

*REPORT AND INDEX OF
UNDERWAY MARINE GEOPHYSICAL DATA*

BOOMERANG EXPEDITION

LEG 4

(BMRG04MV)

R/V MELVILLE

(Issued May 1996)

Ports:

Dunedin, New Zealand (7 January 1996)

to

Hobart, Tasmania (11 January 1996)

Technicians-in-Charge:

James Charters and Seth Mogk

Scripps Institution of Oceanography

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.

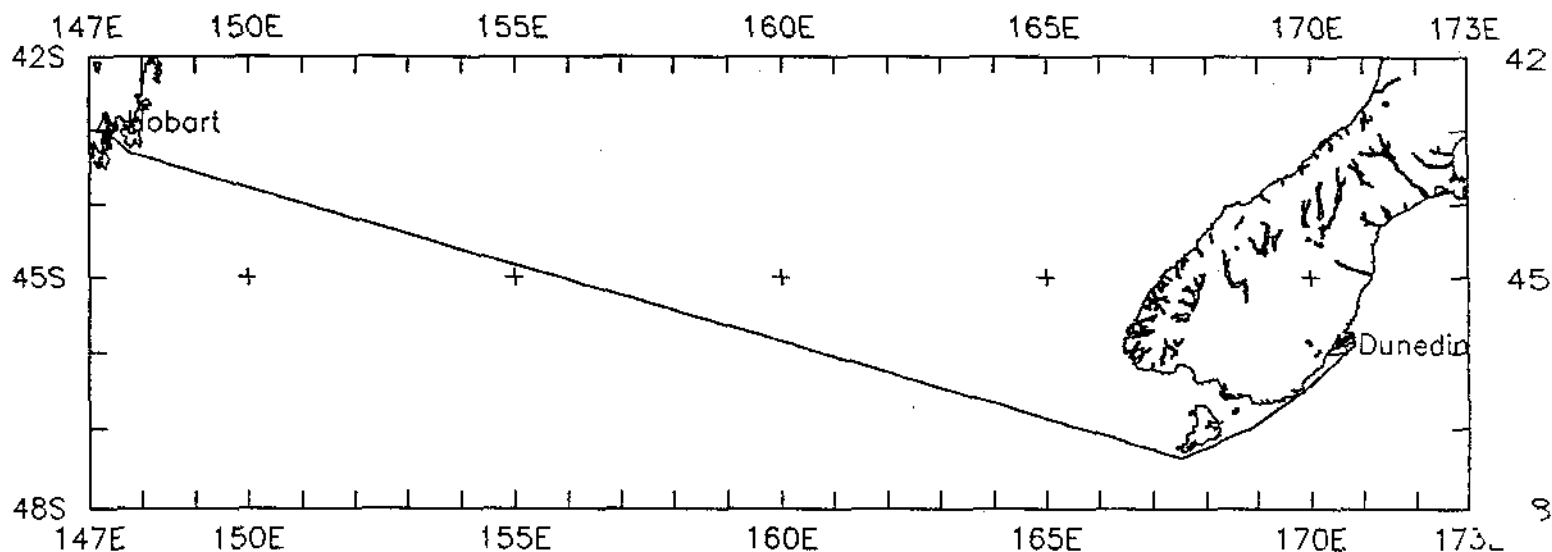
rev 7/93

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 4

TECHNICIANS-IN-CHARGE: James Charters and Seth Mogk

