INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH AND MAGNETIC DATA

(ISSUED AUGUST 1981)

RAMA EXPEDITION

LEG 15

Dutch Harbor, Alaska (21 June 1981)
to
San Diego, California (2 July 1981)

R/V T. Washington

Chief Scientist - J. Burke (WHOI)

Resident Marine Tech - J. Boaz

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

Data Collection Funded by ONR, NSF and Woods Hole
Grant Numbers ONR-0440, NSF-OCE80-24472, WHOI-30296
Bathymetric Data Collection
and Processing Funded by
Defense Mapping Agency
Contract 800-81-C-0023
Data Processing Funded by SIA and DMA

GDC Cruise I.D.# - 181

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 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).

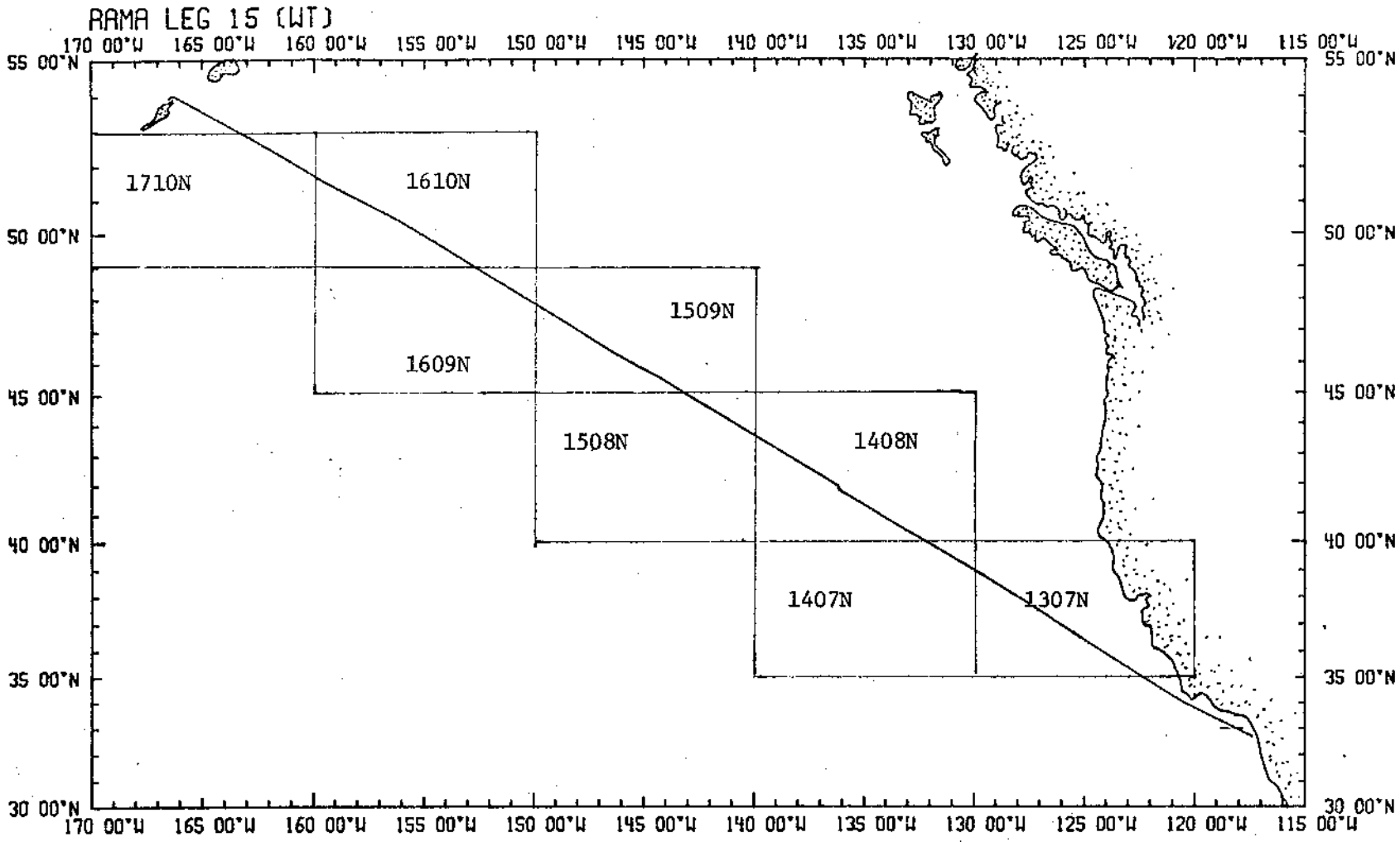
5. S.I.O. Sample Index - list of beginning and end times and positions of all underway records as well as all other samples (geology, biology, physical oceanography, etc.) collected on the cruise leg.

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

   b. Subbottom profiler records (airgun)

