

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

PLUME EXPEDITION

LEG 1
=====

R/V Thomas Washington

(Issued November 1990)

San Diego, California (5 January 1990)
to
Galapagos Islands (16 January 1990)

Chief Scientist:

Charles Cox (Scripps Institution of Oceanography)

Resident Marine Technician - Gene Pillard

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 OCE87-02835
ONR Grant Number 1219

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

SIO Sea Beam Data Information

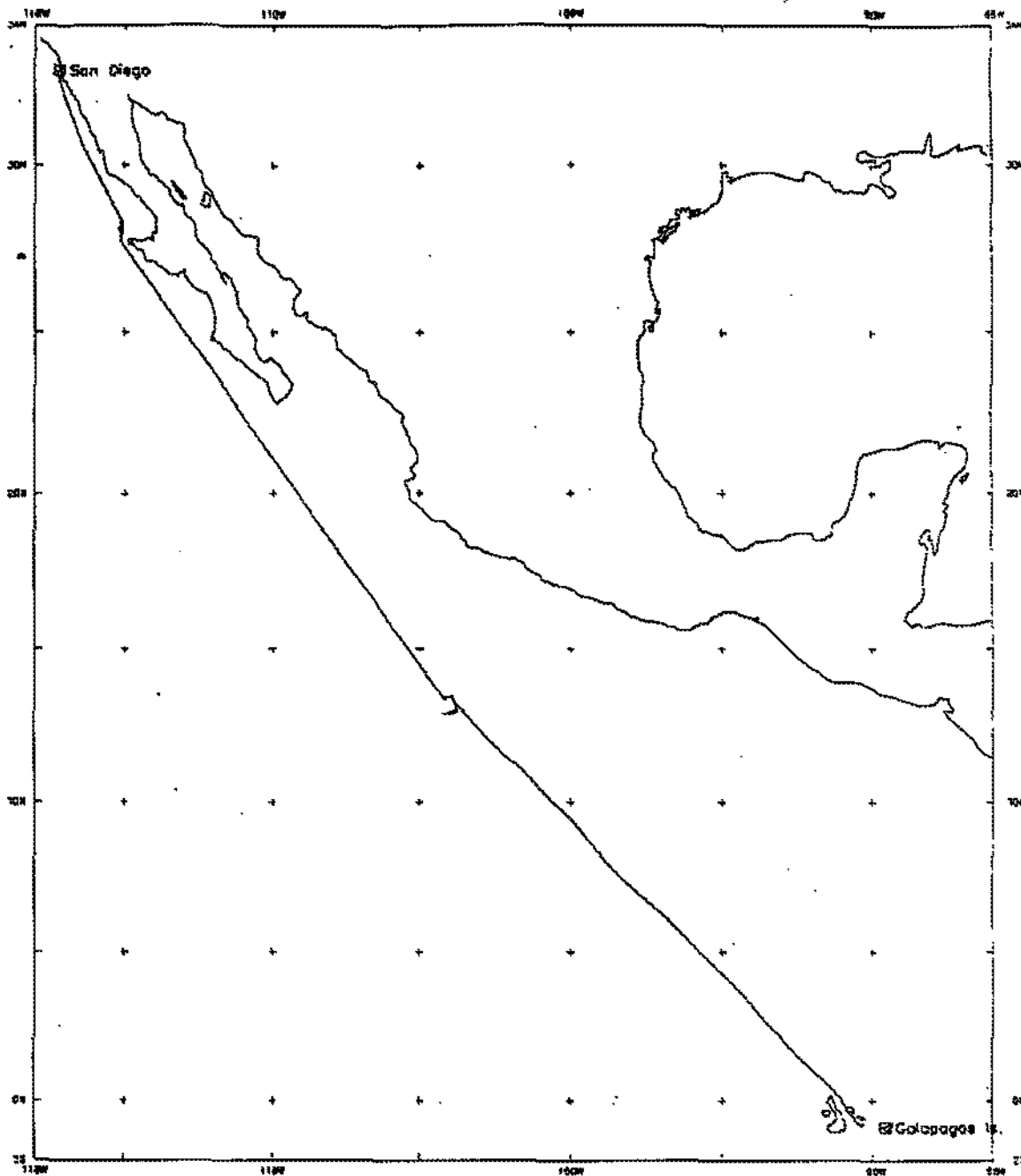
The following forms are available, subject to approval of the cruise leg chief scientist:

- 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 1

CHIEF SCIENTIST:

Charles Cox (Scripps Institution of Oceanography)

