

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

Cook Expedition

Leg 3

(COOK03MV)

R/V Melville

(Issued December 2000)

Ports:

Arica, Chile (16 October 2000)

to

Papeete, Tahiti (7 November 2000)

Chief Scientist:

Barry Eakins - Scripps Institution of Oceanography
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Computer Tech - Ron Moe

Resident Marine Tech - Ron Comer

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

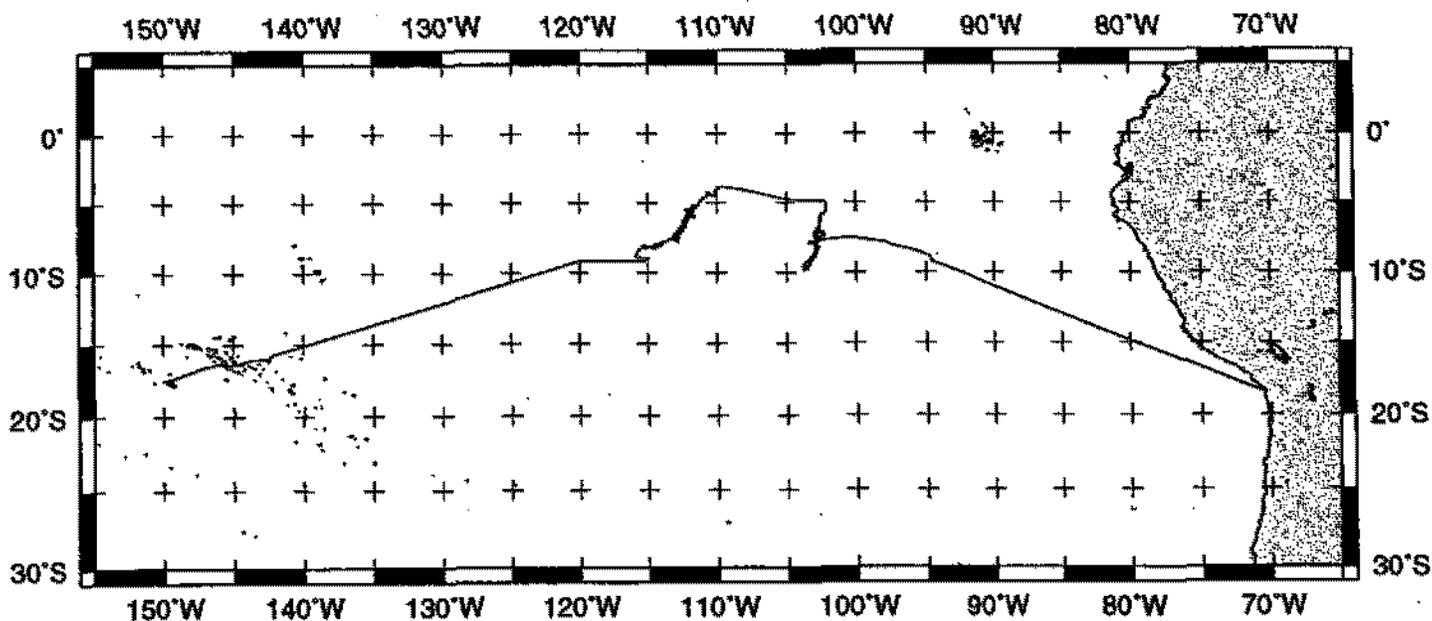
Profiles – depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

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.

Rev 6/2000



COOK EXPEDITION LEG 3 (COOK03MV)

CHIEF SCIENTIST: Barry Eakins, Scripps Institution

PORTS: Arica, Chile - Papeete, Tahiti

DATES: 16 October - 7 November 2000

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise-6564 miles

Magnetics-5410 miles

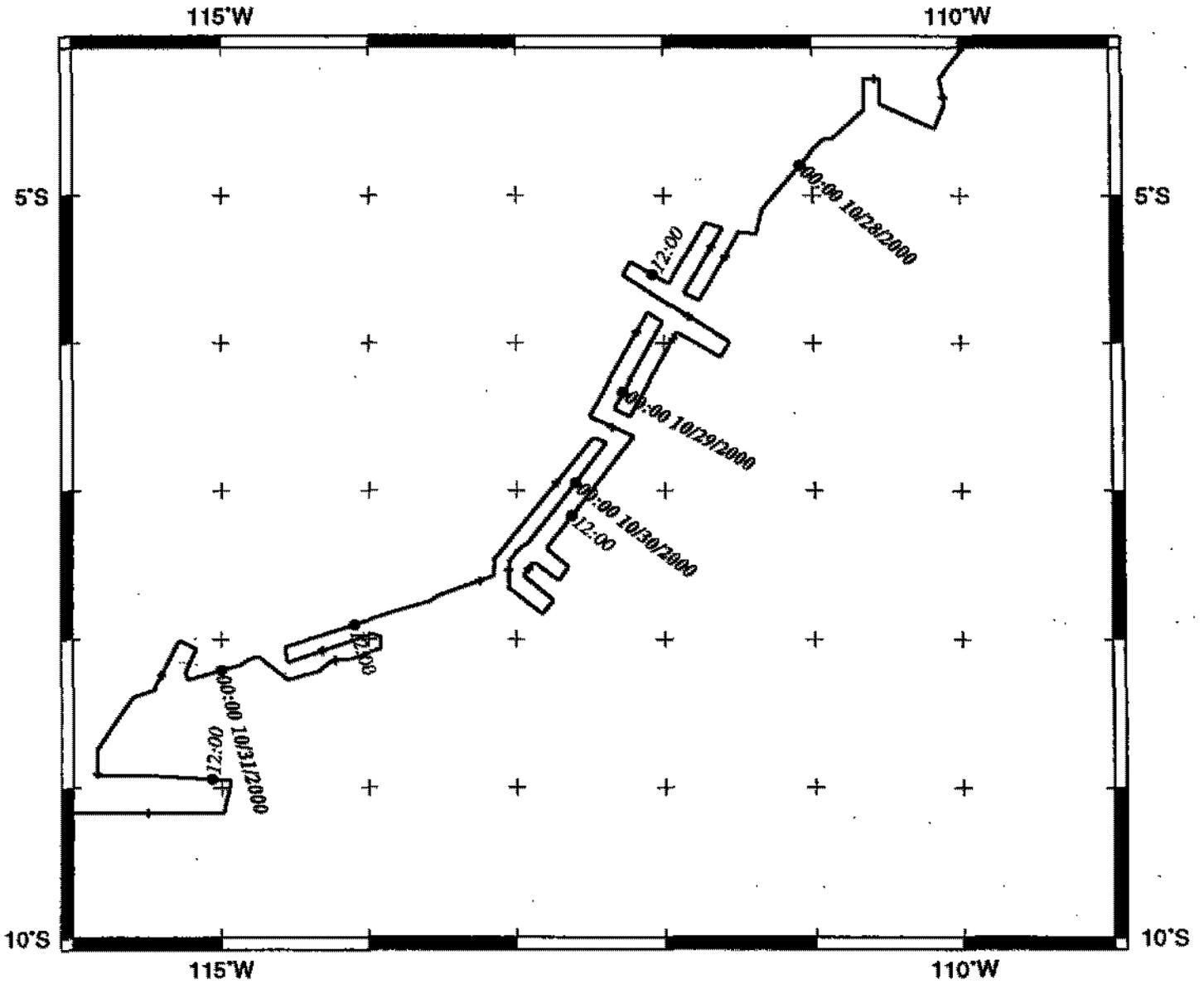
Bathymetry-6262 miles

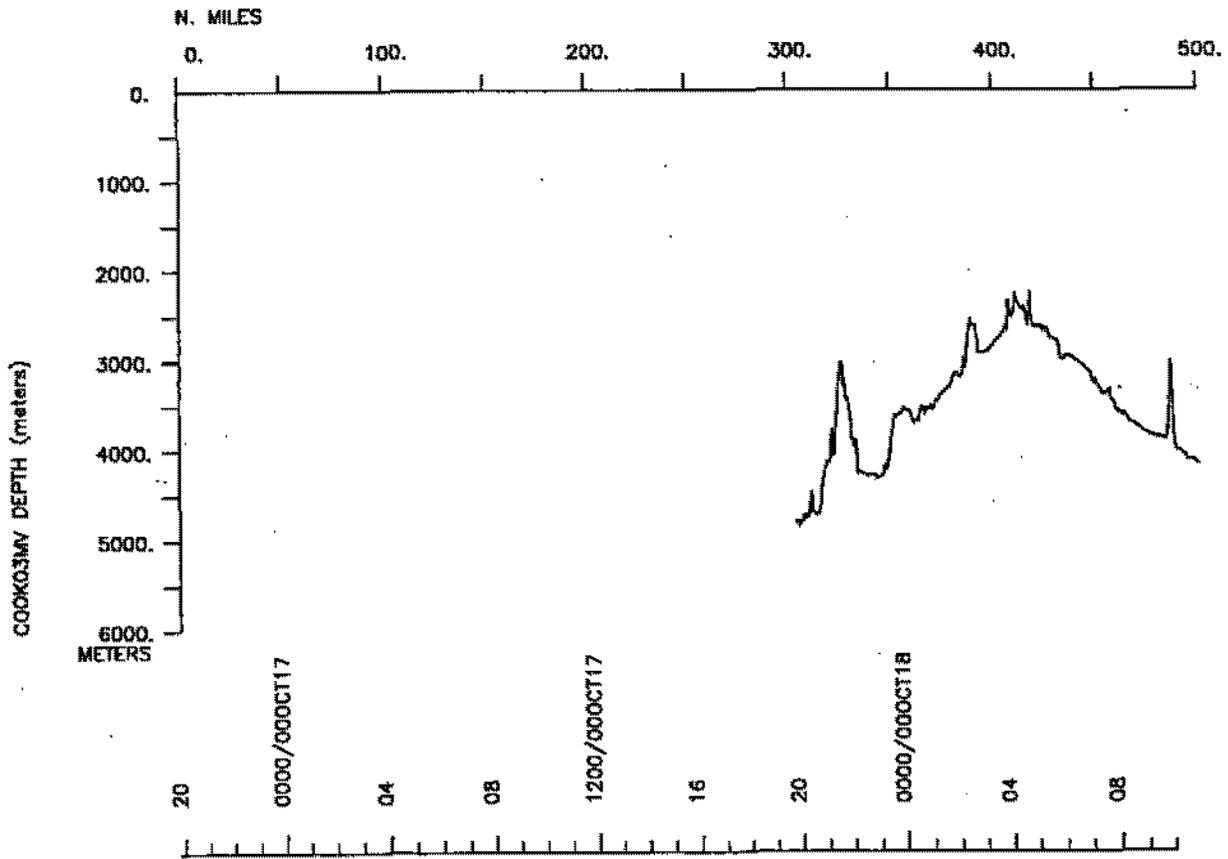
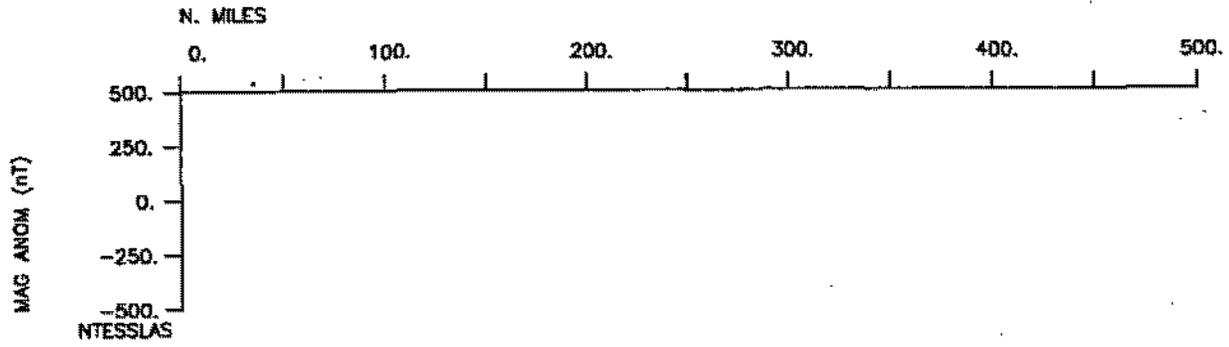
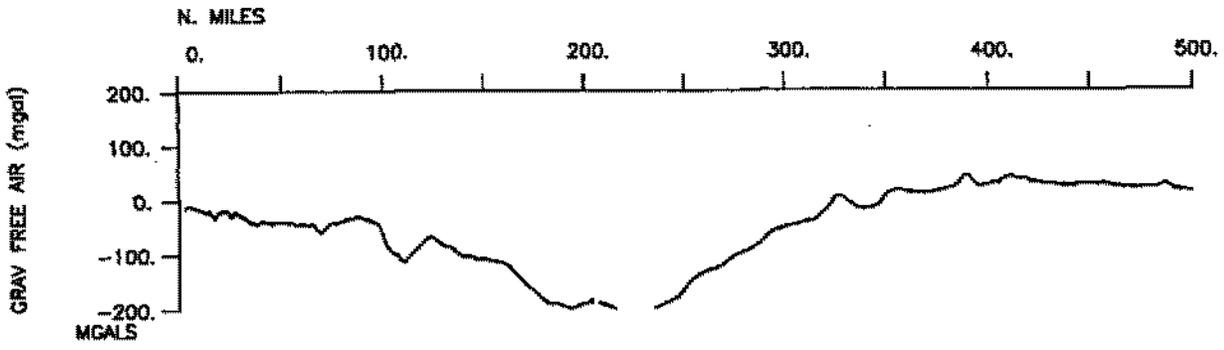
Seismic Reflection-none collected

