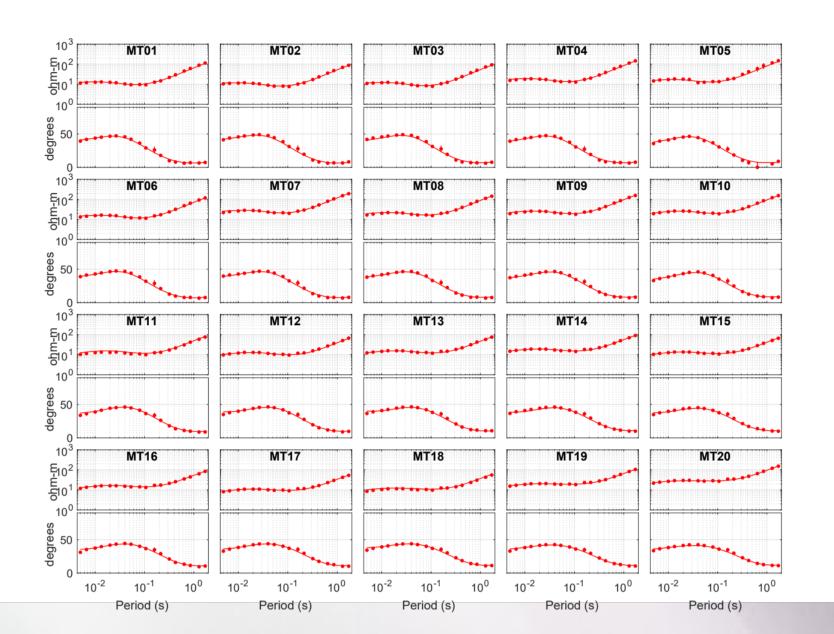
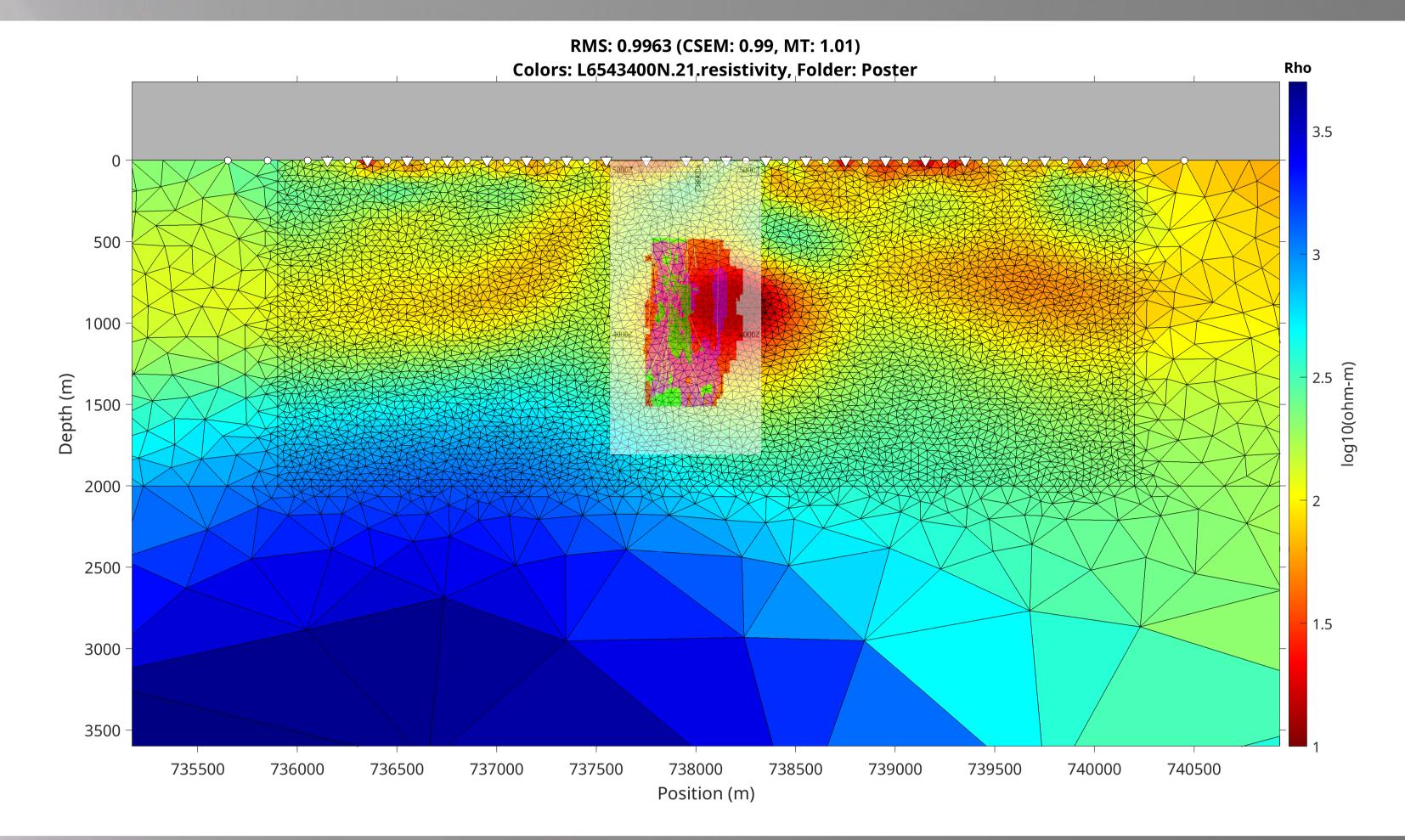
