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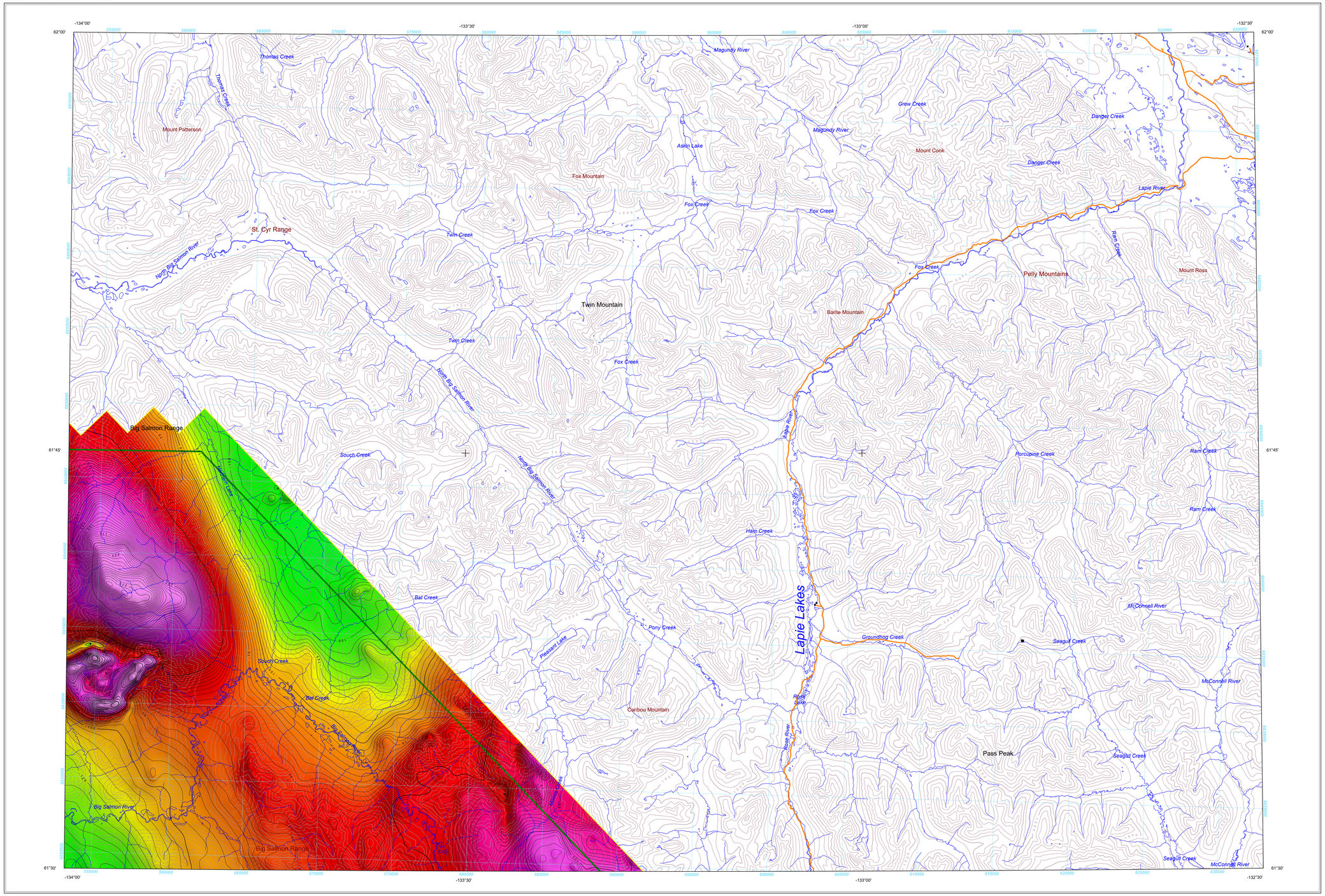
RESIDUAL TOTAL MAGNETIC FIELD



Residual Total Magnetic Field

This map of the residual total magnetic field was derived from data acquired during an aeromagnetic survey carried out by Geo Data Solutions GDS Inc. from January 12, 2018 to March 16, 2018. The data were recorded using split-beam cesium vapour magnetometers (sensitivity = 0.005 nT) mounted in each of the tail booms of a Beechcraft King Air aircraft (C-FLRB) and a Piper Navajo (C-GPTB). 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 1606 m for the year 2018.12 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.

Copies of this map and accompanying data 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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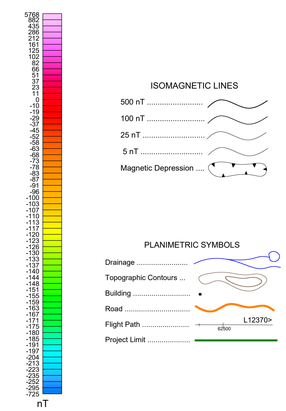

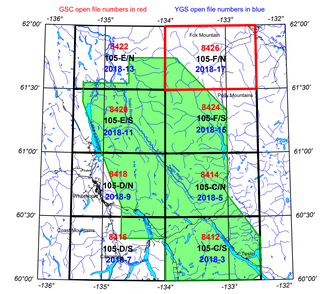

AEROMAGNETIC SURVEY OF THE MARSH LAKE AREA

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GEOLOGICAL SURVEY OF CANADA OPEN FILE 8426
YUKON GEOLOGICAL SURVEY OPEN FILE 2018-17

RESIDUAL TOTAL MAGNETIC FIELD

AEROMAGNETIC SURVEY OF THE MARSH LAKE AREA

YUKON

Part of NTS 105-F/North

Scale 1:100 000

2 0 2 4 6
(kilometres)

NAD83(CSRS) / UTM zone 8N

Universal Transverse Mercator Projection
North American Datum,1983

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Base map at the scale of the topographic maps, with modifications
Elevations in metres above mean sea level

Authors: F. Kiss and O. Boulanger

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Contract and project management by the
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Cartographic design by I. D'Amours

Permanent link: https://doi.org/10.4095/308237

LOCATION MAP

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