



Sea floor terrain ruggedness index (TRI). 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 areas. 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 TRI value of each pixel and its eight neighboring pixels in a three-pixel by three-pixel grid that measures 39 x 39 m. Areas of ruggedness were calculated using this filtered image; see table 1.