# INFORMAL REPORT AND INDEX OF NAVIGATION, DEPTH AND MAGNETIC DATA (Issued June 30, 1978)

#### INDOMED EXPEDITION

#### LEG 7

Colombo, Sri Lanka (4 April 1978)
to
Port Louis, Mauritius (24 April 1978)
R/V Melville

Chief Scientist - D. Spencer (Woods Hole Oceanographic Inst.)
Resident Marine Tech - R. Comer

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

Data Collection Funded by NSF Grant Number OCE76-03936 Data Processing Funded by SIA, NSF, 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 Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093.

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

#### Contents:

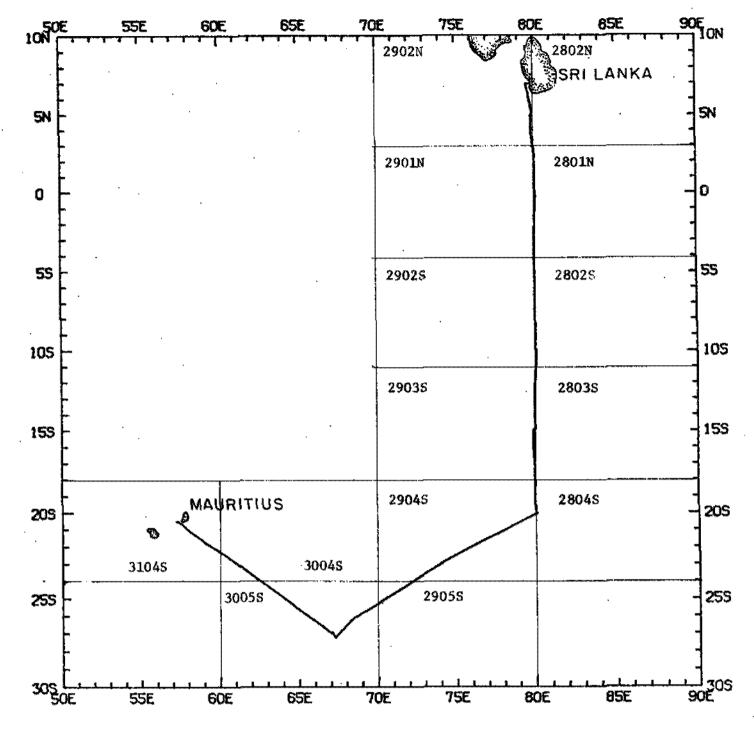
Track Charts - annotated with dates (day/month) and hour ticks. The scale is .3"/deg. long.

Profiles - Depth and magnetic anomaly vs. distance. Dates (day/month) and positions of major course changes (greater than 30 degrees) are annotated. Sections of track having subbottom profiler (airgum) 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 forms, 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

<sup>\*</sup> NO SUBBOTTOM PROFILER DATA COLLECTED



## INDOMED EXPEDITION LEG 7

Chief Scientist - D. Spencer (Woods Hole Oceanographic Inst.)

Ports: Colombo, Sri Lanka - Port Louis, Mauritius

Dates: 4 April - 24 April 1978

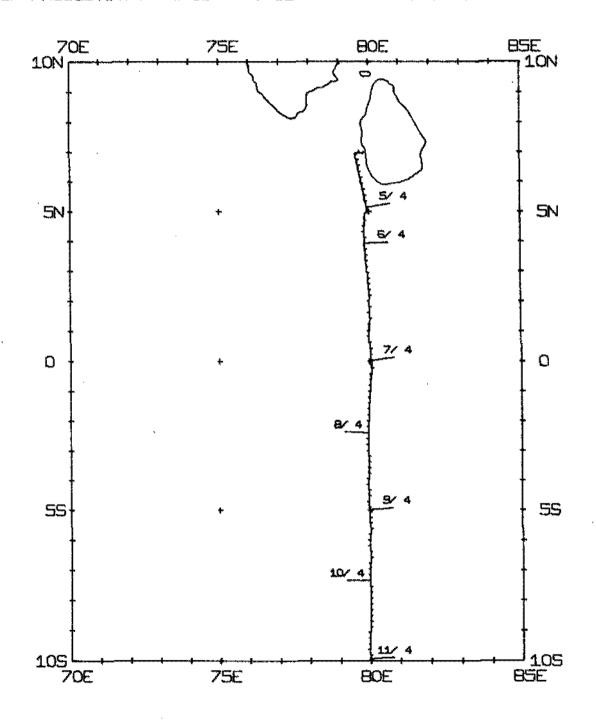
Ship: R/V Melville

#### TOTAL MILEAGE

- 1) Cruise  $\overline{3277}$  miles
- 2) Bathymetry 2981 miles
- 3) Magnetics 3024 miles
- 4) Seismic Reflection none collected

