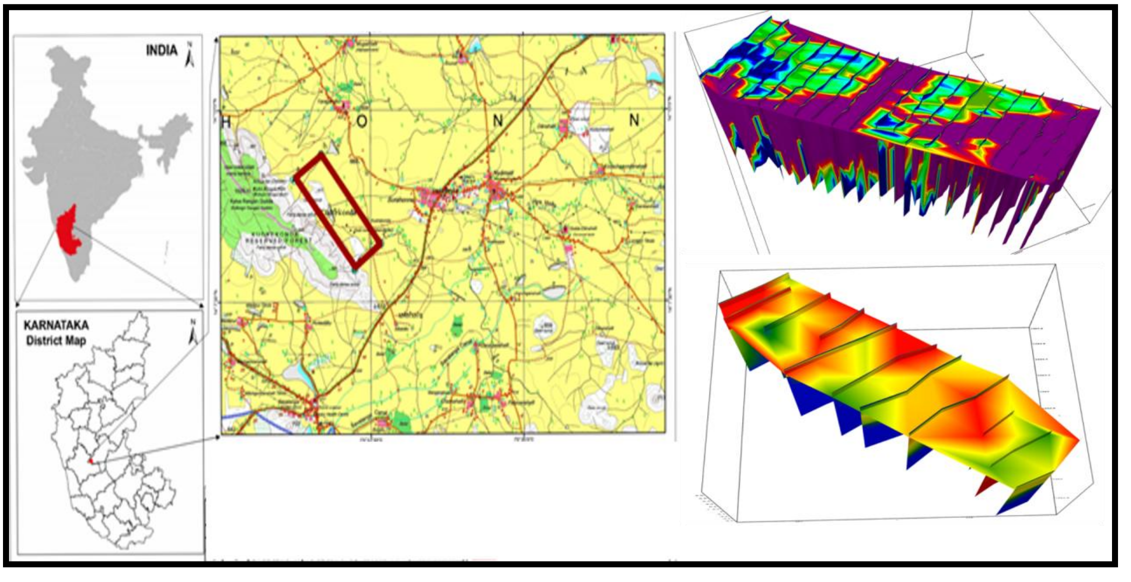
Annexure-VII

REPORT ON GROUND GEOPHYSICAL SURVEY (TDEM & MT) IN

KUDREKONDA BLOCK DAVANAGERE

KARNATAKA



A MINI RATNA COMPANY

MINERAL EXPLORATION and CONSULTANCY LIMITED
(A Government of India Enterprise)
NAGPUR (Maharashtra), India

Jun - 2025

REPORT OF TIME DOMAIN ELECTROMAGNETIC, MAGNETOTELLURICS SURVEY IN KUDEREKONDABLOCK,DAVANAGERE, KARNATAKA

1.0 INTRODUCTION

1.1 BACKGROUND

Mineral Exploration Corporation Limited (MECL) having its corporate office at Nagpur, Maharashtra is functioning under Ministry of Mines, Government of India with 100% holding for systematic exploration of minerals.

In view of the MMDR amendments act -2015, Minerals (Evidence of Mineral Contents) Rule 2015 and Mineral Auction Rule-2015, Ministry of Mines, GSI identified the block for exploration and MECL decided to take up the block for G-4 level Phase -1 of exploration under NMET funding. MECL requested Ministry of Mines, Government of India to allot this block for exploration to MECL.

The contrast in the physical properties of the mineralised zone and the host rock forms the basis of Geophysical Survey. The physical properties for different host rock types and gold are shown in below Table-1.1.

Table -1.1 Physical Properties of different host rocks and gold

Ore/ rock	Chemical composition	Density (g/cc)	Mag. Sus 10^{-3}CGS
Carbonates	$CO3^{2-}$	2.7 to 2.8	0 to 0.01
Chlorite	ClO^{-2}	2.6 to 3.3	10^{-3} to 10^{-6}
Tourmaline	$XY_3Z_6(T_6O_{18})(BO_3)_3V_3W$ Where : X can be Na, Ca, K, etc, Y ca can be Li, Mg, Fe^2 etc and Z can be Mg, Al, Fe^3, Cr^3	2.82–3.32	3.4 to 0.58 x 10^{-6}
Quartz	SiO_2	2.6-2.8	.00063
Gold	Au	19.3	$-1.4x10^{-9}$

In the assigned area the Geophysical Survey was carried out for delineating mineralised zone along with depth, strike and extent of occurrence if any.

1.2 SCOPE OF WORK

The scope of work consisted of Acquisition, Processing and Interpretation of ground Time Domain Electromagnetic (TDEM), Magneto-telluric (MT) and Deep Induced Polarization survey data. The Geophysical Survey has to be carried out with 100m as profile interval and 50m as station interval in a grid pattern(100 x 50 mts)with 360 stations for TDEM Survey, for MT 250 x 250mts with 36 stations and 30-line km for Deep I.P with 100mts as profile line and 20mts as station spacing with 100x 20mts as grid pattern covering an area of 2.73 sqkm. The main objective of the Geophysical survey was to delineate gold ore zones and other associated minerals if any.

1.3 FIELD ACTIVITIES

A base camp for geophysical party was established at Shivamogga, Shivamogga DistrictKarnataka.Total6members team (Table1.6) equipped with Time Domain Electromagnetic, Magneto-tellurics and Deep I.P &DGPS, Total Station and GPS was engaged for the work. The field activities consisted of the following:

- Fixing of survey points in 100m x 50m grid for TDEM.
- Fixing of survey points in 250m x 250m grid for MT.
- Acquisition of TDEM and MT.
- Field QC of acquired data on day-to-day basis.

Total area surveyed and stations recorded in the block are given below.

S.No	Method	Approved	Acquired	Grid	Profile Direction
1	Time Domain Electromagnetic	360 Stations	440	100 x 50m	N45°E
2	Magneto-telluric	36 Stations	36	250 x 250m	N45°E
3	Deep I.P	30 Lkm	**Suspended**		

The Layout map of Geophysical stations in Kuderkonda block is shown in Fig 1.3.1 (a) and Fig 1.3.1 (b)

Due to Local village agitation Deep I.P Survey was suspended and with the guide lines of NMET several meetings along with Local Administration and with District commissioner was held with villages but still the problem persists. Hence the Deep I.P Survey was suspended.

1.4 DURATION OF WORK

The Geophysical survey was planned to complete within month duration i.e. from 06/05/24 to 30/08/24.

1.5 BACK-OFFICE WORK

- QA/QC of acquired data on day-to-day basis.
- Preliminary processing of data to check for errors/jumps.
- Monitoring of station and coverage

1.6 LIST OF PERSONNEL

Following personnel were involved in the project as given below

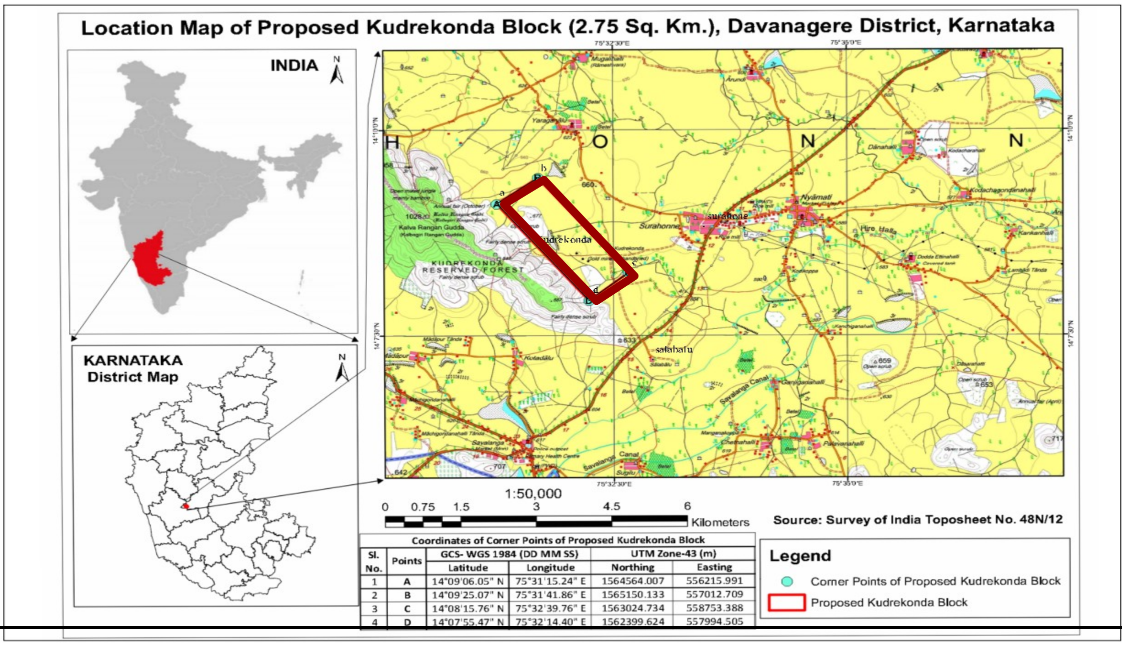
Table 1.6 List of key Personnel's

Sl.No.	Name and Designation	Responsibility
1	G. S. Dhami GM (Geological Services)	Heading the entire project, Monitoring, Liasoning, Data Processing, Interpretation and Report writing
2	A.B.S.S. Rama Krishna Manager	Field Management, Liasoning, Planning, onsite QC, Data Processing, Interpretation and Report writing
3	Amit Tiwari – Assistant Manager	Field Data acquisition and QC Processing
4	Mahindar Esampalli - Sr. Geophsyicsit	Field Data acquisition and QC Processing
5	Naveen Kumar - Geophysicist	Field Data acquisition
6	Ramesh Kumar - Geophysicist	Field Data acquisition
7	Bishwajit Pal, STA (S&M)	Surveying

2.0 EXPLORATION PARAMETERS

2.1 PROJECT AREA LOCATION

The survey area, Kuderekonda block is located 35 Km away from Shivamogga, Karnataka. The location of the block is shown in Figure 2.1.1.The corner points of the block demarcated for Geophysical Survey are as follows:



Sl. No.	Points	GCS- WGS 1984 (DD MM SS)		UTM Zone-43 (m)	
		Latitude	Longitude	Northing	Easting
1	A	14°09'06.05" N	75°31'15.24" E	1564564.007	556215.991
2	B	14°09'25.07" N	75°31'41.86" E	1565150.133	557012.709
3	C	14°08'15.76" N	75°32'39.76" E	1563024.734	558753.388
4	D	14°07'55.47" N	75°32'14.40" E	1562399.624	557994.505

Figure 2.1.1 Location of Block Boundary

Table 2.1: Block boundary Coordinates

Corner Points	Easting	Northing
A	556216.2	1564564.06
B	557012.78	1565150.13
C	558753.43	1563024.74
D	557994.63	1562399.77

2.2 INSTRUMENT DETAILS

2.2.1 TIME DOMAIN ELECTROMAGNETIC (TDEM) SYSTEM

Type	Terra TEM-24 & Terra TX-50
Make	Monex GeoScope
Output Current	1 to 50 amperes
Wave Form	50% duty cycle
Loop size	500m x 500m
Synchronization	GPS
Output Power	6 K Watt
Software	Zond 1D/2D

2.2.2 MAGNETO TELLURIC (MT):

Type	Geoprad-8
Make	AGCOS
Effective frequency band	43,000 to 0.0001 Hz
Input Impedance	10MΩ
Accuracy of synchronisation	$\pm 1 \times 10^{-6}$
Synchronization	GPS
Power supply	12V internal battery
Software	Zond 1D/2D

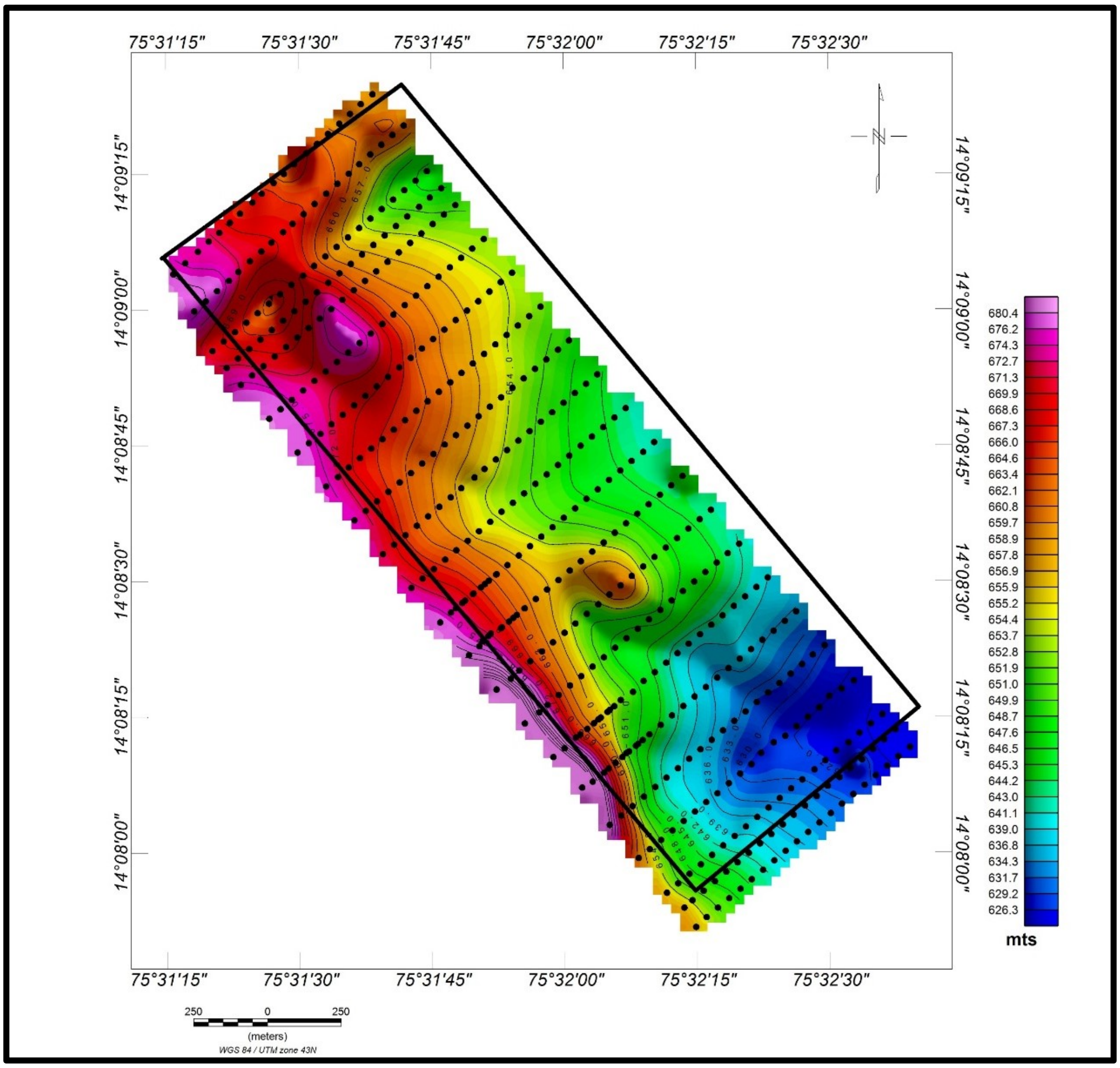
2.2.3 SURVEY EQUIPMENTS

- DGPS
- Total Station-Sokia
- GPS-Garmin handheld

2.3 FIELD DATA ACQUISITION

The Block boundary demarcations and survey stations were fixed in the grid pattern with spacing of 50m as station interval and 100m as profile interval for TDEM survey and 250m X 250m for MT survey with bearing N45°EusingDGPS and Total Station. Pegs with marked station number were placed at every point. The Reduced level (RL) of every station was determined with Total Stations with an accuracy of ±2cm.

The Time Domain Electromagnetic and Magento-telluric data was recorded at every station on daily basis. A total of 360 stations of TDEM and 36 stations of MT were recorded covering2.73sq. km area. The digital elevation map (RL) of study area is shown in Figure 2.3.1 in which the North western portion is elevated where as South eastern part is low lying area the total variation of the elevation within the area is 101mts with high as 723mts and low as 622mts.



DATA REDUCTION AND PROCESSING

2.3.1 **Time Domain Electromagnetic Survey (TDEM)**

TDEM survey stations were established at fixed intervals of 50 m × 100 m across the entire survey block. Wooden pegs marked with station numbers were placed at each location. The end coordinates of the TDEM layout is given in below table 2.3.1. Field data quality assurance and preliminary processing were conducted on a daily basis during the data acquisition phase. Final data processing, including the generation of digital data and map products, was carried out at the corporate office in Nagpur following the completion of the field survey.

Time Domain Electromagnetic Method (TDEM) is an inductive electromagnetic technique used to measure resistivity. It operates by passing an electric current through a wire loop, which, in accordance with Ampere's Law, generates a primary magnetic field. When the primary current is rapidly switched off, it causes a time-varying magnetic flux that induces voltages—and consequently eddy currents—in subsurface conductive bodies, as described by Faraday's Law.

