INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued July 1986)

PAPATUA EXPEDITION

LEG 9

Guam (30 April 1986)
to
Sasebo, Japan (11 May 1986)

R/V T. Washington

Chief Scientist - H. Craig

Resident Marine Tech - G. Hargreaves

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

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

GDC Cruise I.D.# 220

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)534-2755.

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.

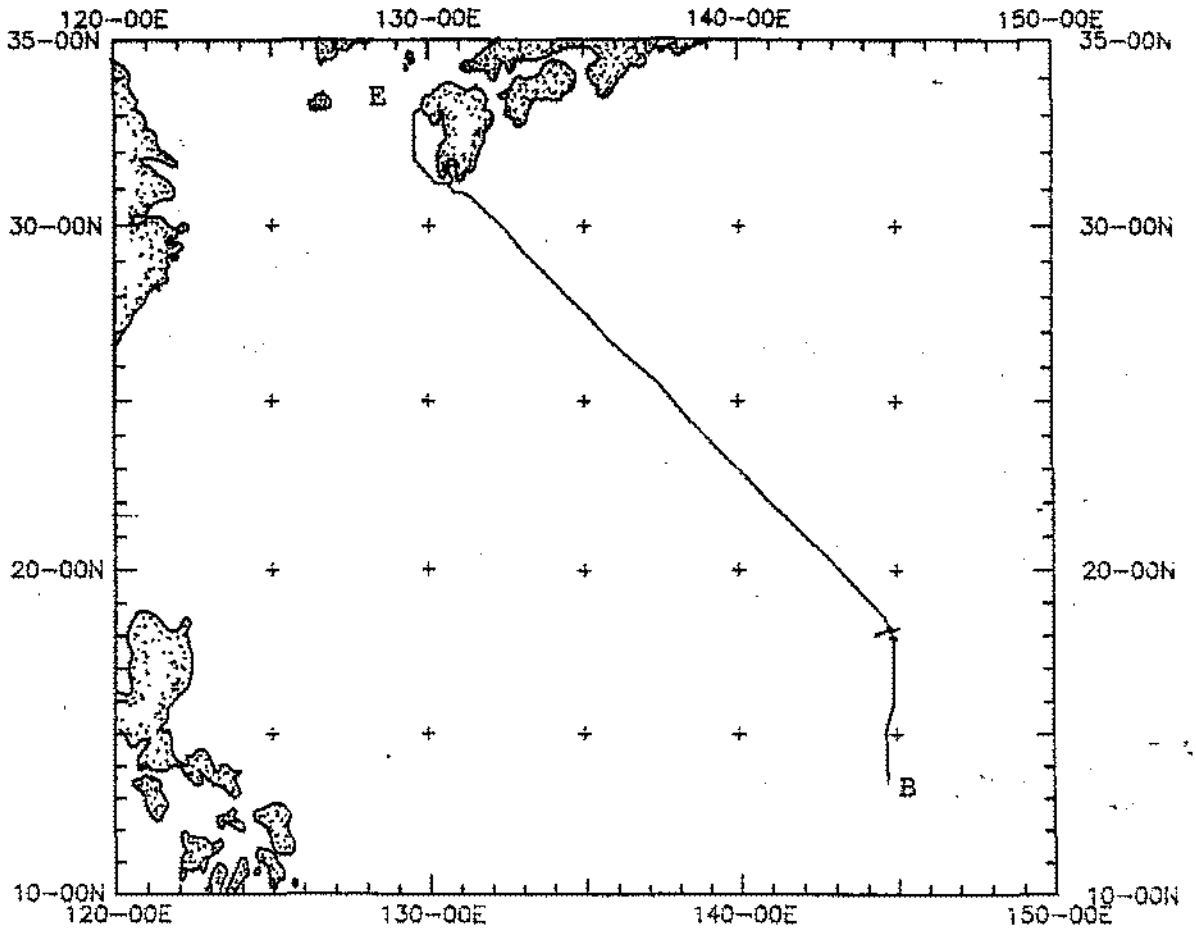
1) Archive contour copy of contour swath books generated in real time on board ship available for inspection at the Data Center.

