

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA
(Issued December 1985)

PAPATUA EXPEDITION

LEG 2

Manzanillo, Mexico (19 October 1985)
to
Manzanillo, Mexico (17 November 1985)

R/V T. Washington

Chief Scientist - P. Lonsdale

Resident Marine Tech - G. Pillard

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

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

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.

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)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 $\frac{2}{3}$ degree beam width) depths retrieved at one minute intervals of ship time.
3. Plots of magnetic anomaly 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

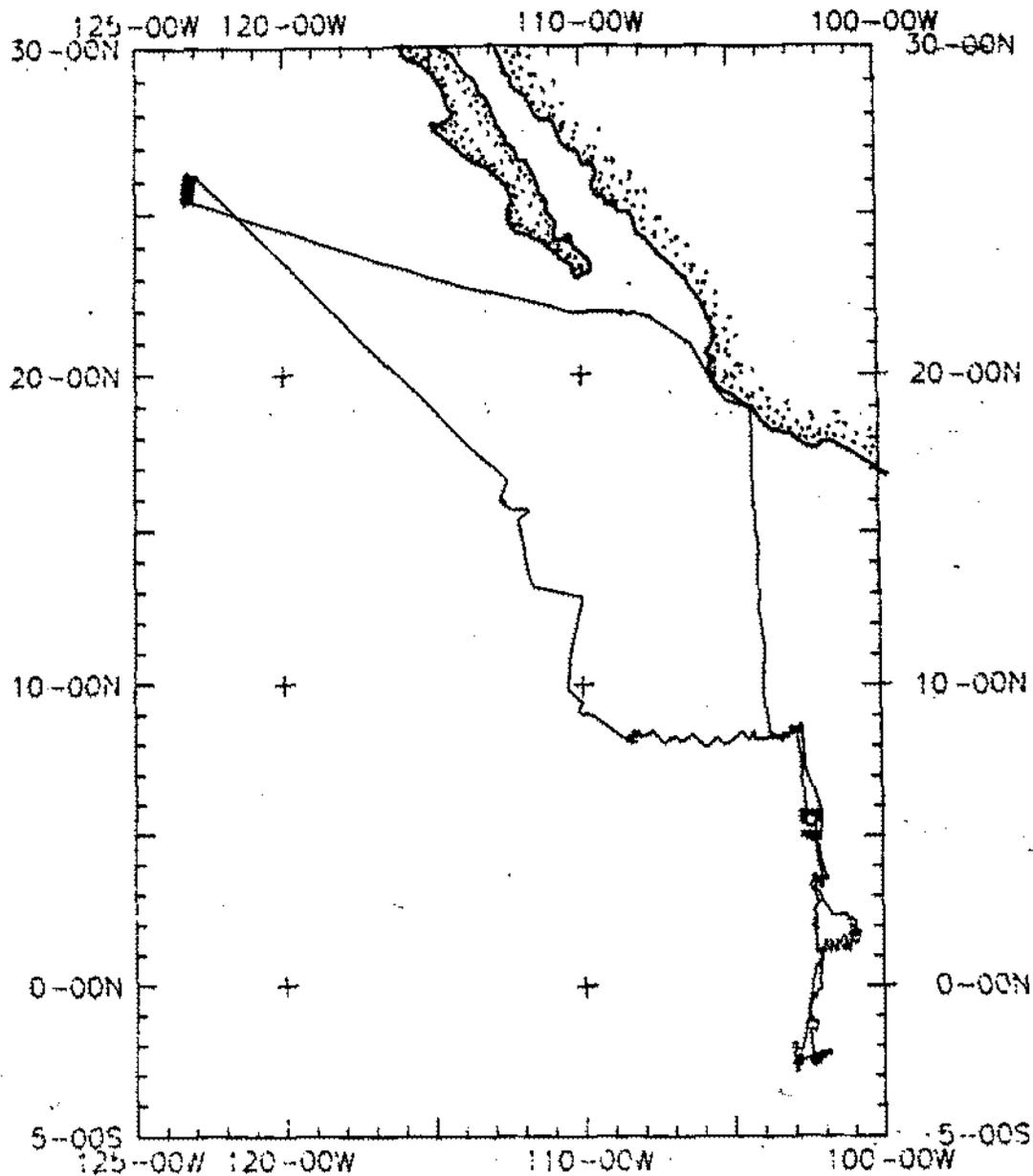
Revised June 1985 (Sea Beam)

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



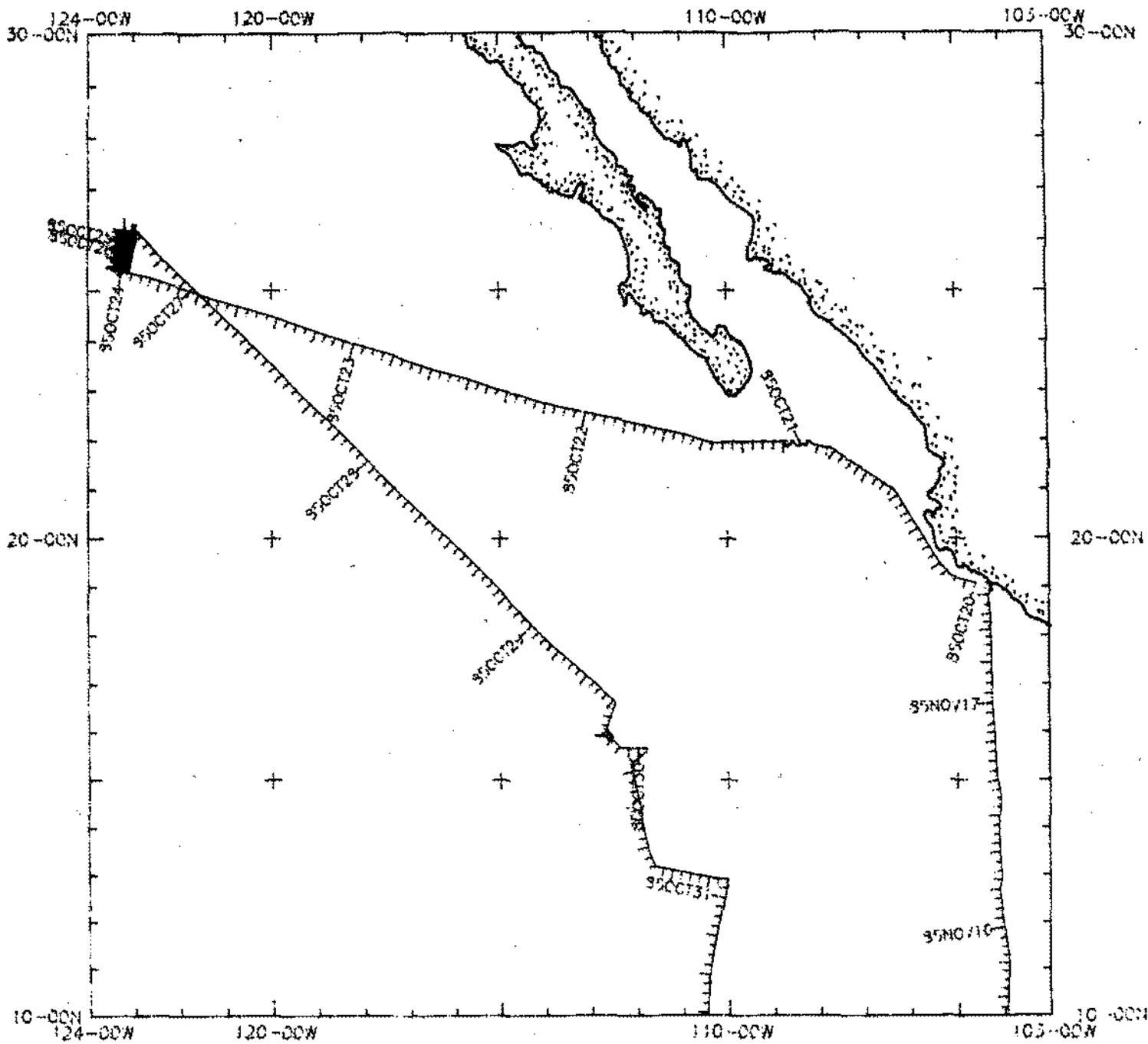
PAPATUA LEG 02 Track at .1632in/deg

PAPATUA EXPEDITION
LEG 2

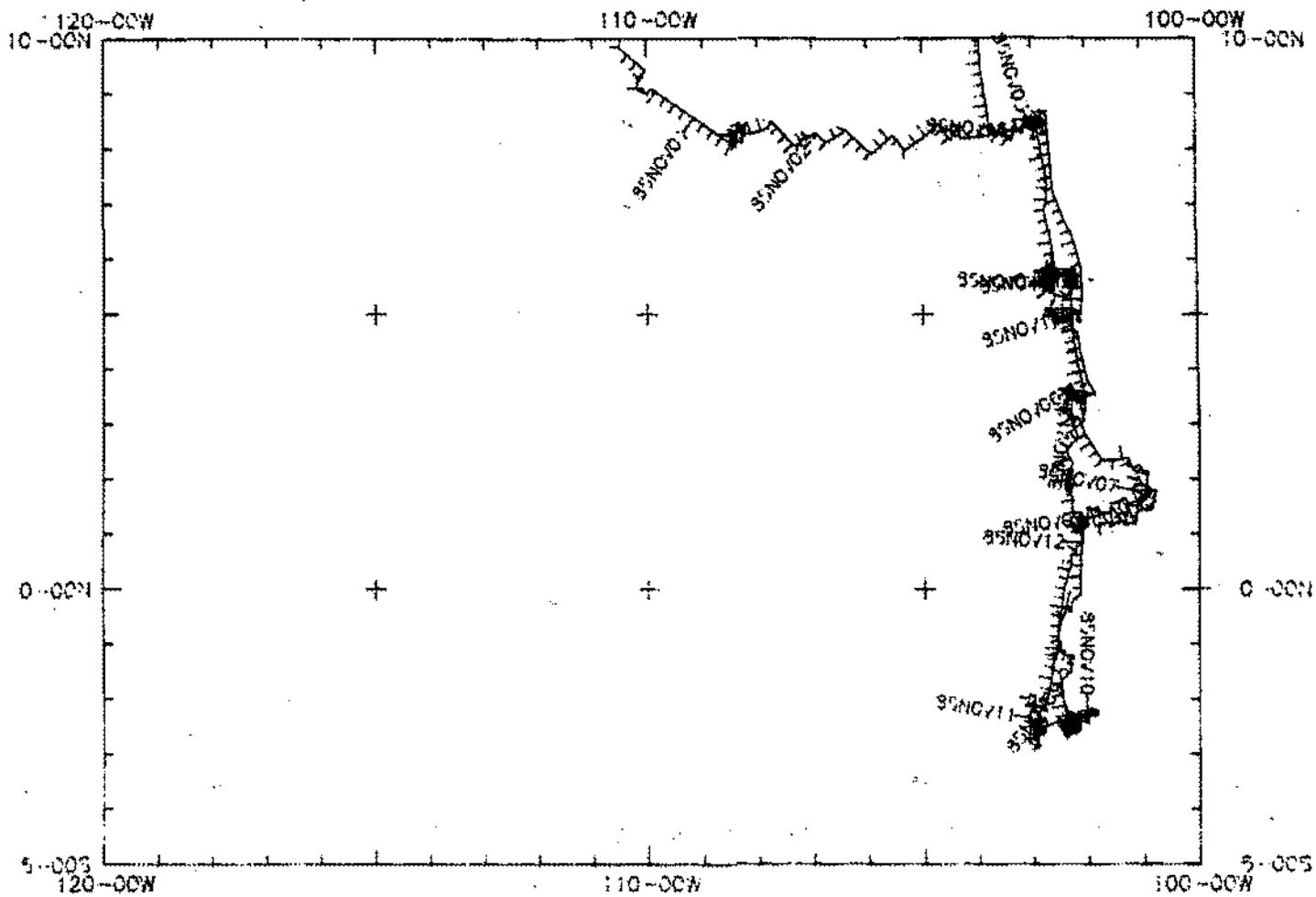
CHIEF SCIENTIST: P. Lonsdale
 PORTS: Manzanillo, Manzanillo, Mexico
 DATES: 19 October - 17 November 1985
 SHIP: R/V T.Washington

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

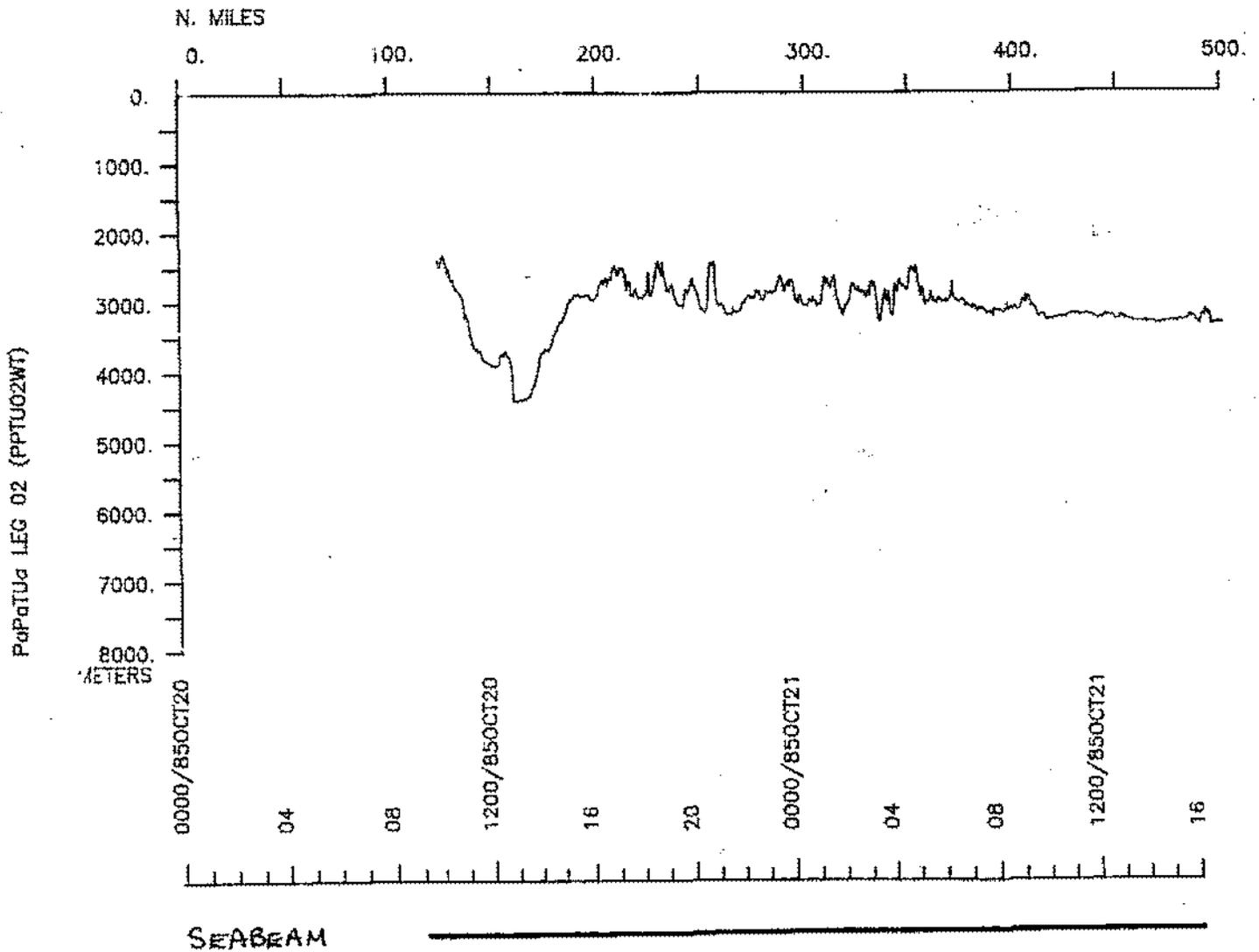
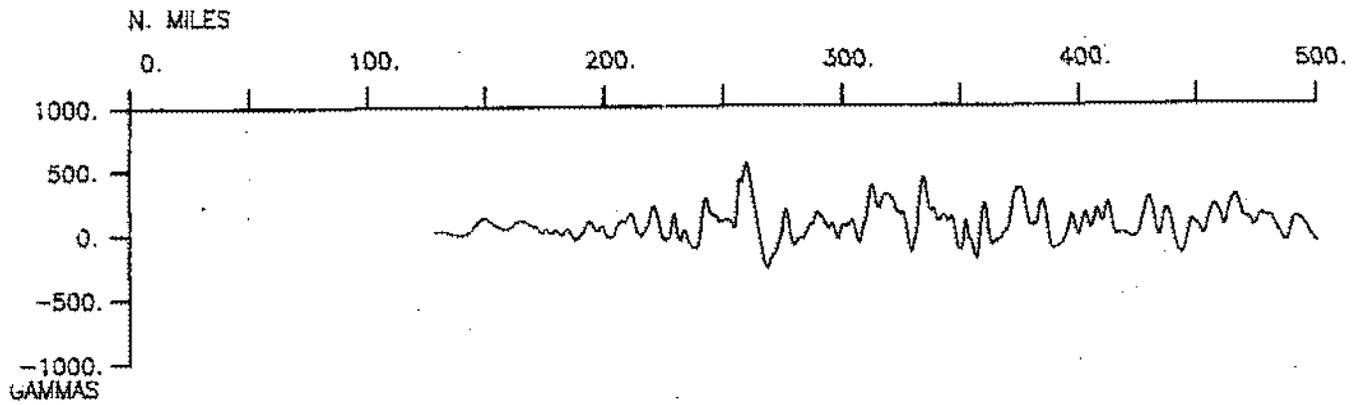
- 1) Cruise - 8264 miles
- 2) Bathymetry - 8100 miles
- 3) Magnetics - 8009 miles
- 4) Seismic Reflection - none collected
- 5) Gravity - none collected
- 6) SeaBeam - 8100 miles

