



THE UNIVERSITY OF TEXAS

MARINE SCIENCE INSTITUTE
GEOPHYSICS LABORATORY
GALVESTON, TEXAS 77550

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10 October 1978

RESEARCH CRUISE REPORT FOR LEGS IG29-2 and IG29-3

SHIP NAME:

Ida Green

OPERATING INSTITUTION:

The University of Texas
Marine Science Institute

CLEARANCE COUNTRIES:

Panama
Costa Rica

DATES:

IG29-2: 10 June - 29 June
IG29-3: 01 July - 21 July

PORT CALLS:

Panama Canal Zone:
07 June - 10 June
21 July - 25 July
San Jose, Guatemala:
14 June
Acapulco, Mexico:
29 June - 01 July

PROJECT TITLE:

Geophysical Investigation of the
Middle America Trench

CHIEF SCIENTISTS:

Dr. John Ladd - IG29-2
Dr. J. Lamar Worzel - IG29-3

FOREIGN PARTICIPANTS:

Luis Sanchez Barreda
The University of Texas at Austin
(Present address: See letterhead.)
Julio Yon
Seccion Hidrografia/Oceanografia
Base Naval
St. Tomas de Castilla, Izabel
Guatemala, CA

DESCRIPTION OF SCIENTIFIC PROGRAM:

The general scientific program of cruise IG29 legs 2 and 3 of the R/V *Ida Green* was directed toward geophysical and geological investigations of the Middle America Trench. Delineation of detailed geologic structure of these areas is vital to our understanding of the tectonic history of these areas in the light of plate tectonics. The tracks for IG29-2 and IG29-3 are shown in Figures 1 through 6. Over all tracks continuous measurements of bathymetry and magnetics were recorded. Over most of the track in the detailed survey areas multichannel seismic profiles were also recorded. In addition several refraction sonobuoy measurements were made at various positions on the track, and deep-sea piston cores sampled the seafloor. On IG29-2 we had an onboard observer, Julio Yon, from the Guatemalan Navy. On IG29-3 we had a foreign scientist, Luis Sanchez-Barreda, who is a Mexican national in the Ph.D. program at The University of Texas at Austin.

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OBSERVATIONS AND SAMPLES:

Bathymetric, magnetic, and deep penetration seismic data collected simultaneously along track in detailed survey areas (see accompanying figures), also core and dredge samples in detailed survey areas.

Location of data: See letterhead.

KEY CONTACTS:

IG29-2: Dr. John W. Ladd

IG29-3: Dr. J. Lamar Worzel (both at letterhead address).

