

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

TOPO90 EXPEDITION

LEG 1

=====

R/V Thomas Washington

(Issued November 1990)

San Diego, California (12 September 1990)
to
San Diego, California (19 September 1990)

Chief Scientist:

Kenneth Brink (Woods Hole Oceanographic Institute)

Resident Marine Technician - Bob Wilson

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:
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.# 249

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

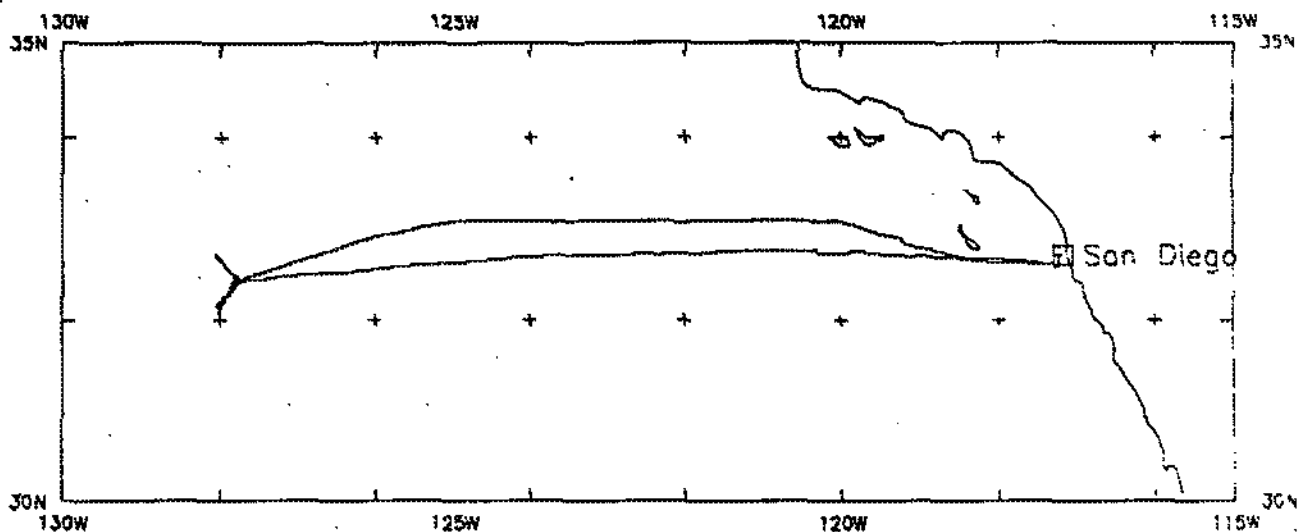
The following forms are available, subject to approval of the cruise leg chief scientist:

- 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



TOPO90 EXPEDITION LEG 1

CHIEF SCIENTIST:

Kenneth Brink (Woods Hole Oceanographic Institute)

