REPORT AND INDEX OF

UNDERWAY MARINE GEOPHYSICAL DATA

PHOENIX EXPEDITION

LEG 1

R/V Melville

(Issued March 1993)

San Diego, California (7 July 1992)
to
Acapulco, Mexico (16 July 1992)

Chief Scientist:

Christian de Moustier (Scripps Institution)

Resident Marine Technician - Seth Mogk

Computer Technicians - Ron Moe and Jim Charters

Sea Beam/Underway Processor - Stuart M. Smith

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 OCE91-02183
and University of California General Funds

GDC Cruise I.D.# 260

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 with seismic reflection data have a wide black line along the bottom of the profile).

Sample Index - list of begin/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. Internet Email:ssmith@ucsd.edu

1. Files on Exabyte, DAT or 1/2 inch magnetic tape:
   a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
   b) These same data in a merged ASCII file in the MGD77 Exchange format.
   c) SeaBeam depth data (binary, Sun byte order) in SIO Swath Bathymetry format (not available on 1/2" tape).
   d) SeaBeam Sidescan data (not available on 1/2" tape).

2. Microfilm (35mm flowfilm) or Xerox copies of:
   a) Underway Watch log book.
   b) SeaBeam vertical beam profile/Sidescan records.
   c) Echosounder records - 3.5 kHz frequency.
   d) Magnetometer records.
   e) Seismic reflection profiler records.

3. Navigation listing with times and positions of fixes and course and speed changes.

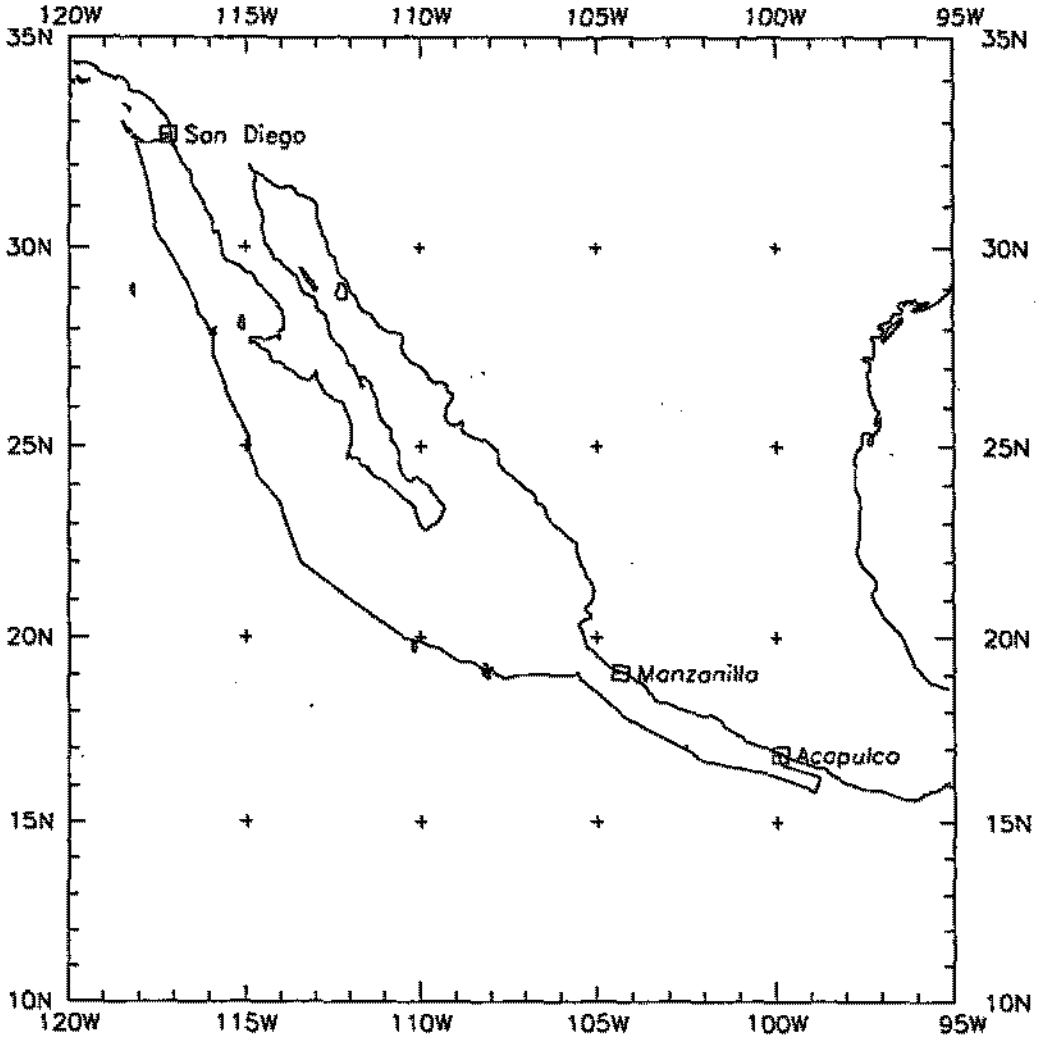
4. Plots:
   a) Copies of archived 1.2"/degree scale trackplots.
   b) Copies of archived 8"/degree scale SeaBeam depth plots.
   c) Custom plots in Mercator projection:
      1) Track plots.
      2) SeaBeam depth contour plots.
      3) Depth, magnetic or gravity values printed or profiled along track.

