INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

TOPO90 EXPEDITION

LEG 2

R/V Thomas Washington

(Issued November 1990)

San Diego, California (23 September 1990)
to
San Diego, California (1 October 1990)

Chief Scientist:

Charles Eriksen (University of Washington)

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

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&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.)

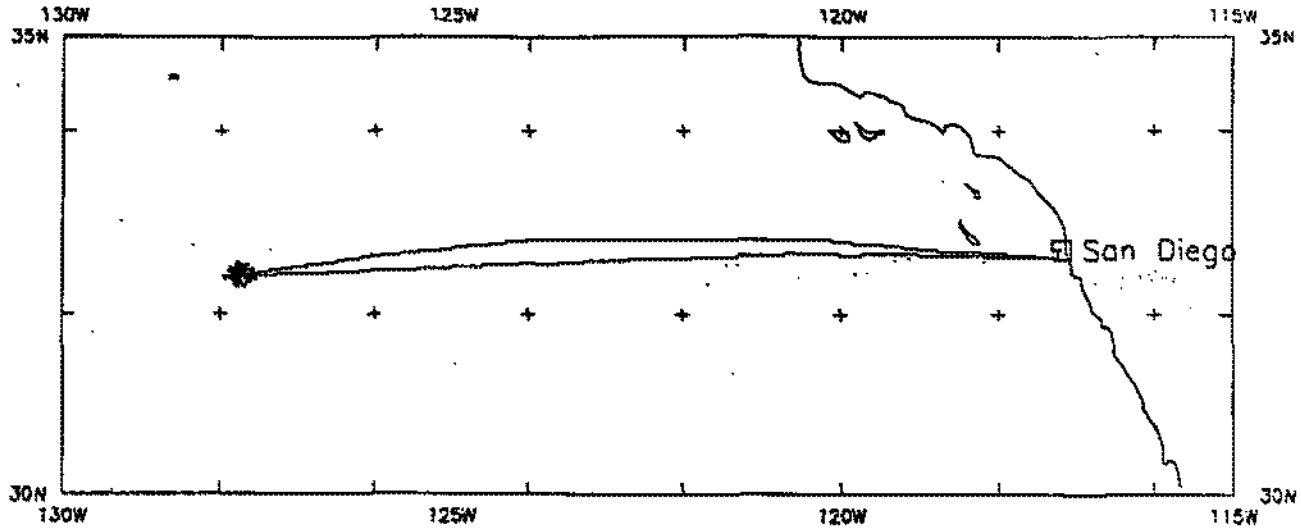
4) Archive contour plots - 16"/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center; additional copies may be generated from plot files stored on tape.

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.

