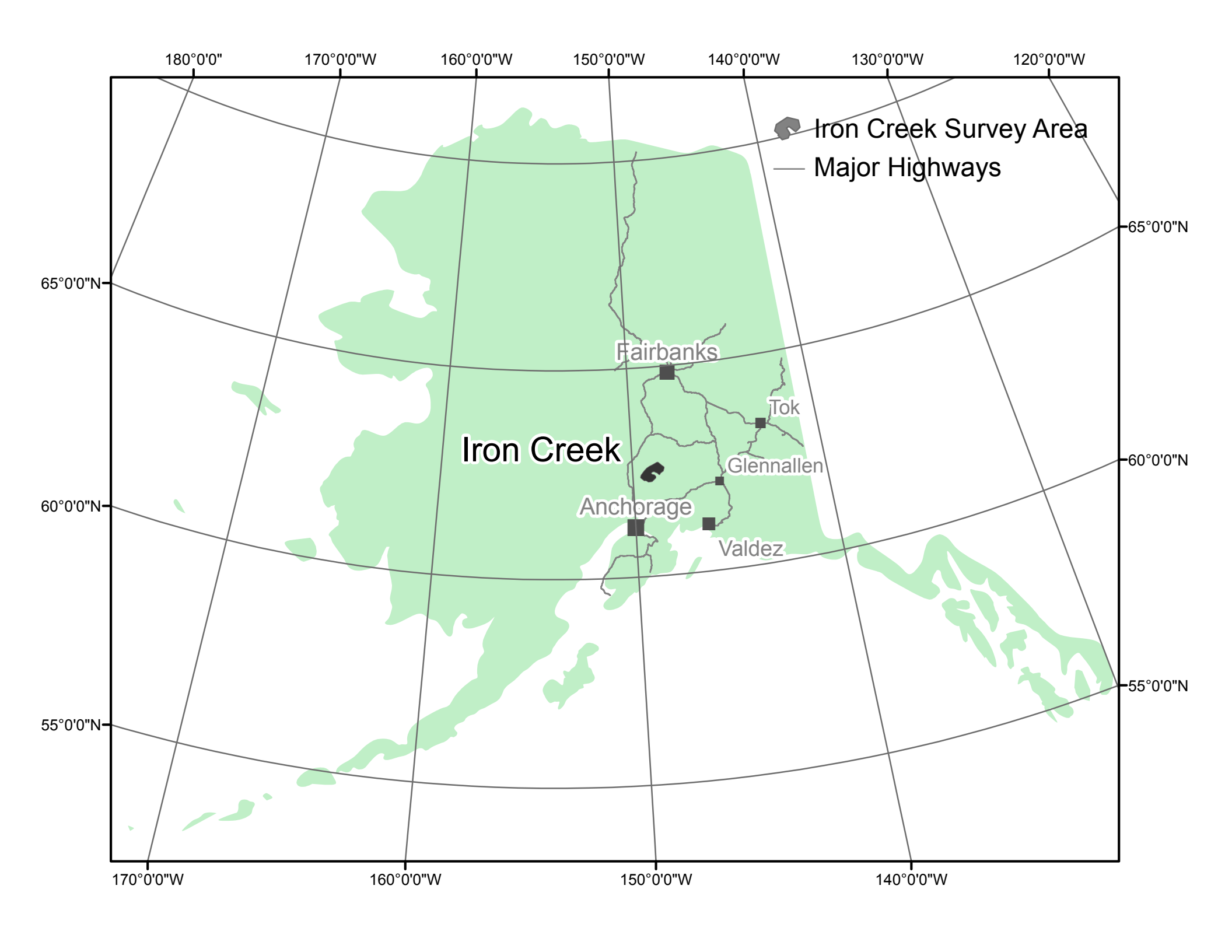
Iron Creek Airborne Electromagnetic and Magnetic Geophysical Survey Data Compilation

