

*Report and Index of
Underway Marine Geophysical Data*

Nemo Expedition

Leg 3

(NEMO03MV)

R/V Melville

(Issued September 2000)

Ports:

Manzanillo, Mexico (15 May 2000)

to

Puerta Caldera, Costa Rica (8 June 2000)

Chief Scientist:

Nicklas Pias - Oregon State University

Pias@oce.orst.edu

Computer Tech - Dan Jacobson

Resident Marine Techs - Gene Pillard; Shad Baiz

Post-Cruise processing and report preparation by the
Geological Data Center, Scripps Institution of Oceanography
La Jolla, CA 92093-0223

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 ID# 292

***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

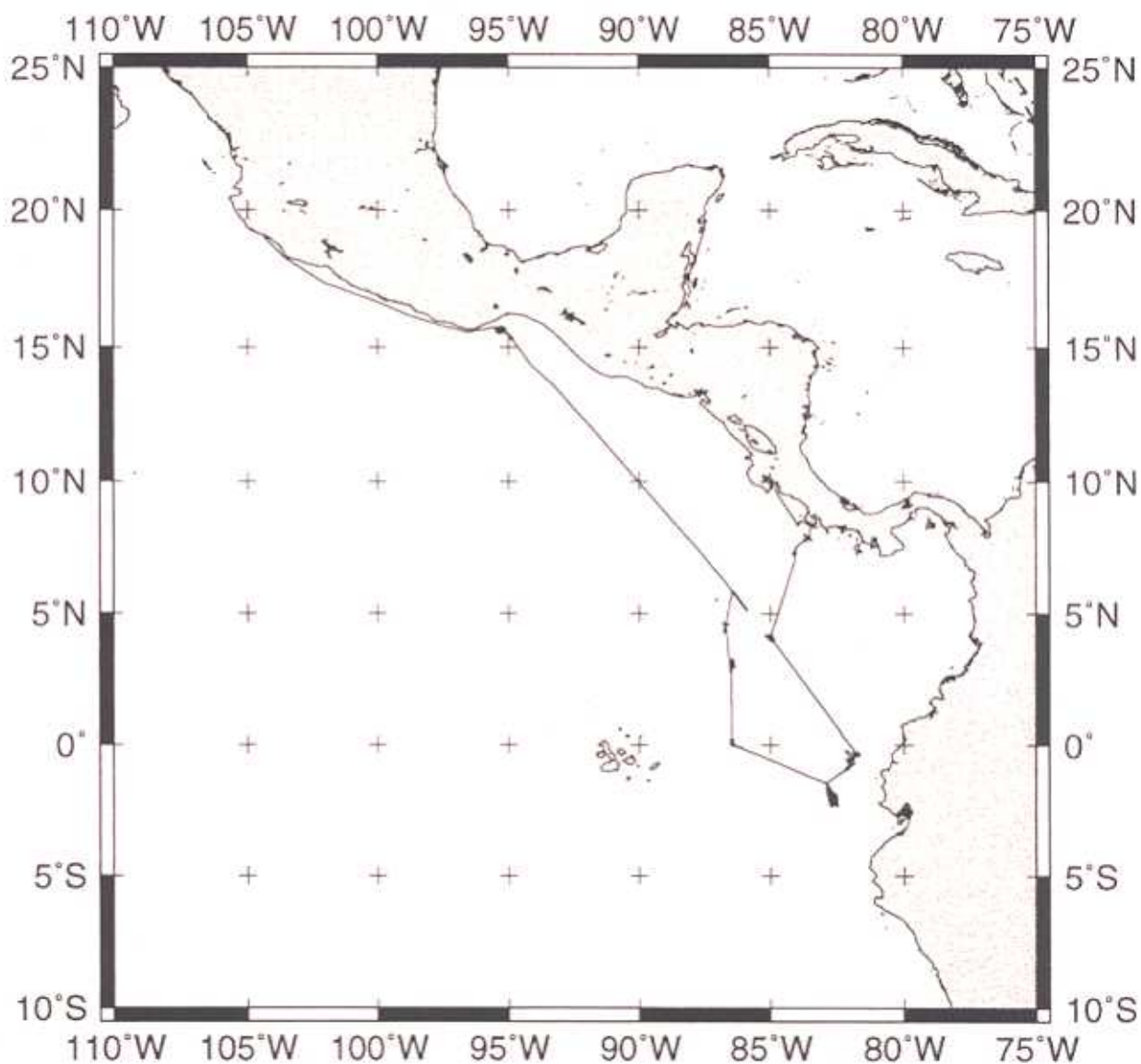
Profiles – depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

Sample Index – list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines collected on the leg.

NOTE: One or more of the underway data types may not be collected on a given leg. For information on the availability and reproduction costs of data in the following forms, contact the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223. Phone: (858)534-2752, Fax: (858)534-6500, internet email: ualbright@ucsd.edu or gwells@ucsd.edu

1. Files via ftp or on 8mm (Exabyte) magnetic tape or CDrom:
 - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
 - b) Above data in a single merged ASCII file in the MGD77 Exchange Format.
 - c) SeaBeam depth data (binary, Sun byte order)
 - d) SeaBeam Sidescan data.
2. Microfilm (35mm flowfilm) or hard copies of:
 - a) Underway watch log
 - b) SeaBeam vertical beam profile/Sidescan records.
 - c) 3.5 kHz and 12 kHz echosounder records.
 - d) Seismic reflection profiler records.
3. Navigation abstract listing with times and positions of major course and speed changes.
4. Custom plots in Mercator projection:
 - a) Track plots.
 - b) SeaBeam depth contour plots.
 - c) Depths, magnetic or gravity values printed or profiled along track.

Rev 6/2000



NEMO EXPEDITION LEG 3 (NEMO03MV)

