

INFORMAL REPORT AND INDEX OF  
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA  
(Issued January 1989)

ROUNABOUT EXPEDITION

LEG 10

=====

R/V Washington

Yokosuka, Japan (9 November 1988)  
to  
Majuro, Marshall Is. (12 December 1988)

Chief Scientist: E. L. Winterer  
Scripps Institution of Oceanography

Resident Marine Technician - Gene Pillard

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

Data Collection and Processing Funded by NSF  
Grant Number OCE87-02835

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.

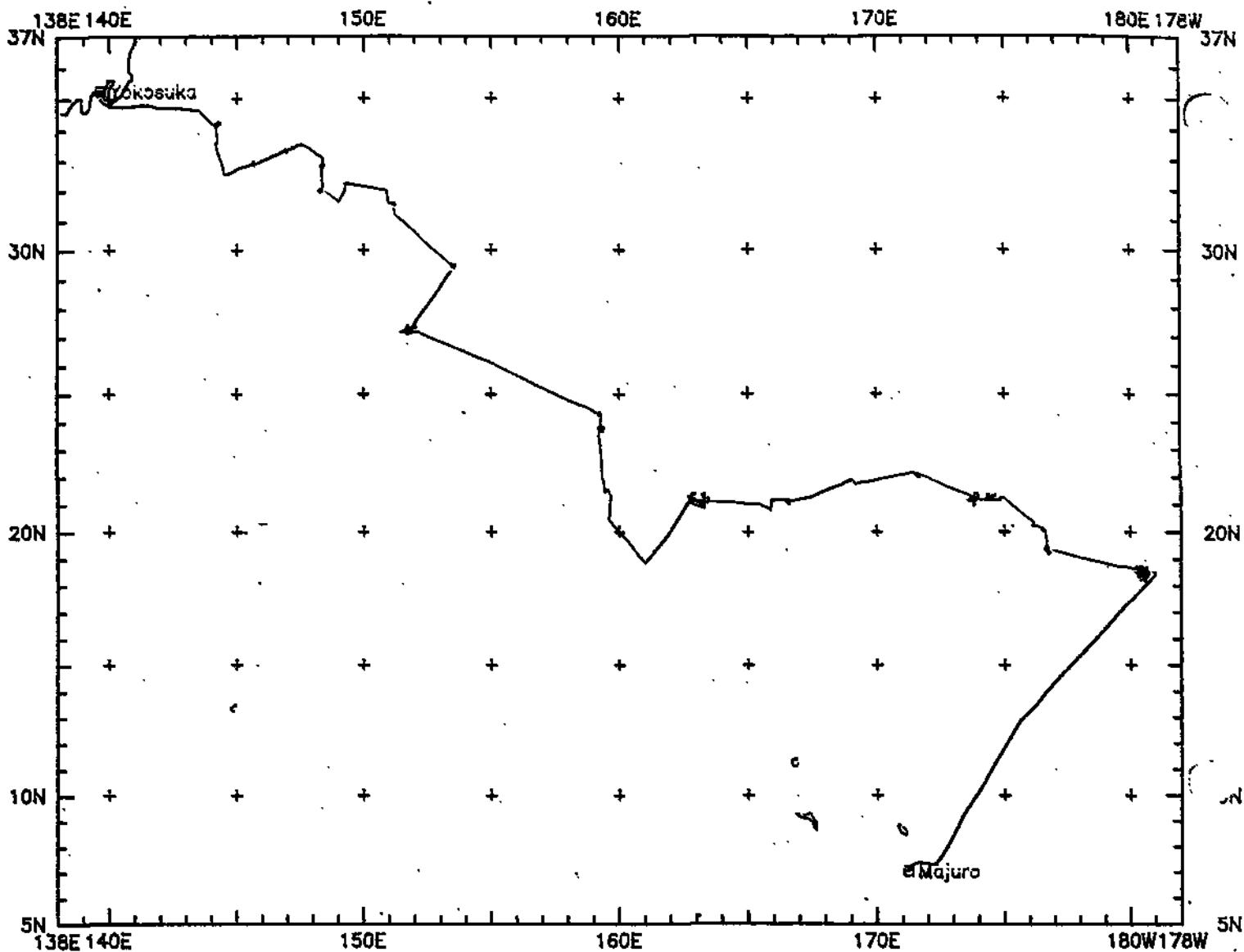
1. Navigation listing with times and positions of course and speed changes, fixes and drift velocity.
2. Depth compilation plots - compilation plots at the traditional scale of 4in/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2&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 10 (RNDB10WT)

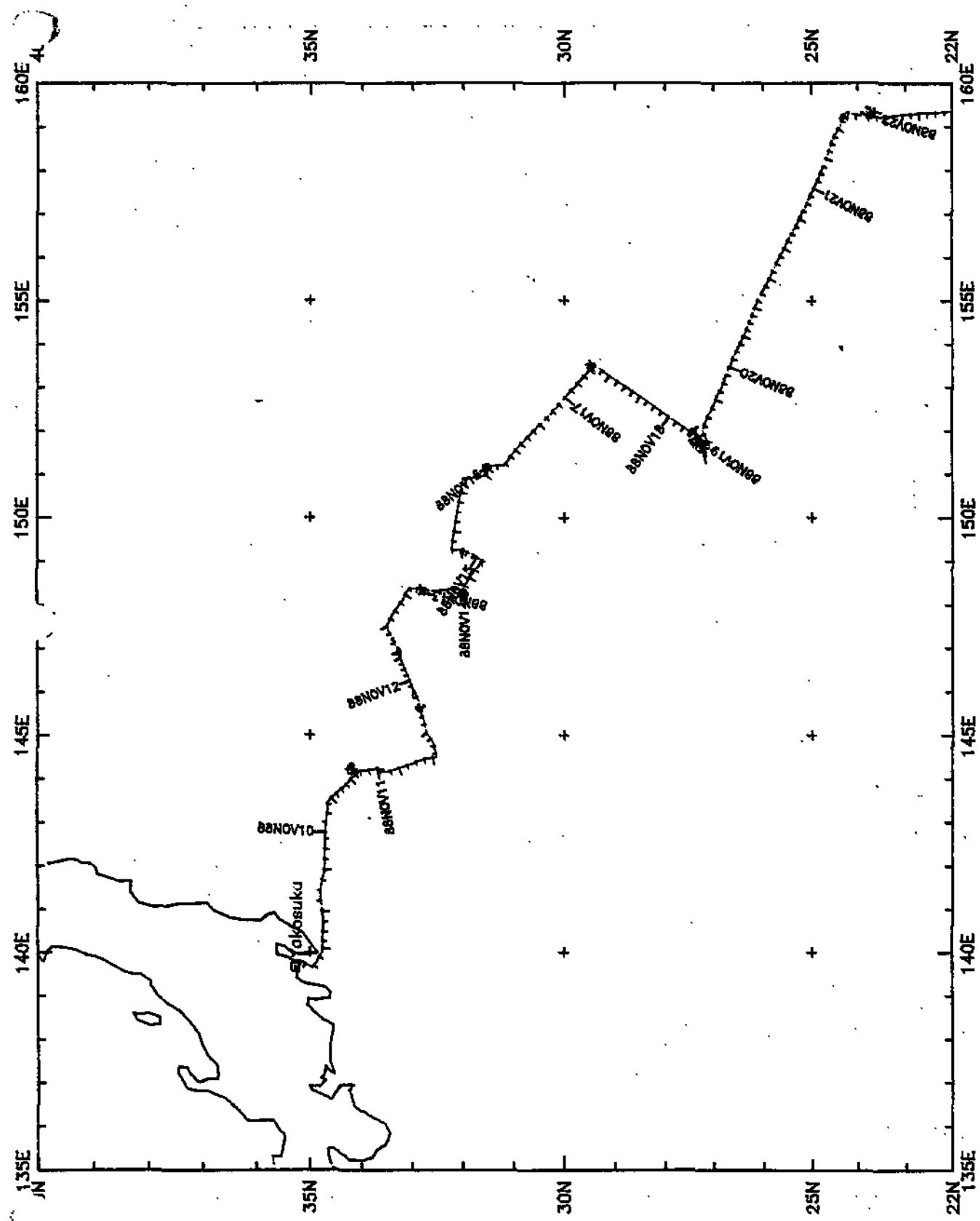
#### ROUNDABOUT EXPEDITION LEG 10

**CHIEF SCIENTIST:**

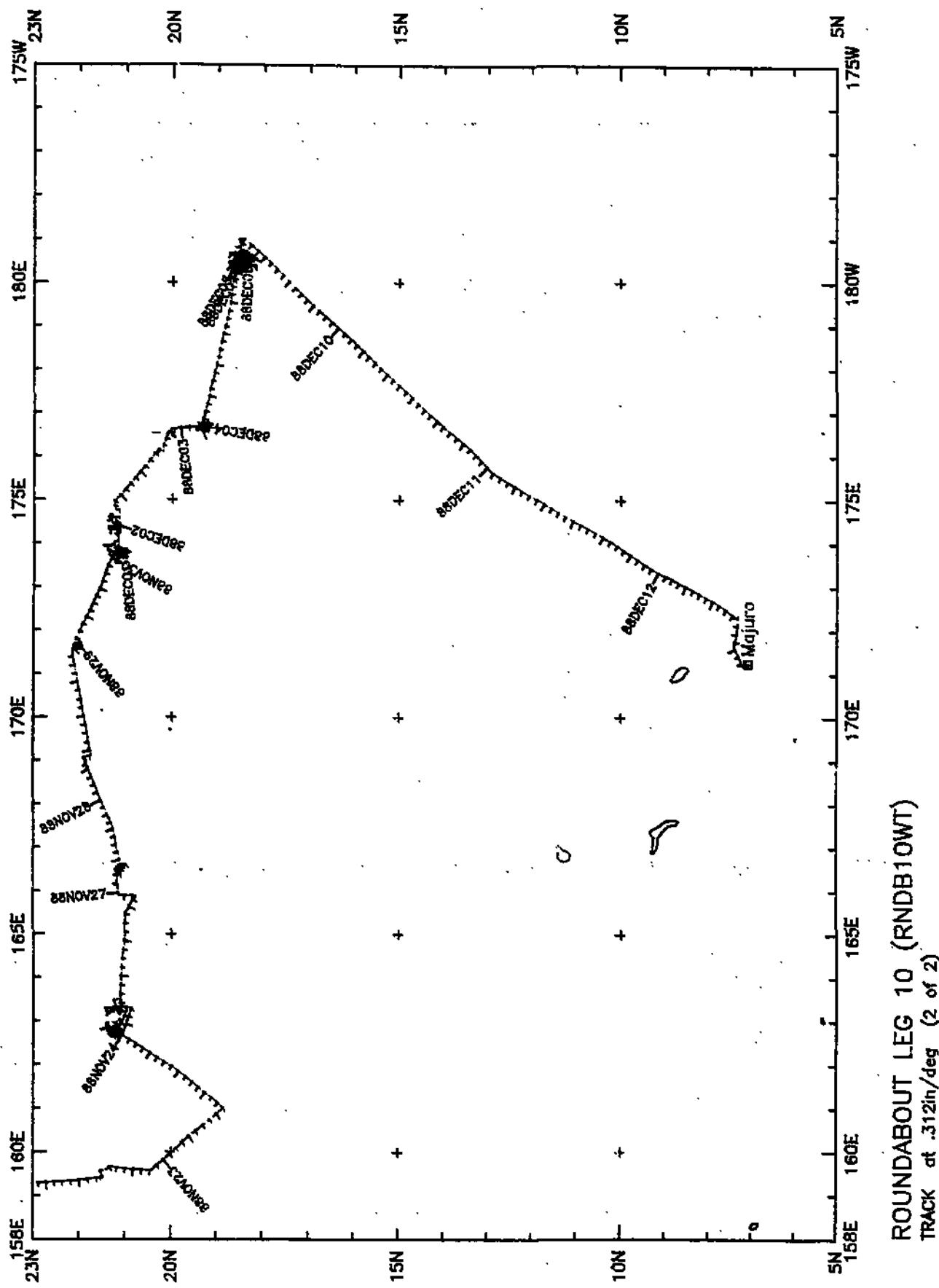
E. L. Winterer (Scripps Institution of Oceanography)  
 PORTS: Yokosuka, Japan - Majuro, Marshall Islands  
 DATES: 9 November - 12 December 1988  
 SHIP: R/V T. Washington