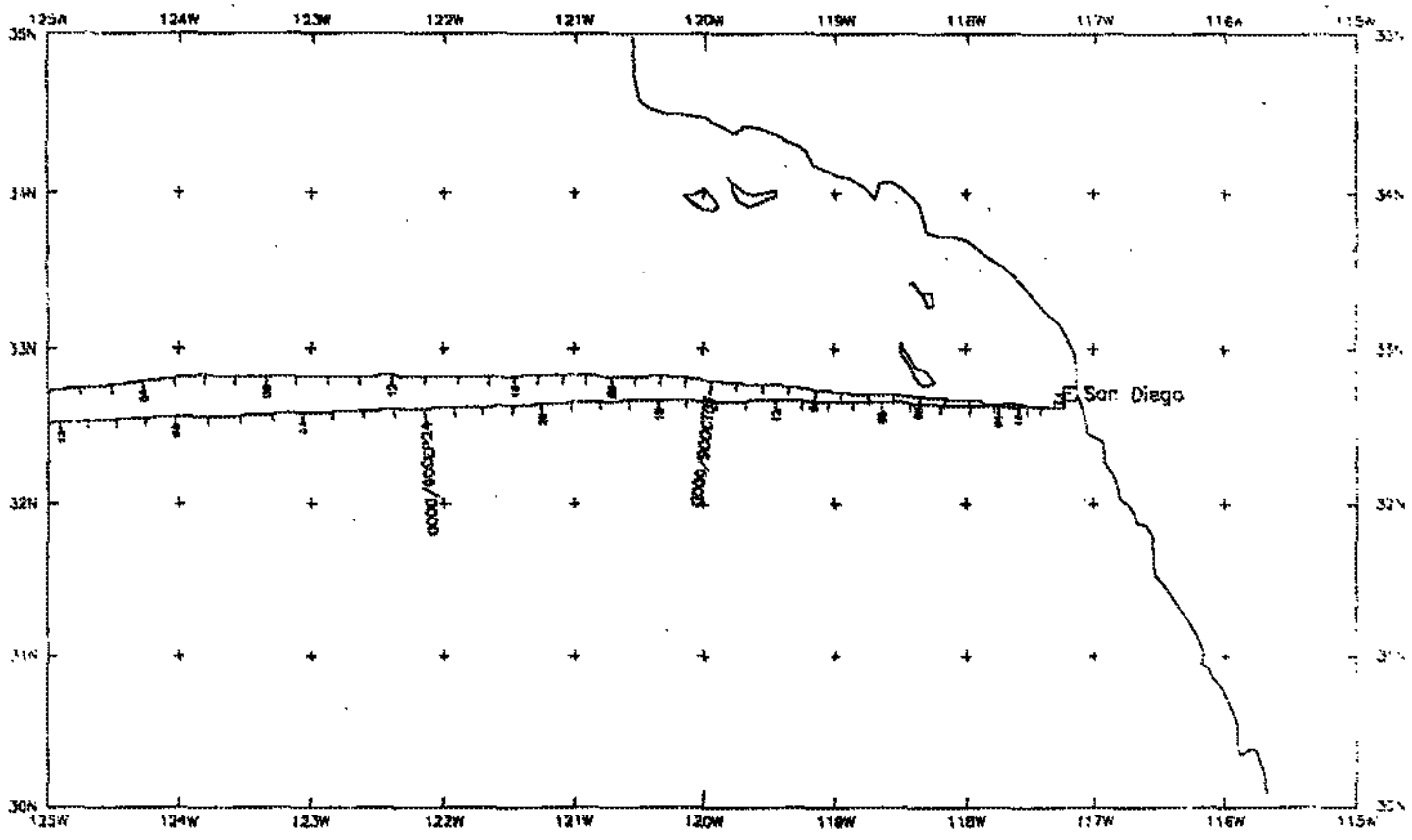
April 1989



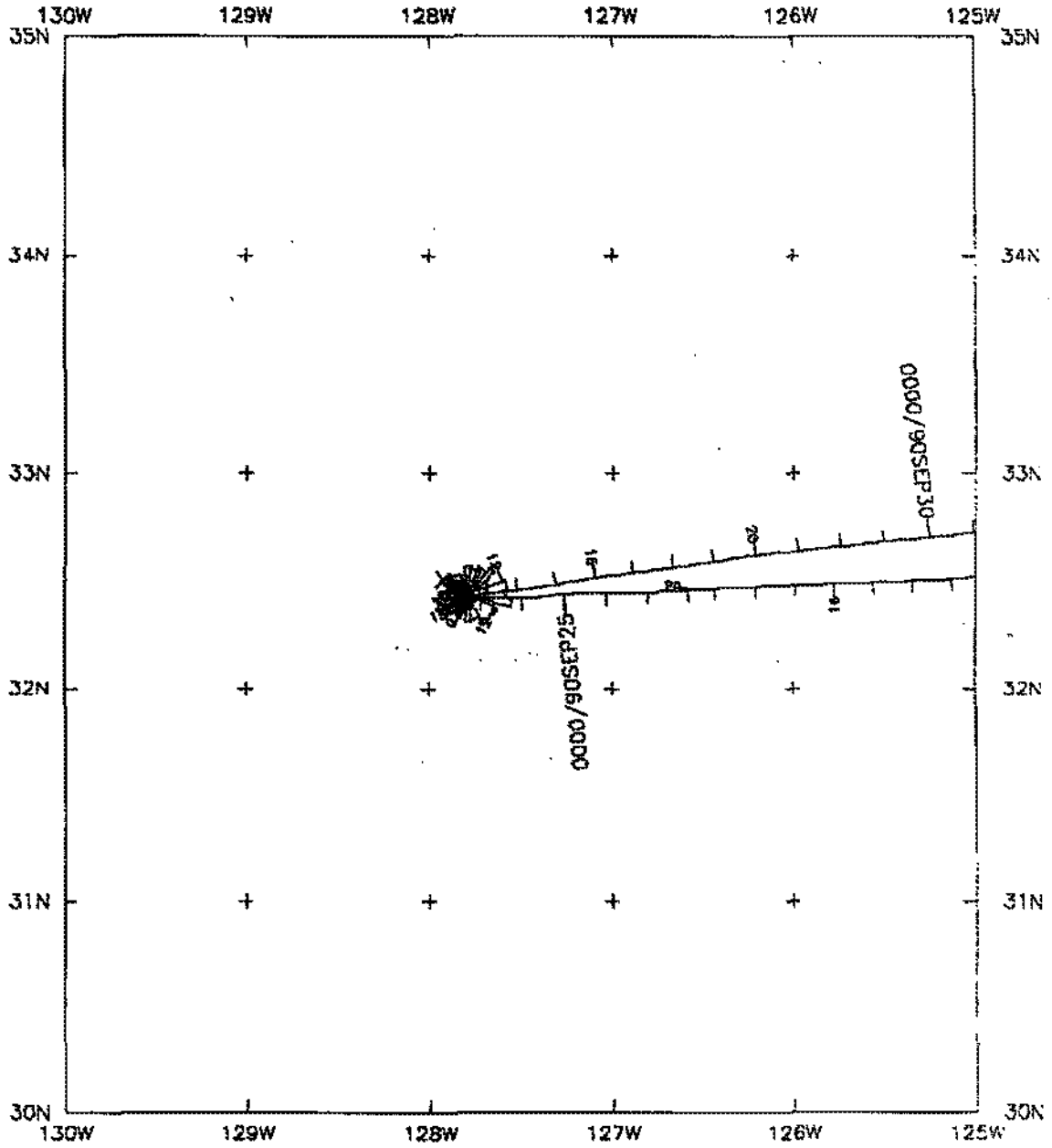
TOPO90 EXPEDITION LEG 2

CHIEF SCIENTIST:
Charles Eriksen (University of Washington)
PORTS: San Diego - San Diego, Calif.
DATES: 23 September - 1 October 1990
SHIP: R/V T. Washington