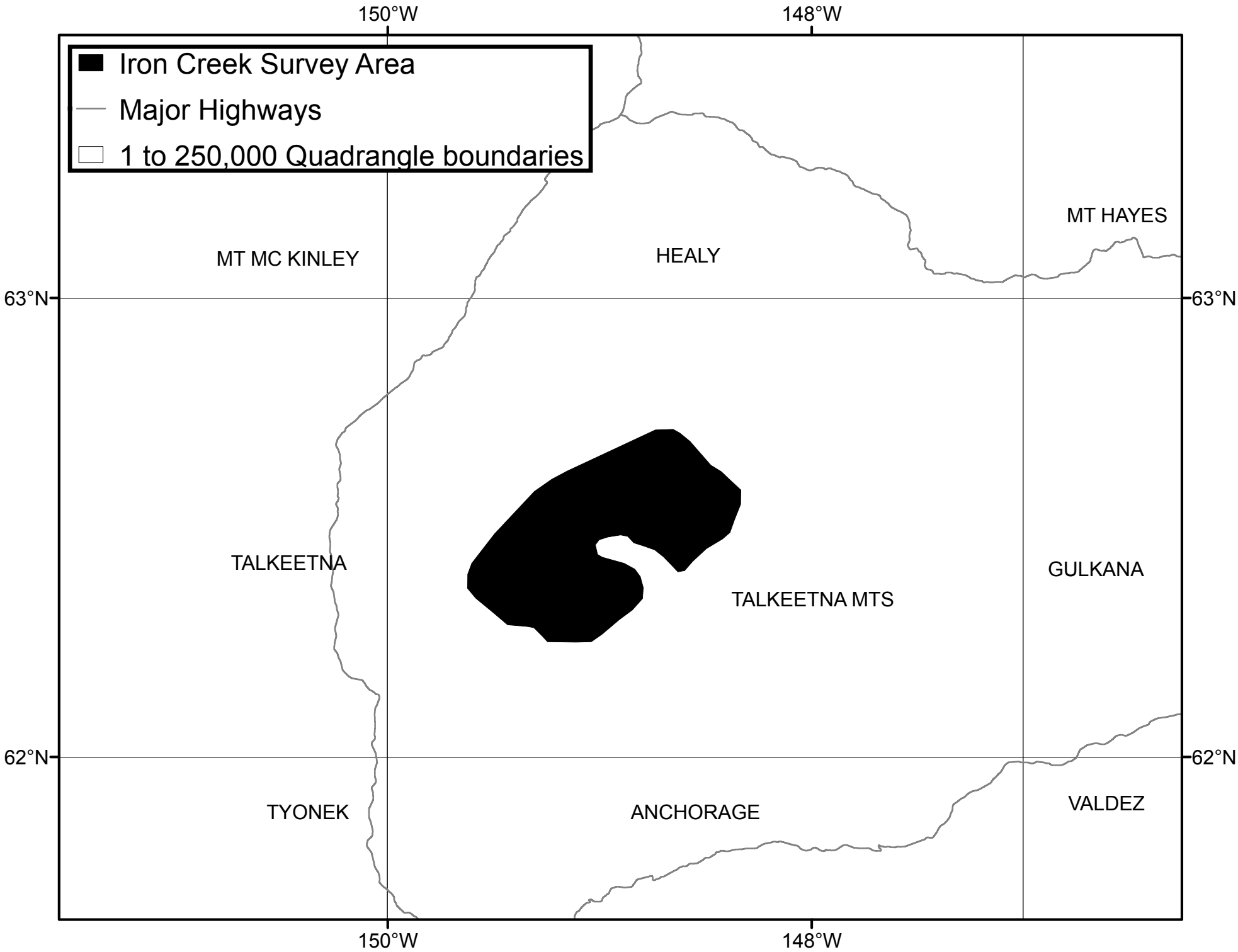
Survey Date: August 1997

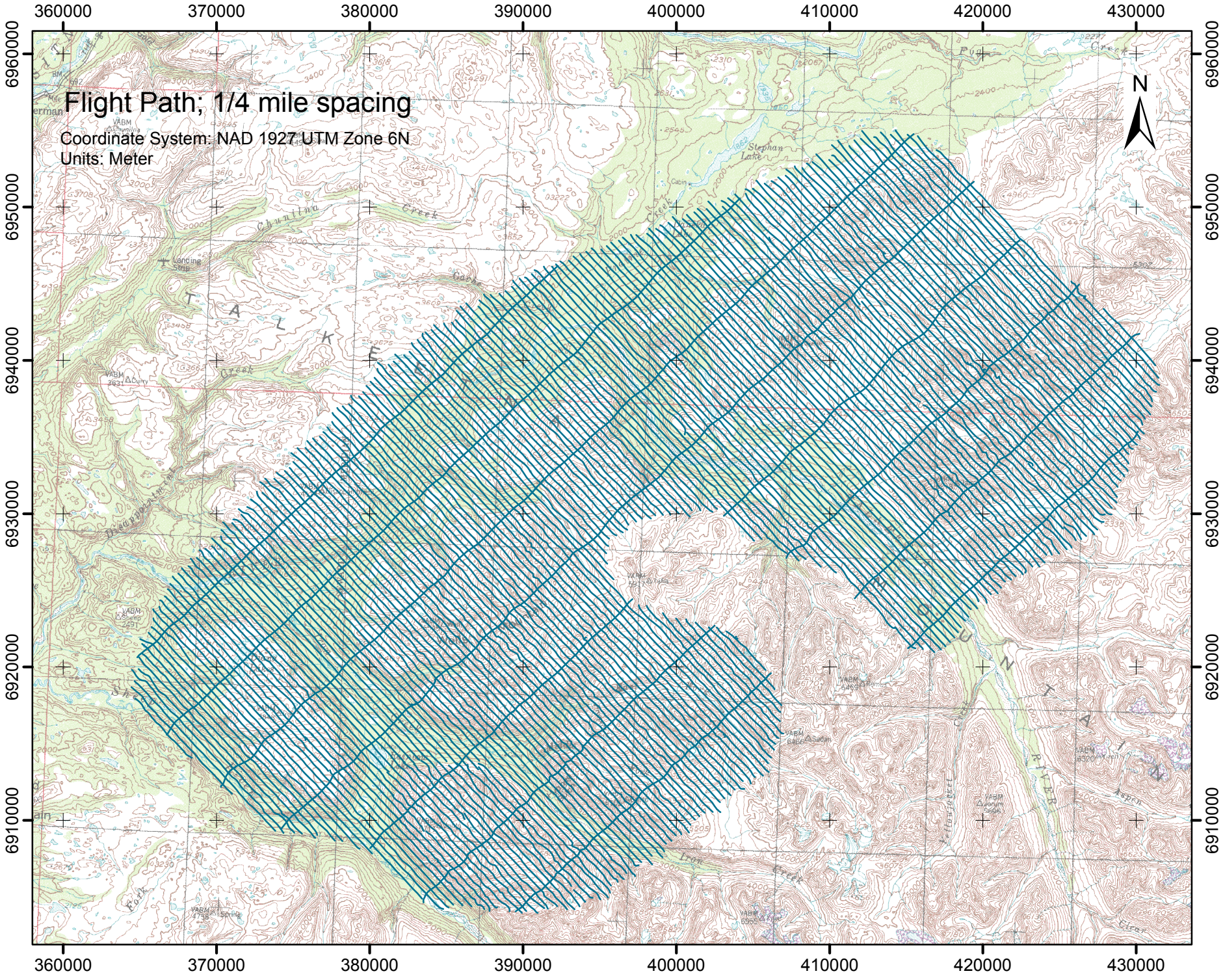
Alaska Division of Geological and Geophysical Surveys

www.dggs.alaska.gov

Burns, L.E., Dighem-Geoterrex, and WGM, Inc., Emond, A.M., Graham, G.R.C., 2014, Iron Creek airborne electromagnetic and magnetic geophysical survey data compilation: Alaska Division of Geological & Geophysical Surveys Geophysical Report 2014-6. doi:10.14509/27360

