

*Report and Index of
Underway Marine Geophysical Data*

BOOMERANG EXPEDITION

LEG 7

(BMRG07MV)

R/V MELVILLE

(Issued July 1996)

Ports:

Port Hedland, Australia (19 April 1996)

to

Suva, Fiji (3 May 1996)

Chief Scientist:

Nan Bray, Scripps Institution of Oceanography

Resident Marine Technician - Ron Comer

Computer Technician - Jim Charters

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.# 267

**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)534-5306, Internet email: ssmith@ucsd.edu

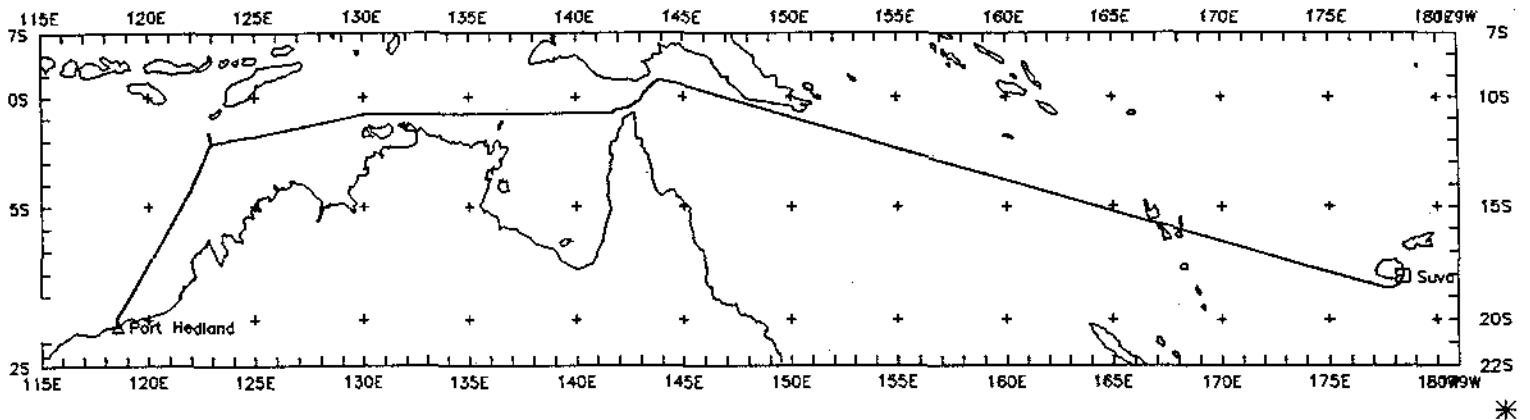
1. Files on Exabyte, DAT or 1/2 inch magnetic tape:
 - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
 - b) These same data in a merged ASCII file in the MGD77 Exchange Format.
 - c) SeaBeam depth data (binary, Sun byte order) in SIO Swath Bathymetry Format (not available on 1/2" tape).
 - d) SeaBeam Sidescan data (not available on 1/2" tape).
2. Microfilm (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.

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



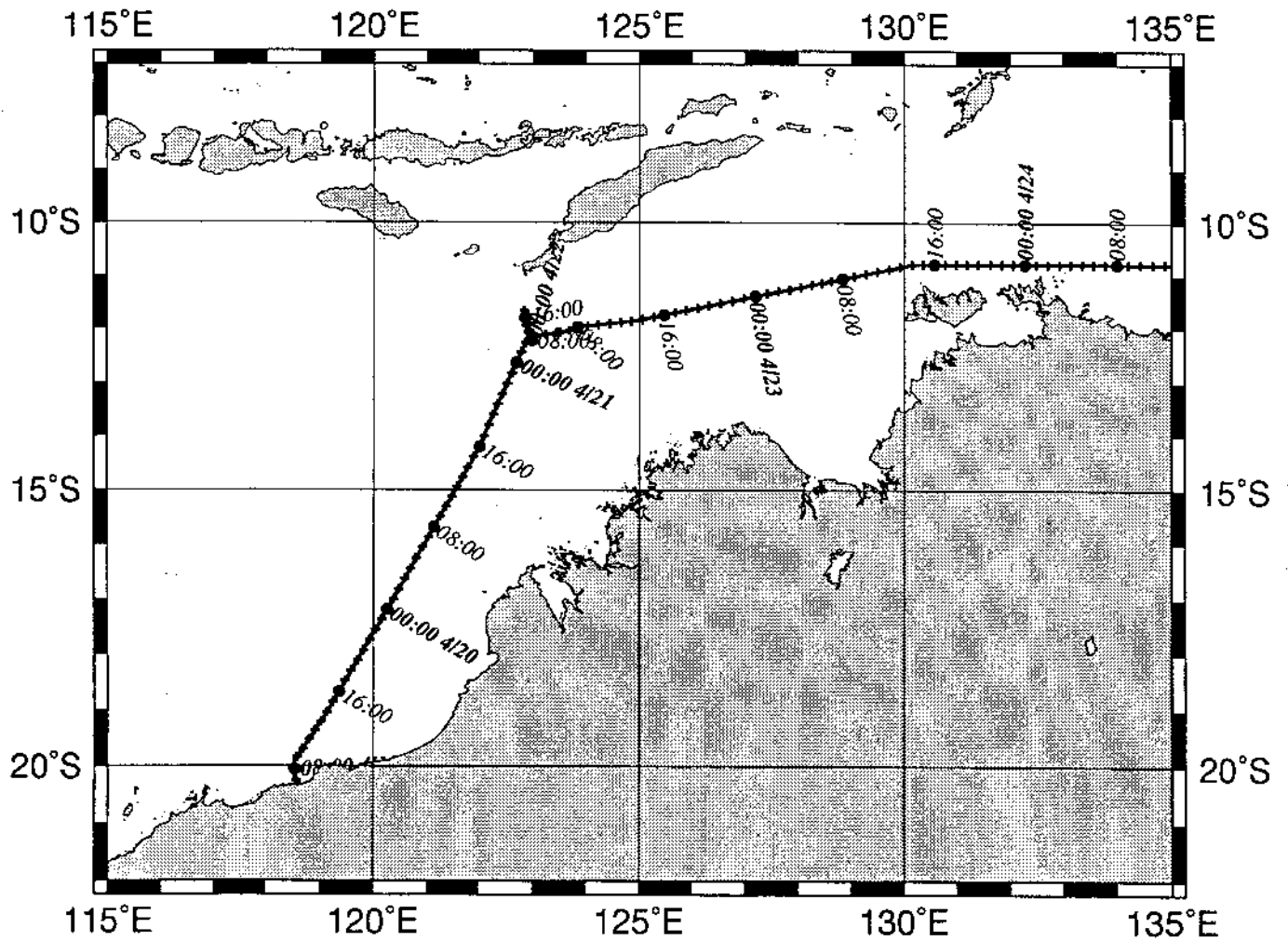
BOOMERANG EXPEDITION LEG 7
 =====

CHIEF SCIENTIST: Nan Bray
 Scripps Institution of Oceanography
 PORTS: Port Hedland, Australia - Suva, Fiji
 DATES: 19 April - 3 May 1996
 SHIP: R/V Melville

