

Interim Review of 2011 Exploration at Compass Creek

7th October, 2011 Jim McGregor-Dawson

Field work was conducted at Compass Creek from August 21 to September 23, 2011.

Exploration included:

The IP/Resistivity program completed 8 lines totalling 16.5 km. Five lines were located over the southern Magnetic Anomaly & Mavis Mine area with line spacing of 500 m. Three lines were located over the Jason's Peak – Kamas Cauldron area with 350 m line spacing.

Reconnaissance mapping and rock chip sampling was conducted in the mountainous terrane around the Mavis Mine area, and between the old Hewson Mine and the Jason's Peak and Kamas Cauldron prospects. Also mapping and sampling was done in the southern part of the Magnetic Anomaly. A total of 51 rock chip samples were collected from mineralised material, and have been submitted for analysis.

Preliminary Results & Comments

Mapping in the hilly terrane between Hewson's and Jason's Peak revealed broad zones of metasomatic alteration related to structures that contain network quartz veining and locally host breccia zones with significant gossan (ex-sulphide) mineralisation (e.g. Hewson's mine). These alteration/vein zones form the high ridges and hills due to their resistance to weathering. The alteration type seen in the structural zones is the same as that seen around the breccia pipes of Jason's Peak and Kamas Cauldron. Thus they are all thought to be related, and resulted from hydrothermal fluids coming off granite at shallow depth, beneath the hilly terrane. The alteration zones mainly trend NNW-SSE and occupy large parts of a 1 km wide by 2 km long area, with the possibility of extending to 3 km length. Individual alteration zones range from 5m to 150m wide and extend up to 1 km in length. About 25 rock samples have been collected from the mineralised breccia-vein material.

All eight IP lines show significant chargeability anomalies. Some of these were expected as they reflect known surface mineralisation; however, several locations were a surprise (blind anomalies) as there is no known sulphide mineralisation on the surface.

The following are my (geologist) thoughts on the IP/Resistivity pseudo-sections and related geology. Our geophysical consultant (Dave McInnes) will provide his thoughts and some modelled interpretations at a later date.

Southern Group of IP Lines

IP line 8511750N is located over the southern part of the Magnetic Anomaly, about 175m north of the contact with the granite (to the south). This line produced very high chargeability values and shows a clear “pants leg” feature indicating a mineralised zone between 788400E to 788700E (300m), with the central 100m (788500-600E) being the most likely target.

A north-south trending strongly gossanous quartz-breccia vein (fault) occurs at 788510E and is traceable over 125m from near the granite contact, northward to about 50m south of the IP line. This strong mineralised zone is 10 to 15m wide over much of its exposure. This gossan-vein matches quite well with a magnetic linear interpreted by Terra Search in 2010. Hence it is quite likely that pyrrhotite makes up much of the sulphides in this vein. The Terra Search magnetic linear is traceable for over 700m to the NNE. The gossan vein (and IP anomaly) is in the core of the north plunging anticline, and lies just to the east of a large mass of dark grey hornfels (400m x 50m) which also occupies the core of the anticline. A sample collected last year from this gossan vein returned anomalous copper, lead and bismuth with weakly anomalous arsenic, tin and silver (710 ppm Cu, 2950 ppm Pb, 38 ppm Bi, 93 ppm As, 21 ppm Sn & 0.8 ppm Ag). Five additional samples have been collected.

IP line 8512250N is located in the middle of the Magnetic Anomaly. A partially formed “pants leg” feature indicates a chargeable zone between 788300E to 788700E (400m). This matches very well with the alteration and quartz-sulphide zone mapped in 2010. The central part of this interval (788400-600E) is probably the more prospective zone.

IP line 8512750N is located over the north end of the Magnetic Anomaly and the related alteration zone; as well as close to the areas where gold nuggets have been found by prospectors. The chargeability pseudo-section shows two “pants leg” features: the western zone of chargeability (788650 – 900E) matches well with the mapped alteration zone over some low hills where some gold nuggets had been found. The eastern zone (789300 – 600E) appears to show the response at near surface, however there is no evidence of alteration or mineralisation in rock exposures (or float) along the base of a ridge where the IP line is located. Two possible explanations are: (1) that the creek located just to the south of the line, may also host a mineralised fault structure, or (2) the apparent bedding controlled quartz-sulphide-gold mineralisation seen at Mavis South may continue 350m on bedding trend to the SSE, but below the present surface. This zone is cut by the next IP line.

IP line 8513250N is located about 150m south of the Mavis mine, and passes over a zone of apparent bedding controlled quartz veining, alteration and sulphide mineralisation (oxidized) that carries anomalous gold (up to 1.25 g/t Au) from IsMins 2010 samples. This area is referred to as Mavis South, and it is within the core of the north to NNE plunging anticline. The IP chargeability shows a well-defined “pants leg” feature indicating a sulphide zone between 789100E to 789500E. This matches very well with the Mavis South mineralised zone that is located between 789125E to 789175E. The surface exposure of the Mavis South mineralised zone is about 250m long by 50m wide, and appears to follow the bedding direction (NNW-SSE). More importantly, the Mavis South mineralised zone and the IP

anomaly both coincide with the Airborne Electro-Magnetic (AEM) anomaly (150 – 200m depth slice) that occurs between 789000E to 789500E (500m) and trends about N-S. [An additional 11 rock samples have been collected from the Mavis South mineralised area].

