

Only
\$599!

The Industry Standard in Mapping Solutions

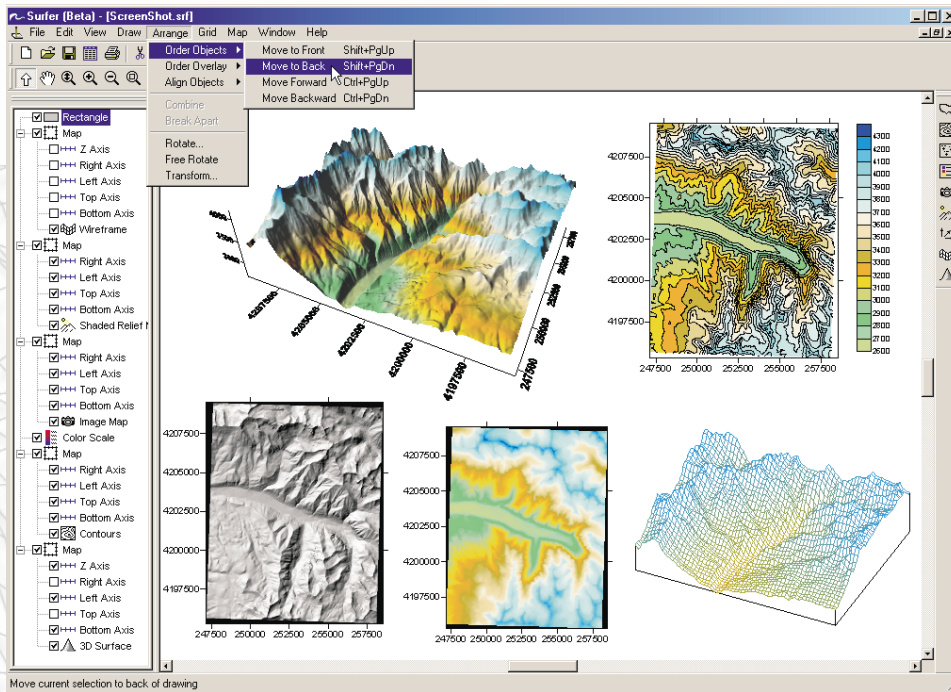


*Contouring and 3D
Surface Mapping for
Scientists and
Engineers*

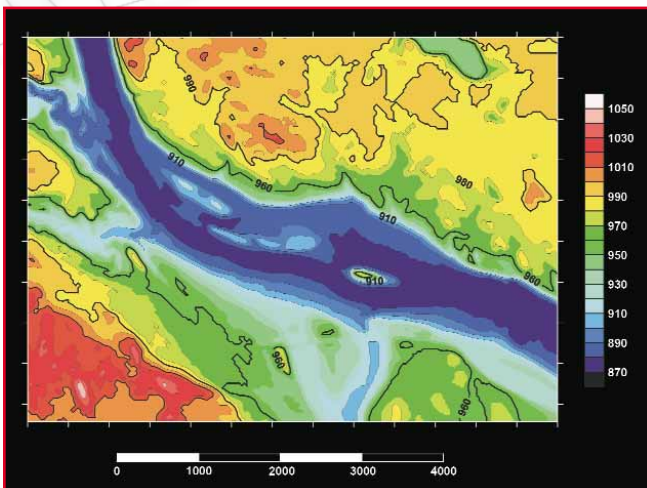
Surfer[®] 8

Surfer® 8

The software of choice for creating contour maps!



Present your data at its best! Create one of nine different colorful map types! Organize all your maps and objects with the easy-to-use Object Manager.



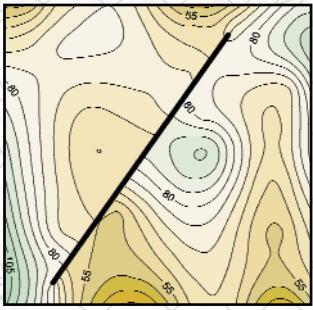
Individual contour labels can be dragged to a new location, new labels can be added and individual labels can be deleted.