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. M. Smith - June 1985

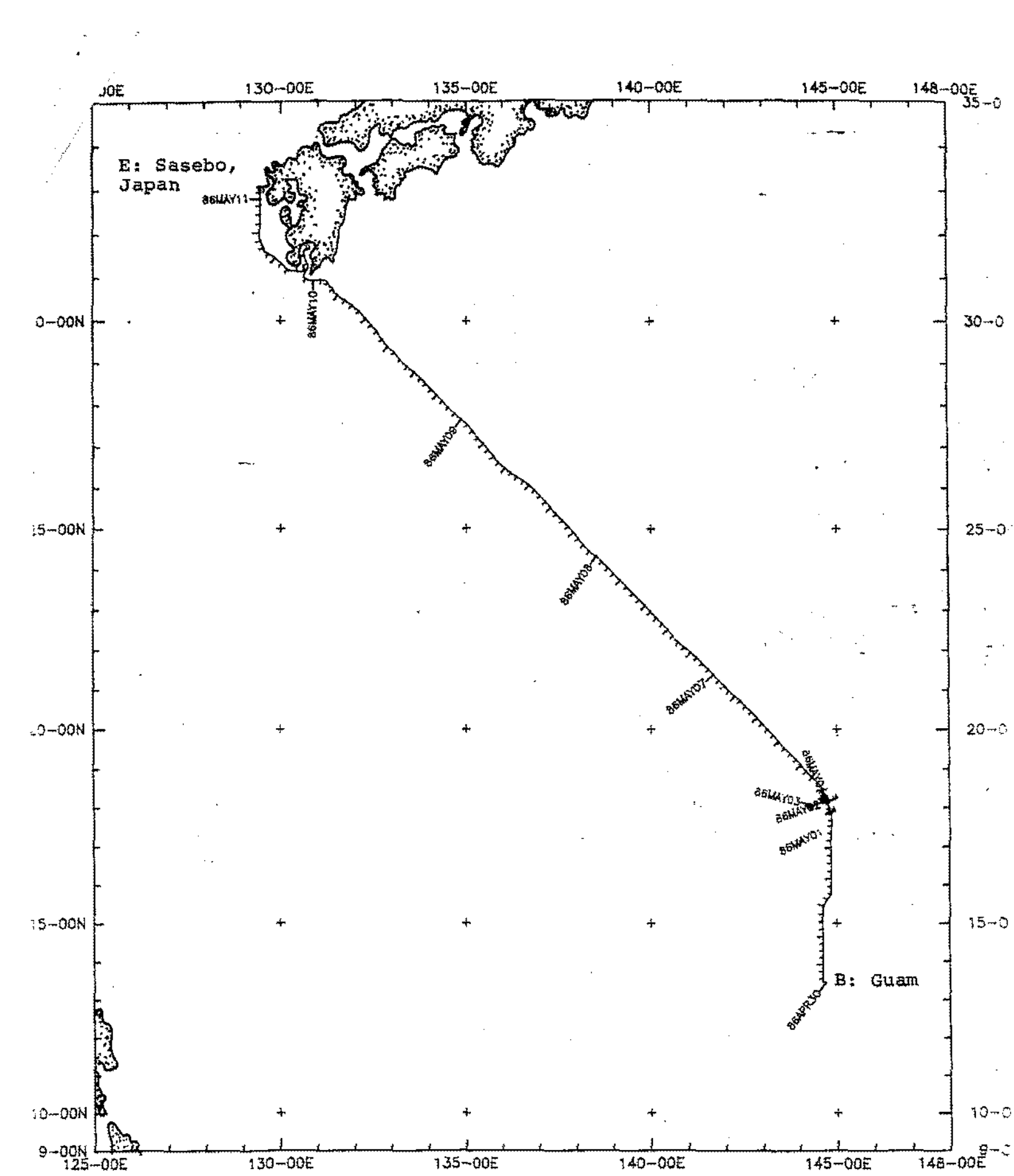


PAPATUA LEG 09 Track at .1632in/degree

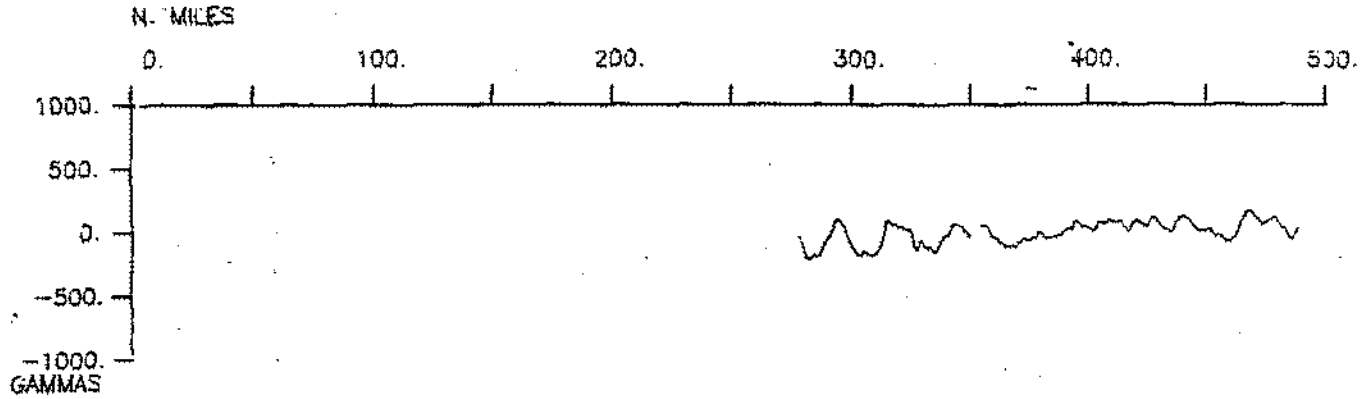
PAPATUA EXPEDITION
LEG 9

CHIEF SCIENTIST: H. Craig
PORTS: Guam - Sasebo, Japan
DATES: 30 April - 11 May 1986
SHIP: R/V T. Washington

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED
1) Cruise - 2192 miles
2) Bathymetry - 1872 miles
3) Magnetics - 740 miles
4) Seismic Reflection - none collected
5) Gravity - none collected
6) SeaBeam - 1872 miles



