

*Report and Index of
Underway Marine Geophysical Data*

BOOMERANG EXPEDITION

LEG 5

(BMRG05MV)

R/V MELVILLE

(Issued May 1996)

PORTS:

Hobart, Tasmania (16 January 1996)

to

Fremantle, Australia (17 February 1996)

Co-Chief Scientists:

Jean C. Sempere (University of Washington)

David Christie (Oregon State University)

Resident Marine Technician: Seth Mogk

Computer Technician: James Charters

No SeaBeam 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.

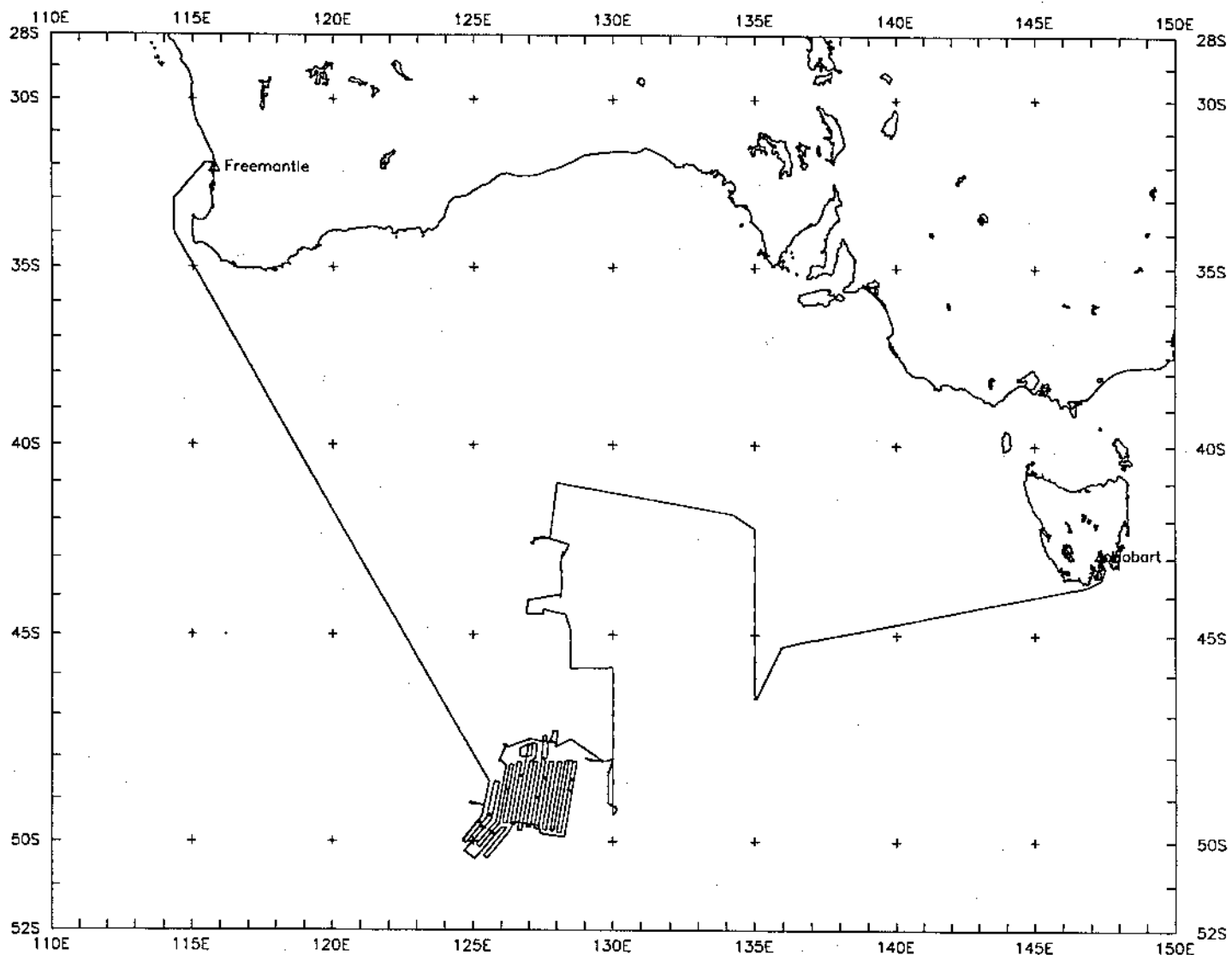
Profiles - depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

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)534-6500, 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.