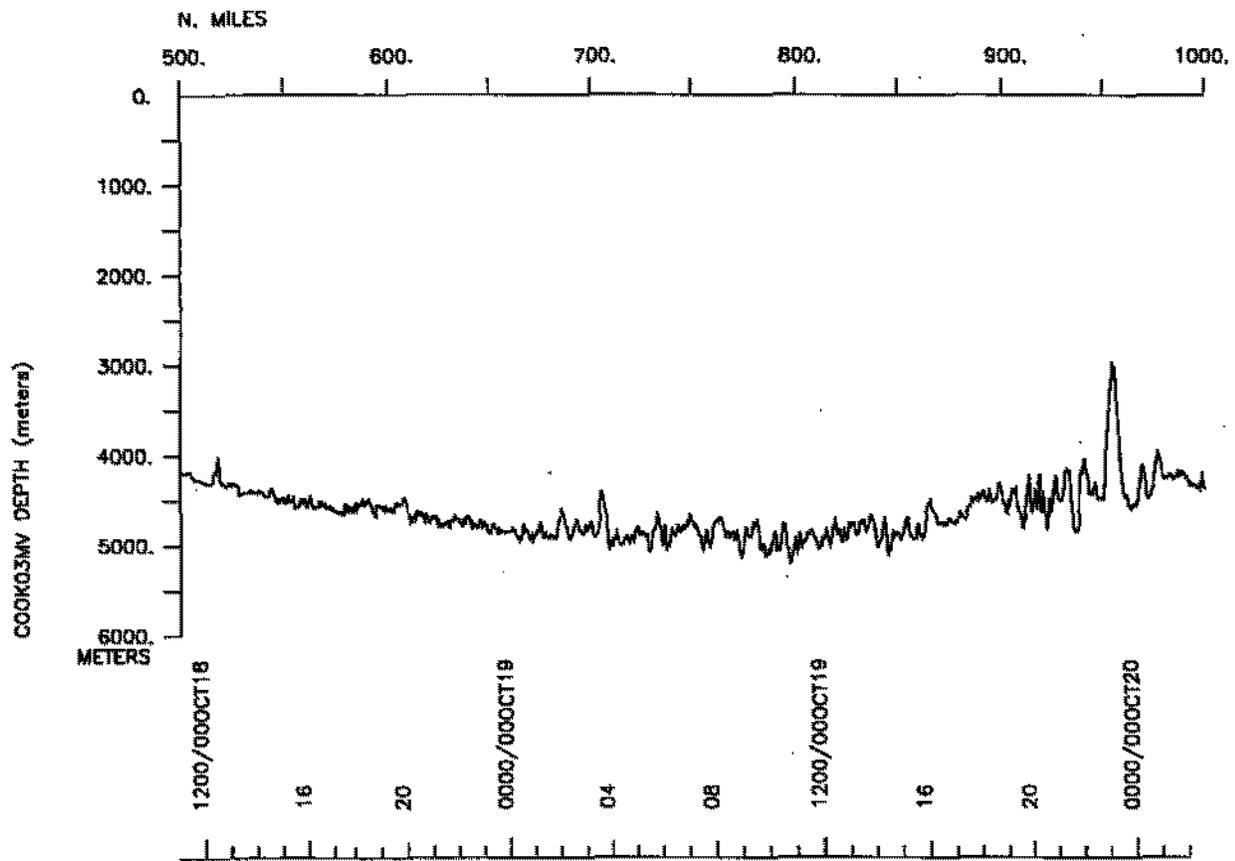
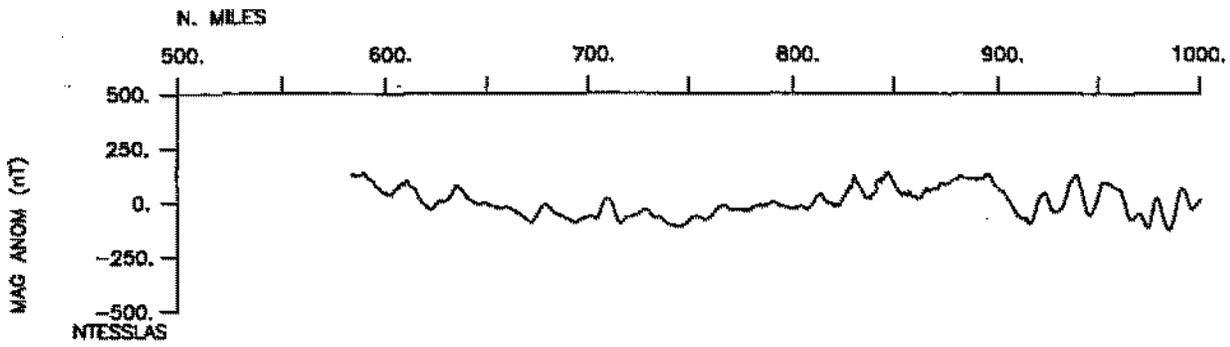
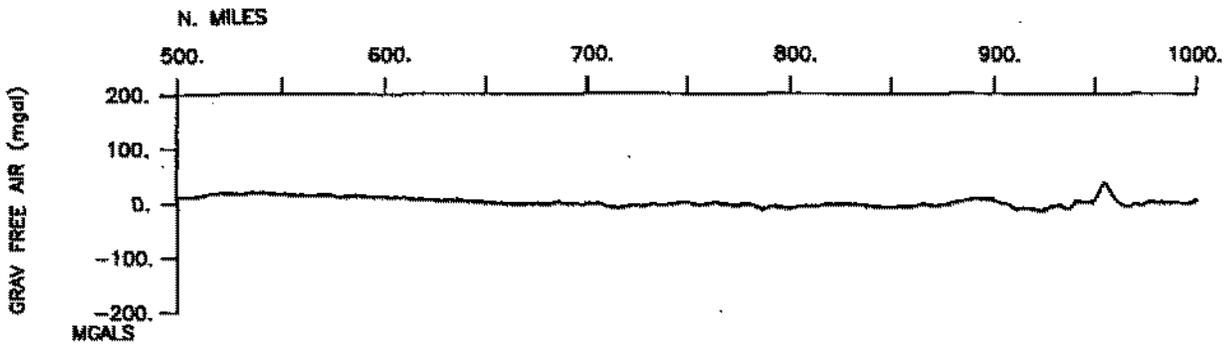
Sea Beam-6262 miles

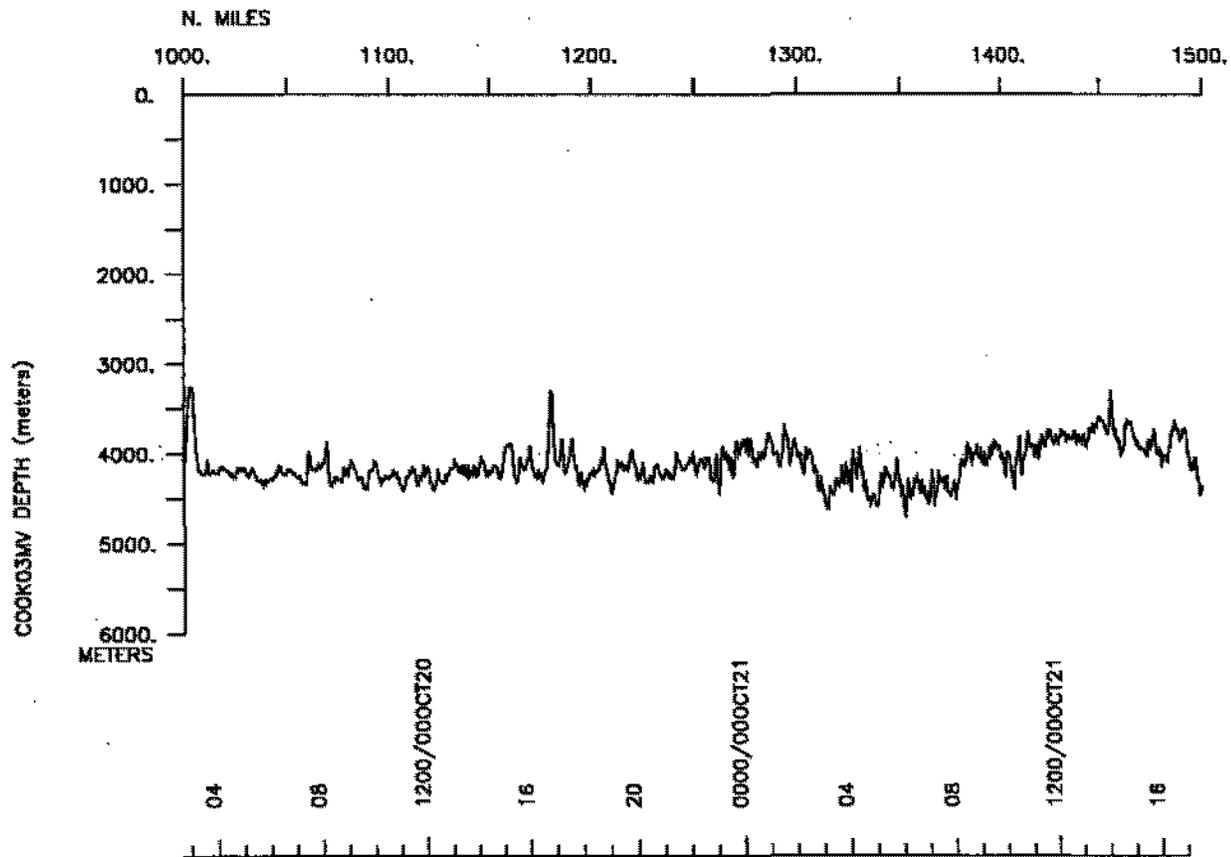
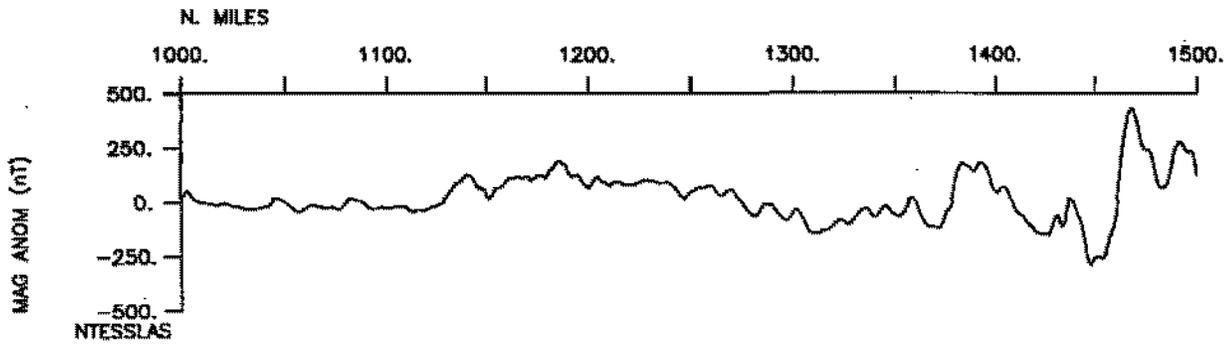
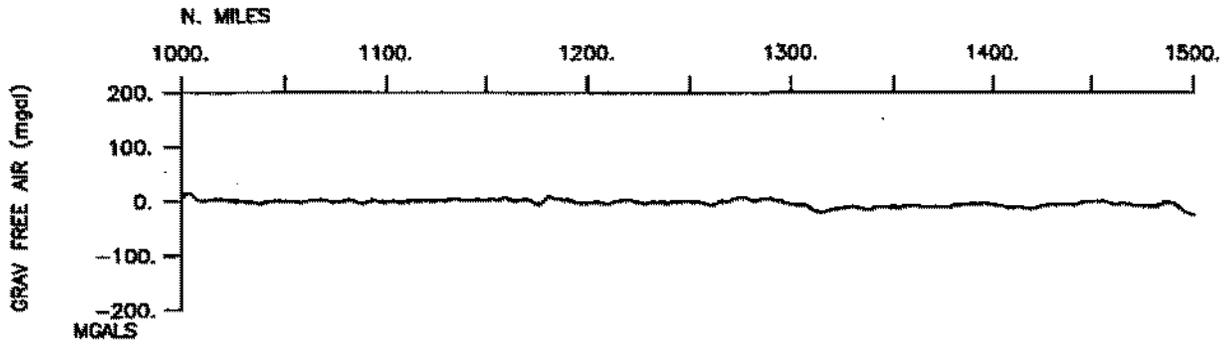
Gravity-6524 miles