These eddy currents generate a secondary magnetic field, the time derivative of which (dB/dt) is typically measured as a voltage over time at one or more surface receiver coils following the shutoff of the primary current. From this measured voltage and the elapsed time after current turnoff, an apparent resistivity of the subsurface can be calculated

TDEM data was acquired using a TerraTEM-24 system, employing a fixed square transmitter loop measuring 300 m × 300 m. The depth of investigation (DOI) is influenced by subsurface resistivity, signal-to-noise ratio, and varies across sounding locations. DOI is also dependent on the receiver configuration and loop size, with a general rule of thumb estimating the DOI at approximately 2–3 times the side length of the transmitter loop. In this study, the DOI was also evaluated qualitatively at each site by assessing the sensitivity of model parameters to the measured data.

Resolved depths extended to at least 500 m below the RL, with average depths of investigation ranging from 500 m to 600 m below the surface. To cover the entire survey block, multiple fixed loops were established. An induction coil sensor was used to receive the data. Multiple soundings were conducted at each location, and the data were stacked to enhance quality and reduce noise.

Data analysis involved several steps, including data format conversion, statistical processing and averaging, forward modeling, data inversion, and model validation. Field operations were challenged by the need to handle and transport four heavy 300-meter-long, 16 mm cables, which proved cumbersome and time-consuming. Additionally, relocating the 6 kW generator from one site to another posed logistical difficulties and impacted the overall survey pace

Fig: 2.3.2 Terra TX and TEM used for TDEM survey

Data was processed and inverted using the Zond TEM 1D/2D data processing software packages. Data were inverted for two end-member model classes: (1) minimum-layer models, and (2) 20-layer, smooth, inverse models and generated the following figures.

- Fig 2.3.3 TDEM 2D-Sections of all lines in 3D view
- Fig 2.3.4 TDEM slice view of study area at 20mts depth
- Fig 2.3.5 TDEM slice view of study area at 50mts depth
- Fig 2.3.6 TDEM slice view of study area at 100mts depth
- Fig 2.3.7 TDEM slice view of study area at 150mts depth
- Fig 2.3.8 TDEM slice view of study area at 200mts depth
- Fig 2.3.9 TDEM slice view of study area at 250mts depth
- Fig 2.3.10 TDEM slice view of study area at 300mts depth
- Fig 2.3.11 TDEM slice view of study area at 300mts depth

Table 2.3.1 Layout line End coordinates

TDEM Layout Coordinates						
Starting Coordinate				Ending Coordinate		
Line No	**X**	**Y**	**Elevation**	**X**	**Y**	**Elevation**
Line 1	558008	1562286	657.487	558734	1562897	622.423
Line 1.5	557969	1562351	656.775	558685	1562957	622.651
Line 2	557909	1562402	656.11	558641	1563008	623.086
Line 3	557813	1562520	659.132	558543	1563123	626.288
Line 4	557715	1562632	685.113	558444	1563242	630.06
Line 5	557621	1562758	719.725	558348	1563357	635.756
Line 6	557524	1562862	708.897	558251	1563472	639.003
Line7	557427	1562976	712.128	558154	1563586	641.721
Line 8	557331	1563091	713.862	558058	1563702	642.981
Line 9	557238	1563208	681.87	557962	1563817	645.59
Line 10	557139	1563319	678.646	557866	1563931	642.299
Line 11	557042	1563436	672.935	557769	1564047	643.101
Line 12	556945	1563551	671.606	557673	1564161	645.144
Line 13	556849	1563666	675.159	557576	1564276	649.309
Line 14	556752	1563781	675.727	557480	1564391	652.252
Line 15	556655	1563896	678.546	557383	1564506	652.976
Line 16	556559	1564010	681.153	557287	1564620	652.988
Line 17	556463	1564125	675.882	557191	1564736	650.43
Line 17.5	556415	1564183	672.598	557143	1564793	647.88
Line 18	556367	1564240	670.305	L18S20	557094	1564851
Line 19	556304	1564375	679.45	L19S19	557015	1565006
Line 20	556233	1564500	678.474	L20S18	556909	1565112

2.3.2 MAGNETOTELLURIC (MT)

The electromagnetic method plays an important role in mineral exploration and has been widely used in searching for metal resources such as gold, copper, molybdenum, lead-zinc, bauxite, and uranium. Detailed field geological surveys, TDEM and MT (AMT) survey were carried out to investigate gold bearing deposit anomalies in the Kuderkonda block. The purpose of the AMT survey is to identify the resistivity characteristic of the gold ore bodies and the extension of ore-controlling structures (or ore bodies). In accordance with the depth of 50–100 m shaft (old working), total 36 stations with 250 x 250mts gird within 2.76 Sqkm area were selected for AMT geophysical survey.

Audio magneto-telluric sounding is an important geophysical method that uses natural electromagnetic fields as the field source to study the electrical structure of the earth's interior. The earth is seen as the horizontal medium and the magneto-telluric field is vertically projected into the ground in the form of plane electromagnetic waves. Orthogonal electromagnetic field components are observed on the ground, and its frequency response reflects the vertical distribution of the electrical properties of the underground medium. Through a certain inversion method, the resistivity distribution at different depths can be obtained.

A multi frequency domain electromagnetic sounding system, called the Gepard-8, 8 channel receiver system manufactured by AGCOS is used for survey. It combines the advantages of all AMT, CSAMT and MT. The passive source electromagnetic method is the core, the natural background field source reflects the deep structure. The artificial transmitted signal is used to compensate for the shortcomings of some frequency bands of the natural signal. In areas with weak or no signal, it ensures that a reliable signal can be observed in the entire frequency band to obtain high-resolution resistivity imaging

Thirty-six sounding were carried out according to the geological characteristics of ore-controlling structures within the block area. The AMT survey measurement sites were set at 250 m x 250m intervals along the TDEM survey lines. Among them, the Stations 3&4of lines 4 & 5and Stations2&3of lines 10 & 11 were measured across the shafts of old working for correlation of TDEM and MT data. In order to eliminate the influence of terrain, the obtained sounding data were processed with terrain elevation correction. For AMT profile, the vertical axis is the altitude, and the terrain line is obtained by interpolation using high-precision DGPS data.

In this measurement, each electric field measurement point was soaked with clean water to reduce the contact resistivity of the detection point. Based on the analysis of the AMT data curve and the inversion resistivity model using Zond MT 2D & 3D software, the results show that the underground resistivity inversion slice image (Figures 2.3.12 to 2.3.21)inversion displays the depth extension upto 400 – 450 mts of the ore-controlling shear structure and the variation characteristics of rock mass. It obviously reflects the differences in resistivity between the surrounding rock and the ore body. The resistivity of metal sulfide metallogenic belt is lower than host rocks such as intrusive rocks, granite, and metamorphic rocks. This

geophysical information provides important and direct evidence for determining the location of concealed ore bodies anomalies in the study area.
Data was processed and inverted using the Zond MT 2D/3D data processing software packages. And generated the following figures.

- Fig 2.3.12MT 2D-Sections of all profiles in 3D view
- Fig 2.3.13MT slice view of study area at 100mts depth
- Fig 2.3.14MT slice view of study area at 150mts depth
- Fig 2.3.15MT slice view of study area at 200mts depth
- Fig 2.3.16MT slice view of study area at 250mts depth
- Fig 2.3.17MT slice view of study area at 300mts depth
- Fig 2.3.18MT slice view of study area at 350mts depth
- Fig 2.3.19MT slice view of study area at 400mts depth
- Fig 2.3.20MT slice view of study area at 450mts depth
- Fig 2.3.21MT slice view of study area at 500mts depth

3.0 RESULTS OF GEOPHYSICAL SURVEY

3.1 TIME DOMAIN ELECTROMAGNETIC SURVEY (TDEM)

The TDEM method is known for its high-resolution imaging of subsurface conductive layers. For investigations targeting depths of up to 500 m, a 300 m × 300 m transmitter loop was employed, with station spacing maintained at 50 m. As part of the standard TDEM survey protocol, multiple readings were taken at each station using an induction coil sensor. These readings involved variations in transmission periods, current repetition rates, and ramp times to optimize data quality.
A transmitter current of up to 50 A was injected into the ground to generate a strong electromagnetic field capable of penetrating deeper subsurface layers. Data acquisition was performed using appropriately selected time windows to capture responses at various depths. To ensure accurate synchronization between the transmitter and receiver, both systems were synchronized using GPS.

The TDEM response is influenced by several factors, including rock type, porosity, pore fluid conductivity, and the mineral content of the solid matrix. Low resistivity values are typically associated with the presence of sulphide minerals and increased porosity, particularly in sericitized rocks. In contrast, high resistivity values are commonly linked to quartz-rich zones, intrusive rocks, and areas of silicification.
The processed TDEM data provided final outputs that clearly reflected variations in resistivity both laterally and vertically. The methodology adopted in this study proved highly effective in detecting zones of auriferous and disseminated sulphide mineralization, as well as in facilitating lithological and structural mapping

The TDEM survey revealed that gold ore mineralization in the study area occurs as discontinuous ore bodies or lodes, trending approximately NW–SE, sub-parallel to the regional structural trend of the area's geology. This mineralization anomalies appears to be structurally controlled, primarily localized along shear zones, faults, and fracture systems—conditions that are geologically favorable for ore deposition.

Two distinct low-resistivity zones were interpreted as anomalous zones, which correlate with the locations of historical mining shafts. These anomalies indicate the occurrence of subsurface mineralization. The TDEM results also indicate that the subsurface in the study area is not homogeneous. Northern and Southern parts of the survey block may reveals he association of sulphide minerals in quartz-carbonate veins or the possibility of occurrence of concealed auriferous type sulphide occurring as lensoidal ore bodies with limited strike length.

Thus, modeling of the TDEM data indicates the presence of two moderatelow-resistivity zones with limited strike extension within the study area. Overall, the ground TDEM survey concluded that the property indicates the presence of auriferous sulphide bodies particularly within the marked anomalous zones(Figure 3.1)

3.2 MAGNETOTELLURIC (MT)

The measurements were taken along profiles4 and 5 also Profile 10 & 11to cross the shaft section for correlation of TDEM and MT as well as old working. Both profiles were1000 m in length, with 4 measurement points at 250 m intervals along N45°E trend. The inversion data in slice of the along the shafts were plotted and shown in Figure (3.2)

It has been observed that the shaft, which was mainly composed of slate and mica-schist were exposed in few areas at old working shaft area. Occasionally, granite can be observed in the study area. Thus, the moderate low resistivity anomaly is presumed to be the geophysical response of auriferous sulphide bearing formations, whereas the increase in resistivity at 280–340 m and 420–480 m vertically indicates that the auriferous sulphides is in the form of lensoidal bodies bounded by quartz/ granite formations. Thus this indicates that the auriferous sulphide body is not continuous and is being intermittently interrupted by high resistive formations and it corroborates with the findings of TDEM. The low resistivity occurrence in both shaft areas indicates the filling of void zones saturated debris.

Two steeply dipping, moderatelow resistivity anomalous zones in the inverted section indicates the occurrence of auriferous sulphide zones which persists from shallow to deeper upto a depth of 400-450mts. The zone is being intermittently interrupted by high resistive formations. Thus, the alternate occurrence of moderate lowzones are bounded with high resistivity material within the 350 mcumulative zone. This indicates the presence of intermittent zones of auriferous sulphide bounded by resistive formations and the location of shaft. This increase in moderatelow resistivity zone extends beyond shaft depth indicating the continuity of auriferous formation upto a depth of 400 - 450mts. It has been observed that the shallow part of the moderatelow resistivity zone is dipping steeply toward NW which coincides with the dip of the host rocks. Thus, this moderatelow resistivity shallow anomaly zone may be interpreted as the geophysical response of shaft filled with debris. and beyond the shaft, the depth can be indicated as auriferous body hosted by quartz veins.

According to previous surveys and Geological mapping the old working locations were identified and are typical corroborating with the moderatelow resistivity zones identified which may be a pathfinder for association for auriferous sulphide ores zones in the study area. The presence and overlapping of the above-mentioned anomalies with TDEM zones indicated by the AMT method coincides with the extension of gold-bearing ore zones. However, this should be verified by Deep I.P survey as well as drilling.

4.0 Conclusion and Recommendations:

The Ground Geophysical survey has clearly differentiated between the auriferous sulphides/host rocks and surrounding litho units by their differences in resistivity's. The results of both the survey shows the extension of ore-controlling structures, which persists upto a depth of 400– 450m at two locations in North and south of the study area with moderate low to moderate high resistivity.Low resistivity zones observed at shallow depth (0-100mts) indicate the presence of abandoned shafts & underground old workings filled with saturated debris/voids.

The survey results indicated that the TDEM and AMT method is effective and feasible in detecting the distribution of auriferous sulphides and the host rocks in the kuderekonda block. It can provide basic geological information for deep resource exploration. These methods can be used as an available exploration technology for deep prospecting in similar areas. However, gold mineralization occurs in ppm level, therefore, geophysical methods for gold exploration are planned to target the host/repository rock and favorable structures. Any metal occurring in ppm level cannot be picked by geophysical methods.

Based on combined Ground Geophysical Survey of TDEM & MT survey data, it is recommended to validate identified two geophysical anomaly zones (falling within the old working shafts) by further Deep I.P. geophysical survey as well as by deep drilling. Total four boreholes proposed (03 Boreholes in Northern Anomaly zone & 01 Borehole in Southern Anomaly zone) to test the integrated geophysical anomalies up to vertical depth from 250m to 350m from ground surface.

Note: The depths of proposed boreholes are based on vertical depths. However, to intersect anomalous zones the inclined boreholes are to be planned for investigation. The locations of boreholes well given in in Figure 4.1

Proposed Drill holes			
S.No	**X**	**Y**	**Depth**
PB1	556675.8	1564705	350m
PB2	556791.1	1564596	300m
PB3	556835.9	1564538	300mts
PB4	557789.4	1563475	250 mts

