

INFORMAL REPORT AND INDEX OF
NAVIGATION AND DEPTH DATA

(Issued August 1979)

INDOMED EXPEDITION

LEG 16

Manzanillo, Mexico (26 March 1979)
to
Mazatlan, Mexico (7 April 1979)

R/V Melville

Chief Scientist - F. Spiess (SIO)

Resident Marine Tech - J. Coatsworth

Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center

Data Collection Funded by NSF
Grant Number OCE7801664
Data Processing Funded by SIA, NSF and ONR

NOTE: This is an index of underway geophysical data edited and processed shortly after the completion of the cruise leg and is intended primarily for informal use within the institution. This document is not to be reproduced or distributed outside Scripps without prior approval of the chief scientist or the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093.

Informal Report and Index of Navigation, Depth, Magnetic and Subbottom Profiler Data**

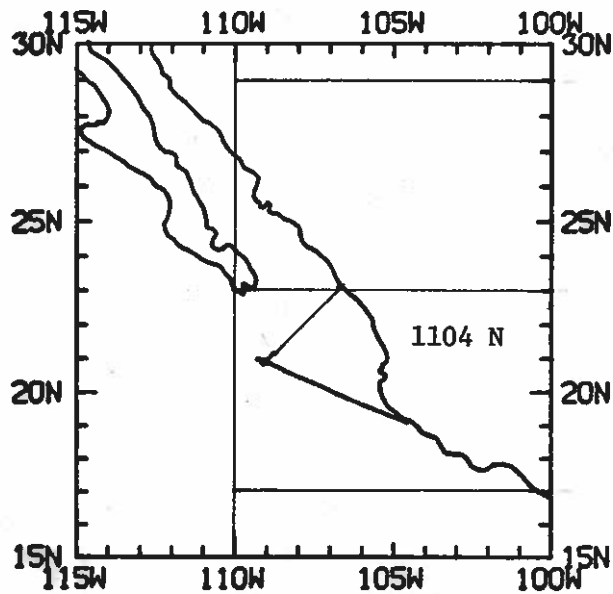
Contents:

- Index Chart** - gives track of cruise leg and boundaries of depth compilation plots (see below).
- Track Charts** - annotated with dates (day/month) and hour ticks. The scale is .3"/deg. long.
- Profiles** - Depth and magnetic anomaly vs. distance. Dates (day/month) and positions of major course changes (greater than 30 degrees) are annotated. Section of track having subbottom profiler (airgun) records have a solid black line along the bottom of the profile.

For information on the availability and reproduction costs of data in the following form contact S. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography La Jolla, California 92093. Phone: (714) 452-2752.

1. Navigation listing of times and positions of course and speed changes, fixes and drift velocity.
2. Depth compilation plots - in fathoms (assumed sound velocity of 800 fm./sec.) at approximately 1 mile spacing, plotted at 4"/degree with standard U. S. Navy Oceanographic Office BC series boundaries (see index chart).
3. Plots of magnetic anomaly profiles along track - map scale = 1.2"/degree; anomaly scale between 15°N and 15°S latitude = 500 gamm/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamm/inch; from values retrieved at approximately 1 mile spacing and regional field removed using the 1975 IGRF.
4. Card decks of navigation, depth and magnetics (for specific formats, contact S. M. Smith, Geological Data Center).
5. S. I. O. Sample Index - list of beginning and end times and positions of all underway records as well as all other samples (geology, biology, physical oceanography, etc.) collected on the cruise leg.
6. Microfilm or Xerox copies of:
 - a. Echosounder records - 12 and 3.5 kHz frequency
 - b. Subbottom profiler records (airgun)
 - c. Magnetometer records
 - d. Underway Data Log