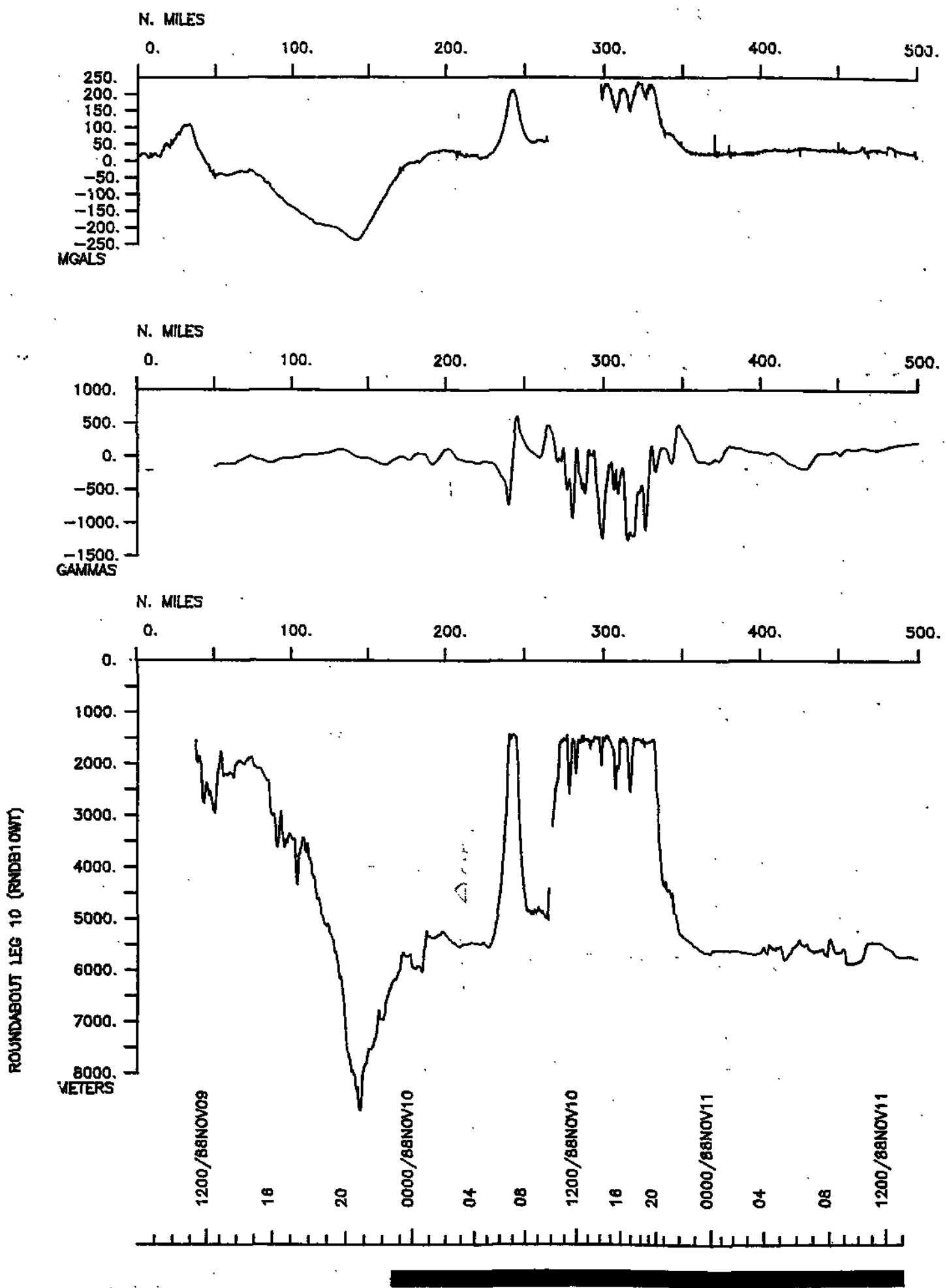
**TOTAL MILEAGE OF UNDERWAY DATA COLLECTED**

- 1) Cruise - 6811 miles
- 2) Bathymetry - 6746 miles
- 3) Magnetics - 6351 miles
- 4) Seismic Reflection - 6271 miles
- 5) Gravity - 6661 miles
- 6) Sea Beam - 6746 miles

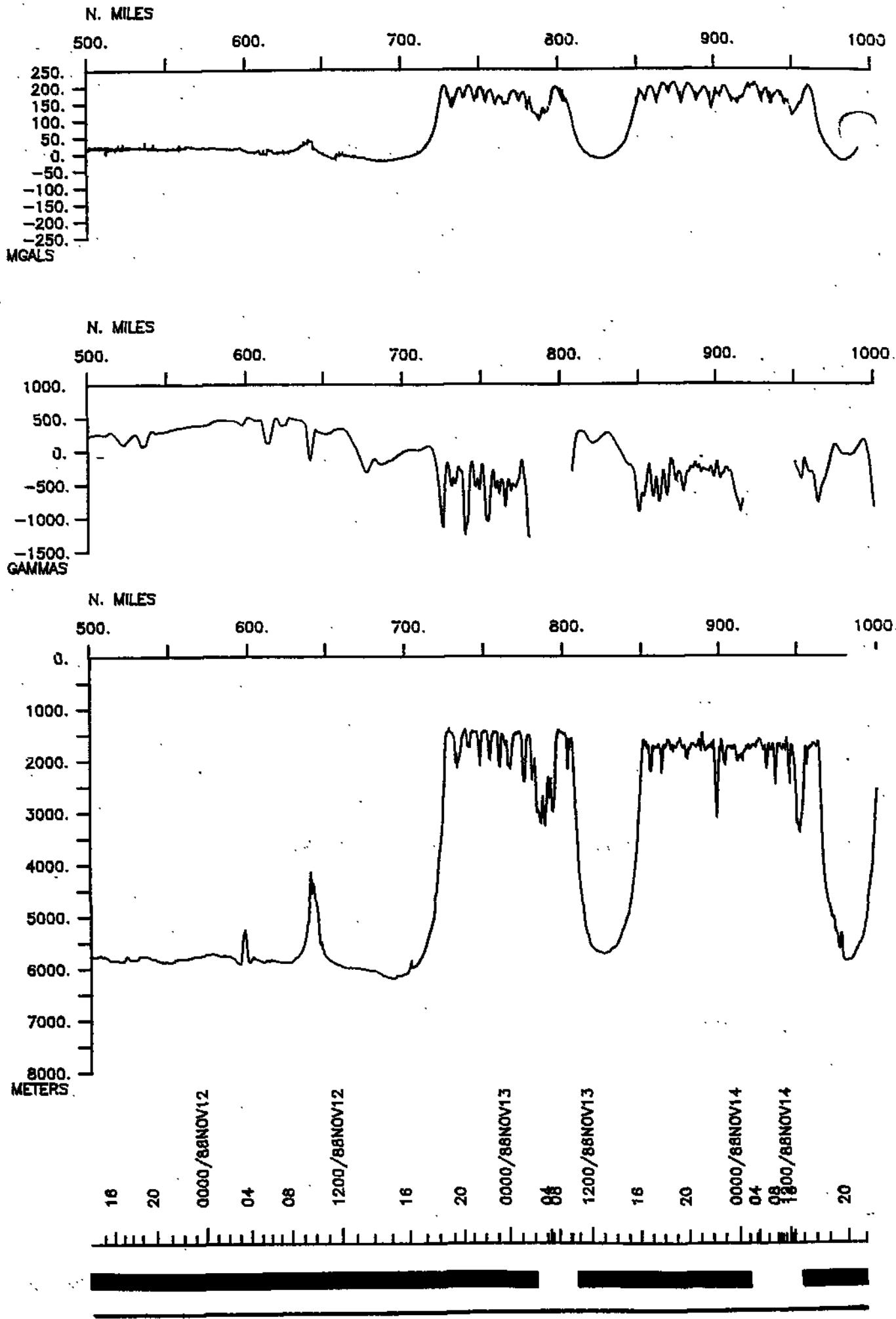


ROUNDABOUT LEG 10 (RNDDB10WT)  
TRACK at .312h/deg (1 of 2)

