

INTRODUCTION
 The Bay of Fundy is located on the east coast of Canada between the province of New Brunswick and New Brunswick (Fig. 1). It is a microtidal estuarine environment (Amos et al., 1980) with the highest tides in the world (17 m) according to O'Reilly et al. (2005) and Blanton (2006). This map is one of a series of seven contour maps that show seafloor relief of the Bay of Fundy in shaded-relief view and backscatter strength (contour) by depth at a scale of 1:50 000. Backscatter strength is used to identify the geological nature of the substrate (Mellish and Hughes Clarke, 1963). The backscatter strength maps are based on multibeam sonar covering 10 000 km² of the seafloor. Water depth is derived from the color-coded bathymetry (blue) outside the multibeam sonar coverage area. The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area. The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area.

DESCRIPTIVE NOTES
 The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area. The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area. The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area.

MULTIBEAM-SONAR SURVEYS
 The University of New Brunswick, the Canadian Hydrographic Service and the Geological Survey of Canada conducted Bay of Fundy multibeam sonar surveys from 1992 to 2009. During those eighteen years, multibeam sonar systems were used to map the seafloor. The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area.

ACKNOWLEDGMENTS
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REFERENCES
 Amos, C.L., Buxton, D.E., Doherty, G.R., Dalrymple, R.W., McCann, S.B., and Rao, M.J., 1980. Geomorphology and sedimentology of the Bay of Fundy. Geological Association of Canada, Paper 79-23, 13 p.

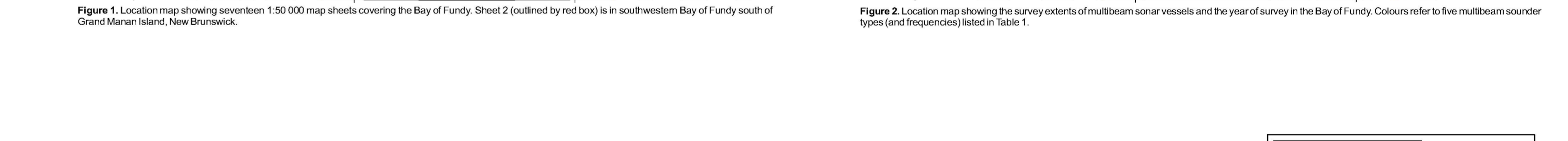
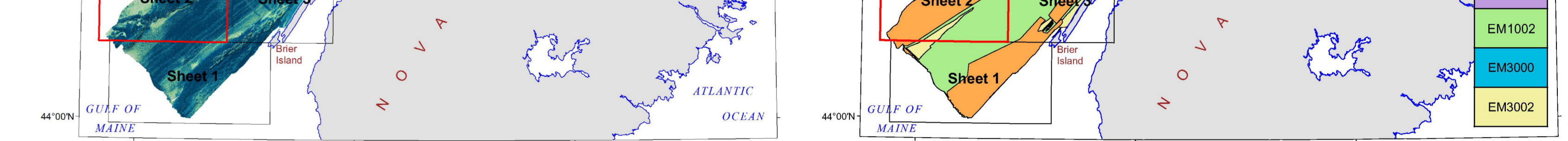
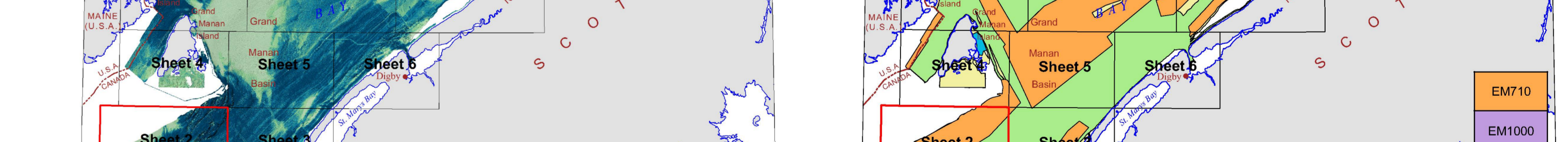
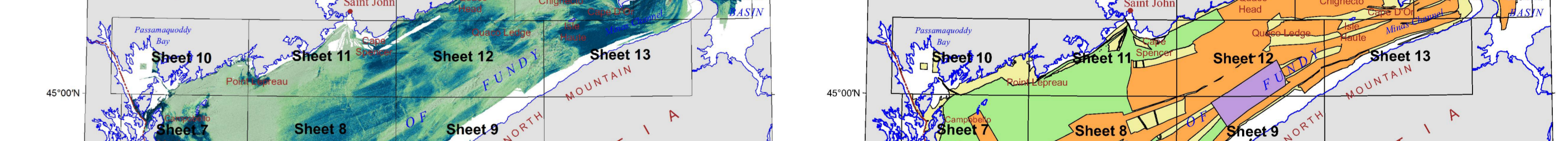
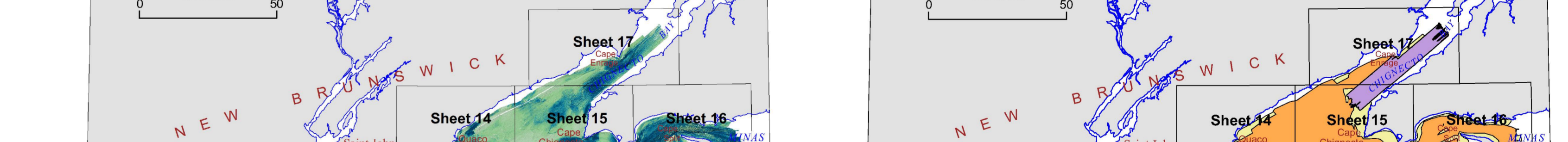
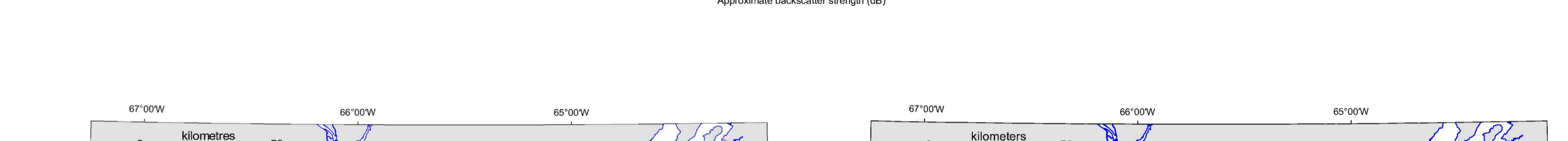
BACKSCATTER DEFINITION
 The backscatter coefficient of a given sediment type (sand, silt, or gravel as defined by Wentworth (1922) and modified by Folk (1954)) is a function of the angle of incidence of the acoustic beam to the seafloor (the grazing angle). This parameter is a function of the sediment type, the water depth, and the grazing angle.

