

DESCRIPTIVE NOTES

INTRODUCTION
Multibeam systems record bathymetry and backscatter amplitude. This map is a direct proxy for seafloor roughness. Backscatter is the amount of energy reflected back to the receiver...

EXTRACTION, GRIDDED, AND LEVELLING OF BACKSCATTER
Backscatter was extracted using tools developed in-house at GSC Atlantic. Raw Kongsberg diagrams from the various survey systems used in Placentia Bay were first converted to GeoStar Sensor Format (GSF) files...

DISTRIBUTION OF BACKSCATTER VALUES
Backscatter is depicted using a colour scale ranging from almost white (low backscatter) to indigo (high backscatter). The natural backscatter is measured over a digital elevation model of the seafloor...

INTERPRETATION OF BACKSCATTER
The interpretation of backscatter in this map was based on the following GSC marine sector and sampling surveys. Previous work in Placentia Bay was done by Shaw et al. (2006) and Shaw et al. (2007)...

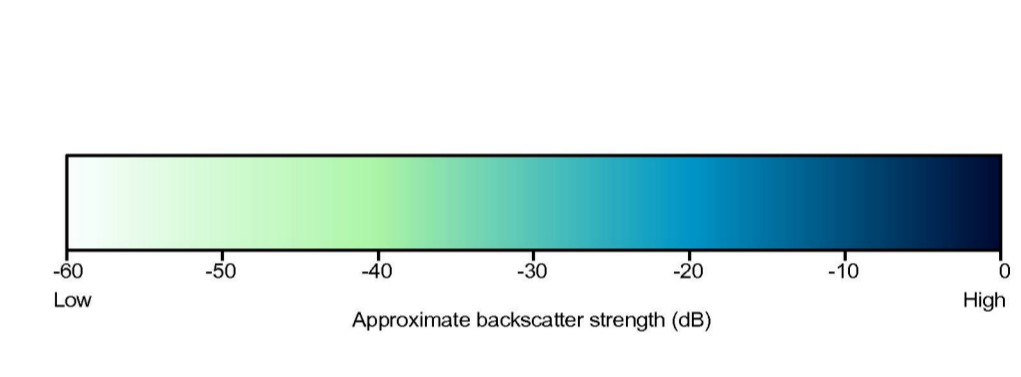
ACKNOWLEDGMENTS
Most surveys were carried out with the collaboration of the Canadian Hydrographic Service (CHS), in particular the staff at the Hydrographic Station in Placentia Bay...

REFERENCES
Courtney, R.C. and Shaw, J. 2000. Multibeam bathymetry and acoustic reflectance imaging of the shelf western Labrador, Canada. p. 31-42.

Figure 1: Cruise 2008-02 (CCGS Shearwater), station 15, photograph-24, depth 61 m, at 47°10'30.54"N, 54°19'15.10"W. The photograph was taken in an area of rugged backscatter topography...

Figure 2: Cruise 2008-02 (CCGS Shearwater), station 20, photograph-31, depth 65 m, at 47°10'21.91"N, 54°19'15.10"W. The photograph was taken in an area of rugged backscatter topography...

Figure 3: Cruise 2008-02 (CCGS Shearwater), station 21, photograph-26, depth 121 m, at 47°10'21.91"N, 54°19'15.10"W. The photograph was taken in an area of smooth seafloor with low backscatter...



MAP 2152A: BACKSCATTER STRENGTH AND SHADED SEAFLOOR RELIEF OF PLACENTIA BAY WEST OFFSHORE NEWFOUNDLAND AND LABRADOR. Includes scale bar (1:50,000), projection information, and contact details for the Geological Survey of Canada.