



THE UNIVERSITY OF TEXAS

MARINE SCIENCE INSTITUTE
GEOPHYSICS LABORATORY
GALVESTON, TEXAS 77550

700 The Strand
713 765-2173

16 September 1977

RESEARCH CRUISE REPORT

Leg: IG 24-7
IG 24-8
IG 24-9

SHIP NAME:

R/V *Ida Green*

OPERATING INSTITUTION:

University of Texas
Marine Science Institute

PROJECT TITLES:

- 1) Geophysical Investigations of
the Middle America Trench (MAT)
- 2) Multichannel Investigation
Southeast of the Dominican Republic

PORT CALLS:

Puntarenas, Costa Rica	18 July
	19 July
Balboa, Panama	28 July - 2 Aug.
Santo Domingo, Dominican Republic	9 Aug. - 11 Aug.
	18 Aug. - 21 Aug.

CHIEF SCIENTIST:

Dr. M. H. Houston

GENERAL SCIENTIFIC PROGRAM:

Cruise IG 24 of the R/V *Ida Green* was directed toward geophysical and geological investigations of the MAT. Delineation of the detailed structure and geologic history of the MAT is vital to our understanding of an "active" continental margin in the light of plate tectonics.

Leg IG 24-7

CLEARANCE COUNTRIES:

Nicaragua
Costa Rica
Panama

DATES:

18 July - 28 July

FOREIGN SCIENTISTS:

None.

SCIENTIFIC PROGRAM:

The general track for IG 24-7 is shown in Figures 1 and 2. Over all tracks continuous measurements of bathymetry and magnetics were recorded. The dashed lines indicate multichannel seismic profiles of 120 n.m. Figure 3 indicates the position of 4 refraction shots to an array of seismometers located on Nicoya Peninsula. Figure 4 shows the location of 5 piston-core samples. Figure 5 shows the location of a 90 n.m. multichannel seismic survey off the coast of Nicaragua; Figure 6 indicates a 250 n.m. seismic survey off Panama.

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Leg IG 24-8

CLEARANCE COUNTRIES:

Panama
Nicaragua
Dominican Republic

DATES:

2 Aug. to 18 Aug.

FOREIGN SCIENTISTS (R.D. only)

Narciso Almonte, Dominican Navy
Francisco Arnemann, INDOTEC

SCIENTIFIC PROGRAM:

The general track for the first part of IG 24-8 is shown in Figure 7. The dashed lines in Figures 7 and 8 indicate a multichannel seismic profile of 120 n.m. Figure 9 shows the locations of two other seismic lines of 105 n.m. shot in the area on IG 24-1. The general track of 600 n.m. for the second part of IG 24-8 is indicated in Figure 10. (See detailed Research Report for Dominican work by project scientist Dr. John W. Ladd.)

Leg IG 24-9

CLEARANCE COUNTRIES:

None

DATES:

21 Aug. to 29 Aug.

FOREIGN SCIENTISTS:

None

SCIENTIFIC PROGRAM:

Only underway geophysics (bathymetry and magnetics) data were collected along the track of IG 24-9 as indicated in Figure 11.

KEY CONTACT:

Dr. M. H. Houston
University of Texas
Marine Science Institute
Geophysics Laboratory
700 The Strand
Galveston, TX 77550

Tel. (713) 765-2915

Ig 24-7 Trackchart - Part II

Penana Multichannel Profiling

1
2
3
4
5
6

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—
△
|
○
○
△

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△
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77-10247

