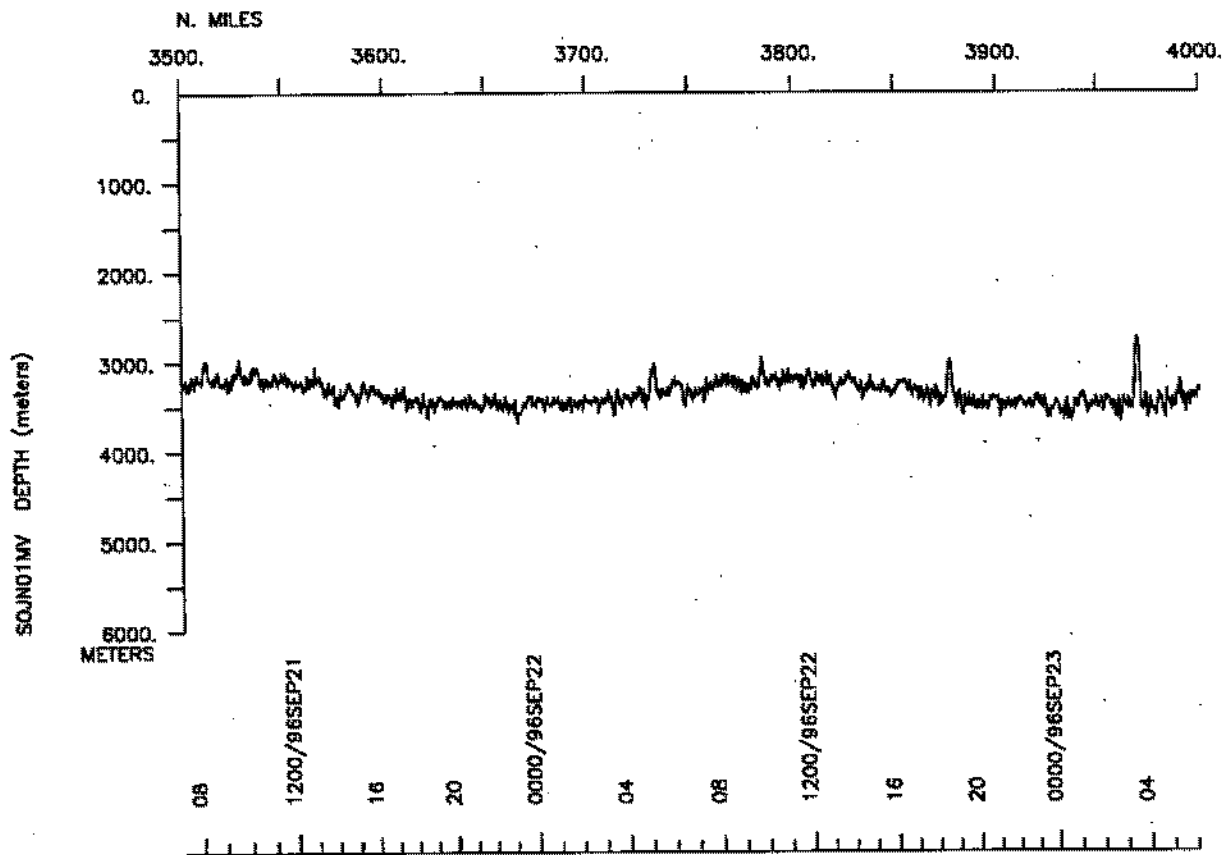
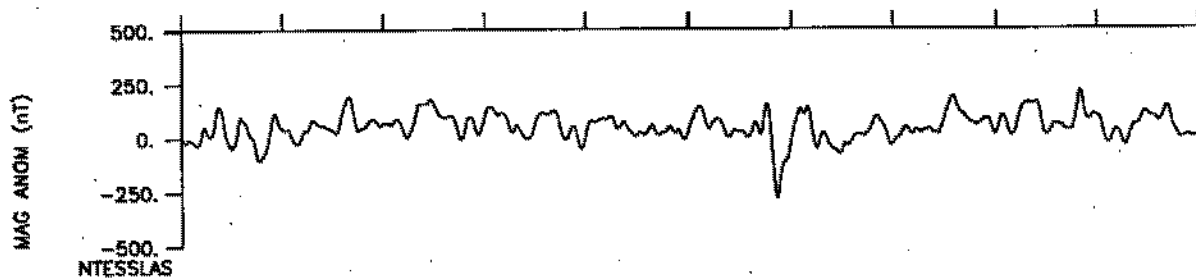
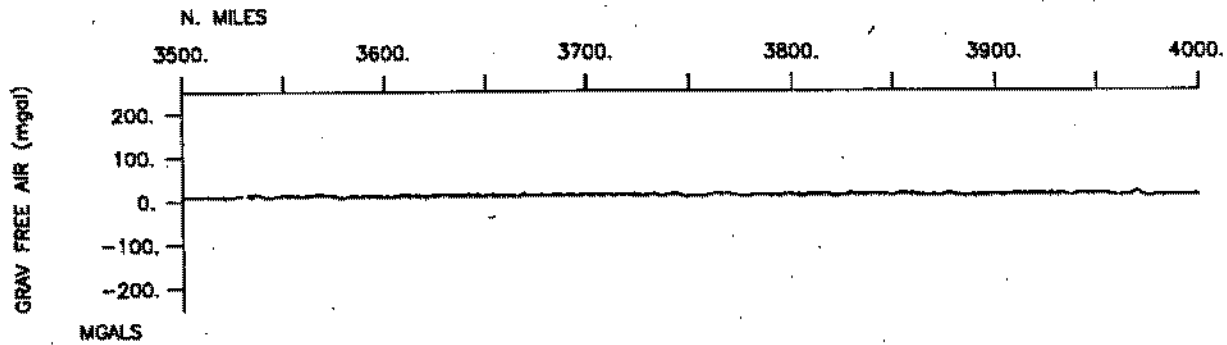


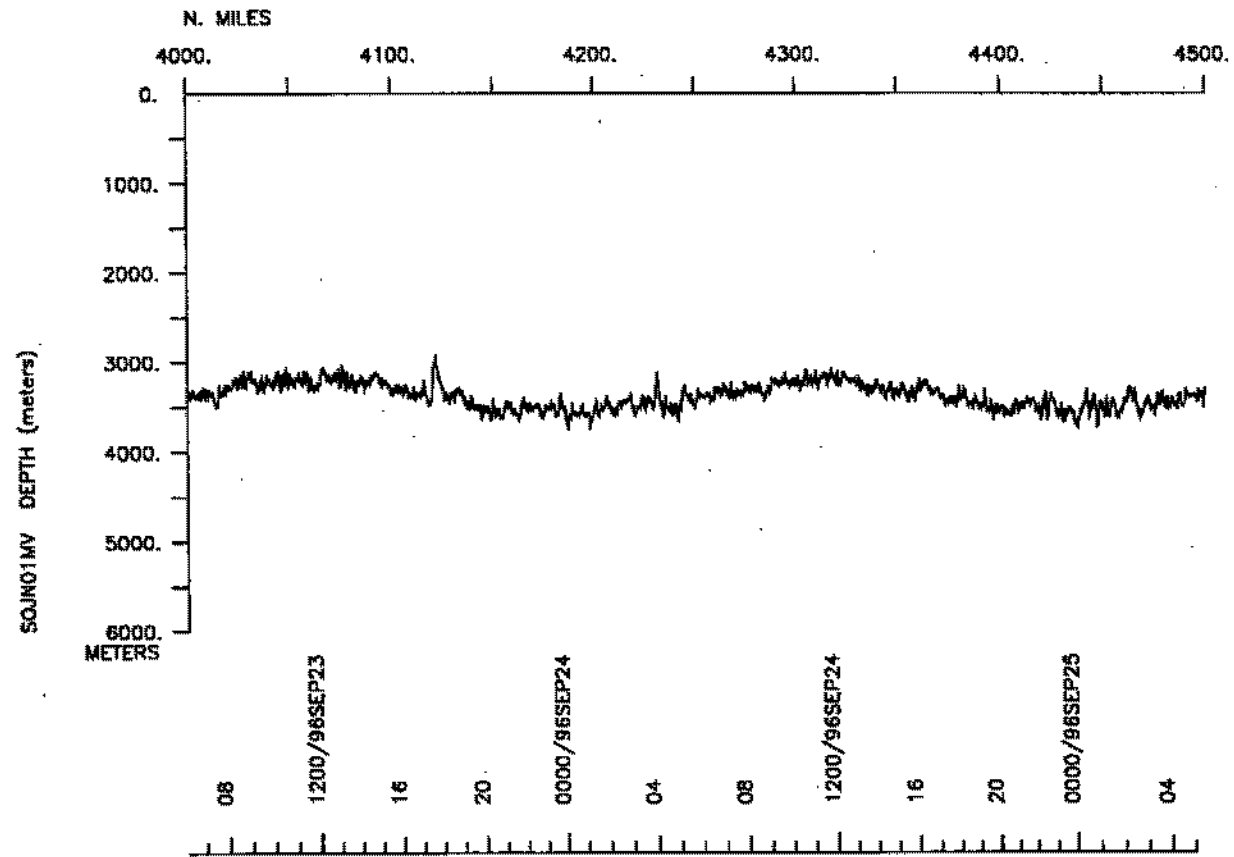
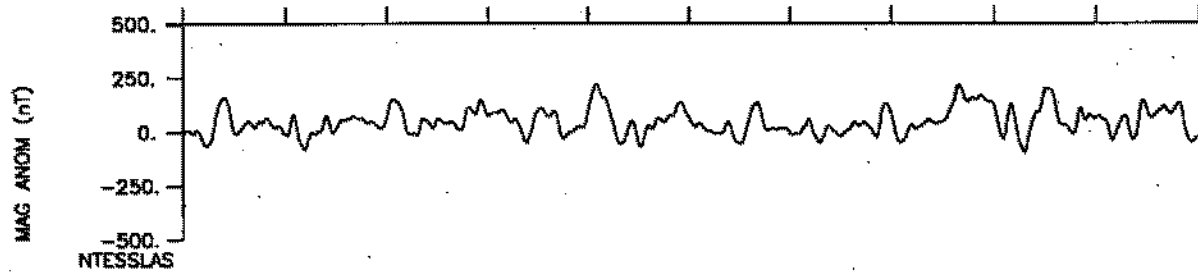
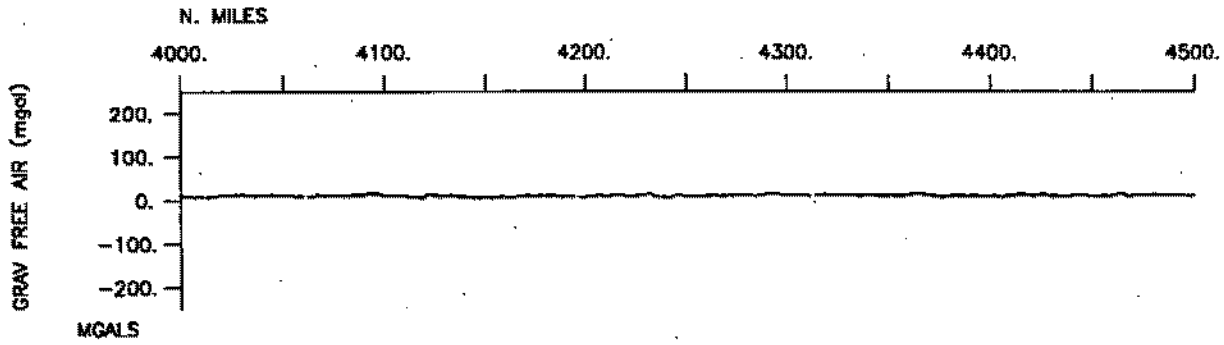


