

PRELIMINARY REPORT AND INDEX
OF
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA
CATO EXPEDITION
LEG 8
R/V MELVILLE

Balboa, C. Z. (19 Jan. 1973)
To
San Diego, Cal. (14 Feb. 1973)

Chief Scientist, Leg 8 - R. Davis

Cruise Coordinator - T. Chase

Airgun Tech. - D. McKinney

Computer Tech - M. Elston

Resident Marine Tech. - J. Coatsworth

Data Processed by - U. Albright, J. Moore, O. McConnell

Geological Data Center

T. E. Chase - Curator

S. M. Smith - Data Processing Coordinator

Scripps Institution of Oceanography

La Jolla, California

March 29, 1973

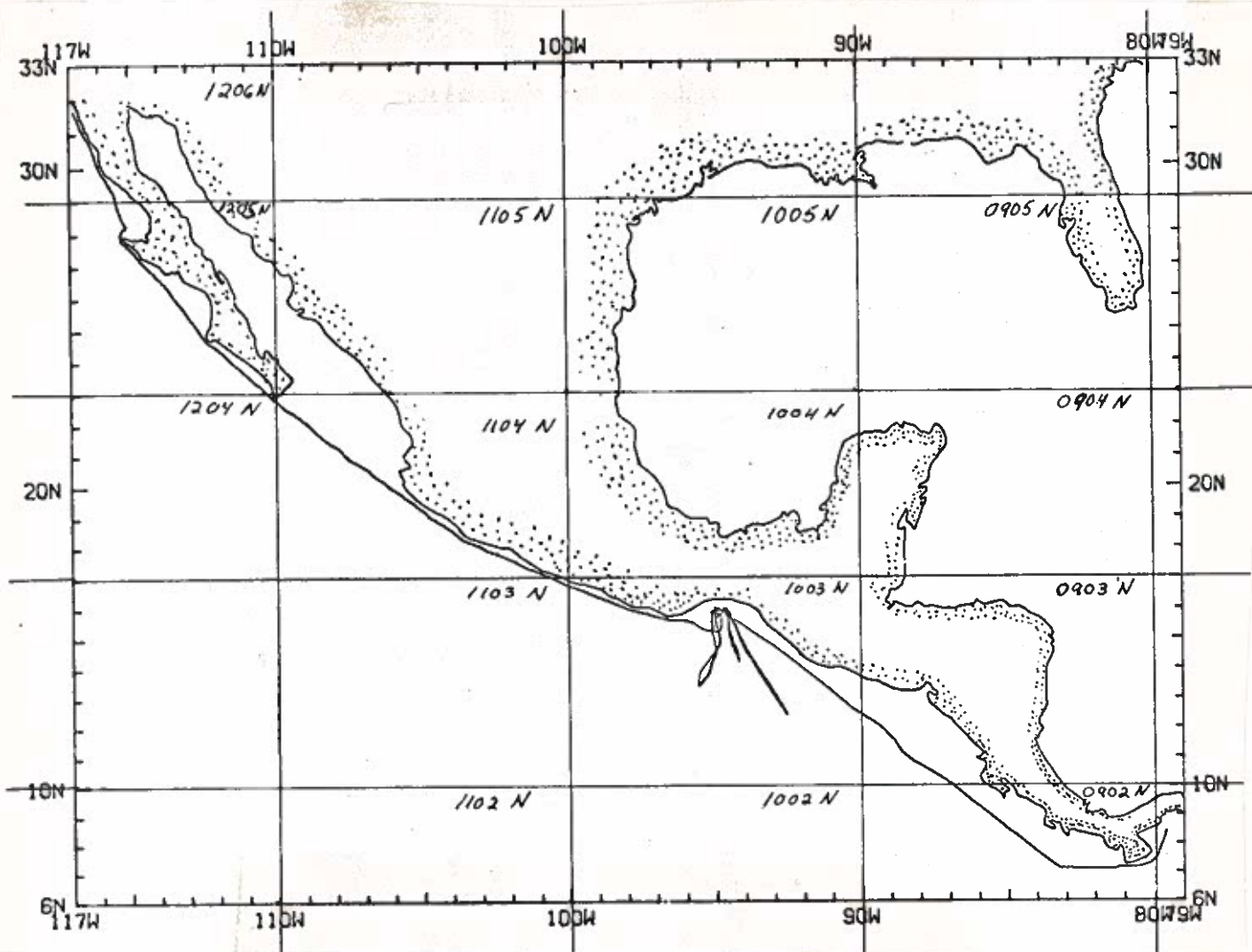
Preliminary Report and Index of Navigation, Depth, Magnetic and Subbottom Profiler Data

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 (.3"/deg. long) is the same as the index charts of previous SIO cruises published as Report IMR TR-25.
- 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 T. E. Chase, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92037 (714-453-2000, Ext. 1534):

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 1965 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
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CATO EXPEDITION

LEG 8

R/V Melville

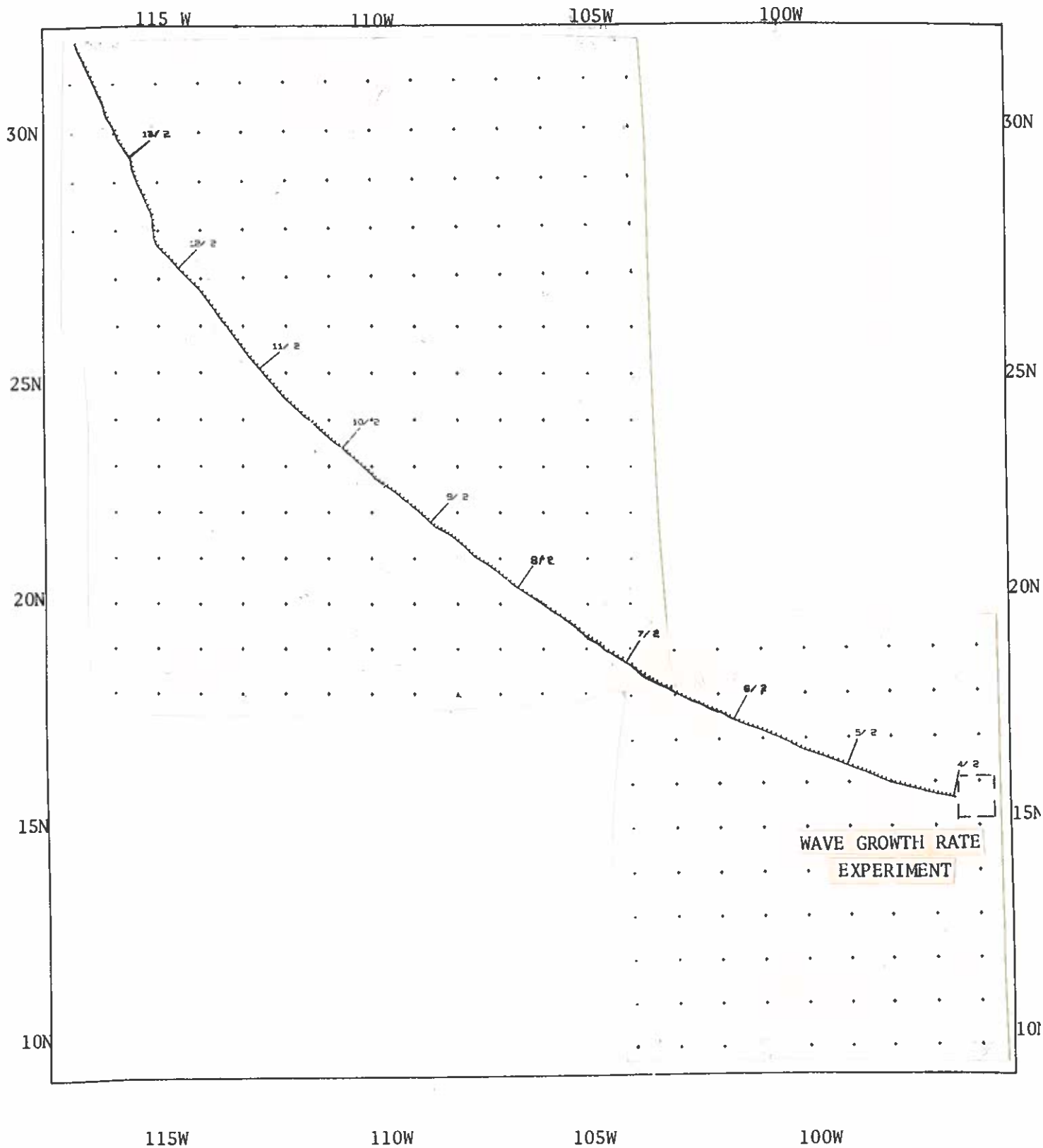
Chief Scientist - R. Davis

Balboa, C.Z. - San Diego

19 Jan. 1973 - 14 Feb. 1973

TOTAL MILEAGE

- 1) Cruise - 4182.5 miles
- 2) Bathymetry - 1293 miles
- 3) Magnetics - 1295 miles
- 4) Seismic Reflection - 922 miles

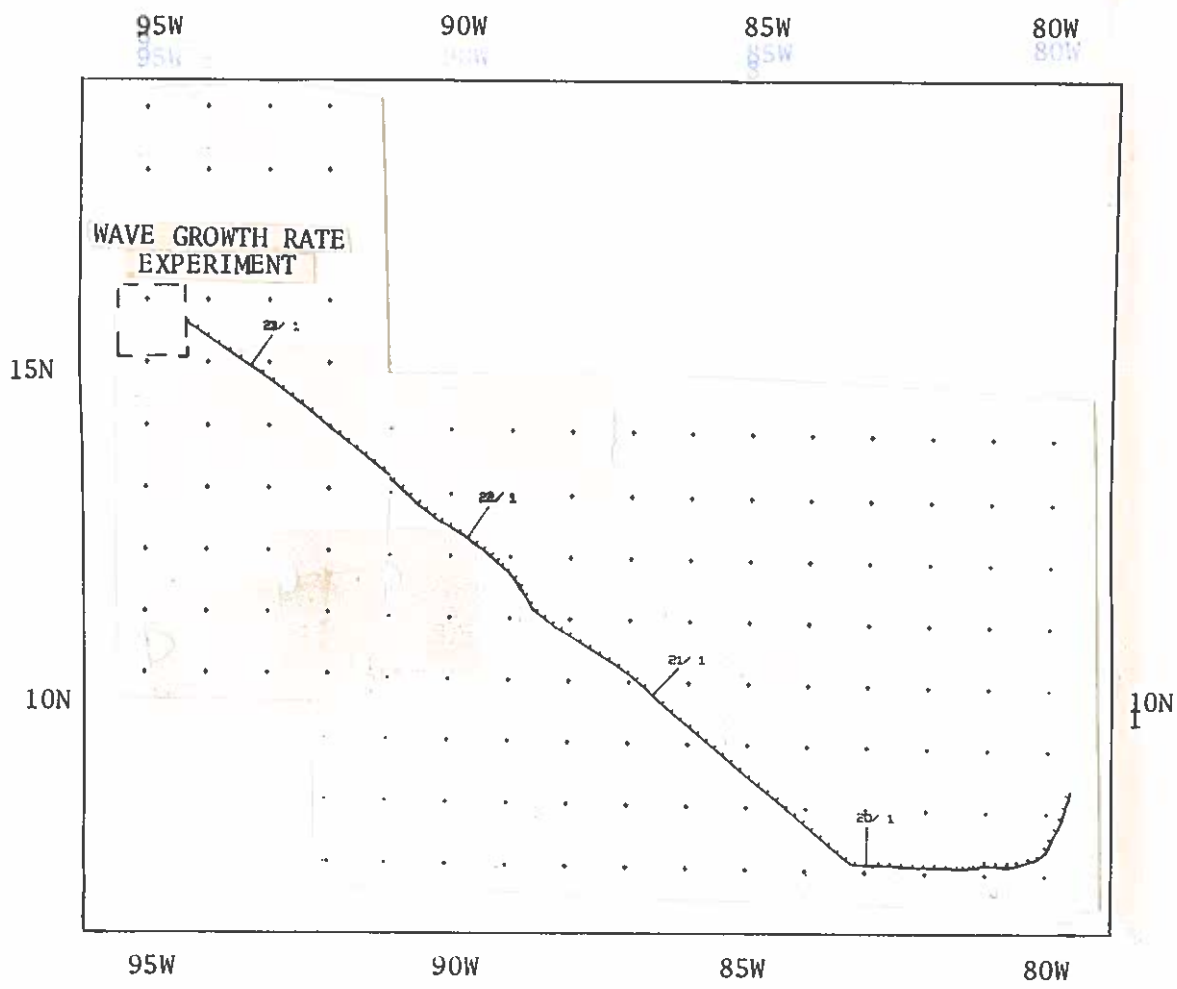


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trackplot

(sheet 1 of 2)