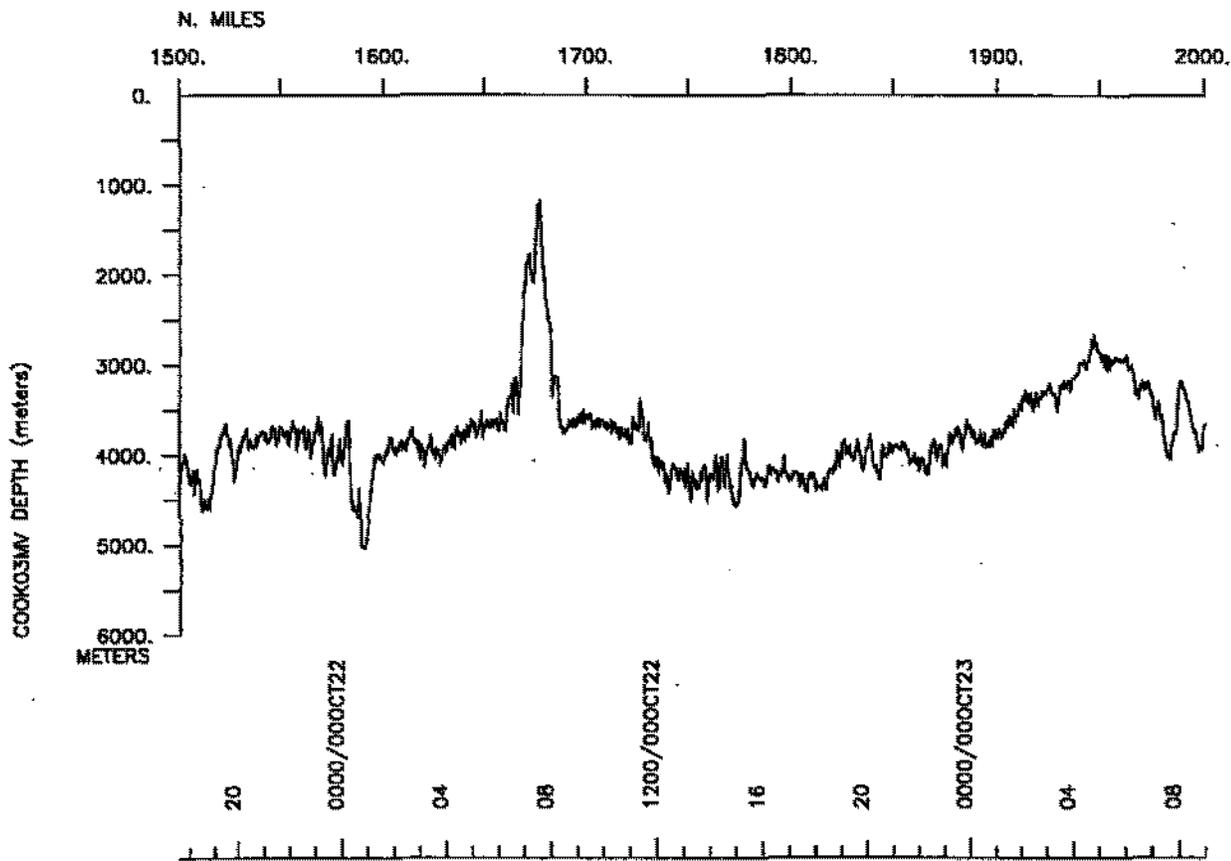
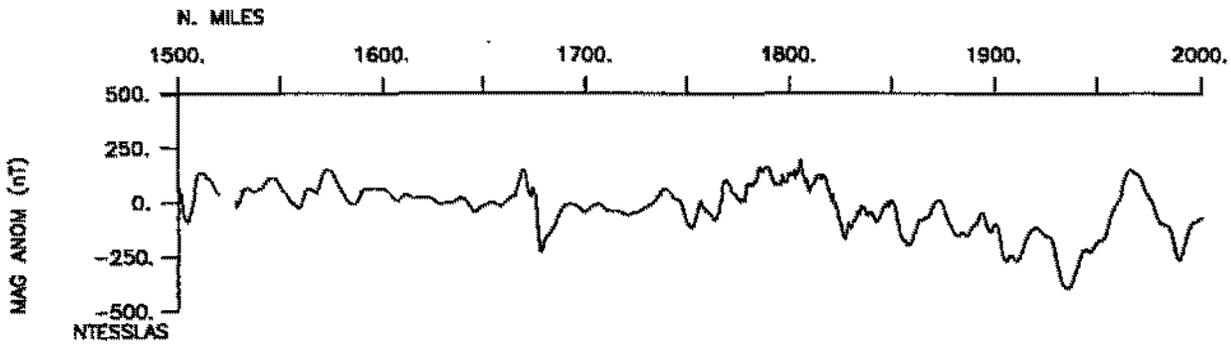
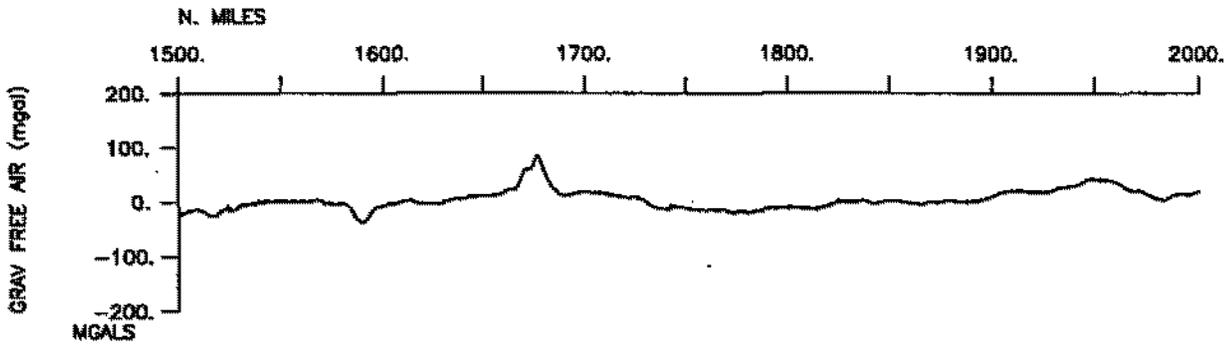
COOK03MV west survey track

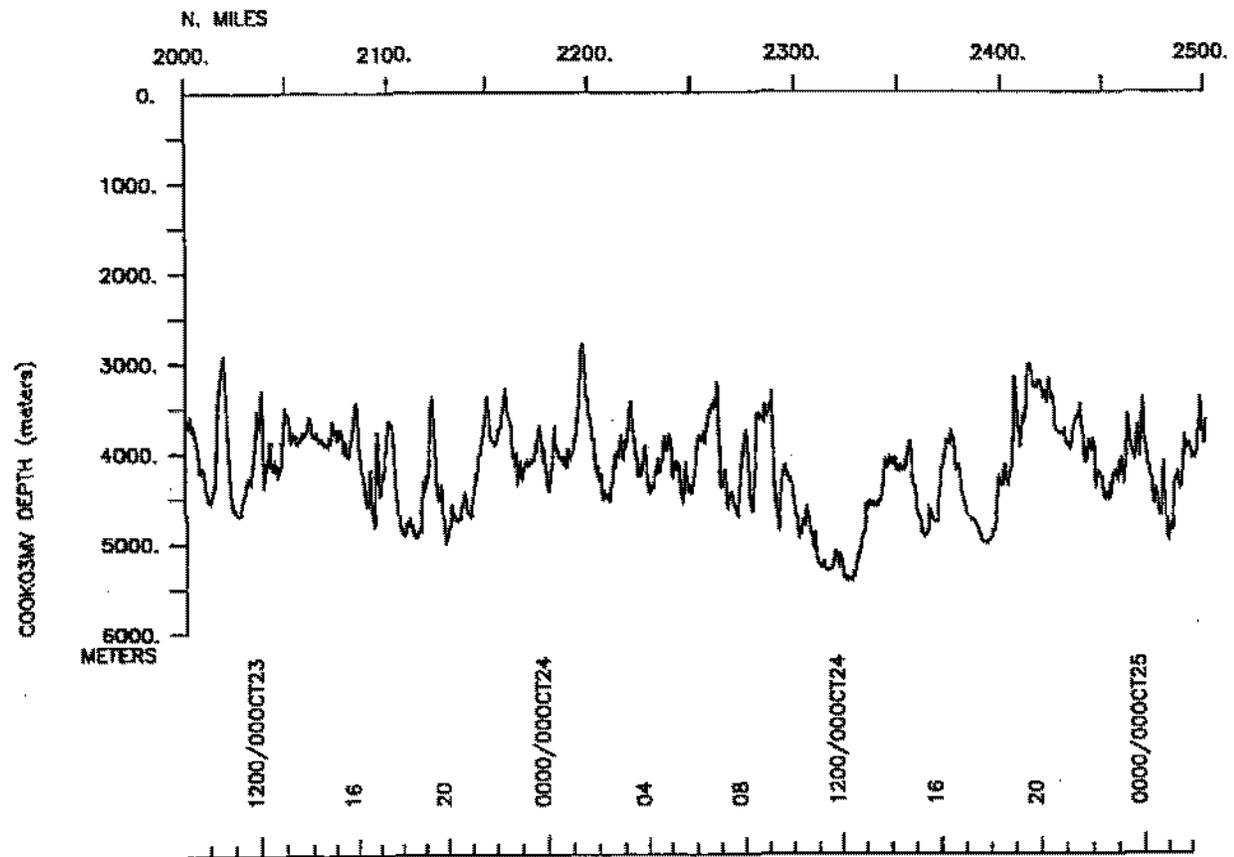
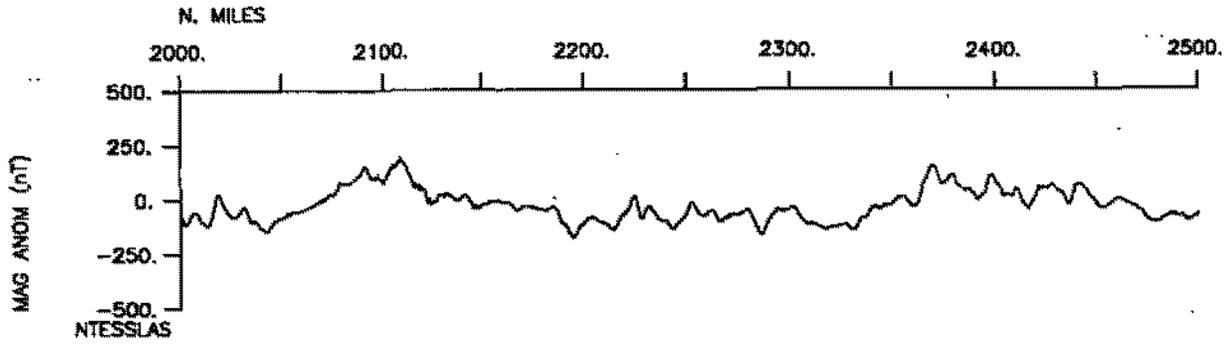
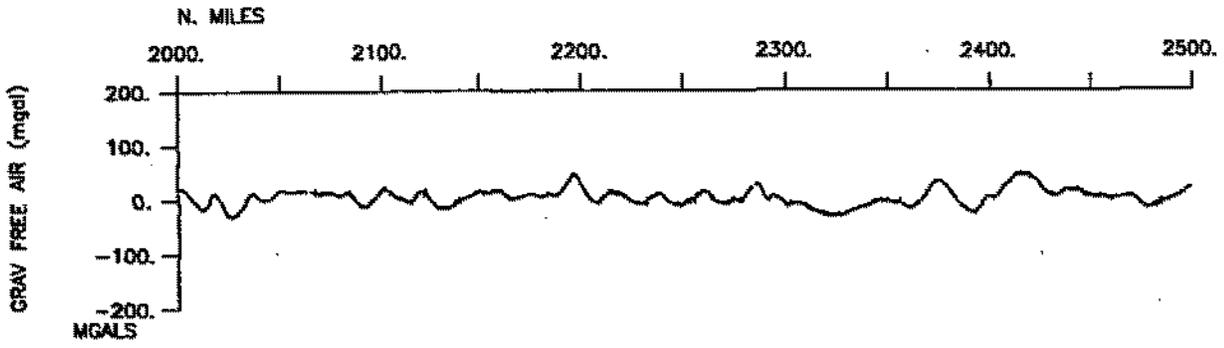


