

TITAN MT High Resolution Resistivity

This brief slide deck shows how some of the features of the TITAN MT system and makes a direct comparison to SPARTN MT , a full frequency, stand alone MT survey.



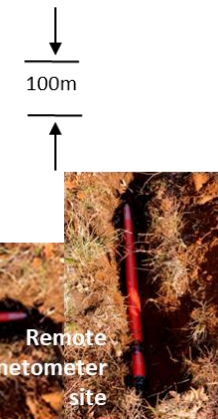
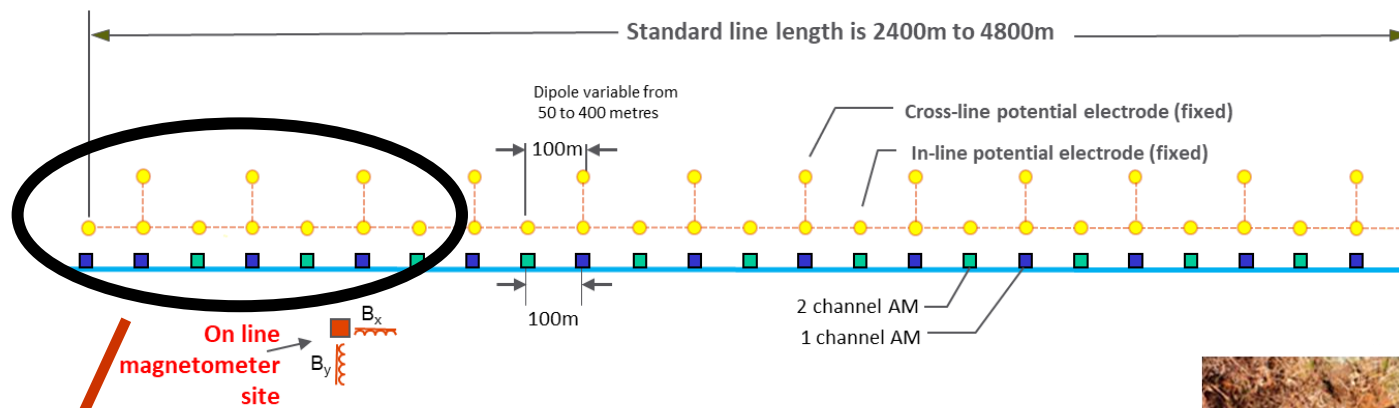
TITAN MT utilizes many contiguous electric field measurements coupled with sparse magnetic field measurements