BOOMERANG EXPEDITION LEG 5

CO-CHIEF SCIENTISTS: Jean Christophe Sempere

University of Washington

David Christie, Oregon State University

PORTS: Hobart, Tasmania - Fremantle, Australia

DATES: 16 January - 17 February 1996

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 6710 miles

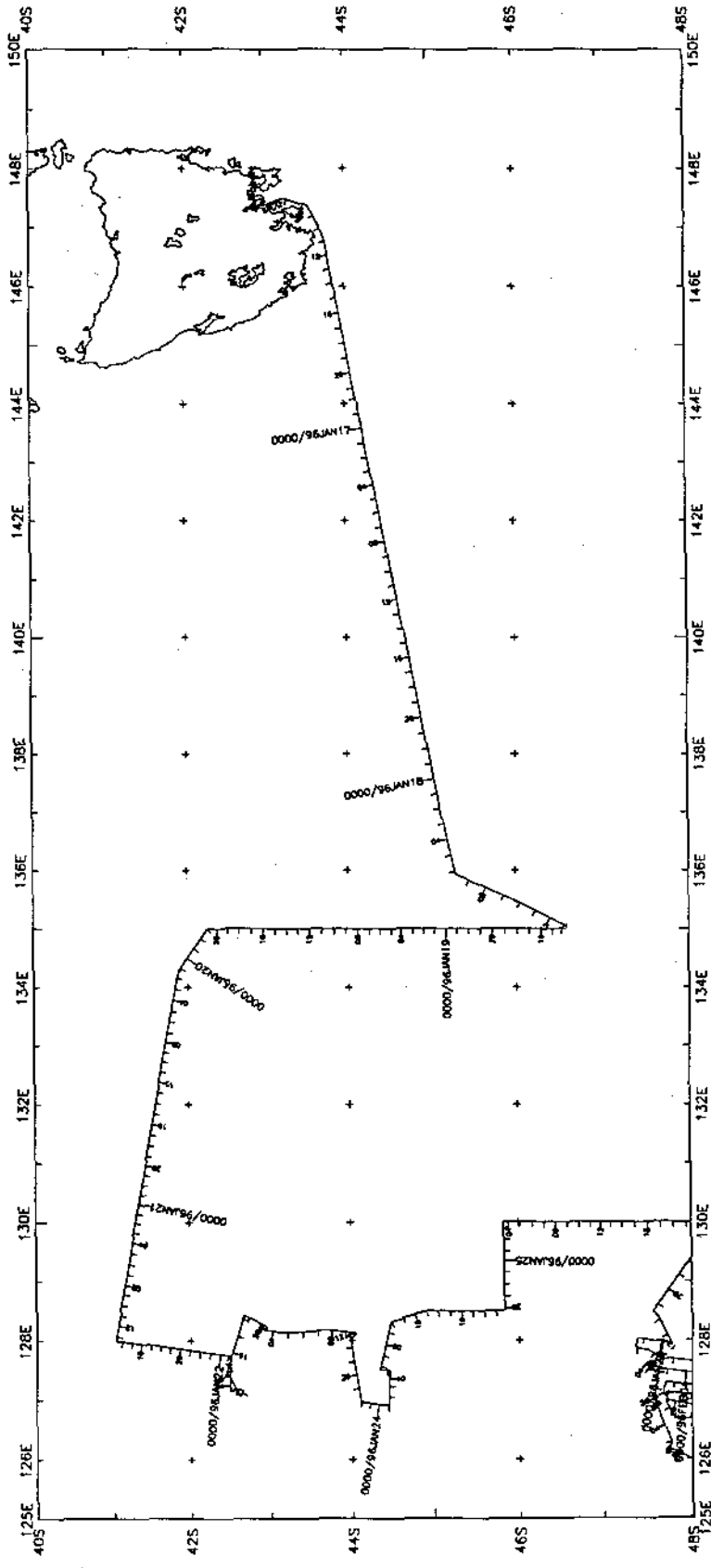
Magnetics - 5099 miles

Bathymetry - 6430 miles

Seismic Reflection - 1080 miles

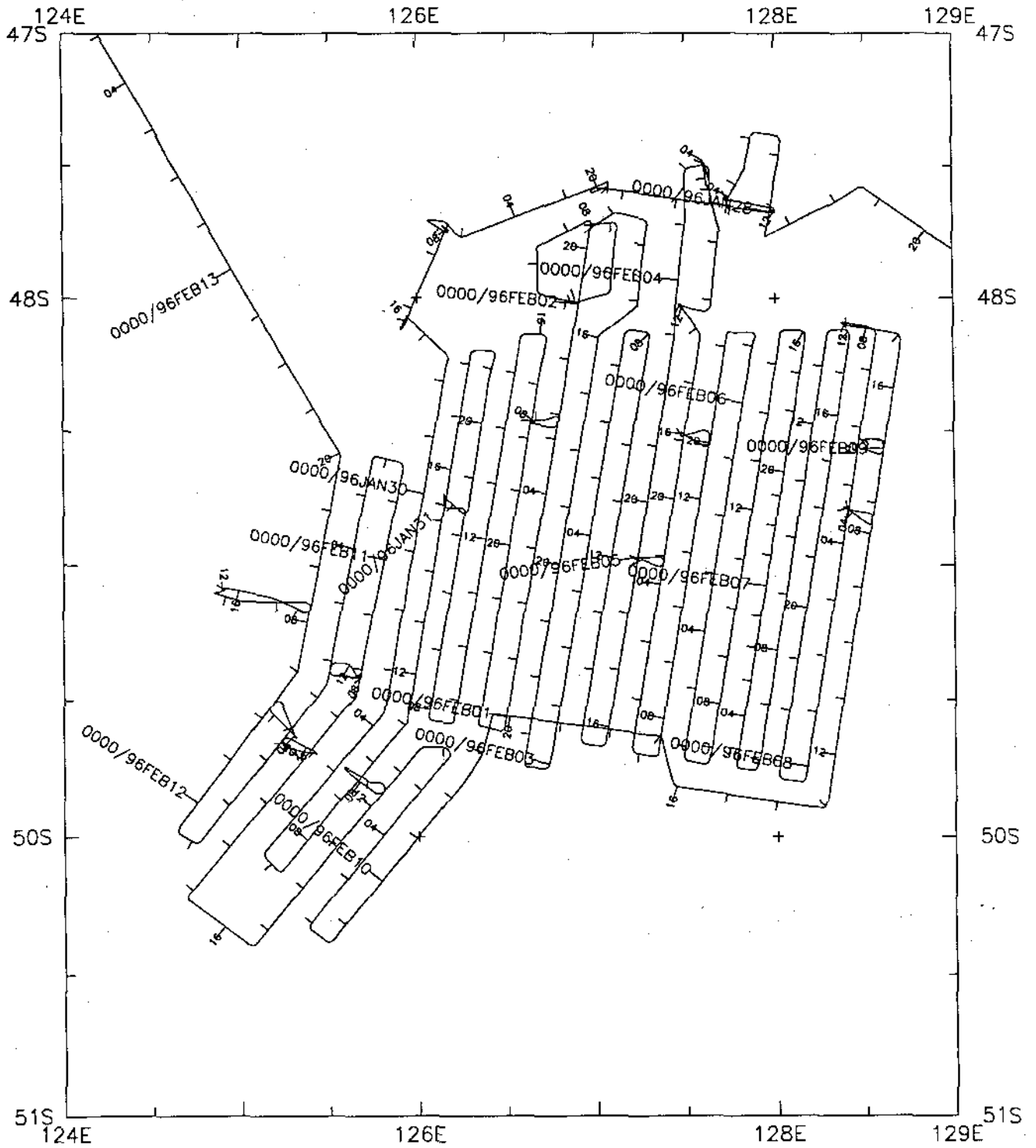
Sea Beam - 6430 miles

Gravity - 6662 miles



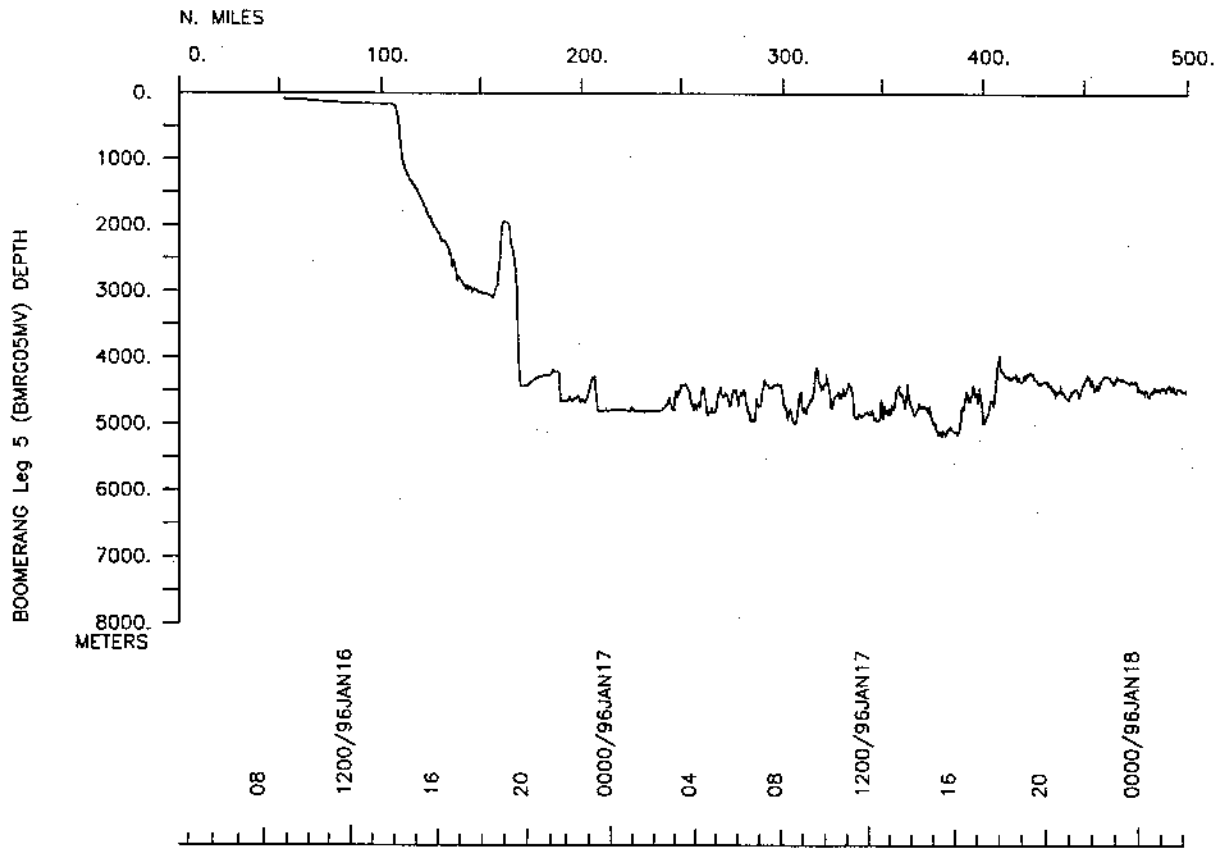
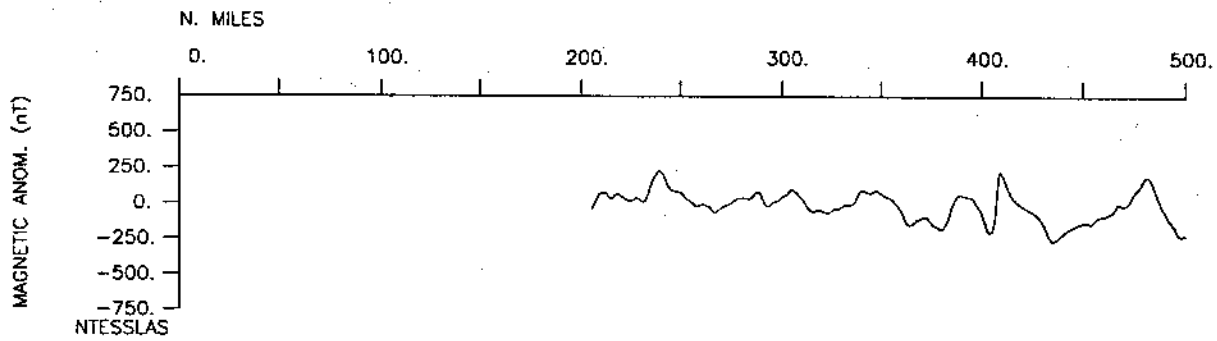
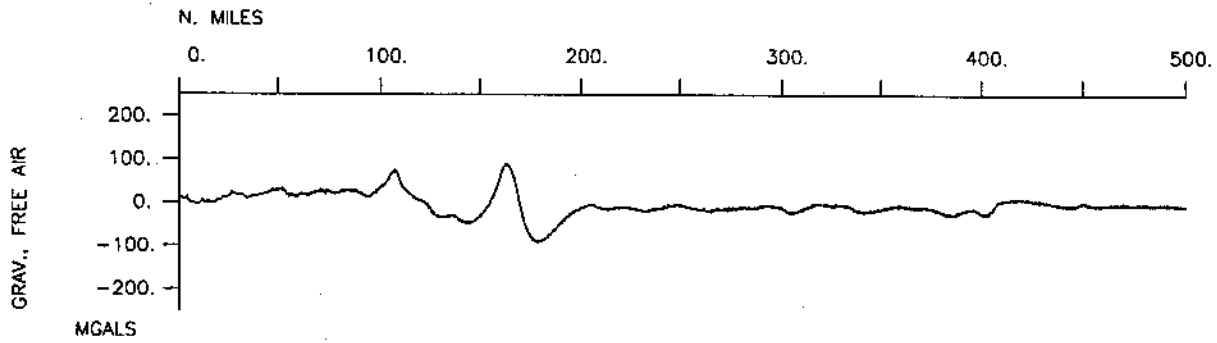
BOOMERANG Leg 5 (BMRG05MV)

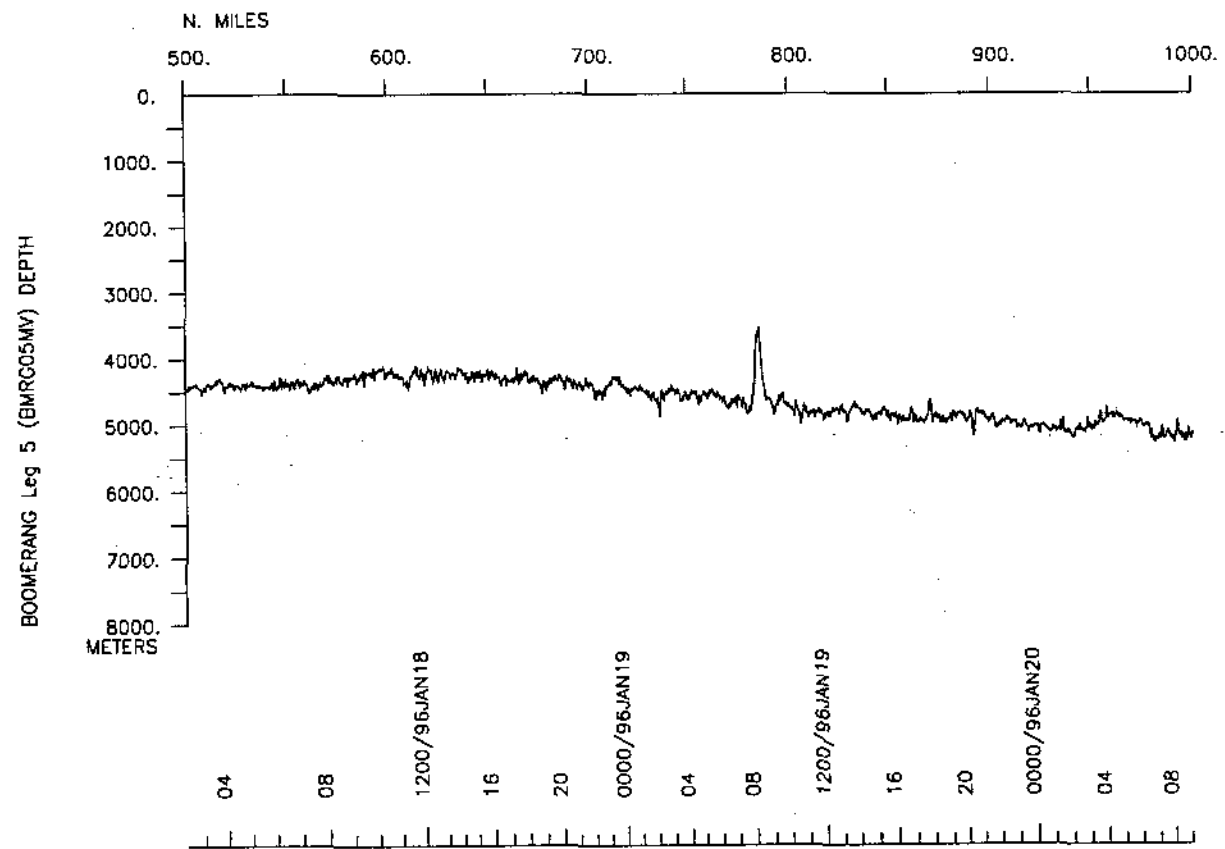
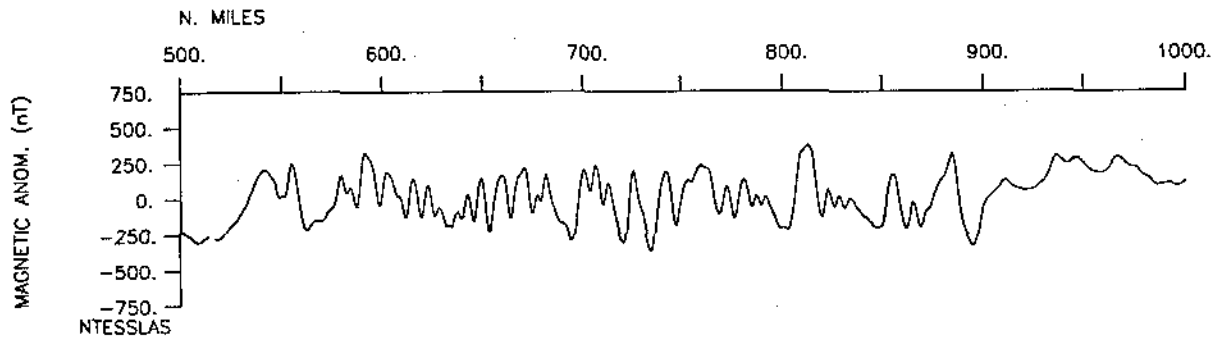
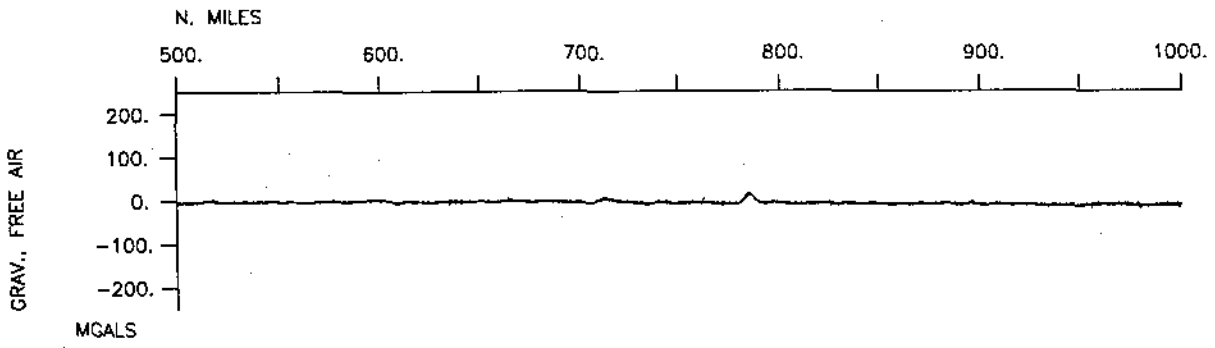
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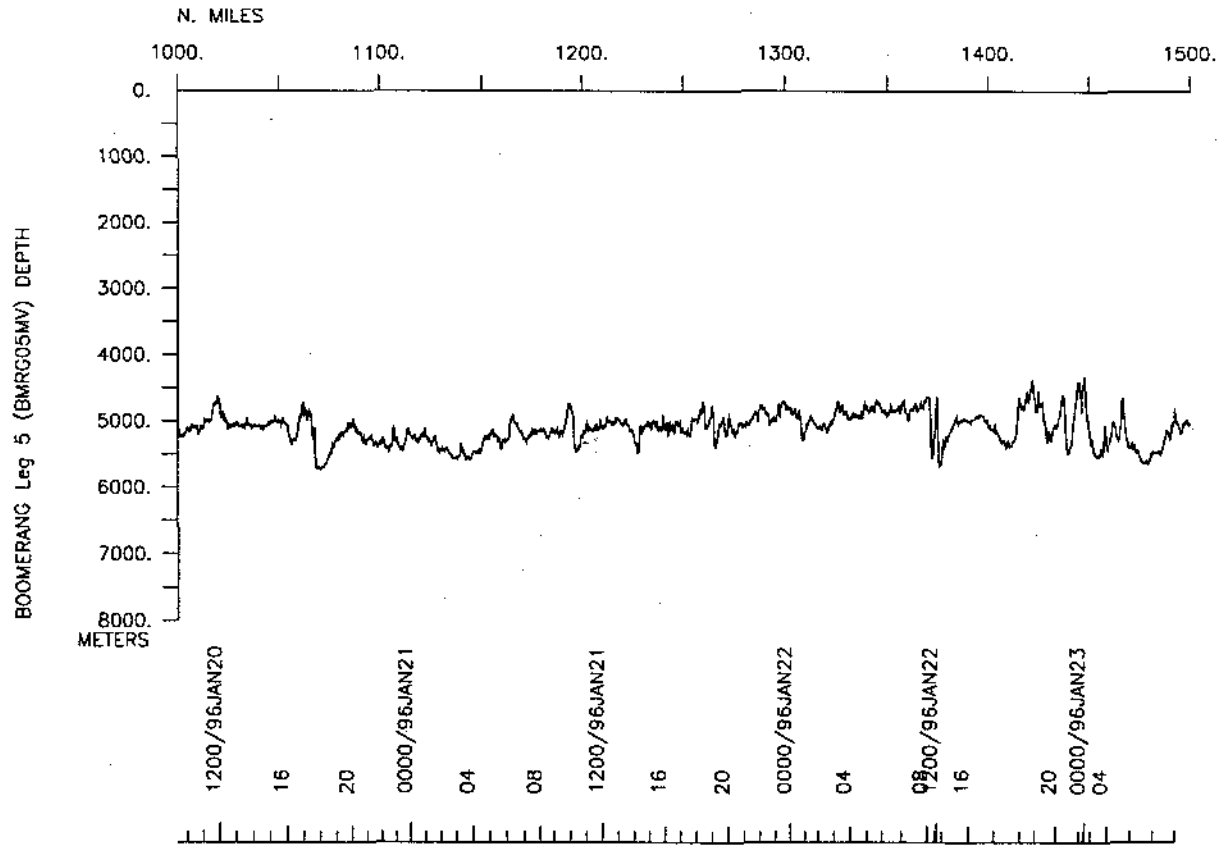
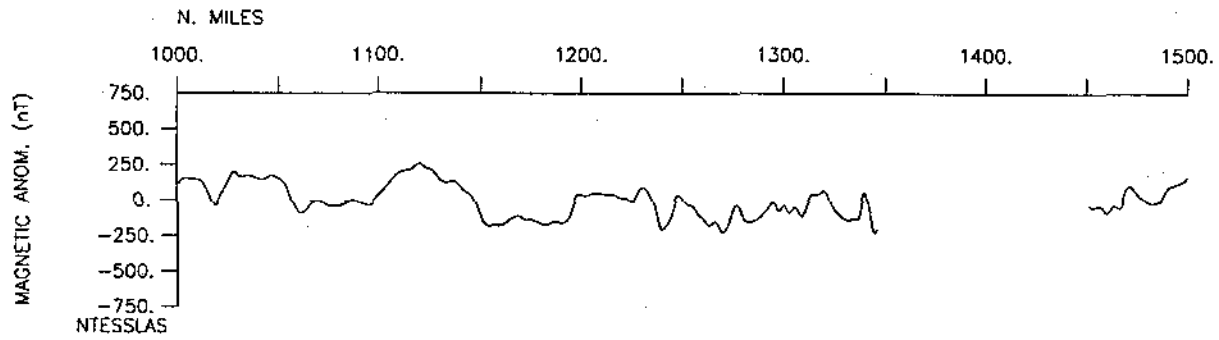
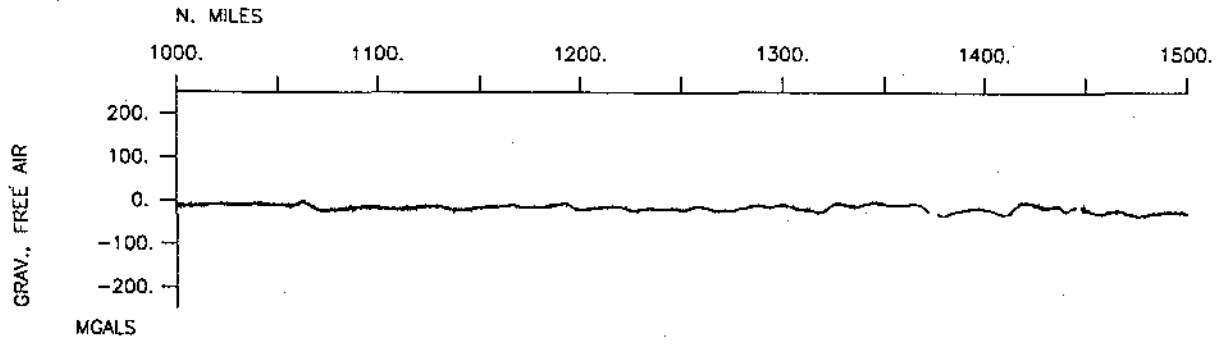


