

***Report and Index of
Underway Marine Geophysical Data***

Cook Expedition

Leg 1

(COOK01MV)

R/V Melville

(Issued February 2001)

Ports:

San Diego, California (21 August 2000)

to

Arica, Chile (27 September 2000)

Chief Scientist:

Kenneth Bruland, Univ. of California Santa Cruz

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Computer Tech - John Chatwood

Resident Marine Tech - Bob Wilson

**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.

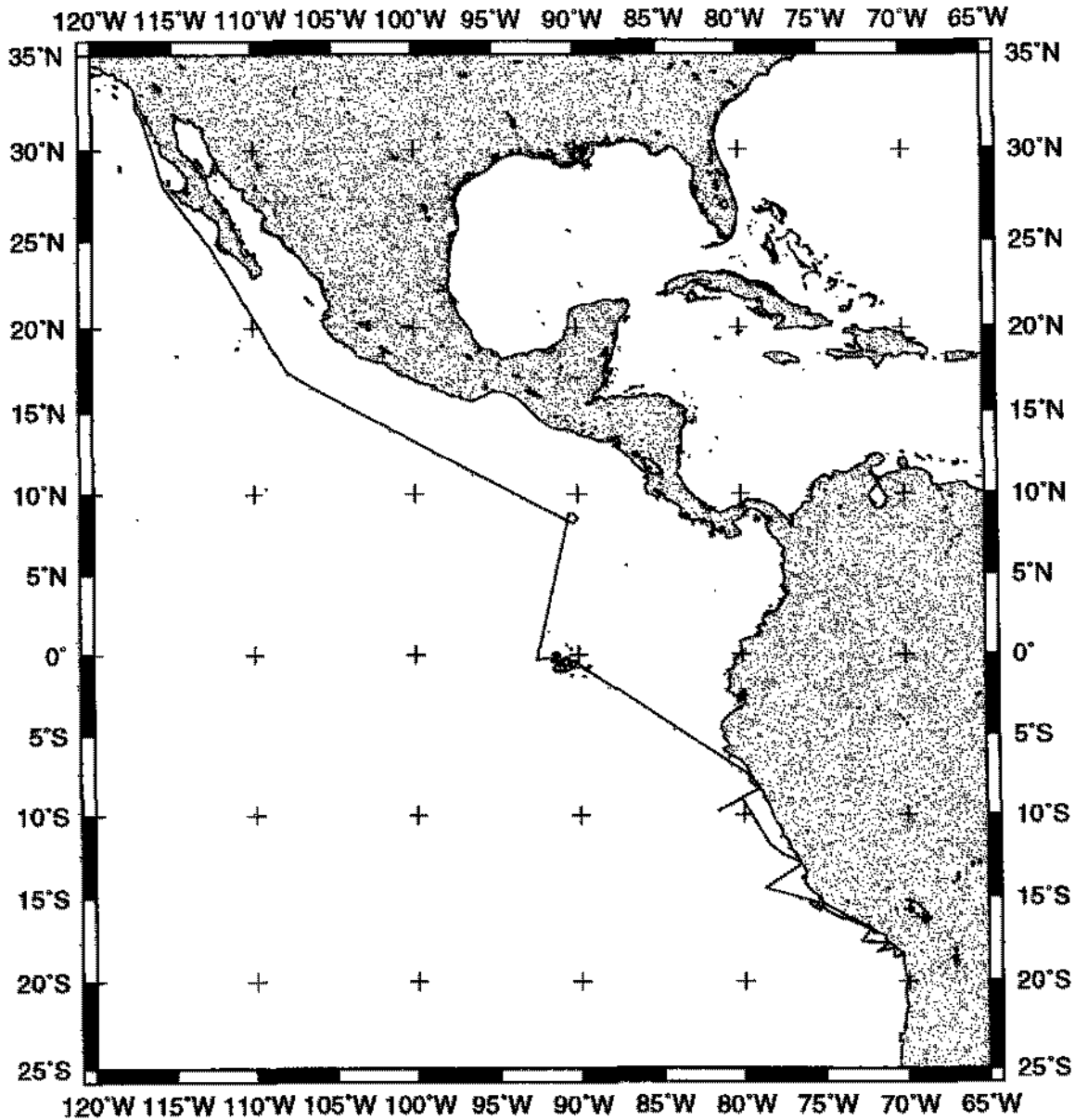
Track Charts– annotated with dates and hour ticks

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 1 (COOK01MV)