PAPATUA LEG 9 track at .312in/deg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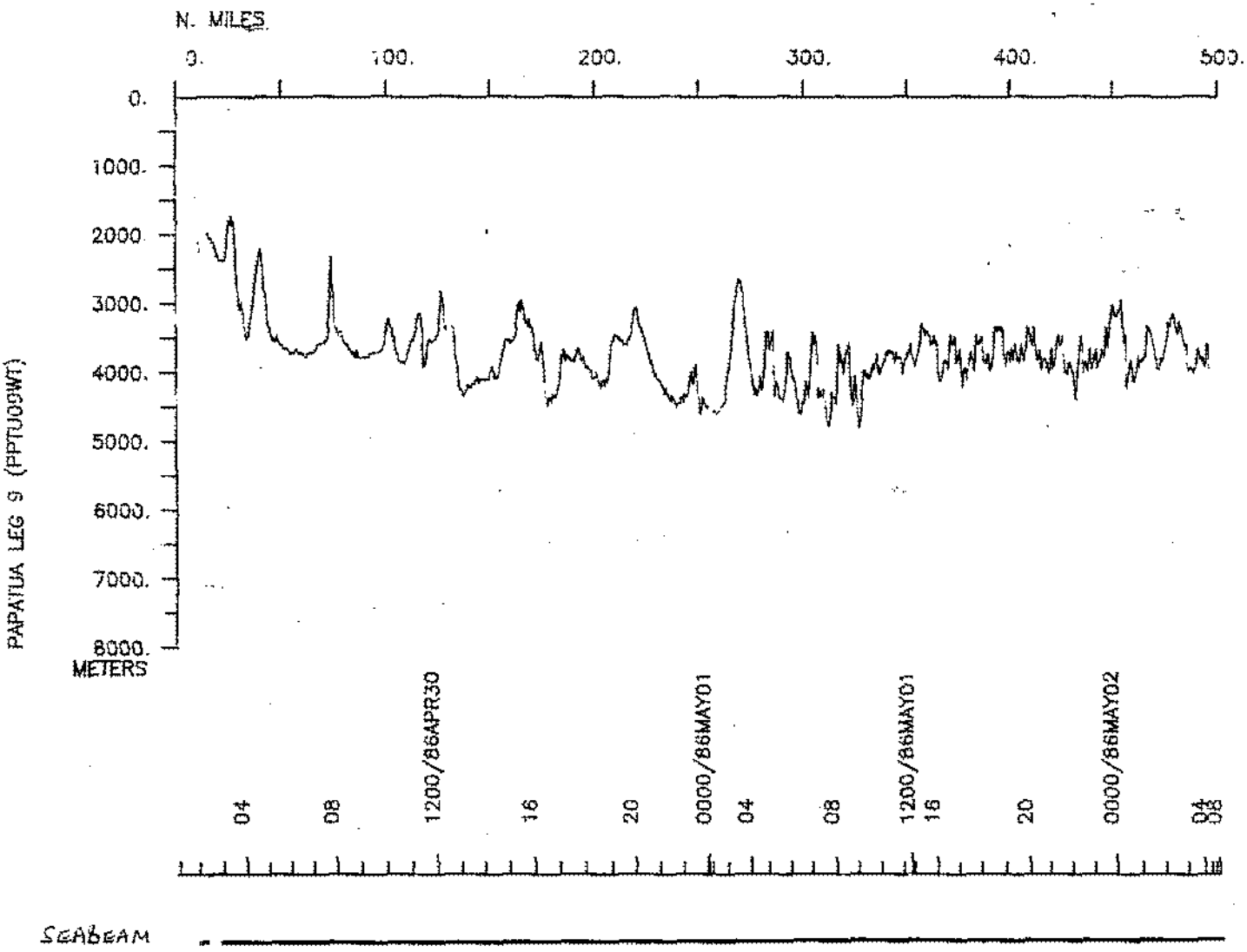
GAMMAS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200.
300.
400.
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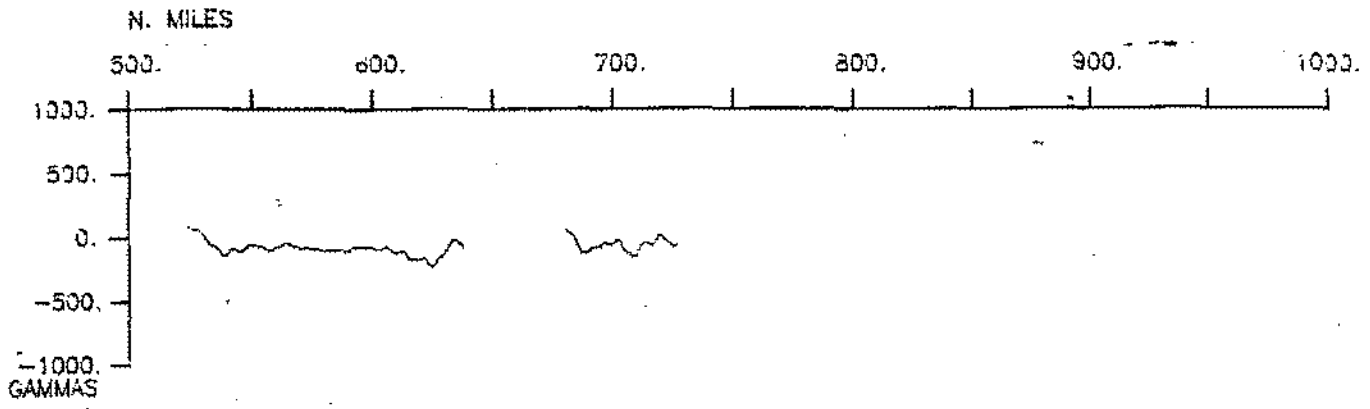
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
PAPATUA LEG 9 (PPTU09WT)
04
08