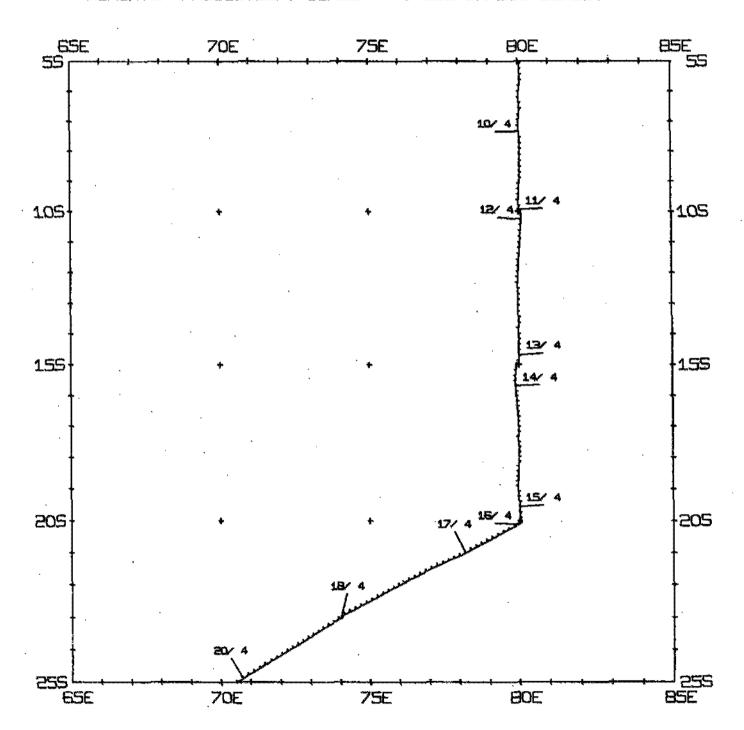
## INMODOZMV TRACK PLOT (1 OF 3)

MERCATOR PROJECTION, SCALE: 0.312 INVOEG LONGITUDE



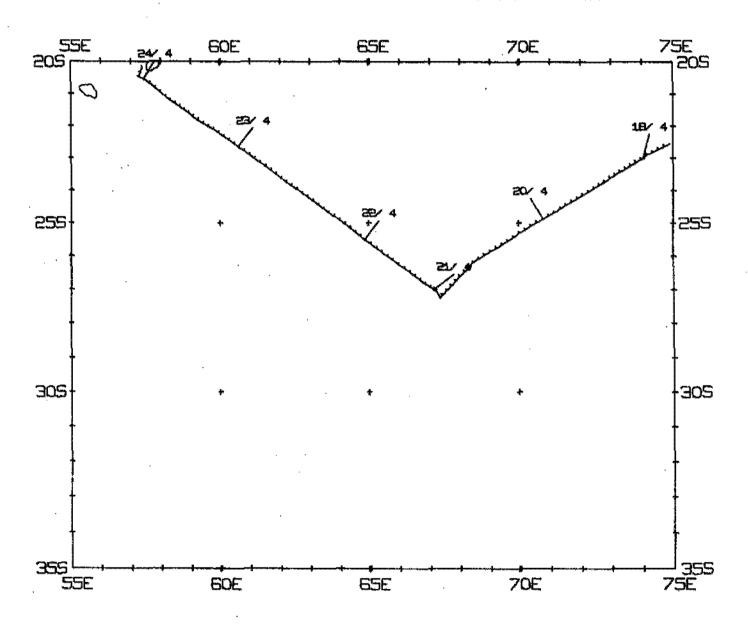
INMOOTMY TRACK PLOT (2 OF 3)