CHIEF SCIENTIST: Kenneth Bruland, Univ. of California Santa Cruz

PORTS: San Diego, California - Arica, Chile

DATES: 21 August - 27 September 2000

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise- 5800 miles

Magnetics- none collected

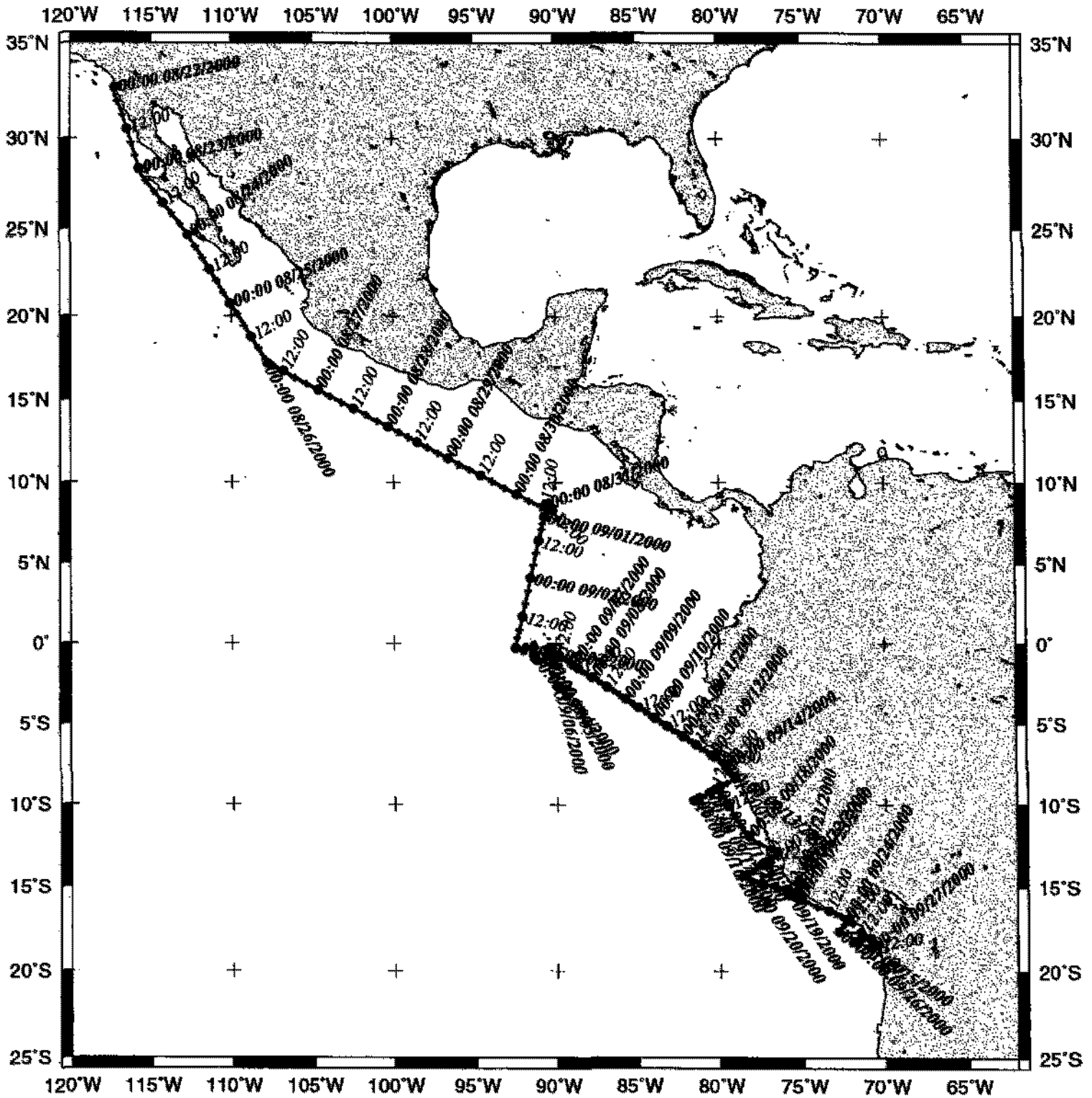
Bathymetry- 5045 miles

Seismic Reflection- none collected

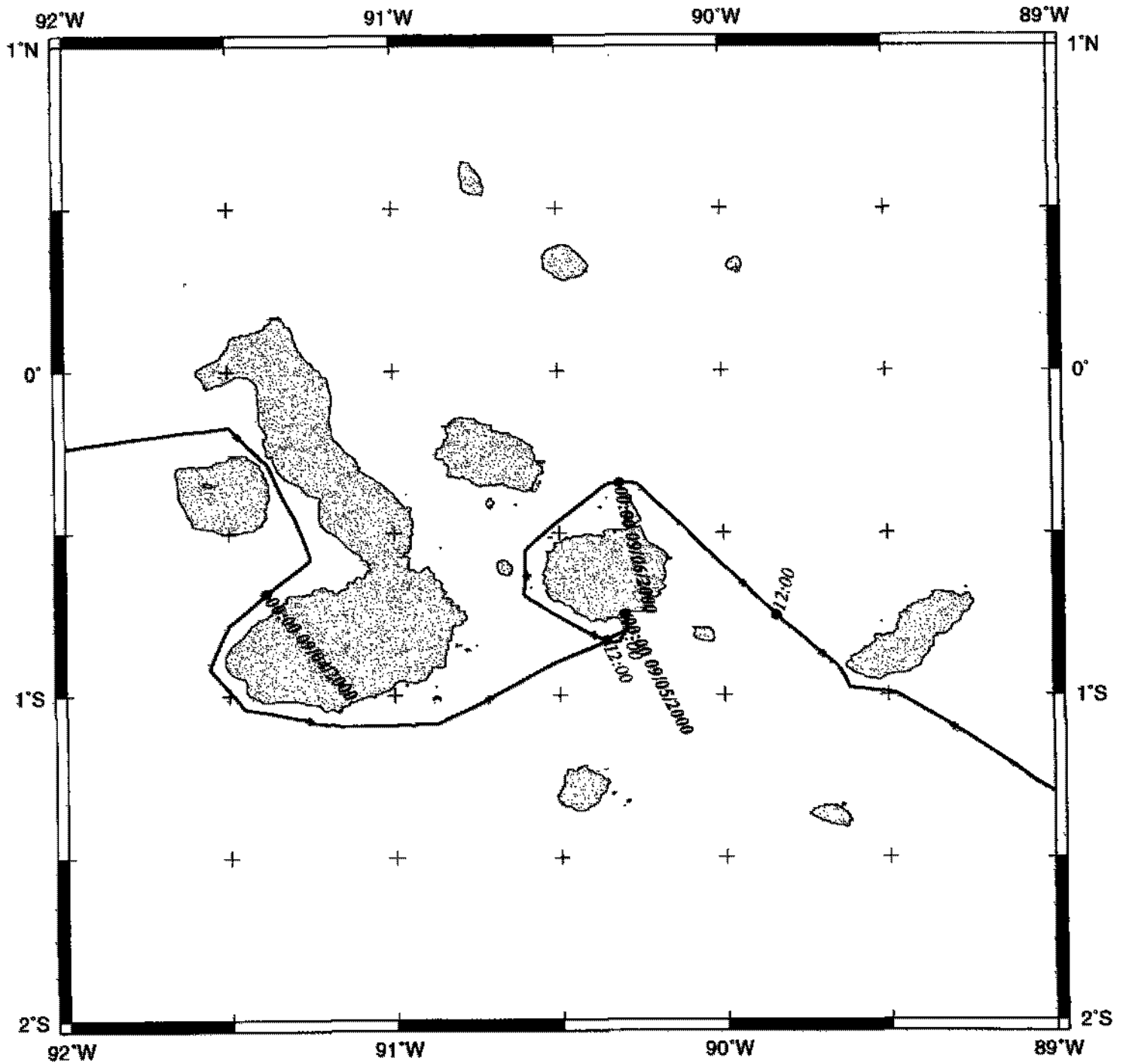
Sea Beam- 5045 miles

Gravity- 5688 miles

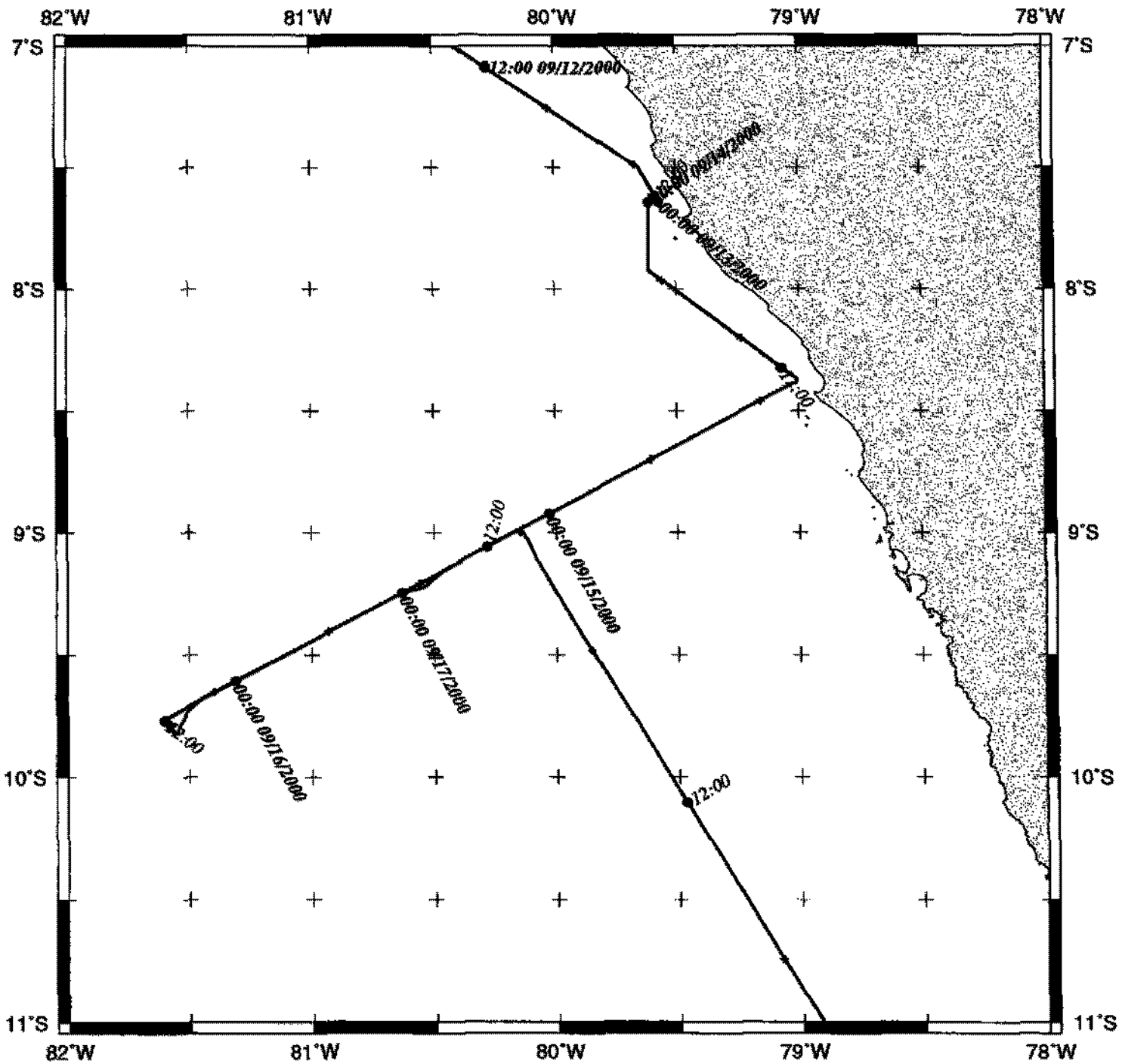
COOK leg 1 Track



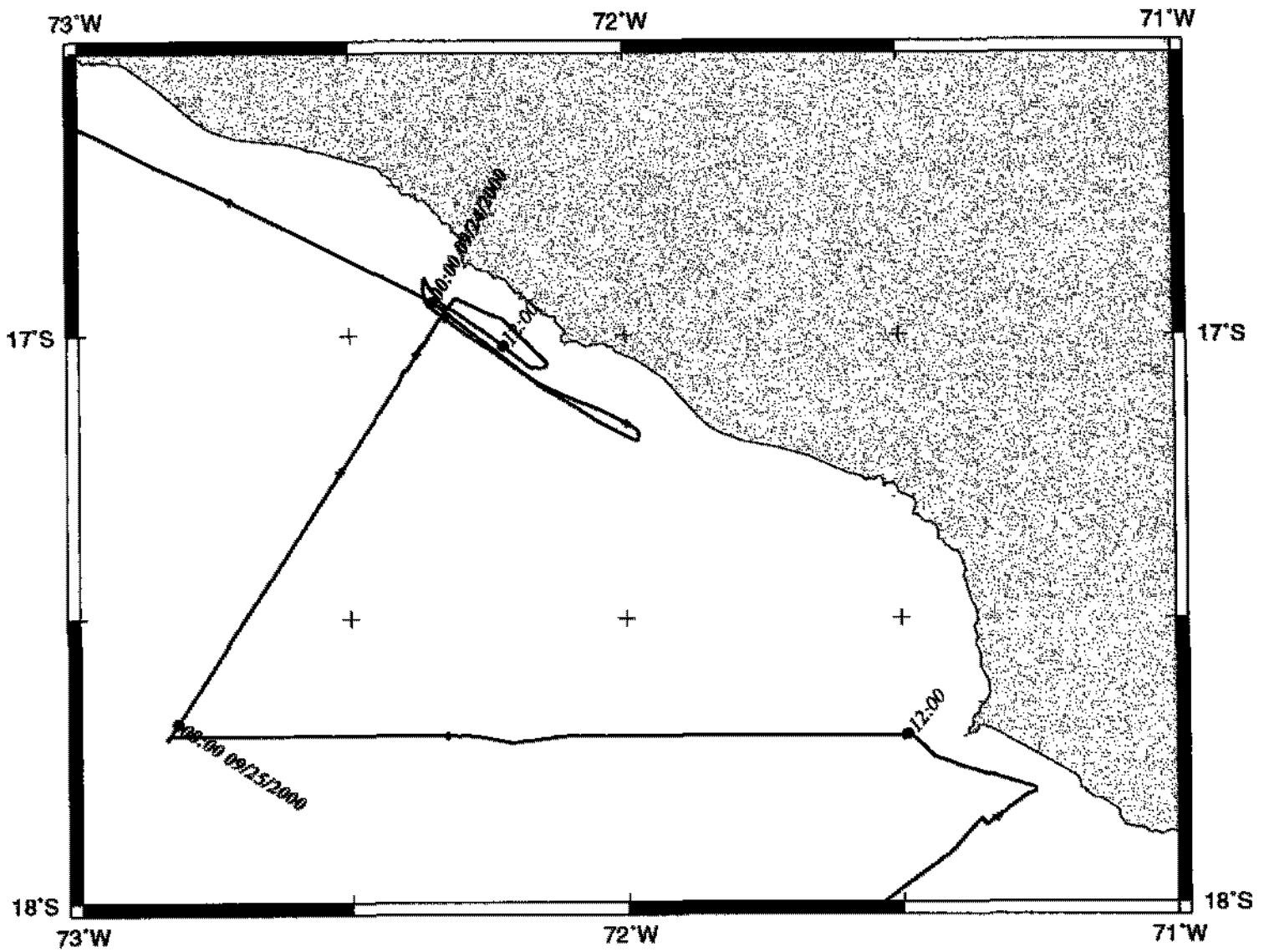
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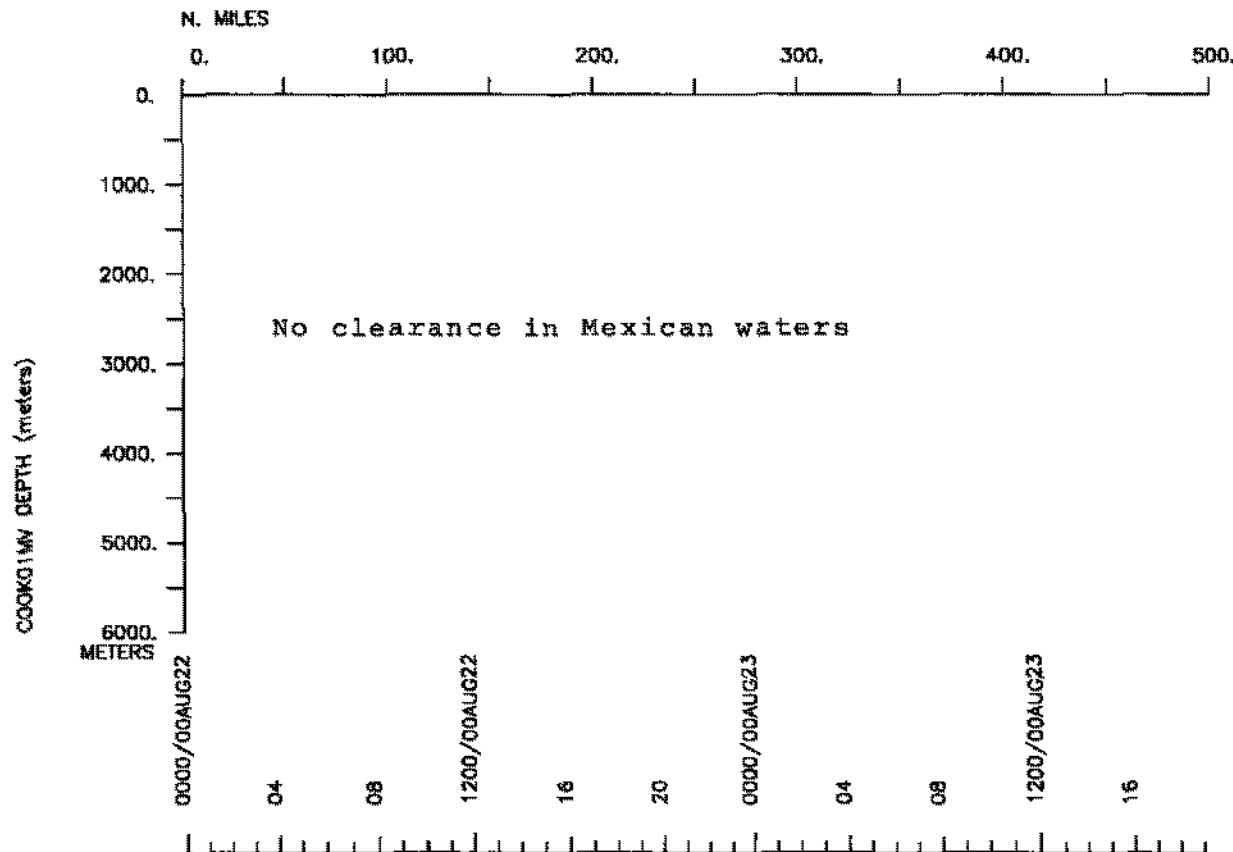
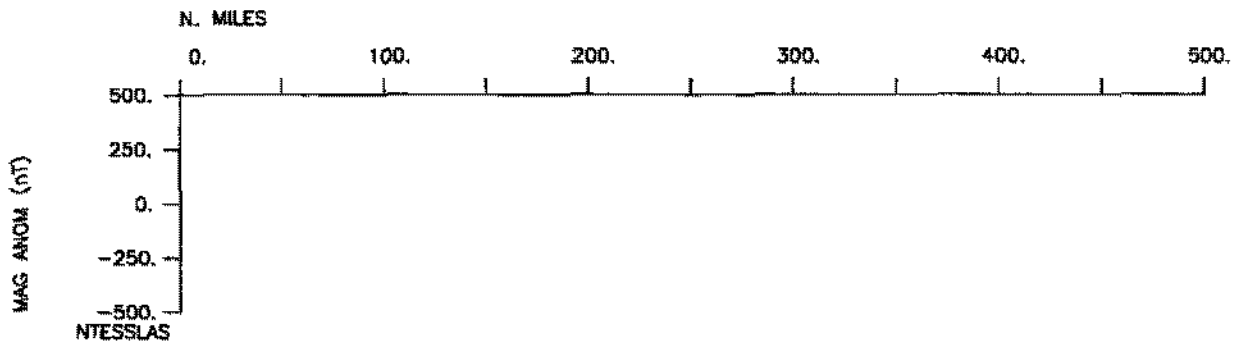
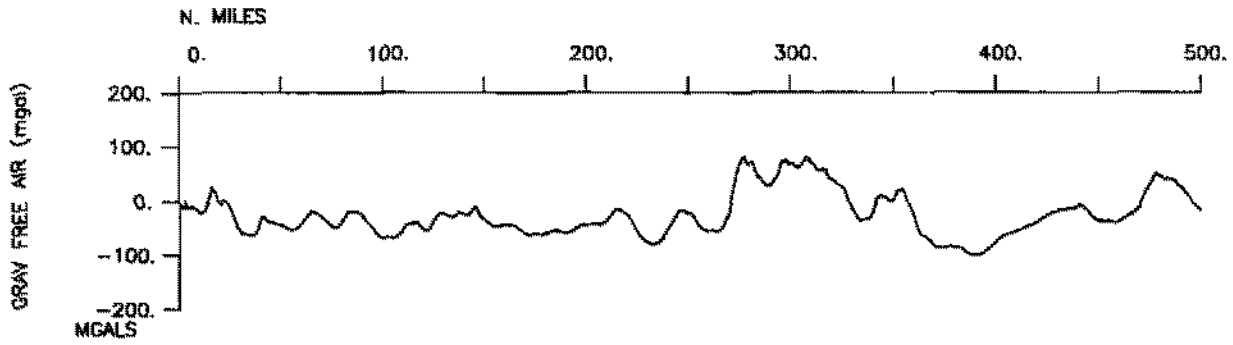