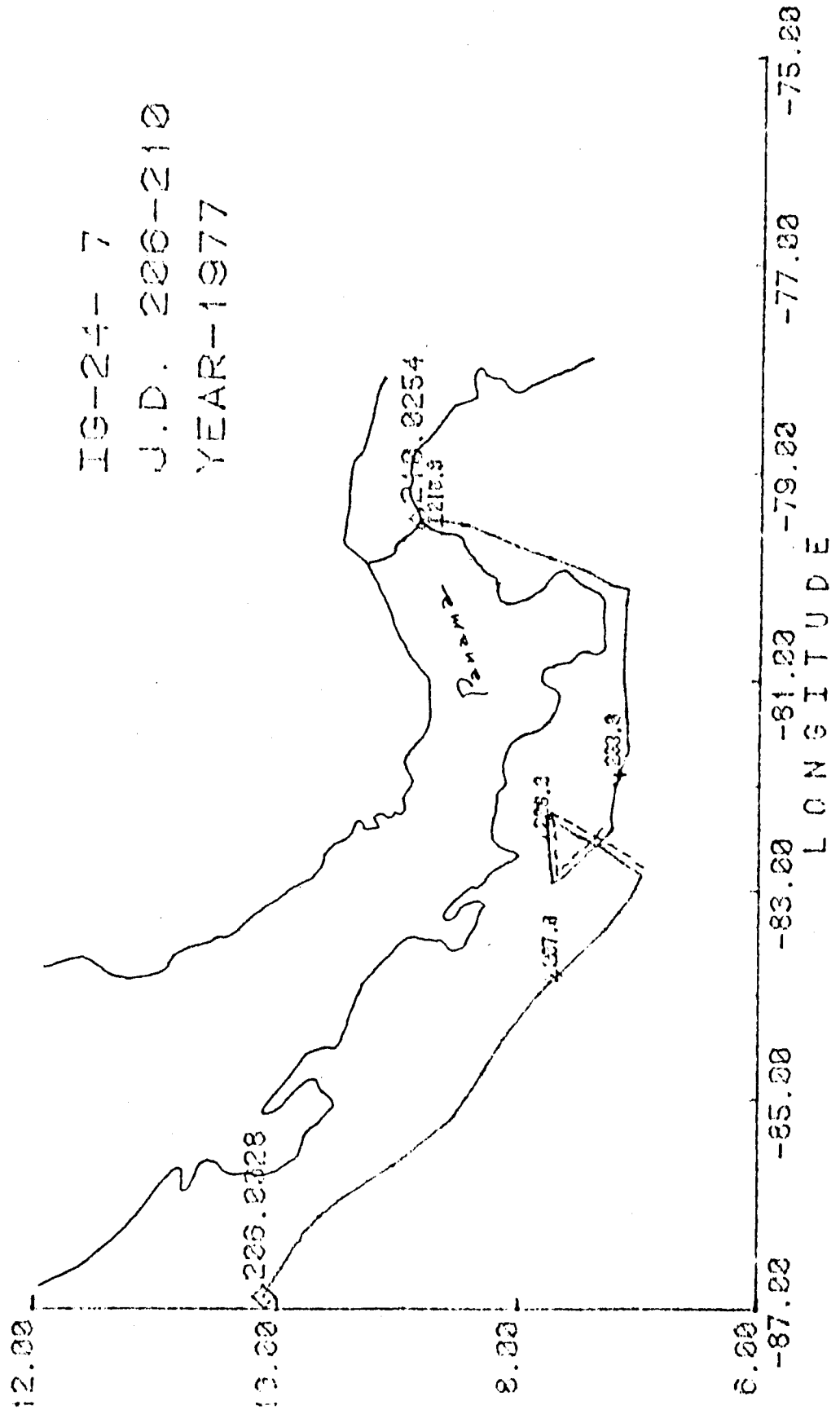


Fig. 2

Nicoya Refraction Experiment

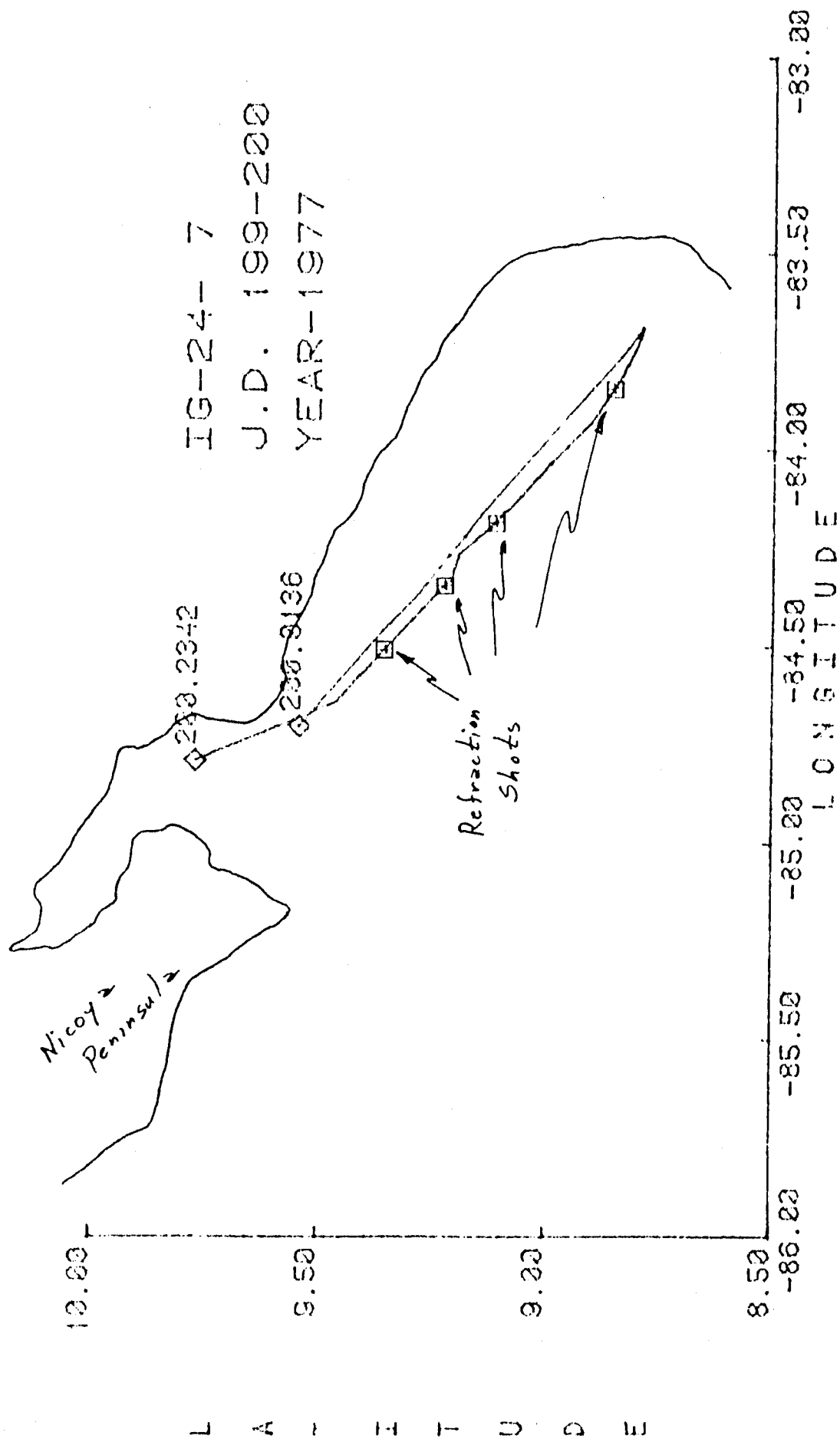


