

*Report and Index of
Underway Marine Geophysical Data*

Cook Expedition

Leg 4

(COOK04MV)

R/V Melville

(Issued February 2001)

Ports:

Papeete, Tahiti (11 November 2000)

to

Apia, Western Samoa (22 December 2000)

Chief Scientist:

Roger Larson, University of Rhode Island

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Computer Tech - Ron Moe

Resident Marine Tech - 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# 295

***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.

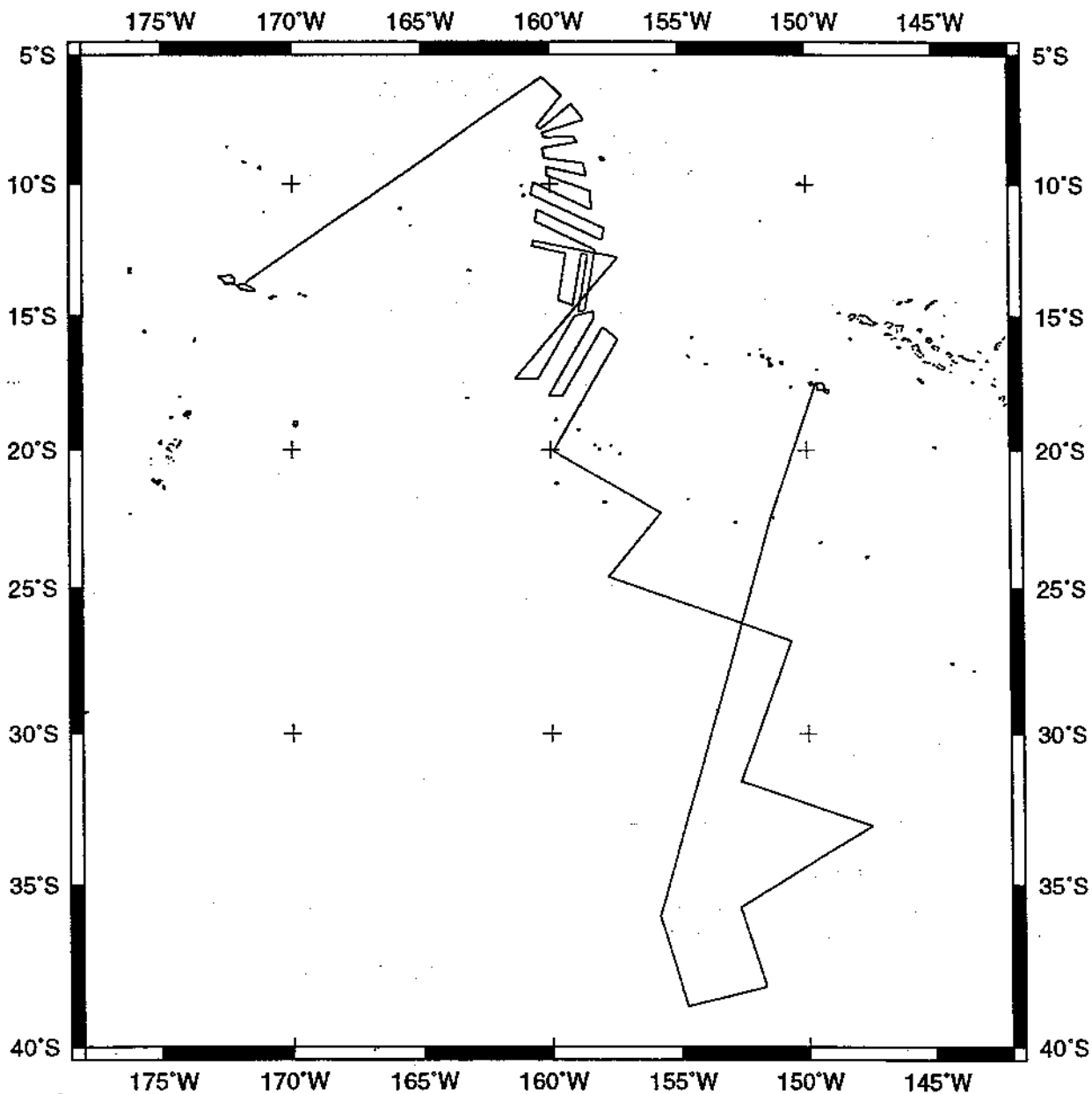
Track Charts– annotated with dates and hour ticks

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.



COOK EXPEDITION LEG 4 (COOK04MV)

CHIEF SCIENTIST: Roger Larson, Univ. of Rhode Island

PORTS: Papeete, Tahiti - Apia, Western Samoa

DATES: 11 November - 22 December 2000

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise- 8132 miles

Magnetics- 7980 miles

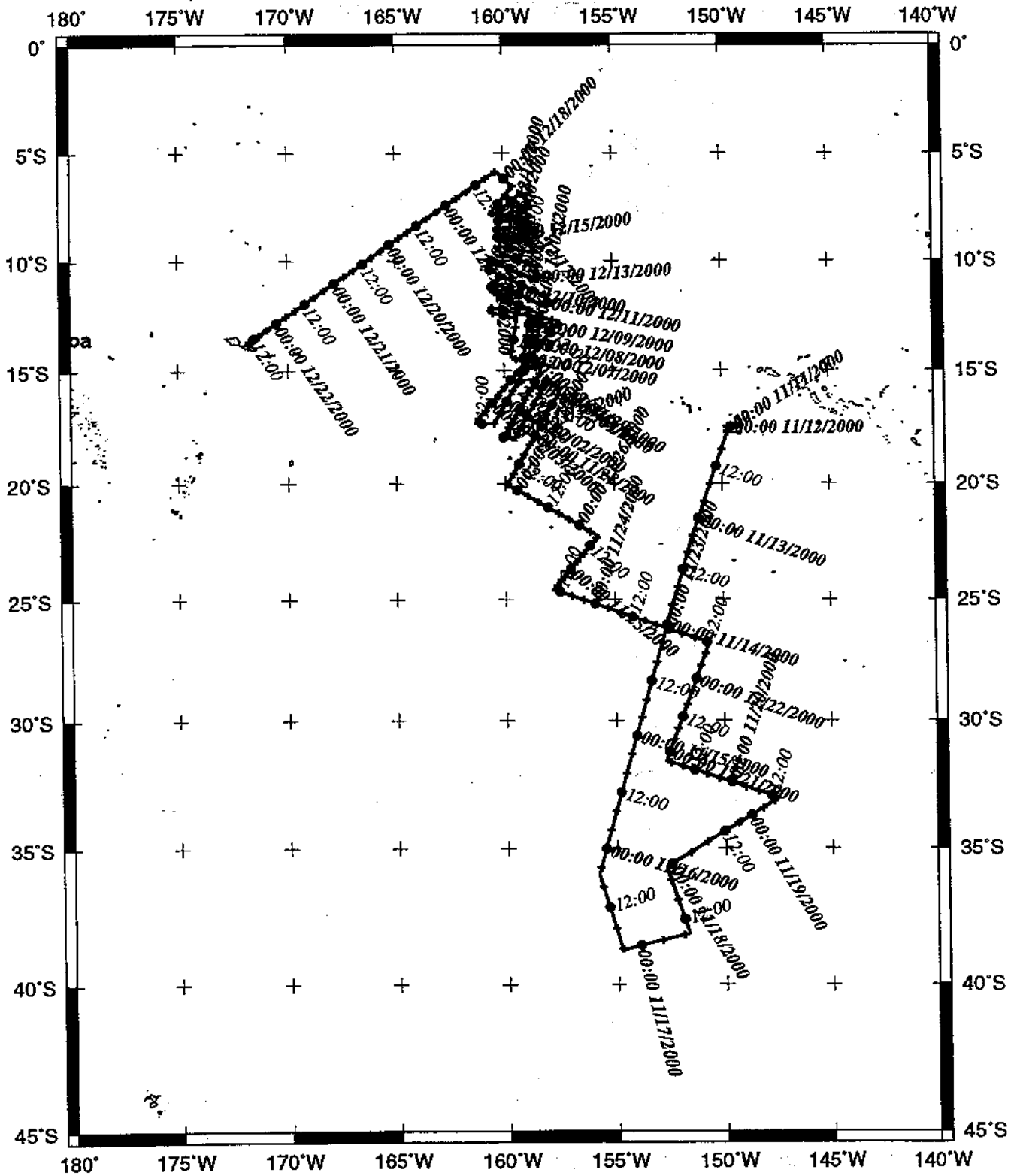
Bathymetry- 8100 miles

Seismic Reflection- none collected

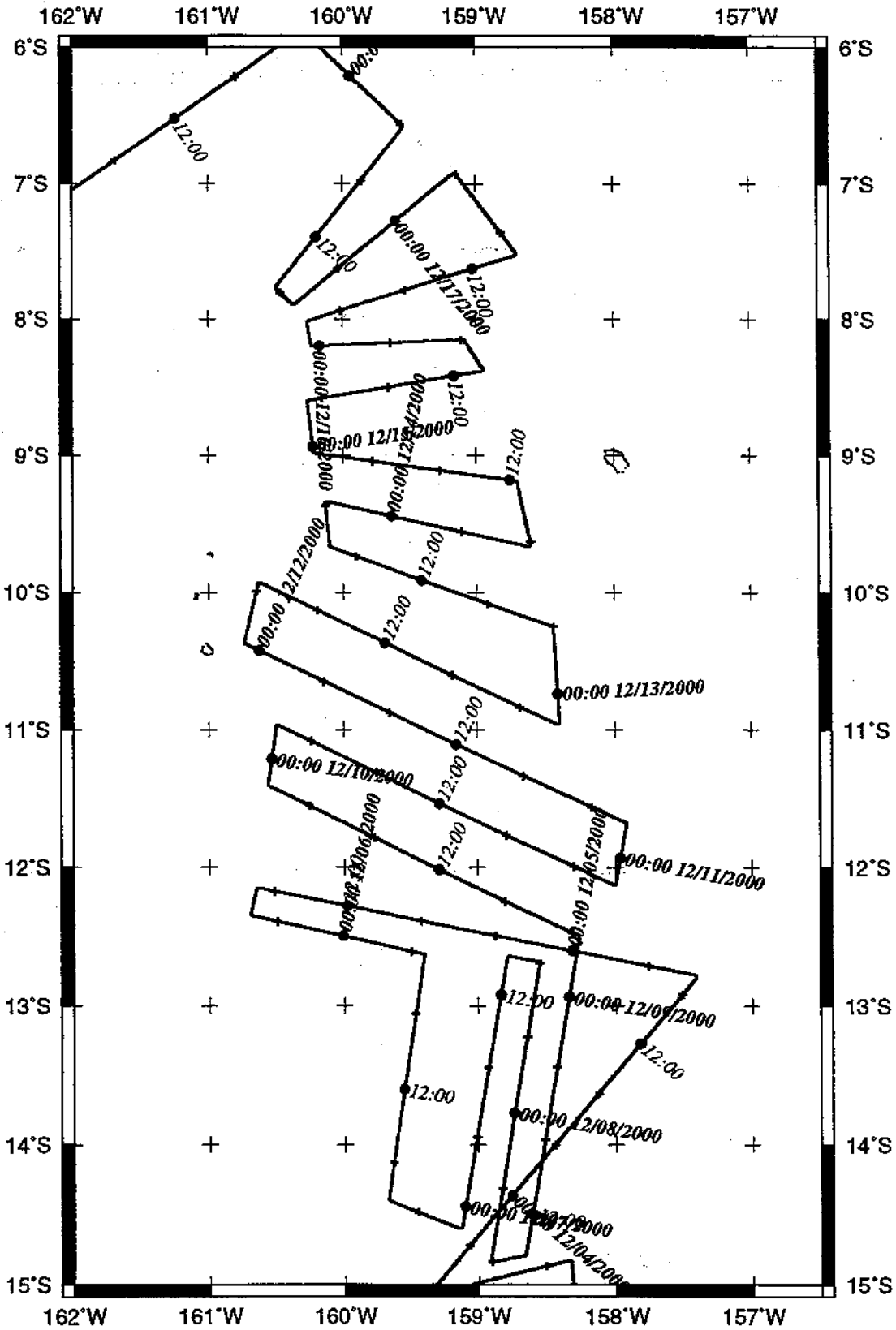
Sea Beam- 8100 miles

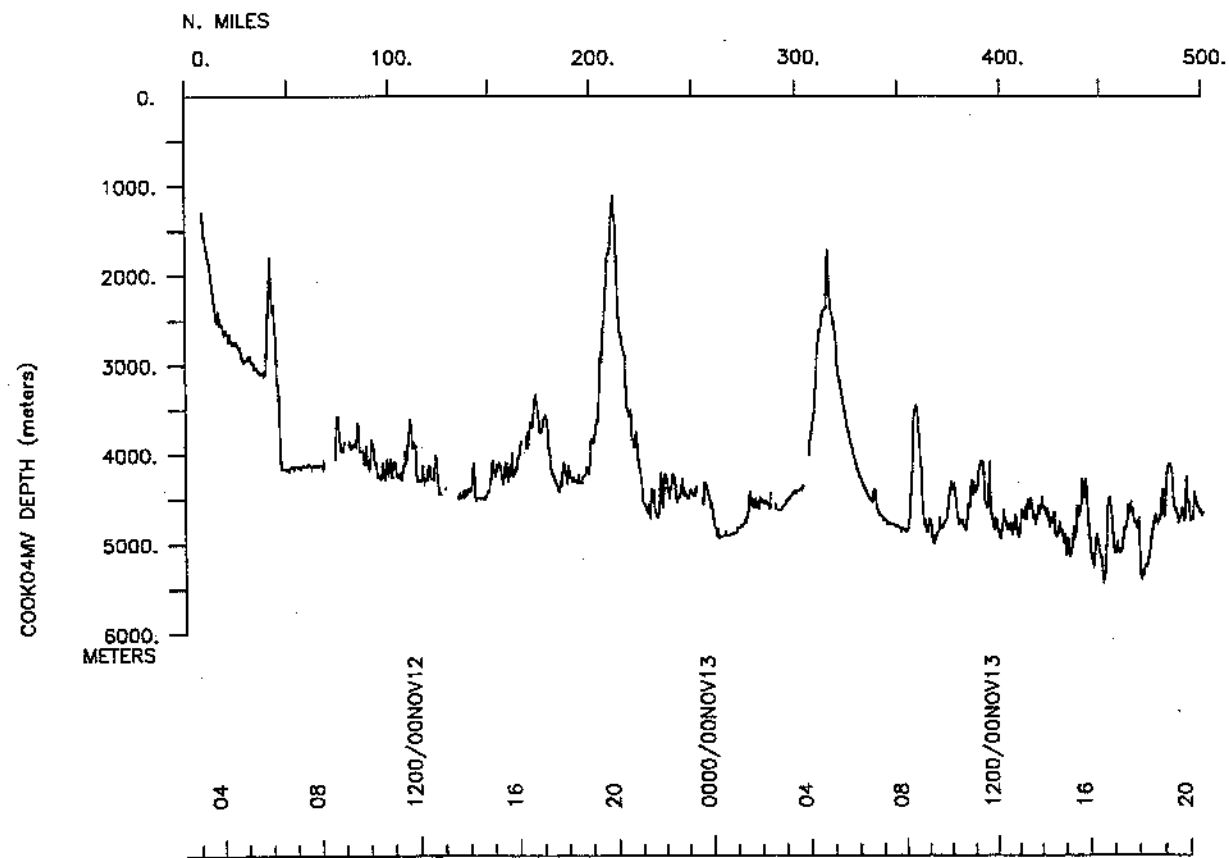
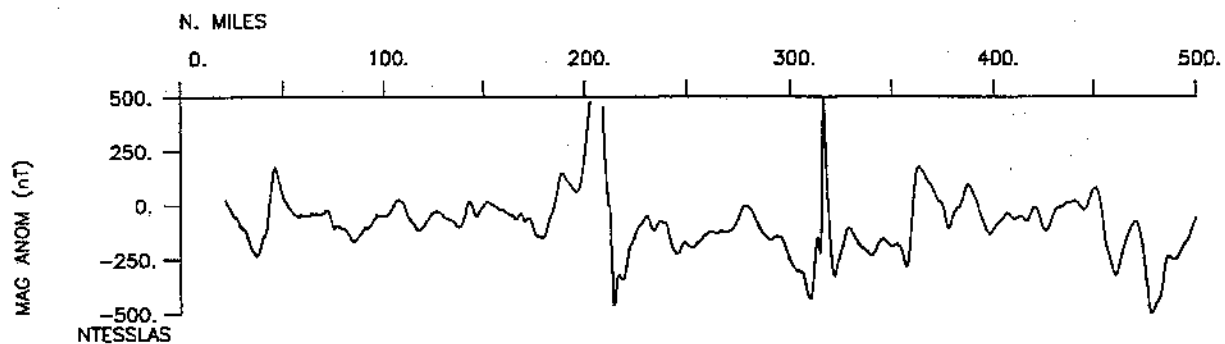
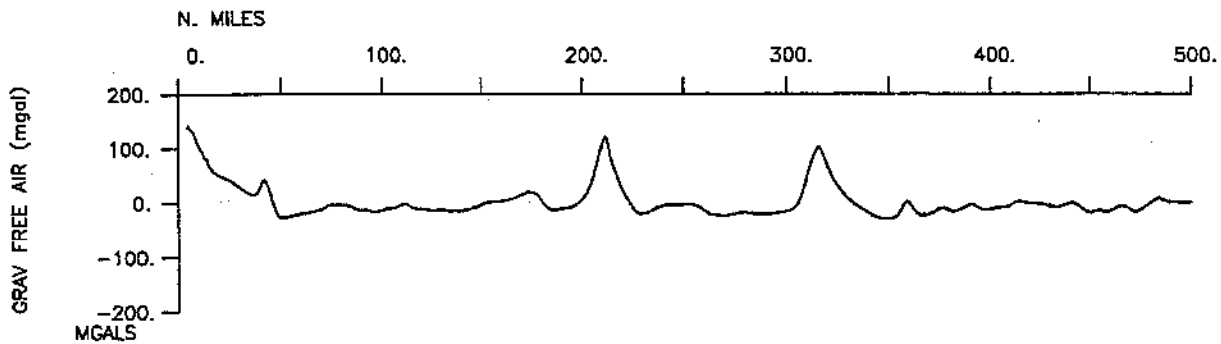
Gravity- 8102 miles