Typical station set up



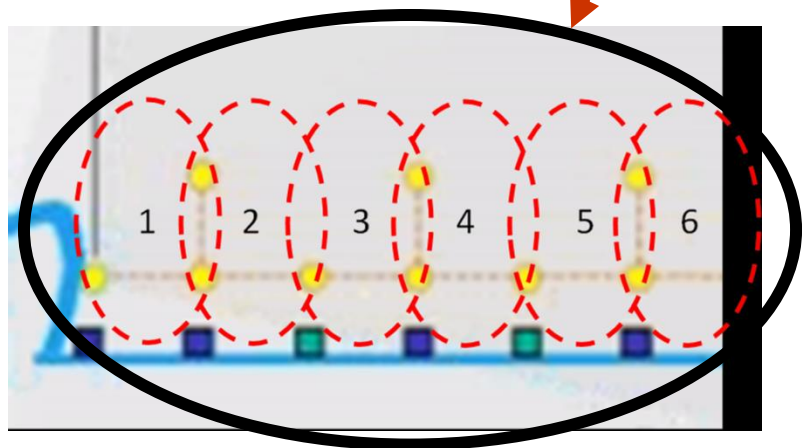
Multi channel acquisition module

Battery

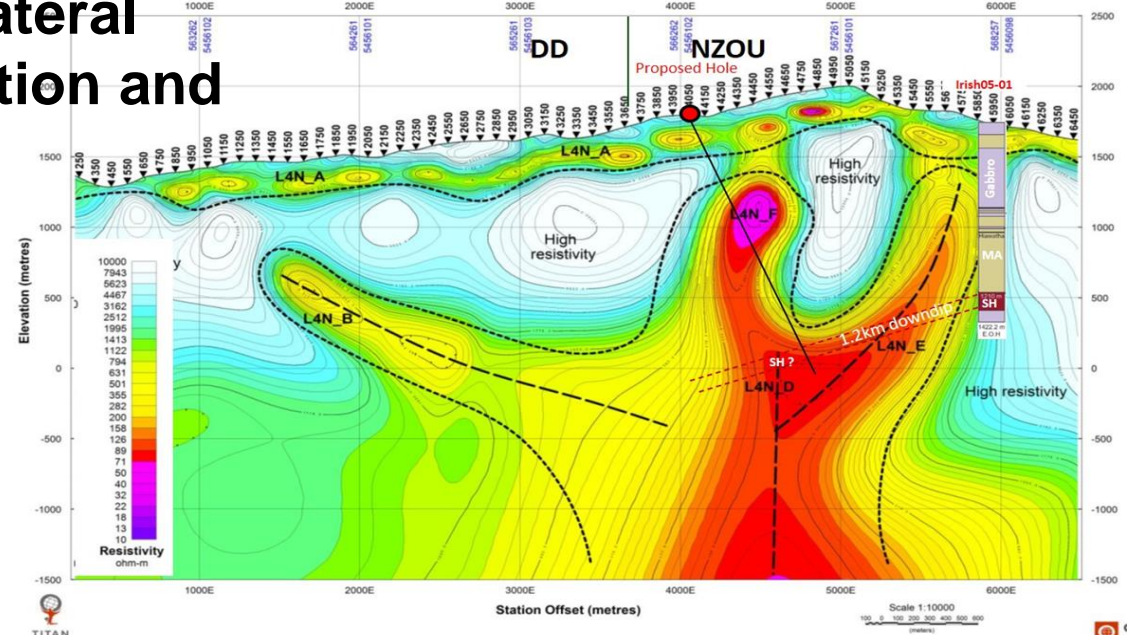


B_x
 B_y >20 km from line

Multiple MT sites, collected simultaneously

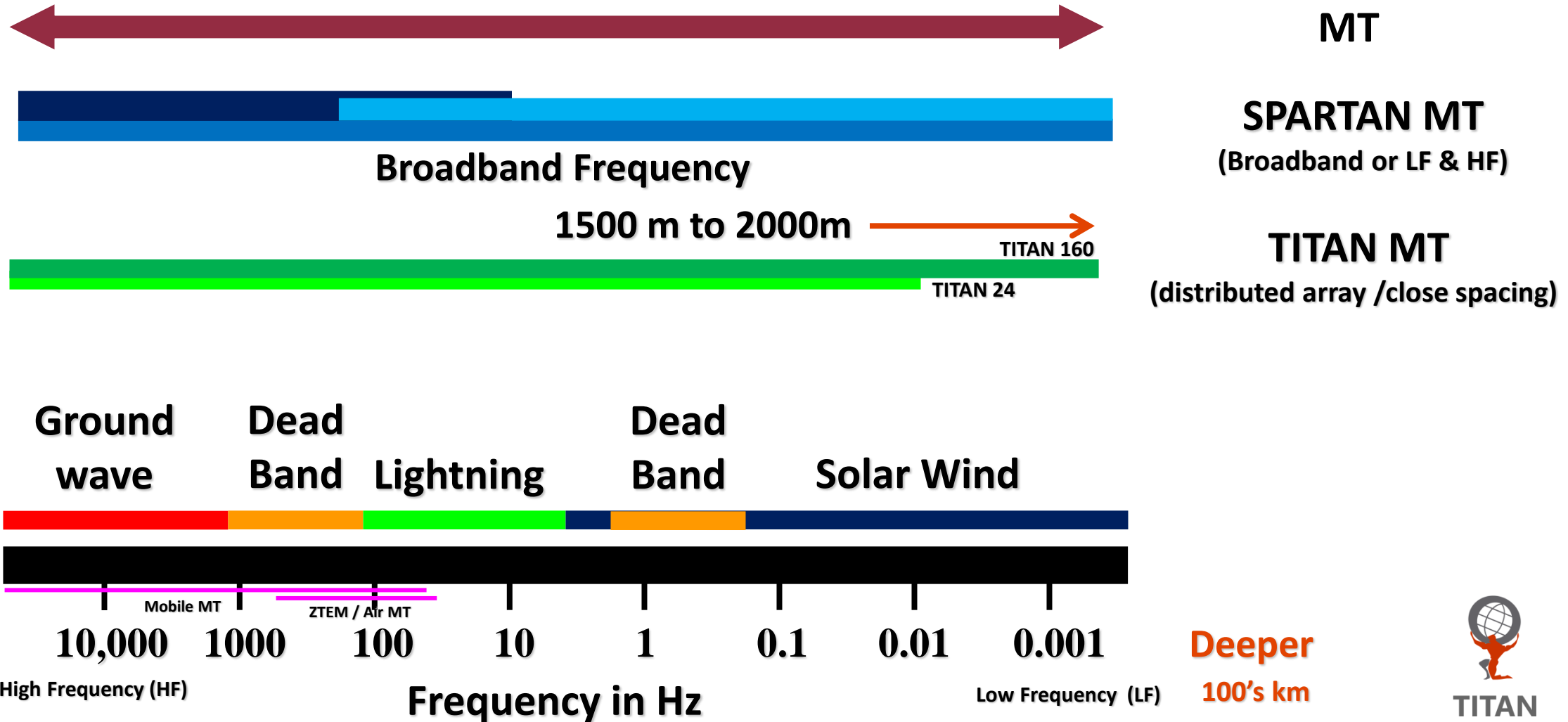


High lateral resolution and deep



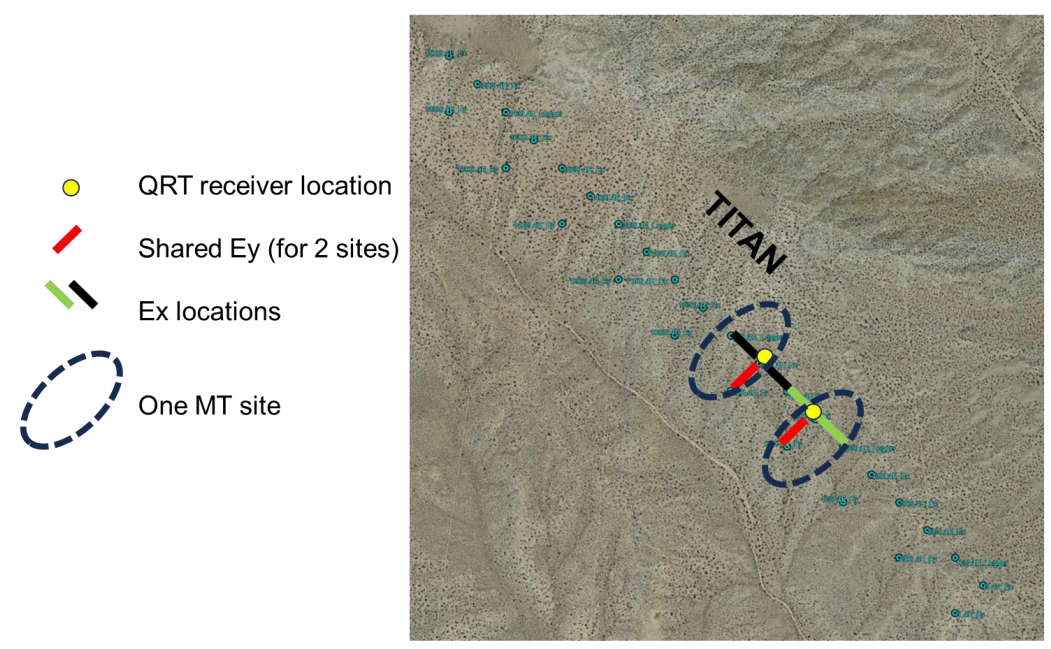
TITAN MT can collect the same low frequencies