CHIEF SCIENTIST: Nicklas Pias, Oregon State University

PORTS: Manzanillo, Mexico - Puerto Caldera, Costa Rica

DATES: 15 May - 08 June 2000

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise- 4566 miles

Magnetics- 640 miles

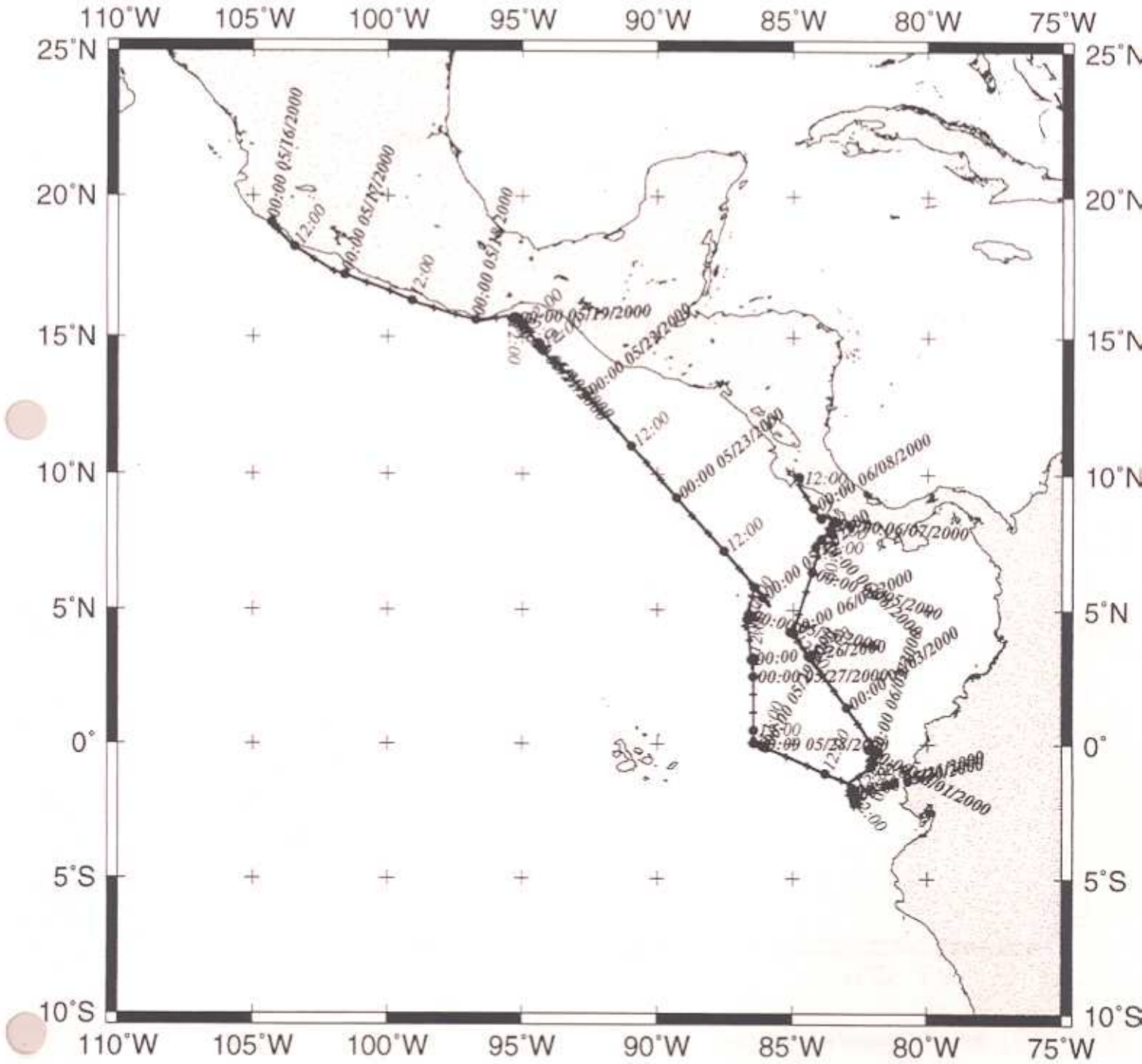
Bathymetry- 4496 miles

Seismic Reflection- 2000 miles

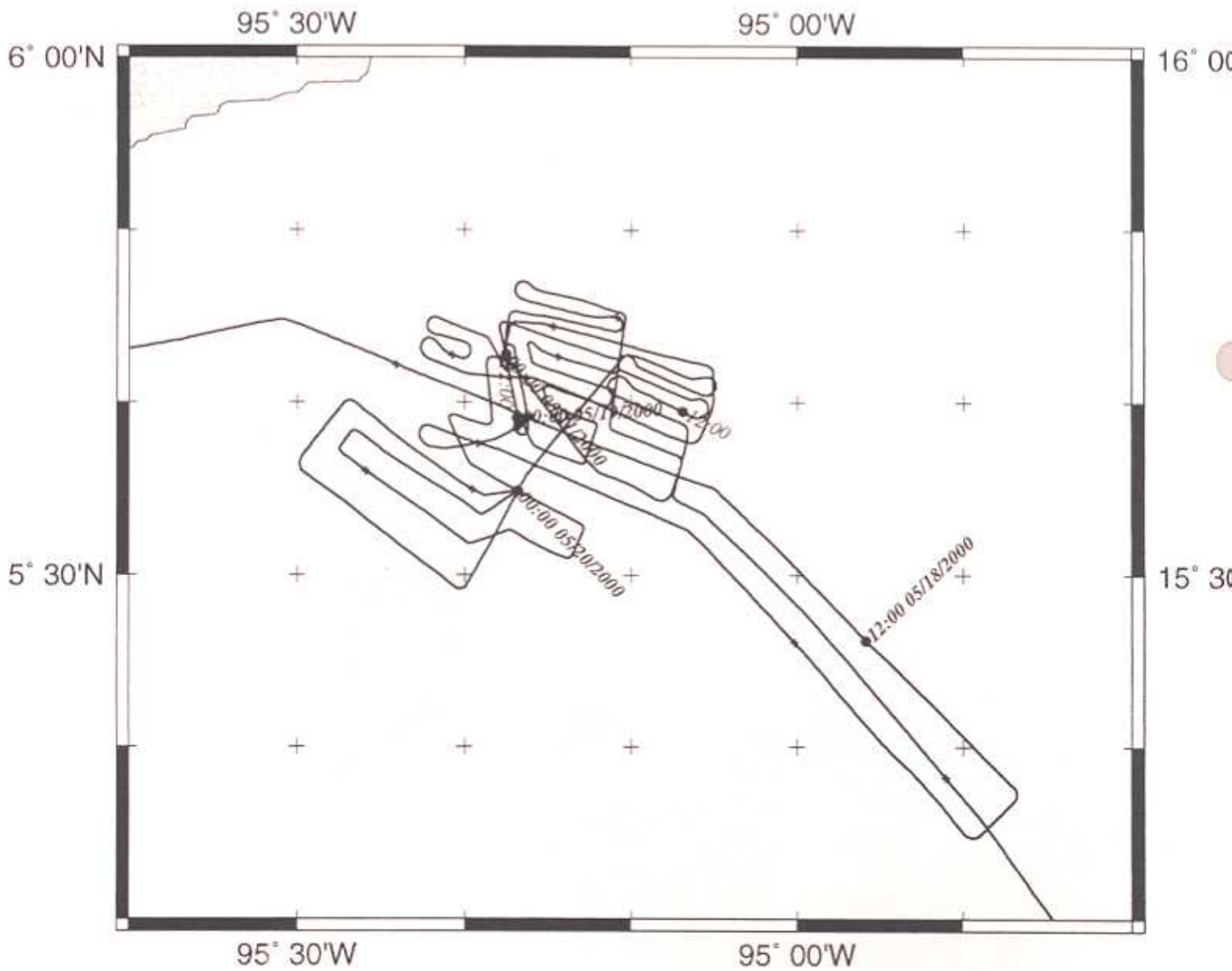
Sea Beam- 4496 miles

Gravity- 4560 miles

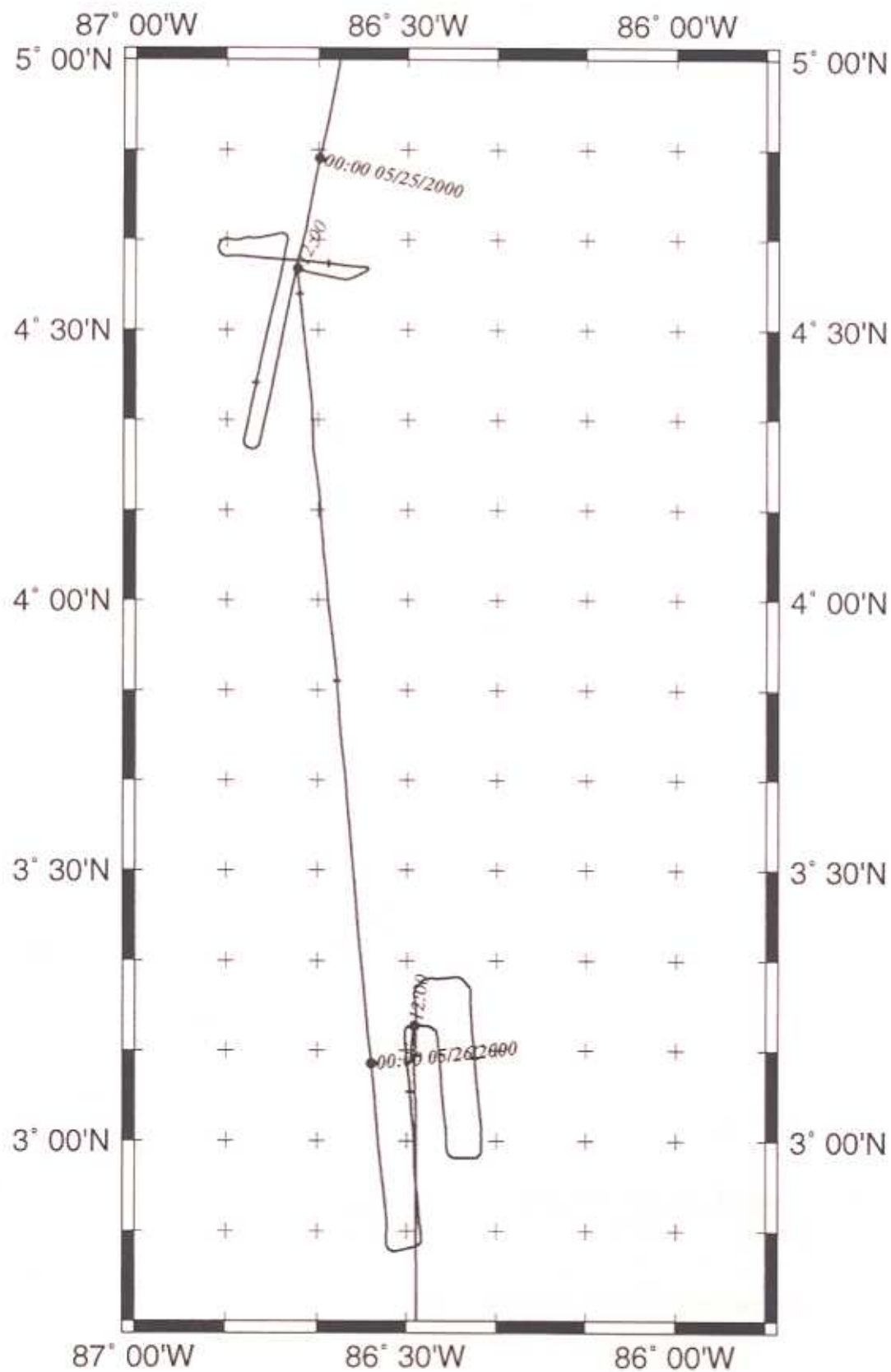
NEMO Leg 3 Track



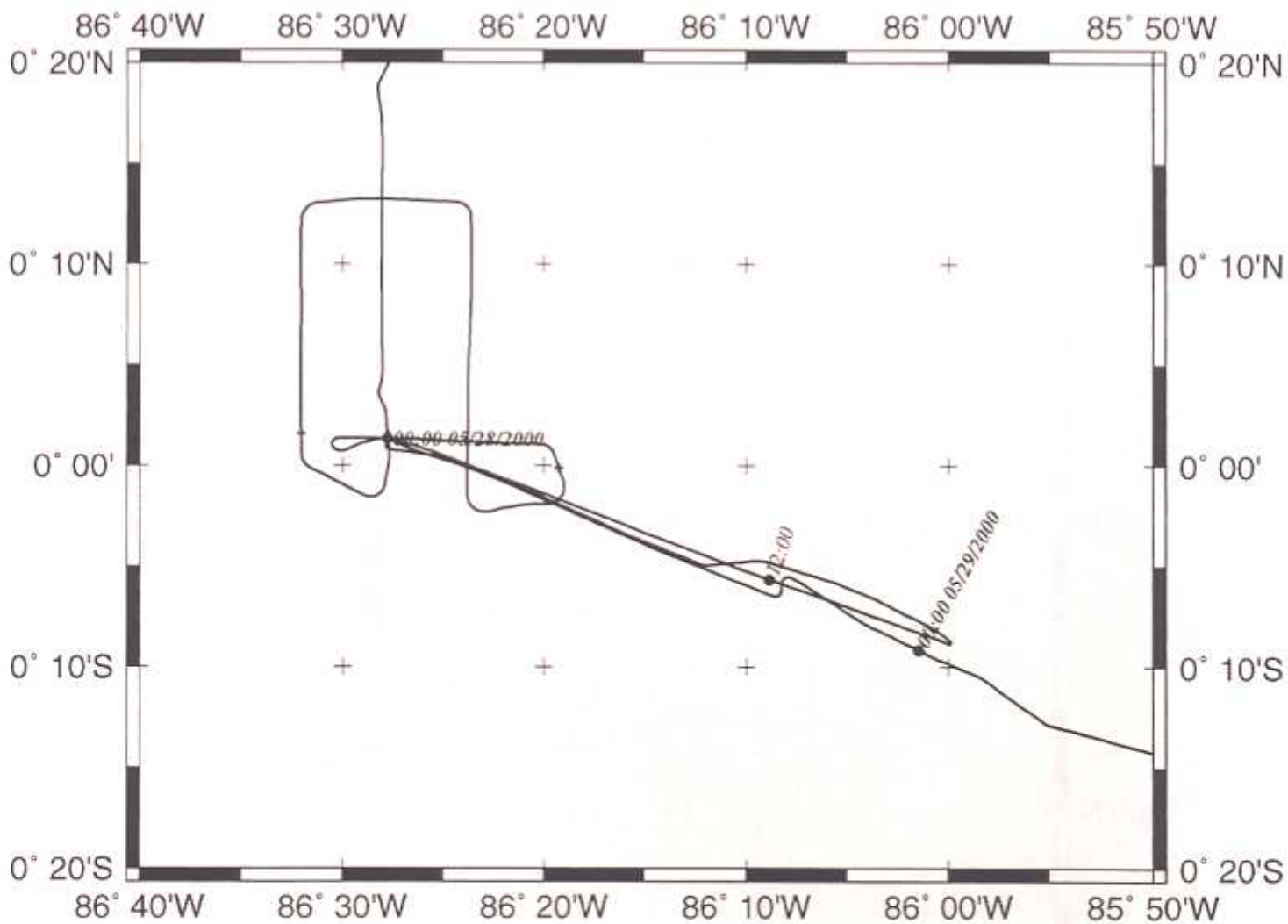
NEMO03MV survey 1