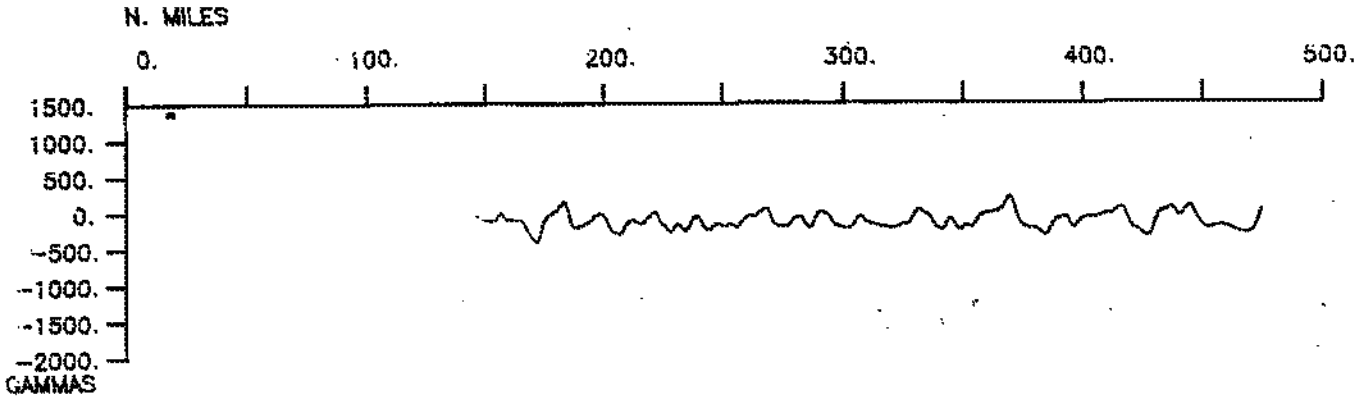
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED
1) Cruise - 1397 miles
2) Bathymetry - 1302 miles
3) Magnetics - 1102 miles
4) Seismic Reflection - none collected
5) Gravity - none collected
6) Sea Beam - 1302 miles (Collected in Transit Mode)

