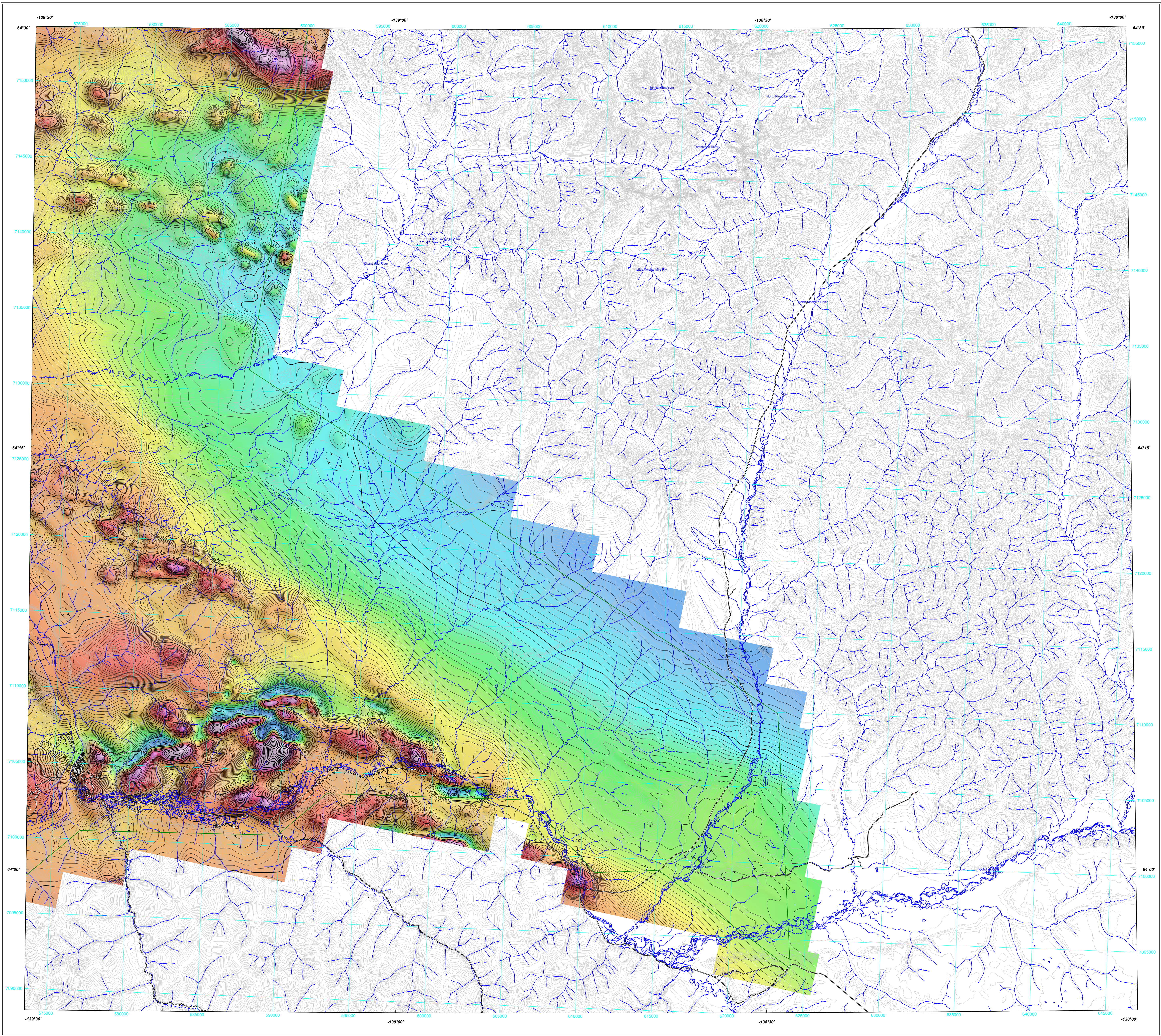




RESIDUAL TOTAL MAGNETIC FIELD



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

GEOLOGICAL SURVEY OF CANADA OPEN FILE 7636
YUKON GEOLOGICAL SURVEY OPEN FILE 2014-4

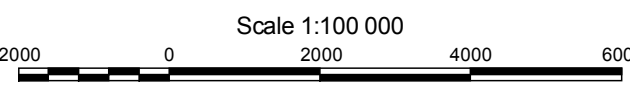
RESIDUAL TOTAL MAGNETIC FIELD

AEROMAGNETIC SURVEY OF THE DAWSON AREA

Authors: F. Kiss and M. Coyle

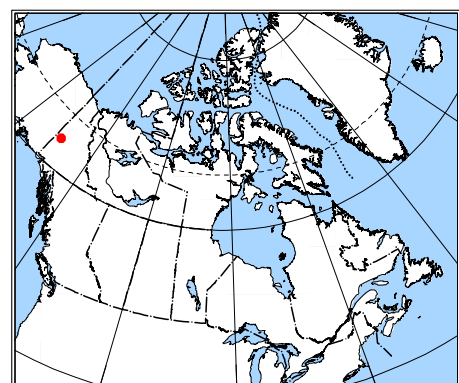
Data acquisition, data compilation and map production by
Goldak Airborne Surveys, Saskatoon, Saskatchewan
Contract and project management by
the Geological Survey of Canada, Ottawa, Ontario.