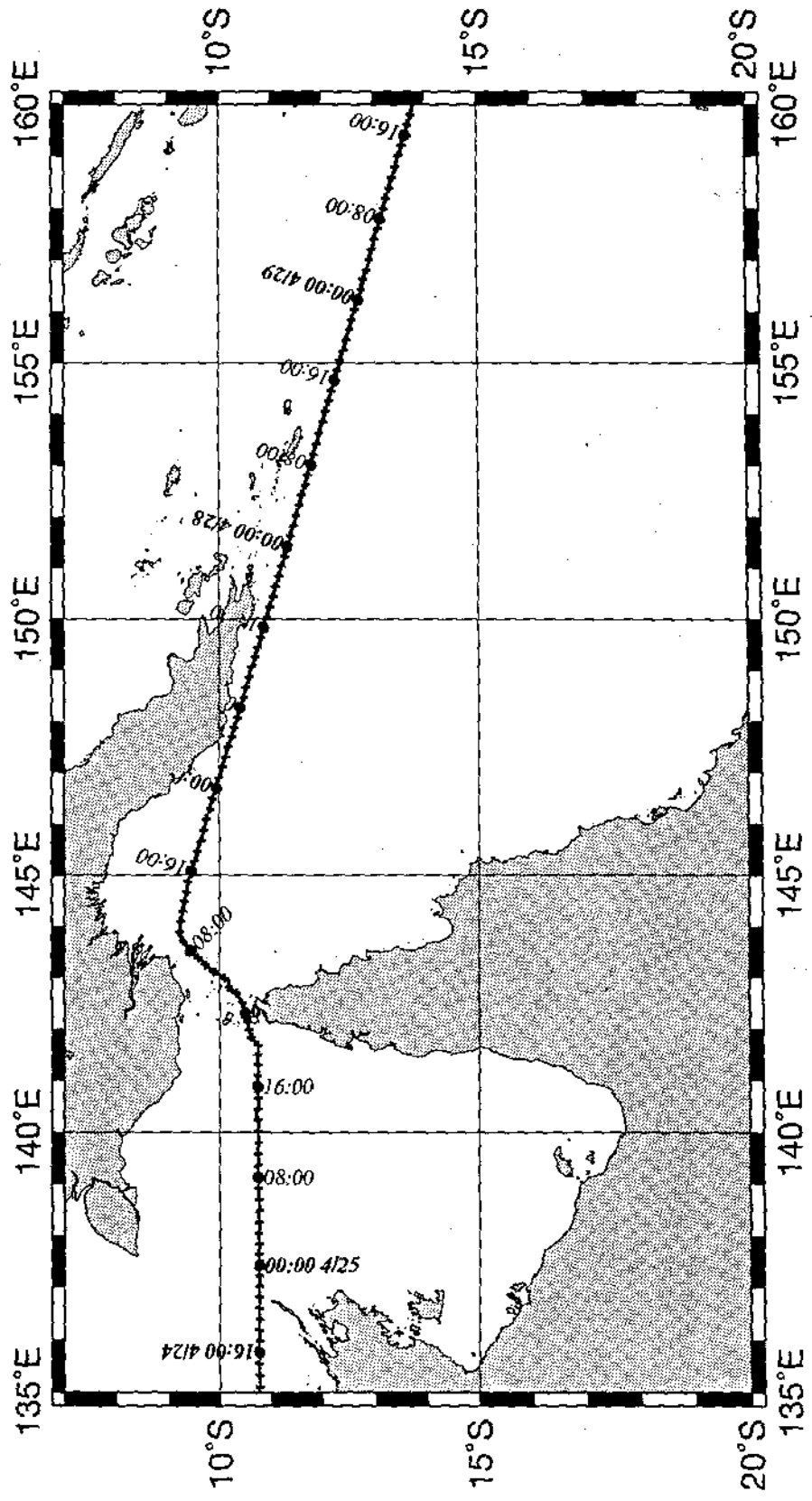
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 4050 miles	Magnetics - 2230 miles
Bathymetry - 3820 miles	Seismic Reflection - none collected
Sea Beam - 3820 miles	Gravity - 4020 miles

