

# GEOPHYSICAL DATA SET (GDS) 1086A METADATA

## GENERAL INFORMATION

**Official Name of the Data Set or Information Holding:** Ontario Airborne Geophysical Surveys, Magnetic Gradiometer and Gamma-Ray Spectrometric Data, Grid and Profile Data (ASCII Format) and Vector Data, Ramsey–Algoma Area

**Acronyms are Used to Identify the Data Set or Information Holding:** GDS1086A

**Describe the Data Set or Information Holding:**

Ontario Geological Survey (author)

This publication can be downloaded from GeologyOntario: see Distribution Information section.

Geophysical Data Set (GDS) 1086a includes the results of an airborne magnetic gradiometer and gamma-ray spectrometric survey, totalling 117,772 line-kilometres, flown over the Ramsey–Algoma area in northeastern Ontario. The survey covers an area approximately 26,058 square kilometres, and was flown by Sander Geophysics Ltd. (Ottawa, Ontario).

This geophysical data set includes airborne magnetic and gamma-ray spectrometric profile data—both raw and processed—in ASCII (.xyz) file format; 50 m × 50 m grids (in ASCII (.gxf) file format) of the magnetic and gamma-ray spectrometric (radiometric) data; databases of Keating correlation coefficient anomalies in ASCII (.csv) file format; databases of gamma-ray spectrometric (radiometric) profile data in ASCII (.xyz) file format; GeoTIFF (.tif) images of magnetic and gamma-ray spectrometric grids; vector (.dxf) files of flight path, Keating correlation coefficient anomalies and contours of the residual magnetic field; and a survey report and supporting documents in portable document format (.pdf).

These data accompany geophysical Maps 82950 to 82994, which are available separately from the digital data set.

### Survey Parameters:

Survey type: magnetic gradiometer and gamma-ray spectrometer

Date flown: June 20 to September 3, 2018

Survey conducted by: Sander Geophysics Ltd., Ottawa, Ontario

Survey size: 117,772 line-kilometres

Survey area: 26,058 square kilometres

Flight-line spacing: 250 m

Control-line spacing: 2000 m

Nominal aircraft terrain clearance: 100 m

Magnetic survey type: horizontal gradiometer  
Magnetic sampling interval: 10 readings per second  
EM survey type: N/A  
EM domain: N/A  
EM height: N/A  
VLF-EM: none  
Gamma-ray survey: 256-channel gamma-ray spectrometric

Additional information and metadata are found within a readme file provided with the product.

### **The Intended Use and Purpose for Collecting the Data Set or Information Holding:**

Airborne geophysics is an integral part and core function of the Ontario Geological Survey's (OGS) geoscience activities. This magnetic gradiometer and gamma-ray spectrometric 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.

### **CONSTRAINTS FOR USING THE DATA SET**

#### **Describe any Restrictions and Legal Prerequisites for Accessing the Data Set (Data Privacy/Security):**

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**Describe any Legislated or Legal Authority for Collecting the Data Set:** N/A

**Select the Level of Privacy for this Metadata Information:** Public

**Time Coverage:** March 4, 2019

**Time Coverage Comments:** Date of Publication.

**Enter or Select the Current Status of the Data Set:** Complete

**Enter or Select the Frequency with which Changes or Additions are Made to the Data Set:** Not Planned

**Enter the retention schedule number:** 9999

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Ontario Geological Survey  
OGS  
Geophysical  
Aeromagnetic  
Airborne Magnetic (Residual)  
Airborne Magnetic (Gradient)  
Airborne Magnetic (Total)  
Airborne Gamma Ray

**Business Theme:**

Geological Survey  
Geology

**GEOGRAPHIC INFORMATION**

**Selected geographic type:** Bounding Box only

North Bounding Latitude: 47° 38'

South Bounding Latitude: 48° 08'

West Bounding Longitude: -83° 39'

East Bounding Longitude: -81° 26'

**Geographic 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:** +/- 10 m

**Vertical Position Accuracy of Features:** Not Applicable

## DATA SOURCE INFORMATION

**Data Source Type:** Includes Bibliographic Information

**Describe for the Source Data Contribution:** Product includes references to other sources of information

**Data Source Type:** Direct Field Collection

**Source Data Set Description:** Survey flown from June 20 to September 3, 2018, by Sander Geophysics Ltd. (Ottawa, Ontario)

## CONTACT INFORMATION

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**METADATA**

**Date of this Metadata Description/Update:** February 11, 2019

**Date when Metadata Should be Reviewed:** December 31, 2019

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