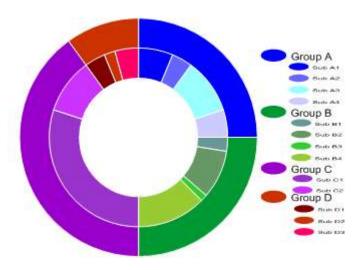
What's New in Grapher 11?

We have compiled a list of some of the top new features in Grapher 11. This list is only a small sampling of the new features added to Grapher 11.

Create 2D Doughnut Plots

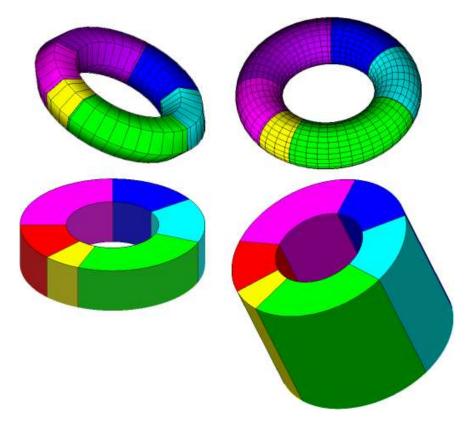
Doughnut plots are a new type of statistical graph. All of the categories in the doughnut are made into percentages of the whole, similar to pie charts. Multiple doughnut plots can be stacked, for making comparisons between data easier.



Add text to fully customize your graph.

Create 3D Doughnut Plots

3D doughnut plots are very similar to 2D doughnut plots, except they are displayed in 3D and cannot be stacked. The shape of the doughnut and the height of the doughnut can be changed for easy visual interpretation of the data.

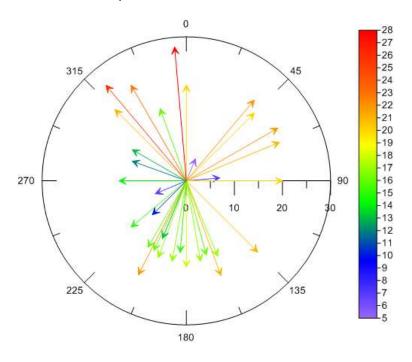


Create the plot in exactly the layout and formation that you want.

All aspects of the doughnut plot are fully customizable.

Create Polar Vector Plots

Polar plots plot data with angle and radius values. Two types of vector plots can be created in polar coordinate systems: 1 Point Vectors which go from a starting point to a specified angle with the specified distance and 2 Point Vectors which connect two points. Polar vector plots can be combined with other polar plots to give your graphs the best appearance. Alter all aspects of the polar plot, including the line color and arrow style.

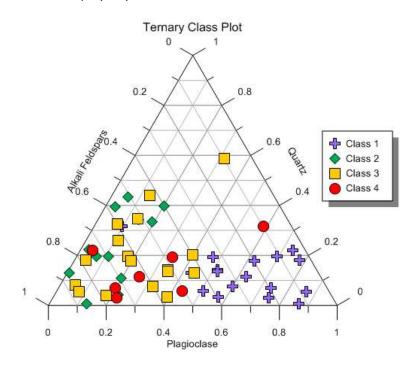


Display polar vector plots connecting two points.

Color vectors all the same or with the color indicating length.

Create Ternary Class Scatter Plots

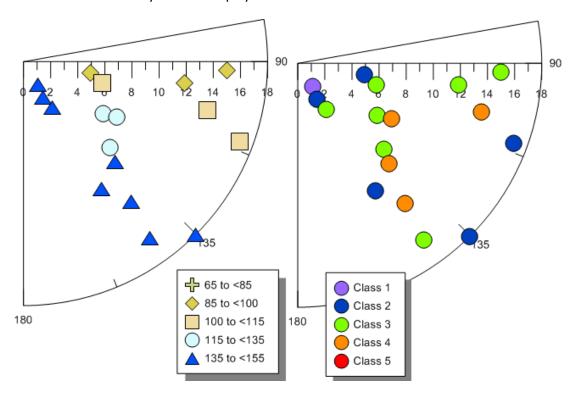
Create ternary diagrams displaying any three variables normalized to 100%. Add a fourth variable to the data by displaying the data as a class scatter plot. Lines can connect the poins, labels can be added, and any portion of the graph can be edited. Create the classes from text columns or from numeric columns for best display of your data.



Create ternary class plots to highlight a function of your ternary data. For instance, all of the items in a class could be collected on the same date or from the same location.