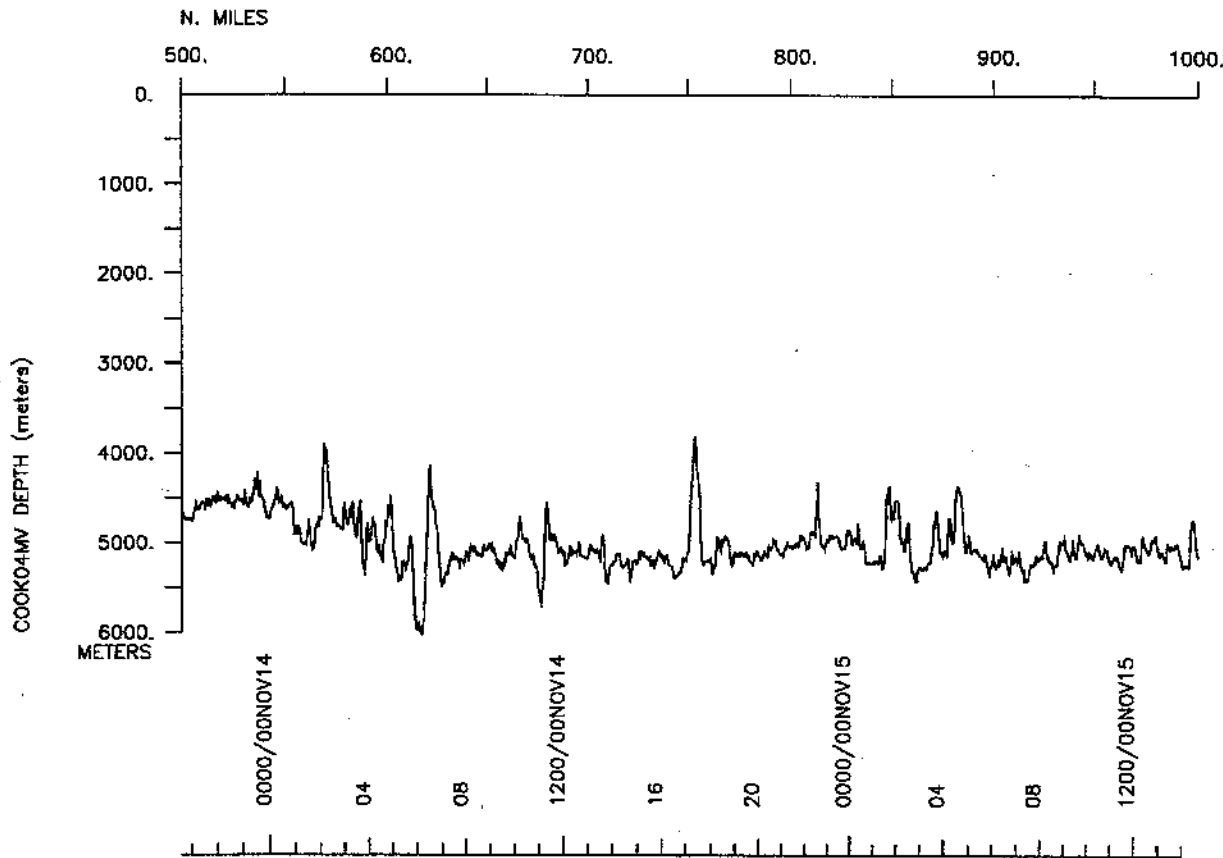
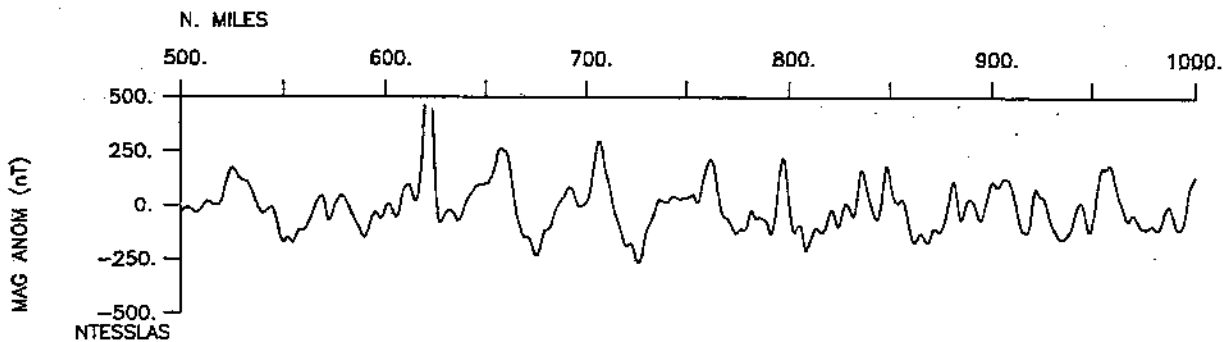
COOK leg 4 Track

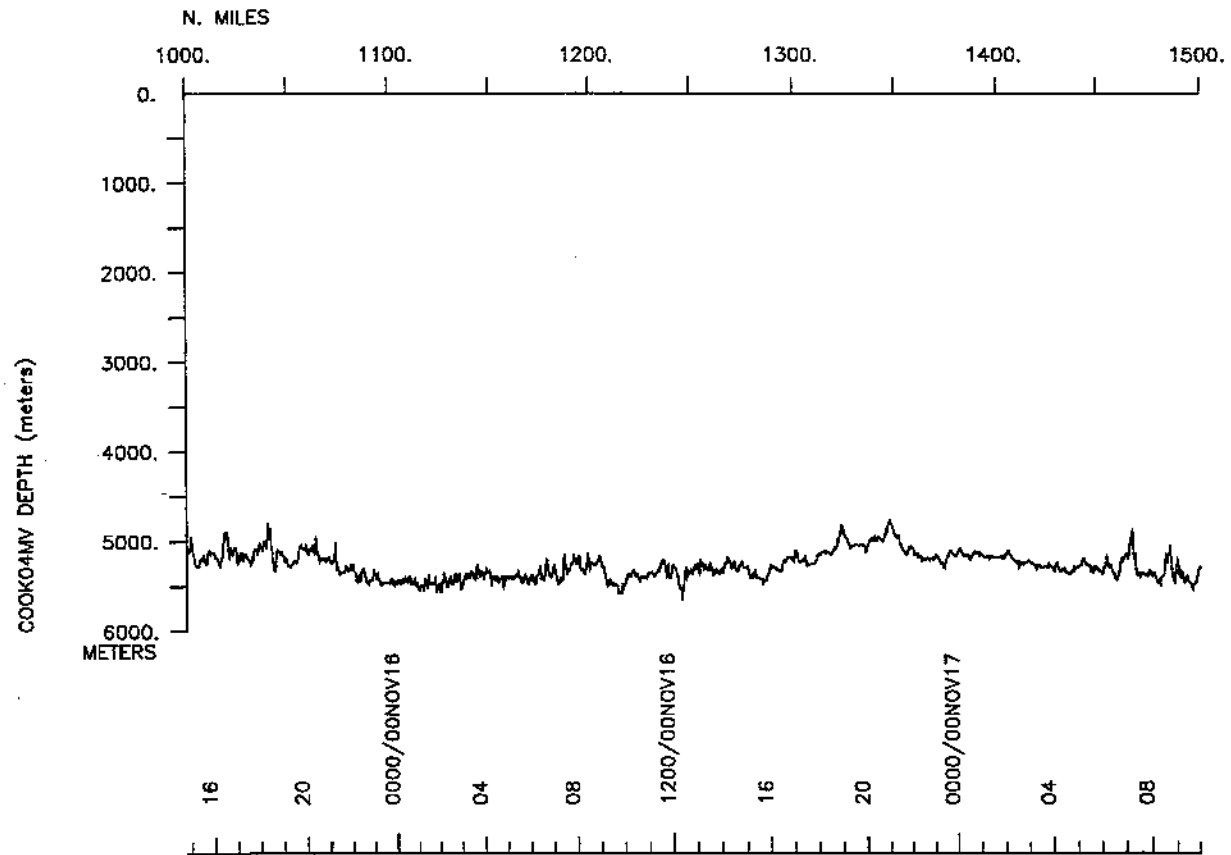
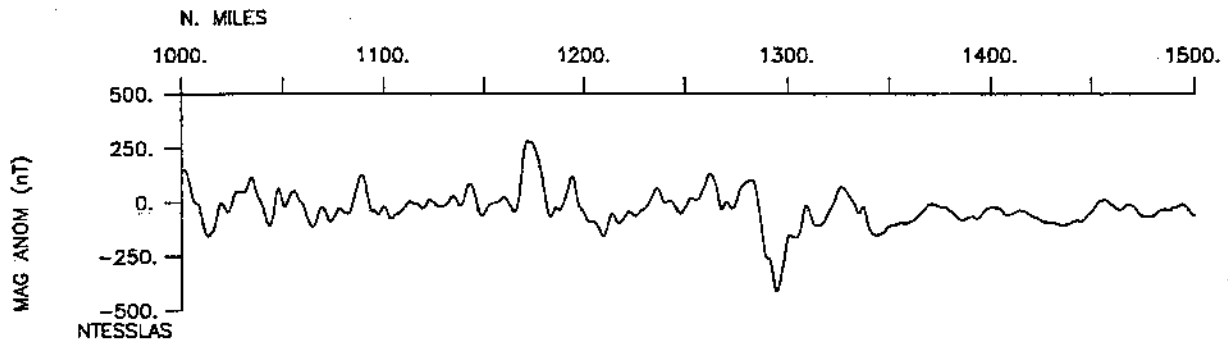
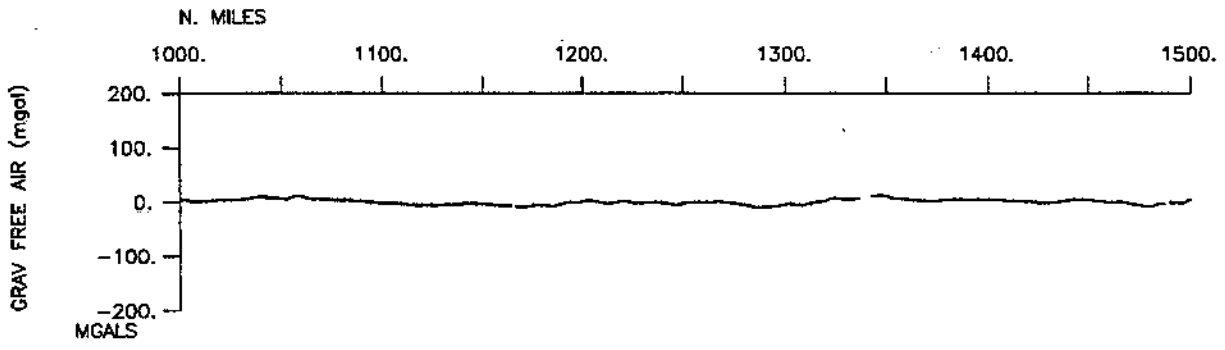