Scripps Institution of Oceanography

PORTS: Dunedin, New Zealand - Hobart, Tasmania

DATES: 7 - 11 January 1996

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 1132 miles

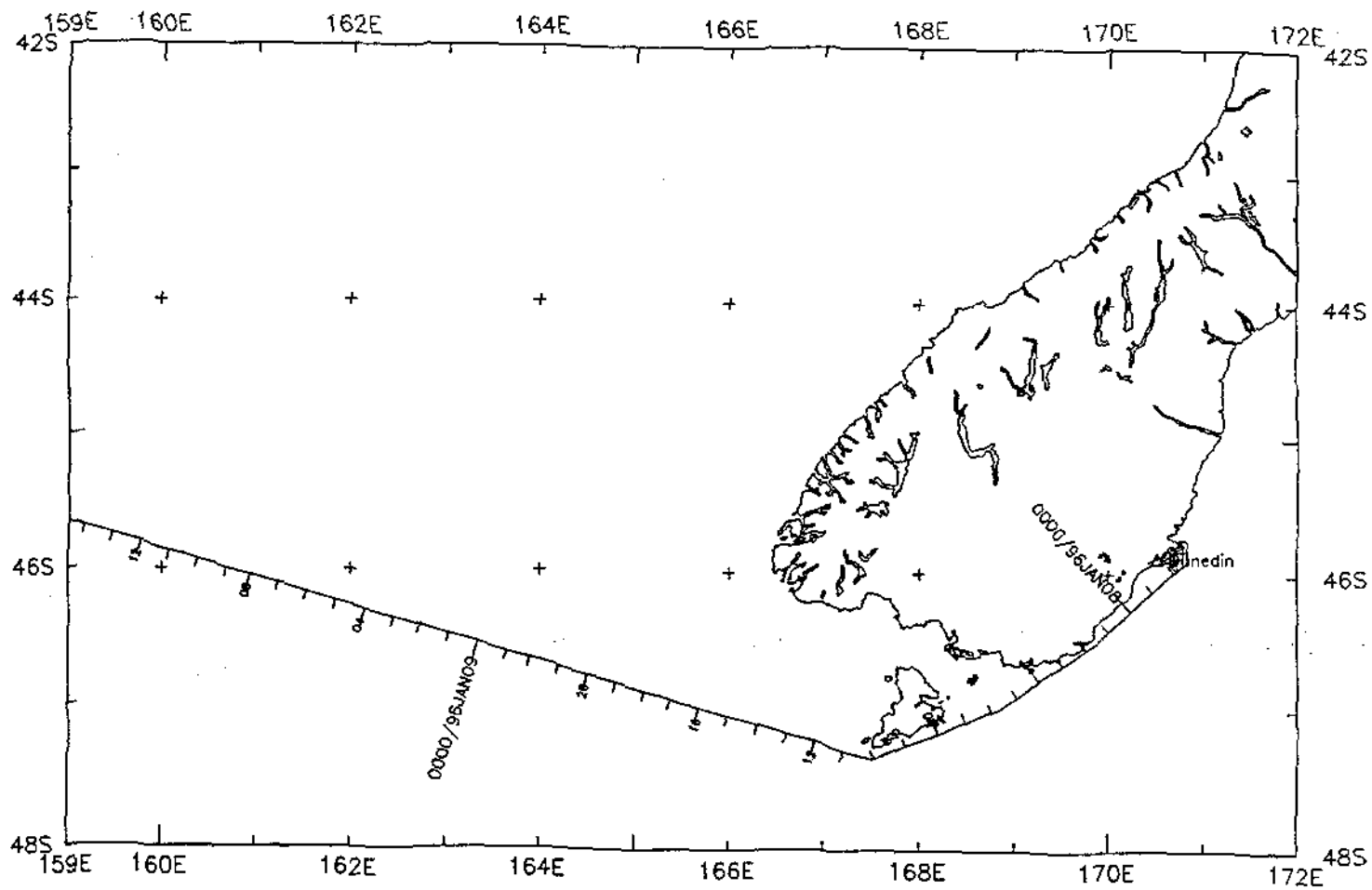
Magnetics - 912 miles

Bathymetry - 1015 miles

