GEOSOFT

Target for ArcGIS

Subsurface Geology

An extension for Esri ArcGIS
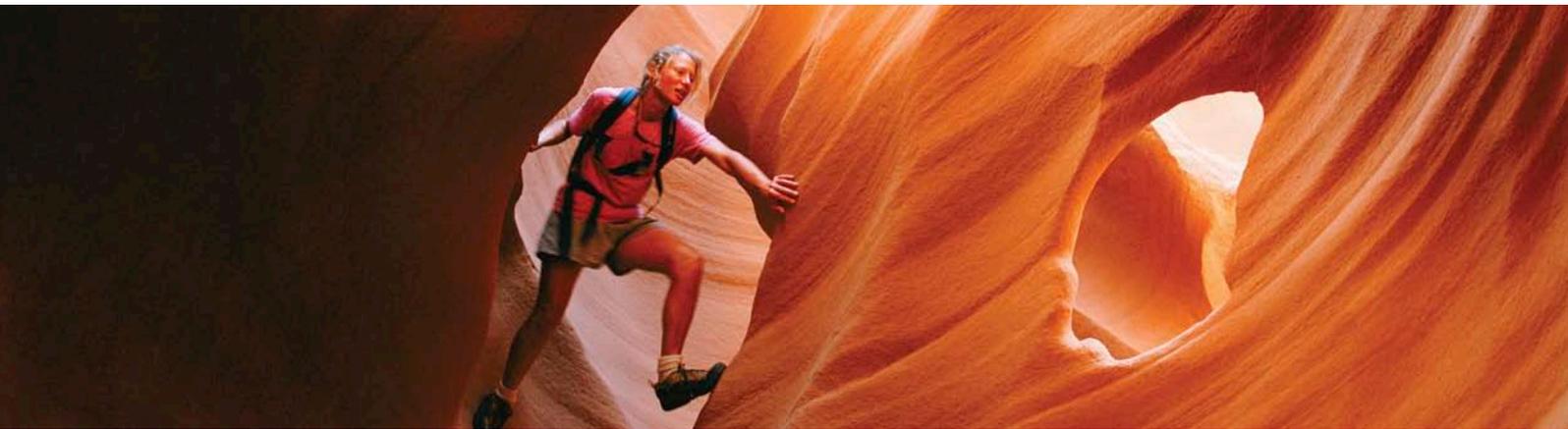
Why Target for ArcGIS?

Target for ArcGIS, a surface and drillhole mapping extension to Esri's ArcGIS software, simplifies the compilation, mapping and analysis of geospatial data within your GIS environment.

The ideal solution for geologists, exploration managers and environmental scientists who require advanced drillhole capabilities and visualization within ArcMap, Target for ArcGIS™ is particularly valued for its ability to incorporate and produce drillhole plans, sections and graphic strip logs within Esri's ArcMap environment.

Process large volume drillhole data with ease, and generate professional quality maps for presentation. Target for ArcGIS adds powerful spatial data mapping and processing capabilities to your GIS.

Use Target for ArcGIS to:

- Integrate borehole positions with other surface data such as geology, geochemistry or geophysics through plan, profiles and section map views.
- Recreate sections and plans with a few mouse clicks.
- Automate legend generation, including lithology patterns.
- Present geological, geochemical, geophysical and geotechnical data in a single graphic display.
- Create up to 32 logs with data and graph type selections in each plot.
- Display your data in 3D with drill traces, surfaces and 3D models.
- Generate surface grids using robust methodology such as minimum curvature, kriging, IDW and tinning.
- Enhance surface mapping with interval and exact level contouring.
- Generate a voxel (3D grid), incorporating the strike, dip and plunge from your geology.
- Display isosurfaces from your voxels.

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 on sections from geophysical inversions to determine if a selected drill target was intersected. Easily display isosurfaces from any voxel in your 3D view.

One Simple Interactive Environment

Target for ArcGIS 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.

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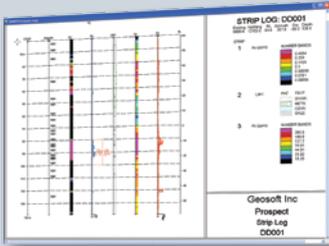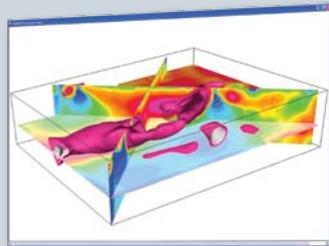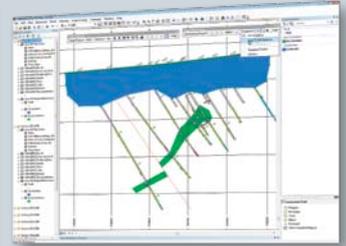
Display your data in strip logs, sections or 3D view.

Generate sections, plans or isosurfaces.
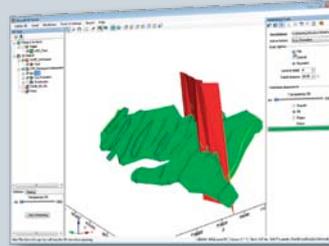
Build wireframes from section interpretations.

Digitizing workflow for creating geological interpretations.

Core Capabilities

Target for ArcGIS includes 3D voxel and isosurface generation and visualization, and supports common mine planning systems.

Subsurface 3D Tools

It's simple to visualize and analyze subsurface drillhole and borehole geology data in 3D, including 3D voxel visualization within an Esri environment.

The subsurface 3D viewer can spin, interactively zoom, pan, rotate, slice and otherwise manipulate 3D views of drillholes and geophysical models represented by 2D grids.