NTS parts of 115-O/14, 115-O/15, 115-O/16, 116-B/1, 116-B/2, 116-B/3, 116-B/6 and 116-B/7
YUKON



Universal Transverse Mercator Projection
North American Datum 1983

Other Map(s) the Queen in Right of Canada, as Represented by the Minister of Natural Resources Canada, 2014
Digital topographic data from Natural Resources Canada



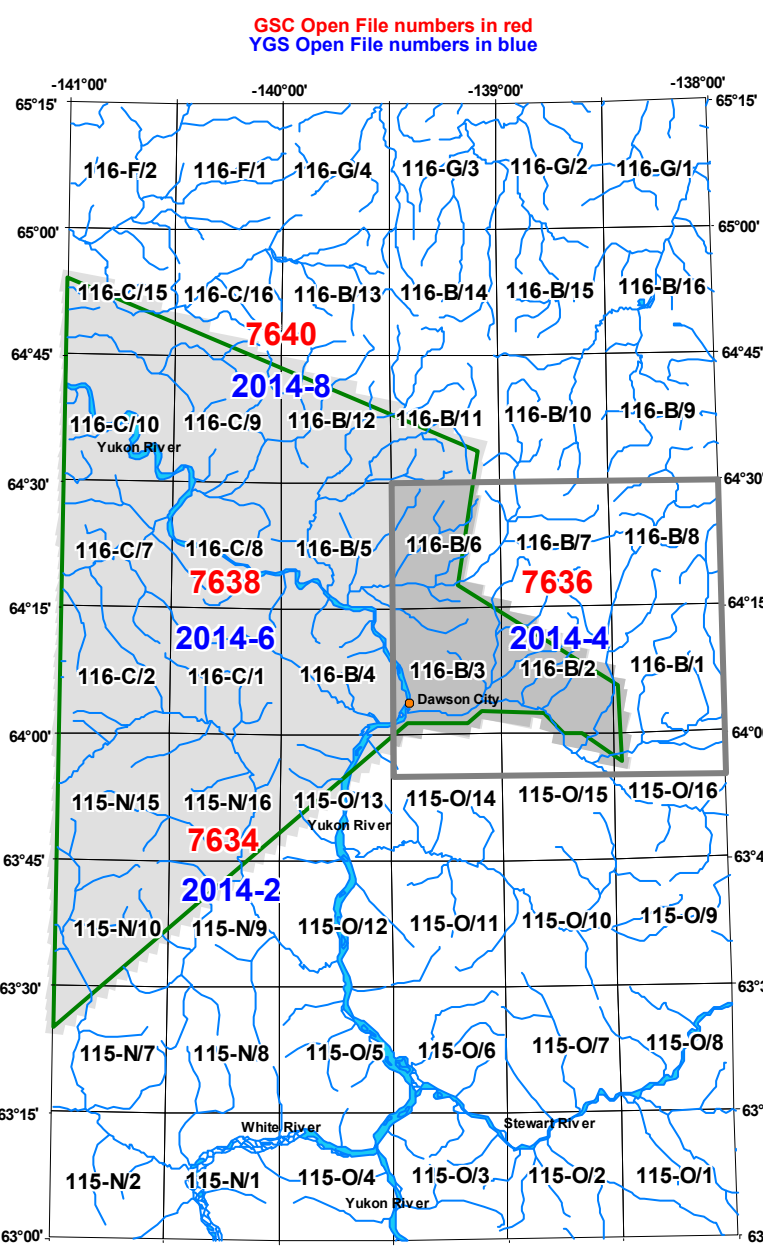
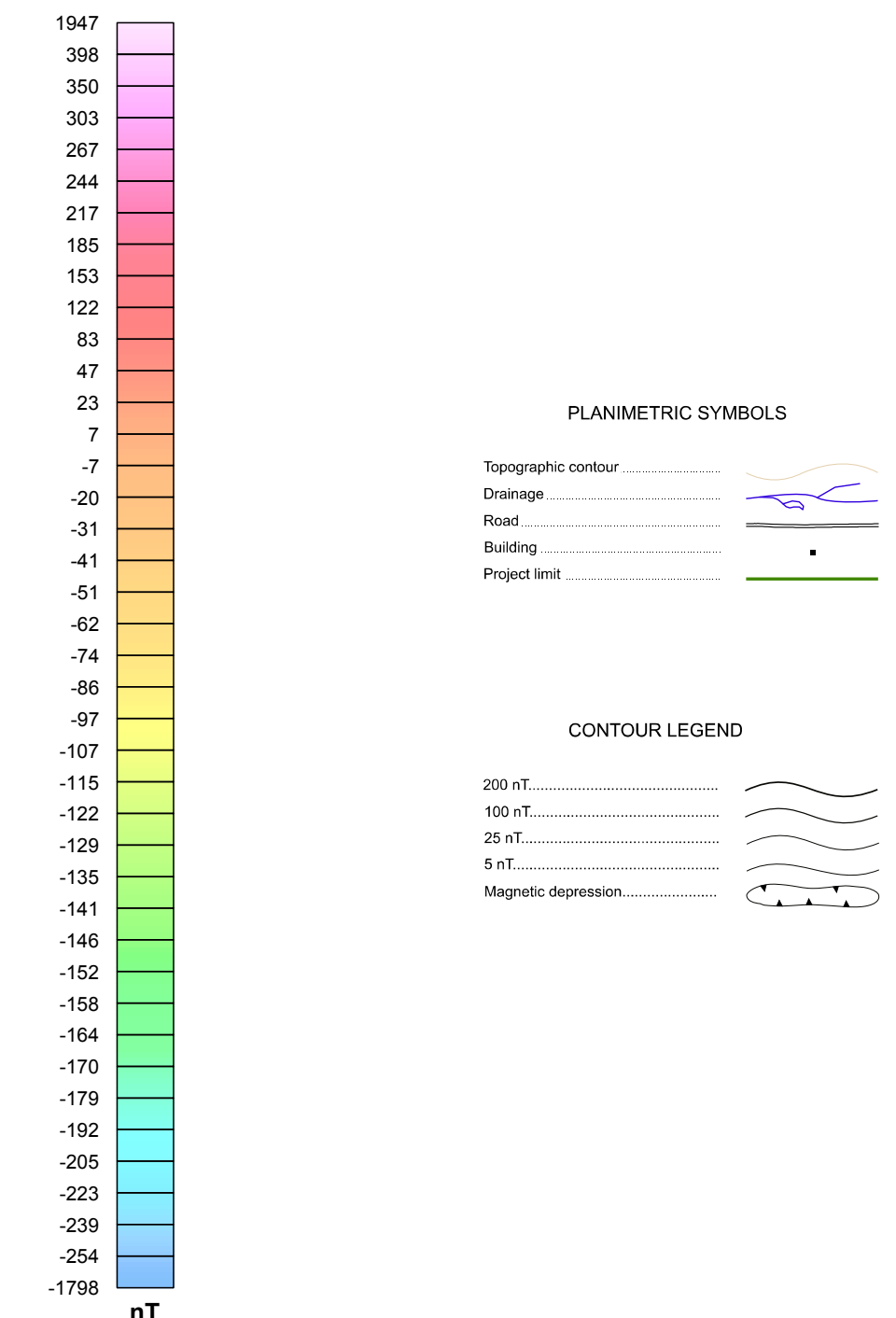
LOCATION MAP