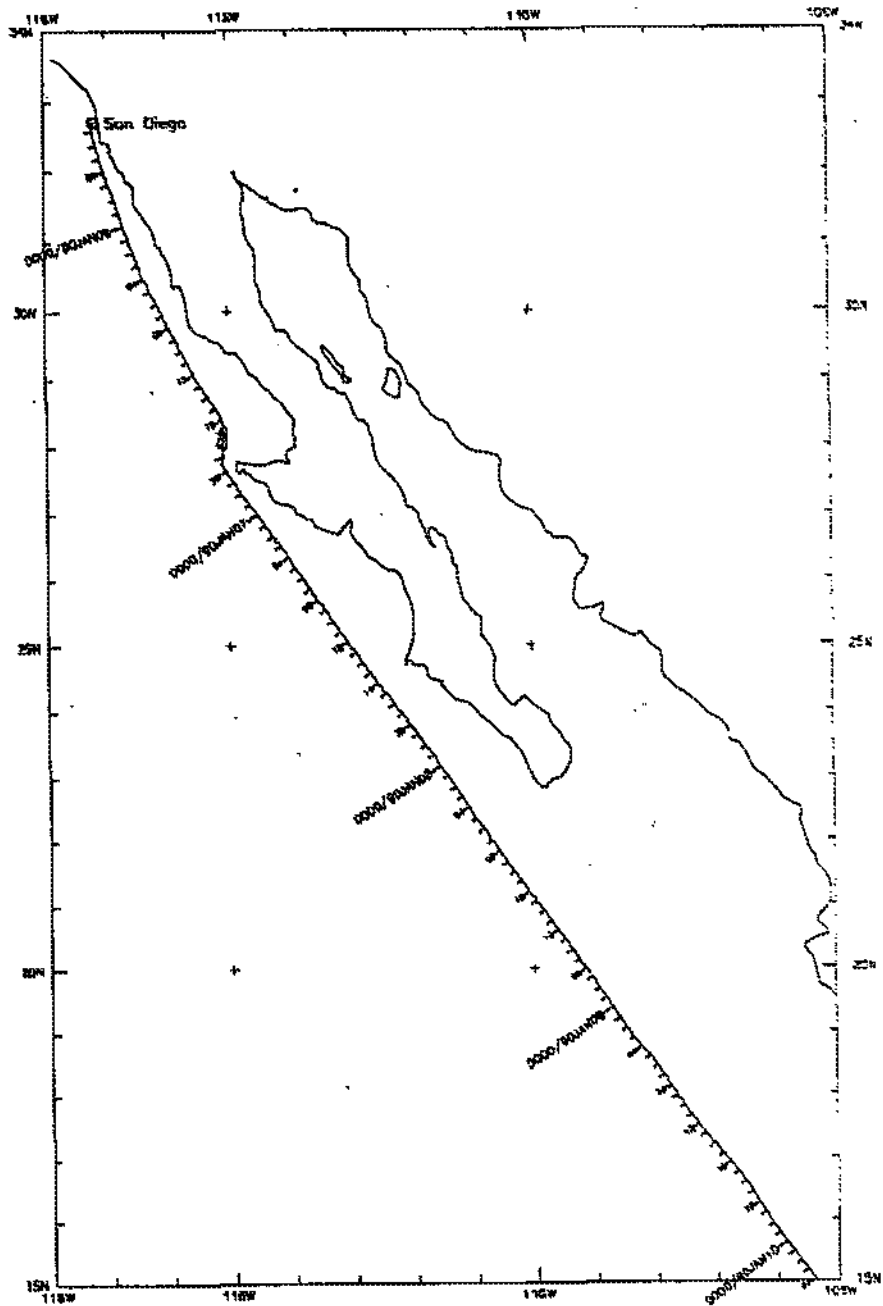
PORTS: San Diego, California - Galapagos Islands

DATES: 5 -16 January 1990

SHIP: R/V T. Washington

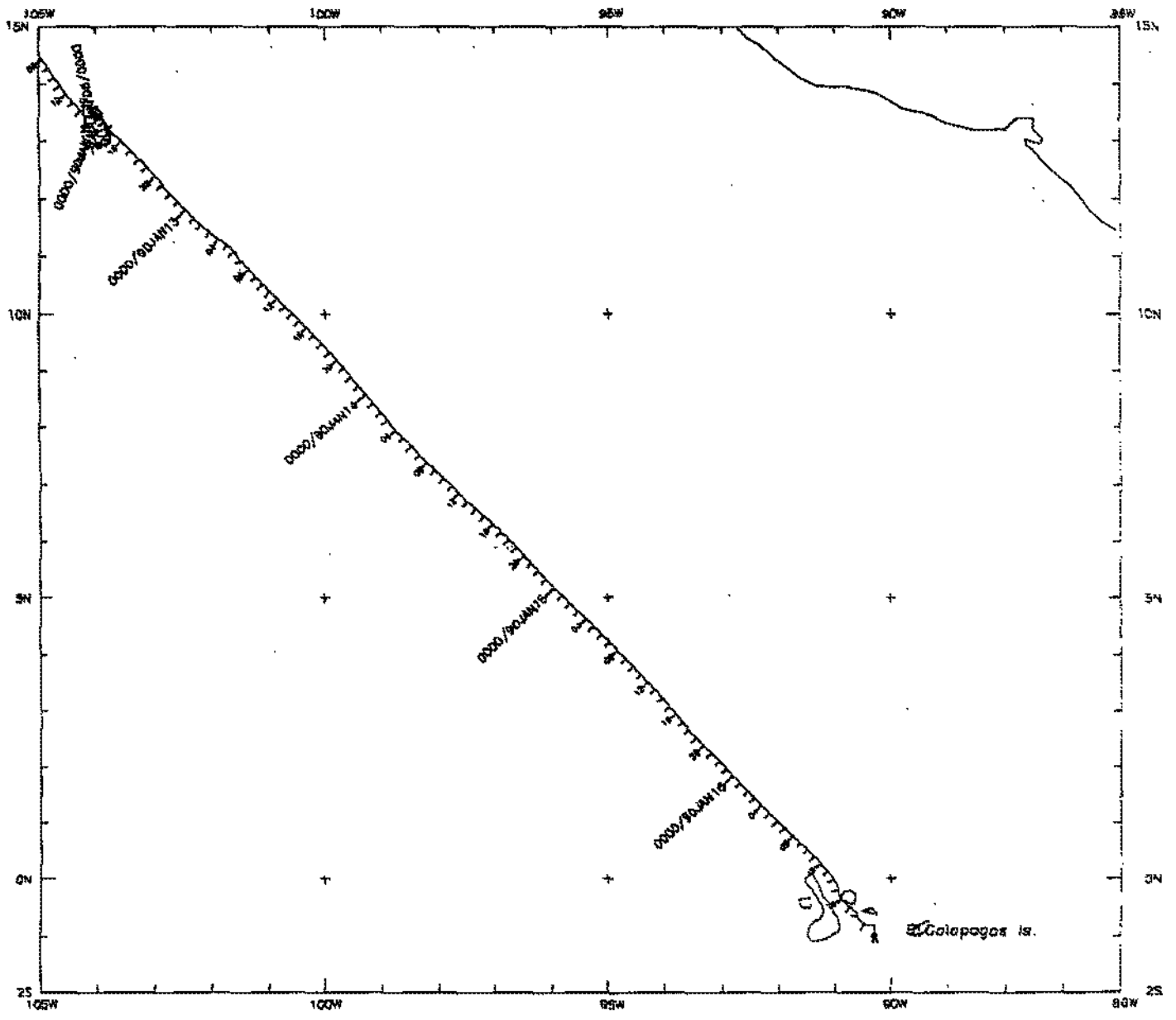
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

- 1) Cruise - 2791 miles
- 2) Bathymetry - 2291 miles
- 3) Magnetics - 1626 miles
- 4) Seismic Reflection - none collected
- 5) Gravity - collected but not processed
- 6) Sea Beam - 2291 miles