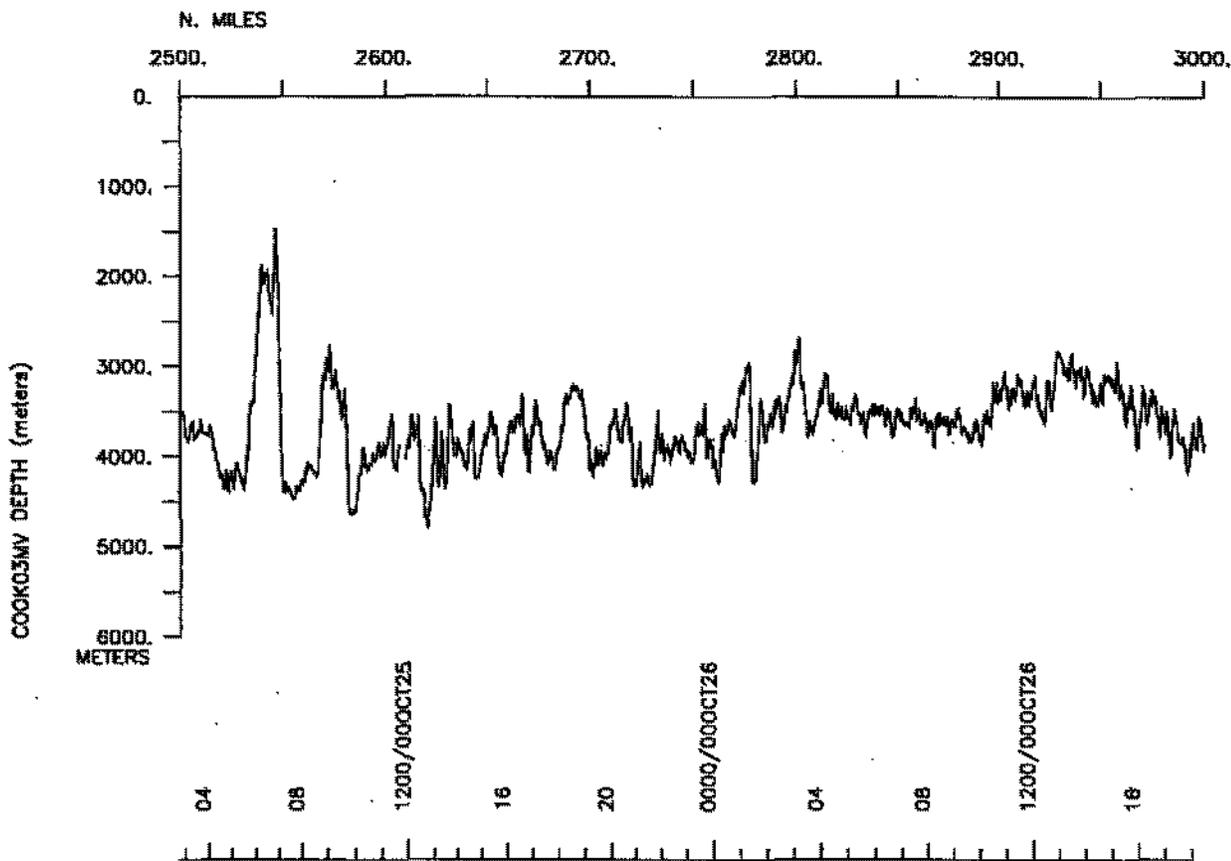
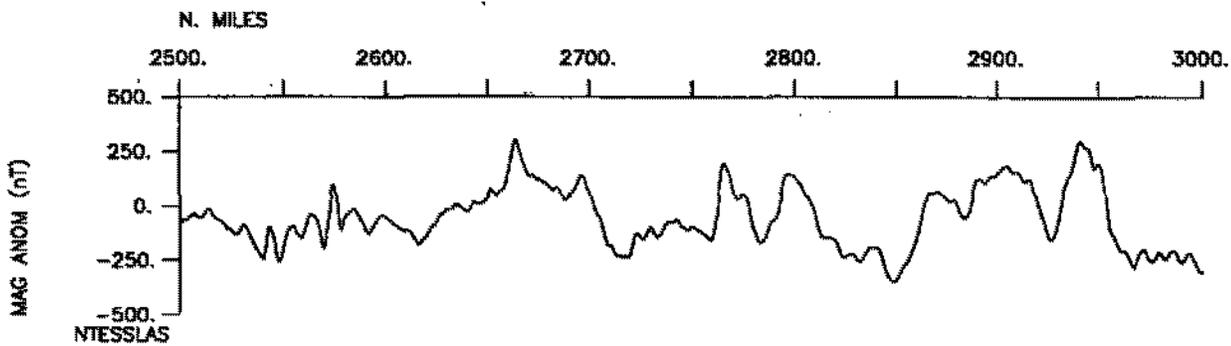
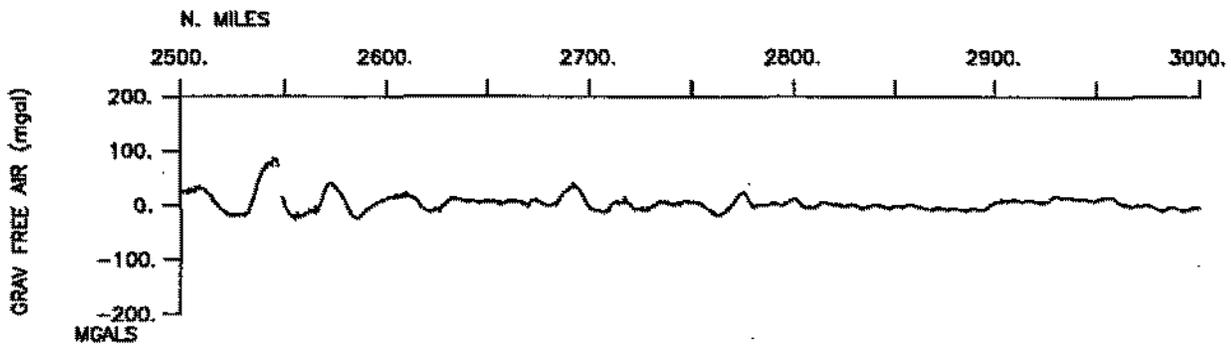


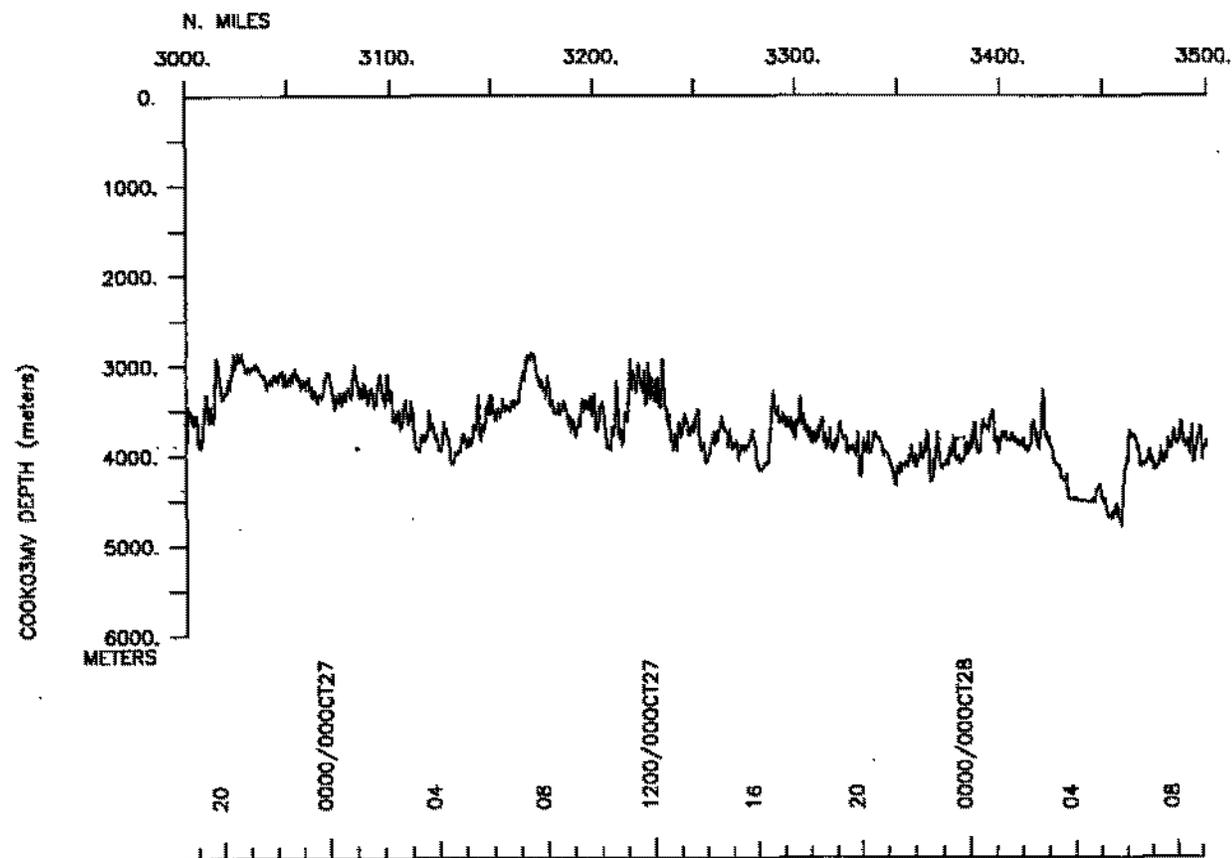
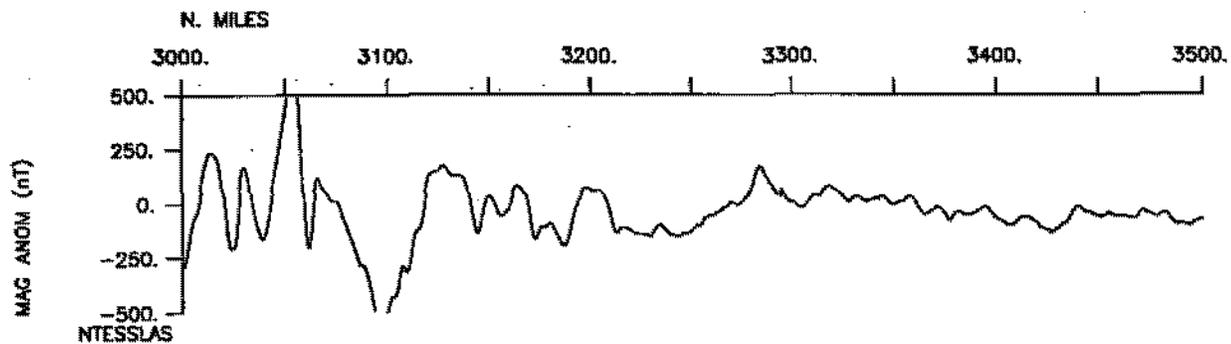
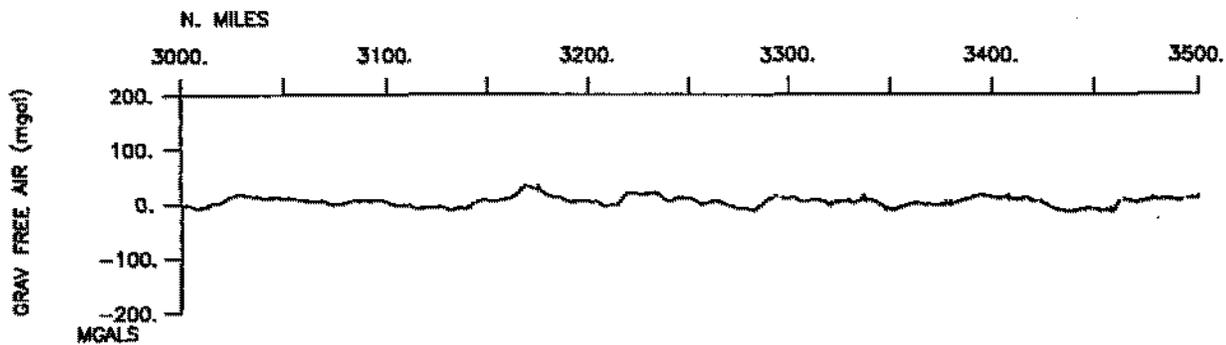