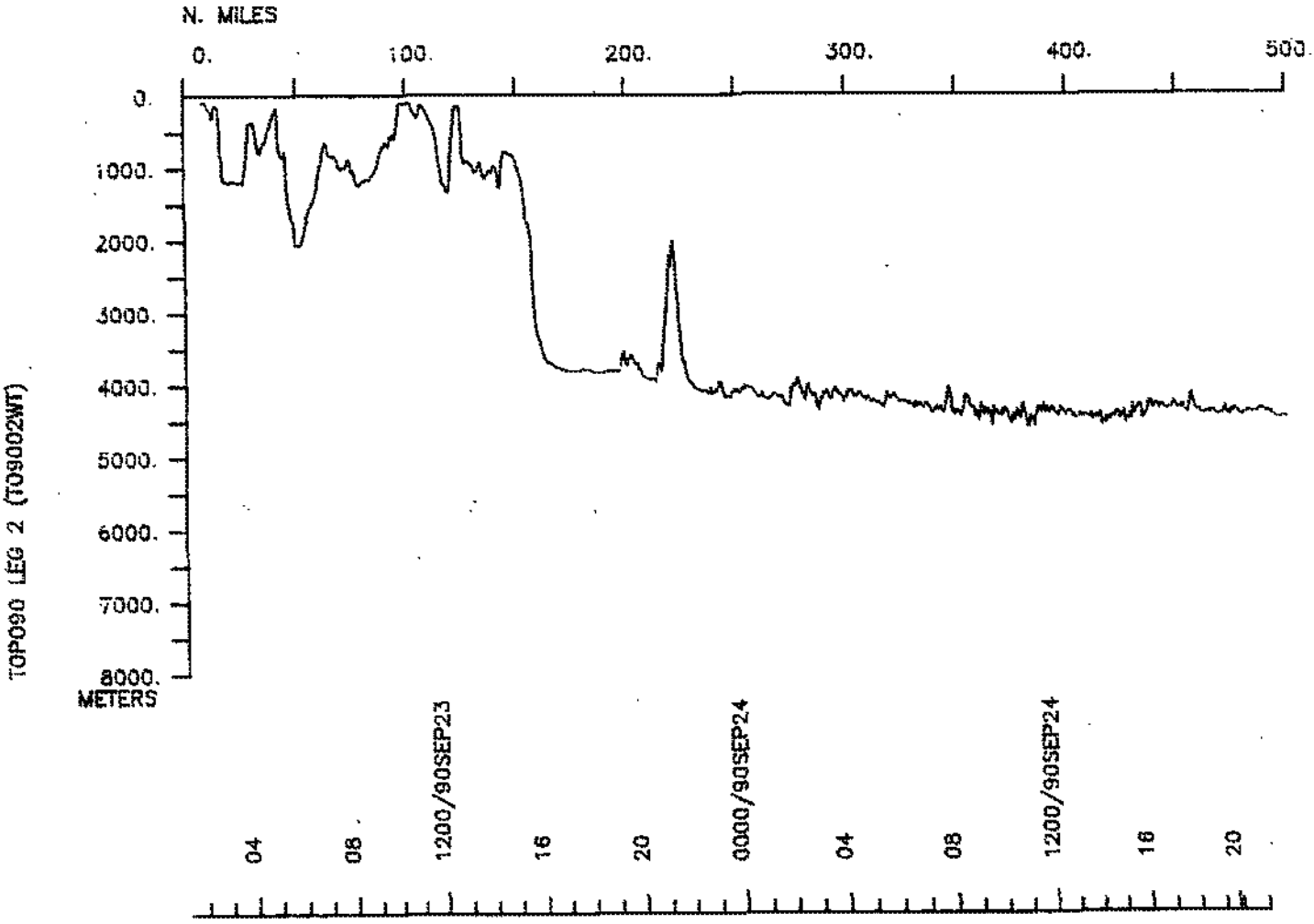


TOPO90 Expedition Leg 2 (T09002WT)
Track 1 of 2



TOPO90 Expedition Leg 2 (TO9002WT)
Track 1 of 2


N. MILES
0.
100.
200.
300.
400.
500.
1500.
1000.