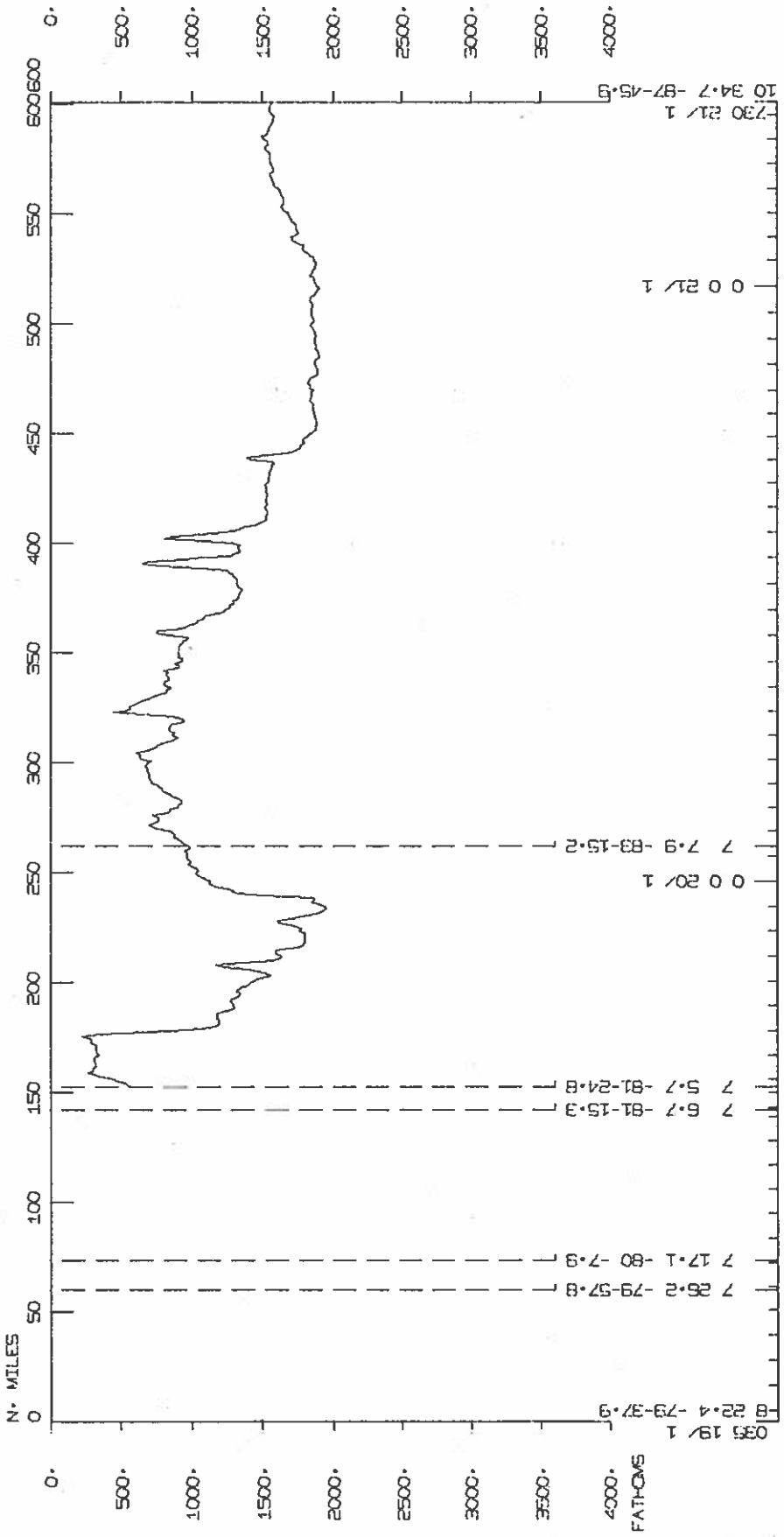
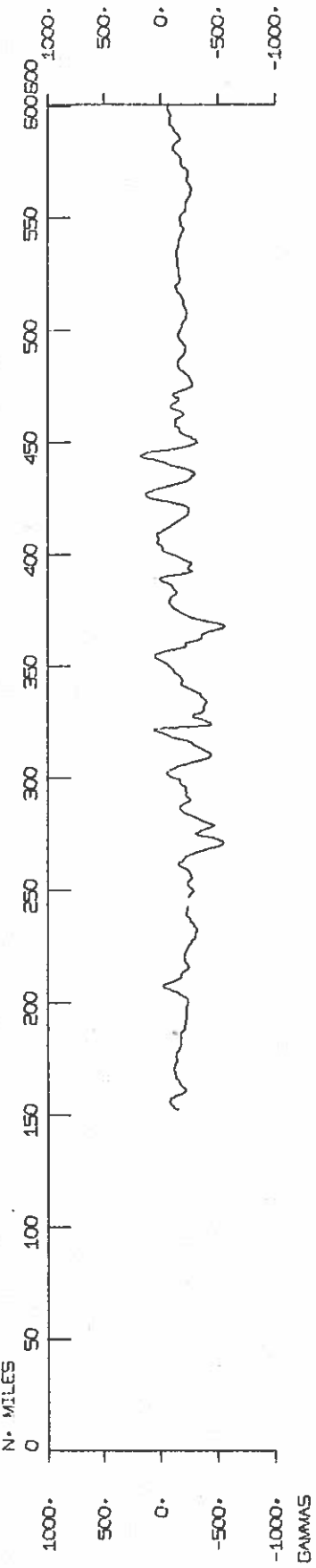
CATO EXPEDITION

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sheet 2 of 2

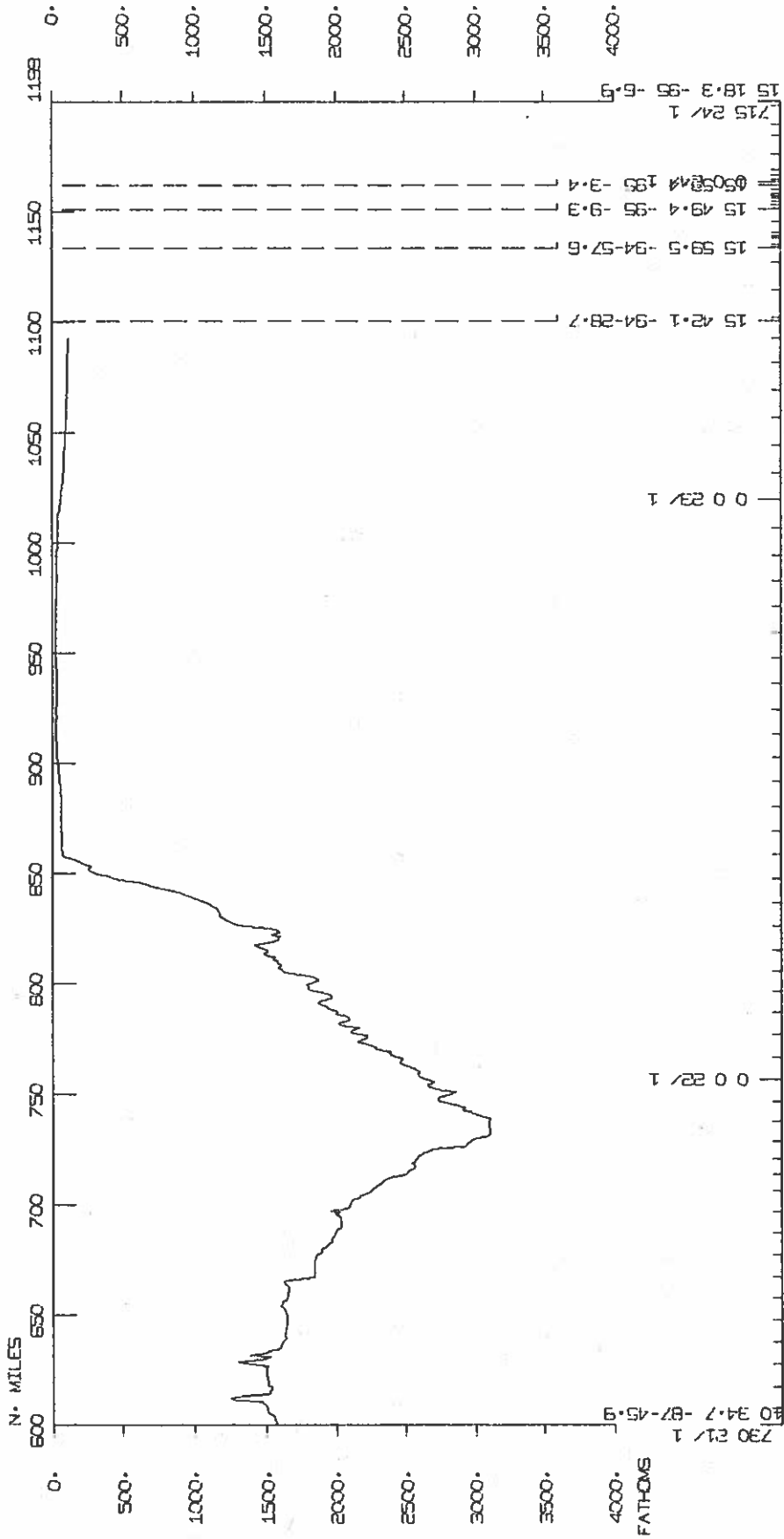
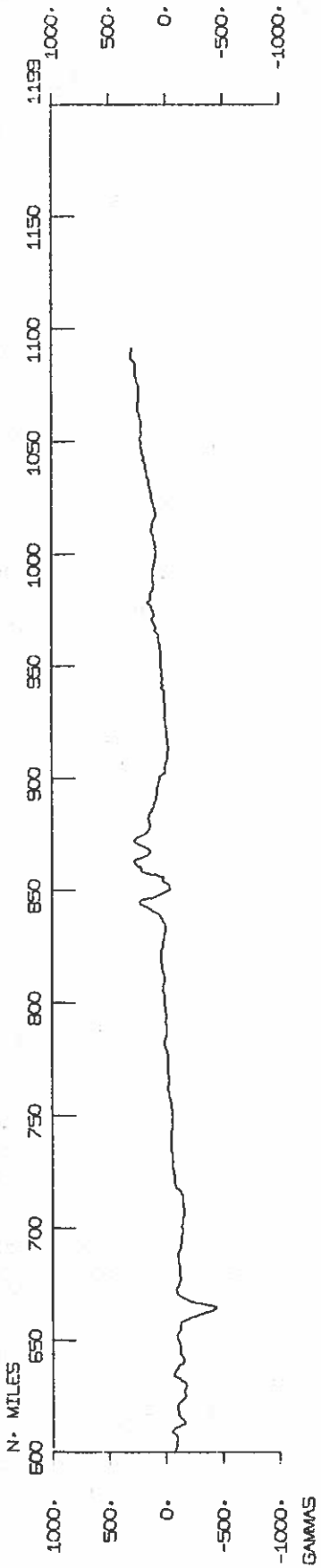
TRACKPLOT

