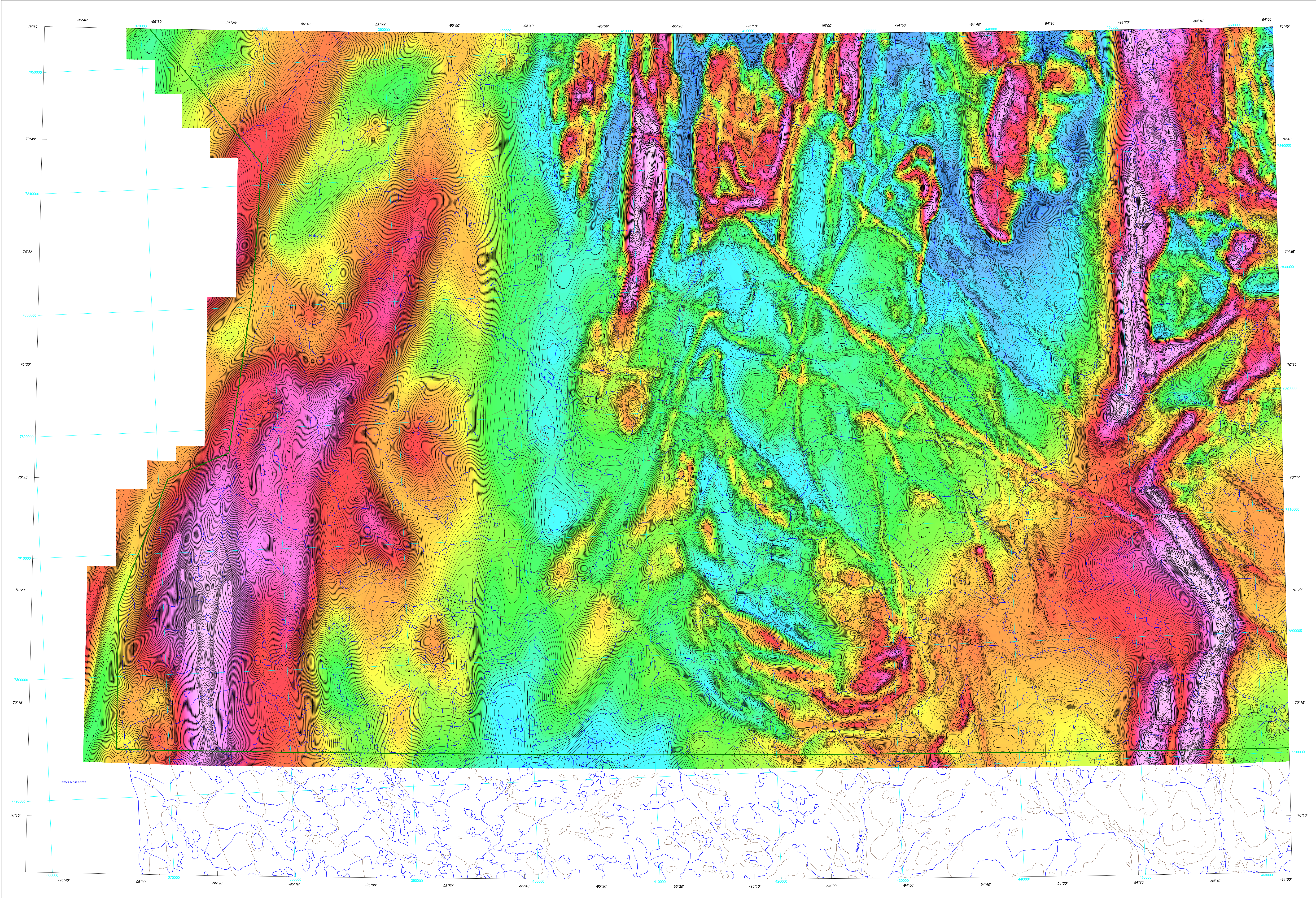


RESIDUAL TOTAL MAGNETIC FIELD

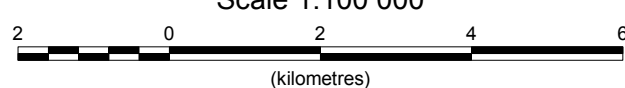


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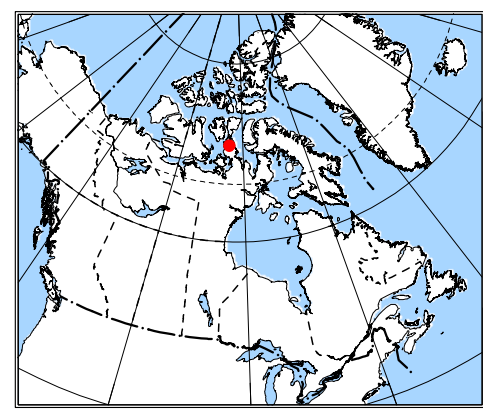
Authors: M. Coyle, O. Boulanger, V. Tschirhart and F. Kiss
Data acquisition, data compilation and map production by Sander Geophysics Limited, Ottawa, Ontario
Contract and project management by the Geological Survey of Canada, Ottawa, Ontario
Cartographic design by D. Oneschuk
doi:10.4095/29454

GEOLOGICAL SURVEY OF CANADA OPEN FILE 8157
RESIDUAL TOTAL MAGNETIC FIELD
AEROMAGNETIC SURVEY OF THE NORTHERN BOOTHIA PENINSULA II

NUNAVUT
NTS 57-F/5, 6, 11, 12 and parts of 57-F/3, 4, 67-E/1, 8, 9
Scale 1:100 000



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Topographic data from Natural Resources Canada
Cartographic source: 500 metres



