

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

GLORIA EXPEDITION

LEG 9
=====

R/V Melville

(Issued August 1993)

Acapulco, Mexico (5 July 1993)
to
San Diego, Calif. (4 August 1993)

Chief Scientist:

Peter Lonsdale (Scripps Institution)

Resident Marine Technician - Seth Mogk

Computer Technician - Jim Charters

No Sea Beam/Underway Processor on board

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

Data Collection and Processing Funded by:
NSF Grant Number OCE91-00522

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.

GDC Cruise I.D.# 261

INFORMAL 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 anomaly 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, CA 92093-0223. Phone (619)534-2752. Fax (619)534-5306. Internet Email: ssmith@ucsd.edu

1. Files on Exabyte, DAT or 1/2 inch magnetic tape:
 - 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 (not available on 1/2" tape).
 - d) SeaBeam Sidescan data (not available on 1/2" tape).

2. Microfilm (35mm flowfilm) or Xerox 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.

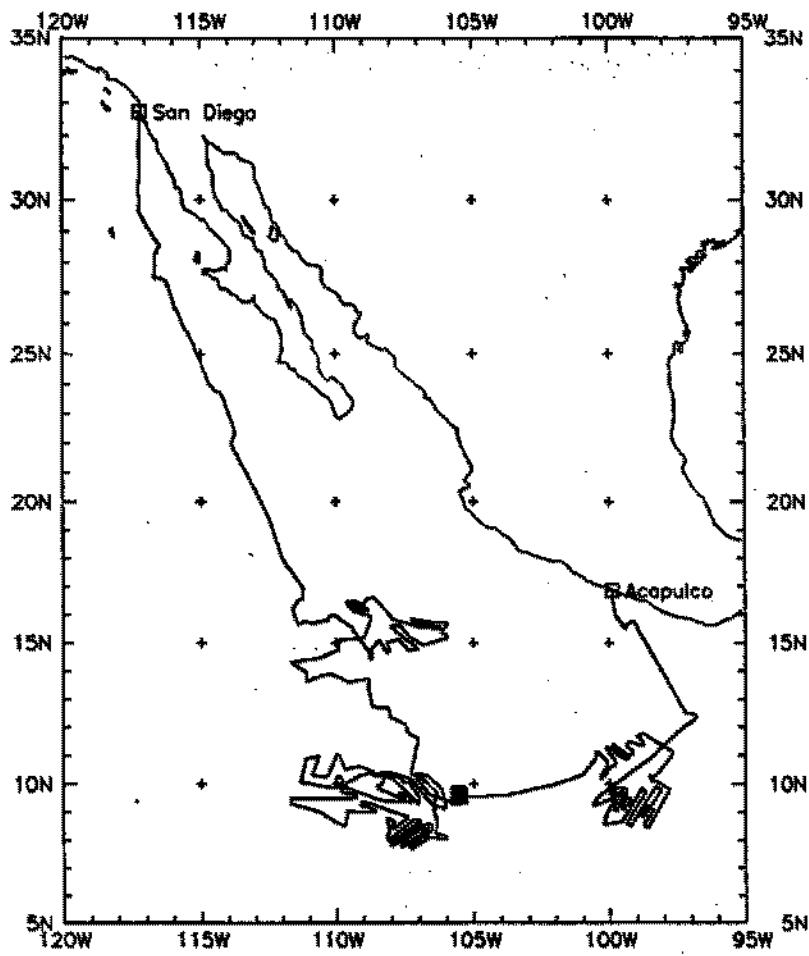
4. Plots:
 - a) Copies of archived 1.2"/degree scale trackplots.
 - b) Copies of archived 8"/degree scale SeaBeam depth plots.
 - c) Custom plots in Mercator projection:
 - 1) Track plots.
 - 2) SeaBeam depth contour plots.
 - 3) Depth, magnetic or gravity values printed or profiled along track.

SIO SeaBeam 2000 Data Information

The following forms are available, subject to approval of the cruise leg chief scientist:

- 1) Hardcopy of realtime contour swath records and records with vertical beam and sidescan grayscale display are available for inspection at the data center.
- 2) Microfilm (35mm flowfilm) of vertical beam/sidescan records.
- 3) Sea Beam merged tapes - Sea Beam data merged with GPS-based navigation. (Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of speeds and drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping Sea Beam swaths.)
- 4) Archive contour plots - 8"/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center; additional copies may be generated from plot files stored on tape.
- 5) Custom generated plots of Sea Beam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns).

Revised February 1993



GLORIA Leg 9 (GLOR09MV)

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GLORIA EXPEDITION LEG 9



CHIEF SCIENTIST: Peter Lonsdale, Scripps Institution

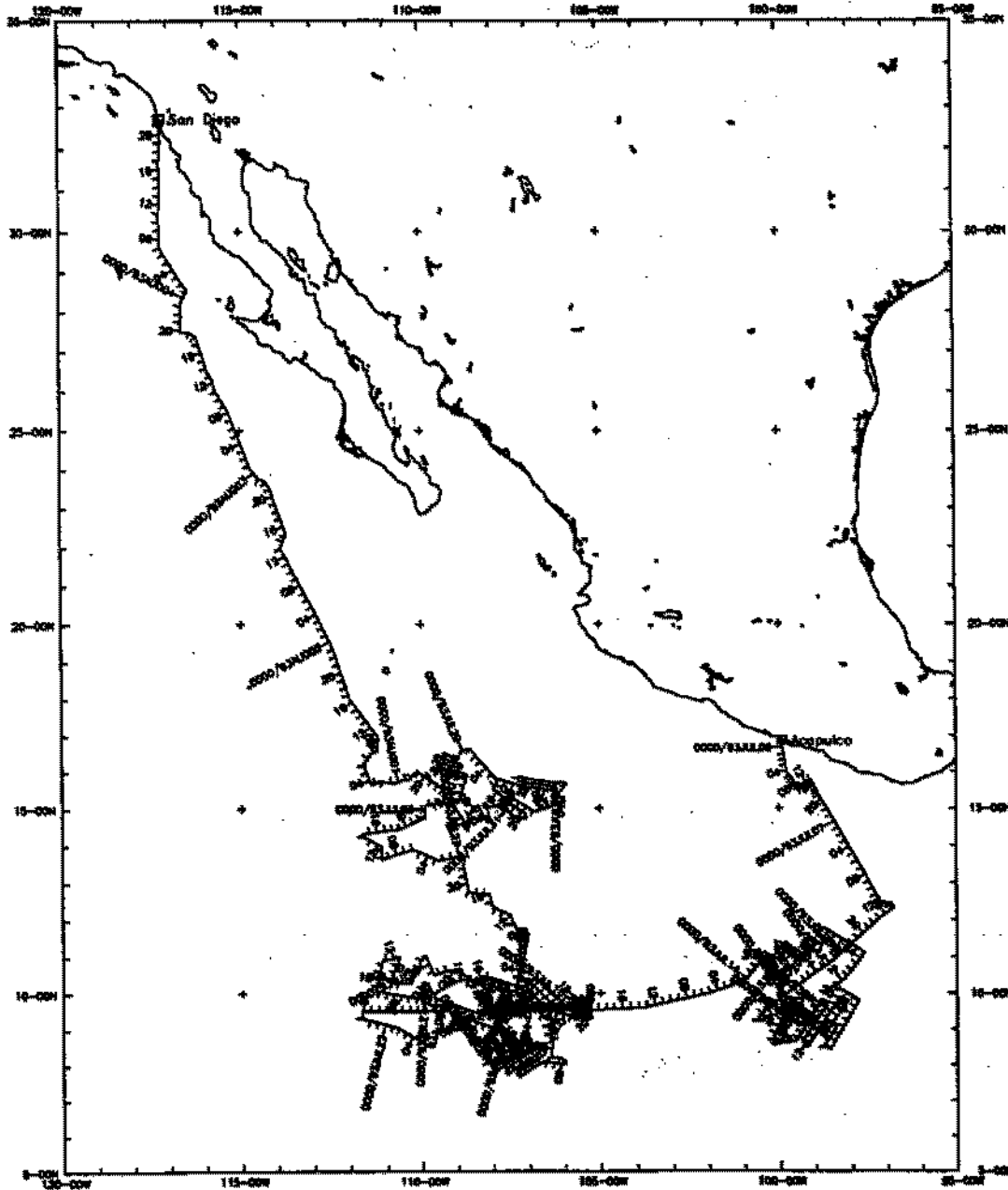
PORTS: Acapulco, Mexico - San Diego, Calif.

DATES: 5 July - 4 August 1993

SHIP: R/V Melville

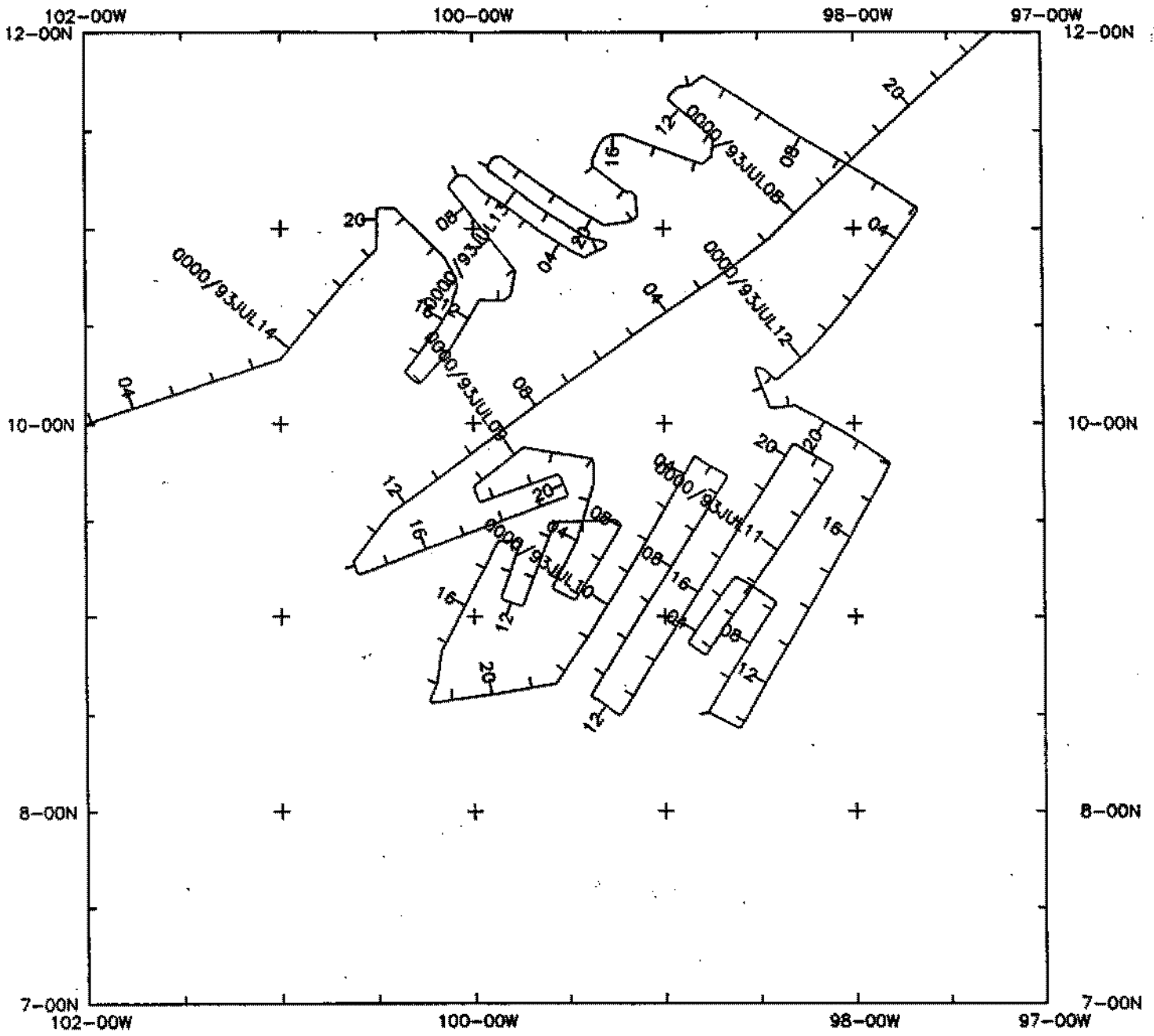
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 9012 miles	Magnetics - 8953 miles
Bathymetry - 8997 miles	Seismic Reflection - none collected
Sea Beam - 8997 miles	Gravity - 8912 miles