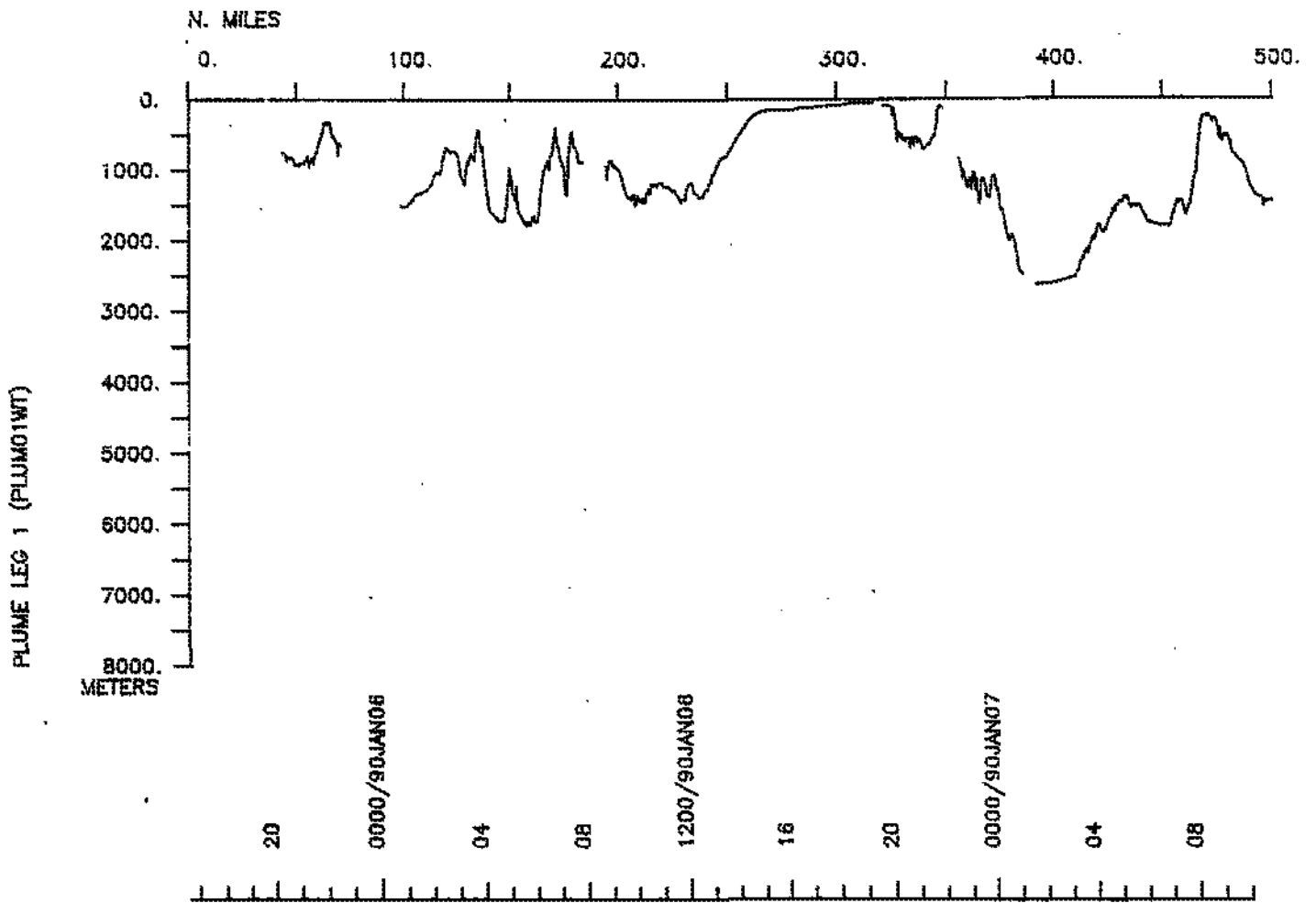
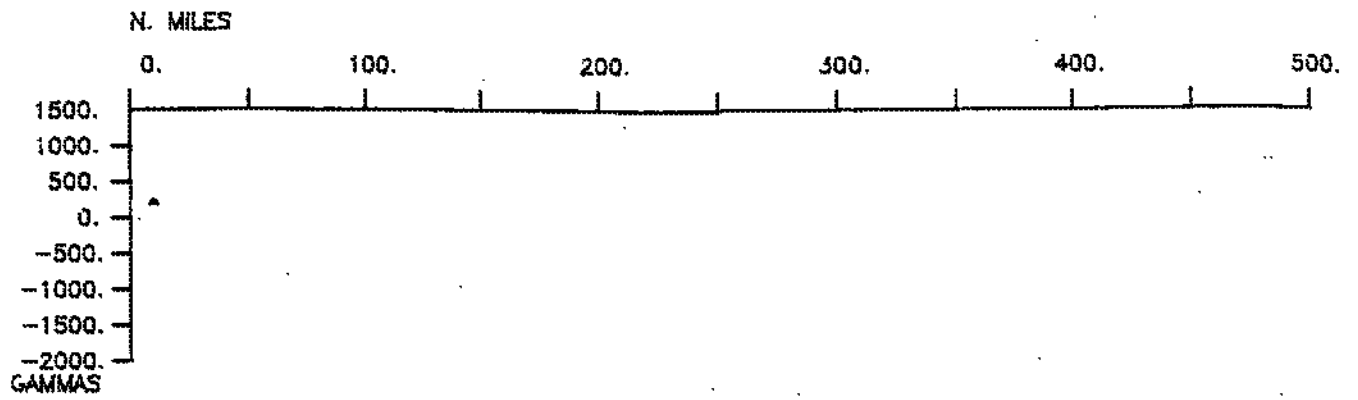


PLUME Expedition Leg 1 (PLUM01WT)
 (Track 1 of 2)