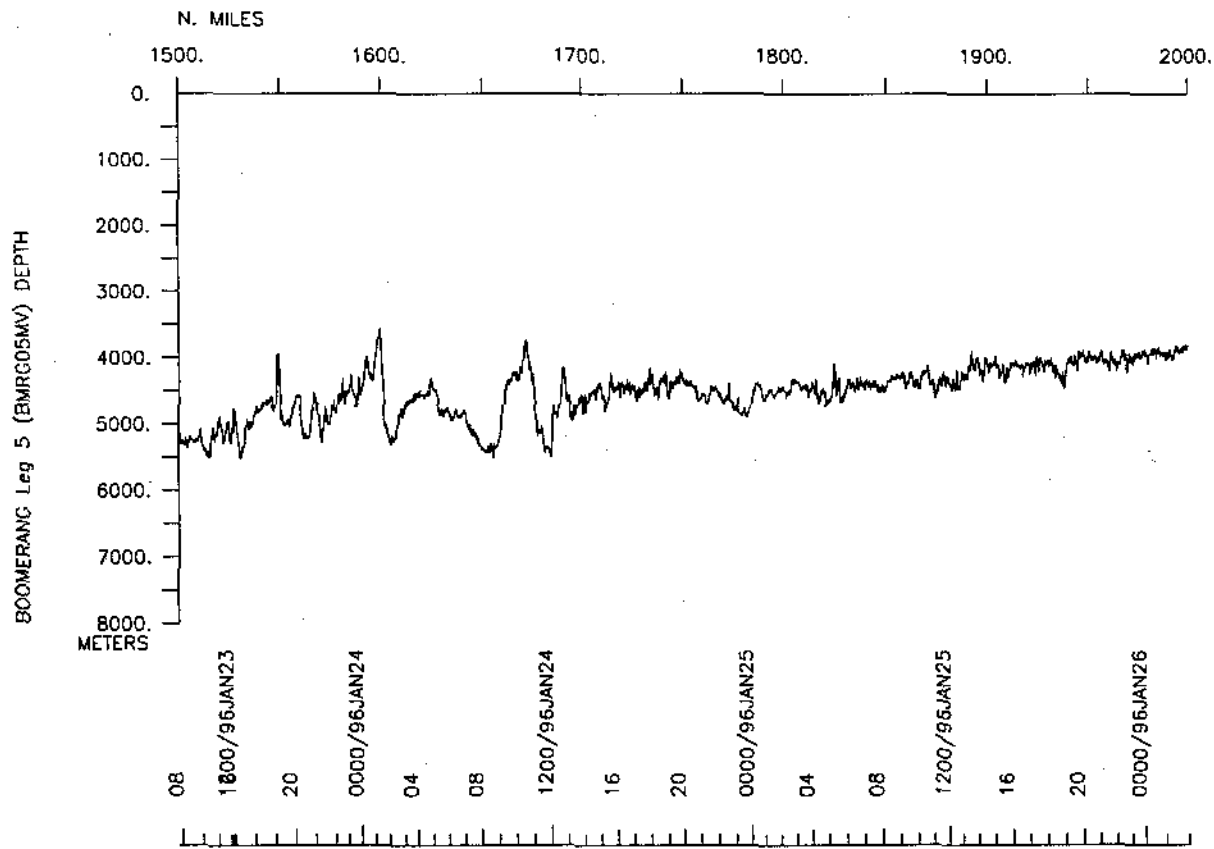
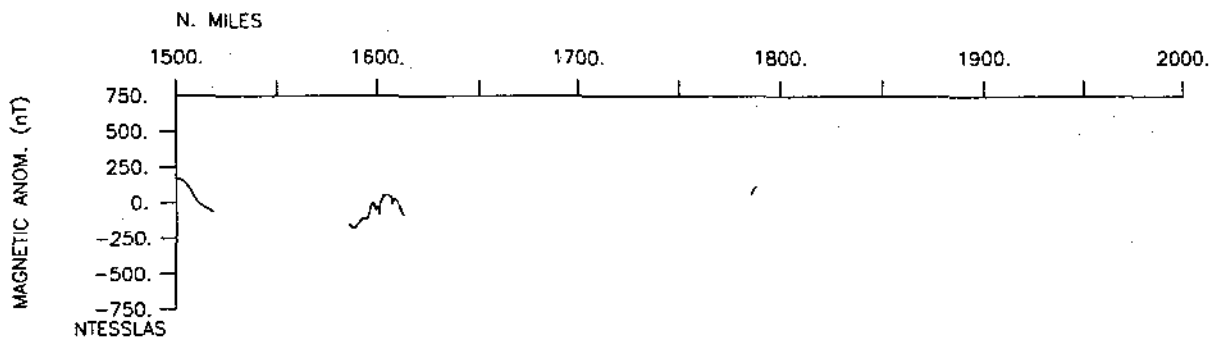
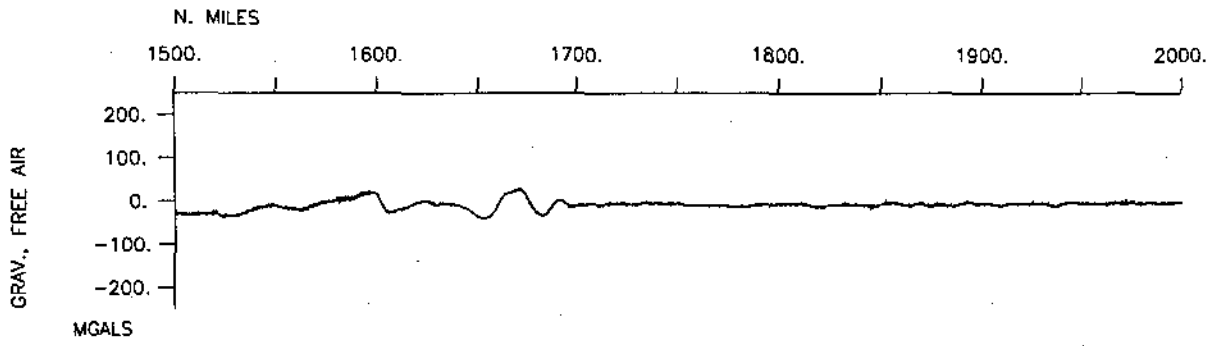
BOOMERANG Leg 5 (BMRG05MV) SURVEY