Table 4.0 Proposed Bore holes

5.0 LIST OF FIGURES

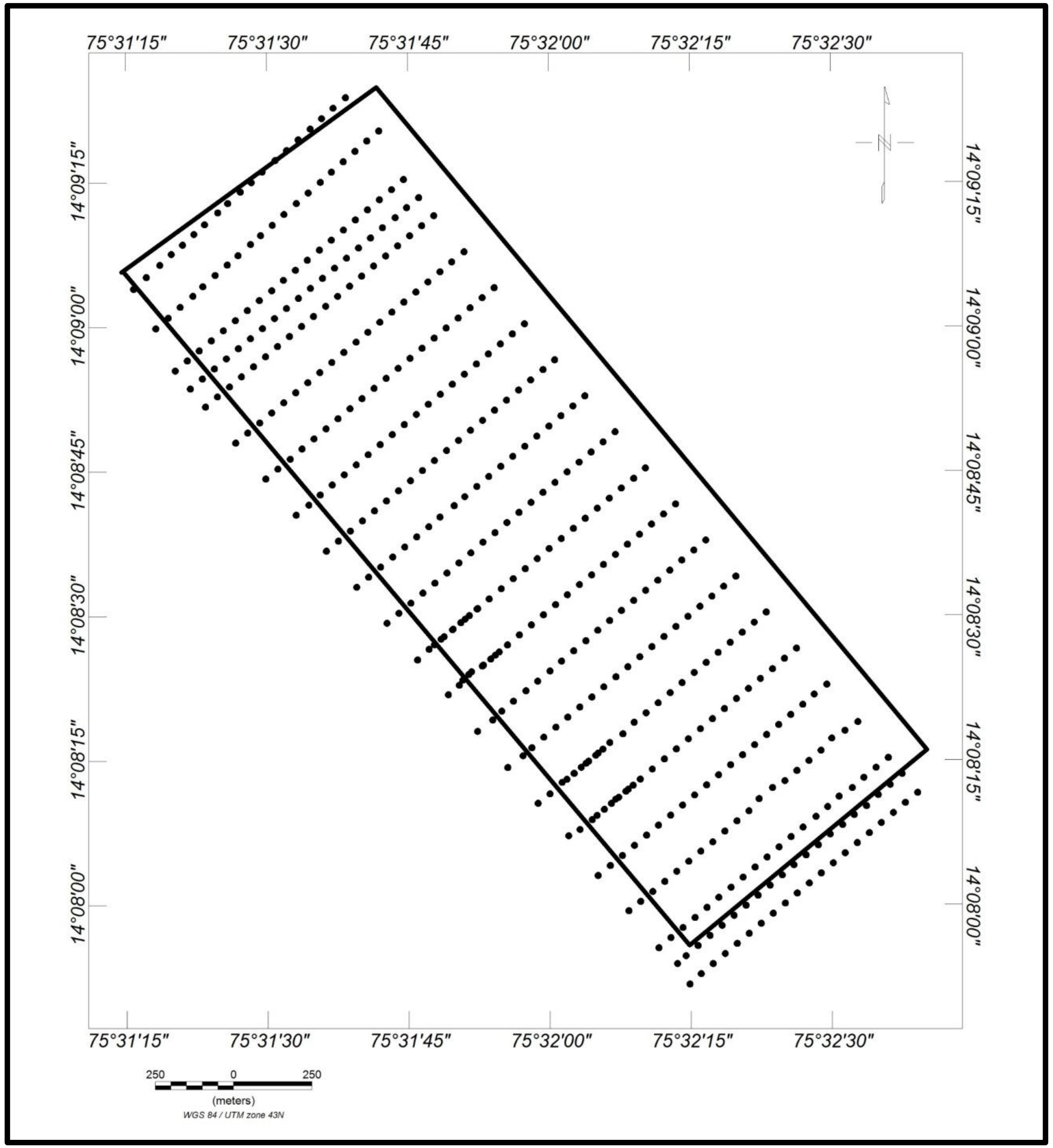


Figure 1.3.1 (a) Layout Map of Time Domain Electromagnetic Profiles

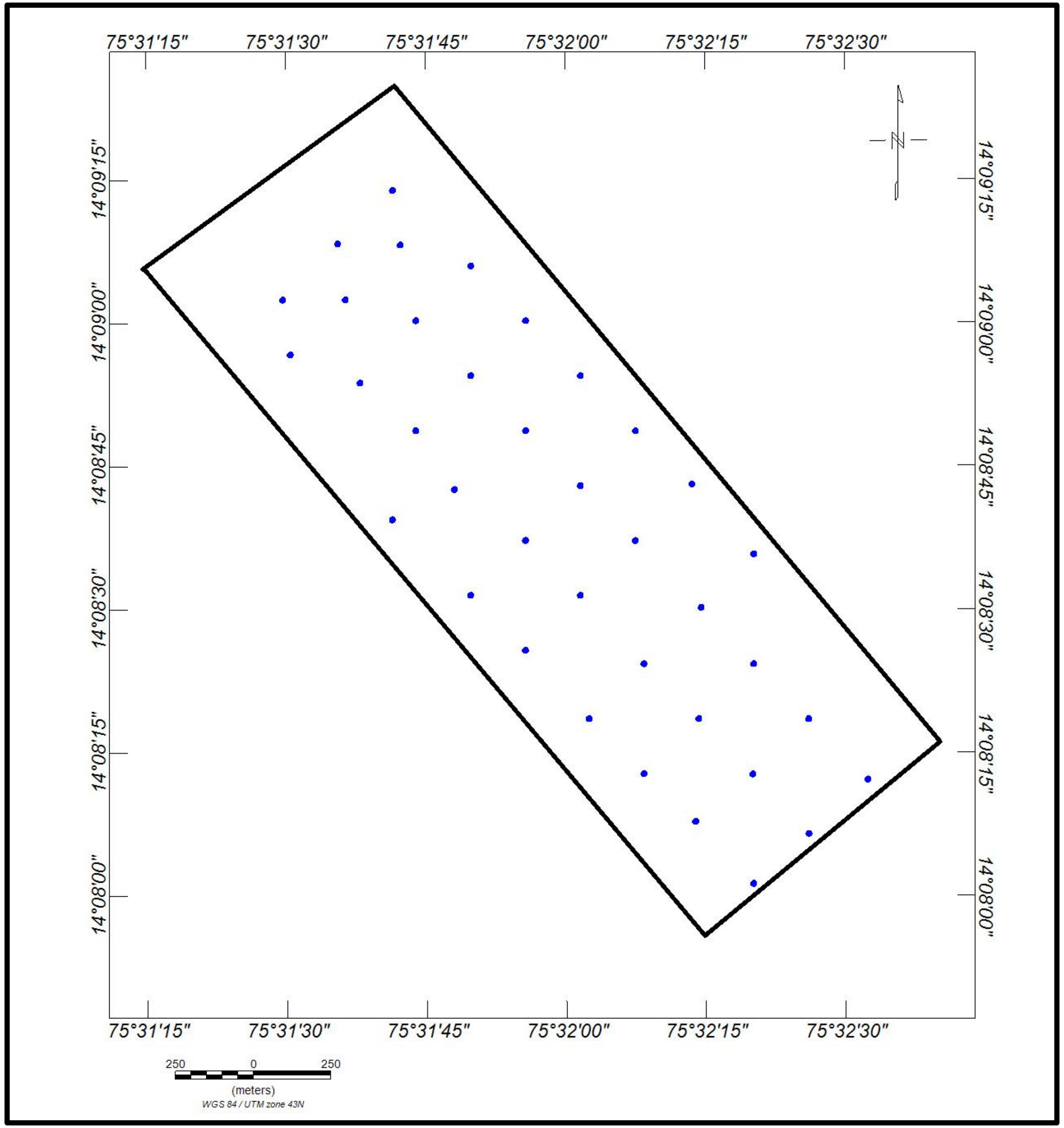


Figure 1.3.1 (b) Layout Map of Magneto-telluric Profiles

Figure 2.1.1 Location of Block boundary on Google map

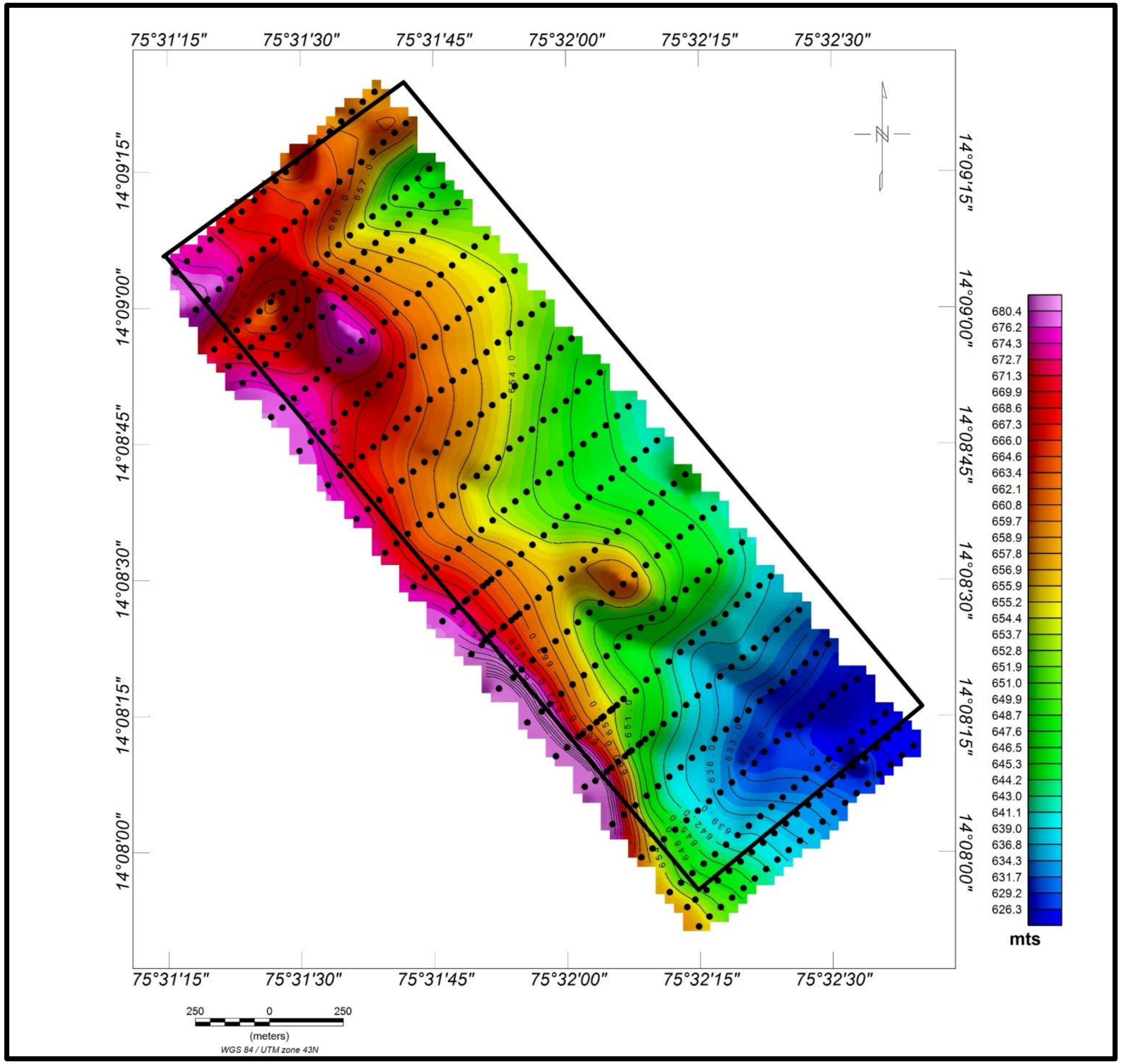


Figure 2.3.1 Elevation Map of Study area

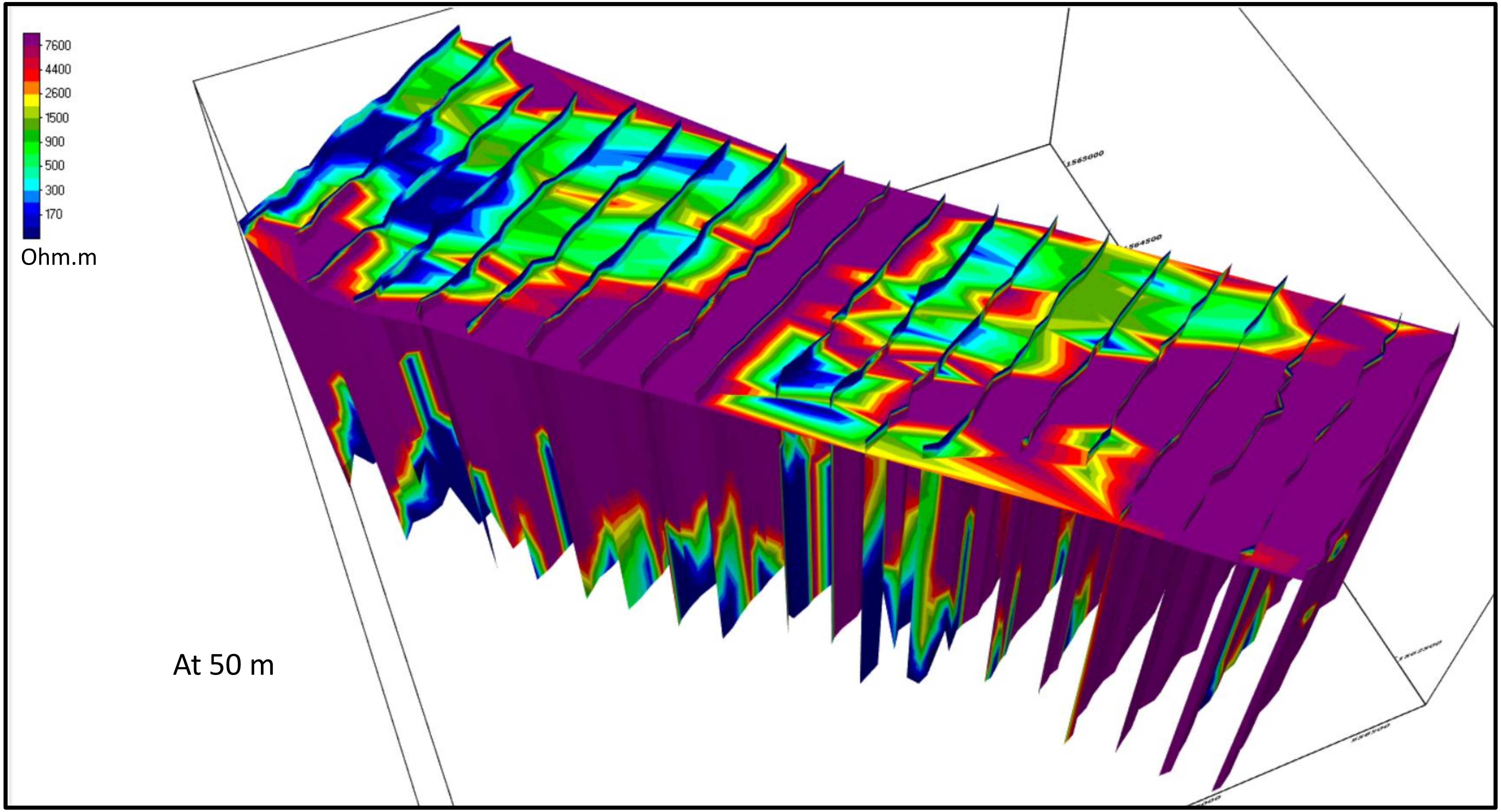


Figure 2.3.3 TDEM 2D-Sections of all lines in 3D view