SeaBeam 2000 Data

Phoenix Leg 1 was primarily a check out cruise for the newly installed Sea Beam 2000 multibeam echo sounder with no funds available for data post processing. These data are proprietary to the SIO Shipboard Technical Support Group.

Seabeam data were displayed intermittently on the hardcopy recorder but not digitally logged on this leg.

May 1993



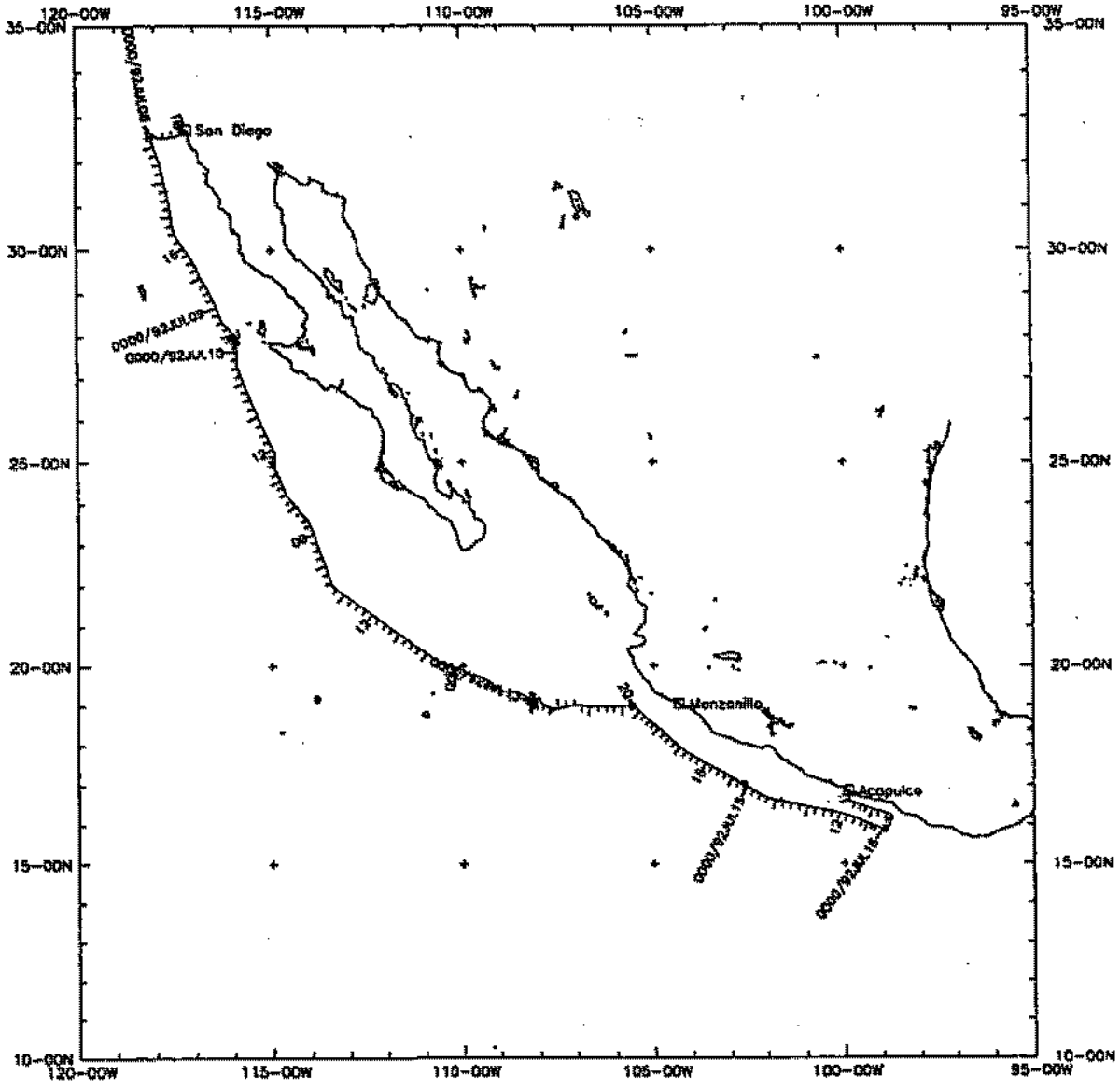
PHOENIX Leg 1 (PHNX01MV)

