

Parts of NTS 58-C/3, 4, 5 and 6

NUNAVUT

Scale 1:100 000

NAD83 / UTM zone 15N

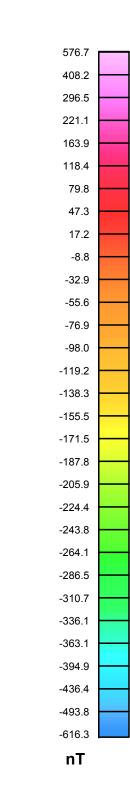
Universal Transverse Mercator Projection North American Datum 1983 ©Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources Canada, 2015 Digital topographic data from Natural Resources Canada

MAP LOCATION

Residual Total Magnetic Field

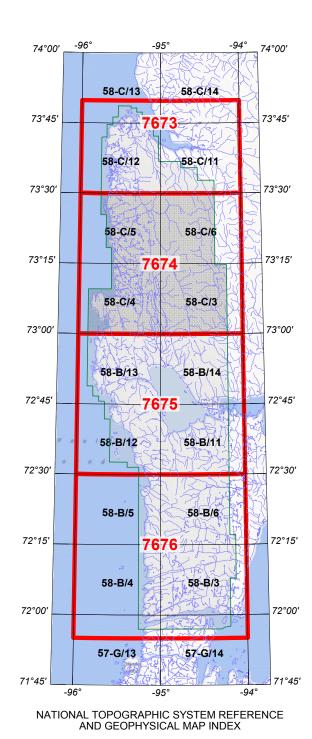
This map of the residual total magnetic field was derived from data acquired during an aeromagnetic survey carried out by EON Geosciences Inc. from May 30 to July 8, 2014. The data were recorded using split-beam cesium vapour magnetometers (sensitivity = 0.005 nT) mounted in each of the tail booms of a Piper Cheyenne II aircraft (C-GFON) and a Cessna 206 aircraft (C-FTPN). The nominal traverse line spacings were 400 m and 500 m. The nominal control line spacing was 2400 m. The aircraft flew at a nominal terrain clearance of 150 m. Traverse lines were oriented E-W 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 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 399.88 m for the year 2014.465 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 GeoGratis portal at http://geogratis.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, 615 Booth Street, Ottawa, Ontario K1A 0E9. Telephone: (613) 995-5326, email: infoqdc@agg.nrcan.gc.ca.

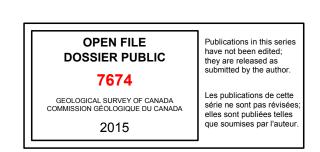


ISOMAGNETIC LINES Magnetic Depression

PLANIMETRIC SYMBOLS Topographic Contour



AEROMAGNETIC SURVEY OF SOMERSET ISLAND AREA



Recommended citation: Coyle, M. and Oneschuk, D., 2015. Residual total magnetic field,
Aeromagnetic survey of Somerset Island Area,
Parts of NTS 58-C/3, 4, 5 and 6, Nunavut; Geological Survey of Canada, Open File 7674;