Using Panoply to Visualize MODIS Files

Panoply is a very easy to use free program which plots geo-gridded arrays from netCDF, HDF and GRIB datasets. This activity will show how to use a MODIS aerosol file with panoply.

Go to this site to obtain panoply for your platform.
http://www.giss.nasa.gov/tools/panoply/

Files can be opened in Panoply in one of two ways:
1) Start panoply and in the "File Menu" select open file
2) Click on your file. Panoply should recognize the file and open it.

Once the file is open select the "Datasets" tab.
Click the arrow next to "Data Fields" to show all of the data fields.
Check the "List only plottable variables" box at the bottom of the page.

Find the "Optical_Depth_Land_And_Ocean" variable and double click on it.
Find the plot window and activate it by clicking on it.
Find the area on the map which displays the data.
To zoom in, mouse over the area you want to enlarge. On a mac hold down the command key while clicking the area you want to enlarge. Make sure you center the magnifying glass icon over the area you wish to enlarge so it will stay in the center of your screen.

Here are some things you can do to modify the display:
Arrays Tab
In the array tab below the image select "interpolate" if you want a smoother image.

Scale Tab
Select a minimum and maximum value. Use zero as a minimum. Hit enter and the scale in the image should update.
You can select other color scales from the drop down menu.
To change the scale caption click the "Other" button and then enter your text in the box.

Labels Tab
Change the plot name and plot title.

To Save The Outbook
In the file menu select "Save Image" or "Export to KMZ"

You may want to experiment with some other file parameters:
Return to the "Sources" window
Corrected_Optical_Depth_Land