

**INDUCED POLARIZATION / RESISTIVITY
SURVEYS AT THE ELDORADO PROPERTY,
YUKON TERRITORY**

for: **KLONDIKE STAR MINERAL CORP.**

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Work Performed: August 22 – September 25, 2006
Location: 63° 53' N 139° 14' W
NTS: 1150/14
Mining District: Dawson
Date: Feb 20 2007

SUMMARY

An induced polarization / resistivity survey (IP) was conducted at the Eldorado property (Lone Star Project) for Klondike Star Mineral Corp. Three grids were surveyed in 2006: the Buckland grid (12.025 line-km), the Lone Star East grid (11.1 line-km), and the Lone Star West grid (14.475 line-km) between August 22 to September 25, 2006. An IP data set from a 1987 survey which overlapped all three 2006 grids was digitised and is included in this report.

The 1987 survey, centered on the Lone Star mine and workings, and detected a 10 mV/V chargeability anomaly. This is adjacent to a prominent NNW conductive trend structure.

Several ENE trending conductive features were identified on the Buckland grid, which are interpreted to be the Buckland Shear Zone. Associated chargeability highs present favorable targets.

A band of slightly elevated chargeability through the Lone Star East grid may represent stratabound mineralization and extensive elevated chargeability was identified on the north east part of the grid. A favorable target is at the intersection of two conductivity trends coincident with elevated chargeability.

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1.0 INTRODUCTION

An induced polarization / resistivity (IP) survey was conducted at the Eldorado Property (Lone Star Project) for Klondike Star Mineral Corporation. The survey was performed on a three grids; the Buckland grid (12.025 line-km), the Lone Star East grid (11.1 line-km), and the Lone Star West grid (14.475 line-km). An expanding pole-dipole array geometry was used for the survey with a 25 metre dipole spacing (L850W on the Lone Star West grid was surveyed with both 25 and 50 metre dipoles). The work was conducted between August 22 and September 25, 2006.

The entire project area is large, comprising 1,056 mineral claims on map sheets 115O/14, 115O/10, 115O/15 and 116B/03, but the 2006 IP survey was conducted on the main contiguous claim blocks on NTS sheet 115O/14. The IP survey covered the Lone Star Zone (Lone Star East and Lone Star West grids) and the Buckland Shear Zone (Buckland grid). In addition, data from a 1987 IP survey, conducted by Peter E. Walcott & Associates Ltd. and central to the three 2006 grids, were digitized and are presented in this report. The 1987 grid covered the central Lone Star Zone including the historic Lone Star mine which operated from 1912 to 1914. All three 2006 surveys overlapped to some extent the 1987 survey.

2.0 LOCATION AND ACCESS

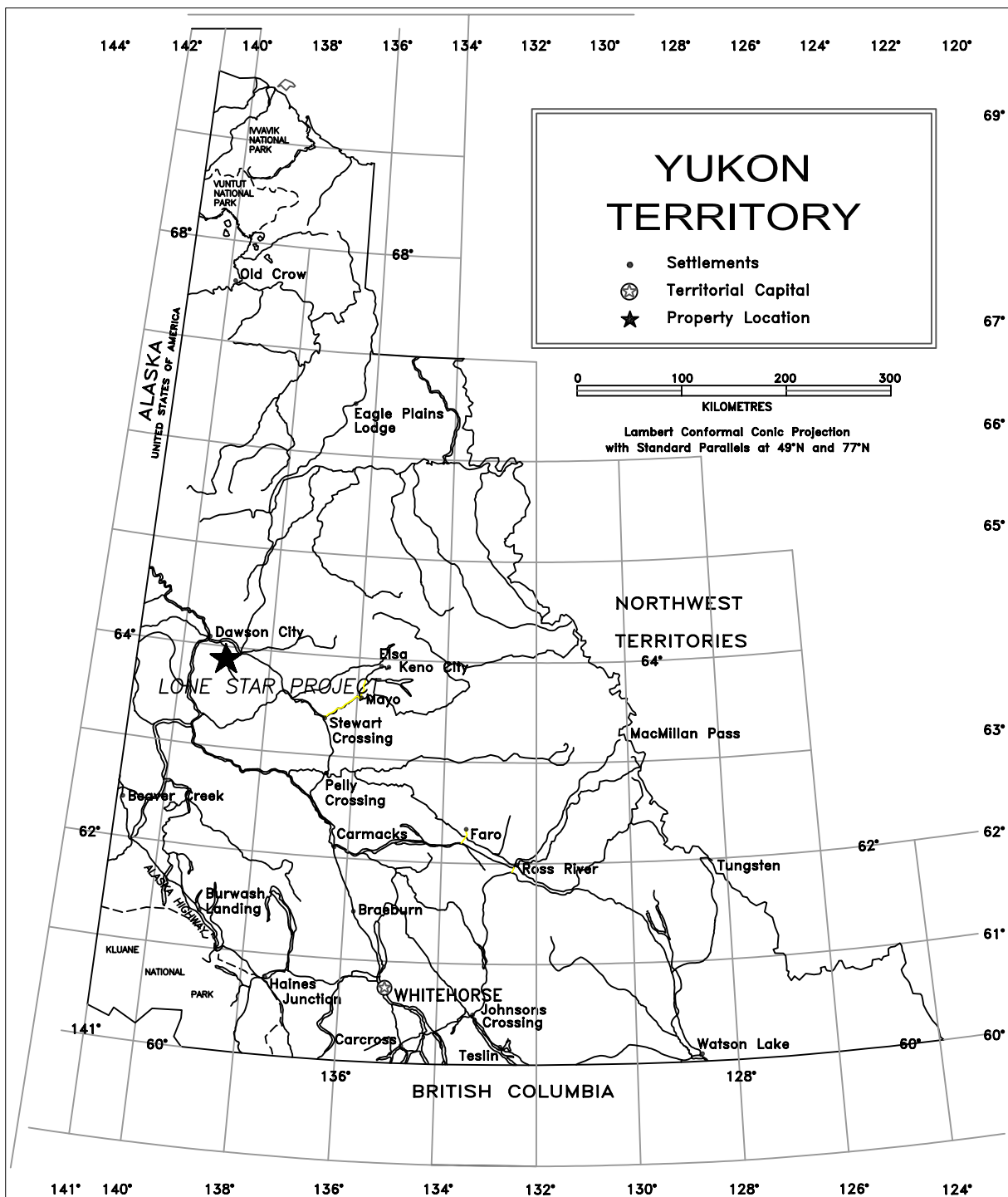
The Lone Star Project is located between Eldorado and Upper Bonanza Creeks in the Klondike gold district near to Dawson City, Yukon Territory (Figure 1). A map of the three grids surveyed in 2006 and the 1987 digitized lines with claim boundaries is shown in Figure 2.

Due to the long history of mining in the area, there is excellent road and ATV access to and within all three grids surveyed in 2006. The IP crew stayed at the Klondike Star camp on the property by Eldorado Creek.

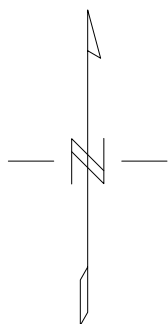
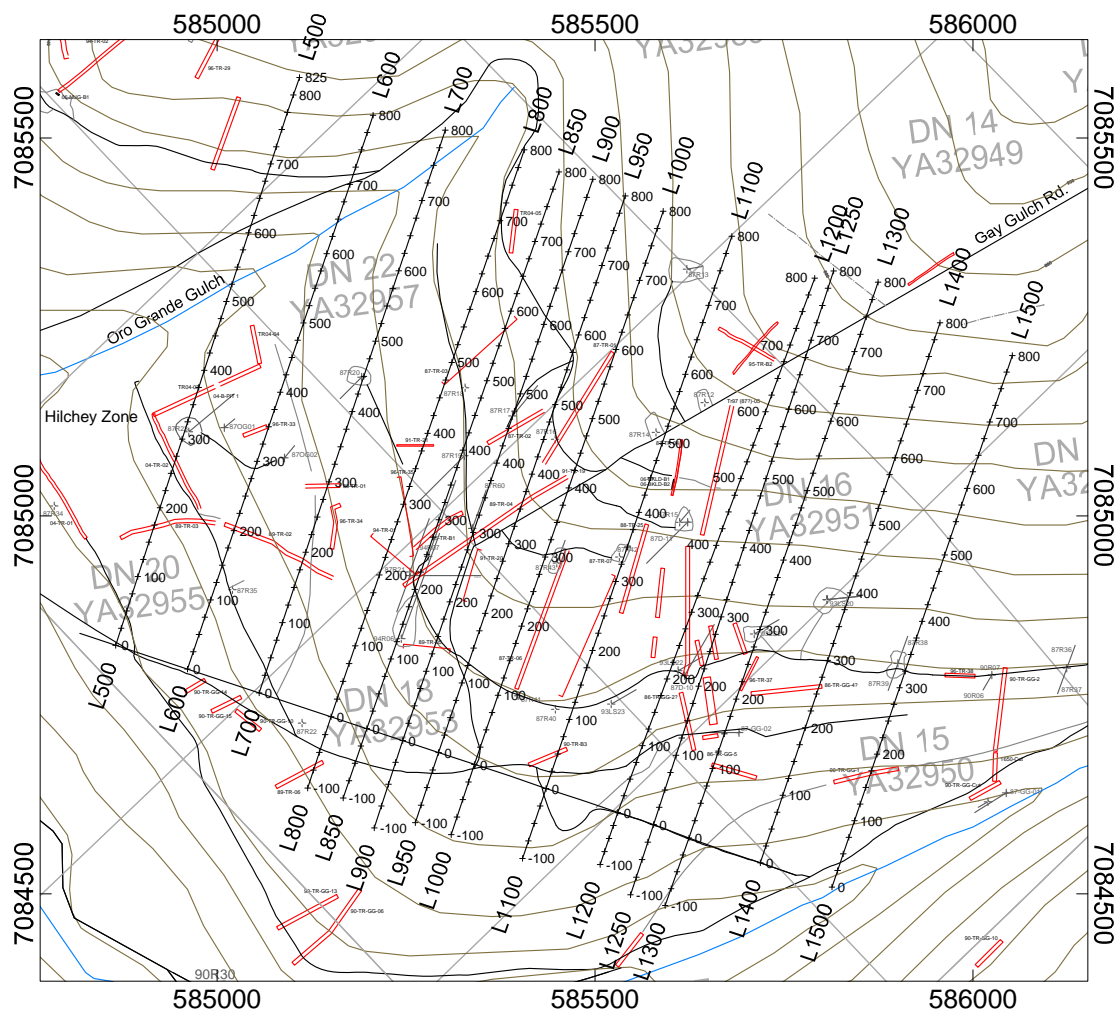
3.0 GRIDS

The survey grids are shown in Figure 3a (Buckland), 3b (Lone Star East), 3c (Lone Star West) and 3d (portion of Walcott 1987 IP survey digitized and included in this report). The grid dimensions and center coordinates are shown below:

Grid	Center UTM Easting	Center UTM Northing	Number of lines	Line length	Line spacing
Buckland	585500	7085000	14; Lines	800 m –	100 m with 50 m



Clondike Star Mineral Corp.	LONE STAR PROJECT	
PROPERTY LOCATION MAP	MINING DISTRICT: DAWSON	
	SCALE 1: 6,000,000	NTS: N/A
	DATUM: N/A	DRAWN BY: DH
	DATE: 20 Feb 2007	FIGURE: 1
AURORA GEOSCIENCES LTD.		

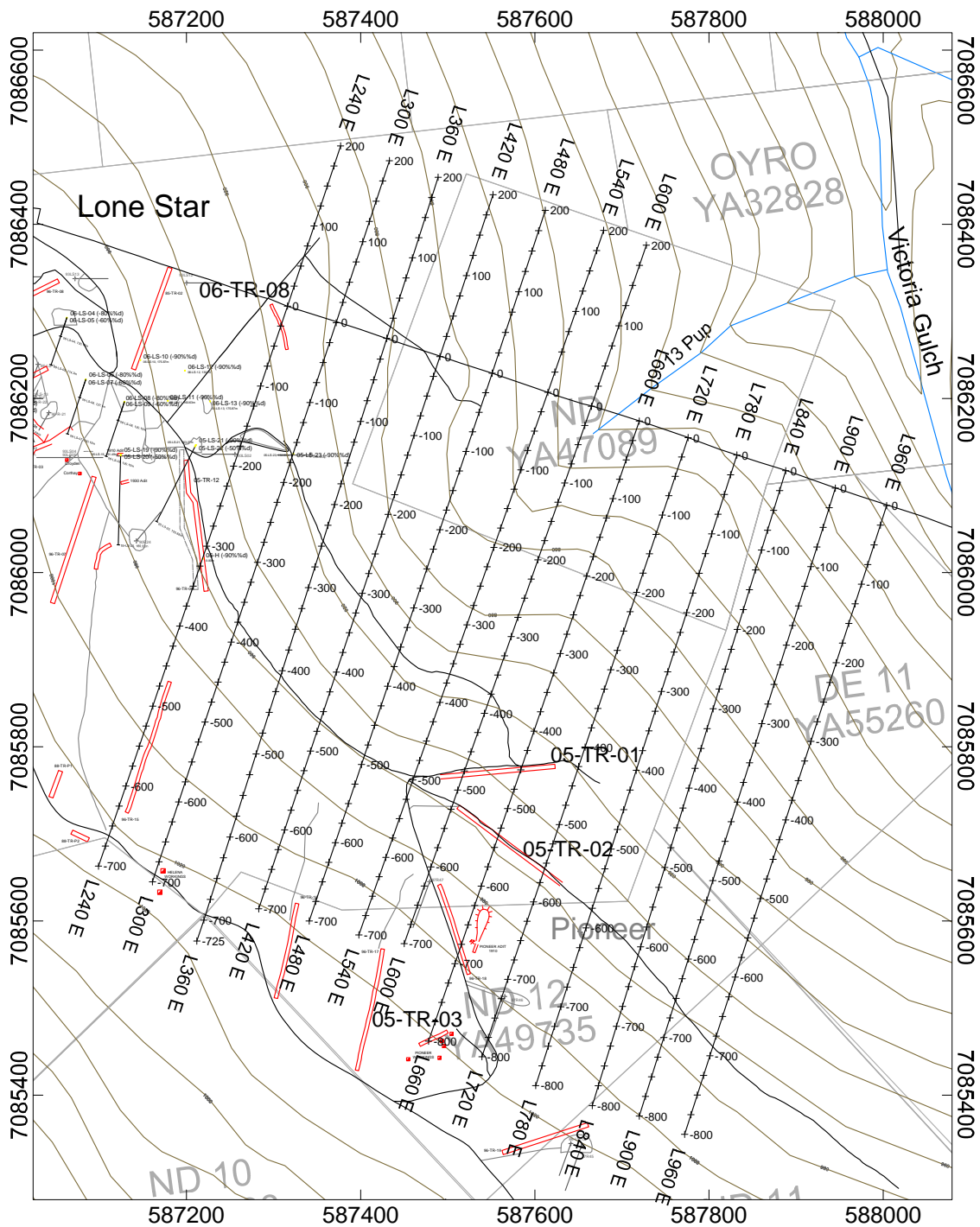


Scale 1:10000
 100 0 100 200
 (metres)
 NAD83 / UTM zone 7N

Klondike Star Mineral Corp.

Lone Star Project
 Buckland IP Grid
 Location Map

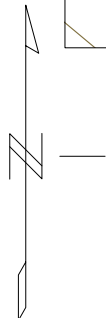
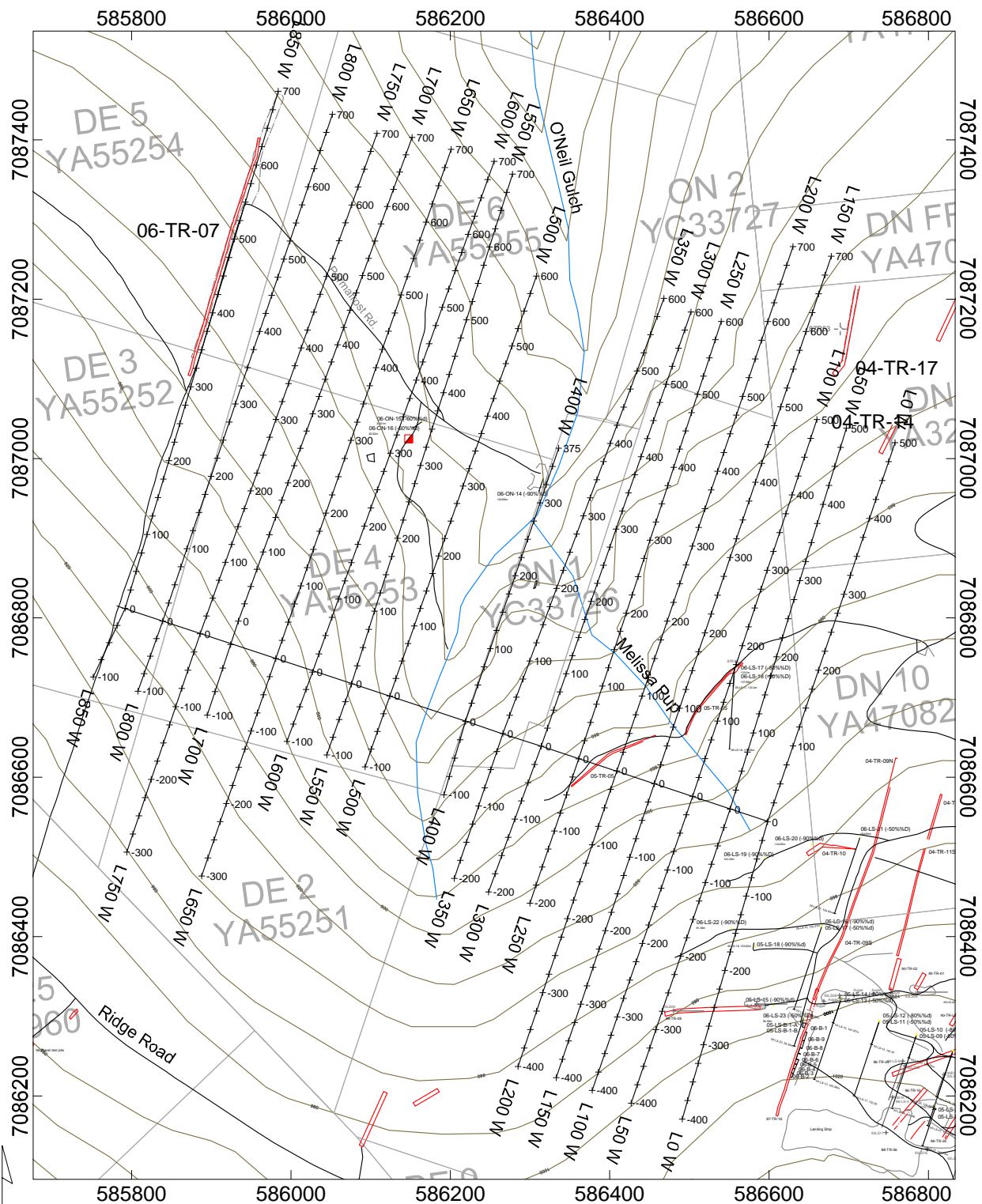
Figure 3a
 February 19, 2007



Klondike Star Mineral Corp.

**Lone Star Project
Lone Star East IP Grid
Location Map**

Figure 3b
February 16, 2007

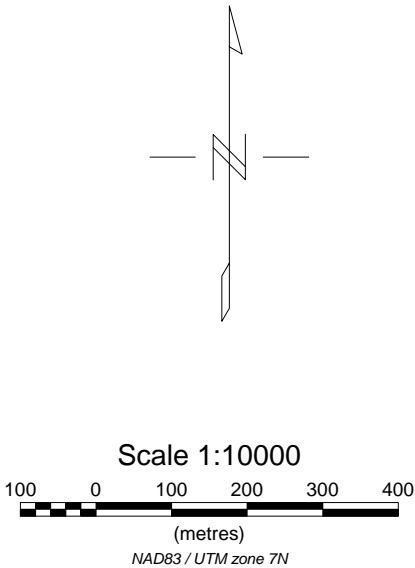
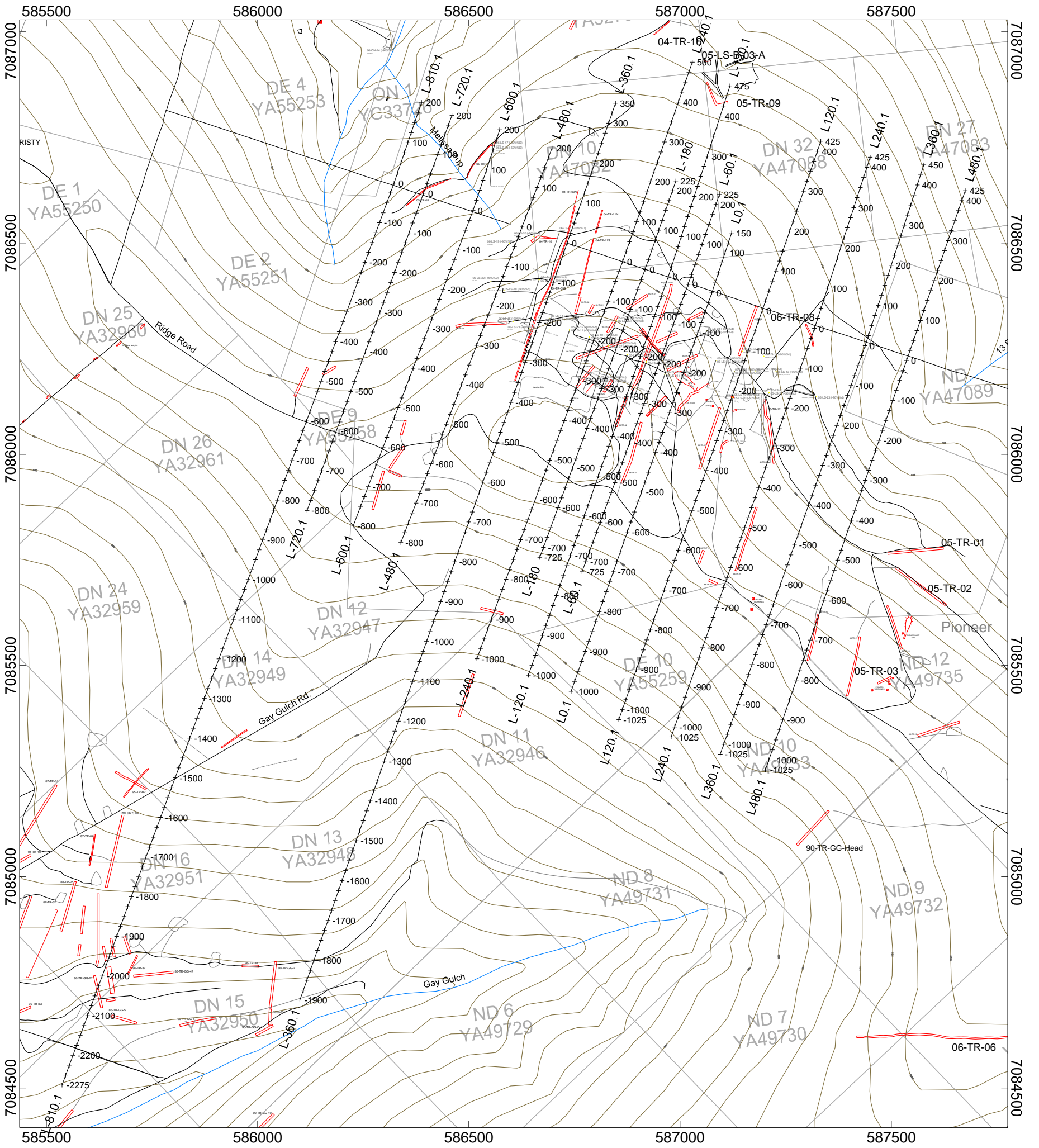


Scale 1:7500
 100 0 100
 (metres)
 NAD83 / UTM zone 7N

Klondike Star Mineral Corp.

**Lone Star Project
 Lone Star West IP Grid
 Location Map**

Figure 3c
 February 16, 2007



Klondike Star Mineral Corp.

**Lone Star Project
1987 Walcott IP Grid
Location Map**

Figure 3d
February 19, 2007

Grid	Center UTM Easting	Center UTM Northing	Number of lines	Line length	Line spacing
			500E to 1500E	900 m	infill lines at 850E, 950E and 1250E.
Lone Star East	587550	7085950	13; Lines 240E to 960E	800 m – 1000 m	60 m
Lone Star West	586260	7086815	17; Lines 0 to 850W	475 m – 1100 m	50 m
Walcott 1987 IP Survey	586850	7086090	14; Lines 810.1W to 480.1E	950 m – 2475 m	120 m with 60 m infill lines at 180.1W and 60.1W

All the grids have a baseline azimuth of 108°/288° and the wing lines run 18 degrees east of north. Coordinates are in UTM Zone 7N, NAD83. The Walcott 1987 lines have been renamed with a *.1 suffix to avoid confusion with the 2006 lines. Only the lines that were IP surveyed or were digitized from the 1987 survey are included in the tabulation above. There were 4 more lines (L600E – L960E) that were not digitized in the 1987 survey that twinned the 2006 Lone Star East grid in addition to the three twinned lines which were examined for consistency. All the 50 m infill lines were cut on the Buckland grid but only three of them were surveyed in 2006.

The three 2006 grids were installed and surveyed by Klondike Star Mineral Corporation using Real Time Kinetic (RTK) differential GPS. Typically, GPS control points were taken at the ends of each line and the baseline intersection. Occasionally more control points were surveyed where it was noted that the line was not straight.

The 2006 baseline and lines 240E, 360E and 480E of the Lone Star East grid follow the Walcott 1987 survey lines which were relocated and brushed out for the 2006 survey. Geo-registration of the Walcott 1987 data was done by matching the intersection of L360.1W and the baseline on a scaled image from the 1987 report to a known point. The ends of the lines were then digitized from the map and station locations determined by interpolation. Lines 810.1W and 600.1W from the 1987 survey are coincident with lines 300W and 100W of the Lone Star West grid. The baseline is identical between the 1987 and both 2006 Lone Star grids and therefore the station numbering is consistent. The Walcott 1987 line 810.1W appears to overlap the Buckland grid line 1250E, although this was not checked on the ground. The station numbering is not consistent with the table below illustrating the relationship:

1987 Walcott IP	2006 Buckland grid
1500S on L810.1W	700N on L1250E
1800S on L810.1W	400N on L1250E
2275S on L810.1W	100S on L1250E

4.0 PERSONNEL AND EQUIPMENT

The surveys were conducted by the following personnel:

Andre Lebel	Crew chief	From August 22 to September 25
Dan Shorty	Technician	From August 22 to September 19
Cody Woodman	Technician	From September 19 to September 25
Sebastian Roy	Helper	From August 22 to September 25
Steve Francis	Helper	From August 22 to September 25

The crew was equipped with the following instruments and general equipment:

<u>IP Receiver</u>	Iris Elrec Pro s/n 2315-202353-122
<u>IP Transmitters</u>	GDD TxII 3.6 kW s/n Tx267 Honda 5kVA gas generator
<u>IP Equipment</u>	Repair tools & spare IP parts 6 km 18 gauge wire 25 m IP cables 4 VHF handheld radios VHF base radio Georeels & spools, Speedy winders and spools, stainless steel electrodes
<u>Other</u>	Lap top computer 1 ton truck 2 Non-differential GPS receivers Globalstar satellite phone
<u>Software</u>	Geosoft Oasis 6.0.1 with IP package

5.0 SURVEY SPECIFICATIONS

The surveys were conducted according to the following specifications:

<u>Grid registration:</u>	Line ends and baseline intersections, surveyed with RTK-DGPS as supplied by Klondike Star, were used to register the grid to NAD83, UTM Zone 7N coordinates.
<u>IP Array:</u>	Expanding pole-dipole. Stationary electrodes were at the north end of each line on the Buckland grid and at the south ends of each line for the Lone Star East and Lone Star West grids.
<u>Dipole spacing:</u>	25 m (all lines), 50m (Lone Star West L850W).
<u>Separations:</u>	Six dipoles read from n=1,2, ..., 6.
<u>Tx:</u>	Time domain with a 50% duty cycle, reversing polarity, 0.125 Hz
<u>Signal sampling:</u>	20 windows, semi-logarithmic sampling over 2 s. Sampling commences 40 ms after shutoff. Sample windows are shown in the table below:

	1	2	3	4	5	6	7	8	9	10
Width	40	40	40	40	40	40	40	80	80	80
Channel	11	12	13	14	15	16	17	18	19	20
Width	80	80	80	80	160	160	160	160	160	160

<u>Parameters readings:</u>	<p>Mi - 20 semi-logarithmically spaced time slice channels</p> <p>V_p - primary voltage</p> <p>Sp - self-potential (voltage)</p> <p>I - current</p> <p>Rs - electrode resistance</p> <p>Err - standard deviation of stacked readings</p>
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<u>Stacks, repeats:</u>	At least 15 stacks were taken at each station. Stations that were noisy (error > 5 mV/V) were repeated several times
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6.0 SURVEY NOTES

The survey log in Appendix B describes survey operations including production. The crew mobilized to the Klondike Star camp on the property from Whitehorse on Aug 22, 2006 and started to survey Aug 23 on the Lone Star East grid. Aside from minor problems with moisture from rain, the surveying went well and the crew completed the Lone Star East grid on Aug 31. After starting on Lone Star West on Sept 01, the crew took the weekend off and resumed work on Lone Star West on Sept 04, completing the 100 m lines on Sept 08 and moving onto the Buckland grid between Sept 08 and Sept 12 before returning to the Lone Star West grid on Sept 12 to resume the infill 50 m lines until Sept 17. Line 850 on Lone Star West was surveyed with both 25 and 50 m dipoles. Finally the crew returned to the Buckland grid on Sept 18 and surveyed there until Sept 24, and drove back to Whitehorse on Sept 25. Total production was 38.5 line-km surveyed on 45 lines over 31 survey days for an average production of 1.24 line-km per day,

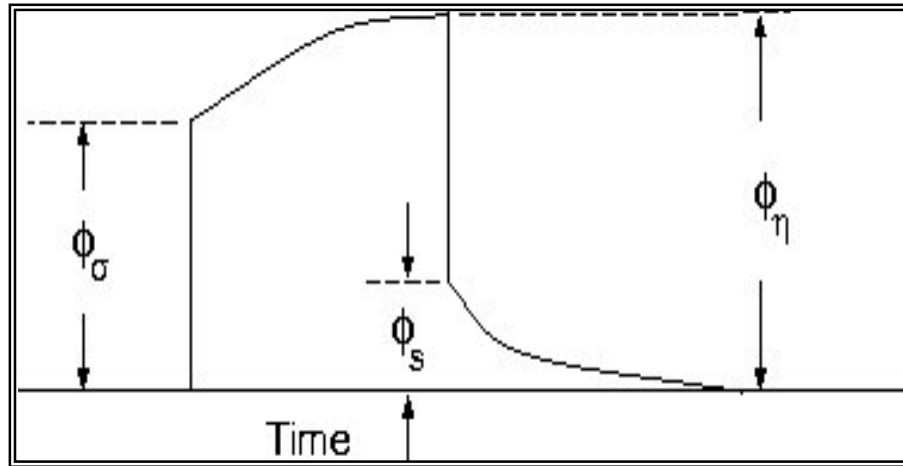
The survey used a modified pole-dipole array where the line commences as a dipole-dipole and then all electrodes are moved except the trailing current electrode as the survey progresses. Therefore the array becomes a pole-dipole by the end of a long line. All electrodes are always kept co-linear to facilitate the correction to the apparent resistivity and to ensure that the assumptions for the 2D inversions are valid.

7.0 IP INVERSION METHOD

The data were inverted using the DCIP2D package developed by the University of British Columbia Geophysical Inversion Facility. The inversion algorithm is described in detail by Oldenburg and Li (1994). A brief description of key features of the algorithm follows.

The IP effect can be described in macroscopic terms. If a time domain signal is put into the ground, as soon as the current is turned on, the voltage immediately rises to a level (ϕ_{σ}) and thereafter continues to rise to a higher level (ϕ_{η}). At current shutoff, the voltage immediately falls to a level (ϕ_s) and then slowly decays to zero along a curve similar to that between ϕ_{σ} and ϕ_{η} . Apparent chargeability is defined as the “extra” voltage observed:

$$\eta_a = \frac{\phi_{\eta} - \phi_{\sigma}}{\phi_{\eta}} = \frac{\phi_s}{\phi_{\eta}}$$



The observed DC potentials ϕ_σ are defined by the vector form of Ohms Law:

$$\nabla \cdot (\sigma \nabla \phi_s) = -I\delta(\mathbf{r} - \mathbf{r}_s)$$

where $\mathbf{r}-\mathbf{r}_s$ is the vector to the measurement point, I is the current and σ is the conductivity structure of the earth - the unknown quantity in the geophysical problem. The chargeability can be modeled by replacing the conductivity by an equivalent apparent conductivity controlled by the chargeability:

$$\sigma_\eta = \sigma(1 - \eta)$$

Modeling the IP effect then involves running two conductivity models - one with σ and one with σ_η .

The unknown quantity is the distribution of conductivities in the earth. The software models the earth conductivity structure as a series of rectangular cells of varying size and aspect ratio. The grid is finest (most detailed) near the measurement points and much coarser at locations beside or at depth beneath the measurement points. The padding cells are necessary to avoid edge effects in the model. The size and dimensions of the models in no way compensates for the basic limitations on depth of penetration and resolution inherent in the IP/resistivity survey. Thus the effective depth of penetration (0.5 to 1.0 times the maximum dipole separation) is the limit to which the models should be relied upon to accurately reflect true earth conductivities and chargeabilities.

The program calculates the potential across the finite element network using a starting model. Appropriate boundary conditions are applied when calculating the potentials across the network. These include the condition that all current flow is normal to the cell

boundaries and voltages are continuous across the boundaries. The sensitivity of the model to changing the parameters in any cell is calculated as is the misfit between the model results and the actual observed potentials / chargeabilities. The model is then adjusted using the calculated sensitivities of the response to changes in the conductivity of individual cells.

There is no unique solution or model which fits any set of IP / resistivity data. A best-fit model is one which (1) fits the data within the error of the survey and (2) invokes the minimum required degree of complexity to fit the data. For a set of **N** measurements, a global misfit can be defined as:

$$\Psi_d = \sum_{i=1}^N (W_i (r_i - r_i^{obs}))^2$$

where W_i is the weighting factor for the i^{th} measurement (r_i^{obs}) and r_i is the model response for this measurement. The weighting factor is usually the inverse of the error so that a measurement with high error has a low weighting and vice versa. In a system with random noise, the target misfit is **N**. The algorithm reduces Ψ_d by repeatedly adjusting the conductivities to improve the fit until the global misfit equals the target misfit. At this point, the model fits the data to within the error of the survey.

The second requirement of a successful solution is that the complexity of the final model be minimized. IP measurements are inherent averages, deriving resistivity and chargeabilities from large volumes of the subsurface. It is possible to over-fit data, deriving solutions which over-minimize misfit but which invoke models with detail beyond the resolving power of the measuring arrays. The problem is ill-posed and inherently ambiguous in that an infinite number of models may satisfy the global misfit equals target misfit criterion. If both a simple and complex solution can adequately replicate the field data within the bounds of measurement error, the simple solution is to be preferred.

Starting with a reference model m_0 and weighting functions for x and z (w_x , w_z), define the complexity of the model as Ψ_m where:

$$\psi_m(m, m_0) = \alpha_s \int \int w_s(x, z) (m - m_0)^2 dx dz + \int \int \left\{ \alpha_x w_x(x, z) \left(\frac{\partial(m - m_0)}{\partial x} \right)^2 + \alpha_z w_z(x, z) \left(\frac{\partial(m - m_0)}{\partial z} \right)^2 \right\} dx dz$$

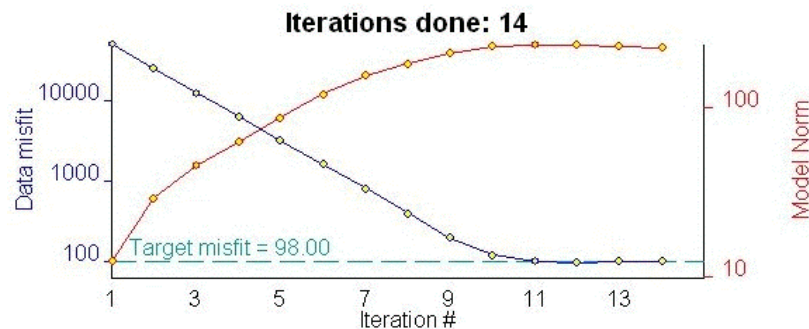
where α_x , α_z and α_s define the relative weight of the model in x , z and fineness. Increasing any of these weighting coefficients increases the importance of that

dimension in the final solution. For example, to weight the final solutions towards vertical structures, α_z would be weighted several times more than α_x . To force the model to generate fewer small scale structures, α_s is increased.

The final criteria for a successful solution can then be expressed as:

1. Minimize Ψ_m
2. Subject to the constraint that $\Psi_d = N$ (or very close to it).

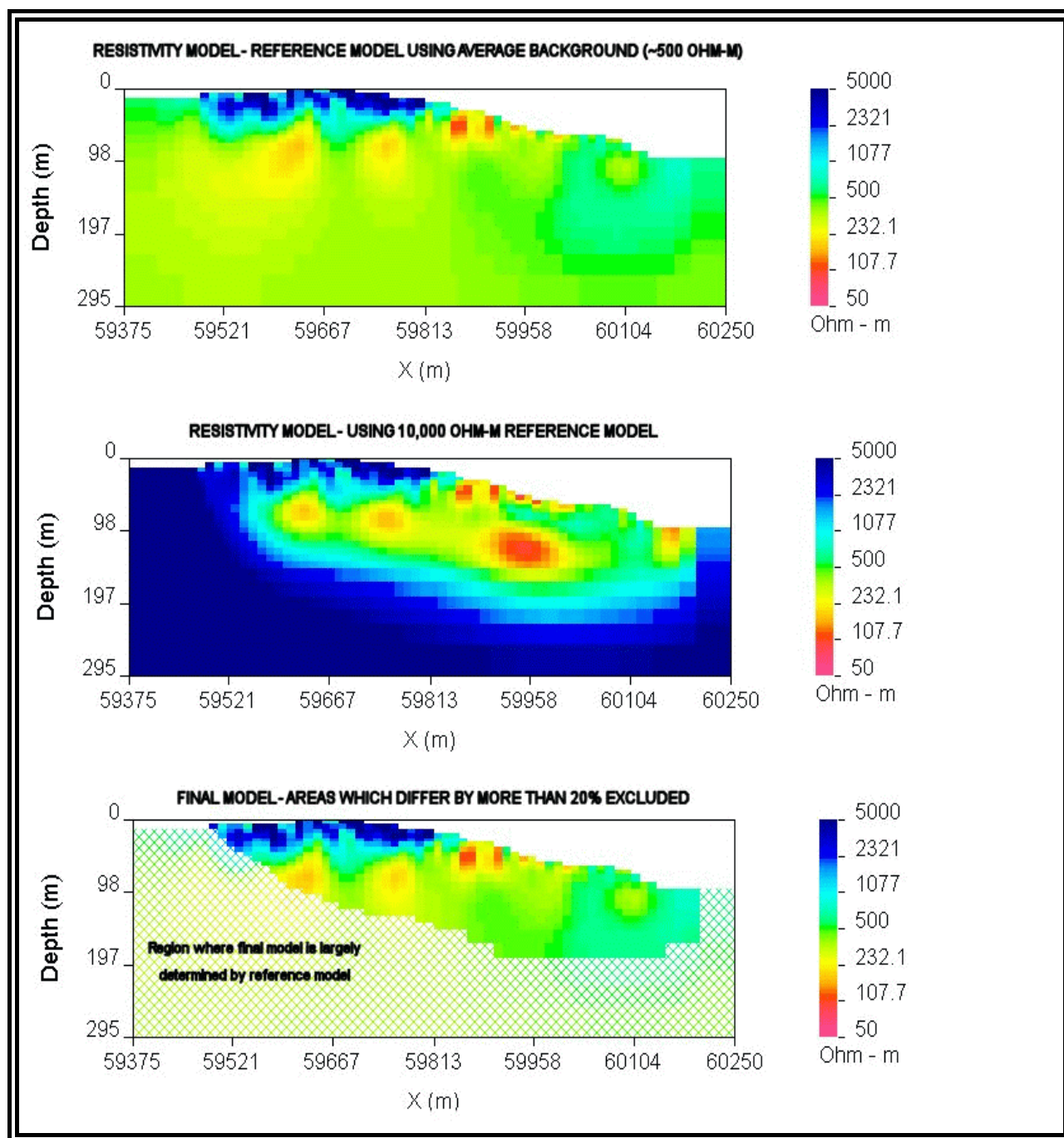
To evaluate a solution, the reader should examine not only the final values but the path the program followed to reach these values. An example of typical convergence curves is shown below:



The black line traces the value of Ψ_d with each iteration and in a good inversion, this will converge to the target misfit (N). The orange curve traces the convergence behavior of Ψ_m . This curve normally starts at a very small value because the reference model is usually set to the initial model and the initial and reference models are very simple. As the inversion proceeds, the solution model becomes increasingly complex as it is adjusted to meet the target misfit. After reaching target misfit, minor adjustments are made to reduce the complexity of the model and the Ψ_m curve stabilizes at some high value.

The field observations often have significant poorly quantified errors and the complexity of the background conductivity response may be such that it is impossible to reduce Ψ_d to N . Instead, Ψ_d can be scaled proportionately by a “chi-factor” ranging up or down from 1.0 (no scaling). Setting a large chi-factor loosens the control that goodness-of-fit exerts on the solution and generally directs the program to use very simple models which tend to smooth out the conductivities and fails to accurately model the fine details in resistivity or chargeability known to exist in the ground. Setting a chi-factor which is too low may prevent convergence to an acceptable solution. Generally, chi is left at 1.0.

A final feature of note in the inversion is the use of initial and reference conductivity and chargeability models in the inversion process. As noted above, the relation for Ψ_m requires a reference model (m_0) against which solutions are compared. This can be an actual 2D model constructed from known geology or a estimate of half space conductivity or chargeability. In addition, the modeling process will start from an initial model which has the same general form. In general, an average half space conductivity and chargeability based on the field values is the best model to start from and this is the default model for both inversions if none other is specified. This will ensure that Ψ_m converges to a value which is not too large. The initial and reference models can be used to estimate the depth of investigation. If two inversions are performed with very different reference models, there will be regions in the final models which will be the same in both inversion and peripheral regions where the final models will resemble the reference models. An example is shown below:



8.0 DATA PROCESSING

The following procedures were used to prepare and invert the induced polarization and resistivity data:

1. *Data review.* All data were dumped daily and imported into the Geosoft Oasis Montaj IP package. All readings were examined; outliers and data with relatively large errors were thrown out, the rest were averaged to produce a single reading for each station and n-separation. Where there were repeat readings, a weighted average was used to bias readings with higher stacks and lower standard deviations. The averages were calculated as follows:

$$AverageV = \left(\sum_i S_i V_i / Err_i \right) / \left(\sum_i S_i / Err_i \right)$$

$$AverageErr = \left(\sum_i S_i \right) / \left(\sum_i S_i / Err_i \right)$$

where S represents the number of stacks, V is the value to be averaged and Err is the standard deviation of the reading. The standard deviation of voltage measurements were taken to be equal to 1 as this value is not reported by the instrument. If the data were too noisy and were not repeatable, no final data were included in the final data set. Typically data quality was good throughout the survey.

Data from the 1987 Walcott IP survey were digitized from the pseudosections and imported into the Geosoft Oasis Montaj IP package.

2. *Registration.* GPS points were provided by Klondike Star personnel and coordinates for the stations determined by linear interpolation between GPS points. All UTM coordinates are in NAD83 Zone 7N. The topography was extracted from a digital elevation model equivalent to NTS 1:50,000 maps.

A scaled image of the 1987 Walcott IP survey was matched and rotated to a known point and line. The baseline intersections and ends of lines were then digitised. Station locations were determined by linear interpolation between these measured points.

3. *Apparent resistivity calculation.* The apparent resistivity was corrected for the effect of the proximal stationary current electrode in the modified pole-dipole geometry array used for the 2006 surveys.

4. *Data formatting.* The apparent chargeability, resistivity (in normalized voltage over current) and topographic data were formatted for entry into the 2D UBC inversion program.

5. *Resistivity modelling.* For each line, errors in the apparent conductance were assigned to the data. There is no means of directly quantifying these errors because neither the transmitter nor receiver records the error in the current or voltage. Errors were assumed to be $0.001 + 5\%$ S/m except lines 480E, 120E, 0, 60W, 120W and 360W from the 1987 Walcott data where the errors were assumed to be $0.003 + 5\%$ S/m. Following error assignment, the data were inverted and where high topographic relief dictated, a deep mesh was constructed. Default initial and reference models based on an average of the apparent resistivity were used. After the default run, the data were inverted a second time using initial and reference models as detailed below under DOI (depth of investigation) model. These half-space models are a much higher value (or lower) than the average in the survey area. The purpose of this second run is to generate a model with a background resistivity greatly different than the average values used in the default run. After the second run, the two models were compared and the lower region in the default model which differed by a factor more than the DOI cut off were replaced by a hatching pattern on the default run. In these hatched regions, the final model is not sensitive to the field data and there is no reliable subsurface information. The Chi factor was adjusted to ensure convergence and an appropriate level of structure to the model.

Resistivity inversion parameters

Line	Chi Factor	DOI Model (Ohm-m)	DOI Cut-off	Notes
Buckland grid				
L500E	1	10000	0.1	
L600E	1	10000	0.1	
L700E	1	10000	0.1	
L800E	3	10000	0.1	
L850E	2	10000	0.1	
L900E	1	10000	0.1	
L950E	1	10000	0.1	
L1000E	1	10000	0.1	
L1100E	3	10000	0.4	
L1200E	1	10000	0.1	
L1250E	1	10000	0.1	
L1300E	1	10000	0.1	
L1400E	1	10000	0.1	
L1500E	1	10000	0.1	
Lone Star West grid				
L0W	0.5	100000	0.1	
L50W	1	100000	0.1	

Line	Chi Factor	DOI Model (Ohm-m)	DOI Cut-off	Notes
L100W	0.8	100000	0.1	Non default weighting coefficients of as = 0.01, az = 1 and ax = 1 were used
L150W	0.3	100000	0.1	
L200W	0.5	100000	0.2	
L250W	1	100000	0.1	
L300W	1.5	100000	0.1	
L350W	1.5	100000	0.2	
L400W	0.3	100000	0.1	
L500W	1	100000	0.1	
L550W	1	100000	0.1	
L600W	2.5	100000	0.1	
L650W	1	100000	0.1	
L700W	2	100000	0.1	
L750W	1	100000	0.1	
L800W	1.55	100000	0.1	
L850W	1	100000	0.1	
L850W-50	3.5	100000	0.2	

Lone Star East grid

L240E	1	10000	0.1
L300E	1	10000	0.1
L360E	1	10000	0.1
L420E	1	10000	0.1
L480E	1	10000	0.3
L540E	1.5	10000	0.4
L600E	1	10000	0.1
L660E	3	10000	0.1
L720E	1	10000	0.1
L780E	1	10000	0.3
L840E	1	10000	0.1
L900E	1.5	10000	0.1
L960E	1	10000	0.1

Walcott 1987 IP grid

L810.1W	1.85	50000	0.3
L720.1W	0.1	50000	0.3
L600.1W	1	20000	0.2
L480.1W	1.2	50000	0.3

Line	Chi Factor	DOI Model (Ohm-m)	DOI Cut-off	Notes
L360.1W	0.3	50000	0.3	
L240.1W	0.4	20000	0.3	
L180.1W	0.9	20000	0.3	
L120.1W	0.9	20000	0.3	
L60.1W	0.3	20000	0.2	
L0.1	0.3	20000	0.1	
L120.1E	0.3	20000	0.2	
L240.1E	1	10000	0.1	
L360.1E	1.55	50000	0.4	
L480.1E	1.2	20000	0.3	

5. Chargeability modelling. For each datum, the observed standard deviation of chargeability was used as a measure of error for apparent chargeability. To avoid zero errors, a minimum of 0.5 mV/V was added to each error measurement. The IP data were first inverted using default values (initial and reference model of a 0 mV/V half-space), with the same mesh as the resistivity modelling, using the default recovered resistivity model. After the first run, the data were inverted a second time using initial and reference models which incorporated background chargeabilities as detailed below under DOI model (a much higher value than the average in the survey area). The two models were then compared and regions in the default model which varied more than the DOI cut off were replaced by a hatched pattern in the final models. In these hatched regions, the final model is not sensitive to the field data and there is no reliable subsurface information. The Chi factor was adjusted to ensure convergence and an appropriate level of structure to the model.

Chargeability inversion parameters

Line	Chi Factor	DOI Model (mV/V)	DOI Cut-off	Notes
Buckland grid				
L500	17.5	100	0.1	Poor fit to high chargeabilities.
L600	5	100	0.2	Poor fit at n = 5 and 6 to the high chargeabilities around Stn's 400 to 500

Line	Chi Factor	DOI Model (mV/V)	DOI Cut-off	Notes
L700	14	100	0.1	Non default weighting coefficients of $a_s = 1$, $a_x = 0.00001$ and $a_z = 1$ were used. Poor fit to high chargeabilities, especially to the north.
L800	45	100	0.1	Very poor fit to the high chargeabilities throughout the section. Model severely underestimated chargeability of line.
L850	1	100	0.1	
L900	1	100	0.1	
L950	2	100	0.1	Poor fit to moderate-high chargeabilities
L1000	9	100	0.1	
L1100	12	100	0.1	Moderate fit to high chargeability at station 500N
L1200	2.1	100	0.1	Poor fit to high chargeability in middle of line.
L1250	26	100	0.1	Poor fit to high chargeability in middle of line.
L1300	1	100	0.1	
L1400	1	100	0.1	Non default weighting coefficients of $a_s = 0.01$, $a_x = 1$ and $a_z = 1$ were used.
L1500	2	100	0.1	
Lone Star West grid				
L0	1.5	100	0.1	
L50	62	100	0.1	Non default weighting coefficients of $a_s = 0.0005$, $a_x = 1$, and $a_z = 1$ were used. Moderate fit to high chargeabilities on n=5&6.
L100	1	100	0.1	
L150	6.5	100	0.1	Moderate fit to high chargeabilities.
L200	5.5	100	0.1	Moderate fit to high chargeabilities.
L250	4	100	0.1	Moderate fit to high chargeabilities.

Line	Chi Factor	DOI Model (mV/V)	DOI Cut-off	Notes
L300	34.5	100	0.1	Very poor fit at n = 5 and 6 around stations 100N and 200N
L350	9	100	0.1	Moderate fit to high chargeabilities.
L400	0.8	100	0.1	Low chargeability around 0 not well represented in the model.
L500	2	100	0.1	Poor fit at n=5 and 6 around stations 0 and 50N
L550	8.5	100	0.1	Poor fit at n=5 and 6 around station 300N
L600	3.5	100	0.1	
L650	1	100	0.1	
L700	68	100	0.1	Very poor fit to high chargeabilities.
L750	0.7	100	0.1	
L800	17	100	0.1	Poor fit to the high chargeabilities at n=6 for the entire line
L850	1	100	0.1	
L850-50	0.3	100	0.2	Poor fit to the high chargeabilities around station 100N
Lone Star East grid				
L240	1	100	0.1	
L300	0.5	100	0.1	
L360	4	100	0.1	
L420	8.5	100	0.1	
L480	30	100	0.1	Moderate fit to high chargeabilities.
L540	73	100	0.1	Poor fit to high chargeabilities.
L600	92	100	0.1	Poor fit to the anomaly at station -400
L660	50	100	0.1	Very poor fit to high chargeabilities.
L720	1	100	0.1	
L780	7.5	100	0.1	
L840	1.5	100	0.1	
L900	11	100	0.1	

Line	Chi Factor	DOI Model (mV/V)	DOI Cut-off	Notes
L960	6	100	0.1	
Walcott 1987 IP grid				
L810.1W	0.5	100	0.3	
L720.1W	0.4	100	0.3	
L600.1W	1.8	100	0.2	
L480.1W	1	100	0.3	
L360.1W	1	100	0.3	
L240.1W	1.3	100	0.3	
L180.1W	1.1	100	0.2	
L120.1W	2.1	100	0.3	
L60.1W	0.75	100	0.3	
L0.1	0.75	100	0.2	
L120.1E	0.9	100	0.2	
L240.1E	1.7	100	0.2	
L360.1E	1.4	100	0.3	
L480.1E	1.3	100	0.3	

6. *Image extraction.* After the modelling was complete, final images were generated with the inversion software and converted to JPEGs which appear in Appendix D.

7. *Composite sections.* Pseudosections of the apparent resistivity, apparent chargeability, error in chargeability and true sections of recovered models of resistivity and chargeability were prepared from the final edited data and modelling results using the Geosoft Oasis Montaj IP package. Logarithmic colour scales for the resistivity sections and linear colour scales for the chargeability and error were used. To highlight details, colours are scaled to each line individually. Composite sections are in Appendix E, found in the back pockets of this report.

8. *Stacked sections.* Stacked pseudosections of the apparent resistivity and apparent chargeability and stacked models of resistivity and chargeability were produced for each grid. Logarithmic colour scales were used for the resistivity sections and linear colour scales were used for the chargeability. A common colour scheme was used for all lines within each grid. Stacked sections are found in Appendix F.

9. *3D gridding.* A 2.5D model was constructed from the 2D inversions. It is not a true 3D model as all the models were inverted using a 2 dimensional assumption. The models from the UBC GIF code were converted to ASCII xyz files. The geo-registration is based on a single point per line with a known azimuth, therefore there can be small geo-registration errors where the lines had a bend.

Data that did not agree within a factor of 0.4 between the default model run and the high chargeability or high resistivity run were rejected. The data were concatenated for each grid and also each grid was concatenated to a master file including all the grids. Resistivities were converted into conductivities. The data were imported into Rockworks 2004 for 3D gridding. The topographic surface was imposed as an upper boundary to the model with null values above the surface of the DEM. An inverse distance gridding algorithm was used with a moderate directional weighting of 108 degrees to offset the bias generated by greater data density along the line direction. A maximum distance filter was also applied with grid nodes far away from a valid data point assigned a null value. Finally a post-gridding high fidelity algorithm was applied to reduce the residuals between the source data and the gridded model. The table below describes details of the models for each grid.

Grid	UTME min	UTME max	UTMN min	UTMN max	Cell size	Maximum distance cutoff
Buckland	584400	586640	7084110	7085800	10 m	140 m
Lone Star East	588350	586580	7086840	7084720	10 m	45 m
Lone Star West	587400	585290	7087720	7085920	10 m	30 m
1987 Walcott IP	588500	584900	7087800	7084100	20 m	77 m
All grids	584400	588500	7084100	7087720	20 m	50 m

All the models had a vertical node size of 10 metres.

Surfaces parallel to the topographic surface were extracted and gridded using the same colour scheme as was used in the stacked sections. Individual grid results are embedded in the results and discussion section of this report. Plan maps at a 1:10000 scale of models using the data from all four grids are in Appendix G, in the back pocket of this report.

10. *Digital archive.* The final IP data, digital copies of the composite sections, stacked sections, inversion images and plan view maps were written to CD-ROM (attached to this report).

9.0 DATA PRODUCTS

A digital archive containing the report, figures, final and raw data is appended on CD-ROM to this report. The digital archive contains the following files and folders.

Raw	Raw IRIS Elrec Pro daily dump files, both in binary IRIS and ASCII formats.
Buckland 2006 IP.gdb, Buckland 2006 IP.xyz, Lone Star East 2006 IP.gdb, Lone Star East 2006 IP.xyz, Lone Star West 2006 IP.gdb, Lone Star West 2006 IP.xyz, 1987 Walcott IP.gdb, 1987 Walcott IP.xyz	In the Final folder, final IP data in Geosoft database and ASCII xyz format for the three 2006 grids. Digitized IP data Geosoft database and ASCII xyz format from Walcott 1987 survey.
Buckland IP Grid Coordinates.xls Lonestar IP East Grid Coordinates.xls Lonestar IP West Grid Coordinates.xls 1987 GPS.xls	In the Final folder, Excel spreadsheets as supplied by Klondike Star personnel with all GPS survey points. Spreadsheet with digitised data of 1987 Walcott IP survey.
Figures	A folder with full scale pdf copies of all figures found in the back pocket of this report.
Inversion images	Jpgs of recovered models with convergence curves and observed and predicted data for each line.
Lone Star Project 2006 IP survey.pdf	PDF of this report

10.0 RESULTS & DISCUSSION

Composite sections comprising pseudosections of apparent resistivity, apparent chargeability and error in apparent chargeability and recovered models of resistivity and chargeability are found for all 4 grids in Appendix E at a scale of 1:2500, except for lines 810.1W of the Walcott 1987 IP survey which were plotted at 1:5000 because of its length. Appendix F has stacked pseudosections of apparent chargeability and apparent resistivity and stacked recovered models of resistivity and chargeability plotted at a 1:4000 scale. Plan maps parallel to the ground of recovered resistivity and chargeability at a 1:10,000 scale are in Appendix G. All the above appendices are found in the back pockets of this report. Page sized versions of the above figures, not to scale, are found in Appendix H.

Buckland Grid

Line 810.1W from the Walcott 1987 survey extends into the 2006 Buckland grid, lying

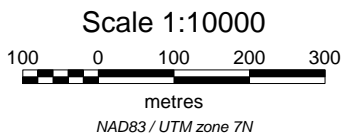
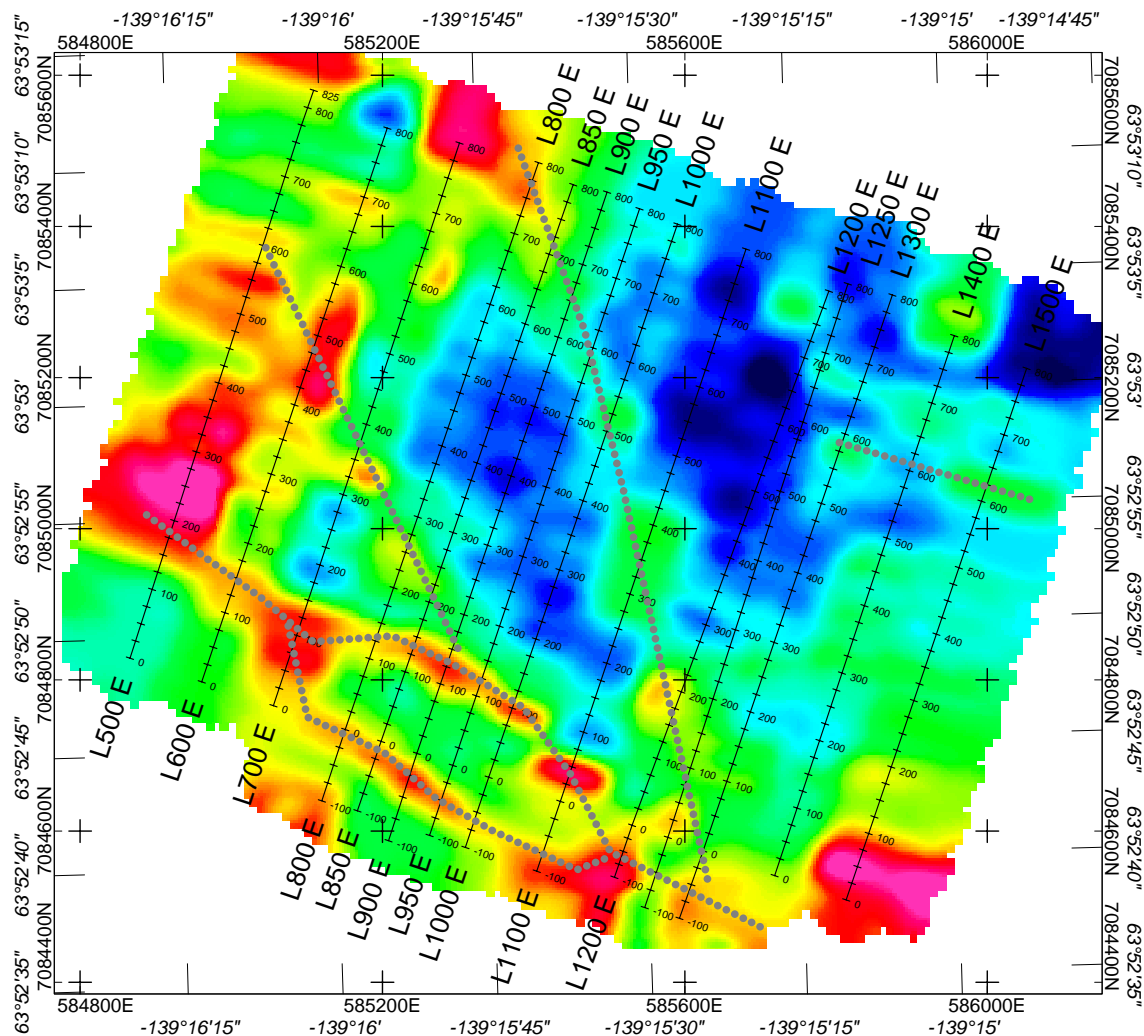
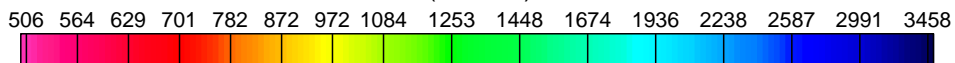
close to line 1250. The results of the 1987 survey are consistent with those of the 2006 survey with a modest increase in conductivity at the south end of the line and two modest recovered chargeability highs, with amplitude between the more muted L1300E response and the higher amplitude response on L1250E.

Plan maps from the 2.5D model extracted at a constant depth below surface are shown in figures 4 through 7. Figures 4 and 5 show gridded recovered resistivity at depths of 20 m and 70 m below surface respectively; these grids are interpolated and extracted from the recovered resistivity sections which are also shown as stacked 2D sections in Appendix F. In general, the grid has two domains, a resistive domain to the northeast and more conductive ground to the south and west. In the south, the conductive zone is splayed into two well defined linear conductive features running 120/300 between L700E and L1200E. The southern feature appears to pinch out at depth, but as this feature is at the very southern extreme of the survey line, large dipole separation data were not collected here and the lack of continuity at depth may only reflect a paucity of data. The more northern feature appears to coalesce into another conductive structure running at NW at depth. A NNW conductive break running through the resistive domain runs from station 0 on L1300E through station 800N on L800E. Another more subtle conductive feature runs ENE from L1500E to L 1250E, 600N on the 70 m below surface grid.

Some caution must be exercised in the interpretation of the recovered chargeability models because modeling (inversion) was unable to replicate the observed data in the area. This is reflected by most of the chi-factors from the inversions being > 1 and can be seen visually by inspection of the inversion results in Appendix D. The chargeability model does not have as well defined structure as the resistivity model. Both the 50 m depth map (Figure 6) and the 100 m depth map (Figure 7) have > 15 mV/V zones recovered at the south ends of lines 1100E – 1250E and the south end of lines 500E and 600E. Several other areas of high chargeability are imaged on lines 500E and 600E, particularly on the deeper map, however the highest apparent chargeabilities in the data were not well fitted on these lines. L800E has high apparent chargeabilities, but the data misfit is large here and the high apparent chargeability is only marginally represented in the model. A central area on lines 1000 to L1250E also has elevated chargeabilities, although the area likely under estimates the true chargeability as model had poor fits to high apparent chargeability in the middle of the lines.

The linear ESE/WNW resistivity lows are interpreted to be the Buckland “Shear Zone” where brittle fractures are present and may act as conduits for groundwater leading to their reduced resistivity. Chargeability highs coincident with resistivity lows are imaged in the vicinity of the Hilchey Zone at station 300N on line 500E, although more anomalous values are found to the east on L600E. However, the data to model misfit was high on L500E and several high apparent chargeability readings were not reproduced by the model. The chargeability high on L800E at station 200N is under-fit by the inversion and the true chargeability anomaly is likely greater than shown. As well, there are high chargeability zones between stations 200N and 500N on lines 1000E to 1250E (which are also likely under estimated in the recovered model), on the

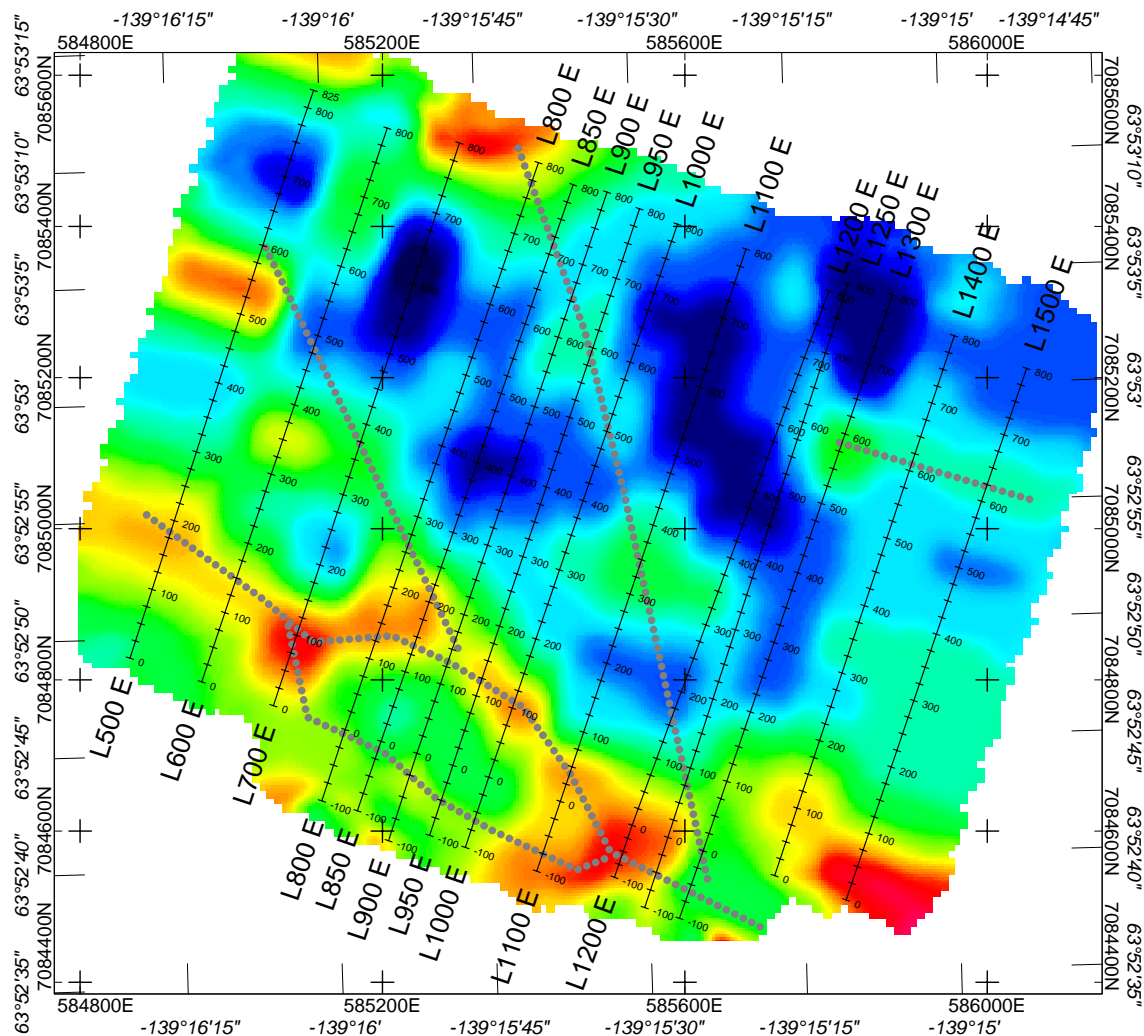
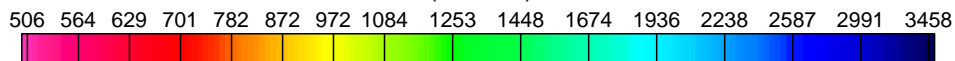
Recovered Resistivity (Ohm-m)



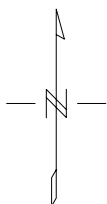
Buckland Resistivity Plan Map
grid from 3D model - 20 m below surface

Figure 4

Recovered Resistivity (Ohm-m)

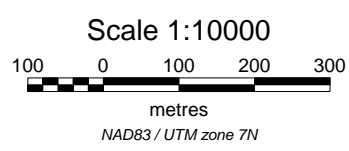
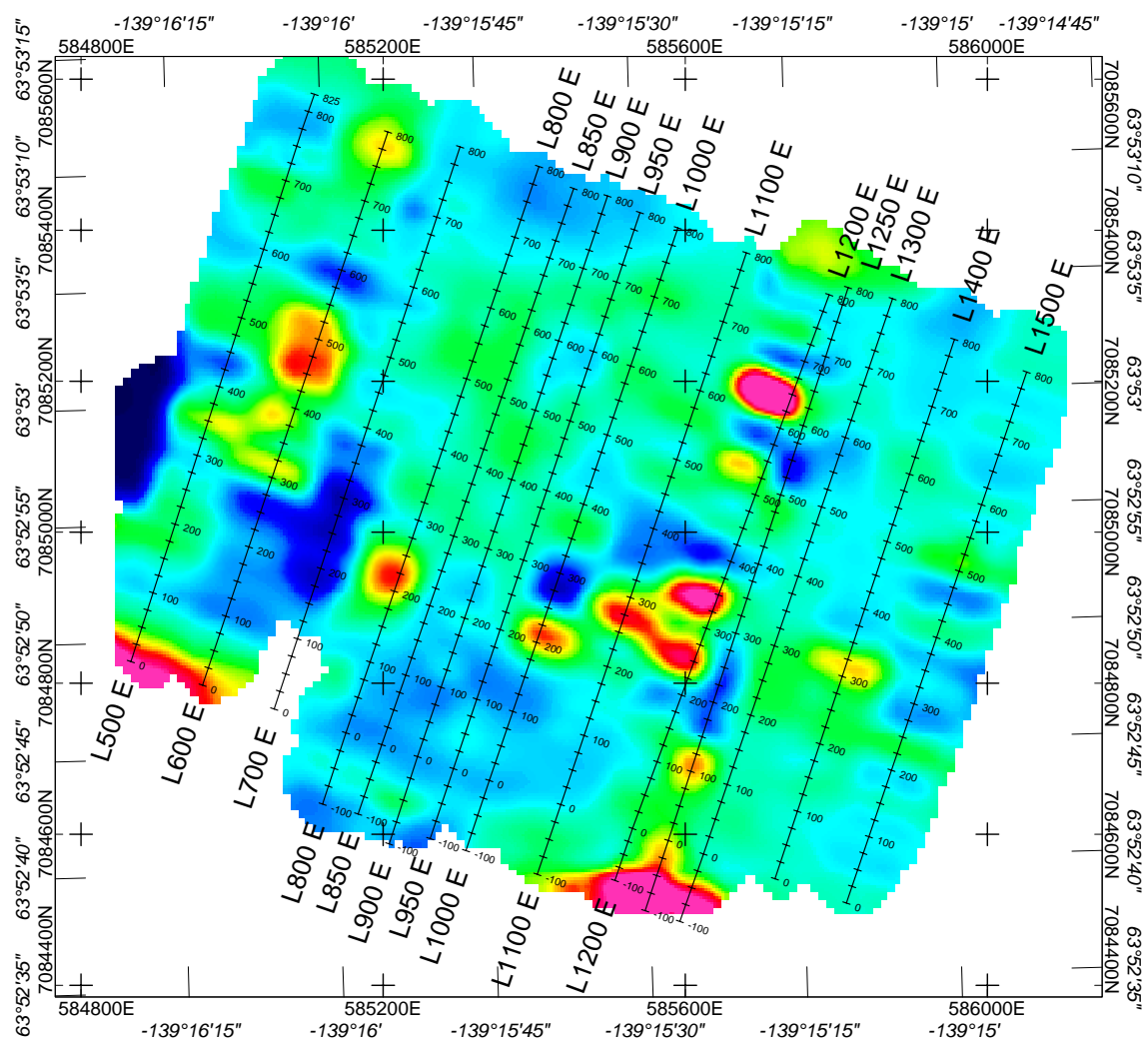
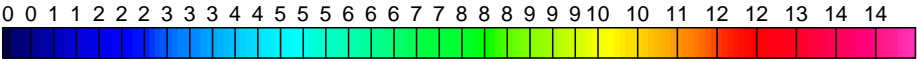


Scale 1:10000
100 0 100 200 300
metres
NAD83 / UTM zone 7N

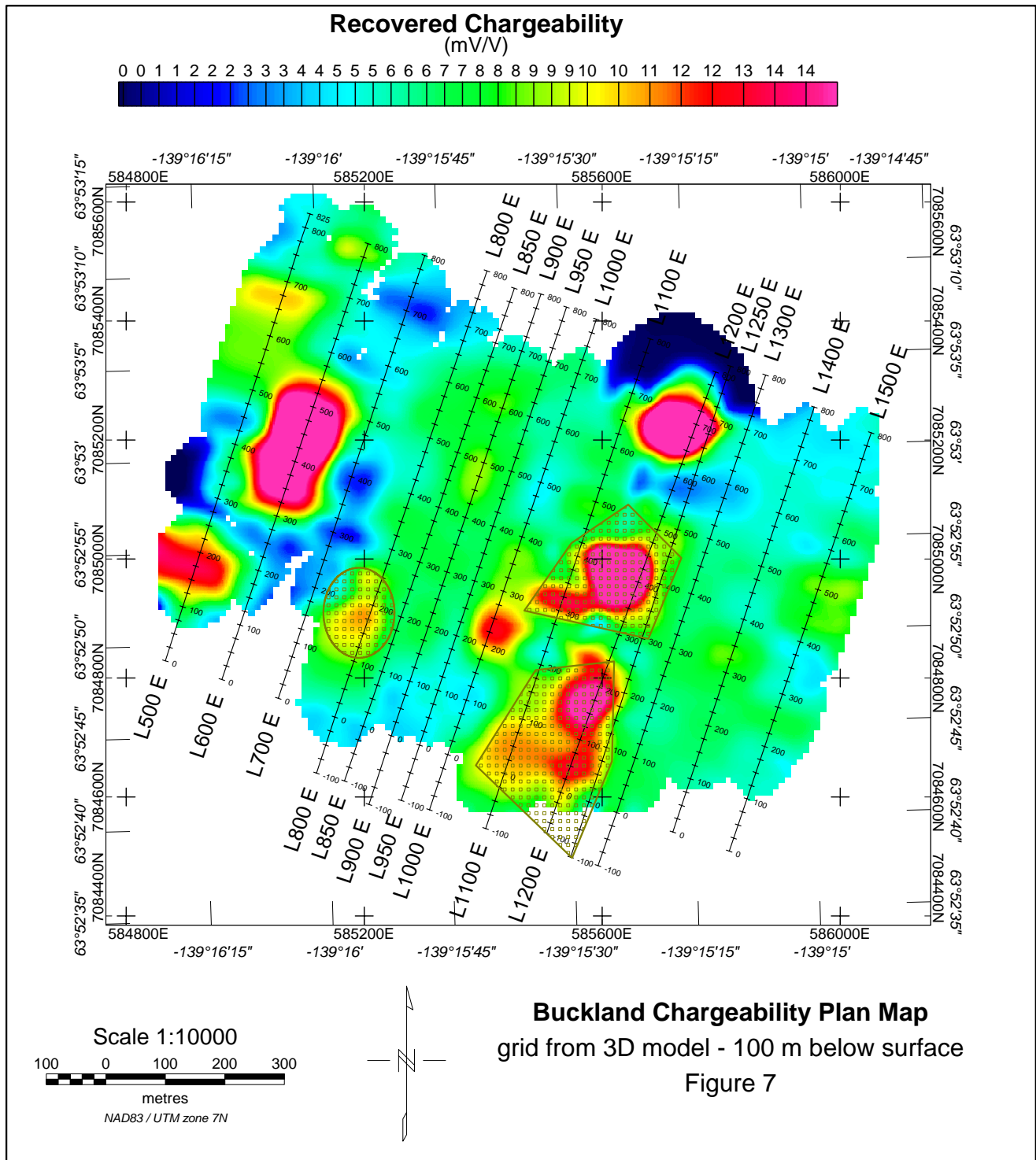


Buckland Resistivity Plan Map
grid from 3D model - 70 m below surface
Figure 5

Recovered Chargeability
(mV/V)



Buckland Chargeability Plan Map
grid from 3D model - 50 m below surface
Figure 6



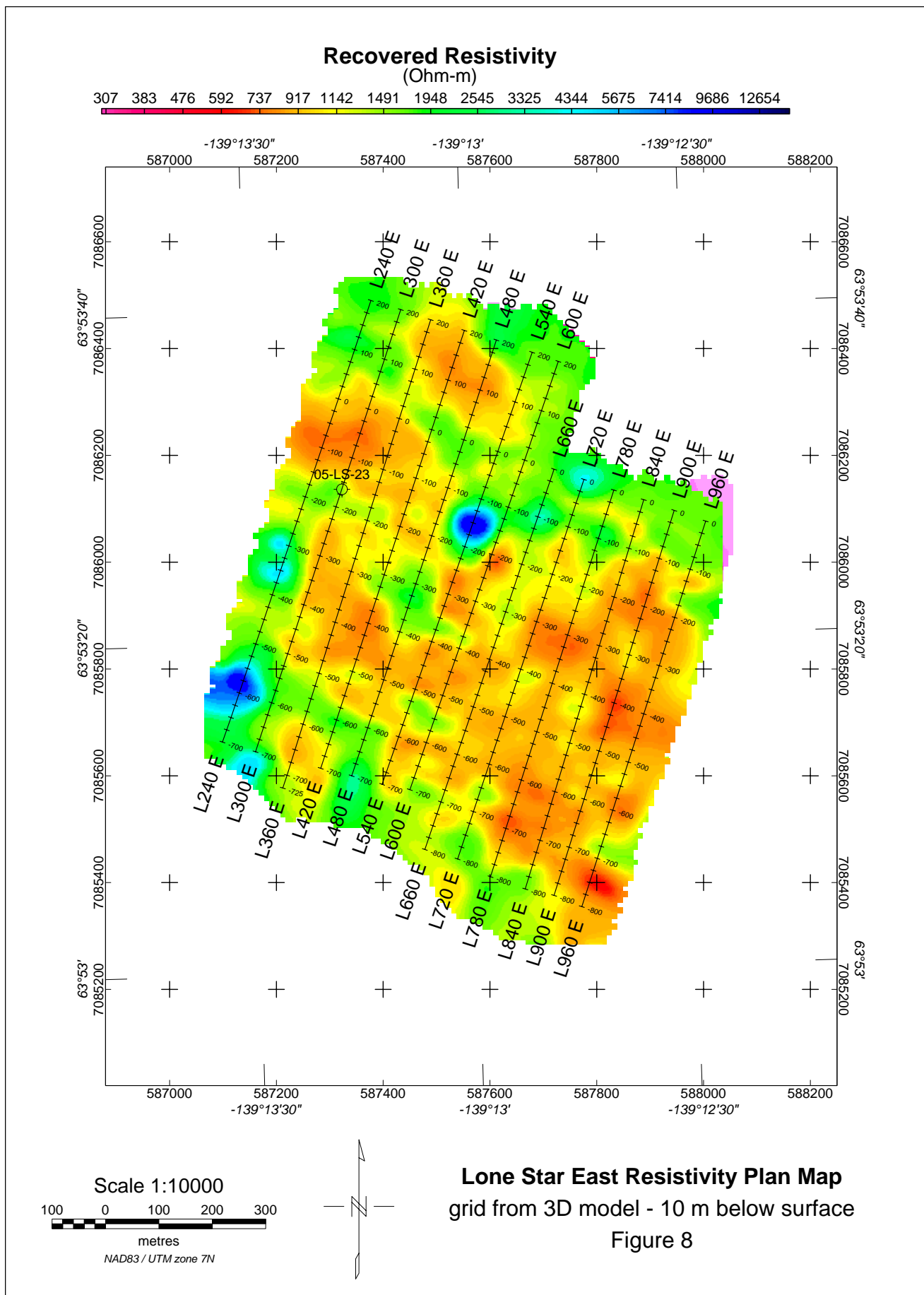
south ends of lines 1100, 1200 and 1250 and on the north end of line 1200E. The chargeability highs on the south ends of lines 1000E to 1250E are coincident with the coalescing of the two linear conductive features interpreted as the Buckland shear zone. This suggests the presence of structurally controlled chargeable mineralization.

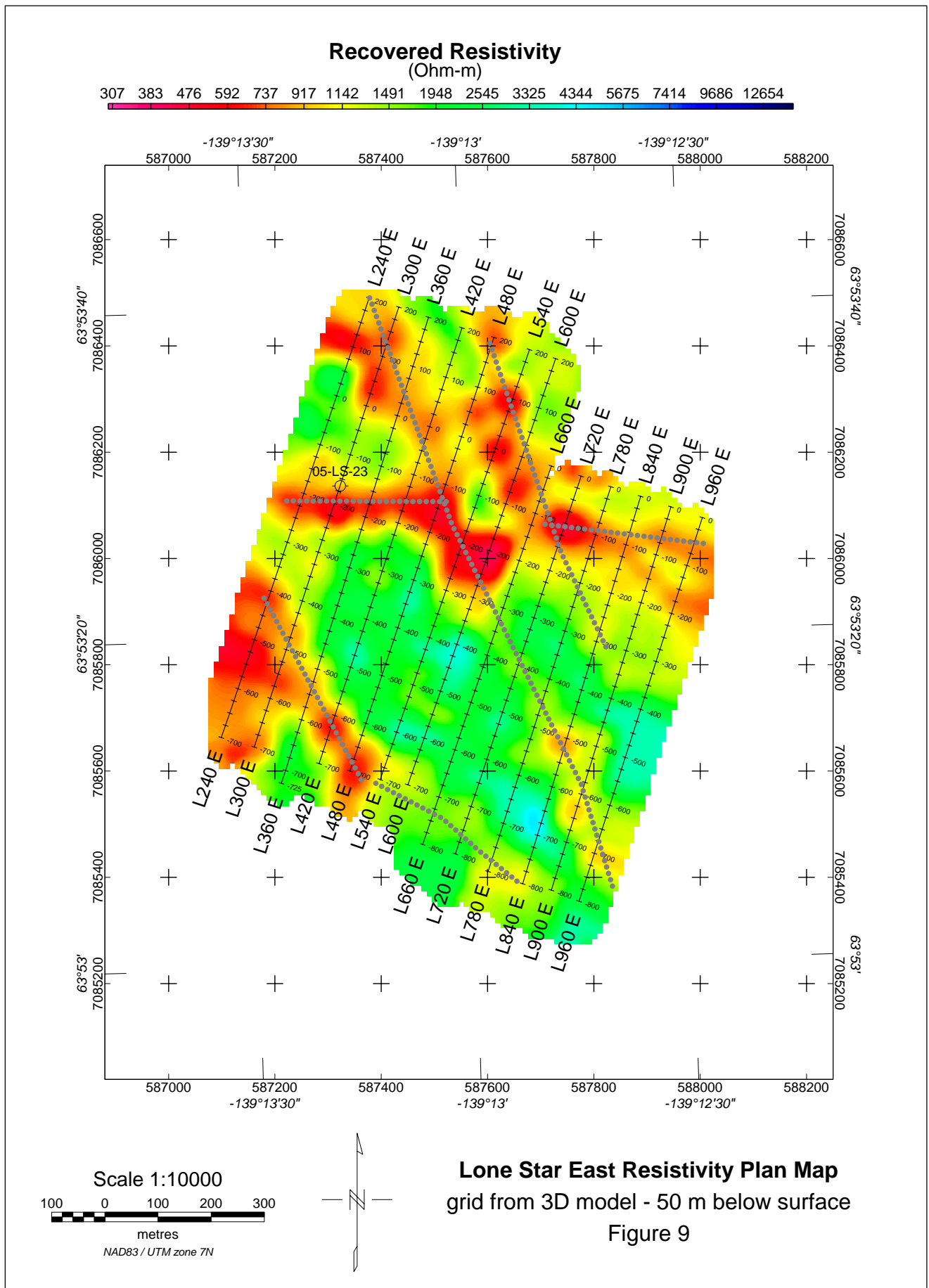
Lone Star East Grid

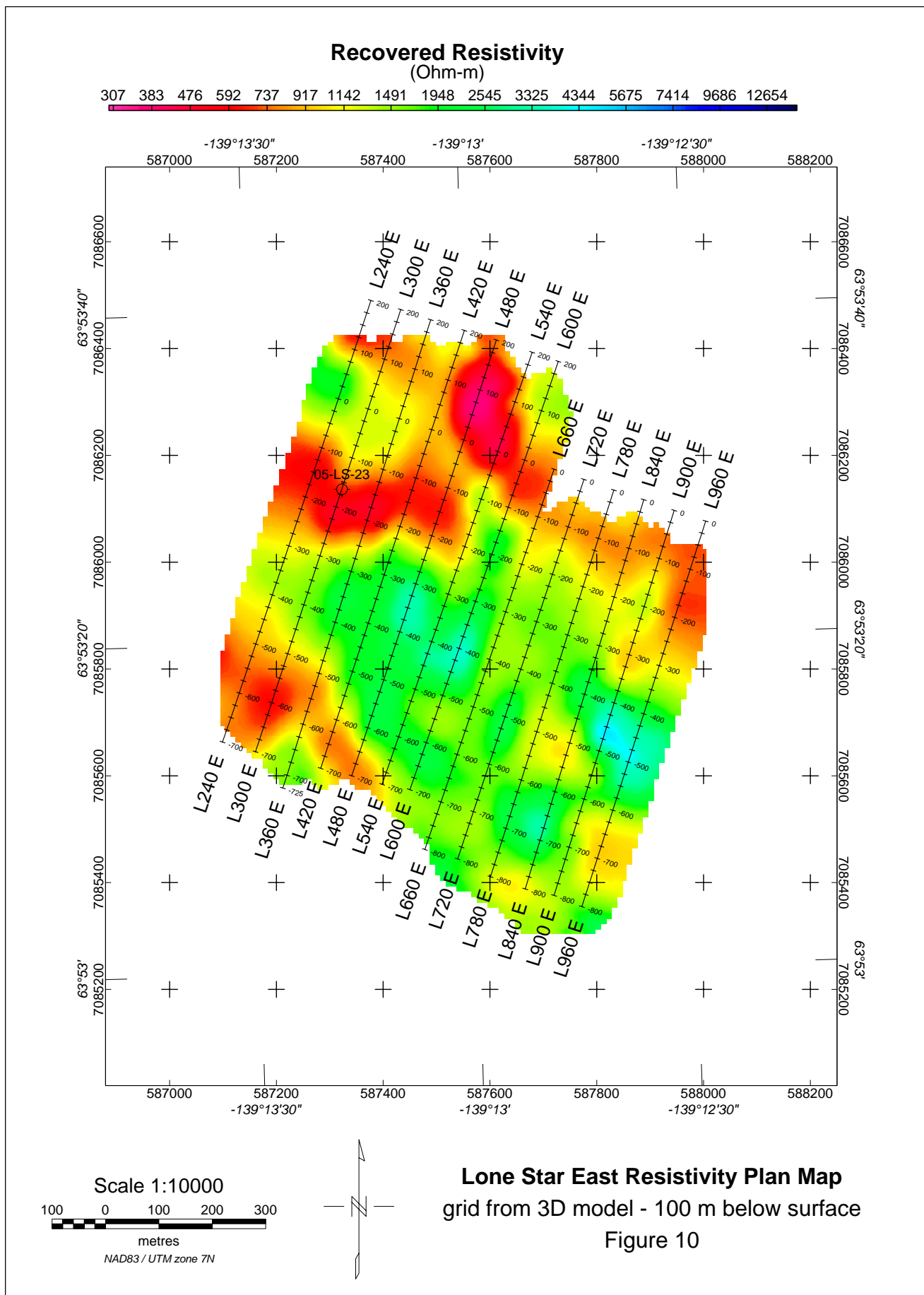
The Lone Star East grid overlaps extensively with the 1987 Walcott IP survey sharing a common baseline and lines spaced 120 metres from L240E to L960E. The 2006 Lone Star East survey had a line spacing of 60 metres, therefore every second line was a new line. Three lines (240.1E, 360.1E and 480.1E) of the repeated 1987 Walcott survey lines were digitized and are presented in this report as a check on the consistency of the results. The two surveys agree very well with each other; main differences in the recovered resistivity models of the include a conductive body at station 225S on L360E which is only marginally imaged in the 1987 recovered model and a much stronger conductive anomaly on the north end of L480 on the 2006 survey than the Walcott 1987 survey. The reason for these discrepancies is that in both cases, the recovered anomalies are being driven by low apparent resistivity readings on $n = 5$ & 6 separations in the 2006 data while the Walcott 1987 survey only read $n = 1$ through 4.

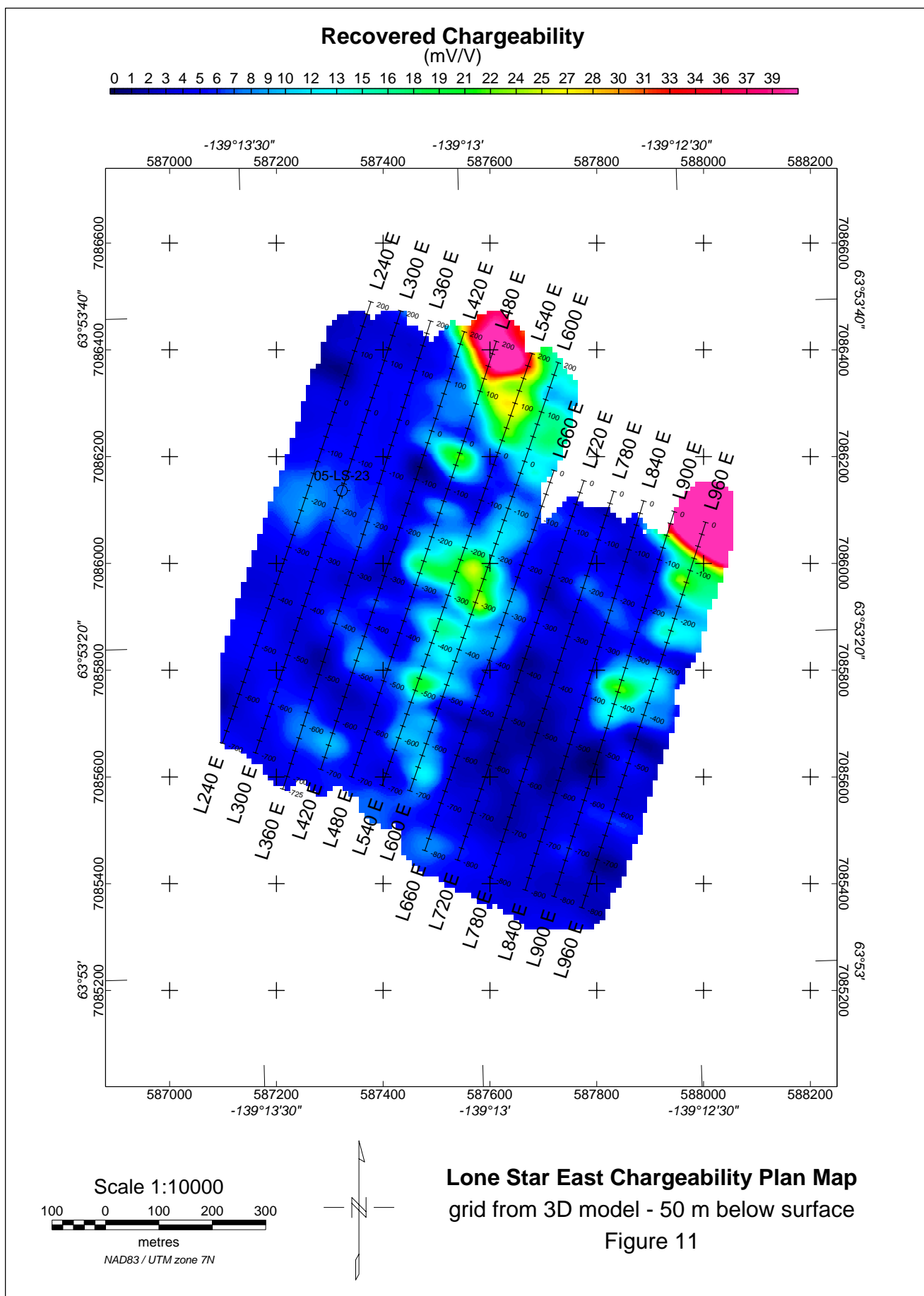
The recovered chargeabilities are less consistent, likely because of the different maximum n -separation again. L240E has subdued recovered chargeabilities in both surveys with the largest values centered at station 200S. The 2006 survey has the largest apparent chargeabilities on $n=5$ & 6 separations and therefore the 2006 recovered model has a greater amplitude than the recovered model the Walcott 1987 data. On L360E, both surveys again image an overall subdued chargeability response with a small-amplitude high at station 600S (575S on the Walcott 1987 survey) and a broad low-amplitude response centered at station 200S. The 2006 recovered model has a greater amplitude again because of the extra $n = 5$ & 6 readings. On L480E, the difference between the two surveys is extreme. The 2006 survey read some large apparent chargeabilities values on $n = 5$ & 6 and drove the recovered models to high-amplitude chargeability anomalies. The locations are consistent with modest chargeability anomalies imaged from the Walcott 1987 survey, but as the amplitudes are mainly driven by the large $n = 5$ & 6 readings the differences in recovered amplitudes are large. The 2006 survey is the preferred data set as it contains the $n=5$ & 6 readings.

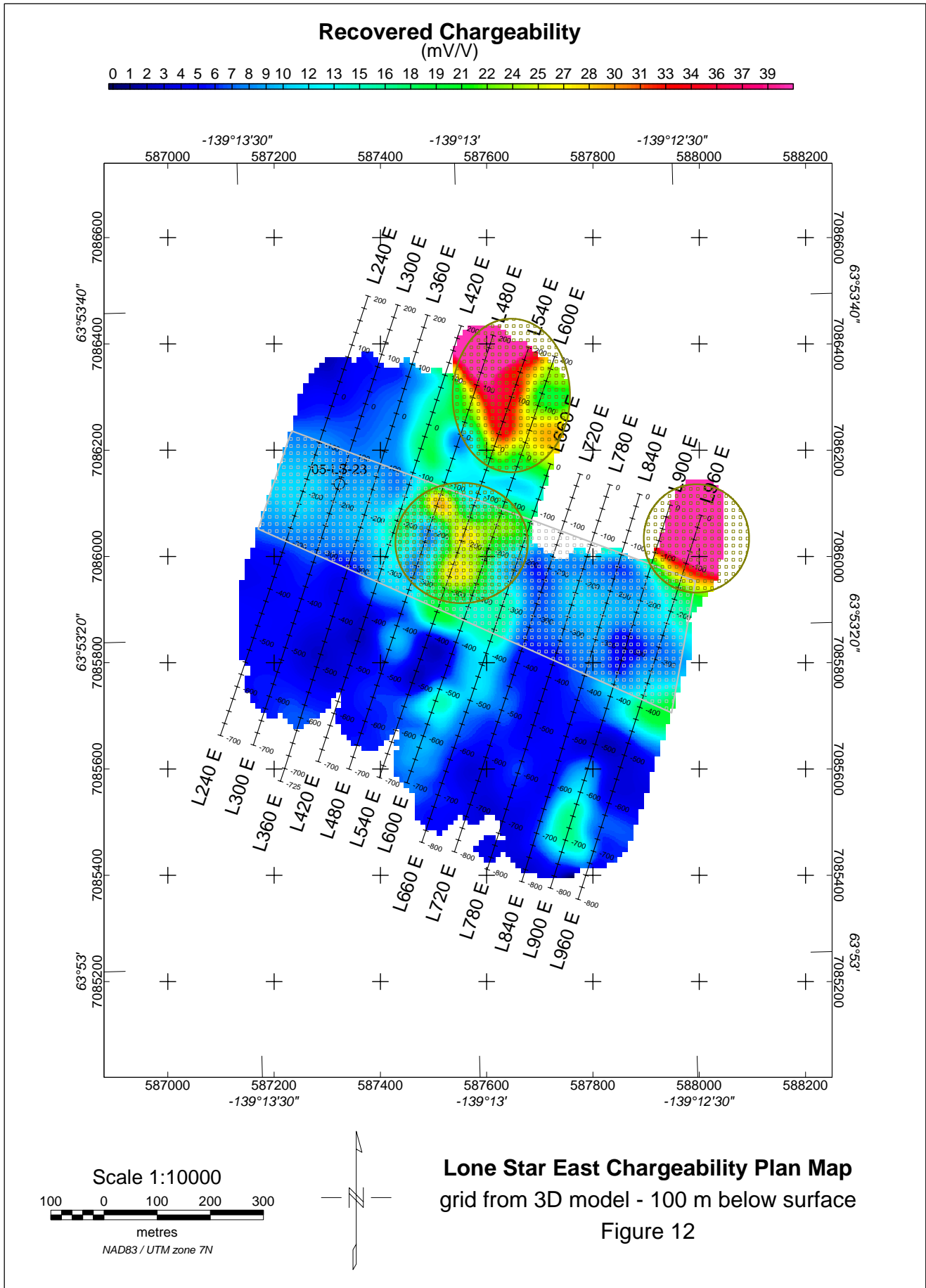
The recovered resistivity model, illustrated by Figures 8 (10 m below surface), 9 (50 m below surface) and 10 (100 m below surface), shows generally a trend of conductive ground (< 1000 Ohm-m) to the northeast and more resistive ground to the southwest on the deeper models. The model 10 m below surface has more consistent resistivity throughout the entire grid. Three linear conductive features run approximately NNW: 1) from L480E, 700S to L240E, 500S 2) from L960E, 700S to L240E, 100N and 3) from L840E, 300S to L480E, 200N. These may be the expressions of the characteristic

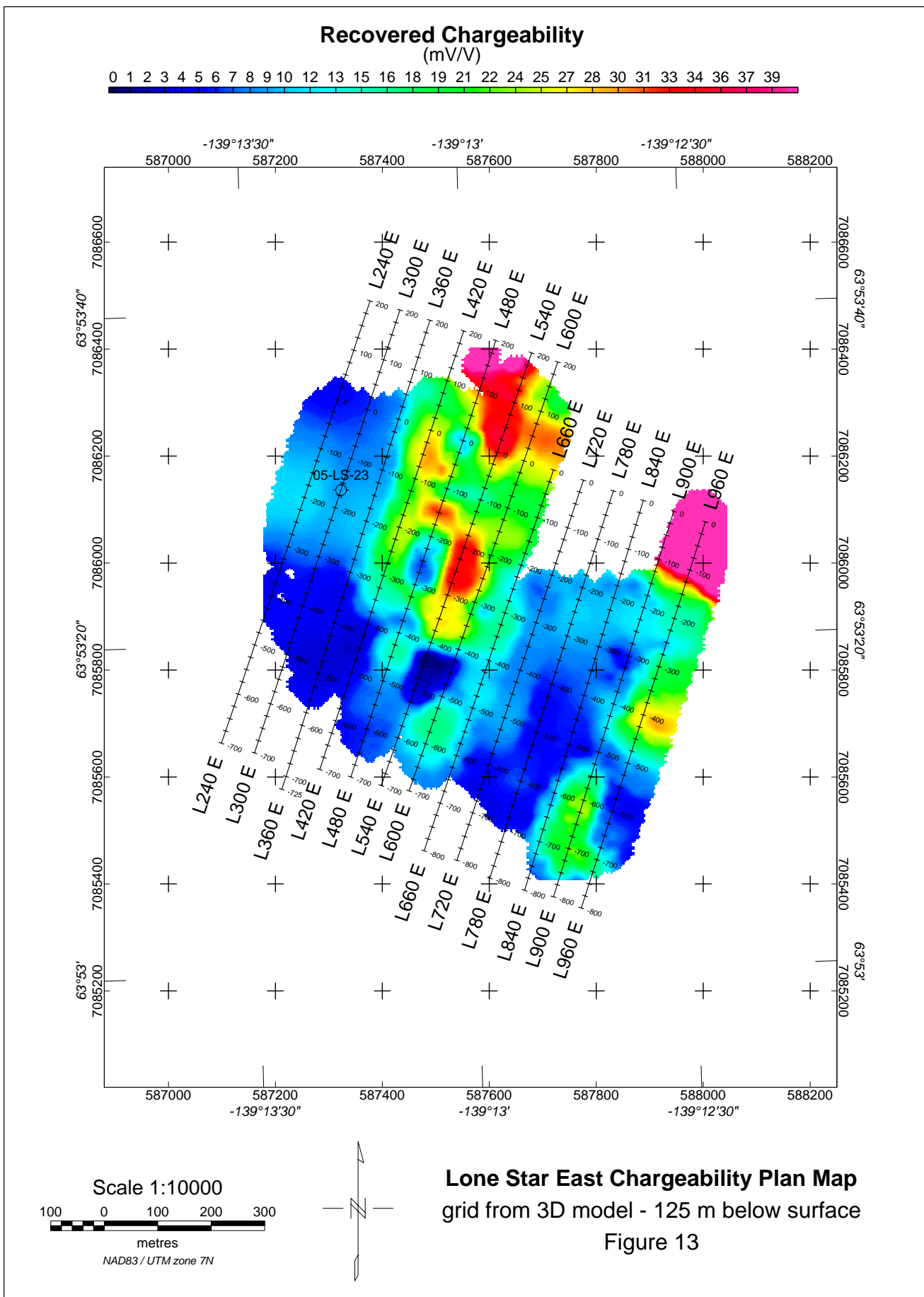












fracturing adjacent to intrusive diabase dikes observed in the area. In addition there is a conductive feature running EW from L240E, 200S to L960E, 75S. All of the conductive features are most easily seen in the 50 m below surface plot (Figure 9).

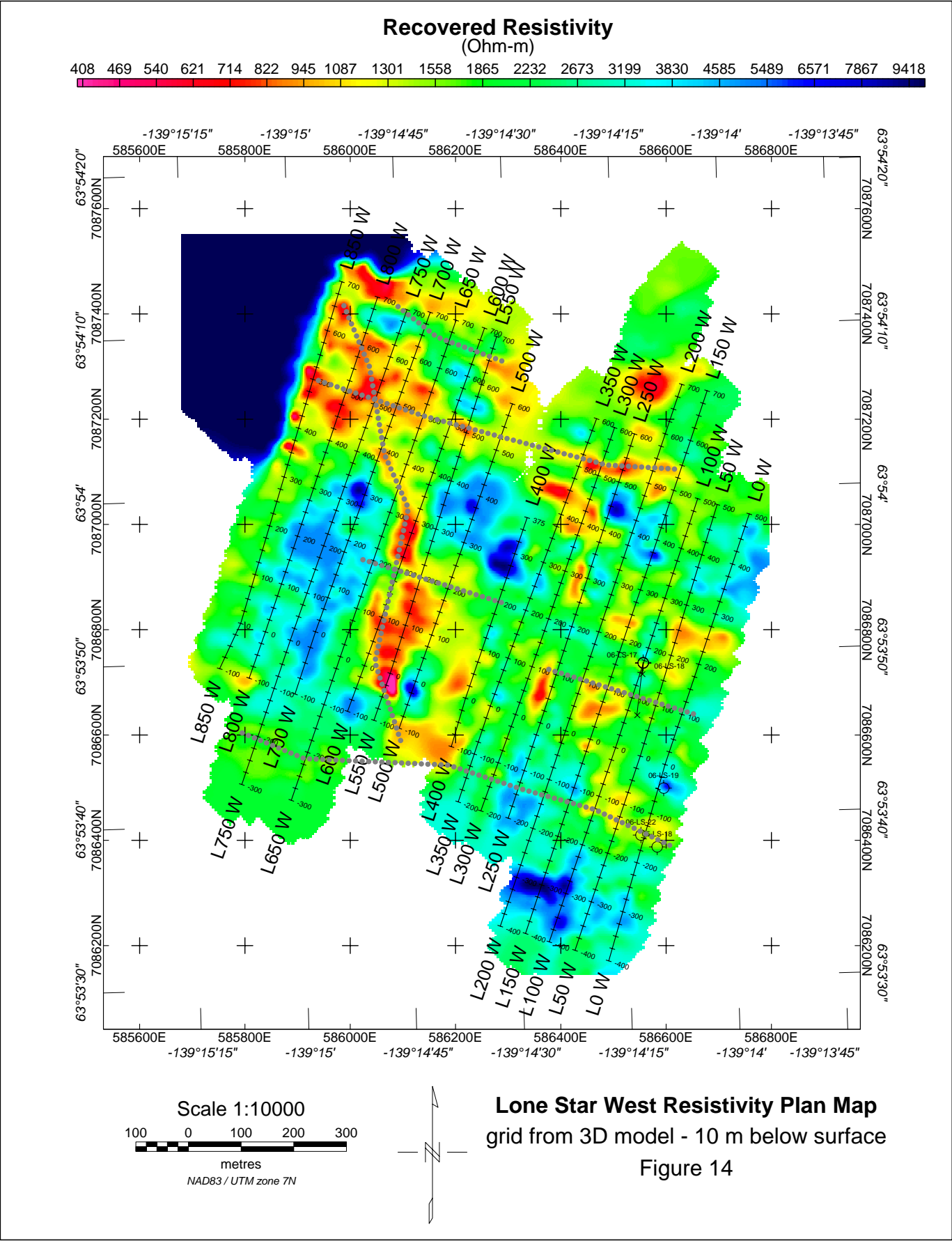
Plan views of recovered chargeability models are shown in Figures 11, 12 and 13 at depths of 50, 100 and 125 m below surface respectively. Some caution must be exercised in interpreting the recovered chargeability models as the misfit between the observed and predicted data is large on lines 480E through 660E. The recovered models do not reproduce the high apparent chargeability observed and the true chargeability distribution is likely greater than what is modelled. The upper layer is generally not chargeable, reflecting the deep weathering of the unglaciated Klondike region. There is a wide 200 m band of moderately elevated chargeability (10 mV/V) running across the grid centered at 200S, seen in Figures 12 and 13. Superimposed on this moderate chargeability trend are large chargeabilities on lines 420E through 660E, on line 900E from 600S to 700S and on L960E, particularly the north end of the lines 480E, 540E and 960E. These high chargeability features are quite deep and appear to increase in amplitude down to below 125 m (relative to surface).

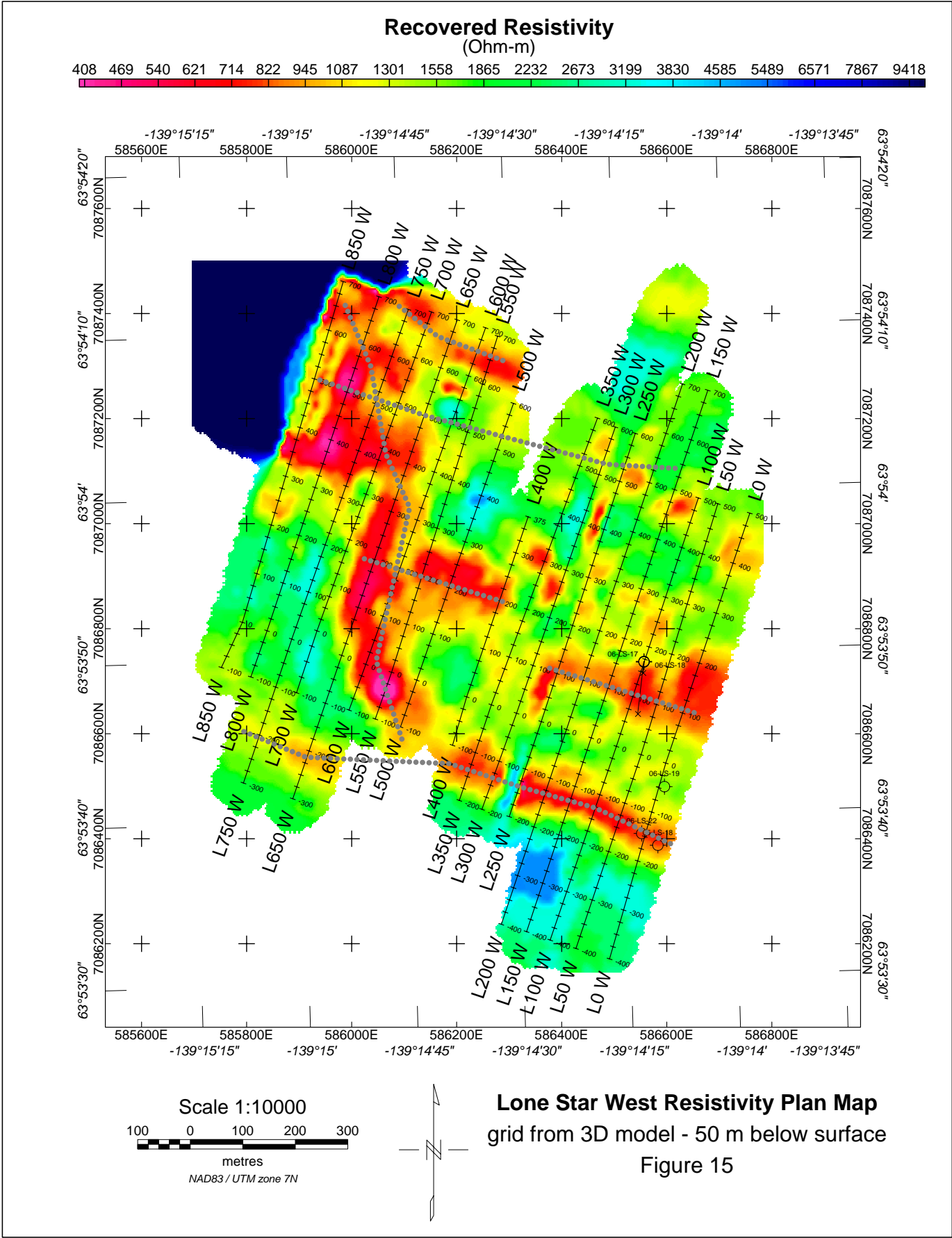
Drill hole 05-LS-23, which is a vertical hole with the collar at 587322E, 7086136N (corresponding to station 165S on L300E) recovered only trace pyrite to 50 m, trace to 2% pyrite from 50 m to 100 m and finally increasing to 4 – 8 % pyrite from 100 m to 132 m. This is consistent with the model, although the modest recovered chargeability anomaly is closer to surface than the observed mineralization at 100 – 132 m.

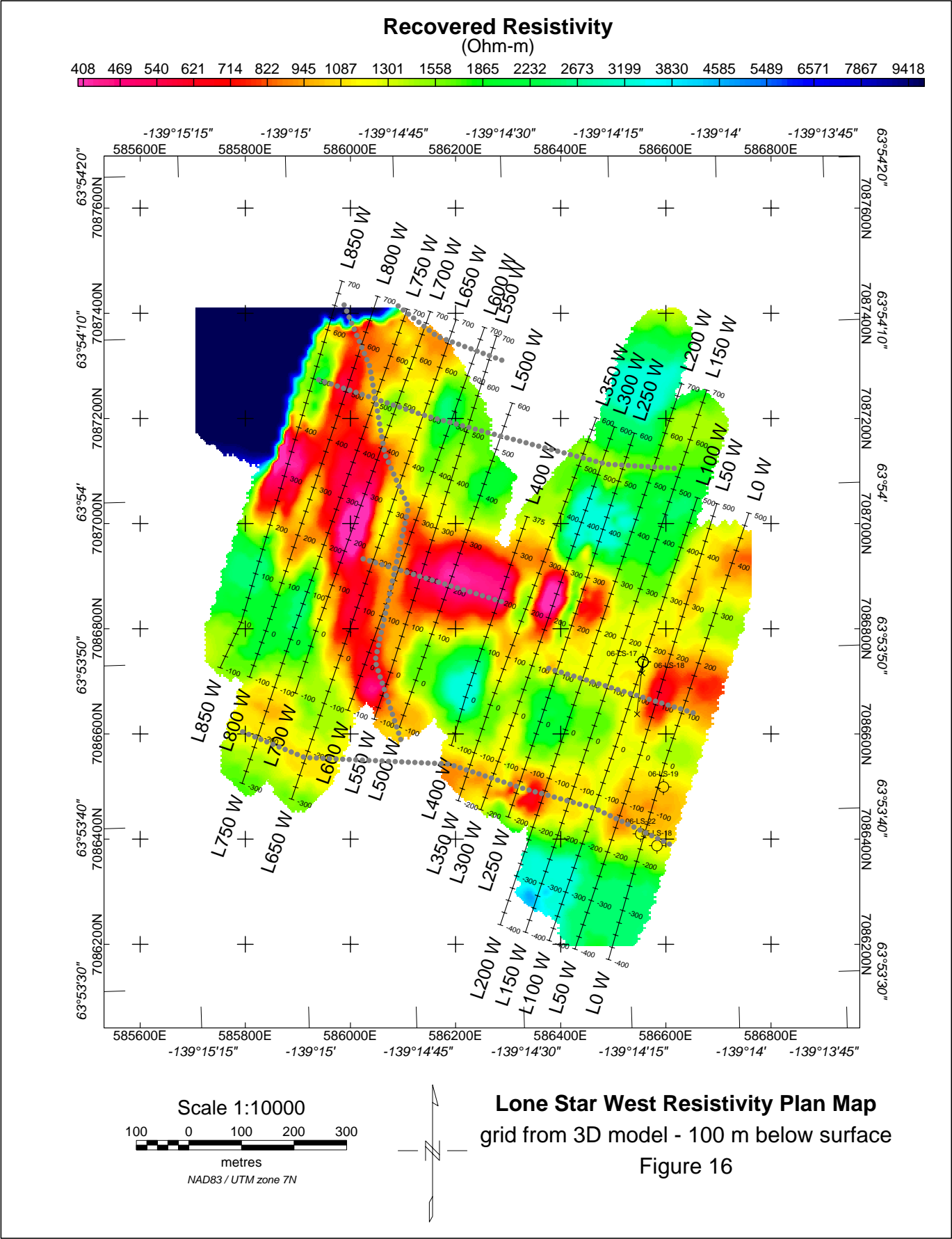
Lone Star West Grid

The 2006 Lone Star West grid overlaps with the 1987 Walcott IP grid on lines 300W (equivalent to the Walcott L810.1W), 100W (equivalent to the Walcott L600.1W), L200W (close to Walcott L720.1W) and L0W (close to Walcott 480.1W). The station numbering is consistent for the two surveys. The recovered resistivity models between the two surveys agree very well. The 2006 survey has higher recovered chargeabilities in general, partly caused by the highest apparent chargeabilities often measured on the n=5 & 6 channels which were not surveyed in the 1987 survey. There is quite a large difference between the two surveys on L300W / L810.1W which could also be attributed to the fact that different array geometries were used (dipole-dipole as opposed to modified pole-dipole. Of note on the L300W / L810.1W is that the surficial high chargeability at station 100N is imaged in both surveys.

