



DATAMINE



DISCOVER

Release Notes

Discover for ArcGIS Pro 2.1

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The product described in this documentation may be connected to, and/or communicate information and data via, a network interface, which should be connected to a secure network. It is your sole responsibility to ensure a secure connection to the network and to establish and maintain appropriate measures (such as but not limited to the installation of firewalls, application of authentication measures, encryption of data, installation of antivirus programs, etc.) to protect the product, the network, your systems, and the interface against any kind of security breach, unauthorised access, interference, intrusion, leakage, damage, or corruption or theft of data. We are not liable for damages or losses related to any such security breach, unauthorised access, interference, intrusion, leakage, damage, or corruption or theft of data.

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Overview

Built as a plugin to ArcGIS Pro, Discover is a comprehensive package for the importation, centralisation and analysis of geosciences data, whether you are conducting mineral exploration, or environmental assessments. With Discover, you can import numerous geoscience specific data types, create cartographic quality drillhole plans and sections, as well as view all of your data in 3D. ArcGIS Pro has the unique ability to switch seamlessly from 2D to 3D GIS environments. You also have the flexibility to web share all of your 2D and 3D scenes to members within your organisation or the general public.

Import drillhole data from numerous different data repositories and seamlessly refresh data as new data becomes available. Create legends to apply to all of your ArcGIS pro data types: surface, drillhole, line or point data.

Produce stunning cartographic quality drillhole section and plans. Create section templates to manage all of your section data and styling in 2D or 3D to effortlessly keep all section data in standard formats and styles across your project. Digitise data and register images on section and seamlessly send this to 3D. Visualise all of your data in 3D by importing 2D and 3D data from a wide variety of common mining data formats.

Technical Support and Further Information

If you are a licensed Discover for ArcGIS Pro user, you can request support via the Support Portal (<https://www.dataminesoftware.com/support/>) or by emailing support.discover@dataminesoftware.com.

Release notes for other versions of Discover for ArcGIS Pro are available via the Support Portal.

Discover for ArcGIS Pro 2.1

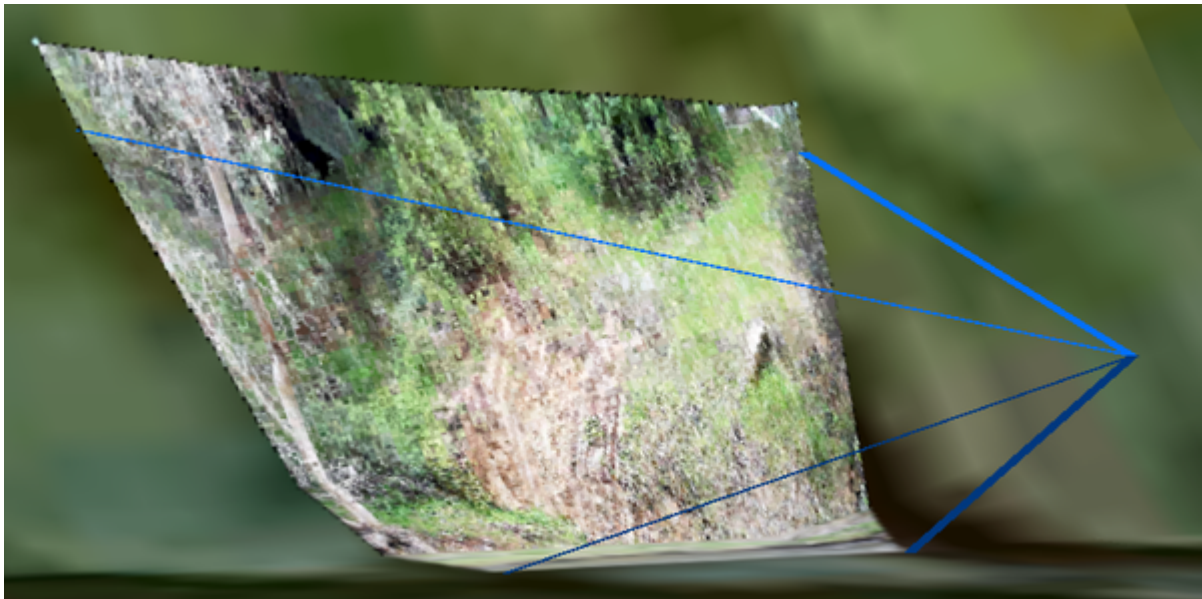
Note: This version of Discover for ArcGIS Pro is compatible with ArcGIS Pro 3.0 and 3.1.