CATO LEG 8

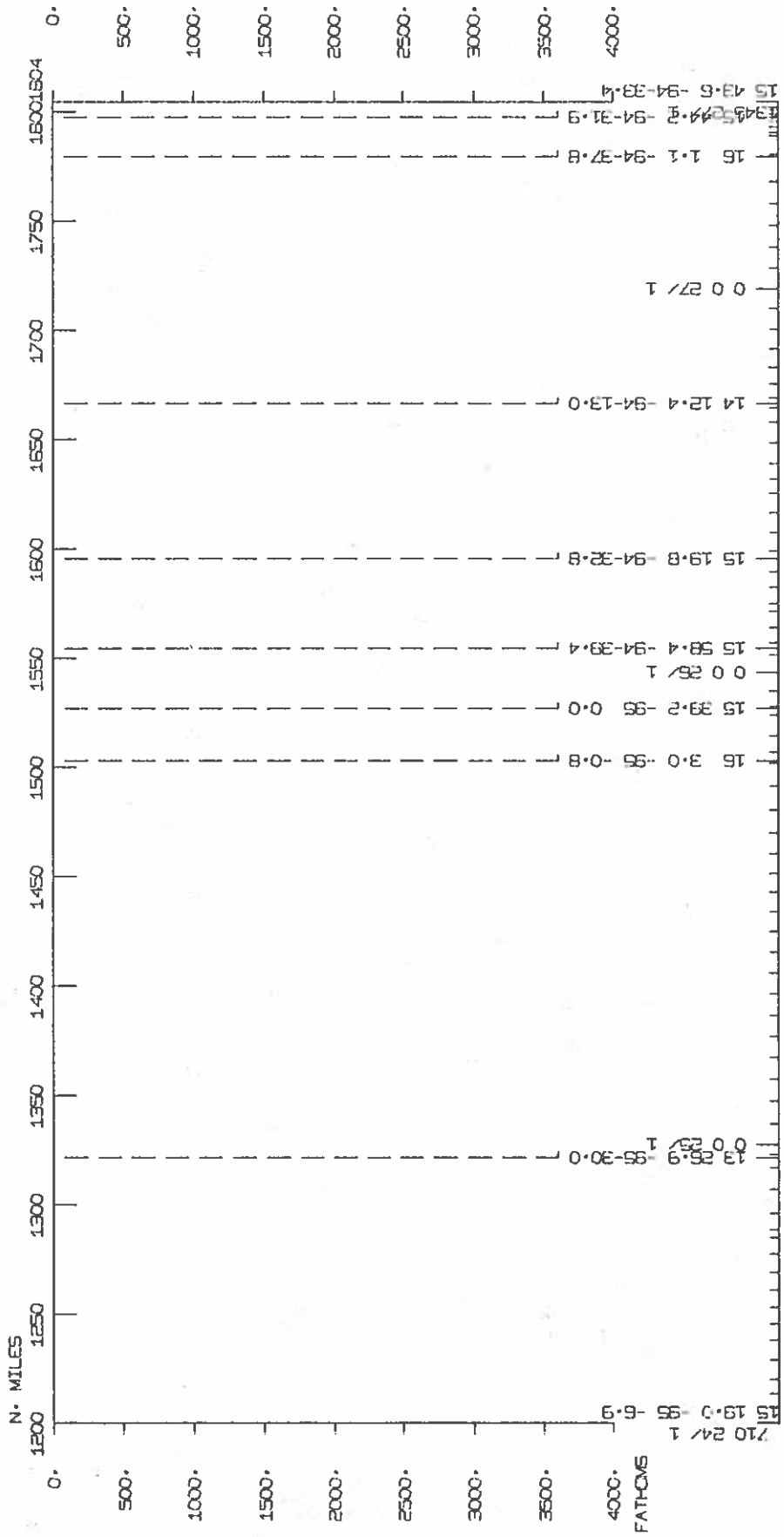
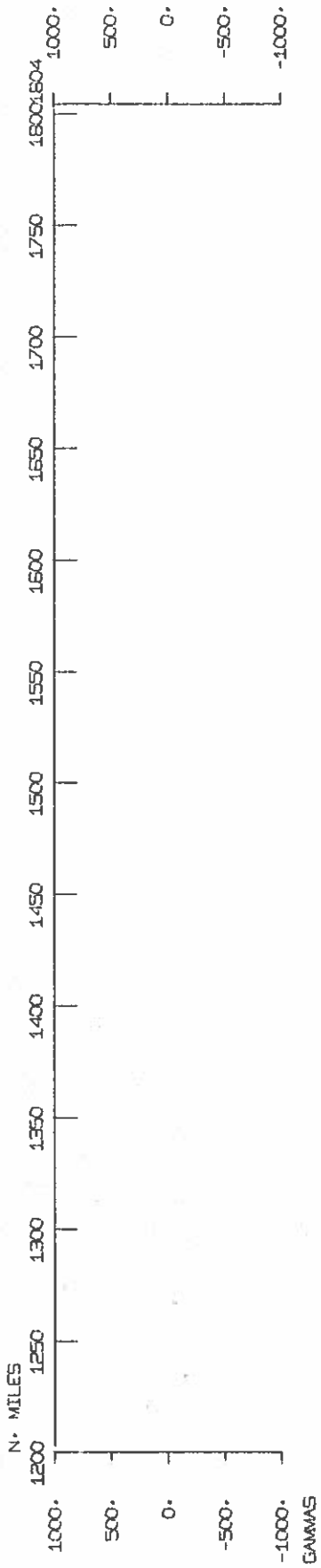


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CATO LEG 8



CATO LEG 8



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13 28.9 95 -30.0
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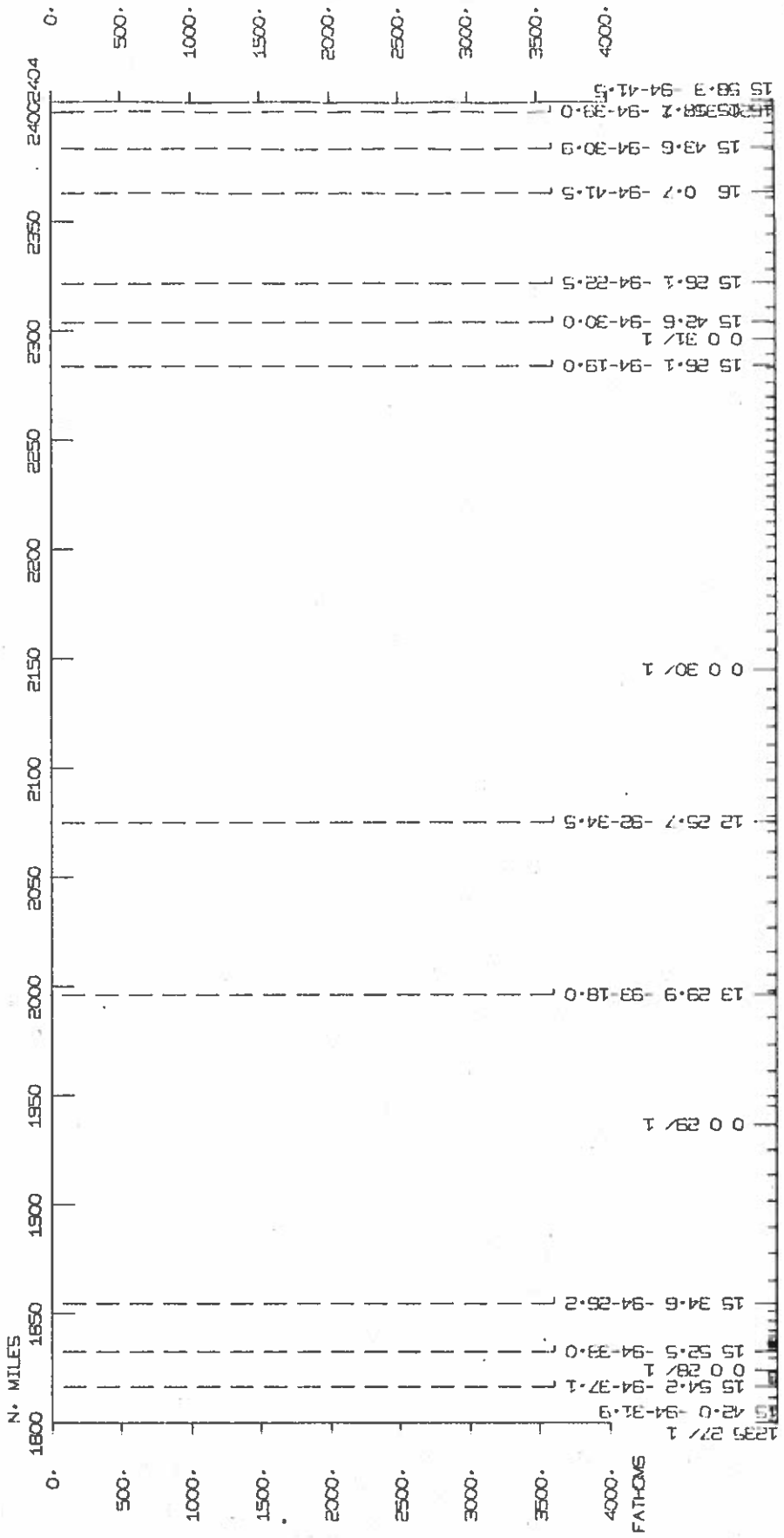
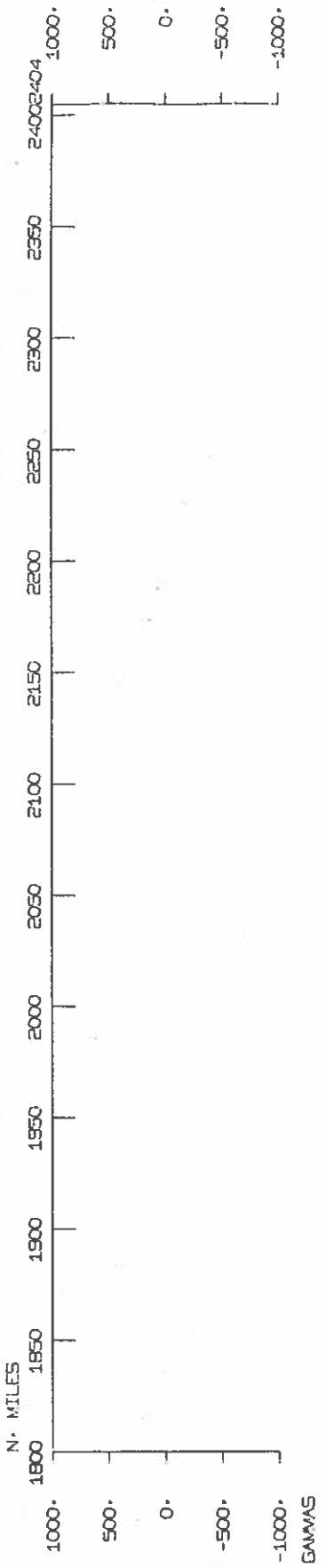
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14 12.4 94 -13.0
15 45.4 94 -31.9
15 43.6 94 -33.4

