INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued March 1983)

BENTHIC EXPEDITION

LEG 4

Honolulu, Hawaii (9 January 1983)
to
Papeete, Tahiti (16 February 1983)

R/V Melville

Co-Chief Scientists - T. Jordan and J. Orcutt (SIO)

Resident Marine Tech - G. Pillard

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

Data Collection Funded by ONR
Grant Number USN N00014-83-K-0151
Data Processing funded by SIA, ONR, and NSF

GDC Cruise I.D.# - 204

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

Contents:

Index Chart - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

Track Charts - annotated with dates (day/month) and hour ticks. The scale is .312 in/degree longitude.

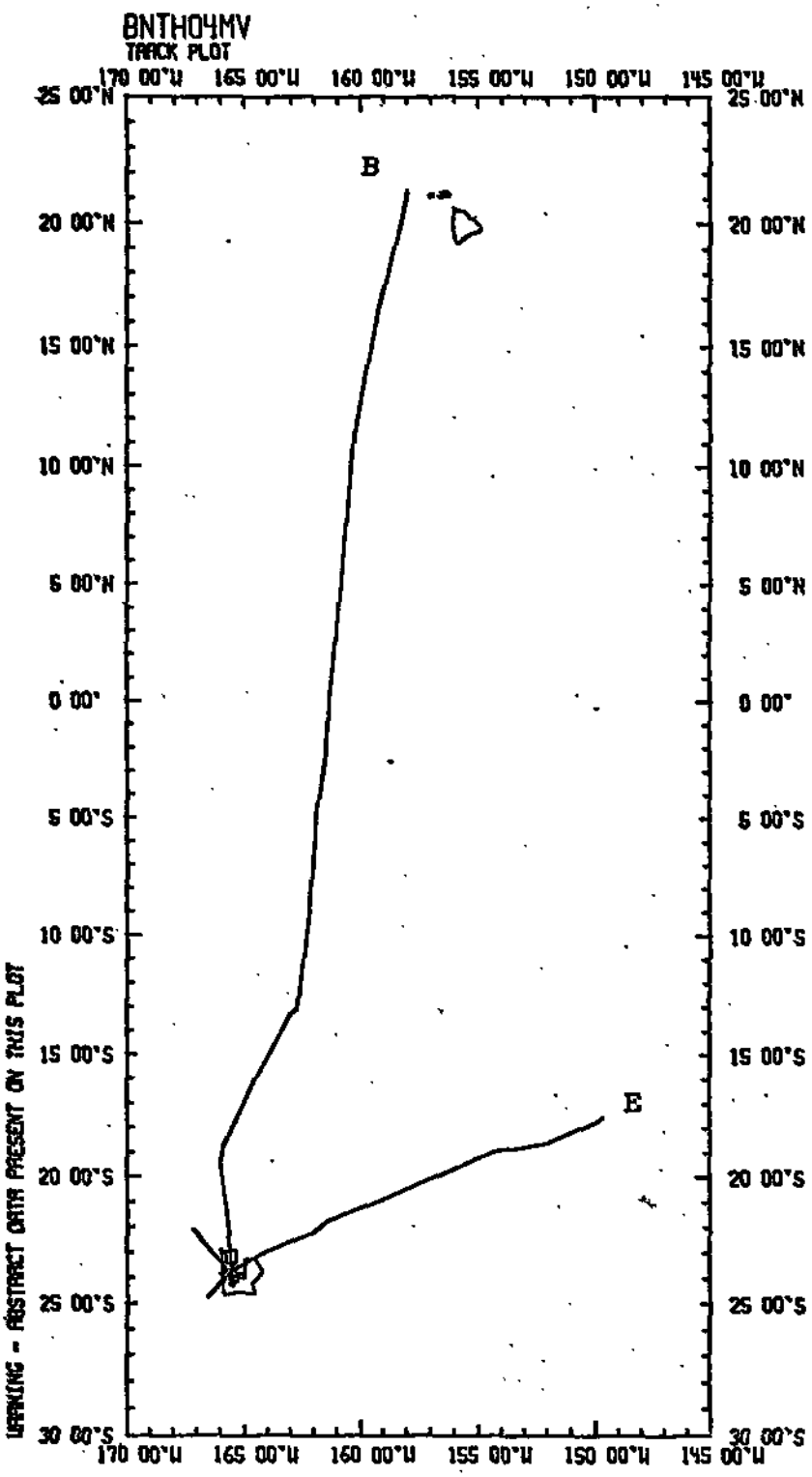
Profiles - depth and magnetic anomaly vs. distance. Dates (day/month) and positions of major course changes (greater than 30 degrees) are annotated. Sections of track having subbottom profiler (airgun) records have a wide black line along the bottom of the profile. Sections having Sea Beam are indicated by a narrow line.

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.

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 - Compilation plots at the traditional scale of 4"/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2&2/3 degree beam width) depths retrieved at one minute intervals of ship time.
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 1980 IGRF.
4. Separate time series files of navigation, depth and magnetics of data merged in the MGD77 Exchange format on magnetic tape.
5. 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

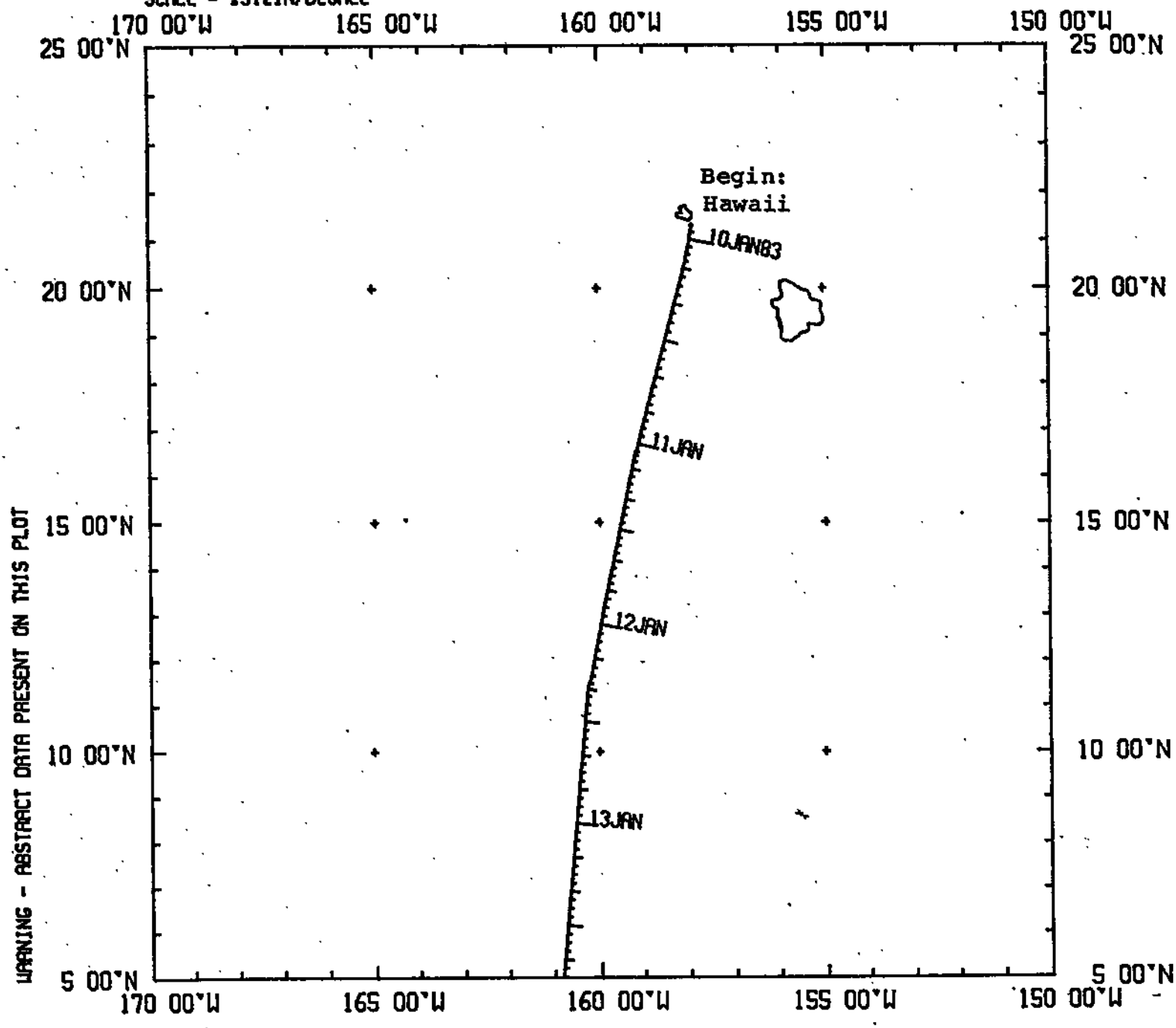
Rev June 1982 (Sea Beam)



