INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued September 1985)

MARATHON EXPEDITION

LEG 5

Honolulu, Hawaii (12 August 1984)
to
Pago Pago, Samoa (21 August 1984)

R/V T. Washington

Chief Scientist - R. Comer

Resident Marine Tech - R. Comer

Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center

Data Collection and Processing funded by NSF
Grant Number OCE83-17741
Data Processing funded by SIA and NSF

GDC Cruise I.D.# 215

INFORMAL REPORT AND INDEX OF NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

Contents:

Index Chart - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

Track Charts - annotated with dates (day/month) and hour ticks. The scale is .312 in/degree longitude.

Profiles - depth and magnetic anomaly vs. distance. Dates (day/month) and positions of major course changes (greater than 30 degrees) are annotated. 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 (geology, biology, physical oceanography, etc.) collected on the 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, California 92093. Phone (619)452-2752.

1. Navigation listing of 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 magnetic anaomaly profiles along track - map scale = 1.2in/degree, anomaly scale between 15N and 15S latitude = 500 gamma/inch, anomaly scale north of 15N and south of 15S = 1000 gamma/inch, from values retrieved at approximately 1 mile spacing and regional field removed using the 1980 IGRF.
4. Separate time series files of navigation, depth and magnetics of 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 (air or water guns)
   c. Magnetometer records
   d. Underway data log

Revised June 1985 (Sea Beam)

SIO Sea Beam Data

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

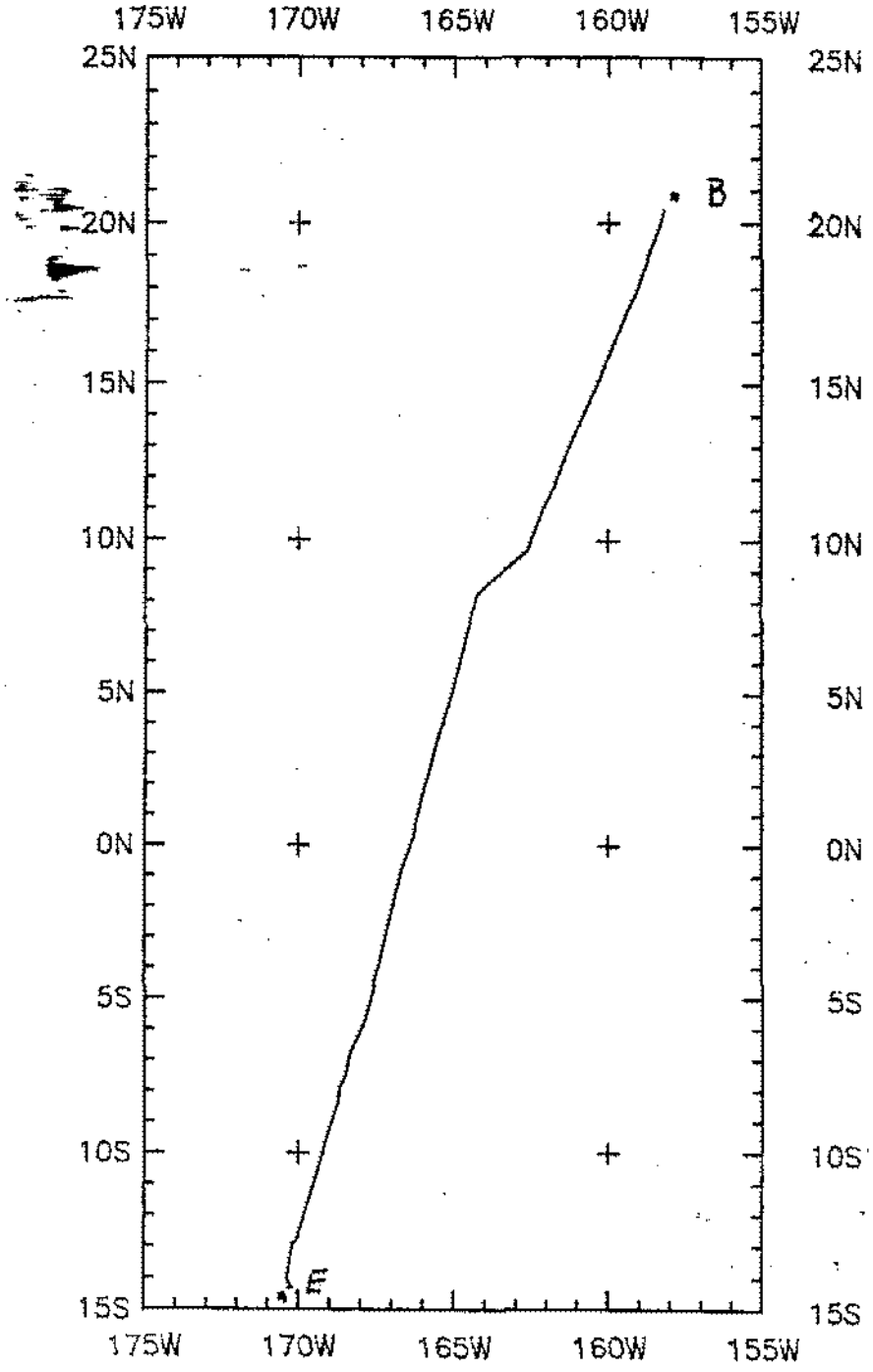
1) Archive contour copy of contour swath books generated in real time on board ship available for inspection at the Data Center.

2) Microfilm (35mm flowfilm) containing swath books plus, for some cruises, the UGR monitor record and navigation listings.

3) Sea Beam merged tapes - Sea Beam data merged with navigation. (Navigation is edited to the extent that 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) 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).