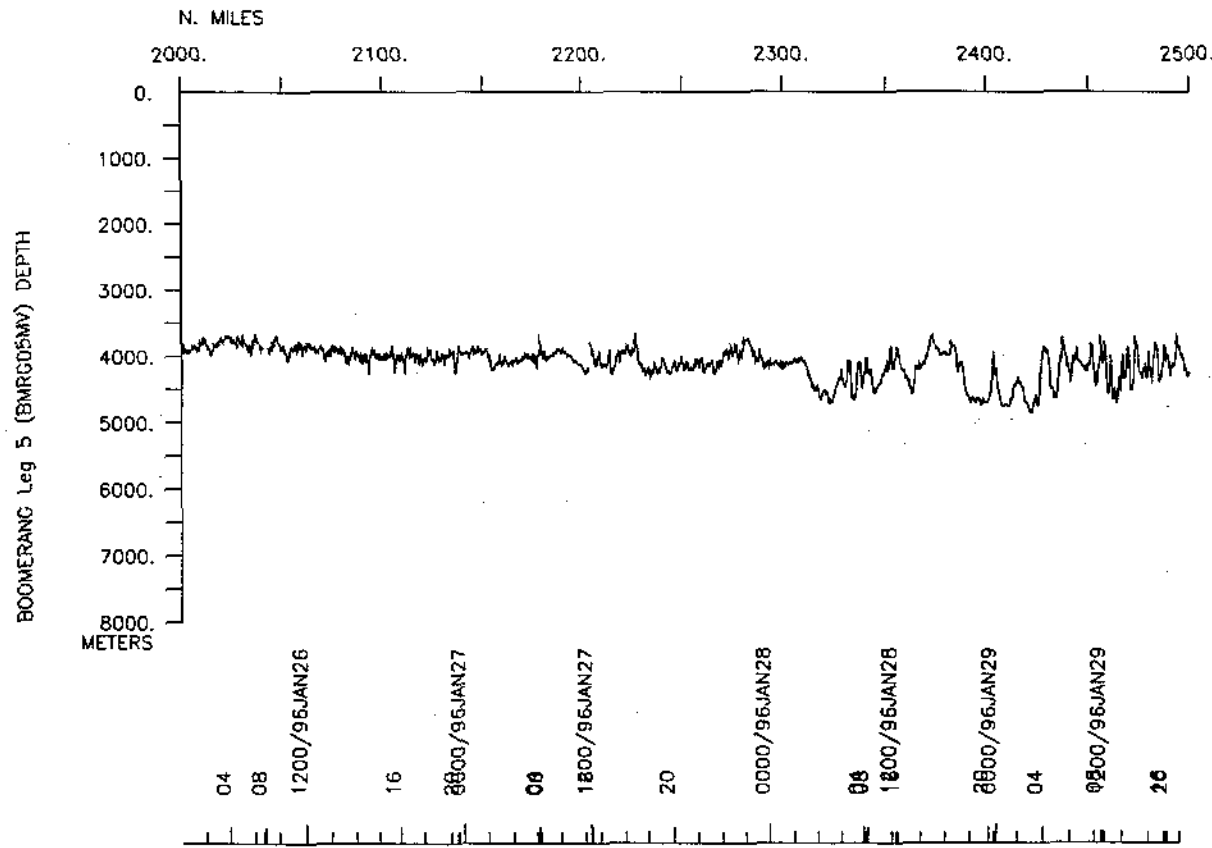
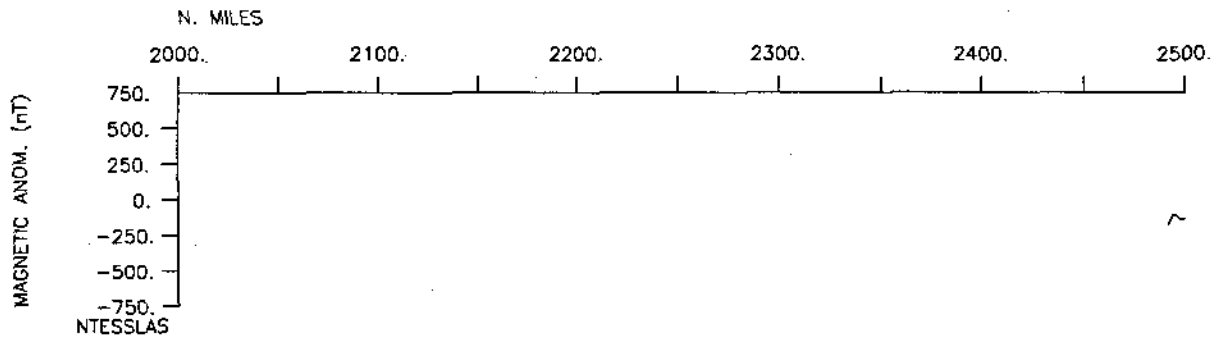
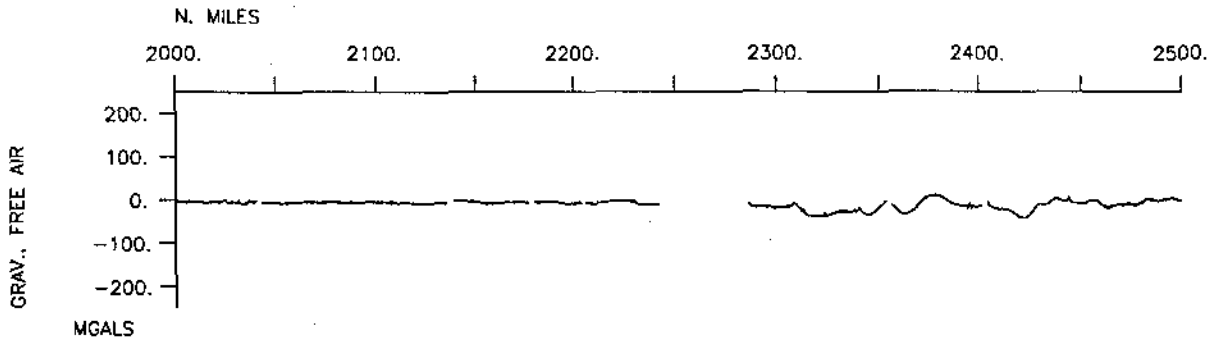
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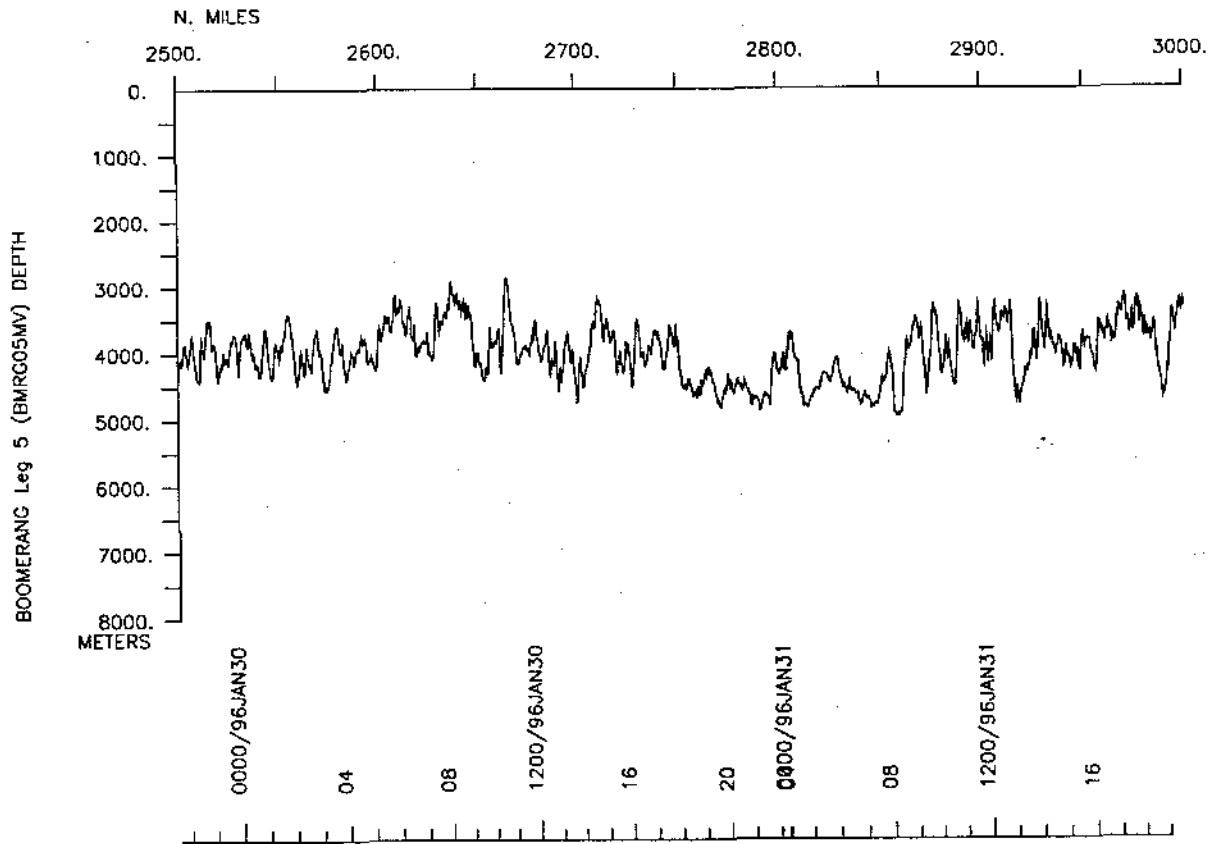
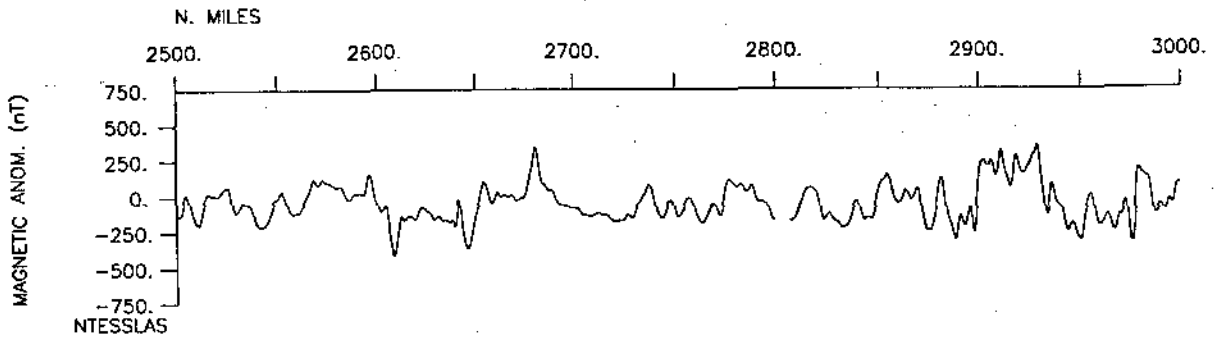
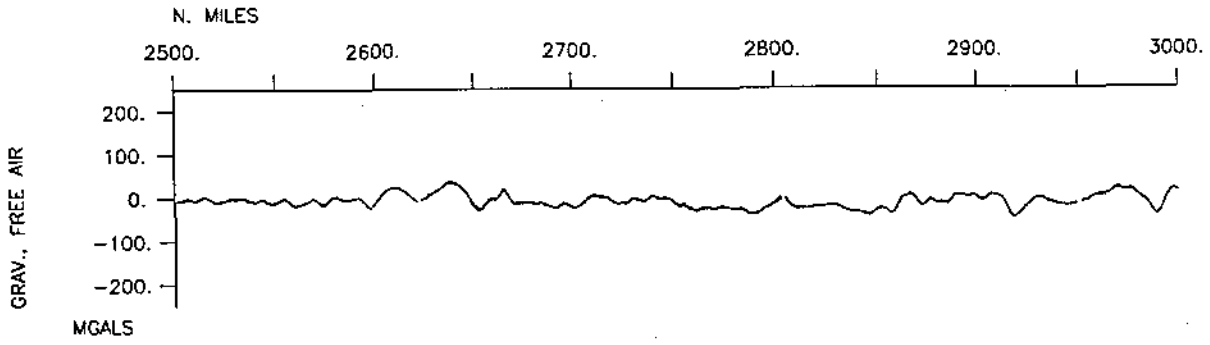