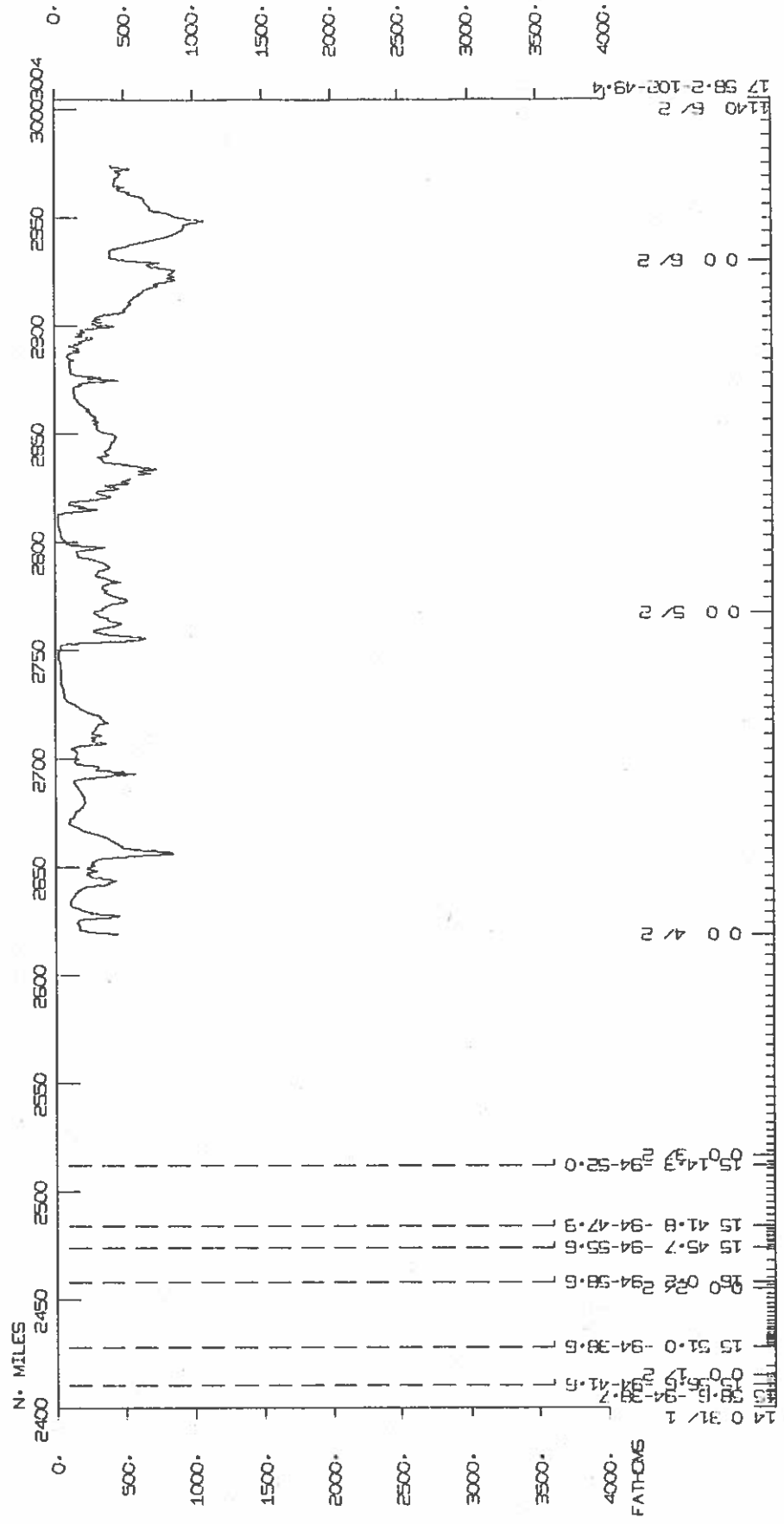
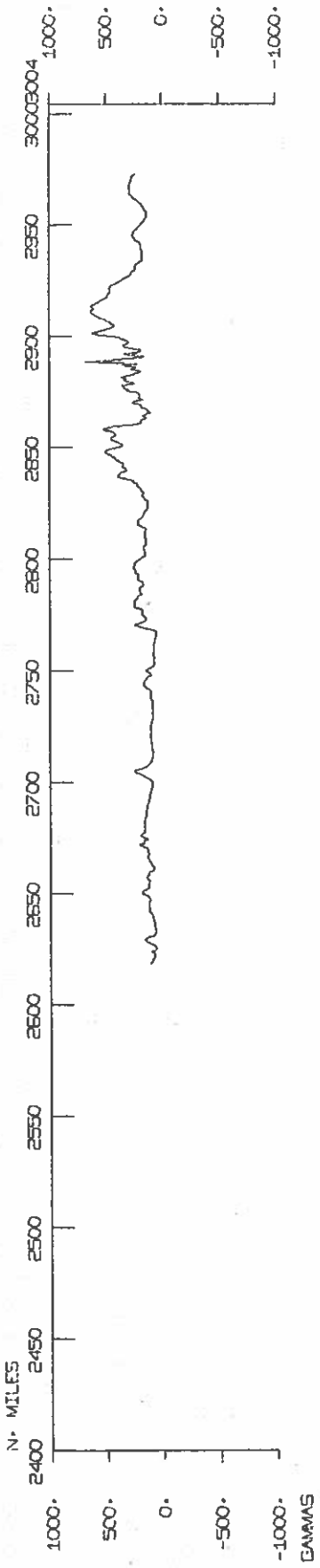
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CATO LEG 8

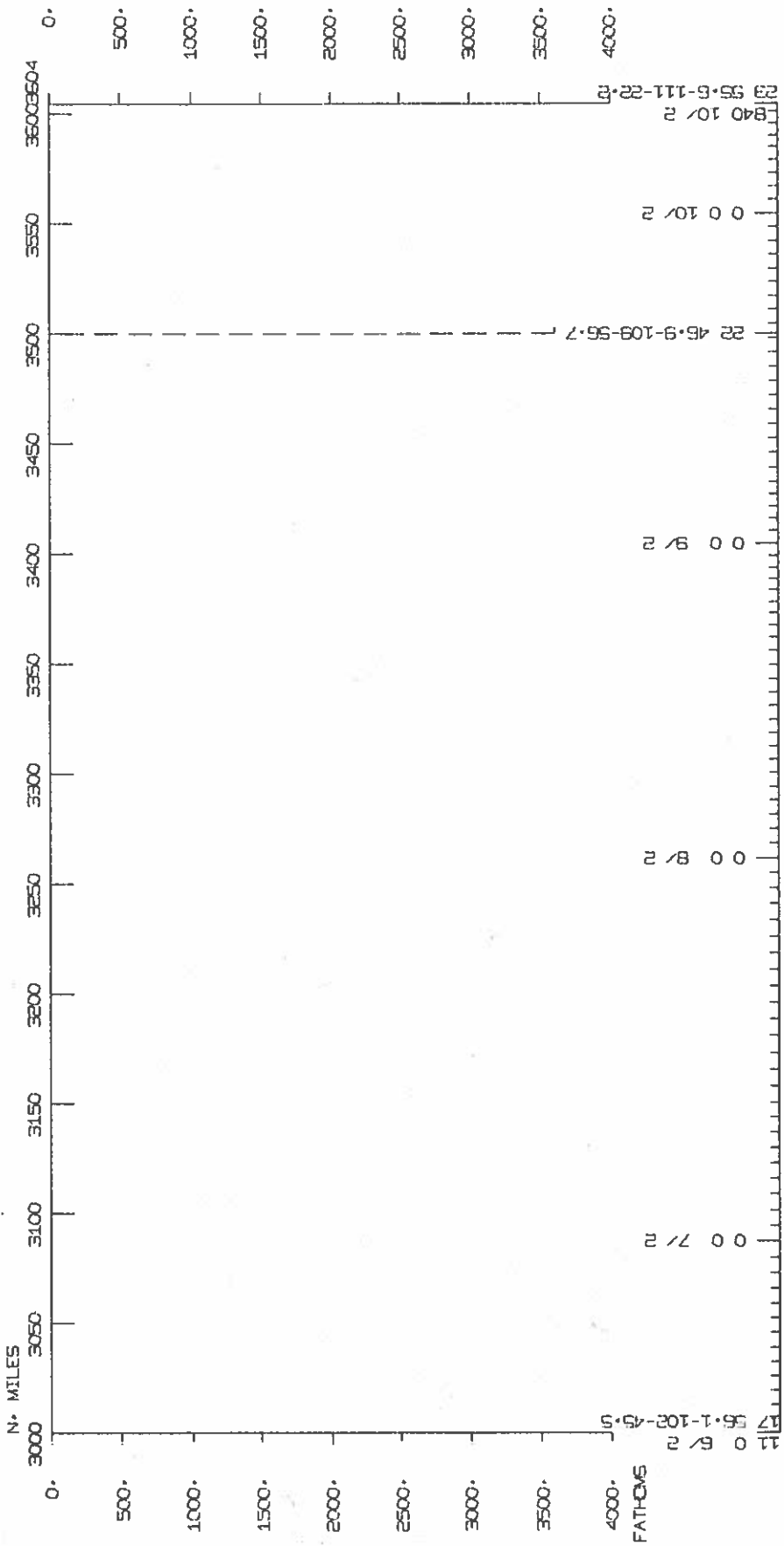
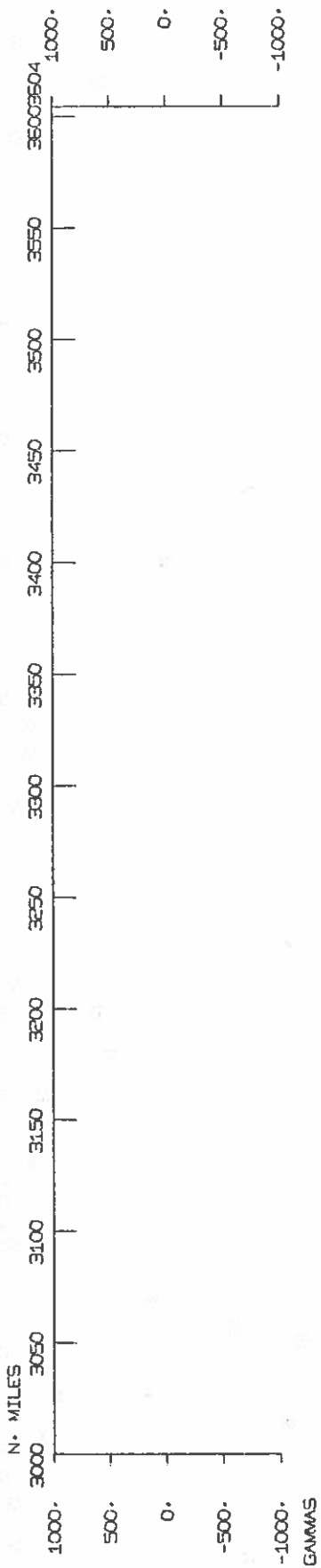


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 15 54.2 -94-37.1
 0 0 28/ 1
 15 52.5 -94-33.0
 15 34.6 -94-26.2
 0 0 29/ 1
 13 29.9 -93-18.0
 12 25.7 -92-34.9
 0 0 30/ 1
 15 26.1 -94-19.0
 0 0 31/ 1
 15 42.6 -94-30.0
 15 26.1 -94-22.5
 15 0.7 -94-41.5
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 15 25.8 -94-33.0
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CATO LEG B