1200/86APR30
16
20
0000/86MAY01
04
08
1200/86MAY01
16
20
0000/86MAY02
04
08
SEABEAM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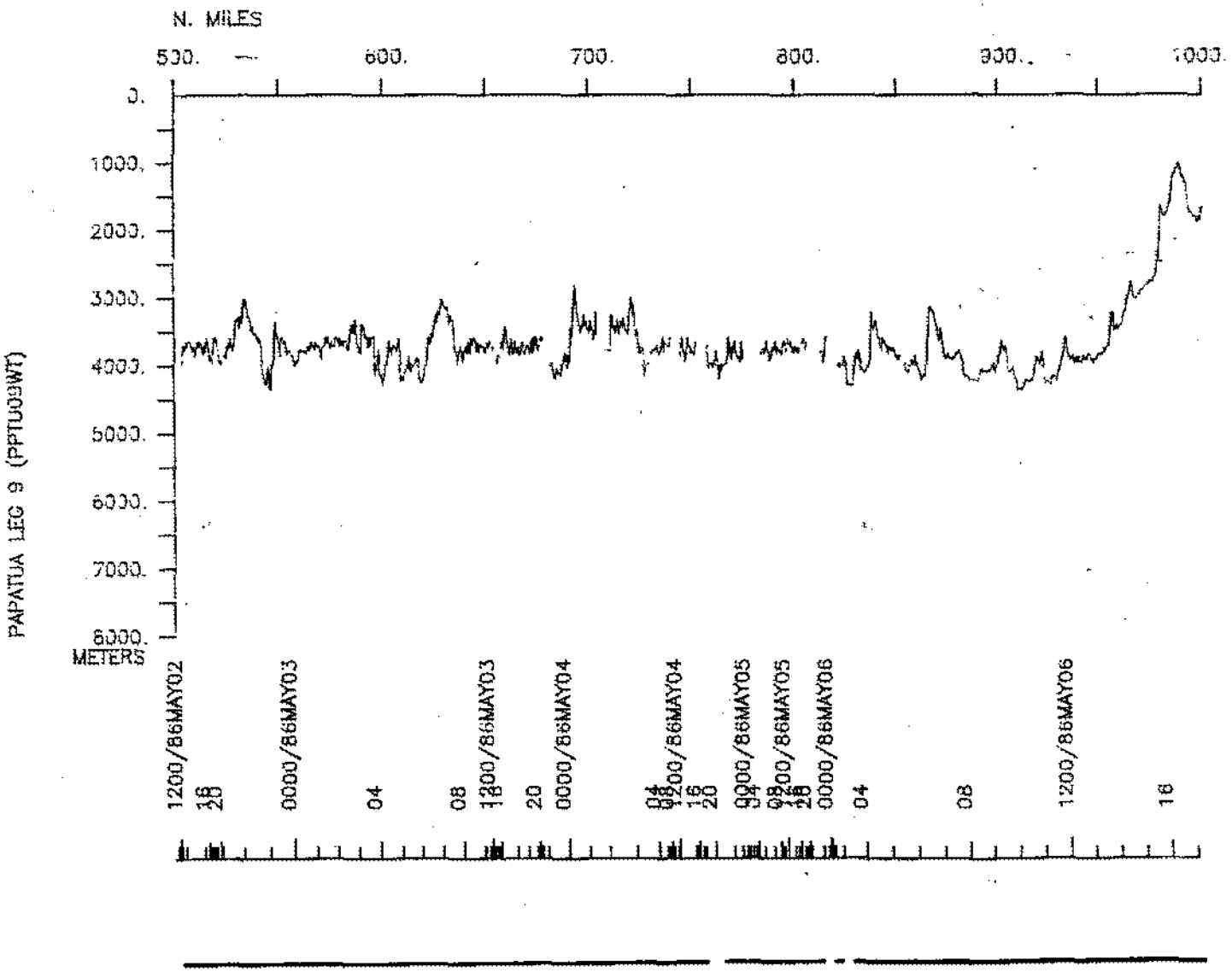
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700.
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900.
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0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