Fig. 3

Costa Rica
 Core Locations

IG-24- 7
 J.D. 201-203
 YEAR-1977

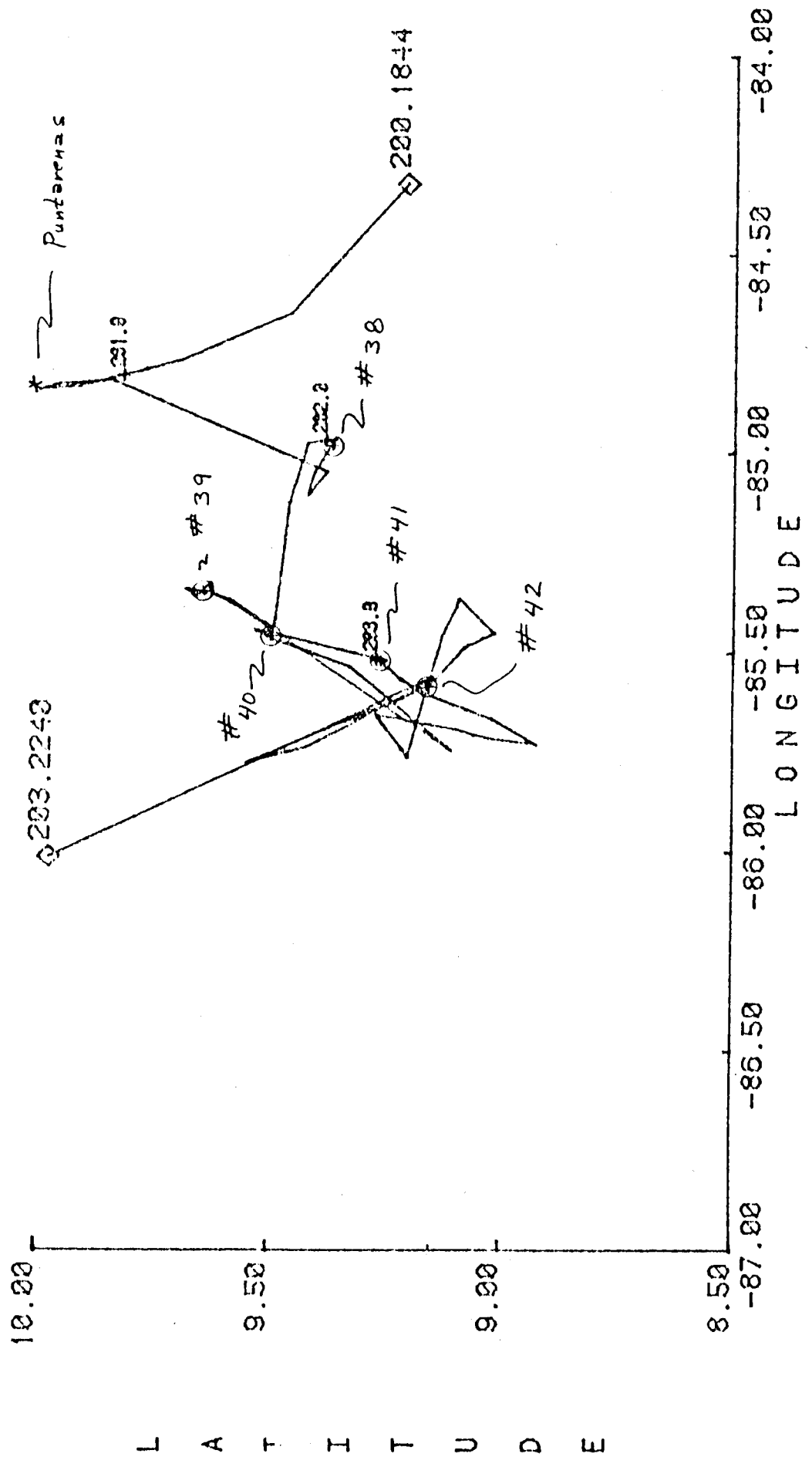


