

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

PLUME EXPEDITION

LEG 8

R/V Thomas Washington

(Issued October 1990)

La Guaira, Venezuela (29 June 1990)
to
Manzanillo, Mexico (09 July 1990)

No Chief Scientist on board

Resident Marine Technician - Geoff Hargreaves

Post-Cruise Processing and Report Preparation by the
Geological Data Center, Scripps Institution of Oceanography
La Jolla, California 92093

Data Collection and Processing Funded by:
NSF Grant Number OCE90-00048

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.# 246

INFORMAL REPORT AND INDEX OF NAVIGATION AND UNDERWAY GEOPHYSICAL DATA

Processed by the Geological Data Center
Scripps Institution of Oceanography

Contents:

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 profile (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 92093-0223. Phone (619)534-2752. Fax (619)534-5306.

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 Information

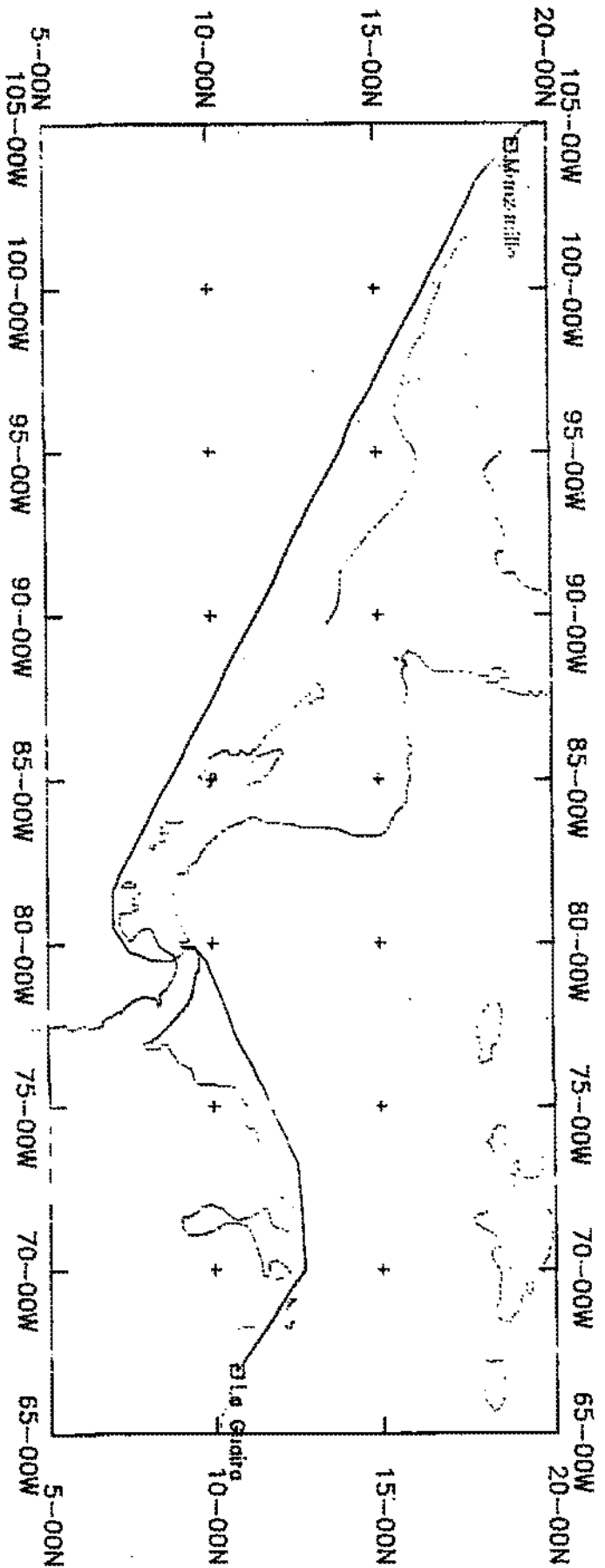
The following forms are available, subject to approval of the cruise leg chief scientist:

- 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

NOTE: Sea Beam data collection and processing were not funded by extramural grants on this leg. Instead, they have been collected and processed in "transit mode" by the SIO Shipboard Technical Support group as part of an experimental program to optimize ship usage and to increase the amount of available Sea Beam data. At this time, policies for processing these data are under review. For more information, contact the Geological Data Center curator.