PAPATUA LEG 9 (PPTU09WT)
1200/86MAY02
16
20
0000/86MAY03
04
08
1200/86MAY03
16
20
0000/86MAY04
04
08
1200/86MAY04
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04
08
1200/86MAY06
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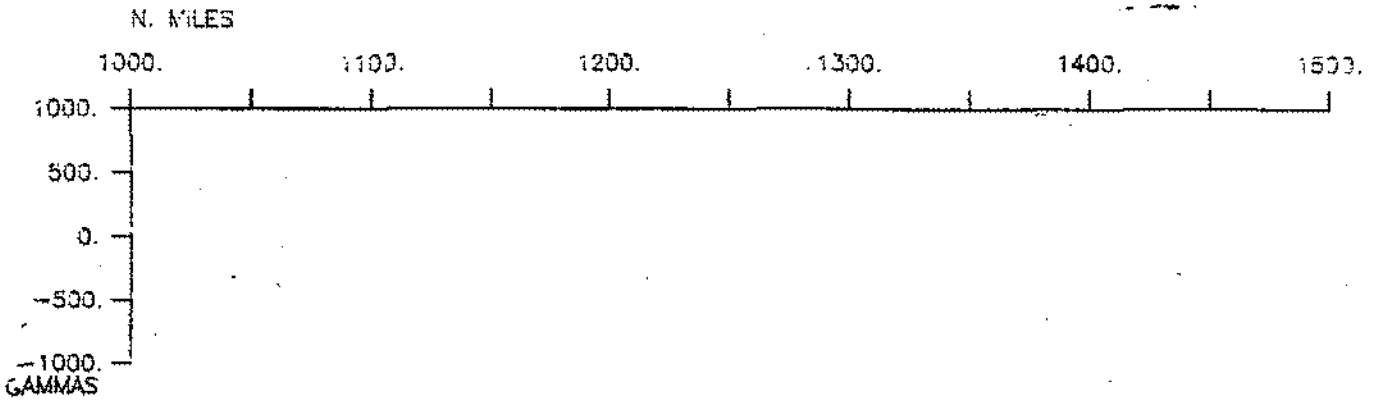
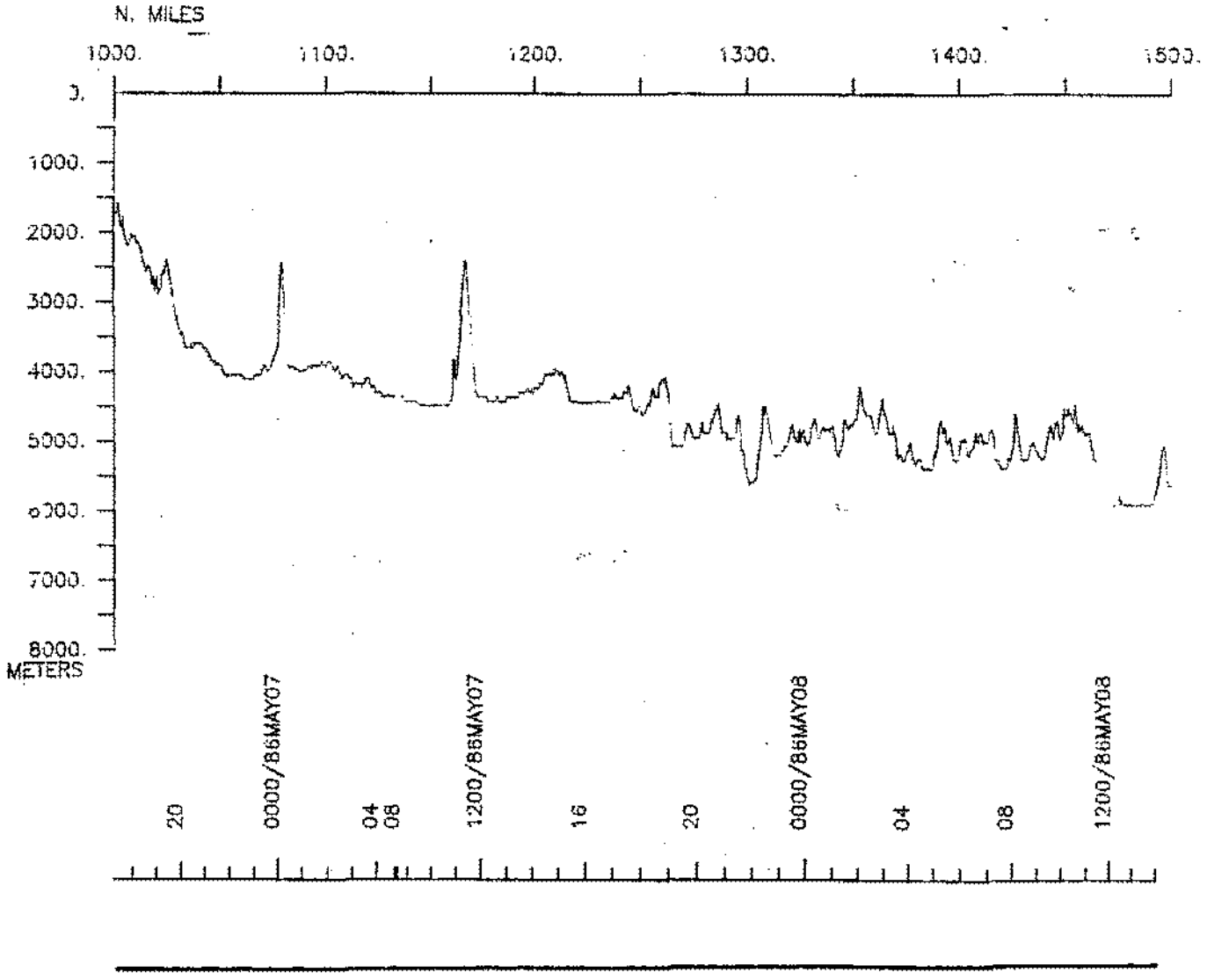
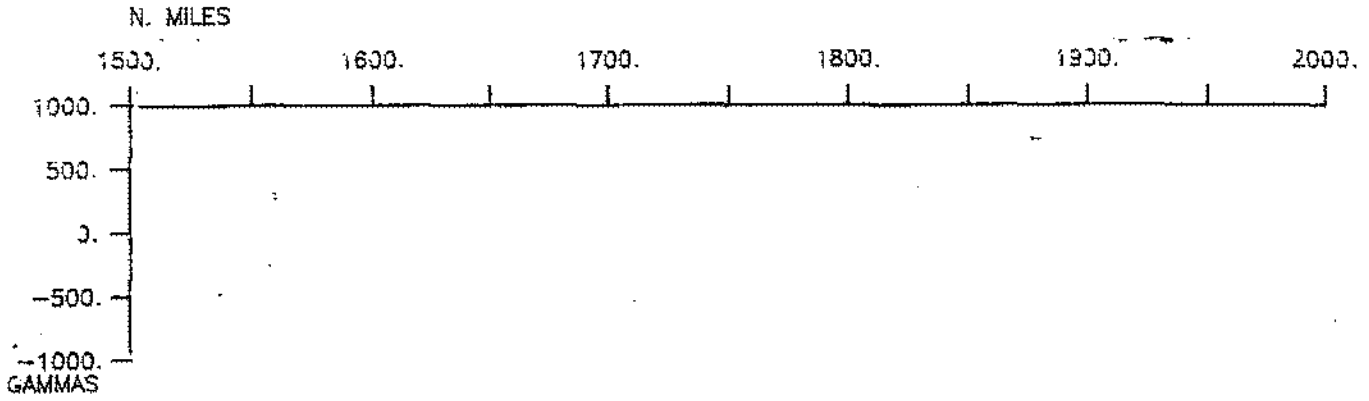