PHOENIX EXPEDITION LEG 1

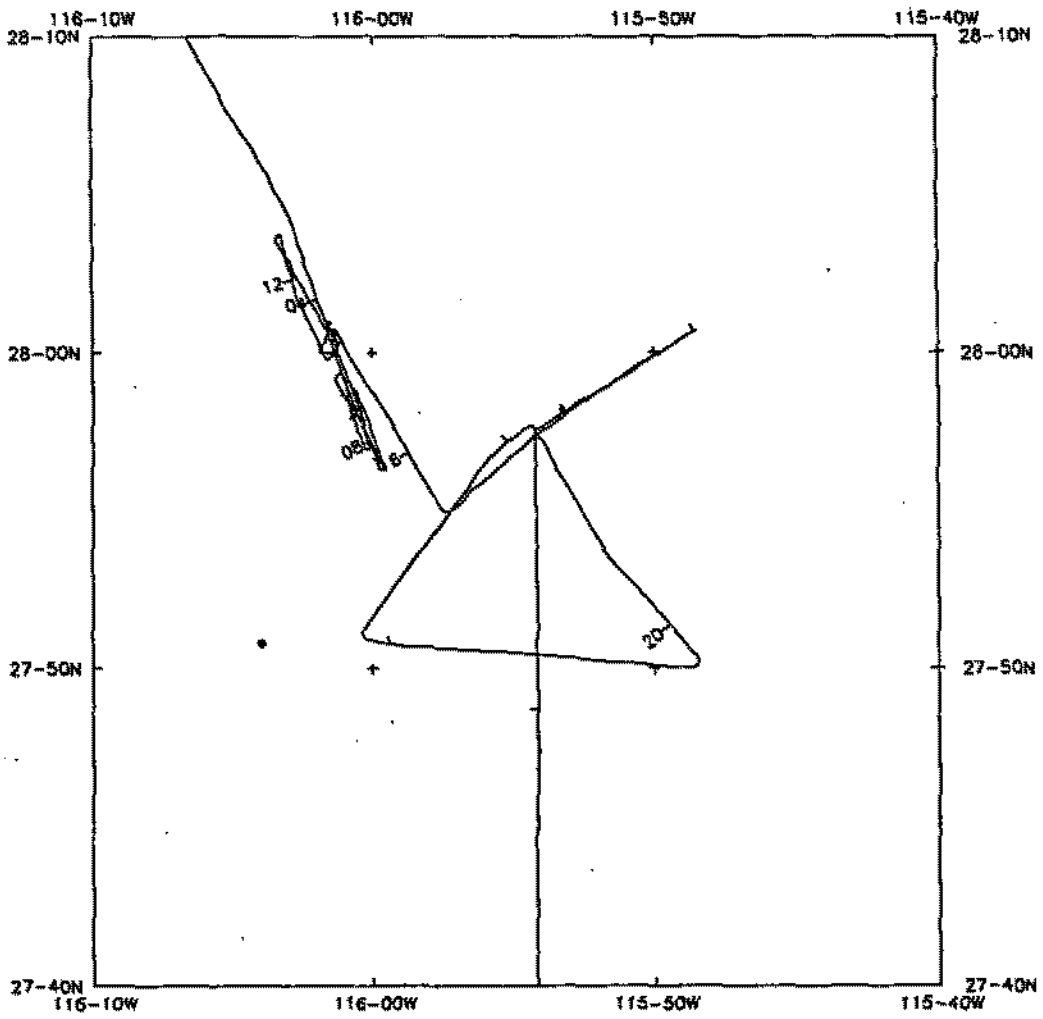
CHIEF SCIENTIST: Christian de Moustier, SIO
PORTS: *San Diego, Calif. - Acapulco, Mexico*
DATES: 7 - 16 July 1992
SHIP: R/V Melville
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 2166 miles	Magnetics - 1446 miles
Bathymetry - 1860 miles	Seismic Reflection - tests only
*Sea Beam - 1860 miles**	*Gravity - none collected*