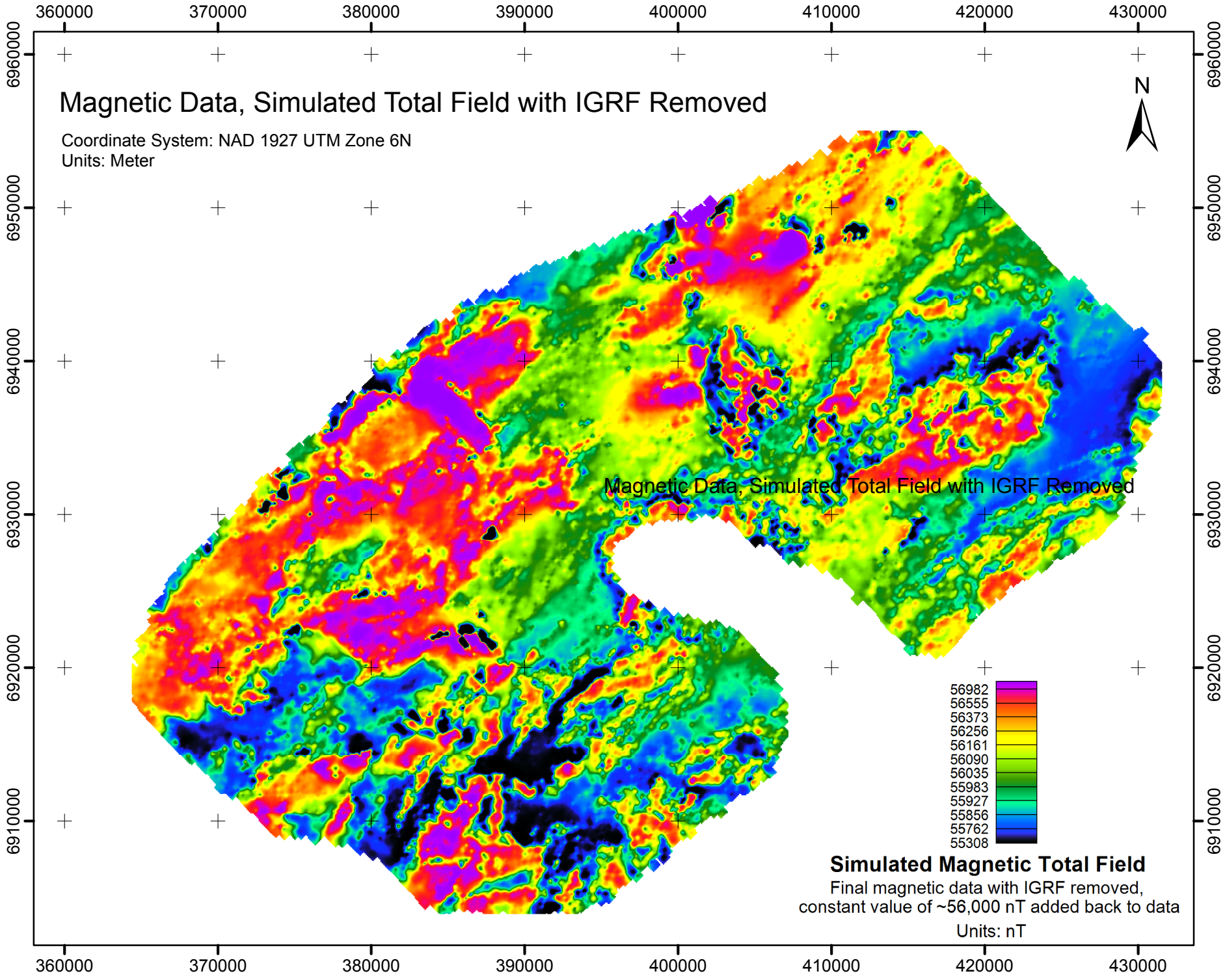

Iron Creek Survey Area
Major Highways
Iron Creek
Fairbanks
Tok
Glennallen
Anchorage
Valdez
180°0'0"
170°0'0"W
160°0'0"W
150°0'0"W
140°0'0"W
130°0'0"W
120°0'0"W
65°0'0"N
60°0'0"N
55°0'0"N