April 1989



PLUME EXPEDITION LEG 8

NO CHIEF SCIENTIST - TRANSIT MODE

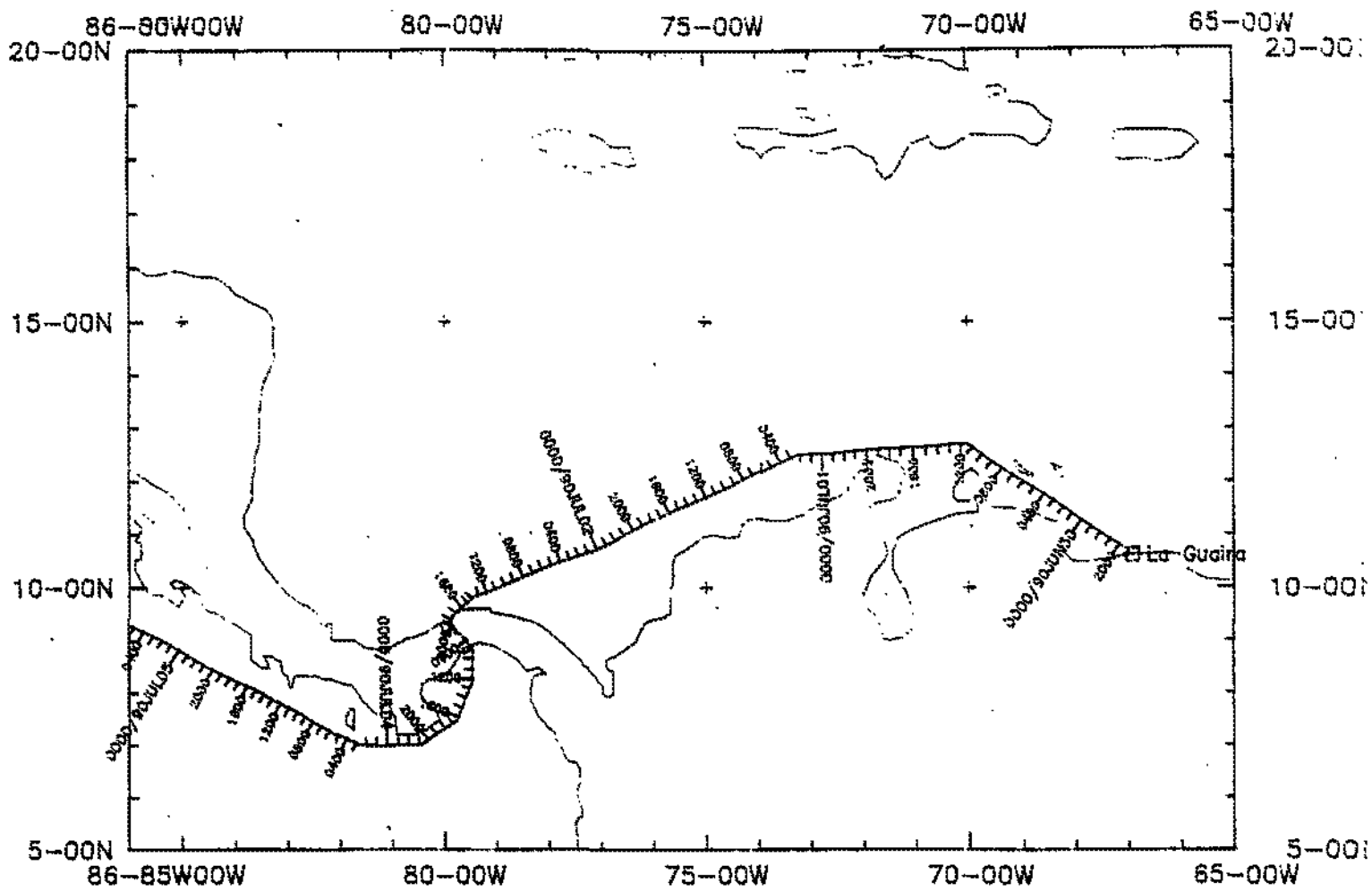
PORTS: La Guaira, Venezuela - Manzanillo, Mexico