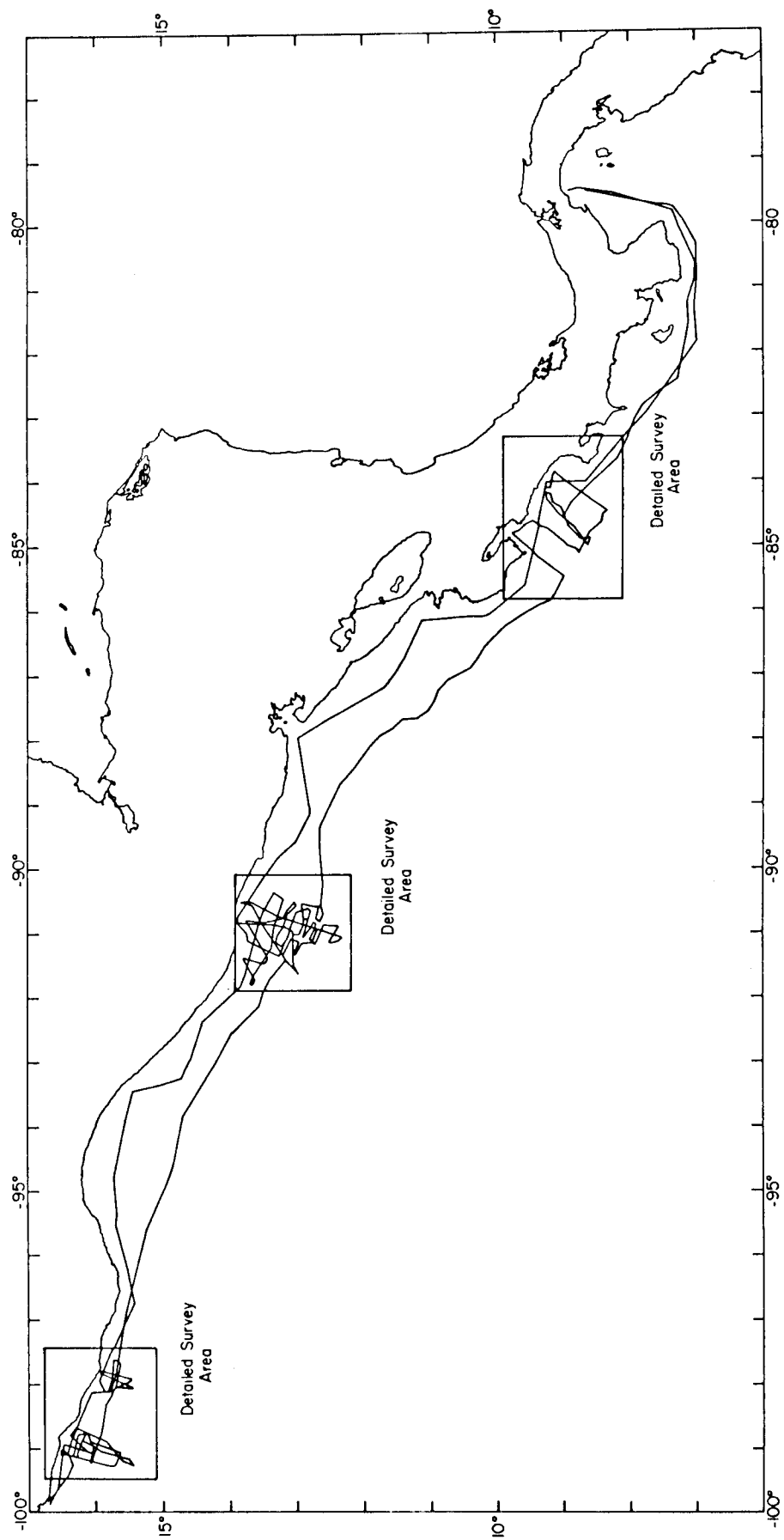


Fig. 1. Complete Track, Legs 29-2 and 29-3.