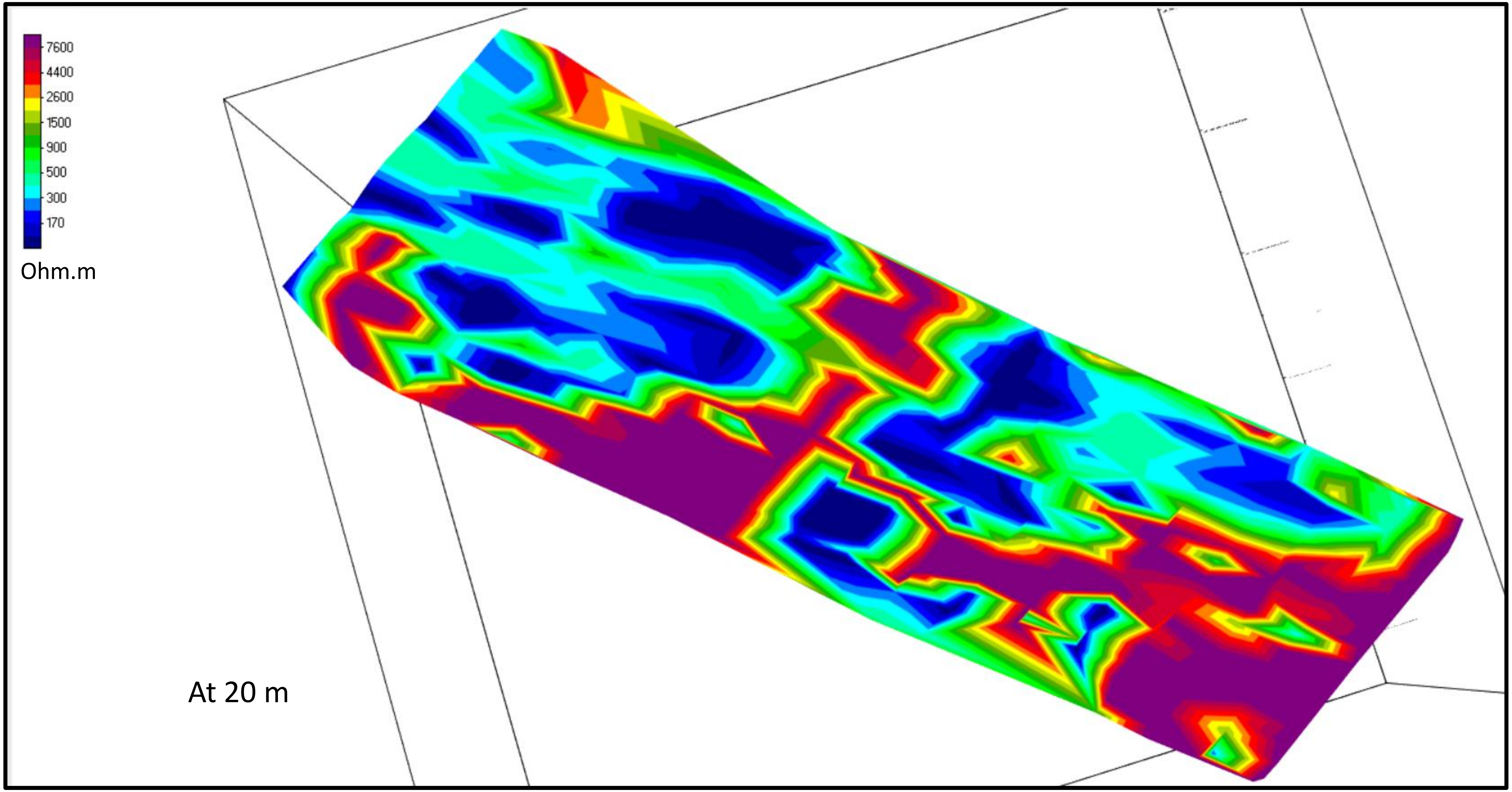


Figure 2.3.4 TDEM slice view of study area at 20mts depth

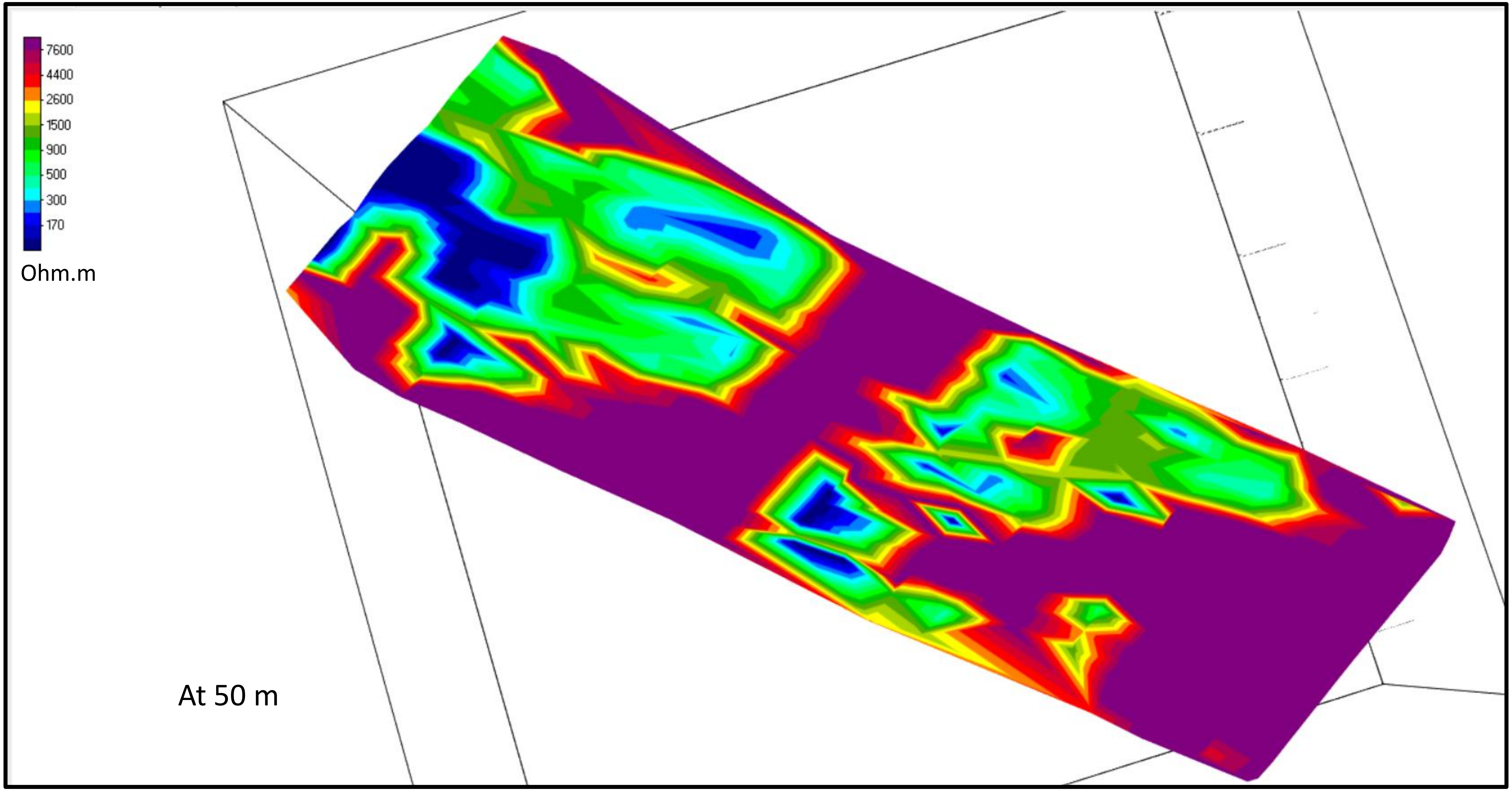


Figure 2.3.5 TDEM slice view of study area at 50mts depth

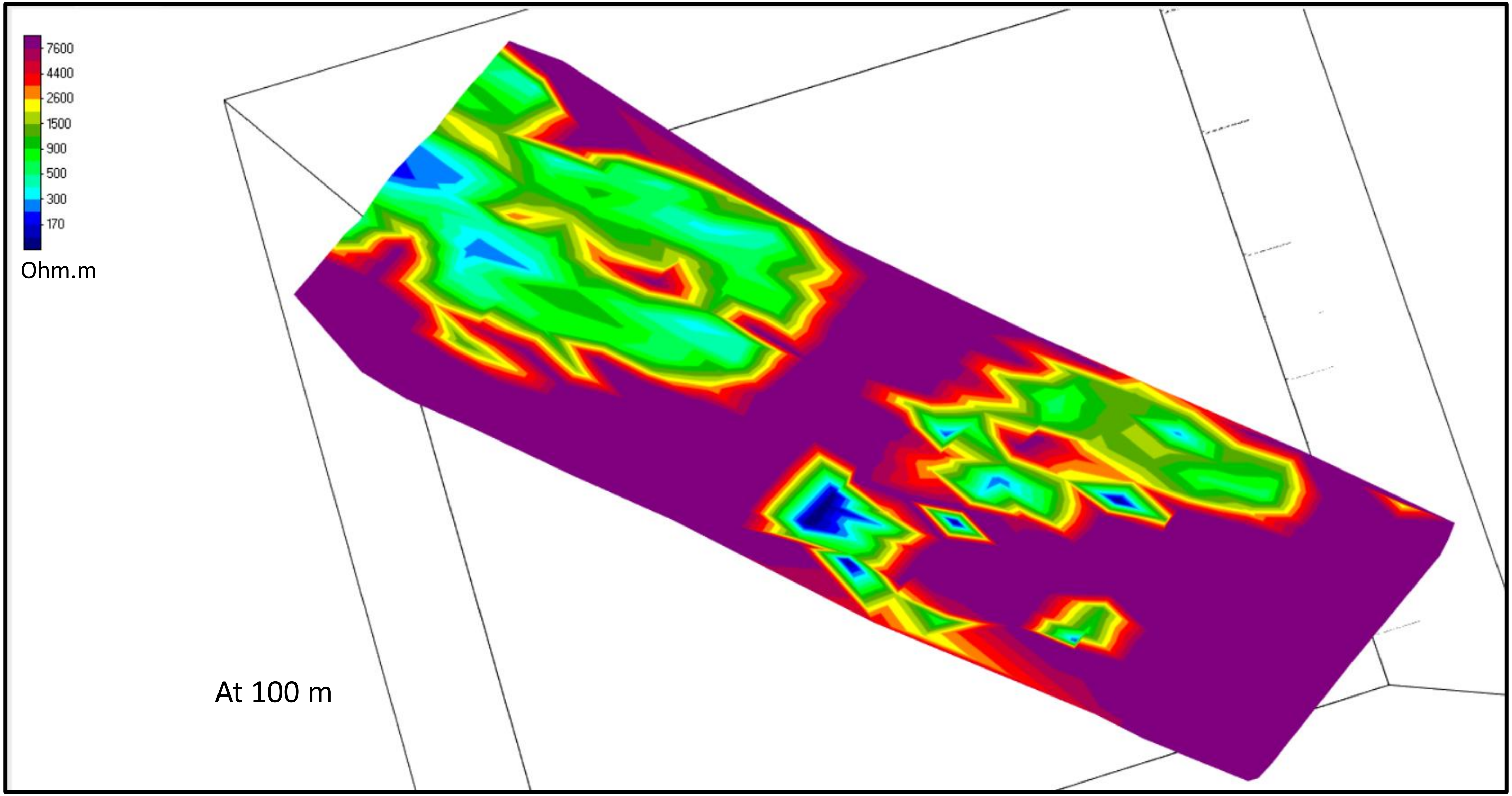


Figure 2.3.6 TDEM slice view of study area at 100mts depth

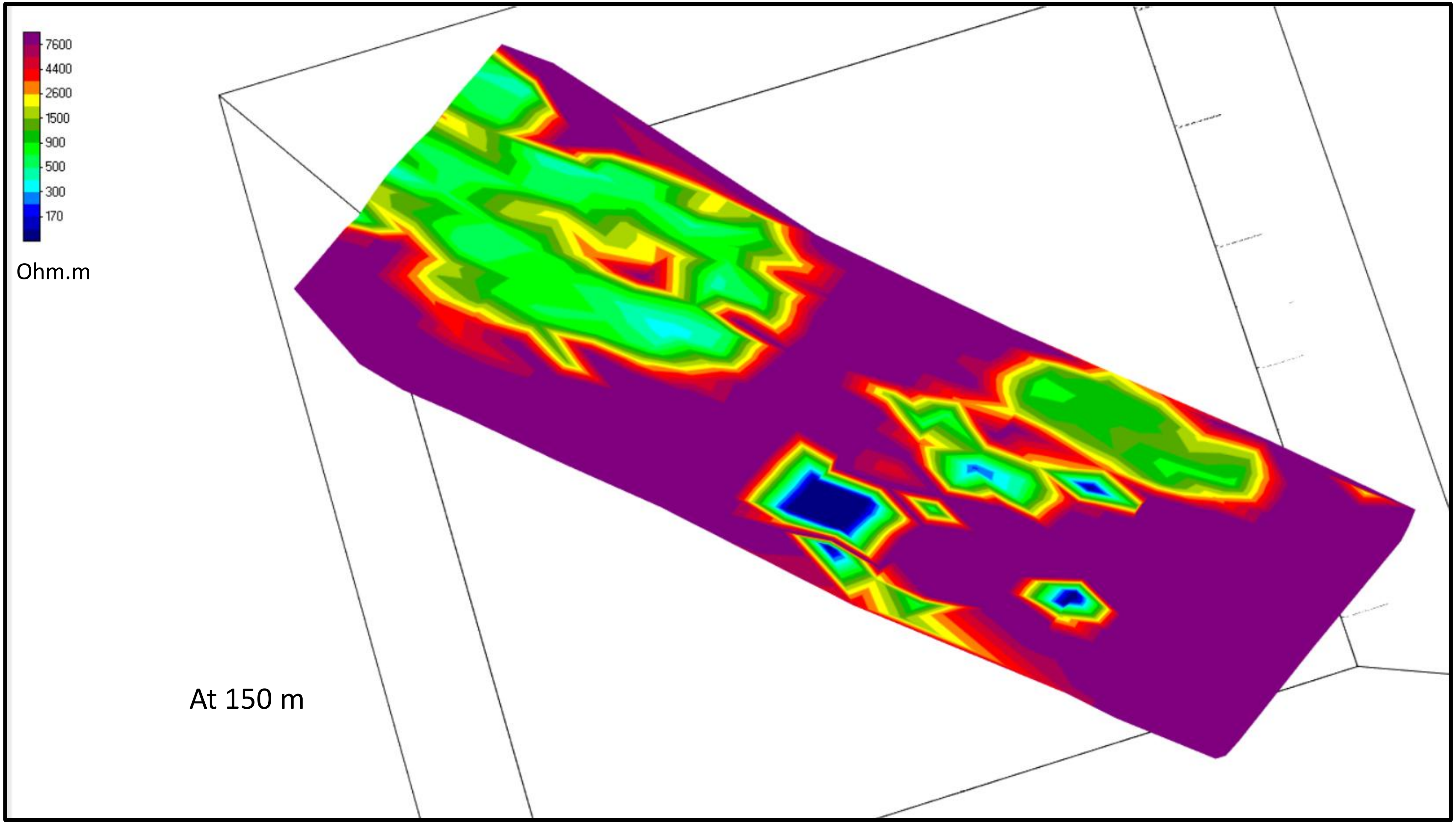


Figure 2.3.7 TDEM slice view of study area at 150mts depth

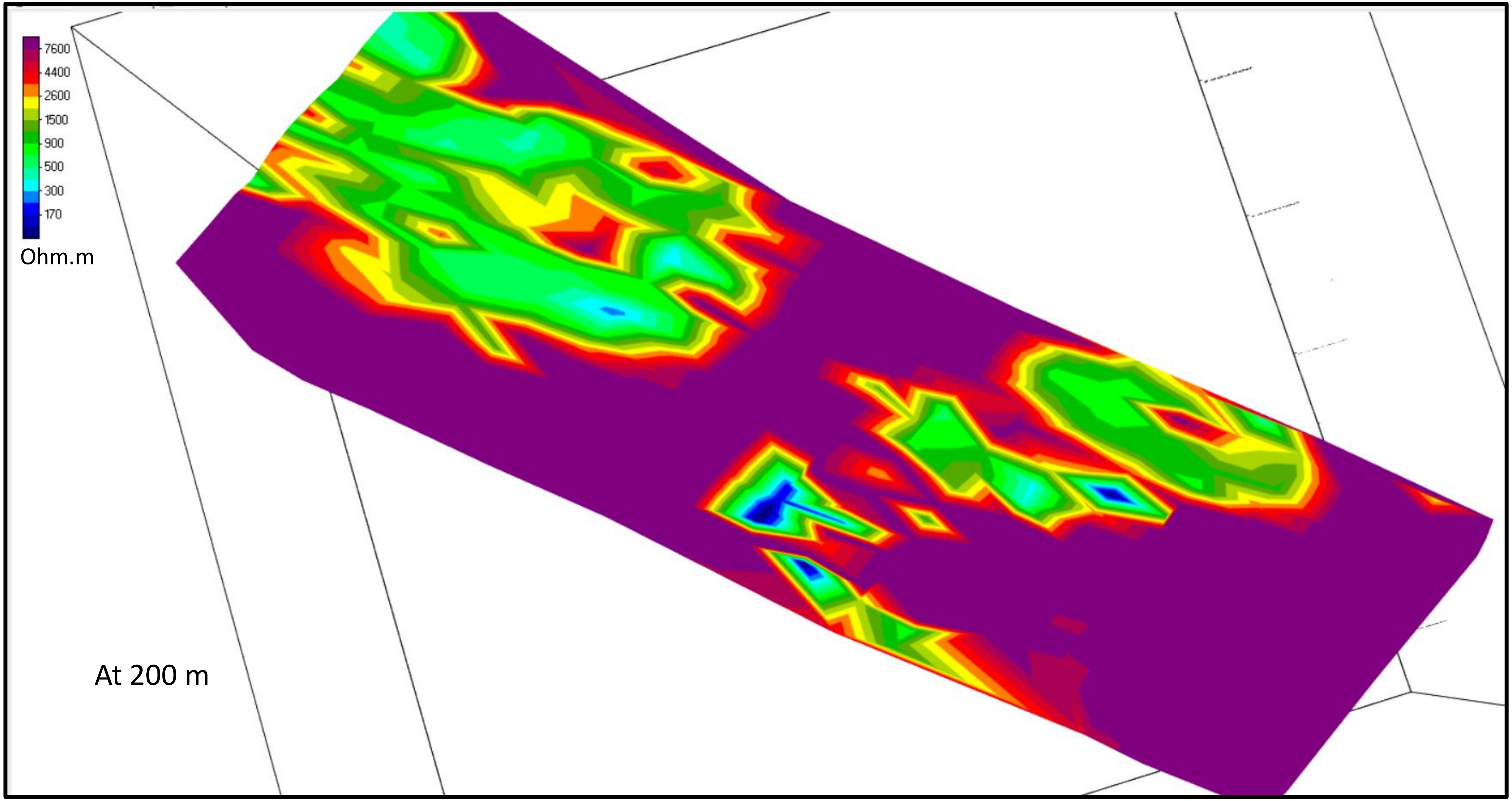


Figure 2.3.8 TDEM slice view of study area at 200mts depth