DATES: 29 June - 9 July 1990

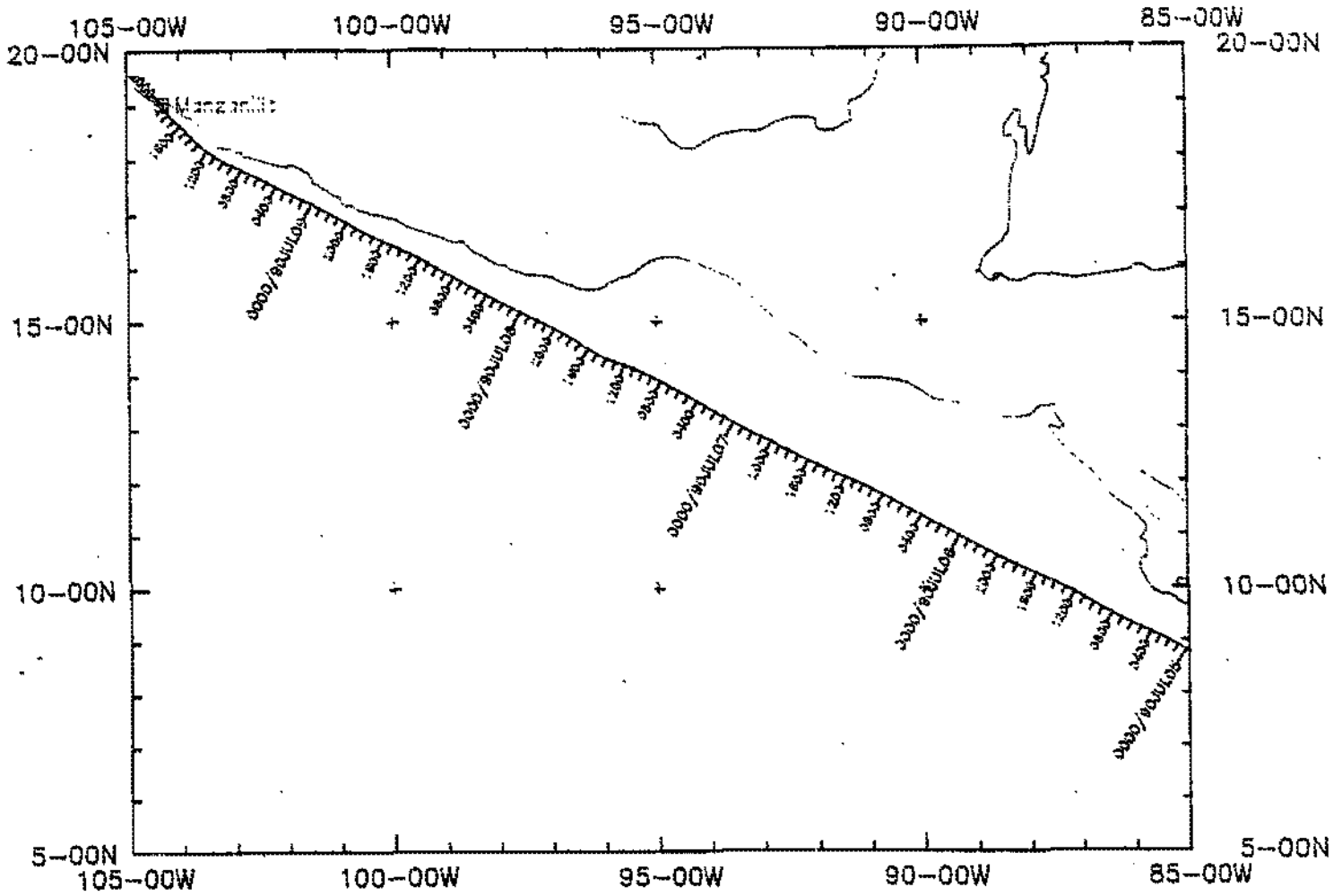
SHIP: R/V T. Washington

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

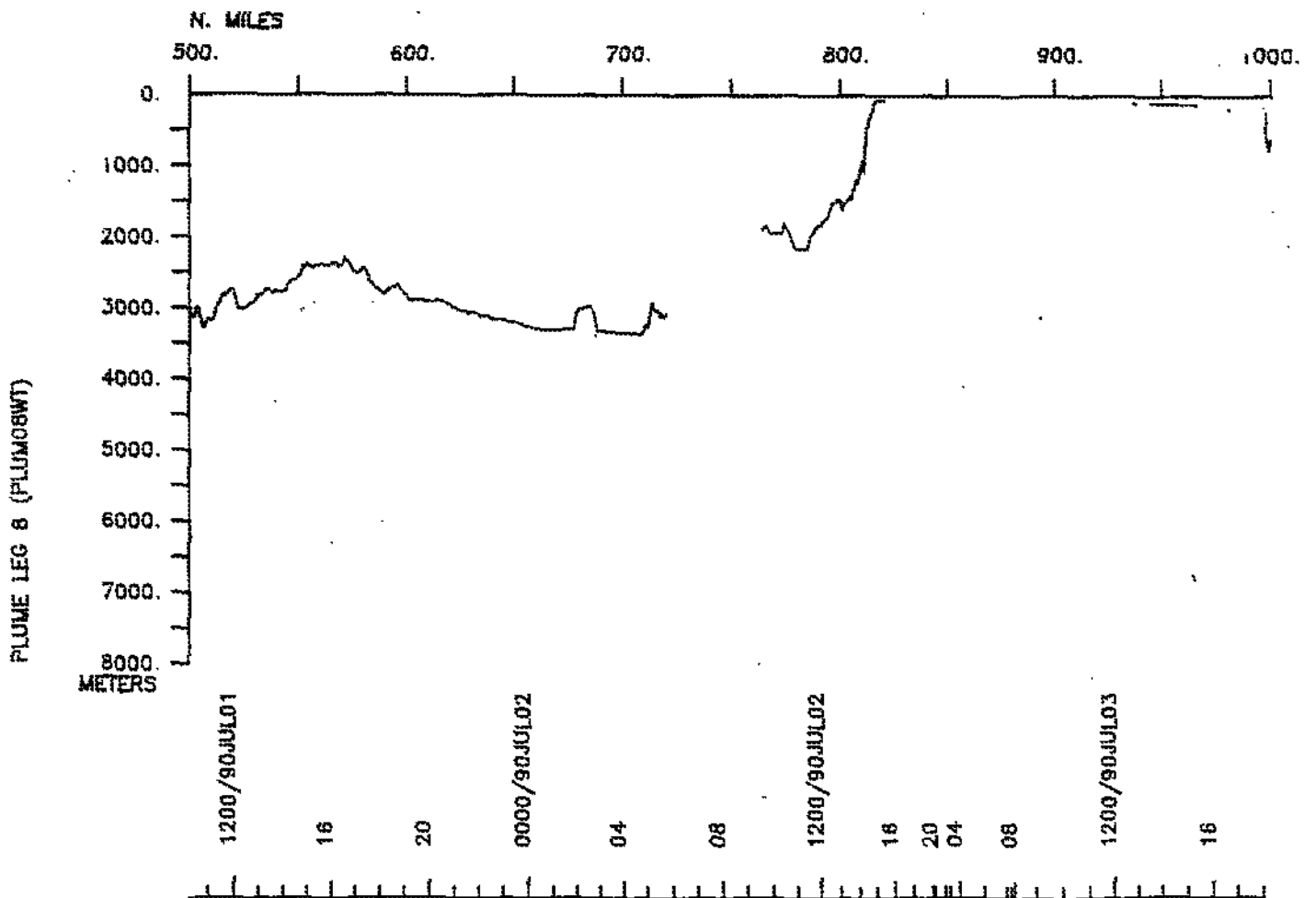
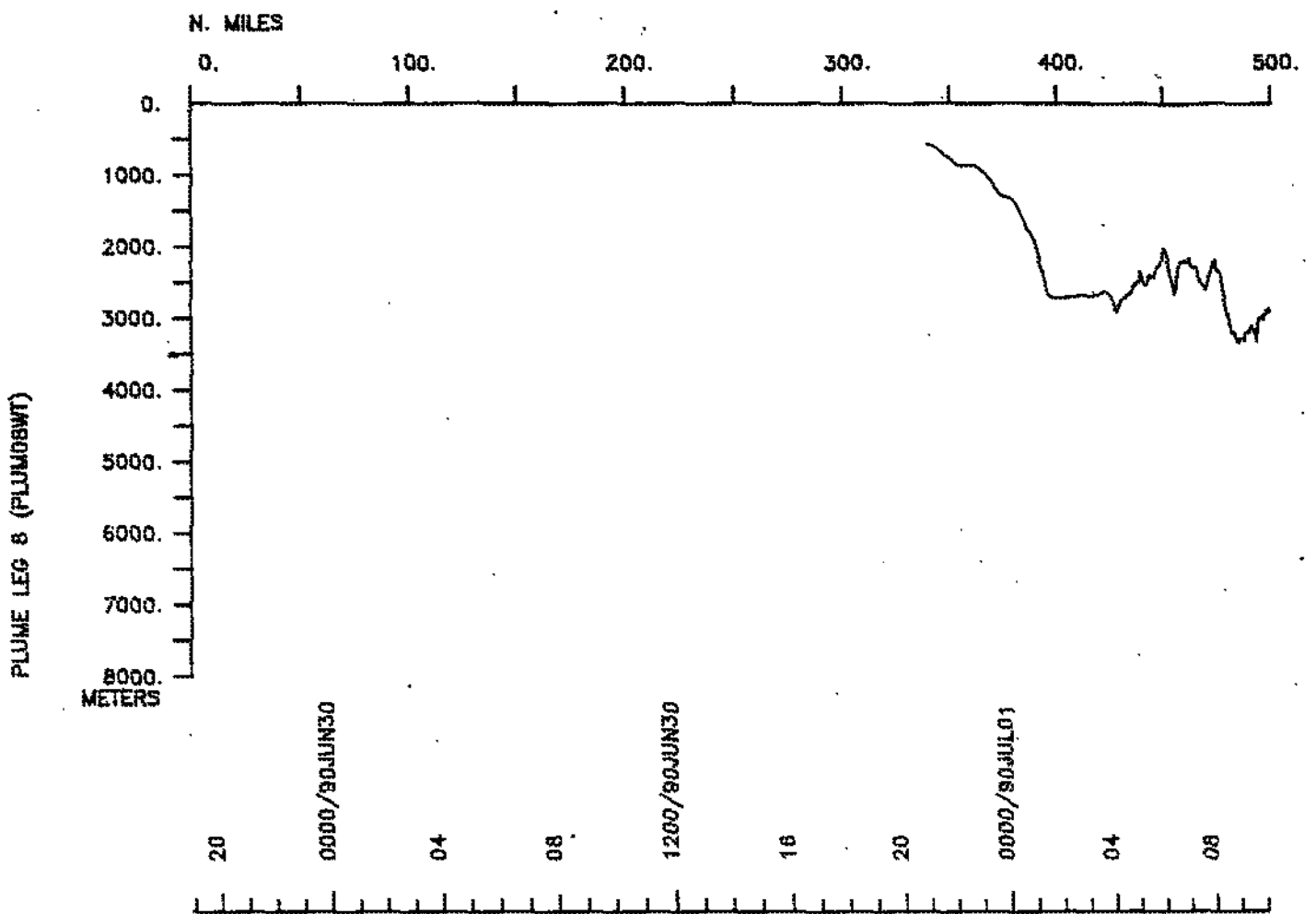
- 1) Cruise - 2624 miles
- 2) Bathymetry - collected in transit mode
- 3) Magnetics - none collected
- 4) Seismic Reflection - none collected
- 5) Gravity - collected but not processed
- 6) Sea Beam - collected in transit mode