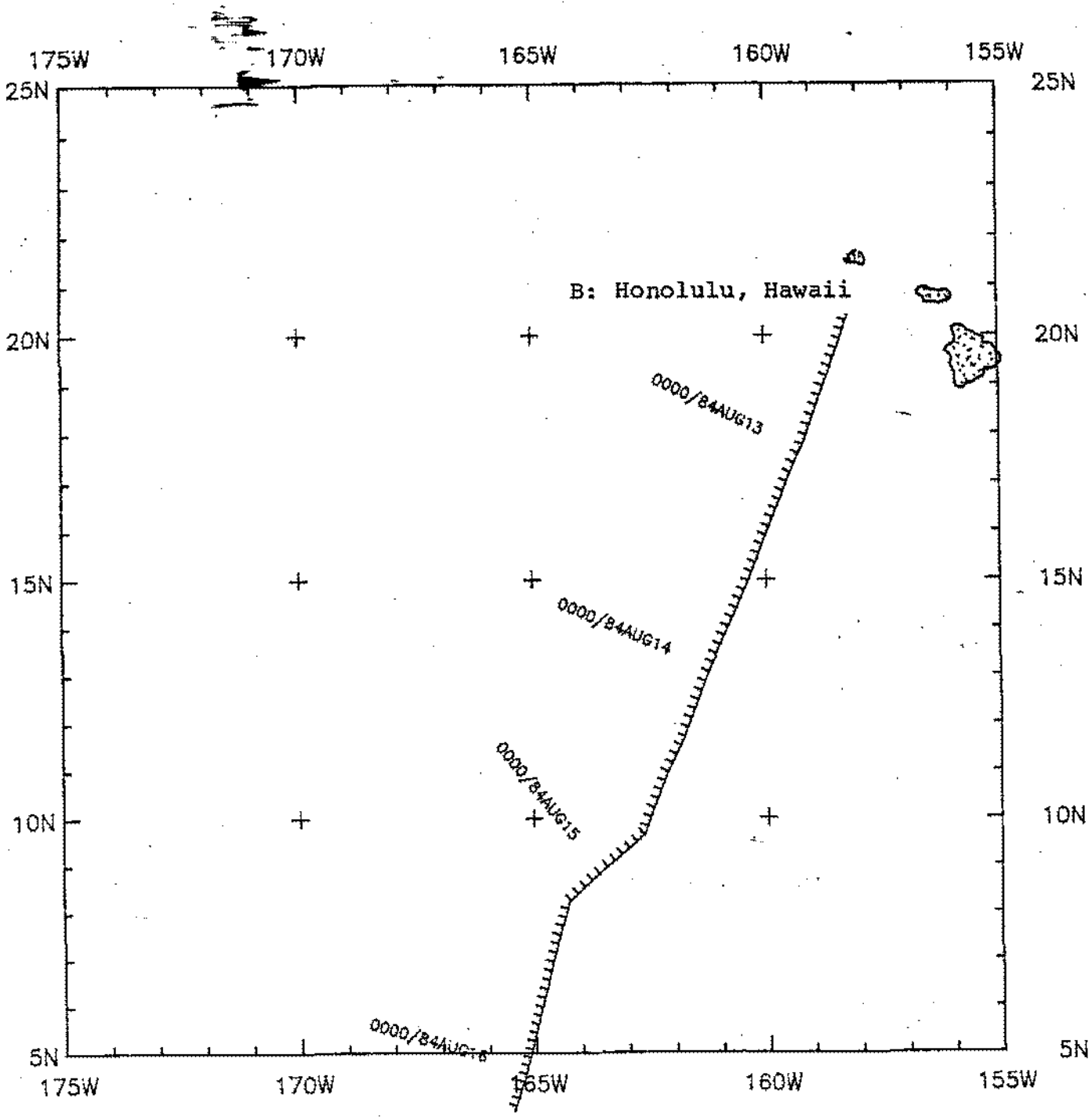
S. N. Smith - June 1985



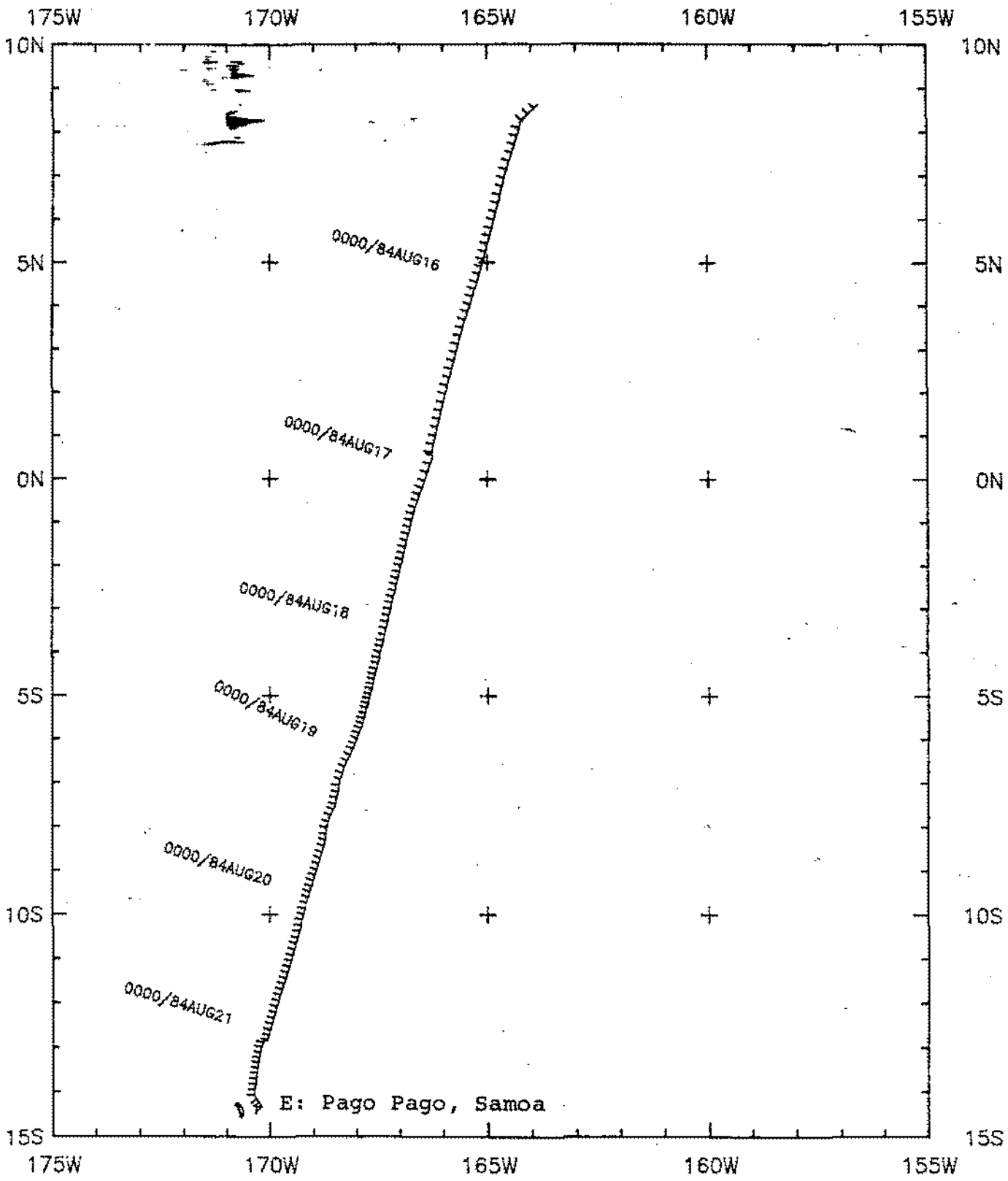
MARATHON EXPEDITION
LEG 5

CHIEF SCIENTIST: R.L. Comer (SIO)
PORTS: Honolulu, Hawaii - Pago Pago, Samoa
DATES: 12 - 21 August 1984
SHIP: R/V Washington