that is measured by full frequency MT



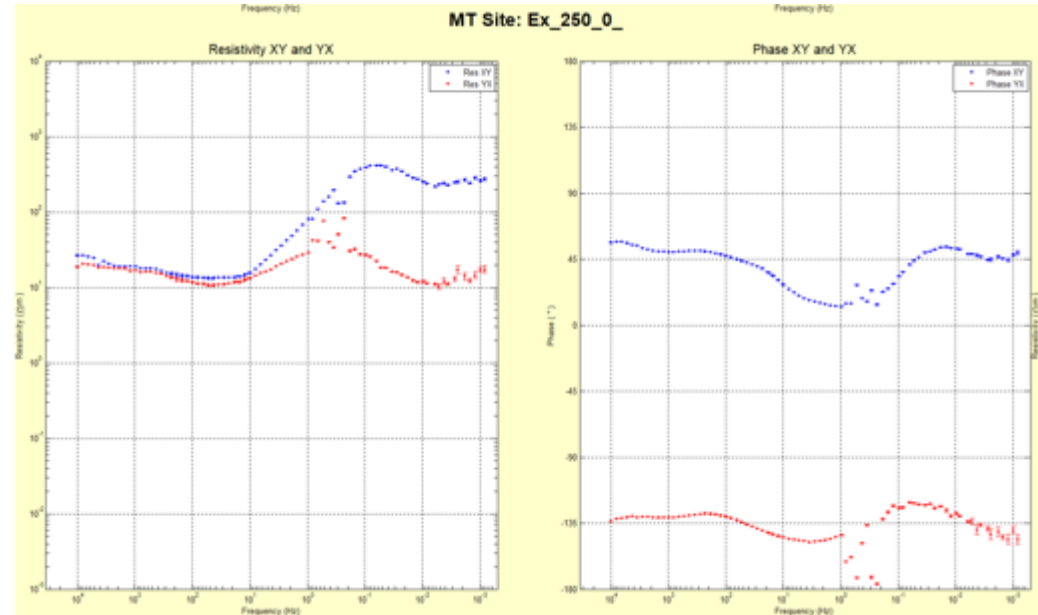
TITAN

We compared a line of TITAN MT and a line of Spartan MT



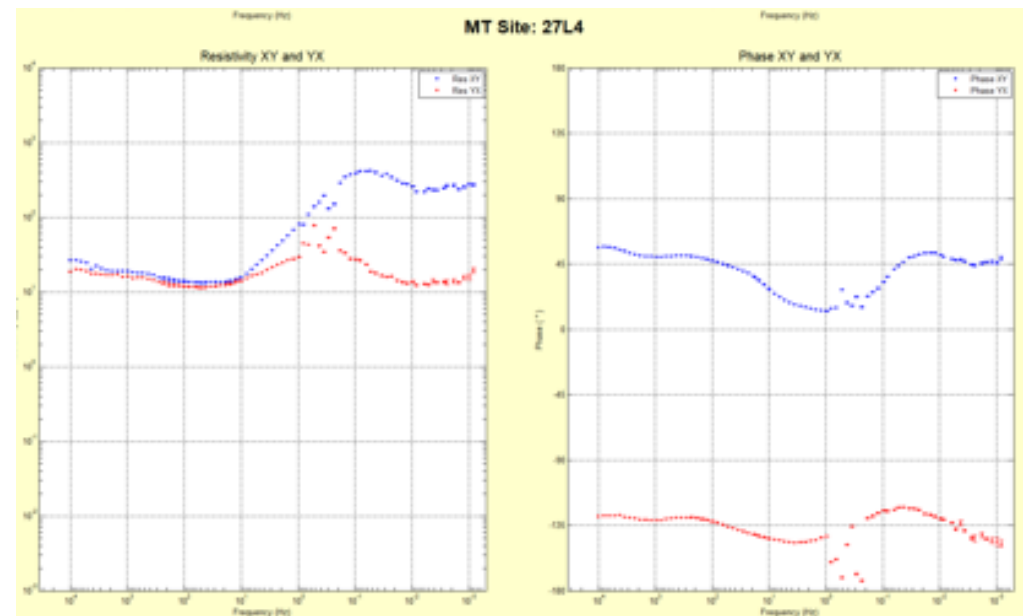
TITAN MT raw data plots compare almost identically to SPARTAN