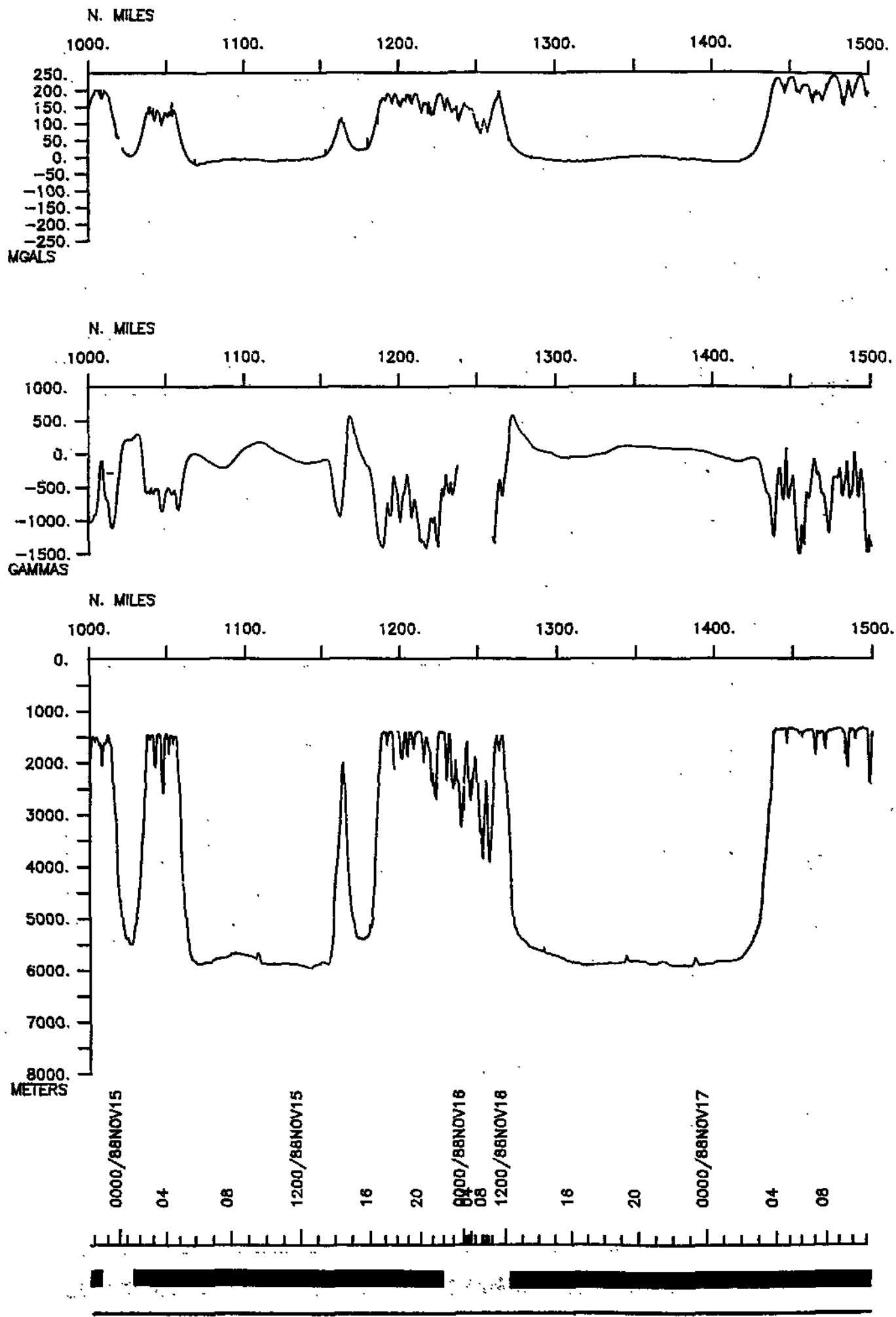


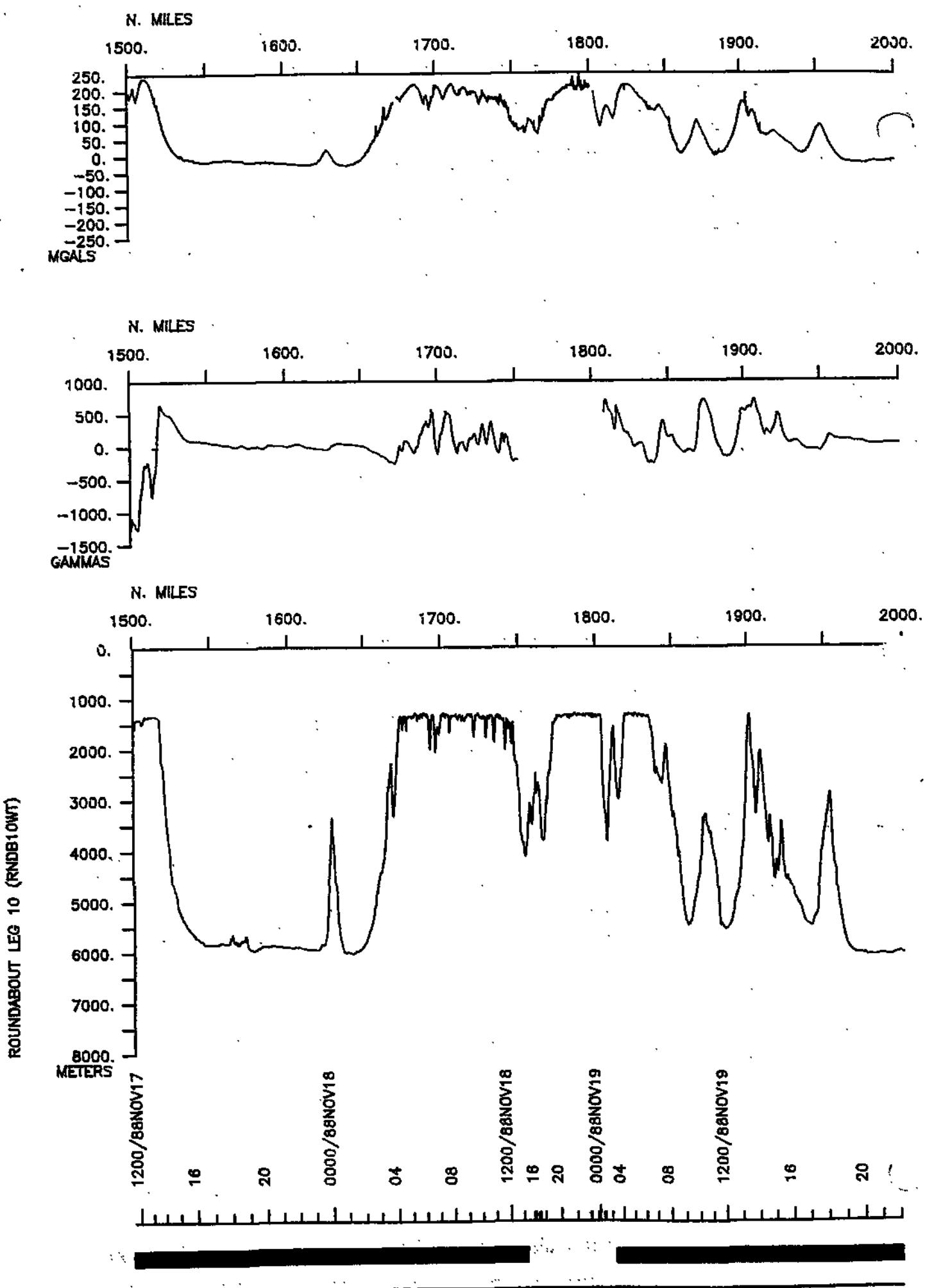


ROUNDABOUT LEG 10 (RNDB10WT)

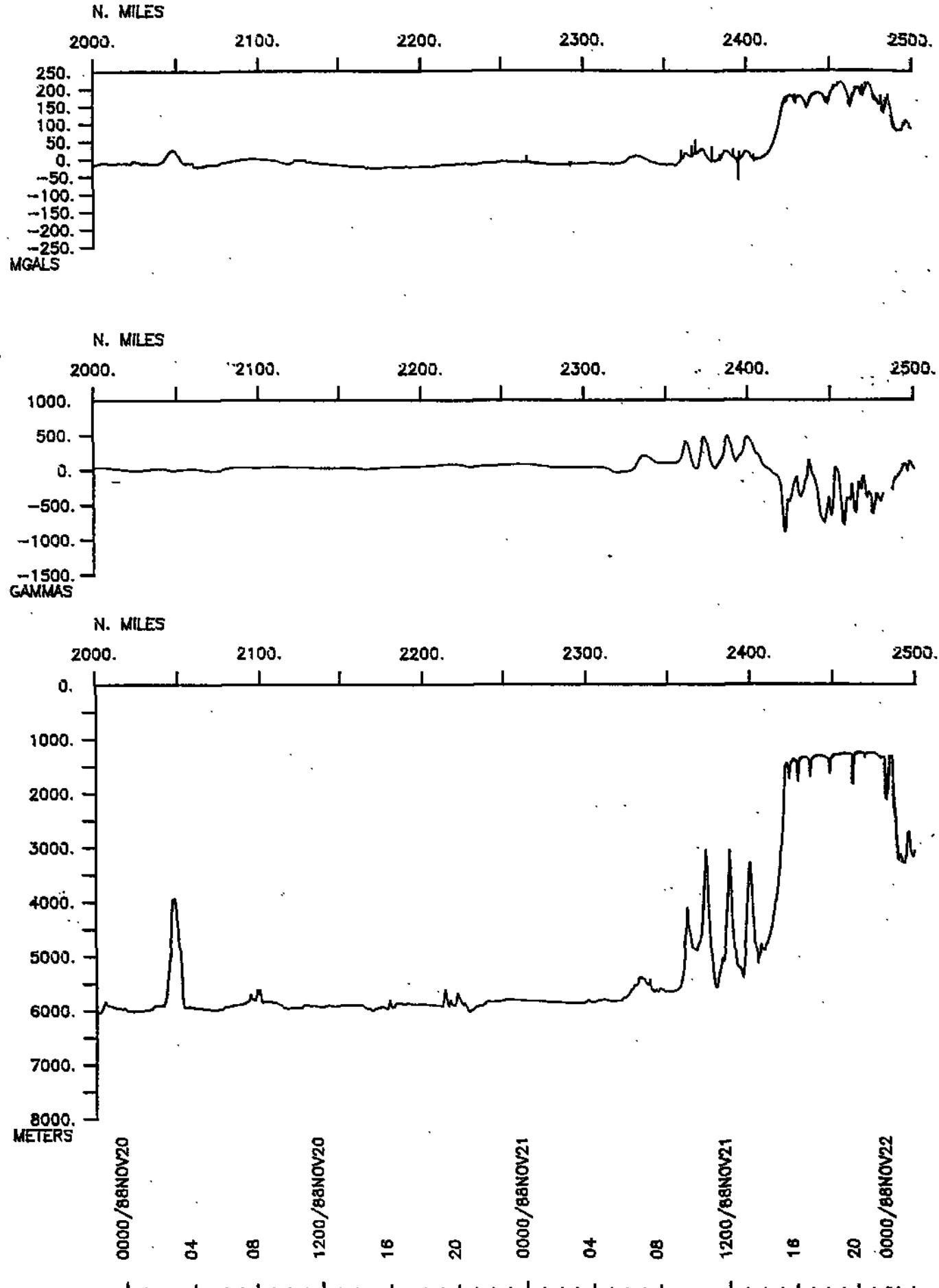


ROUNDABOUT LEG 10 (RNDB10WT)