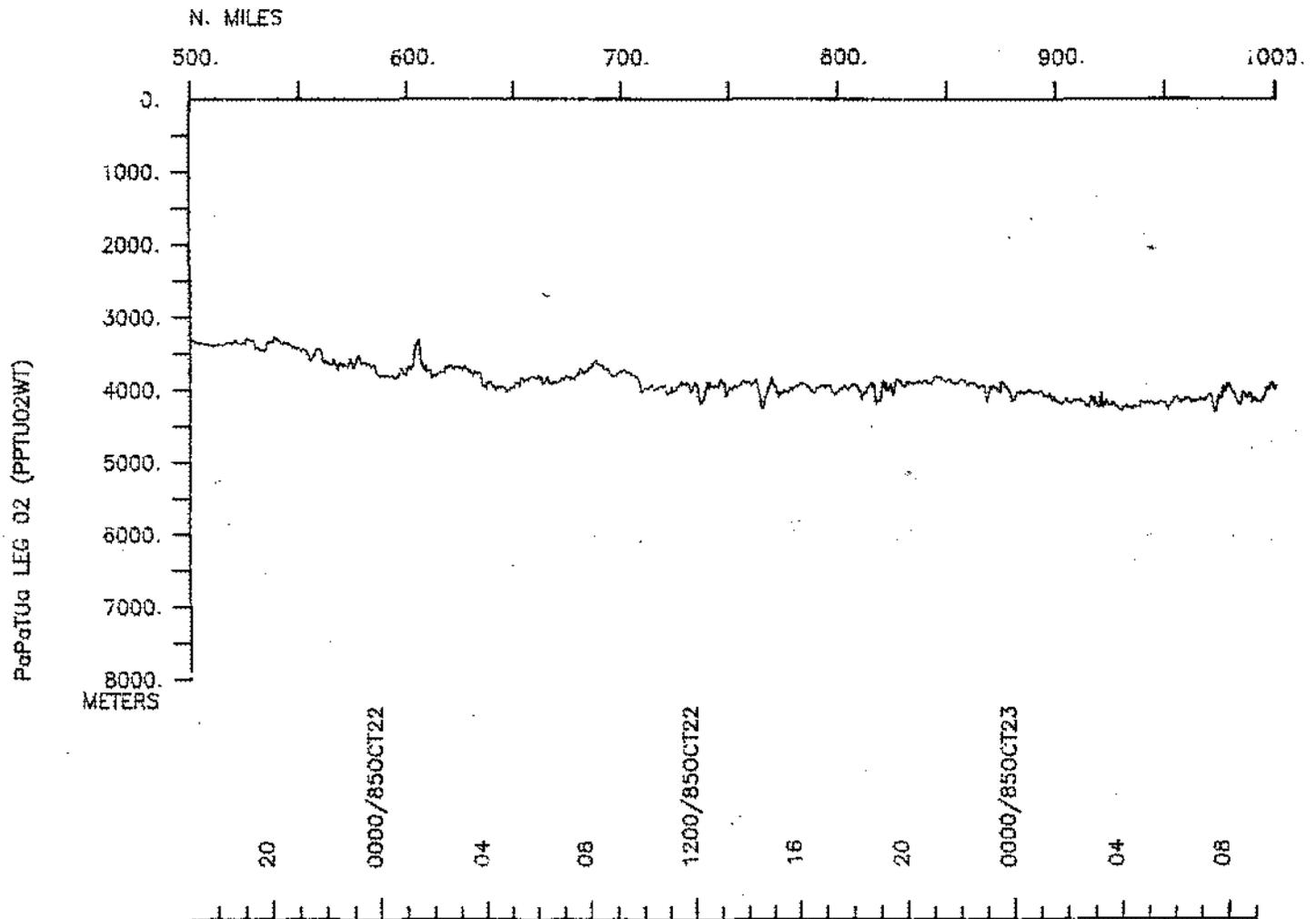
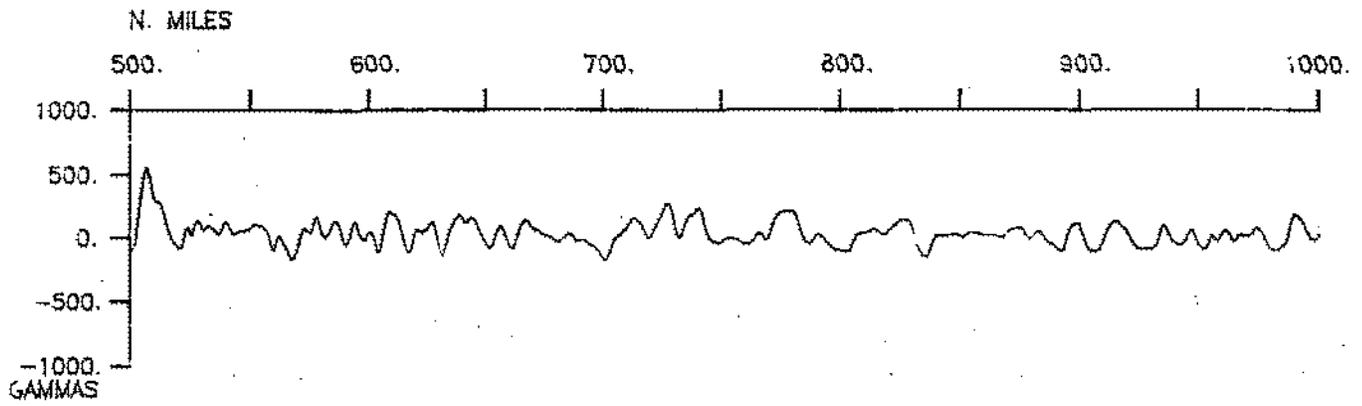


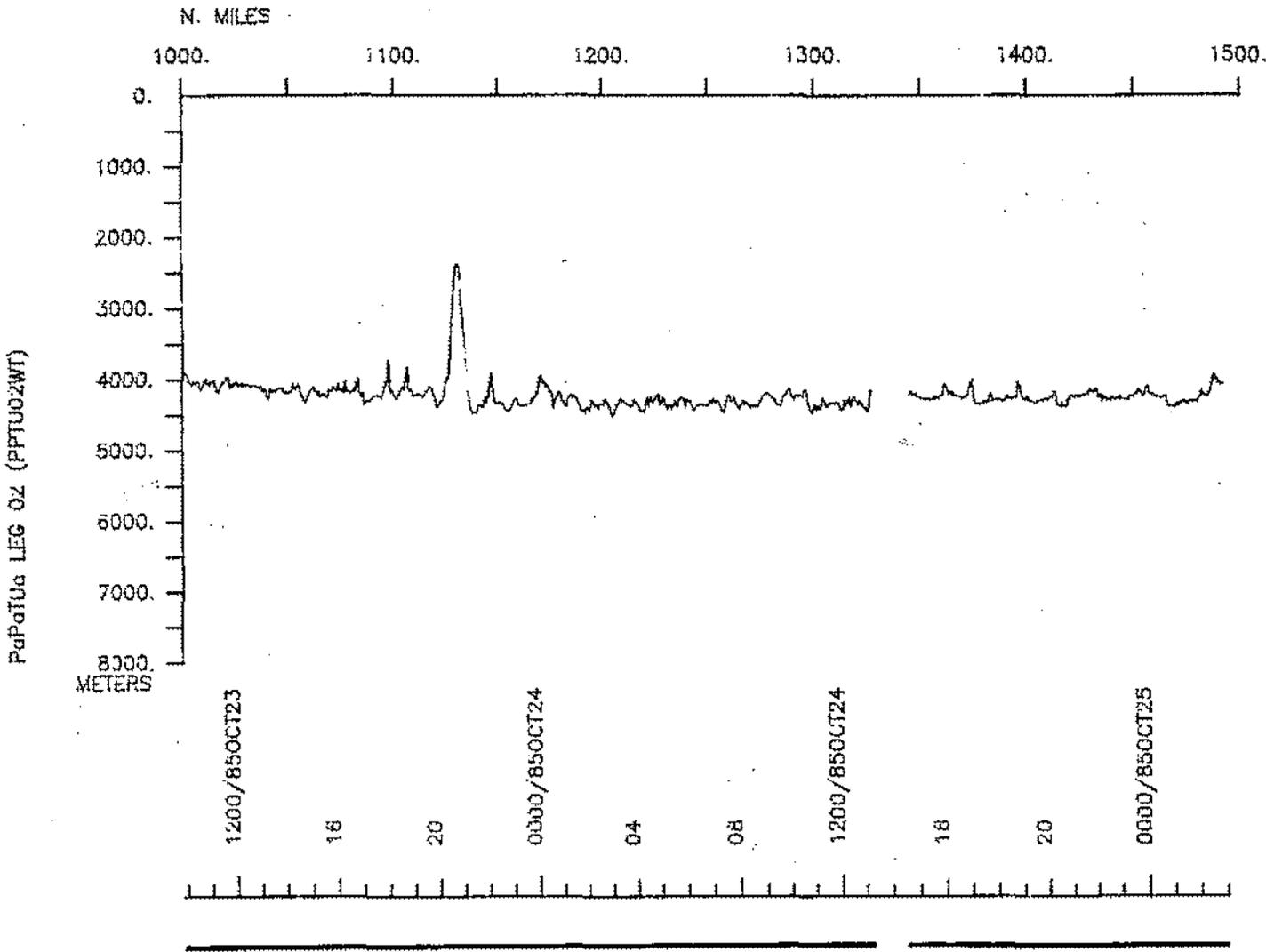
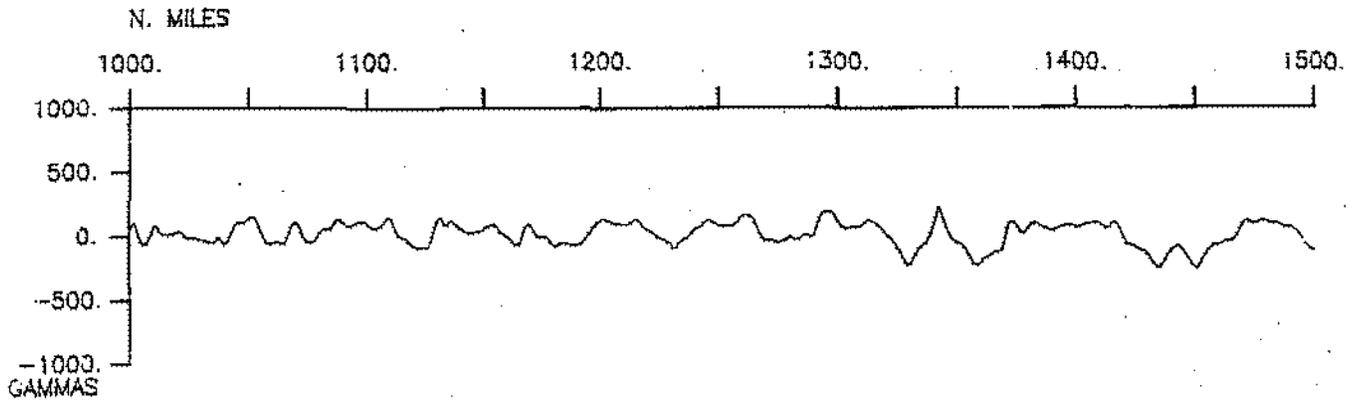
PAPATUA LEG 02 Track at .312in/deg (Plot 1 of 2)

