INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(ISSUED MAY 1981)

RAMA EXPEDITION

LEG 9

Agana, Guam (31 January 1981)
to
Agana, Guam (16 February 1981)

R/V T. Washington

Co-Chief Scientists - L. Dorman (SIO)
M. Reichle (SIO)
D. Bibee (Oregon State University)

Resident Marine Tech - R. Wilson

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

Data Collection Funded by NSF and ONR
Grant Numbers OCE77-23258 and ONR-0440
Data Processing Funded by SIA, NSF and ONR

GDC Cruise I.D.# - 184

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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 in/degree longitude.

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) or meters (assumed sound velocity of 1500m/sec) at approximately 1 mile spacing, plotted at 4in/degree with standard U. S. Navy Oceanographic Office BC series boundaries (see index chart).

3. Plots of magnetic anomaly profiles along track - map scale = 1.2inch/degree, anomaly scale between 15N and 15 S latitude = 500 gamma/inch, anomaly scale north of 15N and south of 15S = 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).

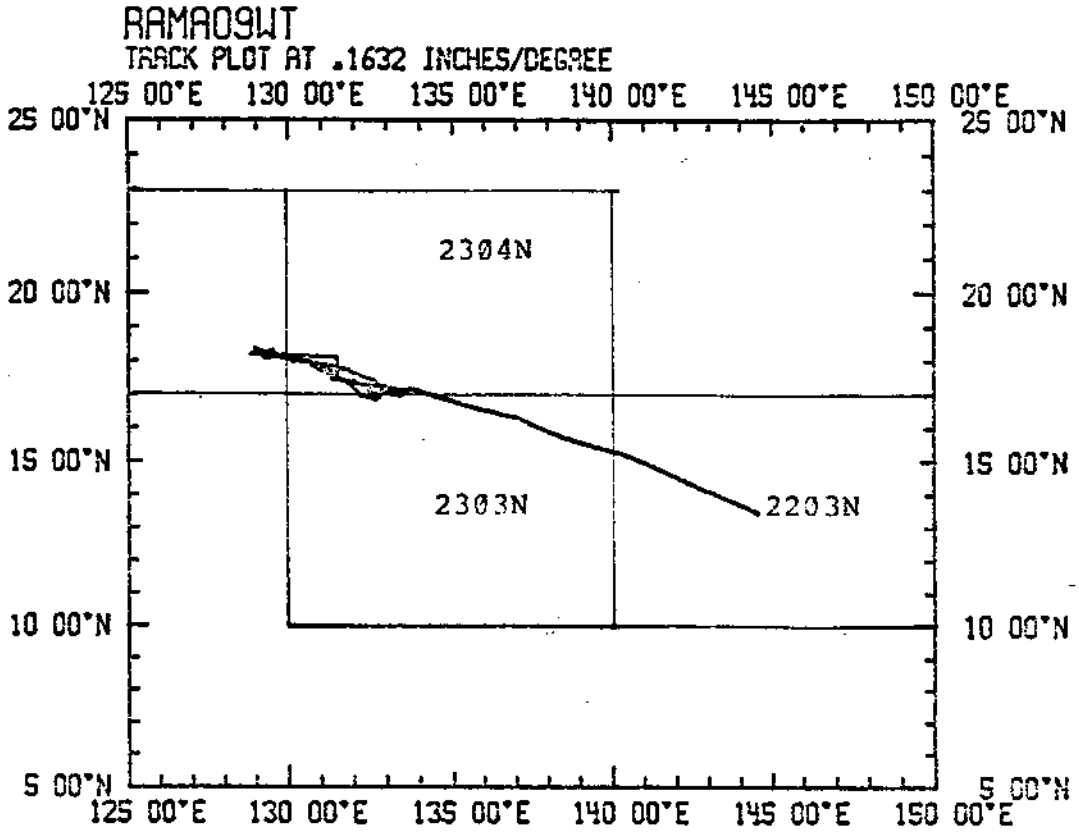
5. S.I.O. Sample Index - list of beginning and end times and positions of all underway records as well as all other samples (geology, biology, physical oceanography, etc.) collected on the cruise leg.