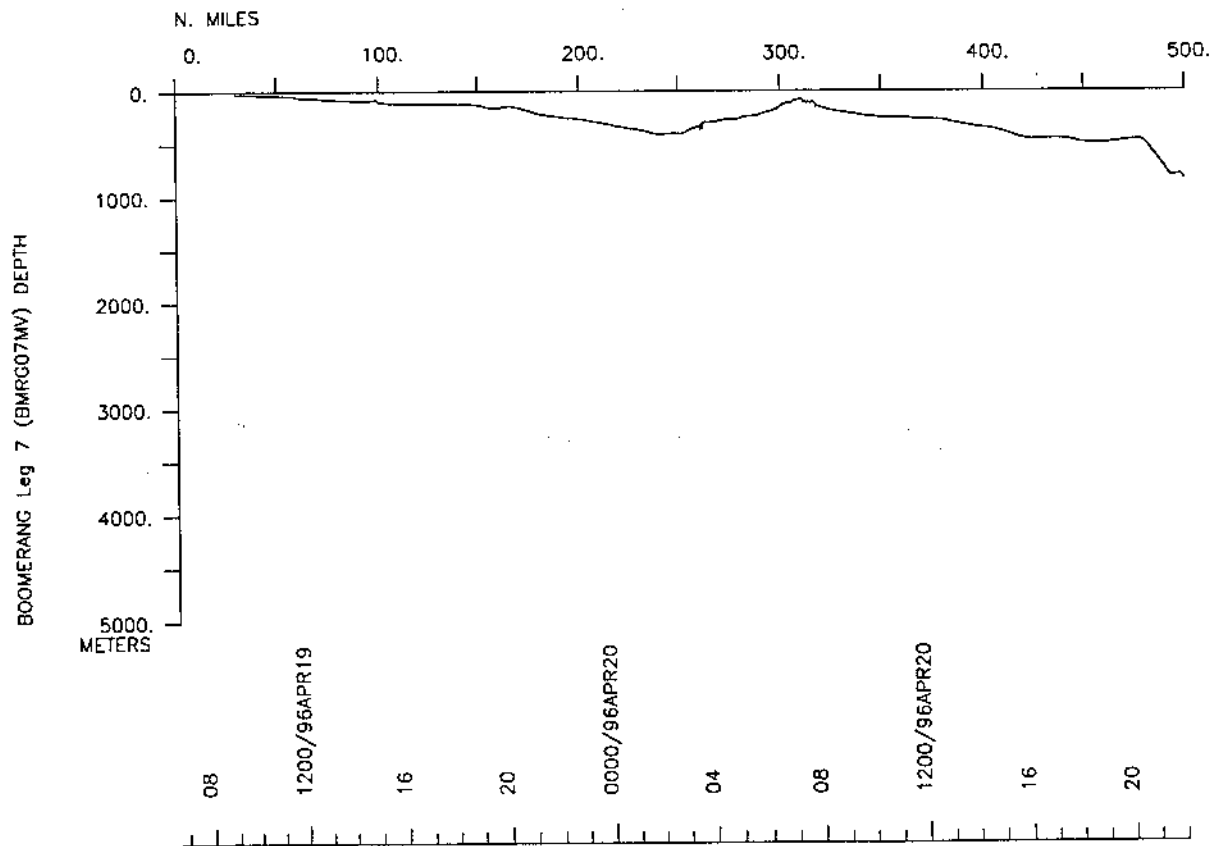
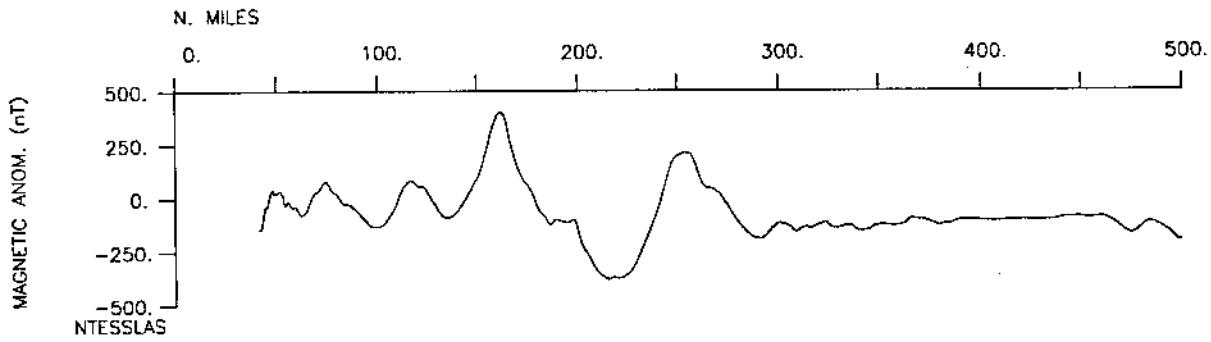
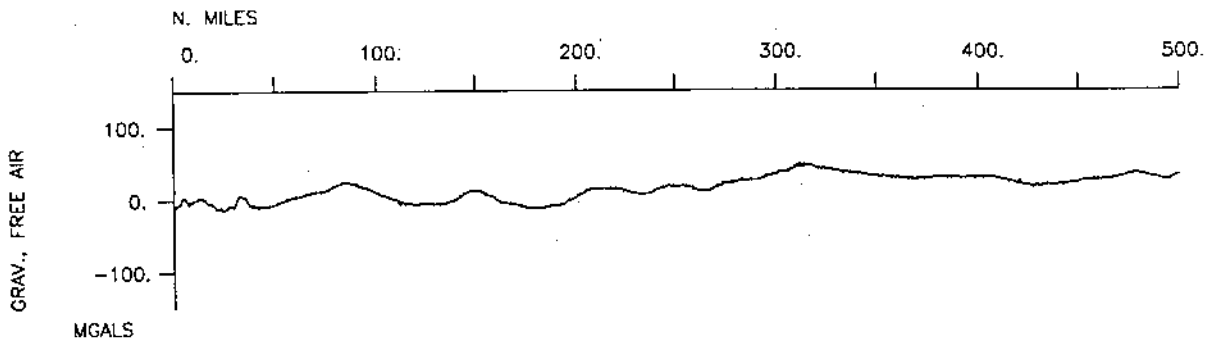
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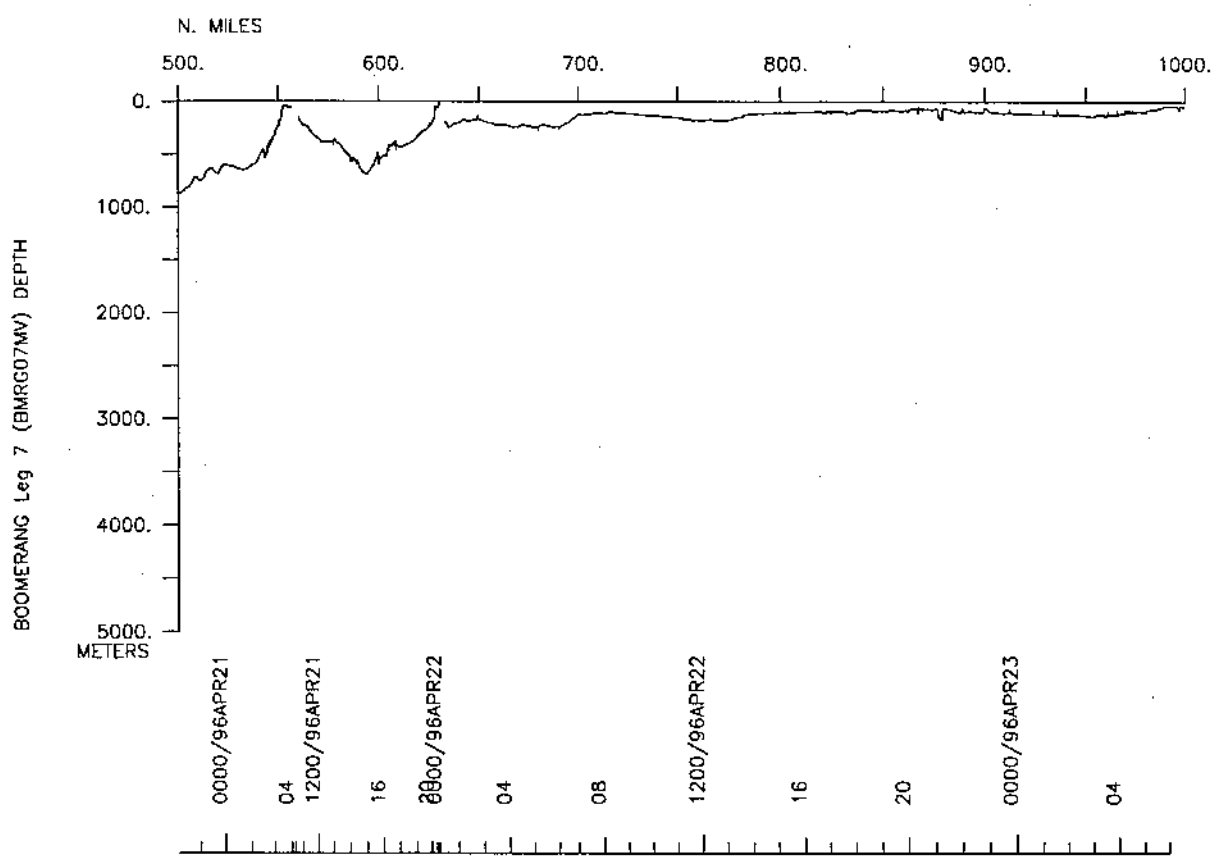
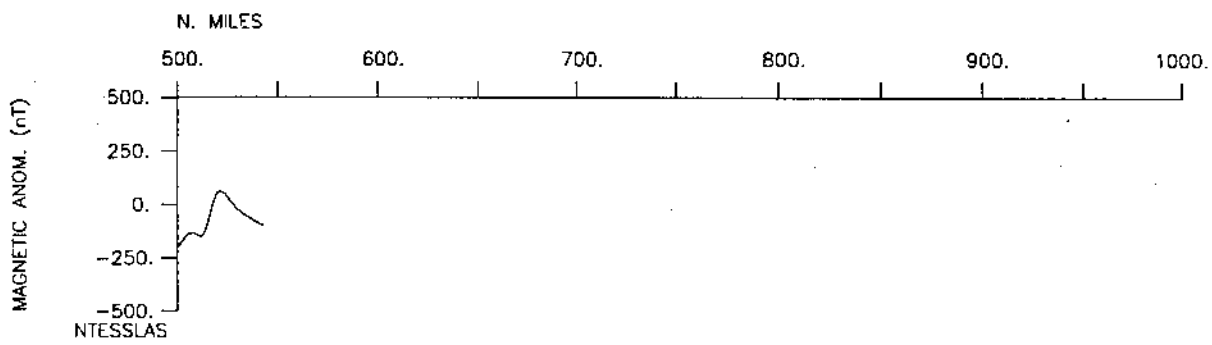
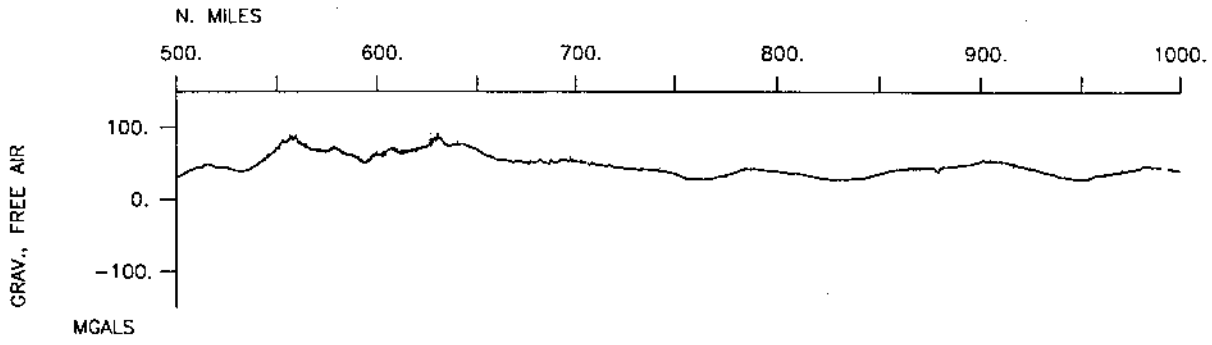