PAPATUA LEG 9 (PPTU09WT)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-500.
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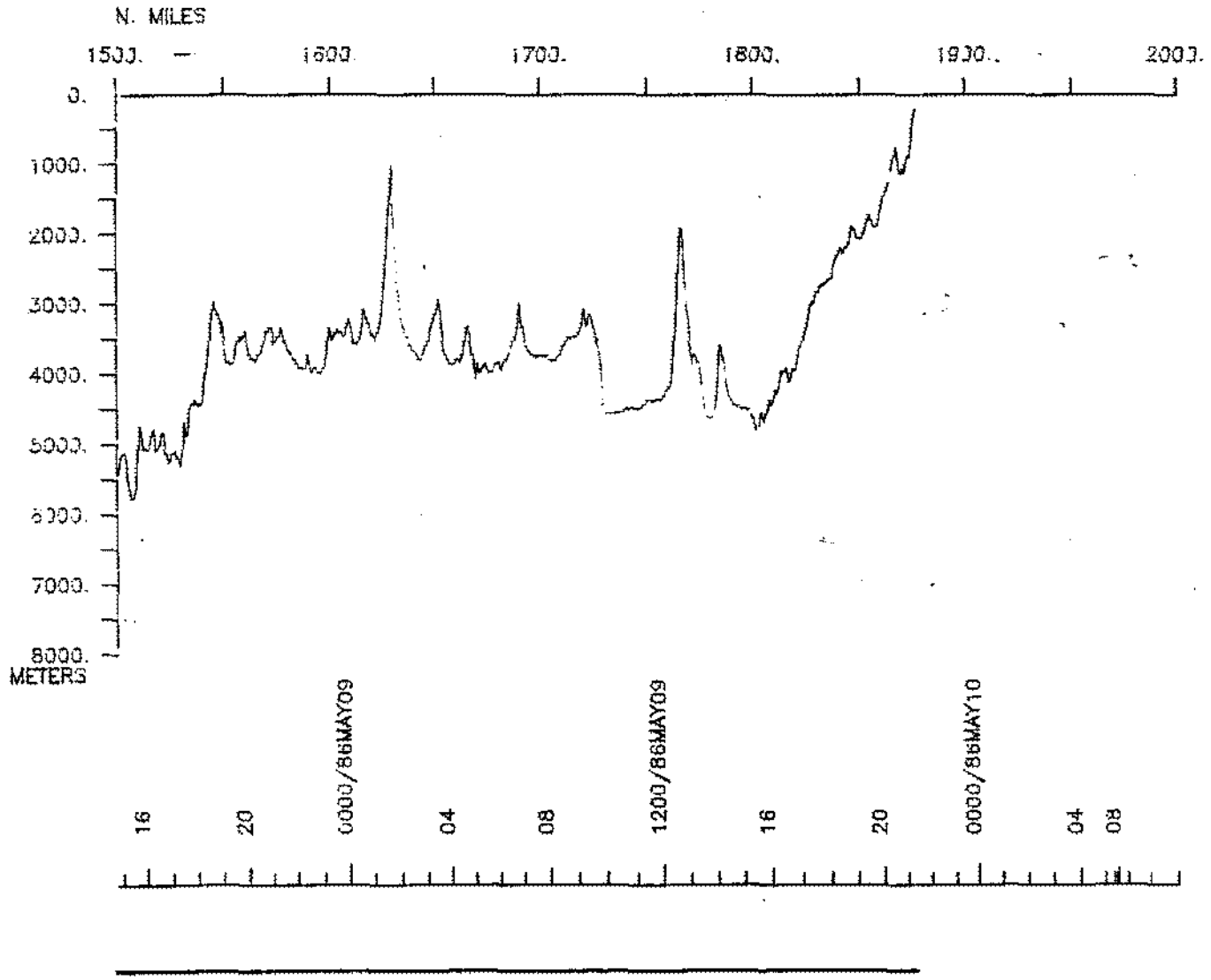
GAMMAS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1700.
1800.
1900.
2000.
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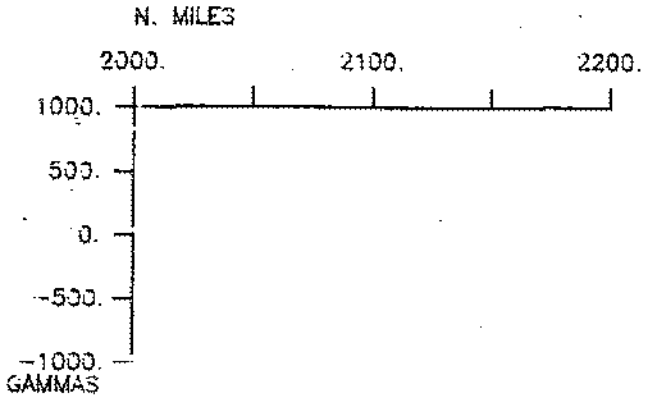
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
PAPATUA LEG 9 (PPTU09WT)
16
20
0000/86MAY09
04
08
1200/86MAY09
16
20
0000/86MAY10
04
08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2200.
1000.
500.
0.
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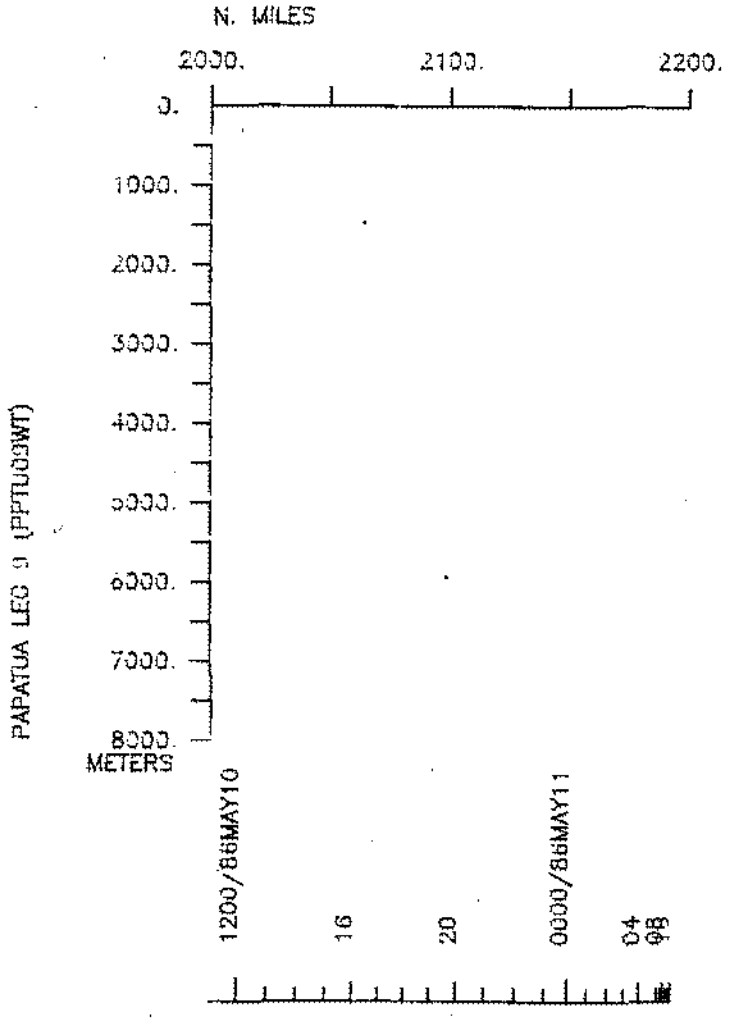
-1000.
GAMMAS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2100.
2200.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
PAPATUA LEG 9 (PPTU09WT)
1200/86MAY10
16
20
0000/86MAY11
04
08