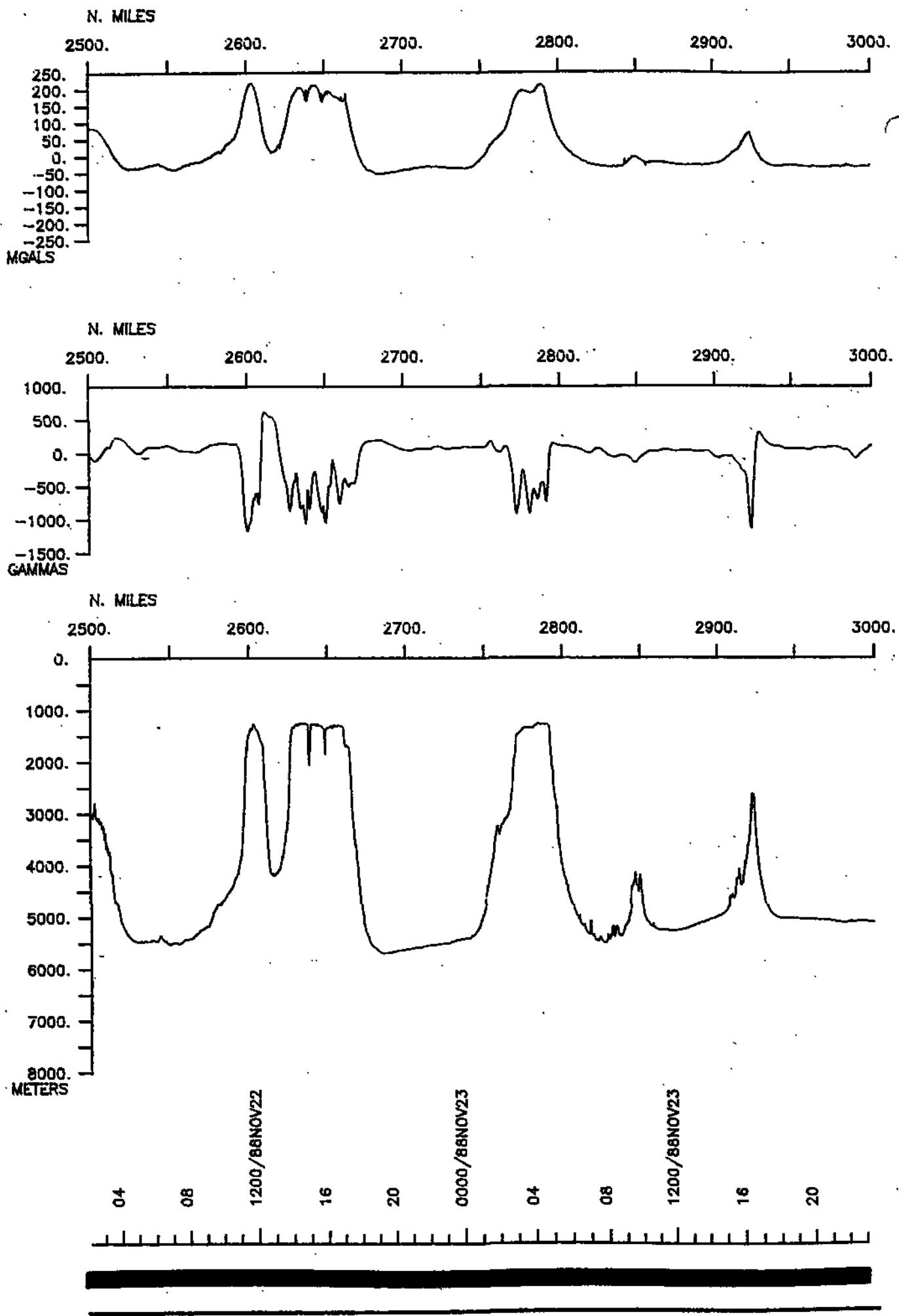




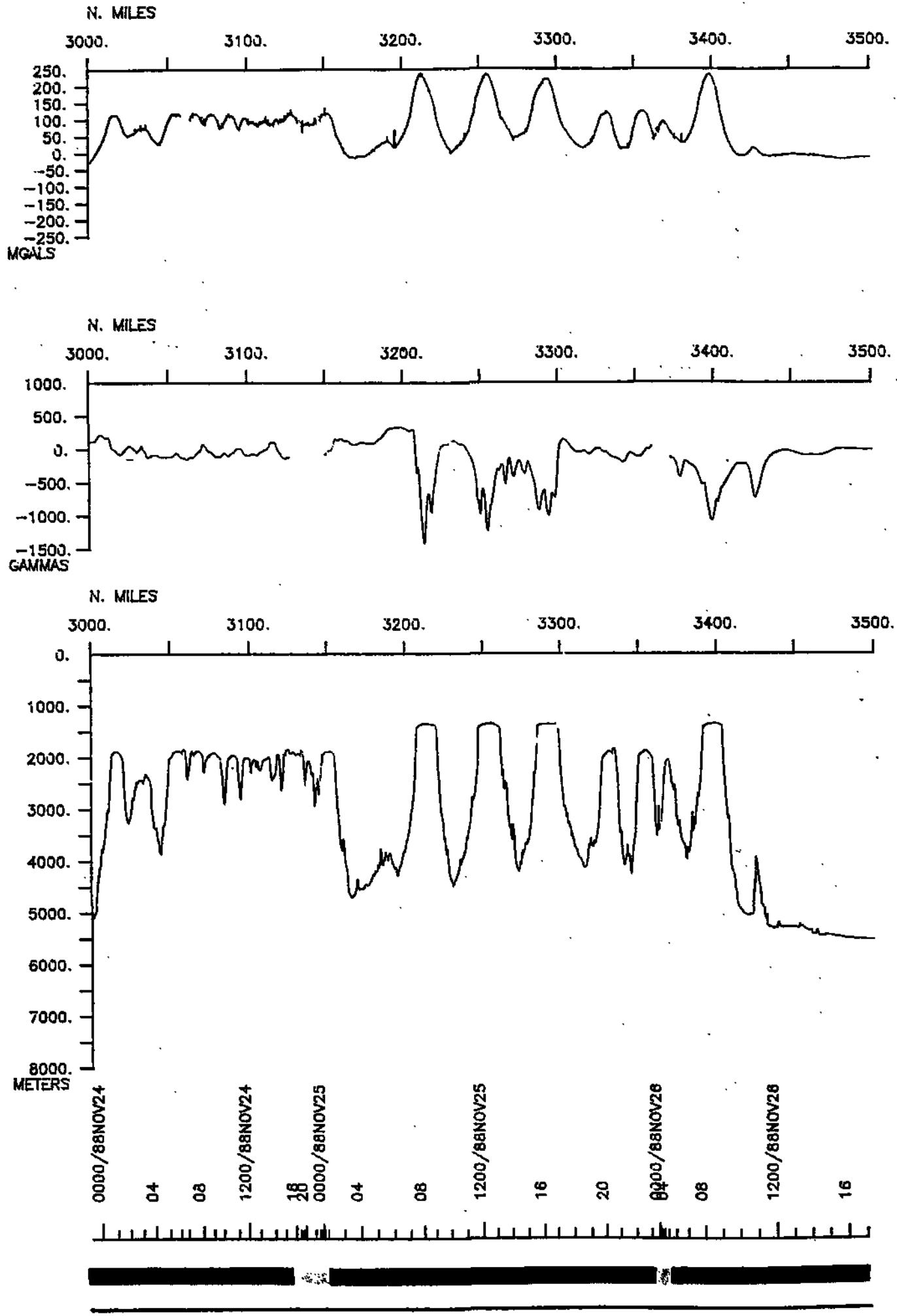
ROUNDABOUT LEG 10 (RND810WT)



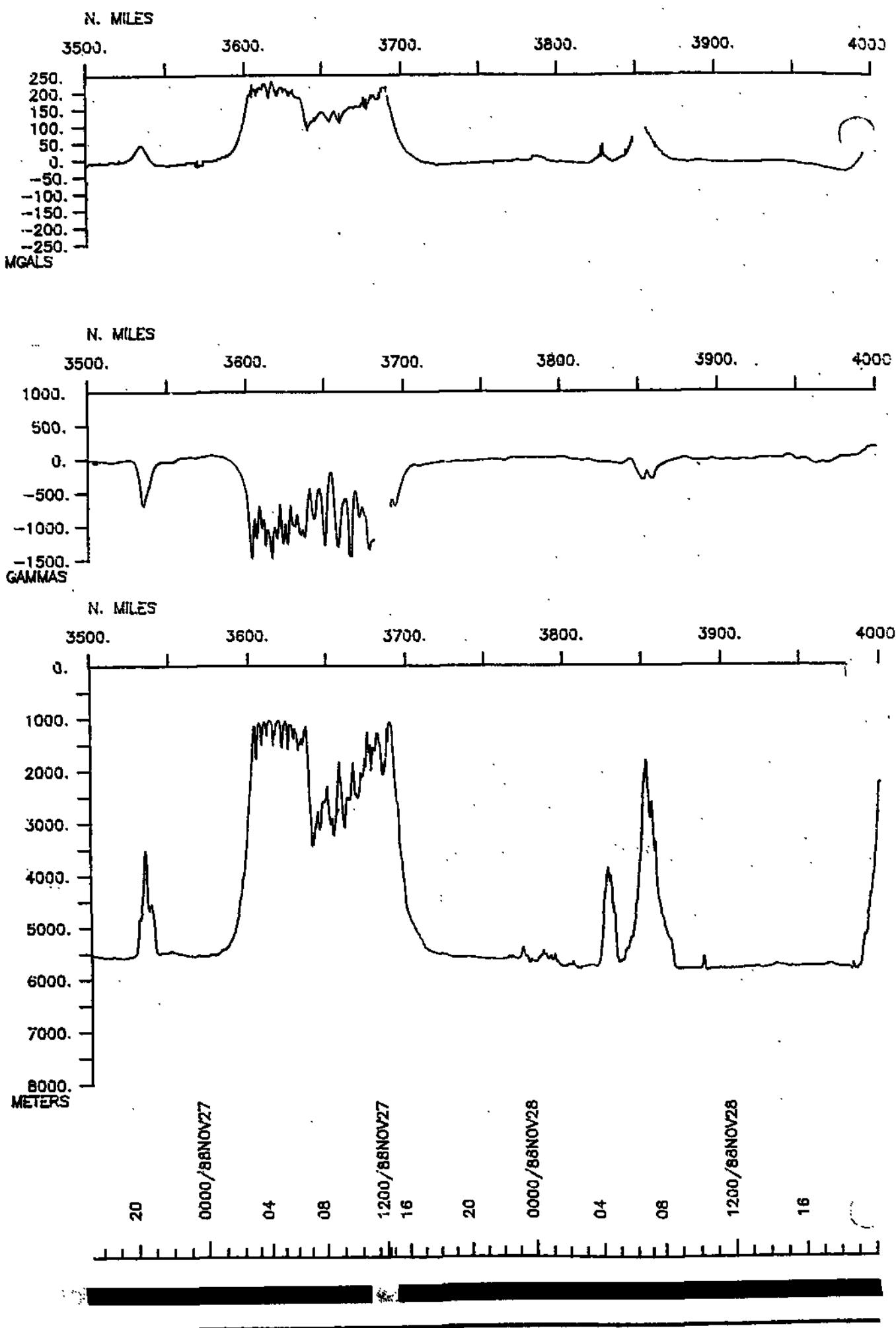
ROUNDABOUT LEG 10 (RNDB10WT)



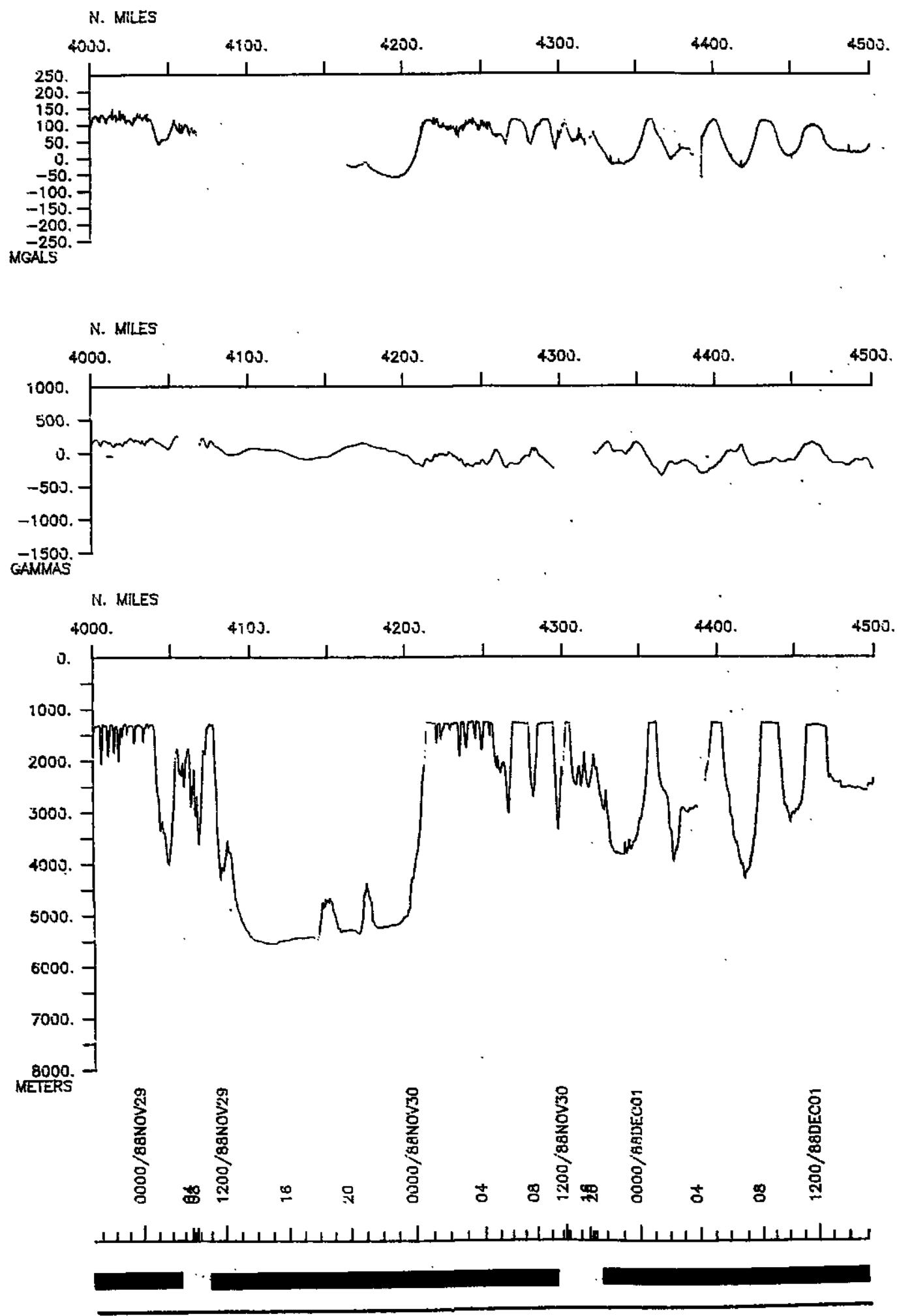
ROUNDABOUT LEG 10 (RNDB10WT)



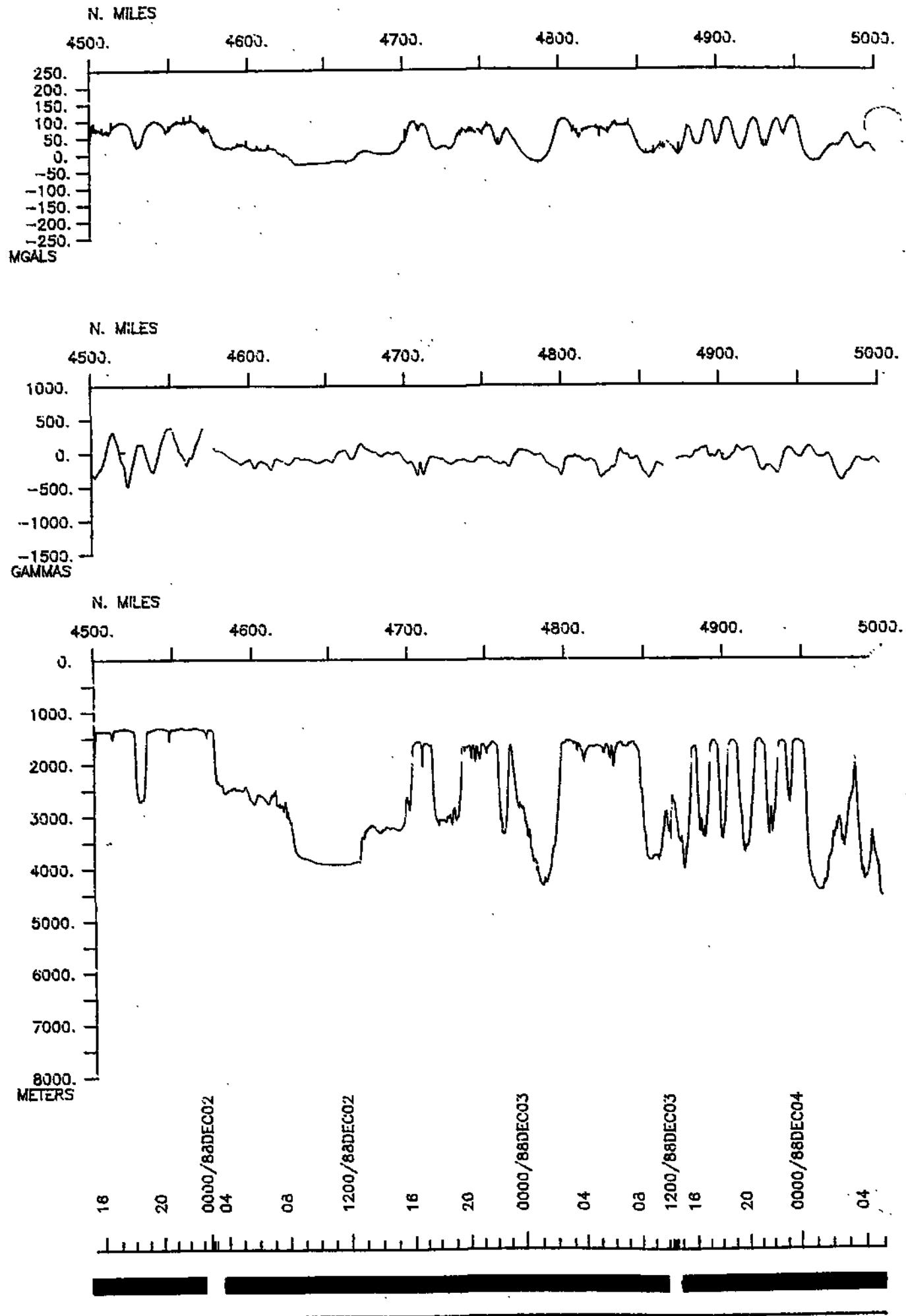
ROUNDABOUT LEG 10 (RNDB10WT)