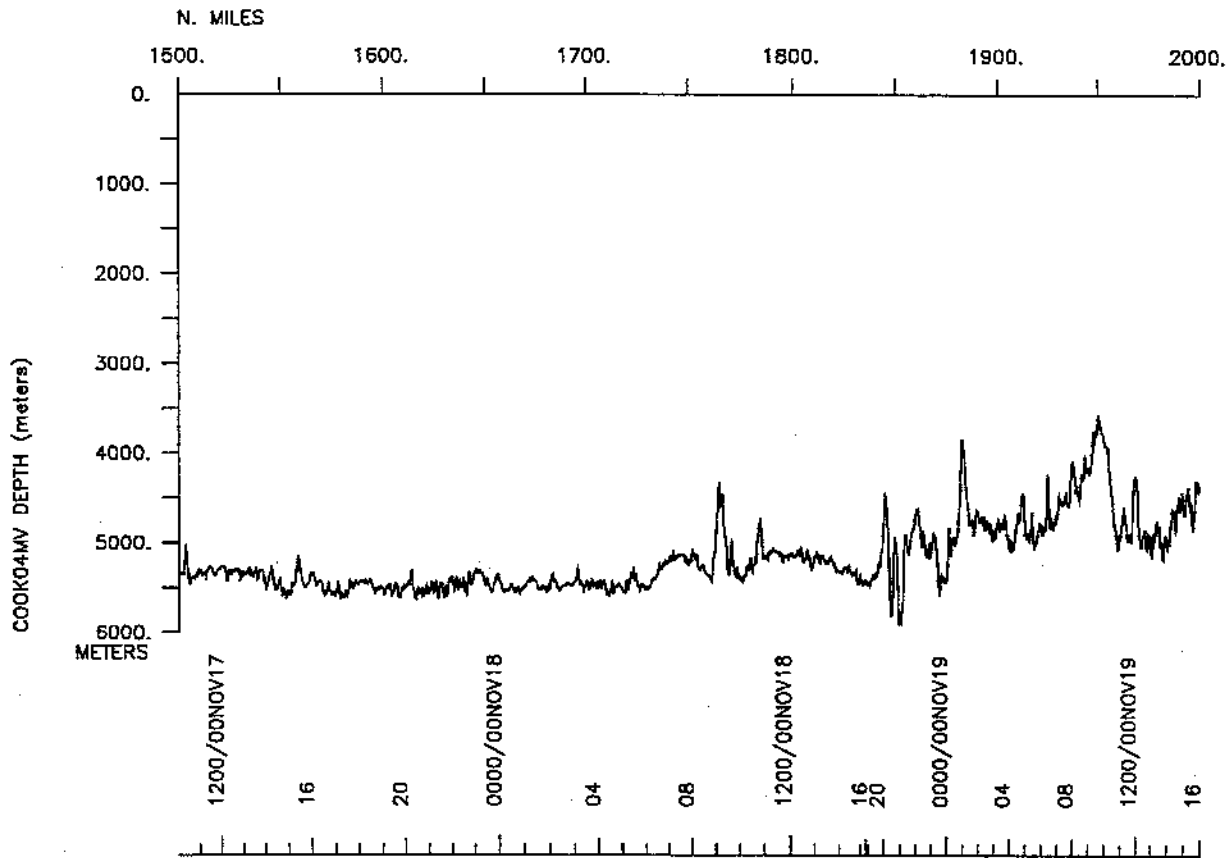
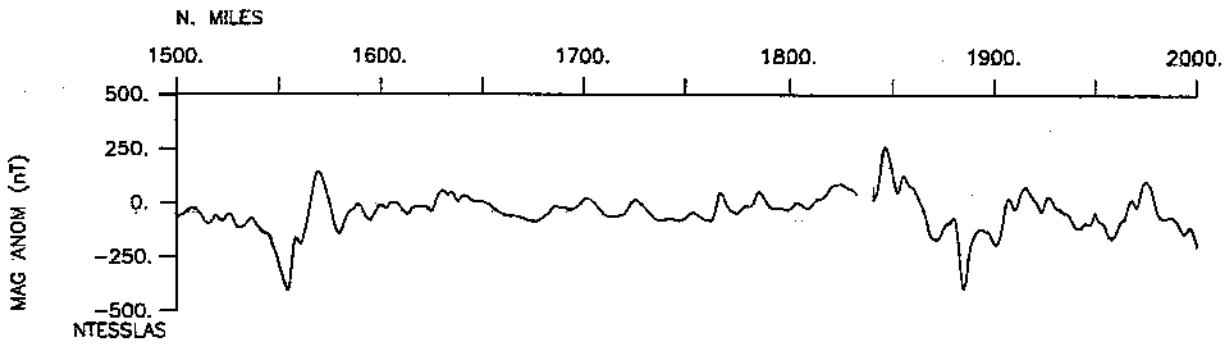
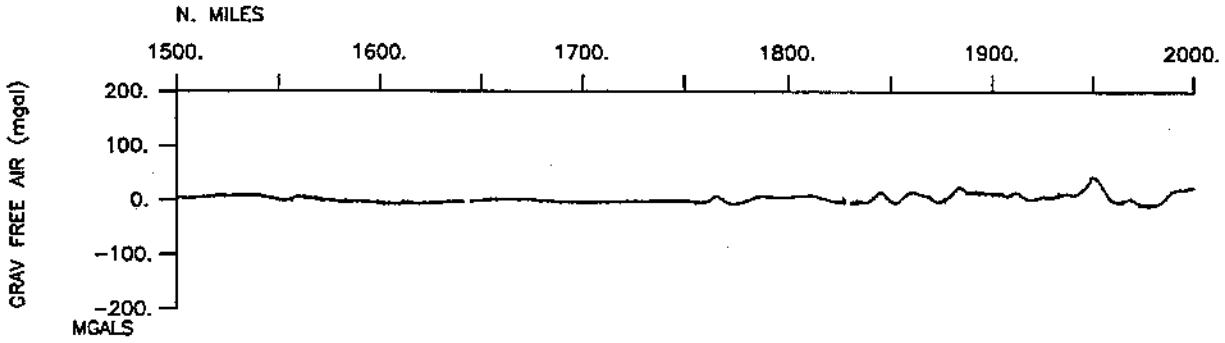
COOK leg 4 Track

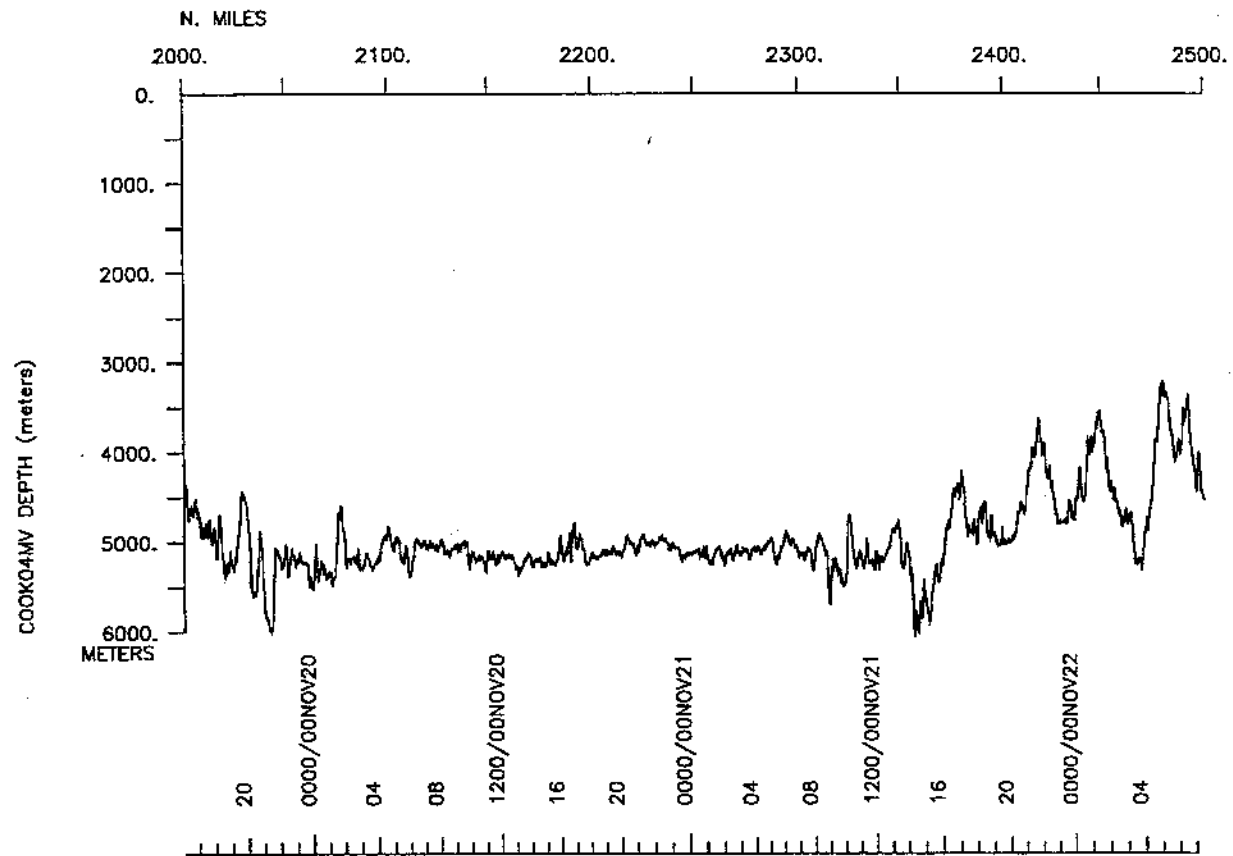
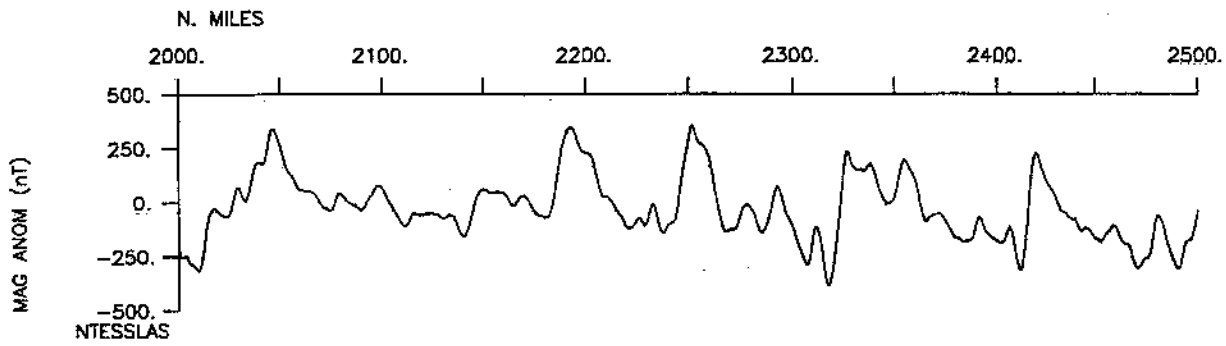
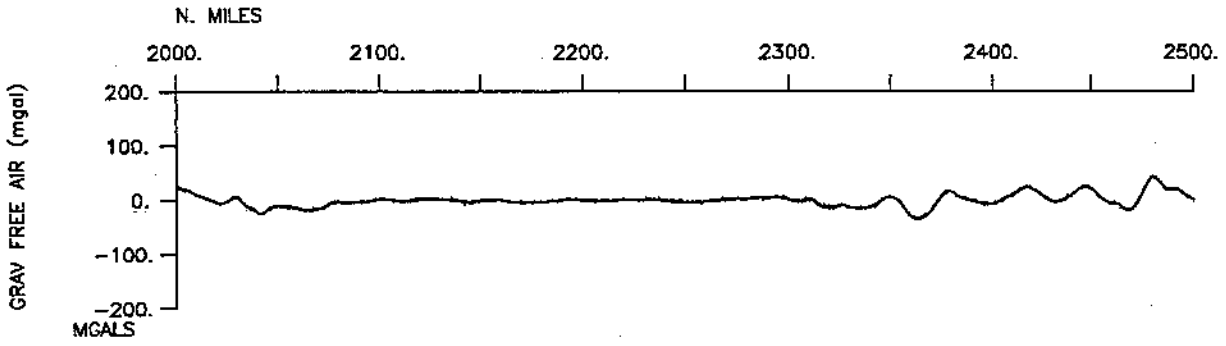


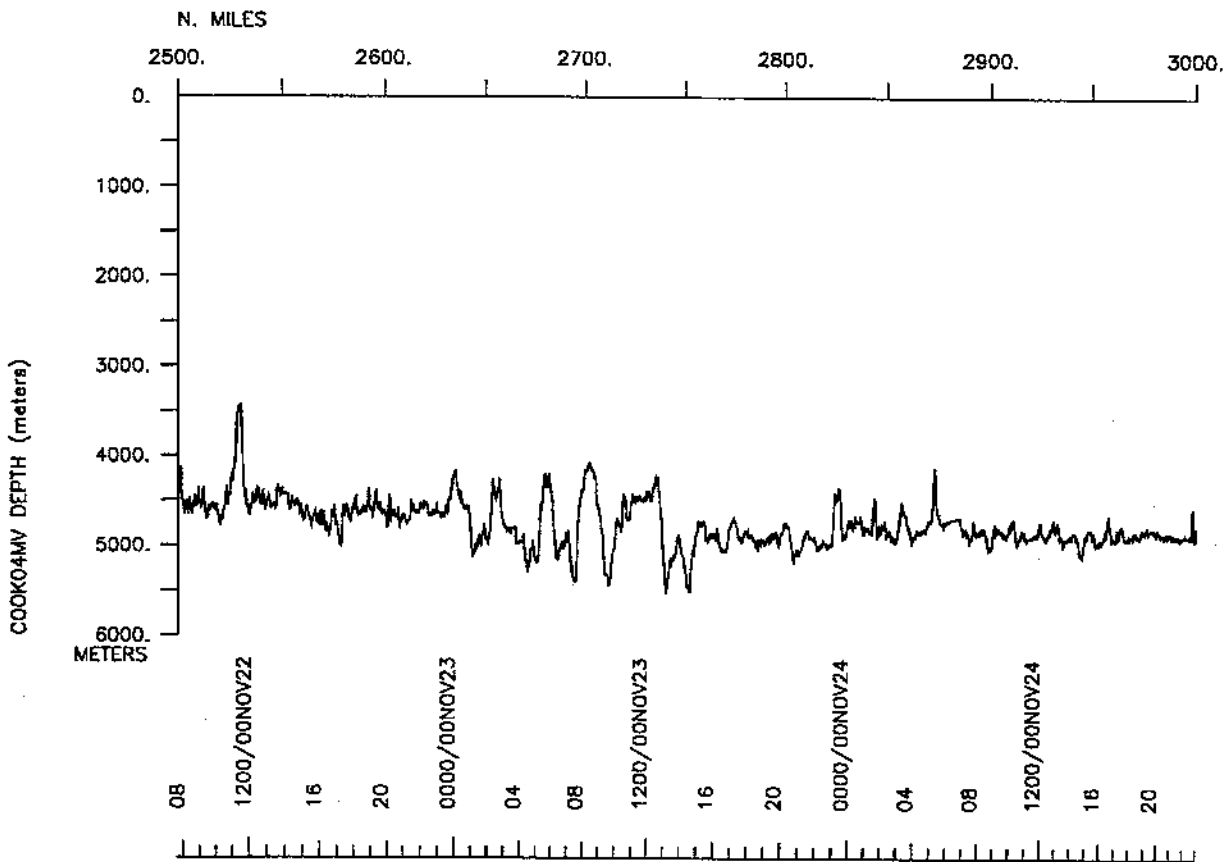
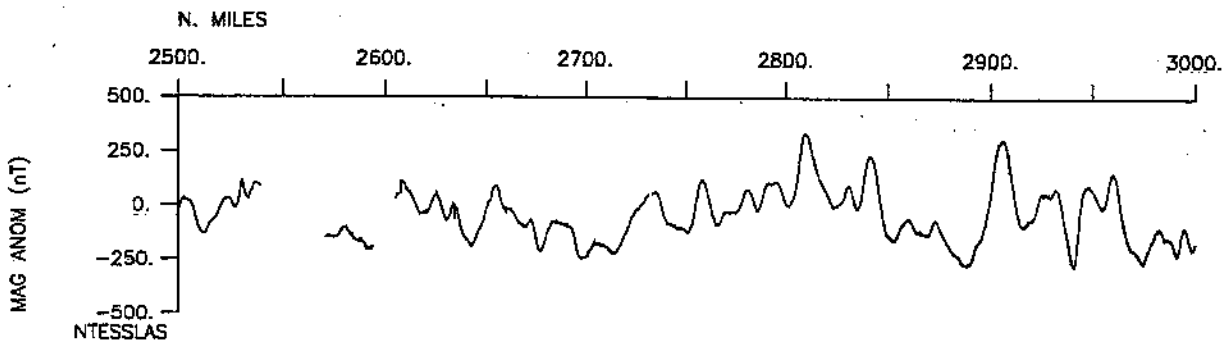
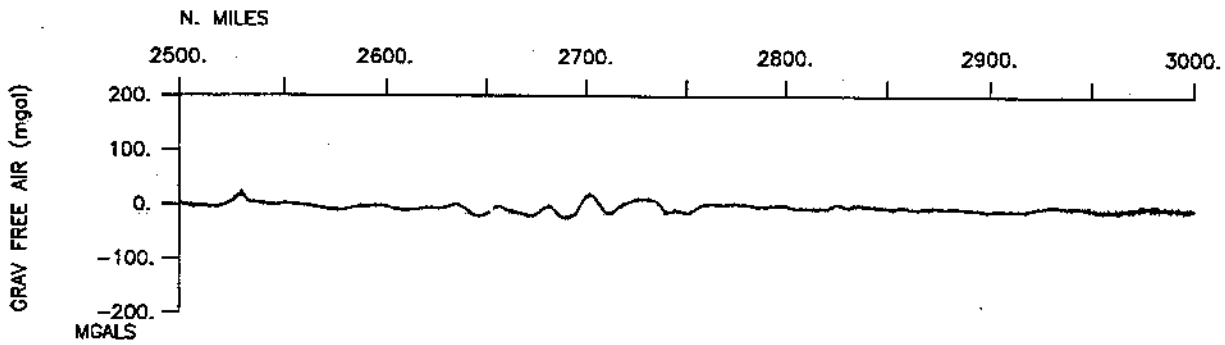