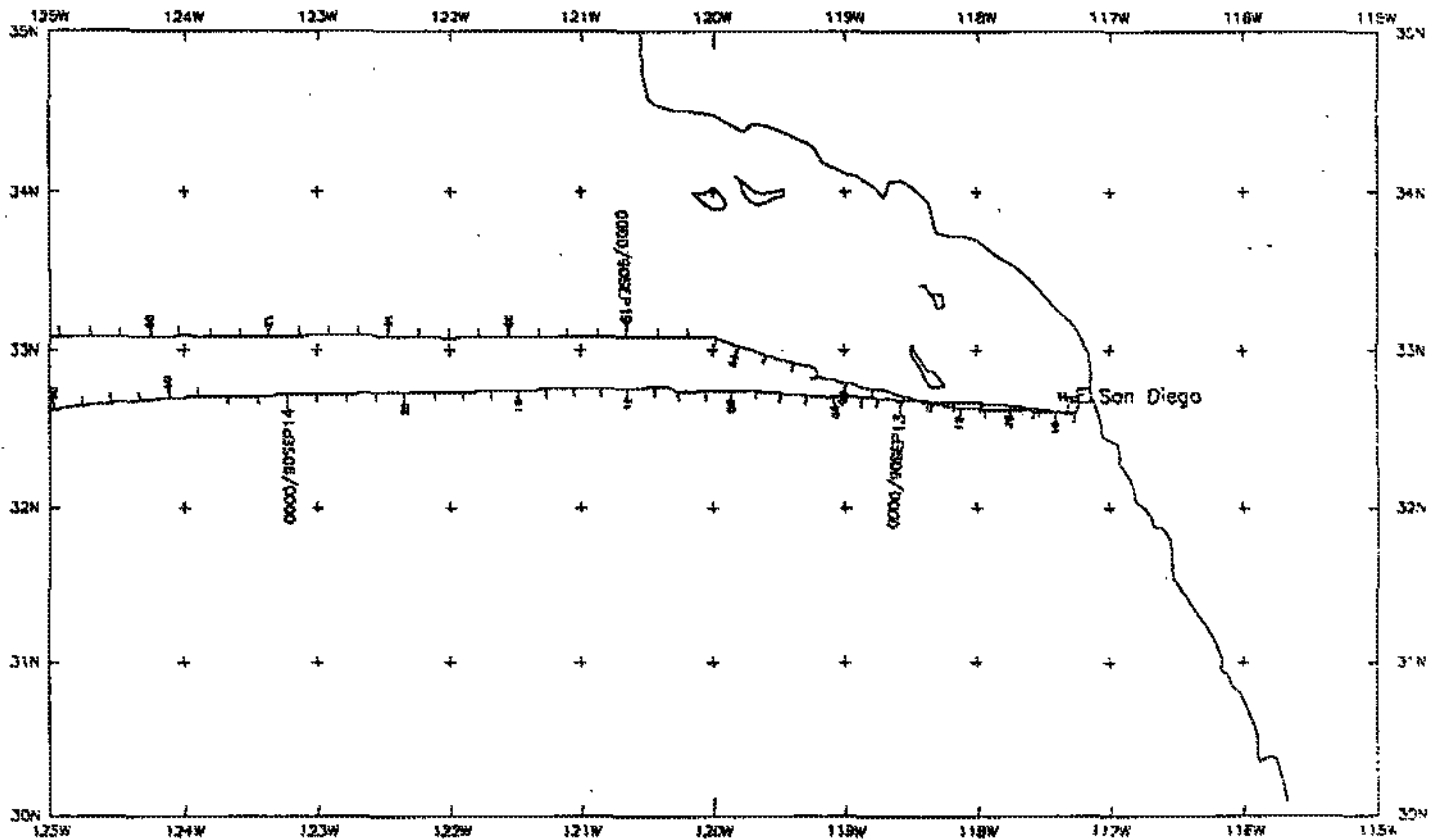
PORTS: San Diego - San Diego, Calif.

