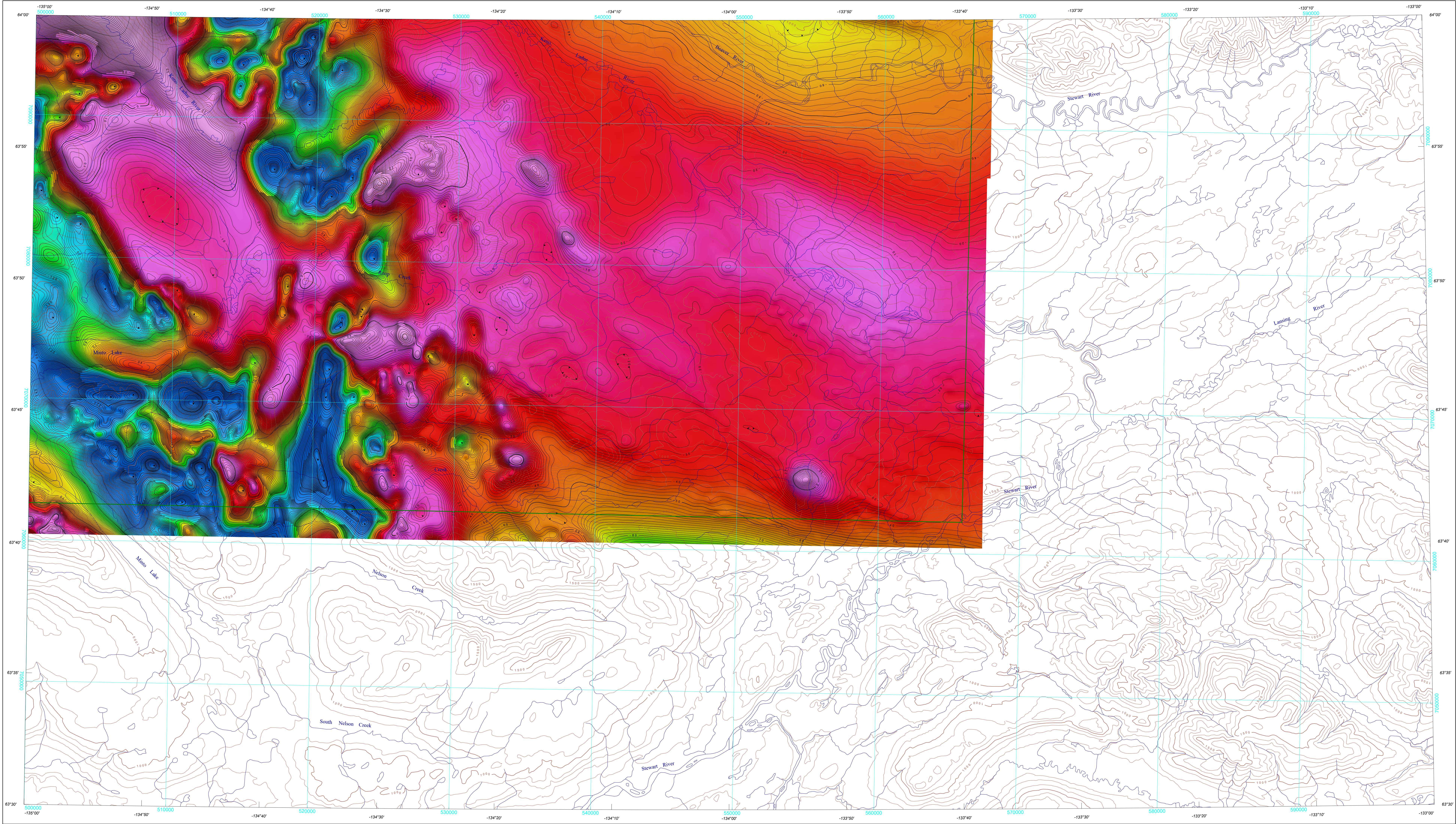


RESIDUAL TOTAL MAGNETIC FIELD



Residual Total Magnetic Field

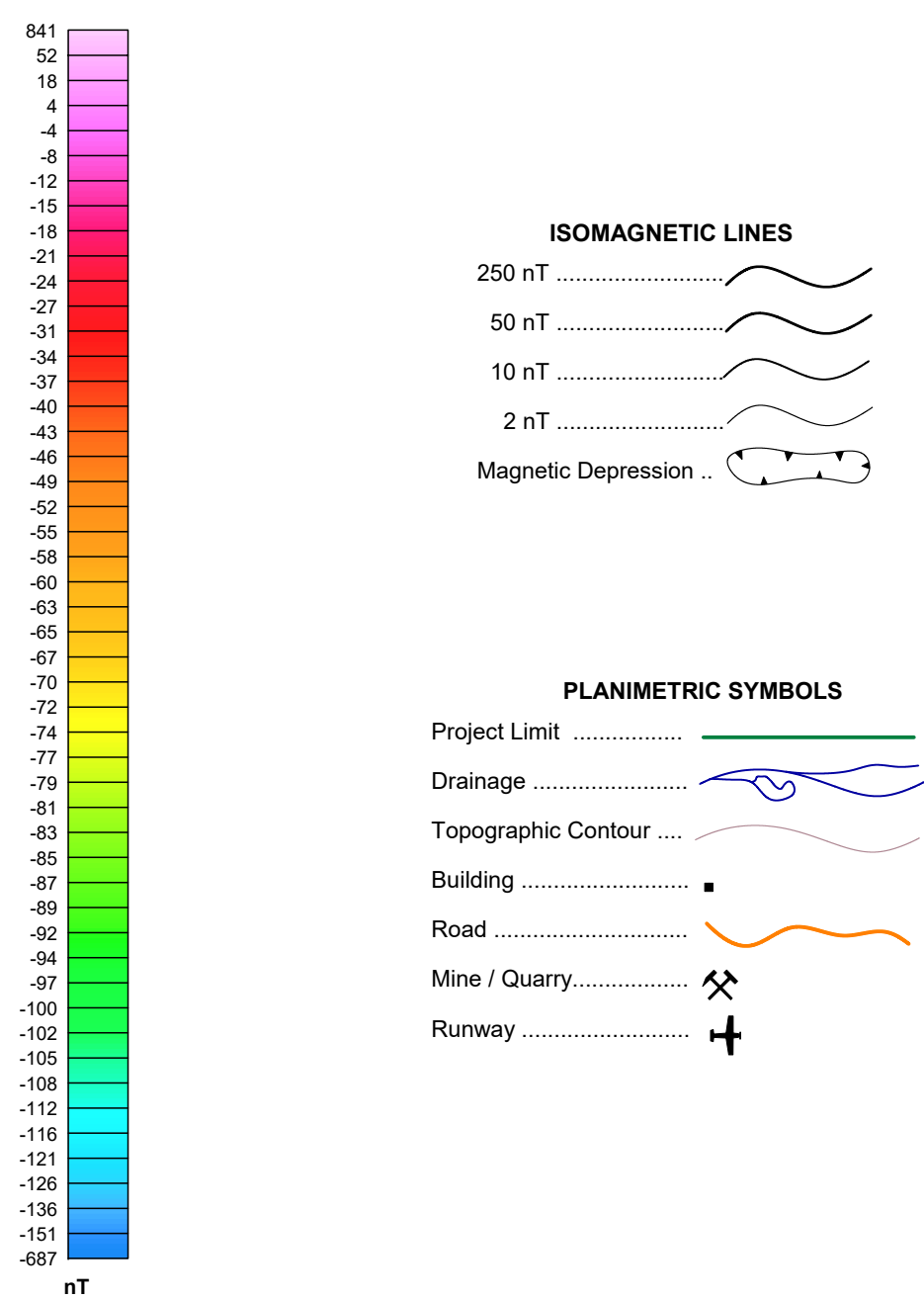
This map of the Residual Total Magnetic Field was derived from data acquired during an aeromagnetic survey carried out by Geo Data Solutions (GDS) Inc. from January 19, 2020 to March 28, 2020. The data were recorded using a split-beam cesium vapour magnetometer (sensitivity = 0.005 nT) mounted in the tail boom of a Beechcraft King Air aircraft (C-119). The nominal traverse and control line spacing were, respectively, 400 m and 2400 m, and the aircraft flew at a nominal terrain clearance of 150 m. Traverse lines were oriented N0°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 computed and 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 1500 m for the year 2020.2 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://gdr.agr.nrcan.gc.ca>. For more information about this survey, please contact the Geophysical Data Centre, Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0S8. Telephone: (613) 995-5326; email: [nrcan.info@info@nrcan.gc.ca](mailto:nrcan.info@info@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 3703 (K-101), Whitehorse, Yukon, Y1A 2C5. Telephone: (867) 667-3201; email: [geology@gov.yk.ca](mailto:geology@gov.yk.ca); website: <http://www.geology.gov.yk.ca>.

Acknowledgements

The author thanks the field crew chief, Saleh Elmoussaoui (Geo Data Solutions GDS Inc.) for his cooperation and for his able technical assistance for the duration of this survey contract; Douglas Oneschuk (GSC) for his cartographic design expertise and Mark Pilkington (GSC) for his helpful comments and suggestions to improve the maps.