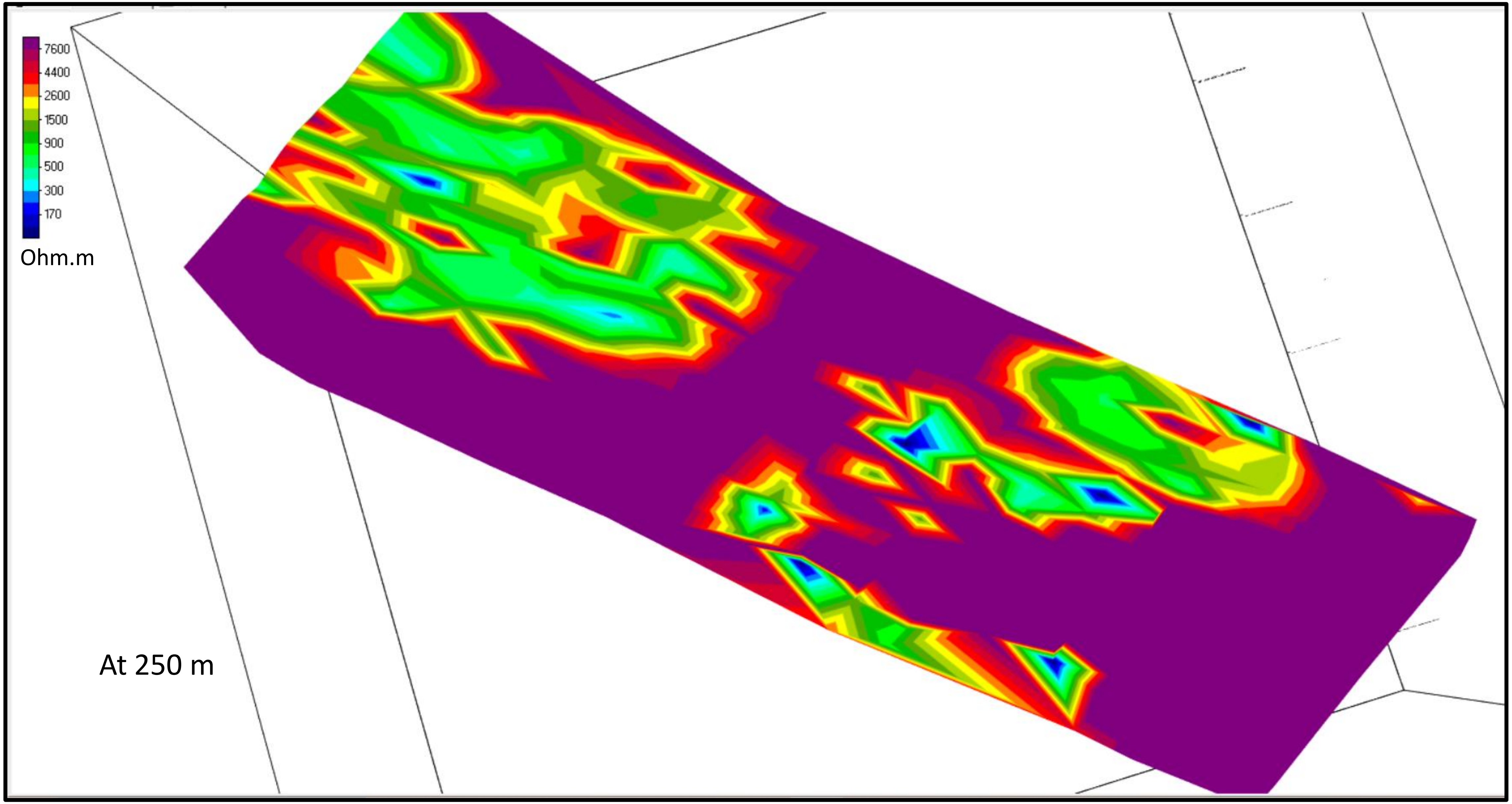


Figure 2.3.9 TDEM slice view of study area at 250mts depth

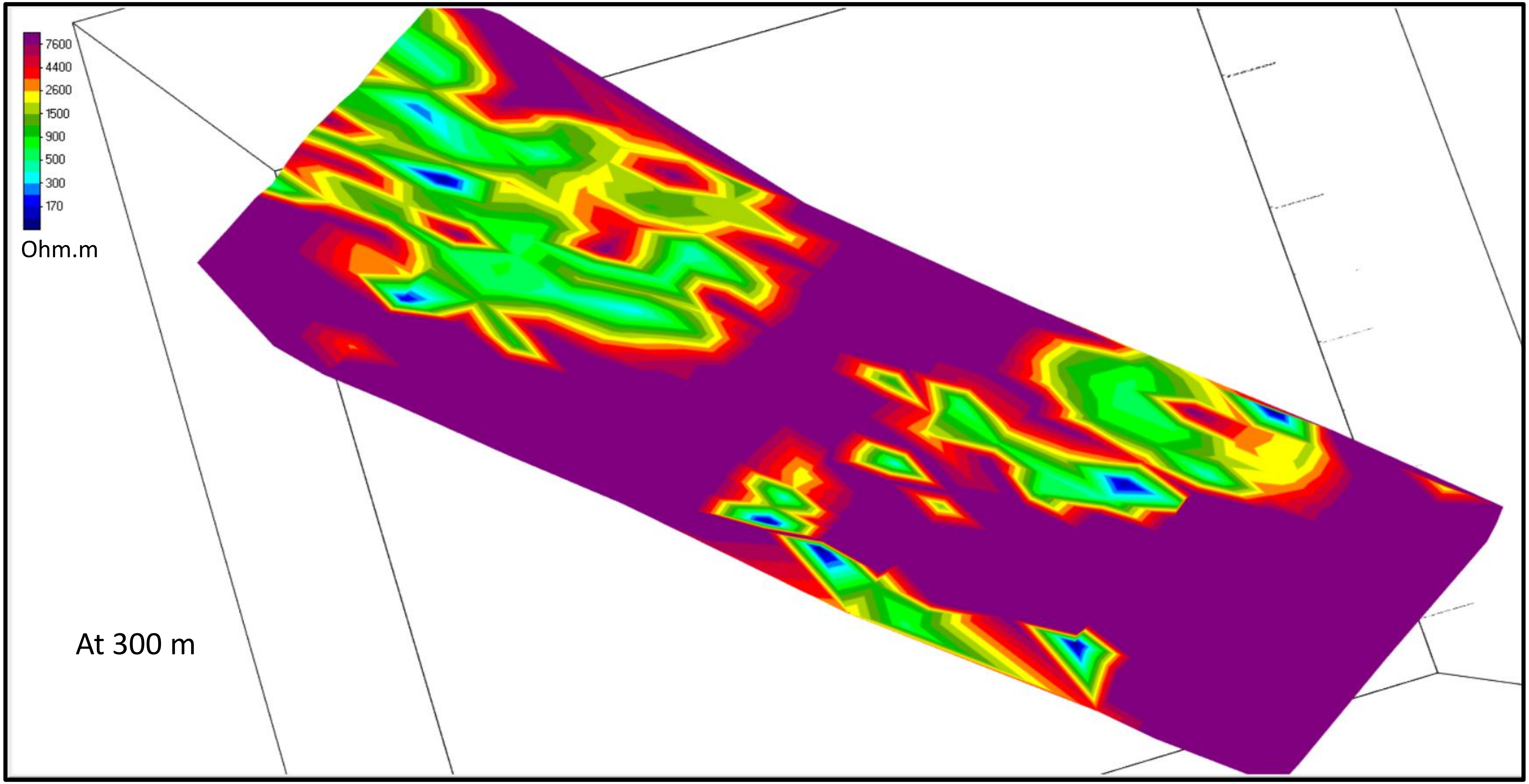


Figure 2.3.10 TDEM slice view of study area at 300mts depth

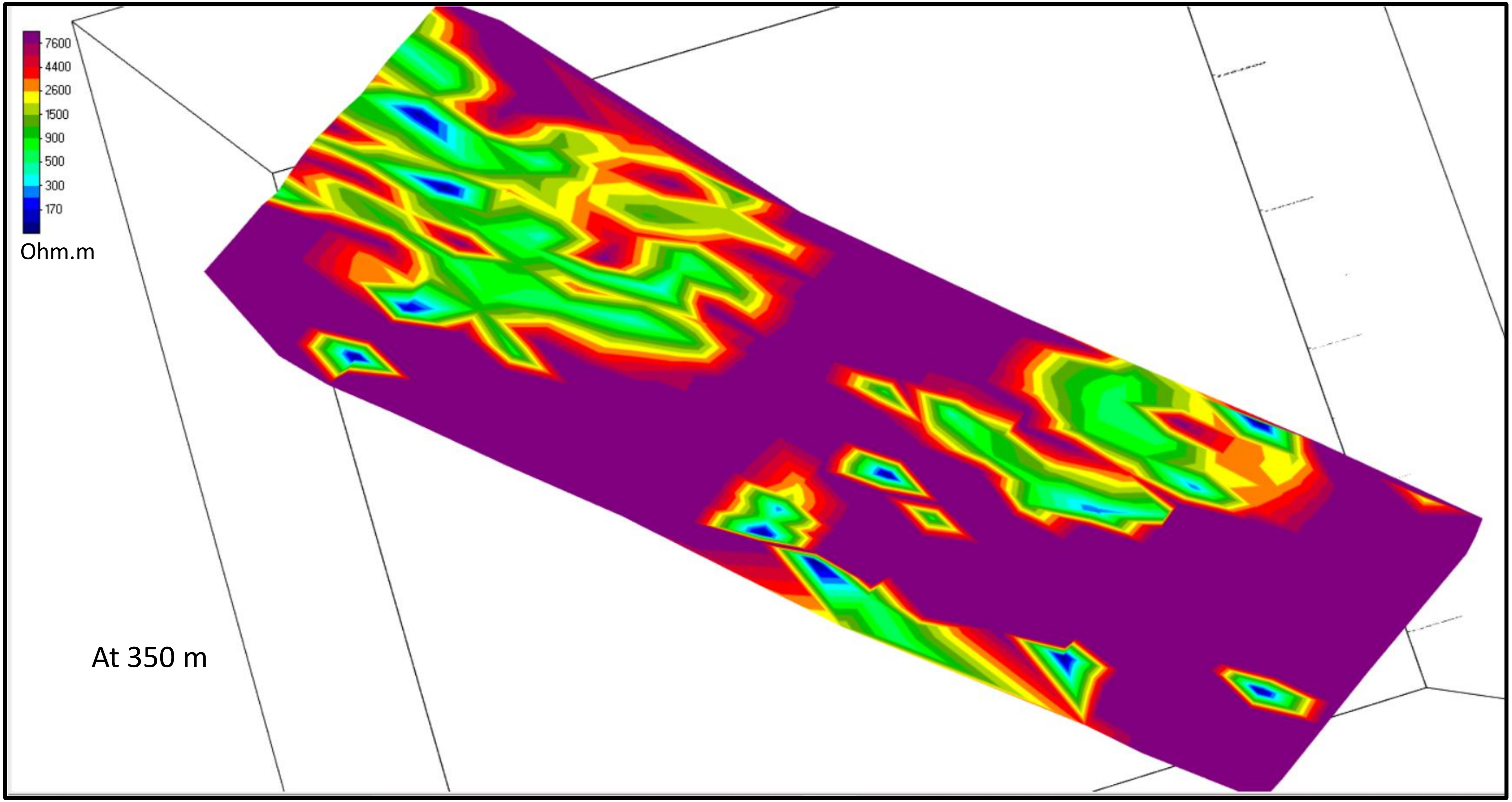


Figure 2.3.11 TDEM slice view of study area at 350mts depth

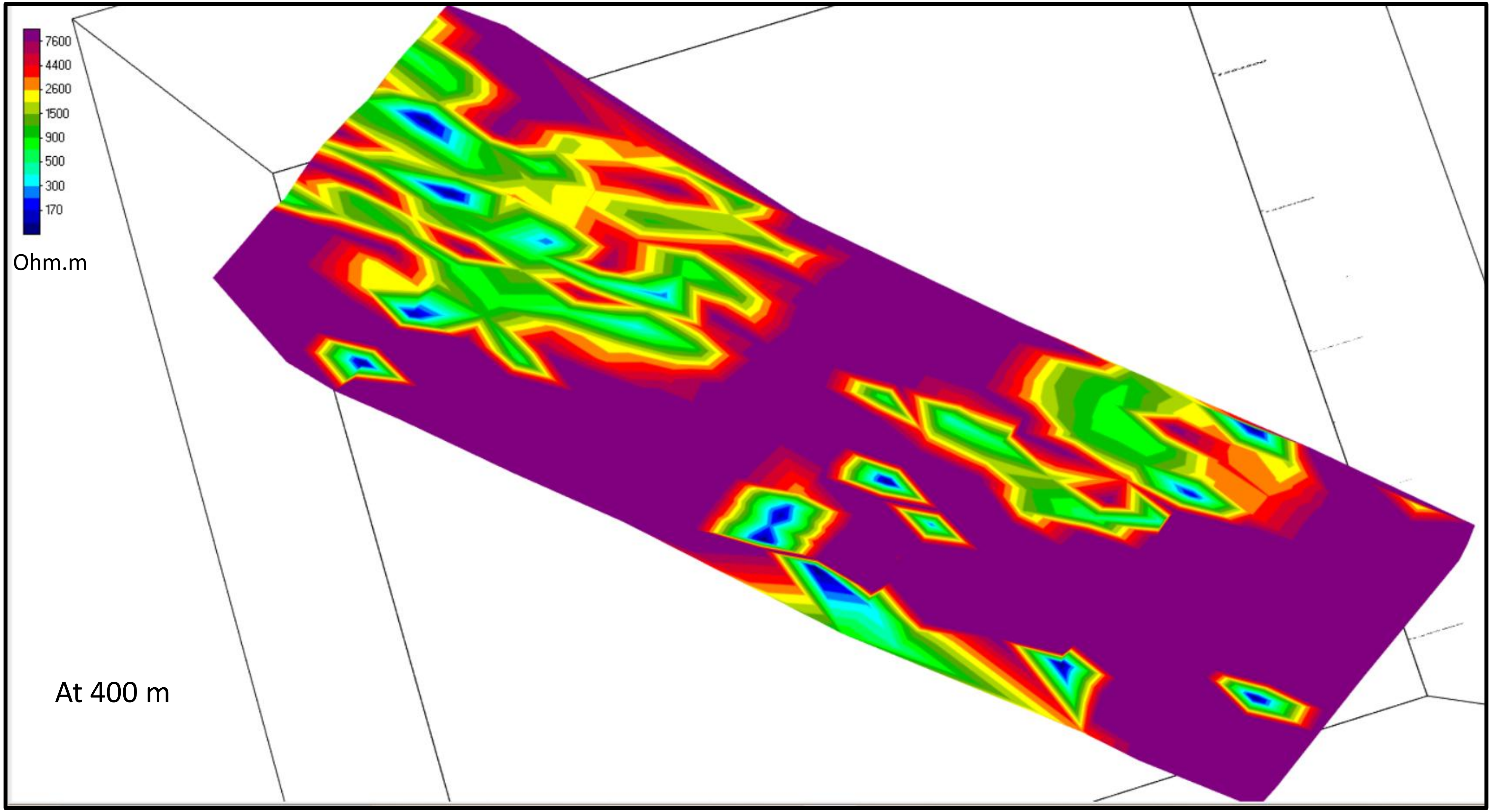


Figure 2.3.12 TDEM slice view of study area at 400mts depth

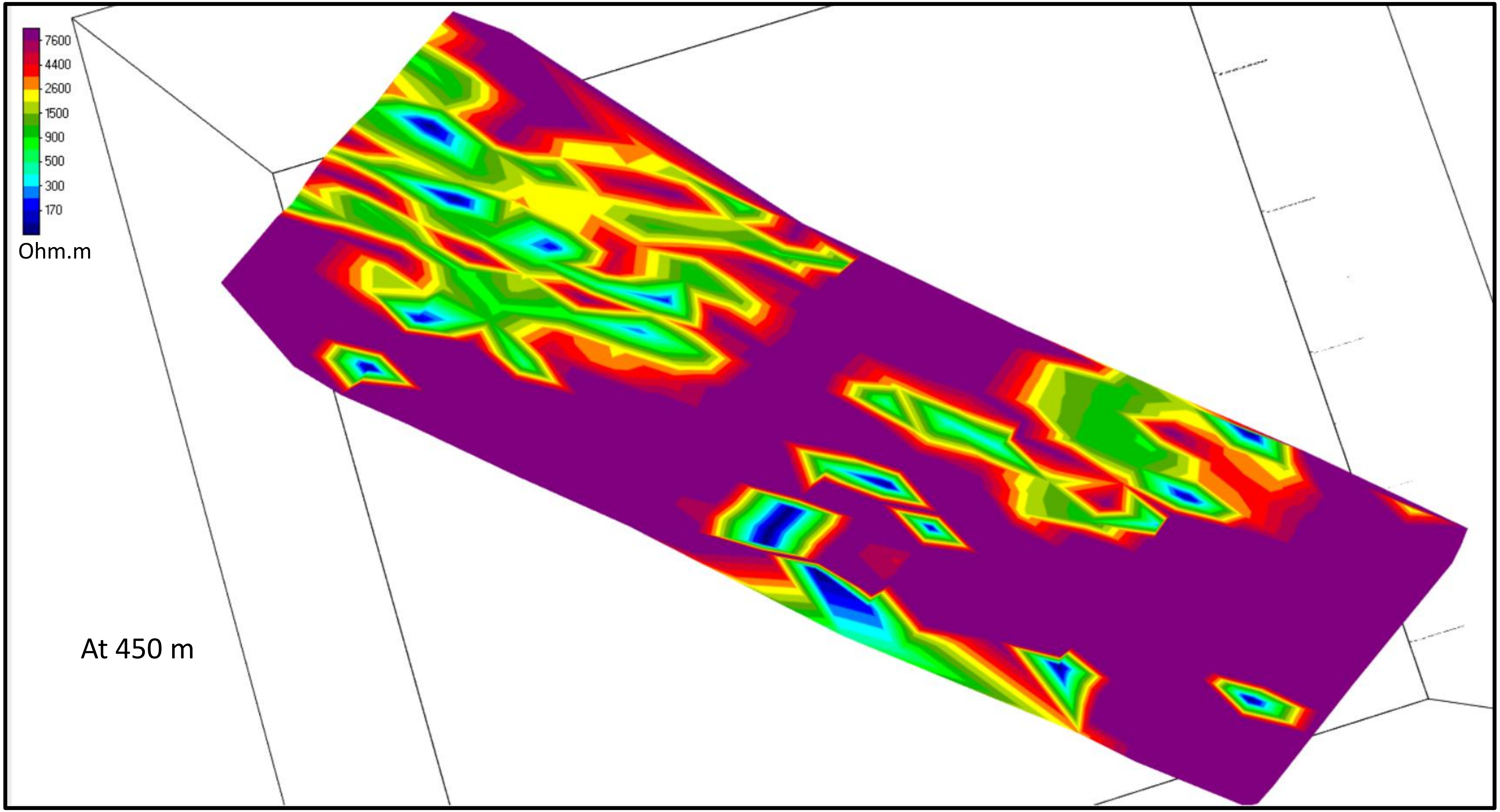


Figure 2.3.13 TDEM slice view of study area at 450mts depth

