

INFORMAL REPORT AND INDEX OF  
NAVIGATION, DEPTH, MAGNETIC, GRAVITY AND SUBBOTTOM PROFILER DATA  
(Issued August 1988)

ROUNABOUT EXPEDITION

LEG 1

=====

San Diego, California (29 April 1988)  
to  
Honolulu, Hawaii (15 May 1988)

R/V Washington

Co-Chief Scientists:

J. Hildebrand (Scripps Institution of Oceanography)  
A. Chave (AT&T Bell Laboratories)

Resident Marine Technician - J. Boaz

Data Collection and Processing Funded by ONR-0005/0010  
NSF Grant Number OCE87-02835  
and UC General Ship Funds

Post-Cruise Processing and Report Preparation  
by Geological Data Center, Scripps Institution of Oceanography

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.  
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Geological Data Center, Scripps Institution of Oceanography,  
La Jolla, California 92093.

GDC Cruise I.D.# 239

INFORMAL REPORT AND INDEX OF NAVIGATION  
AND UNDERWAY GEOPHYSICAL DATA

Processed by the Geological Data Center  
Scripps Institution of Oceanography

Contents:  
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- 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 anomaly and gravity free air anomaly vs. distance. Sections of track having subbottom profiles (airgun or watergun) records have a wide black line along the bottom of the profile. Sections having Sea Beam are indicated by a narrow black line.
- Sample Index - list of beginning and end times and positions of all underway records as well as all other samples and measurements (geology, biology, physical oceanography, etc.) collected on the cruise leg.

NOTE: One or more of the underway data types may not be collected on a given cruise leg.

For information on the availability and reproduction costs of data in the following forms, contact S. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, CA 92093. Phone (619)534-2752.

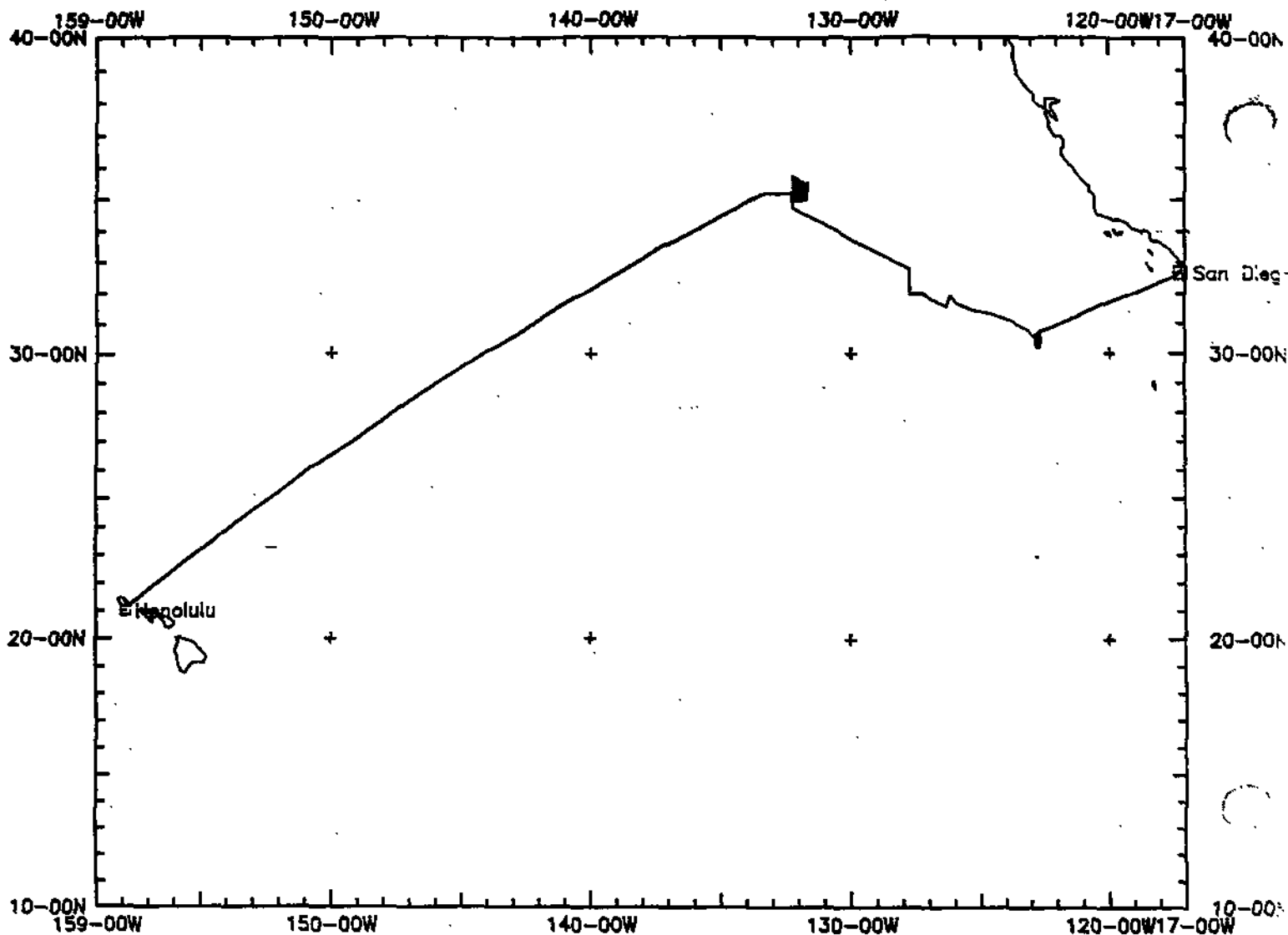
1. Navigation listing with times and positions of course and speed changes, fixes and drift velocity.
2. Depth compilation plots - compilation plots at the traditional scale of 4in/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2 $\frac{2}{3}$  degree beam width) depths retrieved at one minute intervals of ship time.
3. Plots of depths, magnetics or gravity profiles along track - custom plots at various map and profile scales on Mercator projection may be requested.
4. Separate time series files of navigation, depth, gravity and magnetics as well as these data merged in the MGD77 Exchange format on magnetic tape.
5. Microfilm or Xerox copies of:
  - a. Echosounder records - 12 and 3.5 kHz frequency
  - b. Subbottom profiler records
  - c. Magnetometer records
  - d. Underway data log book

## SIO Sea Beam Data

The following forms are available, subject to approval of the cruise leg chief scientist:

- 1) Archive copy of contour swath books generated in real time on board ship available for inspection at the data center.
- 2) Microfilm (35mm flowfilm) containing swath books plus, for some cruises, the Sea Beam monitor record and navigation list.
- 3) Sea Beam merged tapes - Sea Beam data merged with navigation. (Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping Sea Beam swaths.)
- 4) Archive contour plots - 16"/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center; additional copies may be generated from plot files stored on tape.
- 5) Custom generated plots of Sea Beam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns).

revised October 1986



Roundabout, Leg 1 (RNDB01WT)

Scale: 0.1632"/deg longitude

#### ROUNABOUT EXPEDITION LEG 1

##### CO-CHIEF SCIENTISTS:

J. Hildebrand (Scripps Institution of Oceanography)

A. Chave (AT&T Bell Laboratories)

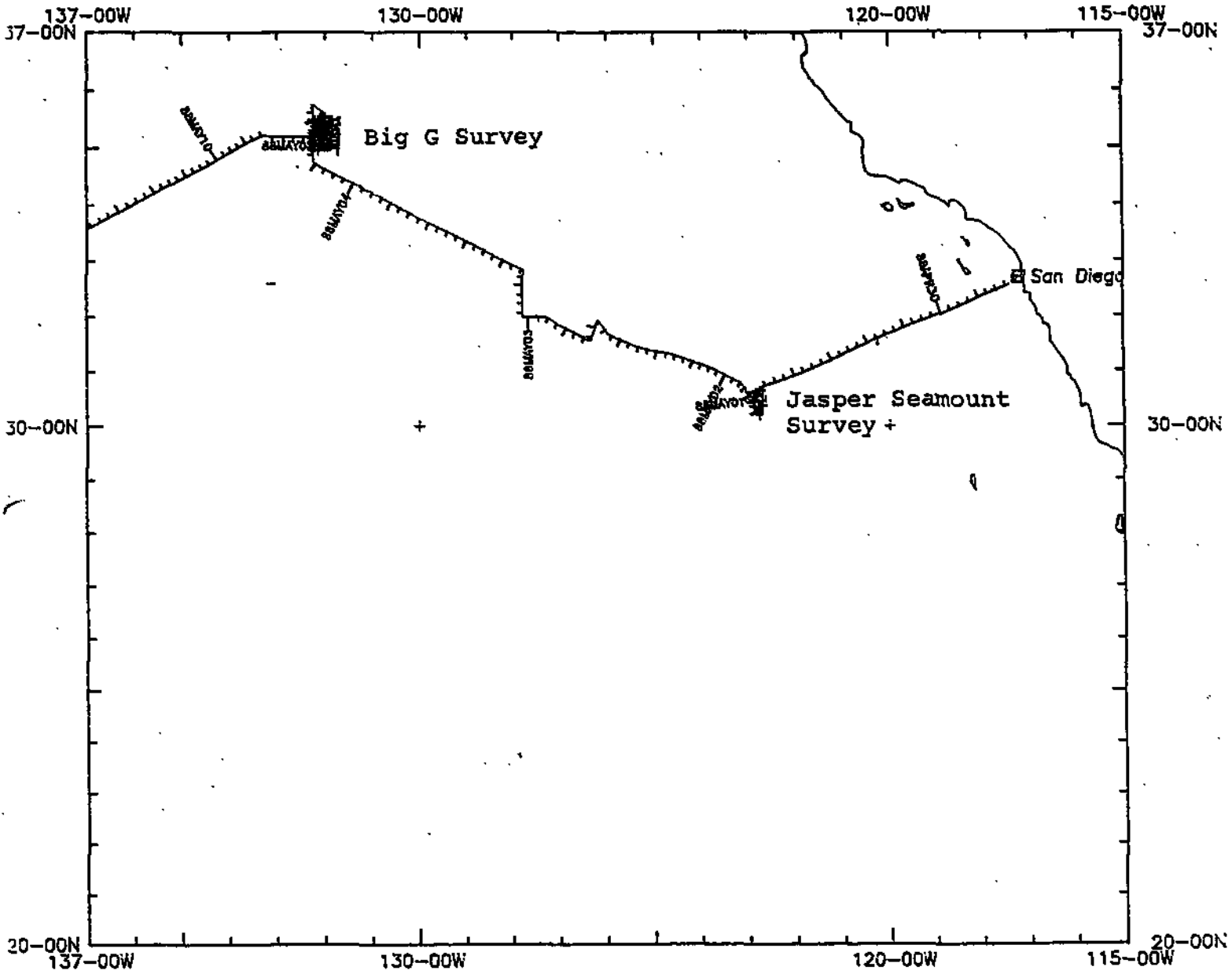
PORTS: San Diego, Calif. - Honolulu, Hawaii