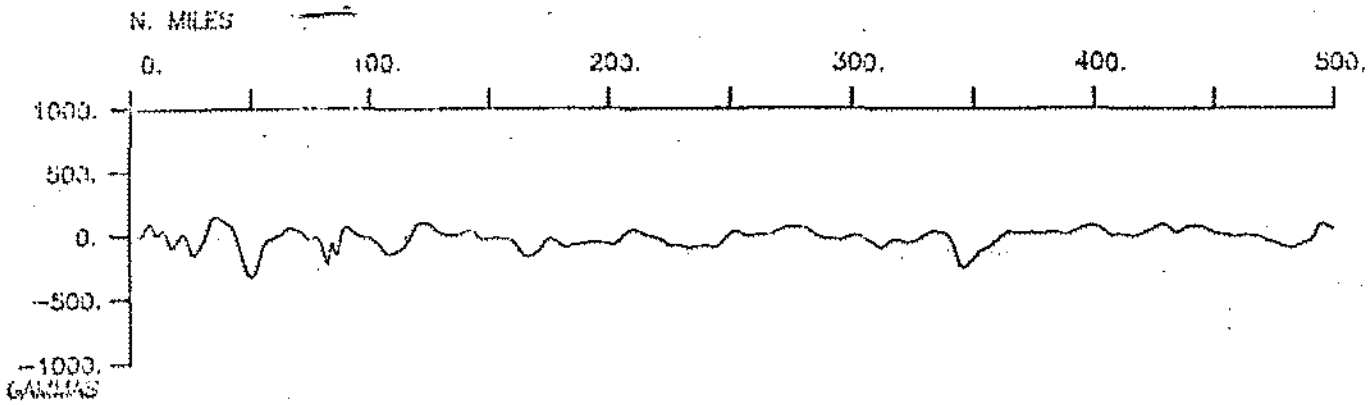
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED
1) Cruise - 2249 miles
2) Bathymetry - 1439 miles
3) Magnetics - ~~none collected~~ 2249
4) Seismic Reflection - none collected
5) Gravity - none collected
6) SeaBeam - 1499 miles