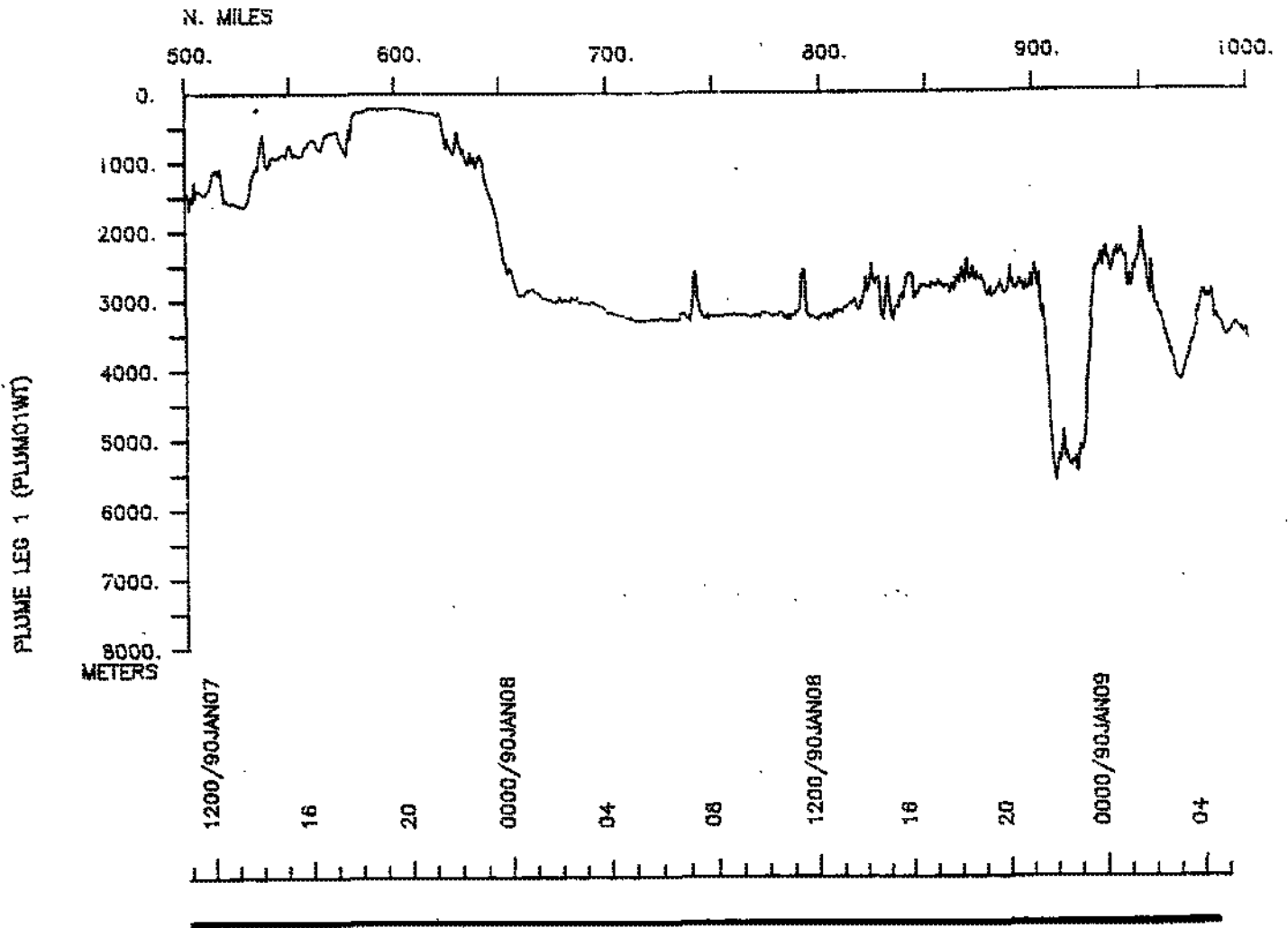
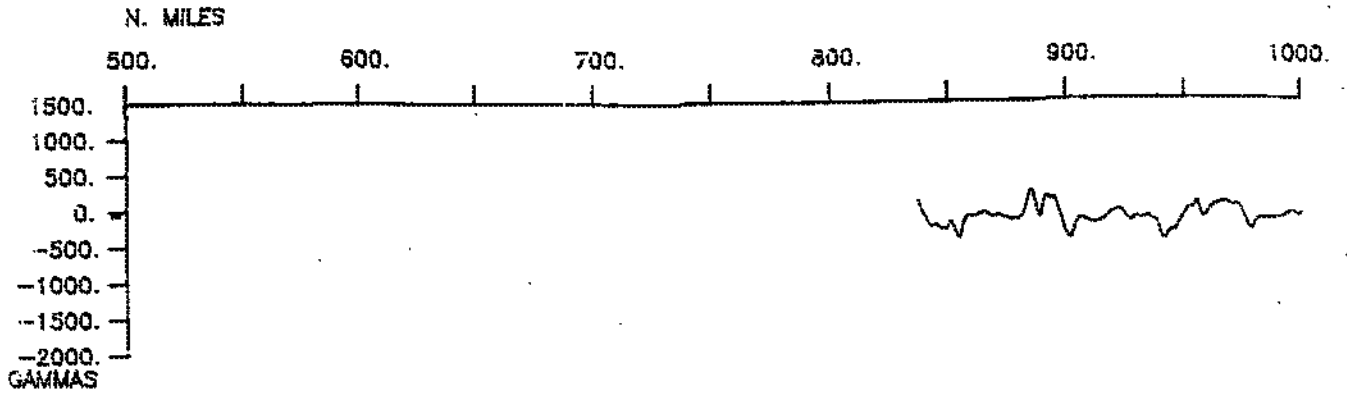
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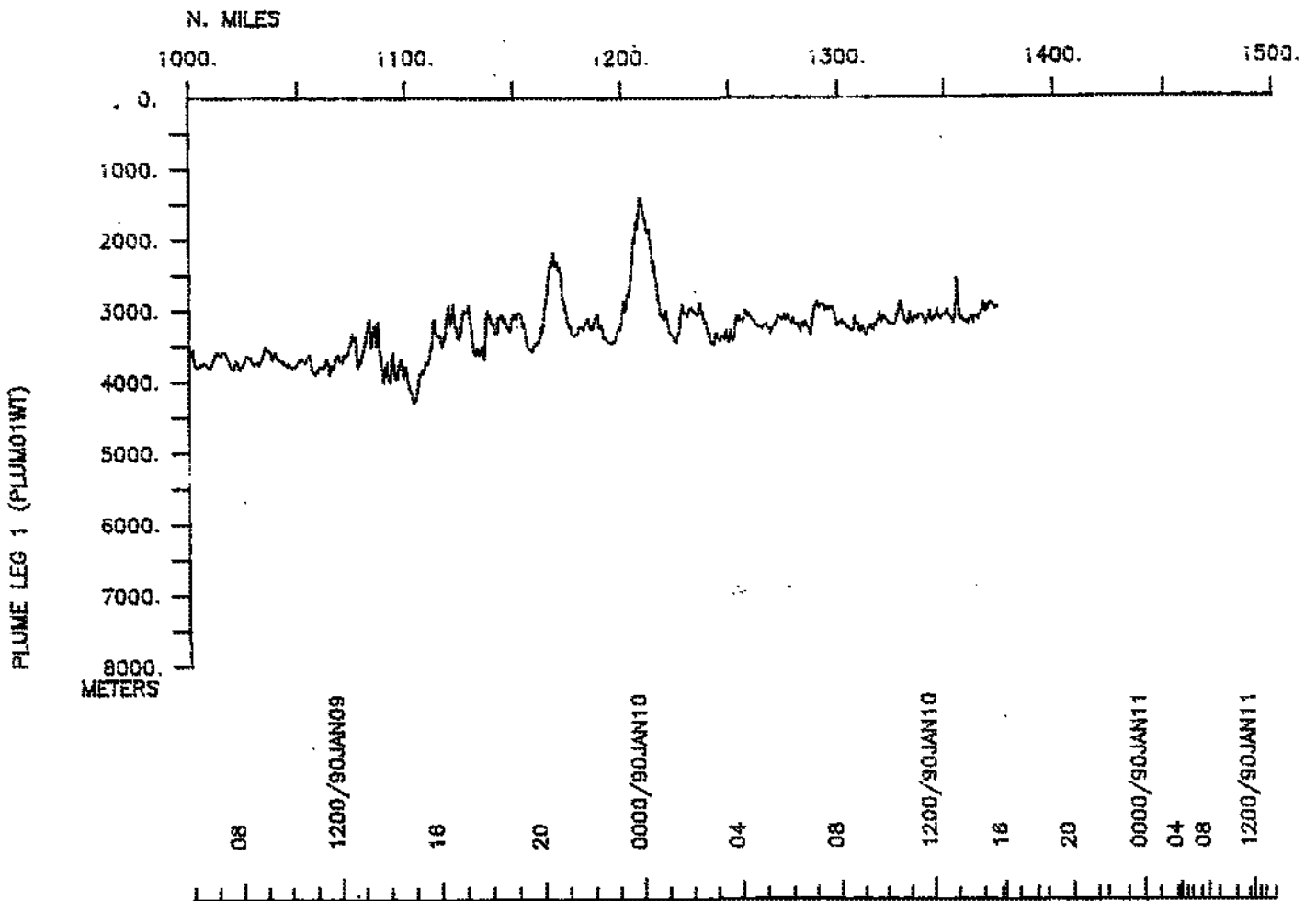
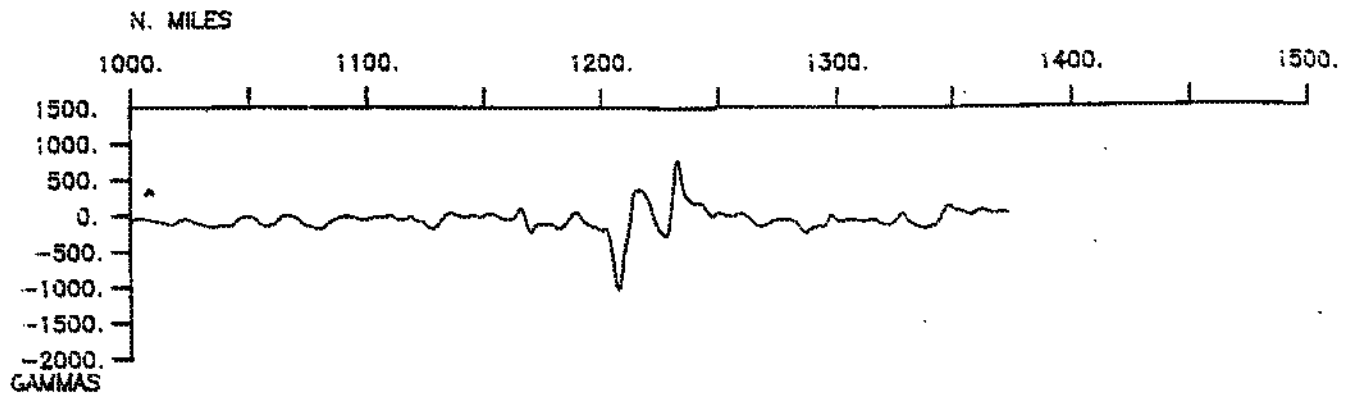