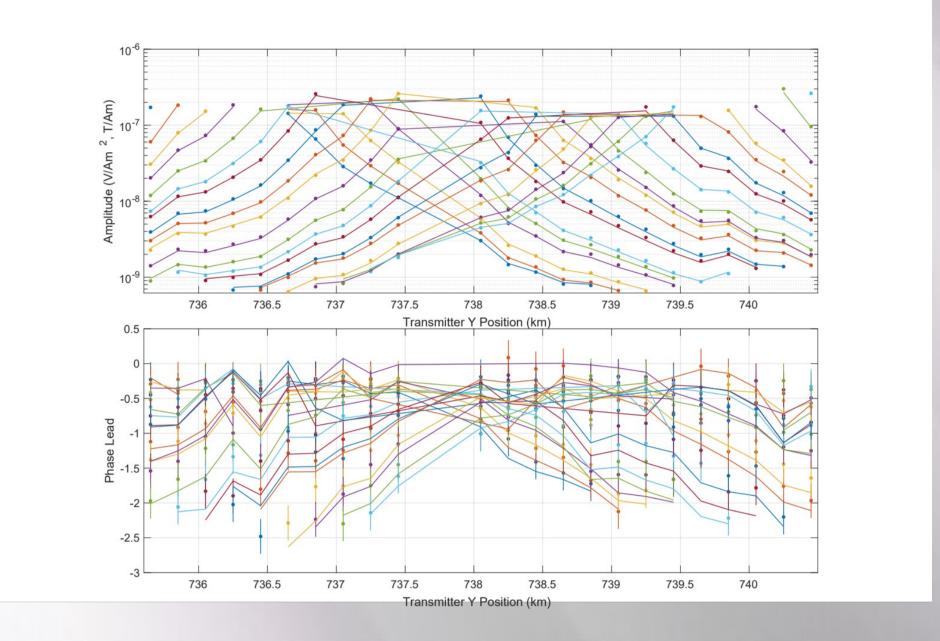