New Features

Outcrop Mapping

The Outcrop Mapping functionality lets you create Outcrop Mapping projects with template tables that you can annotate in the field. The Outcrop Mapping project can be appended to a Mobile project, which you can export to a mobile device.

You can take pictures of outcrops in the field and annotate them at the face using your mobile device. The outcrops can then be imported back to the desktop and draped on a surface in 3D or as 2D-sections based on the location data and other image metadata generated by the mobile device.



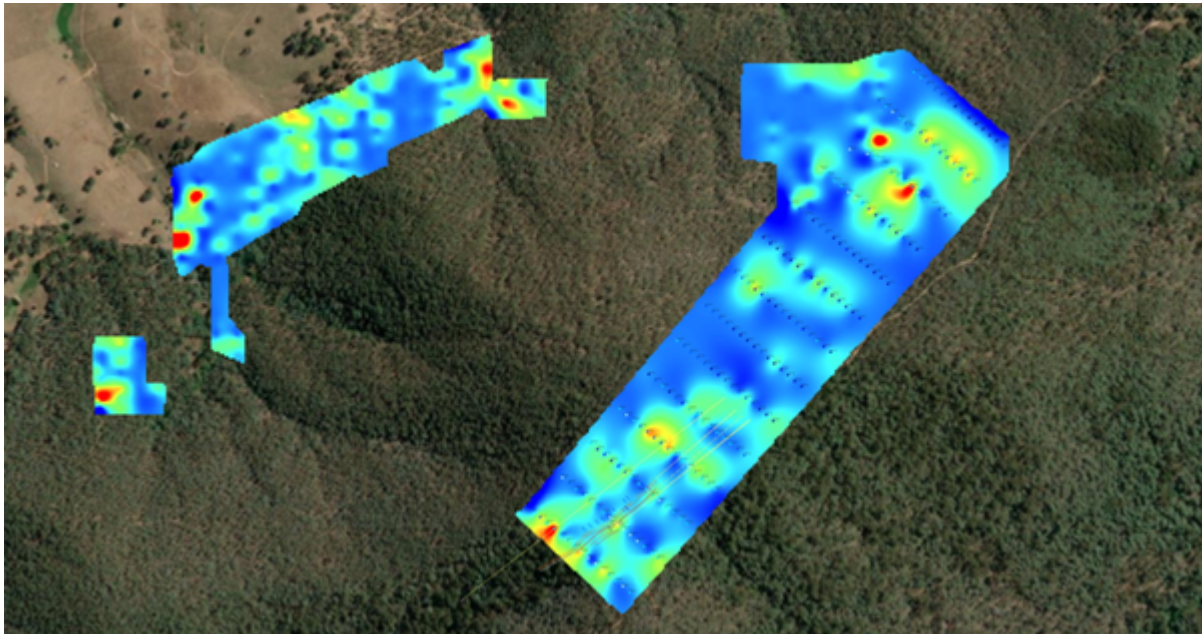
Raster Interpolation

Create single or multi-banded rasters from vector data based on multiple variables.