Fig. 4

Nicaragua Multichannel Profiling

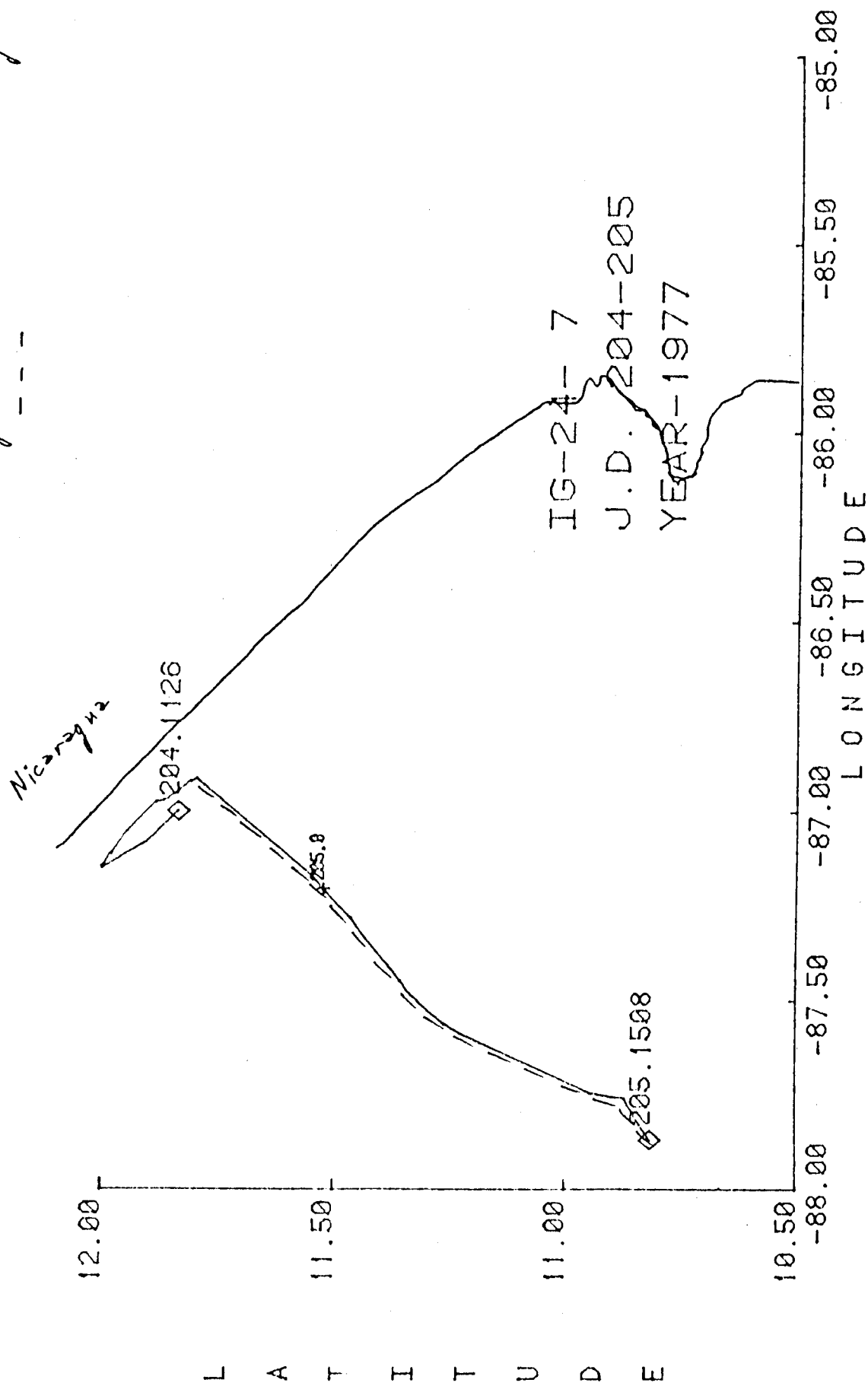


Fig. 5

Panama Multichannel Profiling

