

PRELIMINARY REPORT AND INDEX
OF
NAVIGATION, DEPTH AND MAGNETIC DATA
CATO EXPEDITION
LEG 1
R/V MELVILLE

San Diego (7 June, 1972)

To

Honolulu (5 July, 1972)

Chief Scientist, Leg 1 - J. McGowan

Cruise Coordinator - T. Chase

Computer Tech. - M. Moore

Resident Marine Tech. - D. Mead

Data Processed by - U. Albright, O. McConnell, I. Bustillos

Geological Data Center

T. E. Chase - Curator

S. M. Smith - Data Processing Coordinator

Scripps Institution of Oceanography

La Jolla, California

September 13, 1972

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

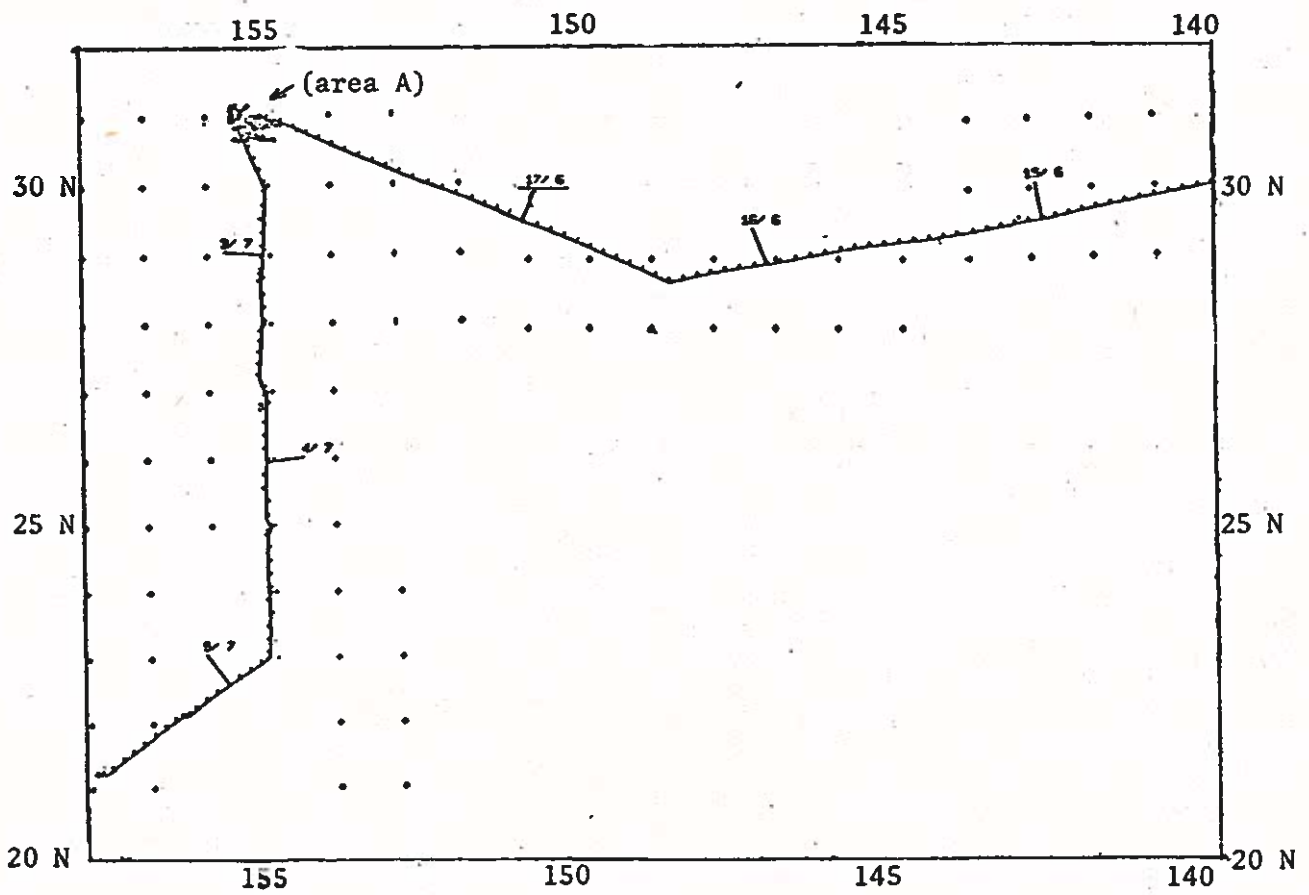
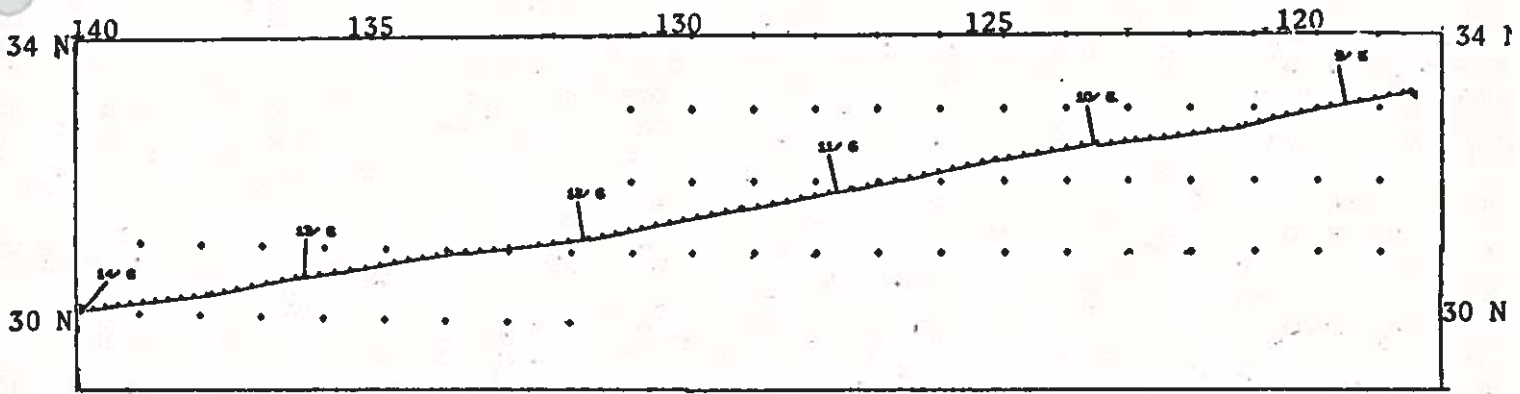
Contents:

- 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 position of major course changes (greater than 30 degrees) are annotated. Sectors of track having subbottom profiler (airgun) records have a solid black line along the bottom of the profile.

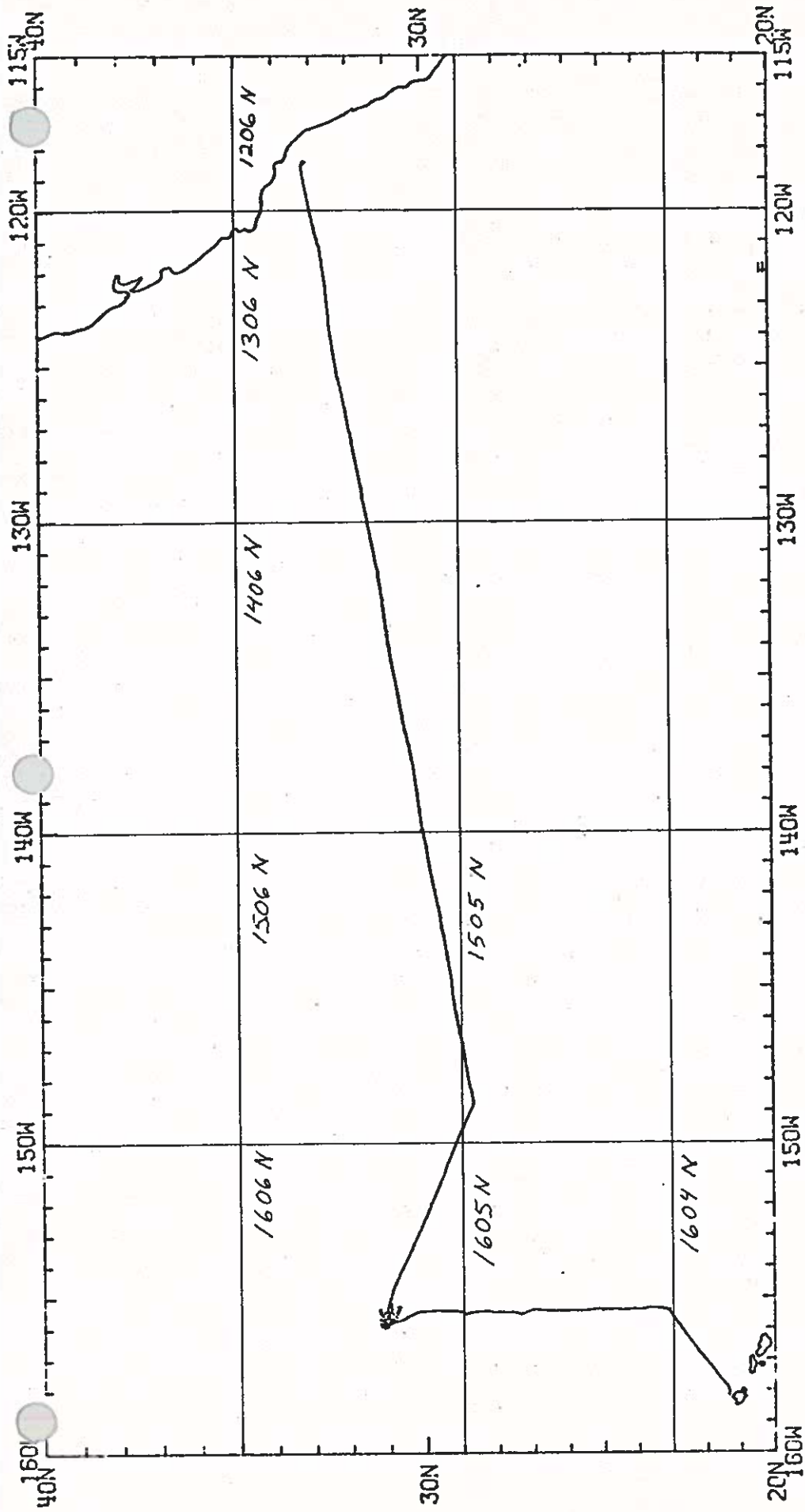
For information on the availability and reproduction costs of data in the following for contact T.E. Chase, Curator, Geological Data Center, Scripps Institution of Oceanography La Jolla, California 92037 (714-453-2000, ext. 1534):

1. Navigation listing of times and positions of course and speed change 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 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