6. Microfilm or Xerox copies of:
   a. Echosounder records - 12 and 3.5 kHz frequency

   b. Subbottom profiler records (airgun)

   c. Magnetometer records

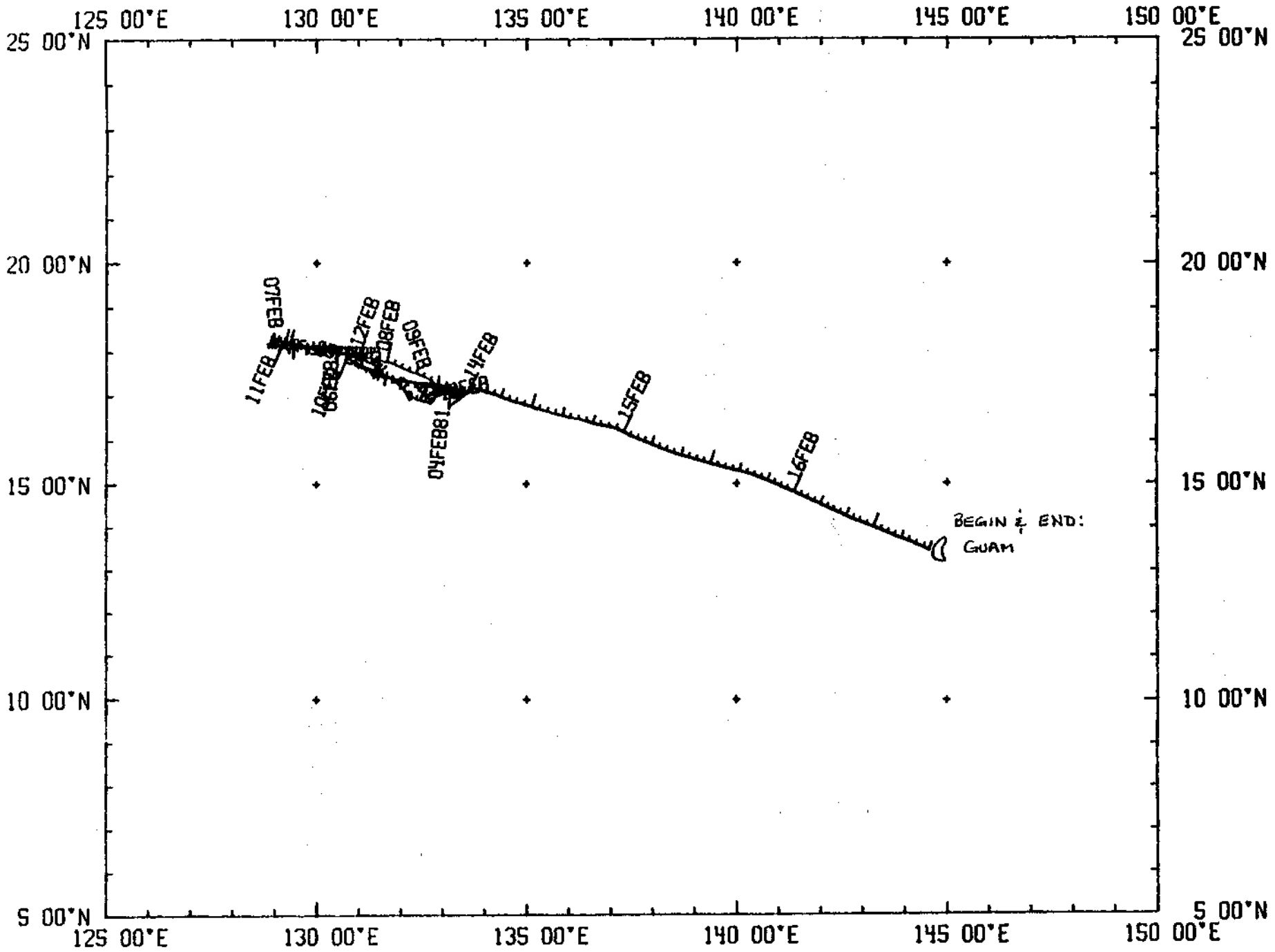
   d. Underway data log

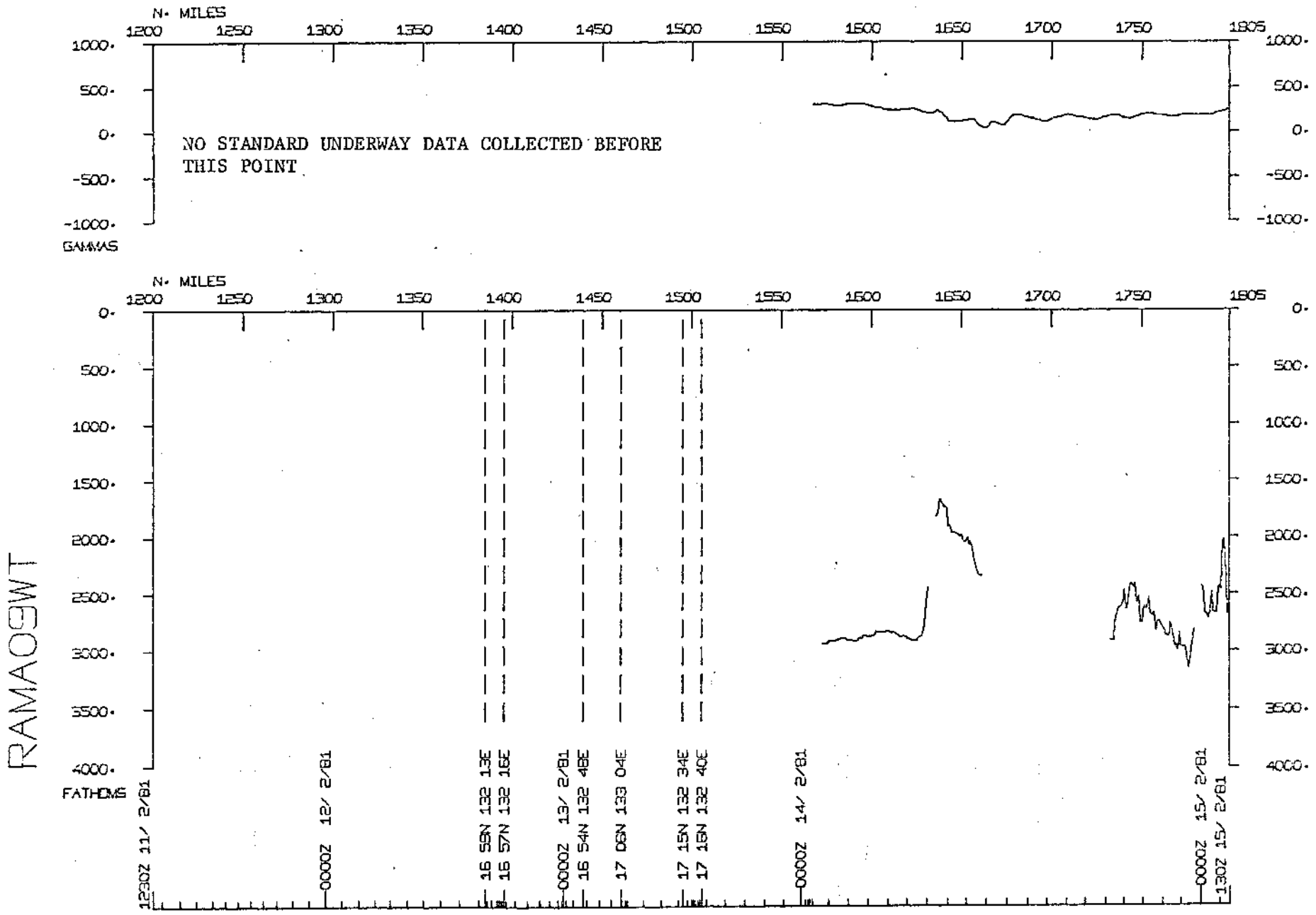


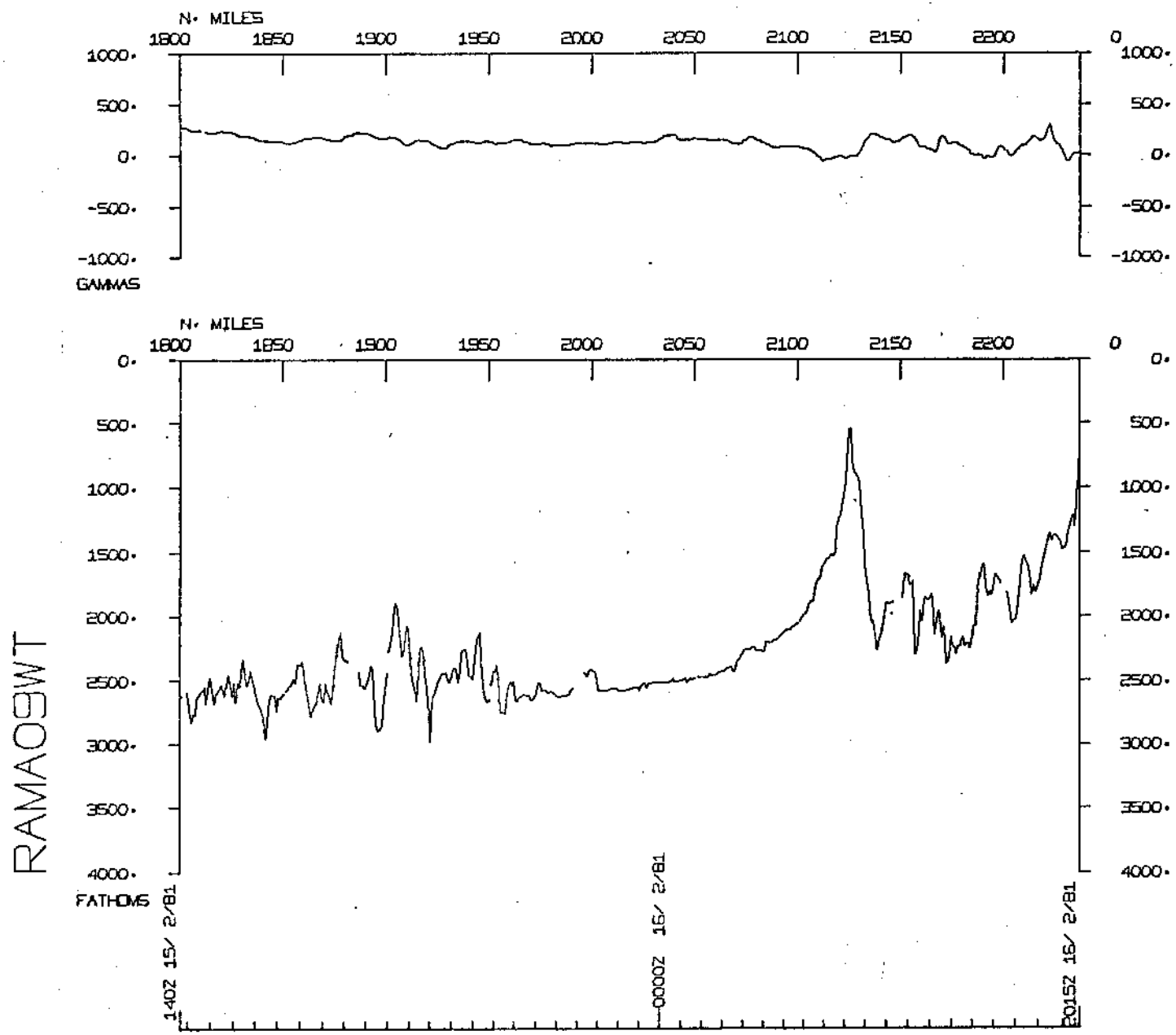
RAMA EXPEDITION
LEG 9

Co-Chief Scientists: L. Dorman and M. Reichle (SIO) and D. Bibee (OSU)
PORTS: Agana to Agana, Guam
DATES: 31 January - 16 February 1981
SHIP: T. Washington

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED
1) Cruise - 2244 miles
2) Bathymetry - 570 miles
3) Magnetics - 664 miles
4) Seismic Reflection - none collected
5) Gravity - 617 miles


RAMA09WT
TRACK PLOT AT .312 INCHES/DEGREE
125 00°E
130 00°E
135 00°E
140 00°E
145 00°E
150 00°E
25 00°N
20 00°N
15 00°N
10 00°N
5 00°N
07FEB
11FEB
12FEB
08FEB
09FEB
14FEB
15FEB
16FEB
BEGIN & END:
GUAM


