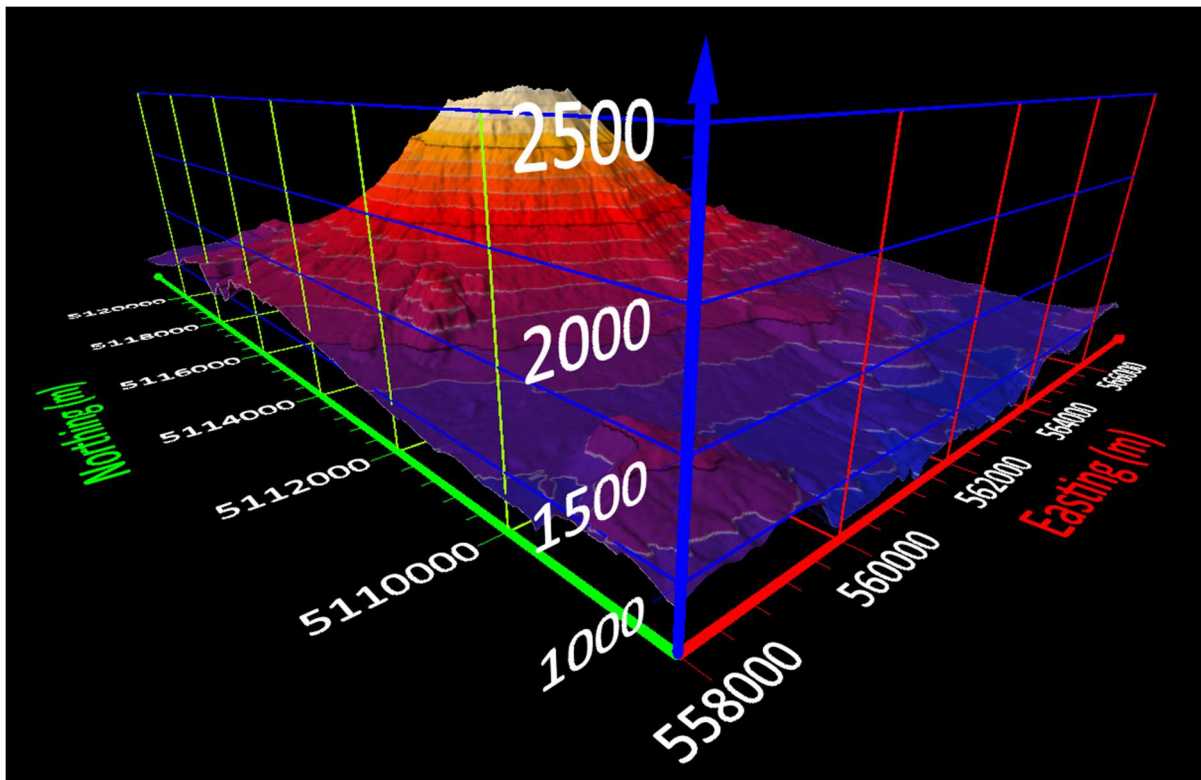


What's New In Surfer 17?

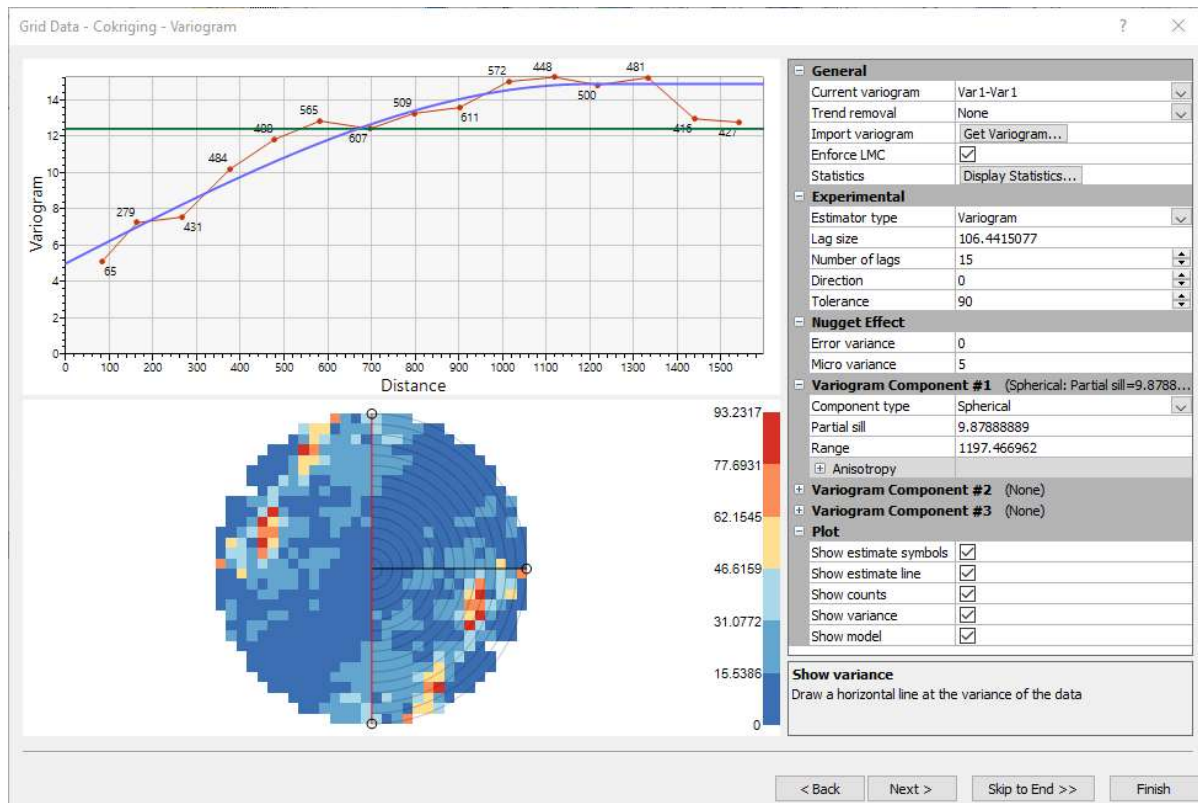
There are many exciting new features in the latest Surfer! We focused on increasing usability, improving workflows to increase time savings, and including the most commonly requested new features. The top new features are listed below. A more complete list of the new features can be found in the Online Help, or in the Surfer Version History page