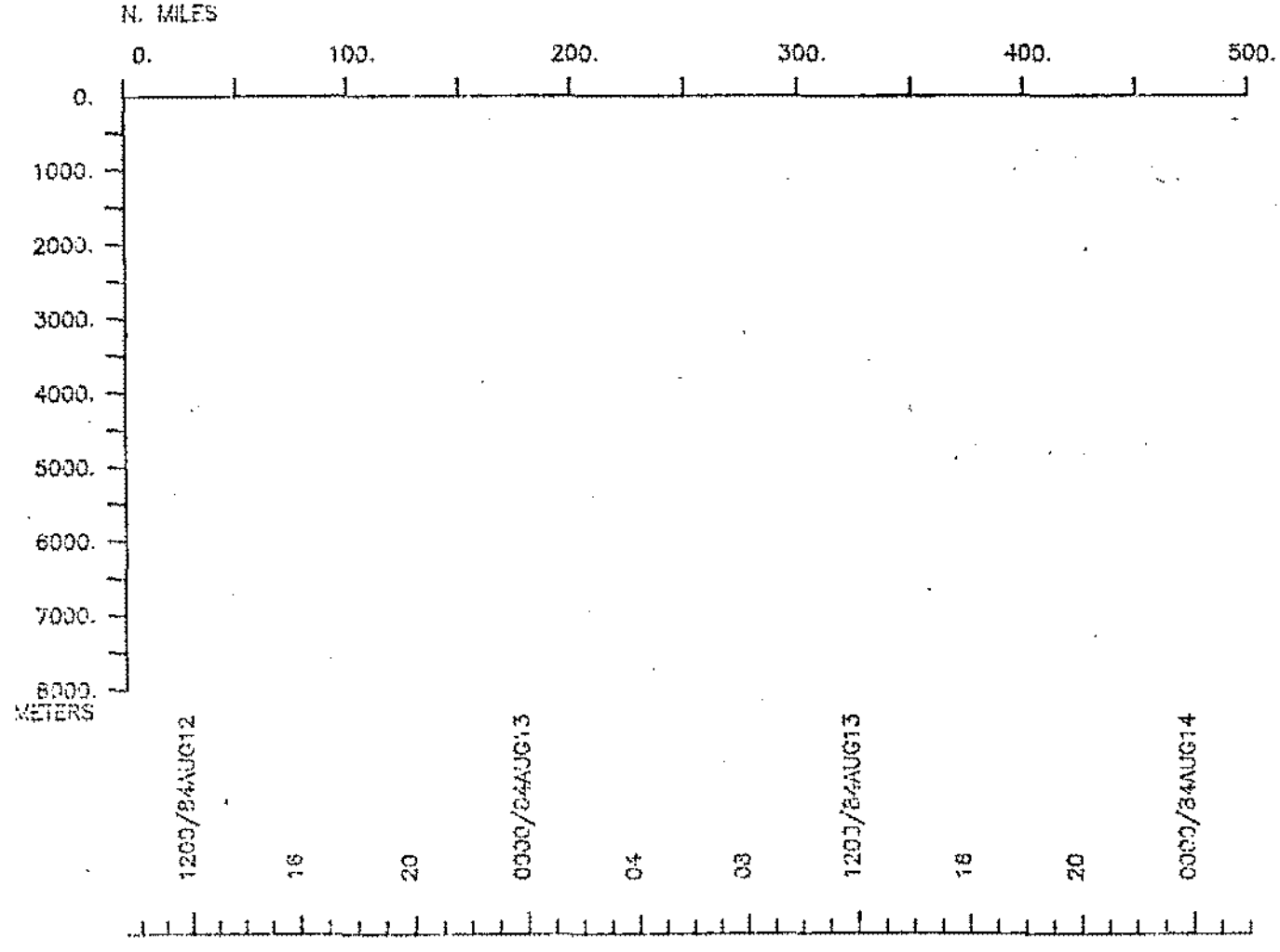


MARATHON LEG 5 Track at .312in/degree (plot 1 of 2)