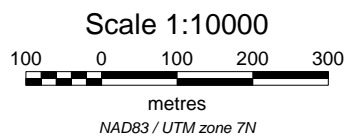
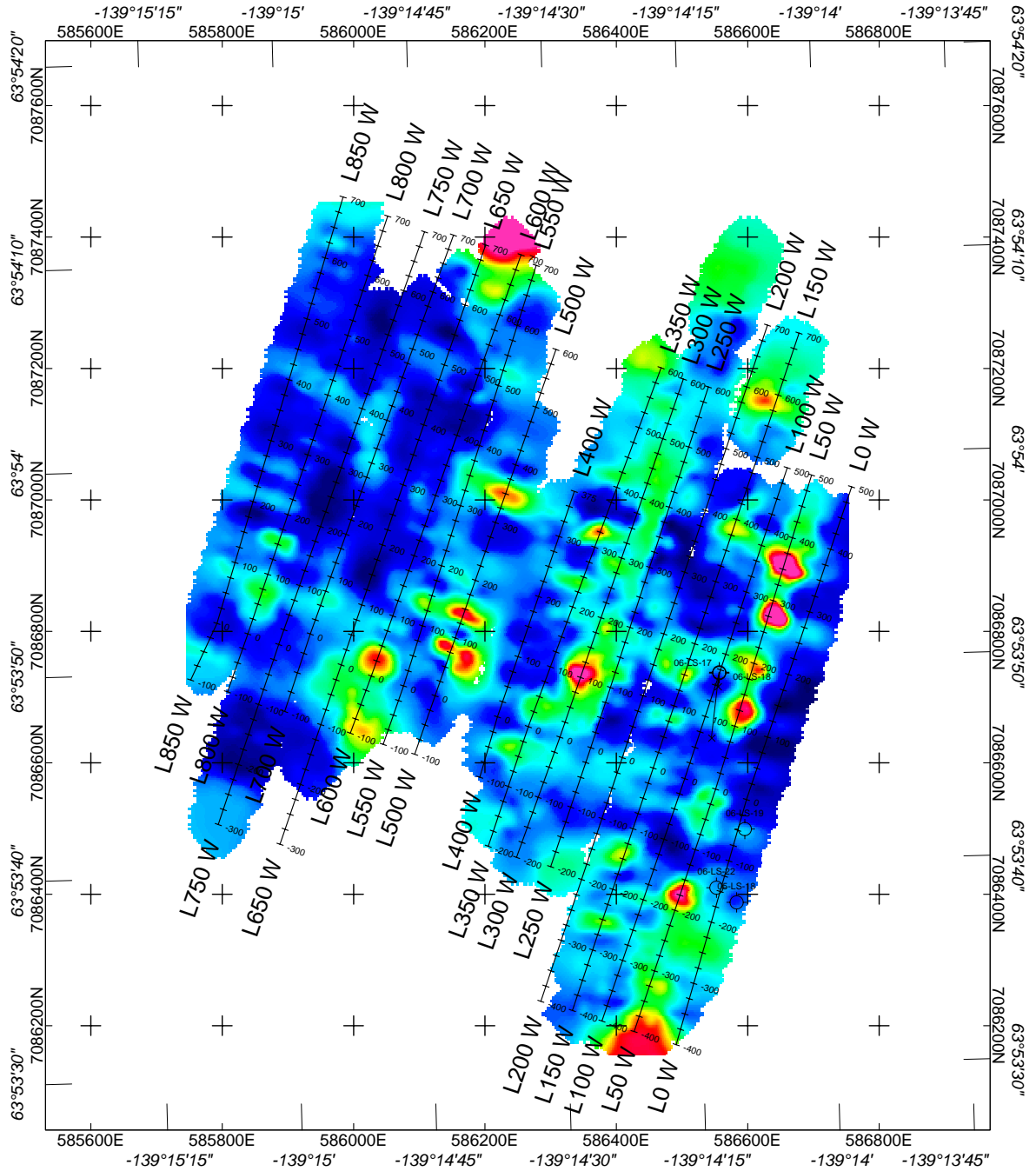
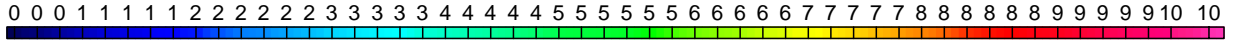
Plan maps of recovered resistivity are shown in Figures 14, 15 and 16 showing depths of 10, 50 and 100 m below surface respectively. Two sets of conductive features are seen. There are several ESE-WNW trending features: one runs all the way across the grid between 100S and 200S, seen best on Figures 15 and 16. A second is visible on Figure 15, running across the northern extent of lines 550W through 850W, although it is obscured by the general low resistivity in the NW corner of the grid. A third is from L0W to L250W along station 100N and a fourth from L400W through L550W at station 200N both again best seen on Figure 15 at a depth of 50 m below surface. Lastly, there





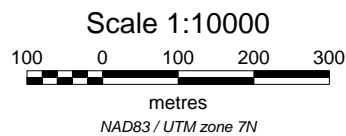
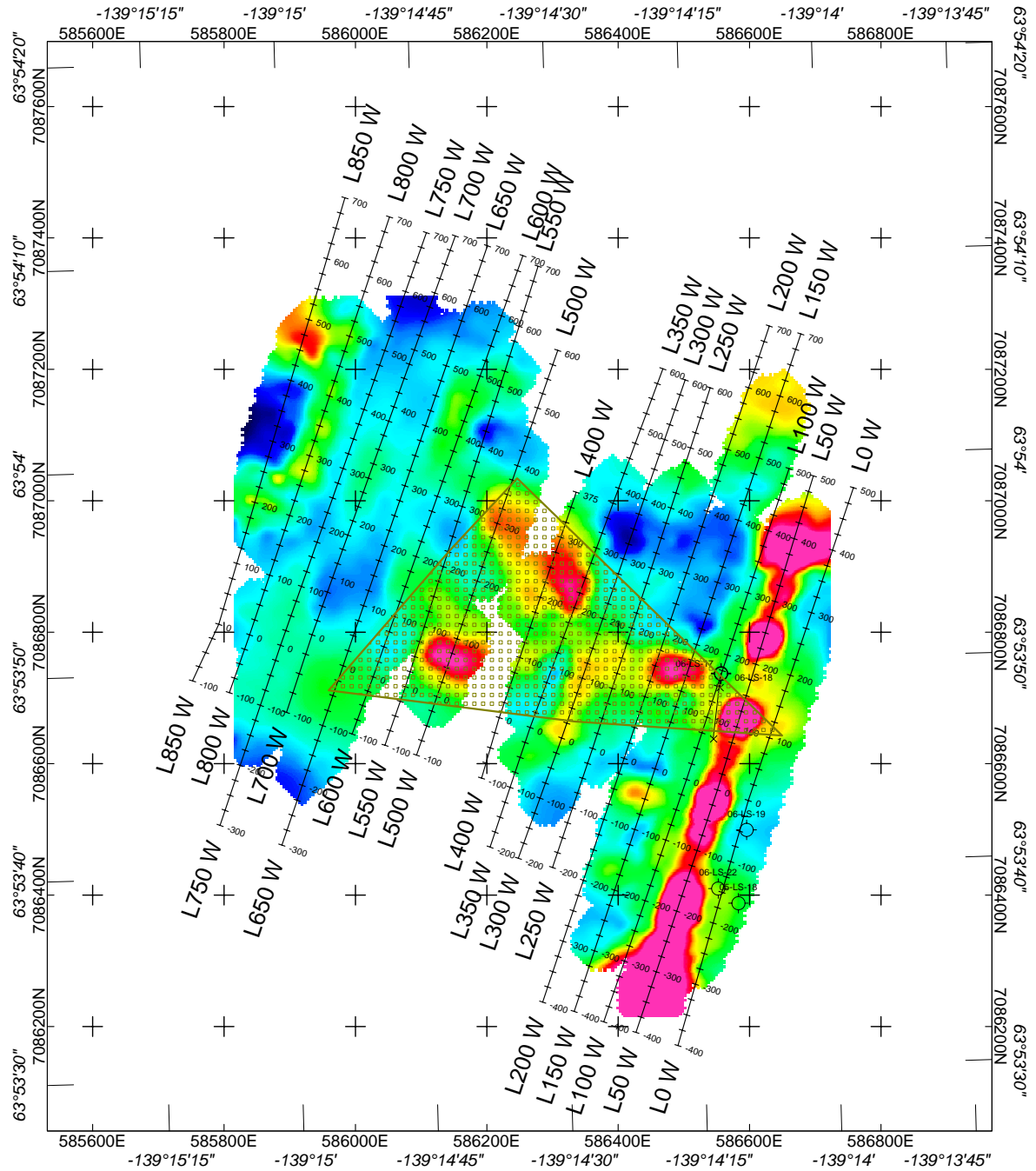


Recovered Chargeability (mV/V)



Lone Star West Chargeability Plan Map
grid from 3D model - 25 m below surface
Figure 17

Recovered Chargeability (mV/V)



Lone Star West Chargeability Plan Map
grid from 3D model - 75 m below surface
Figure 18

is a conductive trend along station 500N, seen only in the shallower plan map, Figure 14 at a depth of 10 m. There is also a N-S trending conductive feature from the southern extreme of line 500W to the northern extreme of line 800W. This trend appears to dip to the west. These features can also be seen on the stacked recovered resistivity sections in Appendix E.

In the recovered chargeability, shown in plan maps of 25 and 50 m below surface shown in Figures 17 and 18 respectively, there are elevated chargeabilities all along line 50W. Line 50W often had very high apparent chargeabilities on the $n=6$ channel, and this aspect of the data was poorly modelled by the inversion algorithm. Fine details of the recovered model should therefore be viewed with suspicion, although the overall texture of the recovered model - that of several small, predominantly deep, chargeable bodies - is consistent with the data. It is surprising that no indications of these features appear in either lines 0 or 100W, suggesting that part of the response is caused by local current channeling through a chargeable structure related to the stationary electrode at the south end of the line

There are also elevated chargeabilities in a triangular region bounded by L650W, 25S; L500W, 375N and LOW, 100N with high spatial frequency anomalies in the 25 m depth plan map and broader anomalies imaged deeper at 75 m below surface. Lastly elevated chargeabilities are imaged in the northern half of lines 800W and 850W, the northern extreme of lines 600W and 650W and at station 600N of lines 150W and 200W.

On line 350W, the character of the recovered model is suspect; the data suggests several thin or small chargeable bodies as opposed to the single large deep anomalous body produced by the inversion algorithm. Similarly for line 700W, where the recovered model shows a single, barely anomalously high chargeability feature while the data suggests several thin or small chargeable bodies. Lines 300W and 800W also had particularly poor fits between the modelled response and the data.

Drill holes 06-LS-17 and 06-LS-18 were both collared very close to L100W, station 175N. Aside from trace pyrite, 06-LS-17 had 2-5 % pyrite from 20- 25 m and from 115 m to the end of the hole, which was nearly vertical with a dip of 80 degrees. Although the shallower band of pyrite is not imaged in the recovered model, the deeper interval is consistent with the model which shows a chargeable body at a depth of approximately 100 metres. Hole 06-LS-18, at a dip of 50 degrees, has 1-2 % pyrite from 107 – 133 m, which is again consistent with the modelled results. The drill hole generally passes above the recovered chargeable anomaly, only grazing the edge of high chargeability in the model. The trace of the hole is not parallel to the lines and the hole ends in between lines 50W and 100W.

Drill holes 06-LS-22, 05-LS-18 and 06-LS-19 are vertical holes with the collar of 06-LS-22 approximately 10 m SW of station 150S on line 0W, the collar of 05-LS-18 40 m SE of station 150S, line 0W and the collar of 06-LS-19 20 m SE of station 50S, line 0W. Neither 06-LS-22 nor 05-LS-18 recovered more than trace pyrite in the upper 50

meters, and then varying trace to locally 10% pyrite to the end of the hole. Hole 06-LS-19 had pyrite throughout the hole. The recovered model shows no chargeable body south of station 50S and a slightly anomalous chargeable body centered at 200S.

Combined Walcott 1987 IP grid & 2006 grids

There is a modest chargeability high of 10-15 mV/V in the central portion of the Walcott 1987 grid centered at station 300S from line 0.1W to 240.1W, which is coincident with the old workings and the historic mine. This high chargeability is imaged to start close to surface and extends to depth.

On the Lone Star East grid, lines 540E, L600E and the northern end of L480E form another area of elevated recovered chargeability. At approximately 100 m below surface, this area broadens and essentially coalesces with the central anomaly on the Walcott 1987 grid. The highest chargeabilities continue to be centered on lines 480E, 540E and 600E close to the station 200N as well as the northern ends of the lines from line 480E to 960E. These chargeabilities are the highest of all four grids.

Another area of widespread elevated chargeability is in the Buckland grid where a number of isolated > 10 mV/V chargeability anomalies amalgamate by 100 m depth to form extensive areal coverage. In particular the south end of lines 1100E to 1250E and an area between stations 400 and 500 N on line 600E stand out.

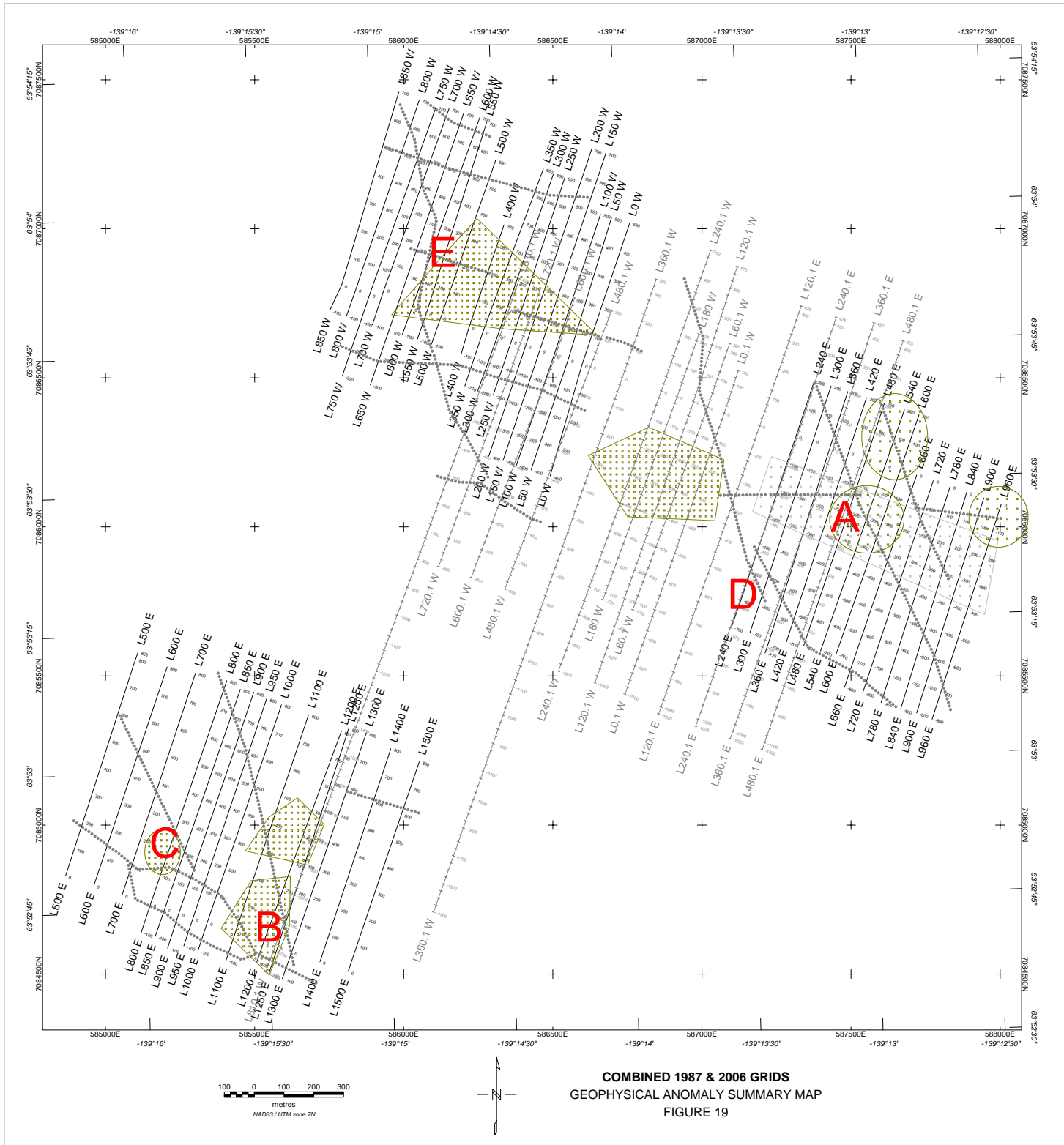
Lastly there are the chargeabilities along line 50W in the Lone Star West grid which attract attention however, as described above, the details of the recovered model on L50W of the Lone Star West grid should be viewed with caution.

There is a continuation of the NNW-SSE conductivity feature images in the 2006 Lone Star East grid which runs from L480E, 700S to L240E, 500S on the 2006 grid and then continues through to the north end of L240.1W from the 1987 survey, possibly as a second parallel structure. In addition there is a continuation of the ESE-NWN structures images on the Lone Star West grids at station 100N on line 360.1W. There is another ESE-NWN linear feature from L480.1W to L810.1W at approximately 500S as well as a continuation of the predominantly NS feature on the Lone Star West grid, which ends at line 720.1W, station 425S.

11.0 CONCLUSIONS AND RECOMMENDATIONS

Figure 19 is a compilation of the conductive trends and chargeability anomalies featured in previous figures.

- The IP / resistivity surveys identified a number of conductive trends that fall within 2 general directional sets suggesting structural control. In general there are not chargeability trends associated with the conductive features.



- The main chargeability high from the 1987 Walcott IP survey lies over the main Lone Star zone and has been the hub of past exploration. It is immediately adjacent to the conductive trend labeled “D” in Figure 19, which corresponds well to the reported area of altered felsic and volcanic schists, identified by Kennecott’s 1993 exploration and indicated to host mineralization.
- Significant chargeability anomalies were identified on the Buckland grid: the anomaly at L800E, 200N (C on Figure 19), the high chargeabilities on lines 1000E and 1100E between 200N and 300N and the high chargeabilities on the south ends of lines 1200E and 1250E (B on Figure 19). The chargeability anomalies labeled B & C on Figure 19 are of particular interest because of their proximity to convergence zones of conductivity trends, suggesting structurally controlled mineralization. These targets are recommended drill targets.
- The Lone Star East grid showed a band of slightly elevated chargeability, which may be consistent with stratabound mineralization if the trend matches fold axes. There is further, extensive, elevated chargeability through the north east part of the grid, particularly on lines 420E, 480E, 540E and 600E. A particularly favorable target is indicated by “A” on Figure 19 where there is a convergence of conductive features coincident with elevated chargeability superimposed on the weak band of elevated chargeability. This is a recommended drill target.
- The Lone Star West grid has had a number of holes drilled on the eastern edge of the grid, but none into any of the larger chargeability anomalies. The character of the chargeability on the grid is very discontinuous with most of the highest apparent chargeability data not being well represented by the model. Target E on Figure 19 shows proximal elevated chargeability coincident with convergent conductivity trends. This is a recommended secondary drill target.

Respectfully submitted,
AURORA GEOSCIENCES LTD.

Dave Hildes P. Geo, Ph. D.
Geophysicist

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APPENDIX A - CERTIFICATE

I, David Henry Degast Hildes, Ph. D., with residence address in Whitehorse, Yukon Territory do hereby certify that:

1. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia, license #29887
2. I am a graduate of the Queens University of Ontario with a B.Sc. (Honours) degree in Chemical Physics obtained in 1991 and a graduate of the University of British Columbia with a Ph. D. in Geophysics obtained in 2001.
3. I have been actively involved in mineral exploration since 1999 and am now employed as a geophysicist with Aurora Geosciences Ltd.
4. I am the project manager for the work described in this report.

Dated this ____ of _____, 2007 in Whitehorse, Yukon.

Respectfully Submitted,

Dave H. D. Hildes Ph. D., P.Geo.

APPENDIX B – SURVEY LOG

Klondike Star- Eldorado IP (KDS-06-02-YT) DAILY OPERATIONS LOG

Date	Survey /standby	Rx	Tx	Current	Cables	Weather	Grid	Lines	From	To	Line-km	Notes
22-Aug-06	Mobe					Sunny 20 C	Lone Star East					We left Whitehorse at 11am and arrived in Dawson at 4pm. Andre drove the truck and Steve and Sebastian drove their own vehicle.
23-Aug-06	Survey	Andre	Dan	Seb	Steve	Cloudy 10C	Lone Star East	240	700S	200N	0.9	We started on east grid of 3 going north, with the transmitter in the morning. We started at 10am and finished at 6pm
							Lone Star East	300	700S	500S	0.2	
24-Aug-06	Survey	Andre	Dan	Seb	Steve	Sunny, 15C	Lone Star East	300	500S	200N	0.7	
							Lone Star East	360	725S	0N	0.725	
25-Aug-06	Survey	Andre	Dan	Steve	Seb	Rainy 5C	Lone Star East	360	0N	200N	0.2	It rained all morning and the cables got wet, so we took them back the camp and dried them out, and got a few more hours in once the weather broke at around 4pm, then we finished at around 7pm
							Lone Star East	420	700S	200N	0.9	
26-Aug-06	Survey	Andre	Dan	Steve	Seb	Cloudy 15C	Lone Star East	480	700S	200N	0.9	We started at around 8h30 am and finished at 6h30 pm
							Lone Star East	540	700S	400S	0.3	
27-Aug-06	Survey	Andre	Steve	Seb	Dan	Sunny 15C	Lone Star East	540	400S	200N	0.6	We started at 8h30 and finished around 6h30
							Lone Star	600	700S	400S	0.3	

Date	Survey /standby	Rx	Tx	Current	Cables	Weather	Grid	Lines	From	To	Line-km	Notes
							East					
28-Aug-06	Survey	Andre	Steve	Seb	Dan	Sunny 20 C	Lone Star East	600	400S	200N	0.6	We started at around 8h30 and finished around 6h30
							Lone Star East	660	800S	0N	0.8	
29-Aug-06	Survey	Andre	Seb	Dan	Steve	Sunny 20 C	Lone Star East	720	800S	0N	0.8	Started around 8h30. Finished around 5h30pm
							Lone Star East	780	800S	0N	0.8	
30-Aug-06	Survey	Andre	Seb	Dan	Steve	Sunny 20 C	Lone Star East	840	800S	0N	0.8	We started around 8h30 and finished around 6h30pm
							Lone Star East	900	800S	0N	0.8	
31-Aug-06	Survey	Andre	Dan	Steve	Seb	Rain 10 C	Lone Star East	960	800S	0N	0.8	
1-Sep-06	Survey	Andre	Dan	Steve	Seb	Mixed sun and rain 15C	Lone Star West	800	100S	700N	0.8	
							Lone Star West	700	100S	400N	0.5	
2-Sep-06	Day off											
3-Sep-06	Day off											
4-Sep-06	Survey	Andre	Steve	Seb	Dan	Sunny 15 C	Lone Star West	700	400N	700N	0.3	
							Lone Star West	600	100S	700N	0.8	
							Lone Star West	500	100S	175N	0.275	

Date	Survey /standby	Rx	Tx	Current	Cables	Weather	Grid	Lines	From	To	Line-km	Notes
5-Sep-06	Survey	Andre	Steve	Seb	Dan	Mixed sun and rain 10C	Lone Star West	500	175N	600N	0.425	
							Lone Star West	400	100S	375N	0.475	
							Lone Star West	300	200S	225N	0.425	
6-Sep-06	Survey	Andre	Seb	Dan	Steve	Mixed sun and rain 10C	Lone Star West	300	225N	600N	0.375	
							Lone Star West	200	400S	700N	1.1	
7-Sep-06	Survey	Andre	Seb	Dan	Steve	Sunny 15C	Lone Star West	100	400S	500N	0.9	
							Lone Star West	0	400S	50S	0.35	
8-Sep-06	Survey	Andre	Dan	Steve	Seb	Sunny 15C	Lone Star West	0	50S	500N	0.55	Steve wasn't feeling good in the afternoon-- he rested up so we only had 3 guys for the rest of the day
							Buckland	1100	800N	500N	0.3	
9-Sep-06	Survey	Andre	Dan	Steve	Seb	Sunny 15C	Buckland	1100	500N	100S	0.6	
							Buckland	1200	800N	100S	0.9	
10-Sep-06	Survey	Seb	Steve	Andre	Dan	Sunny 20C	Buckland	1000	800N	100S	0.8	
							Buckland	700	800N	500N	0.3	
11-Sep-06	Survey	Andre	Steve	Seb	Dan	Rainy 15C	Buckland	700	500N	0	0.5	I couldn't find the 800N picket until 525N when I came across it so I started the line 25m further N than I should have
							Buckland	500	825N	200N	0.625	
12-Sep-06	Survey	Andre	Seb	Dan	Steve	Sunny	Buckland	500	200N	0	0.2	

Date	Survey /standby	Rx	Tx	Current	Cables	Weather	Grid	Lines	From	To	Line-km	Notes
						15C	Lone Star West	50	400S	500N	0.9	
13-Sep-06	Survey	Andre	Seb	Dan	Steve	Sunny 15C	Lone Star West	150	400S	700N	1.1	
							Lone Star West	250	200S	600N	0.8	
14-Sep-06	Survey	Andre	Dan	Steve	Seb	Sunny15C	Lone Star West	550	100S	700N	0.8	
							Lone Star West	850	100S	400N	0.5	
15-Sep-06	Survey	Andre	Dan	Steve	Seb	Sunny 15C	Lone Star West	850	400N	700N	0.3	
							Lone Star West	850	100S	700N	0.8	
							Lone Star West	750	300S	0	0.3	
16-Sep-06	Survey	Andre	Steve	Seb	Dan	Cloudy 5C	Lone Star West	750	0	700N	0.7	
							Lone Star West	650	300S	700N	1	
17-Sep-06	Survey	Andre	Steve	Seb	Dan	Cloudy with some rain	Lone Star West	350	200S	600N	0.8	
18-Sep-06	Survey	Andre	Seb	Dan	Steve	Sunny	Buckland	600	800N	0	0.8	
							Buckland	800	800N	100S	0.9	
19-Sep-06	Survey	Andre	Seb	Dan	Steve	Cloudy	Buckland	900	800N	100S	0.9	
							Buckland	1300	800N	500N	0.3	

Date	Survey /standby	Rx	Tx	Current	Cables	Weather	Grid	Lines	From	To	Line-km	Notes
20-Sep-06	Survey	Andre	Seb	Steve	Cody	Cloudy	Buckland Buckland	1300 1400	500N 800N	100S 0	0.6 0.8	
21-Sep-06	Survey	Andre	Seb	Steve	Cody	Sunny	Buckland	1500	800N	0	0.8	
22-Sep-06	Survey	Andre	Steve	Cody	Seb	Partly rainy and sunny	Buckland	1250	800N	100S	0.9	
23-Sep-06	Survey	Andre	Steve	Cody	Seb	sunny	Buckland Buckland	950 850	800N 800N	100S 500N	0.9 0.3	
24-Sep-06	Survey	Andre	Steve	Cody	Seb	sunny	Buckland	850	500N	100S	0.6	We finished the line around 1pm, and finished cleaning up all the wires and stuff by 3h30, and then started packing up packing up
25-Sep-06	Mobe out											

total		
Km's	Lonestar East	11.125
	lonestar West	15.250
	Buckland	12.125

APPENDIX C – INSTRUMENT SPECIFICATIONS

I. OVERVIEW

I.1. GENERALITIES

The ELREC Pro unit is a receiver designed for high productivity mineral exploration. It allows to measure primary voltage and decay voltage curve values, giving thus resistivity and chargeability (IP) data.

This unit is designed to be used with an *IRIS instruments* external transmitter, called VIP.

The main technical characteristics of this receiver are the following ones:

- 10 reception dipoles available to carry out some measurements with high productivity in the field
- 20 partial chargeability windows available to measure the discharge phenomena with an high accuracy.
- a 1 μ V resolution on the primary voltage allowing to obtain very accurate measurements.
- a large graphic LCD display for user-friendly operating allowing to show the data in real time numerically and graphically.

The ELREC Pro unit can be also used in automatic switching mode (in that case, some additional external *Switch Plus* boxes have to be used) for intensive measurements.

I.2. DESCRIPTION

I.2.1. Front panel

All controls are located on the front panel. This one features:

- Graphic LCD (128x140 dots) made of 16 lines by 40 characters
- Eleven plugs for connecting the potential electrodes
- Plugs "+" and "-" for the external battery connection
- Three pins plug (RS232 standard port) for the serial link cable connection
- Four pins plug for internal battery charger connection
- Keyboard with 16 keys

ANNEX 3: IP PARAMETERS AND CHARGEABILITY

The partial chargeabilities measurements (M_i) and the average global one deduced (M_g) give some information regarding the ability of the soil to charge itself due to a current flow.

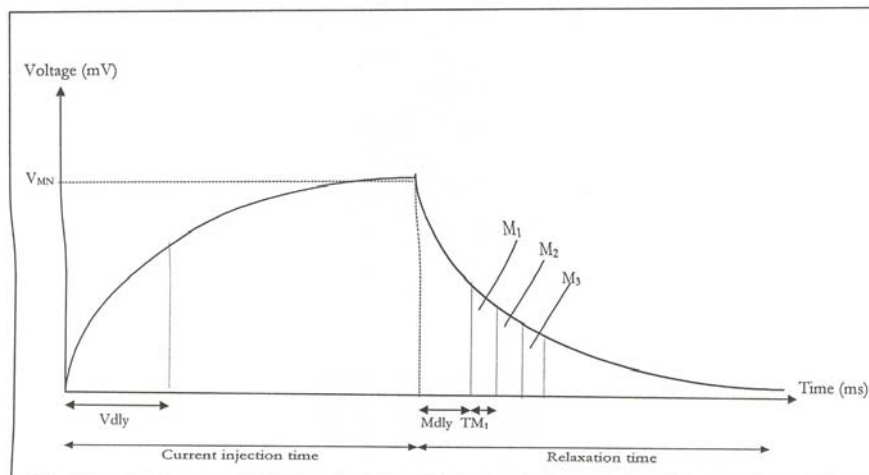
The partial chargeability of the window "i" is measured thanks to the following formula:

$$M_i = \int_{TM_i} V dt / TM_i \cdot V_{MN}$$

And the global chargeability is computed thanks to the following formula:

$$M_g = \frac{\sum_{i=1}^n (M_i \cdot TM_i)}{\sum_{i=1}^n TM_i} \quad (n: \text{number of IP windows})$$

The discharge phenomena observed during the relaxation time can be described according to the following curve:



With the ELREC Pro, up to 20 IP windows can be used to define the decay curve.

The number of IP windows available for the measurement depends on the type of IP mode and on the current injection time:

⇒ **Current injection times** available (cf. II.1.5): 500 ms - 1 s - 2 s - 4 s - 8 s

⇒ **Types of IP mode** available (cf. II.1.5): Arithmetic – Semi logarithmic – Logarithmic
Cole-Cole - Programmable

For a given current injection time and IP mode, the program will choose automatically the IP parameters (Mdly, Vdly, TM_i) that will be used for the measurement.

Note:

The programmable mode is a mode where 20 fully programmable windows are available. The operator has to select the delay time (Mdly) with a minimum of 20 ms and the width of each partial window (TM_i) with a minimum of 10 ms. Vdly is automatically determined by the injection time chosen.

In the following tables, the preset TM_i values are given for each IP mode (1 means TM₁ ...):

• **Time = 500 ms**

Mode	Vdly	Mdly	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Arith.	280	60	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Semi	280	40	40	80	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Log.	280	160	80	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cole	280	160	80	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

• **Time = 1000 ms**

Mode	Vdly	Mdly	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Arith.	580	120	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Semi	580	40	20	20	20	20	20	20	20	20	40	40	40	40	40	80	80	80	80	80	80	80
Log.	580	160	120	220	420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cole	580	20	10	20	20	20	20	20	30	30	30	40	40	40	50	50	50	60	60	70	80	90

• **Time = 2000 ms**

Mode	Vdly	Mdly	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Arith.	1260	240	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Semi	1260	40	40	40	40	40	40	40	80	80	80	80	80	80	80	160	160	160	160	160	160	160
Log.	1260	160	120	220	420	820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cole	1260	20	20	30	30	30	40	40	50	60	70	80	90	100	110	120	130	140	150	160	180	200

ELREC Pro – User's manual

• Time = 4000 ms

Mode	Vdly	Mdly	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Arith.	2620	480	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
Semi	2620	160	80	80	80	80	80	80	80	80	160	160	160	160	160	320	320	320	320	320	320	320
Log.	2620	160	120	220	420	820	1620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cole	2620	20	40	50	60	70	80	90	100	110	120	140	160	180	200	220	250	280	320	380	450	530

• Time = 8000 ms

Mode	Vdly	Mdly	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Arith.	5340	960	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320
Semi	5340	320	160	160	160	160	160	160	160	160	320	320	320	320	320	320	640	640	640	640	640	640
Log.	5340	160	120	220	420	820	1620	3220	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cole	5340	20	40	60	80	100	120	150	180	220	250	280	320	360	400	450	500	580	700	850	1010	1180

About the **IP values type**, note that the changing "raw (R) \leftrightarrow normalised (N)" can be realised after the acquisition.

The normalization allows to homogenize the data that have been obtained with various injection and integration times. This is made with respect to a standard decay curve, which is the one obtained with the following parameters:

Mode: Logarithmic
Injection time: 2000 ms
Vdly: 1260 ms
Mdly: 160 ms
TM₁: 120 ms
TM₂: 220 ms
TM₃: 420 ms
TM₄: 820 ms

The coefficients to multiply, allowing to go from a type to the other one, are indicated in the following tables:

ELREC 10

42

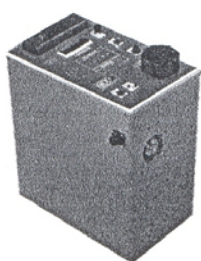
ANNEX 7: SPECIFICATIONS*Technical:*

- Input impedance: 10 Mohm
- Input overvoltage protection up to 1000V
- Automatic SP bucking with linear drift correction
- Internal calibration generator for a true calibration on request of the operator
- Internal memory: 3200 dipoles reading
- Automatic synchronization and re-synchronization process on primary voltages signals whenever needed
- Proprietary intelligent stacking process rejecting strong non-linear SP drifts
- Common mode rejection: more than 100 dB (for $R_s = 0$)
- Self potential (Sp) : range: -15V - +15V
: resolution: 0.1 mV
- Ground resistance measurement range: 0.1 - 100 kohms
- Primary voltage : range: 10 μ V - 15V
: resolution: 1 μ V
: accuracy: typ. 0.3%
- Chargeability : resolution: 10 μ V/V
: accuracy: typ. 0.6%

General:

- Dimensions: 31x21x25 cm
- Weight (with the internal battery): 9 kg
- Operating temperature range: -30°C - 70°C
- Case in fiber-glass for resisting to field shocks and vibrations

Instrumentation GDD



The Induced Polarization Transmitter

TxII-1800 and TxII-3600 Models

**For Fast, High-Quality
Induced Polarization Surveys
in All Field
Conditions**

Flyers high / low resolution TxII/1 (63 KB) / TxII/2 (1 MB)

**At Last, a High-Quality
Affordable IP Transmitter**

TxII-1800 Model, 1800 watts

Its high power, up to 10 amperes, combined with its light weight and a 21 kg/2000W Honda generator makes it particularly suitable for dipole-dipole Induced Polarization surveys.

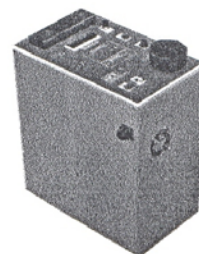
Features

- Protection against short circuits even at zero (0) ohms
- Output voltage range: 150 V to 2400 V / 14 steps
- Power source: 120 V, Optional: 220 V / 50/60 Hz
- Operates from a light backpackable standard 120 V generator
- Up to three years warranty

This backpackable 1800 watts induced polarization (I.P.) transmitter works from a standard 120 V source and is well adapted to

CONTENTS

- ☐ TxII-1800/TxII-3600 IP transmitter
- ☐ Specifications
- ☐ Purchase - Rental



rocky environments where a high output voltage of up to 2400 V is needed. Moreover, in highly conductive overburden, at 150 V, the highly efficient TxII-1800 watts transmitter is able to send a current of up to 10 amperes. By using this I.P. transmitter, you obtain fast and high-quality I.P. readings even in the most difficult conditions.

TxII-3600 Model, 3600 watts

Its high power, up to 10 amperes, combined with a Honda generator makes it particularly suitable for pole-dipole Induced Polarization surveys.

Features

- **Protection against short circuits even at zero (0) ohms**
- **Output voltage range: 150 V to 2400 V / 14 steps**
- **Power source: 220 V, 50/60 Hz**
- **Operates from a standard 220 V generator**
- **Up to three years warranty**

This 3600 watts induced polarization (I.P.) transmitter works from a standard 220 V source and is well adapted to rocky environments where a high output voltage of up to 2400 V is needed. Moreover, in highly conductive overburden, at 150 V, the highly efficient TxII-3600 watts transmitter is able to send a current of up to 10 amperes. By using this I.P. transmitter, you obtain fast and high-quality I.P. readings even in the most difficult conditions.

Specifications

General		
Size	TxII-1800	21 x 34 x 39 cm
Size	TxII-3600	21 x 34 x 50 cm
Weight	TxII-1800	approx. 20 kg
Weight	TxII-3600	approx. 35 kg

Operating temperature	-40°C to 65°C
Electrical	
Used for time-domain IP	2 sec. ON 2 sec. OFF
Time Base	1-2-4-8 sec.
Output current range	0.005 to 10 A
Output voltage range	150 to 2400 V
Power source TxII-1800	Recommended motor/generator set: Standard 120 V / 60 Hz backpackable Honda generator Suggested Models: EU1000iC, 1000 W, 13.5 kg. or EU2000iC, 2000 W, 21.0 kg.
Power Source TxII-3600	Recommended motor/generator set: Standard 220 V, 50/60 Hz Honda generator Suggested Models: EM3500XK1C, 3500 W, 62 kg or EM5000XK1C, 5000 W, 77 kg
Controls	
Power	ON/OFF
Output voltage range switch	150 V, 180 V, 350 V, 420 V, 500 V, 600 V, 700 V, 840 V, 1000 V, 1200 V, 1400 V, 1680 V, 2000 V, 2400 V
Displays	
Output current LCD	reads to ± 0.001 A
Very cold weather	standard LCD heater on readout
Protection	Total protection against short circuits even at zero (0) ohms
Indicator lamps (in case of overload)	<ul style="list-style-type: none"> - High voltage ON-OFF - Output overcurrent - Generator over or undervoltage - Overheating - Logic failure - Open loop protection

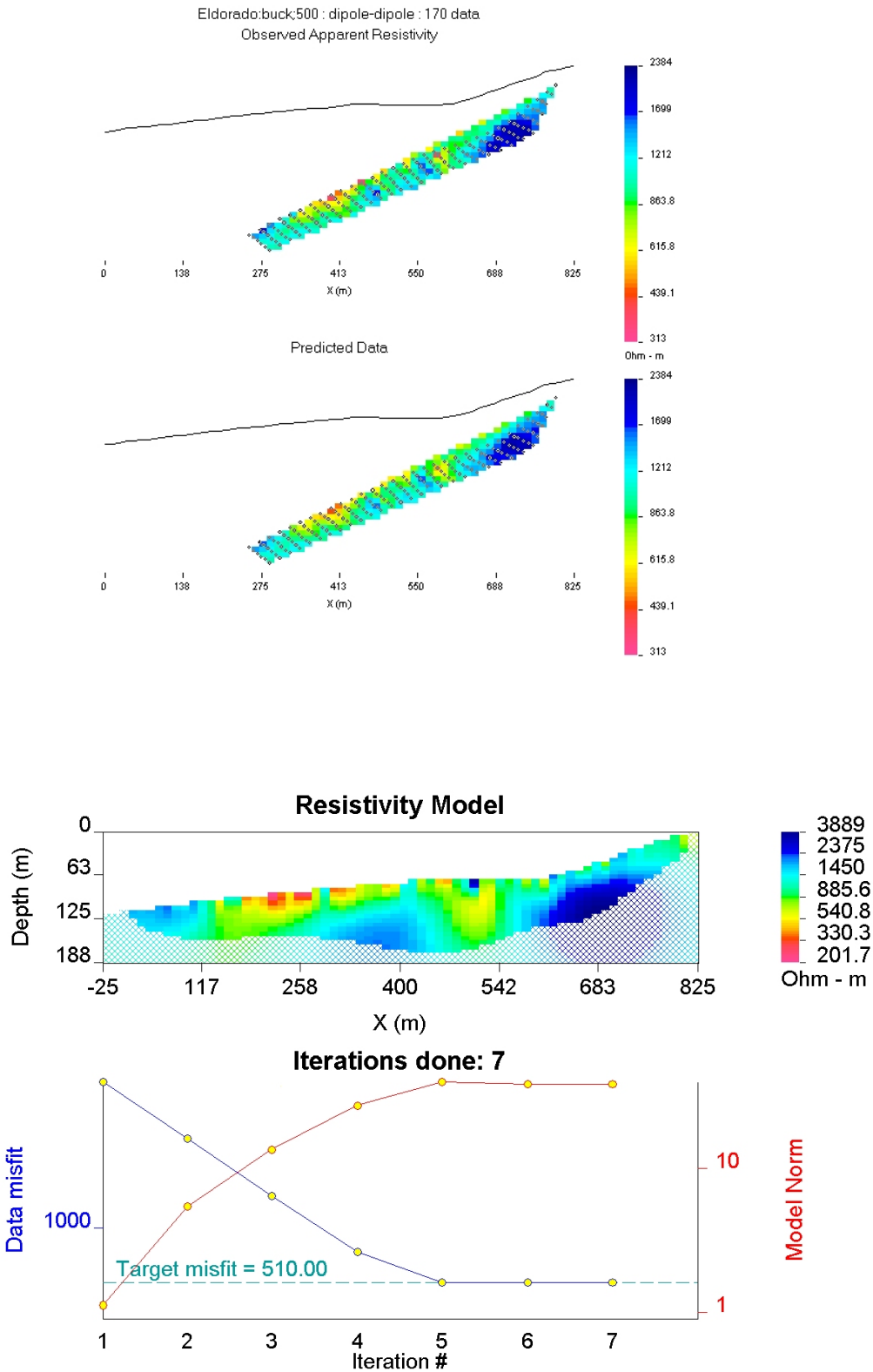
Purchase and Rental Info

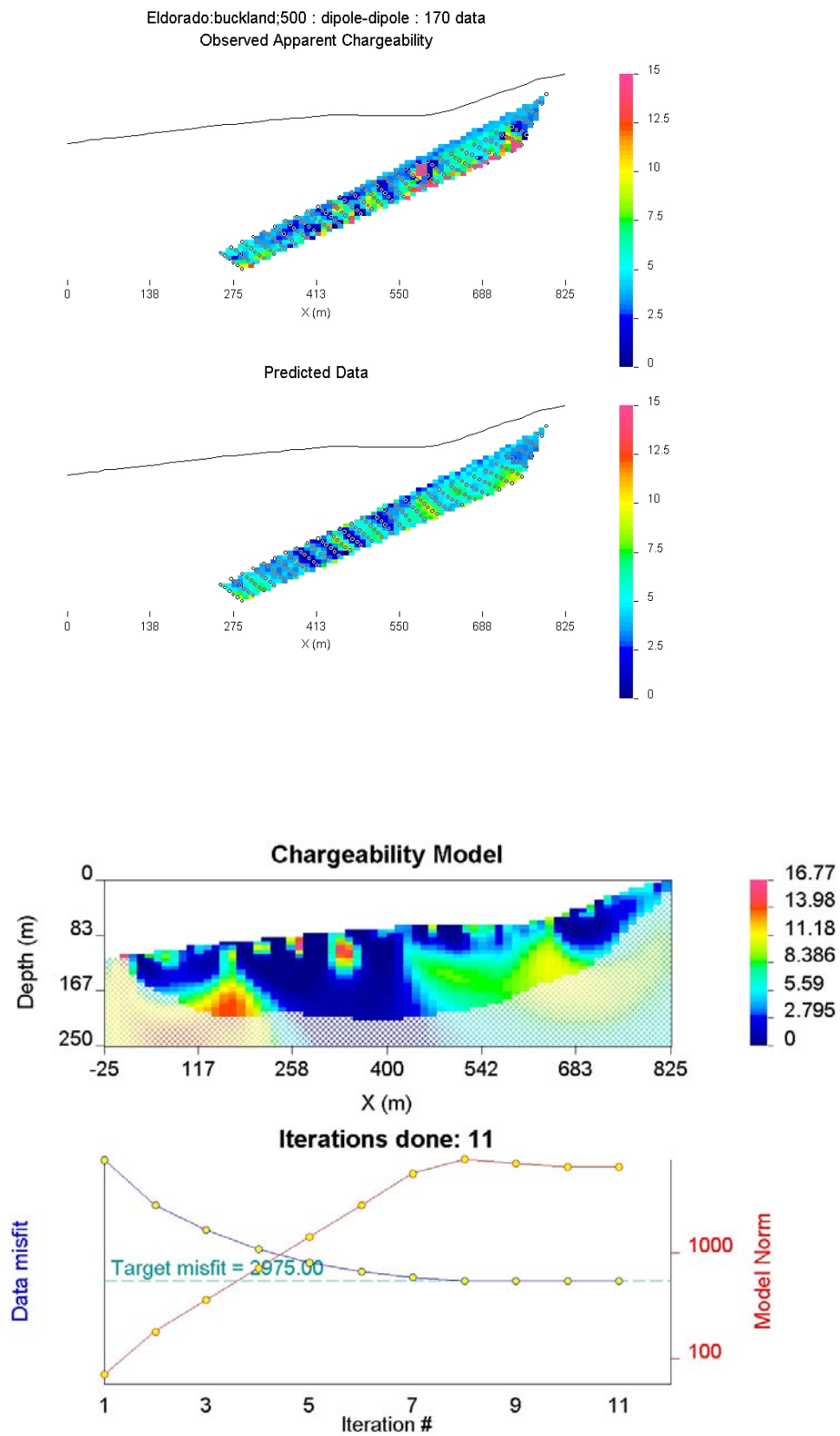
Interested by the TxII-1800 W IP or the TxII-3600 W IP transmitter?

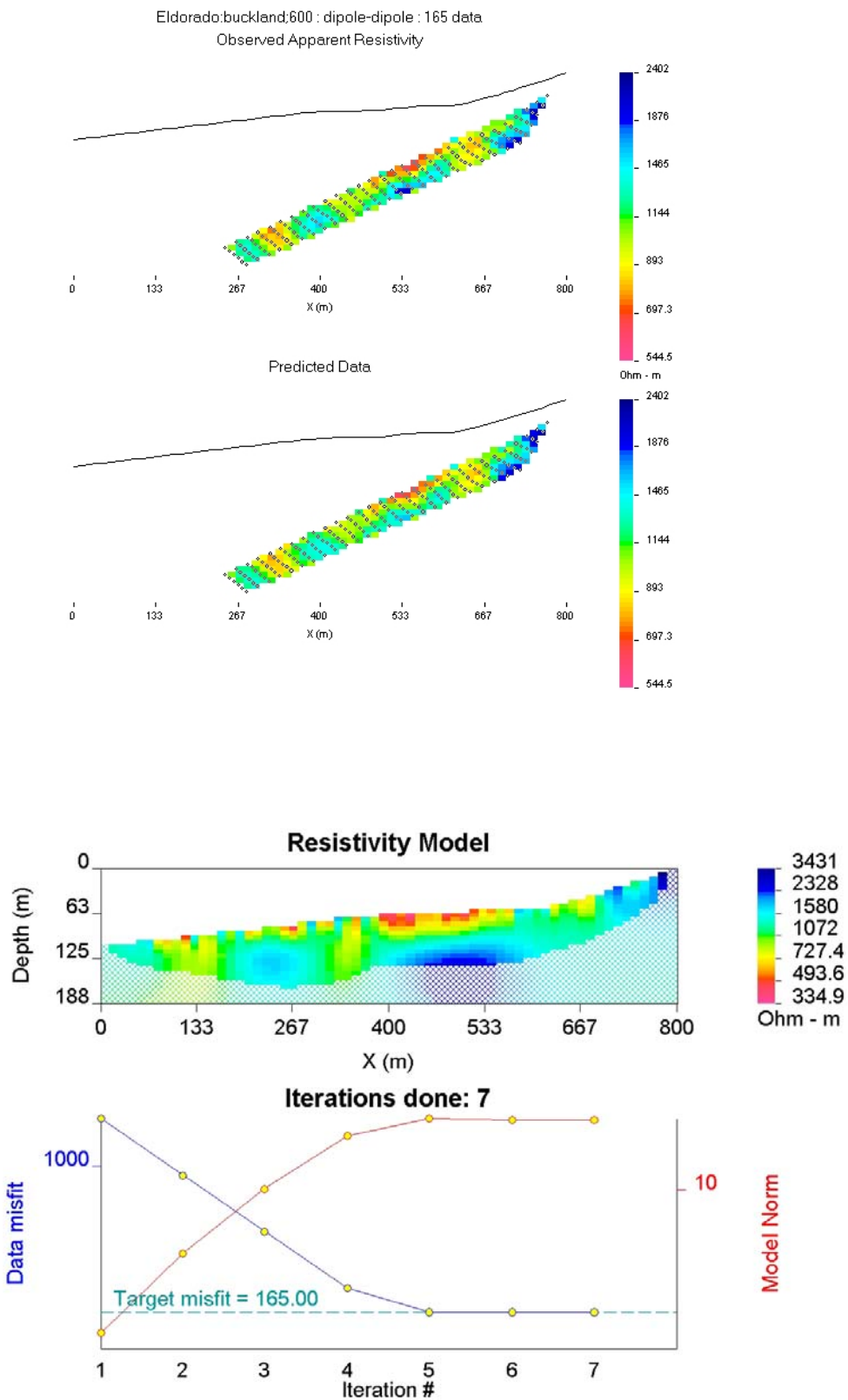
It is simple. You can rent it or purchase it. The choice is yours. Here is some information you

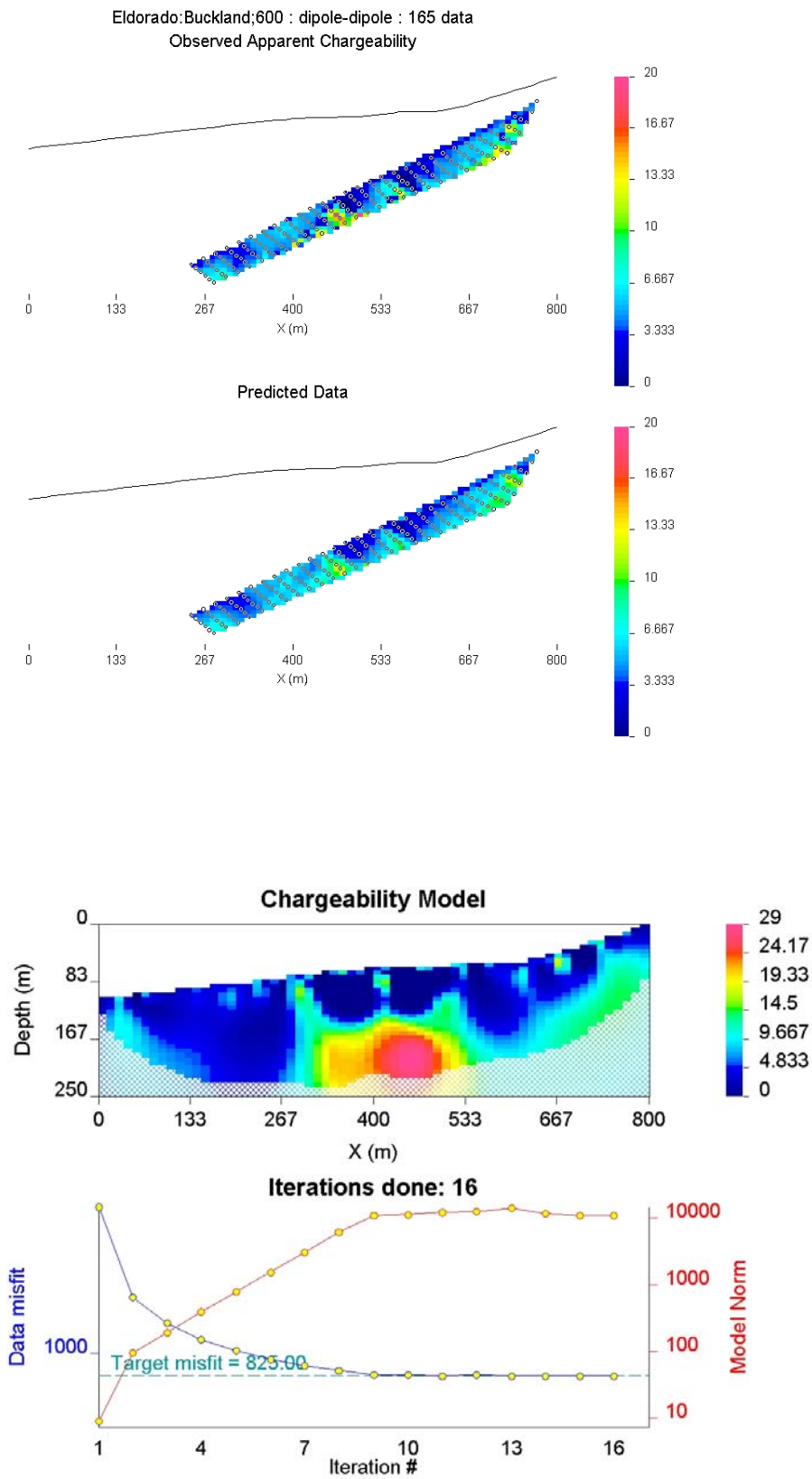
APPENDIX D – INVERSION RESULTS

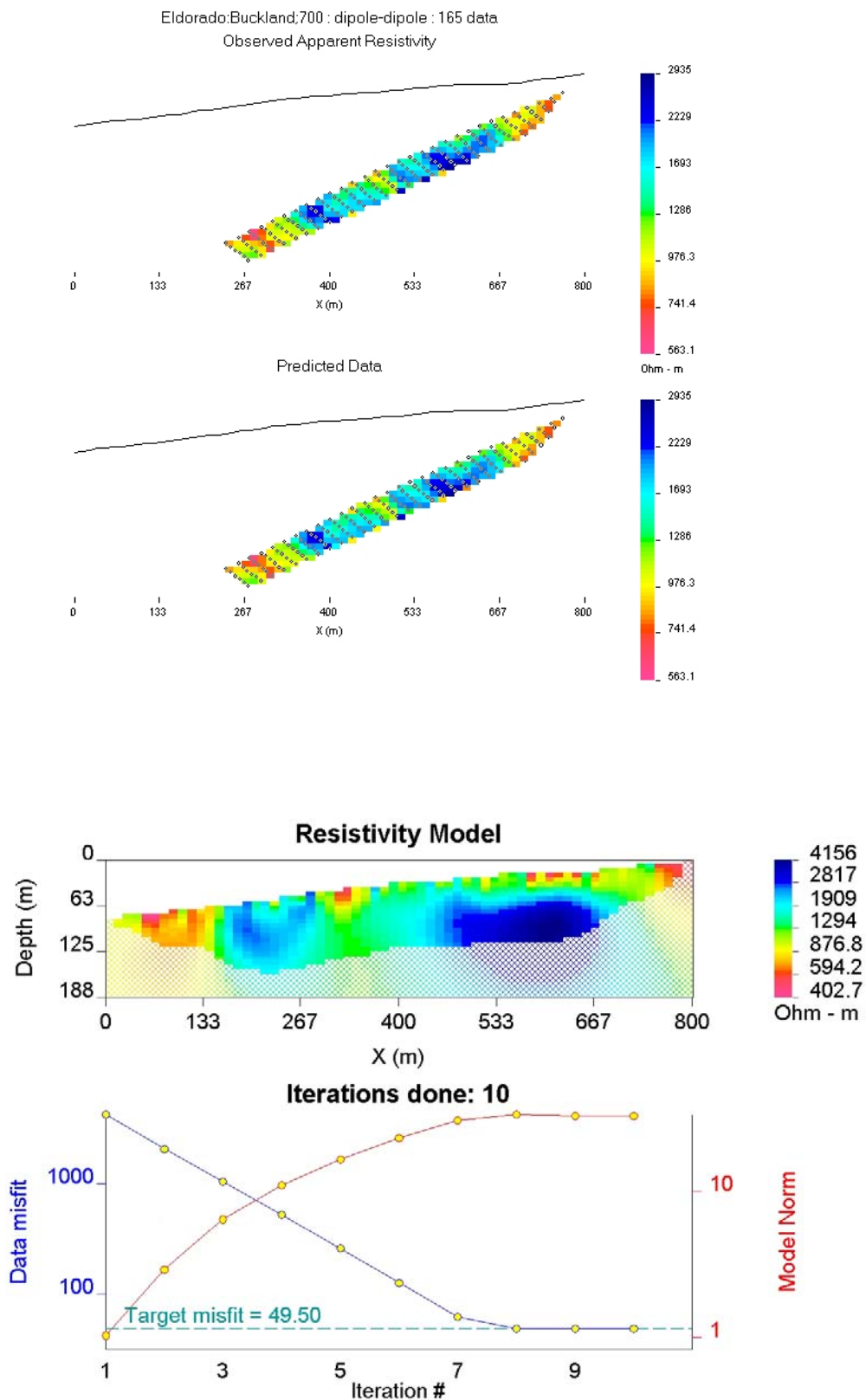
Buckland grid

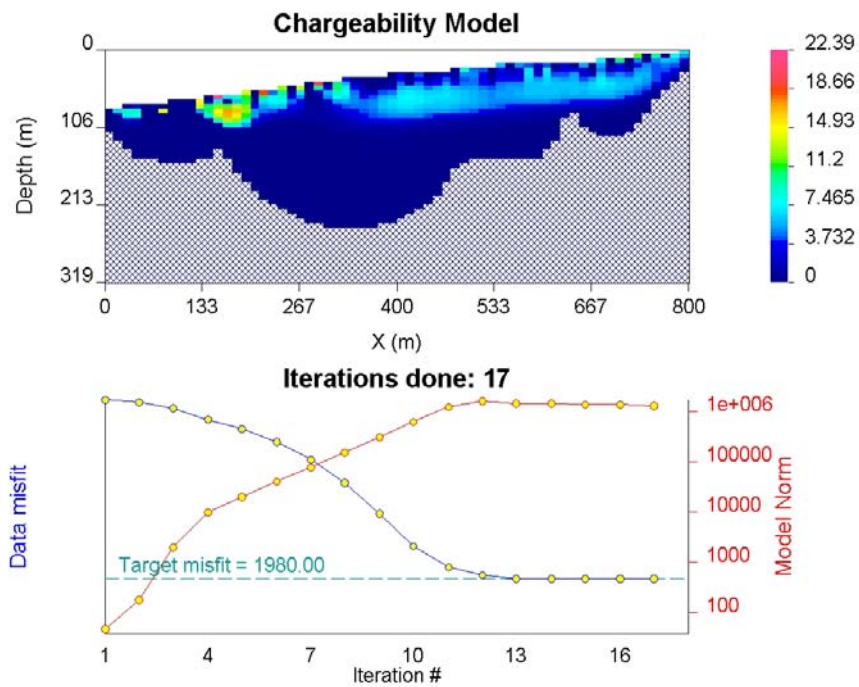
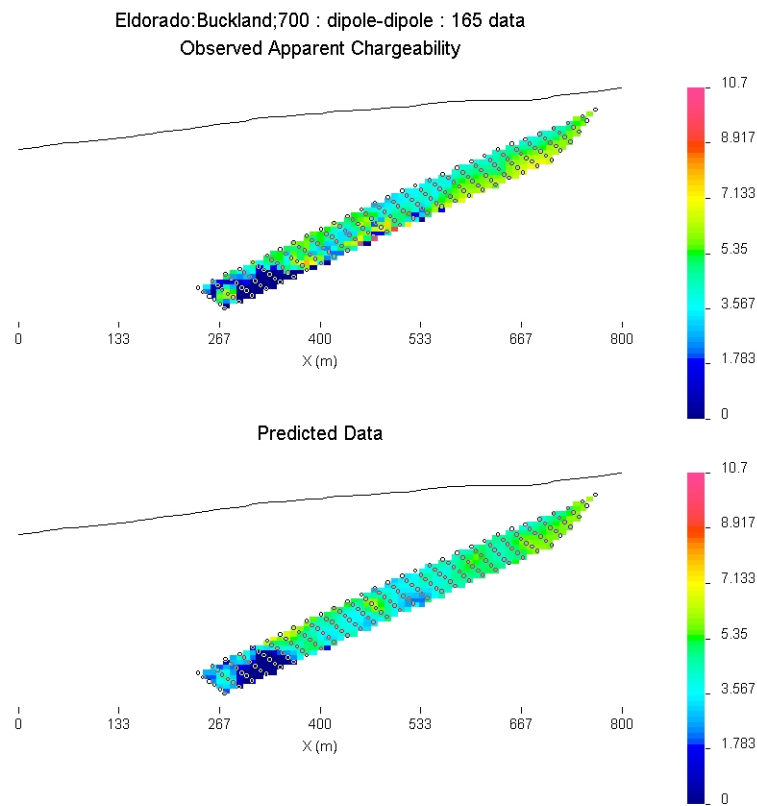


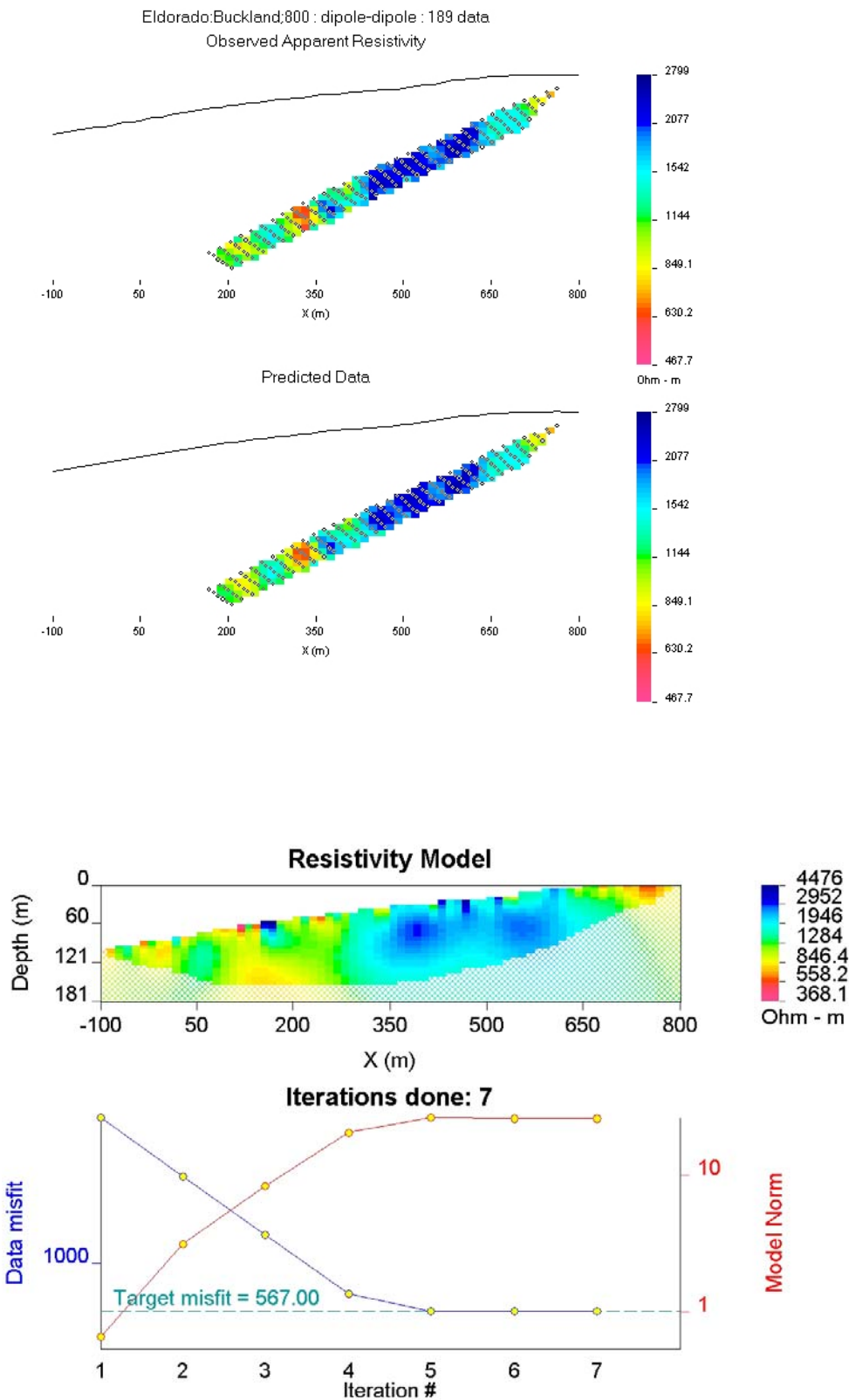


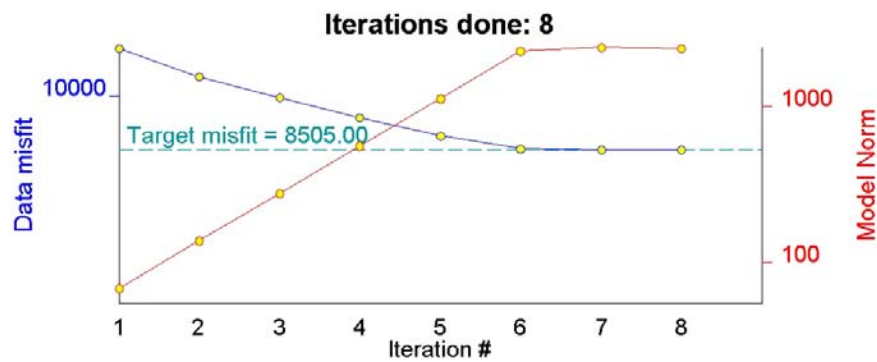
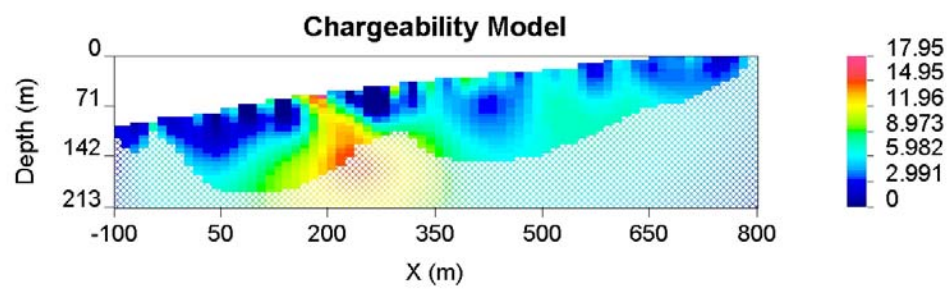
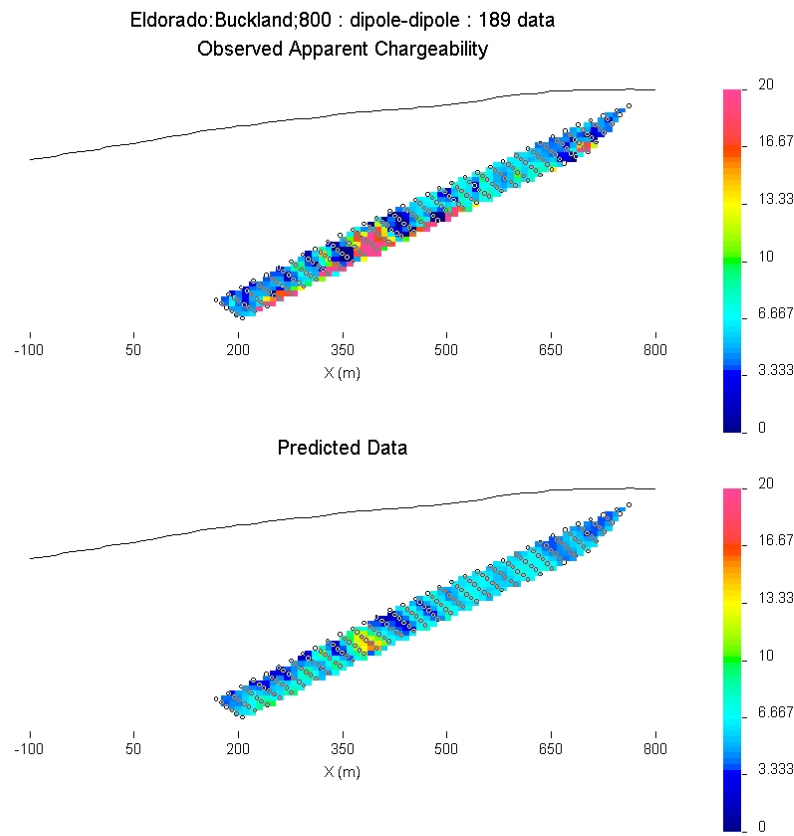


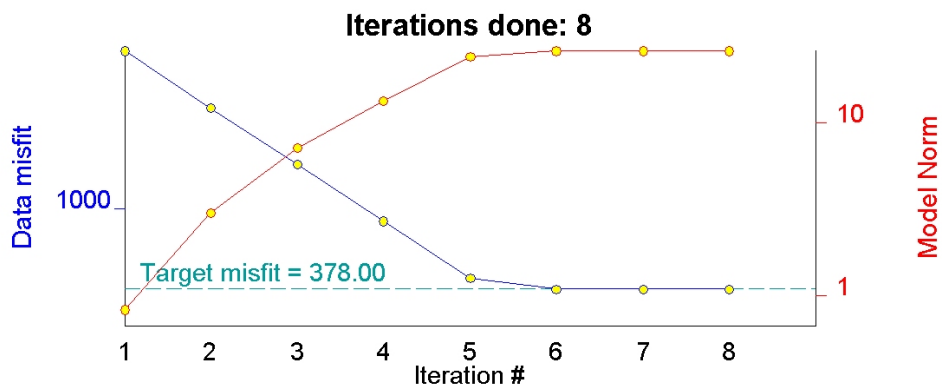
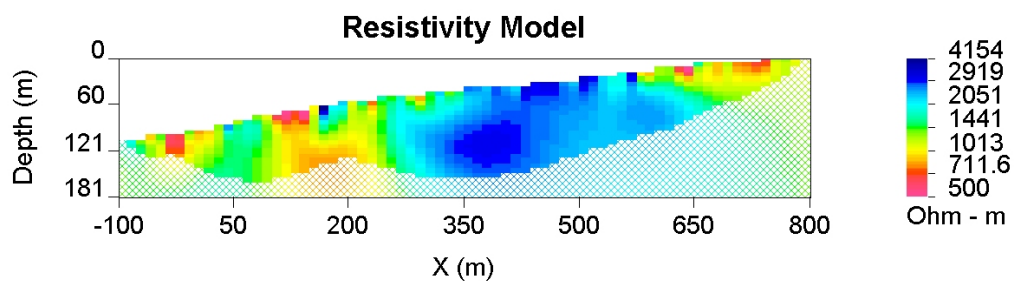
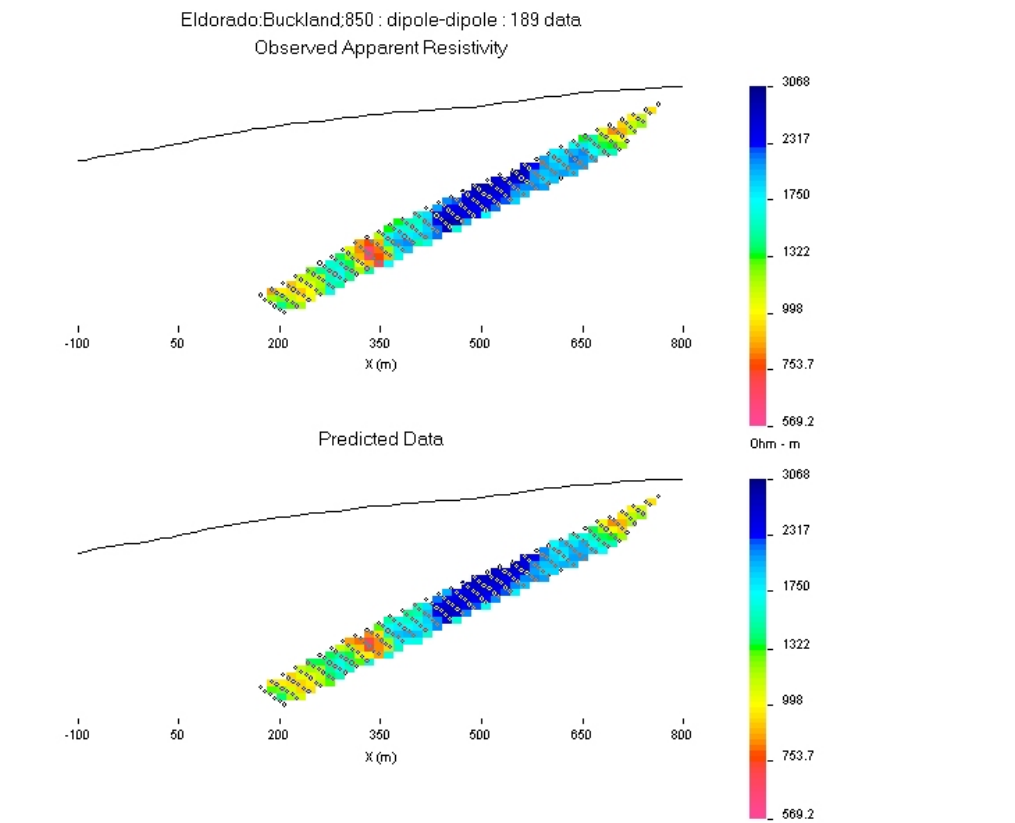


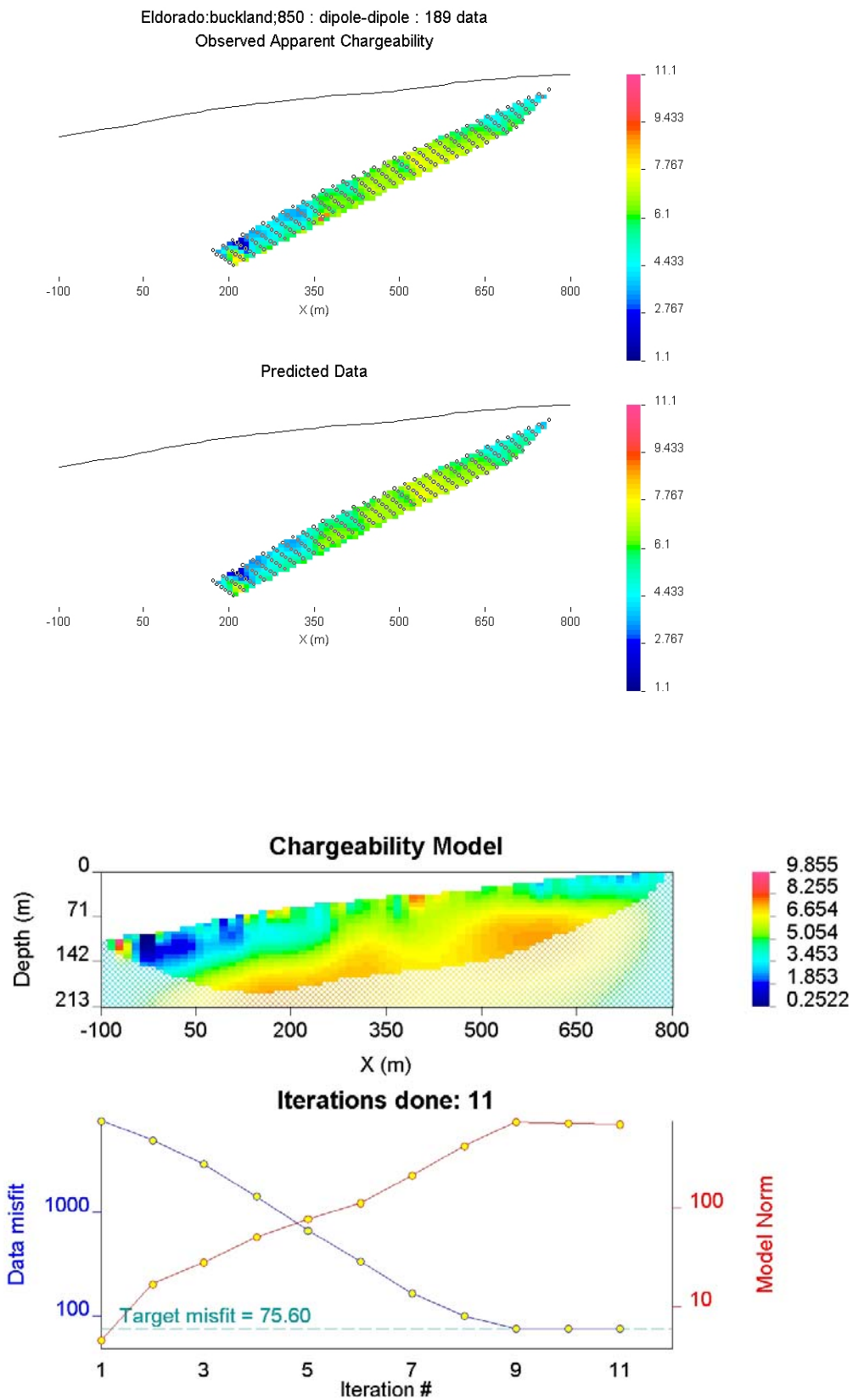


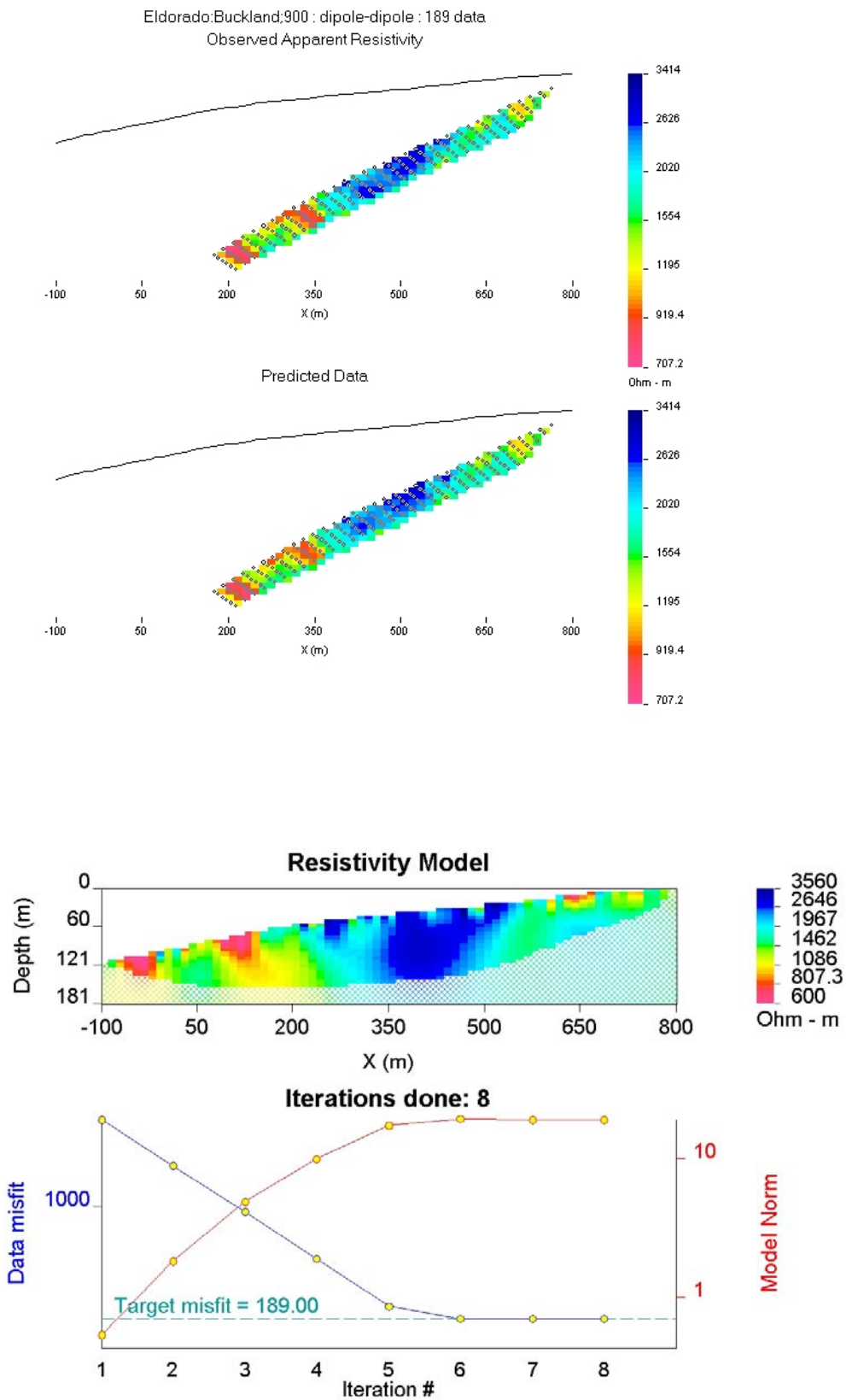


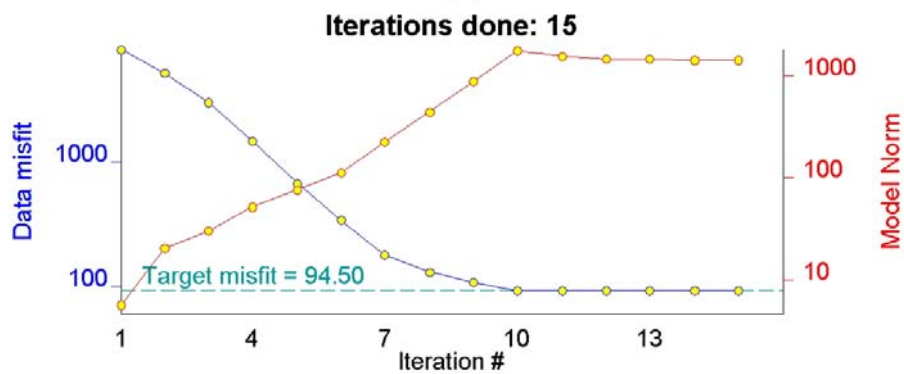
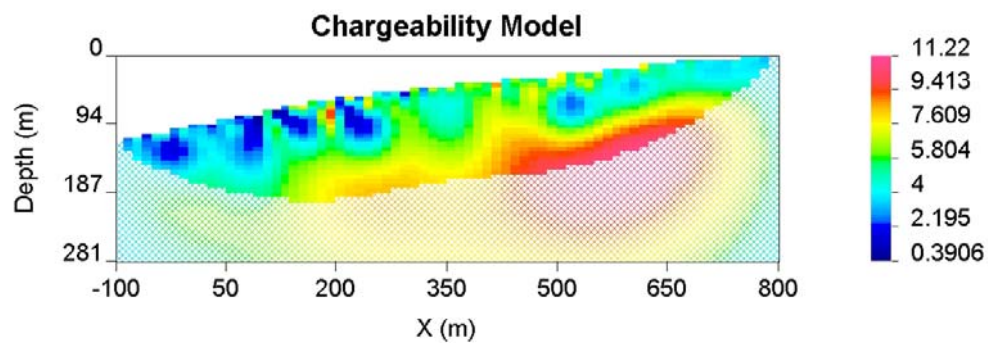
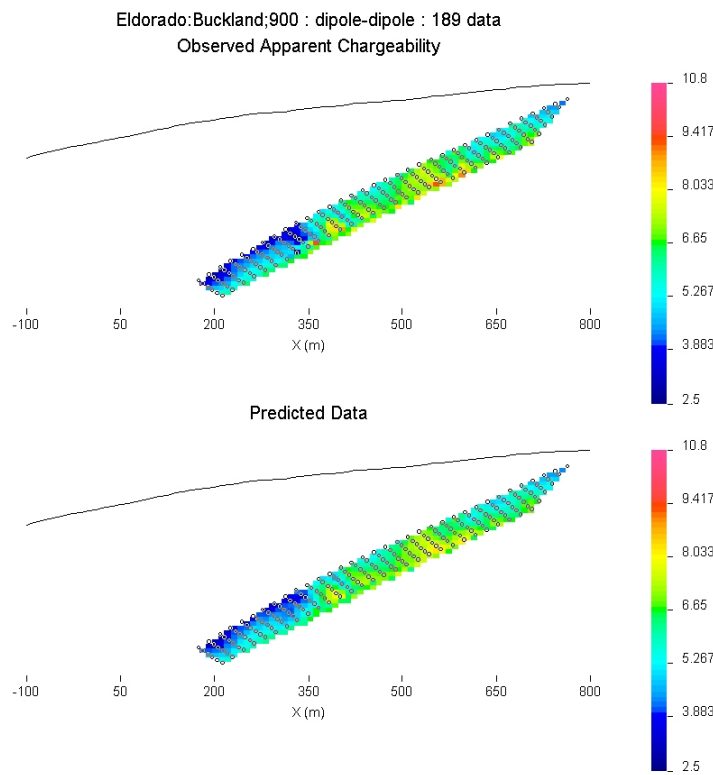


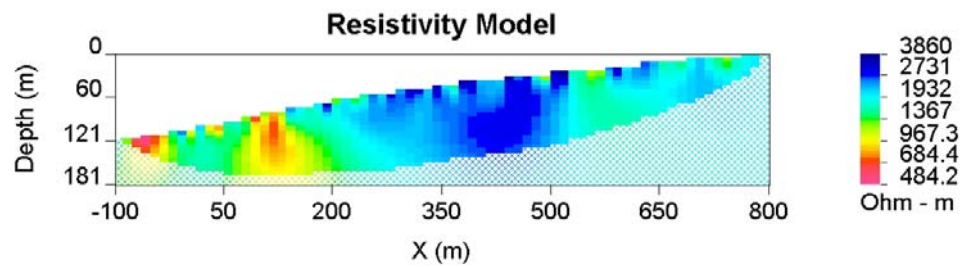
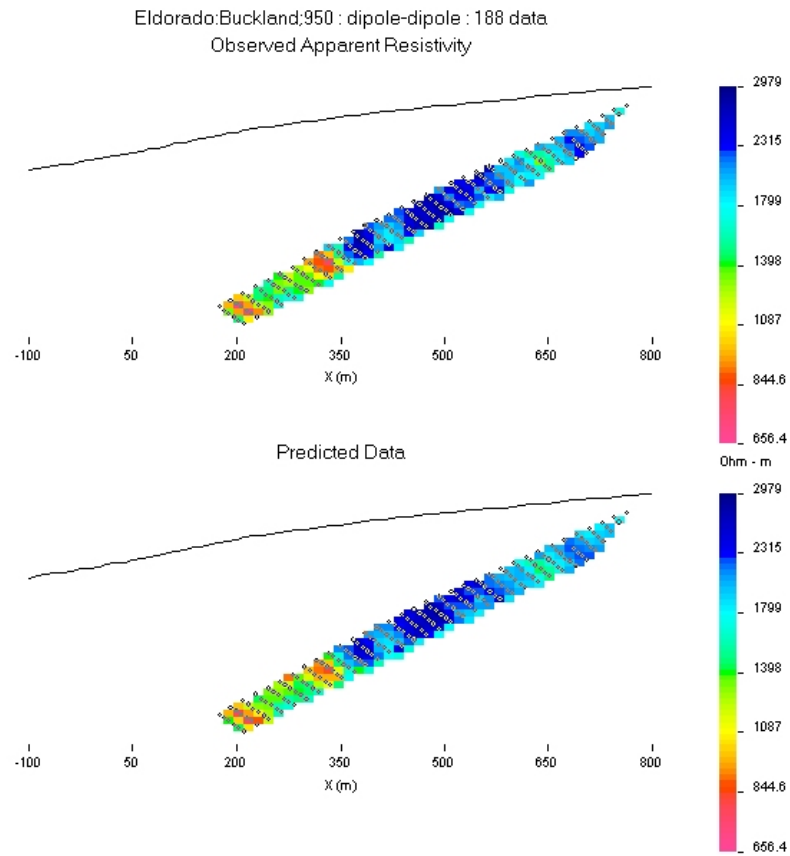




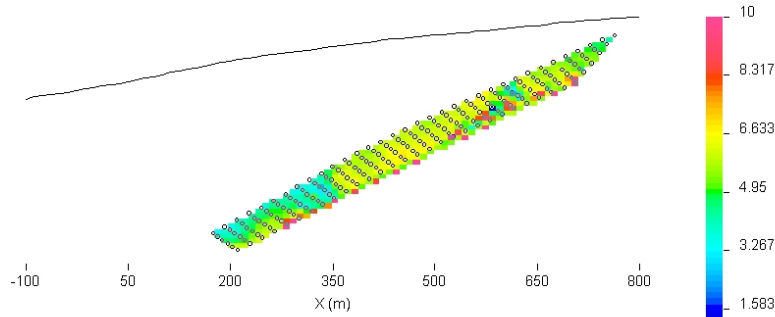




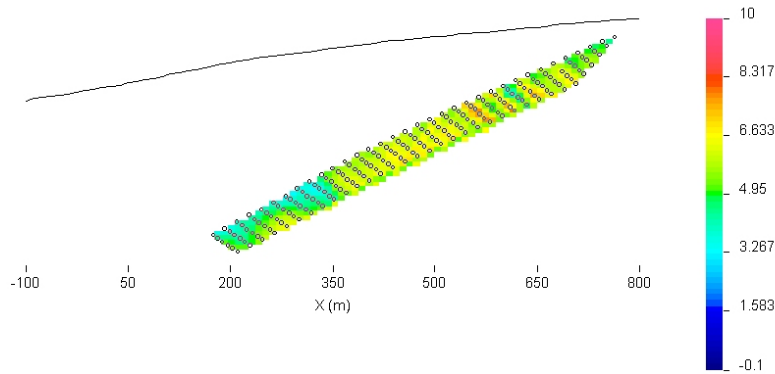




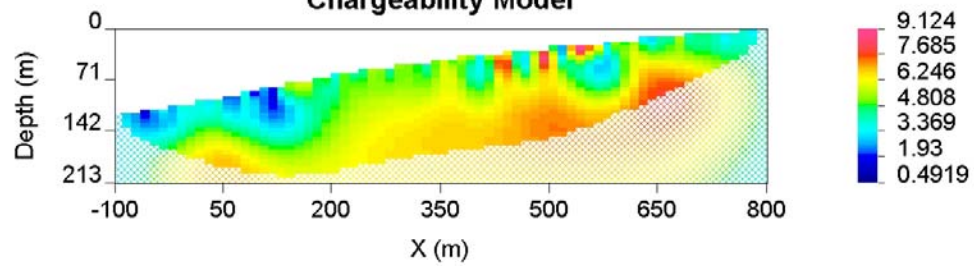
Eldorado:Buckland;950 : dipole-dipole : 188 data
Observed Apparent Chargeability



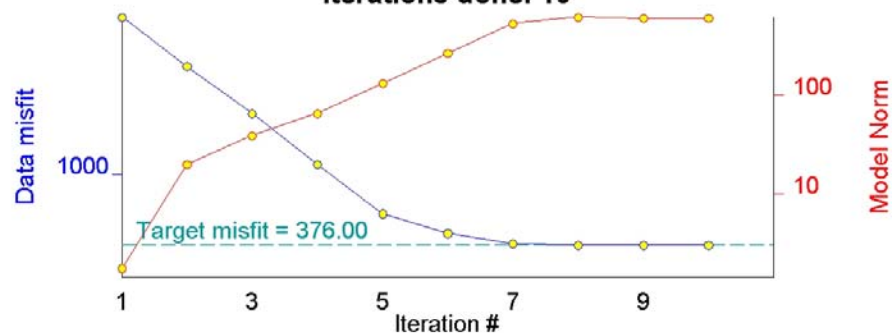
Predicted Data

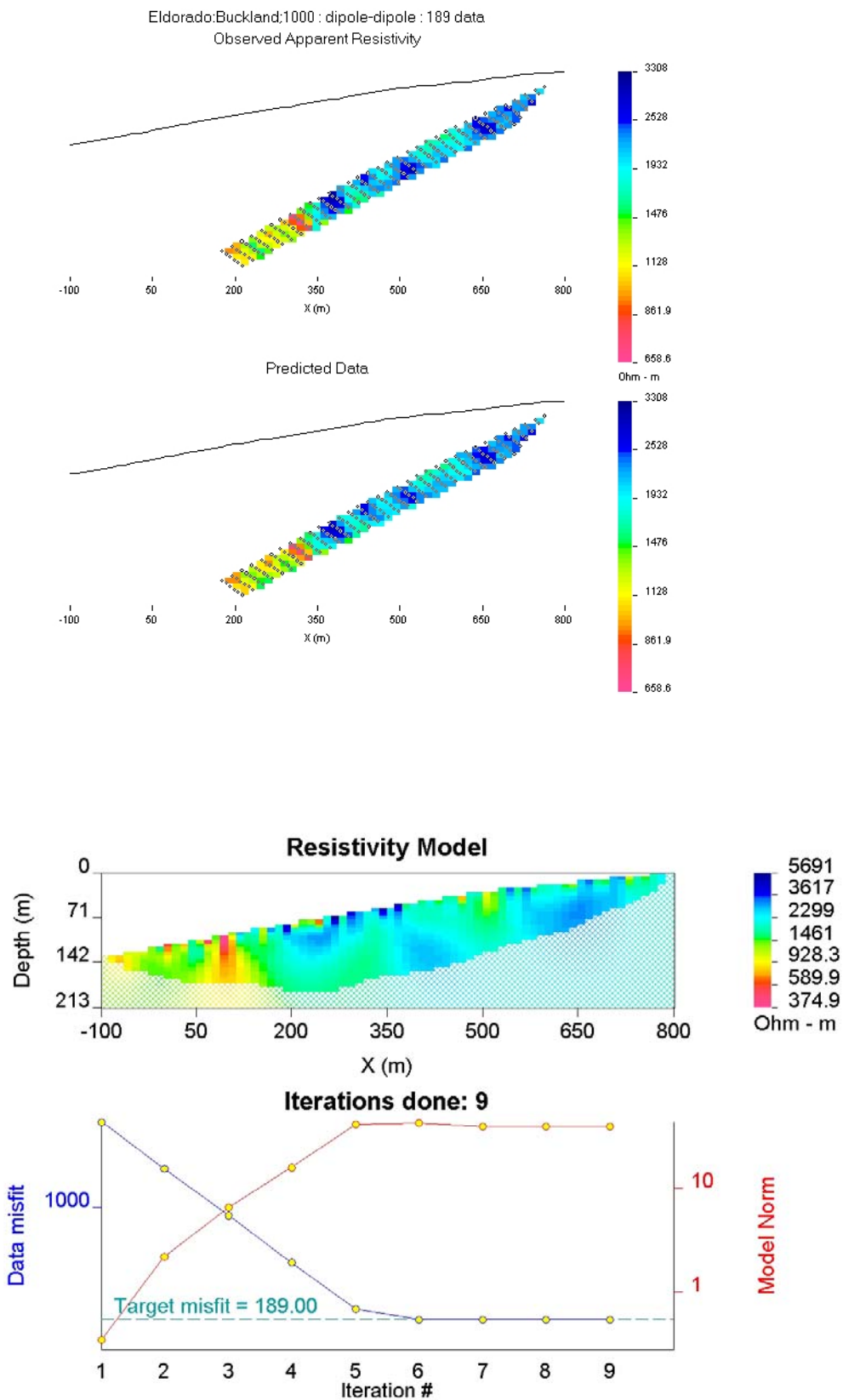


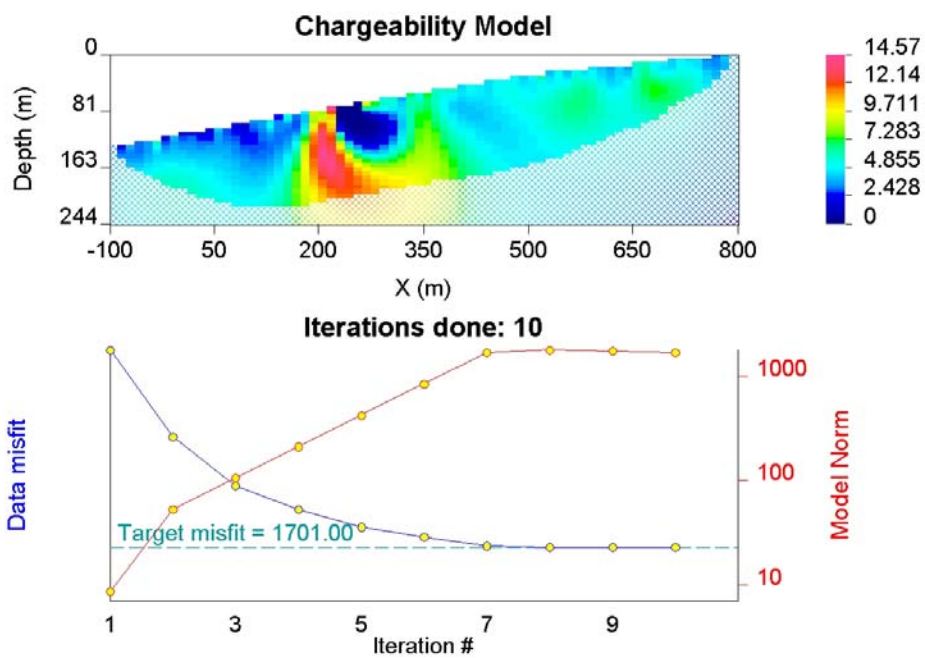
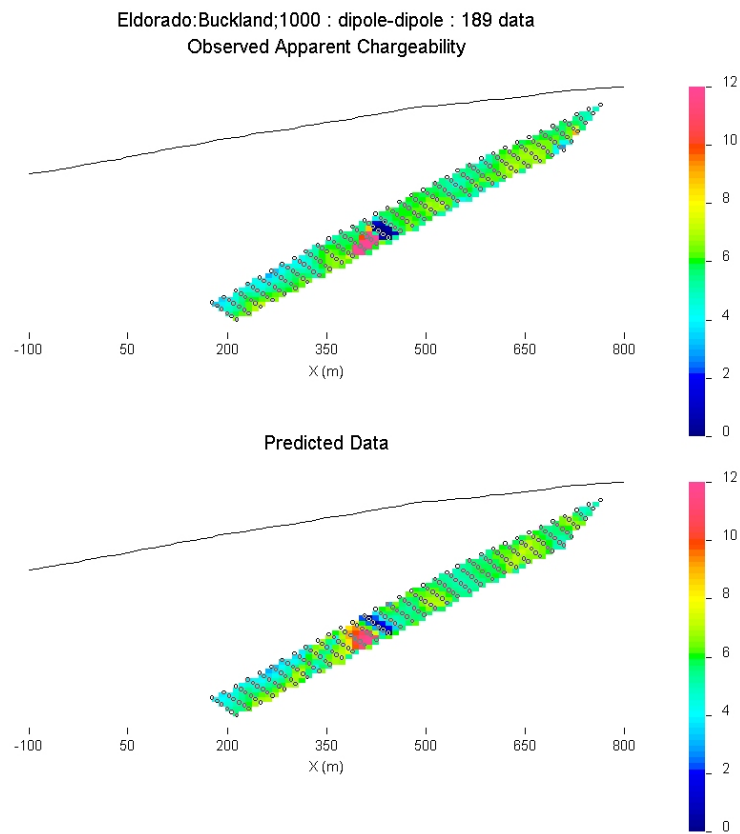
Chargeability Model

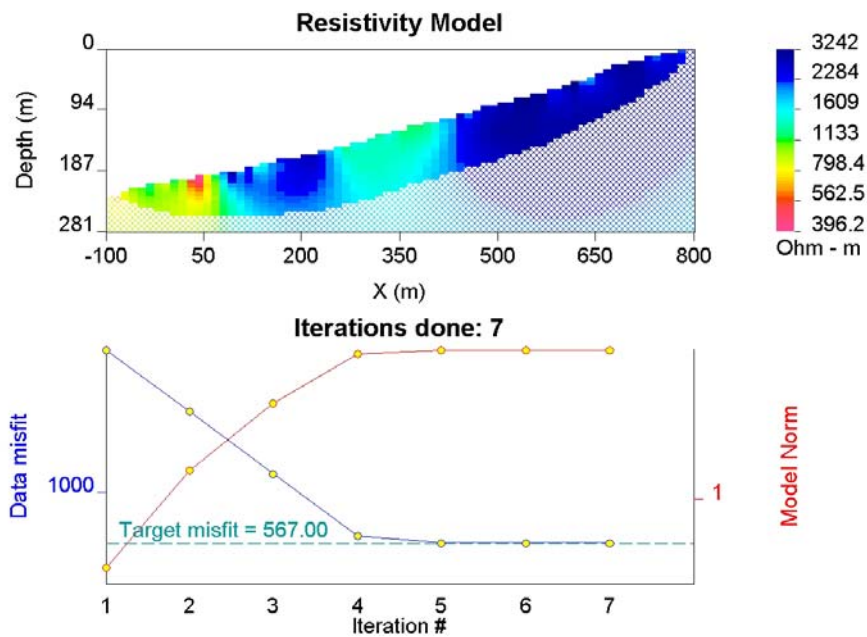
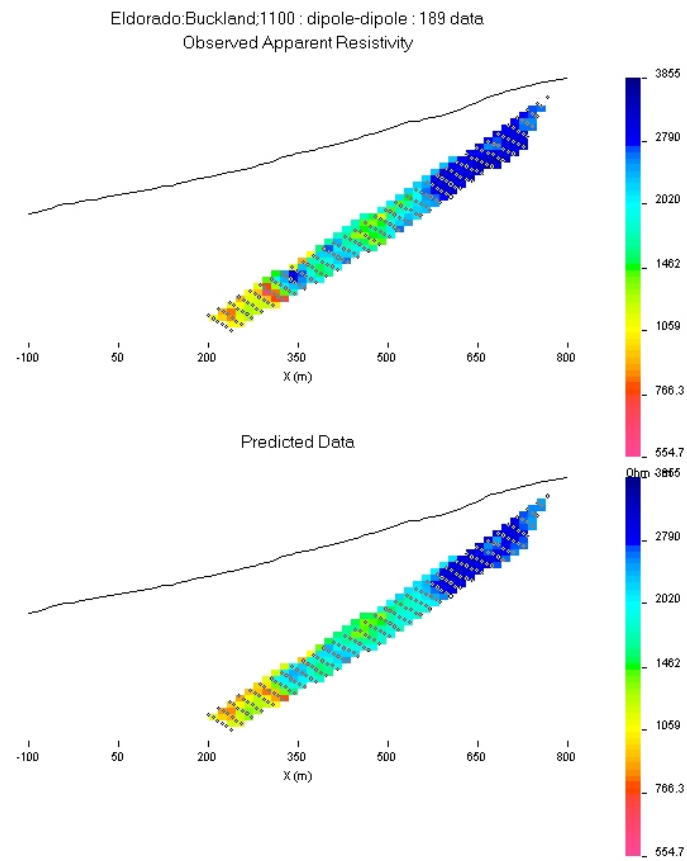


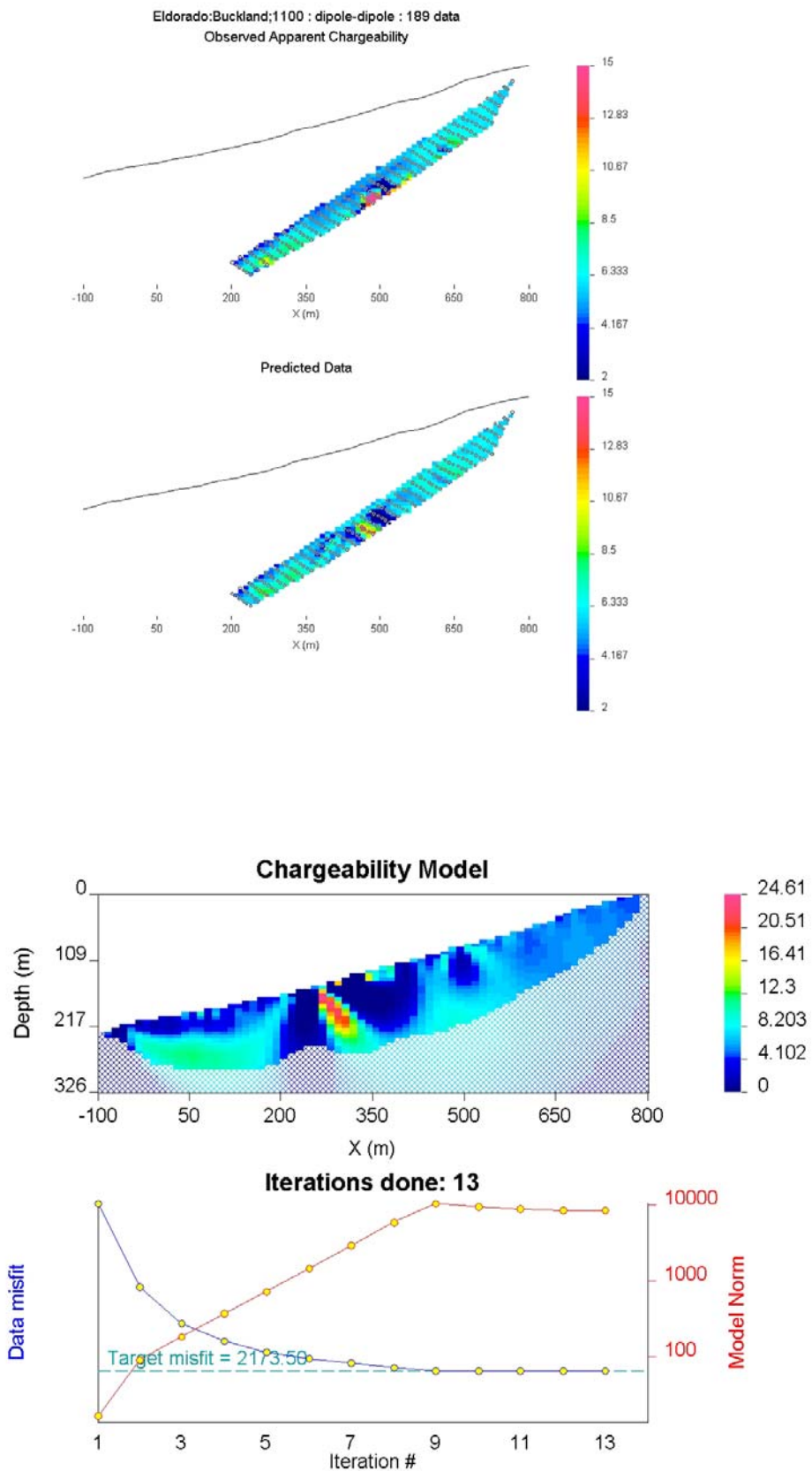
Iterations done: 10

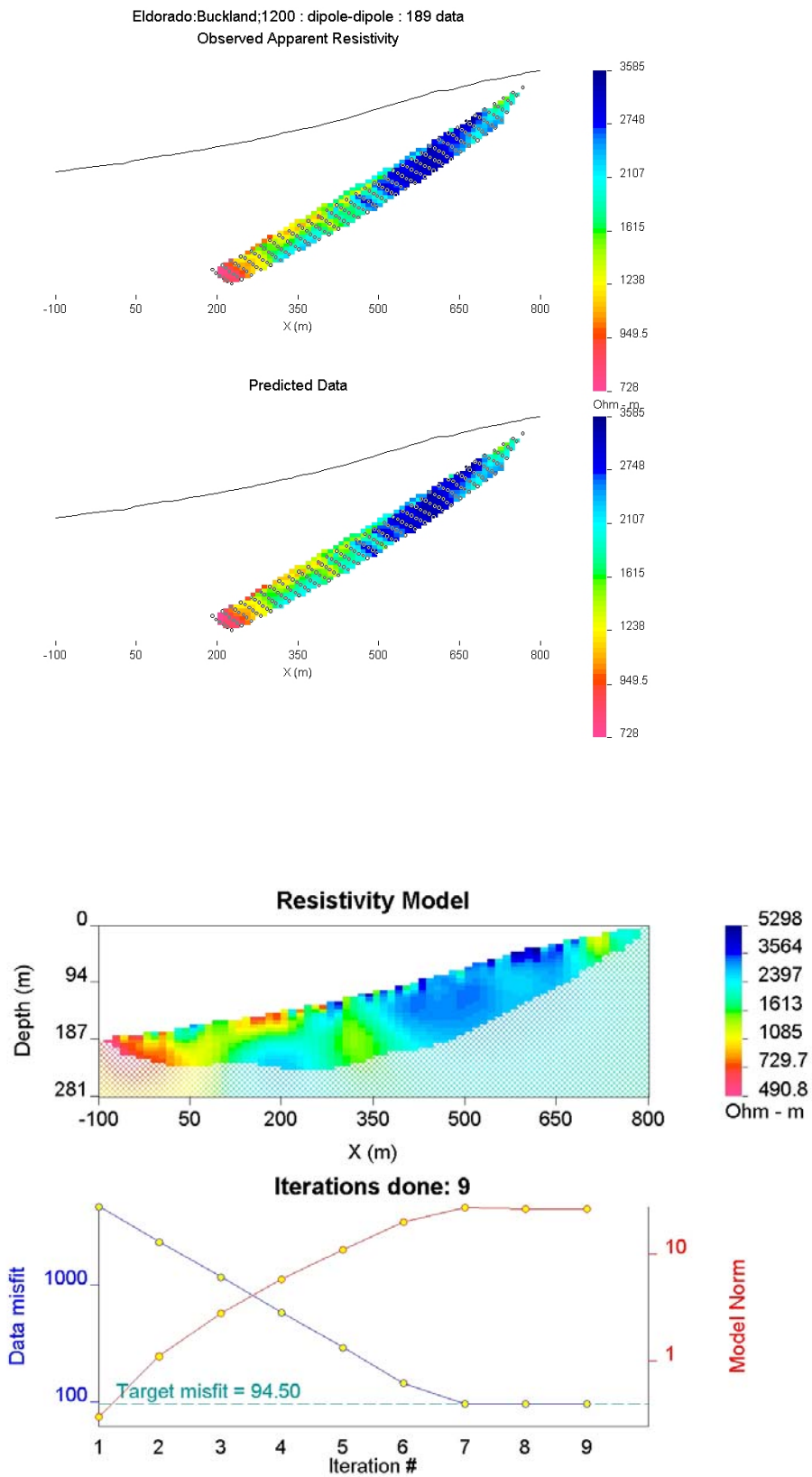


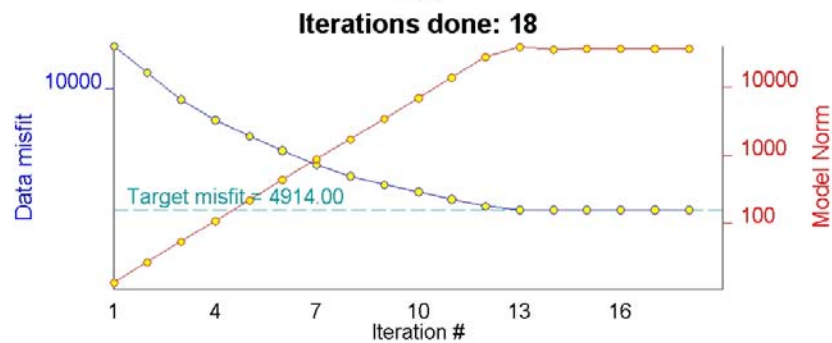
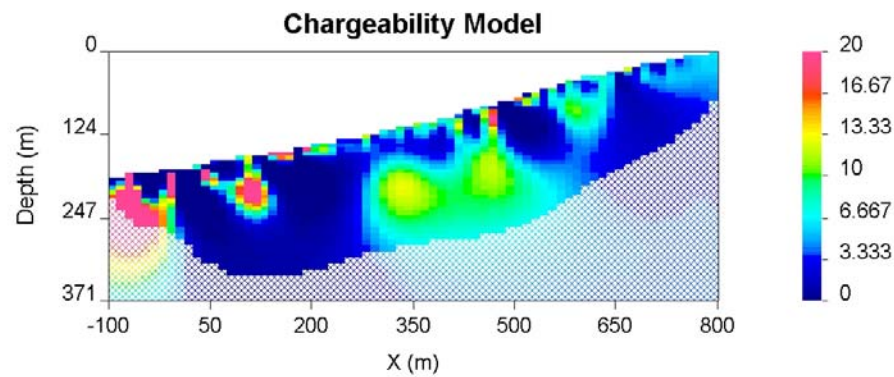
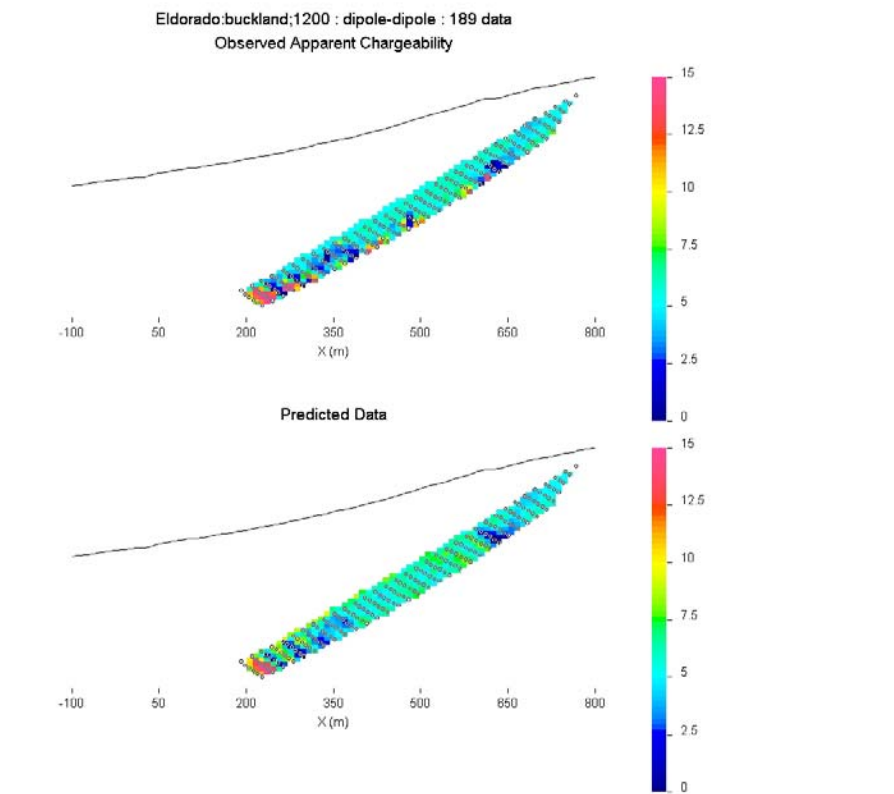


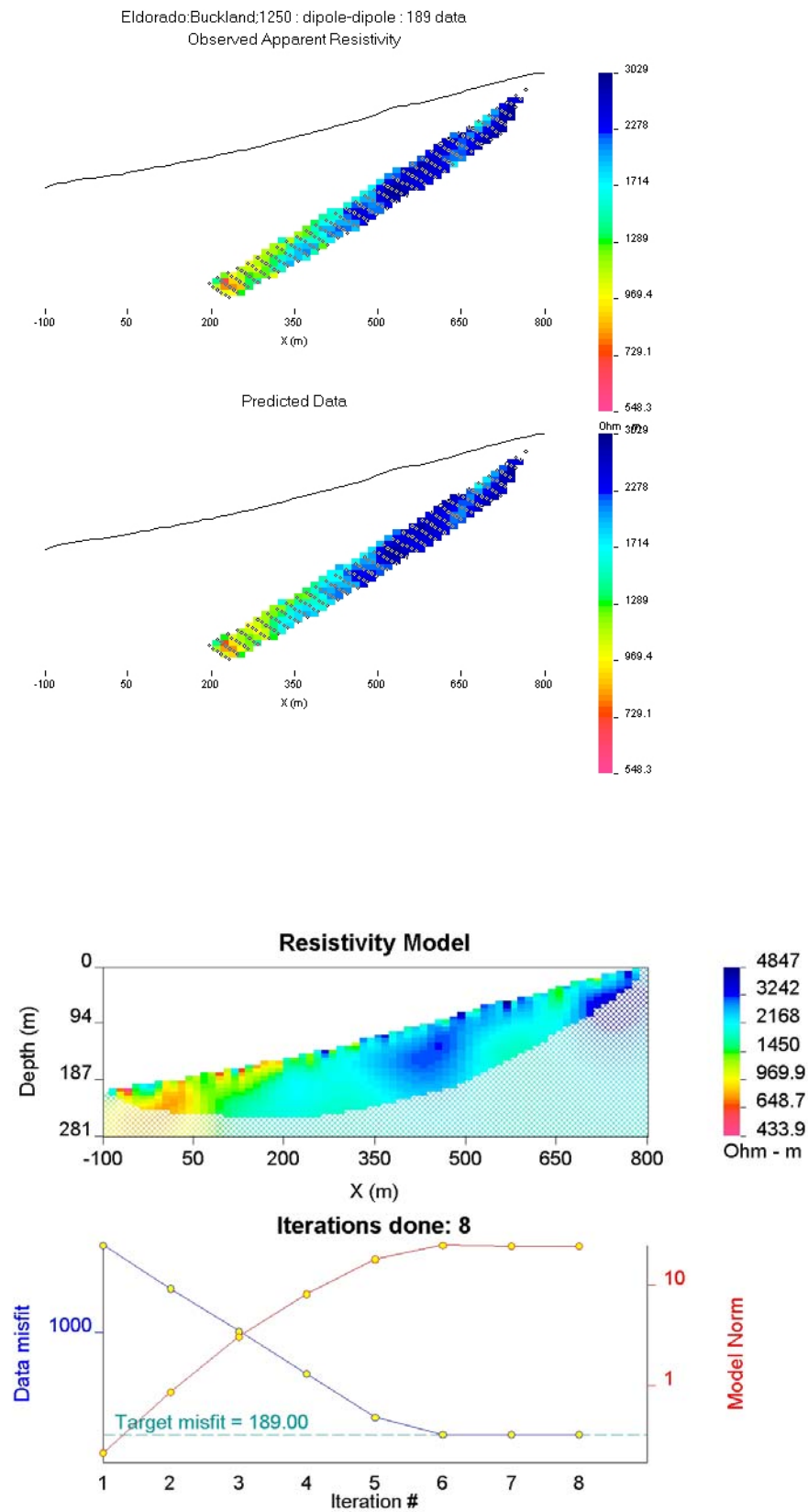


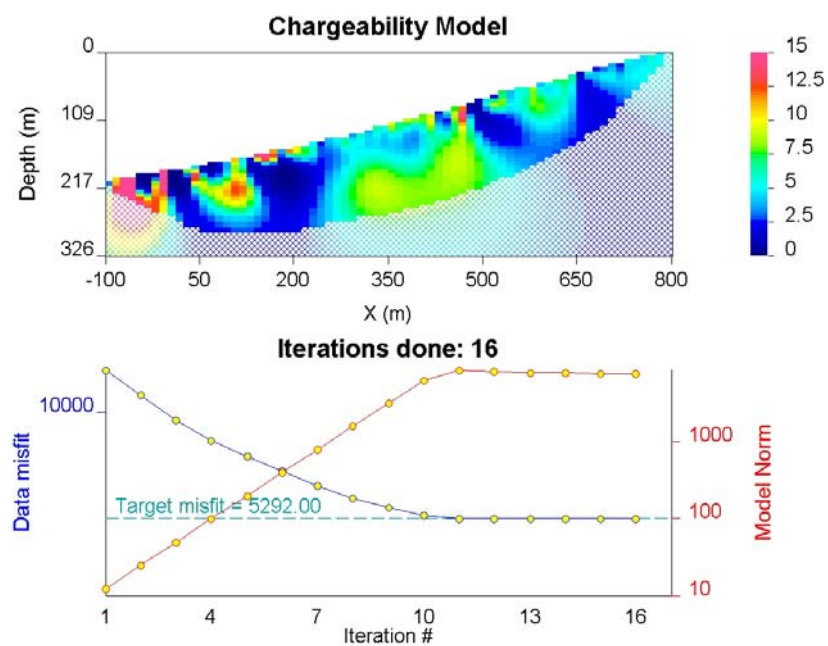
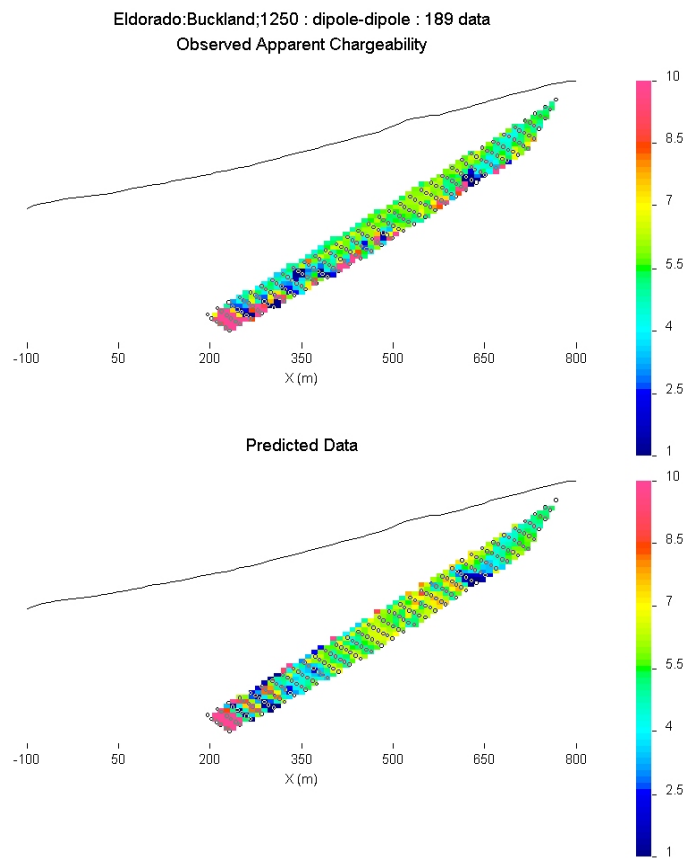