IP line 8513750N is located about 350m north of the Mavis mine. This line was done to test for the northern extension of mineralisation from the Mavis area and to confirm the presence of the AEM anomaly. The chargeability pseudo-section shows a well-defined broad “pants leg” feature roughly between 788900E to 789500E (600m), with a well-defined core between 789100E and 789300E (200m). Reconnaissance mapping in 2010 did not indicate any significant surface mineralisation in this area, and the IP response tends to indicate a buried source for this chargeability. This IP response matches very well with the AEM anomaly (150-200m depth slice) which occurs from 789050E to 789450E (400m). A NNW trending alteration zone with local quartz-sulphide breccia veins (faults) was mapped between 789600E and 789750E (150m). This zone doesn’t appear to show as a separate IP chargeable zone, but it is within the broader “pants leg” feature, and hence may be masked by the main zone. Five rock samples have been collected from mineralised veins in the altered zones.

Northern Group of IP Lines

IP line 8515650N was positioned to go directly over the top of the Kamas Cauldron breccia pipe. Strangely the chargeability pseudo-section shows only a very weak (5-7mV/V) “pants leg” feature corresponding to the highly mineralised breccia pipe. The pseudo-section indicates a chargeable body around 790375E to 790550E, which matches very well with the breccia pipe at 790440E to 790520E, and the alteration extending another 20-30m out beyond the edge of the pipe. The reason for such a weak response over the pipe is thought to be a combination of three factors: (1) deep oxidation of sulphides (>100m?) due to funnelling of surface water within the breccia surrounded by impervious massive alteration, (2) the pipe is quite narrow and the chargeability is masked by a much greater volume of un-mineralised country rock, and (3) the massive alteration around the pipe shows very little evidence of interconnectivity of sulphides or fractures, and thus it may be acting as a resistant to current entering the pipe. This last point is supported by the very high “Apparent Resistivity” that matches with the position of the breccia pipe and alteration.

The western end of IP line 8515650N shows 2/3s of a “pants leg” feature where the line is starting to enter the broad alteration zone in the hilly terrane. The pseudo-section indicates a chargeable zone between 789800E to 789950E (150m) that matches well with a mapped alteration zone between 789850E and 789900E (50m). Unfortunately the terrane to the west is quite rugged and there was no time to extend the line further west.

IP line 8516000N is a long line designed to “tie together” the line over Kamas Cauldron 350m to the south and the line over Jason’s Peak 350m to the north. What this line did in effect was provide a complete section through the northern portion of the broad alteration zone. The chargeability pseudo-section shows a broad chargeable zone between about 788800E to 790000E (1.2 km wide). The core of the chargeable zone appears to lie between 789000E to 789700E (700m), and this matches well with the projection of the mapped

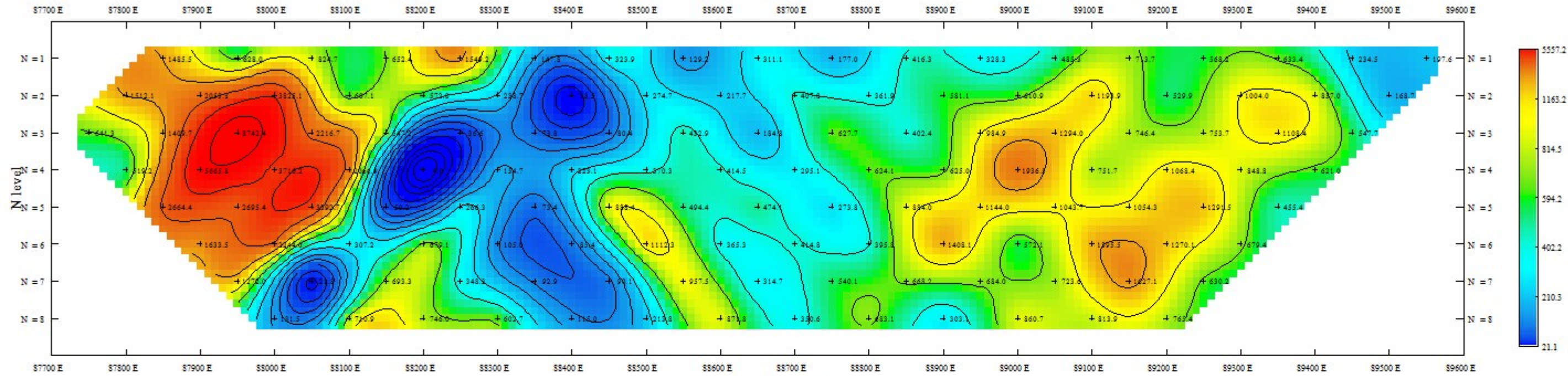
alteration zone. What is also encouraging is the presence of a deep chargeability high between 789275E to 789350E (75m) that matches well with a mapped mineralised vein zone on the surface between 789340E to 789390E (50m). This mineralised vein zone trends about N-S and is traceable over 300m along trend. Another deep chargeability anomaly (moderate) occurs between 789100E to 789200E (100m), and it is possible this may match with the Jason's Peak breccia pipe that occurs 350m due north. Further to the east there is another deep chargeability anomaly (weak to moderate) between 789600E and 789700E (100m); this coincides exactly with the location of a NNW trending ridge of alteration, veining and local sulphide mineralisation.

