GEOSECS EXPEDITION

LEG E

R/V MELVILLE

INFORMAL REPORT AND INDEX OF NAVIGATION, DEPTH AND MAGNETIC DATA

Honolulu, Hawaii (4 December 1973)

to

Pago Pago, Samoa (29 December 1973)

Chief Scientist - R. Weiss

Resident Marine Tech - S. Witherow

Post- Cruise Processing by - S. Smith, U. Albright,

G. Psaropulos, R. Lingley, J.L. Abbott

Prepared by

Underway Data Processing Group

S.I.O. Geological Data Center Scripps Institution of Oceanography La Jolla, California

March 21, 1975

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 (452-2182):

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).

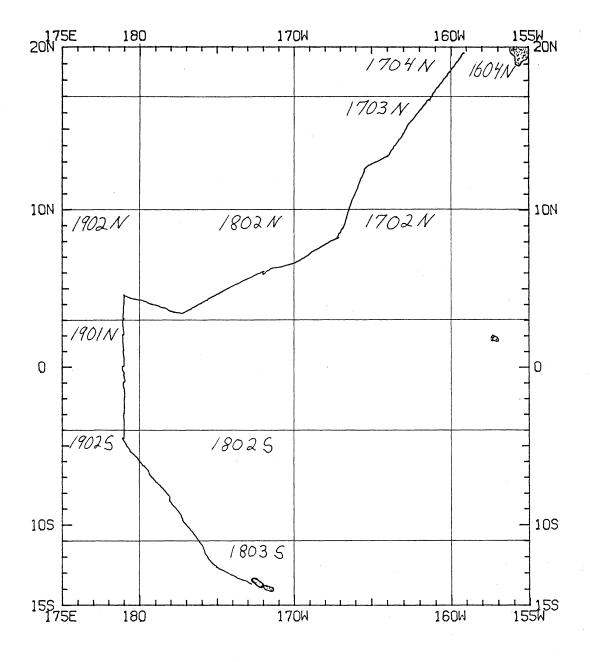
3. Plots of magnetic anomaly profiles along track-map scale = 1.2"/ degree; anomaly scale between 15°N and 15°S latitude = 500 gamma/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamma/inch) from values retrieved at approximately 1 mile spacing and regional field removed using the 1965 IGRF.

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

*no subbottom profiler data for this leg. Cruise report delayed because shipboard computer/receiver problems required reprocessing of satellite fixes.