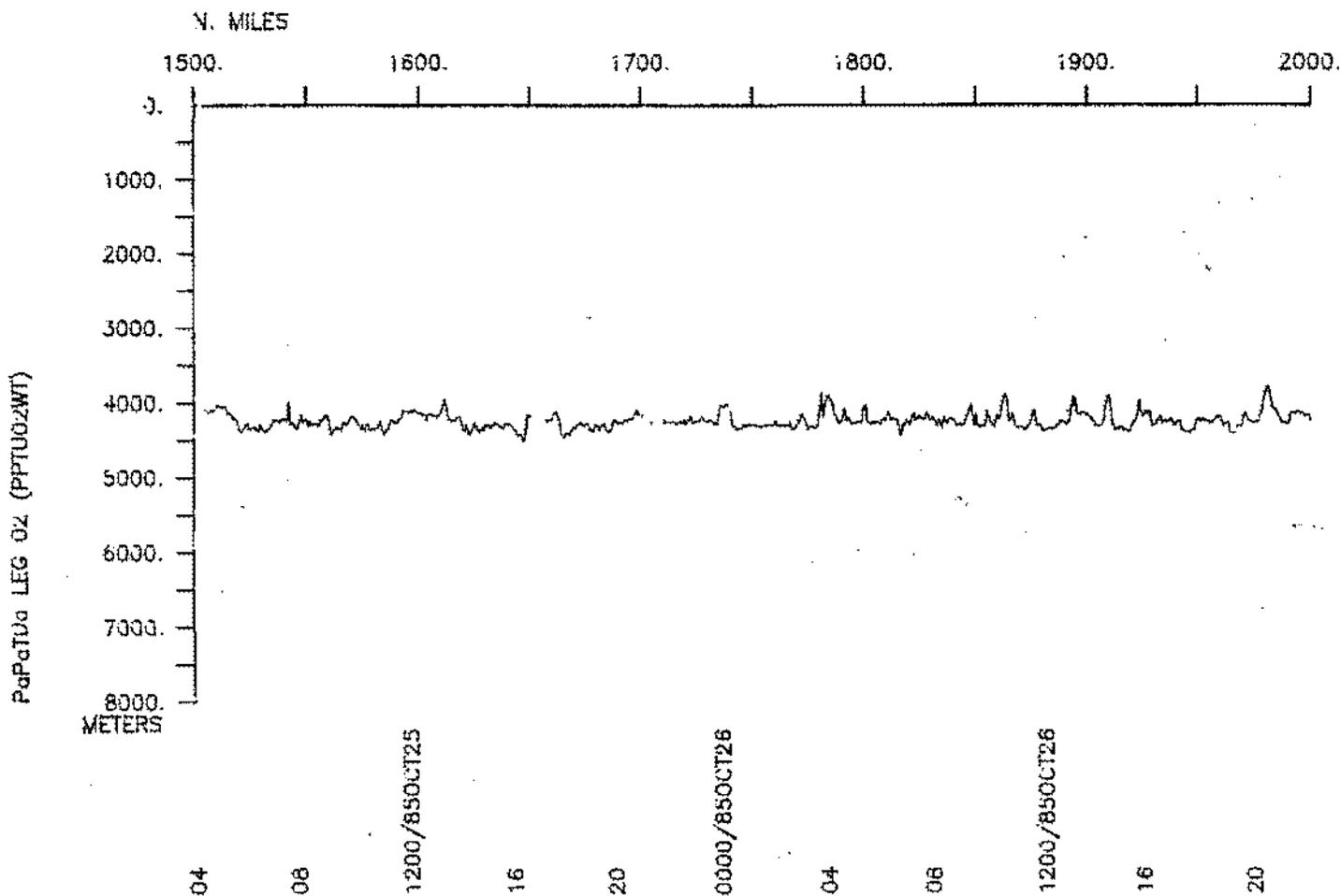
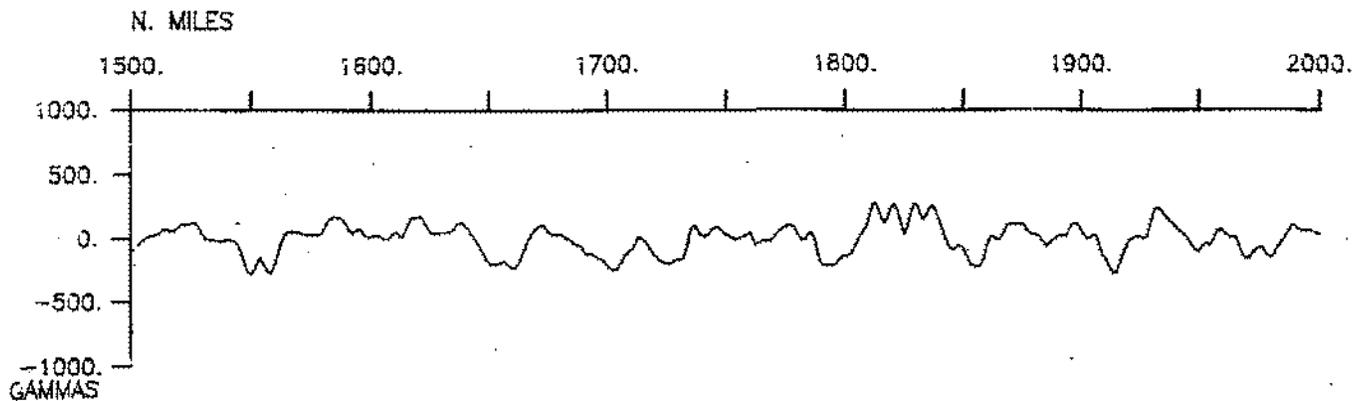


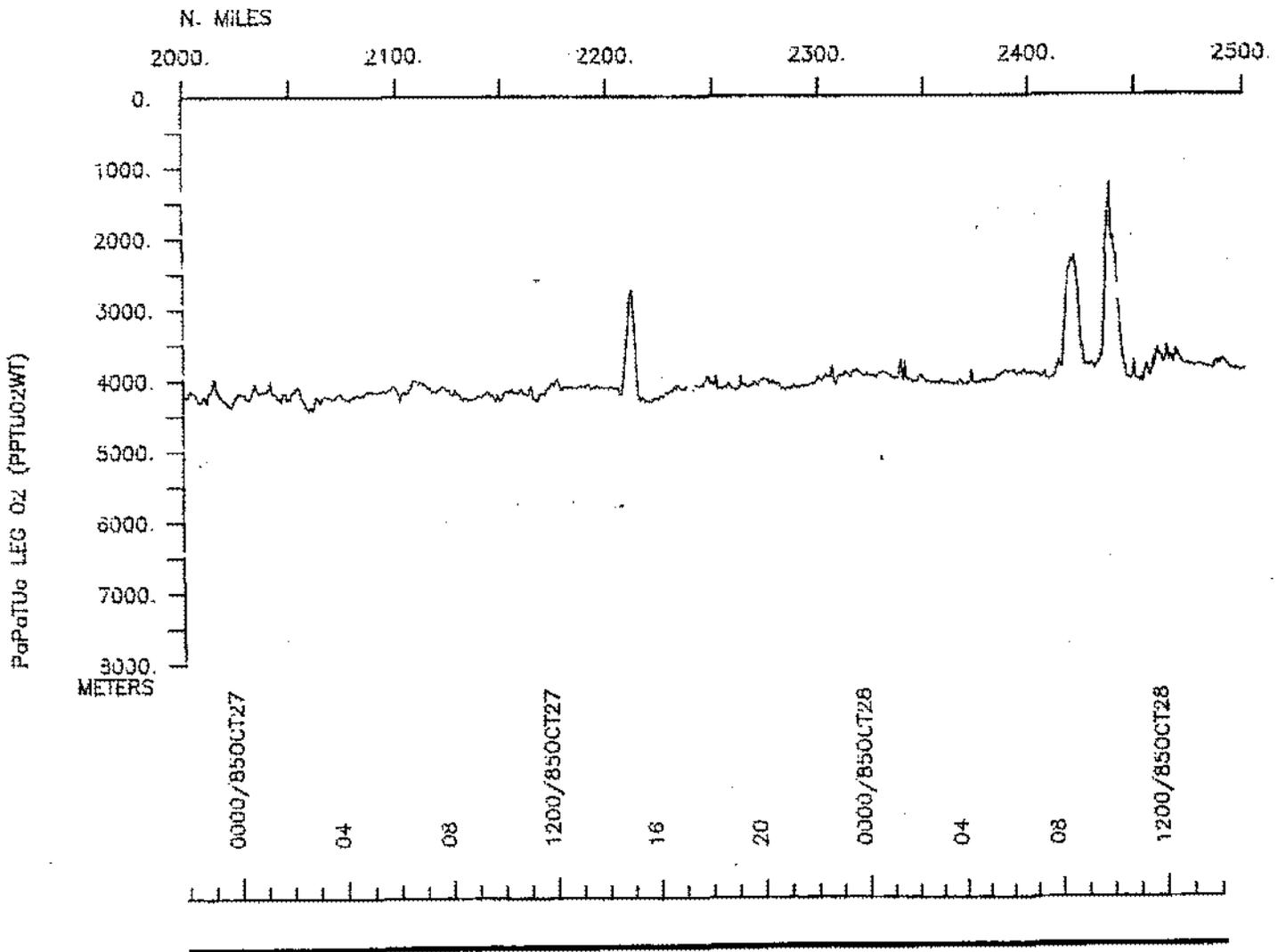
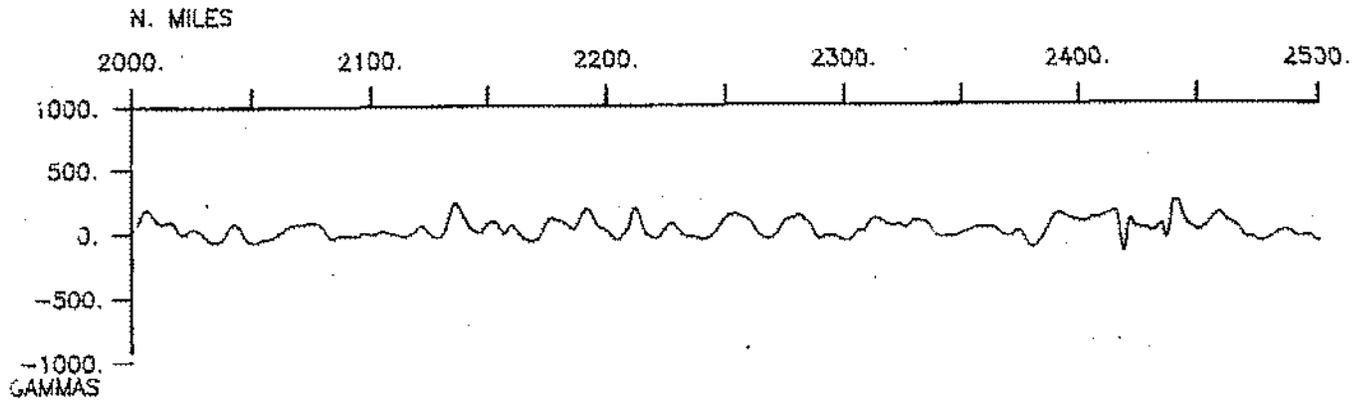
PAPATUA LEG 02 Track at .312in/deg (Plot 2 of 2)

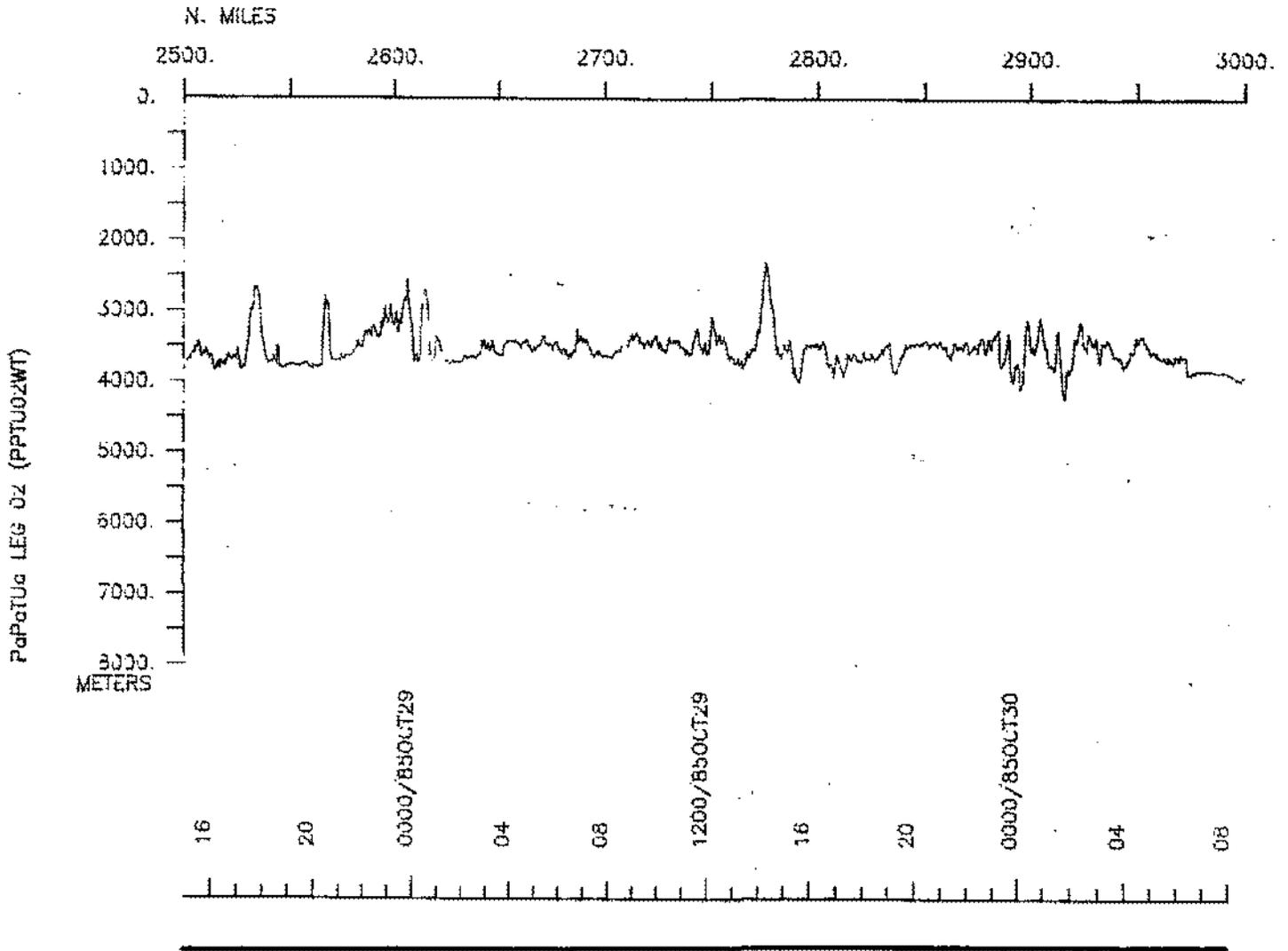
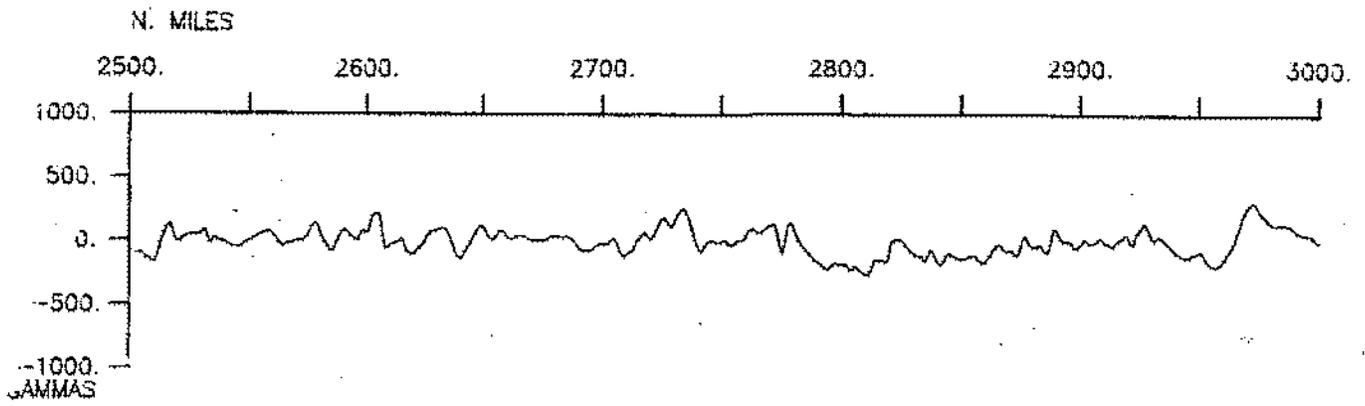