New 3D View features

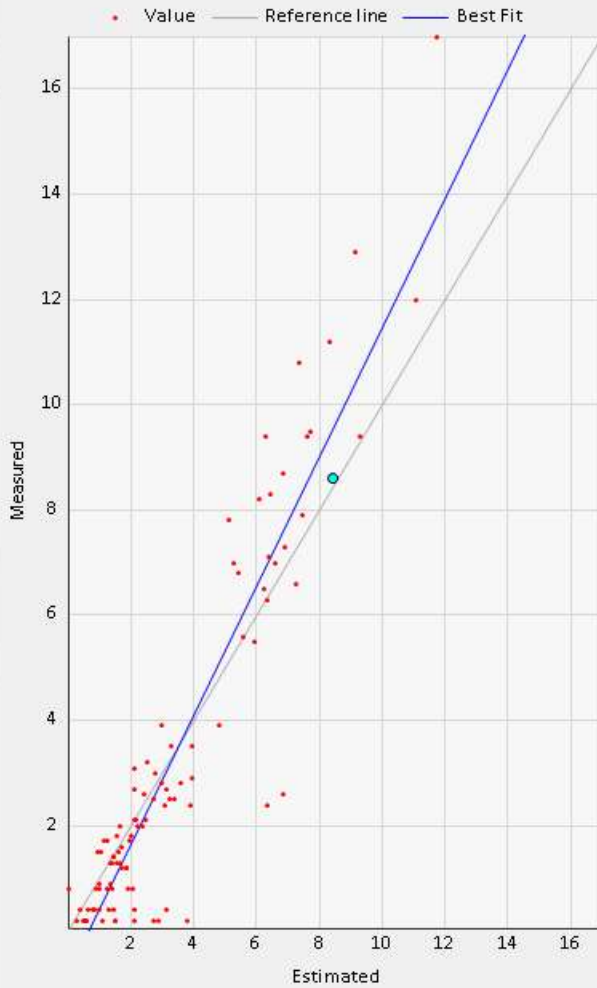
- Add axes, titles, tick marks, grid lines, and labels to your models in the 3D View! 3D analysis is now much more precise, and you can create beautiful graphics for use in reports and presentations.
- Hover your mouse at any location over the model to view the XYZ coordinates at that position in the status bar.



New Grid Data features



1. *An all-new Grid Data wizard.* We have redesigned the Grid Data tool in Surfer to give you more clarity, flexibility, and validation when gridding - as well as adding a ton of new features!
2. *New gridding method: Cokriging.* By popular demand, we now offer cokriging as a new gridding method! You can use cokriging to interpolate a primary dataset as guided by a secondary correlated dataset. Read more about cokriging here: [Grid data using cokriging in Surfer](#)
3. *Graphic variogram modelling for kriging/cokriging.* Modelling variograms is now so much more intuitive, interactive, and user-friendly. Our graphic display allows you to easily view anisotropy, and visually match the model to the estimated variogram values.
4. *Visual cross-validation checking before gridding.* Cross-validation allows you to check the accuracy of your gridding parameters prior to gridding.
5. *Save your gridding parameters for re-use.* If you often find yourself specifying the same gridding parameters again and again, you can now save these settings to a file which can then be loaded into the Grid Data wizard whenever you need to re-use them.
6. *Immediately add your new grid files to the Plot window as map layers.* Save time by immediately adding your new grid files to the Plot window as contour, color relief, 3D surface, or other grid-based map layers.
7. *Assign NoData (blank) during gridding.* Load a file containing polygons, or choose from a base layer in the Plot window. Grid your data and assign NoData values inside or outside the polygons all in one step!