IP line 8516350N was positioned to test the Jason's Peak breccia pipe. Similar to line 8516000N, this line also tested the full width of the alteration zone. The chargeability pseudo-section shows a significant chargeable zone between 788900E to 789600E (700m), and this matches well with the mapped alteration between 789050E to 789600E (550m). A deep chargeability high is present between 789050E and 789150E (100m), and this may match with the location of Jason's Peak which is at 789100E to 789200E (100m) on surface. Slightly further to the east is a somewhat shallower chargeability anomaly between 789250E and 789320E (70m), which may match with the north projection of mapped alteration and vein zone noted on line 8516000N (789340E to 789390E).

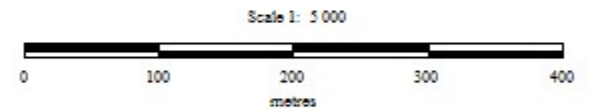
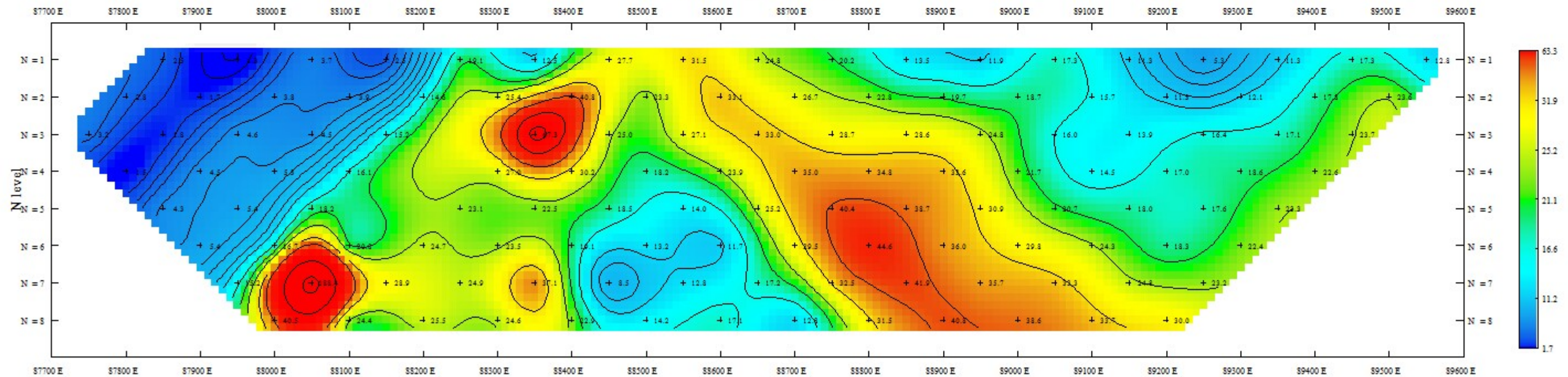
Summary

The IP/Resistivity and mapping programs have been successful in defining known target zones (sulphide mineralisation), and have also found very significant new hidden targets. These targets should be tested by drilling next year.

Apparent Resistivity (obs) (ohm.metres)



Chargeability (obs) (mV/V)