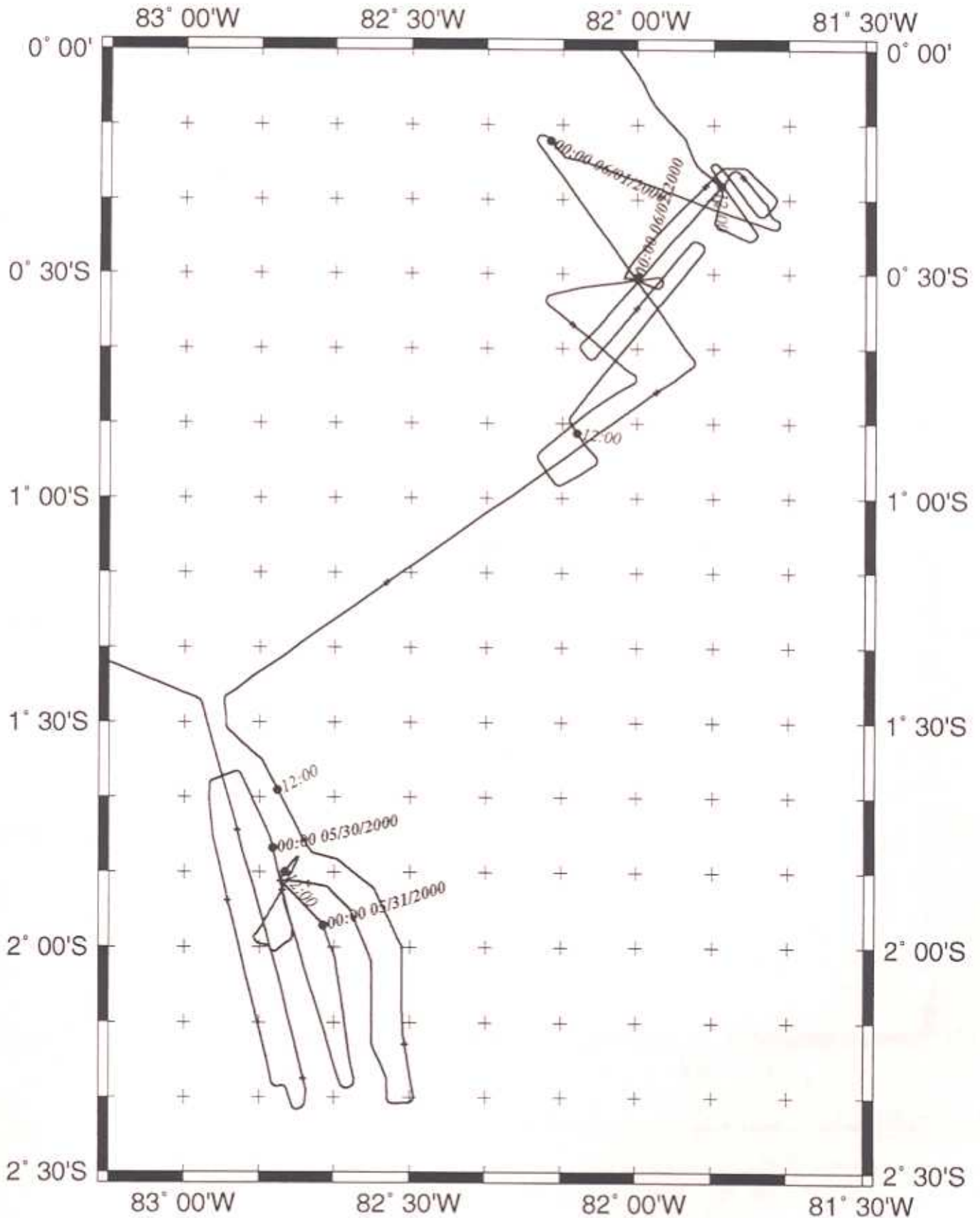
NEMO03MV survey 2



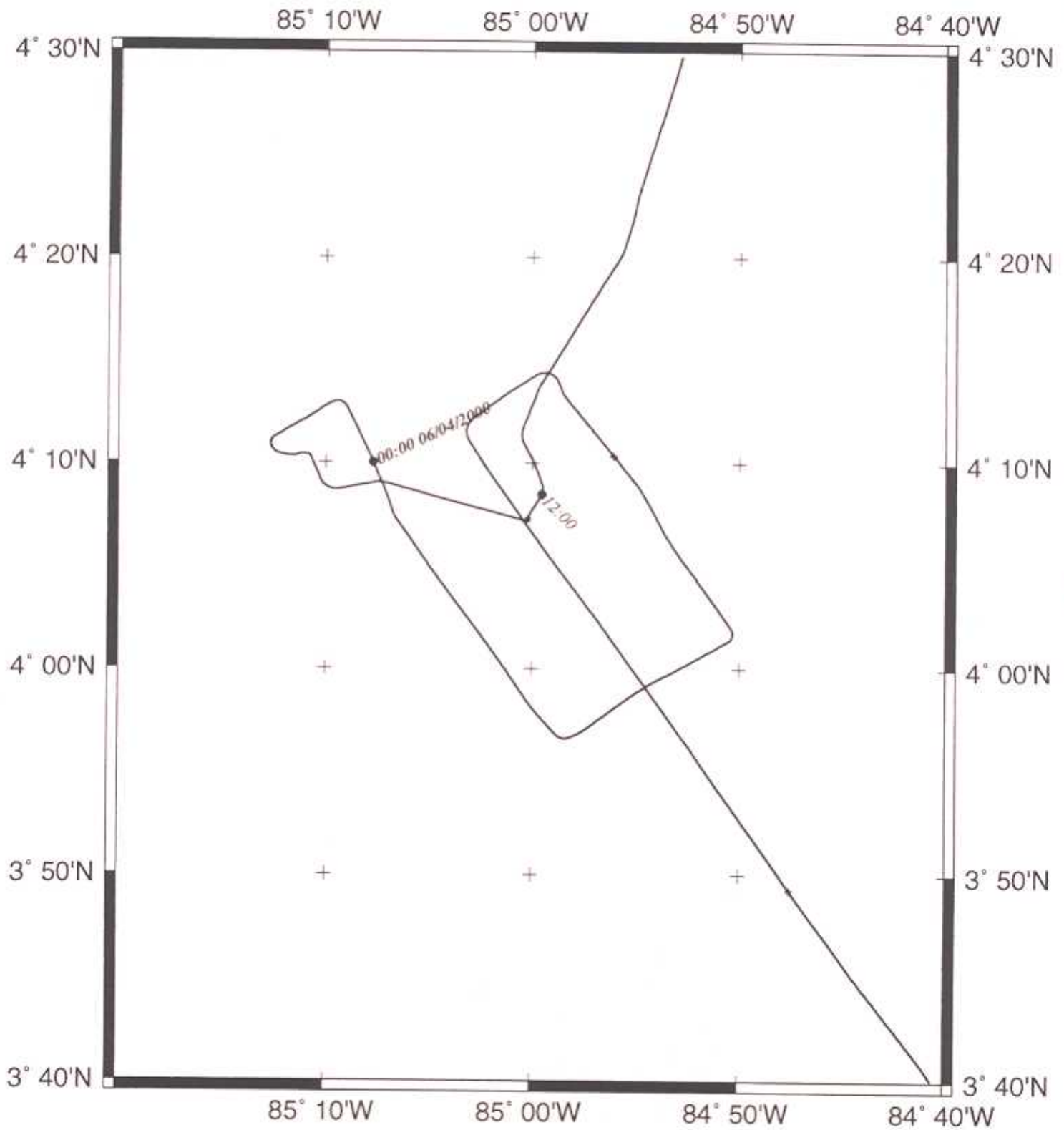
NEMO03MV survey 3



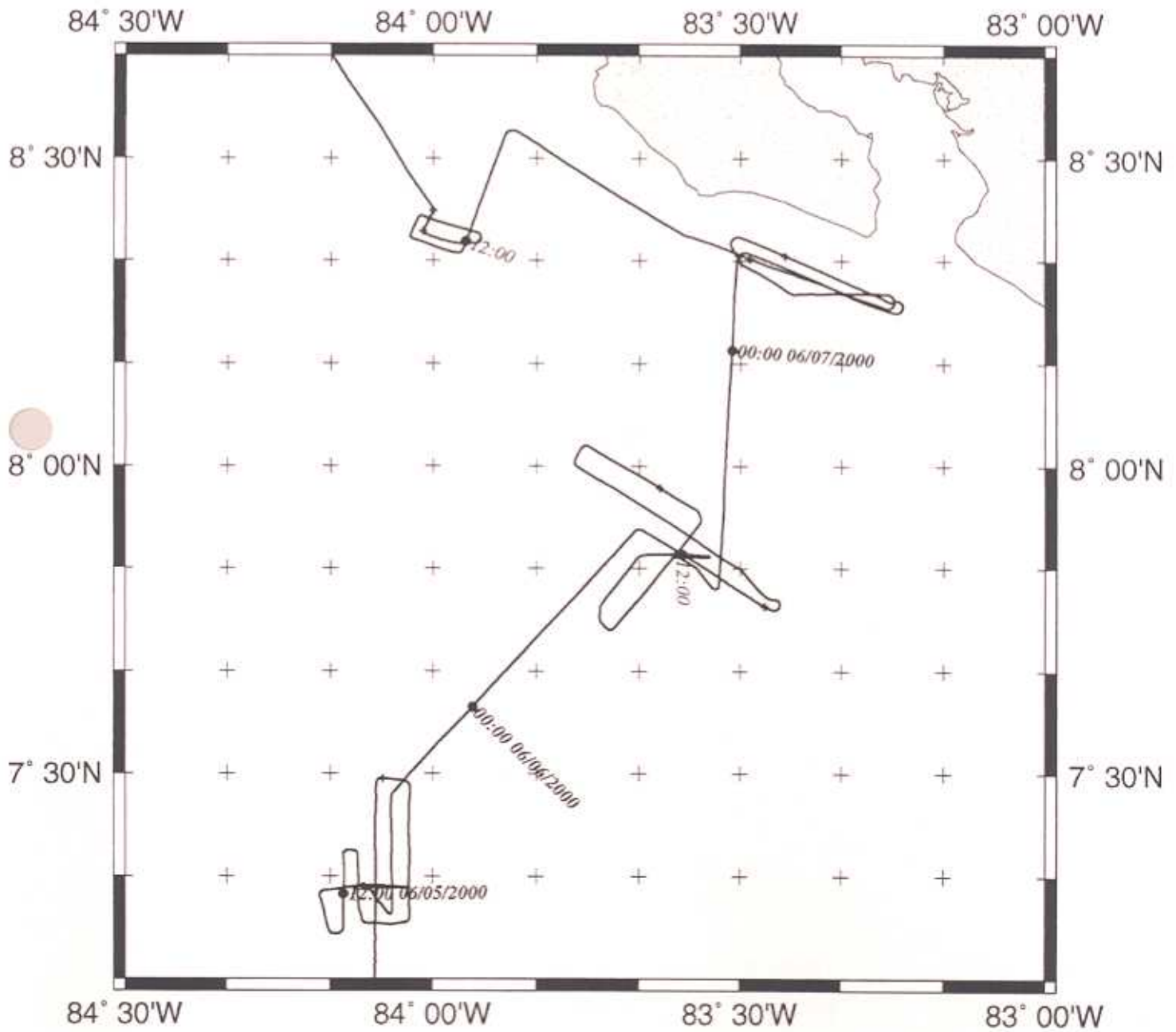
NEMO03MV survey 4

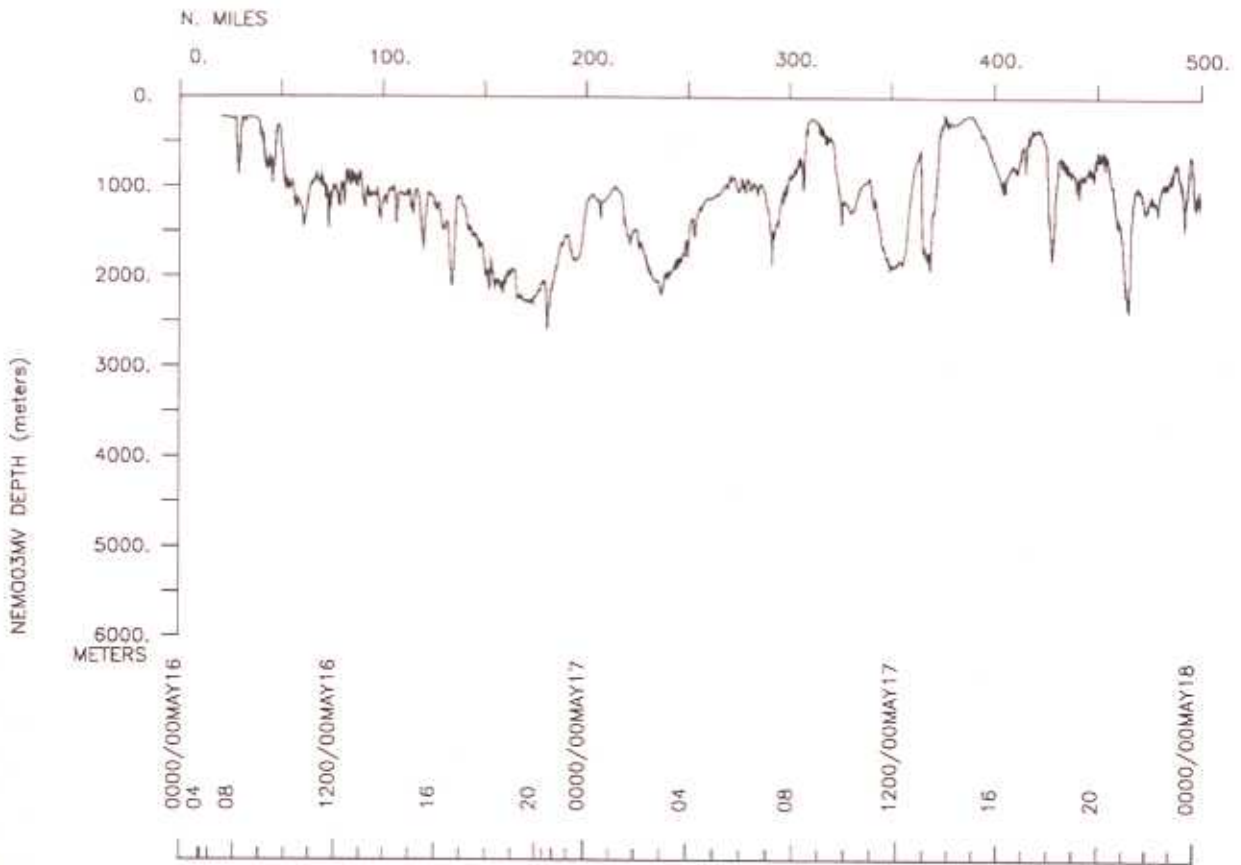
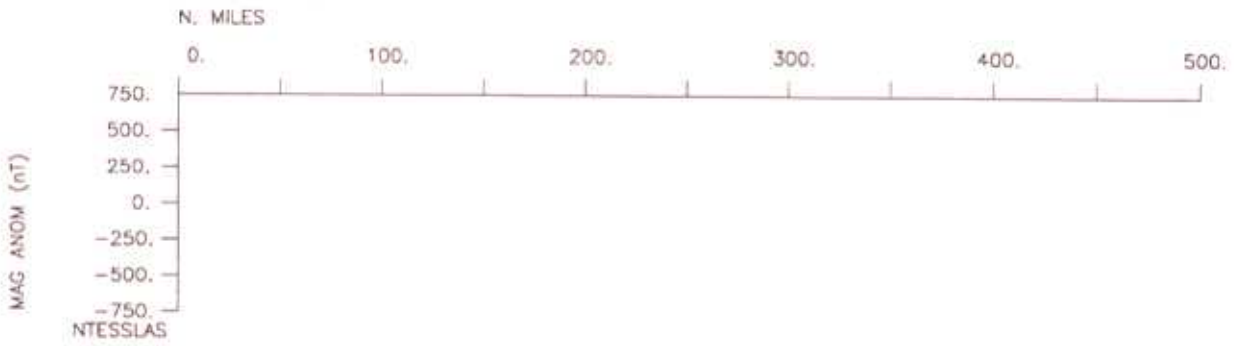
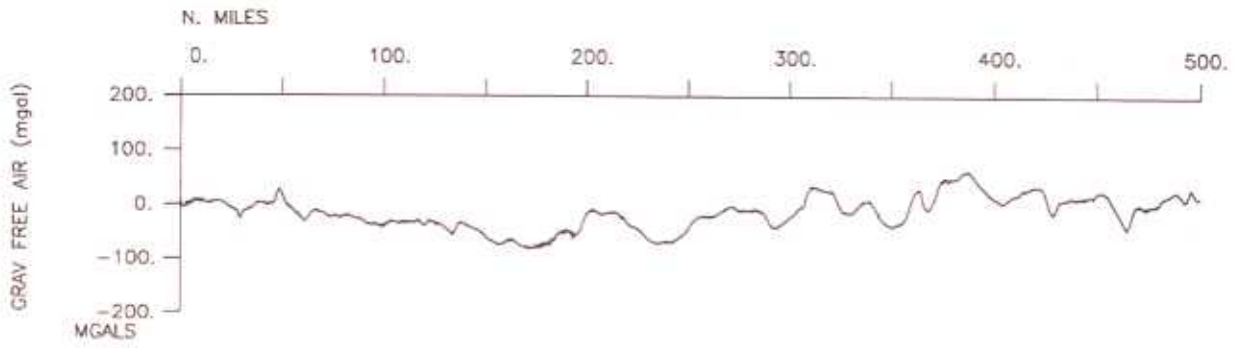


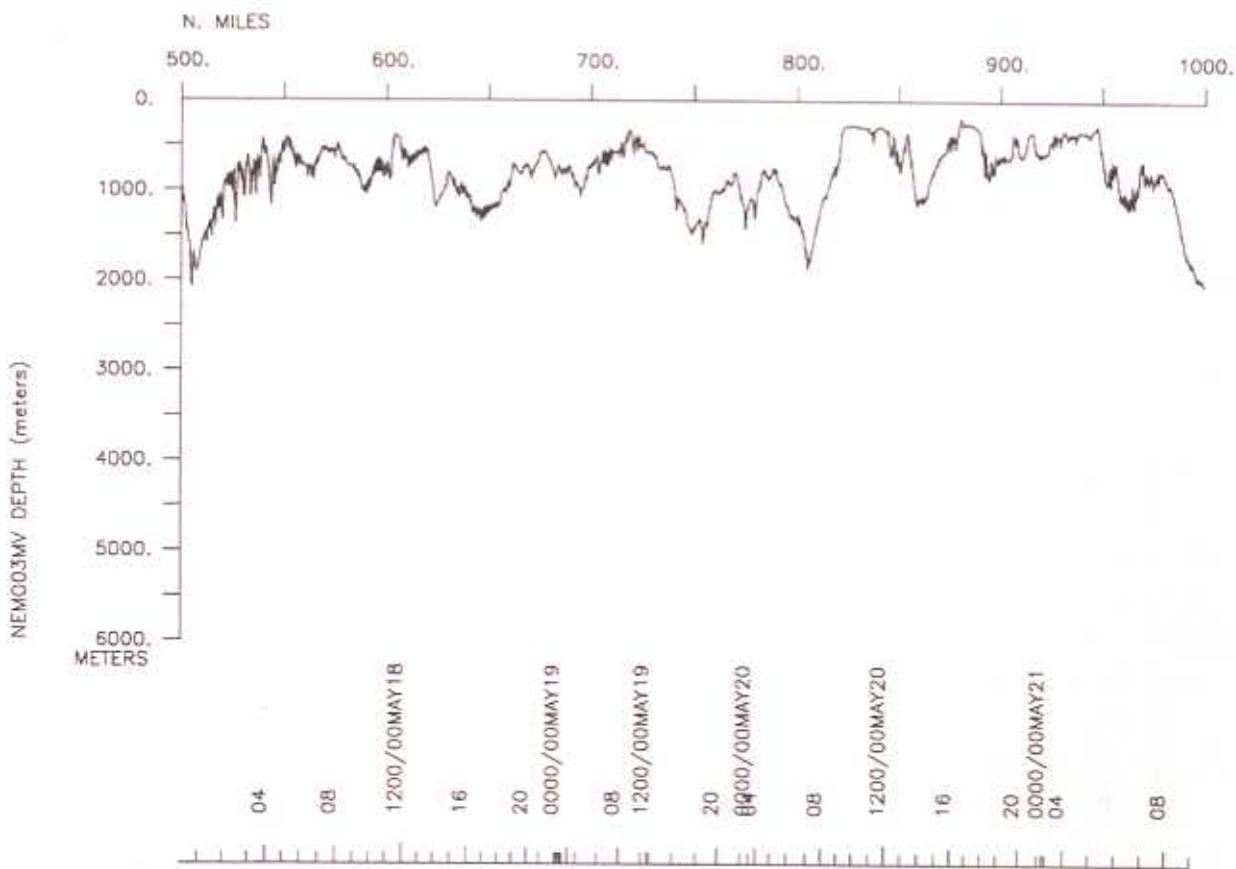
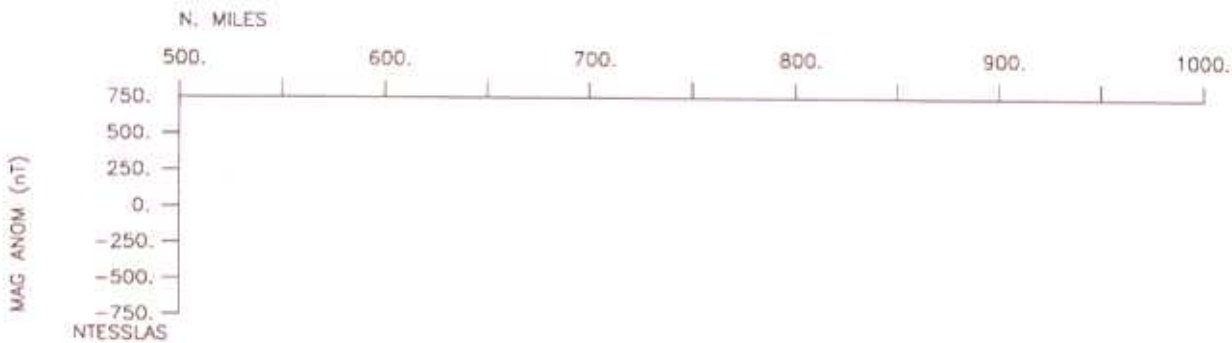
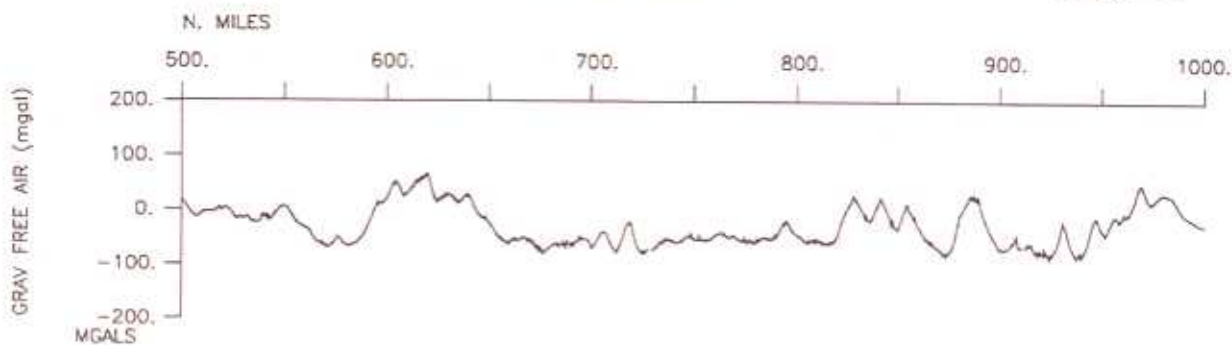
NEMO03MV survey 5

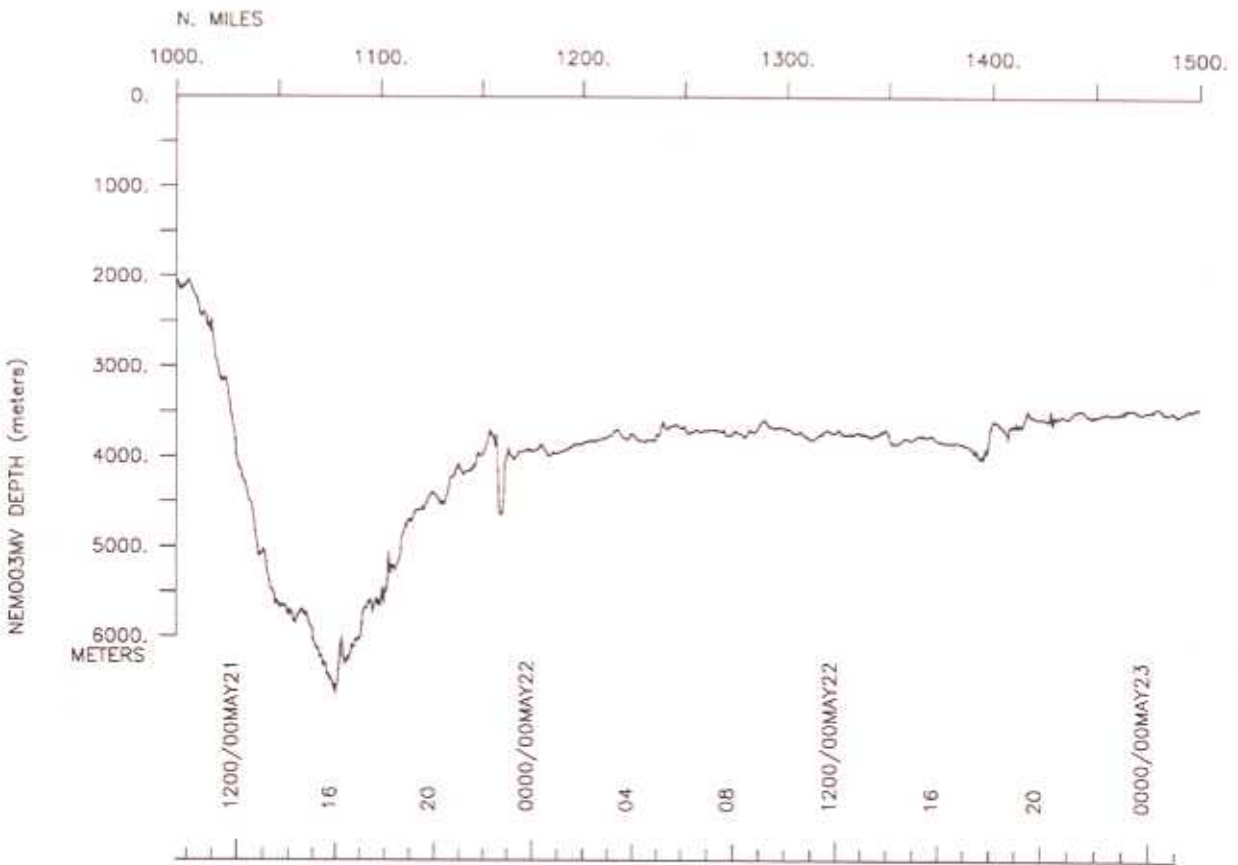
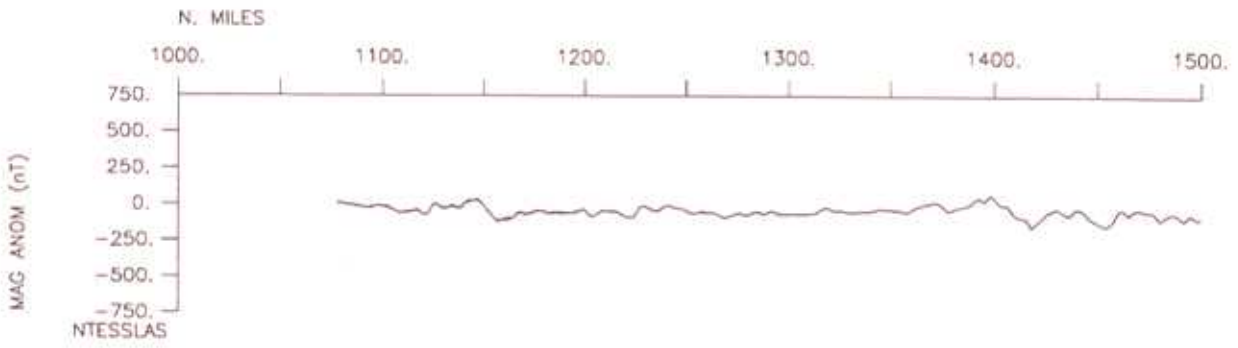
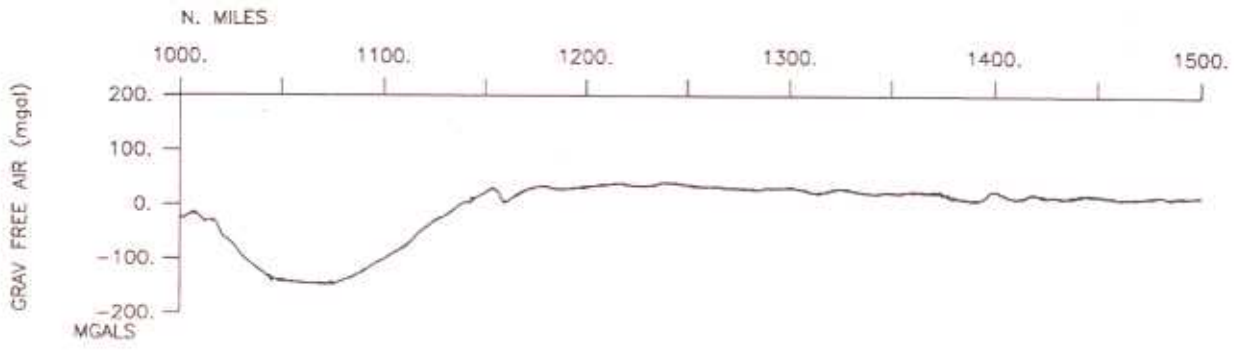