DATES: 29 April - 15 May 1988

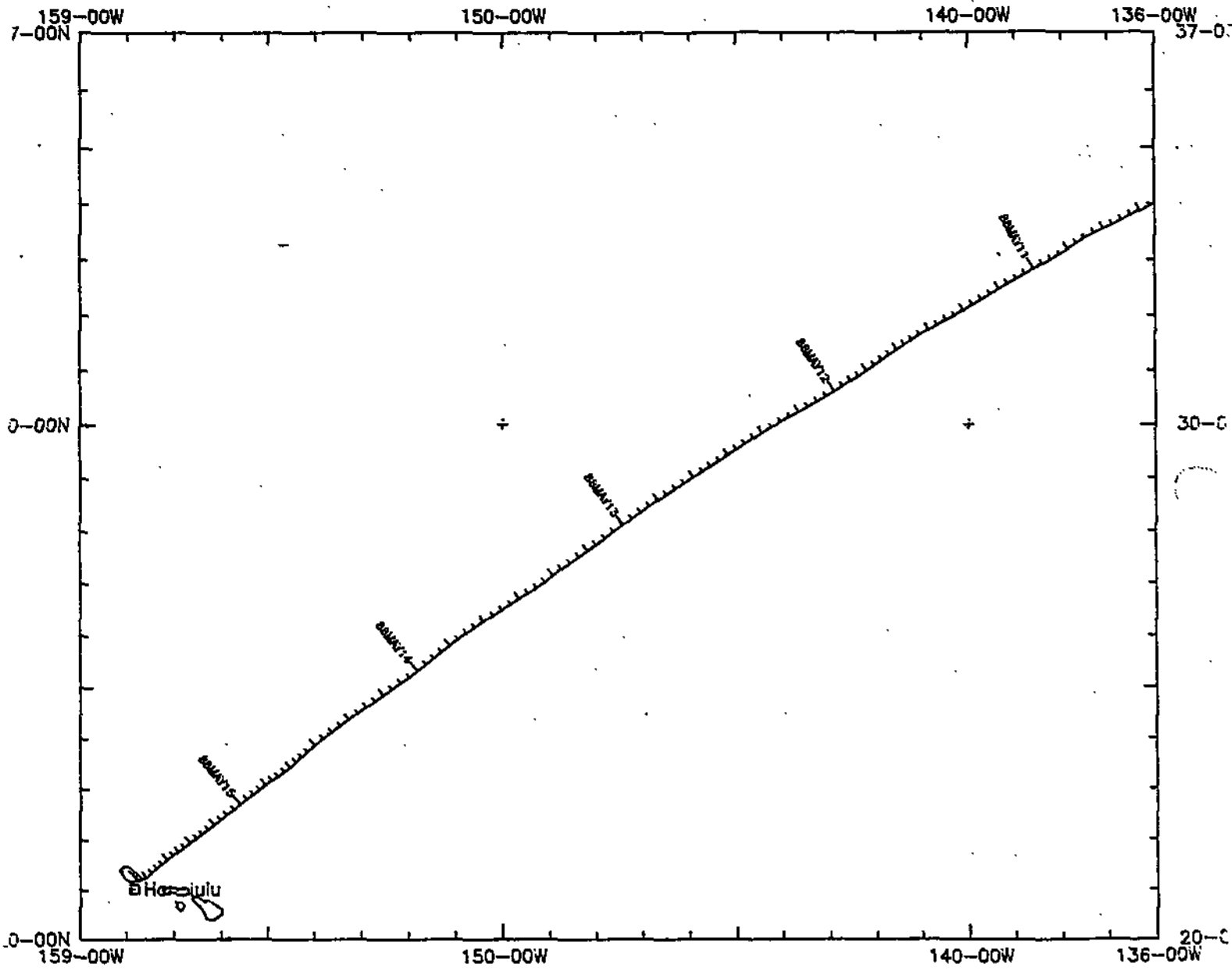
SHIP: R/V T. Washington

##### TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

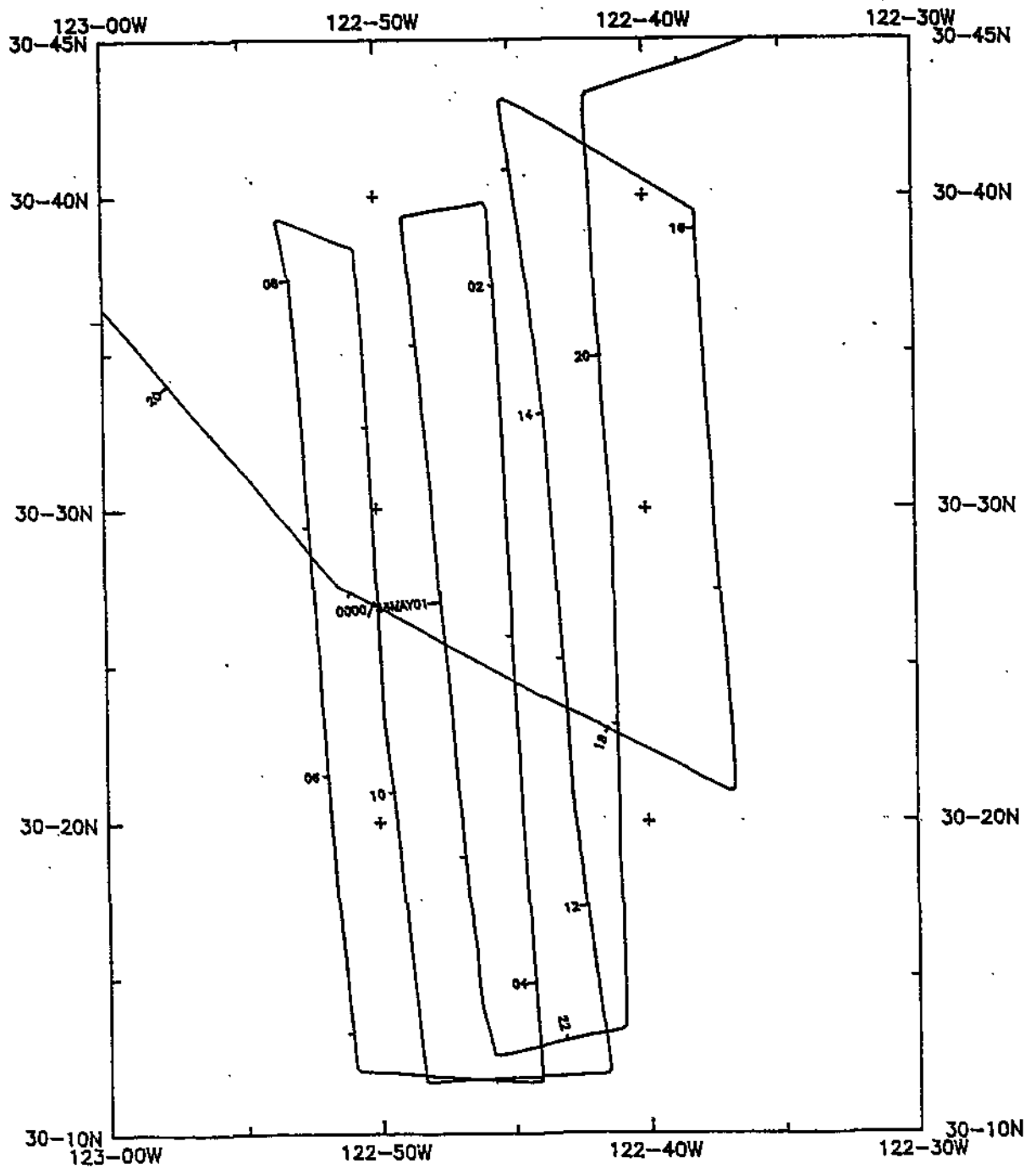
- 1) Cruise - 3889 miles
- 2) Bathymetry - 3687 miles
- 3) Magnetics - 3769 miles
- 4) Seismic Reflection - none collected
- 5) Gravity - 3889 miles
- 6) Sea Beam - 3687 miles



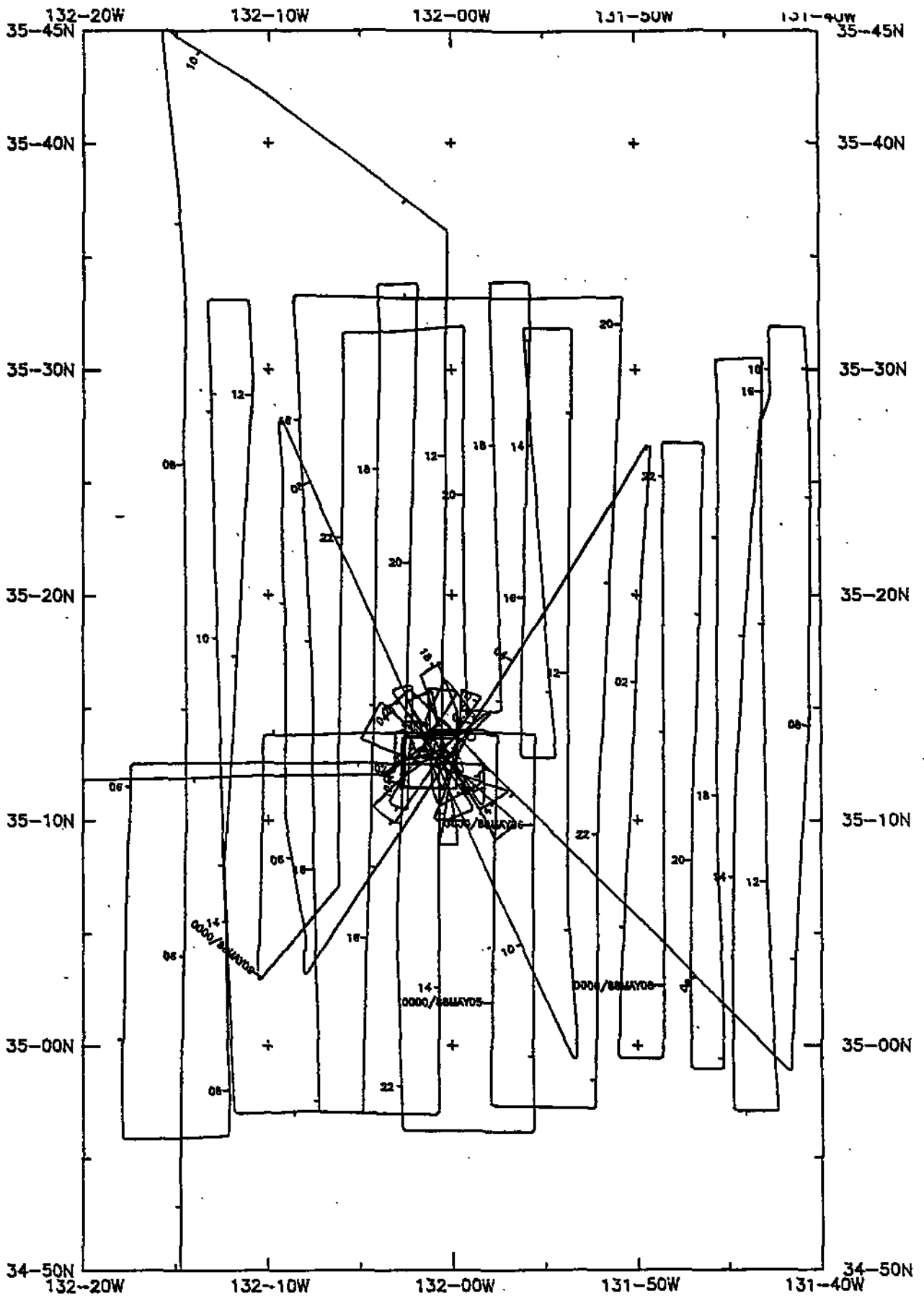
ROUNABOUT LEG 1 (RNDB01WT)  
Plot 1 of 2 at .312in deg longitude