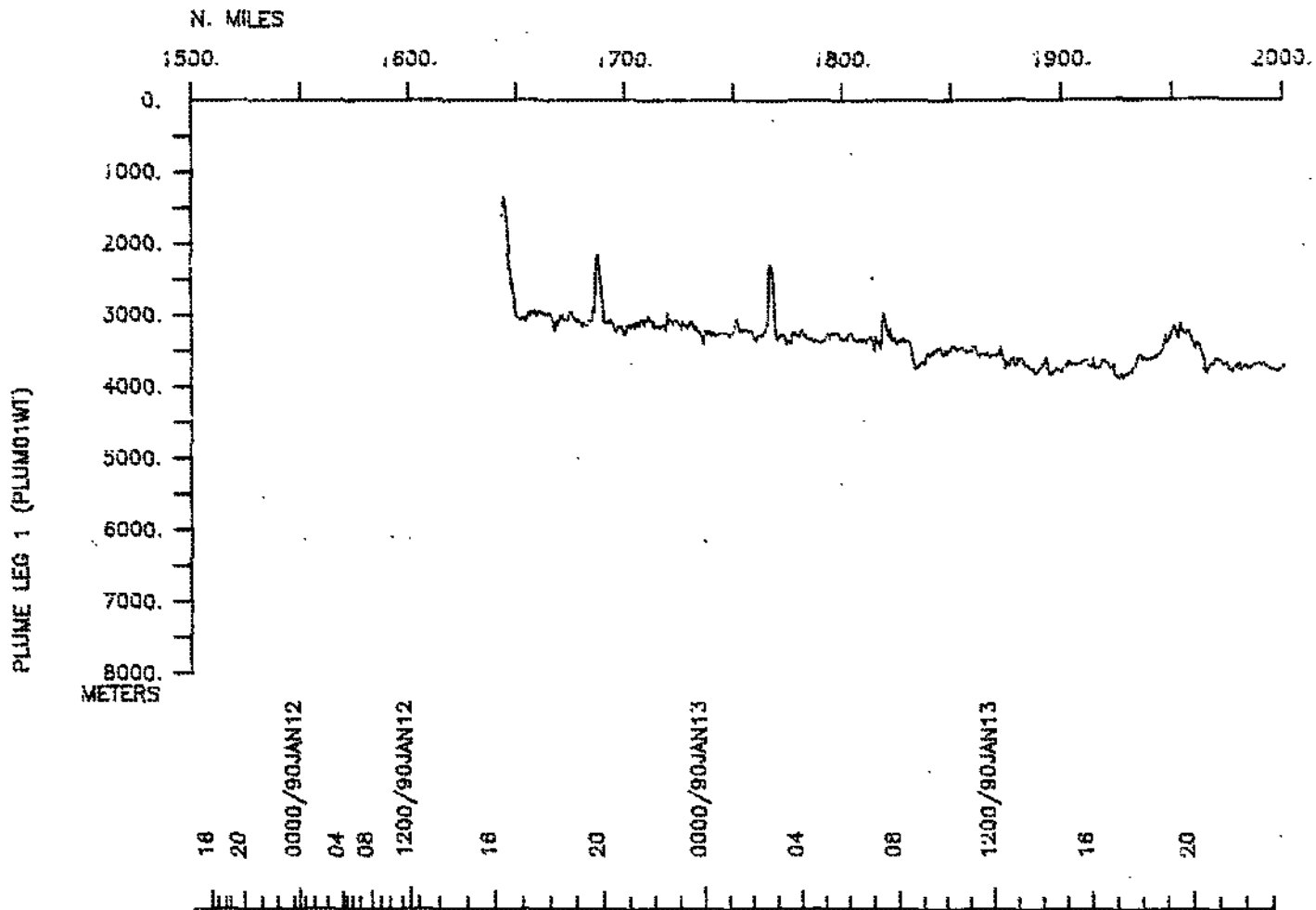
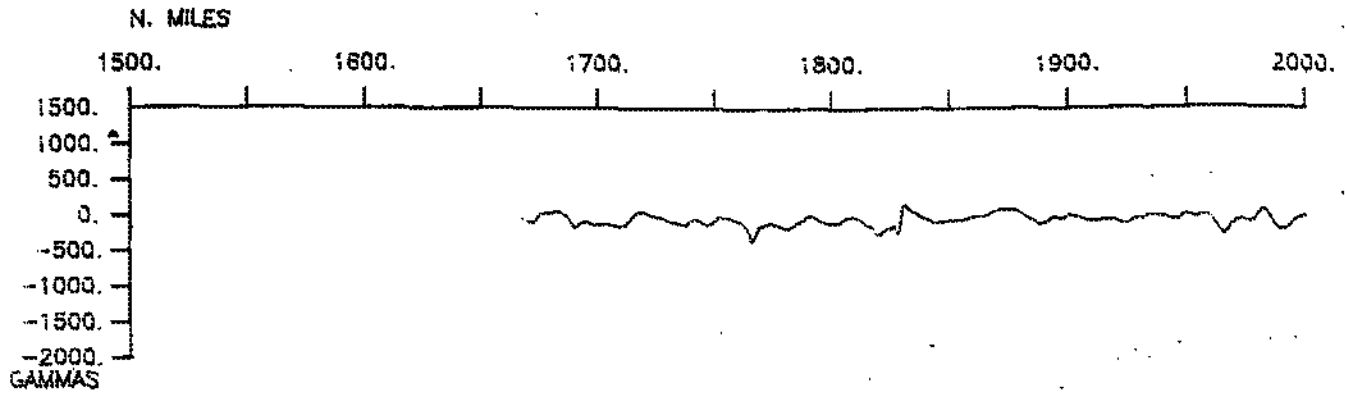
PLUME Expedition Leg 1 (PLUM01WT)
 (Track 2 of 2)