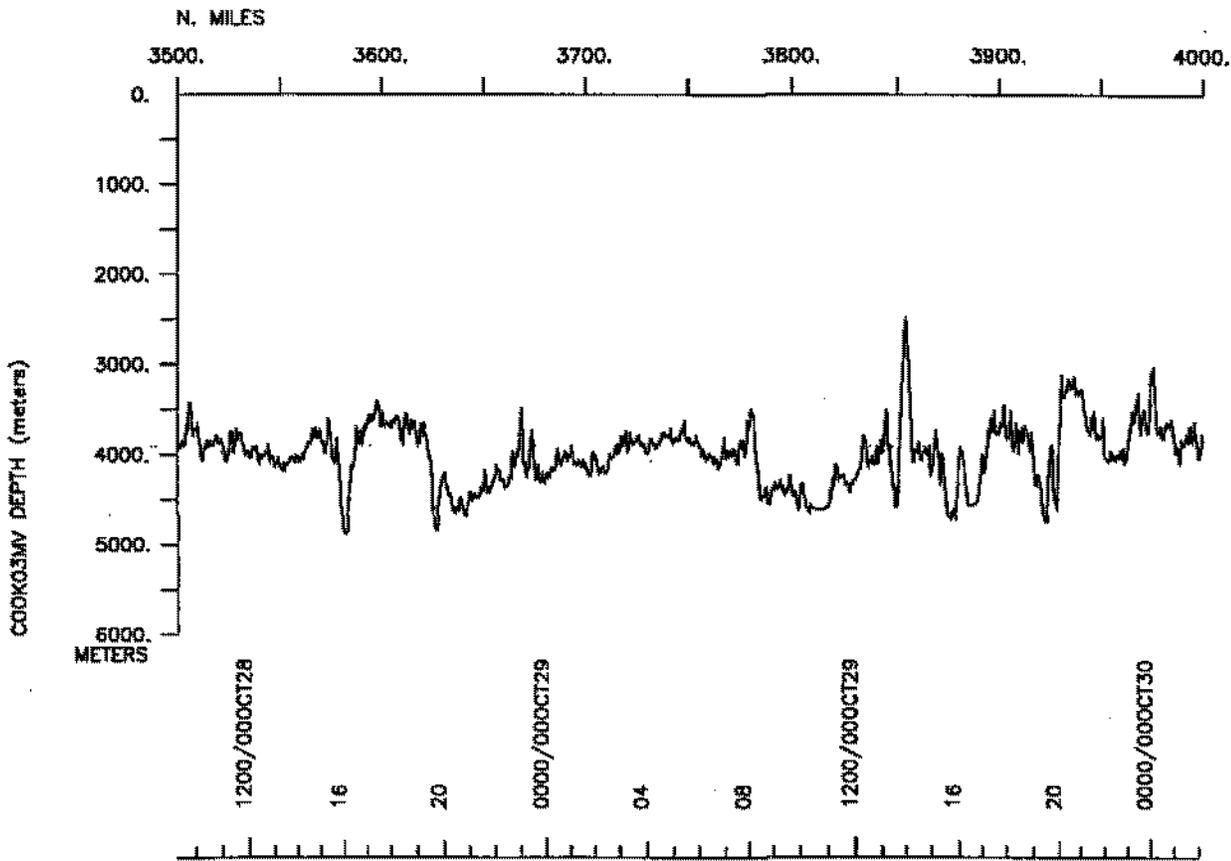
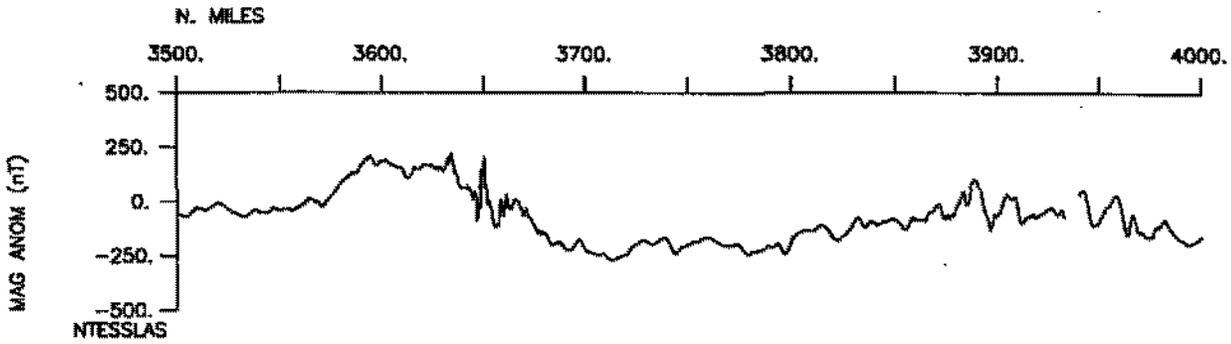
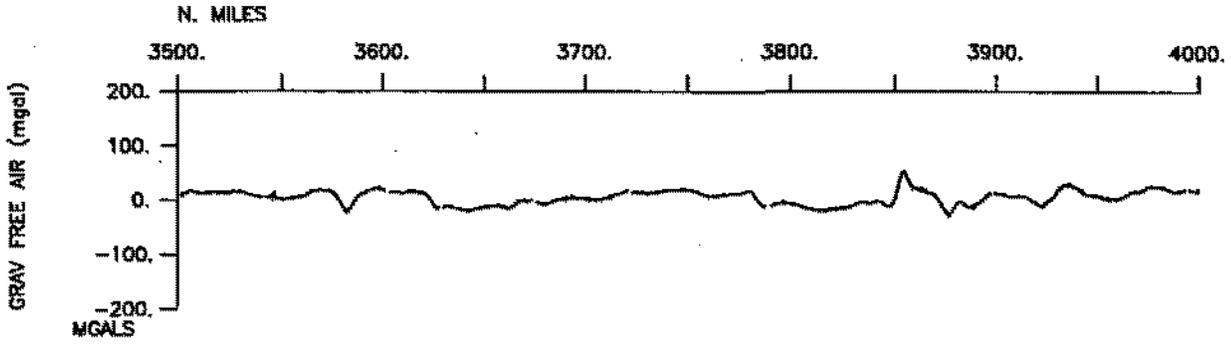