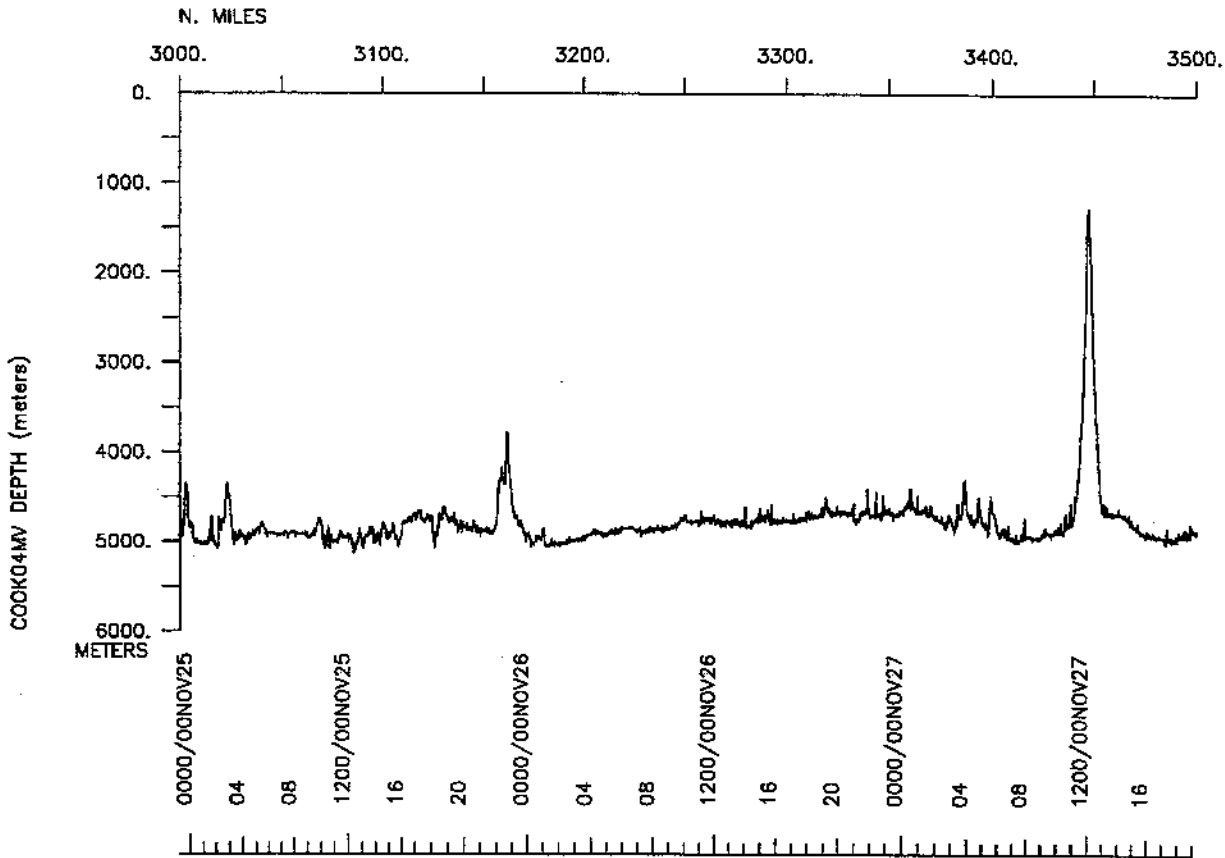
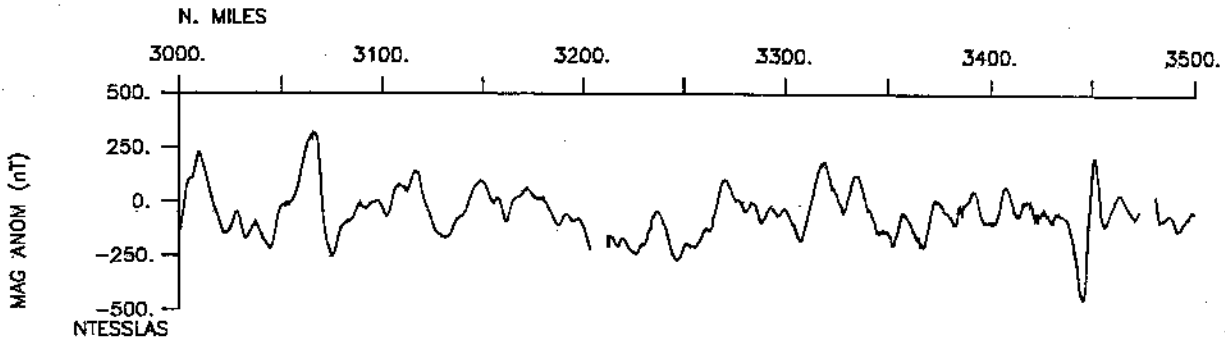
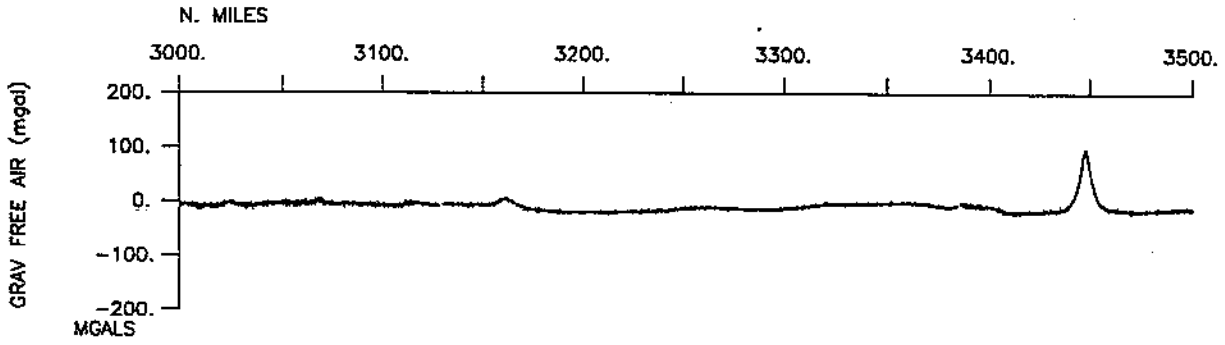


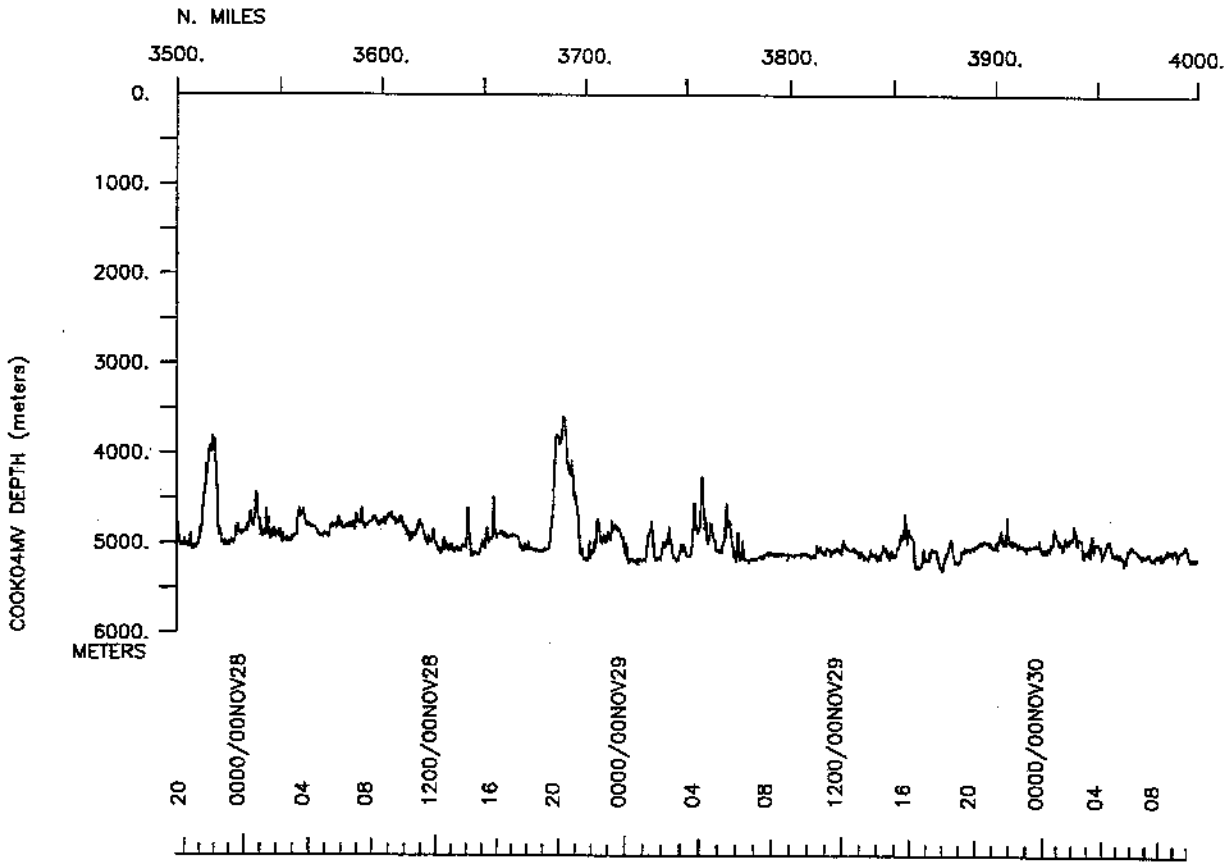
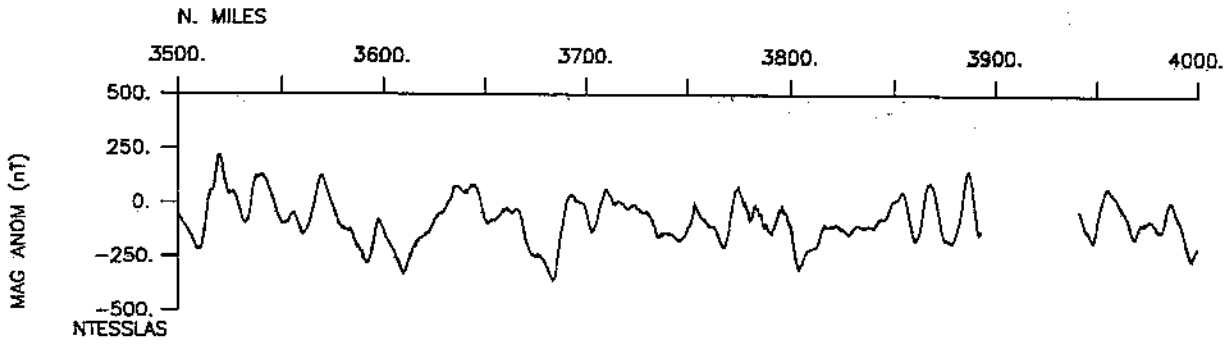
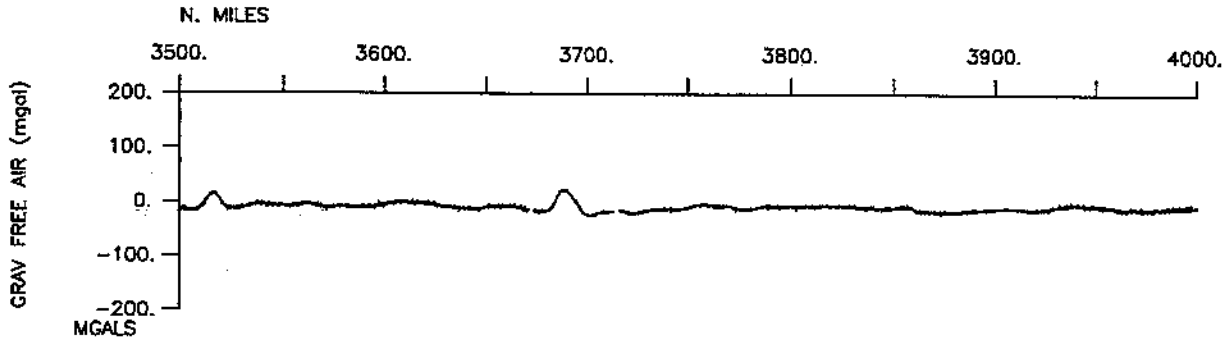


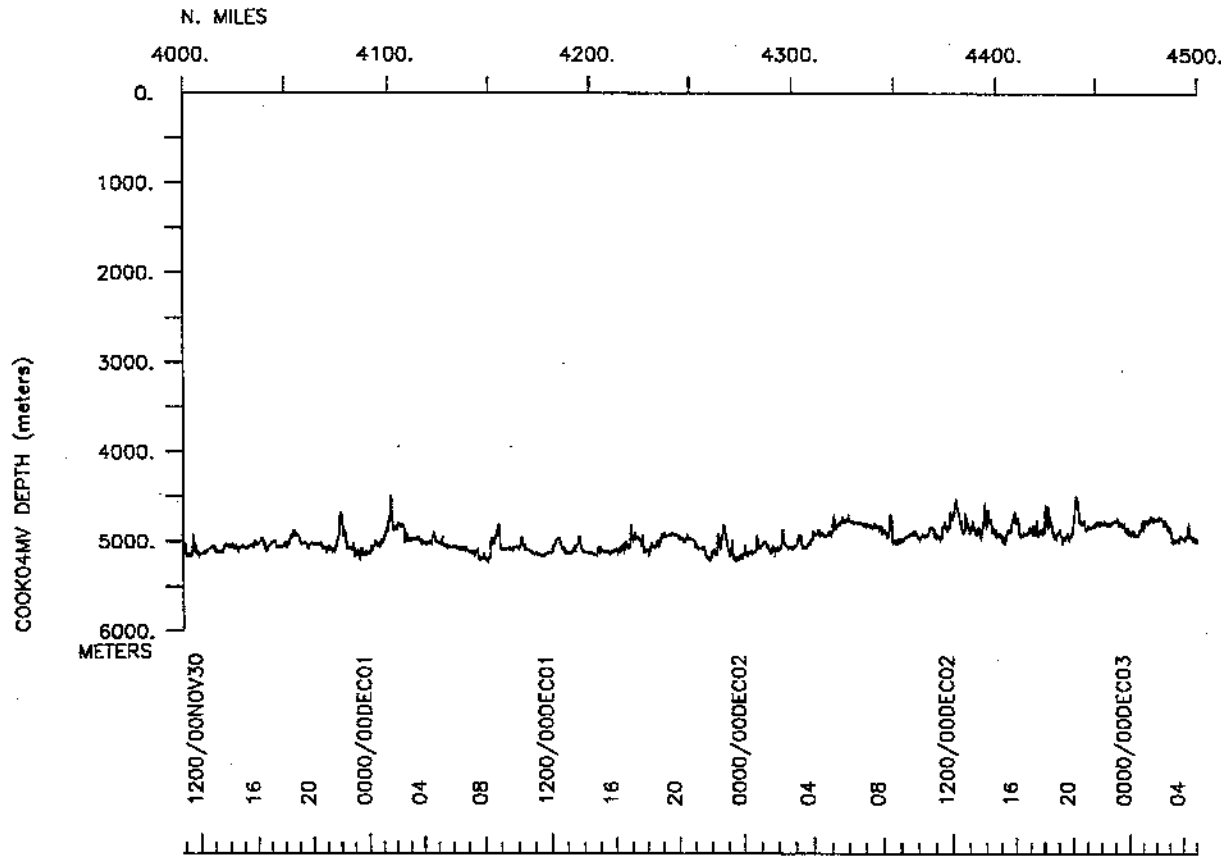
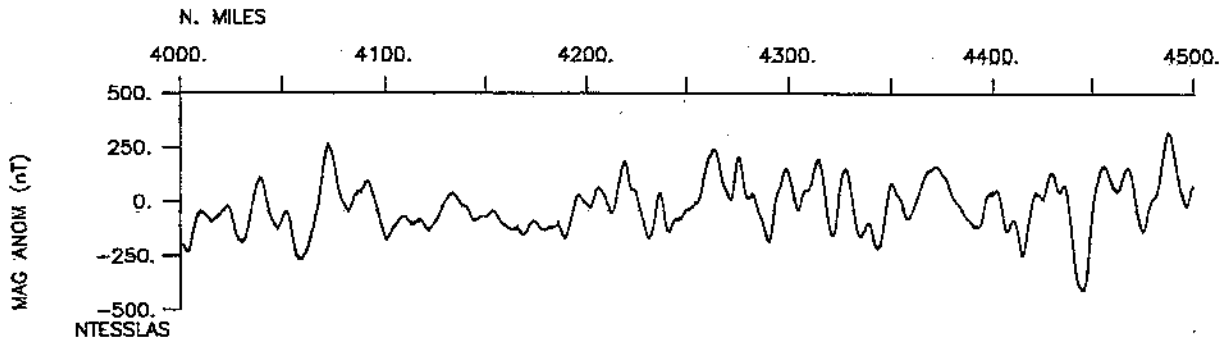
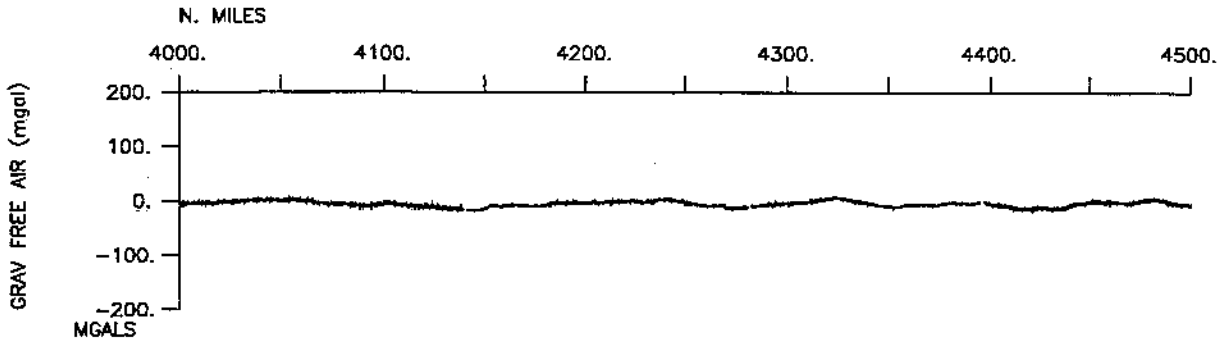


