

Inspector Panel

This window allows you to change the parameters of any of the 5 data sets that the program can display simultaneously. The pop-up menu at the top of the window selects which data set you are modifying.

The Formula-File selector is the only one that doesn't require the "OK" button to be pressed after a change is made. Plot3D can plot data files, DEM files and formulas. Click for more details:

- ;Formula.rtf;;↵ **Formulas**
- ;File.rtf;;↵ **Files**
- ;DEM.rtf;;↵ **DEM Files (USGS Digital Elevation Maps)**

The series of geometric shapes at the bottom of the inspector allows you to change the display symbol for the current data set. The blank square turns the current data set "off". The more points in the symbol, the slower the 3d plot will be rendered. Mesh is the fastest type.

The cylinder symbol has been replaced with a histogram mode in this version. Histogram mode will work for all 3 data set types. It will display a cylinder with height 'z' for every data point. The cap of the cylinder will be colored, but the cylinder itself is white/grey. In scatter plot mode the size of the cylinders is determined by the nx/ny for the data set (nx/ny have no other meaning in this mode).

The lower right symbol allows:

;Spherical.rtf;;**Spherical Plots**

There are now a variety of color options:

In 'Mono' mode, the entire plot will be colored with the color from the 1st color well.

In 'Height' mode color is height dependant and will vary smoothly between all of the selected colors in the 5 color wells. ie -if 2 color wells are selected, the bottom of the plot will be the color of the 1st, and the top of the plot will be the color of the 2nd with a smooth gradation

between the top and bottom.

In 'Grad' mode color is dependent on the steepness of the slope at any given point. Steep areas will be given 'high' values and flat slopes will be given 'low' values, ie $\sqrt{(\text{dz}/\text{dx})^2 + (\text{dz}/\text{dy})^2}$. A warning, this calculation is done via the sampled mesh, not with the original equation, so mesh size CAN have an effect on this plot.

In 'Next Set Z' mode (works only on data set 1), the color is determined by the altitude of the next data set (data set 2). This mode still has a few problems/features. 1) Data set 2 is used to determine min/max Z even if it is turned off. 2) The z->color translation uses the same zmin/zmax that is used for data set 1. So, data set 2 must cover a similar range in Z for this method to work properly. 3) This mode works ONLY when the mesh size for data sets 1 and 2 is the same.