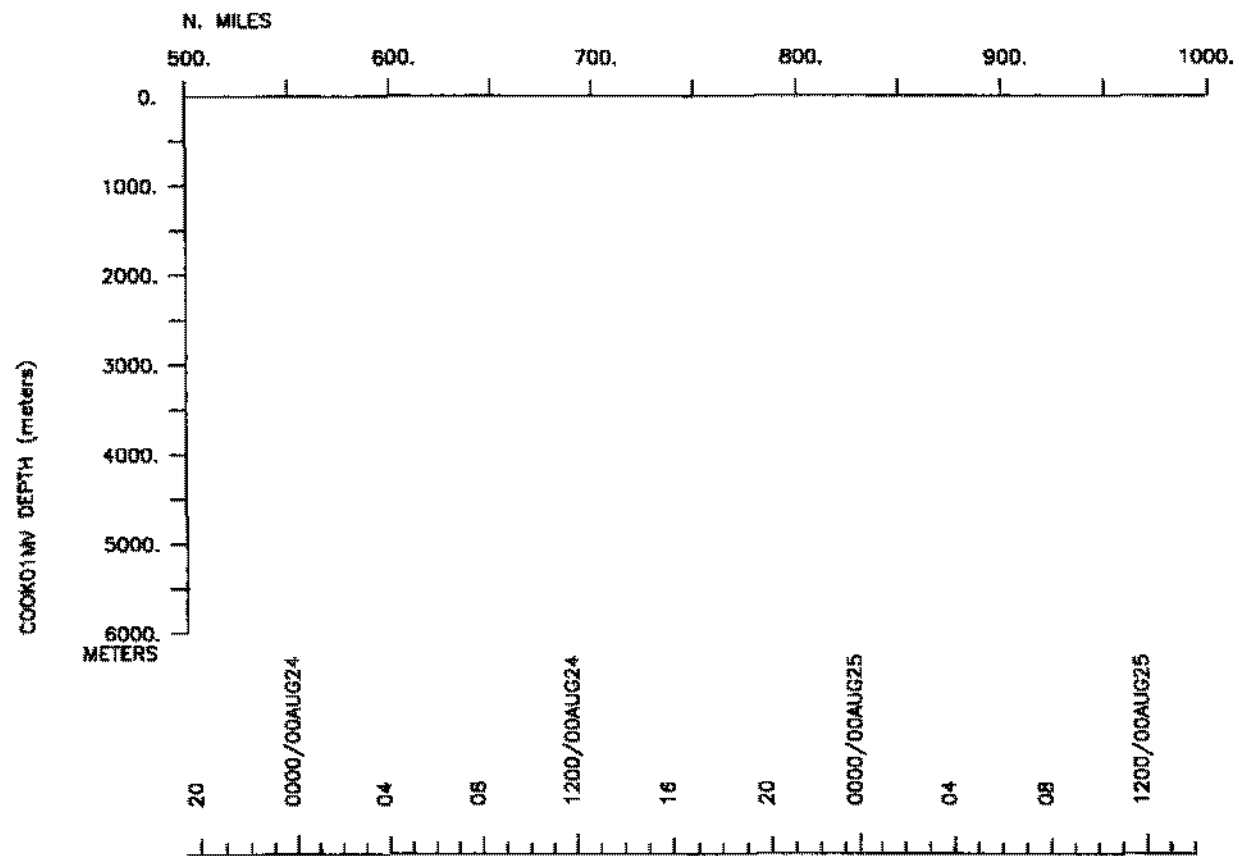
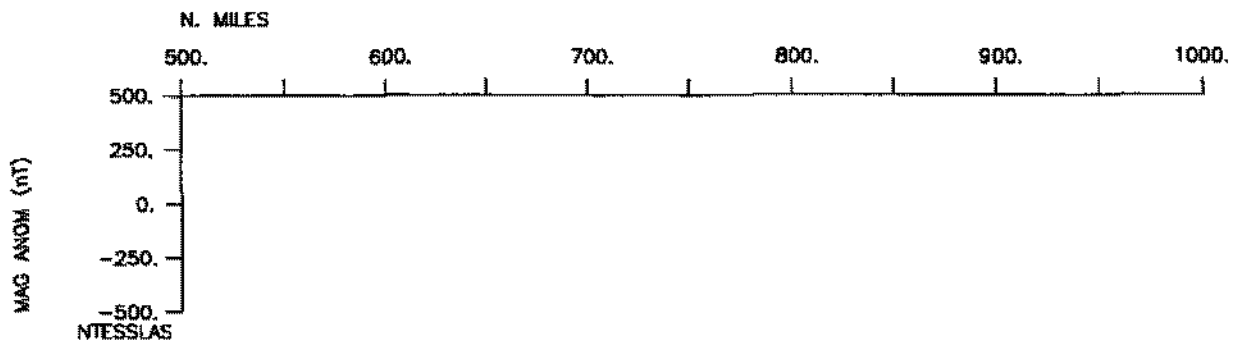
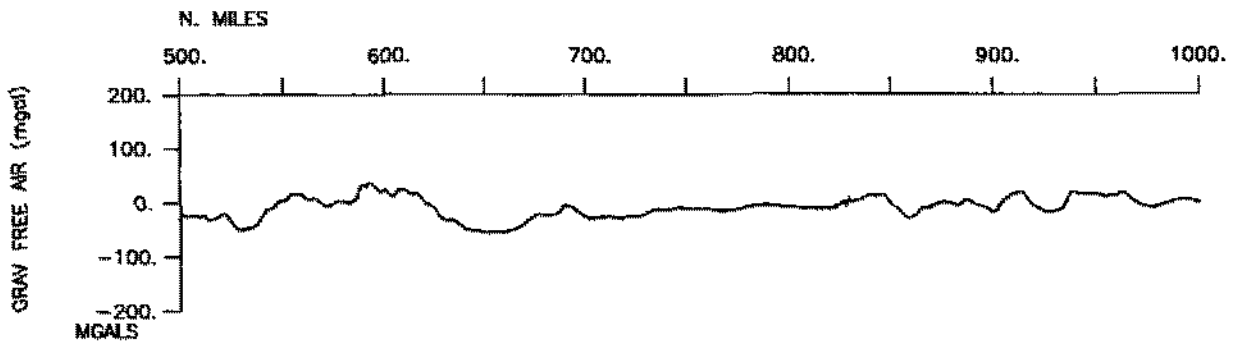
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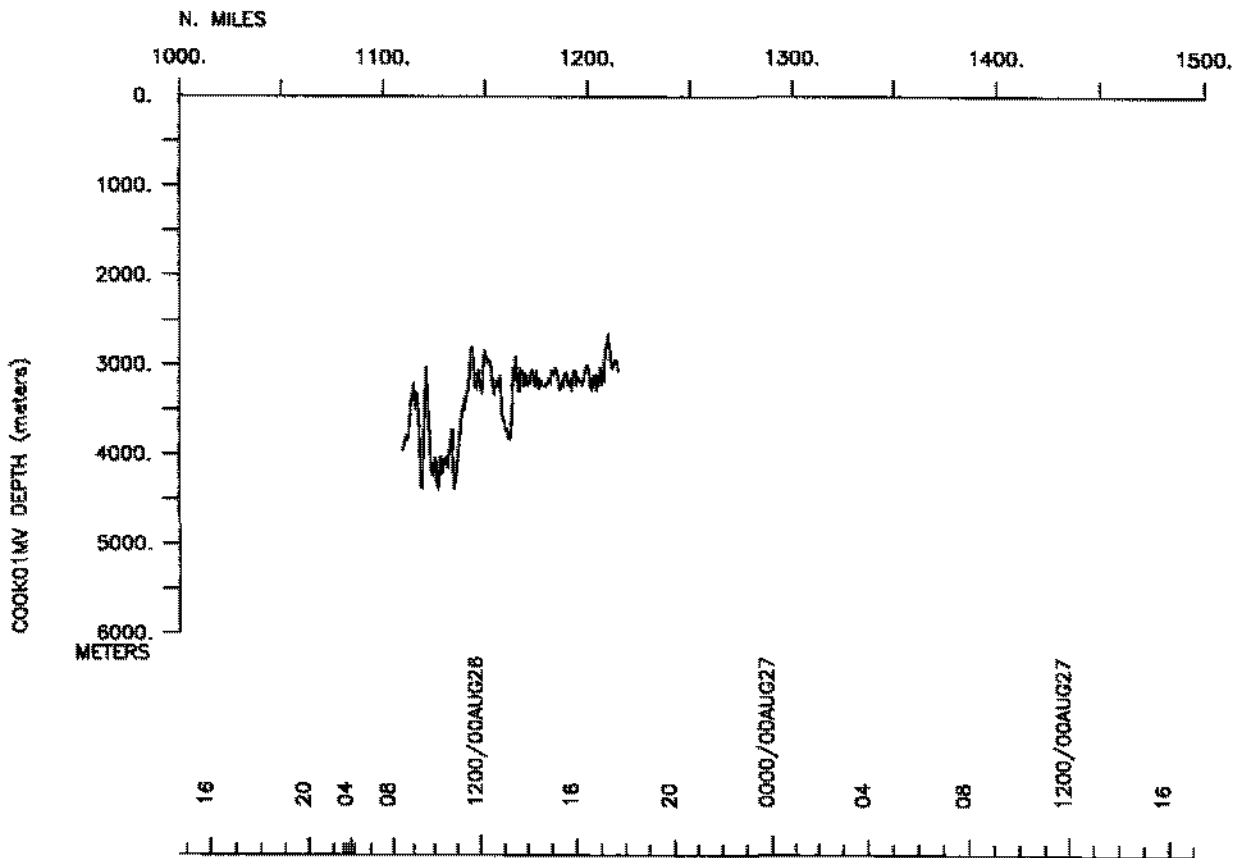
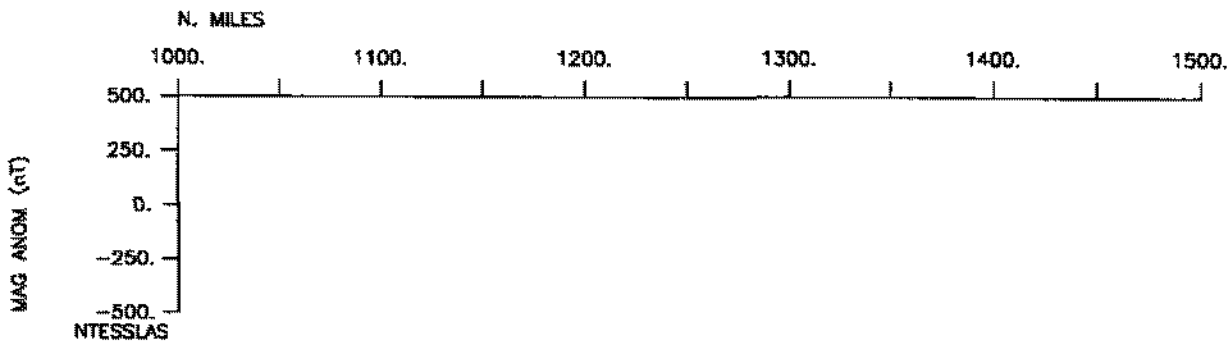
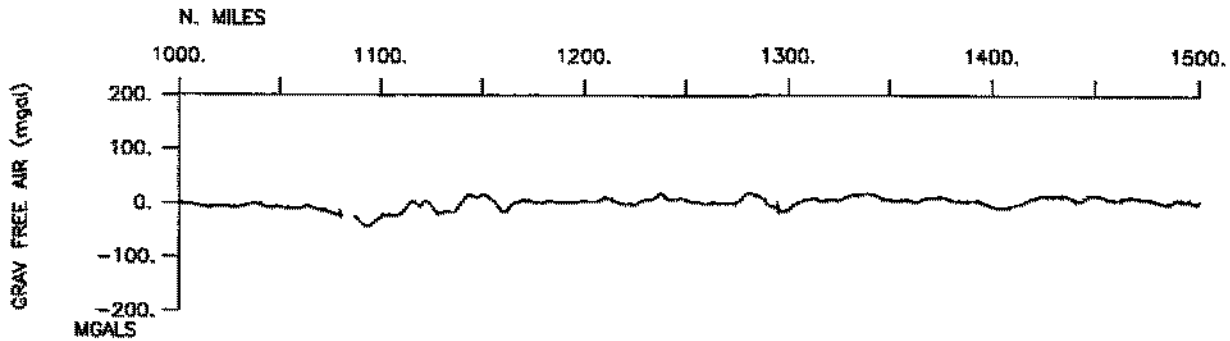


