

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

(Issued January 1979)

MARIANA EXPEDITION

LEG 5

Agana, Guam (15 October 1978)

to

Agana, Guam (24 October 1978)

R/V T. Washington

Chief Scientist - James Hawkins (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 OCE78-17823

Data Processing Funded by SIA, NSF, ONR and IDOE SEATAR

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

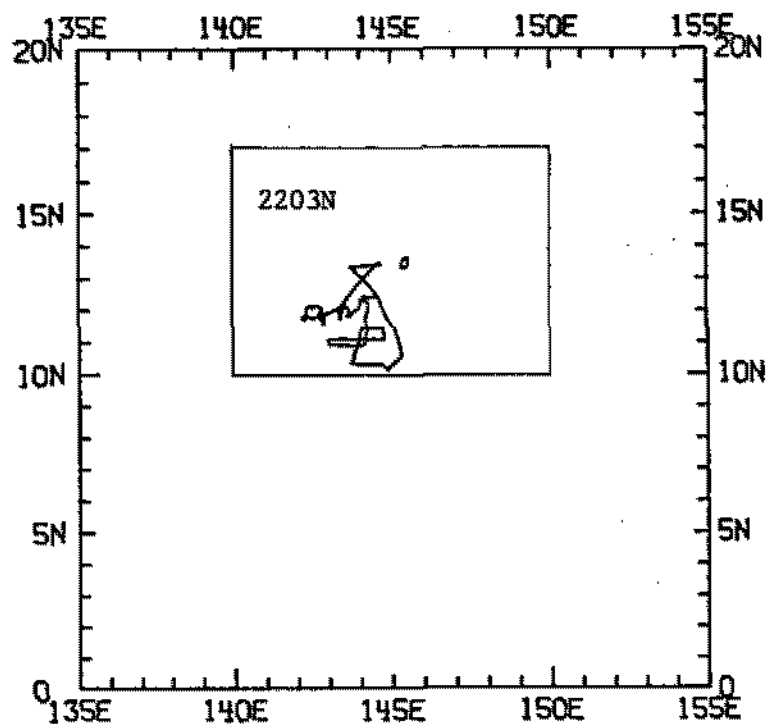
Contents:

- 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. Sections 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 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 gamma/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamma/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

* Gravity - Contact L. M. Dorman (ext.2406) for status



MARIANA EXPEDITION LEG 5

Chief Scientist - J. Hawkins (SIO)