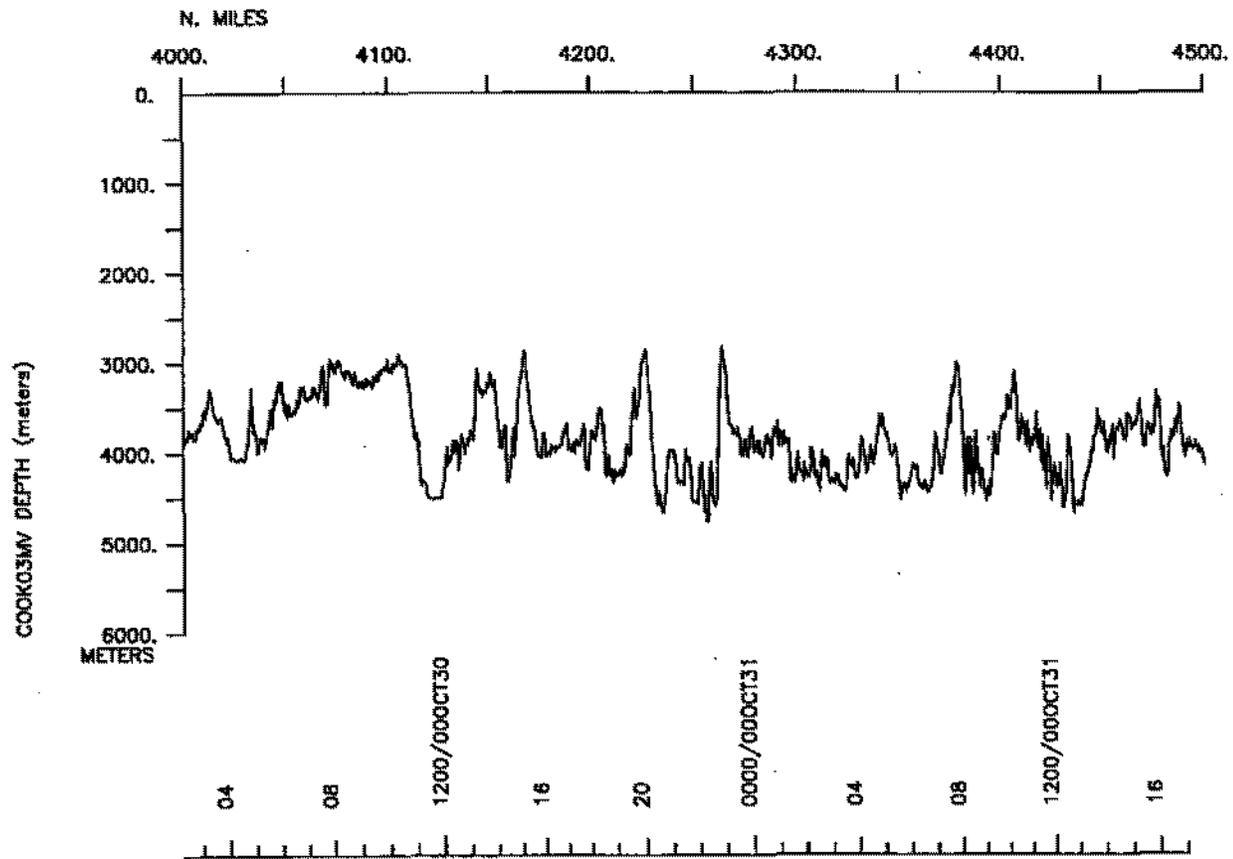
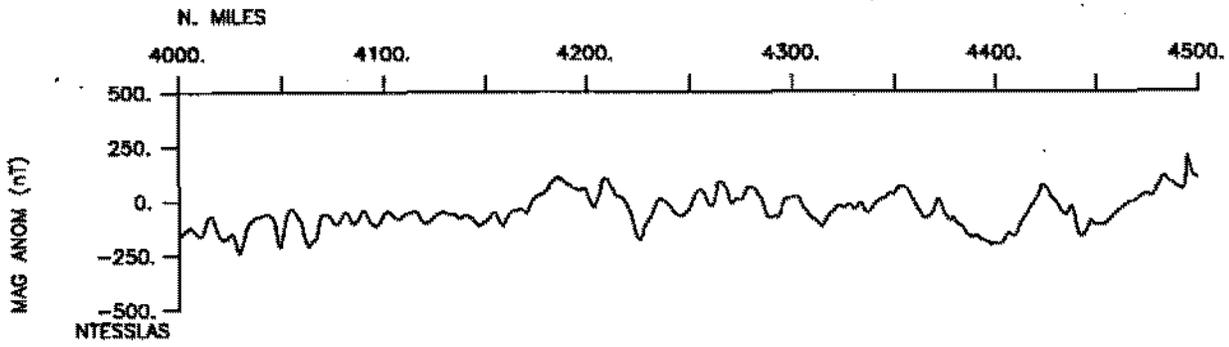
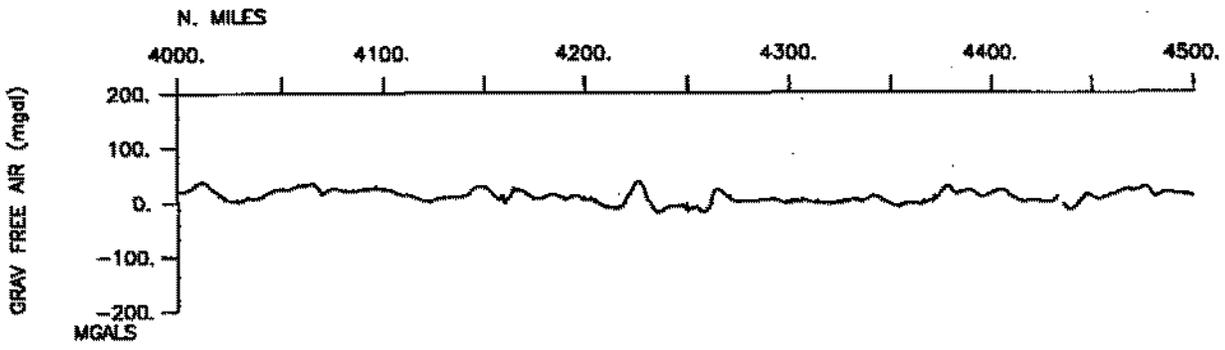


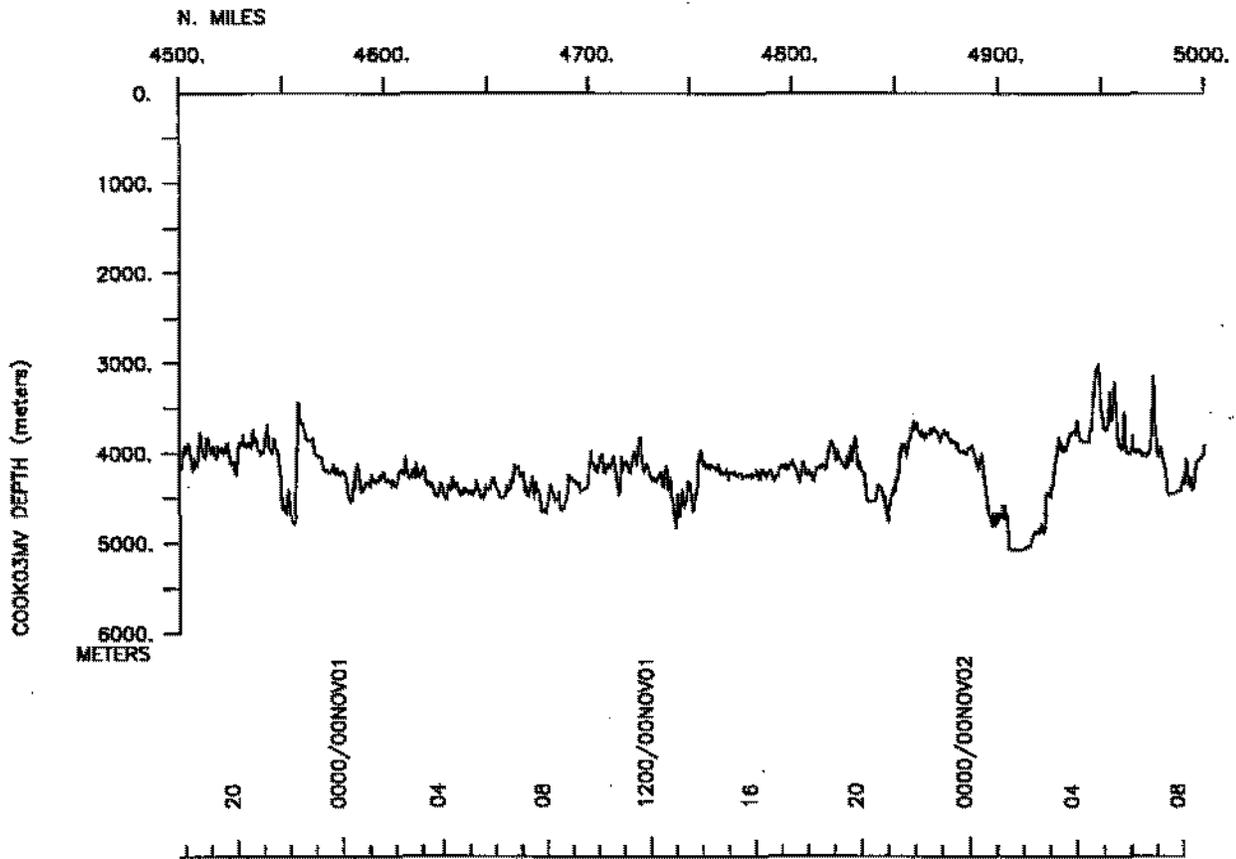
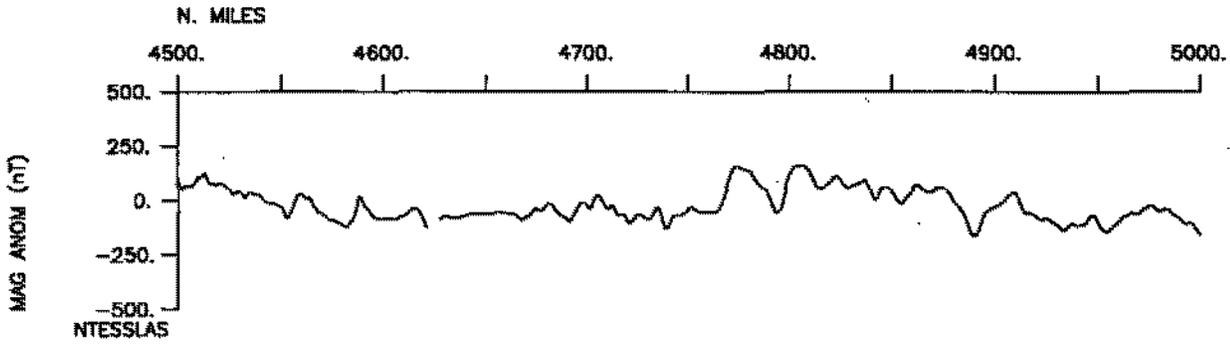
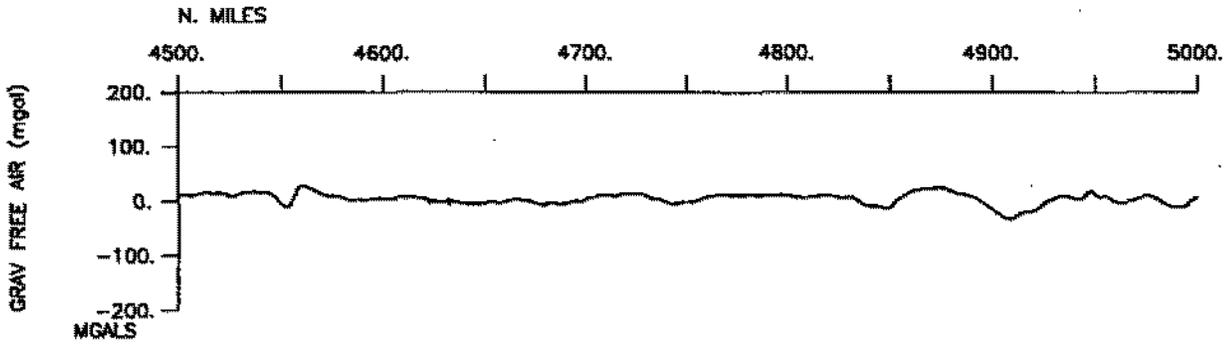