BENTHIC EXPEDITION
LEG 4

Co-Chief Scientists: T. Jordan and J. Orcutt (SIO)
Ports: Honolulu, Hawaii - Papeete, Tahiti
Dates: 9 January - 16 February 1983
Ship: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED
1) Cruise - 6101 miles
2) Bathymetry - 5961 miles
3) Magnetics - 4051 miles
4) Seismic Reflection - 460 miles
5) Gravity - none collected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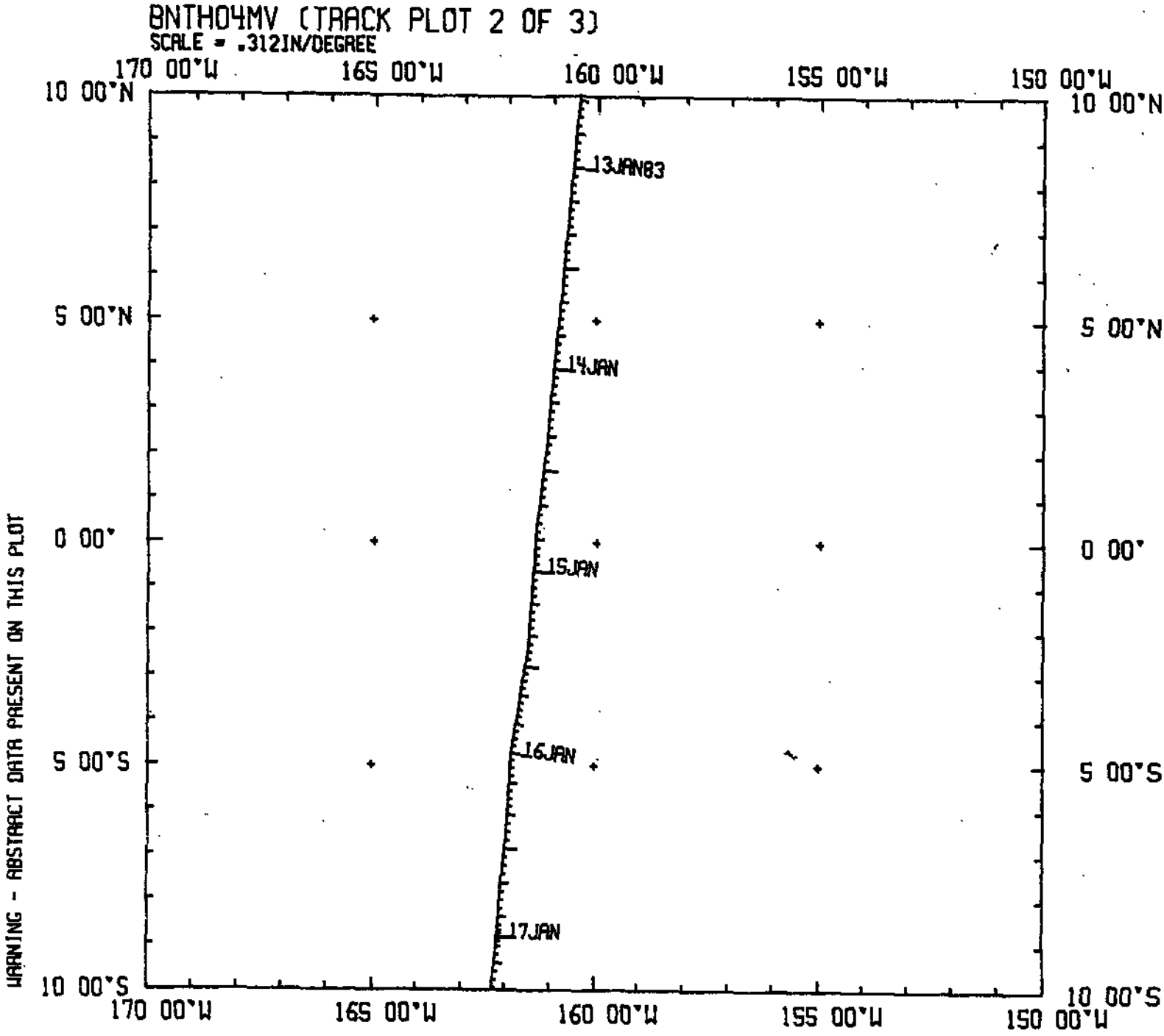
170 00'W
165 00'W
160 00'W
155 00'W
150 00'W
25 00'N
20 00'N
15 00'N
10 00'N
5 00'N
Begin:
Hawaii
10JAN83
11JAN
12JAN
13JAN
WARNING - ABSTRACT DATA PRESENT ON THIS PLOT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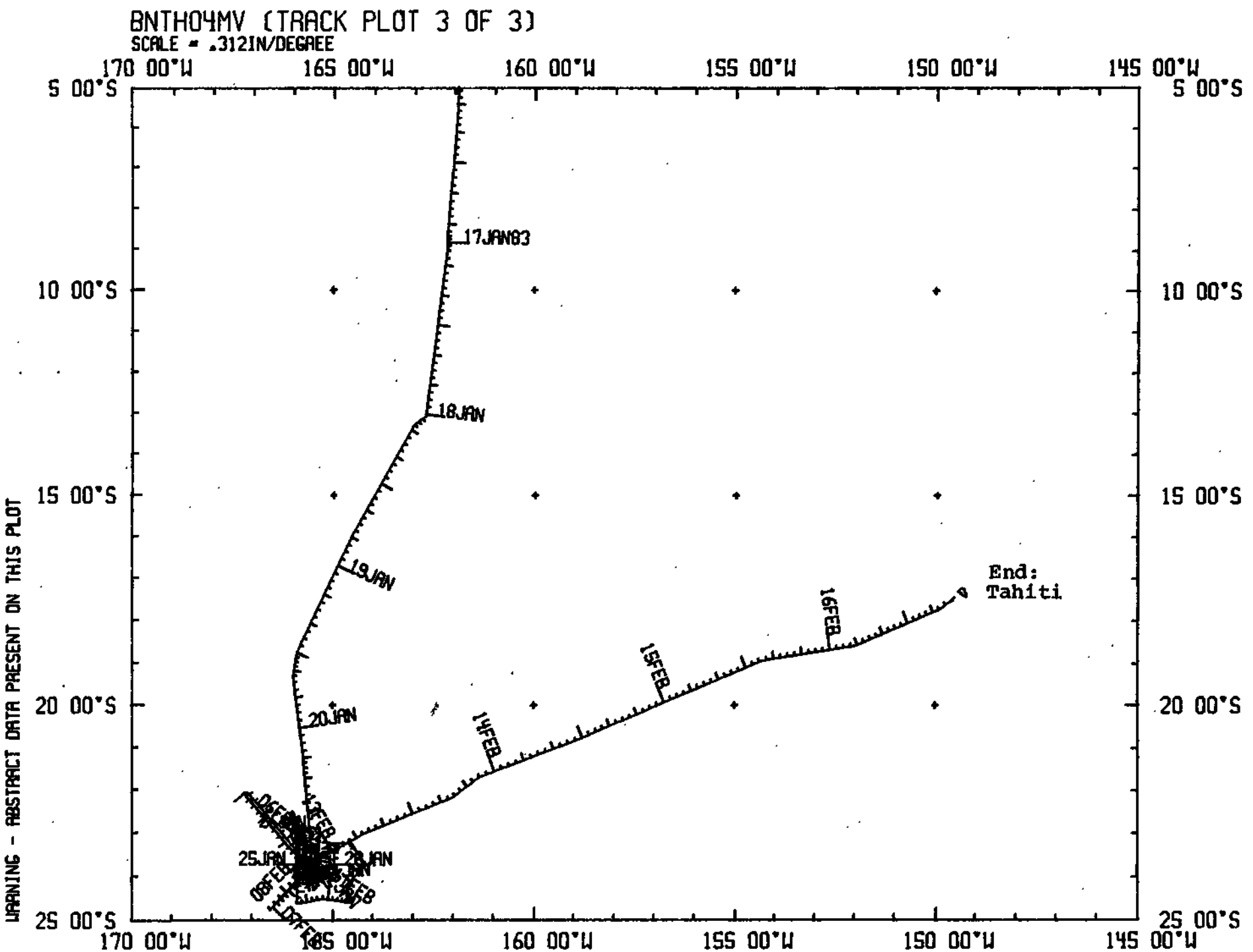
165 00°W
160 00°W
155 00°W
150 00°W
10 00°N
5 00°N
0 00°
5 00°S
10 00°S
13JAN83
14JAN
15JAN
16JAN
17JAN
WARNING - ABSTRACT DATA PRESENT ON THIS PLOT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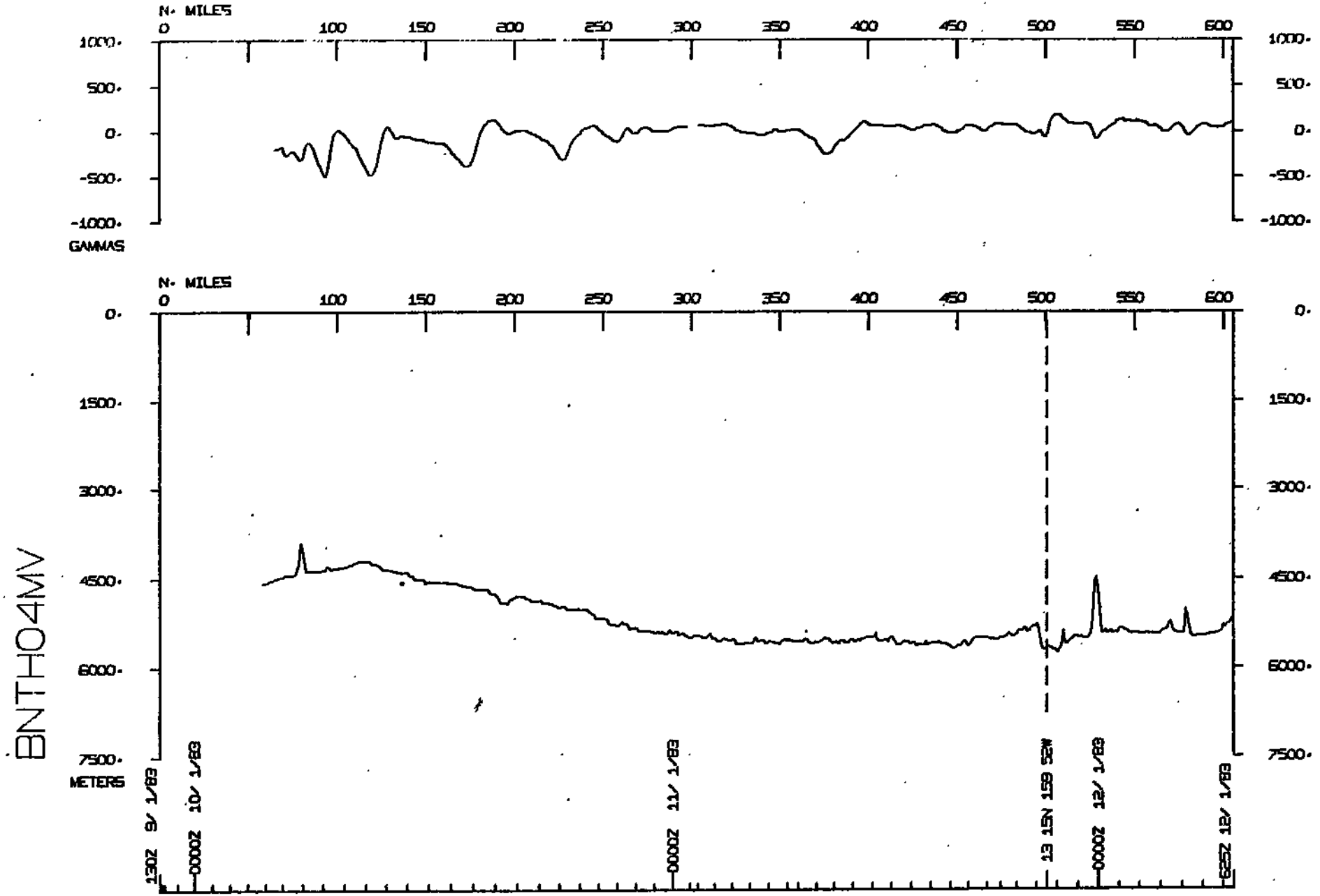
160 00°W
155 00°W
150 00°W
145 00°W
5 00°S
10 00°S
15 00°S
20 00°S
25 00°S
17JAN83
18JAN
19JAN
20JAN
14FEB
15FEB
16FEB
End:
Tahiti
25JAN
28JAN
WARNING - ABSTRACT DATA PRESENT ON THIS PLOT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500.
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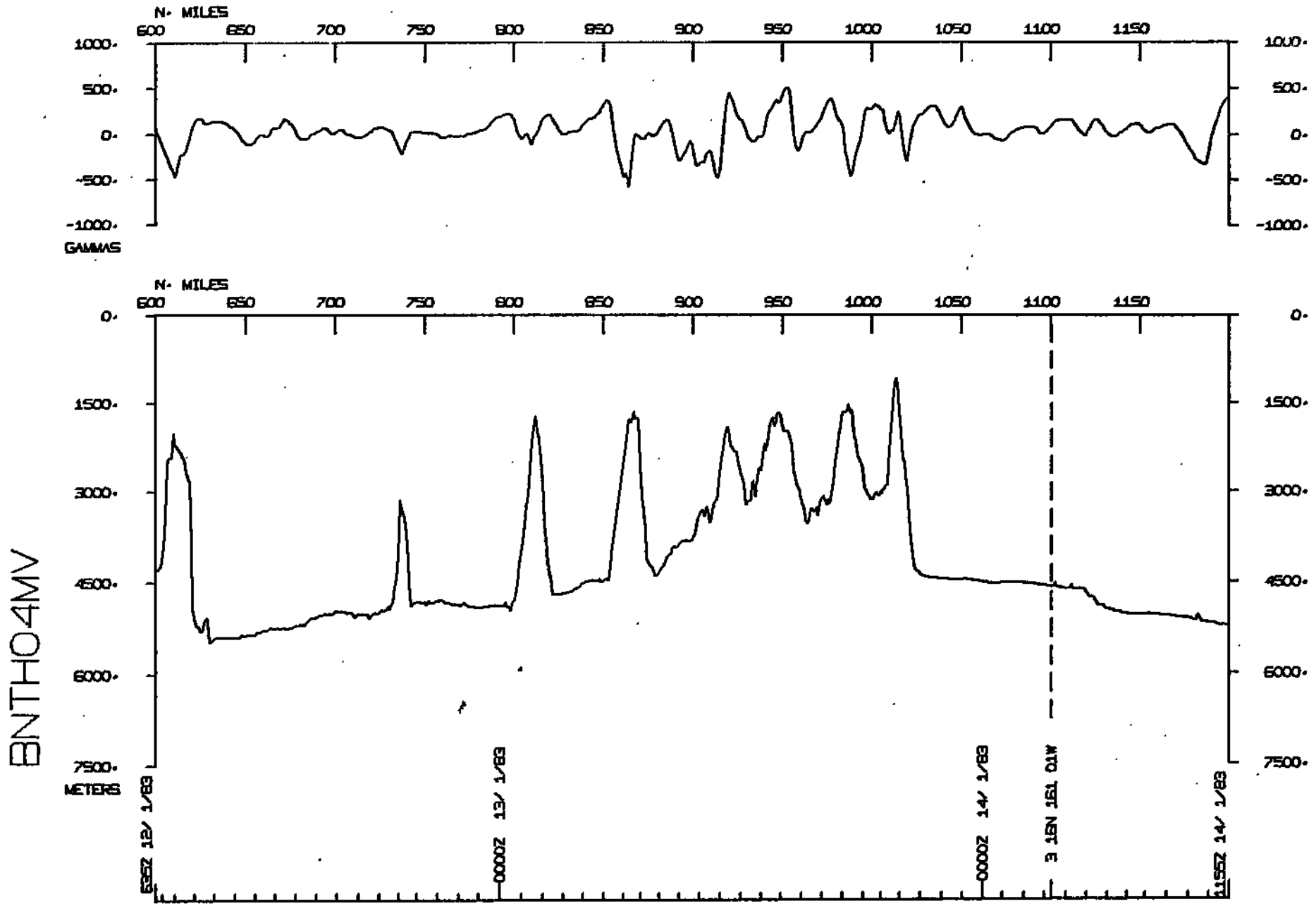
-1000.
GAMMAS
N. MILES
0
1500.
3000.
4500.
6000.
7500.
METERS
1302 9/ 1/83
00002 10/ 1/83
00002 11/ 1/83
13 15N 15W 52W
00002 12/ 1/83
6252 12/ 1/83
BNTH04MV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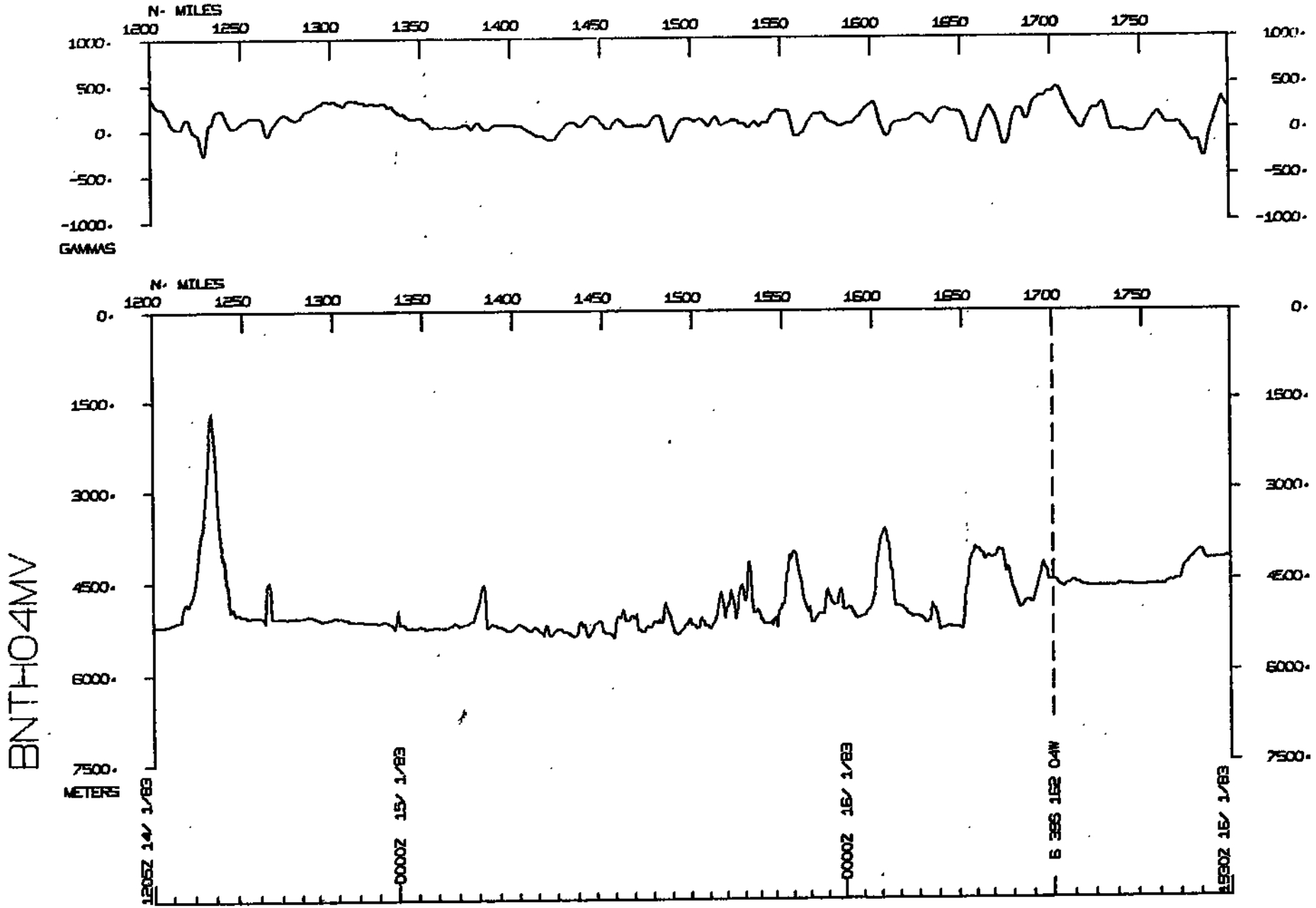
800
850
900
950
1000
1050
1100
1150
1000.