** NO SUBBOTTOM PROFILER OR MAGNETIC DATA COLLECTED



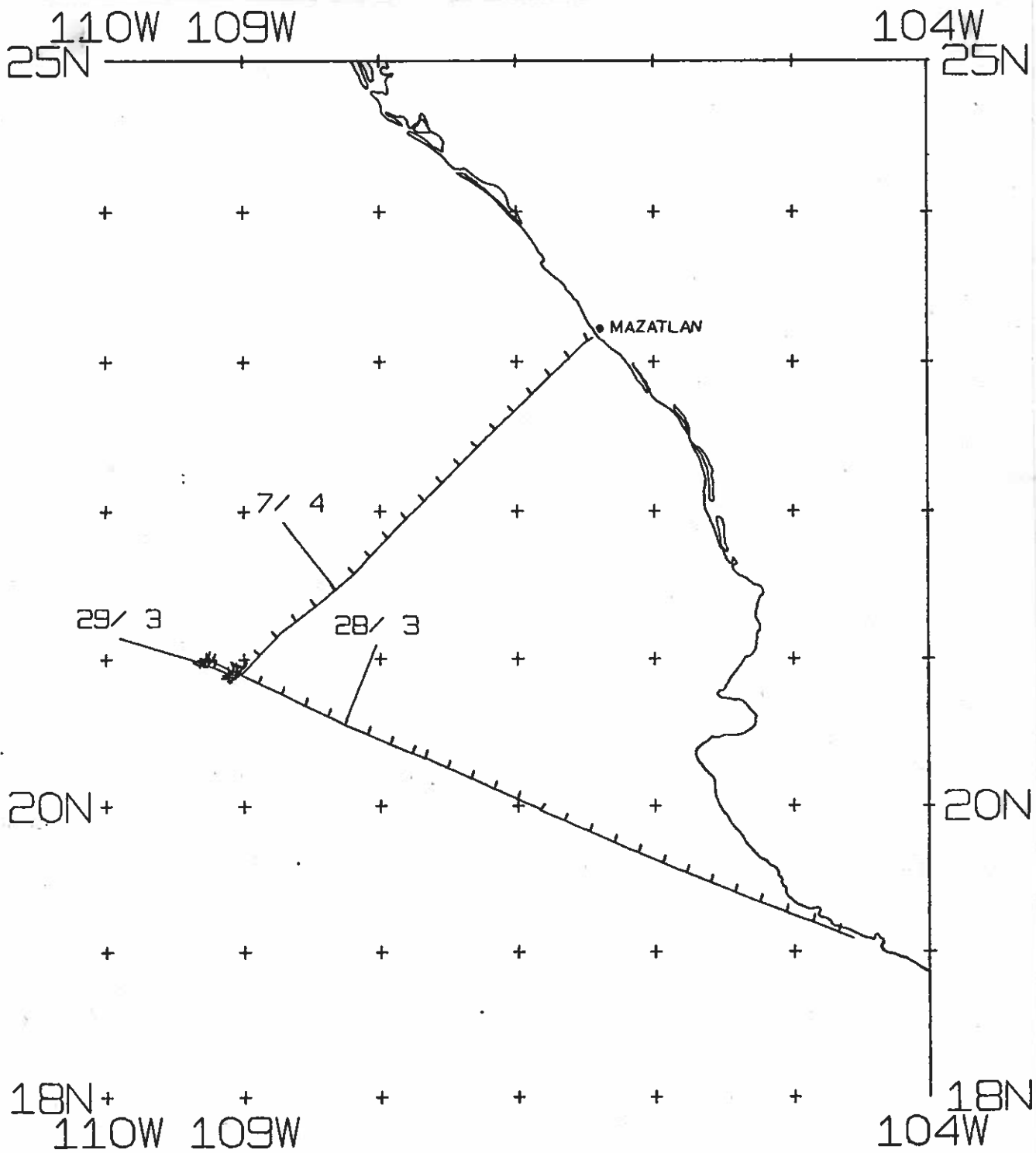
INDOMED EXPEDITION LEG 16

Chief Scientist: F. Spless (SIO)
 Ports: Manzanillo, Mexico to Mazatlan, Mexico
 Dates: 26 March to 7 April 1979
 Ship: R/V Melville

