

# EMIGMA 9.5

relational database

for XP / Vista / W7 / W8.1/W10

*Potential Fields*

*Ground, Airborne, Borehole, Marine*

## 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

## Gradients

Gradients from TMI, imported gradients or components

Gradient derivation from multiple sensors, de-rotation

Modeling and Inversion

Enhanced contouring with horizontal gradients

## 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*

## 3D Inversion

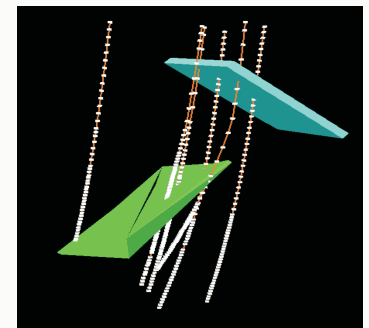
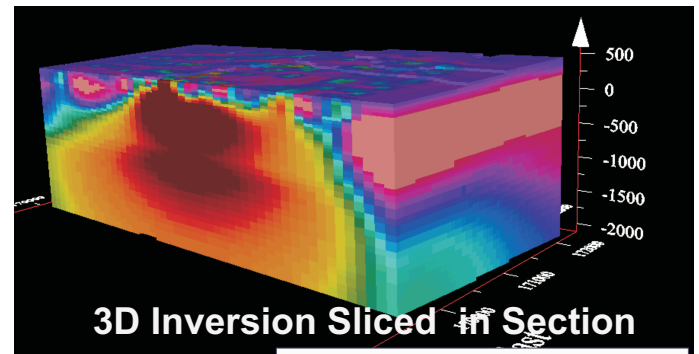
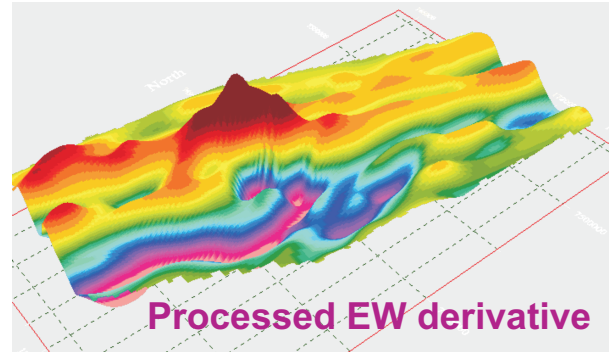
Fast Matrix and Large Matrix techniques, Multi-Processing allowing rapid inversion

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

# Magnetics



Borehole Magnetics

## Processing, Imaging & Interpretation Suite for Mining, Oil & Gas, Near Surface

Exploration, Environmental, UXO, Geotechnical, Delineation

# EMIGMA 9.5

*for XP / Vista / W7 / W8.1/W10*  
**Potential Fields**

**Ground, Airborne, Borehole, Marine**

## 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-component 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

## 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

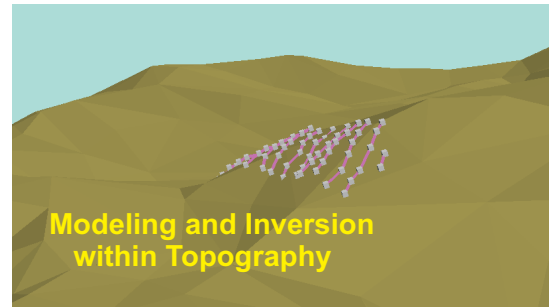
Inversion from profile or gridded data

3D Extended Euler Solutions with Post-Processing

# Gravity



**River Basin Model**

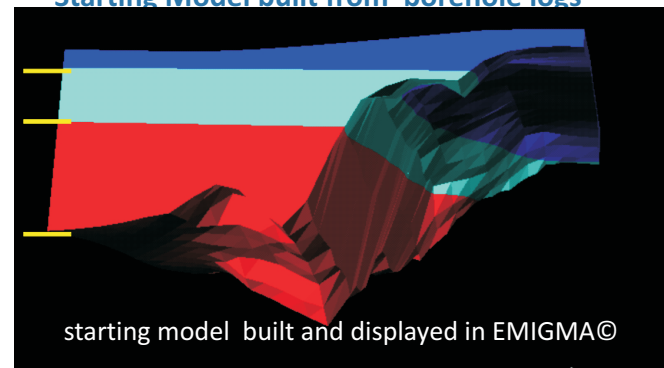


**Starting Model built from borehole logs**

depth = 200m

depth = 593m

depth = 1365m



**NEW !**

**Fast Compiler 3D Inversion**

## **Processing, Imaging & Interpretation Suite**

**Exploration, Environmental, Geotechnical, Delineation, UXO**