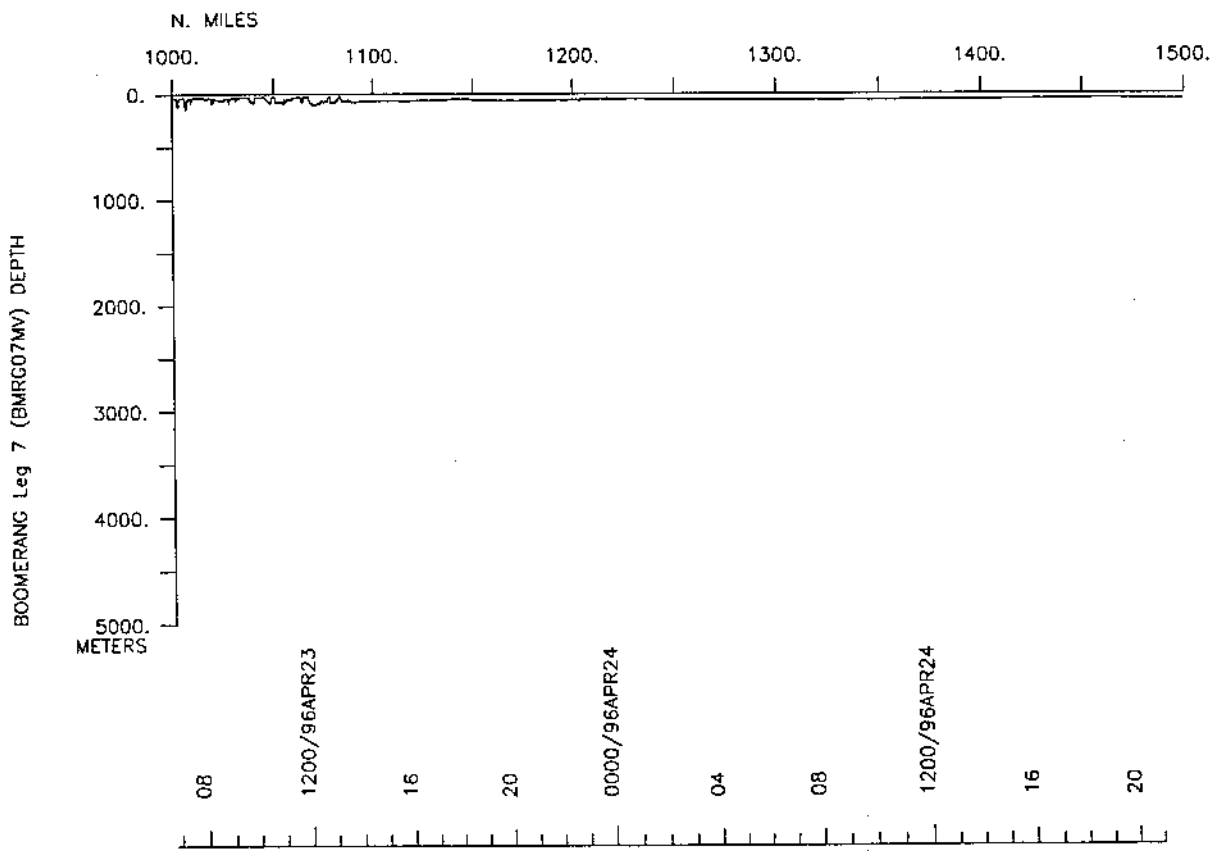
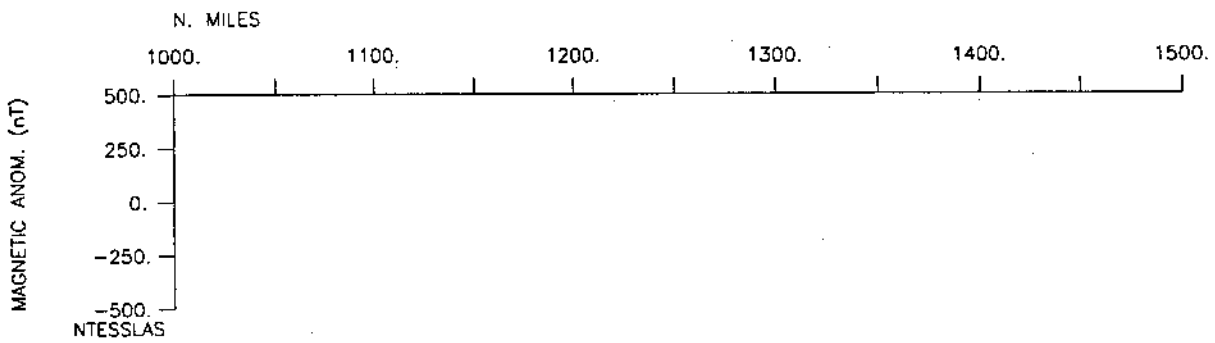
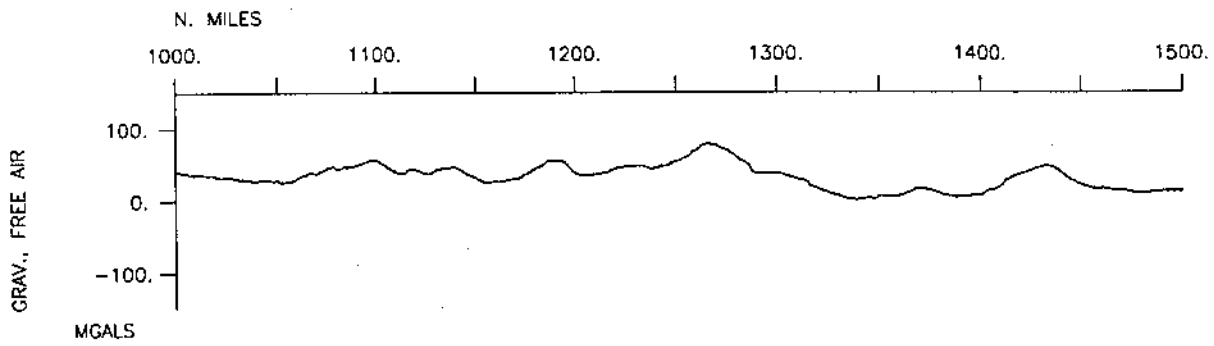
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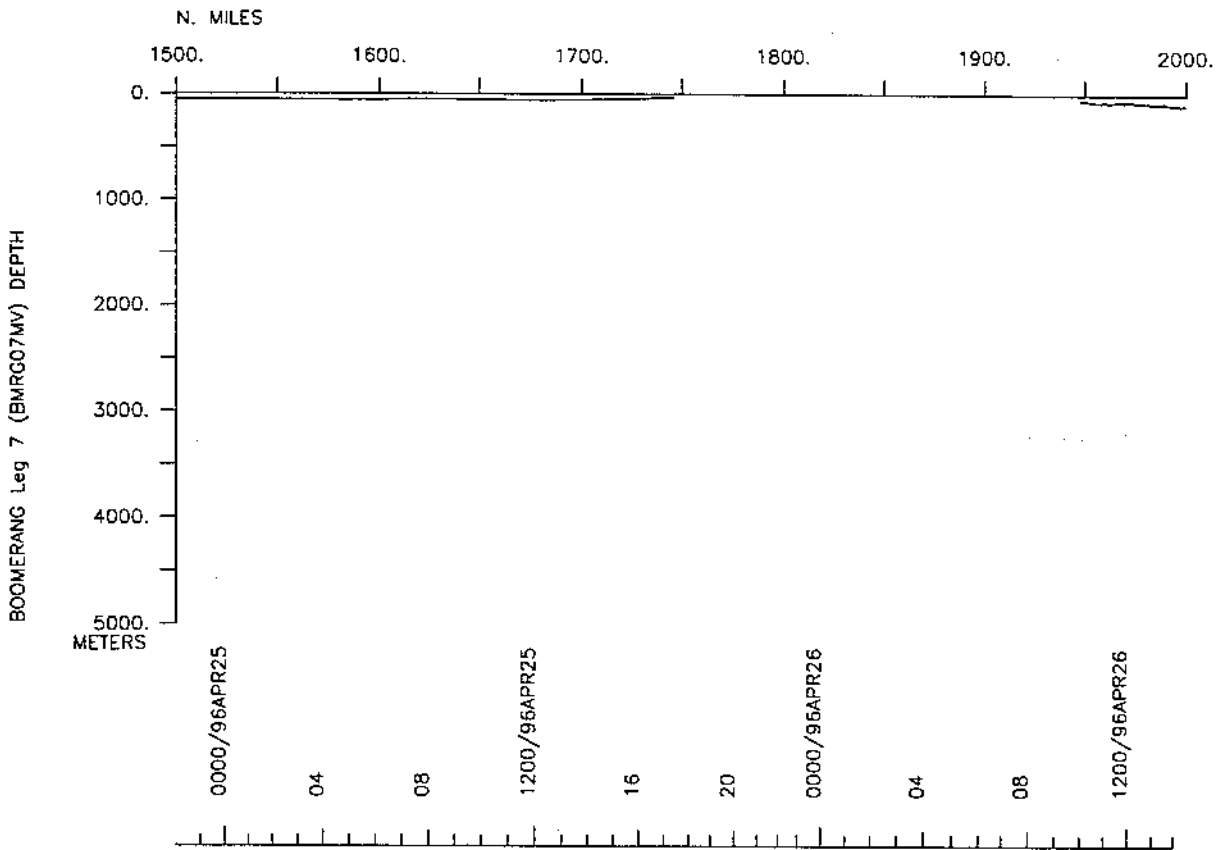
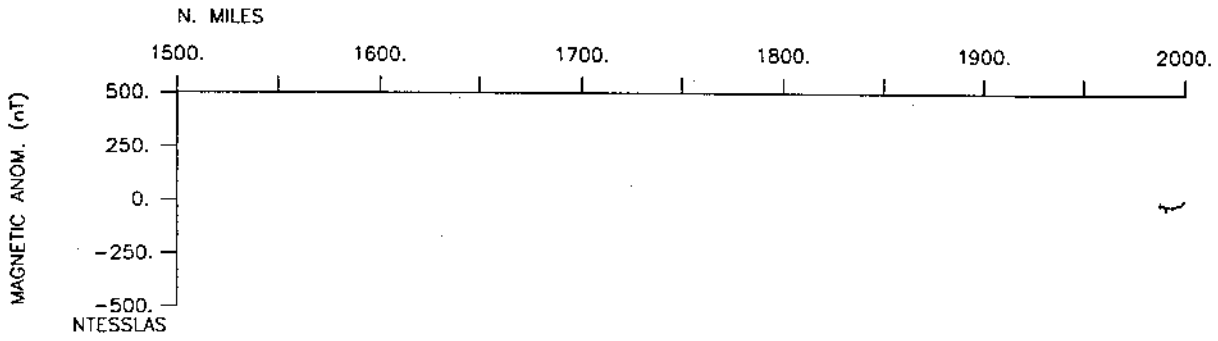
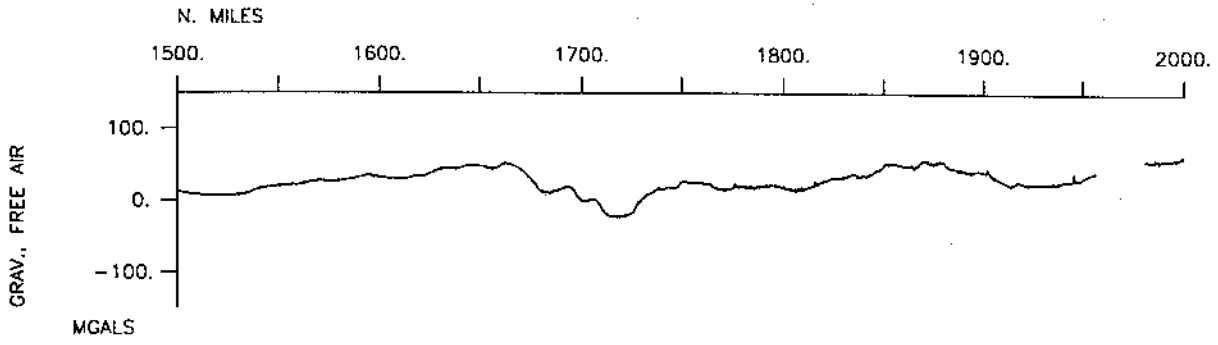