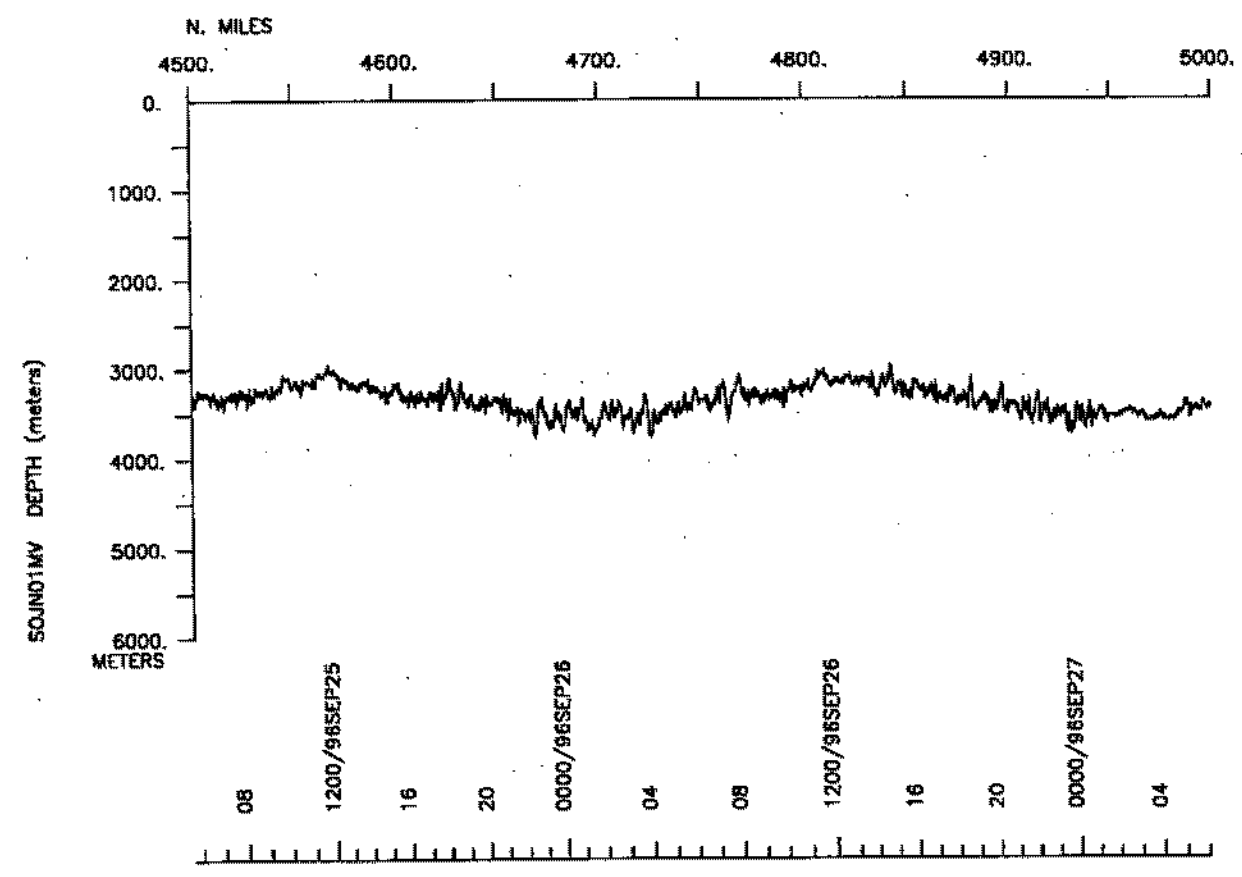
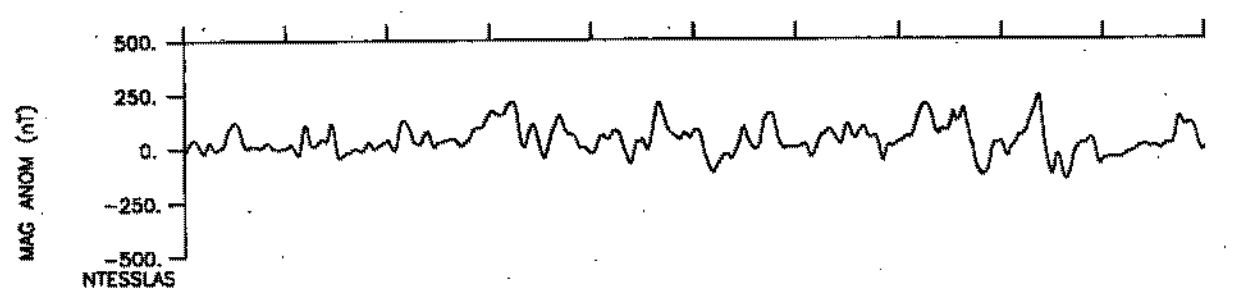
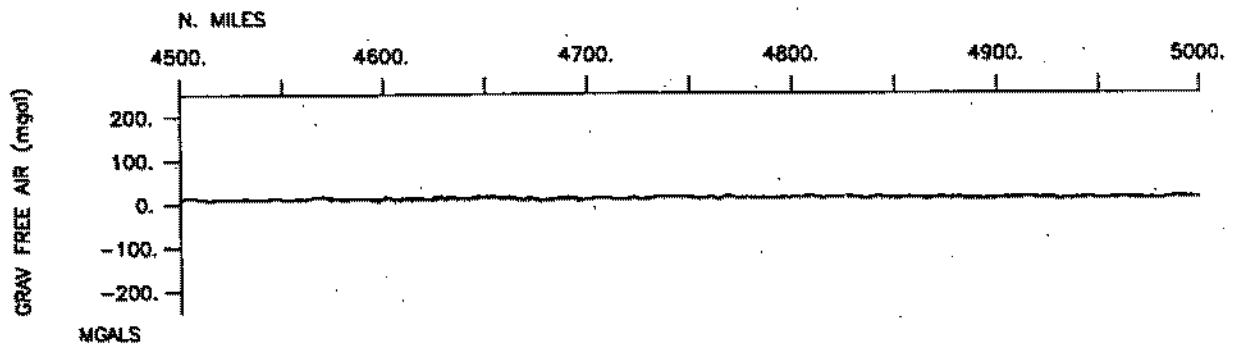


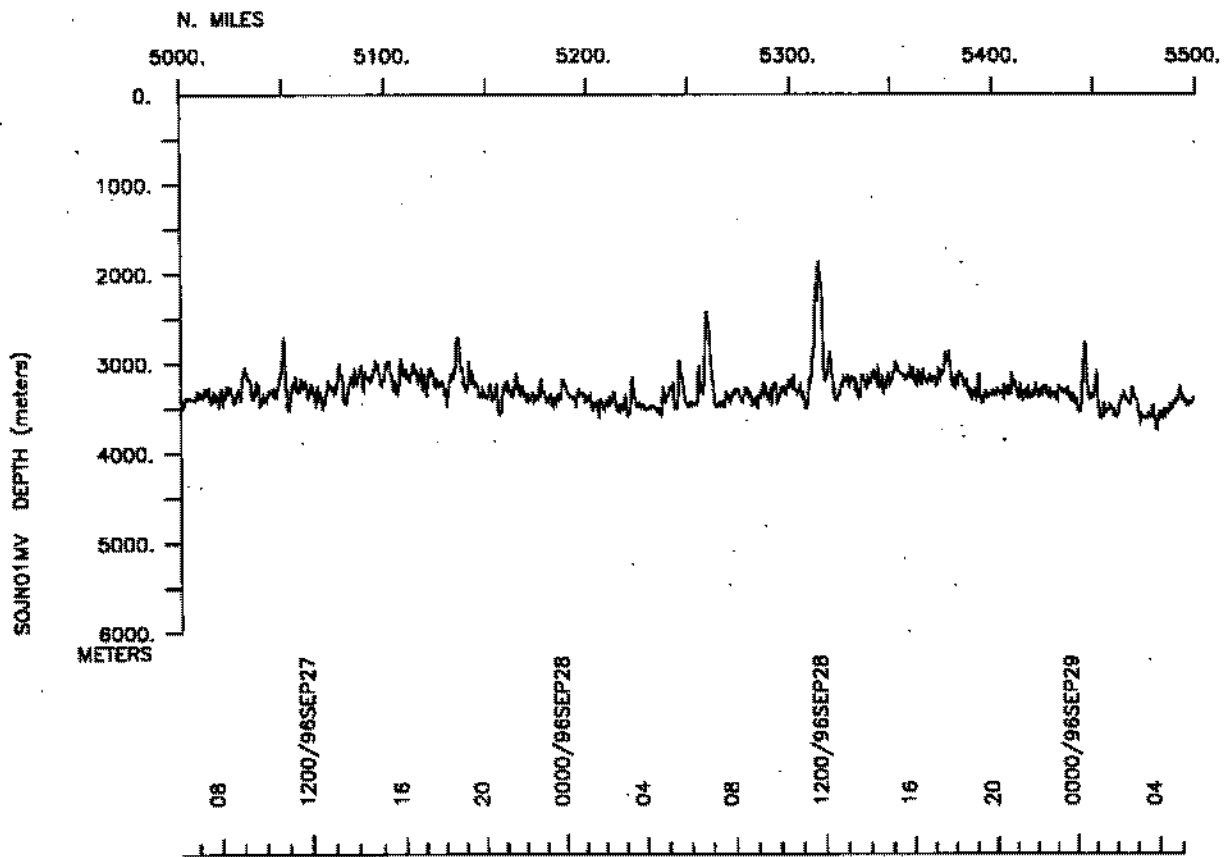
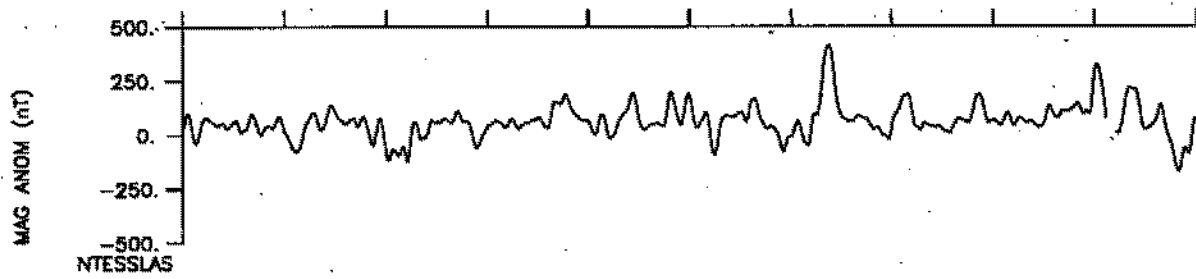
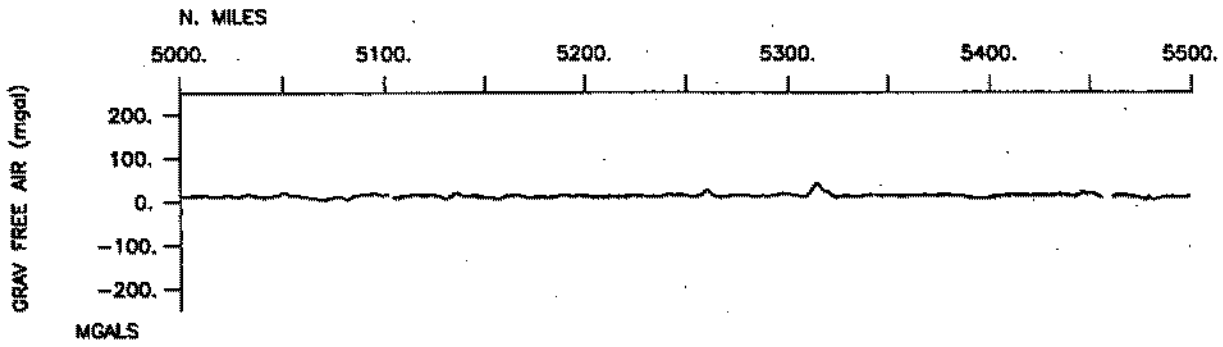


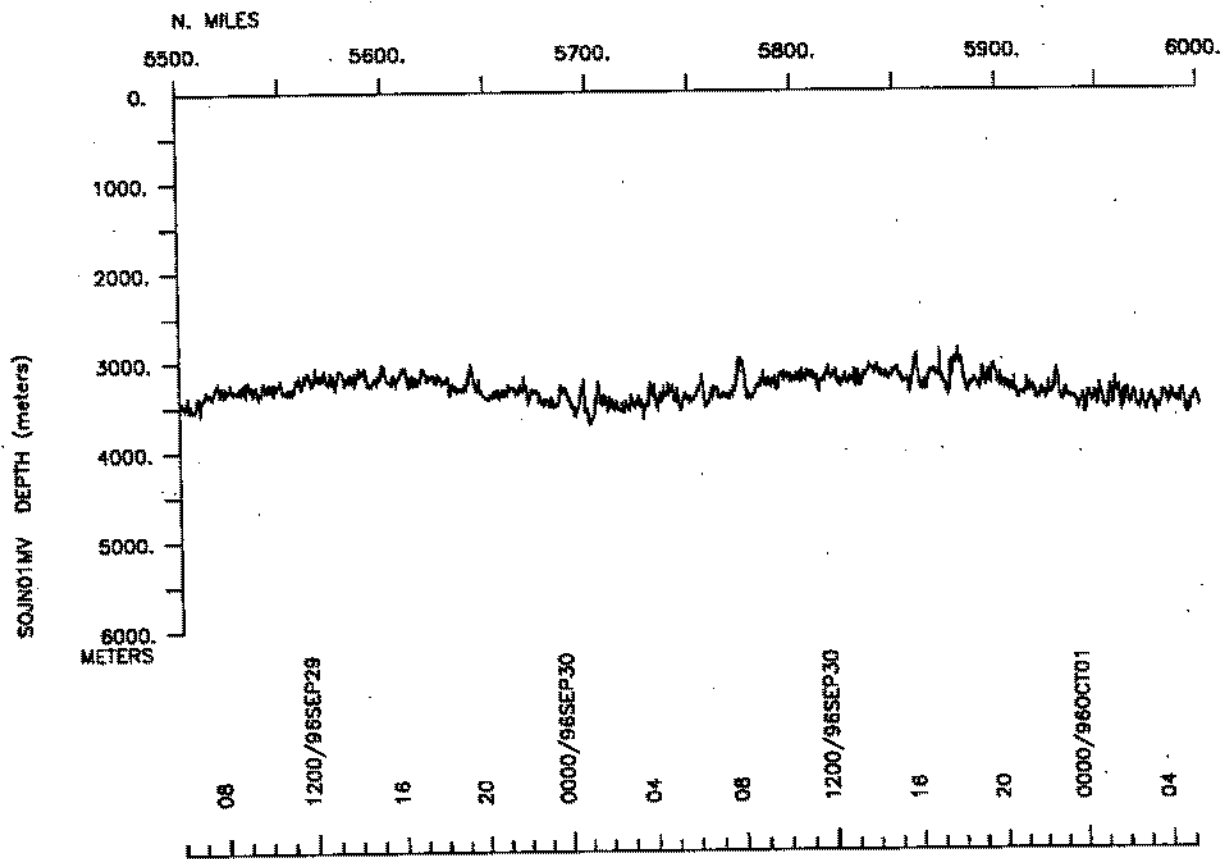
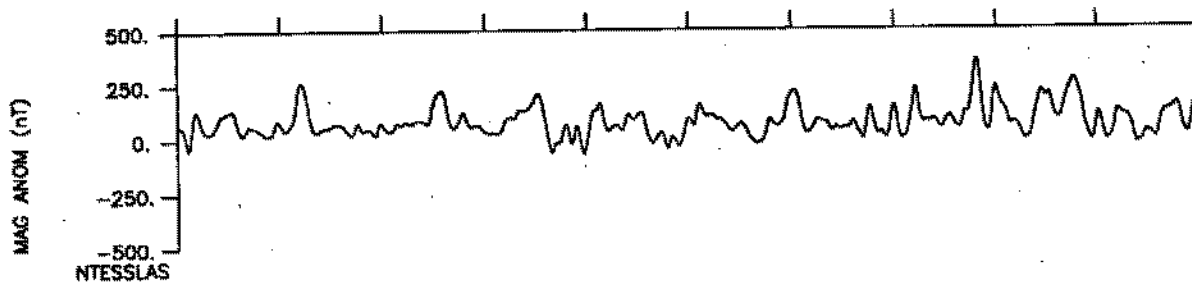
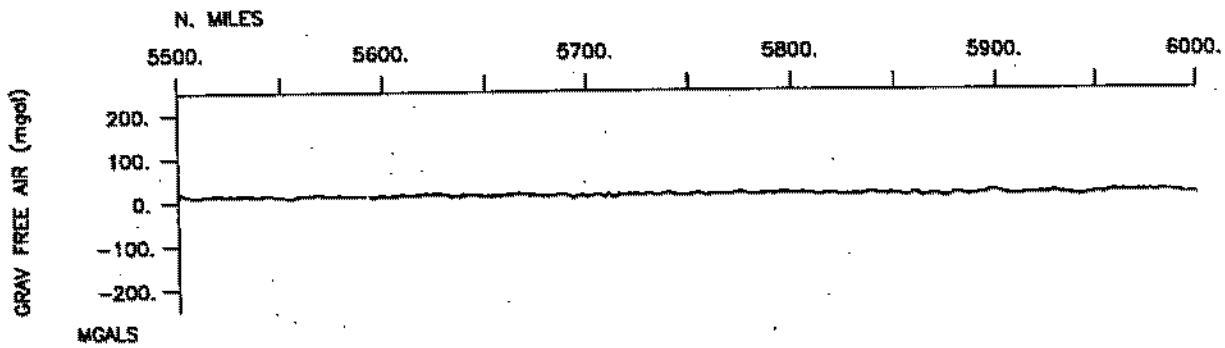