CATO LEG 8



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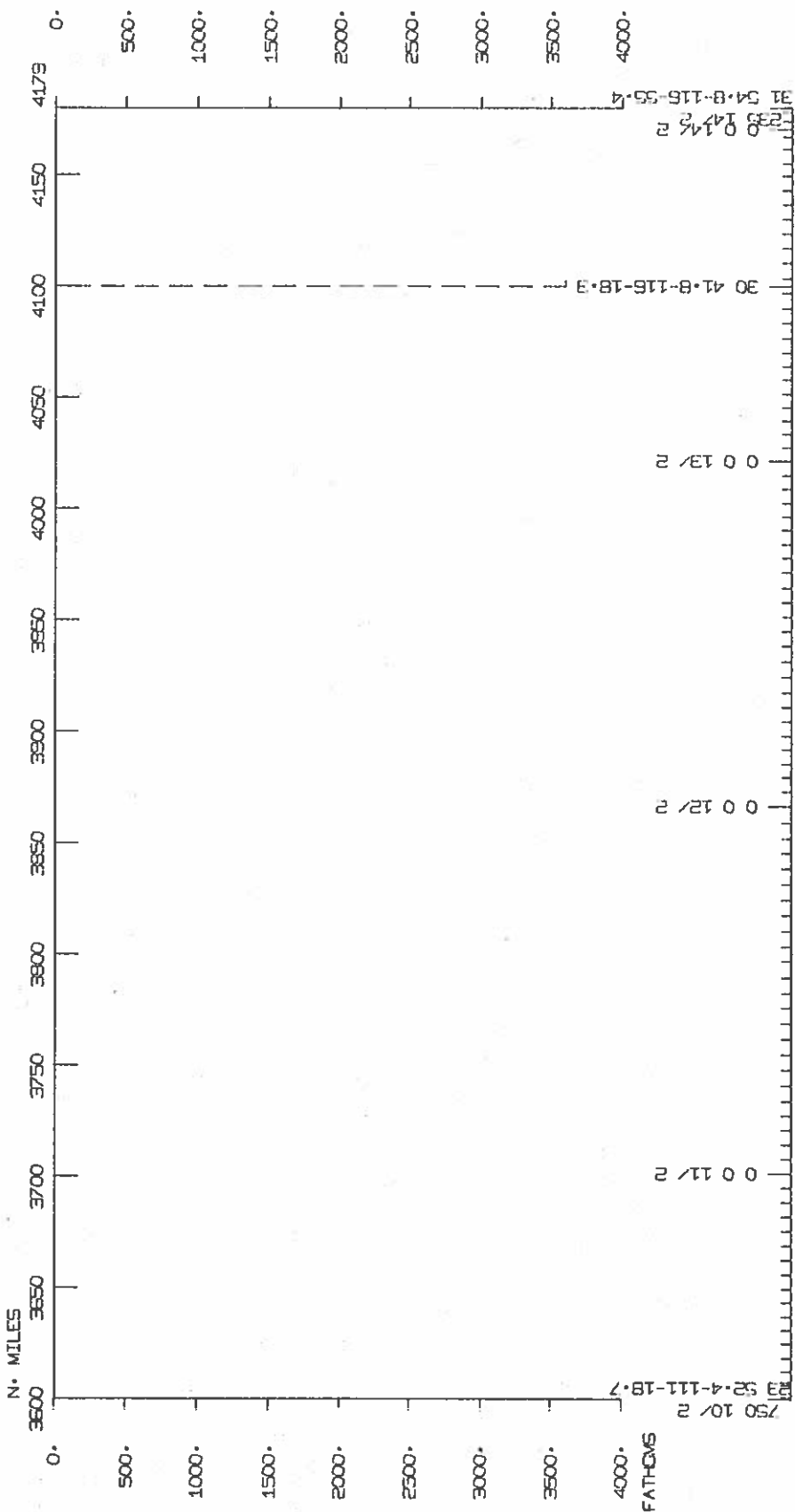
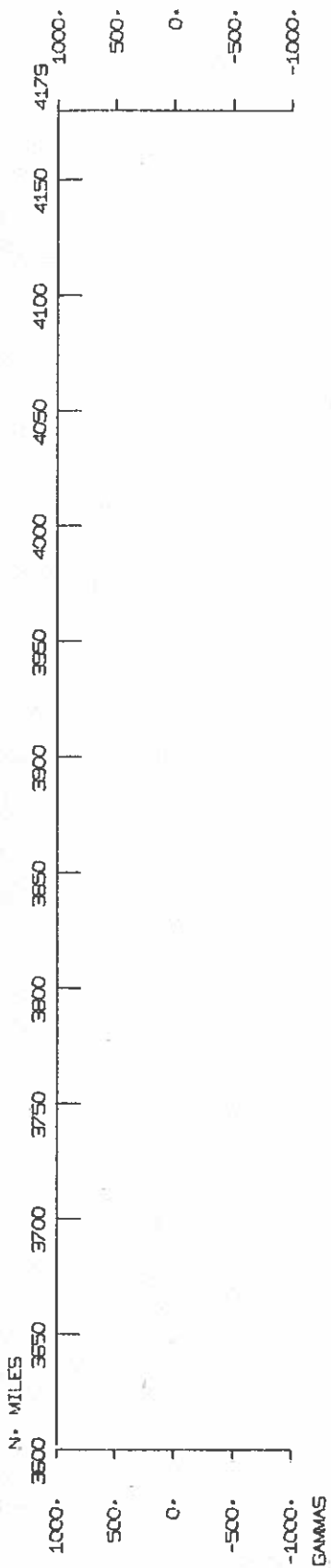
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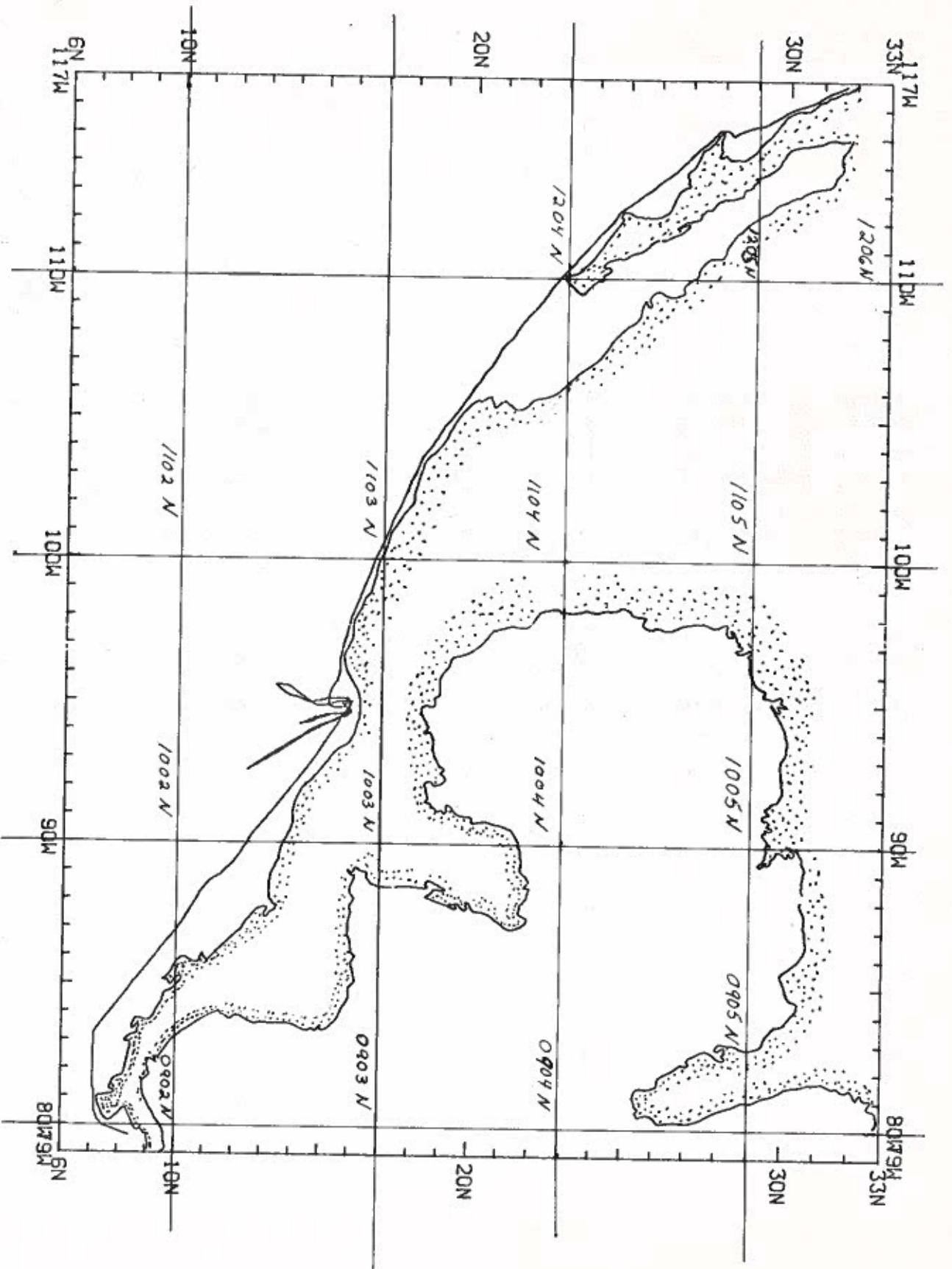
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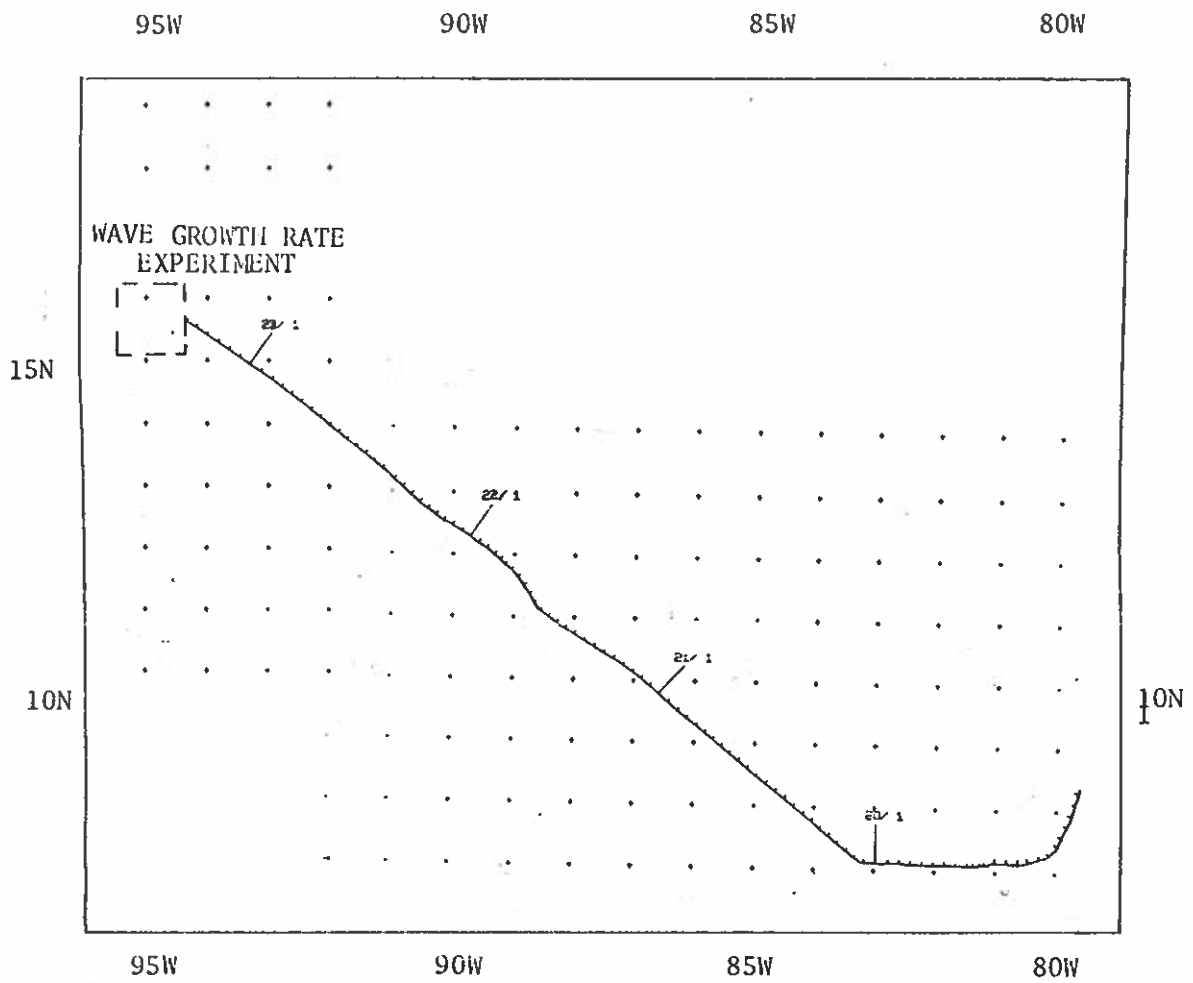
CATO LEG 8