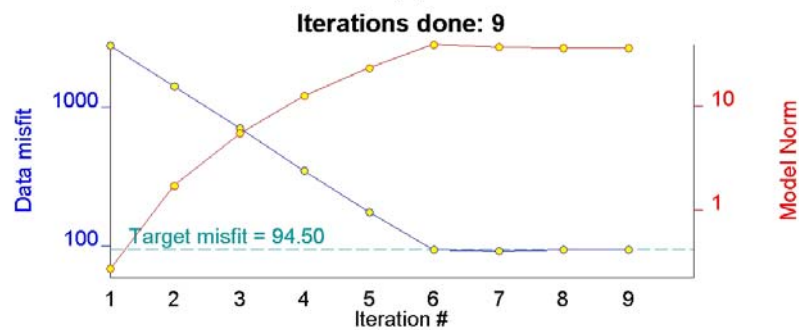
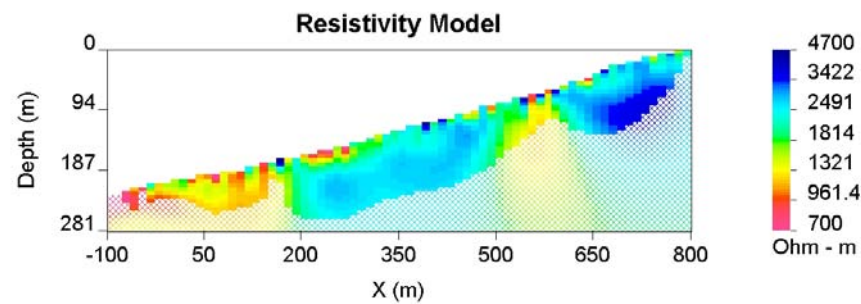
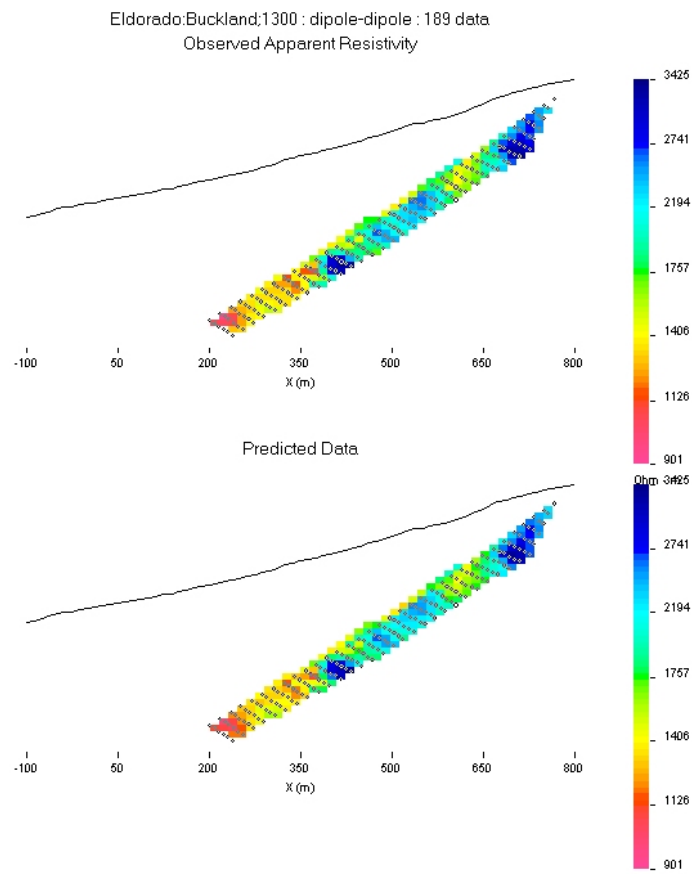


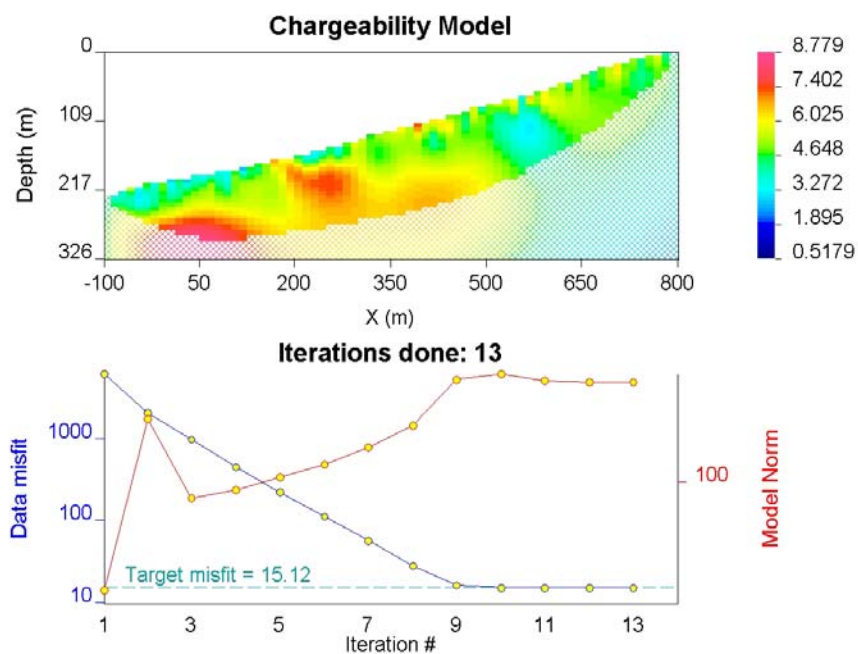
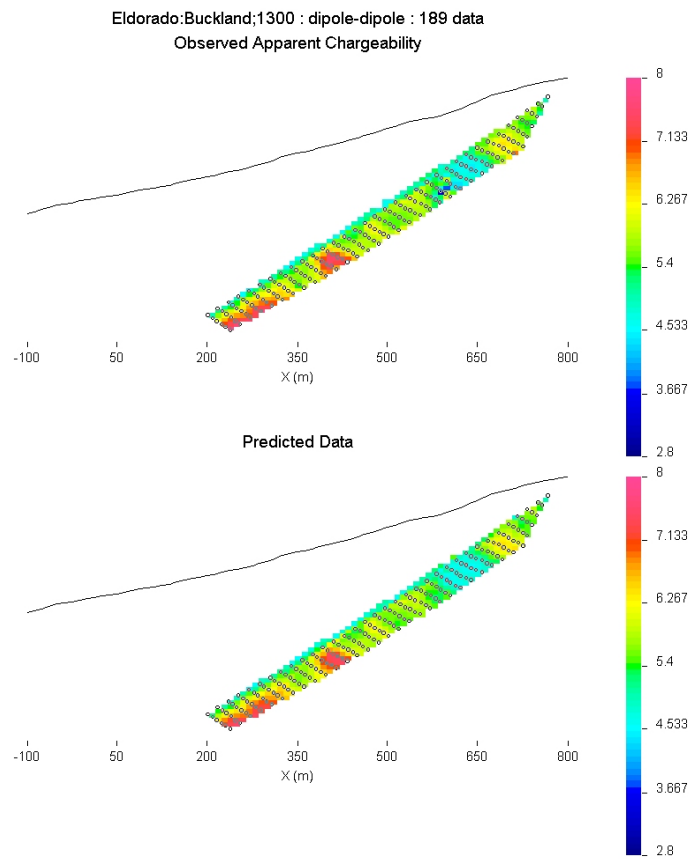


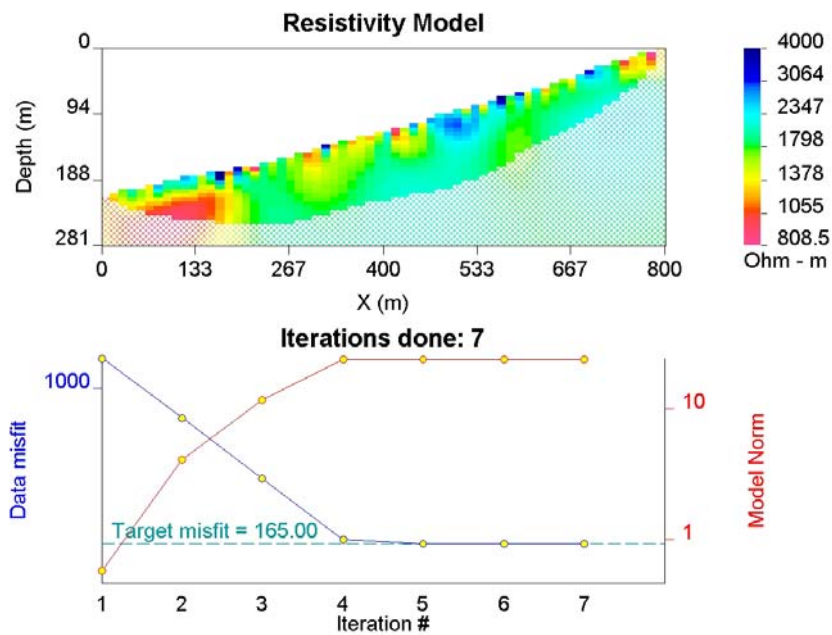
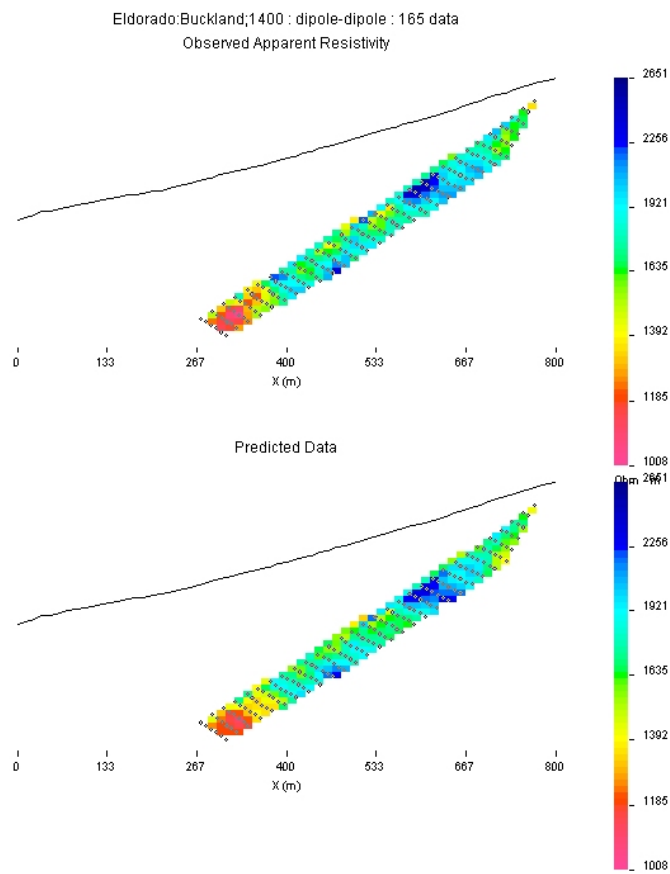


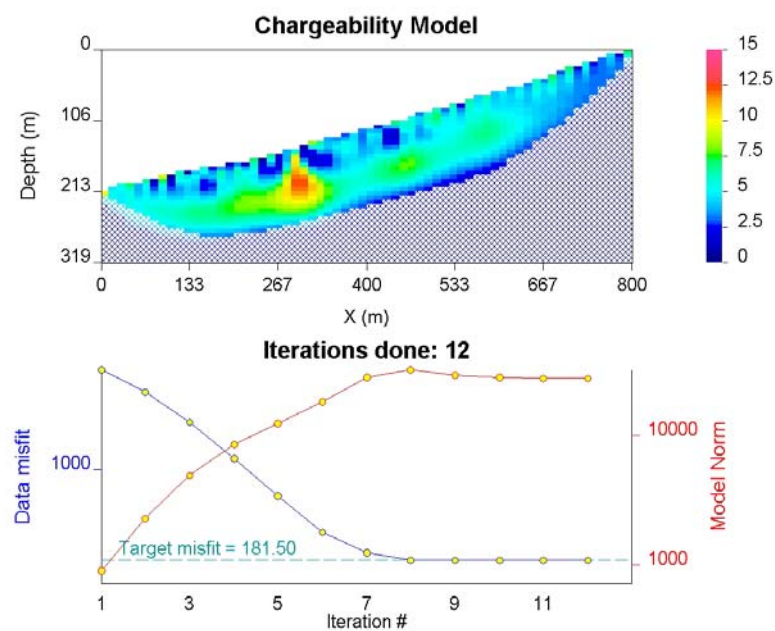
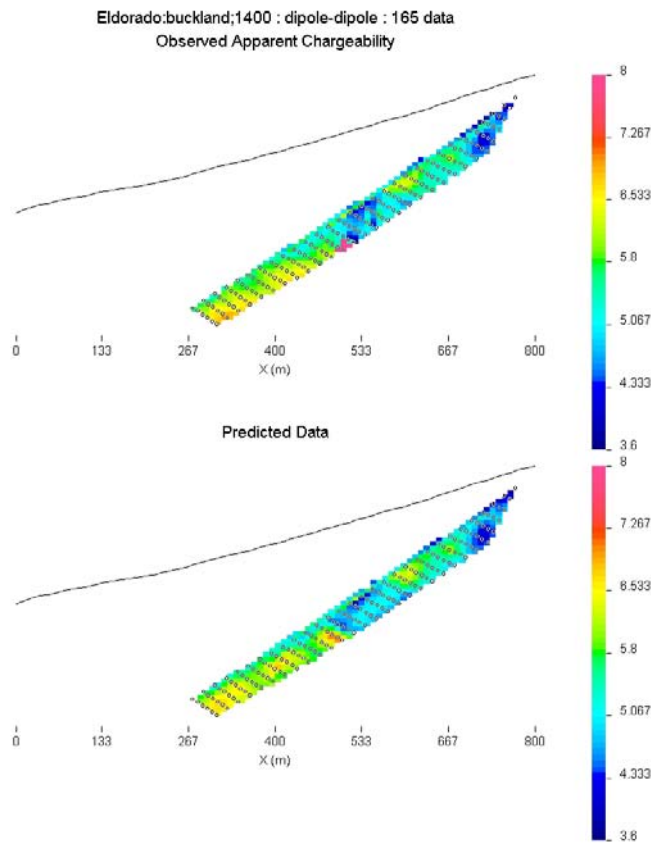


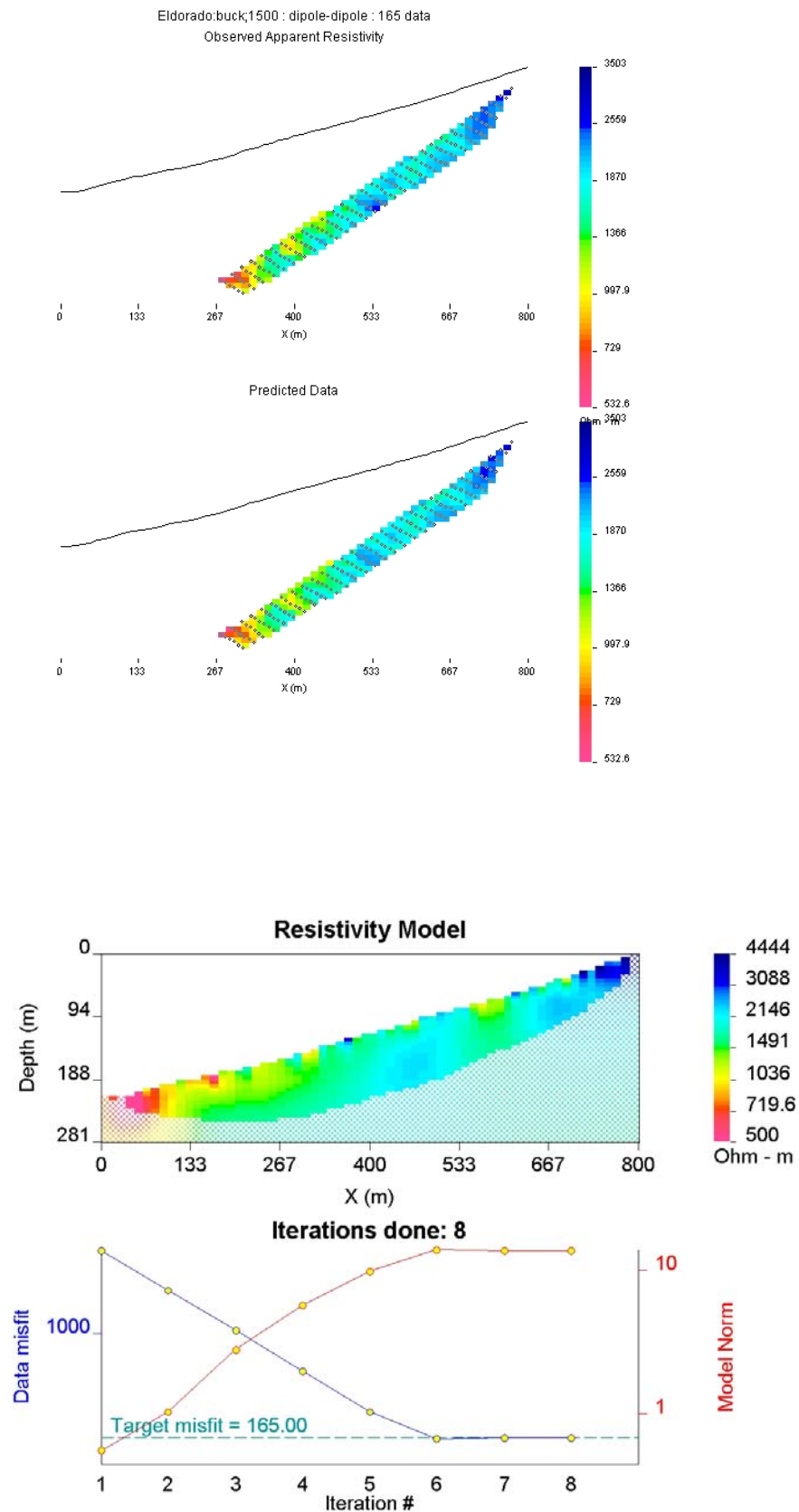


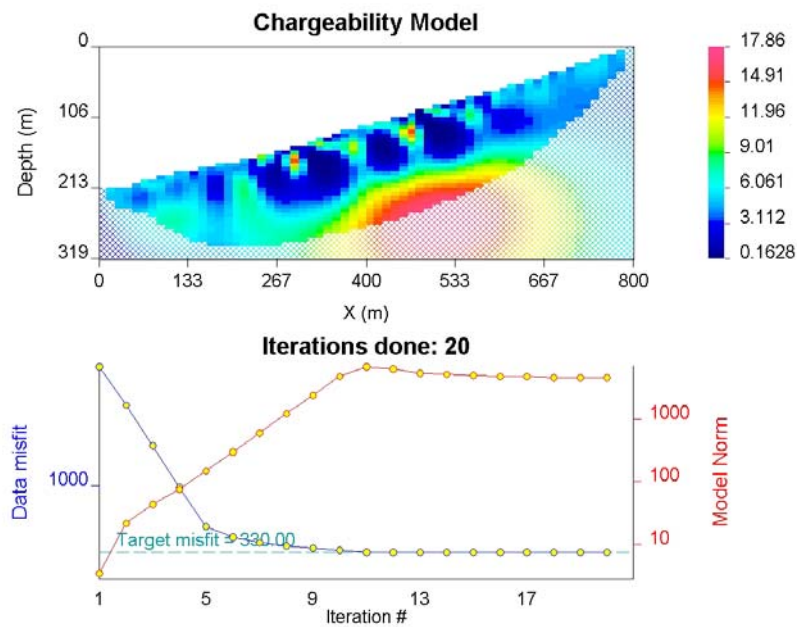
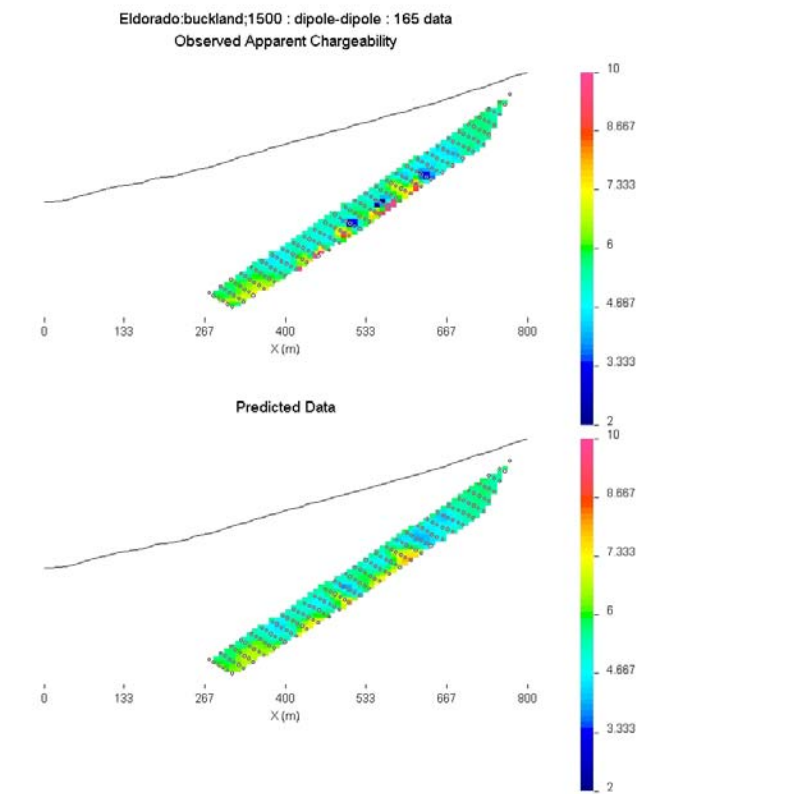




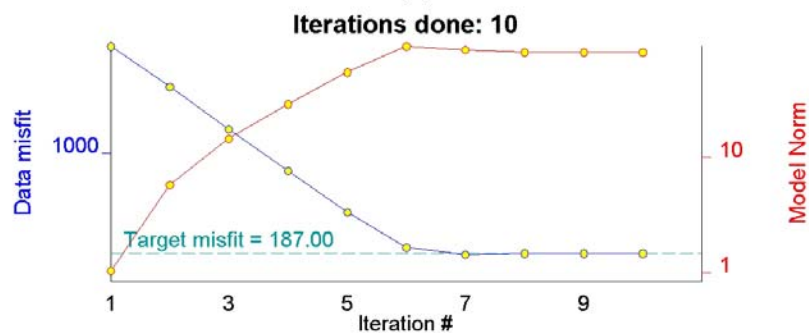
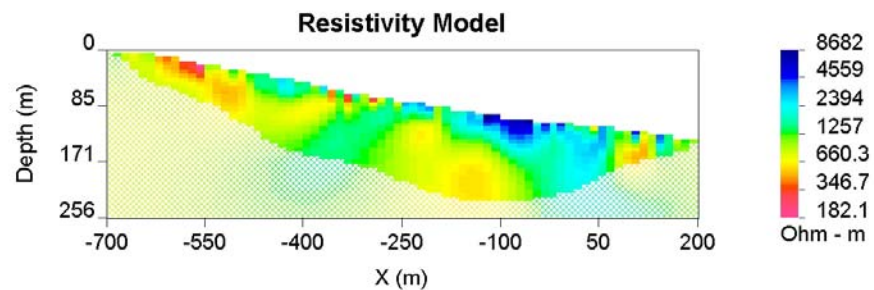
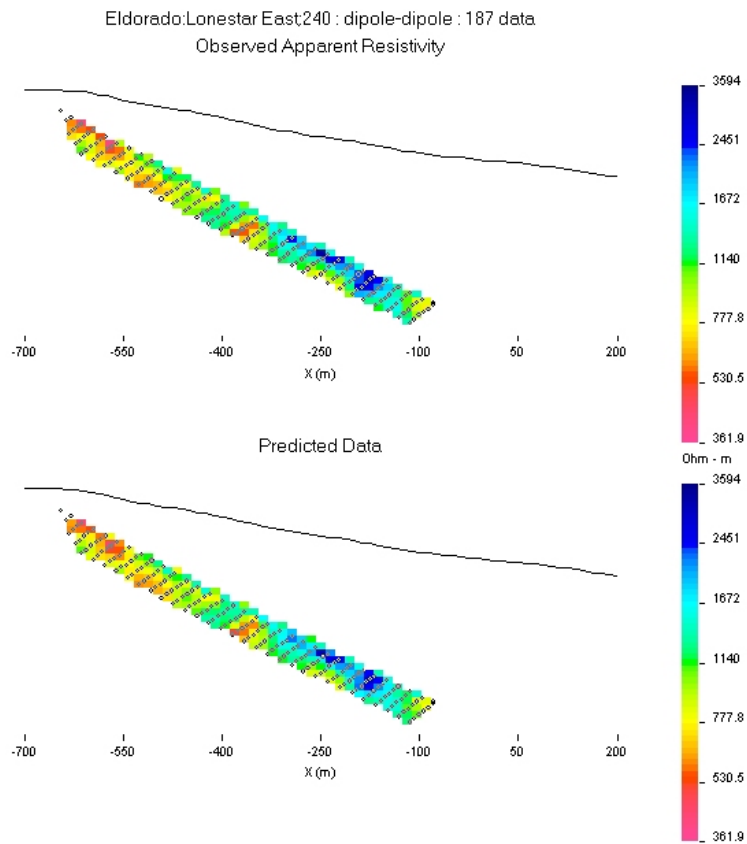


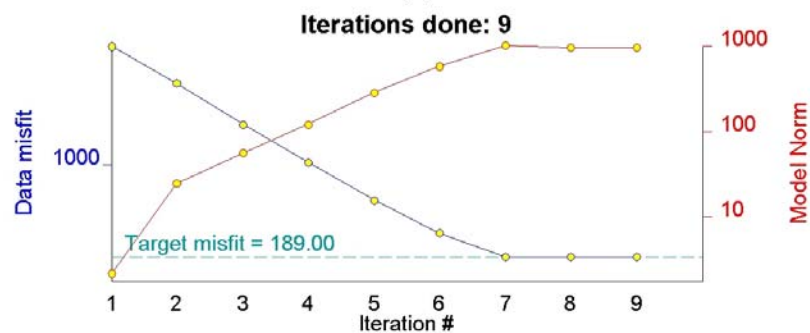
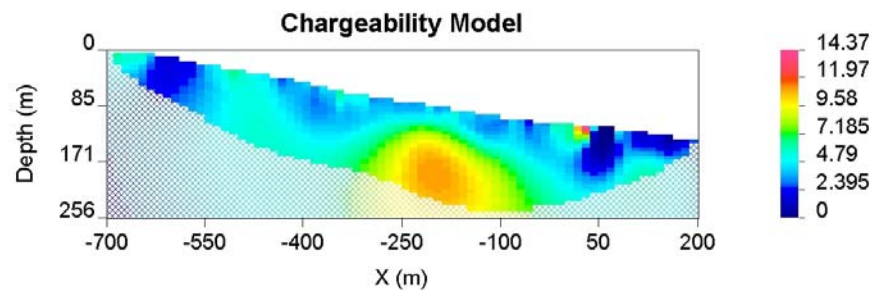
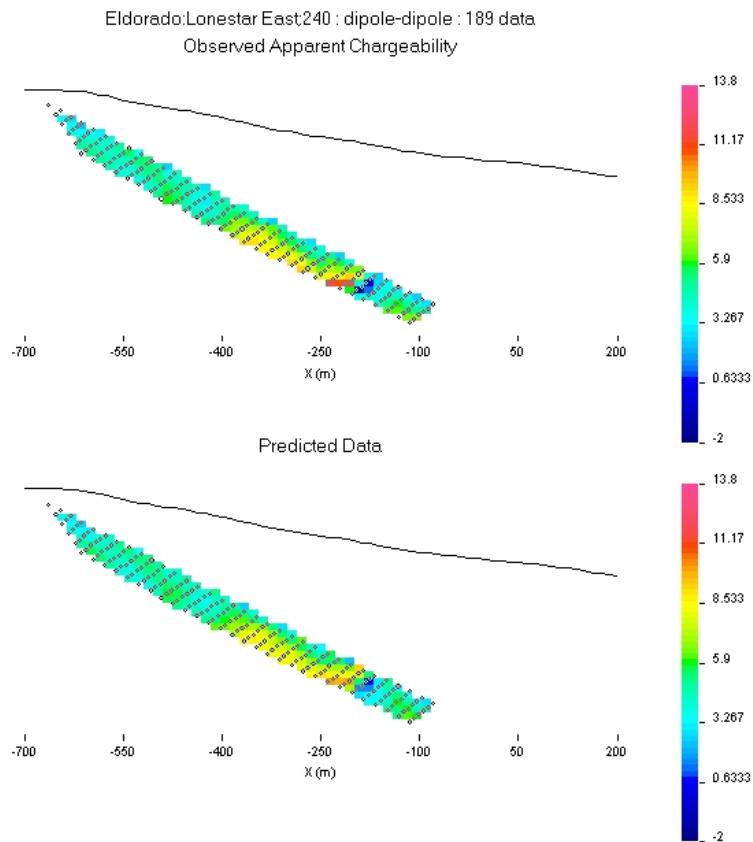


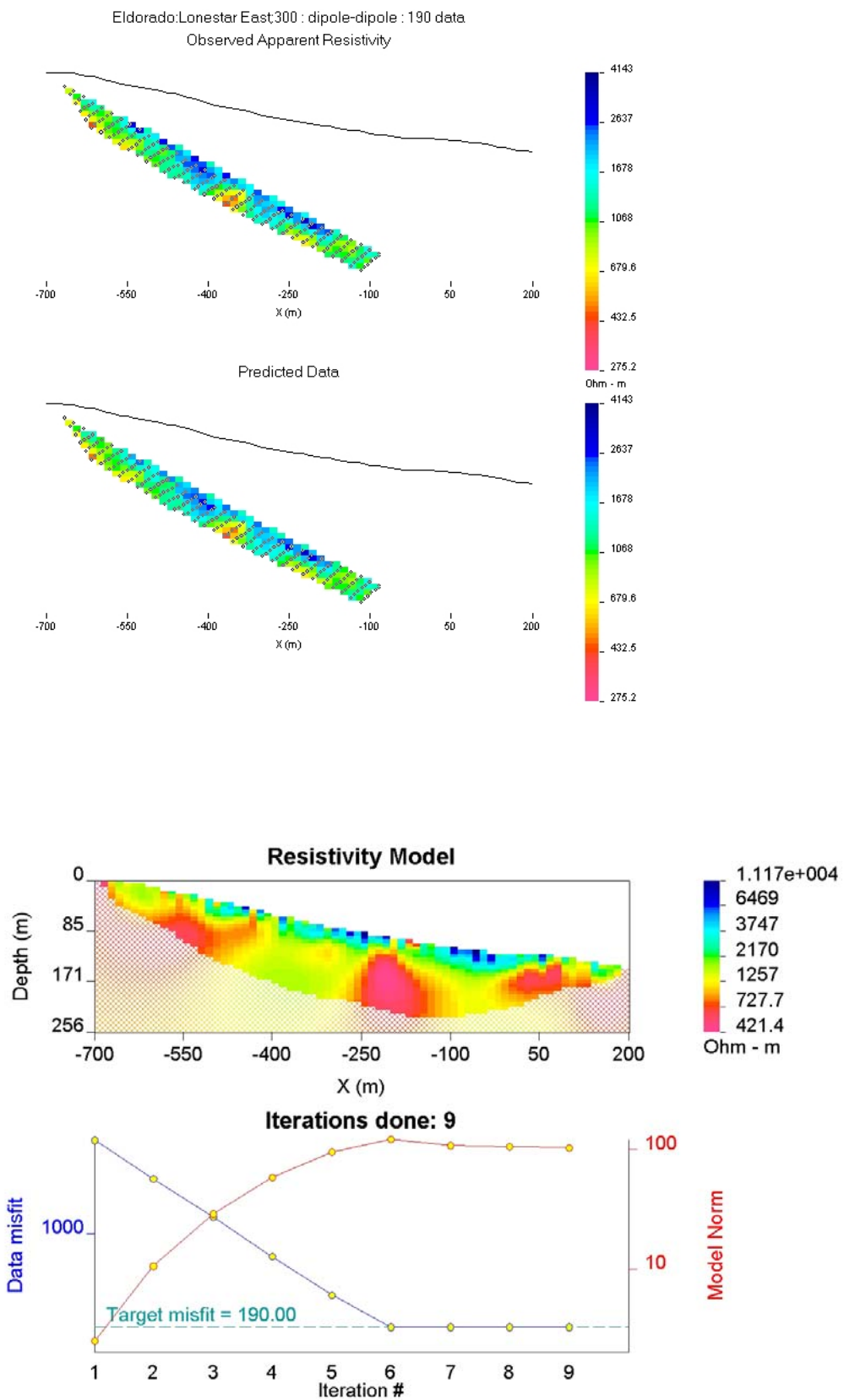


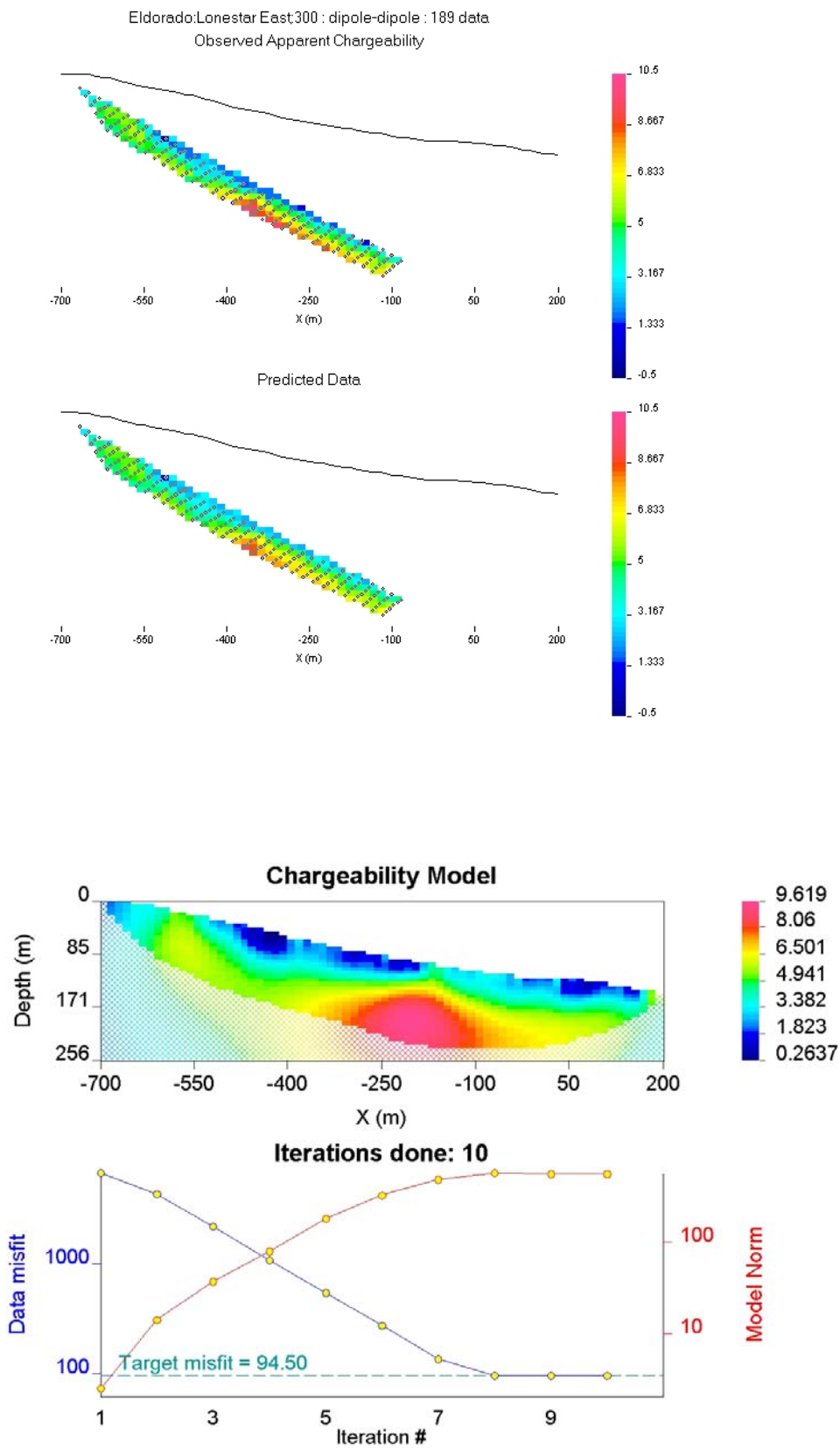


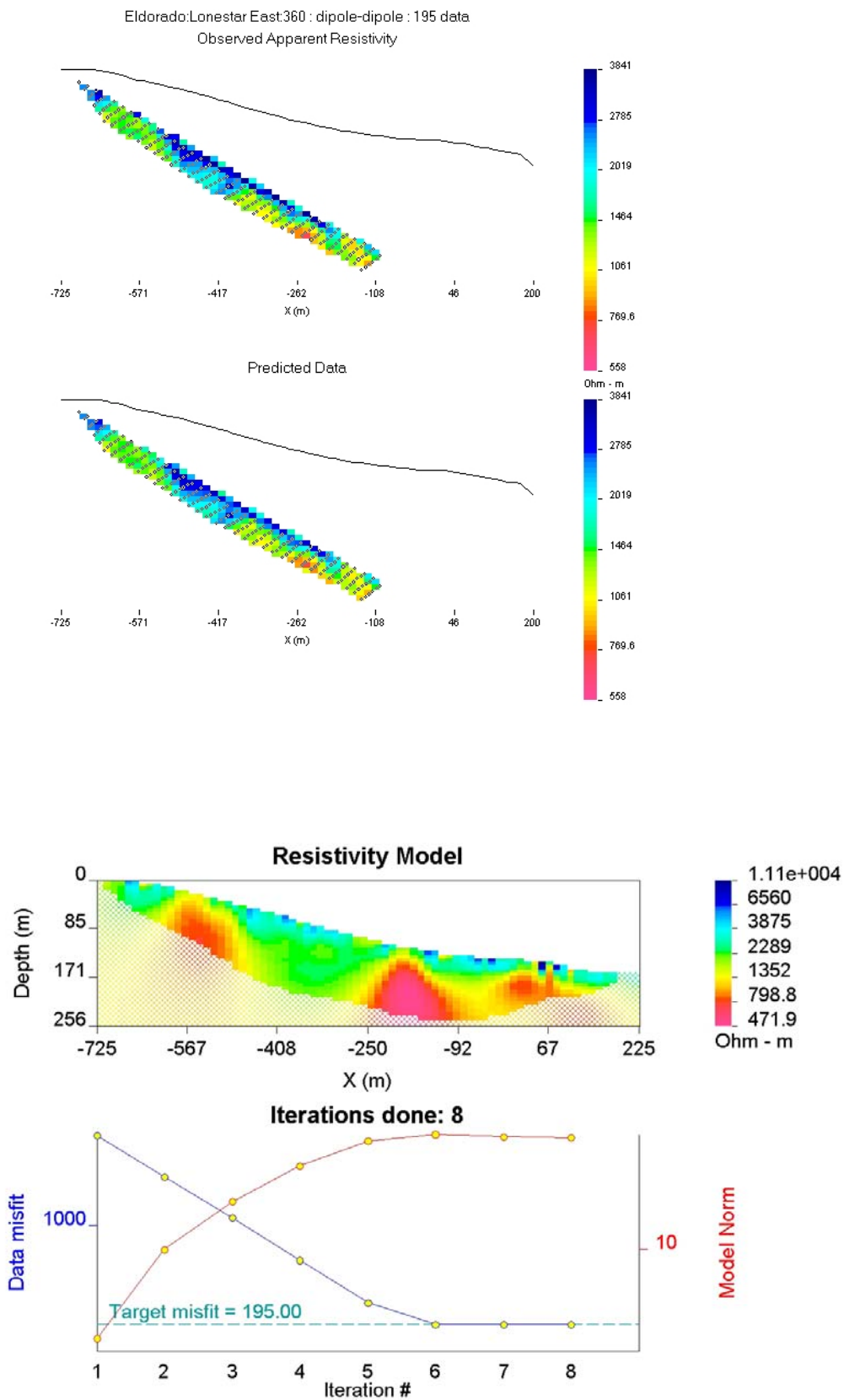
Lonestar East grid

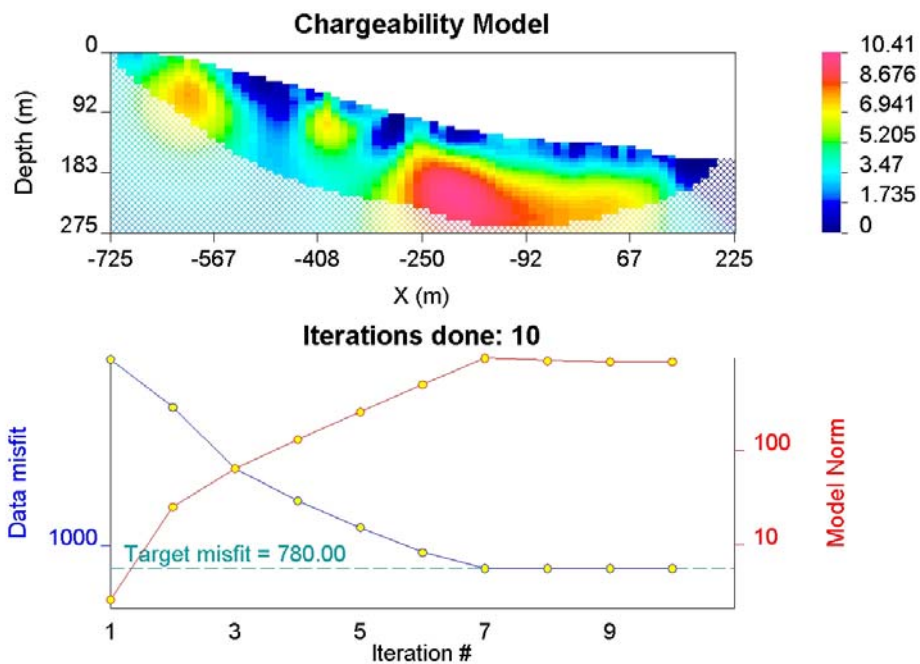
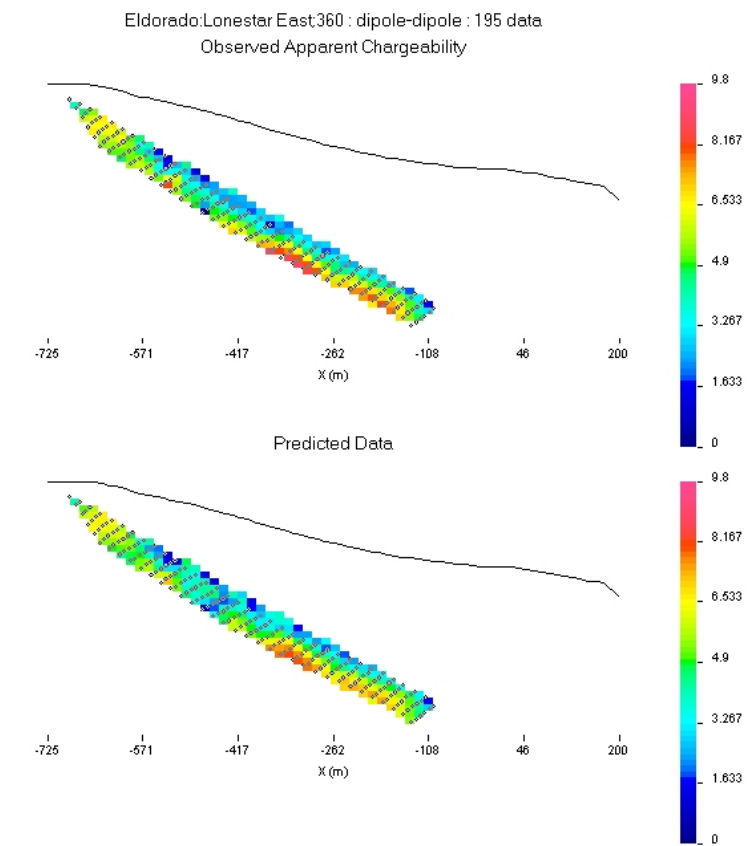


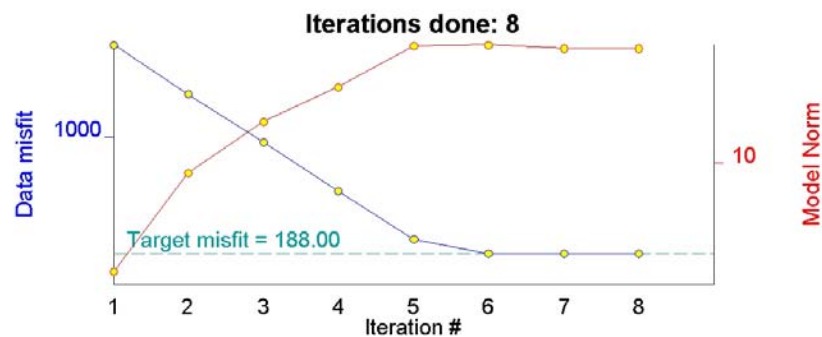
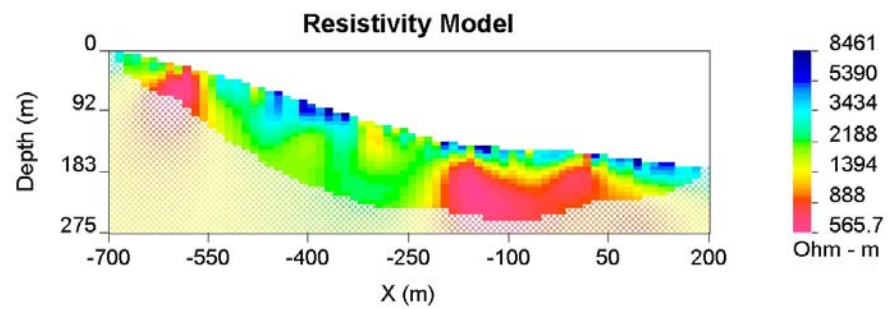
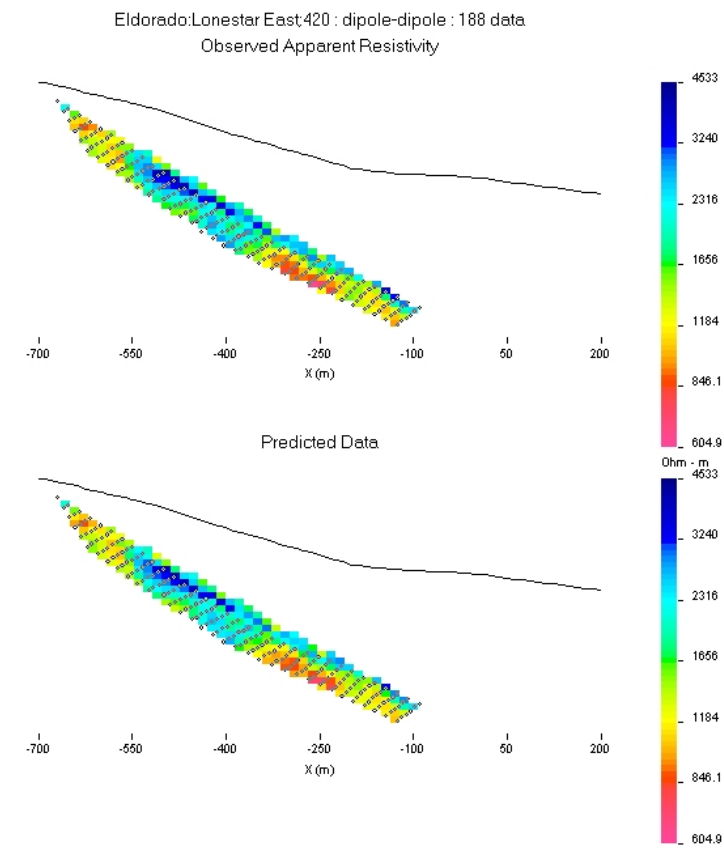


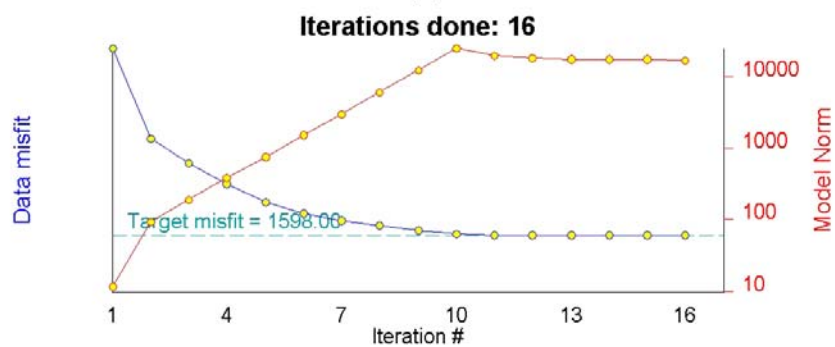
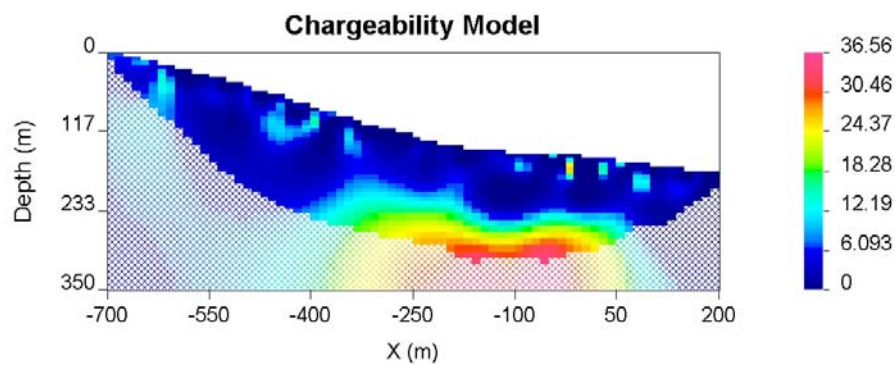
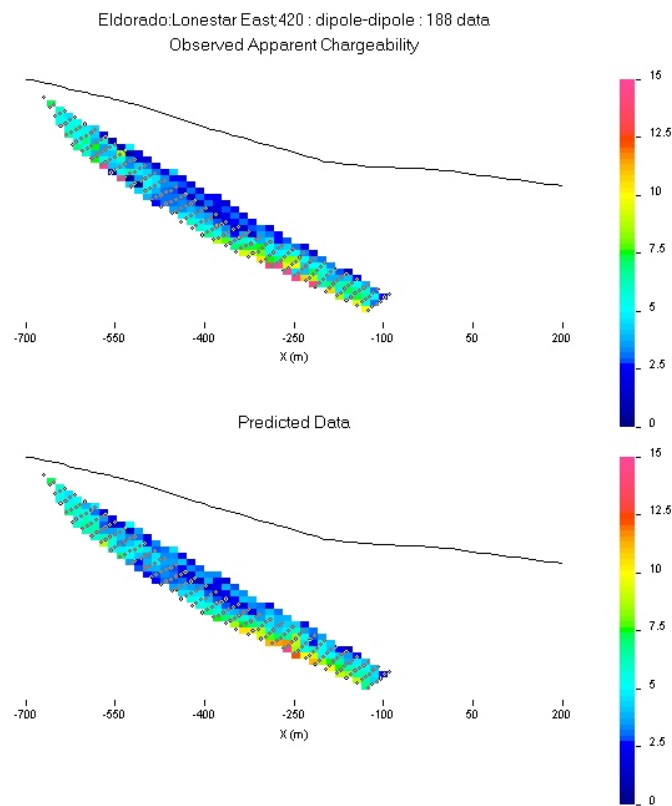


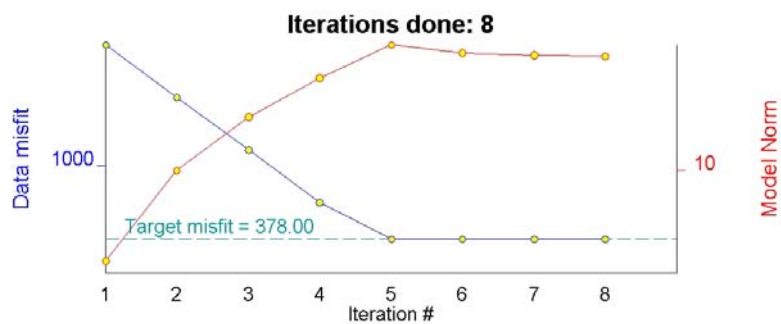
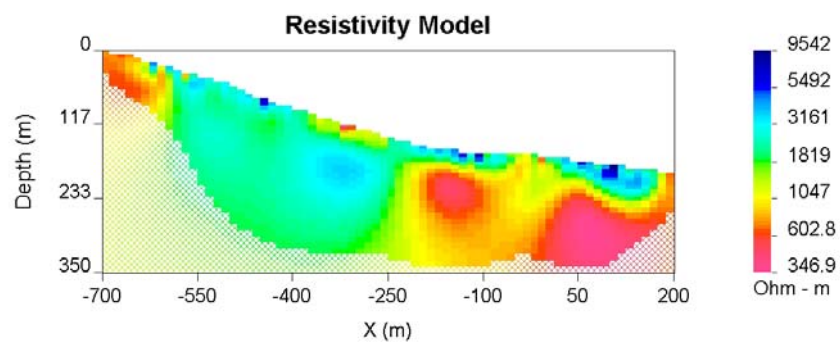
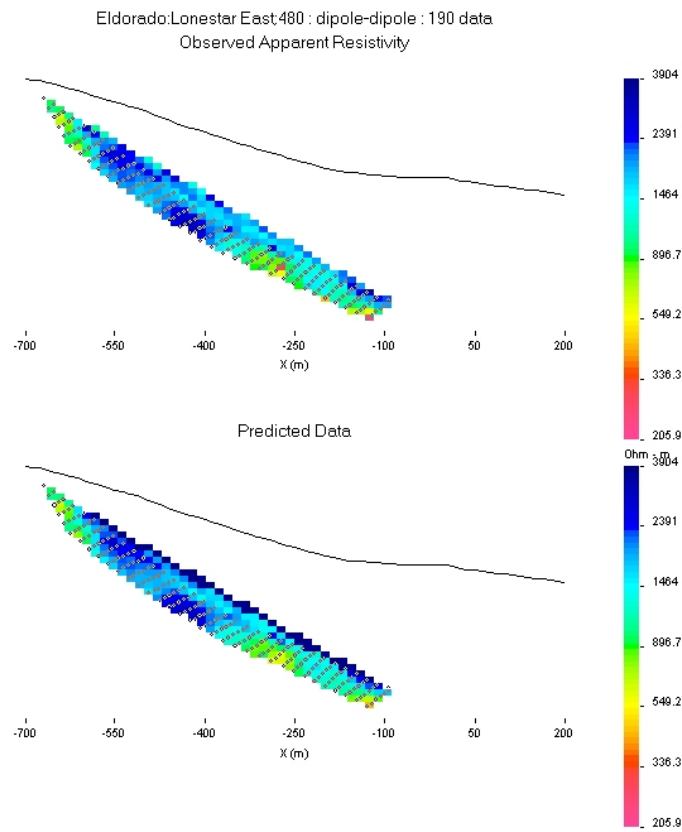


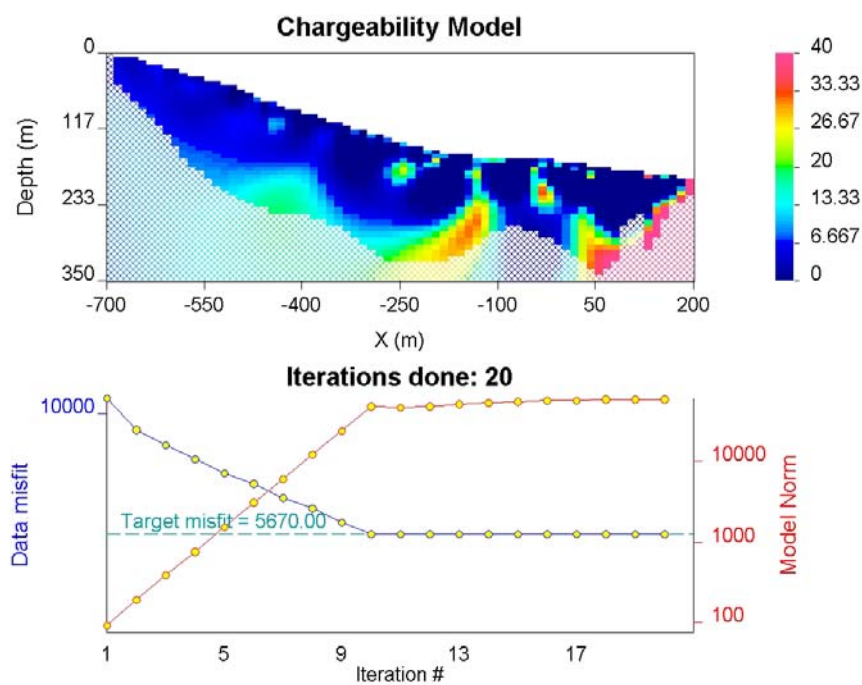
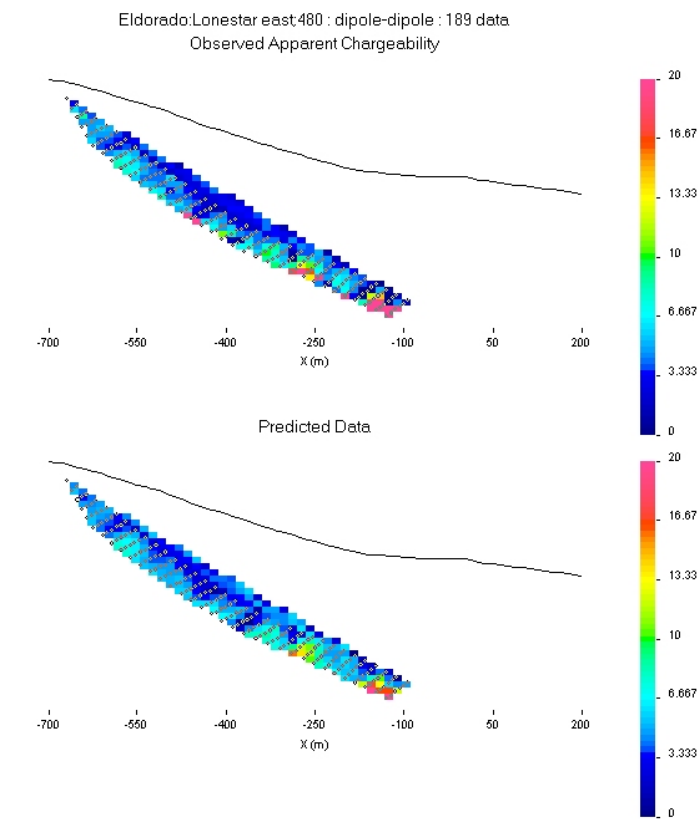


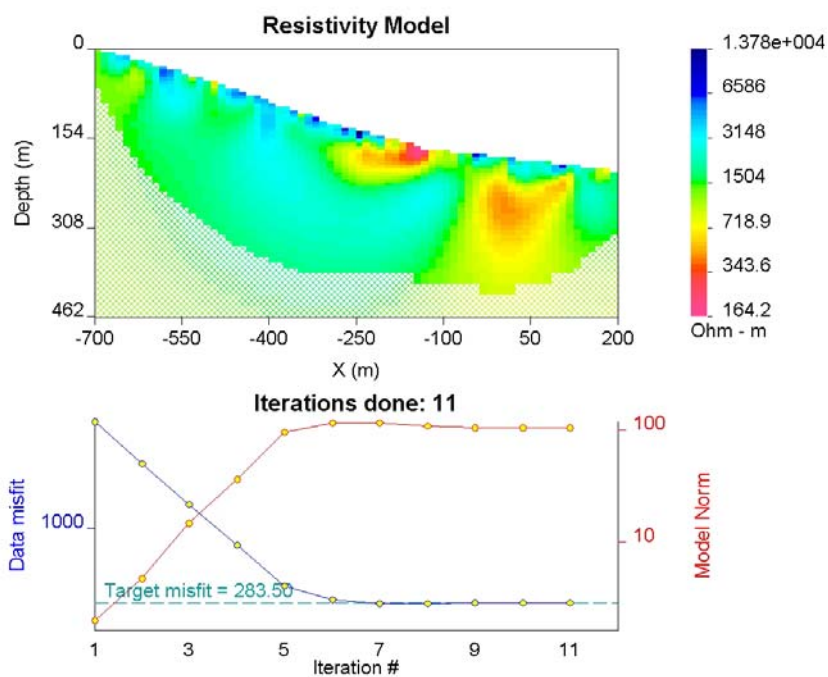
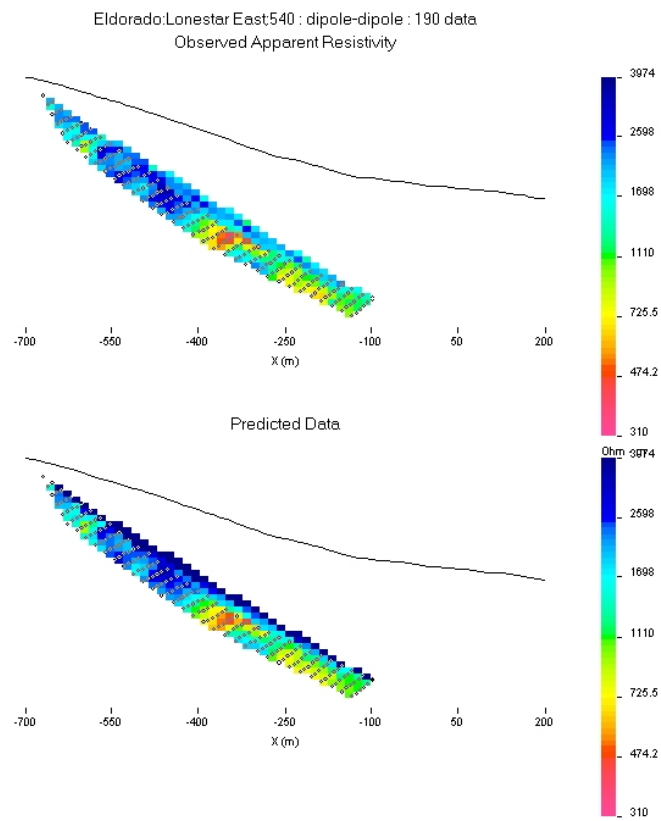


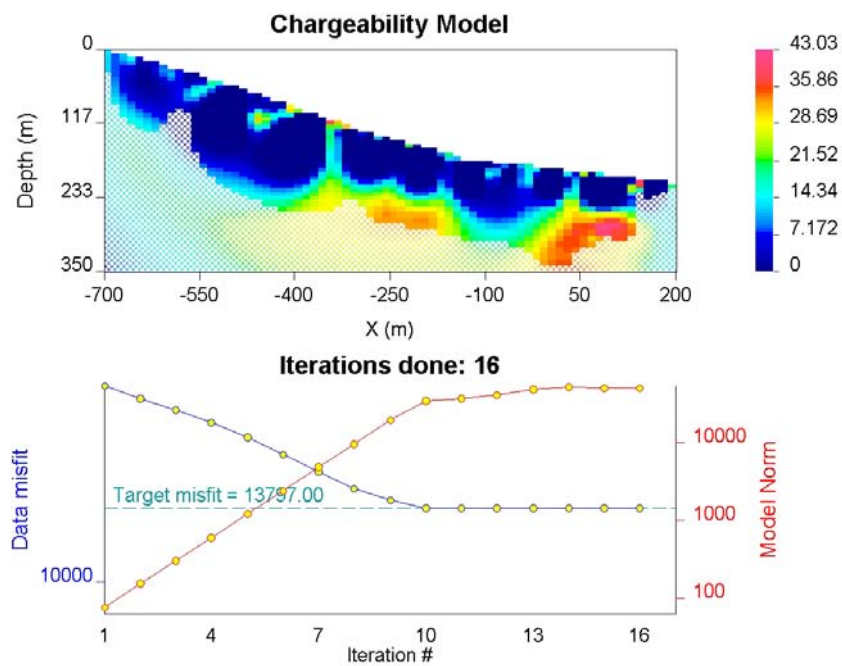
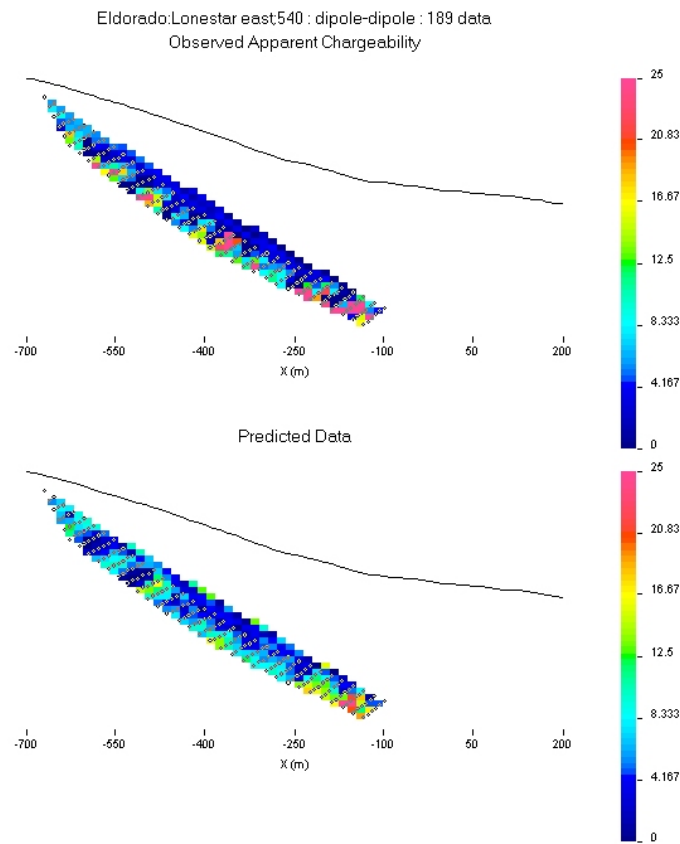


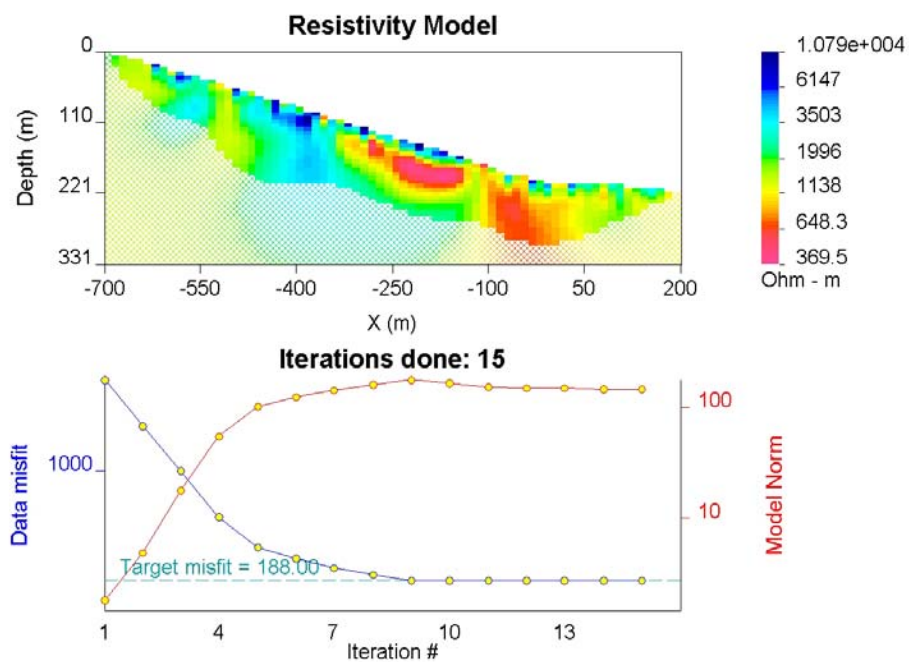
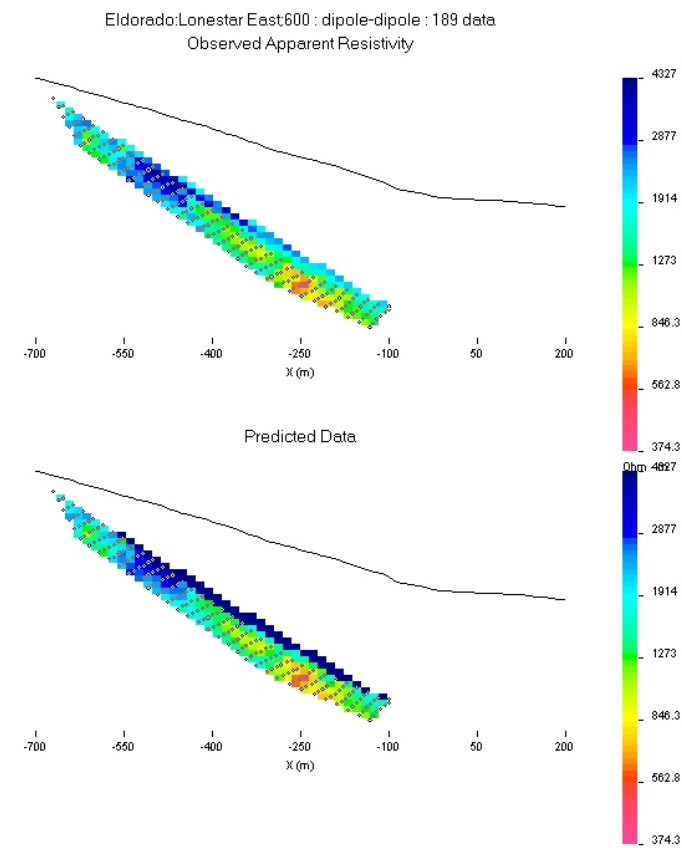


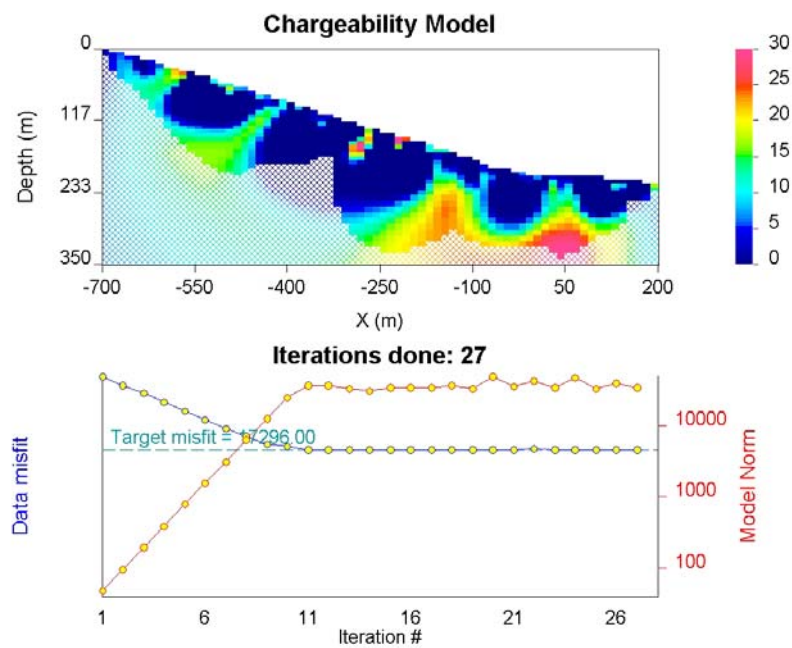
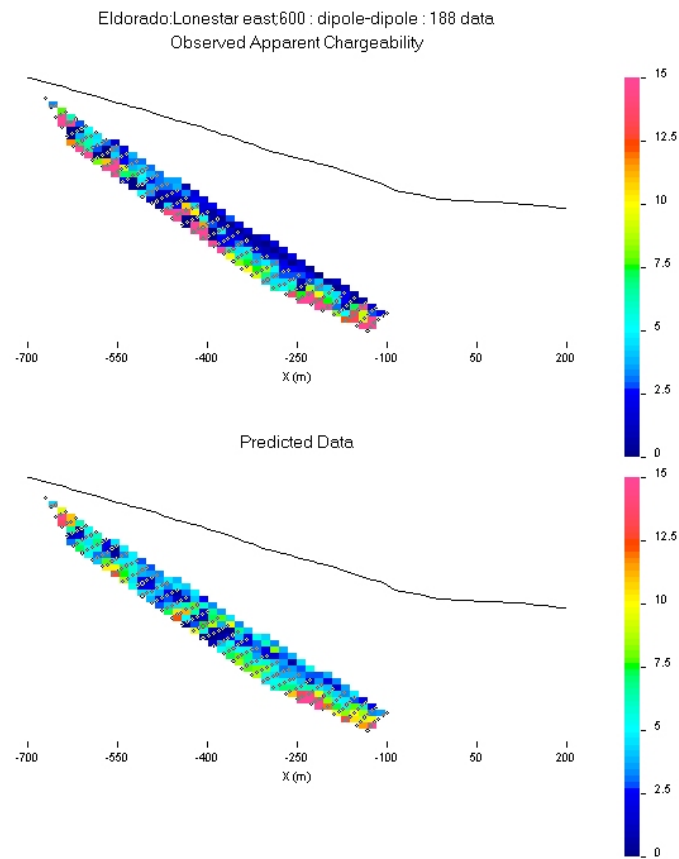


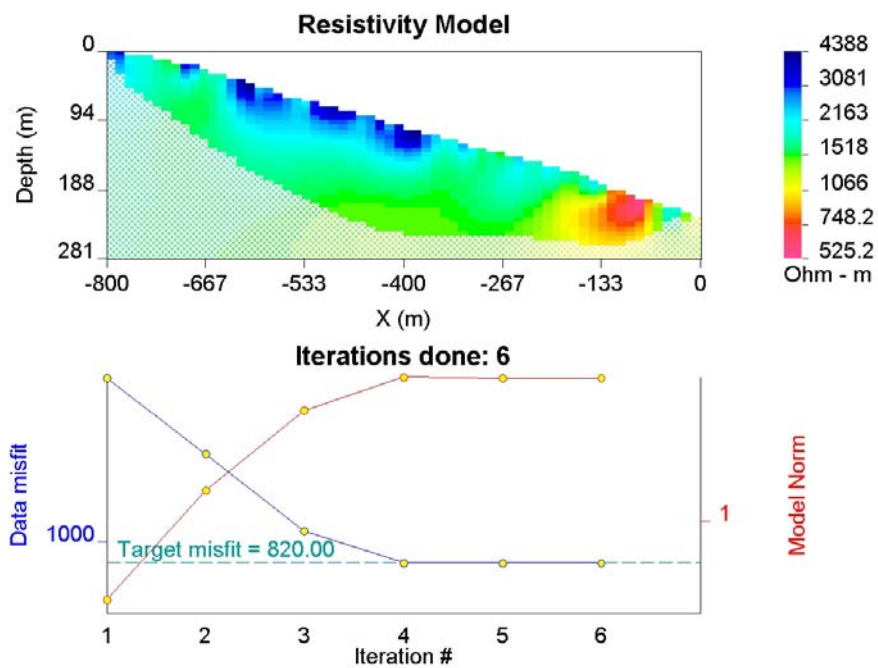
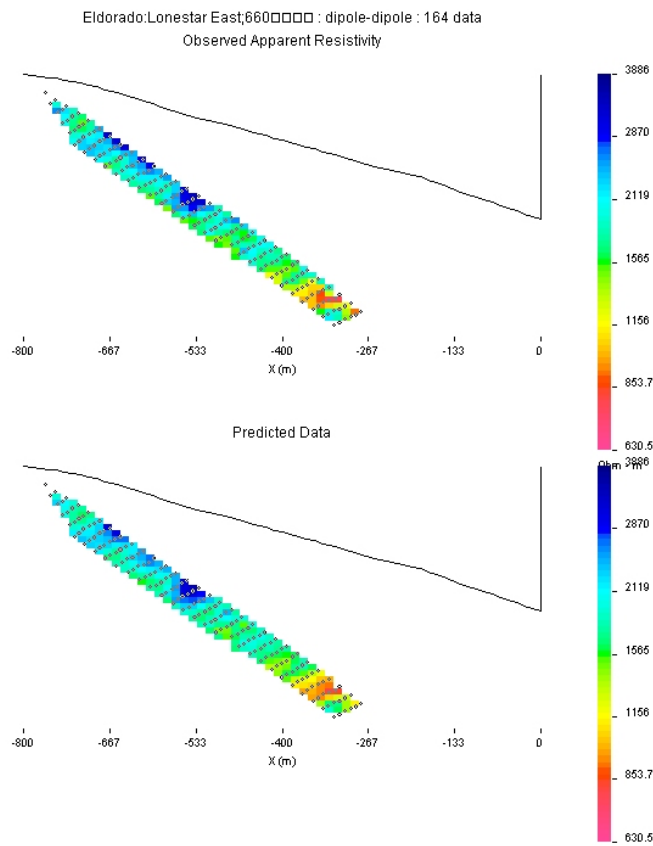


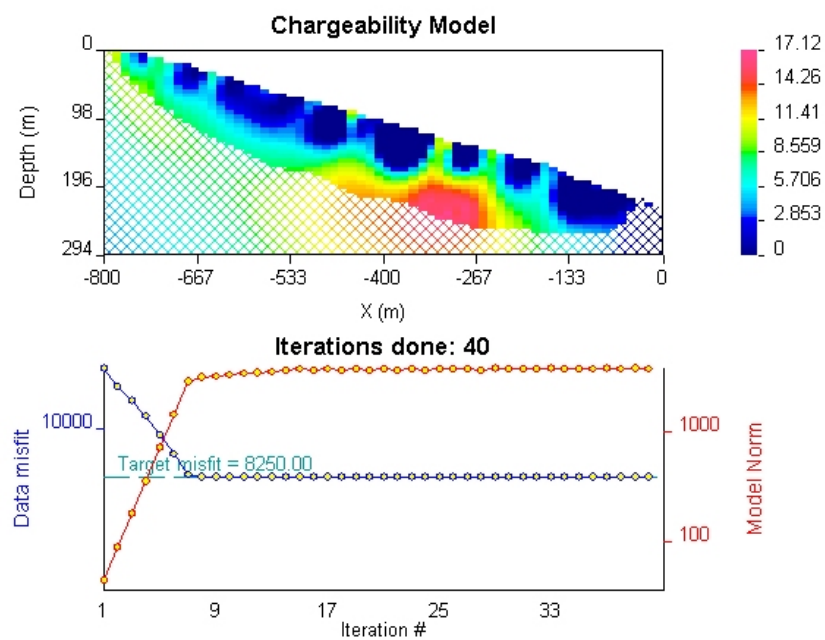
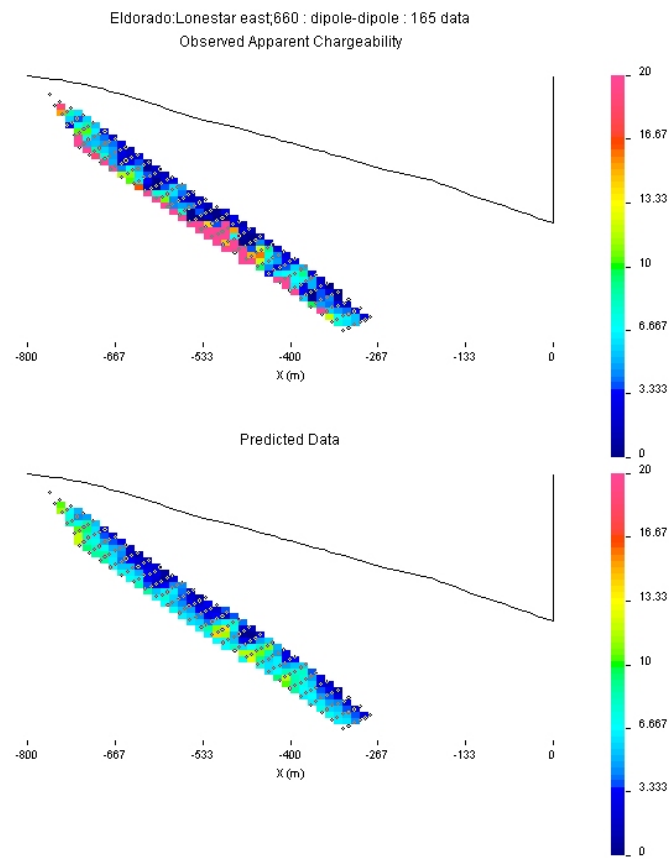


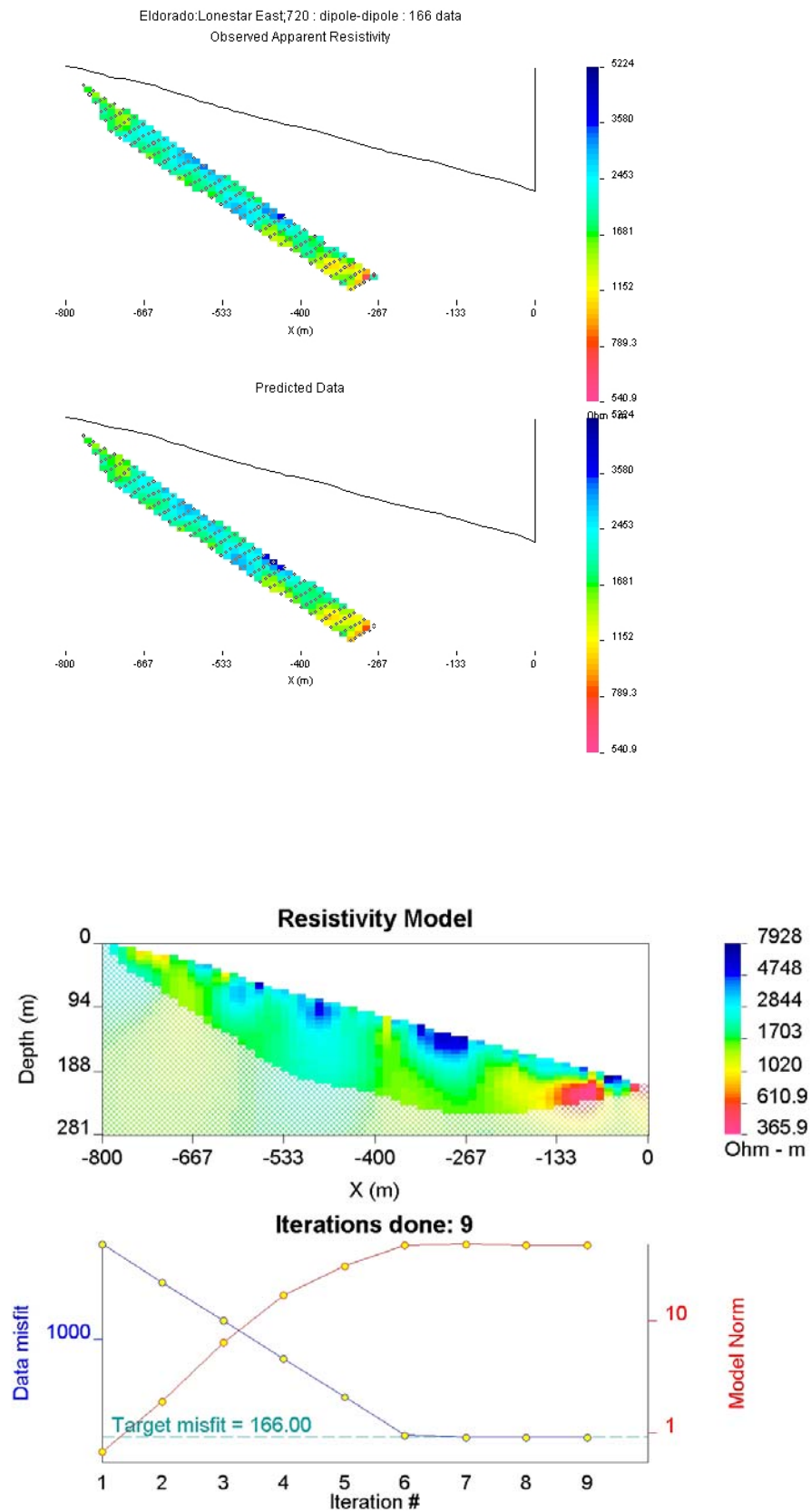


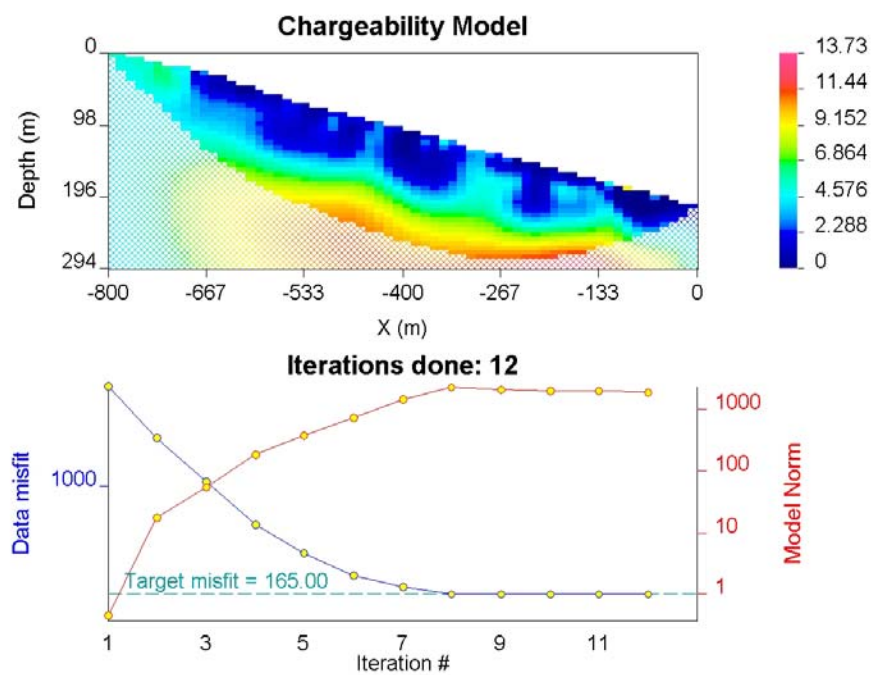
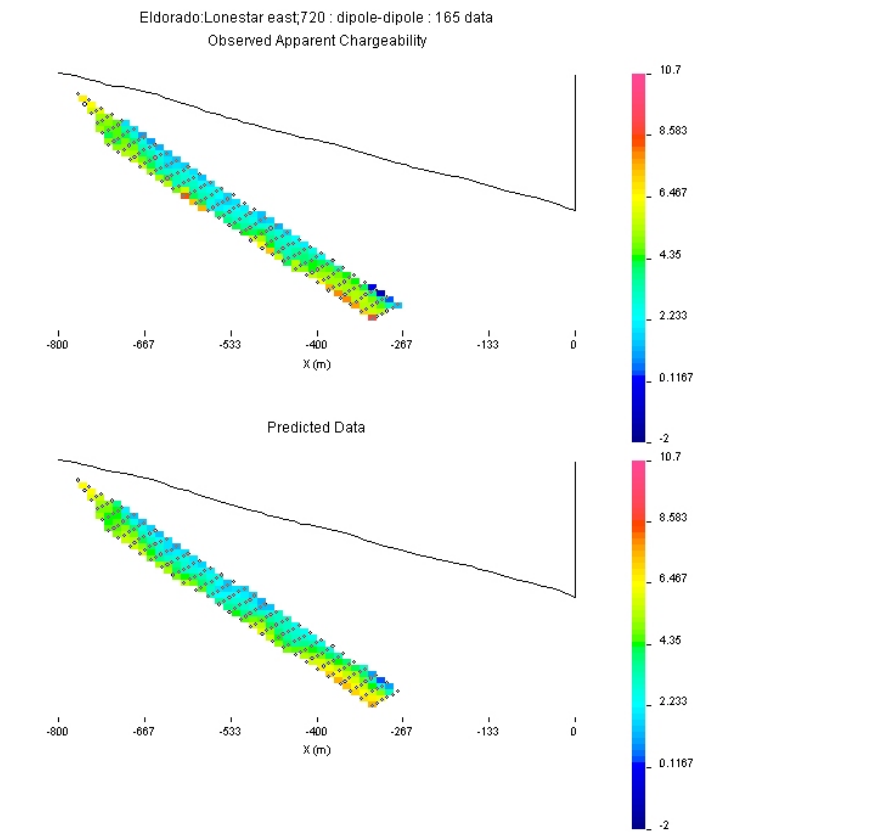


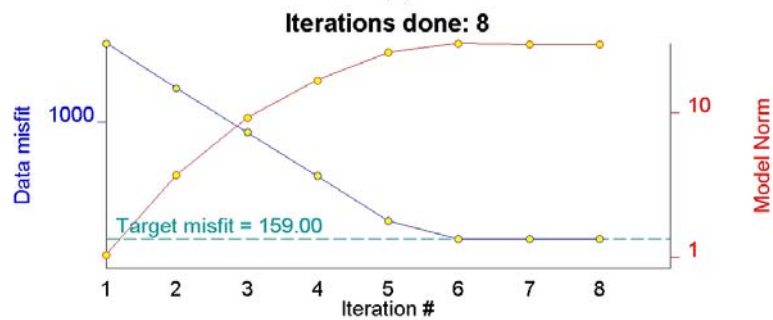
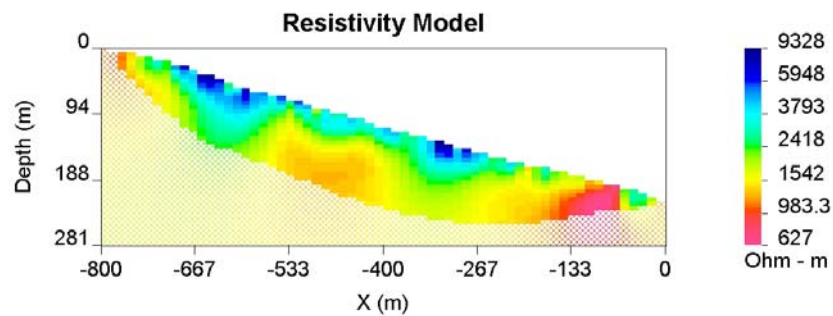
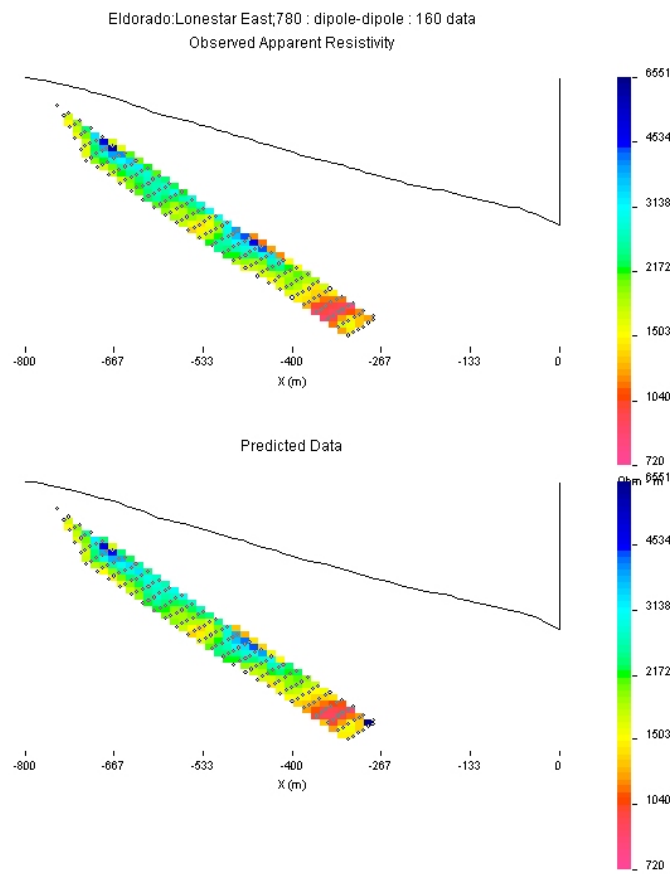


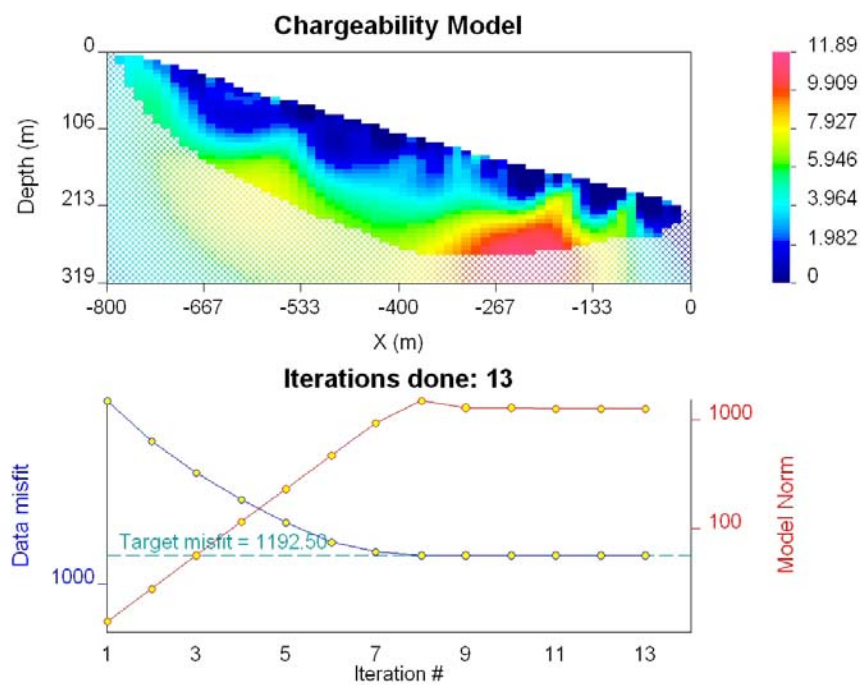
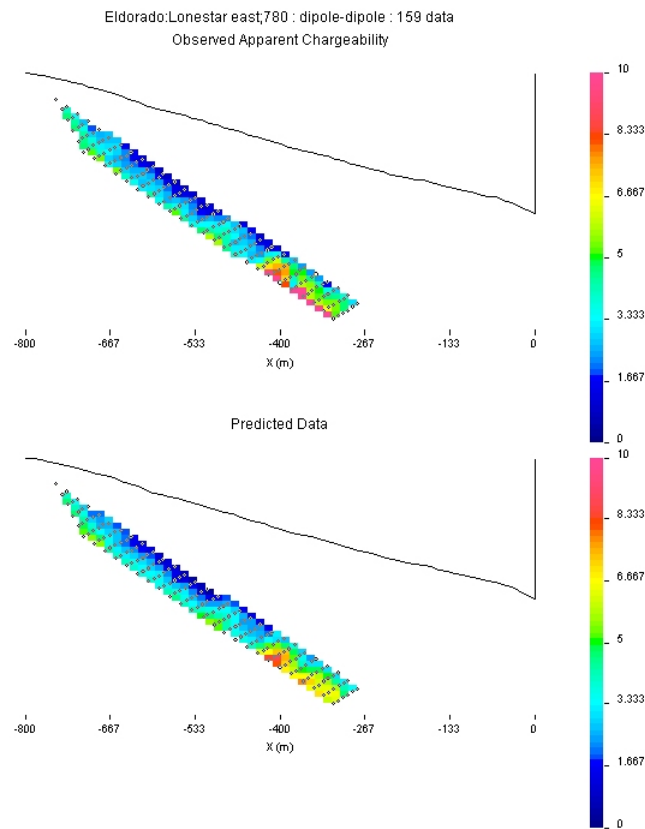


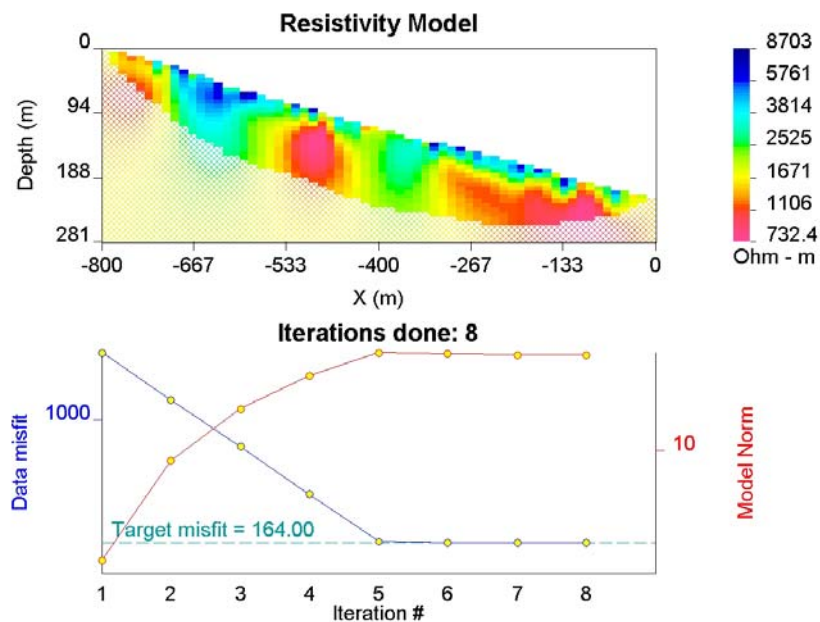
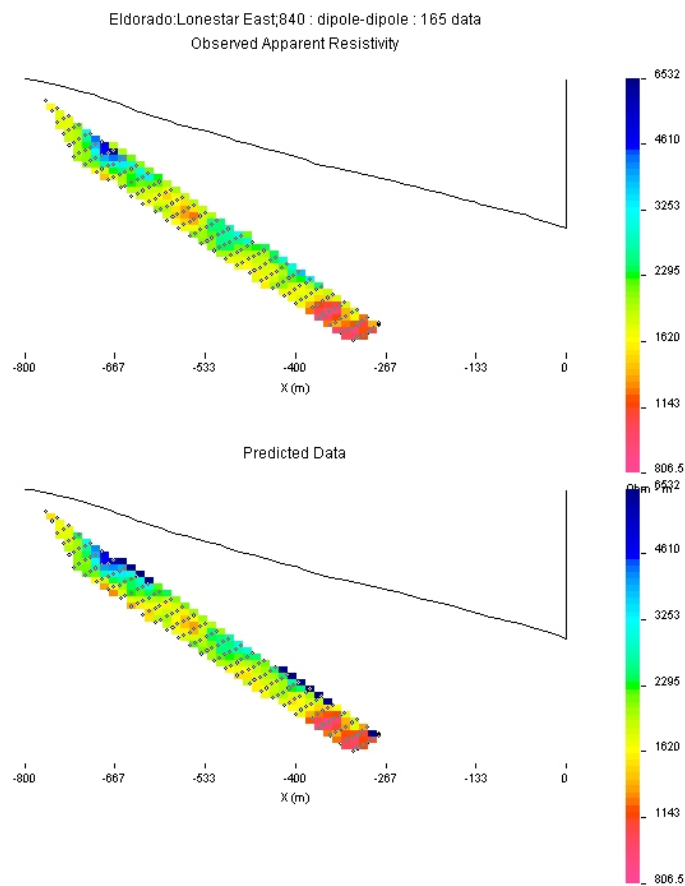


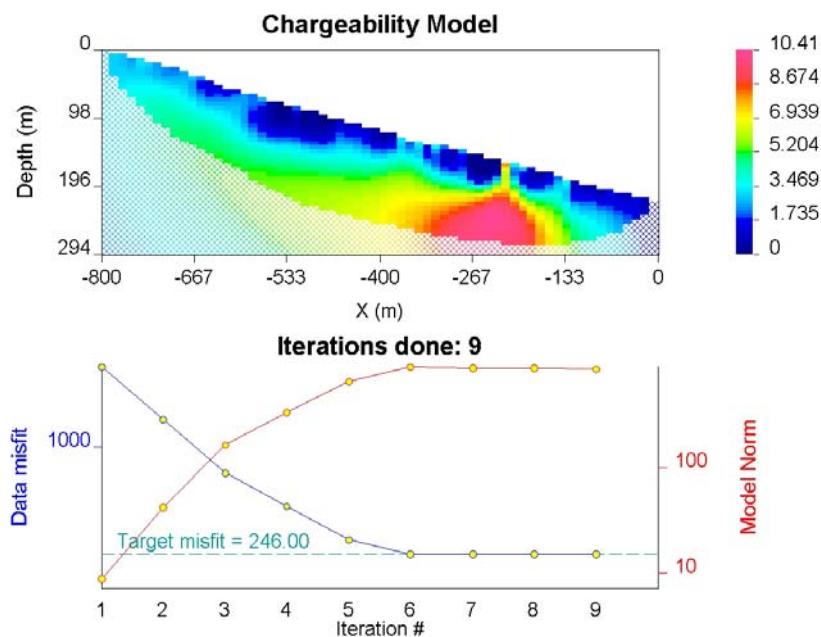
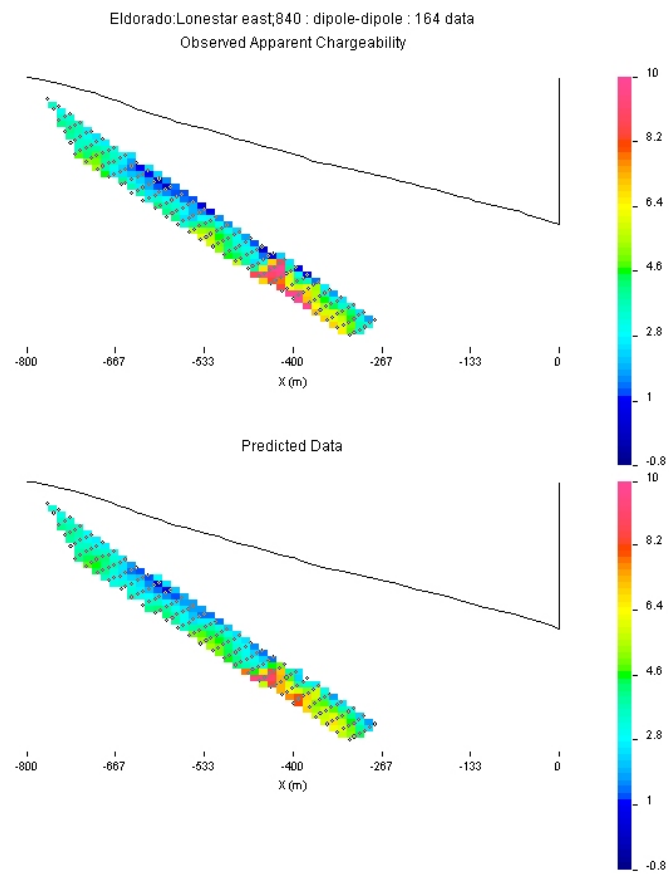


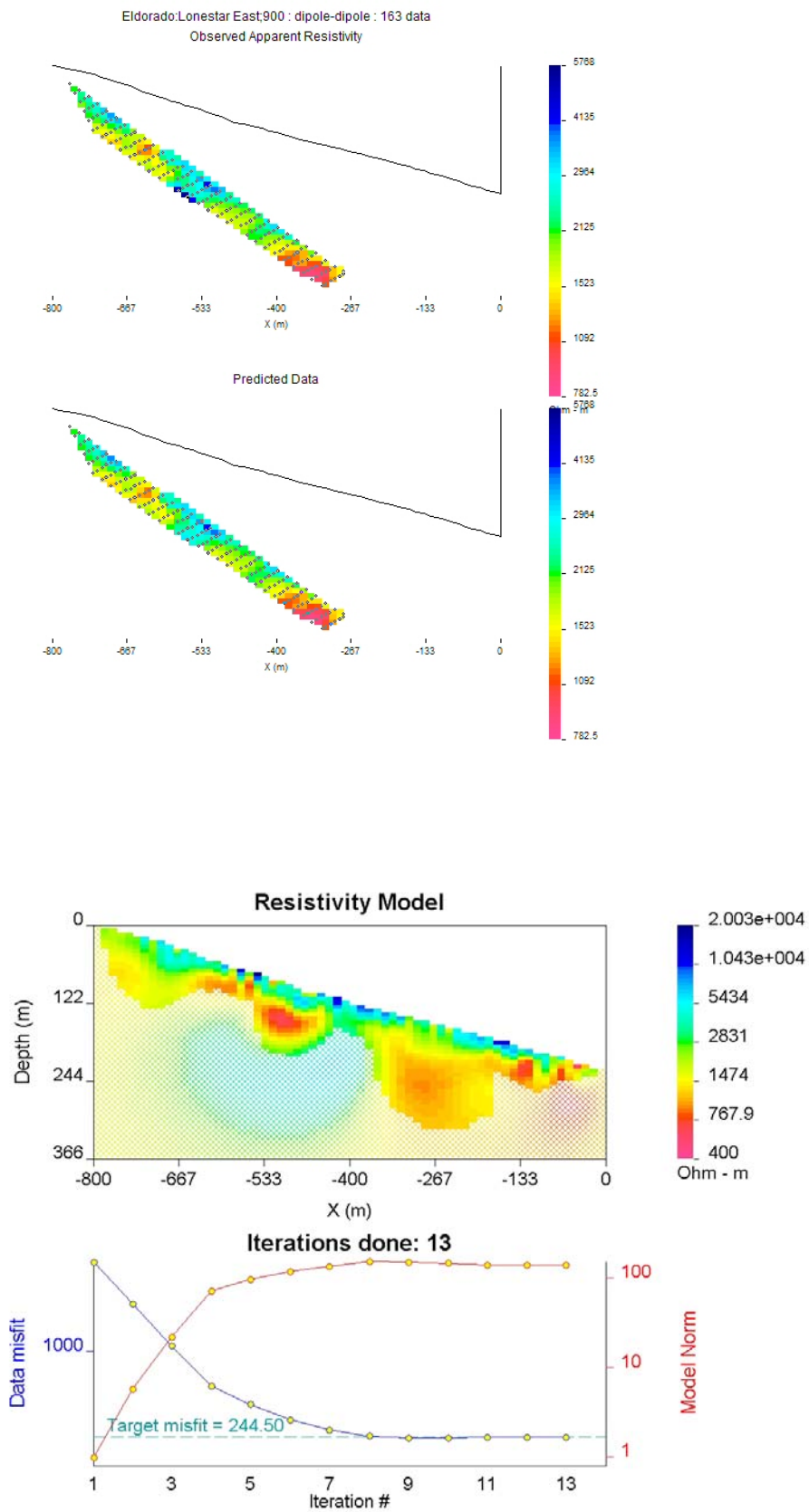


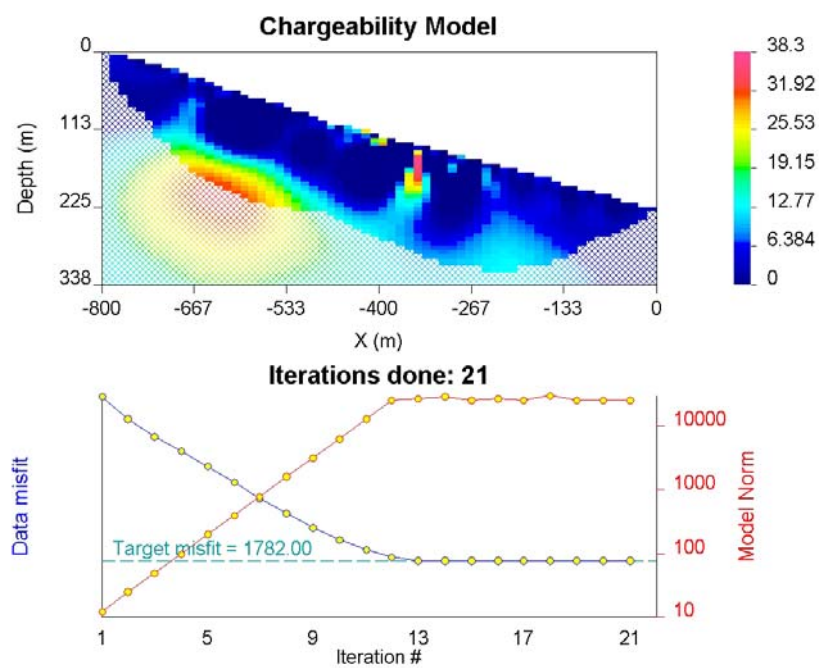
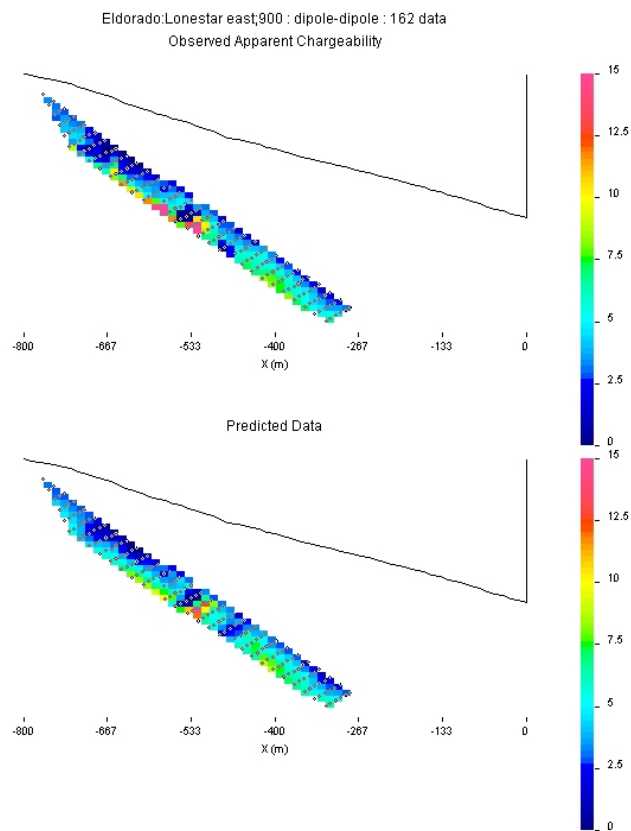


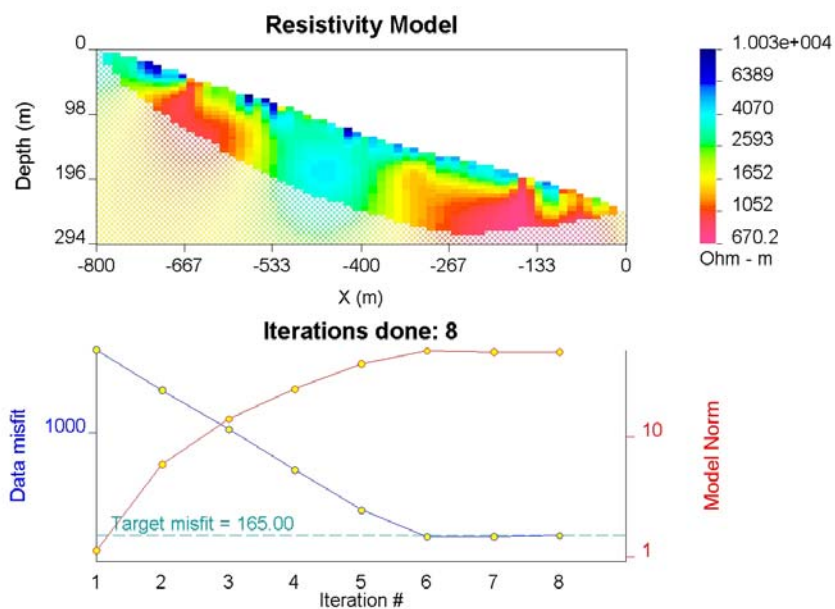
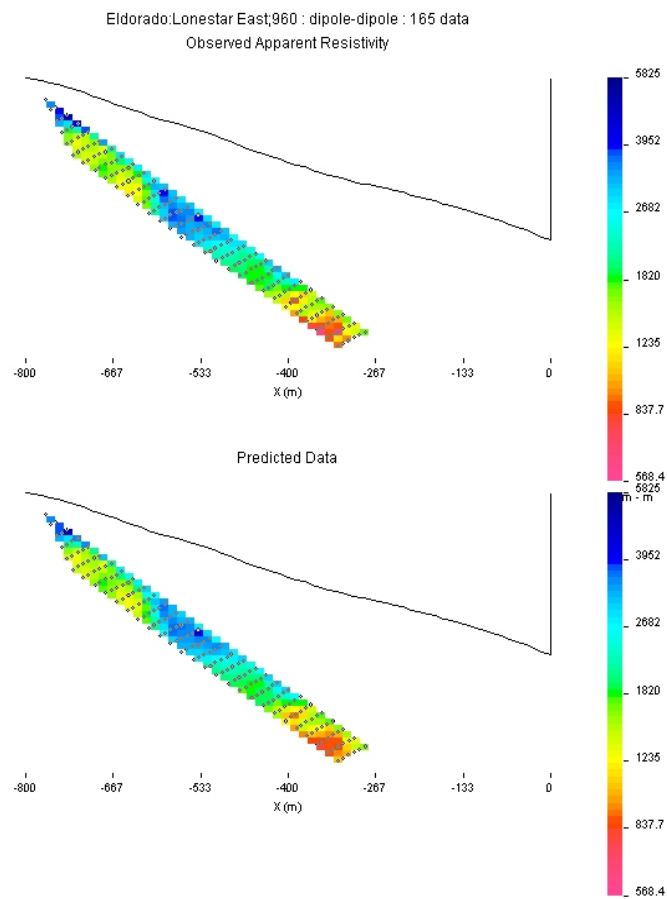


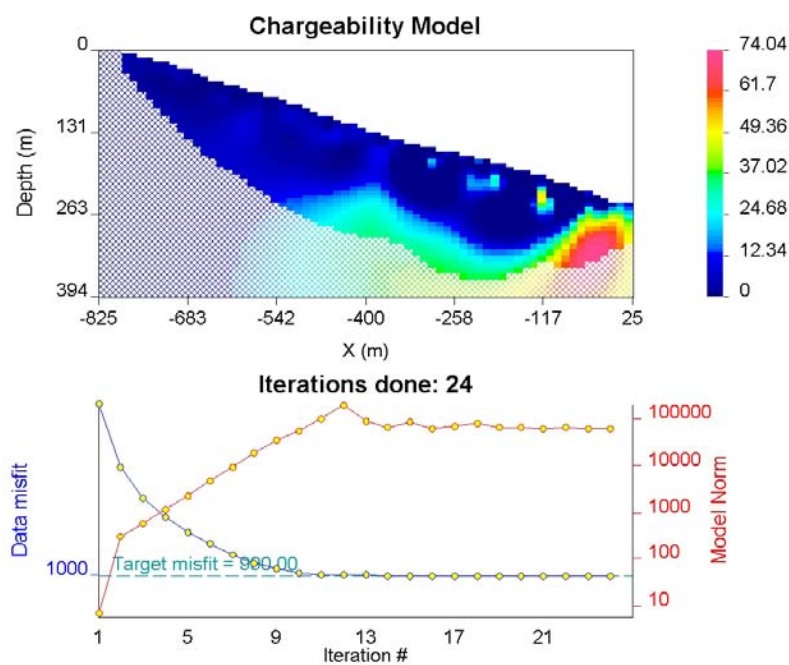
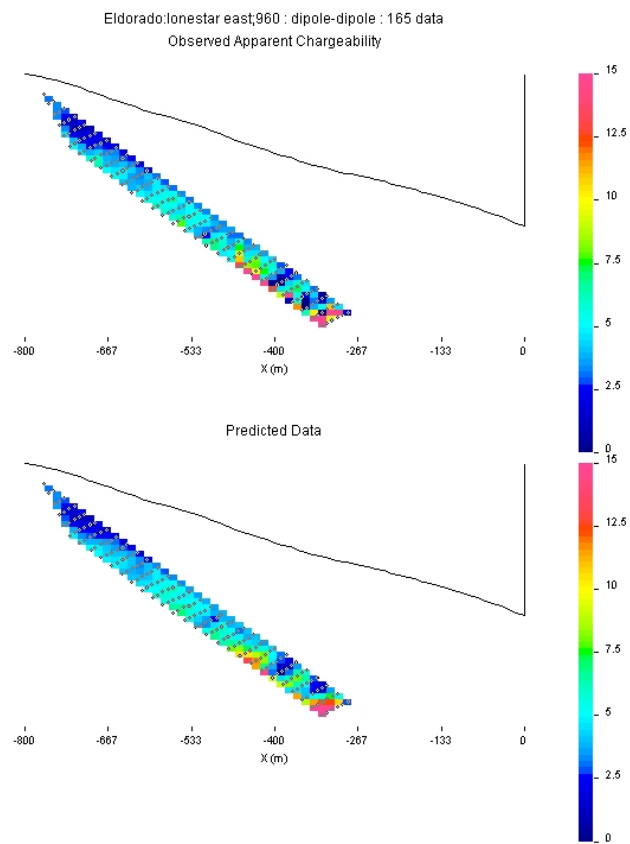




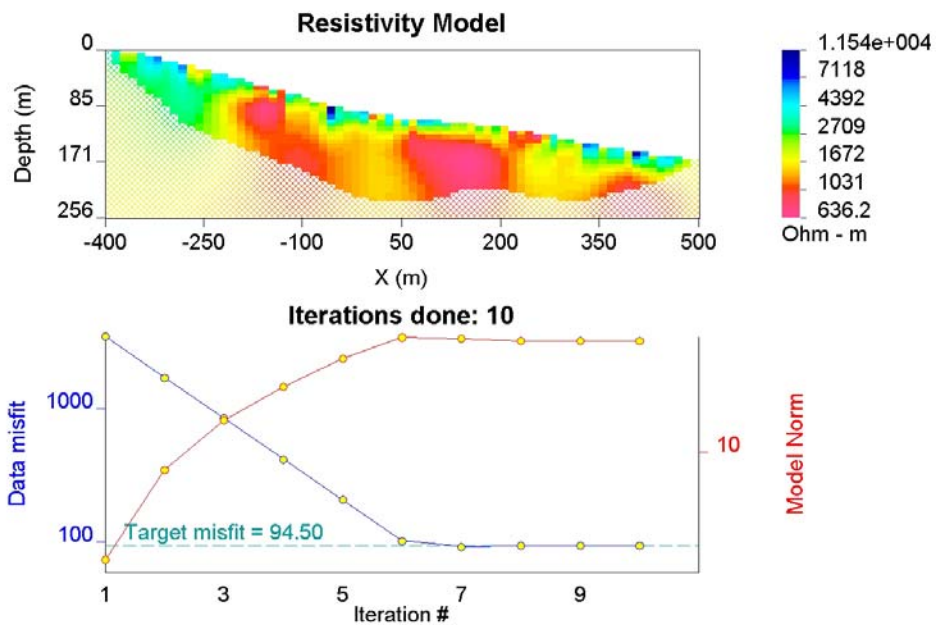
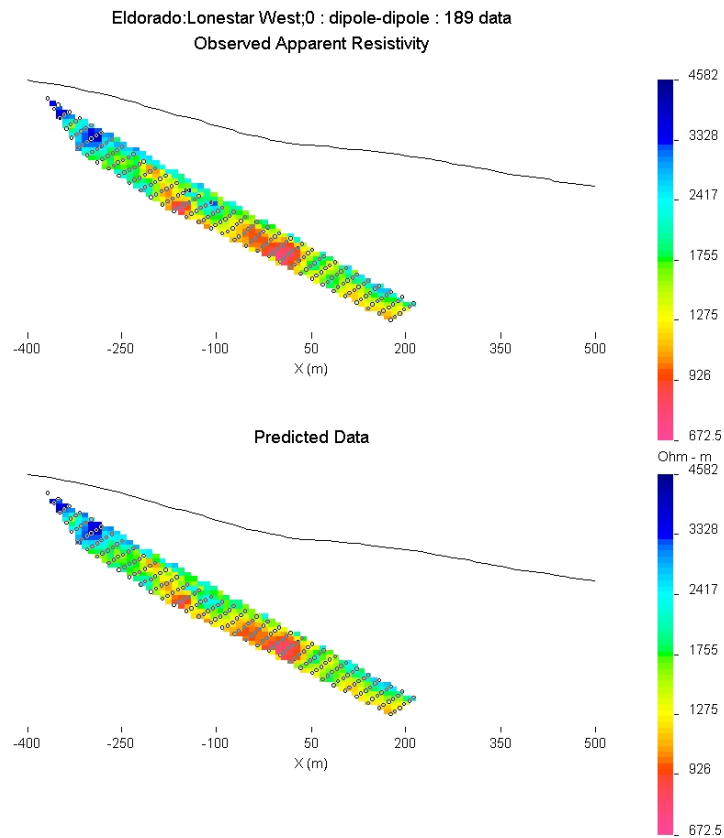