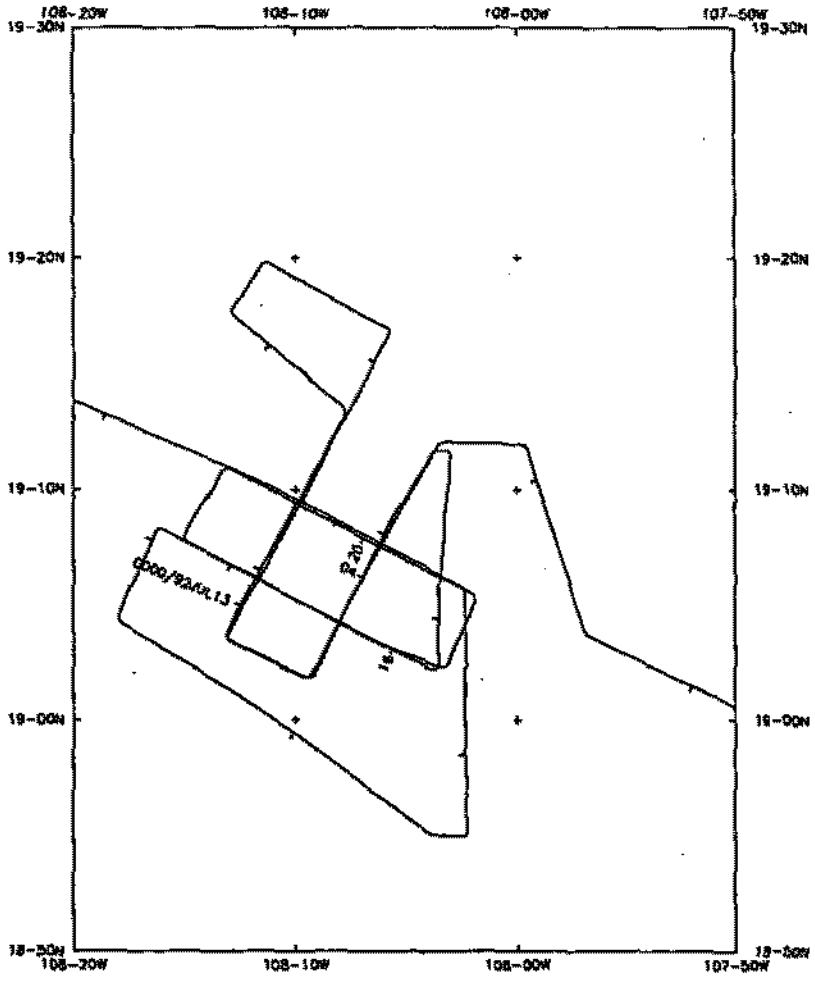
*collected in ancillary mode



PHOENIX Leg 1 (PHNX01MV1



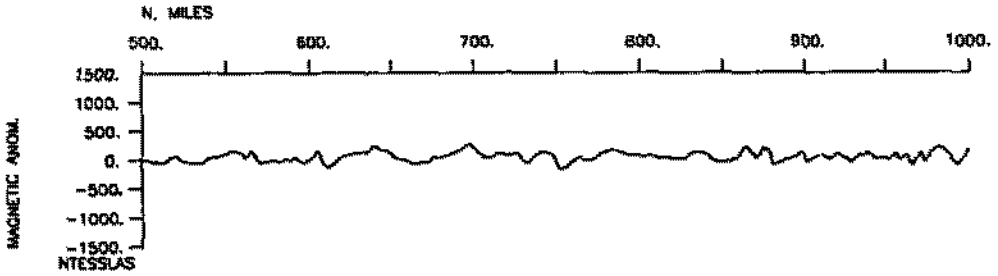
PHOENIX Leg 1 (PHNX01MV)
Survey Area 1

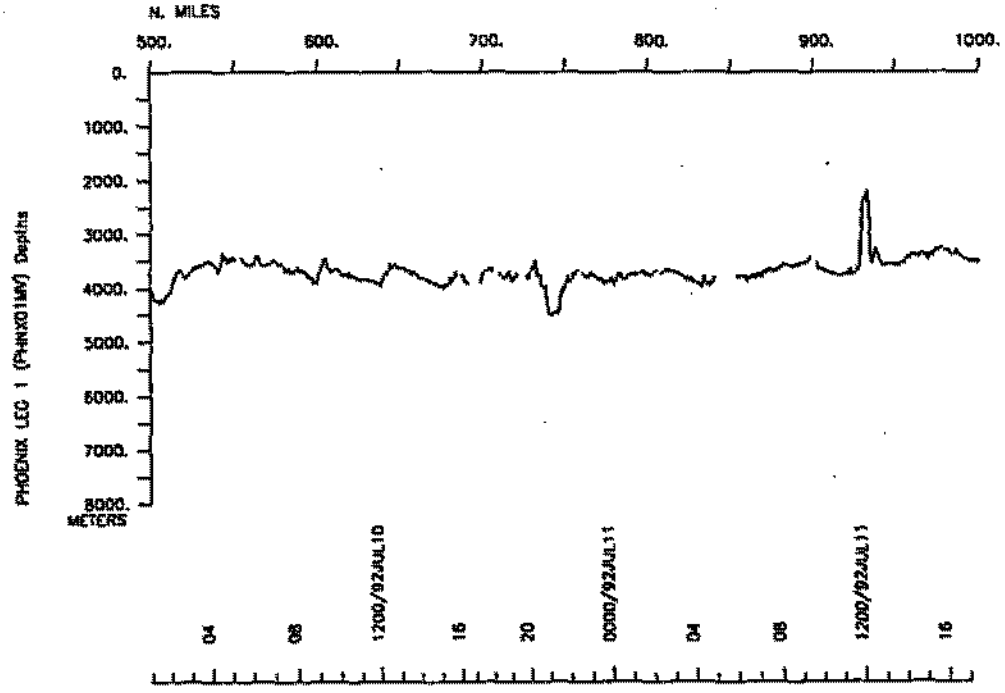


