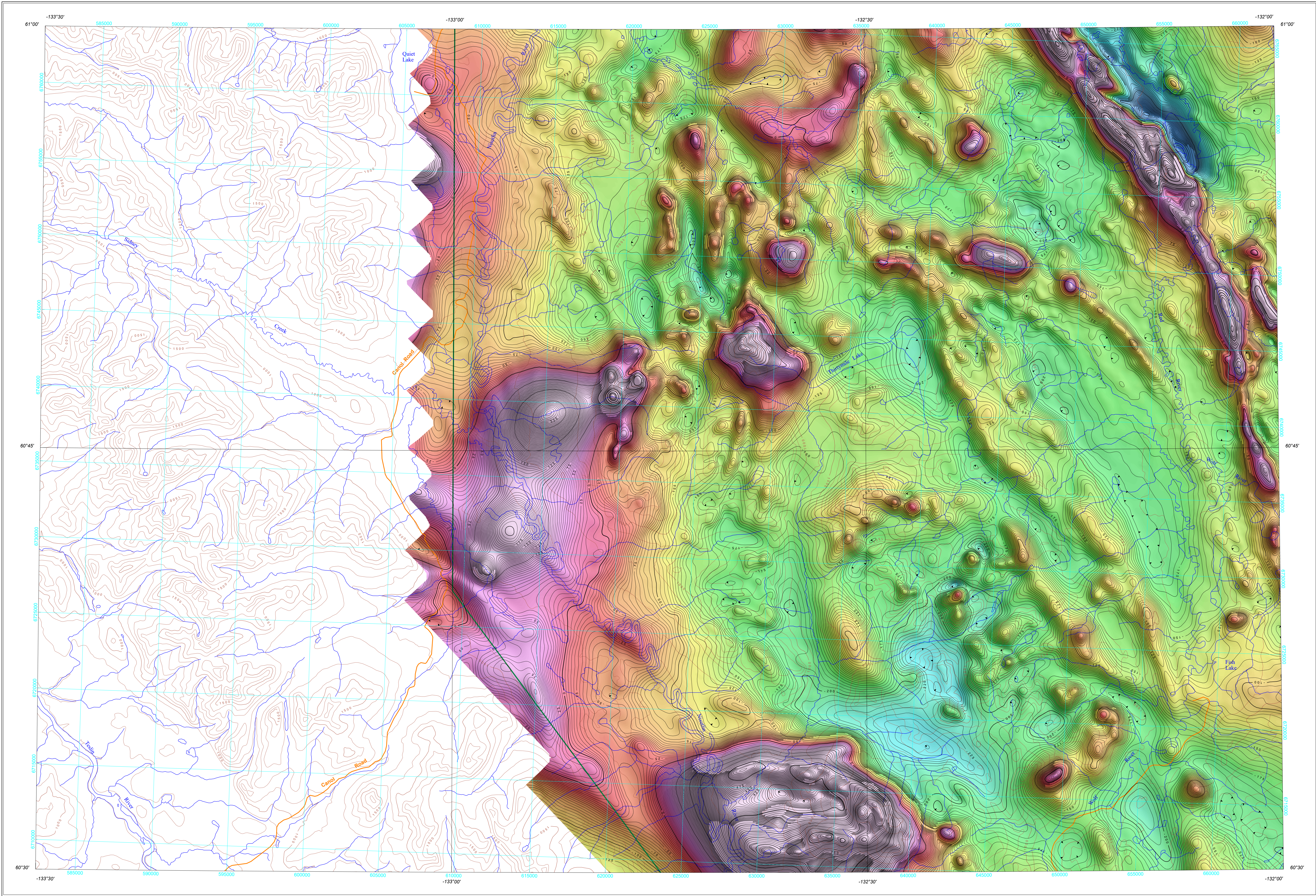


RESIDUAL TOTAL MAGNETIC FIELD



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Author: F. Kiss

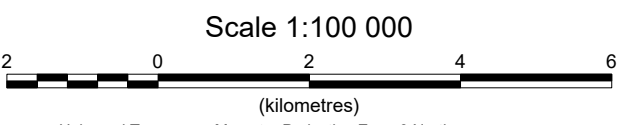
Data acquisition and data compilation by Novitem Inc., Mont-Saint-Hilaire, Quebec
Contract and project management by the Geological Survey of Canada, Ottawa, Ontario
Cartographic design by D. Oneschuk, Geological Survey of Canada
Permanent link: <https://doi.org/10.4095/314832>