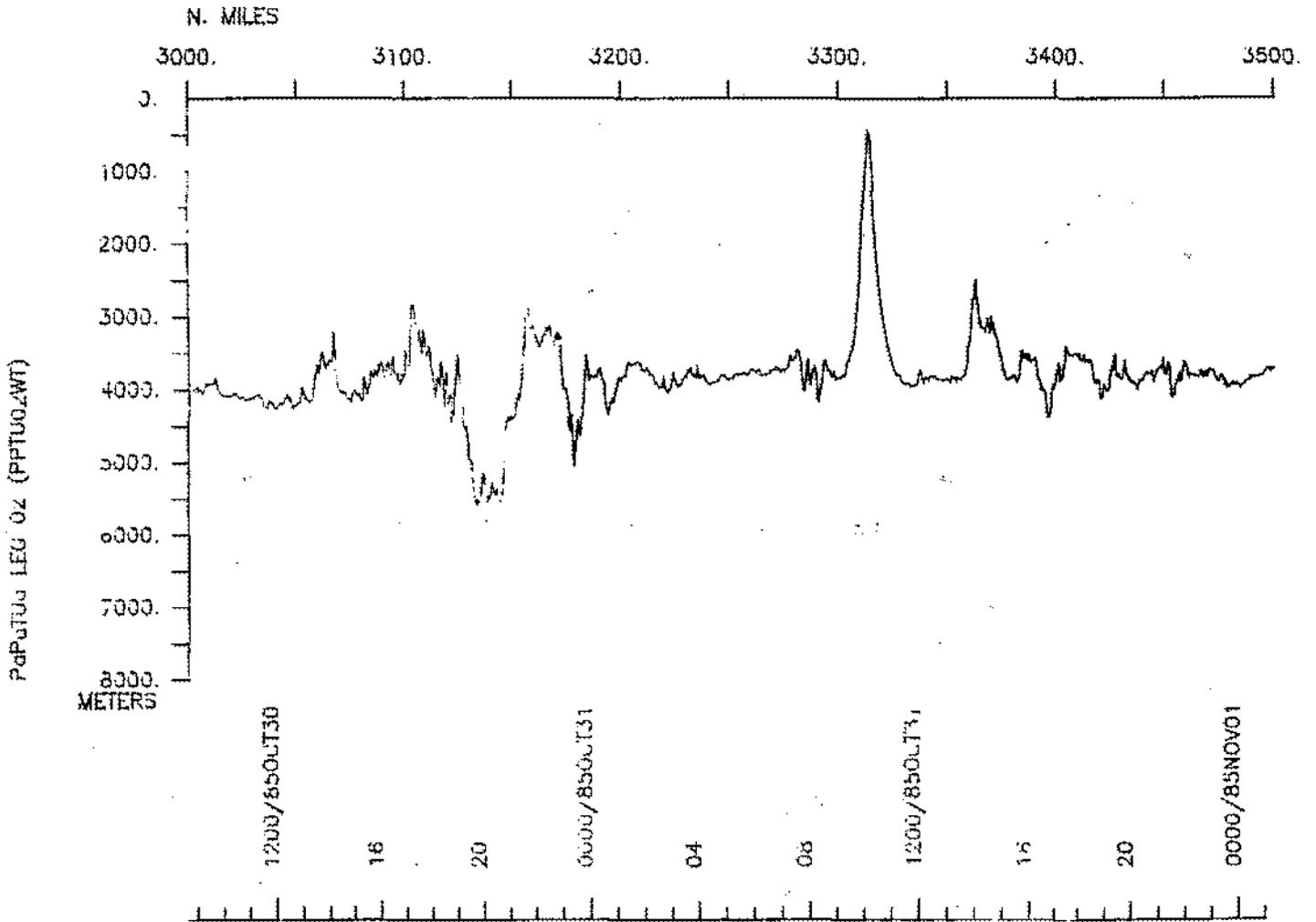
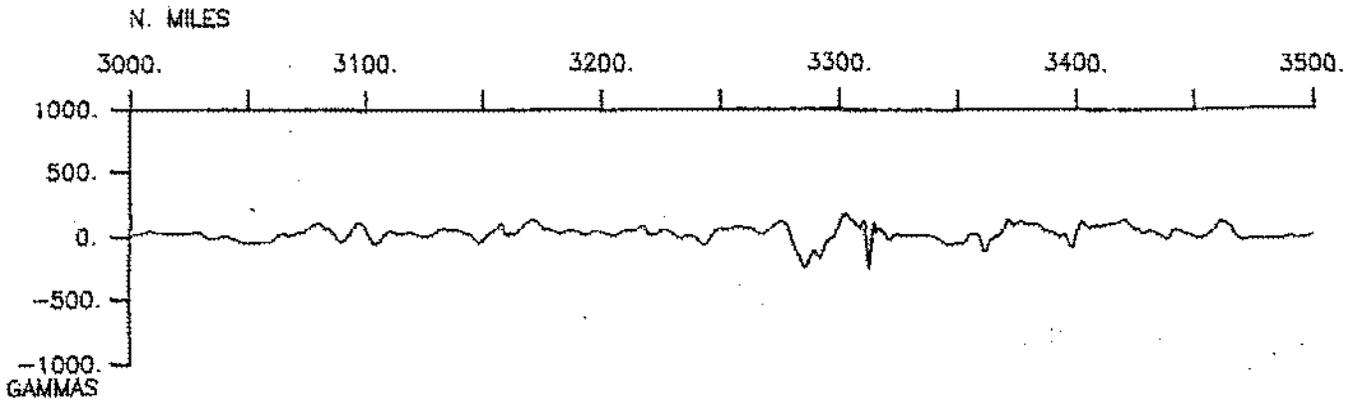


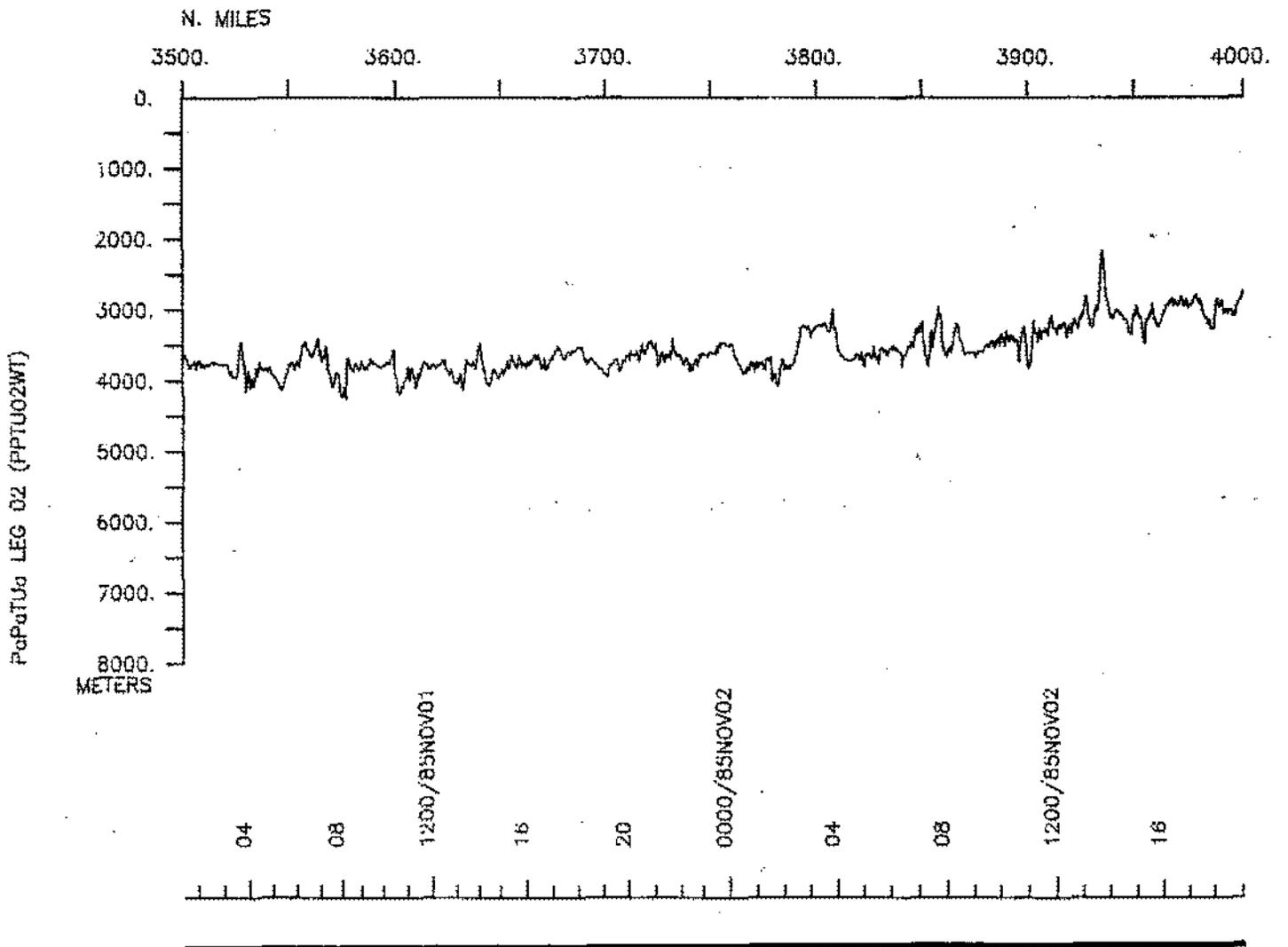
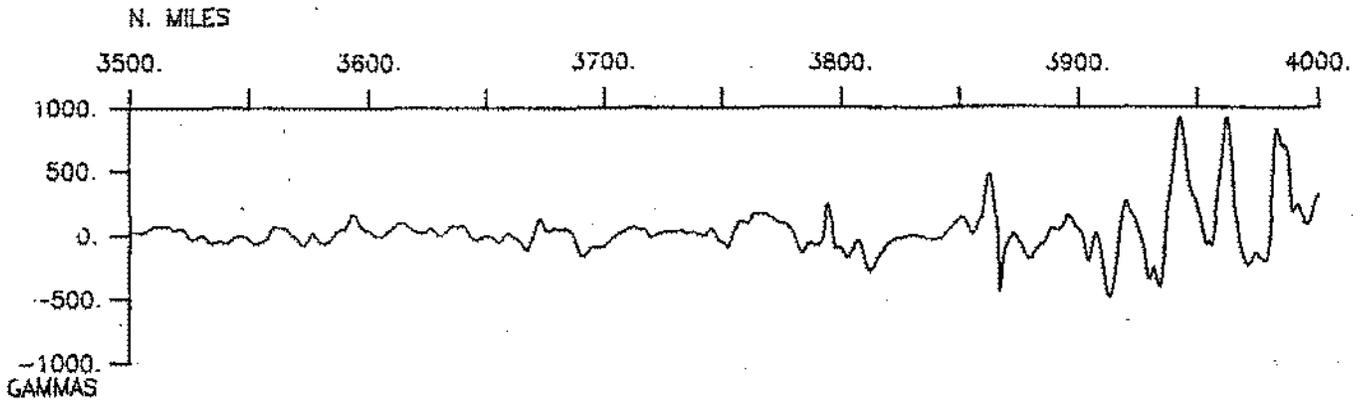


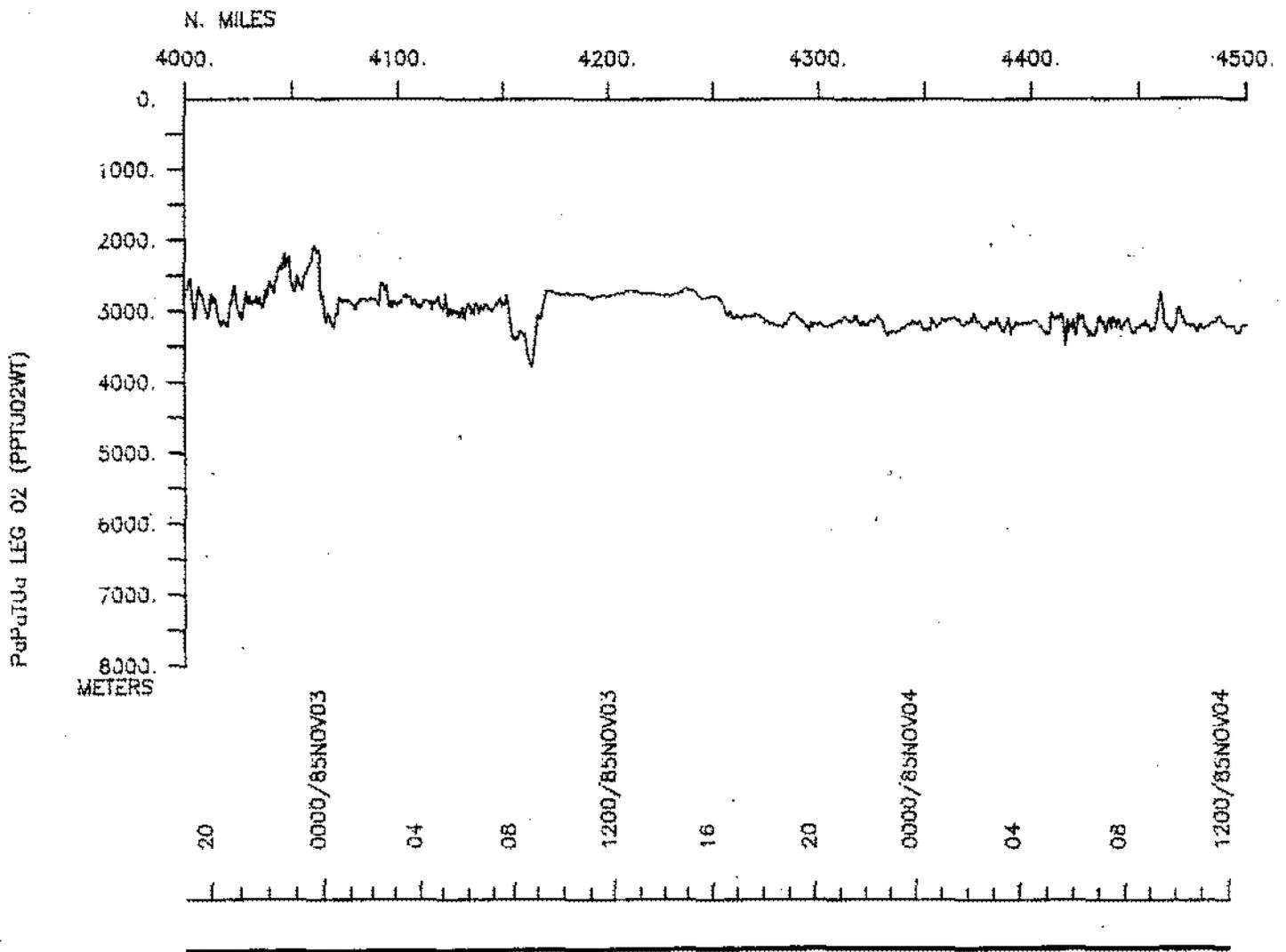
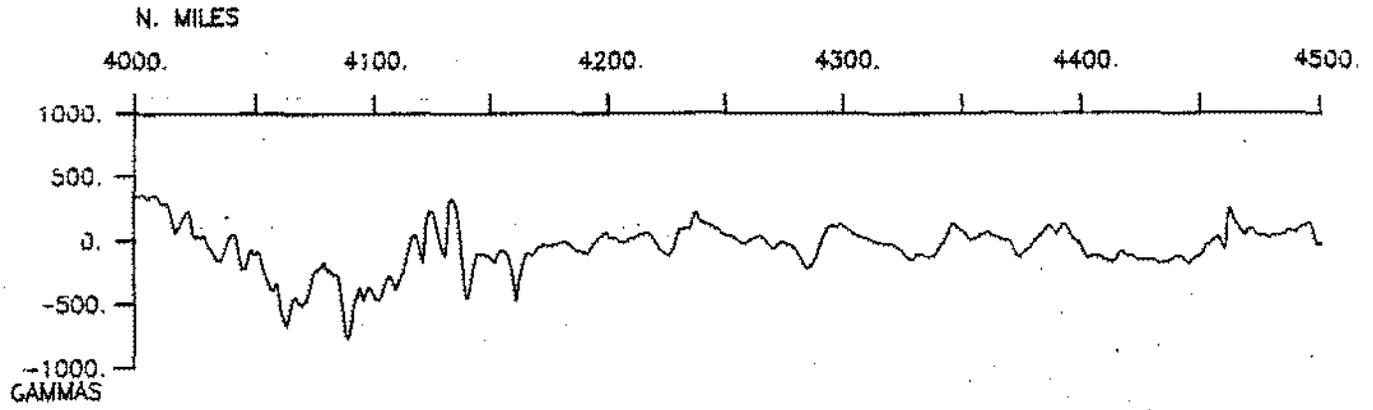