Residual Total Magnetic Field

This map of the residual total magnetic field was derived from data acquired during an aeromagnetic survey carried out by Goldak Airborne Surveys from February 17 to March 21, 2014. 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-JBB and C-JBG). The nominal traverse and control line spacings were, respectively, 400 m and 2400 m and the aircraft flew at a nominal terrain clearance of 125 m. Traverse lines were oriented at N10°E with orthogonal control lines. The flight path was recovered following post-flight differential corrections to the raw Global Navigational Satellite System (GNSS) 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 1152.3 m for the year 2014.17 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.

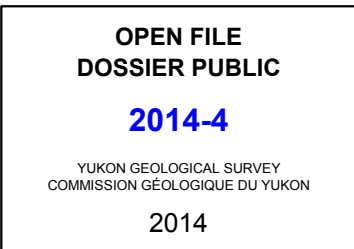
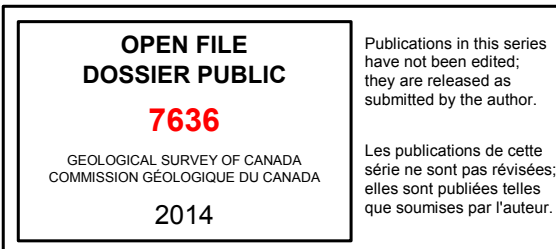
A digital version of this map can be downloaded, at no charge, from Natural Resources Canada's Geoscience Data Repository (MIRAGE) at http://apps1.gdr.nrcan.gc.ca/mirage/mirage_index.asp. Corresponding digital profile and gridded data as well as similar data for adjacent airborne geophysical surveys are available from Natural Resources Canada's Geoscience Data Repository for Aeromagnetic data at http://gdr.gdr.nrcan.gc.ca/index_a.html. The same products are also available, for a fee, from the Geophysical Data Centre, Geological Survey of Canada, 615 Booth Street, Ottawa, Ontario K1A 0E9. Telephone: (613) 995-5326; email: mtrigo@gdr.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 (6102), Whitehorse, Yukon, Y1A 2C6. Telephone: (867) 667-3201; email: geology@gov.yk.ca. Web site: <http://data.geology.gov.yk.ca/>.



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND GEOPHYSICAL MAP INDEX

AEROMAGNETIC SURVEY OF THE DAWSON AREA



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116-B/2, 116-B/3, 116-B/6 and 116-B/7, Yukon,
Geological Survey of Canada, Open File 7636,
Yukon Geological Survey, Open File 2014-4,
Scale 1:100 000.