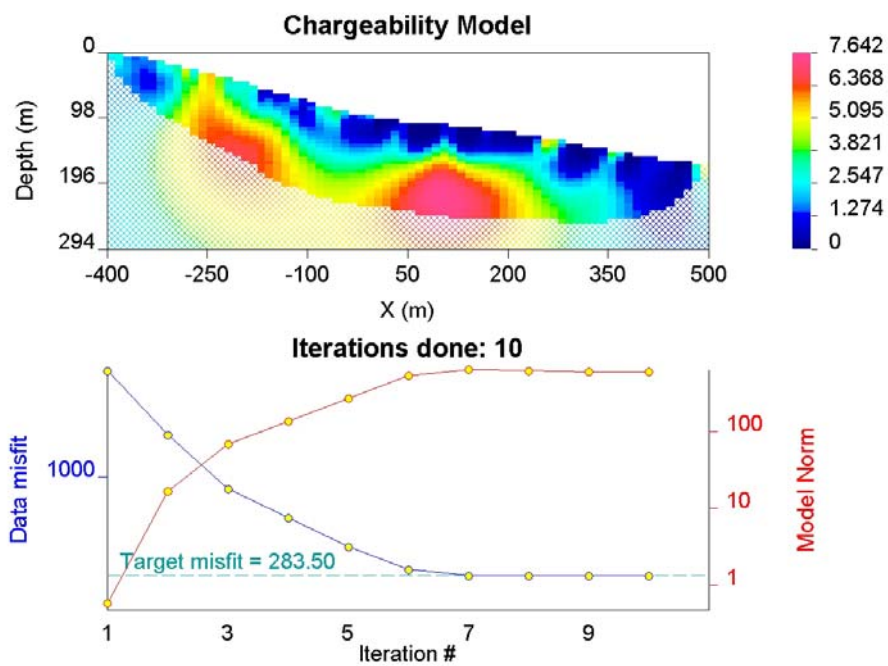
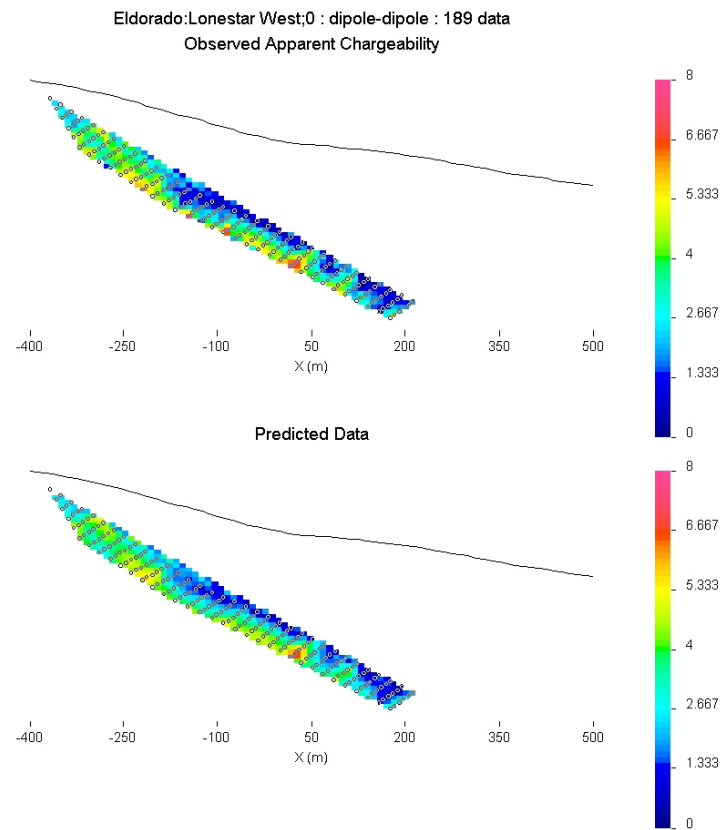


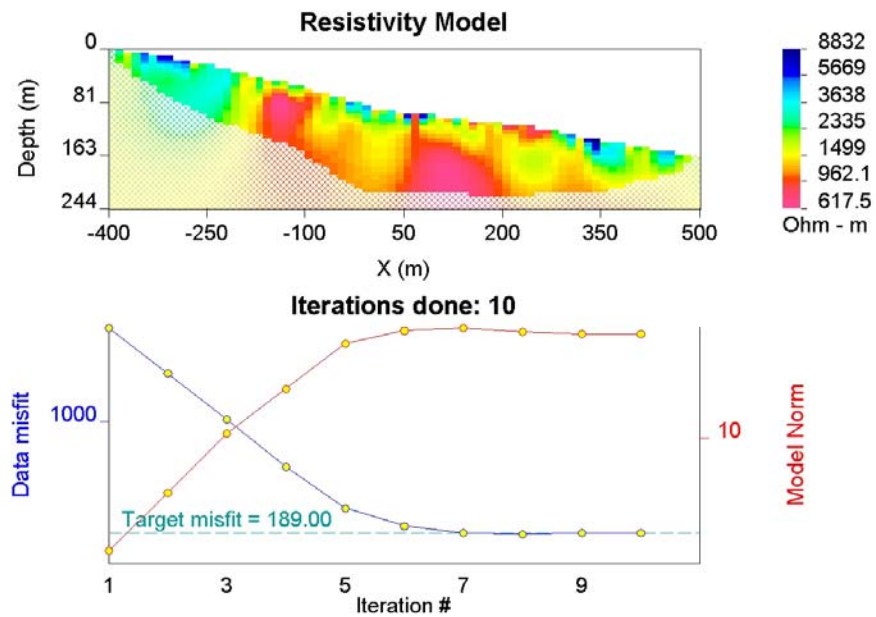
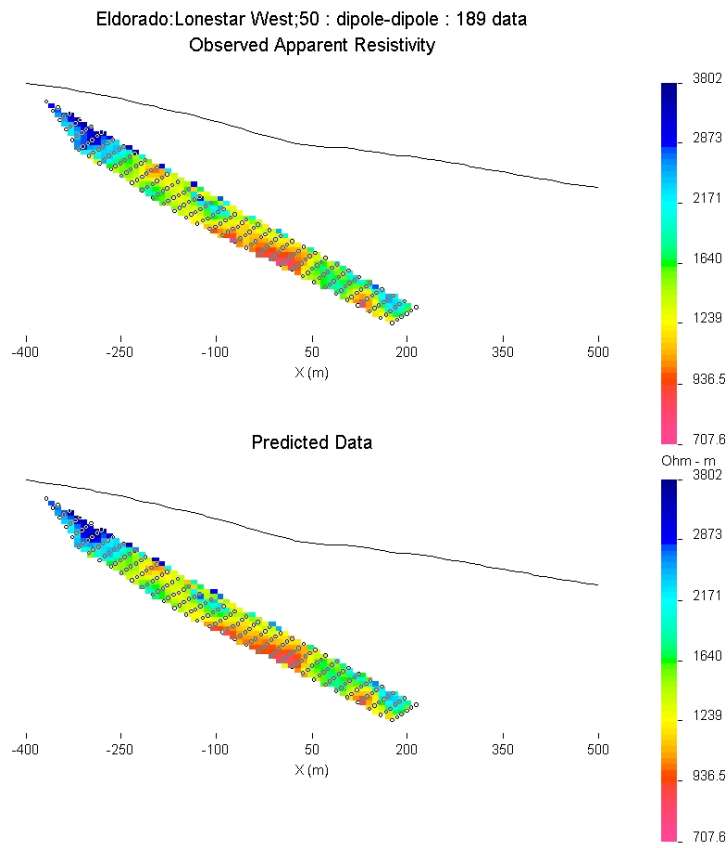


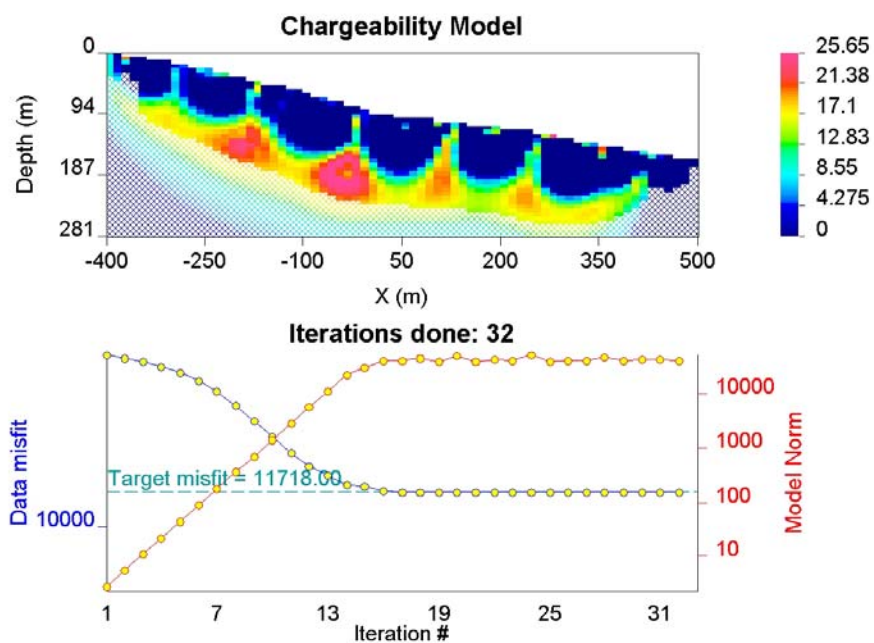
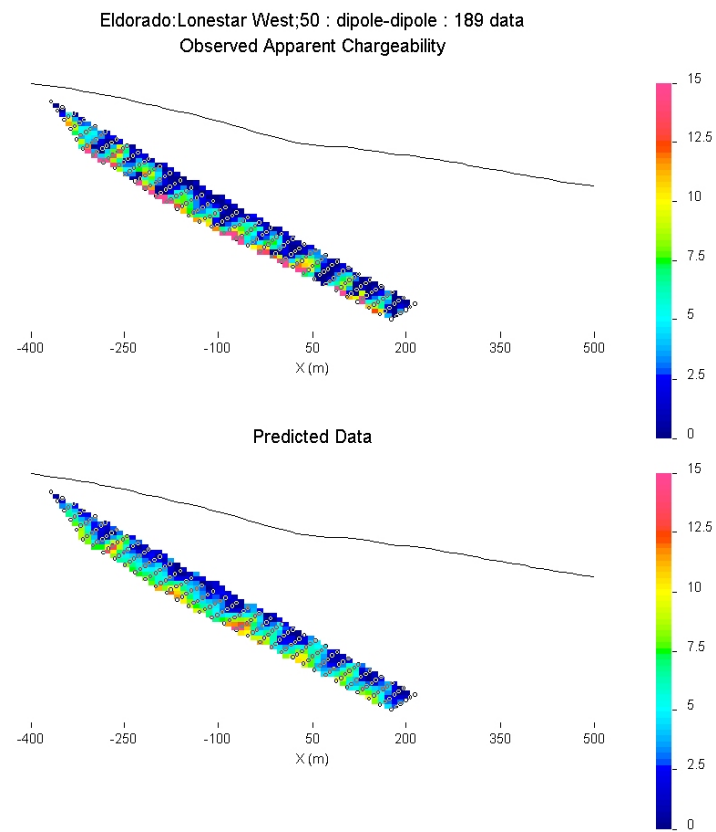


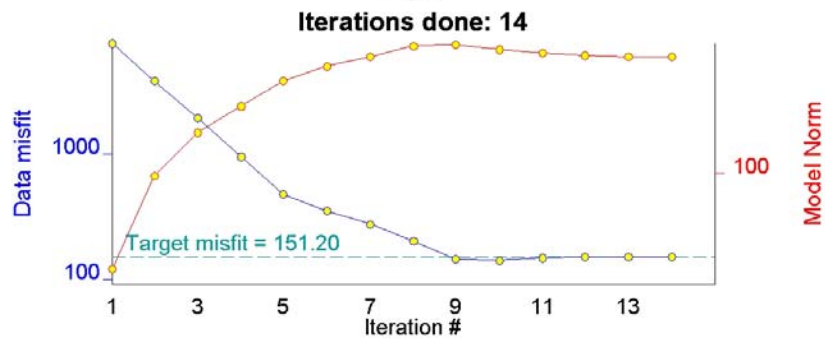
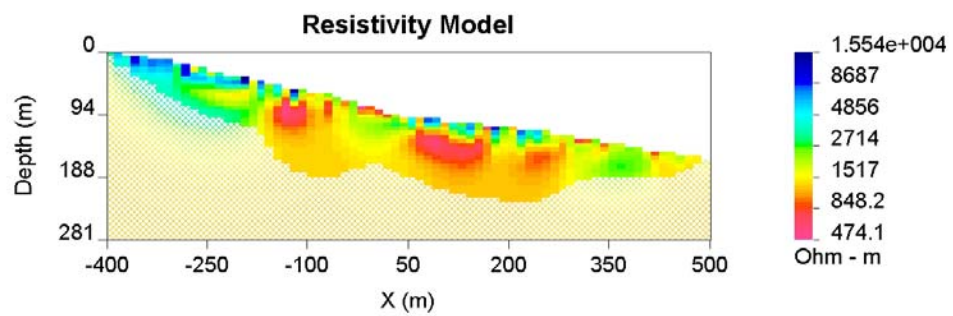
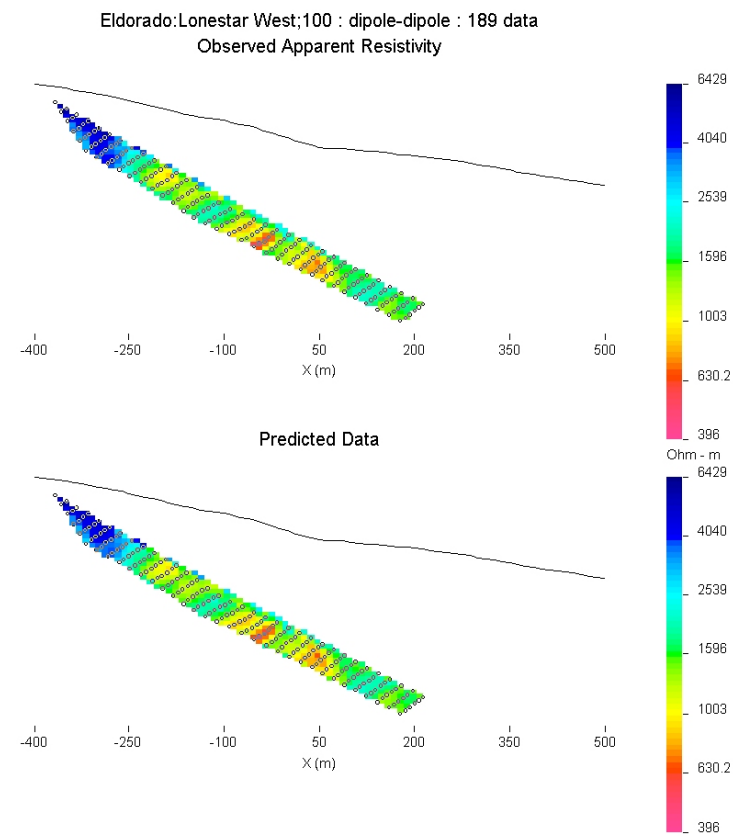
Lonestar West grid

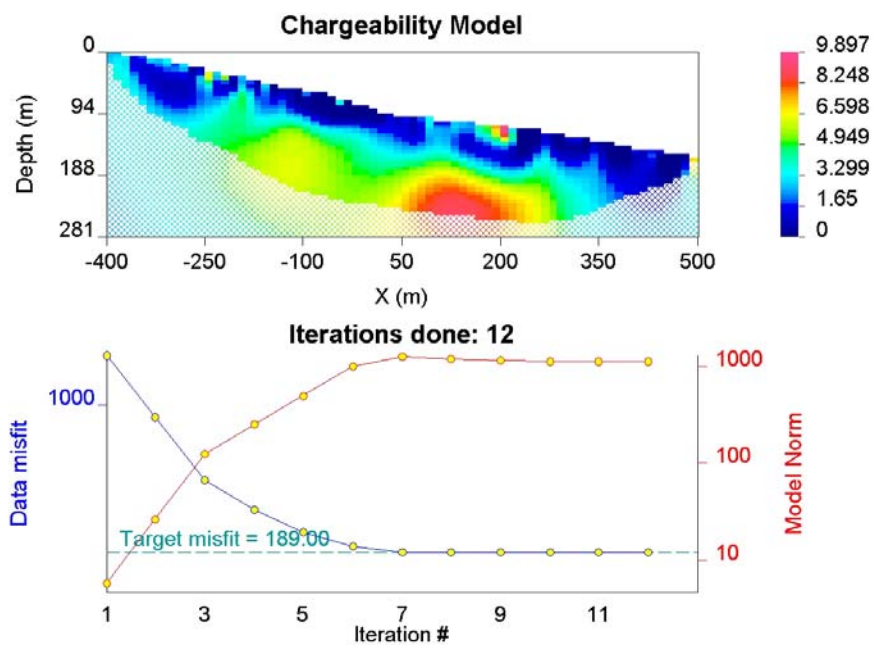
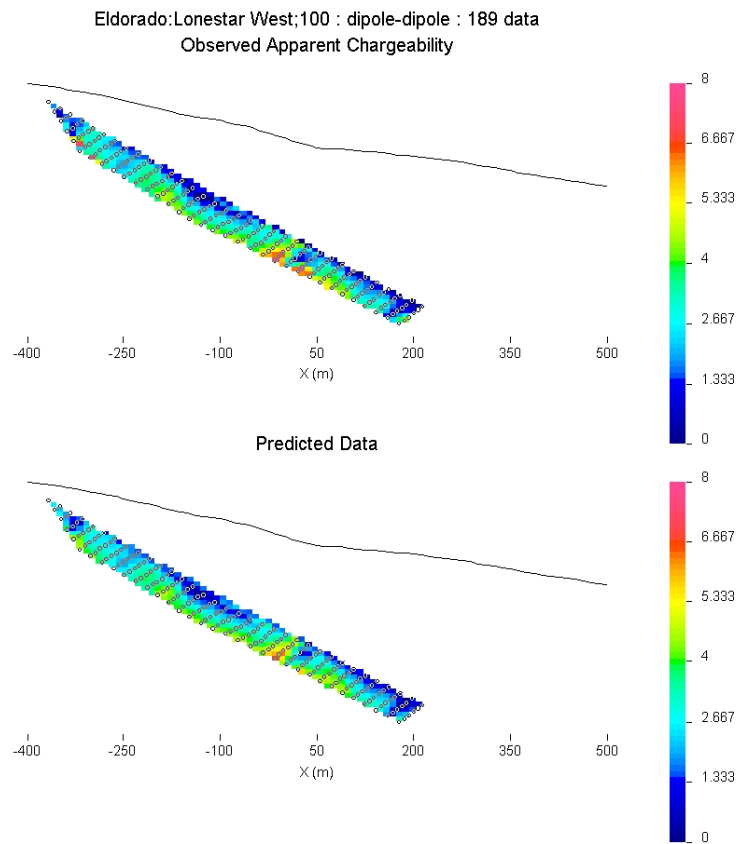


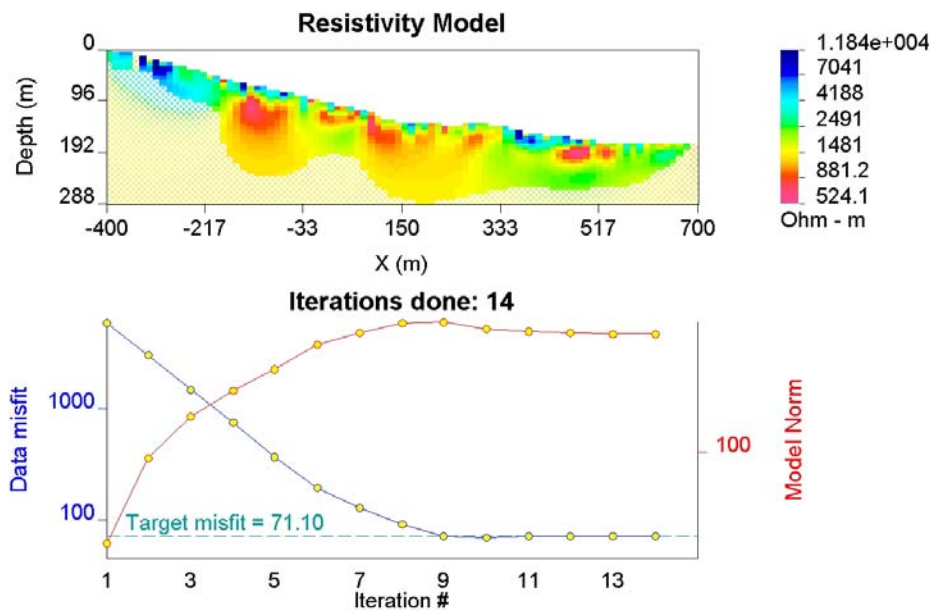
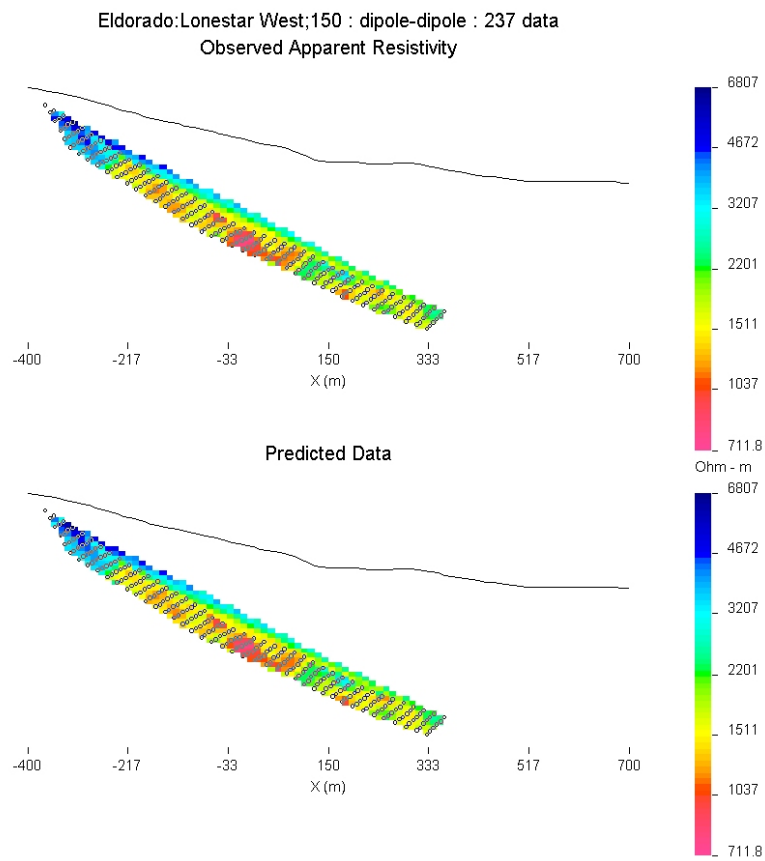


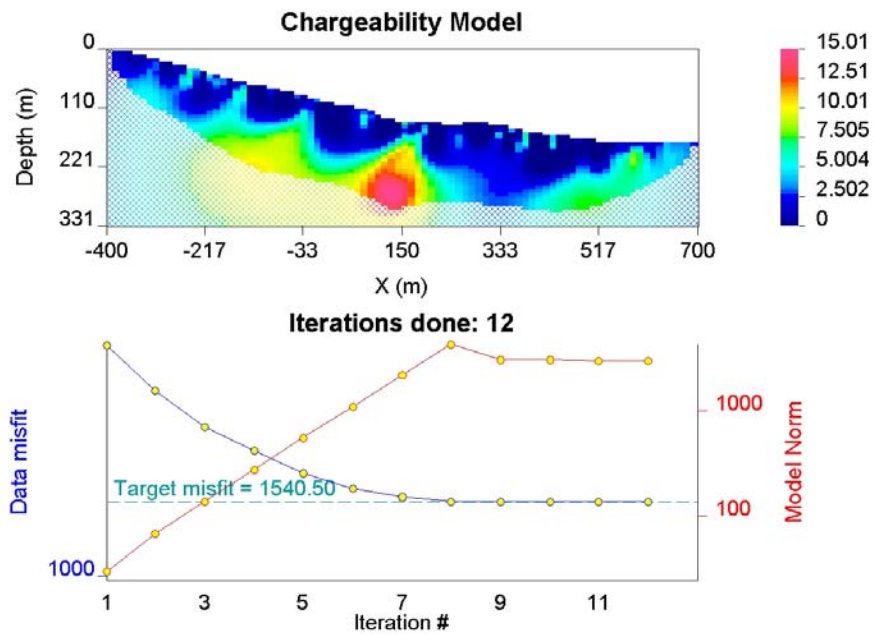
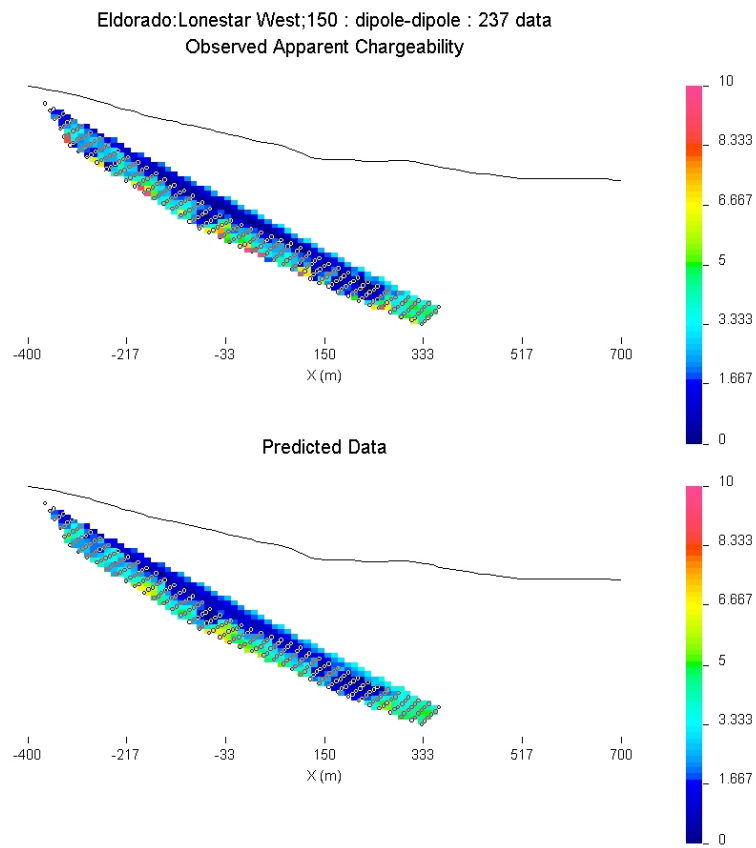


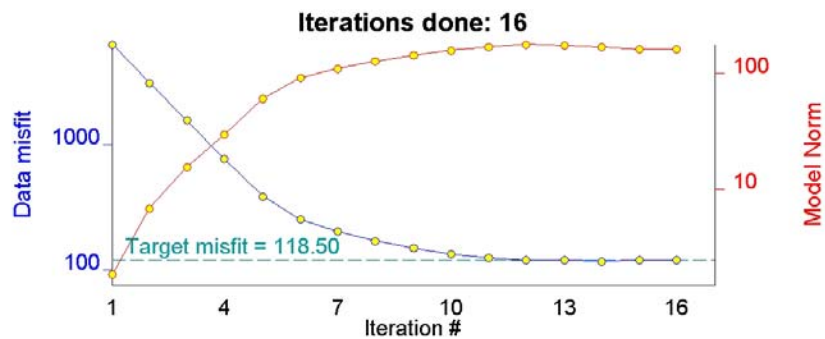
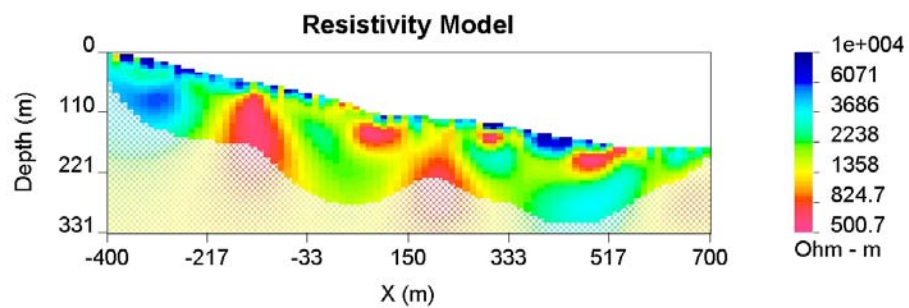
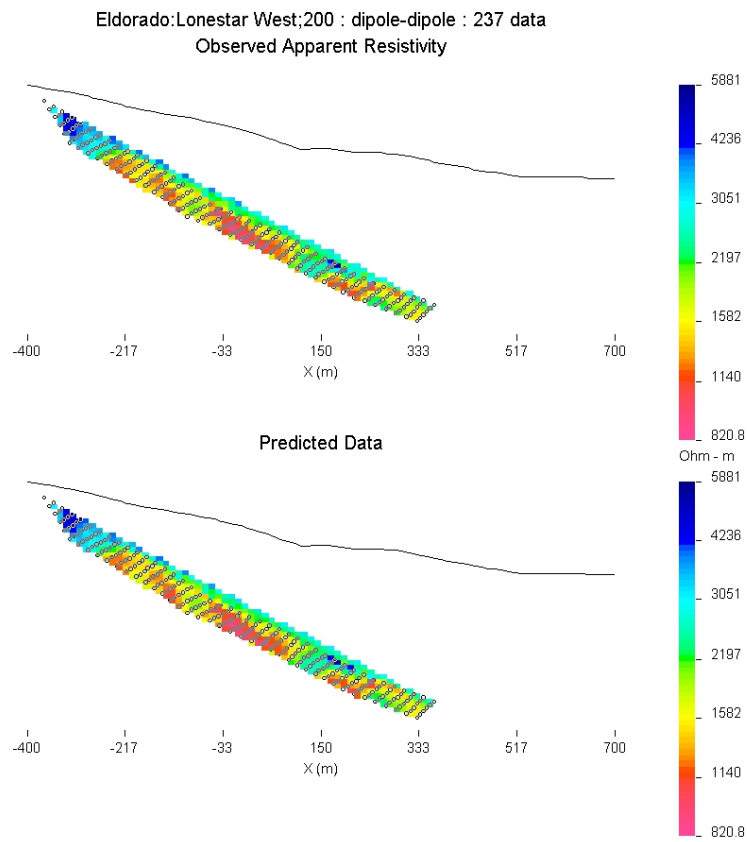


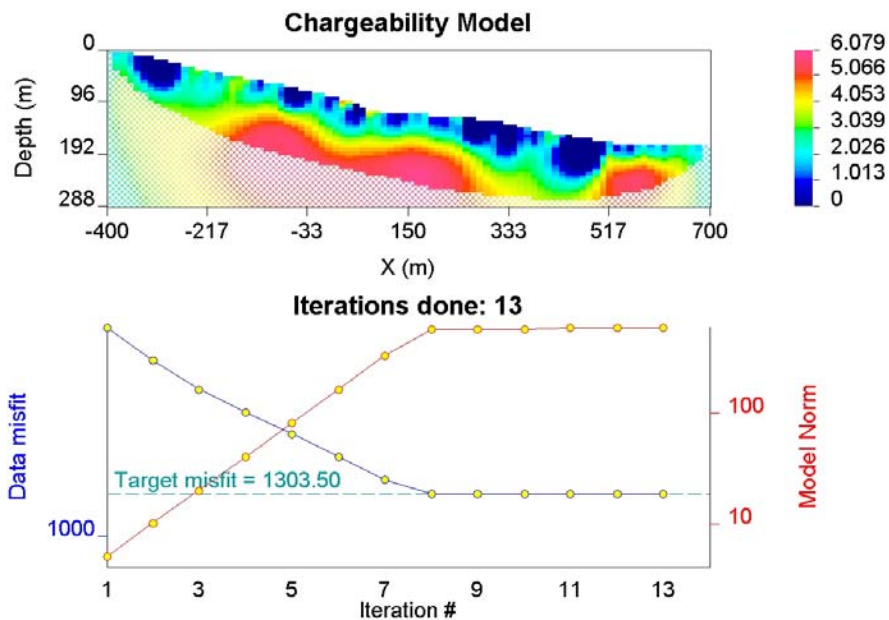
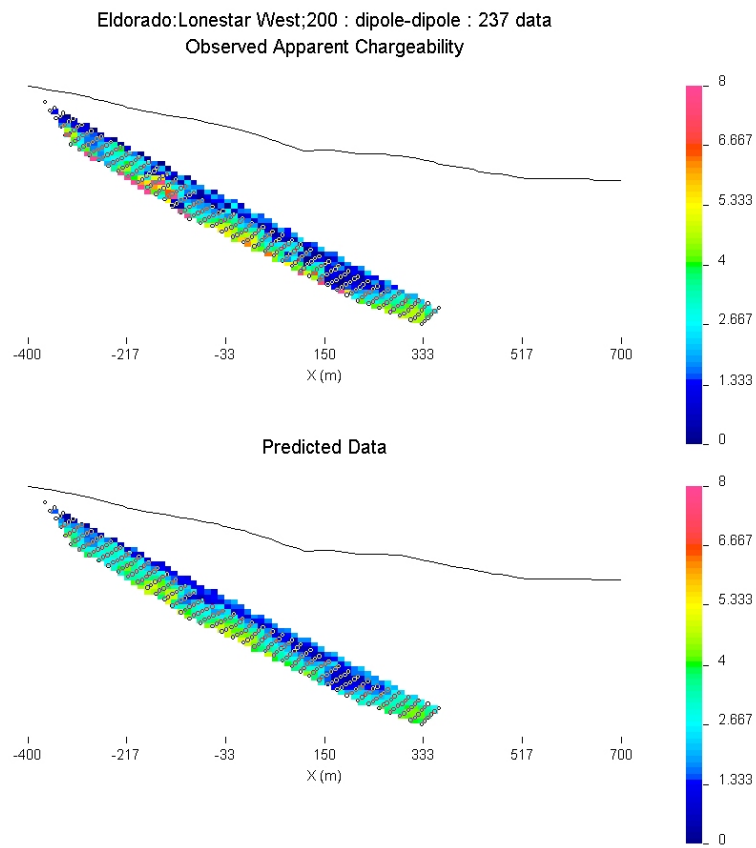


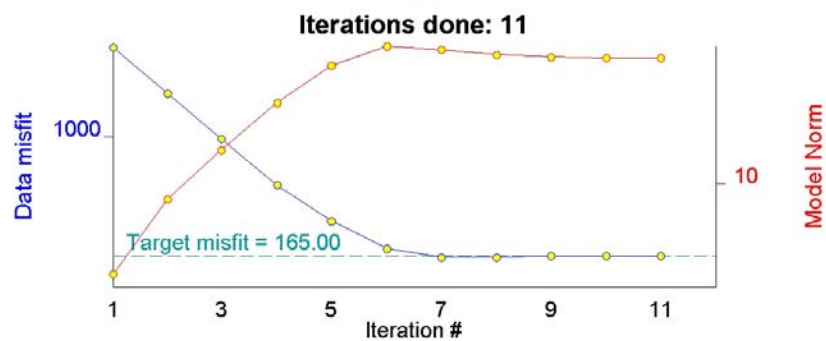
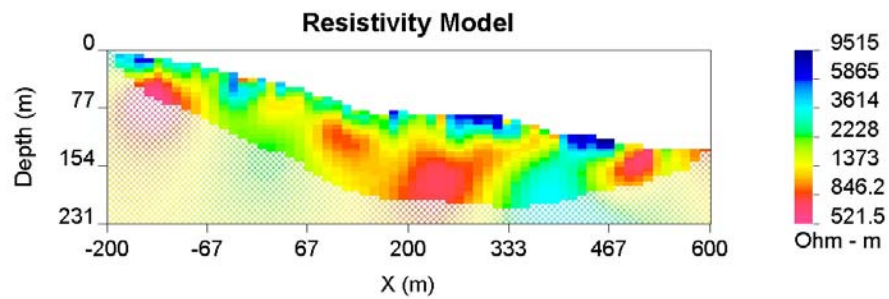
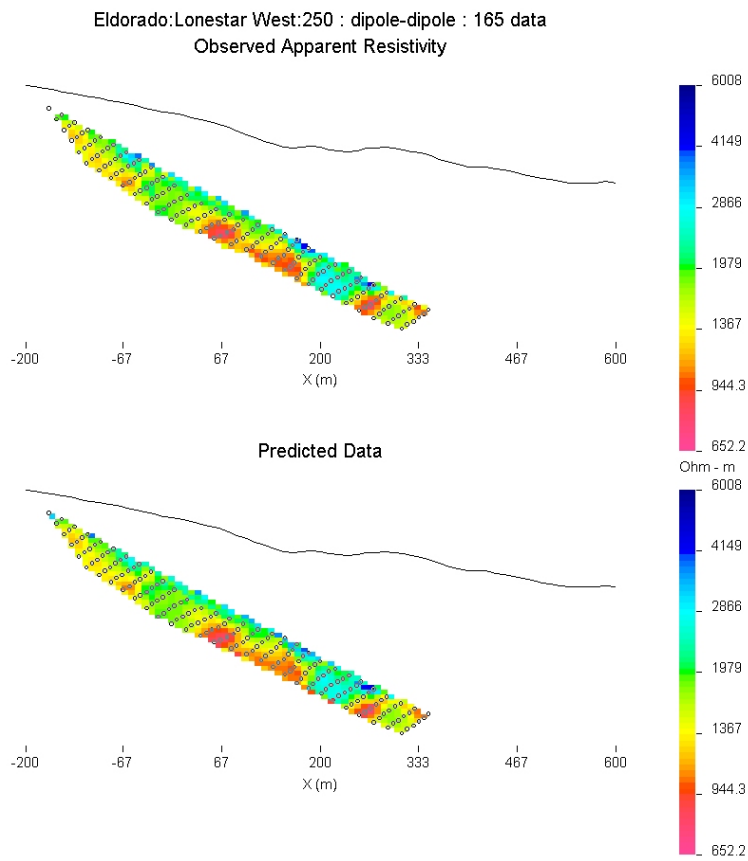


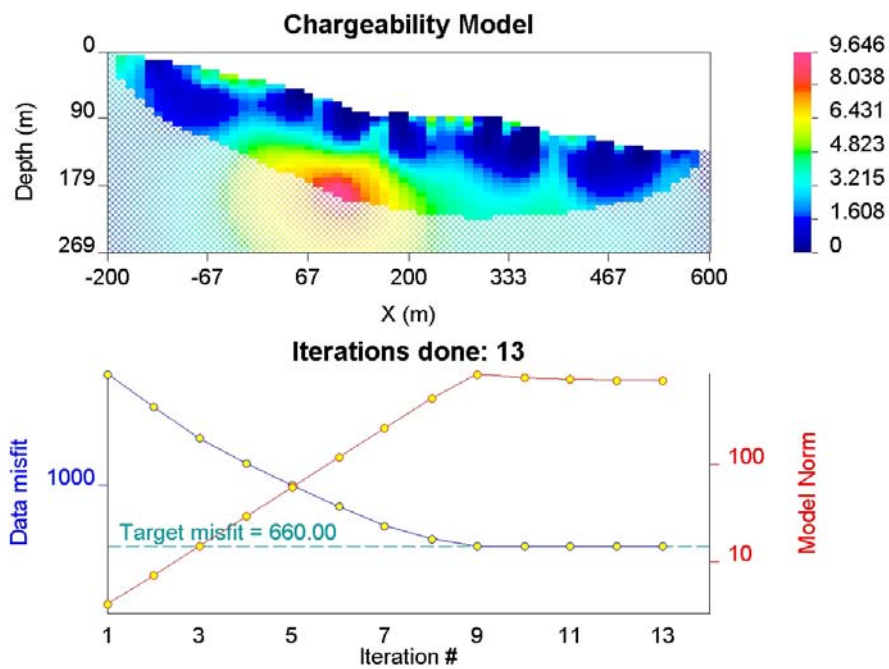
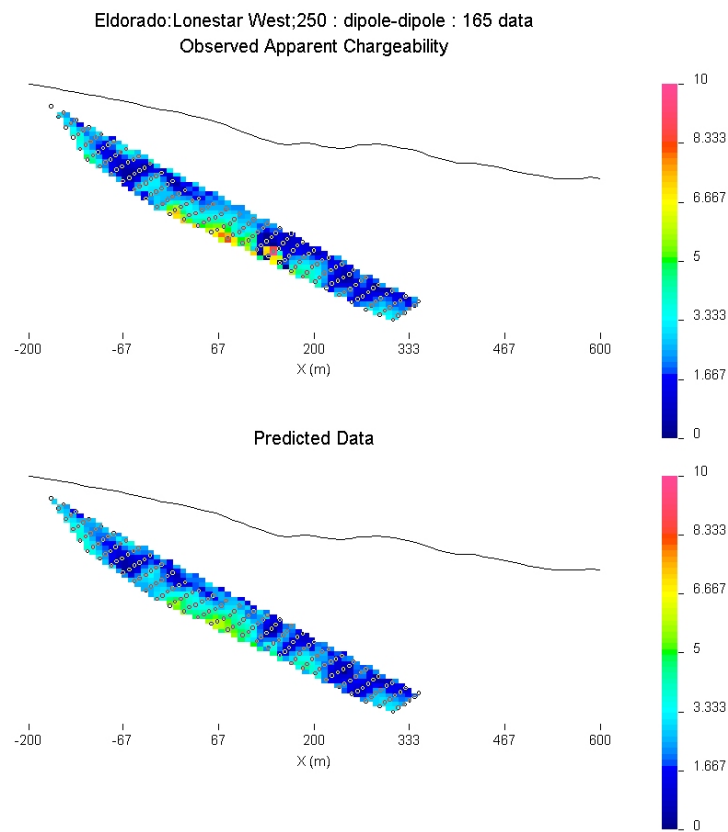


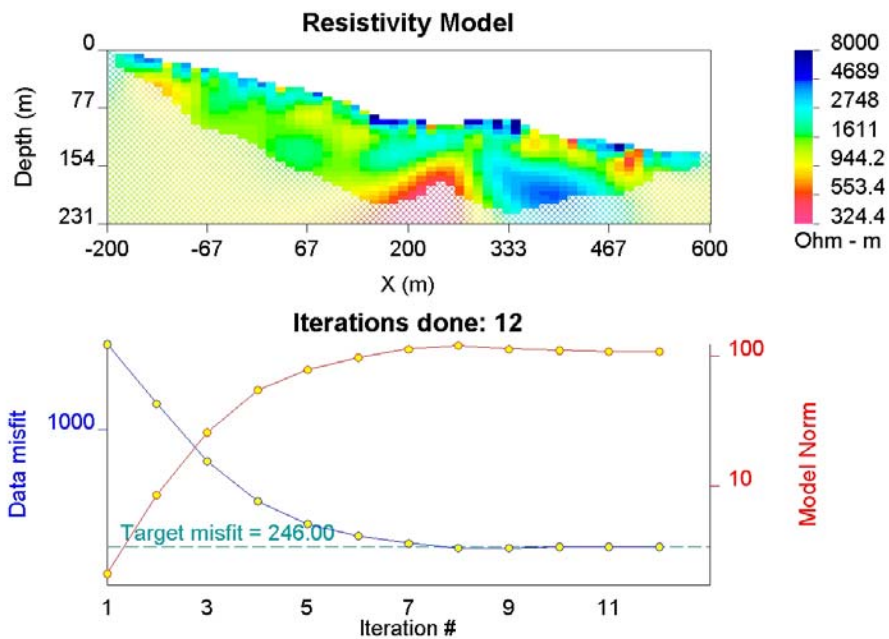
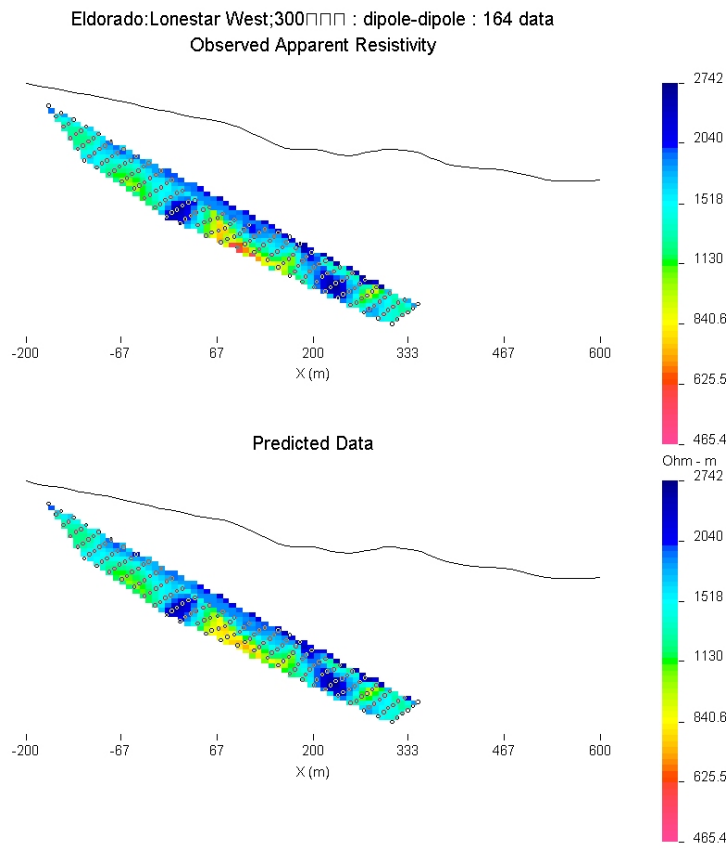


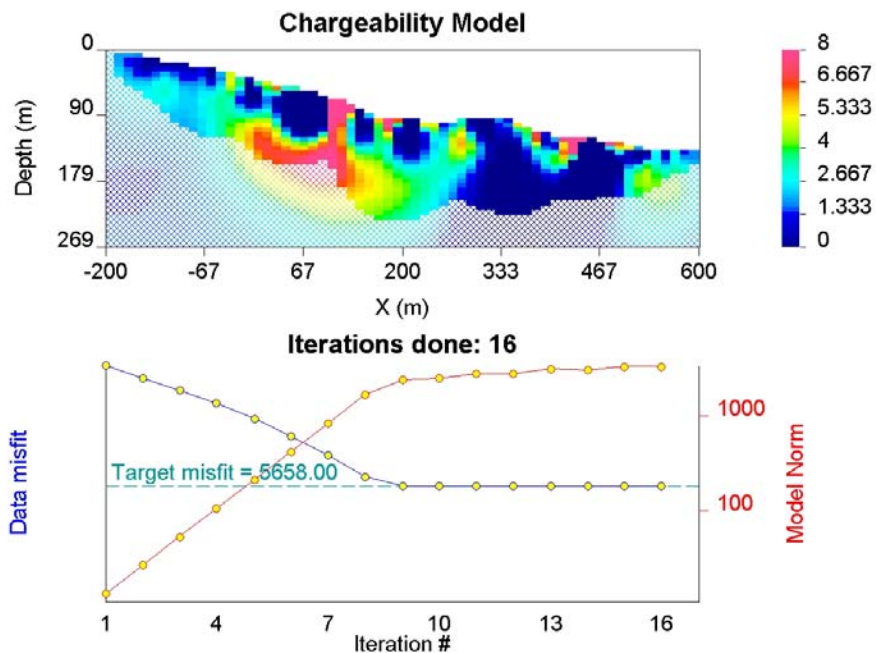
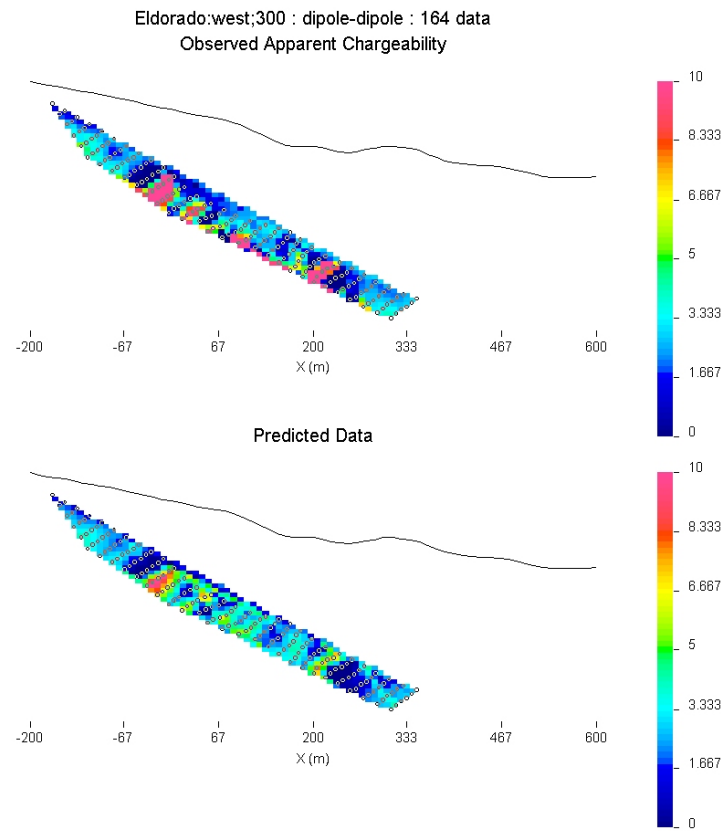


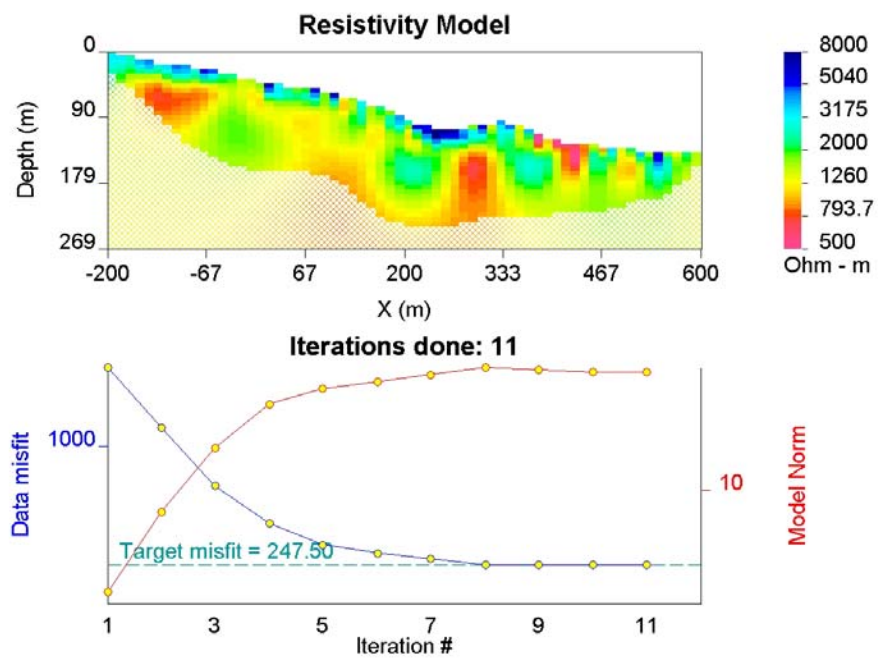
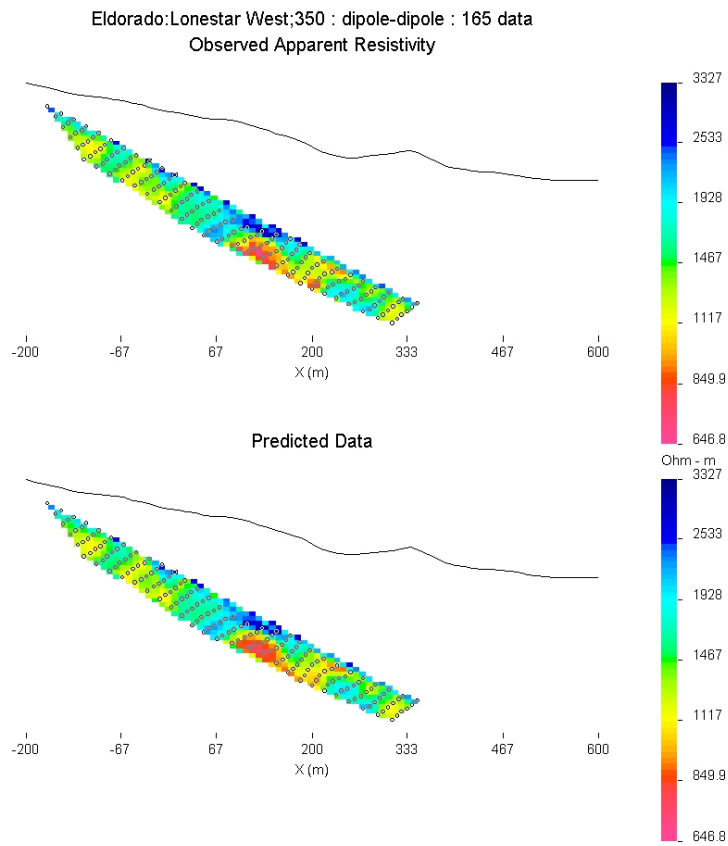


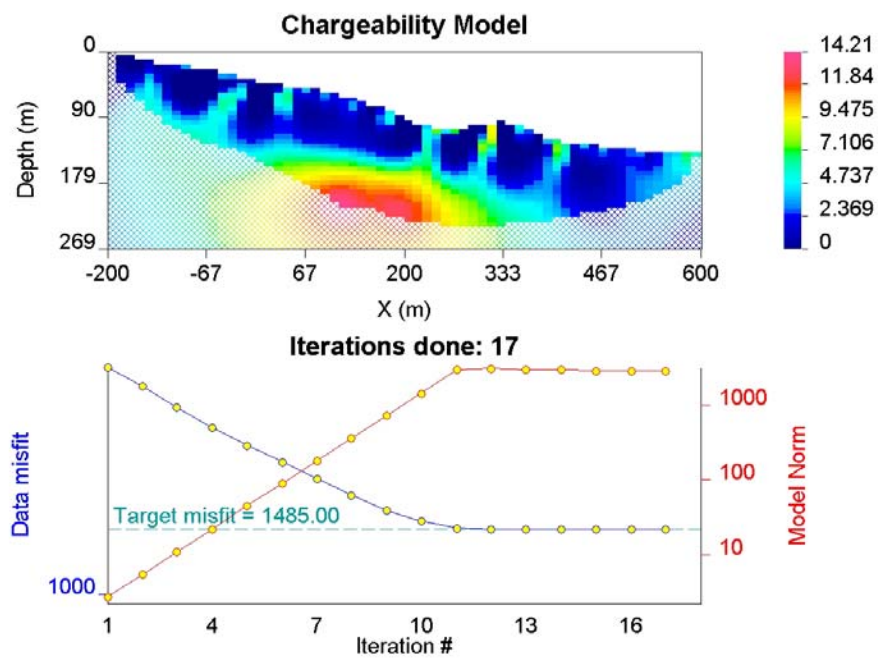
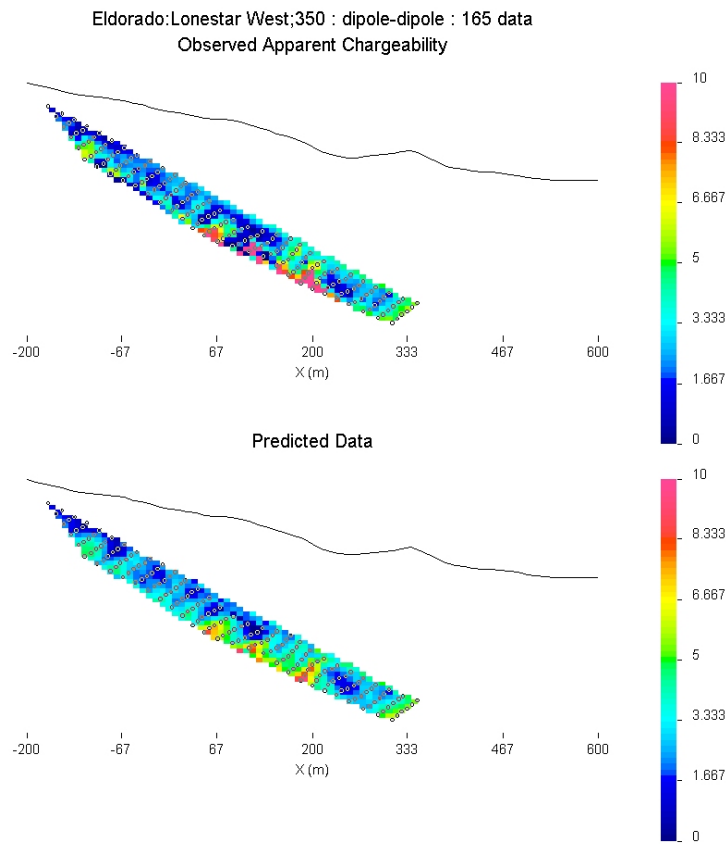


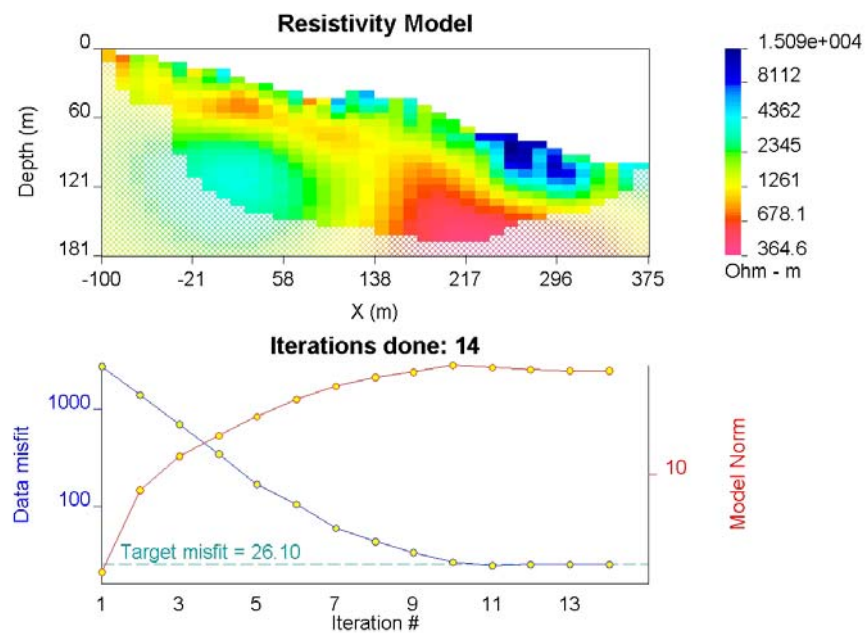
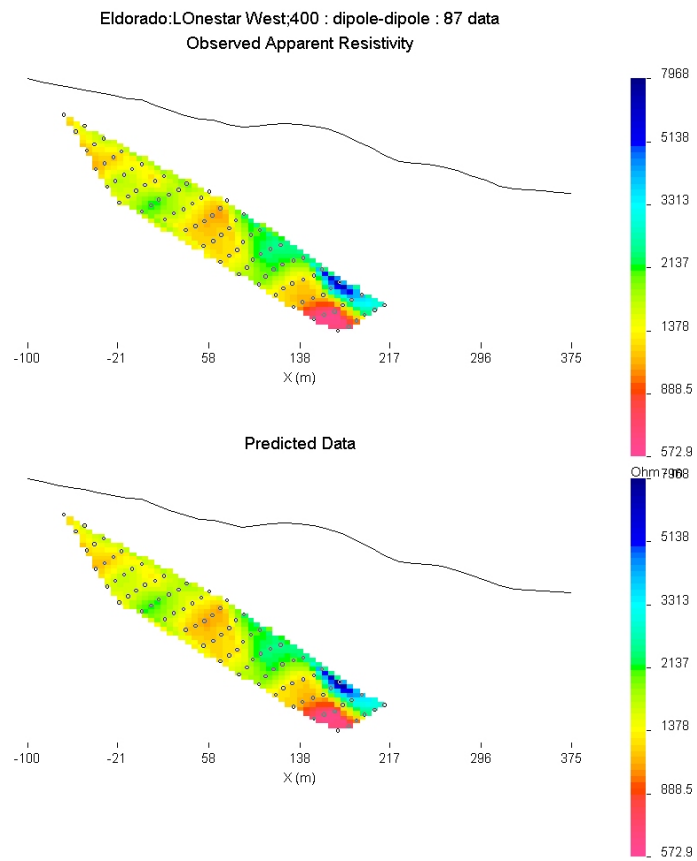


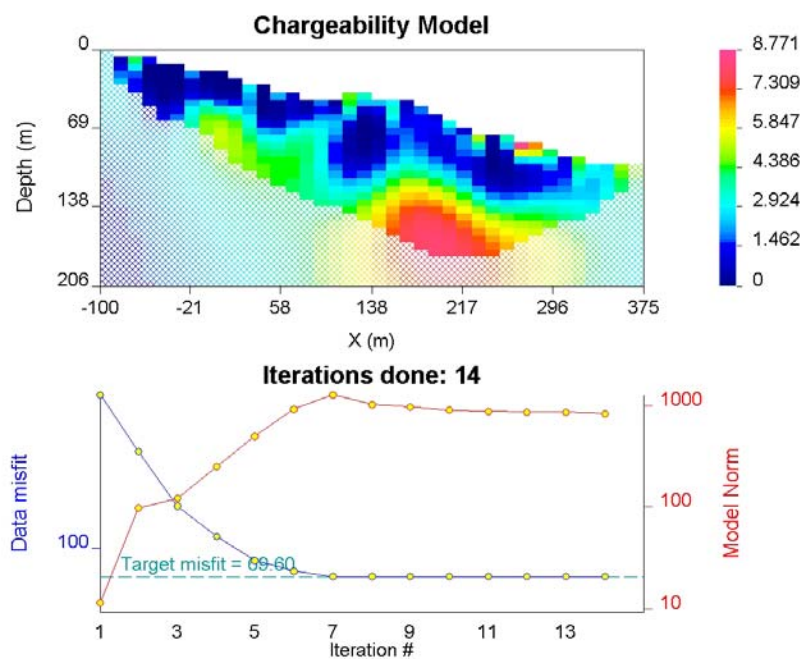
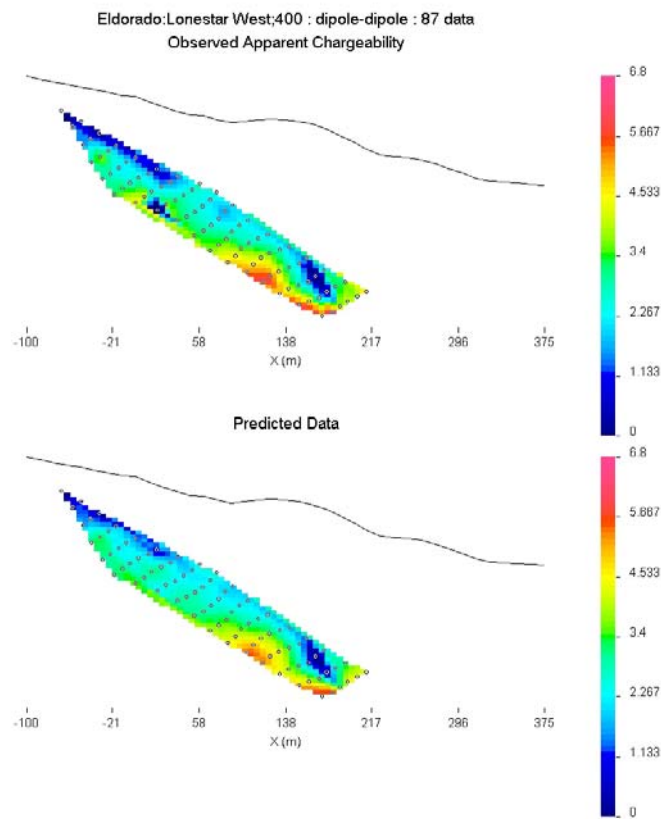


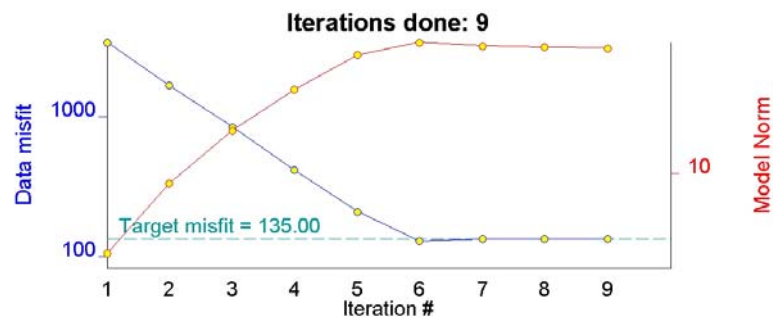
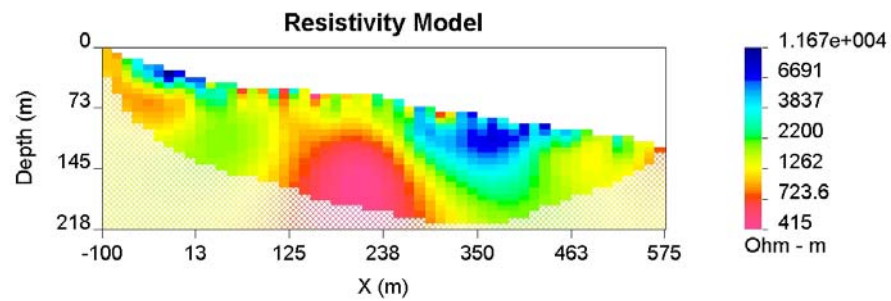
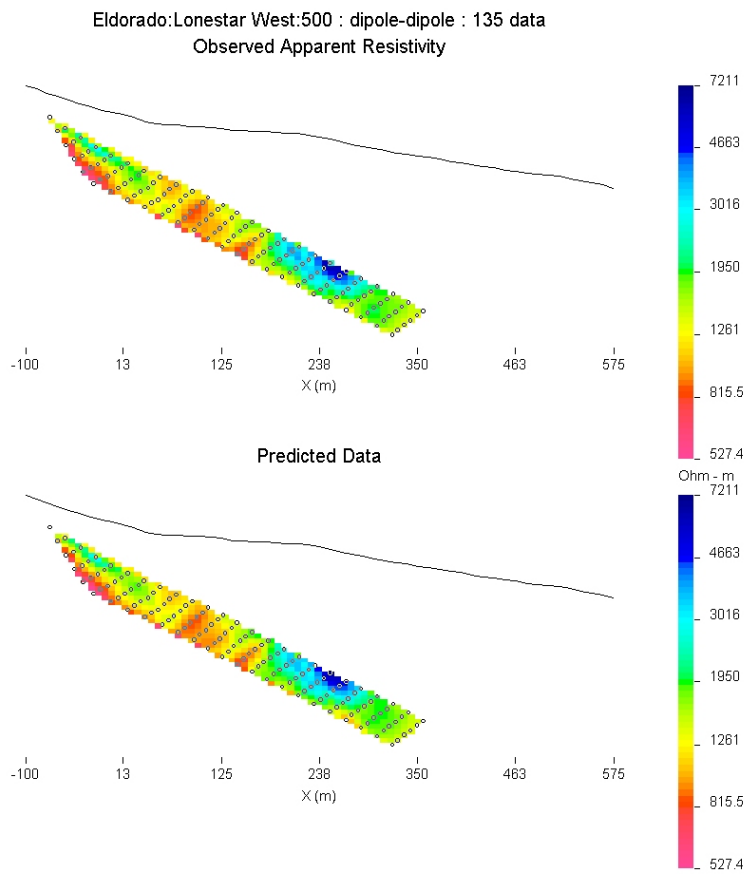


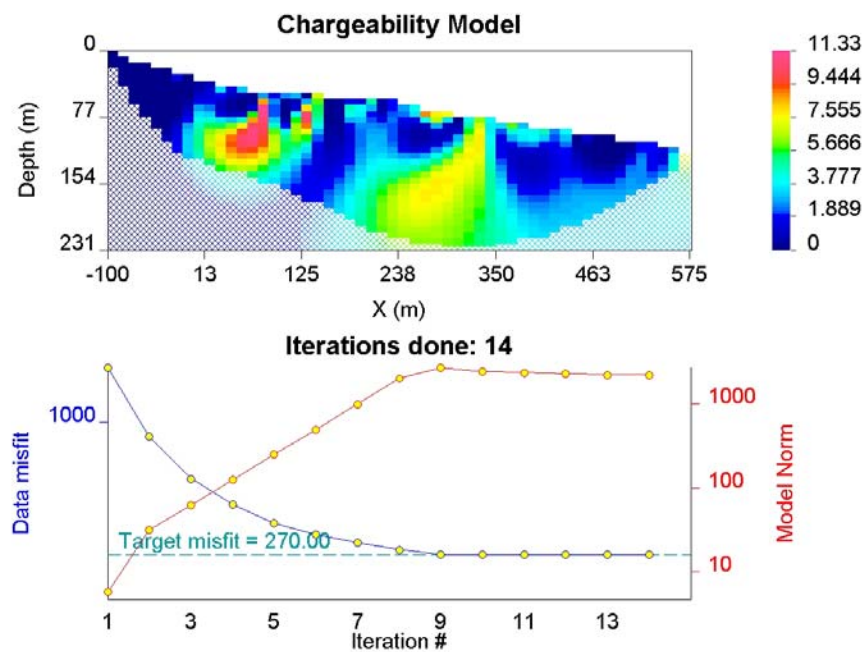
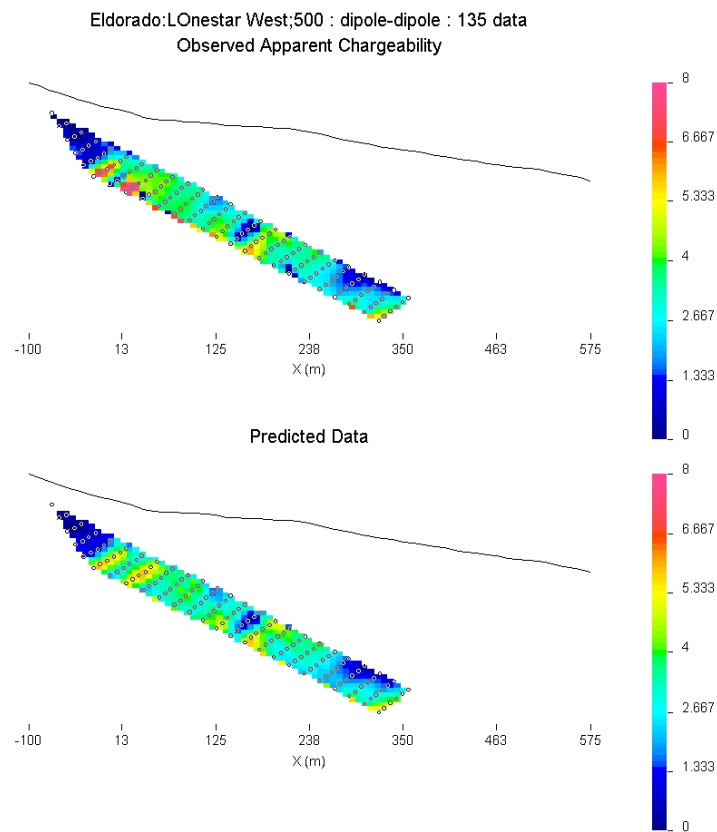


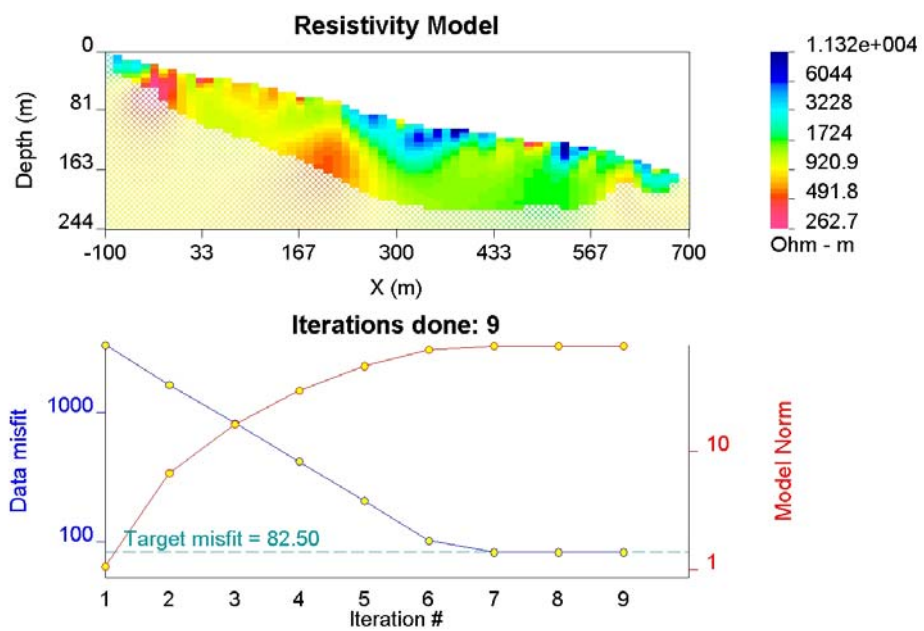
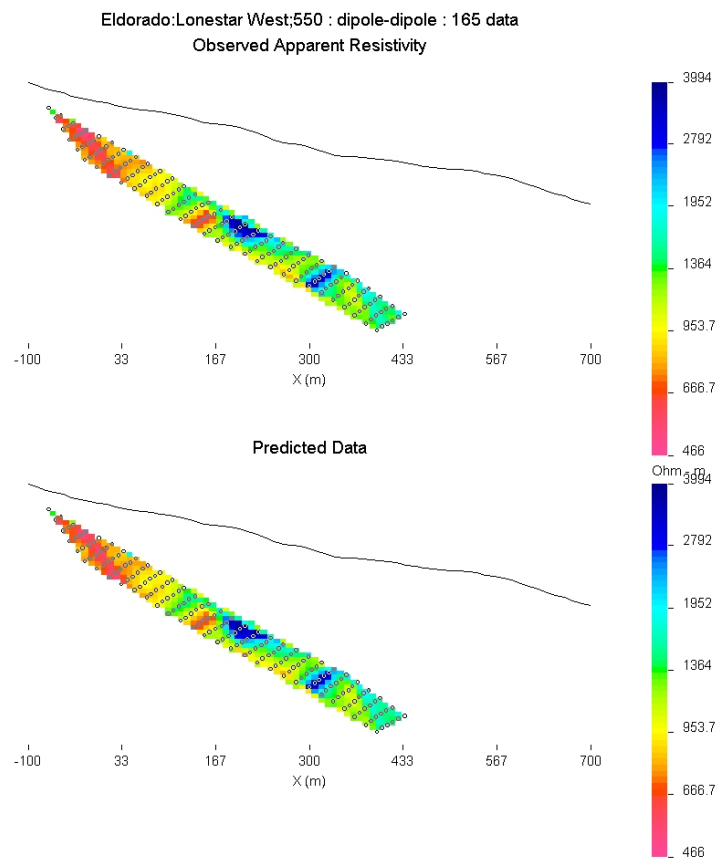


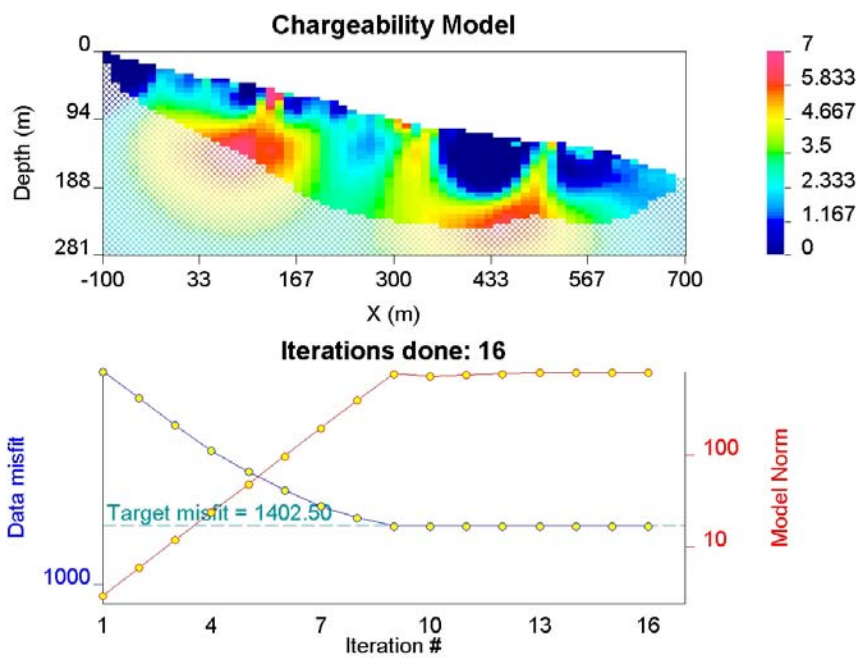
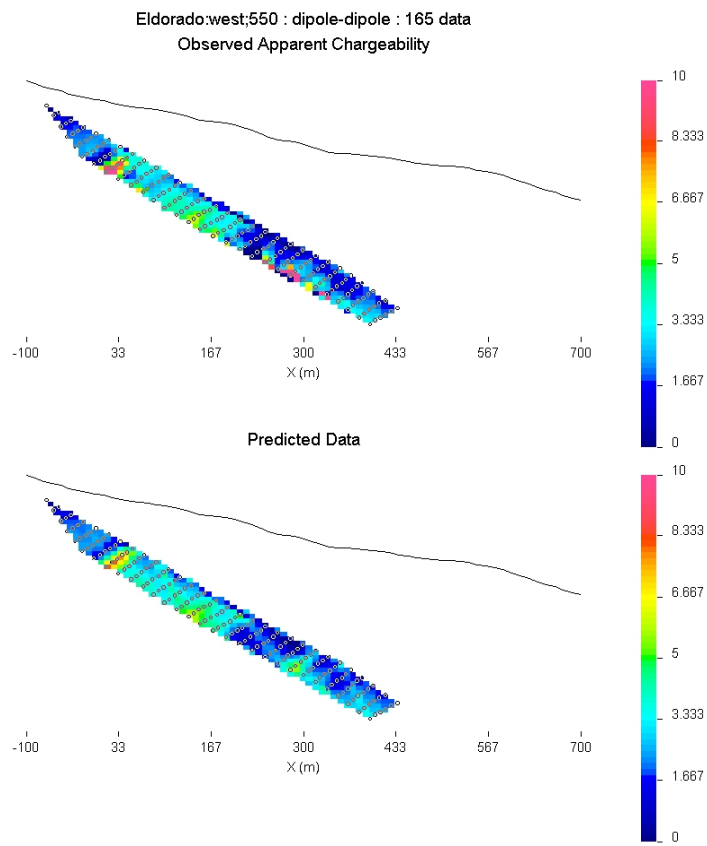


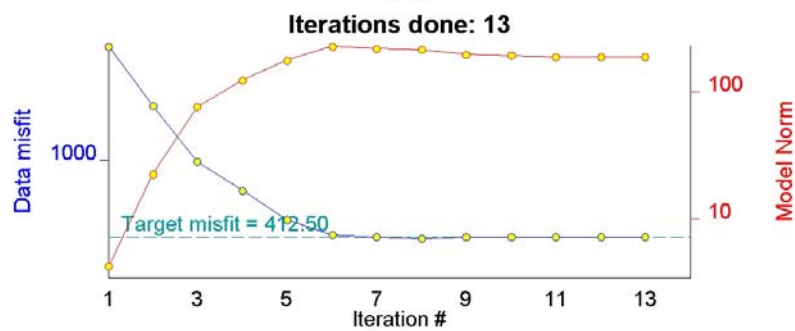
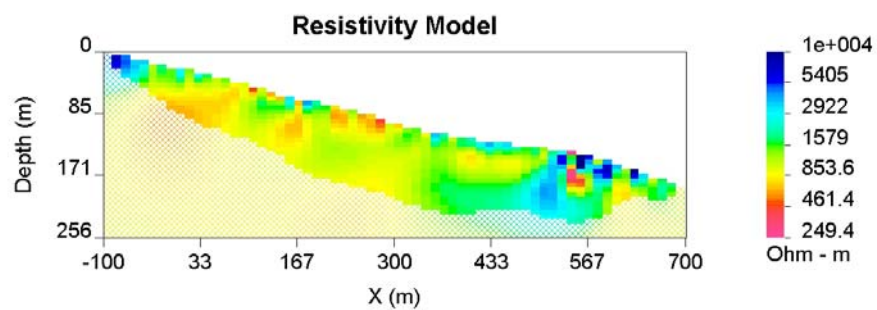
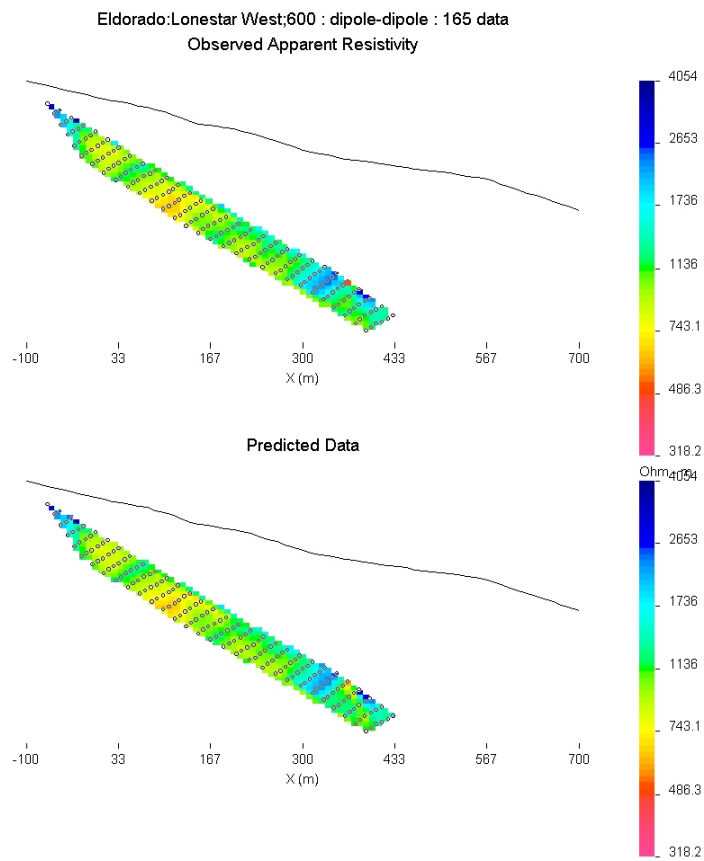


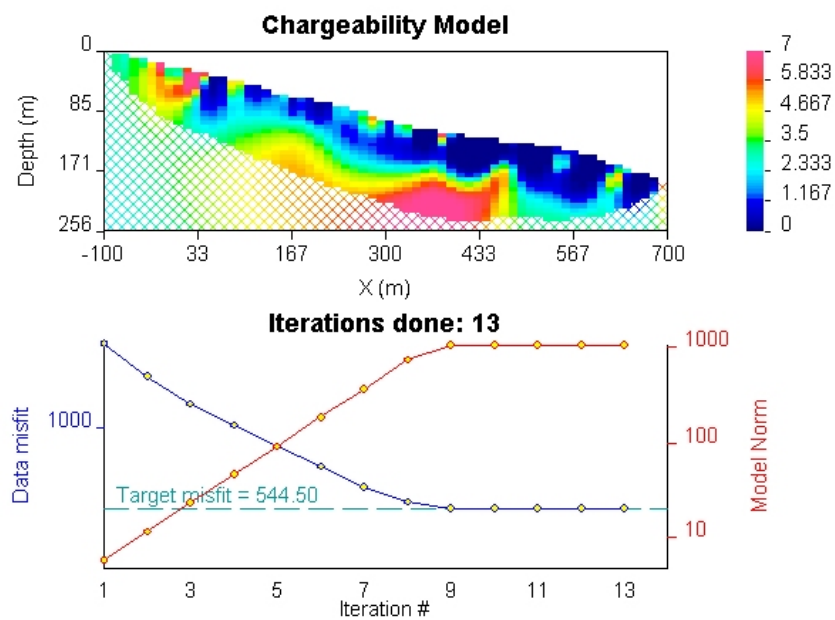
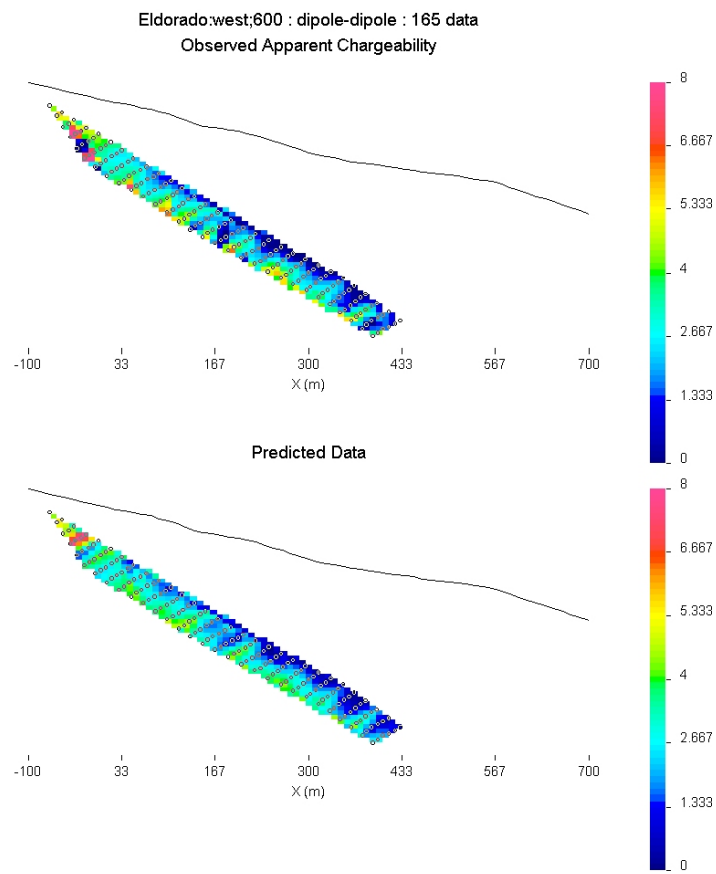


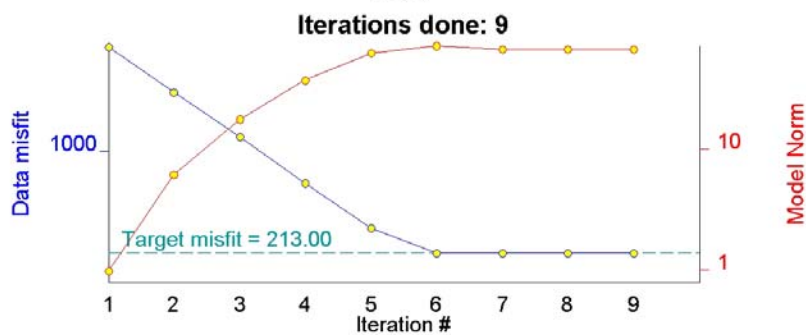
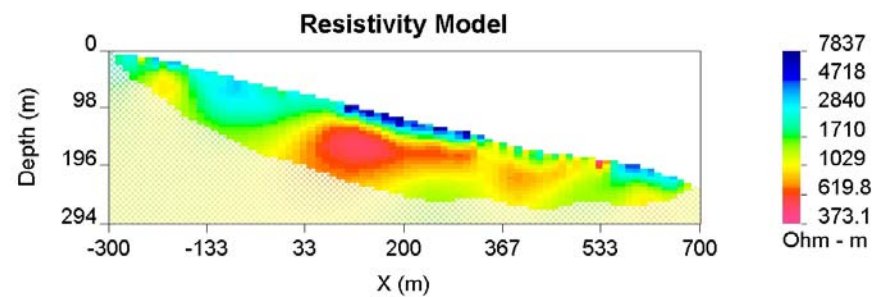
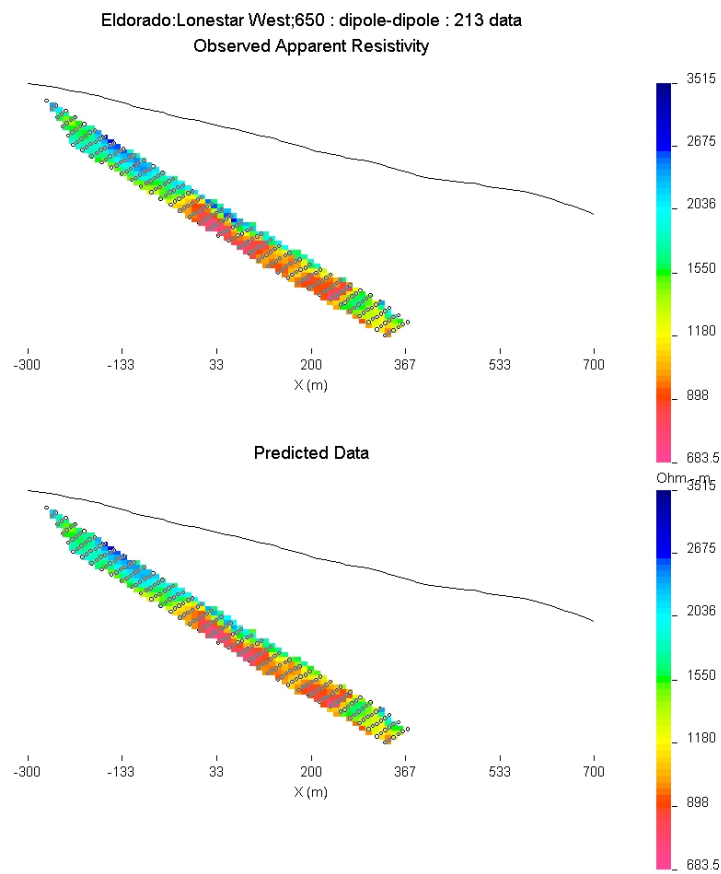


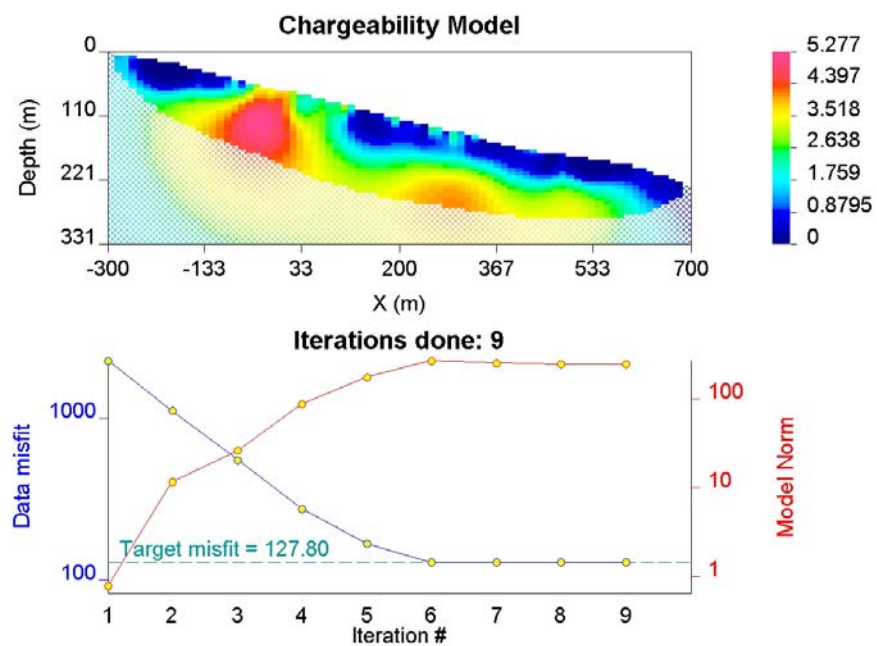
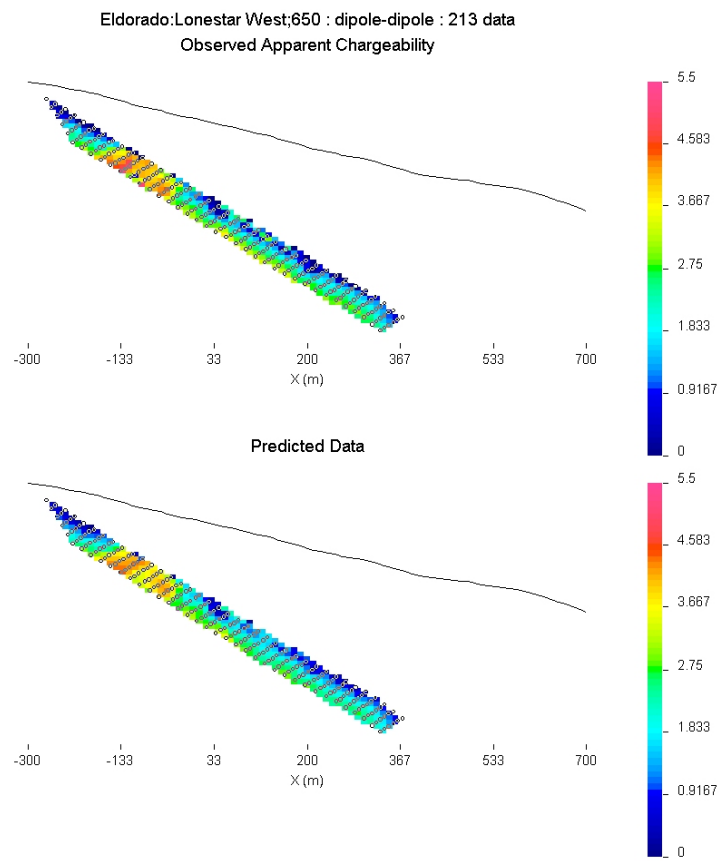


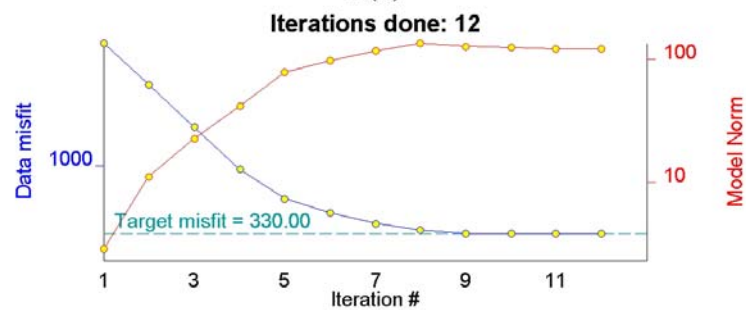
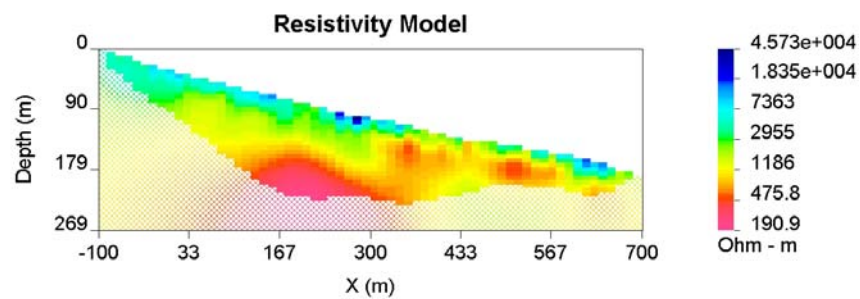
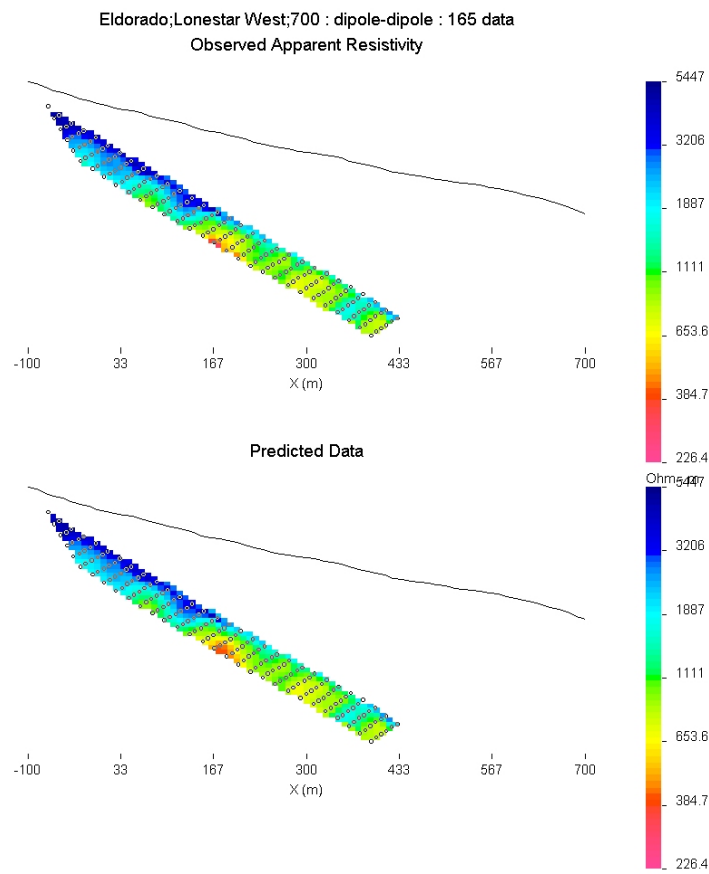


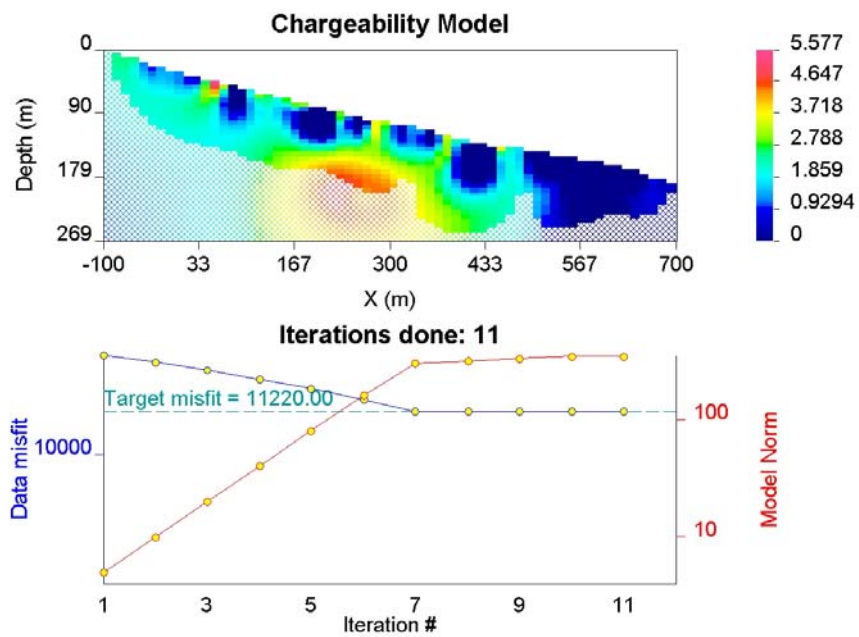
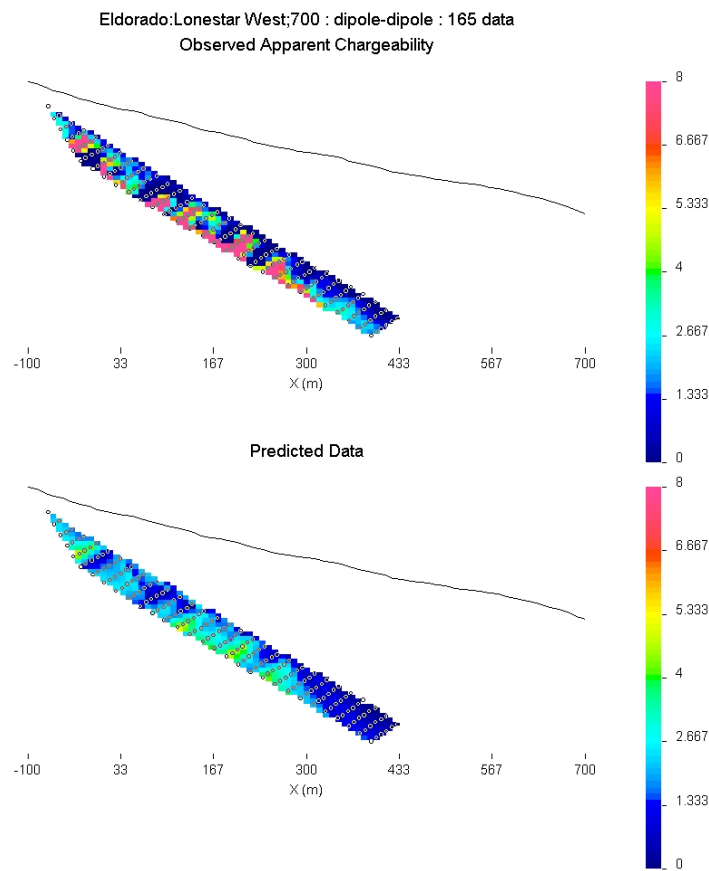


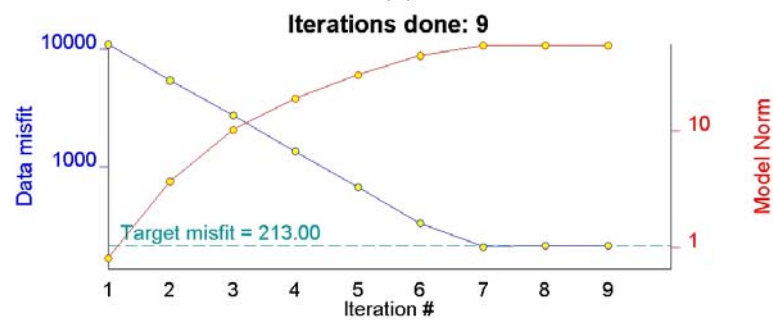
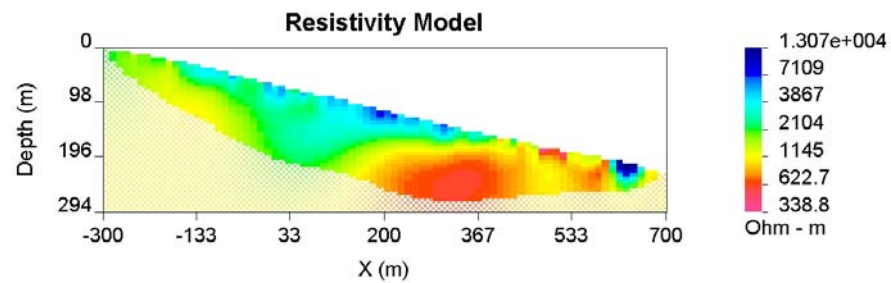
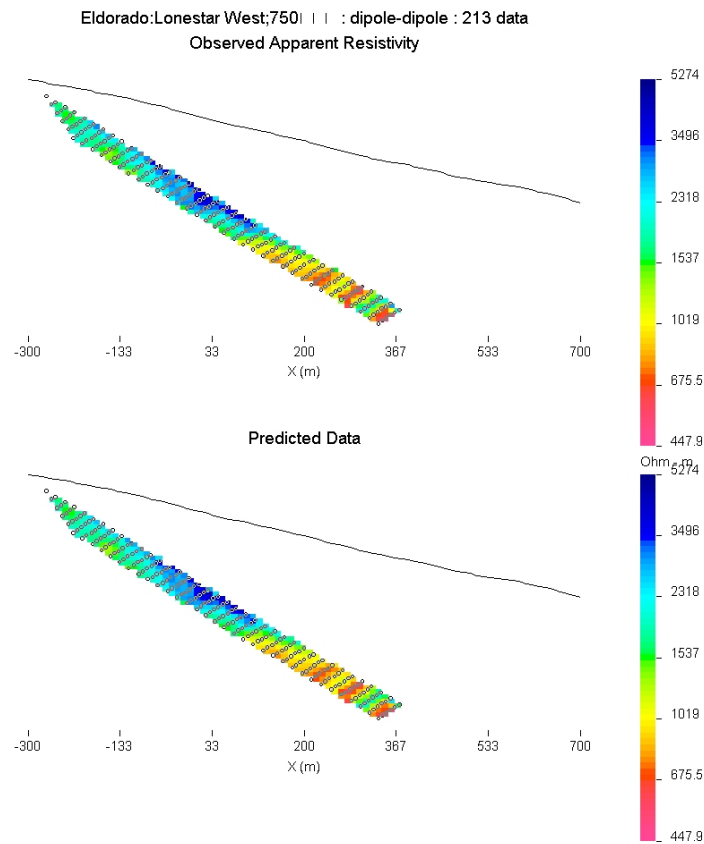


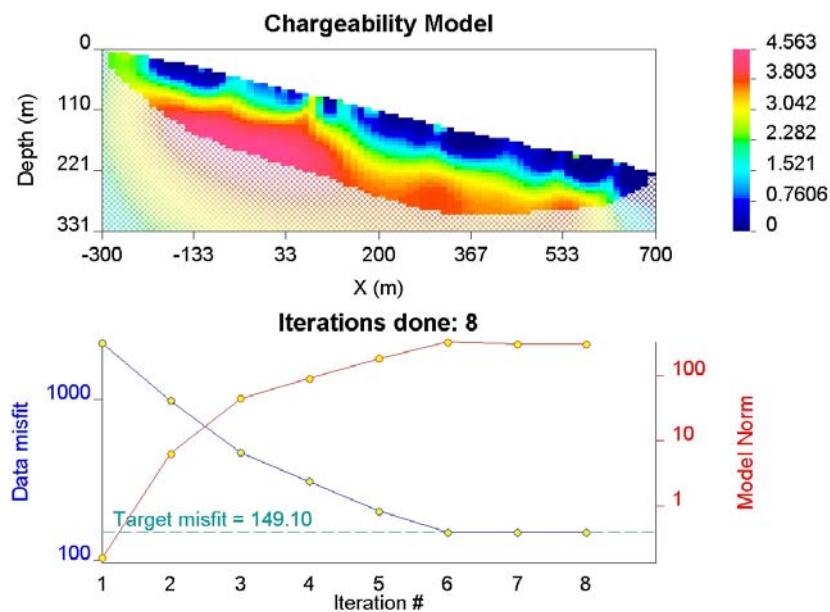
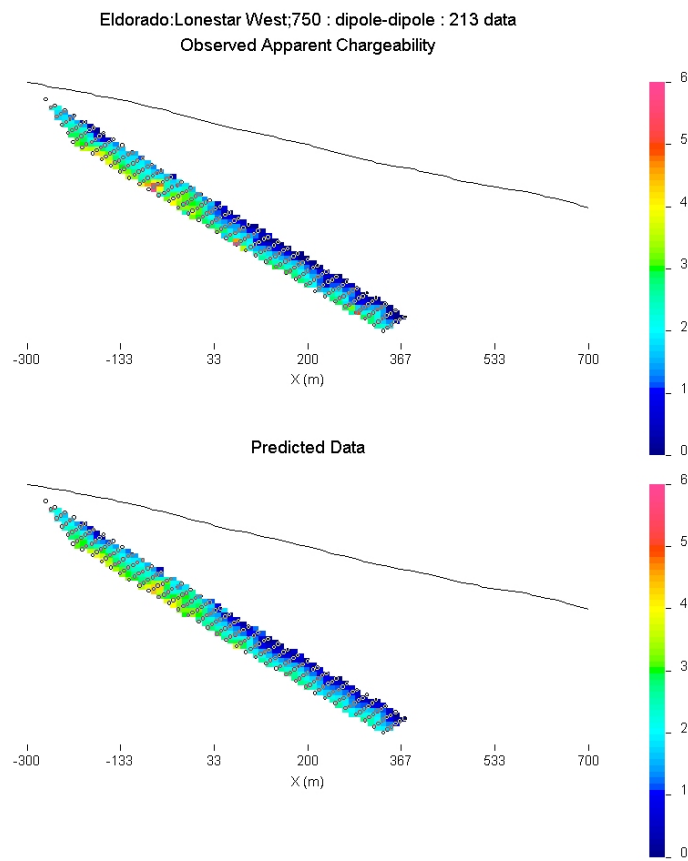


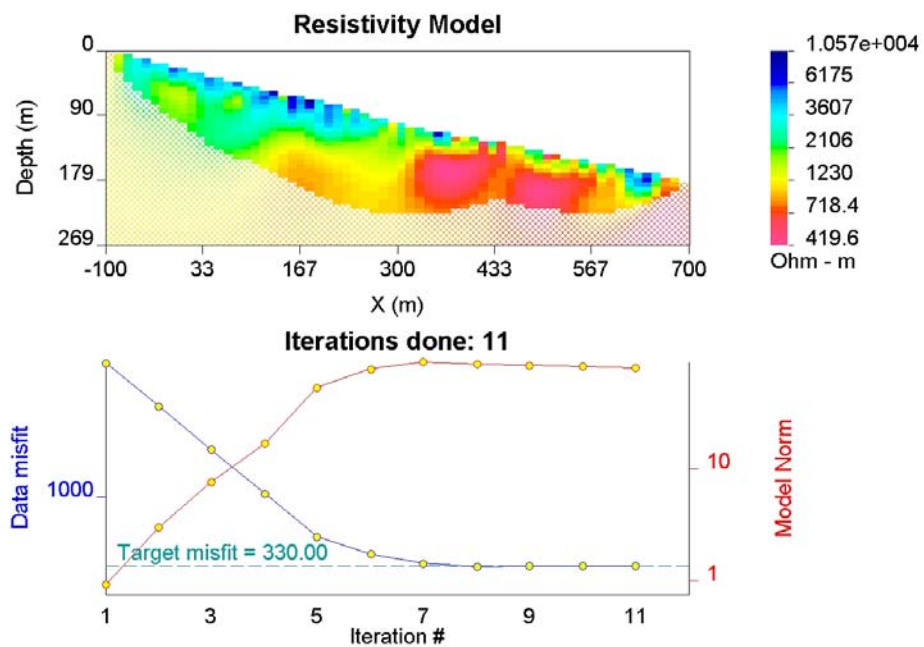
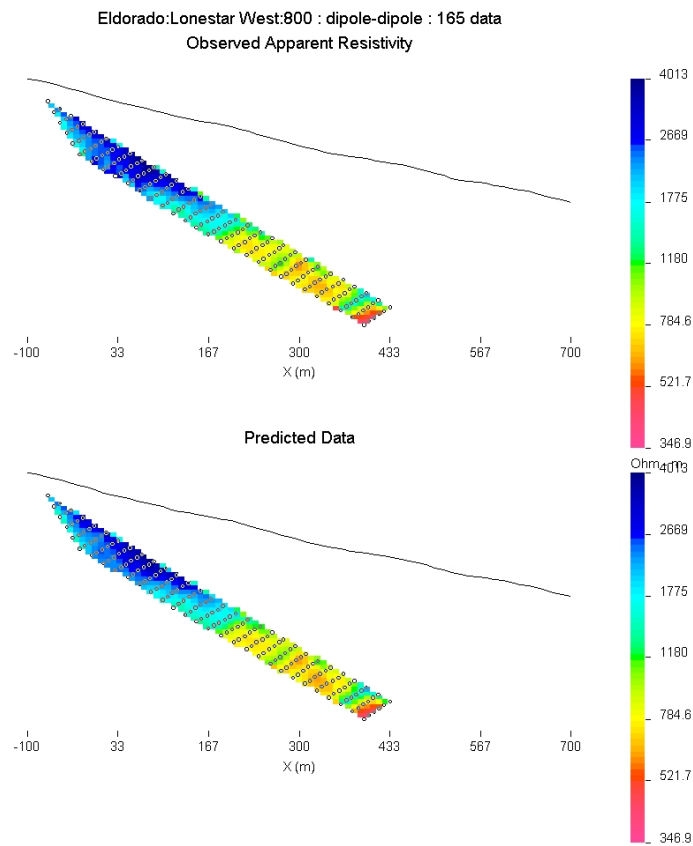


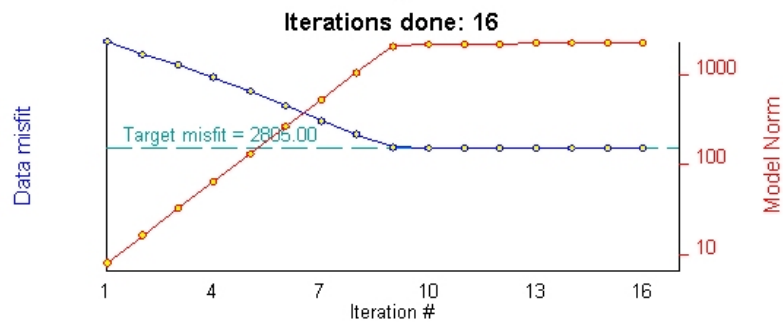
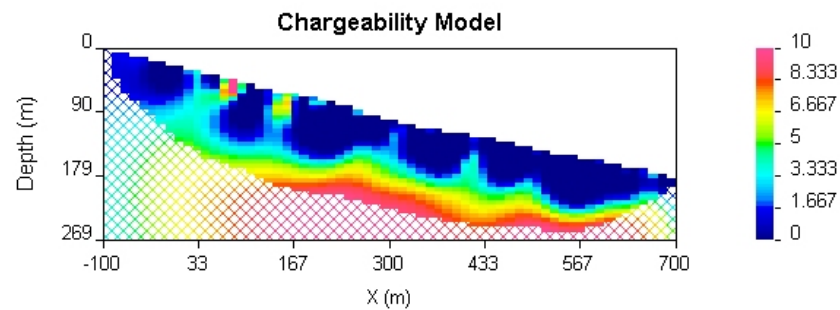
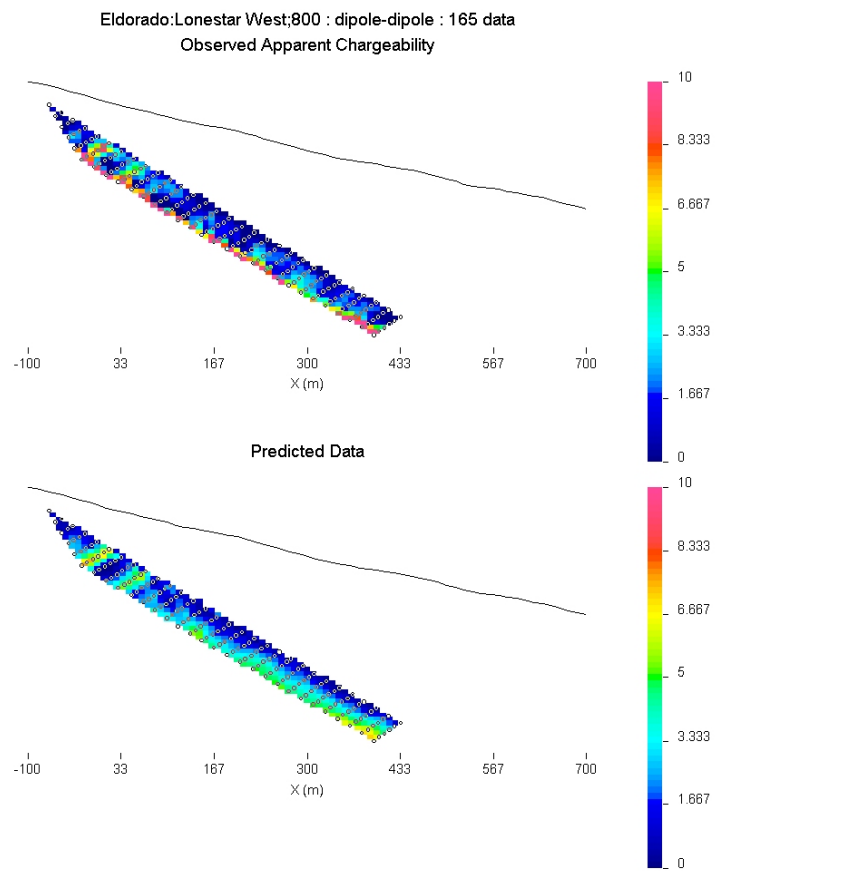


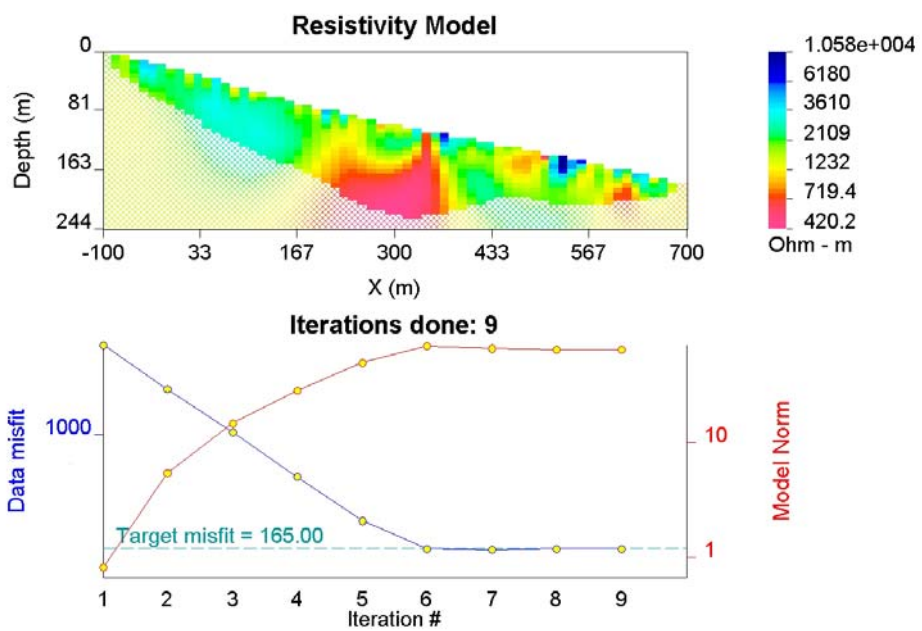
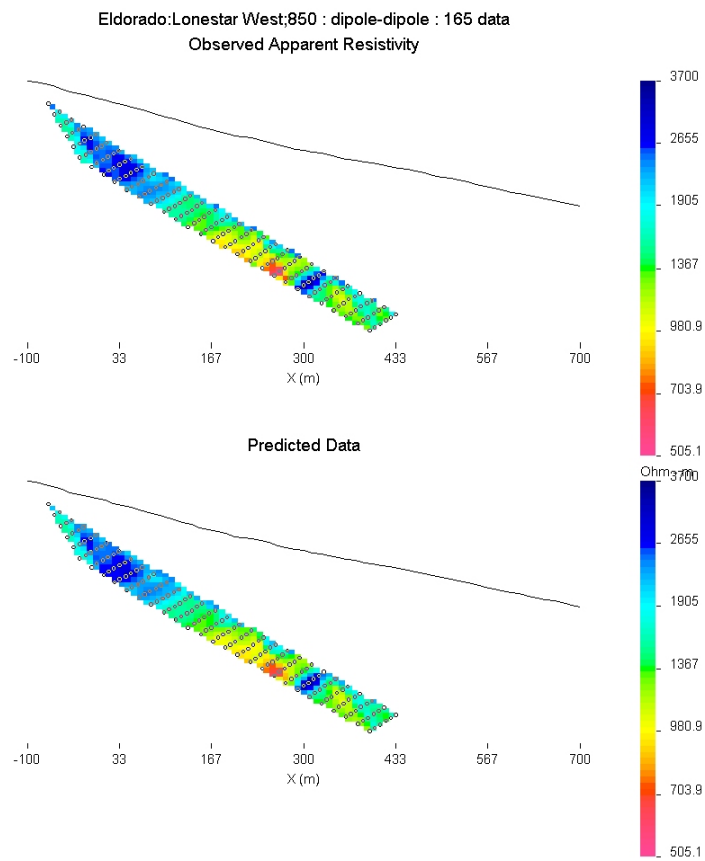