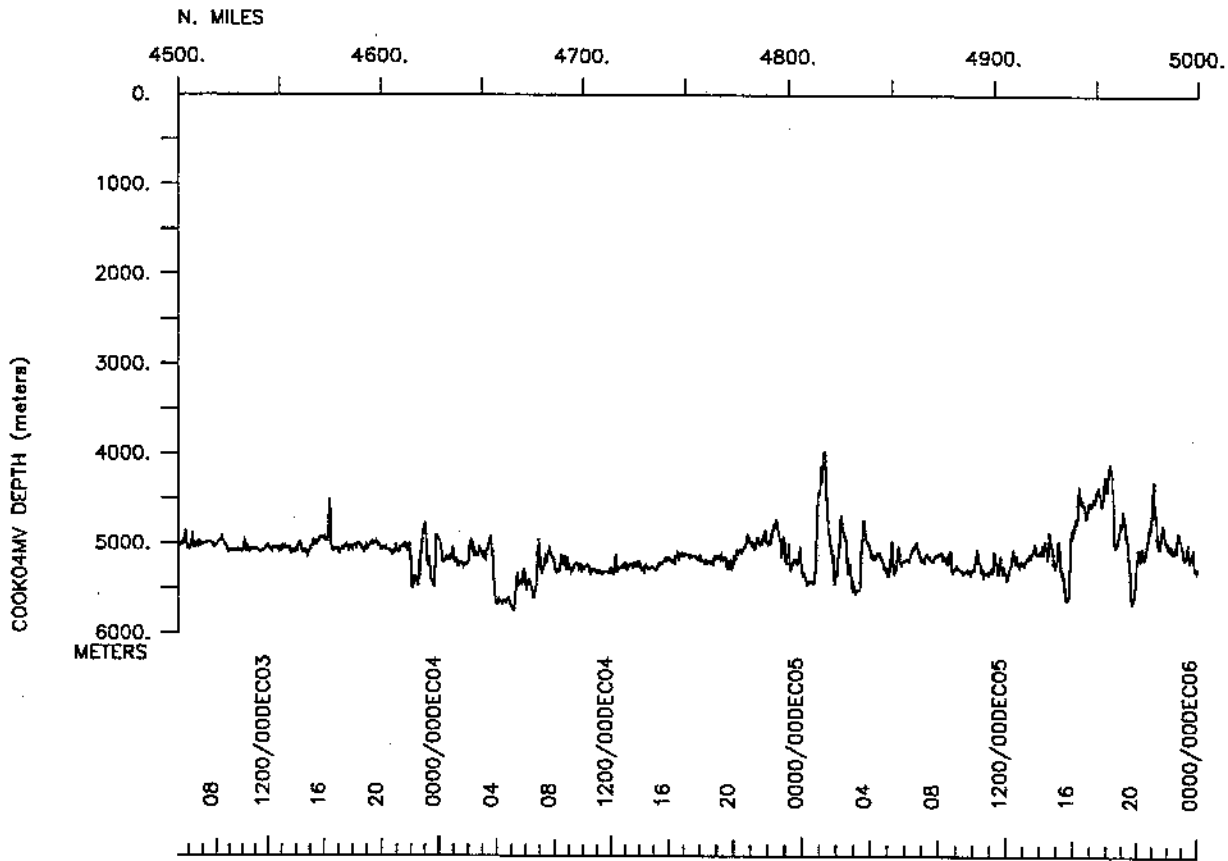
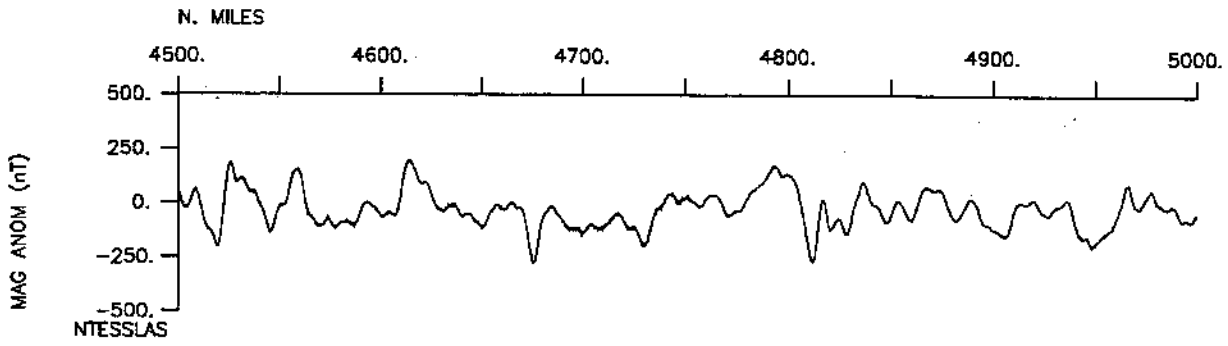


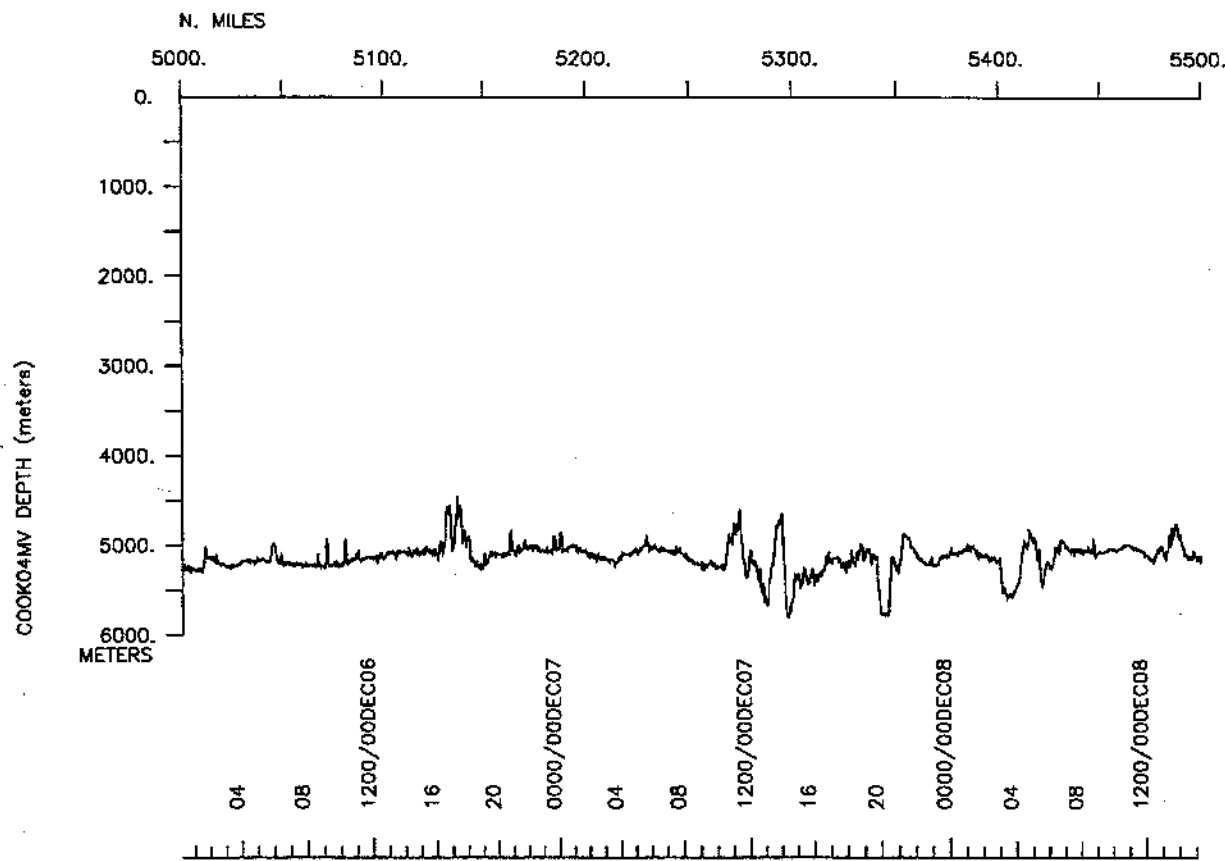
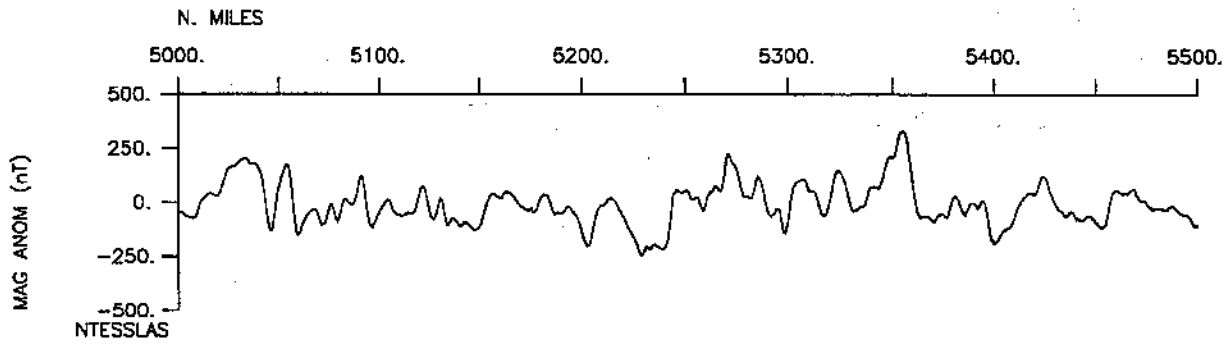
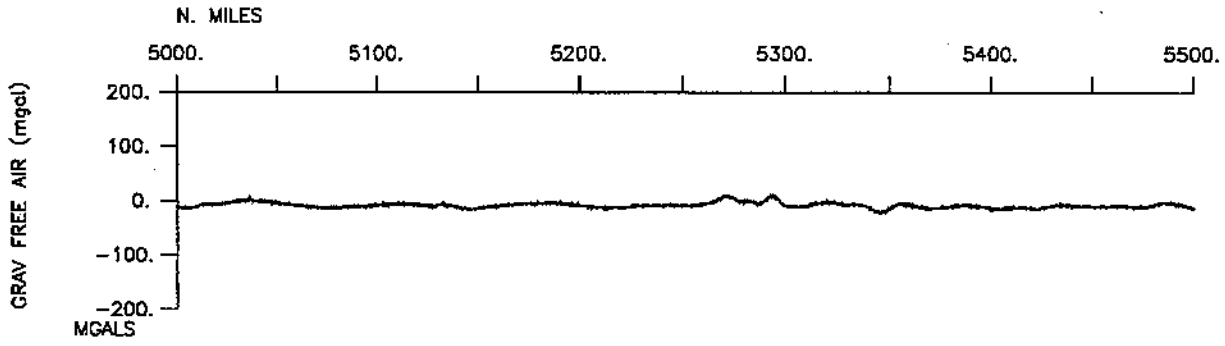