   c. Magnetometer records

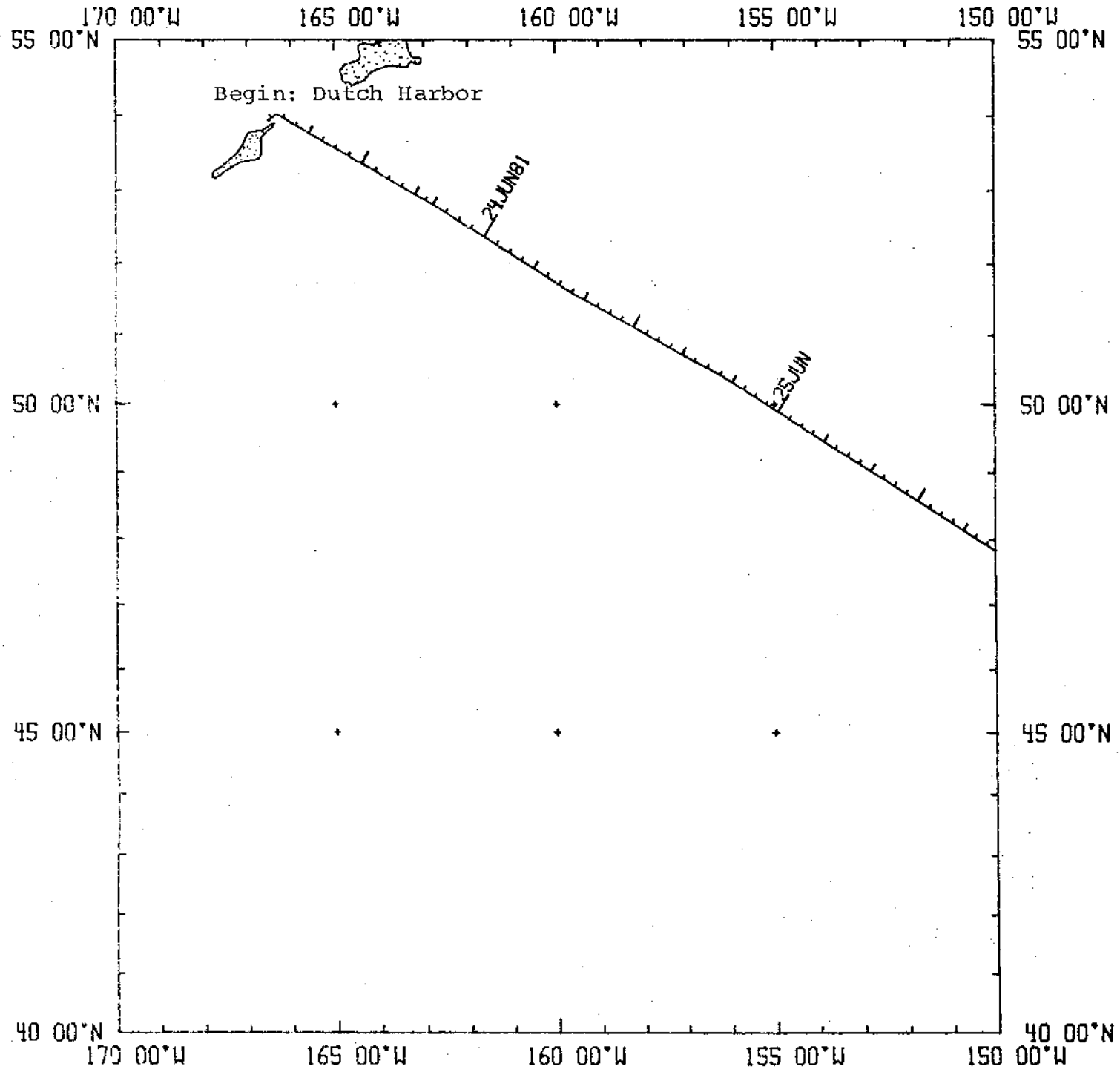
   d. Underway data log

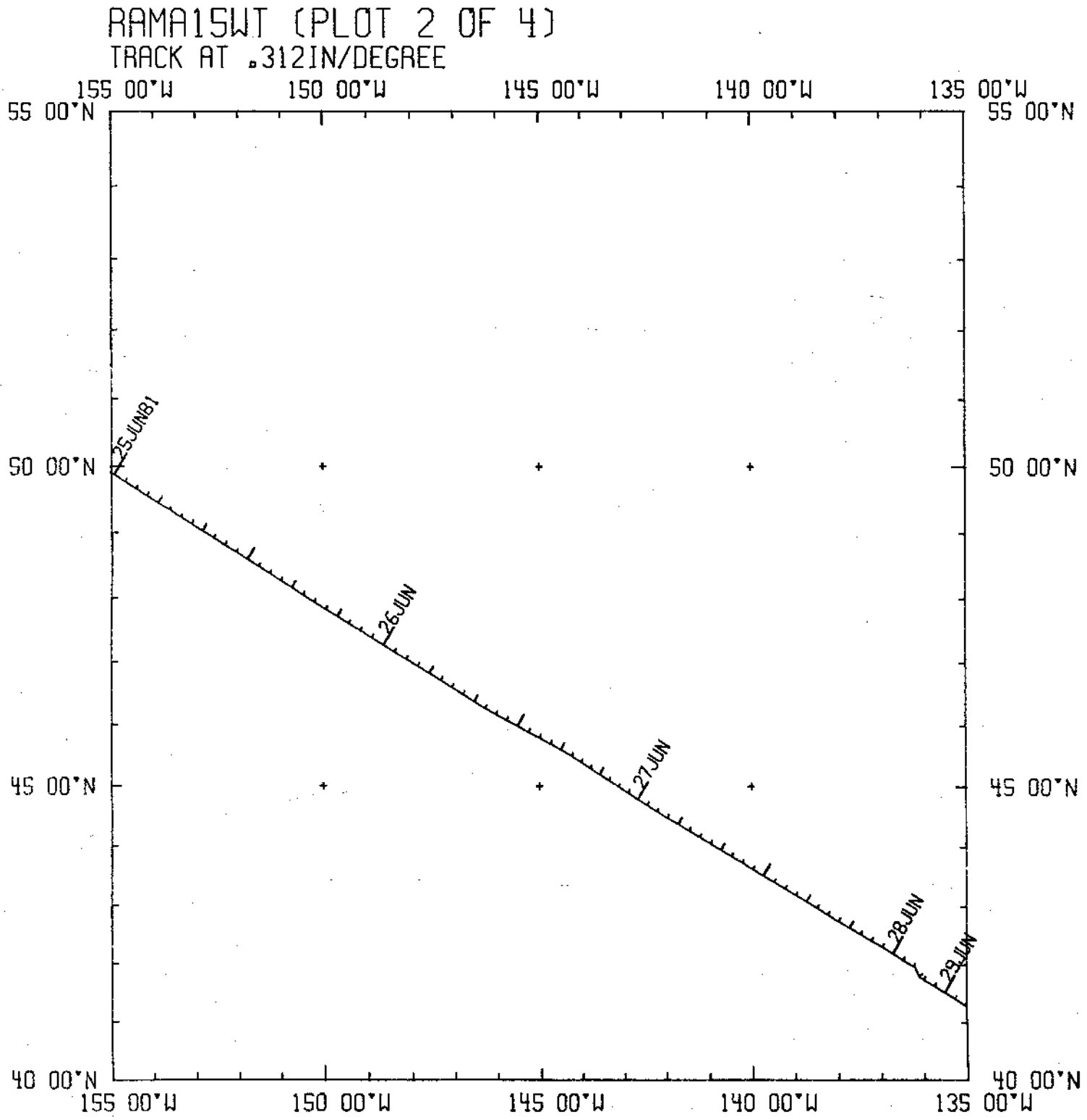


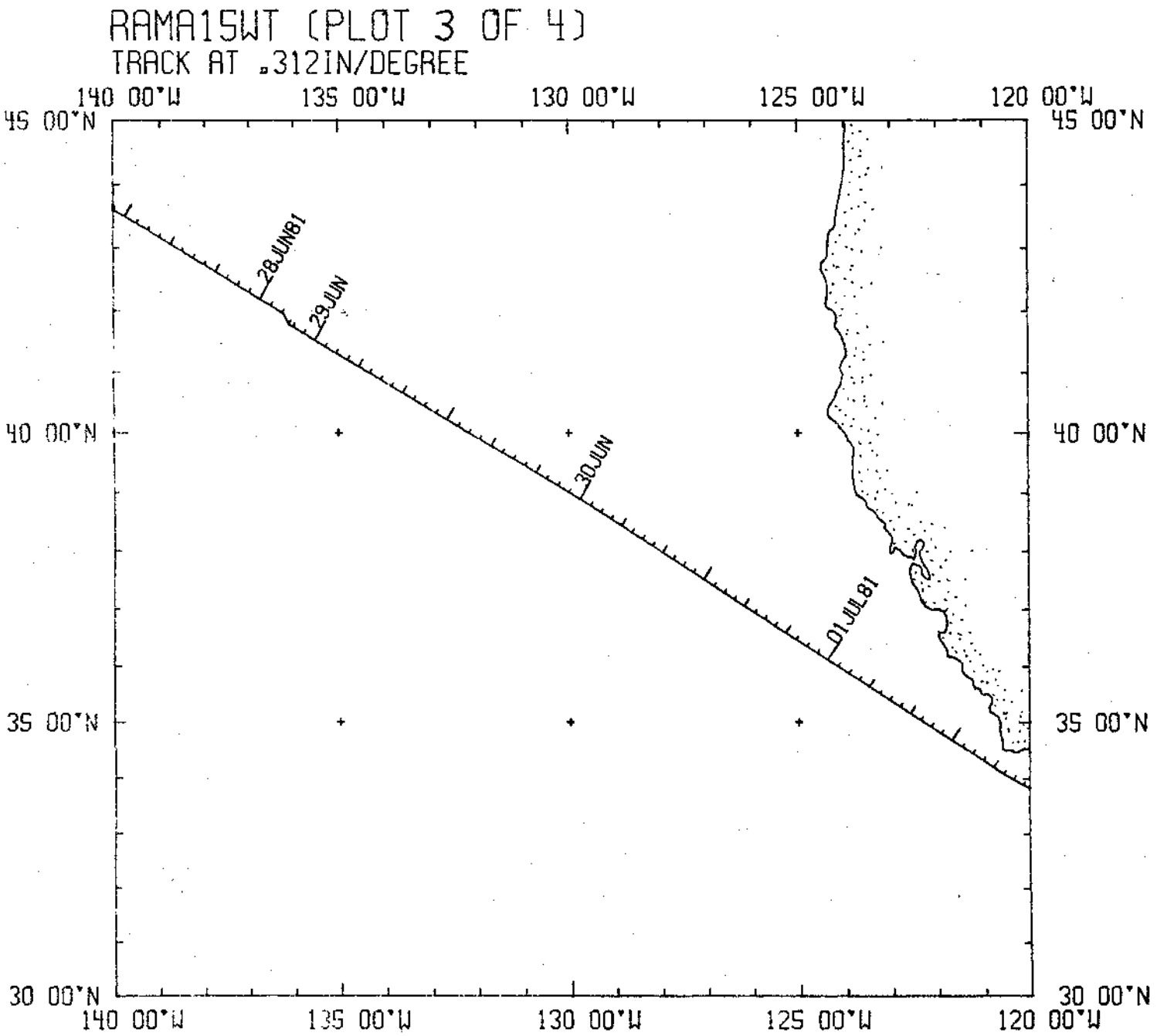
RAMA EXPEDITION
