

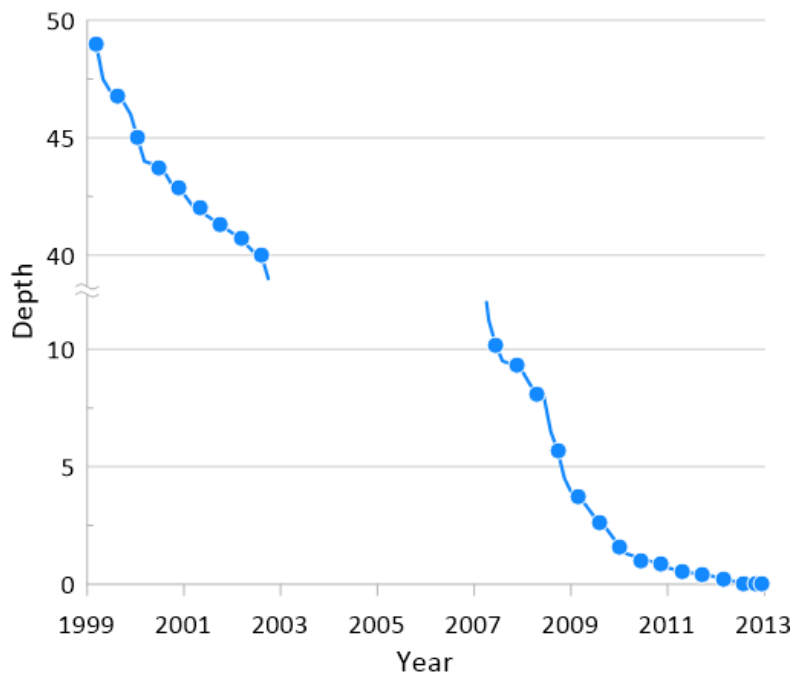
## What's New in Grapher 15?

There are many exciting new features in Grapher v15! 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 by clicking the **? button** in the upper right corner of the program to open the Help.

### Break Axis improvements

Draw more attention to important regions of your graphs with these new break axis features:

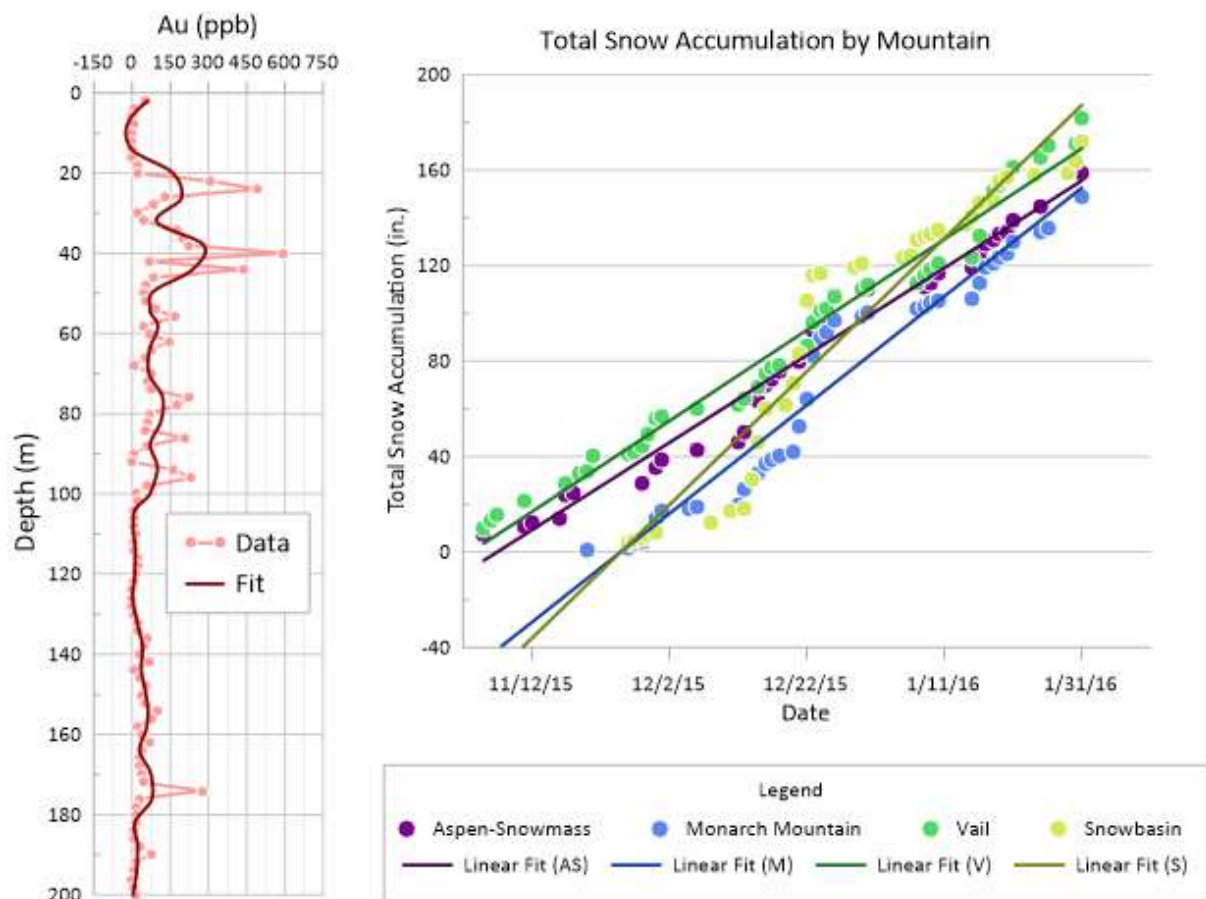
- Draw line plot to break axis limits
- Add a symbol or line before and after the break axis limits on the plot itself
- Choose from four different options for the break axis symbol