DATES: 12 - 19 September 1990

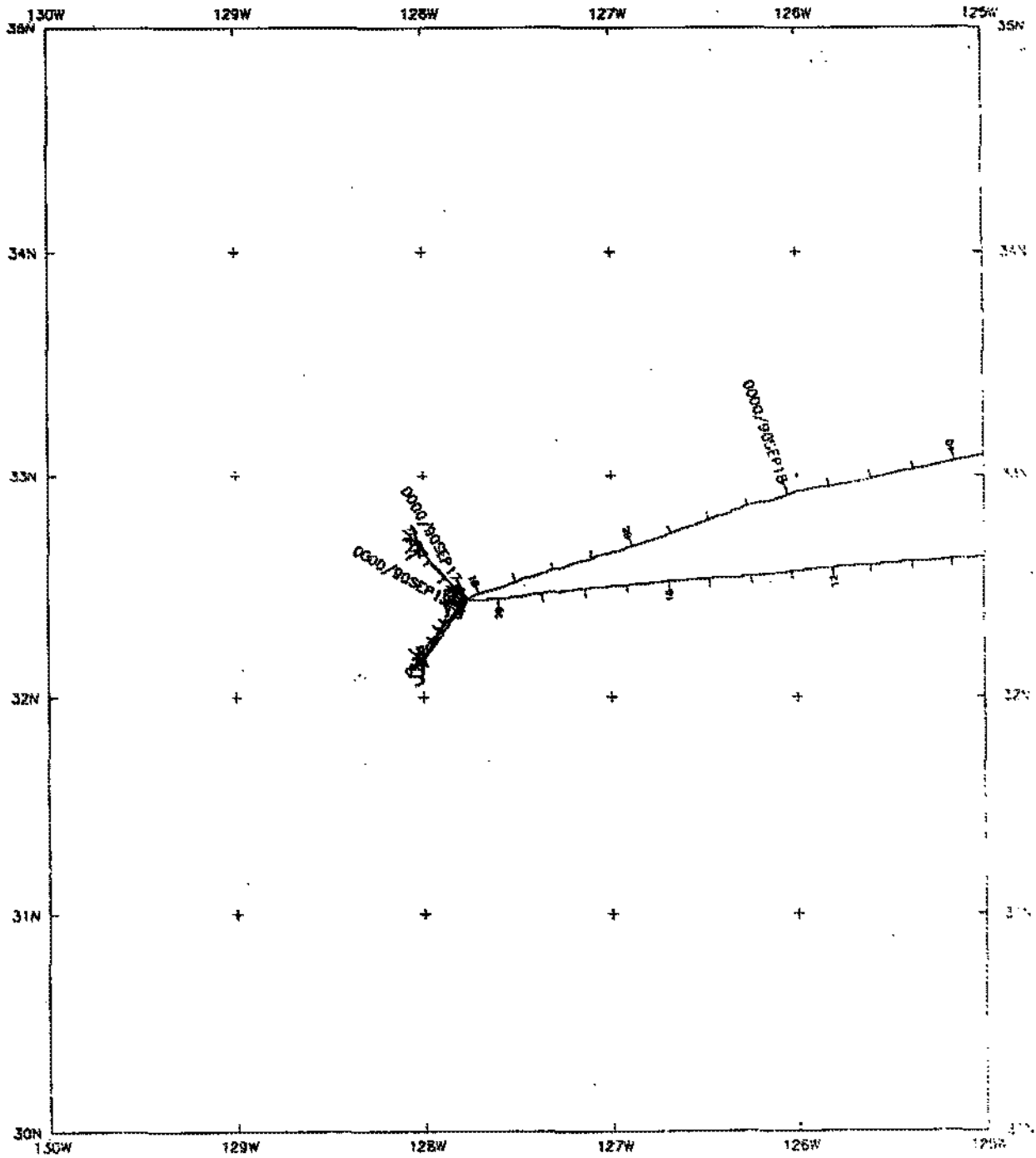
SHIP: R/V T. Washington

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