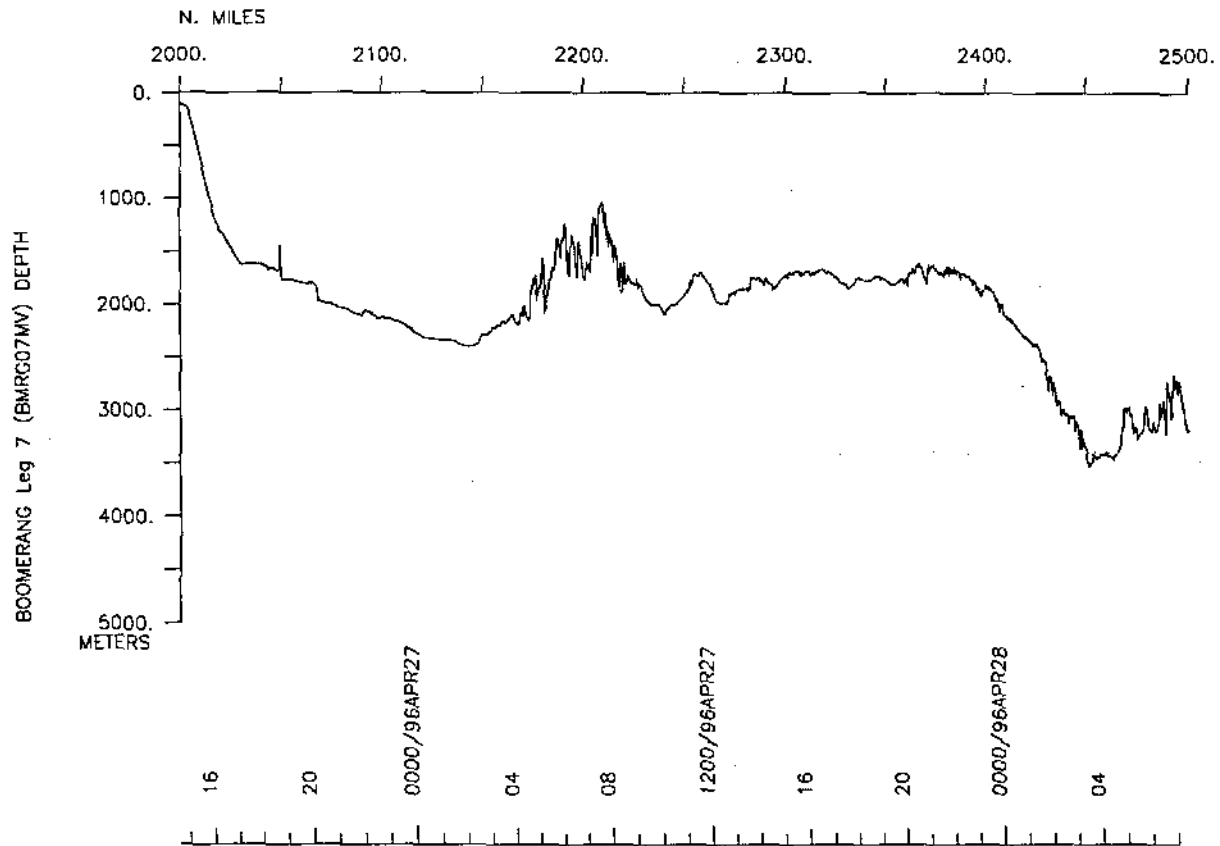
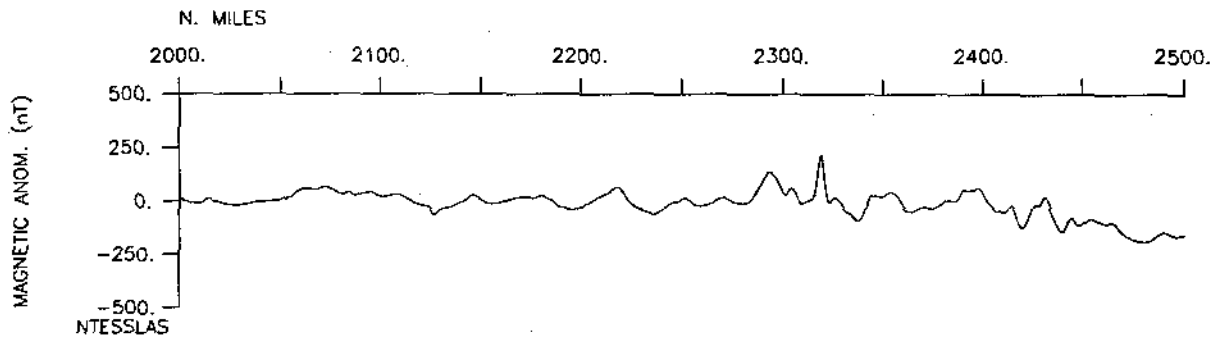
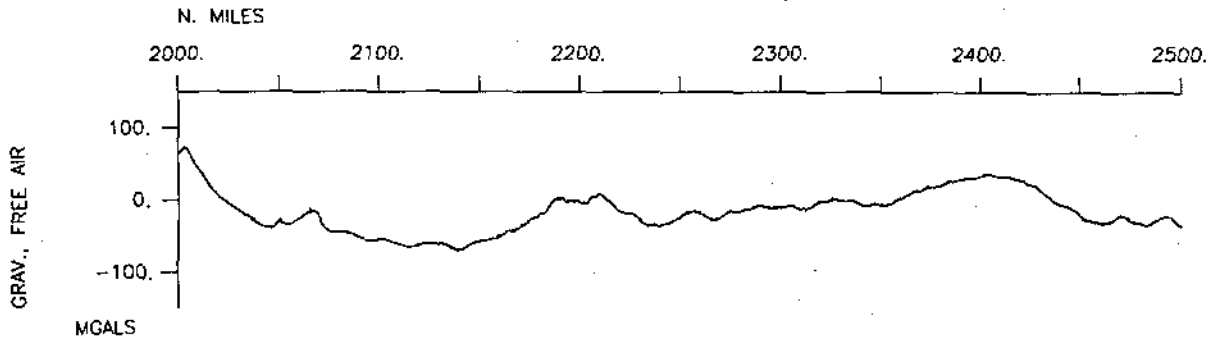
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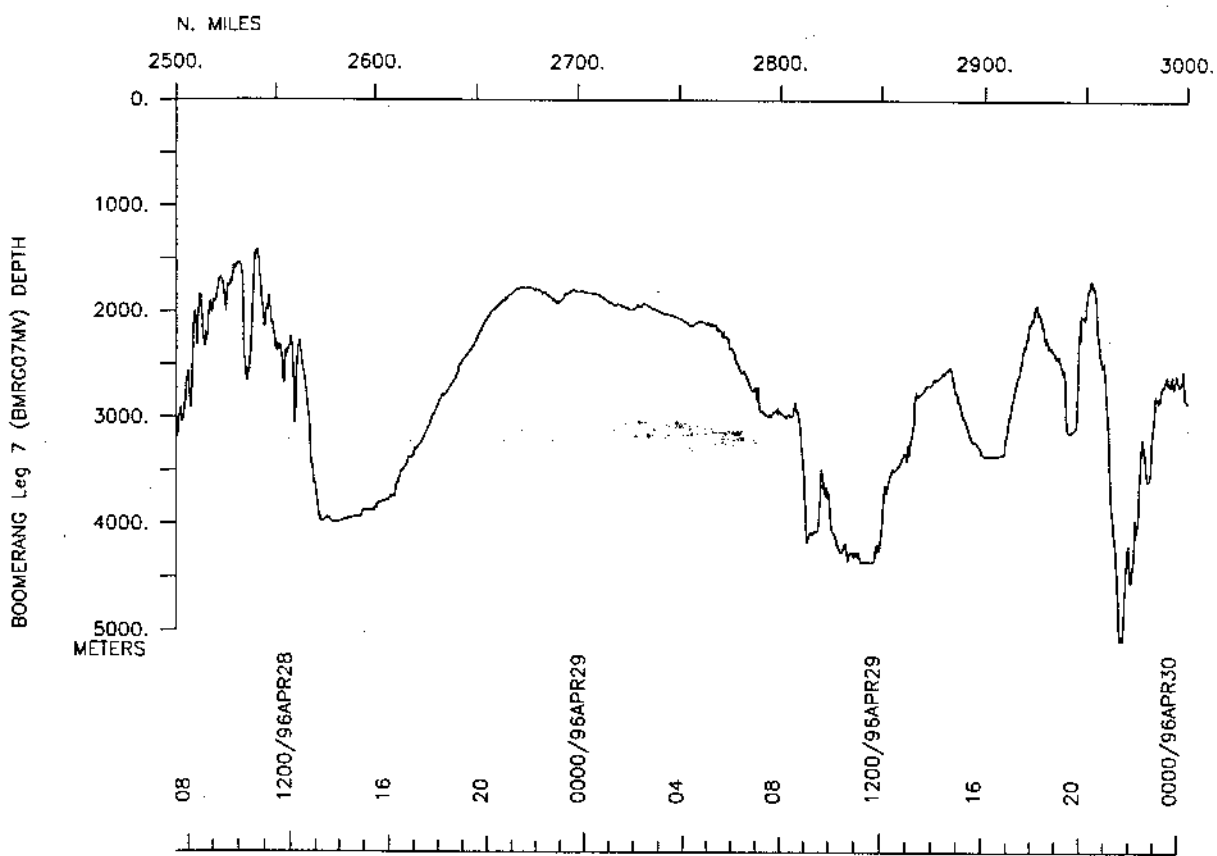
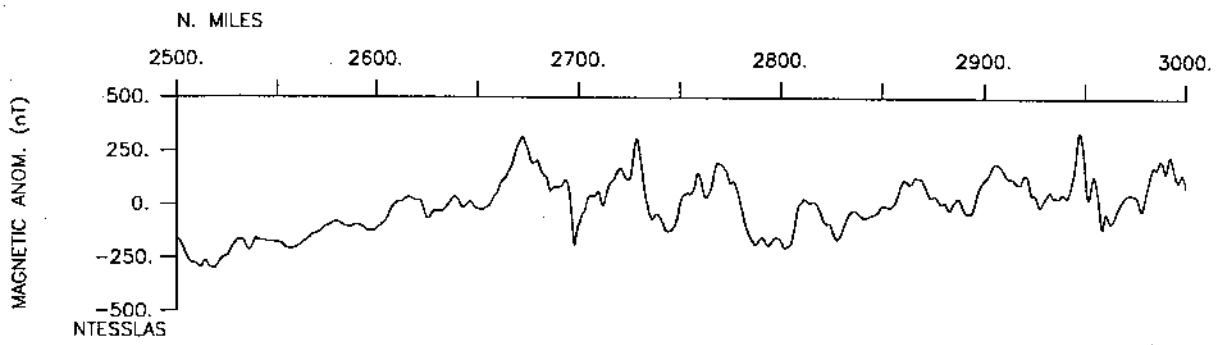
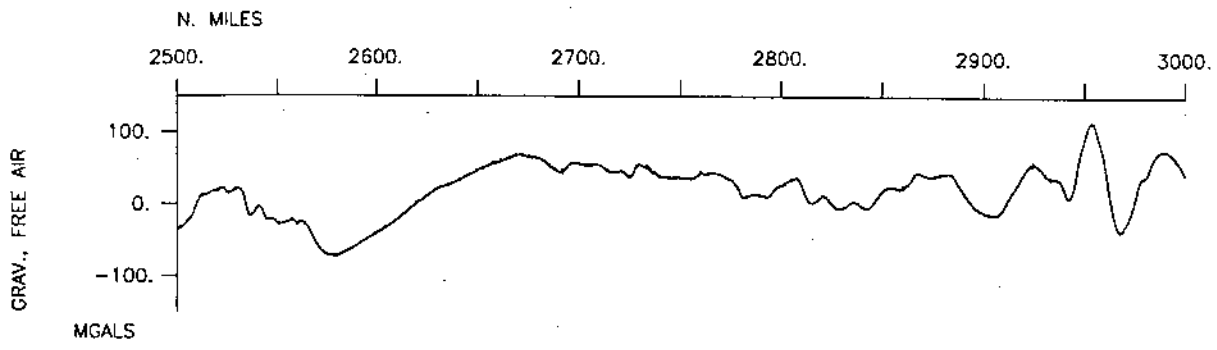