Surfer is the most powerful, flexible, and easy-to-use contouring and 3D surface mapping package available. Surfer easily and accurately transforms your XYZ data into spectacularly colorful contour, surface, wireframe, shaded relief, image, post, and vector maps in minutes! And best of all, it's affordable!

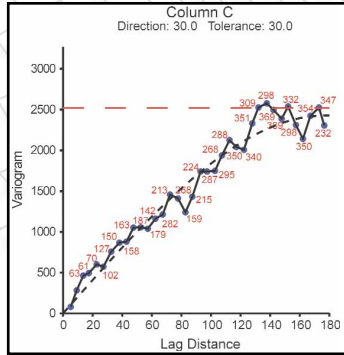
Since 1984, over 100,000 scientists and engineers world-wide have discovered Surfer's power and simplicity. Surfer's outstanding gridding and contouring capabilities have made Surfer the software of choice for working with XYZ data. Over the years, Surfer users have included hydrologists, engineers, geologists, archeologists, oceanographers, biologists, foresters, geophysicists, medical researchers, climatologists, and more! Anyone wanting to visualize their XYZ data with striking clarity and accuracy will benefit from Surfer's powerful features!

Superior Gridding

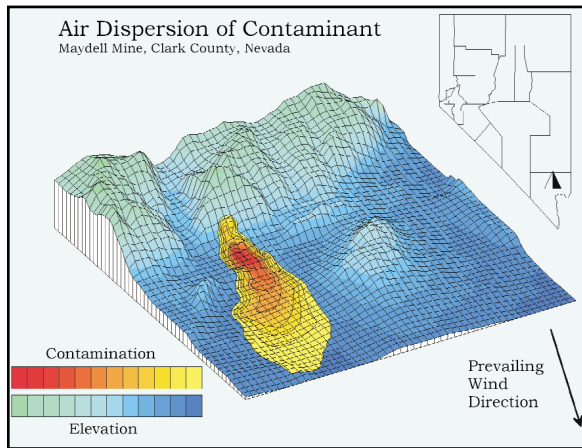
Surfer provides more gridding methods and more control over gridding parameters than any other software package on the market. **Surfer** will quickly interpolate irregularly or regularly spaced data into a regularly spaced grid. Use **Surfer's** default settings or choose from twelve different gridding methods to generate a grid file which best represents your data.



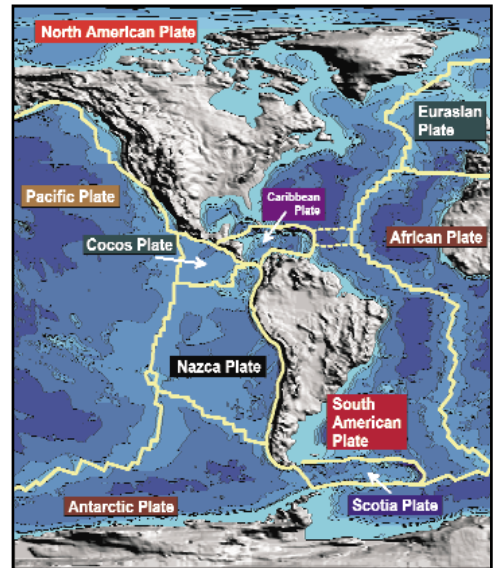
Easily add faults and breaklines to your grid.



Surfer includes an integrated data analysis tool for variogram modeling. The variogram model helps in selecting an appropriate model when gridding using the Kriging algorithm.



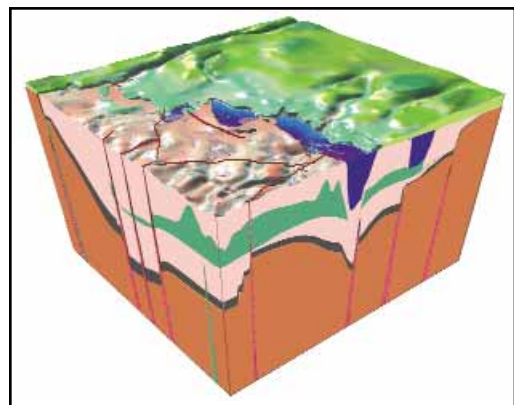
Display multiple Z variables by overlaying a color-filled contour map over a wireframe map.