S.I.O. SAMPLE INDEX

(Issued July 1986)

PAPATUA EXPEDITION

Leg 9

Guam (30 April 1986)
to
Sasebo, Japan (11 May 1986)

R/V T. Washington

Chief Scientist - H. Craig

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. #220

#***PORTS***

0137 300486	LGPT B GUAM	13-274N 144-37 E	fPPTU09WT
0500 110586	LGPT E SASEBO,JAPAN	33-10 N 129-43 E	fPPTU09WT

#***PERSONNEL***

#	**NAME**	**TITLE***	**AFFILIATION**	**CRID**
PECS GRD	CRAIG,H.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	PPTU09WT
PECS GRD	CRAIG,V.	LAB ASSISTANT	SCRIPPS INSTITUTION	PPTU09WT
PECT SCG	MOORE,M.	COMPUTER TECH.	SCRIPPS INSTITUTION	PPTU09WT
PESP GRD	HEY,R.N.	RESEARCH ASSOC.	SCRIPPS INSTITUTION	PPTU09WT
PEBE STS	PHILLIPS,J.	SEA BEAM TECH.	SCRIPPS INSTITUTION	PPTU09WT
PERT STS	HARGREAVES, G.	RESIDENT TECH.	SCRIPPS INSTITUTION	PPTU09WT
PESP GRD	HORIBE,Y.	PROFESSOR	SCRIPPS INSTITUTION	PPTU09WT
PEOB JPN	GAMO,T.	GEOCHEMIST	JAPAN	PPTU09WT
PESP GRD	WOLGAST,D.	RESEARCH TECH.	SCRIPPS INSTITUTION	PPTU09WT
PESP STS	COSTELLO,J.	MARINE TECH.	SCRIPPS INSTITUTION	PPTU09WT
PEBO STS	ALBRIGHT,U.	SEA BEAM OPERATOR	SCRIPPS INSTITUTION	PPTU09WT
PESP SIX	MATSON,E.	PROFESSOR	UNIV.OF GUAM	PPTU09WT
PESP SIX	STAKES,D.	PROFESSOR	UNIV. OF S.CAROLINA	PPTU09WT

#***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.42755

#***LOG BOOKS***

0137 300486          LBUW B UNDERWAY WATCH LOG     GDC 13-274N 144-353E sPPTU09WT
0844 070586          LBUW E UNDERWAY WATCH LOG     GDC 22-012N 140-546E sPPTU09WT

#***THERMOGRAPHS***

1626 300486          TGRC B THERMOGRAPHS 1-5       GDC 16-137N 144-503E sPPTU09WT
1720 090586          TGRC E THERMOGRAPHS 1-5       GDC 30-163N 132-014E sPPTU09WT

