

Technical Information

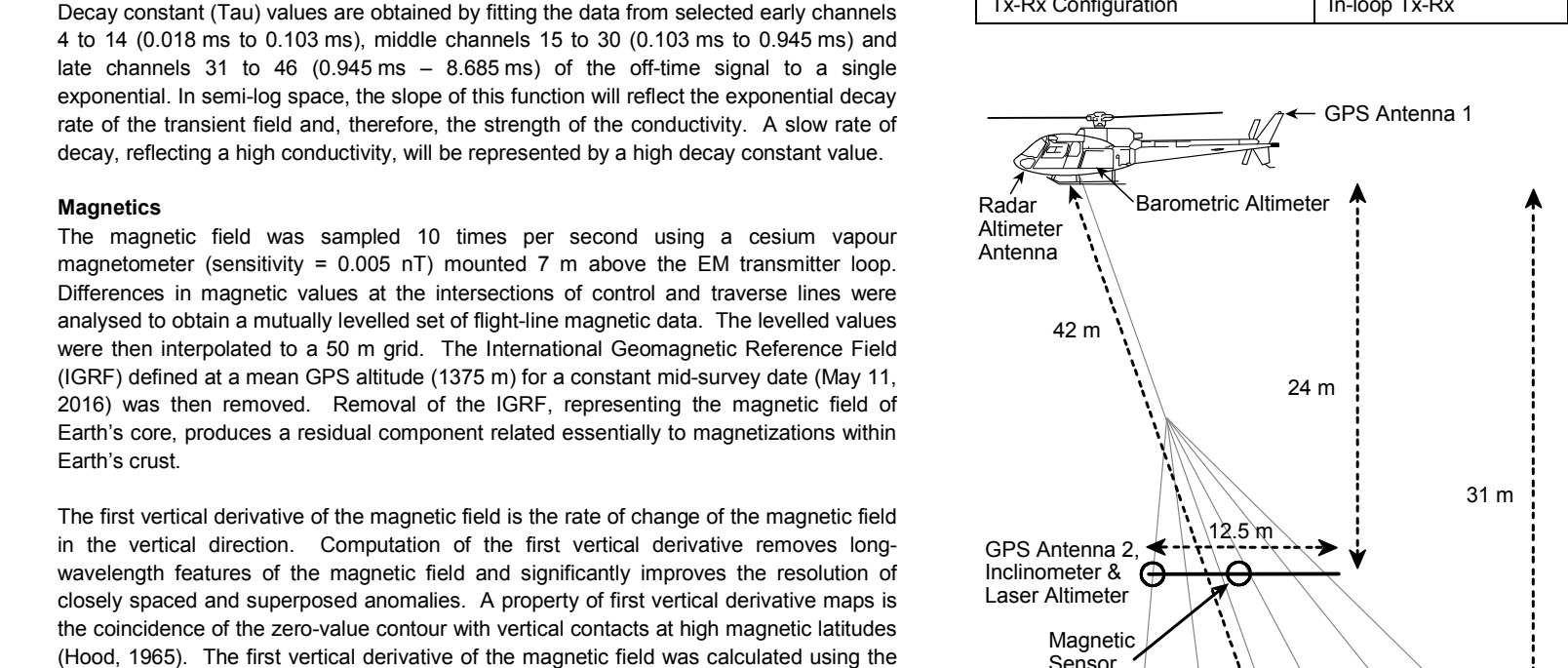
This map was compiled from data acquired during an airborne electromagnetic (EM) survey of the Livingstone Creek area by the Yukon Geological Survey (YGS) in 2016. The survey was conducted using a helicopter-mounted EM system. The system was mounted on a Eurocopter AS350 B3 helicopter. The helicopter flight altitude was maintained at an average ground clearance of 150 m with an average speed of 90 km/h. Aerial navigation was provided by a Garmin 1500 dual frequency GPS. Post-flight differential corrections were applied to the flight path using a ground-based GPS station. The EM system consists of a transmitter and a receiver. The transmitter was mounted on the helicopter and the receiver was mounted on a boom extending from the helicopter. The receiver was mounted on a boom extending from the helicopter. The receiver was mounted on a boom extending from the helicopter. The receiver was mounted on a boom extending from the helicopter.