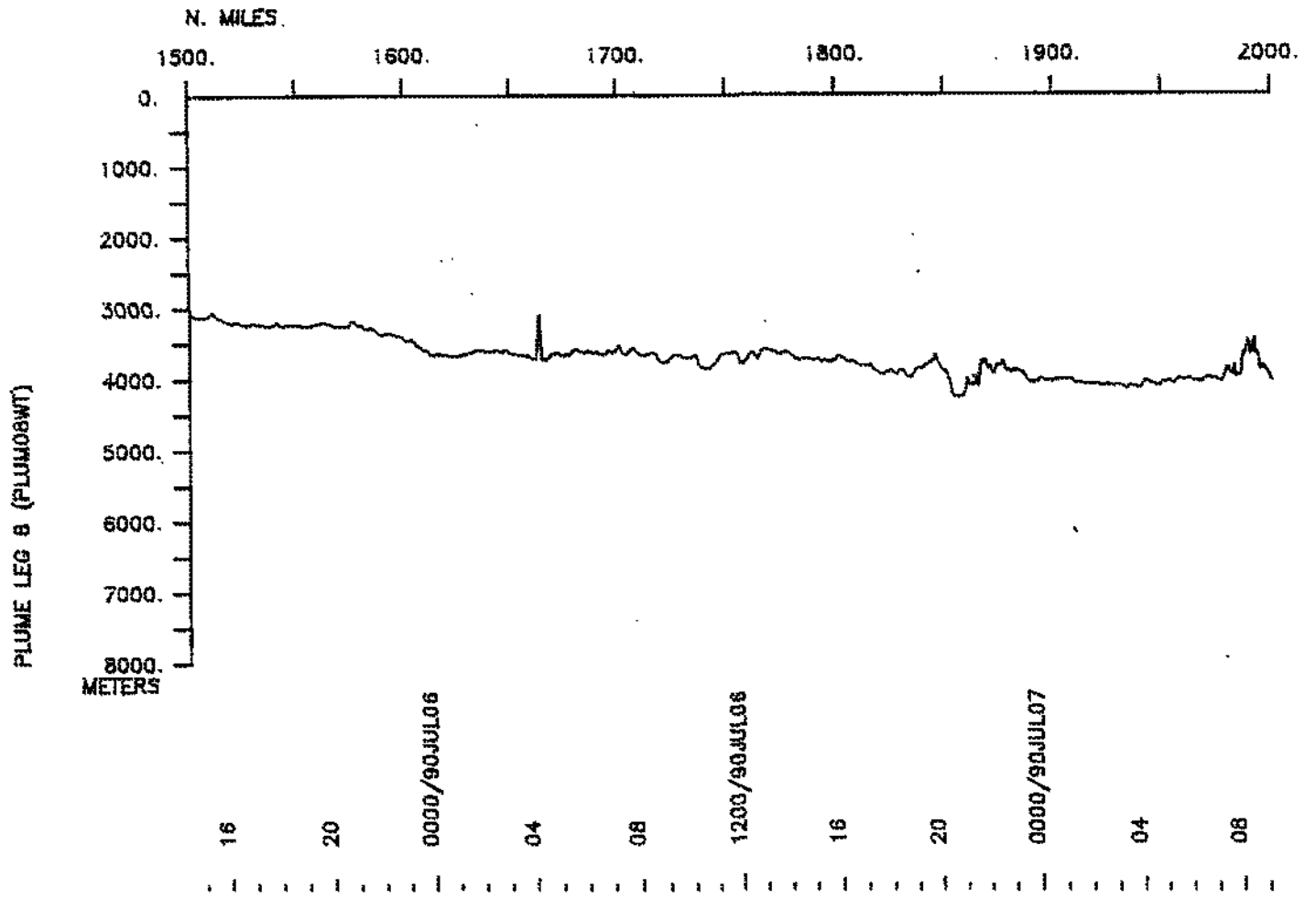