IG-24- 7
J.D. 227-228
YEAR-1977

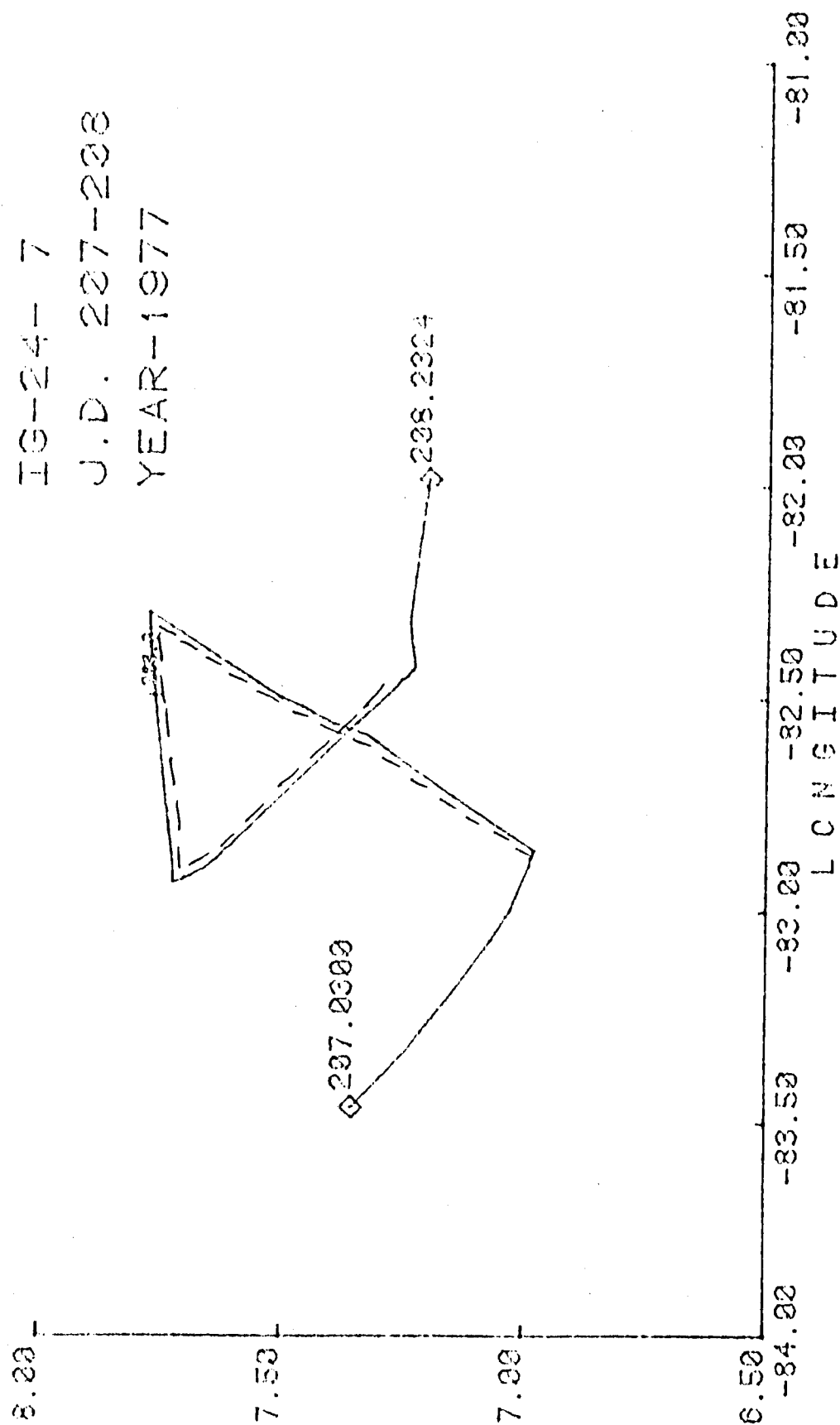
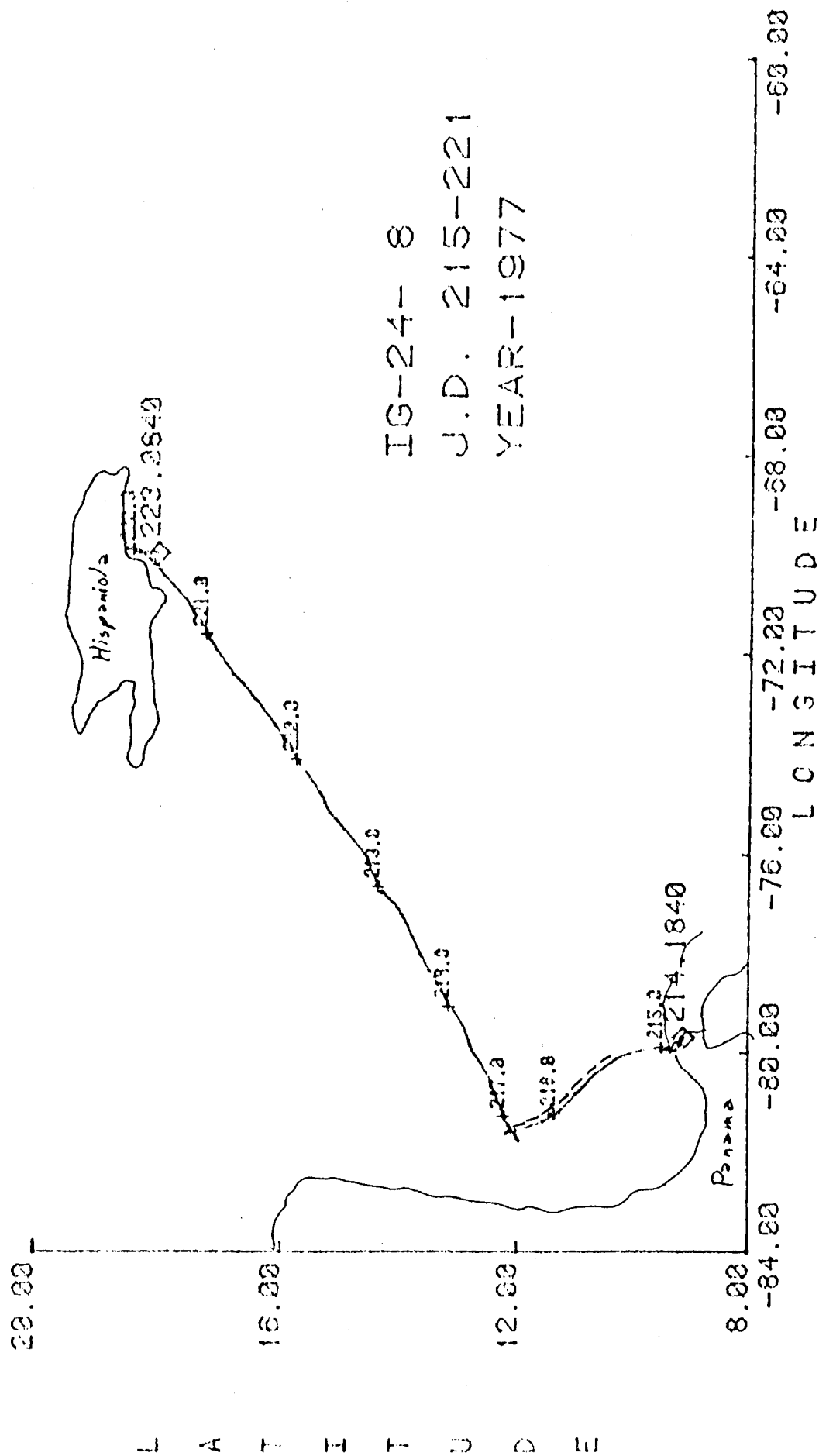


