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Sidescan-sonar data collected during May 1978
from the southern New England Continental Shelf

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Sidescan-sonar data were collected aboard R/V WESTWARD (Cruise W-39-4) during May 1978 by the U.S. Geological Survey using an Ocean Research Equipment System¹. Navigation in the study area was by Loran C. The 368 kilometers of survey were conducted in Block Island Sound, in Rhode Island Sound, and over the mid-Continental Shelf south of Block Island and Martha's Vineyard (Fig. 1).

Although the records are generally of good quality, variable ship speeds were caused by changes of wind and sail. Thus, care must be used in dimensional and orientation analysis of the bed-form features observed on the records.

On the midshelf, three bottom types were observed: 1) smooth, featureless sea floor, 2) elongated bodies of megaripples, and 3) ground-fishing trawler marks. The distribution of the features seems to be related to current velocity, grain-size distribution, water depth, and fishing intensity. The midshelf survey results are discussed with cruise data of R/V CAPE HENLOPEN (also collected in the spring of 1978) by Twichell and others (1981)².

The sonographs from Block Island and Rhode Island Sounds show a pattern indicative of a till cap atop a submerged part of the coastal end moraine, as well as the megarippled and smooth sea floor.

The original records may be examined in the U.S. Geological Survey offices in Woods Hole, Mass. Copies of the records can be purchased only from the National Geophysical and Solar-Terrestrial Data Center, NOAA/EDIS/NGSDC, Code D621, 325 Broadway, Boulder, CO 80303 (303-497-6338).

1. Use of tradenames in this report is for descriptive purposes only and does not constitute endorsement by the U.S. Geological Survey. This report is preliminary and has not been reviewed for conformity with USGS editorial standards.

2. Twichell, D.C., McClennen, C.E., and Butman, B., 1981, Morphology and processes associated with the accumulation of the fine-grained sediment deposit on the southern New England Shelf: *Journal of Sedimentary Petrology*, v. 51, no. 1, p. 269-280.

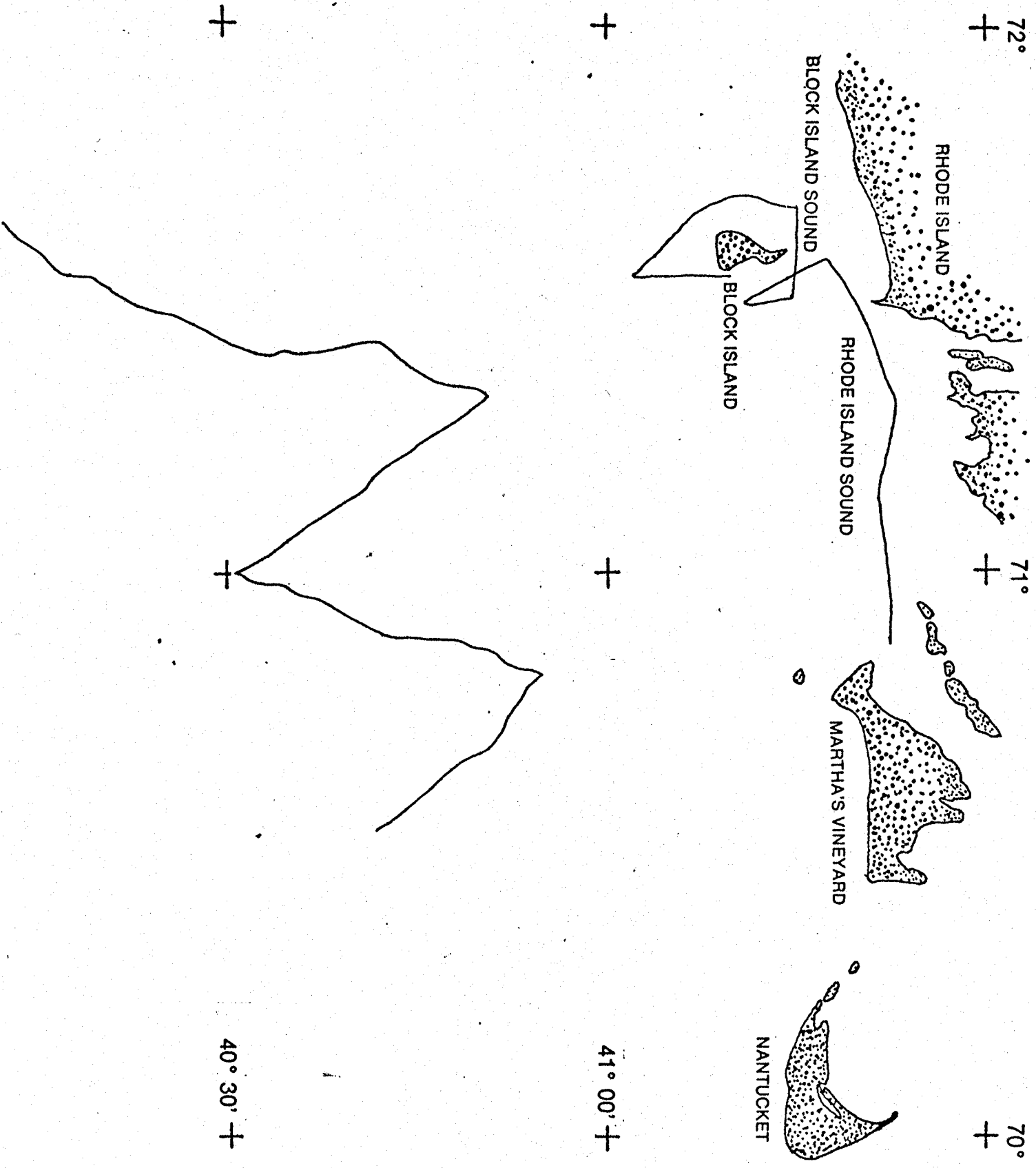


Figure 1 - Tracklines along which sidescan records were collected.