500.
0.
-500.
-1000.
-1500.
-2000.
GAMMAS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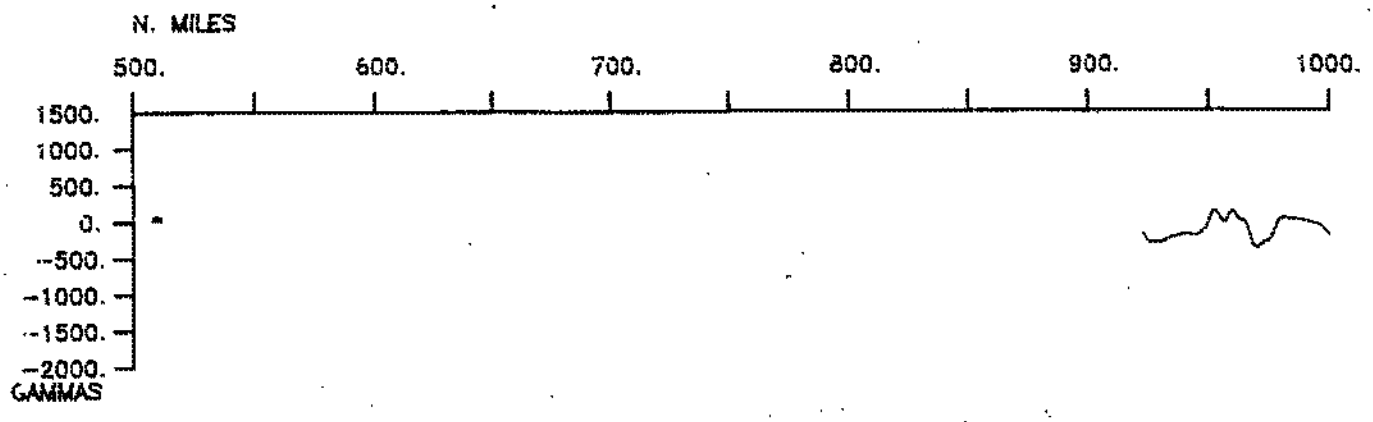
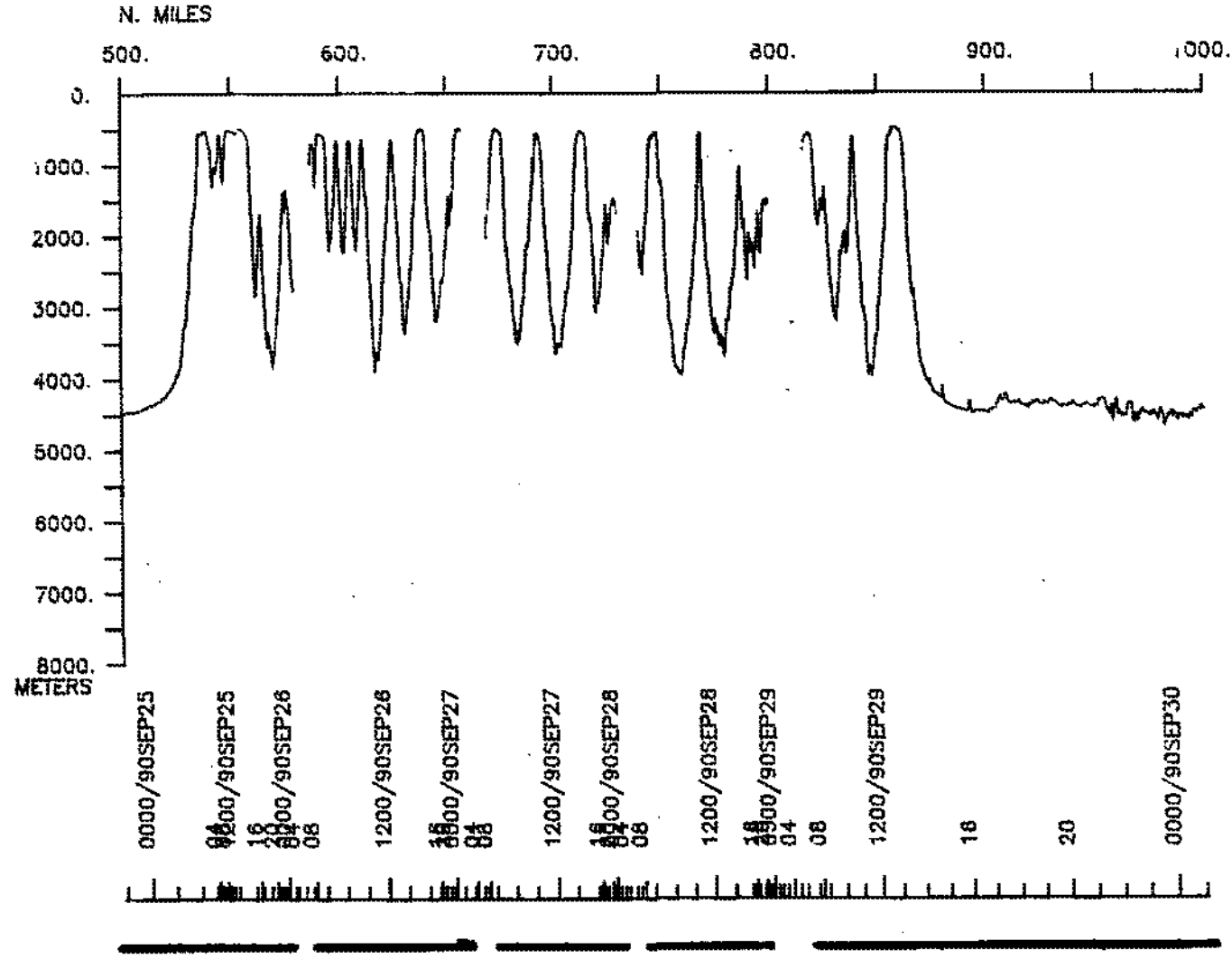