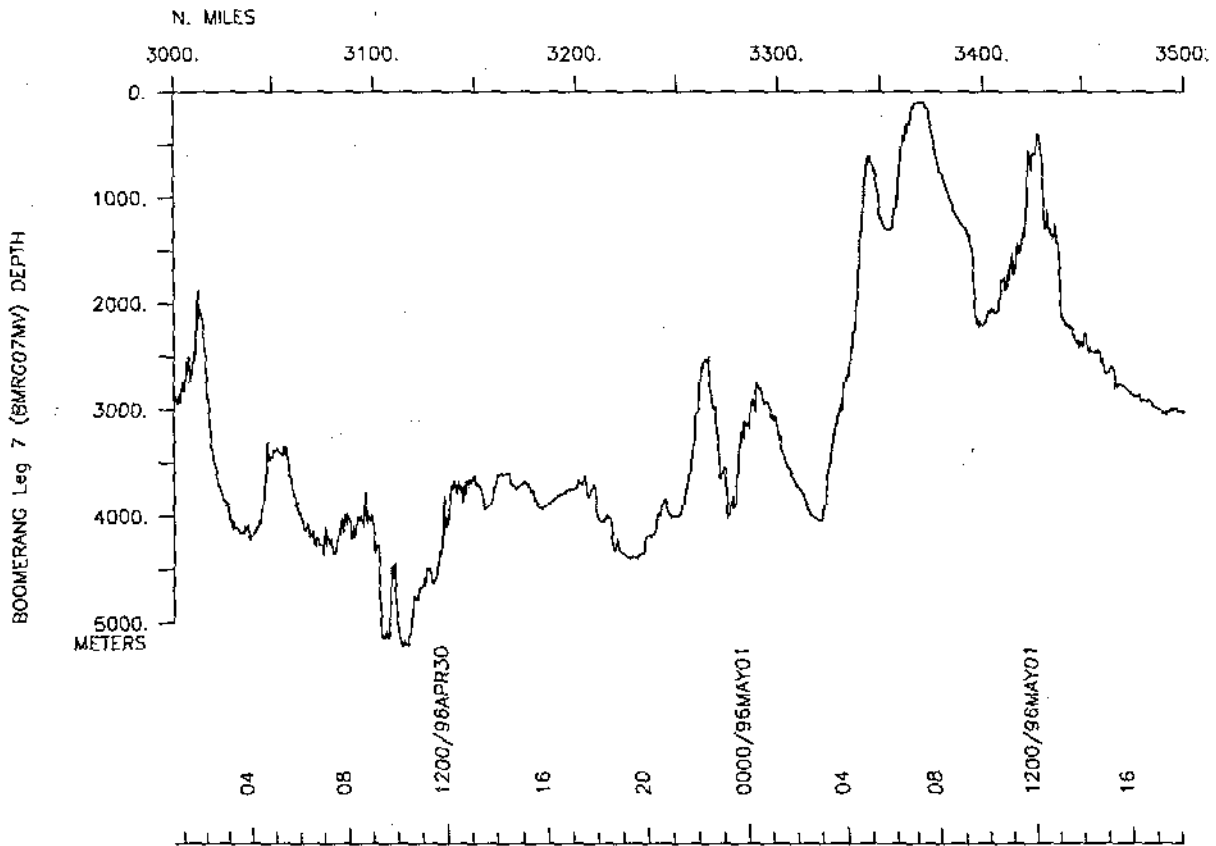
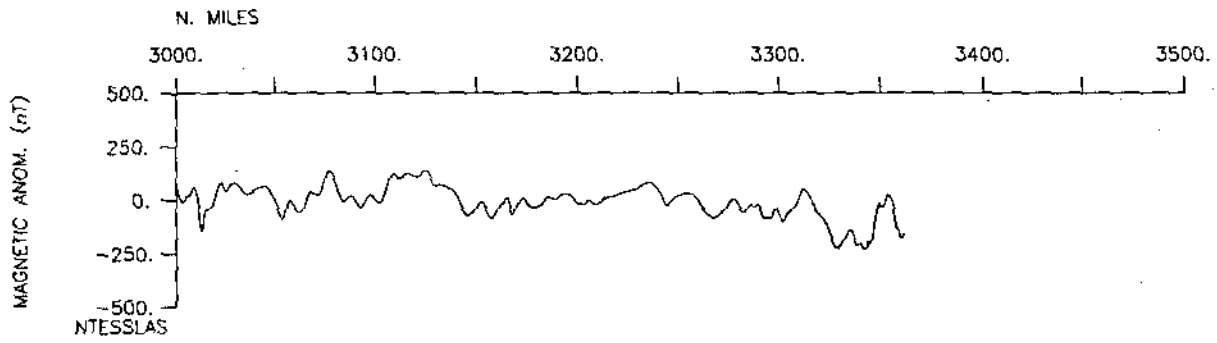
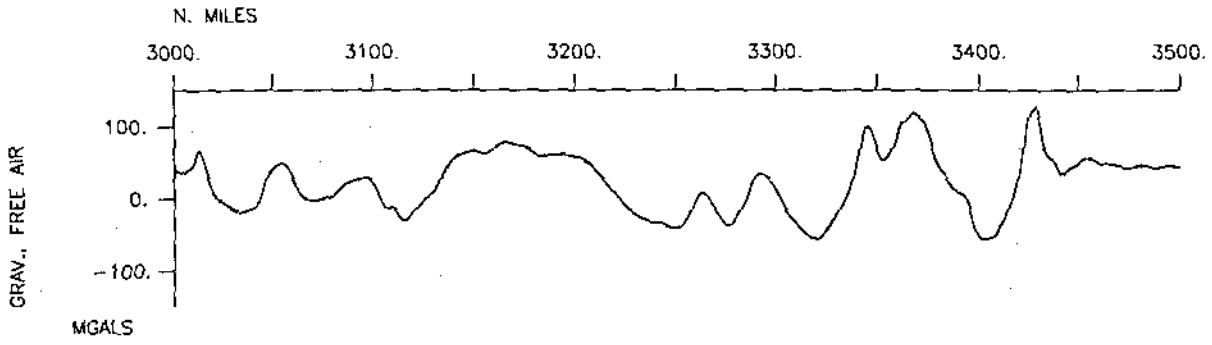