The raster can be colored by stretch or RGB. Color ramps from common geophysical formats can be imported from CLR, LUT or TBL files. The following methods for raster interpolation are available:

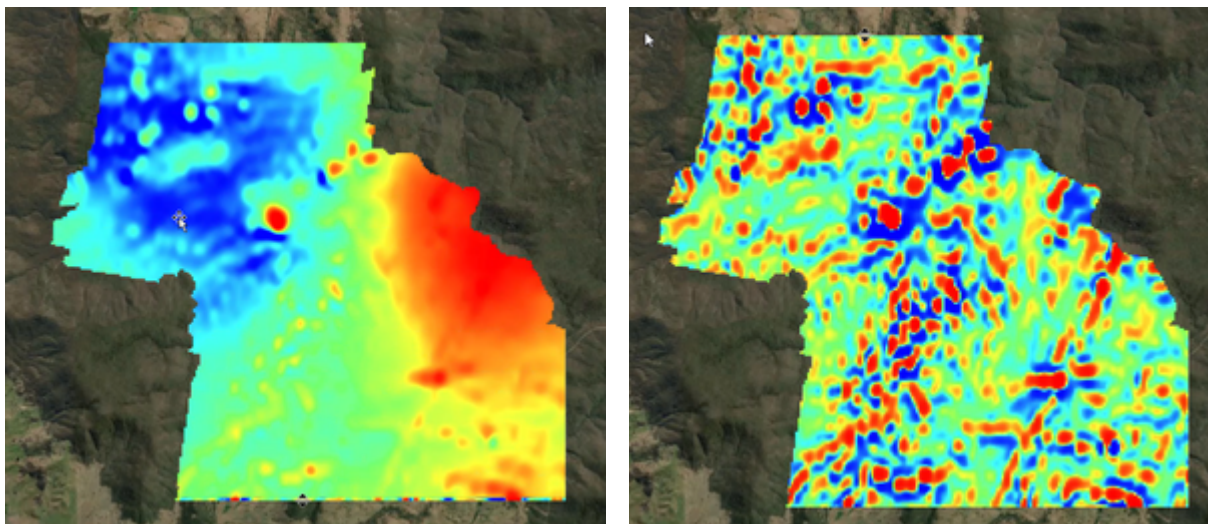
- Triangulation
- Minimum Curvature

- Spatial Neighbour
- ID2
- Density
- Distance
- Color Ramp Importers



Geophysical Filters

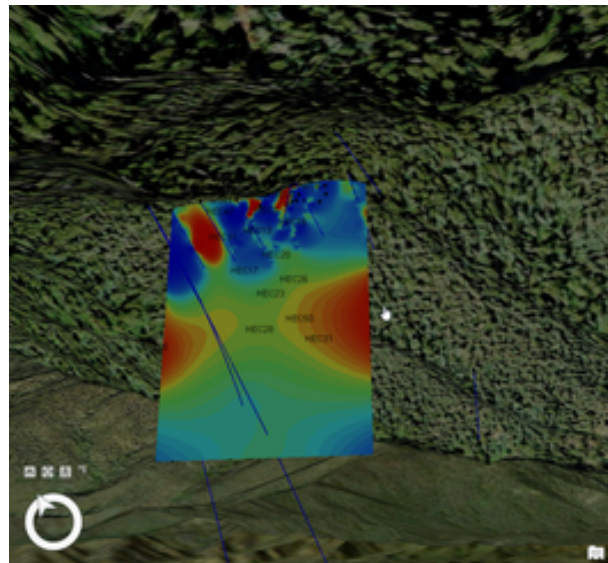
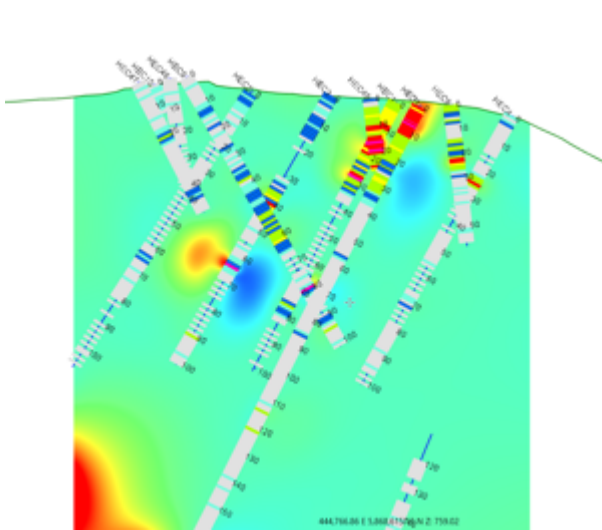
After you have created your raster files, you can apply geophysical filters to bring out the required details. There are 101 different geophysical filter types.