Use a combination of map types to generate colorful displays of XYZ data.

Powerful Contouring

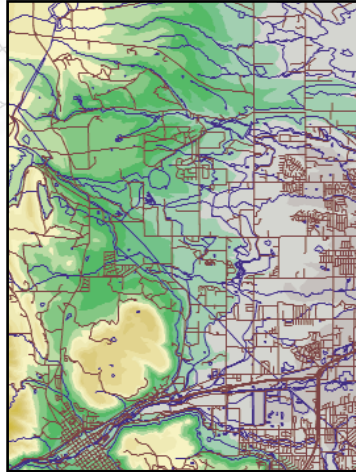
Customize your contour maps by manipulating contour line intervals, thickness, spacing, color, and labeling. Add a gradient color fill, hachures, or a color scale bar for an original map ready for publication. To position contour line labels, simply click on a label and drag it to the desired location! You can even drape a contour map over a wireframe or surface map to display multiple variables. Creating customized high-precision contour maps has never been so easy!



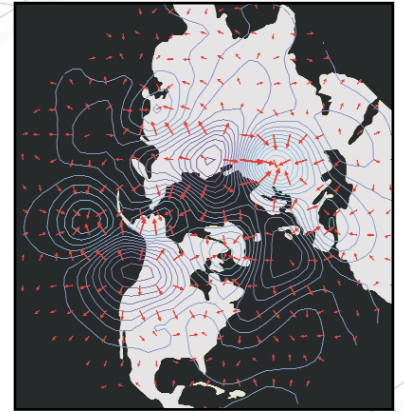
Surface maps display your data as rendered 3D surfaces. Overlay surface maps with other surface maps to generate informative block diagrams.

Numerous Options

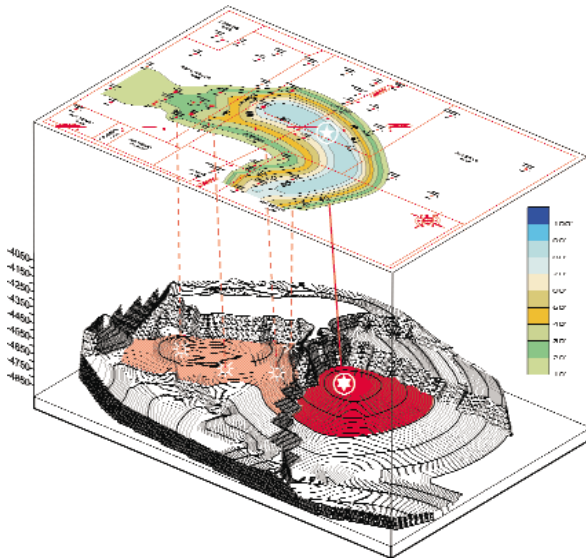
Surfer includes extensive customization options to allow complete control over all map types. Overlay or stack any number of maps and display an unlimited number of maps per page. Scale, tilt, and rotate your maps for the best data presentation possible. Customize maps by adding text, symbols, polylines, and polygons. With **Surfer's** Object Manager, all of the objects on the page are sensibly organized and are readily accessible for editing. With **Surfer**, the possibilities are endless...



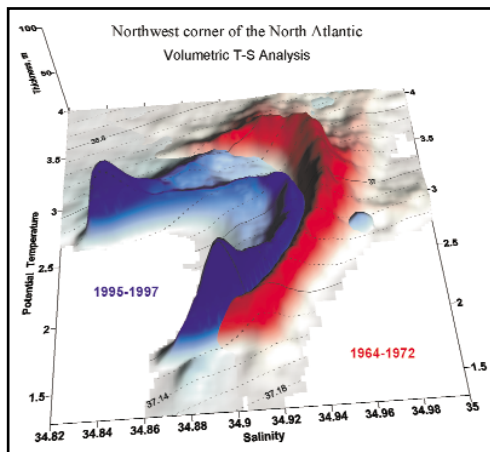
Easily generate maps from USGS DEM and DLG files. Surfer has native support for SDTS DEM and DLG files.