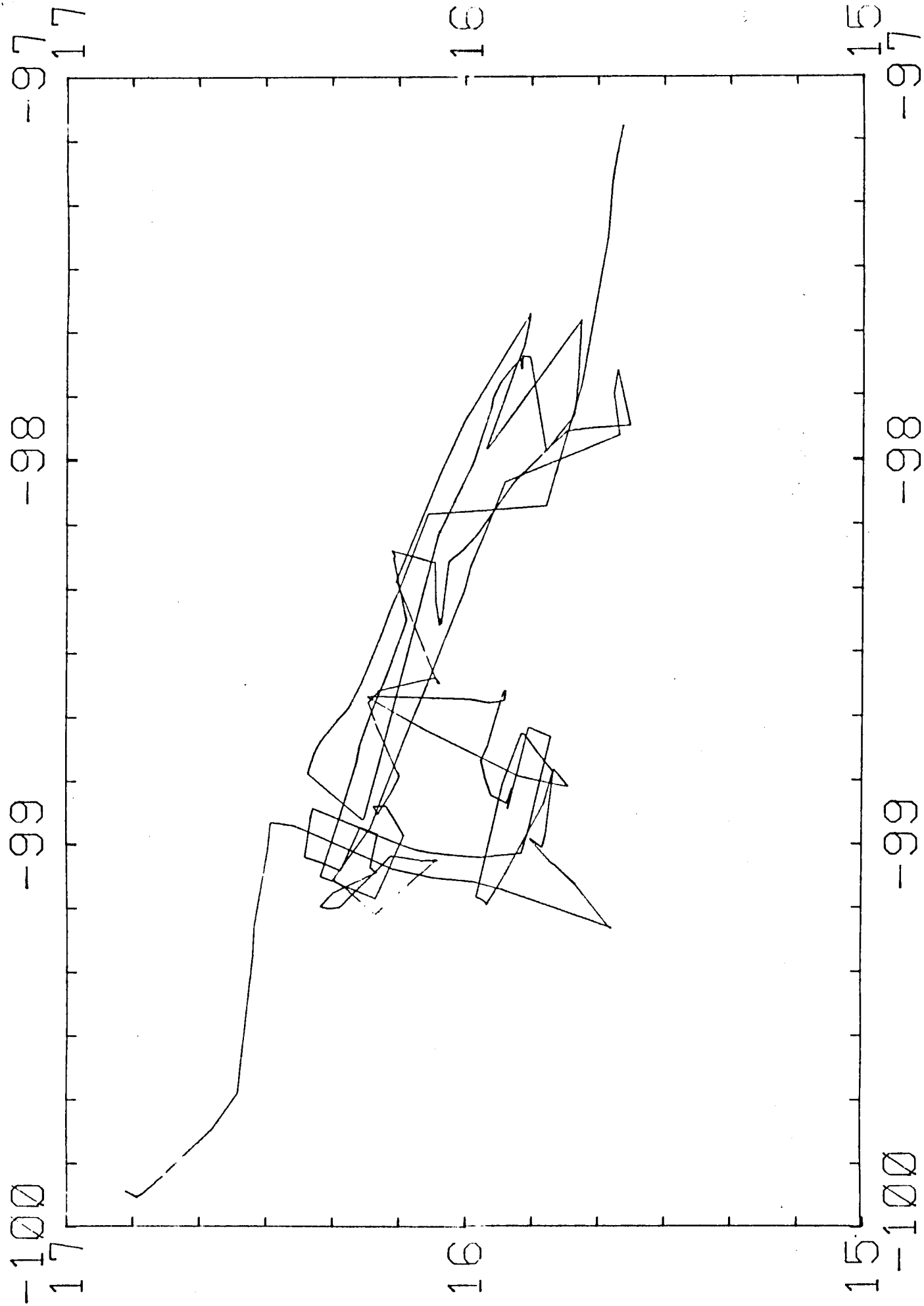


Fig. 2. Detailed Track, Oaxaca Area (Northbound).

