

DESCRIPTIVE NOTES

INTRODUCTION
Multibeam systems record mean energy and time series of amplitudes returned in each beam. This mean energy is commonly called backscatter strength. It is tempting to use this as a direct proxy for surface roughness...

EXTRACTION, GRIDDING, AND LEVELING OF BACKSCATTER
Backscatter was extracted using tools developed in-house at GSC Atlantic. Raw Kongsberg datagrams from various systems were used to generate Placentia Bay maps first covered to generate Geospatial Data (GSDP)...

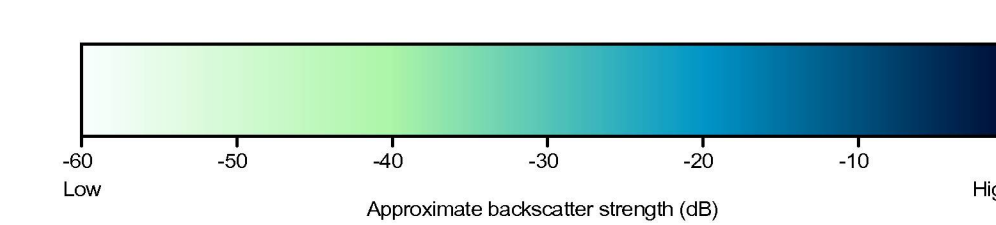
DISTRIBUTION OF BACKSCATTER VALUES
Backscatter is depicted using a colour scale ranging from almost white (low backscatter) to indigo (high backscatter). The colour backscatter is derived over a grey digital elevation model of the bathymetry...

INTERPRETATION OF BACKSCATTER
The interpretations of backscatter in this area are based on GSC marine seismic and sampling survey data (Shaw et al., 2007). The large area of low backscatter corresponds with the back deposits of proglacial till...

ACKNOWLEDGMENTS
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- REFERENCES
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Foster, D.P. and Shaw, J. 2010a. Backscatter strength and shaded seafloor relief: Placentia Bay, west of Newfoundland and Labrador. Geological Survey of Canada, Map 2155A, scale 1:500 000.
Foster, D.P. and Shaw, J. 2010b. Backscatter strength and shaded seafloor relief: Placentia Bay, west of Newfoundland and Labrador. Geological Survey of Canada, Map 2154A, scale 1:500 000.
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Shaw, J. and Fortin, D.L. 1995. The proglacial tillite in Newfoundland. Canadian Journal of Earth Sciences, v. 32, p. 1502-1520.
Shaw, J., Jamieson, K., Brashett, D., Agency, K., Wils, B., and Sandeen, G. 2007. Surveys in Placentia Bay, Newfoundland coast 2005-09. CGGS Hydrographic Survey of Canada, Chart 2626, 8 p.

SYMBOLS
Grid survey: yellow dot
Seafloor protrusion: red triangle



MAP 2155A
BACKSCATTER STRENGTH AND SHADED SEAFLOOR RELIEF
PLACENTIA BAY SOUTHEAST
OFFSHORE NEWFOUNDLAND AND LABRADOR
Scale 1:500 000 / Échelle 1:500 000
Authors: D.P. Foster and J. Shaw
This map was produced by Natural Resources Canada in co-operation with Fisheries and Oceans Canada
Multibeam bathymetric data collected by Canadian Hydrographic Service and Natural Resources Canada, 1981, 1983, 1993, and 1995
Multibeam backscatter data compiled by D.P. Foster, 2007 and 2008
Digital cartography by P.A. Melbourn, Data Dissemination Division (DDI)
Geographic Information System (GIS) data provided by the Canadian Hydrographic Service and Geospatial Information Institute (GII)
Projection: Transverse Mercator Projection, North American Datum 1983
Scale: 1:500 000
Magnetic declination 2010, 1°33'W, decreasing 11.4" annually
Elevations in feet above mean sea level
Depths in metres below mean sea level
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