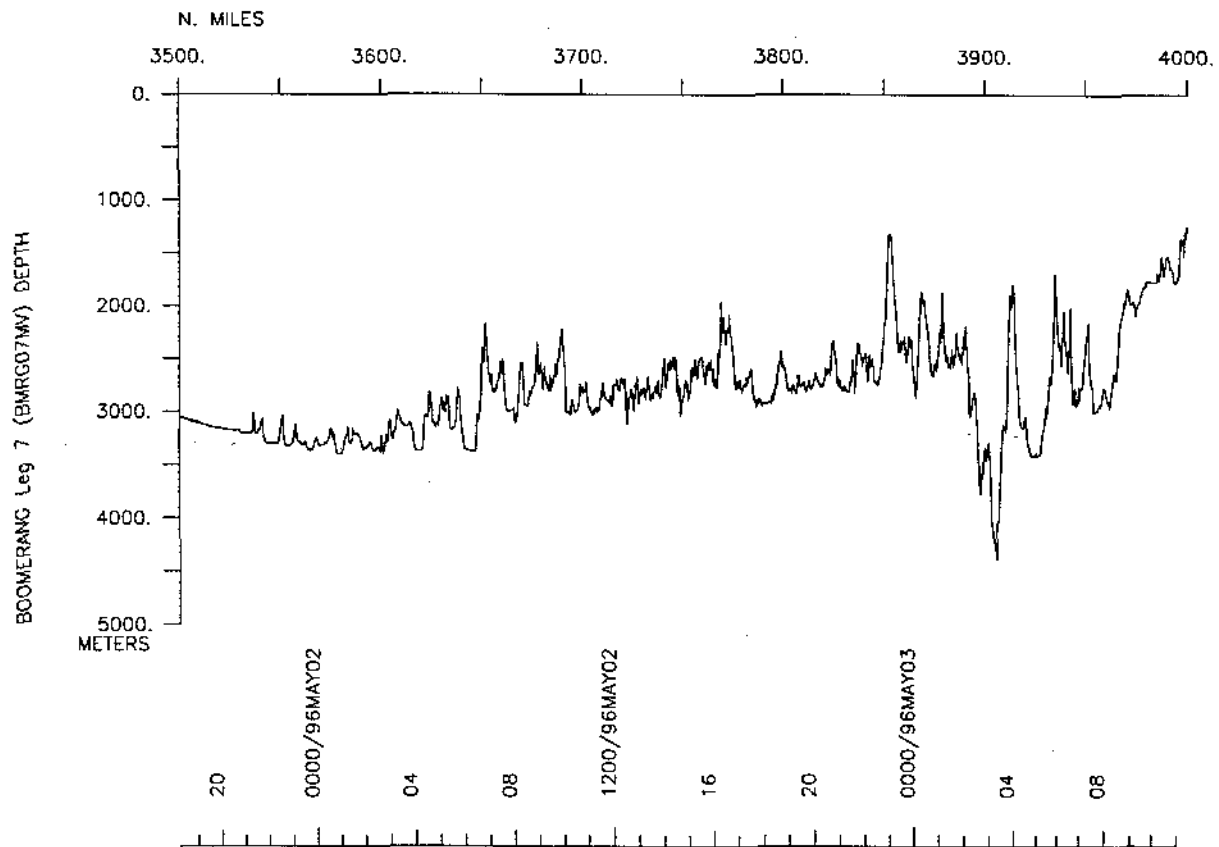
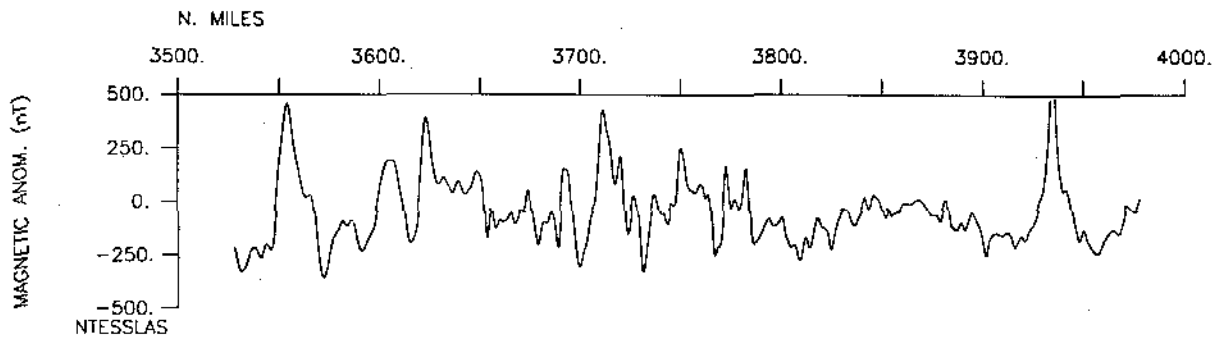
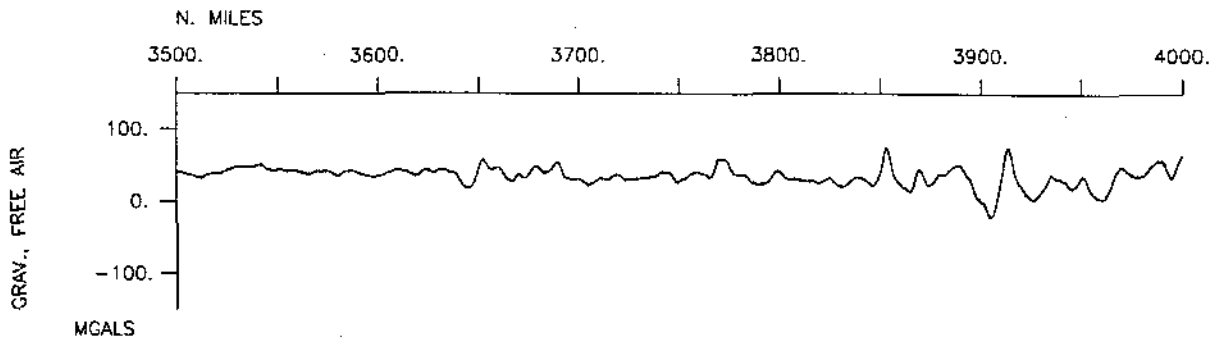