Raster on Section

Drillhole data can be interpreted on a section as a raster. First make points on the section from drillhole data, and then create the raster, which can be clipped to the section extents and topography. Any raster on a section can be displayed in 3D. The following methods are available:

- Point to section
- Raster clip to section
- Raster section to 3D



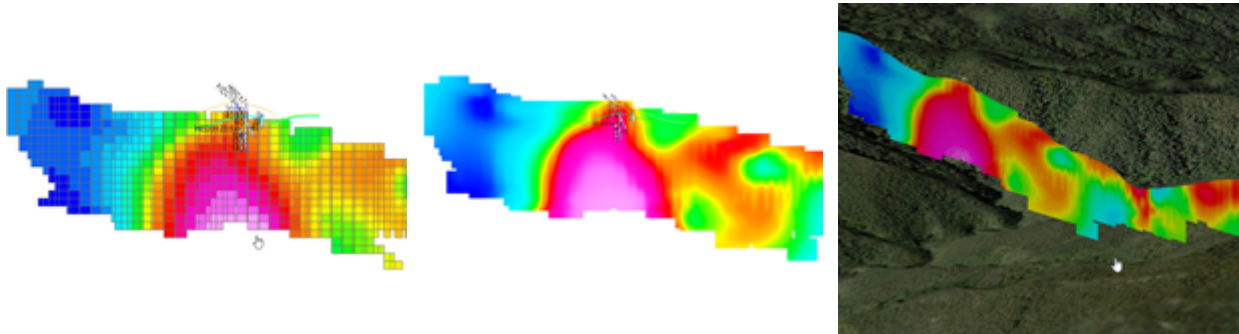
Geophysical Grid Import and Export

The rasters we create in ArcGIS Pro are in ESRI formats. However, quite often, users need to import or export geophysics grids that ESRI does not support. The screenshot below lists the grid types that can be imported and exported.



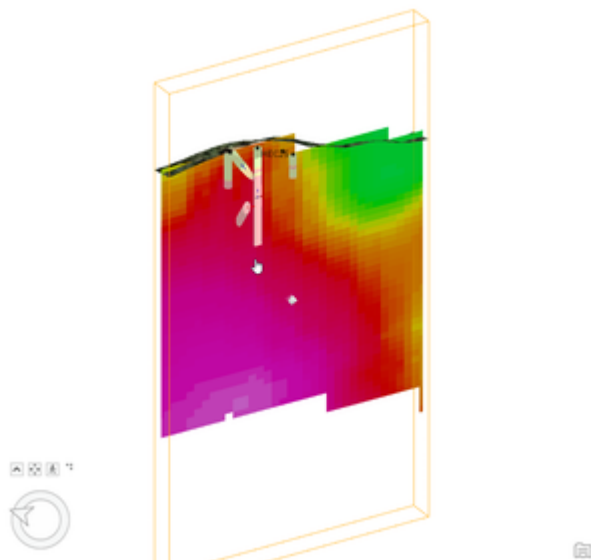
Voxel to Section

You can display NetCDF voxels on a section as polygon vectors or raster images. These images can be sent to 3D using the Raster to 3D tool.



