

Encom™ Discover™ 2011

The release of Encom Discover 2011 from Pitney Bowes Business Insight showcases the ongoing innovative developments that have made Discover the ‘must-have’ GIS application for geoscientists worldwide. This release includes extensive upgrades to the drillhole module, including notably faster section/plan creation speeds and direct support for attributed section lines; rapid contouring of multi-gigabyte gridded surfaces; and one-step grid utility processing of multiple gridded surfaces (such as re-projection or slope analysis).

General Improvements

- Acquire API support updated to API 4.2.2.2

ENHANCED VECTOR SUPPORT

- Direct and intuitive access to Discover's extensive range of redesigned Vector Import and Vector Export options (such as KML, GPX, etc)
- Discover 2011 can also now export vector data in the Surpac String format

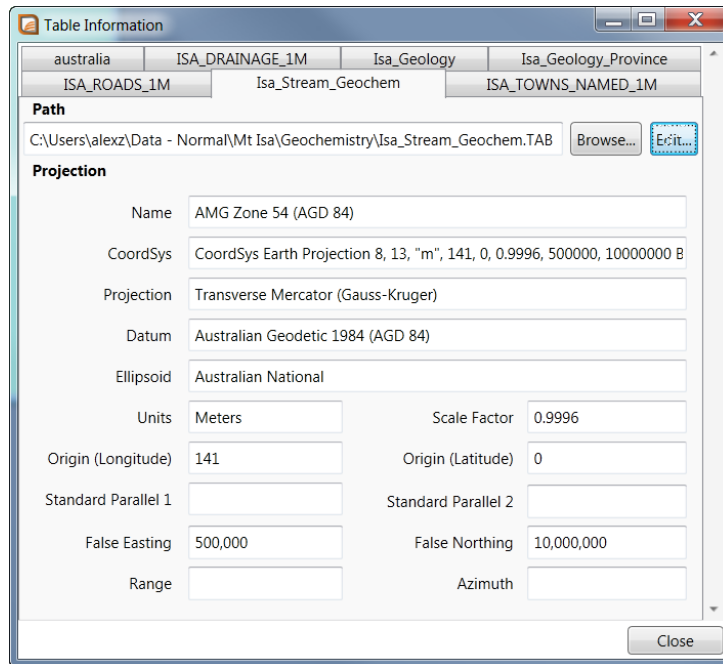
NEW LAYER CONTROL AND TABLE LIST ENHANCEMENTS

Encom Discover 2011 adds some great usability options to the MapInfo Professional interface:

- Compare Structure (Table List only)
Auto-opens the selected tables into Discover's Multi-table Structure Manager, for multiple field propagation/addition/renaming/editing/etc
- Select/Unselect All (Layer Control only)

- **ShowInfo**

Effortlessly check the projections of multiple tables at once. Examine and directly browse to table file locations, as well as directly edit the TAB file

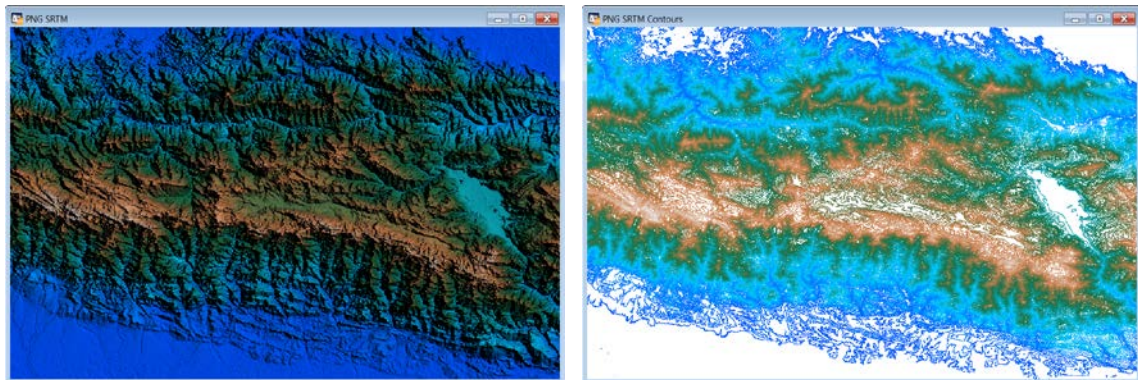


Effortlessly examine projection and location information of multiple tables simultaneously with the Show Info option.

Surfaces

GRID CONTOURING

The completely rebuilt Grid Contouring engine assures extremely fast and efficient processing of very large grid files, including tiled datasets. In addition to the existing functionality, Discover 2011 allows you to colour the contours from a legend.



