

*Report and Index of
Underway Marine Geophysical Data*

BOOMERANG EXPEDITION

LEG 8

(BMRG08MV)

R/V MELVILLE

(Issued July 1996)

Ports:

Suva, Fiji (7 May 1996)

to

Pago Pago, Samoa (8 June 1996)

Chief Scientist:

Sherm Bloomer - Oregon State University

Resident Marine Technician - Ron Comer

Computer Technician - Todd Porteous

SeaBeam/UW Processor - Stuart M. Smith

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.

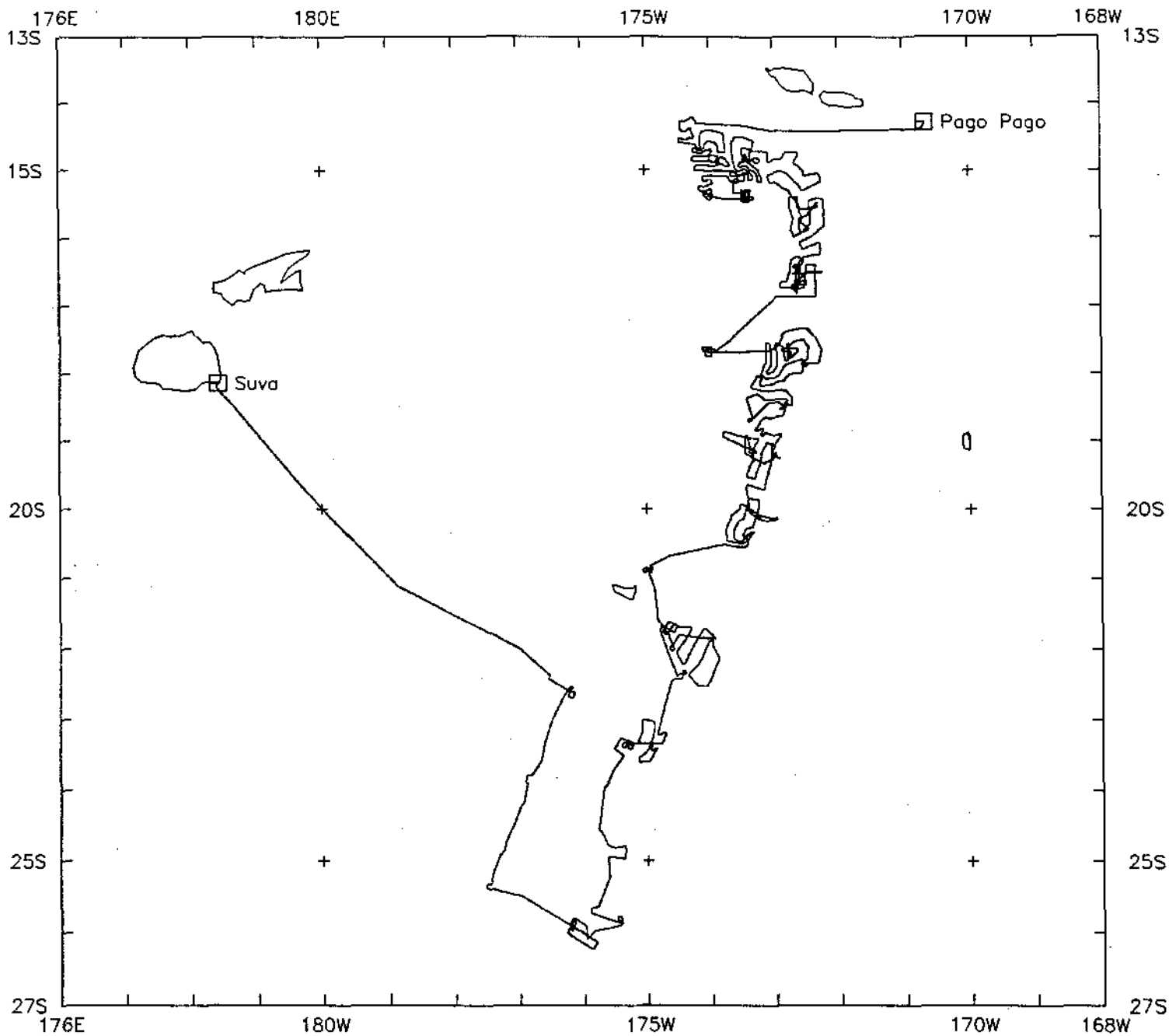
Profiles - depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

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.



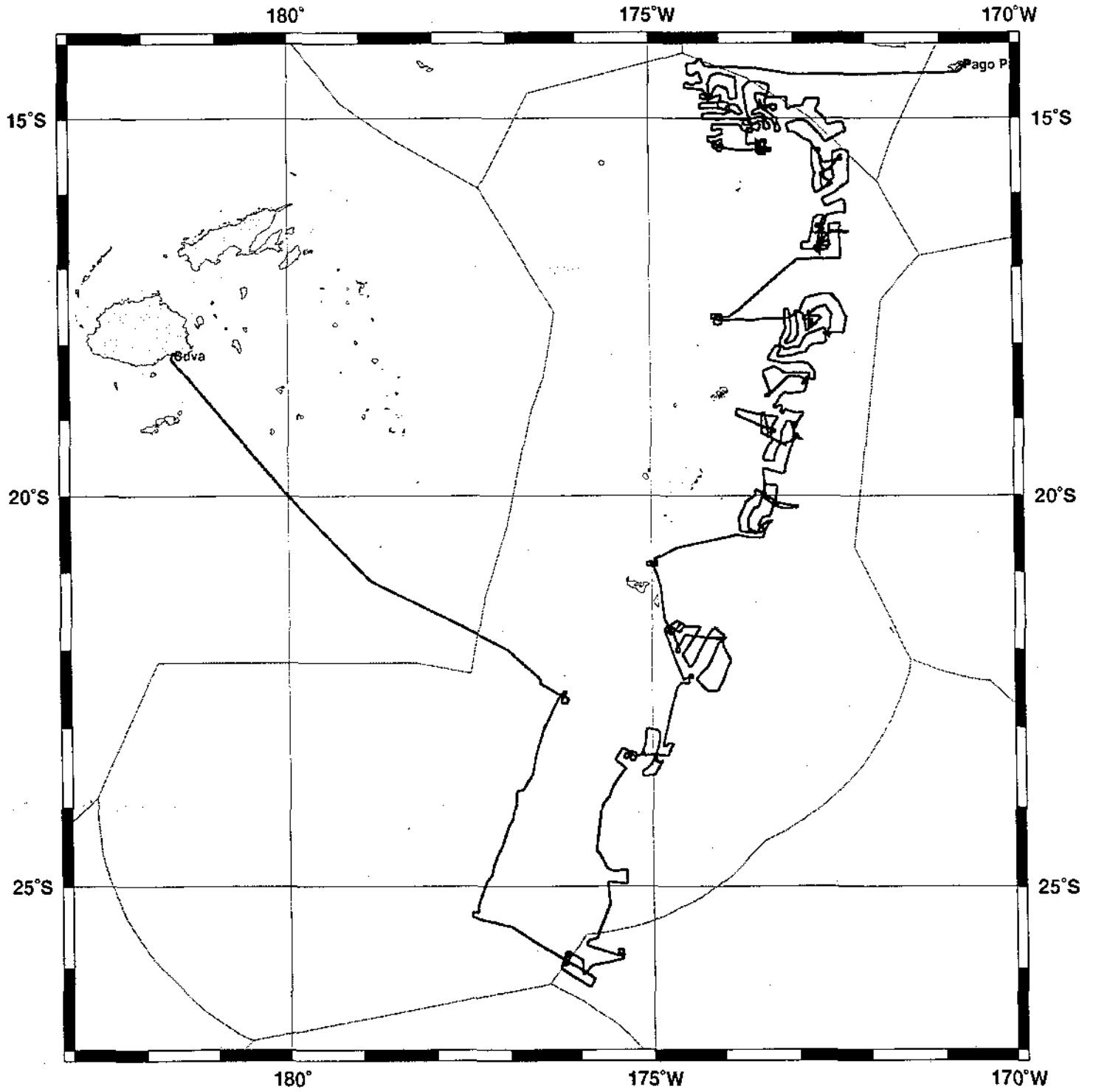
BOOMERANG EXPEDITION LEG 8

CHIEF SCIENTIST: Sherm Bloomer
Oregon State University
PORTS: Suva, Fiji - Pago Pago, Samoa
DATES: 7 May 1996 - 8 June 1996
SHIP: R/V Melville

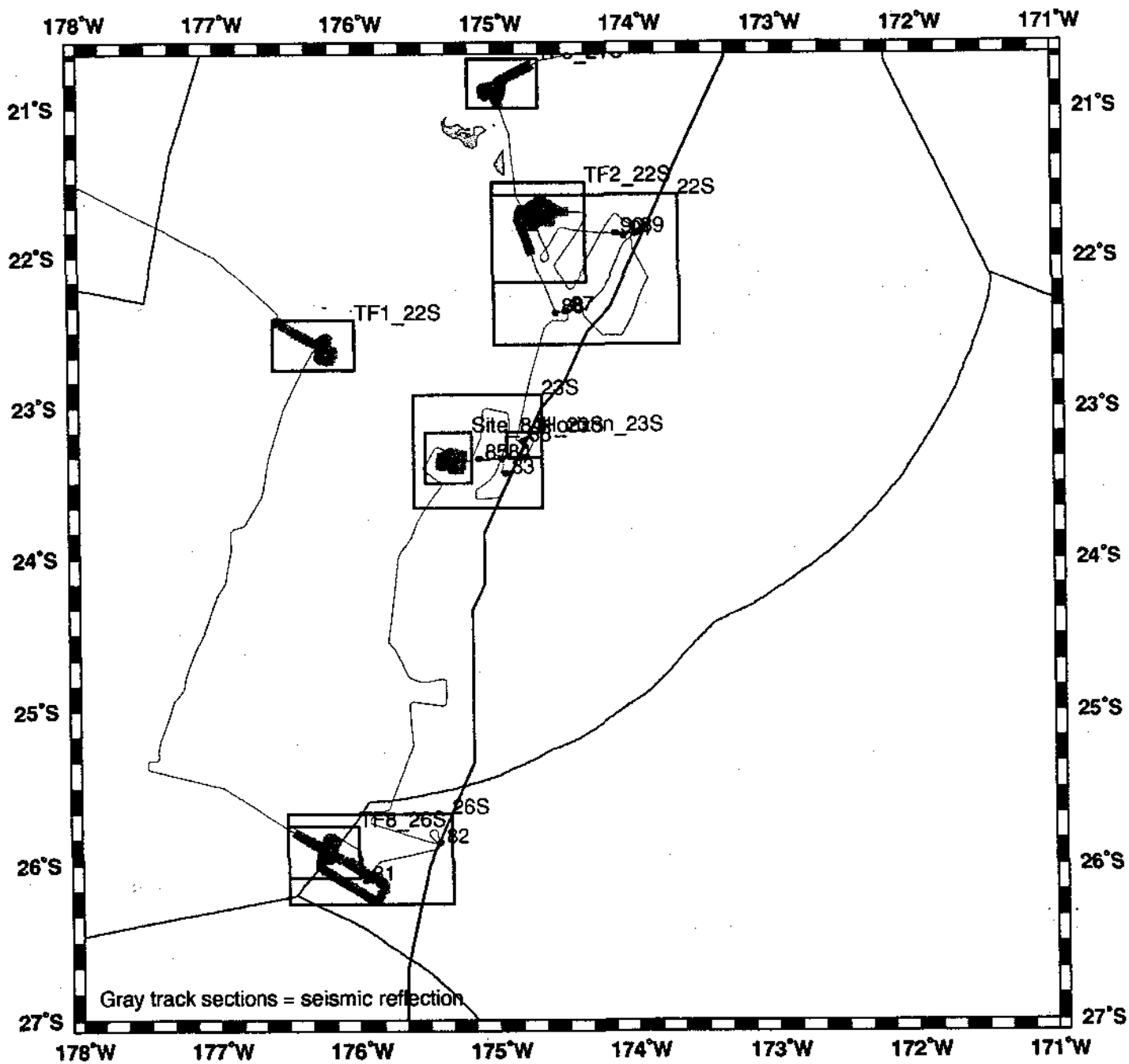
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 5477 miles	Magnetics - 4362 miles
Bathymetry - 5425 miles	Seismic Reflection - 880 miles
Sea Beam - 5425 miles	Gravity - 5470 miles