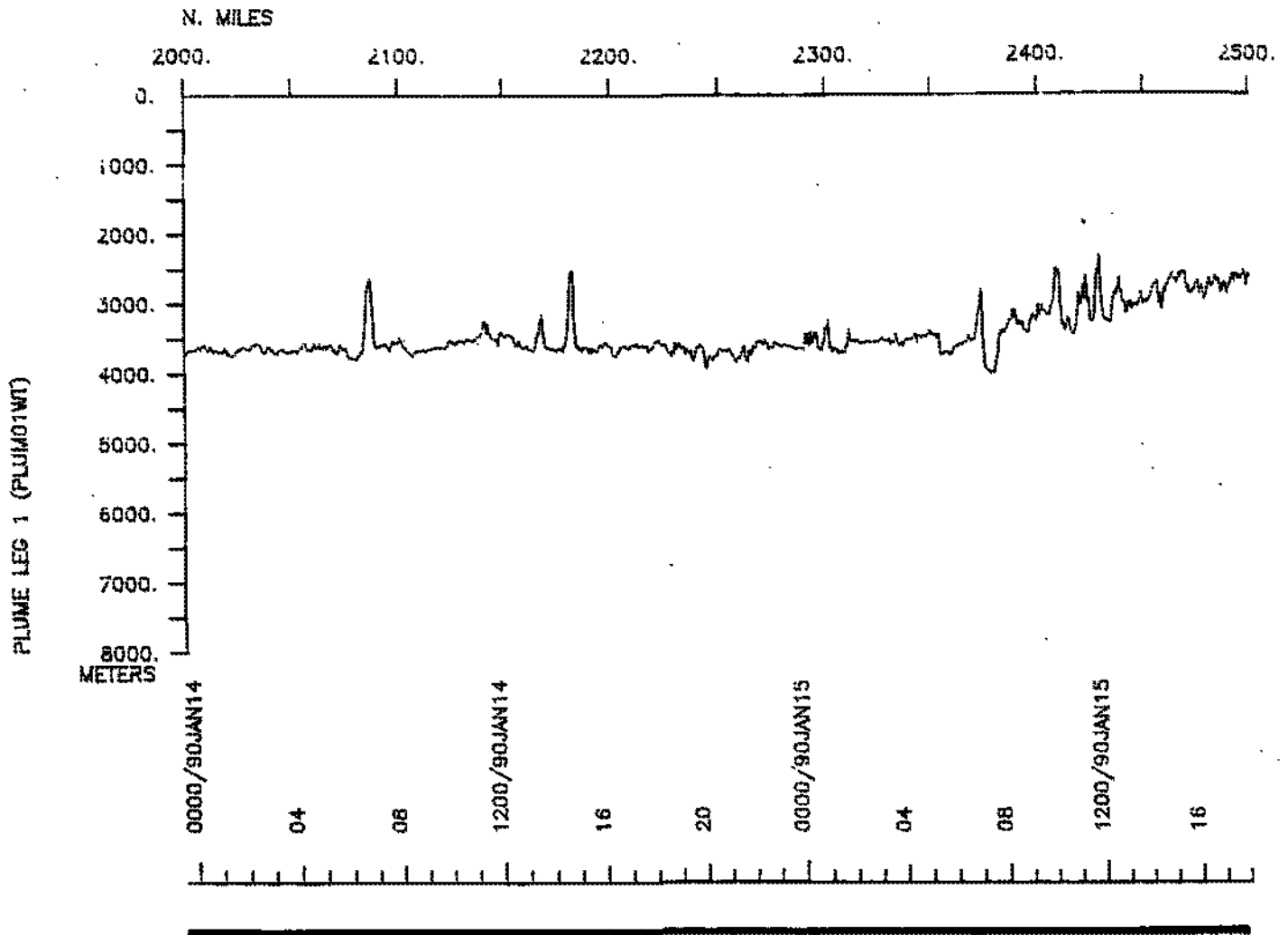
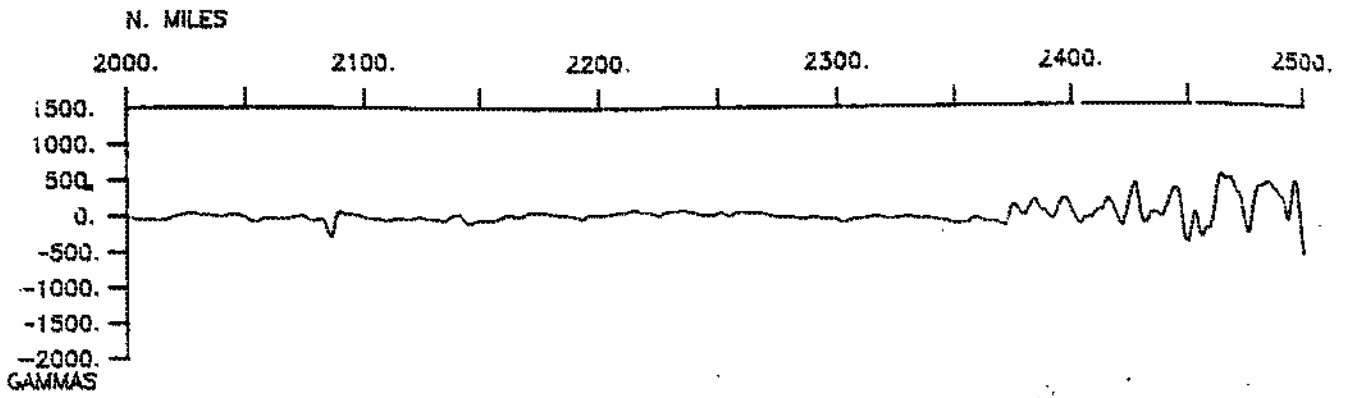