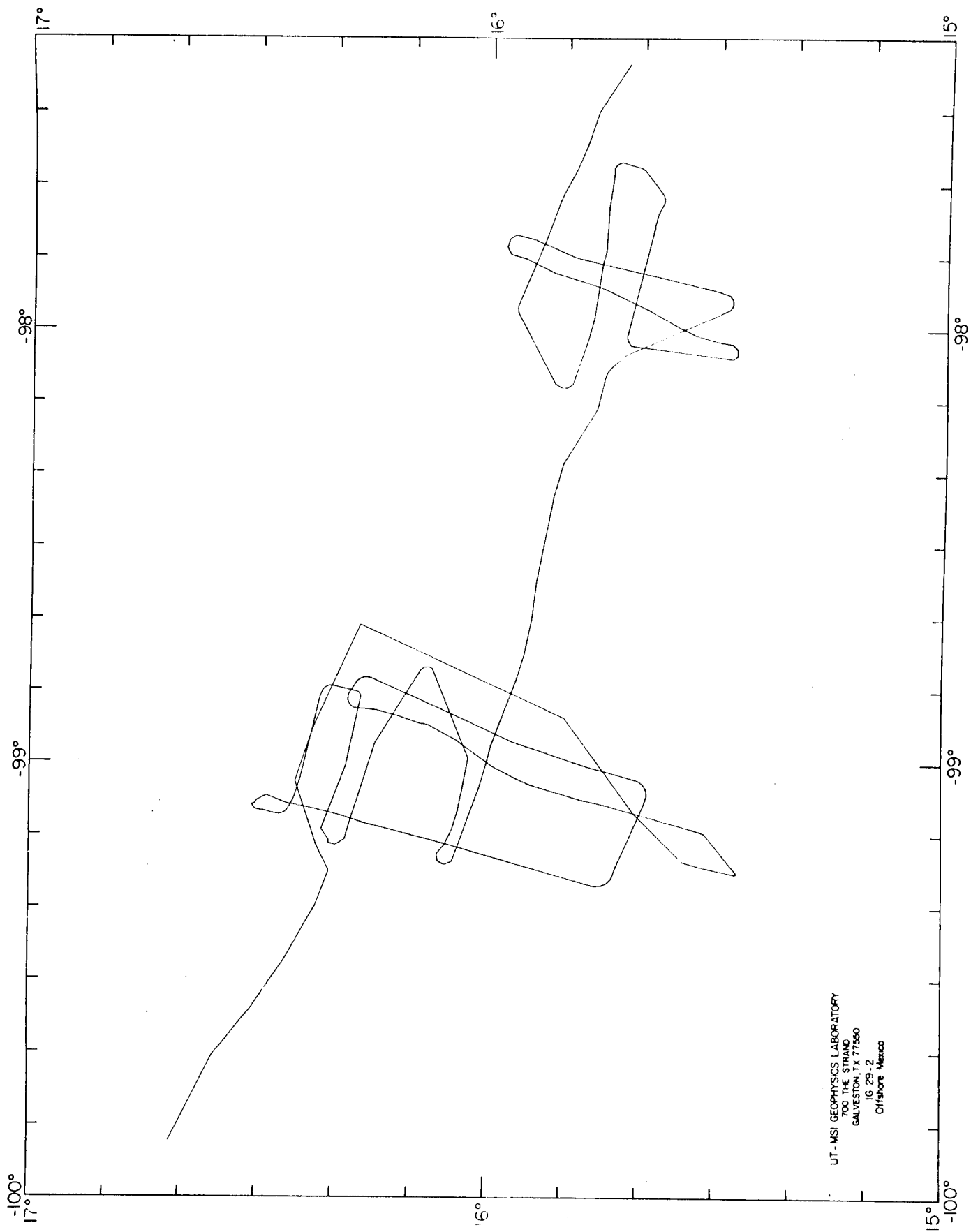


Fig. 3. Detailed Track, Oaxaca Area (Southbound).