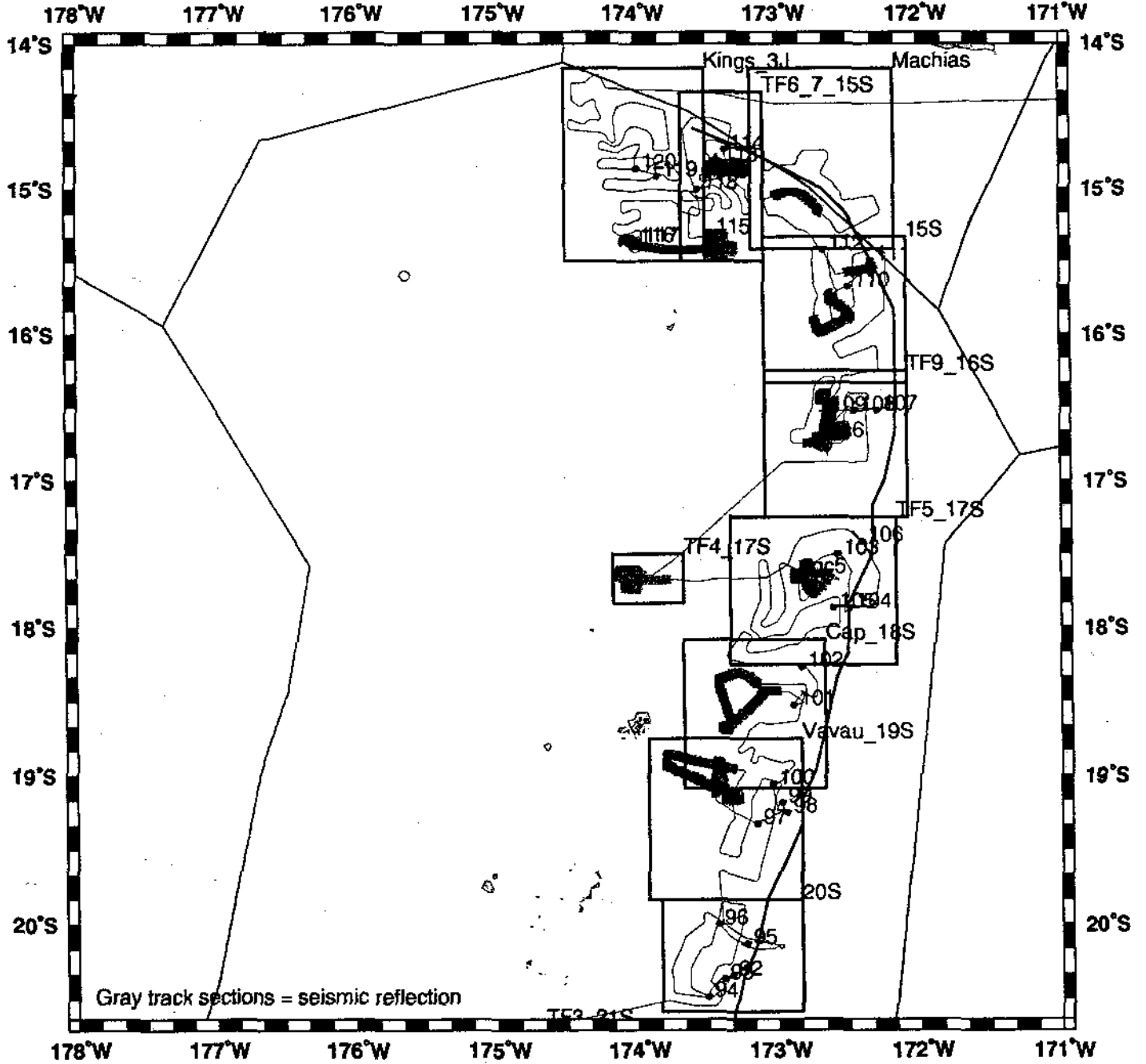
BMRG08MV Track



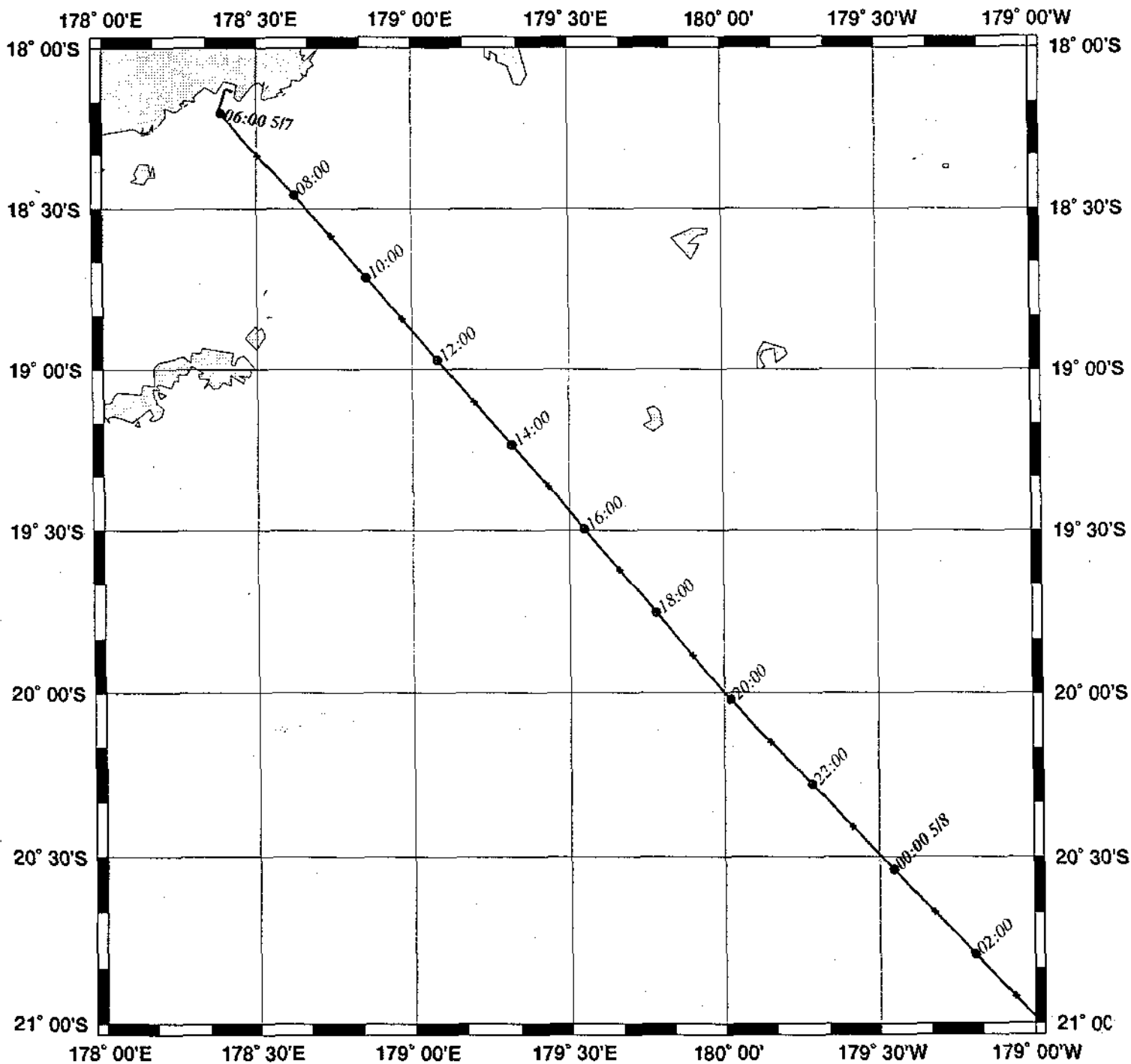
BMRG08MV_sites_South



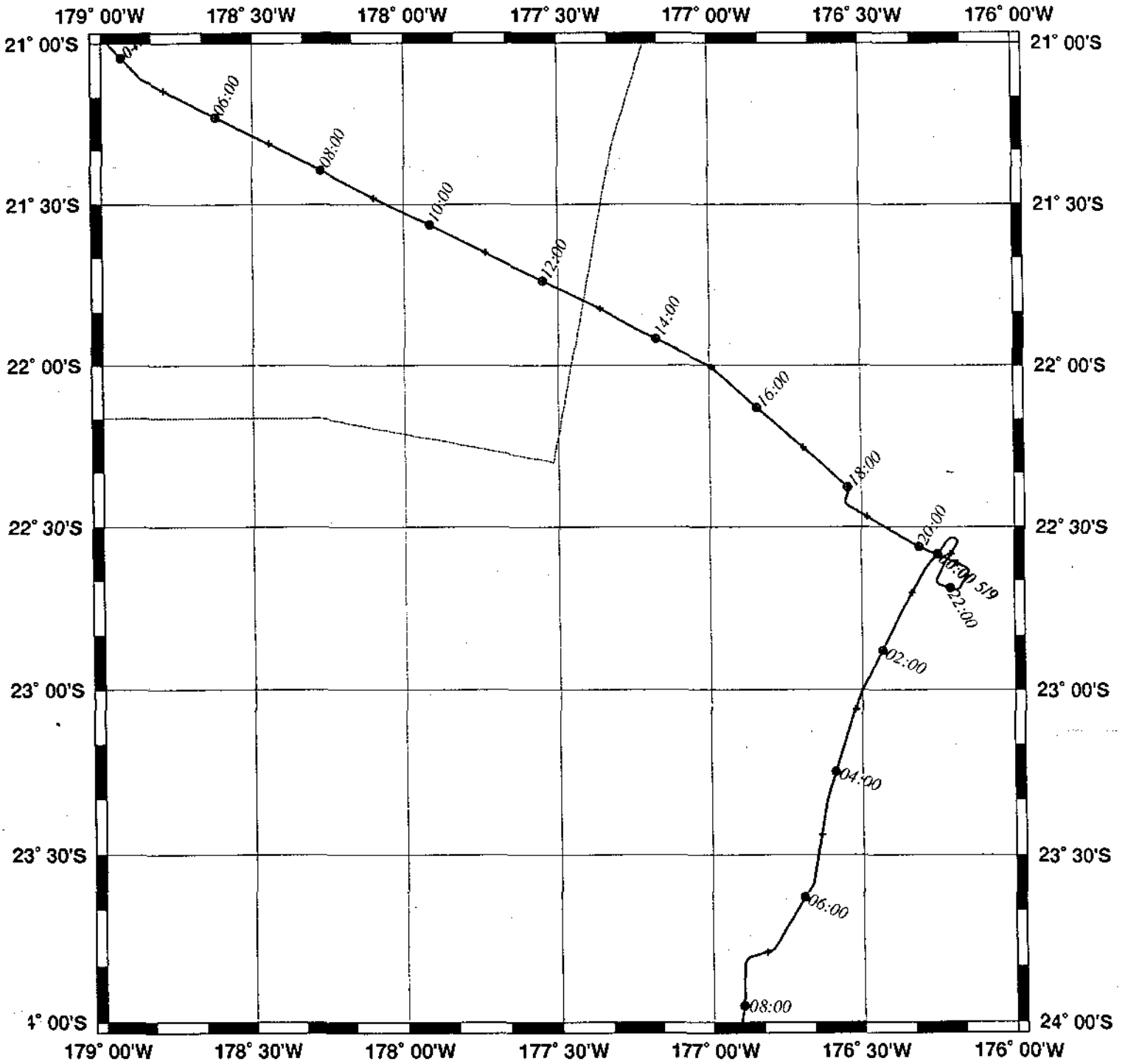
BMRG08MV_sites_North



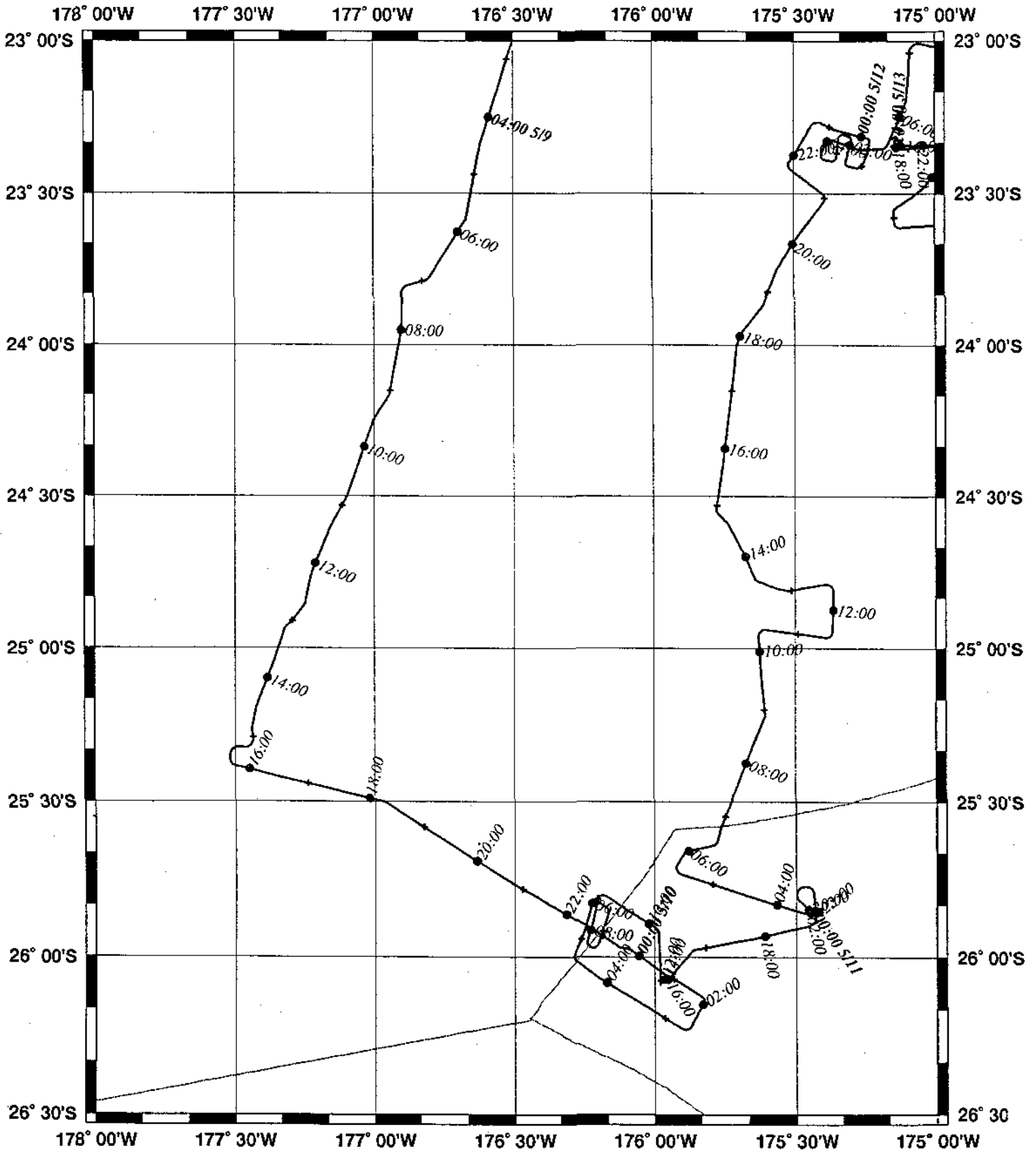
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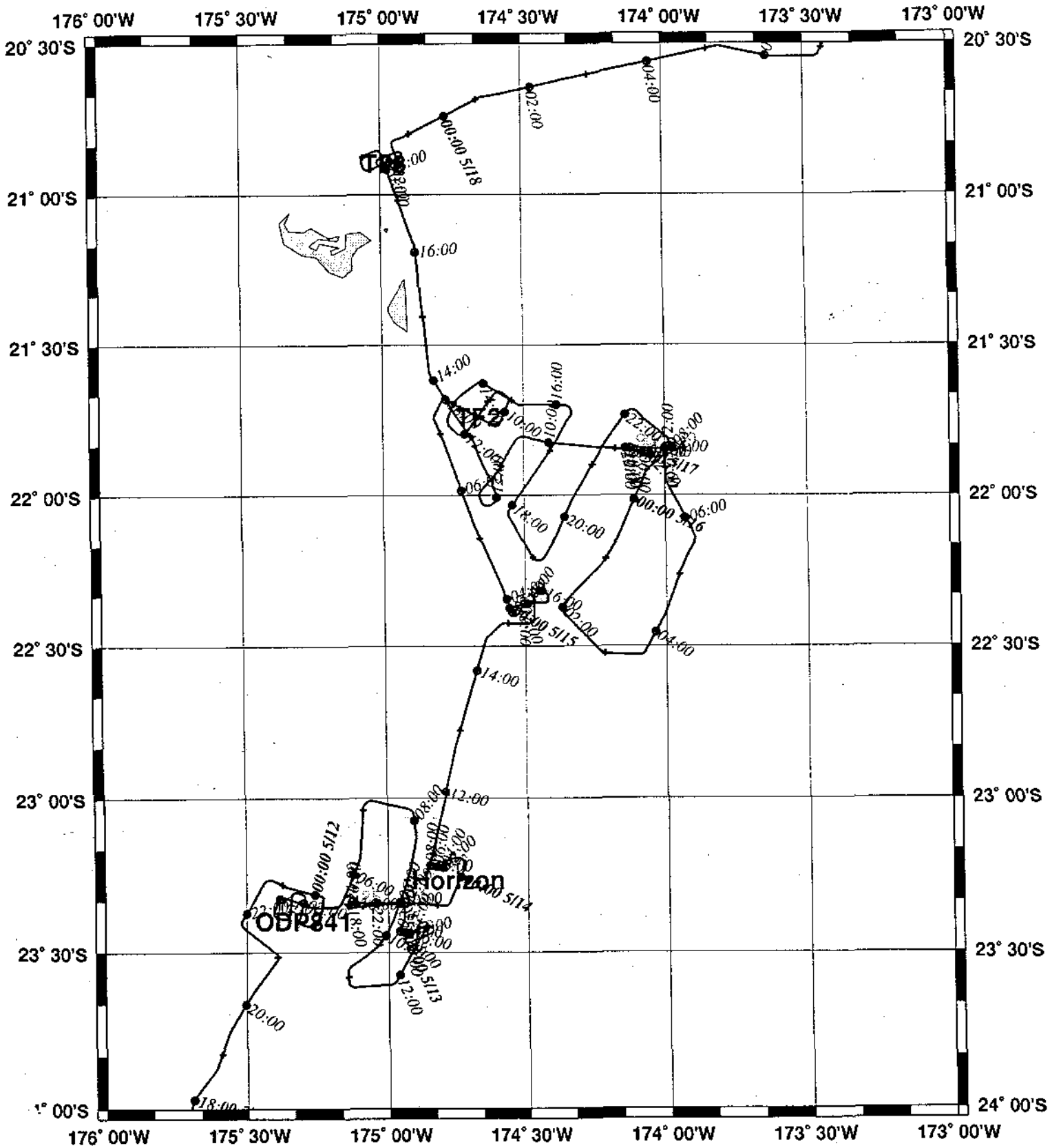