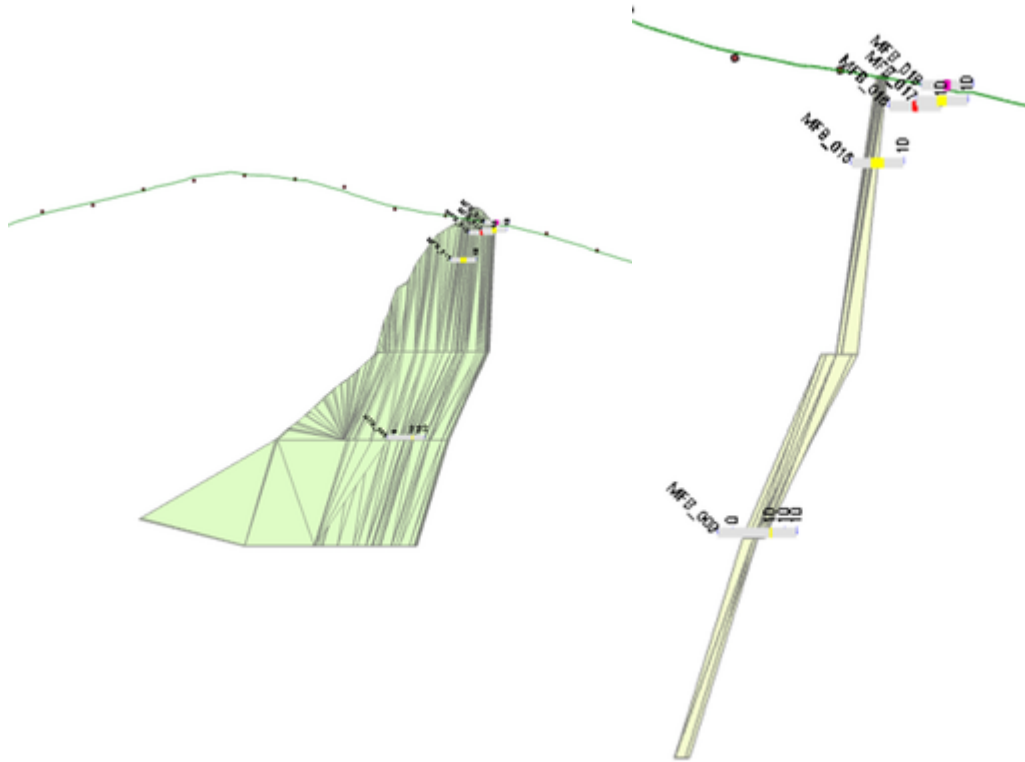
3D Section Clip

You can clip a 3D scene to a section view.



Object to Section

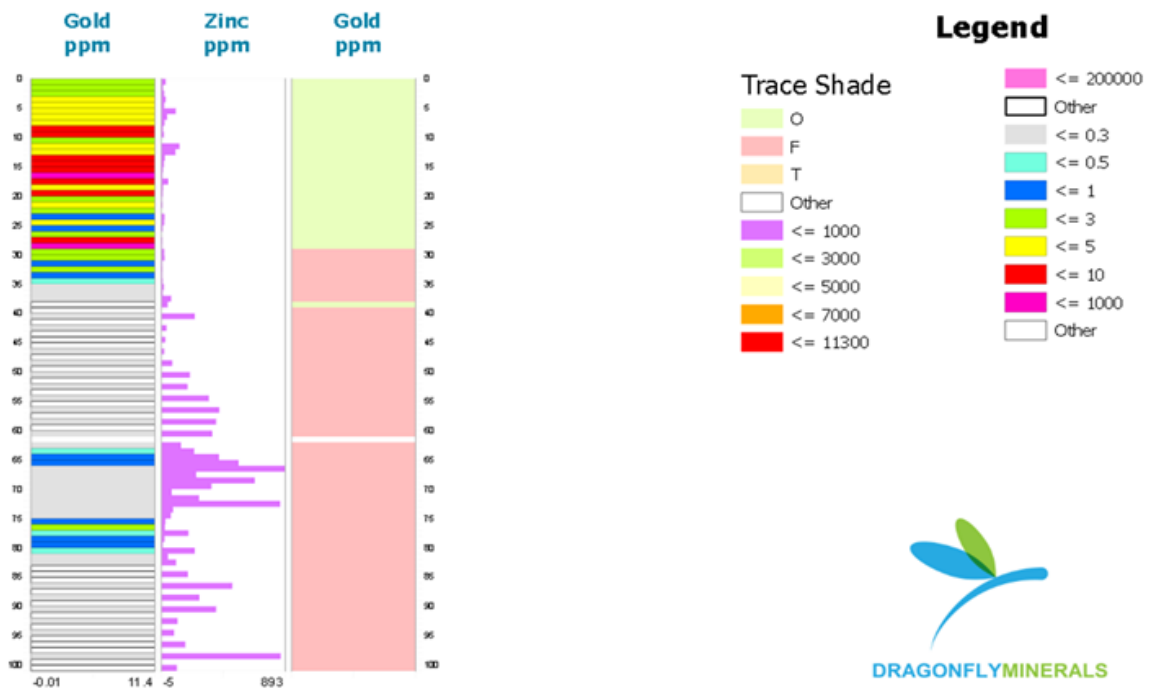
You can add vector objects to a section by projecting a feature onto a section. For example, this is useful for projecting workings onto sections. Objects can be clipped to the section envelope or shown as a whole.