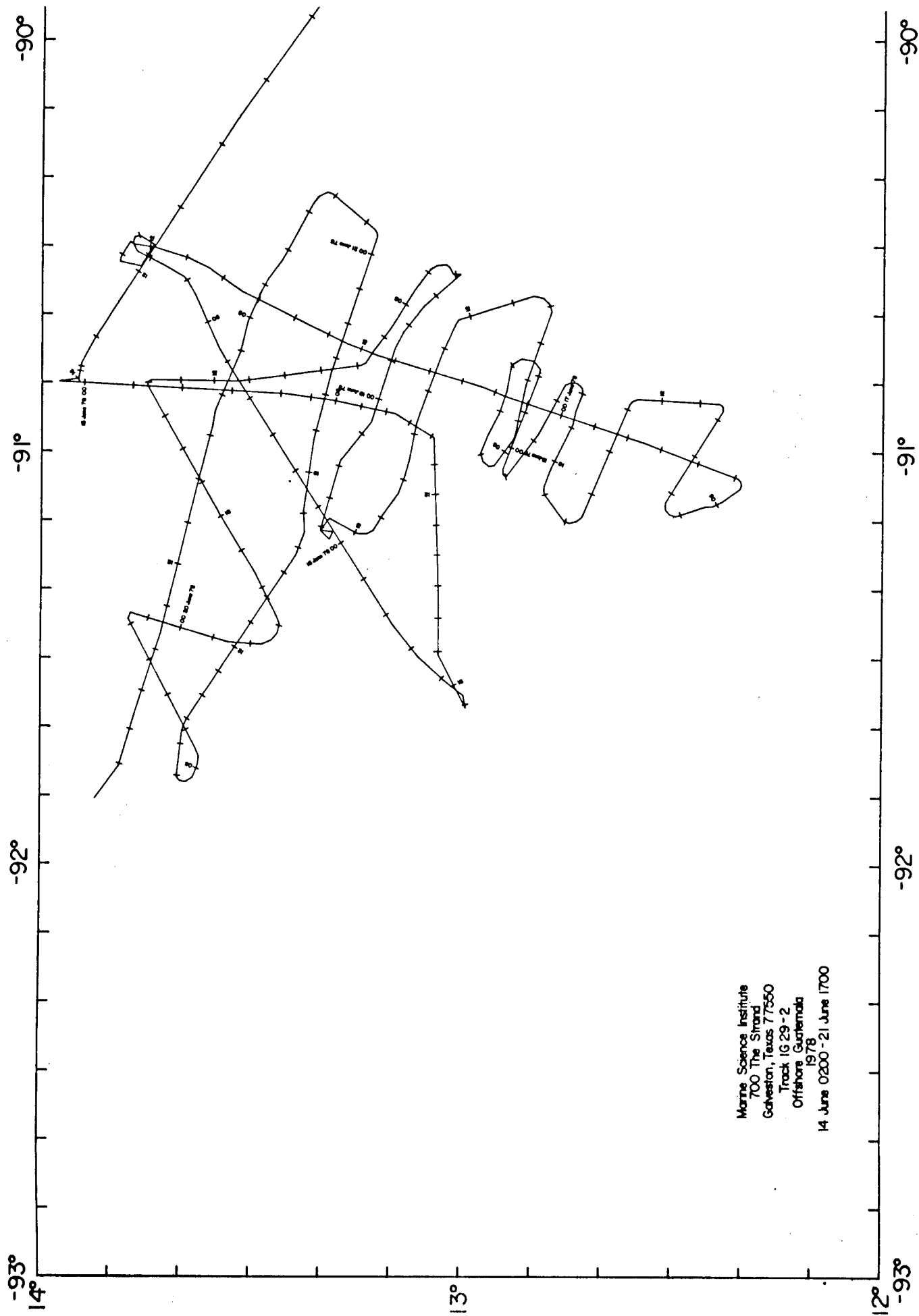


Fig. 4. Detailed Track, Guatemala Area.

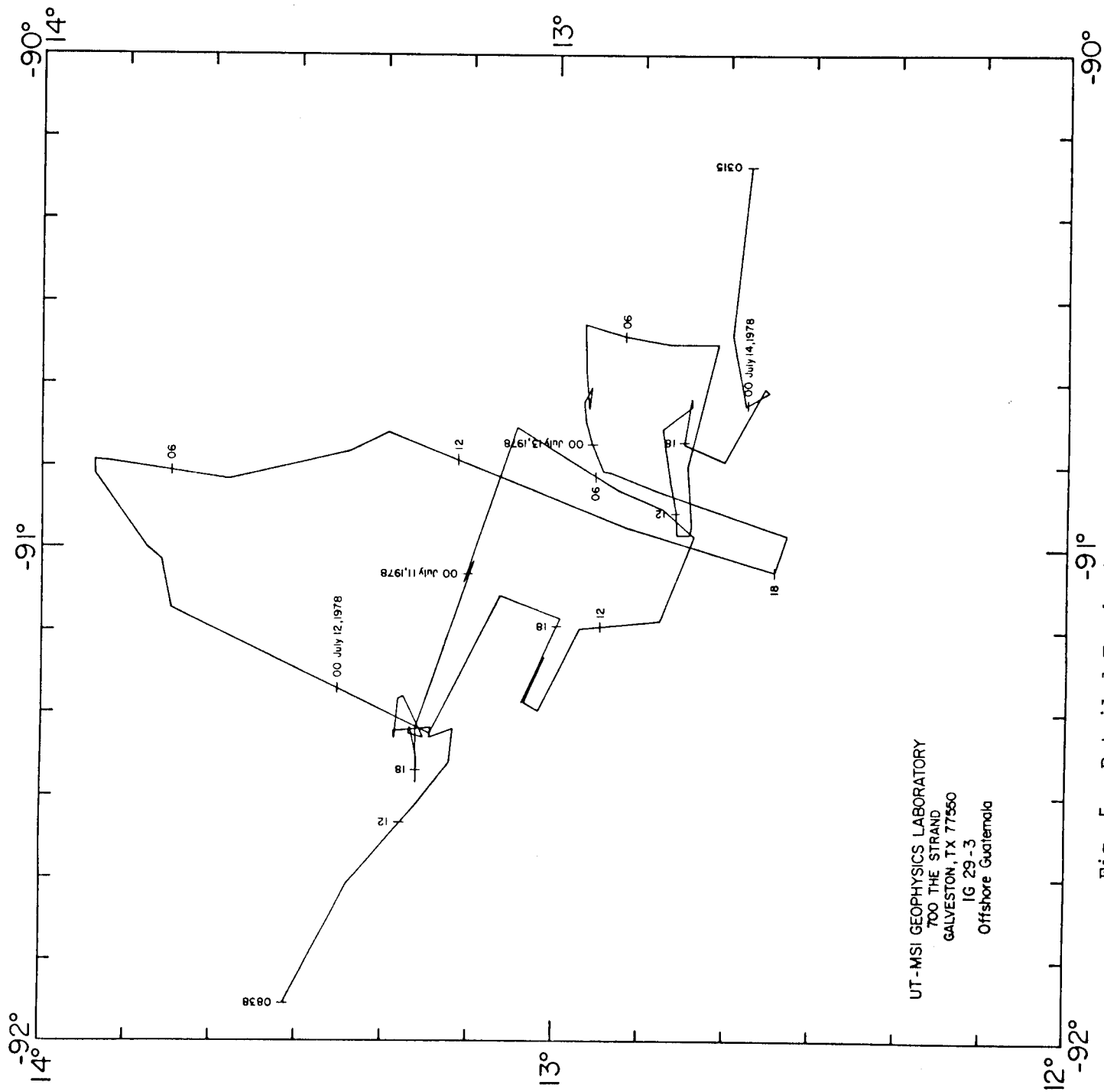


Fig. 5. Detailed Track, Guatemala Area (Southbound).