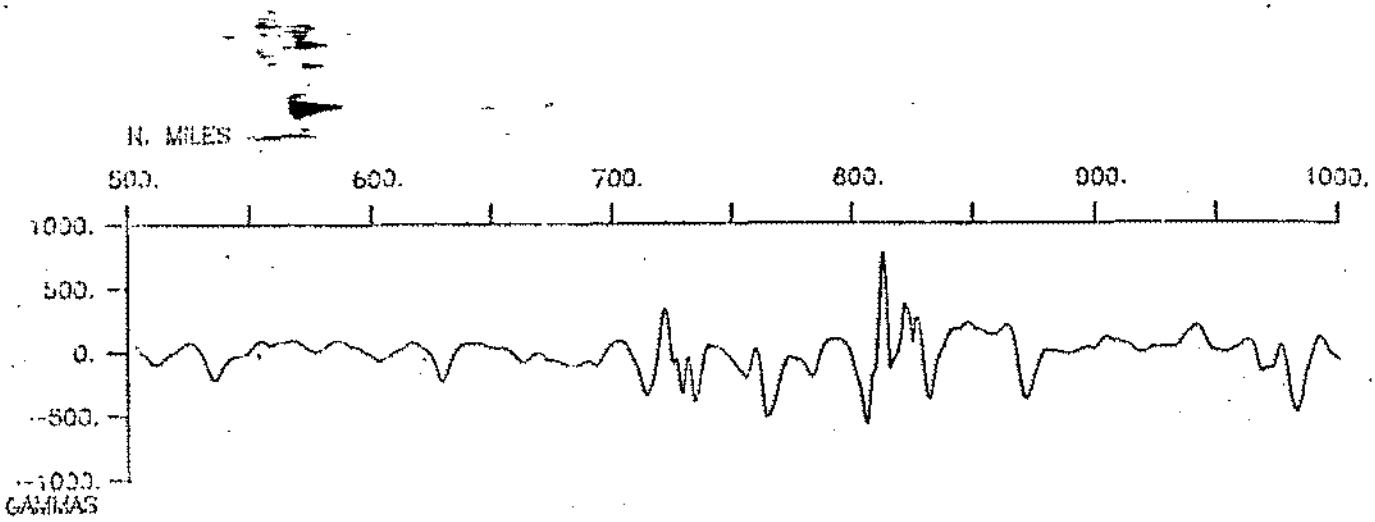


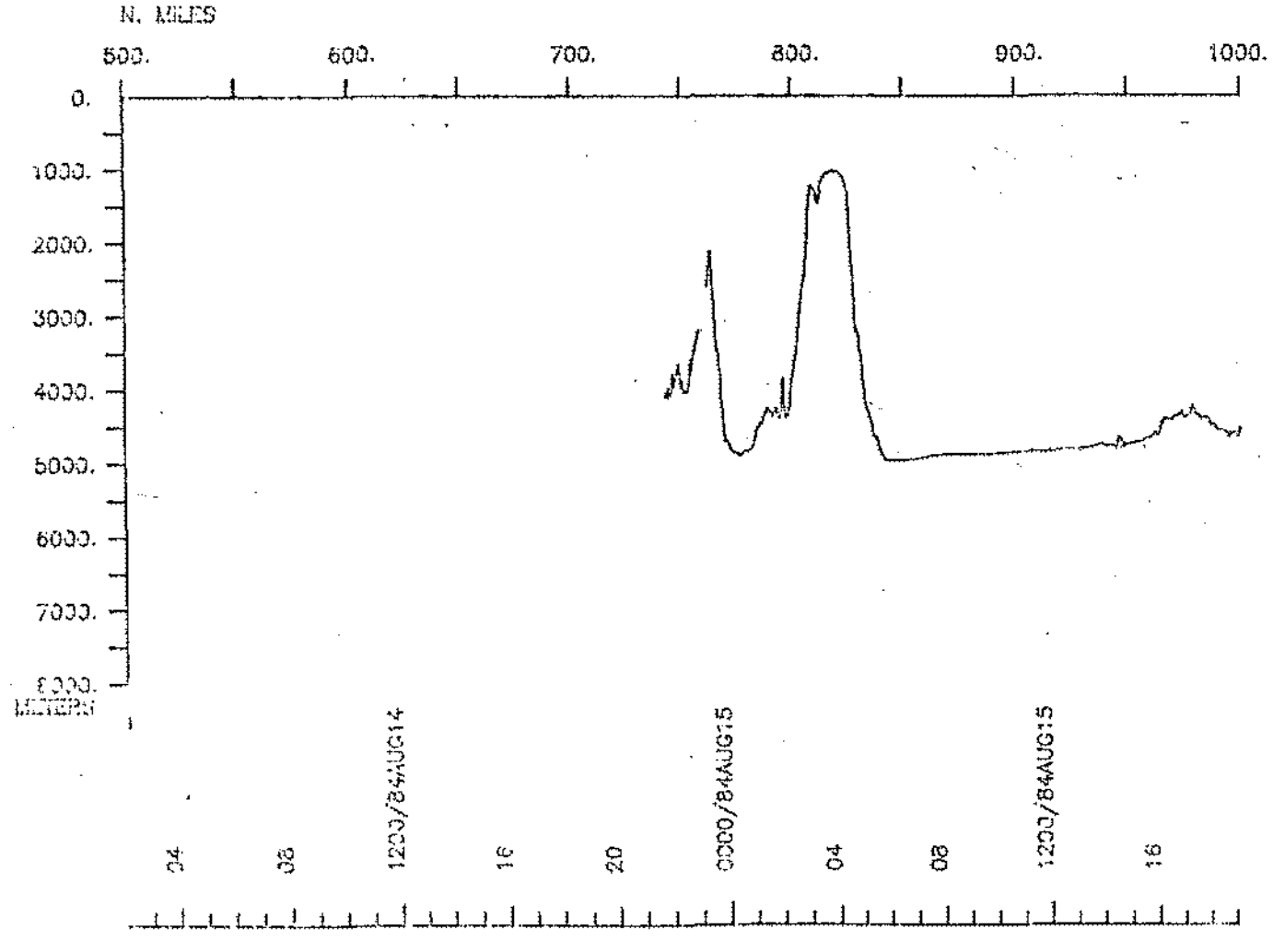
MARATHON LEG 5 Track at .312in/degree (plot 2 of 2)





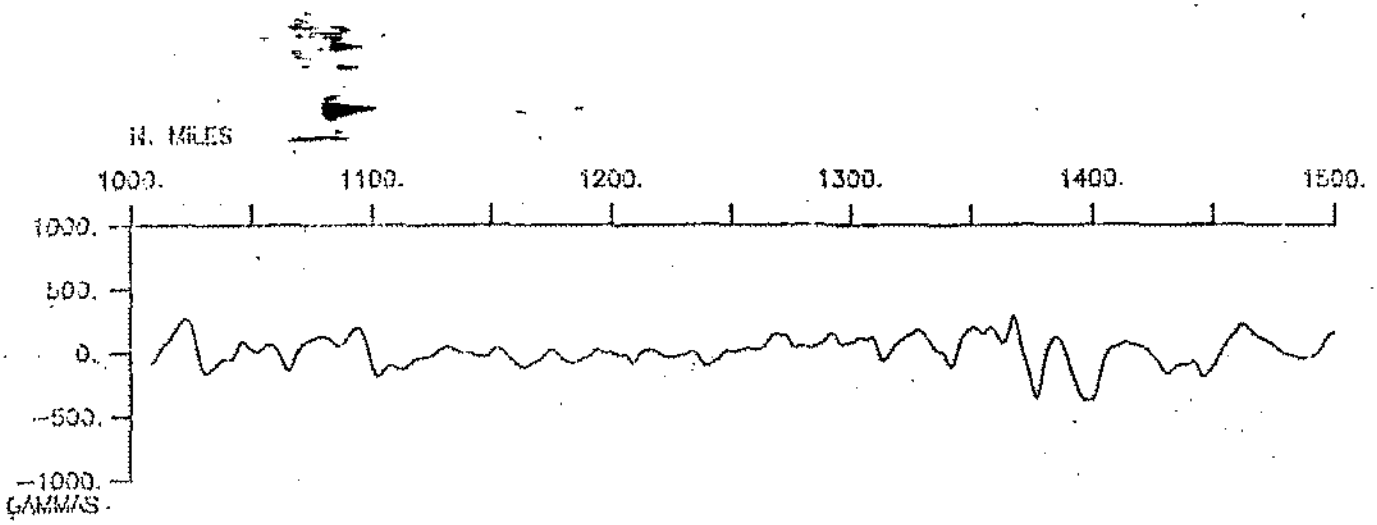
MARATHON LEG 05 (MRTNOSWT)





MARATHON LEG 05 (MERNOSWT)

