

Xplorpac – Geological Database and Visualisation System

Gemcom Surpac Xplorpac Edition is a flexible suite of 3D visualisation and modelling tools for integrating and presenting geological information. With Xplorpac, users experience ease of management for drillhole data, surface samples, geochemistry and geophysical information. Using open database technology, Xplorpac allows users to connect to an existing database or create a new one.

Geoscientists looking for an easily integrated software tool choose Xplorpac because it allows them to visualise a wide range of raw data formats and then create maps, sections, models and volume estimations. Data relationships may be complex, but 3D display helps to effectively communicate targeting concepts to management.

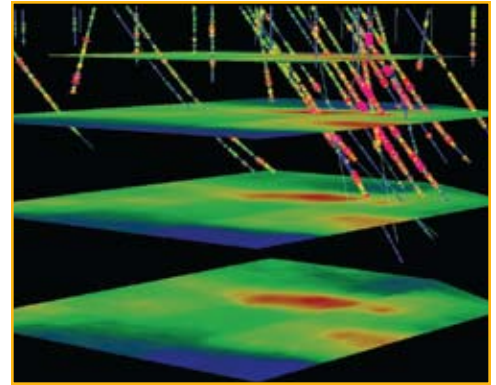
Output Display Options

Xplorpac offers a fully integrated 3D graphics window with multiple layer control and view ports. Standard data display options include contouring, colour shading, plan view maps and cross-sections at any orientation. Xplorpac has an AutoPlot function, a full range of custom plotting tools and can generate graphical core log reports, maps and sections in professional hard copy. Users may include geological symbols, legends, title blocks and corporate logos. Xplorpac allows presentation of valuable exploration data, including 3D image capture, aerial photograph draping and animated flyovers. Users can also transfer images with ease to other packages for web site publishing or slide show presentations.

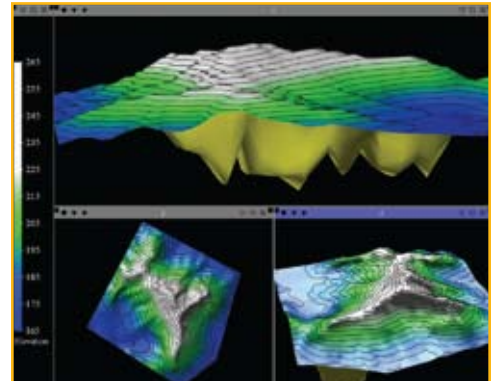
Data Analysis and Interpretation

Xplorpac comes with a full range of analytical and modelling tools including digital terrain modelling (DTM) for constructing physical surfaces such as topography, faults or geologic contacts. Surfaces may be contoured, colour shaded and sliced in any orientation. Grid modelling and interpolation options can be used for normalising data distribution. A geologist may gain greater perspective by draping a geochemical signature over a surface DTM.

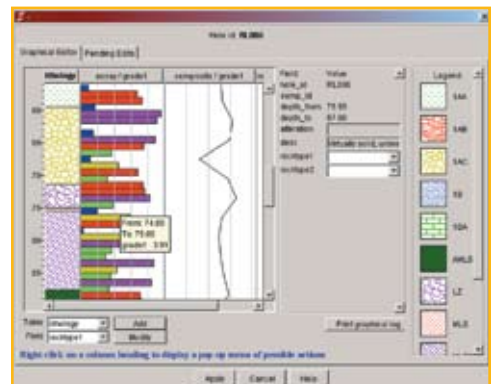
Viewing drillhole data for the entire trace of a hole is a core function of the 3D visualisation window. The user controls which important fields to display, such as lithology, alteration or assay results. Solid modelling (or wireframing) is a powerful way to define the ore zone's 3D spatial extent and the way it interacts with other objects. Xplorpac goes the extra step by including several volume calculation tools, such as a polygonal reserves method, volumes between surfaces and within defined areas.



Drillholes and induced polarization (IP) chargeability plans at Oyu Tolgoi Project. Image courtesy of Ivanhoe Mines Ltd.



Xplorpac user interface showing multiple viewports of surface topography, contours and an ore body model.



Graphical interface to individual drillhole data showing legend, patterns and graphs.

Reporting

Xplorpac accepts data in many formats, including the ability to link into existing Microsoft Access, Oracle and Microsoft SQL Server databases (and other ODBC compliant types) so that visualisation can begin immediately. Files from MapInfo, MicroStation and AutoCAD are also supported. Database management tools allow the user to create and delete databases, load and unload text data and check the integrity of the data in a database. A variety of interactive drillhole functions allow the user to extract data for visualisation and plotting. The interactive compositing functions allow the user to display, edit and report composited values for multiple intervals down a number of drillholes. Multiple plans and sections can easily be extracted for viewing and plotting. Statistical and mathematical functions can be performed on nominated fields and a number of automated reporting functions are included.

Surpac Xplorpac Edition Modules

CORE FEATURES AND FUNCTIONALITY	
3D Graphics Display	Sophisticated and powerful 3D modelling environment
Plotting	Create, preview, annotate and print user-defined plots
CAD Tools	Create and work with point and line data
Wireframe (DTM) Tools	Create and work with wireframe surfaces and sub-surfaces
Geological Drillhole Database	Manage, query and display drillhole and assay information
Basic Statistics	Tools for general data analysis, min, max, mean
Scripting and Automation	Record / playback macros and write custom workflows
Language Support	English, Chinese, Russian, Spanish, French and German
Online Help / Tutorials	Documentation, examples, tutorials and data
OPTIONAL MODULES	
Autoplot	Quick plots to scale with basic user-defined options
Geostatistics	Tools for trend analysis, variogram modelling and validation
Solids Modelling	Create wireframes of geological features and underground workings
Data Plug-ins	Read and exchange data with multiple geoscience applications
Network Licence Manager	Share and manage licenses across the network

For more information email surpac@gemcomsoftware.com.

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