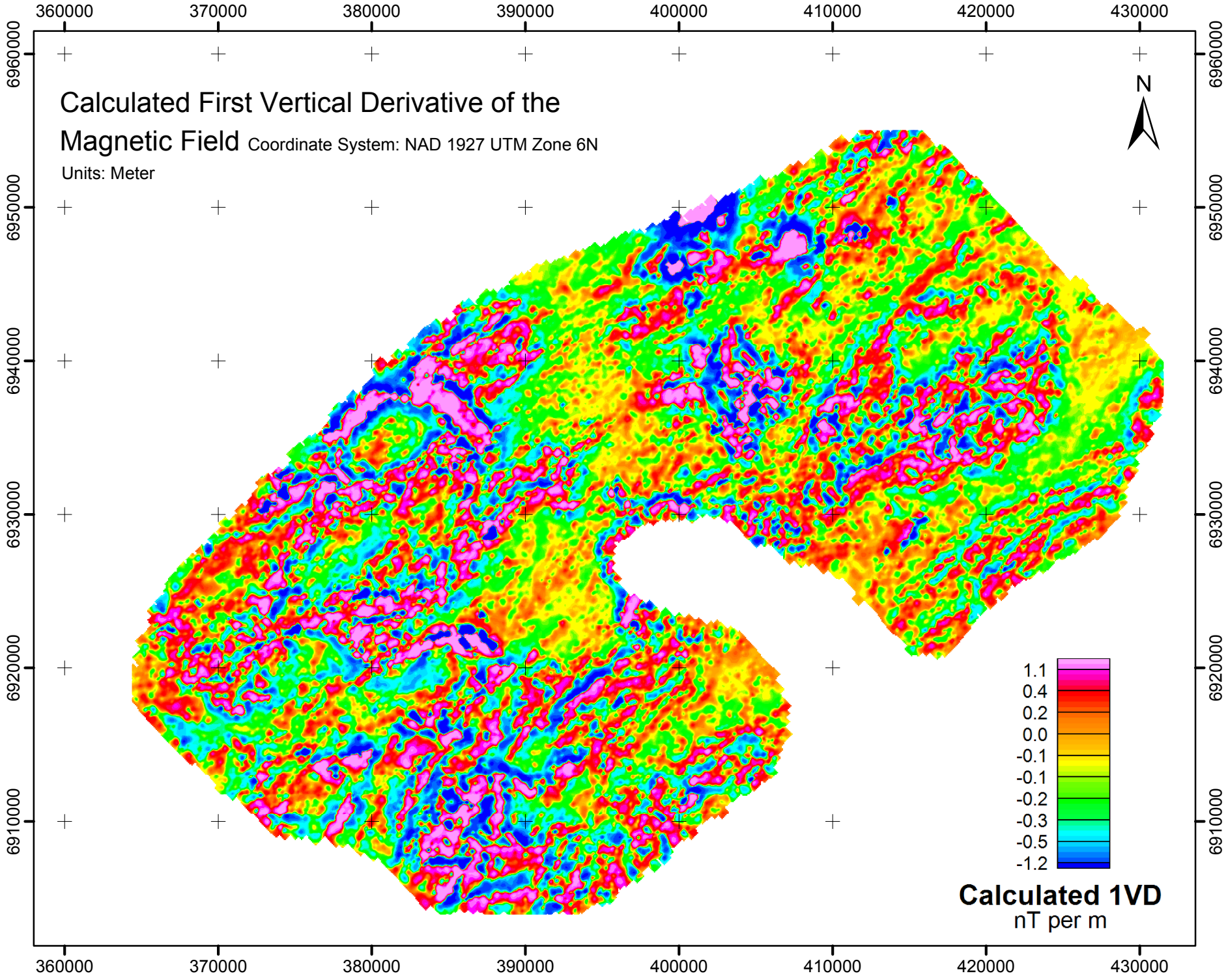

Iron Creek Survey Area
Major Highways
1 to 250,000 Quadrangle boundaries
150°W
148°W
63°N
62°N
MT MC KINLEY
HEALY
MT HAYES
TALKEETNA
TALKEETNA MTS
GULKANA
TYONEK
ANCHORAGE
VALDEZ

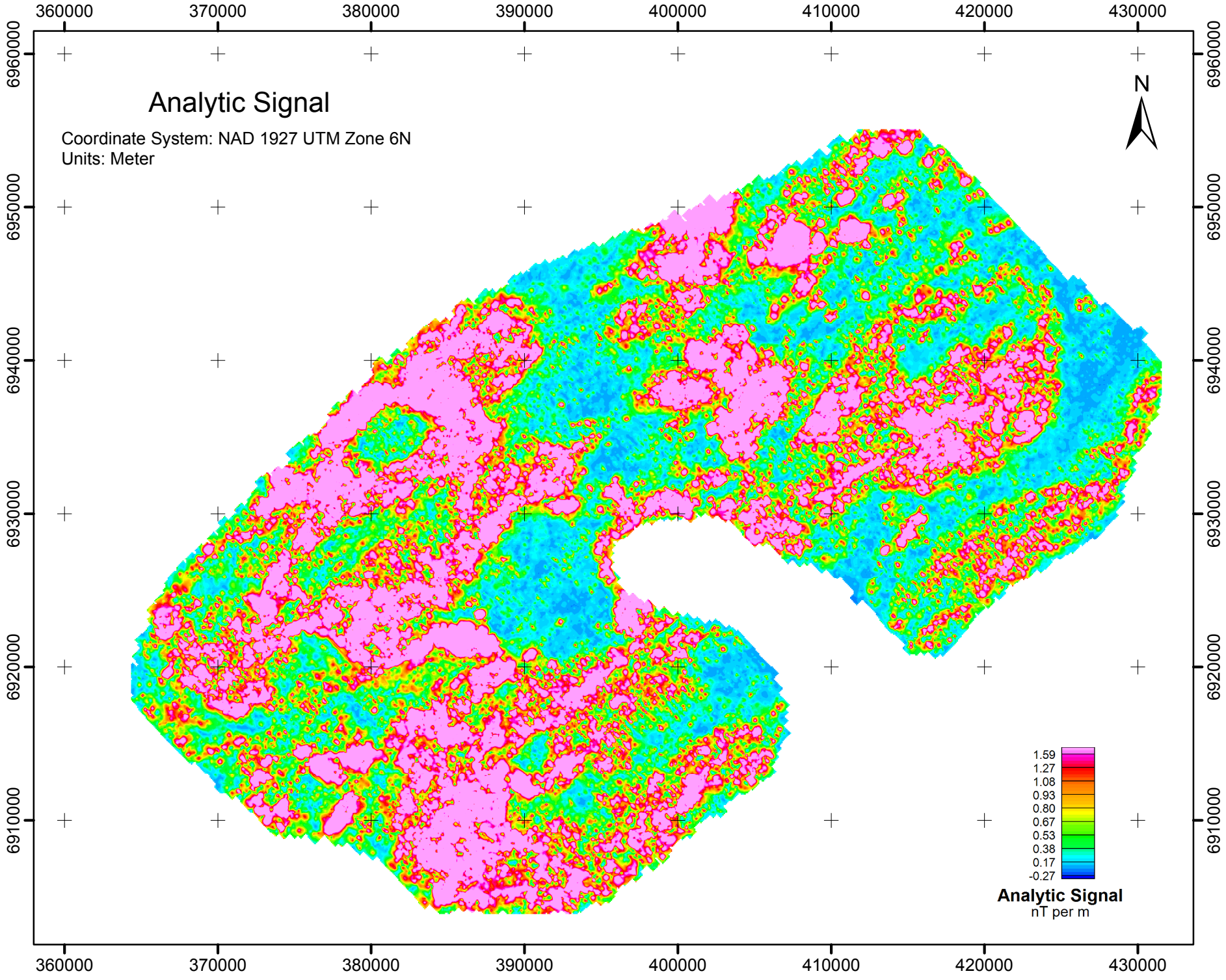

Flight Path; 1/4 mile spacing
Coordinate System: NAD 1927 UTM Zone 6N
Units: Meter
N
360000
370000
380000
390000
400000
410000
420000
430000
6960000
6950000
6940000
6930000
6920000
6910000
Stephan Lake
Chunilna Creek
Landing Strip
Iron Creek
RIVER