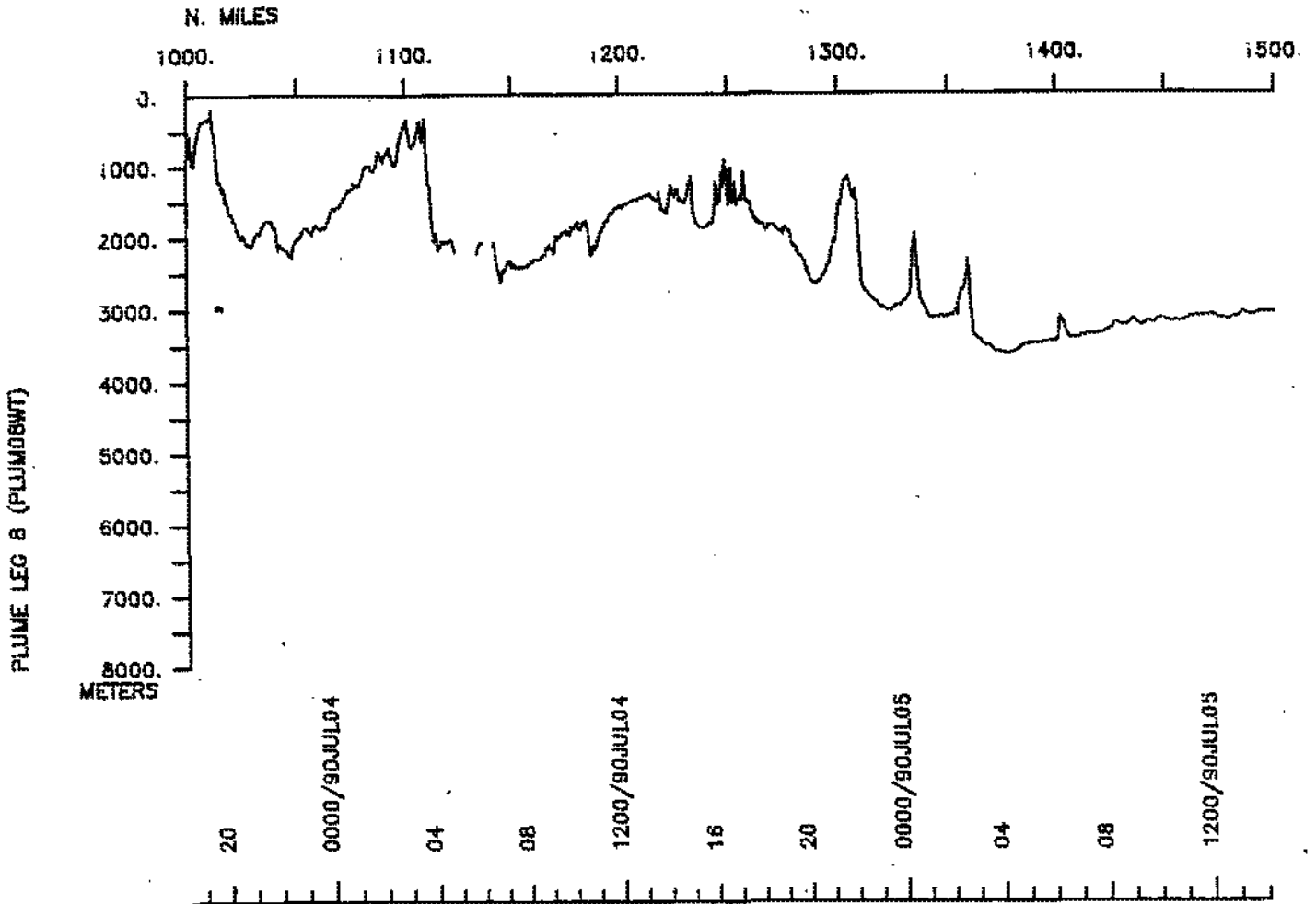