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CRTO LEG 8

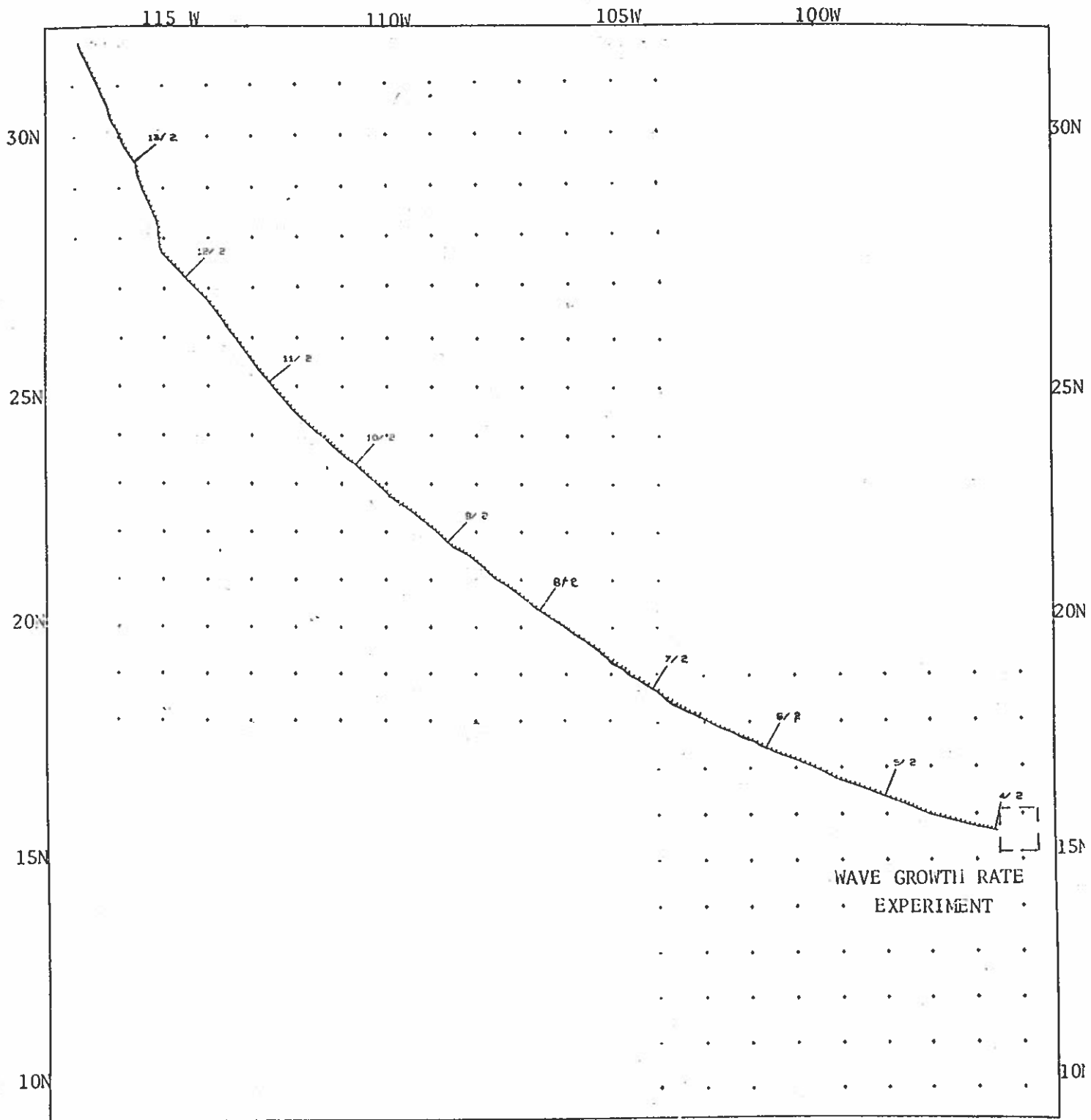


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TRACKPLOT



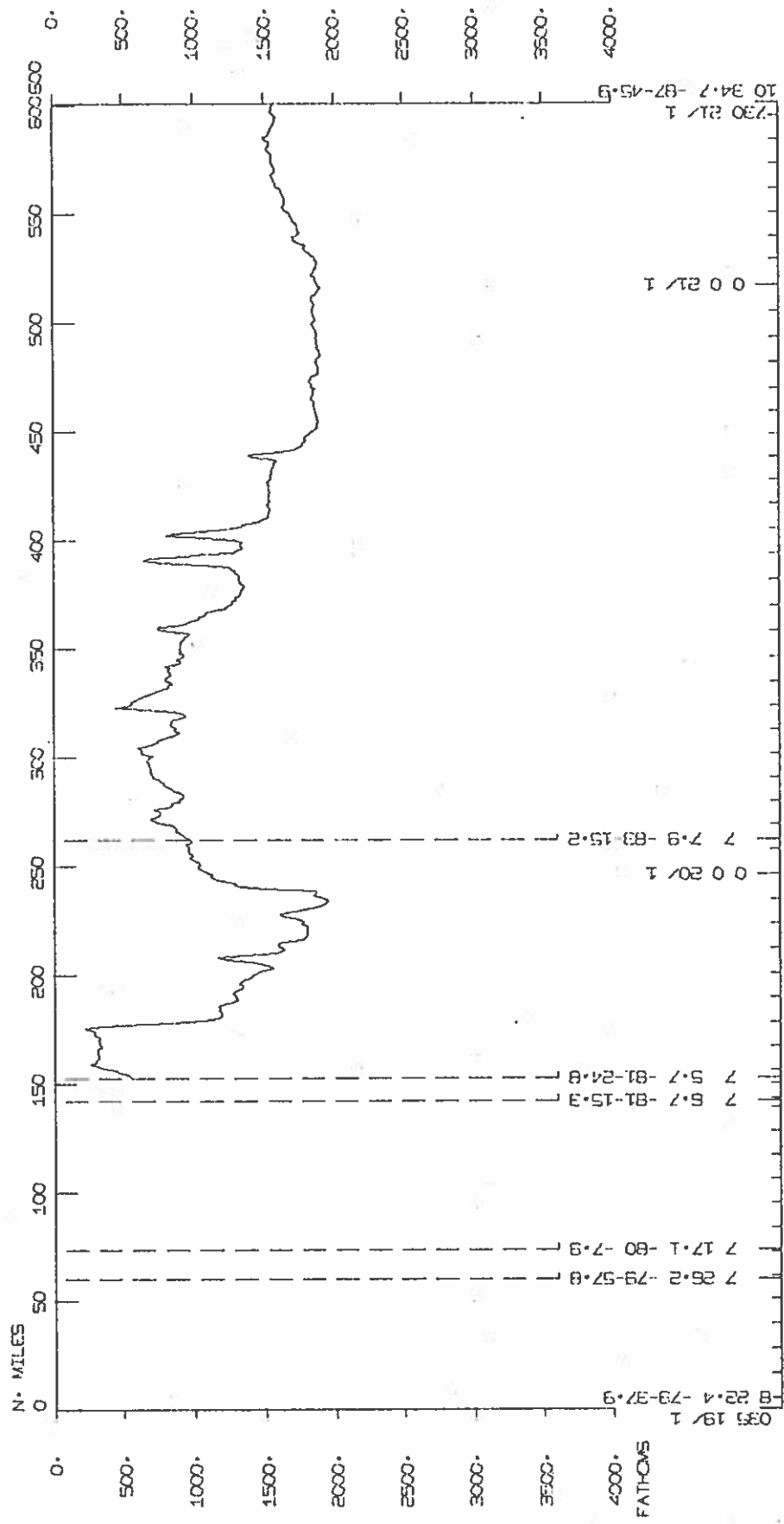
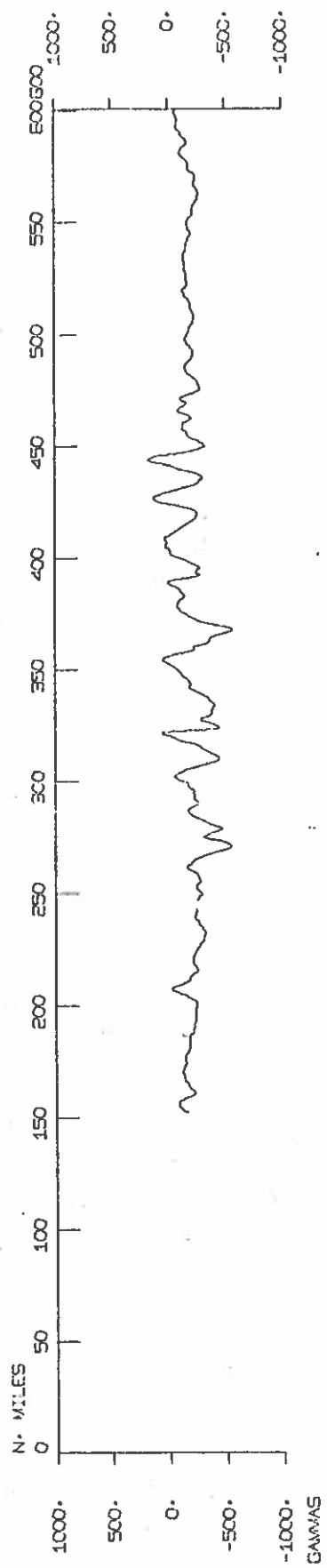
CATO EXPEDITION

LEG 8

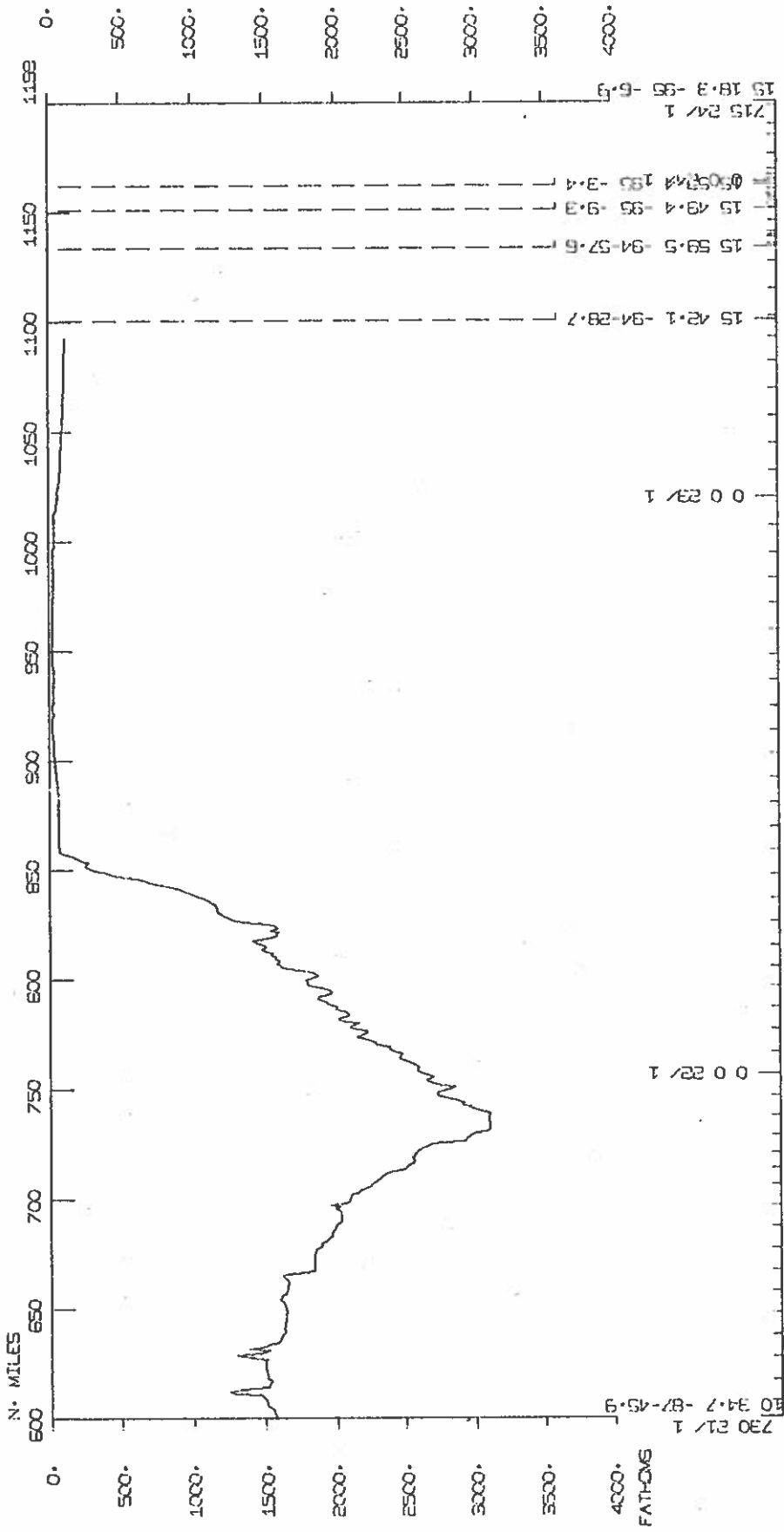
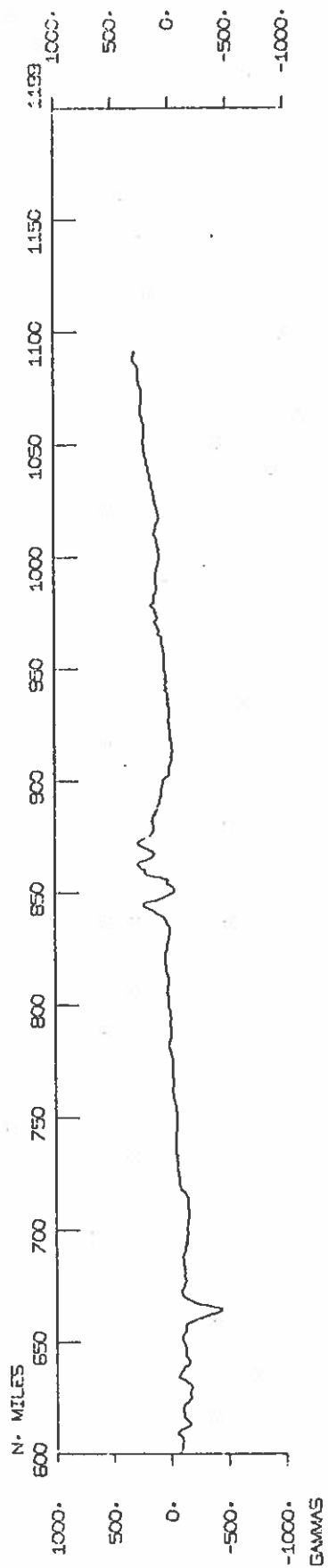
trackplot

