

Figure 1. Station 113. This photograph, covering approximately 120 m by 80 m (96 m²) of seafloor, is from a region of moderate backscatter strength (2.0 to 3.0) at a depth of 130 m on western German Bank (Hubert 2003:054, Station 113, 44°22'30"N, 66°42'30"W). The sediment is classified as a muddy sand (Hodgson 1994, 1995). The photograph is oriented vertically with the current flow direction (Hodgson 2003:054, Station 113, 44°22'30"N, 66°42'30"W) indicated by a red arrow. Photograph by staff of the Hubert 2003:054. GSC 2004:093:004

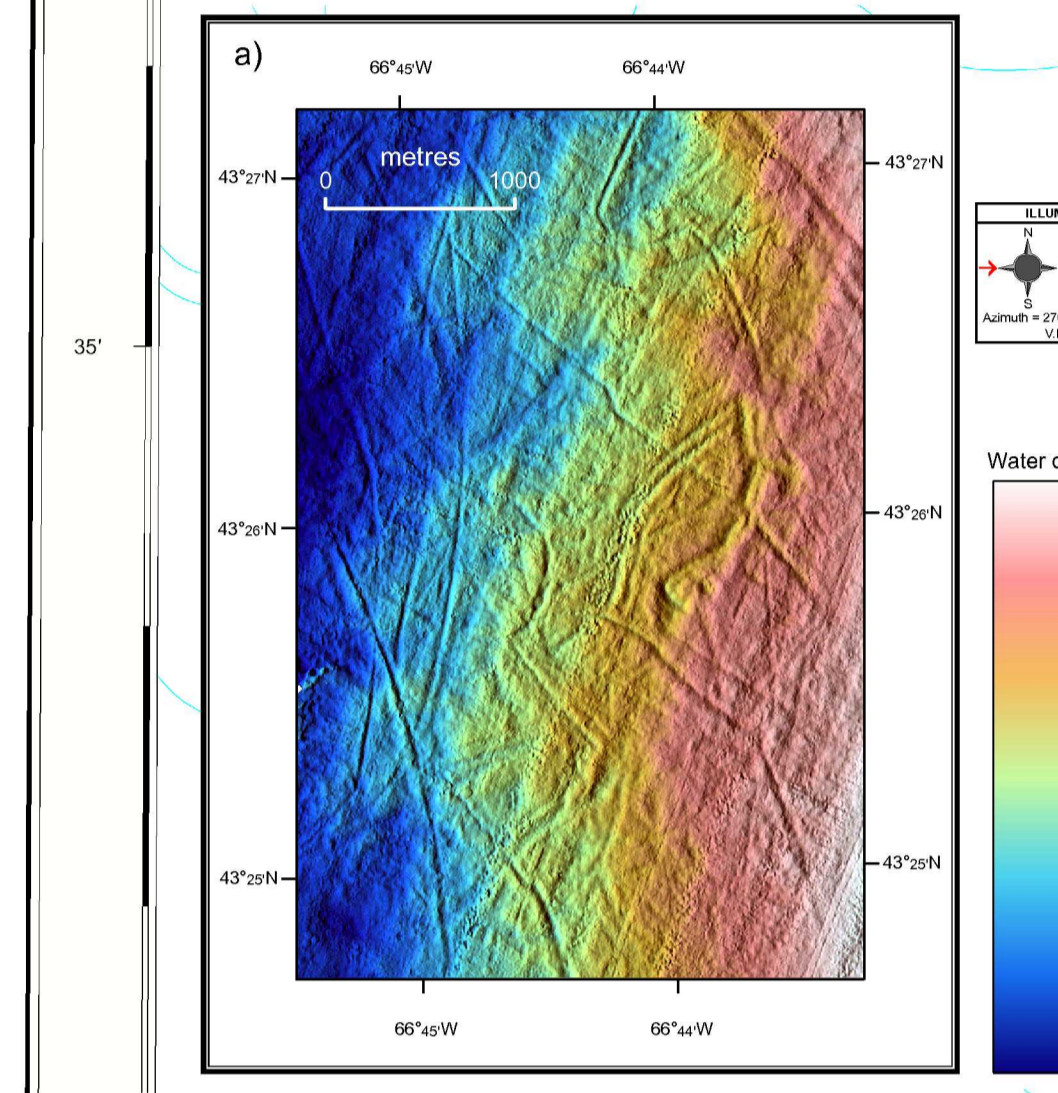


Figure 2. A bathymetric cross-section plot showing water depth in meters on the y-axis (100 to 150) and distance in meters on the x-axis (0 to 100). The plot shows a slope from 100m depth to 150m depth. A color scale on the right indicates backscatter strength from 0.5 to 3.5. A red arrow points to a 'Multiple-level scour' feature and a blue arrow points to a 'Single-level scour' feature.

