

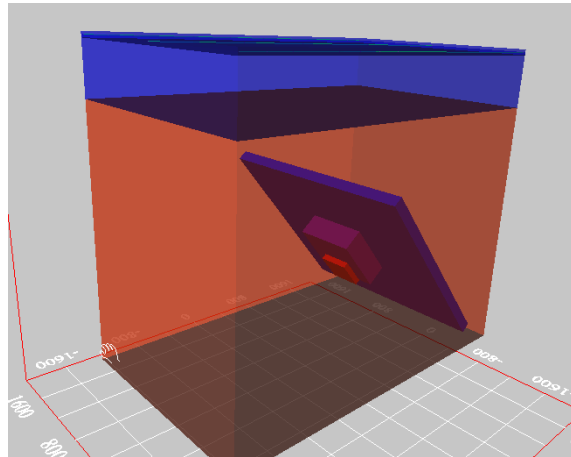
EMIGMA for MT/AMT and VLF-R

For ground, marine and airborne surveys

The natural field interpretation tools are available as an add-on to the EMIGMA Complete package or as a standalone and now as part of our Oil&Gas package.

It allows easy survey design including coordinate systems, geographic survey directions and true electric bipole receivers with actual survey lengths and orientations. Airborne MT as well as ZTEM is allowed.

Also available as add-on with this package is a new version of GBDECOMP decomposition package for XP/2000 including the Groom-Bailey Decomposition. Associated tools are provided for decomposition parameter plotting and fit analyses. The package also has accompanying software to generate synthetic impedances from your model results to allow the decomposition analyses.



Unlimited Survey Size!

DATA IMPORT

- ASCII XYZ data imports as impedance tensors and tippers.
- .tbl format import
- .edi format import
- Easy to organize QCTool import
- Import for ZTEM via .gdb format or .qct format

DATA PROCESSING AND CORRECTION

- 1D digital and spatial filters, 2D spatial filters
- Data Corrector tool combining dynamic spreadsheets and a line plotter for data cleaning, missing data interpolation and simultaneous plotting of different data channels for fast cross-analysis

3D MODELING

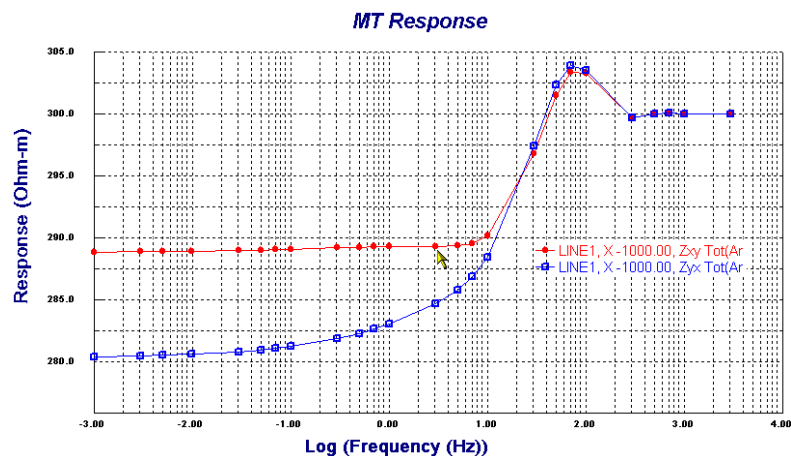
- Fast and accurate 3D simulations: model suite generation and batch mode
- Electric cable and magnetic dipole receivers
- True electric bipole receivers with actual survey lengths
- Unlimited prism, plate and polyhedra targets
Polyhedra: pipes (hollow cylinders with or without lids), ellipsoids, shells, bullets, landmines, drums, spheres, general polyhedra...
- Multiple body interactions
- Topography effects
- Magnetic structure effects
- Ability to handle full contrast between host and bodies
- Interactive 3D model building tool

1D MT INVERSION

- Resistivity depth inversions and 3D volumes
- Multi-layer inversion for up to 100 layers of uniform or non-uniform thickness
- 3D inversion is coming in early 2011.

DATA DISPLAY AND ANALYSES

- 3D data display as profiles, vectors, true 3D surfaces or contoured surface with 3D structure representation
- PEXShow tool - 2D representation of Resistivity/MT inversions with easy-to-switch-to susceptibility and conductivity sections
- Pseudo-sections, depth images and Bostick transformations
- Grids: Natural Neighbor, Delauney Triangulation, Minimum Curvature and Thin-Plate-Splines
- Contours: 2D and 3D surfaces
- Line plots
- Residual plots



GBDECOMP

- Generator of synthetic impedance tensors and noise to be processed with a suite of decomposition algorithms