MAP LOCATION

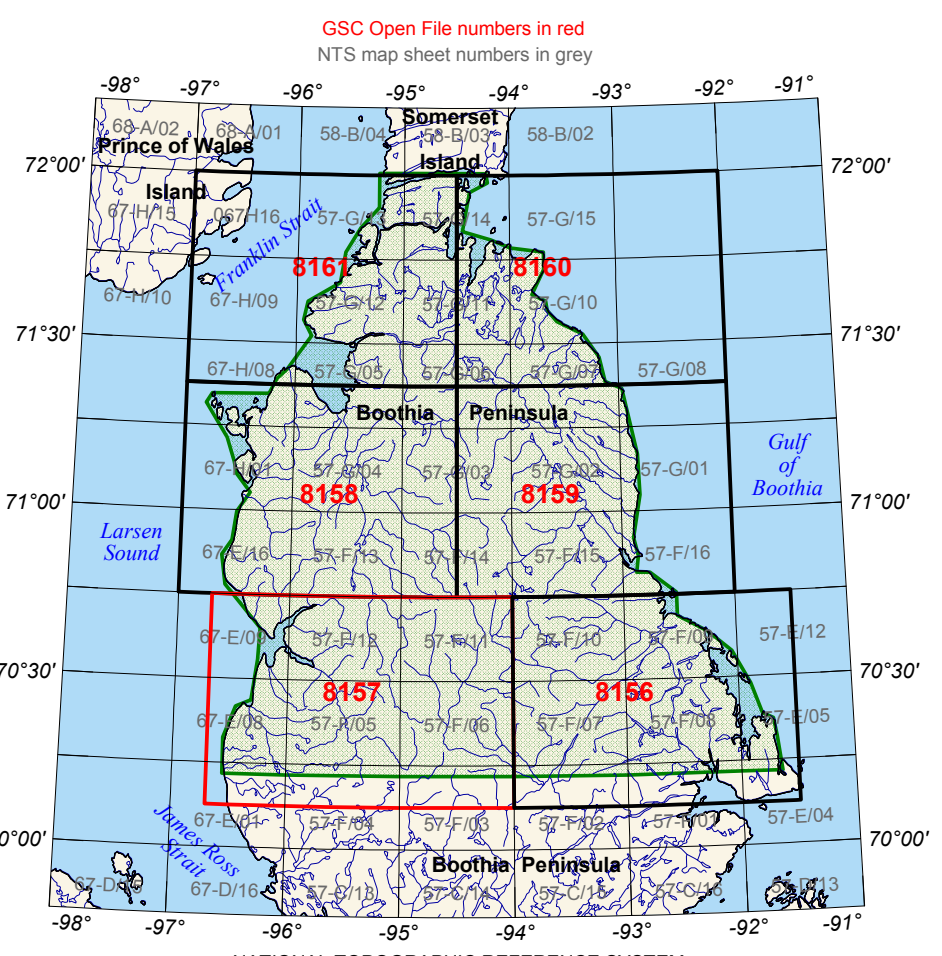
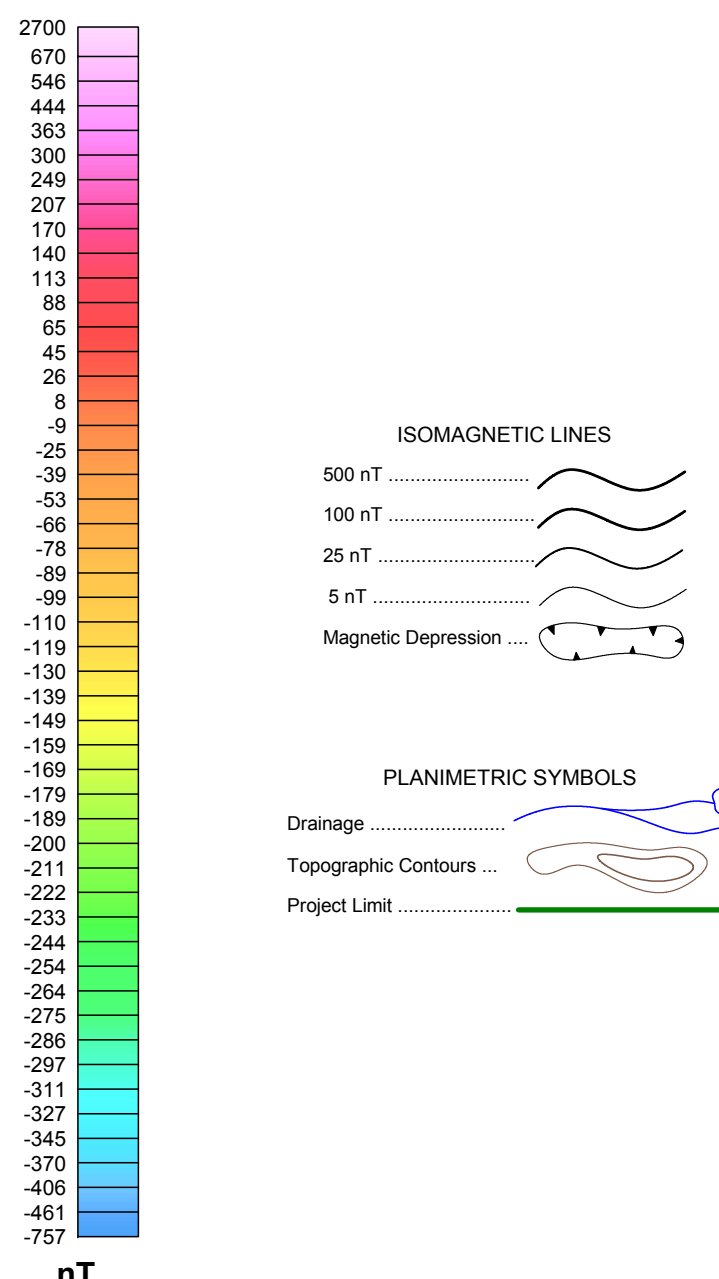
Residual Total Magnetic Field

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-350L and C-350V). 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 N80°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 leveled set of flight-line magnetic data. The leveled 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 GEOCAN (<http://geocan.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.nrcan.gc.ca/index_e.htm. 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: info@geopg.nrcan.gc.ca

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