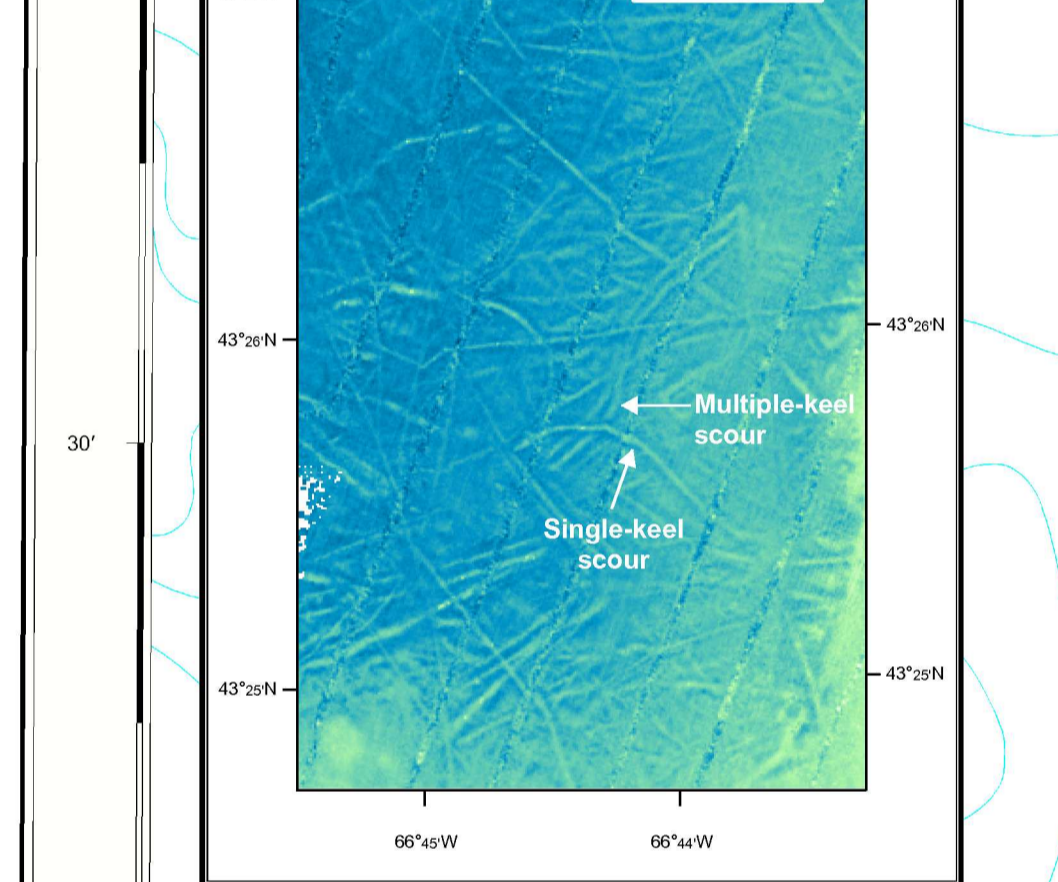


Figure 3. Station 81. This photograph, covering approximately 120 m by 80 m (96 m²) of seafloor, is from a region of low backscatter strength (0.5 to 1.0) at a depth of 130 m on western German Bank (Hubert 2003:054, Station 81, 44°22'30"N, 66°42'30"W). The sediment is classified as a muddy sand (Hodgson 1994, 1995). The photograph is oriented vertically with the current flow direction (Hodgson 2003:054, Station 81, 44°22'30"N, 66°42'30"W) indicated by a red arrow. Photograph by staff of the Hubert 2003:054. GSC 2004:093:004



Figure 4. Station 80. This photograph, covering approximately 120 m by 80 m (96 m²) of seafloor, is from a region of moderate backscatter strength (2.0 to 3.0) at a depth of 130 m on western German Bank (Hubert 2003:054, Station 80, 44°22'30"N, 66°42'30"W). The sediment is classified as a muddy sand (Hodgson 1994, 1995). The photograph is oriented vertically with the current flow direction (Hodgson 2003:054, Station 80, 44°22'30"N, 66°42'30"W) indicated by a red arrow. Photograph by staff of the Hubert 2003:054. GSC 2004:093:004