Seismic Reflection - none collected

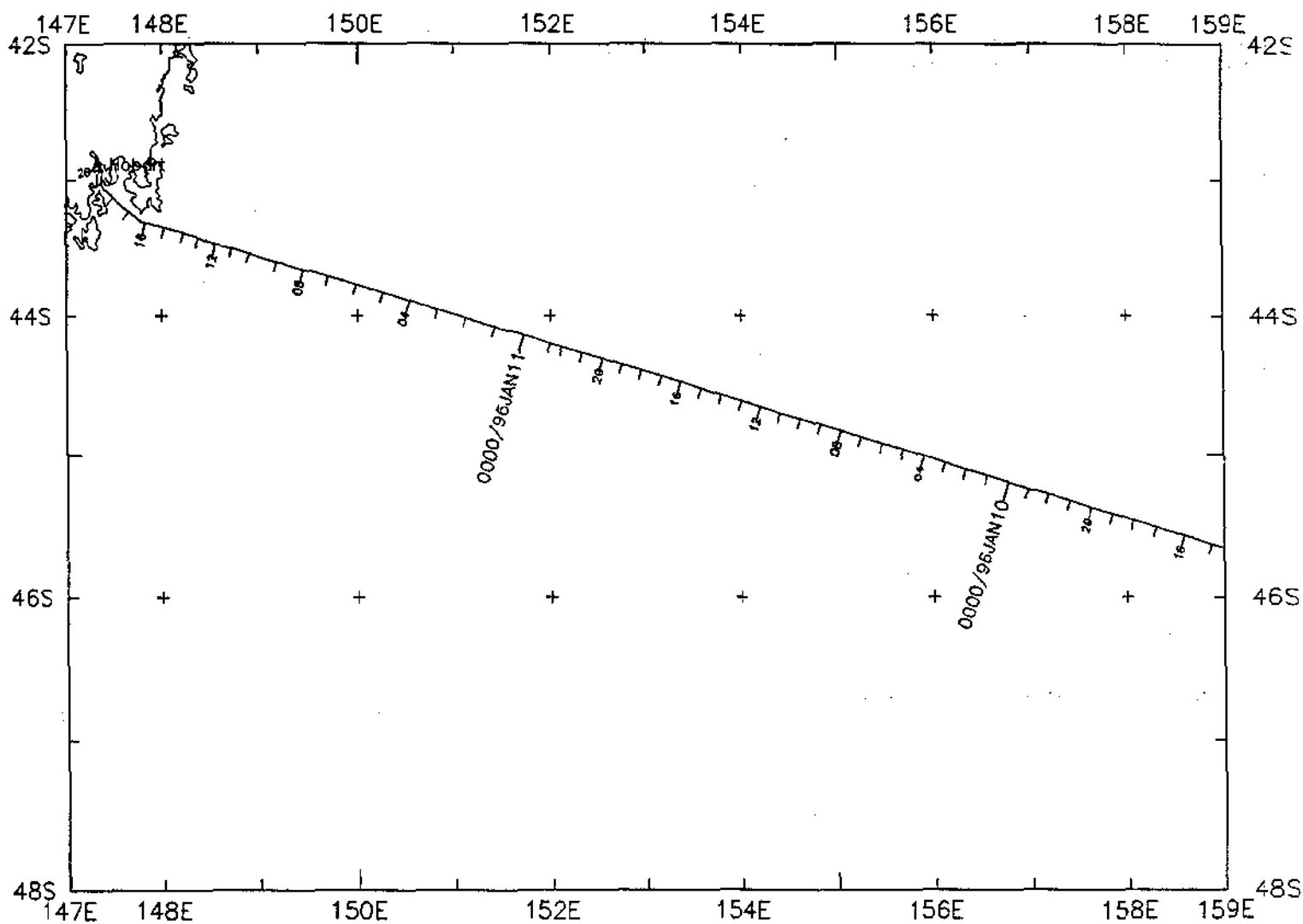
Sea Beam - 1015 miles

Gravity - 1122 miles



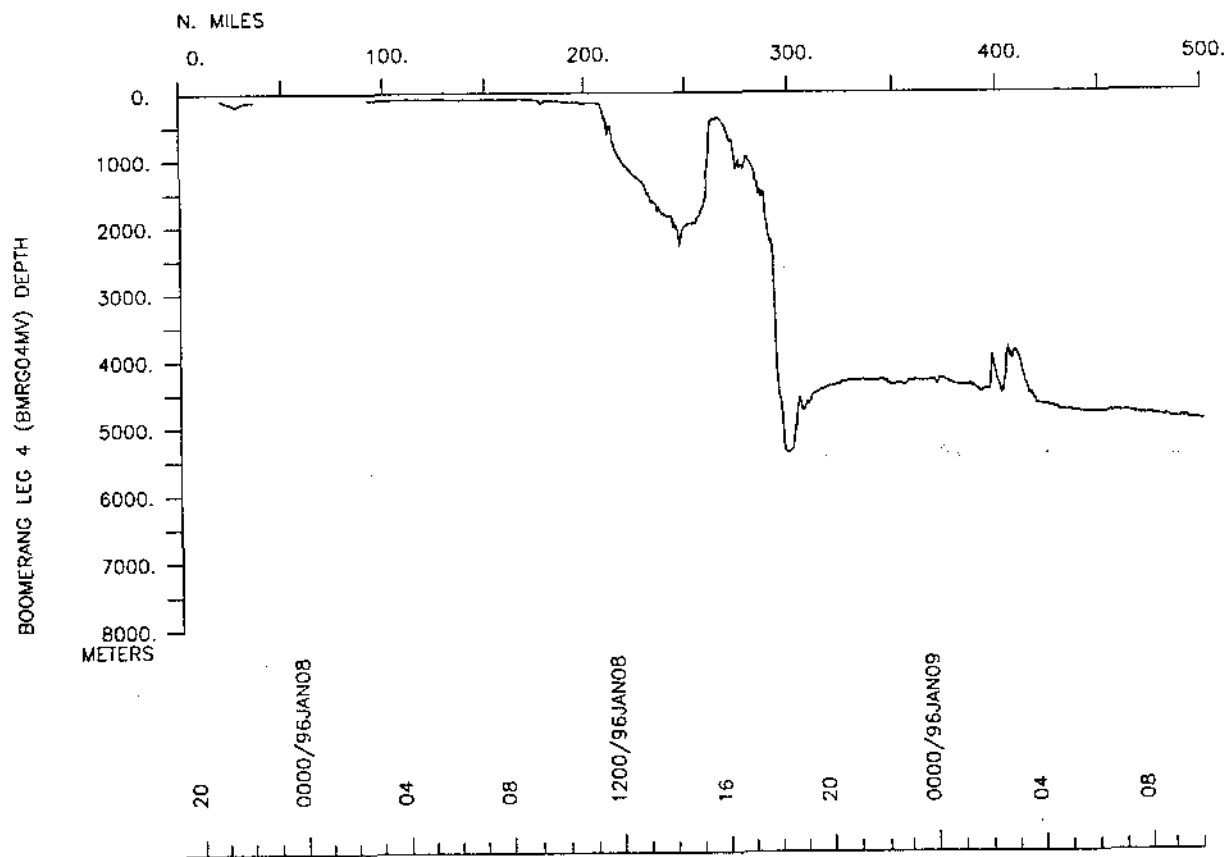
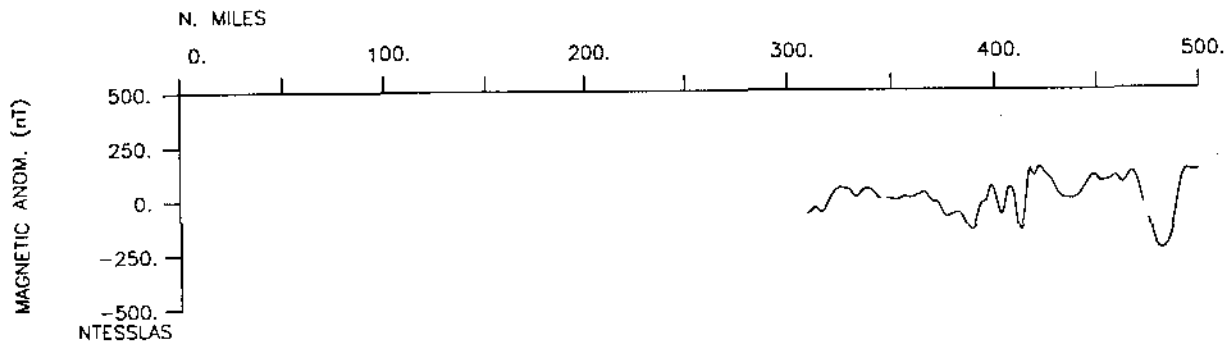
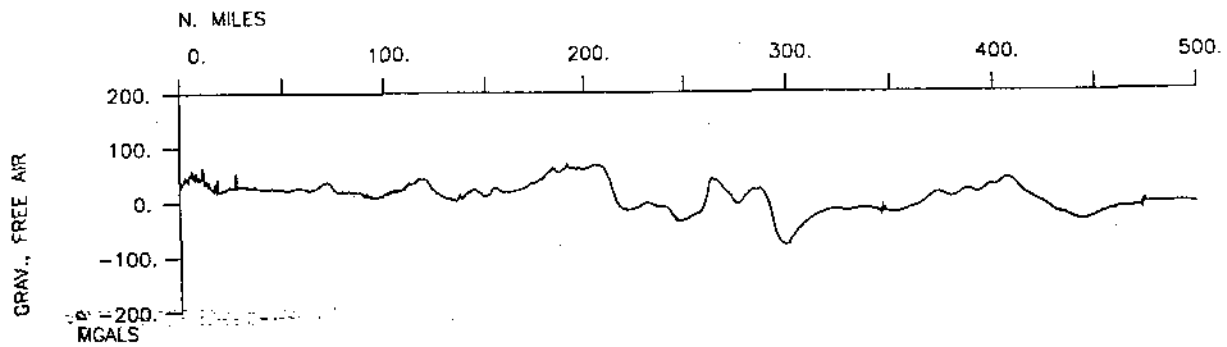
BOOMERANG Leg 4 (BMRG04MV)

