



Software for Subsurface
Exploration





“Geosoft’s Target software has given us superior visualization capabilities for seeing, and showing, what we do as geologists. We found the Target strip log function to be a very effective tool for giving potential investors drillhole data and a perspective on one page.”

Mark Le Grange, Platreef Resources



Why Target?

Target is essential exploration software that provides a complete solution for drillhole projects from grass roots to near mine exploration.

For earth explorers that work with multidisciplinary datasets, geology, geochemistry and geophysics, there is no better software choice. Target™ built on the Geosoft® Oasis montaj™ software platform, which is the industry standard for working with exploration geoscience data.

You can also extend your Target software with the robust Geosoft Geochemistry extension. Target Geochemistry provides a complete geochemical solution, from raw data import, QA/QC and mapping to advanced statistical analysis.



Use Target to:

- Integrate boreholes with other surface data, such as geology, geochemistry or geophysics through plan, profiles and section map views.
- Plot data down holes in plan or sections: using values, text, profiles, bar plot/ histogram and lithological patterns.
- Update drillhole data and recreate sections and plans with one mouse click.
- Present geological, geochemical, geophysical and geotechnical data in a single graphic display.
- Create graphical drill logs with up to 32 different types of data.
- Display your data in 3D with drill traces, surfaces and 3D models.
- Combine satellite imagery or air photos with topography in 3D views.
- Generate surface grids and section grids using robust methodology such as minimum curvature, kriging, and tinning algorithms.
- Enhance surface mapping with interval and exact level contouring.
- Drag and drop interpretations from sections to your 3D view.

From Planning To Drilling

Display a few drillholes at the early stage of an exploration program in 3D, right through to thousands of drillholes during the advanced stages of exploration drilling. Drape satellite images or geology layers overtop a digital elevation model. Add surface data and potential drill collars to the 3D view. Display drill traces intersecting sections from geophysical inversions to determine if a selected drill target was intersected. Easily display mineral horizons or sedimentary units as layers within the 3D view.

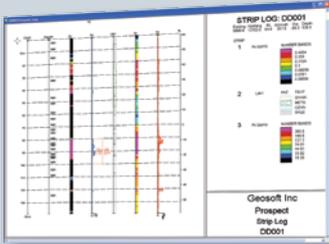
One Simple Interactive Environment

Target makes it simple for you to manipulate a huge volume of surface and subsurface geochemistry, geophysics, and geology data within a single transparently-linked interactive 3D environment. Plot geochemical surface data and query geological mapping regions. Then integrate all available data at every stage of an exploration program to enhance your understanding of underlying subsurface geology, verify assumptions, and share ideas with internal and external teams.

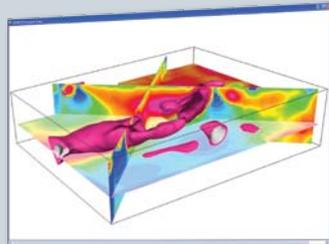


"With each release we remain focused on usability and productivity advances within the Geosoft Target environment, allowing us to put more power, flexibility and control into the hands of our clients. This focus is the foundation of our vision to help geoscientists recapture time lost to handling and working with data, so they are free to explore."

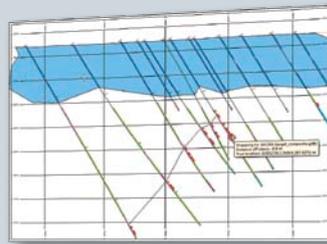
Louis Racic, Geosoft Product Management Director



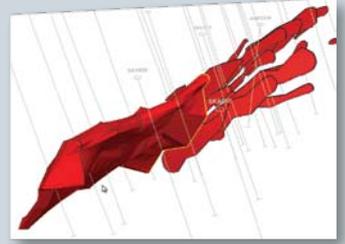
Display your data in strip logs, sections or 3D view.



Generate sections, plans or isosurfaces.



A new streamlined workflow makes it easy to digitize geological interpretations on section and plan maps.



An easy-to-use wireframing interface that enables you to build 3D subsurface geological models.

Core Capabilities

Subsurface 3D Tools

The subsurface 3D viewer can interactively zoom, pan, rotate, slice and otherwise manipulate 3D views of drillholes and geophysical models represented by 2D grids, Surpac STR or DTM and Datamine Wireframe models.

Data Import

Easy to use import wizards enable you to import drillhole data from a wide range of data sources. These include ASCII, ODBC and acQuire. You can also import data from CAD, DXF formats and MapInfo. Data validation when you import, ensures the integrity of any subsurface information you generate.

Drillhole Plans and Sections

Routinely visualize thousands of drillholes at a time. Easily create and recreate drillhole sections and plans, using Graphical User Interfaces (GUI) with sensible default settings. Recreating a section or plan is as easy as a few mouse button clicks, because the parameters of all plans, sections and graphic logs are saved to the map itself.

Powerful Data Processing

Built on Geosoft's industry-leading Oasis montaj software, Target provides powerful spatial data mapping and processing capabilities for efficiently working with the large volumes of data used in mineral exploration.

An advanced coordinate projection engine ensures full, on the fly reprojection support for all datasets, allowing you to combine multiple datasets having different coordinate systems.

Dynamic Data Linking

Analyze and interrogate drillhole data in real time via dynamically linked sections, plans and database views.