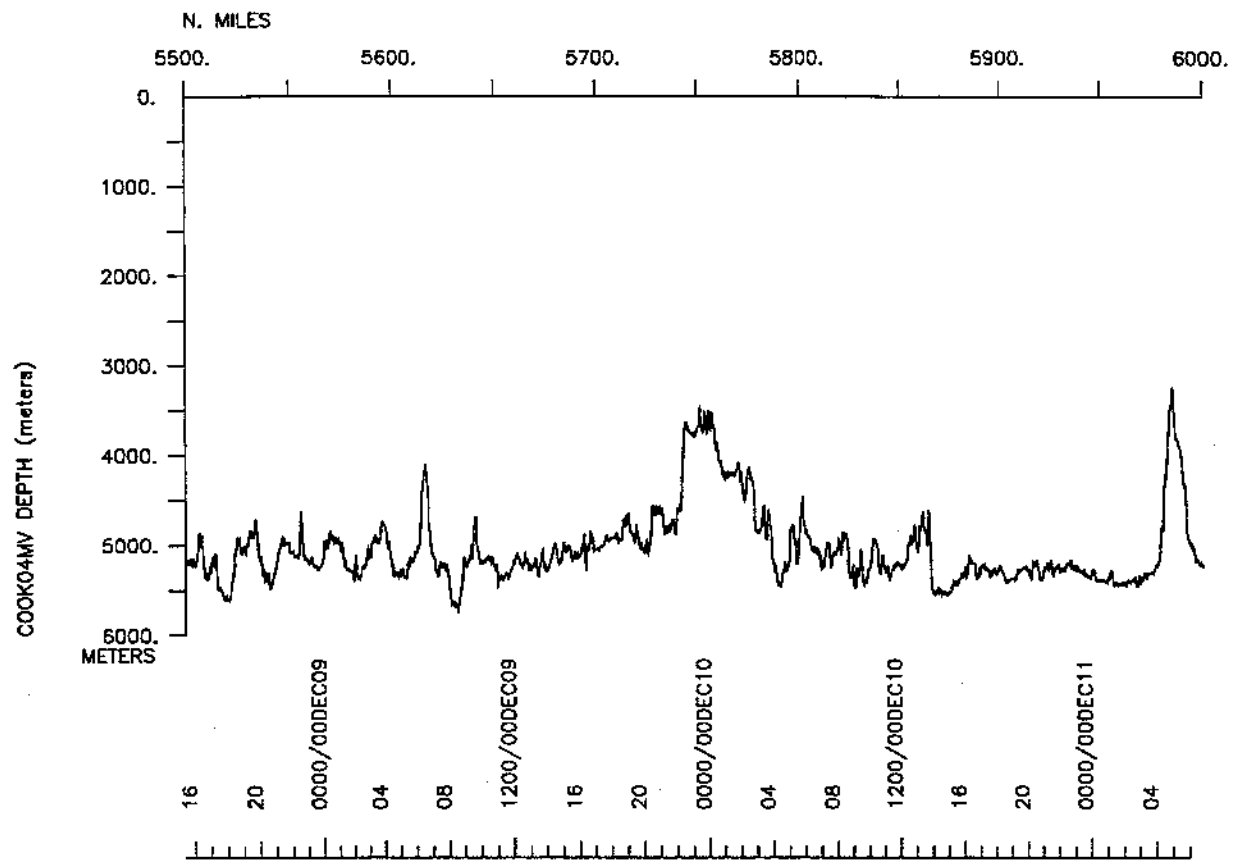
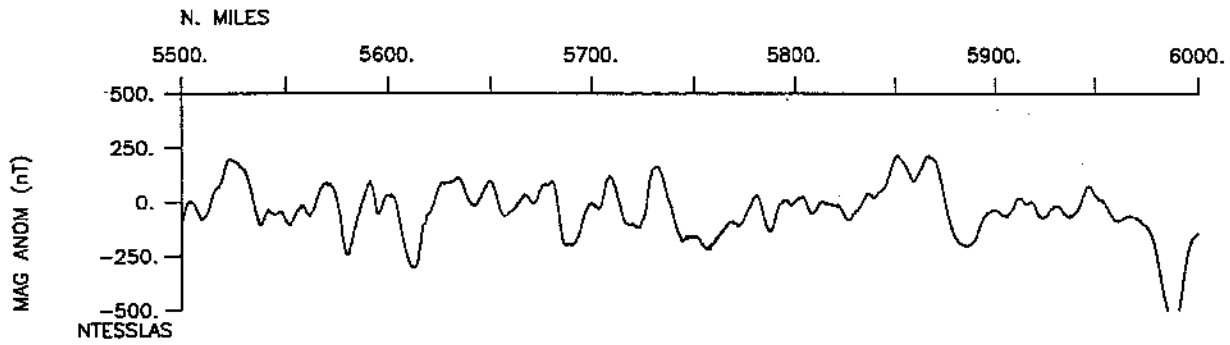
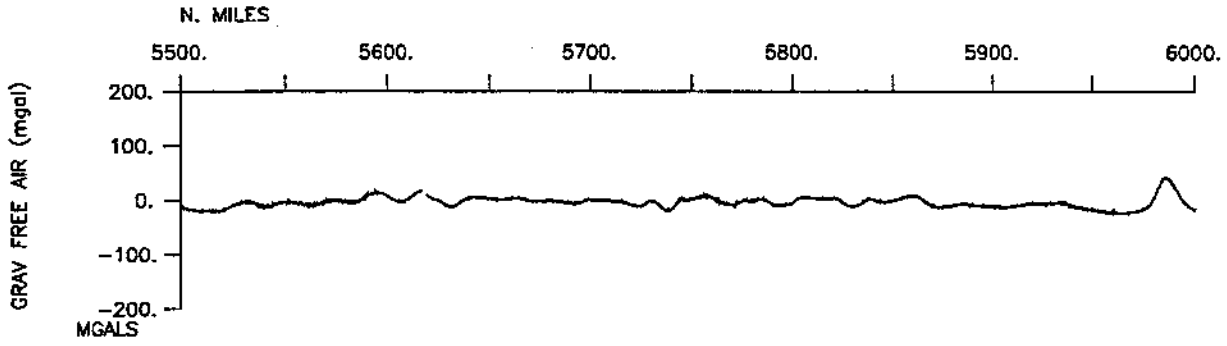


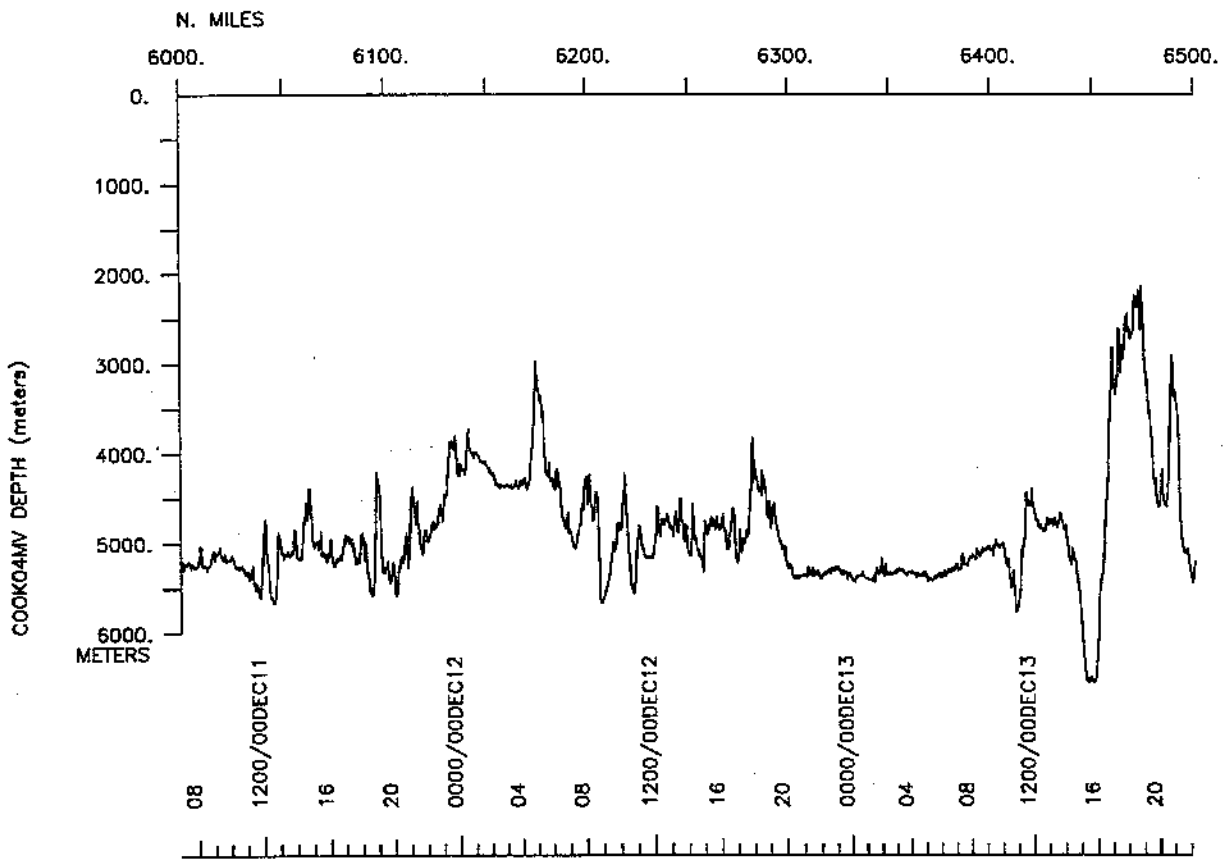
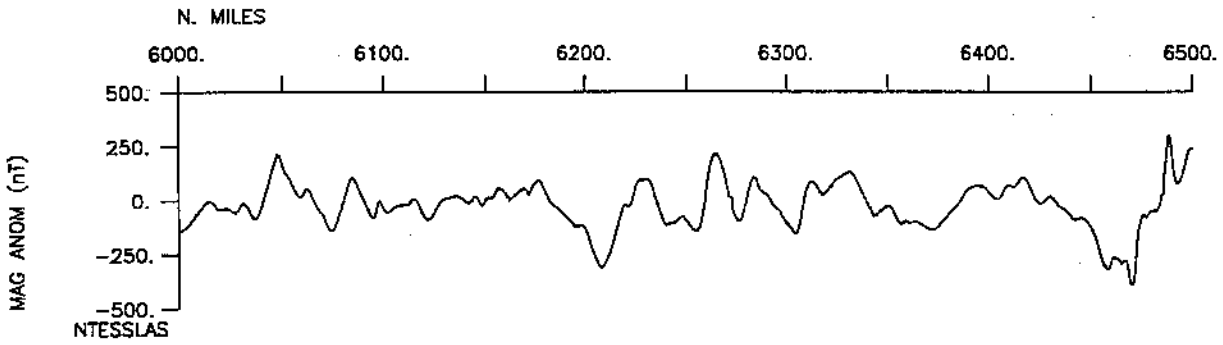
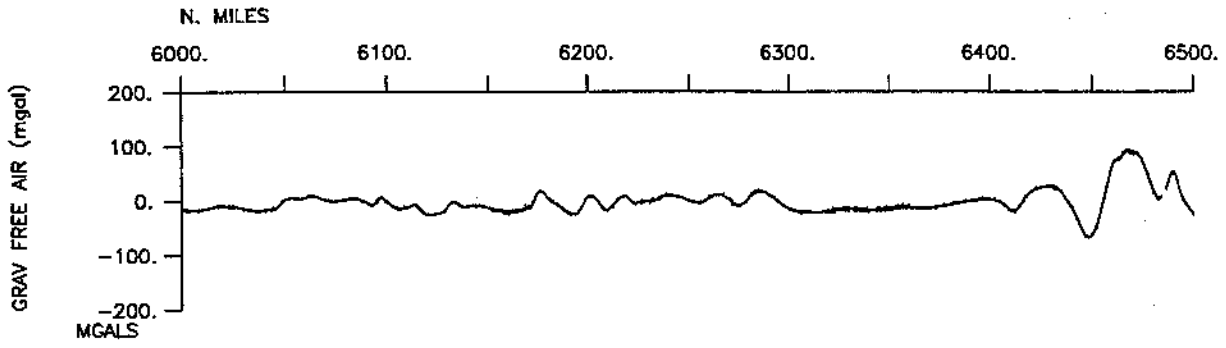


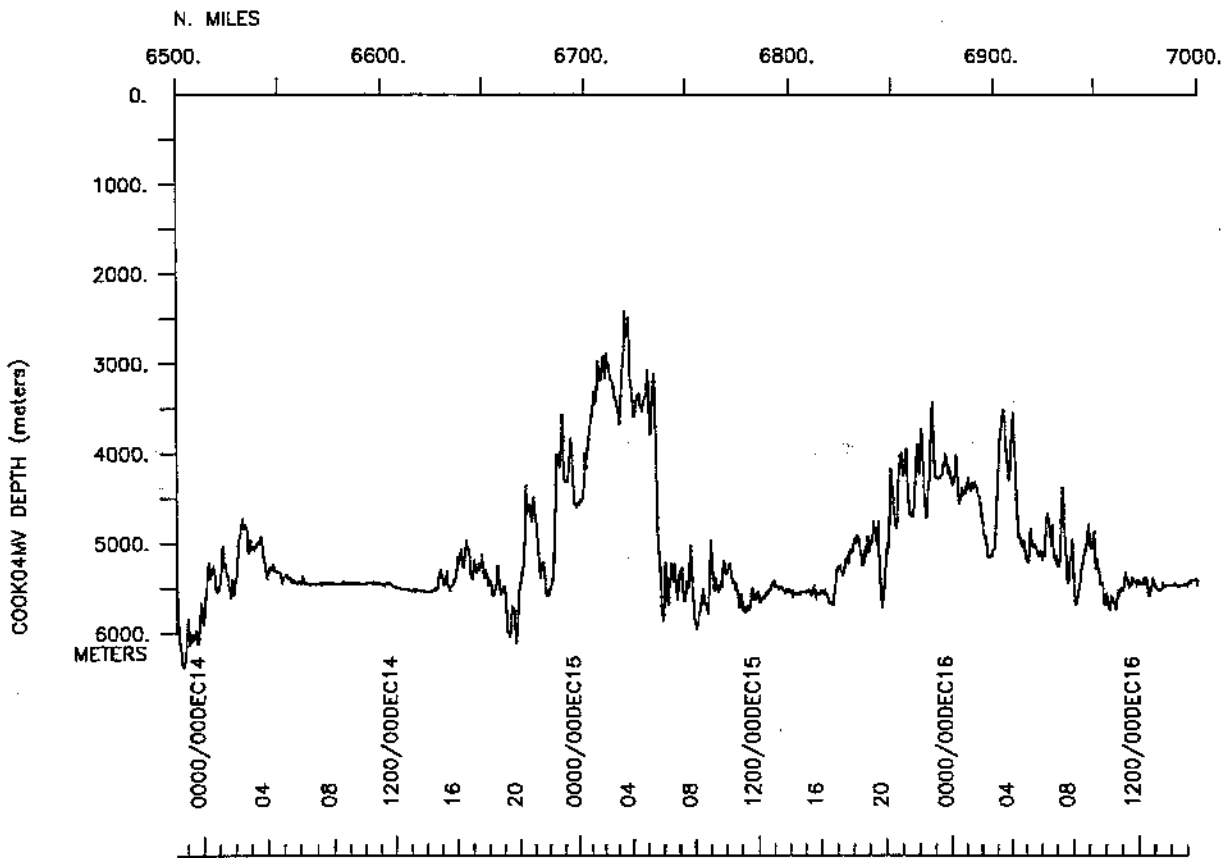
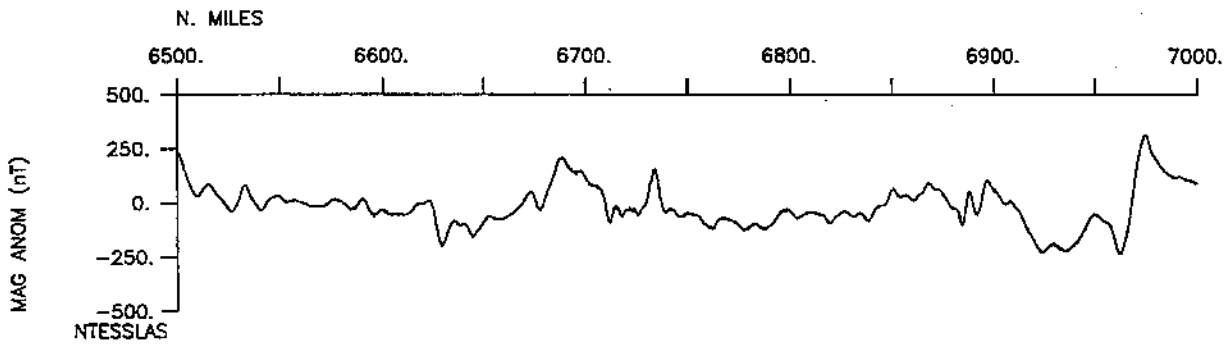
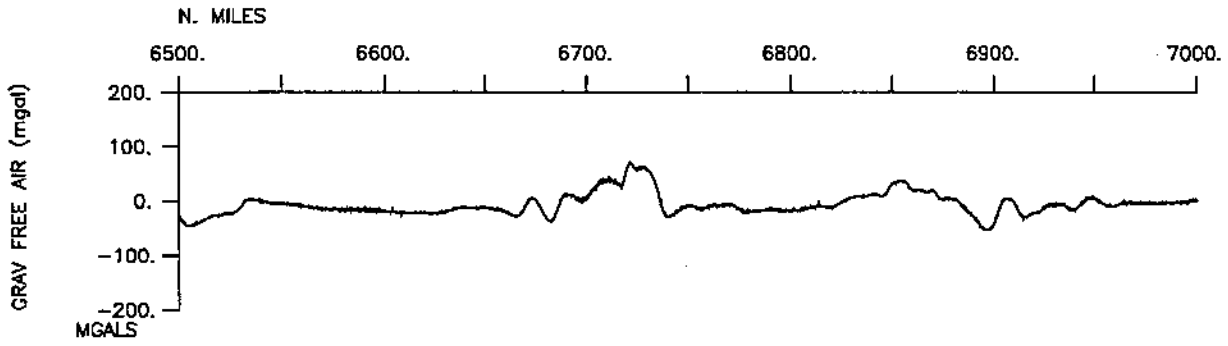


