GDS 1087 METADATA

GENERAL INFORMATION

Title
Ontario Airborne Geophysical Surveys, Magnetic and Electromagnetic Data, Grid and Profile Data (ASCII and Geosoft® Formats) and Vector Data, Biscotasing Area

Alternate Title
GDS1087

Author(s)
Ontario Geological Survey

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Abstract
Geophysical Data Set (GDS) 1087 includes the results of an airborne magnetic and electromagnetic survey, totalling 6146 line-kilometres, flown over the Biscotasing area of northeastern Ontario. The survey covers an area approximately 1058 square kilometres, and was flown by SkyTEM Canada Inc. (Woodstock, Ontario).

This geophysical data set includes 1) airborne magnetic and electromagnetic profile data—both raw and processed—in ASCII (*.xyz*) and Geosoft® (*.gdb*) file formats; 2) 40 m × 40 m grids in ASCII (*.gxf*) and Geosoft® (*.grd*) file formats of the magnetic and electromagnetic profile data and derivatives; 3) database of picked electromagnetic anomalies in ASCII (*.csv*) and Geosoft® (*.gdb*) file formats; 4) database of Keating correlation coefficient anomalies in ASCII (*.csv*) and Geosoft® (*.gdb*) file formats; 5) GeoTIFF (*.tif*) images of magnetic and electromagnetic grids; 6) vector (*.dxf*) files of flight path, EM anomalies, Keating anomalies and contours of the residual magnetic field, EM decay constant and apparent conductivity; and 7) the survey report in portable document format (*.pdf*).

The survey parameters are the following:
Survey type: Electromagnetic and Magnetic;
Survey date flown: December 6, 2019, to February 16, 2020;
Survey area: 1058 square kilometres;
Survey size: 6146 line-kilometres;
Flight-line spacing: 200 m;
Control-line spacing: 1500 m;
Aircraft nominal terrain clearance: 89 m;
Magnetic survey type: single sensor total field;
Magnetic sampling interval: 10 readings per second;
EM survey type: SkyTEM;
EM domain: TDEM;
EM height: 49 m;
VLF-EM: N/A;
Gamma-ray survey: N/A.

These data accompany geophysical Maps 83 000 to 83 013, which are available separately from the digital data set.

The following publications are associated with this publication: M83000, M83001, M83002, M83003, M83004, M83005, M83006, M83007, M83008, M83009, M83010, M83011, M83012, M83013

Additional information can be found within a readme file provided with the product.

Purpose or Objective
Airborne geophysics is an integral part and core function of the Ontario Geological Survey's (OGS) geoscience activities. This magnetic gradiometer survey was carried out as part of the Ontario Geological Survey's Precambrian bedrock mapping program to provide high-quality and high-resolution geophysical data to assist in mapping the bedrock geology of the area.

The objective of this product is to collect and disseminate geoscience information for Ontario.

Keywords
Geological Survey
Geology
Ministry of Energy, Northern Development and Mines
ENDM
Ministry of Northern Development and Mines
MNDM
Ontario Geological Survey
OGS
Geophysical Data Set
GDS
Geophysics, General
Geophysical
Magnetic and Electromagnetic (EM) Data
Airborne Electromagnetic (EM)
Airborne Electromagnetic (EM) and Magnetic (Total Field)
Airborne Magnetic (Residual)
High Resolution Total Field Magnetics
Electromagnetic (EM) Decay Constant
Apparent Conductivity
Keating Coefficients

Business Themes
Geological Survey
Geology

GEOGRAPHIC INFORMATION

Geographic bounding box (decimal degrees)

North bounding latitude:	47.7330°
West bounding longitude:	-82.8670°
East bounding longitude:	-82.0170°
South bounding latitude:	47.1830°

Description of Completeness: irregularly shaped study area - completeness not available

MAPPING INFORMATION:

Grid Coordinate System Used:	Universal Transverse Mercator
Map Projection:	Transverse Mercator
Horizontal Geodetic Datum:	NAD83
Vertical Datum:	Not Applicable
Horizontal Position Accuracy of Features:	Precise ±5 m
Vertical Position Accuracy of Features:	Precise ±5 m

DATA SOURCE INFORMATION

Data Source Type and Description
Includes Bibliographic Information: Product includes references to other sources of information

Data Source Type and Description
Direct Field Collection: Survey conducted from December 6, 2019 to February 16, 2020 by SkyTEM Canada Inc. (Woodstock, Ontario).

Current Status of the Data: Complete

Frequency of Changes or Additions to be made to the Data: Not Planned

CONSTRAINTS FOR USING THE DATA

Abbreviated Terms of Use.
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