500.
0.
-500.
-1000.
GAMMAS
N. MILES
0.
1500.
3000.
4500.
6000.
7500.
METERS
BNTH04MV
0352 12/ 1/83
0000Z 13/ 1/83
0000Z 14/ 1/83
3 15N 161 01W
1152 14/ 1/83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1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
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500.
0.
-500.
-1000.
GAMMAS
N. MILES
0.
1500.
3000.
4500.
6000.
7500.
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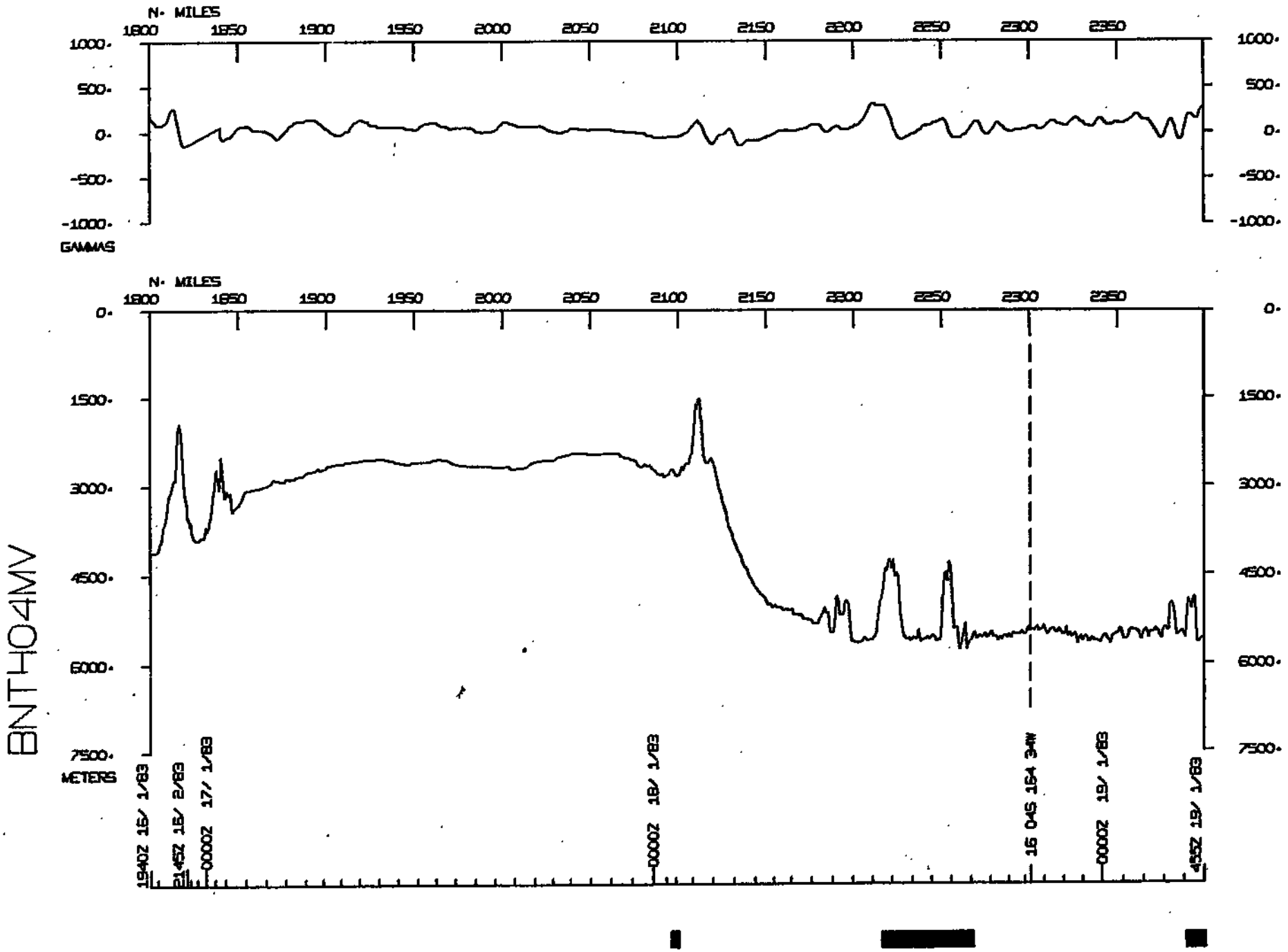
00002 15 1/83
00002 16 1/83
B 385 182 04W
1530Z 16 1/83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1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
1000.
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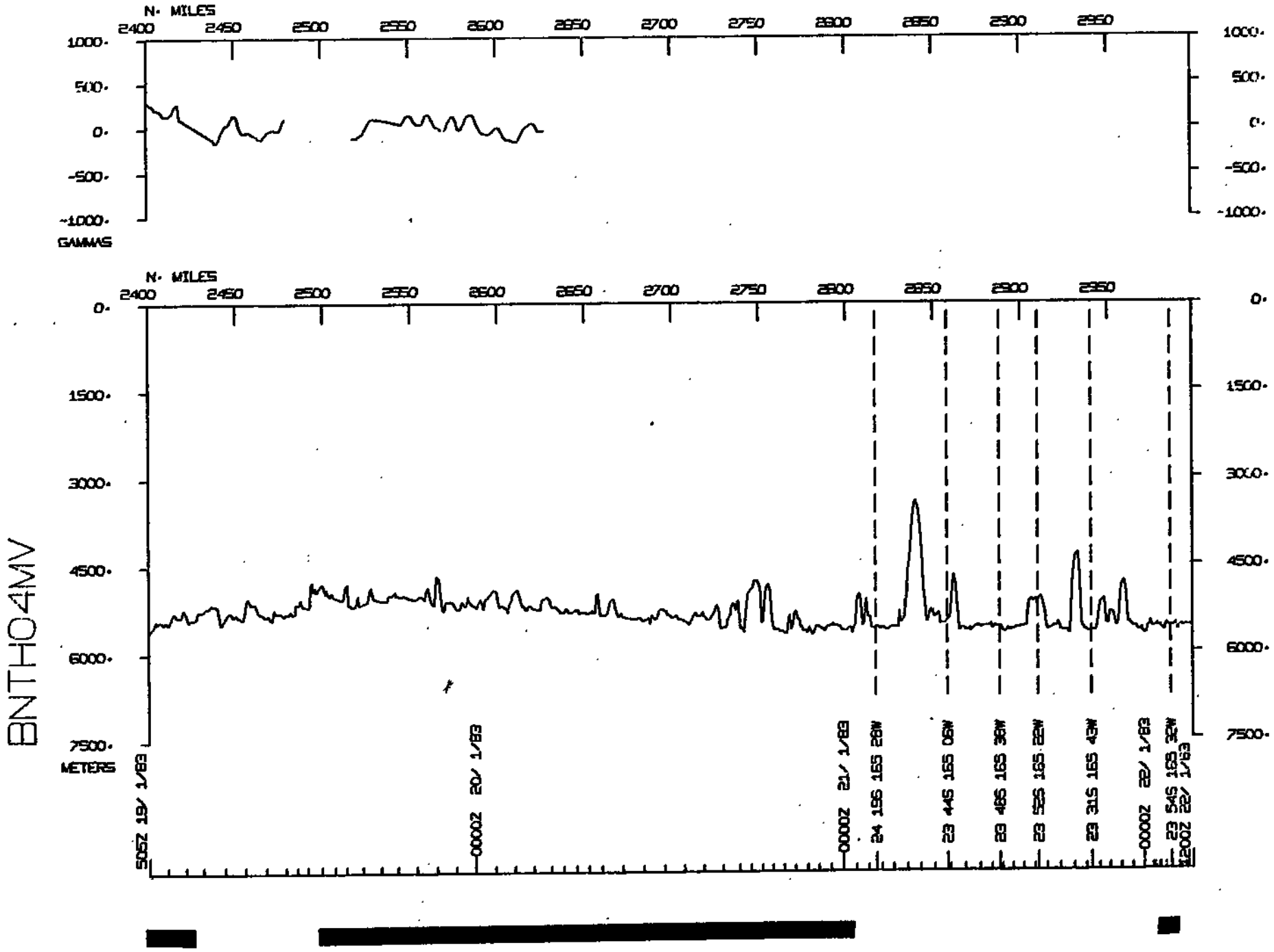
0.
-500.
-1000.
GAMMAS
N. MILES
0.
1500.
3000.
4500.
6000.
7500.
METERS
BNTH04MV
19402 15/ 1/83
21452 15/ 2/83
00002 17/ 1/83
00002 18/ 1/83
15 045 154 34W
00002 19/ 1/83
4552 19/ 1/83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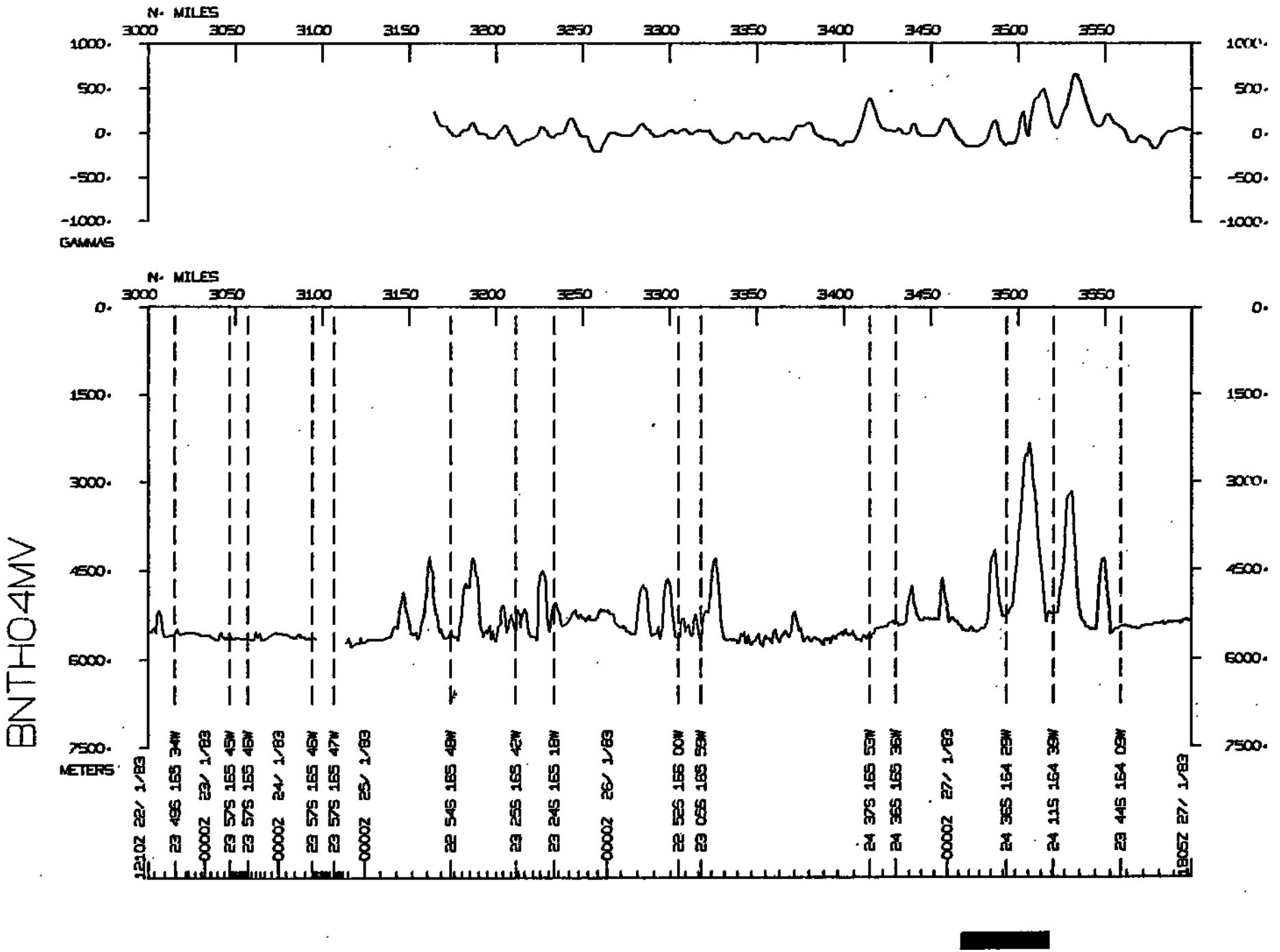
1000.
500.
0.
-500.
-1000.
GAMMAS
N. MILES
2400 2450 2500 2550 2600 2650 2700 2750 2800 2850 2900 2950
0.
1500.
3000.
4500.
6000.
7500.
METERS
BNTH04MV
5052 19/ 1/83
00002 20/ 1/83
00002 21/ 1/83
24 195 165 28W
23 445 165 05W
23 485 165 36W
23 525 165 22W
23 315 165 43W
00002 22/ 1/83
23 545 165 32W
12002 22/ 1/83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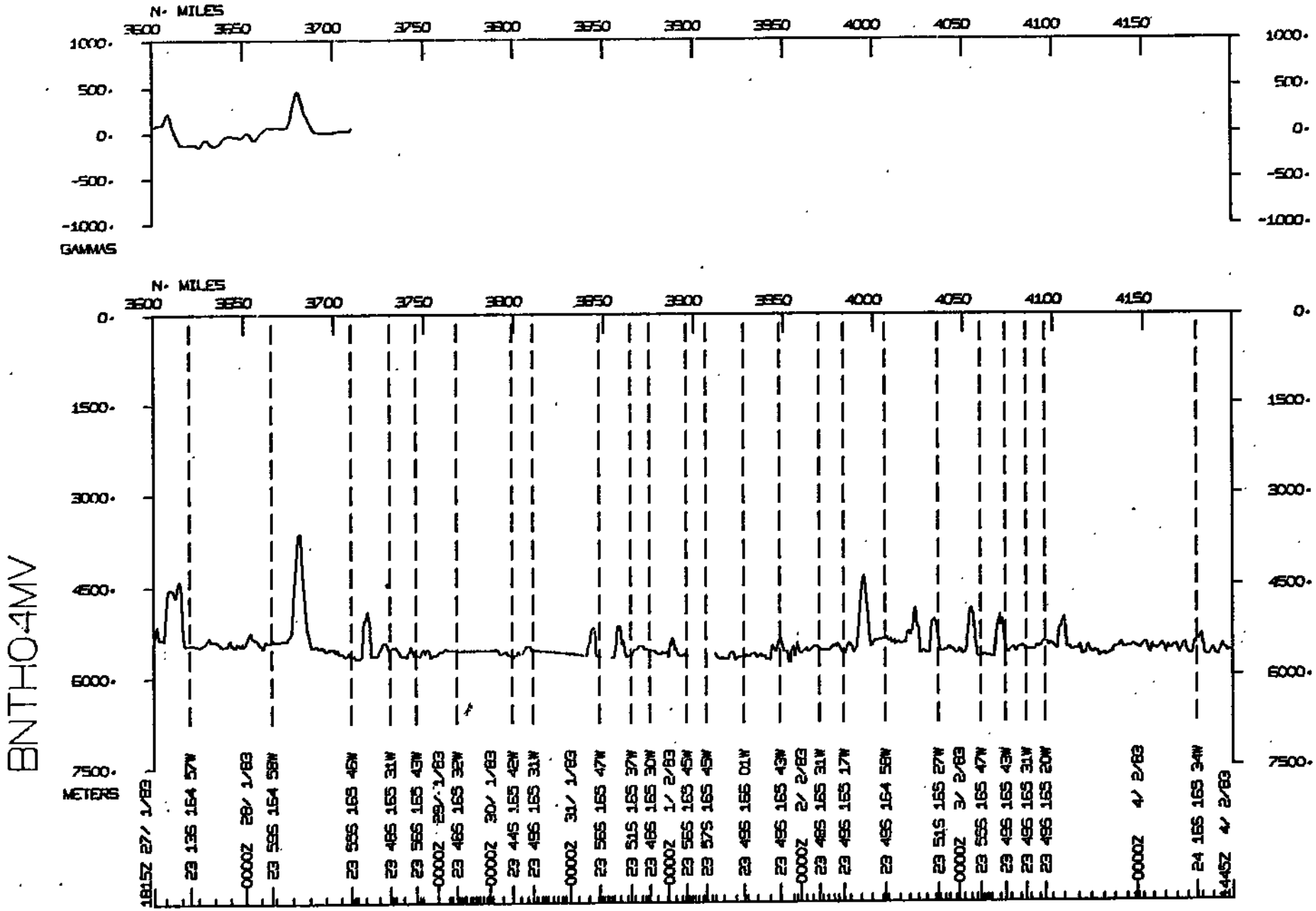
3050
3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
1000.
500.
0.
-500.
-1000.
GAMMAS
N. MILES
0.
1500.
3000.
4500.
6000.
7500.
METERS
BNTHO4MV