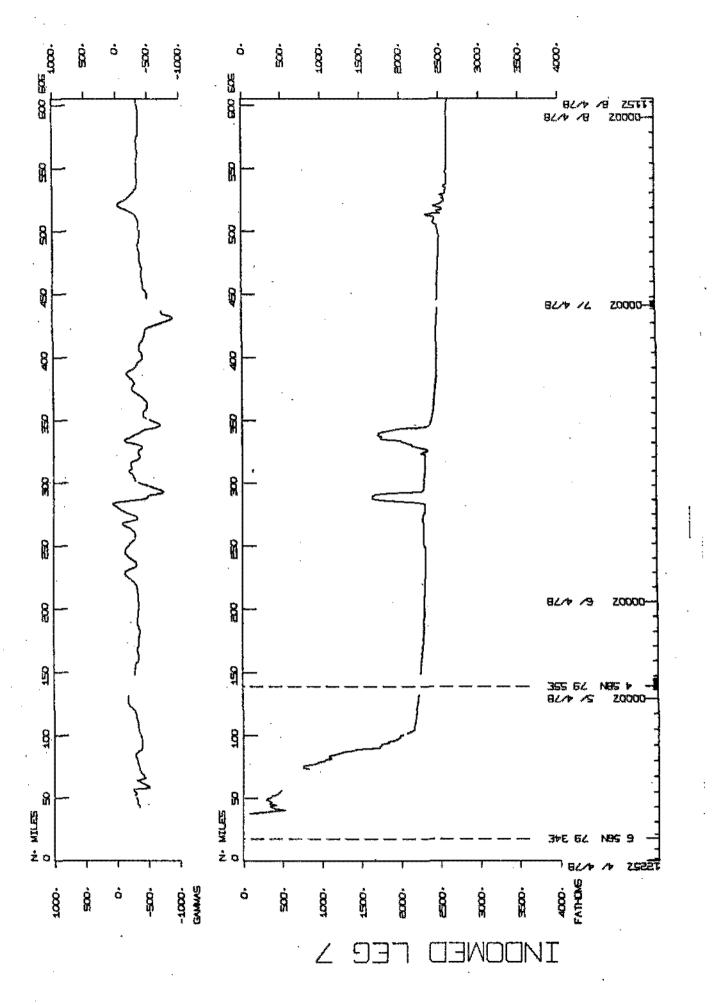
MERCATOR PROJECTION; SCALE= 0.312 IN/DEG LONGITUDE