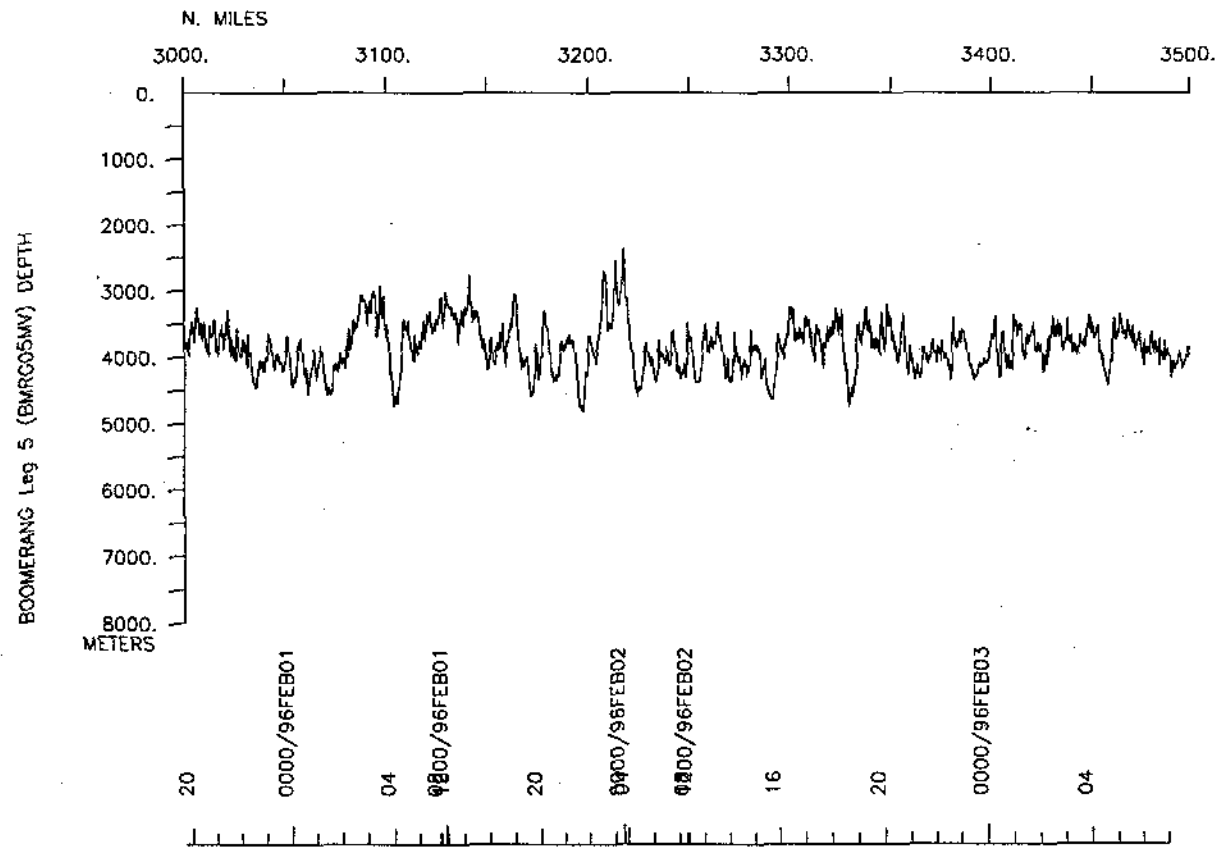
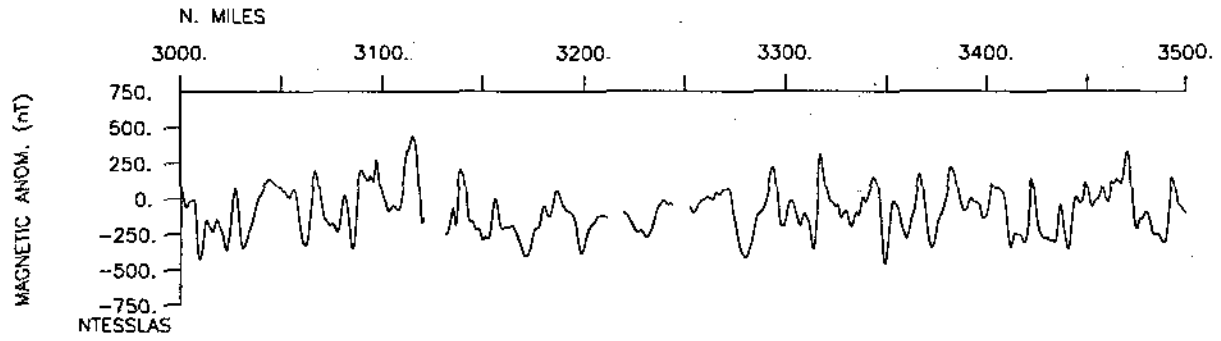
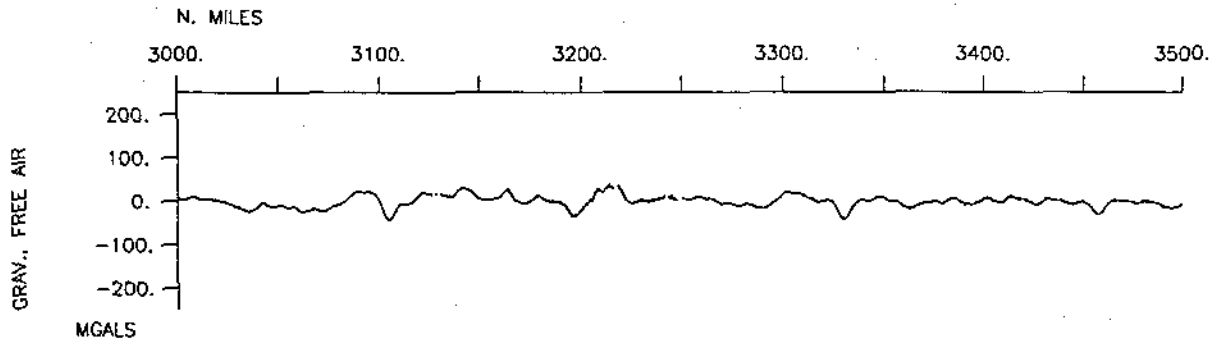


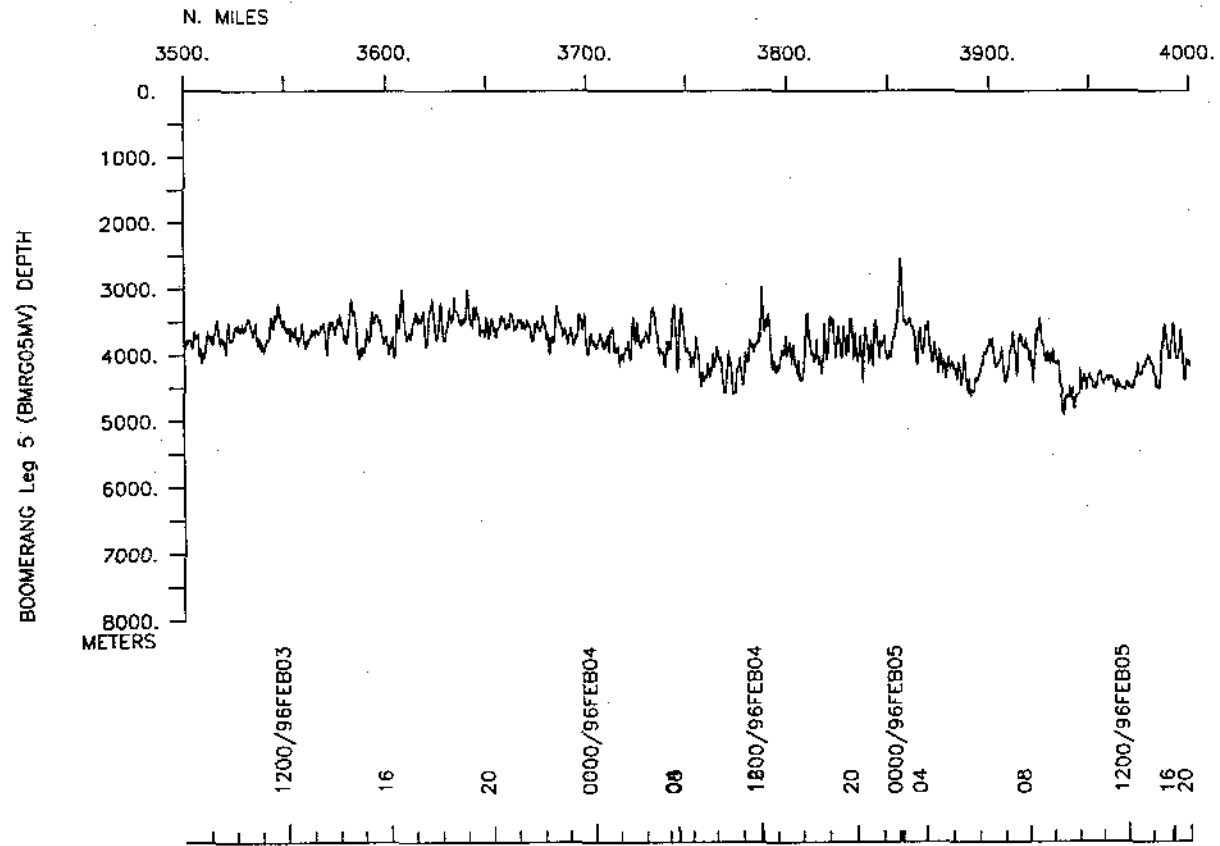
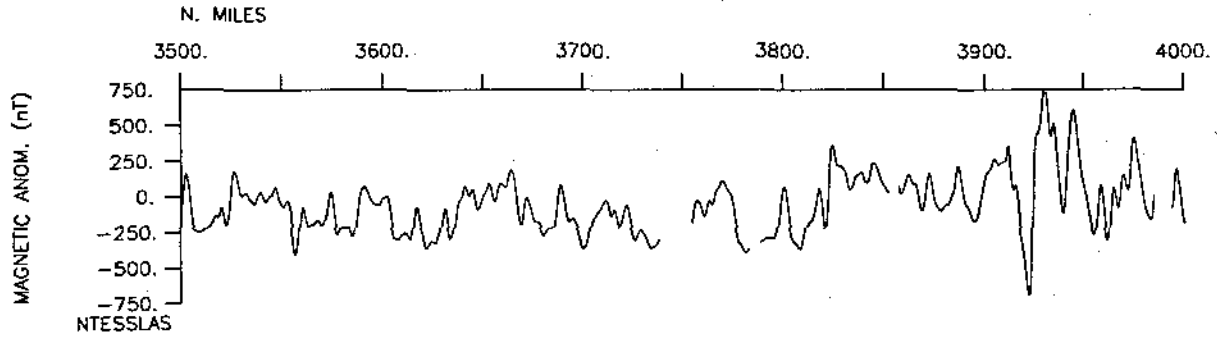
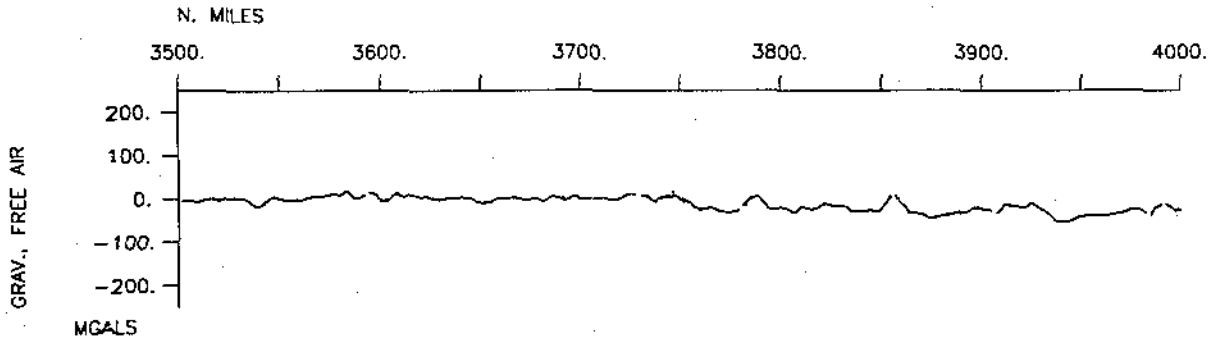