MIMDAS at Carrapateena. Joint MT-CSEM Resistivity/IP Inversion MARE2DEM / Historical Data 2006

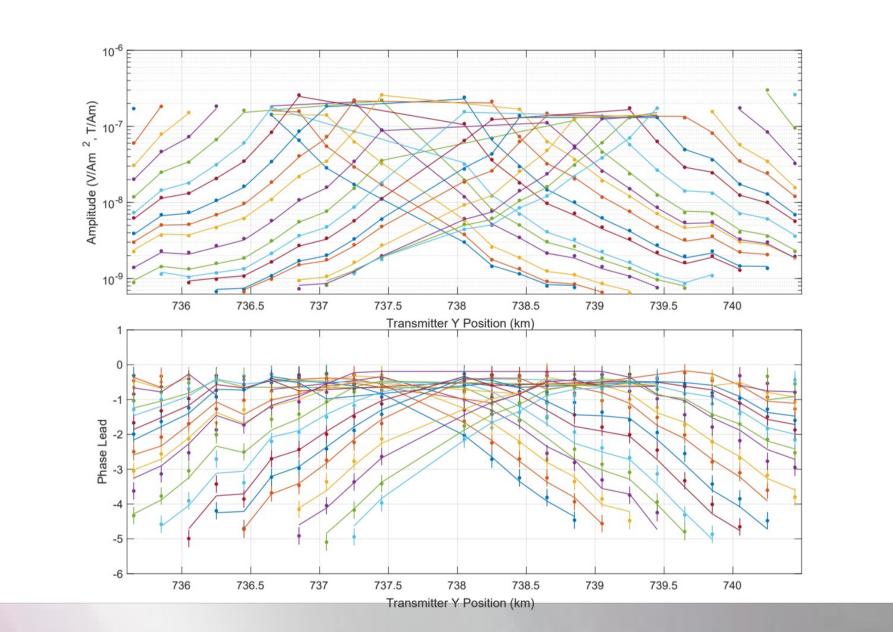