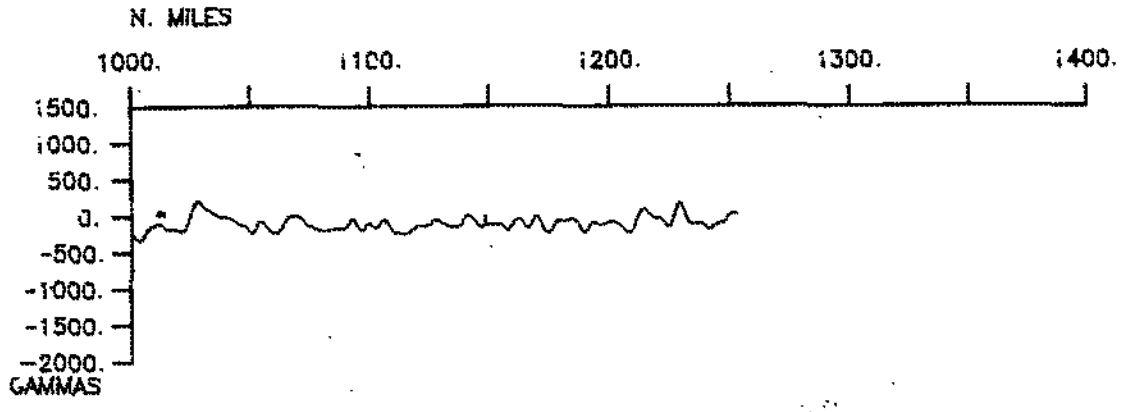
100.
200.
300.
400.
500.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
TOP090 LEG 2 (TO90002WT)
04
08
1200/90SEP23
16
20
0000/90SEP24
04
08
1200/90SEP24
16
20