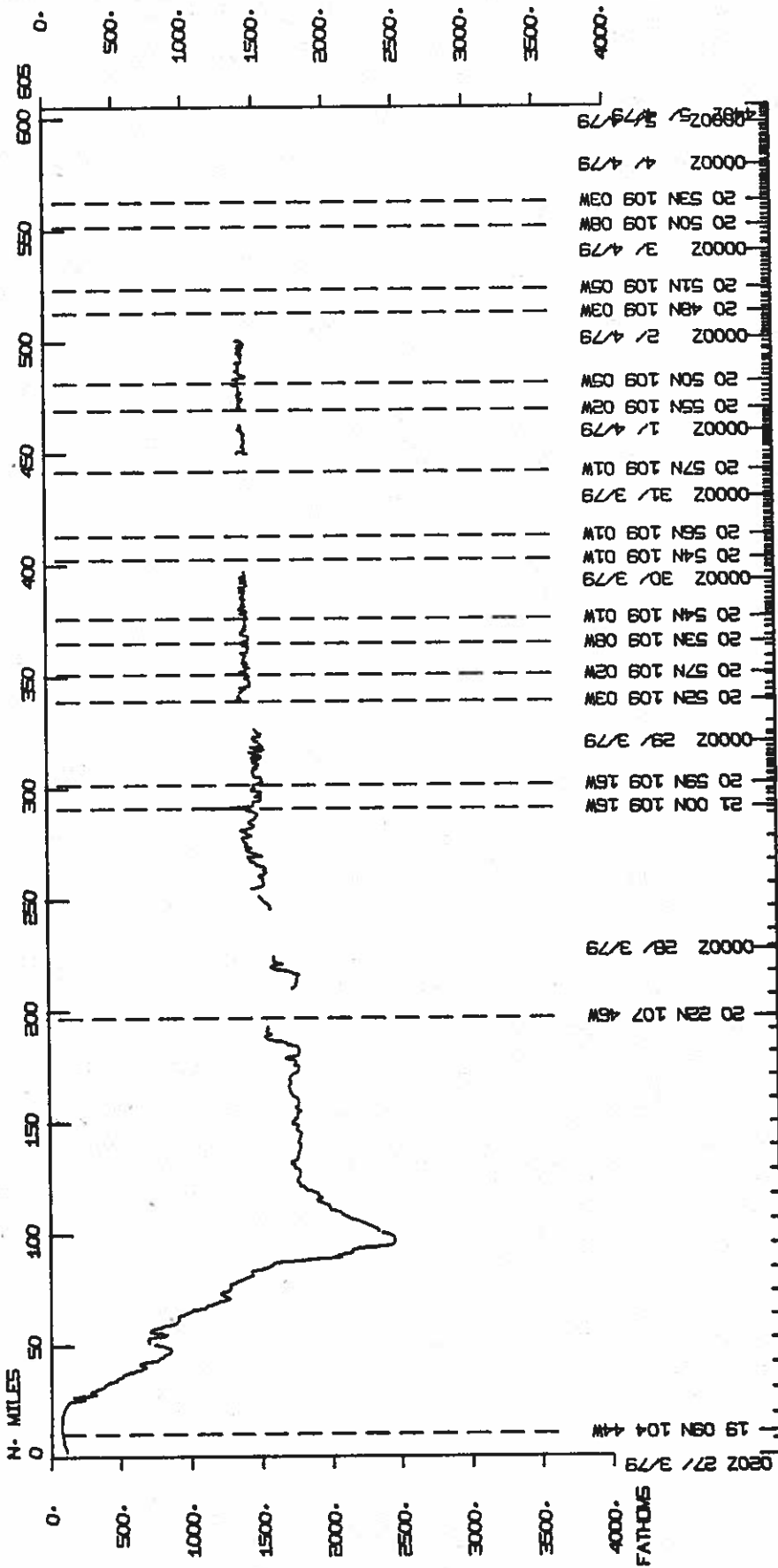
TOTAL MILEAGE

- 1) Cruise - 874 miles
- 2) Bathymetry - 405 miles
- 3) Seismic Reflection - none collected
- 4) Magnetics - none collected
- 5) Gravity - none collected