#***SEABEAM SURVEYS***

0950 010586          MBSV B SB SRVY MARIANAS       GDC 18-053N 144-442E sPPTU09WT
2210 020586          MBSV E TROUGH AXIS            GDC 18-073N 144-342E sPPTU09WT
1855 300486          MBSV B SB SRVY MARIANAS       GDC 16-441N 144-503E sPPTU09WT
0920 010586          MBSV E SOUTHERN TROUGH AREA   GDC 18-000N 144-457E sPPTU09WT
2245 020586          MBSV B SB SRVY MARIANAS       GDC 18-046N 144-270E sPPTU09WT
0605 030586          MBSV E MOUNDS AREA            GDC 18-051N 144-255E sPPTU09WT
0700 030586          MBSV B SB SRVY MARIANAS       GDC 18-086N 144-344E sPPTU09WT
0320 060586          MBSV E TROUGH AXIS            GDC 18-203N 144-356E sPPTU09WT

#***SEABEAM MONITOR 12 Khz EPC RECORDER***

0202 300486          MBRM B SB MONITOR R-01        GDC 13-323N 144-356E sPPTU09WT
2130 300486          MBRM E SB MONITOR R-01        GDC 17-138N 144-496E sPPTU09WT
2138 300486          MBRM B SB MONITOR R-02        GDC 17-153N 144-497E sPPTU09WT
2108 040586          MBRM E SB MONITOR R-02        GDC 18-147N 144-389E sPPTU09WT
2113 040586          MBRM B SB MONITOR R-03        GDC 18-148N 144-390E sPPTU09WT
2332 080586          MBRM E SB MONITOR R-03        GDC 27-356N 134-565E sPPTU09WT
2337 080586          MBRM B SB MONITOR R-04        GDC 27-362N 134-556E sPPTU09WT
2120 090586          MBRM E SB MONITOR R-04        GDC 30-462N 131-192E sPPTU09WT

#***SEABEAM ARCHIVE SWATH BOOKS***

0159 300486          MBSB B SB ARCHIVE S.B. 01     GDC 13-317N 144-356E sPPTU09WT
0010 020586          MBSB E SB ARCHIVE S.B. 01     GDC 18-085N 144-484E sPPTU09WT
0012 020586          MBSB B SB ARCHIVE S.B. 02     GDC 18-082N 144-486E sPPTU09WT
0138 060586          MBSB E SB ARCHIVE S.B. 02     GDC 18-155N 144-414E sPPTU09WT
0140 060586          MBSB B SB ARCHIVE S.B. 03     GDC 18-155N 144-414E sPPTU09WT
2030 070586          MBSB E SB ARCHIVE S.B. 03     GDC 23-476N 139-044E sPPTU09WT
2040 070586          MBSB B SB ARCHIVE S.B. 04     GDC 23-493N 139-029E sPPTU09WT
1253 080586          MBSB E SB ARCHIVE S.B. 04     GDC 26-093N 136-356E sPPTU09WT
1258 080586          MBSB B SB ARCHIVE S.B. 05     GDC 26-098N 136-348E sPPTU09WT
2109 090586          MBSB E SB ARCHIVE S.B. 05     GDC 30-449N 131-210E sPPTU09WT
```

#GMT DDMMYY LOC T #TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
#***SEABEAM SURVEY SWATH BOOKS***						
0159 300486	MBSB B	SB SURVEY S.B. 01	GDC	13-317N	144-356E	sPPTU09WT
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0012 020586	MBSB B	SB SURVEY S.B. 02	GDC	18-082N	144-486E	sPPTU09WT
0138 060586	MBSB E	SB SURVEY S.B. 02	GDC	18-155N	144-414E	sPPTU09WT
#***MAGNETIC (EARTH TOTAL FIELD) RECORDS***						
0425 010586	MGRA B	MAGNETICS R-01	GDC	17-520N	144-512E	sPPTU09WT
0318 040586	MGRA E	MAGNETICS R-01	GDC	18-075N	144-434E	sPPTU09WT
#***CAMERA RUNS***						
0947 020586	CATB B	35mm CAMERA RUN 1	GRD	18-159N	144-393E	sPPTU09WT
1144 020586	CATB E	35mm CAMERA RUN 1	GRD	18-154N	144-401E	sPPTU09WT
1140 030586	CATB B	35mm CAMERA RUN 2	GRD	18-141N	144-418E	sPPTU09WT
1330 030586	CATB E	35mm CAMERA RUN 2	GRD	18-142N	144-407E	sPPTU09WT
0841 040586	CATB B	35mm CAMERA RUN 3	GRD	18-130N	144-421E	sPPTU09WT
1100 040586	CATB E	35mm CAMERA RUN 3	GRD	18-129N	144-423E	sPPTU09WT
0121 050586	CATB B	35mm CAMERA RUN 4	GRD	18-153N	144-406E	sPPTU09WT
0348 050586	CATB E	35mm CAMERA RUN 4	GRD	18-146N	144-427E	sPPTU09WT
1630 050586	CATB B	35mm CAMERA RUN 5	GRD	18-123N	144-415E	sPPTU09WT
1915 050586	CATB E	35mm CAMERA RUN 5	GRD	18-101N	144-434E	sPPTU09WT
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1317 010586	HCNI B	HYDRO CAST 02	GRD	18-109N	144-422E	sPPTU09WT
1915 020586	HCNI B	HYDRO CAST 03	GRD	18-156N	144-424E	sPPTU09WT
2105 030586	HCNI B	HYDRO CAST 04	GRD	18-133N	144-424E	sPPTU09WT
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1020 050586	HCNI B	HYDRO CAST 06	GRD	18-126N	144-423E	sPPTU09WT
0104 060586	HCNI B	HYDRO CAST 07	GRD	18-148N	144-419E	sPPTU09WT
0635 070586	HCNI B	HYDRO CAST 08	GRD	22-006N	140-560E	sPPTU09WT
#						
#		END SAMPLE INDEX				