Single-channel seismic reflection data from the upper Continental Rise offshore New Jersey collected by RV GYRE (Cruise 82-G-10A)

by

James M. Robb
US Geological Survey
Woods Hole, MA 02543

U. S. Geological Survey Open-File Report 83-673

From 28 August - 1 September, 1982, single-channel seismic-reflection profiles of the upper Continental Rise offshore New Jersey were acquired aboard RV GYRE (cruise 82-G-10A) (fig. 1). About 800 km were profiled using two 40-in^3 airguns as sound source. Use of an 800-j Teledyne minisparker was discontinued after about 600 km of profiling to avoid interference with airgun data. Echo-sounding data, using a 3.5-kHz transducer system, were acquired over the full 800 km of ship track. Narrow-beam echo soundings (using an Edo 4077 towed transducer) were also collected, but use of the system was discontinued in poor sea conditions after about 342 km. Airgun and minisparker data were recorded on EPC 19-in dry-paper recorders at a 2-second sweep. Filter settings and recording ranges, generally 60-150 Hz for the airgun data, are annotated on the records.

Navigation positions were obtained by the USGS integrated navigation system using Loran-C with satellite updates.

These profiles and echo soundings, intended for surficial geologic studies, extend and complement several sets of previously acquired single-channel seismic-reflection and mid-range sidescan-sonar data and echo-soundings (Robb, 1980a,b; Robb and others, 1981; Hampson, 1981). The older data cover primarily a Continental Slope area between Lindenkohl and Toms Canyons, whereas these newer profiles cover the contiguous upper Continental Rise (fig. 1).

Original records may be viewed at the U. S. Geological Survey, Woods Hole, Massachusetts 02543 (617-548-8700). Microfilm copies of the data can be purchased only from the National Geophysical Data Center, NOAA, Code E64, 325 Broadway, Boulder, Colorado 80303 (303-497-6339).

This report is preliminary and has not been reviewed for conformity with U. S. Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.

References Cited

Hampson, J.C., Jr., 1982, High-resolution Seismic-reflection profiles collected aboard RV GYRE, cruise 80-G-7A, over the Continental Slope and upper Continental Rise, offshore New Jersey: U. S. Geological Survey Open-file Report 82-305, 4 p.

Robb, J. M., 1980a, High-resolution seismic-reflection profiles collected by the R.V. JAMES M. GILLIS, cruise GS 7903-4, in the Baltimore Canyon Outer Continental Shelf area, offshore New Jersey: U.S. Geological Survey Open-file Report 80-934, 3 p.

Robb, J. M., 1980b, High-resolution seismic-reflection profiles collected by the R/V COLUMBUS ISELIN, cruise CI 7807-1, in the Baltimore Canyon Outer Continental Shelf area, offshore New Jersey: U.S. Geological Survey Open-file Report 80-935, 3 p.

Robb, J.M., Ryan, W.B.F., and Hampson, J.C., Jr., 1981, Description of mid-range sidescan-sonar data from the Continental Slope offshore New Jersey, collected by R.V. GYRE, Cruise 80-G-8A: U.S. Geological Survey Open-file Report 81-1328, 6 p., 2 figs.

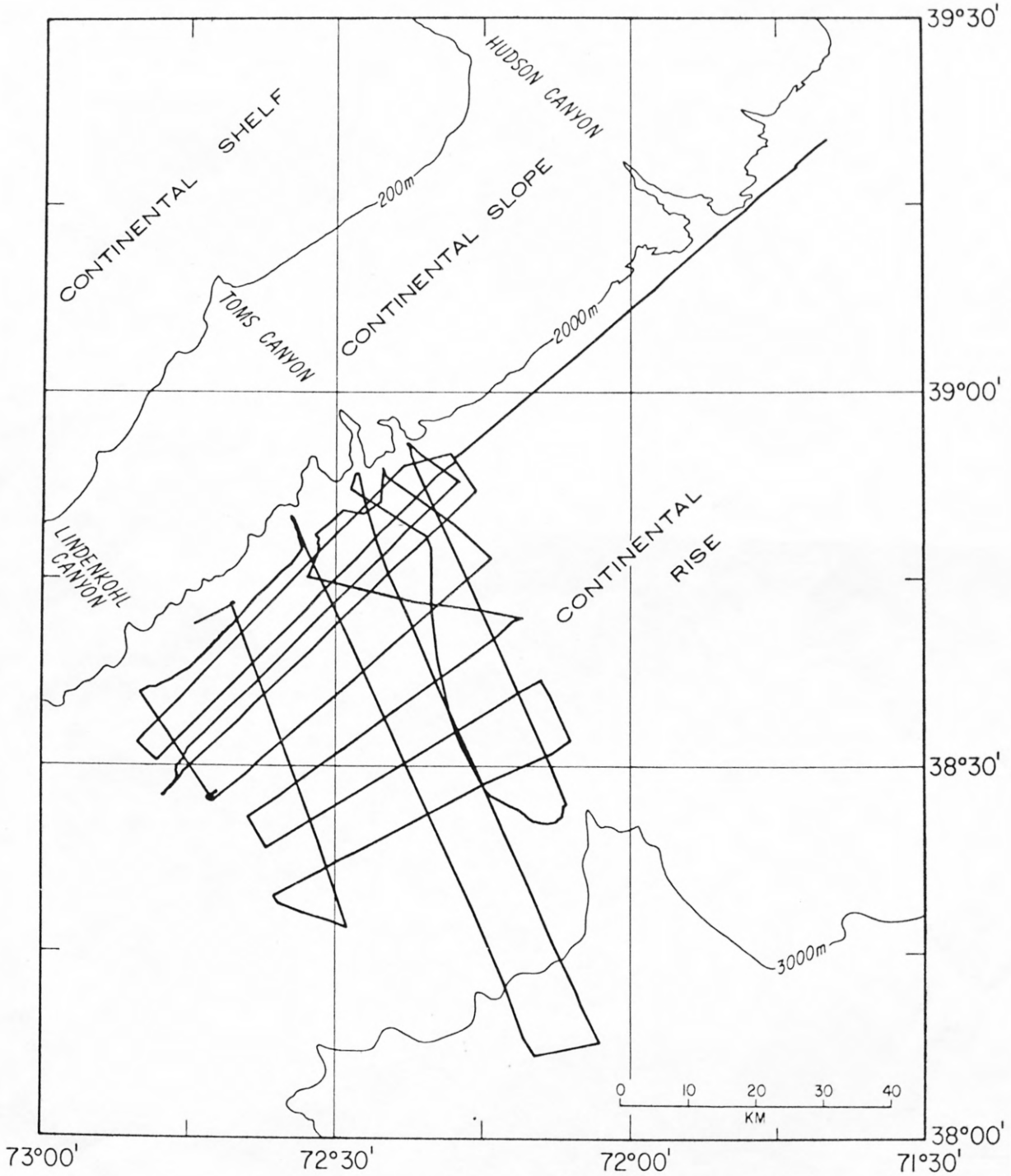

Figure 1. Tracklines of RV GYRE, 28 August - 1 September 1982.