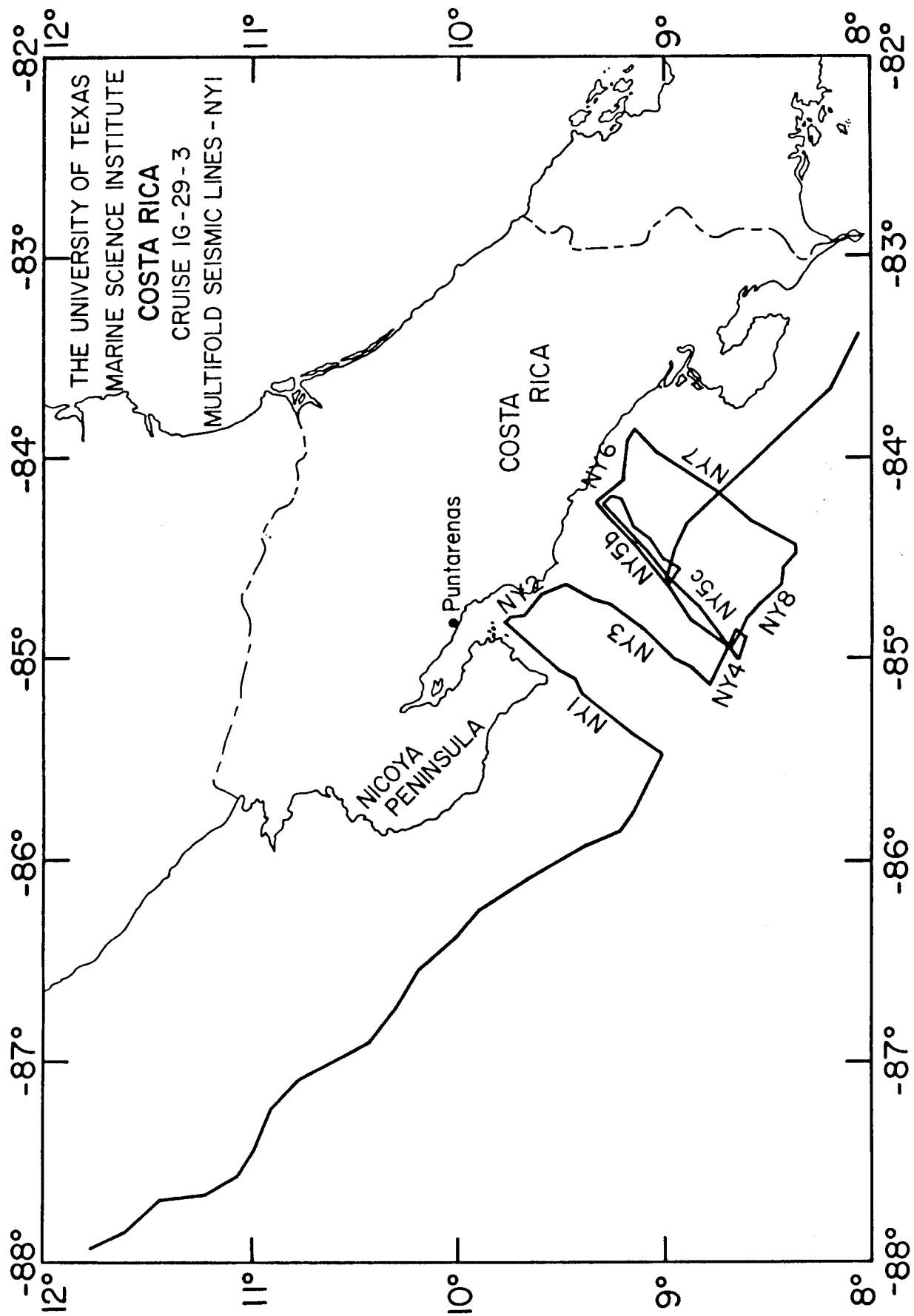


Fig. 6. Detailed Track, Costa Rica Area.