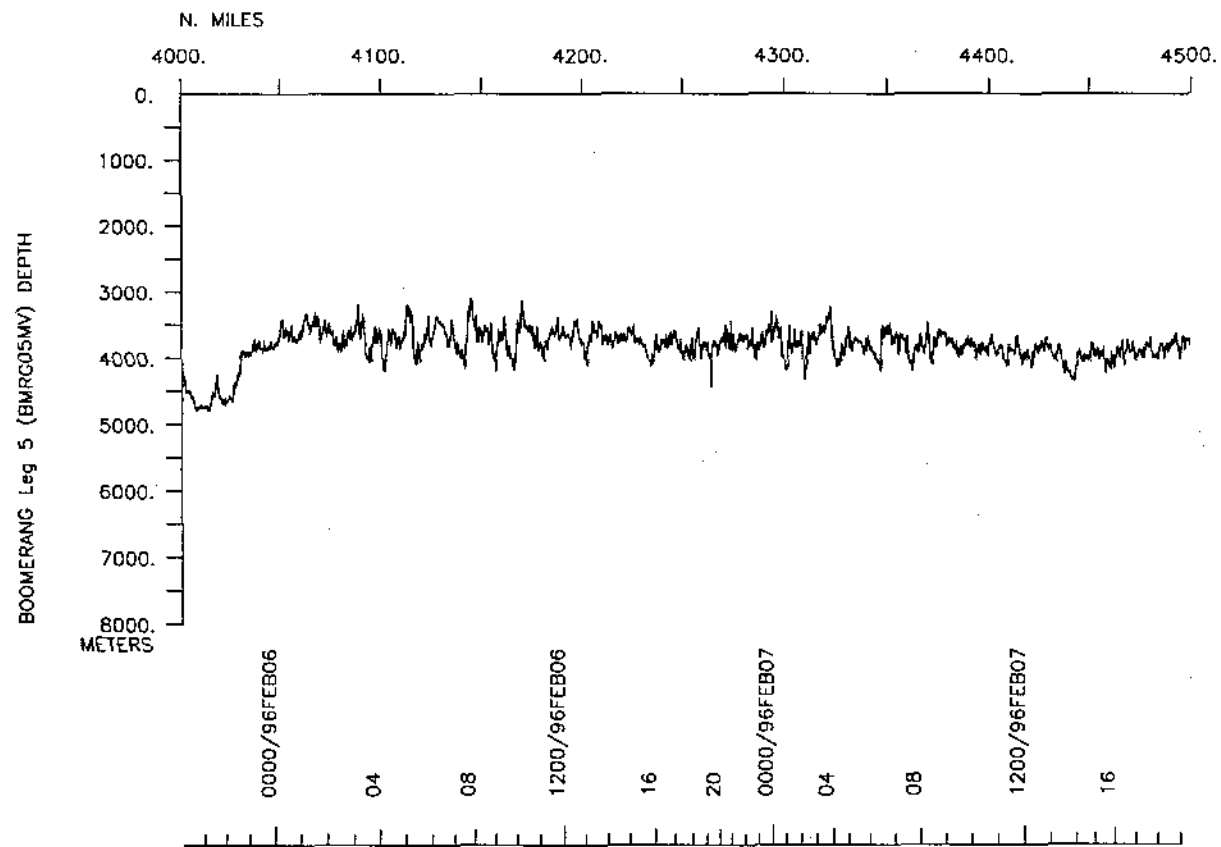
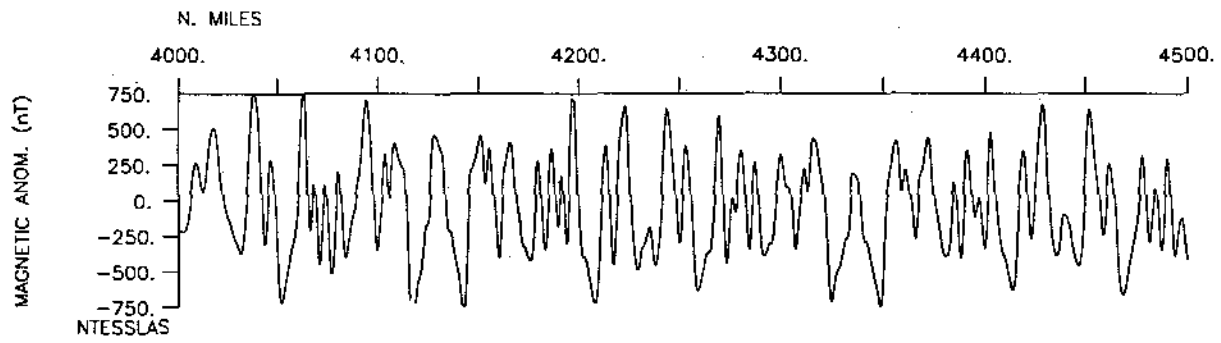
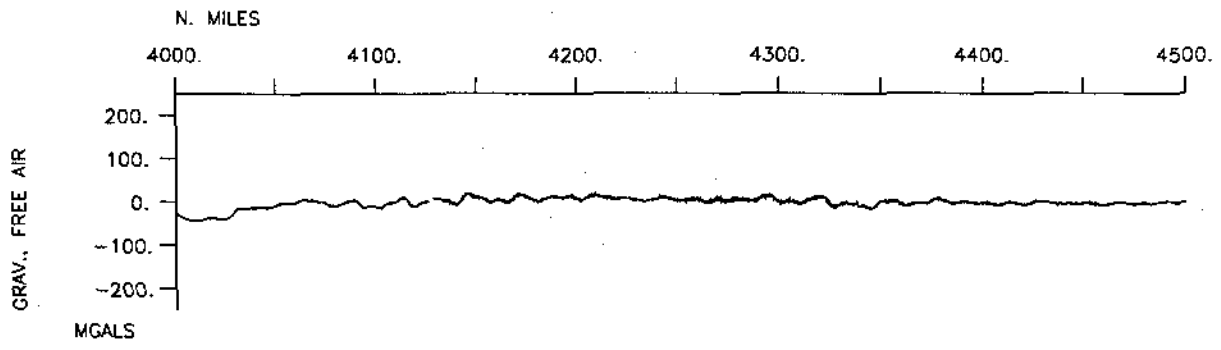


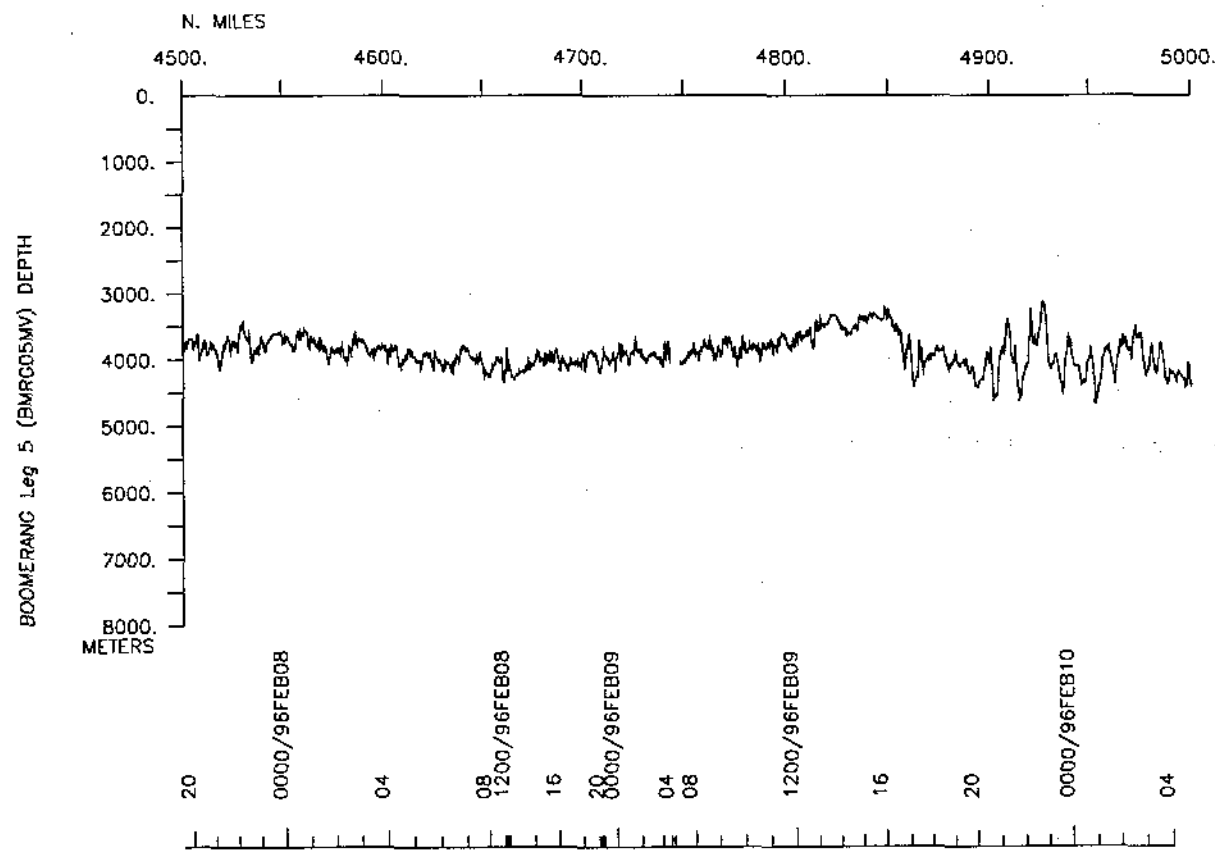
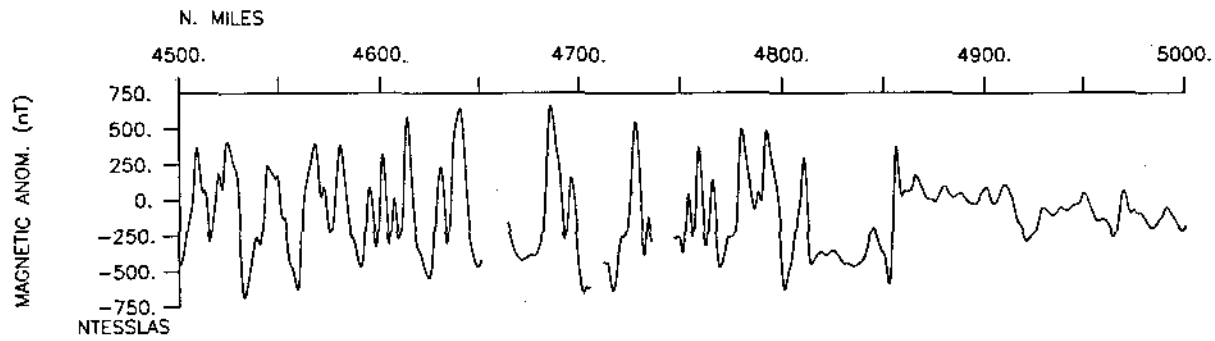
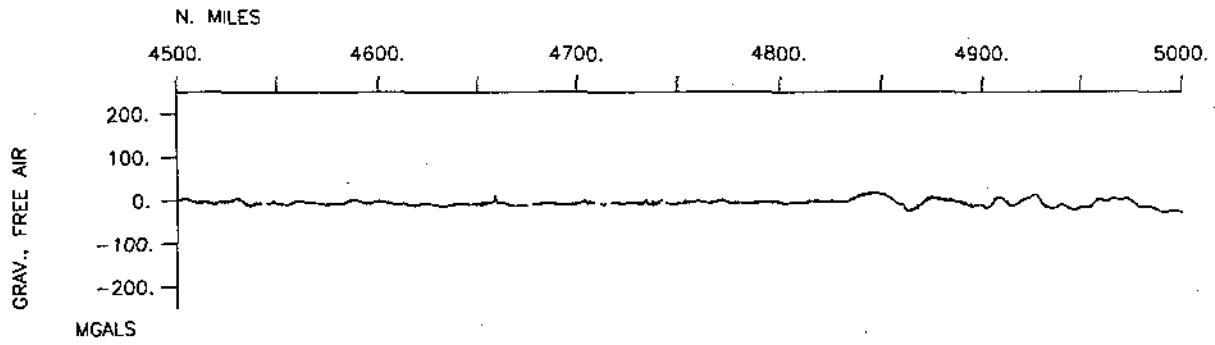