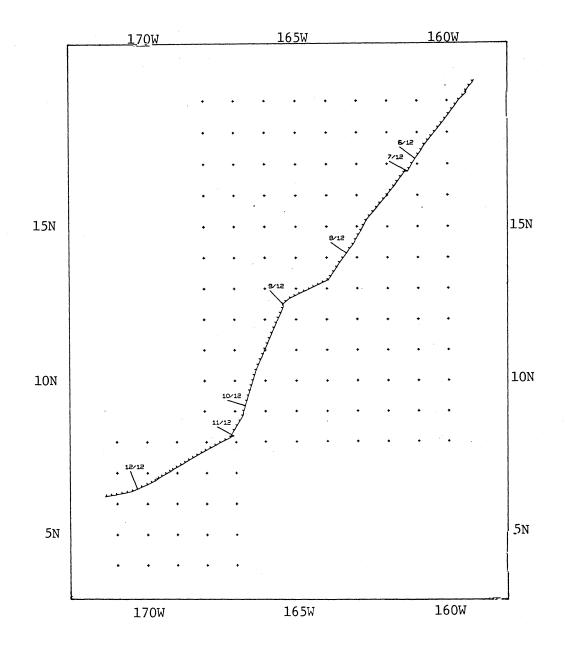


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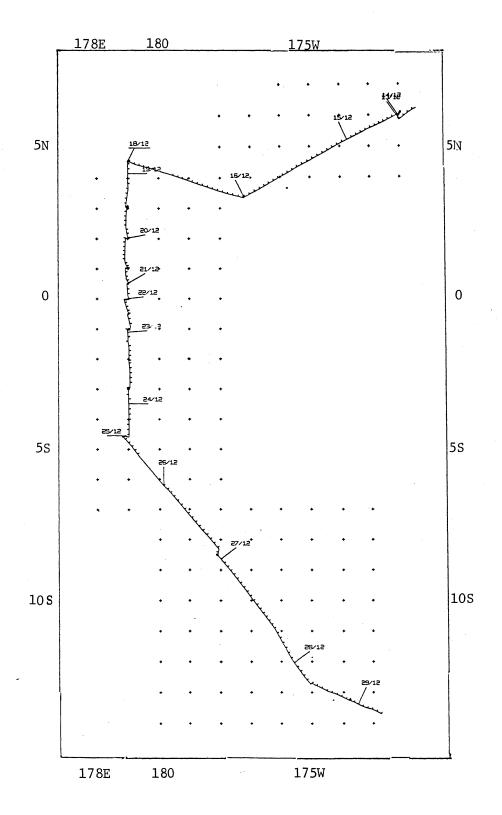
Chief Scientist - R. Weiss Honolulu - Pago Pago (4 December 1973 - 29 December 1973)

TOTAL MILEAGE

- 1) Cruise 3252 miles
- 2) Bathymetry 2272 miles
- 3) Magnetics 3037 miles
- 4) Seismic Reflection none collected