Cato leg 1, track plot



CATO EXPEDITION

LEG 1

R/V MELVILLE

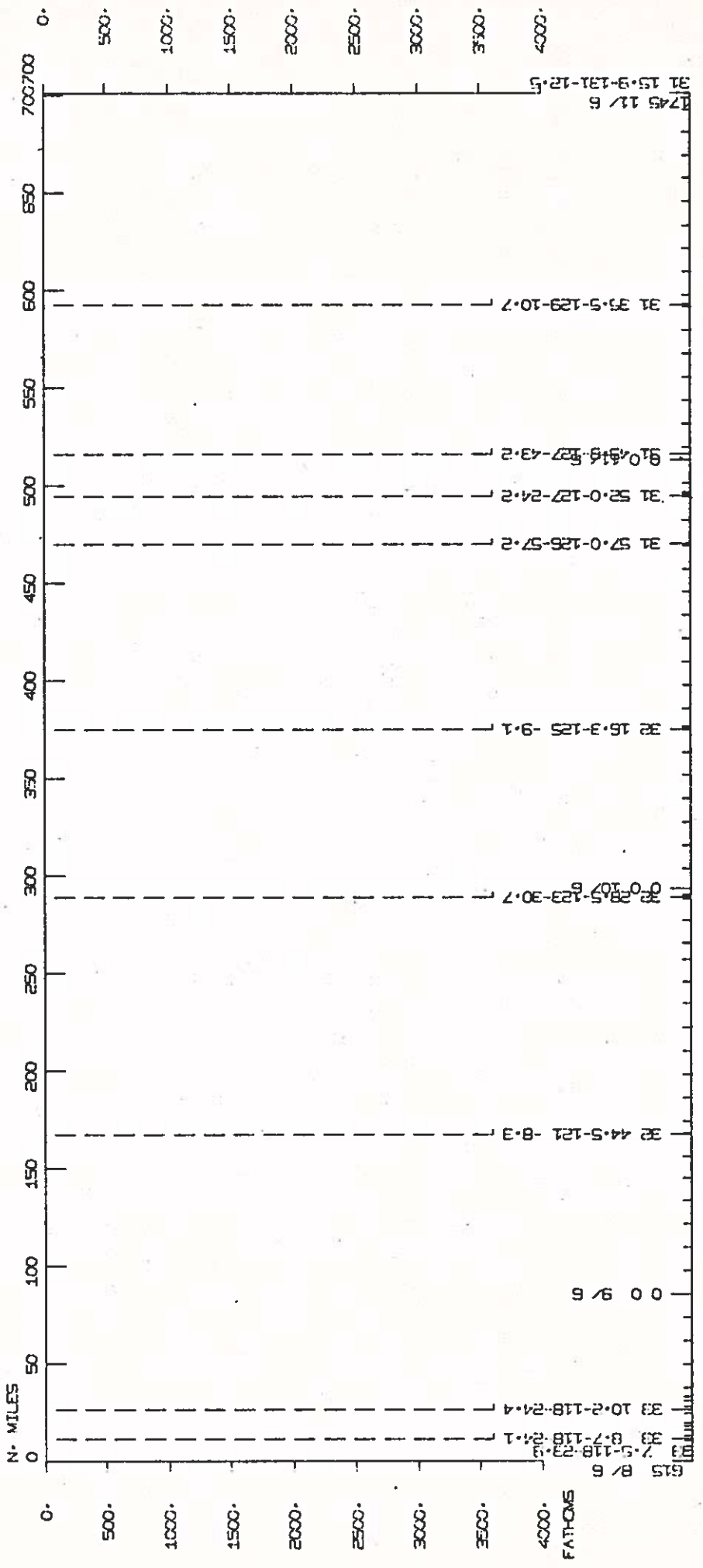
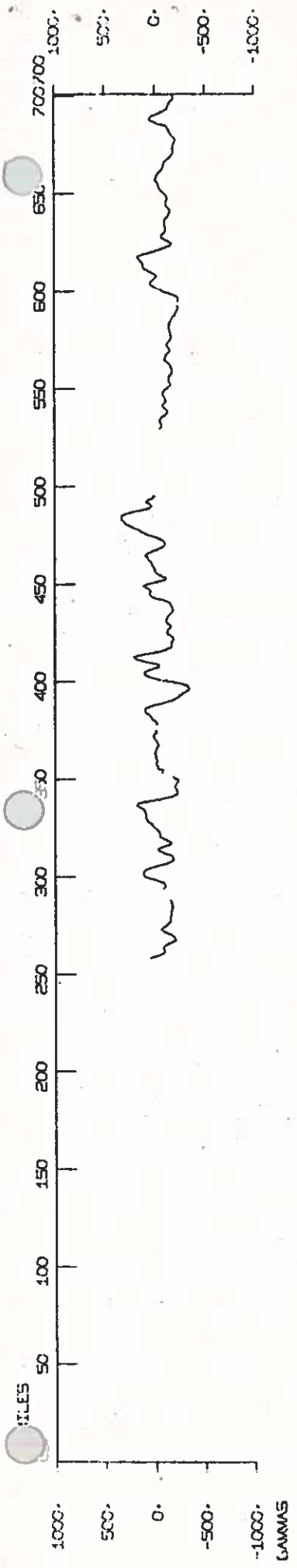
CHIEF SCIENTIST - J. MCGOWAN

San Diego - Honolulu (7 June 1972 to 5 July 1972)

Total Mileage

- 1) Cruise - 3594.5 miles
- 2) Bathymetry - 1240 miles
- 3) Magnetics - 1605 miles
- 4) Seismic Reflection - 0.0 miles

CATO LEG 1



CATO LEG 1

