

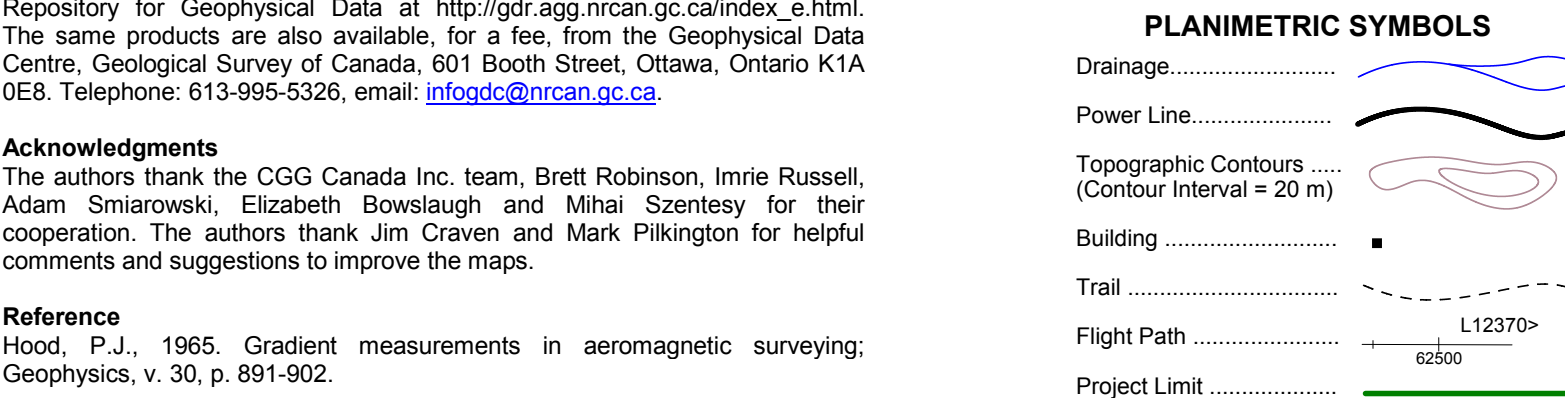
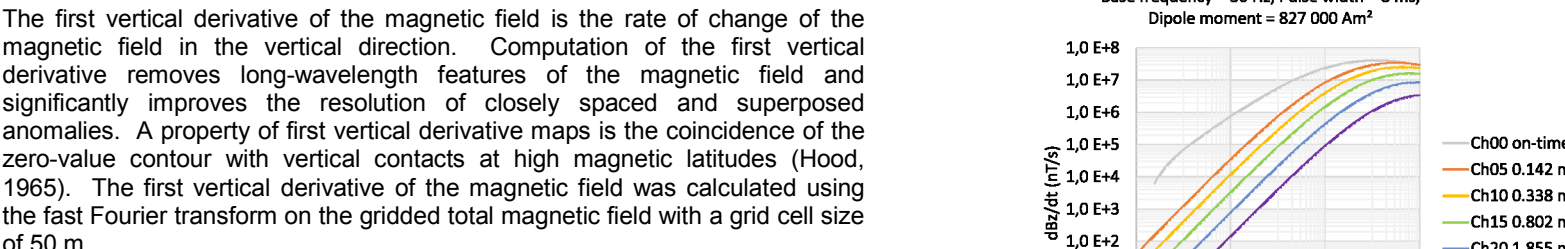
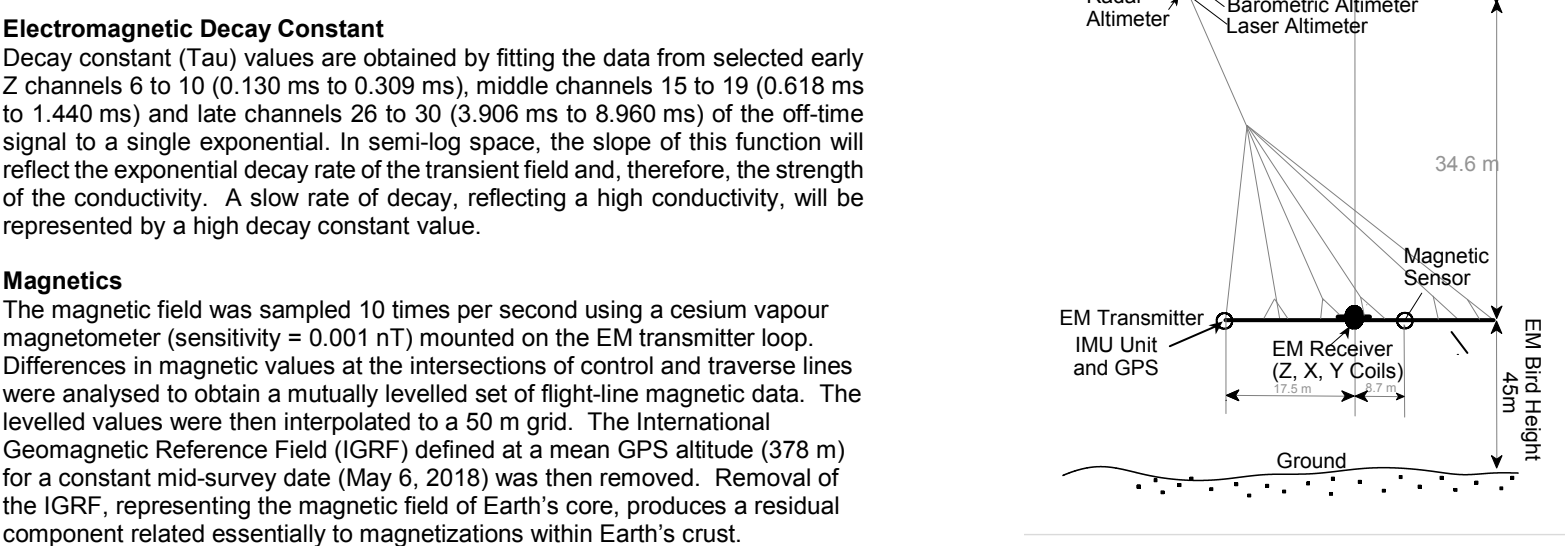
Technical Information