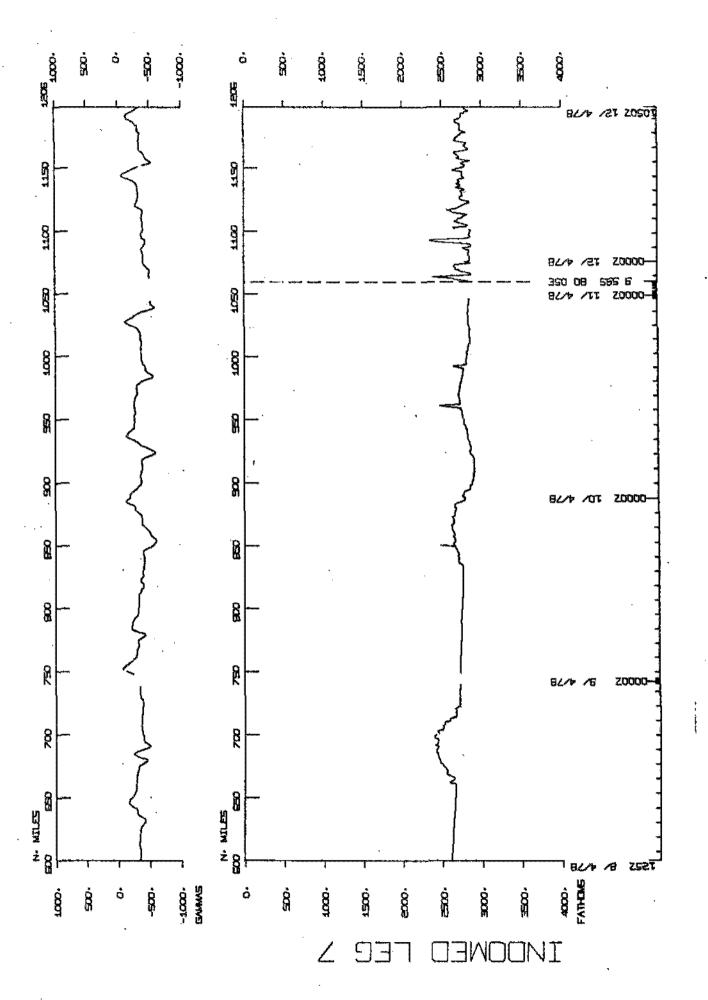


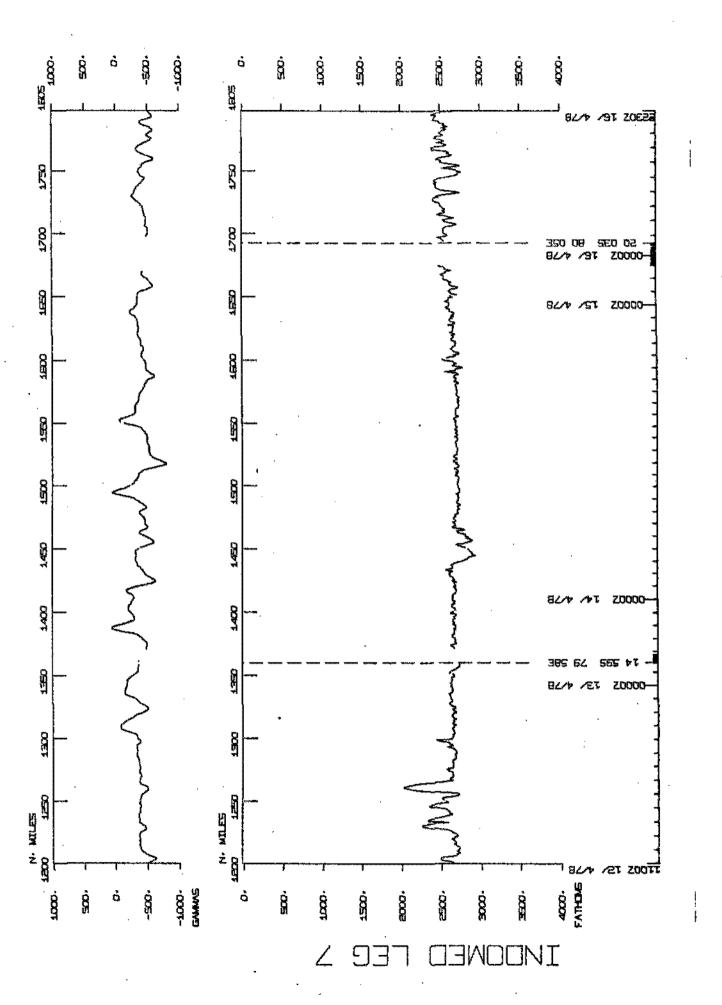
## INMOOZMV TRACK PLOT (3 OF 3)

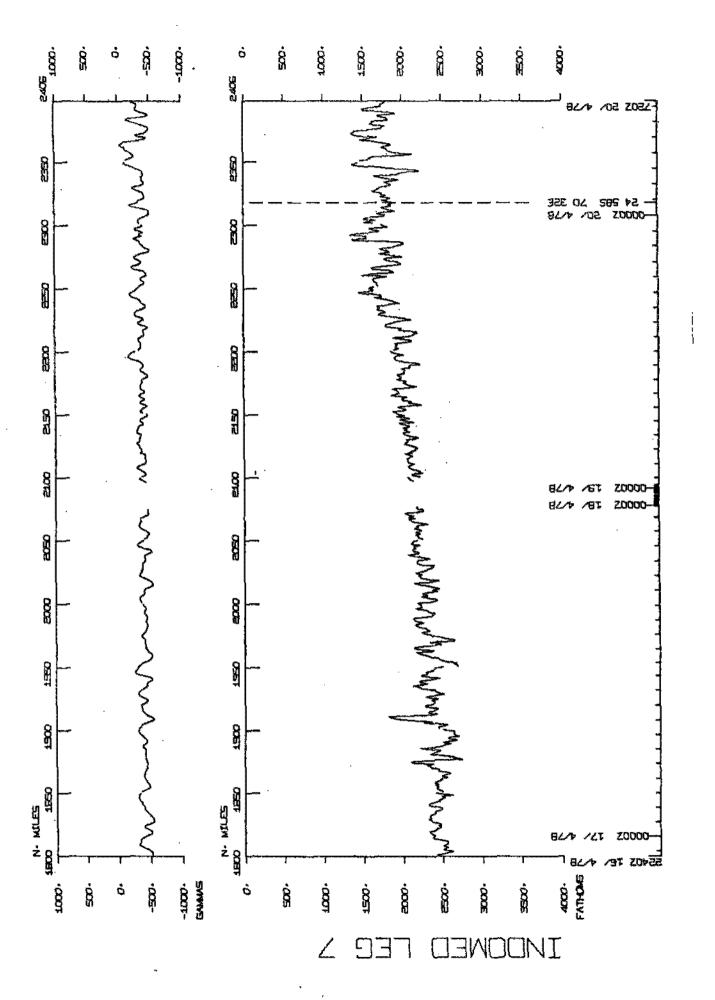
## MERCATOR PROJECTION, SCALE: 0.312 INVOEG LONGITUDE