ROUNDABOUT LEG 1 (RND01WT)  
 Plot 2 of 2 at .312in deg longitude

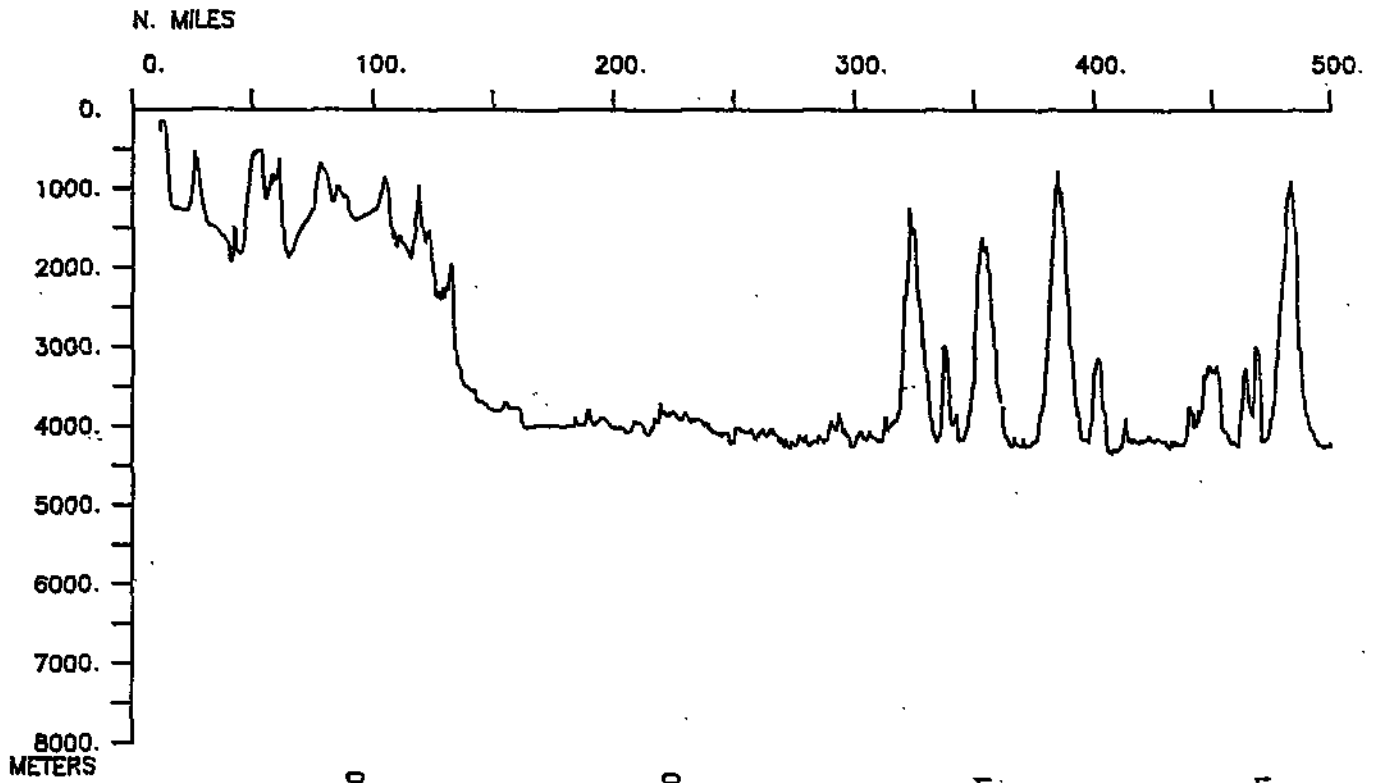
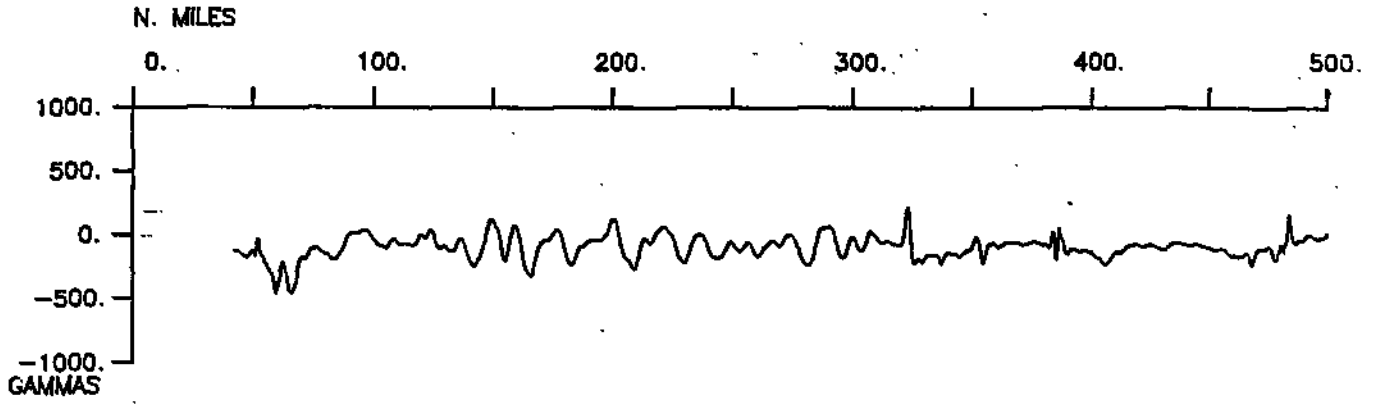
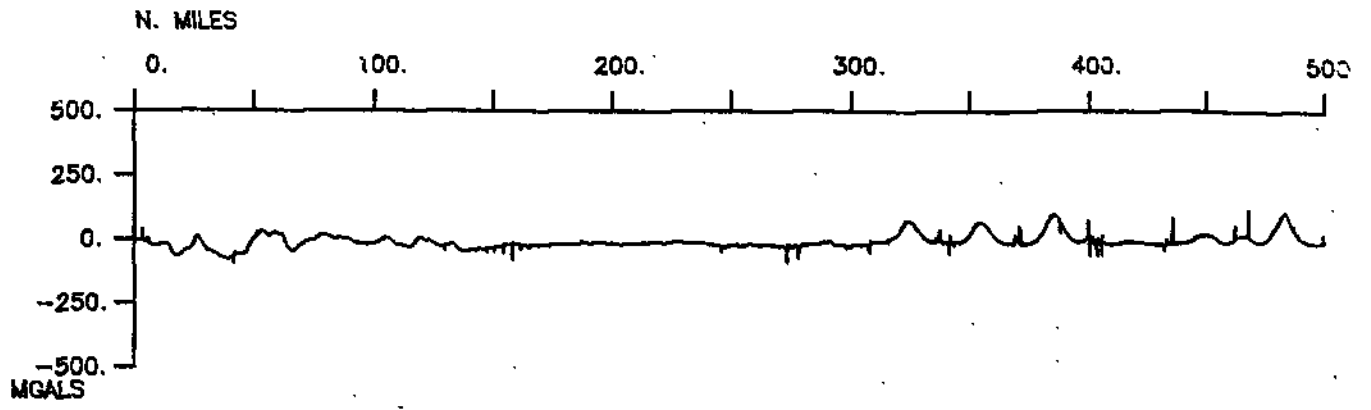


