

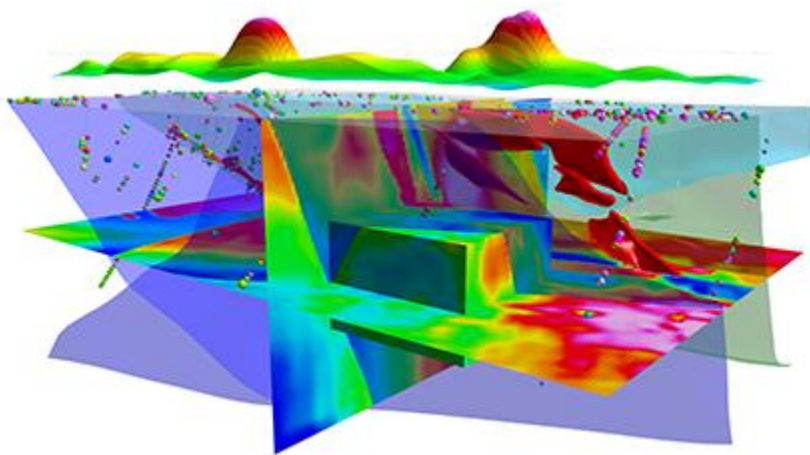


Mira Geoscience
...modelling the earth

GOCAD® Mining Suite – Advanced Geophysics Package

GOCAD Mining Suite is the industry-leading platform for 3D integrated modelling of geological, geophysical, geochemical, structural, and geotechnical data. It specializes in the modelling of challenging environments within the realms of exploration, resource assessment, mine sites, and geotechnical modelling. It is the leader in 3D geological and structural modelling; excelling where drillhole control is minimal or non-existent, as well as in geologically-based 3D geophysical modelling and inversion, complex stratigraphic and fault modelling, geotechnical rock mass modelling and hazard assessment.

Use *all* of your data, *all* of the time



“I’ve had a chance to use SKUA (Implicit Modelling) on an active project and compare the results with conventional modelling. Generally, I’ve found most software looks good in the packaging and produces rather underwhelming results – SKUA was completely the opposite, I’m completely gobsmacked with how well it created an extensive, realistic regional model with a few scraps of a priori information.”

*-Adam Woolridge, Director
– Xpotential Geoscientific Consulting*

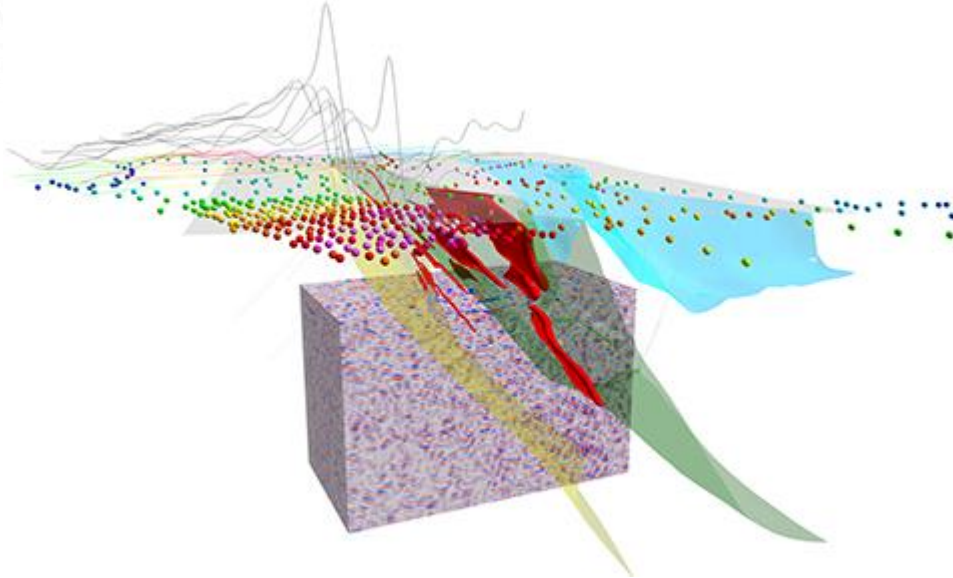
GOCAD Mining Suite is configured into packages specific to the minerals exploration and mining industry. The packages are designed to suit the specific requirements of geologists, geochemists, geophysicists, structural geologists, and geotechnical engineers. They are designed for integrated 3D model-building across all commodity types and geological environments, leveraging the core ability to import, create, and integrate objects of all types in a single environment. It is a true 3D GIS, where both vector objects (points, curves, and surfaces) and raster objects (grids/voxets) can be built, imported, edited, queried, and visualized. This Common Earth Modelling platform allows technicians, geoscientists, engineers, and managers to develop, share, and collaborate on data, information, and models regardless of their respective discipline.

