

Mercaator projection, Geographic Reference System 1983, North American Datum 1983
Longitude of central meridian 70°50' W, latitude of true equator 42°10' N
This map is not intended for navigational purposes.

SCALE 1:60 000
ONE CENTIMETER ON THE MAP REPRESENTS ONE METRE ON THE SEA FLOOR
CONTOUR INTERVAL 5 METERS
BROWN CONTOURS INDICATE TOPOGRAPHIC CONTOURS
DATUM MEAN LOWER LOW WATER

SEA FLOOR TERRAIN RUGGEDNESS INDEX
Interval >20 to 100 cm (100-m increments)
Interval >1 to 2 m (100-m increments)
Interval >2 to 6 m (100-m increments)

Colors represent the average change in elevation, in centimeters, between a central area (a 13 x 13-m pixel) and the eight pixels that surround it (total area analyzed is three pixels by three pixels, or 39 x 39 m in size). For example, on the map blue represents central pixels having an average elevation change of +70 to 80 cm with respect to their surrounding eight-pixel area. Note the elevation change increments in the color scale vary from 10 cm to 50 cm to 100 cm. A filter was applied to the ruggedness index image to smooth the boundaries between the mapped intervals. The filter calculated the mean of the TRM value of each pixel and its eight neighboring pixels in a 3-pixel-by-3-pixel grid that measures 39 x 39 m. Areas of ruggedness were calculated using this filtered image; see table 1 for map D on the DVD-ROM.

Sheet 1.—General sea floor ruggedness and topography.

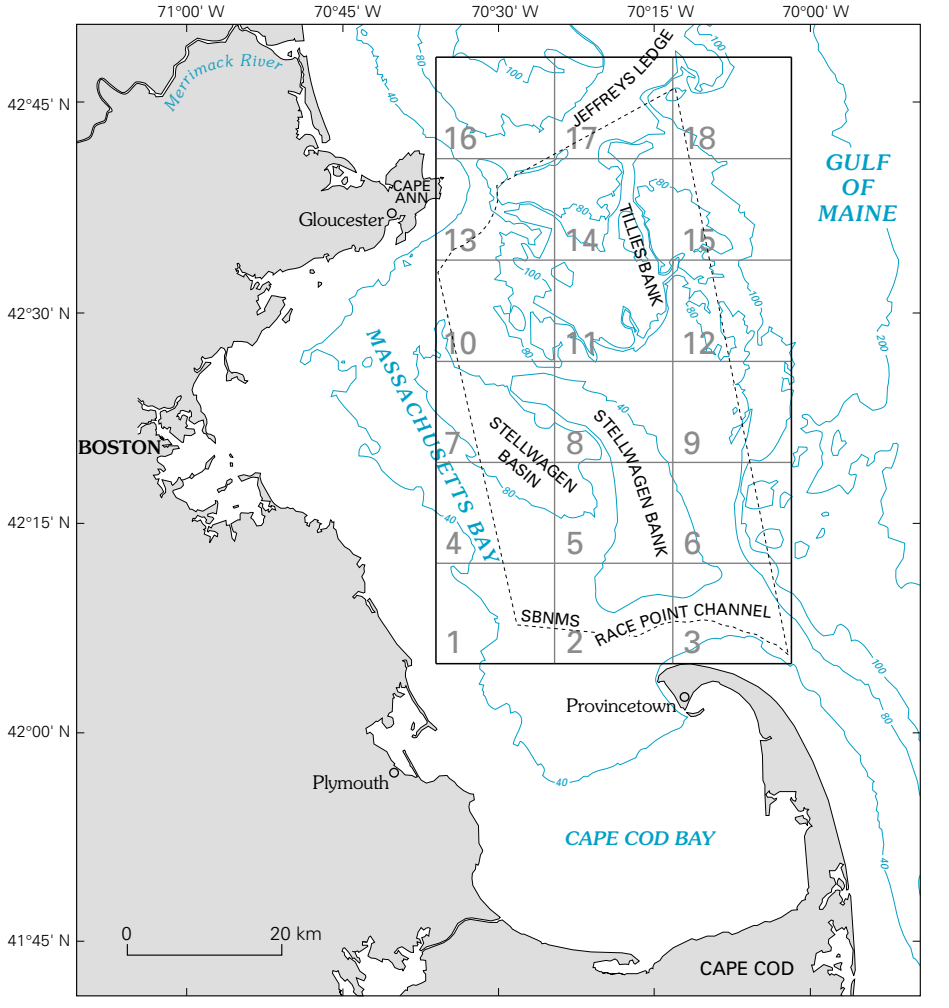
MAP D.—SEA FLOOR RUGGEDNESS IN THE
STELLWAGEN BANK NATIONAL MARINE SANCTUARY REGION

By
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Sea Floor Image Maps Showing Topography, Sun-Illuminated Topography, Backscatter Intensity, Ruggedness, Slope, and the Distribution of Boulder Ridges and Bedrock Outcrops in the Stellwagen Bank National Marine Sanctuary Region off Boston, Massachusetts

Page C. Valentine, editor



Location Map.—Regional setting of the map area outlined in black. Publications specific to the entire map area or to individual subregions 1-4-13 located in grid are listed in the explanatory text file for MAP 2840-D on the DVD-ROM. Stellwagen Bank National Marine Sanctuary boundary is shown as a dashed line. Stellwagen Bank boundary is shown as a solid line. Bathymetric contours are shown in meters.



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