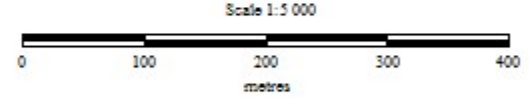
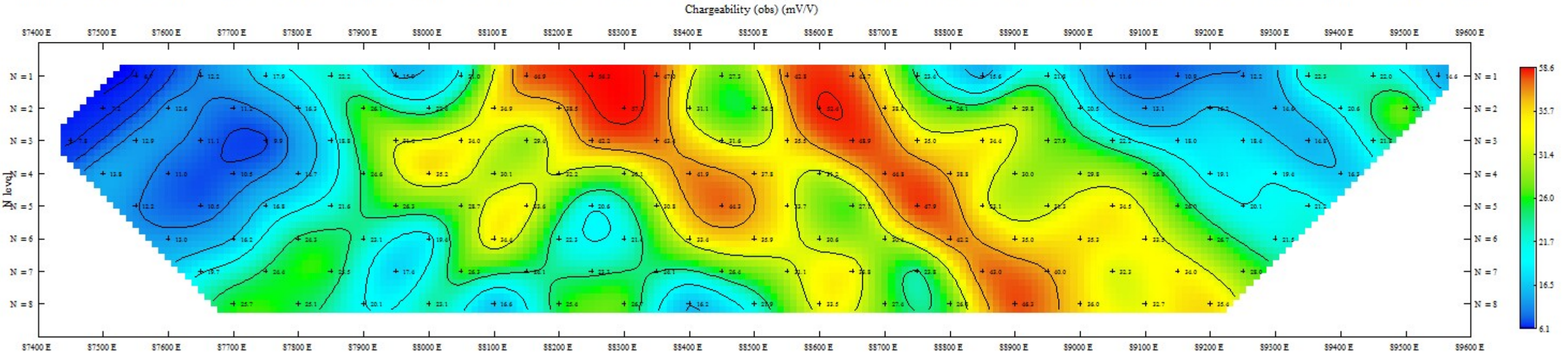
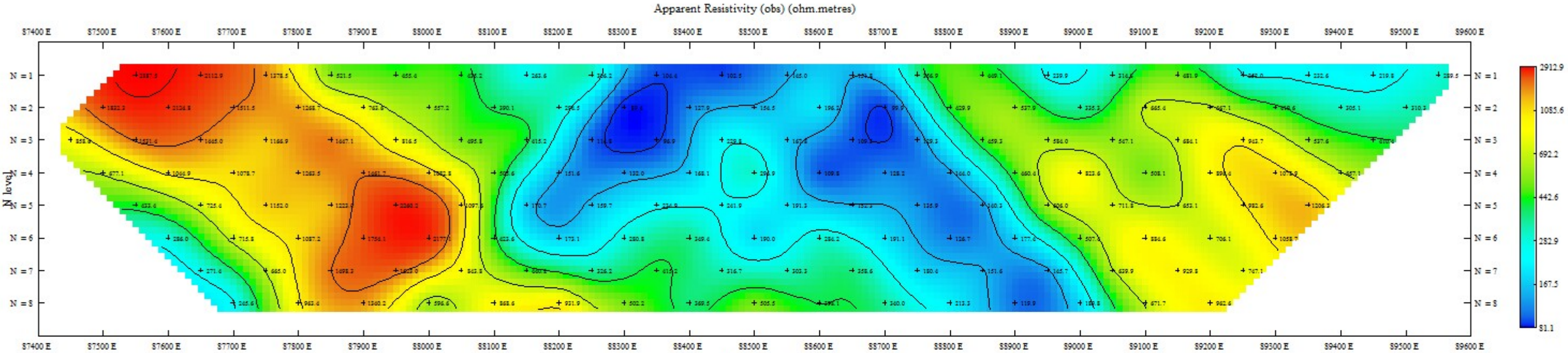


Fender Geophysics

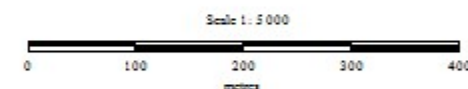