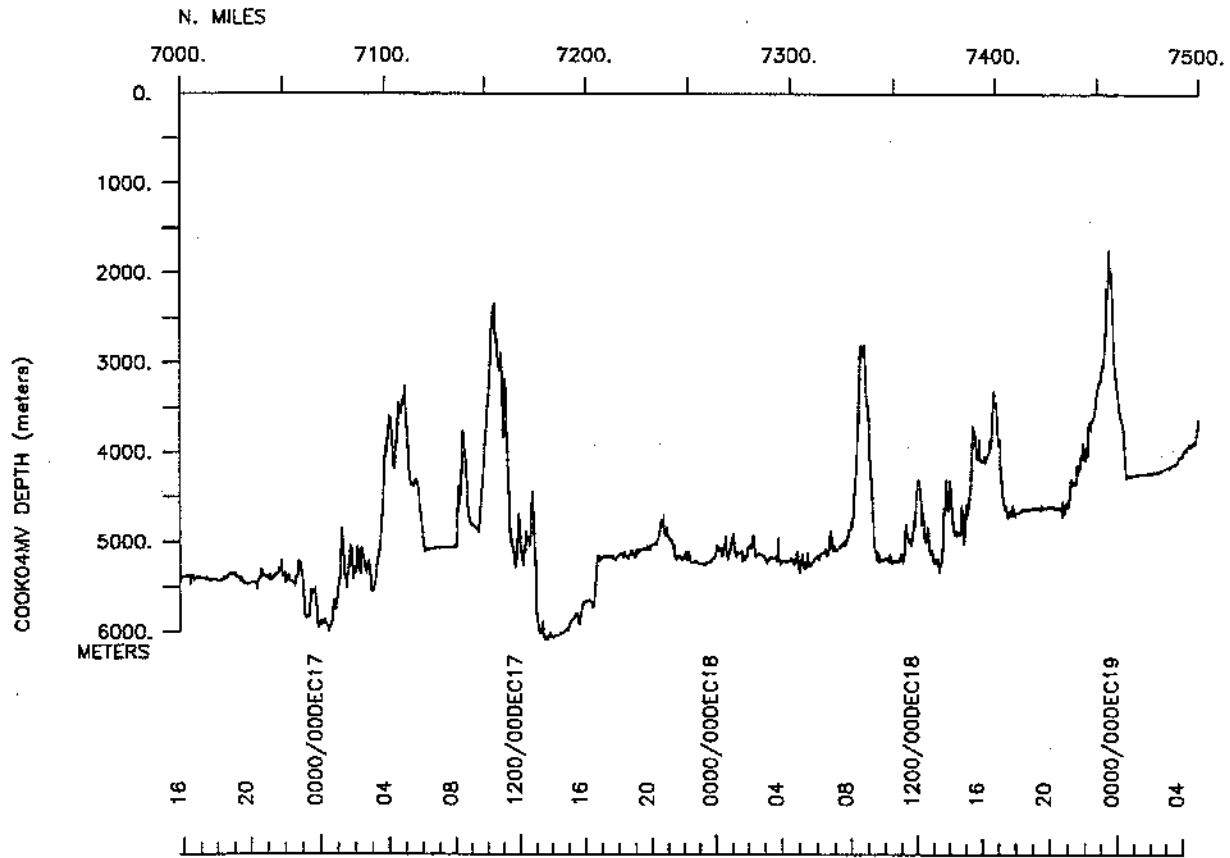
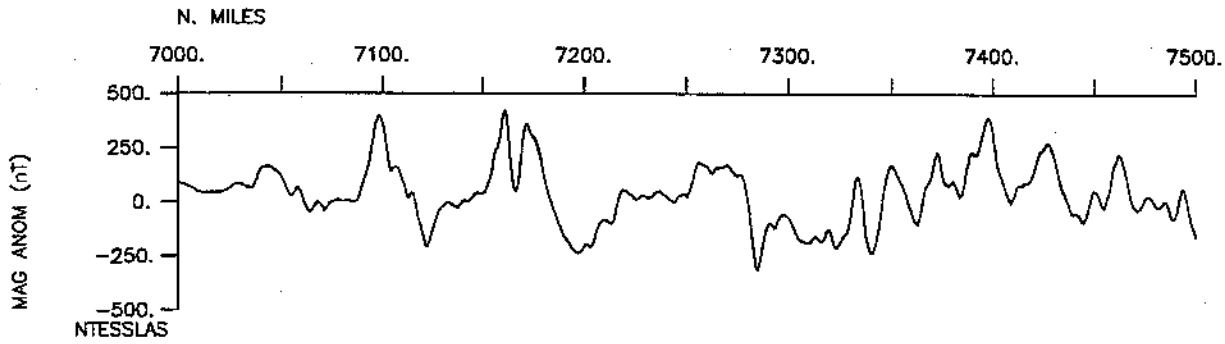
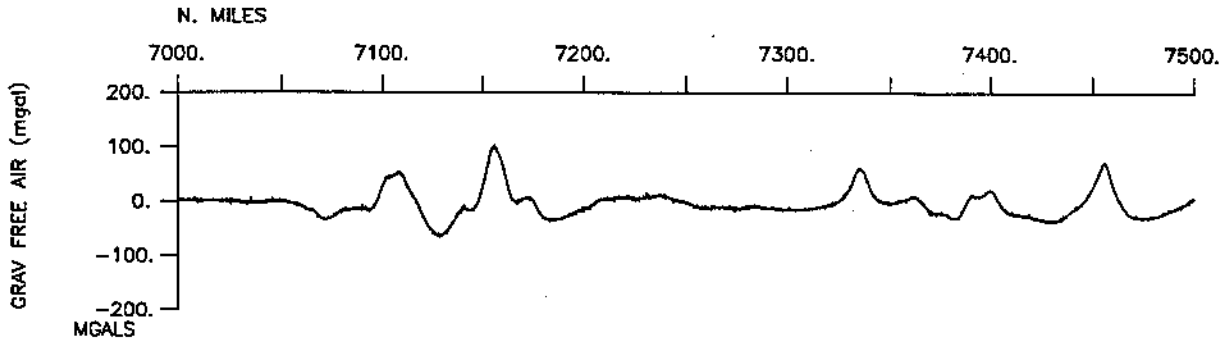


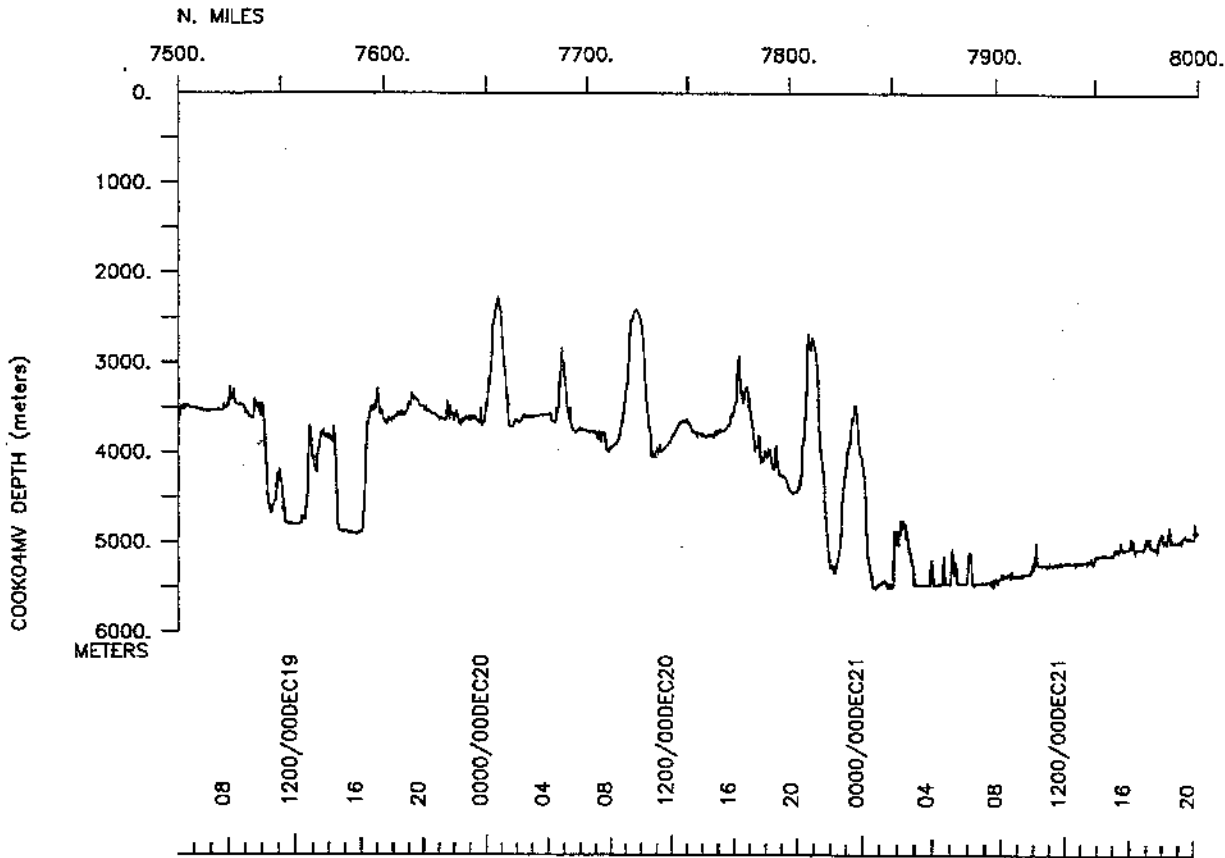
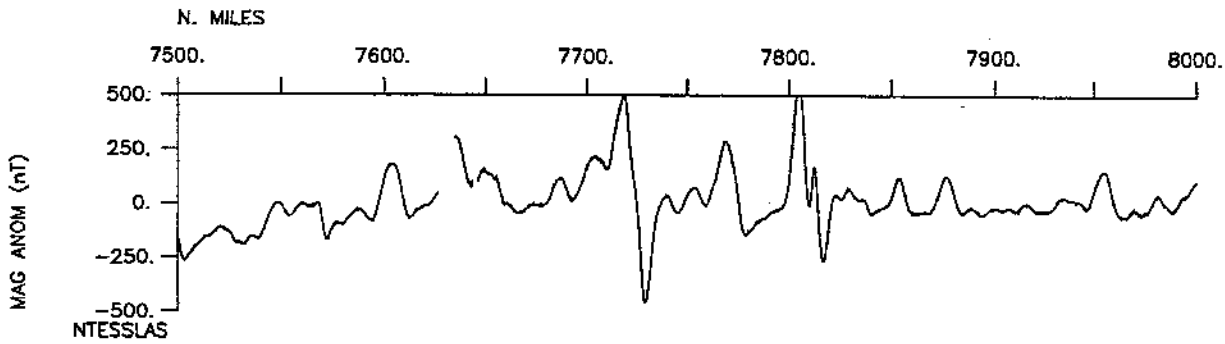
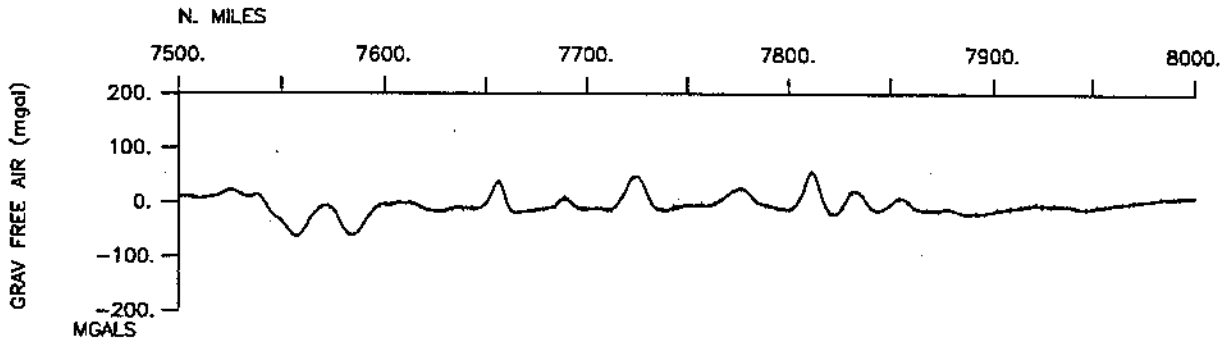


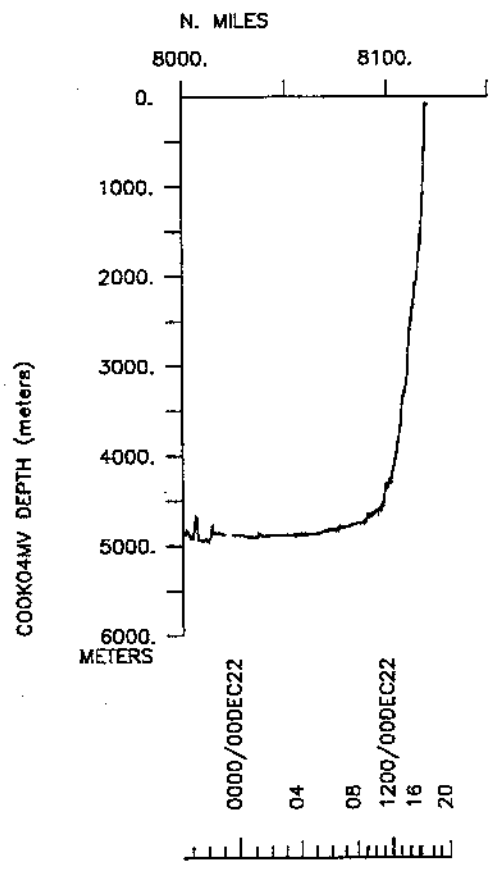
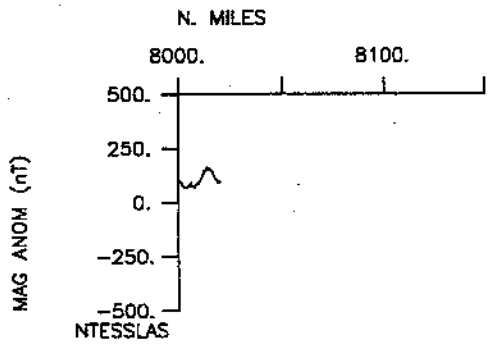
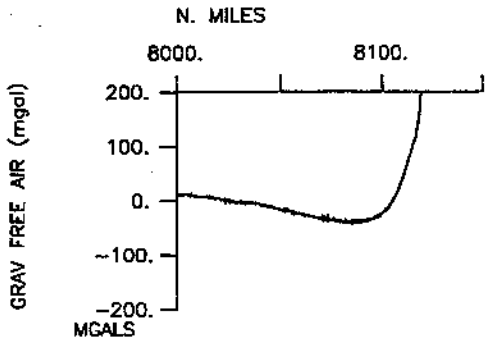












S.I.O. Sample Index

COOK Expedition

Leg 4

(COOK04MV)

R/V Melville

(Issued February 2001)

PORTS:

Papeete, Tahiti (11 November 2000)

to

Apia, Western Samoa (22 December 2000)

Chief Scientist:

Roger Larson, University of Rhode Island

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# 295

**** Ports ***

0200	121100	LGPT B	Papeete, Tahiti	17-32.00S	149-34.00W	f	COOK04MV
2030	221200	LGPT E	Apia, W. Samoa	13-40.00S	171-46.00W	f	COOK04MV

**** Personnel ***

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS URI	Larson, Dr. R.	Chief Scientist	U. of Rhode Island	COOK04MV
PESP SIX	Abrams, Dr. L.	Scientist	U. of No. Carolina	COOK04MV
PESP URI	Pakalny, Dr. R.	Scientist	U. of Rhode Island	COOK04MV
PEST URI	Viso, R.	Scientist	U. of Rhode Island	COOK04MV
PESP URI	Grenier, J.	Watch Stander	U. of Rhode Island	COOK04MV
PEST URI	Neisingh, M.	Student	U. of Rhode Island	COOK04MV
PEST URI	Forest, A.	Student	U. of Rhode Island	COOK04MV
PEST URI	Kriner, K.	Student	U. of Rhode Island	COOK04MV
PESP SIO	Goodwillie, A.	Seabeam Processor	Scripps Institution	COOK04MV
PEBE STS	Palomares, R.	Electronics Tech	Scripps Institution	COOK04MV
PECT STS	Moe, R.	Computer Tech	Scripps Institution	COOK04MV
PERT STS	Baiz, S.	Resident Tech	Scripps Institution	COOK04MV

**** 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	CODE	LATITUDE	LONGITUDE	p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP