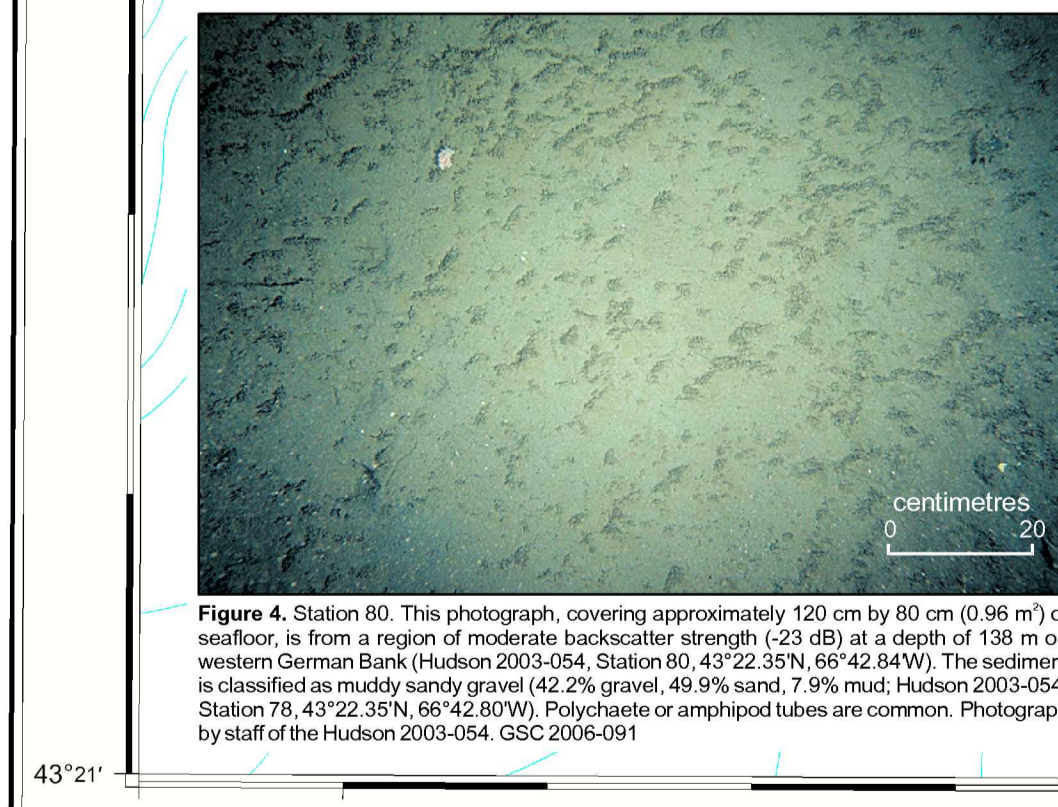


Figure 5. Station 74. This photograph, covering approximately 120 m by 80 m (96 m²) of seafloor, is from a region of moderate backscatter strength (2.0 to 3.0) at a depth of 130 m on western German Bank (Hubert 2003:054, Station 74, 44°22'30"N, 66°42'30"W). The sediment is classified as a muddy sand (Hodgson 1994, 1995). The photograph is oriented vertically with the current flow direction (Hodgson 2003:054, Station 74, 44°22'30"N, 66°42'30"W) indicated by a red arrow. Photograph by staff of the Hubert 2003:054. GSC 2004:093:004

