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Preliminary analysis of the Hellenic geomagnetic array stations' response functions

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The National Observatory of Athens currently operates the HellENIc GeoMagnetic Array (ENIGMA), an array of 4 ground-based magnetometer stations in the area of south-eastern Europe (central and southern Greece). Based on one year (2008) of vector magnetic field data, recorded at the various array sites, magnetic response function estimates are inferred at 5 s – 2048 s. The magnetic response functions are then viewed as real and imaginary induction arrows, detecting sharp conductivity boundaries and providing a picture of the geometry of regional conductors. First results from efforts on inversion and modelling of the ENIGMA magnetic response functions will also be discussed.