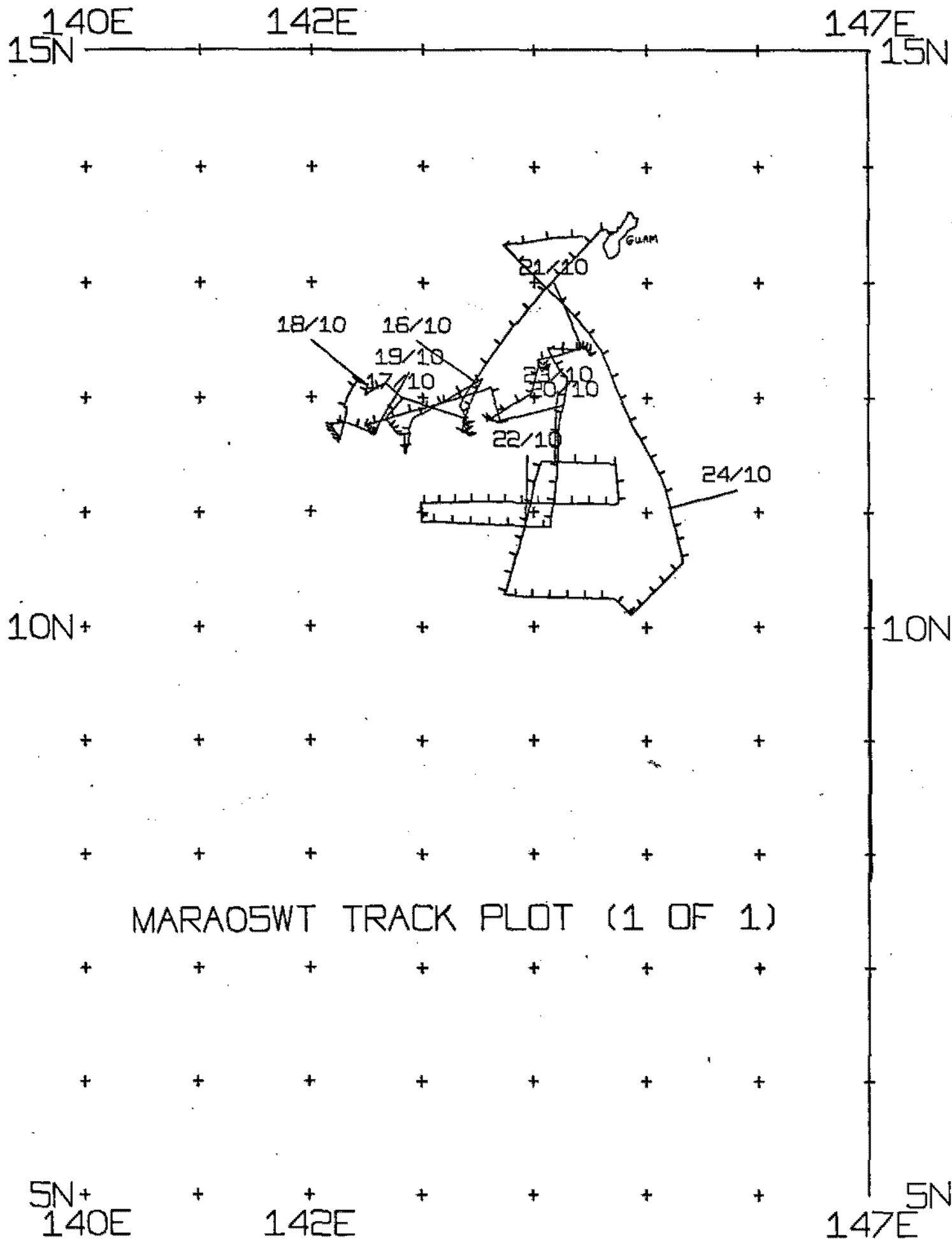
Ports - Agana to Agana, Guam

Dates - 15 to 24 October 1978