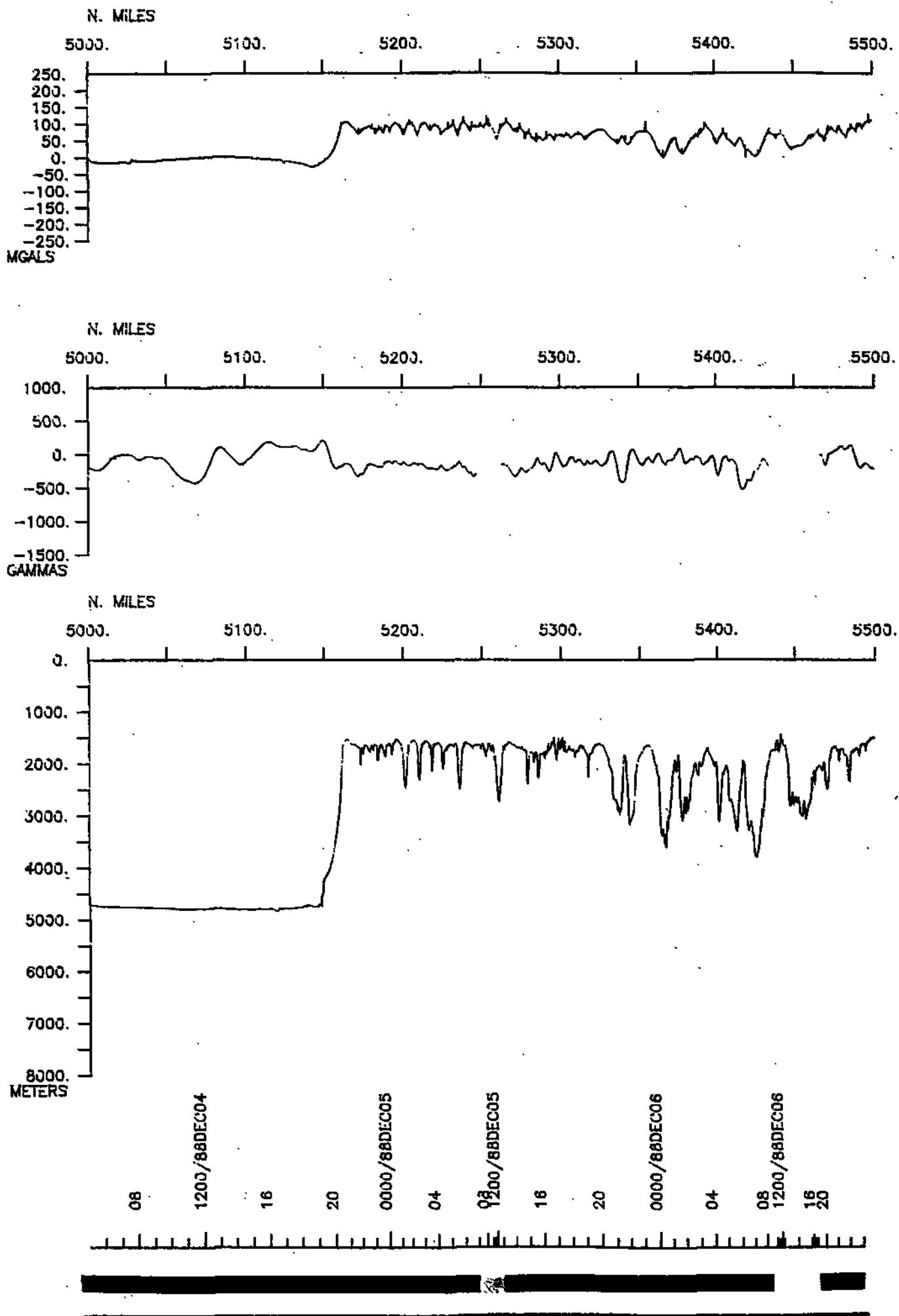
ROUNDABOUT LEG 10 (RNDB10WT)



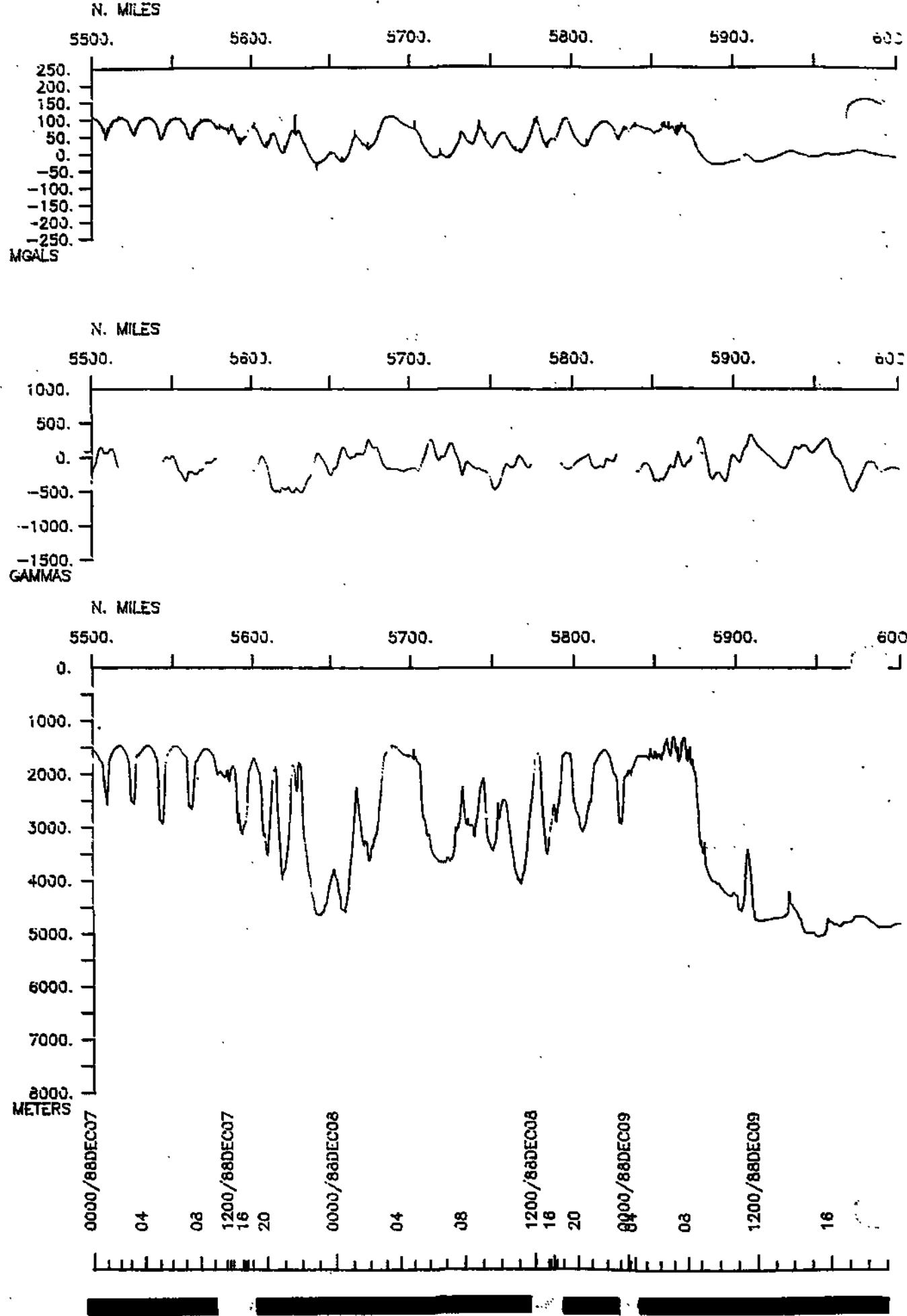
ROUNDABOUT LEG 10 (RNDB10WT)



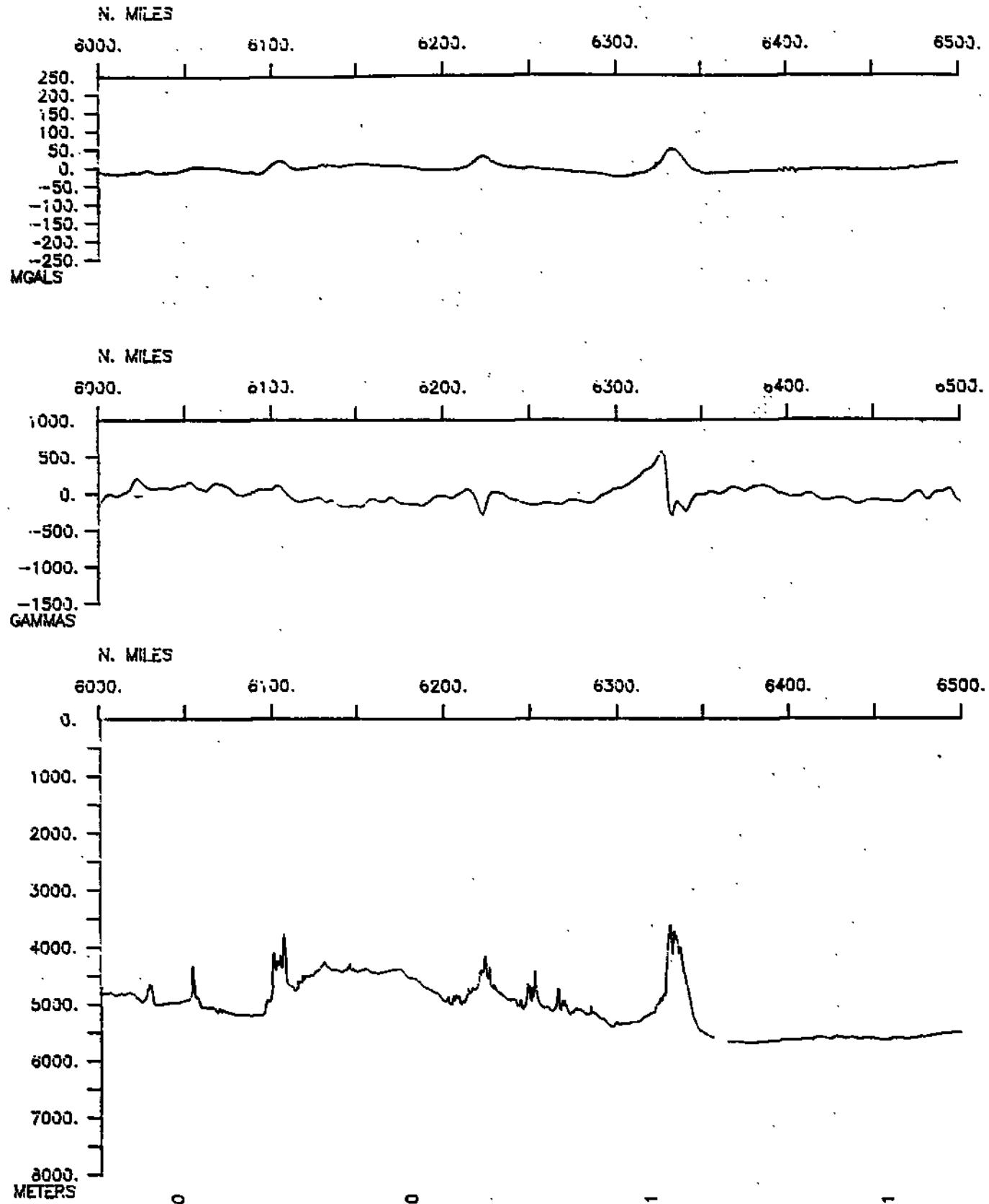
ROUNDABOUT LEG 10 (RNDB10WT)