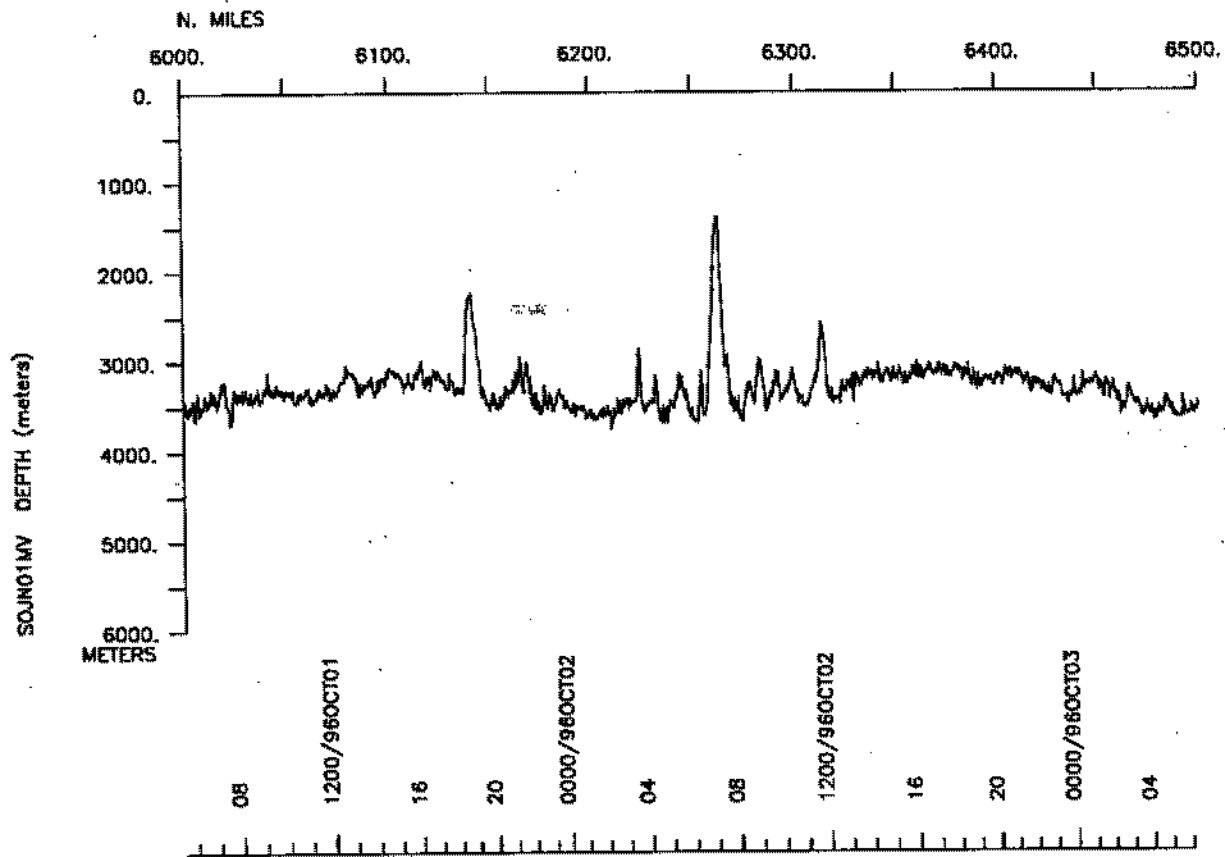
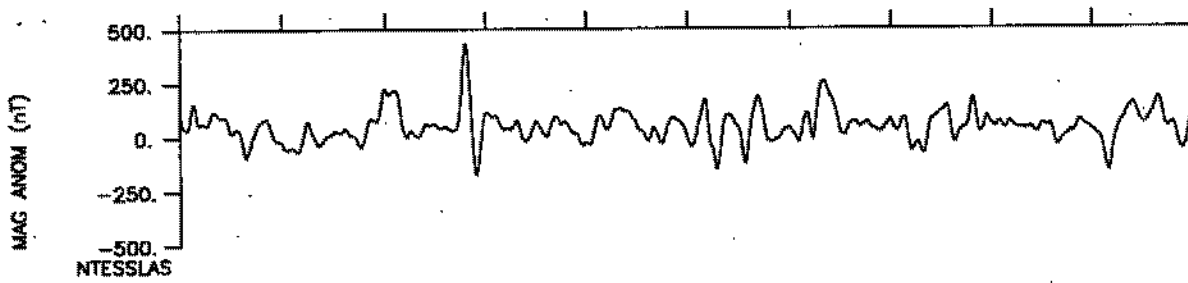
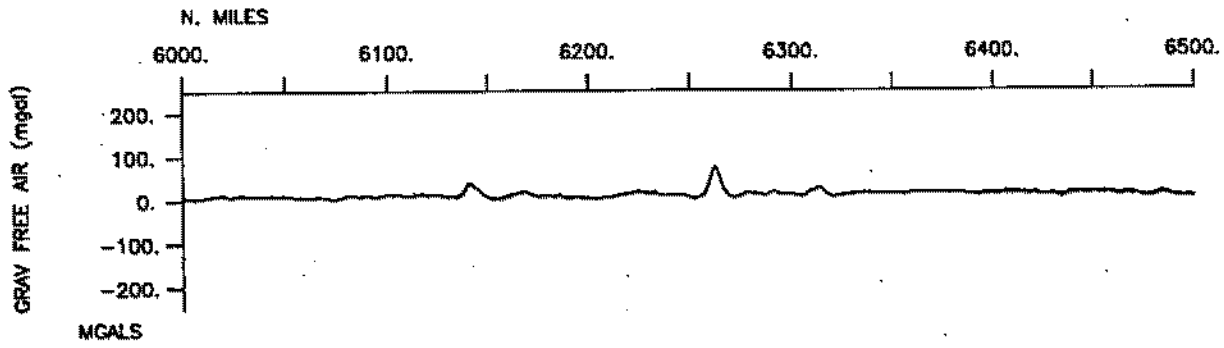


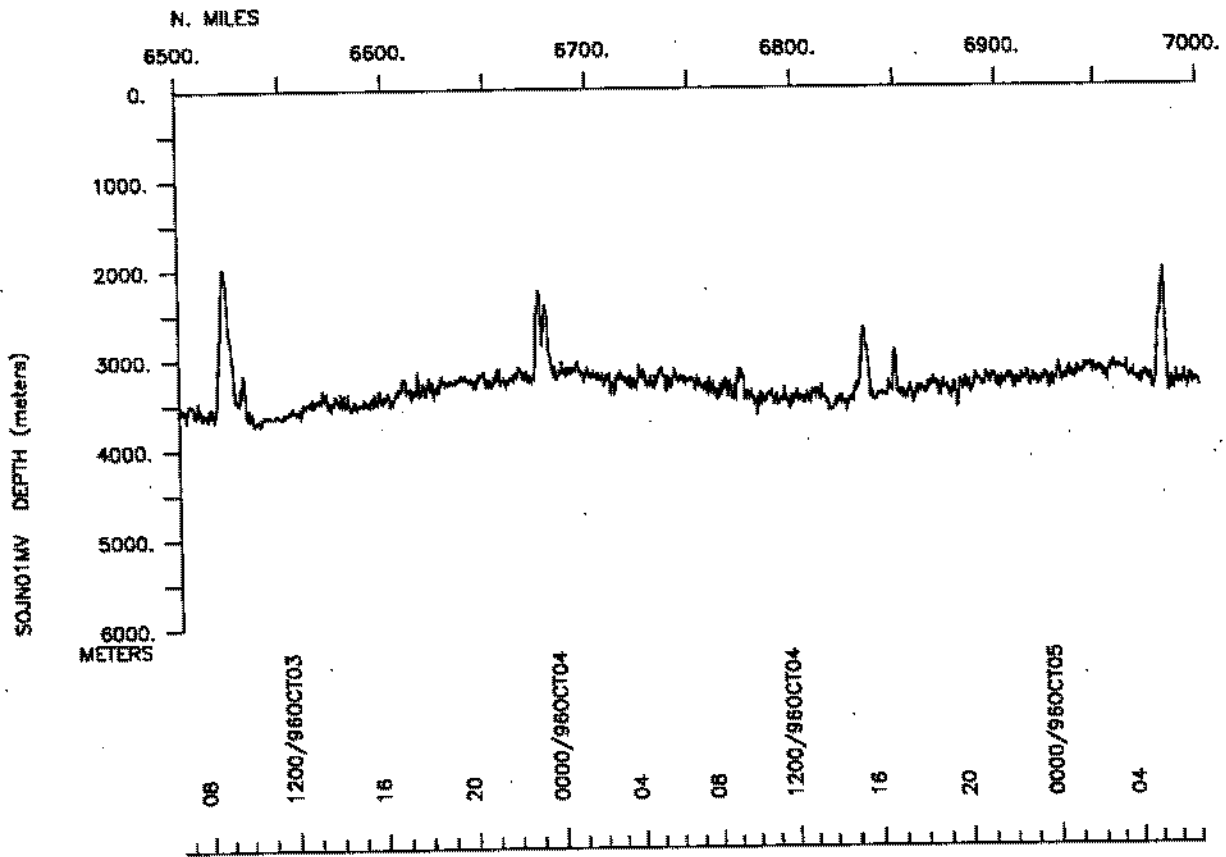
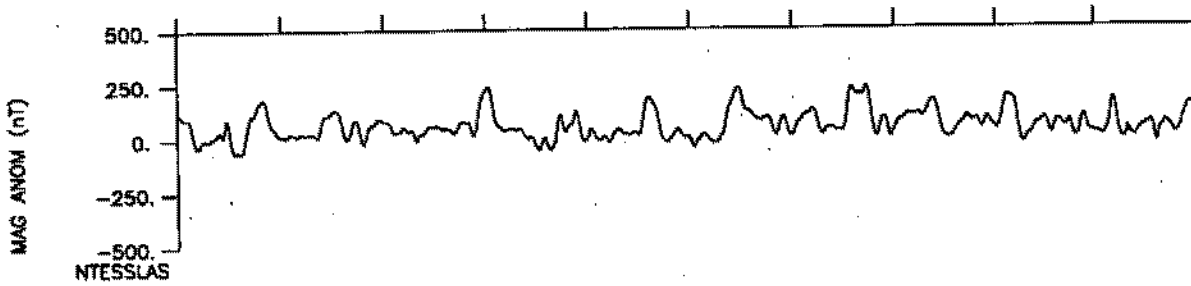
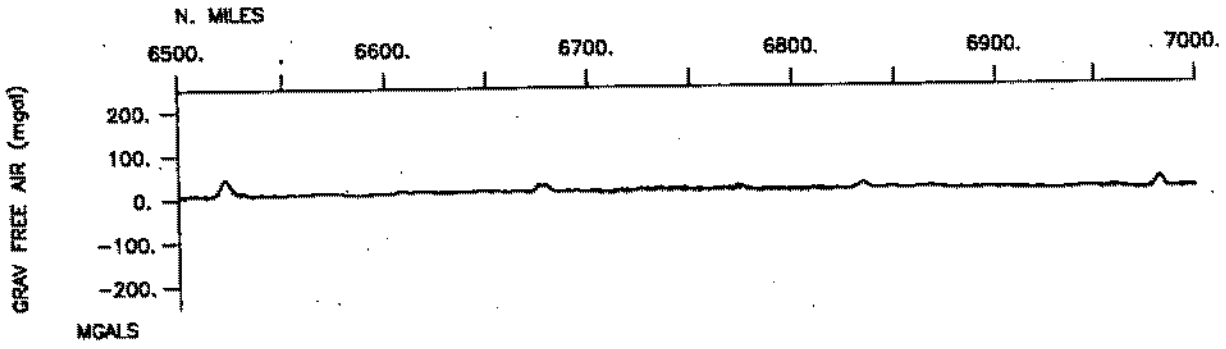