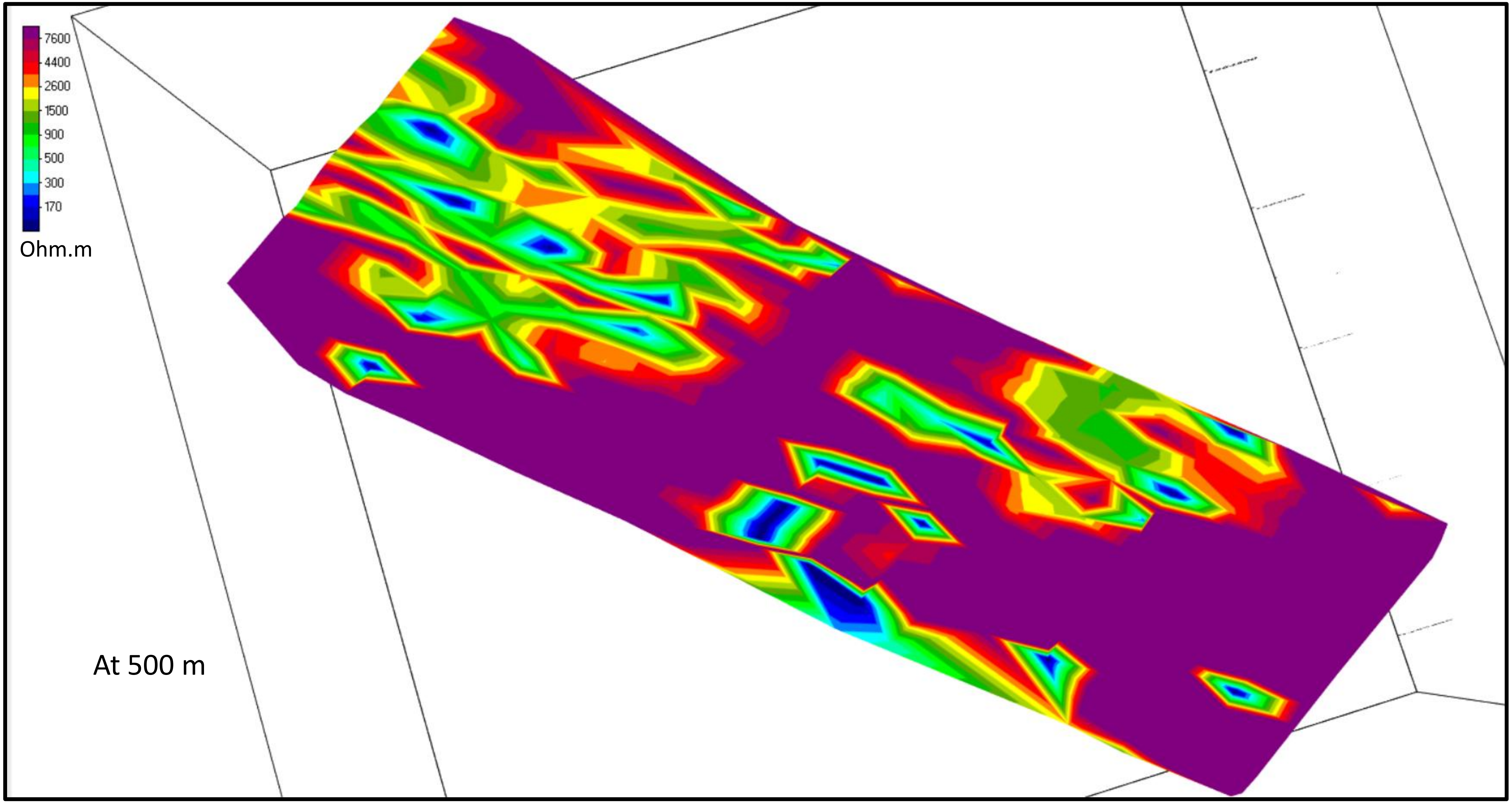


Figure 2.3.14 TDEM slice view of study area at 500mts depth

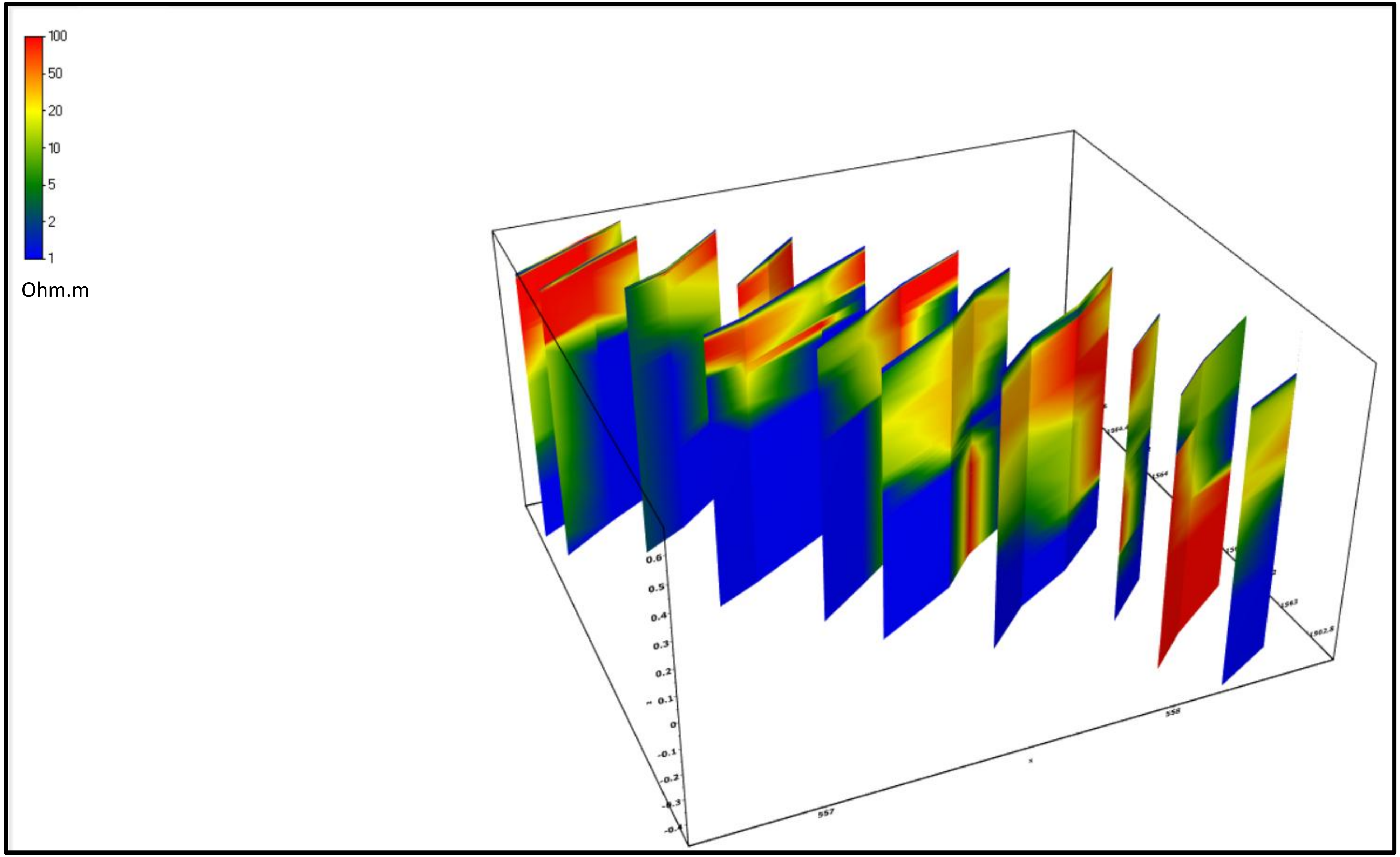


Figure 2.3.15 MT 2D-Sections of all lines in 3D view

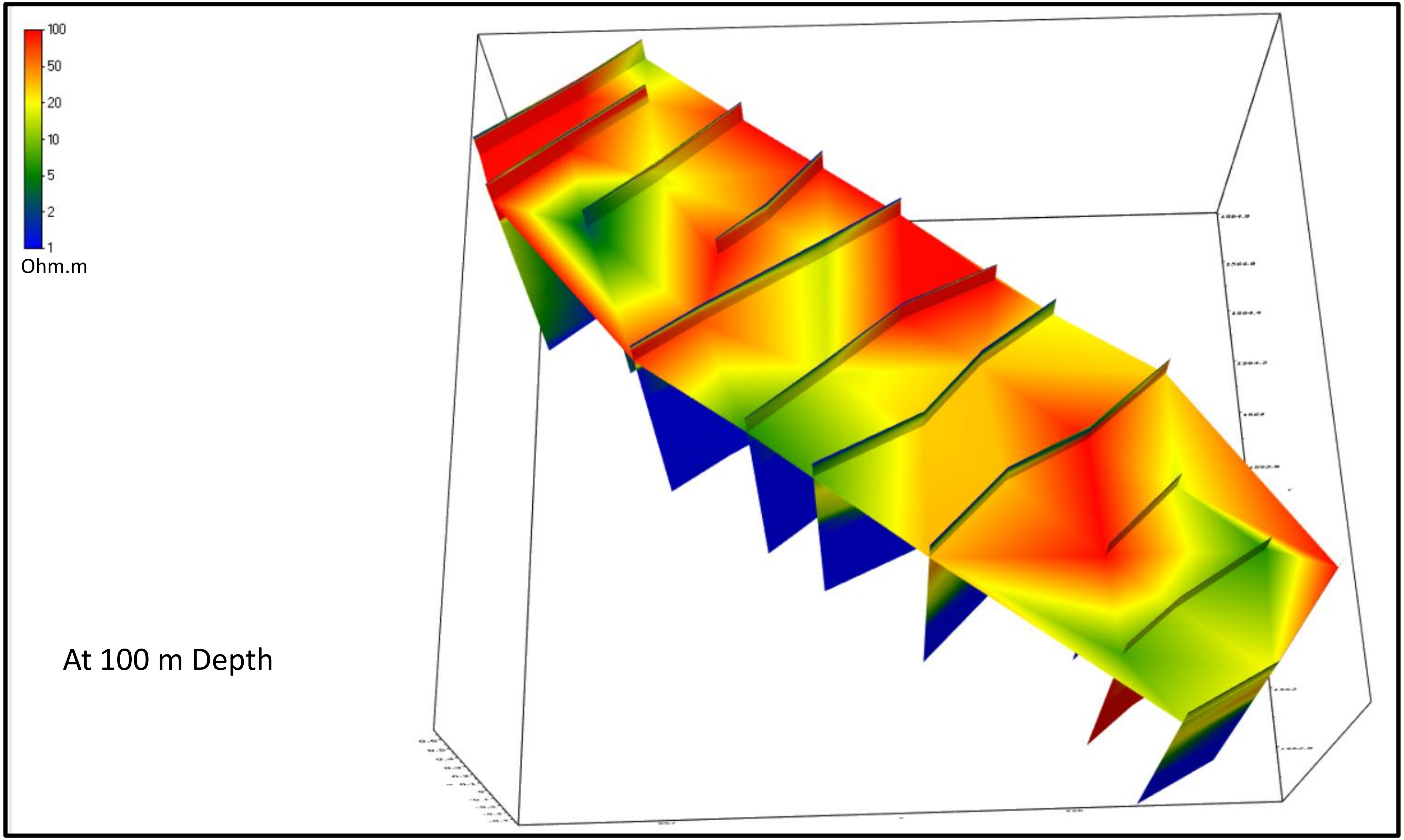


Figure 2.3.16 MT slice view of study area at 100mts depth

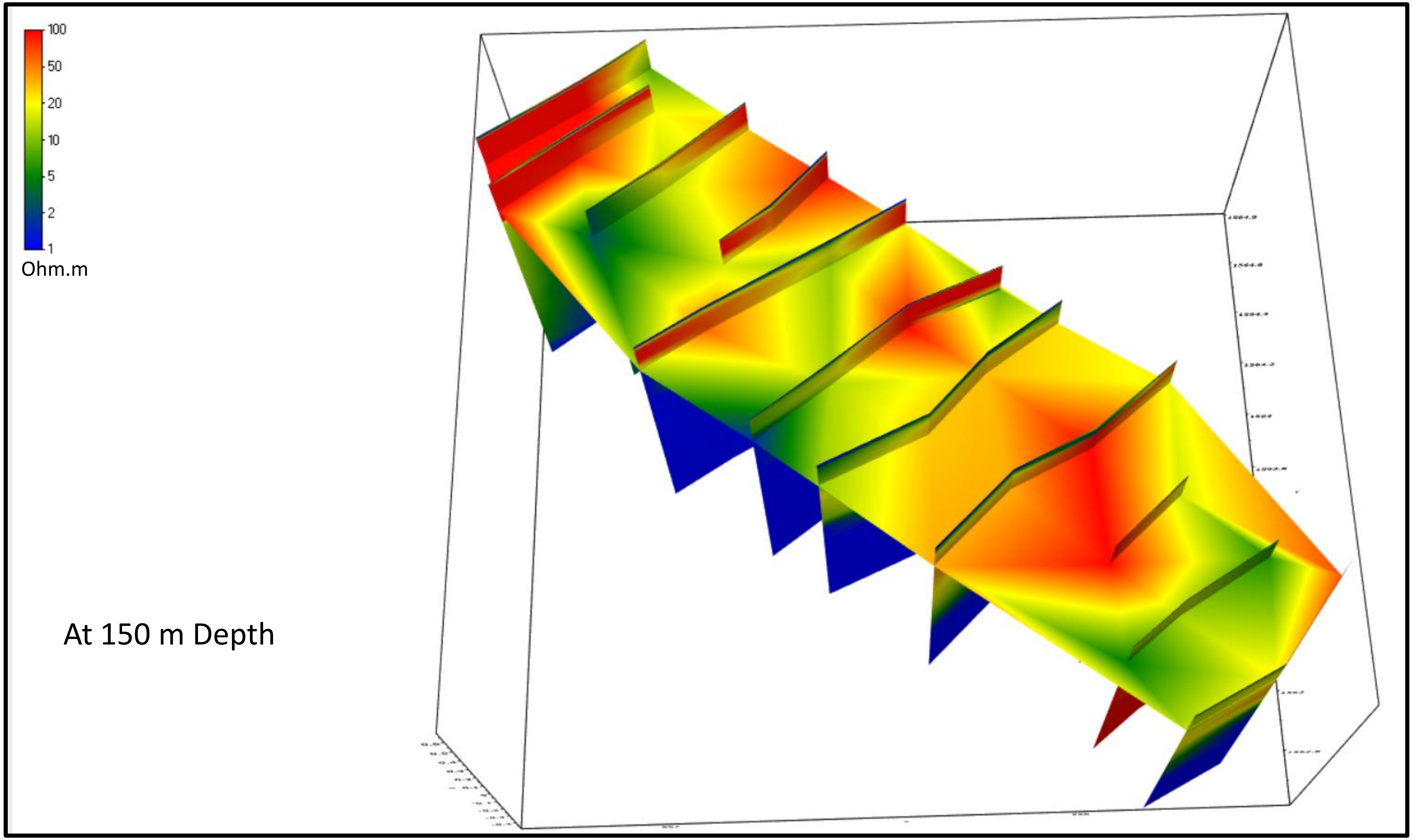


Figure 2.3.17 MT slice view of study area at 150mts depth

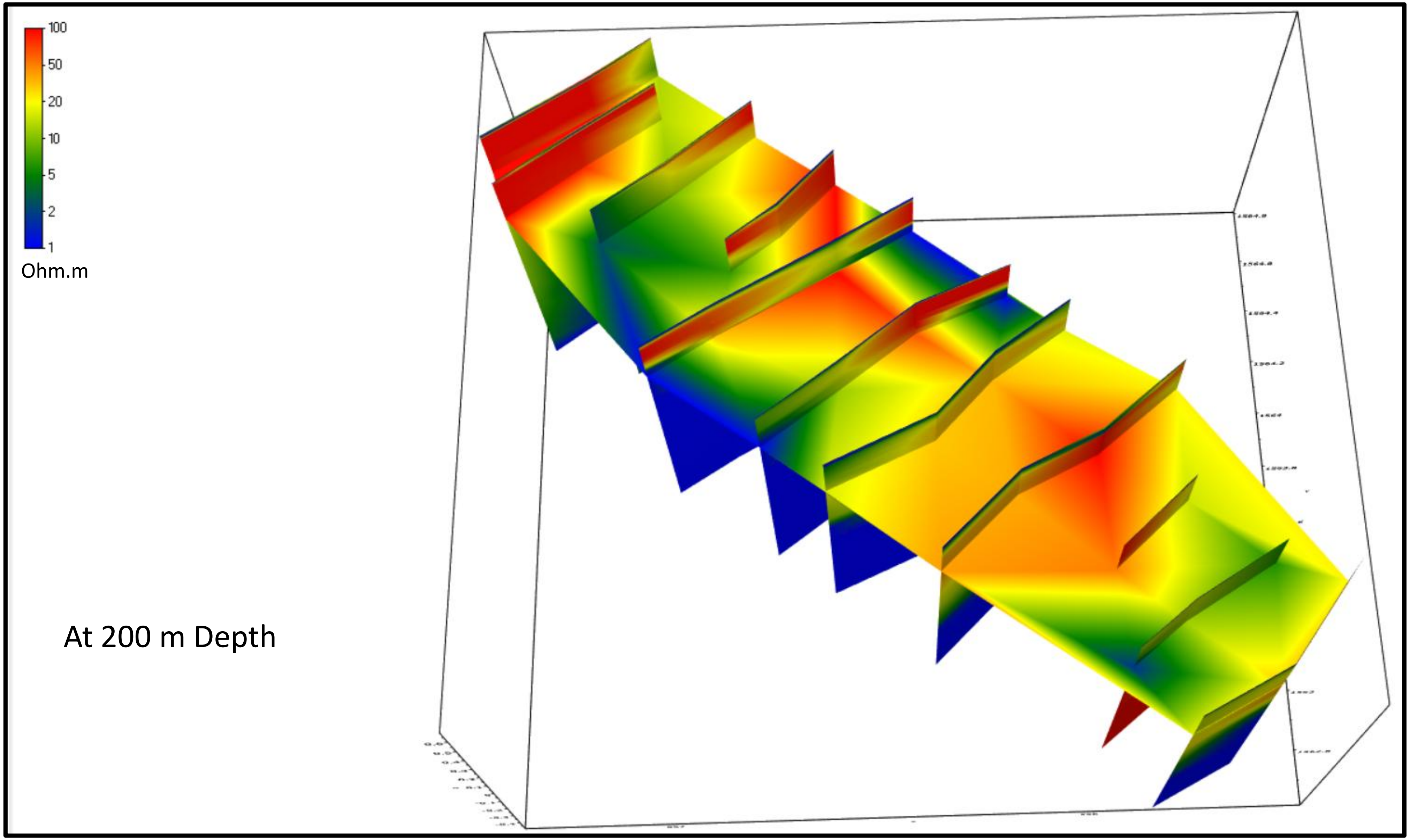


Figure 2.3.18 MT slice view of study area at 200mts depth