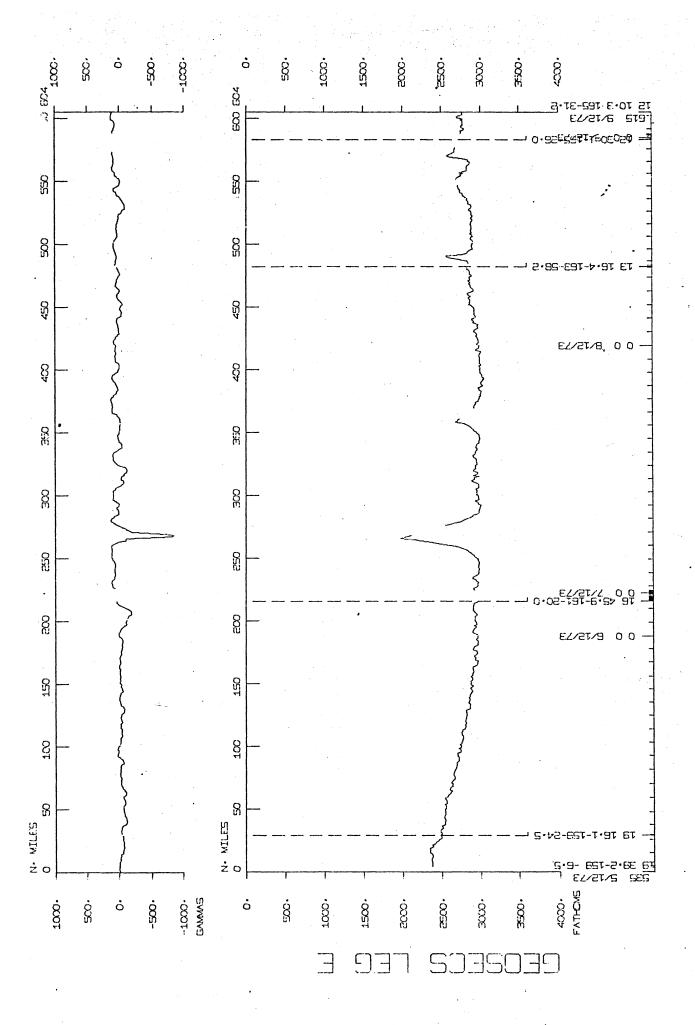


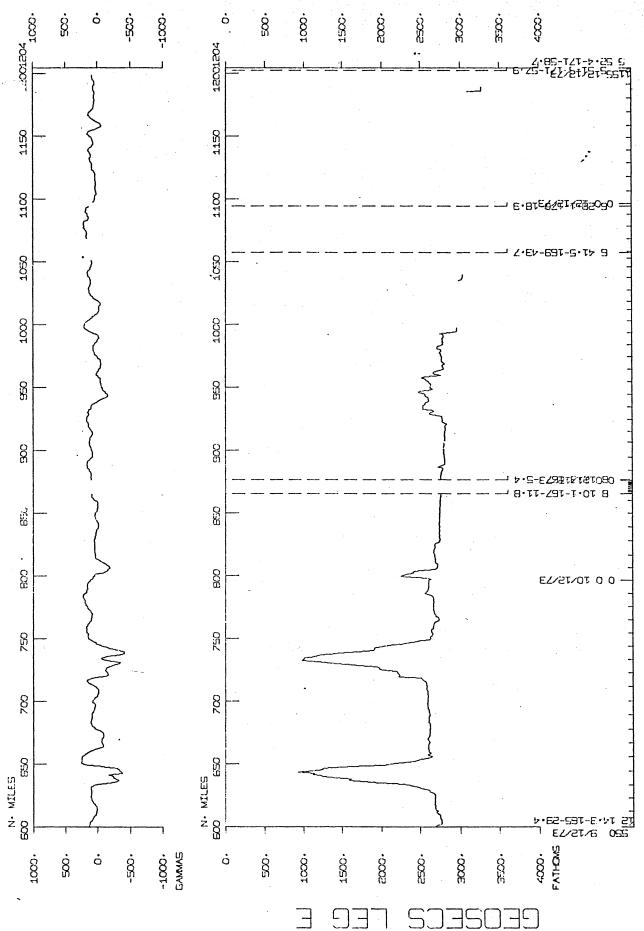
GEOSECS LEG E Track Plot 1 of 2

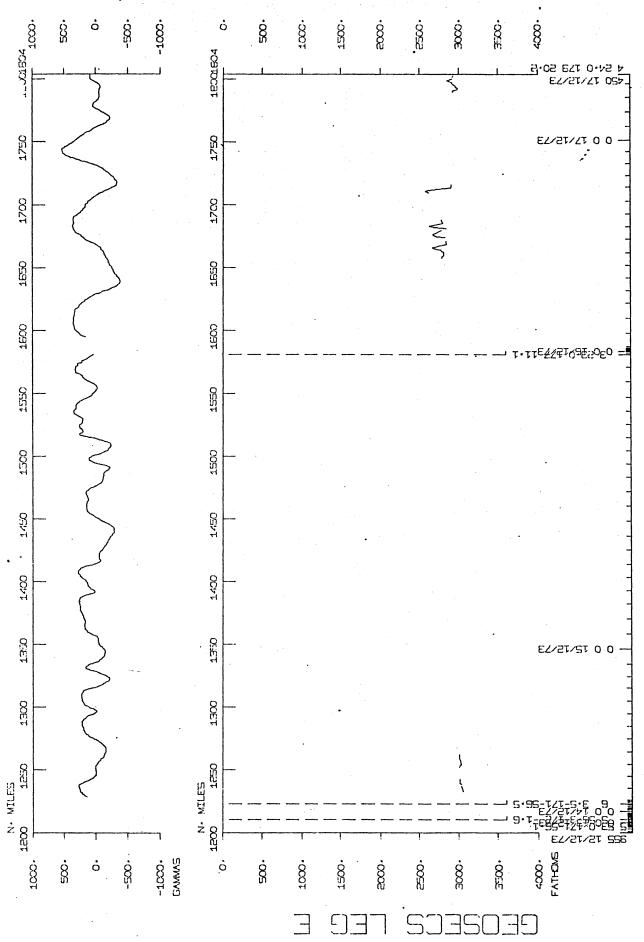


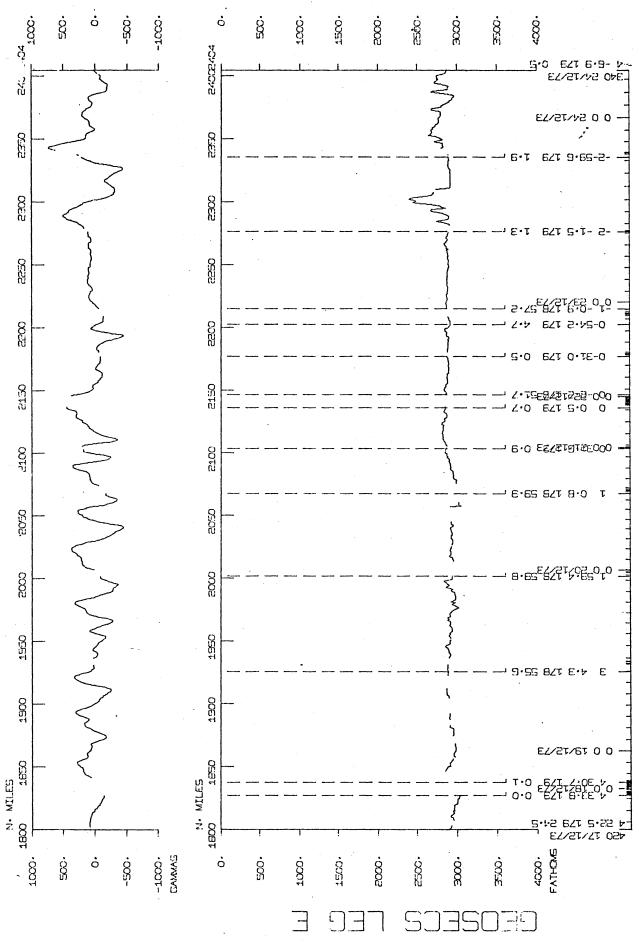
GEOSECS LEG E Track Plot 2 of 2