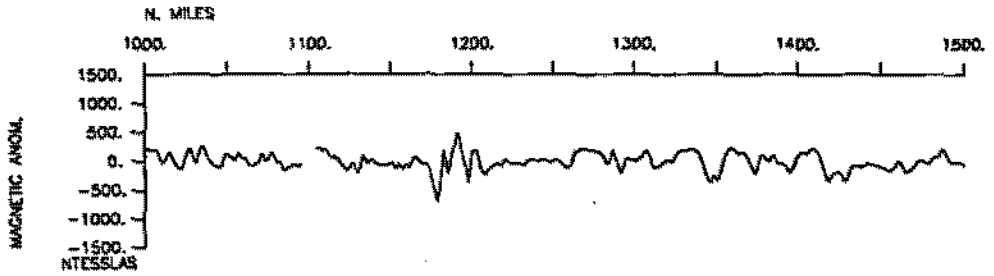
PHOENIX Leg 1 (PHNX01MV)
Survey Area 2

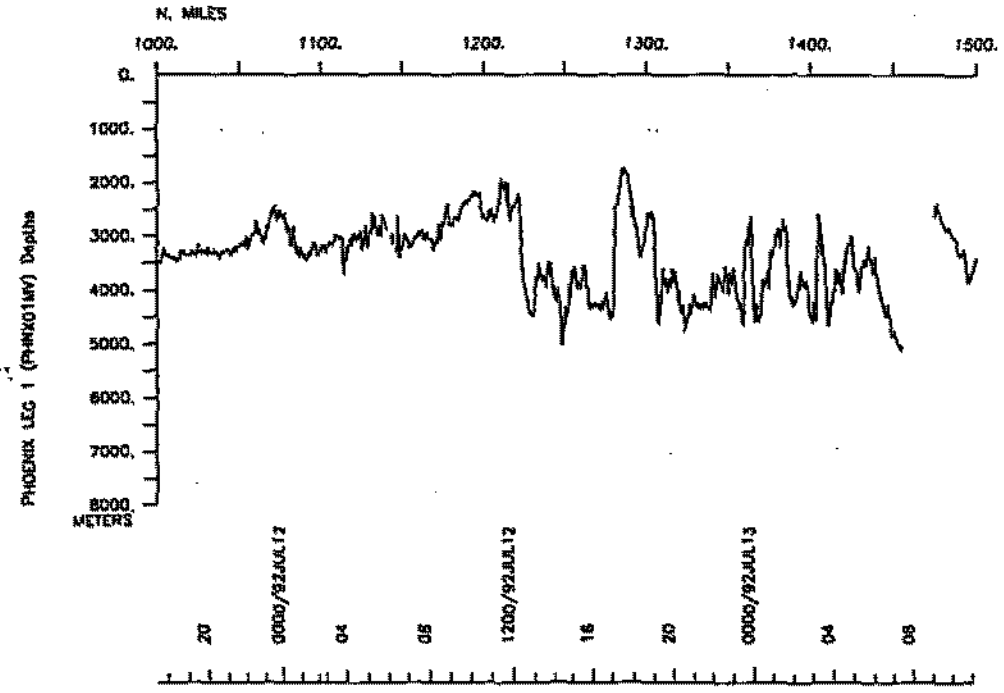
N. MILES
0.
100.
200.
300.
400.
500.
1500.
1000.
500.
0.
-500.
-1000.
-1500.
NTESSLAS
MAGNETIC ANOM.

N. MILES
0.
100.
200.
300.
400.
500.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
PHOENIX LEG 1 (PHNX01MV) Depths
16
20
0000/92JUL08
04
08
1200/92JUL08
16
20
0000/92JUL09
04
08
1200/92JUL09
16
20
0000/92JUL10