(sheet 1 of 2)

CATO LEG 8

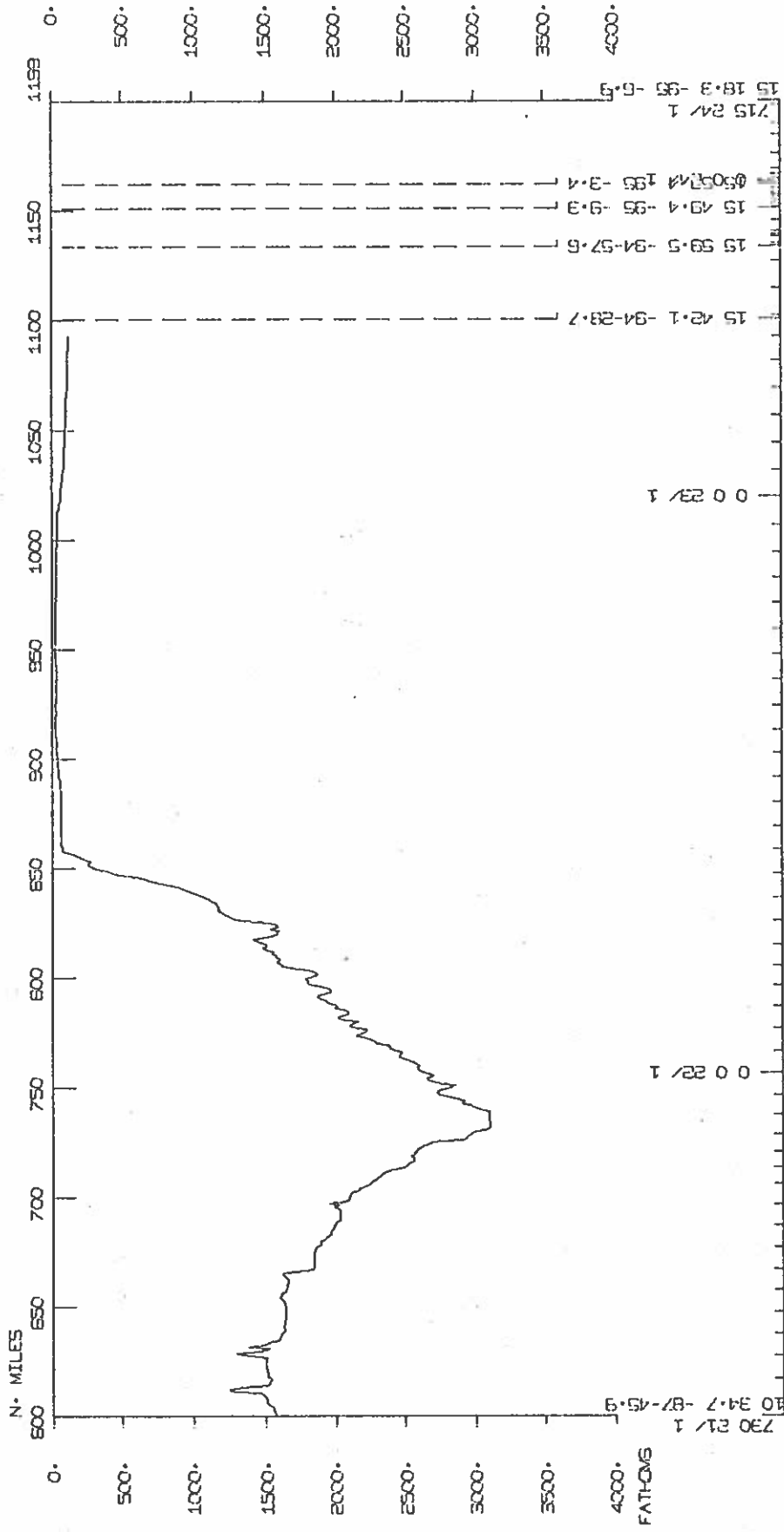
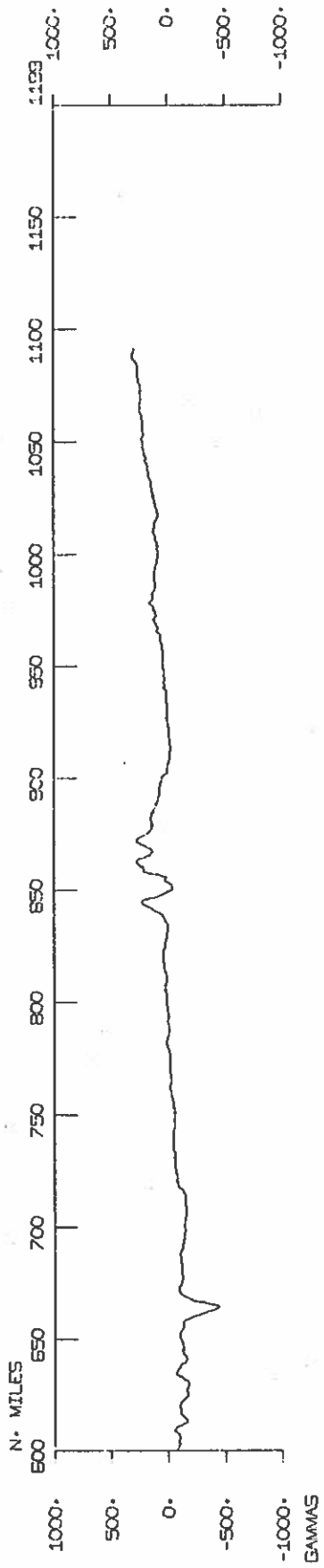


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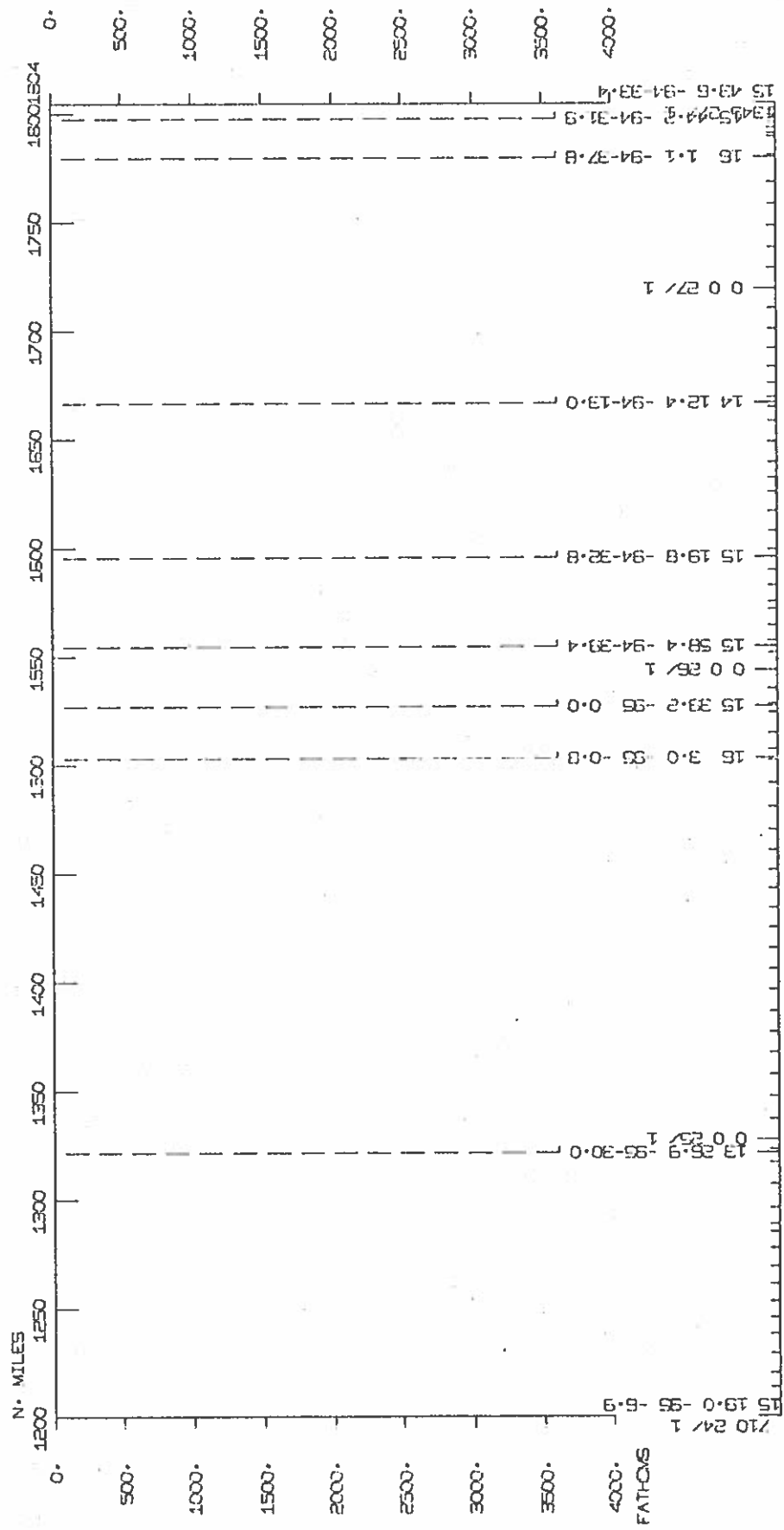
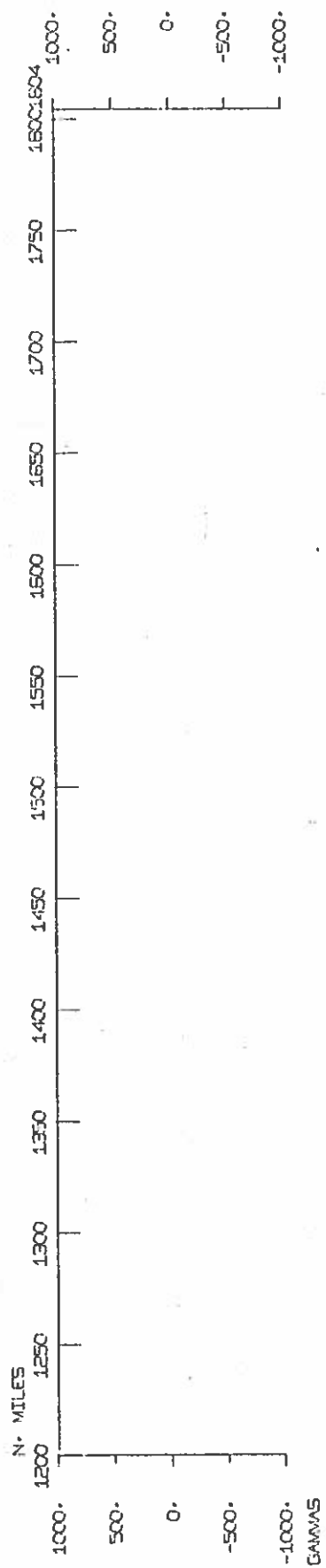