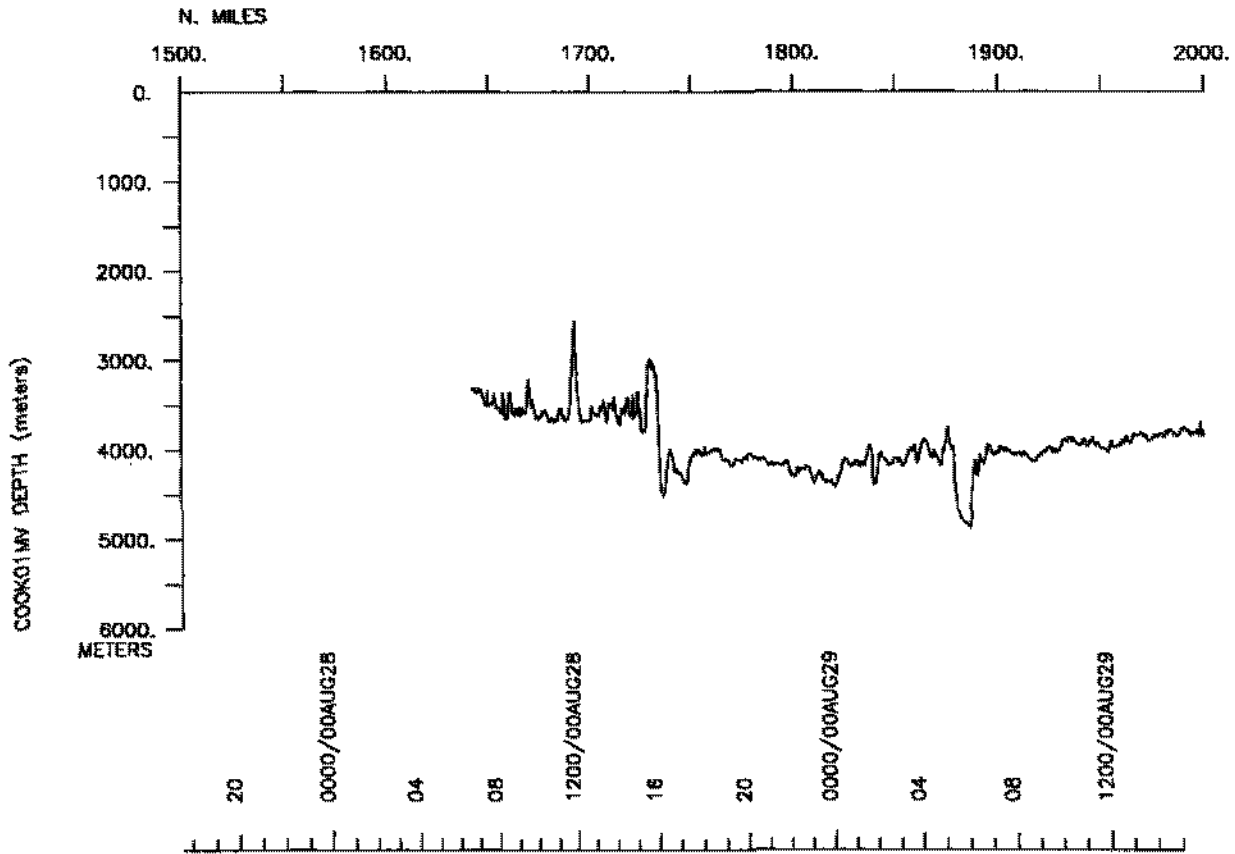
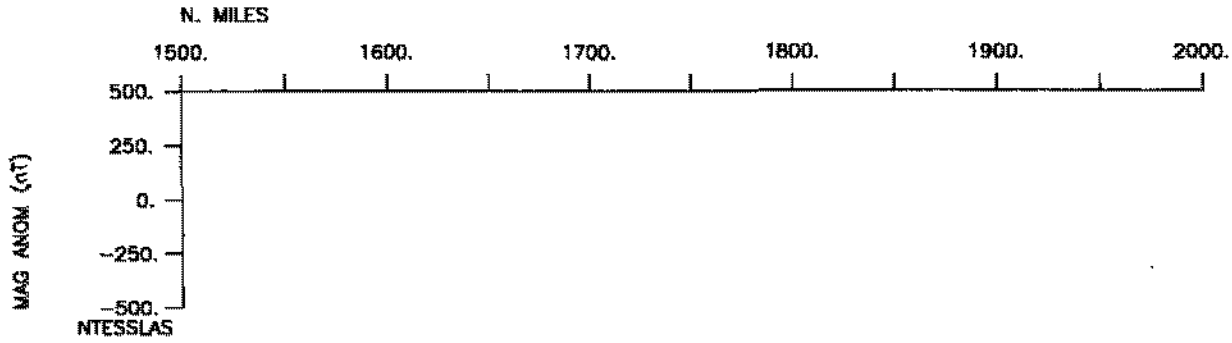
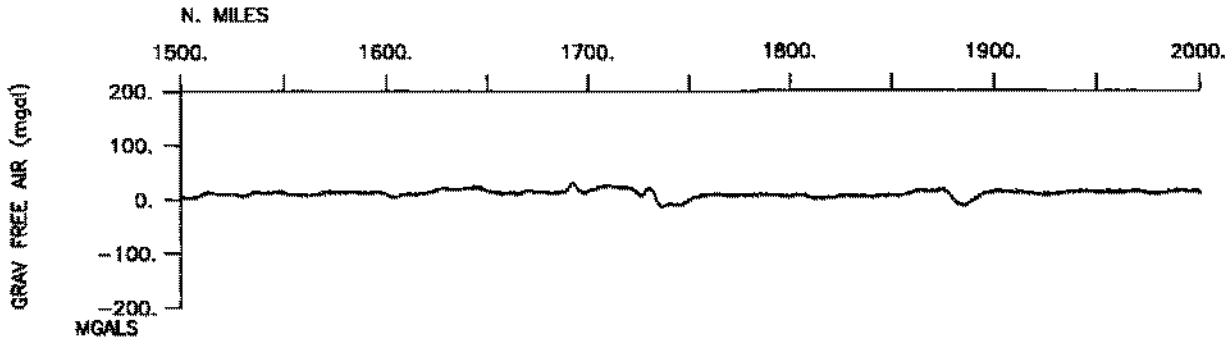
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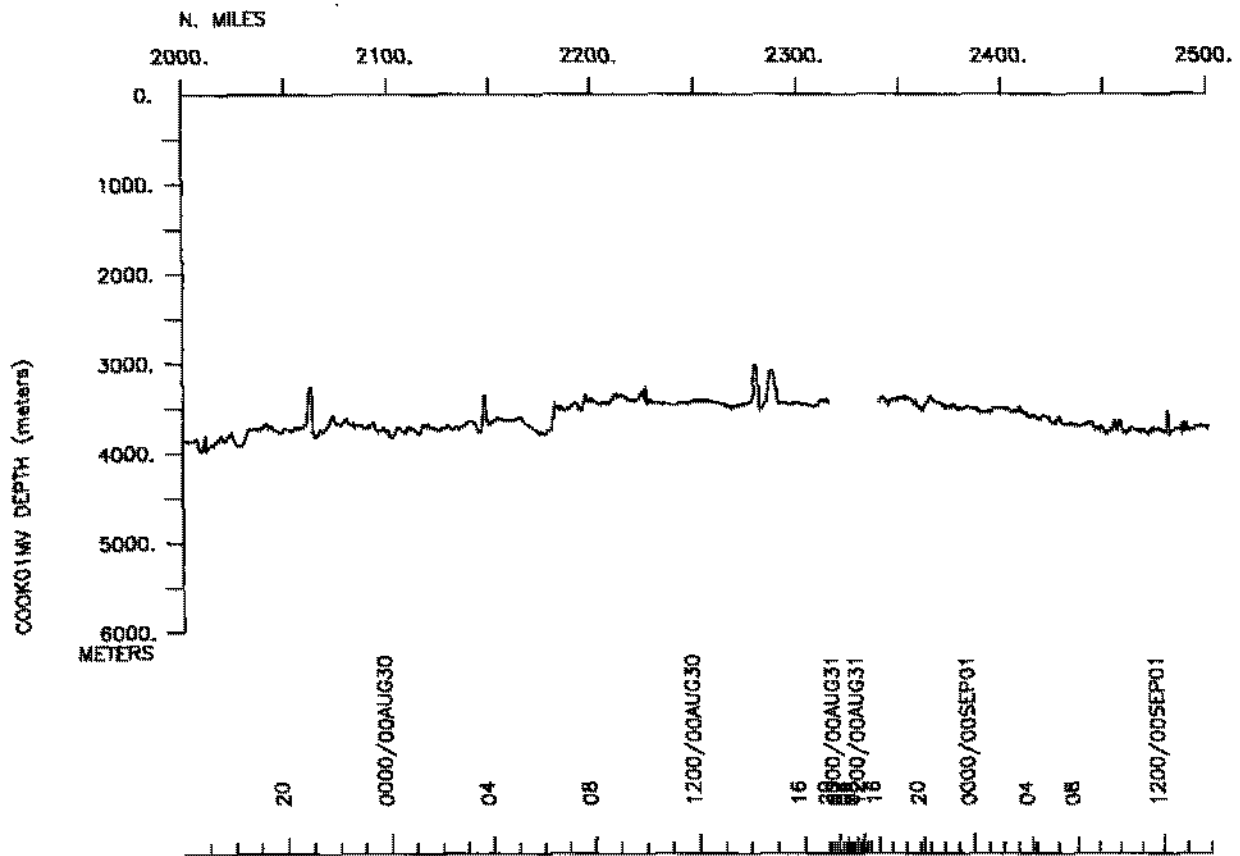
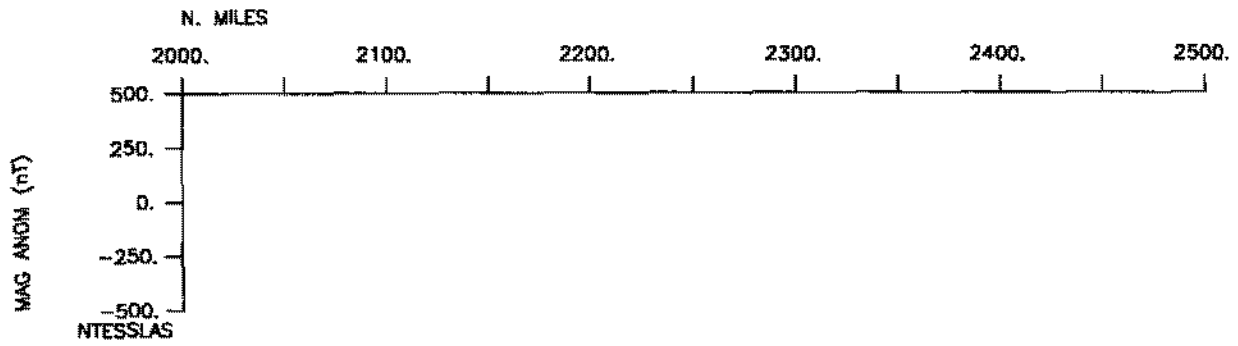
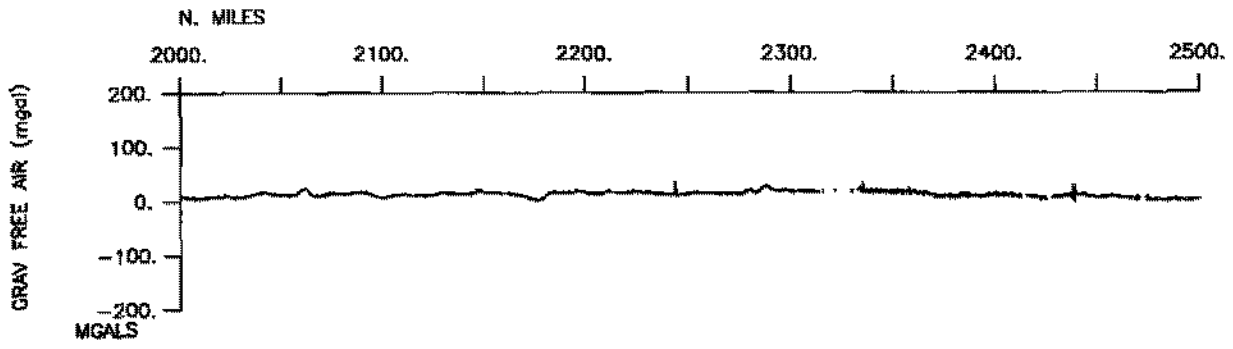


