# What's New in Surfer v25

There are several new features in the latest release of Surfer! The top new features are listed

Grid, Map and Visualize XYZC Data

Grid true 3D XYZC data (e.g. soil or groundwater contamination concentration) and save the results to a 3D grid in VTK format. Create a map from the 3D grid, adjust the slice value displayed in the 2D map, and then visualize the entire 3D grid in the 3D view as a volume render. Add an isosurface (to define the surface at a particular C value) and color scales.
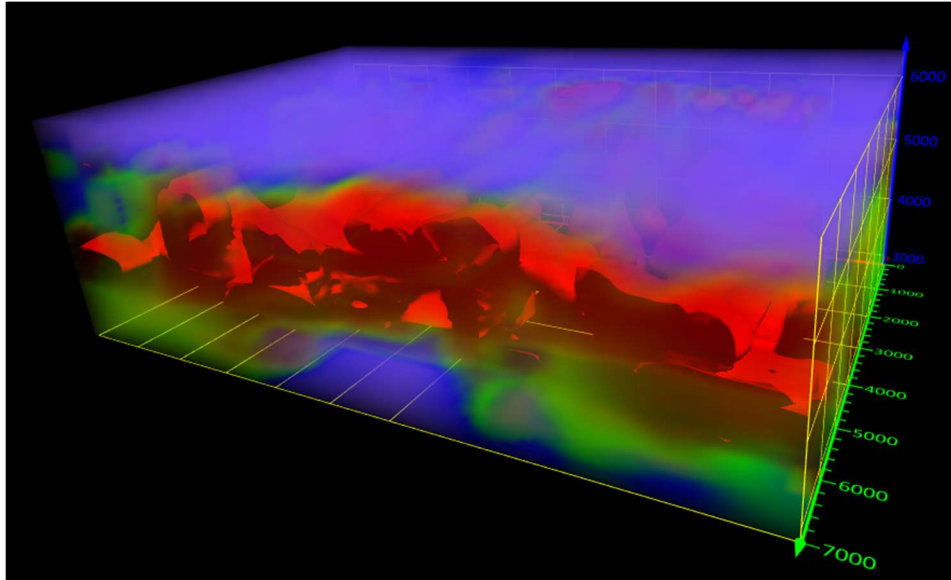
Interpolate and visualize 3D data, such as subsurface soil or groundwater contamination, mineralization concentration, seismic refraction velocity, temperature distribution, or dissolved oxygen concentration.

Interpolate XYZC Data to Create a 3D Grid

Interpolate a 3D grid from XYZC data, where you have XYZ location data together with a fourth variable, using one of three gridding methods. Save the results to a 3D grid in VTK format.
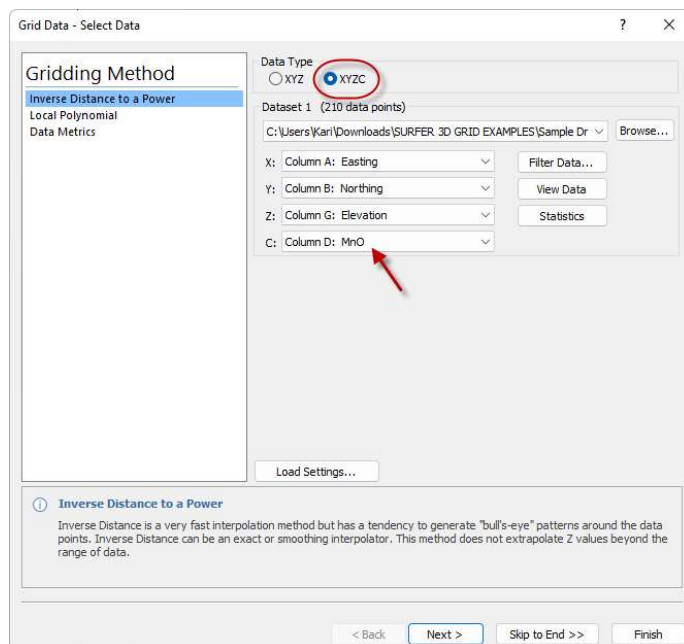