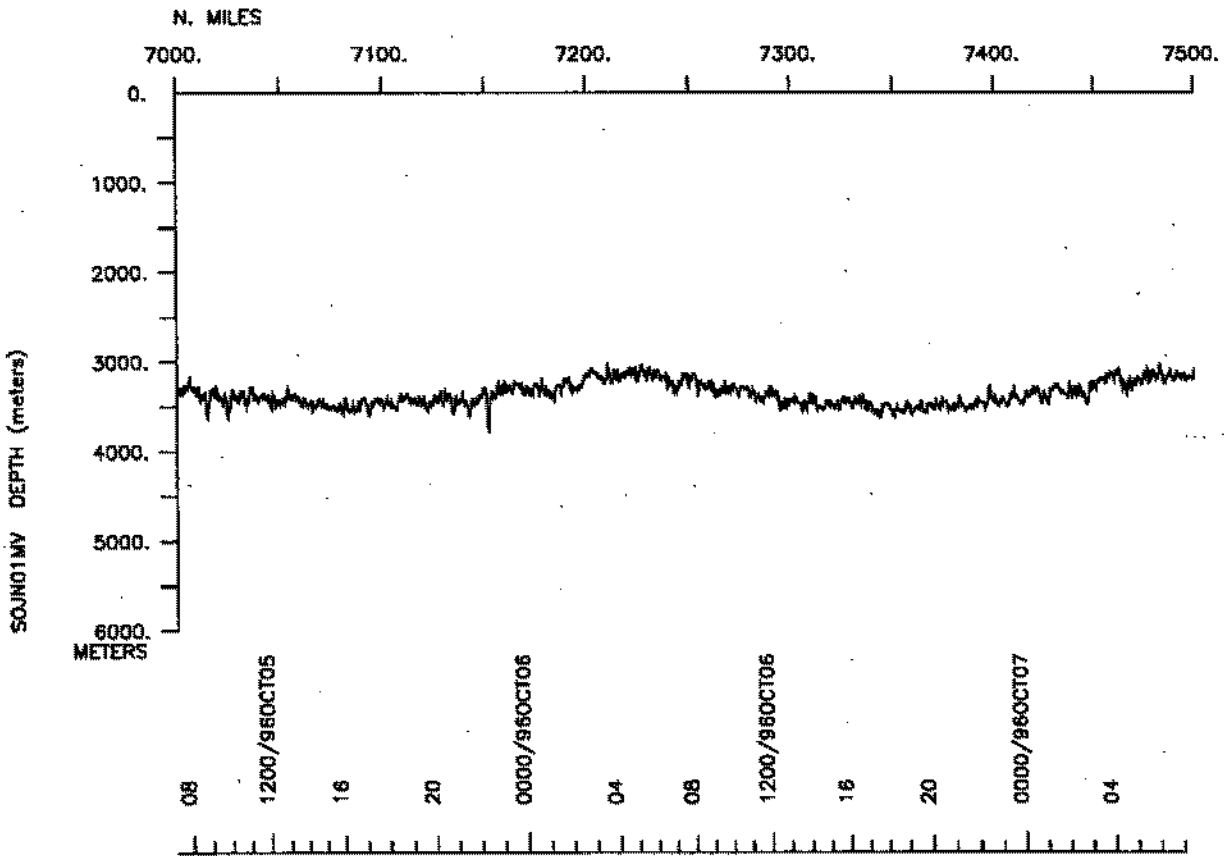
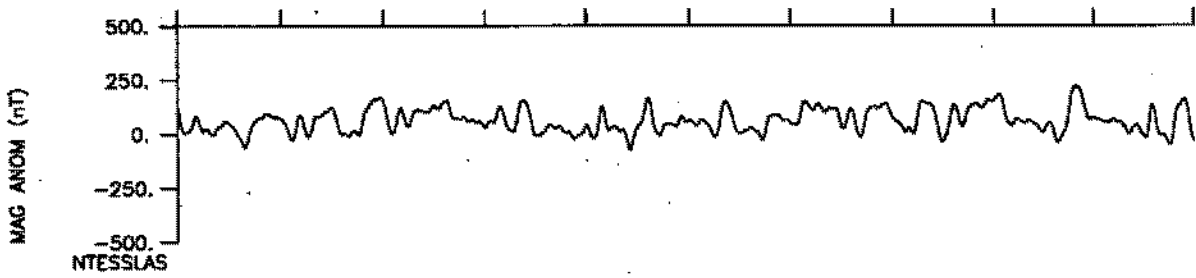
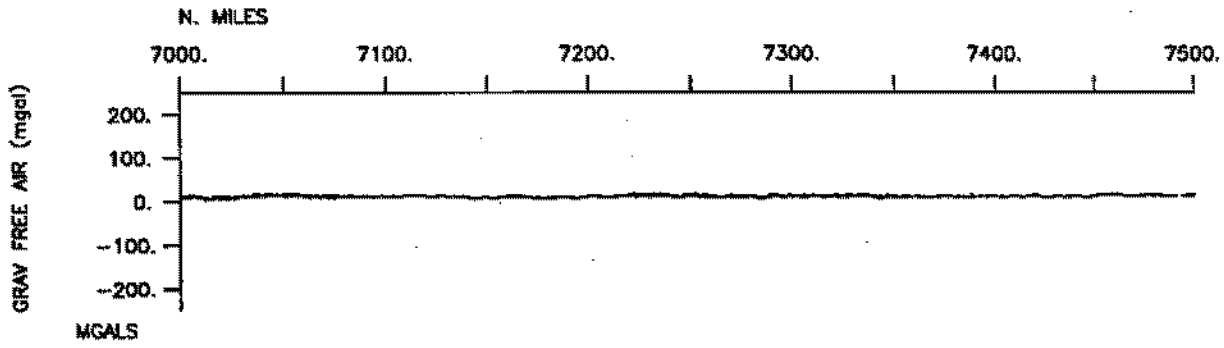


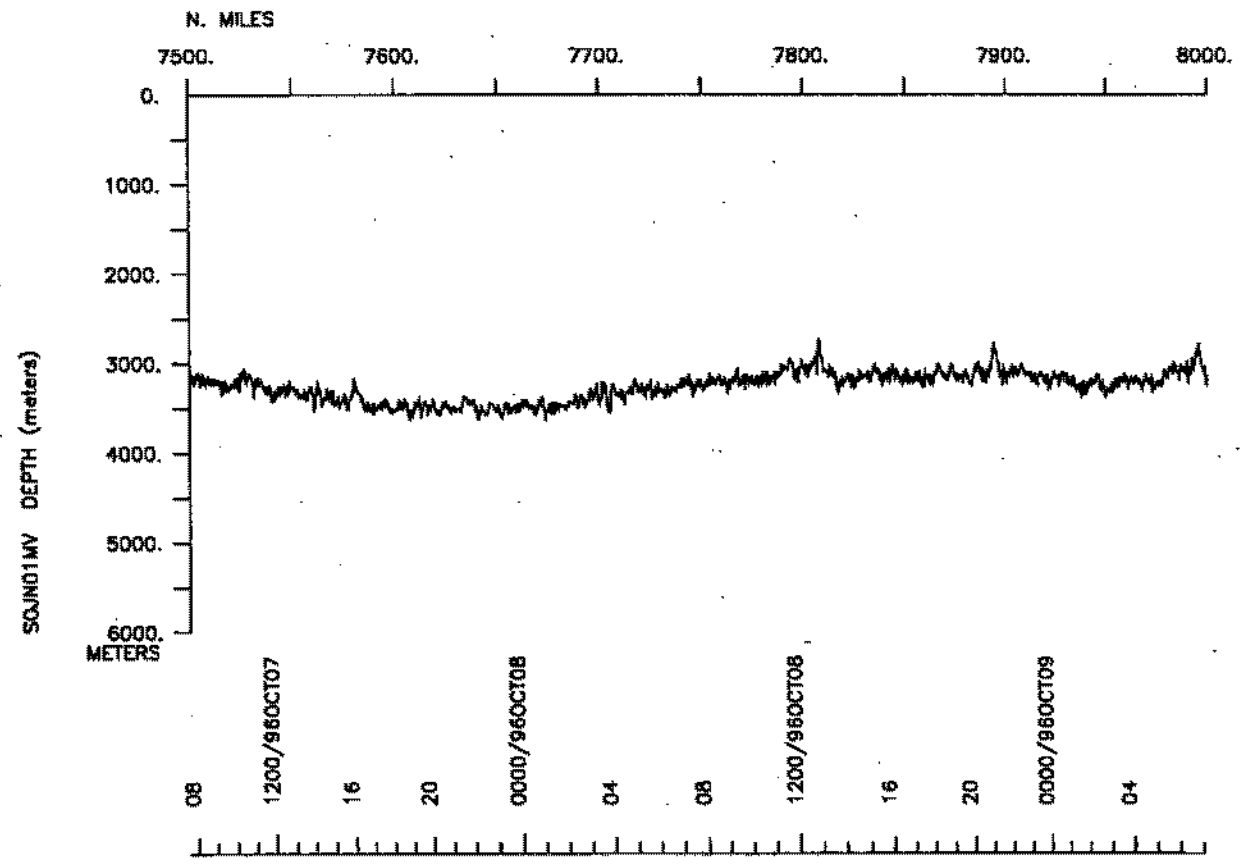
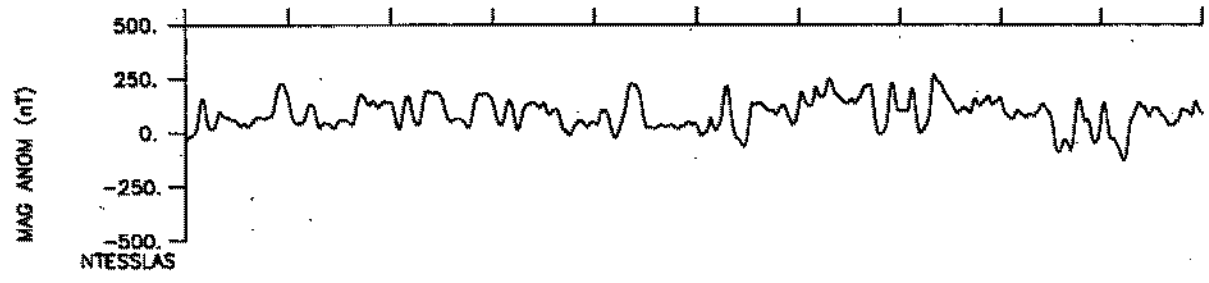
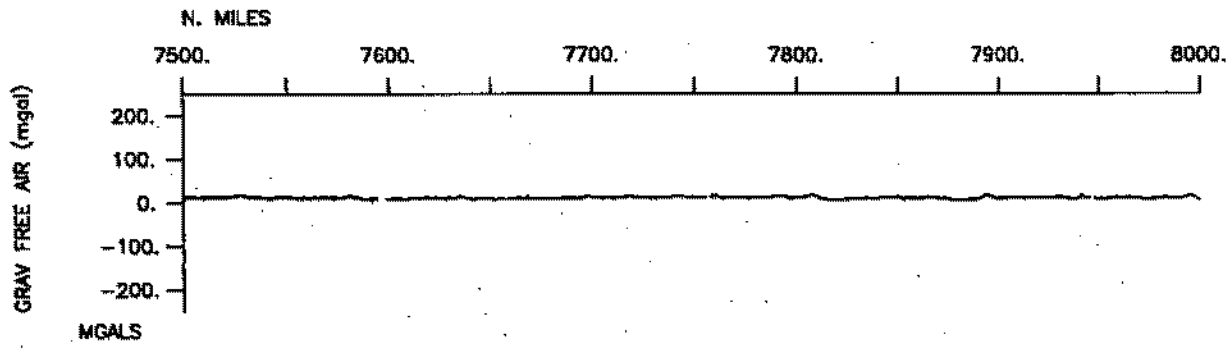