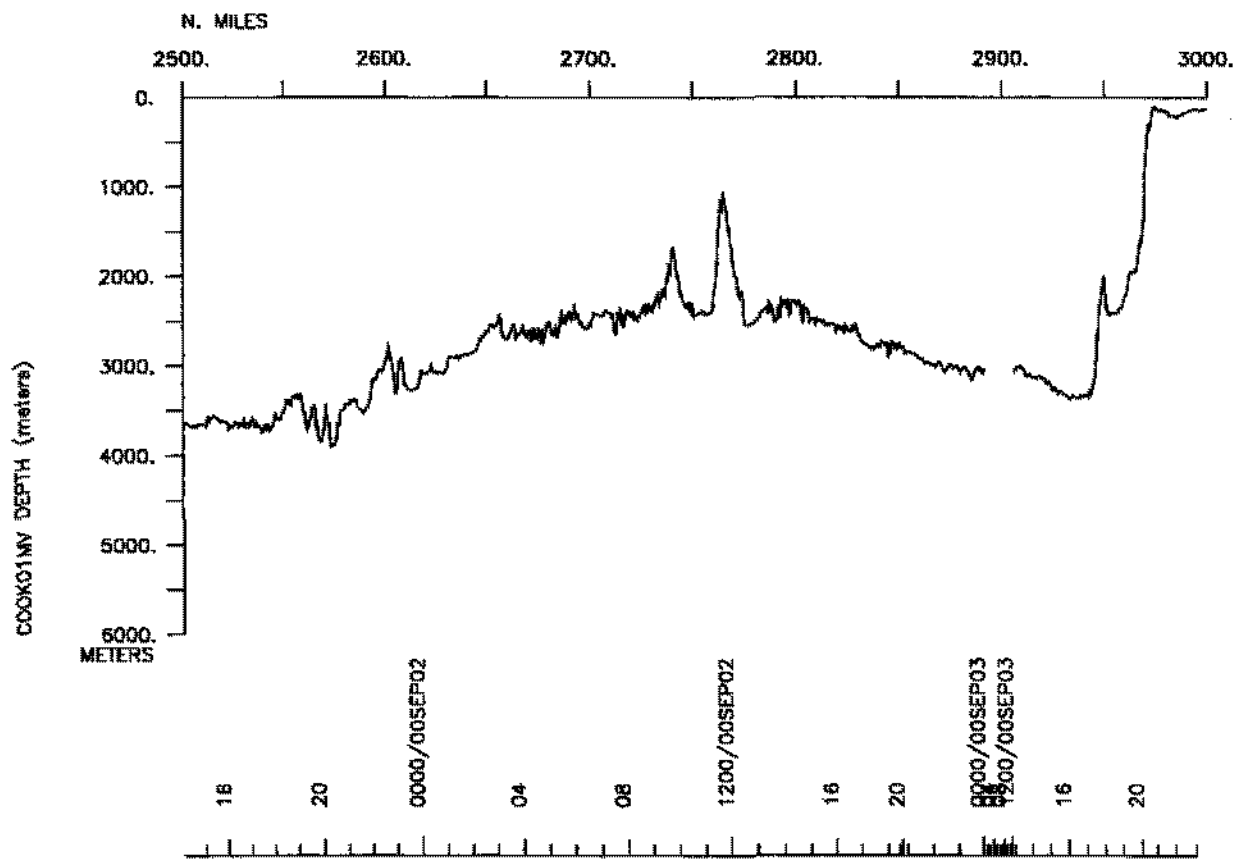
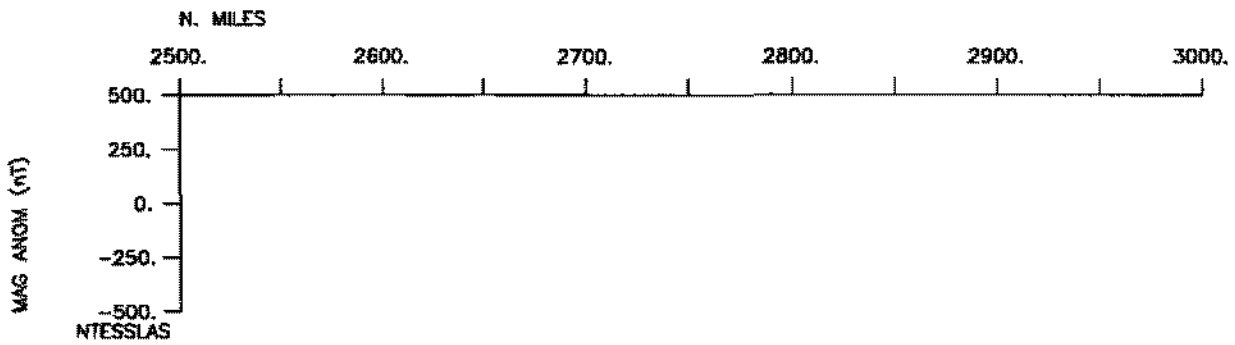
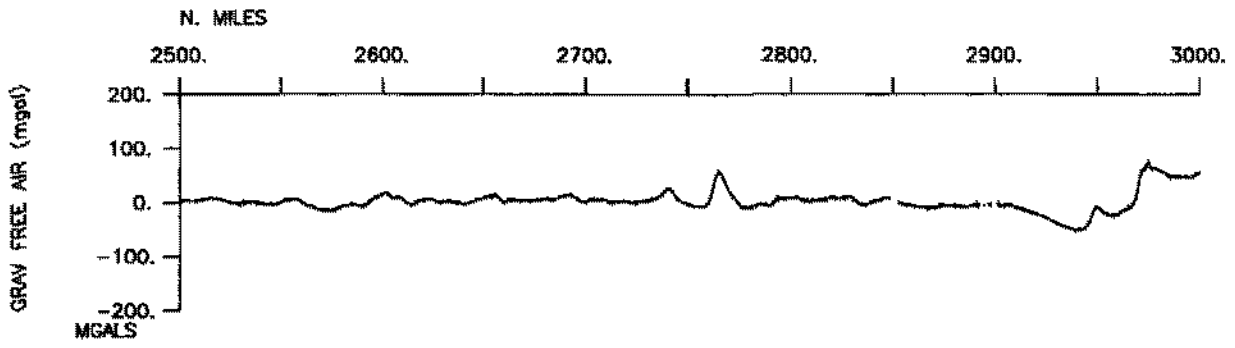


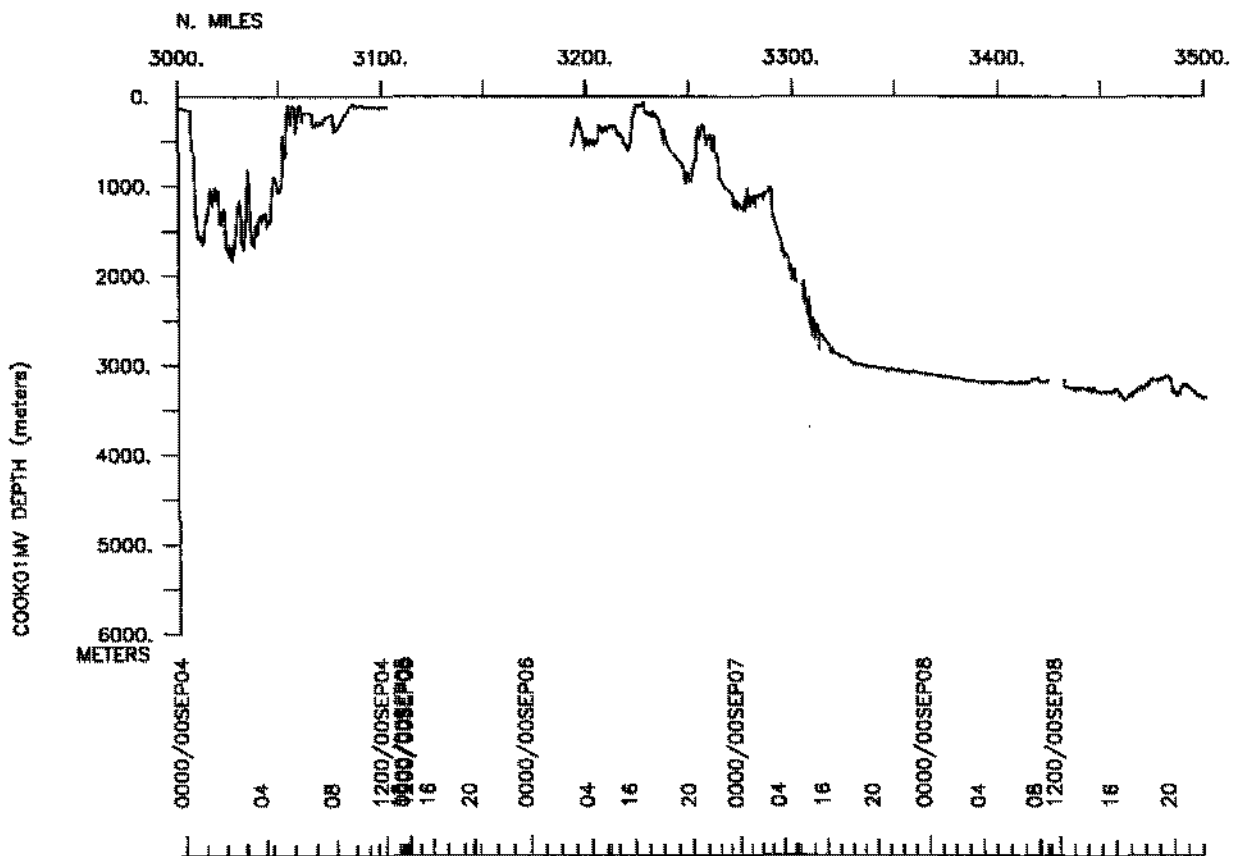
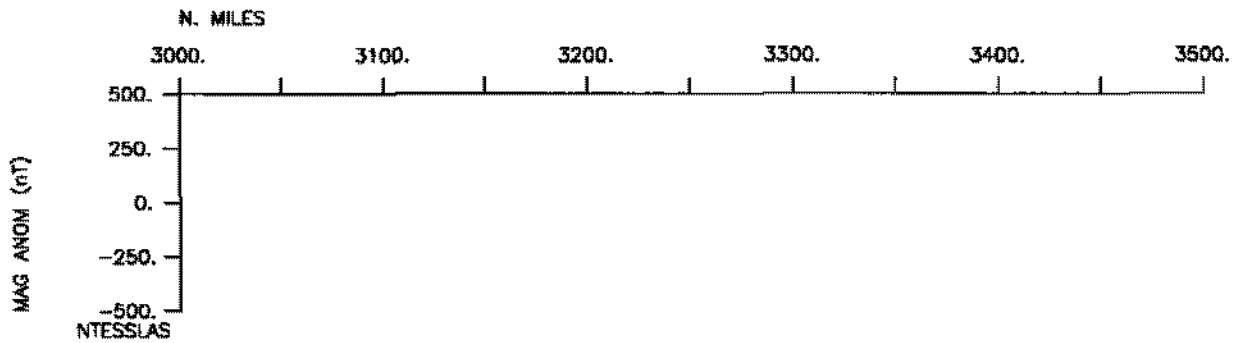
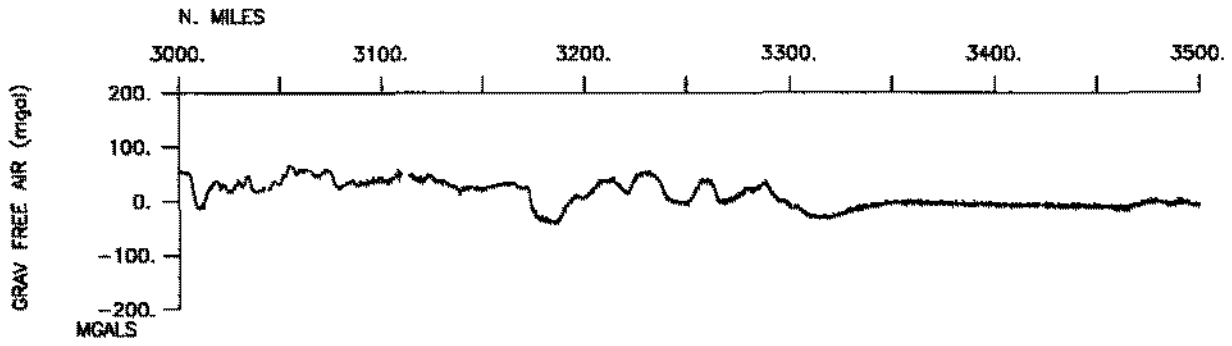