Grid your XYZC data to create a 3D grid

Create a 2D Map from a 3D Grid

Immediately see how the map changes with depth/elevation through a 3D grid. Create a 2D map of a slice through the 3D grid, and use a slider to move the slice up and down through the 3D grid. The map updates immediately as you move the slider. For example, create a contour map of a 3D grid of GPR data, move the slider and see how the GPR data (and the contours) change through the grid file with depth.

A 3D grid can be created either by gridding XYZC data in Surfer or in another software package. Supported 3D grid formats include VTK and HDF.
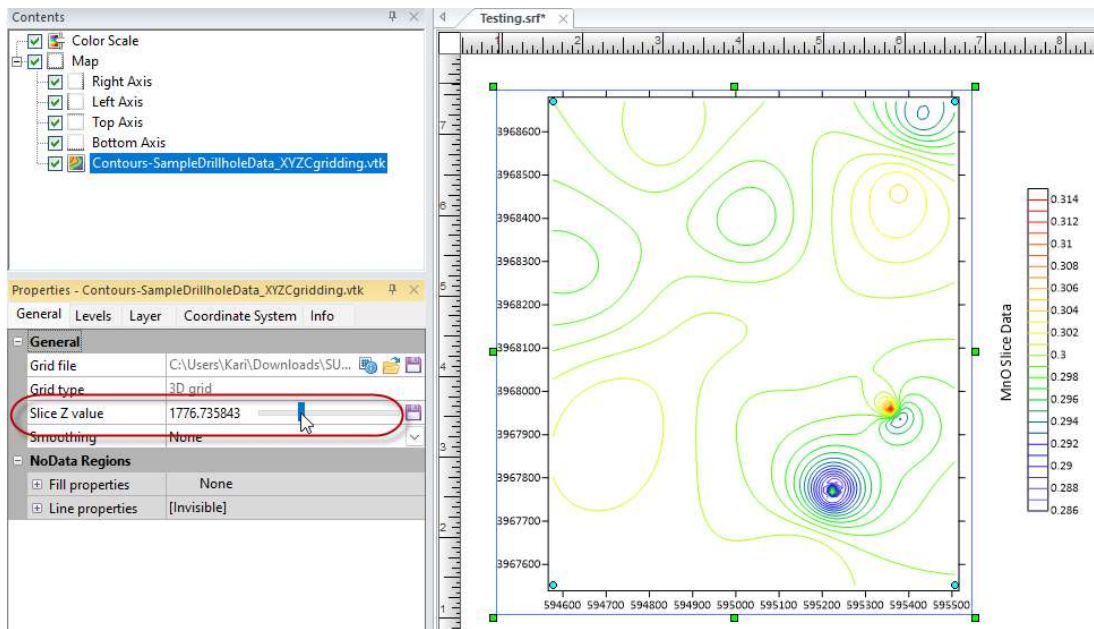
Display your 3D grid as a 2D map, and adjust the slice value using a slider