SEABEAM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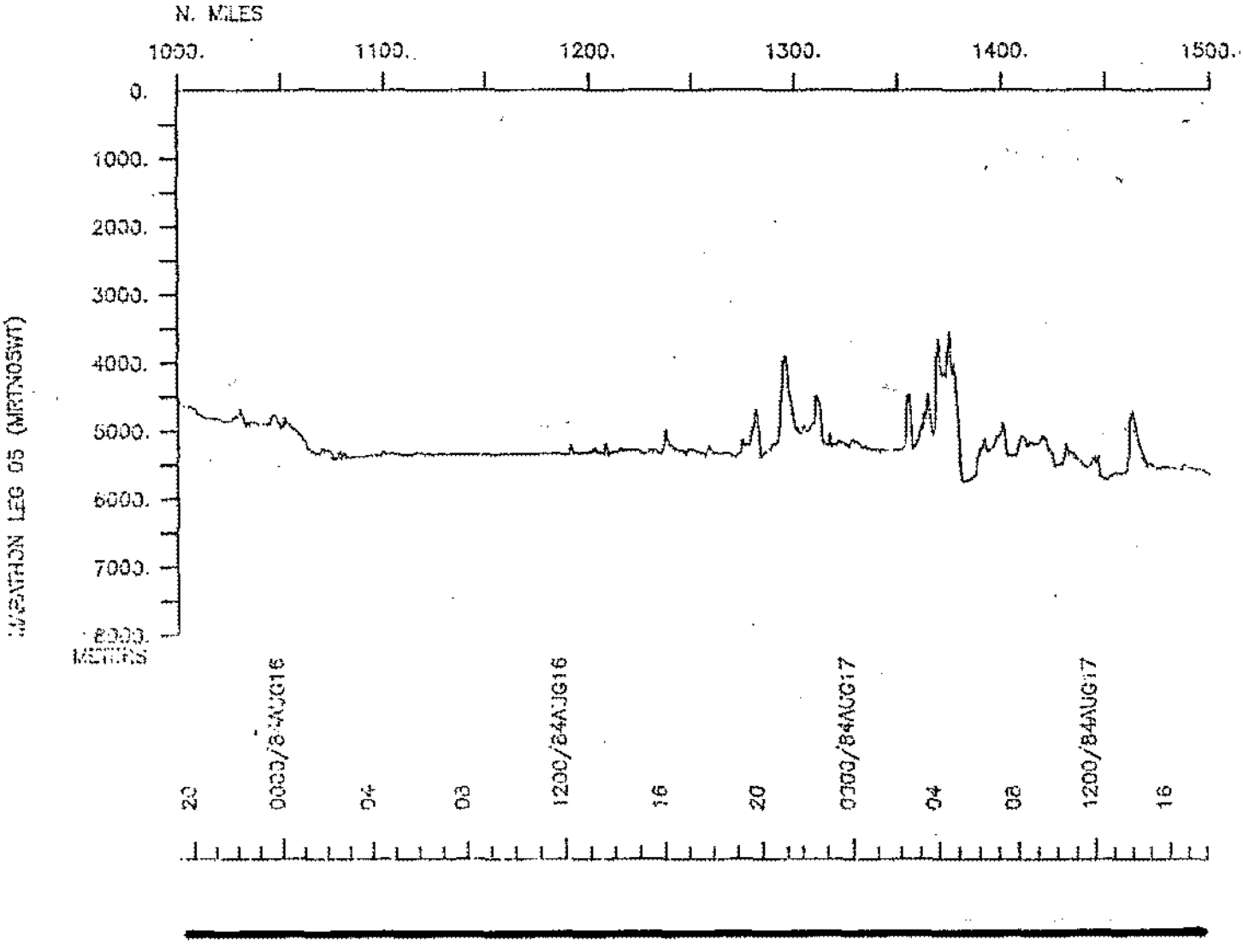
1200.
1300.
1400.
1500.
1000.
500.
0.
-500.
-1000.
GAMMAS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1000.
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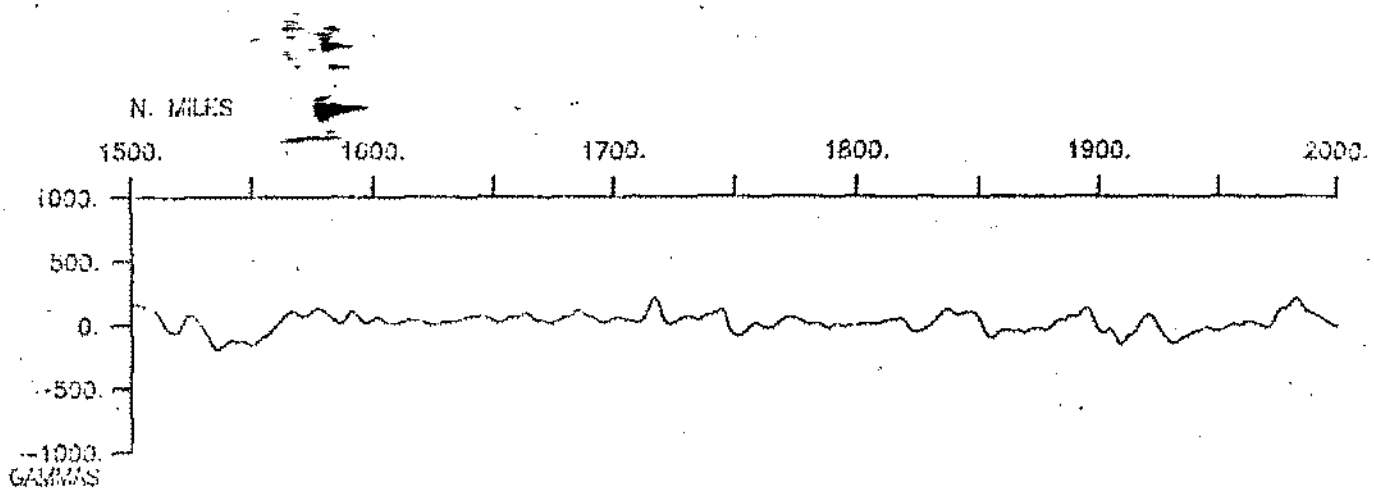
3000.
4000.
5000.
6000.
7000.
8000.
METERS
20
0000/84AUG16
04
08
1200/84AUG16
16
20
0000/84AUG17
04
08
1200/84AUG17
16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1700.
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1900.
2000.
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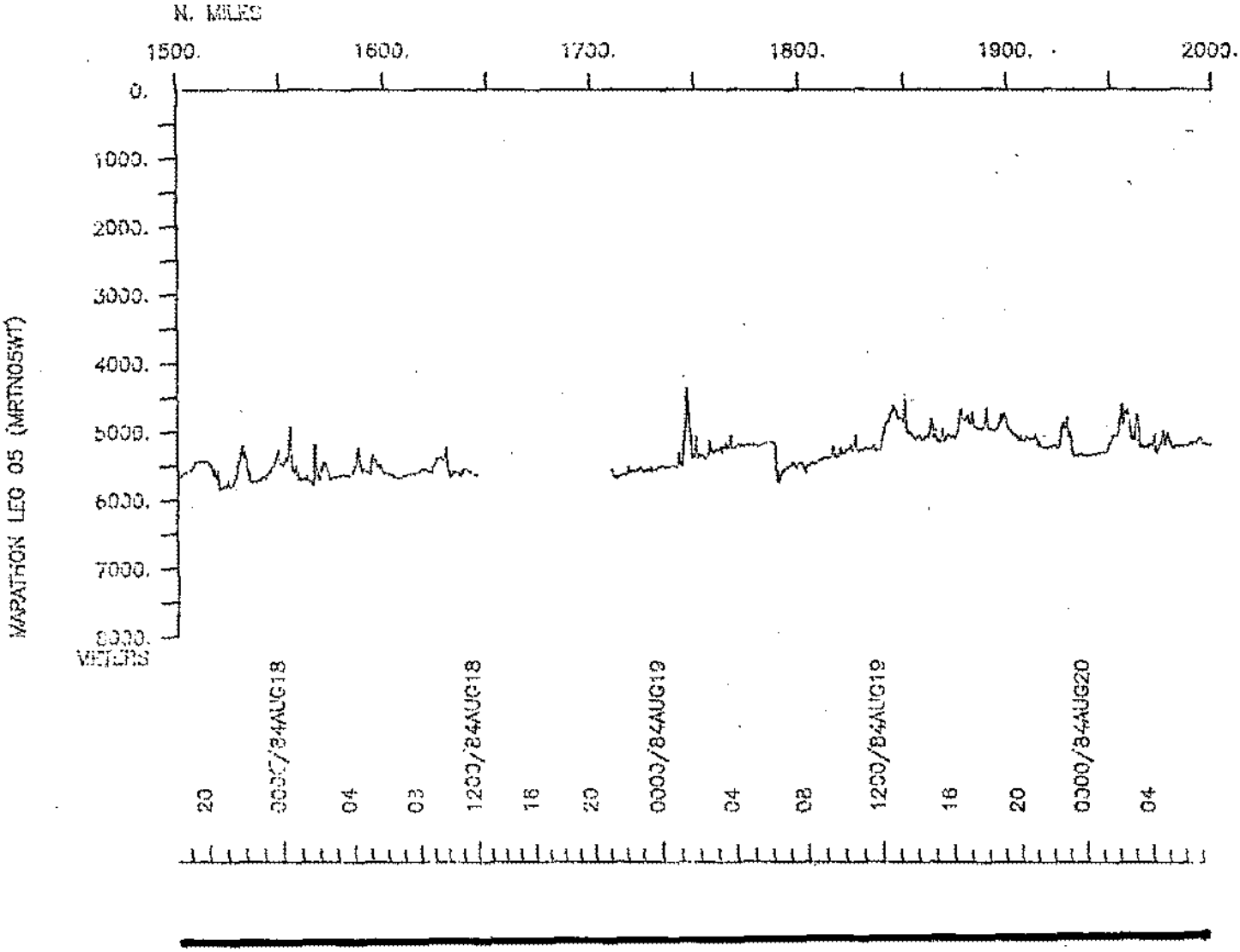
-1000.