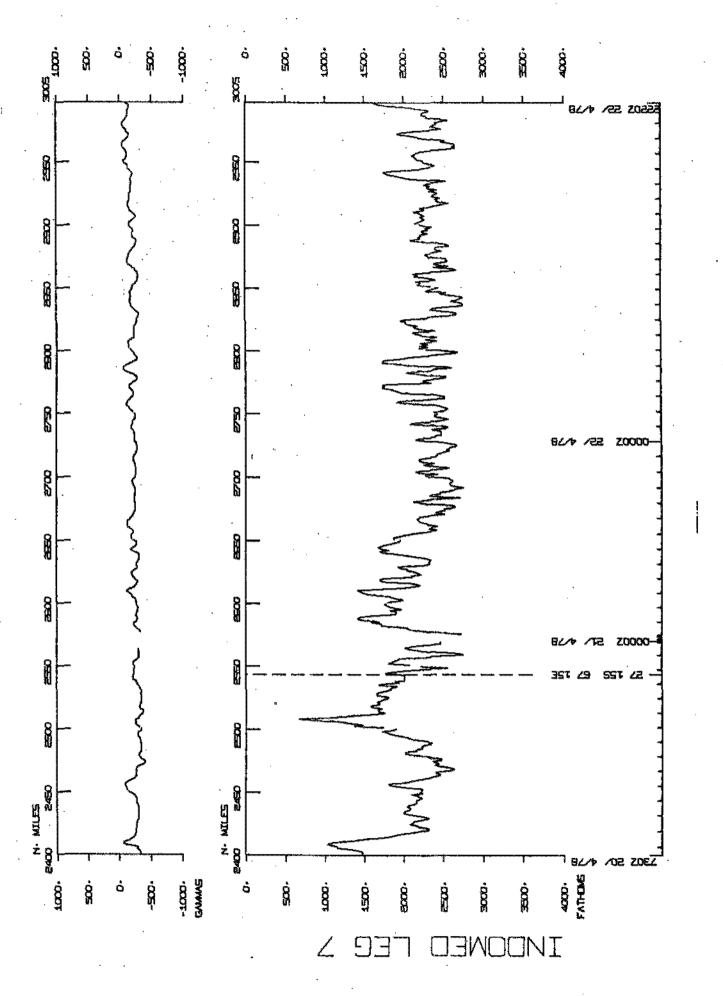


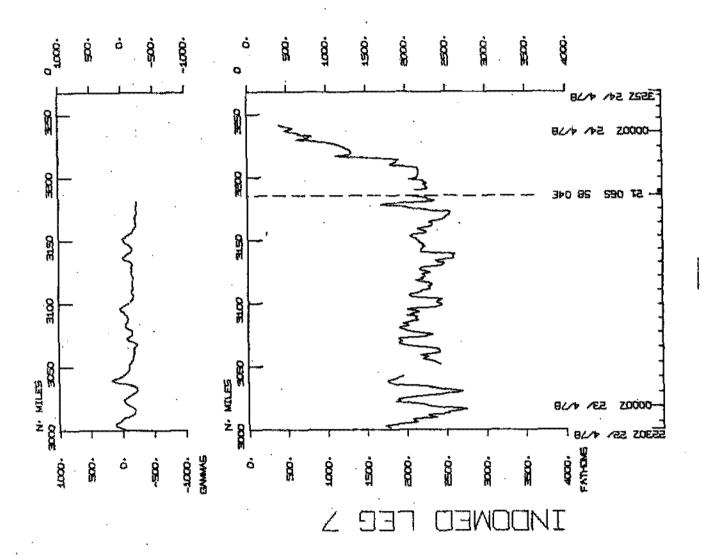












#### S.I.O SAMPLE INDEX

(Issued June 28, 1978)

#### INDOMED EXPEDITION

#### LEG\_7

Colombo, Sri Lanka (4 April 1978) to Port Louis, Mauritius (24 April 1978)

R/V Melville

Chief Scientist - D. Spencer (Woods Hole Oceanographic Inst.)

Resident Marine Tech - R. Comer

Post-Gruise 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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(INMOUTHV) \*\*\*

#### \*\*\* SAMPLE INDEX INDOMED LEG 07

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	60E	1205	180	120W	60M	OM	

04APR78 - COLOMBO, SR1 LANKA

24APR78 - PORT LOUIS, MAURITIUS

CHIEF SCIENTIST - SPENCER. D.

WHO

SHIP - R/V MELVILLE (SIO)

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

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

DISP				TYP	E		1	DTAL	
		0 P	GC	ř.B	MG	PE			_
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GSX	1		8			14	I	22	
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LDO	1					Ş	I	2	
MTG	1					1	I	1	
NZO	I					1	I	1	
PRL	1					2	1	2	
MHO	I					2	I	2	
TOTAL	1		8	·	2	24	1	37	-

#### SAMPLE 'TYPE' CODES USED ABOVE

DP # DEPTH

GC = GEOCHEMICAL SAMPLING

LB = LOG BOOKS

MG = MAGNETICS (TOWED VEHICLE, SURFACE, TOTAL FIELD)

PE = PERSONNEL IN SCIENTIFIC PARTY

