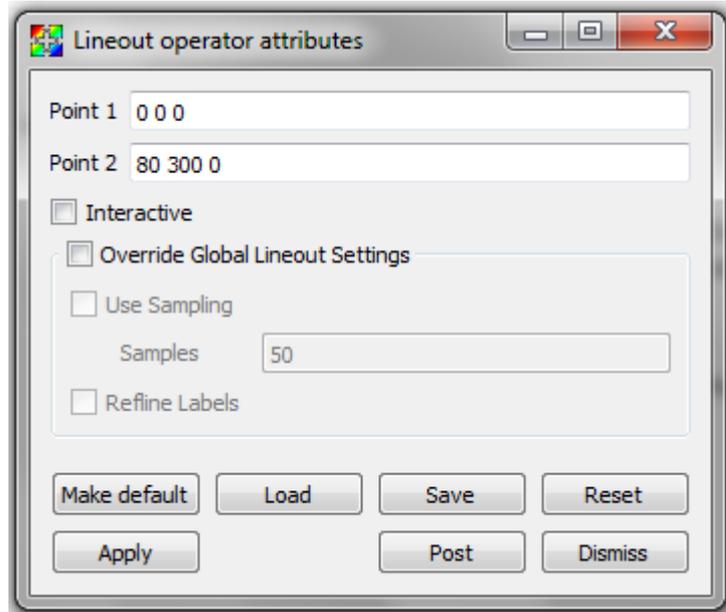


## Quick manual for 3D visualization software VisIt

How to make a 1D slice plot from a 2D plot file?

1. Open the 2D \*.vtr file with VisIt.
  - a. VisIt main window ->In Sources box Open
2. In Plots box click to the Add button, from the drop down menu:
  - a. Curve ->Lineout
3. It will add a new plot to the plot files.
4. Click on the "Lineout" text from the Tree menu, and add the coordinates for Point 1 and Point 2 to a form like this:  
Point 1:  $x_1, y_1, z_1$   
Point 2:  $x_2, y_2, z_2$
5. Click to apply, and then draw the plot with the draw button from the Plots terminal.

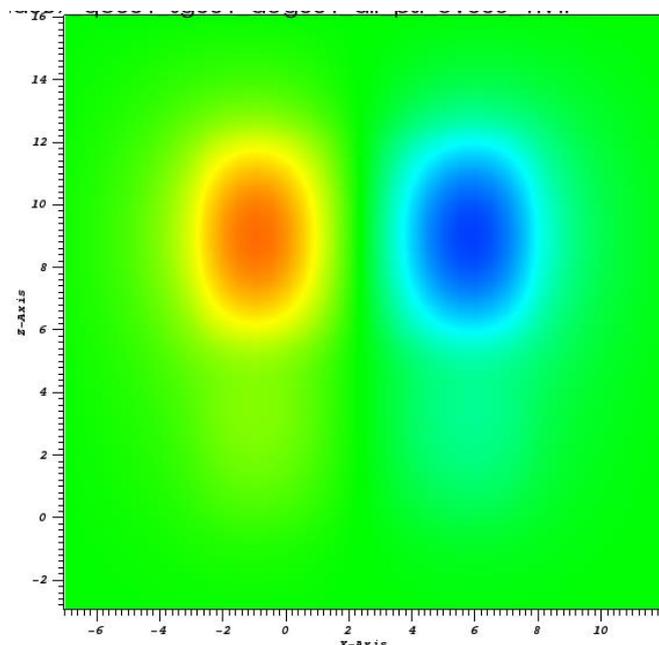


How to make 2D plots?

1. After you opened the file click on the Pseudocolor, or on the Contour button (Which plot you prefer, or both).
2. Click on your data file from the list
3. You can change the properties of the plot if you double click on the plot from the plots list.

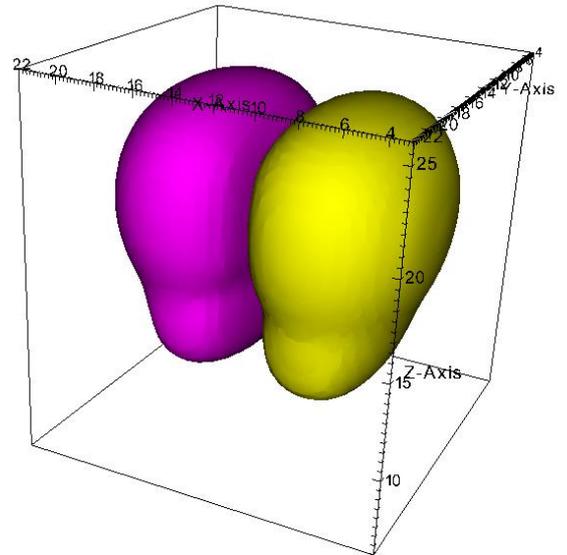
How to make surface plots? (From 2D values to a 3D elevated plot)

1. Probably the surface plot feature is turned off by default, so you have to turn it on:  
Main menu: Options->Plugins->Choose surface plots-> Apply.  
And then save setting from the Options menu!!! And restart VisIt.
2. Then add a plot surface plot, from the Add menu. And draw it.
3. You can change the properties of the plot with a double click on the Surface property in the plots list.



### How to make Contour in 3D?

1. Load the 3D \*.vtr file, and add a contour feature.
2. You can adjust the opacity and the number of levels if you double click on the contour feature.



### How to make 2D plots from a 3D data?

1. Load the 3D \*.vtr file, and add a surface feature.
2. Add a Slice operator: Operator-Slicing-Slice
3. In the Slice feature define the slice plane coordinates, and draw.

### How to plot different plots on top of each other?

1. Load the files, and add the plots.
2. Uncheck the "Apply operators to all plots" checkbox.
3. Add a Transform operator: Operator-transform-transform
4. Alter the translation operator features in the transform operator, and draw.