TITAN



At station 250

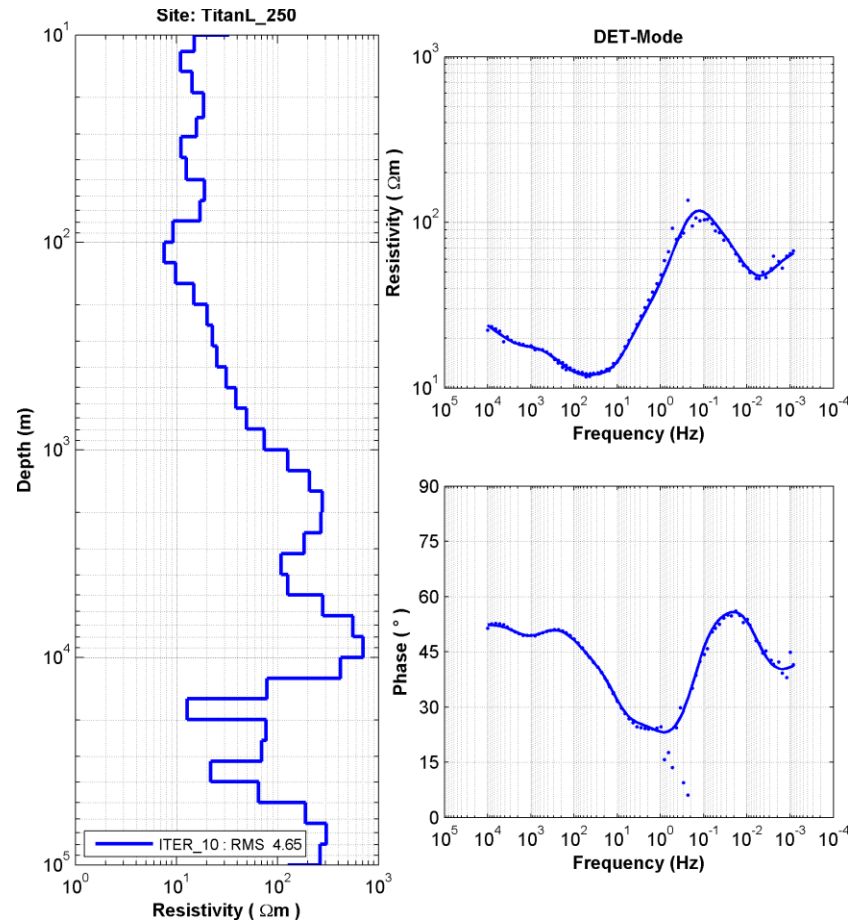
SPARTAN



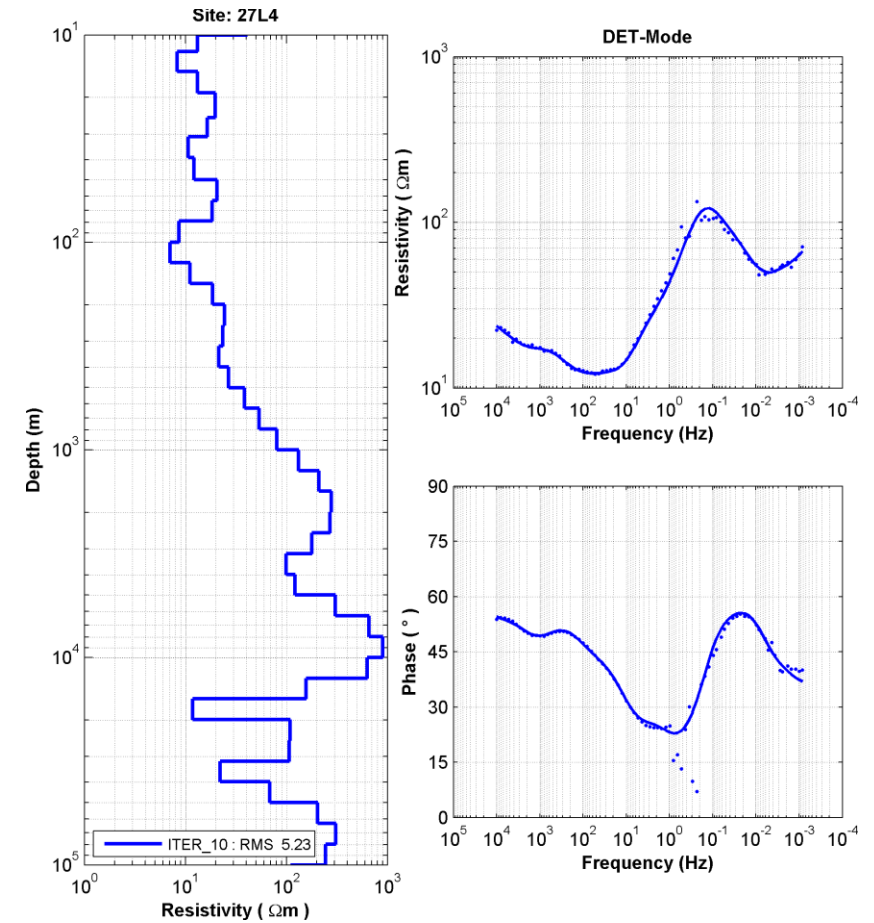
Sounding Curves from TITAN MT vs Stand alone MT

At station 250

TITAN MT



SPARTAN MT

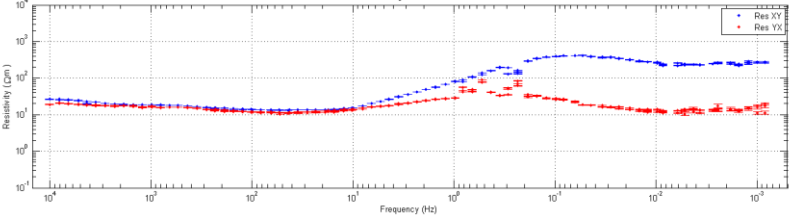


TITAN

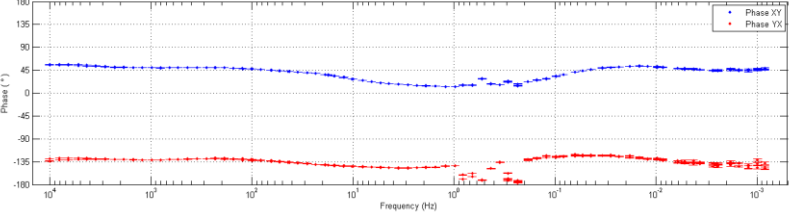
The data was superimposed from SPARTAN and 2 configurations of TITAN. It is very similar.