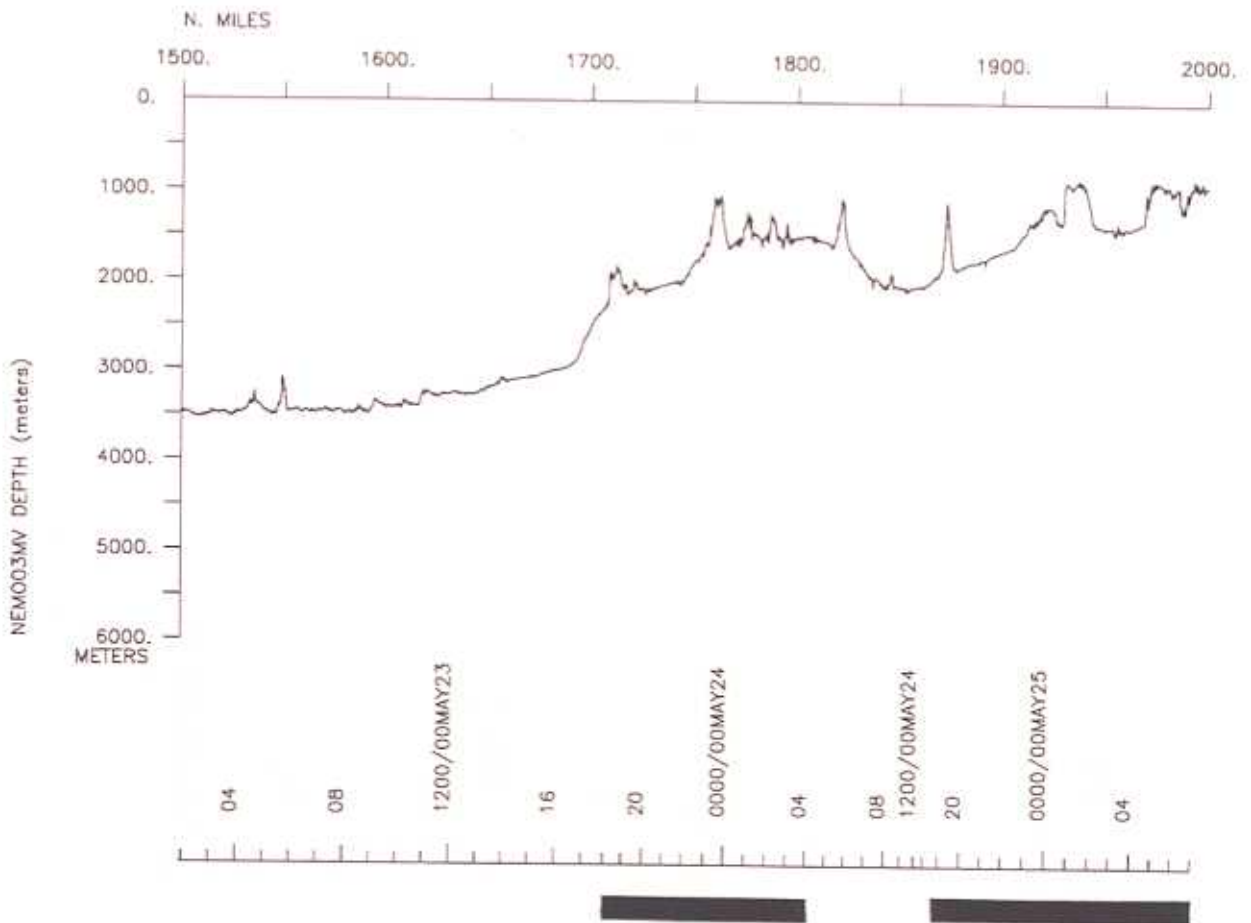
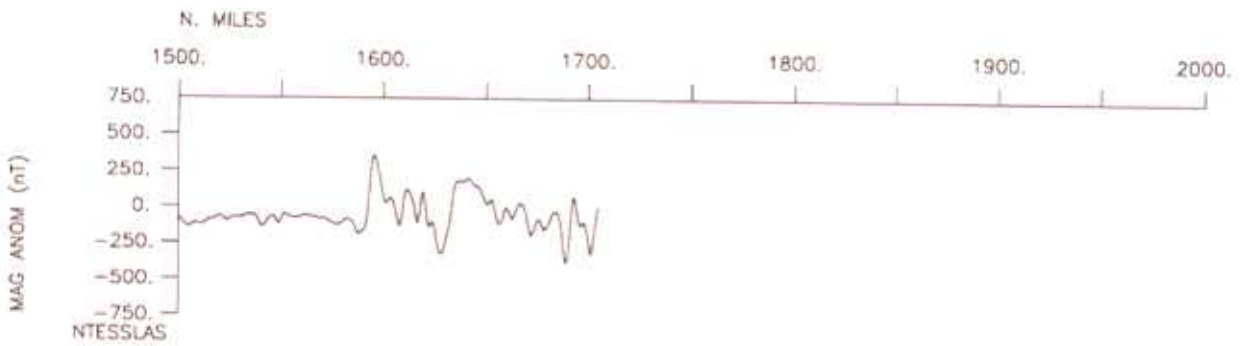
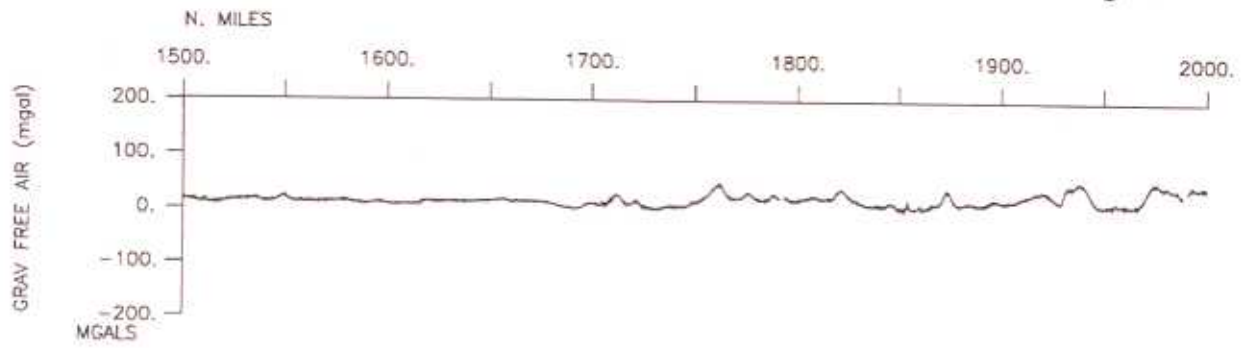
NEMO03MV survey 6

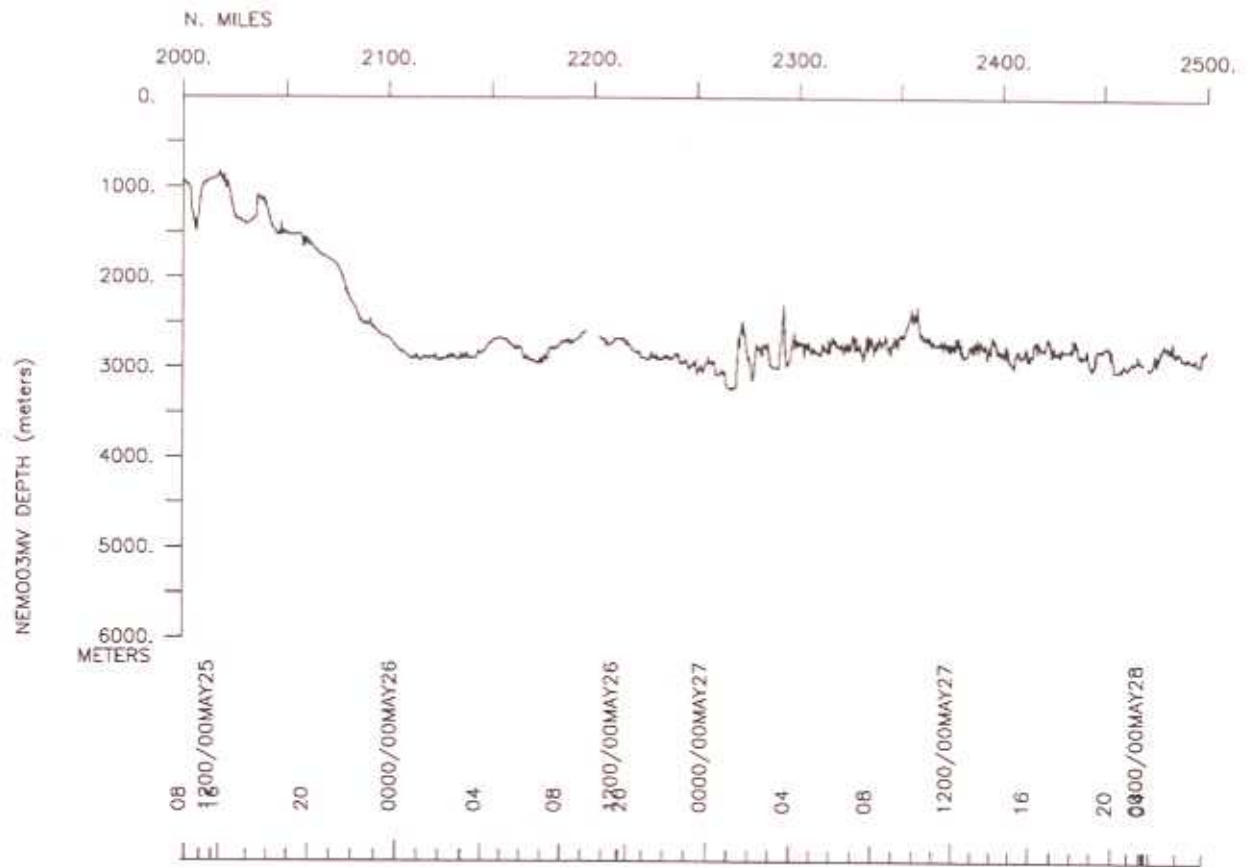
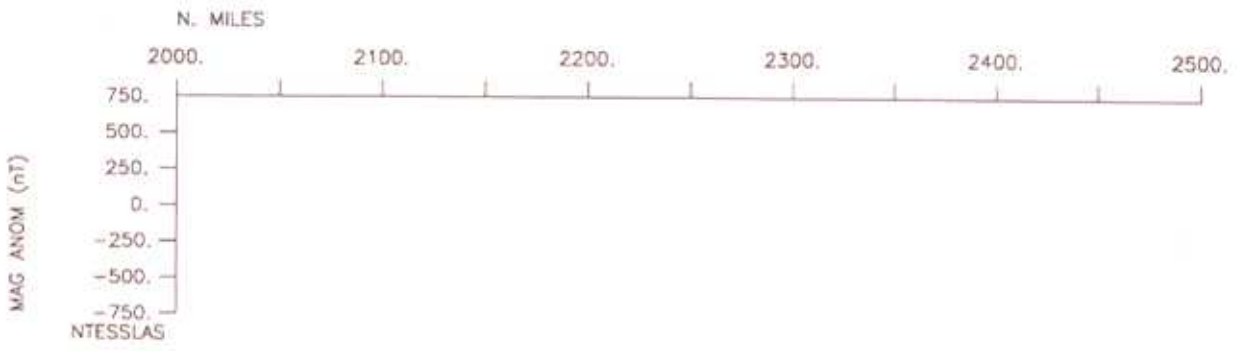
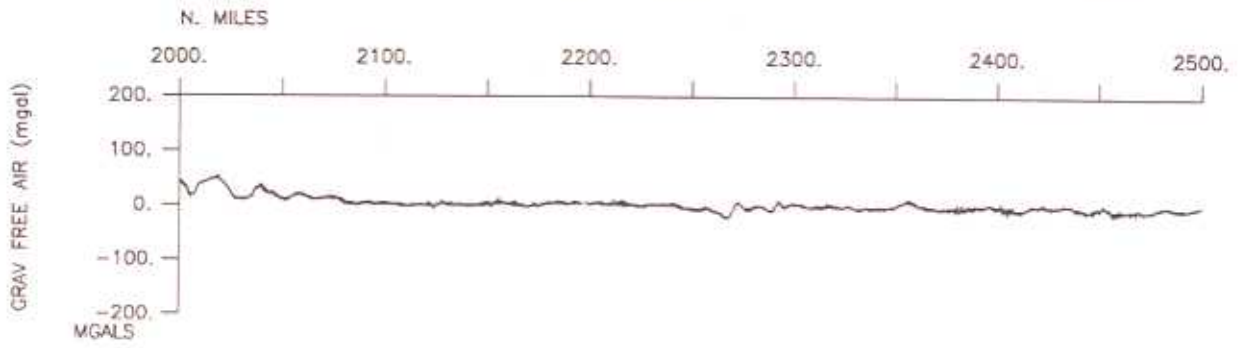