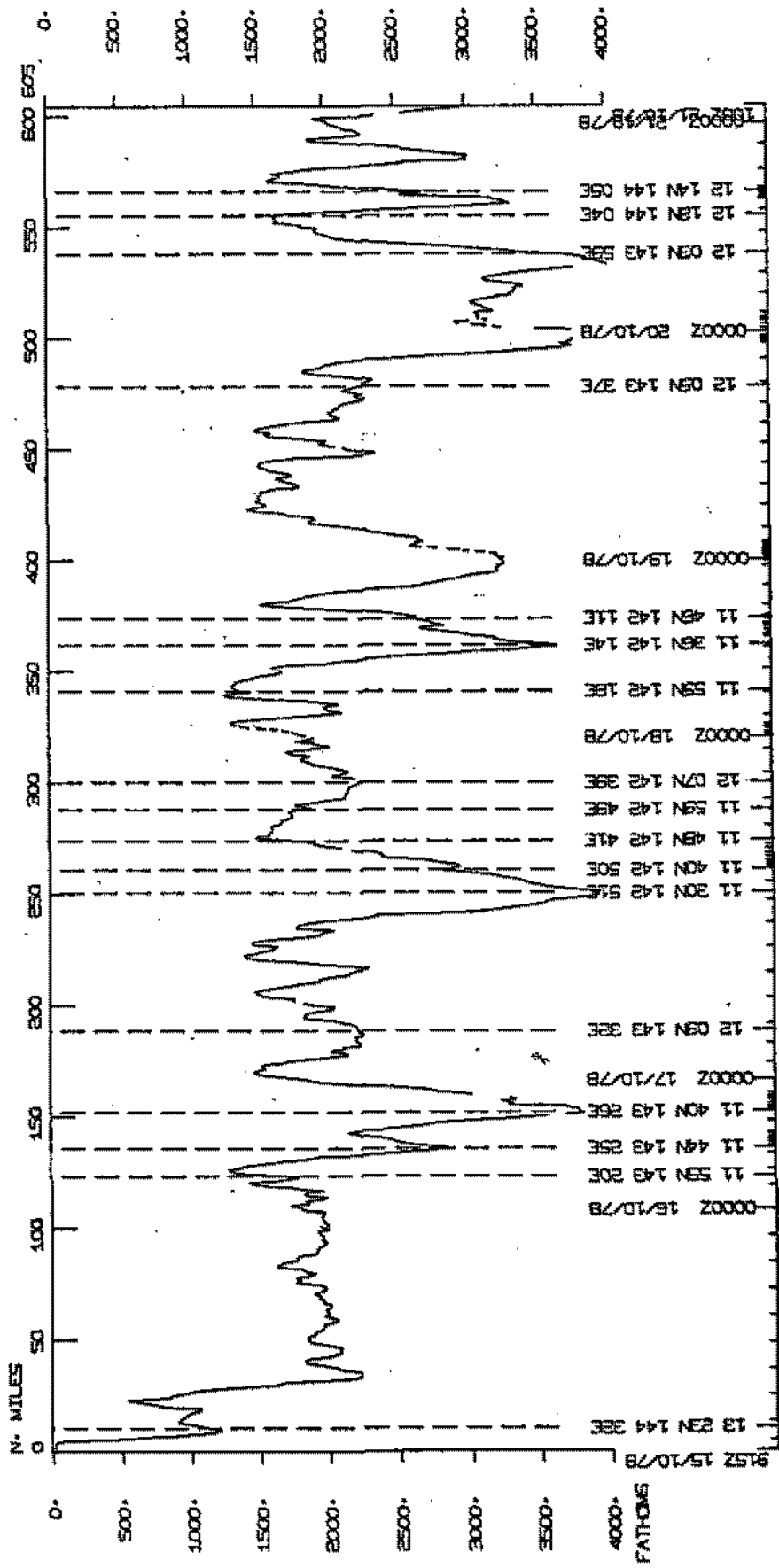
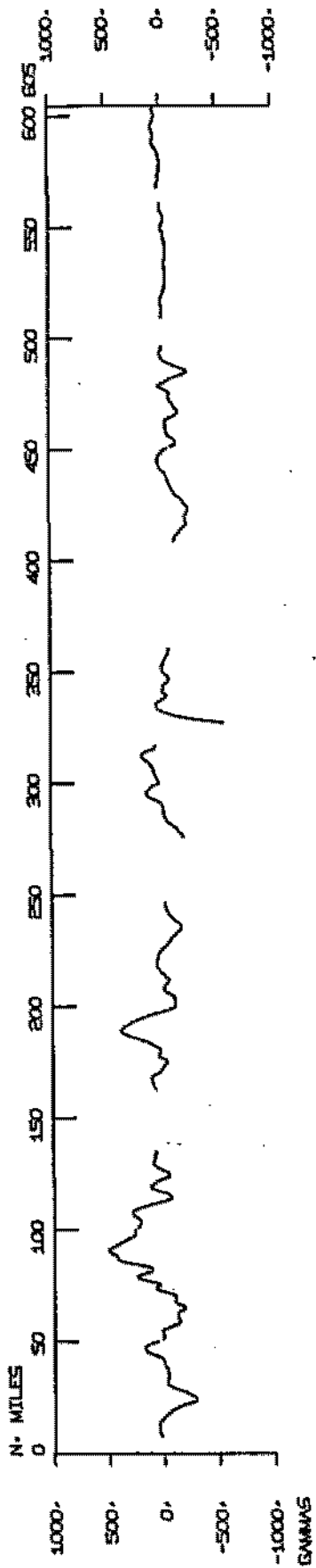
Ship - R/V T. Washington