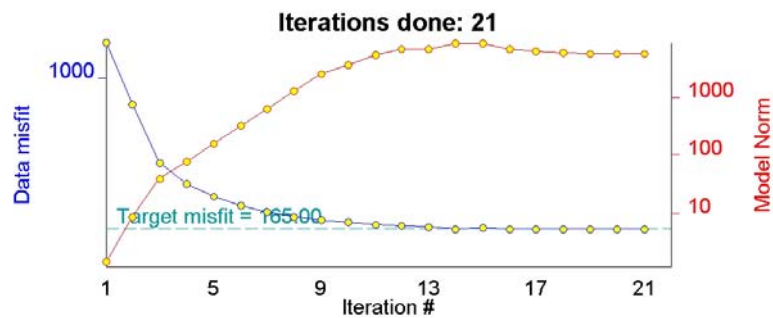
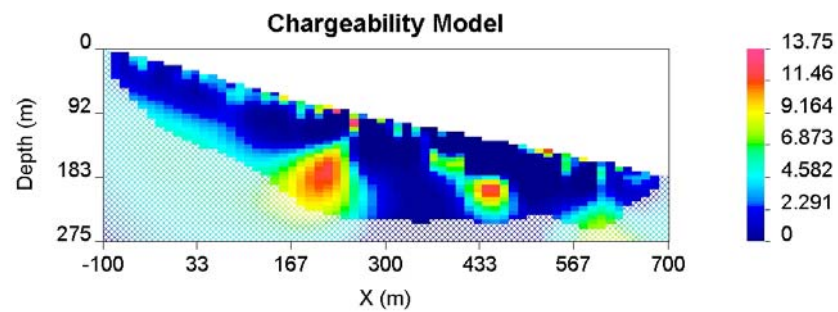
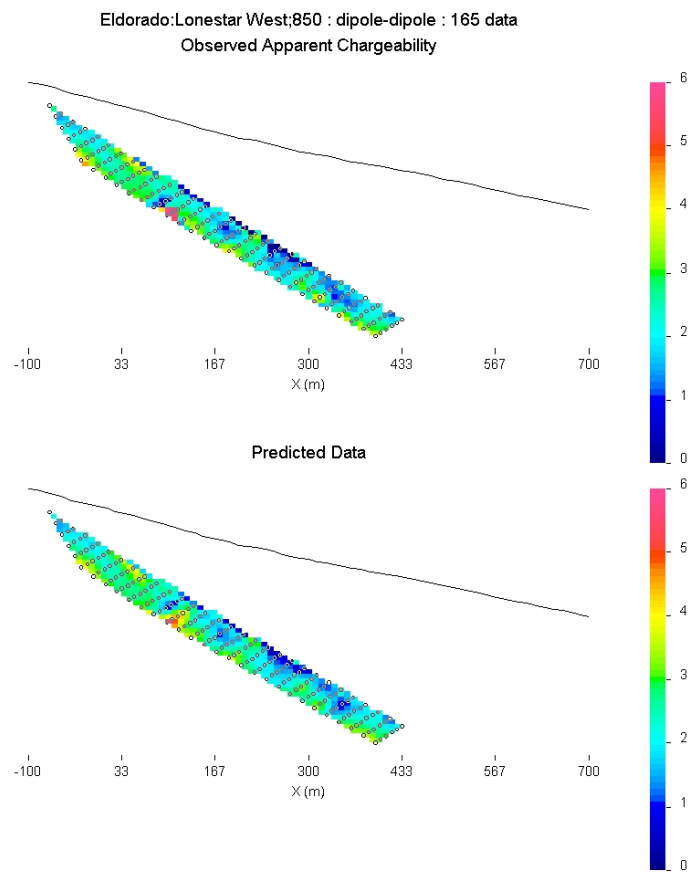


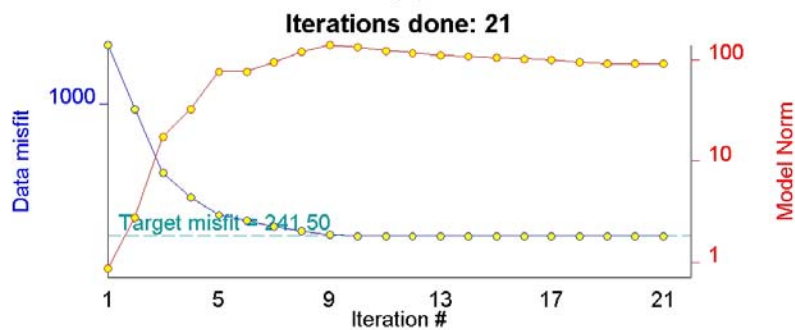
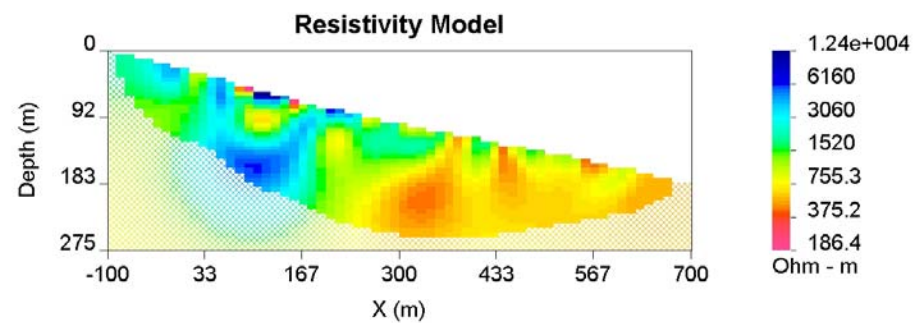
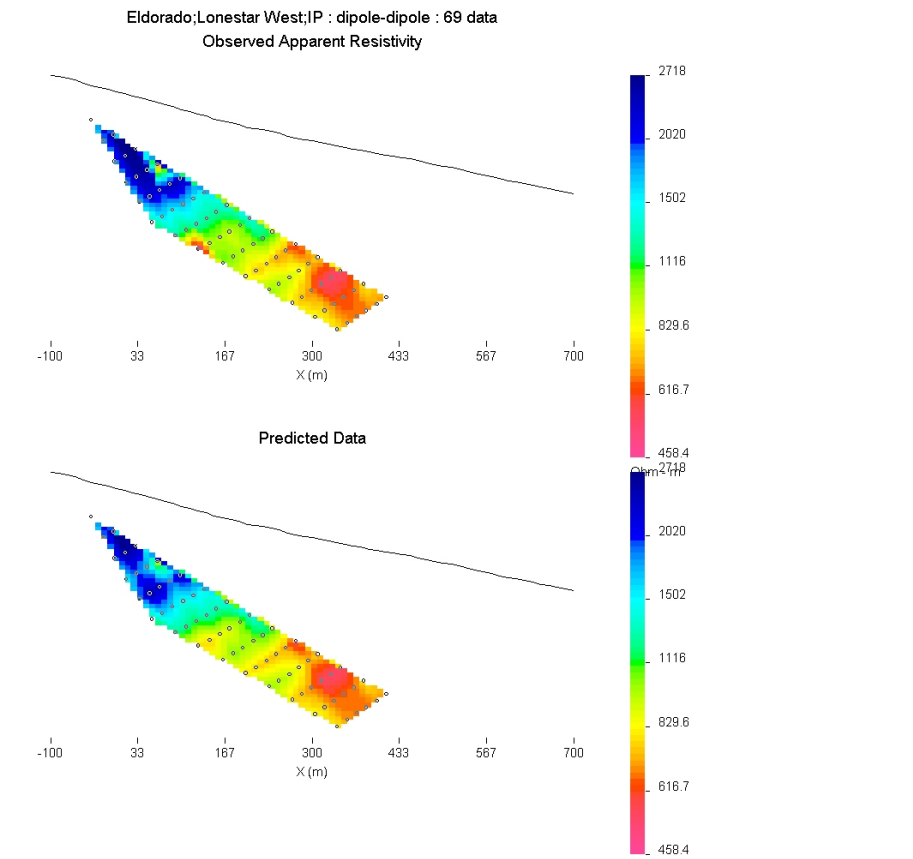


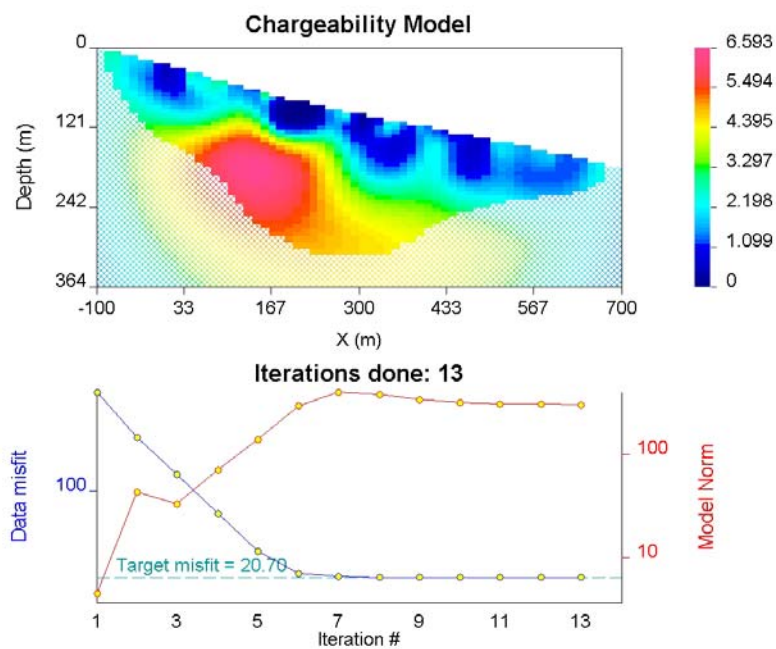
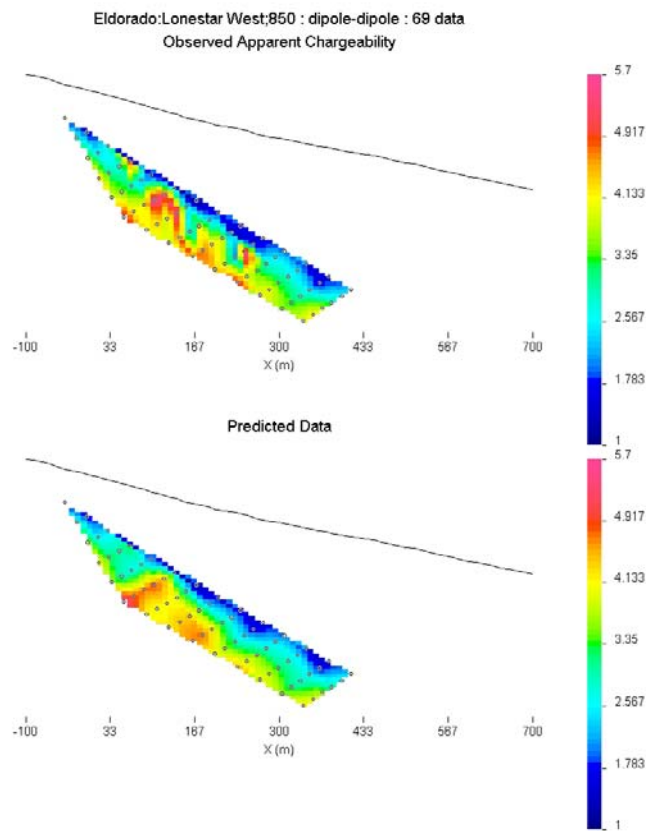






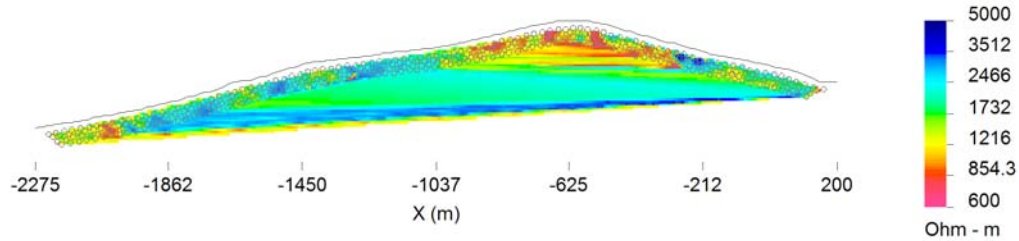




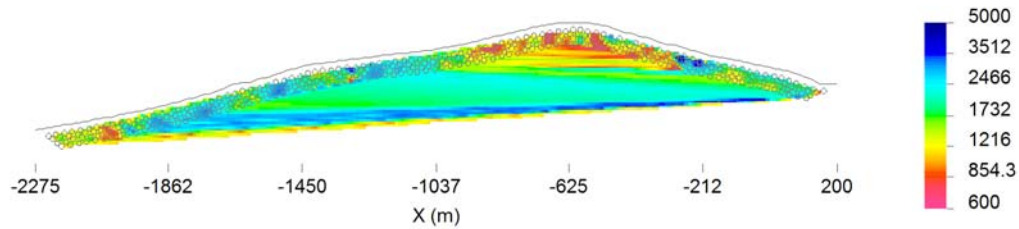


1987 grid

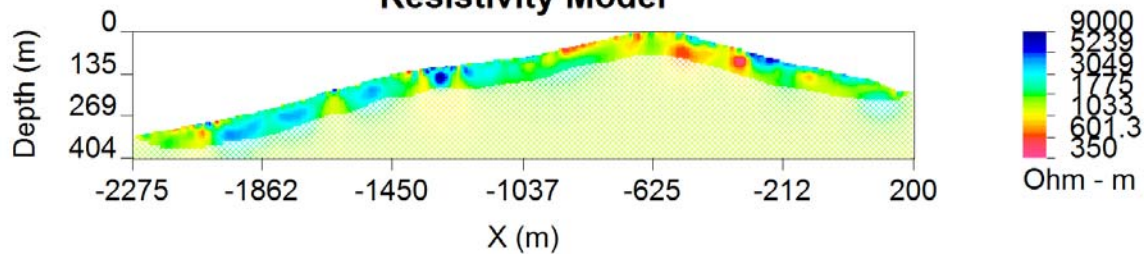
Eldorado: 1987 Lonestar; Line 8+10W : dipole-dipole : 382 data
Observed Apparent Resistivity



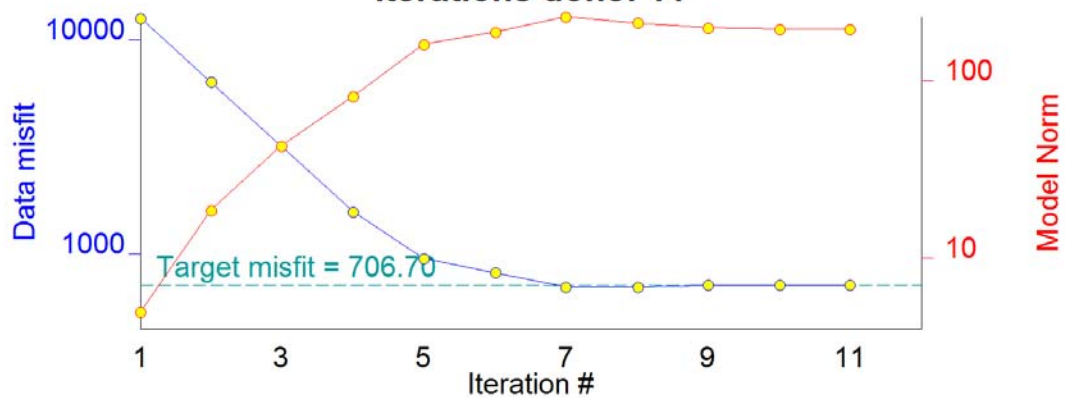
Predicted Data



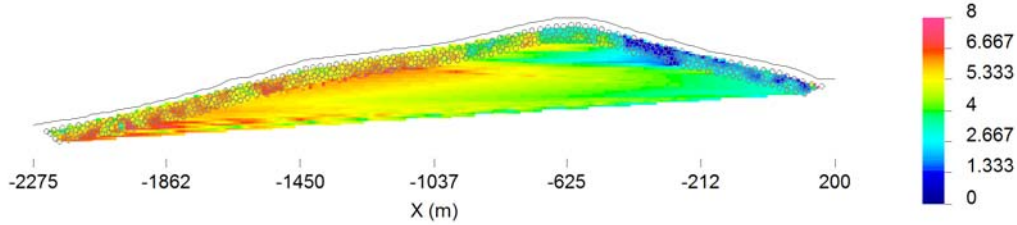
Resistivity Model



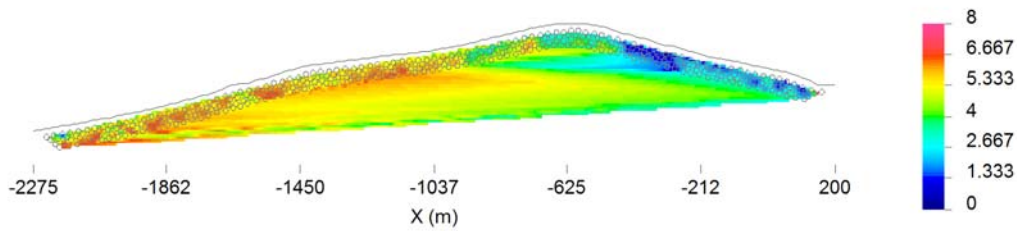
Iterations done: 11



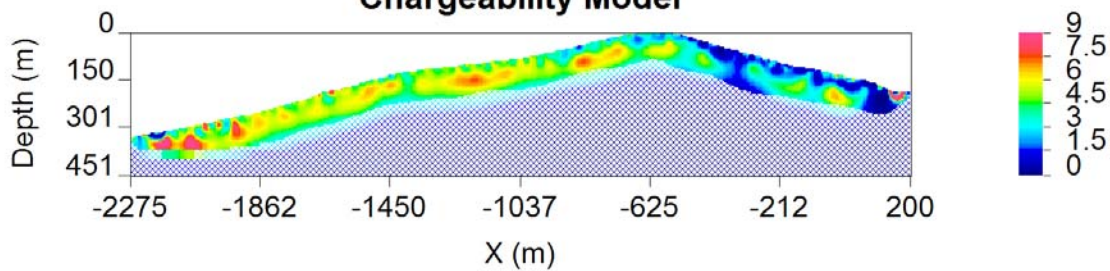
Eldorado: 1987 Lonestar; Line 8+10W : dipole-dipole : 382 data
Observed Apparent Chargeability



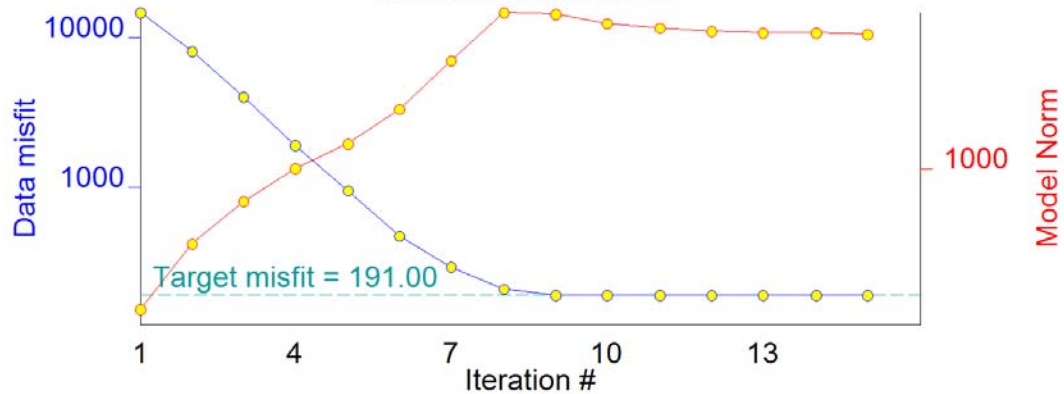
Predicted Data



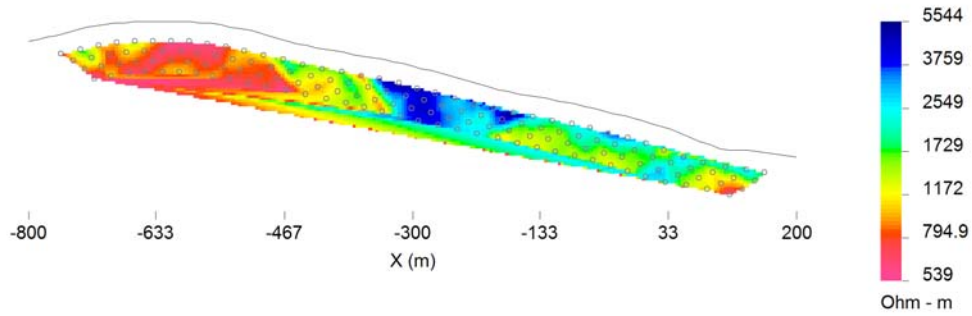
Chargeability Model



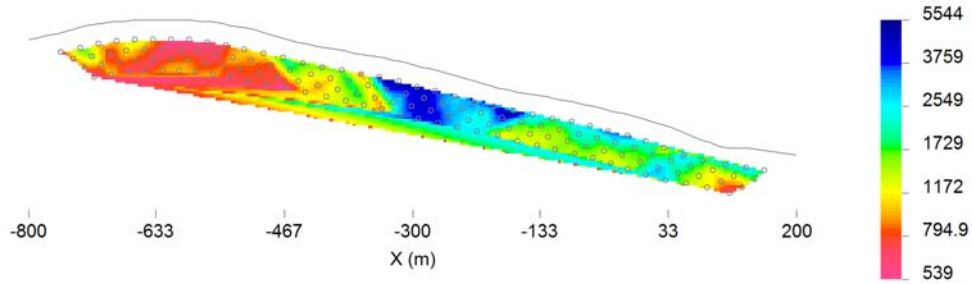
Iterations done: 15



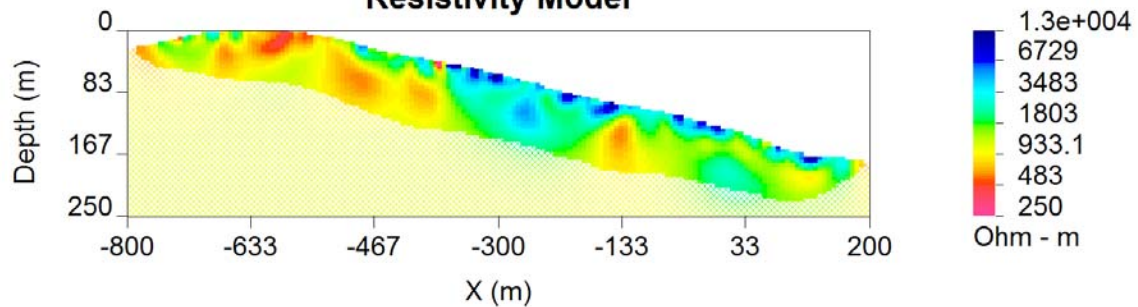
Eldorado: 1987 Lonestar; Line 7+20W : dipole-dipole : 146 data
Observed Apparent Resistivity



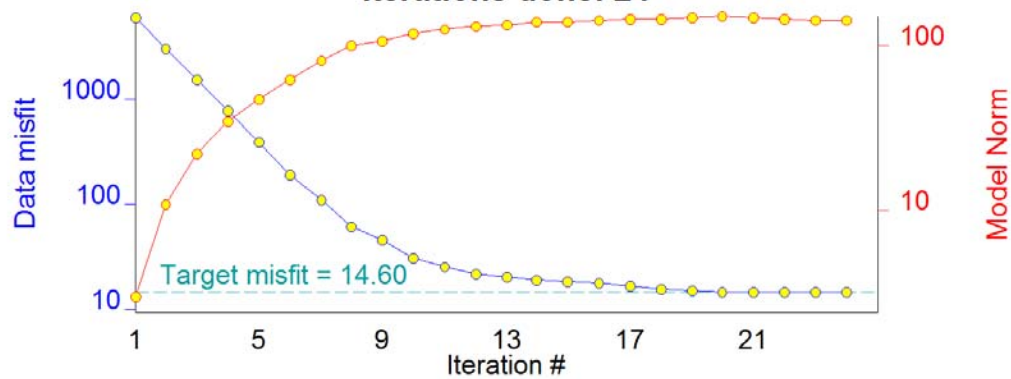
Predicted Data



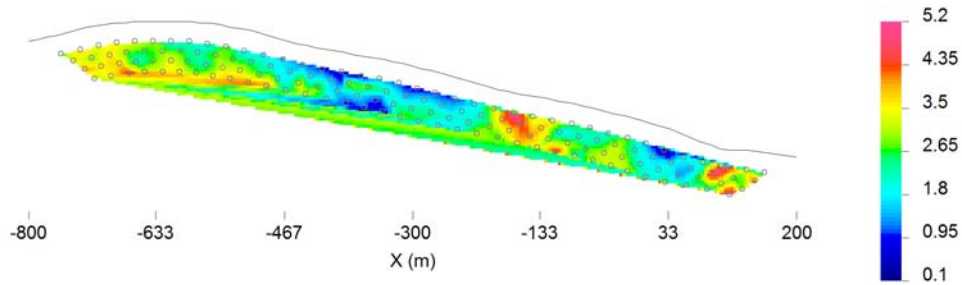
Resistivity Model



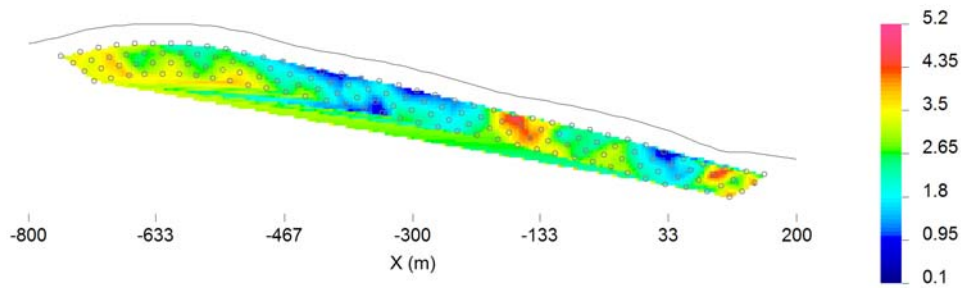
Iterations done: 24



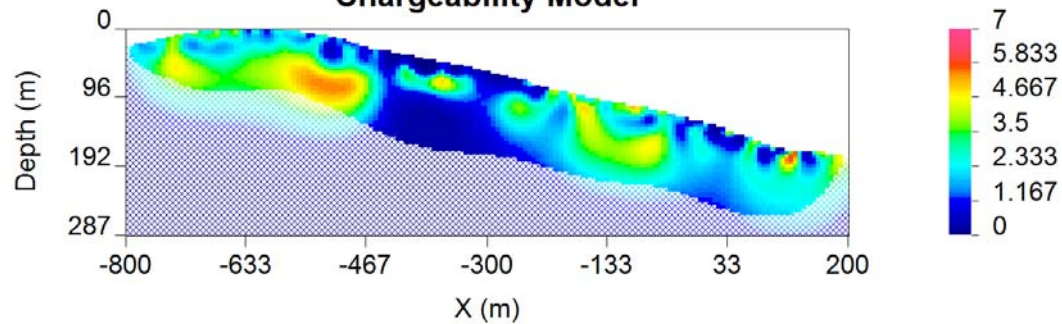
Eldorado: 1987 Lonestar; Line 7+20W : dipole-dipole : 146 data
Observed Apparent Chargeability



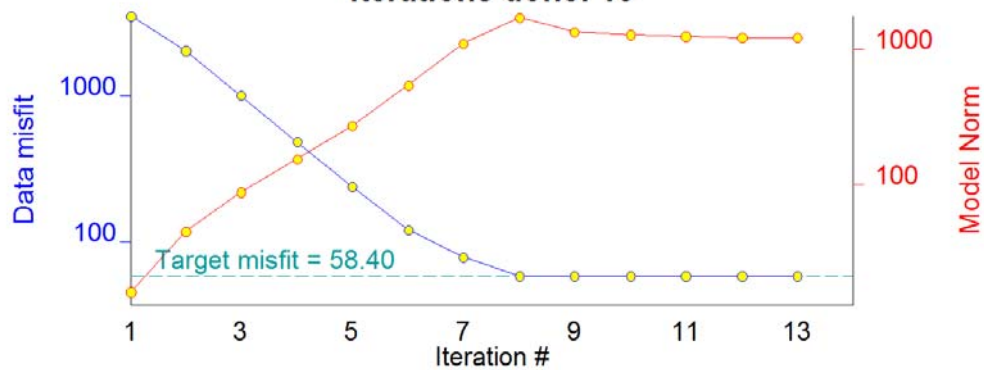
Predicted Data



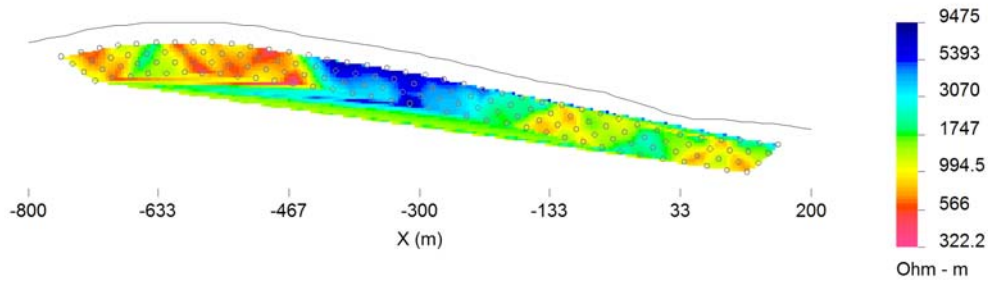
Chargeability Model



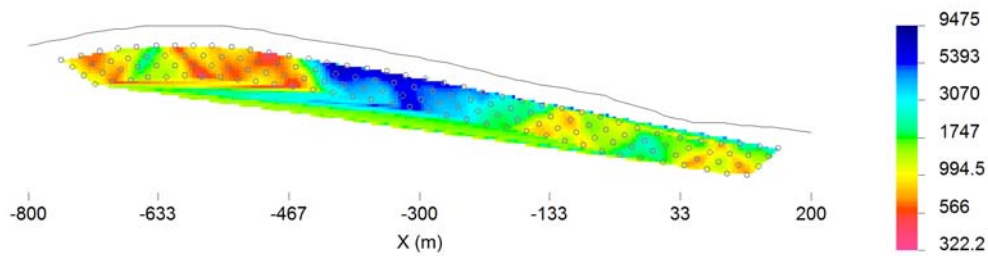
Iterations done: 13



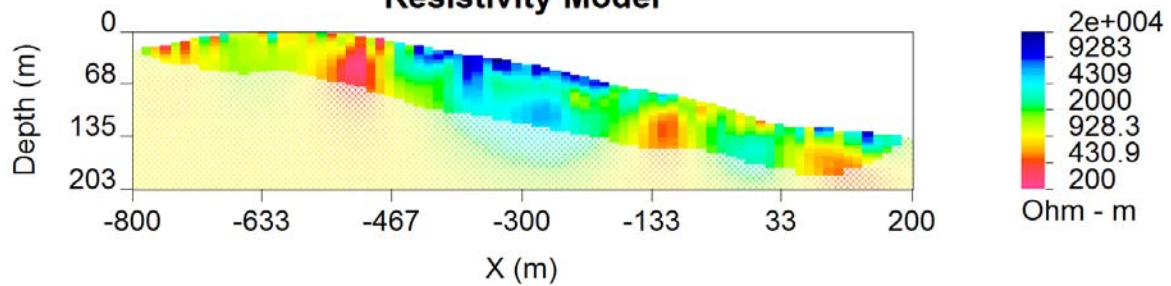
Eldorado: 1987 Lonestar; Line 6+00W : dipole-dipole : 146 data
Observed Apparent Resistivity



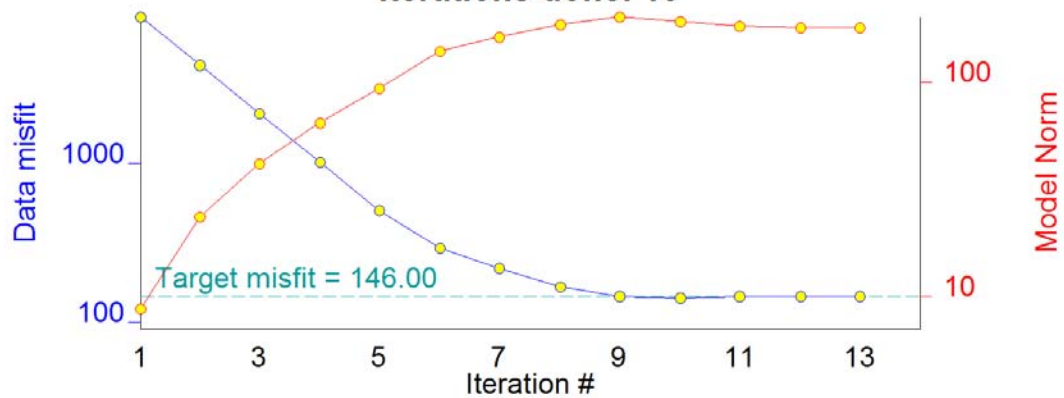
Predicted Data



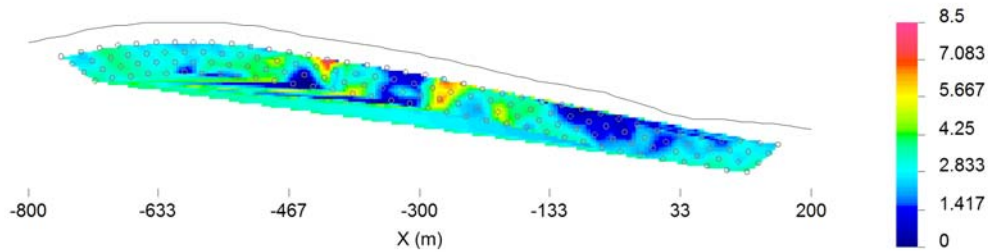
Resistivity Model



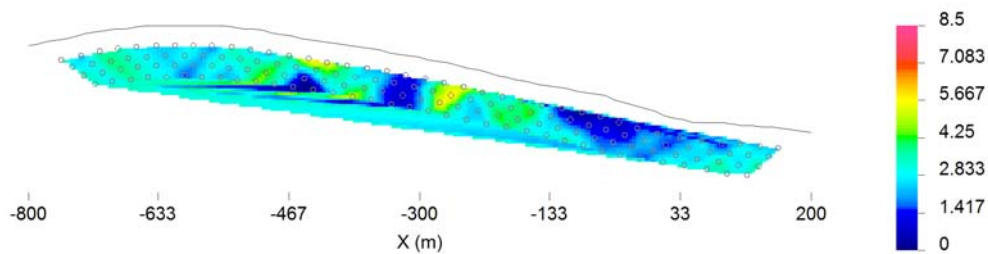
Iterations done: 13



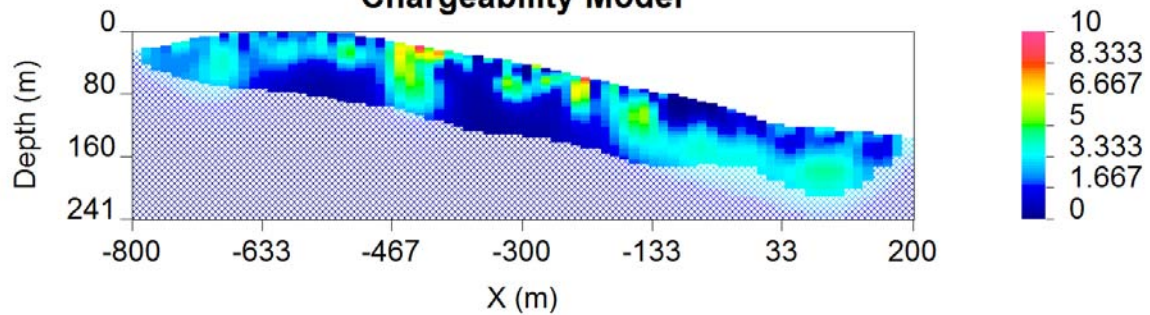
Eldorado: 1987 Lonestar; Line 6+00W : dipole-dipole : 146 data
Observed Apparent Chargeability



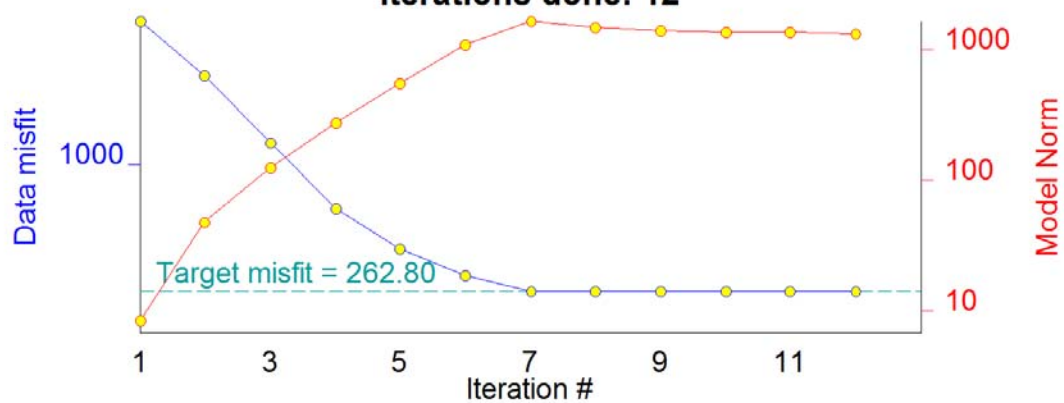
Predicted Data



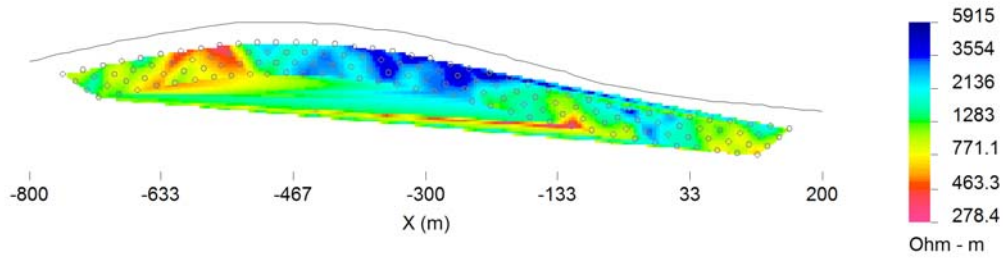
Chargeability Model



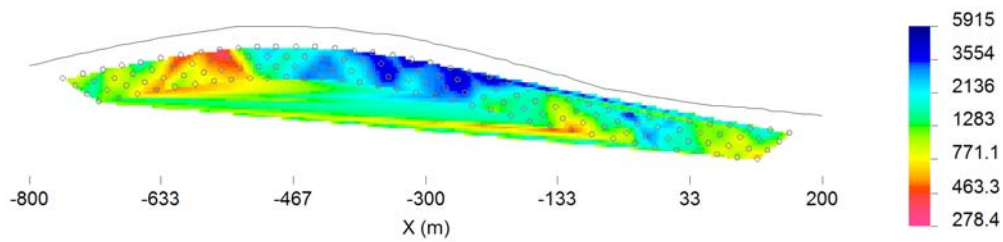
Iterations done: 12



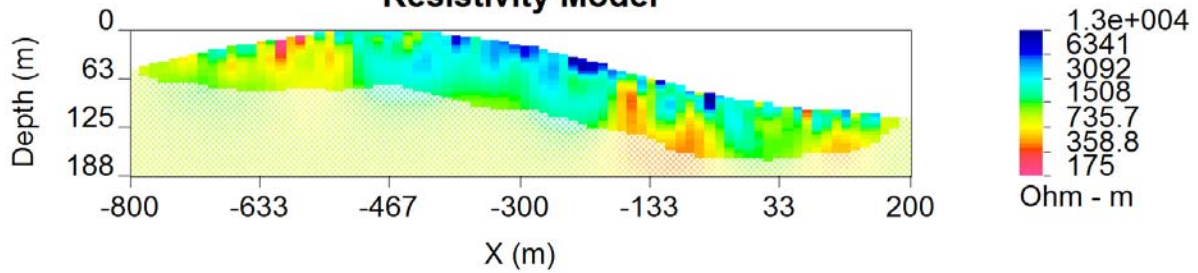
Eldorado: 1987 Lonestar; Line 4+80W : dipole-dipole : 146 data
Observed Apparent Resistivity



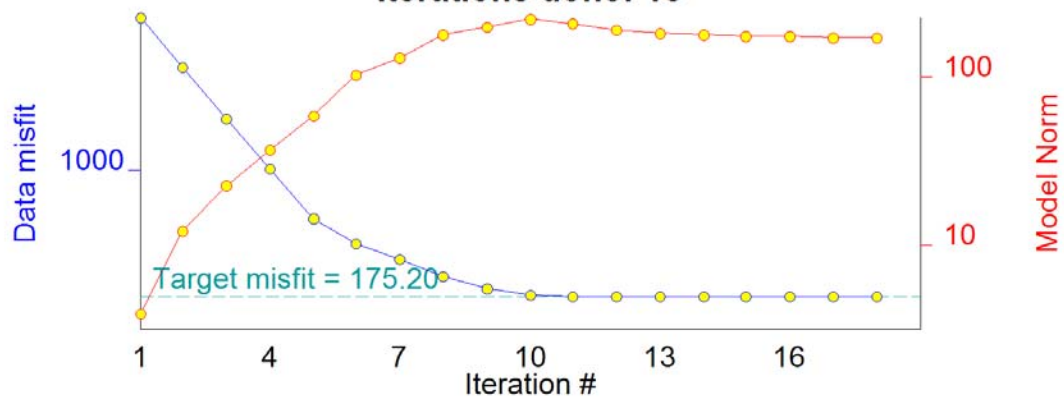
Predicted Data



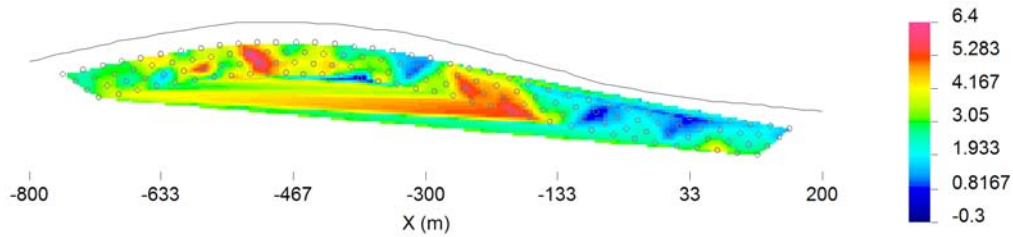
Resistivity Model



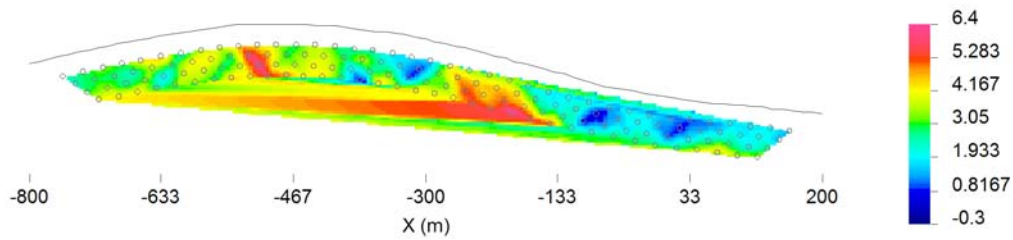
Iterations done: 18



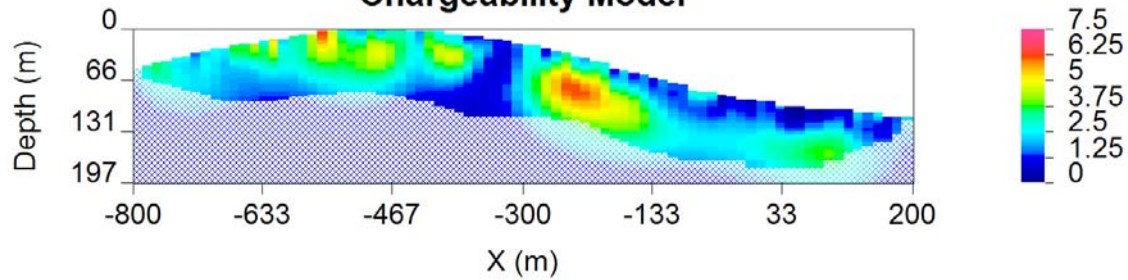
Eldorado: 1987 Lonestar; Line 4+80W : dipole-dipole : 146 data
Observed Apparent Chargeability



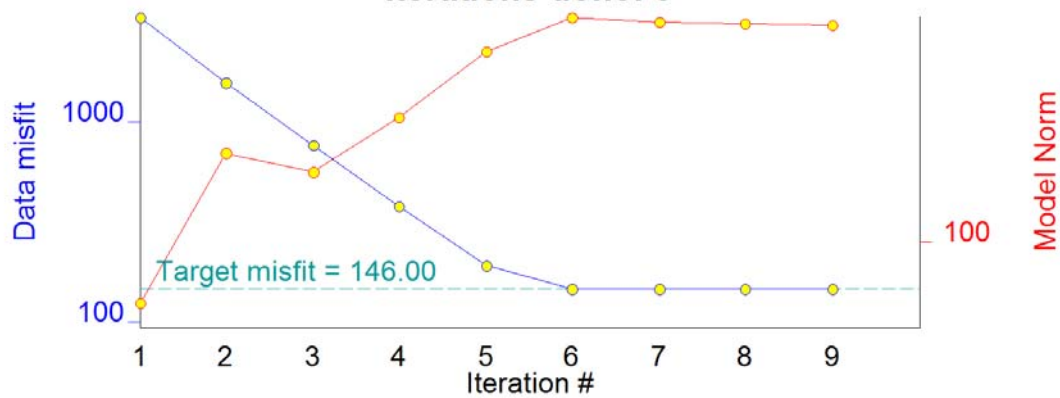
Predicted Data



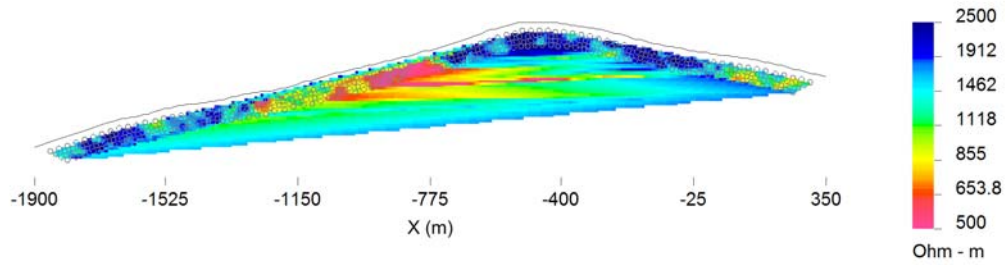
Chargeability Model



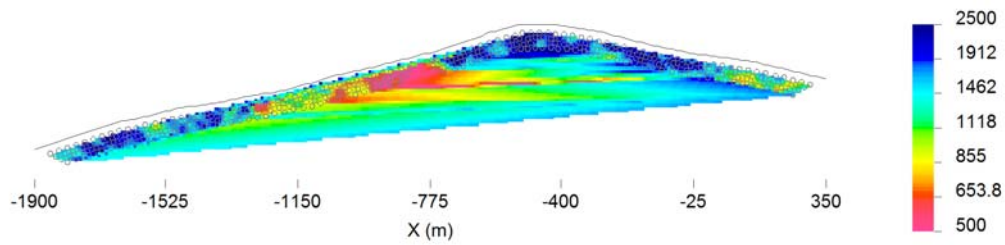
Iterations done: 9



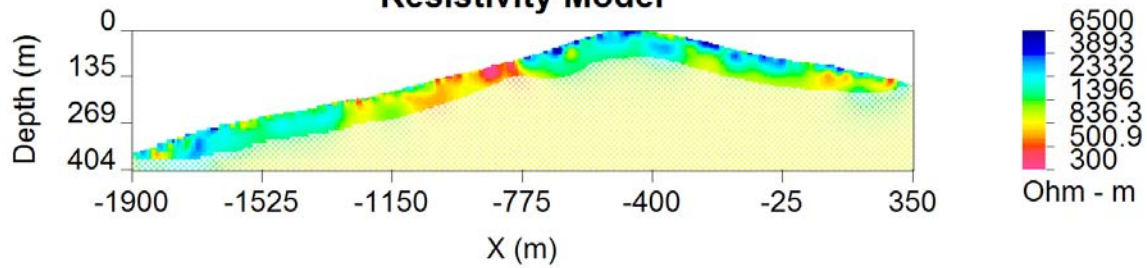
Eldorado: 1987 Lonestar; Line 3+60W : dipole-dipole : 336 data
Observed Apparent Resistivity



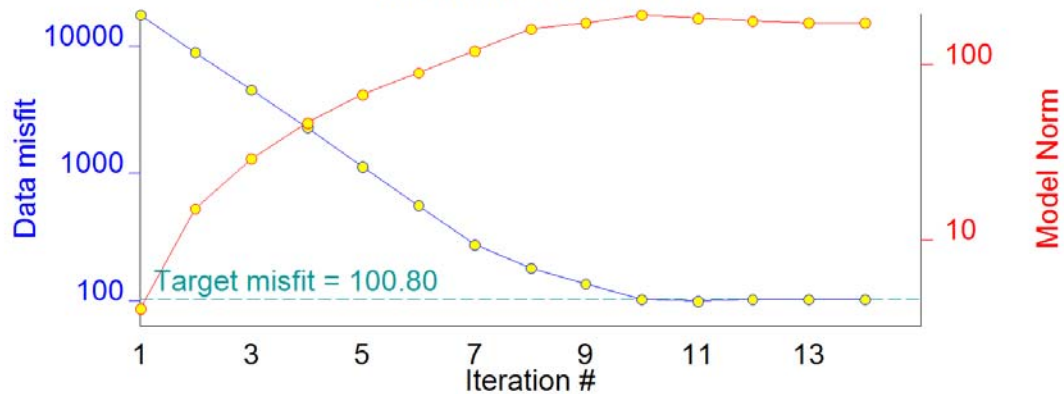
Predicted Data



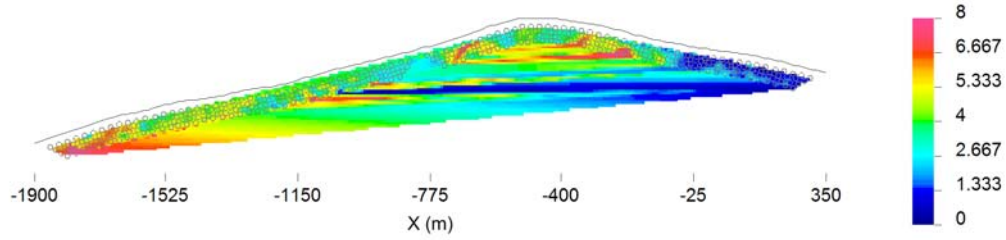
Resistivity Model



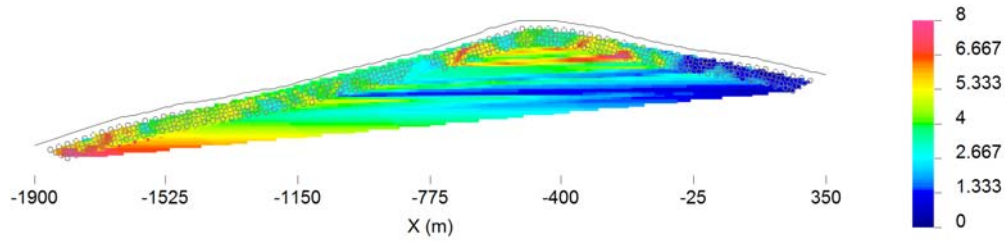
Iterations done: 14



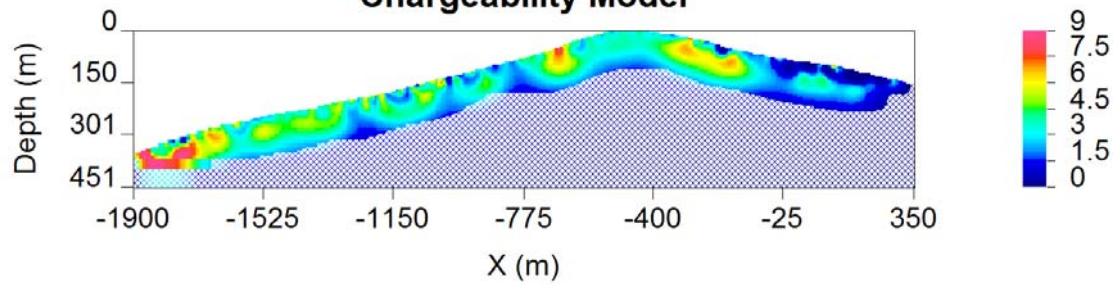
Eldorado: 1987 Lonestar; Line 3+60W : dipole-dipole : 336 data
Observed Apparent Chargeability



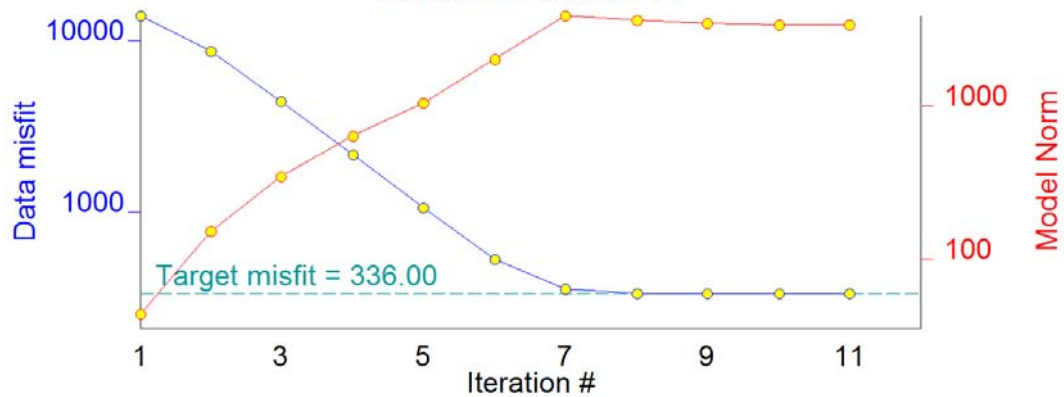
Predicted Data



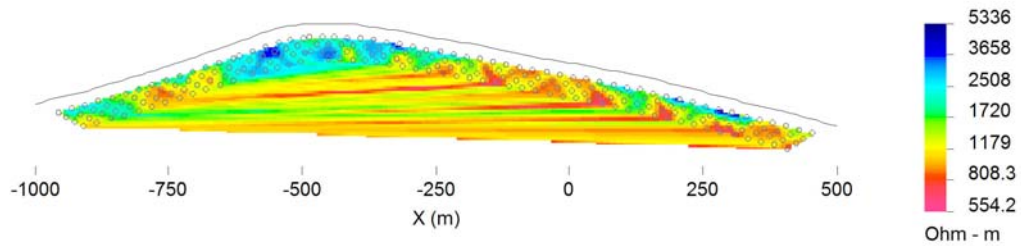
Chargeability Model



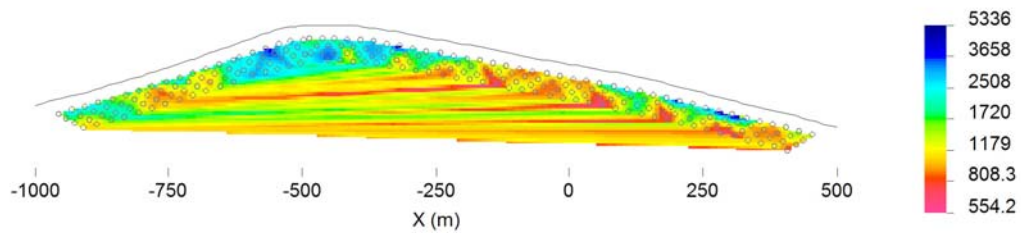
Iterations done: 11



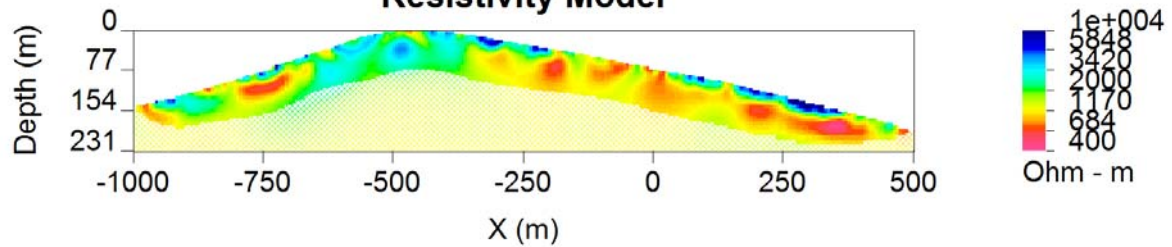
Eldorado: 1987 Lonestar; Line 2+40W : dipole-dipole : 225 data
Observed Apparent Resistivity



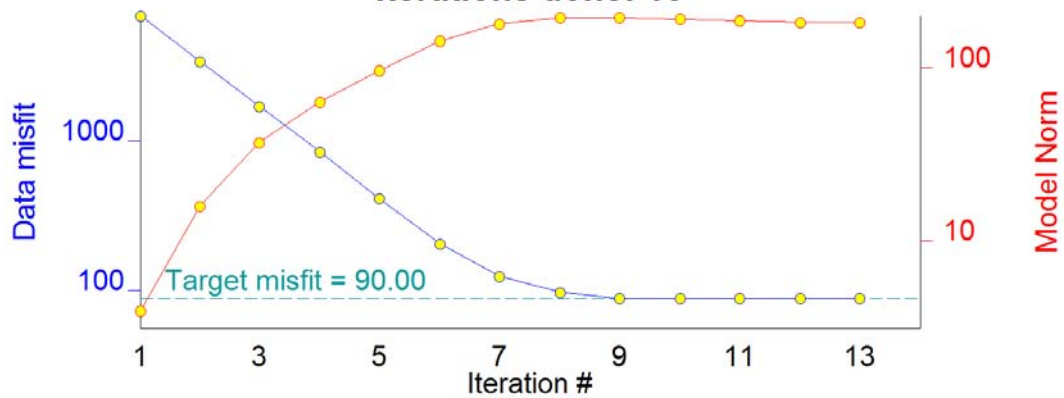
Predicted Data



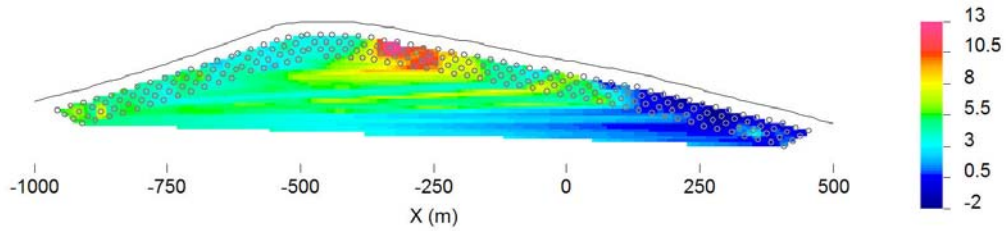
Resistivity Model



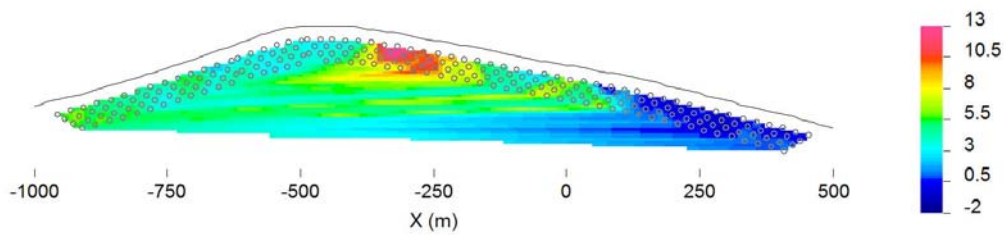
Iterations done: 13



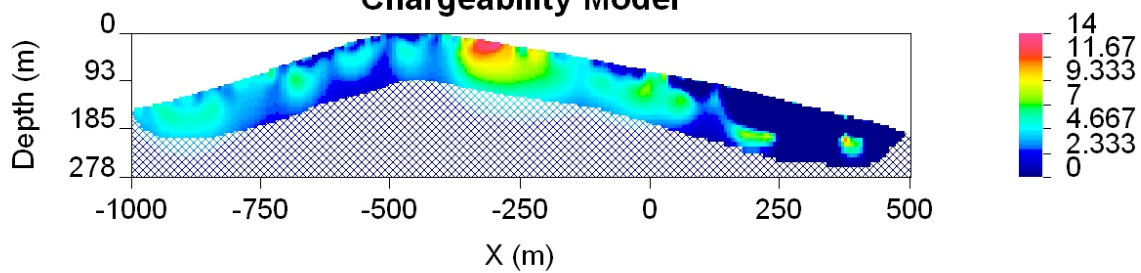
Eldorado: 1987 Lonestar; Line 2+40W : dipole-dipole : 225 data
Observed Apparent Chargeability



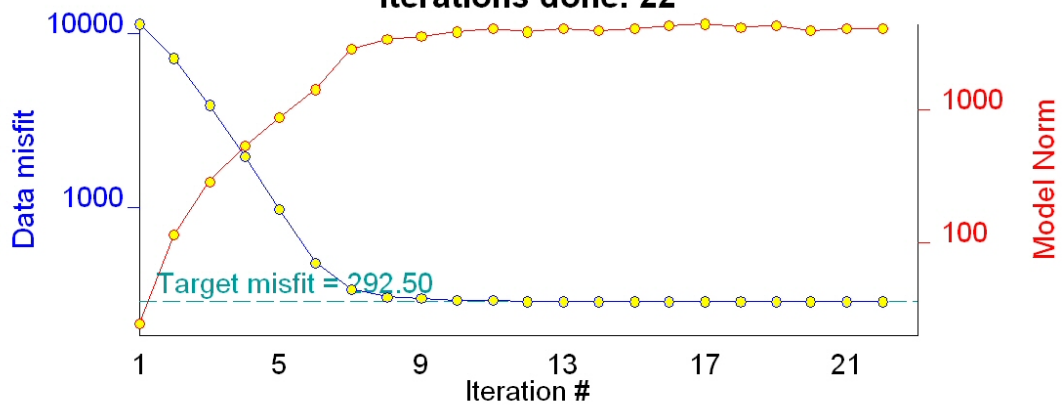
Predicted Data



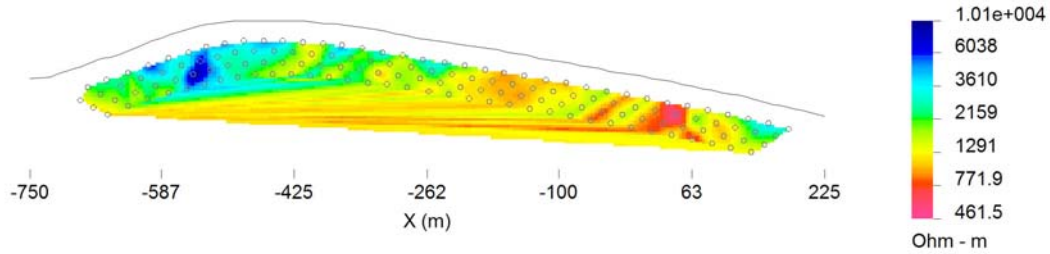
Chargeability Model



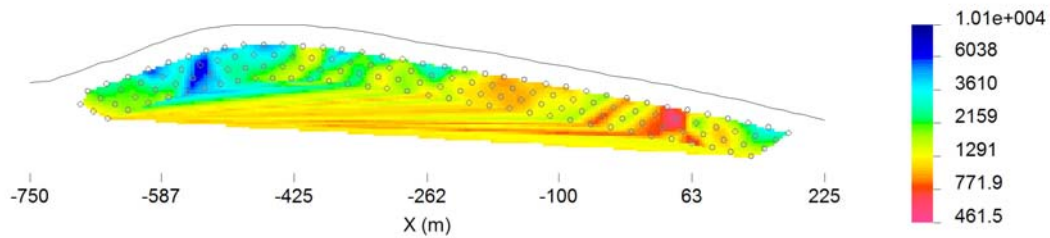
Iterations done: 22



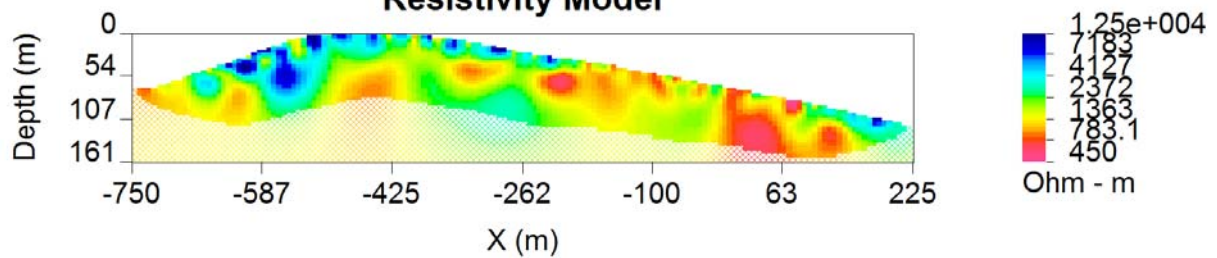
Eldorado: 1987 Lonestar; Line 1+80W : dipole-dipole : 141 data
Observed Apparent Resistivity



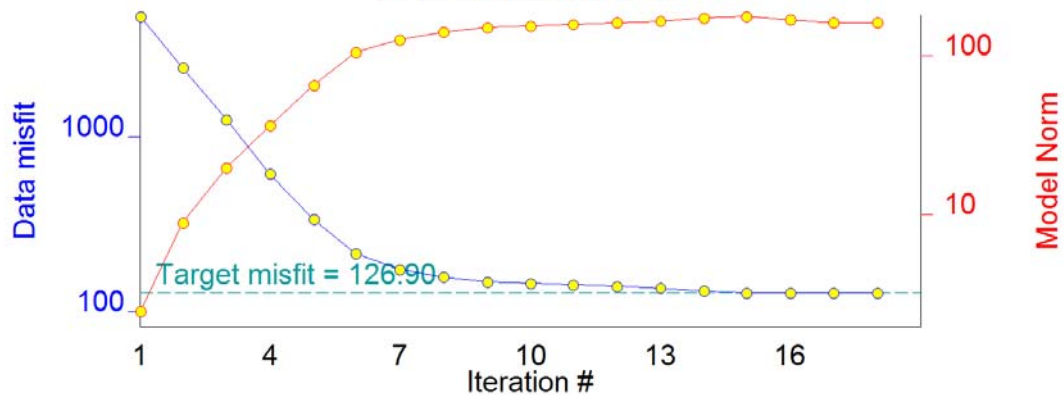
Predicted Data



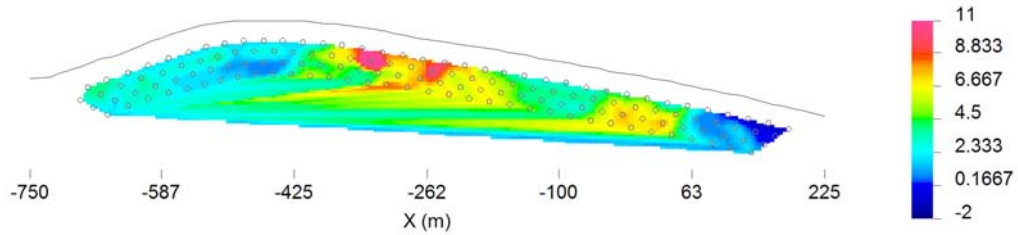
Resistivity Model



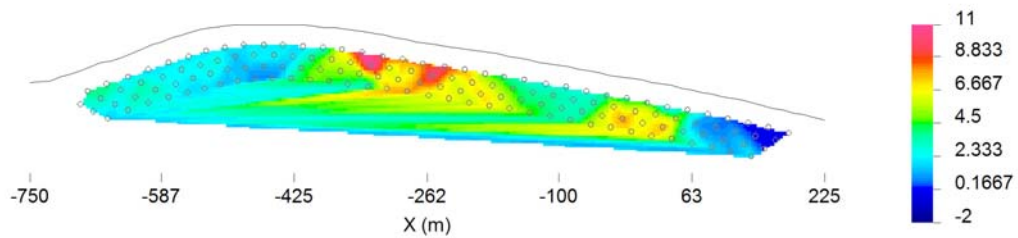
Iterations done: 18



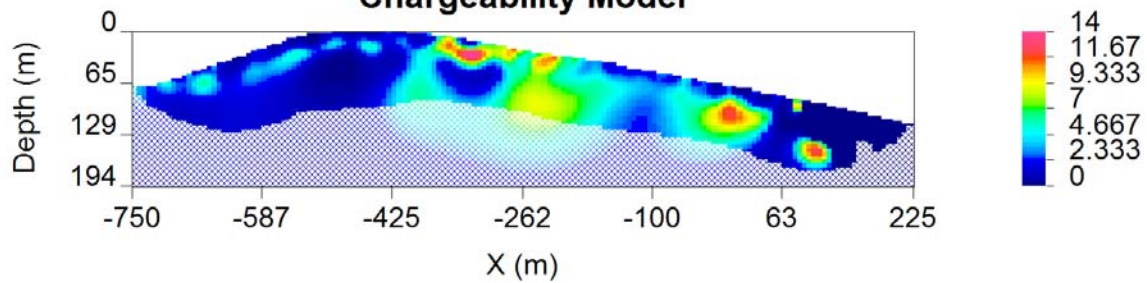
Eldorado: 1987 Lonestar; Line 1+80W : dipole-dipole : 141 data
Observed Apparent Chargeability



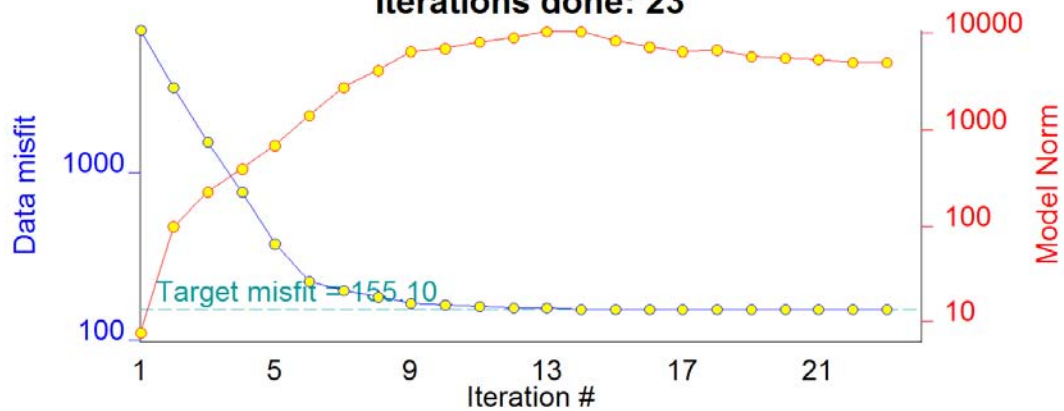
Predicted Data



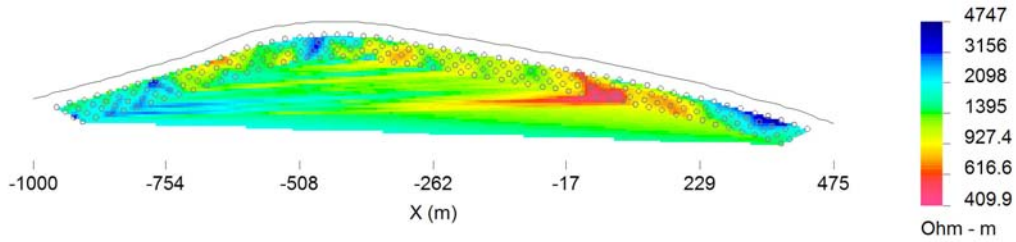
Chargeability Model



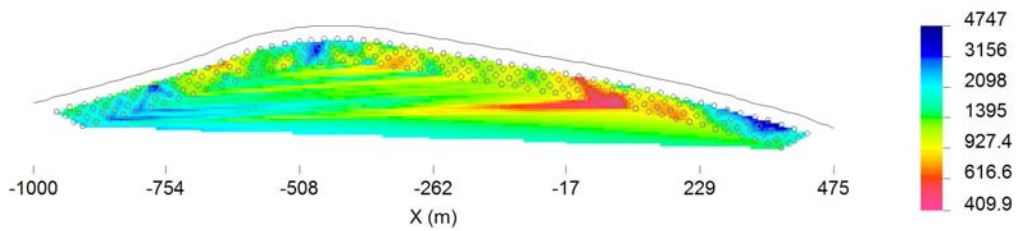
Iterations done: 23



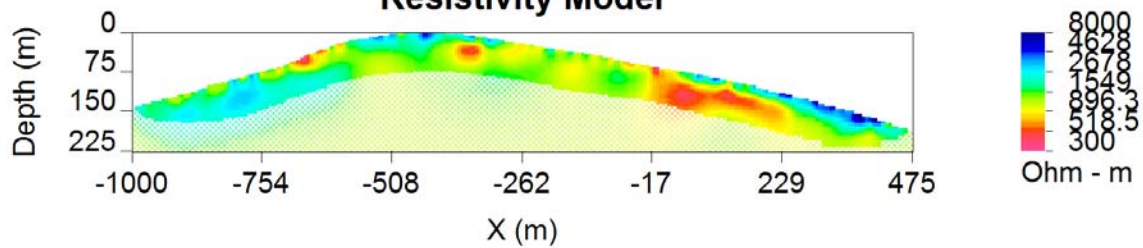
Eldorado: 1987 Lonestar; Line 1+20W : dipole-dipole : 222 data
Observed Apparent Resistivity



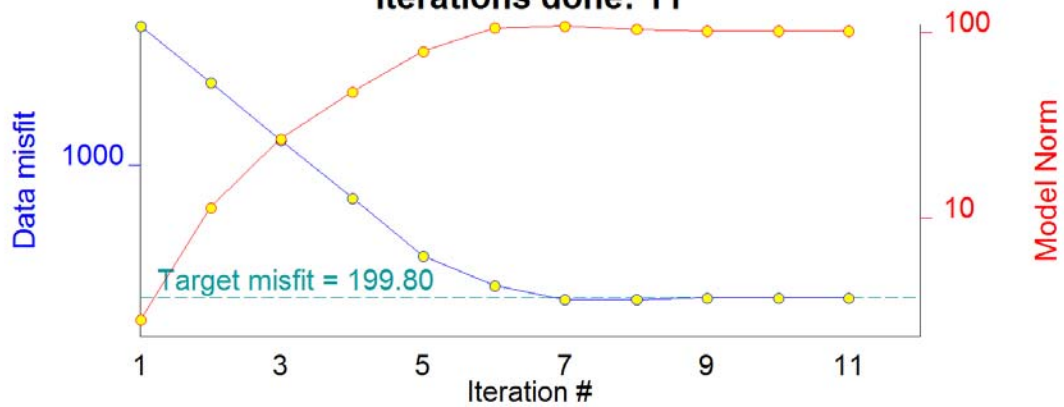
Predicted Data



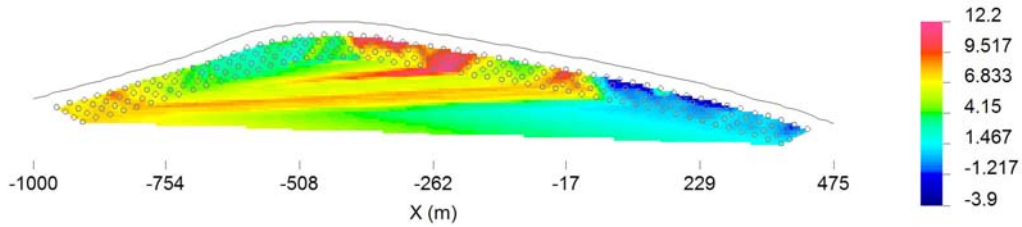
Resistivity Model



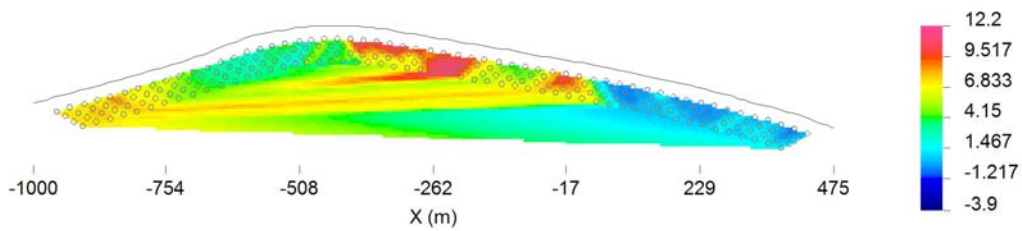
Iterations done: 11



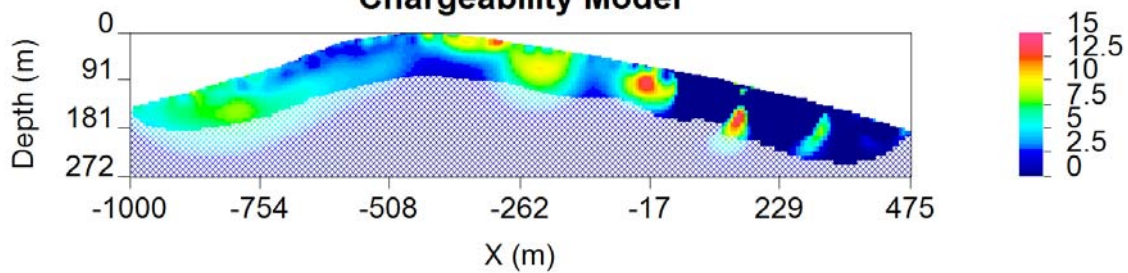
Eldorado: 1987 Lonestar; Line 1+20W : dipole-dipole : 222 data
Observed Apparent Chargeability



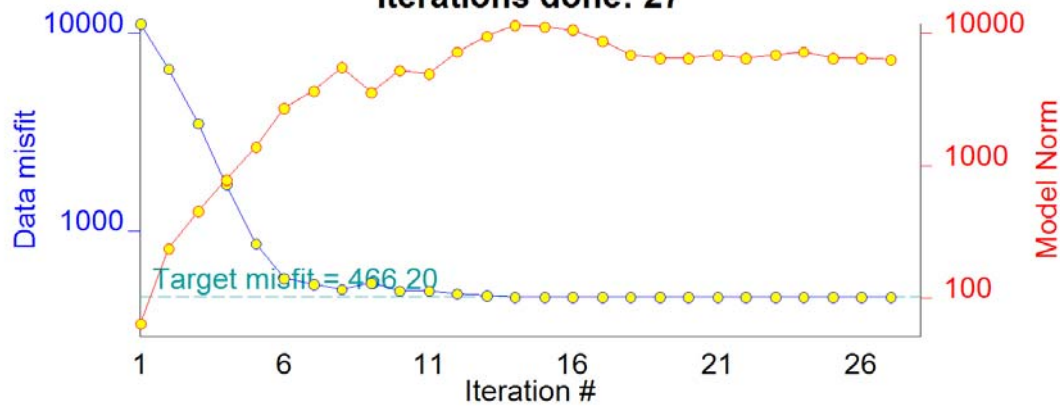
Predicted Data



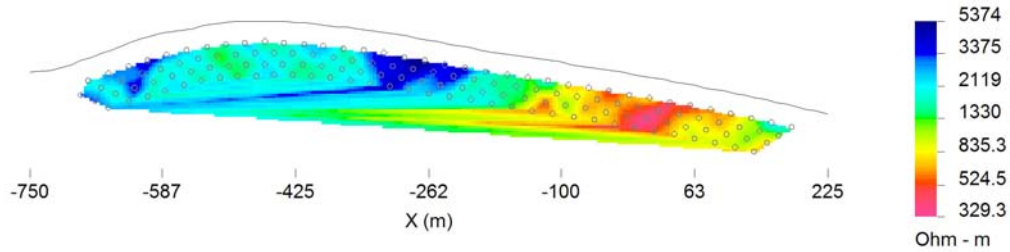
Chargeability Model



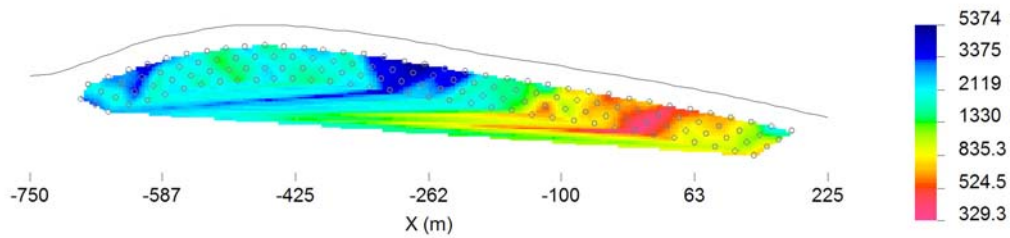
Iterations done: 27



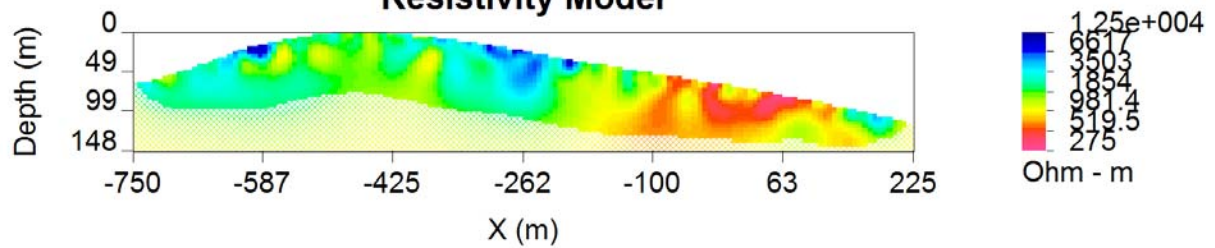
Eldorado: 1987 Lonestar; Line 0+60W : dipole-dipole : 141 data
Observed Apparent Resistivity



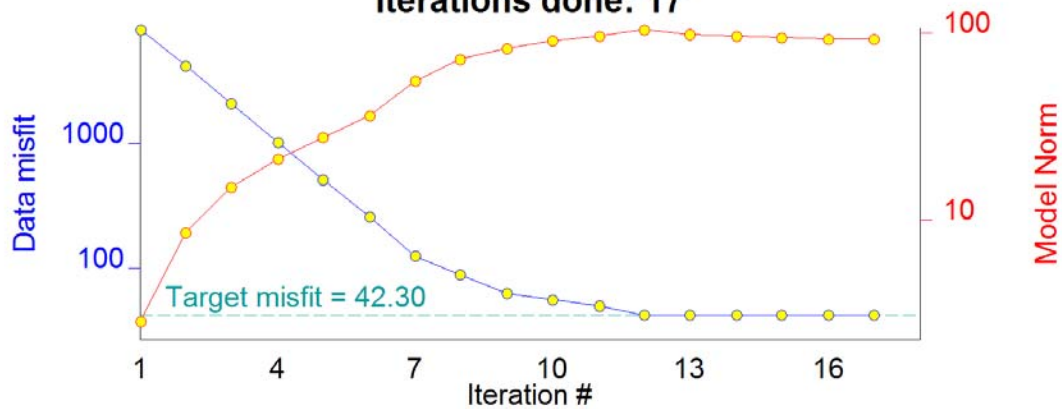
Predicted Data



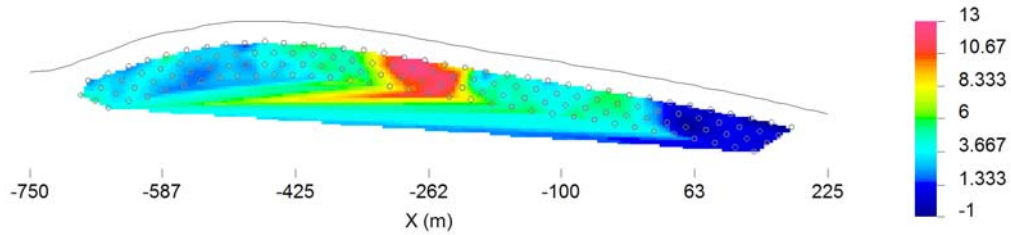
Resistivity Model



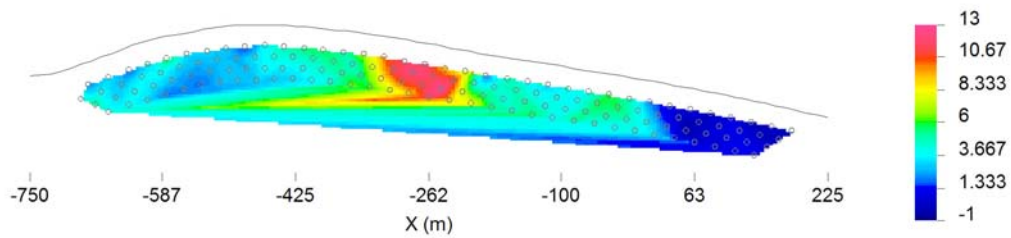
Iterations done: 17



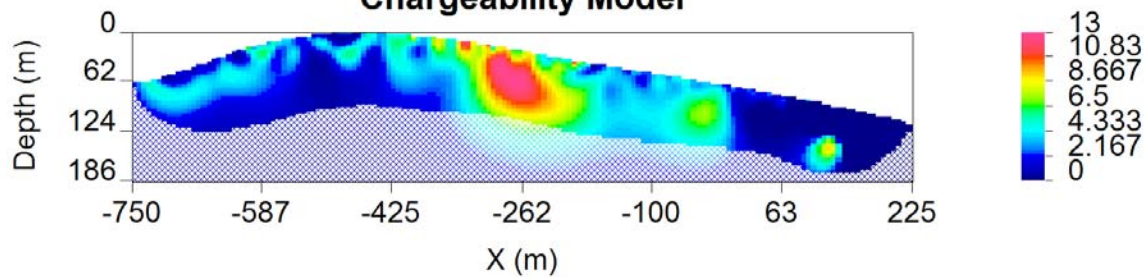
Eldorado: 1987 Lonestar; Line 0+60W : dipole-dipole : 141 data
Observed Apparent Chargeability



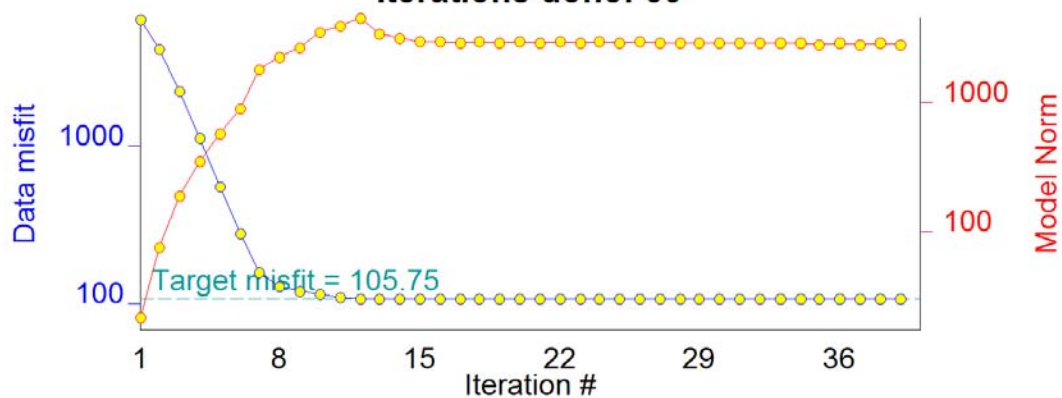
Predicted Data



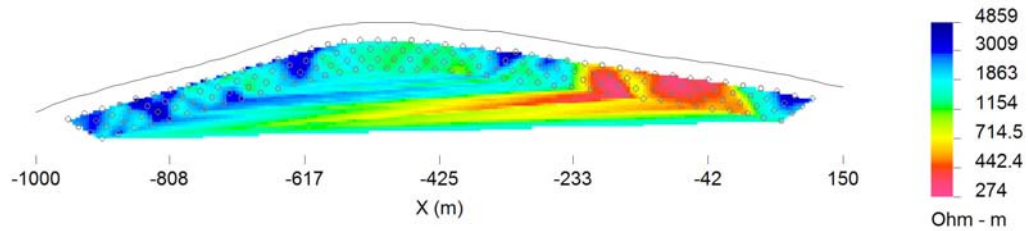
Chargeability Model



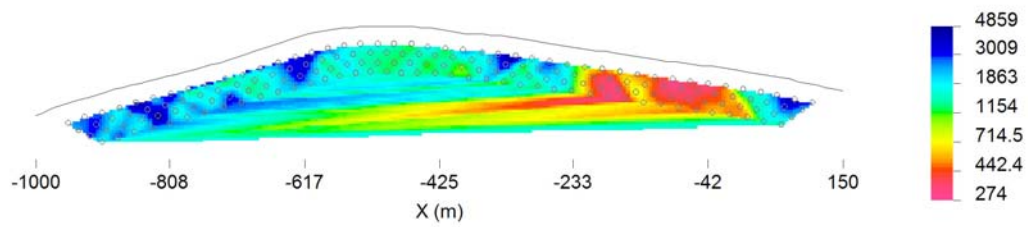
Iterations done: 39



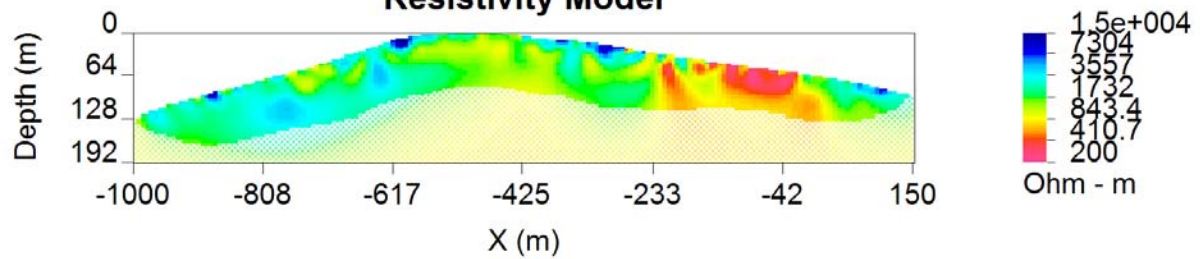
Eldorado: 1987 Lonestar; Line 0+00 : dipole-dipole : 170 data
Observed Apparent Resistivity



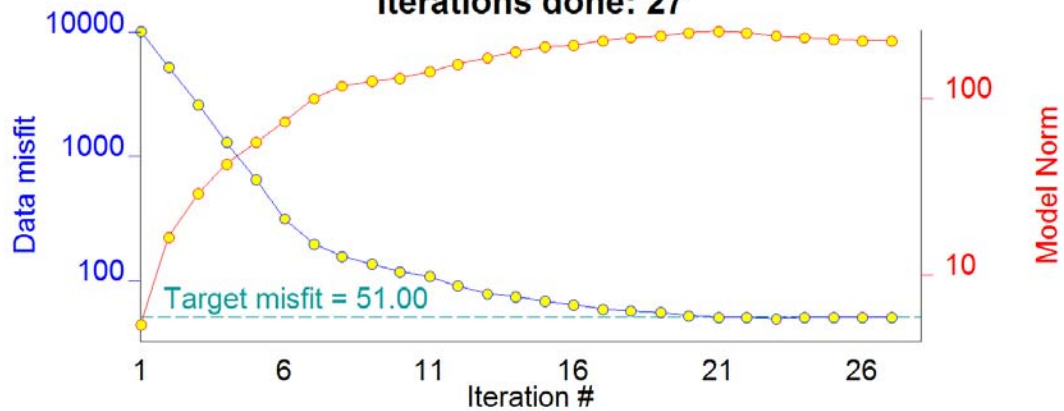
Predicted Data



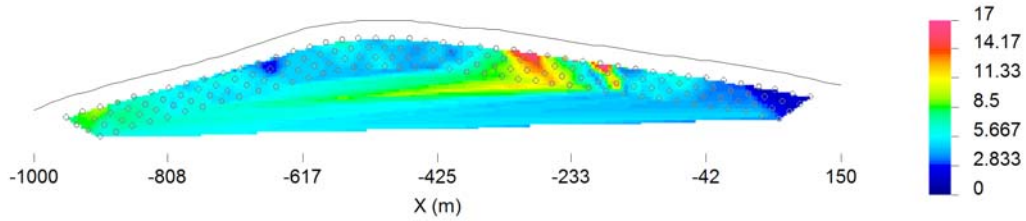
Resistivity Model



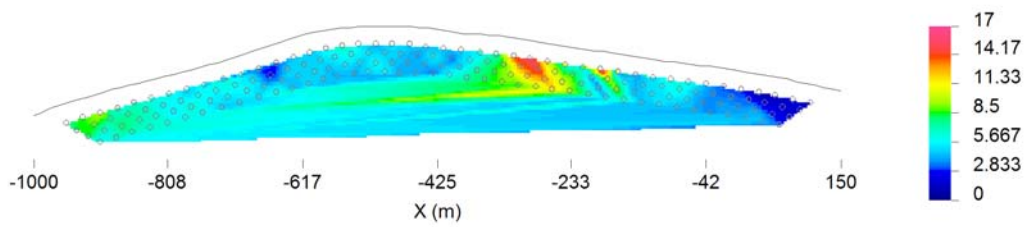
Iterations done: 27



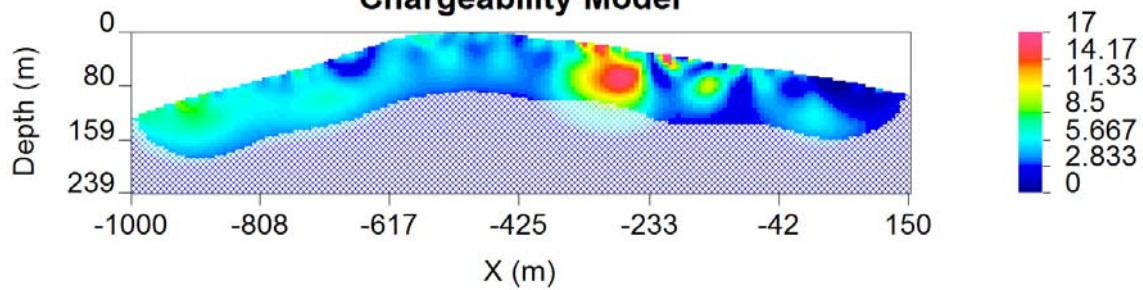
Eldorado: 1987 Lonestar; Line 0+00 : dipole-dipole : 170 data
Observed Apparent Chargeability



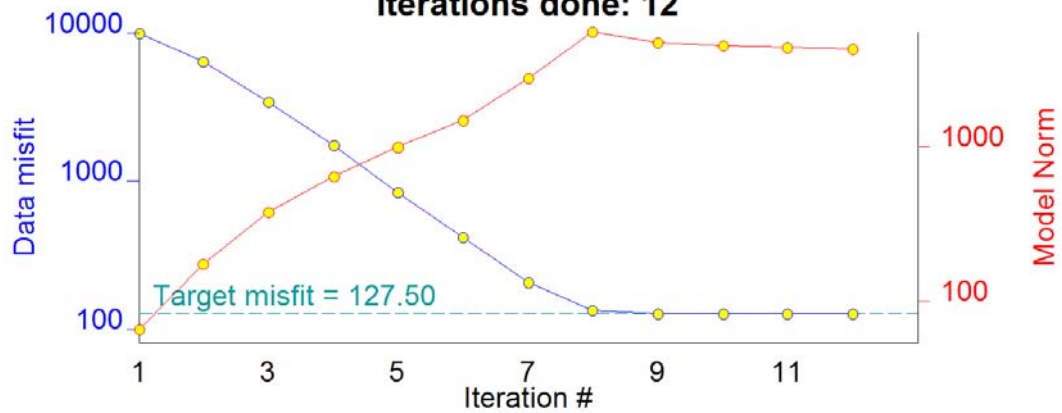
Predicted Data



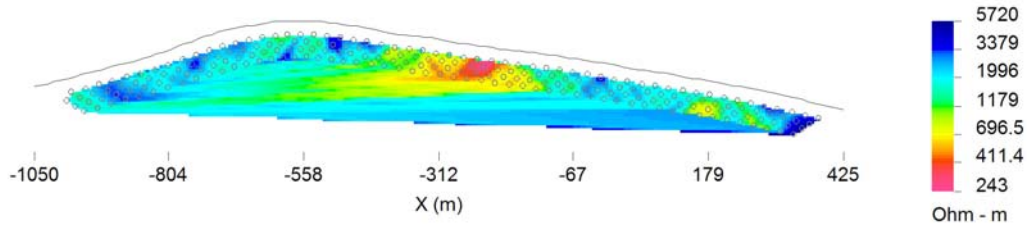
Chargeability Model



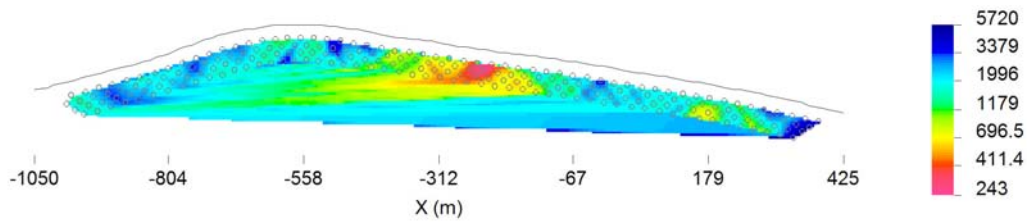
Iterations done: 12



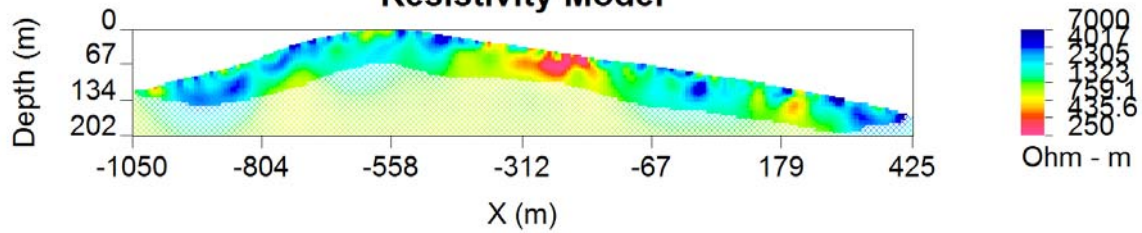
Eldorado: 1987 Lonestar; Line 1+20E : dipole-dipole : 221 data
Observed Apparent Resistivity



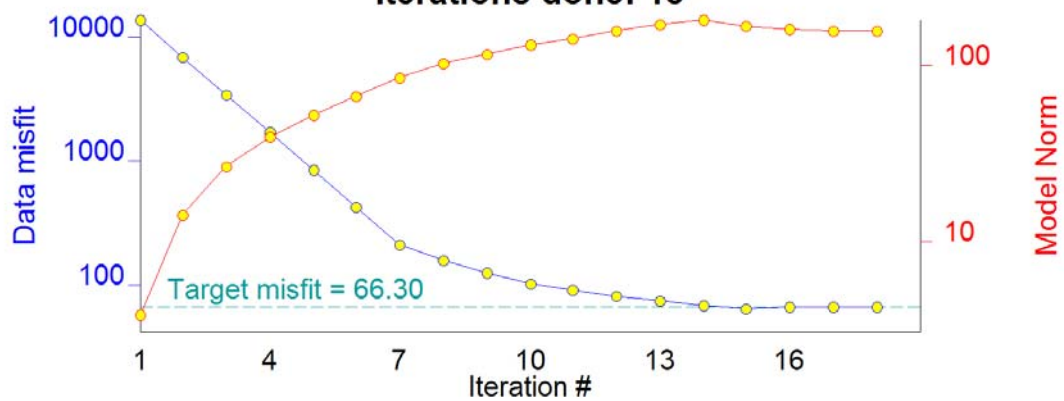
Predicted Data



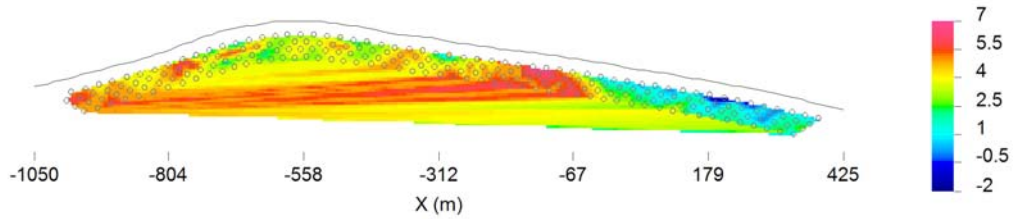
Resistivity Model



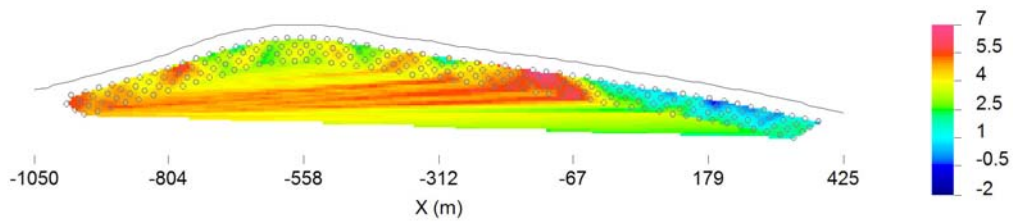
Iterations done: 18



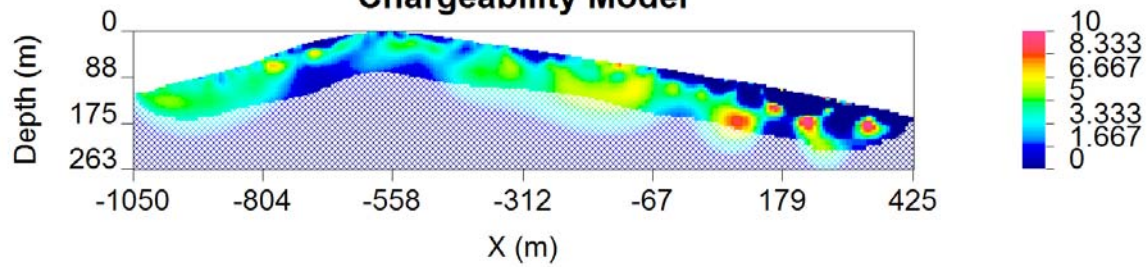
Eldorado: 1987 Lonestar; Line 1+20E : dipole-dipole : 221 data
Observed Apparent Chargeability



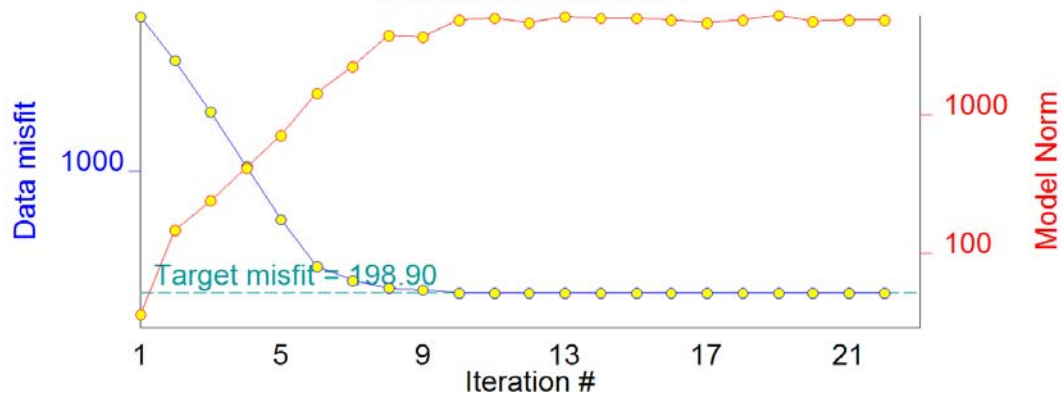
Predicted Data



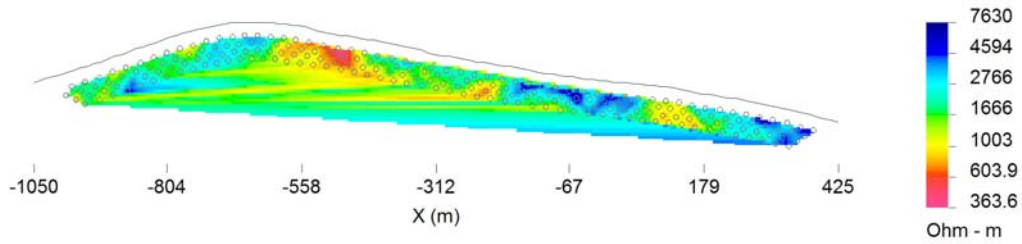
Chargeability Model



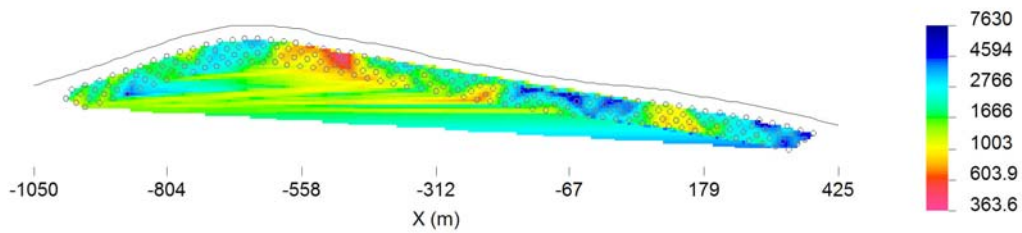
Iterations done: 22



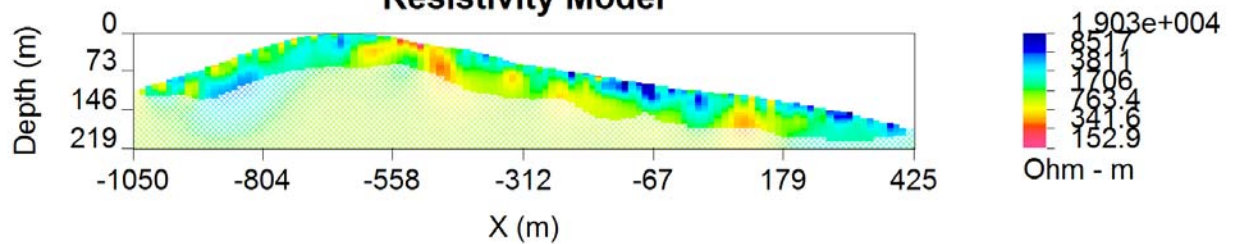
Eldorado: 1987 Lonestar; Line 2+40E : dipole-dipole : 221 data
Observed Apparent Resistivity



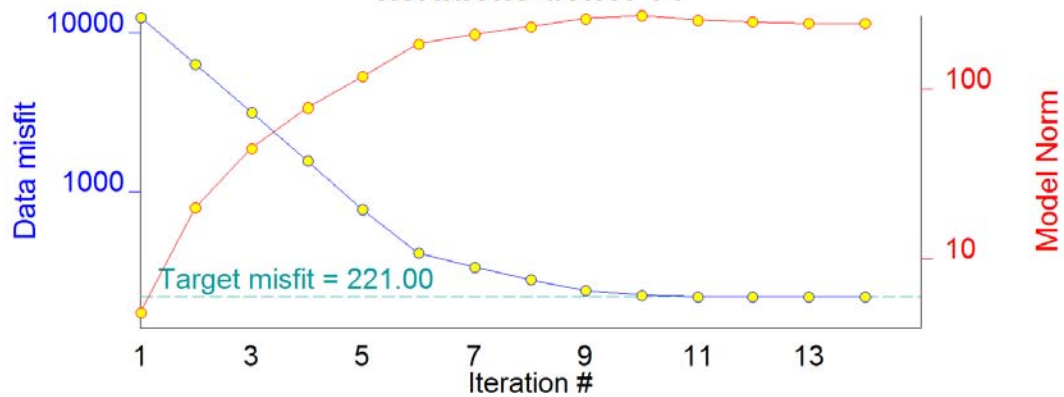
Predicted Data



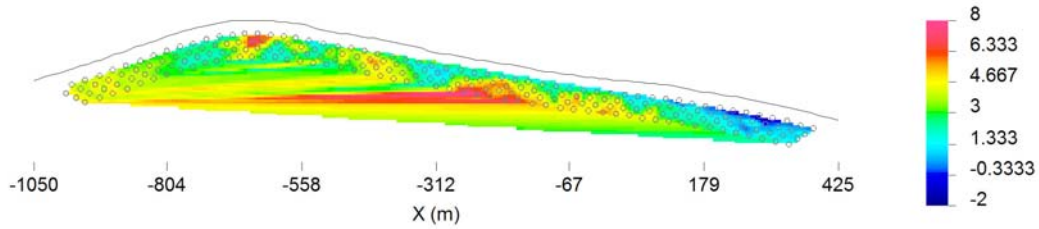
Resistivity Model



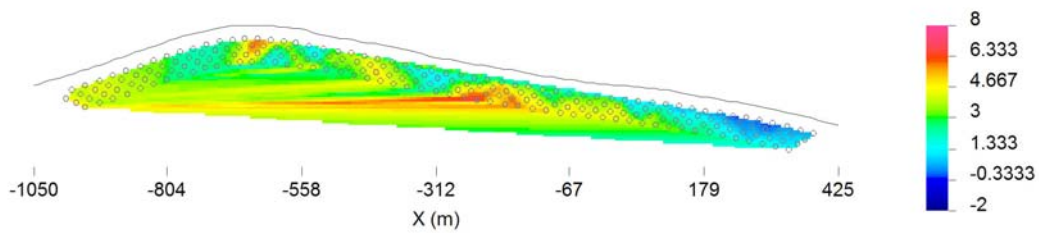
Iterations done: 14



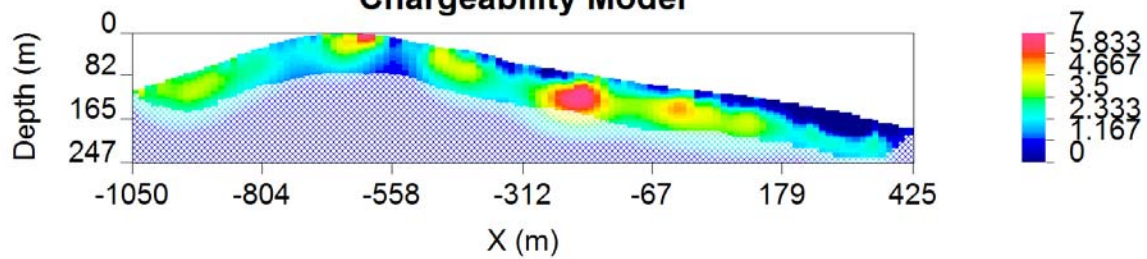
Eldorado: 1987 Lonestar; Line 2+40E : dipole-dipole : 221 data
Observed Apparent Chargeability



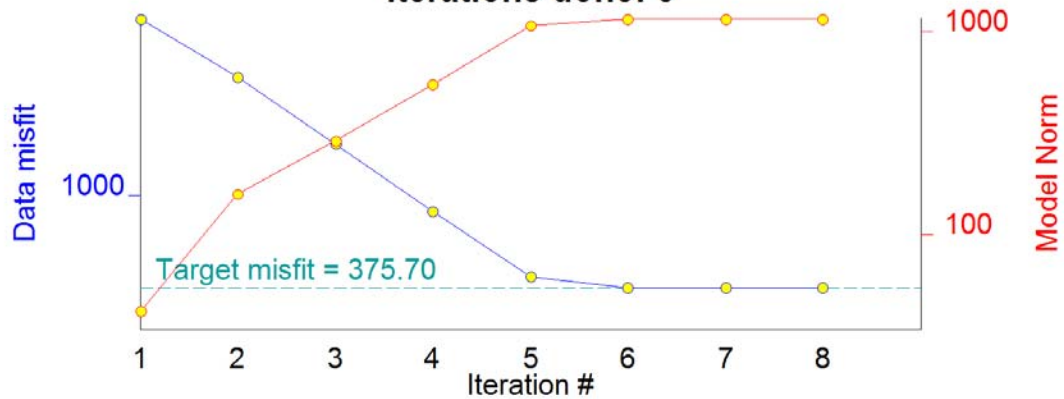
Predicted Data



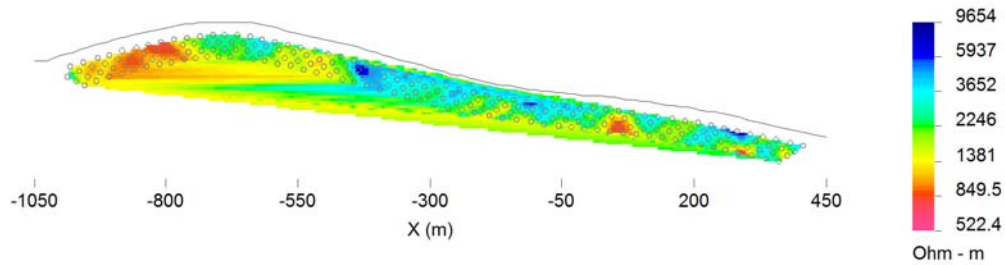
Chargeability Model



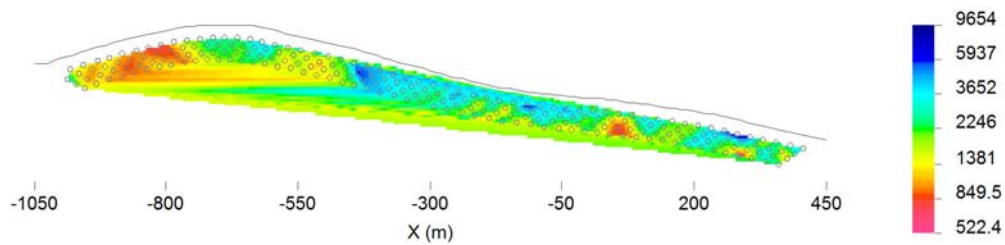
Iterations done: 8



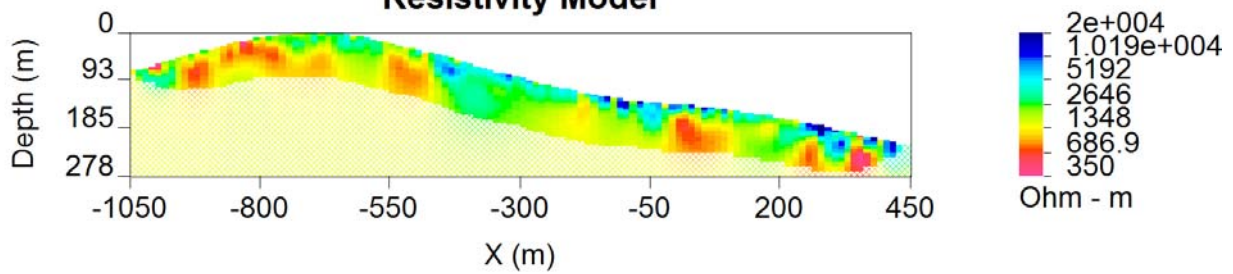
Eldorado: 1987 Lonestar; Line 3+60E : dipole-dipole : 225 data
Observed Apparent Resistivity



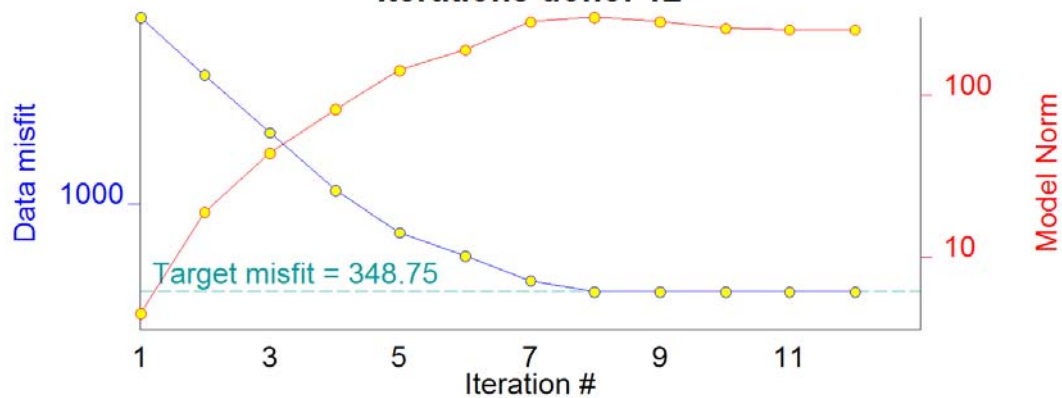
Predicted Data



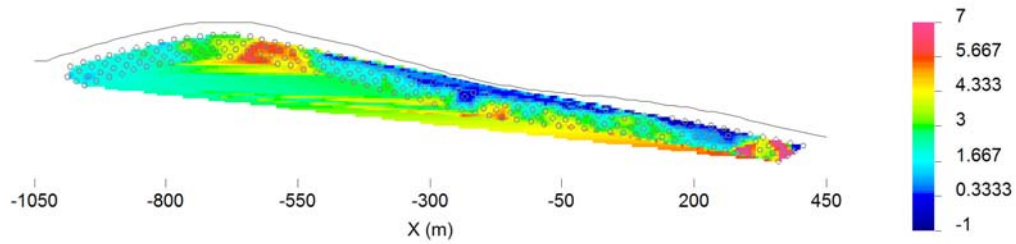
Resistivity Model



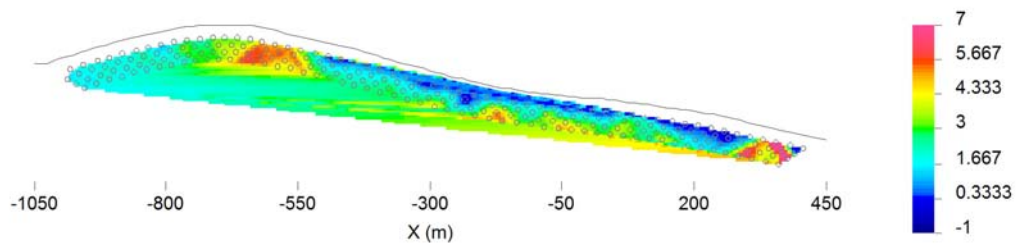
Iterations done: 12



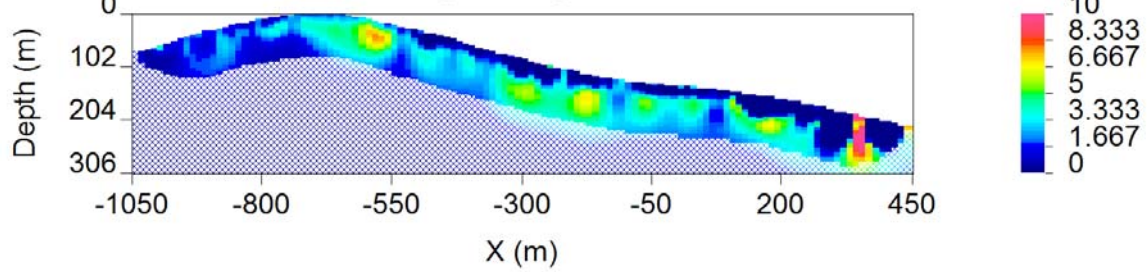
Eldorado: 1987 Lonestar; Line 3+60E : dipole-dipole : 225 data
Observed Apparent Chargeability



