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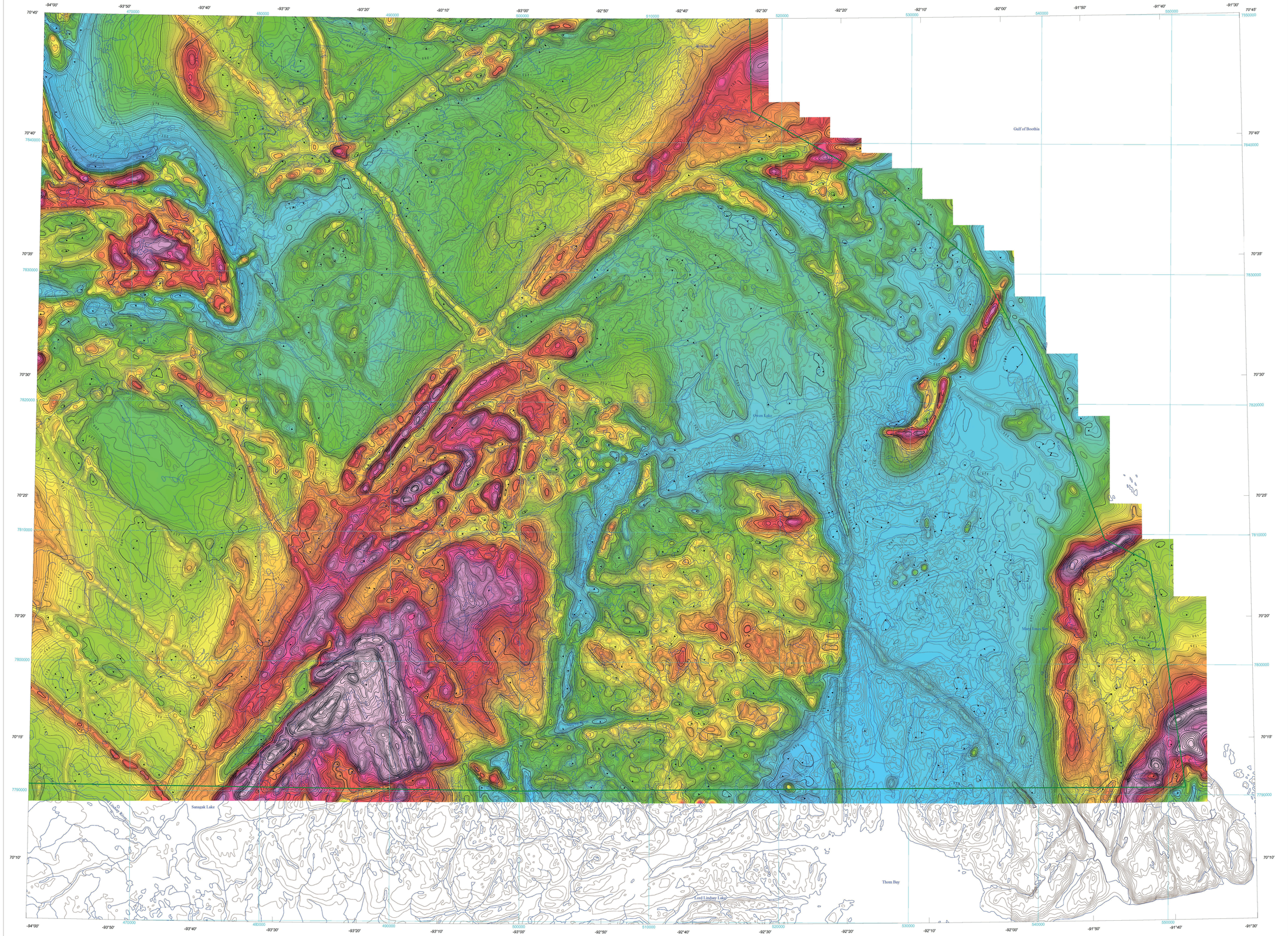
Celebrating 175 yrs

