

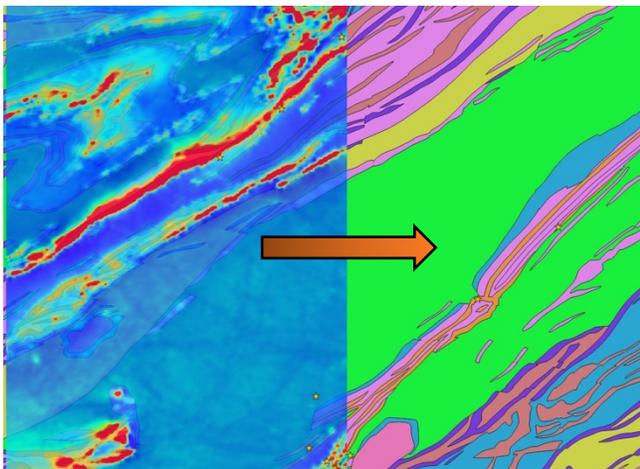
AI For Magnetic Data Structural Interpretation

Unlock More Value in Your Data

Computational Geosciences offers an innovative solution for geological mapping and structural interpretation from airborne magnetic data. Automated structural interpretation from airborne magnetic datasets allows for:

- Rapid first order interpretation of major geologic structures and units
- Increased data coverage for geologic mapping
- Valuable new information from remote areas

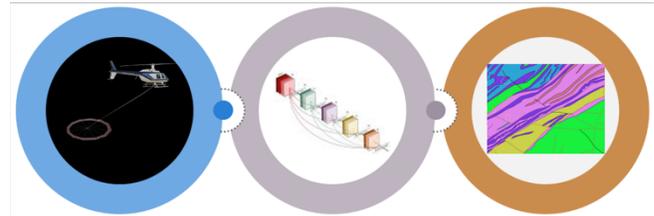
Regional aeromagnetic surveys have become commonplace as an exploration tool for mapping structure and geology. The datasets can quickly and efficiently be collected at scale, and often contain rich information which can be manually interpreted, used to generate secondary data products (ie: derivative maps), or even inverted in 3D to reveal structure at depth.



Convert your magnetic data grids into valuable geological maps for your next project

Expert Structural Interpretation

The structural and lithological interpretation of such datasets is often the most expensive task in post-processing, both in terms of dollar value and time spent. Furthermore, access to expert individuals with the necessary background and knowledge to properly interpret a magnetic dataset is often quite restrictive, since each locality can require different experience.



A Scalable AI Solution

CGI introduces a method by which a deep convolutional neural network is trained to interpret major structural boundaries and identify key lithological units from analyzing magnetic data grids. The algorithm is trained using example pairs of magnetic data and expert interpretations, such that it is able to reproduce the results on new uninterpreted data, thus greatly increasing the ability to quickly and efficiently process magnetic datasets.

Applied in combination with a knowledgeable team, this product can assist in defining structural controls for your next exploration product and expedite the interpretation of your regional datasets.

CGI's leading-edge AI algorithms are versatile and innovative. These services, combined with CGI's extensive experience and expertise in geophysical modelling, helps you get the most value from your data in an effective and cost-efficient way.