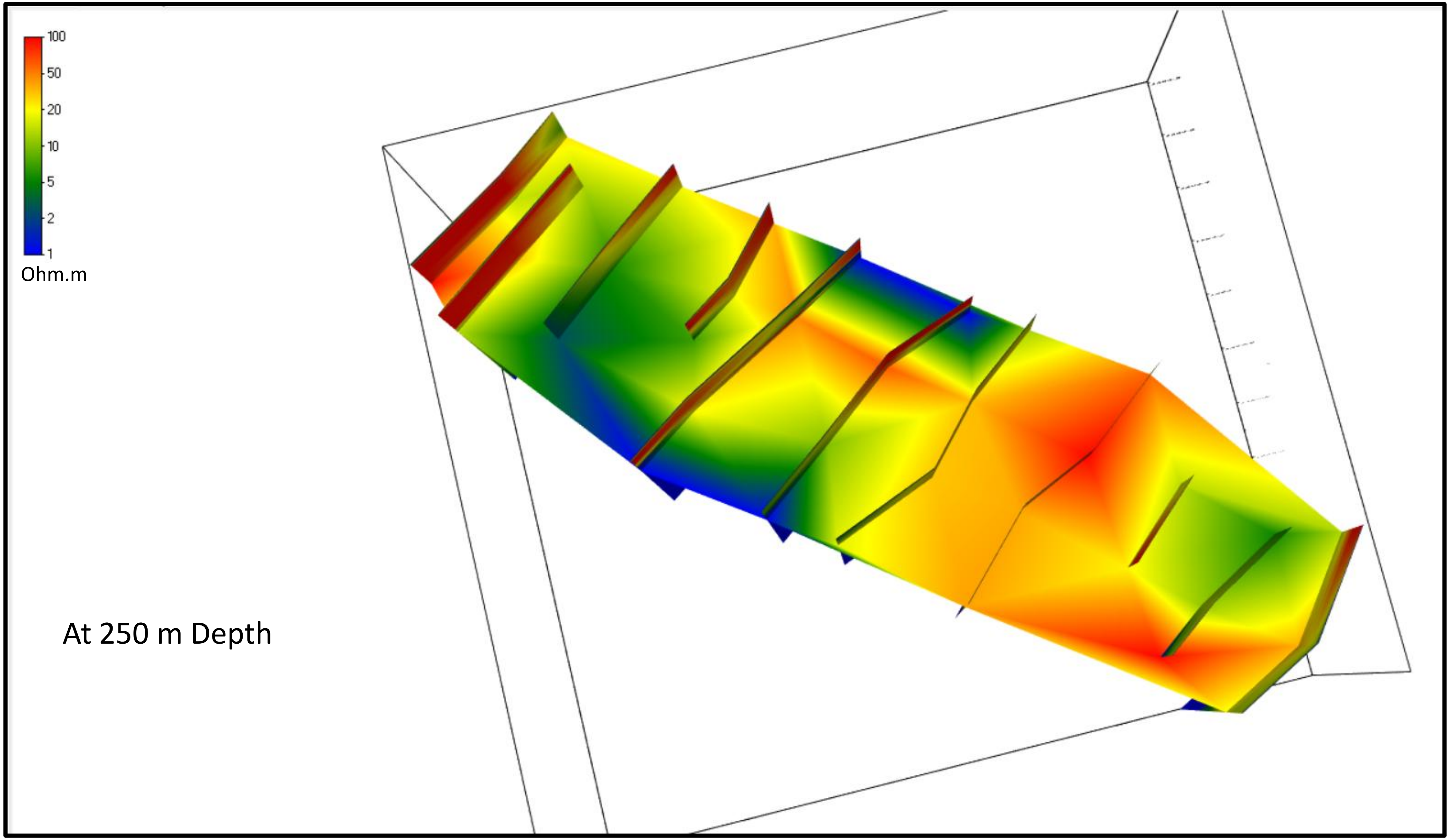


Figure 2.3.19 MT slice view of study area at 250mts depth

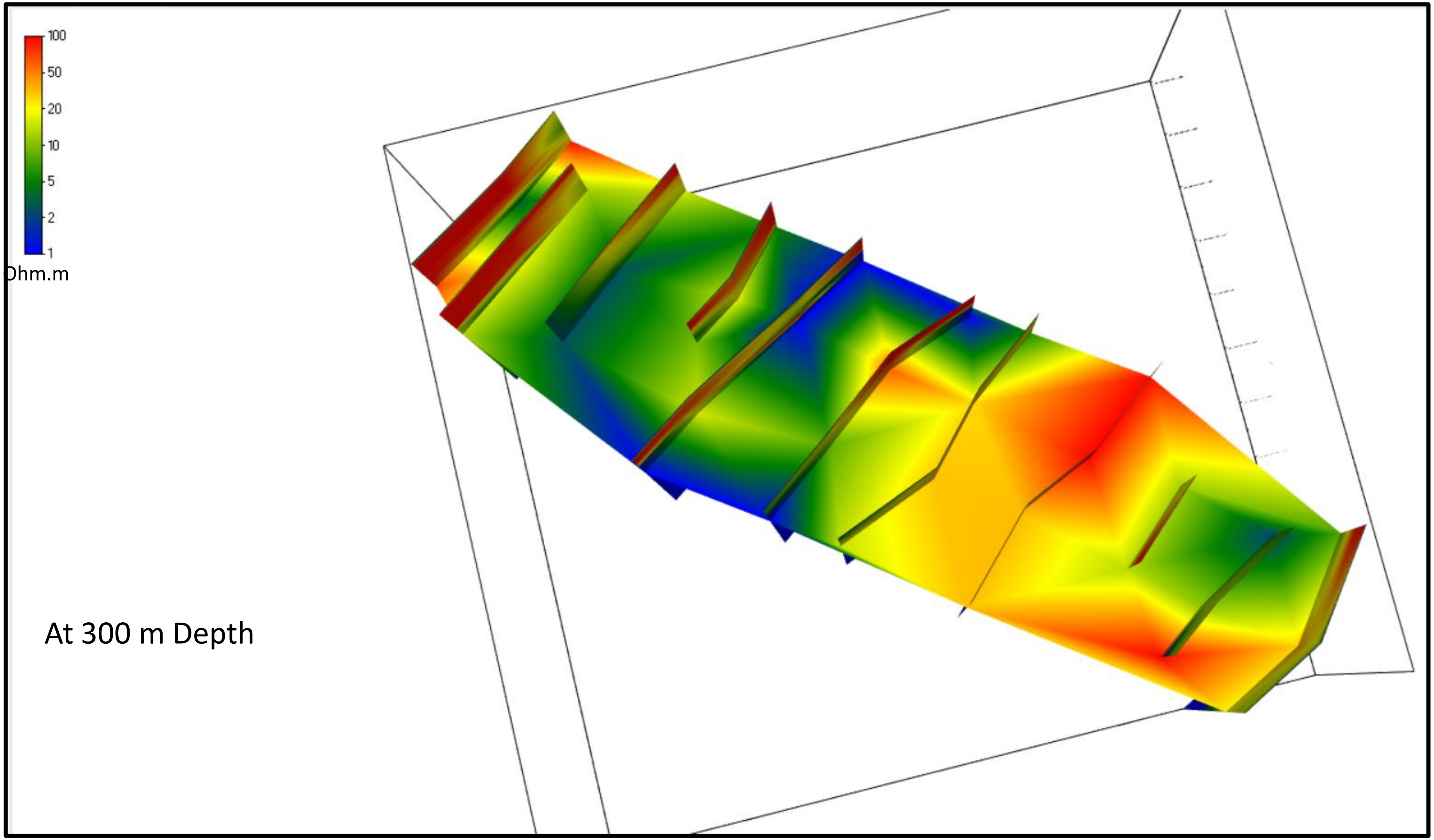


Figure 2.3.20 MT slice view of study area at 300mts depth

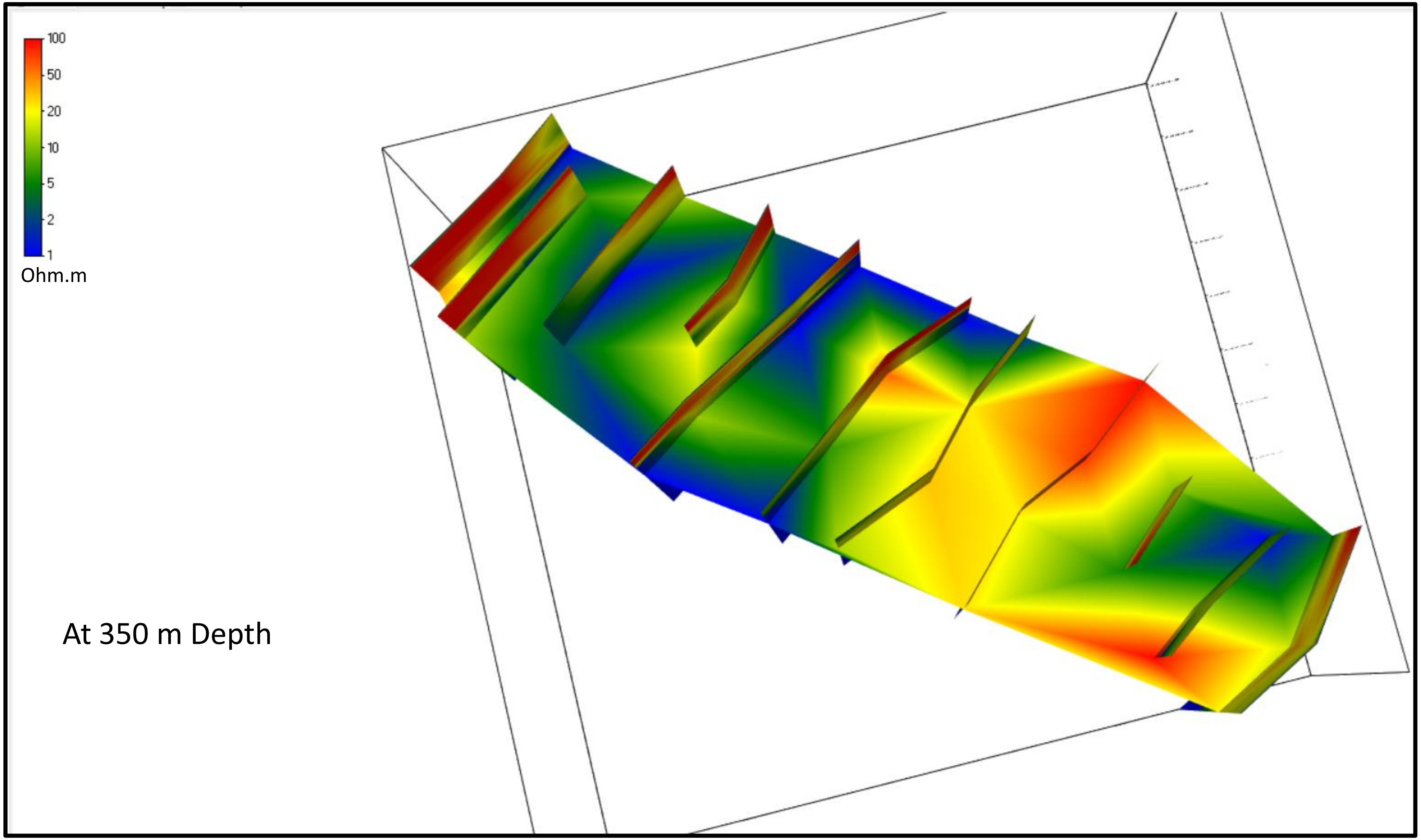


Figure 2.3.21 MT slice view of study area at 350mts depth

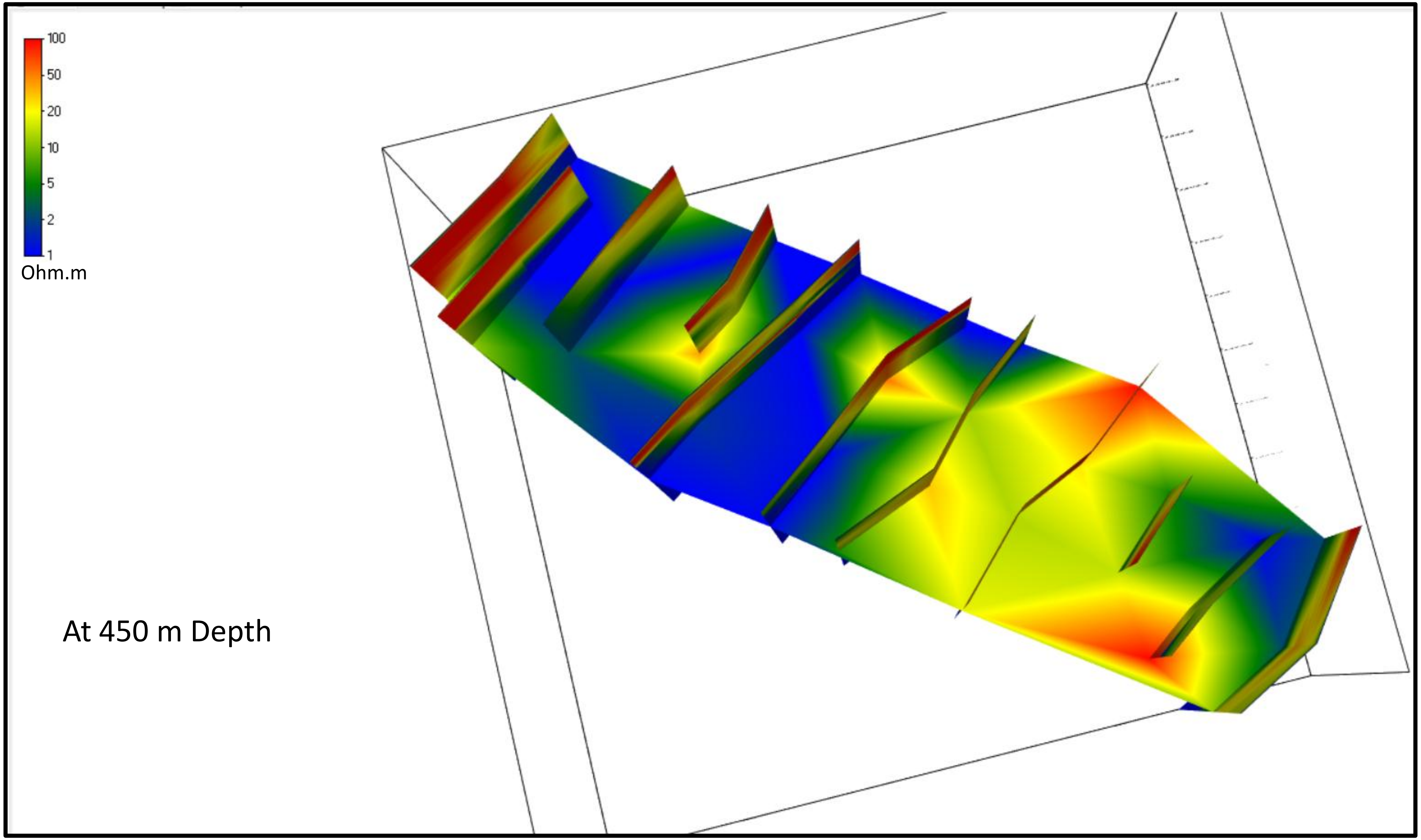


Figure 2.3.22 MT slice view of study area at 400mts depth

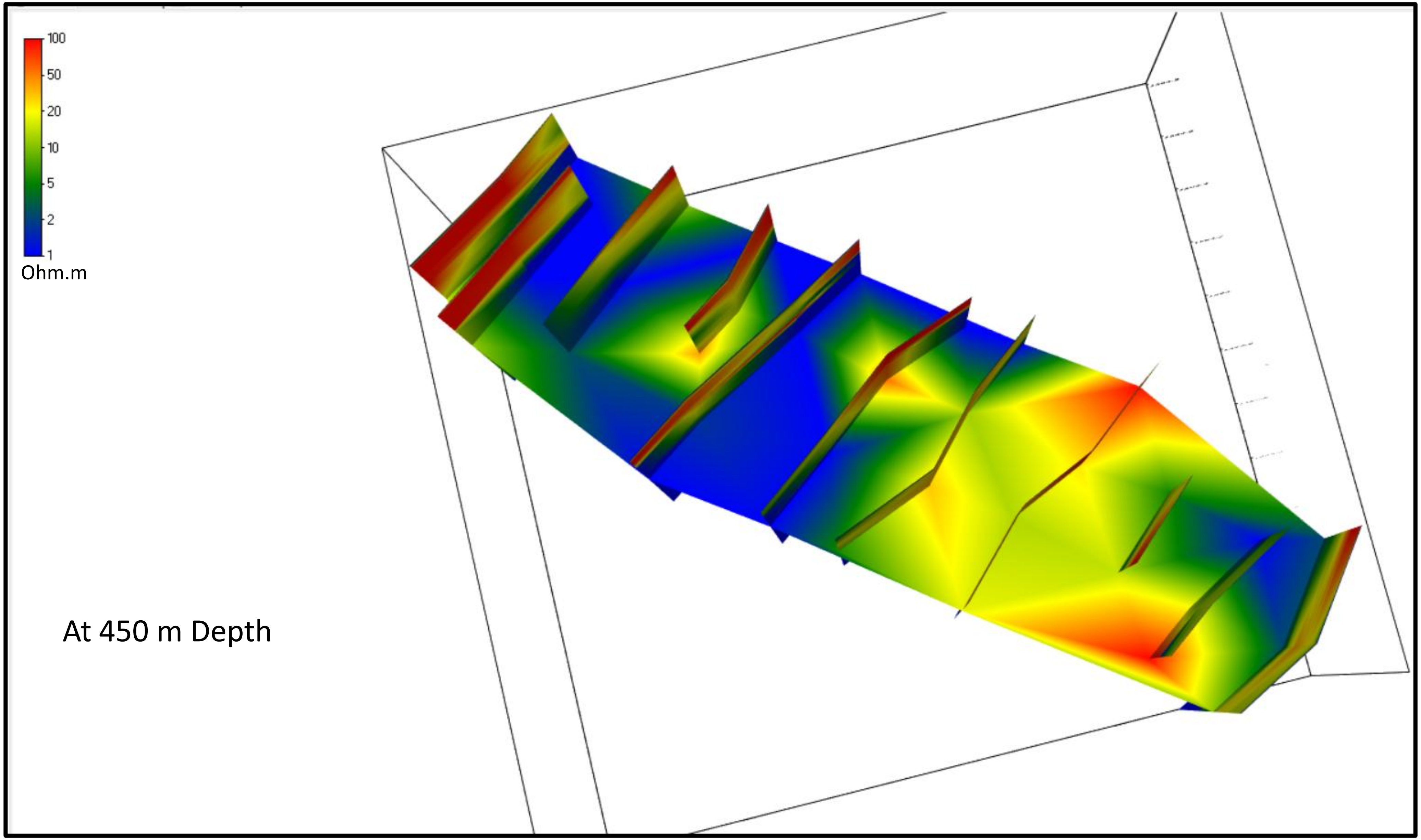


Figure 2.3.23 MT slice view of study area at 450mts depth