ROUNDABOUT LEG 10 (RNDB10WT)



## ROUNDABOUT LEG 10 (RNDB10WT)



0000/88DEC10

04

08

1200/88DEC10

16

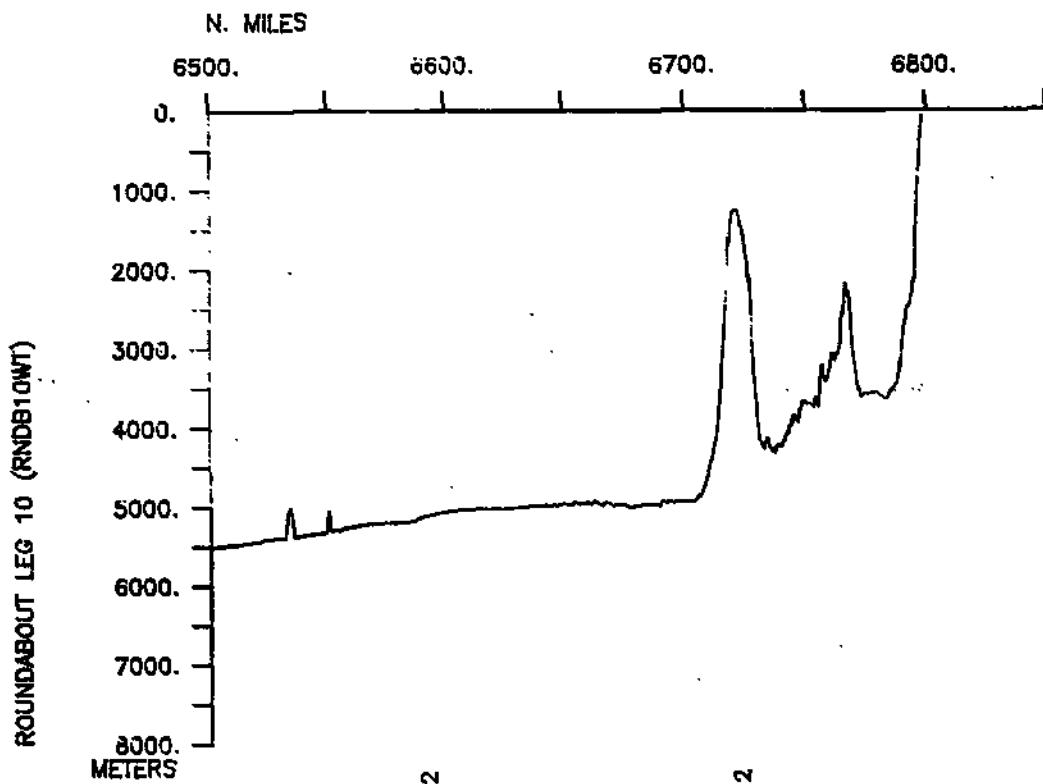
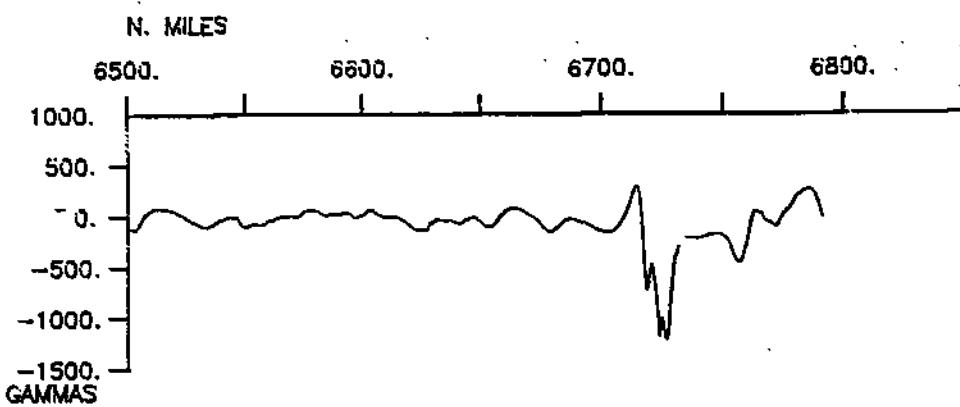
20

0000/88DEC11

04

08

1200/88DEC11



0000/88DEC12

1200/88DEC12

16

20

04

08

16

## S.I.O. SAMPLE INDEX

(Issued January 1989)

### ROUNABOUT EXPEDITION

Leg 10  
=====

R/V T. Washington

Yokosuka, Japan (9 November 1988)  
to  
Majuro, Marshall Is. (12 December 1988)

Chief Scientist:

E. L. Wintrerer (SIO)

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

Jan 24 11:50 1989 ROUNDABOUT LEG 10 SAMPLE INDEX Page 1

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

0700 091188	LGPT B YOKOSUKA, JAPAN	35-17 N 139-40 E fRNDB10WT
2000 121288	LPGT E MAJURO, MARSHALL IS.	7-06 N 171-15 E fRNDB10WT

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

	***NAME***	***TITLE***	***AFFILIATION***	**CRID**
PECS GRD	WINTERER, J.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	RNDB10WT
PEBO STS	ALBRIGHT, U.	SEABEAM OPERATOR	SCRIPPS INSTITUTION	RNDB10WT
PEAT STS	CRAMPTON, P.	SEISMIC ENGINEER	SCRIPPS INSTITUTION	RNDB10WT
PEST MIT	GOFF, J.A.	GRAD STUDENT	MASS. INST. OF TECH.	RNDB10WT
PEST SIX	GROTSCH, J.	GRAD STUDENT	U. OF ERIAGEN, GERMANY	RNDB10WT
PEST SIX	ITO, G.	STUDENT	COLORADO COLLEGE, CO.	RNDB10WT
PEST GRD	LYNCH, M.A.	GRAD STUDENT	SCRIPPS INSTITUTION	RNDB10WT
PESP MIT	MCNUTT, M.	SCIENTIST	MASS. INST. OF TECH.	RNDB10WT
PECT STS	MOORE, M.	COMPUTER TECH	SCRIPPS INSTITUTION	RNDB10WT
PEST UTK	NAKANISHI, M.	GRAD STUDENT	UNIV. OF TOKYO	RNDB10WT
PESP GRD	NATLAND, J.	SCIENTIST	SCRIPPS INSTITUTION	RNDB10WT
PERT STS	PILLARD, E.G.	RESIDENT TECH	SCRIPPS INSTITUTION	RNDB10WT
PESP TAM	SAGER, W.	ASSIST. PROFESSOR	TEXAS A&M UNIV.	RNDB10WT
PEBE STS	STUBER, D.	SEABEAM ENGINEER	SCRIPPS INSTITUTION	RNDB10WT
PEST GRD	VAN WASSBERGEN, R.	GRAD STUDENT	SCRIPPS INSTITUTION	RNDB10WT
PEST MIT	WOLFE, C.	GRAD STUDENT	MASS. INST. OF TECH.	RNDB10WT

\*\*\*\*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.

Jan 24 11:25 1989 ROUNDABOUT LEG 10 SAMPLE INDEX Page 2

#	GMT DDMYY LOC T # TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	CRUISE LAT.	LONG.	LEG-SHIP
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\*\*\*\*UNDERWAY DATA CURATOR - S. M. SMITH EXT. 42752

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

1142 091188	LBUW B	UNDERWAY WATCH LOG	GDC	34-452N	140-003E	sRNDB10WT
1830 121288	LBUW E	UNDERWAY WATCH LOG	GDC	7-108N	171-102E	sRNDB10WT

\*\*\*\* 12 KHZ SEABEAM MONITOR RECORDS \*\*\*

1311 091188	MBRM B	SEABEAM MONITOR R-01	GDC	34-447N	140-167E	sRNDB10WT
0308 161188	MBRM E	SEABEAM MONITOR R-01	GDC	31-306N	151-098E	sRNDB10WT
0317 161188	MBRM B	SEABEAM MONITOR R-02	GDC	31-307N	151-095E	sRNDB10WT
1350 231188	MBRM E	SEABEAM MONITOR R-02	GDC	19-307N	161-342E	sRNDB10WT
1400 231188	MBRM B	SEABEAM MONITOR R-03	GDC	19-321N	161-354E	sRNDB10WT
1837 021288	MBRM E	SEABEAM MONITOR R-03	GDC	20-100N	176-209E	sRNDB10WT
1846 021288	MBRM B	SEABEAM MONITOR R-04	GDC	20-095N	176-224E	sRNDB10WT
0338 071288	MBRM E	SEABEAM MONITOR R-04	GDC	18-338N	179-312W	sRNDB10WT
0655 071288	MBRM B	SEABEAM MONITOR R-05	GDC	18-337N	179-291W	sRNDB10WT
1927 111288	MBRM E	SEABEAM MONITOR R-05	GDC	9-509N	173-470E	sRNDB10WT
1934 111288	MBRM B	SEABEAM MONITOR R-06	GDC	9-499N	173-463E	sRNDB10WT
1815 121288	MBRM E	SEABEAM MONITOR R-06	GDC	7-127N	171-122E	sRNDB10WT

\*\*\*\* SEISMIC REFLECTION RECORDS - SLOW \*\*\*

2330 091188	SPRS B 4 SEC	SEISMIC R-01	GDC	34-419N	142-387E	sRNDB10WT
0208 111188	SPRS E 4 SEC	SEISMIC R-01	GDC	33-334N	144-087E	sRNDB10WT
0214 111188	SPRS B 4 SEC	SEISMIC R-02	GDC	33-328N	144-085E	sRNDB10WT
0800 171188	SPRS E 4 SEC	SEISMIC R-02	GDC	29-301N	153-364E	sRNDB10WT

Jan 24 11:25 1989 ROUNDABOUT LEG 10 SAMPLE INDEX Page 3

#	GMT DDMMYY	LOC T	SAMP	SAMPLE	DISP		CRUISE	
#	TIME DATE	TIME Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP
#	-----	-----	-----	-----	-----	-----	-----	-----
0806	171188		SPRS	B 4 SEC SEISMIC R-03	GDC	29-301N	153-355E	sRNDB10WT
2132	221188		SPRS	E 4 SEC SEISMIC R-03	GDC	20-329N	159-344E	sRNDB10WT
2134	221188		SPRS	B 4 SEC SEISMIC R-04	GDC	20-326N	159-343E	sRNDB10WT
1218	281188		SPRS	E 4 SEC SEISMIC R-04	GDC	21-547N	170-039E	sRNDB10WT
1218	281188		SPRS	B 4 SEC SEISMIC R-05	GDC	21-547N	170-039E	sRNDB10WT
0906	041288		SPRS	E 4 SEC SEISMIC R-05	GDC	18-586N	178-176E	sRNDB10WT
0909	041288		SPRS	B 4 SEC SEISMIC R-06	GDC	18-585N	178-182E	sRNDB10WT
1151	101288		SPRS	E 4 SEC SEISMIC R-06	GDC	14-438N	177-218E	sRNDB10WT
1154	101288		SPRS	B 4 SEC SEISMIC R-07	GDC	14-434N	177-213E	sRNDB10WT
1750	121288		SPRS	E 4 SEC SEISMIC R-07	GDC	7-140N	171-159E	sRNDB10WT