ROUNDABOUT LEG 1 (RNDB01WT)  
 JASPER SEAMOUNT SURVEY

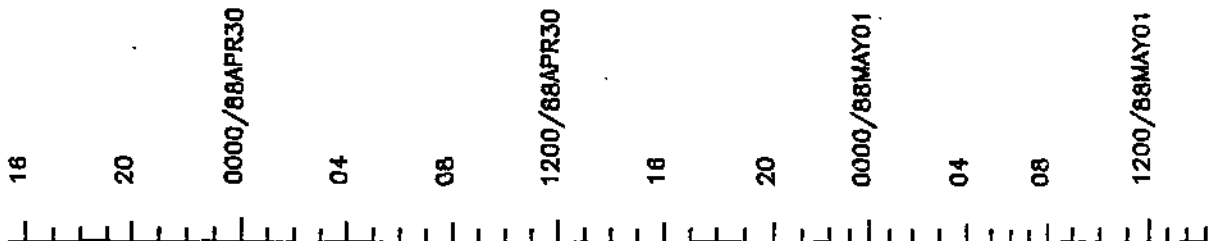


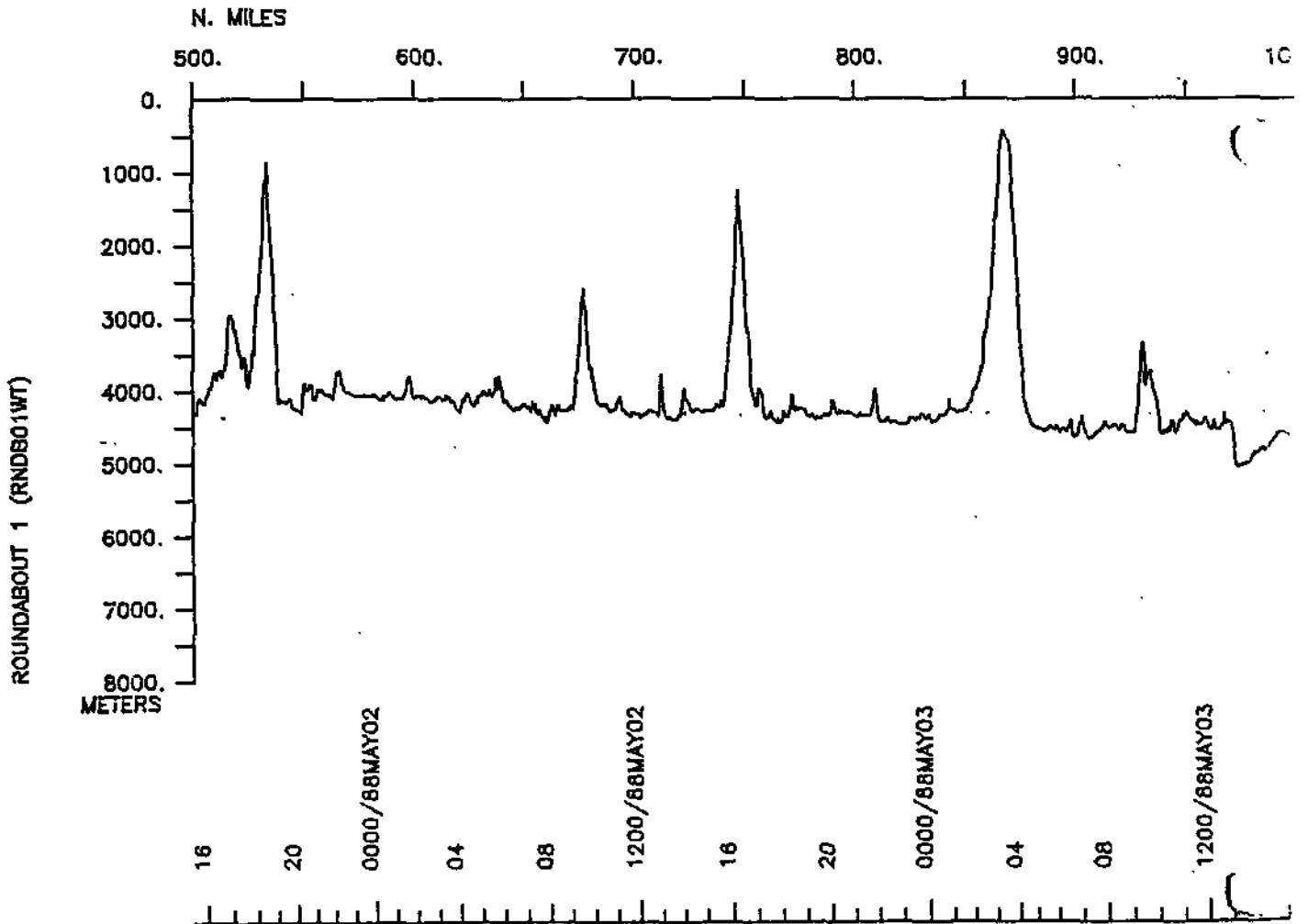
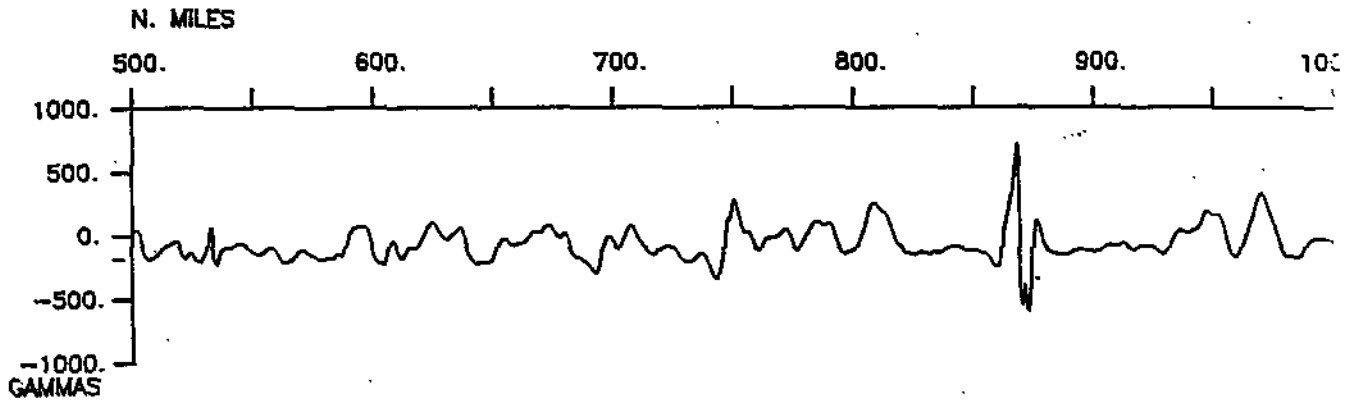
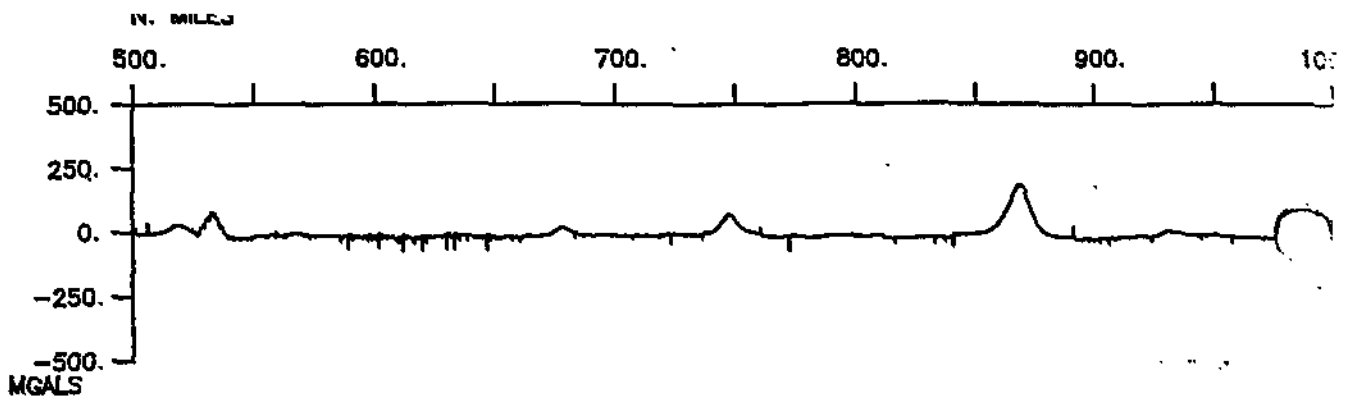
ROUNDBABOUT LEG 1 (RNDB01WT)  
BIG G SURVEY

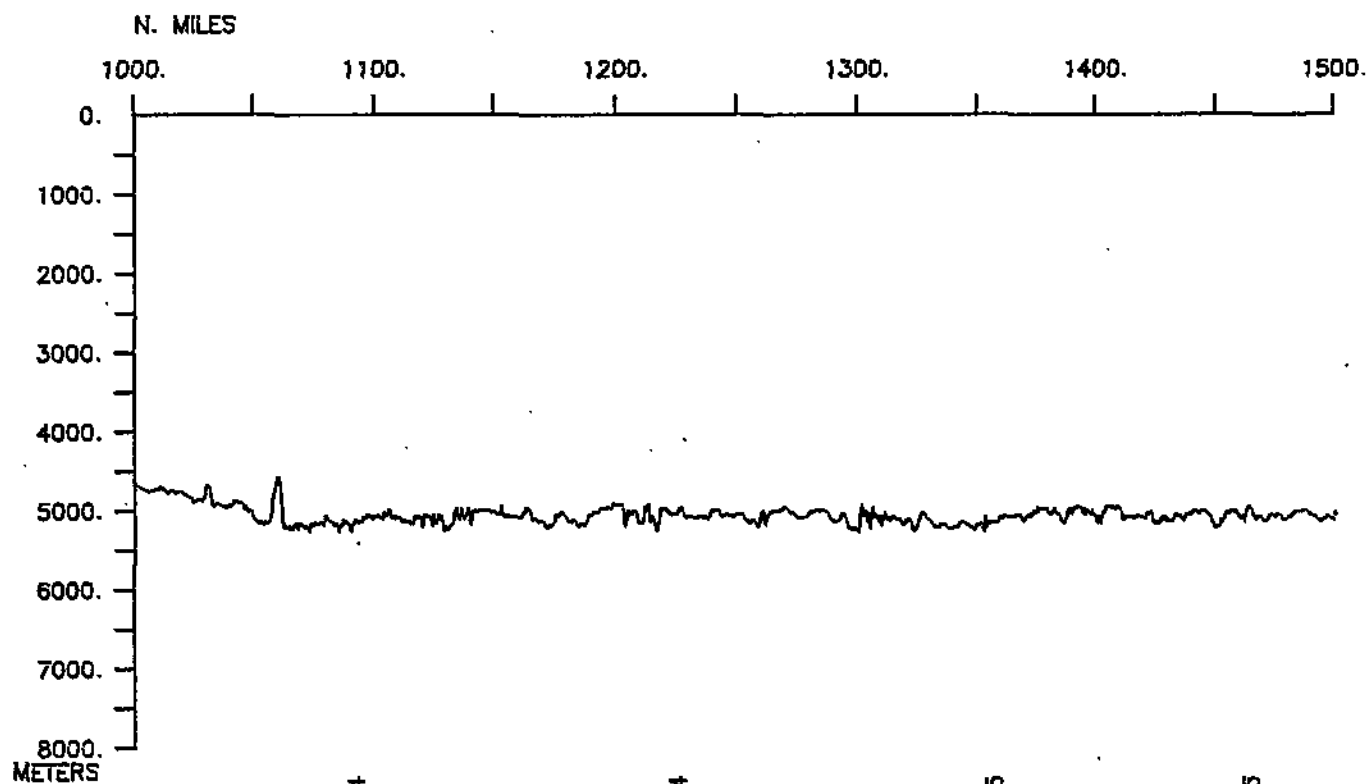
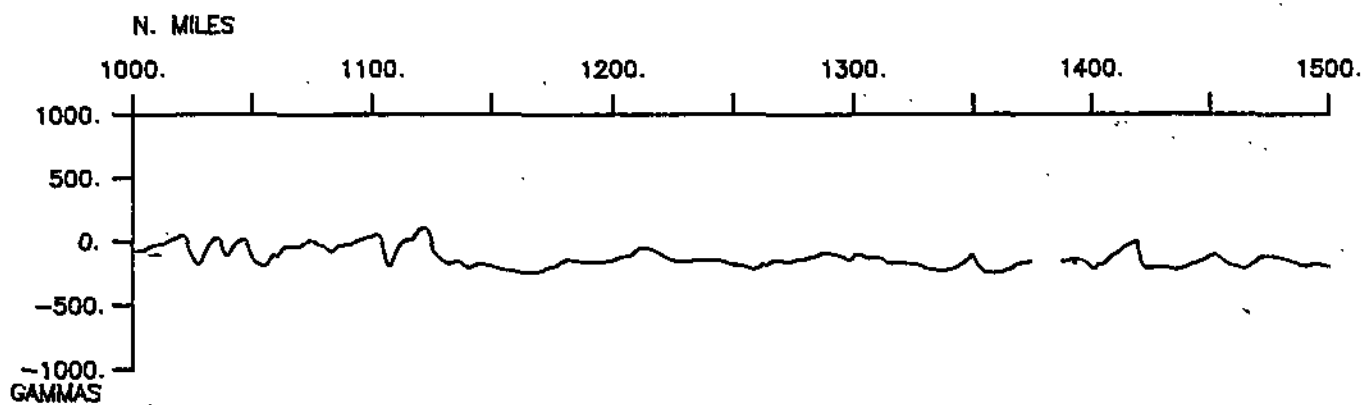
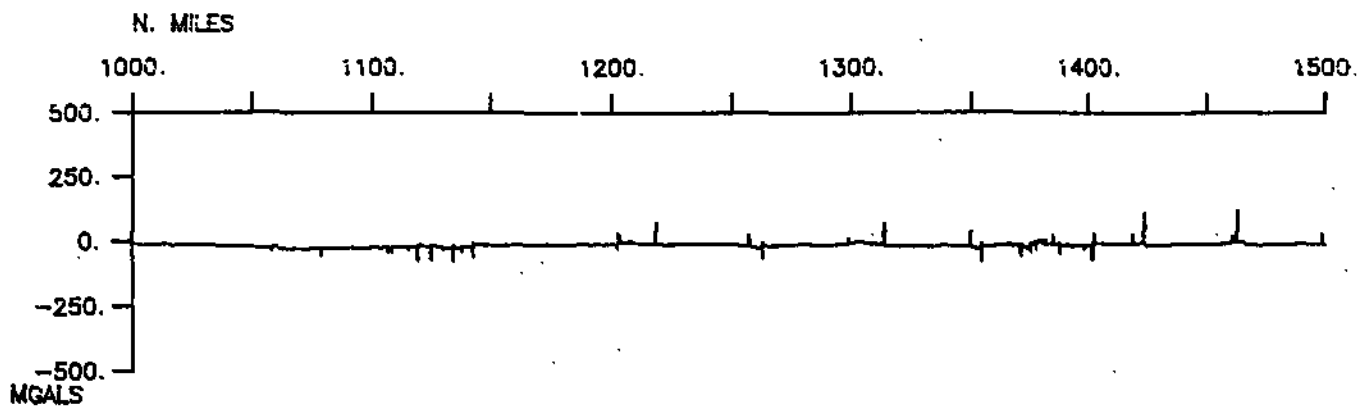