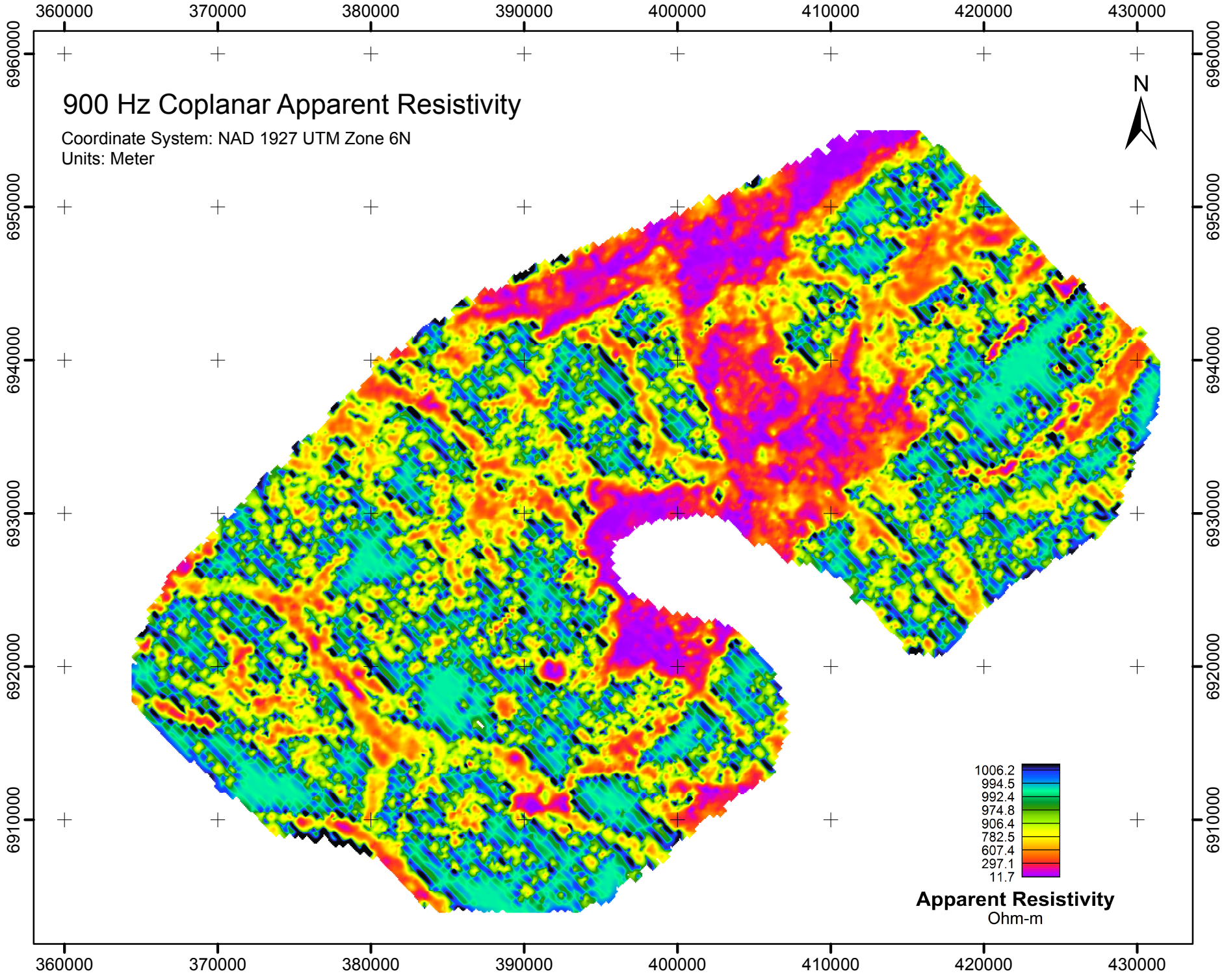
Magnetic Data, Simulated Total Field with IGRF Removed