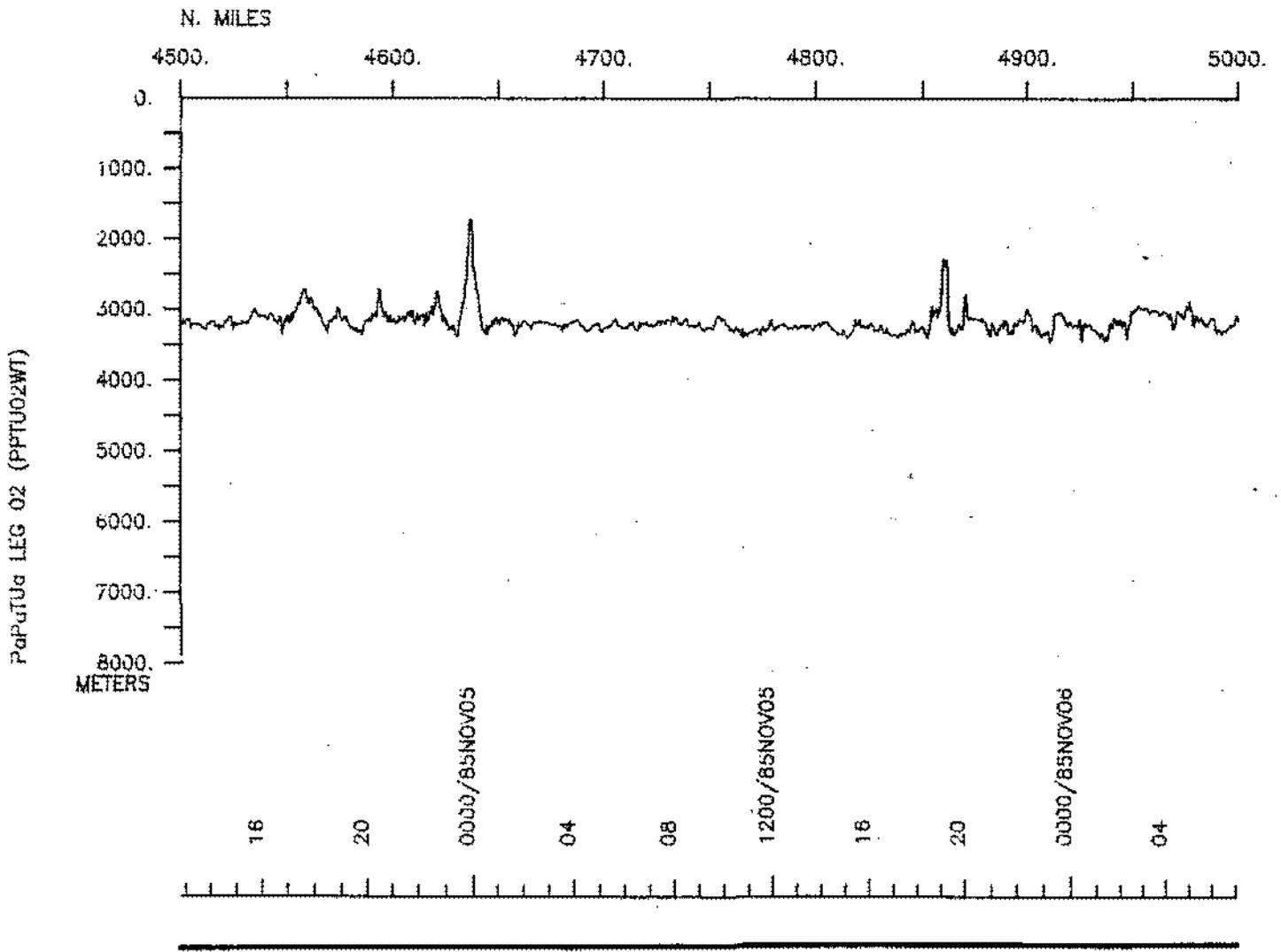
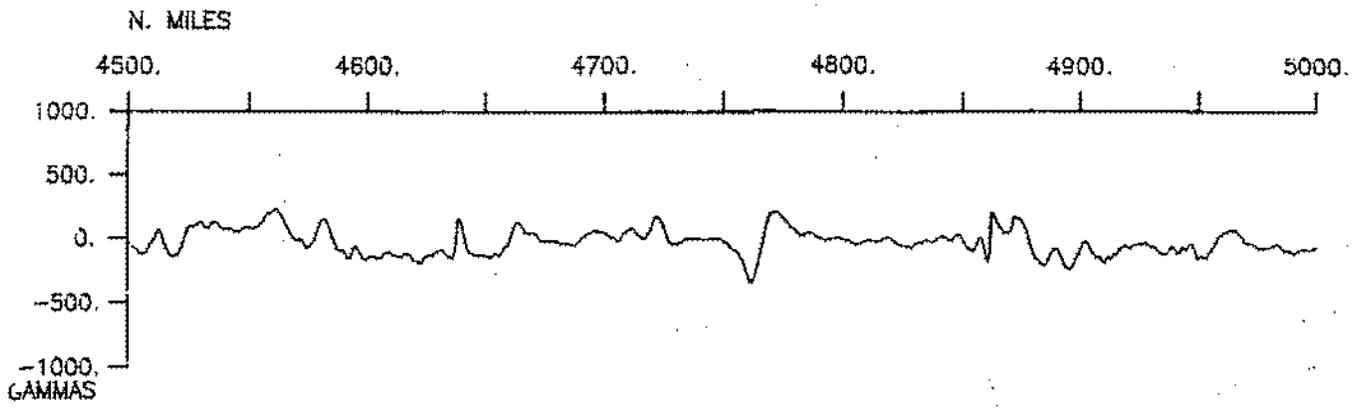


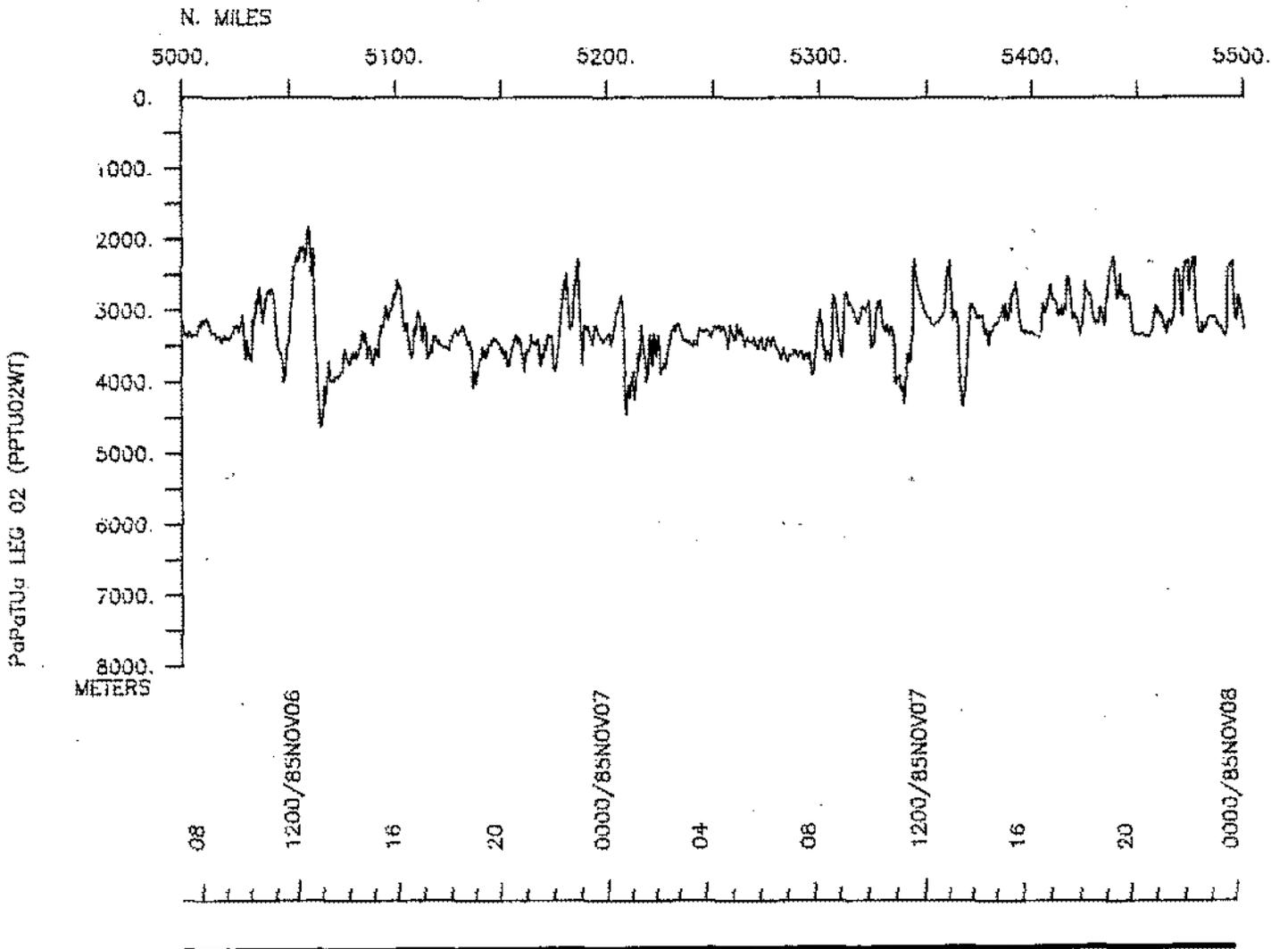
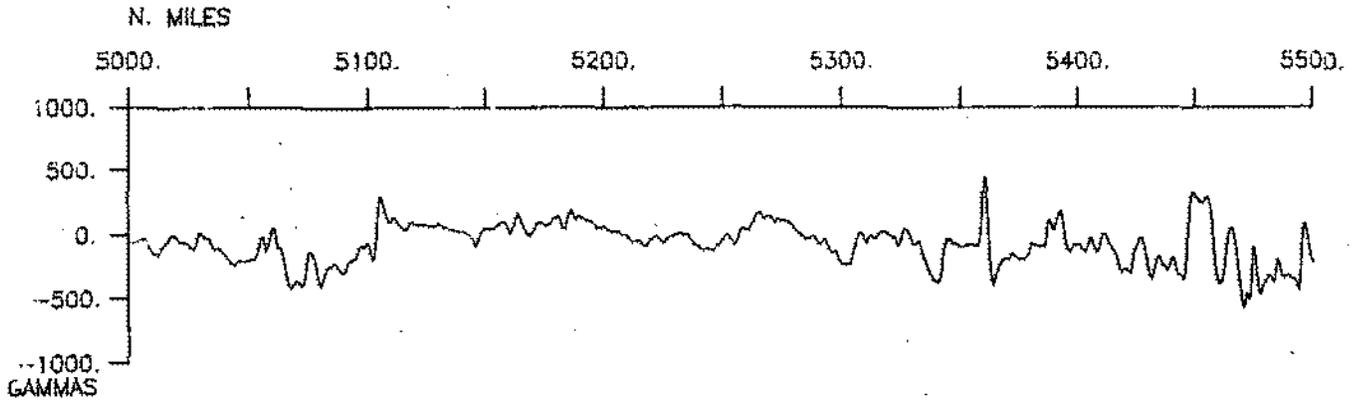