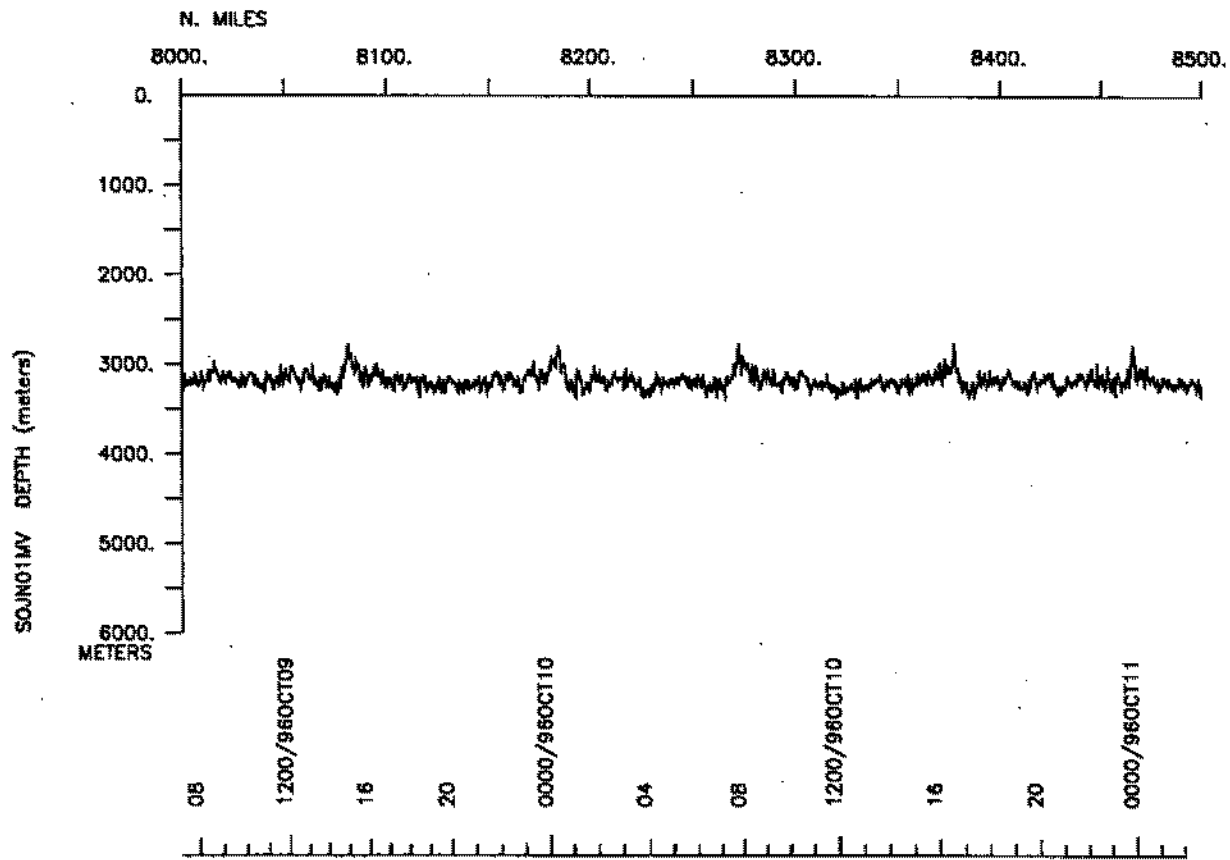
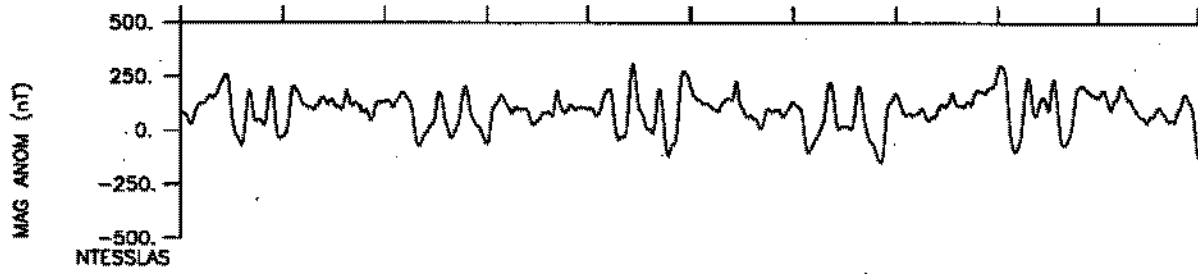
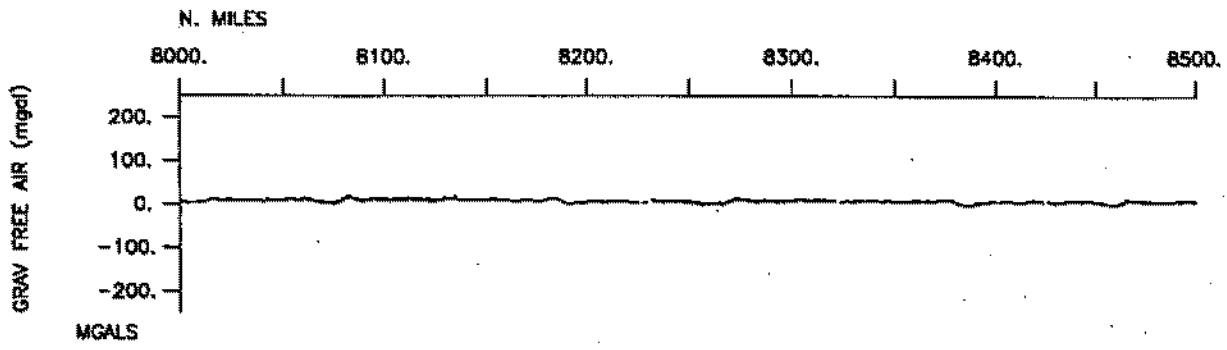


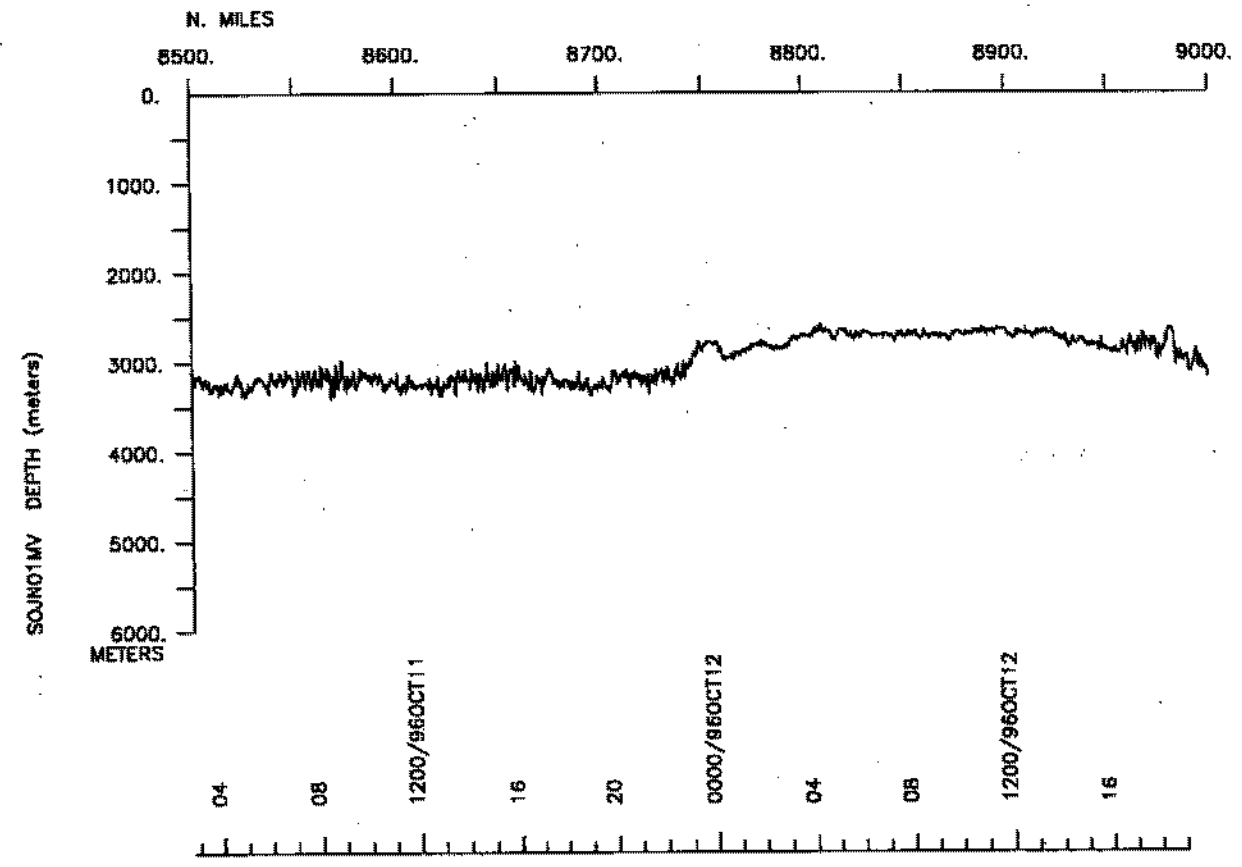
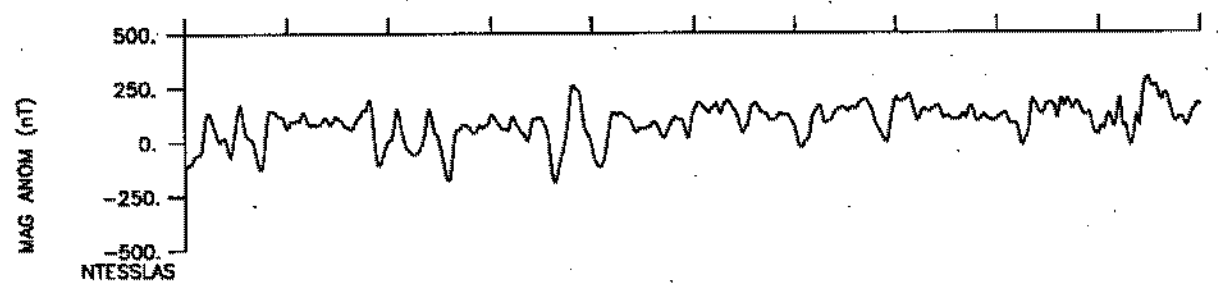
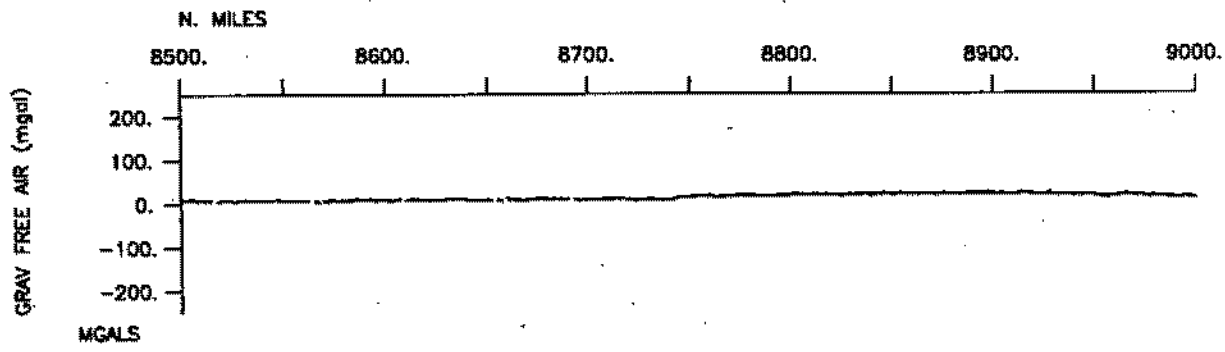


