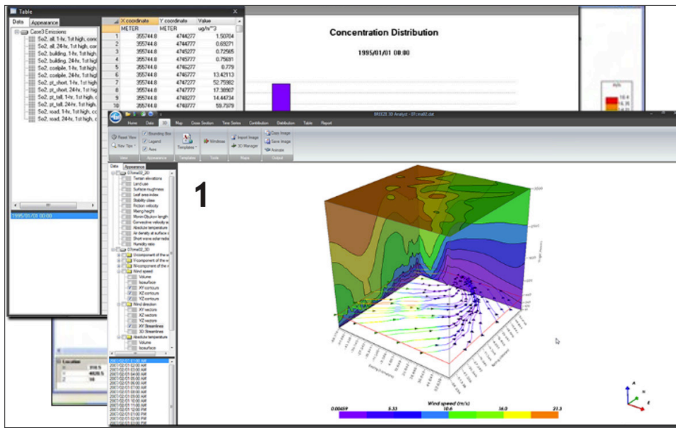




BREEZE 3D ANALYST

BREEZE 3D Analyst is a powerful post-processor that enables you to analyze and visualize data in 3D space, geographical information system (GIS) display, cross section contours and surfaces, and time series charts. 3D Analyst also allows for the extraction and merging of data to create new data sets based on highs, summations, differences, etc. It is useful for analyzing meteorological, terrain, and concentration data. Animated movies can also be created for display in presentations and it is compatible with Google Earth and Surfer®.



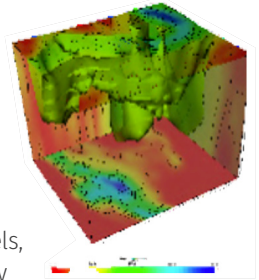
BREEZE 3D Analyst is included for free with the purchase of BREEZE AERMOD, CALPUFF, and Incident Analyst. It is also available for purchase as three stand-alone versions: one for gridded meteorological data, one for dispersion model data, and one for terrain data. Additional data types can be programmed into the application on request.

Display Windows

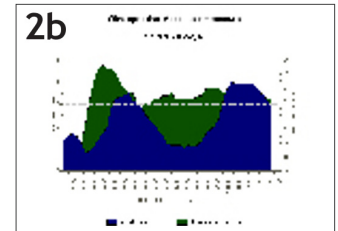
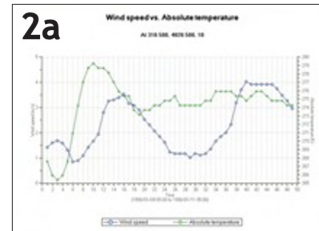
In the **3D Display (1)**, rapidly navigate and investigate the distribution of spatial data. In the top-left panel, the user-data and associated display options are provided in an intuitive and organized tree structure. In the bottom-left panel, the data time-periods can be selected randomly or in sequence. Click on an item in the data-tree to display either a cross-sectional plane, three-dimensional iso-surface, volume, or vectors.

You can also select contour planes and observe the spatial variations of the data as you move (i.e. slide) the planes to any location in X,Y,Z. Or, click on the color scale to select and move the iso-plane to any desired value. The data spatially transitions from

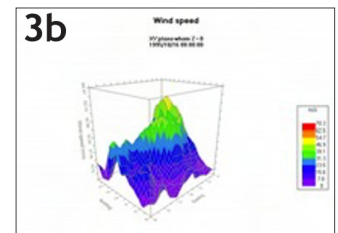
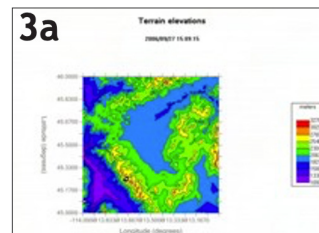
min to max. Display any number of variables with any number of contour planes and iso-surfaces. Set the transparency of both the contour planes and iso-surfaces. Observe how the planar contours intersect the iso-surfaces. Set color and level values for any number of contour and surface values. Automatic levels, user-defined min/max thresholds, and fully user-defined level tables are available.