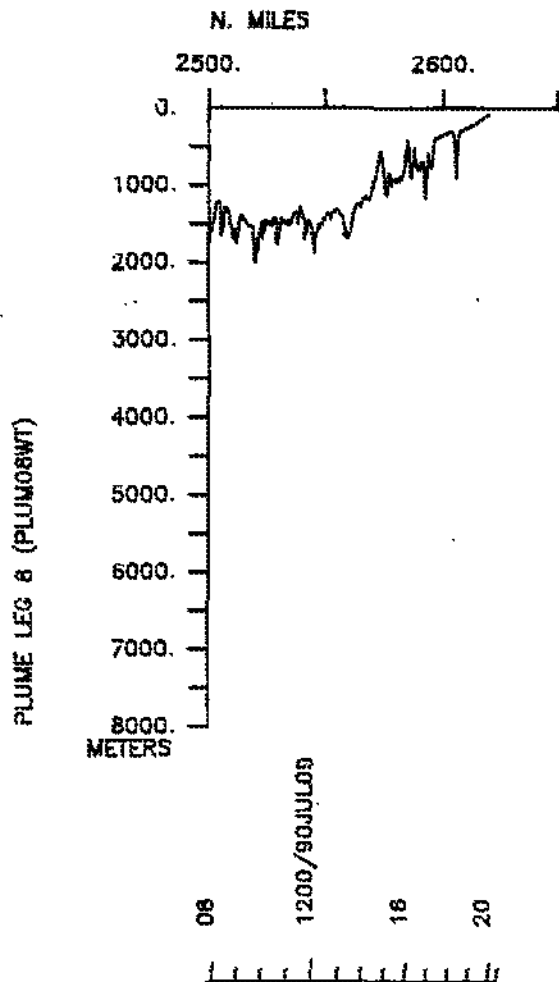
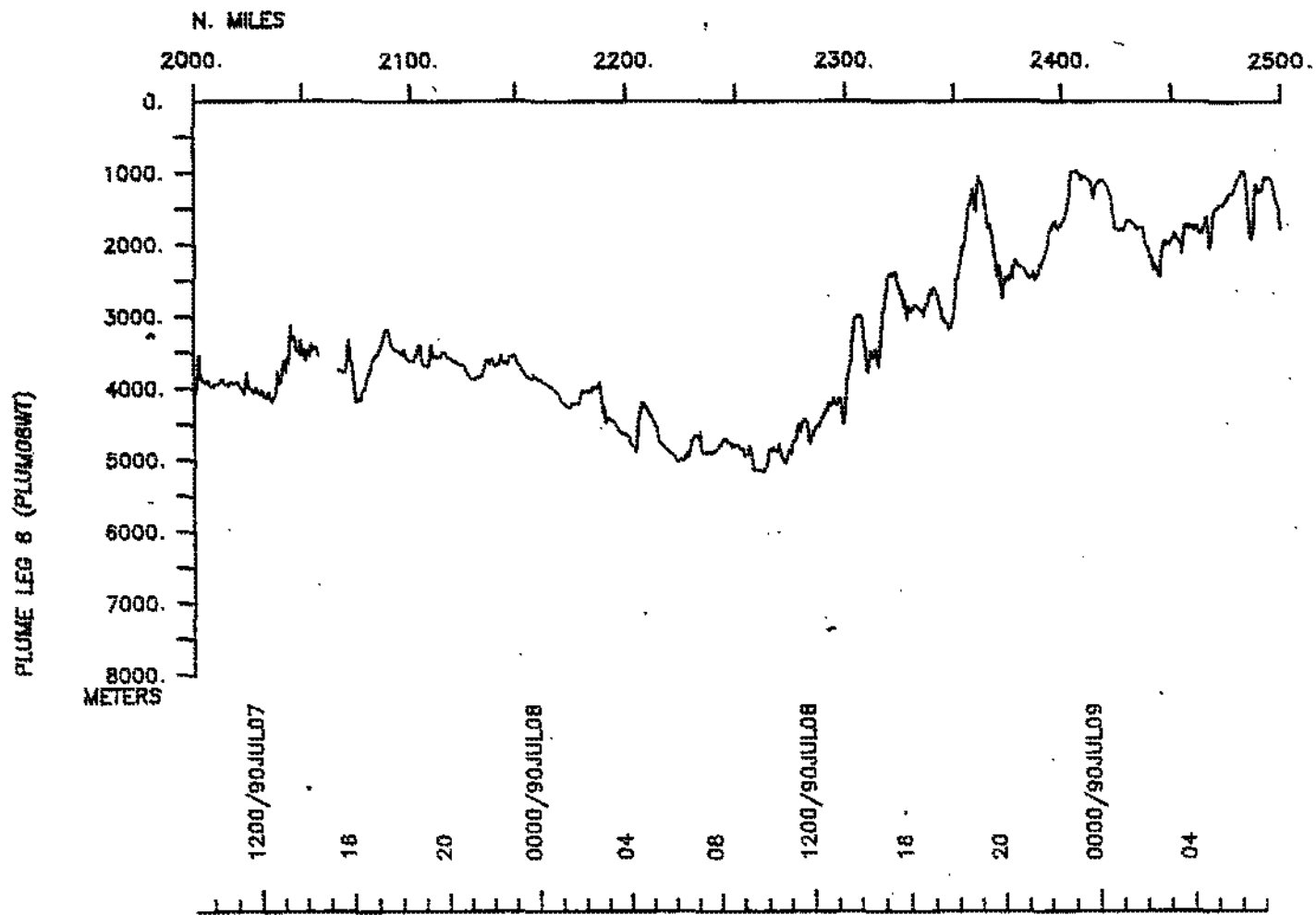
PLUME LEG 8 (PLUM08WT)
 (TRACK 1 OF 2)