It is compatible with major mine planning formats, Surpac STR or DTM and Datamine Wireframe models, allowing you to easily update, modify or enhance data. Import commonly used mine planning formats, block models and surfaces, such as: Datamine, Surpac, GOCAD, Micromine, Gemcom, Minesight, UBC, Vulcan and Leapfrog.

You can create vertically or horizontally exaggerated perspectives to provide clearer views of widely spaced data.

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 and GIS packages such as Microstation, DXF formats and MapInfo. Data validation on import ensures the integrity of any subsurface information you generate.

Data Interchange – maximize your datasets to their full potential.

Drillhole Plans and Sections

Routinely visualize thousands of drillholes at a time. Easily create and recreate drillhole sections and plans using intuitive workflows and sensible default settings.

Recreating a section or plan is as easy as a few mouse button clicks, as the parameters of all plans, sections and graphic logs are saved with the map itself.

Draw interpretations on sections and show in a 3D view or export to a 3D file.

Powerful Data Processing

Target for ArcGIS is powered by Geosoft's industry-leading processing engine for handling large volumes of exploration data within the ArcGIS environment.

Dynamic Data Linking

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

Surface and Drillhole Data Integration

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

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

Strip Log and Fence Diagram Visualization

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

Professional Map Production

The full-featured dynamic contouring algorithm with gradient feathering and extensive labelling control provides professional quality presentation. It's easy and quick to create gridded maps, surface maps, posted value maps, sublocation maps, and many more varieties.

Target for ArcGIS includes 3D voxel visualization, support of common mine planning system formats and Unicode multi-language support.

Built-In Data Access Technology

For complete investigation and informed decision-making, use Seeker to find, display and extract more data from a variety of data servers. You can search internal as well as public servers, including DAP and ArcIMS within the ArcGIS environment.

### Digitizing Geological Interpretations

A streamlined workflow makes it easy to digitize geological interpretations on section maps using the native ArcGIS editing tools. You can save all your interpretations to a single Interpretations Geodatabase, making it easier to manage and to share geological models with colleagues.
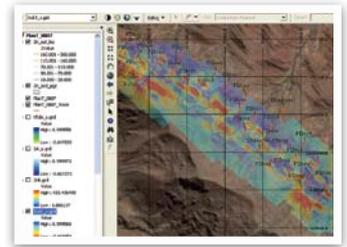
Wireframing

An easy-to-use wireframing interface that enables you to build 3D subsurface geological models by joining section interpretations stored in a Target for ArcGIS Interpretations Geodatabase. Simply click on the features you want to include and a wireframe model is created from the shapes.
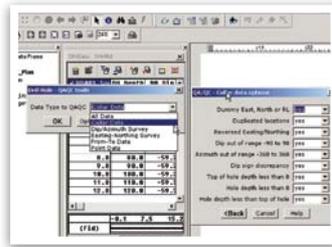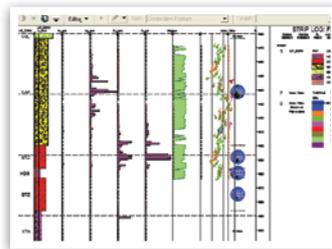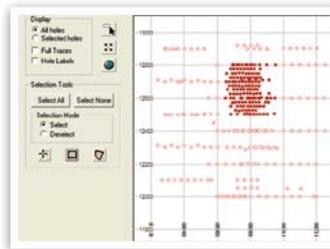
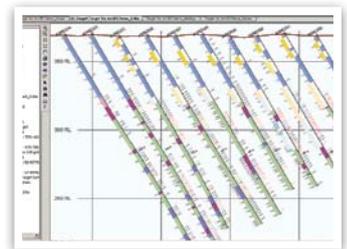Import and QC data.
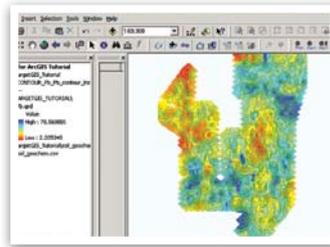
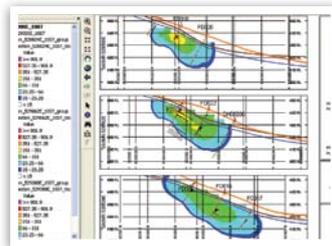Create surface grids and contours.
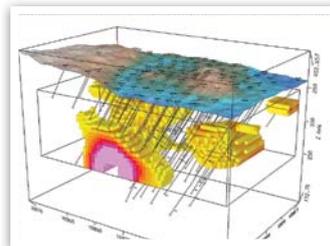

Integrate with DEM.

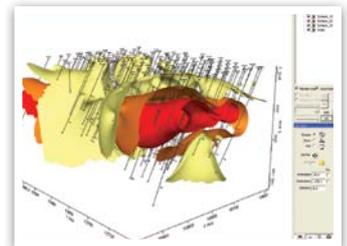Create strip logs.

Select drillhole of interest.

Display drillholes in section plots.

Create multiple section plots.

Display voxels in 3D drill plots.

Generate isosurfaces from voxel data.

freedom to explore

Geosoft Inc.
Queens Quay Terminal, 207 Queens Quay West, Suite 810, PO Box 131 Toronto, ON Canada M5J 1A7
+1 800 363-MAPS, explore@geosoft.com, www.geosoft.com

International Offices:
Geosoft Africa Ltd., Geosoft Australia Pty. Ltd., Geosoft Europe Ltd., Geosoft Latinoamerica Ltda., Geosoft (USA) Research Inc.