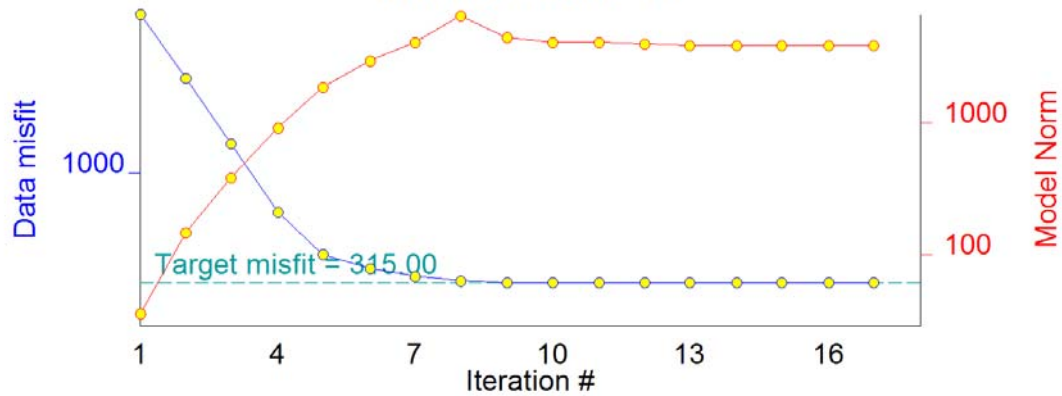
Predicted Data



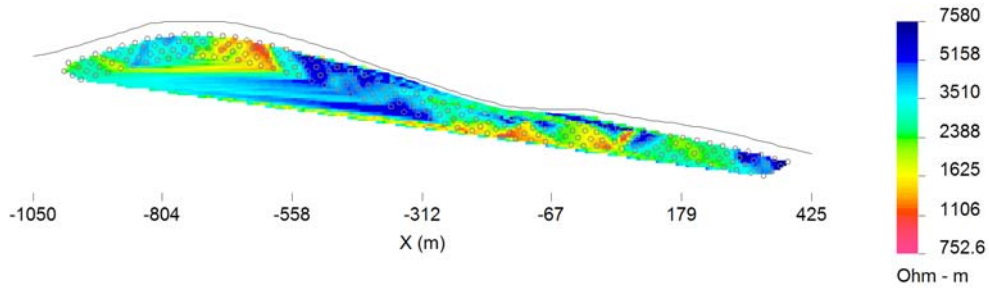
Chargeability Model



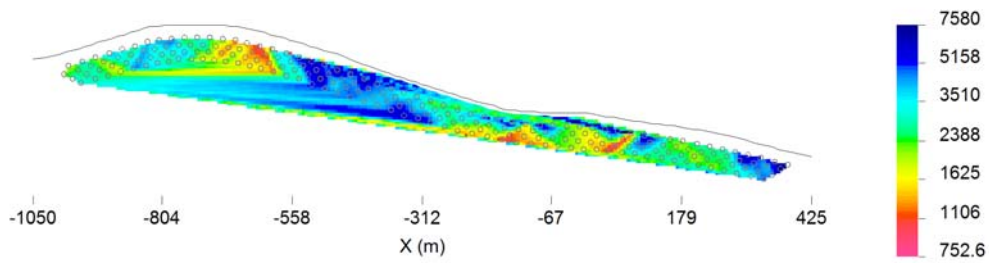
Iterations done: 17



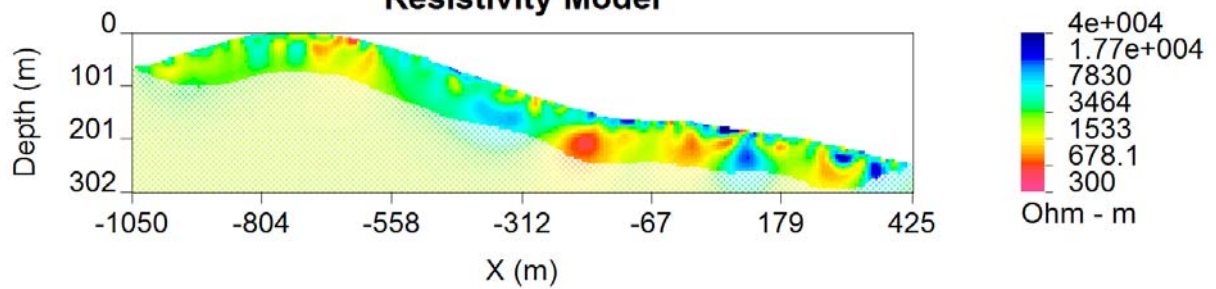
Eldorado: 1987 Lonestar; Line 4+80E : dipole-dipole : 221 data
Observed Apparent Resistivity



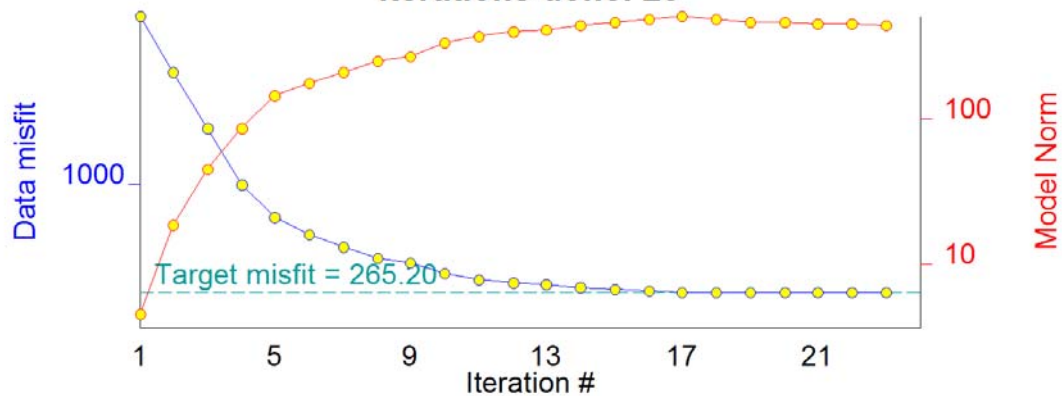
Predicted Data



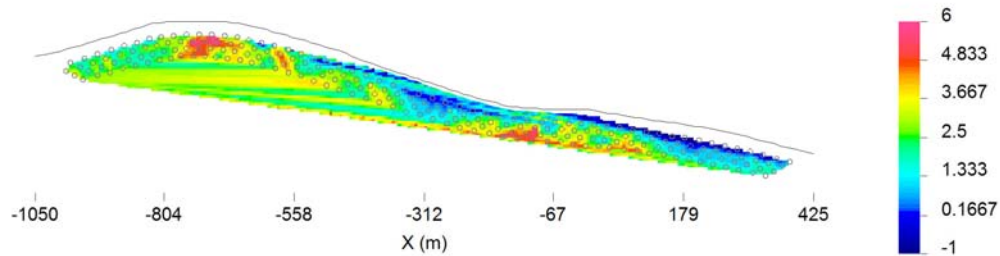
Resistivity Model



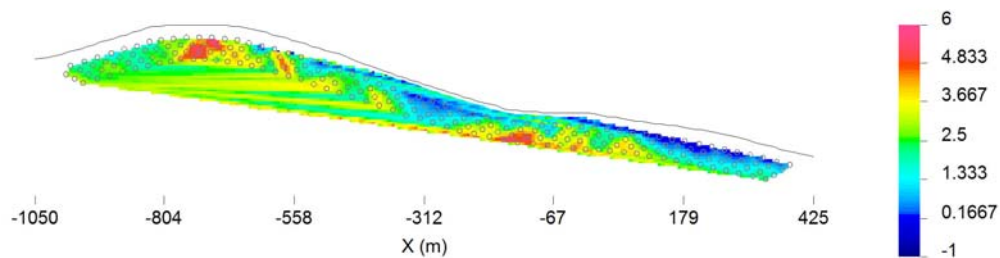
Iterations done: 23



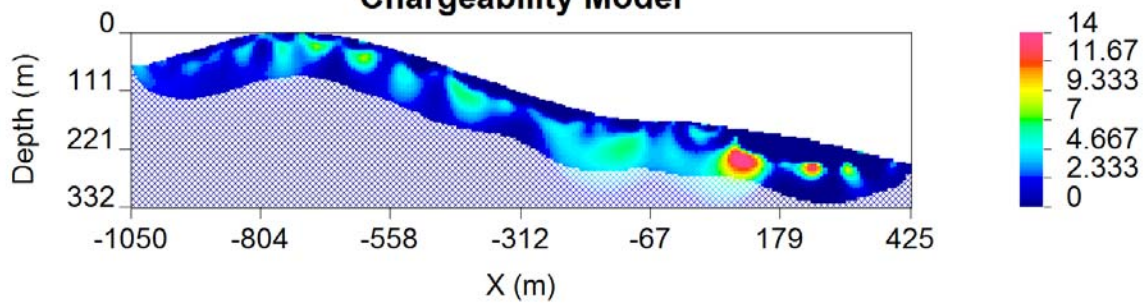
Eldorado: 1987 Lonestar; Line 4+80E : dipole-dipole : 221 data
Observed Apparent Chargeability



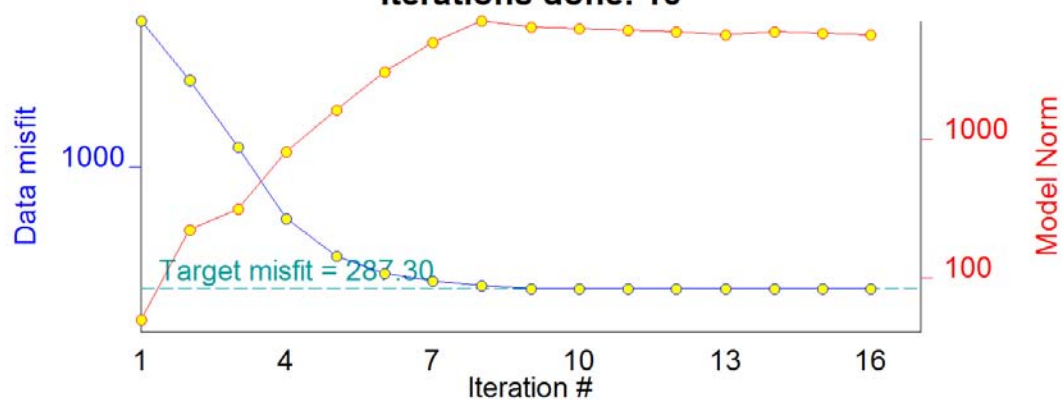
Predicted Data



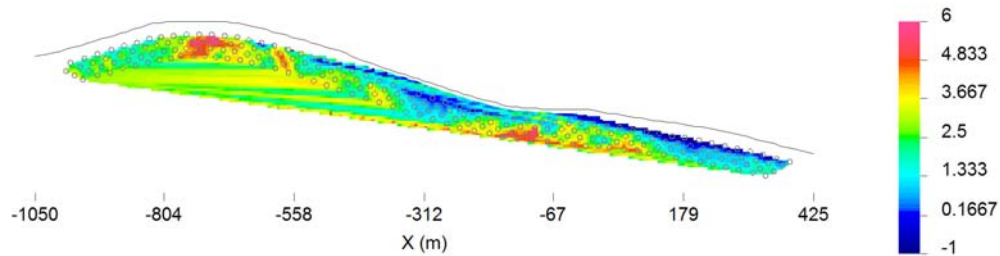
Chargeability Model



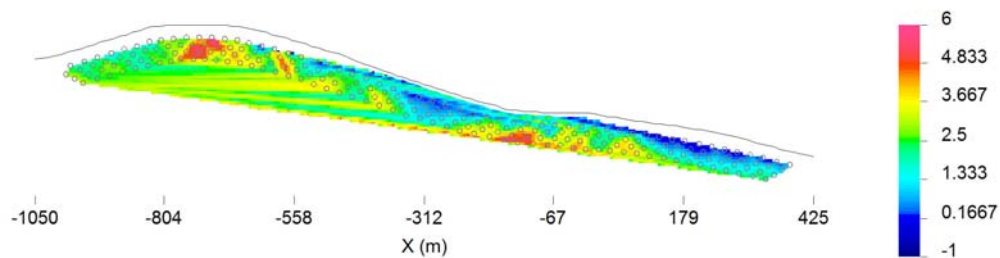
Iterations done: 16



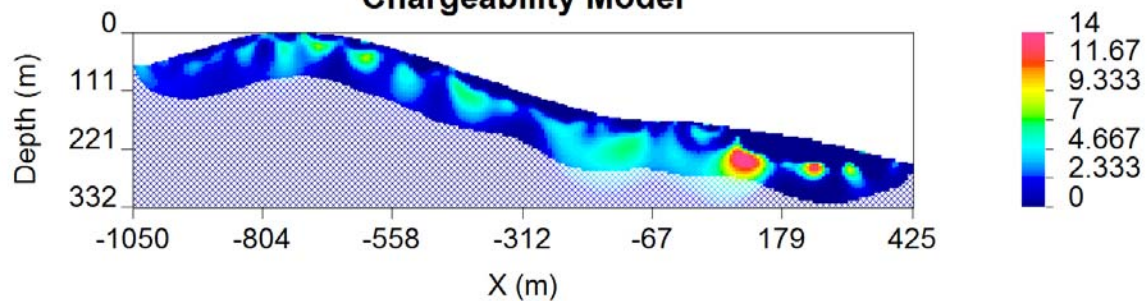
Eldorado: 1987 Lonestar; Line 4+80E : dipole-dipole : 221 data
Observed Apparent Chargeability



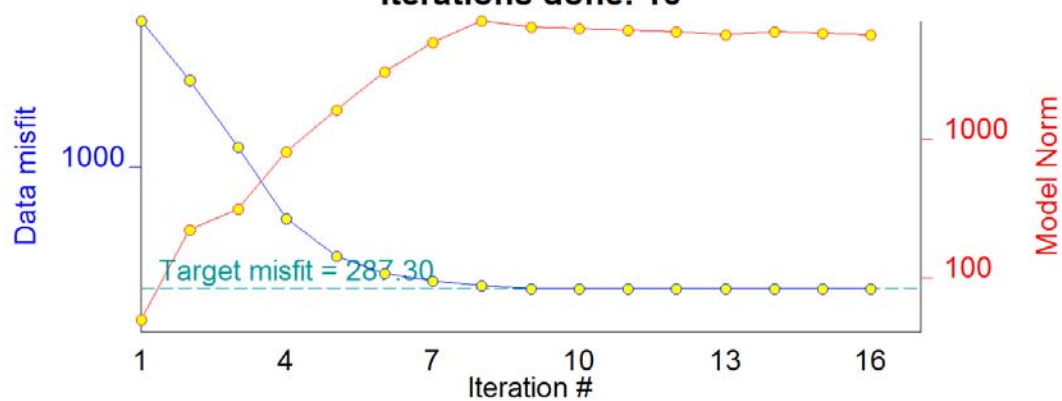
Predicted Data



Chargeability Model

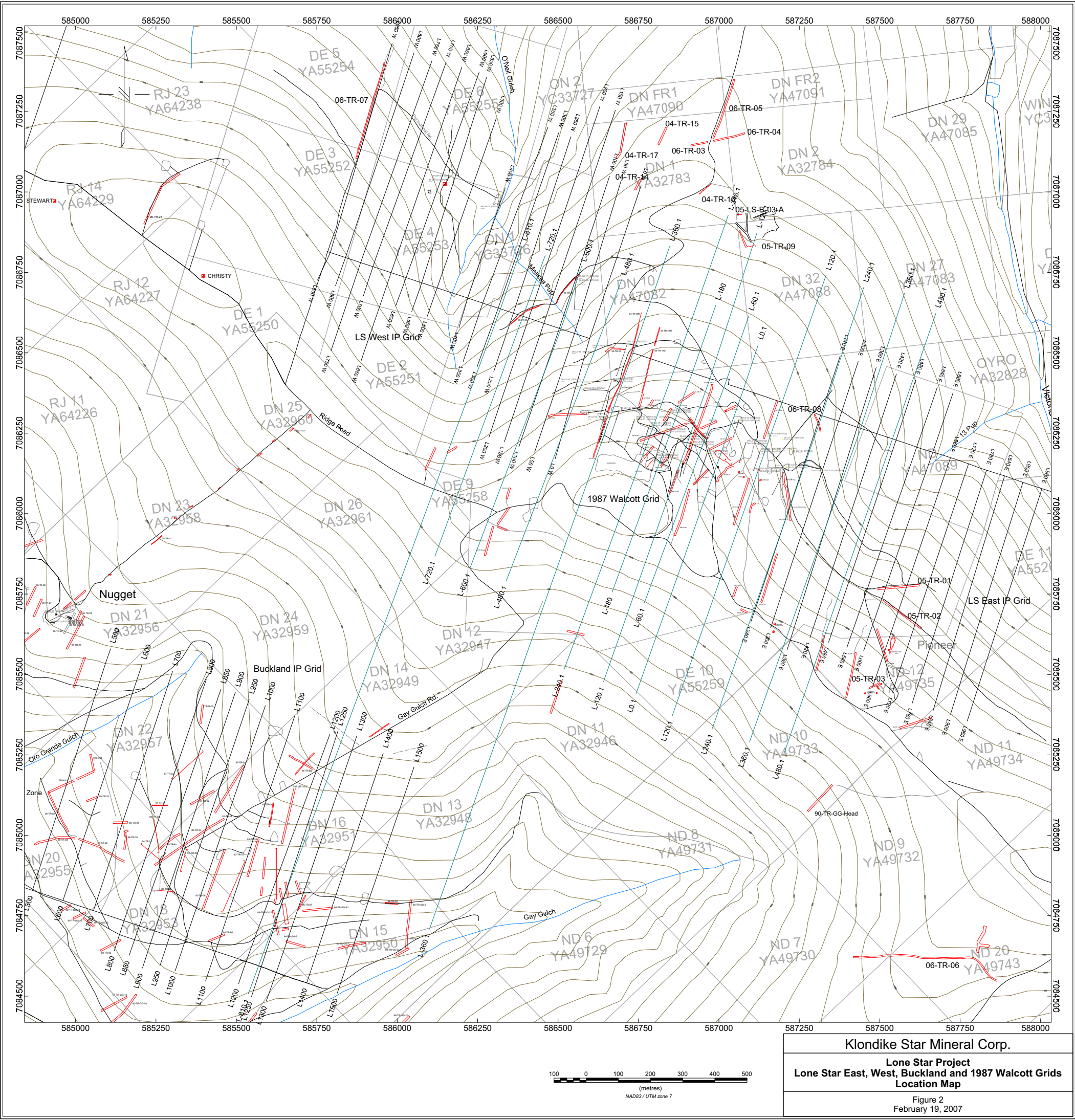


Iterations done: 16



APPENDIX H

PAGE SIZED FIGURES FROM BACK POCKETS

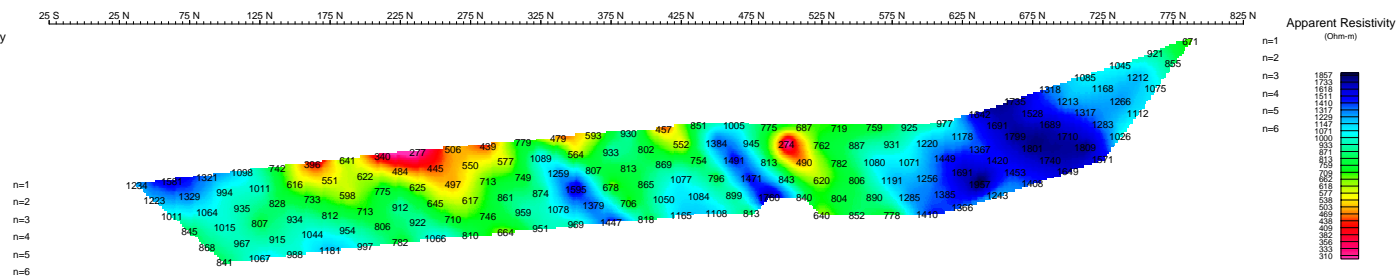


Klondike Star Mineral Corp.

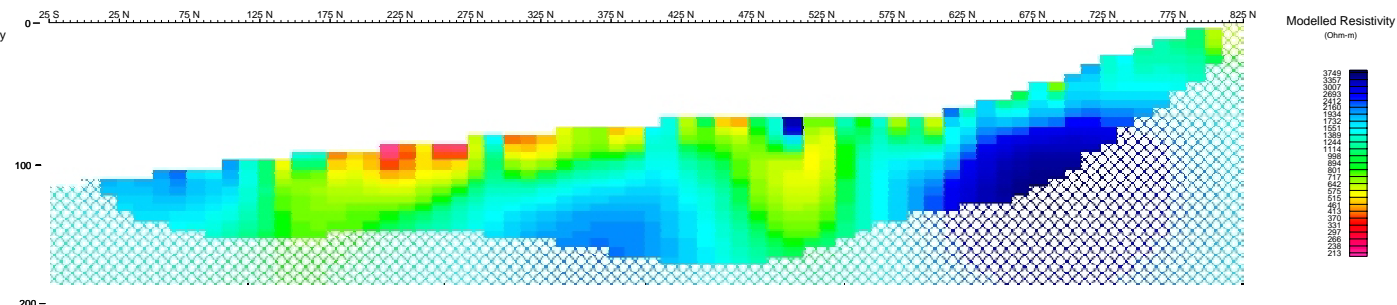
Lone Star Project
Lone Star East, West, Buckland and 1987 Walcott Grids
Location Map

Figure 2
February 19, 2007

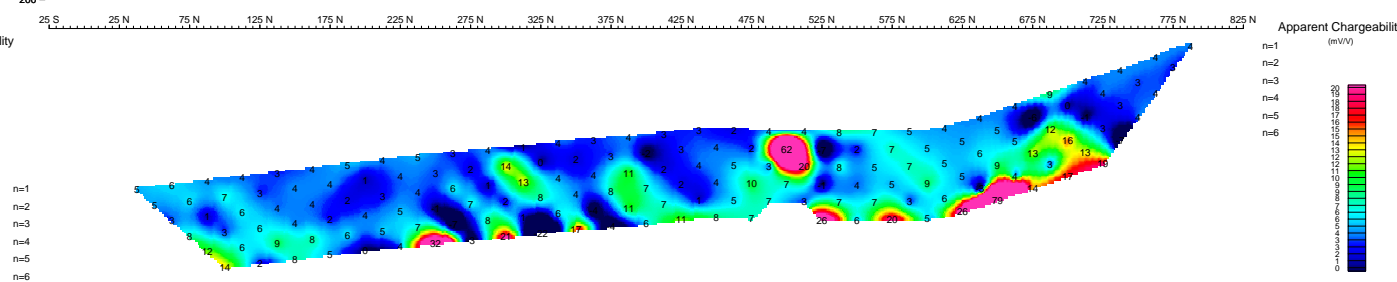
Apparent Resistivity
(Ohm-m)



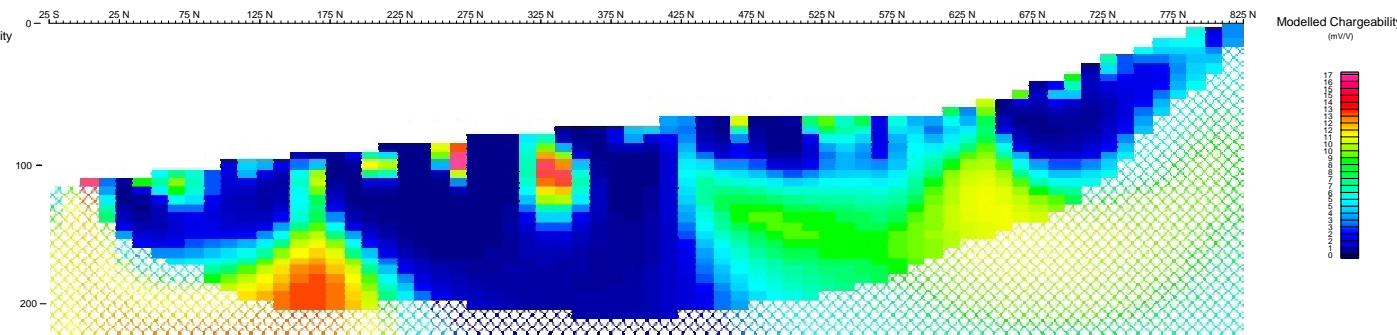
Modelled Resistivity
(Ohm-m)



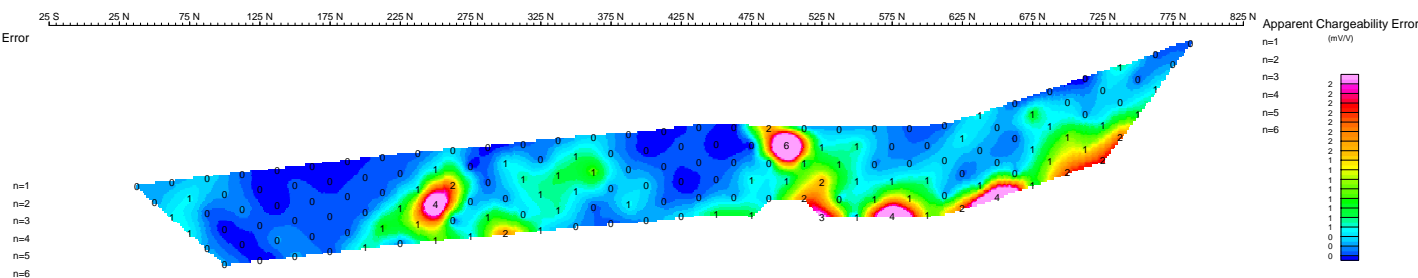
Apparent Chargeability
(mV/V)



Modelled Chargeability
(mV/V)

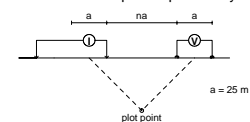


Apparent Chargeability Error
(mV/V)



COMPOSITE SECTION L500 E

Modified Dipole-Dipole Array



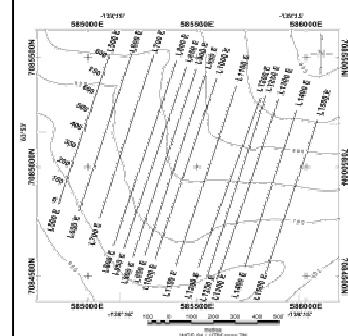
Stationary electrode at 825N (moving S).

Receiver: Iris ElrecPro

Transmitter: GDD Tx-II 3.6kW

Data File: Buckland 2006 IP.xyz

Dates Surveyed : Aug 22 to Sept 25, 2006



25 0 25 50 75 100 125 150
metres

Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, BUCKLAND GRID
COMPOSITE SECTION L500 E

NTS: 115 O/14

Datum: NAD 83

Job: KDS-06-02-YT

Drawn by: A. Lebel

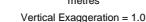
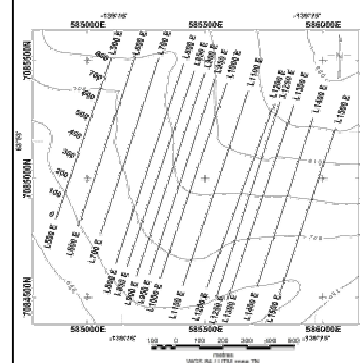
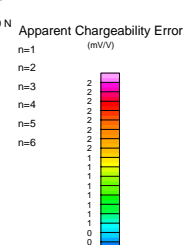
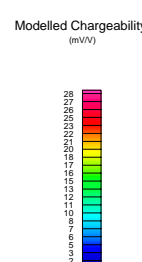
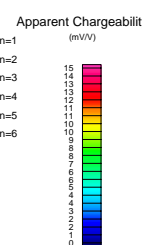
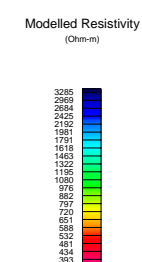
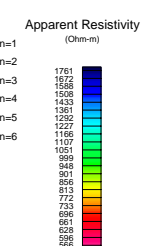
Mining District: Dawson

Projection: UTM Zone 7

Date: 19 Oct 06

Appendix E

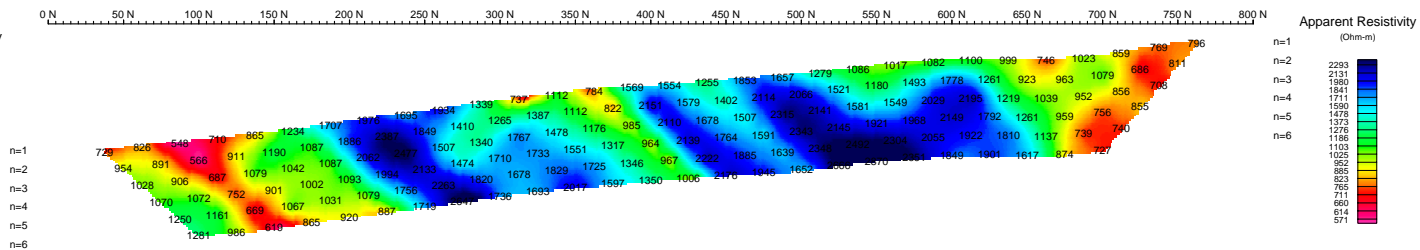
AURORA GEOSCIENCES LTD.



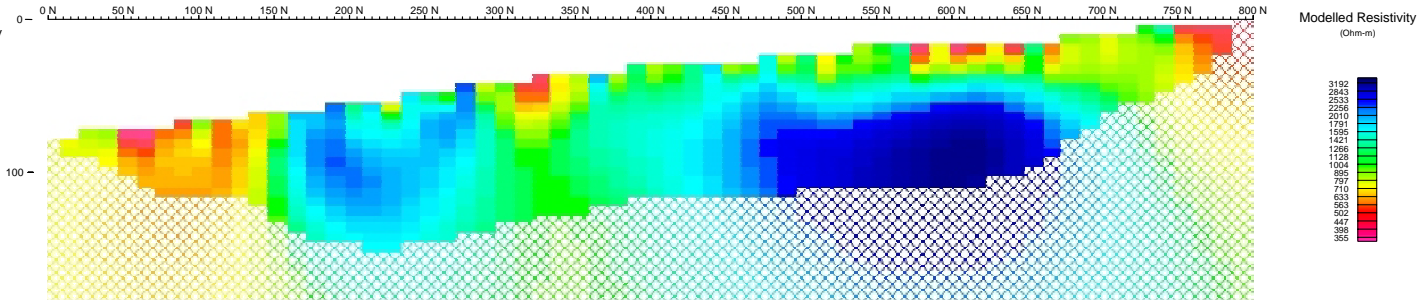
Mining District: Dawson
Projection: UTM Zone 7
Date 07 Feb 07
Appendix E

AURORA GEOSCIENCES LTD.

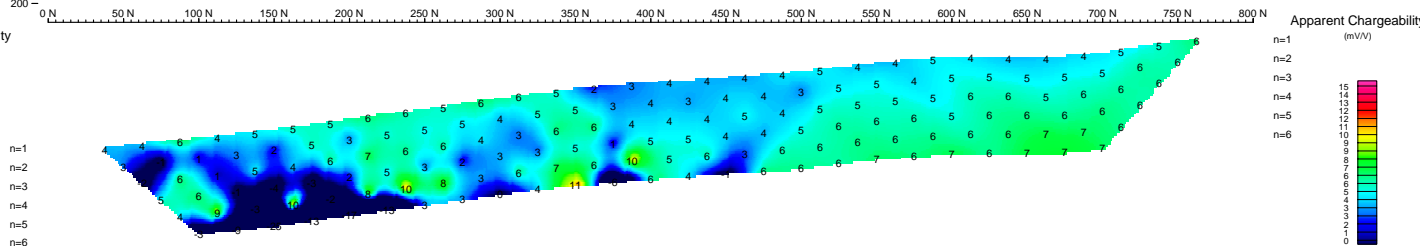
Apparent Resistivity
(Ohm-m)



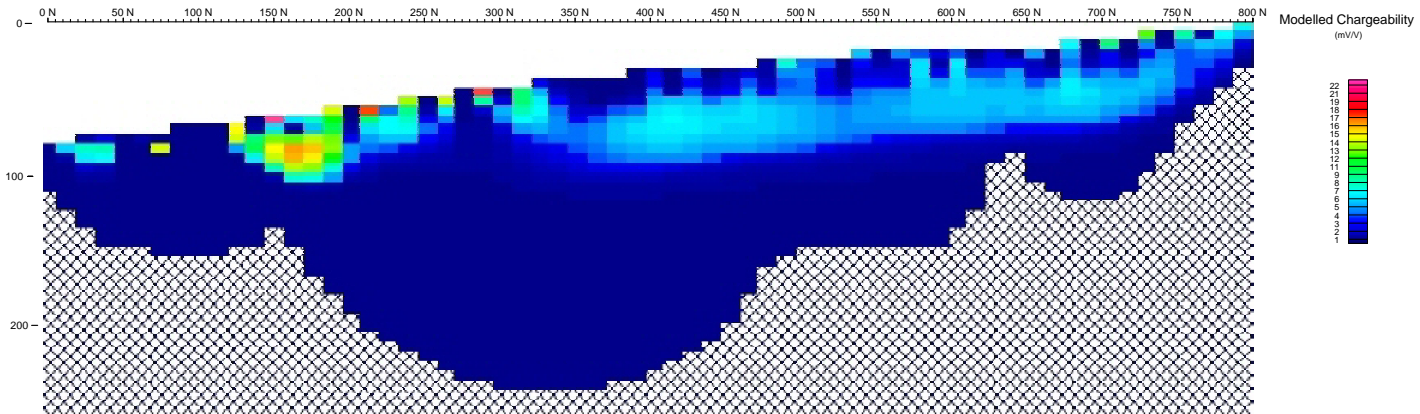
Modelled Resistivity
(Ohm-m)



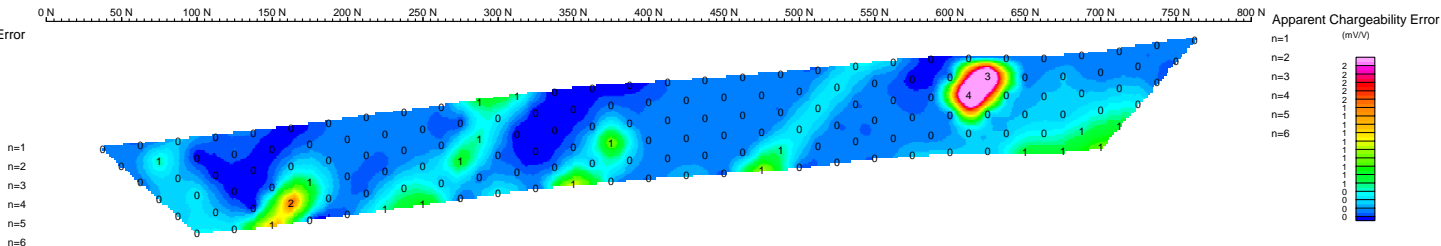
Apparent Chargeability
(mV/V)



Modelled Chargeability
(mV/V)

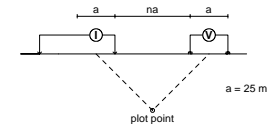


Apparent Chargeability Error
(mV/V)



COMPOSITE SECTION L700 E

Modified Dipole-Dipole Array



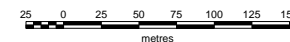
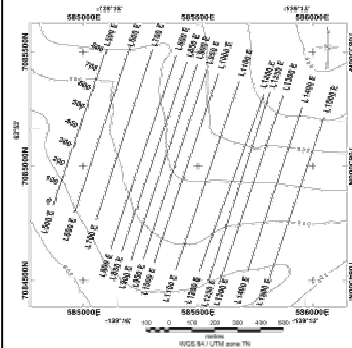
Stationary electrode at 800N (moving S).

Receiver: Iris ElrecPro

Transmitter: GDD Tx-II 3.6kW

Data File: Eldorado 2006 IP.xyz

Dates Surveyed : Aug 22 to Sept 25, 2006



Vertical Exaggeration = 1.0

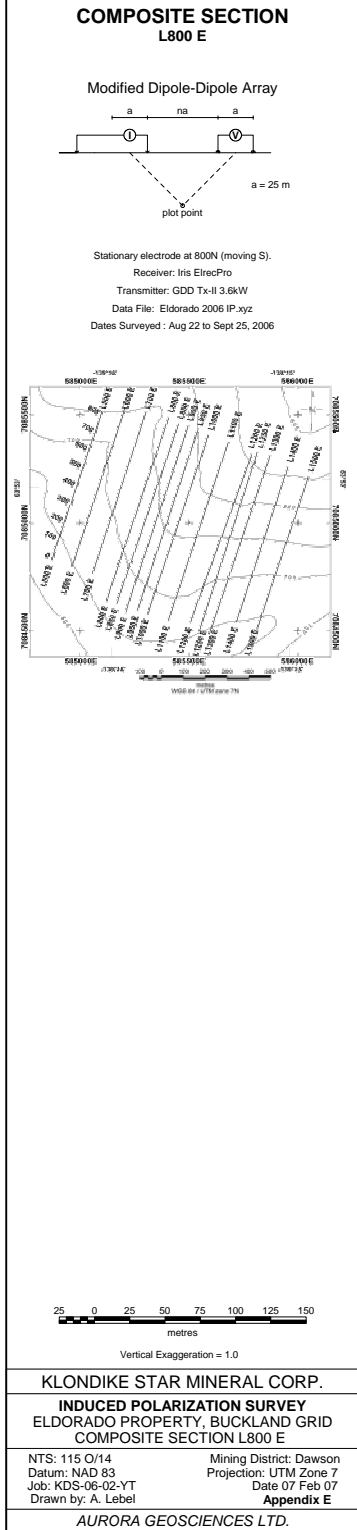
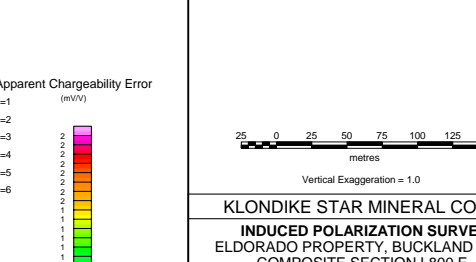
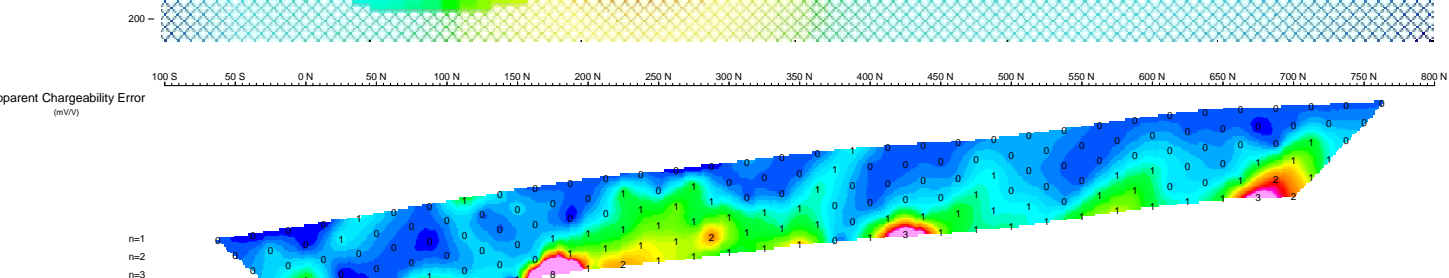
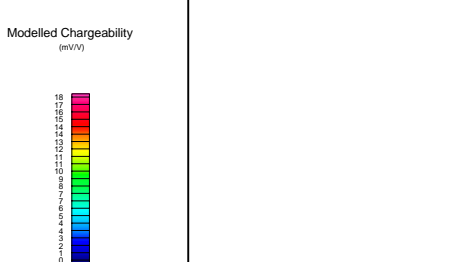
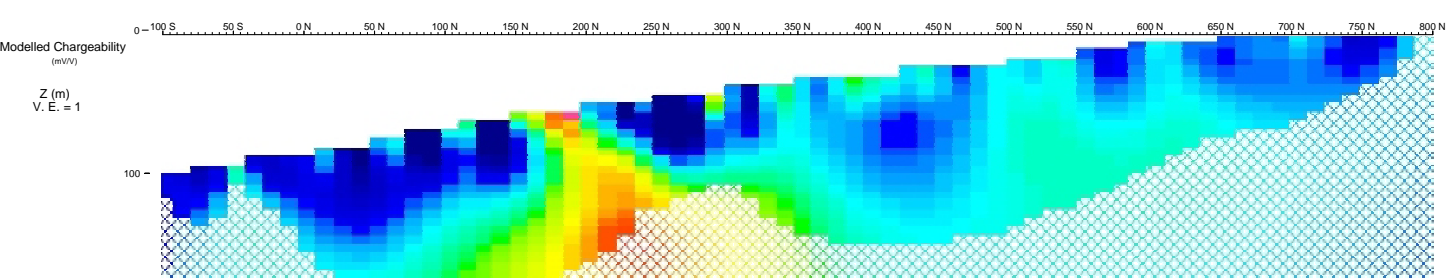
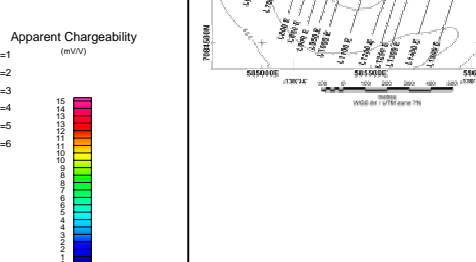
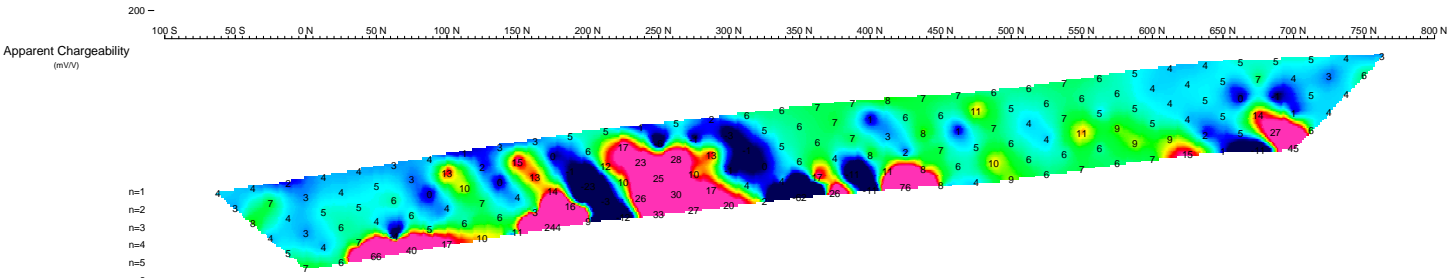
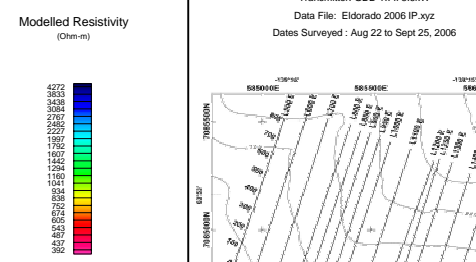
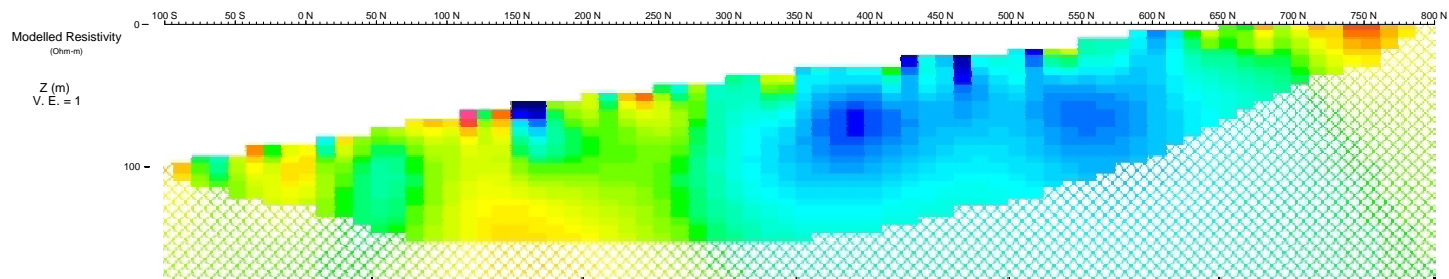
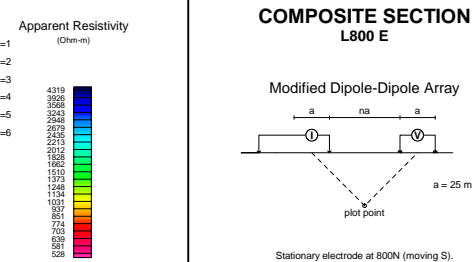
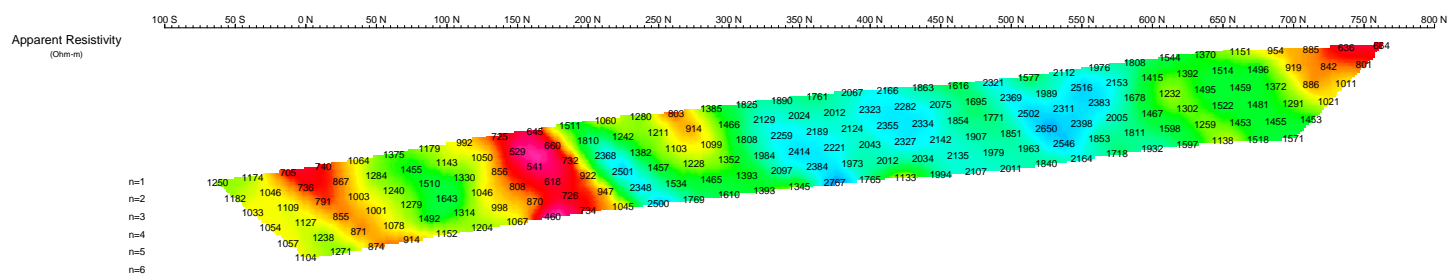
KLONDIKE STAR MINERAL CORP.

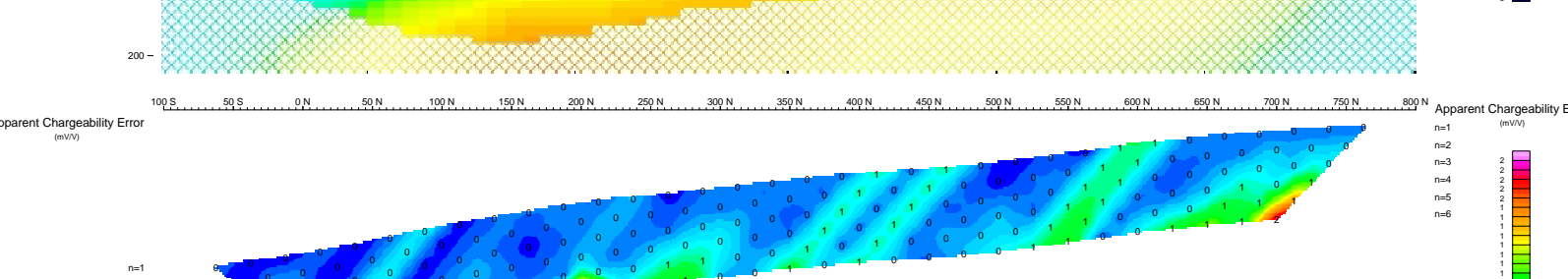
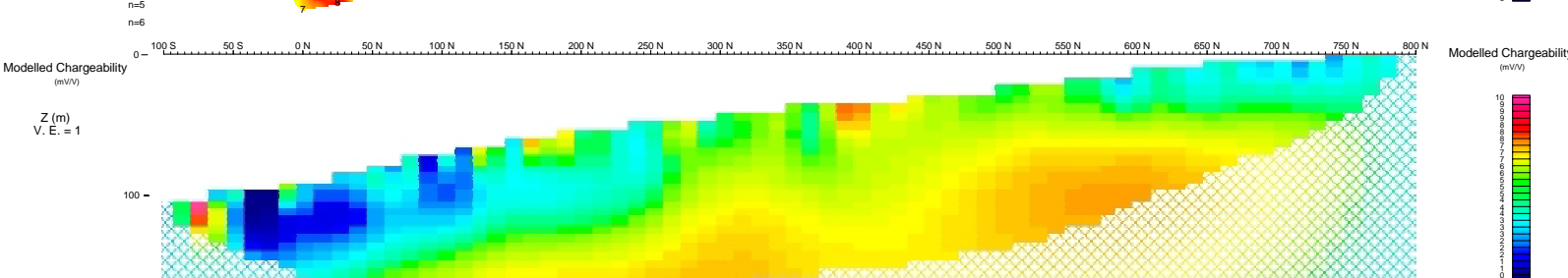
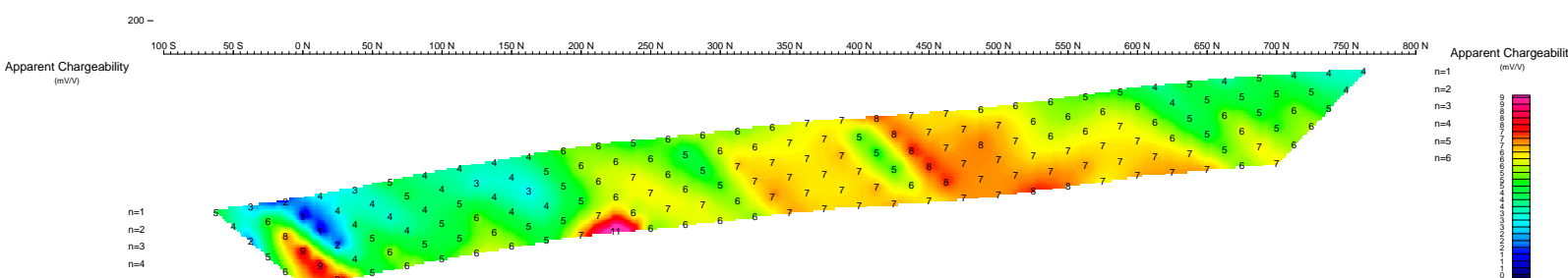
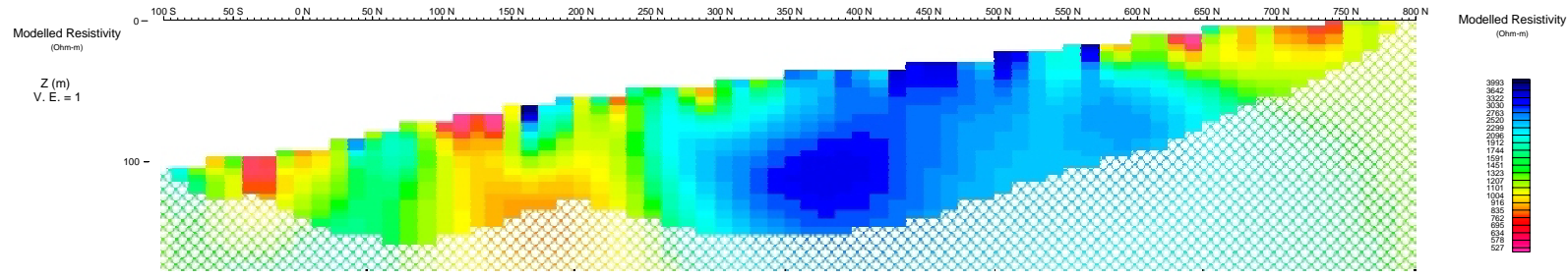
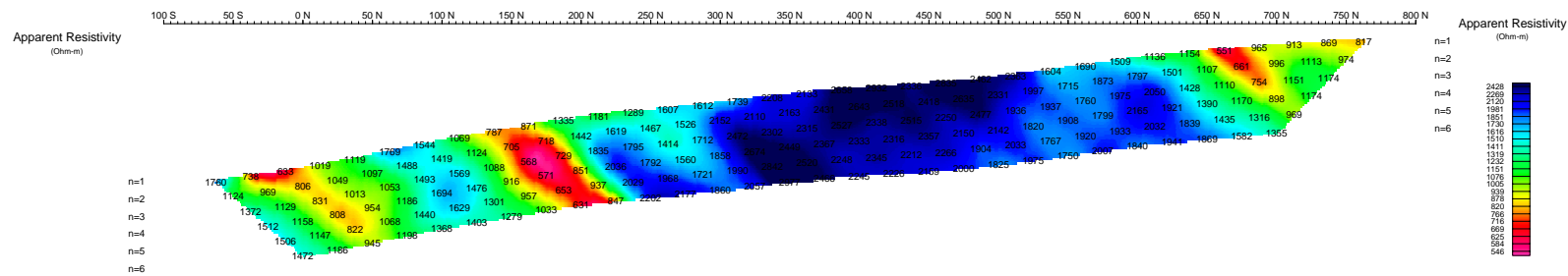
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, BUCKLAND GRID
COMPOSITE SECTION L700 E

NTS: 115 O/14
Datum: NAD 83
Job: KDS-06-02-YT
Drawn by: A. Lebel

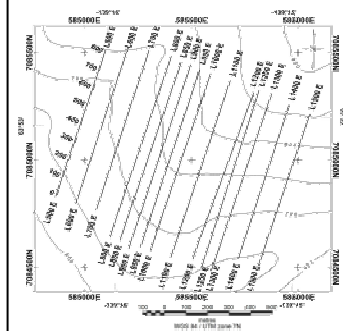
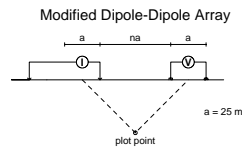
Mining District: Dawson
Projection: UTM Zone 7
Date 07 Feb 07
Appendix E

AURORA GEOSCIENCES LTD.





COMPOSITE SECTION L850 E

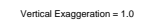
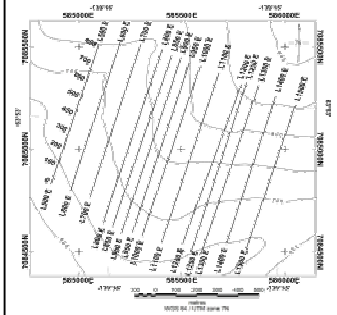
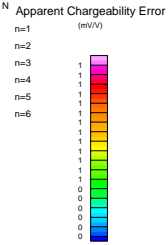
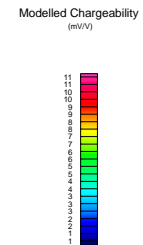
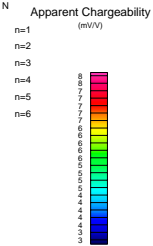
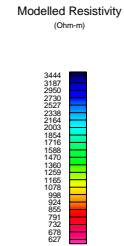
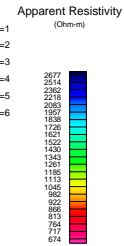


KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDERADO PROPERTY, BUCKLAND GRID
COMPOSITE SECTION L850 E

NTS: 115 O/14
Datum: NAD 83
Job: KDS-06-02-YT
Drawn by: A. Lebel

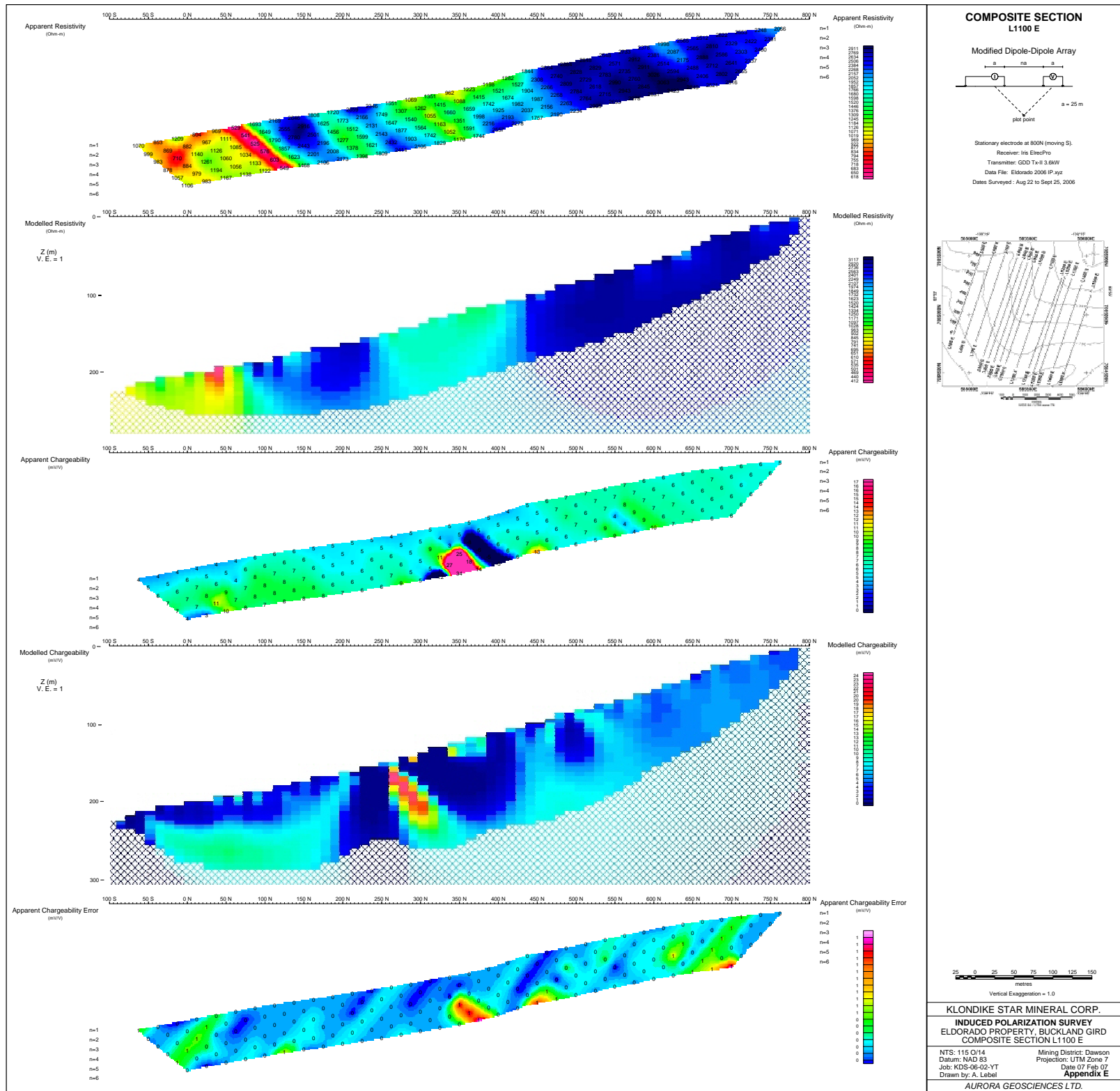
Mining District: Dawson
Projection: UTM Zone 7
Date 07 Feb 07
Appendix E

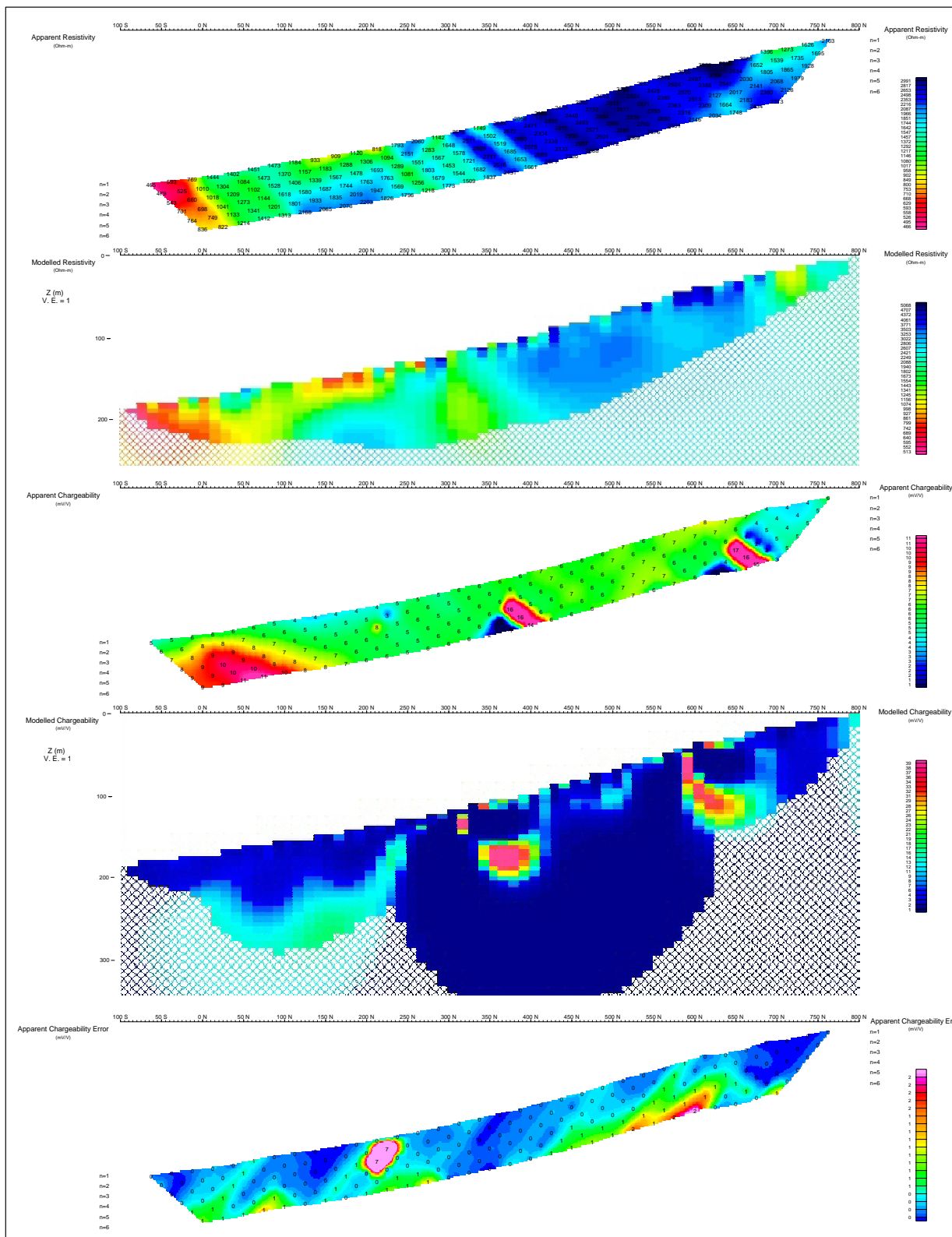
AURORA GEOSCIENCES LTD.



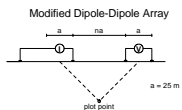
Date 07 Feb 07
Appendix E

AURORA GEOSCIENCES LTD.

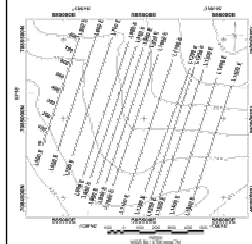




COMPOSITE SECTION L1200 E



Stationary electrode at 800N (moving S).
Receiver: Irs ElecPro
Transmitter: GDD Tx-II 3.6kW
Data File: Eldorado 2006 IP.xyz
Dates Surveyed: Aug 22 to Sept 25, 2006



25 0 25 50 75 100 125 150
metres

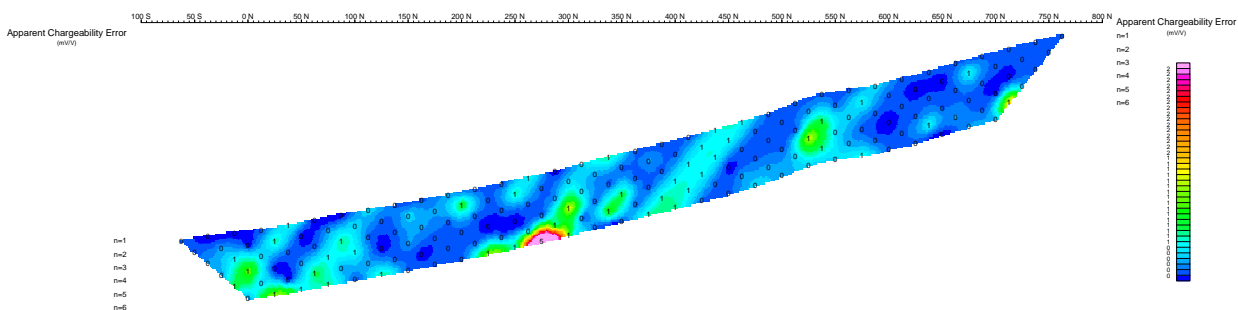
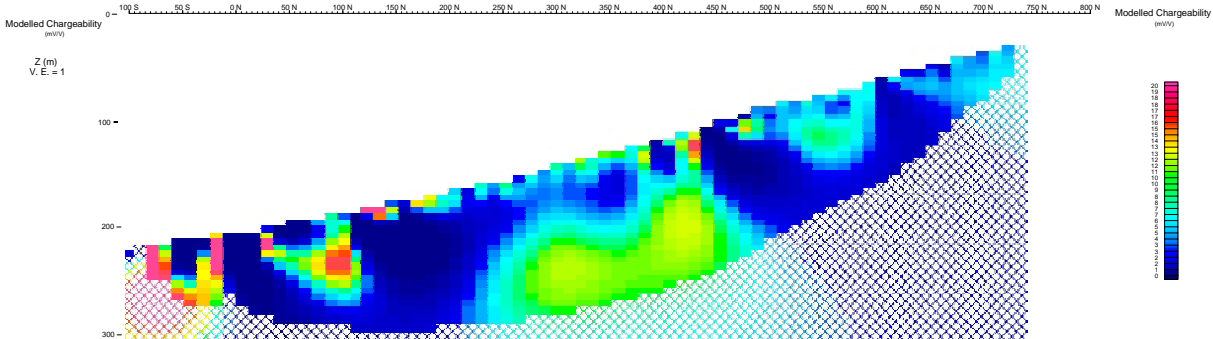
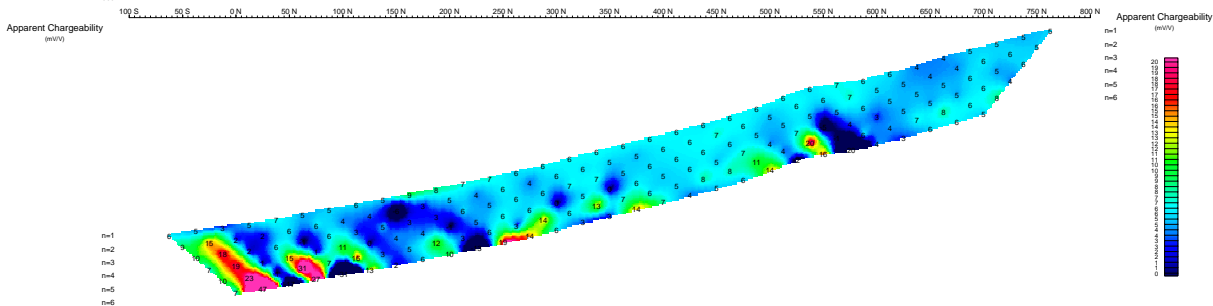
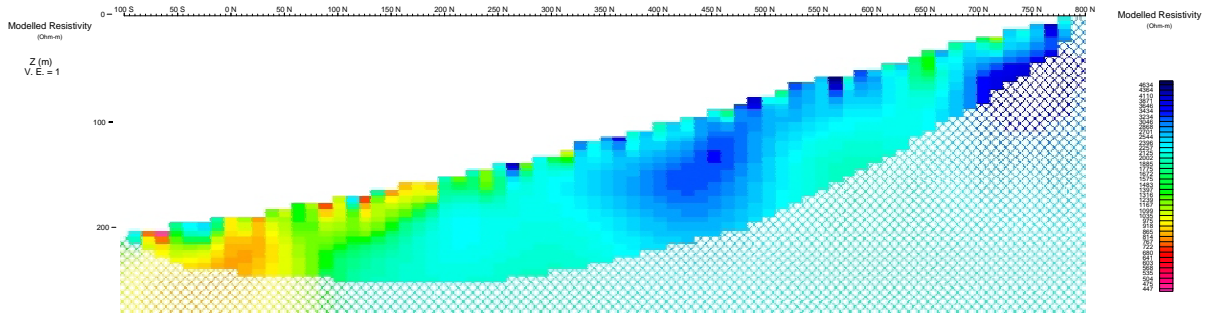
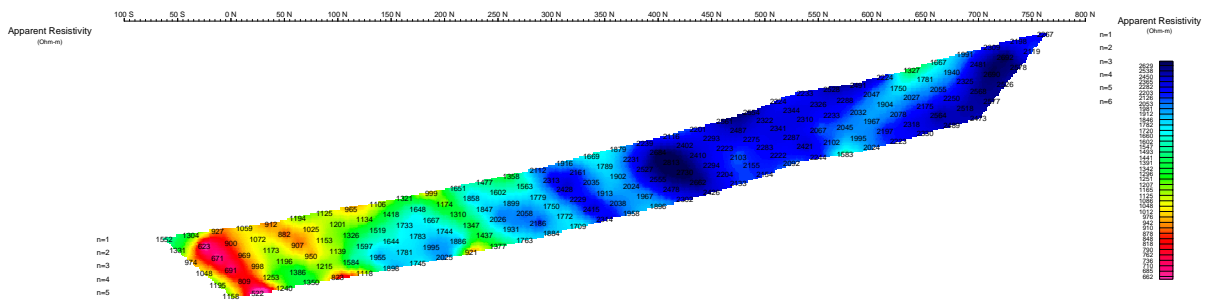
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, BUCKLAND GRID
COMPOSITE SECTION L1200 E

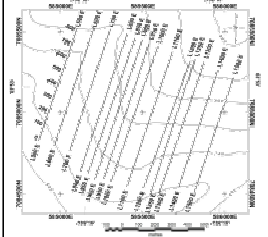
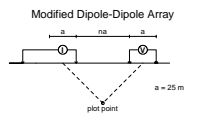
NTS: 115 Q14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date 07 Feb 07
Drawn by: A. Lebel

Appendix E

AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L1250 E



25 0 25 50 75 100 125 150
metres

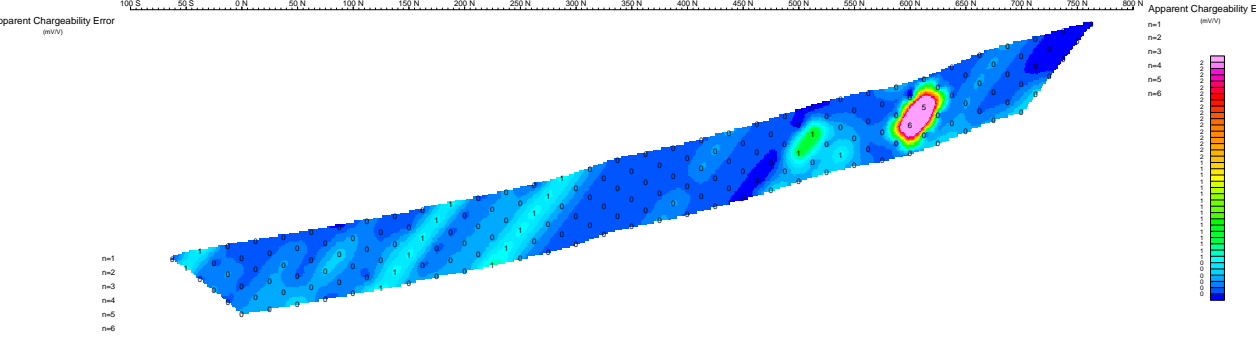
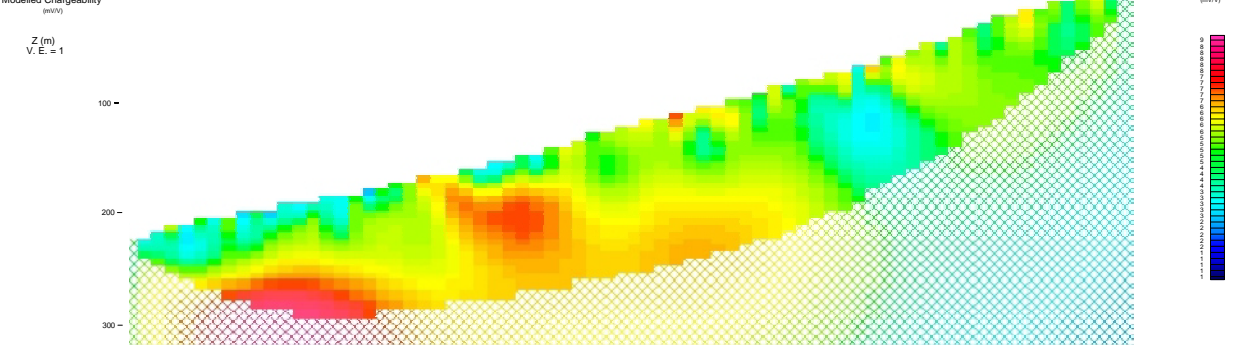
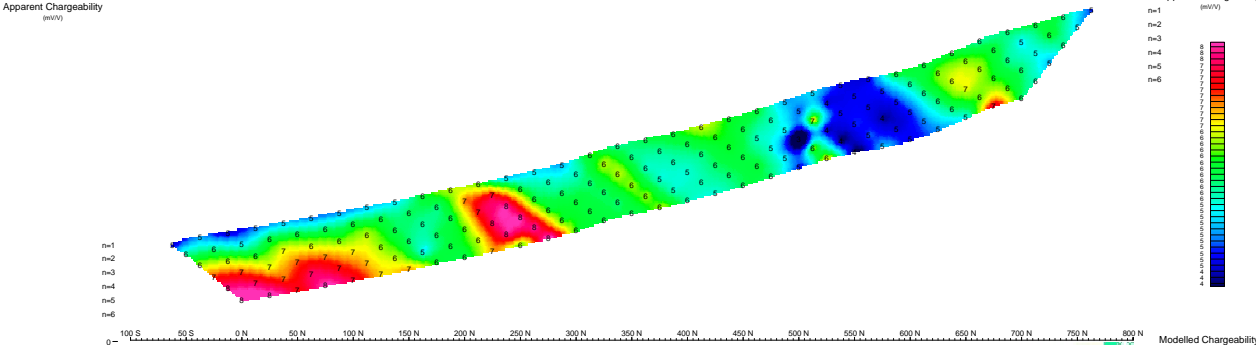
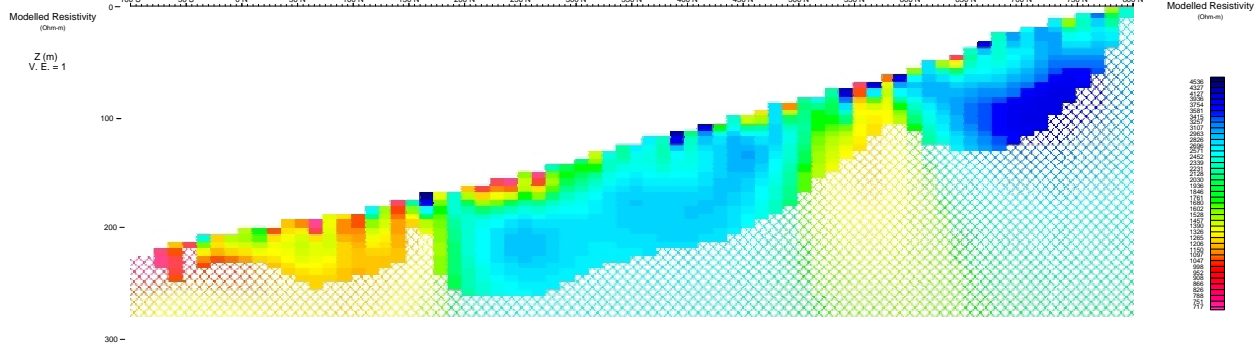
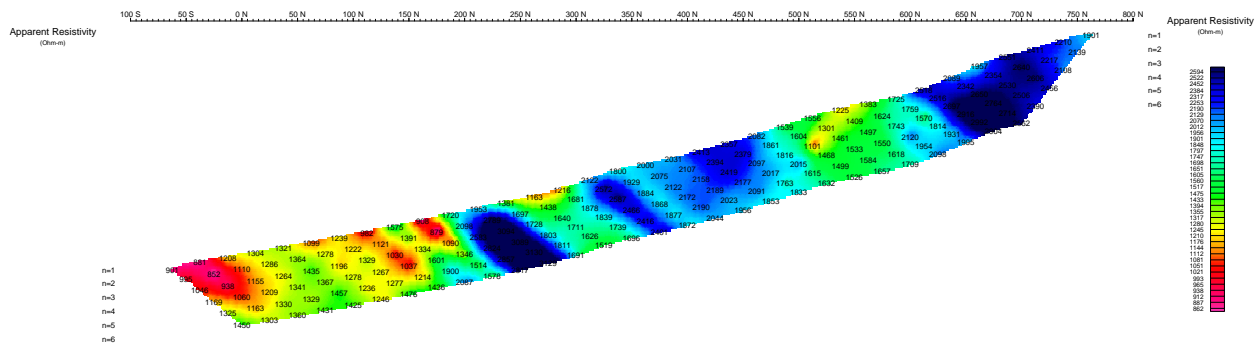
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, BUCKLAND GRID
COMPOSITE SECTION L1250 E

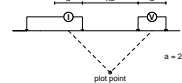
NTS: 1:15 0/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 07 Feb 07
Drawn by: A. Lebel

AURORA GEOSCIENCES LTD.

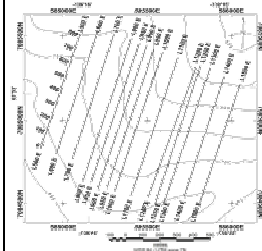


COMPOSITE SECTION L1300 E

Modified Dipole-Dipole Array



Stationery electrode at 800N (moving S).
Receiver: Iris ElecPro
Transmitter: GDO Tx-8 3.8kW
Data File: Eldorado 2006 IP.xyz
Dates Surveyed: Aug 22 to Sept 25, 2006



25 0 25 50 75 100 125 150
metres

Vertical Exaggeration = 1.0

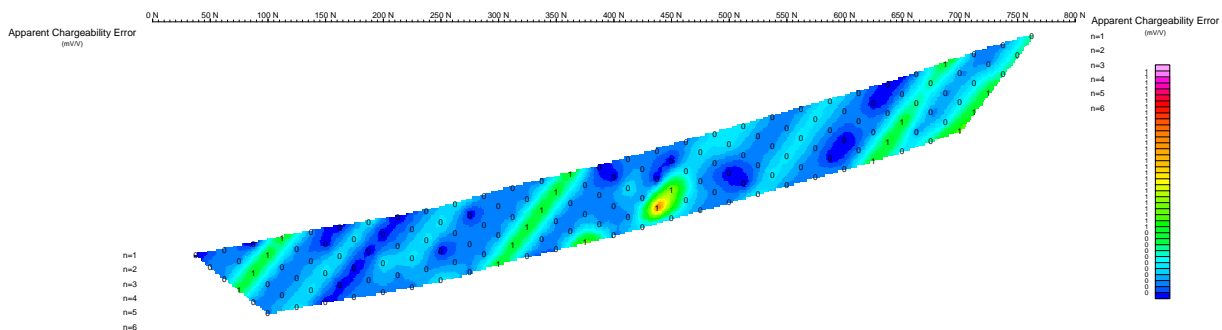
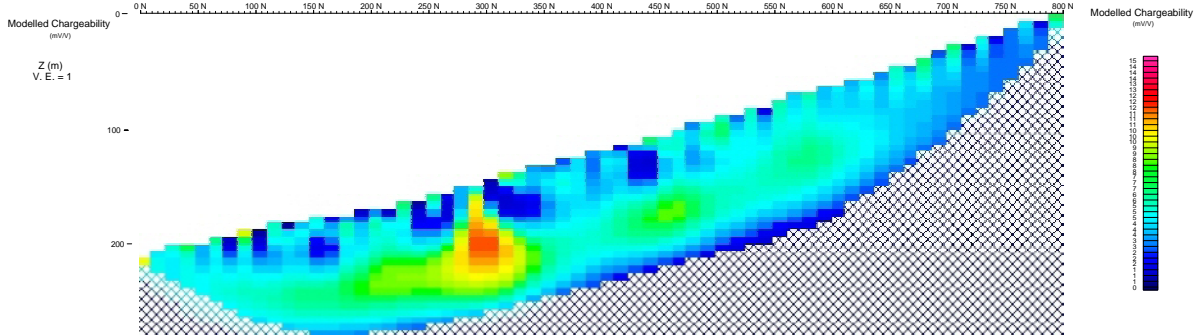
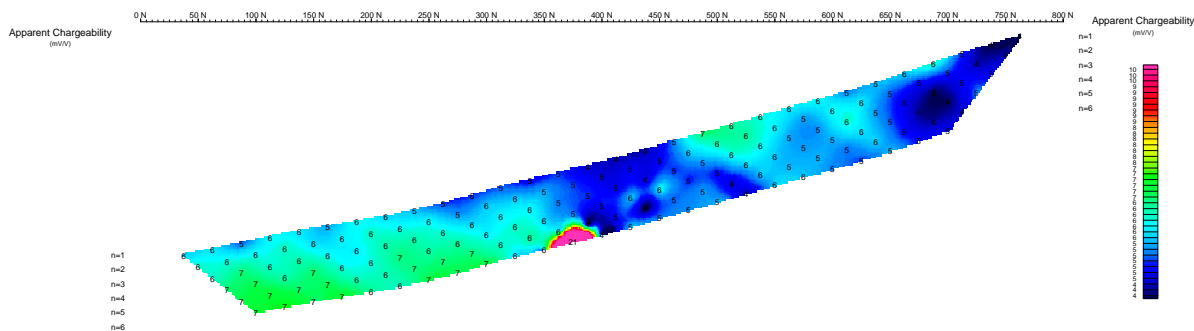
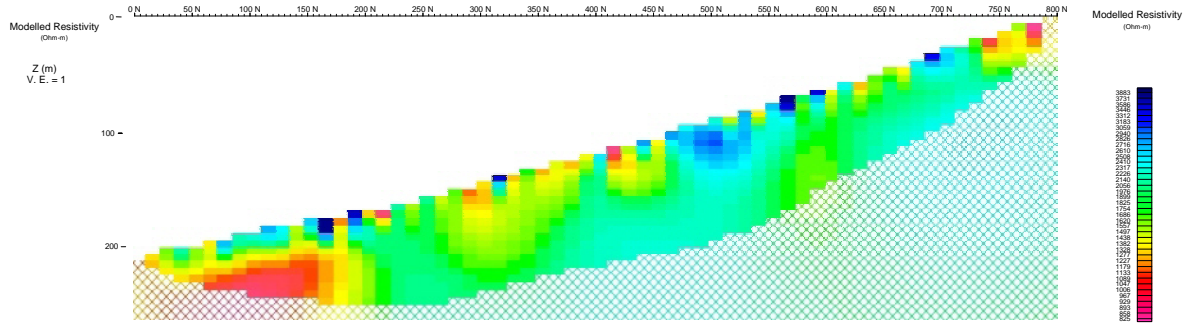
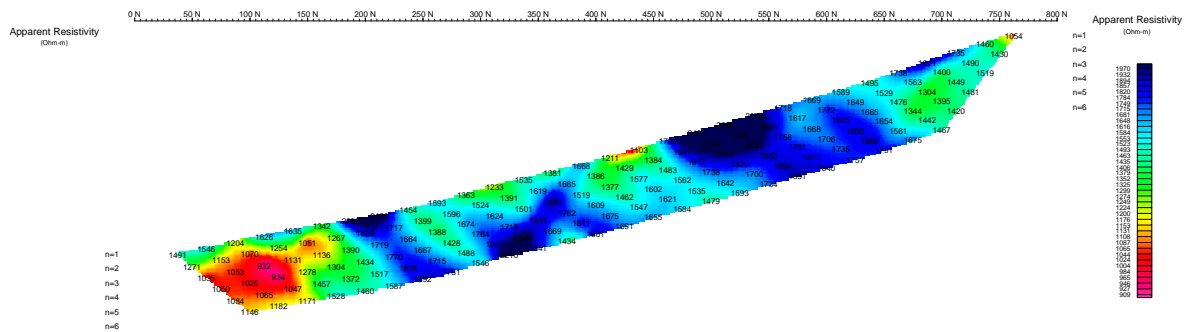
KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, BUCKLAND GRID
COMPOSITE SECTION L1300 E

NTS: 1:15 0/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 07 Feb 07
Drawn by: A. Lebel

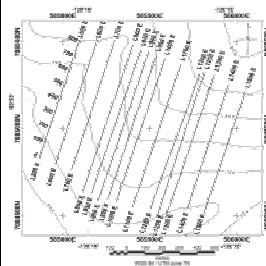
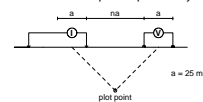
Appendix E

AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L1400 E

Modified Dipole-Dipole Array



25 0 25 50 75 100 125 150
metres

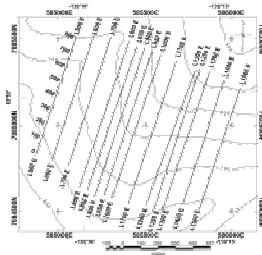
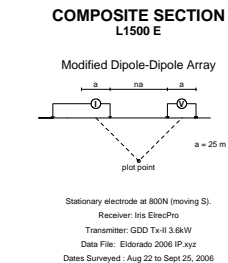
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, BUCKLAND GIRD
COMPOSITE SECTION L1400 E

NTS: 115 Q/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 07 Feb 07
Drawn by: A. Label
Appendix E

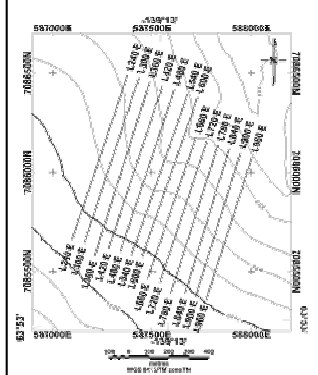
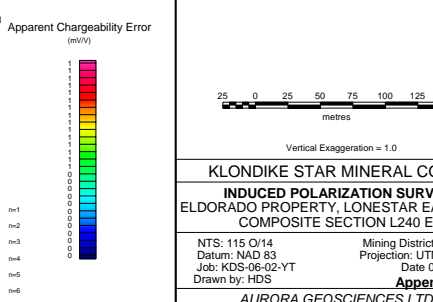
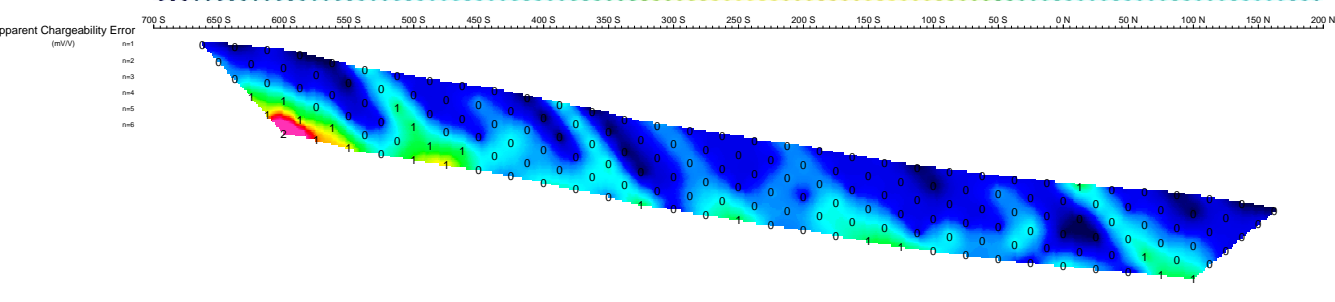
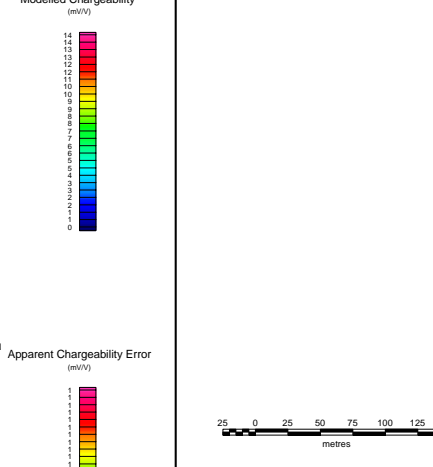
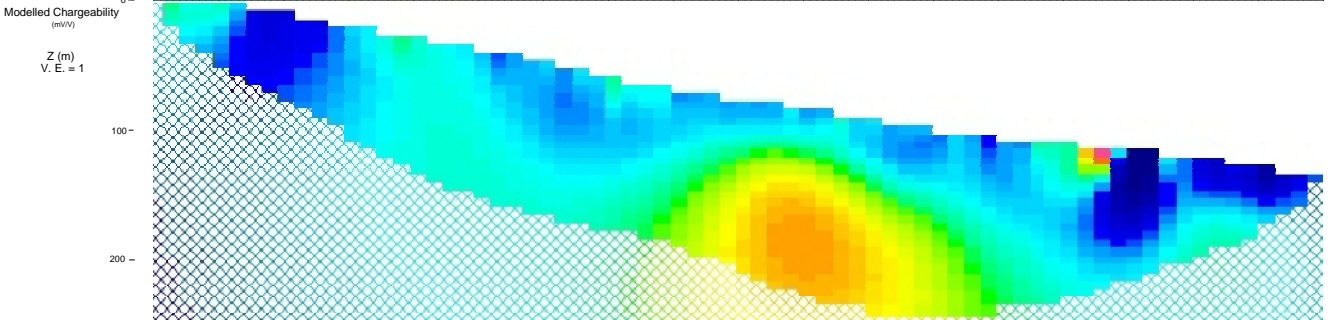
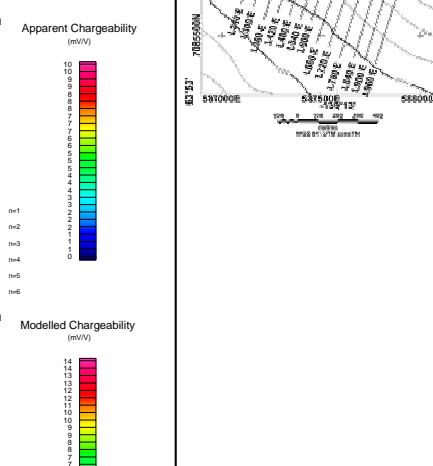
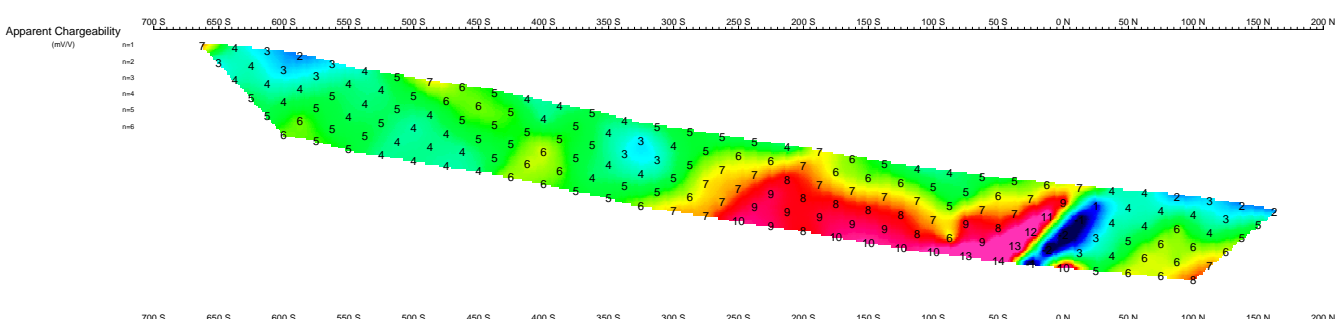
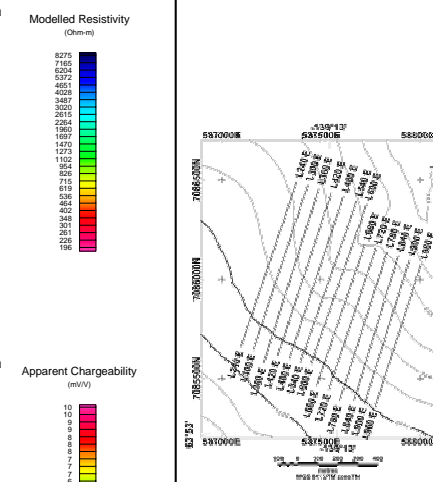
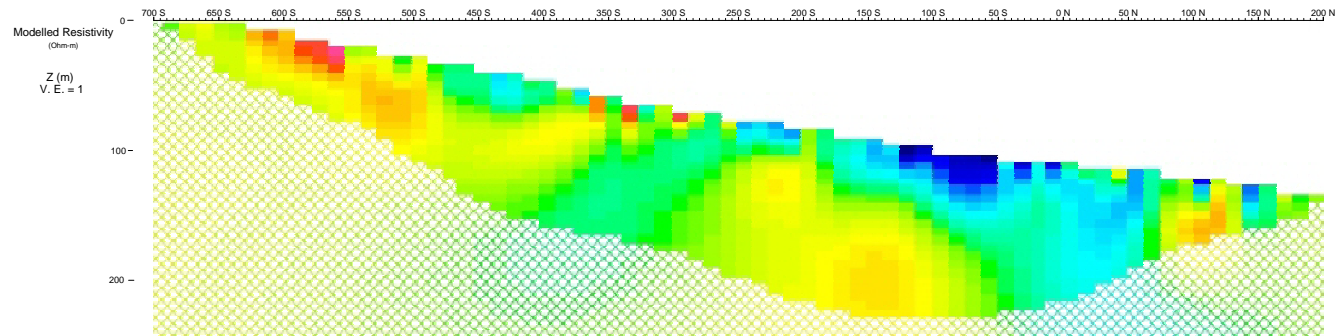
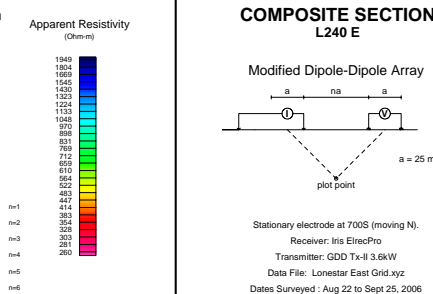
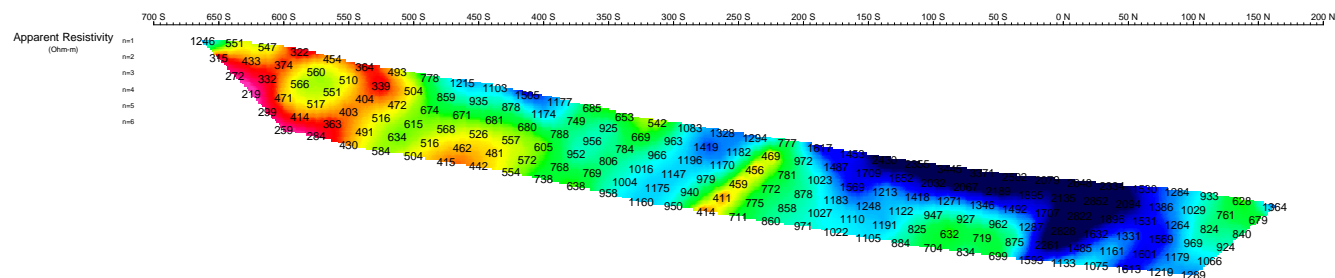
AURORA GEOSCIENCES LTD.



KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
 ELDORADO PROPERTY, BUCKLAND GIRD
 COMPOSITE SECTION L1500 E

NTS: 115 O/14	Mining District: Dawson
Datum: NAD 83	Projection: UTM Zone 18
Job: KDS-08-02-YT	Date 07 Feb
Drawn by: A. Lebel	Appendix E

AURORA GEOSCIENCES LTD.



Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY

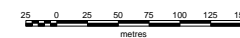
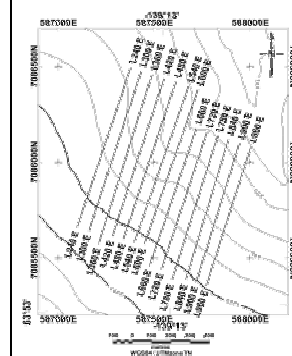
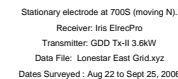
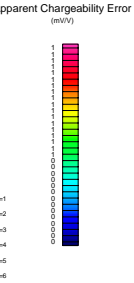
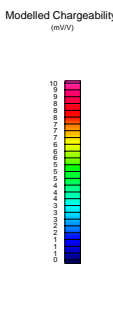
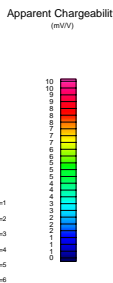
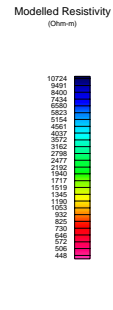
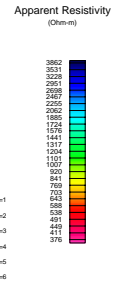
ELDORADO PROPERTY, LONESTAR EAST GRID

COMPOSITE SECTION L240 E

NTS: 115 O/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 08 Feb 07
Drawn by: HDS

Appendix E

AURORA GEOSCIENCES LTD.



Vertical Exaggeration = 1.0

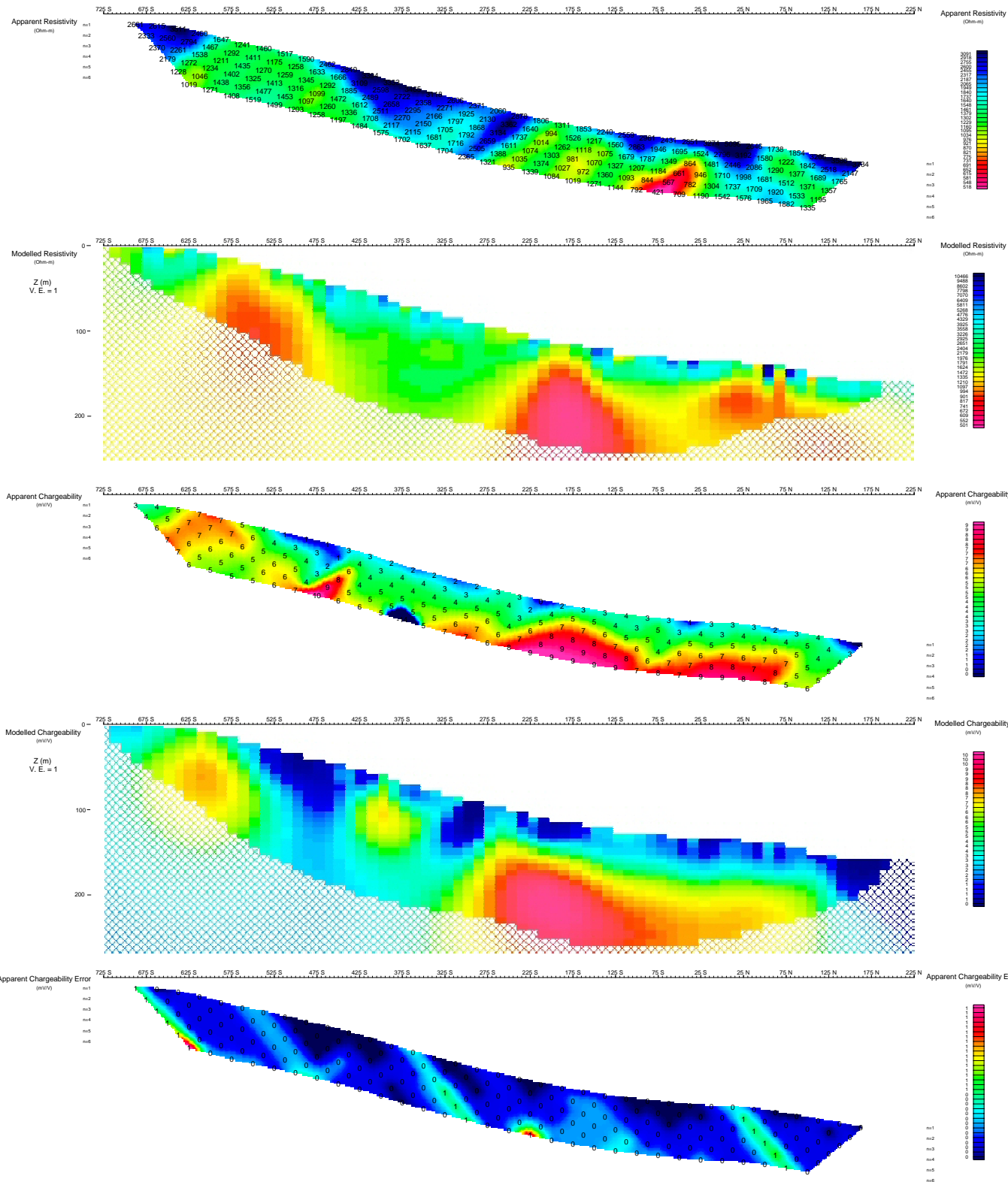
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
LDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L300 E

NTS: 115 O/14
Datum: NAD 83
Job: KDS-06-02-YT
Drawn by: HDS

Mining District: Dawson
Projection: UTM Zone 7
Date 08 Feb 07

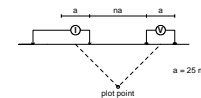
Appendix E

AURORA GEOSCIENCES LTD.

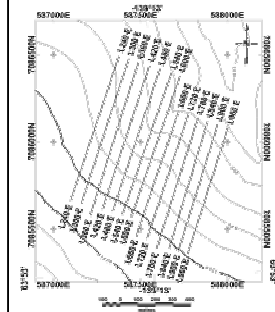


COMPOSITE SECTION L360 E

Modified Dipole-Dipole Array



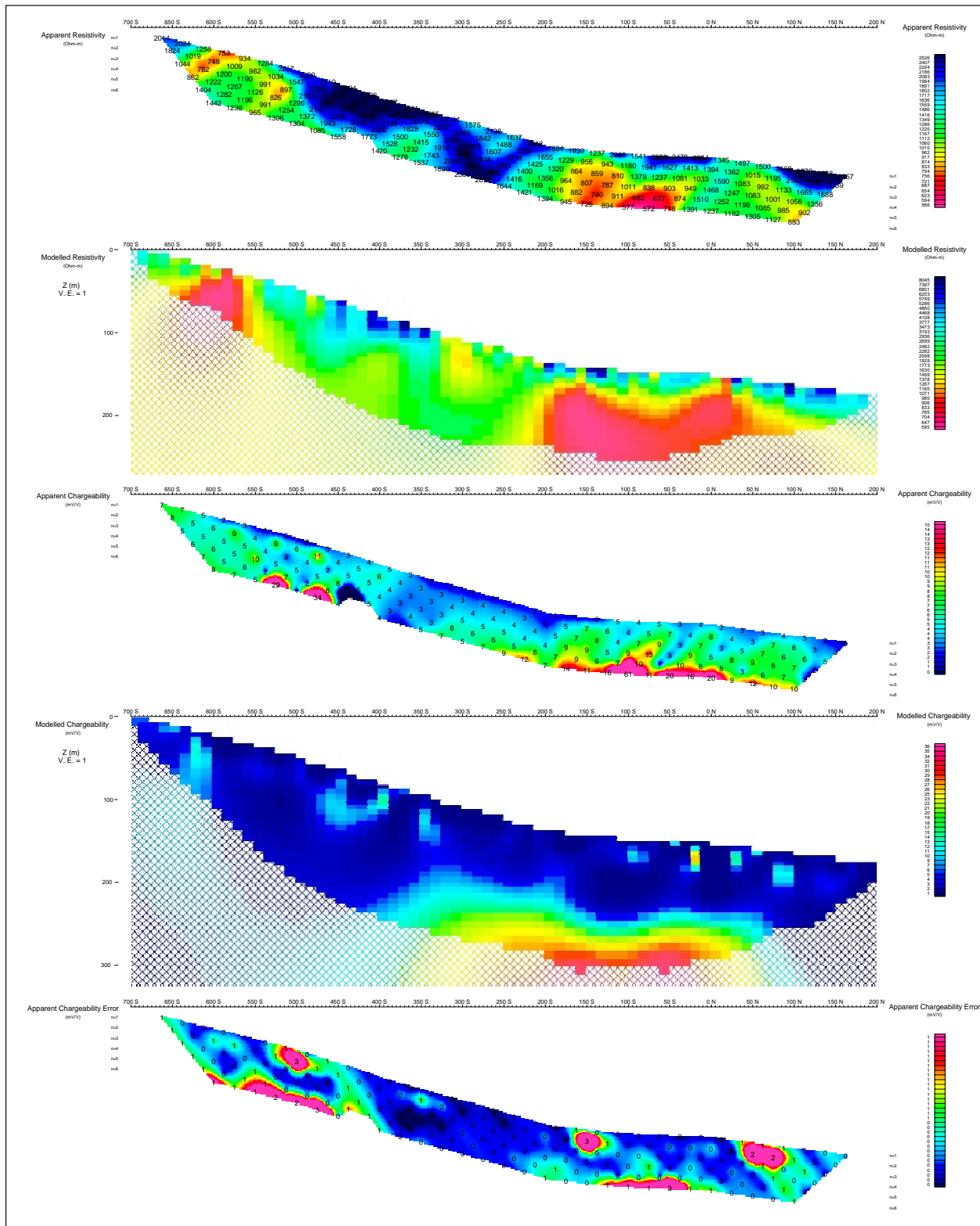
Stationary electrode at 725S (moving N).
Receiver: line Electrode
Transmitter: GDD Tx-11 3.6W
Data File: Lonestar East Grid.xyz
Dates Surveyed : Aug 22 to Sept 25, 2006



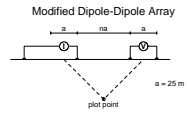
25 0 25 50 75 100 125 150
metres
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L360 E

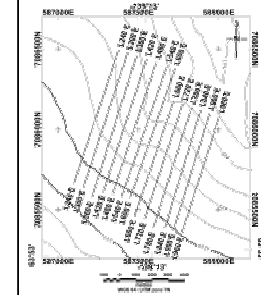
NTS: 115 Q/H4 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 08 Feb 07
Drawn by: HDS
Appendix E
AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L420 E



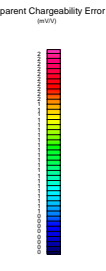
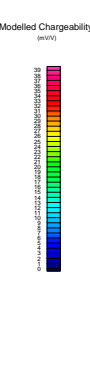
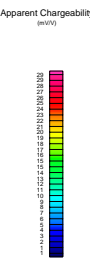
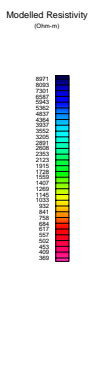
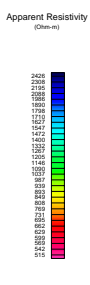
Stationary electrode at 700S (moving N).
Receiver: Ins ElecPro
Transmitter: GDO Tx-II 3.6kW
Data File: Lonstar East Grid.xyz
Dates Surveyed: Aug 22 to Sept 25, 2006



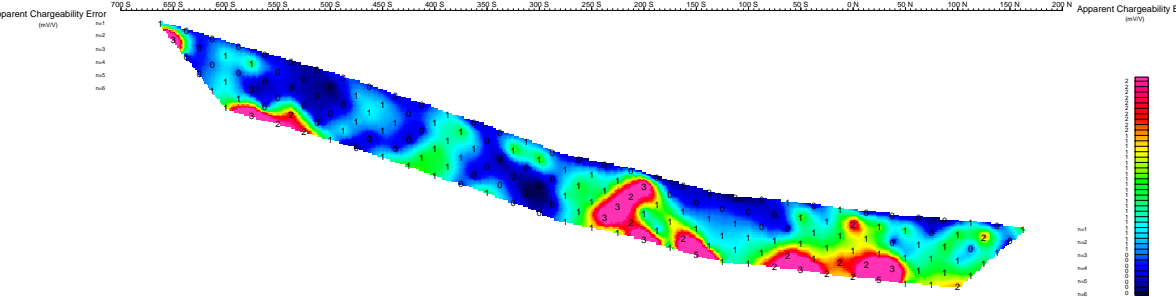
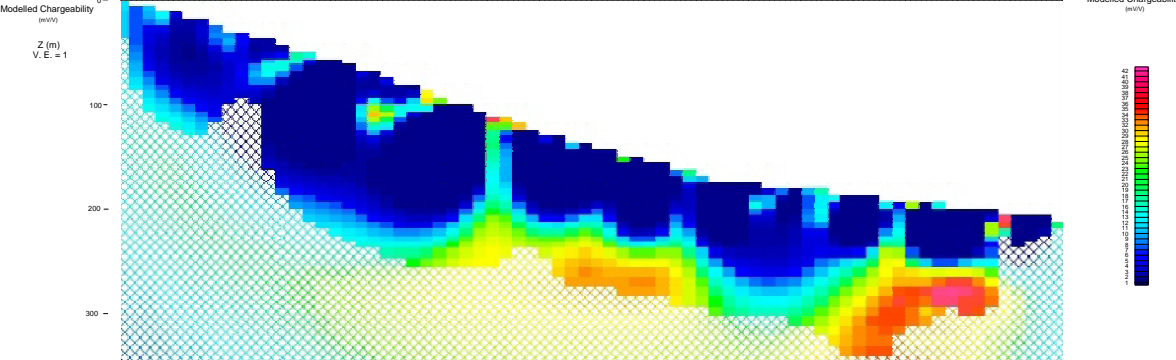
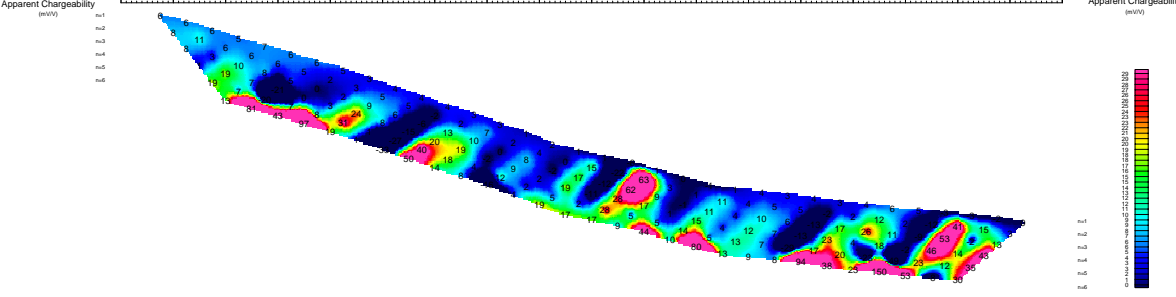
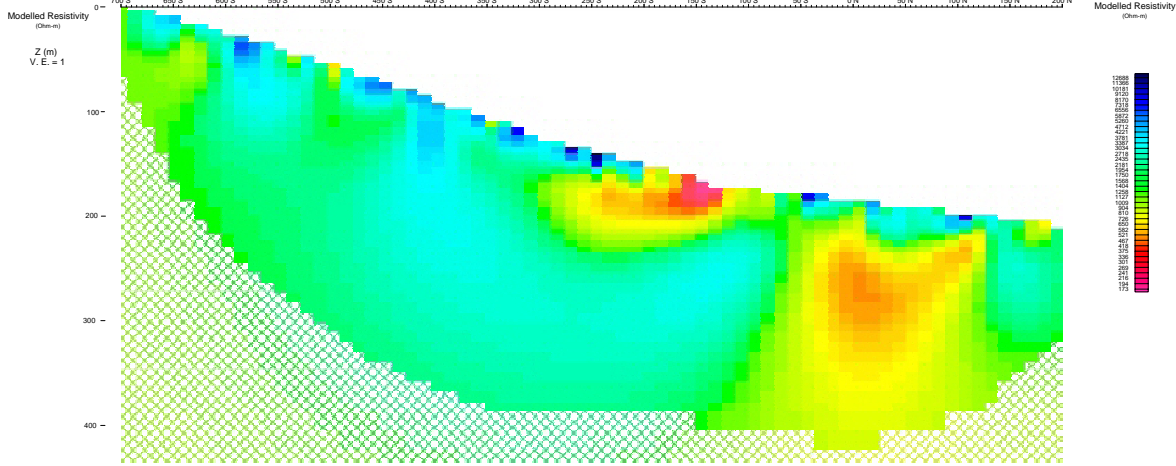
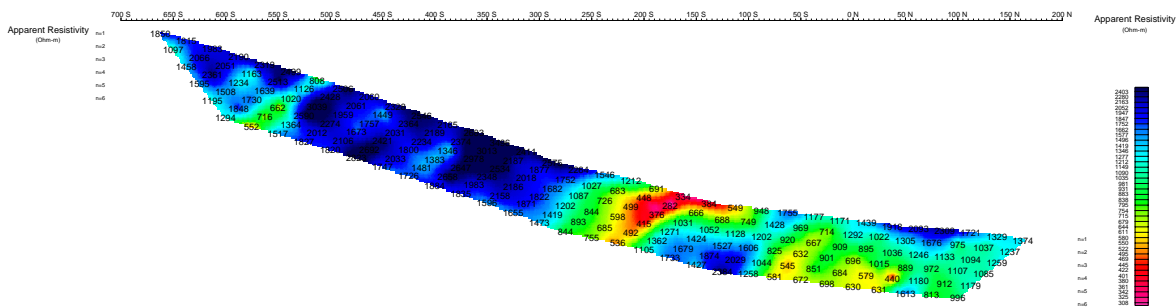
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L420 E

NTS: 1:15 O14
Datum: NAD 83
Job: KDS-96-02-YT
Drawn by: HDS

Mining District: Dawson
Projection: UTM Zone 7
Date 09 Feb 07
Appendix E
AURORA GEOSCIENCES LTD.

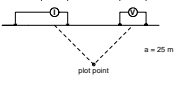


KLONDIKE STAR MINERAL CORP.	
INDUCED POLARIZATION SURVEY	
ELDORADO PROPERTY, LONESTAR EAST GRID	
COMPOSITE SECTION L480 E	
NTS: 115 0/14	Mining District: Dawson
Datum: NAD 83	Projection: UTM Zone 7
Job: KDS-06-02-YT	Date 08 Feb 07
Drawn by: HDS	Appendix E
AURORA GEOSCIENCES LTD.	

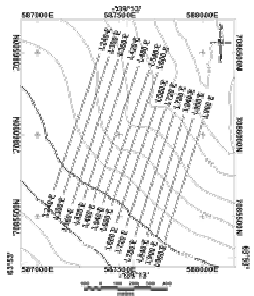


COMPOSITE SECTION L540 E

Modified Dipole-Dipole Array

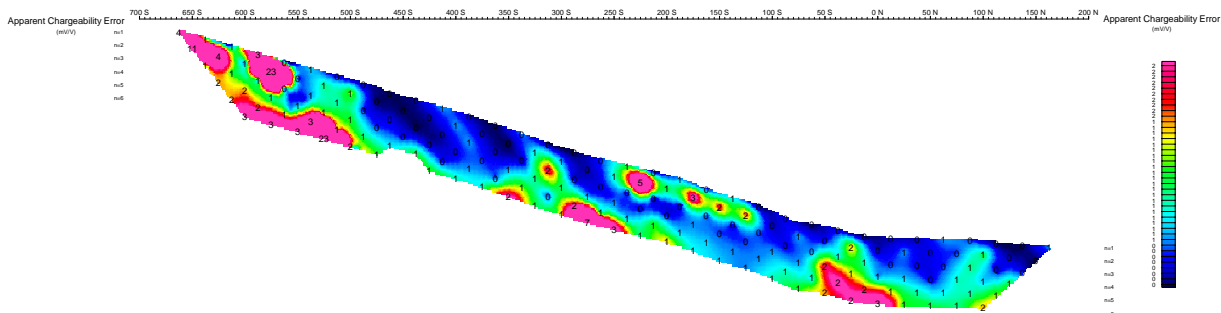
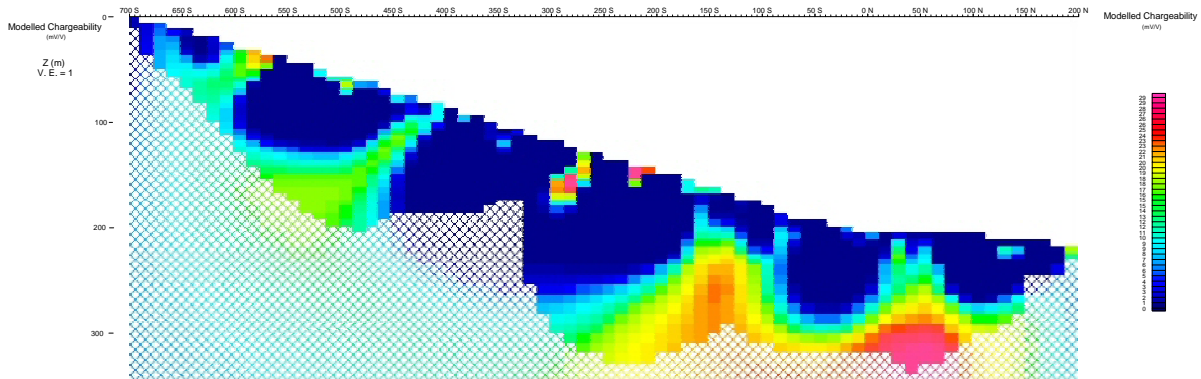
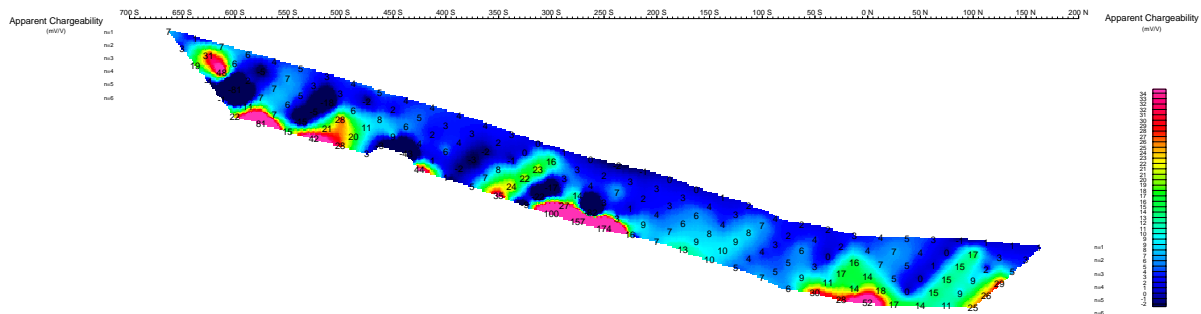
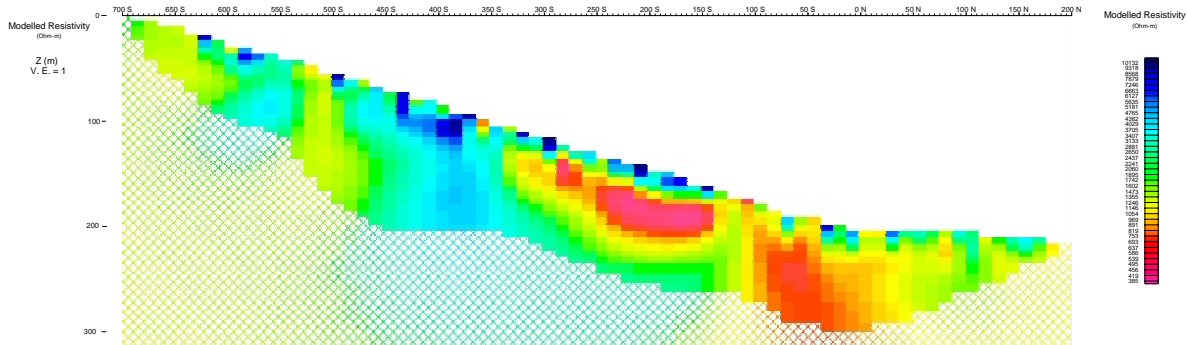
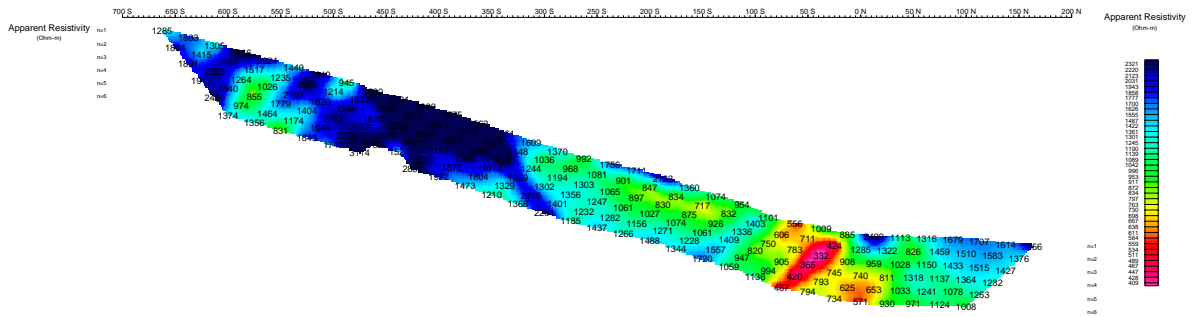


Stationary electrode at 700S (moving N).
Receiver: Irs ElecPro
Transmitter: GDD Tx-II 3.6kW
Data File: Lonestar East Grid.xyz
Dates Surveyed: Aug 22 to Sept 25, 2006



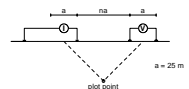
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L540 E
NTS: 1:15 0/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date 08 Feb 07
Drawn by: HDS
AURORA GEOSCIENCES LTD.