TOTAL MILEAGE

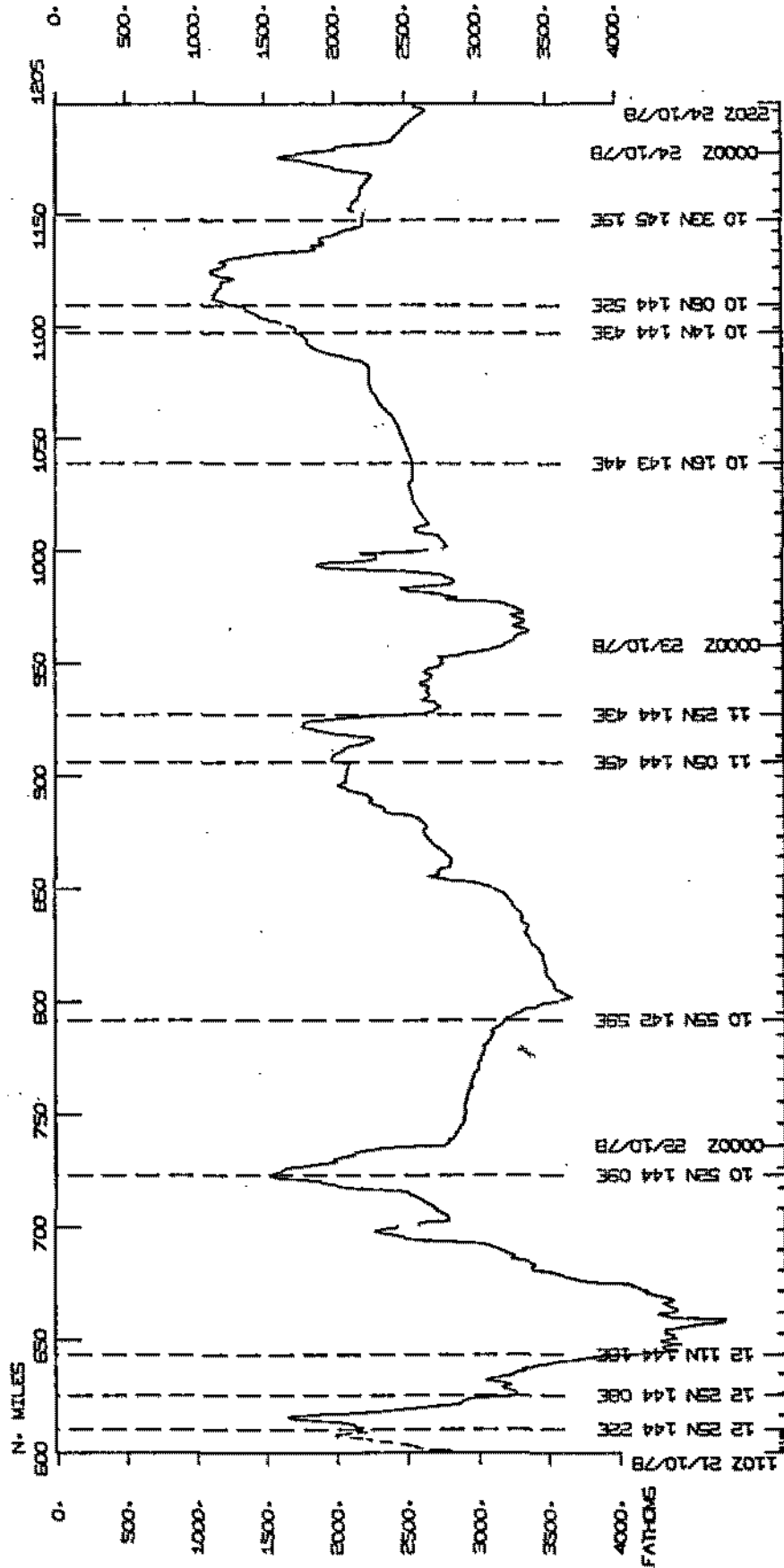
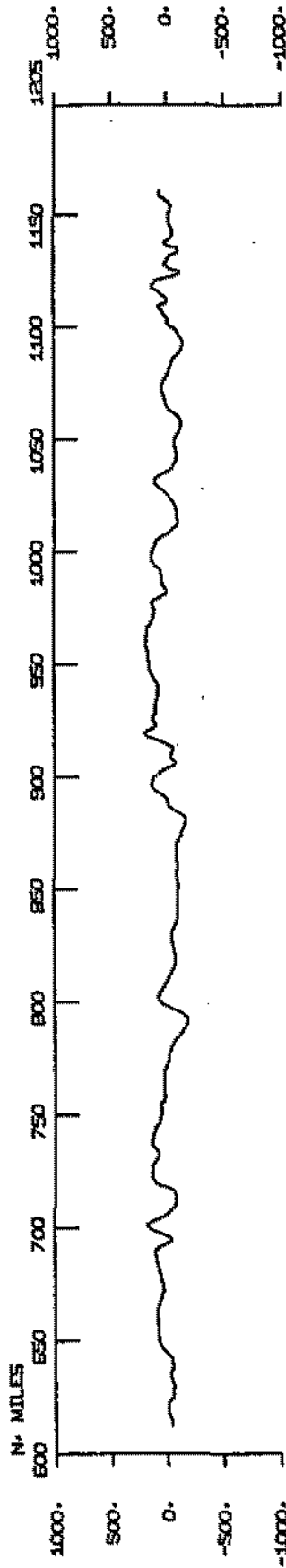
- 1) Cruise - 1394 miles
- 2) Bathymetry - 1389 miles
- 3) Magnetics - 1114 miles
- 4) Seismic Reflection - 944 miles
- 5) Gravity - collected