PLUME LEG 8 (PLUM08WT)
(Track 2 of 2)







S.I.O. SAMPLE INDEX

(Issued October 1990)

PLUME EXPEDITION

Leg 8

R/V T. Washington

La Guaira, Venezuela (29 June 1990)
to
Manzanillo, Mexico (09 July 1990)

No Chief Scientist on board

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.# 240

**** PORTS ***

1850 290690	LGPT B LA GUAIRA, VENEZUELA	10-37 N 66-56 W	#PLUM08WT
2240 090790*	LGPT E MANZANILLO, MEXICO	19-03 N 104-20 W	#PLUM08WT

****PERSONNEL****

	NAME	***TITLE***	***AFFILIATION***	**CRID**
PERT MTG	HARGREAVES,G.	RESIDENT TECH.	SCRIPPS INST.OF OCEAN.	PLUM08WT
PECT SIO	CHARTERS,J.	COMPUTER TECH	SCRIPPS INST.OF OCEAN.	PLUM08WT

****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			CRUIS
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

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

**** ECHO SOUNDER RECORDS - 12 KHZ ***

2100 290690	MBMR B SB MONITOR R-01	GDC 10-547N	67-211W	sPLUM08WT
1630 030790	MBMR E SB MONITOR R-01	GDC 7-271N	79-473W	sPLUM08WT
1754 030790	MBMR B SB MONITOR R-02	GDC 7-188N	80-005W	sPLUM08WT
2000 030790	MBMR E SB MONITOR R-02	GDC 7-055N	80-205W	sPLUM08WT

**** GRAVITY - CONTINUOUS COMPUTER LOG ***

1850 290690	GVCR B GRAVITY	GDC 10-392N	66-594W	sPLUM08WT
2240 090790	GVCR E GRAVITY	GDC 19-036N	104-180W	sPLUM08WT

**** EXPENDABLE BATHYTHERMOGRAPHS ***

1707 010790	BTXP	XBT 0001 Probe T-4	GDC 11-186N	75-535W	sPLUM08WT
1555 040790	BTXP	XBT 0002 Probe T-4	GDC 8-074N	83-479W	sPLUM08WT