This map was compiled from data acquired during an airborne electromagnetic/magnetic survey carried out by CCG Canada Inc. utilizing CCG's HELITEM 35C Time-Domain Electromagnetic (TDEM) system. The system was mounted on a Eurocopter AS350 B3 helicopter (registration: C-GFUG) and the survey was carried out between March 30 and June 13, 2018. The helicopter flight altitude was maintained at an average ground clearance of 80 m with an average speed of 90 km/h. Aircraft navigation used a 14-channel NovAtel dual frequency GPS system. Post-flight differential corrections were applied to finalize the flight path position. A vertically mounted video camera was used to record images of the ground. The radar height was recorded ten times per second using a Honeywell altimeter and the barometric altitude was recorded five times per second using a Motorola precision pressure transducer. The magnetic data were recorded 10 times per second using a Sincritex CS-3-A cesium magnetometer.

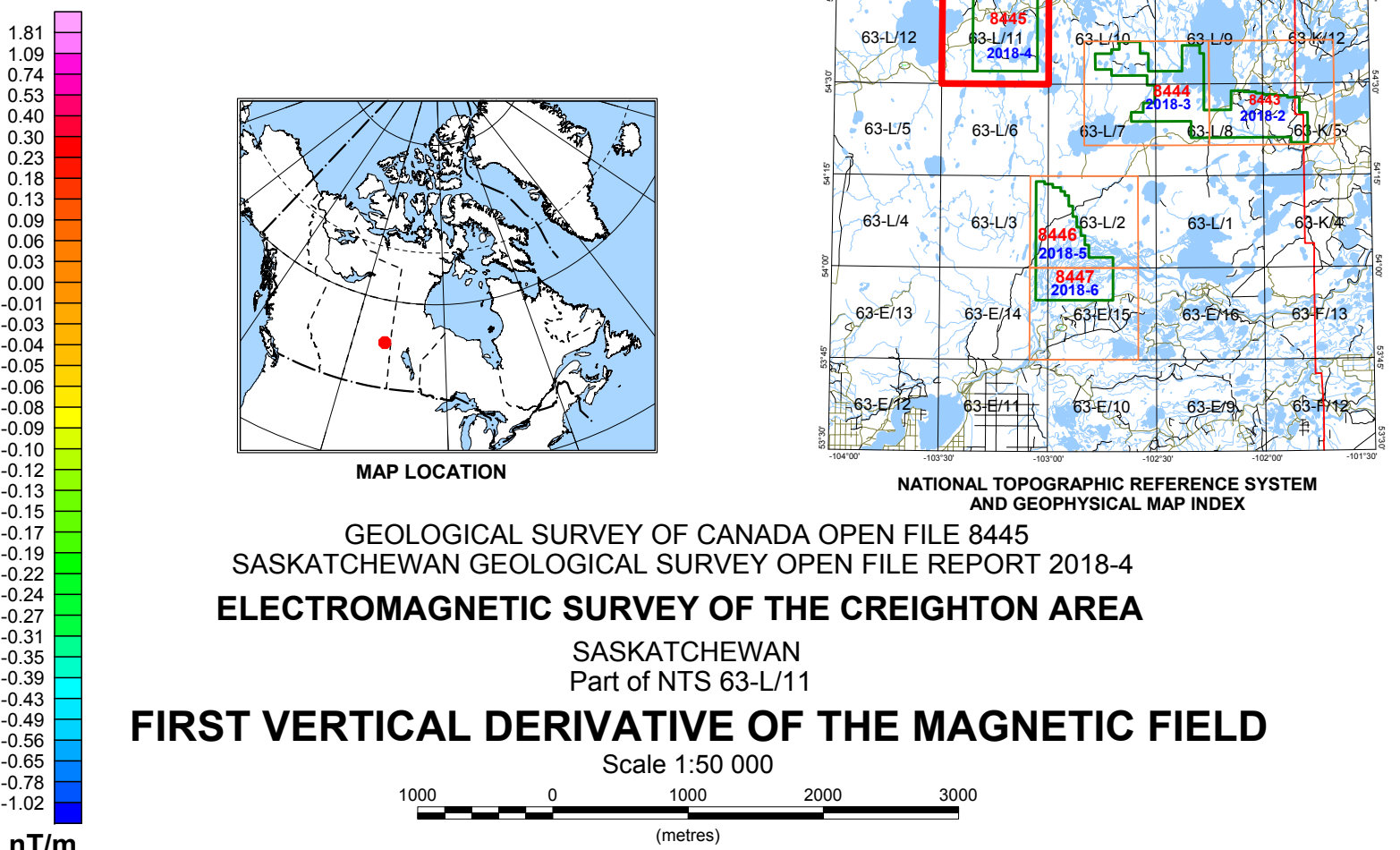
Traverse line azimuth	N88°E
Traverse line spacing	200 m
Tie line azimuth	N358°E
Tie line spacing	1200 m
Aircraft average clearance	80 m
EM transmitter nominal clearance	45 m
Magnetic sensor nominal clearance	45 m
EM receiver nominal clearance	45 m

Electromagnetic System Specifications:

Base frequency	30 Hz
Waveform	Half sinusoid
Transmitter pulse width	8 ms
Transmitter area	962 m ²