At 250

MT Site: All MT Sites
Resistivity XY and YX

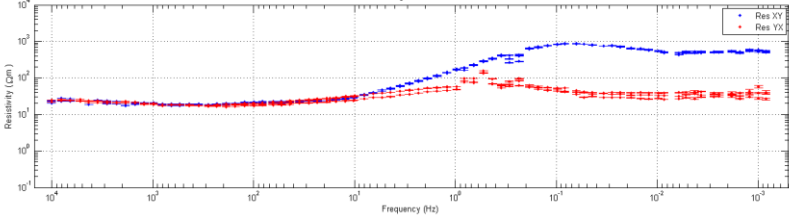


Phase XY and YX

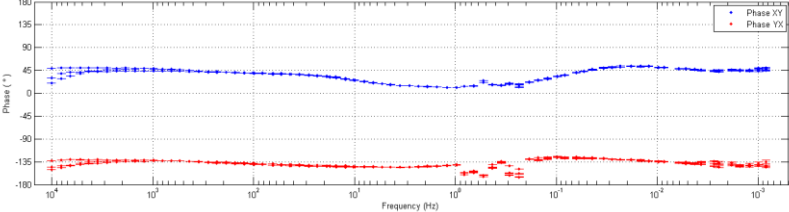


At 850

MT Site: All MT Sites
Resistivity XY and YX

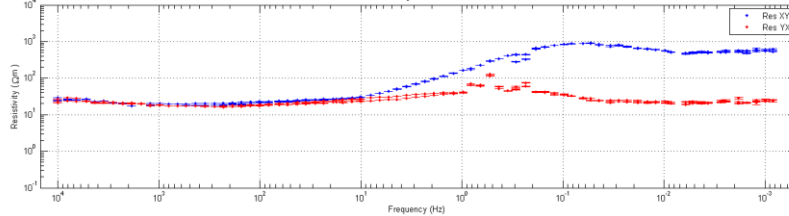


Phase XY and YX

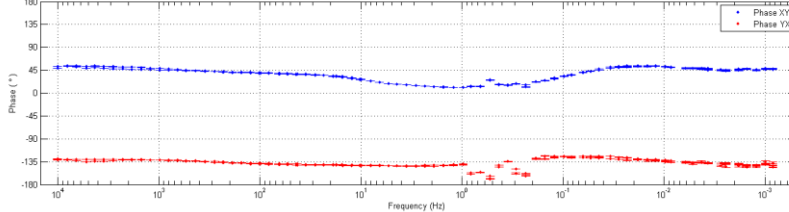


At 1450

MT Site: All MT Sites
Resistivity XY and YX



Phase XY and YX

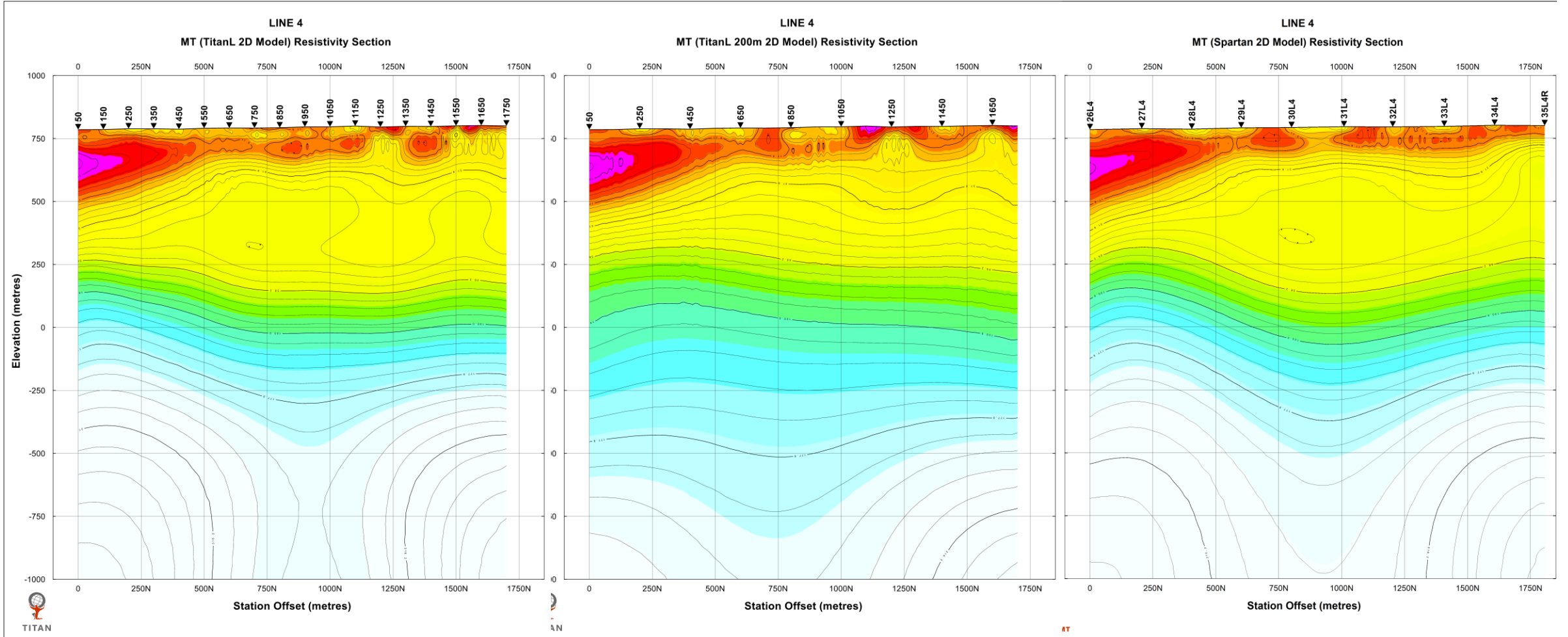


TITAN was deployed with 100m dipoles for the test But was also sampled at 200m for the direct compare

TITAN (100m)

TITAN (200m)

Spartan (200m) (without Tipper (Z))