Fig. 6

IG 24-8 Trackchart Part I

Panama-Nicaragua Multichannel



IG-24- 8
J.D. 215-221
YEAR-1977

Fig. 7

Panama - Nicaragua
 Multichannel

IG-24- 8
 J.D. 215-217
 YEAR-1977

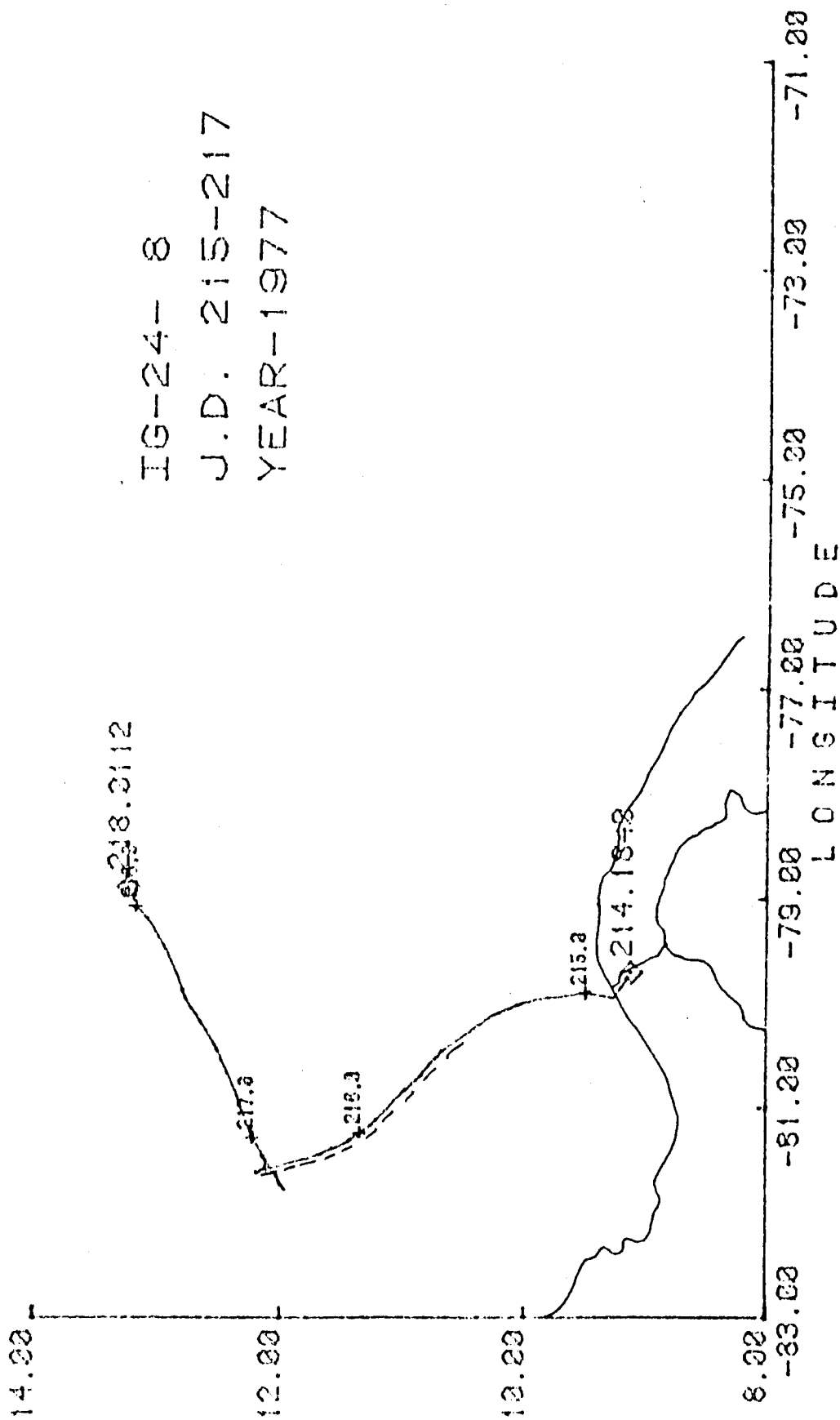


Fig. 8

Panel Multichannel ---