GEOLOGICAL SURVEY OF CANADA OPEN FILE 8605
YUKON GEOLOGICAL SURVEY OPEN FILE 2019-8

RESIDUAL TOTAL MAGNETIC FIELD

AEROMAGNETIC SURVEY OF THE WOLF LAKE AREA

YUKON
Part of NTS 105-C (north half)



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Base map at the scale of 1:250 000 from Natural Resources Canada, with modifications
Elevations in metres above mean sea level

Residual Total Magnetic Field

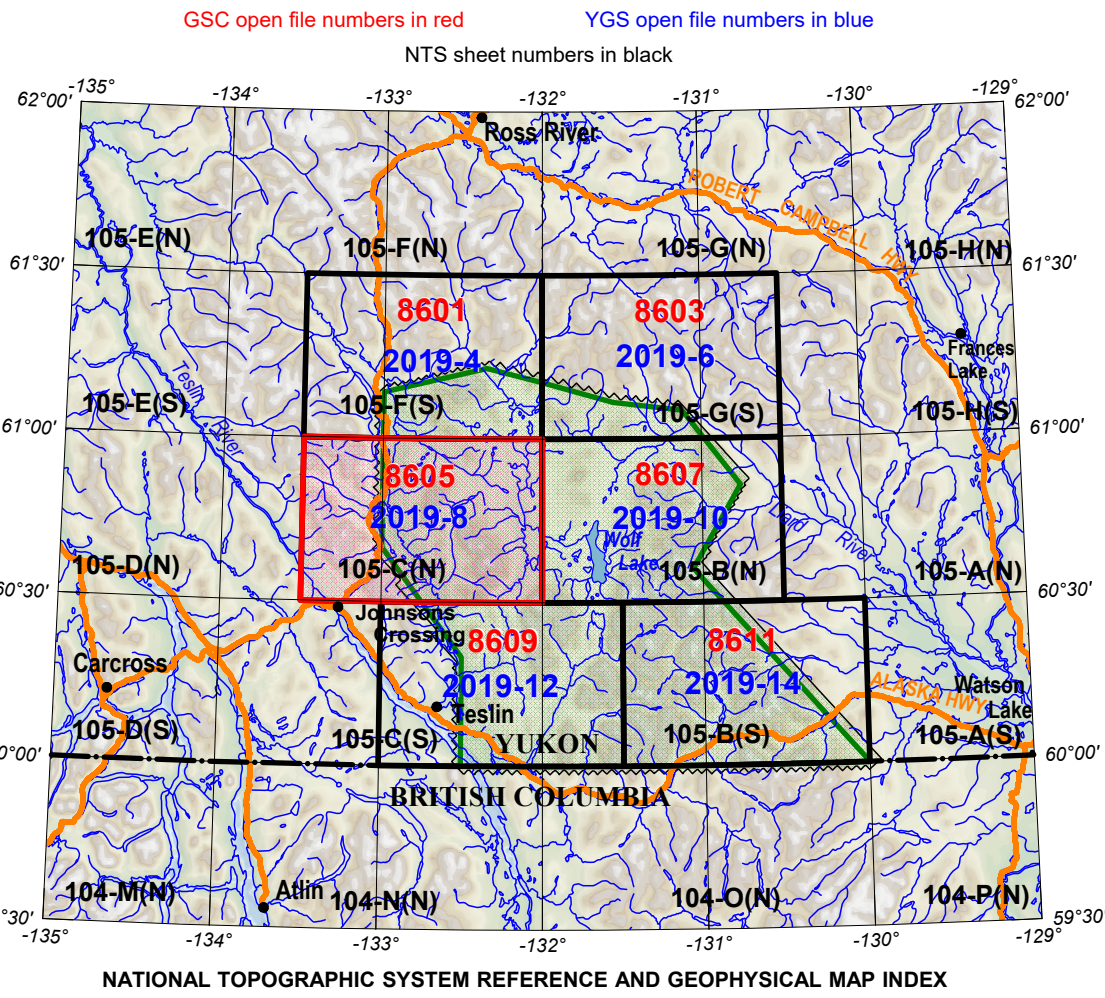
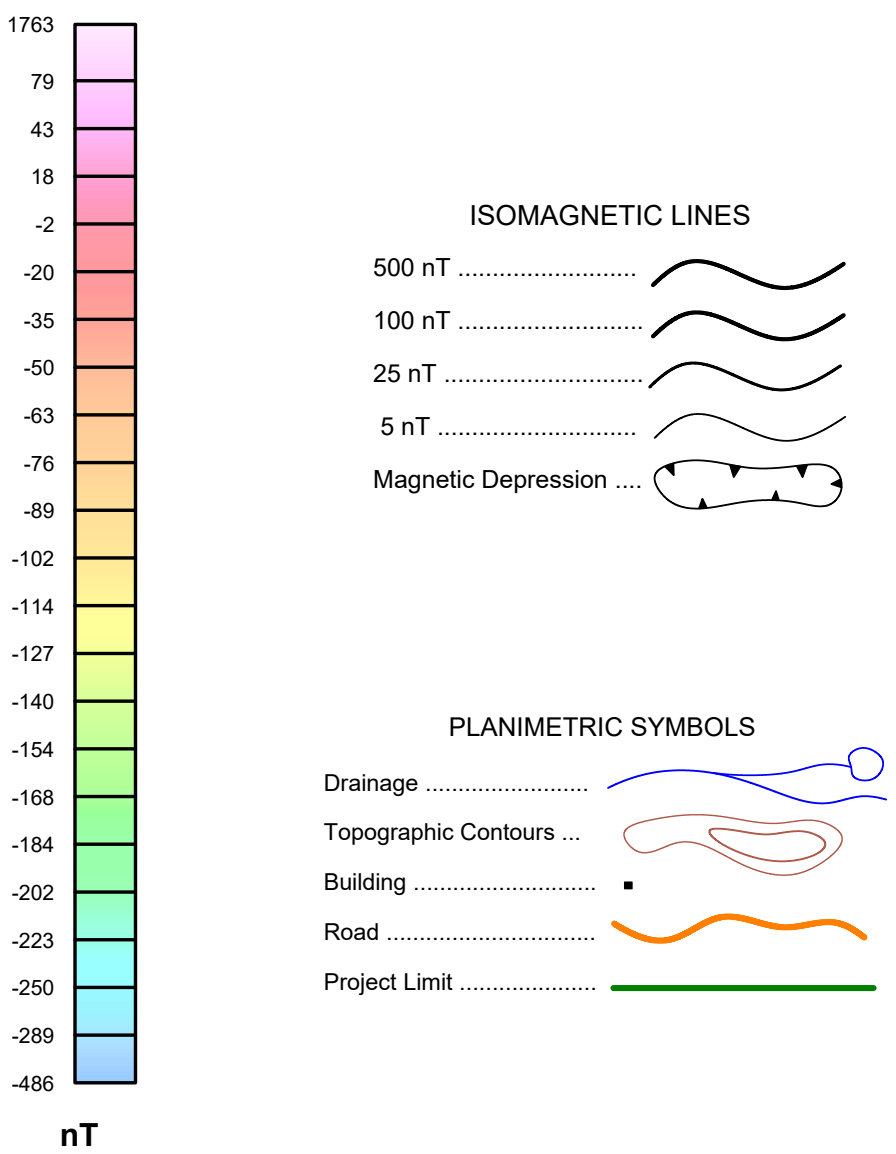
This map of the residual total magnetic field was derived from data acquired during an aeromagnetic survey carried out by Novitem Inc. from February 23, 2019 to April 2, 2019. The data were recorded using split-beam cesium vapour magnetometers (sensitivity = 0.005 nT) mounted in each of the tail booms of two Piper Navajo aircraft (C-FVNG and C-GJDD). 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 N45°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 1803 m for the year 2019.2 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://air.geoscan.nrcan.gc.ca/data/a.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: pfogg@gsd.nrcan.gc.ca

Copies of this map may also be obtained from the Yukon Geological Survey, Energy, Mines and Resources, Government of Yukon, P.O. Box 2703 (K-102), Whitehorse, Yukon, Y1A 2C6. Telephone: (867) 667-3201, email: geology@gov.yk.ca, website: <http://www.geology.gov.yk.ca>

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AEROMAGNETIC SURVEY OF THE WOLF LAKE AREA

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Geological Survey of Canada, Open File 8605;
Yukon Geological Survey Open File 2019-8.
Scale 1:100 000. <https://doi.org/10.4095/314832>