N. MILES
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1805
1000.
500.
0.
-500.
-1000.
GAMMAS
NO STANDARD UNDERWAY DATA COLLECTED BEFORE
THIS POINT
N. MILES
0.
500.
1000.
1500.
2000.
2500.
3000.
3500.
4000.
FATHOMS
1230Z 11/ 2/81
0000Z 12/ 2/81
16 58N 132 13E
16 57N 132 16E
0000Z 13/ 2/81
16 54N 132 48E
17 06N 133 04E
17 15N 132 34E
17 18N 132 40E
0000Z 14/ 2/81
0000Z 15/ 2/81
1330Z 15/ 2/81
RAMA09WT


N. MILES
1800
1850
1900
1950
2000
2050
2100
2150
2200
0
1000.
500.
0.
-500.
-1000.
GAMMAS
N. MILES
1800
1850
1900
1950
2000
2050
2100
2150
2200
0
0.
500.
1000.
1500.
2000.
2500.
3000.
3500.
4000.
FATHOMS
1402 15/ 2/81
00002 15/ 2/81
20152 15/ 2/81
RAMA09WT

S.I.O. Sample Index

(Issued May 1981)

RAMA EXPEDITION
LEG 9

Agana, Guam (31 January 1981)
to
Agana, Guam (16 February 1981)

R/V T. Washington

Co-Chief Scientists - L. Dorman (SIO)
M. Reichle (SIO)
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Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center

Index Encoding Funded by NSF
Grant Number OCE80-22996
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.)

S.I.O. SAMPLE INDEX GENERATED 30APR81

*** RAMA LEG 9 SAMPLE INDEX (RAMA09WT) ***

31JAN81 - AGANA, GUAM

TO

16FEB81 - AGANA, GUAM

CHIEF SCIENTISTS - DORMAN, L. GRD
REICHLE, M. GRD
BIBEE, D. OSU

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
	BT	DP	GV	LB	MG	PE	SB	SR	
GDC		2		1	1	1			5
GRD				1		5			6
JGPP						2			2
LMD			1	1			11	1	14
MTG	2					1			3
OSU				1		5	15		21
SCG						1			1
TOTAL	2	2	1	4	1	15	26	1	52

SAMPLE 'TYPE' CODES USED ABOVE

BT = BATHYTHERMOGRAM
DP = DEPTH
GV = GRAVITY
LB = LOG BOOKS
MG = MAGNETICS (TOWED VEHICLE, SURFACE, TOTAL FIELD)
PE = PERSONNEL IN SCIENTIFIC PARTY
SB = SEISMIC BUOY
SR = SEISMIC RUN

SAMPLE 'DISP' CODES USED ABOVE

GC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
RD = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)
MD = LEROY M. DORMAN (EXT. 2406)
TG = MARINE TECHNOLOGY GROUP (EXT 4194)
SU = OREGON STATE UNIVERSITY
CG = SHIPBOARD COMPUTER GROUP (EXT. 4195)

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
	/ /	000			RAMA LEG 9 SAMPLE INDEX		00 00.	00 00.	RAMA09WT

*** PORTS ***

629	31/ 1/81			LGPT	B AGANA, GUAM		17 00.7N	133 29.5E	S RAMA09WT
124	16/ 2/81			LGPT	E AGANA, GUAM		13 27.4N	144 35.7E	S RAMA09WT

PERSONNEL*

** NAME ***	*** TITLE ***	*** AFFILIATION ***
1 DORMAN, L.	CHIEF SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
2 REICHLE, M.	CHIEF SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
3 BIBEE, D.	CHIEF SCIENTIST	OREGON STATE UNIVERSITY
4 MOORE, R.	SPECIALIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
5 OTT, J.	COMPUTER TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
6 WILLOUGHBY, D.	ASST DEV ENG	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
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9 STANDING, W.	ENGINEER	OREGON STATE UNIVERSITY
0 NEWHOUSE, D.	STAFF RES ASST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
1 BRETHERTON, B.	STUDENT WORKER	OREGON STATE UNIVERSITY
2 BARTELS, F.	VOLUNTEER	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675
3 MARCHISIO, G.	GRAD STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
4 GOODMAN, D.	GRAD STUDENT	OREGON STATE UNIVERSITY
5 WILSON, R.	RESIDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093