SHOTPOINT MAP

IG-24-1

UT/MSI

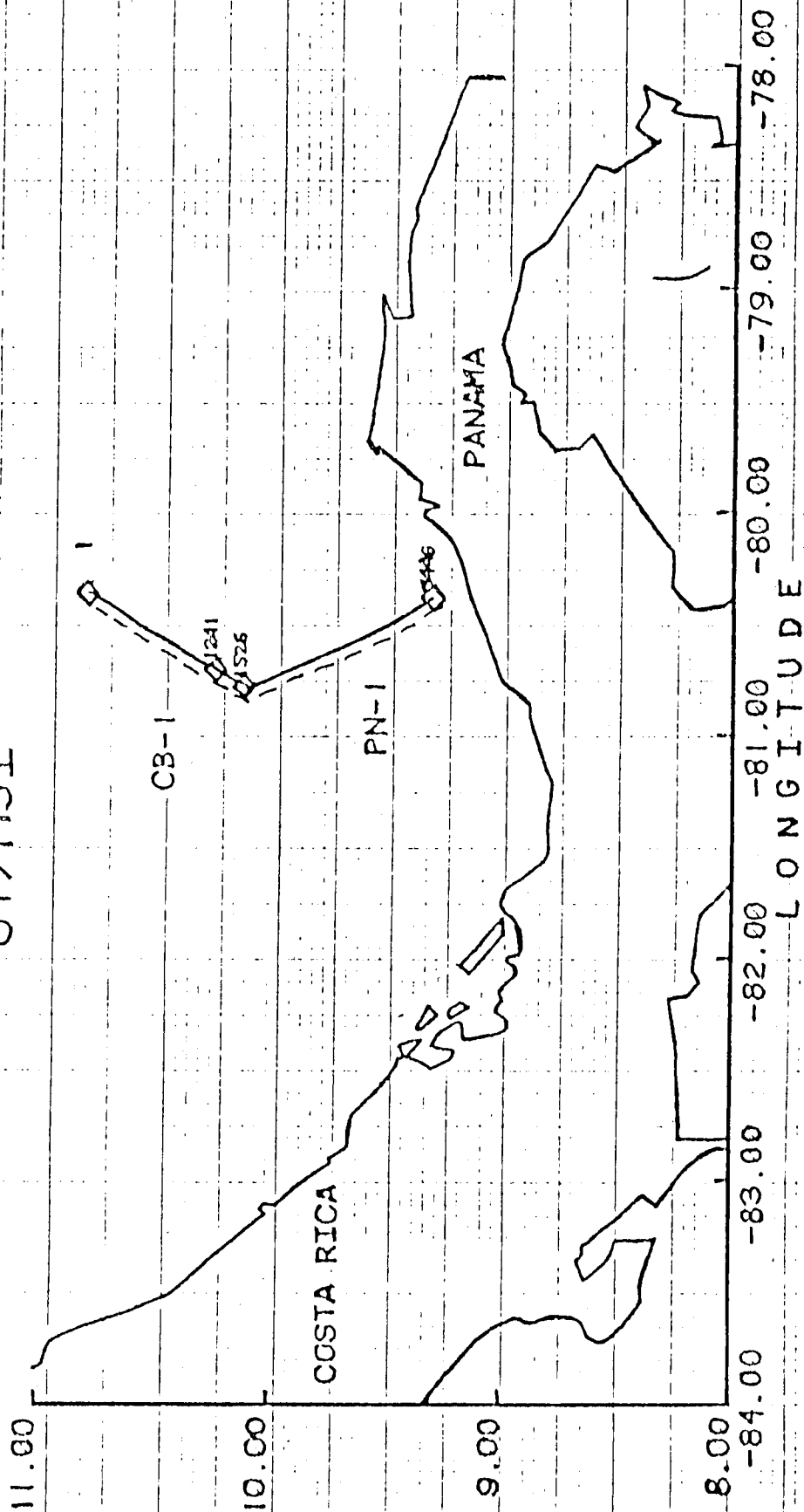


Fig. 9.

IG 24-8 Trackchart Part II

Dominican Republic Multichannel

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IG-24- 8
J.D. 221-230
YEAR-1977

