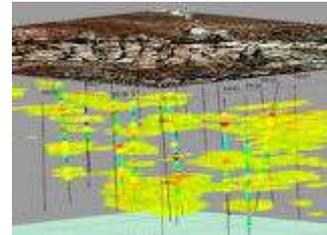


3D Solid Models

Use **RockWorks** to create continuous 3D "solid models" or "block models" of your downhole geochemical, geophysical, or geotechnical measurements; observed lithology materials; color categories; fractures; and vectors/voids. These features are **included in RockWorks Levels 4 and 5**

3D Ore Block Models

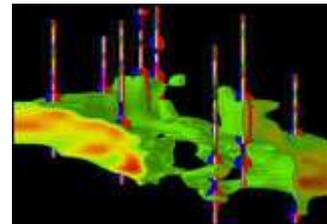
- Choose from a variety of 3D modeling algorithms and controls.
- Create block models of assay concentrations and display them in 3D as isosurfaces or voxel models.
- Run a floating-cones pit optimization.



Block Model of ore concentrations displayed as 3D voxels with logs and an aerial image

3D Geophysical Solid Models

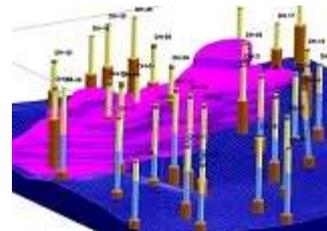
Create solid models of downhole point measurements - gamma, resistivity, etc. - and view them in 3D as isosurface or 3D voxel displays



Solid model based on downhole geophysical data

3D Contaminant Models

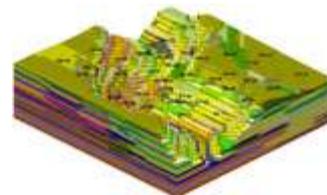
- Create static models of contaminant plumes and display them in 3D as isosurfaces or as color-coded voxels.
- Create transitional time-based models, display these "morphed" sequences, and create movie animations.



3D Solid Model of contaminant concentrations displayed as an isosurface diagram

3D Lithology Block Models

- Create solid models representing the distribution of your lithology material types.
- Display all or selected materials as color-coded 3D voxels.
- View volumes of each lithology type.



3D Block Model based on material types using the lithoblenning modeling method

3D Color Solids

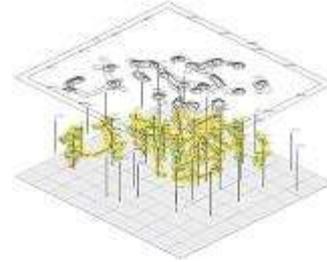
- Display interpolated color data as 3D voxel models or 3D points.
- Filter for specific color ranges, and view volumes



RockWorks color model interpolated from borehole color intervals

3D Vector-Based Models

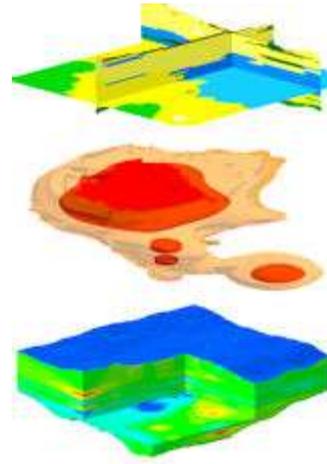
- Use RockWorks to convert downhole directional data into solid models that approximate the extents of the vectors.
- An example application is the generation of void geometries (cave models) based on downhole laser surveys.



RockWorks vector model

RockWorks Block Modeling Options

- Choose from a solid or wireframe surface displays, and adjust transparency.
- Apply a variety of color schemes, including user-created custom schemes.
- Interactively filter for specific value ranges and view corresponding volumes.
- Insert horizontal and vertical slices, and reposition them to view hot spots.
- Illustrate multiple concentration levels with "x-isosurfaces"
- Insert cutouts to view the model interior.
- Include automatic or customized legends
- Apply dozens of solid model manipulation tools and filters
- Include logs, aerial photos, 3D surfaces, and many other 3D entities in your scenes.



Examples of some of the Block Modeling Options in RockWork