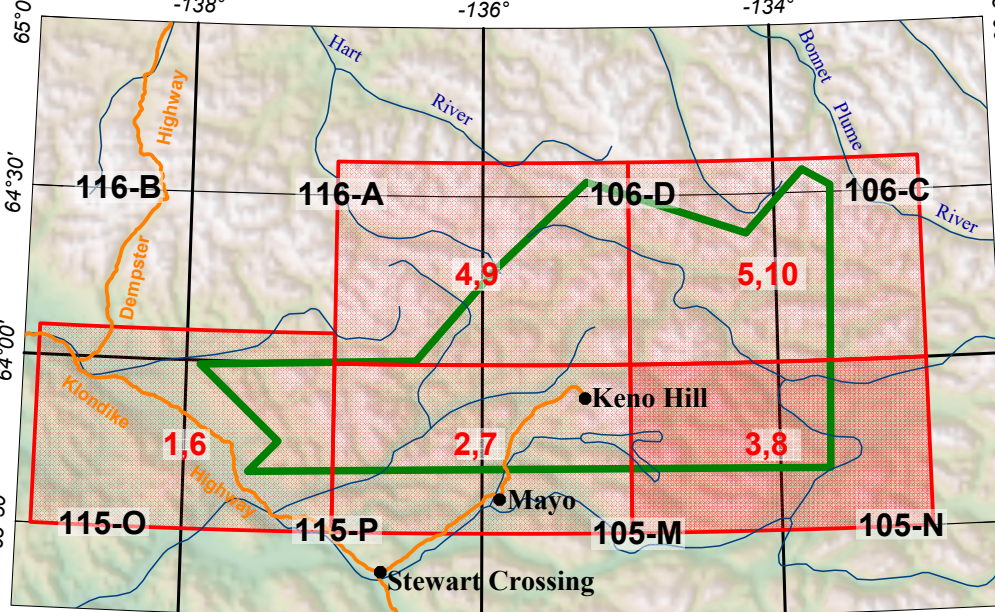
MAP SHEET SUMMARY

- Sheet 1: Residual Total Magnetic Field, parts of NTS 115-P (north half) and 116-A (south half)
- Sheet 2: Residual Total Magnetic Field, parts of NTS 105-M (north half) and 115-P (north half)
- Sheet 3: Residual Total Magnetic Field, parts of NTS 105-M (N (north halves))
- Sheet 4: Residual Total Magnetic Field, parts of NTS 116-A (south half) and 106-D
- Sheet 5: Residual Total Magnetic Field, parts of NTS 106-C, D
- Sheet 6: First Vertical Derivative of the Magnetic Field, parts of NTS 115-P (north half) and 116-A (south half)
- Sheet 7: First Vertical Derivative of the Magnetic Field, parts of NTS 105-M (north half) and 115-P (north half)
- Sheet 8: First Vertical Derivative of the Magnetic Field, parts of NTS 105-M (N (north halves))
- Sheet 9: First Vertical Derivative of the Magnetic Field, parts of NTS 116-A (south half) and 106-D
- Sheet 10: First Vertical Derivative of the Magnetic Field, parts of NTS 106-C, D

GSC Open File 8728

YGS Open File 2020-7

Sheet numbers in red



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND GEOPHYSICAL MAP INDEX

AEROMAGNETIC SURVEY OF THE NASH CREEK AREA  
YUKON

Author: F. Kiss

Data acquisition and data compilation by  
Geo Data Solutions (GDS) Inc. Level, Quebec.  
Contract and project management by the  
Geological Survey of Canada, Ottawa, Ontario

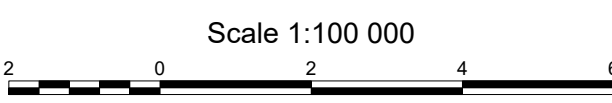
Digital cartography by D. Oneschuk, Geological Survey of Canada

Permanent link: <https://doi.org/10.4095/326147>

GEOLOGICAL SURVEY OF CANADA OPEN FILE 8728  
YUKON GEOLOGICAL SURVEY OPEN FILE 2020-7

AEROMAGNETIC SURVEY OF THE NASH CREEK AREA  
YUKON  
PARTS OF NTS 105-M, N, 106-C, D, 115-P AND 116-A

RESIDUAL TOTAL MAGNETIC FIELD  
PARTS OF NTS 105-M, N (NORTH HALVES)



Scale 1:100 000

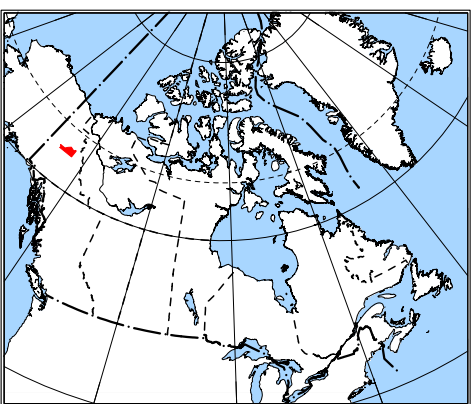
WGS84/IGRF 2020 zone 18

Universal Transverse Mercator Projection  
North American Datum 1983

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

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MAP LOCATION

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