### SAMPLE 'DISP' CODES USED ABOVE

GOC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)

GRO = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)

GSX = GEOCHEMICAL OCEAN SECTIONS STUDY (EXT. 4420)

ISL = STATE OF ISRAEL

LDO = LAMONY-DOHERTY GEOPHYSICAL OBSERVATORY, COLUMBIA UNIVERSITY

MTG = MARINE TECHNOLOGY GROUP (EXT 4194)

NZD . = NEW ZFALAND

PRL = PACIFIC RESEARCH LABORATORY

WHO = WOODS HOLE OCEANOGRAPHIC INSTITUTION

#### \*\*\* PORTS \*\*\*

1230	4	478	LGPT	В	COLUMBO, SRI LANKA	6	564N	79	507E	5	INMDO7MV
415	24	478	LGPT	E	PORT LOUIS, MAURITIUS	20	95S	57	30 E	F	INMDO7MV

#### \*\*\*PERSONNEL\*\*\*

PECS	SPENCER, D.	WHO.	INMDO7MV
PERT	COMER, R.	MTG	INMDO7MV
PE	BEAUPRE, M.	GSX	1 NMDO7M V
PE	80 S. D.	GSX	INMDO7MV
PECT	CHARTERS, J.	MTG	INMUOTMV
PE	CHRISTIANSEN, M.	GSX	INMDO7MV
PEMT	COLBERT, J.	· GSX	I NMDO7M V
PΕ	FLEER, A.	WHO	INMDO7MV
PEXN	GOBAT, D.	GSX	INMDO7M V
PE	JAEGER, E.	GSX	INMDO7MV
PEXN	KRISHNAMURTHY, R.	PRL	I NMDO7M V
PESR	MANTYLA, A.	GSX	INMDO7MV
PECT	MANTYLA, N.	GSX ·	INMDO7M V
PE	MORRIONE, M.	GSX	1NMDO7MV
PEMT	RAGAN, P.	GSX	I NMDO7M V
PE	SAIGH, D.	L00	INMOO7MV
PE	SANBORN, K.	G\$X	I NMDO7M V
PEXN	SANTCHI, P.	GSX	INMOUTMV
PEXM	SARIN, M.	PRL	V MTOOMN!
PEMT	SCHECHTMAN, N.	F DO	I NMOO7M V
PEXN	SMITHS, A.	NZD	INMDO7MV
PEXN	STEINHORN, I.	ISL	1NM007MV
PEMT	WELLS, J.	GSX	INMDO7MV
PEMT	WITHEROW, S.	GSX	I NMD07MV