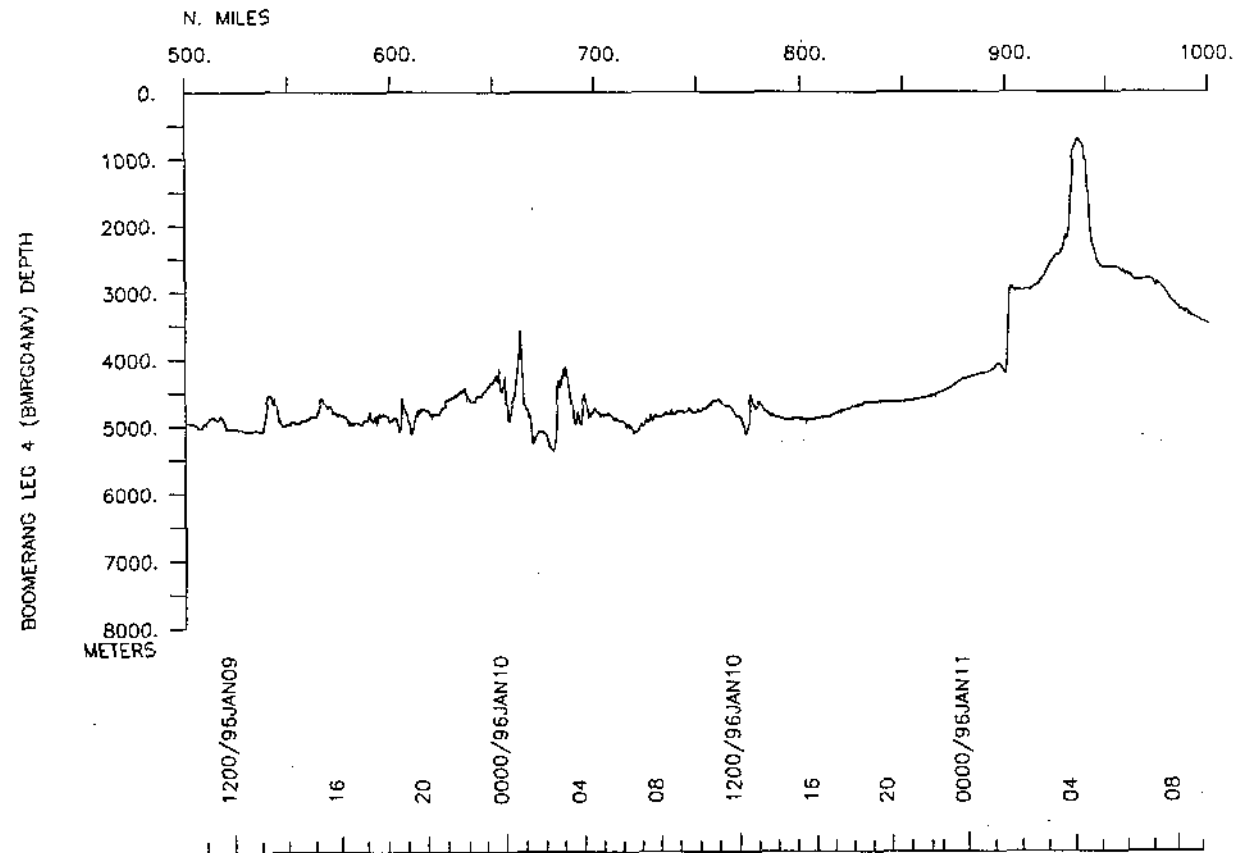
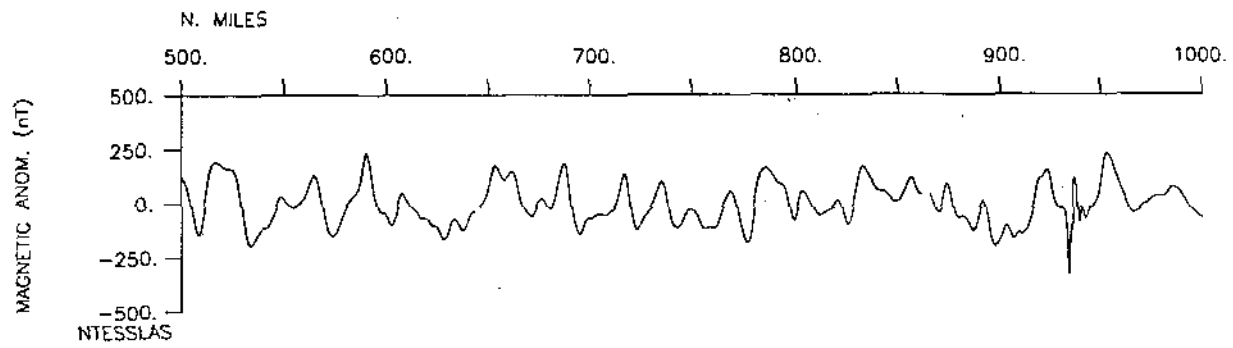
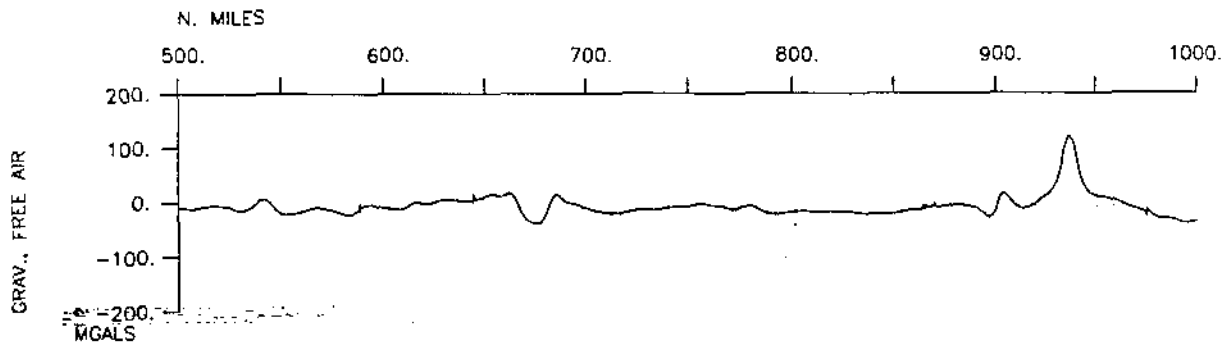
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