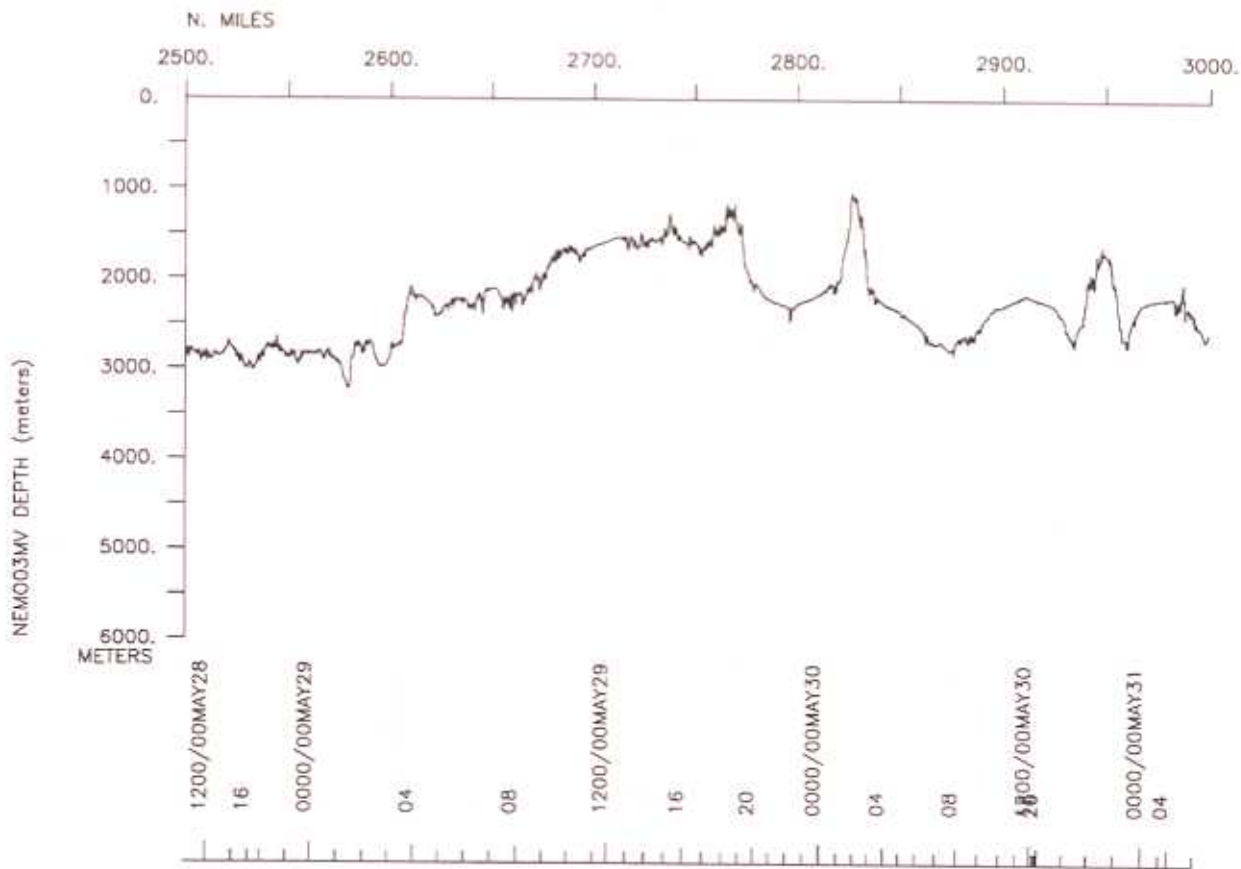
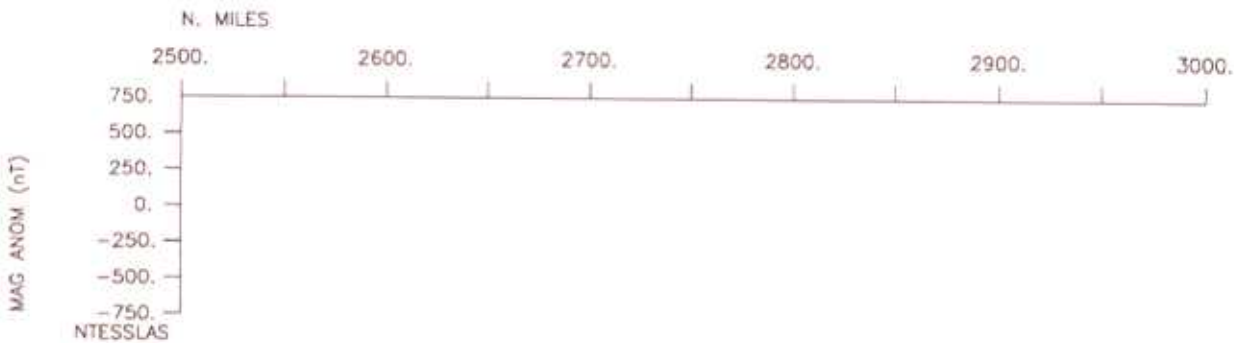
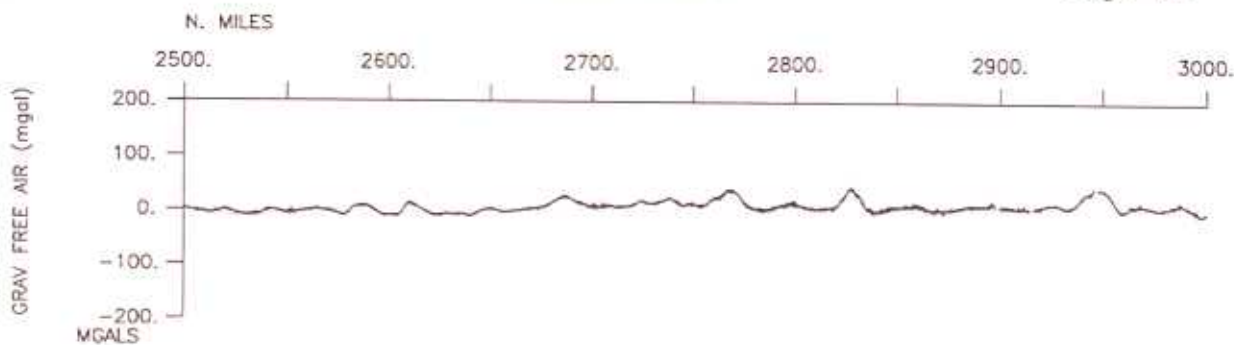


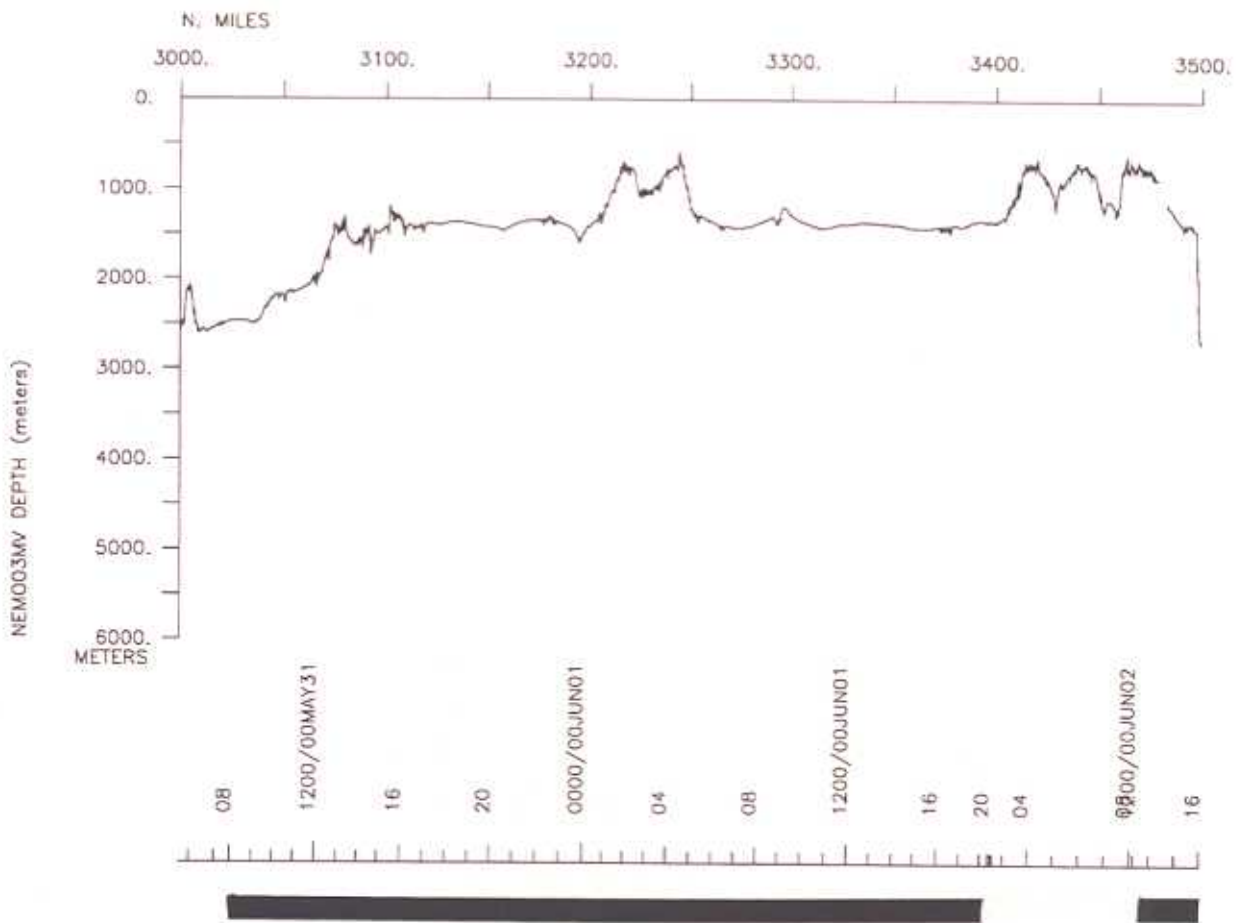
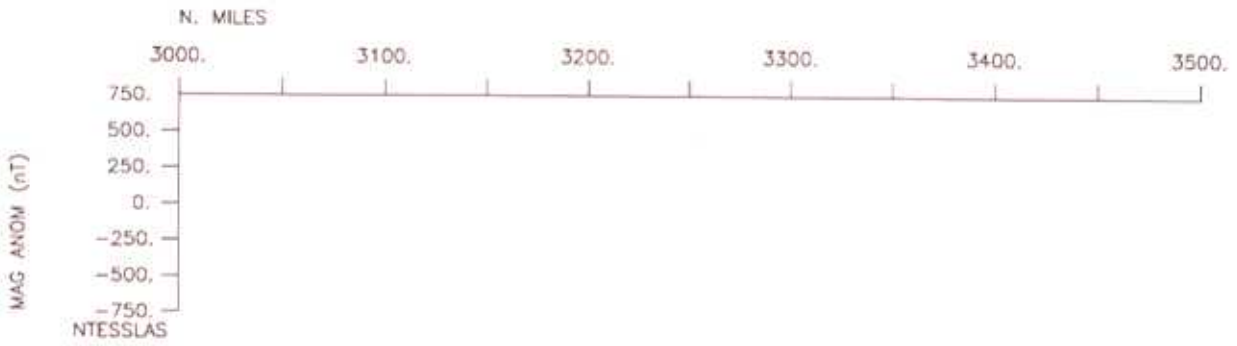
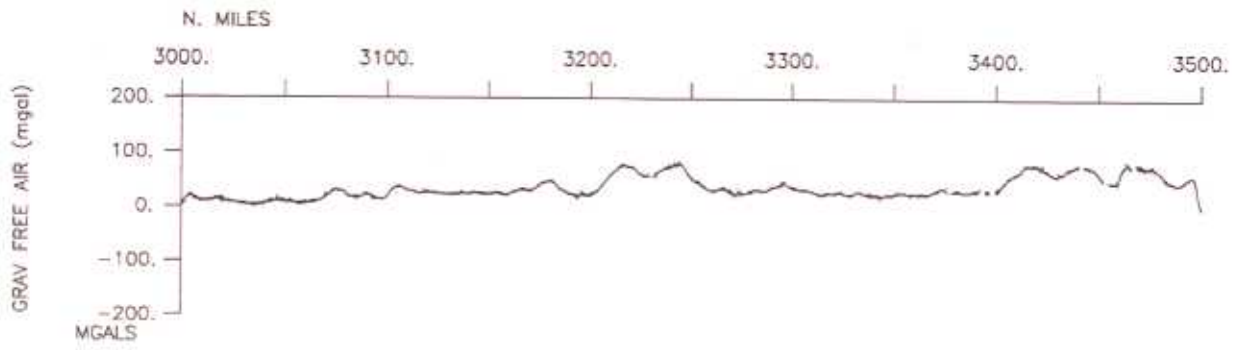


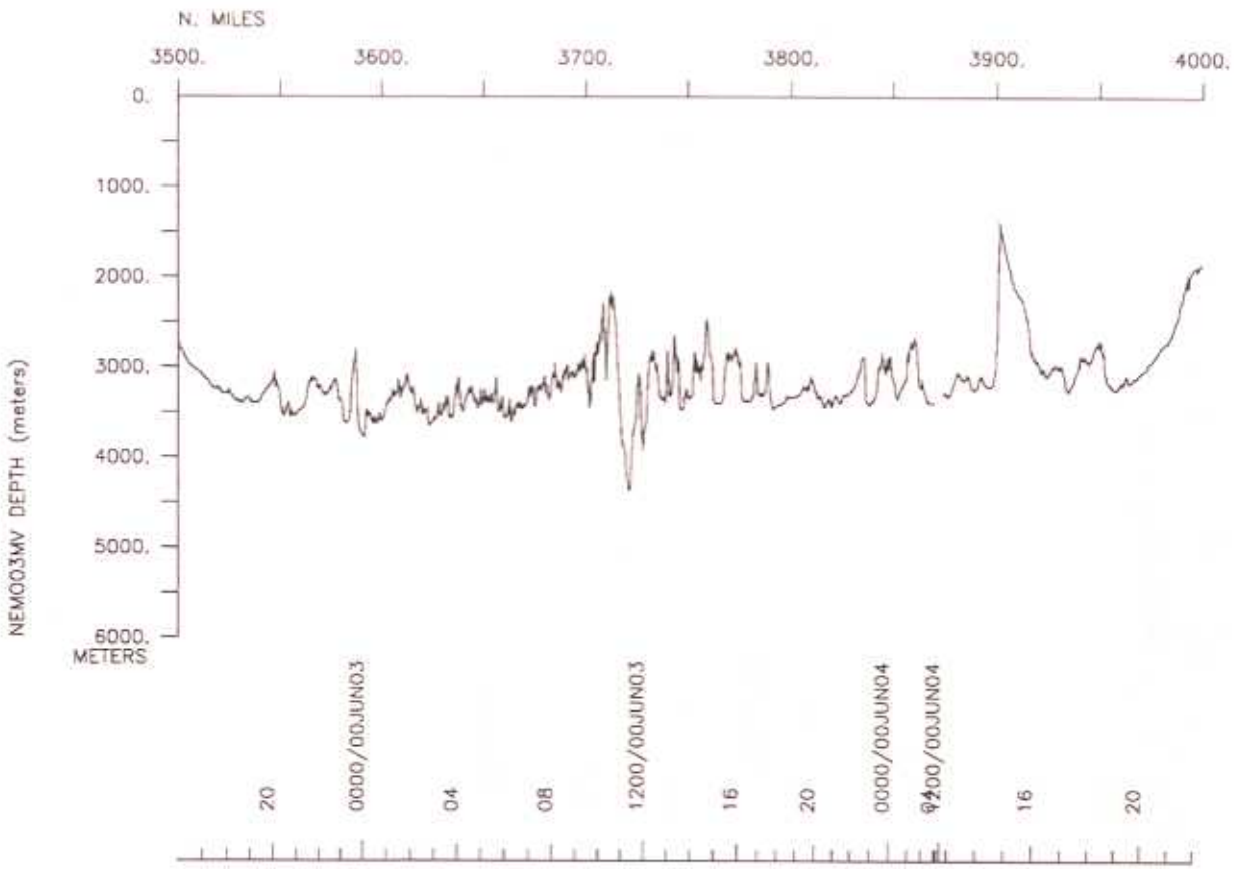
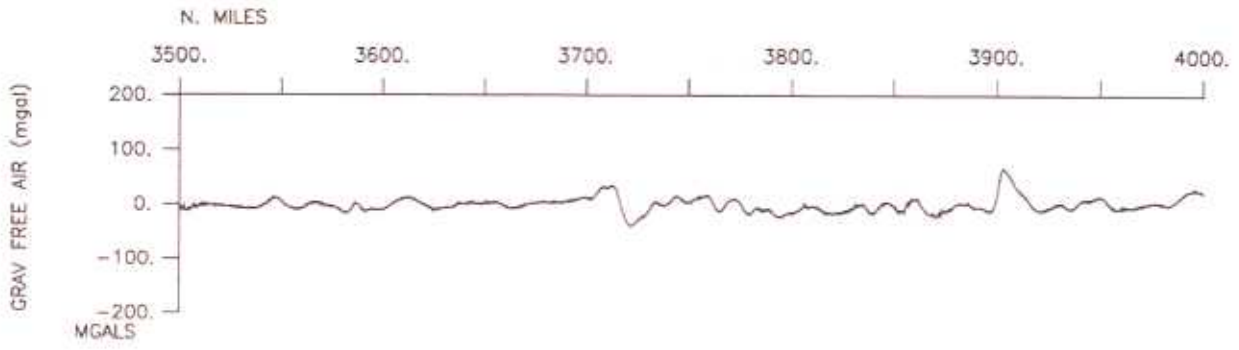