## Visualize the 3D Grid in the 3D View as a volume render

Gain an overall view of all the 3D data by visualizing any 3D grid as a 3D volume, with full control over color and transparency.
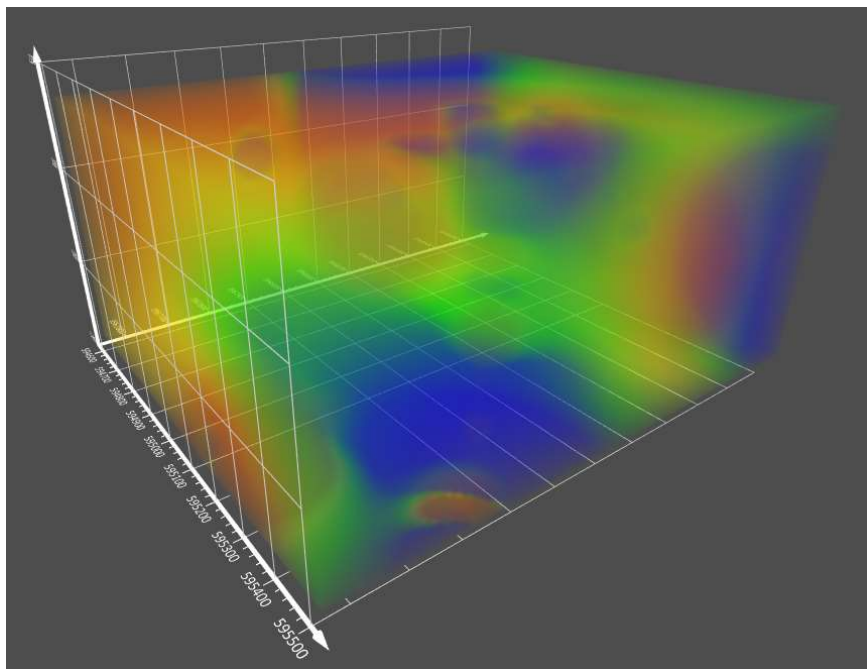
Visualize a 3D grid as a rendered volume, where the color represents the C value, such as contaminant concentration.

## Visualize the 3D Grid in the 3D View as an isosurface

Determine exactly where specific C values are in a 3D grid using isosurfaces. This helps delineate specific areas such as plume extents or mineralization cutoffs.
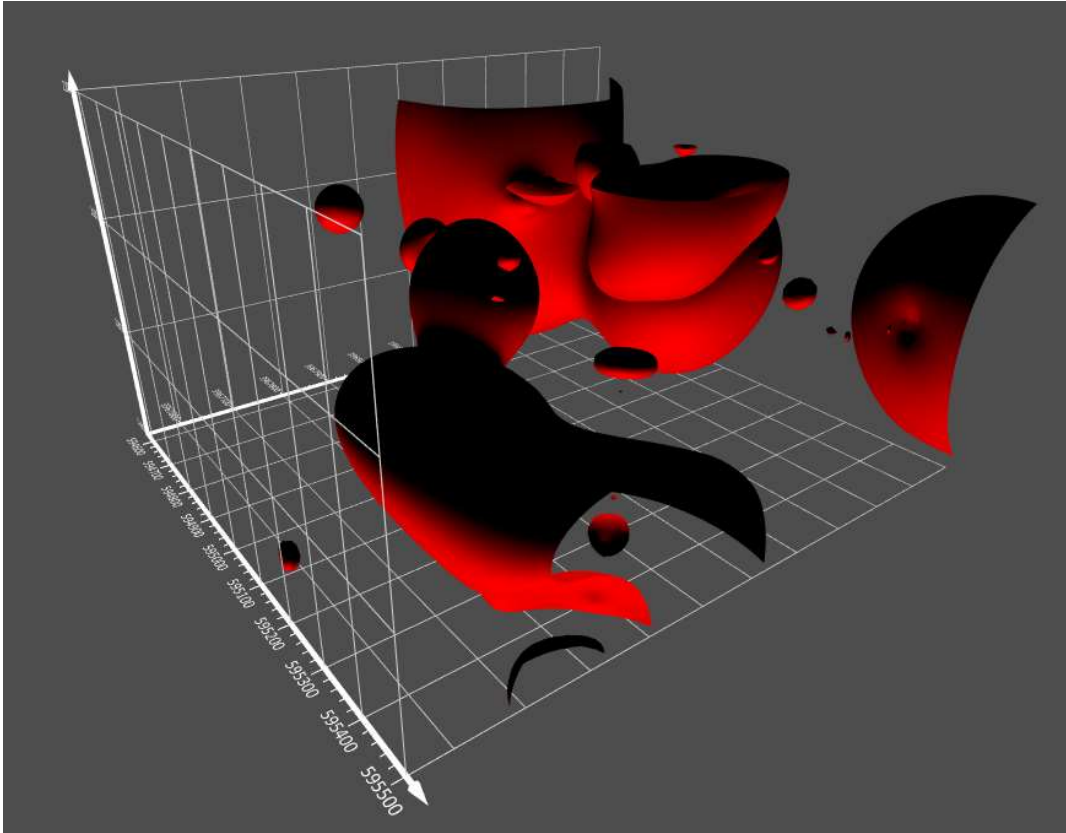
Create an isosurface for a 3D grid at any specified C value, allowing you to visualize surfaces of a singular value.