Electromagnetic System Specifications:

Base Frequency	30 Hz
Transmitter Pulse Width	5.11 ms
Transmitter Area/Effective Area	530.9 m ² / 2123.7 m ²
Transmitter Current	111.7 A
Transmitter Loop Diameter	26 m
Transmitter Current	221 A
Receiver Current	475.00 A (4 turns)
Receiver Loop Diameter	10 m
Receiver	3-component induction coil (Z, X, Y)
Z and X coil diameter (turns)	1.2 m / 100 turns & 0.30 m / 30 turns
Measured Response	Voltage (dB) 2°-40°/0.0001 V
Digital recording	20-bit/1000 samples
Channel #	1-20
1° off zone Z channel	after pulse turn off
1° off zone X channel	in-pulse 1/4th

Electromagnetic System Specifications:

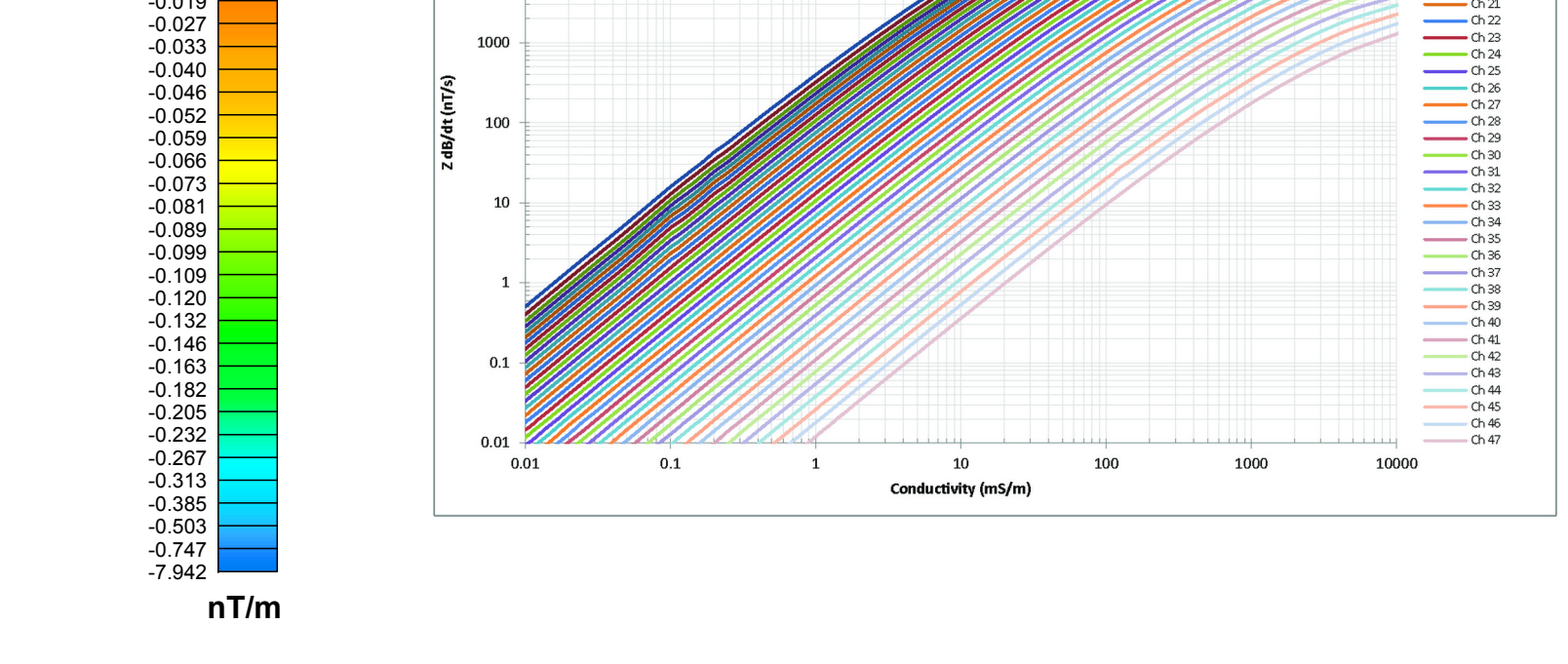
The TEM system operating at a base frequency of 30 Hz transmits a 5.11 ms square wave pulse with a peak current of 221 A. The transmitter is mounted on a boom extending from the helicopter. The receiver is mounted on a boom extending from the helicopter. The receiver is mounted on a boom extending from the helicopter. The receiver is mounted on a boom extending from the helicopter.