12102 22/ 1/83
23 496 185 34W
00002 23/ 1/83
23 575 185 45W
23 576 185 48W
00002 24/ 1/83
23 575 185 46W
23 575 185 47W
00002 25/ 1/83
22 545 185 48W
23 255 185 42W
23 245 185 18W
00002 26/ 1/83
22 526 186 00W
23 056 185 59W
24 376 185 53W
24 365 185 36W
00002 27/ 1/83
24 365 184 29W
24 115 184 39W
23 445 184 09W
18052 27/ 1/83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3750
3800
3850
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3950
4000
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4100
4150
1000.
500.
0.
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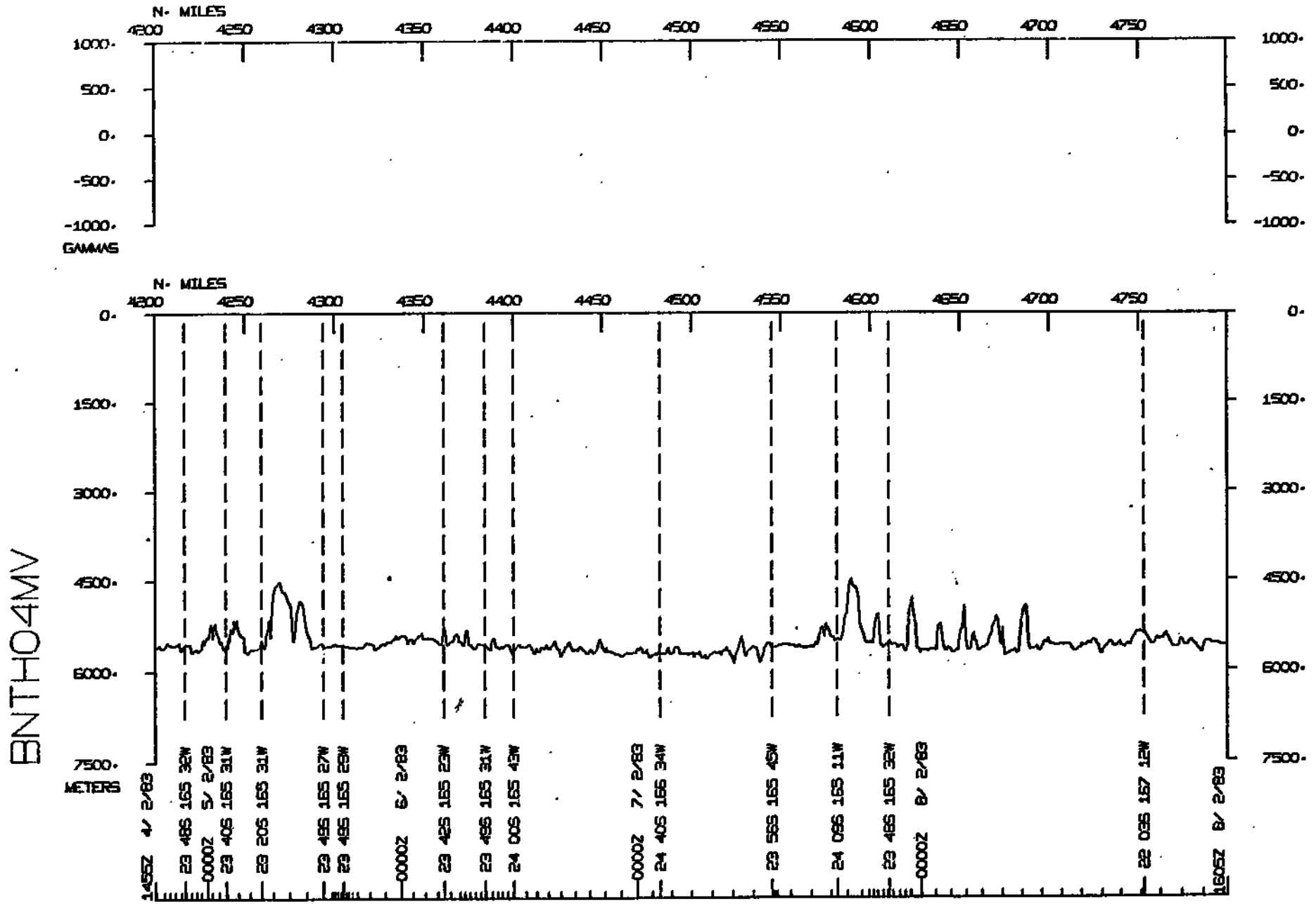
GAMMAS
N. MILES
0.
1500.
3000.
4500.
6000.
7500.
METERS
BNTHO4MV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4300
4350
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4450
4500
4550
4600
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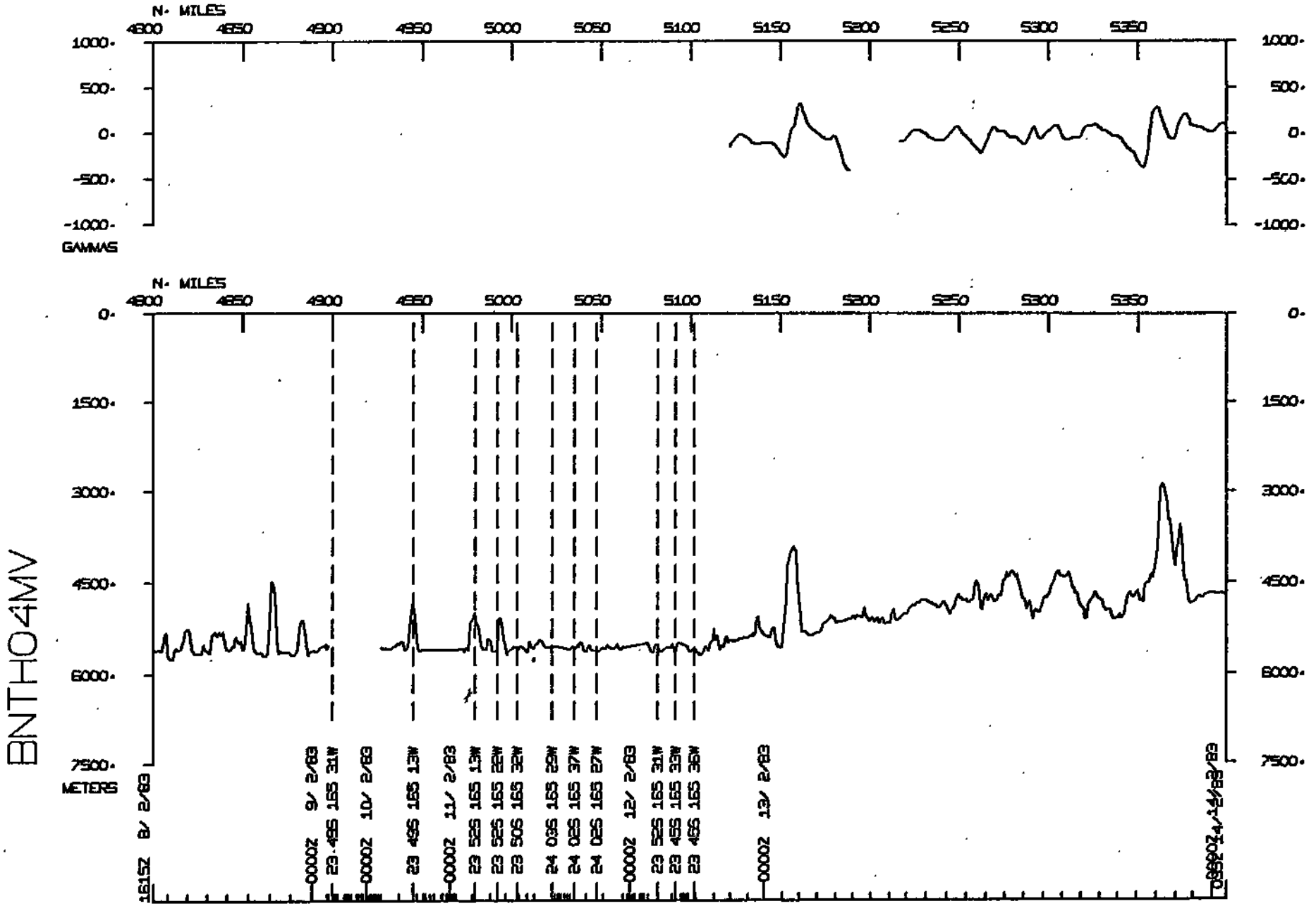
4750
1000·
500·
0·
-500·
-1000·
GAMMAS
N- MILES
0·
1500·
3000·
4500·
6000·
7500·
METERS
BNTH04MV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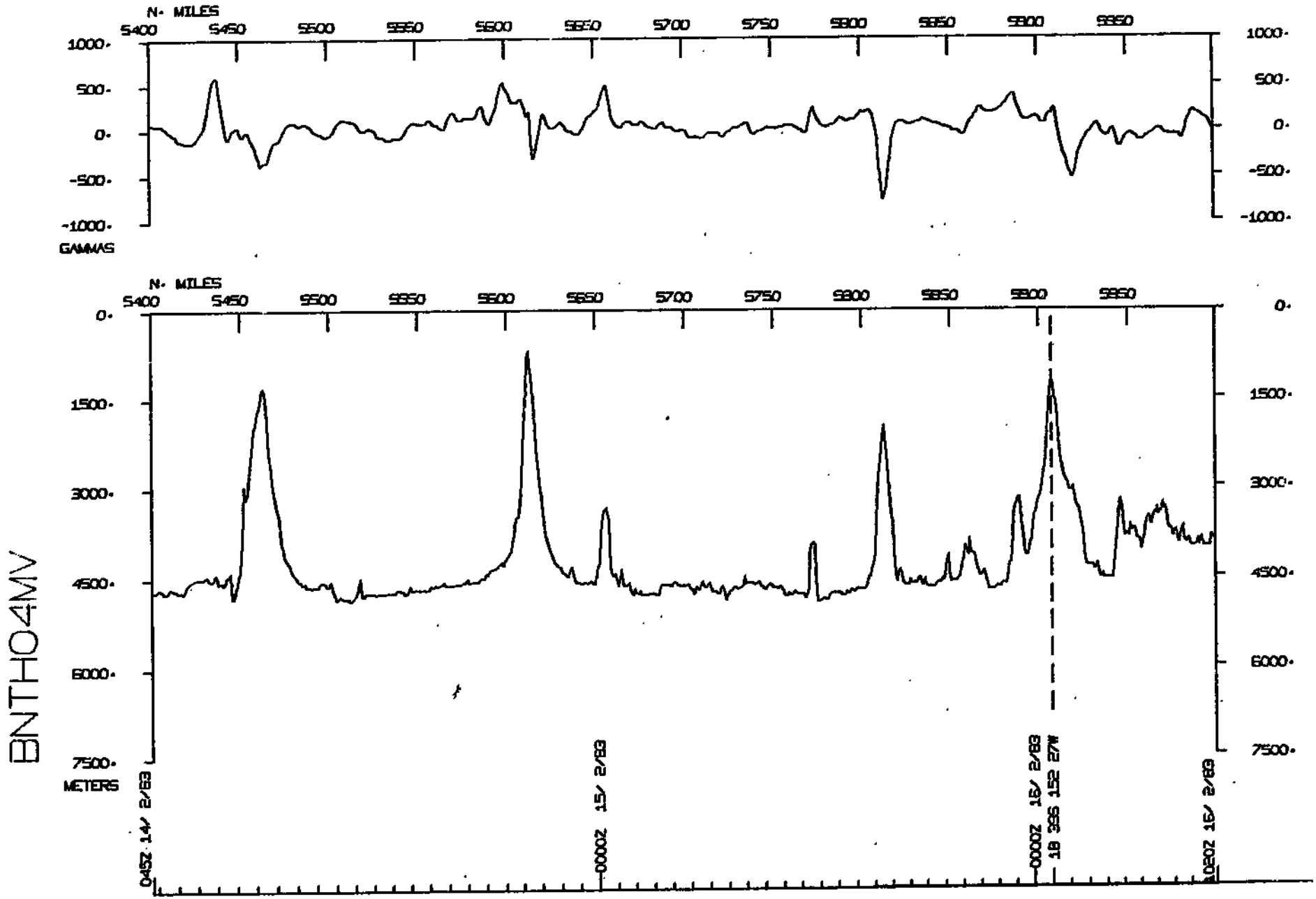
-500-
-1000-
GAMMAS
N- MILES
0-
1500-
3000-
4500-
6000-
7500-
METERS
BNTHO4MV
8/ 2/83
9/ 2/83
10/ 2/83
11/ 2/83
12/ 2/83
13/ 2/83
14/ 2/83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5900
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500.
0.
-500.
-1000.
GAMMAS
N. MILES
0.
1500.
3000.
4500.
6000.
7500.
METERS
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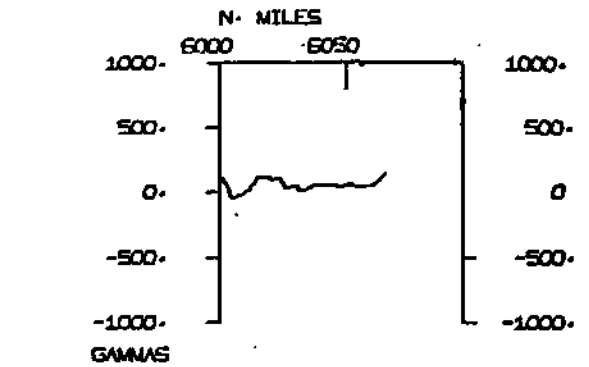
00002 15/ 2/83
18 396 152 27W
0202 16/ 2/83