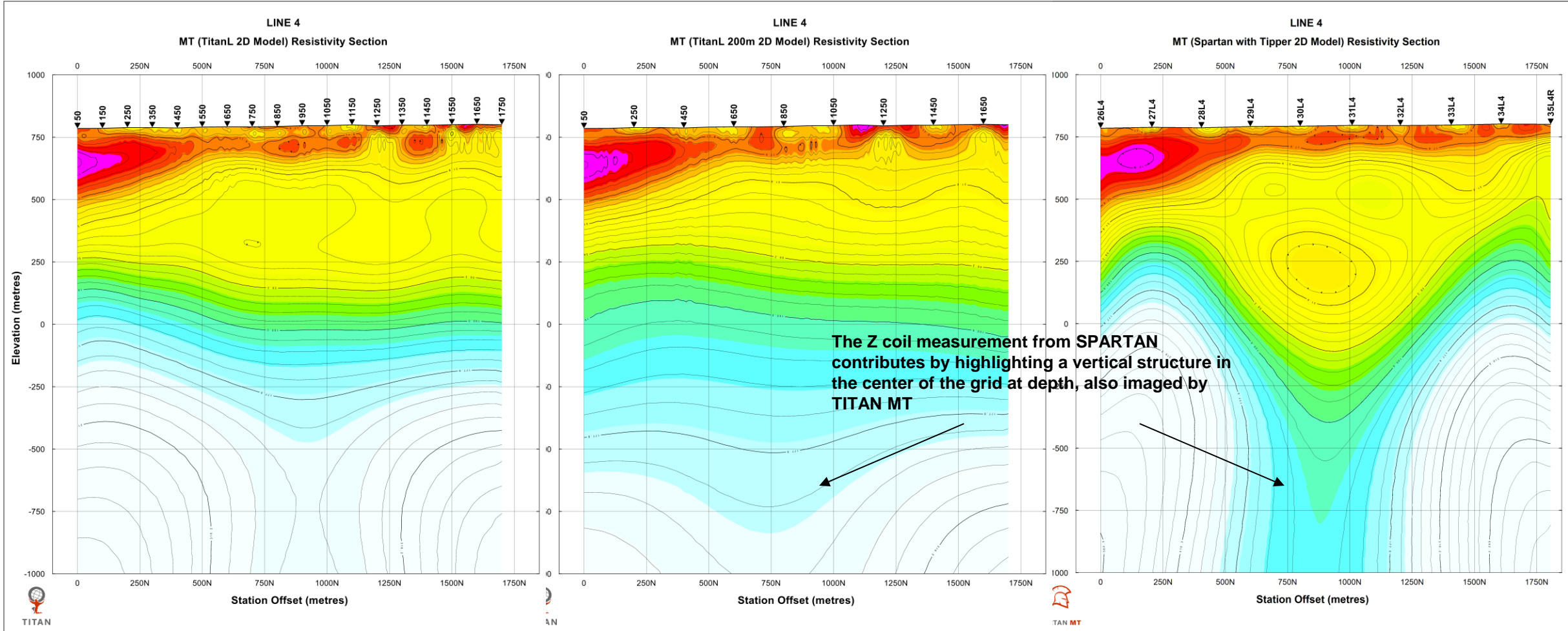


TITAN was deployed with 100m dipoles for the test but was also sampled at 200m for the direct compare

TITAN (100m)

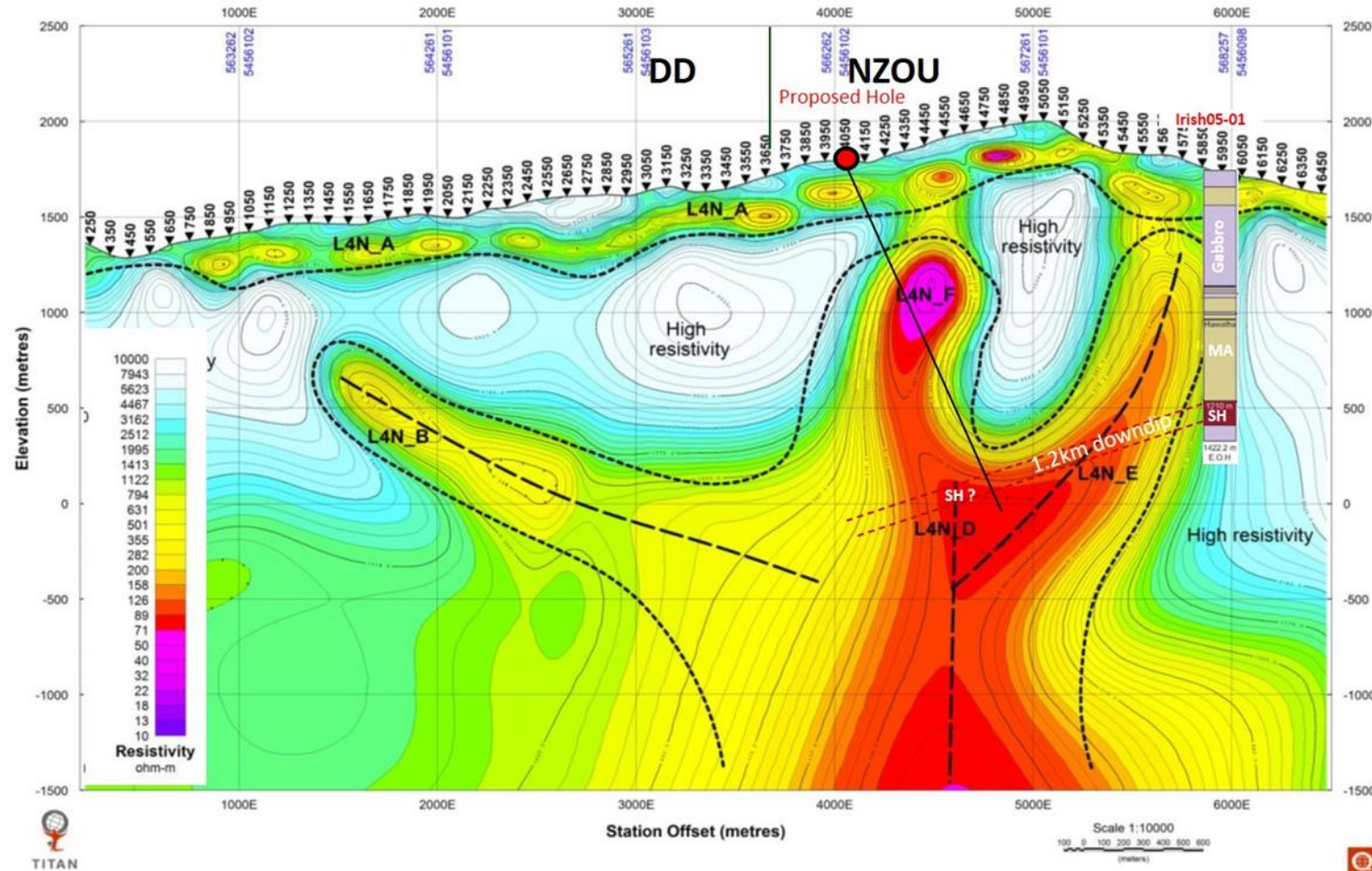
TITAN (200m)

Spartan with Tipper (200m)