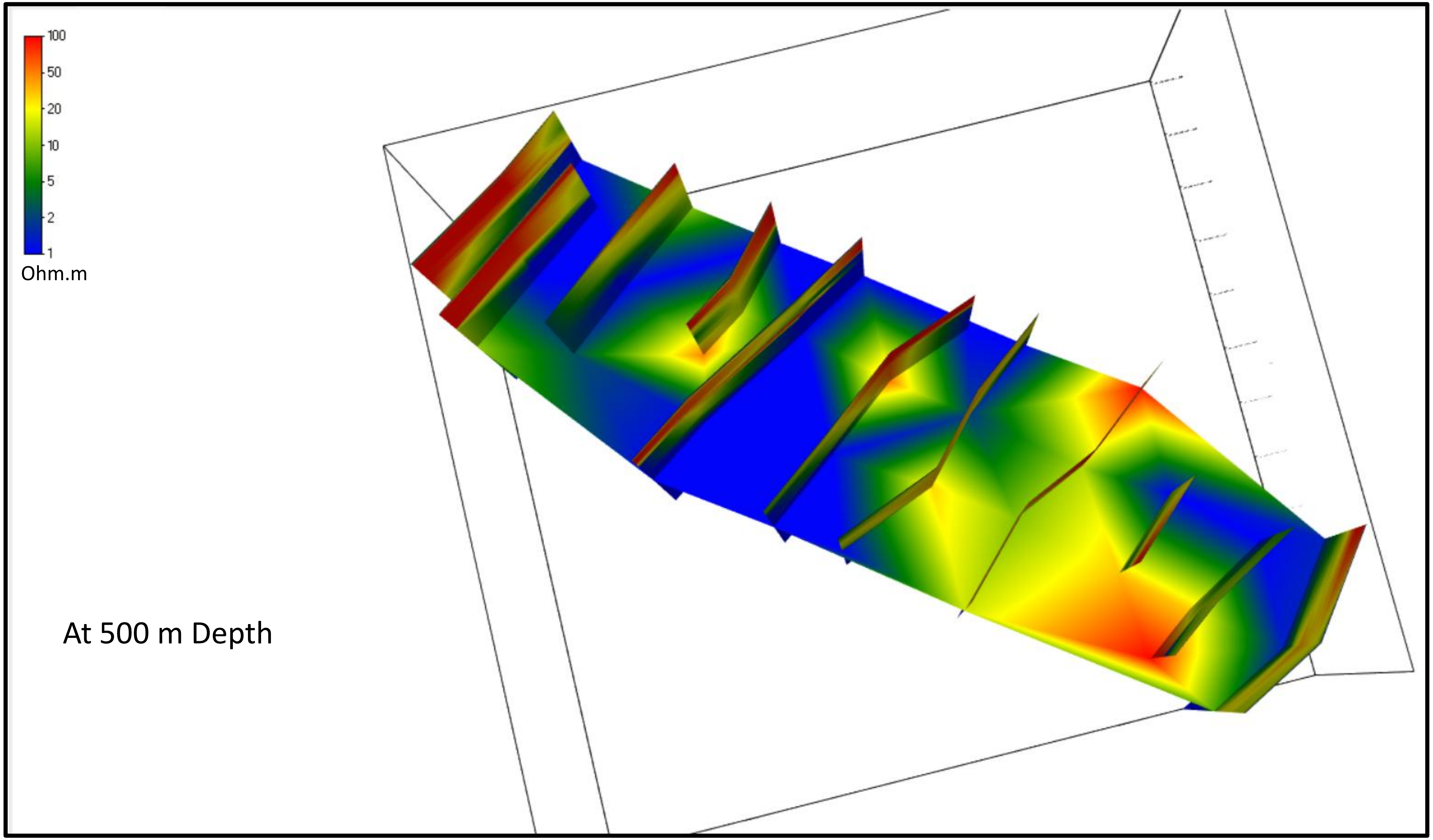


Figure 2.3.24 MT slice view of study area at 500mts depth

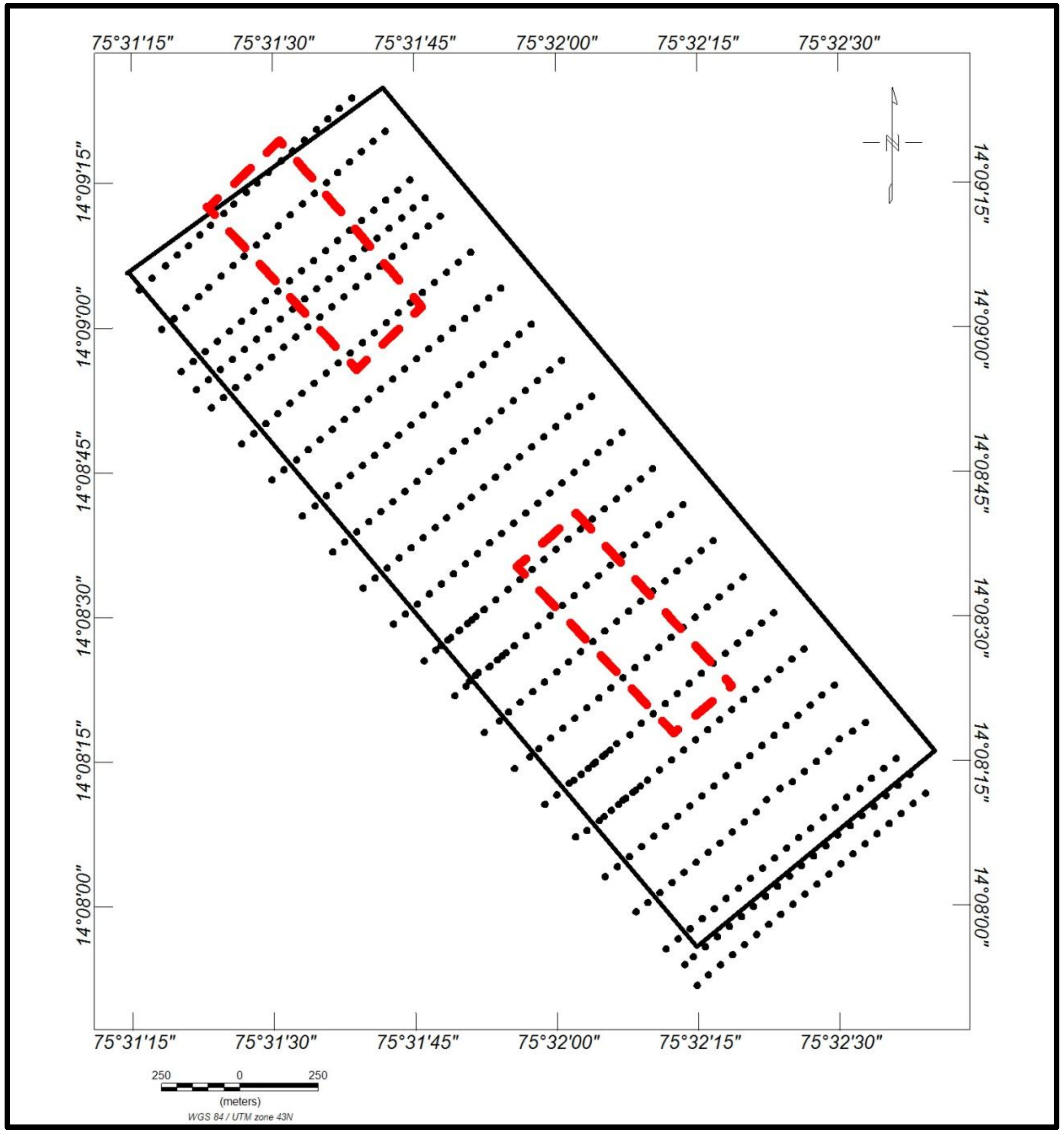


Figure 3.1. Anomaly zones marked on TDEM profiles

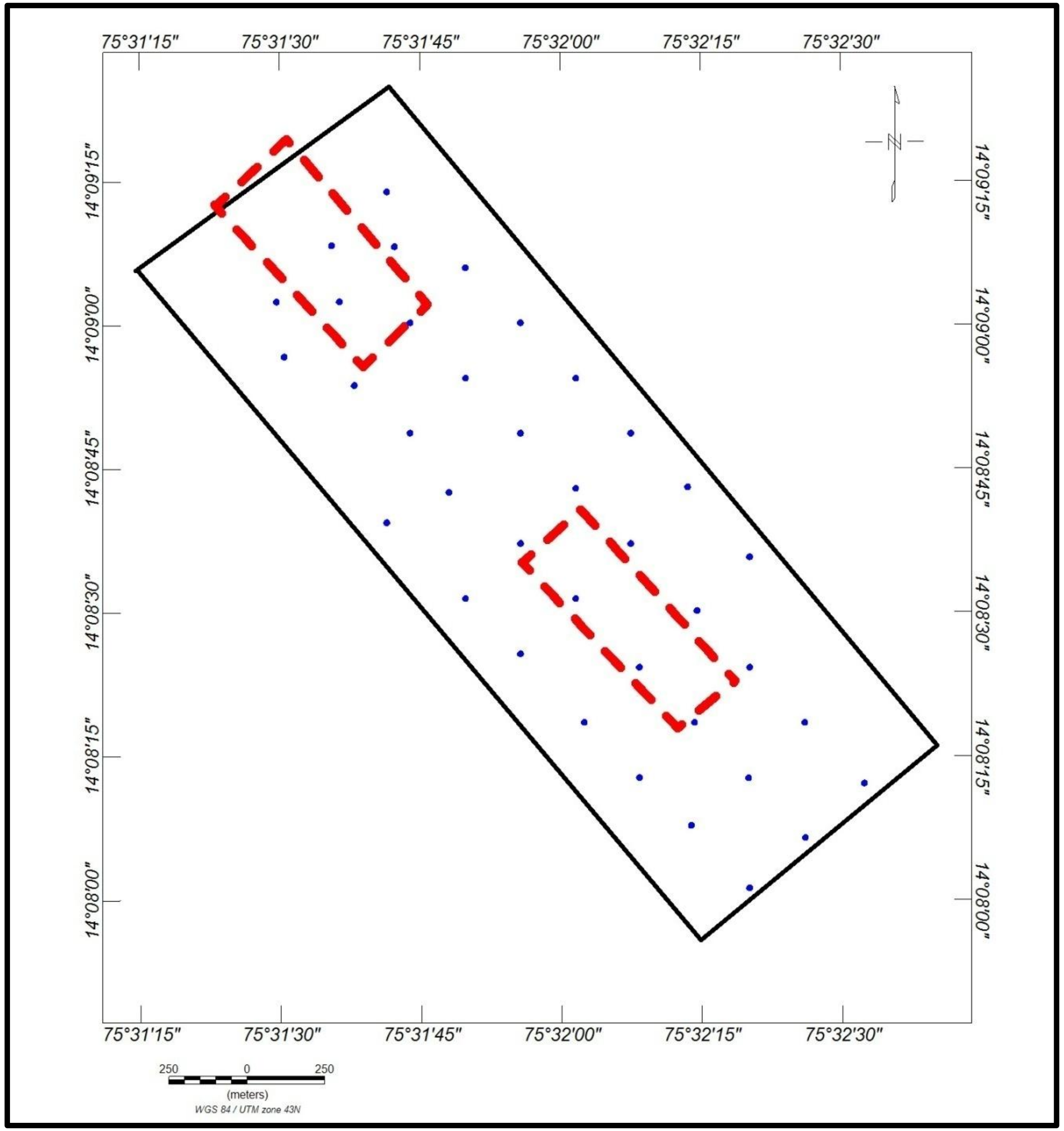
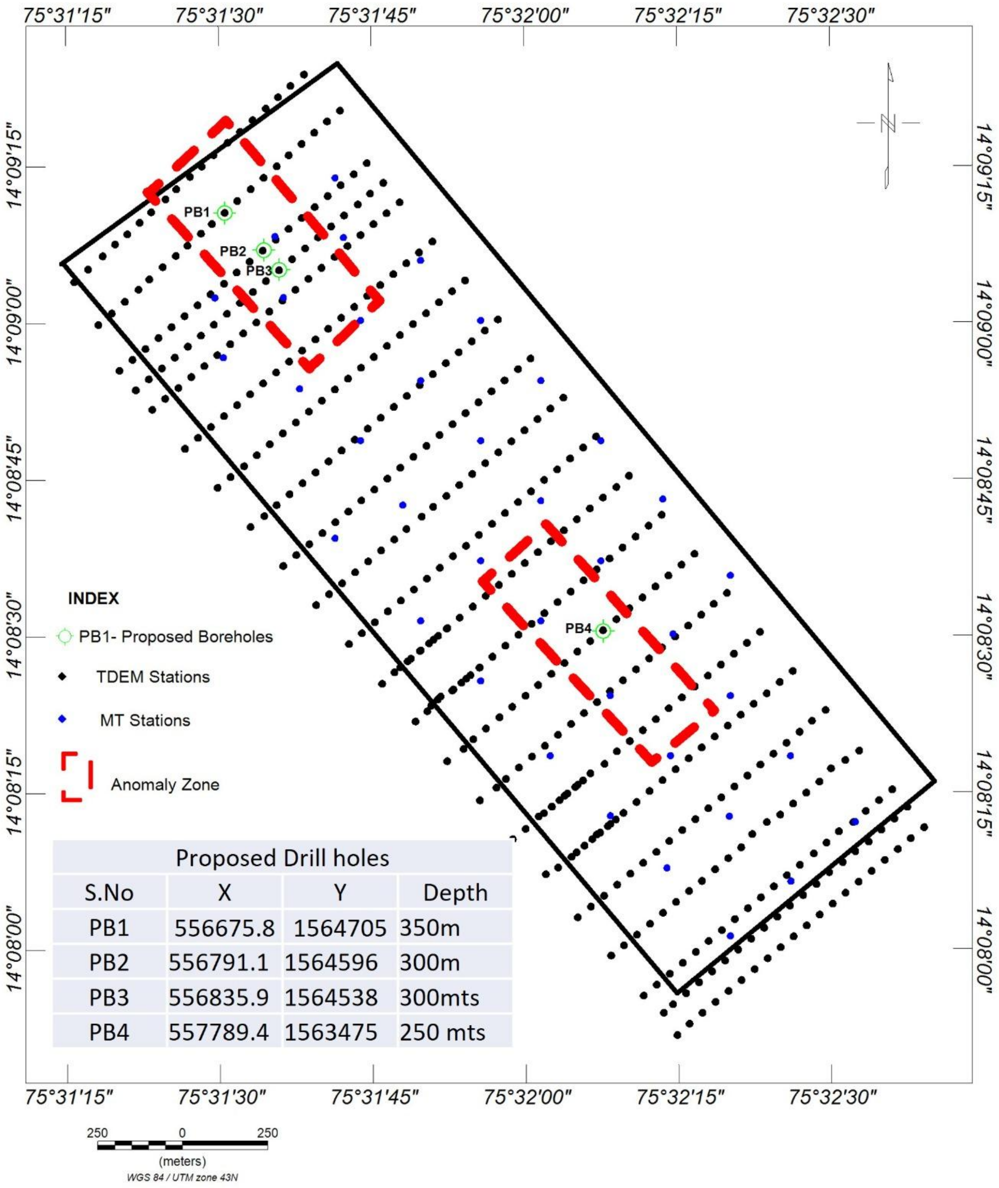


Figure 3.2. Anomaly zones marked on MT profiles



Proposed Drill holes			
S.No	X	Y	Depth
PB1	556675.8	1564705	350m
PB2	556791.1	1564596	300m
PB3	556835.9	1564538	300mts
PB4	557789.4	1563475	250 mts

Figure 4.1 Proposed borehole locations