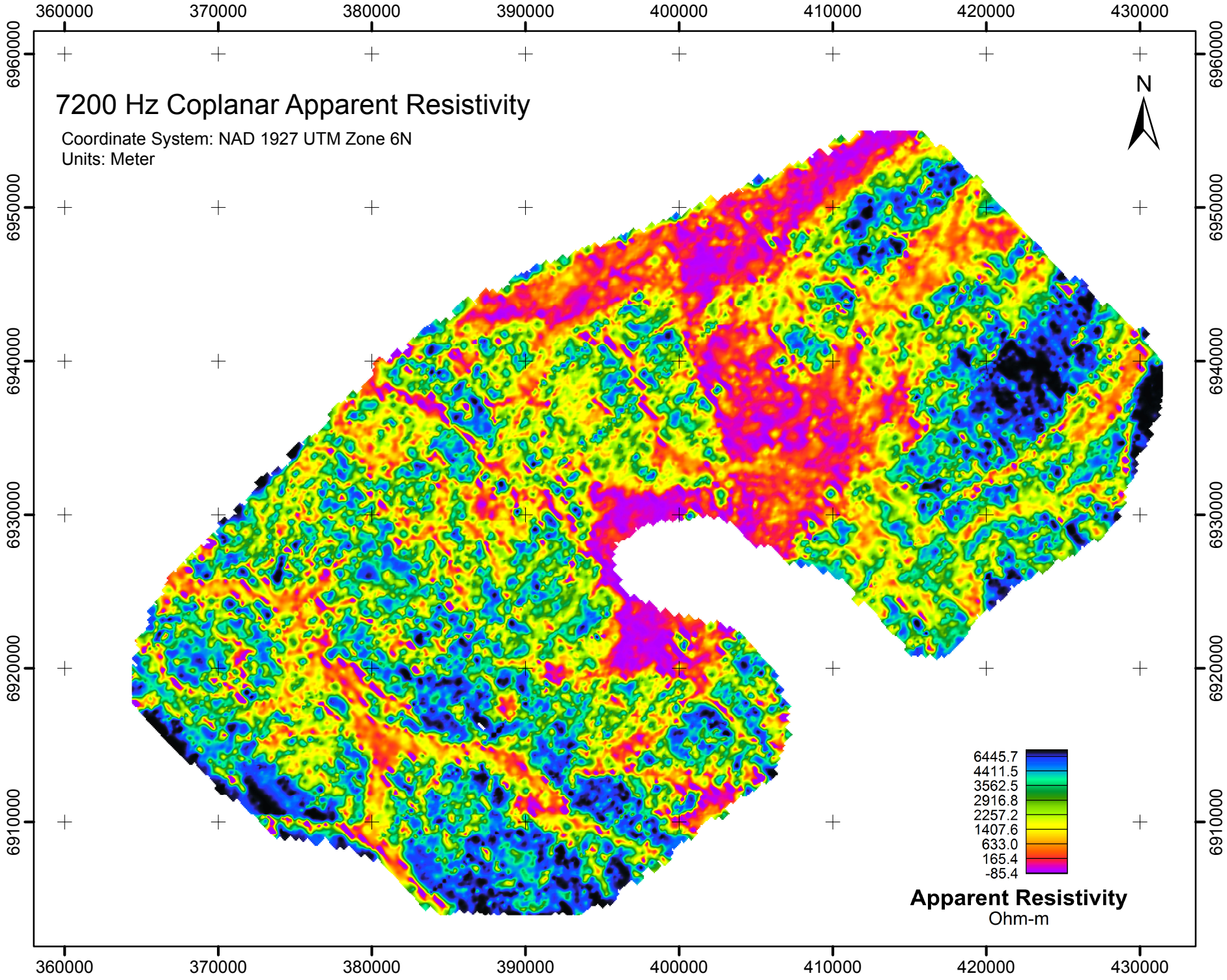
Coordinate System: NAD 1927 UTM Zone 6N
Units: Meter