We have a package configured for your needs:

Role	Geoscience Exploration Package	Advanced Interpretation Package	Geotechnical Modelling Package	Integrated Modelling Package	Advanced Geophysics Package	Stratigraphic Modelling Package
Technician	✓					
GIS Technician	✓					
Geomodeller	✓	✓				
Geochemist		✓		✓		
Geologist	✓	✓				✓
Geophysicist					✓	✓
Structural Geologist		✓		✓		✓
Resource Geologist		✓		✓		✓
Geological Engineer			✓			
Geotechnical Engineer			✓			

Advanced Geophysics Package

Users: Geophysicists



Primarily for geophysicists, but also has exceptional functionality for structural geologists. Includes the full capability of the Advanced Interpretation Package plus specific functionality for geophysical inversion, interpretation, and rapid structural geology incorporation, which is critical to the constrained geophysical inversion process. Includes unique geologically-driven inversion software (VPmg).

GOCAD 3D Mining Viewer + Foundation Modelling Module

Multi-Core Support for Foundation Modelling Module

Maps, Cross-Sections, and Log Display Module

Mining Utilities Module

3D-GIS Module

Well Correlation and Stratigraphic Analysis Module

Interpretation Modelling Module

Velocity Modelling and Time-to-Depth Conversion Module

+

SKUA Structure with Multi-Core Processing Module

- *Implicit modelling for stratified geological settings.*
- *Builds complex fault networks and stratigraphic horizons.*
- *Allows overturned folds as well as reverse and dying faults.*
- *Works in tandem with a stratigraphic column and includes depositional relationships between formations.*
- *Leverages multi-core processing capability for rapid processing.*

VPmg Package Module

- *Constrained inversion code operating directly on the geologic model.*
- *3D gravity and gravity gradient inversion and forward modelling.*
- *3D magnetic and magnetic gradient inversion and forward modelling.*
- *3D self-demagnetization.*

VPem1D Module

- *Airborne 1D TEM inversion program with the same geometry inversion approach used by VPmg.*

Potential Fields Module

- *Modelling and inversion for gravity and magnetics.*
- *Leverages 3D geological models, structure, geometry, and physical properties as inversion constraints.*
- *Works seamlessly with VPmg and UBC-GIF MAG3D and GRAV3D inversion codes.*

Electromagnetics Module

- *Modelling and inversion for electrical and electromagnetic data.*
- *Electrical: Inversion, forward modelling, and editing of 2D and 3D DC Resistivity and Induced Polarization (IP).*
- *Electromagnetics: Inversion, forward modelling, and editing of time-domain airborne EM.*
- *Leverages 3D geological models, structure, geometry, and physical properties as inversion constraints.*
- *Works seamlessly with VPem1D, VPem3D as well as UBC-GIF DCIP2D, DCIP3D, EM1DTM, EM1DFM inversion codes.*

Seismic Module

- *3D forward modelling for hard rock environments (2D and 3D synthetic seismograms).*
- *Models seismic reflections data using 3D geological and physical properties models.*
- *2D forward modelling and inversion provides straight and curved ray time-travel within discretized 2D planes.*