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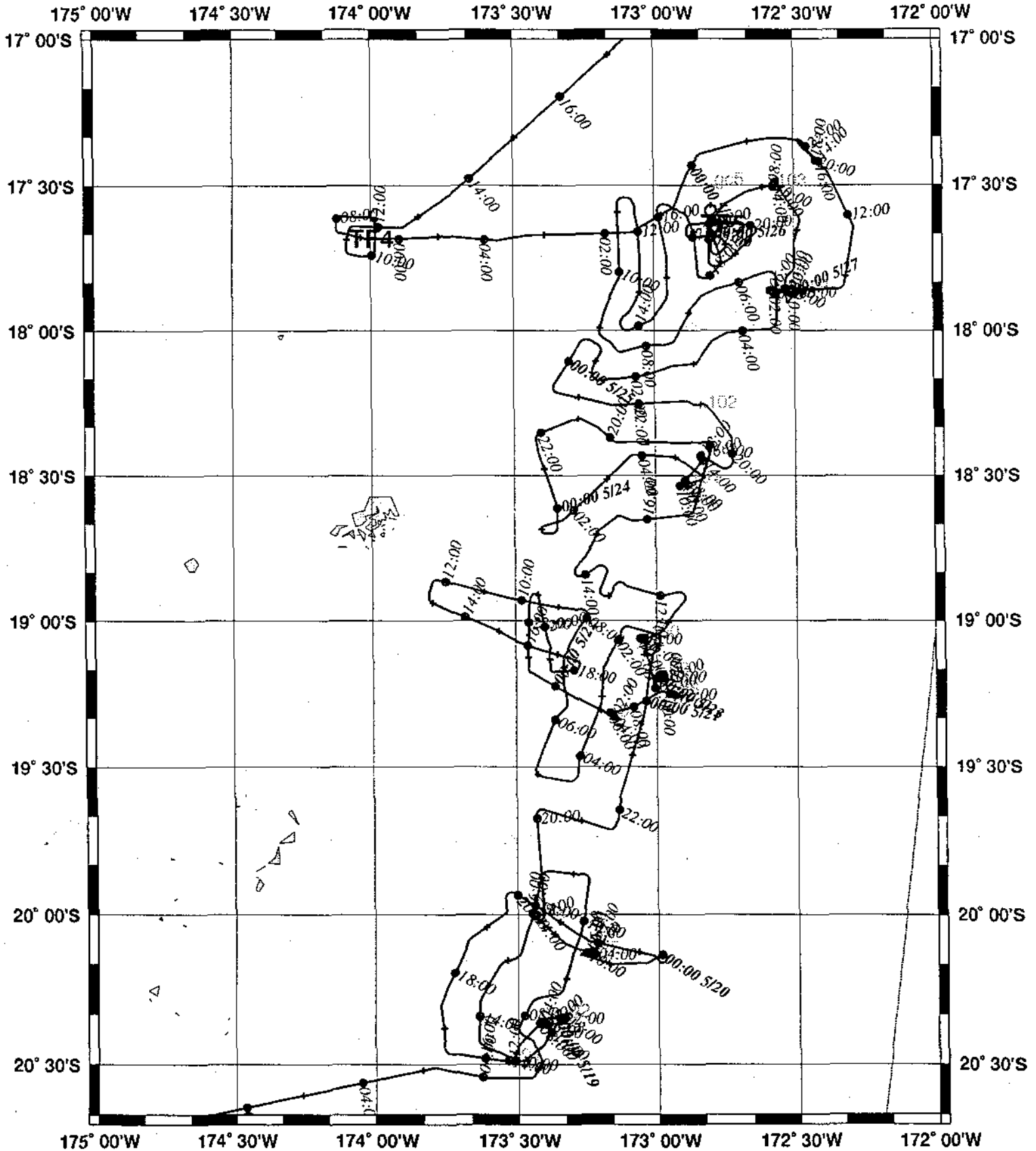
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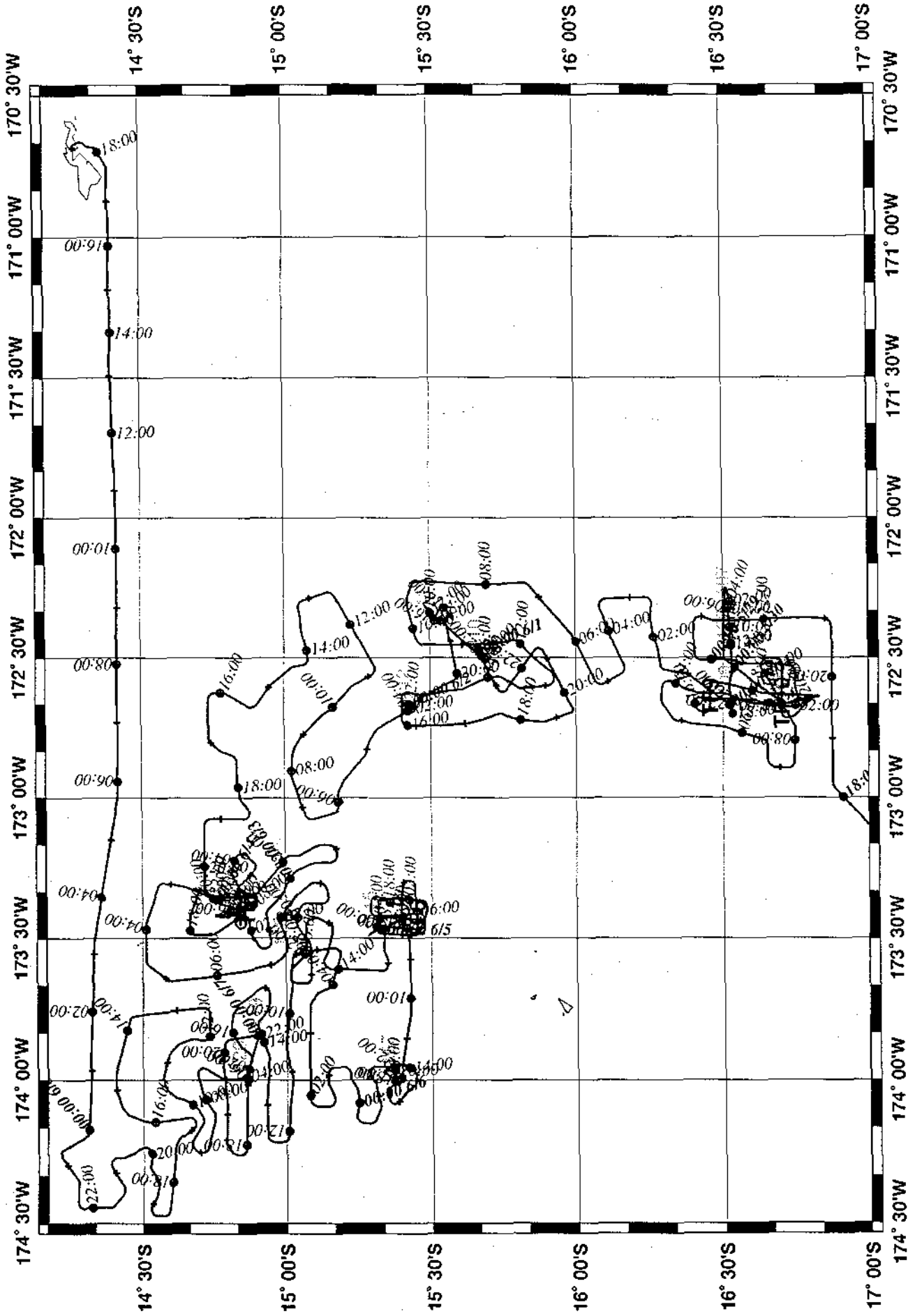
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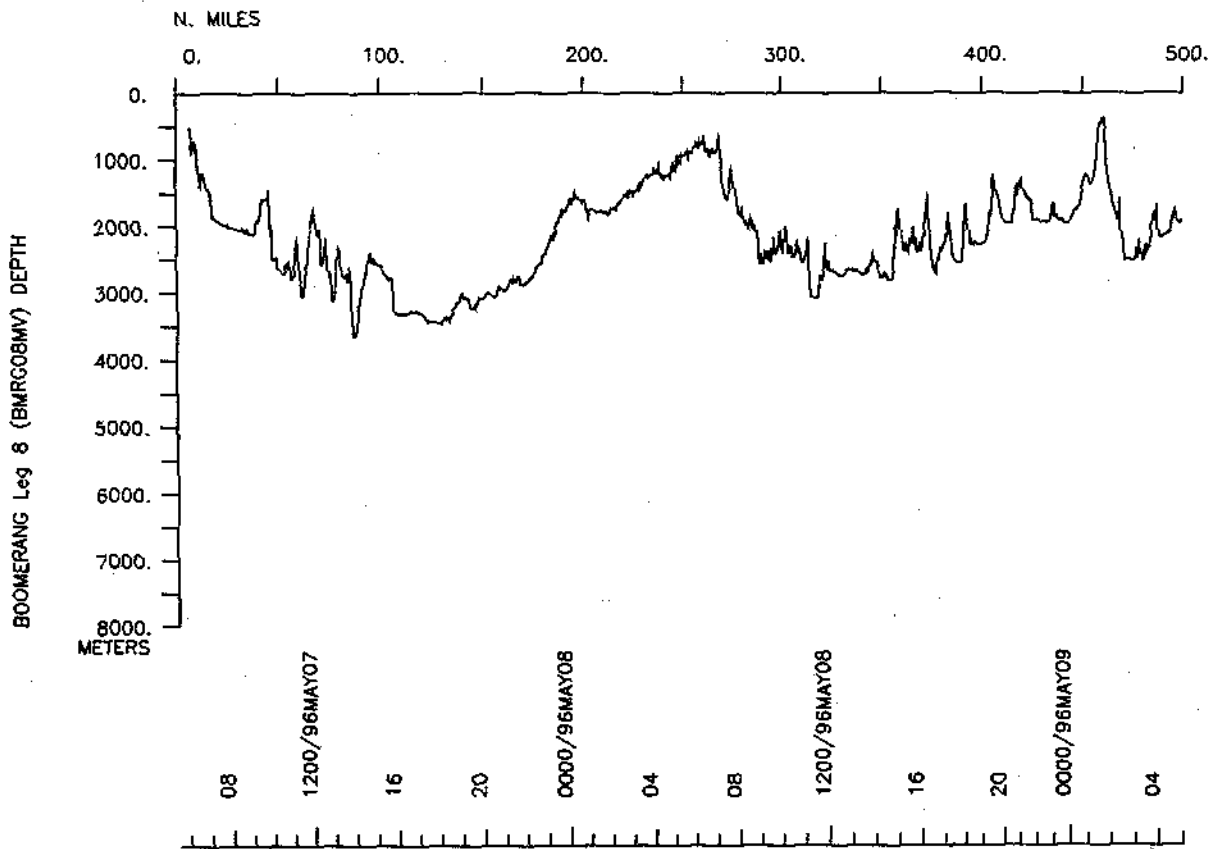
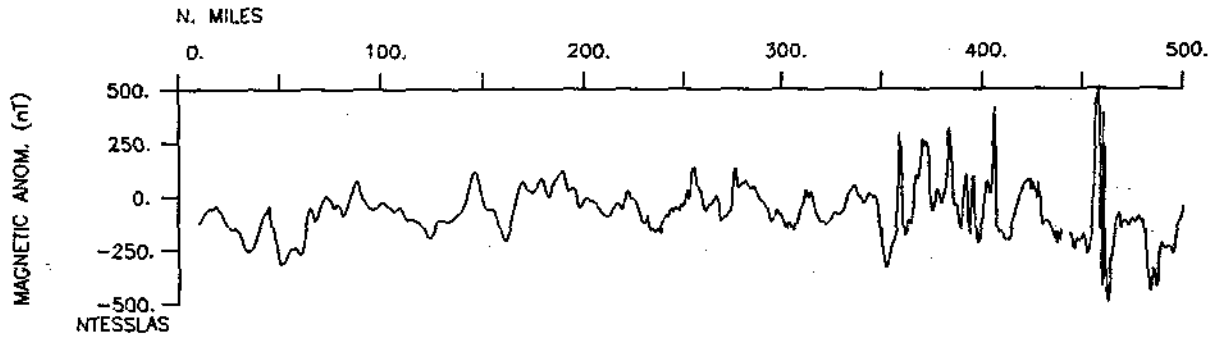