SEABEAM





JOP090 LEG 2 (T09002WT)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1000.
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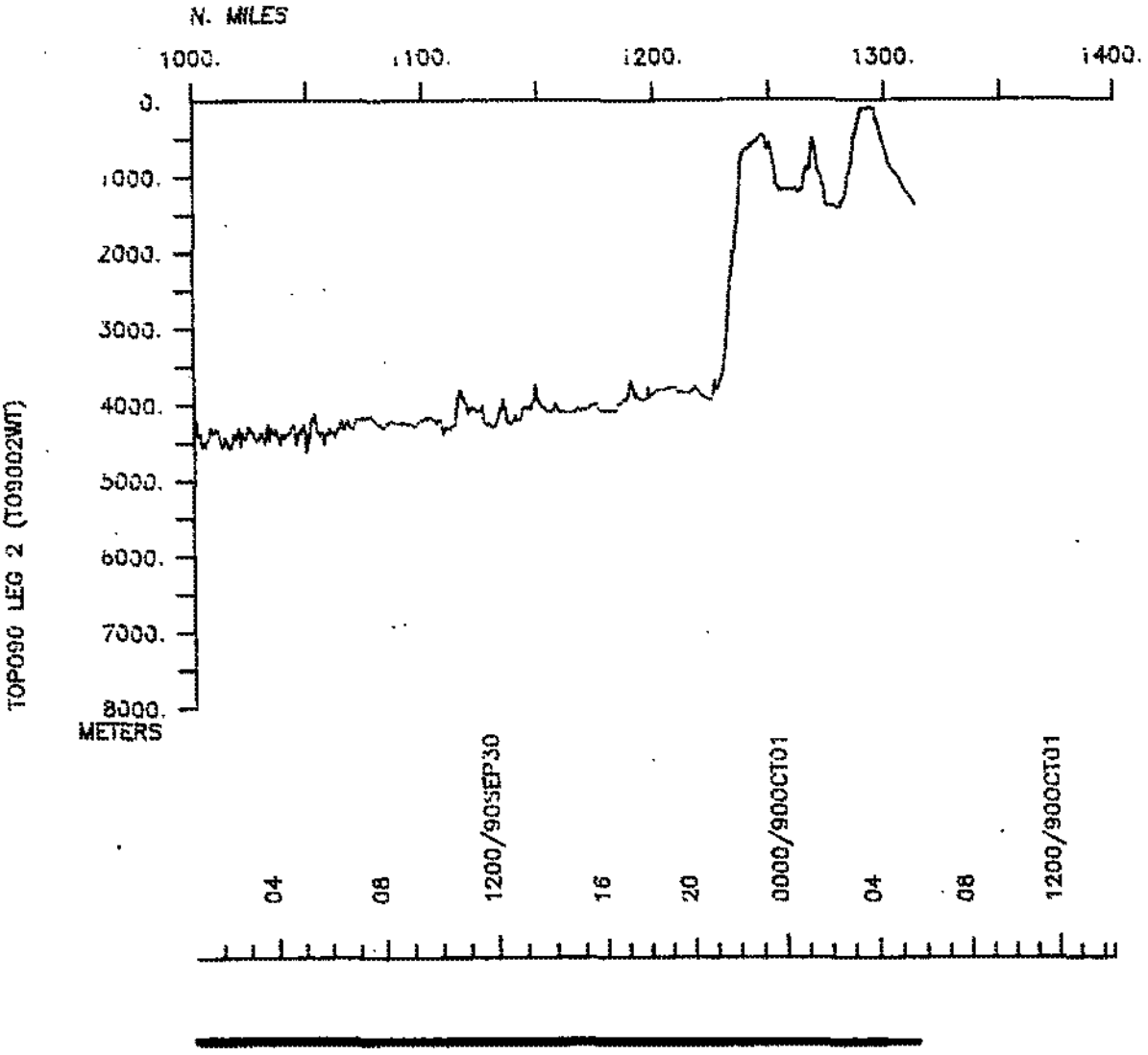
1200.
1300.
1400.
1500.
1000.
500.
0.
-500.
-1000.
-1500.
-2000.
GAMMAS


N. MILES
1000.
1100.
1200.
1300.
1400.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
TOP090 LEG 2 (T09002WT)
04
08
1200/90SEP30
16
20
0000/90OCT01
04
08
1200/90OCT01

S.I.O. SAMPLE INDEX

(Issued November 1990)

TOPO90 EXPEDITION

Leg 2

R/V T. Washington

San Diego, California (23 September 1990)
to
San Diego, California (1 October 1990)

Chief Scientist:

Charles Eriksen (University of Washington)