## Keep Map Limits and Size after Changing the Coordinate System

Set your map limits and the map size to exactly what you want, change the coordinate system of the map, and your custom limits and size are retained!

World Geodetic System 1984 (Lat/Lon)

UTM NAD27 zone 13N
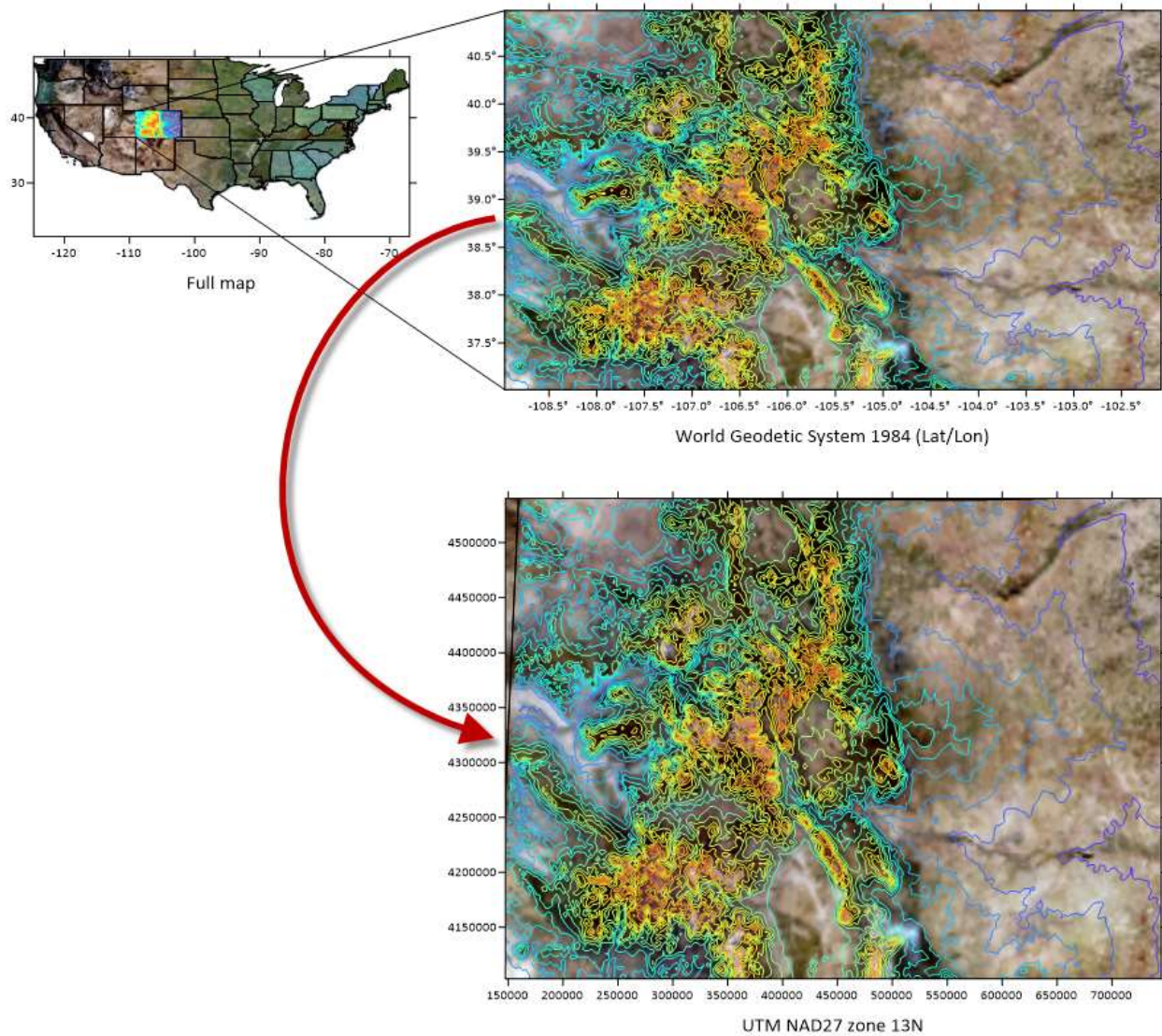
Limit your map extents and size the map to any scale you wish, then change the coordinate system of the map and the limits and size are also converted.