LEG 15

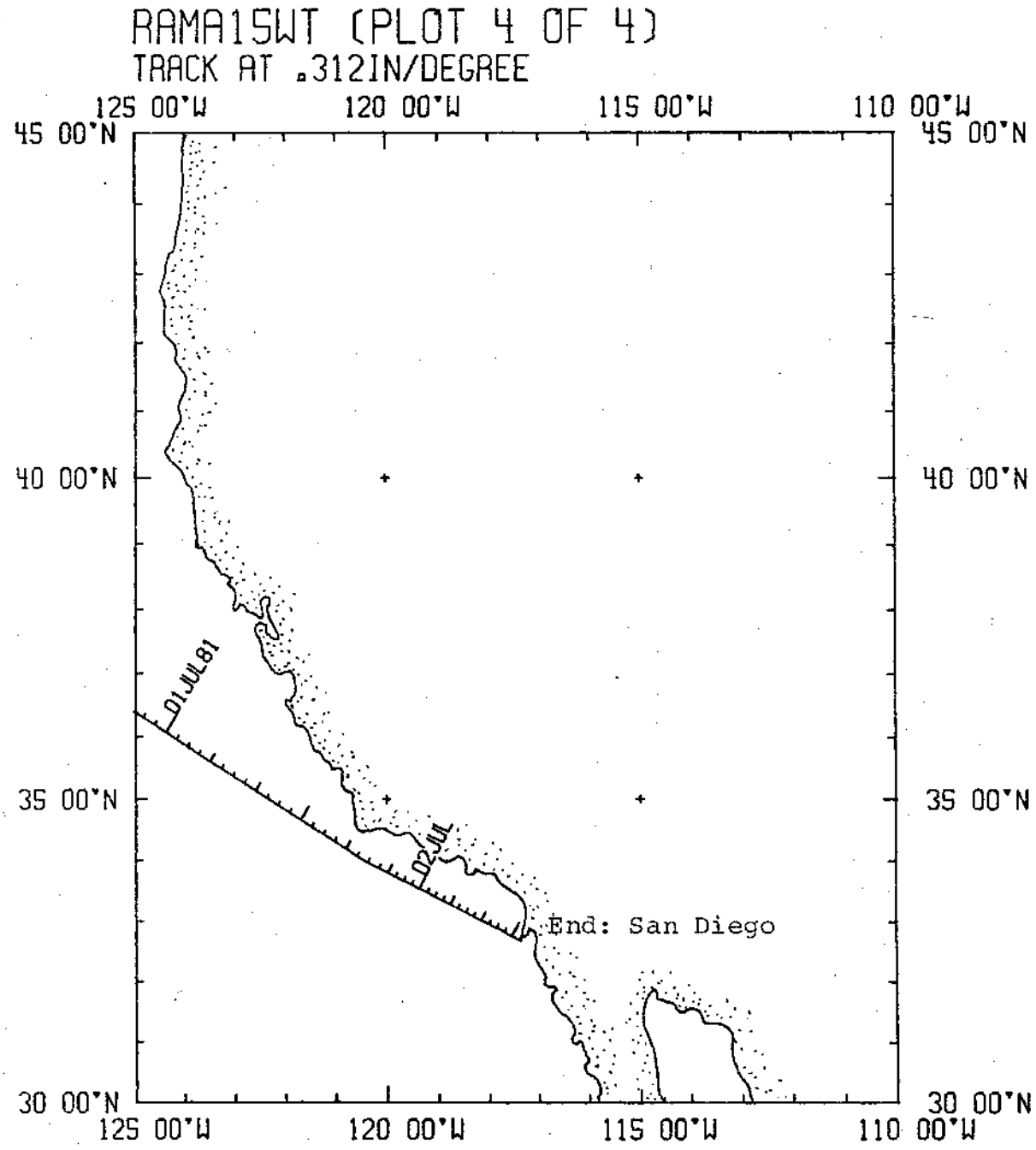
Chief Scientist: J. Burke (WHOI)
Ports: Dutch Harbor, Alaska - San Diego, Cal.
Dates: 21 June - 2 July 1981
Ship: R/V T. Washington