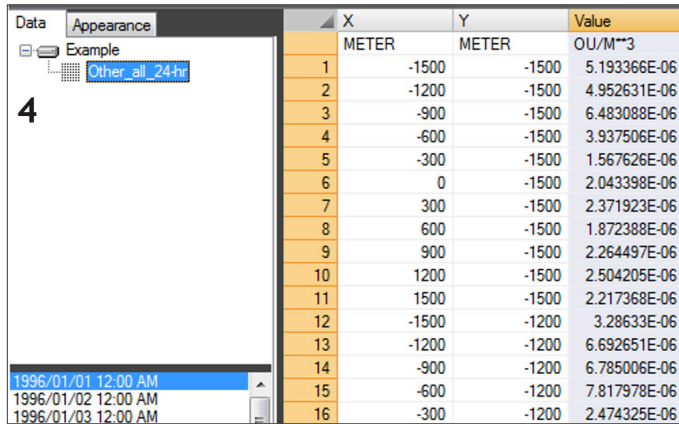
The **Time Series Display (2a and 2b)** window shows the change in a selected parameter as a function of time. Up to two parameters can be plotted in the same chart. The data displayed is for a specific location (x,y coordinate) which can be selected by the user. If 3D data is available, the specific height level (z-value) can be selected. A tool button allows the user to change to a bar chart, area chart, or other chart types.



The **Cross Section Display (3a and 3b)** visualizes 2D or 3D gridded data as a 2D or 3D contoured image. 3D data can be displayed in the XY, XZ, or YZ planes for different levels (e.g., heights above ground level or mean sea level) and different time periods. Other available cross-section charts include the mesh display, 3D surface display, scatter plot, and more.



The **Table Display (4)** window shows the gridded data in tabular format. Simply select the parameter type from the Data tab to display the desired data. If data is available for multiple time periods, select the desired time period. The data can be cut and pasted to a spread sheet.



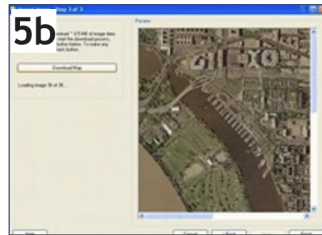
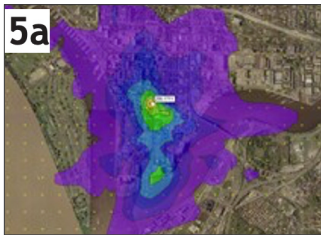
	X	Y	Value
	METER	METER	OU/M**3
1	-1500	-1500	5.193366E-06
2	-1200	-1500	4.952631E-06
3	-900	-1500	6.483088E-06
4	-600	-1500	3.937506E-06
5	-300	-1500	1.567626E-06
6	0	-1500	2.043398E-06
7	300	-1500	2.371923E-06
8	600	-1500	1.872388E-06
9	900	-1500	2.264497E-06
10	1200	-1500	2.504205E-06
11	1500	-1500	2.217368E-06
12	-1500	-1200	3.28633E-06
13	-1200	-1200	6.692651E-06
14	-900	-1200	6.785006E-06
15	-600	-1200	7.817978E-06
16	-300	-1200	2.474325E-06

1996/01/01 12:00 AM
1996/01/02 12:00 AM
1996/01/03 12:00 AM

- ▶ Customize object properties to display data as desired
- ▶ Copy snapshots of each display window and paste to other applications
- ▶ Extract subsets of X, Y, Z formatted data to view and analyze
- ▶ Merge multiple data sets together and simultaneously perform various operations (scale and translate) on the merged data
- ▶ Plot data to Surfer, VTK (Visualization Tool Kit for 3D rectilinear file format), and Google Earth applications
- ▶ Animate 2D and 3D displays and present results in Flash (.SWF) or .AVI movies
- ▶ Display reports of basic statistics for each parameter within a data set
- ▶ Copy and paste tabular data to spreadsheets

All trademarks are the property of their respective owners.

The **Map Display (5a and 5b)** displays contours and high values within a GIS. Base maps can be added to the display, including ESRI Shapefiles, MapInfo TAB files, AutoCAD DXF files, and various raster images. 3D Analyst links to a map server to make importing aerial photographs simple. A population analysis tool can identify populations exposed to specific contour levels.



Finally, the **Report Display** window provides summary and statistical information for a selected data set, including minimum, maximum, median, mean, standard deviation, variance, maximum table (i.e. max50), and others.

BREEZE 3D Analyst Capabilities

- ▶ View data in 3D surface, 2D plane, tabular, and as a function of time
- ▶ Perform integrated data contouring
- ▶ Perform population analyses with census data for user-defined threshold levels or for auto-generated concentration levels
- ▶ Slice 3D view to identify data trends and anomalies
- ▶ Display data while simultaneously interacting with it
- ▶ Increase understanding of complex data sets and the interrelationships of multiple parameters

trinityconsultants.com/software

P +1 972.661.8881 / F +1 972.385.9203

breeze@trinityconsultants.com

©2022 All Rights Reserved.