Vector maps show the direction and magnitude of data. Combine vector maps with any other map type!



Stack and rotate maps for the best presentation possible!



Combining surface maps is an excellent technique to visually compare data sets.

Free Technical Support

When you have questions, consult the easy-to-understand User's Guide, check **Surfer's** online help, or browse the **Surfer** Support Forum or the **Surfer** FAQ's on our web page. If you do need additional assistance for any reason, Golden Software provides free technical support to registered users by phone, email and fax.

To order Surfer, please contact Golden Software at:

800-972-1021

or

303-279-1021

Place your order or download a free demo version online at:

www.goldensoftware.com

Surfer® 8 Features

User Friendly

- Easy-to-learn Windows user interface with floating or dockable toolbars that can be turned on and off.
- The Object Manager allows you to select, edit, show, or hide all objects in an easy-to-use hierarchical tree view.
- Full 32-bit, double-precision application.
- Multi-level Undo and Redo.
- Multiple informative reports can be generated in the program.

General Features

- Define custom colors, fill patterns, and line styles.
- Define axis attributes including titles, grid lines, tick marks, and tick spacing for all map types.
- Independent scaling for X, Y, and Z (if applicable) dimensions.
- Rotate and 3D tilt all map types and bitmaps, using either orthographic or perspective projections.
- Directly load USGS SDTS DEM files instead of Surfer grid files.
- Display map scale bars for all map types.

Contour Maps

- Custom or automatic contour intervals.
- Control contour label frequency and spacing.
- Apply color and pattern fill between contours.
- Save and retrieve custom contour fill attributes.
- Add color scale legends.
- Display fault lines with custom line styles.
- Export contours in 3D DXF format.

3D Wireframe Maps

- Apply custom or automatic color zones.
- Display lines of constant X, Y, and Z.
- Use custom or automatic Z levels.

Surface Maps

- Control the color, lighting, mesh, base, and overlay color blending.
- Most map types, including other surface maps and bitmaps, can be overlaid on surfaces.

Post Maps

- Post proportional or fixed size symbols.
- Add labels from a data file.
- Specify the position, label, symbol, and rotation angle for each posted point.
- Post all points from a worksheet column or post every n^{th} point.
- Create classed post maps that show different symbols for different ranges of data.
- Create a classed post map legend.

Shaded Relief Maps

- Create photo-quality shaded relief maps.
- Control light position angles.
- Set relief parameters using central difference or midpoint difference gradient methods.
- Specify how colors are mapped to the reflectance and specify the color for missing data.

Image Maps

- Create continuous solid color image maps.
- Use data independent color spectrum files.
- Dither bitmaps or interpolate pixels.

Vector Maps

- Create vector maps from one or two grid files.
- Define symbol style, color, and frequency.
- Symbol color may be fixed, based on vector magnitude or the values of an arbitrary grid.
- Display color scale and vector scaling legends.
- Scale the arrow shaft length, head length, and symbol width based on minimum and maximum data values.
- Control vector orientation, symbol origin, and choose from linear, logarithmic, or square root scaling methods.

Base Maps

- Import base maps in several formats: EMF, E00, GSI, DXF, DLG, LGO, LGS, GSB, BNA, BLN, PLT, CLP, WMF, SHP, MIF, BMP, JPG, PNG, TIF, TGA, PCX, DCX, WPG, PCT, GIF, and USGS SDTS TVP (DDF).
- Specify the bitmap coordinate system.
- Edit line, fill, text, and symbol attributes for vector base map formats.

Overlay Maps

- Stack and overlay most combinations of maps.
- No limit to the number of overlays that can be combined.