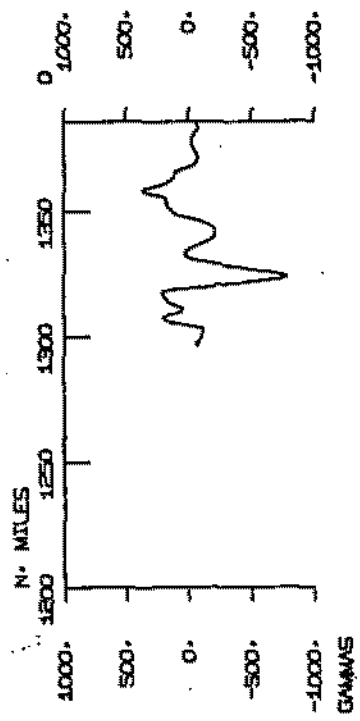
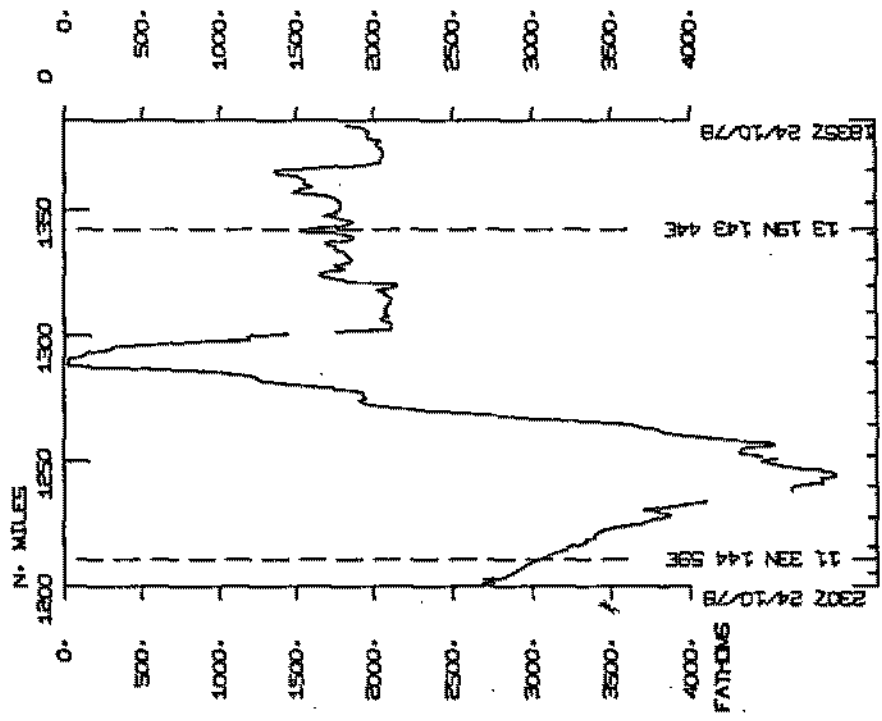
MARIANA LEG 5