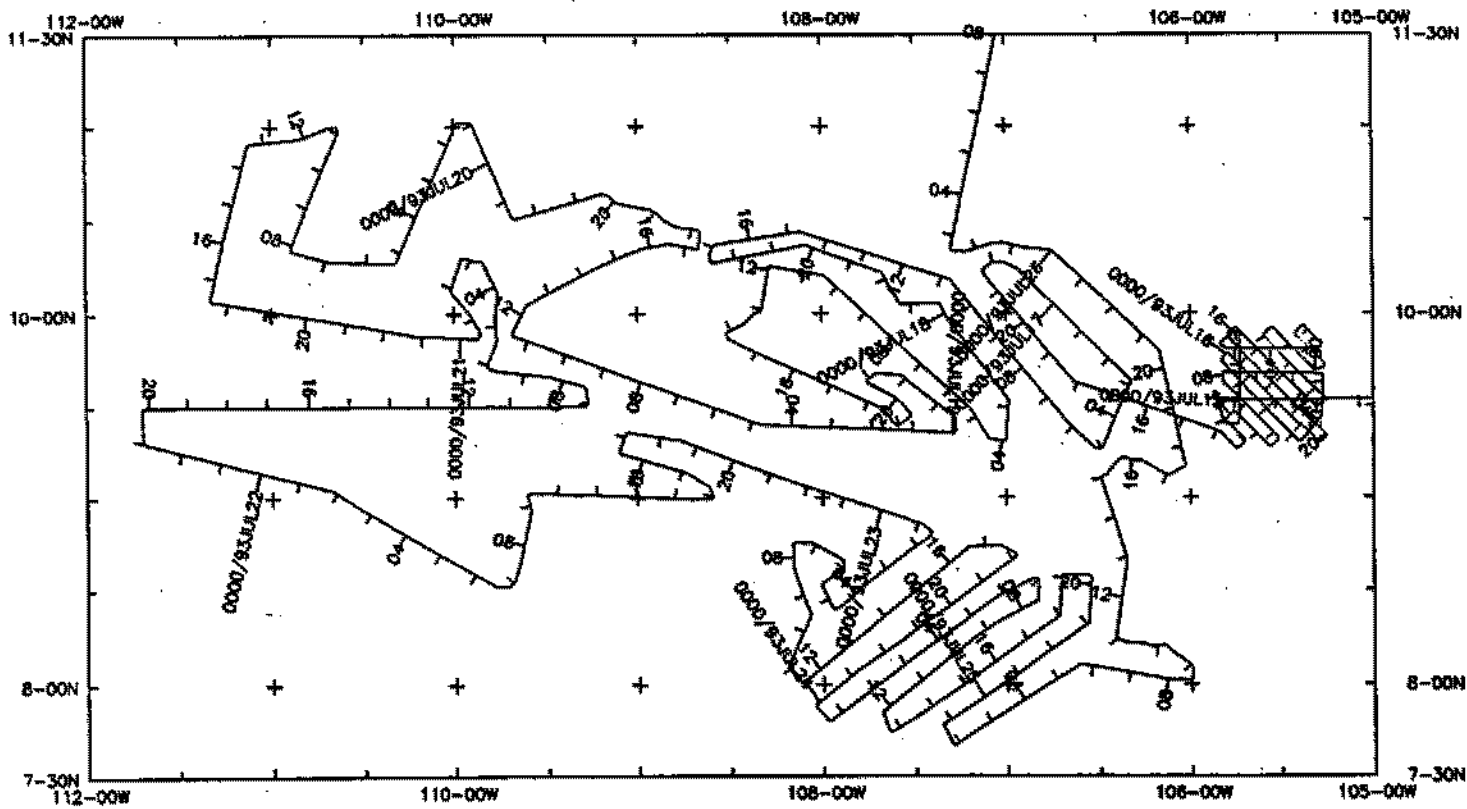
GLORIA LEG 9 (GLOR09MV)

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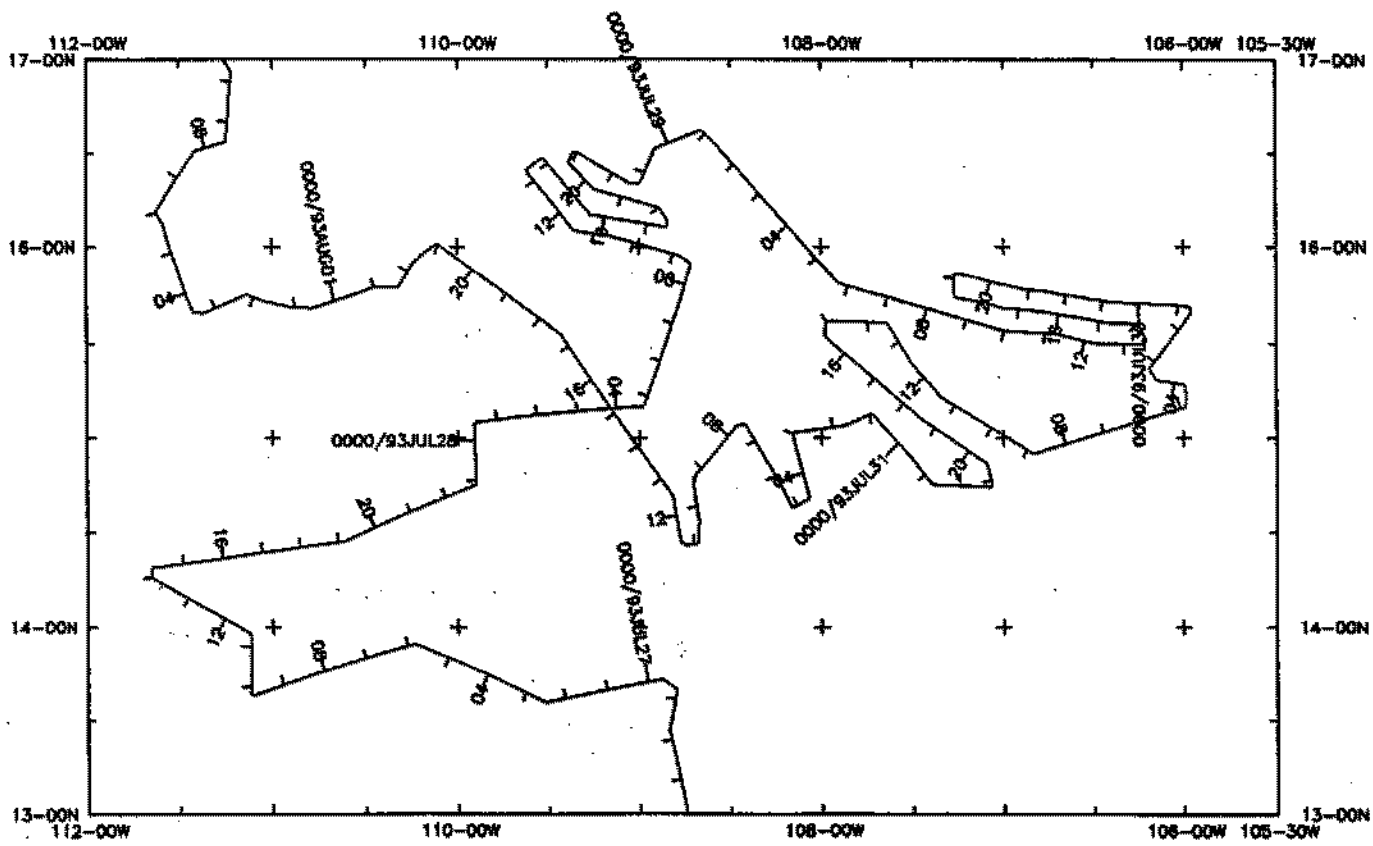
GLORIA LEG 9 (GLOR09MV)
Survey area 1

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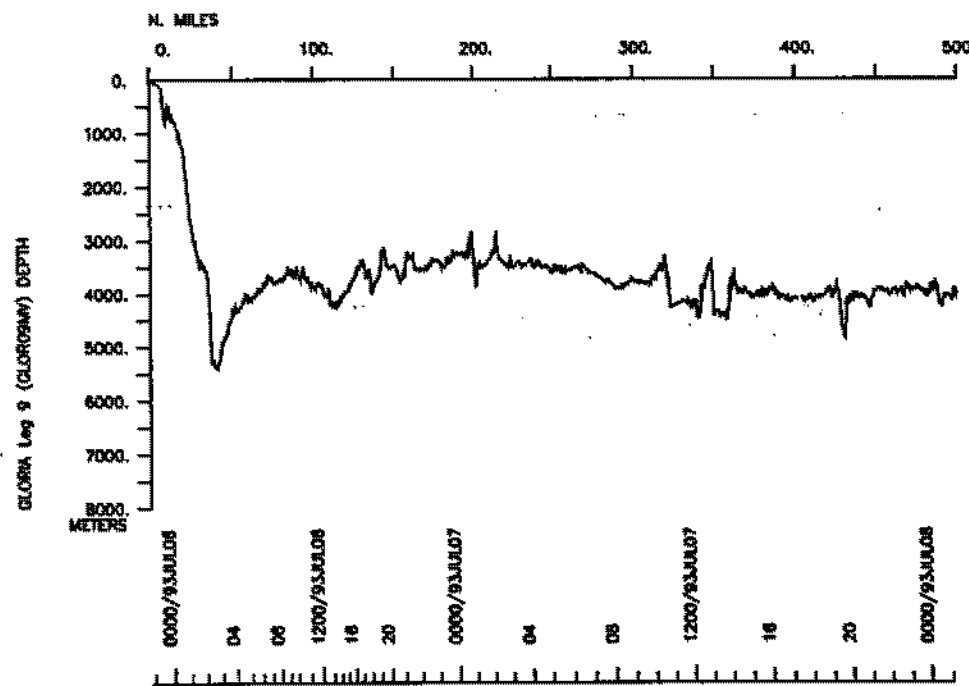
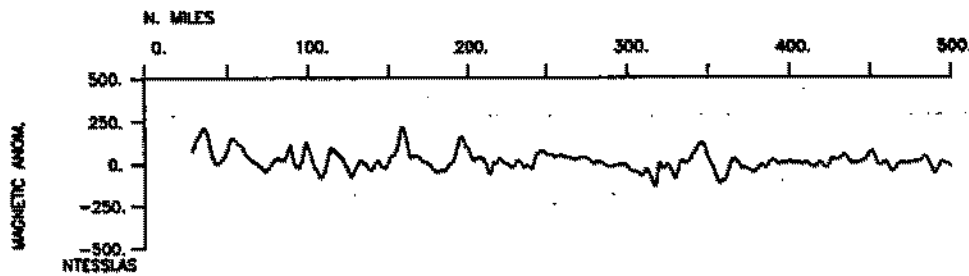
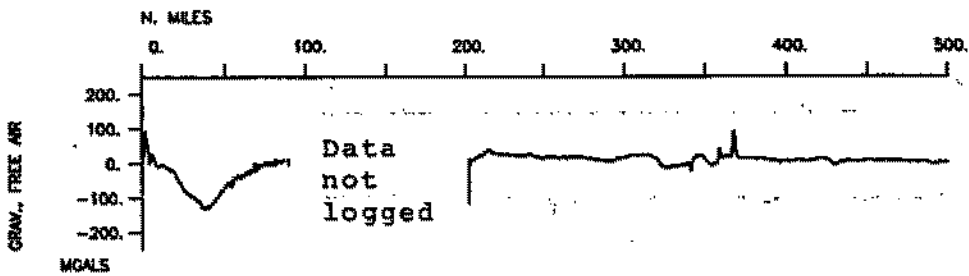
GLORIA LEG 9 (GLOR09MV)
 Survey area 2

