



INTRODUCTION

Georges Bank is a large submarine bank in the Gulf of Maine near the edge of the continental shelf south of Nova Scotia and east of Cape Cod. The bank is approximately 200 km long and 100 km wide. The international boundary between Canada and the United States bisects the bank with the northeastern part of the bank being Canadian territory.

This map of Georges Bank, Fundian Channel, and Northeast Channel is the product of a 1999-2000 bathymetric survey that used multibeam sonar systems to map 11 985 km² of the sea floor. Other bathymetric data for the area, collected geologically and biologically for scientific purposes, are included in the map. The map shows the bathymetry of Georges Bank, Fundian Channel, and Northeast Channel as shaded relief and sea floor depth (looked by contour) at a scale of 1:175 000. Topographic contours are shown as dashed lines. The system includes 113 beam-swath multibeam sonar data collected by the Canadian Hydrographic Service using a Kongsberg EM1002 system. The data are presented at a depth interval of 25 metres. The bathymetric data were collected by the Canadian Hydrographic Service using the following vessel and equipment:

MULTIBEAM BATHYMETRY DATA COLLECTION

Figure 1 shows the three-component areas of the Georges Bank and Fundian Channel multibeam sonar bathymetric survey. Current collection of the Fundian Channel and Northeast Channel was completed in 1999 by the Canadian Hydrographic Service using the Canadian Coast Guard Ship *Frederick G. Case* (5047) in the Fundian Channel. The Fundian Channel and Northeast Channel were surveyed in 2000 by the Canadian Hydrographic Service using the Canadian Coast Guard Ship *Frederick G. Case* (5047) in the Fundian Channel and the Canadian Hydrographic Service in partnership with the Canadian Offshore Sealing Industry Mapping Group, Inc. (COSI) in the Northeast Channel. The survey was completed on 25 May 2000. The survey was supported by Kongsberg EM1002 multibeam bathymetric survey system (64 MHz) with the beam-swath configuration set to collect data in 113 beams. The system included 113 beam-swath multibeam sonar data collected by the Canadian Hydrographic Service using the following vessel and equipment:

MULTIBEAM BATHYMETRIC DATA DISPLAY

The multibeam bathymetric data were processed as an ungridded national datum on Georges Bank and 10 m per pixel horizontal resolution in Fundian Channel. The shaded relief image was created by contouring the bathymetric data into contours at 25 m intervals. The contours were then displayed as a shaded relief image. The map is presented in a format of a 30° by 30° grid. The map is presented in a format of a 30° by 30° grid. The map is presented in a format of a 30° by 30° grid. The map is presented in a format of a 30° by 30° grid.

GEOMORPHOLOGY

The morphology of the Gulf of Maine and Georges Bank is the result of marine sediment deposition during the Pleistocene epoch (115 000–120 000 years ago) and the Holocene epoch (120 000–125 000 years ago). The Pleistocene epoch (115 000–120 000 years ago) was characterized by the presence of the Laurentide ice sheet. The Holocene epoch (120 000–125 000 years ago) was characterized by the presence of the Laurentide ice sheet.

FUNDIAN CHANNEL AND NORTHEAST CHANNEL

Georges Bank is bounded to the north by the Fundian Channel and to the south by the Northeast Channel. The Fundian Channel is a narrow channel that separates the northwestern part of Georges Bank from the northeastern part of Georges Bank. The Northeast Channel is a narrow channel that separates the northeastern part of Georges Bank from the southeast part of Georges Bank.

ACKNOWLEDGMENTS

K. Field of the Canadian Hydrographic Service (CHS) organized the multibeam bathymetric survey of the Fundian Channel and Northeast Channel. M. Lamplugh and D. Corbett of CHS organized the multibeam bathymetric survey of Georges Bank in cooperation with the Canadian Offshore Sealing Industry Mapping Group. D. Belliveau of the Geological Survey of Canada (GSC) participated in the Fundian Channel survey conducted by the Canadian Offshore Sealing Industry Mapping Group. The Canadian Offshore Sealing Industry Mapping Group (COSI) participated in the Northeast Channel survey. The Canadian Offshore Sealing Industry Mapping Group (COSI) participated in the Northeast Channel survey.

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Multibeam bathymetric data collected by Canadian Hydrographic Service, Canadian Offshore Sealing Industry Mapping Group, and Geomatics First Foods Inc., 1999-2000

Multibeam bathymetric data collected by Canadian Hydrographic Service and Geomatics First Foods Inc., 1999-2000

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SHADED SEAFLOOR RELIEF
GEORGES BANK, FUNDIAN CHANNEL,
AND NORTHEAST CHANNEL
GULF OF MAINE

Scale 1:175 000/Echelle 1:175 000

Projection: Transverse Mercator Projection
North American Datum 1983
Spheroid: GRS80
Datum: North American Datum 1983
Units: Metres
Datum shift: 0 metres
False easting: 500 000 metres
False northing: 0 metres
Map showing the secondary environment of eastern Georges Bank, U.S. Geological Survey, Miscellaneous Investigations Series map I-1147, 1982. Scale 1:250 000.

Location map showing extent of map area in red. The map area is shown in a red box on the map. The map area is shown in a red box on the map.

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Projection: Transverse Mercator Projection
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