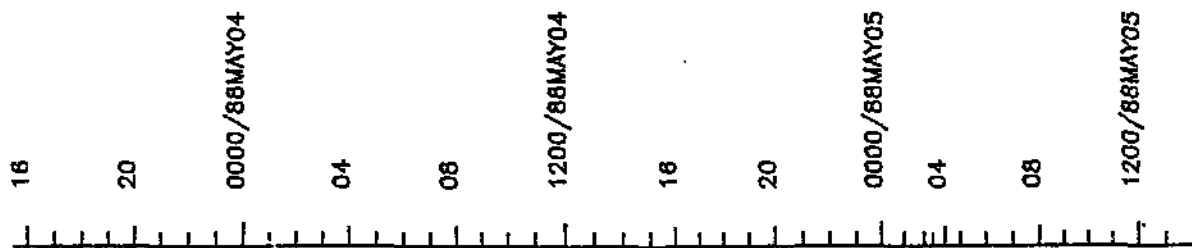
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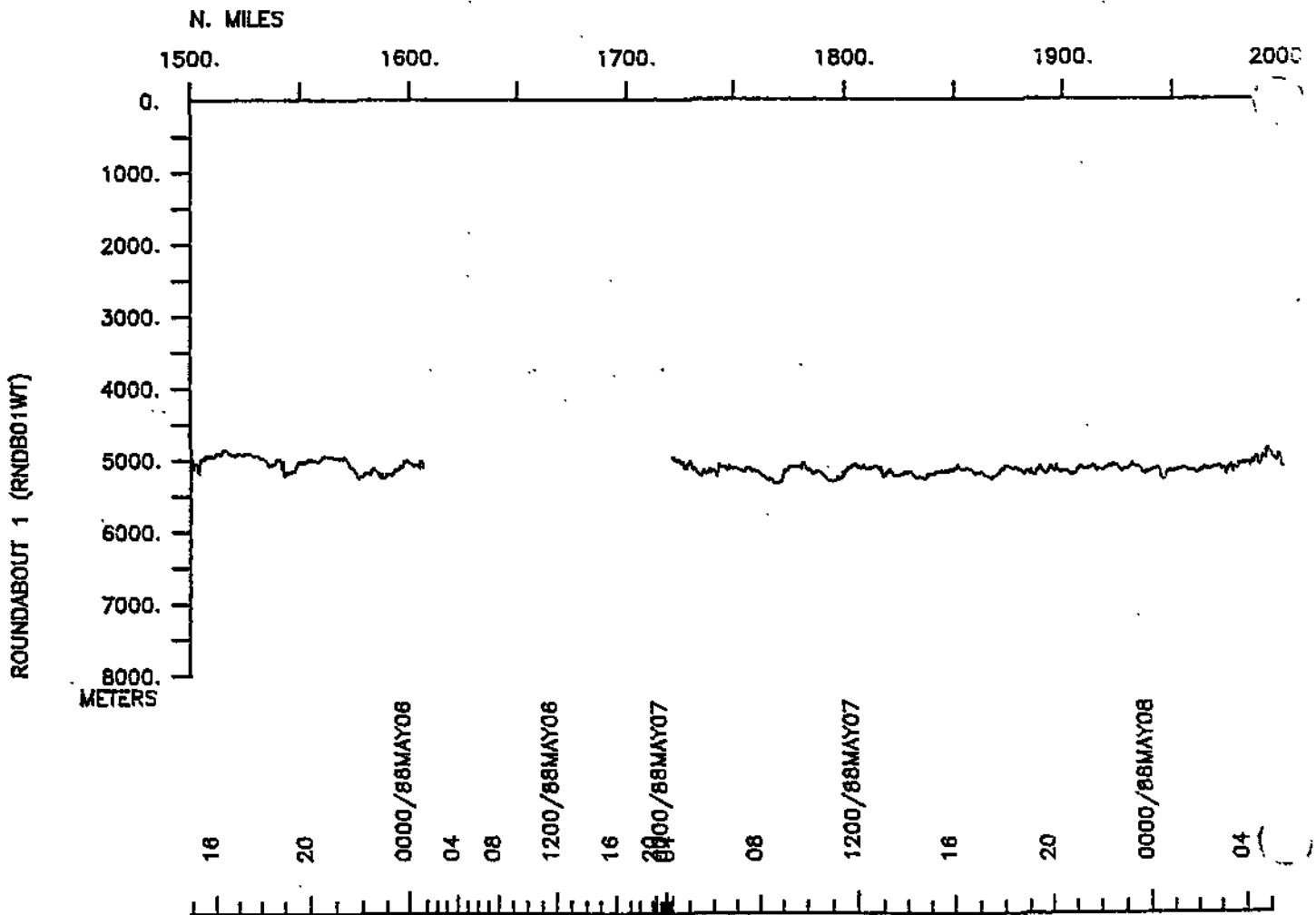
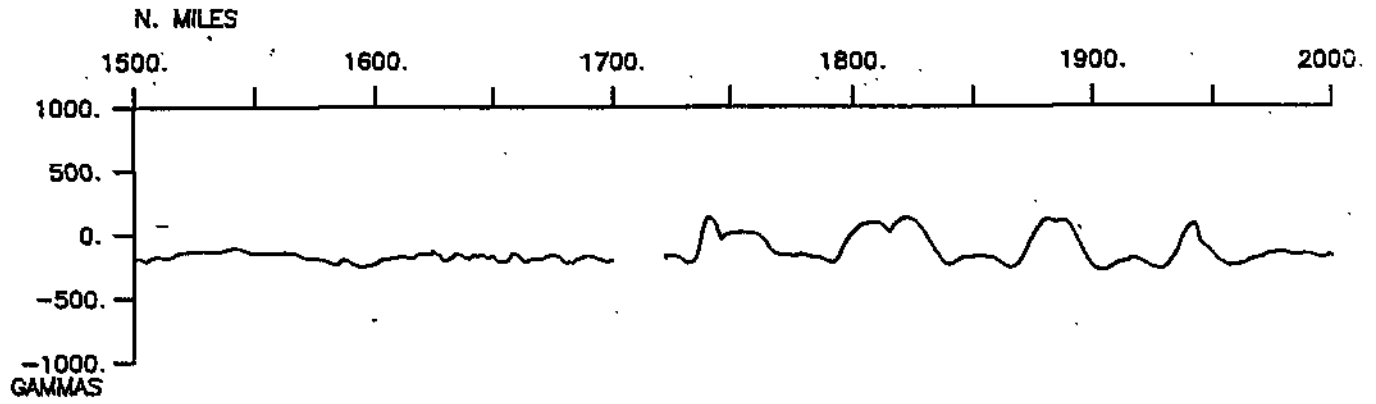
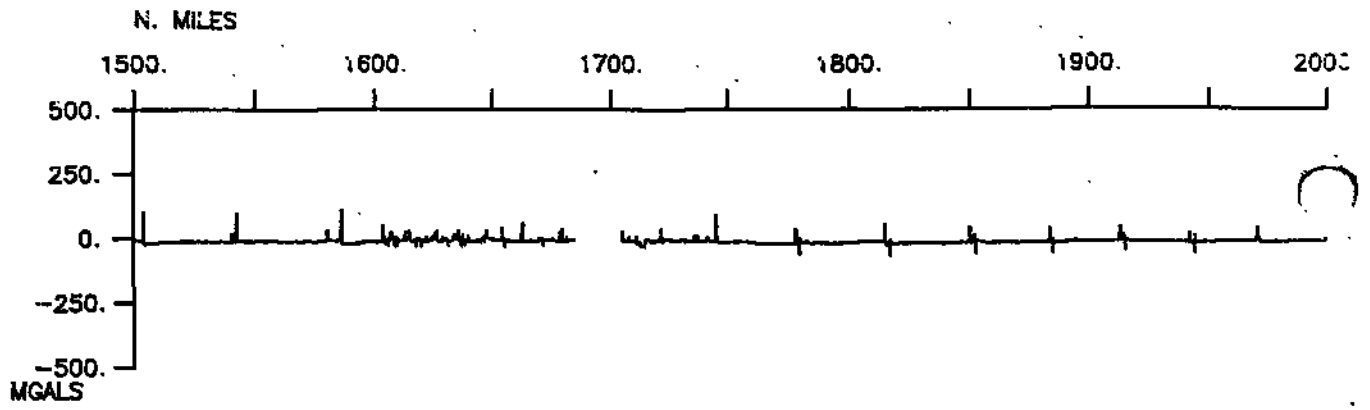