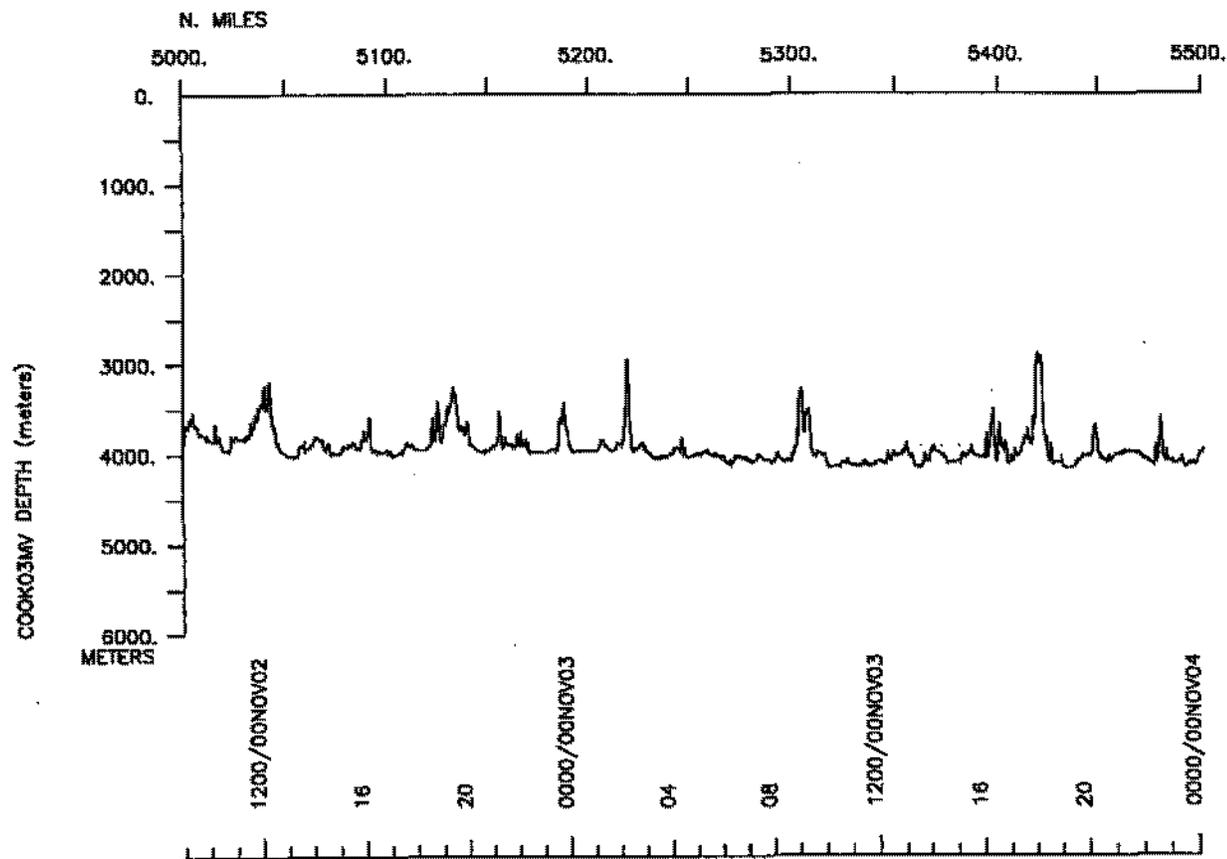
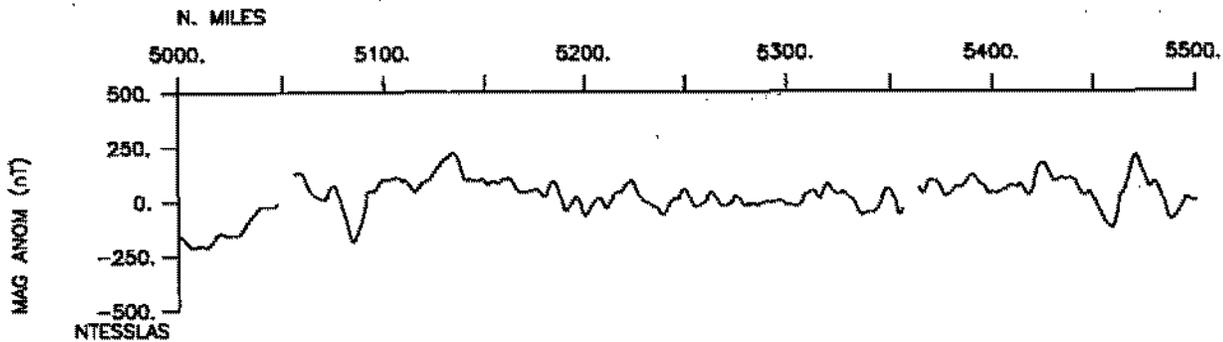
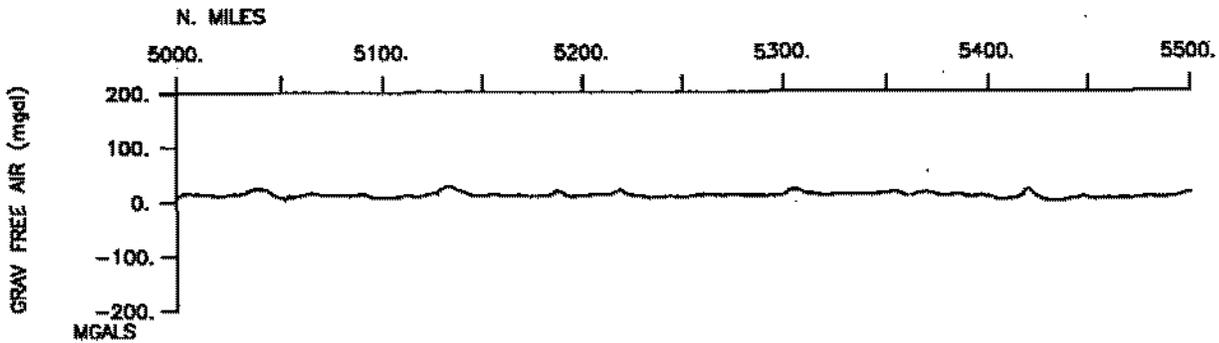


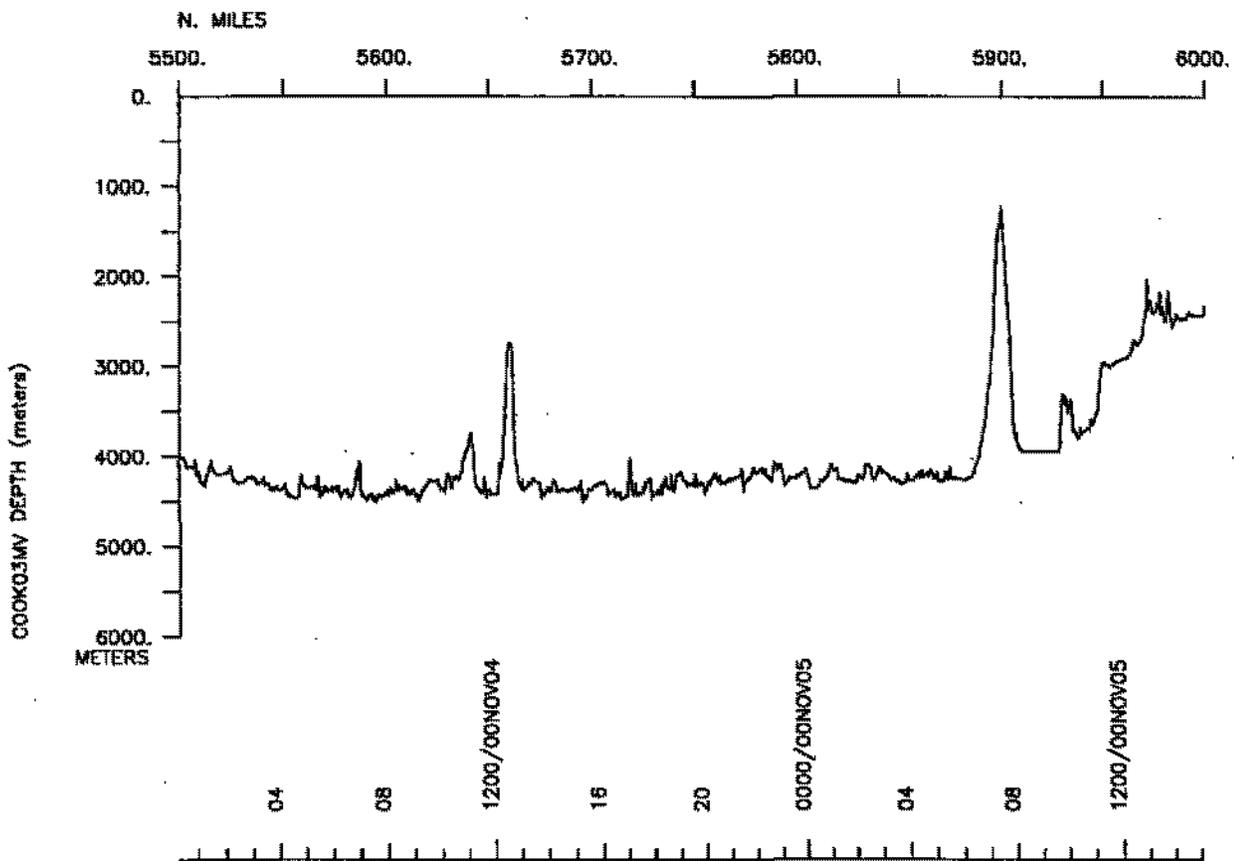
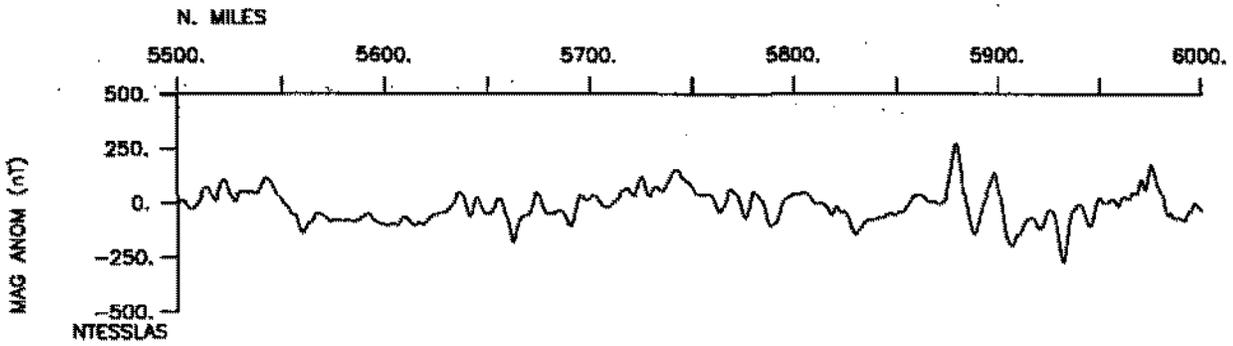
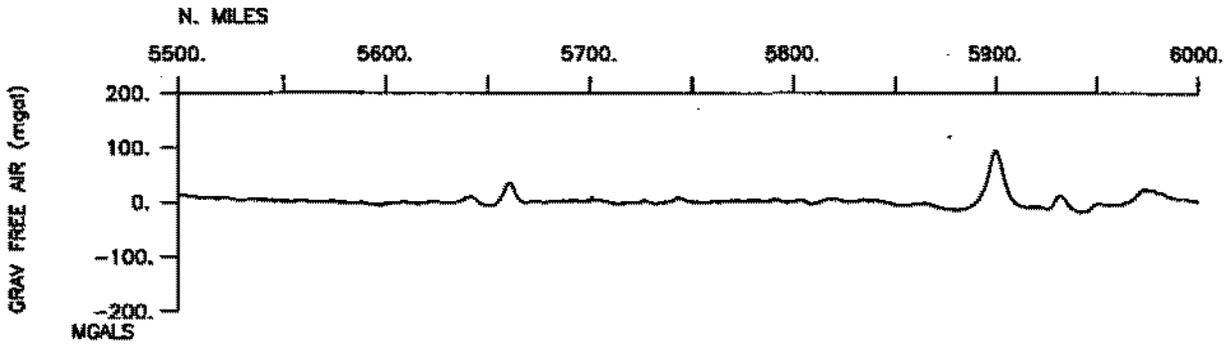