Gridding Methods

- Create grids from up to 1 billion XYZ data points.
- Specify faults and breaklines during gridding.
- Create grids with up to 100 million nodes.
- Gridding methods include: Ordinary and Universal Kriging, Inverse Distance to a Power, Minimum Curvature (with tension), Modified Shepard's Method, Natural Neighbor, Nearest Neighbor, Polynomial Regression, Radial Basis Function, Triangulation with Linear Interpolation, Moving Average, Data Metrics, and Local Polynomial.
- Apply a generic data exclusion filter for eliminating unwanted data.
- Use powerful duplicate data resolution techniques.
- Use Cross Validate to assess the quality of the selected gridding method.
- Create variogram models.
- Generate a report of the gridding statistics and parameters.
- Customize search rules.
- Apply anisotropy ratios and angles for most gridding methods.
- Generate grids from a user specified function of two variables.

Grid Calculus

- Take first or second order directional derivatives.
- Use terrain modeling to analyze terrain slope, terrain aspect, profile curvature, plan curvature, and tangential curvature.
- Apply differential and integral operations including gradient, Laplacian, biharmonic, and integrated volume.
- Apply Fourier and spectral analysis to generate a grid correlogram or periodogram.

Variography

- Display both the experimental variogram and the variogram model.
- Specify the estimator type as a variogram, standardized variogram, auto covariance, or auto correlation.
- Specify variogram model components: exponential, Gaussian, linear, logarithmic, nugget effect, power, quadratic, rational quadratic, spherical, wave (hole effect), cubic, or pentaspherical.
- Combine multiple variogram components into complex nested models.
- Use the AutoFit feature to define the parameters of selected components.
- Customize the variogram to display symbols, variance, and number of pairs for each lag.
- Export the experimental variogram data for plotting in other graphing programs.

Grid Utilities

- Interactively edit nodes in the grid node editor.
- Blank specified regions of the grid.
- Compute grid volumes, surface areas, cross sections, and residuals.
- Use matrix or spline smoothing utilities.
- Use the on-screen digitizing function to digitize in map coordinates.
- Convert binary grids to ASCII grids or ASCII data files.
- Combine multiple grid files to form a single grid file.
- Filter grids using many pre-defined filters or define your own filter.

Export Options

- Export formats include EMF, MIF, GSI, GSB, DXF, SHP, WMF, CLP, CGM, TIF, BMP, JPG, TGA, PCX, DCX, WPG, PNG, BNA, BLN, GIF, and PCT.

Drawing Tools

- Drawing tools include text, lines, arrows, polygons, rectangles, ellipses, and symbols.
- All objects can be rotated, moved, scaled, and combined into composite objects.
- Math Text system supports superscripts, subscripts, math and Greek symbols.
- Use the reshape tool to edit areas and curves.

ActiveX Automation

- Automate repetitive tasks with scripts.
- Use Visual Basic, C++, Perl, or any ActiveX Automation compatible programming language.
- Includes Scripter, a VB compatible scripting program to automate Surfer.

Worksheet

- Import Formats include XLS, DAT, SLK, WKX, WRX, CSV, TXT, BNA, and BLN.
- Data file size up to 1 billion rows.
- Calculate data statistics.
- Sort data based on columns.
- Transform data using custom equations.
- Print the worksheet.
- Save your data in XLS, SLK, CSV, TXT, DAT, BNA, and BLN formats.

Order Surfer® Today!

Surfer is available directly from Golden Software.

You can order by phone, fax or
use our secure online order form at:
www.goldensoftware.com

Please contact us if you have any questions.



System Requirements

- Windows 98, Me, 2000, XP, or higher.
- 32 MB RAM minimum, 64 MB recommended.
- 25 MB of free hard disk space.
- 800 X 600 X 256 colors minimum resolution.



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809 14th Street, Golden, Colorado 80401-1866 U.S.A.
800-972-1021 • 303-279-1021 • FAX 303-279-0909