\*\*\* NOTE \*\*\* TIME ZONES AND MINUTES OF LATITUDE AND LONGITUDE ARE LISTED IN TENTHS (E.G. 10.6 IS LISTED AS 106)

\*\*\* NOTE \*\*\* AN 'X' IN THE (B)EGIN/(E)ND COLUMN FOLLOWING THE SAMPLE CODE INDICATES NO SAMPLE OR DATA RECOVERED

GSX 14 582S 79 589E S INMOO7MV GSX 15 3S 79 527E S INMOO7MV

GCLV B GEOSECS STA. 451 GCLV E GEOSECS STA. 451

TIME DATE TIME TZ SAMP

130 13 478 2000 13 478

#### UNDERWAY DATA CURATOR - STUART M. SMITH (EXT. 2752)

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*** LOG BOOKS ***			
1645 040478 0030 240478	LBUW B UNDERWAY WATCH LOG		9 386E S INMDO7MV 7 155E S INMO07MV
*** FATHOGRAMS ***			
1645 4 478	DPR3 8 EDR 3.5 KHZ ROLL-01	GDC 6 348N 79	386E S INMOO7MV
255 15 478	DPR3 E EDR 3.5 KHZ ROLL-01	GDC 20 525 80	3E S INMOO7MV
1330 16 478	DPR3 B EDR 3.5 KHZ ROLL-02		0 46E S INMDO7MV
42 24 478	DPR3 E EDR 3.5 KHZ ROLL-02		7 155E S INMDO7MV
*** MAGNETOMETER **	*		
1700 4 478 1300 19 478	MGR B MAGNETICS ROLL-01 MGR E MAGNETICS ROLL-01		9 393E S INMDO7MV 2 429E S INMDO7MV
1311 19 478	MGR B MAGNETICS ROLL-02	GDC 23 4565 77	2 410E S INMDO7MV
1445 23 478	MGR E MAGNETICS ROLL-02	GDC 21 795 58	3 65E S INMDO7MV
***GEOCHEMICAL STA	TION - LARGE VOLUME***		•
25 5 478	GCLV B GEOSECS STA. 447		9 572E S INMOOTMV
1910 5 478	GCLV E GEOSECS STA. 447		9 518E S INMOOTMV
2005 6 478	GCLV B GEOSECS STA. 448	GSX 0 16N 80	
1150 7 478	GCLV E GEOSECS STA. 448	GSX 0 2S 80	
1325 8 478	GCLV 8 GEOSECS STA. 449	GSX 4 597S 79	9 596E S INMDO7MV
1630 9 478	GCLV E GEOSECS STA. 449	GSX 5 547S 80	0 15E S INMDO7MV
1400 10 478	GCLV B GEOSECS STA. 450	GSX 9 5955 80	
2235 11 478	GCLV E GEOSECS STA. 450	GSX 10 75 80	

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TIME DATE TIME TZ		DISP	28 JUN78	PAGE 2 CRUISE LEG-SHIP
GMT D.M.Y. LOC LOC	CODE SAMPLE IDEN	CODE LAT.	LONG.	LEG-SHIF
300 15 478	GCLV B GEOSECS STA.	452 GSX 20 55S	80 3E	S INMDO7MV
1330 16 478	GCLV E GEOSECS STA.			S INMDO7MV
2235 17 478	GCLV B GEDSECS STA.	453 GSX 22 594S	74 3E	S INMDO7MV
525 19 476	GCLV E GEOSECS STA.	453 GSX 23 6S	74 3E	S INMOOTHV
2155 20 478	GCLV B GEOSEGS STA.	454 GSX 26 5955	67 57E	S INMOOTMV
1100 21 478	GCLV E GEOSECS STA.	454 GSX 27 27S	67 54E	S INMOOTMY