GAMMAS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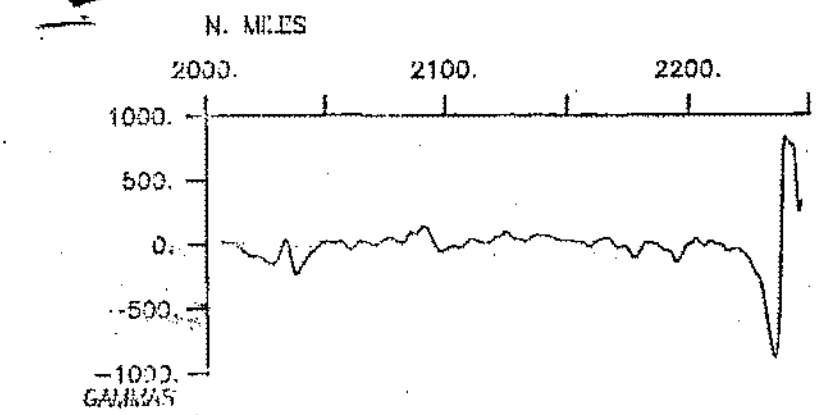
1600.
1700.
1800.
1900.
2000.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
MARATHON LEO 05 (MRTN05WT)
20
3037/84AUG18
04
08
1203/84AUG18
16
20
0003/84AUG19
04
08
1203/84AUG19
16
20
0303/84AUG20
04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2200.
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0.
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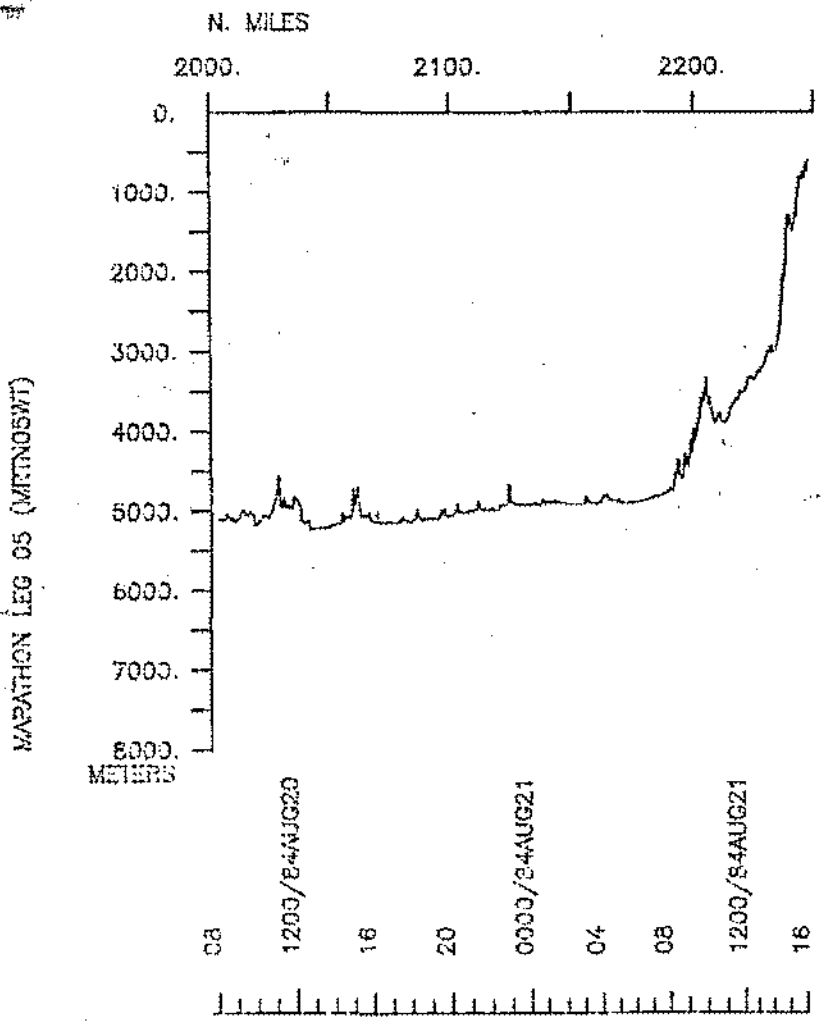
-1000.
GAMMAS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2100.
2200.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
MARATHON LEG 05 (METNOSWT)
08
1200/84AUG20
16
20
0000/84AUG21
04
08
1200/84AUG21
16