DATA PROCESSING
 Backscatter data processing is treated thoroughly by Hughes Clarke et al. (2008) and is summarized here. The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area.

BACKSCATTER DISTRIBUTION
 The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area. The backscatter strength map is based on the color-coded bathymetry map (blue) outside the multibeam sonar coverage area.

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BACKSCATTER STRENGTH AND SHADED SEAFLOOR RELIEF
BAY OF FUNDY, SHEET 2
 OFFSHORE NOVA SCOTIA-NEW BRUNSWICK

Scale 1:50 000 / Échelle 1:50 000

Authors: B.J. Todd, J. Shaw, D.R. Parrott, J.E. Hughes Clarke, D. Cartwright, and S.E. Hayward

This map was produced by Natural Resources Canada in cooperation with Fisheries and Oceans Canada

Multibeam backscatter data collected by Canadian Hydrographic Service, 1993, 2006-2009; Geological Survey of Canada, 1999-2003, 2006-2009; and University of New Brunswick, 1993, 1996, 2002-2009

Multibeam backscatter data compiled by Canadian Hydrographic Service, Geological Survey of Canada, and University of New Brunswick, 1993-2010

Digital cartography by P.A. Melborne and P. O'Brien, Data Dissemination Division (DDC), and G. Grant, S.E. Hayward and E. Patton, GSC (Atlantic)

Any revisions or additional geographic information known to the user would be welcomed by the Geological Survey of Canada

Digital base map (land area) from data compiled by Geomatics Canada, modified by GSC (Atlantic)

Digital bathymetry contours in metres supplied by Canadian Hydrographic Service and GSC (Atlantic)

Magnetic declination 2011, 17°21'W, decreasing 6.7" annually

Depth in metres below mean sea level

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