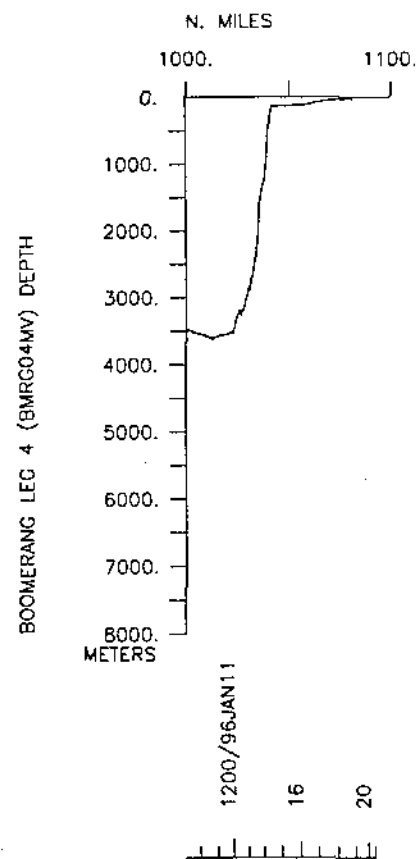
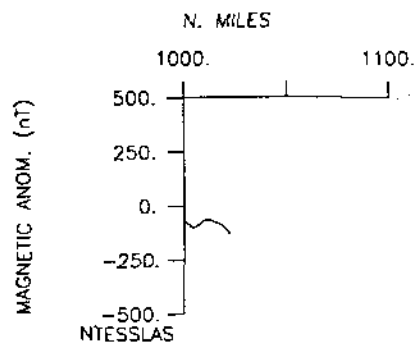
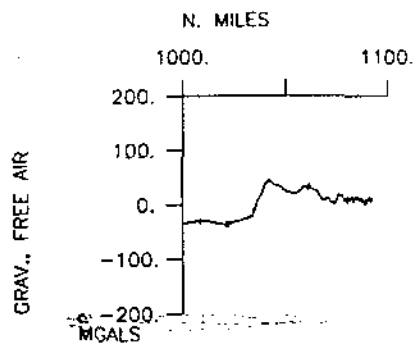