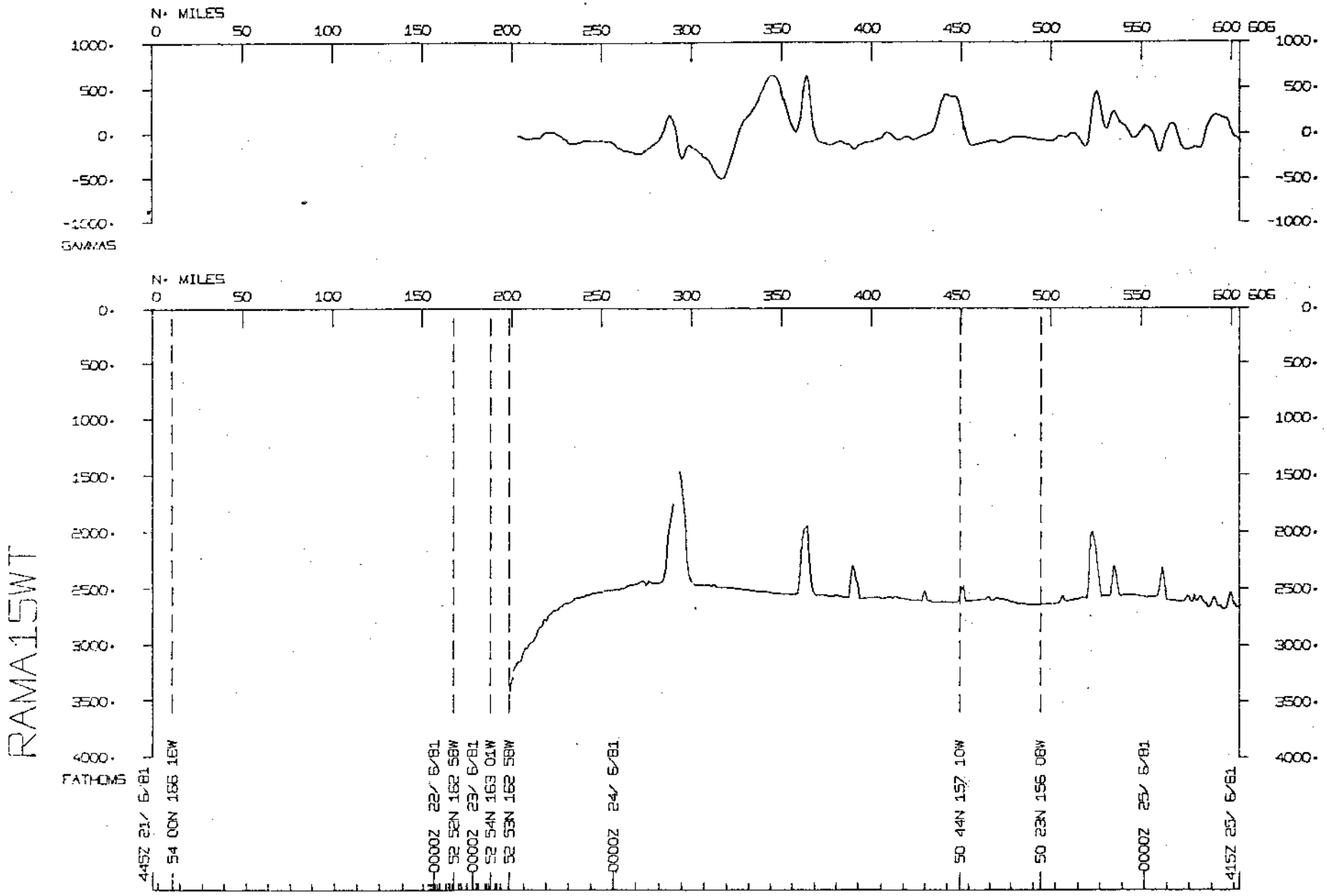
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED
1) Cruise - 2552 miles
2) Bathymetry - 1900 miles
3) Magnetics - 1900 miles
4) Seismic Reflection - none collected
5) Gravity - none collected

