

# Specialty Graphs

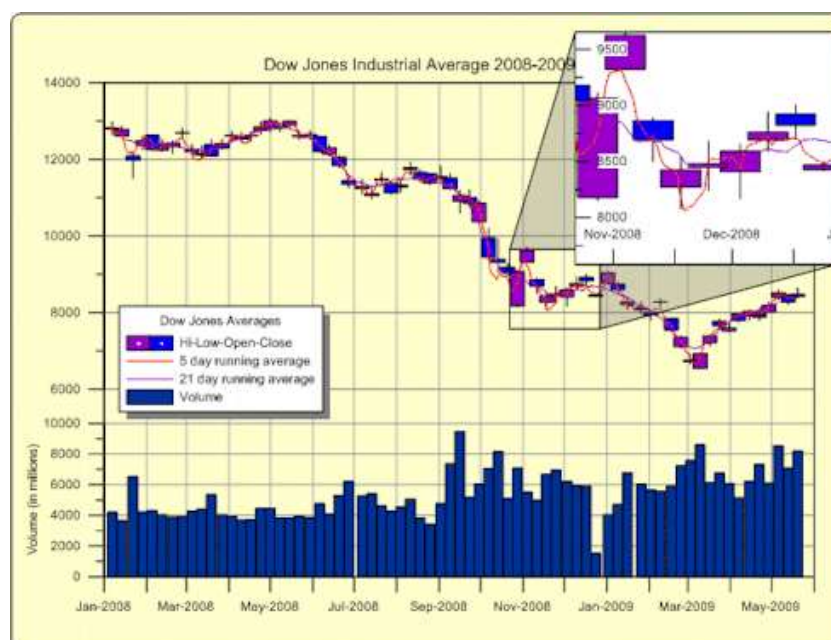
## Types of Specialty Graphs

- High-Low-Close Plot
- Candlestick Plot
- Ternary Line, Scatter, Line/Scatter Plots
- Ternary Class Scatter Plots
- 2 Point Vector Plot
- 1 Point Vector Plot
- 2 Point 3D Vector Plot
- XYZ-dx,dy,dz Vector Plot
- Stiff Diagrams

## Specialty Graph Features

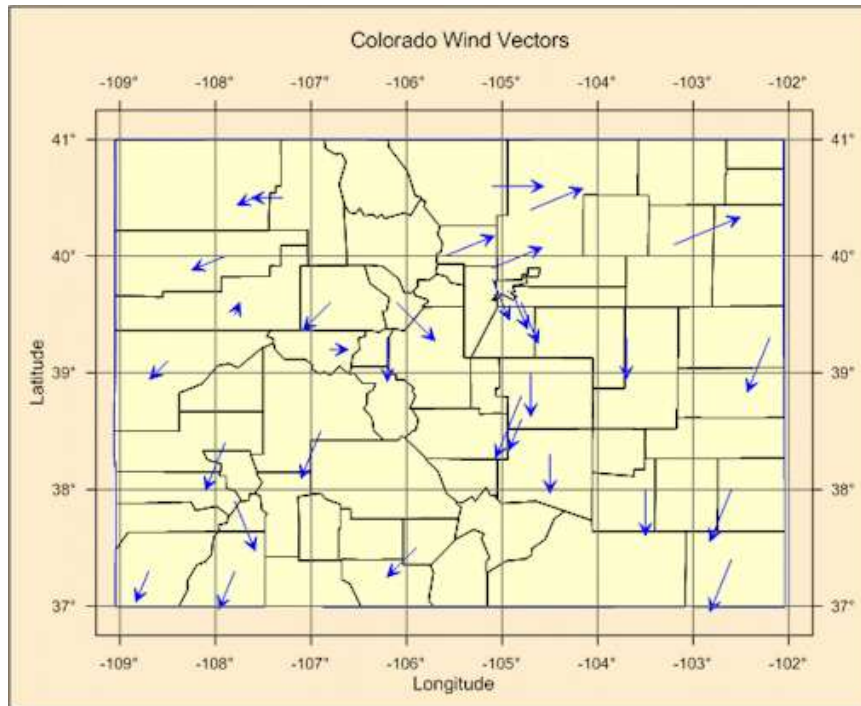
- Display symbols with any shape, color, or opacity.
- Set symbol line and fill properties separately, including setting the line width for the border of the symbol.
- Change the frequency of symbols to control how many symbols are displayed.
- Use a symbol table to vary the symbol.
- Use a symbol column to define the symbol shape from a worksheet column.
- Display lines with any color, width, opacity, or style.
- Display fill with any pattern, color, opacity, or gradient.
- Set specific axis properties for each graph, such as the limits on a ternary axis or the number of rows displayed on a stiff diagram.
- Add labels to points to clarify the graph.
- Add a graph title or legend to enhance your graph.
- Adjust the opacity of all objects in the graph.
- Vary vector lines with a color scale.
- Display bubbles on ternary diagrams to represent a fourth variable.