BNTH04MV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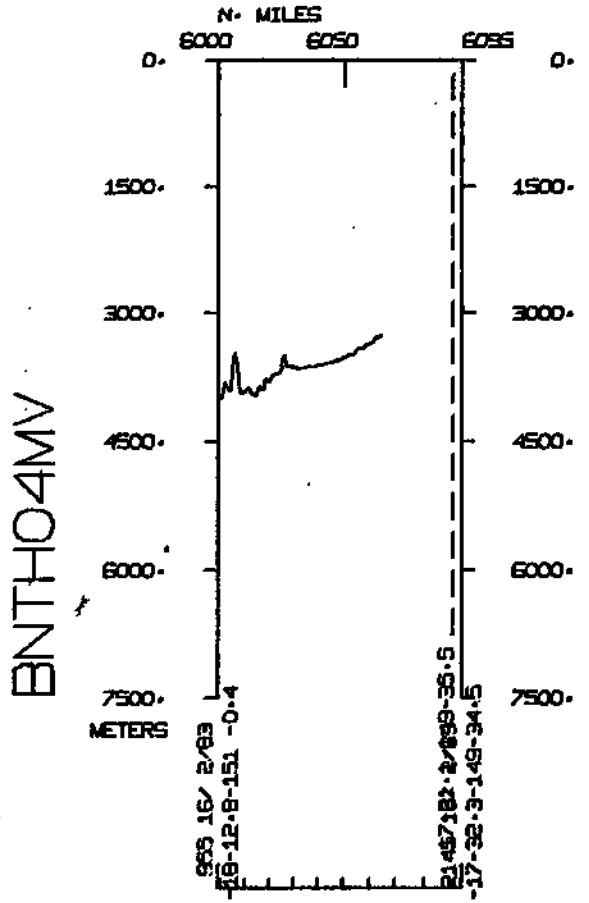
N. MILES
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6095
0.
1500.
3000.
4500.
6000.
7500.
METERS