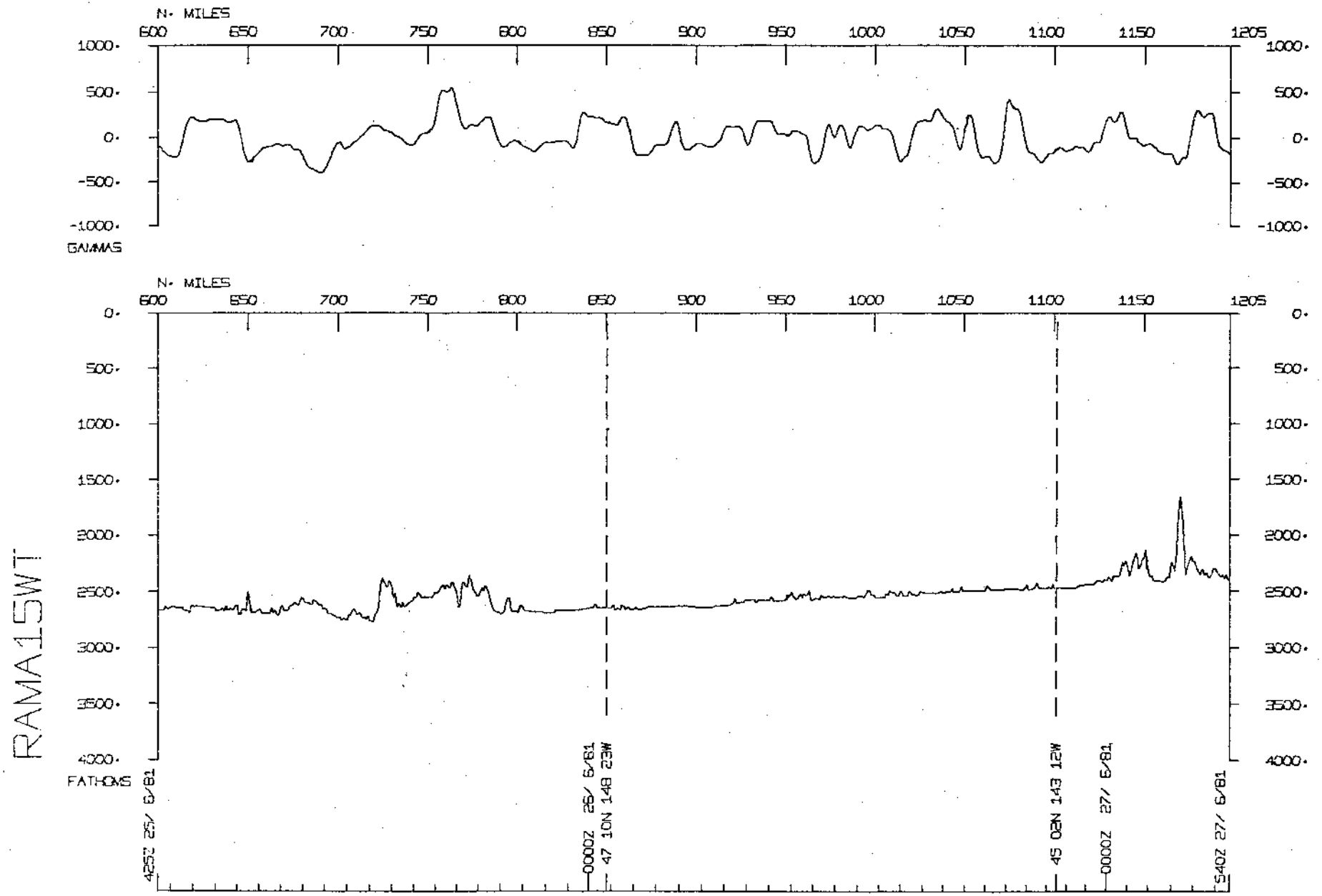

RAMA15WT (PLOT 1 OF 4)
TRACK AT .312IN/DEGREE
170 00'W
165 00'W
160 00'W
155 00'W
150 00'W
55 00'N
50 00'N
45 00'N
40 00'N
Begin: Dutch Harbor
24JUN81
25JUN

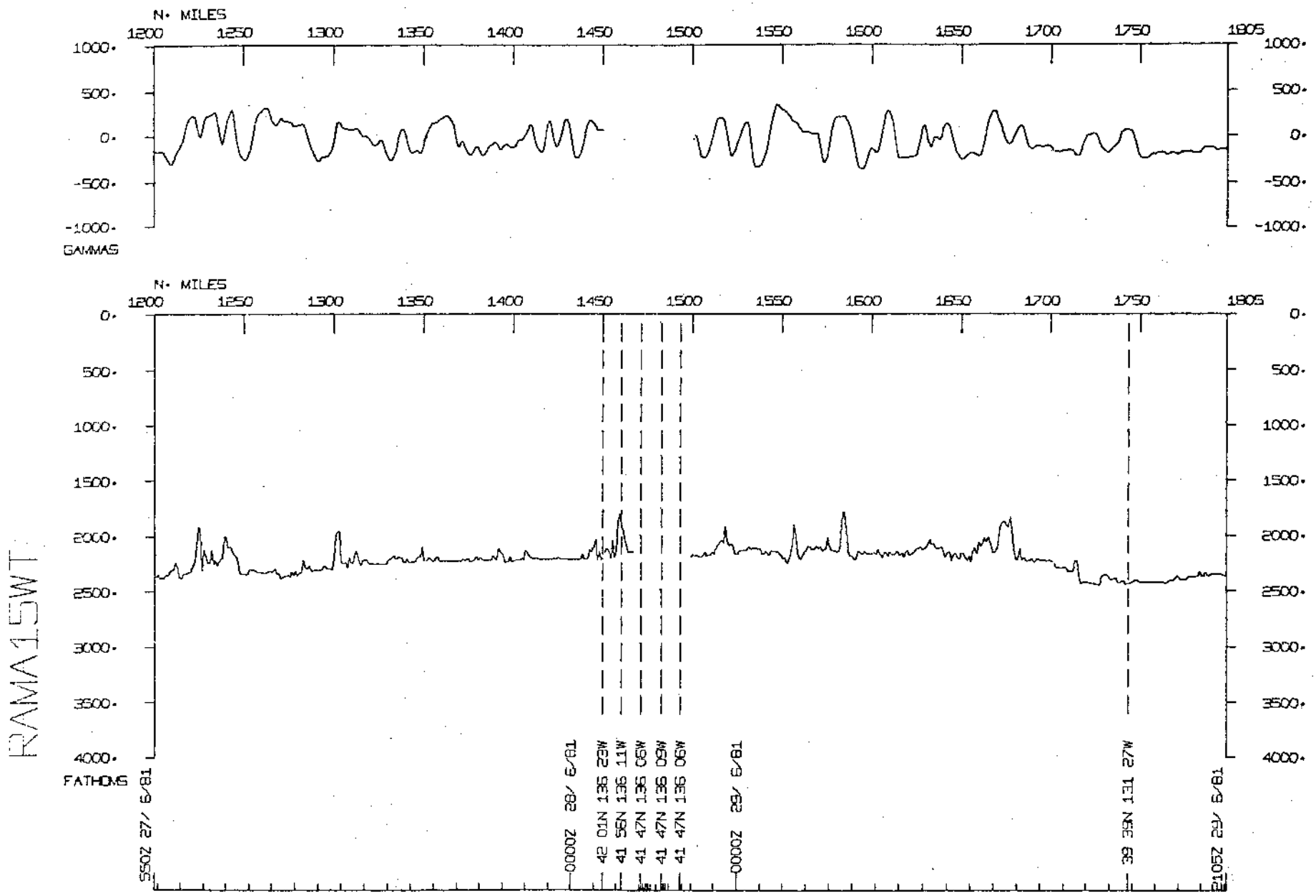

RAMA15WT (PLOT 2 OF 4)
TRACK AT .312IN/DEGREE
155 00'W
150 00'W
145 00'W
140 00'W
135 00'W
55 00'N
50 00'N
45 00'N
40 00'N
25JUNB1
26JUN
27JUN
28JUN
29JUN


RAMA15WT (PLOT 3 OF 4)
TRACK AT .312IN/DEGREE
140 00°W
135 00°W
130 00°W
125 00°W
120 00°W
45 00°N
40 00°N
35 00°N
30 00°N
28JUN81
29JUN
30JUN
01JUL81