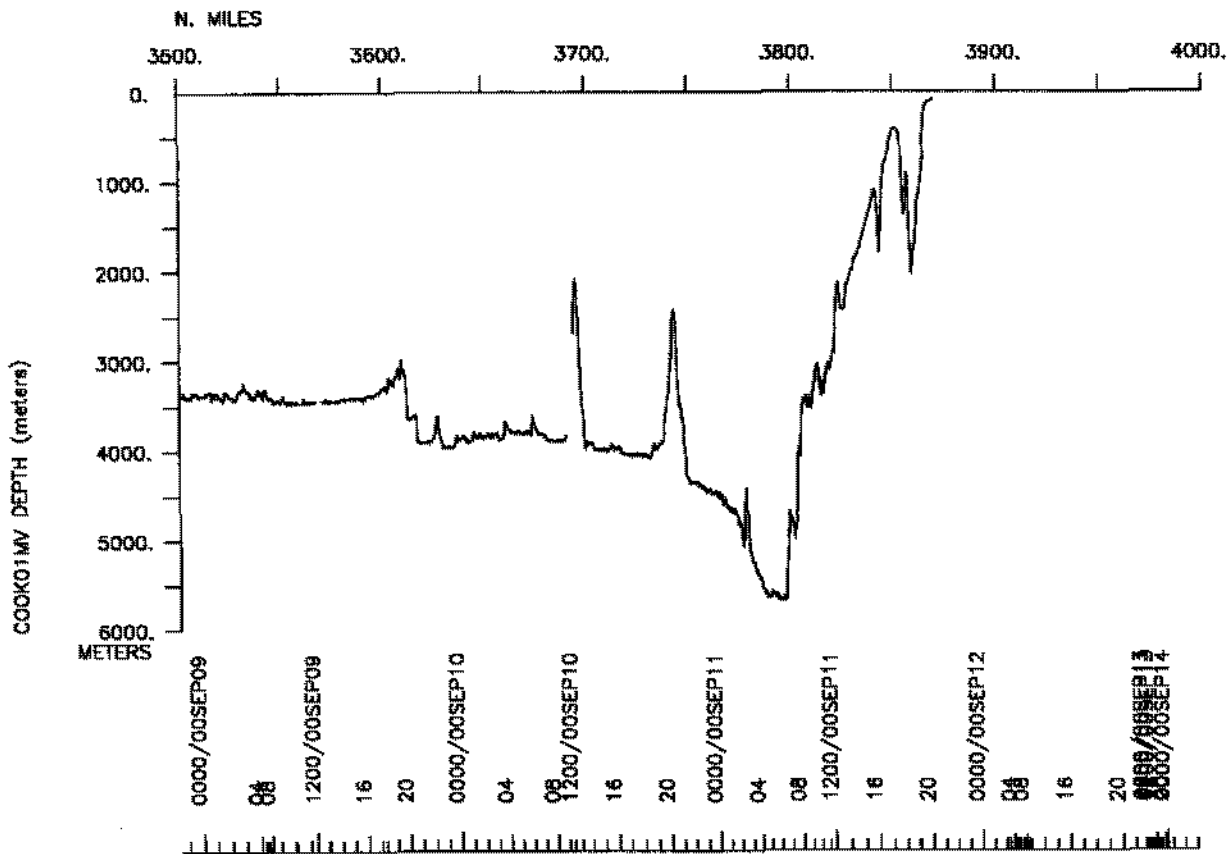
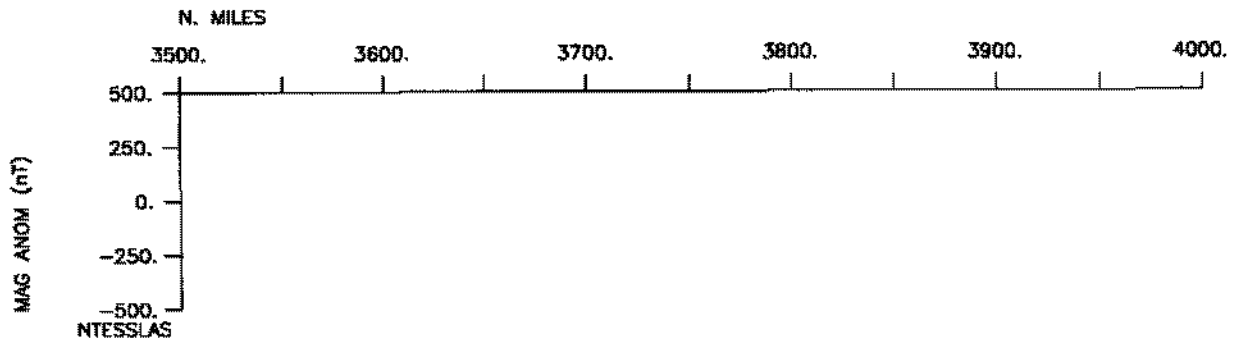
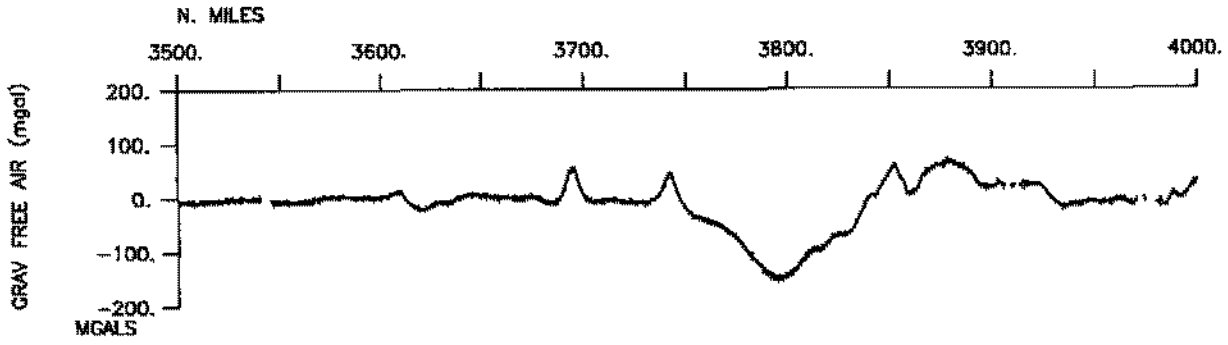


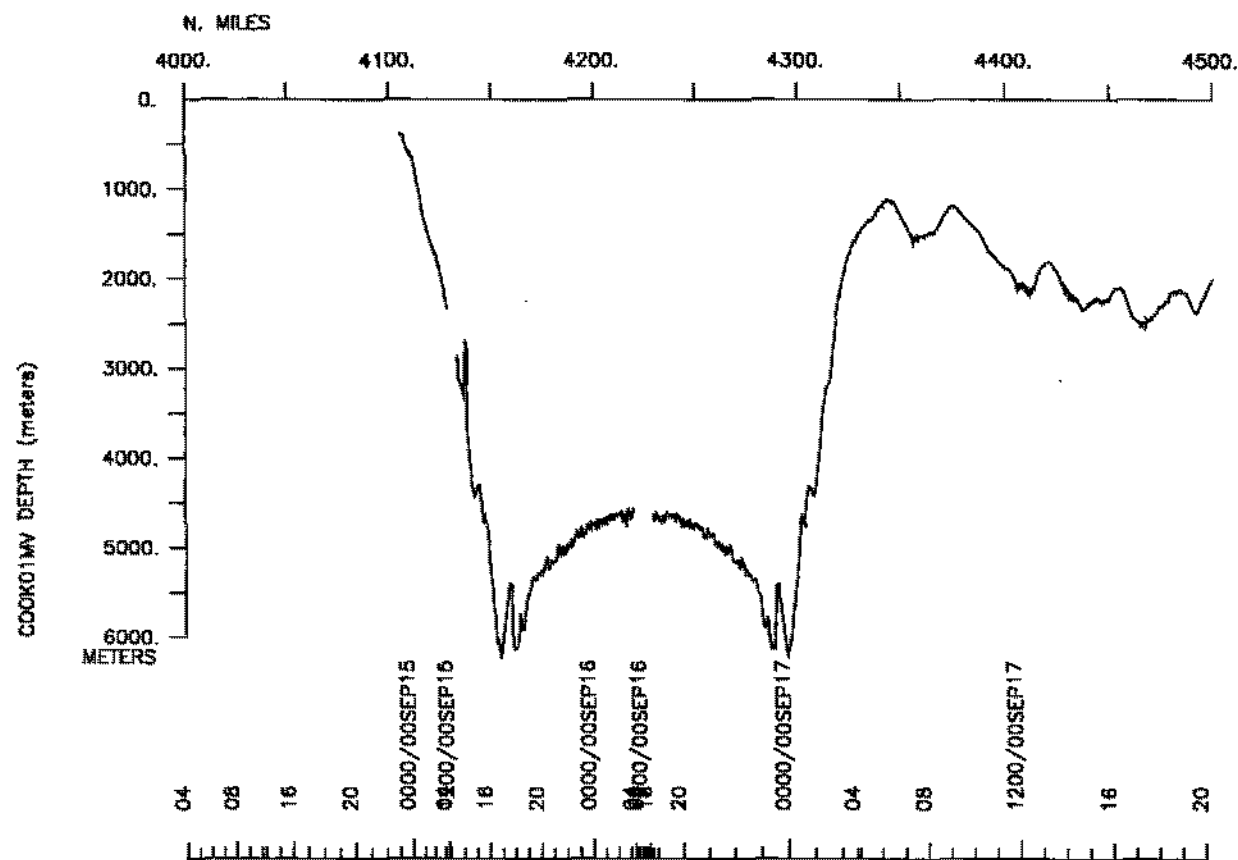
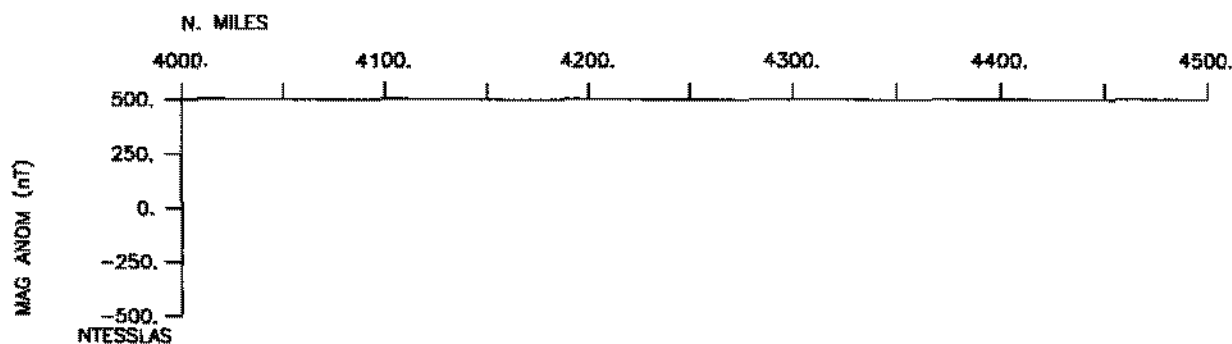
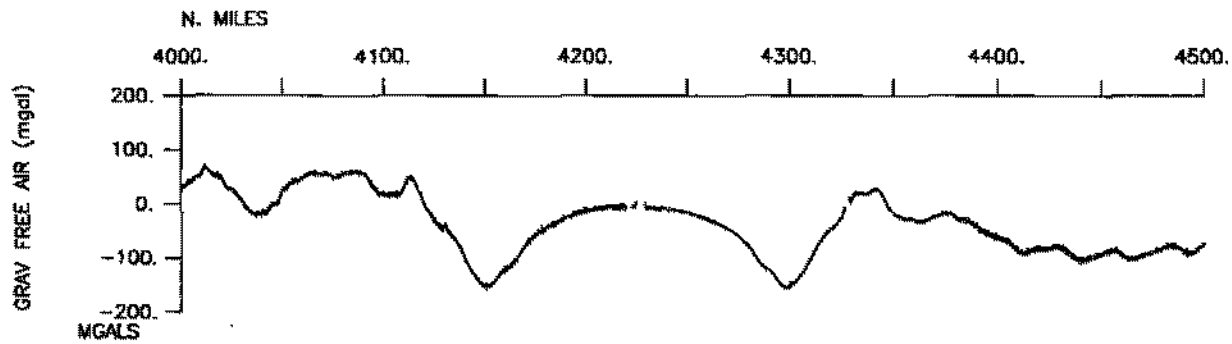