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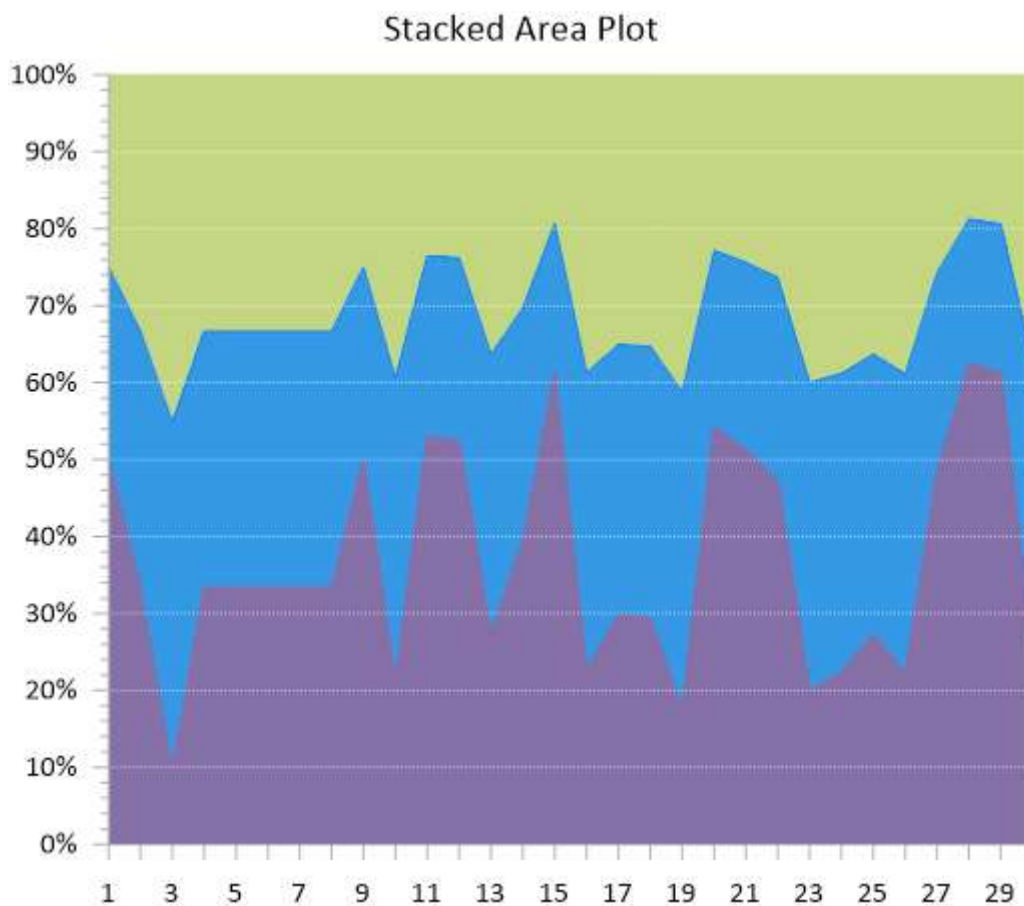
### Fir Curve improvements

Gain more insights into your data by adding fit curves to more data types than ever before! Model down-hole data with  $X=F(Y)$  fit curves or model individual classes or all classes in class scatter plots to make more informed decisions about your data.