Rapidly generate contours for multi-gigabyte gridded surfaces, such as continental-scale SRTM topographic data.

VECTOR TO SURFACE

Easily convert vector objects into gridded surfaces, including 2D vector (TAB and MIF) and 3D vector (such as DXFs) formats.

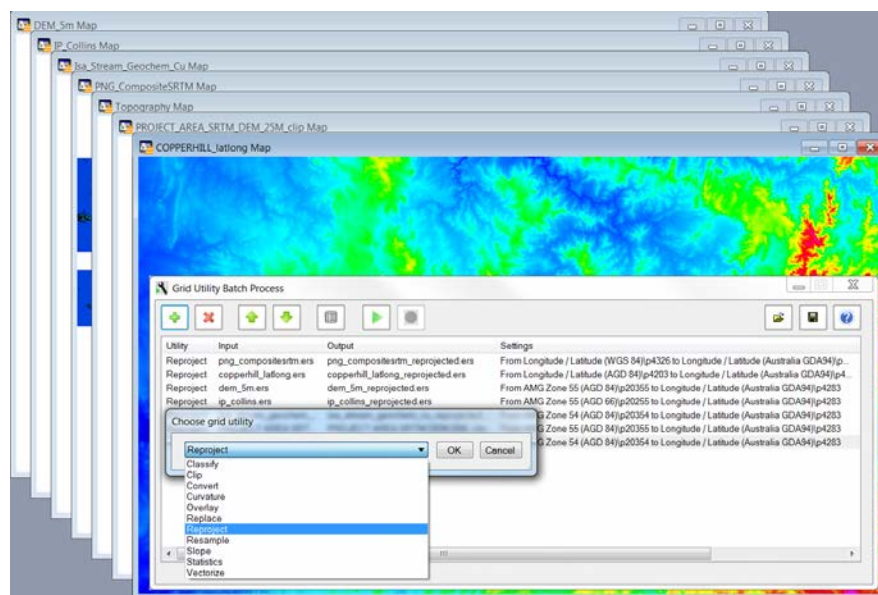
HYDROLOGY

Discover 2011 features significant development in the Hydrology module, including improved pit fill options and a streamlined workflow:

- Lakes and dams can be filtered out of the processing based on their area and/or depth
- Lakes and dams are also now incorporated into the stream generation process
- Catchments and streams can now be saved as grids, allowing further advanced processing within the Surfaces module
- Generate multiple catchments per stream, via either specified locations or for each stream segment
- Significant performance gains through the re-use of intermediary grid files.

GRID BATCH UTILITIES

Apply a grid utility to multiple grid files in one step. For instance reproject 20 grids of differing PROJECTIONS into the same projection for relinquishment/daily handling. This supplements the powerful multi-file processing capabilities already available for vector and raster formats.



Batch reproject multiple grids in one step.

Drillholes

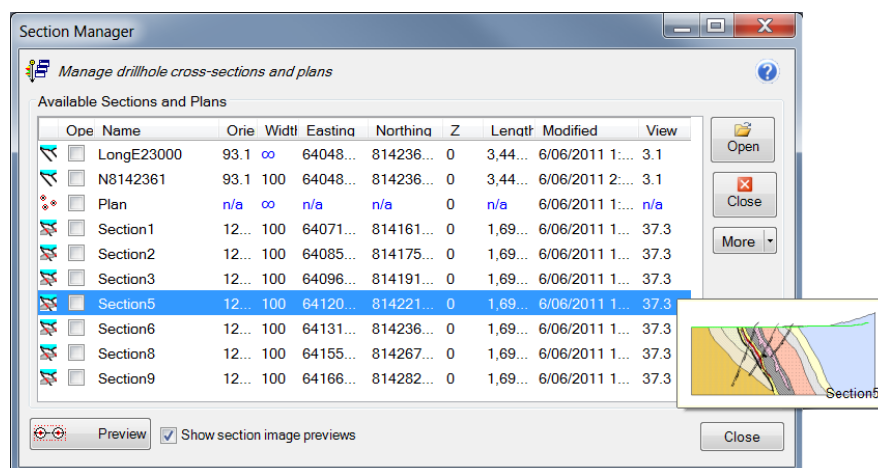
Discover 2011 sees an extensive overhaul of the Drillhole Module, with vast improvements in processing speed and section generation efficiency.

PROJECT MANAGEMENT

- A completely redesigned drillhole management and architecture means exceptional speed and efficiency benefits in large project handling and section generation
- A brand new comprehensive validation tool thoroughly identifies issues and can help autocorrect many common issues, saving wasted downstream time.
- Cross-section generation lines (attributed with sections names and envelope widths) are now automatically saved with a drillhole project. This allows effortless and robust section creation and updating (automatically applying the name and envelope attributes).