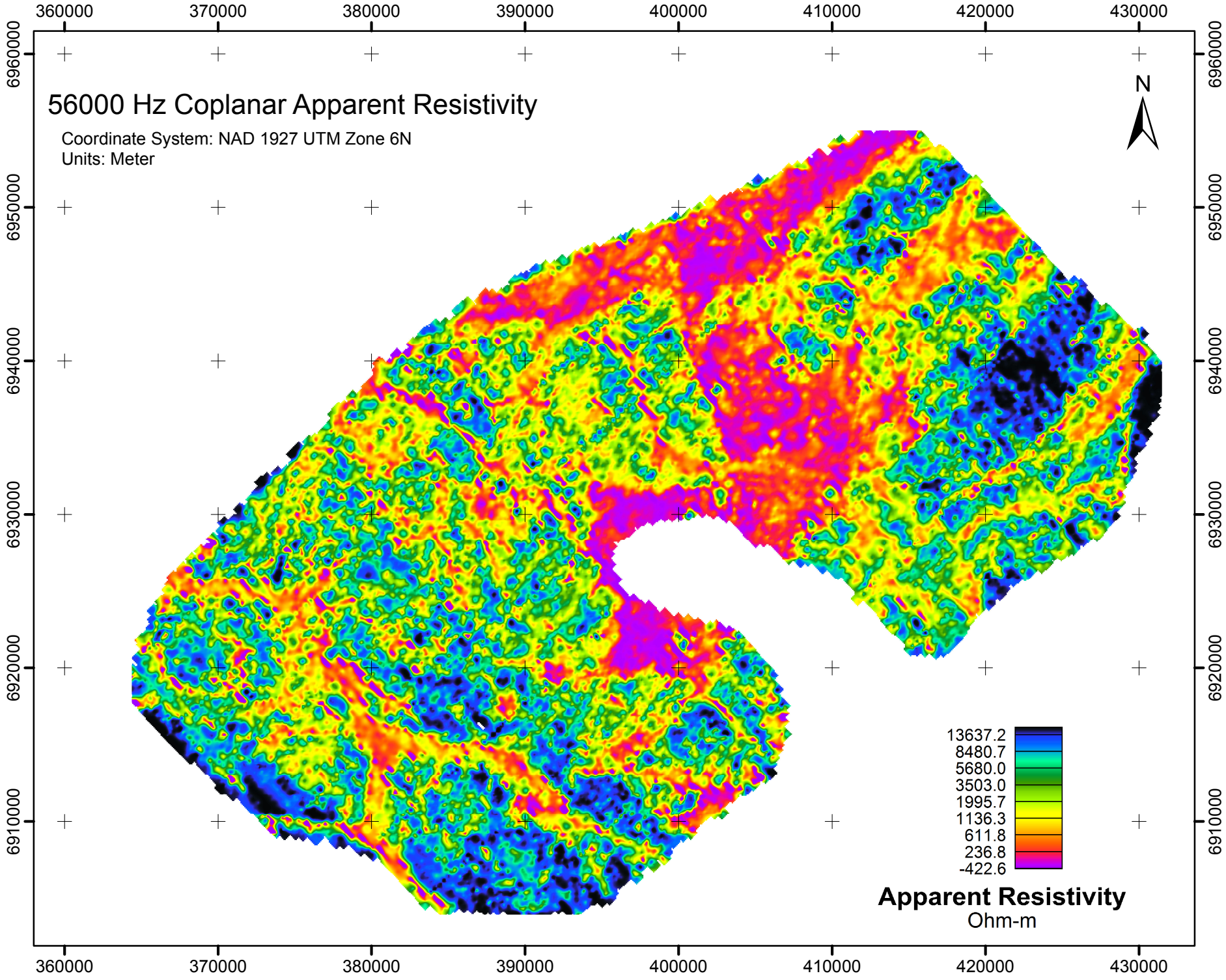



Calculated First Vertical Derivative of the Magnetic Field
Coordinate System: NAD 1927 UTM Zone 6N
Units: Meter
N
360000
370000
380000
390000
400000
410000
420000
430000
6960000
6950000
6940000
6930000
6920000
6910000
1.1
0.4
0.2
0.0
-0.1
-0.1
-0.2
-0.3
-0.5
-1.2
Calculated 1VD
nT per m


Analytic Signal
Coordinate System: NAD 1927 UTM Zone 6N
Units: Meter
N
360000
370000
380000
390000
400000
410000
420000
430000
6960000
6950000
6940000
6930000
6920000
6910000
1.59
1.27
1.08
0.93
0.80
0.67
0.53
0.38
0.17
-0.27
Analytic Signal
nT per m


900 Hz Coplanar Apparent Resistivity
Coordinate System: NAD 1927 UTM Zone 6N
Units: Meter
N
360000
370000
380000
390000
400000
410000
420000
430000
6960000
6950000
6940000
6930000
6920000
6910000
1006.2
994.5
992.4
974.8
906.4
782.5
607.4
297.1
11.7
Apparent Resistivity
Ohm-m


7200 Hz Coplanar Apparent Resistivity
Coordinate System: NAD 1927 UTM Zone 6N
Units: Meter
N
360000
370000
380000
390000
400000
410000
420000
430000
6960000
6950000
6940000
6930000
6920000
6910000
6445.7
4411.5
3562.5
2916.8
2257.2
1407.6
633.0
165.4
-85.4
Apparent Resistivity
Ohm-m


56000 Hz Coplanar Apparent Resistivity
Coordinate System: NAD 1927 UTM Zone 6N
Units: Meter
N
360000
370000
380000
390000
400000
410000
420000
430000
6960000
6950000
6940000
6930000
6920000
6910000
13637.2
8480.7
5680.0
3503.0
1995.7
1136.3
611.8
236.8
-422.6
Apparent Resistivity
Ohm-m