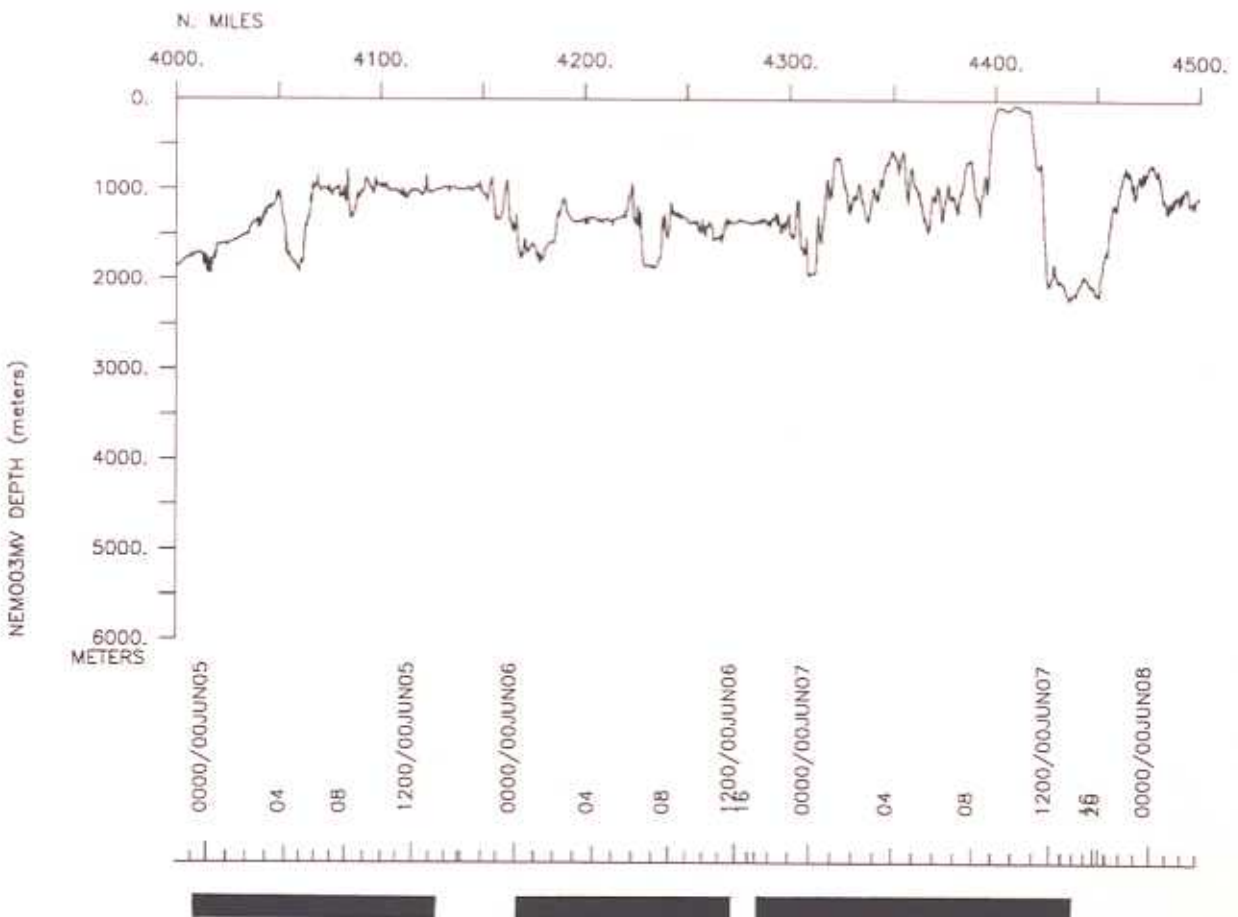
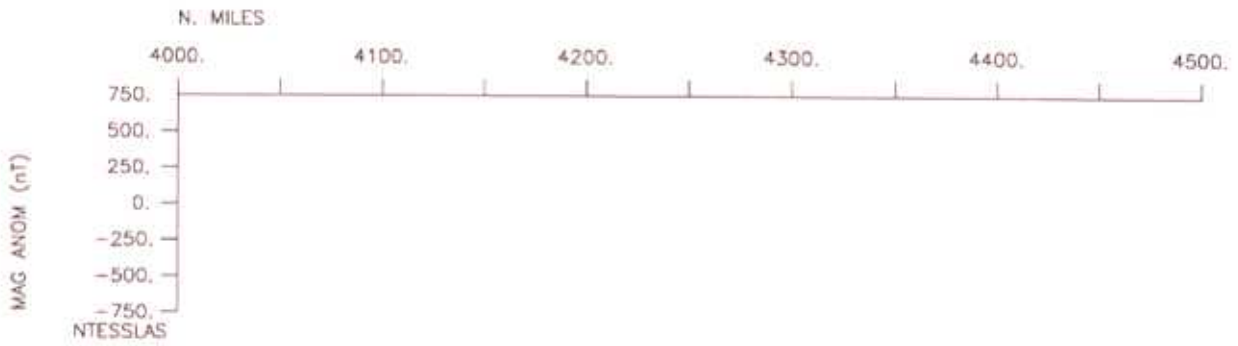
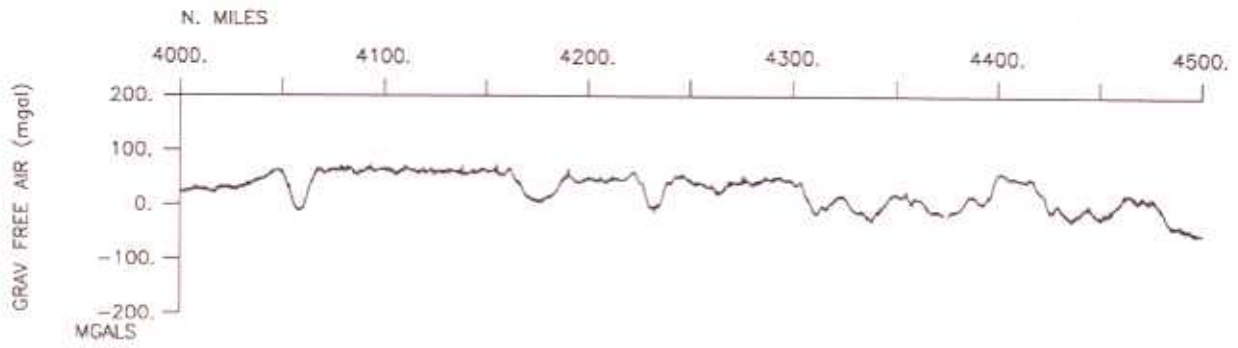


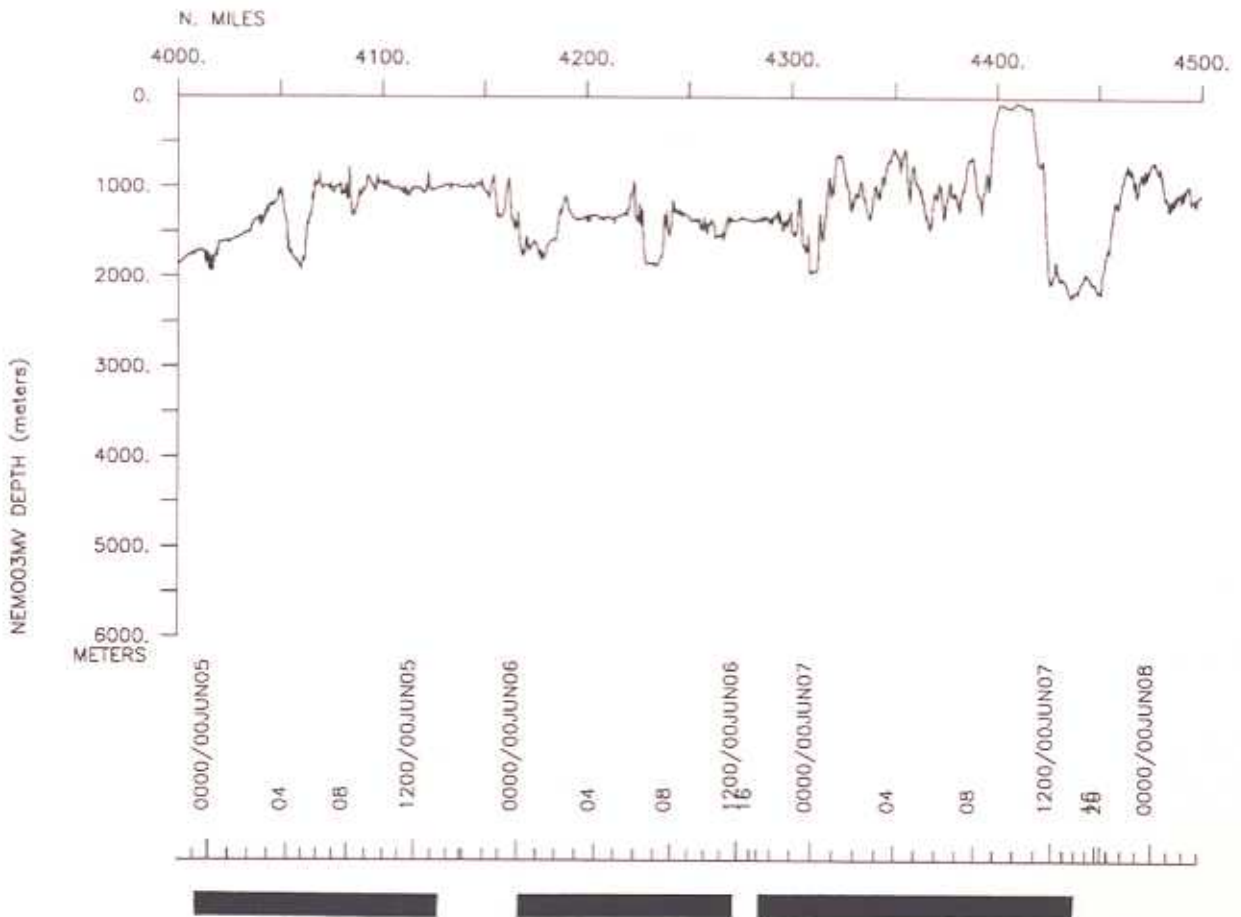
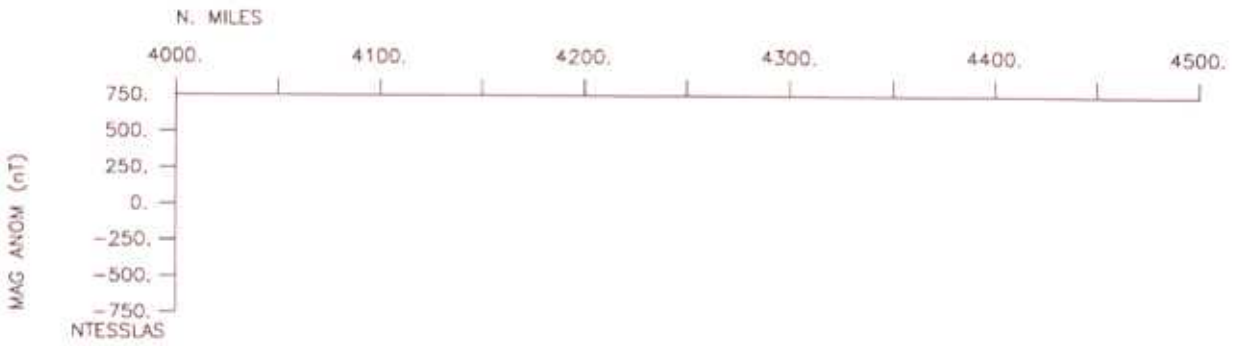
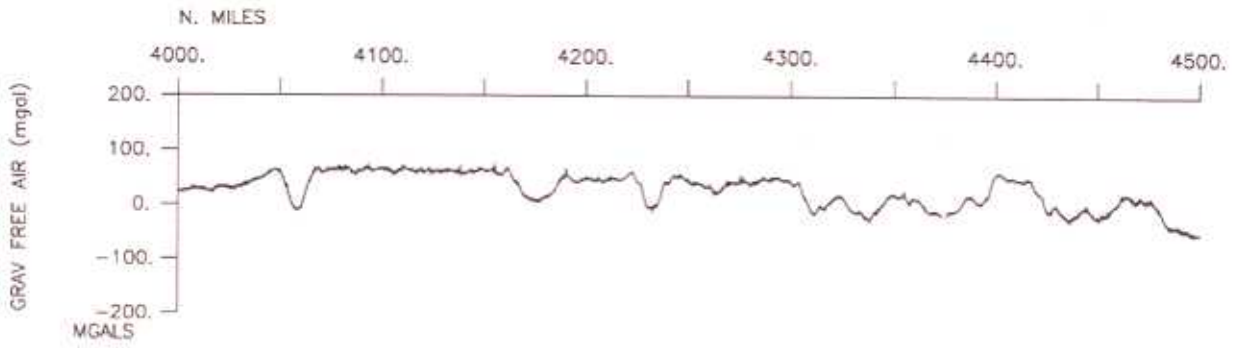


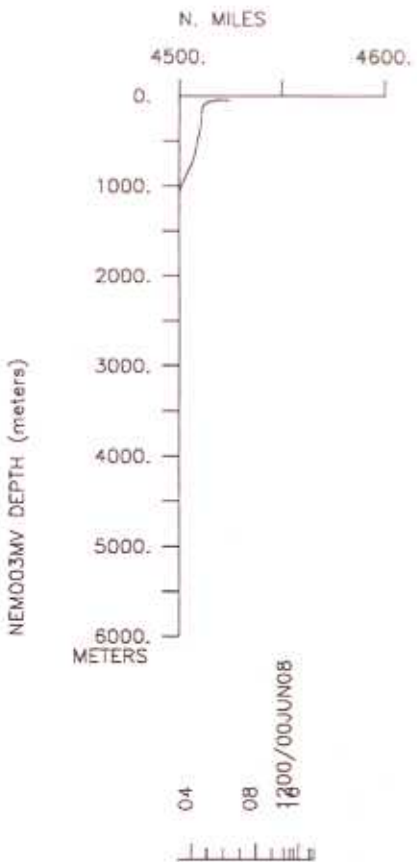
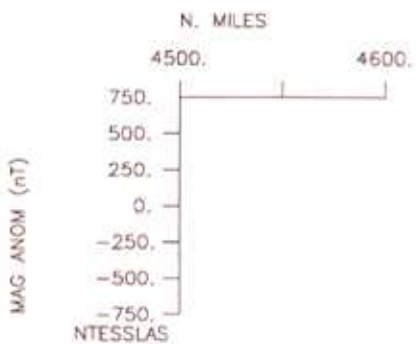
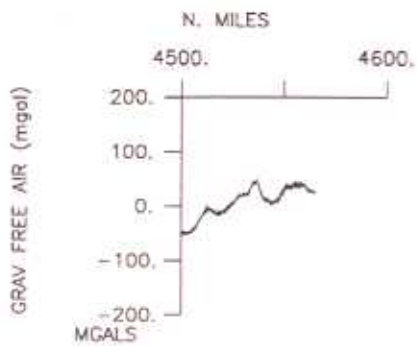












S.I.O. Sample Index

NEMO Expedition

Leg 3

(NEMO03MV)

R/V Melville

(Issued September 2000)

PORTS:

Manzanillo, Mexico (15 May 2000)
to
Puerta Caldera, Costa Rica (8 June 2000)

Chief Scientist:

Nicklas Pias, 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 codes are available from the Geological Data Center.)