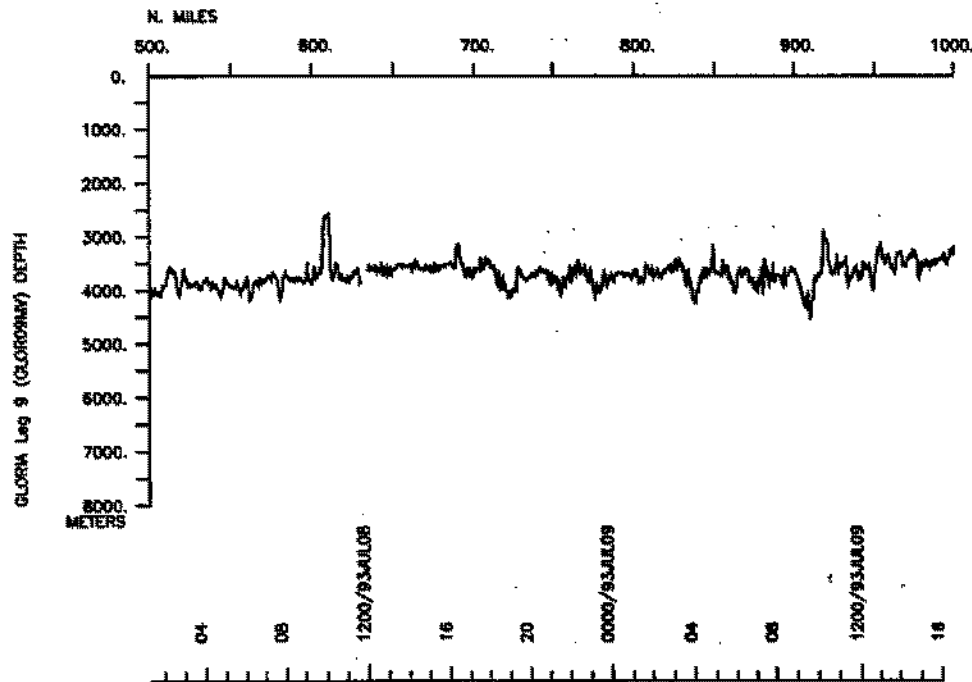
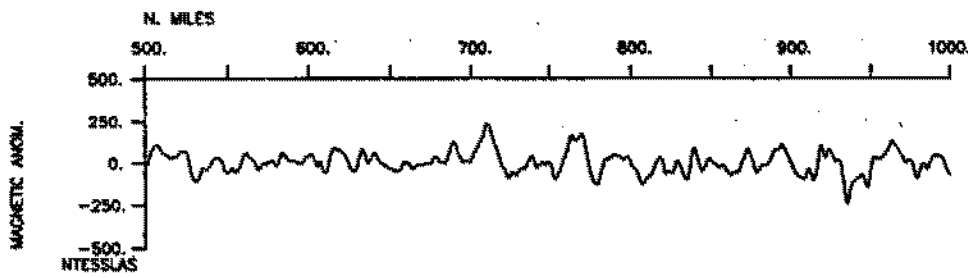
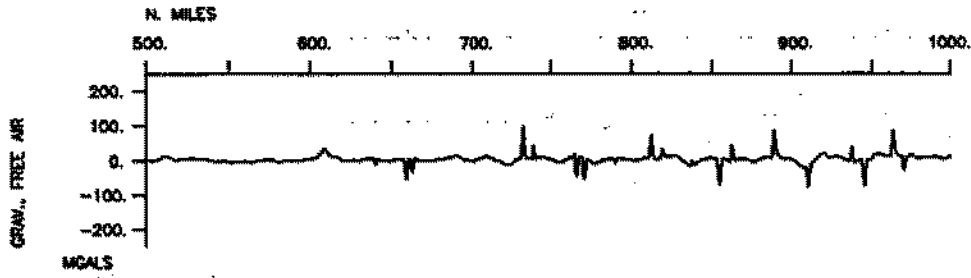
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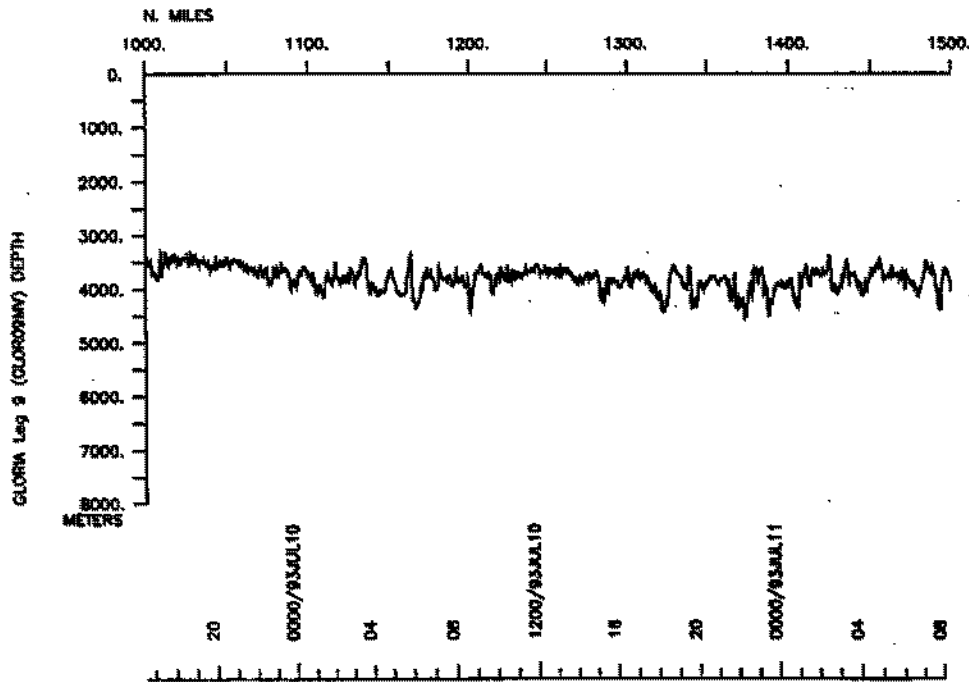
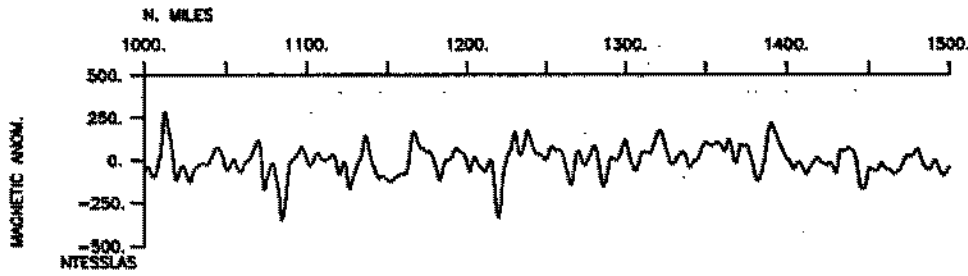
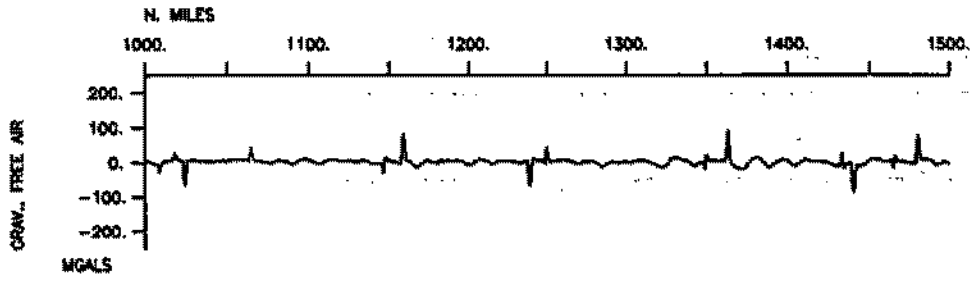


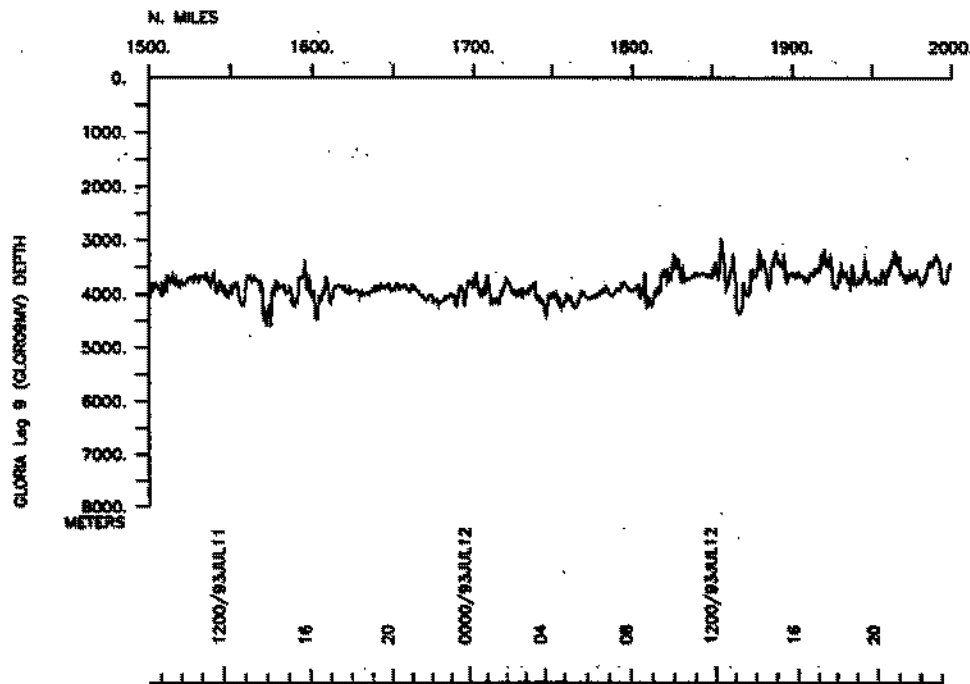
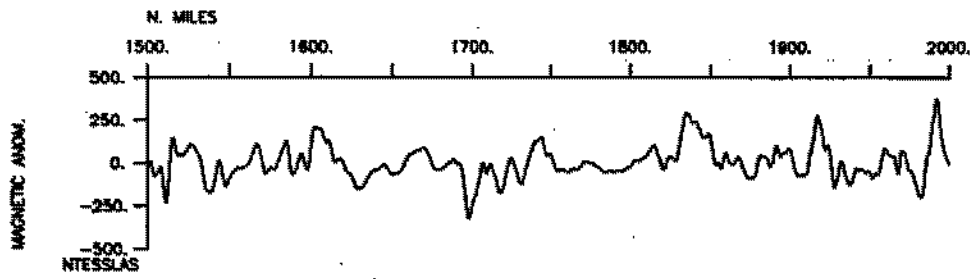
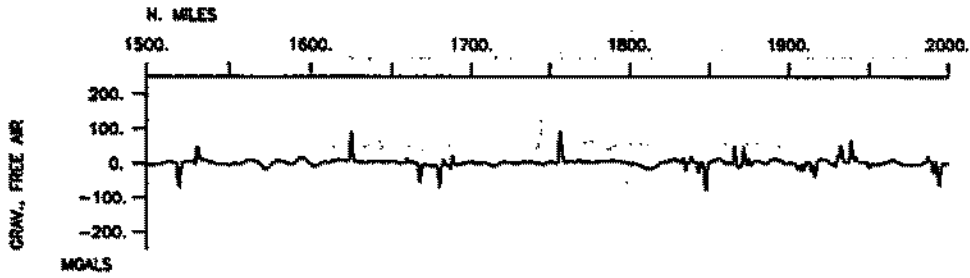
GLORIA LEG 9 (GLOR09MV)
 Survey area 3