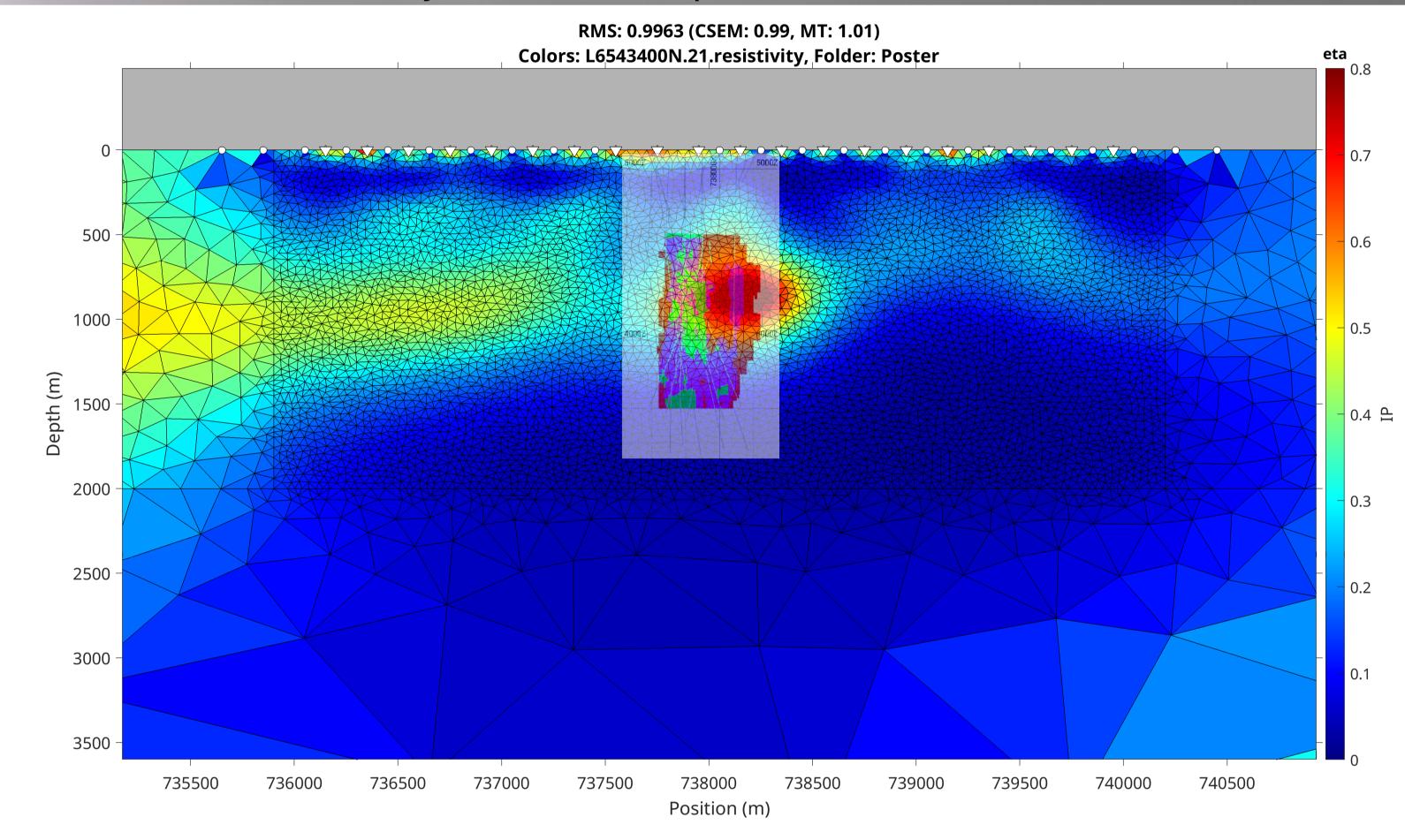
MT Data, Model Fits. 200m TM



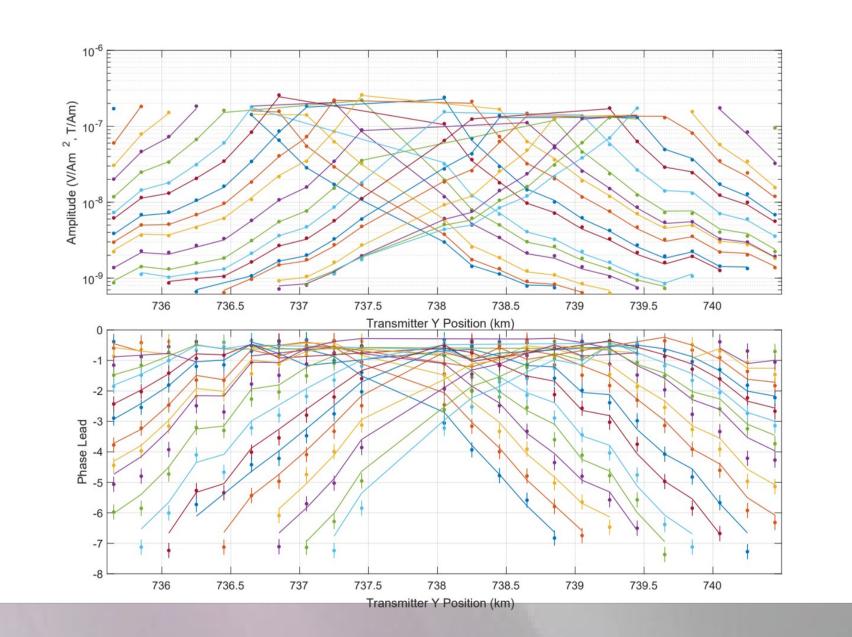
25/256 Amplitude and Phase Data, Model Fits.