SECTION MANAGEMENT

Instantly preview sections as thumbnail images in the Section Manager, without having to open the sections. This is a huge time-saver to identify/find sections of interest, especially when combined with the existing location preview capability of the Section Manager.



Instant section previews in the Section Manager.

- The Section Manager also displays the last date modified for each section, as well as the view direction. These are sortable, allowing the user to easily find the sections they last worked/updated on in projects with large numbers of sections.
- Polylinear and Trench sections can now be Regenerated from the Section Manager

SECTION AND PLAN CREATION

- The Define New Section or Plan tool is now your one-stop shop: create trenches and polyline sections, as well as standard linear drillhole sections and plans. This greatly streamlines the workflow process.
- Frustrated by the overprinting of depth labels with your histograms and trace shades? Depth and collar/EOH labels can now be added and/or modified in the Display Downhole Data dialog. This allows the easy and precise refinement for offset/overlap issues at any point of section/plan generation workflow.
- Additional labelling options allow the precise customisation of information on your sections
- Automated section generation (including preset names and envelopes) using Section Line table
- Considerable improvements in the speed of section/plan generation
- Inflection and 'overlap' area indicators for polyline sections

Encom™ Discover™ 3D 2011

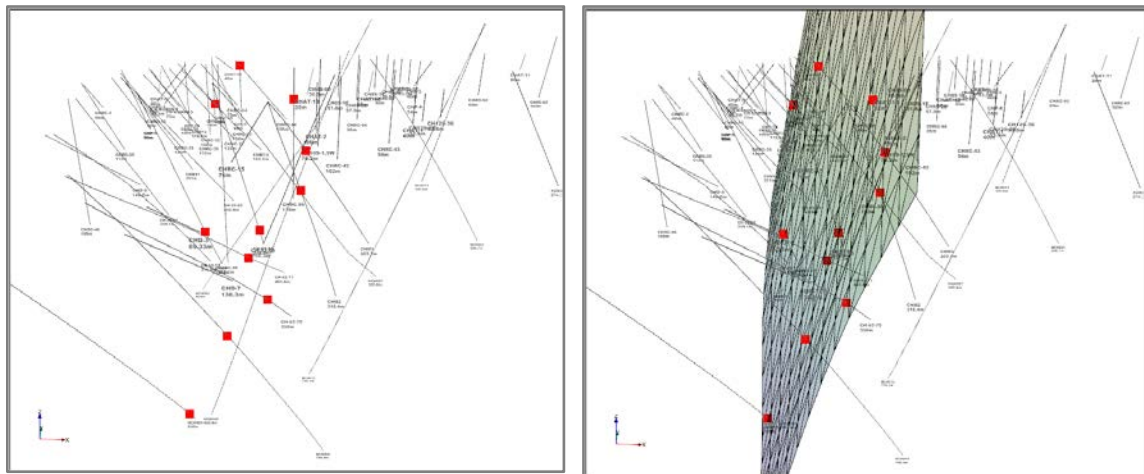
The release of Encom Discover 3D 2011 from Pitney Bowes Business Insight reinforces it as the geoscientist's essential 3D platform for the MapInfo Professional/Discover GIS environment. Discover 3D 2011 includes a number of tools for advanced analytical operations between vector and voxel models, such as determining the mean voxel grades for multiple wireframed orebody models. Dynamic geometric statistics are now automatically calculated for all feature objects, such as volume and surface area, and our seismic interpretation module allows multi-section correlation in both 2D and 3D with fully attributed vector objects.

Features available in this release of Encom Discover 3D include:

- 3D Sessions are now saved with file paths relative to session directory (rather than absolute paths) allowing better portability (for example with the Save to Package tool)

View Intervals as 3D Points

Effortlessly convert a downhole dataset, such as assays, into a mappable table using either the top, mid-point or bottom of the intervals. This allows the simple import into 3D of specific downhole selections for further modelling, such as particular rock types or water table intercepts.



The View Intervals as 3D Points option rapidly converts downhole datasets into 3D Point data (left), for more advanced modelling such as surface interpolation (right).

Feature Objects

Geometric statistics for all feature objects are dynamically calculated after object creation or editing. These include surface area, volume and length (depending on object type), and are inherent in the feature database. This gives the user instant knowledge of, for example, a modelled aquifer volume, and its response to changed water table depths.

Seismic Tool (SEG Y)

Discover 3D 2011's expanded range of seismic digitisation and editing options will help produce more accurate interpretations faster. Correlate seismic features across multiple sections with new horizon and fault labelling functionality.