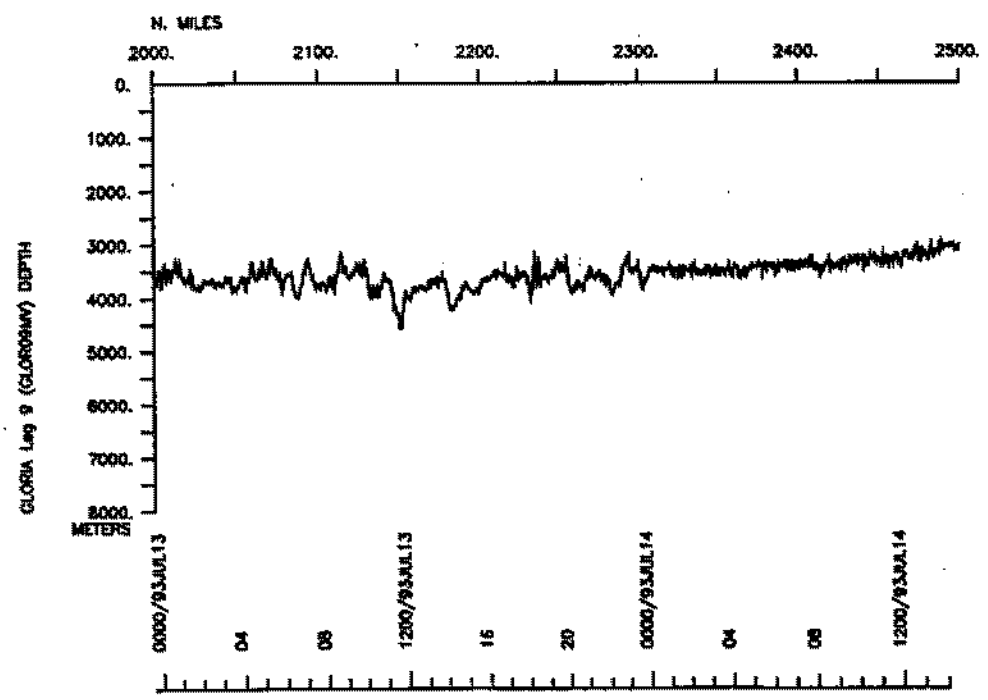
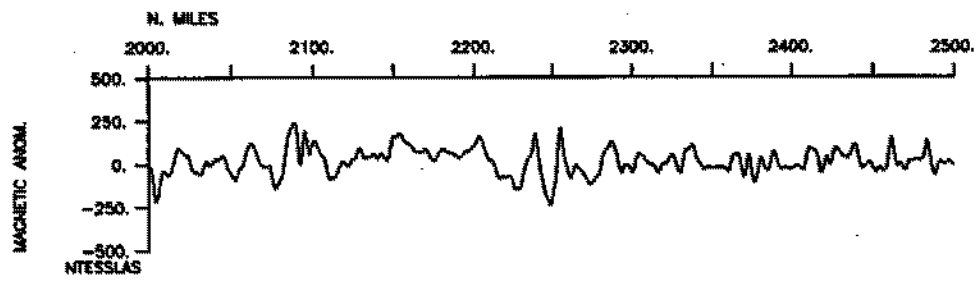
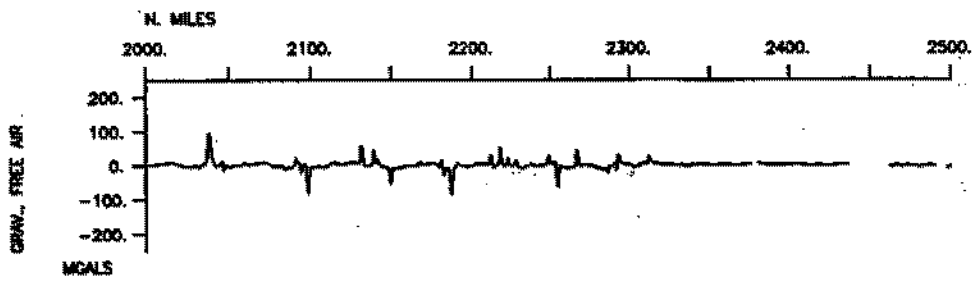
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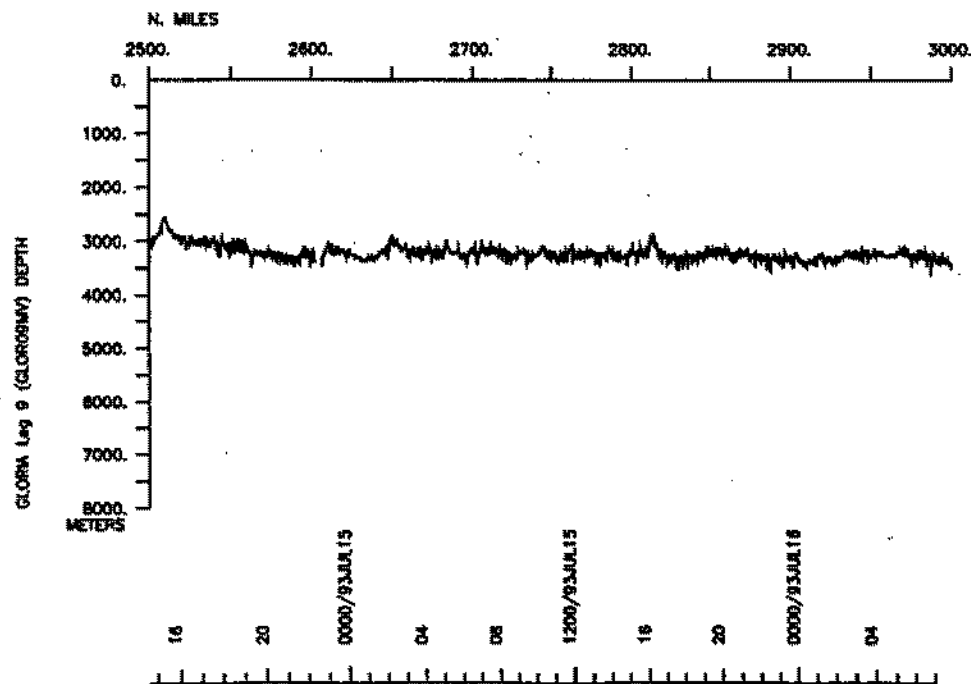
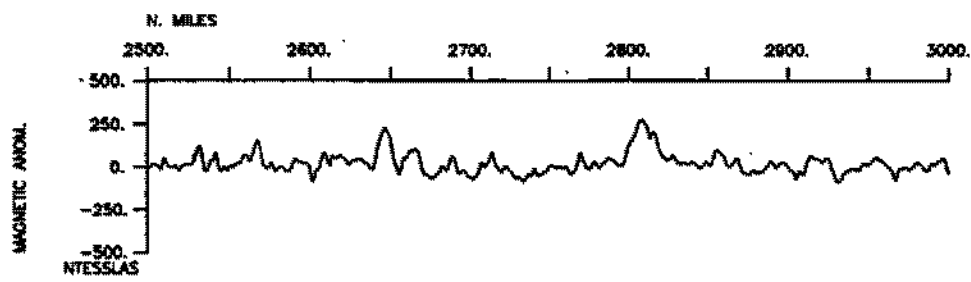
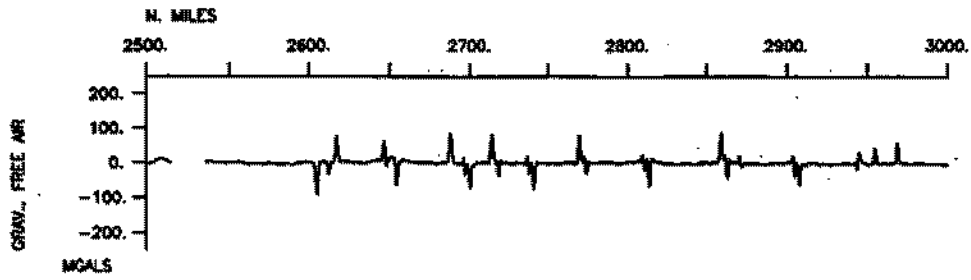


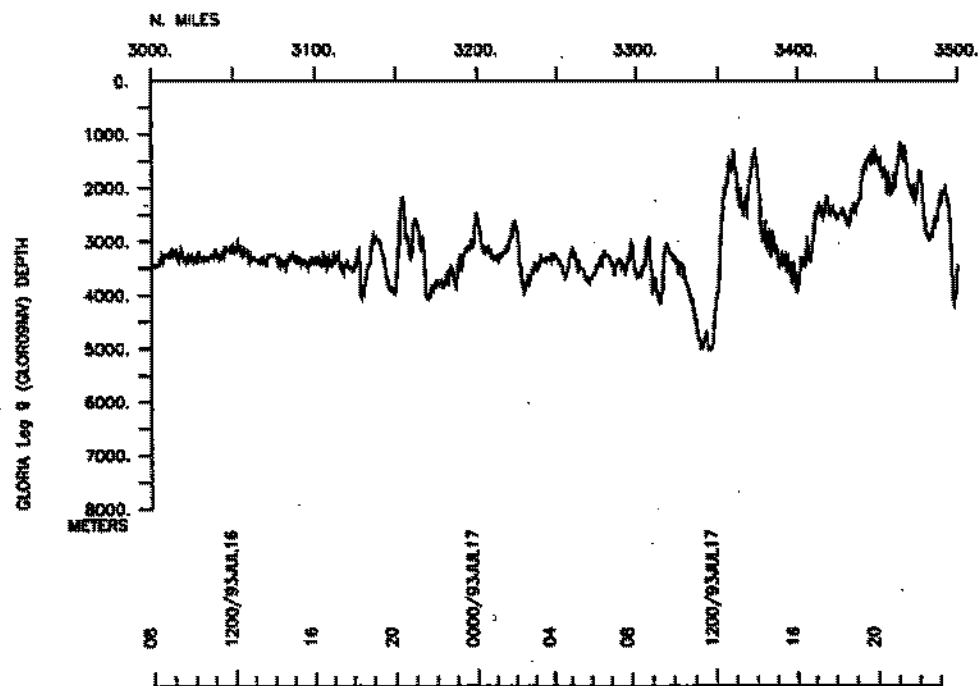
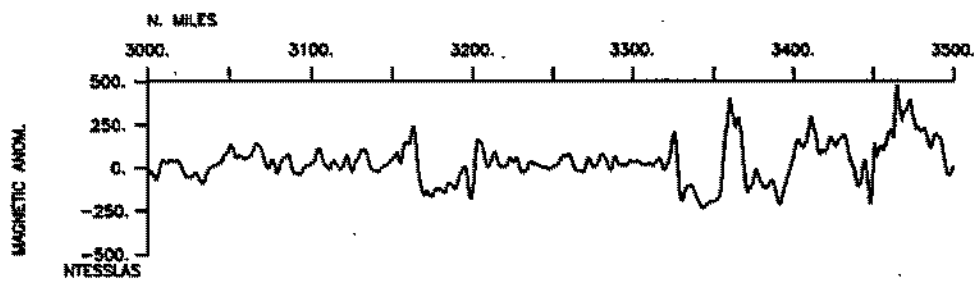
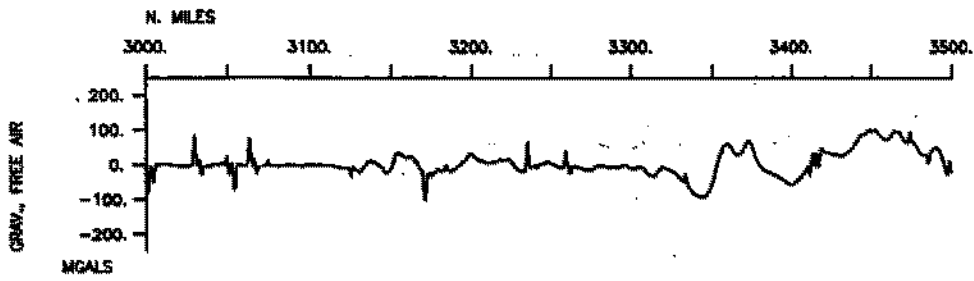