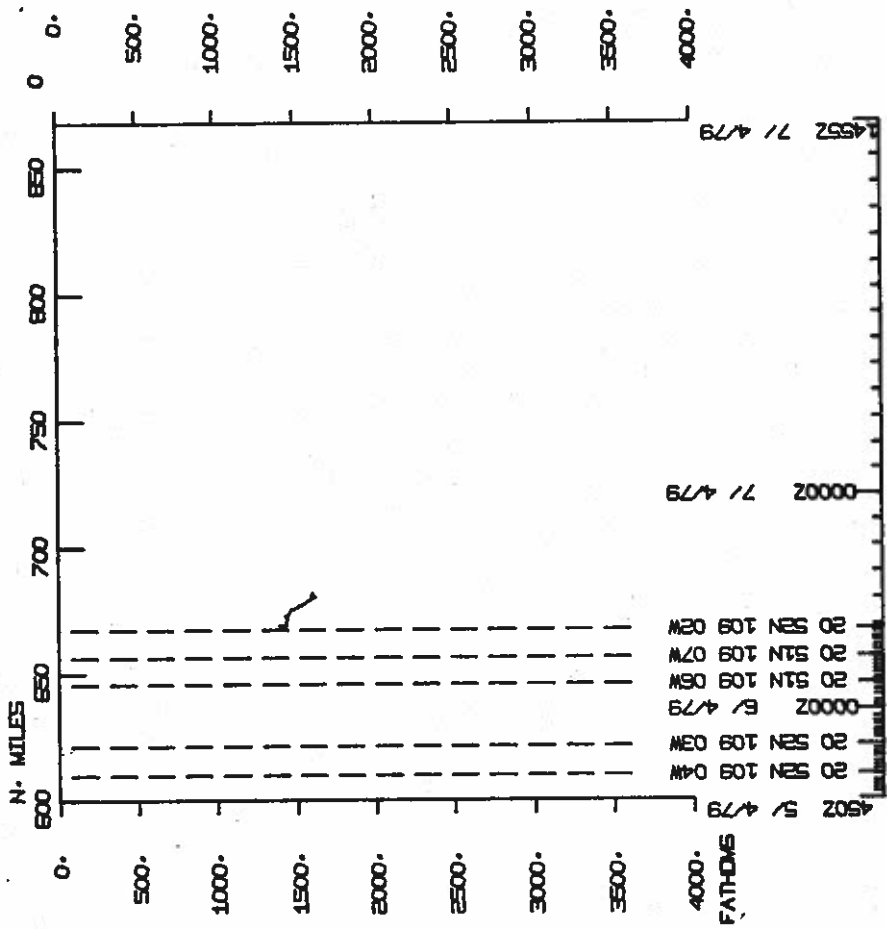
INMD16MV TRACK PLOT (1 OF 1)



INDOMED LEG 15



INDOMED LEG 16



S.I.O. SAMPLE INDEX

(Issued August 1979)

INDOMED EXPEDITION

LEG 16

Manzanillo, Mexico (26 March 1979)

to

Mazatlan, Mexico (7 April 1979)

R/V Melville

Chief Scientist - F. Spiess (SIO)

Resident Marine Tech - J. Coatsworth

Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center

Index Encoding Funded by NSF
Grant Number OCE76-80618
Index Processing and Report Preparation
Funded in part by SIA

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 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 cards. Disposition and sample type are represented by three and four character codes to permit future computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

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S.T.O. SAMPLE INDEX

GENERATED 10 JUL 79

*** INDOMED 16 SAMPLE INDEX

(INMD16MV) ***

.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....