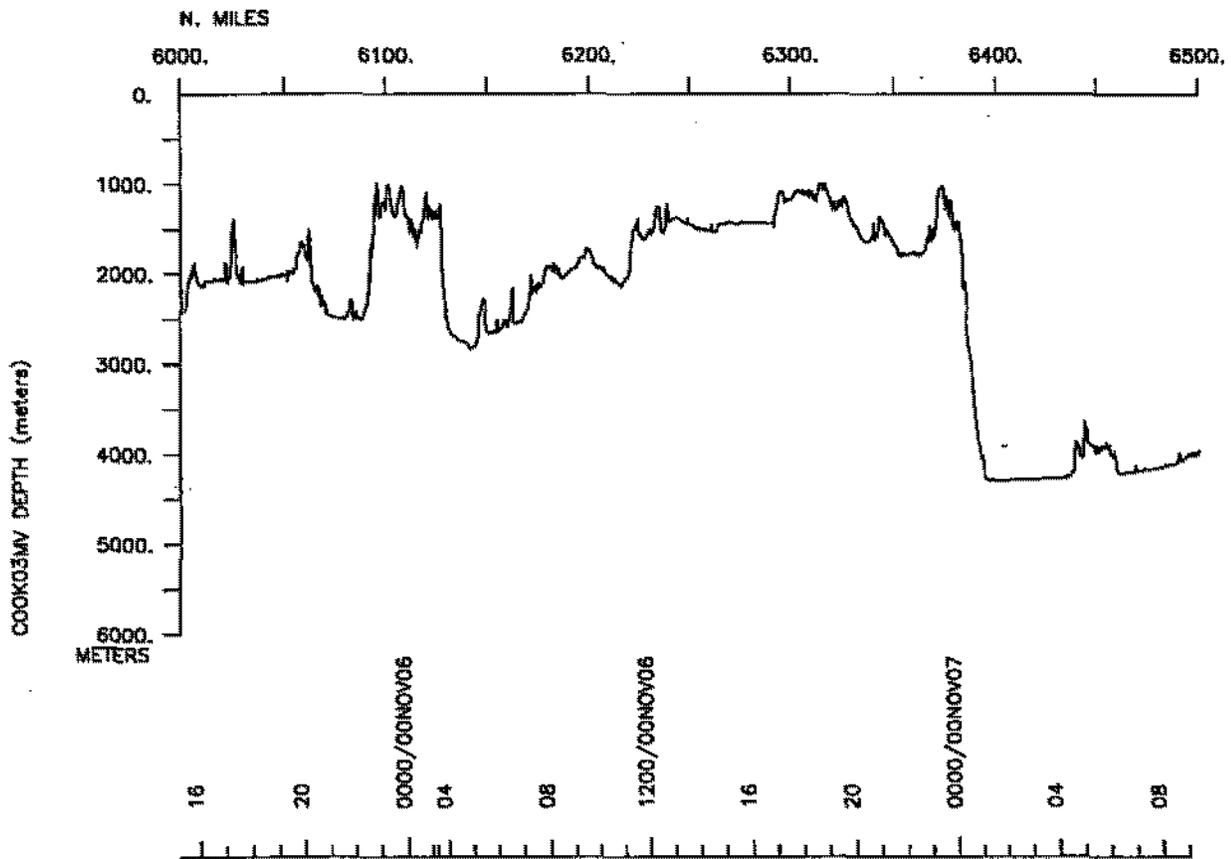
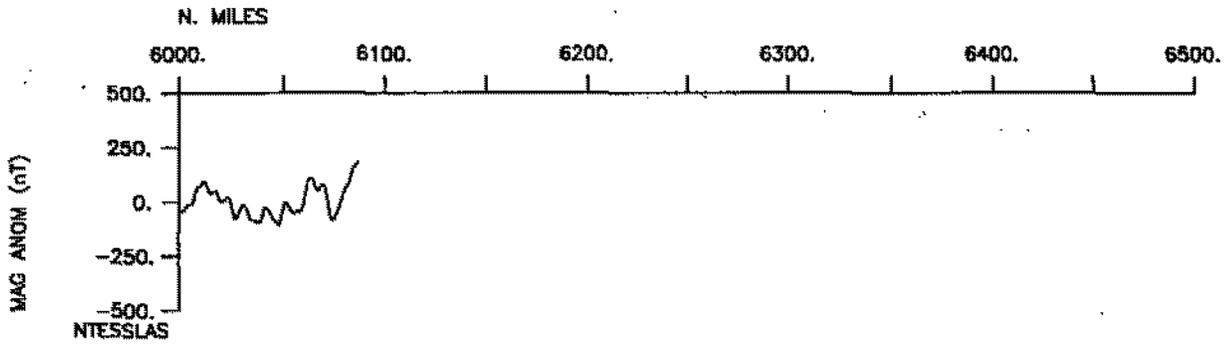
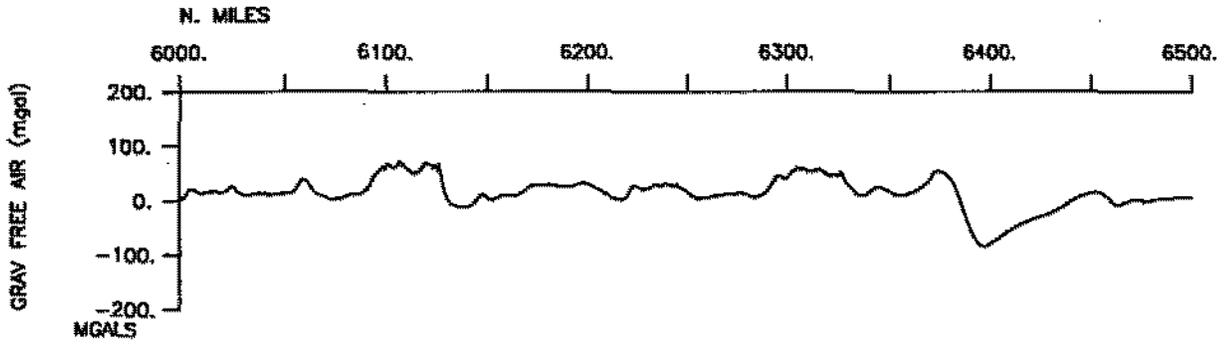


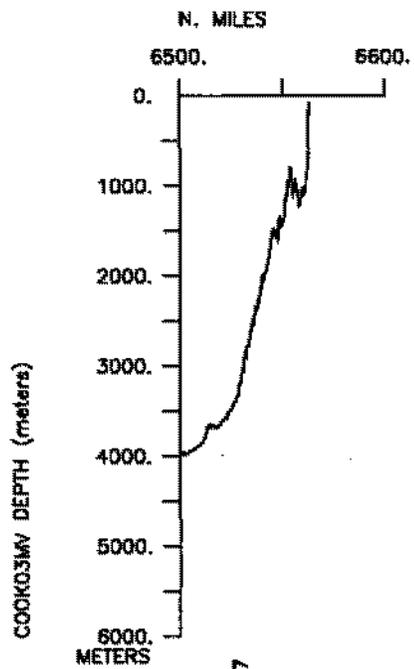
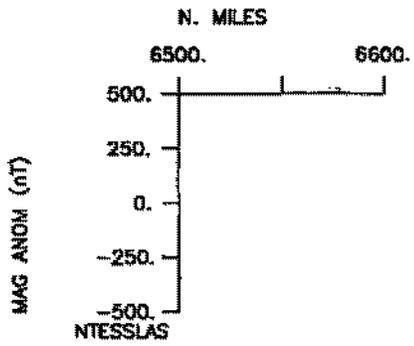
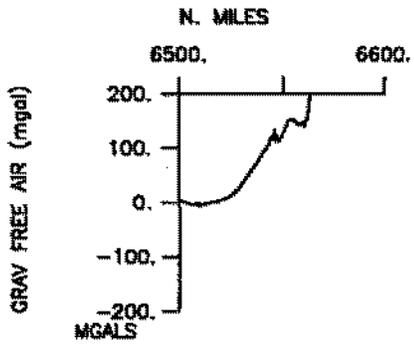












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16



S.I.O. Sample Index

Cook Expedition

Leg 3

(COOK03MV)

R/V Melville

(Issued December 2000)

PORTS:

Arica, Chile (16 October 2000)
to
Papeete, Tahiti (7 November 2000)

Chief Scientist:

Barry Eakins,
Scripps Institution of Oceanography

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 ***

| | | | | | | | | | | |
|------|--------|---|------|---|-----------------|-----|-----------|------------|---|----------|
| 1935 | 161000 | 0 | LGPT | B | Arica, Chile | GDC | 18-28.46S | 70-19.63W | g | COOK03MV |
| 1801 | 071100 | 0 | LGPT | E | Papeete, Tahiti | GDC | 17-32.30S | 149-34.16W | g | COOK03MV |

*** Personnel ***

| # | *****NAME***** | *****TITLE***** | *****AFFILIATION***** | **CRID** |
|------|-----------------|-------------------|-----------------------|----------|
| PECS | GRD Eakins, B. | Chief Scientist | Scripps Institution | COOK03MV |
| PERT | STS Comer, R.L. | Resident Tech. | Scripps Institution | COOK03MV |
| PECT | STS Moe, R. | Computer Engineer | Scripps Institution | COOK03MV |
| PESP | UWA Schacht, K. | Technician | Univ. of Washington | COOK03MV |

*** 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 ***

| | | | | | | | | | | |
|------|--------|---|------|---|--------------------|-----|-----------|------------|---|----------|
| 1935 | 161000 | 0 | LEUW | B | Underway watch log | GDC | 18-28.46S | 70-19.63W | g | COOK03MV |
| 1801 | 071100 | 0 | LEUW | E | Underway watch log | GDC | 17-32.30S | 149-34.16W | g | COOK03MV |

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

| | | | | | | | | | | |
|------|--------|---|------|---|---------------------|-----|-----------|------------|---|----------|
| 2001 | 171000 | 0 | MBSR | B | vbeam&sidescan r-01 | GDC | 16-37.60S | 75-17.84W | g | COOK03MV |
| 0408 | 261000 | 0 | MBSR | E | vbeam&sidescan r-01 | GDC | 4-52.81S | 102-43.89W | g | COOK03MV |
| 0411 | 261000 | 0 | MBSR | B | vbeam&sidescan r-02 | GDC | 4-52.79S | 102-44.55W | g | COOK03MV |
| 1740 | 021100 | 0 | MBSR | E | vbeam&sidescan r-02 | GDC | 10-57.18S | 125-56.98W | g | COOK03MV |

*** Echo Sounder Records ***

| | | | | | | | | | | |
|------|--------|---|------|---|---------------------|-----|-----------|------------|---|----------|
| 1942 | 171000 | 0 | DPR3 | B | 3.5khz Knudsen r-01 | GDC | 16-39.05S | 75-13.98W | g | COOK03MV |
| 1636 | 071100 | 0 | DPR3 | E | 3.5khz Knudsen r-01 | GDC | 17-27.16S | 149-28.28W | g | COOK03MV |

*** Magnetics ***

| | | | | | | | | | | |
|------|--------|---|------|---|-------------------|-----|-----------|------------|---|----------|
| 1754 | 181000 | 0 | MGDR | B | Digital Magnetics | GDC | 14-56.50S | 79-46.19W | g | COOK03MV |
| 2201 | 041100 | 0 | MGDR | E | Digital Magnetics | GDC | 14-12.52S | 136-53.39W | g | COOK03MV |

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

**** Digital Gravity ****

| | | | | | | | | | | |
|------|--------|---|------|-------------------|-----|-----------|------------|---|--|----------|
| 1935 | 161000 | 0 | GVDR | B Digital gravity | GDC | 18-28.46S | 70-19.63W | g | | COOK03MV |
| 1801 | 071100 | 0 | GVDR | E Digital gravity | GDC | 17-32.30S | 149-34.16W | g | | COOK03MV |

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

| | | | | | | | | | | |
|------|--------|---|------|------------------------|-----|-----------|------------|---|--|----------|
| 1935 | 161000 | 0 | IMET | B Weather measurements | GDC | 18-28.46S | 70-19.63W | g | | COOK03MV |
| 1801 | 071100 | 0 | IMET | E Weather measurements | GDC | 17-32.30S | 149-34.16W | g | | COOK03MV |

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

| | | | | | | | | | | |
|------|--------|---|------|------------------------|-----|-----------|------------|---|--|----------|
| 1935 | 161000 | 0 | ADCP | B 300khz Current meas. | GDC | 18-28.46S | 70-19.63W | g | | COOK03MV |
| 1801 | 071100 | 0 | ADCP | E 300khz Current meas. | GDC | 17-32.30S | 149-34.16W | g | | COOK03MV |

**** Oceanographic CTD Floats ****

| | | | | | | | | | | |
|------|--------|---|------|------------------|-----|-----------|------------|---|--|----------|
| 1933 | 211000 | 0 | TDXX | Deploy ARGOS 418 | UWA | 9-08.67S | 94-38.09W | g | | COOK03MV |
| 2200 | 221000 | 0 | TDXX | Deploy SOLO 1169 | SIO | 7-35.88S | 99-54.54W | g | | COOK03MV |
| 2041 | 291000 | 0 | TDXX | Deploy ARGOS 408 | UWA | 7-25.26S | 113-00.21W | g | | COOK03MV |
| 0330 | 011100 | 0 | TDXX | Deploy ARGOS 402 | UWA | 9-10.04S | 117-58.52W | g | | COOK03MV |
| 1301 | 021100 | 0 | TDXX | Deploy SOLO 1176 | SIO | 10-39.99S | 124-59.58W | g | | COOK03MV |
| 1330 | 031100 | 0 | TDXX | Deploy ARGOS 421 | UWA | 12-09.70S | 129-59.74W | g | | COOK03MV |