Magnetics

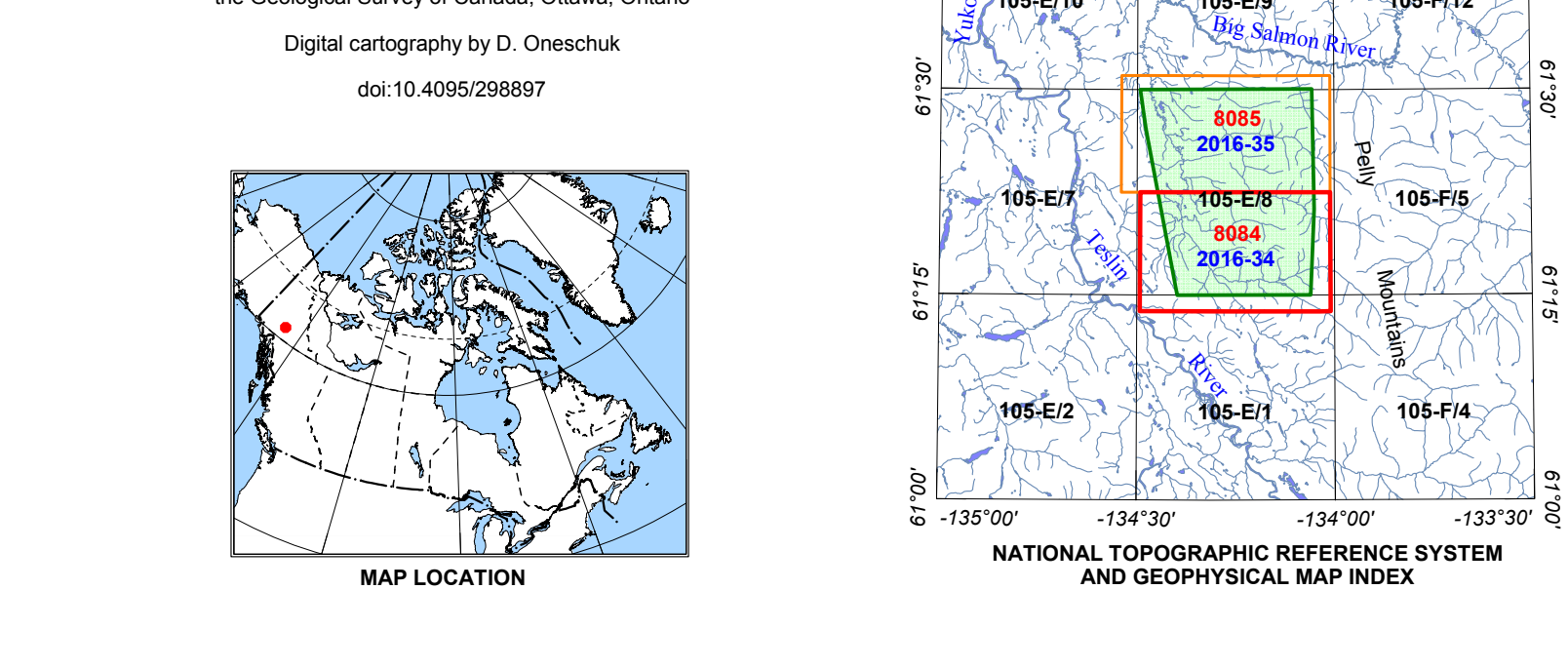
The magnetic field was sampled 10 times per second using a cesium vapour magnetometer. The magnetic field was sampled 10 times per second using a cesium vapour magnetometer. The magnetic field was sampled 10 times per second using a cesium vapour magnetometer. The magnetic field was sampled 10 times per second using a cesium vapour magnetometer.

Digital versions of this map are available for free download through GEOCAN (http://geocan.nrc.ca). Contemporary digital contour and contour data as well as other data for adjacent airborne geophysical surveys can be downloaded at no charge from the National Geomatics Data Repository for Geospatial Data (http://www.ngdr.nrc.ca/). The same products are also available, for a fee, from the Geospatial Data Centre, Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E8. Telephone: (613) 995-5326, email: gsc@geoscan.gc.ca.



PLANIMETRIC SYMBOLS

Drainage	—
Topographic Contours	—
Contour Interval: 20 m	—
Building	■
Tail	—
Flight Path	—
Project Limit	—



GSC OPEN FILE 8084 / YGS OPEN FILE 2016-34
ELECTROMAGNETIC SURVEY OF THE LIVINGSTONE CREEK AREA
 Parts of NTS 105-E11 and 8
FIRST VERTICAL DERIVATIVE OF THE MAGNETIC FIELD
 Scale 1:20 000

Map projection: Universal Transverse Mercator, zone 8. World Geodetic System 1984. No. 4. The datum is North American Datum 1983. The datum is North American Datum 1983. The datum is North American Datum 1983.

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 GEOLOGICAL SURVEY OF CANADA
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 2016
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 YUKON GEOLOGICAL SURVEY
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