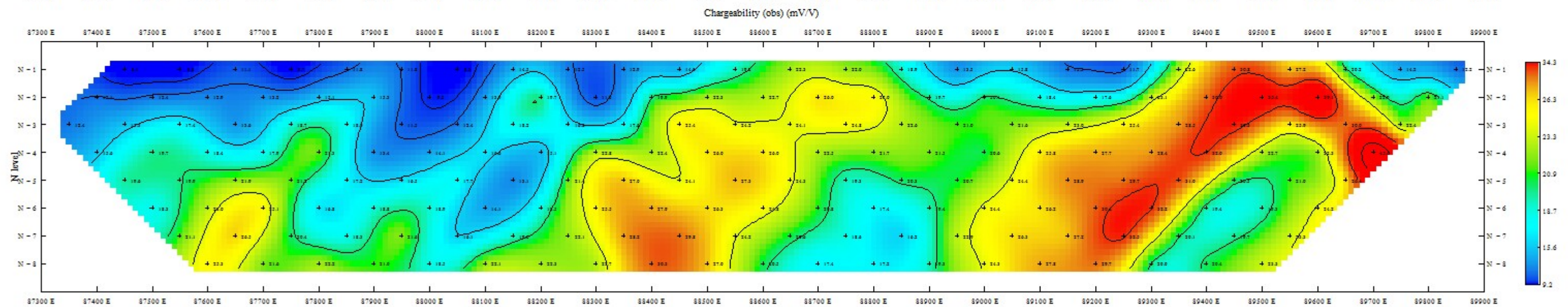
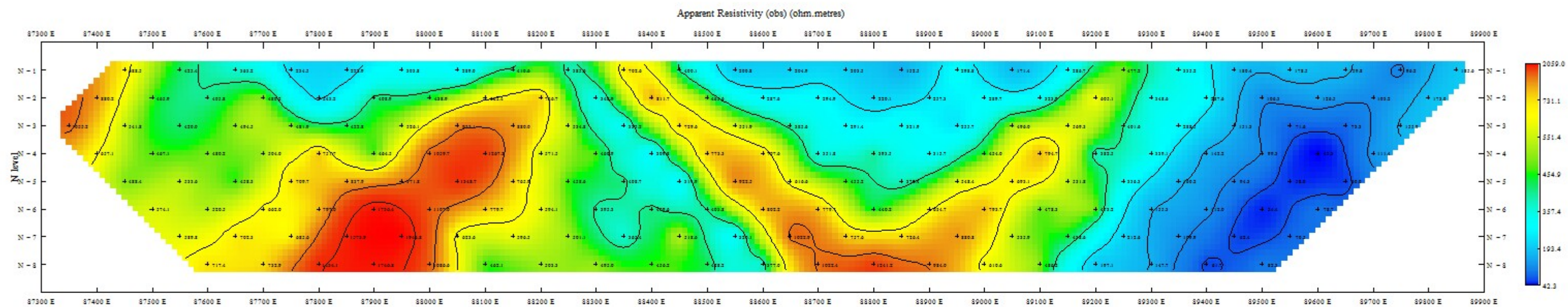
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COMPASS CREEK

