



EMIGMA V9.x Premium and Professional Series

EMIGMA for Potential Fields

EMIGMA for Potential Fields offers a combined Gravity and Magnetics package.

The Gravity package includes a license to **QCTool**, which is used to perform basic corrections such as drift, tidal, latitude, free-air, Bouguer, terrain and now Eötvös. However, a key feature of this package is the novel techniques used to perform topographic corrections. This technique uses a topographic grid to produce a 3D surface, which is then split into tetrahedral cells to compute the gravity contribution of each cell by accurately integrating over the volume grid cell topped with the 3D surface. This results in improved accuracy for large cells, for data locations on the topography and over areas with very significant topography unlike traditional methods.

For advanced processing and interpretation of gravity data, EMIGMA offers a comprehensive suite of features for creating FFT-suitable grids, derivative calculation and many other advanced processing tools, improved visualization and modeling capabilities including import and export of models to DXF (AutoCAD), ASC (Vulcan) and STR (Surpac) formats as well as enhanced 3D inversion techniques. For a detailed overview, see **EMIGMA for Gravity**.

The Magnetics package offers various tools for importing, processing and interpretation of DC magnetic and gradient data from ground, airborne and borehole surveys. While basic magnetic corrections including base station correction, IGRF corrections and tie line corrections are supported in QCTool/EMIGMA, the advanced FFT-processing tools such as derivative calculation, upward/downward continuation and improved Reduction-to-the-Pole techniques make this package truly unique. Additional features of this license include forward simulation capabilities, encompassing both a traditional approach, known as Born or Weak Scattering, as well as a more evolved and accurate approach to include the effects of magnetic field gathering, termed LN or Strong Scattering. Multiple 3D inversion techniques, depth estimation tools and a host of other magnetic modeling features make this a very powerful interpretation tool. For more information, see **EMIGMA for Magnetics**.

This combined package offers exceptional value for processing and interpretation of Potential Field data at a very economical price!

**Unlimited Survey Size with Premium!
50,000 data points per survey with Professional! (ground surveys only)**

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