Some TITAN MT examples

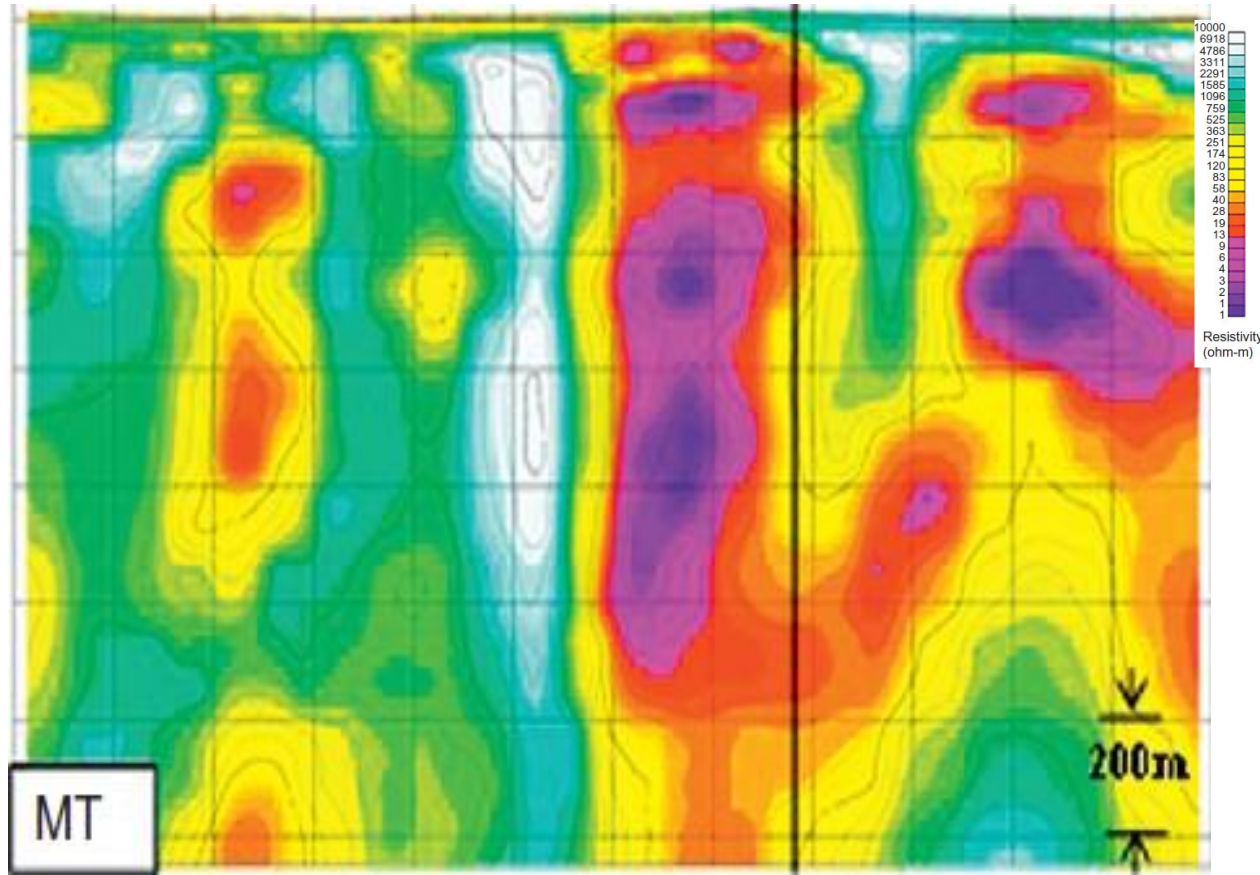
- rapid data collection of many MT sites
- high resolution with 100 m dipoles