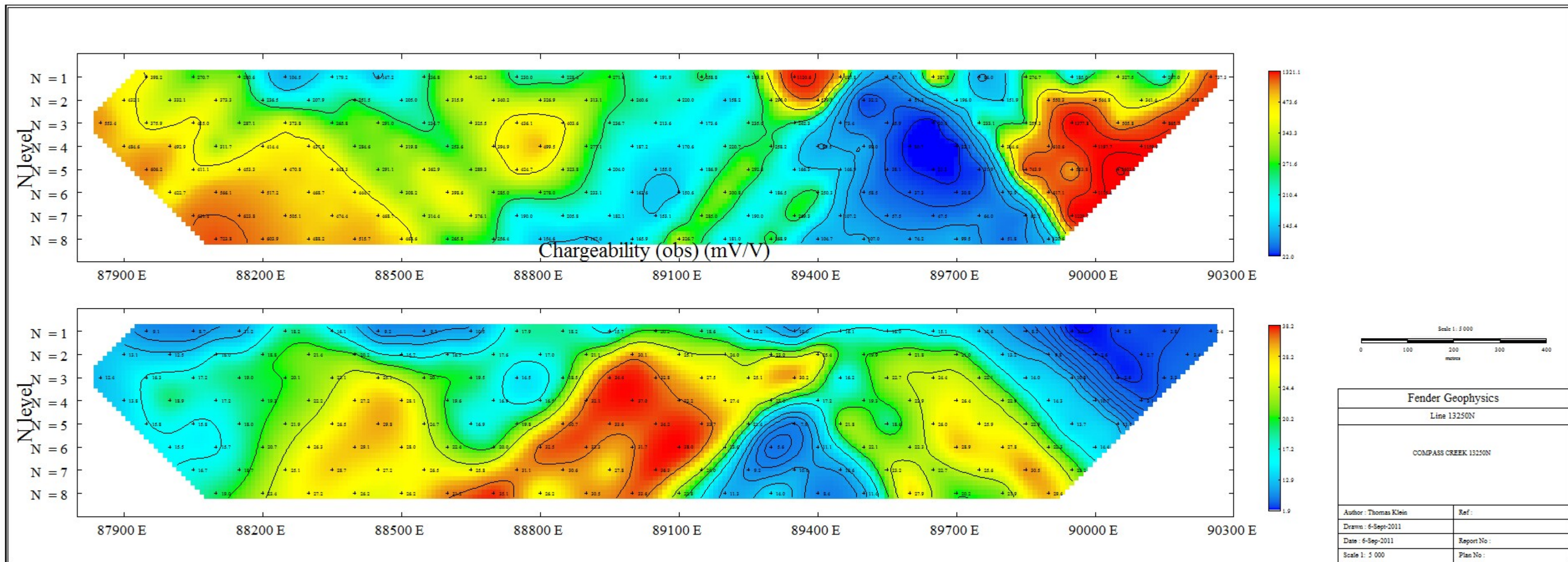
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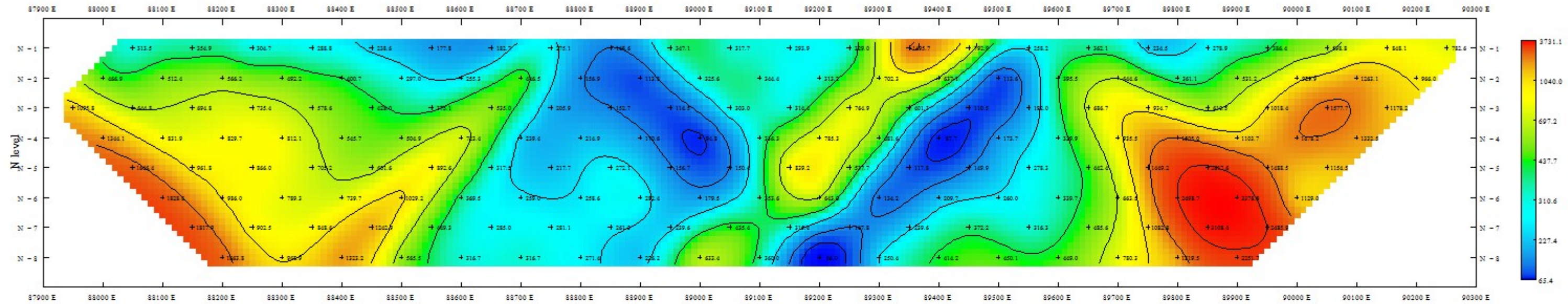
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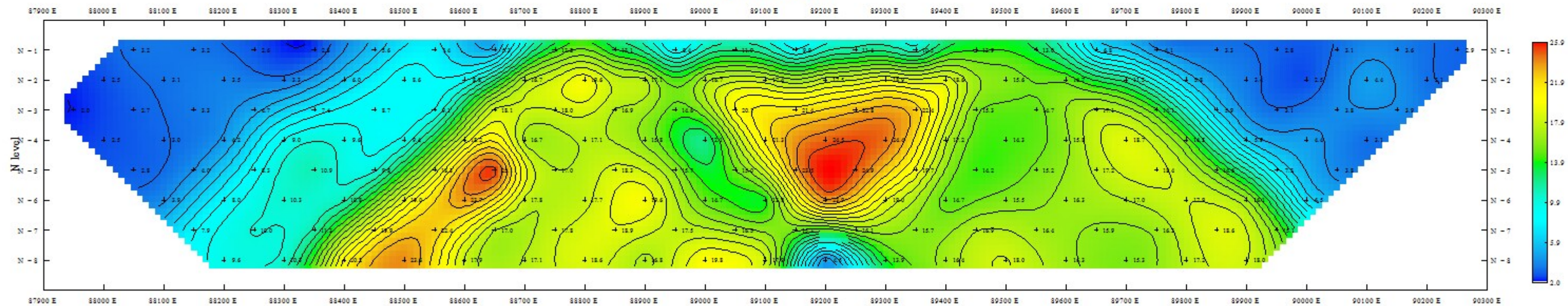
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Apparent Resistivity (obs) (ohm.metres)