GDC Cruise ID# 292

**** Ports ****

0107 160500 0 LGPT B Manzanillo, Mexico 19-03.00N 104-20.00W f NEMO03MV
 1400 080600 0 LGPT E Puerto Caldera, Costa Rica 9-53.00N 84-45.00W f NEMO03MV

**** Personnel ****

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS OSU	Pisias, N.G.	Chief Scientist	Oregon State Univ.	NEMO03MV
PEST OSU	Mix, A.	Co-Chief sci.	Oregon State Univ.	NEMO03MV
PEST SIX	Lyle, M.	Co-Chief sci.	Boise State Univ.	NEMO03MV
PEST OSU	Goldfinger, C.	Co-Chief sci.	Oregon State Univ.	NEMO03MV
PEST SIX	Liberty, L.	Research assoc.	Boise State Univ.	NEMO03MV
PEST SIX	Janik, A.	Graduate student	Univ. of Miami	NEMO03MV
PEST OSU	Kalk, P.	Research assoc	Oregon State Univ.	NEMO03MV
PEST OSU	Moser, C.	Research assoc	Oregon State Univ.	NEMO03MV
PEST OSU	Cheseby, M.	Research assoc	Oregon State Univ.	NEMO03MV
PEST OSU	Weber, M.	Research assoc	Oregon State Univ.	NEMO03MV
PEST SIX	Molina-cruz, A.	Professor	UNAM Mexico City	NEMO03MV
PEST OSU	Kish, S.	Graduate student	Oregon State Univ.	NEMO03MV
PEST SIX	Pisias, N.J.	Technician	Univ. Puget Sound	NEMO03MV
PEST OSU	Feldberg, M.	Graduate student	Oregon State Univ.	NEMO03MV
PEST OSU	Benway, H.	Graduate student	Oregon State Univ.	NEMO03MV
PEST SIX	Perlet, B.	Graduate student	Univ. South Carolina	NEMO03MV
PEST WHOI	Kujawinski, E.	Graduate student	Woods Hole	NEMO03MV
PEST SIX	Kienast, S.	Graduate student	U. British Columbia	NEMO03MV
PEST SIX	Ivanochko, I.	Graduate student	U. British Columbia	NEMO03MV
PEST SIX	Eiler, P.	Professor	Willamette Univ.	NEMO03MV
PEST SIX	Hager, A.	Student	Willamette Univ.	NEMO03MV
PEST SIX	Wright, K.	Student	Willamette Univ.	NEMO03MV
PEST SIX	Taylor, J.	Student	Willamette Univ.	NEMO03MV
PEST SIX	Speck, N.	Student	Cal. Lutheran Univ.	NEMO03MV
PEST SIX	Martiniz, I.	Professor	Univ. Eafit Columbia	NEMO03MV
PEST SIX	Perez-cruz, I.	Graduate student	UNAM Mexico City	NEMO03MV
PERT SIX	Gutierrez, C.	Professor	UNAM Mexico City	NEMO03MV
PEST SIX	Hoven, S.	Professor	IUP	NEMO03MV
PEST SIX	Hulett, D.	Student	Boise State Univ.	NEMO03MV
PERT STS	Baiz, S.	Resident tech	Scripps Institution	NEMO03MV
PESP STS	Mogk, S.	Airgun technician	Scripps Institution	NEMO03MV
PECT STS	Jacobson, D.	Computer tech	Scripps Institution	NEMO03MV
PERT STS	Pillard, G.	Resident tech	Scripps Institution	NEMO03MV

**** 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 - Geological Data Center ext. 41899 *										
#*** Log Books ***										
0100	160500	0	LBUW	B Underway log books	GDC	19-04.06N	104-18.70W	g		NEMO03MV
1917	080600	0	LBUW	E Underway log books	GDC	9-54.73N	84-43.30W	g		NEMO03MV
#*** Echo Sounder Records ***										
0203	160500	0	DPR3	B Knudsen 3.5kHz r-01	GDC	18-57.63N	104-17.89W	g		NEMO03MV
2038	230500	0	DPR3	E Knudsen 3.5kHz r-01	GDC	5-53.74N	86-29.18W	g		NEMO03MV
2046	230500	0	DPR3	B Knudsen 3.5kHz r-02	GDC	5-52.73N	86-28.34W	g		NEMO03MV
1648	290500	0	DPR3	E Knudsen 3.5kHz r-02	GDC	1-23.77S	83-05.79W	g		NEMO03MV
1650	290500	0	DPR3	B Knudsen 3.5kHz r-03	GDC	1-23.89S	83-05.49W	g		NEMO03MV
2339	070600	0	DPR3	E Knudsen 3.5kHz r-03	GDC	8-43.37N	84-12.01W	g		NEMO03MV
#*** Sea Beam Records (vertical beam and side scan) ***										
0733	160500	0	MBSR	B vbeam&sidescan r-01	GDC	18-50.28N	104-09.89W	g		NEMO03MV
1238	300500	0	MBSR	E vbeam&sidescan r-01	GDC	1-51.20S	82-47.20W	g		NEMO03MV
1940	300500	0	MBSR	B vbeam&sidescan r-02	GDC	1-51.20S	82-47.20W	g		NEMO03MV
0557	080600	0	MBSR	E vbeam&sidescan r-02	GDC	9-23.57N	84-38.72W	g		NEMO03MV
#*** Gravity ***										
0127	160500	0	GVDR	B Digital Gravity	GDC	19-01.20N	104-21.17W	g		NEMO03MV
1917	080600	0	GVDR	E Digital Gravity	GDC	9-54.73N	84-43.30W	g		NEMO03MV
#*** Integrated Meteorological Data Aquisition ***										
0100	160500	0	IMET	B weather data	GDC	19-04.06N	104-18.70W	g		NEMO03MV
1917	080600	0	IMET	E weather data	GDC	9-54.73N	84-43.30W	g		NEMO03MV
#*** Acoustic Doppler Current Profiler ***										
0127	160500	0	ADCP	B Acoustic Doppler	GDC	19-01.20N	104-21.17W	g		NEMO03MV
1917	080600	0	ADCP	E Acoustic Doppler	GDC	9-54.73N	84-43.30W	g		NEMO03MV
#*** Magnetics (Earth Total Field) ***										
1539	210500	0	MGDR	B Digital Magnetics	GDC	14-05.72N	93-50.78W	g		NEMO03MV
1750	230500	0	MGDR	E Digital Magnetics	GDC	6-13.87N	86-44.56W	g		NEMO03MV
#*** Seismic Reflection Data ***										
0428	180500	0	SPRS	B Airgun record r-01	GDC	15-40.11N	95-54.68W	g		NEMO03MV
1434	060600	0	SPRS	E Airgun record r-01	GDC	7-51.35N	83-36.50W	g		NEMO03MV

#GMT #TIME #	DDMMYY DATE	SAMP TZ	B CODE	SAMPLE E IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	p c	CRUISE LEG-SHIP
#*** Seismic Reflection ***									
0428	180500	0	SPRS	B teh-01	ag hs ad	GDC	15-40.11N	95-54.68W	g NEMO03MV
2050	180500	0	SPRS	E teh-01	ag hs ad	GDC	15-41.58N	95-17.30W	g NEMO03MV
0330	200500	0	SPRS	B coc-01	ag hs ad	GDC	15-34.79N	95-17.37W	g NEMO03MV
2110	200500	0	SPRS	E coc-01	ag hs ad	GDC	15-42.35N	95-17.83W	g NEMO03MV
1824	230500	0	SPRS	B coc-02	ag hs ad	GDC	6-11.64N	86-42.87W	g NEMO03MV
0924	240500	0	SPRS	E coc-02	ag hs ad	GDC	5-48.40N	86-30.85W	g NEMO03MV
1832	240500	0	SPRS	B coc-03	ag hs ad	GDC	5-44.54N	86-27.97W	g NEMO03MV
0810	250500	0	SPRS	E coc-03	ag hs ad	GDC	4-37.20N	86-37.47W	g NEMO03MV
1811	250500	0	SPRS	B pan-01	ag hs ad	GDC	4-10.06N	86-39.71W	g NEMO03MV
1007	260500	0	SPRS	E pan-01	ag hs ad	GDC	3-10.83N	86-29.04W	g NEMO03MV
2006	260500	0	SPRS	B pan-02	ag hs ad	GDC	3-09.02N	86-29.13W	g NEMO03MV
2127	270500	0	SPRS	E pan-02	ag hs ad	GDC	0-01.33N	86-29.95W	g NEMO03MV
1127	290500	0	SPRS	B car-02	ag hs ad	GDC	1-04.60S	83-52.03W	g NEMO03MV
1140	300500	0	SPRS	E car-02	ag hs ad	GDC	1-48.28S	82-44.85W	g NEMO03MV
0730	310500	0	SPRS	B car-02	ag hs ad	GDC	2-17.70S	82-29.86W	g NEMO03MV
1803	010600	0	SPRS	E car-01		GDC	0-31.63S	81-56.75W	g NEMO03MV
1316	020600	0	SPRS	B pan-03	ag hs ad	GDC	0-17.01S	81-50.46W	g NEMO03MV
0100	040600	0	SPRS	E pan-03		GDC	4-10.31N	85-11.75W	g NEMO03MV
0100	050600	0	SPRS	B coc-01	ag hs ad	GDC	6-33.34N	84-14.06W	g NEMO03MV
1422	050600	0	SPRS	E coc-03		GDC	7-18.80N	84-02.54W	g NEMO03MV
2258	050600	0	SPRS	B coc-03	ag hs ad	GDC	7-29.35N	84-02.77W	g NEMO03MV
1207	060600	0	SPRS	E coc-04		GDC	7-51.35N	83-34.75W	g NEMO03MV
2104	060600	0	SPRS	B mat-01	ag hs ad	GDC	7-49.94N	83-34.32W	g NEMO03MV
1434	070600	0	SPRS	E mat-01		GDC	8-22.59N	83-55.52W	g NEMO03MV
#*** Hydrocasts (Samples shared by U.of So.Carolina & U.of British Columbia)***									
2232	180500	0	HCNI	B n15 on nitrate	#01	SIX	15-39.36N	95-16.85W	g NEMO03MV
2250	180500	0	HCNI	E 2 btl	100m	SIX	15-39.37N	95-16.85W	g NEMO03MV
2314	180500	0	HCNI	B n15 on nitrate	#02	SIX	15-39.36N	95-16.85W	g NEMO03MV
2339	180500	0	HCNI	E 2 btl	150m	SIX	15-39.37N	95-16.85W	g NEMO03MV
0930	190500	0	HCNI	B n15 on nitrate	#05	SIX	15-42.56N	95-17.53W	g NEMO03MV
0958	190500	0	HCNI	E 2 btl	100m	SIX	15-42.61N	95-17.50W	g NEMO03MV
2332	190500	0	HCNI	B n15 on nitrate	#09	SIX	15-34.87N	95-16.78W	g NEMO03MV
2355	190500	0	HCNI	E 2 btl	100m	SIX	15-34.87N	95-16.78W	g NEMO03MV
1003	240500	0	HCNI	B n15 on nitrate	#12	SIX	5-50.79N	86-26.91W	g NEMO03MV
1017	240500	0	HCNI	E 2 btl	100m	SIX	5-50.79N	86-26.91W	g NEMO03MV
1131	250500	0	HCNI	B n15 on nitrate	#16	SIX	4-36.87N	86-42.33W	g NEMO03MV
1144	250500	0	HCNI	E 2 btl	100m	SIX	4-36.87N	86-42.33W	g NEMO03MV
1106	260500	0	HCNI	B n15 on nitrate	#18	SIX	3-12.75N	86-29.17W	g NEMO03MV
1119	260500	0	HCNI	E	100m	SIX	3-12.74N	86-29.16W	g NEMO03MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#										
0225	280500	0	HCNI	B n15 on nitrate	#22	SIX	0-01.34N	86-27.76W	g	NEMO03MV
0230	280500	0	HCNI	E 2 btl	100m	SIX	0-01.45N	86-27.74W	g	NEMO03MV
1537	300500	0	HCNI	B n15 on nitrate	#26	SIX	1-51.20S	82-47.20W	g	NEMO03MV
1553	300500	0	HCNI	E 2 btl	100m	SIX	1-51.20S	82-47.20W	g	NEMO03MV
2045	010600	0	HCNI	B n15 on nitrate	#30	SIX	0-30.85S	81-59.73W	g	NEMO03MV
2053	010600	0	HCNI	E 2 btl	100m	SIX	0-30.85S	81-59.73W	g	NEMO03MV
0647	040600	0	HCNI	B n15 on nitrate	#36	SIX	4-07.10N	85-00.36W	g	NEMO03MV
0701	040600	0	HCNI	E 2 btl	100m	SIX	4-07.16N	85-00.27W	g	NEMO03MV
1700	050600	0	HCNI	B n15 on nitrate	#39	SIX	7-19.00N	84-06.80W	g	NEMO03MV
1741	050600	0	HCNI	E 2 btl	100m	SIX	7-19.00N	84-06.80W	g	NEMO03MV
1515	060600	0	HCNI	B n15 on nitrate	#42	SIX	7-51.44N	83-36.53W	g	NEMO03MV
1601	060600	0	HCNI	E 2 btl	100m	SIX	7-51.41N	83-36.52W	g	NEMO03MV
#*** Cores ***										
2245	180500	0	COPS	B Piston core #03jc		OSU	15-39.37N	95-16.85W	g	NEMO03MV
0115	190500	0	COPS	E Piston core 03 723m		OSU	15-39.04N	95-16.84W	g	NEMO03MV
2245	180500	0	COPG	B Gravity core #03jc		OSU	15-39.37N	95-16.85W	g	NEMO03MV
0115	190500	0	COPG	E Gravity core03 723m		OSU	15-39.04N	95-16.84W	g	NEMO03MV
0400	190500	0	COXX	B Multicore #04mc		OSU	15-39.27N	95-16.75W	g	NEMO03MV
0453	190500	0	COXX	E Multicore 04 725m		OSU	15-39.28N	95-16.75W	g	NEMO03MV
1059	190500	0	COPS	B Piston core #06jc		OSU	15-42.61N	95-17.50W	g	NEMO03MV
1206	190500	0	COPS	E Piston core06 579m		OSU	15-42.61N	95-17.50W	g	NEMO03MV
1059	190500	0	COPG	B Gravity core #06jc		OSU	15-42.61N	95-17.50W	g	NEMO03MV
1206	190500	0	COPG	E Gravity core06 579m		OSU	15-42.61N	95-17.50W	g	NEMO03MV
1539	190500	0	COXX	B Multi-core #07mc		OSU	15-42.61N	95-17.50W	g	NEMO03MV
1637	190500	0	COXX	E Multicore 07 579m		OSU	15-42.61N	95-17.50W	g	NEMO03MV
2149	190500	0	COXX	B Multicore #08mc		OSU	15-34.87N	95-16.78W	g	NEMO03MV
2300	190500	0	COXX	E Multicore 08 1094m		OSU	15-34.87N	95-16.78W	g	NEMO03MV
0029	200500	0	COPS	B Piston core #jc10		OSU	15-34.87N	95-16.78W	g	NEMO03MV
0147	200500	0	COPS	E Piston core10 1082m		OSU	15-34.88N	95-16.78W	g	NEMO03MV
0029	200500	0	COPG	B Gravity core #jc10		OSU	15-34.87N	95-16.78W	g	NEMO03MV
0147	200500	0	COPG	E Gravity co.10 1082m		OSU	15-34.88N	95-16.78W	g	NEMO03MV
0010	210500	0	COPS	B Piston core #11pc		OSU	15-42.81N	95-17.51W	g	NEMO03MV
0101	210500	0	COPS	E Piston core11 574m		OSU	15-42.80N	95-17.51W	g	NEMO03MV
0010	210500	0	COPG	B Gravity core #11pc		OSU	15-42.81N	95-17.51W	g	NEMO03MV
0101	210500	0	COPG	E Gravity core11 574m		OSU	15-42.80N	95-17.51W	g	NEMO03MV
1026	240500	0	COPS	B Piston core #13pc		OSU	5-50.79N	86-26.92W	g	NEMO03MV
1248	240500	0	COPS	E Piston core13 2027m		OSU	5-50.79N	86-26.92W	g	NEMO03MV
1026	240500	0	COPG	B Gravity core #13pc		OSU	5-50.79N	86-26.92W	g	NEMO03MV
1248	240500	0	COPG	E Gravity co.13 2027m		OSU	5-50.79N	86-26.92W	g	NEMO03MV
1512	240500	0	COXX	B Multicore #14mc		OSU	5-50.79N	86-26.92W	g	NEMO03MV
1715	240500	0	COXX	E Multicore 14 2057m		OSU	5-50.79N	86-26.92W	g	NEMO03MV