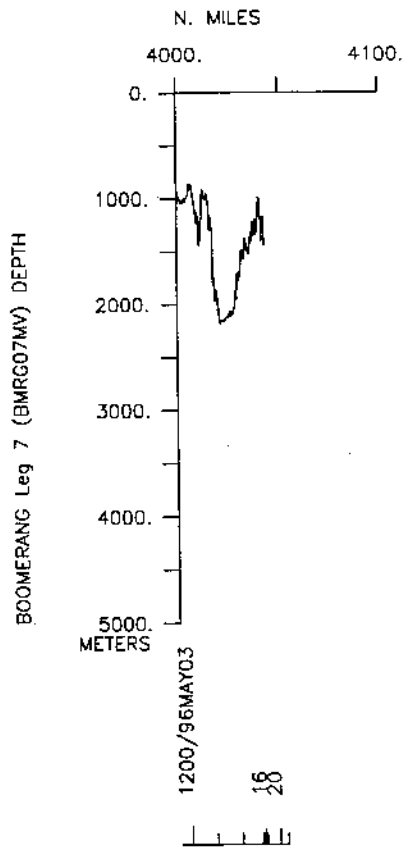
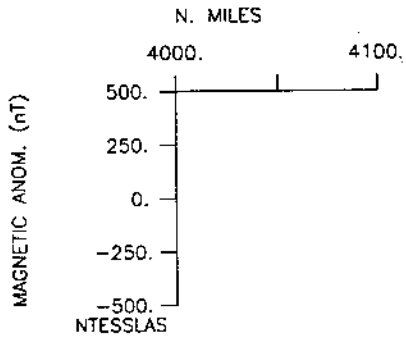
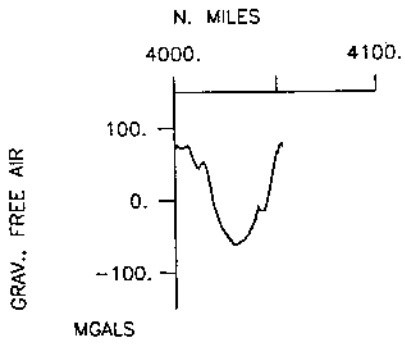












S.I.O. SAMPLE INDEX

BOOMERANG EXPEDITION

LEG 7

(BMRG07MV)

R/V Melville

(Issued July 1996)

Ports:

Port Hedland, Australia (19 April 1996)
to
Suva, Fiji (3 May 1996)

Chief Scientist:

Nan Bray, 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. 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.# 267

**** Ports ***

0630	190496	8	LGPT	B	Port Hedland, Aust.	20-18.00S	118-35.00E	f	BMRG07MV
2100	030596	12	LGPT	E	Suva, Fiji	18-08.00S	178-25.00E	f	BMRG07MV
0243	210496	0	LGSS	B	Ashmore Reef, Aust.	12-12.63S	122-58.91E	g	BMRG07MV
0106	220496	0	LGSS	E	Ashmore Reef, Aust.	12-12.78S	122-59.32E	g	BMRG07MV

**** Personnel ***

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS	SIO Bray, Dr.N.	Chief Scientist	Scripps Institution	BMRG07MV
PERT	STS Comer, R.L.	Resident Tech.	Scripps Institution	BMRG07MV
PECT	STS Charters, J.	Computer Tech.	Scripps Institution	BMRG07MV
RESP	SIO Moore, T.	Computer Prog.	Scripps Institution	BMRG07MV

**** 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.