N. MILES
500.
600.
700.
800.
900.
1000.
1500.
1000.
500.
0.
-500.
-1000.
-1500.
NTESSLAS
MAGNETIC ANOM.

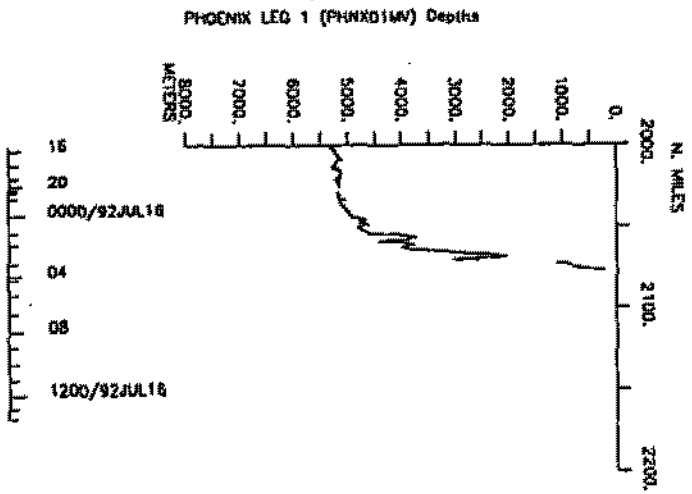

N. MILES
500.
600.
700.
800.
900.
1000.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
PHOENIX LEG 1 (PHNX01M) Depths
04
08
1200/92JUL10
16
20
0000/92JUL11
04
08
1200/92JUL11
16

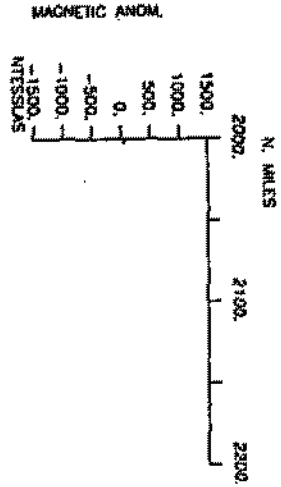

N. MILES
1000.
1100.
1200.
1300.
1400.
1500.
1500.
1000.
500.
0.
-500.
-1000.
-1500.
NTESSLAS
MAGNETIC ANOM.


N. MILES
1000.
1100.
1200.
1300.
1400.
1500.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
PHOENIX LEG 1 (PHNX01MV) Depths
20
0000/92JUL12
04
08
1200/92JUL12
16
20
0000/92JUL13
04
08

N. MILES
1500.
1600.
1700.
1800.
1900.
2000.
1500.
1000.
500.
0.
-500.
-1000.
-1500.
NTESSLAS
MAGNETIC ANOM.

N. MILES
1500.
1600.
1700.
1800.
1900.
2000.
0.
1000.
2000.
3000.
4000.
5000.
6000.
7000.
8000.
METERS
PHOENIX LEG 1 (PHNX01MV) Depths
1200/92JUL13
16
2000/92JUL14
04
08
1200/92JUL14
16
20
0000/92JUL15
04
08
1200/92JUL15


PHOENIX LEG 1 (PHNX01MV) Depths
8000.
METERS
7000.
6000.
5000.
4000.
3000.
2000.
1000.
0.
2000.
N. MILES
2100.
2200.
16
20
0000/92JUL18
04
08
1200/92JUL18


MAGNETIC ANOM.
1500.
1000.
500.
0.
-500.
-1000.
-1500.
NTESSLAS
2000.
N. MILES
2100.
2200.

S.I.O. SAMPLE INDEX

(Issued May 1993)

PHOENIX EXPEDITION

Leg 1

R/V Melville

San Diego, California (7 July 1992)
to
Acapulco, Mexico (18 July 1992)

Chief Scientist:

Christian de Moustier (Scripps Institution)

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.# 260

#*** Ports ***

1500 070792 0 LGPT B San Diego, California 32-40.00N 117-14.00W f PHNX01MV
1500 160792 0 LGPT E Acapulco, Mexico 16-51.00N 99-56.00W f PHNX01MV