'X' = SHIP'S TRACK BY 5 DEGREE SQUARE

	60E	120E	180	120W	60W	0W		
85N							85N	
80N					0	0000	80N	
75N		0		0 00000	000000000		75N	
70N		0000000000		0000 0 00 0	00000000		70N	
65N	0000	00000000000000000000000000		00000000000000000	00	0000	0	65N
60N	0000000000000000000000000000			00000000000000	00	00		60N
55N	0	0000000000000000000000	00	0	00000000	000		55N
50N	000000000000000000000000	0			000000000	0000	00	50N
45N	0000000000 0000000000000000				000000000000	0		45N
40N	0 00 00 000000000000000 0				00000000000			40N
35N	0 00000 000000000000000 0				000000000		0	35N
30N	000 0000000000000000 0				00000000		00	30N
25N	000000000 000000000000				0000 0		000	25N
20N	000000 0000 000 0000		0		X0 00		000	20N
15N	0000000 00 0 00 0				X00 0		000	15N
10N	00000000 0 0 0				0		000	10N
5N	000000000 0					00000	000	5N
0N	0000000	00 00				000000		0N
5S	000000	0 0 0 00				0000000		5S
10S	00000	0 00				000000000		10S
15S	00000	0 0				0000000		15S
20S	000000 0	00000				000000		20S
25S	0000 0	000000				000000		25S
30S	00	0000000				0000		30S
35S	00	00 000	0			00000		35S
40S		00	0			000		40S
45S		0				00		45S
50S						00		50S
55S						0		55S
60S								60S
65S								65S
70S	00	0000000000				0		70S
75S	000000000000000000000000000				0	00000	0000	75S
80S	000000000000000000000000000			000000000000000000000		0000000		80S
85S	000000000000000000000000000			0000000000000000000000000				85S
90S	0000000000000000000000000000			000000000000000000000000000				90S

.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....+.....

26MAR79 - MANZANILLO, MEX.

T0

07APR79 - MAZATLAN, MEX.

CHIEF SCIENTIST - SPIESS, FRED N. MPL

SHIP - R/V MELVILLE (SIO)

PRODUCED BY GEOLOGICAL DATA CENTER, SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CALIFORNIA 92093

INMD 16

NUMBER OF SAMPLES OF CLASS 'TYPE' GOING TO DESTINATION 'DISP'

DISP	TYPE					TOTAL
	CA	DP	DT	LB	PE	
GDC	1	2		1	1	3
GSU	1				1 1	1
HO	1				1 1	1
MBD	1				1 1	1
MPL	1		3		8 1	11
SCG	1				1 1	1
SIO	1				3 1	3
SIX	1				3 1	3
UCS	1				1 1	1
WHO	1	2			4 1	6
TOTAL	1	2	2	3	1 23 1	31

SAMPLE 'TYPE' CODES USED ABOVE

- CA = CAMERA
- DP = DEPTH
- DT = DEEP TOWED INSTRUMENT PACKAGE (MPL PROJECT)
- LB = LOG BOOKS
- PE = PERSONNEL IN SCIENTIFIC PARTY

SAMPLE 'DISP' CODES USED ABOVE

- GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
- GSU = U.S. GEOLOGICAL SURVEY
- MBD = MARINE BIOLOGY RESEARCH DIVISION (EXT. 4245)
- MPL = MARINE PHYSICAL LAB. (EXT 2305)
- SCG = SHIPBOARD COMPUTER GROUP (EXT. 4195)
- SIO = SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CAL. 92093
- SIX = SCRIPPS INSTITUTION NON-EMPLOYEE -(CONTACT DORCAS UTTER EXT. 2356)
- UCS = UNIV. CALIF. SANTA BARBARA
- WHO = WOODS HOLE OCEANOGRAPHIC INSTITUTION

ST D /M /Y #E DATE	LOC TIME T2	LOC T2	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
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INDMED 16 SAMPLE INDEX

INMD16MV

** PORTS **

DO 26/ 3/79				LGPT B MANZANILLO, MEX.		19 03. N	104 20. W	F INMD16MV
DO 7/ 4/79				LGPT E MAZATLAN, MEX.		23 12. N	106 26. W	F INMD16MV