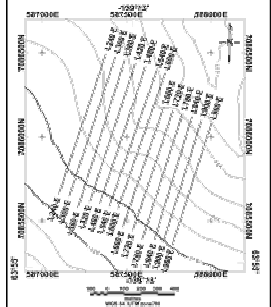


COMPOSITE SECTION L600 E

Modified Dipole-Dipole Array



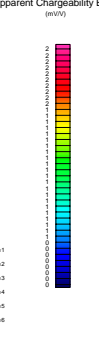
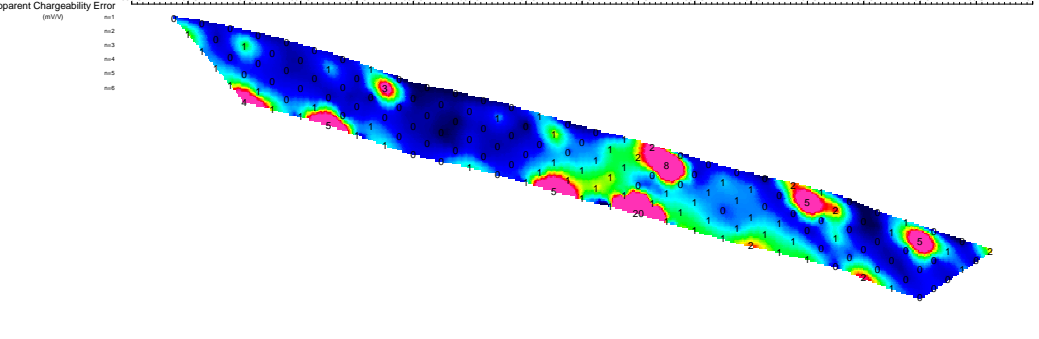
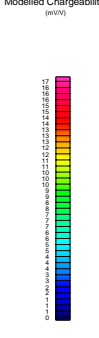
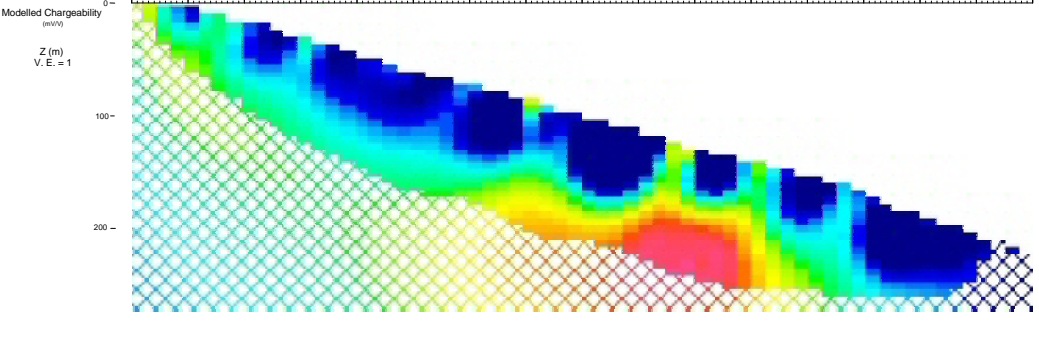
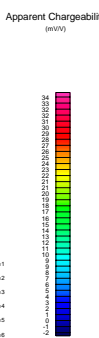
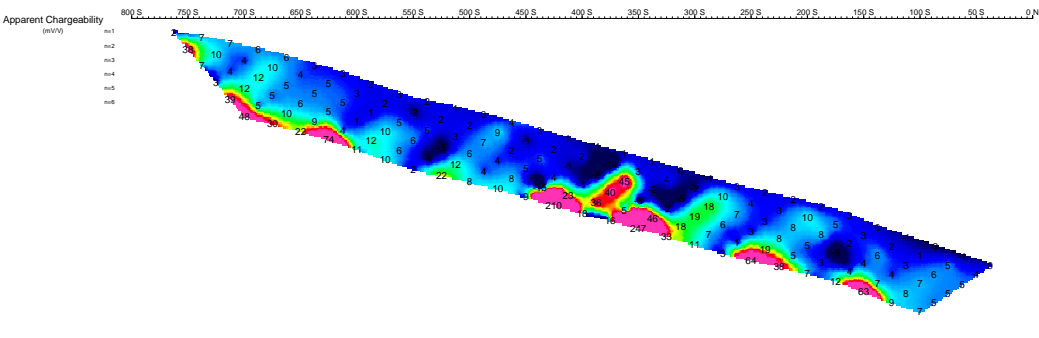
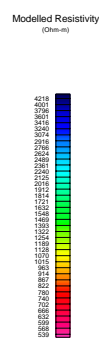
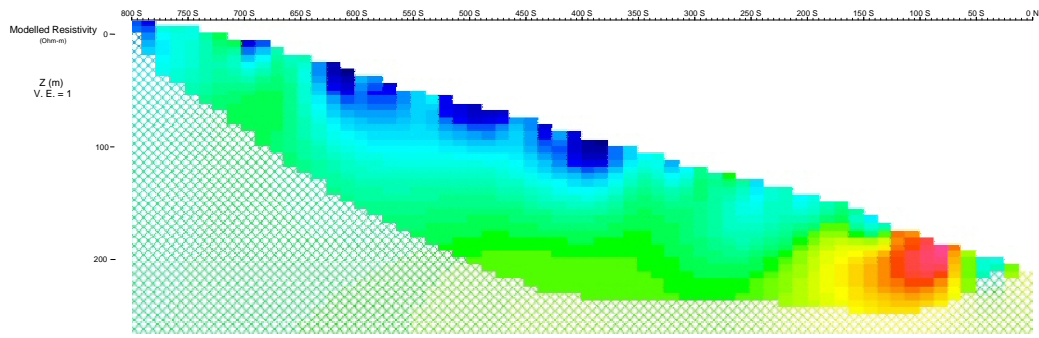
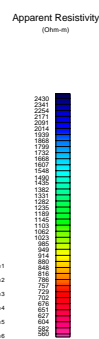
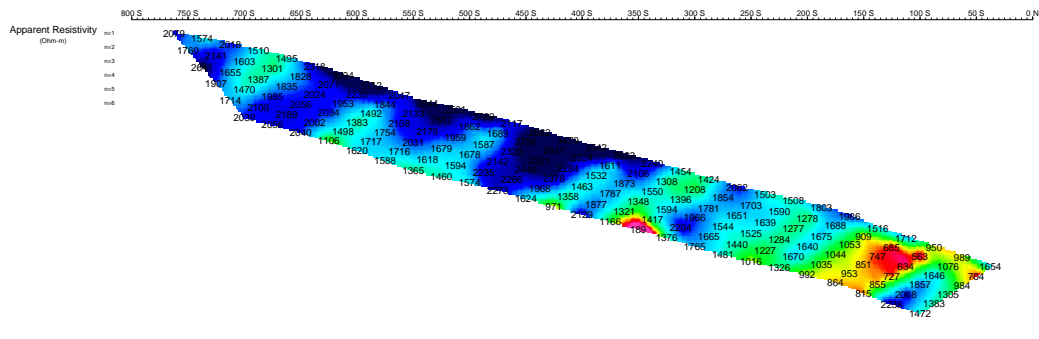
Stationary electrode at 700S (moving N).
Receiver: Iris EnePro
Transmitter: GDD Tr-ii 3.6kV
Data File: Lonestar East Grid.xpt
Dates Surveyed : Aug 22 to Sept 25, 2006



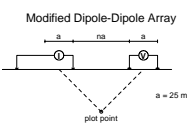
25 0 25 50 75 100 125 150
metres

Vertical Exaggeration = 1.0

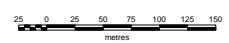
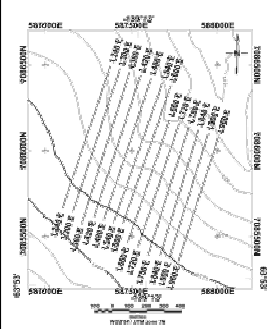
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L600 E
NTS: 1:15,000 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 06 Feb 07
Drawn by: HDS
Appendix E
AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L660 E

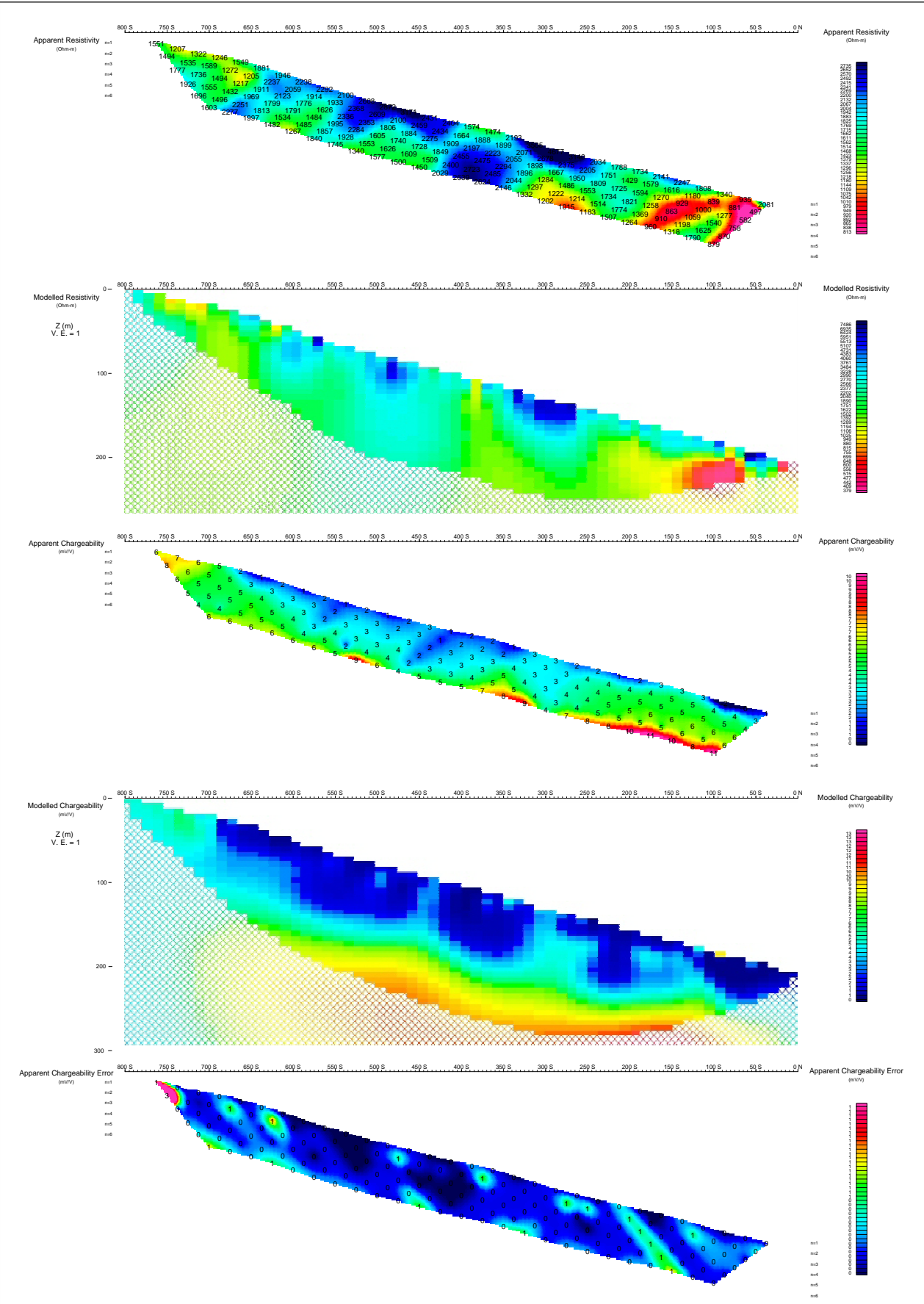


Stationary electrode at 800S (moving N).
Receiver: Iris ElecPro
Transmitter: GDD Tx-II 3.6kW
Data File: Lonestar East Grid.xyz
Dates Surveyed: Aug 22 to Sept 25, 2006



Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L660 E
NTS: 115 Q/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 08 Feb 07
Drawn by: HDS
AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L720 E

Modified Dipole-Dipole Array

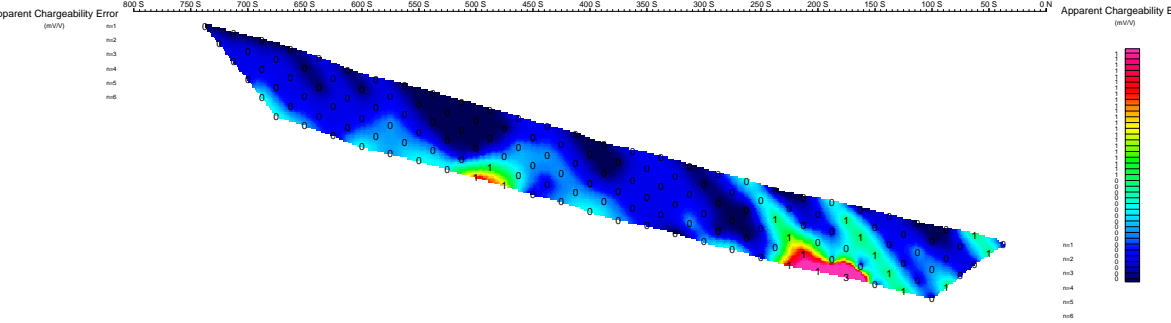
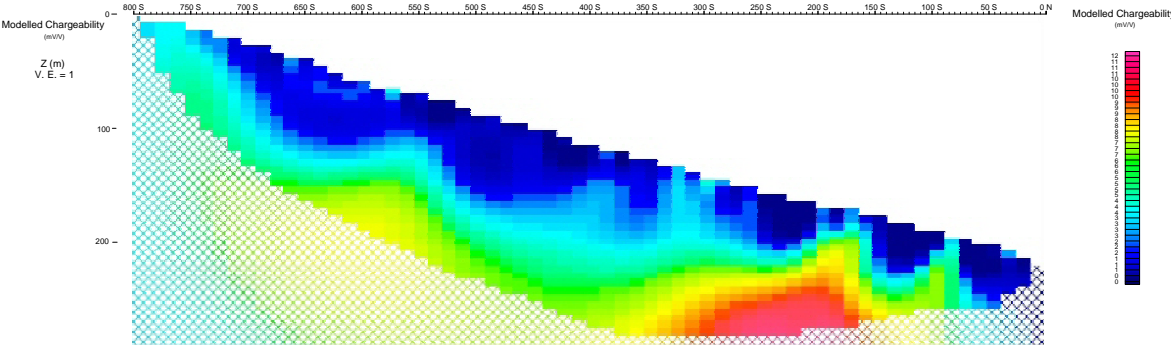
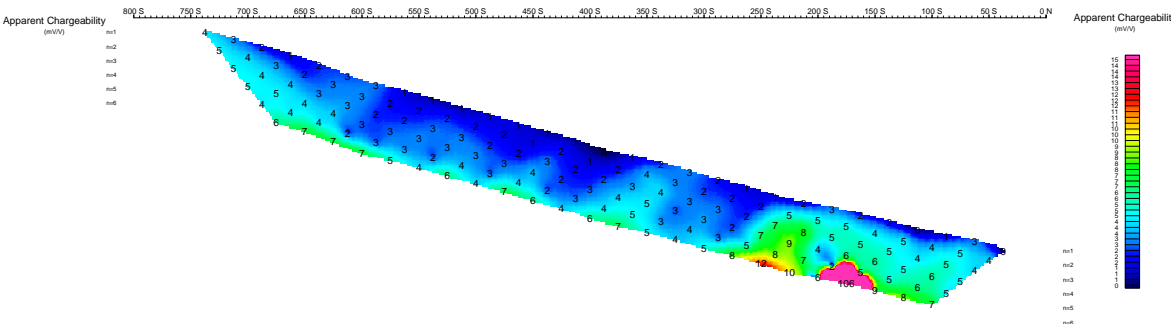
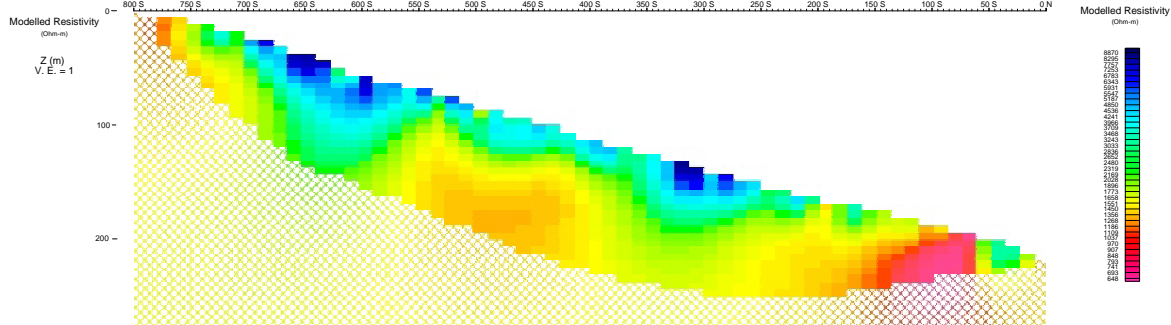
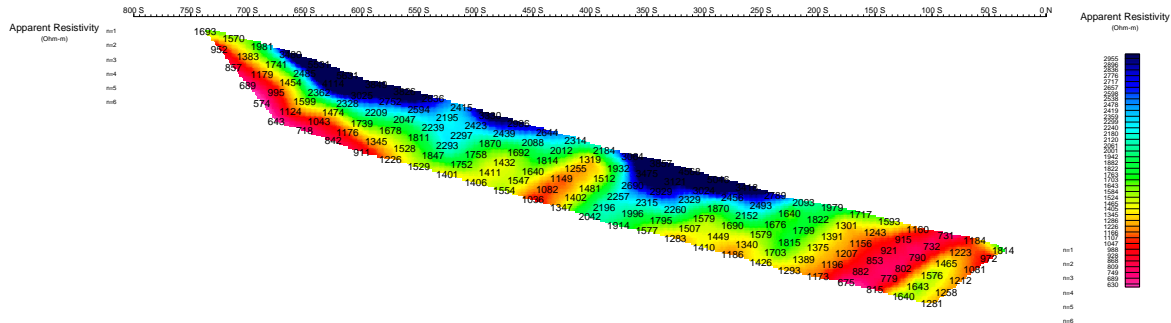
a = 25 m

Stationary electrode at 800N (moving N).
Receiver: Iris EtecPro
Transmitter: GDD Tx-II 3.6kW
Data File: Lonestar East Grid.xyz
Dates Surveyed : Aug 22 to Sept 25, 2006

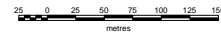
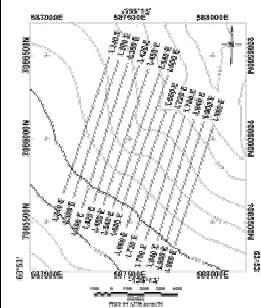
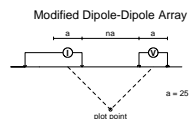
Scale: 1:10000
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L720 E

NTS: 1:15 0/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date 08 Feb 07
Drawn by: HDS **Appendix E**
AURORA GEOSCIENCES LTD.

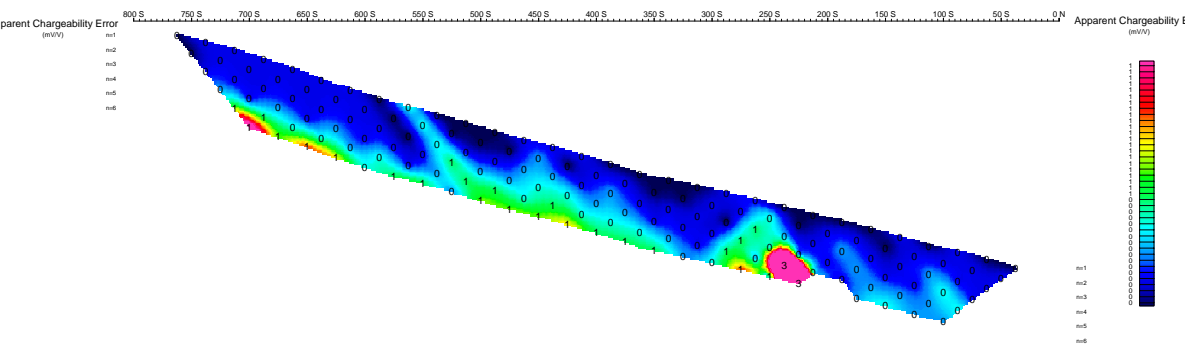
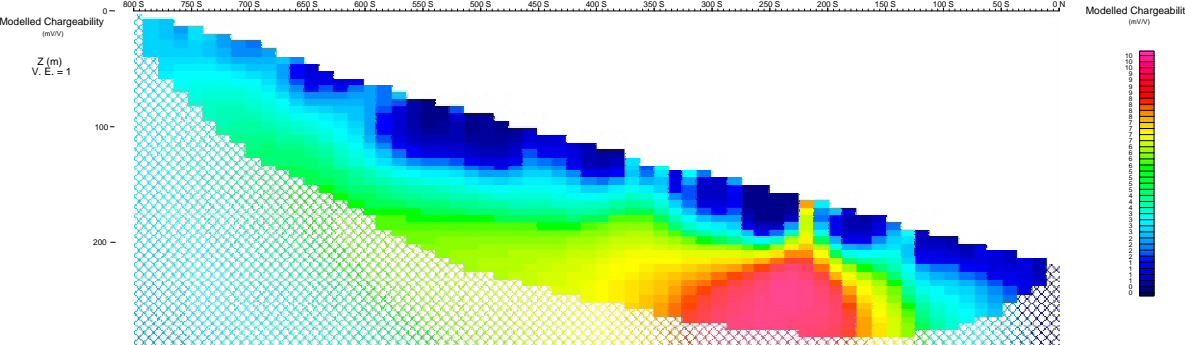
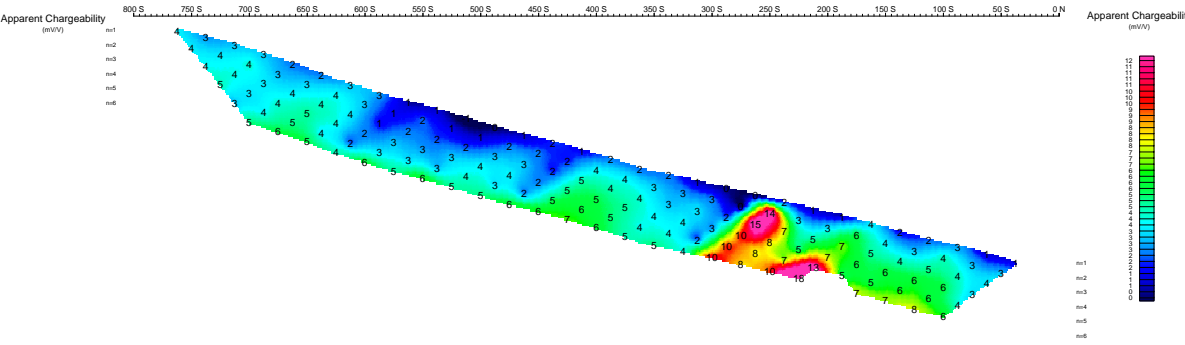
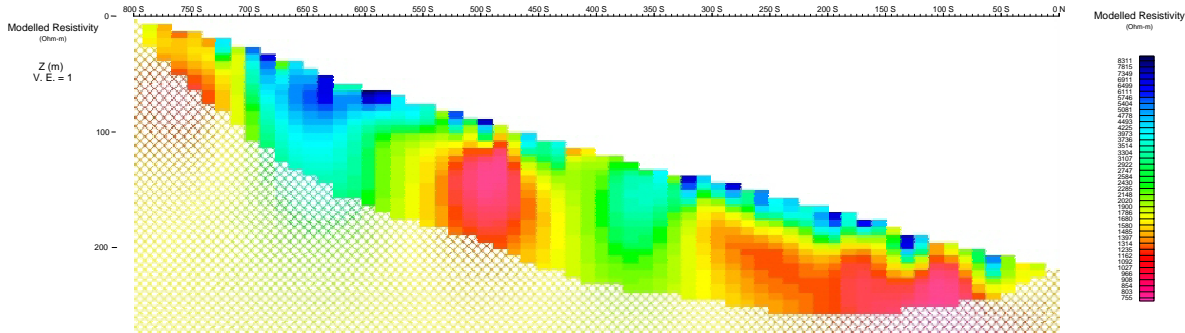
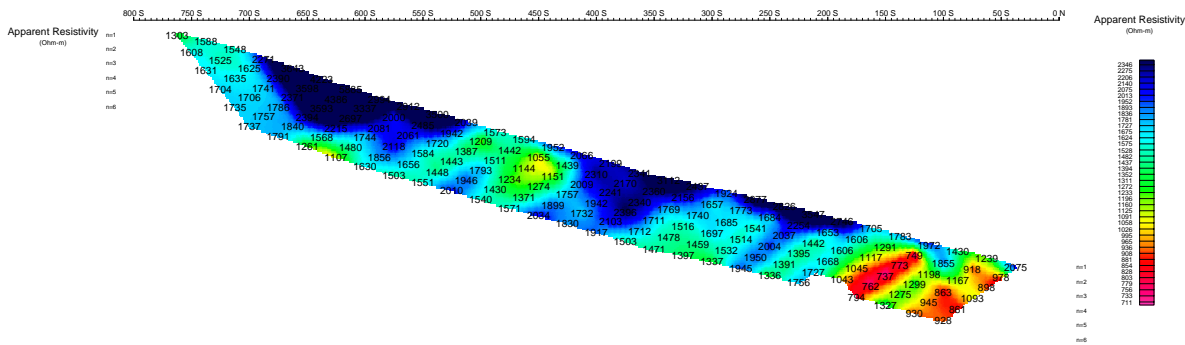


COMPOSITE SECTION L780 E

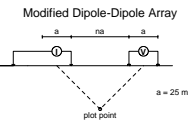


Vertical Exaggeration = 1.0

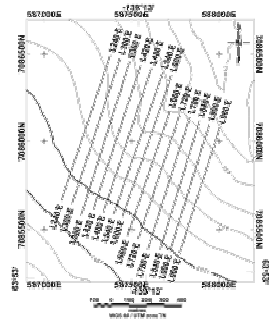
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L780 E
NTS: 1:15 O/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-16-02-YT Date: 08 Feb 07
Drawn by: HDS
Appendix E
AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L840 E



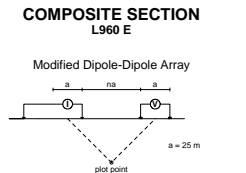
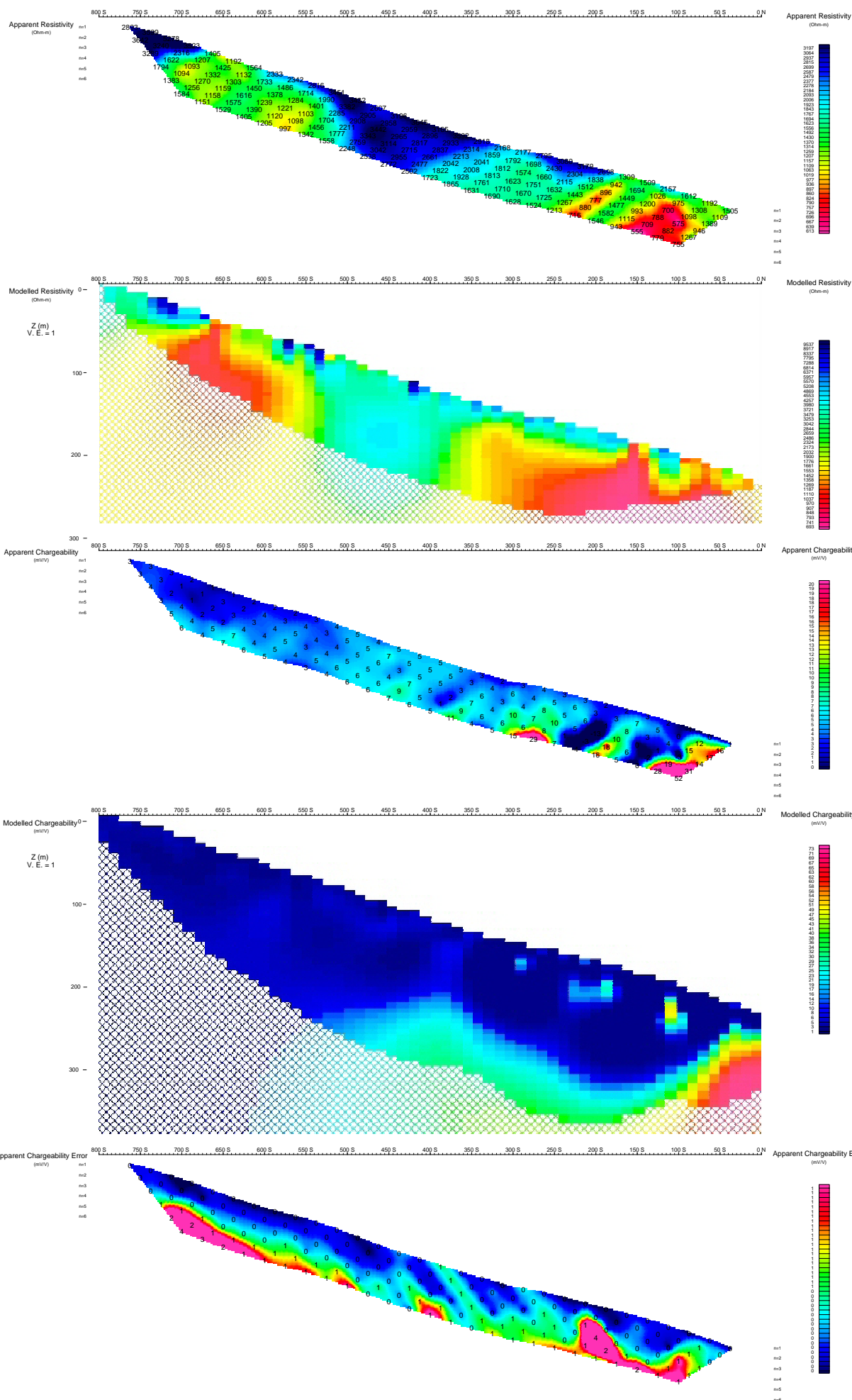
Stationary electrode at 800S (moving N).
Receiver: Iris ElecPro
Transmitter: GDD Tx-II 3.8kW
Data File: Lonestar East Grid.xyz
Dates Surveyed : Aug 22 to Sept 25, 2006



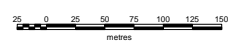
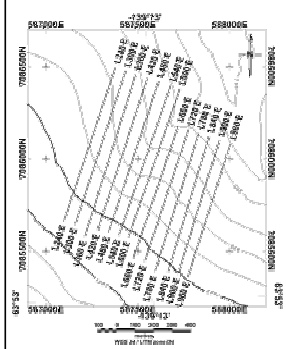
25 0 25 50 75 100 125 150
metres

Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR EAST GRID
COMPOSITE SECTION L840 E
NTS: 115 Q/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-05-02-YT Date: 08 Feb 07
Drawn by: HDS
Appendix E
AURORA GEOSCIENCES LTD.

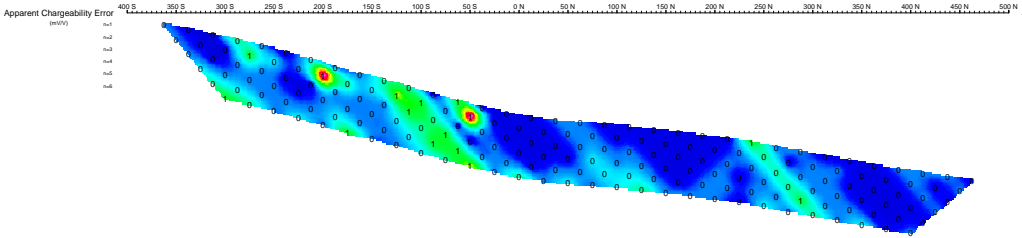
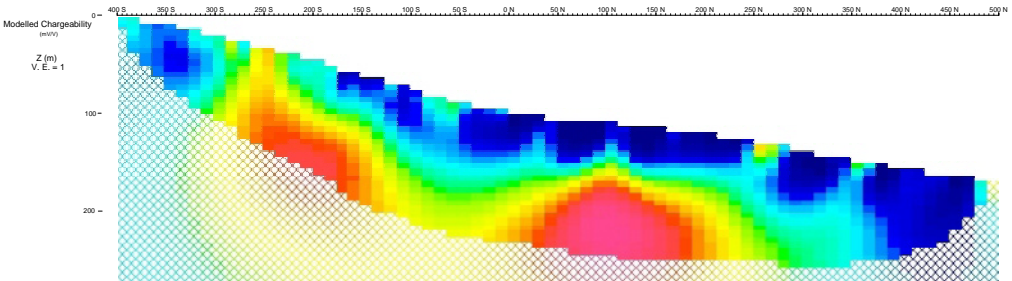
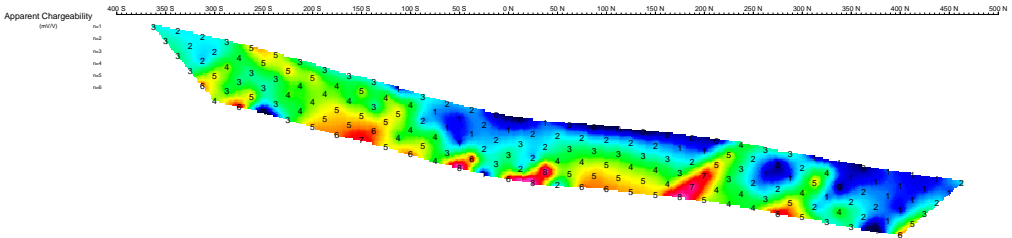
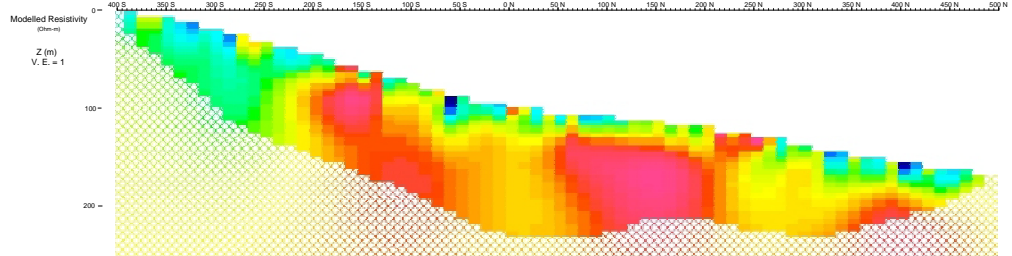
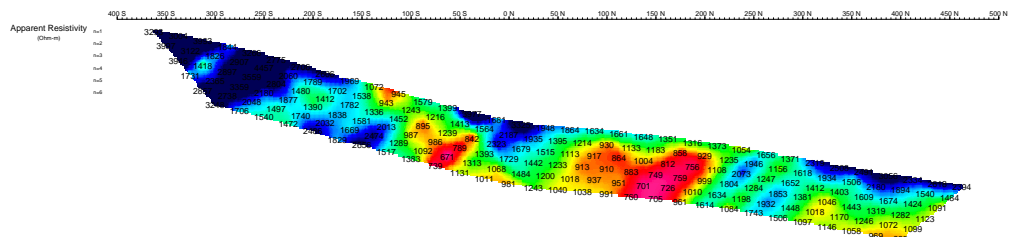


Stationary electrode at 800S (moving N).
Receiver: Iris ElrecPro
Transmitter: GDD Tx-II 3.6kW
Data File: Lonestar East Grid.xyz
Dates Surveyed : Aug 22 to Sept 25, 2006



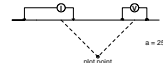
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.	
INDUCED POLARIZATION SURVEY	
ELDORADO PROPERTY, LONESTAR EAST GRID	
COMPOSITE SECTION L960 E	
NTS: 115 O/14	Mining District: Dawson
Datum: NAD 83	Projection: UTM Zone 7
Job: KDS-06-02-YT	Date 08 Feb 07
Drawn by: HDS	Appendix E
AURORA GEOSCIENCES LTD.	

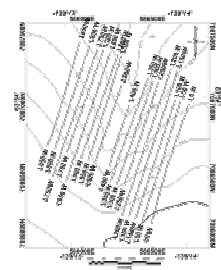


COMPOSITE SECTION L0 W

Modified Dipole-Dipole Array

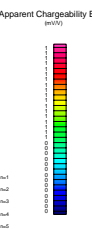
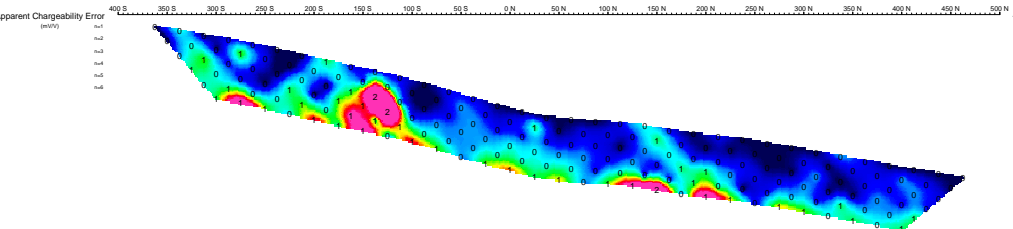
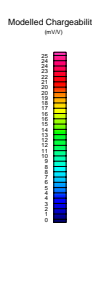
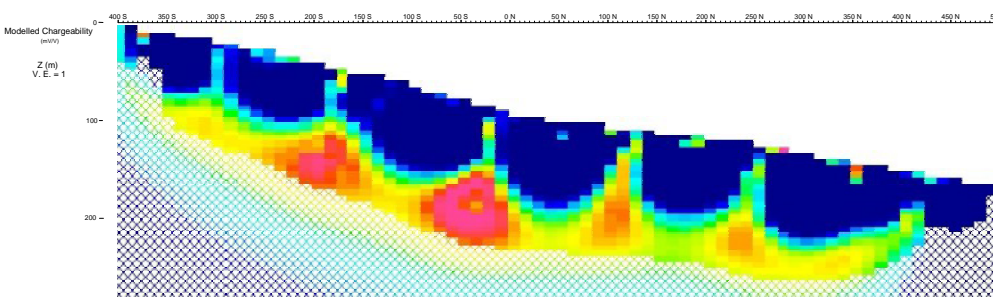
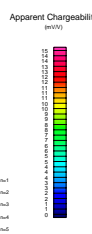
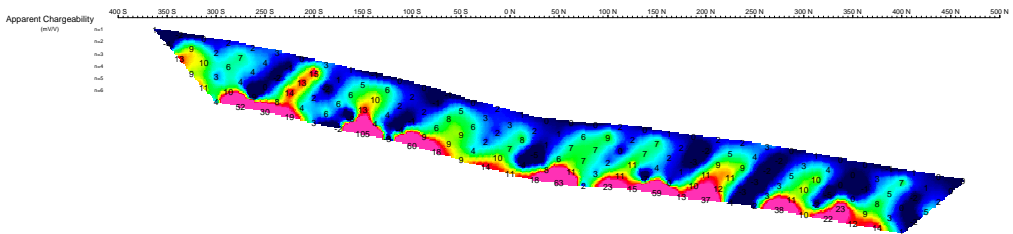
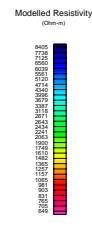
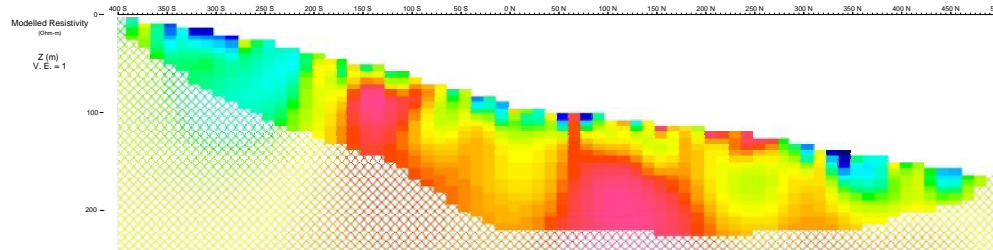
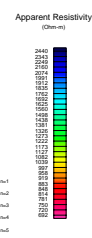
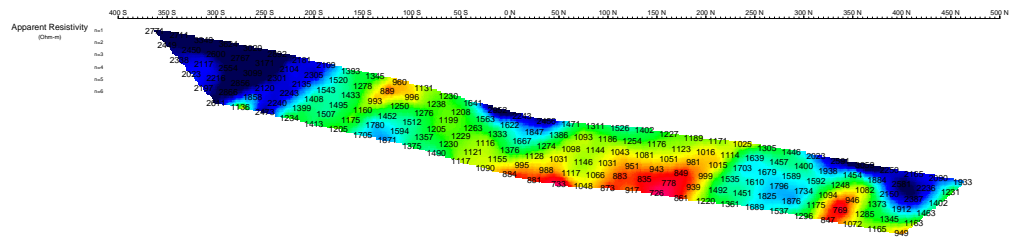


Stationary electrode at 400S (moving N)
Receiver: IIS ElexPro
Transmitter: GDD Tx11 3.6W
Data File: Lonestar West Grid.xyz
Dates Surveyed: Aug 22 to Sept 25, 2006

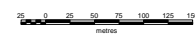
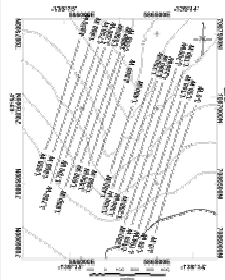
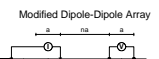


25 50 75 100 125 150
metres
Vertical Exaggeration = 1.0

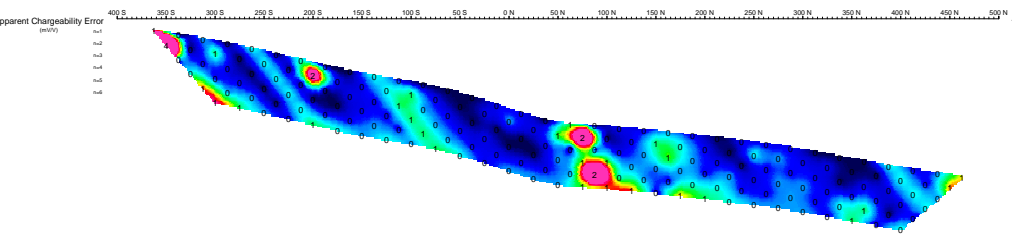
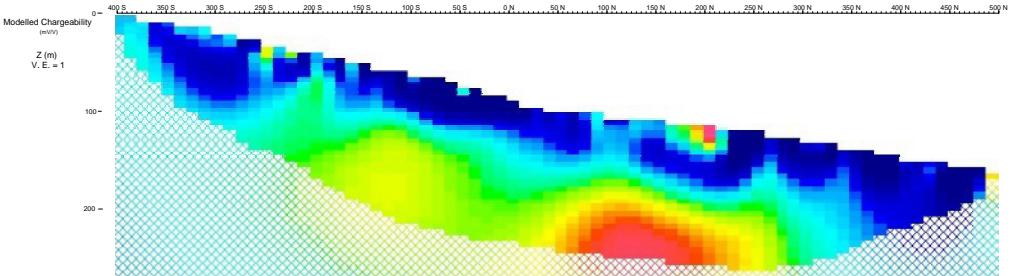
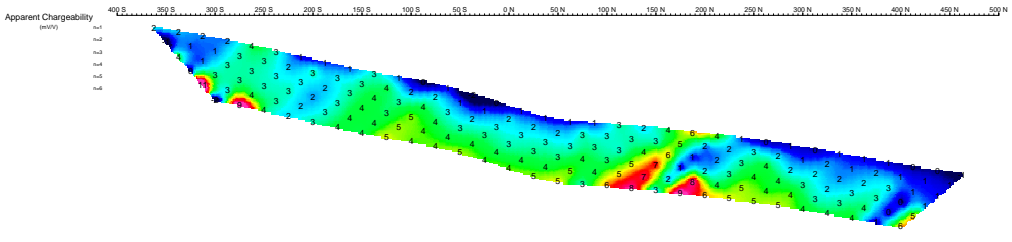
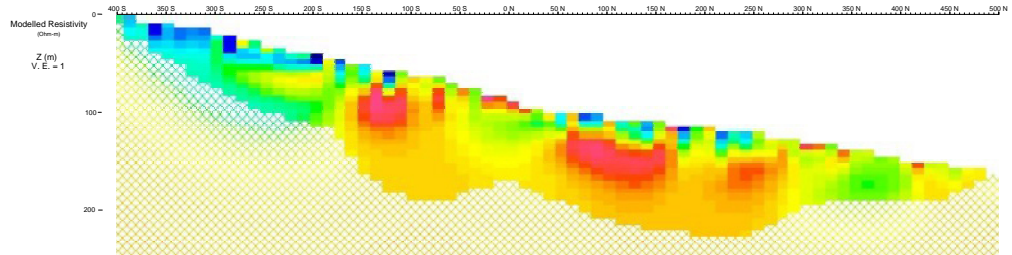
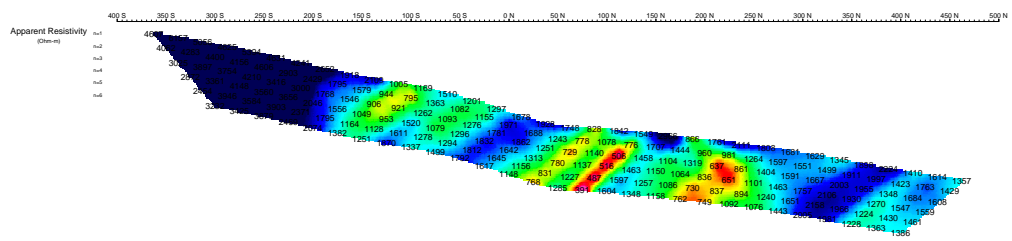
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L0 W
NTS: 115 O14
Datum: NAD 83
Job: KDS-06-02-YT
Drawn by: A. Label
Mining District: Dawson
Projection: UTM Zone 7
Date: 08 Feb 07
Appendix E
AURORA GEOSCIENCES LTD.



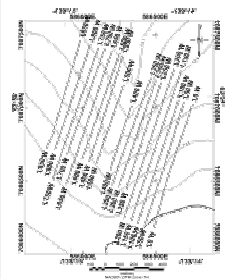
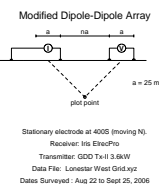
COMPOSITE SECTION L50 W



KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L50 W
NTS: 1:15 01/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date 06 Feb 07
Drawn by: A. Lebel
Appendix E
AURORA GEOSCIENCES LTD.

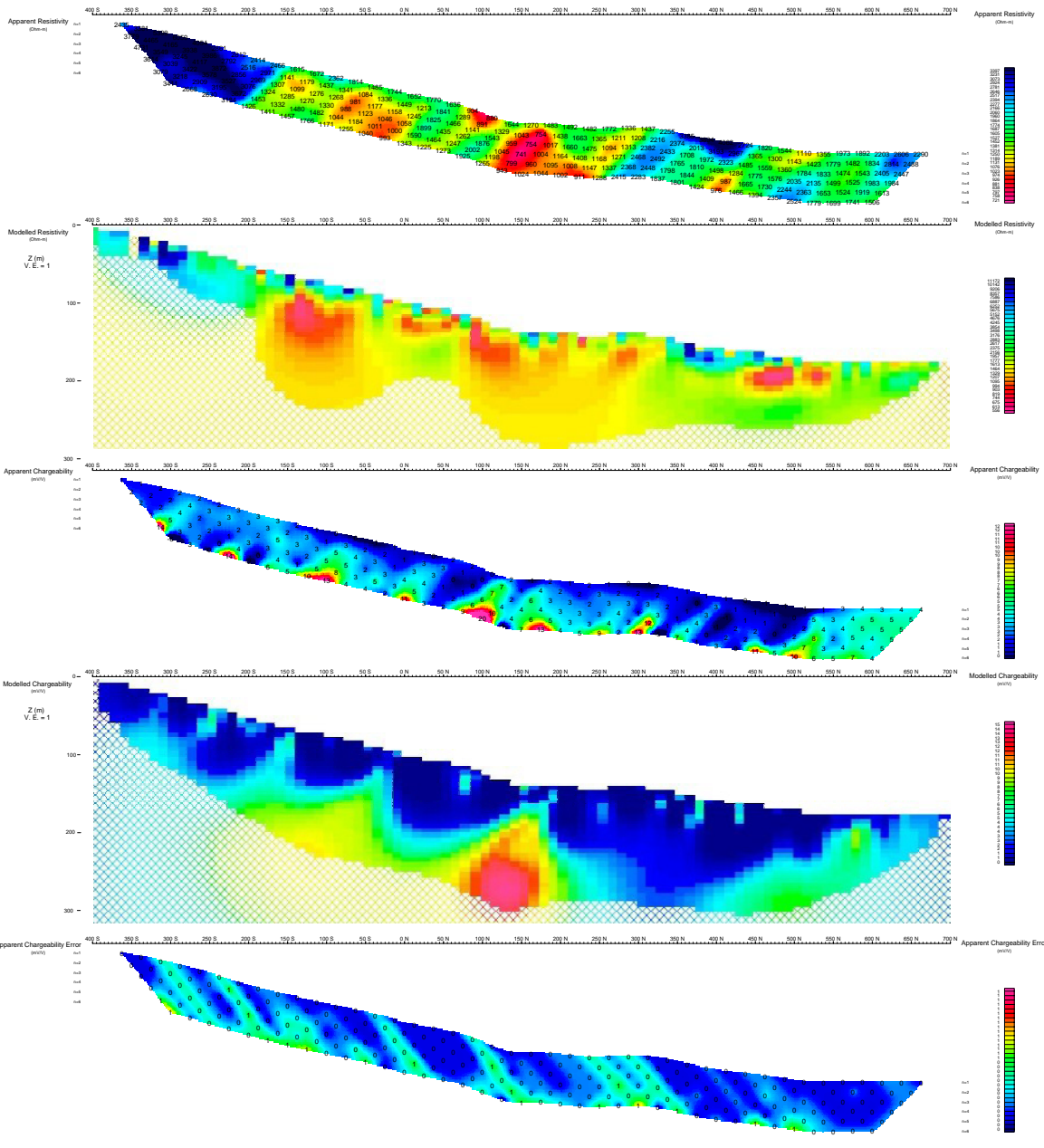


COMPOSITE SECTION L100 W



25 0 25 50 75 100 125 150
metres
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L100 W
NTS: 1:15 014 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date 08 Feb 07
Drawn by: A. Label
Appendix E
AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L150 W

Modified Dipole-Dipole Array

Stationary electrode at 402S (moving N).
Receiver: 1m Electrode
Transmitter: GDD Tx+13.6kV
Data File: Lonestar West Grid.gpr
Dates Surveyed: Aug 22 to Sept 26, 2005

Vertical Exaggeration = 1.0

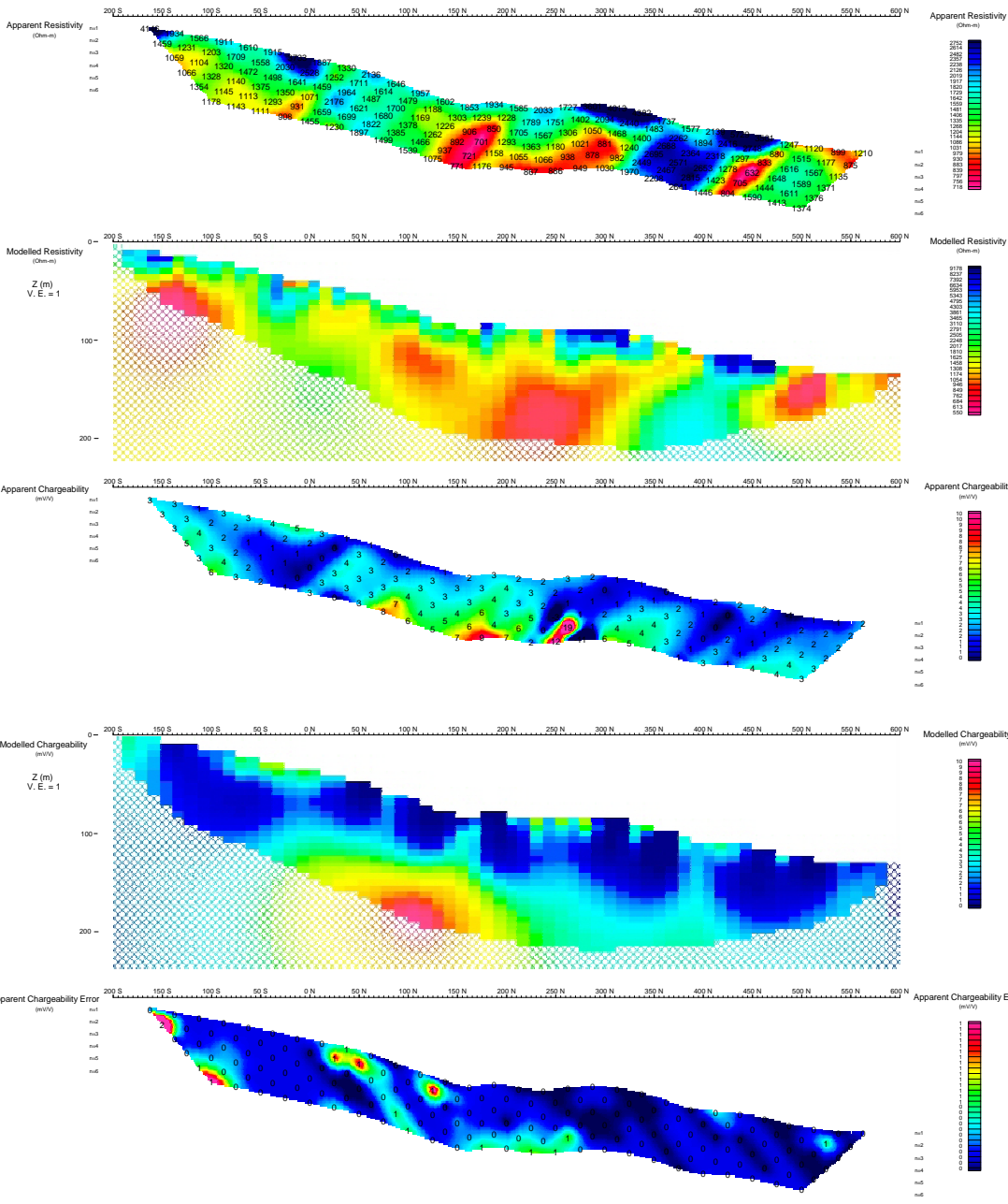
KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L150 W

NTS: 1:15 O14
Datum: NAD 83
Job: KDS-06-02-YT
Drawn by: A. Label

Mining District: Dawson
Projection: UTM Zone 7
Date: 09 Feb 07
Appendix E

AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L250 W

Modified Dipole-Dipole Array

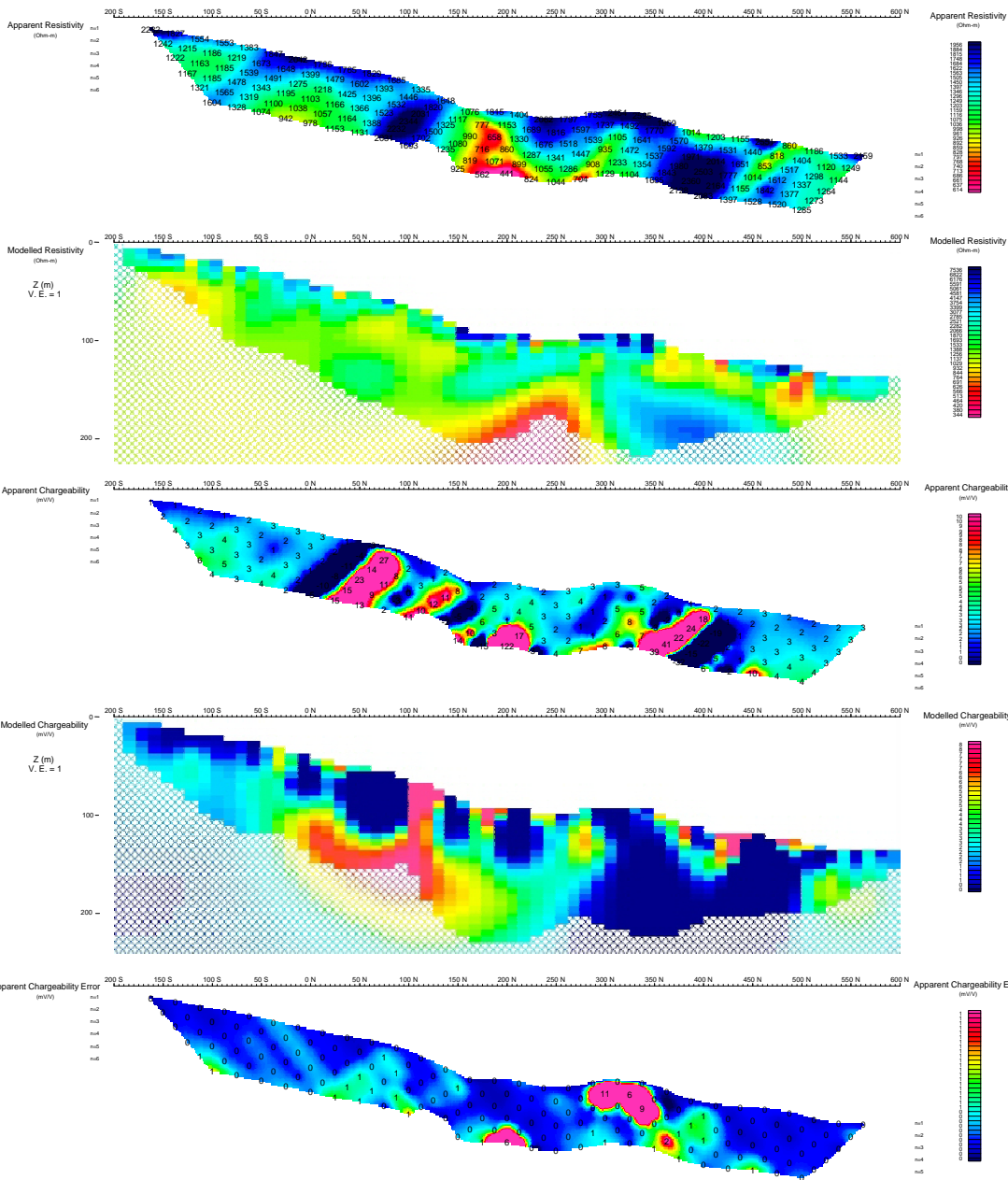
Stationary electrode at 200S (moving N).
Receiver: Irs EnePro
Transmitter: GDO Tx 8 3.6kW
Data File: Northstar West Grid.xyz
Dates Surveyed : Aug 22 to Sept 25, 2006

Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L250 W

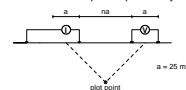
NTS: 1:15 0/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date 09 Feb 07
Drawn by: A. Label **Appendix E**

AURORA GEOSCIENCES LTD.

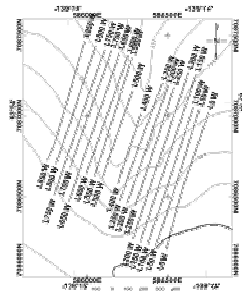


COMPOSITE SECTION L300 W

Modified Dipole-Dipole Array

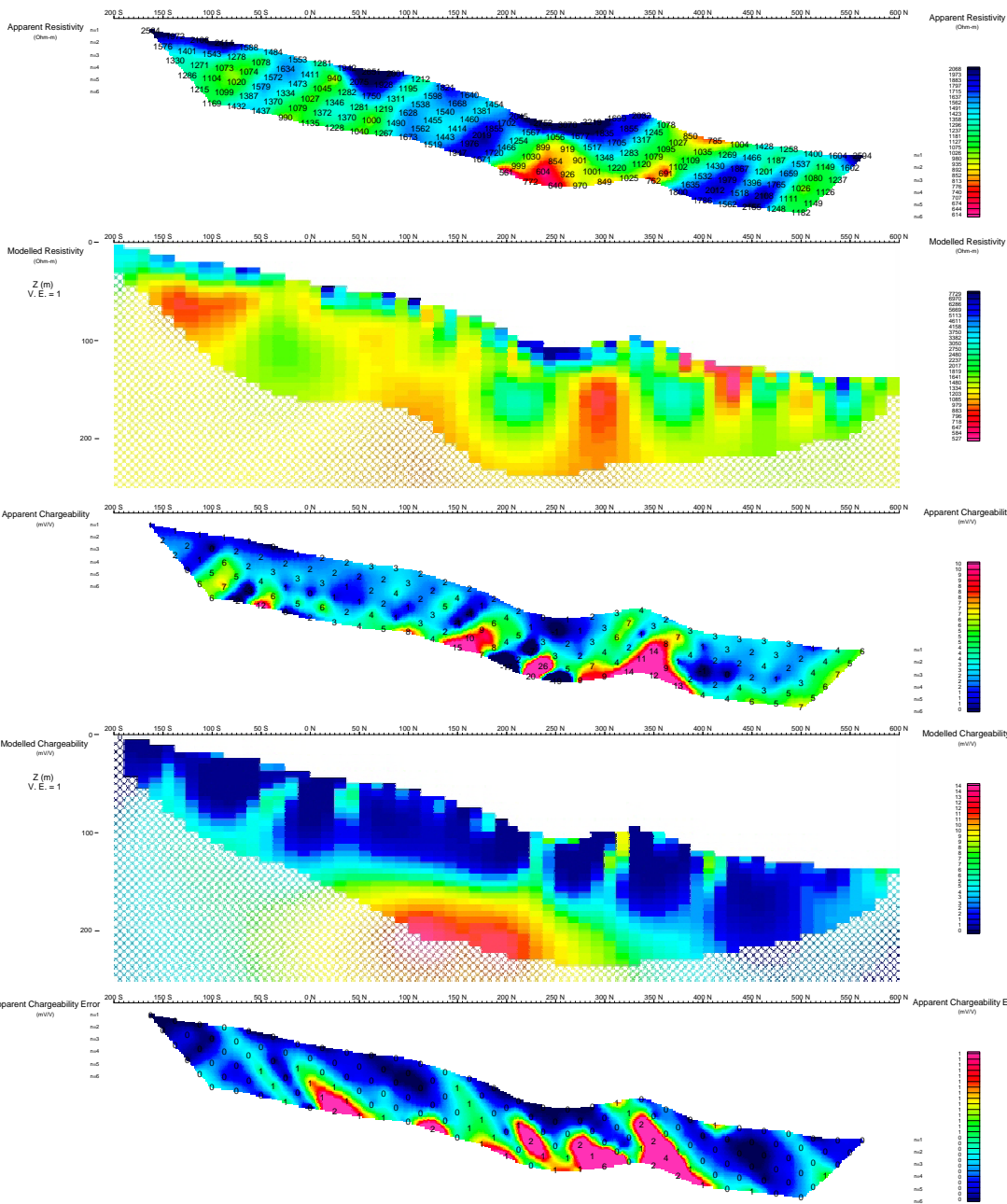


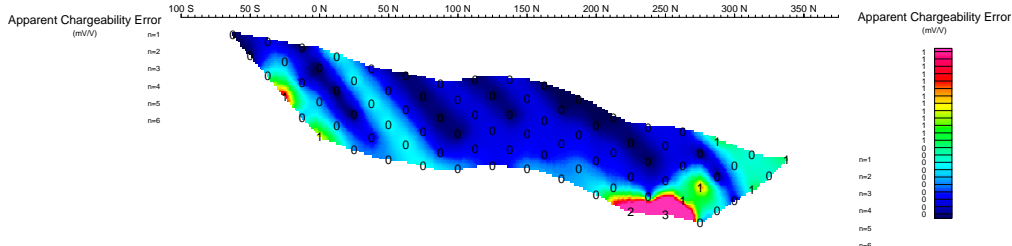
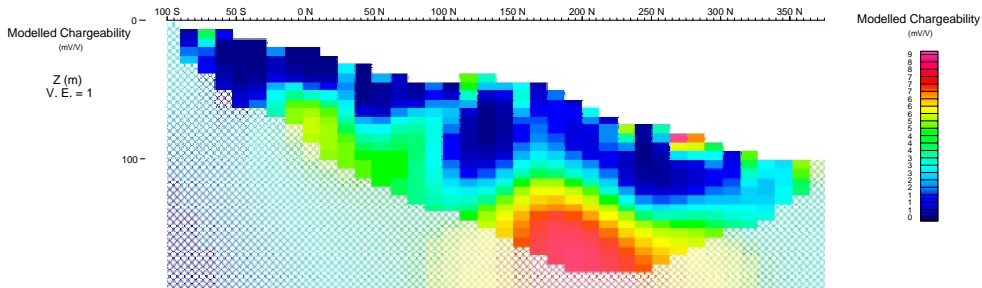
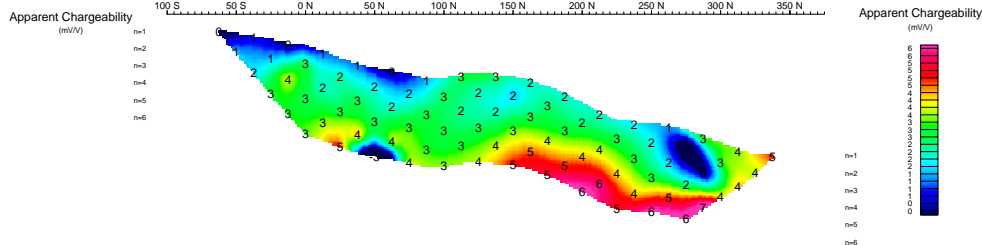
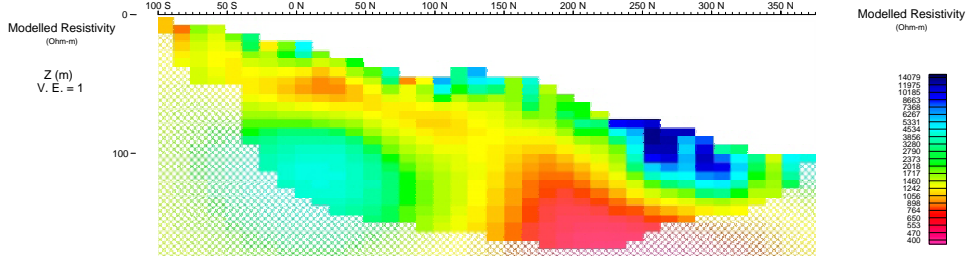
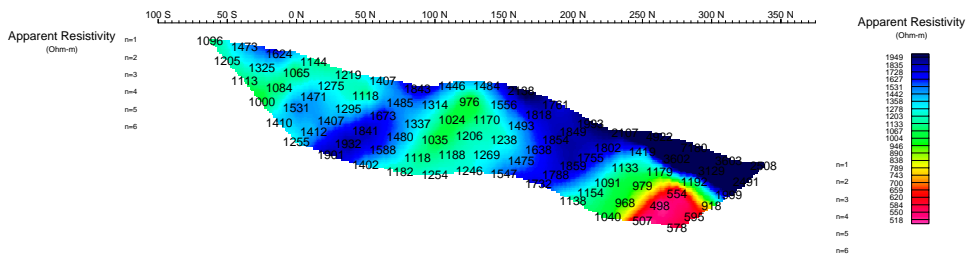
Stationery electrode at 200S (moving N).
Receiver: Iris EtecPro
Transmitter: GDD Tx-8 3.6kW
Data File: Lonestar West Grid.azw
Dates Surveyed : Aug 22 to Sept 25, 2006



Vertical Exaggeration = 1.0

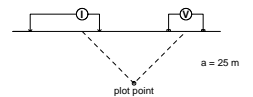
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L300 W
NTS: 1:15 0/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KOS-06-05-YT Date: 09 Feb 07
Drawn by: A. Lebel **Appendix E**
AURORA GEOSCIENCES LTD.





COMPOSITE SECTION L400 W

Modified Dipole-Dipole Array



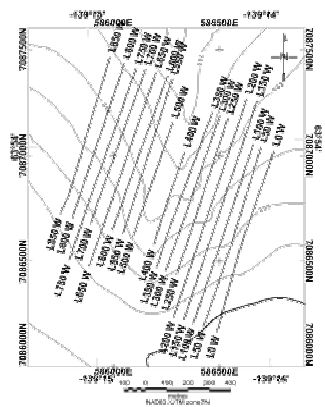
Stationary electrode at 100S (moving N).

Receiver: Iris ElrecPro

Transmitter: GDD Tx-II 3.6kW

Data File: Lonestar West Grid.xyz

Dates Surveyed : Aug 22 to Sept 25, 2006

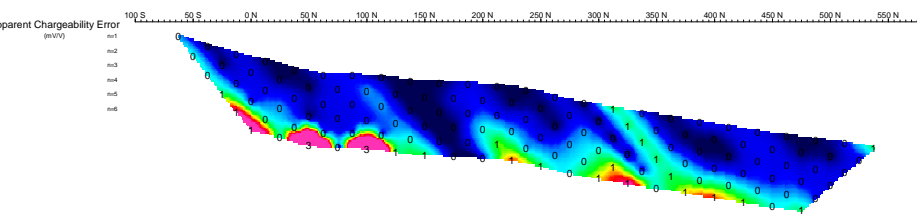
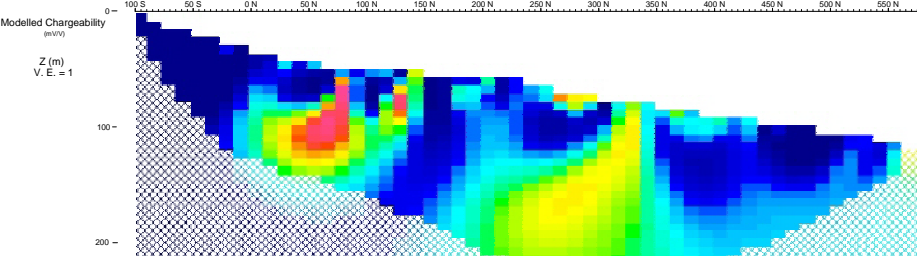
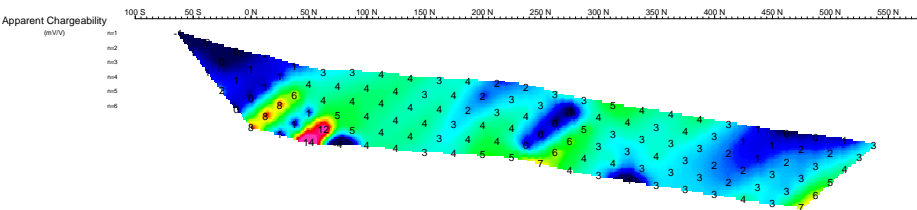
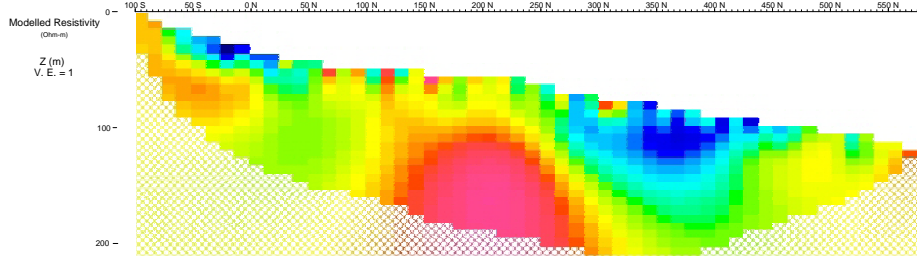
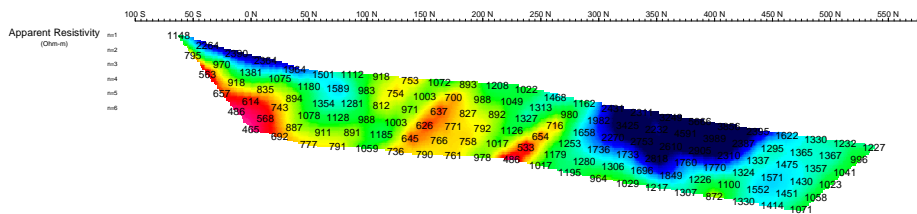


Vertical Exaggeration = 1.0

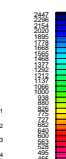
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L400 W

NTS: 115 O/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date 09 Feb 07
Drawn by: A. Lebel

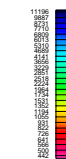
Appendix E
AURORA GEOSCIENCES LTD.



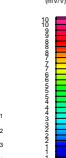
Apparent Resistivity (Ohm-m)



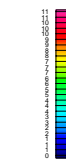
Modelled Resistivity (Ohm-m)



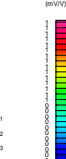
Apparent Chargeability (ppm/V)



Modelled Chargeability (ppm/V)

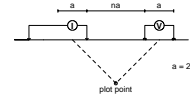


Apparent Chargeability Error (ppm/V)



COMPOSITE SECTION L500 W

Modified Dipole-Dipole Array



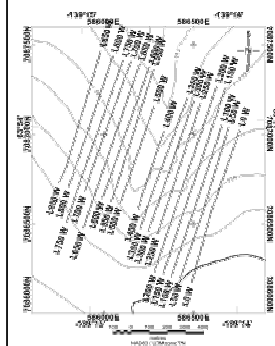
Stationary electrode at 100S (moving N).

Receiver: Iris ElecPro

Transmitter: GDD Tx-II 3.6kW

Data File: Lonestar West Grid.xyz

Dates Surveyed: Aug 22 to Sept 25, 2006



Vertical Exaggeration = 1.0

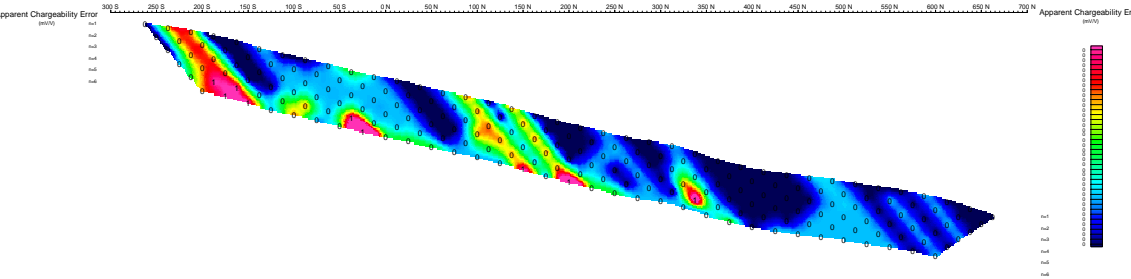
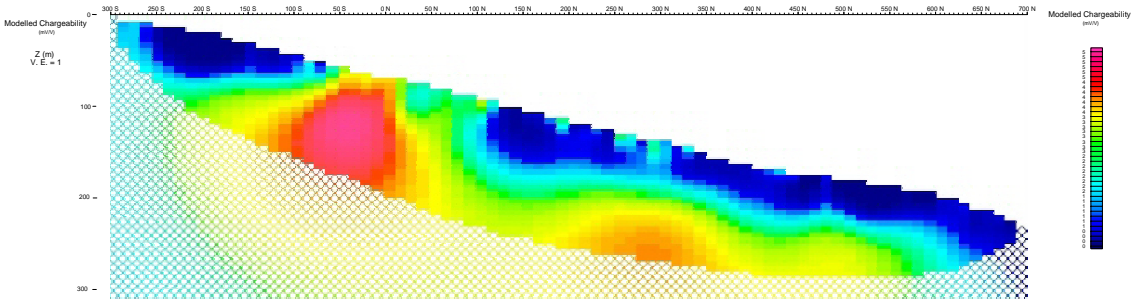
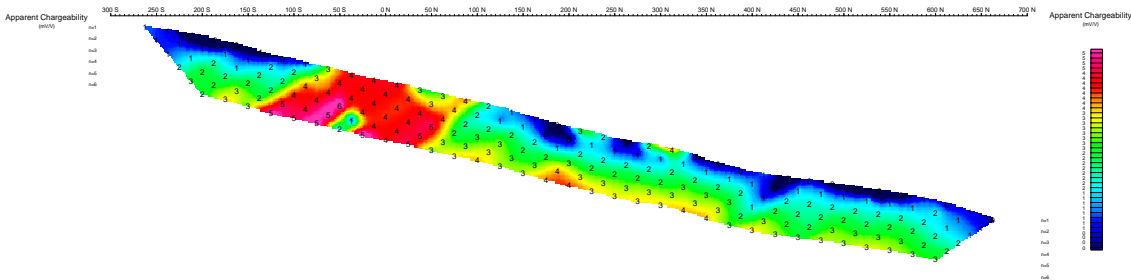
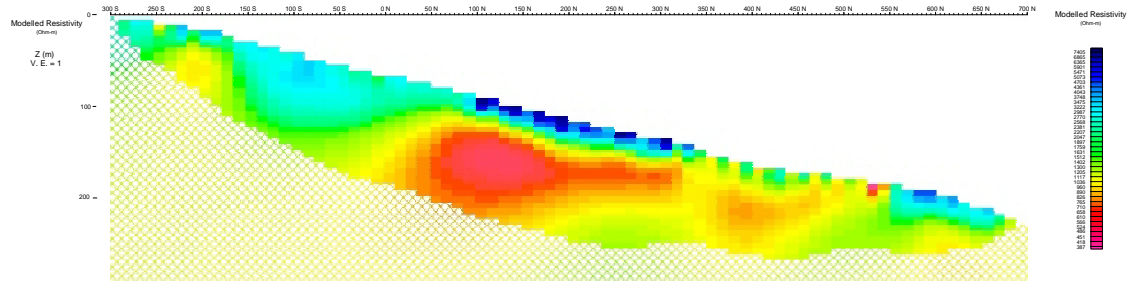
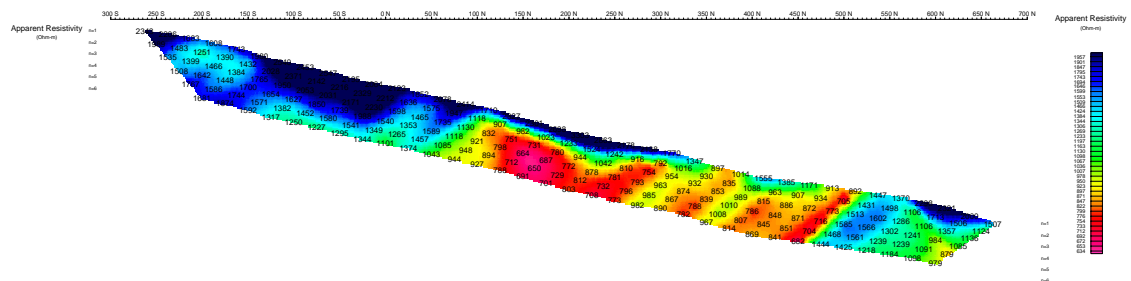
KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L500 W

NTS: 115 O/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 09 Feb 07
Drawn by: A. Lebel
Appendix E
AURORA GEOSCIENCES LTD.

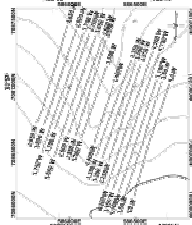
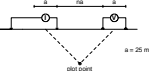


by: A. Lebel



COMPOSITE SECTION L650 W

Modified Dipole-Dipole Array



25 50 75 100 125 150
metres

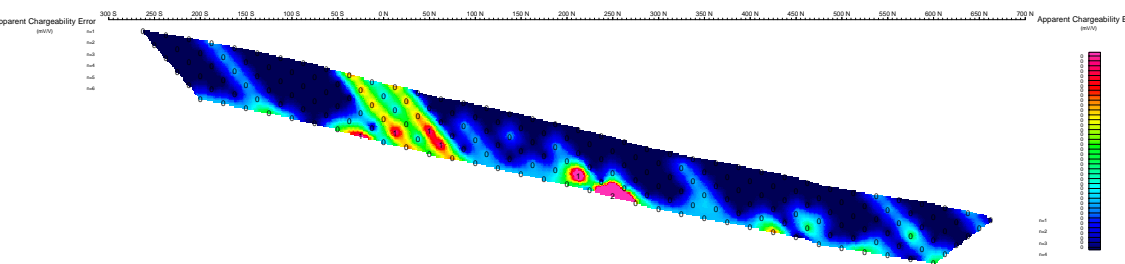
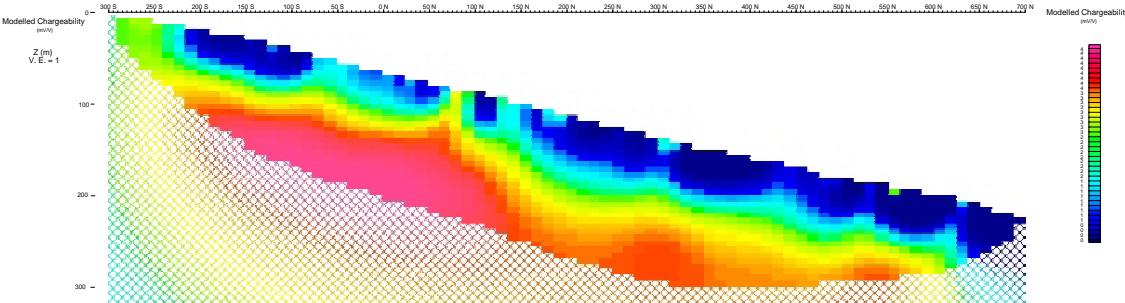
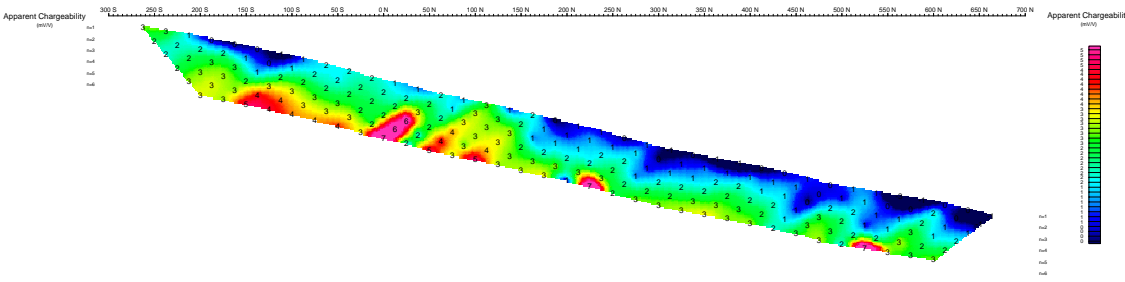
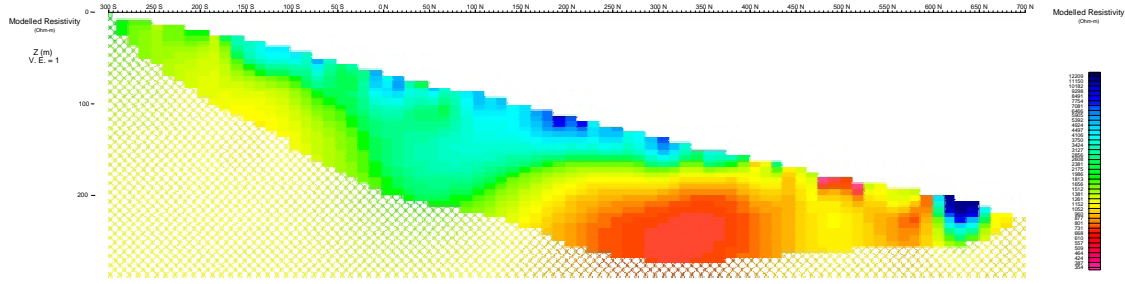
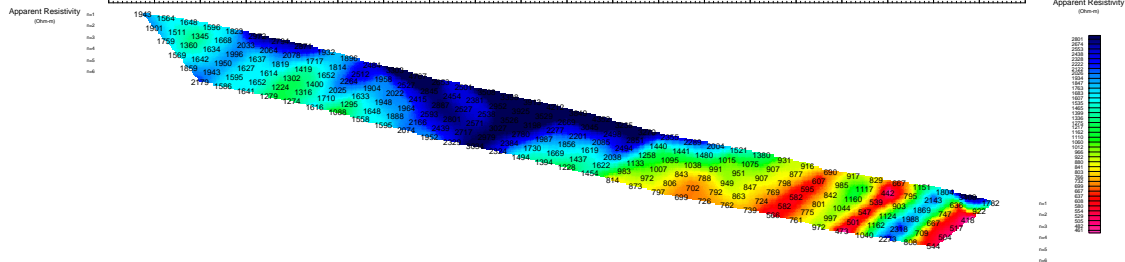
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L650 W

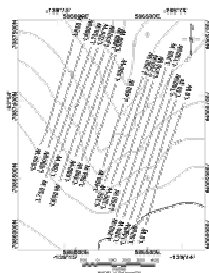
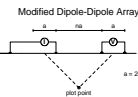
NTS: 1:15 014 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 09 Feb 07
Drawn by: A. Lelievre

Appendix E

AURORA GEOSCIENCES LTD.

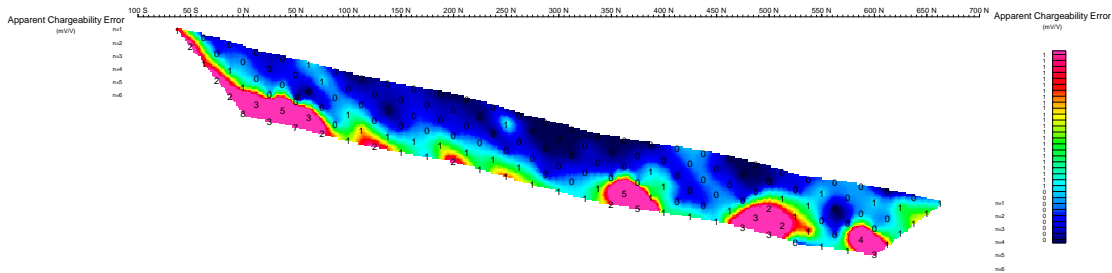
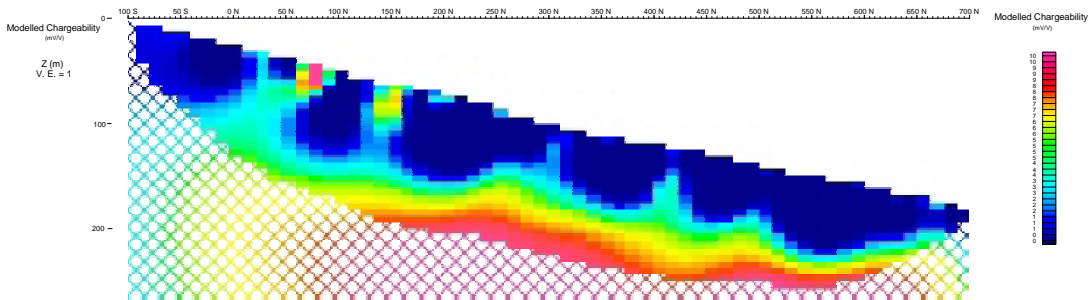
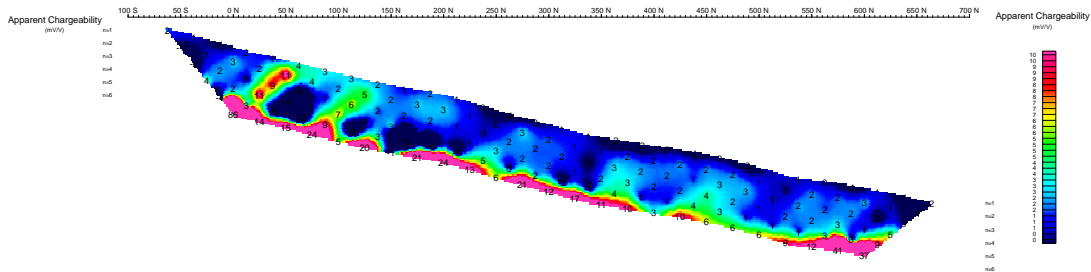
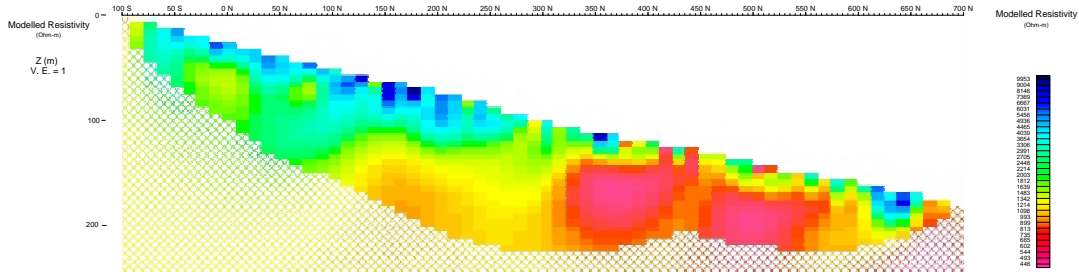
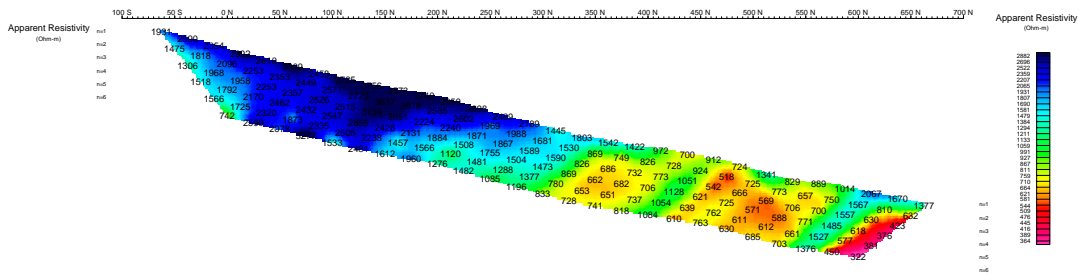


COMPOSITE SECTION L750 W



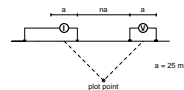
Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L750 W
NTS: 1:15,000 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-GS-VT Date: 09 Feb 07
Drawn by: A. Lebel
Appendix E
AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L800 W

Modified Dipole-Dipole Array



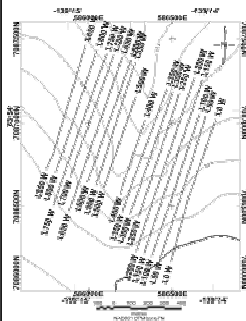
Stationery electrode at 100S (moving N).

Receiver: Iris EtecPro

Transmitter: GDD Tx-8 3.6kW

Data File: Lonestar West Grid.xyz

Dates Surveyed: Aug 22 to Sept 25, 2006



25 0 25 50 75 100 125 150
metres

Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY

ELDORADO PROPERTY, LONESTAR WEST GRID

COMPOSITE SECTION L800 W

NTS: 1:15 Q14 Mining District: Dawson

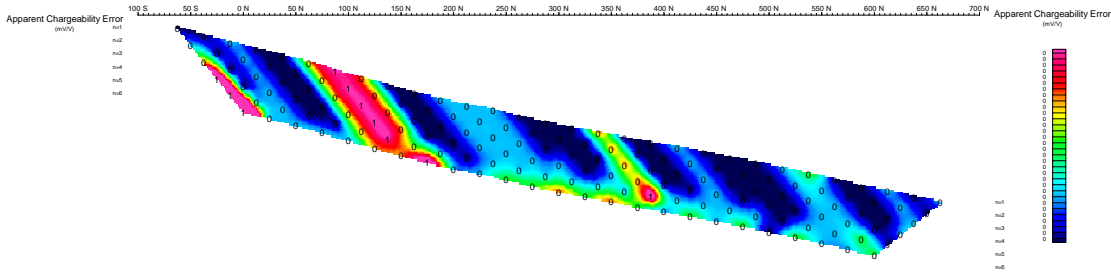
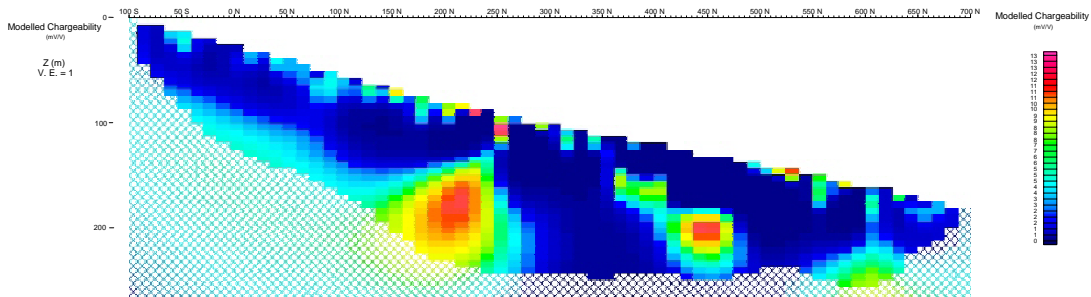
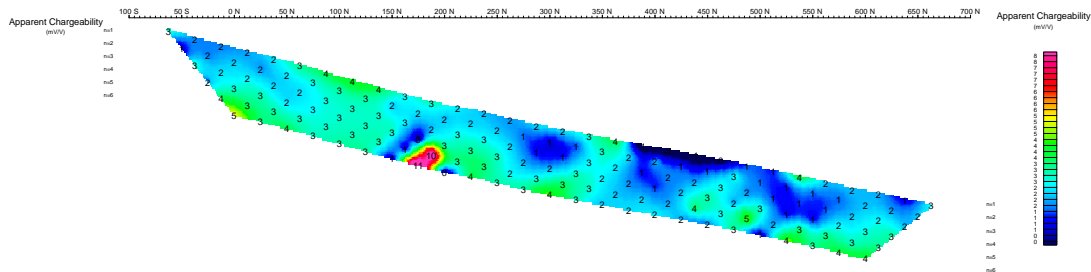
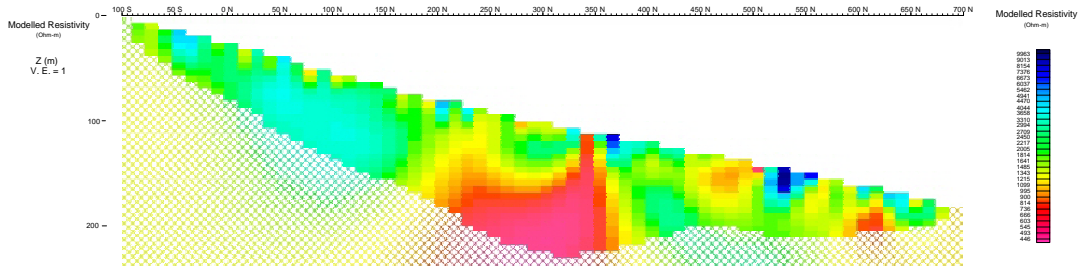
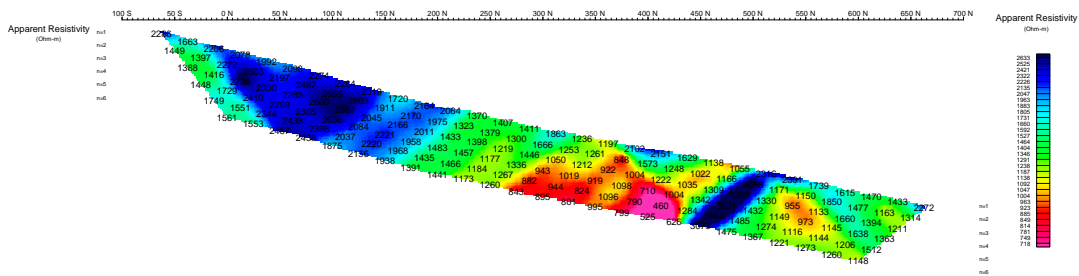
Datum: NAD 83 Projection: UTM Zone 7

Job: KDS-06-02-YT Date: 09 Feb 07

Drawn by: A. Lebel

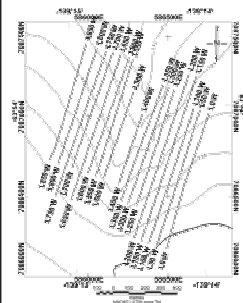
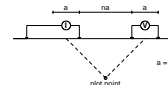
Appendix E

AURORA GEOSCIENCES LTD.



COMPOSITE SECTION L850 W

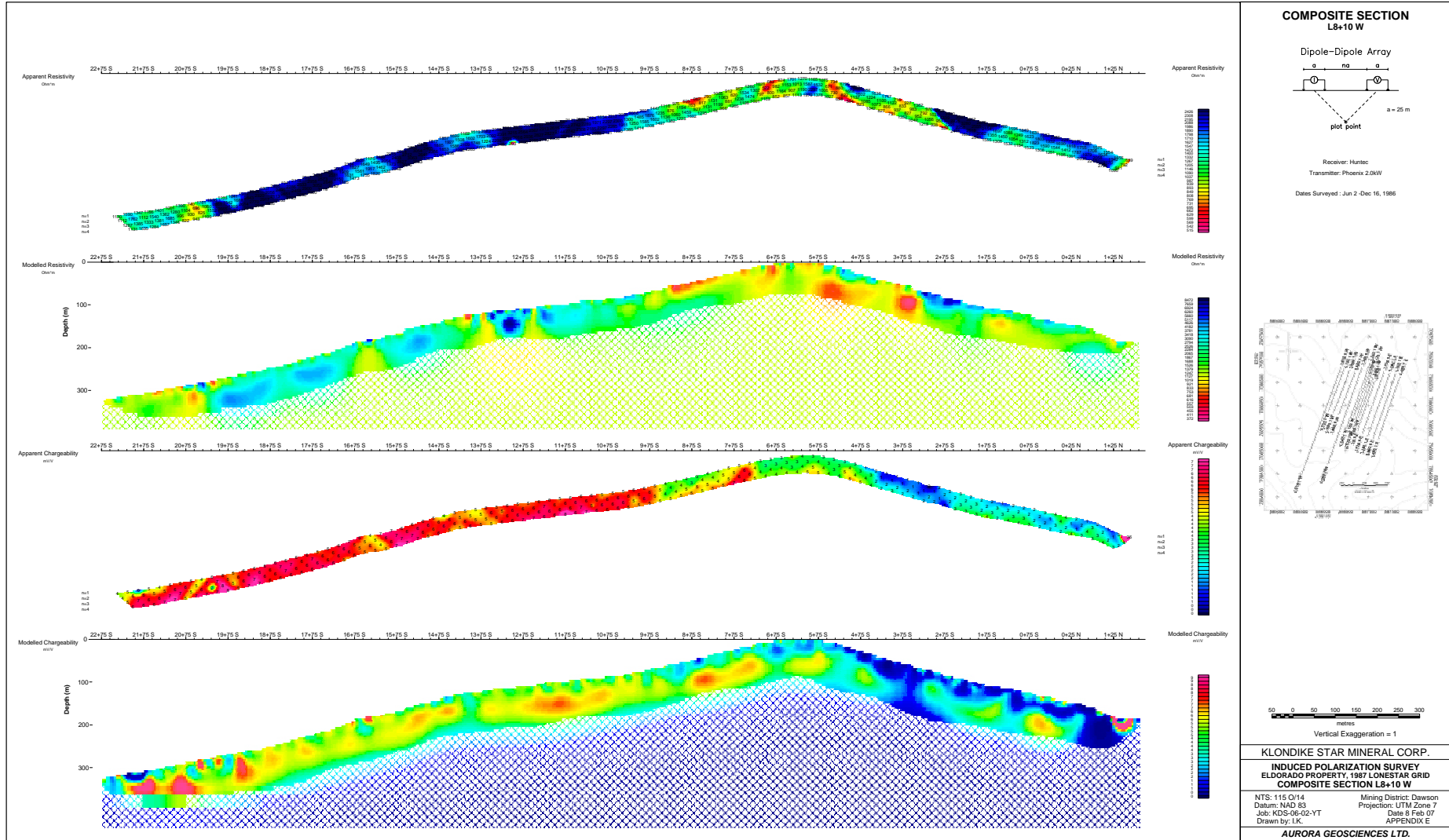
Modified Dipole-Dipole Array



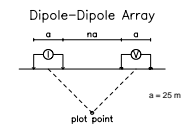
0 25 50 75 100 125 150
metres

Vertical Exaggeration = 1.0

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
COMPOSITE SECTION L850 W
NTS: 115 Q14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-03-YT Date: 09 Feb 07
Drawn by: A. Label
Appendix E
AURORA GEOSCIENCES LTD.

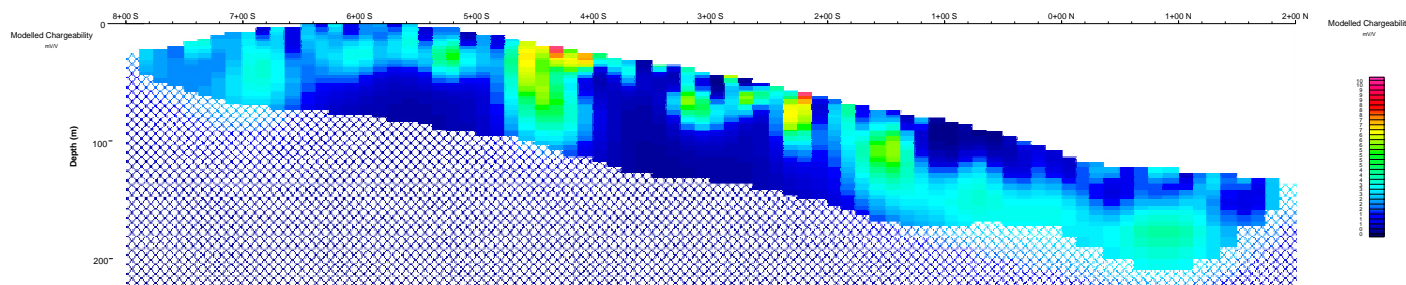
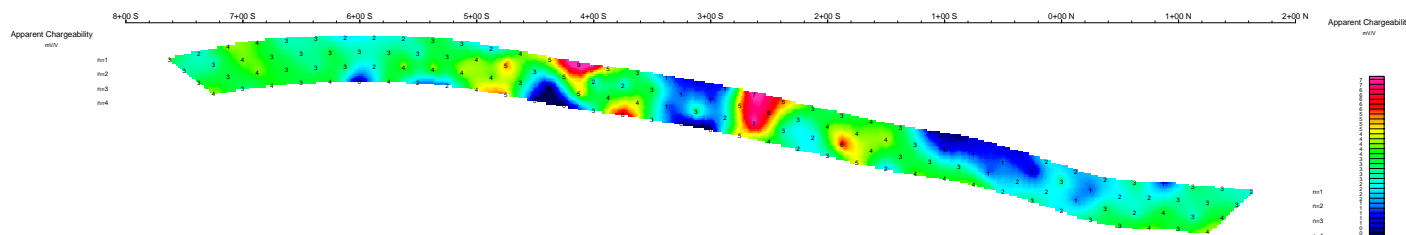
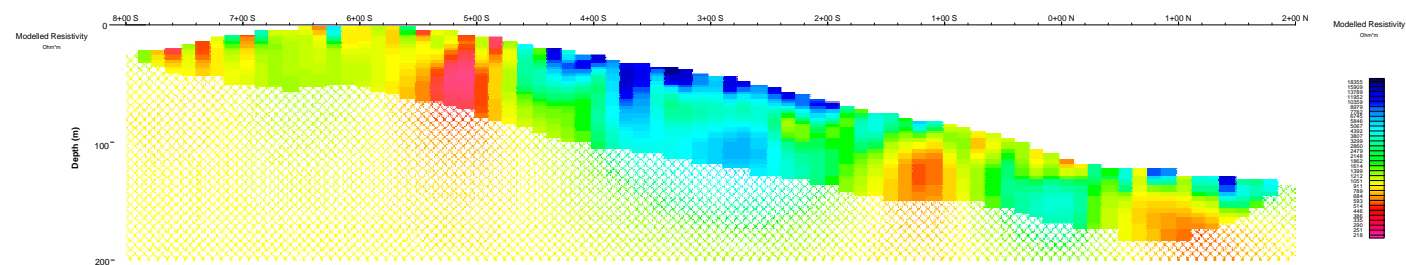
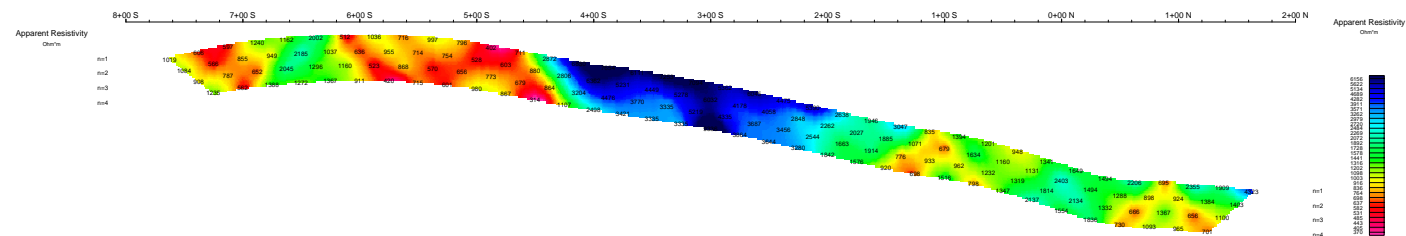
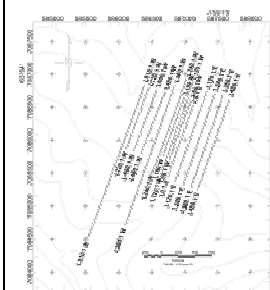


COMPOSITE SECTION L6+00 W



Receiver: Huntec
Transmitter: Phoenix 2.0kW

Dates Surveyed : Jun 2 - Dec 16, 1986



25 0 25 50 75 100 125 150
metres

Vertical Exaggeration = 1

KLONDIKE STAR MINERAL CORP.

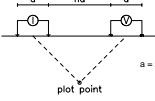
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, 1987 LONESTAR GRID
COMPOSITE SECTION L6+00 W

NTS: 1:15 O'14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 8 Feb 07
Drawn by: I.K. APPENDIX E

AURORA GEOSCIENCES LTD.

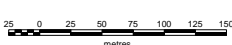
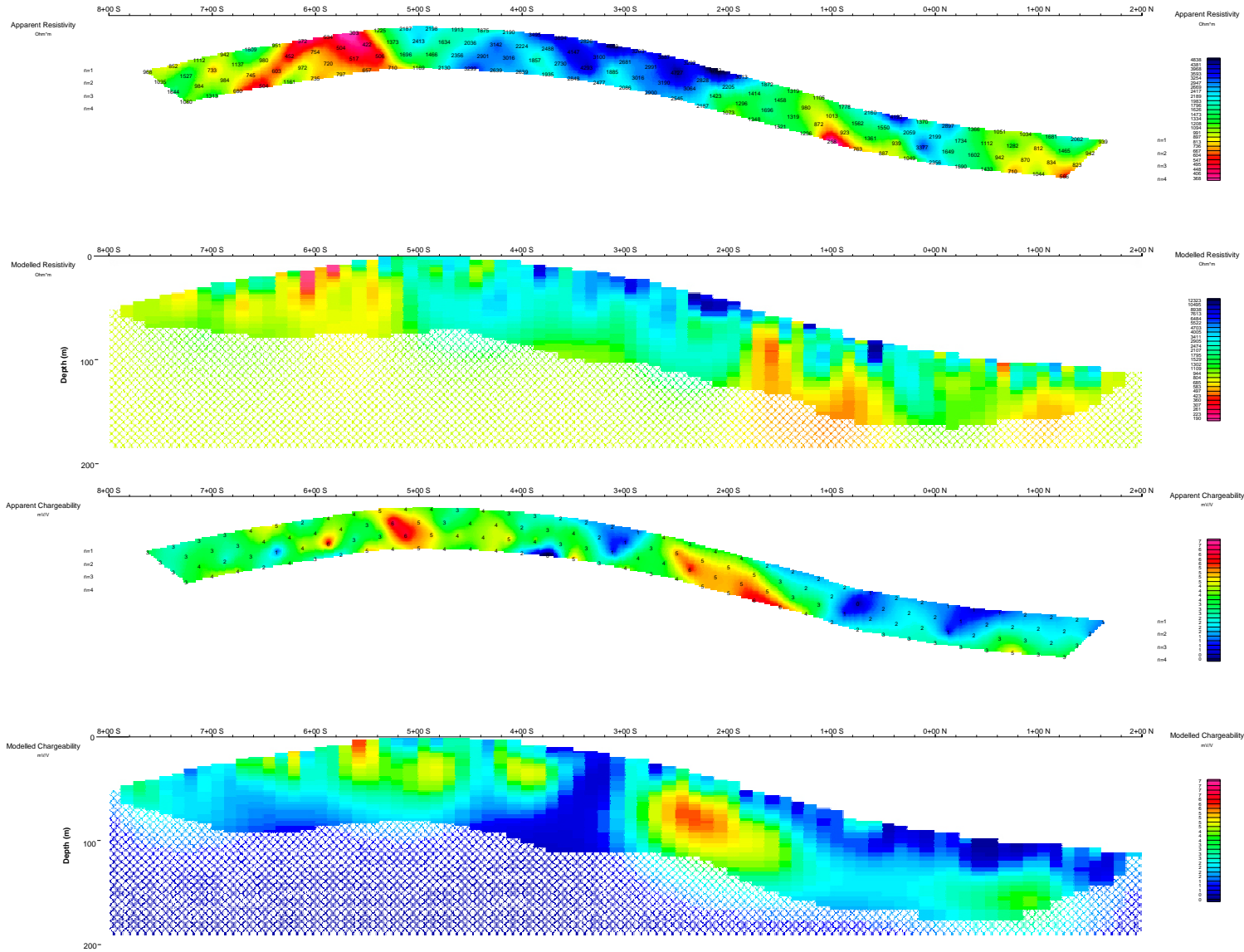
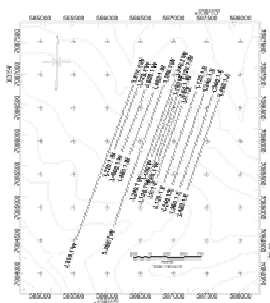
COMPOSITE SECTION
L4+80 W

Dipole-Dipole Array



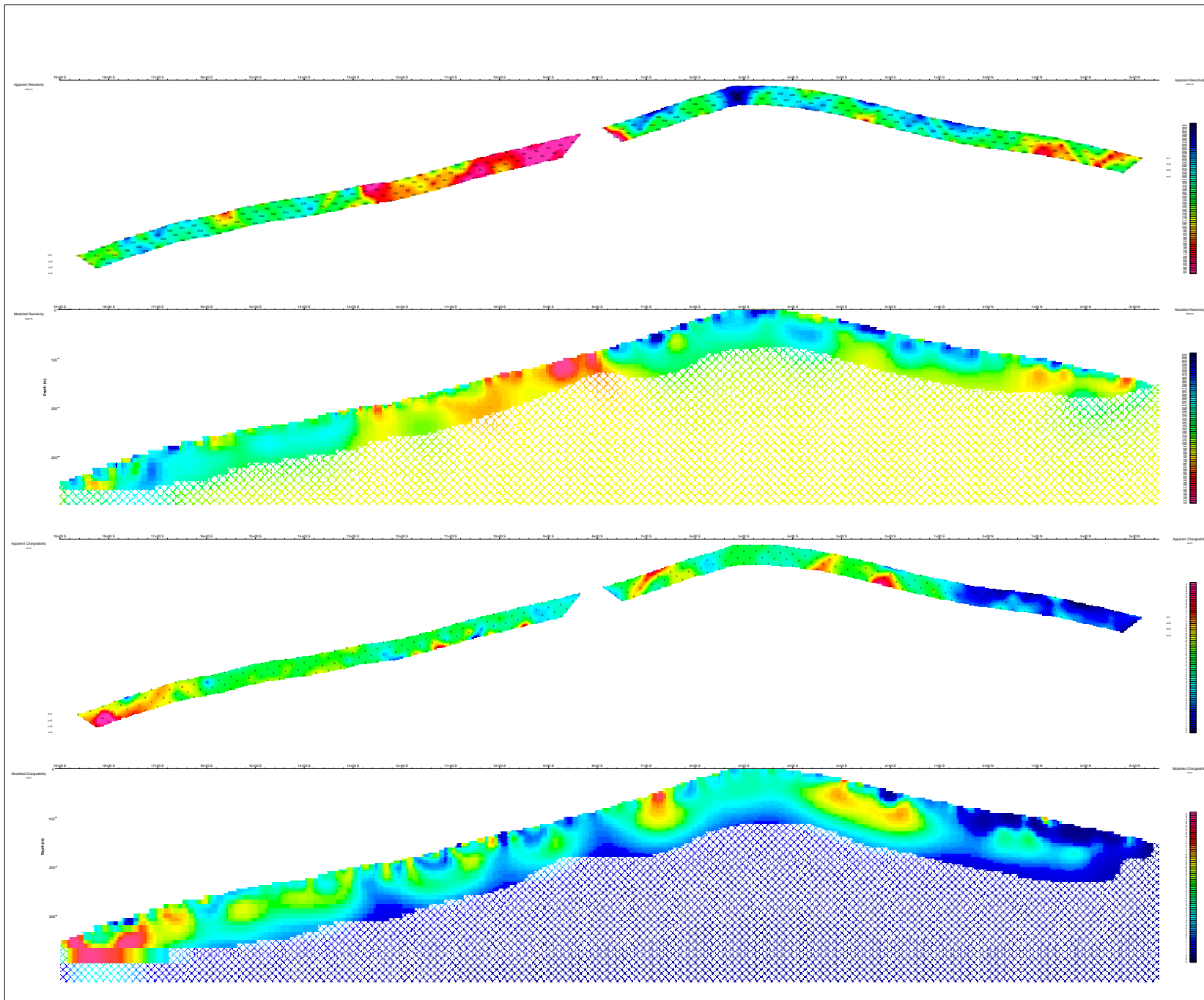
Receiver: Huntec
Transmitter: Phoenix 2.0kW

Dates Surveyed : Jun 2-Dec 16, 1986



Vertical Exaggeration = 1

KLONDIKE STAR MINERAL CORP.	
INDUCED POLARIZATION SURVEY	
ELDORADO PROPERTY, 1987 LONESTAR GRID	
COMPOSITE SECTION L4+80 W	
NTS: 115 O/14	Mining District: Dawson
Datum: NAD 83	Projection: UTM Zone 7
Job: KDS-06-02-YT	Date: 8 Feb 07
Drawn by: I.K.	APPENDIX E
AURORA GEOSCIENCES LTD.	