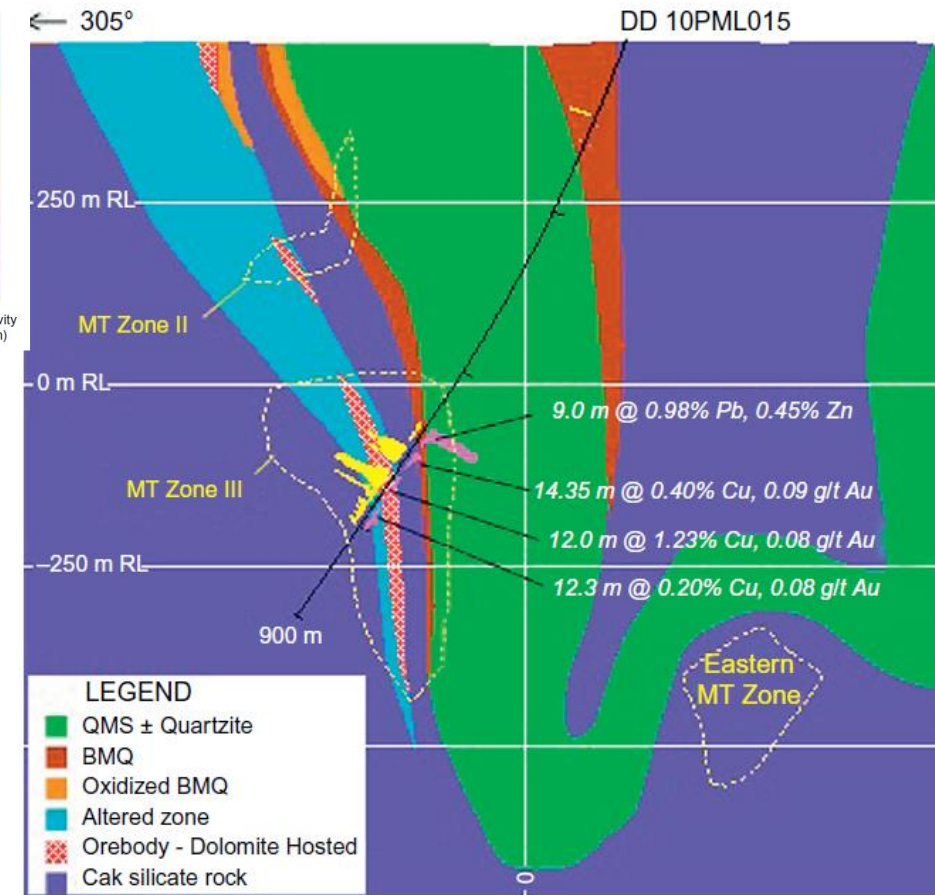
TITAN

Some TITAN MT examples

□ Deep structural resistivity highs



□ Pur-Banera Prospect, Rajasthan, India

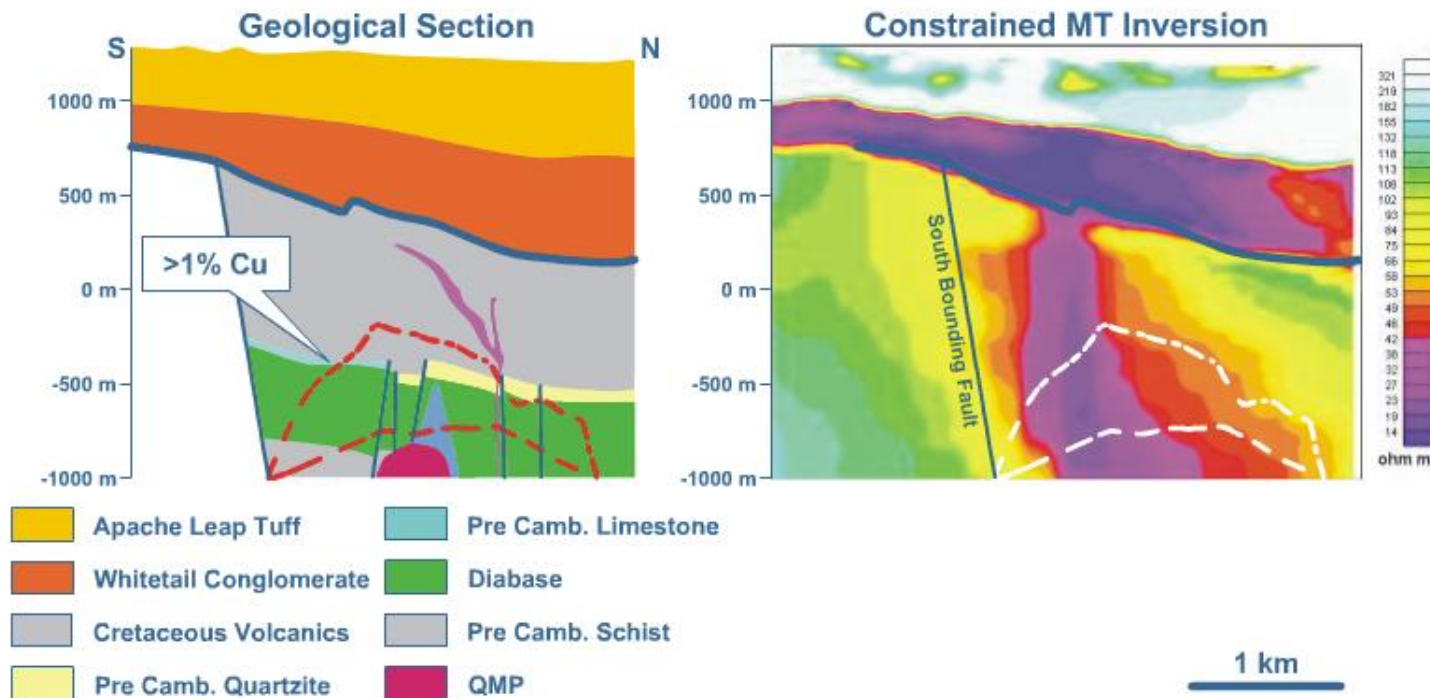


(Kavdia et al., 2015).

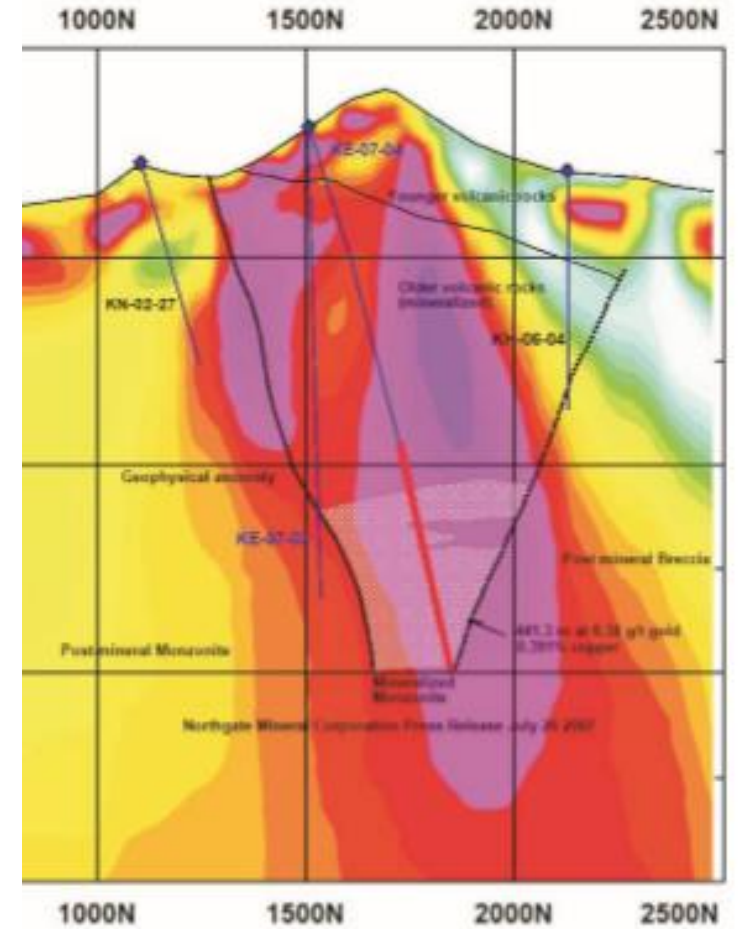
Some TITAN MT examples - Porphyries



MT Inversion - Resolution, Arizona – Porphyry Copper



Ora Zone Titan Cross Section Line



Some TITAN MT examples – Nickel exploration