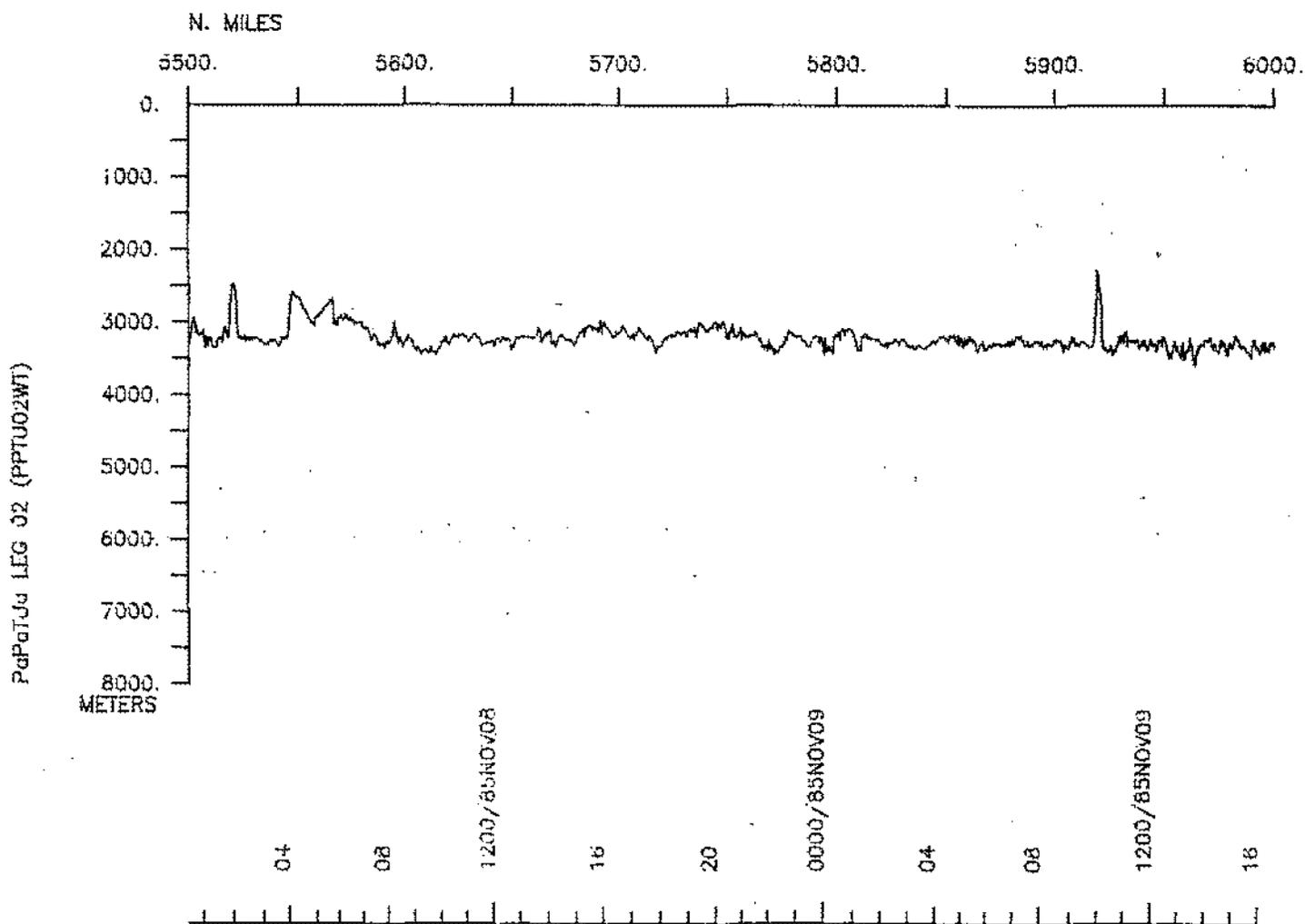
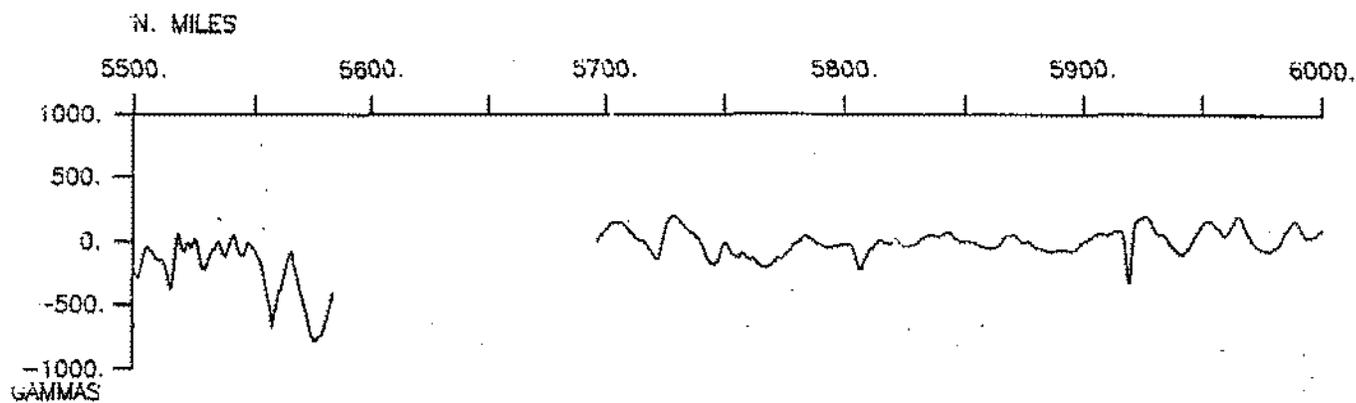


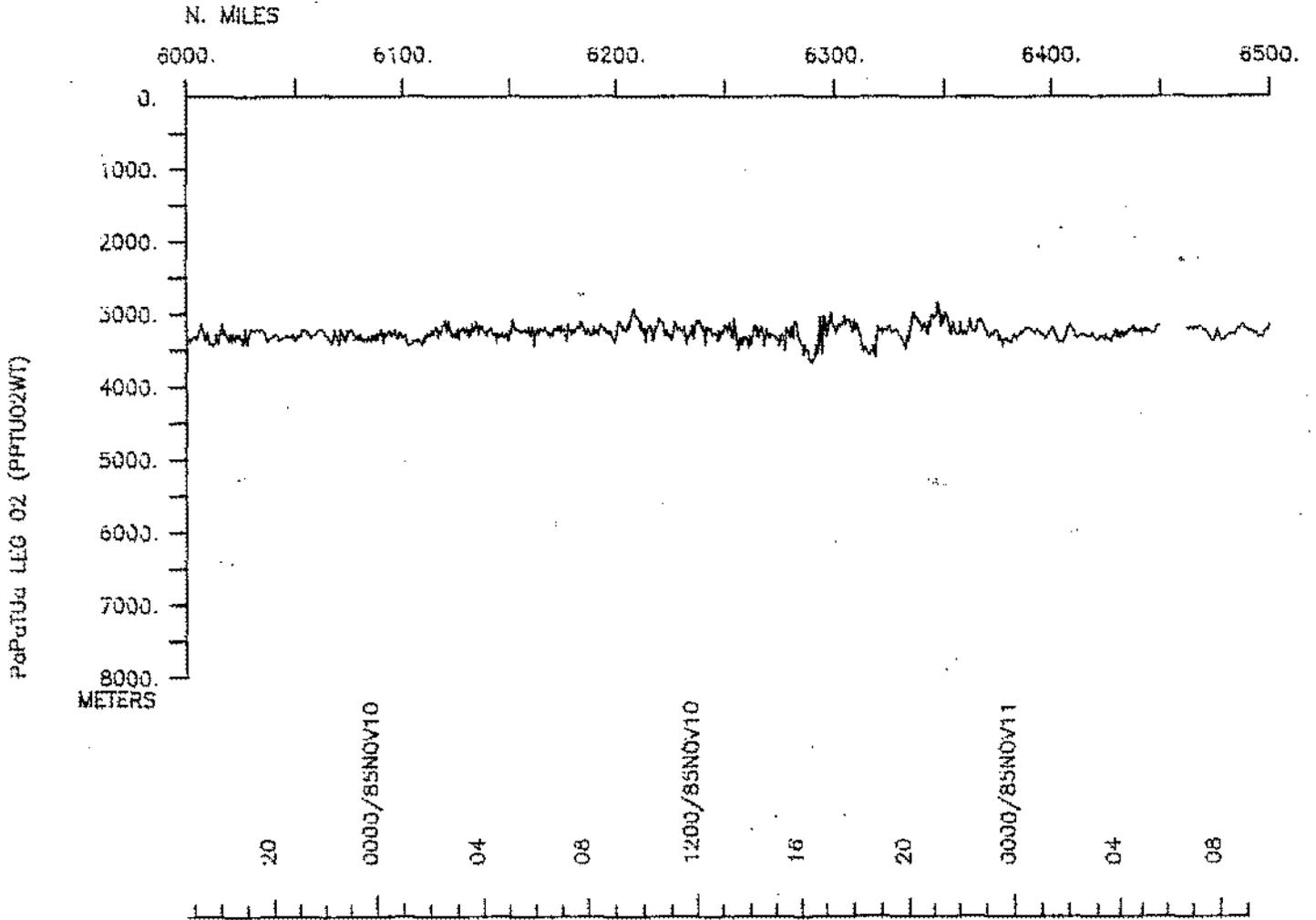
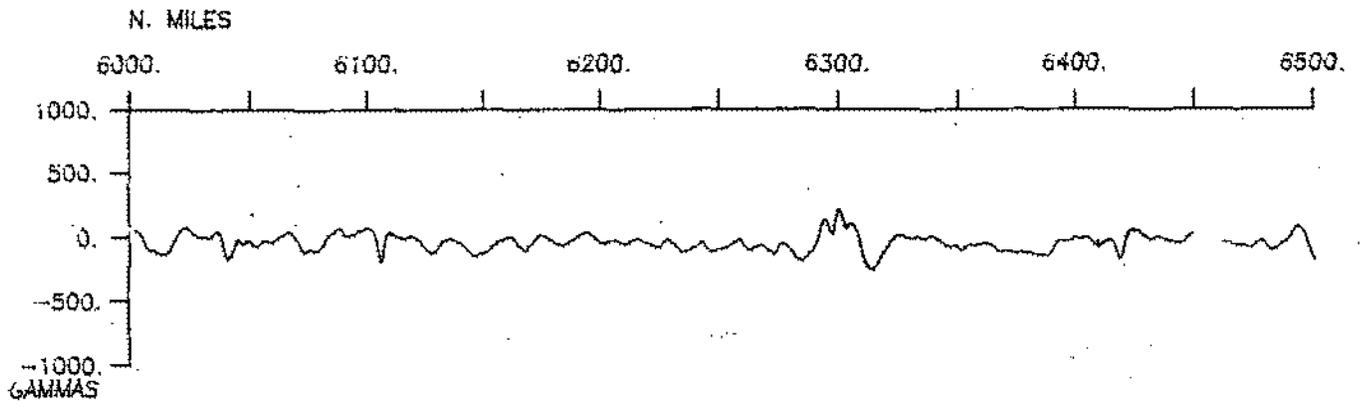


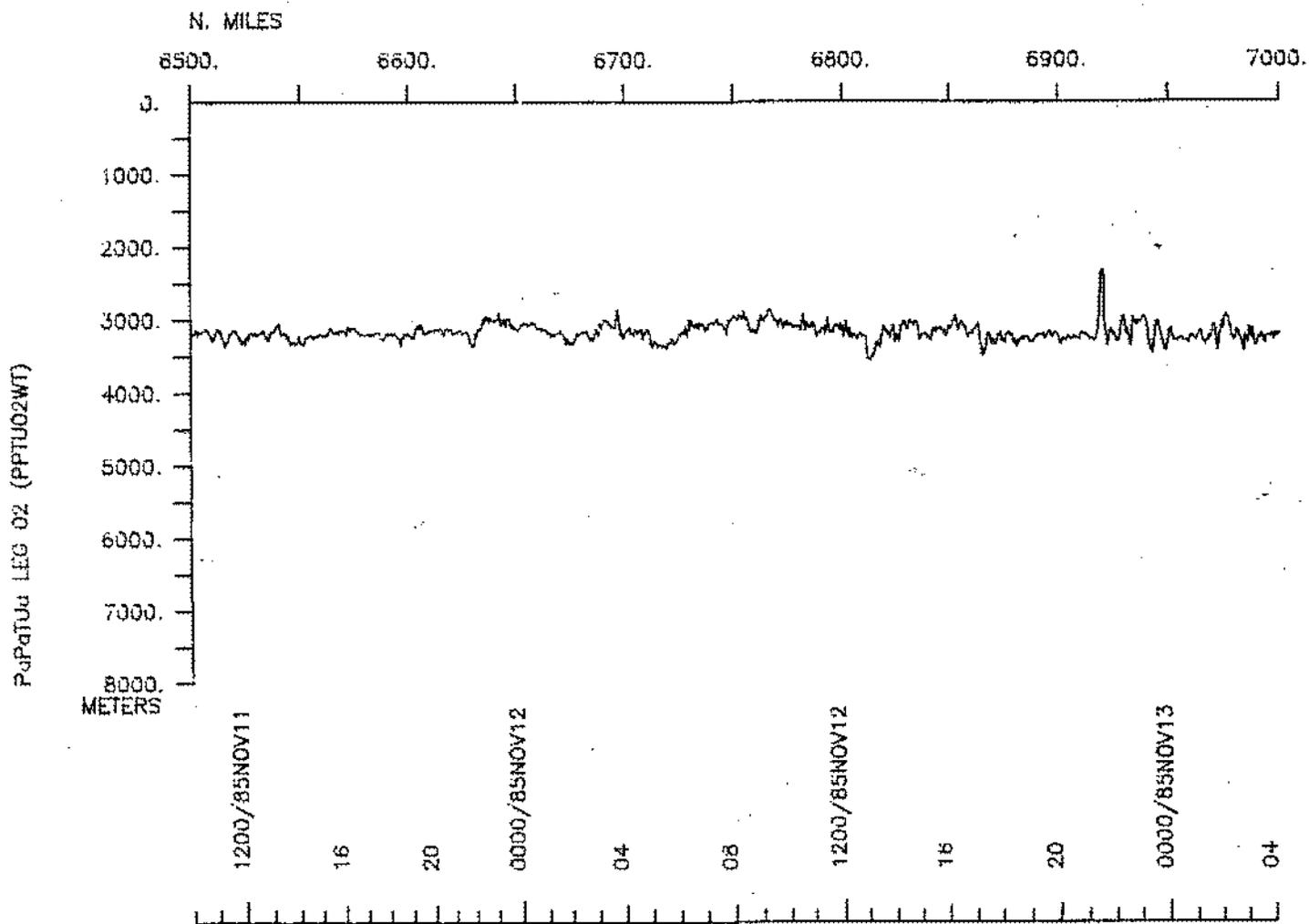
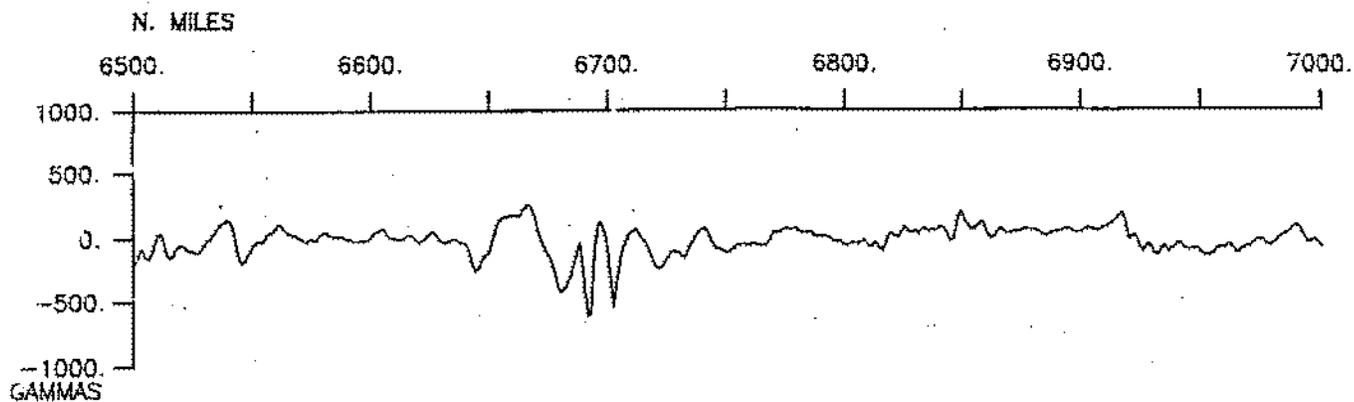