\*\*\*\* SEISMIC REFLECTION RECORDS - FAST \*\*\*

2334	091188		SPRF	B 2 SEC SEISMIC R-01	GDC	34-419N	142-396E	sRNDB10WT
1028	111188		SPRF	E 2 SEC SEISMIC R-01	GDC	32-361N	144-498E	sRNDB10WT
1034	111188		SPRF	B 2 SEC SEISMIC R-02	GDC	32-365N	144-507E	sRNDB10WT
2044	171188		SPRF	E 2 SEC SEISMIC R-02	GDC	28-231N	152-417E	sRNDB10WT
2050	171188		SPRF	B 2 SEC SEISMIC R-03	GDC	28-222N	152-411E	sRNDB10WT
0200	231188		SPRF	E 2 SEC SEISMIC R-03	GDC	19-539N	160-046E	sRNDB10WT
0205	231188		SPRF	B 2 SEC SEISMIC R-04	GDC	19-533N	160-052E	sRNDB10WT
1208	281188		SPRF	E 2 SEC SEISMIC R-04	GDC	21-544N	170-020E	sRNDB10WT
1212	281188		SPRF	B 2 SEC SEISMIC R-05	GDC	21-545N	170-028E	sRNDB10WT
0901	041288		SPRF	E 2 SEC SEISMIC R-05	GDC	18-588N	178-167E	sRNDB10WT
0905	041288		SPRF	B 2 SEC SEISMIC R-06	GDC	18-587N	178-175E	sRNDB10WT
1156	101288		SPRF	E 2 SEC SEISMIC R-06	GDC	14-432N	177-210E	sRNDB10WT
1159	101288		SPRF	B 2 SEC SEISMIC R-07	GDC	14-427N	177-206E	sRNDB10WT
1750	121288		SPRF	E 2 SEC SEISMIC R-07	GDC	7-140N	171-159E	sRNDB10WT

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

\*\*\*\* SEABEAM ARCHIVE SWATH BOOKS \*\*\*

1108 091188		MBSB B SB ARC SWATH BK 01	GDC 34-484N 139-540E	sRNDB10WT
1016 131188		MBSB E SB ARC SWATH BK 01	GDC 32-439N 148-211E	sRNDB10WT
1016 131188		MBSB B SB ARC SWATH BK 02	GDC 32-439N 148-211E	sRNDB10WT
0310 181188		MBSB E SB ARC SWATH BK 02	GDC 27-271N 151-568E	sRNDB10WT
0310 181188		MBSB B SB ARC SWATH BK 03	GDC 27-271N 151-568E	sRNDB10WT
0347 221188		MBSB E SB ARC SWATH BK 03	GDC 23-278N 159-137E	sRNDB10WT
0347 221188		MBSB B SB ARC SWATH BK 04	GDC 23-278N 159-137E	sRNDB10WT
0021 261188		MBSB E SB ARC SWATH BK 04	GDC 21-085N 162-510E	sRNDB10WT
0021 261188		MBSB B SB ARC SWATH BK 05	GDC 21-085N 162-510E	sRNDB10WT
1956 291188		MBSB E SB ARC SWATH BK 05	GDC 21-338N 172-558E	sRNDB10WT
1956 291188		MBSB B SB ARC SWATH BK 06	GDC 21-338N 172-558E	sRNDB10WT
1114 041288		MBSB E SB ARC SWATH BK 06	GDC 18-541N 178-405E	sRNDB10WT
1114 041288		MBSB B SB ARC SWATH BK 07	GDC 18-541N 178-405E	sRNDB10WT
2302 081288		MBSB E SB ARC SWATH BK 07	GDC 18-198N 179-247W	sRNDB10WT
2302 081288		MBSB B SB ARC SWATH BK 08	GDC 18-198N 179-247W	sRNDB10WT
0901 121288		MBSB E SB ARC SWATH BK 08	GDC 7-442N 172-351E	sRNDB10WT
0901 121288		MBSB B SB ARC SWATH BK 09	GDC 7-442N 172-351E	sRNDB10WT
1830 121288		MBSB E SB ARC SWATH BK 09	GDC 7-108N 171-102E	sRNDB10WT

\*\*\*\* MAGNETIC (EARTH TOTAL FIELD) RECORDS \*\*\*

1237 091188		MGRA B MAGNETICS R-01	GDC 34-447N 140-095E	sRNDB10WT
0615 191188		MGRA E MAGNETICS R-01	GDC 27-210N 151-539E	sRNDB10WT
0622 191188		MGRA B MAGNETICS R-02	GDC 27-213N 151-548E	sRNDB10WT
1824 021288		MGRA E MAGNETICS R-02	GDC 20-108N 176-188E	sRNDB10WT
1831 021288		MGRA B MAGNETICS R-03	GDC 20-104N 176-199E	sRNDB10WT
1751 121288		MGRA E MAGNETICS R-03	GDC 7-139N 171-157E	sRNDB10WT

Jan 25 11:04 1989 ROUNDABOUT LEG 10 SAMPLE INDEX Page 5

#GMT DDMYY LOC T #TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	CRUISE LAT.	LONG.	LEG-SHIP
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\*\*\*\* GRAVIMETER \*\*\*

1300 091188	GVDG	B GRAVITY RECORD	GDC	34-448N	140-142E	sRNDB10WT
2000 121288	GVDG	E COMPUTER LOGGED	GDC	7-051N	171-220E	sRNDB10WT

\*\*\*\* SEABEAM TRANSITS AND SURVEYS \*\*\*

1108 091188	MBTL	B SEABEAM TRANSIT	GRD	34-484N	139-540E	sRNDB10WT
0940 101188	MBTL	E LINE #1	GRD	34-030N	144-102E	sRNDB10WT
0940 101188	MBSV	B SEABEAM SURVEY	GRD	34-170N	144-230E	fRNDB10WT
2100 101188	MBSV	E #1 "SEIKO" SMT.	GRD	33-000N	144-050E	fRNDB10WT
2100 101188	MBTL	B SEABEAM TRANSIT	GRD	34-104N	144-074E	sRNDB10WT
1525 111188	MBTL	E LINE #2	GRD	32-512N	145-382E	sRNDB10WT
1525 111188	MBSV	B SEABEAM SURVEY	GRD	33-000N	145-450E	fRNDB10WT
2002 111188	MBSV	E #2 VOGT MAGNETICS	GRD	32-430N	145-350E	fRNDB10WT
2002 111188	MBTL	B SEABEAM TRANSIT	GRD	32-522N	145-416E	sRNDB10WT
0508 121188	MBTL	E LINE #3	GRD	33-174N	146-546E	sRNDB10WT
0508 121188	MBSV	B SEABEAM SURVEY	GRD	33-210N	147-000E	fRNDB10WT
0815 121188	MBSV	E #3 BOX SURVEY	GRD	33-120N	146-500E	fRNDB10WT
0815 121188	MBTL	B SEABEAM TRANSIT	GRD	33-189N	147-001E	sRNDB10WT
1820 121188	MBTL	E LINE #4	GRD	32-506N	148-211E	sRNDB10WT
1820 121188	MBSV	B SEABEAM SURVEY	GRD	32-520N	148-270E	fRNDB10WT
0958 131188	MBSV	E #4 WINTERER SMT.	GRD	32-420N	148-120E	fRNDB10WT
0958 131188	MBTL	B SEABEAM TRANSIT	GRD	32-440N	148-218E	sRNDB10WT
1626 131188	MBTL	E LINE #5	GRD	31-597N	148-187E	sRNDB10WT
1626 131188	MBSV	B SEABEAM SURVEY #5	GRD	32-040N	148-200E	fRNDB10WT
1836 141188	MBSV	E CHARLIE JOHNSON SMT.	GRD	31-520N	148-080E	fRNDB10WT

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#GMT DDMMYY LOC T #TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1836 141188	MBTL B	SEABEAM TRANSIT	GRD	31-598N	148-218E	sRNDB10WT
2100 141188	MBTL E	LINE #6	GRD	31-452N	148-474E	sRNDB10WT
2100 141188	MBSV B	SEABEAM SURVEY	GRD	31-450N	149-100E	fRNDB10WT
0029 151188	MBSV E	#6 STOUT SMT.	GRD	31-320N	148-450E	fRNDB10WT
0029 151188	MBTL B	SEABEAM TRANSIT	GRD	31-459N	149-062E	sRNDB10WT
0228 151188	MBTL E	LINE #7	GRD	31-593N	149-151E	sRNDB10WT
0228 151188	MBSV B	SEABEAM SURVEY #7	GRD	32-040N	149-180E	fRNDB10WT
0415 151188	MBSV E	T. WASHINGTON SMT.	GRD	31-580N	149-120E	fRNDB10WT
0415 151188	MBTL B	SEABEAM TRANSIT	GRD	31-598N	149-142E	sRNDB10WT
1635 151188	MBTL E	LINE #8	GRD	31-344N	151-055E	sRNDB10WT
1635 151188	MBSV B	SEABEAM SURVEY	GRD	31-170N	151-140E	fRNDB10WT
1100 161188	MBSV E	#8 ISAKOV SMT.	GRD	31-290N	151 050E	fRNDB10WT
1100 161188	MBTL B	SEABEAM TRANSIT	GRD	31-355N	151-043E	sRNDB10WT
0330 171188	MBTL E	LINE #9	GRD	29-337N	153-199E	sRNDB10WT
0330 171188	MBSV B	SEABEAM GRDVEY	GRD	29-330N	153-370E	fRNDB10WT
1352 171188	MBSV E	#9 MAKAROV SMT.	GRD	29-230N	153-210E	fRNDB10WT
1352 171188	MBTL B	SEABEAM TRANSIT	GRD	29-238N	153-300E	sRNDB10WT
0256 181188	MBTL E	LINE #10	GRD	27-292N	151-583E	sRNDB10WT
0256 181188	MBSV B	SEABEAM SURVEY	GRD	27-290N	152-020E	fRNDB10WT
1458 191188	MBSV E	#10 "MIT" SMT.	GRD	27-040N	151-390E	fRNDB10WT
1458 191188	MBTL B	SEABEAM TRANSIT	GRD	27-060N	151-436E	sRNDB10WT
0930 211188	MBTL E	LINE #11	GRD	24-184N	159-120E	sRNDB10WT
0930 211188	MBSV B	SEABEAM SURVEY	GRD	24-230N	159-220E	fRNDB10WT
1337 211188	MBSV E	#11	GRD	24-100N	159-100E	fRNDB10WT

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#GMT DDMYY LOC T #TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1337 211188		MBTL B SEABEAM TRANSIT	GRD	24-155N	159-194E	sRNDB10WT
1532 211188		MBTL E LINE #12	GRD	23-563N	159-142E	sRNDB10WT
1532 211188		MBSV B SEABEAM SURVEY	GRD	24-000N	159-290E	fRNDB10WT
0300 221188		MBSV E #12 SCRIPPS SMT.	GRD	23-360N	159-100E	fRNDB10WT
0300 221188		MBTL B SEABEAM TRANSIT	GRD	23-362N	159-128E	sRNDB10WT
0000 241188		MBTL E LINE #13	GRD	21-045N	162-403E	sRNDB10WT
0000 241188		MBSV B SEABEAM SURVEY	GRD	21-260N	162-570E	fRNDB10WT
0330 251188		MBSV E #13 VIBELIUS SMT.	GRD	21-080N	162-400E	fRNDB10WT
0330 251188		MBTL B SEABEAM TRANSIT	GRD	21-009N	162-494E	sRNDB10WT
0615 251188		MBTL E LINE #14	GRD	20-508N	163-181E	sRNDB10WT
0615 251188		MBSV B SEABEAM SURVEY	GRD	21-300N	163-310E	fRNDB10WT
1734 251188		MBSV E #14 "WILDE" SMT.	GRD	21-490N	163-080E	fRNDB10WT
1734 251188		MBTL B SEABEAM TRANSIT	GRD	20-596N	163-109E	sRNDB10WT
1930 251188		MBTL E LINE #15	GRD	21-084N	162-515E	sRNDB10WT
1930 251188		MBSV B SEABEAM SURVEY	GRD	21-240N	163-000E	fRNDB10WT
0630 261188		MBSV E #15 VIBELIUS SMT.	GRD	21-040N	162-360E	fRNDB10WT
0630 261188		MBTL B SEABEAM TRANSIT	GRD	21-106N	162-593E	sRNDB10WT
0220 271188		MBTL E LINE #16	GRD	21-105N	166-248E	sRNDB10WT
0220 271188		MBSV B SEABEAM SURVEY	GRD	21-130N	166-370E	fRNDB10WT
1500 271188		MBSV E #16 WHOI SMT.	GRD	20-590N	166-230E	fRNDB10WT
1500 271188		MBTL B SEABEAM TRANSIT	GRD	21-068N	166-314E	sRNDB10WT
1946 281188		MBTL E LINE #17	GRD	22-090N	171-312E	sRNDB10WT
1946 281188		MBSV B SEABEAM SURVEY	GRD	22-100N	171-450E	fRNDB10WT
1230 291188		MBSV E #17 DARWIN SMT.	GRD	21-570N	171-310E	fRNDB10WT
1230 291188		MBTL B SEABEAM TRANSIT	GRD	22-056N	171-431E	sRNDB10WT
0031 301188		MBTL E LINE #18	GRD	21-157N	173-436E	sRNDB10WT

