

WHAT'S NEW

GEOVIA SURPAC 6.8

THE WORLD'S MOST POPULAR GEOLOGY AND MINE PLANNING SOFTWARE

GEOVIA Surpac™ is the world's most popular geology and mine planning software. It delivers efficiency and accuracy through ease-of-use, powerful 3D graphics, and workflow automation. Surpac addresses the requirements of geologists, surveyors, and mining engineers in the resource sector and is flexible enough to be suitable for every commodity, orebody and mining method. Its multilingual capabilities allow global companies to support a common solution across their operations.

The Surpac 6.8 release introduces Dassault Systemès high performance point cloud functionality, a proprietary method to show and mesh large point cloud datasets, which is available to all users as part of the core Surpac module. Solids Modelling, CAD tools and Geology and Geostatistics features have also gained significant improvements and over 20 additional customer-requested enhancements and product quality improvements.

NEW POINT CLOUD CAPABILITIES

Surpac users are now allowed to load, display, and use the point cloud data to create surfaces and solids. Surpac supports LAS, XYZ, and ASC point cloud formats.

Visualize millions of points in full color, and open Point Clouds of any size as the data is managed in a sophisticated way to ensure the best possible interaction with very large data sets without loss of data integrity.

Digitization is directly possible on the clouds, snapping to any chosen point. This allows for activities such as high accuracy geological interpretation based on rock coloring or other visible characteristics.

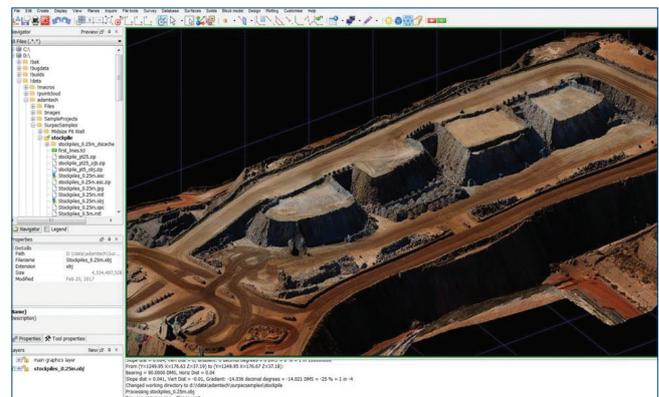
Create a DTM from the point cloud, either as a 3D solid or a 2D mesh. Meshing the data is done intelligently, based on a user-defined tolerance. The tolerance can be used to trade the size of the triangulation (triangles) with adherence to the point cloud points. From those meshes, accurate volumes can be calculated, and designs generated.

Perform the deviation analysis for a point cloud with one trisolation at a time and store the deviation information in the cache folder for display is now possible. The minimum and maximum deviation values can be displayed with a color gradient.

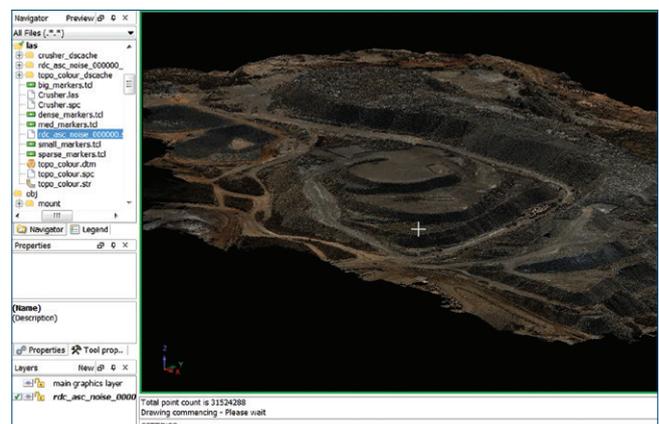
SOLIDS MODELLING ENHANCEMENTS

Surpac 6.8 supports the read and write functionality of the OBJ format data file (including image texture mapping). OBJ is a geometry file format that is a standard output for many photogrammetry systems and is also 3d printer capable.

You either drag and drop the files or can also use the new *File > Import > Wavefront OBJ file to DTM file* function to import an OBJ format data file to the DTM format data file.



Aerial photogrammetry OBJ texture map created using 3d Analyst by Adam Technology.



Full color RGB Point cloud of a waste dump.

Textured meshes are useful for high precision remote mapping and assessment of exploration and mining environments, enabling geologists to map rock and ore zones directly within Surpac, or planners to visually assess rock bolts locations.

The Solids and Surfaces Deviation analysis function can now be used to report both positive and negative deviation with colors representing positive, negative, and zero deviation. This is suitable for planned vs. as built solids or planned vs. actual pit pickup.

CAD TOOLS IMPROVEMENTS

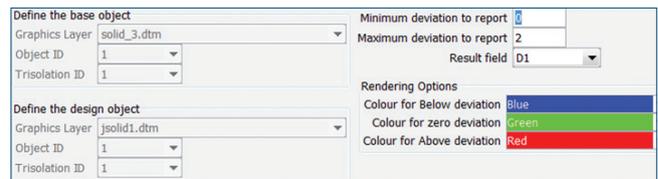
Improved complex curves have been enabled through the addition of the NURBS control panel for greater design flexibility and accuracy.

Explode segments into lines or points and the calculation of polygon centroids have added to the collection of CAD tools.

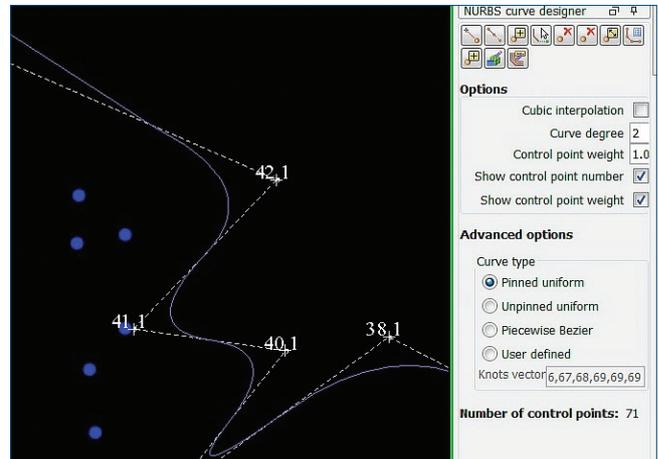
GEOLOGY AND GEOSTATISTICS ENHANCEMENTS

You can now use the new *Block Model > Geostatistics > Multi Domain Analysis* function to generate box and whisker charts which are used to quickly report and compare data from different geological domains.

For more information and a complete list of new enhancements, features and updates, visit www.GEOVIASupport.com or email GEOVIA.Support@3ds.com.



Report positive and negative deviation using the Deviation analysis function.



Bezier NURB Curve design.

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