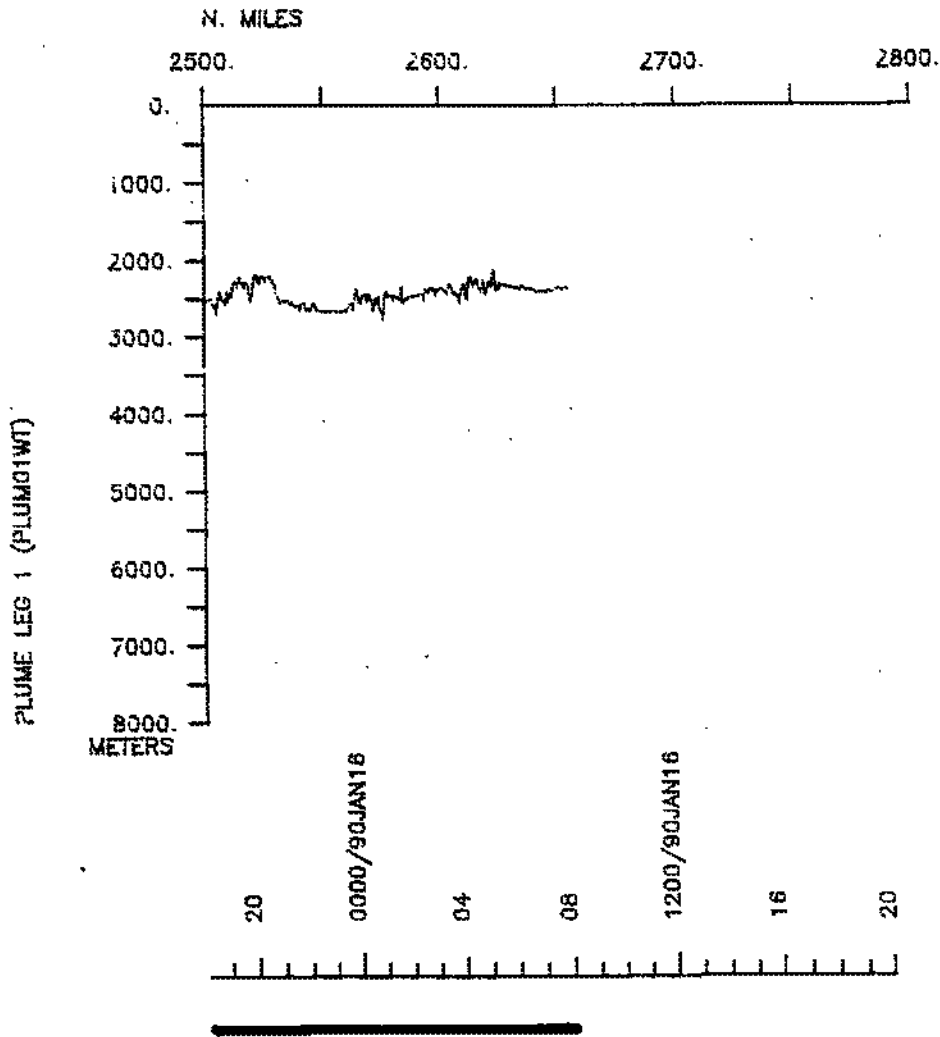
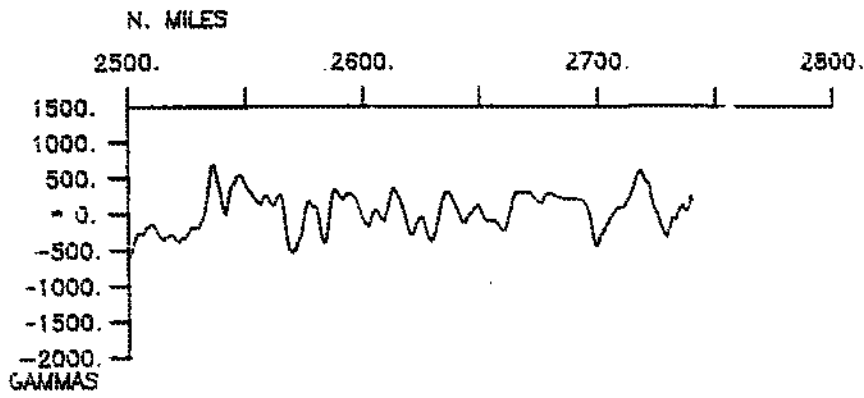
SEABEAM