Chargeability (obs) (mV/V)



Fender Geophysics

Line 13750N

Compass Creek

Author : fender

Ref:

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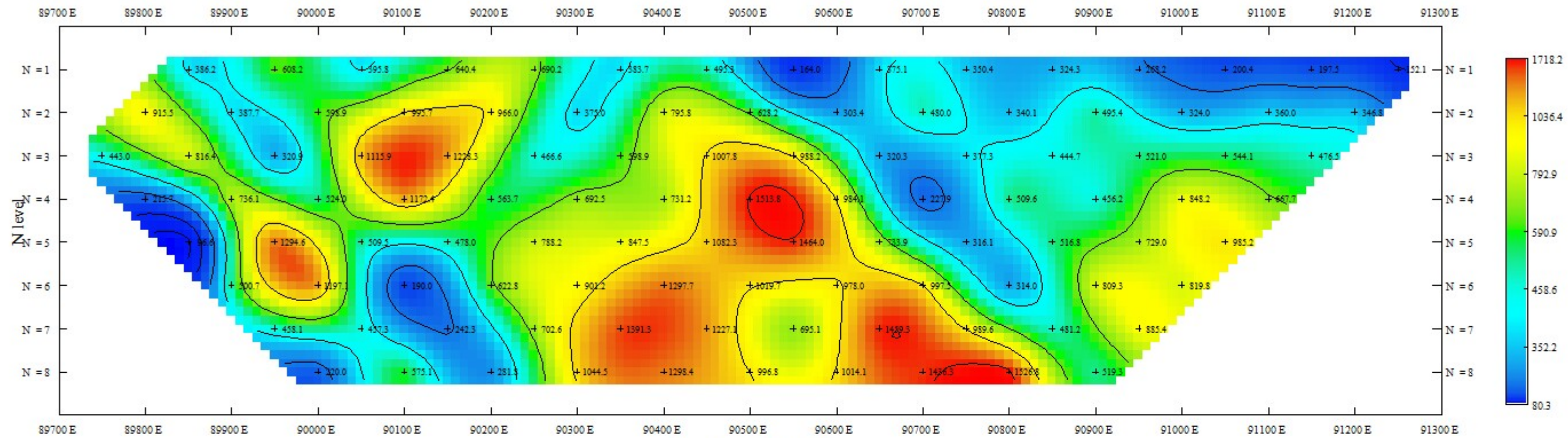
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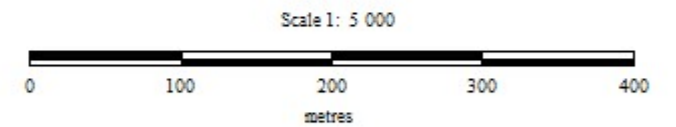
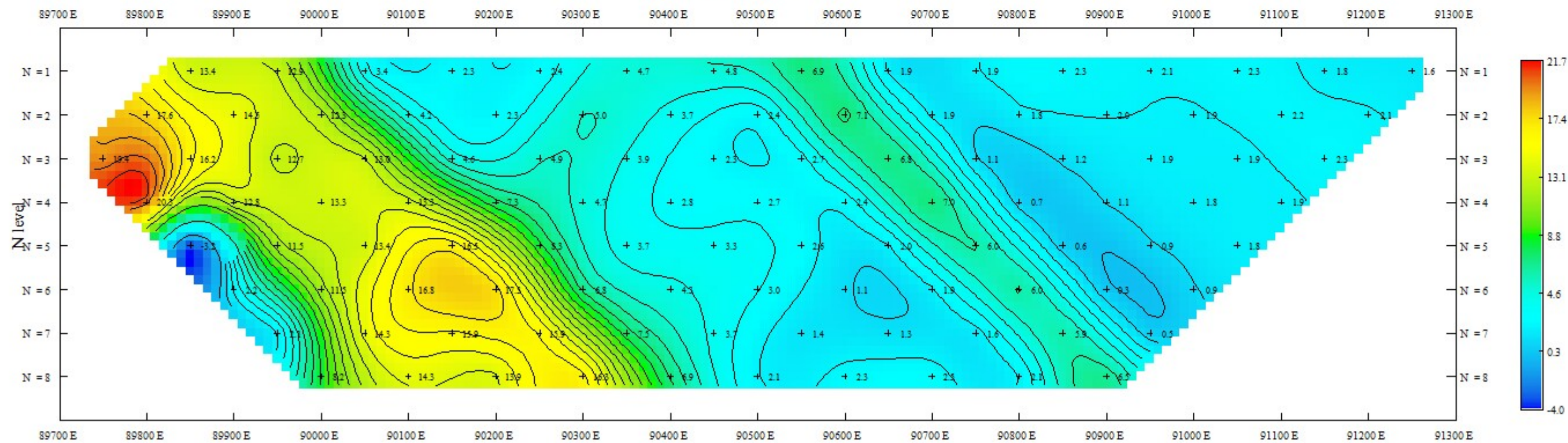
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Apparent Resistivity (obs) (ohm.metres)



Chargeability (obs) (mV/V)