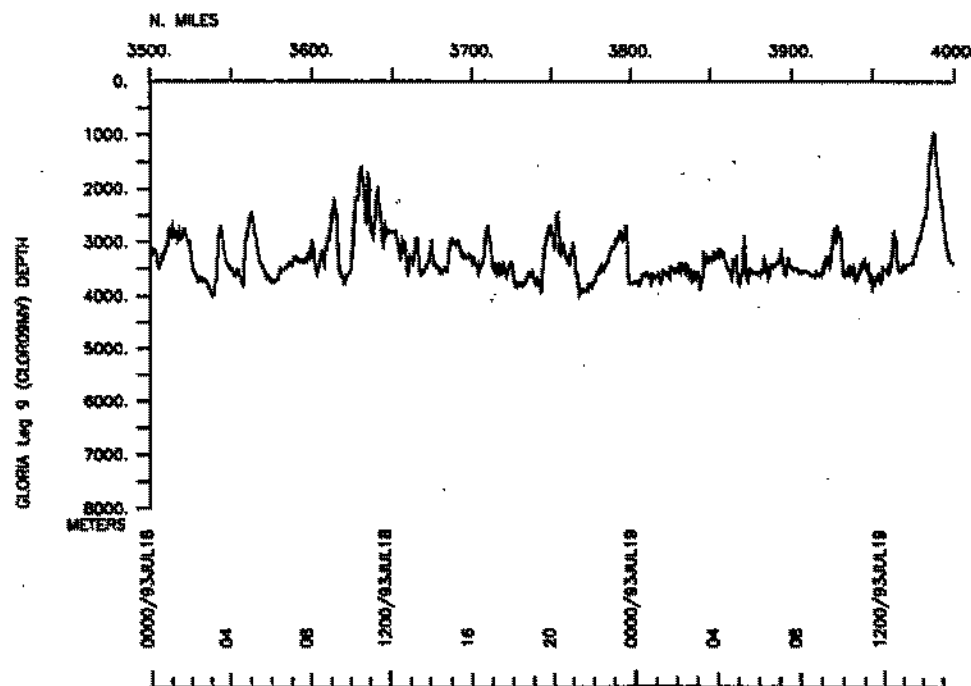
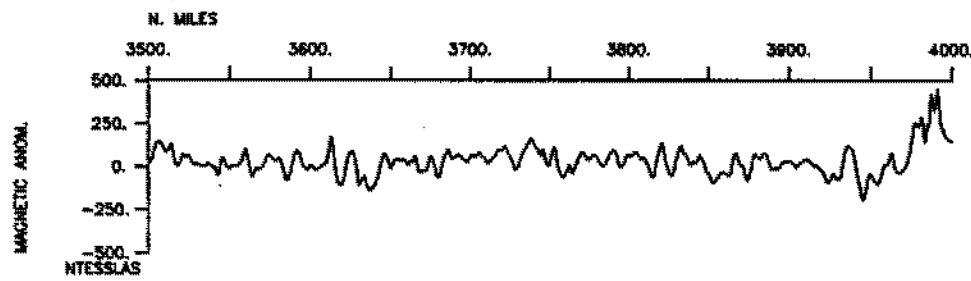
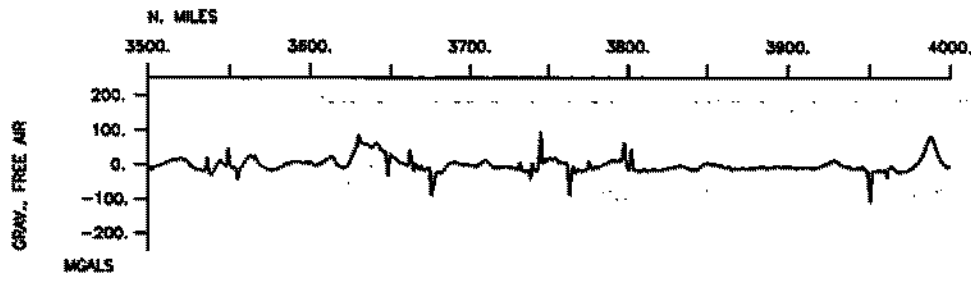


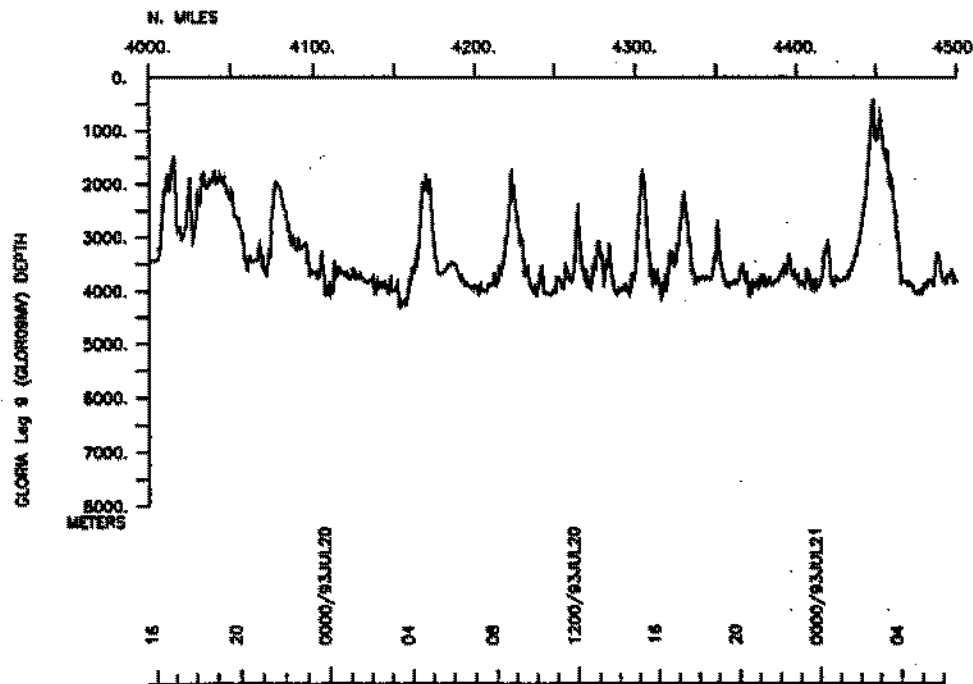
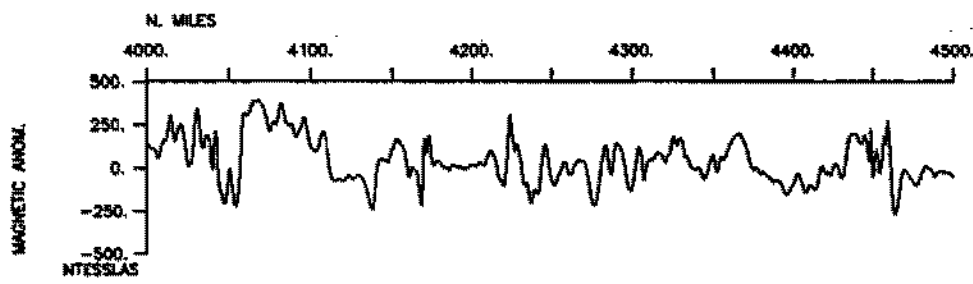
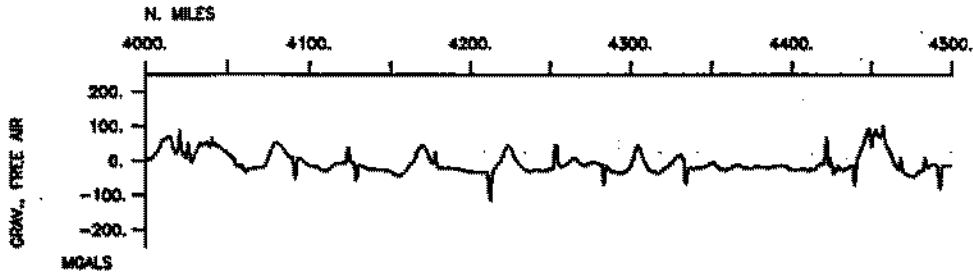


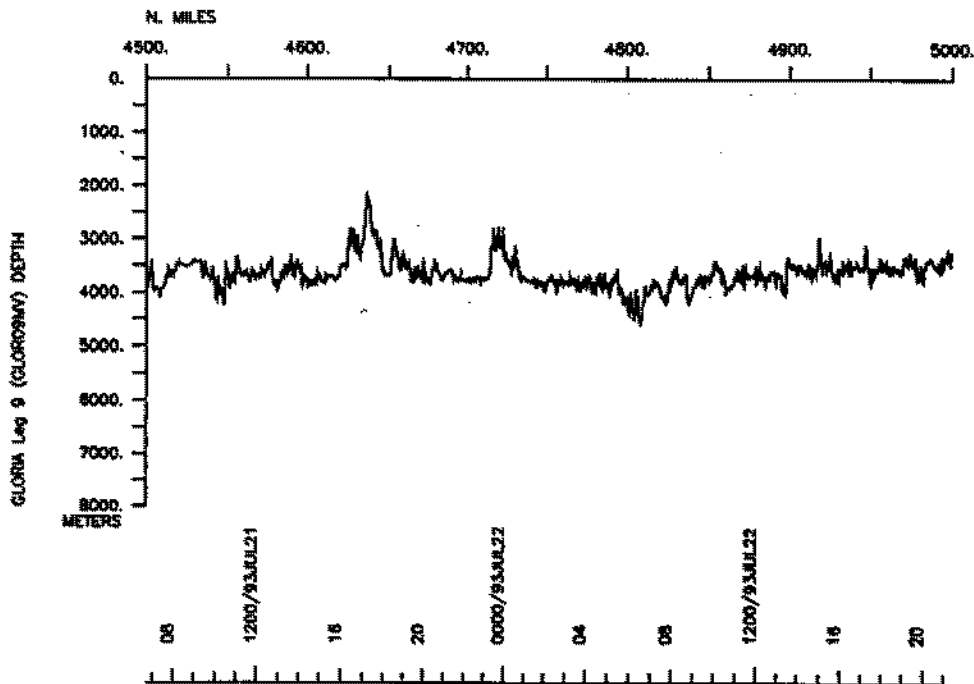
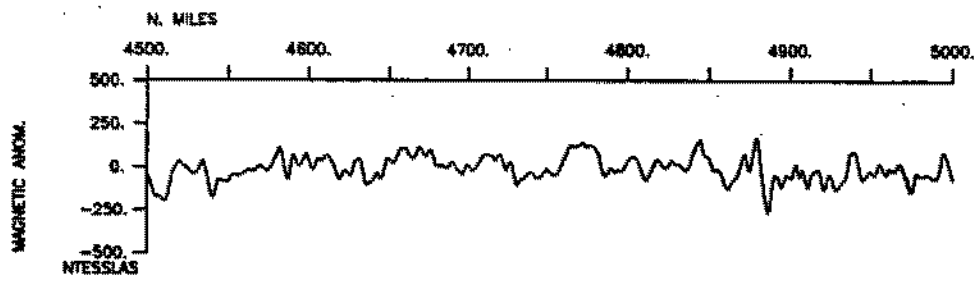
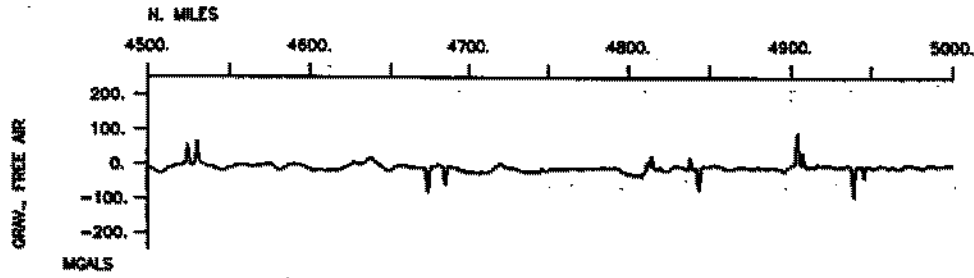