S.I.O. SAMPLE INDEX

(Issued November 1990)

PLUME EXPEDITION

R/V T. Washington

Leg 1

San Diego, California (5 January 1990)
to
Galapagos Islands (16 January 1990)

Chief Scientist:

Charles Cox (Scripps Institution of Oceanography)

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.# 246

****PORTS****

1600 050190	LGPT B SAN DIEGO, CA.	32-43 N 117-11 W	fPLUM01WT
2200 160190	LGPT E GALAPAGOS, ECUADOR	0-54 S 89-36 W	fPLUM01WT

****PERSONNEL****

****NAME****	****TITLE****	****AFFILIATION****	**CRID**
PECS MLR COX, C.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	PLUM01WT
PEST OSU LORANG, M.	GRAD STUDENT	OREGON STATE UNIV.	PLUM01WT
PERT STS PILLARD, G.	RESIDENT TECH	SCRIPPS INSTITUTION	PLUM01WT
PEST OSU PYLE, D.	GRAD STUDENT	OREGON STATE UNIV.	PLUM01WT
PEST OSU TAIT, J.	GRAD STUDENT	OREGON STATE UNIV.	PLUM01WT
PEST OSU WHITTER, J.	GRAD STUDENT	OREGON STATE UNIV.	PLUM01WT

****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-SHT

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

****LOG BOOKS****

2020 080190	LBUW B UNDERWAY LOG BOOK	GDC 19-572N	109-067W	sPLUM01
1545 160190	LBUW E UNDERWAY LOG BOOK	GDC 0-196S	90-529W	sPLUM01

**** ECHO SOUNDER RECORDS - SEA BEAM MONITOR 12 KRZ ****

1541 080190	MBRM B SEABEAM MONITOR R-01	GDC 20-399N	109-389W	sPLUM01
1510 140190	MBRM E SEABEAM MONITOR R-01	GDC 6-253N	97-091W	sPLUM01
1515 140190	MBRM B SEABEAM MONITOR R-02	GDC 6-246N	97-083W	sPLUM01
1545 160190	MBRM E SEABEAM MONITOR R-02	GDC 0-196S	90-529W	sPLUM01

**** MAGNETICS (EARTH TOTAL FIELD) RECORDS ****

1515 080190	MGRA B MAGNETICS R-01	GDC 20-436N	109-416W	sPLUM01
1546 160190	MGRA E MAGNETICS R-01	GDC 0-198S	90-528W	sPLUM01

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

*** GRAVIMETER - CONTINUOUS COMPUTER LOG ***

1600	050190		GVCB	B GRAVITY DATA	GDC	32-394N	117-135W	sPLUM01WT
2200	160190		GVCB	E GRAVITY DATA	GDC	0-488S	90-177W	sPLUM01WT

*** THERMOGRAPH RECORDS ***

1722	050190		TGRC	B THERMOGRAPHS 1-6	GDC	32-304N	117-115W	sPLUM01WT
2200	160190		TGRC	E THERMOGRAPHS 1-6	GDC	0-488S	90-177W	sPLUM01WT

*** ELECTRIC FIELD FREE VEHICLES ***

1526	100190		EFFV	B ELECTROFIELD FREE	MLR	13-252N	104-125W	sPLUM01WT
2200	160190		EFFV	C VEHICLE "KERMIT"	MLR	0-54 S	89-36 W	fPLUM01WT
1650	100190		EFFV	B ELECTROFIELD FREE	MLR	13-270N	104-051W	sPLUM01WT
2200	160190		EFFV	C VEHICLE "RONDA"	MLR	0-54 S	89-36 W	fPLUM01WT
1810	100190		EFFV	B ELECTROFIELD FREE	MLR	13-283N	103-563W	sPLUM01WT
2200	160190		EFFV	C VEHICLE "OPUS"	MLR	0-54 S	89-36 W	fPLUM01WT
2131	100190		EFFV	B ELECTROFIELD FREE	MLR	12-598N	103-469W	sPLUM01WT
2200	160190		EFFV	C VEHICLE "NODDY"	MLR	0-54 S	89-36 W	fPLUM01WT
2349	100190		EFFV	B ELECTROFIELD FREE	MLR	12-553N	103-597W	sPLUM01WT
2200	160190		EFFV	C VEHICLE "QUAIL"	MLR	0-54 S	89-36 W	fPLUM01WT
0200	110190		EFFV	B ELECTROFIELD FREE	MLR	12-542N	104-120W	sPLUM01WT
2200	160190		EFFV	C VEHICLE "MAX"	MLR	0-54 S	89-36 W	fPLUM01WT

*** END SAMPLE INDEX