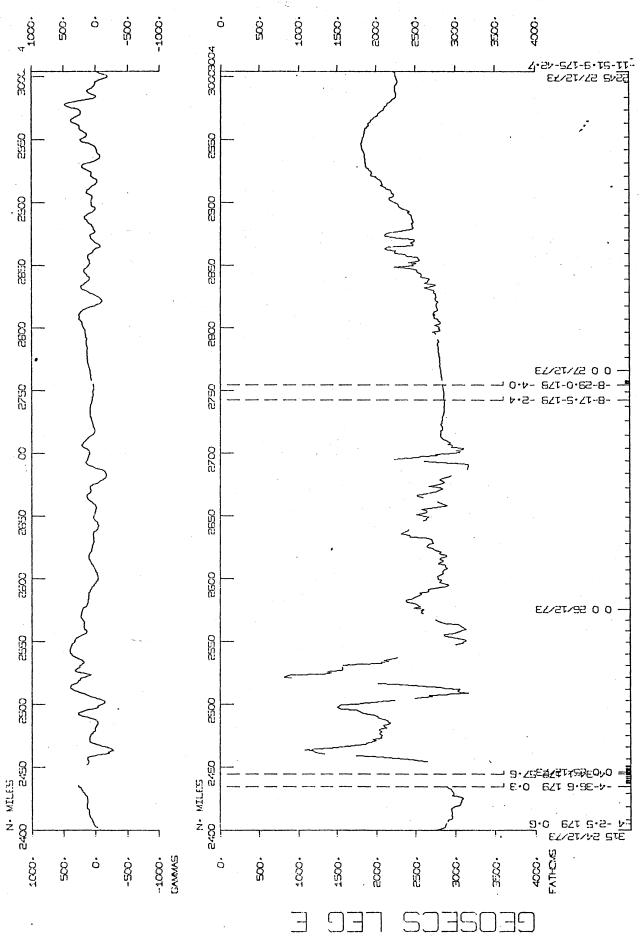
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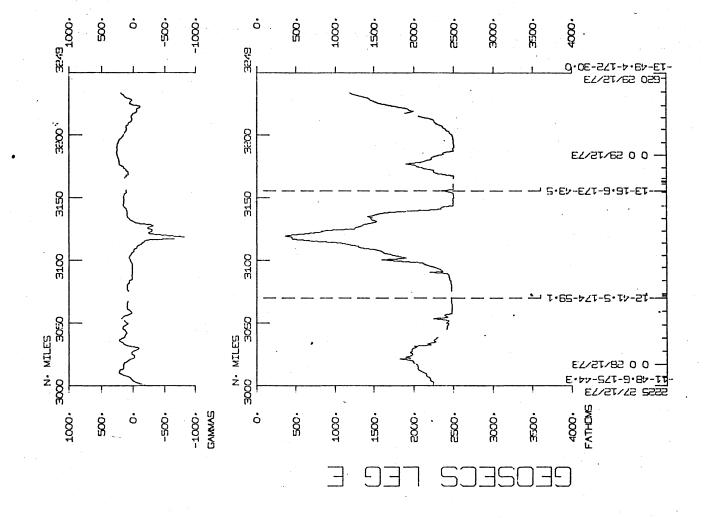












GEOSECS LEG E

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