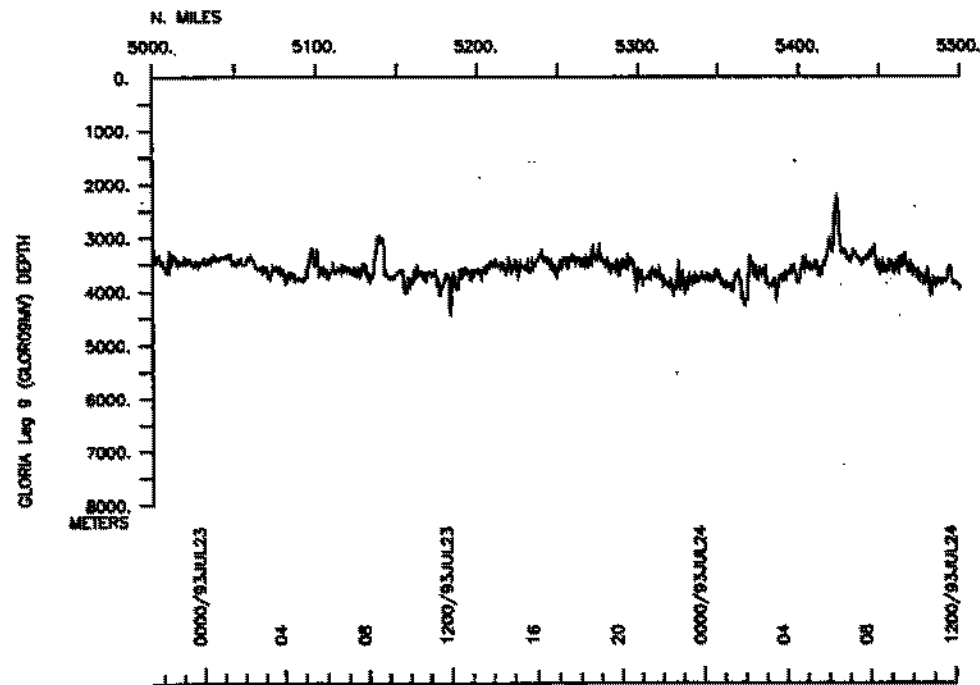
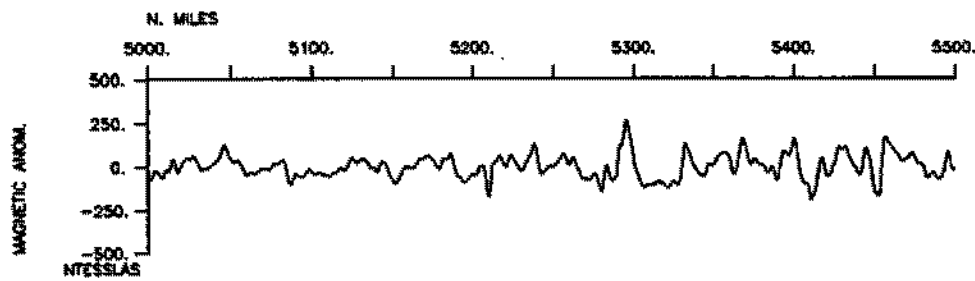
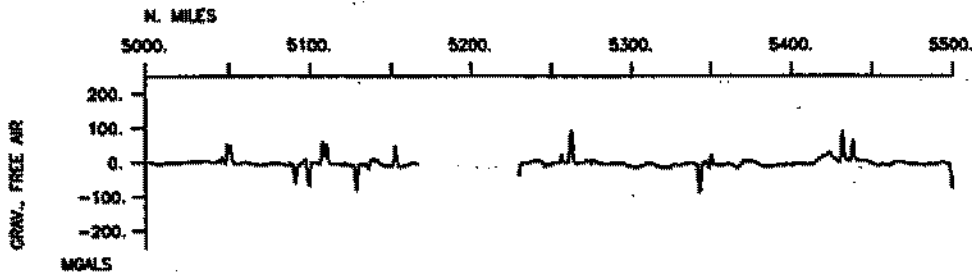


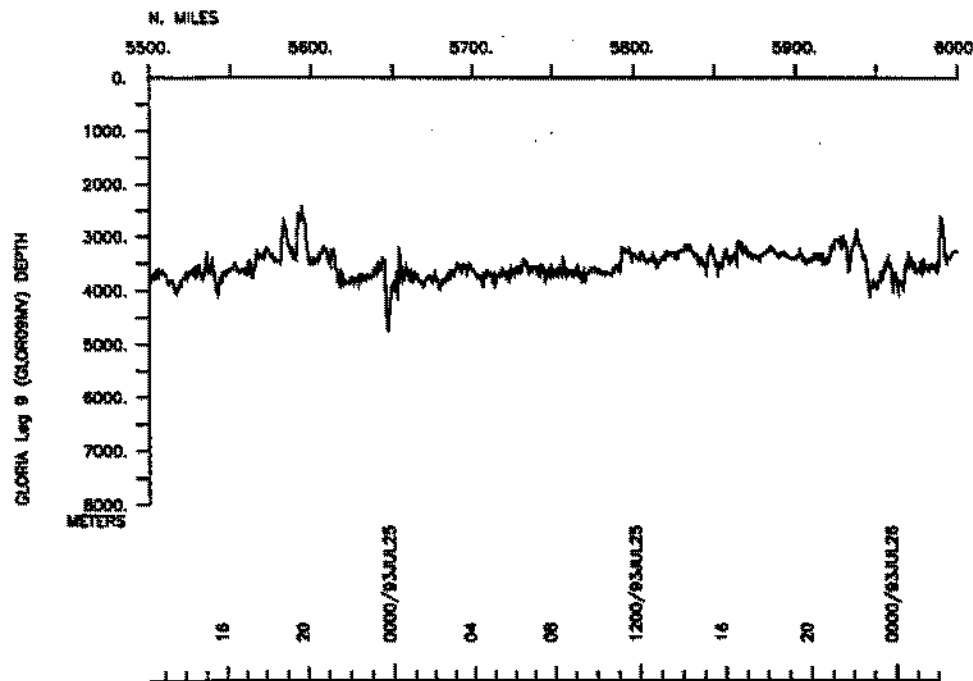
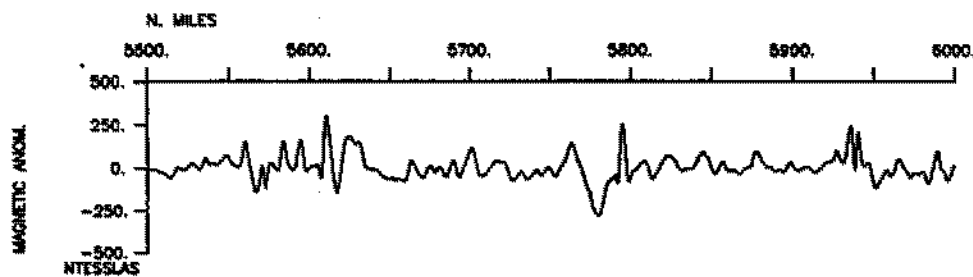
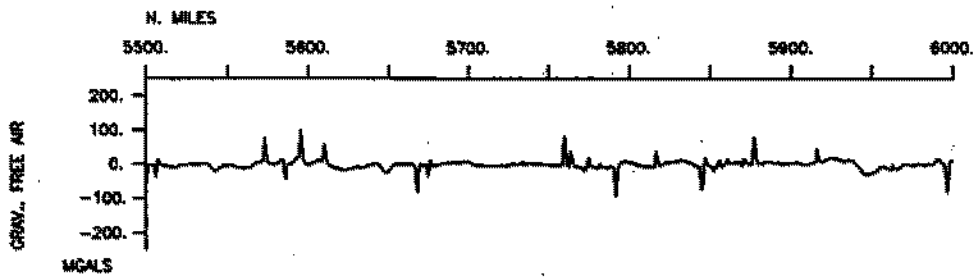


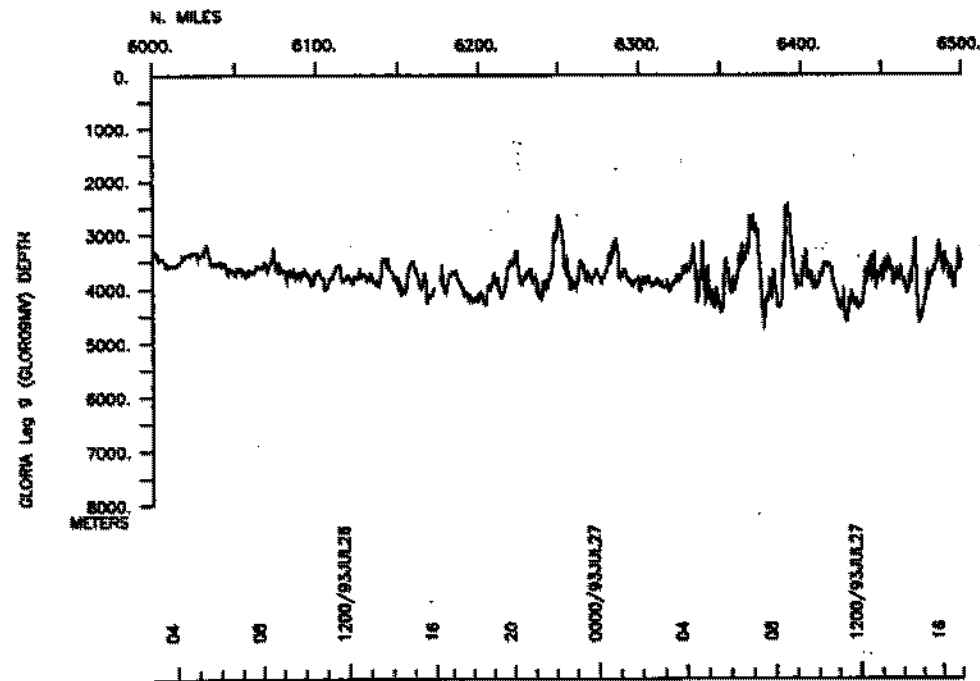
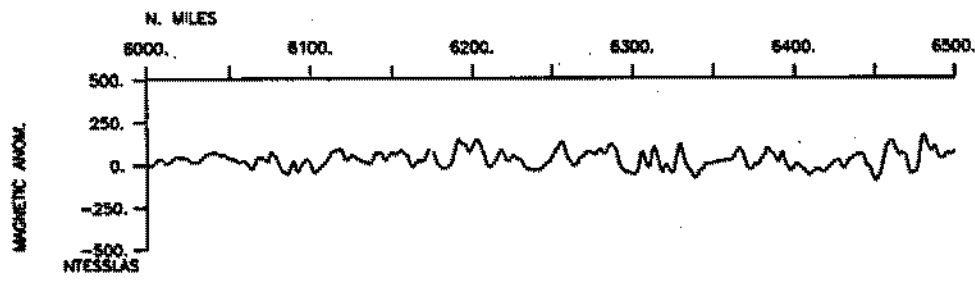
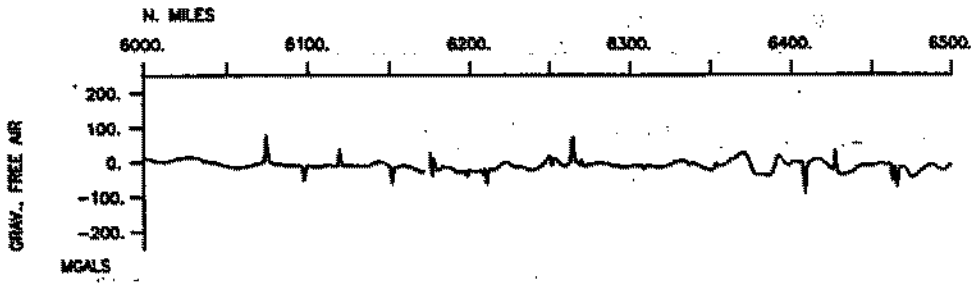