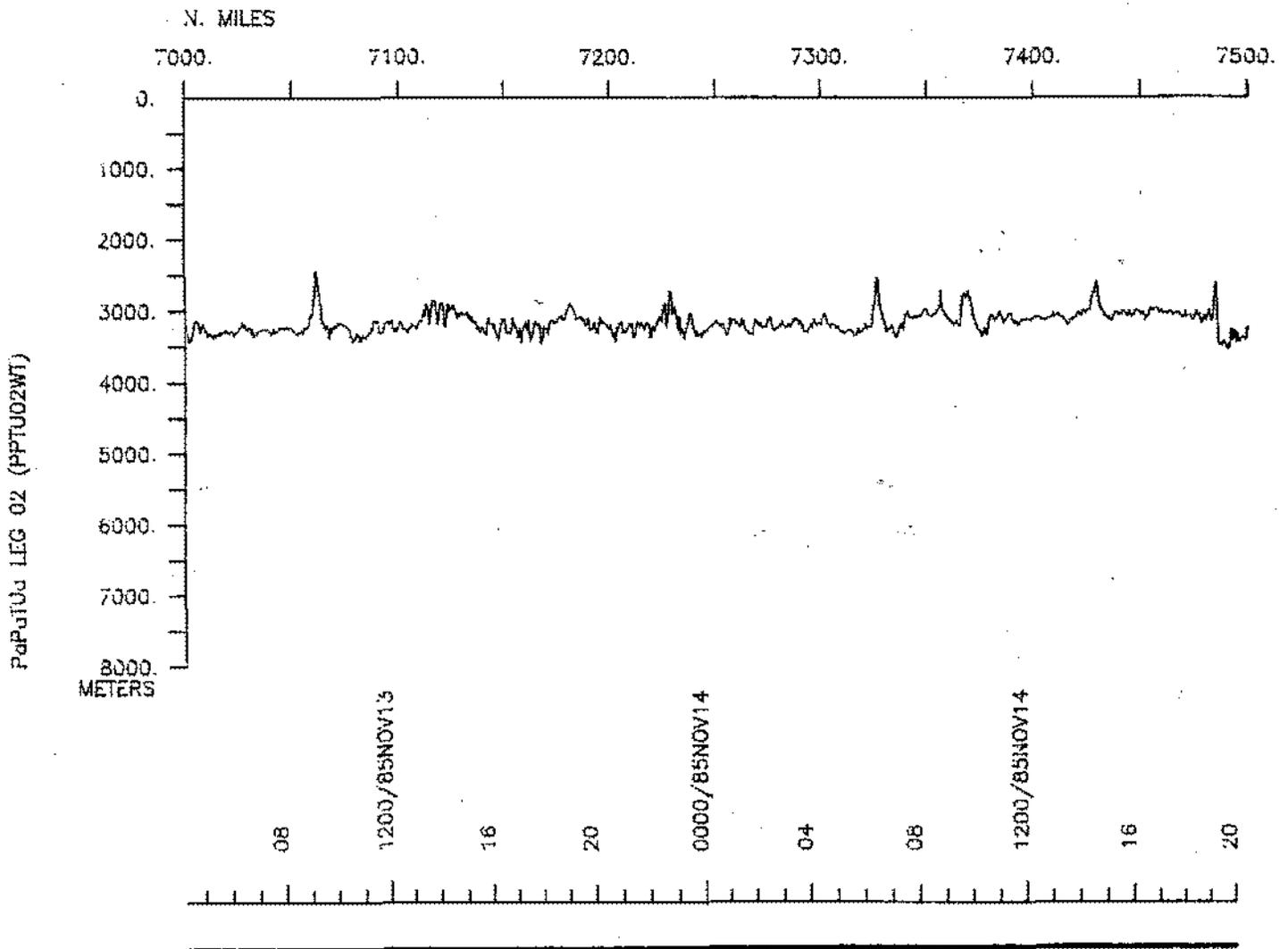
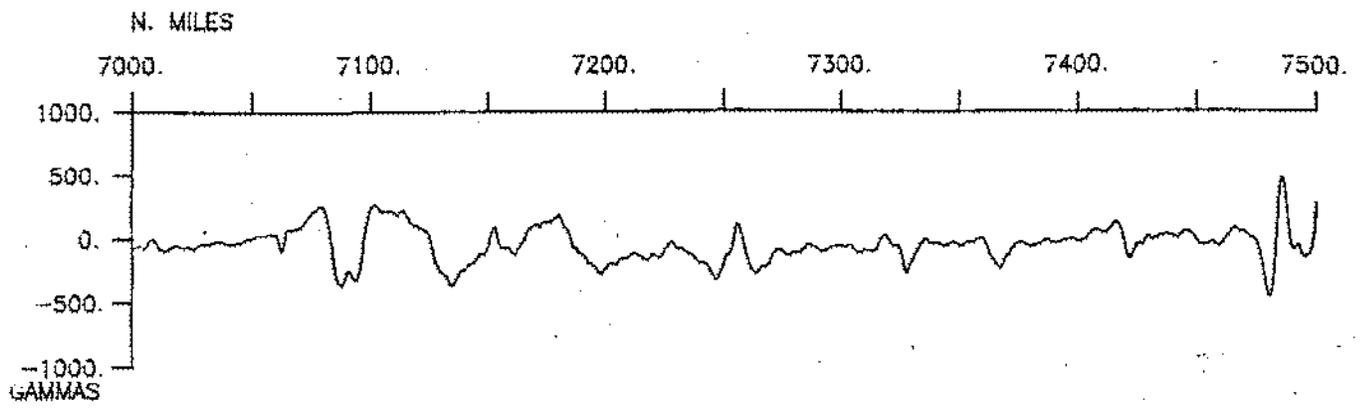


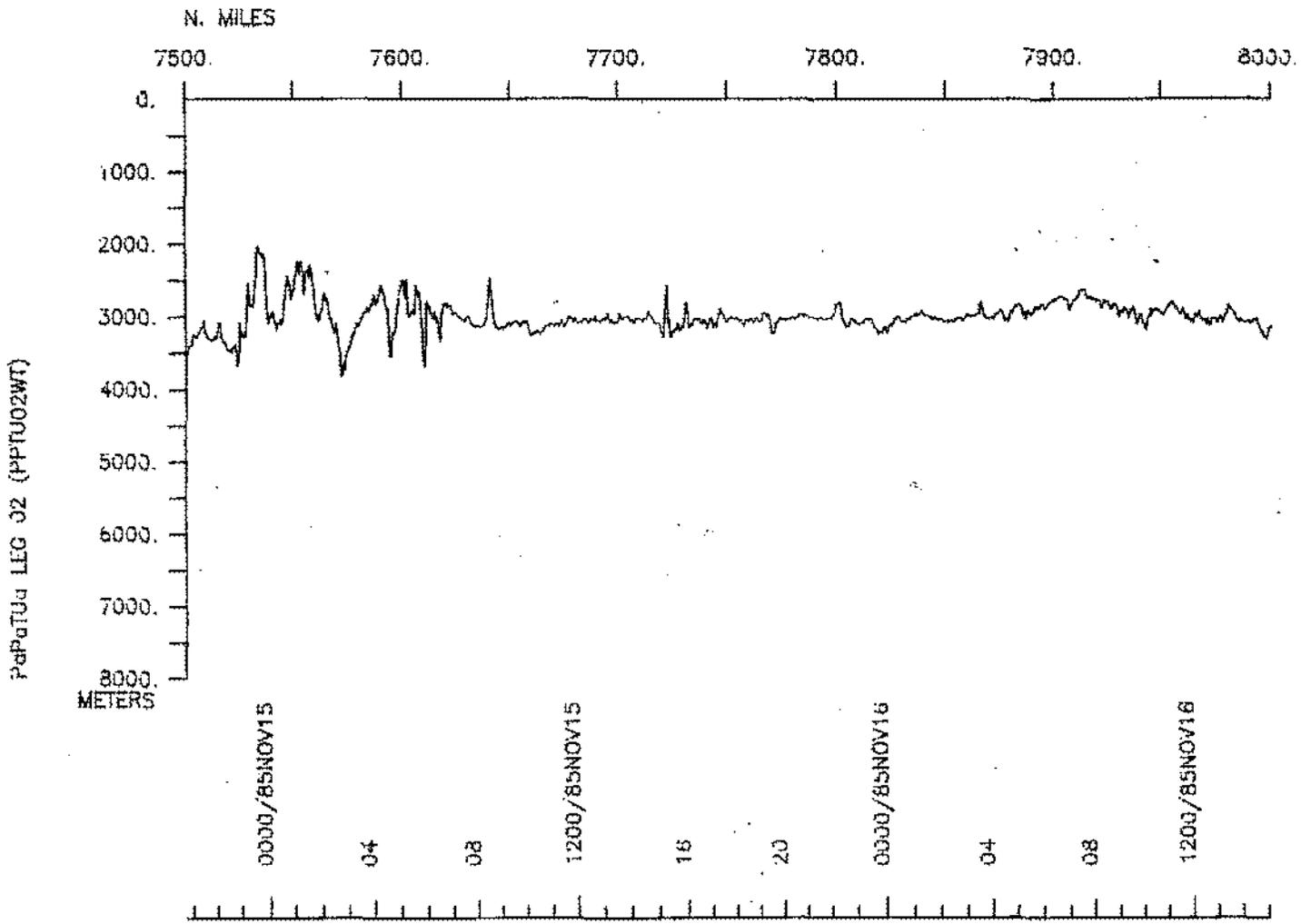
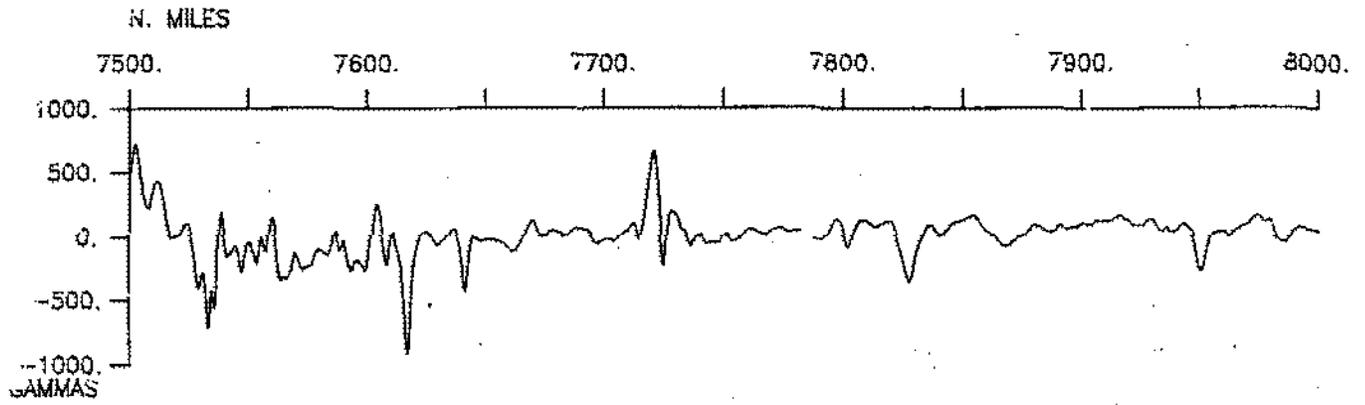




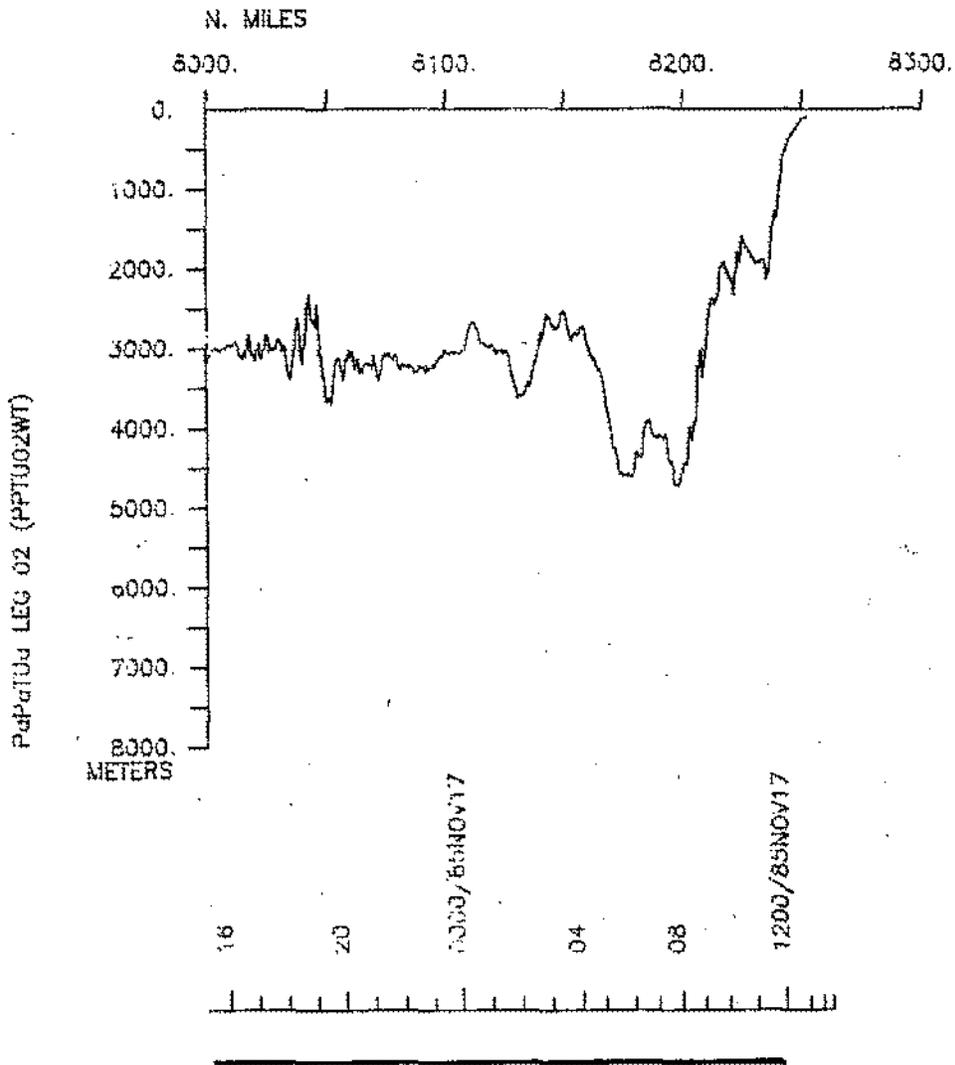
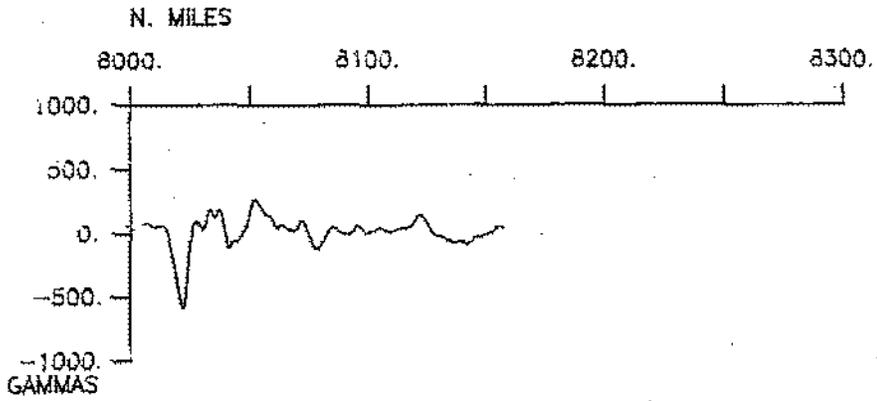








PdP0TU0 LEG 02 (PPTU02WT)



S.I.O. SAMPLE INDEX

(Re-Issued June 1986)

PAPATUA EXPEDITION

Leg 2

Manzanillo, Mexico (19 October 1985)
to
Manzanillo, Mexico (17 November 1985)

R/V T. Washington

Chief Scientist - P. Lonsdale

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

2200 191085	LGPT B MANZANILLO, MEXICO	19-03 N 104-20 W	fpPTU02WT
1400 171185	LGPT E MANZANILLO, MEXICO	19-03 N 104-20 W	fpPTU02WT