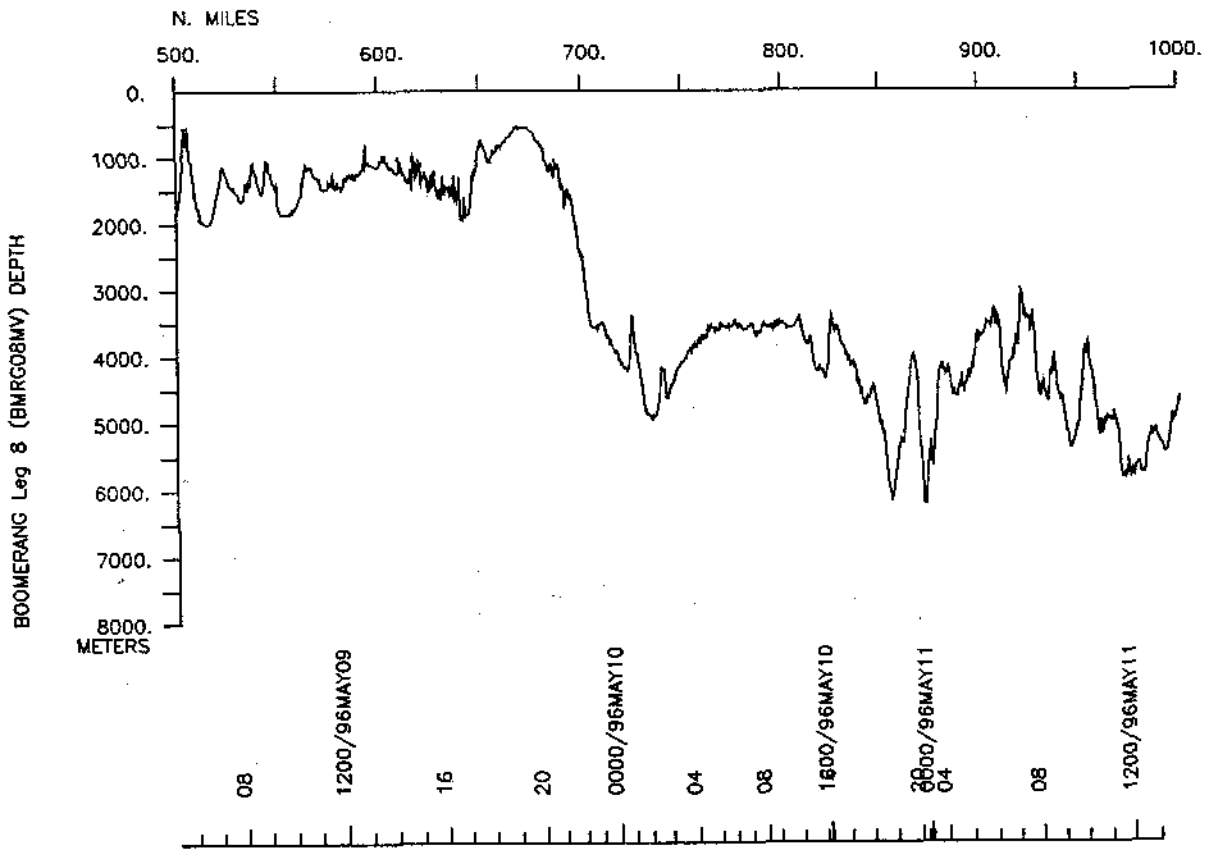
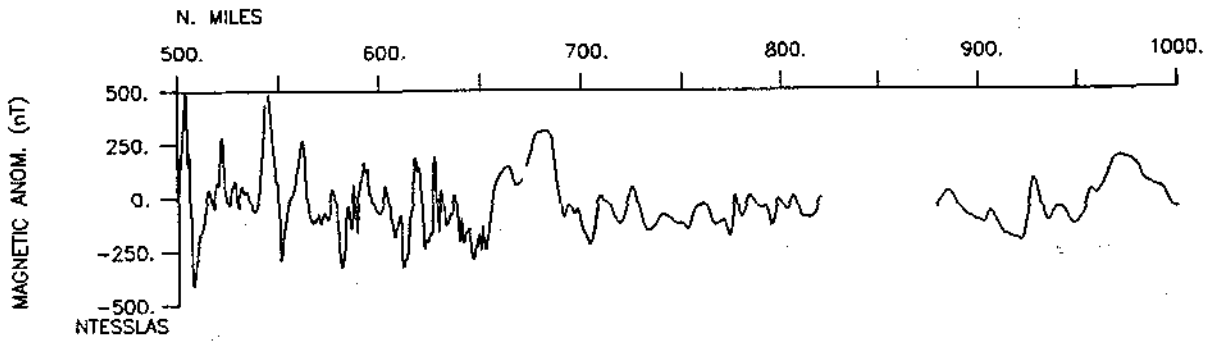
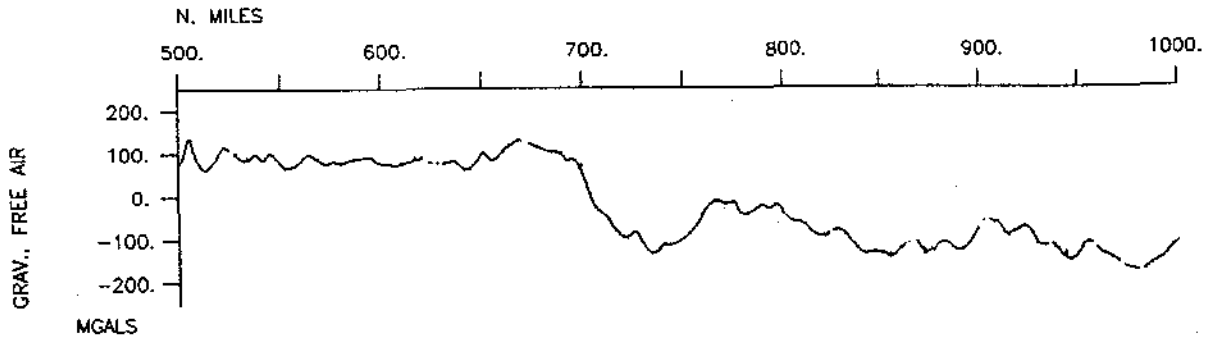
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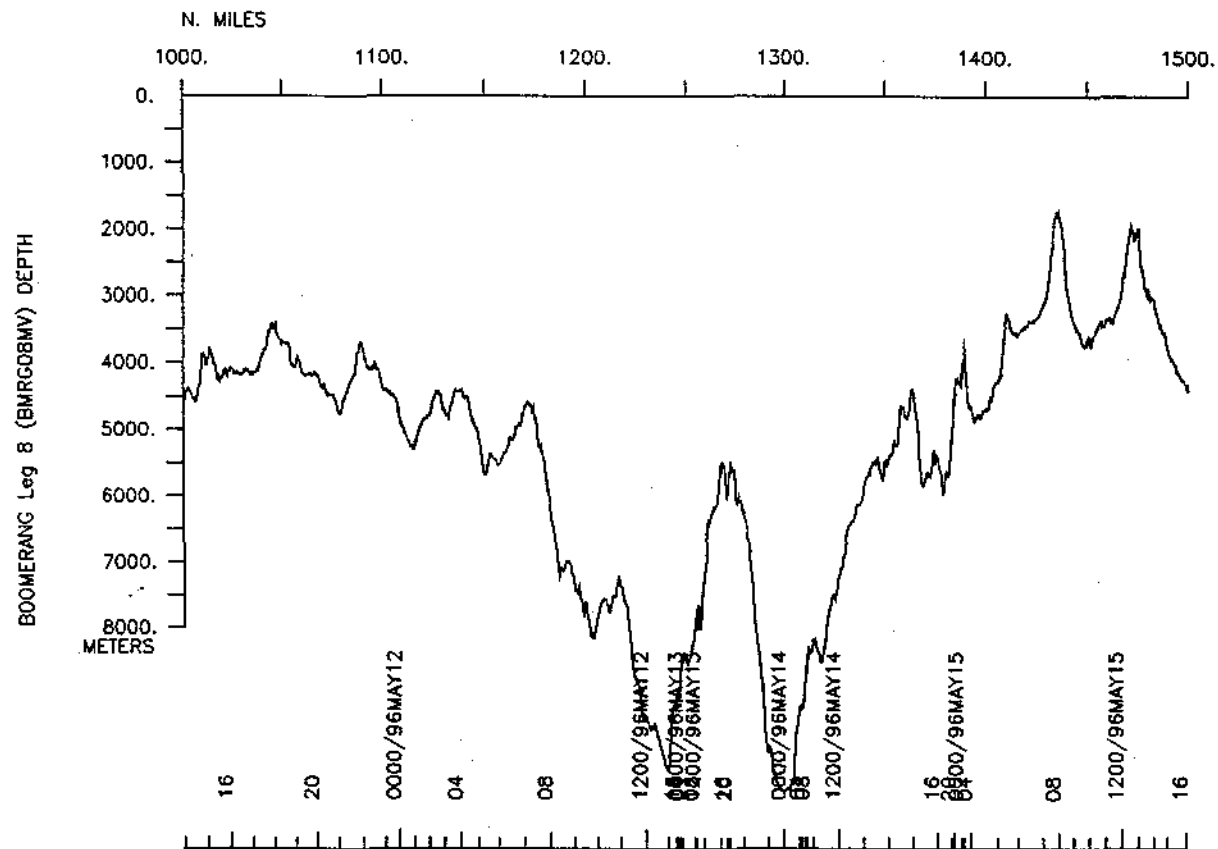
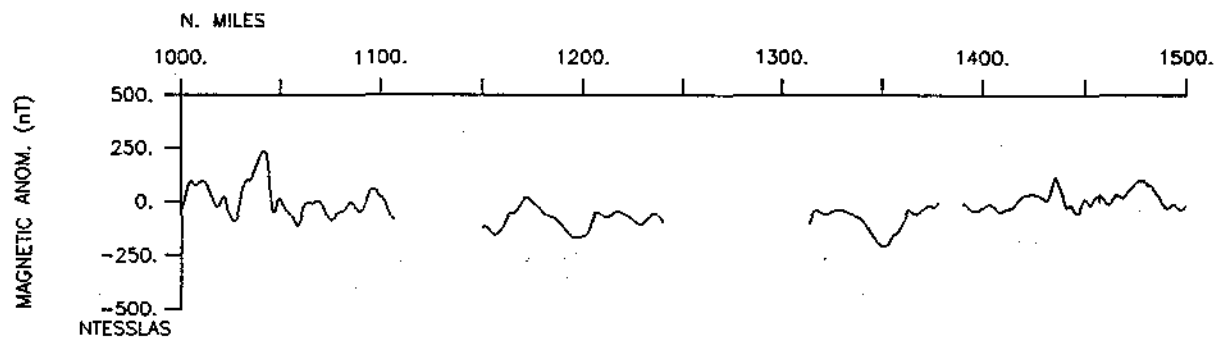
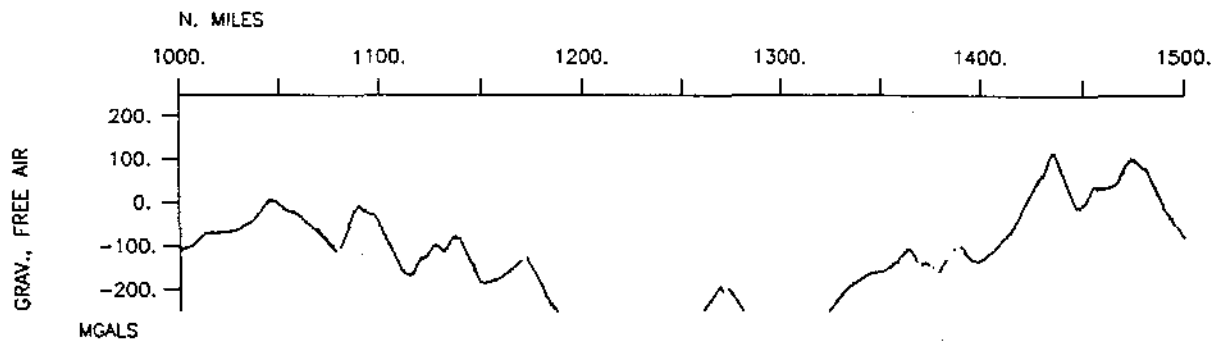