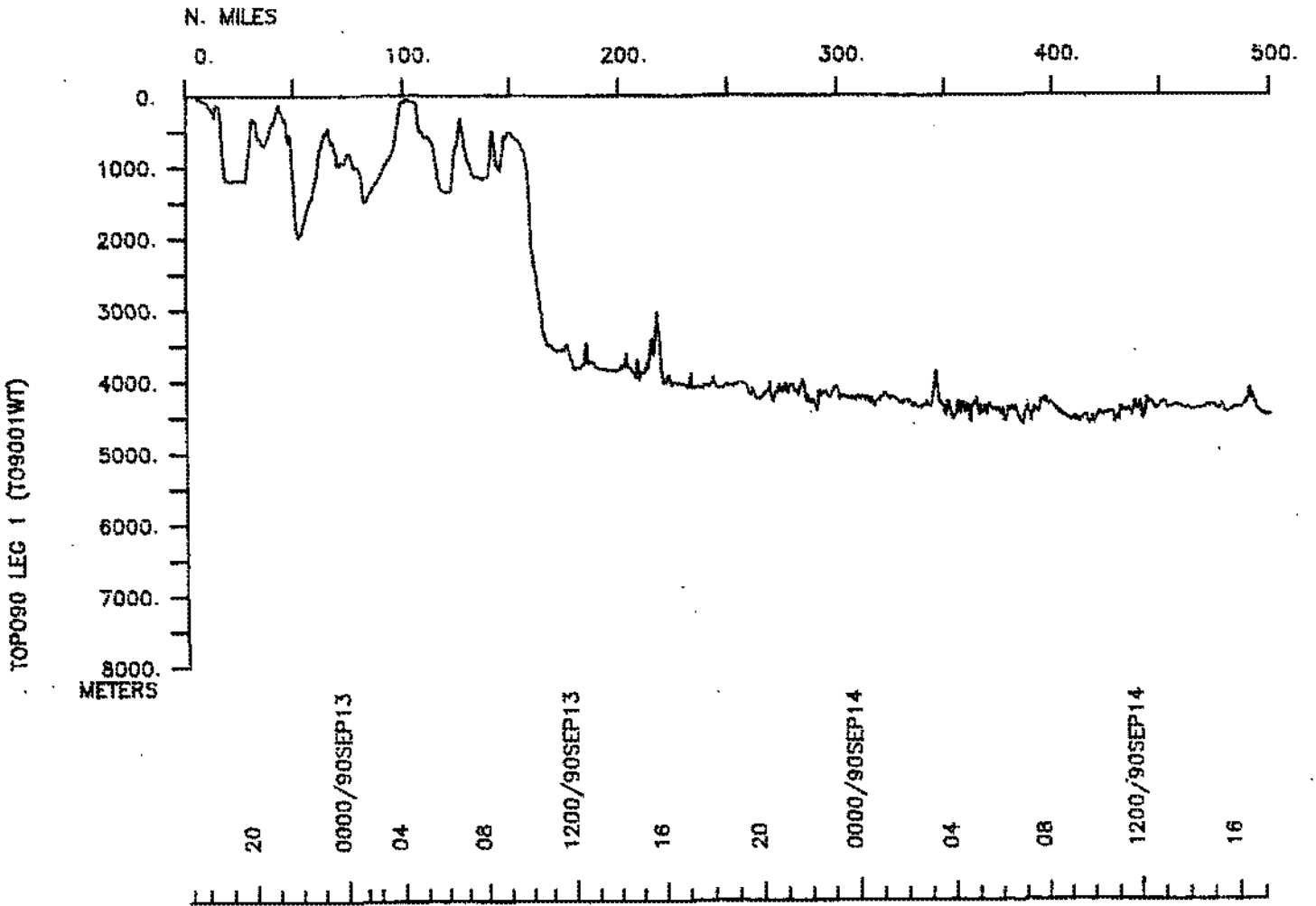
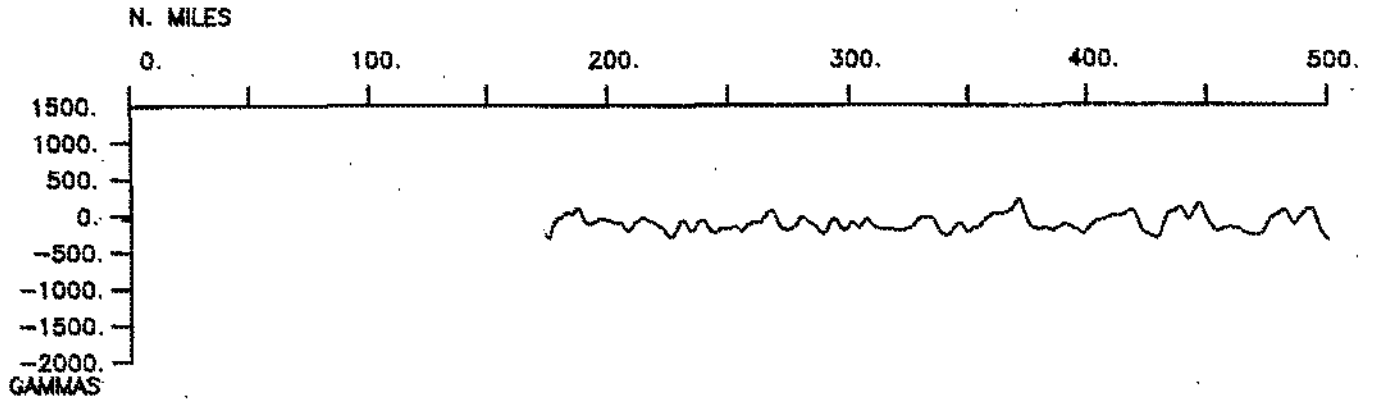
- 1) Cruise - 1315 miles
- 2) Bathymetry - 1100 miles
- 3) Magnetics - 740 miles
- 4) Seismic Reflection - none collected
- 5) Gravity - none collected
- 6) Sea Beam - 1100 miles (Collected in Transit Mode)