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 0 0 22 / 1
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 15 3 -95 -6.5
 715 24 / 1

CATO LEG B

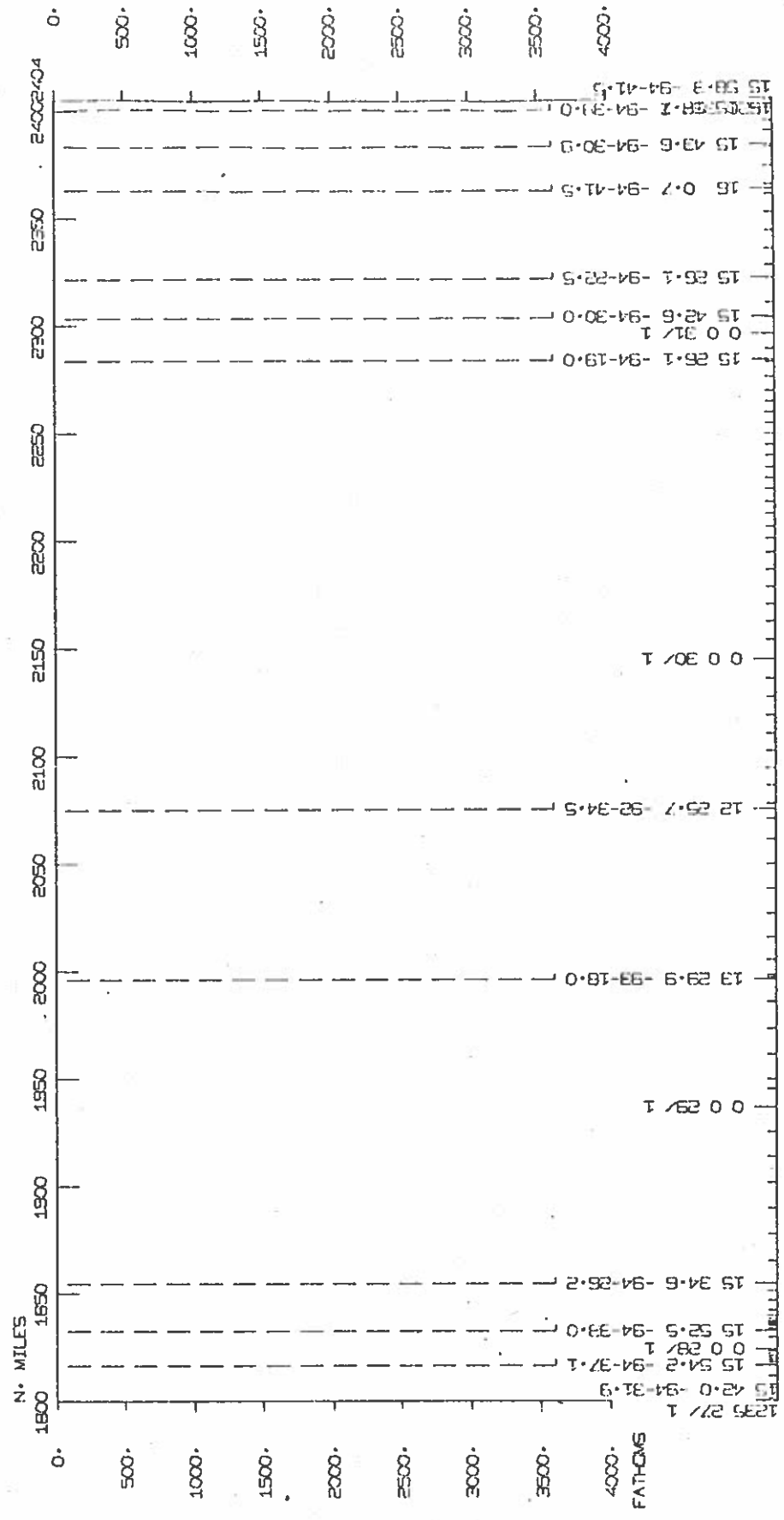
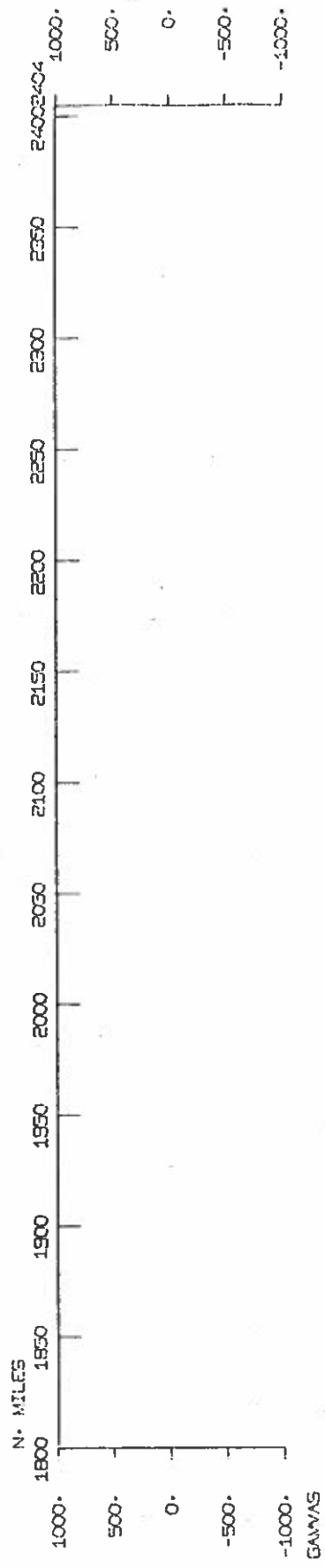


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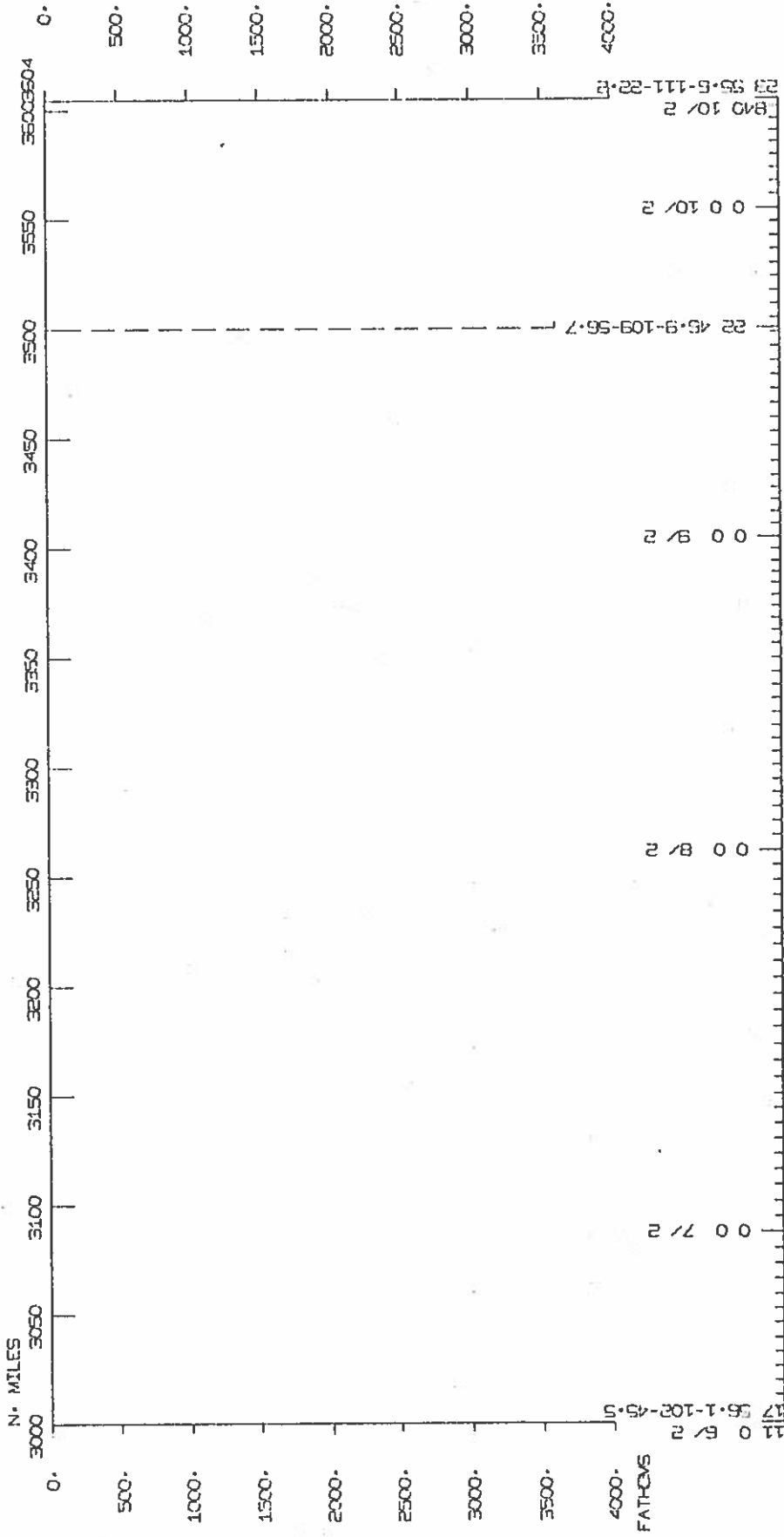
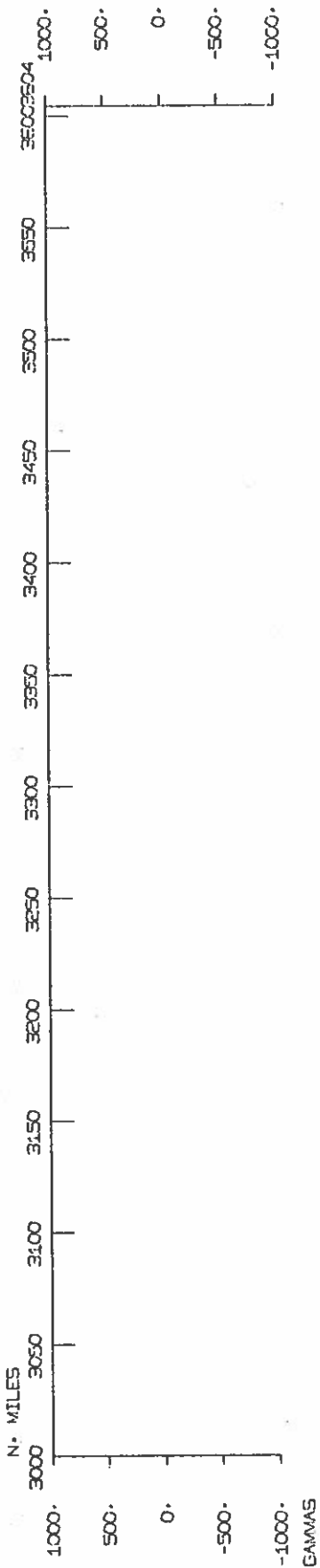
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CATO LEG 8



1235 27/ 1
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 15 34.6 -94-28.2
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 12 25.7 -92-34.5
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 15 26.1 -94-22.5
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CATO LEG 8



CATO LEG 8