MARIANA LEG 5



MARIANA LEG 5



S.I.O. SAMPLE INDEX

(Issued January 1979)

MARIANA EXPEDITION

LEG 5

Agana, Guam (15 October 1978)

to

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R/V T. Washington

Chief Scientist - J. Hawkins (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 by ONR, SIA and IDOE SEATAR

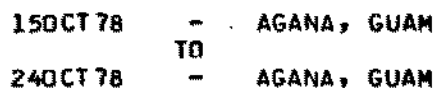
The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the Resident Technician and processed on shore by the S.I.O. Geological Data 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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GENERATED 07 FEB 79

(MARKADSWT) ***



SHIP - R/V THOMAS WASHINGTON (SIO)

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

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

DISP	TYPE								TOTAL
	DP	DR	GV	LB	MG	PE	SP		
GCR	I		9					1	9
GDC	I	9			1	2		2	14
GRD	I						1	1	1
LMD	I			3				1	3
MPL	I					2		1	2
MTG	I					1		1	1
ORD	I					1		1	1
SCG	I					2		1	2
SID	I					5		1	5
UCSB	I					1		1	1
VOL	I					2		1	2
	I					2		1	3
TOTAL	I	9	9	3	1	2	17	2	43

SAMPLE 'TYPE' CODES USED ABOVE

DP = DEPTH
 DR = DREDGE
 GV = GRAVITY
 LB = LOG BOOKS
 MG = MAGNETICS (TOWED VEHICLE, SURFACE, TOTAL FIELD)
 PE = PERSONNEL IN SCIENTIFIC PARTY
 SP = SEISMIC REFLECTION PROFILE AIRGUN

SAMPLE 'DISP' CODES USED ABOVE

GCR = GEOLOGICAL CURATING FACILITY -- W. RIEDEL, (EXT. 4386)
 GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
 GRD = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)
 LMD = LEROY M. DORMAN (EXT. 2406)
 MPL = MARINE PHYSICAL LAB. (EXT 2305)
 MTG = MARINE TECHNOLOGY GROUP (EXT 4194)
 ORD = OCEAN RESEARCH DIVISION
 SCG = SHIPBOARD COMPUTER GROUP (EXT. 4195)
 SID = SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CAL. 92093

GMT D /M /Y	LOC	LOC	CODE	SAMPLE IDENT.	CODE	LAT.	LONG.	LEG-SHIP
TIME DATE	TIME TZ	SAMP	DISP					CRUISE

MARIANA LEG 5 SAMPLE INDEX

MARA05WT

*** PORTS ***

1420 15/10/78
2048 24/10/78

LGPT B AGANA, GUAM
LGPT E AGANA, GUAM

13 27.0N 144 37.0E F MARA05WT
13 27.0N 144 37.0E F MARA05WT

PERSONNEL

*** NAME ***

*** TITLE ***

*** AFFILIATION ***

1 J.W. HAWKINS	CHIEF SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
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3 A.J. HENKY	COMPUTER TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
4 L.D. BIBE	RES. ASSIST.	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
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15 M. REICHL	PROFESSOR	UNIV. CALIF. SANTA BARBARA
16 E.N. SHOR	VOLUNTEER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
17 D.F. WILLOUGHBY	ASST.DVLM.T.ENGR.	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093