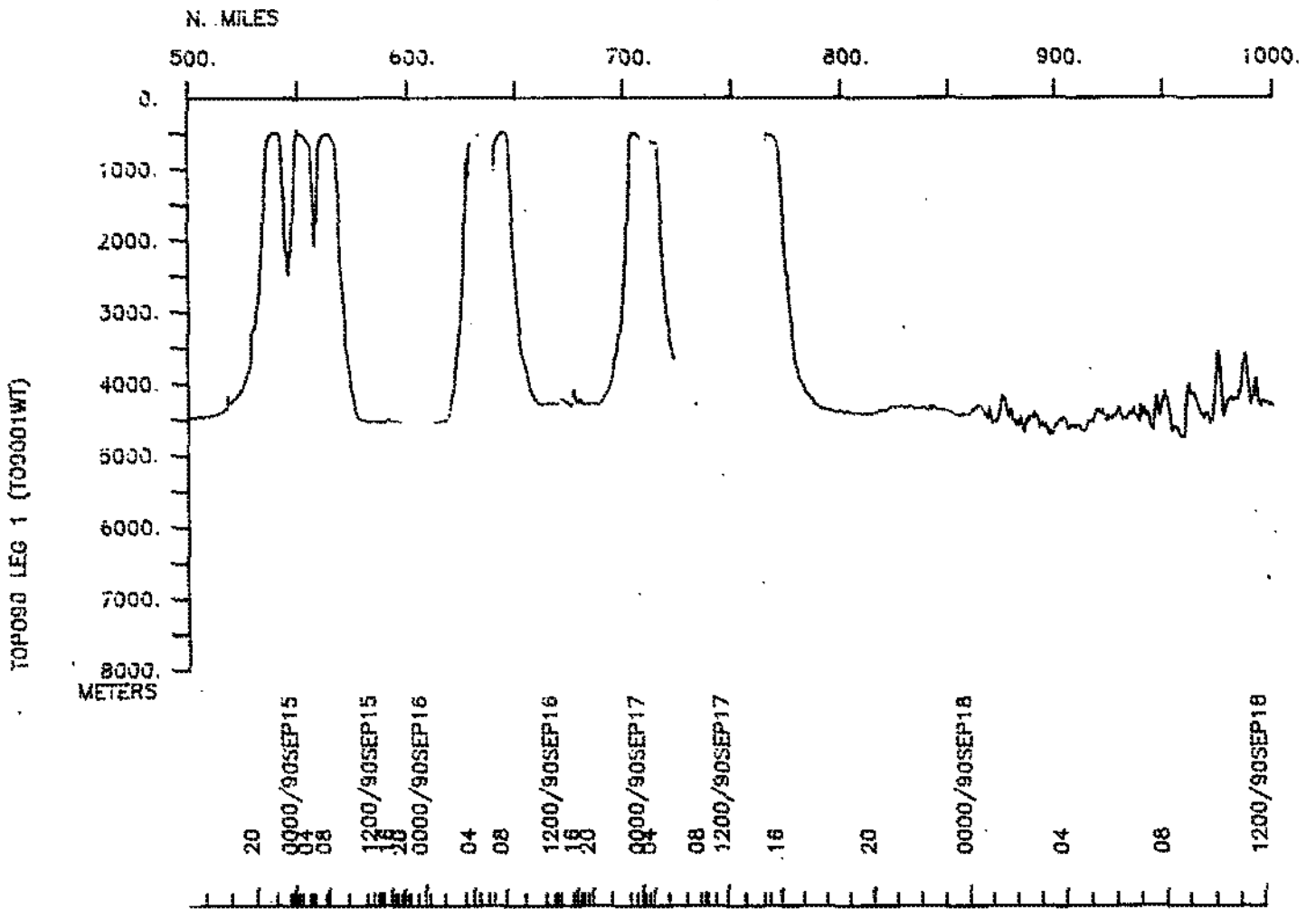
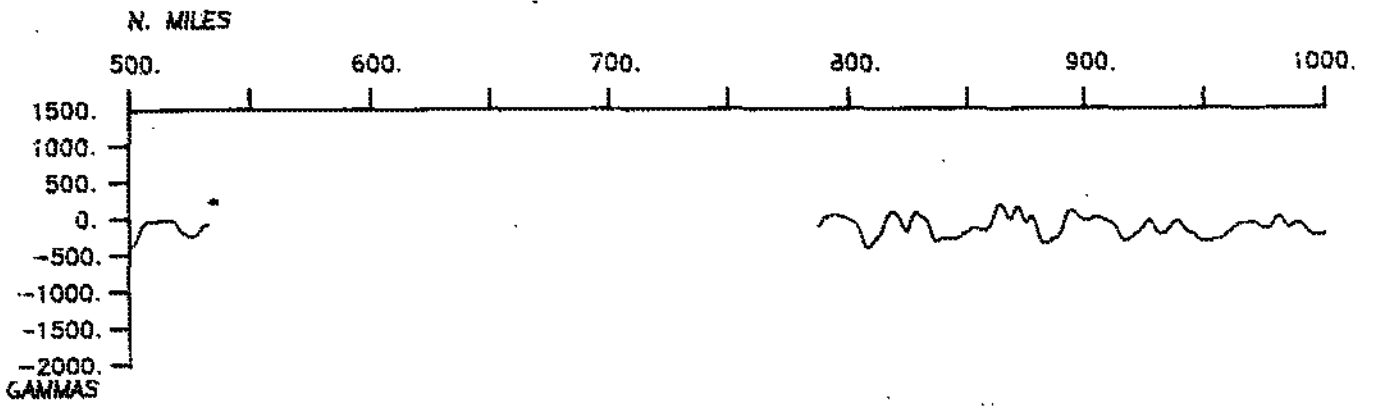
TOPO90 Expedition Leg 1 (T09001WT)
Track 1 of 2