BNTH04MV

S.I.O. Sample Index

(Issued March 1983)

BENTHIC EXPEDITION

Leg 4

Honolulu, Hawaii (9 January 1983)
to
Papeete, Tahiti (16 February 1983)

R/V Melville

Co-Chief Scientists - T. Jordan and J. Orcutt (SIO)

Resident Marine Tech - G. Pillard

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

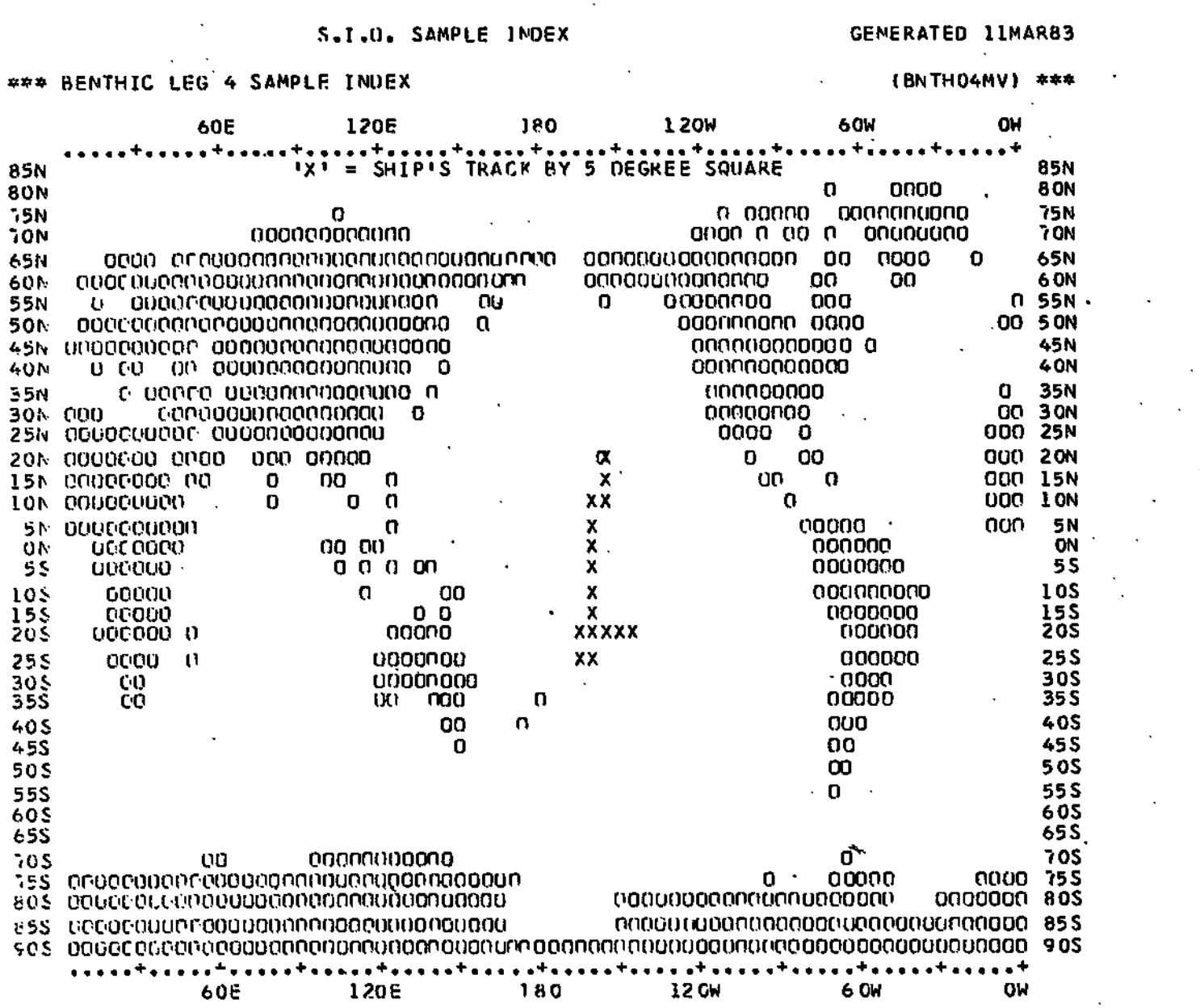
The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident technician and processed on shore by the S.I.O. Geological Data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

GDC Cruise I.D.# -204

S.I.O. SAMPLE INDEX GENERATED 11MAR83

*** BENTHIC LEG 4 SAMPLE INDEX (BNTH04MV) ***



09JAN83 - HONOLULU,HAWAII

TO

16FEB83 - PAPAETTE,TAHITI

CHIEF SCIENTISTS - ORCUTT,J.A. GRD
JORDAN,T.H. GRD

SHIP - R/V MELVILLE (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	CM	DP	GV	LB	MG	PE	SB	SP	SR	
DSD		4									4
DSX							1				1
GDC	77		7	2	1	2			8		97
GRD							14	19		6	39
MTG							3				3
SGG							1				1
SIX							1				1
UCJ							1				1
TOTAL	77	4	7	2	1	2	21	19	8	6	147

SAMPLE 'TYPE' CODES USED ABOVE

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

SAMPLE 'DISP' CODES USED ABOVE

DSL = DEEP SEA DRILLING PROJECT -- B. LONG (EXT. 3506)
DSX = DEEP SEA DRILLING PROJECT NON-EMPLOYEE STATUS
DSX = CONTACT BARBARA LONG EXT. 3506
GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
GRL = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)
MTG = MARINE TECHNOLOGY GROUP (EXT 4164)
SGG = SHIPBOARD GEOPHYSICAL GROUP--P. CRAMPTON (EXT.2079)
SIX = SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
UCJ = UNIV. CALIF. SAN DIEGO (UCSD)

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.		LEG-SHIP CRUISE
	/ /	000			BENTHIC LEG 4 SAMPLE INDEX		00 00.	00 00.		BNTH04NV
*** PORTS ***										
0800	9/ 1/83				LGPT B HONOLULU,HAWAII		21 18.0N	157 52. W	F	BNTH04NV
1000	16/ 2/83				LGPT E PAPAETTE,TAHITI		17 32. S	149 34. W	F	BNTH04NV