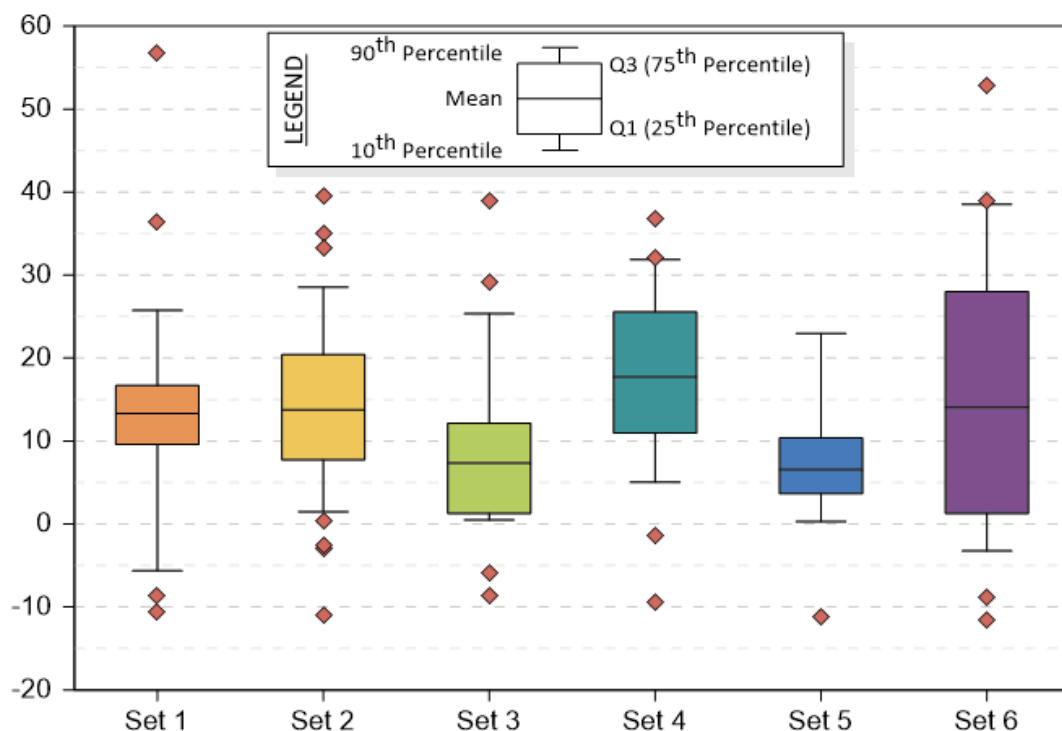
## New Math Plot

Create product plots, subtraction plots, average plots, and any other function-type plot you desire with the new-and-improved Math Plot. Previously called the Summation Plot, the functionality for this plot type has been expanded to support any type of function that Grapher supports.



## Box Plot Customization

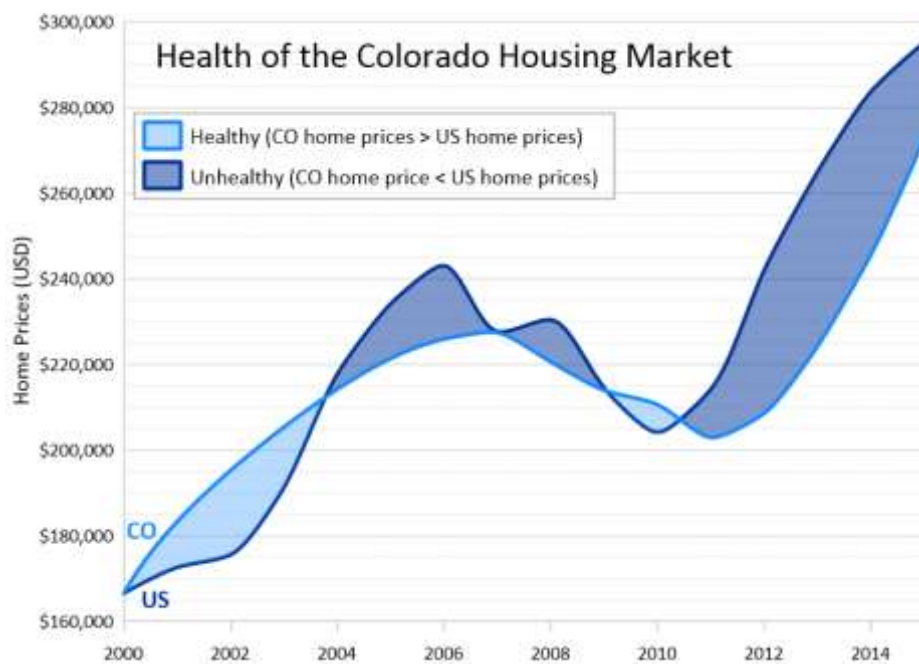
Convey more information than ever before by choosing alternative statistics on a box-whisker plot for the center line, box edges, and whiskers. Center line options are: *Median* or *Mean*. Box edge options are: *Quartiles*, user-defined *Percentiles*, a user-defined *Confidence level*, a user-defined *Standard deviation*, a user-defined *Standard error*, *Minimum/maximum*, and *Average*. Whisker options are: *IQR\*factor* (where factor is user-defined), *Minimum/maximum*, user-defined *Percentiles*, a user-defined *Standard deviation*, and a user-defined *Standard error*.