PERSONNEL

#	***NAME***	***TITLE***	***AFFILIATION***	***CRID**
PECS MPL	LONSDALE, P.F.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	PPTU02WT
PECT MTG	ABBOTT, J.L.	COMPUTER TECH	SCRIPPS INSTITUTION	PPTU02WT
PESP MPL	FOSTER, A.M.	ENGR. AID	SCRIPPS INSTITUTION	PPTU02WT
PESP GRD	LOUGEE, B.A.	RES. ASSIST.	SCRIPPS INSTITUTION	PPTU02WT
PEBE MTG	PHILLIPS, J.M.	SEABEAM TECH	SCRIPPS INSTITUTION	PPTU02WT
PERT MTG	PILLARD, E.G.	RESIDENT TECH	SCRIPPS INSTITUTION	PPTU02WT
PEBO MTG	SMITH, W.L.	SEABEAM OPERATOR	SCRIPPS INSTITUTION	PPTU02WT
PEVL SIX	YATES, R.S.	VOLUNTEER	SIO NON-EMPLOYEE	PPTU02WT

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	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

***UNDERWAY DATA CURATOR - S. M. SMITH EXT.2752

LOG BOOKS

0900 201085	LBUW B UNDERWAY WATCH LOG	GDC 20-231N 105-563W	sPPTU02WT
1200 171185	LBUW E UNDERWAY WATCH LOG	GDC 18-499N 104-193W	sPPTU02WT

MAGNETICS

1003 201085	MGRA B MAGNETOMETER R-01	GDC 20-322N 106-022W	sPPTU02WT
1934 311085	MGRA E MAGNETOMETER R-01	GDC 9-055N 109-550W	sPPTU02WT
1941 311085	MGRA B MAGNETOMETER R-02	GDC 9-051N 109-538W	sPPTU02WT
1351 121185	MGRA E MAGNETOMETER R-02	GDC 2-113N 102-225W	sPPTU02WT
1400 121185	MGRA B MAGNETOMETER R-03	GDC 2-113N 102-208W	sPPTU02WT
0402 171185	MGRA E MAGNETOMETER R-03	GDC 17-266N 104-163W	sPPTU02WT

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

THERMOGRAPHS

2200	191085	TGRC B	THERMOGRAPHS 1-11	GDC	19-039N	104-350W	sPPTU02WT
1400	171185	TGRC E	THERMOGRAPHS 1-11	GDC	19-030N	104-139W	sPPTU02WT

SEABEAM MONITOR

0900	201085	MBMR B	12KHZ SB MONITOR R-01	GDC	20-231N	105-563W	sPPTU02WT
0109	241085	MBMR E	12KHZ SB MONITOR R-01	GDC	25-275N	123-273W	sPPTU02WT
0117	241085	MBMR B	12KHZ SB MONITOR R-02	GDC	25-291N	123-270W	sPPTU02WT
0053	281085	MBMR E	12KHZ SB MONITOR R-02	GDC	21-274N	117-470W	sPPTU02WT
0120	281085	MBMR B	12KHZ SB MONITOR R-03	GDC	21-236N	117-431W	sPPTU02WT
1926	311085	MBMR E	12KHZ SB MONITOR R-03	GDC	9-044N	109-560W	sPPTU02WT
1931	311085	MBMR B	12KHZ SB MONITOR R-04	GDC	9-051N	109-554W	sPPTU02WT
1350	041185	MBMR E	12KHZ SB MONITOR R-04	GDC	5-417N	102-438W	sPPTU02WT
1356	041185	MBMR B	12KHZ SB MONITOR R-05	GDC	5-412N	102-430W	sPPTU02WT
0737	081185	MBMR E	12KHZ SB MONITOR R-05	GDC	1-056N	102-049W	sPPTU02WT
0744	081185	MBMR B	12KHZ SB MONITOR R-06	GDC	1-042N	102-051W	sPPTU02WT
0102	121185	MBMR E	12KHZ SB MONITOR R-06	GDC	1-024N	102-071W	sPPTU02WT
0107	121185	MBMR B	12KHZ SB MONITOR R-07	GDC	1-032N	102-079W	sPPTU02WT
2207	151185	MBMR E	12KHZ SB MONITOR R-07	GDC	11-292N	103-564W	sPPTU02WT
2215	151185	MBMR B	12KHZ SB MONITOR R-08	GDC	11-306N	103-566W	sPPTU02WT
1200	171185	MBMR E	12KHZ SB MONITOR R-08	GDC	18-499N	104-193W	sPPTU02WT

DEPTH RECORDER

1845	231085	DPR3 B	3.5 KHZ RECORDER R-01	GDC	25-064N	122-090W	sPPTU02WT
1541	091185	DPR3 E	3.5 KHZ RECORDER R-01	GDC	2-352S	102-188W	sPPTU02WT

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

SEABEAM SWATH BOOKS

0931	201085	MBSB B	S.B. SWATH BOOK-01	GDC	20-276N	105-592W	sPPTU02WT
0346	221085	MBSB E	S.B. SWATH BOOK-01	GDC	22-444N	113-556W	sPPTU02WT
0346	221085	MBSB B	S.B. SWATH BOOK-02	GDC	22-444N	113-556W	sPPTU02WT
2333	231085	MBSB E	S.B. SWATH BOOK-02	GDC	25-215N	123-101W	sPPTU02WT
2333	231085	MBSB B	S.B. SWATH BOOK-03	GDC	25-215N	123-101W	sPPTU02WT
1850	251085	MBSB E	S.B. SWATH BOOK-03	GDC	25-549N	123-167W	sPPTU02WT
1853	251085	MBSB B	S.B. SWATH BOOK-04	GDC	25-543N	123-168W	sPPTU02WT
0614	271085	MBSB E	S.B. SWATH BOOK-04	GDC	24-092N	120-422W	sPPTU02WT
0614	271085	MBSB B	S.B. SWATH BOOK-05	GDC	24-092N	120-422W	sPPTU02WT
1929	281085	MBSB E	S.B. SWATH BOOK-05	GDC	18-526N	114-572W	sPPTU02WT
1929	281085	MBSB B	S.B. SWATH BOOK-06	GDC	18-526N	114-572W	sPPTU02WT
1052	301085	MBSB E	S.B. SWATH BOOK-06	GDC	13-487N	111-495W	sPPTU02WT
1052	301085	MBSB B	S.B. SWATH BOOK-07	GDC	13-487N	111-495W	sPPTU02WT
0240	011185	MBSB E	S.B. SWATH BOOK-07	GDC	8-153N	108-426W	sPPTU02WT
0240	011185	MBSB B	S.B. SWATH BOOK-08	GDC	8-153N	108-426W	sPPTU02WT
2047	021185	MBSB E	S.B. SWATH BOOK-08	GDC	8-146N	103-437W	sPPTU02WT
2047	021185	MBSB B	S.B. SWATH BOOK-09	GDC	8-146N	103-437W	sPPTU02WT
1421	041185	MBSB E	S.B. SWATH BOOK-09	GDC	5-459N	102-430W	sPPTU02WT
1421	041185	MBSB B	S.B. SWATH BOOK-10	GDC	5-459N	102-430W	sPPTU02WT
0905	061185	MBSB E	S.B. SWATH BOOK-10	GDC	2-294N	101-500W	sPPTU02WT
0905	061185	MBSB B	S.B. SWATH BOOK-11	GDC	2-294N	101-500W	sPPTU02WT
0237	081185	MBSB E	S.B. SWATH BOOK-11	GDC	1-264N	101-568W	sPPTU02WT
0237	081185	MBSB B	S.B. SWATH BOOK-12	GDC	1-264N	101-568W	sPPTU02WT
2040	091185	MBSB E	S.B. SWATH BOOK-12	GDC	2-204S	102-046W	sPPTU02WT
2040	091185	MBSB B	S.B. SWATH BOOK-13	GDC	2-204S	102-046W	sPPTU02WT
1433	111185	MBSB E	S.B. SWATH BOOK-13	GDC	0-352S	102-329W	sPPTU02WT
1433	111185	MBSB B	S.B. SWATH BOOK-14	GDC	0-352S	102-329W	sPPTU02WT
0904	131185	MBSB E	S.B. SWATH BOOK-14	GDC	4-355N	102-098W	sPPTU02WT
0904	131185	MBSB B	S.B. SWATH BOOK-15	GDC	4-355N	102-098W	sPPTU02WT
0107	151185	MBSB E	S.B. SWATH BOOK-15	GDC	8-228N	103-177W	sPPTU02WT
0108	151185	MBSB B	S.B. SWATH BOOK-16	GDC	8-228N	103-178W	sPPTU02WT
1931	161185	MBSB E	S.B. SWATH BOOK-16	GDC	15-414N	104-114W	sPPTU02WT
1931	161185	MBSB B	S.B. SWATH BOOK-17	GDC	15-414N	104-114W	sPPTU02WT
1200	171185	MBSB E	S.B. SWATH BOOK-17	GDC	18-499N	104-193W	sPPTU02WT

SEABEAM TRANSIT LINES

0000	201085	MBTL B	S.B. TRANSIT LINE	GDC	19-046N	104-371W	sPPTU02WT
2300	231085	MBTL E	S.B. TRANSIT LINE	GDC	25-201N	123-029W	sPPTU02WT
1650	271085	MBTL B	S.B. TRANSIT LINE	GDC	22-373N	119-016W	sPPTU02WT
0000	031185	MBTL E	S.B. TRANSIT LINE	GDC	8-241N	103-021W	sPPTU02WT
0930	031185	MBTL B	S.B. TRANSIT LINE	GDC	8-194N	102-528W	sPPTU02WT
2215	031185	MBTL E	S.B. TRANSIT LINE	GDC	5-516N	102-353W	sPPTU02WT

#GMT #TIME	DDMMYY DATE	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
0815	051185	MBTL B	S.B. TRANSIT LINE	GDC	5-246N	102-165W	sPPTUO2WT
1615	051185	MBTL E	S.B. TRANSIT LINE	GDC	3-548N	102-074W	sPPTUO2WT
0430	061185	MBTL B	S.B. TRANSIT LINE	GDC	3-103N	102-171W	sPPTUO2WT
1230	061185	MBTL E	S.B. TRANSIT LINE	GDC	2-228N	101-175W	sPPTUO2WT
0715	081185	MBTL B	S.B. TRANSIT LINE	GDC	1-100N	102-044W	sPPTUO2WT
2000	081185	MBTL E	S.B. TRANSIT LINE	GDC	1-065S	102-308W	sPPTUO2WT
0100	091185	MBTL B	S.B. TRANSIT LINE	GDC	1-313S	102-318W	sPPTUO2WT
0455	091185	MBTL E	S.B. TRANSIT LINE	GDC	2-181S	102-251W	sPPTUO2WT
0520	111185	MBTL B	S.B. TRANSIT LINE	GDC	2-098S	102-483W	sPPTUO2WT
0930	111185	MBTL E	S.B. TRANSIT LINE	GDC	1-194S	102-387W	sPPTUO2WT
1130	111185	MBTL B	S.B. TRANSIT LINE	GDC	1-119S	102-355W	sPPTUO2WT
0100	121185	MBTL E	S.B. TRANSIT LINE	GDC	1-021N	102-072W	sPPTUO2WT
0700	121185	MBTL B	S.B. TRANSIT LINE	GDC	1-253N	102-161W	sPPTUO2WT
2100	121185	MBTL E	S.B. TRANSIT LINE	GDC	3-171N	102-256W	sPPTUO2WT
0445	131185	MBTL B	S.B. TRANSIT LINE	GDC	3-428N	101-573W	sPPTUO2WT
0925	131185	MBTL E	S.B. TRANSIT LINE	GDC	4-397N	102-108W	sPPTUO2WT
0110	141185	MBTL B	S.B. TRANSIT LINE	GDC	4-521N	102-075W	sPPTUO2WT
1200	171185	MBTL E	S.B. TRANSIT LINE	GDC	18-499N	104-193W	sPPTUO2WT

SEABEAM SURVEYS

2300	231085	MBSV B	S.B. SURVEY USAF	GDC	25-201N	123-029W	sPPTUO2WT
1650	271085	MBSV E	S.B. SURVEY USAF	GDC	22-373N	119-016W	sPPTUO2WT
0000	031185	MBSV B	S.B. SURVEY EAST	GDC	8-241N	103-021W	sPPTUO2WT
0930	031185	MBSV E	SIQUEIROS-01	GDC	8-194N	102-528W	sPPTUO2WT
2215	031185	MBSV B	S.B. SURVEY 5.5 N	GDC	5-516N	102-353W	sPPTUO2WT
0815	051185	MBSV E	OFFSET	GDC	5-246N	102-165W	sPPTUO2WT
1615	051185	MBSV B	S.B. SURVEY 3.5 N	GDC	3-548N	102-074W	sPPTUO2WT
0430	061185	MBSV E	SYRVEY-01	GDC	3-103N	102-171W	sPPTUO2WT
1230	061185	MBSV B	S.B. SURVEY EASTERN	GDC	2-228N	101-175W	sPPTUO2WT
0245	081185	MBSV E	MICROPLATE SURVEY	GDC	1-282N	101-571W	sPPTUO2WT
0245	081185	MBSV B	S.B. SURVEY REAL	GDC	1-282N	101-571W	sPPTUO2WT
0715	081185	MBSV E	TRIPLE JUNCTION-01	GDC	1-100N	102-044W	sPPTUO2WT
2000	081185	MBSV B	S.B. SURVEY 1.0 DEG.	GDC	1-065S	102-308W	sPPTUO2WT
0100	091185	MBSV E	SOUTH VOLCANO-01	GDC	1-313S	102-318W	sPPTUO2WT
0455	091185	MBSV B	S.B. SURVEY 2.8 DEG	GDC	2-181S	102-251W	sPPTUO2WT
0520	111185	MBSV E	SOUTH OFFSET	GDC	2-098S	102-483W	sPPTUO2WT
0930	111185	MBSV B	S.B. SURVEY 1.0 DEG.	GDC	1-194S	102-387W	sPPTUO2WT
1130	111185	MBSV E	SOUTH VOLCANO-02	GDC	1-119S	102-355W	sPPTUO2WT
0100	121185	MBSV B	S.B. SURVEY REAL	GDC	1-021N	102-072W	sPPTUO2WT
0700	121185	MBSV E	TRIPLE JUNCTION-02	GDC	1-253N	102-161W	sPPTUO2WT
2100	121185	MBSV B	S.B. SURVEY 3.5 N	GDC	3-171N	102-256W	sPPTUO2WT
0445	131185	MBSV E	SURVEY-02	GDC	3-428N	101-573W	sPPTUO2WT
0925	131185	MBSV B	S.B. SURVEY 4.9 N	GDC	4-397N	102-108W	sPPTUO2WT
0110	141185	MBSV E	S.B. SURVEY 4.9 N	GDC	4-521N	102-075W	sPPTUO2WT

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

#

****BATHY THERMOGRAPHS****

1723	231085	BTXP B	XBT-01	GDC	25-012N	121-517W	sPPTU02WT
1616	291085	BTXP B	XBT-02	GDC	15-525N	112-382W	sPPTU02WT

****SOUND VELOCITY PROFILES****

0925	201085	MBVP B	SOUND VELOCITY	GDC	20-266N	105-586W	sPPTU02WT
1707	251085	MBVP E	PROFILE-01	GDC	26-159N	123-117W	sPPTU02WT
1707	251085	MBVP B	SOUND VELOCITY	GDC	26-159N	123-117W	sPPTU02WT
1200	171185	MBVP E	PROFILE-02	GDC	18-499N	104-193W	sPPTU02WT

#

END SAMPLE INDEX