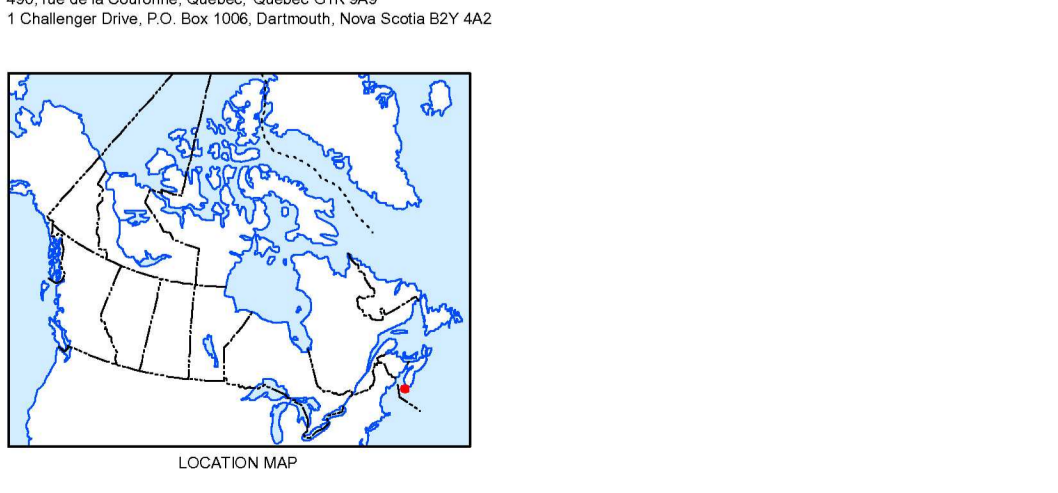
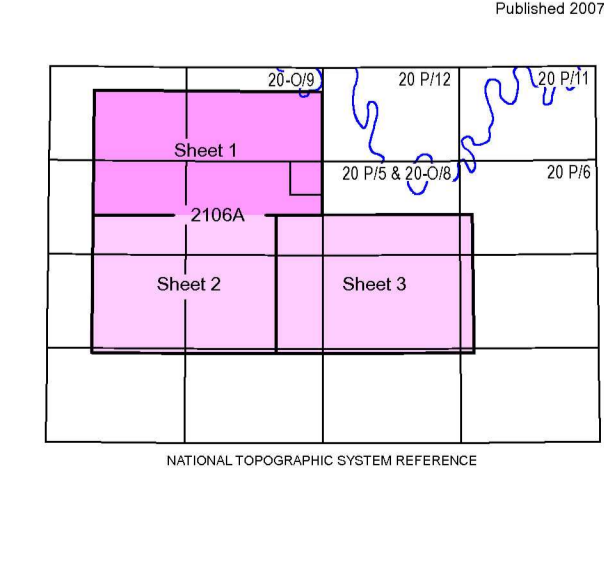


Figure 6. Station 75. This photograph, covering approximately 120 m by 80 m (96 m²) of seafloor, is from a region of moderate backscatter strength (2.0 to 3.0) at a depth of 130 m on western German Bank (Hubert 2003:054, Station 75, 44°22'30"N, 66°42'30"W). The sediment is classified as a muddy sand (Hodgson 1994, 1995). The photograph is oriented vertically with the current flow direction (Hodgson 2003:054, Station 75, 44°22'30"N, 66°42'30"W) indicated by a red arrow. Photograph by staff of the Hubert 2003:054. GSC 2004:093:004



MAP 2106A
BACKSCATTER STRENGTH AND SUN-ILLUMINATED SEAFLOOR TOPOGRAPHY
GERMAN BANK
SCOTIAN SHELF
OFFSHORE NOVA SCOTIA
Scale 1:500 000 Échelle 1:500 000
Author: B.J. Todd
Multibeam bathymetric data collected by Canadian Hydrographic Service, 1987, 1988, 2000, 2002, and 2003
Multibeam backscatter data compiled by Geological Survey of Canada, 2004
Digital bathymetry data in raster compiled by the Canadian Hydrographic Service (GSC 2004)
Digitized by P. O'Riordan, Data Dissemination Division (GDD) and S. Hayward, GSC (2004)
Any revisions or additional information known to the user would be welcomed by the Geological Survey of Canada

Digital bathymetry data in raster compiled by the Canadian Hydrographic Service (GSC 2004)
Digitized by P. O'Riordan, Data Dissemination Division (GDD) and S. Hayward, GSC (2004)
Any revisions or additional information known to the user would be welcomed by the Geological Survey of Canada



DESCRIPTIVE NOTES

INTRODUCTION
This map is part of a data series of German Bank, located on the Scotian Shelf of western Nova Scotia. The map shows the backscatter strength and bathymetric data for selected stations. The map also shows the multibeam topography of German Bank area in quadrilateral view and backscatter strength (contour) at a depth of 130 m.

BACKSCATTER STRENGTH
Multibeam bathymetry was collected by the Canadian Hydrographic Service using the Canadian Coast Guard Ship (CCGS) *St. Lawrence*. The vessel was equipped with a Simrad EK60 echosounder system (120 kHz) and a Simrad EK60 echosounder system (120 kHz) and operated using a Simrad EK60 echosounder system. The data were collected using a Simrad EK60 echosounder system.

BACKSCATTER STRENGTH
The backscatter strength is a measure of the intensity of the backscattered signal. It is expressed in dB. The backscatter strength is a function of the seafloor topography and the sediment type. The backscatter strength is a function of the seafloor topography and the sediment type.

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ACKNOWLEDGMENTS
The authors thank the Canadian Hydrographic Service (CHS) for providing the multibeam bathymetry survey of German Bank and the Canadian Hydrographic Service (CHS) for providing the backscatter strength data. The authors thank the Canadian Hydrographic Service (CHS) for providing the backscatter strength data.

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