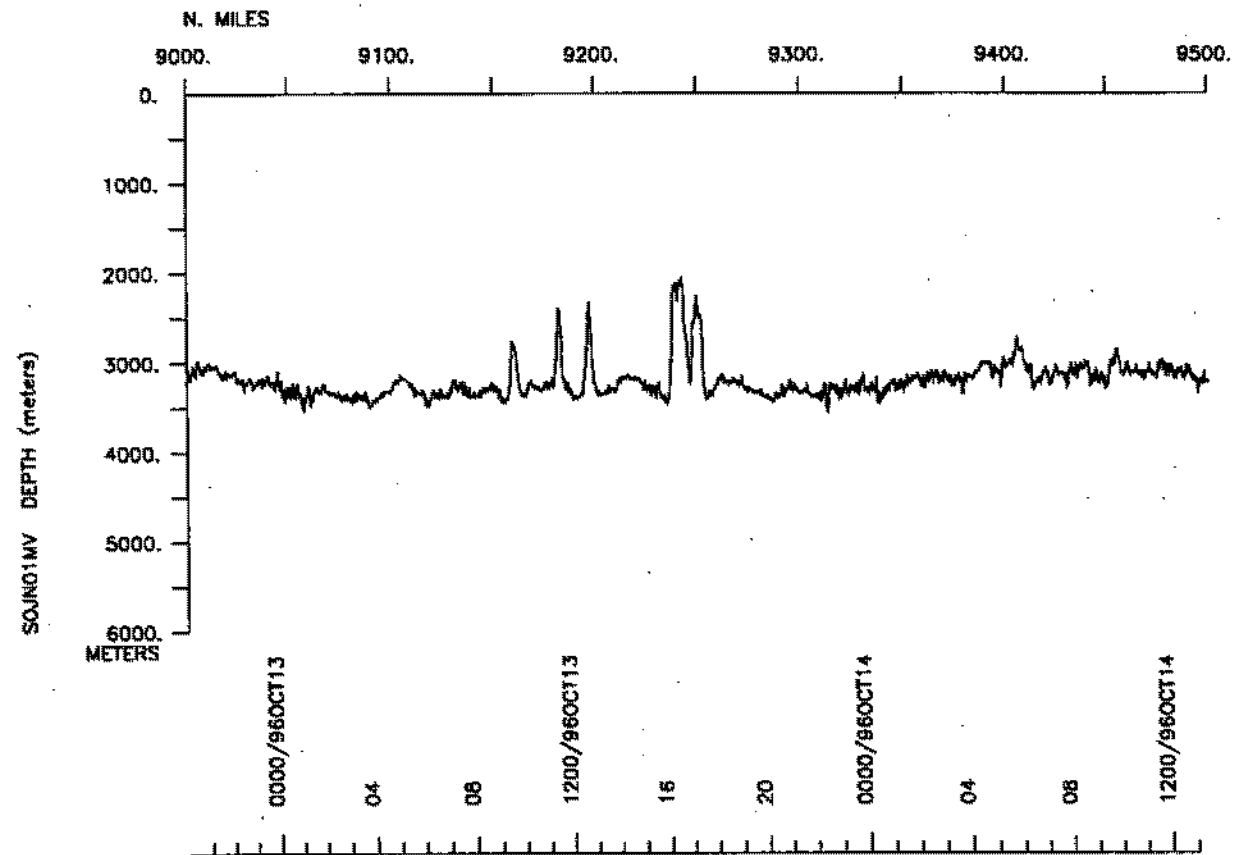
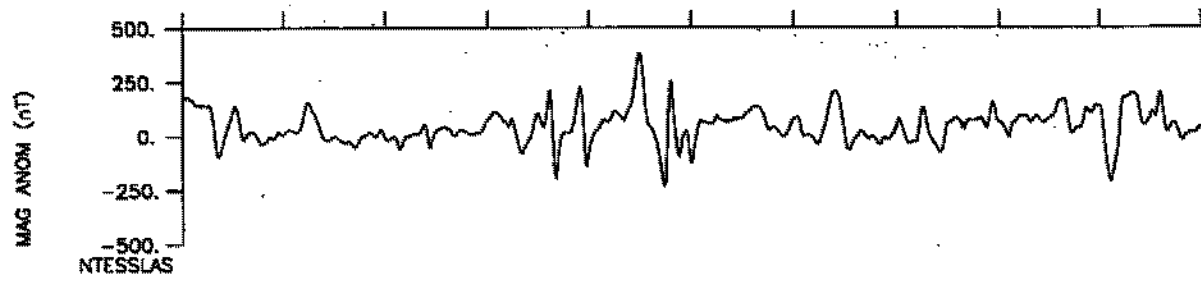
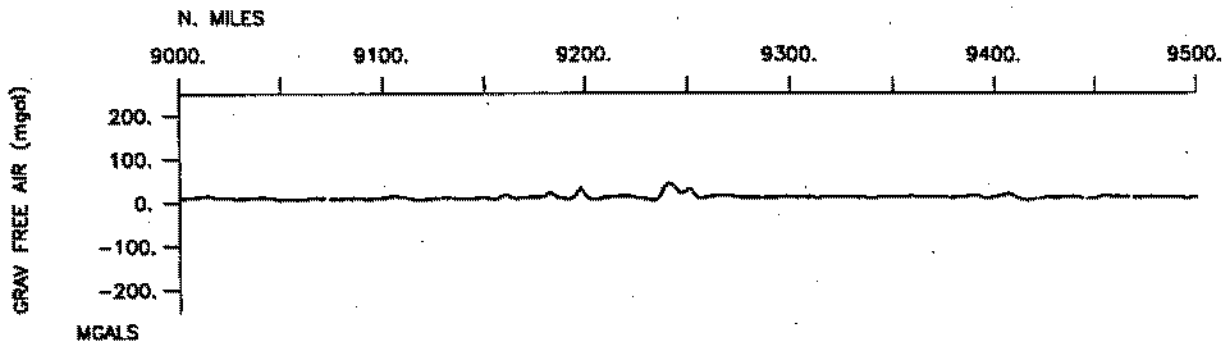


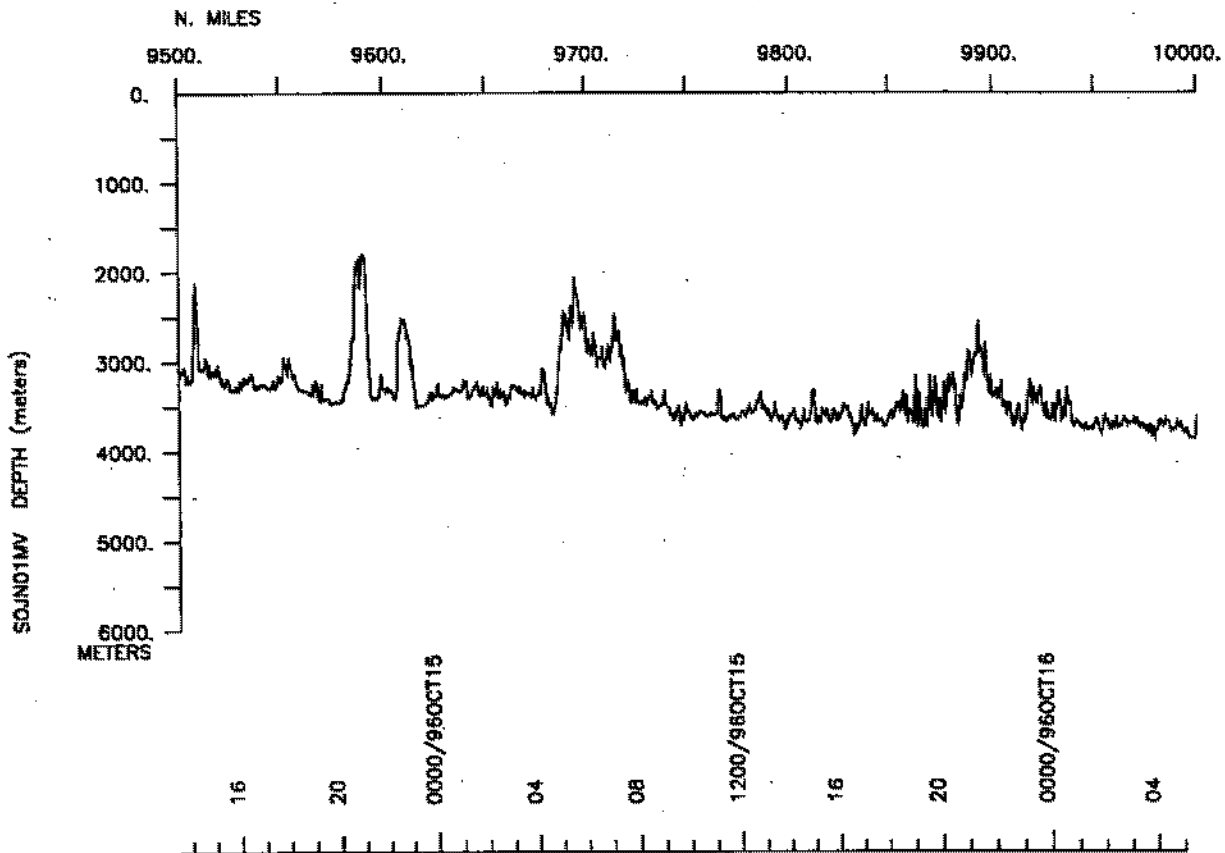
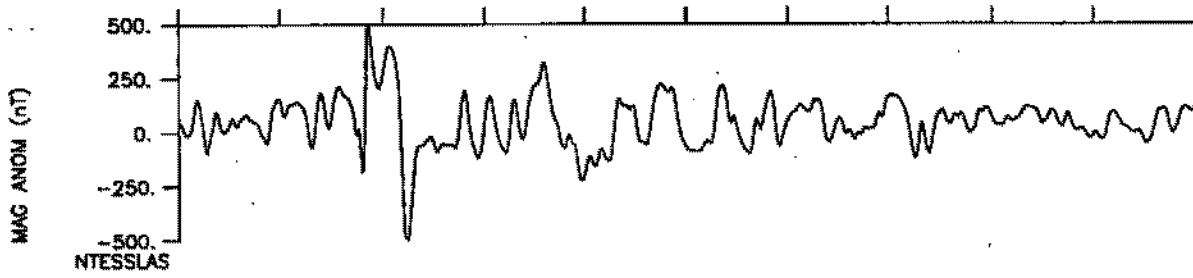
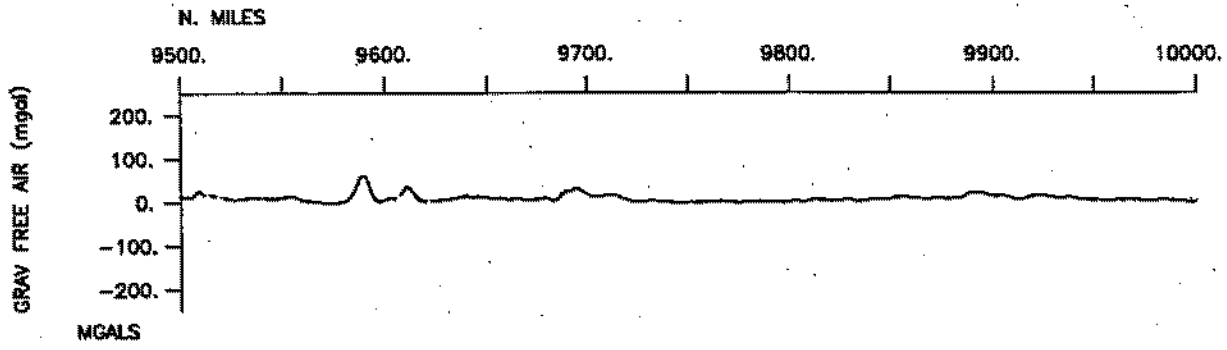


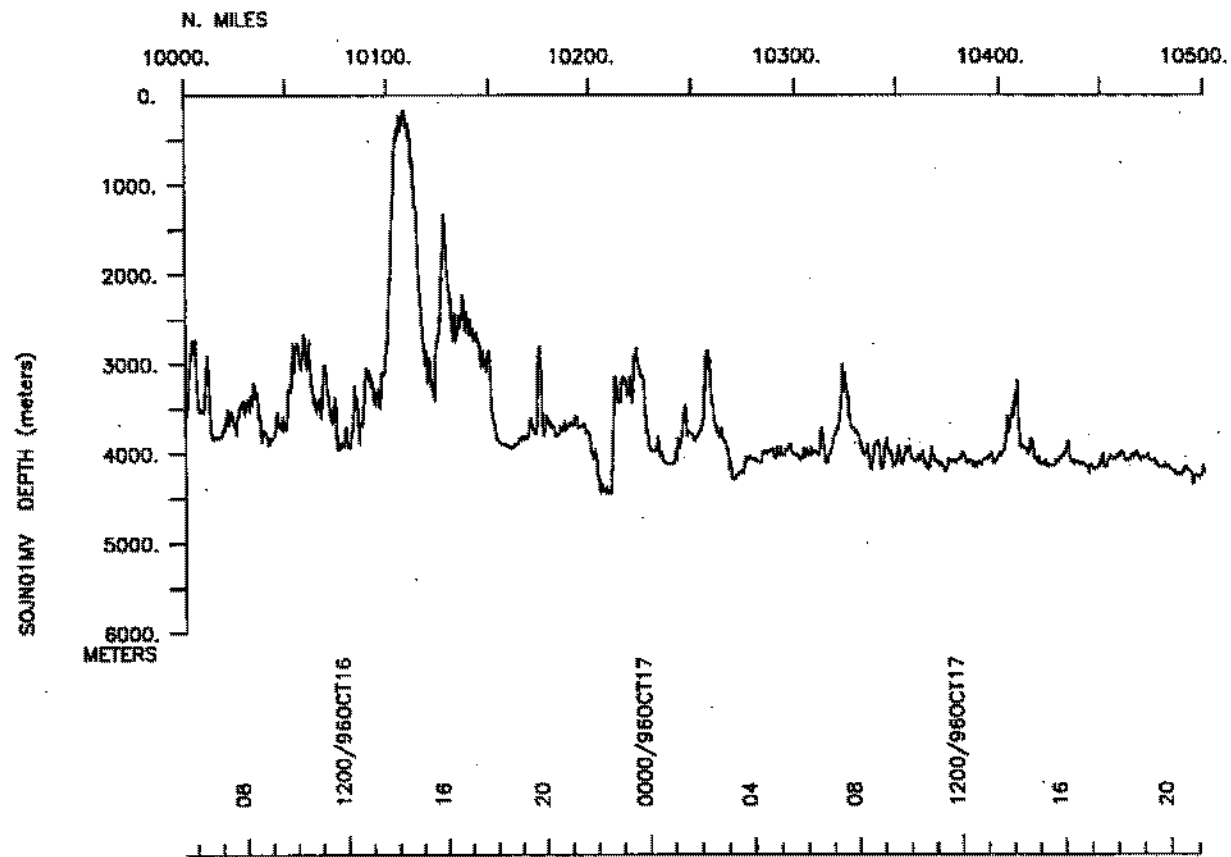
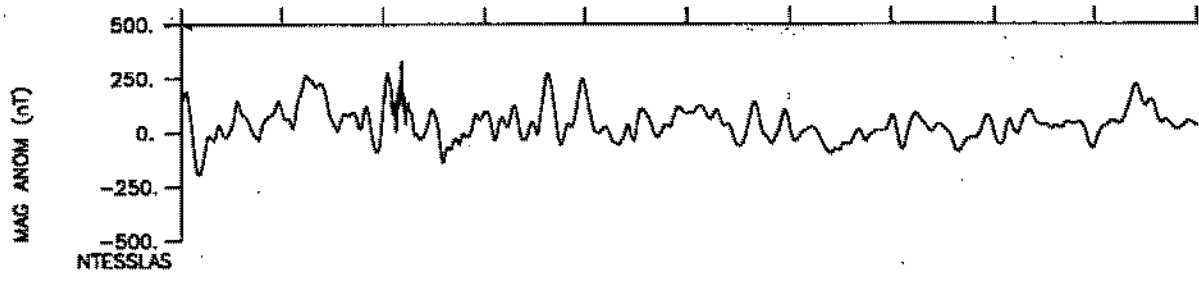
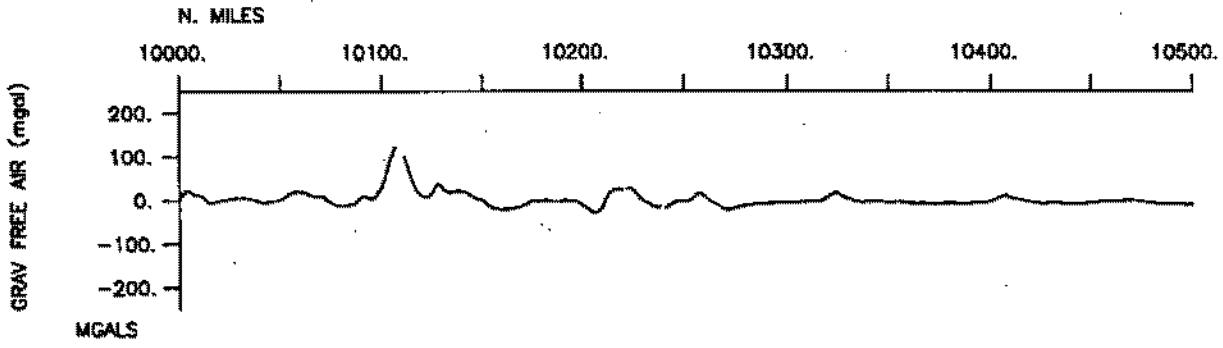


