EMIGMA 11

relational database

W7 / W8.1/W10/W11

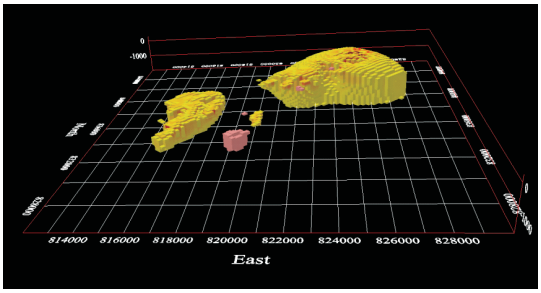
Potential Fields

Ground, Airborne, Borehole, Marine

Magnetics

Data Processing

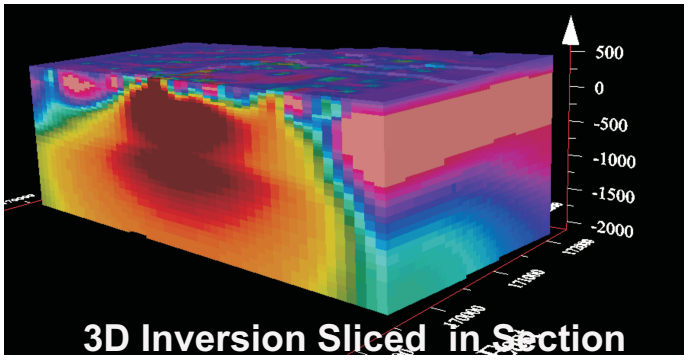
Processing of raw data for marine, ground, borehole and airborne data including drones, UAV, helicopter stinger and towed instruments
Total field, Vector, Gradient, higher order tensor data
Enhanced gridding with rectangular grid cells
Tie Line Corrections
2D FFT/DFT processing for derivatives, continuation, filtering
1D, 2D spatial and digital filters
Trend removal
Analytic Signal,
Reduction-to-Pole including 3 algorithms for low latitudes
Advanced Aeromagnetic Compensation for TMI and Vector data, drone, UAV, helicopter and fixed wing



Focused Inversion Model

Gradients

Gradients from TMI, imported gradients or components
Gradient derivation from multiple sensors, de-rotation
Modeling and Inversion
Enhanced contouring with horizontal gradients



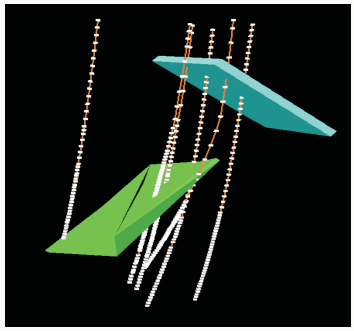
3D Inversion Sliced in Section

Data Display/Analyses/Mapping

Survey and data imaging and contouring
Map import/export, map underlays
Scaled hardcopy maps
3D Surfaces ~ Contours~ Line Plots
2D and 3D .pdf exports

3D Modeling

Fast and accurate 3D simulations
Unlimited prisms and polyhedra targets
Non-linear effects, demagnetization, remanents
Magnetic channelling & magnetic body interactions
Import and exports to CAD software
Simple integration of models with other types of data
The only commercial product offering such accuracy



Borehole Magnetics

3D Inversion

Fast Matrix and Large Matrix techniques, Multi-Processing allowing rapid inversion
Use of gradients and/or vector components, Inversions within Topography
3D inversion volume viewing and exporting, Visual grid setups
3D Extended Euler Solutions with Post-Processing, Inversion for Magnetization Vectors

Processing, Imaging & Interpretation Suite for Mining, Oil & Gas, Near Surface
Exploration, Environmental, UXO, Geotechnical, Delineation

EMIGMA 11

Vista / W7 / W8.1/W10/W11

Potential Fields

Ground, Borehole, Marine

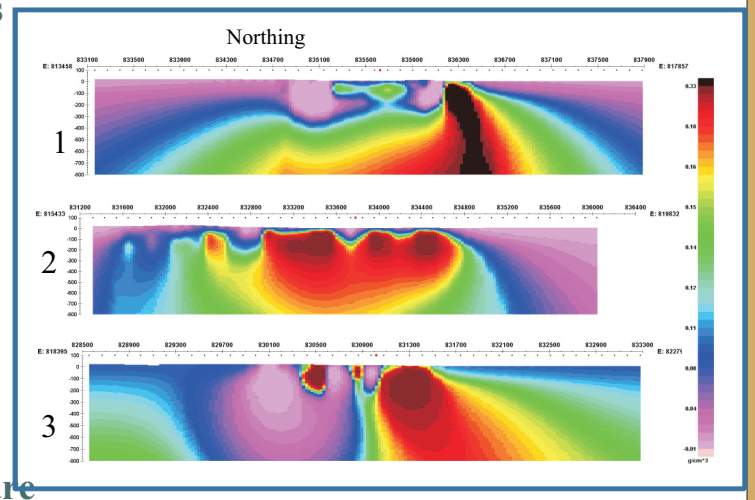
Gravity

Data Processing

Basic gravity corrections
includes QCTool with full gravity reductions
with advanced topography corrections, marine and isostatic corrections
2D FFT processing- derivatives, continuation, filters
1D, 2D spatial and digital filters,

Data Display/Analyses/Mapping

Survey and data imaging and contouring in 3D
2D multi-compoment grids with contouring
and map overlays/underlays with transparencies
Import/Export maps for many applications
Comprehensive Line Plotting capabilities
5 interpolation techniques with user-selectable
aspect ratio for rectangular cells



3D Modeling

Fast and accurate 3D simulations
Unlimited prisms and polyhedral targets
Modeling of variable density topography
3D models with arbitrary strike length
Import and exports to and from CAD software
Simple integration with other types of data

Starting Model built from borehole logs

3D Inversion

Fast Matrix and Large Matrix techniques
Standard Iterative Search technique
3D inversion volume viewing and exporting
Use of gradients in inversions
Inversions within Topography
Visual grid setups
Three types of grid depth definitions
Inversion from profile or gridded data
3D Extended Euler Solutions with Post-Processing

NEW !
Multi-processor 3D Inversion

Processing, Imaging & Interpretation Suite

Exploration, Environmental, Geotechnical, Delineation, UXO

sales@petroseikon.com