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

GMT D /M /Y	LOC	LOC	CODE	SAMPLE	IDENT.	CODE	LAT.	LONG.	LEG-SHIP
TIME DATE	TIME	TZ	SAMP			DISP			CRUISE

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

*** LOG BOOKS ***

1421 15/10/78	LBUW B		UNDERWAY LOG	GDC 13	26.1N	144 39.6E	S	MARA05WT
2048 24/10/78	LBUW E		UNDERWAY LOG	GDC 13	22.8N	144 29.0E	S	MARA05WT

*** FATHOGRAMS ***

1421 15/10/78	DPR3 B	UGR	3.5 KHZ R-01	GDC 13	26.1N	144 39.6E	S	MARA05WT
0412 17/10/78	DPR3 E	UGR	3.5 KHZ R-01	GDC 12	01.7N	143 18.1E	S	MARA05WT
0415 17/10/78	DPR3 B	UGR	3.5 KHZ R-02	GDC 12	01.4N	143 17.5E	S	MARA05WT
0758 22/10/78	DPR3 E	UGR	3.5 KHZ R-02	GDC 11	05.2N	143 09.0E	S	MARA05WT
0815 22/10/78	DPR3 B	UGR	3.5 KHZ R-03	GDC 11	05.2N	143 11.3E	S	MARA05WT
1306 24/10/78	DPR3 E	UGR	3.5 KHZ R-03	GDC 13	04.6N	143 58.9E	S	MARA05WT
1421 15/10/78	DPRT B	GDR	12 KHZ R-01	GDC 13	26.1N	144 39.6E	S	MARA05WT
0915 16/10/78	DPRT E	GDR	12 KHZ R-01	GDC 11	46.9N	143 22.5E	S	MARA05WT
0920 16/10/78	DPRT B	GDR	12 KHZ R-02	GDC 11	47.0N	143 22.5E	S	MARA05WT
1020 18/10/78	DPRT E	GDR	12 KHZ R-02	GDC 11	39.6N	142 15.4E	S	MARA05WT
1030 18/10/78	DPRT B	GDR	12 KHZ R-03	GDC 11	39.7N	142 15.4E	S	MARA05WT
0835 21/10/78	DPRT E	GDR	12 KHZ R-03	GDC 12	25.1N	144 24.5E	S	MARA05WT
0850 21/10/78	DPRT B	GDR	12 KHZ R-04	GDC 12	25.1N	144 24.5E	S	MARA05WT
1914 22/10/78	DPRT E	GDR	12 KHZ R-04	GDC 11	09.6N	144 45.1E	S	MARA05WT
1941 22/10/78	DPRT B	GDR	12 KHZ R-05	GDC 11	13.7N	144 44.7E	S	MARA05WT
1705 23/10/78	DPRT E	GDR	12 KHZ R-05	GDC 10	12.4N	144 58.4E	S	MARA05WT
1710 23/10/78	DPRT B	GDR	12 KHZ R-06	GDC 10	12.9N	144 59.0E	S	MARA05WT
2048 24/10/78	DPRT E	GDR	12 KHZ R-06	GDC 13	22.8N	144 29.0E	S	MARA05WT

*** SEISMIC REFLECTION PROFILES ***

2350 16/10/78	SPRF B	AIRGUN (RF) R-01	GDC 11	47.7N	143 23.6E	S	MARA05WT
1912 24/10/78	SPRF E	AIRGUN (RF) R-01	GDC 13	22.8N	144 29.0E	S	MARA05WT
2350 16/10/78	SPRS B	AIRGUN (RS) R-01	GDC 11	47.7N	143 23.6E	S	MARA05WT
1912 24/10/78	SPRS E	AIRGUN (RS) R-01	GDC 13	22.8N	144 29.0E	S	MARA05WT