#GMT #TIME #-----	DDMMYY _DATE -----	TZ	SAMP CODE	B E	SAMPLE IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	p c	CRUISE LEG-SHIP
0949	250500	0	COXX	B	Multicore #15mc	OSU	4-36.82N	86-42.23W	g	NEMO03MV
1100	250500	0	COXX	E	Multicore 15 925m	OSU	4-36.82N	86-42.23W	g	NEMO03MV
1304	250500	0	COPS	B	Piston core #17pc	OSU	4-36.82N	86-42.23W	g	NEMO03MV
1418	250500	0	COPS	E	Piston core17 885m	OSU	4-36.82N	86-42.23W	g	NEMO03MV
1304	250500	0	COPG	B	Gravity core #17pc	OSU	4-36.82N	86-42.23W	g	NEMO03MV
1418	250500	0	COPG	E	Gravity core17 885m	OSU	4-36.82N	86-42.23W	g	NEMO03MV
1135	260500	0	COPS	B	Piston core #19pc	OSU	3-12.74N	86-29.16W	g	NEMO03MV
1427	260500	0	COPS	E	Piston core19 2657m	OSU	3-12.74N	86-29.16W	g	NEMO03MV
1135	260500	0	COPG	B	Gravity core #19pc	OSU	3-12.74N	86-29.16W	g	NEMO03MV
1427	260500	0	COPG	E	Gravity co.19 2657m	OSU	3-12.74N	86-29.16W	g	NEMO03MV
1622	260500	0	COXX	B	Multicore #20mc	OSU	3-12.74N	86-29.16W	g	NEMO03MV
1855	260500	0	COXX	E	Multicore20 2683m	OSU	3-12.74N	86-29.16W	g	NEMO03MV
2258	270500	0	COXX	B	Multicore #21mc	OSU	0-01.30N	86-27.79W	g	NEMO03MV
0140	280500	0	COXX	E	Multicore21 2958m	OSU	0-01.30N	86-27.79W	g	NEMO03MV
0322	280500	0	COPS	B	Piston core #23pc	OSU	0-01.30N	86-27.79W	g	NEMO03MV
0553	280500	0	COPS	E	Piston core23 2925m	OSU	0-01.30N	86-27.79W	g	NEMO03MV
1601	280500	0	COPG	B	Gravity core #24pc	OSU	0-01.30N	86-27.79W	g	NEMO03MV
2039	280500	0	COPG	E	Gravity co.24 2933m	OSU	0-01.30N	86-27.79W	g	NEMO03MV
1225	300500	0	COXX	B	Multicore #25mc	OSU	1-51.20S	82-47.20W	g	NEMO03MV
1453	300500	0	COXX	E	Multicore25 2205m	OSU	1-51.20S	82-47.20W	g	NEMO03MV
1632	300500	0	COPS	B	Piston core #27pc	OSU	1-51.20S	82-47.20W	g	NEMO03MV
1855	300500	0	COPS	E	Piston core27 2180m	OSU	1-51.20S	82-47.20W	g	NEMO03MV
1632	300500	0	COPG	B	Gravity core #27pc	OSU	1-51.20S	82-47.20W	g	NEMO03MV
1855	300500	0	COPG	E	Gravity co.27 2180m	OSU	1-51.20S	82-47.20W	g	NEMO03MV
0105	310500	0	COGV	B	Gravity core #28	OSU	1-51.20S	82-47.20W	g	NEMO03MV
0246	310500	0	COGV	E	Gravity co.28 2223m	OSU	1-51.20S	82-47.20W	g	NEMO03MV
1849	010600	0	COXX	B	Multicore #29mc	OSU	0-30.80S	81-59.70W	g	NEMO03MV
2015	010600	0	COXX	E	Multicore 29 1343m	OSU	0-30.80S	81-59.70W	g	NEMO03MV
2148	010600	0	COPS	B	Piston core #31pc	OSU	0-30.80S	81-59.70W	g	NEMO03MV
2307	010600	0	COPS	E	Piston core31 1323m	OSU	0-30.80S	81-59.70W	g	NEMO03MV
2148	010600	0	COPG	B	Gravity core #31pc	OSU	0-30.80S	81-59.70W	g	NEMO03MV
2307	010600	0	COPG	E	Gravity co.31 1323m	OSU	0-30.80S	81-59.70W	g	NEMO03MV
0931	020600	0	COGV	X	Gravity core #32	OSU	0-18.28S	81-48.94W	g	NEMO03MV
1012	020600	0	COGV	X	Gravity core #33	OSU	0-18.28S	81-48.94W	g	NEMO03MV
1141	020600	0	COPS	B	Piston core #34pc	OSU	0-18.28S	81-48.94W	g	NEMO03MV
1230	020600	0	COPS	E	Piston core34 730m	OSU	0-18.23S	81-49.03W	g	NEMO03MV
0302	040600	0	COXX	B	Multicore #35mc	OSU	4-07.19N	85-00.29W	g	NEMO03MV
0614	040600	0	COXX	E	Multicore 35 3417m	OSU	4-07.19N	85-00.30W	g	NEMO03MV

#GMT #TIME #-----	DDMMYY DATE	TZ	SAMP CODE	B E	SAMPLE IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	p c	CRUISE LEG-SHIP	
0751 1105	040600 040600		0 0	COPS COPS	B E	Piston core #37pc Piston core37 3392m	OSU OSU	4-07.20N 4-07.39N	85-00.29W 85-00.20W	g g	NEMO03MV NEMO03MV
0751 1105	040600 040600		0 0	COPG COPG	B E	Gravity core #37pc Gravity co.37 3392m	OSU OSU	4-07.20N 4-07.39N	85-00.29W 85-00.20W	g g	NEMO03MV NEMO03MV
1521 1632	050600 050600		0 0	COXX COPG	B E	Multicore #38mc Multicore 38 1003m	OSU OSU	7-19.00N 7-19.00N	84-06.80W 84-06.80W	g g	NEMO03MV NEMO03MV
1806 2022	050600 050600		0 0	COPS COPS	B E	Piston core #40pc Piston core40 984m	OSU OSU	7-19.00N 7-18.77N	84-06.80W 84-06.45W	g g	NEMO03MV NEMO03MV
1806 2022	050600 050600		0 0	COPG COPG	B E	Gravity core #40pc Gravity co.40 984m	OSU OSU	7-19.00N 7-18.77N	84-06.80W 84-06.45W	g g	NEMO03MV NEMO03MV
1307 1437	060600 060600		0 0	COXX COXX	B E	Multicore #41mc Multicore 41 1388m	OSU OSU	7-51.35N 7-51.35N	83-36.50W 83-36.50W	g g	NEMO03MV NEMO03MV
1640 1826	060600 060600		0 0	COPS COPS	B E	Piston core #43pc Piston core43 1350m	OSU OSU	7-51.35N 7-51.35N	83-36.49W 83-36.50W	g g	NEMO03MV NEMO03MV
1640 1826	060600 060600		0 0	COPG COPG	B E	Gravity core #43pc Gravity core43 1350m	OSU OSU	7-51.35N 7-51.35N	83-36.49W 83-36.50W	g g	NEMO03MV NEMO03MV
1658 1908	070600 070600		0 0	COPS COPS	B E	Piston core #44pc Piston core44 2131m	OSU OSU	8-22.85N 8-22.85N	84-00.95W 84-00.95W	g g	NEMO03MV NEMO03MV
1658 1908	070600 070600		0 0	COPG COPS	B E	Gravity core #44pc Gravity co.44 2131m	OSU OSU	8-22.85N 8-22.85N	84-00.95W 84-00.95W	g g	NEMO03MV NEMO03MV
*** Niskin Bottles attached to a Multicorer device ***											
*** Samples shared by Oregon State Univ. & Univ. of British Columbia ***											
0400 0453	190500 190500		0 0	HCNI HCNI	B E	Multicore w/niskin delta c and n 725m	OSU OSU	15-39.27N 15-39.28N	95-16.75W 95-16.75W	g g	NEMO03MV NEMO03MV
1539 1637	190500 190500		0 0	HCNI HCNI	B E	Multicore w/niskin delta c and n 579m	SIX SIX	15-42.61N 15-42.61N	95-17.50W 95-17.50W	g g	NEMO03MV NEMO03MV
2149 2300	190500 190500		0 0	HCNI HCNI	B E	Multicore w/niskin delta c and n 1094m	OSU OSU	15-34.87N 15-34.87N	95-16.78W 95-16.78W	g g	NEMO03MV NEMO03MV
1512 1715	240500 240500		0 0	HCNI HCNI	B E	Multicore w/niskin delta c and n 2057m	SIX SIX	5-50.79N 5-50.79N	86-26.92W 86-26.92W	g g	NEMO03MV NEMO03MV
0949 1100	250500 250500		0 0	HCNI HCNI	B E	Multicore w/niskin delta c and n 925m	OSU OSU	4-36.82N 4-36.82N	86-42.23W 86-42.23W	g g	NEMO03MV NEMO03MV
1622 1855	260500 260500		0 0	HCNI HCNI	B E	Multicore w/niskin delta c and n 2683m	SIX SIX	3-12.74N 3-12.74N	86-29.16W 86-29.16W	g g	NEMO03MV NEMO03MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP					
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	CRUISE
#										LEG-SHIP
2258	270500	0	HCNI	B Multicore w/niskin	OSU	0-01.30N	86-27.79W	g		NEMO03MV
0140	280500	0	HCNI	E delta c and n 2958m	OSU	0-01.30N	86-27.79W	g		NEMO03MV
1225	300500	0	HCNI	B Multicore w/niskin	SIX	1-51.20S	82-47.20W	g		NEMO03MV
1453	300500	0	HCNI	E delta c and n 2205m	SIX	1-51.20S	82-47.20W	g		NEMO03MV
1849	010600	0	HCNI	B Multicore w/niskin	OSU	0-30.80S	81-59.70W	g		NEMO03MV
2015	010600	0	HCNI	E delta c and n 1343m	OSU	0-30.80S	81-59.70W	g		NEMO03MV
0302	040600	0	HCNI	B Multicore w/niskin	SIX	4-07.19N	85-00.29W	g		NEMO03MV
0614	040600	0	HCNI	E delta c and n 3417m	SIX	4-07.19N	85-00.30W	g		NEMO03MV
1521	050600	0	HCNI	B Multicore w/niskin	OSU	7-19.00N	84-06.80W	g		NEMO03MV
1632	050600	0	HCNI	E delta c and n 1003m	OSU	7-19.00N	84-06.80W	g		NEMO03MV
1307	060600	0	HCNI	B Multicore w/niskin	SIX	7-51.35N	83-36.50W	g		NEMO03MV
1437	060600	0	HCNI	E delta c and n 1388m	SIX	7-51.35N	83-36.50W	g		NEMO03MV

**** Expendable Bathythermographs ****

1208	160500	0	BTXP	B xbts 1-19	GDC	18-12.11N	103-25.98W	g		NEMO03MV
0038	060600	0	BTXP	E xbts 1-19	GDC	7-40.91N	83-52.13W	g		NEMO03MV

**** End Sample Index

NEMO03MV

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# MGD77 header file description and data
# column,1      2      3      4      5      6      7      8
#234567890123456789012345678901234567890123456789012345678901234567890
# -cruise identifier
# |             | -format acronym(=MGD77)
# |             | -data center file number(leave blank)
# |             | | -no. of headers type 1 (=1)
# |             | | -no. of headers type 2 (=0)
# |             | | -no. of parameters (=29)
# |             | | parameter codes
# |             | | | -depths           5 = present in file
# |             | | | -mags            3 = collected, not in file
# |             | | | -grav           1 = no collected
# |             | | | -h.r.seis. (3.5 khz)
# |             | | | -d.p.seis. (seis. reflection)
# |             | | | -file creation date
# |             | | | -contributing institution
1NEMO03MVMGD77           10295553      SCRIPPS INSTITUTION OF OCEANOGRAPHY      01
# |             | | code- | -platform type
#country           |platform name           |chief scientist(s)
USA                 R/V Melville           1SHIP NICKLAS PISIAS, OREGON STATE U.      02
#project, cruise & leg           |funding
NEW MILLENIUM OF OCEANOGRAPHY LEG 3      NSF      03
#-----
#bdate|port(city, country)           |edate|port(city, country)
000515MANZANILLO, MEXICO                 000608PUERTA CALDERA, COSTA RICA           04
#navigation instrumentation           |position determination method
PCODE GPS                                 SMOOTHED FIT TO 60 SEC FIXES             05
#bathymetry instrumentation           |additional forms of depth data
SEABEAM 2000 12kHz, w/SIDECAN            ANAL.REC,35MM FILM,DIGITAL MAG. TAPE     06
#magnetics instrumentation           |additional forms of magnetic data
GEOMETRICS MAGNETOMETER MOD-G886        DIGITAL TAPE                             07
#gravity instrumentation              |additional forms of gravity data
BELL BGM-3 METER S/N 224                 DIGITAL TAPE                             08
#seismic instrumentation              |formats of seismic data
AIRGUN                                    ANALOG RECORDS                           09
# data format description (in fortran) for seq. no. 10-11
A(I1,A8,F5.2,4I2,F5.3,F8.5,F9.5,I1,P6.4,F6.1,I2,I1,3P6.1,I1,F5.1,F6.0,F7.1,
F6.1,F5.1,A8,4I1)                        10
#bathymetry
#digitizing rate(min)
# | -sampling rate
# | | -sound velocity(meters/sec)
# | | | -dep datum code
# | | | -interpolation scheme
0101PING IN H2O15000 1 MINUTE VALUES EXTRACTED FROM SEABEAM VERTICAL BEAM 12
#magnetics
#digitizing rate(min)
# | -sampling rate(sec)
# | | -sensor tow dist.(meters)
# | | | -sensor depth (meters)
# | | | -horizontal sensor separation(meters)
# | | | -reference field
# | | | | -method of deriving residual field
0100699999999999999903IGRF-1995  LIN.INTERP.POINTS WITHIN ONE DEGREE SQUARE 13
#gravity
#digitizing rate (min)
# | -sampling rate(sec)
# | | -code
# | | | -theoretical grav. formula(in plain language)
# | | | | -code
# | | | | -reference system (in plain language)
# | | | | -corrections applied
010013IAG SYSTEM 1967 3SYSTEM IGSN 71 EOTVOS AND METER DRIFT 14
#gravity continued
# | departure base station gravity(mgal)
# | | -departure base station description
# | | | -arrival base station gravity(mgal)
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# | | | | -arrival base stat. description
978583 MANZANILLO FISCAL PIER NECORNER 978201 PUERTA CALDERA,COSTA RICA 15
# | 10 degree area identifiers
# |no. of area identifiers (col 1-2) . col 3 is blank, then starting with
# |column 4 for the next two lines, there are 4 columns separated by
# |commas for each area identifiers.
16
#seq. line no's. 18-24 are reserved for additional documentation
17
PROCESSED BY GEOLOGICAL DATA CENTER, SCRIPPS INSTITUTION OF OCEANOGRAPHY 18
19
DEPTHS CORRECTED FOR 5 METER SHIP DRAFT 20
21
22
23
24
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