S.I.O. SAMPLE INDEX

(Issued September 1985)

MARATHON EXPEDITION

Leg 5

Honolulu, Hawaii (12 August 1984)
to
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R/V T. Washington

Chief Scientist - R. Comer

Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center

Index Encoding Funded by NSF
Grant Number OCE83-16603
Index Processing and Report Preparation
funded in part by SIA

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 I.D. #215

#***PORTS***

0420 120884	LGPT B HONOLULU,HAWAII	20-237N 158-114W	fMRTN05WT
1925 210884	LGPT E PAGO PAGO,SAMOA	14-195S 170-202W	fMRTN05WT

#***PERSONNEL***

# ***NAME***	***TITLE***	***AFFILIATION***	**CRID**
PECS MTG COMER,R.L.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	MRTN05WT
PECT SCG CARTER,M.	COMPUTER TECH.	SCRIPPS INSTITUTION	MRTN05WT

#***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 TIME	DDMMYY DATE	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
#***UNDERWAY DATA CURATOR - S. M. SMITH EXT.2752							
#***FATHOGRAMS***							
0430	120884	DPR3 B	3.5KHZ EPC 2SEC R-01	GDC	20-237N	158-114W	sMRTN05WT
1936	120884	DPR3 E	3.5KHZ EPC 2SEC R-01	GDC	18-268N	158-566W	sMRTN05WT
2014	120884	DPR3 B	3.5KHZ EPC 2SEC R-02	GDC	18-192N	158-595W	sMRTN05WT
2150	140884	DPR3 E	3.5KHZ EPC 2SEC R-02	GDC	9-064N	163-159W	sMRTN05WT
#***THERMOGRAPHS***							
0645	120884	TCRC B	THERMOGRAPHS 1-9	GDC	20-237N	158-114W	sMRTN05WT
1922	210884	TCRC E	THERMOGRAPHS 1-9	GDC	14-195S	170-202W	sMRTN05WT
#***MAGNETICS***							
0630	120384	MGRA B	MAGNETICS R-01	GDC	20-237N	158-114W	sMRTN05WT
1610	210884	MGRA E	MAGNETICS R-01	GDC	14-197S	170-193W	sMRTN05WT
#***SEABEAM MONITOR***							
2122	140884	MBRM B	SB UGR MONITOR R-01	GDC	9-102N	163-115W	sMRTN05WT
0600	180884	MBRM E	SB UGR MONITOR R-01	GDC	4-159S	167-314W	sMRTN05WT
0636	180884	MBRM B	SB UGR MONITOR R-02	GDC	4-204S	167-326W	sMRTN05WT
1828	210884	MBRM E	SB UGR MONITOR R-02	GDC	14-195S	170-202W	sMRTN05WT
#***SEABEAM TRANSIT LINE***							
2122	140884	MBTL B	SEABEAM TRANSIT RUN	GDC	9-102N	163-115W	sMRTN05WT
1828	210884	MBTL E	SEABEAM TRANSIT RUN	GDC	14-195S	170-202W	sMRTN05WT

END SAMPLE INDEX