PERSONNEL

*** NAME ***	*** TITLE ***	*** AFFILIATION ***
1 LRCUTT,J.A.	CHIEF SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
2 JORDAN,T.H.	CHIEF SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
3 ABBUTT,J.L.	COMPUTER TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
4 BUAZ,J.T.	EXPLOSIVES TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
5 BURNETT,M.S.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
6 DUPUY,C.G.	OBSERVER	UNIV. CALIF. SAN DIEGO (UCSD)
7 HOLLINSHEAD,C.H.	DVLPT ENG	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
8 HUBENKA,F.	AIRGUN TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
9 KIM,I.I.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
10 LERNER-LAM,A.L.	POST DOC	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
11 PILLARD,E.G.	RESIDENT TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
12 RIEDESEL,M.A.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
13 RITZWOLLER,M.H.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
14 SHAW,P.R.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
15 SHEARER,P.M.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
16 TOY,K.M.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
17 TRIMWELL,S.D.	OBSERVER (NORDA)	DEEP SEA DRILLING PROJECT NON-EMPLOYEE STATUS
18 VALDES,C.M.	OBSERVER	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.
19 VAN BRUGGEN,C.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
20 WILLOUGHBY,D.F.	ELEC TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
21 WEEKS,D.E.	ELEC TECH	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 TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.		LEG-SHIP CRUISE
					UNDERWAY DATA CURATOR - STUART SMITH (EXT.2752)					
*** LOG BOOKS ***										
0400	10/01/83			LBUW B	UNDERWAY LOG	GDC	20 25.5N	158 06.4W	S	BNTH04MV
1630	16/02/83			LBUW E	UNDERWAY LOG	GDC	17 45.2S	149 56.2W	S	BNTH04MV
*** FATHOGRAMS ***										
0350	10/ 1/83			DPRT B	EDO 12KHZ R-01	GDC	20 25.5N	158 06.4W	S	BNTH04MV
2352	13/ 1/83			DPRT E	EDO 12KHZ R-01	GDC	03 56.6N	160 58.0W	S	BNTH04MV
0007	14/ 1/83			DPRT B	EDO 12KHZ R-02	GDC	03 53.8N	160 58.3W	S	BNTH04MV
0209	3/ 2/83			DPRT E	EDO 12KHZ R-02	GDC	23 52.0S	165 45.0W	S	BNTH04MV
0228	3/ 2/83			DPRT B	EDO 12KHZ R-03	GDC	23 52.5S	165 46.0W	S	BNTH04MV
1135	10/ 2/83			DPRT E	EDO 12KHZ R-03	GDC	23 52.1S	165 17.2W	S	BNTH04MV
2238	10/ 2/83			DPRT B	EDO 12KHZ R-04	GDC	23 51.5S	165 17.7W	S	BNTH04MV
1642	16/ 2/83			DPRT E	EDO 12KHZ R-04	GDC	17 45.2S	149 56.2W	S	BNTH04MV
2053	10/ 1/83			DPR3 B	EDO 3.5KHZ R-01	GDC	17 13.2N	158 59.4W	S	BNTH04MV
0625	19/ 1/83			DPR3 E	EDO 3.5KHZ R-01	GDC	17 47.5S	165 25.8W	S	BNTH04MV
0639	19/ 1/83			DPR3 B	EDO 3.5KHZ R-02	GDC	17 49.9S	165 26.9W	S	BNTH04MV
0043	22/ 1/83			DPR3 E	EDO 3.5KHZ R-02	GDC	23 47.1S	165 32.4W	S	BNTH04MV
0152	22/ 1/83			DPR3 B	EDO 3.5KHZ R-03	GDC	23 51.7S	165 32.2W	S	BNTH04MV
0200	6/ 2/83			DPR3 E	EDO 3.5KHZ R-03	GDC	23 35.1S	165 15.5W	S	BNTH04MV
*** MAGNETOMETER ***										
0440	10/ 1/83			MGRA B	MAGNETICS R-01	GDC	20 18.0N	158 08.2W	S	BNTH04MV
0913	26/ 1/83			MGRA E	MAGNETICS R-01	GDC	23 24.0S	165 53.8W	S	BNTH04MV
0924	26/ 1/83			MGRA B	MAGNETICS R-02	GDC	23 25.4S	165 53.9W	S	BNTH04MV
1640	16/ 2/83			MGRA E	MAGNETICS R-02	GDC	17 45.3S	149 56.5W	S	BNTH04MV
GRAVIMETRIC RECORDS CURATOR L.M. DORMAN (EXT.2406)										
1000	10/ 1/83			GVRA B	GRAVIMETER R-01	GDC	19 17.5N	158 24.2W	S	BNTH04MV
1000	16/ 2/83			GVRA C	GRAVIMETER R-01	GDC	18 12.5S	150 59.5W	S	BNTH04MV

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.		LEG-SHIP CRUISE
SEISMIC REFLECTION PROFILER										
0106	18/ 1/83			SPRF	B AIRGUN FAST R-01	GDC	13 08.3S	162 45.2W	S	BNTH04MV
0043	21/ 1/83			SPRF	E 2-SEC EPC-2	GDC	24 06.4S	165 29.3W	S	BNTH04MV
0710	22/ 1/83			SPRF	B AIRGUN FAST R-02	GDC	23 49.1S	165 32.0W	S	BNTH04MV
1049	22/ 1/83			SPRF	E 4-SEC EPC-2	GDC	23 47.5S	165 31.7W	S	BNTH04MV
0106	27/ 1/83			SPRF	B AIRGUN FAST R-03	GDC	24 34.7S	164 58.6W	S	BNTH04MV
0837	27/ 1/83			SPRF	E 4-SEC EPC-2	GDC	24 14.0S	164 38.4W	S	BNTH04MV
0106	18/ 1/83			SPRF	B AIRGUN-FAST R-01	GDC	13 08.3S	162 45.2W	S	BNTH04MV
1705	19/ 1/83			SPRF	E 4-SEC EPC-3	GDC	19 18.2S	166 00.3W	S	BNTH04MV
0359	20/ 1/83			SPRF	B AIRGUN-FAST R-02	GDC	21 14.3S	165 44.2W	S	BNTH04MV
1230	21/ 1/83			SPRF	E 4-SEC EPC-3	GDC	23 53.1S	165 38.2W	S	BNTH04MV
1245	21/ 1/83			SPRF	B AIRGUN FAST R-03	GDC	23 54.7S	165 38.1W	S	BNTH04MV
0043	22/ 1/83			SPRF	E 4-SEC EPC-3	GDC	23 47.1S	165 32.4W	S	BNTH04MV
0710	22/ 1/83			SPRF	B AIRGUN FAST R-04	GDC	23 49.1S	165 32.0W	S	BNTH04MV
1049	22/ 1/83			SPRF	E 4-SEC EPC-3	GDC	23 47.5S	165 31.7W	S	BNTH04MV
0106	27/ 1/83			SPRF	B AIRGUN FAST R-05	GDC	24 34.7S	164 58.6W	S	BNTH04MV
0834	27/ 1/83			SPRF	E 4-SEC EPC-3	GDC	24 14.3S	164 38.2W	S	BNTH04MV
***SEISMIC RUN - REFRACTION AND/OR WIDE ANGLE REFLECTION										
1809	1/ 2/83			SRCS	B LINE-01 SP,EX,OR	GRD	23 49.8S	166 02.0W	S	BNTH04MV
1159	2/ 2/83			SRCS	E HS,AD	GRD	23 49.4S	165 00.3W	S	BNTH04MV
0930	3/ 2/83			SRCS	B LINE-02 AN,EX,OR	GRD	23 49.4S	165 43.0W	S	BNTH04MV
1923	3/ 2/83			SRCS	E HS,AD	GRD	23 48.7S	165 24.8W	S	BNTH04MV
1209	4/ 2/83			SRCS	B LINE-03 SP,EX,OR	GRD	24 15.0S	165 32.0W	S	BNTH04MV
0549	5/ 2/83			SRCS	E HS,AD	GRD	23 21.3S	165 31.4W	S	BNTH04MV
0109	6/ 2/83			SRCS	B LINE-04 SP,EX,OR,MSS	GRD	23 30.1S	165 10.9W	S	BNTH04MV
0034	7/ 2/83			SRCS	E HS,AD	GRD	24 45.2S	166 32.3W	S	BNTH04MV
1229	7/ 2/83			SRCS	B LINE-05 SP,EX,OR,MSS	GRD	24 08.5S	165 11.7W	S	BNTH04MV
1159	8/ 2/83			SRCS	E HS,AD	GRD	22 04.5S	167 12.5W	S	BNTH04MV
0818	11/ 2/83			SRCS	B LINE-06 SP,EX,OR,MSS	GRD	23 49.1S	165 32.0W	S	BNTH04MV
0944	11/ 2/83			SRCS	E HS,AD	GRD	23 53.7S	165 35.7W	S	BNTH04MV

GMT D /M /Y TIME DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.		LEG-SHIP CRUISE
SONOBUOY - OCEAN BOTTOM SEISMOMETER									
0620 23/ 1/83			SBOB	B OBS-PHRED	GRD	23 56.7S	165 45.6W	F	BNTH04MV
0720 7/ 2/83			SBOB	E OBS-PHRED 5630M	GRD	23 56.7S	165 44.7W	S	BNTH04MV
0625 24/ 1/83			SBOB	B OBS-JANICE	GRD	23 55.9S	165 47.2W	F	BNTH04MV
0645 31/ 1/83			SBOB	E OBS-JANICE 5660M	GRD	23 56.3S	165 47.5W	S	BNTH04MV
0102 29/ 1/83			SBOB	B OBS-KAREN	GRD	23 49.0S	165 31.8W	F	BNTH04MV
0631 9/ 2/83			SBOB	E OBS-KAREN 5570M	GRD	23 49.0S	165 32.3W	S	BNTH04MV
1055 29/ 1/83			SBOB	B OBS-JUAN	GRD	23 49.3S	165 31.5W	F	BNTH04MV
0359 9/ 2/83			SBOB	E OBS-JUAN 5565M	GRD	23 49.4S	165 31.8W	S	BNTH04MV
0038 30/ 1/83			SBOB	B OBS-SUZY	GRD	23 49.1S	165 31.4W	F	BNTH04MV
0420 10/ 2/83			SBOB	E OBS-SUZY 5570M	GRD	23 49.3S	165 31.0W	S	BNTH04MV
1125 30/ 1/83			SBOB	B OBS-LYNN	GRD	23 49.3S	165 31.6W	F	BNTH04MV
0640 10/ 2/83			SBOB	E OBS-LYNN 5565M	GRD	23 49.3S	165 31.8W	S	BNTH04MV
1432 5/ 2/83			SBOB	B OBS-JANICE	GRD	23 49.1S	165 31.6W	F	BNTH04MV
1000 16/ 2/83			SBOB	C OBS-JANICE 5565M	GRD	18 12.5S	150 59.5W	S	BNTH04MV
2045 9/ 2/83			SBOB	B OBS-PHRED	GRD	23 49.2S	165 32.7W	F	BNTH04MV
1000 16/ 2/83			SBOB	C OBS-PHRED 5500M	GRD	18 12.5S	150 59.5W	S	BNTH04MV
1135 10/ 2/83			SBOB	B OBS-JUAN	GRD	23 51.9S	165 17.6W	F	BNTH04MV
0119 11/ 2/83			SBOB	E OBS-JUAN 5595M	GRD	23 51.5S	165 17.4W	S	BNTH04MV
2246 10/ 2/83			SBOB	B OBS-SUZY	GRD	23 51.8S	165 18.1W	F	BNTH04MV
1000 16/ 2/83			SBOB	C OBS-SUZY 5610M	GRD	18 12.5S	150 59.5W	S	BNTH04MV
1124 11/ 2/83			SBOB	B OBS-JUAN	GRD	24 02.6S	165 32.0W	F	BNTH04MV
1000 16/ 2/83			SBOB	C OBS-JUAN 5532M	GRD	18 12.5S	150 59.5W	S	BNTH04MV
2142 11/ 2/83			SBOB	B OBS-KAREN	GRD	23 48.6S	165 32.2W	F	BNTH04MV
1000 16/ 2/83			SBOB	C OBS-KAREN 5545M	GRD	18 12.5S	150 59.5W	S	BNTH04MV
1357 12/ 2/83			SBOB	B OBS-LYNN	GRD	23 48.8S	165 32.3W	F	BNTH04MV
1000 16/ 2/83			SBOB	C OBS-LYNN 5503M	GRD	18 12.5S	150 59.5W	S	BNTH04MV
CURRENT MEASUREMENT									
1455 28/ 1/83			CMXX	B CURRENT METER	DSD	23 48.9S	165 31.9W	S	BNTH04MV
1630 28/ 1/83			CMXX	E TETHERED TO 250M	DSD	23 48.9S	165 31.9W	S	BNTH04MV
0600 29/ 1/83			CMXX	B CURRENT METER	DSD	23 49.1S	165 31.5W	S	BNTH04MV
1000 29/ 1/83			CMXX	E TETHERED TO 1000M	DSD	23 49.4S	165 33.1W	S	BNTH04MV
1445 31/ 1/83			CMXX	B CURRENT METER TEMP	DSD	23 49.3S	165 32.5W	S	BNTH04MV
1735 31/ 1/83			CMXX	E TETHERED TO 1000M	DSD	23 49.1S	165 31.9W	S	BNTH04MV