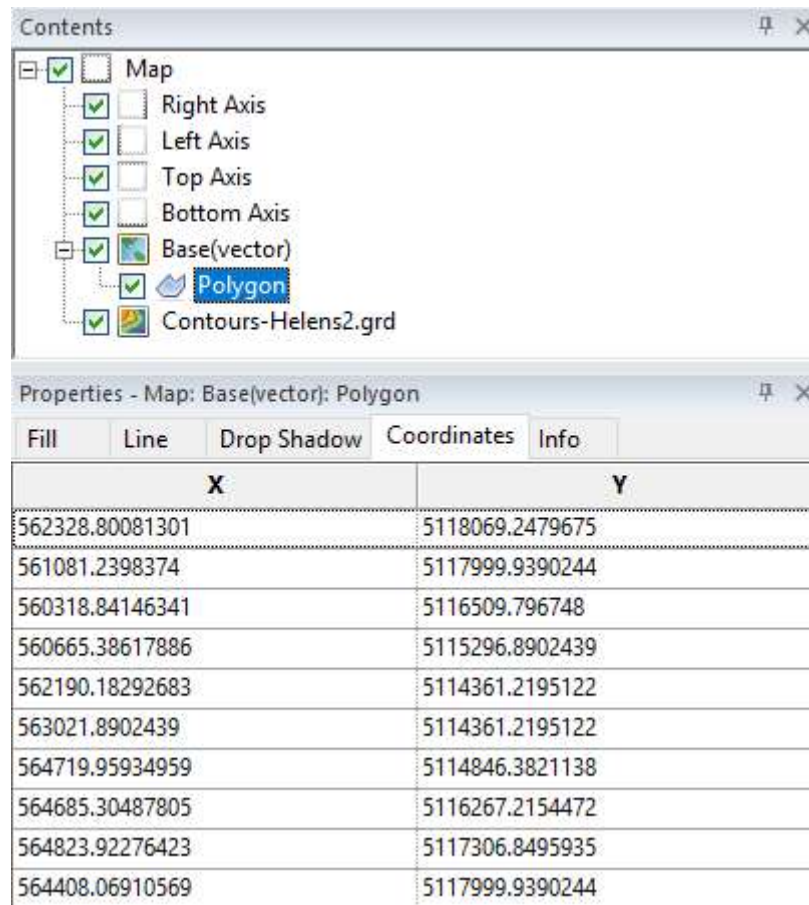
Cross Validation Parameters	
Random points to validate	100
Mean	0.049332079082051
Root mean square	1.4243065157643
Point Filter	
Exclude data within:	
Cross validation results	Report Save...

Random points to validate
 The number of random points from the input data that will be cross validated.

Row	Measured	Estimated	Error
3	8.6	8.418575977...	-0.1814240226589
4	6.5	6.238627326...	-0.2613726730046
5	2.6	6.857348467...	4.2573484677143
6	2.8	2.977993908...	0.17799390866038
8	3.2	2.536508799...	-0.66349120064606
9	2.8	3.569431192...	0.76943119263901
10	2.4	3.051460592...	0.65146059220221
12	1.4	1.461965575...	0.061965575531209
13	1.8	1.548464497...	-0.25153550266227
14	11.2	8.304607904...	-2.8953920952419
15	2.5	3.402650640...	0.90265064020173
16	2	2.215092031...	0.21509203197589
17	9.5	7.718193085...	-1.7818069142955
18	7	6.579302743...	-0.42069725655898
19	7.1	6.360936920...	-0.73906307963857
20	8.7	6.824845686...	-1.8751543130508
21	12.9	9.139401844...	-3.7605981558345
22	5.5	5.947783845...	0.447783845369
24	2.9	3.961648293...	1.0616482930051

Vector editing

- Interactively edit the X and/or Y coordinates of the vertices of points, polylines and polygons. Instead of importing BLN files to create vector objects with specific vertex coordinates, you can manually edit vertex coordinates right in the Properties window. Select a vertex in Properties, and that vertex is highlighted in the plot window, so you always know exactly which one you are editing!



Contents

- Map
 - Right Axis
 - Left Axis
 - Top Axis
 - Bottom Axis
 - Base(vector)
 - Polygon**
 - Contours-Helens2.grd

Properties - Map: Base(vector): Polygon

X	Y
562328.80081301	5118069.2479675
561081.2398374	5117999.9390244
560318.84146341	5116509.796748
560665.38617886	5115296.8902439
562190.18292683	5114361.2195122
563021.8902439	5114361.2195122
564719.95934959	5114846.3821138
564685.30487805	5116267.2154472
564823.92276423	5117306.8495935
564408.06910569	5117999.9390244

Worksheet improvements

- Do you like how Excel can copy an equation downwards to populate an entire column? Now you can do this in Surfer too! Define one transform equation that references specific cells, and copy it down through all of the rest of your data rows.

New Import/Export formats

1. Export contour maps to 3D PDF format
2. Export grids and contour maps to 3D VRML format

Notifications

- Keep up-to-date with Golden Software! Important messages are now delivered via a Notifications window within the program. You can keep the messages, or dismiss them, and close the window after they are read.