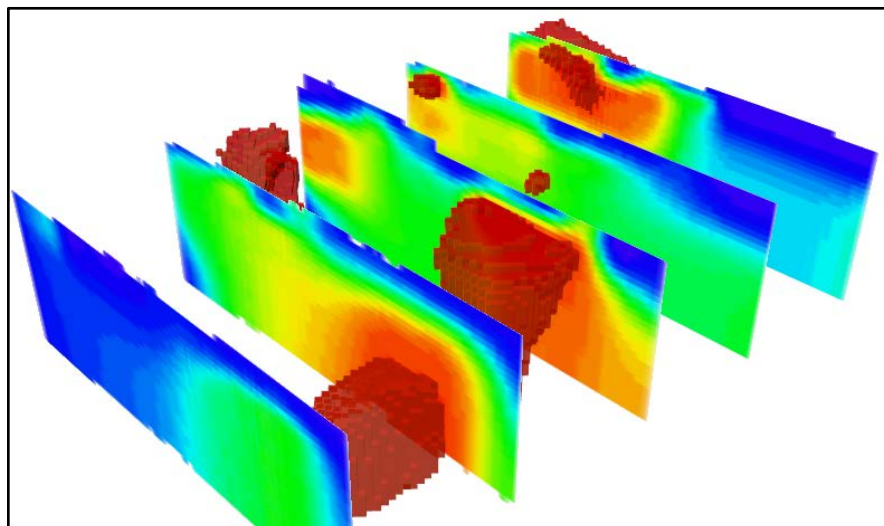
Seamlessly integrate your 2D seismic interpretations with 3D datasets, by exporting them as fully-attributed Discover 3D vector datasets (including horizons, faults and velocity regions).

Voxel Modelling

- Directly interpolate feature points and polylines digitised in 3D (for example snapped to drillholes) into voxel models with the Voxel Gridding tool.

VOXEL SLICES TO IMAGE

- Convert a Sliced view of a block model into easily rendered and handled georeferenced images



GEOSOFT VOXEL SUPPORT

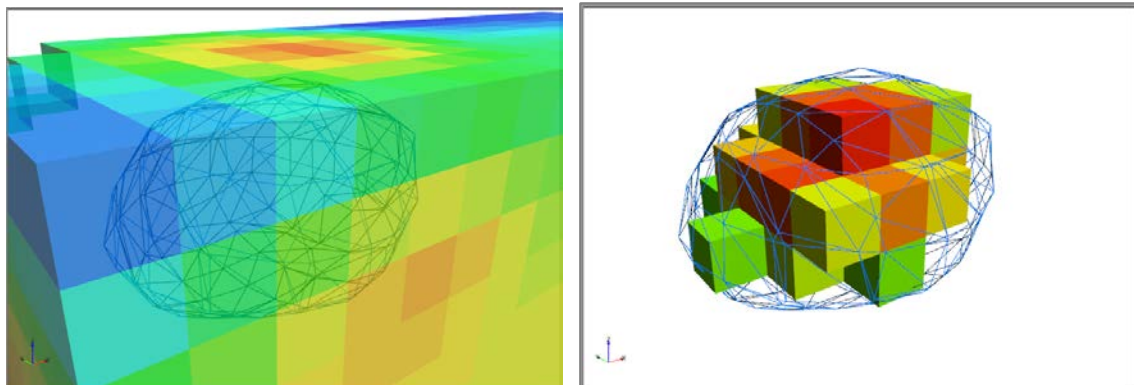
- Geosoft Voxel models can now be imported, displayed and processed by Discover 3D's comprehensive 3D Voxel Toolkit

Voxel / Vector Analysis

A significant focus of this release is a new suite of functionality for advanced 3D modelling and analytics. This includes a number of tools for complex analytical operations between voxel models and 3D vector volumes, such as calculating an ore volume's tonnage and grade.

CLIP VOXEL TO VECTOR

- Constrain a voxel model to the bounds of one or more vector volumes (e.g. supergene lodes).



CLIP VOXEL TO SURFACE

- Split a block model into two regions with a grid or feature surface such as a topographic grid, modelled fault plane or unconformity surface.

ASSIGN VALUES FROM VOXEL TO VECTOR

- Attribute one or more polyhedron volumes with a statistical aggregation of the contained voxel cell values. For example, assign average gold grades to a series of interpreted mineralisation zones from a voxel model.

CREATE VOXEL FROM POLYHEDRON

- Convert one or more polyhedron volumes into a voxel model. This can aid in basic resource calculations; for instance converting a series of interpreted lithological volumes into a voxel model of specific gravities, prior to determining tonnages.