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 LOC TIME TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
**** UNDERWAY DATA CURATOR - STUART M. SMITH EXT. 2752 ***							
*** LOG BOOKS ***							
0629 31/ 1/81		LBUW B	UNDERWAY LOG	GDC	17 00.7N	133 29.5E	S RAMA09WT
2124 16/ 2/81		LBUW E	UNDERWAY LOG	GDC	13 27.4N	144 35.7E	S RAMA09WT
0629 31/ 1/81		LBSC B	OSU OBS LOG BIBEE	OSU	17 00.7N	133 29.5E	S RAMA09WT
2124 16/ 2/81		LBSC E	OSU OBS LOG BIBEE	OSU	13 27.4N	144 35.7E	S RAMA09WT
0629 31/ 1/81		LBSC B	SIO OBS LOG DORMAN	LMD	17 00.7N	133 29.5E	S RAMA09WT
2124 16/ 2/81		LBSC E	SIO OBS LOG DORMAN	LMD	13 27.4N	144 35.7E	S RAMA09WT
0629 31/ 1/81		LBSC B	REICHLE OBS LOG	GRD	17 00.7N	133 29.5E	S RAMA09WT
2124 16/ 2/81		LBSC E	REICHLE OBS LOG	GRD	13 27.4N	144 35.7E	S RAMA09WT
*** FATHOGRAMS ***							
0009 2/ 2/81		DPR3 B	UGR 3.5KHZ R-01	GDC	17 00.7N	133 29.5E	S RAMA09WT
1938 15/ 2/81		DPR3 E	UGR 3.5KHZ R-01	GDC	15 05.7N	140 40.1E	S RAMA09WT
2019 15/ 2/81		DPR3 B	UGR 3.5KHZ R-02	GDC	15 03.0N	140 46.5E	S RAMA09WT
2044 16/ 2/81		DPR3 E	UGR 3.5KHZ R-02	GDC	13 27.4N	144 35.7E	S RAMA09WT
*** MAGNETOMETER ***							
0416 14/ 2/81		MGRA B	MAGNETICS R-01	GDC	17 10.2N	133 42.7E	S RAMA09WT
2016 16/ 2/81		MGRA E	MAGNETICS R-01	GDC	13 27.5N	144 35.5E	S RAMA09WT
GRAVIMETRIC RECORDS CURATOR L.M. DORMAN (EXT.2406)							
0400 14/ 2/81		GVRA B	GRAVITYMETER R-01	LMD	17 10.2N	133 41.3E	S RAMA09WT
2124 16/ 2/81		GVRA E	GRAVITYMETER R-01	LMD	13 27.4N	144 35.7E	S RAMA09WT
SEISMIC REFRACTION - COMBINATION							
0905 7/ 2/81		SRCS B	SEIS. RUN RAMA09-1	LMD	18 22.3N	128 59.9E	S RAMA09WT
0846 8/ 2/81		SRCS E	UR/EX/OB/AD	LMD	17 03.0N	133 08.4E	S RAMA09WT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
SONOBUOY - OCEAN BOTTOM SEISMOMETER*									
903	3/ 2/81			SBOB X	GWEN-LOST	5618M	LMD 17 05.0N	133 38.2E	S RAMA09WT
035	4/ 2/81			SBOB B	JUAN	6026M	LMD 17 16.8N	132 34.1E	S RAMA09WT
050	9/ 2/81			SBOB E	JUAN	6026M	LMD 17 15.6N	132 34.4E	S RAMA09WT
642	4/ 2/81			SBOB X	DOE-LOST	6022M	LMD 17 21.0N	131 58.4E	S RAMA09WT
337	5/ 2/81			SBOB B	PHRED	5828M	LMD 18 08.7N	130 32.4E	S RAMA09WT
041	10/ 2/81			SBOB E	PHRED	5828M	LMD 17 52.2N	130 44.3E	S RAMA09WT
814	7/ 2/81			SBOB B	HUGO BEZDEK	5298M	LMD 18 21.1N	128 59.5E	S RAMA09WT
230	11/ 2/81			SBOB E	HUGO BEZDEK	5298M	LMD 18 18.9N	128 58.9E	S RAMA09WT
053	3/ 2/81			SBOB B	OSU OBS 12	5689M	OSU 17 00.7N	133 29.5E	S RAMA09WT