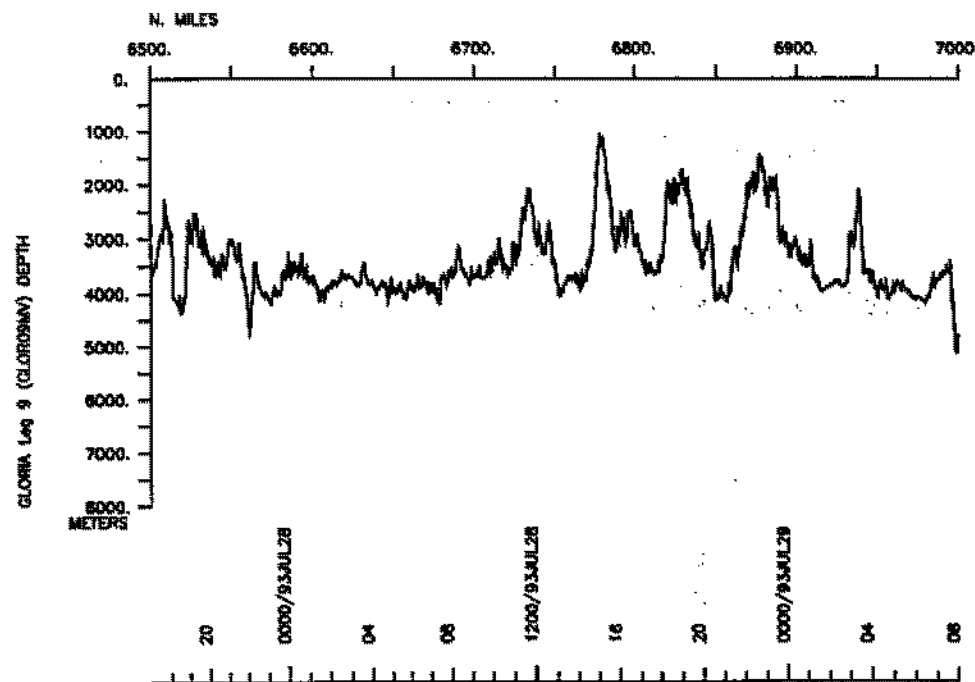
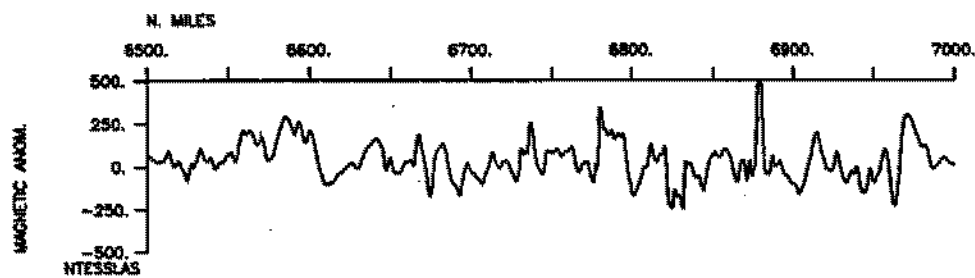
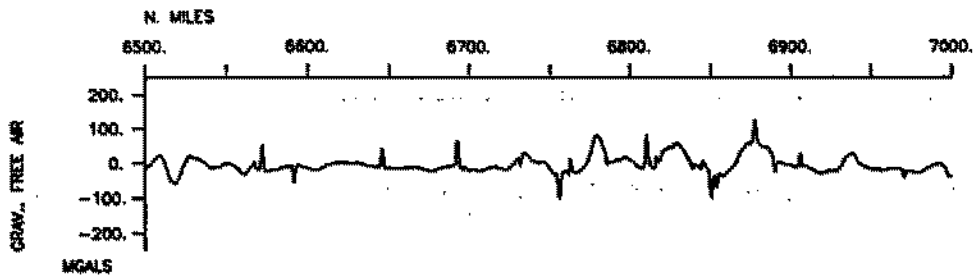


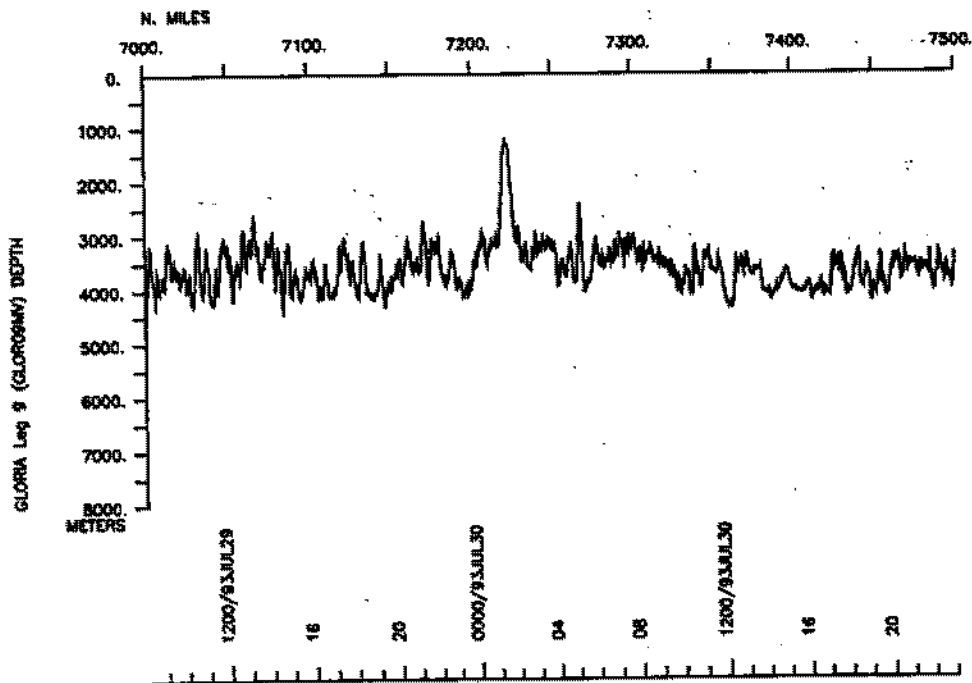
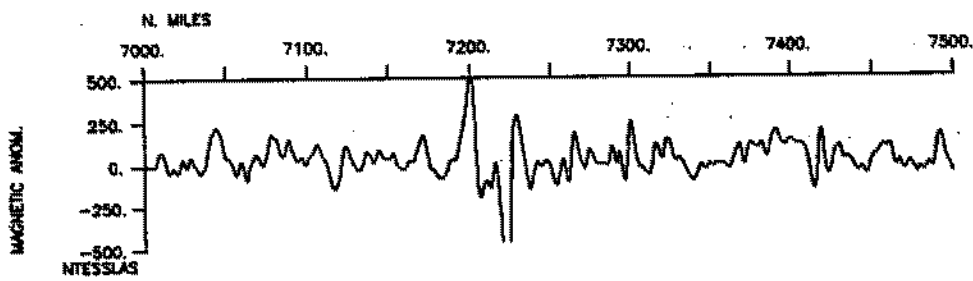
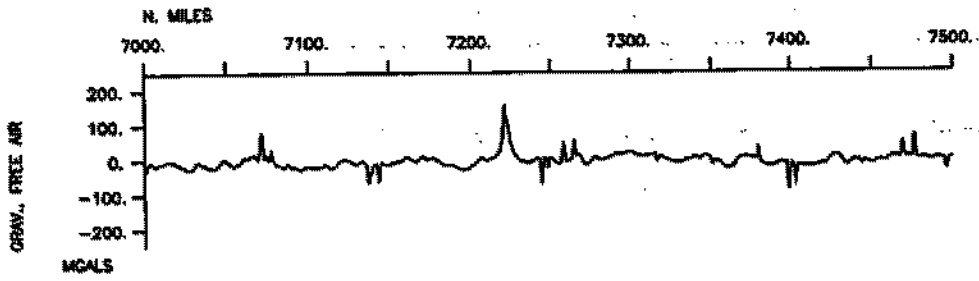


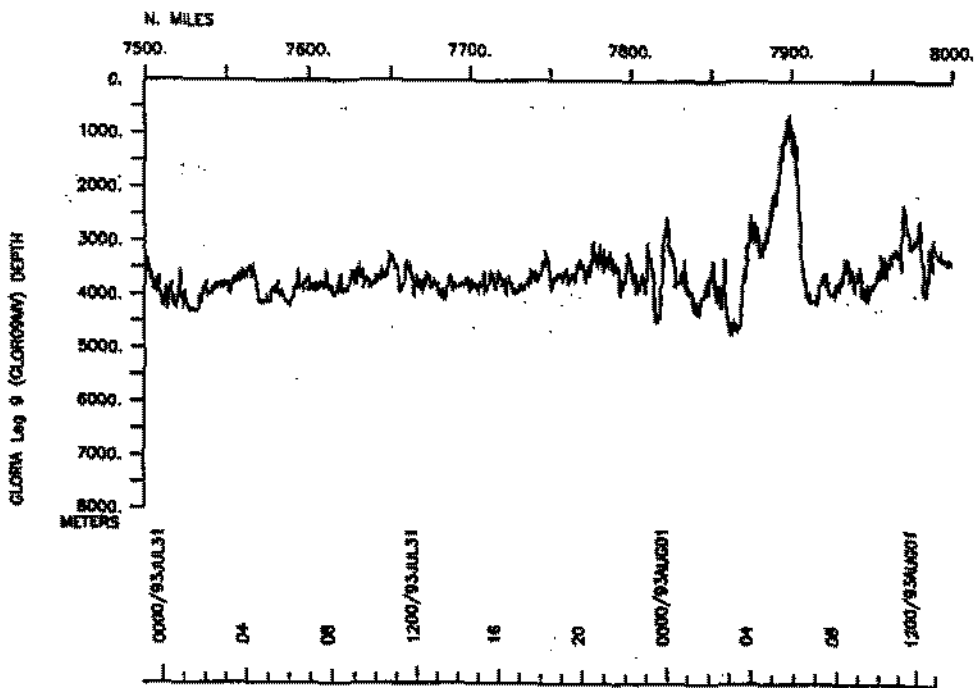
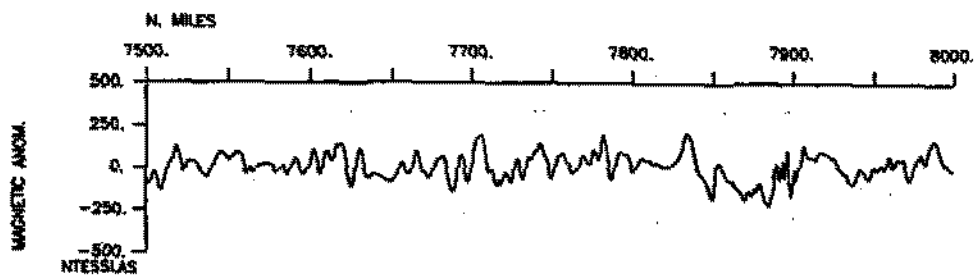
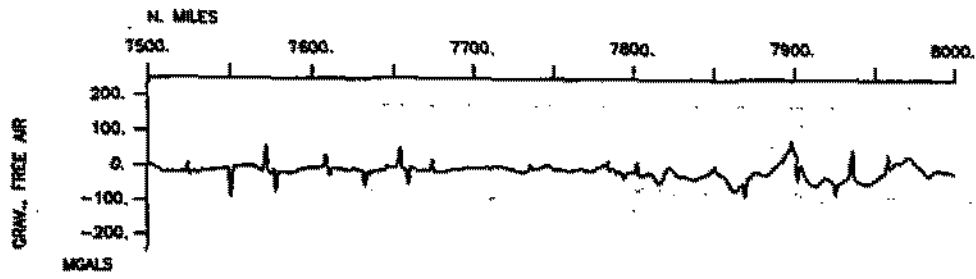