Surface Mapping

Easy to use design wizards and function rich gridding routines simplify the creation of grids and contour maps. They use point sample datasets (such as stream, soil, rock and geophysical data) from a variety of raw data sources (ASCII, Excel, Access, and acQuire).

Surface and Drillhole Data Integration

Combine drillhole data with all other surface data and information to create detailed, integrated surface and subsurface maps.

ESRI Integration

ESRI technology is built into Oasis montaj, ensuring the seamless creation, viewing and sharing of ArcGIS MXD and Geosoft Map files between Geosoft and ArcGIS users.

Strip Log and Fence Diagram Visualization

Easily display your drillhole data in strip logs or fence diagrams.

Map Snapshots

Quickly and easily save new potential target locations and share with colleagues.

3D Gridding

Easily create block models for downhole data using anisotropic kriging or 3D IDW algorithms.

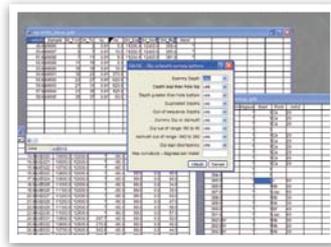
Digitizing geological interpretations

Powerful digitizing tools enable you to combine your expert knowledge with real data to draw accurate geological interpretations on section and plan maps. When digitizing interpretations, you can snap to the true X, Y, Z drillhole data locations or to the points that are projected on the section plane, providing the flexibility and control you need to create more realistic and accurate interpretations. You can save all the interpretations for a drillhole project to a single Geosoft string (geostrng) file, making it easy to manage interpretations and to share models with others.

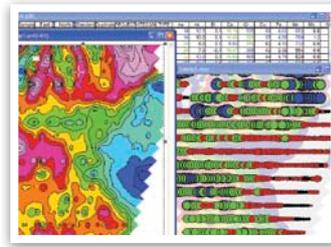
Wireframing

Geosoft provides an easy-to-use wireframing interface that enables you to build 3D subsurface geological models by joining section and plan map interpretations stored in Geosoft string files. Simply click on the features you want to include and a wireframe model is created from the shapes. Polygon features form closed surfaces or bodies and polyline features create open surfaces. Flat, conical or rounded ends can be used to close the open ends of a wireframed polygon feature.

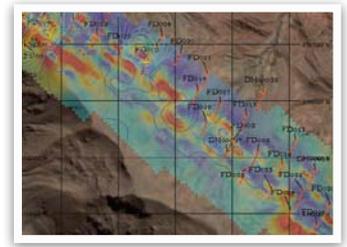
Collaborate on 3D modelling projects by sharing the interpretations as Geosoft string files and the wireframing results as Geosoft geosurface files. When saving a wireframe to a Geosoft surface (geosurface) file, the total surface area is reported for open surfaces and total volume is reported for closed bodies. Closed geosurfaces can be used as variables in voxel math expressions to clip voxels or to create constraints to use in inversions.



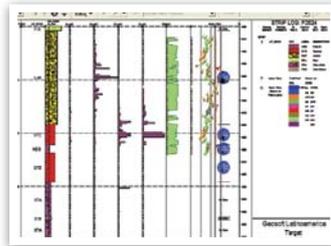
Import and QC data.



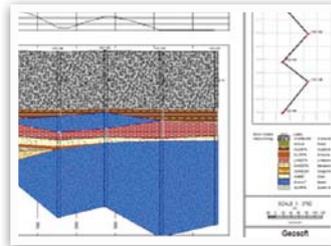
Create surface grids and contours.



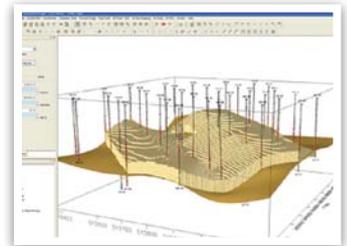
Integrate with DEM.



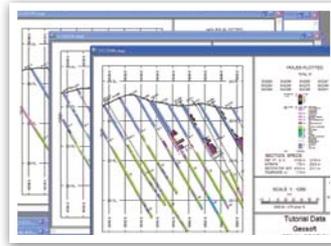
Create strip logs.



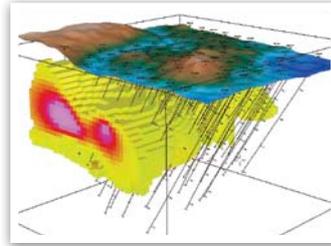
Create fence diagram.



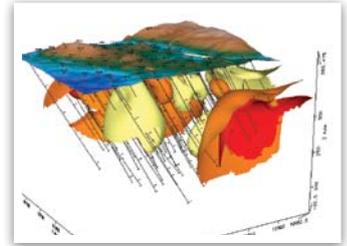
Display geology voxels.



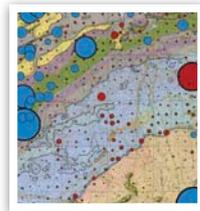
Create multiple section plots.



Display voxels in 3D drill plots.



Generate isosurfaces from voxel data.



Target Geochemistry

Provides QA/QC tools, analytical tools and advanced mapping techniques for surface and subsurface geochemistry. Easy to use Standards and Duplicates handling simplifies the quality control process. Multi-element geochemistry analysis is made simpler with interactive histograms, scatter plots, probability and ternary plots to identify outliers and populations. This extension also includes SEMPlot, a simple to use workflow for analyzing indicator mineral grain geochemistry in diamond exploration.



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