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## Fill between plots differently above and below intersection

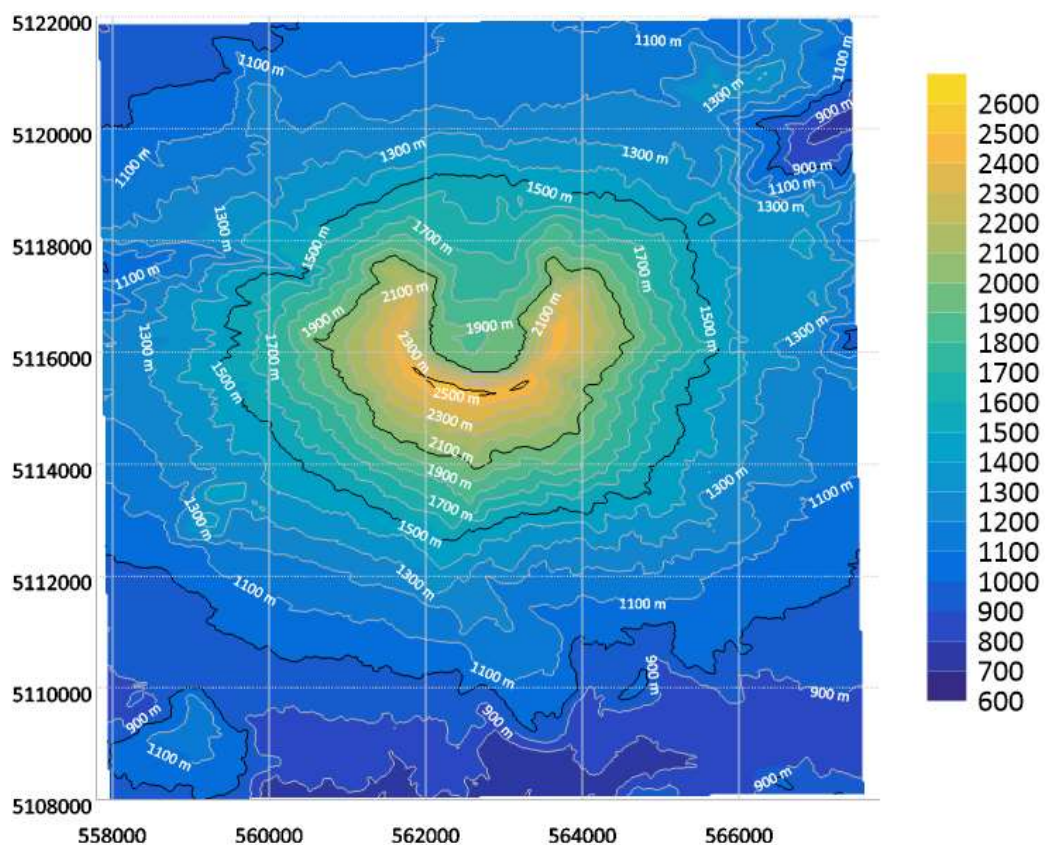
Accentuate differences between two plots by choosing different fill settings for portions above the intersection of the plots versus portions below the intersection of the plots.



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## Label contours

Create more informative graphics by labeling some or all contours for the various contour maps in Grapher.



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## Transform worksheet data with relative cell references

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

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## UI Improvements

Save time by finding commands more quickly and with fewer clicks with the following rearrangements:

- Move pie chart slice properties into Property Manager
  - Move legend entry properties into Property Manager
  - Move shared contour map levels properties into Property Manager
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## Scatter plot symbol color improvements

Exercise more control over the display of scatter plots with these color improvements:

- Color symbols based on a data value mapped to a colormap gradient
  - Color symbols from an RGB color column
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## Many more!

- Option to move error bars behind symbols in line/scatter plot
  - Ability to reverse direction of ternary plot axes
  - Reset pie chart slice properties to defaults
  - Automation: add and edit text using MathText commands
  - Automation: specify data file for use when opening a GRF with missing data
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