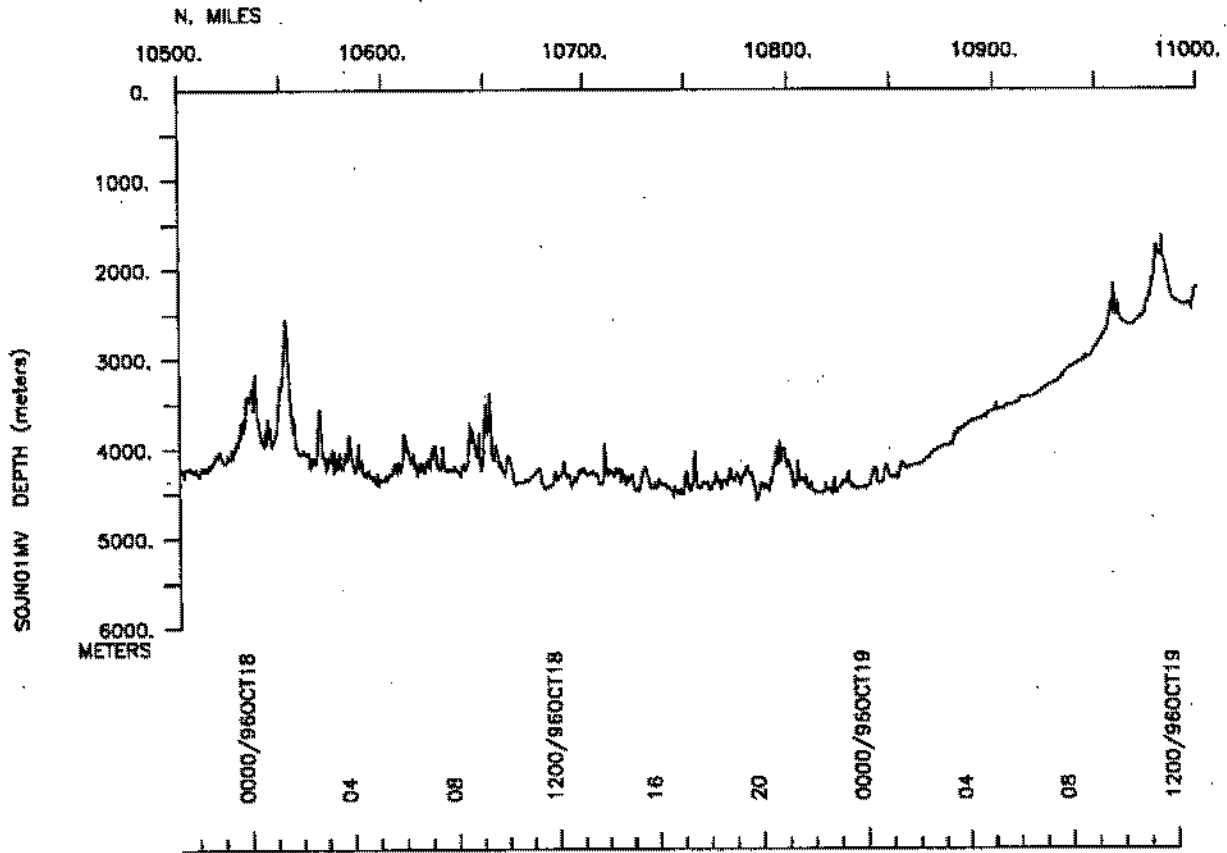
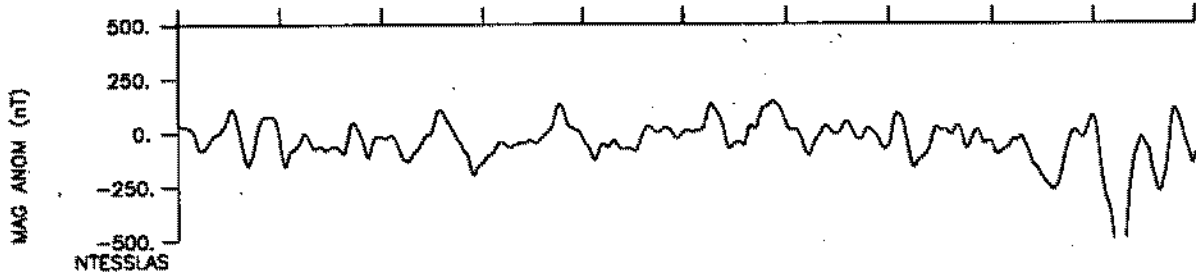
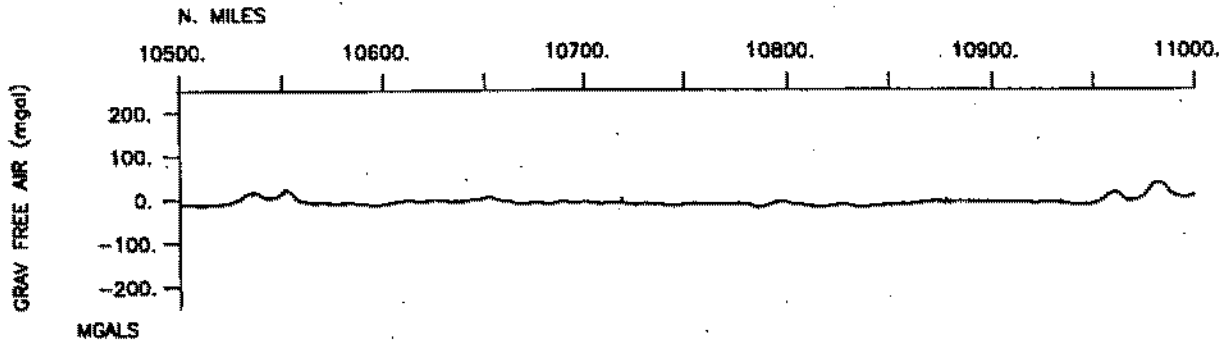


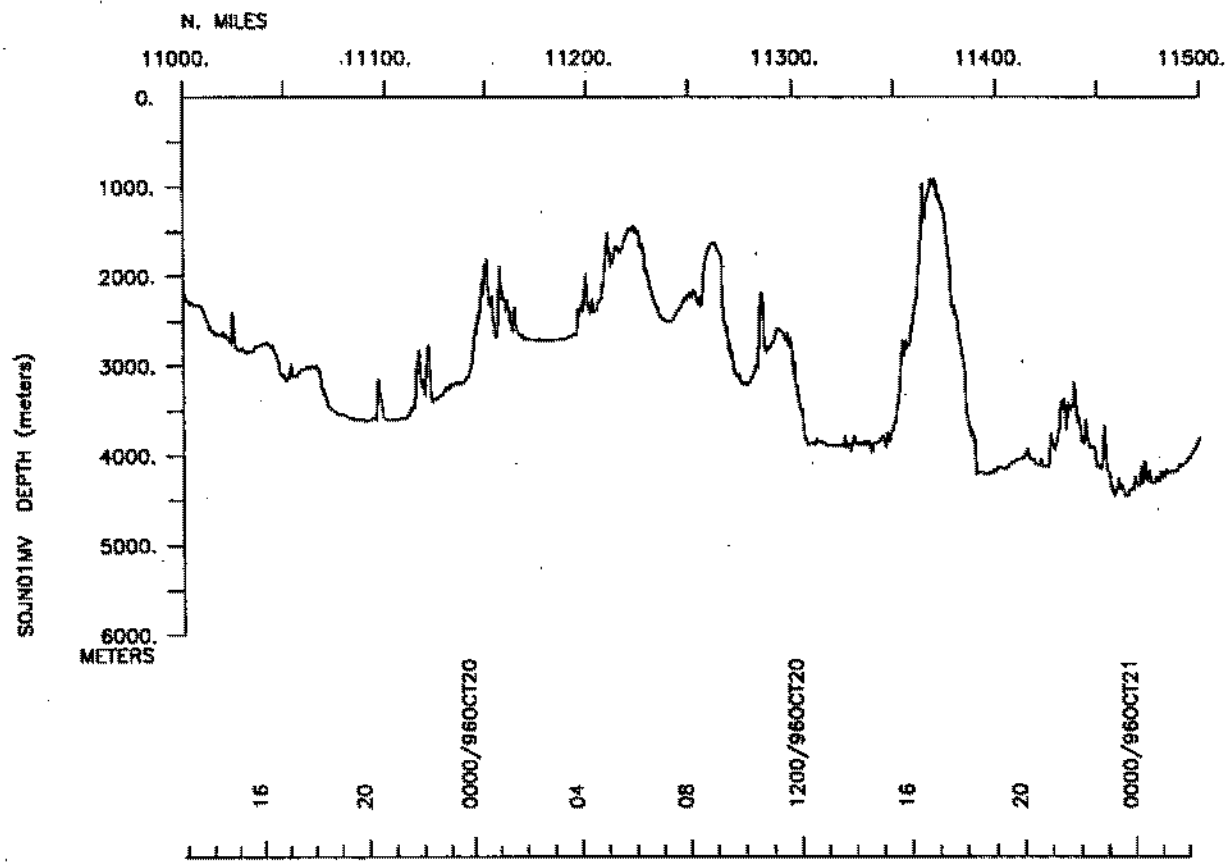
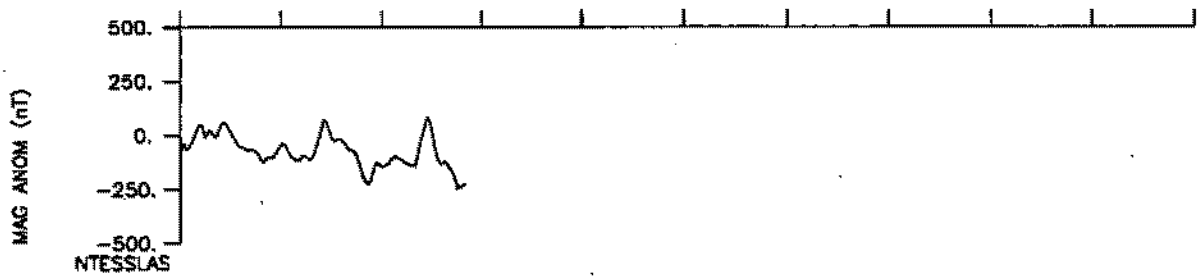
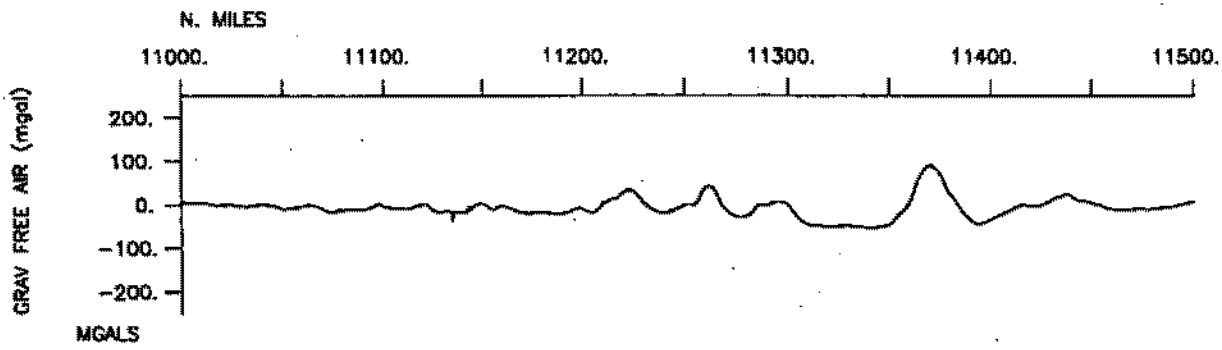