Strip Logs

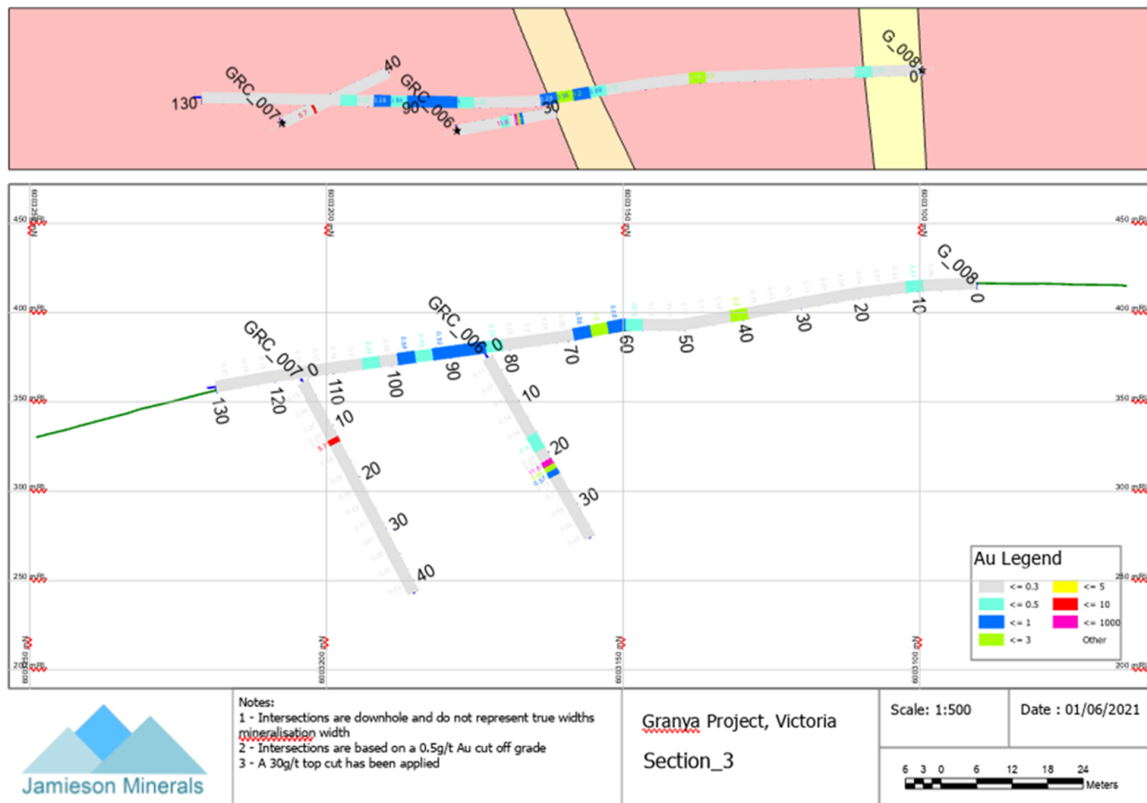
You can create drillhole strip logs from trace shade, bar graphs, or line graphs from downhole drill data. These logs can be output as templated ArcGIS Pro layouts.