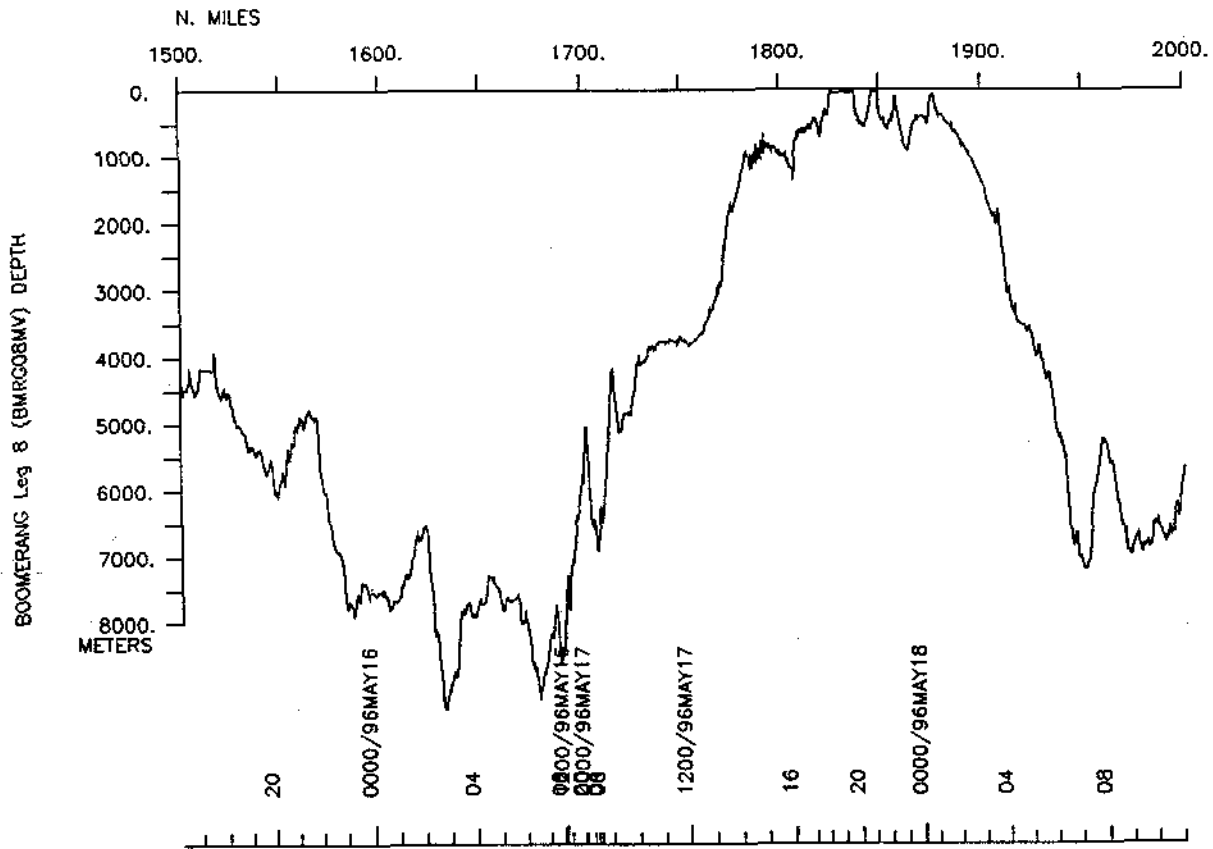
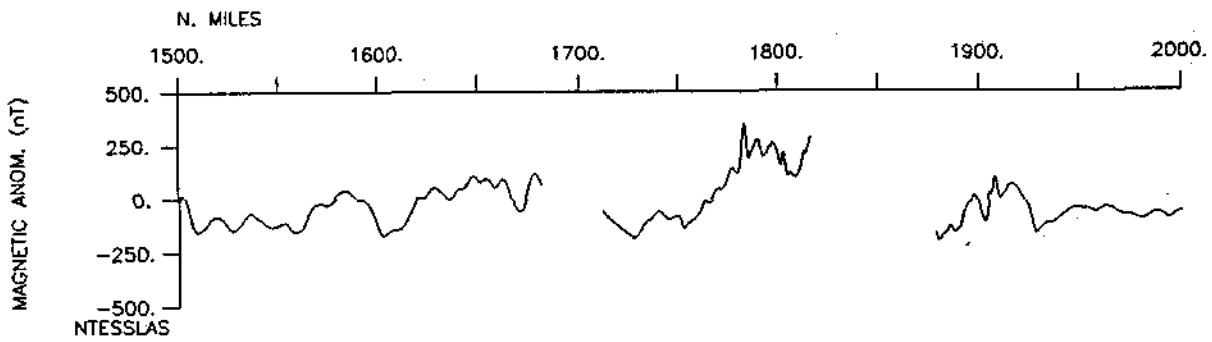
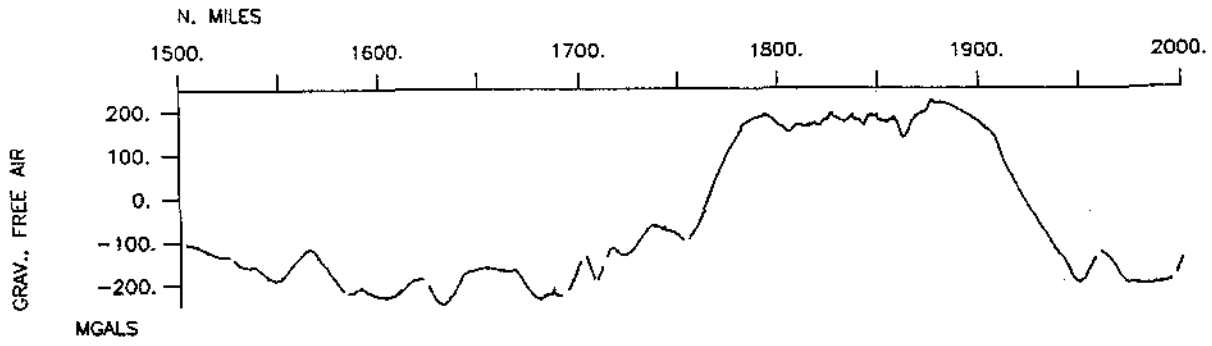
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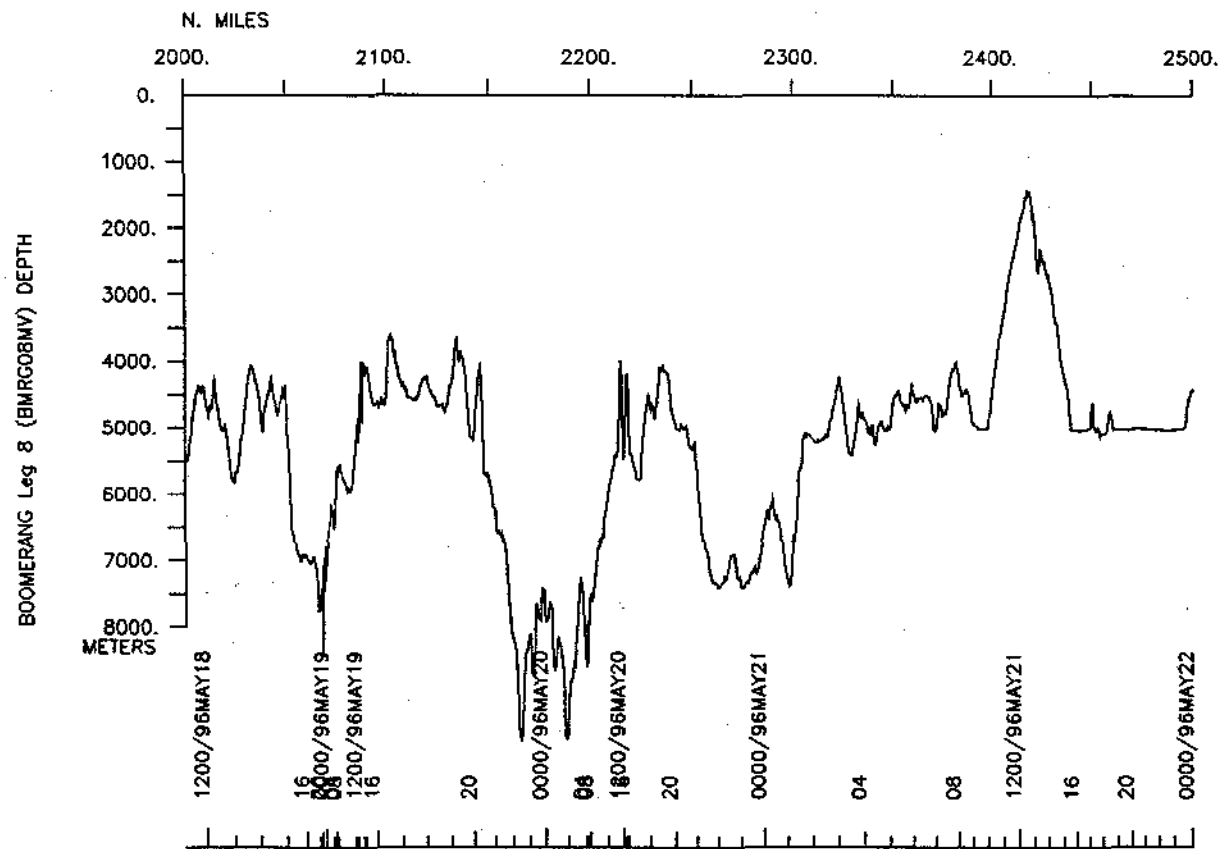
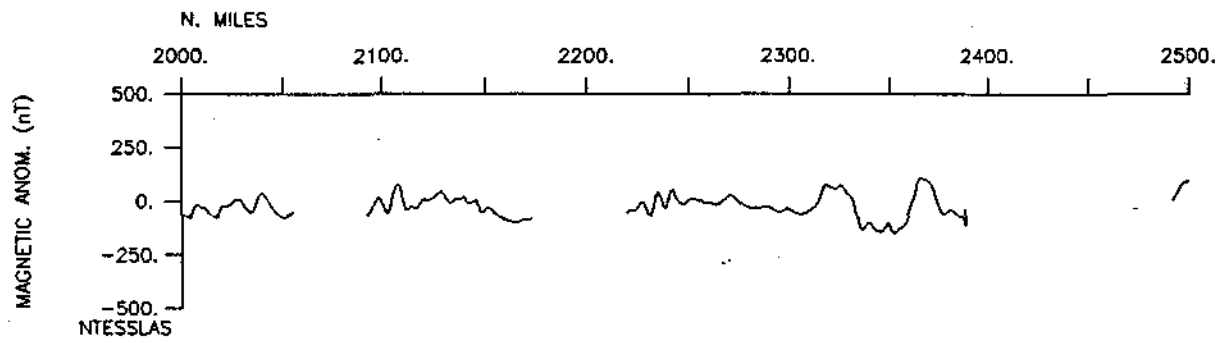
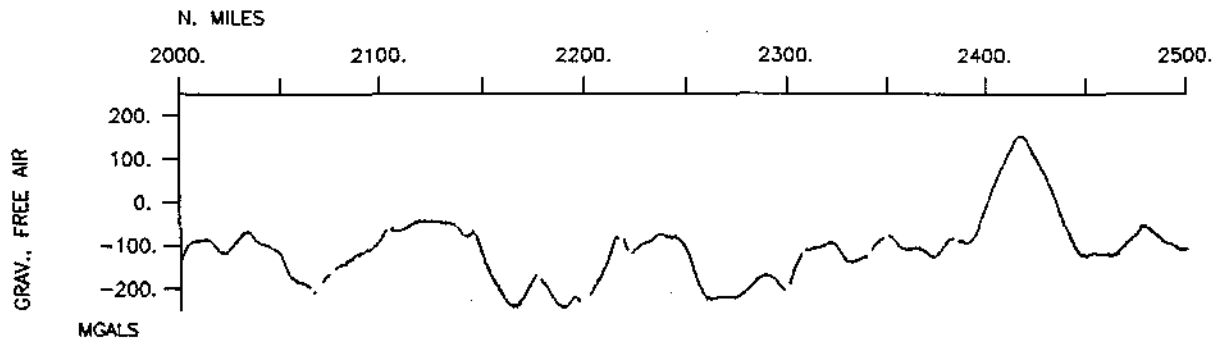


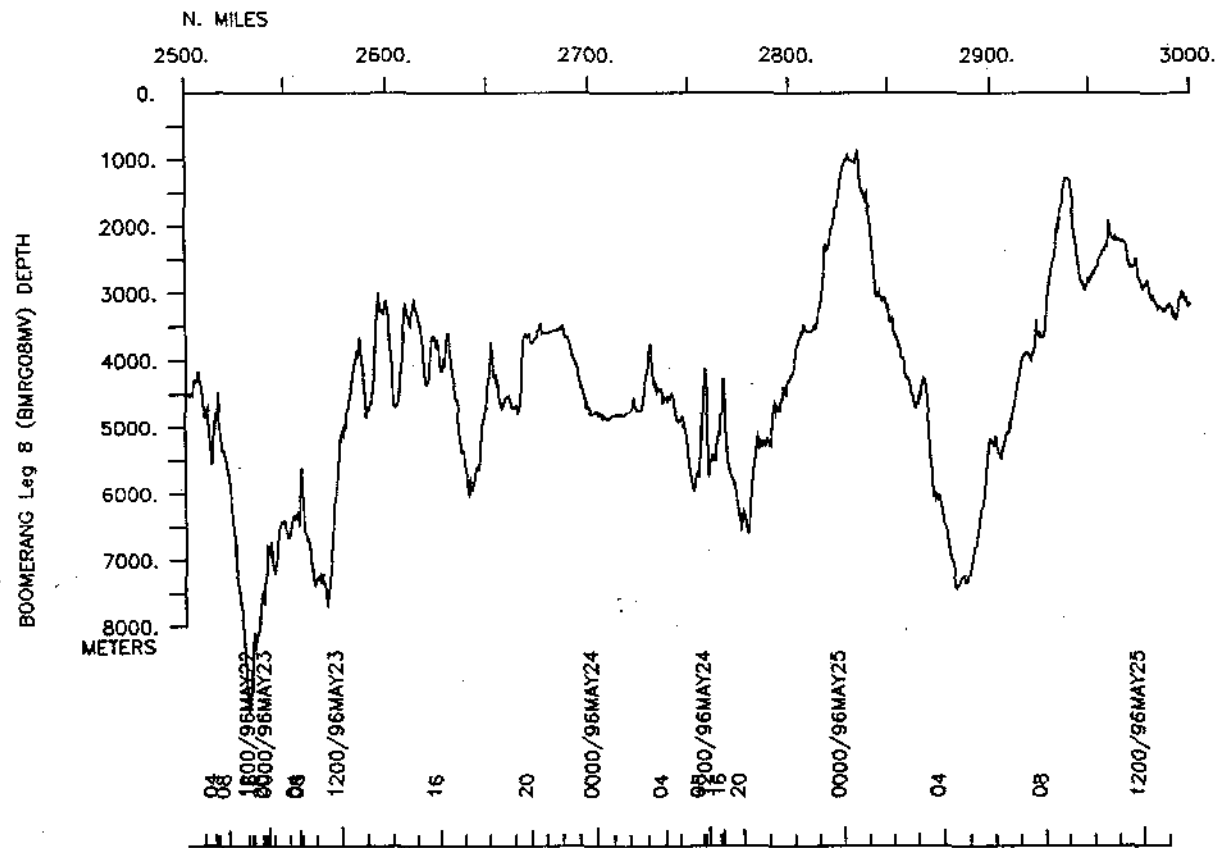
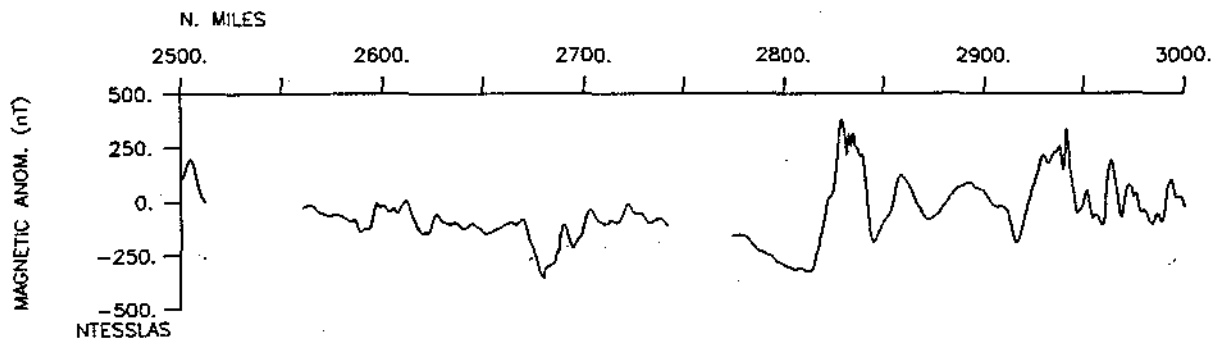
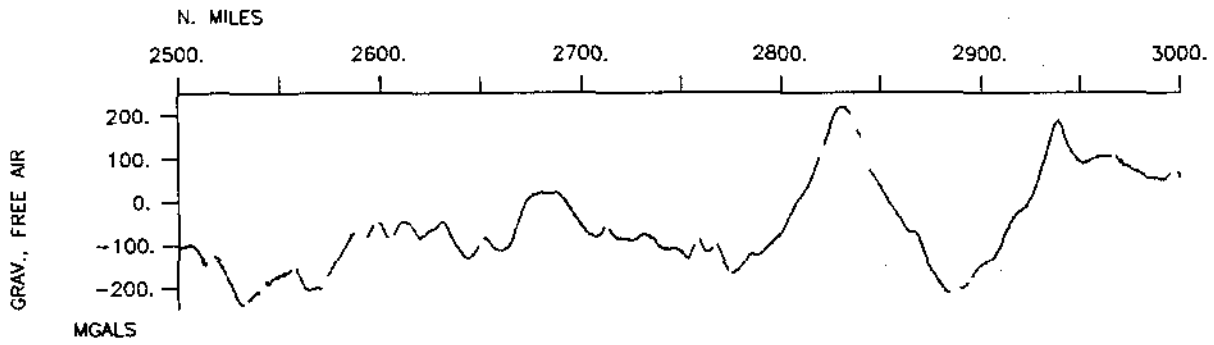