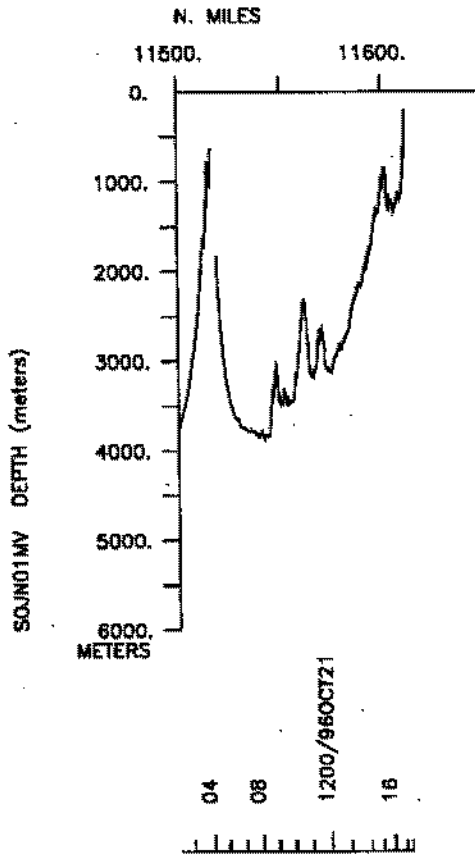
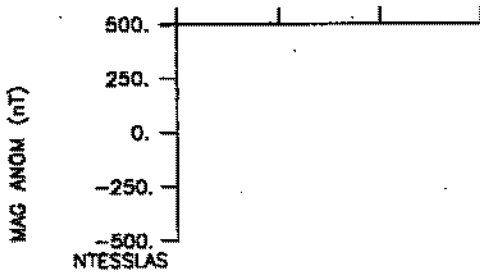
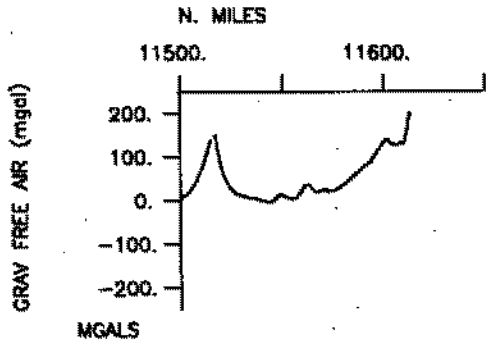












S.I.O. SAMPLE INDEX

SOJOURN EXPEDITION

LEG 1

(SOJN01MV)

R/V Melville

(Issued November 1996)

PORTS:

San Diego, California (8 September 1996)
to
Papeete, Tahiti (21 October 1996)

Chief Scientist:

Daniel Scheirer, Brown 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 cods are available from the Geological Data Center.)

GDC CRUISE I.D.# 269

**** Ports ***

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1742 211096   LGPT E Papeete, Tahiti          GDC 17-32.00S 149-34.00W f SOJN01MV

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**** Personnel ***

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# *****NAME***** *****TITLE***** *****AFFILIATION***** **CRID**
#-----
PECS BRNU Scheirer, Daniel      Chief Scientist      Brown University     SOJN01MV
PESP LDEO Cormier, Marie-H.     Co-Chief Scientist  Lamont-Doherty      SOJN01MV
PESP UCSB Haymon, Rachel        Scientist            U.C. Santa Barbara  SOJN01MV
PESP STS Goodwillie, Andrew     Sbeam Processor     Scripps Institution  SOJN01MV
PERT STS Comer, Ron            Res. Technician     Scripps Institution  SOJN01MV
PECT STS Moe, Ron              Computer Engineer   Scripps Institution  SOJN01MV
PEET STS Heckman, Earl         Hardware Tech.      Scripps Institution  SOJN01MV
PEST UCSB Baron, Susan         Grad. Student       U.C. Santa Barbara  SOJN01MV
PEST UCSB Crowder, Lisa        Grad. Student       U.C. Santa Barbara  SOJN01MV
PEST UCSB Hobson, Joanna       Grad. Student       U.C. Santa Barbara  SOJN01MV
PEST UCSB Sharfstein, Phil     Grad. Student       U.C. Santa Barbara  SOJN01MV
PEST UCSB White, Scott         Undergrad. Stud.    U.C. Santa Barbara  SOJN01MV
PEST UCSB Terra, Fabia         Undergrad. Stud.    U.C. Santa Barbara  SOJN01MV
PEVL UCSB Sandell, Catherine   Volunteer           U.C. Santa Barbara  SOJN01MV
PEVL UCSB Birk, Erika          Volunteer           U.C. Santa Barbara  SOJN01MV
PEVL UCSB Bezy, Bernadette     Volunteer           U.C. Santa Barbara  SOJN01MV

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**** NOTES ***

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#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 ****

1530	080996	0	LBUW	B Underway watch log	GDC	32-41.99N	117-14.24W	g	SOJN01MV
2342	191096	0	LBUW	E Underway watch log	GDC	17-09.86S	141-37.42W	g	SOJN01MV
1530	080996	0	LBSC	B Science Log Book	BRNU	32-41.99N	117-14.24W	g	SOJN01MV
0935	081096	0	LBSC	E Volume 1	BRNU	19-12.51S	112-50.11W	g	SOJN01MV
0944	081096	0	LBSC	B Science Log Book	BRNU	19-12.52S	112-51.93W	g	SOJN01MV
1200	201096	0	LBSC	E Volume 2	BRNU	17-16.43S	144-27.59W	g	SOJN01MV

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

0921	100996	0	MBSR	B vbeam& sidescan r-01	GDC	25-46.71N	119-19.26W	g	SOJN01MV
0705	170996	0	MBSR	E vbeam& sidescan r-01	GDC	5-49.33S	114-25.57W	g	SOJN01MV
0712	170996	0	MBSR	B vbeam& sidescan r-02	GDC	5-50.73S	114-25.94W	g	SOJN01MV
0338	031096	0	MBSR	E vbeam& sidescan r-02	GDC	18-19.37S	111-06.93W	g	SOJN01MV
0342	031096	0	MBSR	B vbeam& sidescan r-03	GDC	18-19.35S	111-06.26W	g	SOJN01MV
0950	081096	0	MBSR	E vbeam& sidescan r-03	GDC	19-12.49S	112-53.14W	g	SOJN01MV
0954	081096	0	MBSR	B vbeam& sidescan r-04	GDC	19-12.48S	112-53.96W	g	SOJN01MV
1715	211096	0	MBSR	E vbeam& sidescan r-04	GDC	17-31.93S	149-35.24W	g	SOJN01MV

**** Magnetism (Earth Total Field) Records ****

0935	100996	0	MGRA	B Magnetic record r-01	GDC	25-44.92N	119-19.81W	g	SOJN01MV
1515	190996	0	MGRA	E Magnetic record r-01	GDC	13-39.86S	114-58.30W	g	SOJN01MV
1527	190996	0	MGRA	B Magnetic record r-02	GDC	13-40.48S	114-56.09W	g	SOJN01MV
0414	011096	0	MGRA	E Magnetic record r-02	GDC	17-59.94S	110-34.08W	g	SOJN01MV
0426	101096	0	MGRA	B Magnetic record r-03	GDC	19-40.20S	114-16.81W	g	SOJN01MV
0350	131096	0	MGRA	E Magnetic record r-03	GDC	15-45.42S	111-26.93W	g	SOJN01MV
0356	131096	0	MGRA	B Magnetic record r-04	GDC	15-46.65S	111-27.08W	g	SOJN01MV
2342	191096	0	MGRA	E Magnetic record r-04	GDC	17-09.86S	141-37.42W	g	SOJN01MV

**** Continuous Recorded Gravity ****

2206	080996	0	GVCR	B Gravity	GDC	32-41.99N	117-14.24W	g	SOJN01MV
1742	211096	0	GVCR	E Gravity	GDC	17-32.04S	149-34.31W	g	SOJN01MV

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

*** Integrated Meteorological Acquisition System ***

2206	080996	0	IMET	B	Weather measurements	GDC	32-41.99N	117-14.24W	g	SOJN01MV
1742	211096	0	IMET	E	Weather measurements	GDC	17-32.04S	149-34.31W	g	SOJN01MV

*** Acoustic Doppler Current Profiler ***

1930	150996	0	ADCP	B	Accoustic Doppler	GDC	0-58.31N	115-21.64W	g	SOJN01MV
1742	211096	0	ADCP	E	Current Profiler	GDC	17-32.04S	149-34.31W	g	SOJN01MV

*** Expendable Bathythermographs ***

1424	100996	0	BTXP	XBT	T-5 t-5\$1.sip	NOAA	24-47.73N	119-32.70W	g	SOJN01MV
1117	110996	0	BTXP	XBT	T-5 t-5\$2.sip	NOAA	20-32.35N	118-45.54W	g	SOJN01MV
1125	120996	0	BTXP	XBT	T-5 t-5\$3.sip	NOAA	15-42.67N	117-53.79W	g	SOJN01MV
1539	130996	0	BTXP	XBT	T-5 t-5\$4.sip	NOAA	10-11.82N	116-56.17W	g	SOJN01MV
1144	140996	0	BTXP	XBT	T-5 t-5\$5.sip	NOAA	6-08.61N	116-14.68W	g	SOJN01MV
1502	150996	0	BTXP	XBT	T-5 t-5\$6.sip	NOAA	1-44.20N	115-29.51W	g	SOJN01MV
1511	150996	0	BTXP	XBT	T-5 t-5\$7.sip	NOAA	1-42.65N	115-29.24W	g	SOJN01MV
1226	160996	0	BTXP	XBT	T-5 t-5\$8.sip	NOAA	2-16.90S	114-48.54W	g	SOJN01MV
2137	170996	0	BTXP	XBT	T-5 t-5\$9.sip	NOAA	8-39.65S	115-13.25W	g	SOJN01MV
2030	180996	0	BTXP	XBT	T-5 t-5\$10.sip	NOAA	13-07.35S	116-29.24W	g	SOJN01MV
2139	200996	0	BTXP	XBT	T-5 t-5\$11.sip	NOAA	15-29.65S	110-15.74W	g	SOJN01MV
1908	210996	0	BTXP	XBT	T-5 t-5\$12.sip	NOAA	15-45.69S	110-52.13W	g	SOJN01MV
1915	220996	0	BTXP	XBT	T-5 t-5\$13.sip	NOAA	15-58.07S	110-59.36W	g	SOJN01MV
2042	230996	0	BTXP	XBT	T-5 t-5\$14.sip	NOAA	16-09.19S	110-52.69W	g	SOJN01MV
1921	240996	0	BTXP	XBT	T-5 t-5\$15.sip	NOAA	16-21.87S	110-57.78W	g	SOJN01MV
1920	250996	0	BTXP	XBT	T-5 t-5\$16.sip	NOAA	16-35.77S	111-15.21W	g	SOJN01MV
2243	260996	0	BTXP	XBT	T-5 t-5\$17.sip	NOAA	16-43.20S	110-47.64W	g	SOJN01MV
2006	270996	0	BTXP	XBT	T-5 t-5\$18.sip	NOAA	17-24.96S	111-45.09W	g	SOJN01MV
2022	290996	0	BTXP	XBT	T-5 t-5\$19.sip	NOAA	17-45.58S	111-23.43W	g	SOJN01MV
1939	300996	0	BTXP	XBT	T-5 t-5\$20.sip	NOAA	17-58.34S	111-39.40W	g	SOJN01MV
1946	300996	0	BTXP	XBT	T-5 t-5\$21.sip	NOAA	17-58.24S	111-38.15W	g	SOJN01MV
1925	011096	0	BTXP	XBT	T-5 t-5\$22.sip	NOAA	18-09.74S	111-47.56W	g	SOJN01MV
1925	021096	0	BTXP	XBT	T-5 t-5\$23.sip	NOAA	18-22.37S	112-29.02W	g	SOJN01MV
1929	021096	0	BTXP	XBT	T-5 t-5\$24.sip	NOAA	18-22.34S	112-28.32W	g	SOJN01MV
2030	031096	0	BTXP	XBT	T-5 t-5\$25.sip	NOAA	18-26.65S	111-55.66W	g	SOJN01MV
2025	141096	0	BTXP	XBT	T-5 t-5\$26.sip	NOAA	18-56.11S	115-45.27W	g	SOJN01MV
2123	151096	0	BTXP	XBT	T-5 t-5\$27.sip	NOAA	18-06.30S	120-35.46W	g	SOJN01MV
2024	161096	0	BTXP	XBT	T-5 t-5\$28.sip	NOAA	18-18.42S	125-31.14W	g	SOJN01MV
2328	171096	0	BTXP	XBT	T-5 t-5\$29.sip	NOAA	17-04.82S	131-06.20W	g	SOJN01MV
2128	181096	0	BTXP	XBT	T-5 t-5\$30.sip	NOAA	16-49.03S	135-47.19W	g	SOJN01MV
2144	181096	0	BTXP	XBT	T-5 t-5\$31.sip	NOAA	16-49.22S	135-50.70W	g	SOJN01MV

GDC

End Sample Index SOJN01MV