**High-Low-Close plots** display a range of Y values at each X value. These plots are commonly used to display the high, low, opening and closing of stock values, though High-Low-Close plots are also used for many other purposes. High-low-close graphs can be displayed with the standard line or with bars, the "candlestick" graph.



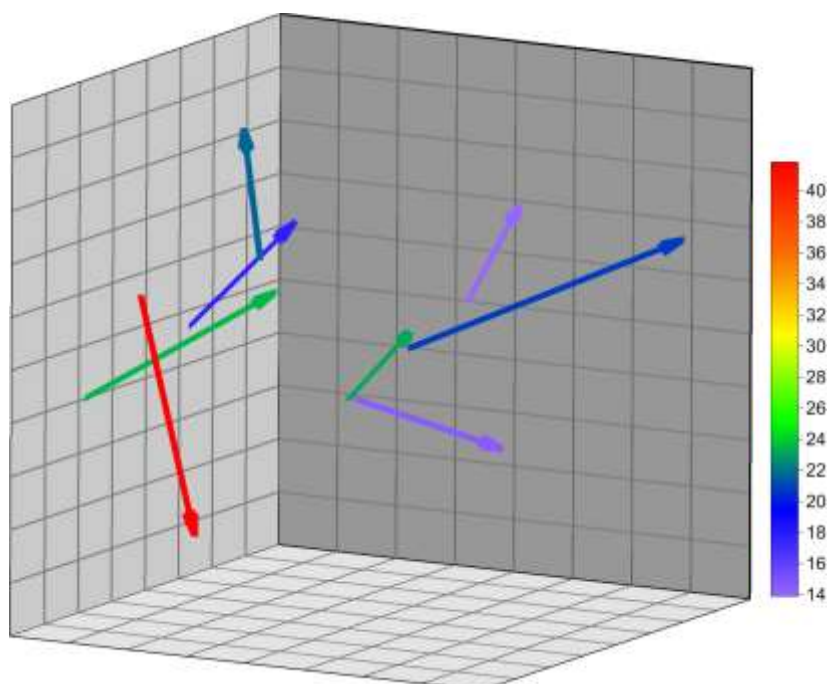
*Display multiple axes and multiple graphs on each page.  
Add a graph magnifier to highlight a subset of your data.*

**Vector plots** are used to show the starting and ending point of a variable, such as wind or current. Grapher allows you to set the starting XY position. The ending position can be specified with angle and magnitude or ending XY position. Create vector plots in 3D using a starting XYZ position. The ending 3D position can be specified with an ending XYZ position or with distances in the X, Y, and Z direction (dx, dy, dz).