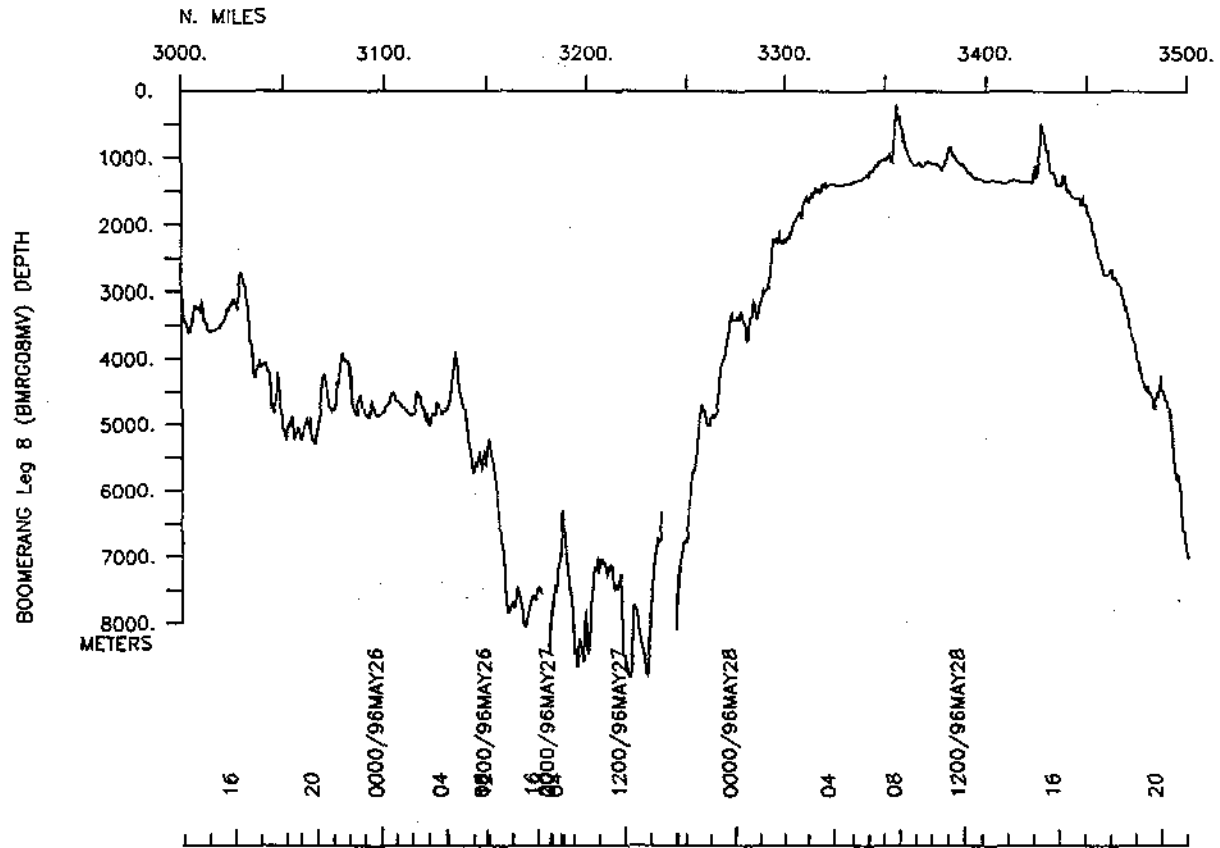
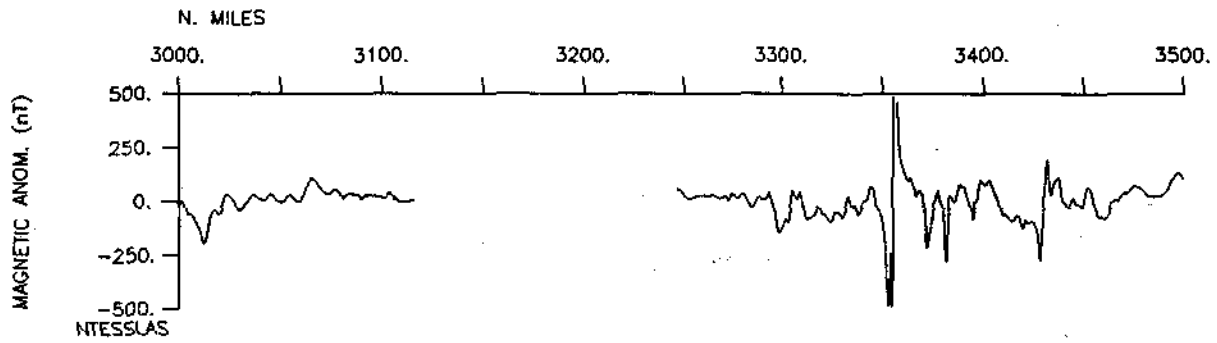
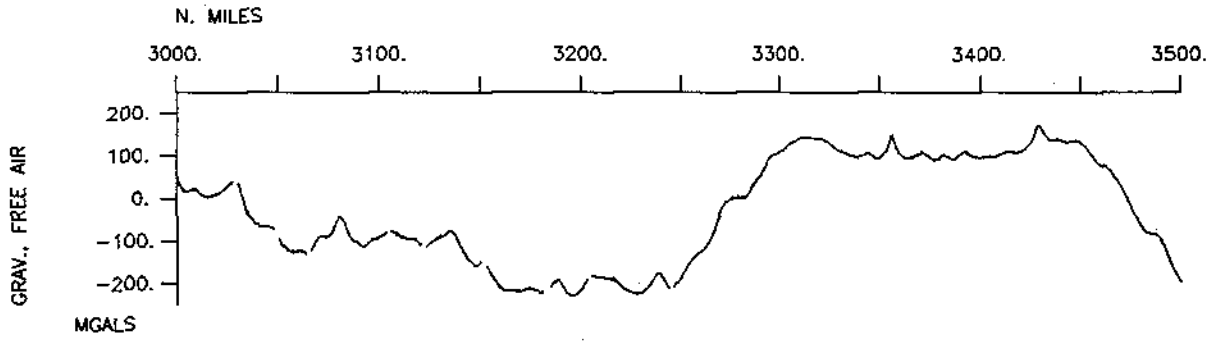


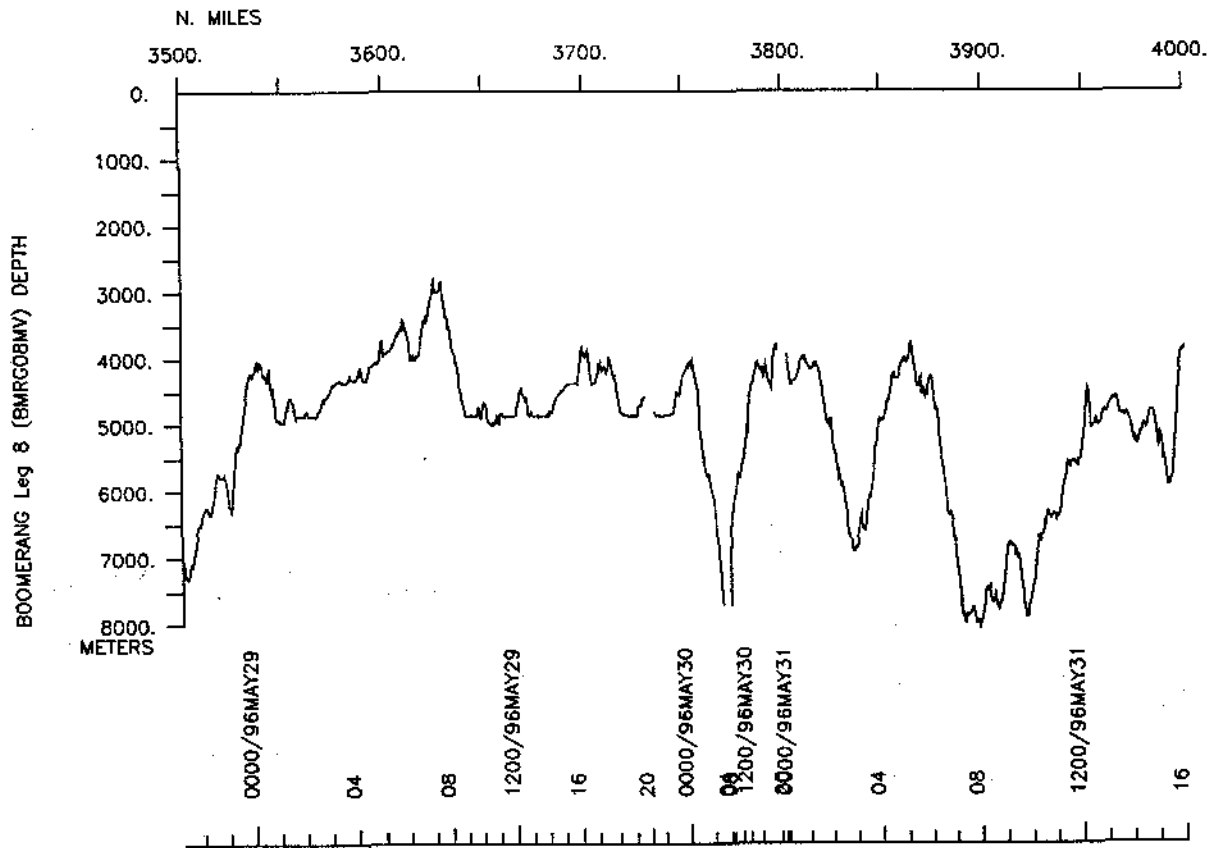
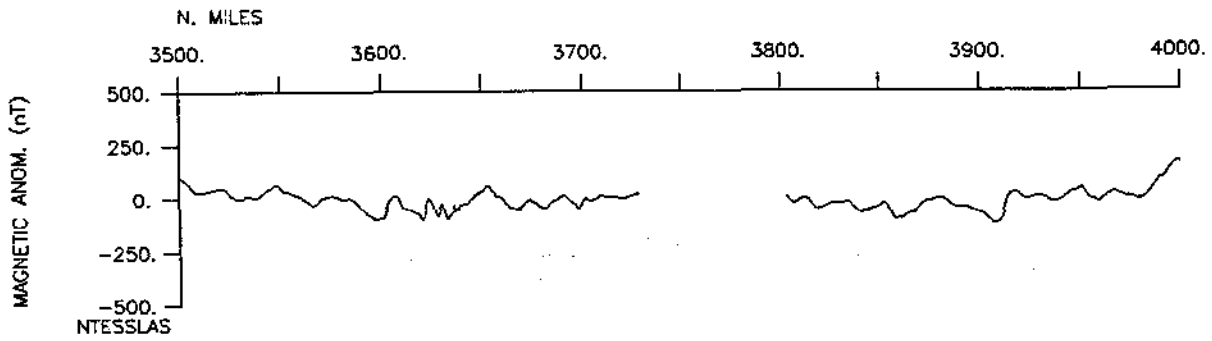
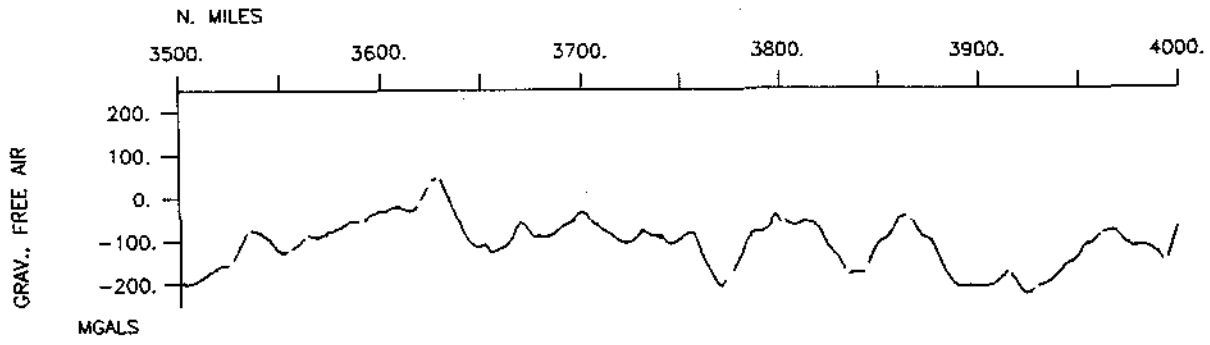