#*** Personnel ***

#		********NAME********	******TITLE******	*****AFFILIATION****	**CRID**
PECS	MPL	deMoustier,C.	Chief Scientist	Scripps Institution	PHNX01MV
PESP	MPL	Lonsdale,P.	Scientist	Scripps Institution	PHNX01MV
PESP	GRD	Mammerickx,J.	Scientist	Scripps Institution	PHNX01MV
PESP	DIR	Shor,G.	Scientist	Scripps Institution	PHNX01MV
PESP	VOL	Shor,E.	Volunteer	Scripps Institution	PHNX01MV
PESP	STS	Adams,G.	Programmer	Scripps Institution	PHNX01MV
PECT	STS	Charters,J.	Computer tech	Scripps Institution	PHNX01MV
PESP	STS	Crampton,P.	Geophys tech	Scripps Institution	PHNX01MV
PESP	STS	Heckman,E.	Hardware tech	Scripps Institution	PHNX01MV
PECT	STS	Moe,R.	Computer tech	Scripps Institution	PHNX01MV
PERT	STS	Mogk,S.	Resident tech	Scripps Institution	PHNX01MV
PESP	STS	Skinner,J.	Hardware tech	Scripps Institution	PHNX01MV
PEBO	STS	Smith,S.M.	Seabeam processor	Scripps Institution	PHNX01MV
PESP	SIX	Calisi,A.	Seabeam tech	SeaBeam Instr. Inc.	PHNX01MV
PESP	SIX	Collins,D.	Seabeam tech	SeaBeam Instr. Inc.	PHNX01MV
PESP	SIX	Glow,S.	Seabeam tech	SeaBeam Instr. Inc.	PHNX01MV
PESP	SIX	Goodwin,W.	Seabeam tech	SeaBeam Instr. Inc.	PHNX01MV
PESP	SIX	Staff,A.	Seabeam tech	SeaBeam Instr. Inc.	PHNX01MV
PEXN	CCS	Delgado,L.	Observer	CISESE, Ensenada	PHNX01MV
PEXN	CCS	Mendoza,R.	Observer	CISESE, Ensenada	PHNX01MV
PEXN	CCS	Ruiz,C.	Observer	CISESE, Ensenada	PHNX01MV

#*** 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.

#GMT DDMMYY #TIME DATE	TZ	SAMP CODE	B E	SAMPLE IDENTIFIER	DISP CODE	LATITUDE	LONGITUDE	p c	CRUISE LEG-SHIP
#*** Underway Data Curator - S. M. Smith ext. 42752 ***									
#*** Log Books ***									
1500 070792	0	LBSC	B	Underway log book	GDC	32-40.10N	117-13.69W	g	PHNX01MV
1500 160792	0	LBSC	E	Underway log book	GDC	16-50.62N	99-54.02W	g	PHNX01MV
#*** Sea Beam Records (vertical beam and side scan) ***									
1900 070792	0	MBSR	B	v.beam/sidescan r-01	GDC	32-35.24N	117-59.58W	g	PHNX01MV
0330 160792	0	MBSR	E	v.beam/sidescan r-01	GDC	16-10.54N	98-44.65W	g	PHNX01MV
#*** Seismic Reflection Records ***									
1655 100792	0	SPRS	B	fast seismic r-01	SGG	24-24.97N	114-44.33W	g	PHNX01MV
0653 140792	0	SPRS	E	fast seismic r-01	SGG	18-32.83N	105-00.77W	g	PHNX01MV
1655 100792	0	SPRS	B	slow seismic r-01	SGG	24-24.97N	114-44.33W	g	PHNX01MV
0653 140792	0	SPRS	E	slow seismic r-01	SGG	18-32.83N	105-00.77W	g	PHNX01MV
#*** Magnetics (Earth Total Field) Records ***									
2300 090792	0	MGRA	B	mag roll 1	GDC	27-48.71N	115-54.14W	g	PHNX01MV
1700 150792	0	MGRA	E	mag roll 1	GDC	15-59.71N	99-17.31W	g	PHNX01MV
#*** Expendable Bathythermographs ***									
2024 070792	0	BTXP		Xbt 1	GDC	32-38.28N	118-09.55W	g	PHNX01MV
0109 090792	0	BTXP		Xbt 2	GDC	28-28.88N	116-20.70W	g	PHNX01MV
1400 120792	0	BTXP		Xbt 3	GDC	19-13.26N	108-18.59W	g	PHNX01MV
1717 130792	0	BTXP		Xbt 4	GDC	19-01.37N	105-34.41W	g	PHNX01MV
2000 150792	0	BTXP		Xbt 5	GDC	15-58.51N	99-09.63W	g	PHNX01MV
#				End Sample Index					PHNX01MV