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.# 249

#***PORTS***

0050 230990 LGPT B SAN DIEGO, CA 32-43 N 117-11 W fTO9002WT
1430 011090 LGPT E SAN DIEGO, CA 32-43 N 117-11 W fTO9002WT

#***PERSONNEL***

	NAME	***TITLE***	***AFFILIATION***	**CRID**
PECS UWA	ERIKSEN, C.	CHIEF SCIENTIST	UNIV.OF WASHINGTON	TO9002WT
PERT STS	WILSON, R.	RESIDENT TECH	SCRIPPS INSTITUTION	TO9002WT
PECT STS	BOUCHARD, G.	COMPUTER TECH	SCRIPPS INSTITUTION	TO9002WT
PESP UWA	BOGUE, N.	RESEARCH ENGINEER	UNIV.OF WASHINGTON	TO9002WT
PESP UWA	HARRIS, C.	RESEARCH SCIENT.	UNIV.OF WASHINGTON	TO9002WT
PEST UWA	CODIGA, D.	GRADUATE STUDENT	UNIV.OF WASHINGTON	TO9002WT
PEST UWA	LEE, C.	GRADUATE STUDENT	UNIV.OF WASHINGTON	TO9002WT
PESP WHO	GARLAND, E.	RESEARCH ASST.	WOODS HOLE	TO9002WT
PESP SIX	REID, R.	ENGINEER	SCRIPPS NON-EMPLOYEE	TO9002WT
PESP SIX	DONNELLEY, P.	OCEANOGRAPHER	SCRIPPS NON-EMPLOYEE	TO9002WT

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

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

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

0252	230990		MBMR	B SEABEAM MONITOR R-01	GDC	32-377N	117-297W	sTO9002WT
1410	230990		MBMR	E SEABEAM MONITOR R-01	GDC	32-395N	119-564W	sTO9002WT
1436	230990		MBMR	B SEABEAM MONITOR R-02	GDC	32-398N	120-021W	sTO9002WT
1508	250990		MBMR	E SEABEAM MONITOR R-02	GDC	32-299N	127-519W	sTO9002WT
1513	250990		MBMR	B SEABEAM MONITOR R-03	GDC	32-300N	127-521W	sTO9002WT
1258	280990		MBMR	E SEABEAM MONITOR R-03	GDC	32-193N	127-435W	sTO9002WT
1304	280990		MBMR	B SEABEAM MONITOR R-04	GDC	32-200N	127-437W	sTO9002WT
1747	300990		MBMR	E SEABEAM MONITOR R-04	GDC	32-495N	121-076W	sTO9002WT
1755	300990		MBMR	B SEABEAM MONITOR R-05	GDC	32-495N	121-061W	sTO9002WT
2038	300990		MBMR	E SEABEAM MONITOR R-05	GDC	32-493N	120-355W	sTO9002WT
2040	300990		MBMR	B SEABEAM MONITOR R-06	GDC	32-493N	120-351W	sTO9002WT

#GMT DDMMYY LOC T #TIME DATE TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
#*** MAGNETICS (EARTH TOTAL FIELD) RECORDS ***						
1432 230990	MGRA B	MAGNETICS R-01	GDC	32-397N	120-013W	sTO9002WT
2342 300990	MGRA E	MAGNETICS R-01	GDC	32-479N	119-598W	sTO9002WT
#*** CURRENT METERS ***						
0614 250990	CMAB B	MOORING R3 588M	UWA	32-246N	127-474W	sTO9002WT
1430 011090	CMAB C	CURRENT METERS	UWA	32-43 N	117-11 W	fTO9002WT
0025 260990	CMAB B	MOORING F2 1496M	UWA	32-285N	127-504W	sTO9002WT
1430 011090	CMAB C	CURRENT METERS	UWA	32-43 N	117-11 W	fTO9002WT
2338 260990	CMAB B	MOORING F3 1405M	UWA	32-247N	127-498W	sTO0902WT
0031 280990	CMAB B	MOORING F4 1462M	UWA	32-246N	127-499W	sTO9002WT
1430 011090	CMAB C	CURRENT METERS	UWA	32-43 N	117-11 W	fTO9002WT
2216 280990	CMAB B	MOORING F5 1495M	UWA	32-247N	127-500W	sTO9002WT
1430 011090	CMAB C	CURRENT METERS	UWA	32-43 N	117-11 W	fTO9002WT
#*** EXPENDABLE BATHYTHERMOGRAPHS ***						
1410 230990	BTXP	xbt 0001 Probe T-4	GDC	32-395N	119-564W	sTO9002WT
1458 240990	BTXP	xbt 0002 Probe T-4	GDC	32-293N	125-329W	sTO9002WT
1926 290990	BTXP	xbt 0003 Probe T-4	GDC	32-361N	126-200W	sTO9002WT
1603 300990	BTXP	xbt 0004 Probe T-4	GDC	32-492N	121-269W	sTO9002WT
#***	END SAMPLE INDEX					