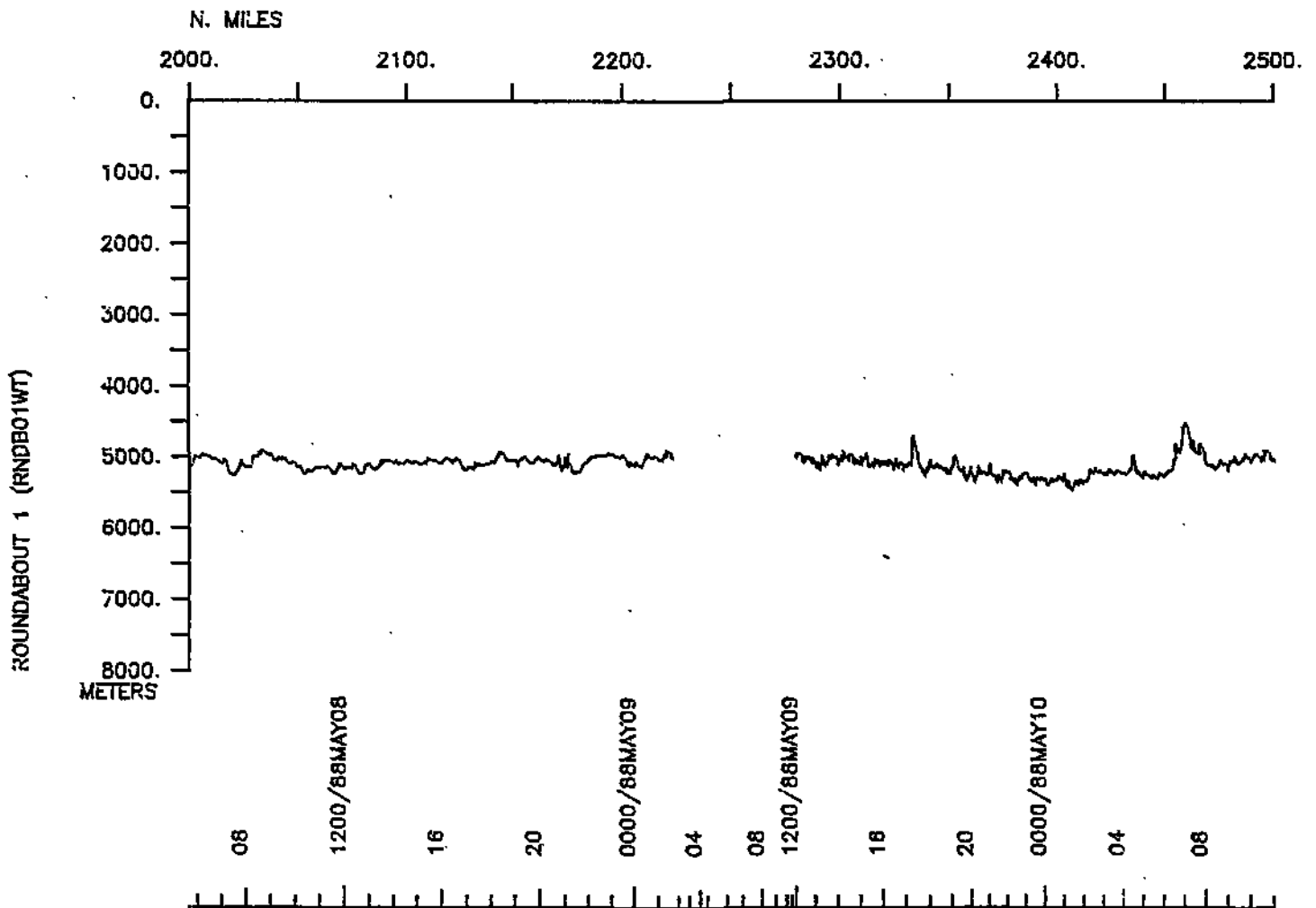
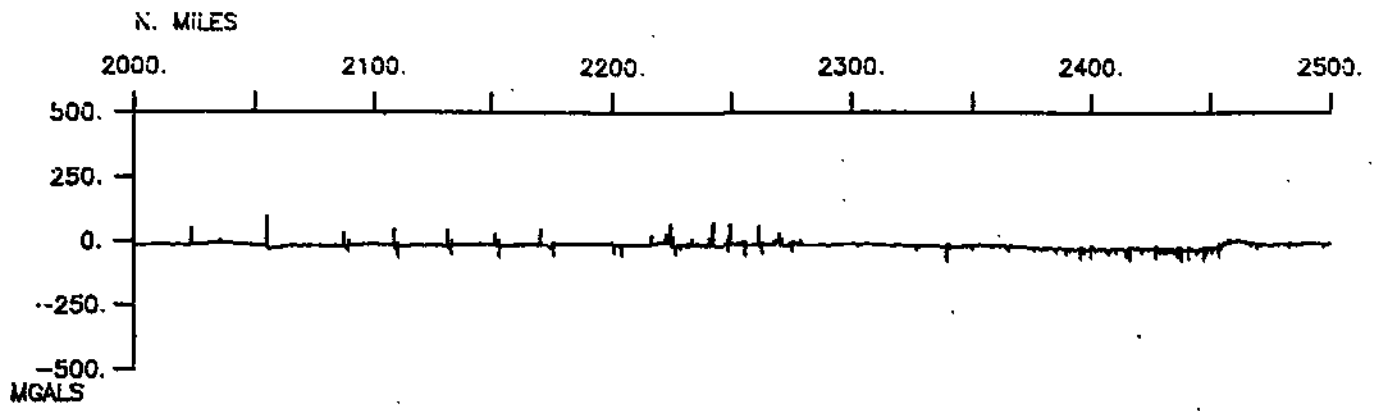


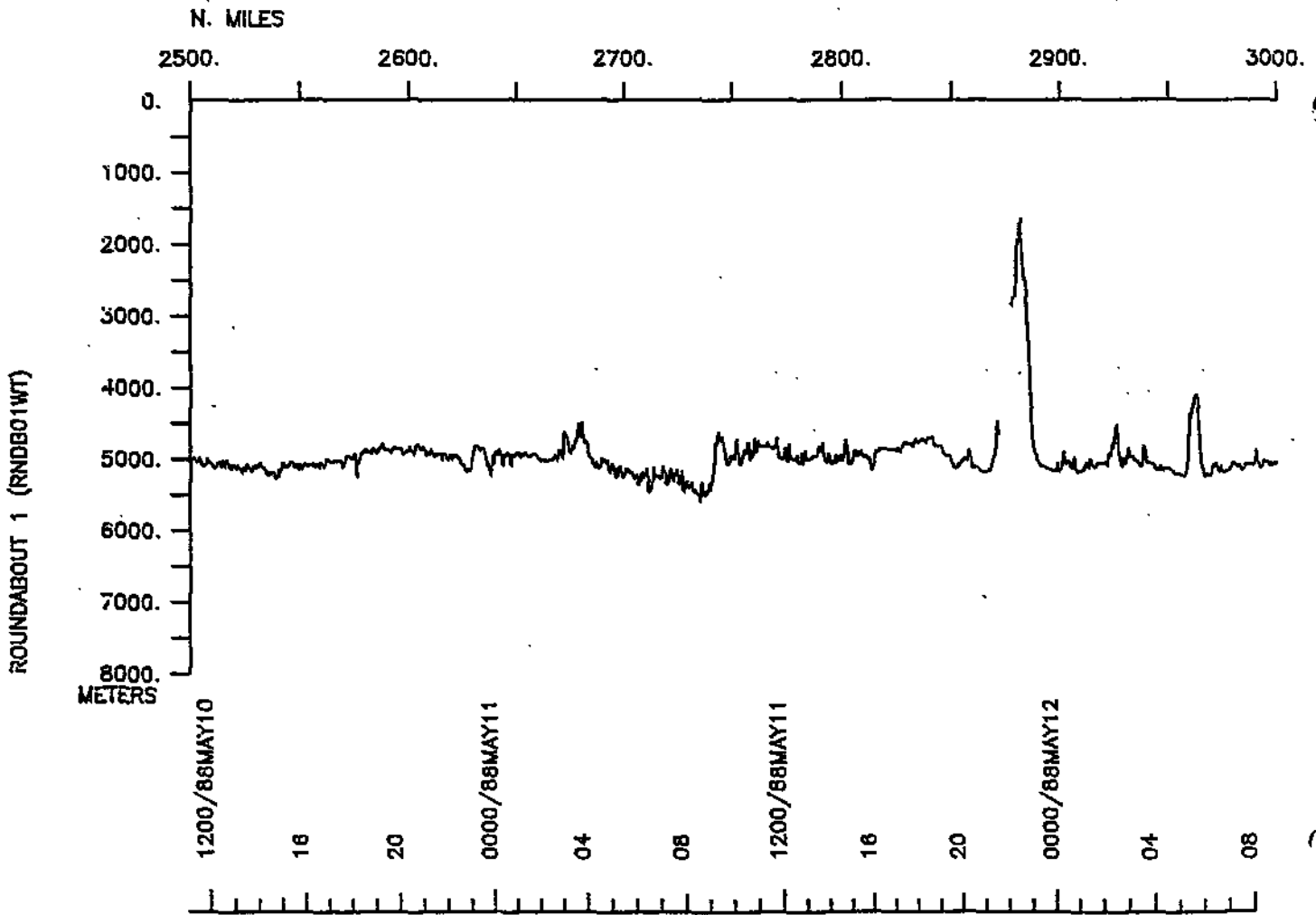
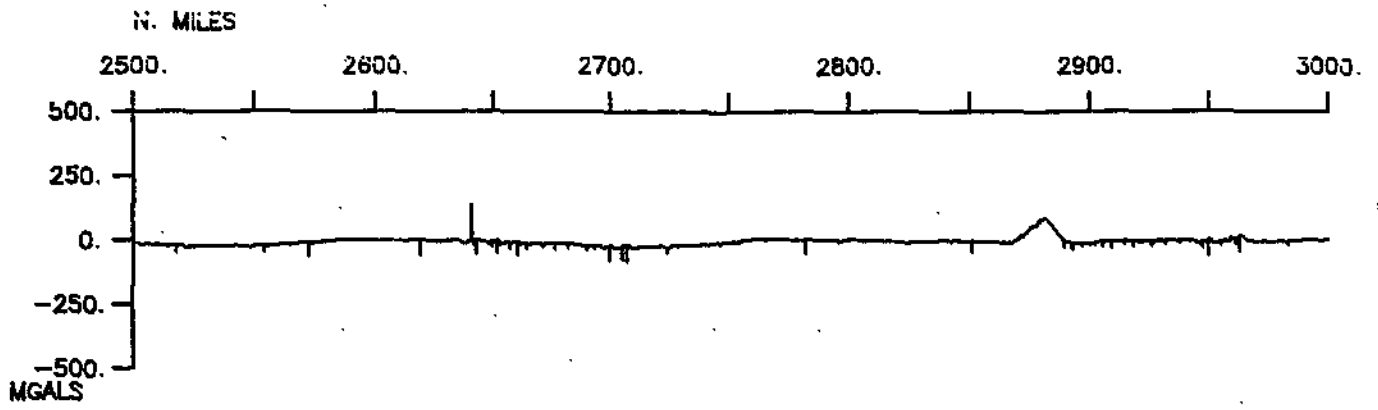