**** Underway Data Curator - Geological Data Center ext. 41899 *

**** Log Books ***

0200	121100	0	LBUW B	Underway watch log	GDC	17-32.03S	149-34.34W	g	COOK04MV
2030	221200	0	LBUW E	Underway watch log	GDC	13-49.63S	171-45.68W	g	COOK04MV
0200	121100	0	LBSC B	Scientific watch log	URI	17-32.03S	149-34.34W	g	COOK04MV
2030	221200	0	LBSC E	Scientific watch log	URI	13-49.63S	171-45.68W	g	COOK04MV

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

0200	121100	0	MBSR B	vbeam&sidescan r-01	GDC	17-32.03S	149-34.34W	g	COOK04MV
0823	281100	0	MBSR E	vbeam&sidescan r-01	GDC	16-56.15S	158-01.81W	g	COOK04MV
0900	281100	0	MBSR B	vbeam&sidescan r-02	GDC	16-51.96S	157-59.33W	g	COOK04MV
1737	221200	0	MBSR E	vbeam&sidescan r-02	GDC	13-45.61S	171-44.76W	g	COOK04MV

**** Echo Sounder Records ***

0328	121100	0	DPR3 B	Knudsen 3.5khz r-01	GDC	17-39.22S	149-41.41W	g	COOK04MV
0339	131200	0	DPR3 E	Knudsen 3.5khz r-01	GDC	10-17.50S	158-26.35W	g	COOK04MV
0418	131200	0	DPR3 B	Knudsen 3.5khz r-02	GDC	10-14.23S	158-28.68W	g	COOK04MV
2300	211200	0	DPR3 E	Knudsen 3.5khz r-02	GDC	12-47.47S	170-23.43W	g	COOK04MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				P	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#	-----			-----						
*** Digital Gravity ***										
0200	121100	0	GVDR	B Gravity data	GDC	17-32.03S	149-34.34W	g		COOK04MV
1800	221200	0	GVDR	E Gravity data	GDC	13-47.48S	171-45.35W	g		COOK04MV
*** Integrated Meteorological Data Acquisition ***										
0200	121100	0	IMET	B Weather measurements	GDC	17-32.03S	149-34.34W	g		COOK04MV
1800	221200	0	IMET	E Weather measurements	GDC	13-47.48S	171-45.35W	g		COOK04MV
*** Acoustic Doppler Current Profiler ***										
0200	121100	0	ADCP	B 300khz current meas.	GDC	17-32.03S	149-34.34W	g		COOK04MV
1800	221200	0	ADCP	E 300khz current meas.	GDC	13-47.48S	171-45.35W	g		COOK04MV
*** Digital Magnetics (Earth Total Field) ***										
0414	121100	0	MGDR	B Digital mag data	GDC	17-47.58S	149-44.24W	g		COOK04MV
2300	211200	0	MGDR	E Digital mag data	GDC	12-47.47S	170-23.43W	g		COOK04MV
*** Aerosol samples ***										
2306	131100	0	ASXX	B Aerosol sample 1	URI	25-52.83S	152-30.77W	g		COOK04MV
0206	141100	0	ASXX	E Aerosol sample 1	URI	26-28.89S	152-42.12W	g		COOK04MV
1214	141100	0	ASXX	B Aerosol sample 2	URI	28-26.18S	153-19.48W	g		COOK04MV
1512	141100	0	ASXX	E Aerosol sample 2	URI	29-00.92S	153-30.67W	g		COOK04MV
1212	151100	0	ASXX	B Aerosol sample 3	URI	32-52.74S	154-47.11W	g		COOK04MV
1510	151100	0	ASXX	E Aerosol sample 3	URI	33-25.80S	154-58.27W	g		COOK04MV
2215	151100	0	ASXX	B Aerosol sample 4	URI	34-43.77S	155-24.88W	g		COOK04MV
0112	161100	0	ASXX	E Aerosol sample 4	URI	35-14.66S	155-35.54W	g		COOK04MV
1213	161100	0	ASXX	B Aerosol sample 5	URI	37-15.77S	155-22.04W	g		COOK04MV
1506	161100	0	ASXX	E Aerosol sample 5	URI	37-48.54S	155-09.23W	g		COOK04MV
2302	171100	0	ASXX	B Aerosol sample 6	URI	35-41.58S	152-40.17W	g		COOK04MV
0205	181100	0	ASXX	E Aerosol sample 6	URI	35-22.00S	152-01.21W	g		COOK04MV
1213	181100	0	ASXX	B Aerosol sample 7	URI	34-20.28S	149-59.38W	g		COOK04MV
1511	181100	0	ASXX	E Aerosol sample 7	URI	34-03.06S	149-25.67W	g		COOK04MV
2215	181100	0	ASXX	B Aerosol sample 8	URI	33-50.43S	149-01.01W	g		COOK04MV
0116	191100	0	ASXX	E Aerosol sample 8	URI	33-38.67S	148-37.11W	g		COOK04MV
1213	191100	0	ASXX	B Aerosol sample 9	URI	32-57.81S	147-52.89W	g		COOK04MV
1509	191100	0	ASXX	E Aerosol sample 9	URI	32-50.52S	148-18.96W	g		COOK04MV
2215	191100	0	ASXX	B Aerosol sample 10	URI	32-32.34S	149-23.83W	g		COOK04MV
2343	191100	0	ASXX	E Aerosol sample 10	URI	32-28.56S	149-37.31W	g		COOK04MV
2212	211100	0	ASXX	B Aerosol sample 11	URI	28-32.09S	151-22.05W	g		COOK04MV
0106	221100	0	ASXX	E Aerosol sample 11	URI	28-09.13S	151-12.53W	g		COOK04MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#	-----			-----						
1214	221100	0	ASXX	B Aerosol sample 12	URI	26-47.85S	150-46.94W		g	COOK04MV
1512	221100	0	ASXX	E Aerosol sample 12	URI	26-39.46S	151-13.92W		g	COOK04MV
2213	221100	0	ASXX	B Aerosol sample 13	URI	26-20.51S	152-14.78W		g	COOK04MV
0111	231100	0	ASXX	E Aerosol sample 13	URI	26-12.50S	152-40.46W		g	COOK04MV
2215	231100	0	ASXX	B Aerosol sample 14	URI	25-16.32S	155-39.69W		g	COOK04MV
0112	241100	0	ASXX	E Aerosol sample 14	URI	25-08.47S	156-04.61W		g	COOK04MV
1217	241100	0	ASXX	B Aerosol sample 15	URI	24-40.31S	157-33.77W		g	COOK04MV
1517	241100	0	ASXX	E Aerosol sample 15	URI	24-28.81S	157-41.74W		g	COOK04MV
1220	251100	0	ASXX	B Aerosol sample 16	URI	22-41.08S	156-05.90W		g	COOK04MV
1531	251100	0	ASXX	E Aerosol sample 16	URI	22-25.01S	155-51.71W		g	COOK04MV
1230	281100	0	ASXX	B Aerosol sample 17	URI	16-28.56S	157-45.49W		g	COOK04MV
1533	281100	0	ASXX	E Aerosol sample 17	URI	16-08.76S	157-33.79W		g	COOK04MV
2340	281100	0	ASXX	B Aerosol sample 18	URI	15-28.97S	158-00.77W		g	COOK04MV
0241	291100	0	ASXX	E Aerosol sample 18	URI	15-52.48S	158-14.80W		g	COOK04MV
1230	291100	0	ASXX	B Aerosol sample 19	URI	17-06.05S	158-58.88W		g	COOK04MV
1532	291100	0	ASXX	E Aerosol sample 19	URI	17-27.55S	159-11.81W		g	COOK04MV
0004	301100	0	ASXX	B Aerosol sample 20	URI	17-57.85S	160-02.20W		g	COOK04MV
0302	301100	0	ASXX	E Aerosol sample 20	URI	17-39.31S	159-51.04W		g	COOK04MV
2314	301100	0	ASXX	B Aerosol sample 21	URI	15-36.09S	158-37.28W		g	COOK04MV
0302	011200	0	ASXX	E Aerosol sample 21	URI	15-14.30S	158-24.32W		g	COOK04MV
2215	011200	0	ASXX	B Aerosol sample 22	URI	16-11.11S	159-45.54W		g	COOK04MV
0115	021200	0	ASXX	E Aerosol sample 22	URI	16-32.34S	159-58.29W		g	COOK04MV
2230	021200	0	ASXX	B Aerosol sample 23	URI	16-35.08S	160-40.65W		g	COOK04MV
0130	031200	0	ASXX	E Aerosol sample 23	URI	16-19.27S	160-26.90W		g	COOK04MV
1303	031200	0	ASXX	B Aerosol sample 24	URI	15-20.84S	159-36.26W		g	COOK04MV
1503	031200	0	ASXX	E Aerosol sample 24	URI	15-10.20S	159-27.07W		g	COOK04MV
2215	031200	0	ASXX	B Aerosol sample 25	URI	14-31.17S	158-53.40W		g	COOK04MV
0122	041200	0	ASXX	E Aerosol sample 25	URI	14-14.22S	158-38.80W		g	COOK04MV
2215	071200	0	ASXX	B Aerosol sample 26	URI	13-32.07S	158-41.57W		g	COOK04MV
2315	071200	0	ASXX	E Aerosol sample 26	URI	13-40.20S	158-42.94W		g	COOK04MV
2245	091200	0	ASXX	B Aerosol sample 27	URI	11-22.44S	160-33.69W		g	COOK04MV
0155	101200	0	ASXX	E Aerosol sample 27	URI	10-58.39S	160-30.01W		g	COOK04MV
1300	101200	0	ASXX	B Aerosol sample 28	URI	11-35.75S	159-09.29W		g	COOK04MV
1600	101200	0	ASXX	E Aerosol sample 28	URI	11-45.97S	158-47.43W		g	COOK04MV
1300	111200	0	ASXX	B Aerosol sample 29	URI	11-03.08S	159-16.75W		g	COOK04MV
1600	111200	0	ASXX	E Aerosol sample 29	URI	10-52.62S	159-39.39W		g	COOK04MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				P	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#	-----	---	---	-----	---	-----	-----	-----	---	-----
#*** Expendable Bathythermographs ***										
2327	121100	0	BTXP	XBT tf_00407.edf	GDC	21-26.04S	151-04.31W	g		COOK04MV
2206	131100	0	BTXP	XBT tf_00408.edf	GDC	25-40.76S	152-26.98W	g		COOK04MV
2222	141100	0	BTXP	XBT tf_00409.edf	GDC	30-18.61S	153-55.96W	g		COOK04MV
2221	151100	0	BTXP	XBT tf_00410.edf	GDC	34-44.85S	155-25.25W	g		COOK04MV
2226	161100	0	BTXP	XBT tf_00411.edf	GDC	38-40.98S	154-16.67W	g		COOK04MV
2236	171100	0	BTXP	XBT tf_00412.edf	GDC	35-45.34S	152-42.05W	g		COOK04MV
2310	181100	0	BTXP	XBT tf_00413.edf	GDC	33-46.73S	148-53.80W	g		COOK04MV
2247	191100	0	BTXP	XBT tf_00414.edf	GDC	32-30.95S	149-28.79W	g		COOK04MV
2302	191100	0	BTXP	XBT tf_00415.edf	GDC	32-30.30S	149-31.11W	g		COOK04MV
2246	201100	0	BTXP	XBT tf_00416.edf	GDC	31-25.65S	152-35.14W	g		COOK04MV
2232	211100	0	BTXP	XBT tf_00417.edf	GDC	28-29.53S	151-20.99W	g		COOK04MV
2248	211100	0	BTXP	XBT tf_00418.edf	GDC	28-27.50S	151-20.15W	g		COOK04MV
2302	221100	0	BTXP	XBT tf_00419.edf	GDC	26-18.30S	152-21.87W	g		COOK04MV
2316	231100	0	BTXP	XBT tf_00420.edf	GDC	25-13.51S	155-48.61W	g		COOK04MV
2300	241100	0	BTXP	XBT tf_00421.edf	GDC	23-48.47S	157-05.69W	g		COOK04MV
2308	241100	0	BTXP	XBT tf_00422.edf	GDC	23-47.80S	157-05.09W	g		COOK04MV
2206	251100	0	BTXP	XBT tf_00423.edf	GDC	21-57.37S	156-23.24W	g		COOK04MV
2211	261100	0	BTXP	XBT tf_00424.edf	GDC	20-24.79S	159-13.64W	g		COOK04MV
2322	271100	0	BTXP	XBT tf_00425.edf	GDC	17-57.71S	158-38.39W	g		COOK04MV
2218	281100	0	BTXP	XBT tf_00426.edf	GDC	15-31.34S	157-52.19W	g		COOK04MV
2257	291100	0	BTXP	XBT tf_00427.edf	GDC	18-00.00S	159-55.46W	g		COOK04MV
0023	011200	0	BTXP	XBT tf_00428.edf	GDC	15-29.37S	158-33.29W	g		COOK04MV
0038	011200	0	BTXP	XBT tf_00429.edf	GDC	15-27.96S	158-32.45W	g		COOK04MV
2218	011200	0	BTXP	XBT tf_00430.edf	GDC	16-11.45S	159-45.74W	g		COOK04MV
2223	011200	0	BTXP	XBT tf_00431.edf	GDC	16-12.02S	159-46.09W	g		COOK04MV
2243	021200	0	BTXP	XBT tf_00432.edf	GDC	16-33.89S	160-39.62W	g		COOK04MV
2307	031200	0	BTXP	XBT tf_00433.edf	GDC	14-26.55S	158-49.42W	g		COOK04MV
2329	041200	0	BTXP	XBT tf_00434.edf	GDC	12-37.15S	158-14.62W	g		COOK04MV
2233	051200	0	BTXP	XBT tf_00435.edf	GDC	12-27.70S	160-11.08W	g		COOK04MV
2240	061200	0	BTXP	XBT tf_00436.edf	GDC	14-35.96S	159-08.31W	g		COOK04MV
2251	071200	0	BTXP	XBT tf_00437.edf	GDC	13-36.92S	158-42.39W	g		COOK04MV
2220	081200	0	BTXP	XBT tf_00438.edf	GDC	13-08.73S	158-22.45W	g		COOK04MV
2258	091200	0	BTXP	XBT tf_00439.edf	GDC	11-20.79S	160-33.44W	g		COOK04MV
2244	101200	0	BTXP	XBT tf_00440.edf	GDC	12-05.50S	157-59.54W	g		COOK04MV
2232	111200	0	BTXP	XBT tf_00441.edf	GDC	10-30.49S	160-27.24W	g		COOK04MV
2226	121200	0	BTXP	XBT tf_00442.edf	GDC	10-55.78S	158-24.15W	g		COOK04MV
2245	121200	0	BTXP	XBT tf_00443.edf	GDC	10-53.49S	158-24.28W	g		COOK04MV
0423	131200	0	BTXP	XBT tf_00444.edf	GDC	10-14.03S	158-29.27W	g		COOK04MV
2311	131200	0	BTXP	XBT tf_00445.edf	GDC	9-25.15S	159-44.34W	g		COOK04MV
2259	141200	0	BTXP	XBT tf_00447.edf	GDC	8-59.58S	160-08.65W	g		COOK04MV
2315	141200	0	BTXP	XBT tf_00448.edf	GDC	8-59.31S	160-10.61W	g		COOK04MV
2251	151200	0	BTXP	XBT tf_00449.edf	GDC	8-11.45S	160-01.38W	g		COOK04MV
2213	161200	0	BTXP	XBT tf_00450.edf	GDC	7-06.64S	159-23.39W	g		COOK04MV
2320	171200	0	BTXP	XBT tf_00452.edf	GDC	6-15.99S	159-52.53W	g		COOK04MV
2347	171200	0	BTXP	XBT tf_00451.edf	GDC	6-13.57S	159-55.15W	g		COOK04MV
2312	181200	0	BTXP	XBT tf_00453.edf	GDC	7-23.81S	162-30.37W	g		COOK04MV
2306	191200	0	BTXP	XBT tf_00454.edf	GDC	9-12.69S	165-08.65W	g		COOK04MV

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End Sample Index

COOK04MV