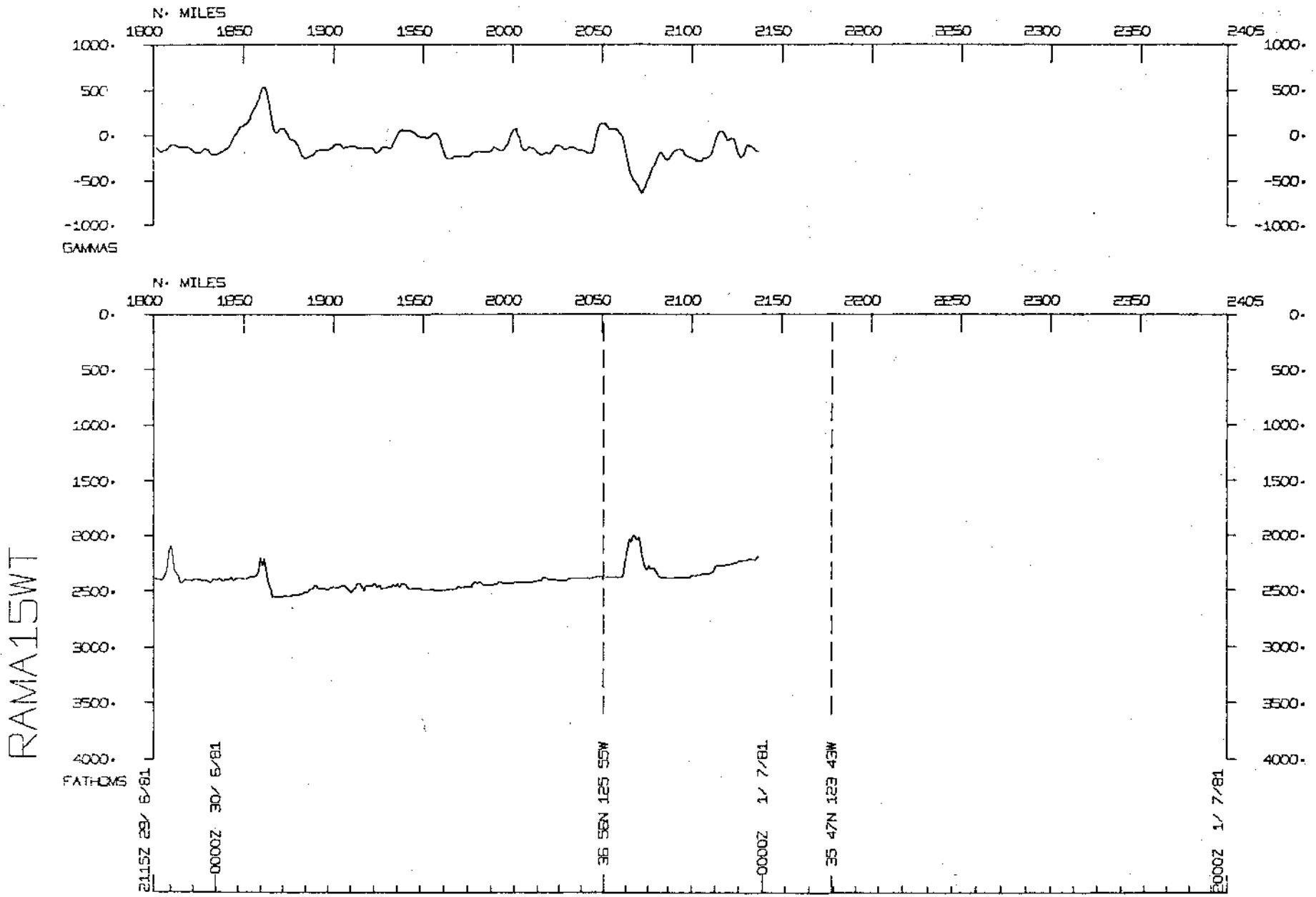

RAMA15WT (PLOT 4 OF 4)
TRACK AT .312IN/DEGREE
125 00°W
120 00°W
115 00°W
110 00°W
45 00°N
40 00°N
35 00°N
30 00°N
01JUL81
02JUL
End: San Diego


N. MILES
0 50 100 150 200 250 300 350 400 450 500 550 600 606
1000
500
0
-500
-1000
GAMMAS
N. MILES
0 50 100 150 200 250 300 350 400 450 500 550 600 606
0
500
1000
1500
2000
2500
3000
3500
4000
FATHOMS
RAMA15WT
445Z 21/ 6/81
54 00N 166 16W
00002 22/ 6/81
52 52N 162 58W
00002 23/ 6/81
52 54N 163 01W
52 53N 162 58W
00002 24/ 6/81
50 44N 157 10W
50 23N 156 08W
00002 25/ 6/81
415Z 25/ 6/81

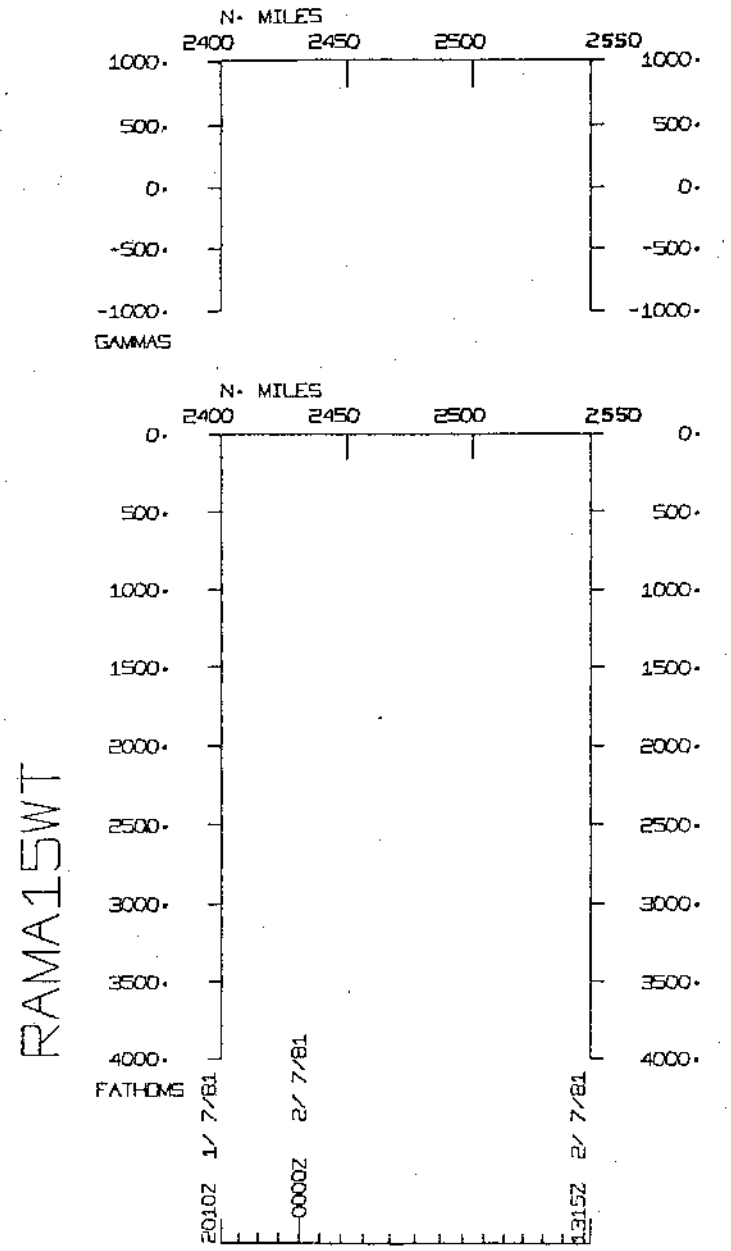

N. MILES
600
650
700
750
800
850
900
950
1000
1050
1100
1150
1205
1000.
500.
0.
-500.
-1000.
GAMMAS
N. MILES
0.
500.
1000.
1500.
2000.
2500.
3000.
3500.
4000.
FATHOMS
4252 25/ 6/81
0000Z 26/ 6/81
47 10N 148 23W
45 02N 143 12W
0000Z 27/ 6/81
5402 27/ 6/81
RAMA15WT