Fender Geophysics

Line 15650N

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Compass Creek

Author : fender

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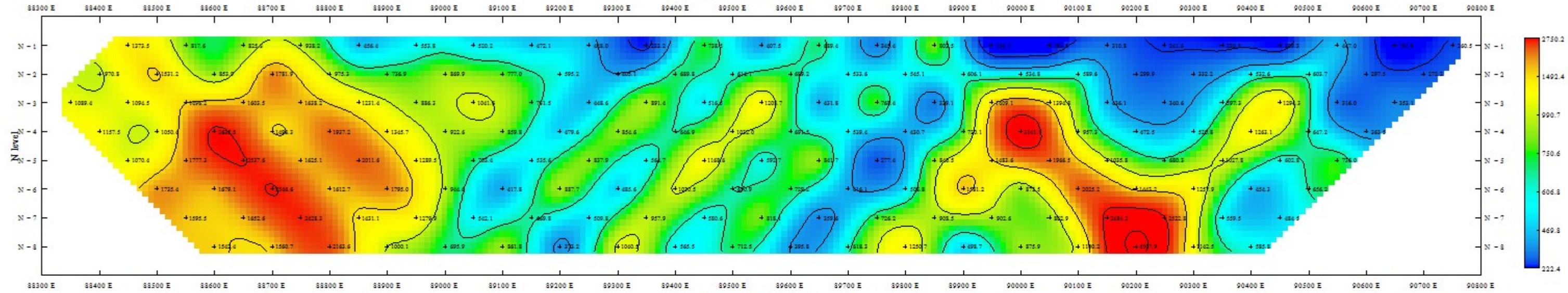
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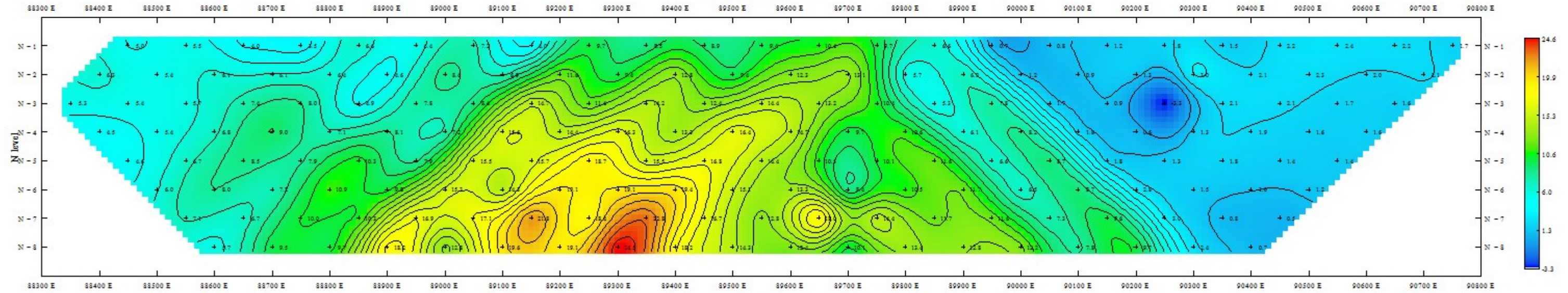
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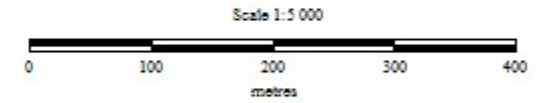
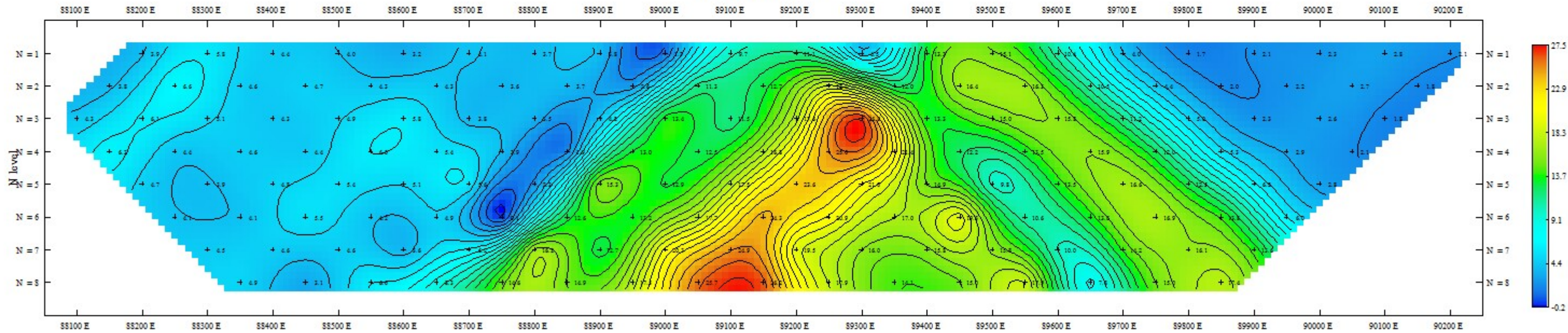
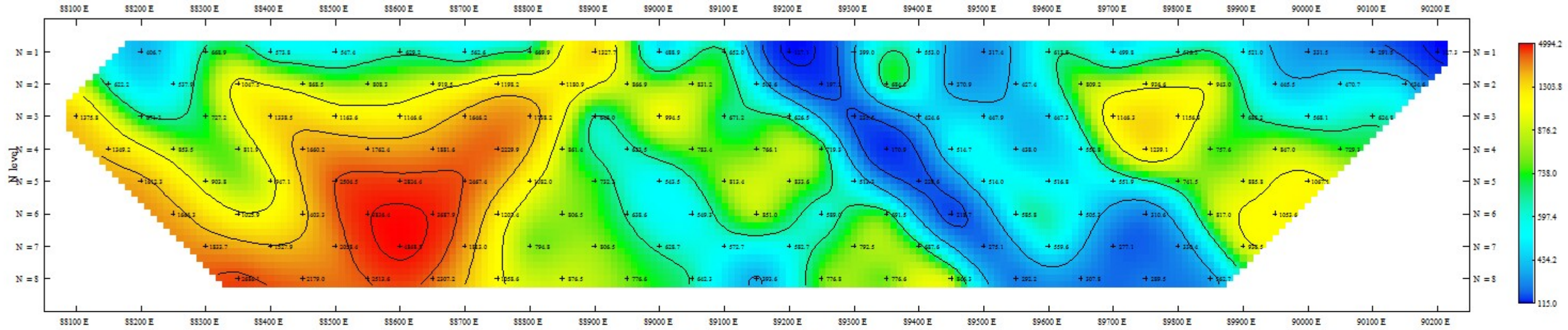
Apparent Resistivity (obs) (ohm.metres)



Chargeability (obs) (mV/V)



Fender Geophysics	
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Compass Creek	
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Scale 1: 5 000	Plan No :



Fender Geophysics	
Line 16350N	
IsMins Compass Creek	
Author : fender	Ref :
Drawn :	
Date : 15-Sep-2011	Report No :
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