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#	GMT DDMYY LOC T # TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	CRUISE LAT.	LONG.	LEG-SHIP
	0031 301288		MBSV B SEABEAM SURVEY	GRD	21-250N	174-000E	fRNDB10WT
	0930 011288		MBSV E #18 "HEEZEN" SMT.	GRD	20-530N	173-300E	fRNDB10WT
	0930 011288		MBTL B SEABEAM TRANSIT	GRD	21-104N	173-561E	sRNDB10WT
	1244 011288		MBTL E LINE #19	GRD	21-108N	174-276E	sRNDB10WT
	1130 011288		MBSV B SEABEAM SURVEY	GRD	21-240N	174-410E	fRNDB10WT
	0253 021288		MBSV E #19 #463 SMT.	GRD	21-070N	174-160E	fRNDB10WT
	0253 021288		MBTL B SEABEAM TRANSIT	GRD	21-093N	174-257E	sRNDB10WT
	1934 021288		MBTL E LINE #20	GRD	20-066N	176-303E	sRNDB10WT
	1934 021288		MBSV B SEABEAM SURVEY	GRD	20-090N	176-390E	fRNDB10WT
	2230 021288		MBSV E #20 "CAPRINA" SMT.	GRD	19-580N	176-240E	fRNDB10WT
	2230 021288		MBTL B SEABEAM TRANSIT	GRD	20-027N	176-361E	sRNDB10WT
	0324 031288		MBTL E LINE #21	GRD	19-160N	176-397E	sRNDB10WT
	1324 031288		MBSV B SEABEAM SURVEY #21	GRD	19-280N	176-500E	fRNDB10WT
	0022 041288		MBSV E "JACQUELINE" SMT.	GRD	19-070N	176-300E	fRNDB10WT
	0022 041288		MBTL B SEABEAM TRANSIT	GRD	19-205N	176-438E	sRNDB10WT
	1900 041288		MBTL E LINE #22	GRD	18-395N	179-551W	sRNDB10WT
	1900 041288		MBSV B SEABEAM SURVEY #22	GRD	18-500N	178-550W	fRNDB10WT
	0845 091288		MBSV E "ALLISON" SMT.	GRD	18-090N	179-550W	fRNDB10WT

\*\*\*\* THERMOGRAPH RECORDINGS \*\*\*

0700 091188	TGRC B THERMOGRAPHS 1-10	GDC 35-155N 139-462E sRNDB10WT
2000 121288	TGRC E THERMOGRAPHS 1-10	GDC 7-051N 171-220E sRNDB10WT

\*\*\*\* EXPENDABLE BATHYTHERMOGRAPH RECORDS \*\*\*

2219 091188	BTXP B XBTS 1-9	GDC 34-421N 142-262E sRNDB10WT
1815 121288	BTXP E XBTS 1-9	GDC 7-127N 171-122E sRNDB10WT

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#GMT DDMYY LOC T #TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	CRAIG LAT.	CRUISE LONG.	LEG-SHIP
<b>**** ROCK DREDGES ***</b>						
0513 131188	DRRO B	DRDGE 49 2344M-2996M	GRD	32-500N	148-248E	sRNDB10WT
0626 131188	DRRO E	DRDGE 49 2344M-2996M	GRD	32-506N	148-240E	sRNDB10WT
0241 141188	DRRO B	DRDGE 50 1780M-1646M	GRD	31-593N	148-174E	sRNDB10WT
0440 141188	DRRO E	DRDGE 50 1780M-1646M	GRD	31-596N	148-156E	sRNDB10WT
0749 141188	DRRO B	DRDGE 51 2087M-1760M	GRD	31-584N	148-199E	sRNDB10WT
0905 141188	DRRO E	DRDGE 51 2087M-1760M	GRD	31-573N	148-187E	sRNDB10WT
1310 141188	DRRO B	DRDGE 52 2375M-1881M	GRD	31-533N	148-141E	sRNDB10WT
1445 141188	DRRO E	DRDGE 52 2375M-1881M	GRD	31-535N	148-135E	sRNDB10WT
0111 161188	DRRO B	DRDGE 53 2375M-1655M	GRD	31-300N	151-121E	sRNDB10WT
0256 161188	DRRO E	DRDGE 53 2375M-1655M	GRD	31-306N	151-101E	sRNDB10WT
0786 161188	DRRO B	DRDGE 54 3747M-2366M	GRD	31-339N	151-038E	sRNDB10WT
0923 161188	DRRO E	DRDGE 54 3747M-2366M	GRD	31-341N	151-047E	sRNDB10WT
1532 181188	DRRO B	DRDGE 55 3198M-2577M	GRD	27-256N	152-024E	sRNDB10WT
1709 181188	DRRO E	DRDGE 55 3198M-2577M	GRD	27-244N	152-012E	sRNDB10WT
0002 191188	DRRO B	DRDGE 56 1382M-1368M	GRD	27-136N	151-443E	sRNDB10WT
<del>1709</del> 191188 <del>0126</del>	<i>hd as per 92</i>	DRRO E DRDGE 56 1382M-1368M	GRD	<del>27-244N</del> <del>27-108N</del>	<del>152-012E</del> <del>151-450E</del>	sRNDB10WT
2301 211188	DRRO B	DRDGE 57 1420M-1339M	GRD	23-432N	159-154E	sRNDB10WT
2346 211188	DRRO E	DRDGE 57 1420M-1339M	GRD	23-435N	159-157E	sRNDB10WT
1719 241188	DRRO B	DRDGE 58 1975M-1879M	GRD	21-162N	162-430E	sRNDB10WT
1838 241188	DRRO E	DRDGE 58 1975M-1879M	GRD	21-170N	162-438E	sRNDB10WT
2246 241188	DRRO B	DRDGE 59 2531M-2044M	GRD	21-134N	162-426E	sRNDB10WT
0025 251188	DRRO E	DRDGE 59 2531M-2044M	GRD	21-139N	162-436E	sRNDB10WT
0114 261188	DRRO B	DRDGE 60 3390M-2241M	GRD	21-090N	162-503E	sRNDB10WT
0340 261188	DRRO E	DRDGE 60 3390M-2241M	GRD	21-102N	162-507E	sRNDB10WT

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#	GMT TIME	DDMMYY DATE	LOC TIME	T IME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	CRUISE LEG-SHIP	LAT.	LONG.
1236	271188				DRRO B	DRDGE 61 1742M-1476M	GRD	sRNDB10WT	21-068N	166-278E
1344	271188				DRRO E	DRDGE 61 1742M-1476M	GRD	sRNDB10WT	21-068N	166-282E
0501	291188				DRRO B	DRDGE 62 2639M-2875M	GRD	sRNDB10WT	21-592N	171-392E
0833	291188				DRRO E	DRDGE 62 2639M-2875M	GRD	sRNDB10WT	21-594N	171-385E
1104	301188				DRRO B	DRDGE 63 2304M-1265M	GRD	sRNDB10WT	21-116N	173-406E
1312	301188				DRRO E	DRDGE 63 2304M-1265M	GRD	sRNDB10WT	21-104N	173-423E
1650	301188				DRRO B	DRDGE 64 2516M-1897M	GRD	sRNDB10WT	21-066N	173-403E
1958	301188				DRRO E	DRDGE 64 2516M-1897M	GRD	sRNDB10WT	21-069N	173-426E
02	011288	<i>and</i> <i>45° 47' N</i>			DRRO B	DRDGE 65 1337M-1342M	GRD	<i>21-081N 174-231E</i>	<i>21-075N 173-455E</i>	<i>sRNDB10WT</i>
0144	011288				DRRO E	DRDGE 65 1337M-1342M	GRD	<i>21-183N 173-485E</i>	<i>21-086N 174-242E</i>	<i>sRNDB10WT</i>
02	1156 031288				DRRO B	DRDGE 66 2999M-2730M	GRD	sRNDB10WT	19-114N	176-415E
1305	031288				DRRO E	DRDGE 66 2999M-2730M	GRD	sRNDB10WT	19-119N	176-425E
J927	051288				DRRO B	DRDGE 67 1635M-1924M	GRD	sRNDB10WT	18-369N	179-336W
1115	051288				DRRO E	DRDGE 67 1635M-1924M	GRD	sRNDB10WT	18-378N	179-329W
1012	061288				DRRO B	DRDGE 68 1748M-1436M	GRD	sRNDB10WT	18-274N	179-166W
1203	061288				DRRO E	DRDGE 68 1748M-1436M	GRD	sRNDB10WT	18-286N	179-164W
1628	061288				DRRO B	DRDGE 69 2529M-2206M	GRD	sRNDB10WT	18-199N	179-276W
1758	061288				DRRO E	DRDGE 69 2529M-2206M	GRD	sRNDB10WT	18-197N	179-283W
1110	071288				DRRO B	DRDGE 70 2080M-1960M	GRD	sRNDB10WT	18-217N	179-254W
1202	071288				DRRO X	DRDGE 70 2080M-1960M	GRD	sRNDB10WT	18-222N	179-253W
1529	071288				DRRO B	DRDGE 71 2924M-2610M	GRD	sRNDB10WT	18-203N	179-250W
1729	071288				DRRO E	DRDGE 71 2924M-2610M	GRD	sRNDB10WT	18-212N	179-246W
1435	081288				DRRO B	DRDGE 72 3337M-2567M	GRD	sRNDB10WT	18-405N	179-435W
1711	081288				DRRO E	DRDGE 72 3337M-2567M	GRD	sRNDB10WT	18-407N	179-416W
0026	091288				DRRO B	DRDGE 73 2000M-1937M	GRD	sRNDB10WT	18-223N	179-276W
0236	091288				DRRO E	DRDGE 73 2000M-1937M	GRD	sRNDB10WT	18-219N	179-264W

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

1247 091188	DPR3 B 3.5KHZ & DREDGE	R-01	GDC 34-448N	140-114E	sRNDB10WT
0400 161188	DPR3 E 3.5KHZ & DREDGE	R-01	GDC 31-315N	151-084E	sRNDB10WT
0630 161188	DPR3 B 3.5KHZ & DREDGE	R-02	GDC 31-342N	151-026E	sRNDB10WT
0752 241188	DPR3 E 3.5KHZ & DREDGE	R-02	GDC 21-111N	162-452E	sRNDB10WT
0757 241188	DPR3 B 3.5KHZ & DREDGE	R-03	GDC 21-103N	162-452E	sRNDB10WT
0605 271188	DPR3 E 3.5KHZ & DREDGE	R-03	GDC 21-058N	166-288E	sRNDB10WT
1204 271188	DPR3 B 3.5KHZ & DREDGE	R-04	GDC 21-067N	166-273E	sRNDB10WT
1958 301188	DPR3 E 3.5KHZ & DREDGE	R-04	GDC 21-069N	173-426E	sRNDB10WT
0031 011288	DPR3 B 3.5KHZ & DREDGE	R-05	GDC 21-157N	173-436E	sRNDB10WT
1306 051288	DPR3 E 3.5KHZ & DREDGE	R-05	GDC 18-379N	179-334W	sRNDB10WT
0114 051288	DPR3 B 3.5KHZ & DREDGE	R-06	GDC 18-254N	179-190W	sRNDB10WT
0338 071288	DPR3 E 3.5KHZ & DREDGE	R-06	GDC 18-338N	179-312W	sRNDB10WT
0338 071288	DPR3 B 3.5KHZ & DREDGE	R-07	GDC 18-338N	179-312W	sRNDB10WT
1555 081288	DPR3 E 3.5KHZ & DREDGE	R-07	GDC 18-409N	179-419W	sRNDB10WT
1600 081288	DPR3 B 3.5KHZ & DREDGE	R-08	GDC 18-409N	179-417W	sRNDB10WT
1159 121288	DPR3 E 3.5KHZ & DREDGE	R-08	GDC 7-184N	172-183E	sRNDB10WT

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