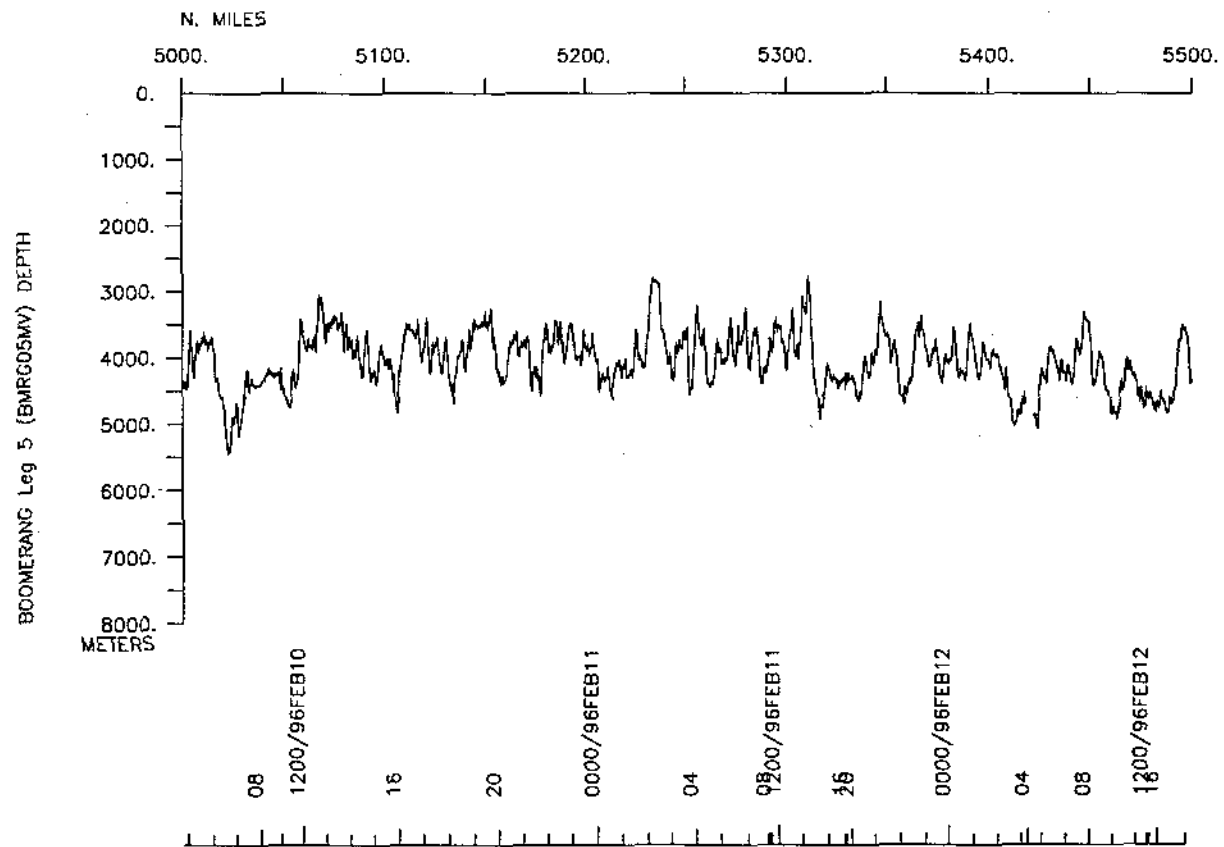
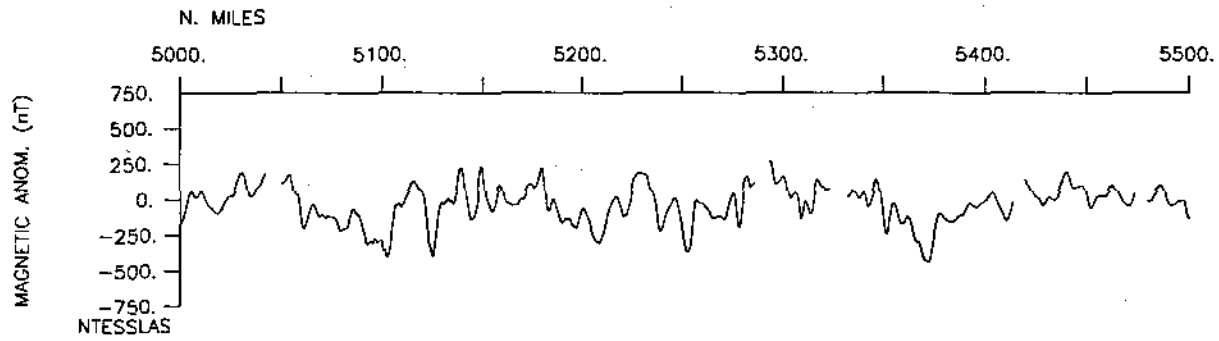
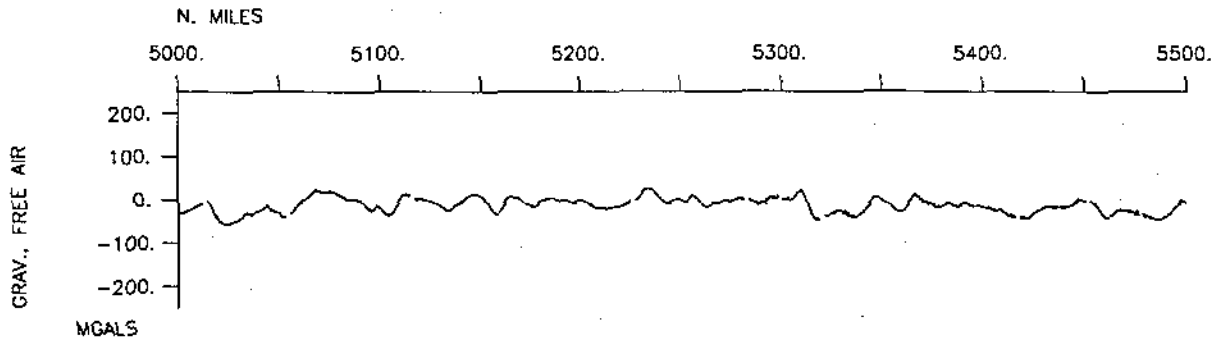


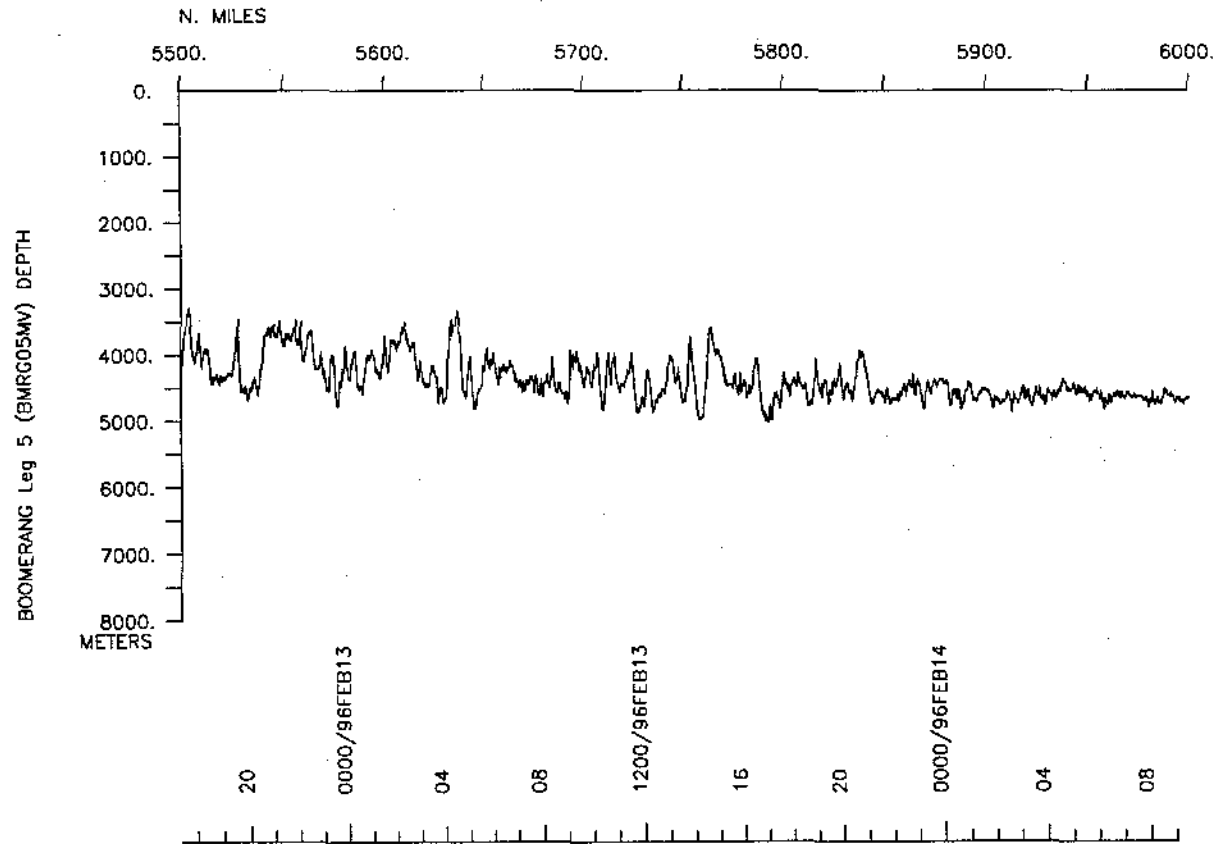
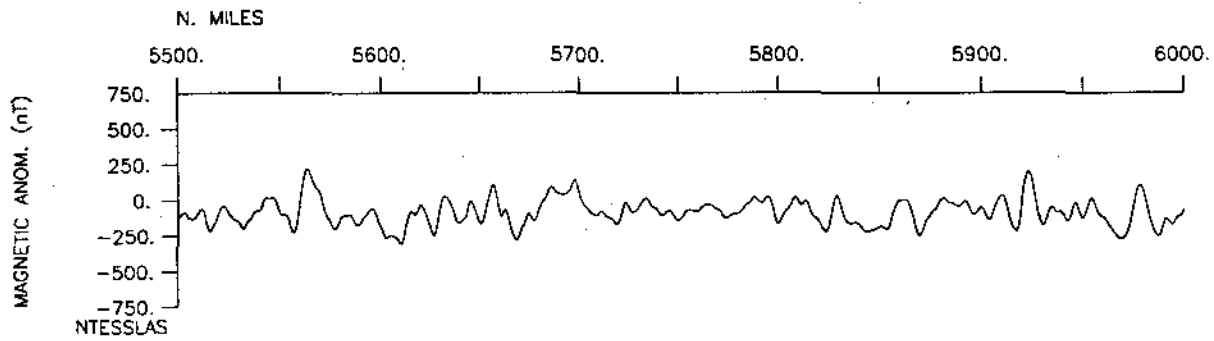
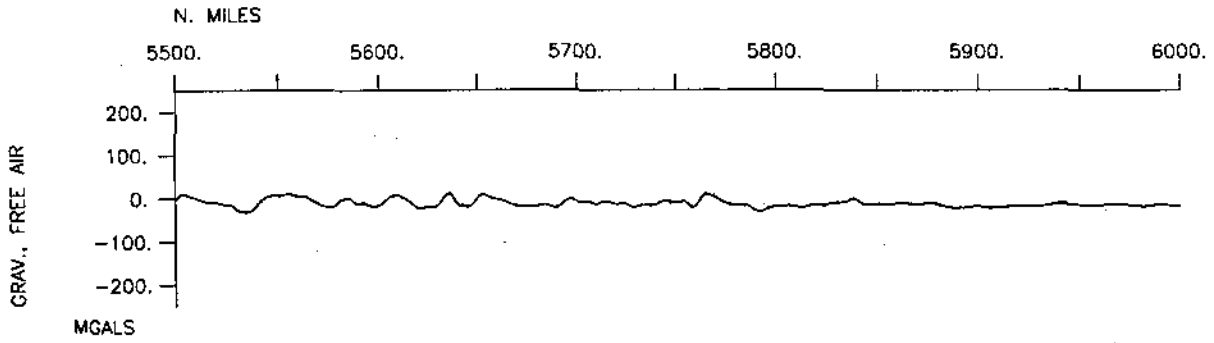












S.I.O. SAMPLE INDEX

BOOMERANG EXPEDITION

LEG 5

(BMRG05MV)

R/V Melville

(Issued May 1996)

PORTS:

Hobart, Tasmania (16 January 1996)
to
Fremantle, Australia (17 February 1996)

Co-Chief Scientists:

Jean C. Sempere (University of Washington)

David Christie (Oregon State 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.# 267

*** Ports ***

0500 160196 LGPT B Hobart, Tazmania 42-53.00S 147-20.00E f BMRG05MV
 1700 170296 LGPT E Fremantle, Australia 32-03.00S 115-45.00E f BMRG05MV

*** Personnel ***

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS UWA	Sempere, J.C.	Chief scientist	Univ. of Washington	BMRG05MV
PECS OSU	Christie, D.	Co-chief scient.	Oregon State Univ.	BMRG05MV
PEST UWA	Archer, S.	Grad student	Univ. of Washington	BMRG05MV
PECT STS	Charters, J.	Computer tech	Scripps Institution	BMRG05MV
PESP STS	Heckman, E.	Hardware tech	Scripps Institution	BMRG05MV
PEVL OSU	Huard, J.	Staff volunteer	Oregon State Univ.	BMRG05MV
PEST FNC	Lecroart, P.	Grad student	France	BMRG05MV
PERT STS	Mogk, S.	Resident tech	Scripps Institution	BMRG05MV
PEVL OSU	Niles, M.	Staff volunteer	Oregon State Univ.	BMRG05MV
PESP SDSU	Pyle, D.	Professor	San Diego State U.	BMRG05MV
PESP OSU	Sprtel, F.	Research asst.	Oregon State Univ.	BMRG05MV
PESP OSU	Standish, J.	Grad student	Oregon State Univ.	BMRG05MV
PESP OSU	Sylvander, B.	Research asst.	Oregon State Univ.	BMRG05MV
PEST OSU	West, B.	Grad student	Oregon State Univ.	BMRG05MV

*** 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 ***

0700	160196	0	LBUW	B	Underway watch log	GDC	43-18.61S	147-28.64E	g	BMRG05MV
2300	150296	0	LBUW	E	Underway watch log	GDC	35-14.92S	115-12.51E	g	BMRG05MV
0700	160196	0	LBSC	B	Geologic sample log	OSU	43-18.61S	147-28.64E	g	BMRG05MV
2300	150296	0	LBSC	E	Geologic sample log	OSU	35-14.92S	115-12.51E	g	BMRG05MV