N. MILES
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1805
1000.
500.
0.
-500.
-1000.
GAMMAS
N. MILES
0.
500.
1000.
1500.
2000.
2500.
3000.
3500.
4000.
FATHOMS
5502 27/ 6/81
00002 28/ 6/81
42 01N 135 23W
41 56N 136 11W
41 47N 136 06W
41 47N 136 09W
41 47N 136 06W
00002 29/ 6/81
39 39N 131 27W
21052 29/ 6/81

RAMA15WT


N. MILES
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2405
1000.
500
0.
-500.
-1000.
GAMMAS
N. MILES
0.
500.
1000.
1500.
2000.
2500.
3000.
3500.
4000.
FATHOMS
2115Z 29/ 6/81
0000Z 30/ 6/81
36 58N 125 55W
0000Z 1/ 7/81
35 47N 123 43W
0000Z 1/ 7/81

RAMA15WT


RAMA15WT
N. MILES
2400
2450
2500
2550
1000
500
0
-500
-1000
GAMMAS
N. MILES
2400
2450
2500
2550
0
500
1000
1500
2000
2500
3000
3500
4000
FATHOMS
1/ 7/81
2010Z
2/ 7/81
0000Z
2/ 7/81
1315Z

S.I.O. Sample Index

(Issued August 1981)

RAMA EXPEDITION

Leg 15

Dutch Harbor, Alaska (21 June 1981)
to
San Diego, Calif. (2 July 1981)

R/V T. Washington

Chief Scientist - J. Burke (WHOI)

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

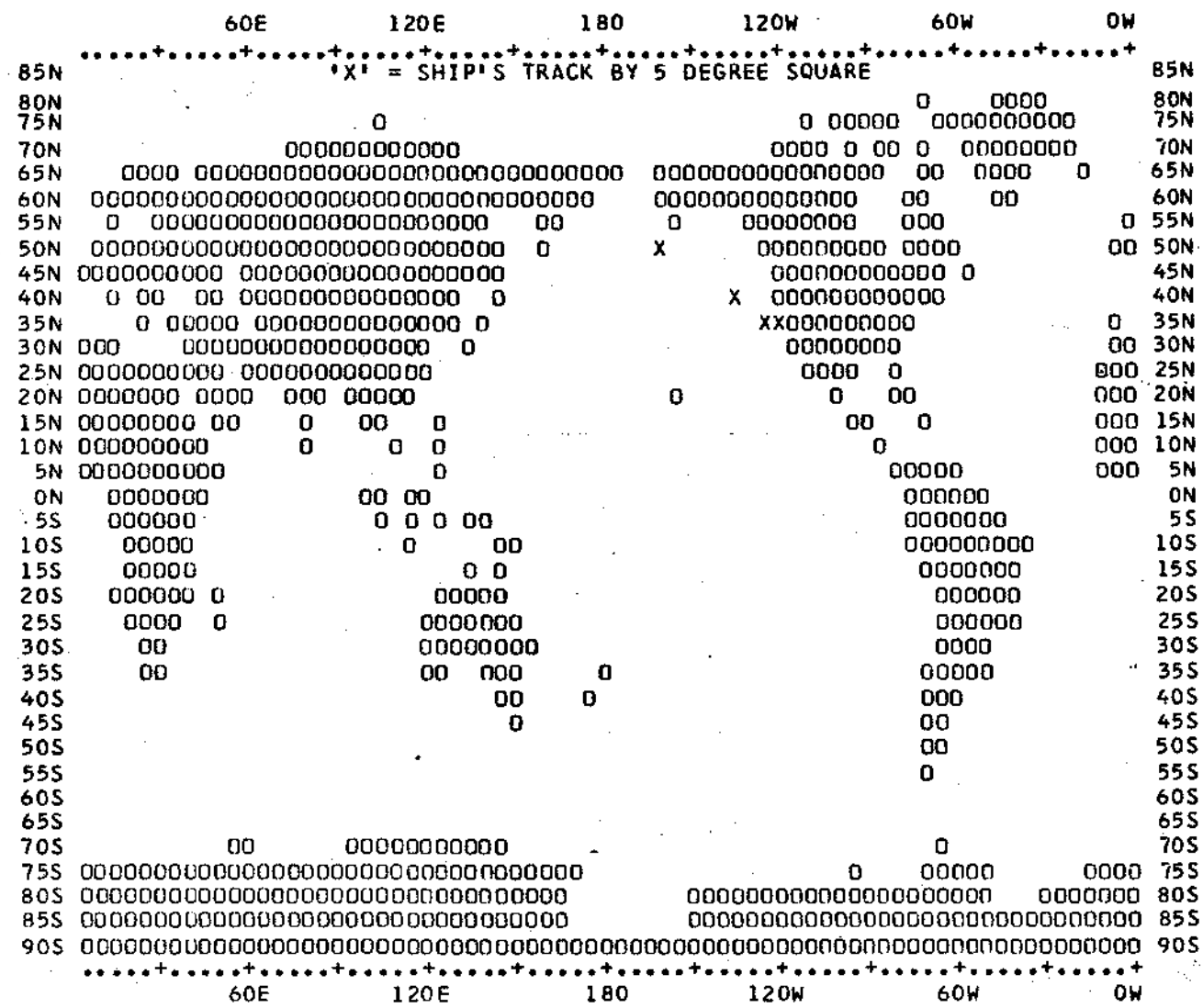
Index Encoding Funded by NSF
Grant Number OCE80-22996
Index Processing and Report Preparation
funded in part by SIA

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 11AUG81

*** RAMA LEG 15 SAMPLE INDEX (RAMA15WT) ***



21JUN81 - DUTCH HARBOR, ALASKA

TO

02JUL81 - SAN DIEGO, CALIF.