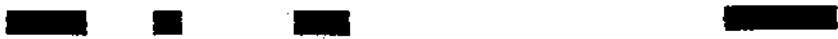
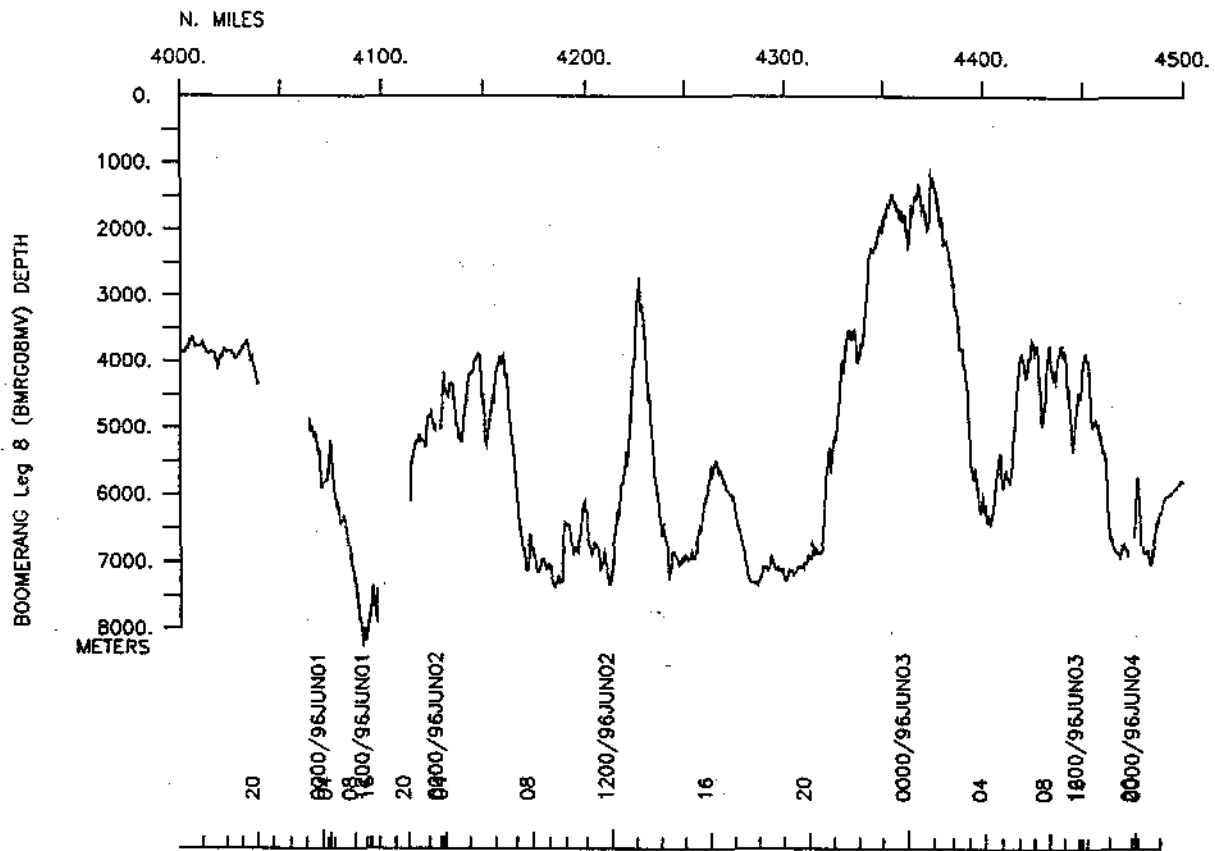
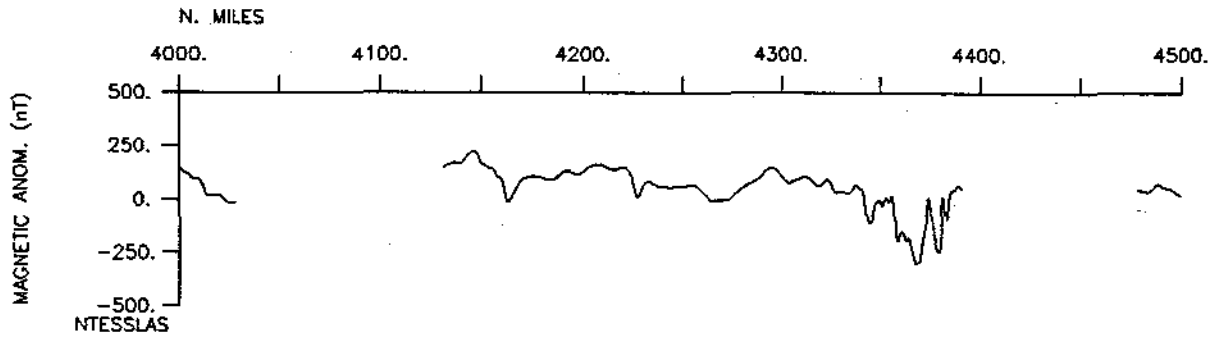
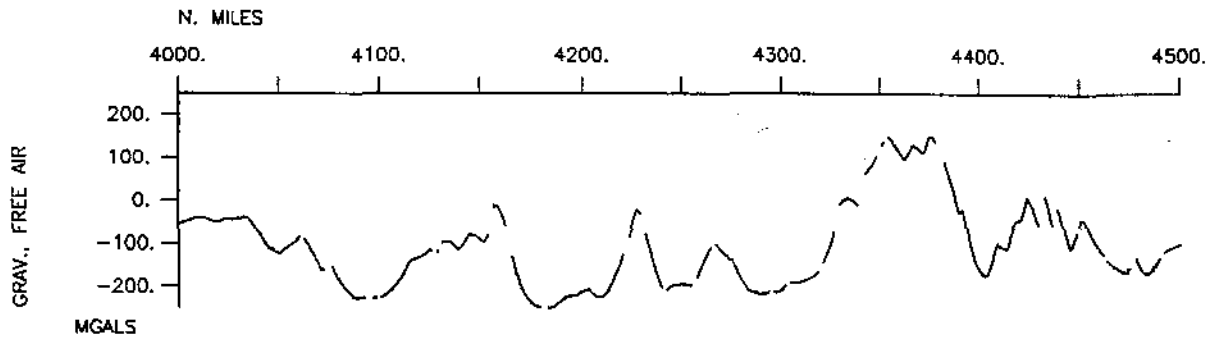


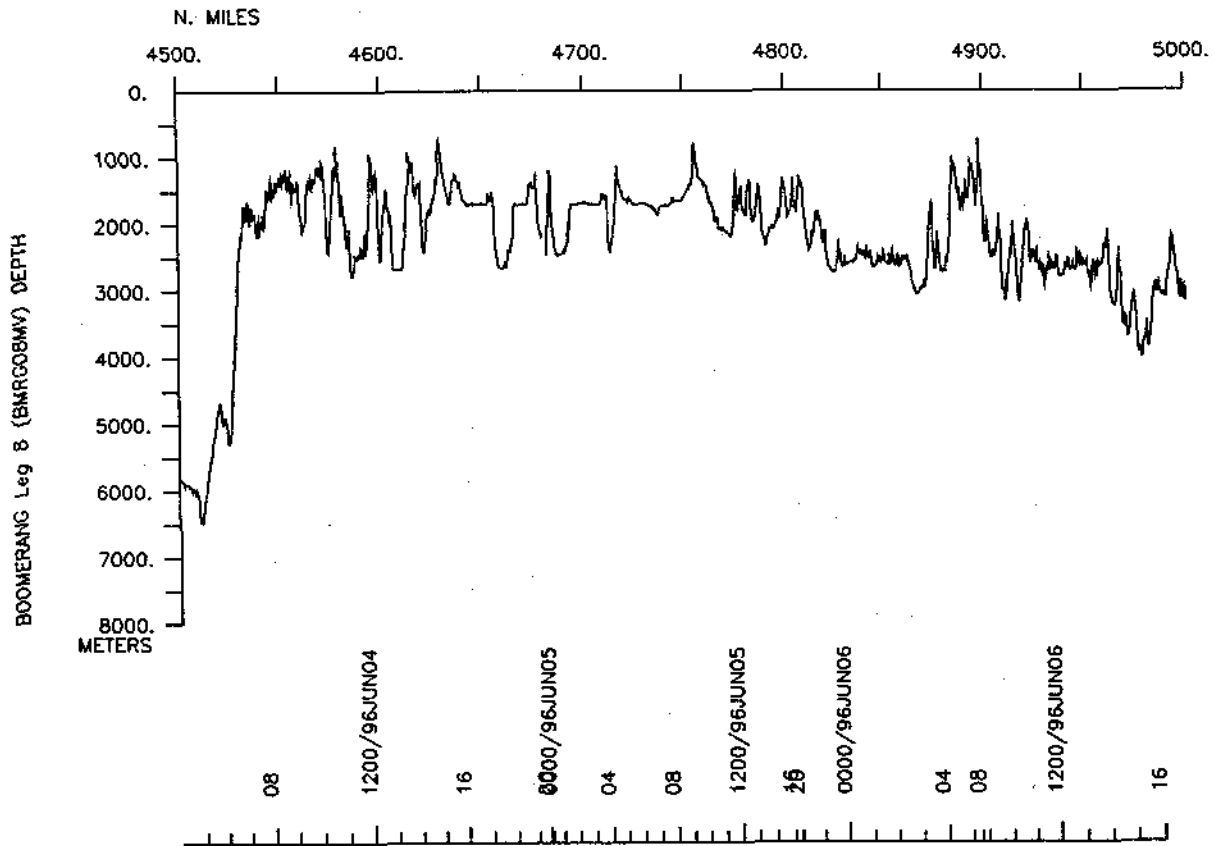
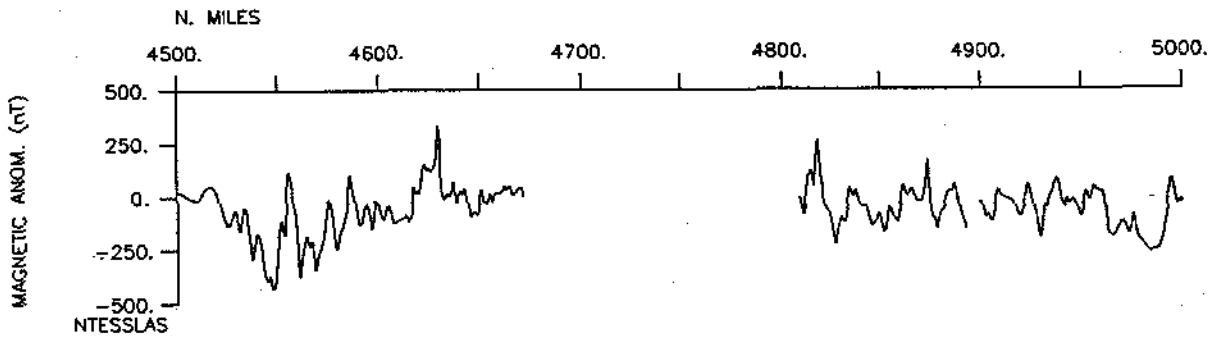
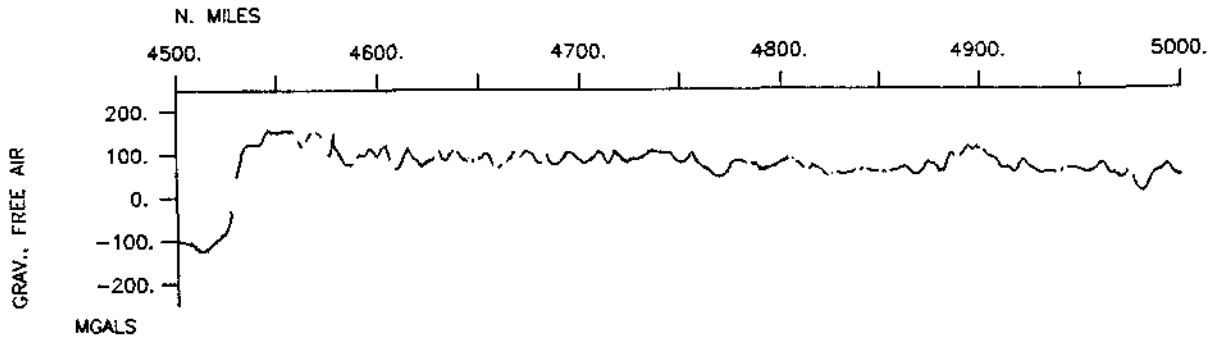


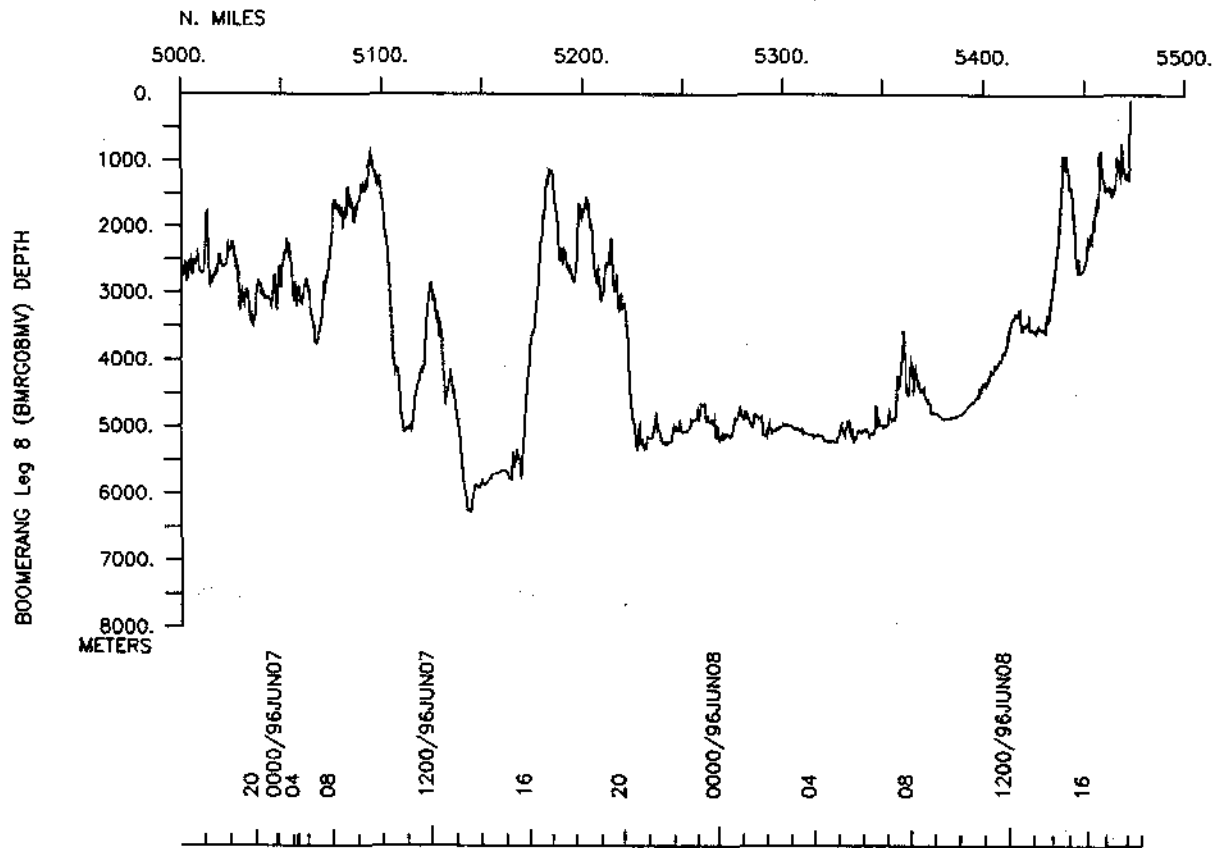
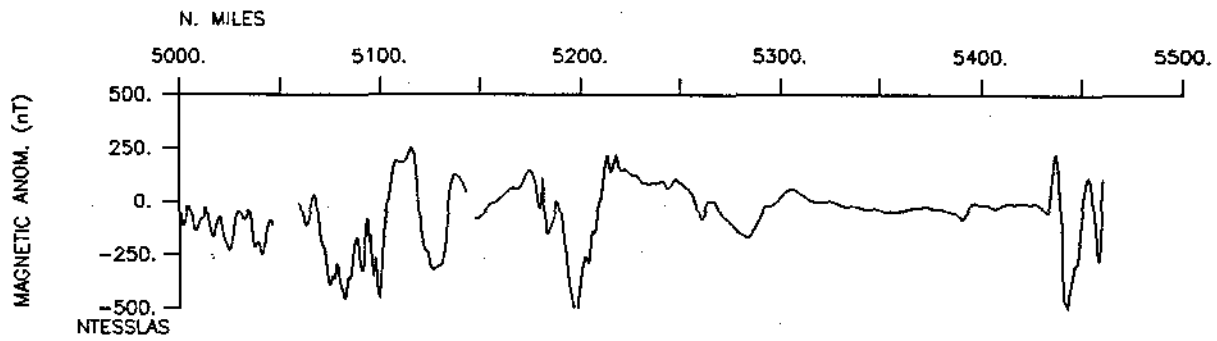
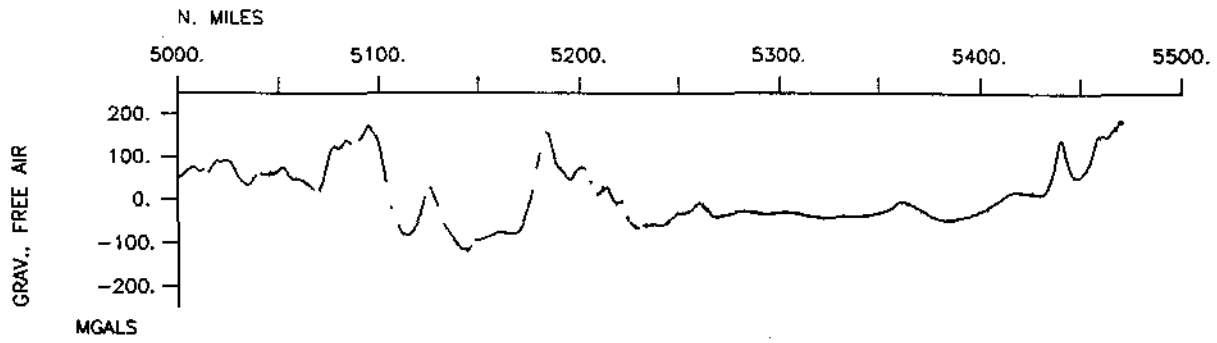