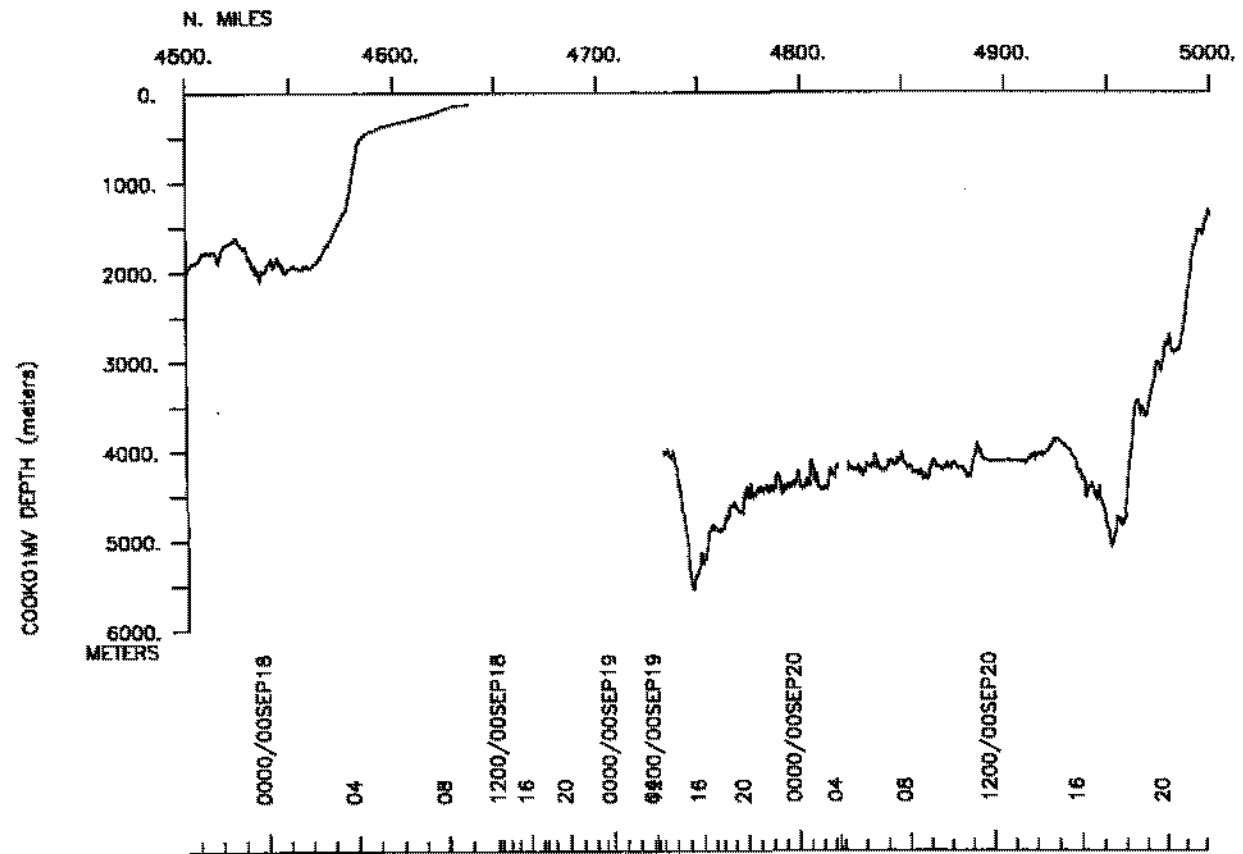
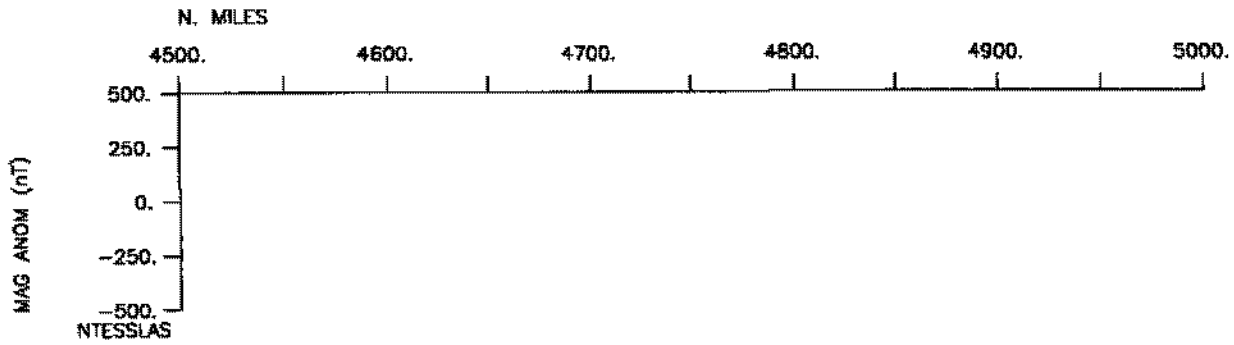
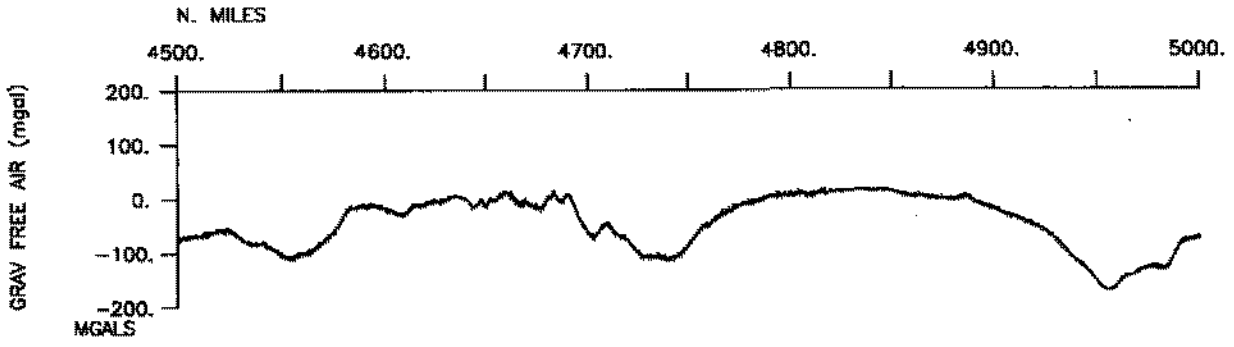


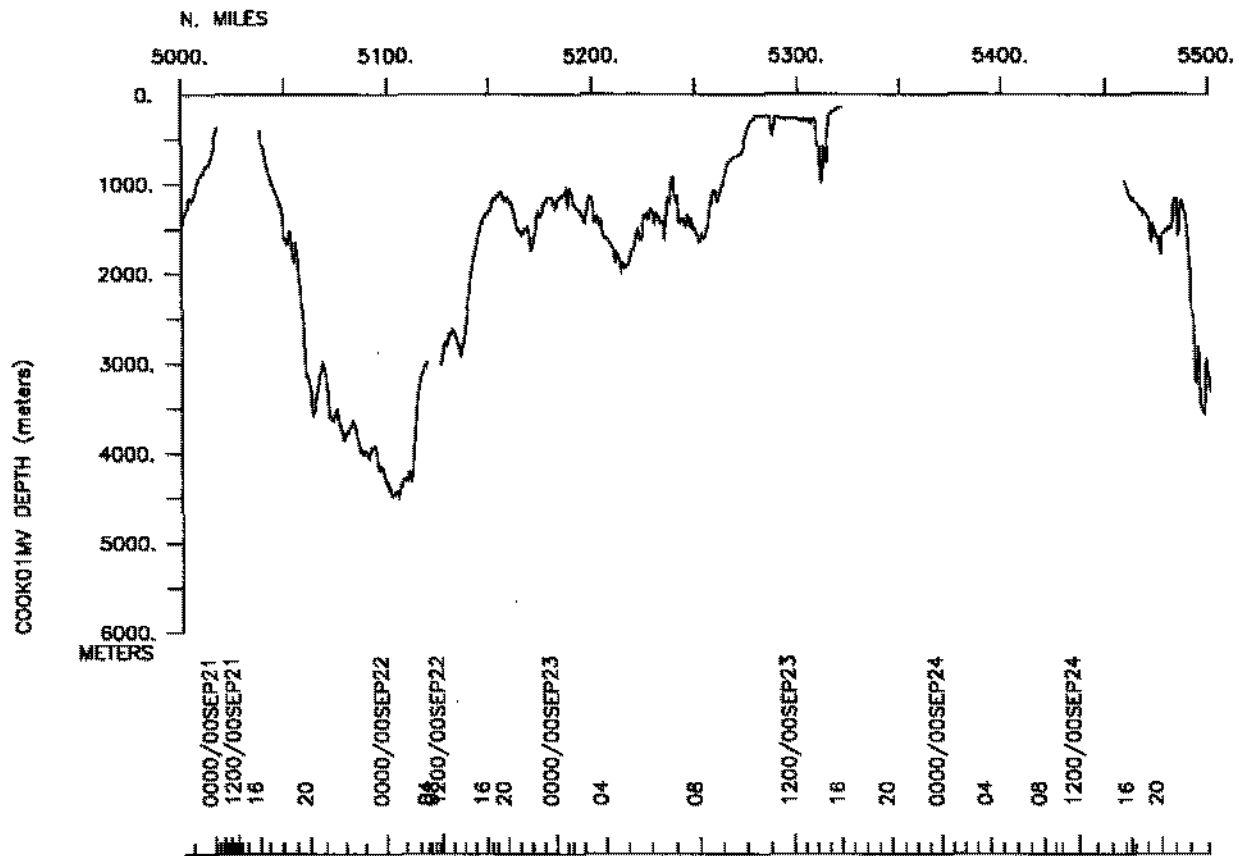
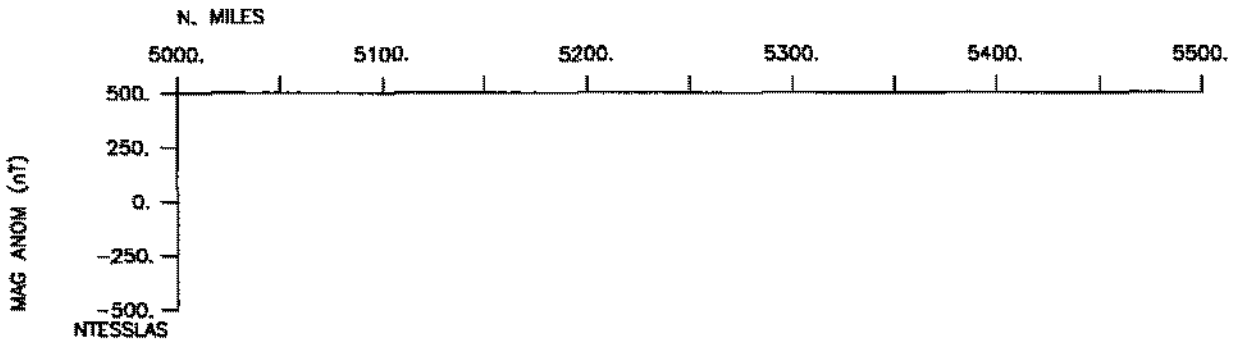
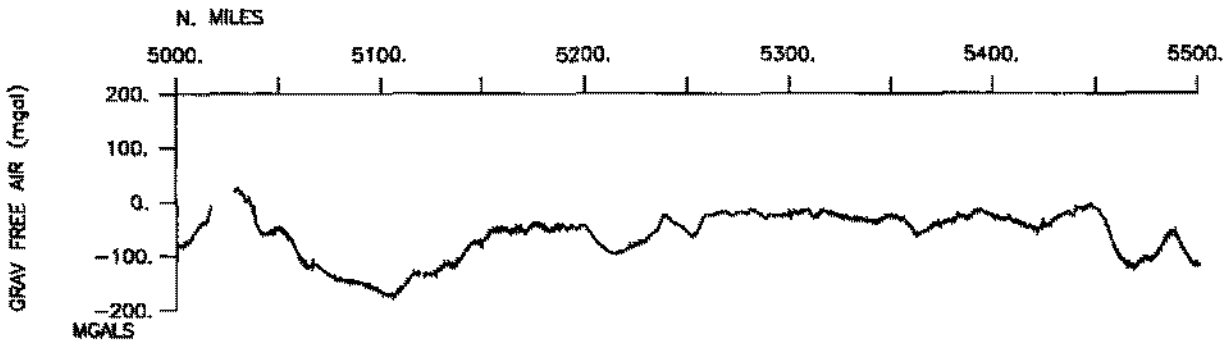