Move Anchor for Vector Base Layer Labels

The devil is in the details! Customize your base layer labels so they look exactly how you want. Create base labels with leader lines, which connect the label to the object they are labeling. If the leader line does not connect the label to the ideal spot on the object, simply move the anchor point for that leader line on the object so it looks just the way you want.
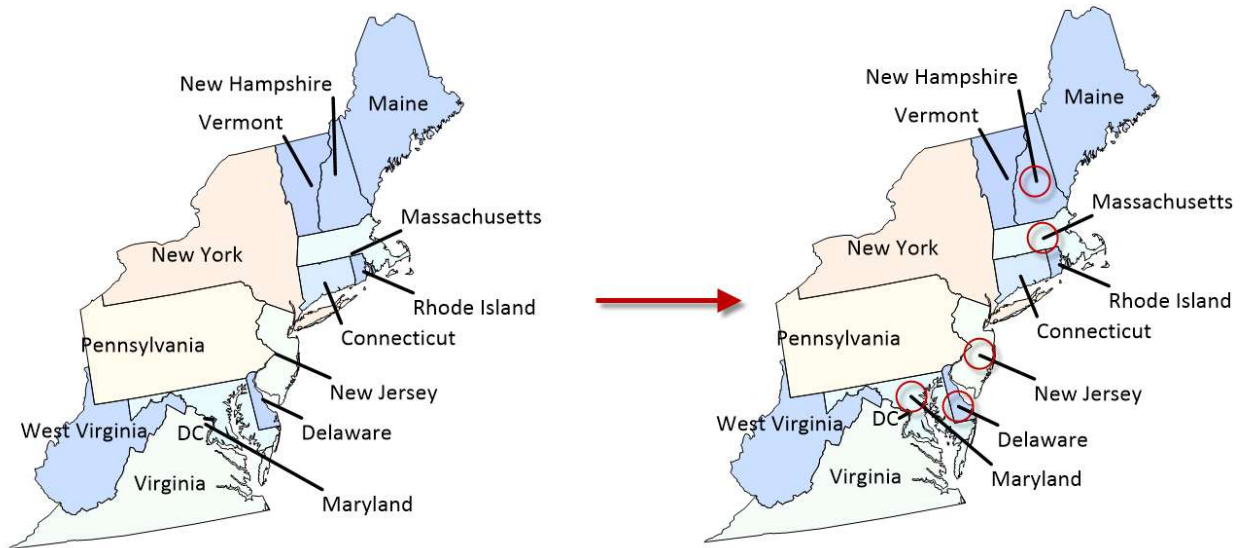
Move the label anchor locations on objects in base layers