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.		CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
0230	4/ 2/83			CMXX B	CURRENT METER TEMP		DSD	23 49.1S	165 31.6W S	BNTH04MV
0500	4/ 2/83			CMXX E	TETHERED TO 500M		DSD	23 48.8S	165 31.7W S	BNTH04MV
*** BATHYTHERMOGRAPH ***										
1844	10/ 1/83			BTXP	XBT-01	NOAA	GDC	17 35.2N	158 53.8W S	BNTH04MV
2212	10/ 1/83			BTXP	XBT-02	NOAA	GDC	16 59.5N	159 02.7W S	BNTH04MV
0502	11/ 1/83			BTXP	XBT-03	NOAA	GDC	15 59.0N	159 19.1W S	BNTH04MV
1018	11/ 1/83			BTXP	XBT-04	NOAA	GDC	15 09.5N	159 28.7W S	BNTH04MV
1819	11/ 1/83			BTXP	XBT-05	NOAA	GDC	13 45.2N	159 46.7W S	BNTH04MV
1837	11/ 1/83			BTXP	XBT-01	SIO NORDA	GDC	13 42.8N	159 47.3W S	BNTH04MV
2245	11/ 1/83			BTXP	XBT-06	NOAA	GDC	13 00.6N	159 55.1W S	BNTH04MV
0442	12/ 1/83			BTXP	XBT-07	NOAA	GDC	11 54.3N	160 07.2W S	BNTH04MV
0642	12/ 1/83			BTXP	XBT-02	SIO NORDA	GDC	11 32.4N	160 13.4W S	BNTH04MV
1012	12/ 1/83			BTXP	XBT-08	NOAA	GDC	10 60.0N	160 20.7W S	BNTH04MV
1601	12/ 1/83			BTXP	XBT-09	NOAA	GDC	09 53.9N	160 28.1W S	BNTH04MV
1837	12/ 1/83			BTXP	XBT-03	SIO NORDA	GDC	09 23.4N	160 29.4W S	BNTH04MV
2100	12/ 1/83			BTXP	XBT-10	NOAA	GDC	08 58.1N	160 30.5W S	BNTH04MV
2325	12/ 1/83			BTXP	XBT-11	NOAA	GDC	08 30.3N	160 31.9W S	BNTH04MV
0201	13/ 1/83			BTXP	XBT-12	NOAA	GDC	07 59.5N	160 35.5W S	BNTH04MV
0436	13/ 1/83			BTXP	XBT-13	NOAA	GDC	07 30.3N	160 38.7W S	BNTH04MV
0632	13/ 1/83			BTXP	XBT-04	SIO NORDA	GDC	07 08.6N	160 39.6W S	BNTH04MV
0732	13/ 1/83			BTXP	XBT-14	NOAA	GDC	07 00.4N	160 40.1W S	BNTH04MV
1032	13/ 1/83			BTXP	XBT-15	NOAA	GDC	06 26.2N	160 42.0W S	BNTH04MV
1326	13/ 1/83			BTXP	XBT-16	NOAA	GDC	05 53.3N	160 44.0W S	BNTH04MV
1808	13/ 1/83			BTXP	XBT-17	NOAA	GDC	04 60.0N	160 49.0W S	BNTH04MV
1832	13/ 1/83			BTXP	XBT-05	SIO NORDA	GDC	04 55.4N	160 49.4W S	BNTH04MV
2052	13/ 1/83			BTXP	XBT-18	NOAA	GDC	04 31.2N	160 53.1W S	BNTH04MV
2336	13/ 1/83			BTXP	XBT-19	NOAA	GDC	03 59.3N	160 57.7W S	BNTH04MV
0228	14/ 1/83			BTXP	XBT-20	NOAA	GDC	03 26.7N	161 00.9W S	BNTH04MV
0445	14/ 1/83			BTXP	XBT-21	NOAA	GDC	02 59.9N	161 03.1W S	BNTH04MV
0628	14/ 1/83			BTXP	XBT-06	SIO NORDA	GDC	02 40.0N	161 03.5W S	BNTH04MV
0741	14/ 1/83			BTXP	XBT-22	NOAA	GDC	02 28.6N	161 04.7W S	BNTH04MV
1004	14/ 1/83			BTXP	XBT-23	NOAA	GDC	02 00.4N	161 07.8W S	BNTH04MV
1516	14/ 1/83			BTXP	XBT-24	NOAA	GDC	00 59.8N	161 15.1W S	BNTH04MV
1746	14/ 1/83			BTXP	XBT-25	NOAA	GDC	00 29.2N	161 18.6W S	BNTH04MV
1832	14/ 1/83			BTXP	XBT-07	SIO NORDA	GDC	00 20.1N	161 19.8W S	BNTH04MV
2045	14/ 1/83			BTXP	XBT-26	NOAA	GDC	00 01.9S	161 20.5W S	BNTH04MV
2318	14/ 1/83			BTXP	XBT-27	NOAA	GDC	00 30.1S	161 20.3W S	BNTH04MV
0202	15/ 1/83			BTXP	XBT-28	NOAA	GDC	01 00.2S	161 24.3W S	BNTH04MV
0447	15/ 1/83			BTXP	XBT-29	NOAA	GDC	01 31.2S	161 27.3W S	BNTH04MV
0630	15/ 1/83			BTXP	XBT-08	SIO NORDA	GDC	01 50.2S	161 28.8W S	BNTH04MV
0732	15/ 1/83			BTXP	XBT-30	NOAA	GDC	02 00.4S	161 29.2W S	BNTH04MV
1020	15/ 1/83			BTXP	XBT-31	NOAA	GDC	02 31.2S	161 31.6W S	BNTH04MV
1307	15/ 1/83			BTXP	XBT-32	NOAA	GDC	03 00.3S	161 34.5W S	BNTH04MV
1613	15/ 1/83			BTXP	XBT-33	NOAA	GDC	03 31.3S	161 41.9W S	BNTH04MV
1832	15/ 1/83			BTXP	XBT-09	SIO NORDA	GDC	03 53.6S	161 45.2W S	BNTH04MV
1928	15/ 1/83			BTXP	XBT-34	NOAA	GDC	04 00.4S	161 46.3W S	BNTH04MV
2214	15/ 1/83			BTXP	XBT-35	NOAA	GDC	04 27.2S	161 50.5W S	BNTH04MV
0147	16/ 1/83			BTXP	XBT-36	NOAA	GDC	05 02.0S	161 54.4W S	BNTH04MV
0431	16/ 1/83			BTXP	XBT-37	NOAA	GDC	05 30.7S	161 55.7W S	BNTH04MV
0629	16/ 1/83			BTXP	XBT-10	SIO NORDA	GDC	05 52.1S	161 56.3W S	BNTH04MV

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.		CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
0725	16/ 1/83			BTXP	XBT-38	NOAA	GDC	06 00.4S	161 57.5W S	BNTH04MV
1026	16/ 1/83			BTXP	XBT-39	NOAA	GDC	06 33.4S	162 03.7W S	BNTH04MV
1452	16/ 1/83			BTXP	XBT-40	NOAA	GDC	07 24.8S	162 08.0W S	BNTH04MV
1803	16/ 1/83			BTXP	XBT-41	NOAA	GDC	08 02.1S	162 10.1W S	BNTH04MV
1831	16/ 1/83			BTXP	XBT-11	SIO NORDA	GDC	08 07.6S	162 10.5W S	BNTH04MV
2052	16/ 1/83			BTXP	XBT-42	NOAA	GDC	08 32.9S	162 11.1W S	BNTH04MV
0151	17/ 1/83			BTXP	XBT-43	NOAA	GDC	09 00.2S	162 11.6W S	BNTH04MV
0438	17/ 1/83			BTXP	XBT-44	NOAA	GDC	09 31.5S	162 14.4W S	BNTH04MV
0629	17/ 1/83			BTXP	XBT-12	SIO NORDA	GDC	09 51.6S	162 18.1W S	BNTH04MV
0725	17/ 1/83			BTXP	XBT-45	NOAA	GDC	09 59.9S	162 19.6W S	BNTH04MV
1305	17/ 1/83			BTXP	XBT-46	NOAA	GDC	11 00.9S	162 28.0W S	BNTH04MV
1827	17/ 1/83			BTXP	XBT-47	NOAA	GDC	12 00.3S	162 38.0W S	BNTH04MV
1830	17/ 1/83			BTXP	XBT-13	SIO NORDA	GDC	12 00.9S	162 38.0W S	BNTH04MV
0005	18/ 1/83			BTXP	XBT		GDC	13 03.2S	162 43.2W S	BNTH04MV
0015	18/ 1/83			BTXP	XBT-48	NOAA	GDC	13 05.0S	162 43.2W S	BNTH04MV
0631	18/ 1/83			BTXP	XBT-14	SIO NORDA	GDC	13 51.4S	163 20.3W S	BNTH04MV
0745	18/ 1/83			BTXP	XBT-49	NOAA	GDC	14 02.2S	163 25.3W S	BNTH04MV
1334	18/ 1/83			BTXP	XBT-50	NOAA	GDC	15 02.2S	163 56.1W S	BNTH04MV
1833	18/ 1/83			BTXP	XBT-15	SIO NORDA	GDC	15 49.6S	164 26.0W S	BNTH04MV
1955	18/ 1/83			BTXP	XBT-51	NOAA	GDC	16 00.2S	164 32.7W S	BNTH04MV
0147	19/ 1/83			BTXP	XBT-52	NOAA	GDC	16 59.5S	165 02.5W S	BNTH04MV
0631	19/ 1/83			BTXP	XBT-16	SIO NORDA	GDC	17 48.5S	165 26.2W S	BNTH04MV
0805	19/ 1/83			BTXP	XBT-53	NOAA	GDC	18 02.9S	165 33.3W S	BNTH04MV
1620	19/ 1/83			BTXP	XBT-54	NOAA	GDC	19 13.2S	166 00.6W S	BNTH04MV
1831	19/ 1/83			BTXP	XBT-17	SIO NORDA	GDC	19 33.3S	165 58.5W S	BNTH04MV
2104	19/ 1/83			BTXP	XBT-55	NOAA	GDC	19 59.7S	165 54.9W S	BNTH04MV
0831	28/ 1/83			BTXP	XBT		GDC	23 55.3S	165 48.1W S	BNTH04MV
2325	14/ 2/83			BTXP	XBT-56	NOAA	GDC	19 59.1S	156 48.6W S	BNTH04MV
1340	15/ 2/83			BTXP	XBT-57	NOAA	GDC	18 59.5S	154 25.8W S	BNTH04MV
1251	16/ 2/83			BTXP	XBT-58	NOAA	GDC	18 01.2S	150 33.4W S	BNTH04MV

9900 END SAMPLE INDEX BNTH04MV