DRILLHOLE HEC_001



Section Plan View

When creating a section layout, you can display a section plan view on top of the layout by selecting the Section Plan option.



Correlation Matrix

Geochemical relationships of multivariable data can be determined using Pearson, Kendall's Tau, or Spearman's Rank correlation coefficients and displayed as an output table.

Copper_Hill_Soils_CorMatrix

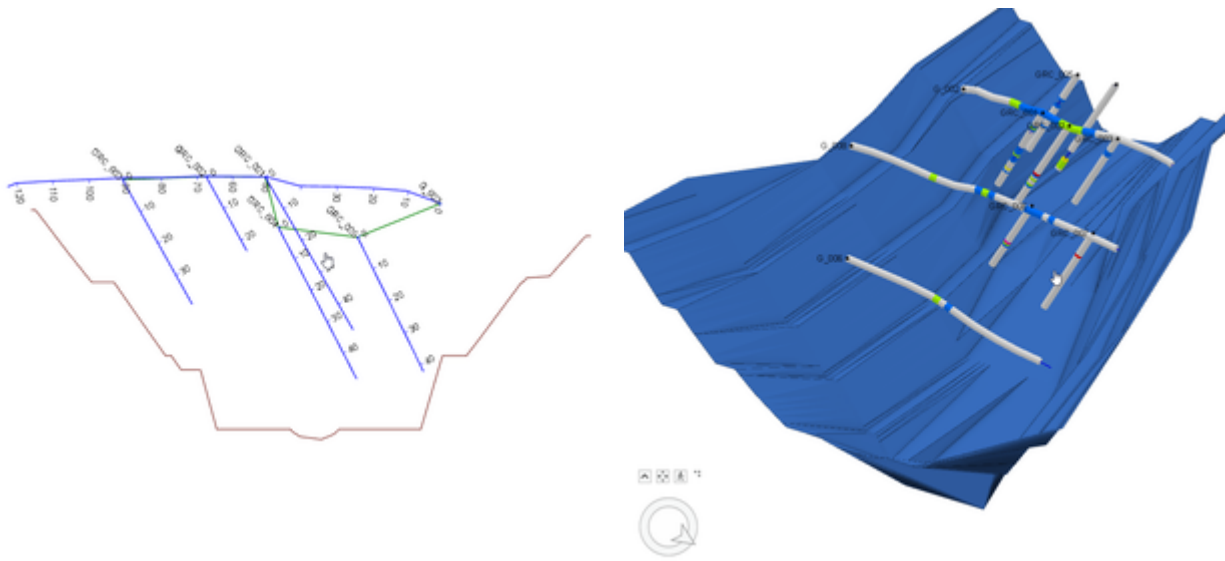
Field: Add Calculate Selection: Select By Attributes Switch Clear

OBJECTID	Field	Au	Cu	Ag	Pb	Zn
1	Au	1	0.070081	-0.003755	0.013628	0.011941
2	Cu	0.070081	1	0.034961	0.205722	0.248209
3	Ag	-0.003755	0.034961	1	0.04821	0.051264
4	Pb	0.013628	0.205722	0.04821	1	0.5378
5	Zn	0.011941	0.248209	0.051264	0.5378	1

Click to add new row.

Surface from Template

You can create surfaces in 3D from lines on sections.





DATAMINE

Datamine enables efficient and sustainable mining through the application of world-leading technology and services.

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