Create Class Plots Based on Text or Numbers

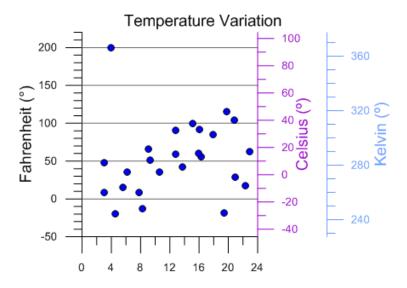
A new enhancement to class plots allows all classes in a class plot to be created from numbers or text. Text can be any variable information, such as probability classifications, group names, collector's names, or scientific names. Change symbols for each class to any desired symbol property. To enhance the class plot even more, the number of classes has been increased to 300 classes. You have full control over all of your data display!



Display data as you want! Control every aspect of your class scatter plot.

Link Axes

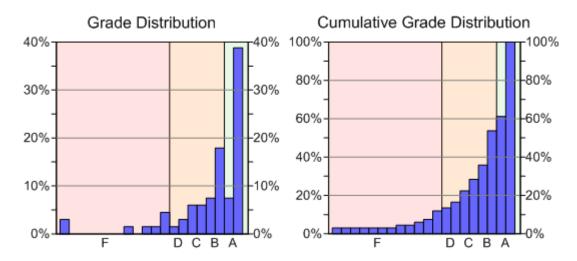
Linking allows one axis to control portions of another axis. The controlling axis can control the scaling, position, tick mark spacing, limits, and length of the dependent axis. The position can include an offset so the dependent axis is always a certain number of page units away from the controlling axis. The length can include a multiplier so that the dependent axis is always a certain percentage in length of the controlling axis. And, the limits can be based on any mathematical function, so that multiple units can be displayed on the graph. This makes editing your graph easier than ever!



Take full control over all aspects of your graph. Allow additional axes to be automatically updated from the controlling axis.

Create Cumulative Histograms

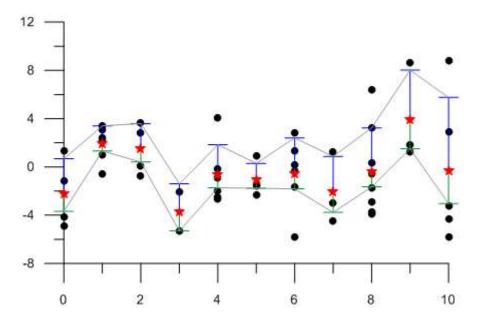
Cumulative histograms display each histogram bin added to the value from the previous bin. This allows additional information to be summarized about the data. A simple check box now calculates the cumulative values and displays these values on the histogram.



Display the data as you want. Show histograms as relative histograms with each bin calculated separately or as cumulative histograms with each bin added to the value from the previous bin.

Enhanced Error Bar Display

Error bars display information about a single set of data in your entire graph. But, the trend of the error bars also helps analyze the trend of the data. Now, with the enhanced error bars in Grapher, your positive and negative values can display different statistical information, giving you more control over every aspect of your data.



Display different positive and negative values for errors bars to best display data trends across all data.

Export Fit Curves with User Defined Spacing and Limits

Not all data fits nicely into even increments. Sometimes, it is necessary to resample data. One easy method of doing this in Grapher 11 is to add and export a fit curve. Set the X minimum and maximum values and the spacing between values when exporting fit curves.

Fully Control Date/Time Values

Date/time data have been upgraded in Grapher 11. Now, all dates from the beginning of time to the end of time can be displayed on your graph. Display data from BC/BCE to AD/CE on the same graph. Simply type the data in the worksheet, set the desired format, and create the graph. All of the data is displayed in the proper locations.

For even further control, any portion of the date/time format is fully customizable. Use yourlanguage, your preferred date/time format, and make your graph exactly like you want.

Store Last Used Export Settings

Export to the same format? Want to use the same settings every time? Now you can. Grapher 11 stores the file format and all settings for each file. This saves you time as you export your data. Settings are automatically stored to meet your preferences.

Calculate Statistics on Range of Values

Need to calculate statistics on data that contains ranges that you want to exclude? Or, do you only want to calculate statistics on data inside a set range? Or do you want to exclude a single value with or without a tolerance value? Now, Grapher makes this easy. Simply select the range you want and calculate the statistics only on the data you need. Don't spend hours getting the data just right. Allow Grapher to make it faster and more convenient.

Increased File Compatibility

You asked and we answered. Import and export in all popular formats! New data import formats include SEG-P1 and DXF data file formats. In addition, export graphs directly to SVG files for easier sharing of graphs on the internet. Many other export and import formats have been enhanced to make your visualization better. Compress PDF files, import CSV files with semi-colon separated data, export with a page boundary for both raster and vector PDF files.

Transform Text, Blank Values, and Numbers

Have some data that isn't quite in the correct format? Wish there were an easy way to convert it? Now there is. A new worksheet feature allows data transforms to work on numbers stored as text and blank values. Now, your data editing is easier than ever.