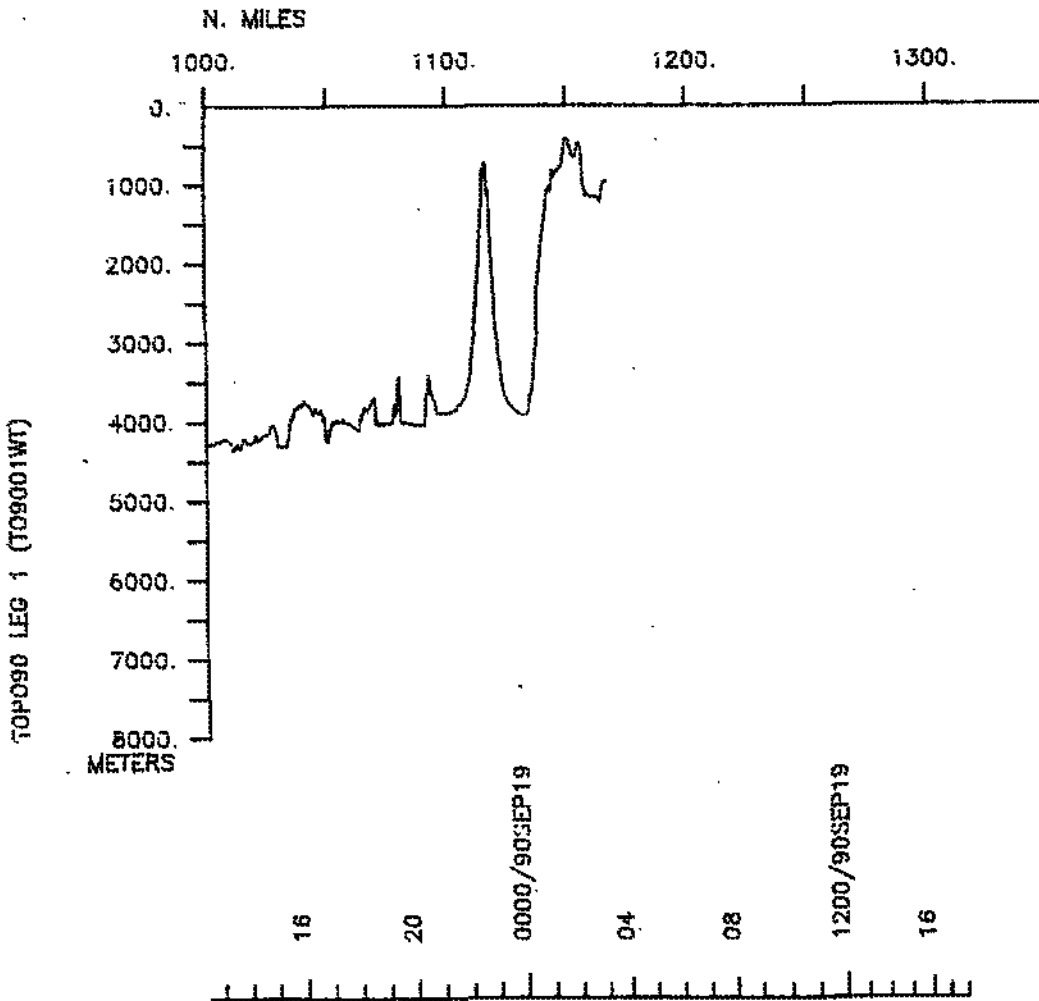
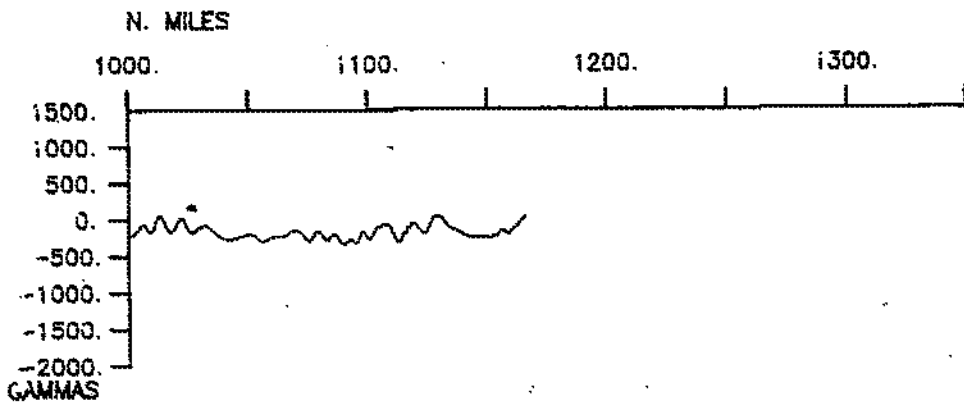