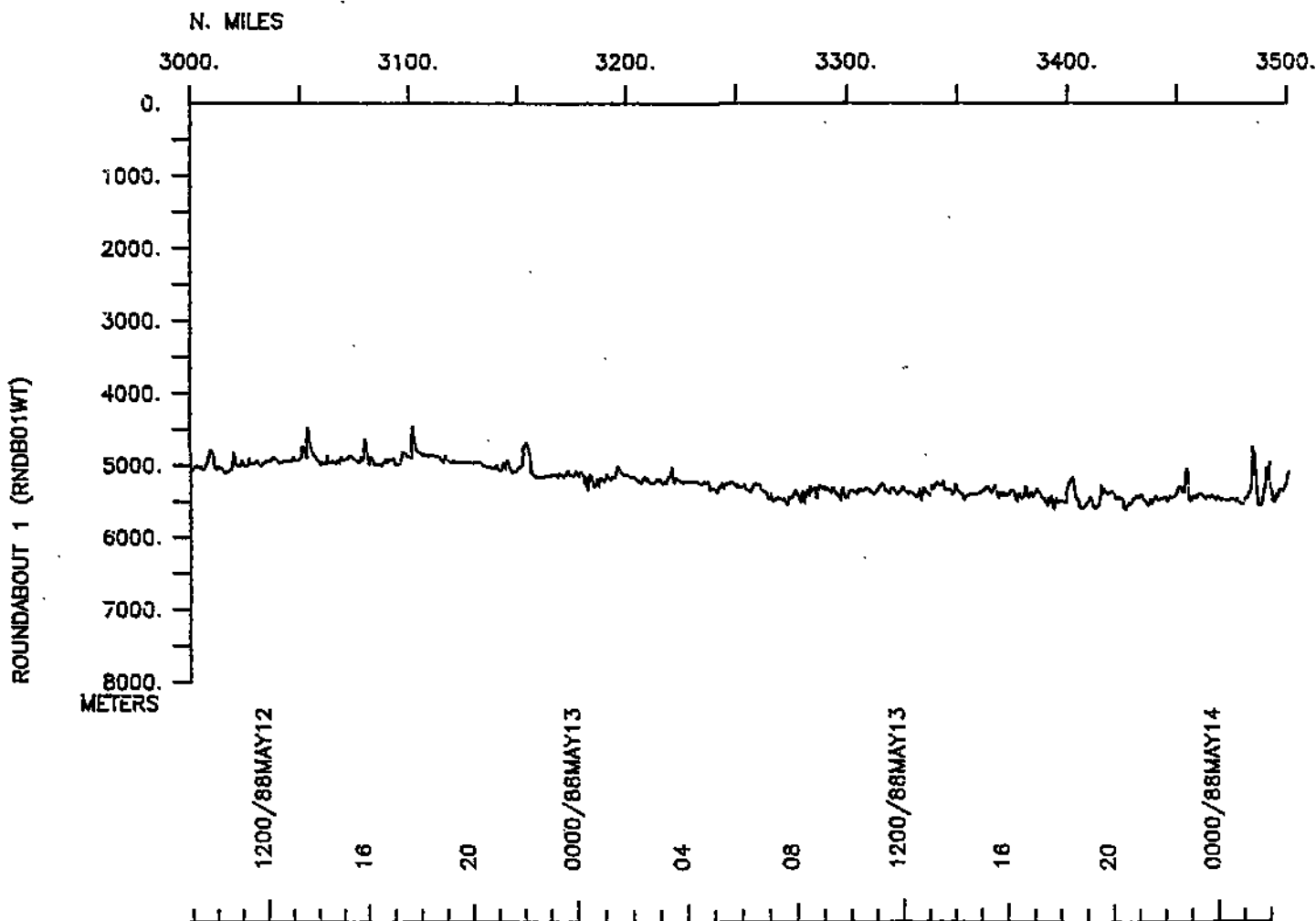
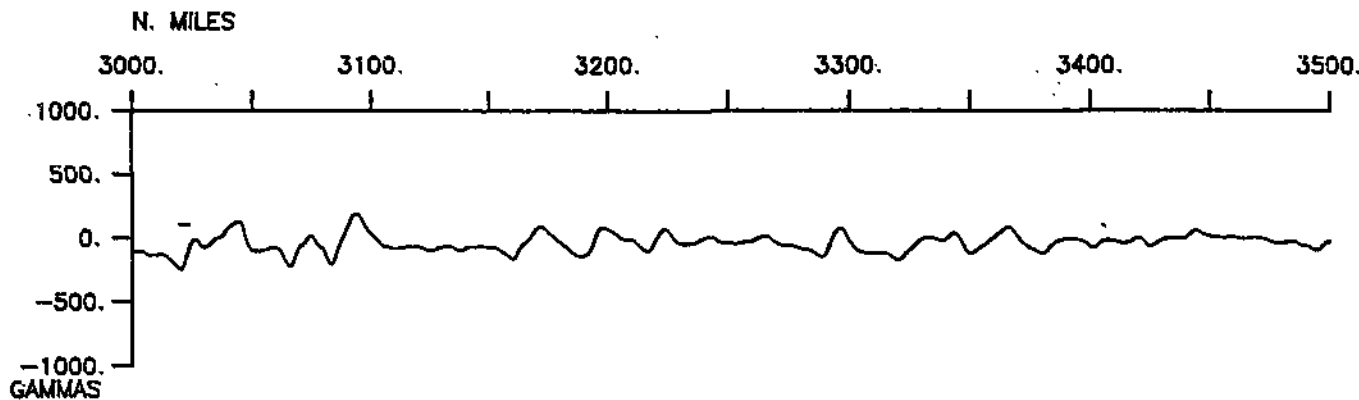
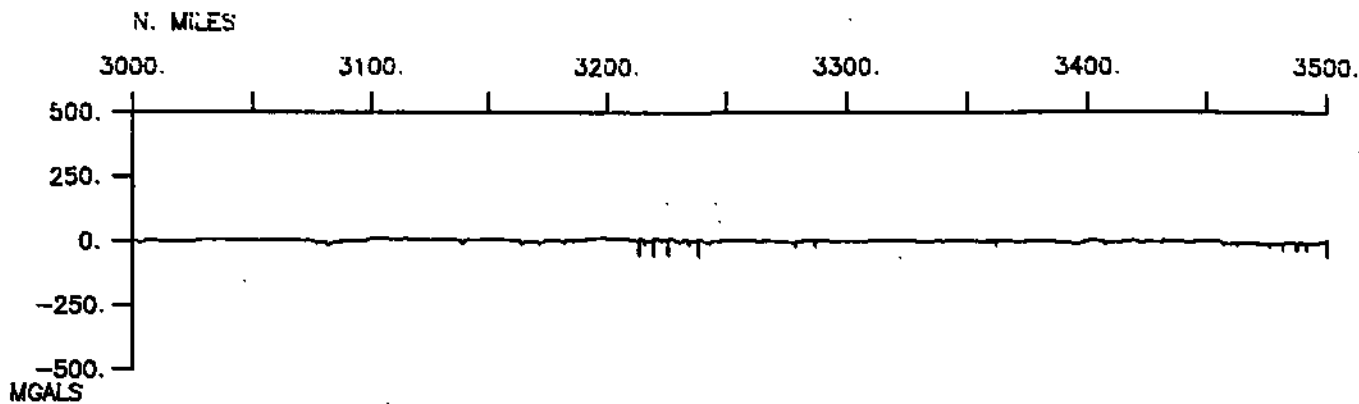
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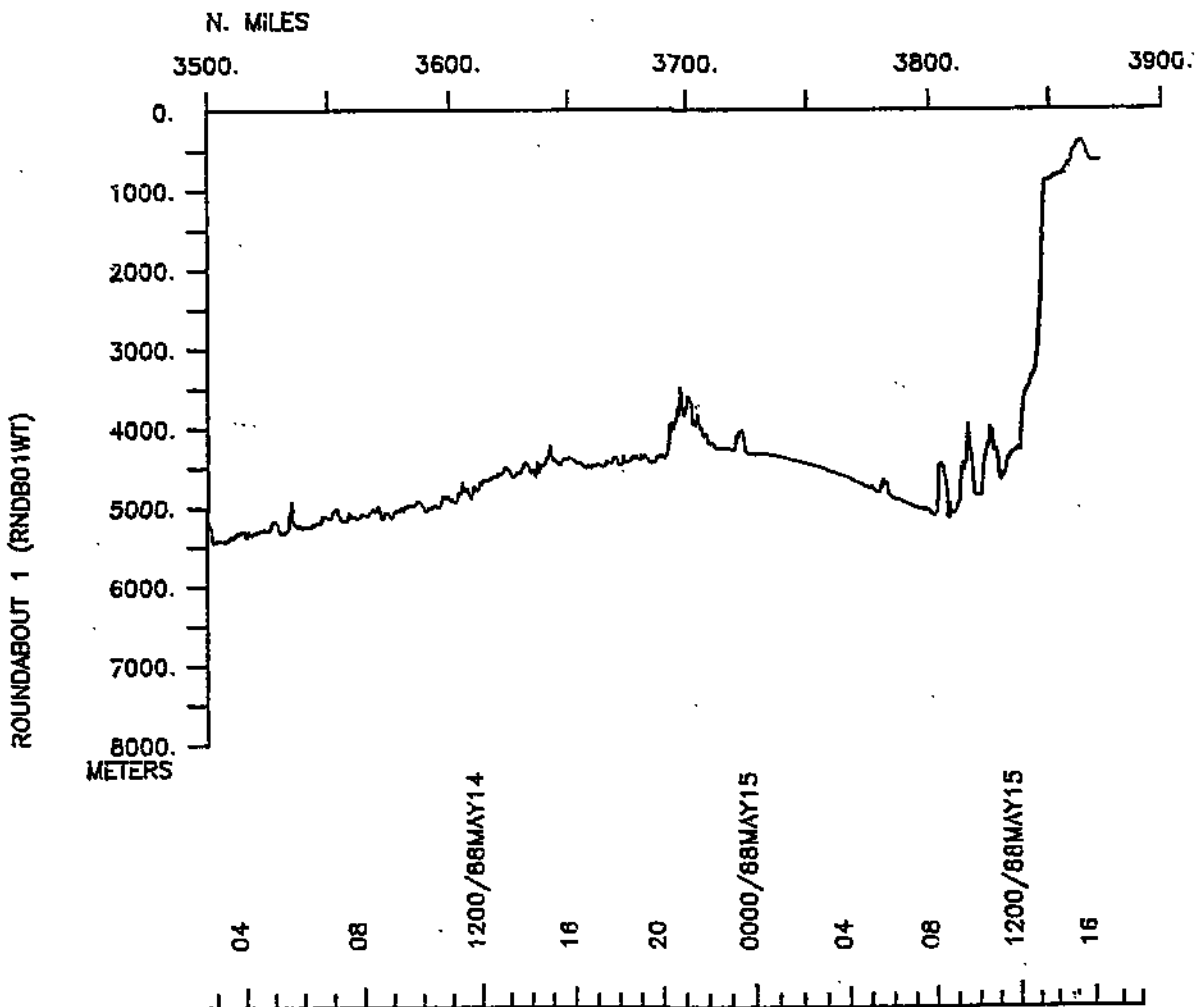
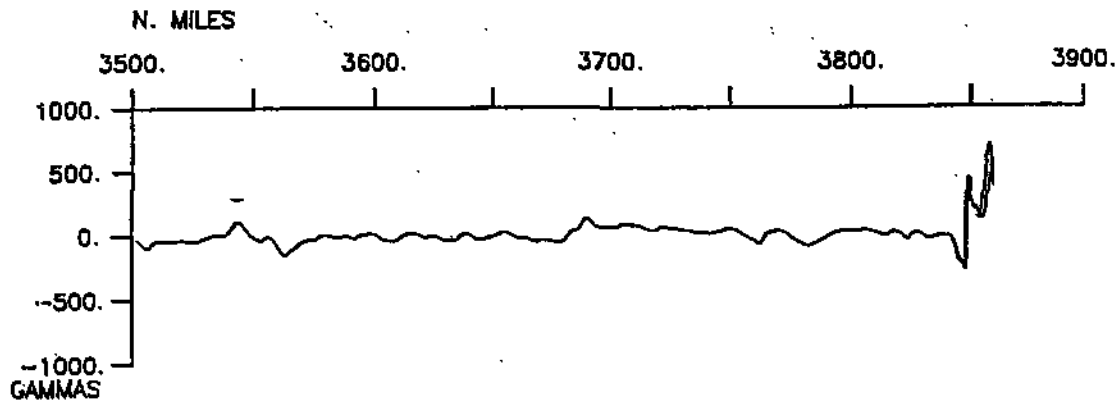
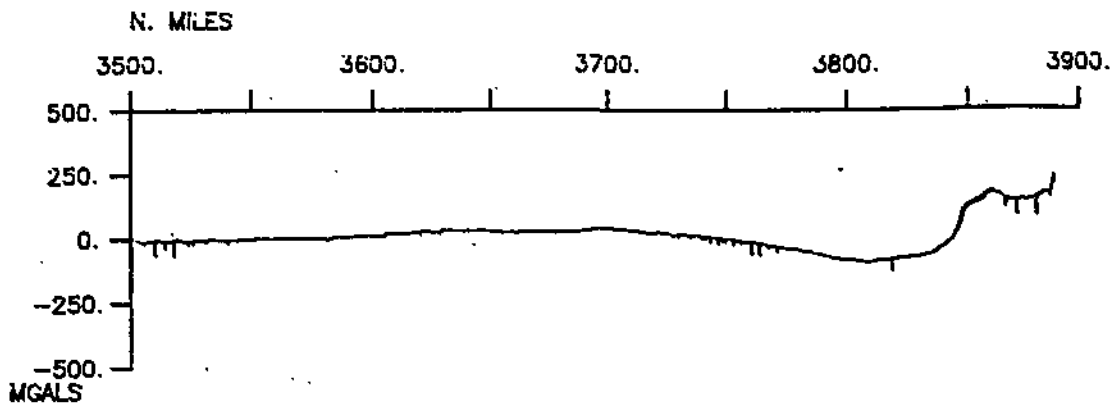














