

Visualizing a Dataset Using Panoply - Longitude-Latitude Plots

In this video you will see how to make a Lat/Lon Plot. This tutorial assumes that you have already installed Panoply and have a netCDF file open that you wish to visualize.

On the Panoply Sources screen, select the data set you wish to plot, and then click the **Create Plot** icon at the top.

In the dialogue box that comes up, click in the radio button next to select **Create georeferenced**.

To produce a Lat/Lon Plot, select **Longitude-Latitude** from the drop down menu.

Click the **Create** button.

This is what your Lat/Lon Plot looks like.

By the way, multiple plots can be opened at one time to compare datasets by repeating this process.

To view the actual values of the dataset variables and the Zonal Averages, click on the **Array Tab** at the top of your window.

Use **Format** to select the number of decimal places and how the values are rounded.

There are many things you can do to customize this plot.

Let's take a look at the tabs below

On the **Array(s) Tab**, you can use the **Plot** drop-down menu to view the Plot as a **Map** or as a line graph of **Zonal Averages**.

There are three ways you can advance through **Time** steps.

You can use the arrow keys on your keyboard and the map or graph will update with each step.

You can enter a number here in the time step, for example time step 11 of 47, and tap the enter key on your keyboard.

Or you can select a specific time step from the **Time** drop-down menu.

On the **Scale Tab**, you can adjust the **Scale Range** to see finer resolution changes of the data.

As an example, I shift the scale so that only areas with salinity greater than the ocean average of 35 [PSU] are highlighted.

The **Map Tab** allows you to select different map projections, with this drop-down menu.

Let's get back to our regular projection.

Use **Center on Lat/Long** to center the projection over the area you wish to examine.

On the **Overlay Tab**, you can select up to two datasets to add to your map to display geographic information, such as country borders and rivers.

Use the **Contours Tab** to delineate data contours. You can customize the contours by selecting **Contour Style** and add **Contour Labels**.

The **Vectors Tab** is only active when combining datasets, which will be reviewed in the Combined Plotting Video.

The **Labels Tab** is used to change the displayed **Plot Name** and **Plot Title**.

We hope you have found this video useful. Print copies of these step-by-step instructions, are also available.

Thank you