RESIDUAL TOTAL MAGNETIC FIELD



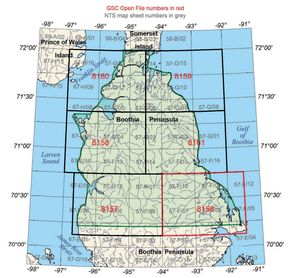
Residual Total Magnetic Field

This map of the residual total magnetic field was derived from data acquired during an aeromagnetic survey carried out by Sander Geophysics Limited from March 15, 2016 to July 3, 2016. The data were recorded using split-beam cesium vapour magnetometers (sensitivity = 0.005 nT) mounted in each of the tail booms of two Cessna 208B Grand Caravan aircraft (C-GSGL and G-GSCV). The nominal traverse and control line spacings were, respectively, 400 m and 2400 m, and the aircraft flew at a nominal terrain clearance of 150 m. Traverse lines were oriented N90°E with orthogonal control lines. The flight path was recovered following post-flight differential corrections to the raw Global Positioning System (GPS) data and inspection of ground images recorded by a vertically-mounted video camera. The survey was flown on a pre-determined flight surface to minimize differences in magnetic values at the intersections of control and traverse lines. These differences were computer-analysed to obtain a mutually levelled set of flight-line magnetic data. The levelled values were then interpolated to a 100 m grid. The International Geomagnetic Reference Field (IGRF) defined at the average GPS altitude of 385 m for the year 2016.38 was then removed. Removal of the IGRF, representing the magnetic field of the Earth's core, produces a residual component related almost entirely to magnetizations within the Earth's crust.

This publication is available for free download through GEOSCAN (http://geoscan.nrcan.gc.ca/). Corresponding digital profile and gridded data as well as similar data for adjacent airborne geophysical surveys are available from Natural Resources Canada's Geoscience Data Repository for Aeromagnetic data at http://gdr.agg.nrcan.gc.ca/index_e.html. The same products are also available, for a fee, from the Geophysical Data Centre, Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E8. Telephone: (613) 995-5326, email: infogdc@agg.nrcan.gc.ca.

Acknowledgements

The authors thank the field crew chiefs, Carsten Mueller and Otong Matsetse (Sander Geophysics Limited) for their cooperation. We also thank Douglas Oneschuk (GSC) for his cartographic design expertise.



NATIONAL TOPOGRAPHIC REFERENCE SYSTEM AND GEOPHYSICAL MAP INDEX

AEROMAGNETIC SURVEY OF THE NORTHERN BOOTHIA PENINSULA II

This aeromagnetic survey and the production of this map were funded by phase 2 of the Geo-mapping for Energy and Minerals (GEM-2) program of the Earth Sciences Sector, Natural Resources Canada.

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Data acquisition, data compilation and map production
by Sander Geophysics Limited, Ottawa, Ontario.
Contract and project management by the
Geological Survey of Canada, Ottawa, Ontario.
Cartographic design by D. Oneschuk.

doi:10.4095/299452

GEOLOGICAL SURVEY OF CANADA OPEN FILE 8156

RESIDUAL TOTAL MAGNETIC FIELD

AEROMAGNETIC SURVEY OF THE NORTHERN BOOTHIA PENINSULA II

NUNAVUT
NTS 57-F/7, 8, 9, 10 and parts of 57-F/1, 2, E/4, 5, 12

Scale 1:100 000

2 0 2 4 6
(kilometres)
UTM zone 15V

Universal Transverse Mercator Projection
North American Datum,1983

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Topographic Data from Natural Resources Canada
Contour Interval 100 metres

MAP LOCATION

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8156
GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA
2016

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Recommended citation
Coyle, M., Boulanger, O., Tschirhart, V. and Kiss, F. 2016.
Residual Total Magnetic Field,
Aeromagnetic Survey of the Northern Boothia Peninsula II, Nunavut,
NTS 57-F/7, 8, 9, 10 and parts of 57-F/1, 2, E/4, 5, 12;
Geological Survey of Canada, Open File 8156;
scale 1:100 000. doi:10.4095/299452.

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