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

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

1915	080196	0	MBSR	B v.beam&sscan r-01	GDC	42-50.68S	147-19.83E	g		BMRG05MV
1830	110196	0	MBSR	E v.beam&sscan r-01	GDC	42-50.68S	147-19.83E	g		BMRG05MV
2009	160196	0	MBSR	B v.beam&sscan r-02	GDC	44-05.12S	144-29.14E	g		BMRG05MV
2259	120296	0	MBSR	E v.beam&sscan r-02	GDC	48-04.21S	125-06.51E	g		BMRG05MV
2300	120296	0	MBSR	B v.beam&sscan r-03	GDC	48-04.04S	125-06.35E	g		BMRG05MV
0028	160296	0	MBSR	E v.beam&sscan r-03	GDC	35-01.56S	115-02.37E	g		BMRG05MV

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

1102	160196	0	MGRA	B Magnetics r-01	GDC	43-45.80S	146-45.07E	g		BMRG05MV
2141	210196	0	MGRA	E Magnetics r-01	GDC	42-04.70S	127-49.30E	g		BMRG05MV
2145	210196	0	MGRA	B Magnetics r-02	GDC	42-05.22S	127-49.21E	g		BMRG05MV
0017	140296	0	MGRA	E Magnetics r-02	GDC	43-32.91S	121-22.83E	g		BMRG05MV
0020	140296	0	MGRA	B Magnetics r-03	GDC	43-32.35S	121-22.40E	g		BMRG05MV
2300	150296	0	MGRA	E Magnetics r-03	GDC	35-14.92S	115-12.51E	g		BMRG05MV

*** Continuous Recorded Gravity ***

0700	160196	0	GVCR	B Gravity	GDC	43-18.61S	147-28.64E	g		BMRG05MV
1500	170296	0	GVCR	E Gravity	GDC	32-02.76S	115-44.92E	g		BMRG05MV

*** Seismic Reflection Records ***

1400	180196	0	SPRF	B Watergun-2Sec r-01	GDC	46-32.67S	135-00.38E	g		BMRG05MV
2305	250196	0	SPRF	E Watergun-2Sec r-01	GDC	48-30.64S	129-59.96E	g		BMRG05MV
1400	180196	0	SPRS	B Watergun-4Sec r-01	GDC	46-32.67S	135-00.38E	g		BMRG05MV
2305	250196	0	SPRS	E Watergun-4Sec r-01	GDC	48-30.64S	129-59.96E	g		BMRG05MV

*** Seismic Reflection Digital Recorder Data ***

1430	180196	0	SPDR	B Watergun x 2 ch HS	UWA	46-29.75S	135-00.05E	g		BMRG05MV
2330	250196	0	SPDR	E data set	UWA	48-33.24S	130-00.02E	g		BMRG05MV

*** 2 Channel Seismic Reflection Line ***

1430	180196	0	SPML	B Watergun x 2 ch HS	GDC	46-29.75S	135-00.05E	g		BMRG05MV
0540	220196	0	SPML	E line 01	GDC	42-39.22S	127-08.99E	g		BMRG05MV
2308	230196	0	SPML	B Watergun x 2 ch HS	GDC	44-14.89S	126-56.47E	g		BMRG05MV
2330	250196	0	SPML	E line 02	GDC	48-33.24S	130-00.02E	g		BMRG05MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#										
#*** Rock Dredges ***										
1105	220196	0	DRRO	B Dredge 07	5442m	OSU	42-26.98S	127-28.96E	g	BMRG05MV
1242	220196	0	DRRO	E no sample	4646m	OSU	42-27.01S	127-28.30E	g	BMRG05MV
2320	220196	0	DRRO	B Dredge 08	4618m	OSU	42-51.32S	128-14.17E	g	BMRG05MV
0036	230196	0	DRRO	E Dredge 08	4415m	OSU	42-51.60S	128-13.49E	g	BMRG05MV
1254	230196	0	DRRO	B Dredge 09	5215m	OSU	43-57.91S	128-06.65E	g	BMRG05MV
1645	230196	0	DRRO	E Dredge 09	4927m	OSU	43-58.35S	128-06.01E	g	BMRG05MV
0721	260196	0	DRRO	B Dredge 10	3870m	OSU	49-12.32S	130-03.62E	g	BMRG05MV
0855	260196	0	DRRO	E no sample	3870m	OSU	49-13.00S	130-04.00E	g	BMRG05MV
2014	260196	0	DRRO	B Dredge 11	4237m	OSU	48-03.23S	130-00.98E	g	BMRG05MV
2221	260196	0	DRRO	E Dredge 11	3897m	OSU	48-03.70S	130-00.60E	g	BMRG05MV
0507	270196	0	DRRO	B Dredge 12	4116m	OSU	48-02.57S	129-04.08E	g	BMRG05MV
0744	270196	0	DRRO	E Dredge 12	3750m	OSU	48-03.11S	129-03.53E	g	BMRG05MV
1316	270196	0	DRRO	B Dredge 13	4218m	OSU	48-07.64S	129-39.19E	g	BMRG05MV
1504	270196	0	DRRO	E Dredge 13	3850m	OSU	48-07.30S	129-39.60E	g	BMRG05MV
0553	280196	0	DRRO	B Dredge 14	4430m	OSU	47-37.36S	127-44.50E	g	BMRG05MV
0733	280196	0	DRRO	E Dredge 14	4104m	OSU	47-37.80S	127-44.00E	g	BMRG05MV
1203	280196	0	DRRO	B Dredge 15	4241m	OSU	47-39.87S	127-59.90E	g	BMRG05MV
1433	280196	0	DRRO	E Dredge 15	3871m	OSU	47-40.70S	127-59.90E	g	BMRG05MV
2207	280196	0	DRRO	B Dredge 16	4600m	OSU	47-34.84S	127-04.49E	g	BMRG05MV
0030	290196	0	DRRO	E Dredge 16	4080m	OSU	47-34.10S	127-04.49E	g	BMRG05MV
0804	290196	0	DRRO	B Dredge 17	4400m	OSU	47-45.00S	126-10.73E	g	BMRG05MV
1033	290196	0	DRRO	E Dredge 17	3800m	OSU	47-44.43S	126-10.08E	g	BMRG05MV
1702	290196	0	DRRO	B Dredge 18	4250m	OSU	48-04.77S	125-56.35E	g	BMRG05MV
1857	290196	0	DRRO	E no sample	3860m	OSU	48-04.16S	125-56.50E	g	BMRG05MV
0020	310196	0	DRRO	B Dredge 19	4175m	OSU	48-46.26S	126-08.82E	g	BMRG05MV
0231	310196	0	DRRO	E Dredge 19	3780m	OSU	48-47.00S	126-09.01E	g	BMRG05MV
1313	010296	0	DRRO	B Dredge 20	3453m	OSU	48-27.81S	126-39.84E	g	BMRG05MV
1504	010296	0	DRRO	E Dredge 20	3050m	OSU	48-28.19S	126-39.22E	g	BMRG05MV

#	GMT #TIME	DDMMYY DATE	SAMP TZ	B CODE	SAMPLE E IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	p c	CRUISE LEG-SHIP
	0053	020296	0	DRRO	B Dredge 21	OSU	48-01.13S	126-52.72E	g	BMRG05MV
	0242	020296	0	DRRO	E Dredge 21	OSU	48-01.20S	126-51.91E	g	BMRG05MV
	0822	020296	0	DRRO	B Dredge 22	OSU	47-43.40S	126-59.18E	g	BMRG05MV
	1049	020296	0	DRRO	E Dredge 22	OSU	47-44.00S	126-59.00E	g	BMRG05MV
	0515	040296	0	DRRO	B Dredge 23	OSU	47-29.15S	127-36.07E	g	BMRG05MV
	0709	040296	0	DRRO	E Dredge 23	OSU	47-29.61S	127-36.30E	g	BMRG05MV
	1336	040296	0	DRRO	B Dredge 24	OSU	48-01.68S	127-28.78E	g	BMRG05MV
	1502	040296	0	DRRO	E Dredge 24	OSU	48-01.40S	127-28.20E	g	BMRG05MV
	2312	040296	0	DRRO	B Dredge 25	OSU	48-58.88S	127-13.87E	g	BMRG05MV
	0151	050296	0	DRRO	E Dredge 25	OSU	48-58.36S	127-13.03E	g	BMRG05MV
	1543	050296	0	DRRO	B Dredge 26	OSU	48-30.92S	127-28.63E	g	BMRG05MV
	1758	050296	0	DRRO	E Dredge 26	OSU	48-30.30S	127-28.68E	g	BMRG05MV
	1024	080296	0	DRRO	B Dredge 27	OSU	48-06.34S	128-23.91E	g	BMRG05MV
	1217	080296	0	DRRO	E Dredge 27	OSU	48-05.80S	128-23.61E	g	BMRG05MV
	1948	080296	0	DRRO	B Dredge 28	OSU	48-32.98S	128-31.28E	g	BMRG05MV
	2155	080296	0	DRRO	E Dredge 28	OSU	48-32.30S	128-30.89E	g	BMRG05MV
	0356	090296	0	DRRO	B Dredge 29	OSU	48-47.49S	128-24.06E	g	BMRG05MV
	0520	090296	0	DRRO	E no sample	OSU	48-47.56S	128-24.07E	g	BMRG05MV
	0836	110296	0	DRRO	B Dredge 30	OSU	49-24.74S	125-40.64E	g	BMRG05MV
	1007	110296	0	DRRO	E Dredge 30	OSU	49-24.30S	125-40.20E	g	BMRG05MV
	1634	110296	0	DRRO	B Dredge 31	OSU	49-41.77S	125-25.09E	g	BMRG05MV
	1809	110296	0	DRRO	E Dredge 31	OSU	49-41.30S	125-24.50E	g	BMRG05MV
	1241	120296	0	DRRO	B Dredge 32	OSU	49-05.62S	124-54.13E	g	BMRG05MV
	1359	120296	0	DRRO	E Dredge 32	OSU	49-05.71S	124-53.40E	g	BMRG05MV
**** Cores ****										
	1004	100296	0	CORG	Rockglass 01	OSU	49-47.55S	125-42.60E	g	BMRG05MV
	0420	120296	0	CORG	Rockglass 02	OSU	49-37.90S	125-17.80E	g	BMRG05MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#	-----	--	-----	-----	-----	-----	-----	-----	-	-----
*** Expendable Bathythermographs ***										
2227	160196	0	BTXP	XBT-01	GDC	44-09.68S	143-58.35E	g		BMRG05MV
0237	180196	0	BTXP	XBT-02	GDC	45-08.91S	136-53.66E	g		BMRG05MV
2124	190196	0	BTXP	XBT-03	GDC	42-12.92S	134-55.94E	g		BMRG05MV
2107	200196	0	BTXP	XBT-04	GDC	41-23.81S	130-45.76E	g		BMRG05MV
2233	210196	0	BTXP	XBT-05	GDC	42-11.31S	127-48.24E	g		BMRG05MV
2057	220196	0	BTXP	XBT-06	GDC	42-53.25S	128-13.04E	g		BMRG05MV
2121	230196	0	BTXP	XBT-07	GDC	44-05.86S	127-06.40E	g		BMRG05MV
2204	240196	0	BTXP	XBT-10	GDC	45-49.96S	128-57.47E	g		BMRG05MV
2159	250196	0	BTXP	XBT-11	GDC	48-22.37S	129-59.97E	g		BMRG05MV
2120	260196	0	BTXP	XBT-12	GDC	48-03.70S	130-00.61E	g		BMRG05MV
2132	270196	0	BTXP	XBT-13	GDC	47-35.47S	128-27.53E	g		BMRG05MV
0548	280196	0	BTXP	XBT-14	GDC	47-37.30S	127-44.60E	g		BMRG05MV
2207	290196	0	BTXP	XBT-15	GDC	48-20.29S	126-08.45E	g		BMRG05MV
2138	300196	0	BTXP	XBT-17	GDC	48-48.13S	126-16.38E	g		BMRG05MV
2108	310196	0	BTXP	XBT-18	GDC	49-09.23S	126-27.10E	g		BMRG05MV
2326	010296	0	BTXP	XBT-20	GDC	48-01.12S	126-54.51E	g		BMRG05MV
2143	020296	0	BTXP	XBT-21	GDC	49-21.51S	126-41.48E	g		BMRG05MV
2119	030296	0	BTXP	XBT-22	GDC	48-29.44S	127-21.24E	g		BMRG05MV
2122	040296	0	BTXP	XBT-23	GDC	48-59.68S	127-18.14E	g		BMRG05MV
#				End Sample Index						BMRG05MV