PERSONNEL***

# NAME ***	*** TITLE ***	*** AFFILIATION ***
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SPIESS, FRED N.	DR	CHIEF SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
MAC DONALD K.	DR	SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
BALLARD, R. D.	DR	SCIENTIST	WOODS HOLE OCEANOGRAPHIC INSTITUTION
NORMARK, W. R.	DR	SCIENTIST	U.S. GEOLOGICAL SURVEY
KENARD, VINCENT	DR	SCIENTIST	SCRIPPS INSTITUTION NON-EMPLOYEE -(CONTACT DORCAS UTTER EXT. 235
BOEGEMAN, DWIGHT E.		ELECT TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
COATSWORTH, JAMES L.		RFS TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
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HAYMON, RACHEL M.		STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
INGRAM, CAMILLA L.		BIOLOGIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
LAWHFAD, ROBERT M.		ENG AID	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
LEGRAND, JACQUES		ENGINEER	SCRIPPS INSTITUTION NON-EMPLOYEE -(CONTACT DORCAS UTTER EXT. 235
MAC KENZIE, KEVIN C.		STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
MOMMA, H. (JAPAN)		ENGINEER	SCRIPPS INSTITUTION NON-EMPLOYEE -(CONTACT DORCAS UTTER EXT. 235
OTT, JOHN D.		PROGRAMMER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
PAVLICFK, FRANK V.		ASST DEV ENGR	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
PORTENUS, JOHN W.		TECHNICIAN	WOODS HOLE OCEANOGRAPHIC INSTITUTION
ROGERS, JAMES E.		DEV TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
SHURE, LOREN		STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
SMITH, ERNEST G. JR.		TECHNICIAN	WOODS HOLE OCEANOGRAPHIC INSTITUTION
UP DE GRAFF, JAYE		STUDENT	UNIV. CALIF. SANTA BARBARA
WELCH, DAVID A.		PROGRAMMER	WOODS HOLE OCEANOGRAPHIC INSTITUTION
YOUNG, EARL M. JR.		ENGINEER	WOODS HOLE OCEANOGRAPHIC INSTITUTION

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 THIS 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 D /M /Y TIME DATE	LOC TIME TZ	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
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UNDERWAY DATA CURATOR - STUART M. SMITH (EXT. 2752)

*** LOG BOOKS ***

0045 27/ 3/79			LRUW B	UNDERWAY WATCH	GDC 19	06.8N	104 37.9W	S INMD16M
0200 6/ 4/79			LRUW E	UNDERWAY WATCH	GDC 21	04.0N	108 50.4W	S INMD16M

*** FATHOGRAMS ***

0023 27/ 3/79			DPR3 B	GDR 3.5 KHZ R-01	GDC 19	05.5N	104 34.2W	S INMD16M
0126 30/ 3/79			DPR3 E	GDR 3.5 KHZ R-01	GDC 20	54.0N	109 01.6W	S INMD16M

1215 31/ 3/79			DPR3 B	GDR 3.5 KHZ R-02	GDC 20	53.8N	109 05.2W	S INMD16M
2025 6/ 4/79			DPR3 E	GDR 3.5 KHZ R-02	GDC 21	04.6N	108 49.8W	S INMD16M

**** DEEP TOW SURVEY **** CURATOR STEVE MILLER (EXT. 4892)

0212 30/ 3/79			DTS B	DEEP TOW = 1	MPL 20	53.5N	109 03.4W	S INMD16M
1110 31/ 3/79			DTS E	DEEP TOW = 1	MPL 20	53.7N	109 05.0W	S INMD16M

0130 2/ 4/79			DTS B	DEEP TOW = 2	MPL 20	52.5N	109 03.2W	S INMD16M
1401 3/ 4/79			DTS E	DEEP TOW = 2	MPL 20	53.5N	109 05.4W	S INMD16M

2049 4/ 4/79			DTS B	DEEP TOW = 3	MPL 20	53.2N	109 03.5W	S INMD16M
1723 6/ 4/79			DTS E	DEEP TOW = 3	MPL 20	54.9N	109 05.8W	S INMD16M

*** CAMERA ***

1411 31/ 3/79			CAWC B	ANGUS SLED 1 STILL	WHO 20	53.7N	109 03.0W	S INMD16M
2300 31/ 3/79			CAWC E	ANGUS SLED 1 STILL	WHO 20	54.3N	109 02.8W	S INMD16M

0427 4/ 4/79			CAWC B	ANGUS SLED 2 STILL	WHO 20	53.4N	109 01.2W	S INMD16M
1500 4/ 4/79			CAWC E	ANGUS SLED 2 STILL	WHO 20	53.1N	109 03.4W	S INMD16M

9900

END SAMPLE INDEX

INMD16M