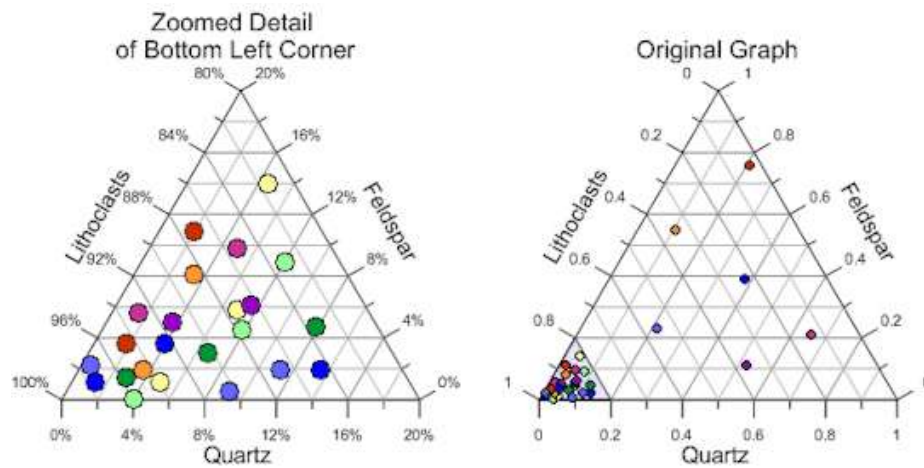
*Add line/scatter base maps to add locations to your vector maps!*

**3D Vector Plots** are used to show the starting and ending point of a variable in 3D space. Set the starting position with an XYZ location. Set the ending position of each vector with another XYZ point or with distances in each of the X, Y, and Z directions.



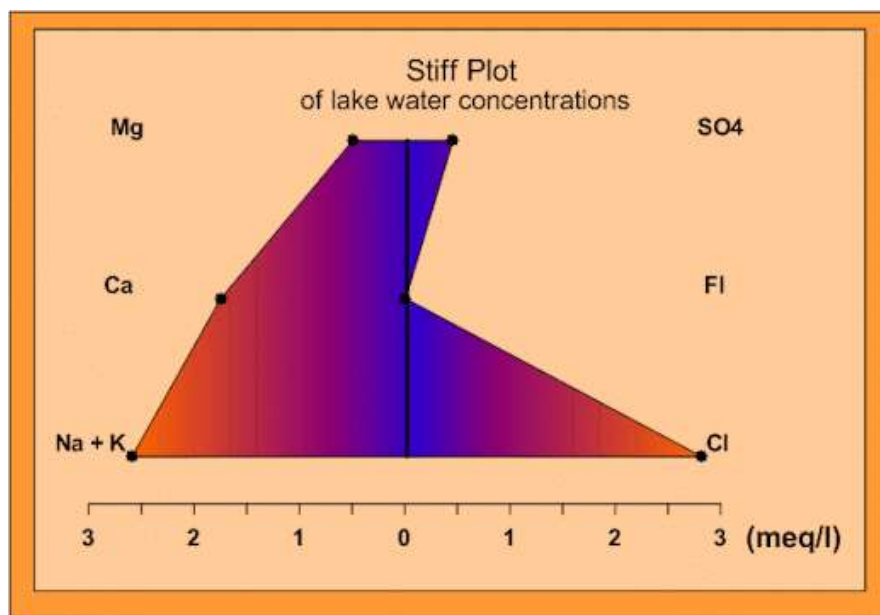
*Display vectors in different colors, to emphasize the lengths of the vectors.*

**Ternary diagrams** show the relative proportions of three variables on three axes. Choose to show the relative proportions as percentages or as fractions. Add lines to connect the points on the ternary diagram! Display any column for the labels or show relative proportions for labels! Display bubbles instead of symbols to add another variable to the graph. Display symbols as classes to add an additional level of detail. Zoom in on an area of interest!



*Zoom in on a section of a ternary diagram to reveal more detail!*

**Stiff diagrams** can be used to display water quality. Stiff diagrams show relative concentrations of multiple cations and anions.



*Stiff plots can be color filled to aid in the interpretation of the graph.*