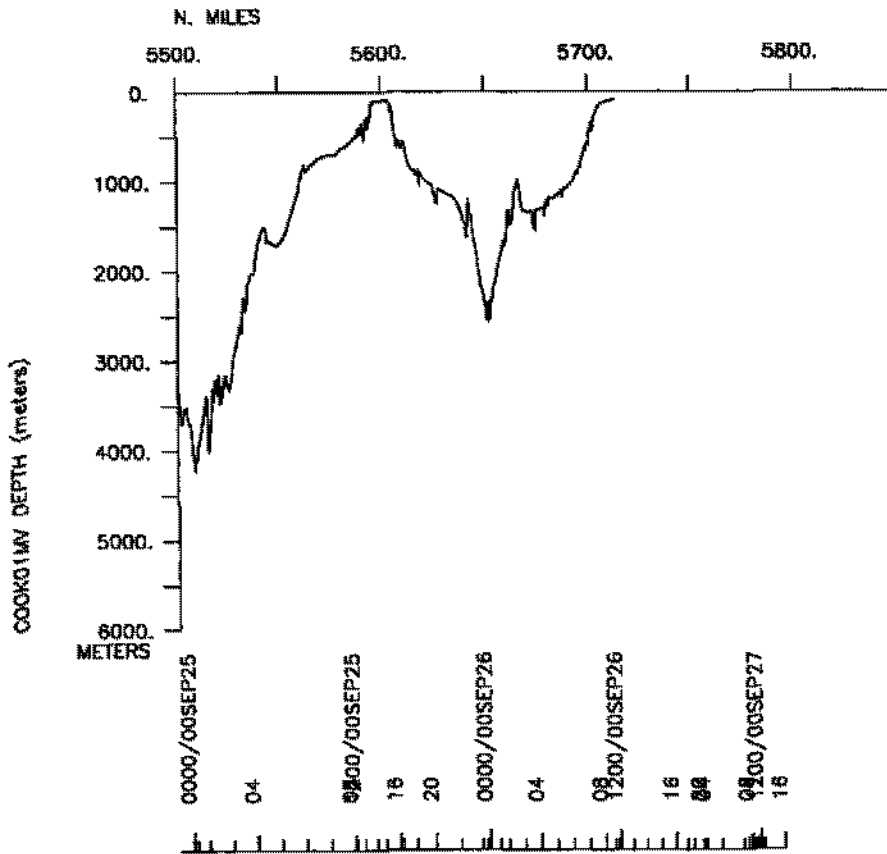
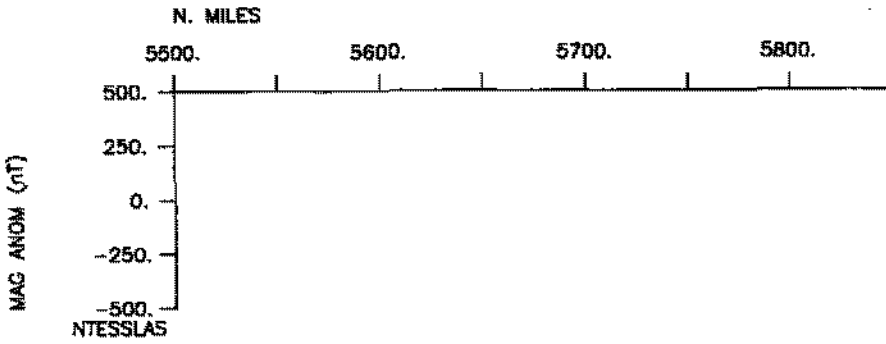
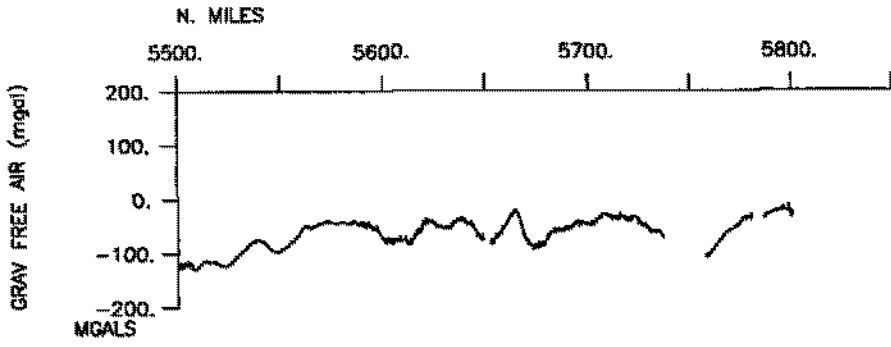












S.I.O. Sample Index

COOK Expedition

Leg 1

(COOK01MV)

R/V Melville

(Issued February 2001)

PORTS:

San Diego, California (21 August 2000)
to
Arica, Chile (27 September 2000)

Chief Scientist:

Kenneth Bruland, Univ. of California Santa Cruz

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

#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 ****

2342	210800	0	LBUW	B Underway watch log	GDC	32-42.06N	117-14.09W	g		COOK01MV
2247	260900	0	LBUW	E Underway watch log	GDC	18-37.51S	70-51.75W	g		COOK01MV

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

0840	260800	0	MBSR	B vbeam&sidescan r-01	GDC	17-01.66N	107-20.65W	g		COOK01MV
1515	300800	0	MBSR	E vbeam&sidescan r-01	GDC	8-44.99N	90-18.35W	g		COOK01MV
1518	300800	0	MBSR	B vbeam&sidescan r-02	GDC	8-45.45N	90-18.81W	g		COOK01MV
2000	260900	0	MBSR	E vbeam&sidescan r-02	GDC	18-37.66S	70-52.13W	g		COOK01MV

**** Echo Sounder Records ****

1123	210800	0	DPR3	B 3.5khz Knudsen r-01	GDC	32-42.05N	117-14.18W	g		COOK01MV
2130	110900	0	DPR3	E 3.5khz Knudsen r-01	GDC	6-50.17S	80-39.04W	g		COOK01MV

**** Digital Gravity ****

2255	210800	0	GVDR	B Digital gravity	GDC	32-42.05N	117-14.18W	g		COOK01MV
1659	270900	0	GVDR	E Digital gravity	GDC	18-26.60S	70-21.25W	g		COOK01MV

**** Integrated Meteorological Data Acquisition ****

2300	210800	0	IMET	B Weather measurements	GDC	32-42.05N	117-14.18W	g		COOK01MV
1350	130900	0	IMET	E Weather measurements	GDC	7-38.39S	79-34.25W	g		COOK01MV

**** Acoustic Doppler Current Profiler ****

2300	210800	0	ADCP	B 300khz Current meas.	GDC	32-42.05N	117-14.18W	g		COOK01MV
1530	270900	0	ADCP	E 300khz Current meas.	GDC	18-26.80S	70-30.59W	g		COOK01MV

**** Surface Samples ****

2358	250800	0	SSCC	B Sipper Tow test	UCSC	17-09.96N	107-45.02W	g		COOK01MV
0426	260800	0	SSCC	E Sipper Tow test	UCSC	17-13.66N	107-44.52W	g		COOK01MV
1945	300800	0	SSCC	B Sipper Tow 1	UCSC	8-40.40N	90-34.25W	g		COOK01MV
0417	010900	0	SSCC	E Sipper Tow 1	UCSC	7-24.53N	90-50.16W	g		COOK01MV
0125	030900	0	SSCC	B Sipper Tow 2	UCSC	0-19.18S	92-30.55W	g		COOK01MV
0414	040900	0	SSCC	E Sipper Tow 2	UCSC	1-04.82S	91-15.67W	g		COOK01MV
1519	050900	0	SSCC	B Sipper Tow 3	UCSC	0-50.32S	90-19.43W	g		COOK01MV
1838	160900	0	SSCC	E Sipper Tow 3	UCSC	9-49.41S	81-33.14W	g		COOK01MV

#*** Ports ***

2300	210800	0	LGPT B	San Diego, Calif.	32-40.00N	117-14.00W	f	COOK01MV
1530	270900	0	LGPT E	Arica, Chile	18-29.00S	70-20.00W	f	COOK01MV
1300	040900	0	LGSS B	Santa Cruz Is, Galapagos	00-54.00S	89-36.00W	f	COOK01MV
1400	050900	0	LGSS E	Santa Cruz Is, Galapagos	00-54.00S	89-36.00W	f	COOK01MV

#*** Personnel ***

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS UCSC	Bruland, K.	Chief Scientist	U.C. Santa Cruz	COOK01MV
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PECT STS	Chatwood, J.	Computer Tech	Scripps Institution	COOK01MV
PECT STS	Palomares, R.	Electronics Tech	Scripps Institution	COOK01MV
PESP UCSC	Smith, G.	Sr. Technician	U.C. Santa Cruz	COOK01MV
PESP UCSC	Rue, E.	Post-Doc	U.C. Santa Cruz	COOK01MV
PESP UCSC	Conn, J.	Technician	U.C. Santa Cruz	COOK01MV
PEST UCSC	Lessin, L.	Grad. student	U.C. Santa Cruz	COOK01MV
PEST UCSC	Corami, F.	Grad. student	U.C. Santa Cruz	COOK01MV
PEST UCSC	Macrellis, H.	Grad. student	U.C. Santa Cruz	COOK01MV
PEST SIX	Hare, C.	Grad. student	U. of Delaware	COOK01MV
PESP SIX	Cottrell, M.	Post-Doc	U. of Delaware	COOK01MV
PESP SIX	Kirchman, D.	Scientist	U. of Delaware	COOK01MV
PEST SIX	Firme, G.	Grad. student	U. of Delaware	COOK01MV
PEST SIX	Weaver, R.	Grad. student	U. of Delaware	COOK01MV
PESP SIX	Lane, T.	Scientist	Princeton Univ.	COOK01MV
PESP SIX	Tortell, P.	Post-Doc	Princeton Univ.	COOK01MV
PESP SIX	DiTullio, G.	Scientist	U. of Charleston	COOK01MV
PESP SIX	Riseman, S.	Technician	U. of Charleston	COOK01MV
PEST SIX	Maucher, J.	Grad. student	U. of Charleston	COOK01MV
PEST SIX	Alm, M.	Grad. student	U. of Charleston	COOK01MV
PESP JPN	Fudaka, R.	Post-Doc	Univ. of Tokyo	COOK01MV
PESP SIX	Sonst, B.	Technician	Univ. of Maine	COOK01MV
PESP CAN	Trick, C.	Scientist	U. of Ontario	COOK01MV
PESP SIX	Rinta-Kanto, J.	Technician	Univ. of Tennessee	COOK01MV
PESP SIX	Wilhelm, S.	Scientist	Univ. of Tennessee	COOK01MV
PEST SIX	Eldridge, M.	Grad. student	Univ. of Tennessee	COOK01MV
PESP WHOI	Saito, M.	Post-Doc	Woods Hole	COOK01MV
PEST UCSB	Franck, V.	Grad. student	U.C. Santa Barbara	COOK01MV
PEST UCSD	Conn, A.	Volunteer	U.C. San Diego	COOK01MV
PESP EDR	Burgos Lopez, L.	Observer	Ecuador	COOK01MV
PESP PRU	Flores, G.	Observer	Peru	COOK01MV
PESP PRU	Vasquez, L.	Observer	Peru	COOK01MV

#*** 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.