COMPOSITE SECTION 1348 W

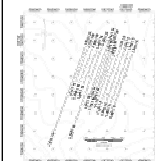
Dipole-Dipole Array



Resistivity (ohm-m)

Transfer Function (ohm-m)

Date Sampled: Jan 2, Dec 16, 1995



Vertical Exaggeration = 1

KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY

ELKLAND PROPERTY, 1861 LONGVIEW DR

COMPOSITE SECTION 1348 W

NTS: 1:15,000

Survey: 1995-96

Job: K20-96-01-VT

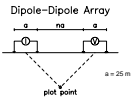
Drawn by: JLC

Date: 8 Feb 97

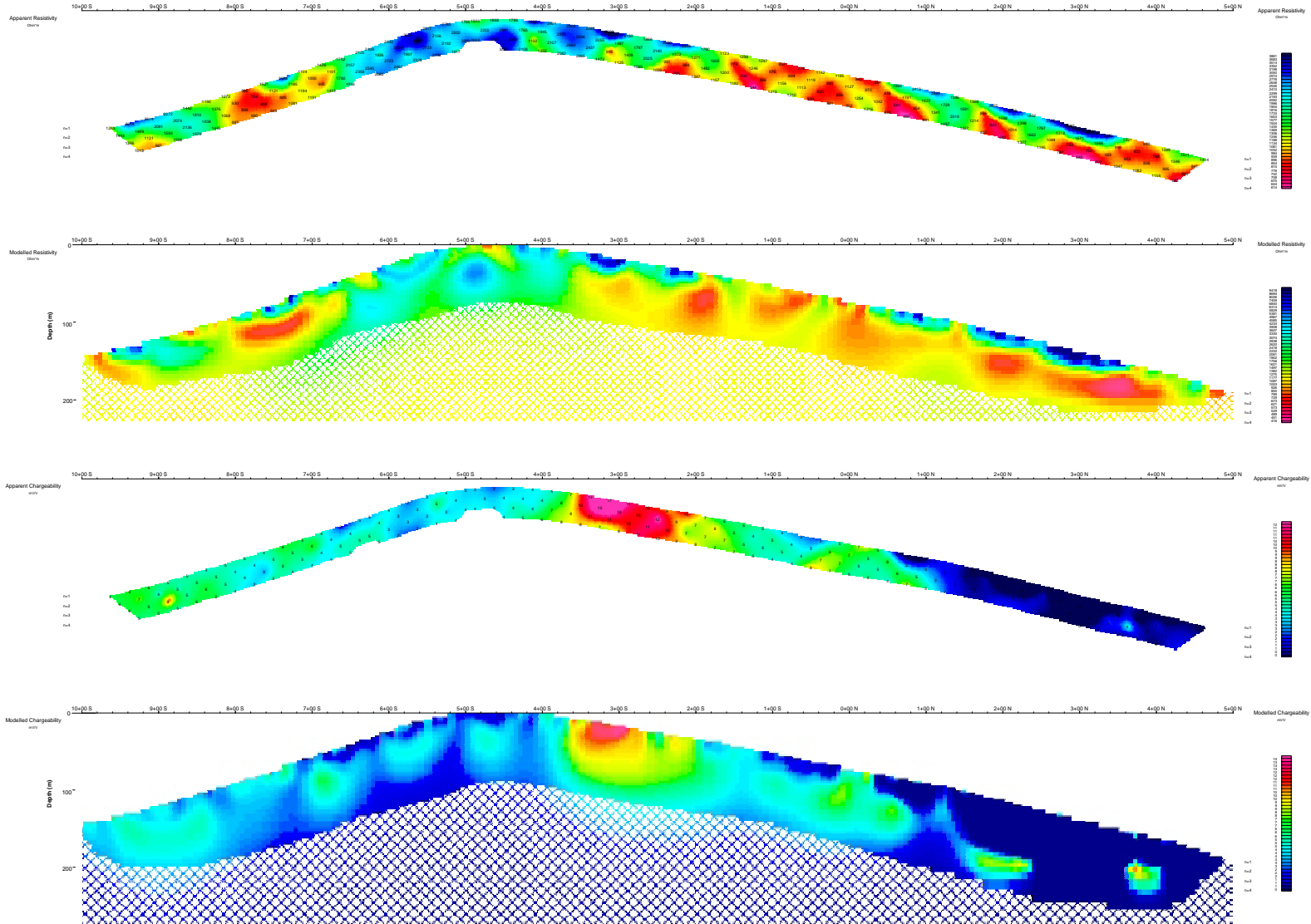
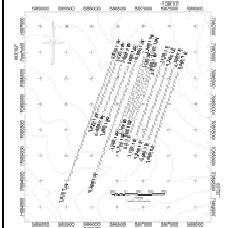
APPENDIX E

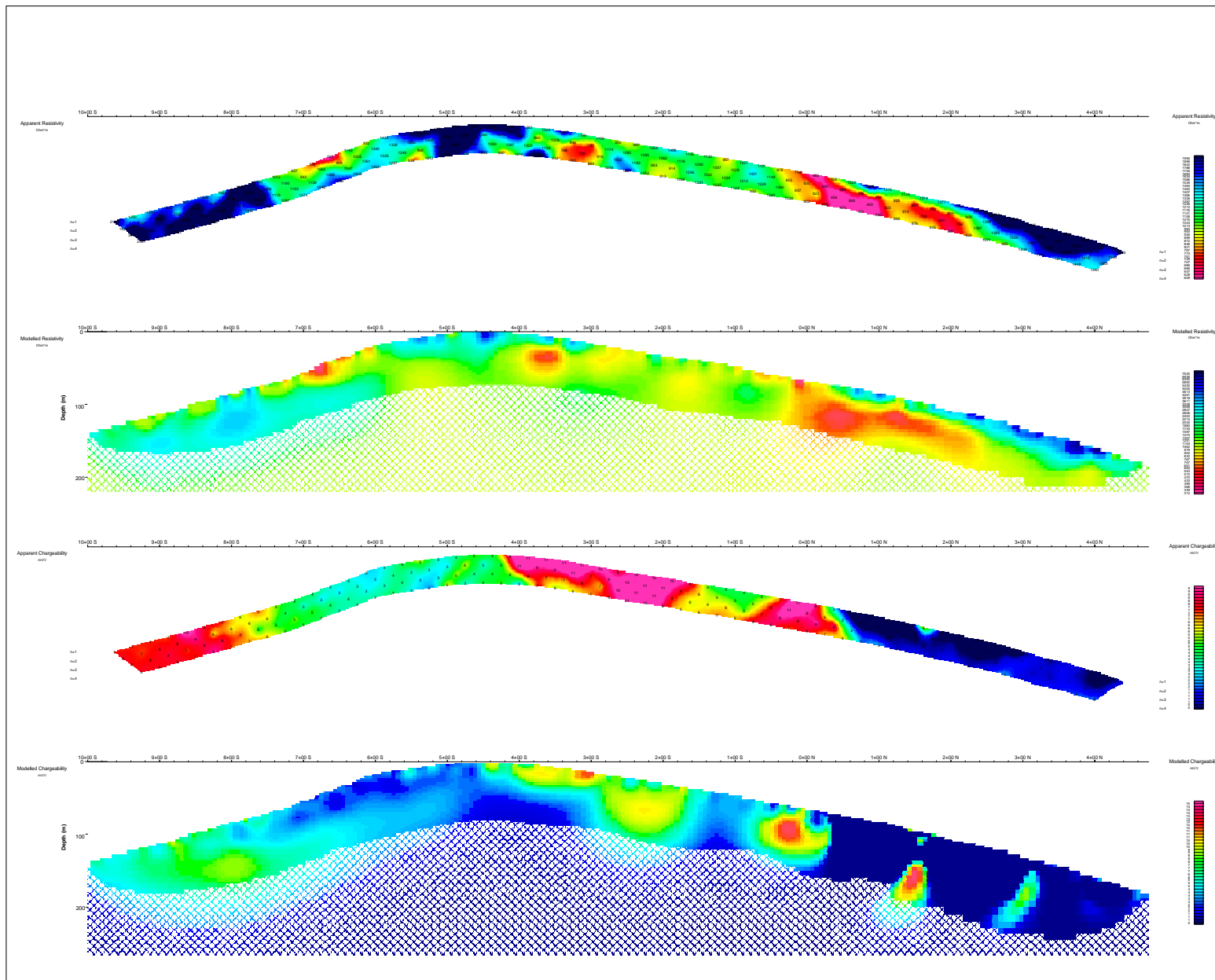
AURORA GEOSCIENCES LTD.

COMPOSITE SECTION L2+40 W

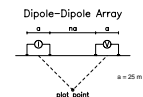


Receiver: Humo
Transmitter: Phoenix 2.0kW
Dates Surveyed: Jun 2-Dec 16, 1998



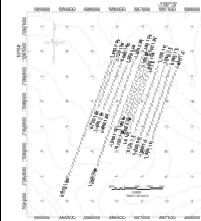


COMPOSITE SECTION L1+20 W



Receiver: Huftec
Transmitter: Phoenix 2.0kW
Dates Surveyed: Jun 2 - Dec 16, 1986

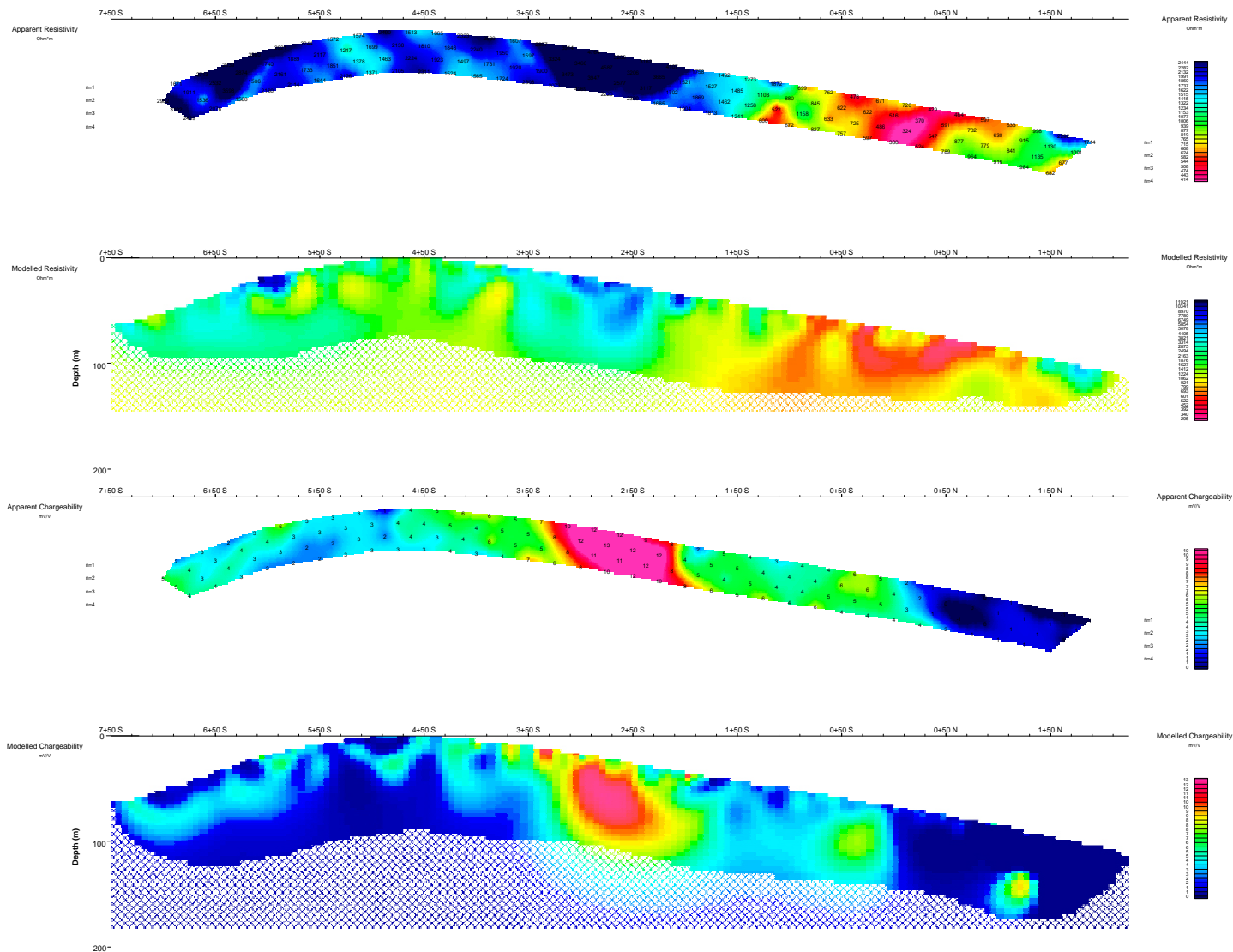
Vertical Exaggeration = 1



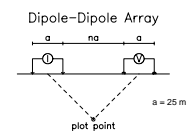
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDOORADO PROPERTY, 1867 LONESTAR GRID
COMPOSITE SECTION L1+20 W

NTS: 1:15 Q14 Mining District, Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 8 Feb 07
Drawn by: JLS APPENDIX E

AURORA GEOSCIENCES LTD.

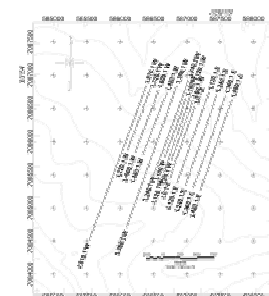


COMPOSITE SECTION L0+60 W



Receiver: Huntec
Transmitter: Phoenix 2.0kW
Dates Surveyed: Jun 2-Dec 16, 1986

Vertical Exaggeration = 1



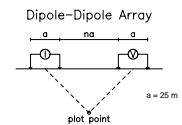
KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY
ELDERADO PROPERTY, 1987 LONESTAR GRID
COMPOSITE SECTION L0+60 W

NTS: 115 O/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 8 Feb 07
Drawn by: L.K. APPENDIX E

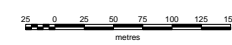
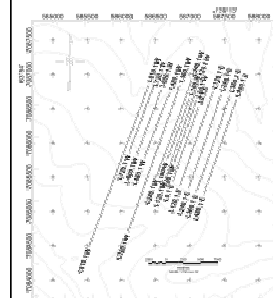
AURORA GEOSCIENCES LTD.

COMPOSITE SECTION L0+00 E



Receiver: Huntic
Transmitter: Phoenix 2.0kW

Dates Surveyed : Jun 2 -Dec 16, 1986

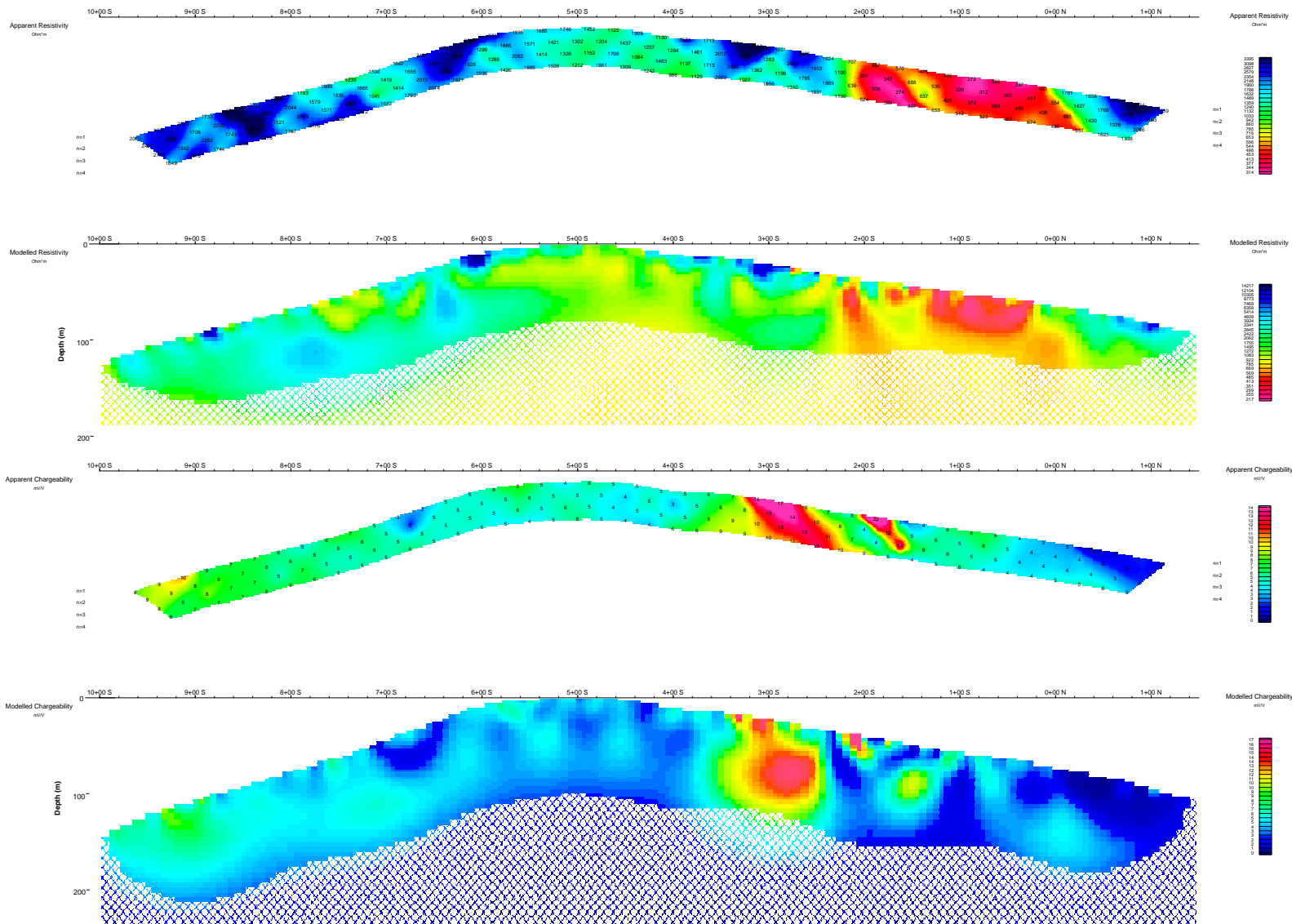


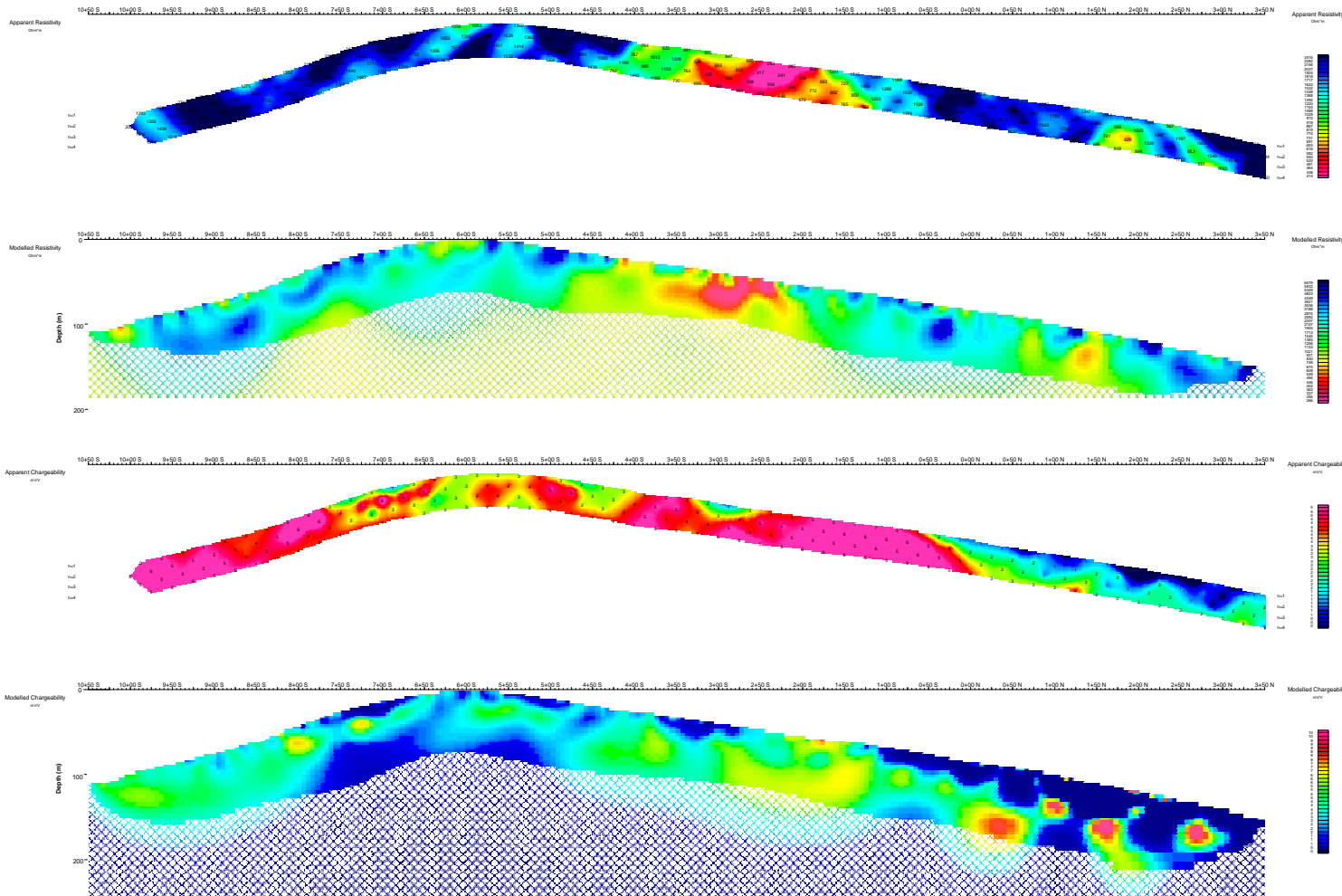
Vertical Exaggeration = 1

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, 1987 LONESTAR GRID
COMPOSITE SECTION L0+00 E

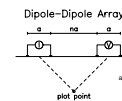
NTS: 1:15 O/14 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 6 Feb 07
Drawn by: I.K. APPENDIX E

AURORA GEOSCIENCES LTD.

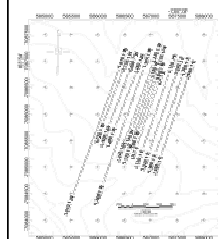




COMPOSITE SECTION L1+20 E



Receiver: Huntec
Transmitter: Phoenix 2.0kW
Dates Surveyed: Jun 2-Dec 16, 1986



Vertical Exaggeration = 1

KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY

ELDORADO PROPERTY, 1987 LONESTAR GRID

COMPOSITE SECTION L1+20 E

NTS: 1:50,000 Mining District: Dawson

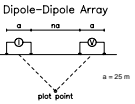
Datum: NAD 83 Projection: UTM Zone 7

Job: KSC-98-02-YT Date: 8 Feb 07

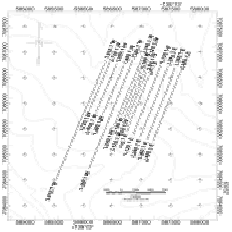
Drawn by: LK APPENDIX E

AURORA GEOSCIENCES LTD.

COMPOSITE SECTION
L2+40 E



Receiver: Huntec
Transmitter: Phoenix 2.0kW
Dates Surveyed: Jun 2-Dec 16, 1986



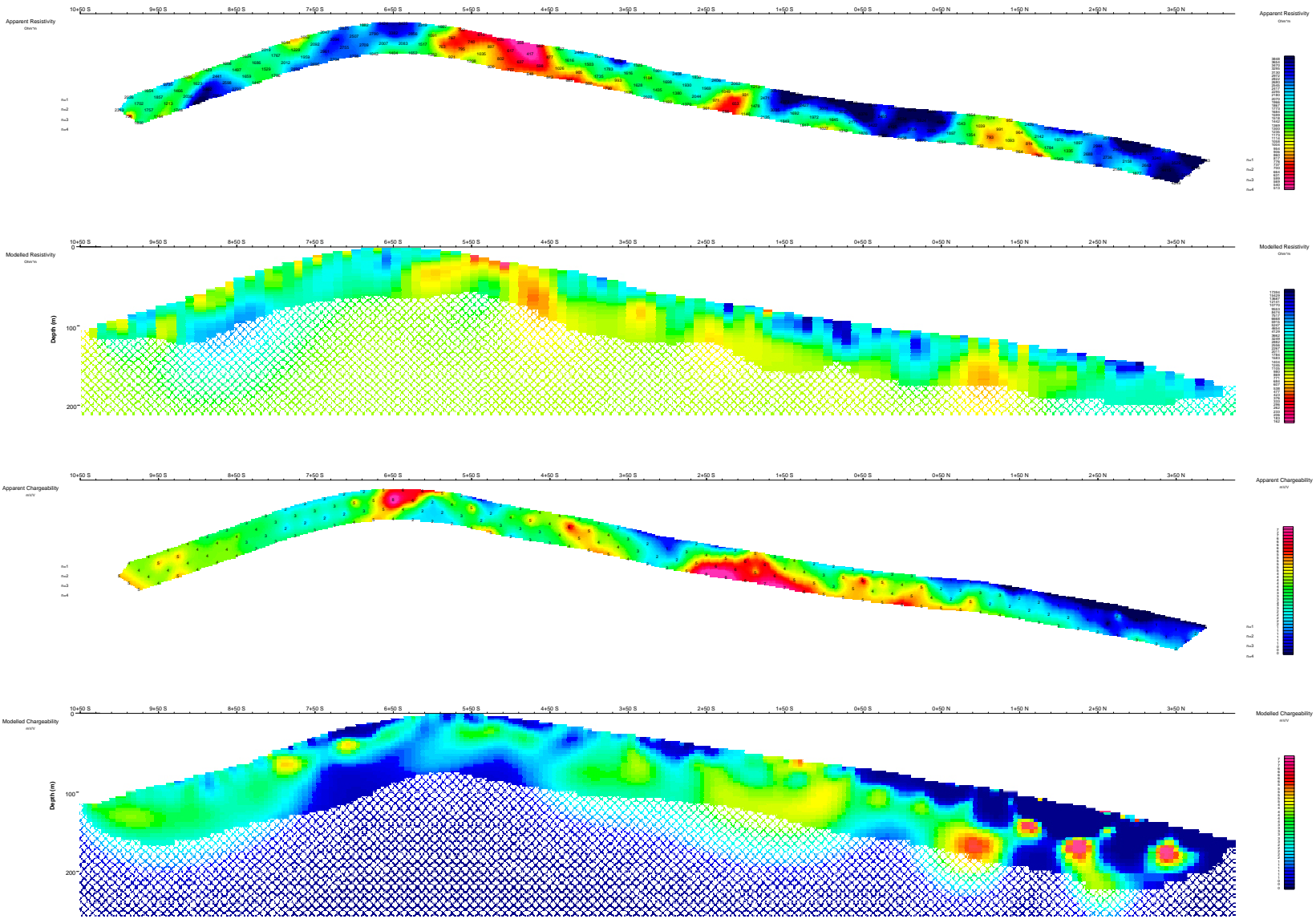
Vertical Exaggeration = 1

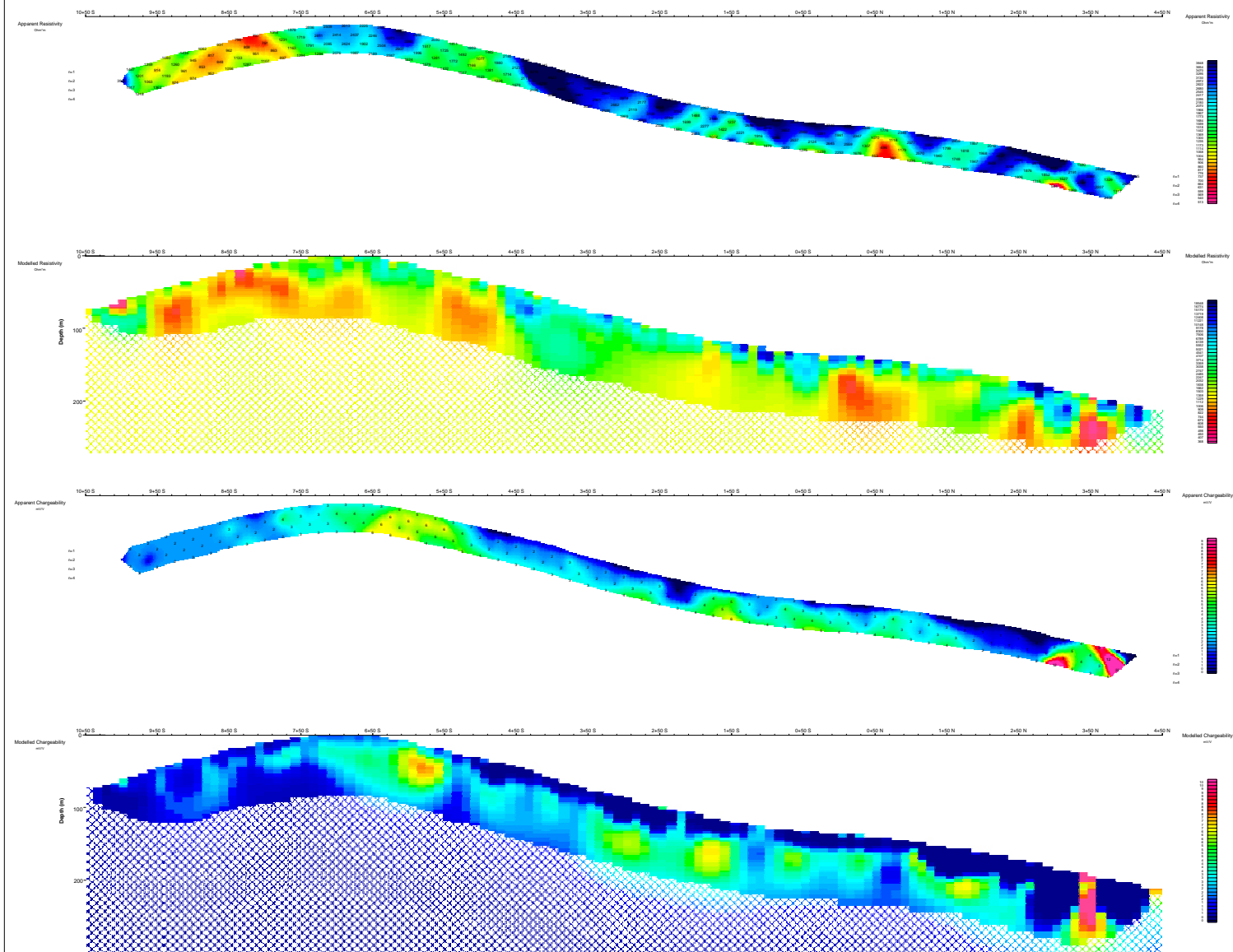
KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, 1987 LONESTAR GRID
COMPOSITE SECTION L2+40 E

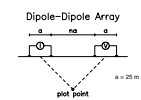
NTS: 1:15 0/14 Mining District, Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-YT Date: 9 Feb 07
Drawn by: LJK APPENDIX E

AURORA GEOSCIENCES LTD.



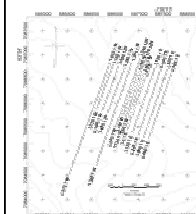


COMPOSITE SECTION L3+60 E



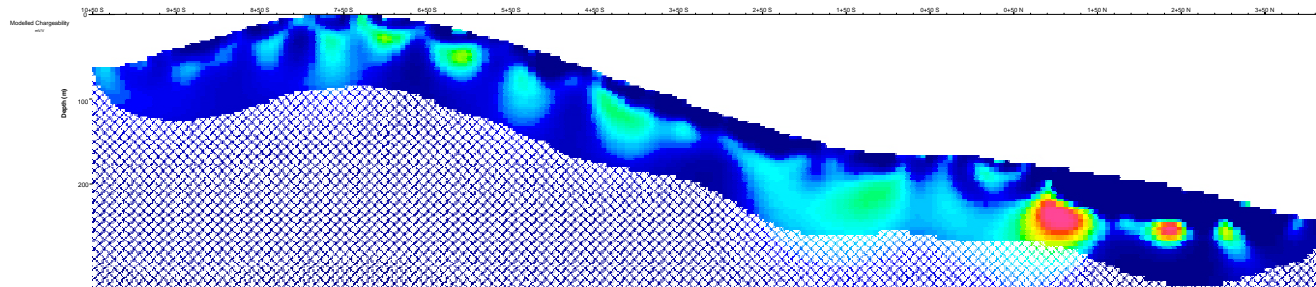
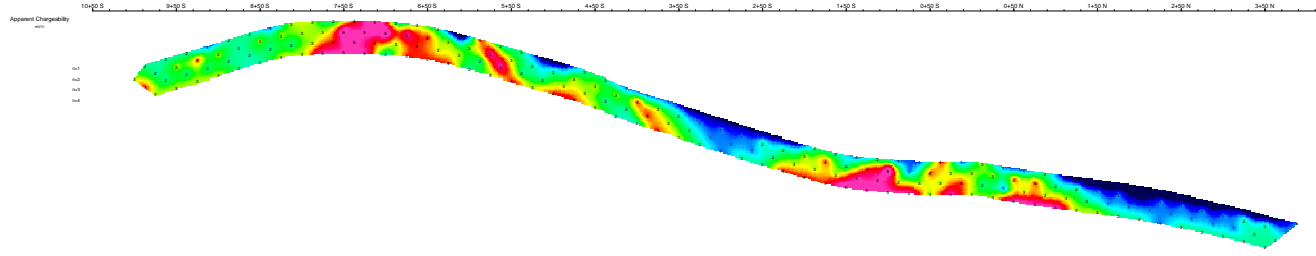
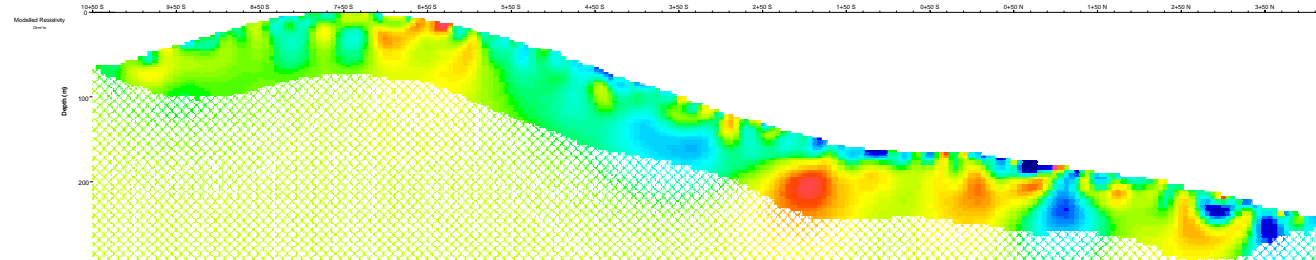
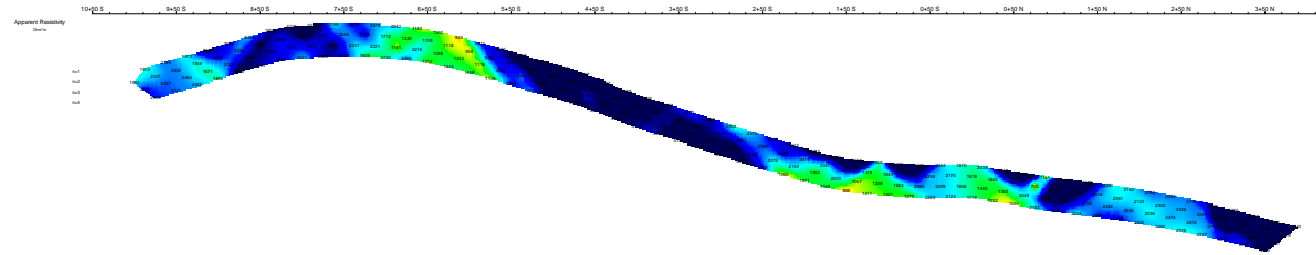
Receiver: Hentec
Transmitter: Phoenix 2.00W
Dates Surveyed: Jun 2-Dec 16, 1998

Vertical Exaggeration = 1

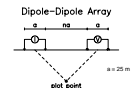


0 25 50 75 100 125 150
metres

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELKHORADO PROPERTY, 1987 LONESTAR GRID
COMPOSITE SECTION L3+60 E
NTS: 1:15,014 Mining District: Dawson
Datum: NAD 83 Projection: UTM Zone 7
Job: KDS-06-02-VT Date: 8 Feb 07
Drawn by: LK APPENDIX E
AURORA GEOSCIENCES LTD.

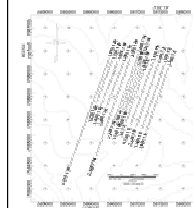


COMPOSITE SECTION L4+80 E



Receiver: Thales
Transmitter: Phoenix 2.0kW
Data Surveyed: Jun 2-Dec 16, 1999

Vertical Exaggeration = 1

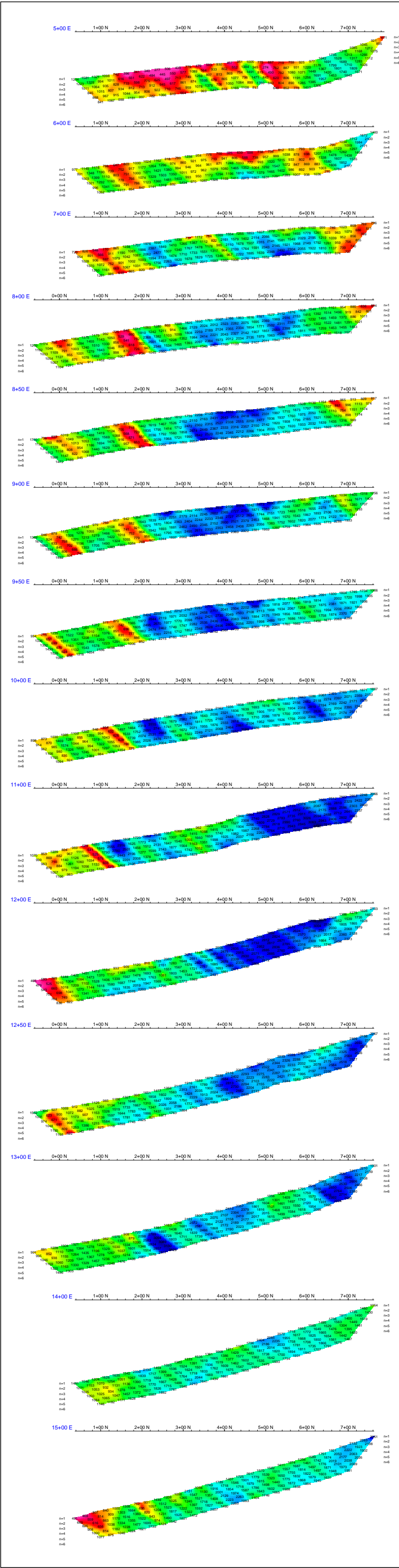


KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDERADO PROPERTY, 1007 LONESTAR GRID
COMPOSITE SECTION L4+80 E

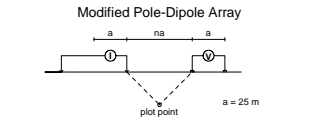
NTS: 1:15,014
Datum: NAD 83
Job: KDS-96-02-YT
Drawn by: J.C.

Mining District: Dawson
Proprietor: UTM Zone 7
Date: 8 Feb 07
APPENDIX E

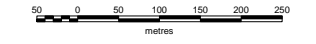
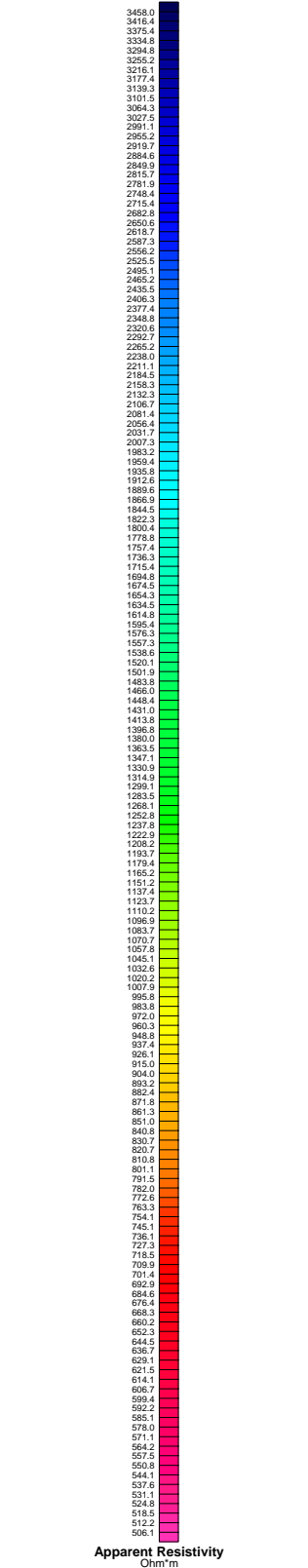
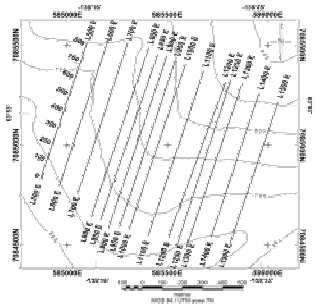
AURORA GEOSCIENCES LTD.



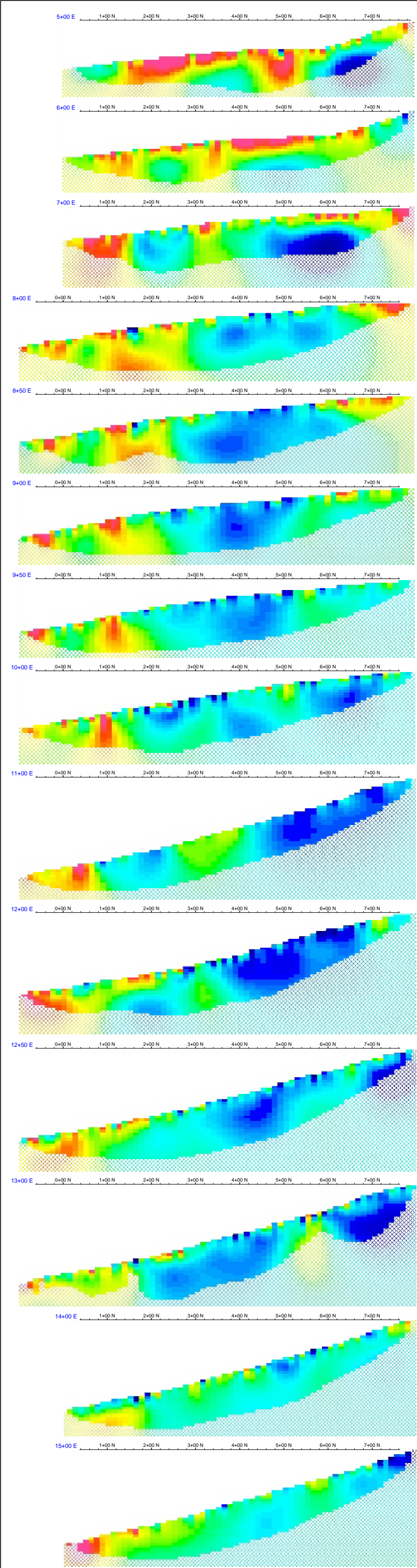
STACKED APPARENT RESISTIVITY



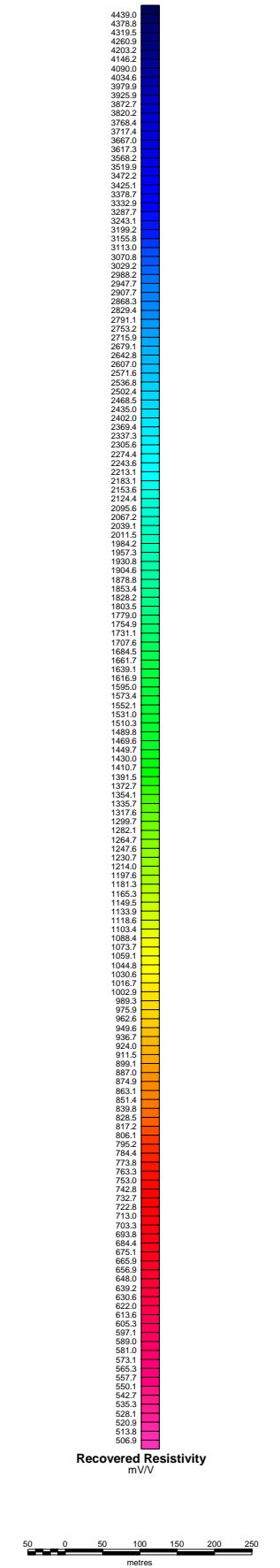
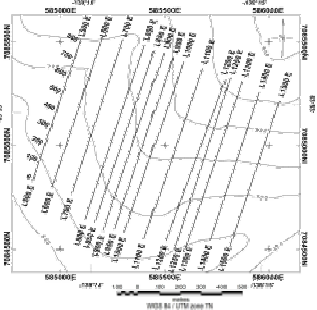
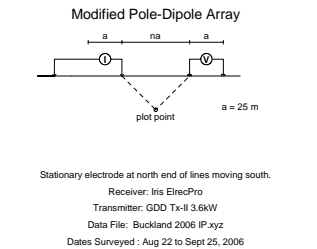
Stationary electrode at north end of lines moving south.
Receiver: Iris ElecPro
Transmitter: GDD Tx-II 3.6kW
Data File: Buckland 2006 IP.xyz
Dates Surveyed : Aug 22 to Sept 25, 2006

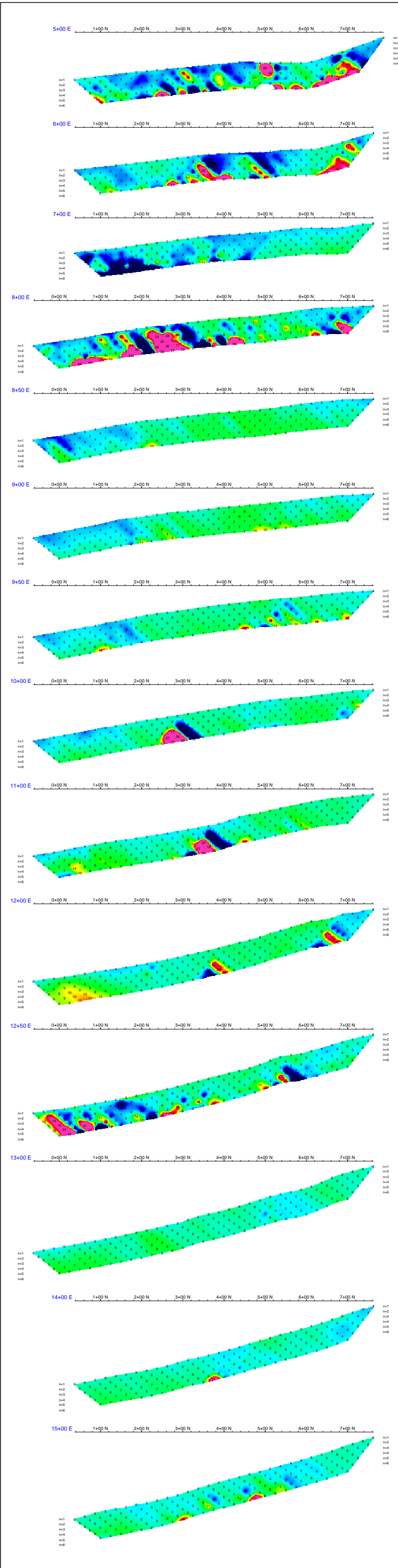


KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, BUCKLAND GRID
APPARENT RESISTIVITY PSEUDOSECTIONS
NTS: 115 O/14 Mining District: Dawson
Grid: Local
Job: KDS-06-02-YT Date 29 Jan 07
Drawn by: H.D.S. APPENDIX: F
AURORA GEOSCIENCES LTD.

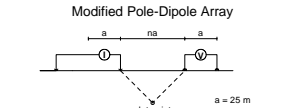


STACKED RECOVERED RESISTIVITY

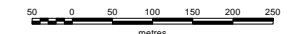
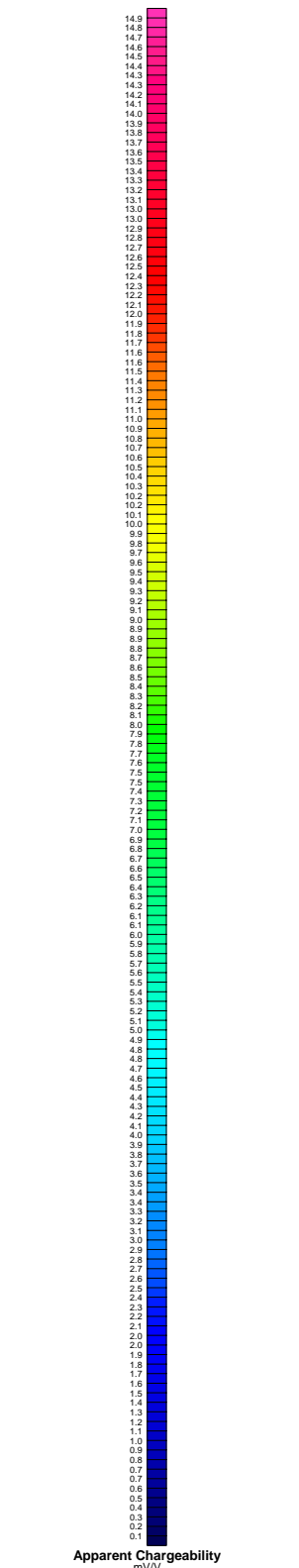
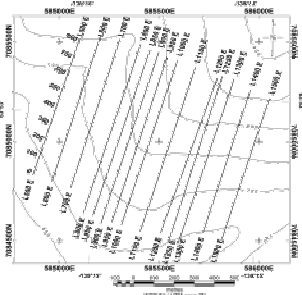




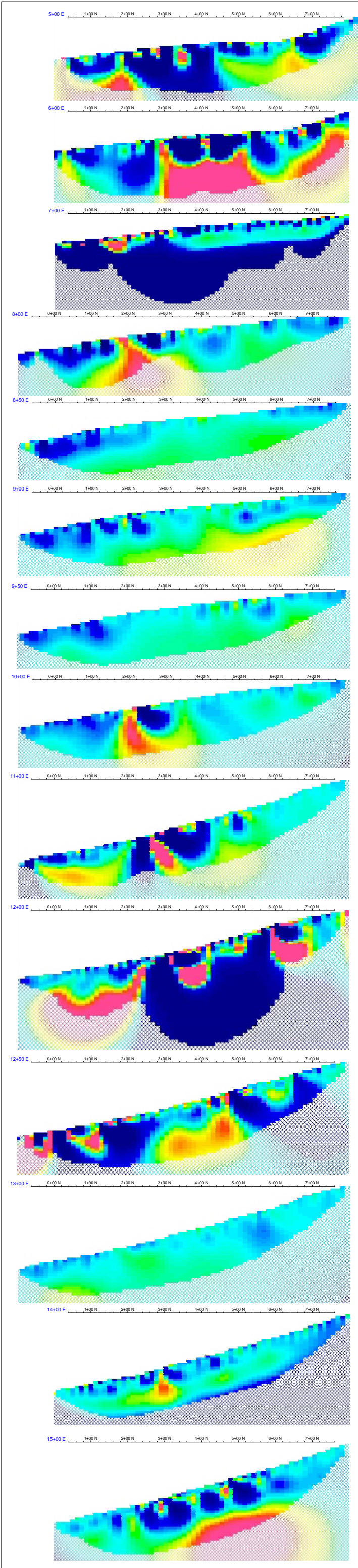
STACKED APPARENT CHARGEABILITY



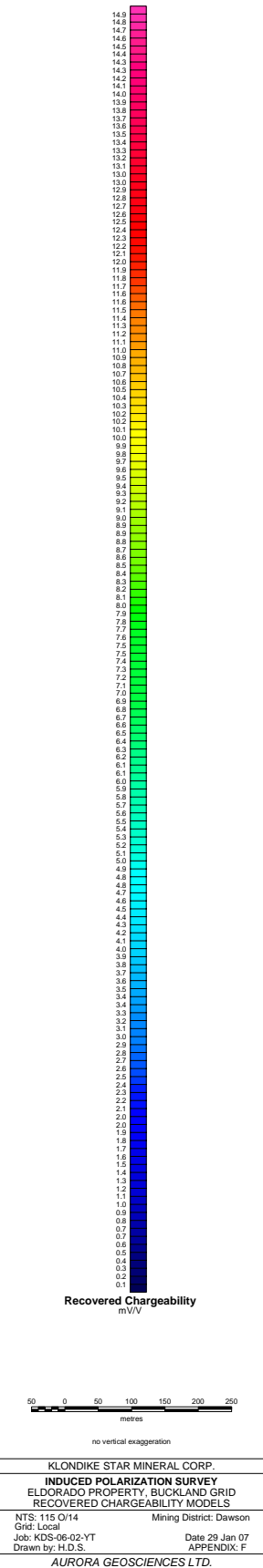
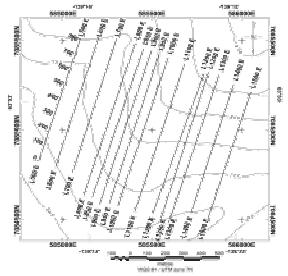
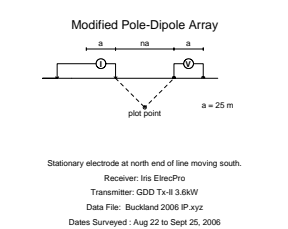
Stationary electrode at south end of lines moving north.
Receiver: Iris ElecPro
Transmitter: GDD Tx-II 3.6kW
Data File: Buckland 2006 IP.xyz
Dates Surveyed : Aug 22 to Sept 25, 2006

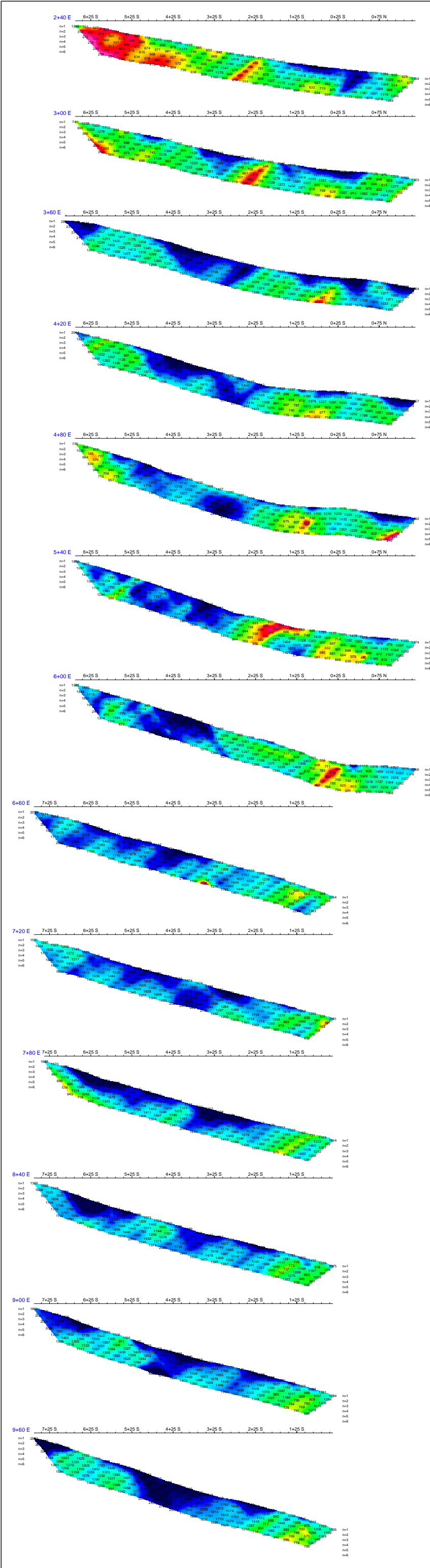


KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, BUCKLAND GRID
APPARENT CHARGEABILITY PSEUDOSECTIONS
NTS: 115 O/14 Mining District: Dawson
Grid: Local
Job: KDS-06-02-YT Date 29 Jan 07
Drawn by: H.D.S. APPENDIX: F
AURORA GEOSCIENCES LTD.

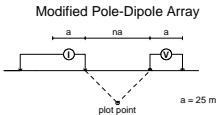


STACKED RECOVERED CHARGEABILITY

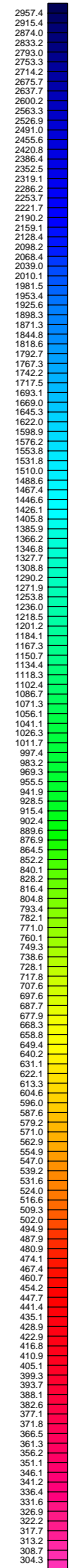
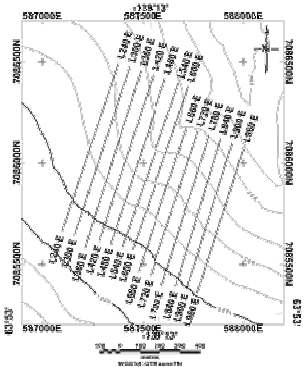




STACKED APPARENT RESISTIVITY

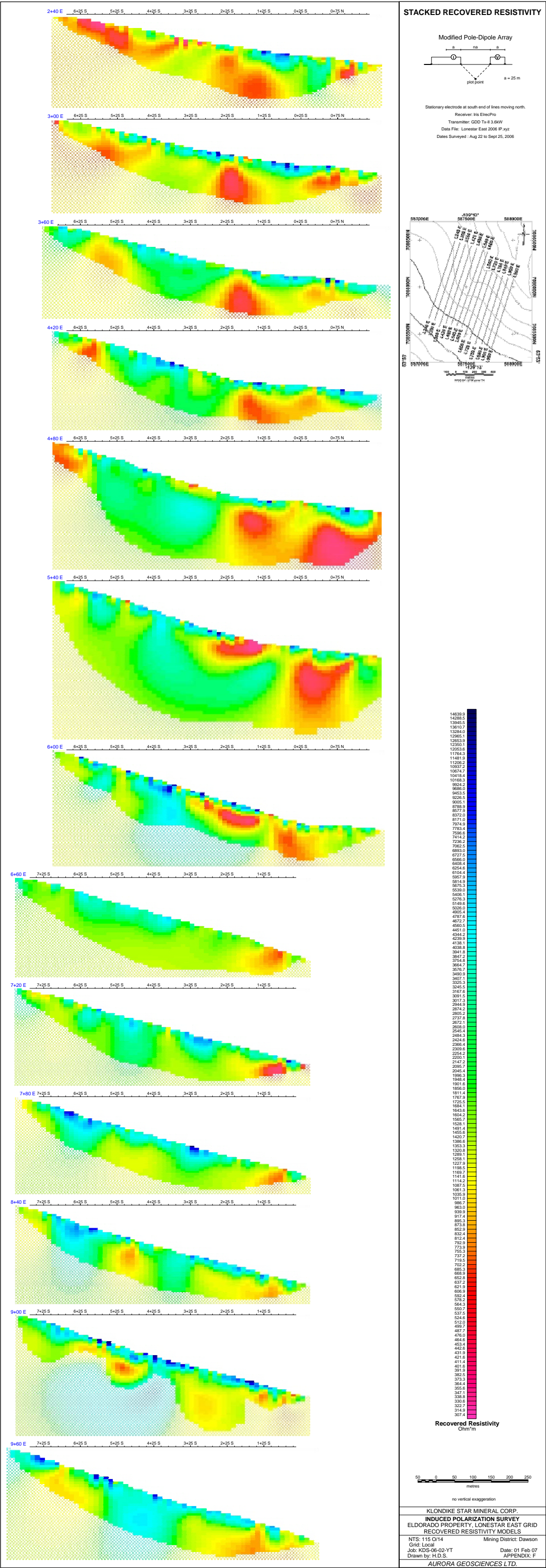


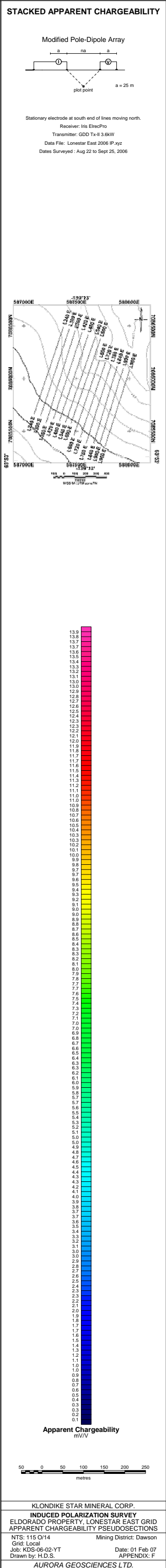
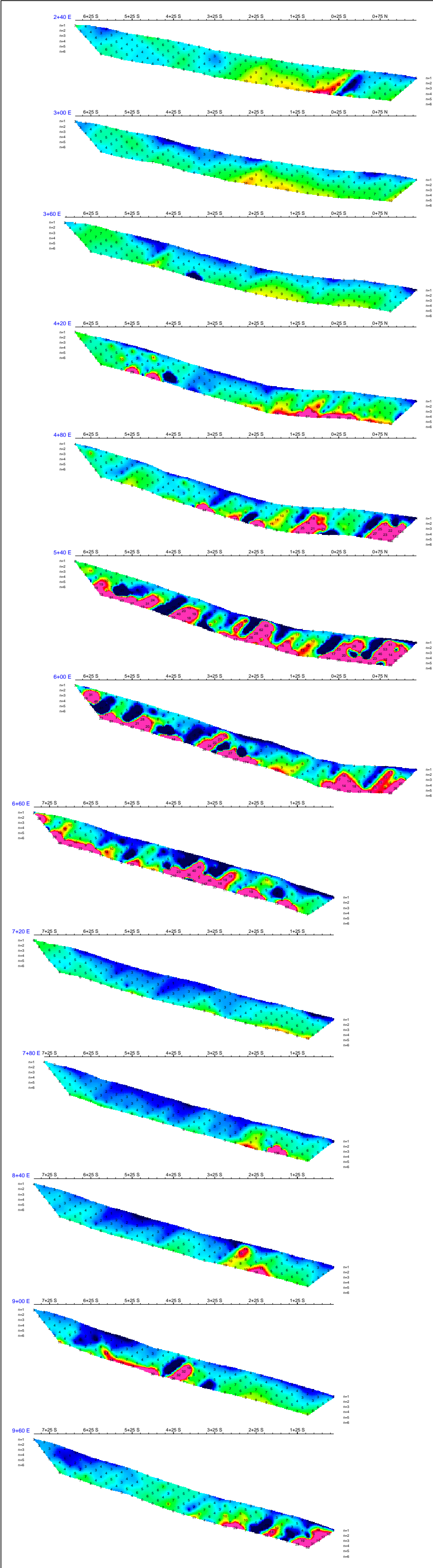
Stationary electrode at south end of lines moving north.
Receiver: Iris ElecPro
Transmitter: GDD Tx-II 3.6kW
Data File: Lonestar East 2006 IP.xyz
Dates Surveyed: Aug 22 to Sept 25, 2006

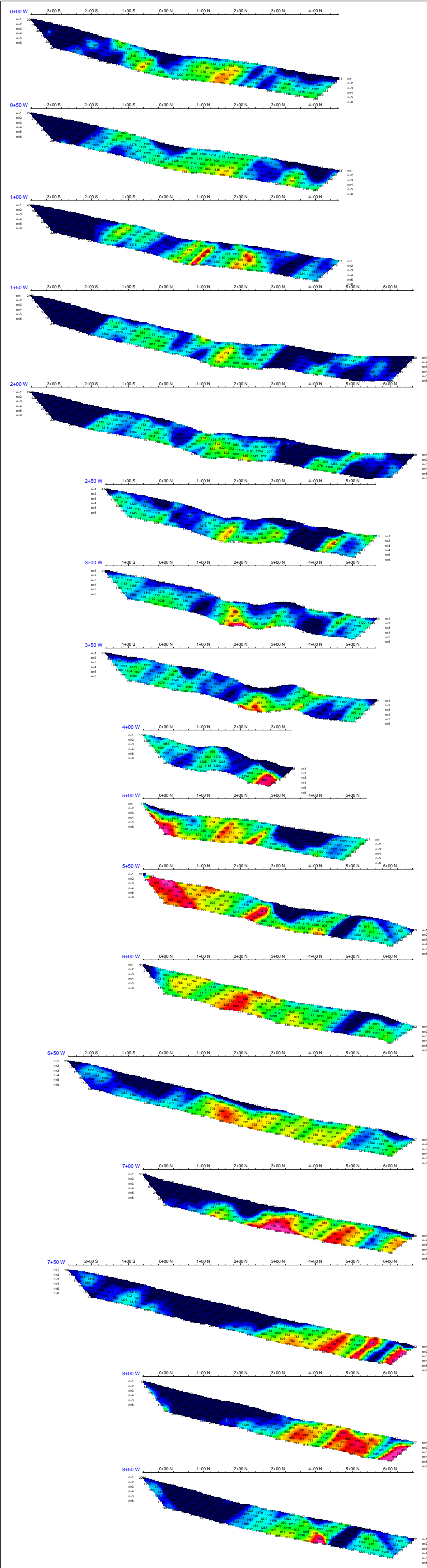


Apparent Resistivity
Ohm.m

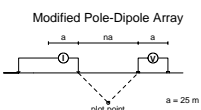




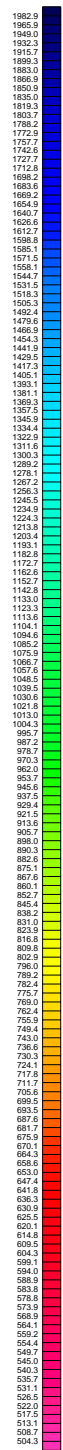
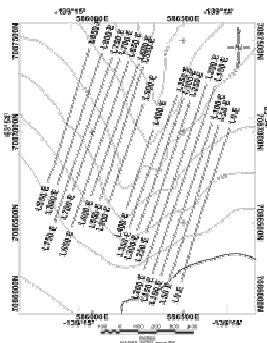




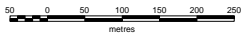
STACKED APPARENT RESISTIVITY



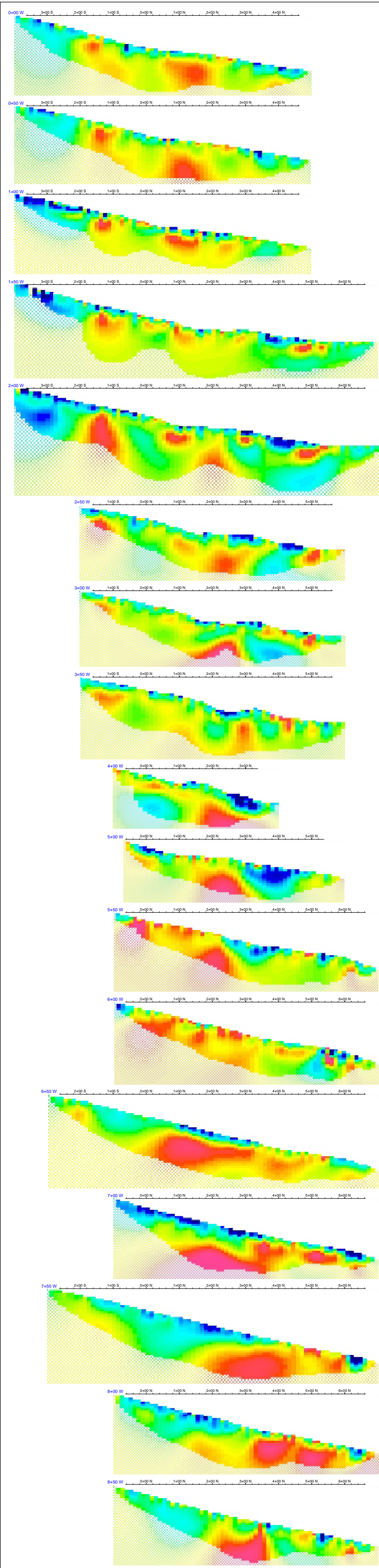
Stationary electrode at south end of lines moving north.
Receiver: Iris ElecPro
Transmitter: GDD Tx-H 3.6kW
Data File: Lonestar West 2006 IP.xyz
Dates Surveyed : Aug 22 to Sept 25, 2006



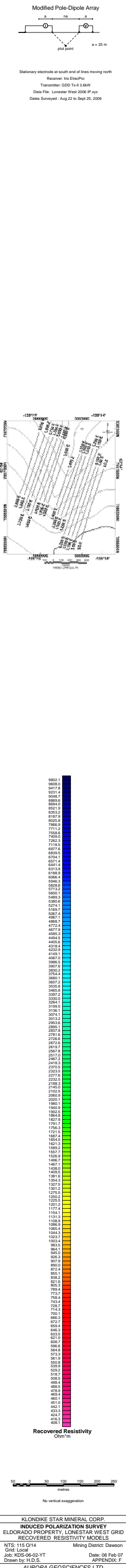
Apparent Resistivity
Ohm-m

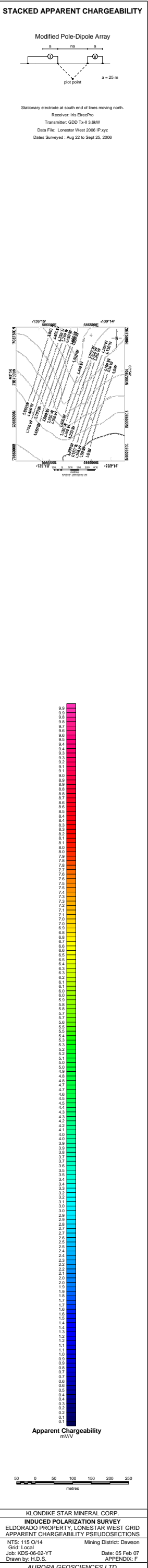
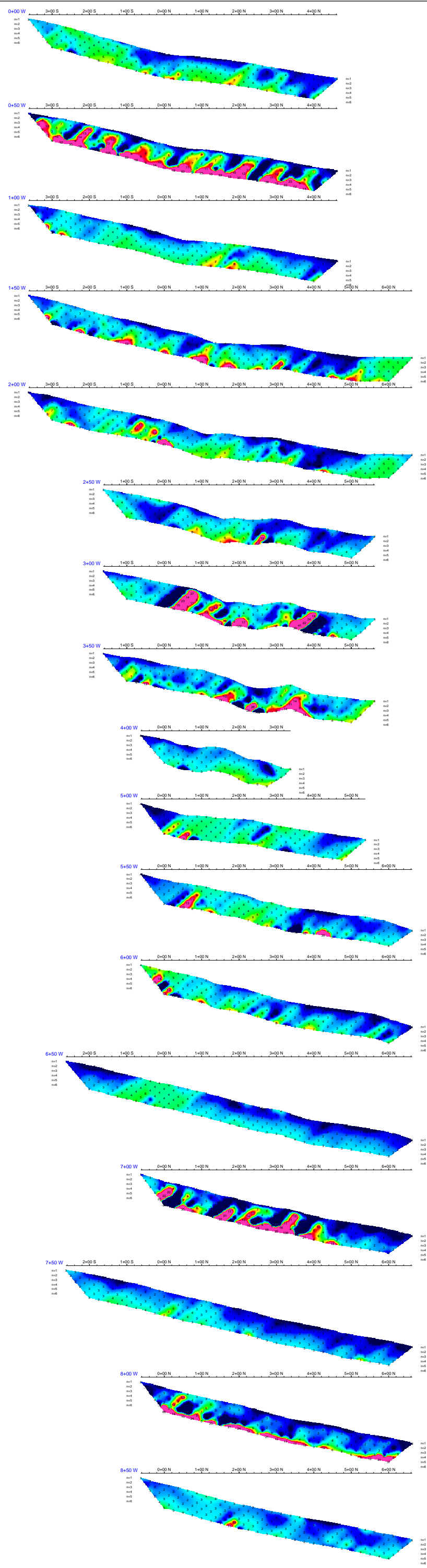


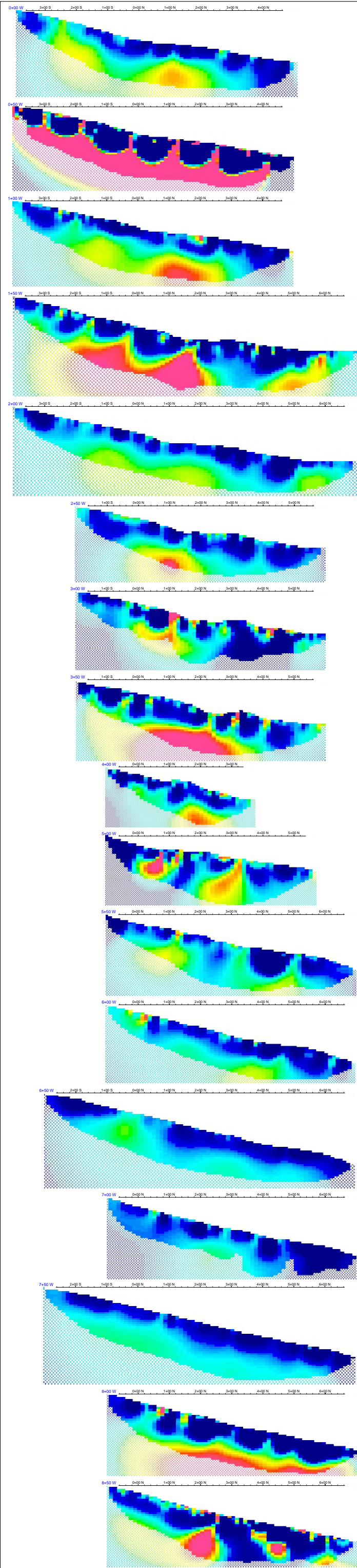
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, LONESTAR WEST GRID
APPARENT RESISTIVITY PSEUDOSECTIONS
NTS: 115 O/14 Mining District: Dawson
Grid: Local Date: 01 Feb 07
Job: KDS-06-02-YT APPENDIX: F
Drawn by: H.D.S.
AURORA GEOSCIENCES LTD.



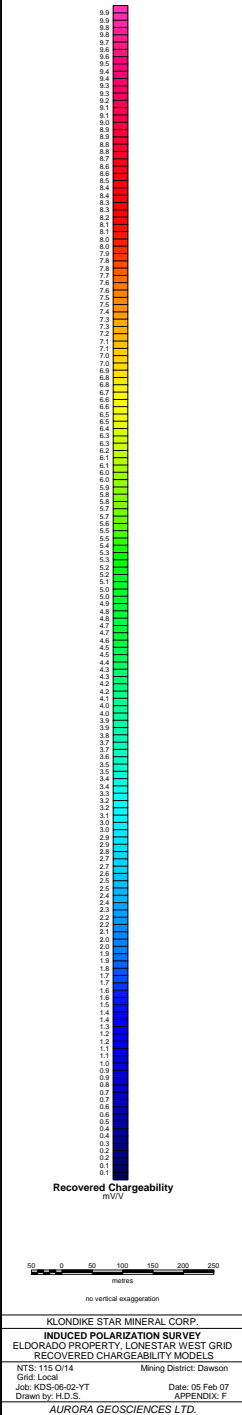
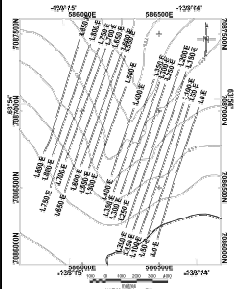
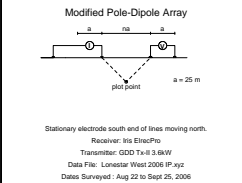
STACKED RECOVERED RESISTIVITY

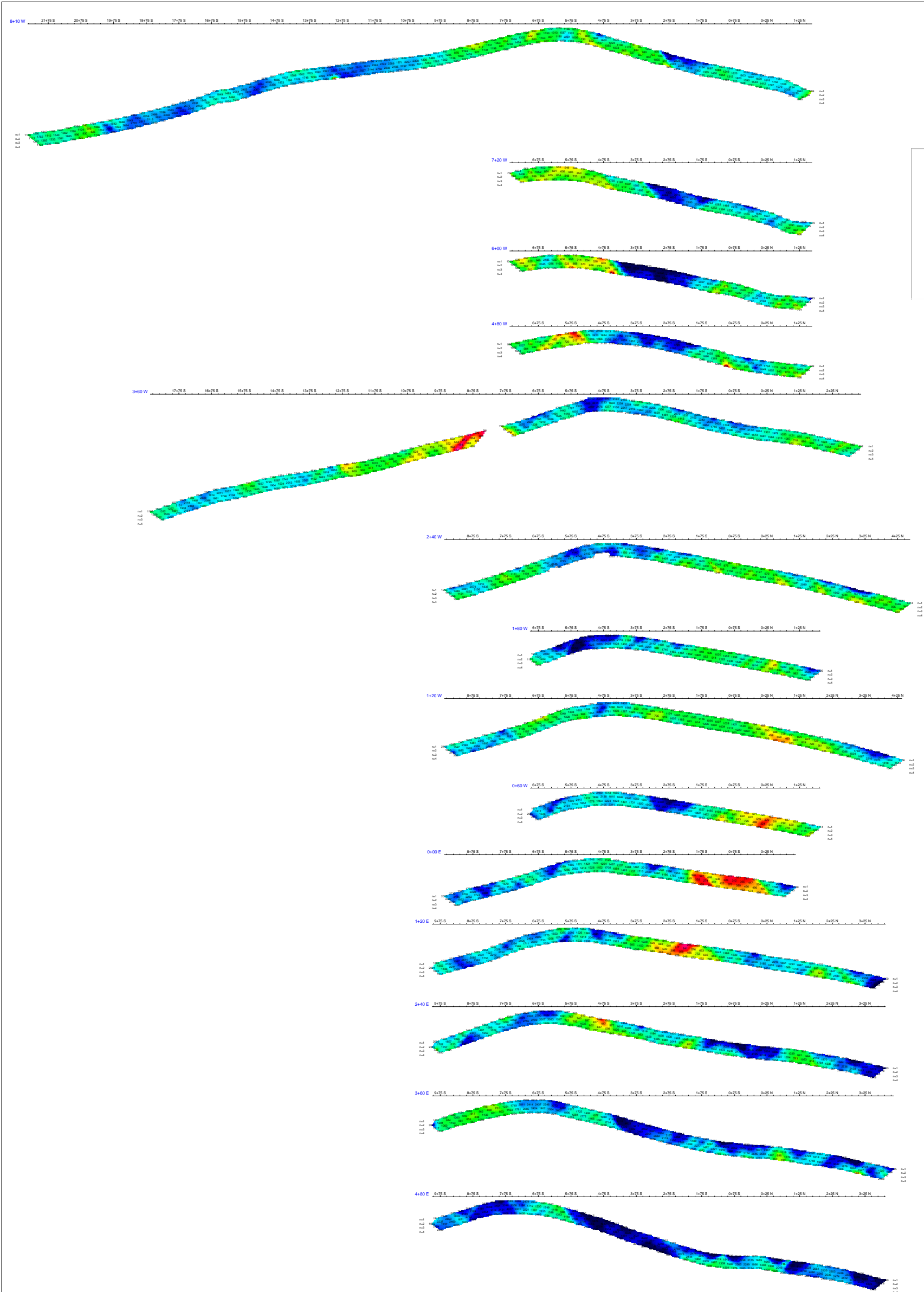




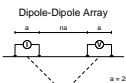


STACKED RECOVERED CHARGEABILITY

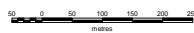
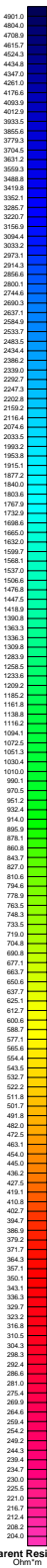
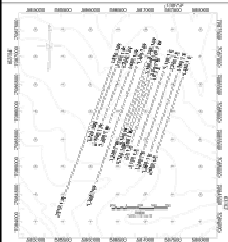




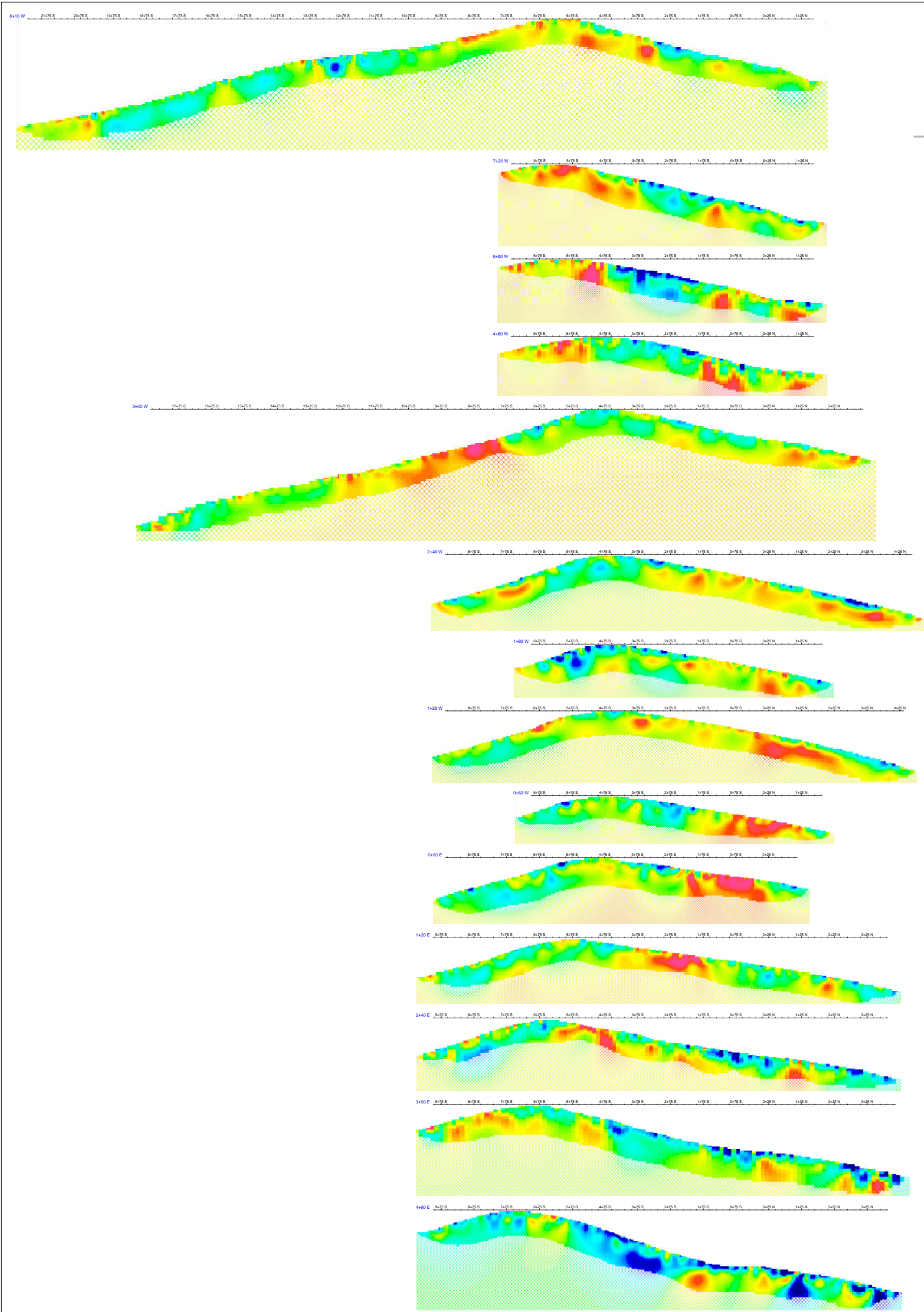
STACKED APPARENT RESISTIVITY



Receiver: HURRIC
Transmitter: Phoenix 2.03W
Dates Surveyed: June 2 to December 16, 1986



KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
EL DORADO PROPERTY, 1987 GRID
APPARENT RESISTIVITY PSEUDOSECTIONS
NTS: 1:15 014
GKT: L259
Job: KDS-96-02-YT
Drawn by: H.D.S.
Mining District: Dawson
Date: 11 Feb 07
APPENDIX: F
AURORA GEOSCIENCES LTD.



STACKED RECOVERED RESISTIVITY

Dipole-Dipole Array

Receiver: 140m
Transmitter: Phoenix 2.0kW
Dates Surveyed: June 2 to December 16, 1986

Scale: 0 50 100 150 200 250 meters

Recovered Resistivity
Ohm·m

14154.9	13818.0	13480.1	13142.1	12804.1	12466.1	12128.1	11790.1	11452.1	11114.1	10776.1	10438.1	10100.1	9762.1	9424.1	9086.1	8748.1	8410.1	8072.1	7734.1	7396.1	7058.1	6720.1	6382.1	6044.1	5706.1	5368.1	5030.1	4692.1	4354.1	4016.1	3678.1	3340.1	3002.1	2664.1	2326.1	1988.1	1650.1	1312.1	974.1	636.1	298.1	10.1
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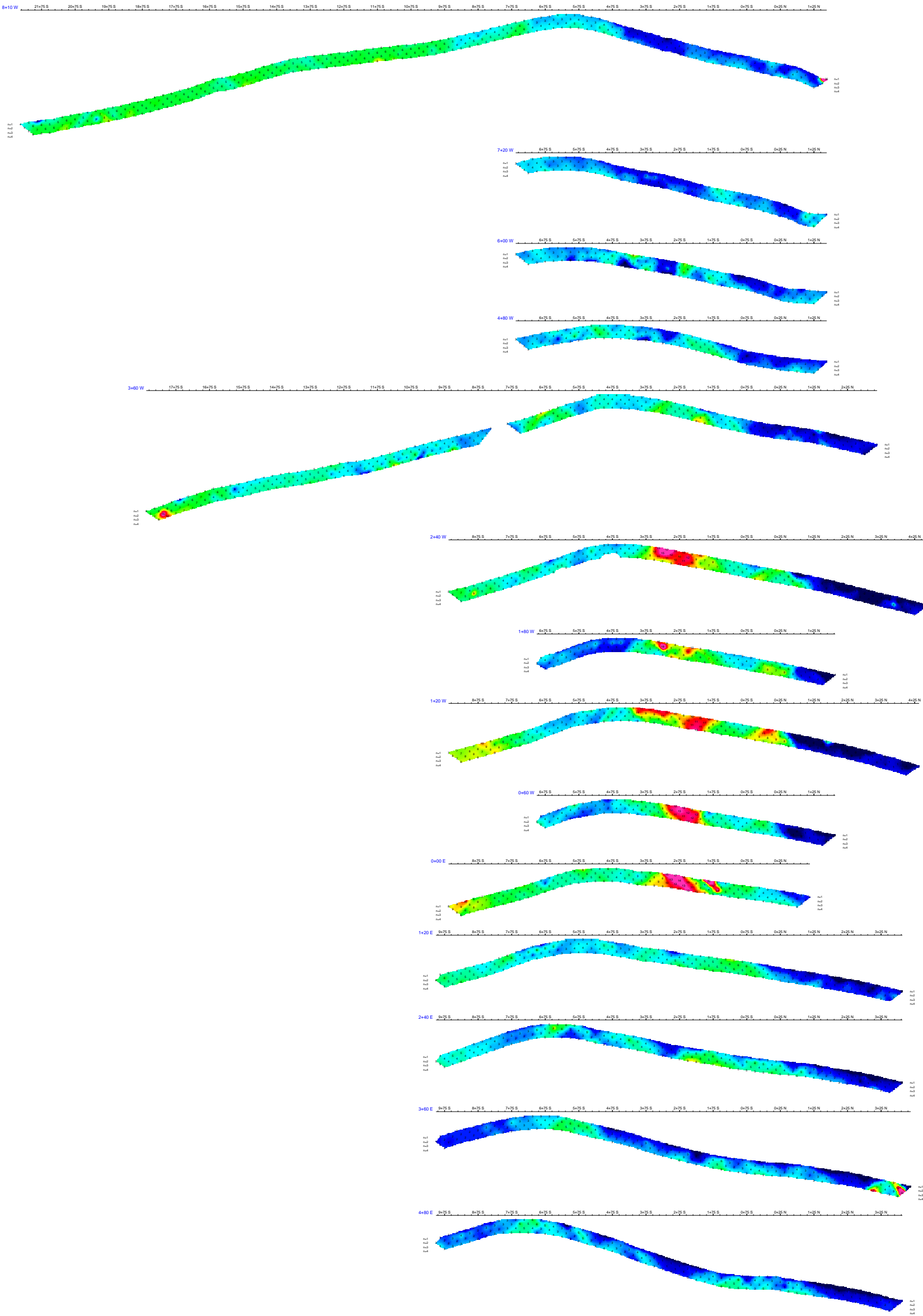
No vertical exaggeration

KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, 1987 GRID
RECOVERED RESISTIVITY MODELS

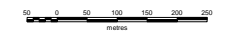
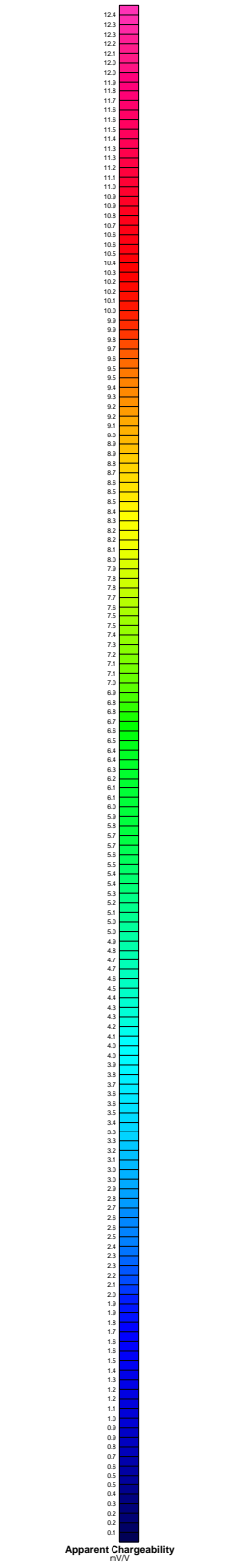
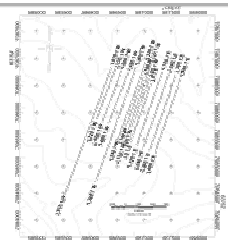
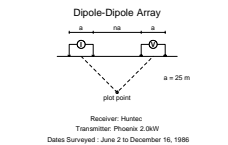
NTS: 1:15 G14
Grid: Local
Job: KDS-86-02-YT
Drawn by: H.D.S.

Mining District: Dawson
Date: 11 Feb 07
APPENDIX: F

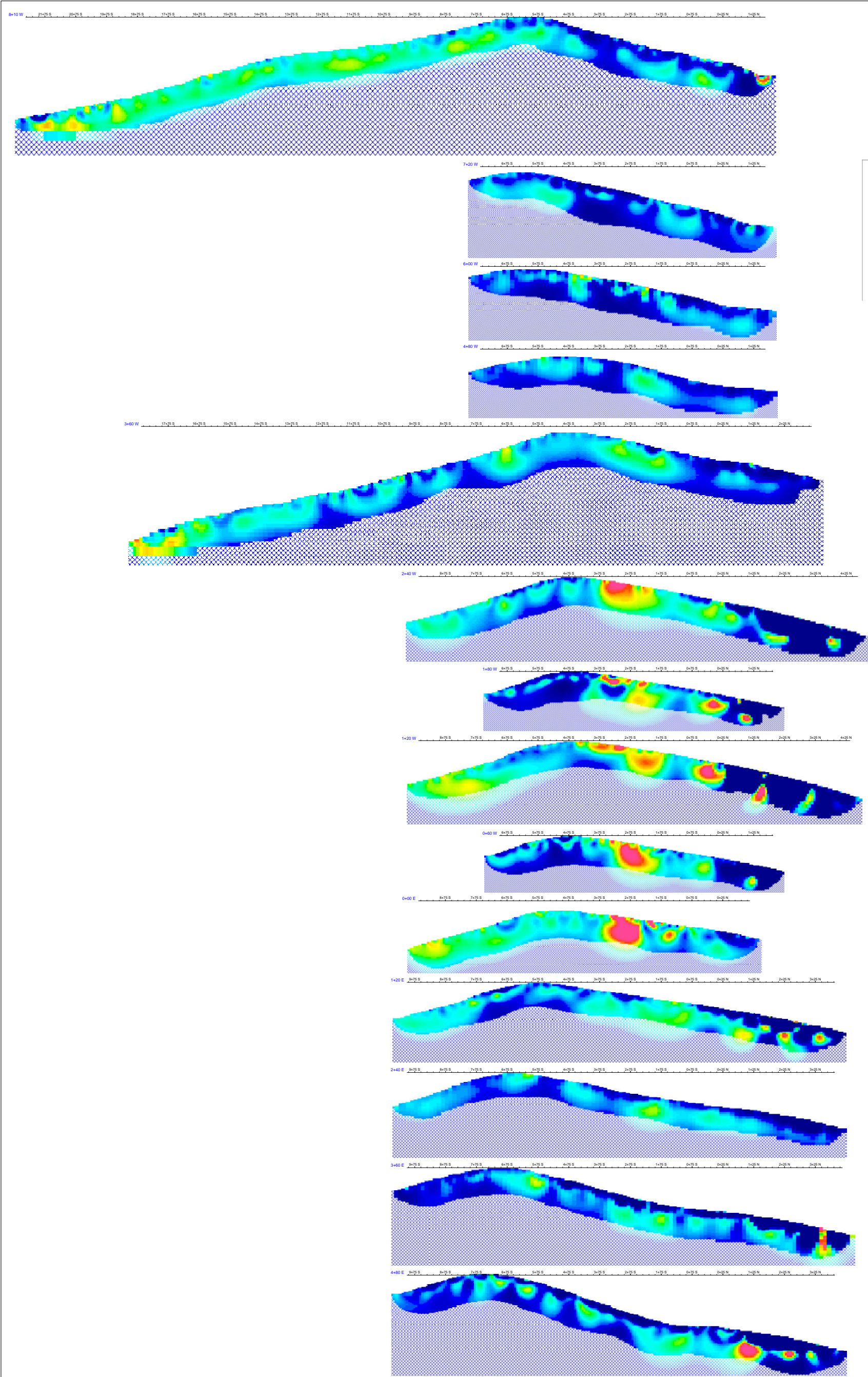
AURORA GEOSCIENCES LTD.



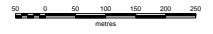
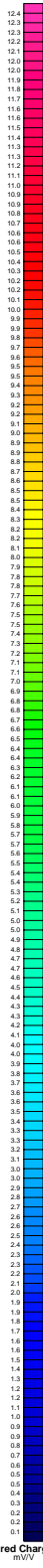
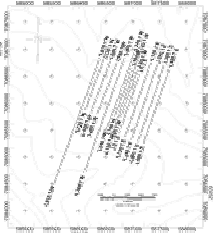
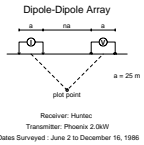
STACKED APPARENT CHARGEABILITY



KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, 1987 GRID
APPARENT CHARGEABILITY PSEUDOSECTIONS
NTS: 115 Q14 Mining District: Dawson
Grid: Local Date: 11 Feb 07
Job: KDS-86-02-YT APPENDIX F
Drawn by: H.D.S.
AURORA GEOSCIENCES LTD.



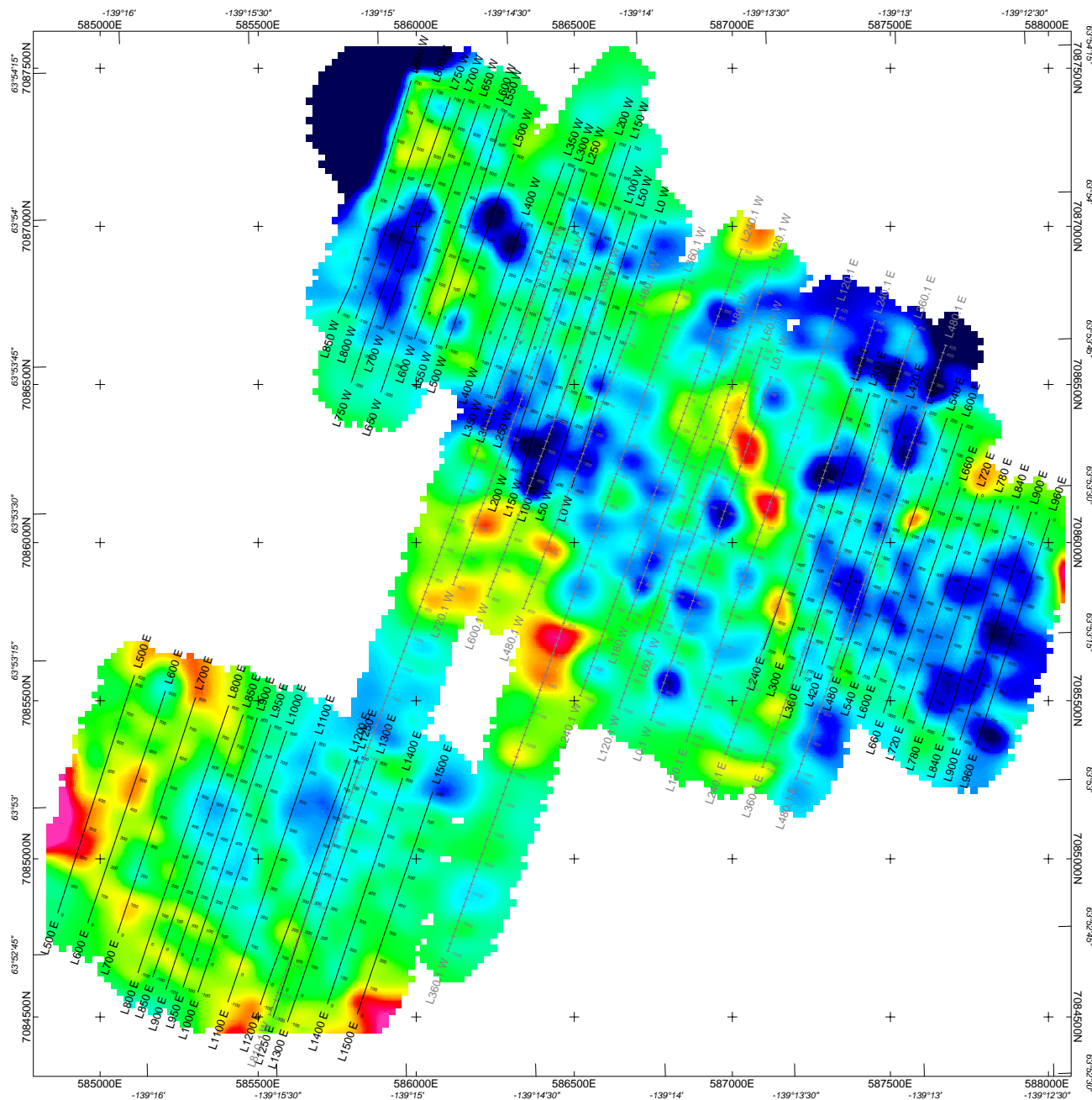
STACKED RECOVERED CHARGEABILITY



No vertical exaggeration

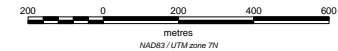
KLONDIKE STAR MINERAL CORP.
INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, 1987 GRID
RECOVERED CHARGEABILITY MODELS

NTS: 1:50,000 Mining District: Dawson
GNS: 1:50,000 Date: 11 Feb 07
Job: KDS-96-02-YT
Drawn by: H.D.S. APPENDIX F
AURORA GEOSCIENCES LTD.



Recovered Resistivity
(Ohm-m)

Gridding Algorithm: Minimum Curvature
Filter: 3 passes Hanning
Cell size: 20



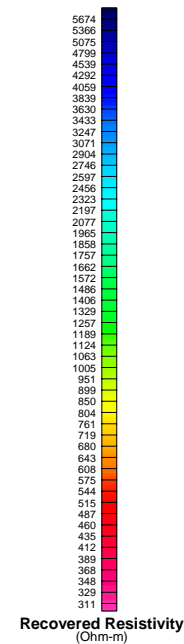
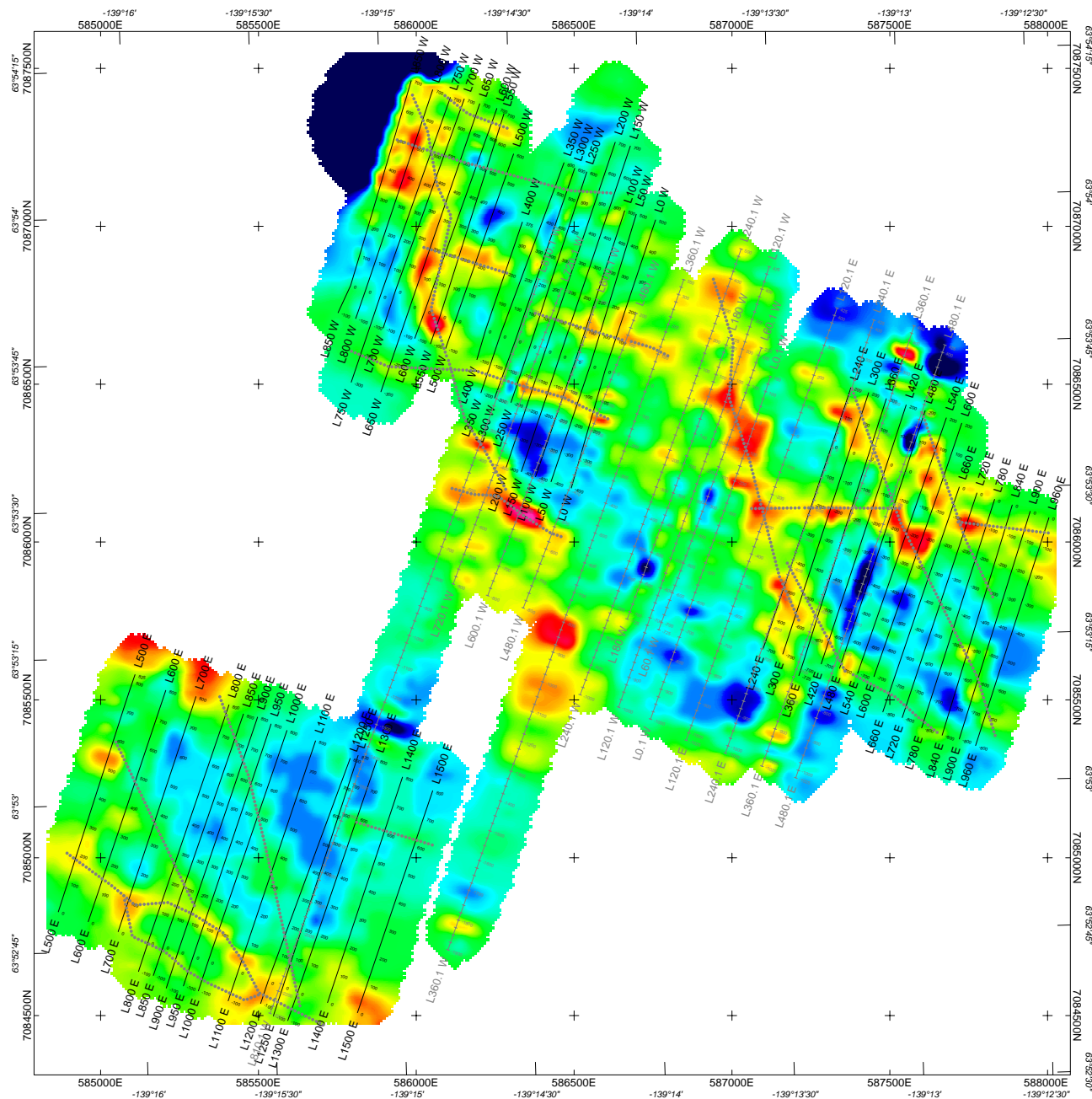
KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY ELDORADO PROPERTY, COMBINED 1987 & 2006 GRIDS RECOVERED RESISTIVITY - 10 m BELOW SURFACE

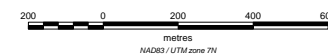
NTS: 1:150,000
Datum: NAD83
Job: KDS-06-02-YT
Drawn by: DH

Mining District: Dawson
Proj: UTM Zone 7N
Date: 13 Feb 07
Appendix G

AURORA GEOSCIENCES LTD.



Gridding Algorithm: Minimum Curvature
Filter : 3 passes Hanning
Cell size: 20



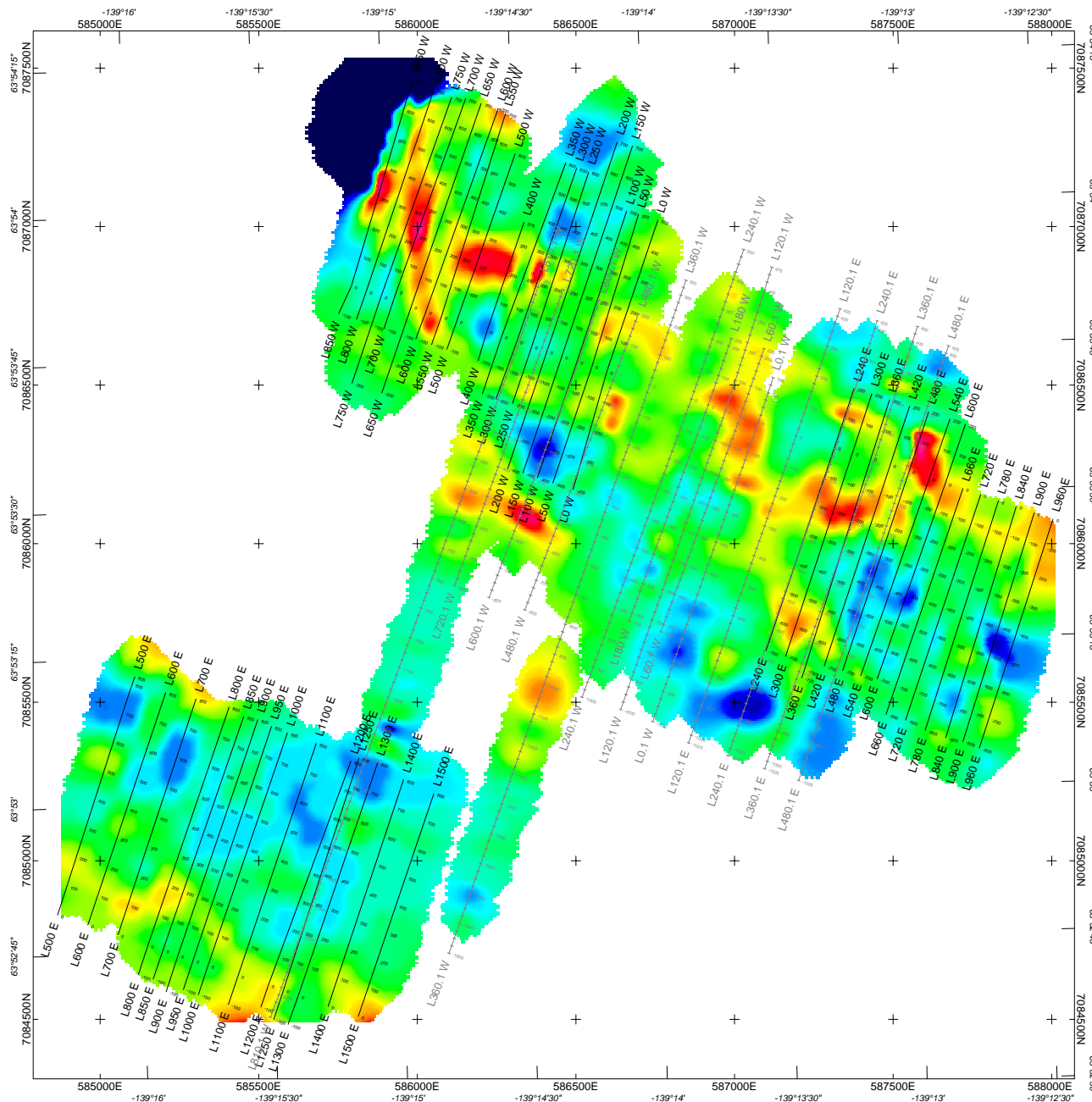
KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY ELDORADO PROPERTY, COMBINED 1987 & 2006 GRIDS RECOVERED RESISTIVITY - 50 m BELOW SURFACE

NTS: 1150/04
Datum: NAD83
Job: KDS-06-02-YT
Drawn by: DH

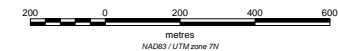
Mining District: Dawson
Proj: UTM Zone 7N
Date: 13 Feb 07
Appendix G

AURORA GEOSCIENCES LTD.



Recovered Resistivity
(Ohm-m)

Gridding Algorithm: Minimum Curvature
Filter : 3 passes Hanning
Cell size: 20



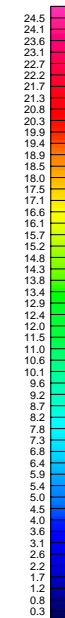
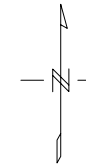
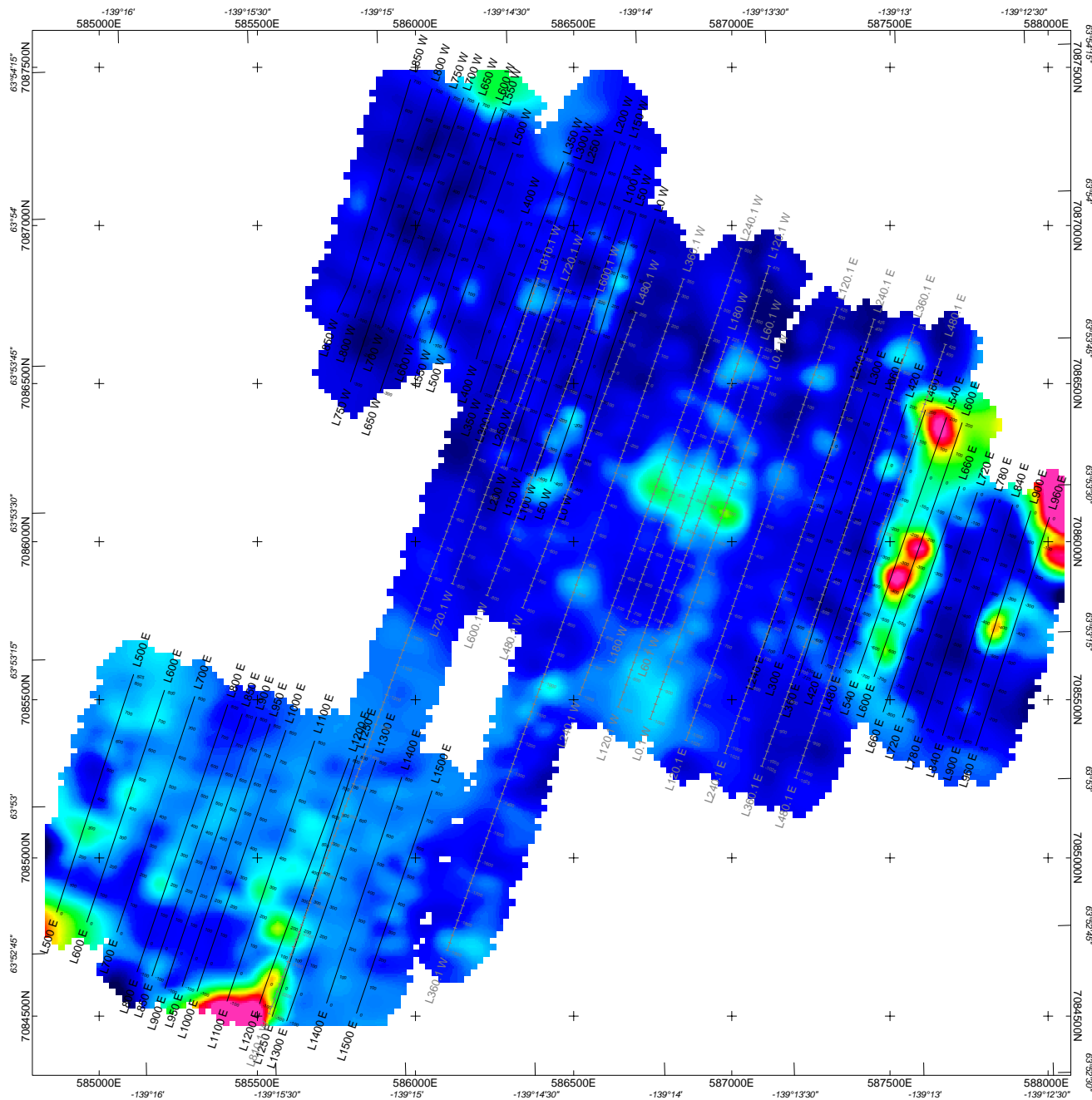
KLONDIKE STAR MINERAL CORP.

**INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, COMBINED 1987 & 2006 GRIDS
RECOVERED RESISTIVITY - 100 m BELOW SURFACE**

NTS: 1150/04
Datum: NAD83
Job: KDS-06-02-YT
Drawn by: DH

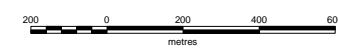
Mining District: Dawson
Proj: UTM Zone 7N
Date: 13 Feb 07
Appendix G

AURORA GEOSCIENCES LTD.



Recovered Chargeability
(mV/V)

Gridding Algorithm: Minimum Curvature
Filter : 3 passes Hanning
Cell size: 20



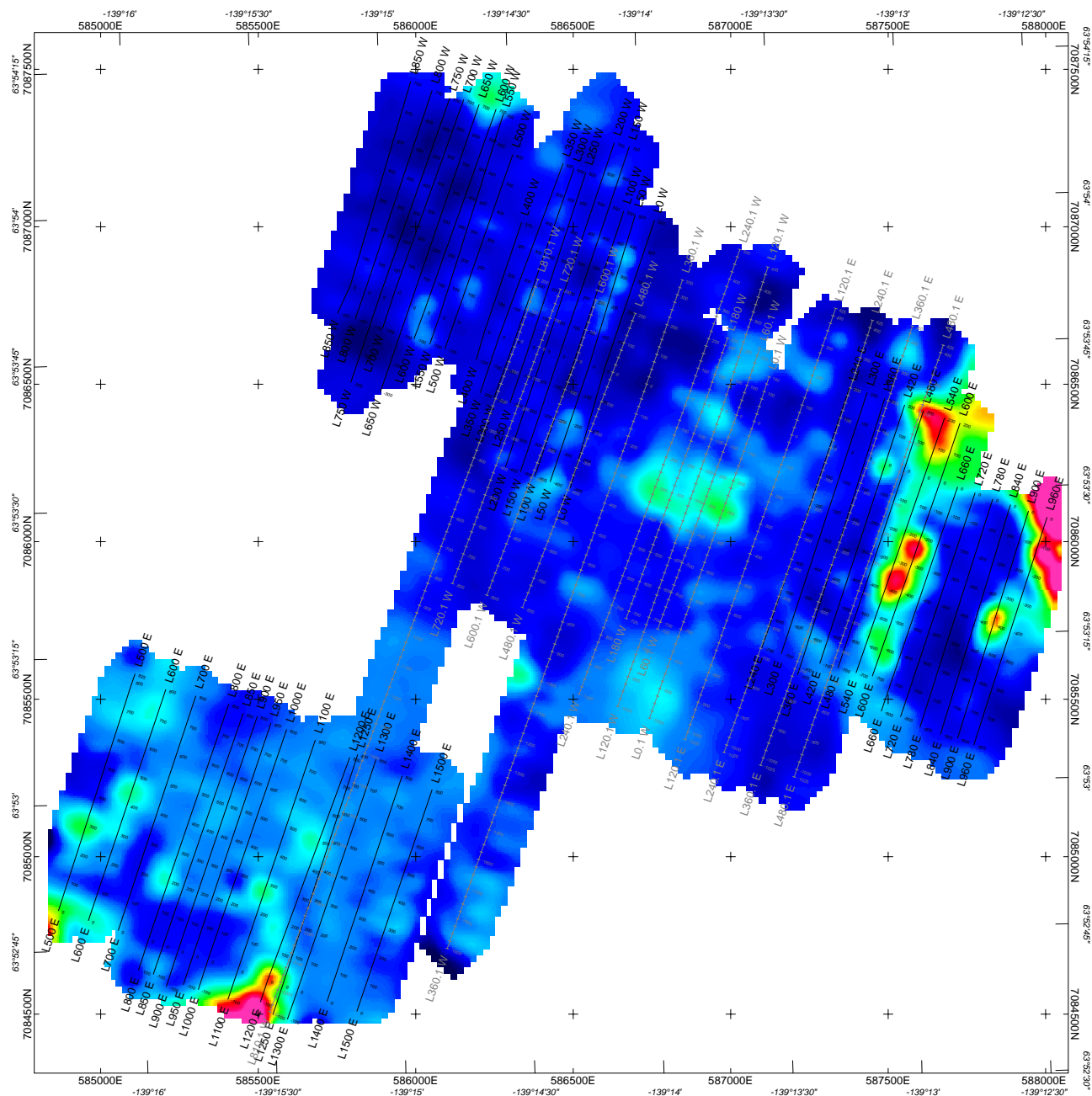
KLONDIKE STAR MINERAL CORP.

**INDUCED POLARIZATION SURVEY
ELDERADO PROPERTY, COMBINED 1987 & 2006 GRIDS
RECOVERED CHARGEABILITY - 10 m BELOW SURFACE**

NTS: 1150/04
Datum: NAD83
Job: KDS-06-02-YT
Drawn by: DH

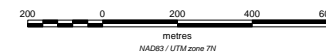
Mining District: Dawson
Proj: UTM Zone 7N
Date: 13 Feb 07
Appendix G

AURORA GEOSCIENCES LTD.



Recovered Chargeability
(mV/V)

Gridding Algorithm: Minimum Curvature
Filter: 3 passes Hanning
Cell size: 20



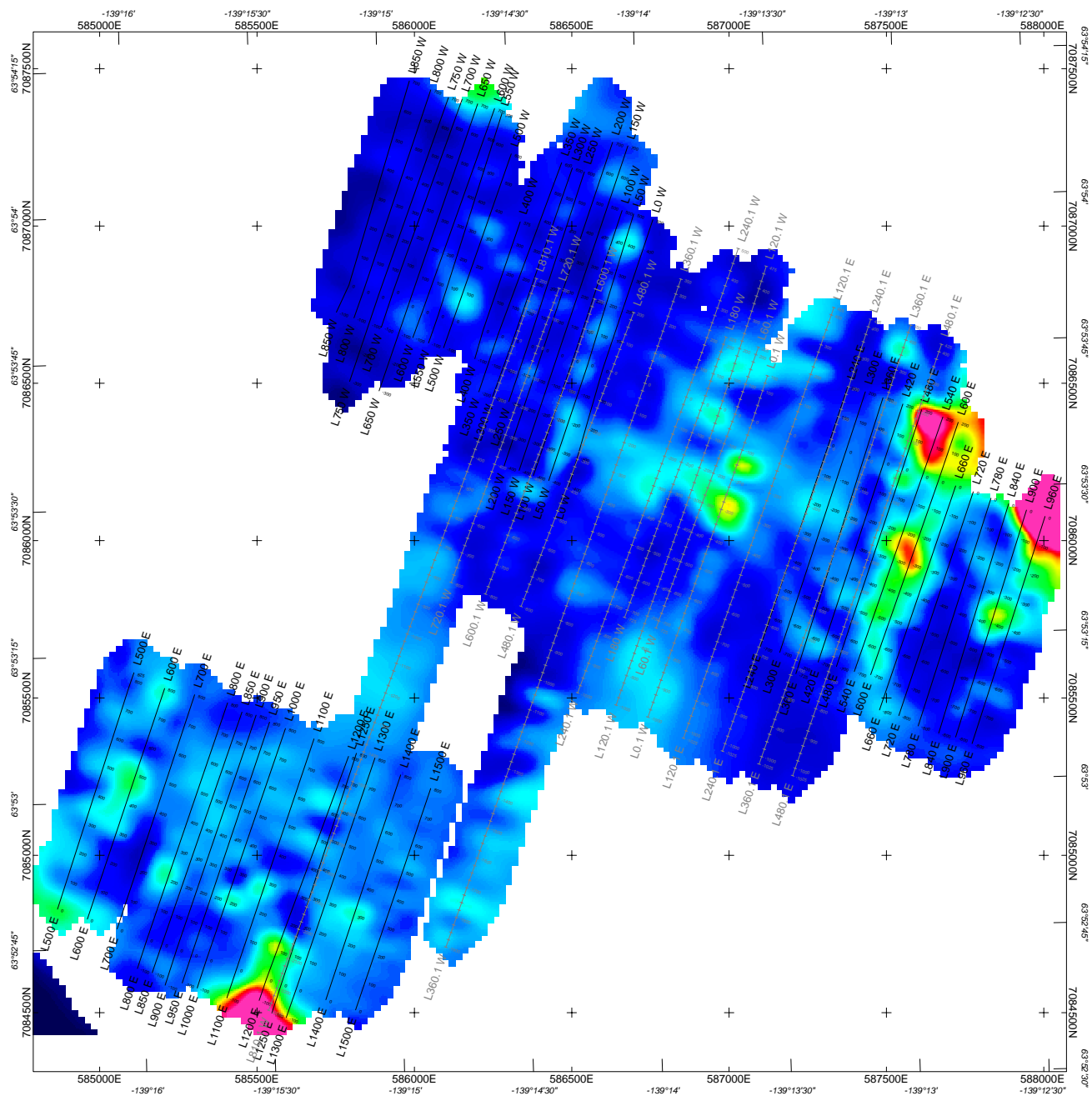
KLONDIKE STAR MINERAL CORP.

INDUCED POLARIZATION SURVEY ELDORADO PROPERTY, COMBINED 1987 & 2006 GRIDS RECOVERED CHARGEABILITY - 20 m BELOW SURFACE

NTS: 1150/04
Datum: NAD83
Job: KDS-06-02-YT
Drawn by: DH

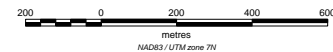
Mining District: Dawson
Proj: UTM Zone 7N
Date: 13 Feb 07
Appendix G

AURORA GEOSCIENCES LTD.



Recovered Chargeability
(mV/V)

Gridding Algorithm: Minimum Curvature
Filter: 3 passes Hanning
Cell size: 20



KLONDIKE STAR MINERAL CORP.

**INDUCED POLARIZATION SURVEY
ELDORADO PROPERTY, COMBINED 1987 & 2006 GRIDS
RECOVERED CHARGEABILITY - 50 m BELOW SURFACE**

NTS: 1150/04
Datum: NAD83
Job: KDS-06-02-YT
Drawn by: DH

Mining District: Dawson
Proj: UTM Zone 7N
Date: 13 Feb 07
Appendix G

AURORA GEOSCIENCES LTD.