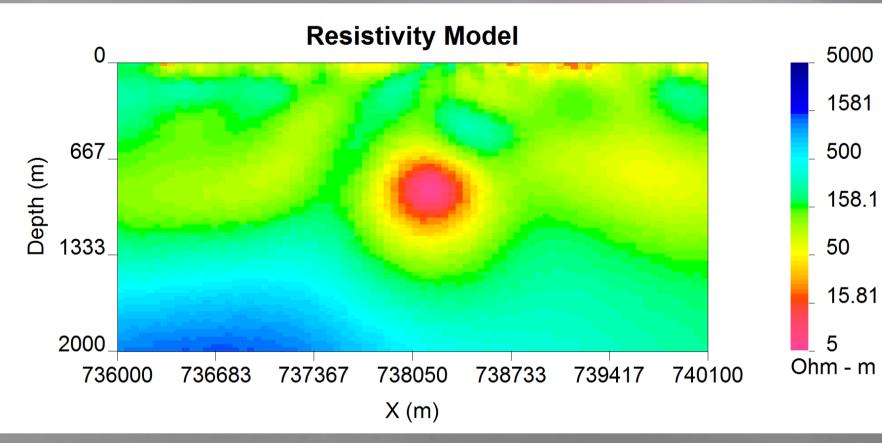
Plot 1. MARE2DEM Resistivity Section. Carrapateena Section Overlain



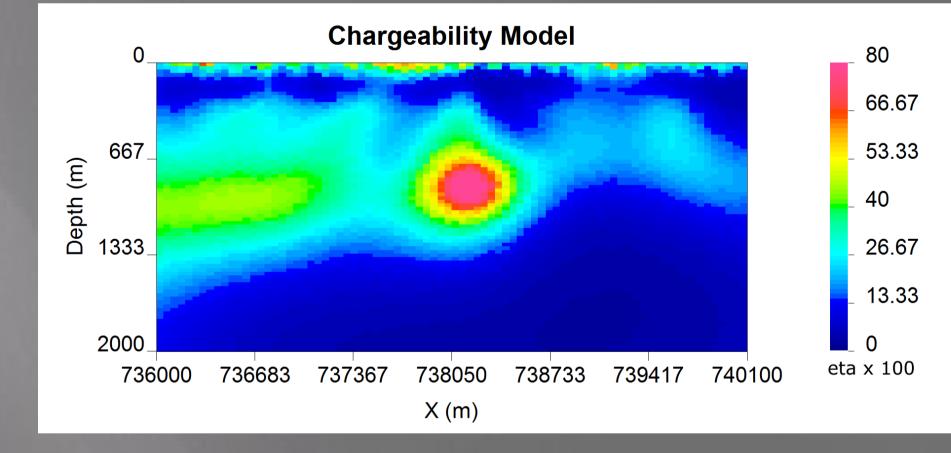
75/256 Amplitude and Phase Data, Model Fits.



Plot 2. MARE2DEM Intrinsic Chargeability (eta) Section. Carrapateena Section Overlain



Plot 3. MARE2DEM Resistivity UBC2D Mesh



Plot 4. MARE2DEM eta x100 UBC2D Mesh

125/256 Amplitude and Phase Data, Model Fits.

The 2006 MIMDAS Carrapateena Survey results have been recast into a CSEM/MT Inversion to recover a complex (Cole-Cole) earth. The resultant Resistivity and Intrinsic Chargeability sections in MARE2DEM's native mesh are displayed in Plots 1 and 2 above with sections of the Carrapateena Ore Deposit overlain. For an unimpeded view these meshes have been transformed into the familiar UBC2D rectilinear meshes in Plots 3 and 4.

Using superposition, the 25/256 Hz (and 1st 2 odd harmonics) pole-dipole IP data was transformed into a dipole-dipole CSEM dataset and inverted jointly with the MT data. This resulted in a singular model which satisfies both datasets to a high degree of fit. Data was originally acquired at both 25/256Hz and 25/512 Hz with the better quality 25/256 data was largely ignored in original interpretations due to the heavy EM coupling present. With its recasting as a CSEM problem, the coupling is part of the solution, not part of the problem and the data becomes eminently valuable. An obvious source exists in the returned sections which is near to the top of the Carrapateena Orebody. Please note that the overlain sections of the orebody are approx 100m off-line to the inversion section.