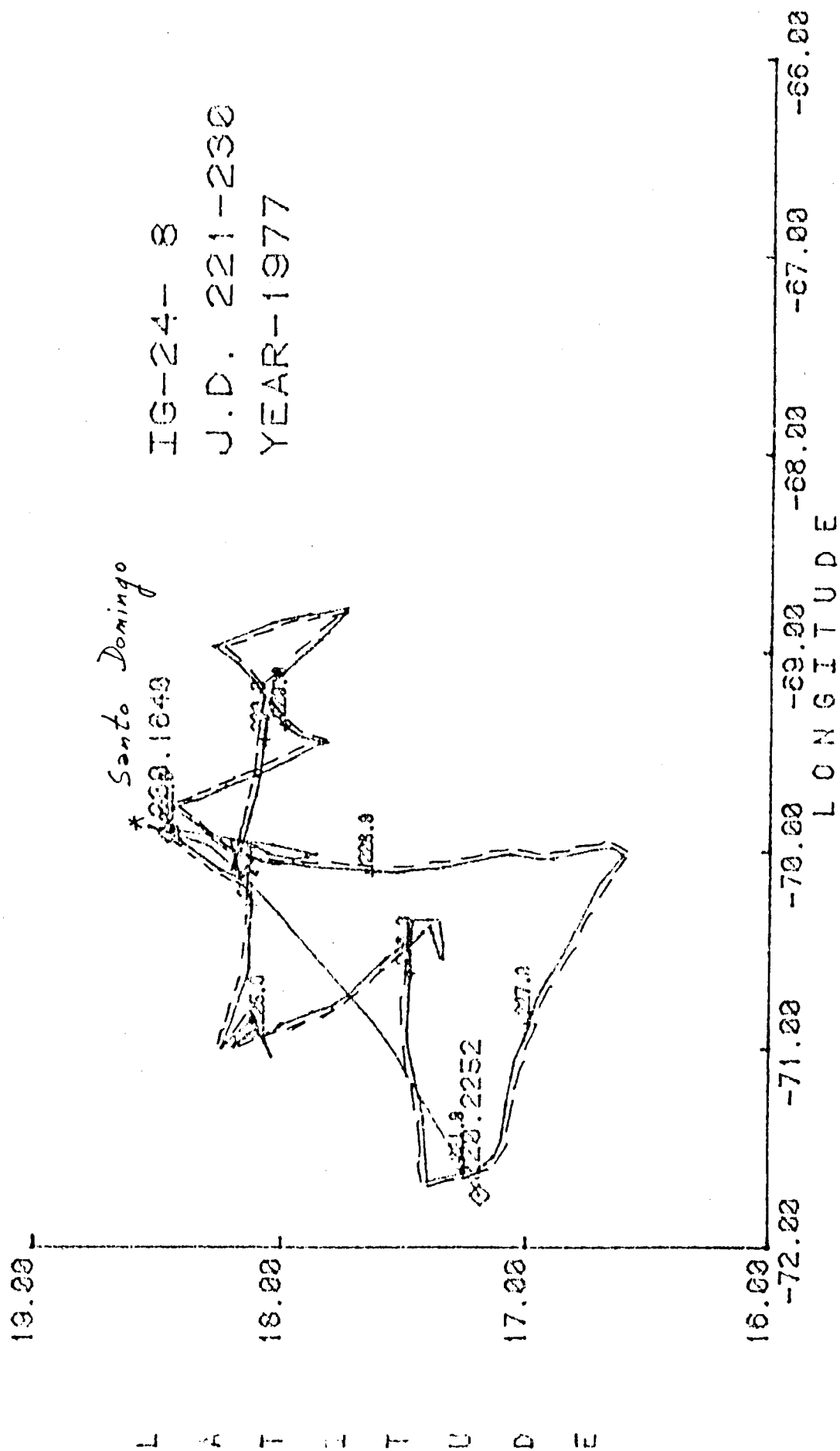


Fig. 10

IG 24-9 Trackchart

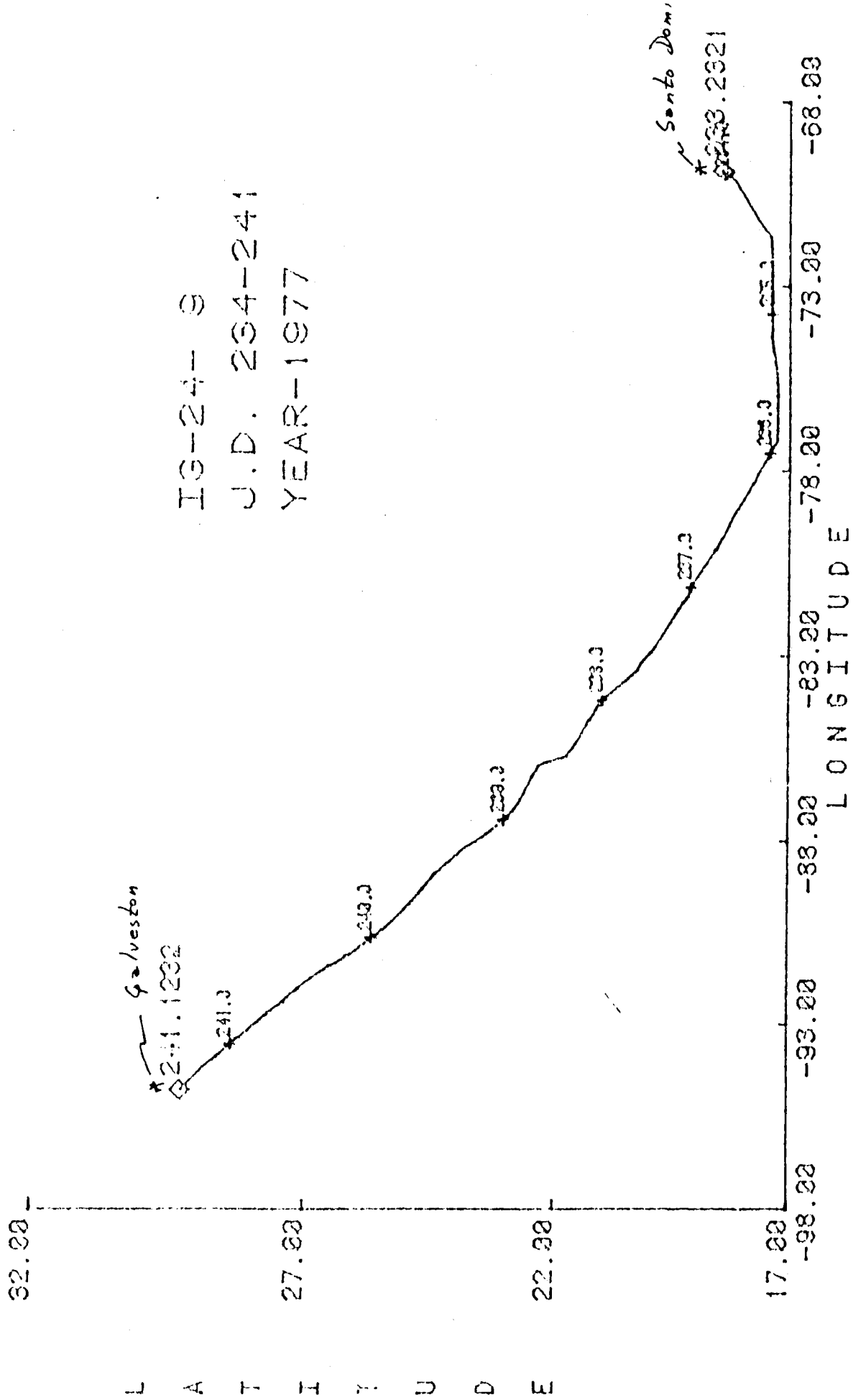


Fig. 11