GMT D / M / Y	LOC LOC	CODE	SAMPLE IDENT.	CODE	LAT.	LONG.	LEG-SHIP
TIME DATE	TIME TZ	SAMP		DISP			CRUISE

*** MAGNETOMETER ***

1532 15/10/78		MGR	R MAGNETICS R-01	GDC	13	25.1N 144 34.0E	S MARA05WT
0948 23/10/78		MGR	E MAGNETICS R-01	GDC	10	15.9N 143 57.7E	S MARA05WT
0955 23/10/78		MGR	R MAGNETICS R-02	GDC	10	15.9N 143 58.8E	S MARA05WT
1905 24/10/78		MGR	E MAGNETICS R-02	GDC	13	22.8N 144 29.0E	S MARA05WT

GRAVIMETRIC RECORDS CURATOR L.M. DORMAN (EXT.2406)

1421 15/10/78		GVR	B GRAV. ANALOG. R-01	LMD	13	26.1N 144 39.6E	S MARA05WT
0127 22/10/78		GVR	E GRAV. ANALOG. R-01	LMD	10	53.3N 143 41.7E	S MARA05WT
0139 22/10/78		GVR	B GRAV. ANALOG. R-02	LMD	10	53.4N 143 39.7E	S MARA05WT
0630 24/10/78		GVR	E GRAV. ANALOG. R-02	LMD	12	05.3N 144 43.8E	S MARA05WT
0640 24/10/78		GVR	B GRAV. ANALOG. R-03	LMD	12	07.2N 144 43.1E	S MARA05WT
2048 24/10/78		GVR	E GRAV. ANALOG. R-03	LMD	13	22.8N 144 29.0E	S MARA05WT

*** DREDGE ***

0612 16/10/78		DRR	B MARA 20D	5298	GCR	11	44.6N 143 25.3E	S MARA05WT
0958 16/10/78		DRR	E MARA 20D	5298	GCR	11	47.7N 143 22.0E	S MARA05WT
1702 16/10/78		DRR	B MARA 21D	7182	GCR	11	40.4N 143 24.7E	S MARA05WT
2025 16/10/78		DRR	E MARA 21D	7182	GCR	11	42.9N 143 22.8E	S MARA05WT
1308 17/10/78		DRR	B MARA 22D	5470	GCR	11	40.6N 142 47.7E	S MARA05WT
1615 17/10/78		DRR	E MARA 22D	5470	GCR	11	44.1N 142 44.2E	S MARA05WT
0150 18/10/78		DRR	B MARA 23D	3536	GCR	12	07.9N 142 28.7E	S MARA05WT
0406 18/10/78		DRR	E MARA 23D	3536	GCR	12	07.8N 142 25.9E	S MARA05WT
1138 18/10/78		DRR	B MARA 24D	5880	GCR	11	40.2N 142 15.2E	S MARA05WT
1735 18/10/78		DRR	E MARA 24D	5880	GCR	11	46.6N 142 11.8E	S MARA05WT
0103 19/10/78		DRR	B MARA 25D	6143	GCR	11	40.9N 142 33.8E	S MARA05WT
0800 19/10/78		DRR	E MARA 25D	6143	GCR	11	45.3N 142 30.8E	S MARA05WT
2322 19/10/78		DRR	B MARA 26D	7103	GCR	11	46.8N 143 41.3E	S MARA05WT
0425 20/10/78		DRR	E MARA 26D	7103	GCR	11	47.9N 143 35.3E	S MARA05WT
1457 20/10/78		DRR	B MARA 27D	5698	GCR	12	14.7N 144 05.7E	S MARA05WT
1831 20/10/78		DRR	E MARA 27D	5698	GCR	12	14.2N 144 05.5E	S MARA05WT
0306 21/10/78		DRR	B MARA 28D	5093	GCR	12	23.3N 144 30.8E	S MARA05WT
0759 21/10/78		DRR	E MARA 28D	5093	GCR	12	25.3N 144 25.0E	S MARA05WT

9900

END SAMPLE INDEX

MARA05WT