Transmitter off-time	8.9 ms
Transmitter loop diameter	35 m
Transmitter current	215 A
Dipole moment (approximately)	827 000 Am ² (4 turns)
Windowed data sampling rate	10 Hz
Receiver	3-component induction coil (Z, X, Y)
Measured response	Voltage (dBd)
Digital recording	Z, X, Y: 5-30 channels
1 st off-time Z channel	Channel 5 at ~8 ms after pulse turn off
Tx-Rx configuration	In-loop concentric



- Reference
- Hood, P.J., 1965. Gradient measurements in aeromagnetic surveying. Geophysics, v. 30, p. 891-902.
- Authors: O. Boulanger, F. Kiss, M. Coyle and O. Mahmoudi
- Data acquisition and data compilation by CCG Canada Limited, Toronto, Ontario. Contract, project management and map production by the Geological Survey of Canada, Ottawa, Ontario
- Permanent link: <https://doi.org/10.4095/308434>
- Sheet 1: Time Decay Constant (Tau-2) - Early Channels (6 to 10)
- Sheet 2: Time Decay Constant (Tau-2) - Mid Channels (15 to 19)
- Sheet 3: Time Decay Constant (Tau-2) - Late Channels (26 to 30)
- Sheet 4: Apparent Conductivity - Early Channel 5 (0.118 ms)
- Sheet 5: Apparent Conductivity - Mid Channel 16 (0.802 ms)
- Sheet 6: Apparent Conductivity - Late Channel 30 (8.272 ms)
- Sheet 7: Residual Total Magnetic Field
- Sheet 8: First Vertical Derivative of the Magnetic Field
- Sheet 9: Interpretation



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2018

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2018