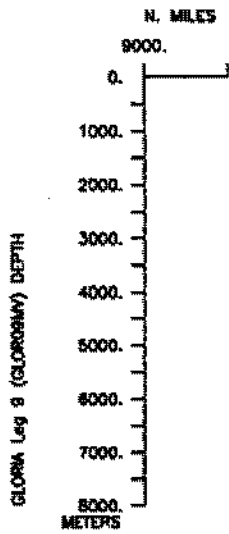
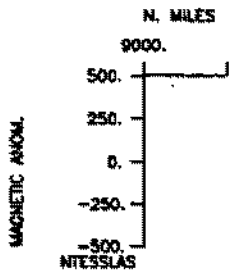
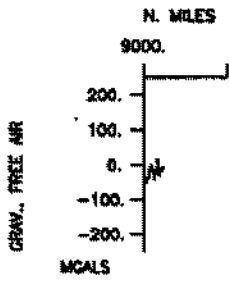


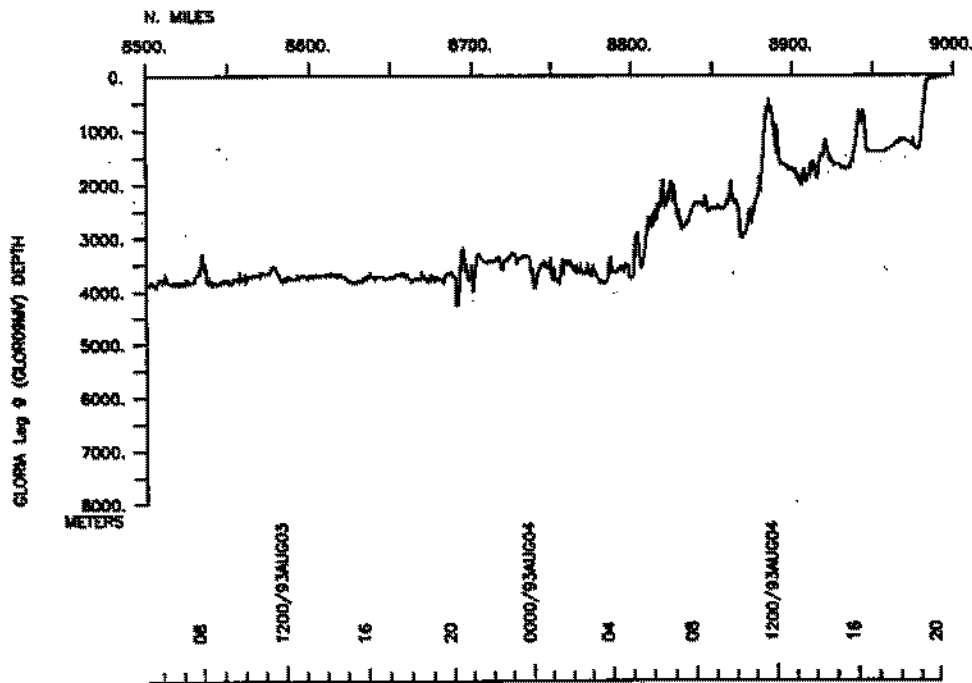
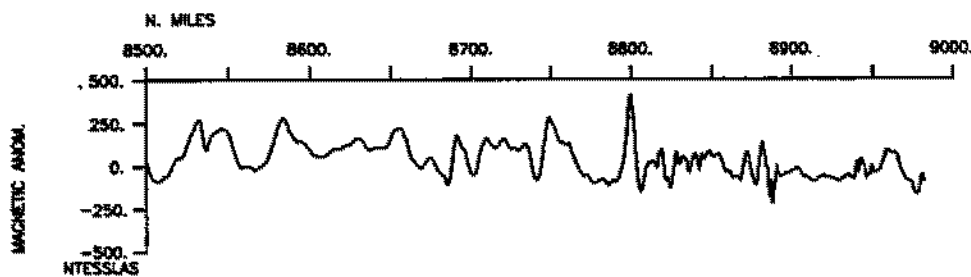
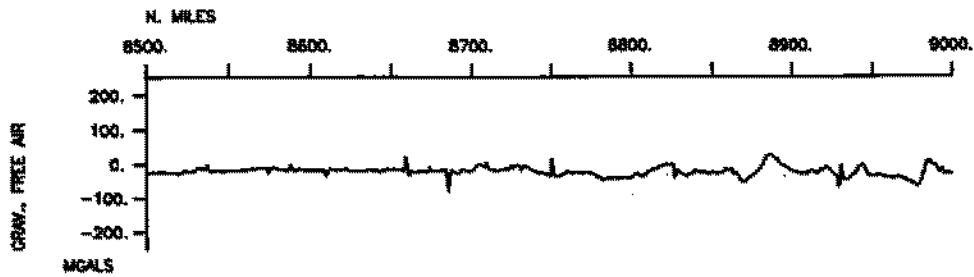












S.I.O. SAMPLE INDEX

(Issued August 1993)

GLORIA EXPEDITION

Leg 9

R/V Melville

Acapulco, Mexico (5 July 1993)
to
San Diego, Calif. (4 August 1993)

Chief Scientist:

Peter Lonsdale (Scripps Institution)

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 further computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC Cruise I.D.# 261

Ports ***

050793	0	LGPT B	Acapulco, Mexico	16-51.00N	99-56.00W	f	GLOR09MV
040893	0	LGPT E	San Diego, Calif.	32-43.00N	117-11.00W	f	GLOR09MV

IV
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Personnel ***

*****NAME*****		*****TITLE*****	*****AFFILIATION*****	**CRID**
MPL	Lonsdale, P.	Chief Scientist	Scripps Institution	GLOR09MV
STS	Charters, J.	Computer tech	Scripps Institution	GLOR09MV
STS	Heckman, E.	Hardware tech	Scripps Institution	GLOR09MV
STS	Mogk, S.	Resident tech	Scripps Institution	GLOR09MV
SIO	Baker, E.	Grad student	Scripps Institution	GLOR09MV
UCB	Baum, K.	Volunteer	U.C. Berkeley	GLOR09MV
SIO	Bowers, N.	Grad student	Scripps Institution	GLOR09MV
SIX	Halle, C.	Volunteer	Non-SIO employee	GLOR09MV
UCB	Kelsch, P.	Volunteer	U.C. Berkeley	GLOR09MV
UCB	Kelly, C.	Volunteer	U.C. Berkeley	GLOR09MV
UCC	Muzzy, M.	Volunteer	U.C. Santa Cruz	GLOR09MV
SIO	Willmeth, E.	Volunteer	Scripps Institution	GLOR09MV
SIO	Williams, K.	Grad student	Scripps Institution	GLOR09MV
MEX	Granados, M.	Mex. Participant	Mex. Naval Oceanogr	GLOR09MV
MEX	Oropeza, B.	Mex. Participant	Mex. Marine Secrety	GLOR09MV
MEX	Vazquez, M.	Mex. Participant	Mex. Naval Oceanogr	GLOR09MV

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NOTES ***

'X' in the (B)egin/(E)nd column following the sample code indicates no
 ple or data recovered. A 'C' indicates continuation of data collection
 m before the beginning or after the end of a particular leg, (moored
 tom instruments, for example.) The number appearing in the columns
 ween the sample identifier and the disposition code, for many sample
 ries, is the water depth in corrected meters. Positions are in tenths
 minutes.

#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. 41898

*** Log books***

2331	050793	0	LBUW	B Underway watch log	GDC	16-43.91N	99-53.89W	g	GLOR09MV
2315	040893	0	LBUW	E Underway watch log	GDC	32-42.41N	117-14.19W	g	GLOR09MV

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

2331	050793	0	MBSR	B v.beam&sidescan r-01	GDC	16-43.91N	99-53.89W	g	GLOR09MV
1228	100793	0	MBSR	E v.beam&sidescan r-01	GDC	8-30.15N	99-13.79W	g	GLOR09MV
1230	100793	0	MBSR	B v.beam&sidescan r-02	GDC	8-30.51N	99-13.56W	g	GLOR09MV
2222	140793	0	MBSR	E v.beam&sidescan r-02	GDC	9-32.13N	105-49.94W	g	GLOR09MV
2238	140793	0	MBSR	B v.beam&sidescan r-03	GDC	9-29.33N	105-50.31W	g	GLOR09MV
1351	160793	0	MBSR	E v.beam&sidescan r-03	GDC	9-21.09N	105-49.79W	g	GLOR09MV
1353	160793	0	MBSR	B v.beam&sidescan r-04	GDC	9-21.27N	105-50.14W	g	GLOR09MV
0209	210793	0	MBSR	E v.beam&sidescan r-04	GDC	10-10.25N	110-00.23W	g	GLOR09MV
0210	210793	0	MBSR	B v.beam&sidescan r-05	GDC	10-10.44N	110-00.16W	g	GLOR09MV
1601	260793	0	MBSR	E v.beam&sidescan r-05	GDC	12-41.83N	108-06.64W	g	GLOR09MV
1627	260793	0	MBSR	B v.beam&sidescan r-06	GDC	12-42.79N	108-09.43W	g	GLOR09MV
1928	010893	0	MBSR	E v.beam&sidescan r-06	GDC	18-36.69N	112-12.23W	g	GLOR09MV
1929	010893	0	MBSR	B v.beam&sidescan r-07	GDC	18-36.90N	112-12.30W	g	GLOR09MV
1940	040893	0	MBSR	E v.beam&sidescan r-07	GDC	32-16.18N	117-10.83W	g	GLOR09MV

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

0200	060793	0	MGRA	B Magnetism roll 01	GDC	16-18.94N	99-50.96W	g	GLOR09MV
1440	110793	0	MGRA	E Magnetism roll 01	GDC	9-09.93N	98-10.58W	g	GLOR09MV
1444	110793	0	MGRA	B Magnetism roll 02	GDC	9-10.66N	98-10.14W	g	GLOR09MV
0654	150793	0	MGRA	E Magnetism roll 02	GDC	9-49.81N	105-21.79W	g	GLOR09MV
0658	150793	0	MGRA	B Magnetism roll 03	GDC	9-49.27N	105-21.27W	g	GLOR09MV
0143	230793	0	MGRA	E Magnetism roll 03	GDC	8-46.11N	107-26.82W	g	GLOR09MV