S.I.O. SAMPLE INDEX

(Issued August 1988)

ROUNABOUT EXPEDITION

Leg 1

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R/V T. Washington

San Diego, Calif. (29 April 1988)  
to  
Honolulu, Hawaii (15 May 1988)

Co-Chief Scientists:

J. Hildebrand (Scripps Institution of Oceanography)  
A. Chave (AT&T Bell Laboratories)

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 further computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC Cruise I.D.# 239

\*\*\* PORTS \*\*\*

1500 290488	LGPT B SAN DIEGO, CALIF.	32 43 N 117 11 W	FRNDBO1WT
1800 150588	LGPT E HONOLULU, HAWAII	21 18 N 157 52 W	FRNDBO1WT

\*\*\*PERSONNEL\*\*\*

***NAME***	***TITLE***	***AFFILIATION***	**CRID**
PECS MPL HILDEBRAND, J.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	RNDBO1WT
PECS IGP CHAVE, A.	CHIEF SCIENTIST	AT&T BELL LABS.	RNDBO1WT
PESP SIX ANDER, M.	RESEARCHER	LOS ALAMOS NAT. LABS	RNDBO1WT
PERT STS BOAZ, J.	RES TECH	SCRIPPS INSTITUTION	RNDBO1WT
PECT STS CHARTERS, J.	COMPUTER TECH	SCRIPPS INSTITUTION	RNDBO1WT
PEST IGP GENRICH, J.	STUDENT	SCRIPPS INSTITUTION	RNDBO1WT
PEST MPL HAMMER, P.	STUDENT	SCRIPPS INSTITUTION	RNDBO1WT
PEBE STS HYLAS, T.	SEA BEAM ENGIN.	SCRIPPS INSTITUTION	RNDBO1WT
PEET MPL PAVLICEK, V.	ENGINEER	SCRIPPS INSTITUTION	RNDBO1WT
PEBO STS SMITH, S.	SEA BEAM OPER.	SCRIPPS INSTITUTION	RNDBO1WT
PEST IGP STEVENSON, M.	STUDENT	SCRIPPS INSTITUTION	RNDBO1WT
PEGT SIX TURNER, D.	GRAVITY TECH	LA COSTE CO.	RNDBO1WT
PESP IGP ZUMBERGE, M.	RESEARCHER	SCRIPPS INSTITUTION	RNDBO1WT
PESP SIX ASUNCION, G	ENGINEER	CONSULTANT	RNDBO1WT

\*\*\*\*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. POSITIONS ARE IN TENTHS  
 #OF MINUTES.

#GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

#-----

\*\*\*UNDERWAY DATA CURATOR - S. M. SMITH EXT. 42752

\*\*\*LOG BOOKS\*\*\*

1900 290488	LBUW B UNDERWAY WATCH LOG	GDC 32-240N 117-531W	sRNDBO1WT
1800 150588	LBUW E UNDERWAY WATCH LOG	GDC 21-190N 157-532W	sRNDBO1WT

#GMT #TIME #	DDMMYY DATE	LOC TIME Z	T Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
*** ECHO SOUNDER RECORDS ***									
1828 0045	290488 010588			MBRM MBRM	B SEABEAM MONITOR R-01 E SEABEAM MONITOR R-01	GDC GDC	32-259N 30-331N	117-464W 122-483W	sRNDB01WT sRNDB01WT
0045 0510	010588 040588			MBRM MBRM	B SEABEAM MONITOR R-02 E SEABEAM MONITOR R-02	GDC GDC	30-331N 34-547N	122-483W 132-148W	sRNDB01WT sRNDB01WT
0517 0603	040588 080588			MBRM MBRM	B SEABEAM MONITOR R-03 E SEABEAM MONITOR R-03	GDC GDC	34-560N 35-089N	132-147W 132-089W	sRNDB01WT sRNDB01WT
0610 0433	080588 110588			MBRM MBRM	B SEABEAM MONITOR R-04 E SEABEAM MONITOR R-04	GDC GDC	35-102N 32-243N	132-091W 139-271W	sRNDB01WT sRNDB01WT
0444 1800	110588 150588			MBRM MBRM	B SEABEAM MONITOR R-05 E SEABEAM MONITOR R-05	GDC GDC	32-232N 21-190N	139-292W 157-532W	sRNDB01WT sRNDB01WT
2130 400	030588 040588			DPR3 DPR3	B 3.5 KHZ R-01 E 3.5 KHZ R-01	GDC GDC	34-097N 34-430N	130-541W 132-117W	sRNDB01WT sRNDB01WT
*** SEA BEAM SWATH BOOKS ***									
1659 0602	290488 010588			MBSB MBSB	B SWATH BOOK 01 E SWATH BOOK 01	GDC GDC	32-322N 30-218N	117-282W 122-520W	sRNDB01WT sRNDB01WT
0602 0553	010588 030588			MBSB MBSB	B SWATH BOOK 02 E SWATH BOOK 02	GDC GDC	30-218N 32-500N	122-520W 127-478W	sRNDB01WT sRNDB01WT
0553 0239	030588 050588			MBSB MBSB	B SWATH BOOK 03 E SWATH BOOK 03	GDC GDC	32-500N 35-128N	127-478W 132-020W	sRNDB01WT sRNDB01WT
0239 1840	050588 090588			MBSB MBSB	B SWATH BOOK 04 E SWATH BOOK 04	GDC GDC	35-128N 35-094N	132-020W 133-256W	sRNDB01WT sRNDB01WT
1850 0808	090588 130588			MBSB MBSB	B SWATH BOOK 05 E SWATH BOOK 05	GDC GDC	35-088N 27-076N	133-274W 148-586W	sRNDB01WT sRNDB01WT
0809 1800	130588 150588			MBSB MBSB	B SWATH BOOK 06 E SWATH BOOK 06	GDC GDC	27-075N 21-190N	148-588W 157-532W	sRNDB01WT sRNDB01WT
*** MAGNETIC (EARTH TOTAL FIELD) RECORDS ***									
1914 210	290488 100588			MGRA MGRA	B MAGNETICS ROLL 1 E MAGNETICS ROLL 1	GDC GDC	32-233N 34-377N	117-552W 134-360W	sRNDB01WT sRNDB01WT
0215 1800	100588 150588			MGRA MGRA	B MAGNETICS ROLL 2 E MAGNETICS ROLL 2	GDC GDC	34-374N 21-190N	134-368W 157-532W	sRNDB01WT sRNDB01WT

#GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP	LAT.	LONG.	CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE			LEG-SHIP

\*\*\* EXPENDABLE BATHY THERMOGRAPHS \*\*\*

2027	300488			BTXP	XBT 0003 PROBE	T-4	GDC 30-296N	122-413W	sRNDB01WT
2036	300488			BTXP	XBT 0004 PROBE	T-4	GDC 30-278N	122-412W	sRNDB01WT
0100	010588			BTXP	XBT 0005 PROBE	T-4	GDC 30-353N	122-485W	sRNDB01WT
1658	010588			BTXP	XBT 0006 PROBE	T-4	GDC 30-278N	122-374W	sRNDB01WT
0114	020588			BTXP	XBT 0007 PROBE	T-4	GDC 31-009N	123-411W	sRNDB01WT
1608	020588			BTXP	XBT 0008 PROBE	T-4	GDC 31-462N	126-149W	sRNDB01WT
0349	030588			BTXP	XBT 0009 PROBE	T-4	GDC 32-321N	127-472W	sRNDB01WT
1828	030588			BTXP	XBT 0014 PROBE	T-4	GDC 33-535N	130-184W	sRNDB01WT
0423	040588			BTXP	XBT 0015 PROBE	T-7	GDC 34-460N	132-147W	sRNDB01WT
0434	040588			BTXP	XBT 0016 PROBE	T-4	GDC 34-481N	132-147W	sRNDB01WT
0442	040588			BTXP	XBT 0017 PROBE	T-7	GDC 34-496N	132-147W	sRNDB01WT
0706	040588			BTXP	XBT 0018 PROBE	T-7	GDC 35-160N	132-144W	sRNDB01WT
0940	040588			BTXP	XBT 0019 PROBE	T-7	GDC 35-434N	132-156W	sRNDB01WT
1201	040588			BTXP	XBT 0020 PROBE	T-7	GDC 35-260N	132-003W	sRNDB01WT
1342	040588			BTXP	XBT 0021 PROBE	T-7	GDC 35-061N	132-008W	sRNDB01WT
2130	040588			BTXP	XBT 0022 PROBE	T-7	GDC 35-149N	131-518W	sRNDB01WT
2138	040588			BTXP	XBT 0023 PROBE	T-4	GDC 35-135N	131-519W	sRNDB01WT
0429	050588			BTXP	XBT 0024 PROBE	T-4	GDC 35-125N	131-590W	sRNDB01WT
1722	050588			BTXP	XBT 0025 PROBE	T-4	GDC 35-190N	132-042W	sRNDB01WT
0938	060588			BTXP	XBT 0028 PROBE	T-4	GDC 35-132N	132-003W	sRNDB01WT
0357	070588			BTXP	XBT 0029 PROBE	T-7	GDC 35-148N	132-031W	sRNDB01WT
0731	070588			BTXP	XBT 0030 PROBE	T-7	GDC 35-091N	131-410W	sRNDB01WT
0902	070588			BTXP	XBT 0031 PROBE	T-7	GDC 35-247N	131-405W	sRNDB01WT
1722	070588			BTXP	XBT 0032 PROBE	T-7	GDC 35-184N	131-456W	sRNDB01WT
1851	080588			BTXP	XBT 0033 PROBE	T-4	GDC 35-170N	131-574W	sRNDB01WT
0051	100588			BTXP	XBT 0035 PROBE	T-4	GDC 34-434N	134-229W	sRNDB01WT
1851	100588			BTXP	XBT 0036 PROBE	T-4	GDC 33-177N	137-387W	sRNDB01WT
1810	110588			BTXP	XBT 0037 PROBE	T-4	GDC 31-097N	141-546W	sRNDB01WT
0308	120588			BTXP	XBT 0038 PROBE	T-4	GDC 30-182N	143-304W	sRNDB01WT
1723	120588			BTXP	XBT 0039 PROBE	T-4	GDC 28-512N	146-120W	sRNDB01WT
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1732	130588			BTXP	XBT 0041 PROBE	T-4	GDC 26-058N	150-421W	sRNDB01WT
0228	140588			BTXP	XBT 0042 PROBE	T-4	GDC 25-009N	152-166W	sRNDB01WT
1829	140588			BTXP	XBT 0043 PROBE	T-4	GDC 23-125N	154-519W	sRNDB01WT

# END SAMPLE INDEX