TO9090 Expedition Leg 1 (TO9001WT)
 Track 2 of 2



SEABEAM





S.I.O. SAMPLE INDEX

(Issued November 1990)

TOPO90 EXPEDITION

Leg 1

R/V T. Washington

San Diego, California (12 September 1990)
to
San Diego, California (19 September 1990)

Chief Scientist:

Kenneth Brink (Woods Hole Oceanographic Institute)

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.# 219

****PORTS****

1633 120990	LGPT B SAN DIEGO, CA	32-43 N 117-11 W	fT09001WT
1710 190990	LGPT E SAN DIEGO, CA	32-43 N 117-11 W	fT09001WT

****PERSONNEL****

****NAME****	****TITLE****	****AFFILIATION****	**CRID**
PECS WHO BRINK, K.	CHIEF SCIENTIST	WOODS HOLE	T09001WT
PERT STS WILSON, R.	RESIDENT TECH	SCRIPPS INSTITUTION	T09001WT
PECT STS BOUCHARD, G.	COMPUTER TECH	SCRIPPS INSTITUTION	T09001WT
PESP WHO CLAY, P.	RESEARCH SPECLST	WOODS HOLE	T09001WT
PESP WHO O'MALLEY, P.	RESEARCH ASST.	WOODS HOLE	T09001WT
PESP WHO DENTON, E.	RESEARCH ASST.	WOODS HOLE	T09001WT
PESP WHO SMITH S.	RESEARCH ASST.	WOODS HOLE	T09001WT
PESP WHO WORRILOW, S.	RESEARCH ASST.	WOODS HOLE	T09001WT
PESP OSU ROOT, D.	RESEARCH ASSOC.	OREGON STATE UNIV.	T09001WT
PESP OSU SIMPKINS, J.	RESEARCH ASSOC.	OREGON STATE UNIV.	T09001WT
PESP WHO MULLINEAUX, L.	ASST. SCIENTIST	WOODS HOLE	T09001WT

****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. 42752

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

1828 120990	MBMR B SEABEAM MONITOR R-01	GDC 32-369N 117-248W	sT09001WT
1611 140990	MBMR E SEABEAM MONITOR R-01	GDC 32-309N 126-439W	sT09001WT
1622 140990	MBMR B SEABEAM MONITOR R-02	GDC 32-307N 126-464W	sT09001WT
1657 170990	MBMR E SEABEAM MONITOR R-02	GDC 32-307N 127-310W	sT09001WT
1703 170990	MBMR B SEABEAM MONITOR R-03	GDC 32-310N 127-298W	sT09001WT
0317 190990	MBMR E SEABEAM MONITOR R-03	GDC 33-040N 119-571W	sT09001WT

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

*** MAGNETIC (EARTH TOTAL FIELD) RECORDS ***

1118	130990			MGRA	B MAGNETICS R-01	GDC	32-457N	120-298W	sT09001WT
1630	140990			MGRA	E MAGNETICS R-01	GDC	32-306N	126-482W	sT09001WT
1634	140990			MGRA	B MAGNETICS R-02	GDC	32-305N	126-491W	sT09001WT
0258	190990			MGRA	E MAGNETICS R-02	GDC	33-047N	119-589W	sT09001WT

*** CURRENT METERS ***

0208	150990			BUAB	B 3 CURRENT METERS	WHO	32-266N	127-460W	sT09001WT
1710	190990			BUAB	C TELEMETERING	WHO	32-43 N	117-11 W	fT09001WT
0402	150990			BUXX	B DOPPLER MOORING 644M	OSU	32-282N	127-485W	sT09001WT
1710	190990			BUXX	C DOPPLER MOORING 644M	OSU	32-43 N	117-11 W	fT09001WT
2013	150990			CMAB	B CURRENT METERS 4520M	OSU	32-422N	128-027W	sT09001WT
1710	190990			CMAB	C CURRENT METERS 4520M	OSU	32-43 N	117-11 W	fT09001WT

*** END SAMPLE INDEX