S.I.O. SAMPLE INDEX

BOOMERANG EXPEDITION

LEG 8

(BMRG08MV)

R/V Melville

(Issued July 1996)

PORTS:

Suva, Fiji (7 May 1996)
to
Pago Pago, Samoa (8 June 1996)

Chief Scientist:

Sherm Bloomer: 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 technicians 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

#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 ***										
0506	070596	0	LBUW	B Underway Watch Log	GDC	18-08.16S	178-25.39E	g		BMRG08MV
1820	080696	0	LBUW	E Underway Watch Log	GDC	14-19.69S	170-40.85W	g		BMRG08MV
#*** Magnetism (Earth Total Field) Records ***										
0626	070596	0	MGRA	B Magnetism r-01	GDC	18-15.72S	178-26.12E	g		BMRG08MV
0300	240596	0	MGRA	E Magnetism r-01	GDC	18-28.72S	173-08.19W	g		BMRG08MV
0315	240596	0	MGRA	B Magnetism r-02	GDC	18-28.72S	173-08.19W	g		BMRG08MV
1702	080696	0	MGRA	E Magnetism r-02	GDC	14-23.51S	170-52.21W	g		BMRG08MV
#*** Continuous Recorded Gravity ***										
0506	070596	0	GVCR	B auto recorded grav	GDC	18-08.16S	178-25.39E	g		BMRG08MV
1912	080696	0	GVCR	E auto recorded grav	GDC	14-16.57S	170-41.15W	g		BMRG08MV
#*** Seismic Reflection Records ***										
1827	080596	0	SPRF	B Watergun 2Sec r-01	GDC	22-24.77S	176-33.04W	g		BMRG08MV
1258	050696	0	SPRF	E Watergun 2Sec r-01	GDC	15-22.77S	174-04.66W	g		BMRG08MV
1827	080596	0	SPRS	B Watergun 4Sec r-01	GDC	22-24.77S	176-33.04W	g		BMRG08MV
1258	050696	0	SPRS	E Watergun 4Sec r-01	GDC	15-22.77S	174-04.66W	g		BMRG08MV
#*** Sea Beam Records (vertical beam and sidescan)										
0605	070596	0	MBSR	B v.beam&sscan r-01	GDC	18-12.83S	178-23.75E	g		BMRG08MV
0158	240596	0	MBSR	E v.beam&sscan r-01	GDC	18-37.28S	173-17.63W	g		BMRG08MV
0202	240596	0	MBSR	B v.beam&sscan r-02	GDC	18-36.95S	173-17.24W	g		BMRG08MV
1820	080696	0	MBSR	E v.beam&sscan r-02	GDC	14-19.69S	170-40.85W	g		BMRG08MV
#*** Integrated Meteorological Acquisition System ***										
0506	070596	0	IMET	B IMET obs	GDC	18-08.16S	178-25.39E	g		BMRG08MV
1820	080696	0	IMET	E IMET obs	GDC	14-19.69S	170-40.85W	g		BMRG08MV

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

**** Dredges ****

1303	100596	0	DRRO	Rock Dred.	81	4103M OSU	26-04.20S	175-57.70W	g	BMRG08MV
2234	100596	0	DRRO	Rock Dred.	82	6186M OSU	25-51.20S	175-25.20W	g	BMRG08MV
2222	120596	0	DRRO	Rock Dred.	83	8788M OSU	23-26.32S	174-55.69W	g	BMRG08MV
0749	130596	0	DRRO	Rock Dred.	84	7953M OSU	23-20.50S	174-57.20W	g	BMRG08MV
1652	130596	0	DRRO	Rock Dred.	85	6023M OSU	23-20.60S	175-07.00W	g	BMRG08MV
0434	140596	0	DRRO	Rock Dred.	86	9163M OSU	23-13.60S	174-48.31W	g	BMRG08MV
1850	140596	0	DRRO	Rock Dred.	87	5196M OSU	22-21.60S	174-29.40W	g	BMRG08MV
0049	150596	0	DRRO	Rock Dred.	88	4270M OSU	22-22.52S	174-33.46W	g	BMRG08MV
1045	160596	0	DRRO	Rock Dred.	89	8360M OSU	21-50.35S	173-58.41W	g	BMRG08MV
1943	160596	0	DRRO	Rock Dred.	90	5893M OSU	21-50.60S	174-07.21W	g	BMRG08MV
0358	170596	0	DRRO	Rock Dred.	91	6903M OSU	21-51.77S	174-03.21W	g	BMRG08MV
1927	180596	0	DRRO	Rock Dred.	92	7567M OSU	20-20.61S	173-20.11W	g	BMRG08MV
0255	190596	0	DRRO	Rock Dred.	93	6514M OSU	20-22.00S	173-23.80W	g	BMRG08MV
1124	190596	0	DRRO	Rock Dred.	94	5041M OSU	20-29.34S	173-30.73W	g	BMRG08MV
0450	200596	0	DRRO	X Rock Dred.	95	8379M OSU	20-08.00S	173-13.80W	g	BMRG08MV
1358	200596	0	DRRO	Rock Dred.	96	5407M OSU	19-60.00S	173-25.99W	g	BMRG08MV
0348	220596	0	DRRO	Rock Dred.	97	5016M OSU	19-19.70S	173-09.20W	g	BMRG08MV
1222	220596	0	DRRO	Rock Dred.	98	8942M OSU	19-15.20S	172-56.30W	g	BMRG08MV
2047	220596	0	DRRO	Rock Dred.	99	7531M OSU	19-11.01S	172-58.50W	g	BMRG08MV
0550	230596	0	DRRO	Rock Dred.	100	6345M OSU	19-03.60S	173-02.50W	g	BMRG08MV
0754	240596	0	DRRO	Rock Dred.	101	4972M OSU	18-31.70S	172-53.51W	g	BMRG08MV
1440	240596	0	DRRO	Rock Dred.	102	5043M OSU	18-27.00S	172-49.80W	g	BMRG08MV
0940	260596	0	DRRO	Rock Dred.	103	5551M OSU	17-30.20S	172-34.60W	g	BMRG08MV
1940	260596	0	DRRO	Rock Dred.	104	8310M OSU	17-52.09S	172-29.60W	g	BMRG08MV
0432	270596	0	DRRO	Rock Dred.	105	6871M OSU	17-52.15S	172-34.38W	g	BMRG08MV
1643	270596	0	DRRO	Rock Dred.	106	8022M OSU	17-25.00S	172-24.55W	g	BMRG08MV
0417	300596	0	DRRO	Rock Dred.	107	6843M OSU	16-31.40S	172-18.00W	g	BMRG08MV
1219	300596	0	DRRO	Rock Dred.	108	5070M OSU	16-31.65S	172-26.95W	g	BMRG08MV
2005	300596	0	DRRO	Rock Dred.	109	4353M OSU	16-31.79S	172-39.40W	g	BMRG08MV
0216	010696	0	DRRO	Rock Dred.	110	5697M OSU	15-40.78S	172-29.53W	g	BMRG08MV
1134	010696	0	DRRO	Rock Dred.	111	7956M OSU	15-29.99S	172-20.30W	g	BMRG08MV
2327	010696	0	DRRO	Rock Dred.	112	5110M OSU	15-25.60S	172-40.01W	g	BMRG08MV
1153	030696	0	DRRO	Rock Dred.	113	4496M OSU	14-48.70S	173-24.10W	g	BMRG08MV
2125	030696	0	DRRO	Rock Dred.	114	6563M OSU	14-45.00S	173-21.50W	g	BMRG08MV
2019	040696	0	DRRO	Rock Dred.	115	2128M OSU	15-18.70S	173-27.50W	g	BMRG08MV
1650	050696	0	DRRO	Rock Dred.	116	1650M OSU	15-22.60S	174-00.20W	g	BMRG08MV
1918	050696	0	DRRO	Rock Dred.	117	1800M OSU	15-22.10S	173-58.19W	g	BMRG08MV
0615	060696	0	DRRO	Rock Dred.	118	1486M OSU	15-03.80S	173-32.90W	g	BMRG08MV
2206	060696	0	DRRO	Rock Dred.	119	3173M OSU	14-55.00S	173-50.30W	g	BMRG08MV
0329	070696	0	DRRO	Rock Dred.	120	3074M OSU	14-51.79S	173-59.10W	g	BMRG08MV

**** Cores ****

0450	260596	0	COGV	Gravity Core 5	4828M	WHOI	17-38.00S	172-47.90W	g	BMRG08MV
2158	290596	0	COGV	Gravity Core 6	4870M	WHOI	16-42.25S	172-39.85W	g	BMRG08MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP			p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE	c	LEG-SHIP
#*** Seismic Survey Lines ***									
1827	080596	0	SPSV	B Seismic line 1	SGG	22-24.77S	176-33.04W	g	BMRG08MV
0000	090596	0	SPSV	E Seismic line 1	SGG	22-34.97S	176-15.05W	g	BMRG08MV
2110	090596	0	SPSV	B Seismic line 2	SGG	25-47.49S	176-27.21W	g	BMRG08MV
0833	100596	0	SPSV	E Seismic line 2	SGG	25-50.91S	176-12.58W	g	BMRG08MV
2320	110596	0	SPSV	B Seismic line 3	SGG	23-17.63S	175-20.07W	g	BMRG08MV
0455	120596	0	SPSV	E Seismic line 3	SGG	23-21.30S	175-14.59W	g	BMRG08MV
0600	140596	0	SPSV	B Seismic line 4	SGG	23-13.39S	174-49.59W	g	BMRG08MV
1540	140596	0	SPSV	E Seismic line 4	SGG	22-21.99S	174-28.07W	g	BMRG08MV
1720	170596	0	SPSV	B Seismic line 5	SGG	20-59.33S	174-56.88W	g	BMRG08MV
0030	180596	0	SPSV	E Seismic line 5	SGG	20-42.49S	174-42.39W	g	BMRG08MV
0833	210596	0	SPSV	B Seismic line 6	SGG	18-57.54S	173-17.81W	g	BMRG08MV
2316	210596	0	SPSV	E Seismic line 6	SGG	19-09.25S	173-27.36W	g	BMRG08MV
1938	230596	0	SPSV	B Seismic line 7	SGG	18-23.15S	173-07.44W	g	BMRG08MV
0432	240596	0	SPSV	E Seismic line 7	SGG	18-25.98S	172-58.62W	g	BMRG08MV
1830	250596	0	SPSV	B Seismic line 8	SGG	17-46.54S	172-45.61W	g	BMRG08MV
0218	260596	0	SPSV	E Seismic line 8	SGG	17-43.61S	172-48.04W	g	BMRG08MV
0500	280596	0	SPSV	B Seismic line 9	SGG	17-40.54S	173-45.81W	g	BMRG08MV
1217	280596	0	SPSV	E Seismic line 9	SGG	17-38.70S	173-55.83W	g	BMRG08MV
0730	290596	0	SPSV	B Seismic line 10	SGG	16-44.80S	172-51.48W	g	BMRG08MV
1900	290596	0	SPSV	E Seismic line 10	SGG	16-44.56S	172-38.08W	g	BMRG08MV
1845	310596	0	SPSV	B Seismic line 11	SGG	15-54.55S	172-43.52W	g	BMRG08MV
2306	310596	0	SPSV	E Seismic line 11	SGG	15-43.38S	172-35.28W	g	BMRG08MV
1800	010696	0	SPSV	B Seismic line 12	SGG	15-32.89S	172-19.36W	g	BMRG08MV
1930	010696	0	SPSV	E Seismic line 12	SGG	15-34.99S	172-30.27W	g	BMRG08MV
0715	020696	0	SPSV	B Seismic line 13	SGG	15-03.18S	173-00.30W	g	BMRG08MV
1003	020696	0	SPSV	E Seismic line 13	SGG	15-10.39S	172-40.22W	g	BMRG08MV
0200	030696	0	SPSV	B Seismic line 14	SGG	14-52.95S	173-28.25W	g	BMRG08MV
0924	030696	0	SPSV	E Seismic line 14	SGG	14-47.40S	173-25.01W	g	BMRG08MV
0040	050696	0	SPSV	B Seismic line 15	SGG	15-19.02S	173-25.88W	g	BMRG08MV
1258	050696	0	SPSV	E Seismic line 15	SGG	15-22.77S	174-04.66W	g	BMRG08MV
#				End Sample Index					BMRG08MV