

Charleston, South Carolina

This mosaic and derivative data were part of the M.S. thesis of Katherine Luciano, as part of the Educational Mapping portion of the US Geological Survey National Mapping program. The sidescan sonar depicts the distribution of coarse shelly sands (white, high backscatter), very fine sands (dark grey), and mud (black, off Capers Island).

The Quaternary Isopach and Isopach of materials above the first return were digitized in SonarWiz and transferred to ArcGIS for DEM rendering.

Please note the thickness of the Quaternary deposits outlining the positions of old river channels and tidal inlet paths. Also, the sidescan shows several distinct patterns of deposition throughout the area alongshore and with depth offshore.

The data was collected using a Klein 4900khz sidescan and Edgetech 216s. These onshore-offshore geologic mapping projects in EDMAP are the first funded by the USGS. The project was completed entirely off a 6.5-m (21'), center-console vessel.

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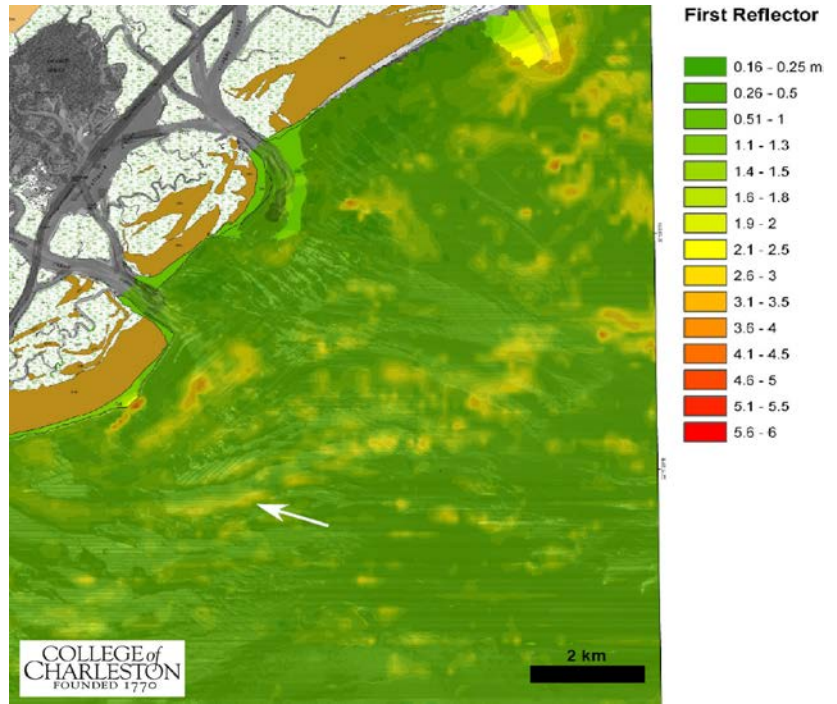


Image 1: Above First Reflector

Image 2: Sub-bottom Data

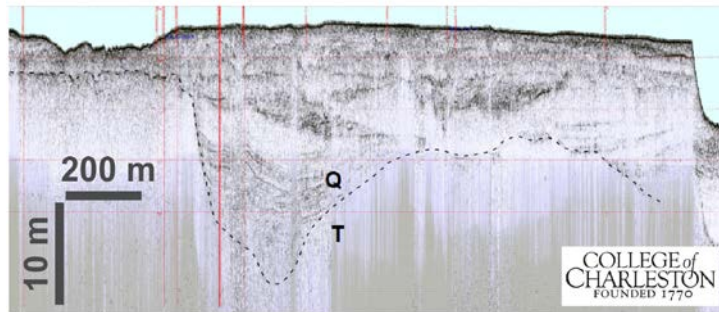


Image 4: Sidescan Data

Image 3: Isopach