156	8/ 2/81			SBOB E	OSU OBS 12	5689M	OSU 16 56.8N	133 25.7E	S RAMA09WT
026	3/ 2/81			SBOB B	OSU OBS 14	5733M	OSU 17 00.7N	133 29.5E	S RAMA09WT
435	8/ 2/81			SBOB E	OSU OBS 14	5733M	OSU 17 00.0N	133 11.1E	S RAMA09WT
207	4/ 2/81			SBOB X	OSU OBS 11-LOST		OSU 17 10.3N	133 05.0E	S RAMA09WT
052	5/ 2/81			SBOB B	OSU OBS 13	5685M	OSU 17 35.4N	131 26.7E	S RAMA09WT
640	9/ 2/81			SBOB E	OSU OBS 13	5685M	OSU 17 34.2N	131 26.8E	S RAMA09WT
735	6/ 2/81			SBOB B	OSU OBS 1	5824M	OSU 18 10.1N	129 50.9E	S RAMA09WT
231	10/ 2/81			SBOB E	OSU OBS 1	5824M	OSU 17 59.7N	130 11.3E	S RAMA09WT
403	6/ 2/81			SBOB X	OSU OBS 2-LOST		OSU 18 11.2N	129 17.1E	S RAMA09WT
403	7/ 2/81			SBOB B	OSU OBS 3	5626M	OSU 18 15.1N	129 04.5E	S RAMA09WT
007	11/ 2/81			SBOB E	OSU OBS 3	5626M	OSU 18 15.5N	129 04.0E	S RAMA09WT
140	10/ 2/81			SBOB B	M. MCKISICK	5801M	LMD 17 52.6N	130 47.8E	S RAMA09WT
124	16/ 2/81			SBOB C	M. MCKISICK	5801M	LMD 13 27.4N	144 35.7E	S RAMA09WT
303	12/ 2/81			SBOB B	PHRED	6071M	LMD 16 52.9N	132 41.7E	S RAMA09WT
124	16/ 2/81			SBOB C	PHRED	6071M	LMD 13 27.4N	144 35.7E	S RAMA09WT
644	13/ 2/81			SBOB B	JUAN	5803M	LMD 17 06.9N	133 04.7E	S RAMA09WT
124	16/ 2/81			SBOB C	JUAN	5803M	LMD 13 27.4N	144 35.7E	S RAMA09WT
557	13/ 2/81			SBOB B	HUGO BEZDEK	6042M	LMD 17 17.0N	132 38.1E	S RAMA09WT
124	16/ 2/81			SBOB C	HUGO BEZDEK	6042M	LMD 13 27.4N	144 35.7E	S RAMA09WT
200	9/ 2/81			SBOB B	OSU OBS 14	6046M	OSU 17 21.0N	131 59.5E	S RAMA09WT
124	16/ 2/81			SBOB C	OSU OBS 14	6046M	OSU 13 27.4N	144 35.7E	S RAMA09WT
356	10/ 2/81			SBOB B	OSU OBS 13	5673M	OSU 18 00.7N	130 10.7E	S RAMA09WT
124	16/ 2/81			SBOB C	OSU OBS 13	5673M	OSU 13 27.4N	144 35.7E	S RAMA09WT
814	9/ 2/81			SBOB B	OSU OBS 12	5442M	OSU 17 34.3N	131 26.8E	S RAMA09WT
124	16/ 2/81			SBOB C	OSU OBS 12	5442M	OSU 13 27.4N	144 35.7E	S RAMA09WT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
135	12/ 2/81			SBOB B	OSU OBS 3	5944M	OSU 16 55.3N	132 12.8E	S RAMA09WT
124	16/ 2/81			SBOB C	OSU OBS 3	5944M	OSU 13 27.4N	144 35.7E	S RAMA09WT
252	14/ 2/81			SBOB B	OSU OBS 8	5623M	OSU 17 08.9N	133 40.4E	S RAMA09WT
124	16/ 2/81			SBOB C	OSU OBS 8	5623M	OSU 13 27.4N	144 35.7E	S RAMA09WT

*** BATHYTHERMOGRAPH ***

0437	2/ 2/81			BTXP	NO. SAMPLES = 1	MTG	17 00.7N	133 29.5E	S RAMA09WT
1139	7/ 2/81			BTXP	NO. SAMPLES = 1	MTG	18 15.0N	129 20.1E	S RAMA09WT

9900 END SAMPLE INDEX RAMA09WT