

ENGINE - ENhanced Geothermal Innovative Network for Europe Workshop 2: Exploring high temperature reservoirs: new challenges for geothermal energy SIAF Campus, 1 - 4 April 2007, Volterra, Italy

Electrical resistivity 3D modelling of the crust structure at the Travale high enthalpy geothermal field

Catalina Mayorga & Adele Manzella Istituto di Geoscienze e Georisorse CNR – Italy

1st aim is to obtain a reasonable fit of the measured MT data by 3D electrical resistivity modelling

Methodology \implies carry out 3D models, calculate forward responses, compare with measured data









Response of model including currently exploited productive fractures

Response of model including extended reservoirs and resistive lower crust-mantle

Response of model including extended reservoirs and conductive lower crust-mantle

measured MT data

 2^{nd} aim \implies determine whether MT is able to recognize different reservoir geometries and dimensions and the optimum spacing between stations to achieve so

Methodology \implies carry out 2D models, calculate forward responses, use them in 2D inversions of *a priori* models repeat the procedure reducing stations spacing









Come, see our poster and let's discuss about it!