CHIEF SCIENTIST - BURKE,J. WHO

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	GC	LB	MG	PE	TR	
GDC	1		1	2			4
MTG					1		1
SIO					1	4	5
WHO		25			6		31
TOTAL	1	25	1	2	8	4	41

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
TR = TRAP

SAMPLE 'DISP' CODES USED ABOVE

GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
MTG = MARINE TECHNOLOGY GROUP (EXT 4194)
SIO = SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CAL. 92093
WHO = WOODS HOLE OCEANOGRAPHIC INSTITUTION

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
					RAMA LEG 15 SAMPLE INDEX				RAMA15WT
*** PORTS ***									
0400	21/ 6/81			LGPT B	DUTCH HARBOR, ALASKA		53 54. N	166 32. W	F RAMA15WT
1320	2/ 7/81			LGPT E	SAN DIEGO, CALIF.		32 43. N	117 11. W	F RAMA15WT

PERSONNEL

*** NAME ***	*** TITLE ***	*** AFFILIATION ***
1 BURKE,J.	CHIEF SCIENTIST	WOODS HOLE OCEANOGRAPHIC INSTITUTION
2 BOAZ,J.	RESIDENT TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 920
3 MOE,R.	COMPUTER TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 920
4 INGRAM,I.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
5 CLIFFORD,D.H.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
6 CAREY,A.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
7 DESROSIERS,T.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
8 OLSEN,B.	MARINE TECH	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 TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
**** UNDERWAY DATA CURATOR - STUART M. SMITH EXT. 2752 ***									
*** LOG BOOKS ***									
1925	23/06/81			LBUW B	UNDERWAY LOG	GDC	52 52.0N	162 57.0W S	RAMA15WT
2350	30/06/81			LBUW E	UNDERWAY LOG	GDC	36 09.7N	124 25.1W S	RAMA15WT
*** FATHOGRAMS ***									
1921	23/ 6/81			DPRT B	UGR 12 KHZ R-01	GDC	52 52.0N	162 57.0W S	RAMA15WT
2350	30/ 6/81			DPRT E	UGR 12 KHZ R-01	GDC	36 09.7N	124 25.1W S	RAMA15WT
*** MAGNETOMETER ***									
1945	23/ 6/81			MGRA B	MAGNETICS R-01	GDC	52 50.3N	162 52.0W S	RAMA15WT
0340	30/ 6/81			MGRA E	MAGNETICS R-01	GDC	38 27.9N	128 57.1W S	RAMA15WT
0353	30/ 6/81			MGRA B	MAGNETICS R-02	GDC	38 26.4N	128 54.2W S	RAMA15WT
2350	30/ 6/81			MGRA E	MAGNETICS R-02	GDC	36 09.7N	124 25.1W S	RAMA15WT
***GEOCHEMICAL STATION ***									
0250	22/ 6/81			GCXX	NO-01 300M STA.1	WHO	52 52.2N	162 57.8W S	RAMA15WT
0408	22/ 6/81			GCXX	NO-02 -3000M STA.1	WHO	52 52.6N	162 58.5W S	RAMA15WT
0650	22/ 6/81			GCXX	NO-03 800M STA.1	WHO	52 52.1N	163 00.7W S	RAMA15WT
0805	22/ 6/81			GCXX	NO-04 200M STA.1	WHO	52 52.4N	163 00.5W S	RAMA15WT
0920	22/ 6/81			GCXX	NO-05 400M STA.1	WHO	52 52.6N	163 00.4W S	RAMA15WT
1040	22/ 6/81			GCXX	NO-06 5000M STA.1	WHO	52 53.0N	163 00.8W S	RAMA15WT
1810	22/ 6/81			GCXX	NO-07 100M STA.1	WHO	52 52.4N	163 00.1W S	RAMA15WT
1950	22/ 6/81			GCXX	NO-09 500M STA.1	WHO	52 52.9N	162 58.7W S	RAMA15WT
2125	22/ 6/81			GCXX	NO-10 1000M STA.1	WHO	52 53.1N	163 01.0W S	RAMA15WT
2225	22/ 6/81			GCXX	NO-11 250M STA.1	WHO	52 52.8N	163 01.3W S	RAMA15WT
0010	23/ 6/81			GCXX	NO-12 6607M STA.1	WHO	52 52.9N	163 00.7W S	RAMA15WT
0215	23/ 6/81			GCXX	NO-13 6000M STA.1	WHO	52 53.4N	163 01.4W S	RAMA15WT
0730	23/ 6/81			GCXX	NO-14 2500M STA.1	WHO	52 55.6N	163 00.7W S	RAMA15WT
0957	23/ 6/81			GCXX	NO-15 5500M STA.1	WHO	52 53.3N	163 01.8W S	RAMA15WT
0620	23/ 6/81			GCXX	NO-16 275M STA.1	WHO	52 55.2N	163 01.4W S	RAMA15WT
0548	23/ 6/81			GCXX	NO-17 225M STA.1	WHO	52 55.0N	163 01.7W S	RAMA15WT
0455	28/ 6/81			GCXX	NO-01 300M STA.2	WHO	41 47.5N	136 06.3W S	RAMA15WT
0521	28/ 6/81			GCXX	NO-02 200M STA.2	WHO	41 47.7N	136 06.4W S	RAMA15WT
0548	28/ 6/81			GCXX	NO-03 400M STA.2	WHO	41 47.8N	136 06.5W S	RAMA15WT
0636	28/ 6/81			GCXX	NO-04 1000M STA.2	WHO	41 47.9N	136 06.3W S	RAMA15WT
0726	28/ 6/81			GCXX	NO-05 500M STA.2	WHO	41 48.1N	136 05.8W S	RAMA15WT
0817	28/ 6/81			GCXX	NO-06 650M STA.2	WHO	41 48.0N	136 05.2W S	RAMA15WT
0855	28/ 6/81			GCXX	NO-07 750M STA.2	WHO	41 47.9N	136 04.6W S	RAMA15WT
0920	28/ 6/81			GCXX	NO-08 100M STA.2	WHO	41 47.9N	136 04.5W S	RAMA15WT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.		CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
1019	28/ 6/81			GCXX	ND-09	4130M STA.2	WHO	41 48.1N	136 04.7W S	RAMA15WT
TRAP										
1748	21/ 6/81			TRFV B	STA-H334	6423M	SIO	52 53.2N	163 02.6W S	RAMA15WT
2012	22/ 6/81			TRFV E	STA-H334	6423M	SIO	52 53.0N	162 58.4W S	RAMA15WT
1924	21/ 6/81			TRFV B	STA-H335	6391M	SIO	52 52.8N	163 00.5W S	RAMA15WT
1735	23/ 6/81			TRFV E	STA-H335	6391M	SIO	52 53.6N	162 59.0W S	RAMA15WT
1940	22/ 6/81			TRFV X	STA-H336	6361M	SIO	52 52.8N	162 58.9W S	RAMA15WT
0317	28/ 6/81			TRFV B	STA-H337	4094M	SIO	41 47.1N	136 06.5W S	RAMA15WT
1930	28/ 6/81			TRFV E	STA-H337	4094M	SIO	41 47.5N	136 08.8W S	RAMA15WT
0335	28/ 6/81			TRFV B	STA-H338	4097M	SIO	41 47.0N	136 06.4W S	RAMA15WT
2111	28/ 6/81			TRFV E	STA-H338	4097M	SIO	41 46.5N	136 04.9W S	RAMA15WT
9900				END SAMPLE INDEX						RAMA15WT