BOOMERANG Leg 4 (BMRG04MV)

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S.I.O. SAMPLE INDEX

BOOMERANG EXPEDITION

LEG 4 R/V Melville

(BMRG04MV)

(Issued May 1996)

PORTS:

Dunedin, New Zealand (7 January 1996)

to

Hobart, Tasmania (11 January 1996)

Technicians-in-Charge:

James Charters and Seth Mogk

(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 cods are available from the Geological Data Center.)

GDC CRUISE I.D.# 267

**** Ports ***

1200	070196	0	LGPT B	Dunedin, New Zealand	45-53.00S	170-31.00E	f	BMRG04MV
2100	110196	0	LGPT E	Hobart, Tazmania	42-53.00S	147-20.00E	f	BMRG04MV

**** Personnel ***

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECT STS	Charters, J.	Computer tech	Scripps Institution	BMRG04MV
PERT STS	Mogk, S.	Resident tech	Scripps Institution	BMRG04MV

**** NOTES ***

#An 'X' in the (B)egin/(E)nd column following the sample code indicates no
#sample or data recovered. A 'C' indicates continuation of data collection
#from before the beginning or after the end of a particular leg. (Moored
#bottom instruments, for example.) The number appearing in the columns
#between the sample identifier and the disposition code, for many sample
#entries, is the water depth in corrected meters.

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

*** Underway Data-Curator - S. M. Smith ext. 42752 ***

*** Log Books ***

1200	070196	0	LBUW	B Underway watch log	GDC	45-52.71S	170-30.82E	g	BMRG04MV
2100	110196	0	LBUW	E Underway watch log	GDC	42-53.18S	147-20.32E	g	BMRG04MV

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

1500	070196	0	MBSR	B v.beam&sscan r-01	GDC	45-52.71S	170-30.82E	g	BMRG04MV
1700	110196	0	MBSR	E v.beam&sscan r-01	GDC	43-14.26S	147-39.95E	g	BMRG04MV

*** Magnetics (Earth Total Field) Records ***

1912	080196	0	MGRA	B magnetics r-01	GDC	46-48.49S	164-43.89E	g	BMRG04MV
1148	110196	0	MGRA	E magnetics r-01	GDC	43-28.79S	148-33.94E	g	BMRG04MV

*** Expendable Bathythermographs ***

2312	090196	0	BTXP	XBT-01	GDC	45-13.89S	156-55.66E	g	BMRG04MV
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*** Current Meters ***

2209	080196	0	CMRT	ALACE drifter 603	PORD	46-38.36S	163-52.69E	g	BMRG04MV
0810	090196	0	CMRT	ALACE drifter 610	PORD	46-02.42S	160-54.96E	g	BMRG04MV
2244	090196	0	CMRT	ALACE drifter 612	PORD	45-14.82S	157-01.14E	g	BMRG04MV
2206	100196	0	CMRT	ALACE drifter 611	PORD	44-13.46S	152-06.36E	g	BMRG04MV

#	End Sample Index								BMRG04MV
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