

Panoply Exercise

Looking into Level 2 and 3 Aerosol Products

Panoply is an open source software to read and view netCDF, HDF, and GRIB data. It can be downloaded and installed from the NASA GISS website:

<http://giss.nasa.gov/tools/panoply/>

There are three parts to this exercise:

1. Mapping Level 2, 10km Aerosol Data
2. Mapping Level 2, 3km Aerosol Data
3. Mapping Level 3, 1 degree Daily Aerosol Data

Mapping Level 2, 10km Aerosol Data

1. Follow the instructions to visualize aerosol data from:
<http://disc.sci.gsfc.nasa.gov/recipes/?q=recipes/Quick-View-Data-with-Panoply>
2. Display **Image_Optical_Depth_Land_Ocean** sds from the following data file in your directory

MOD04_L2.A2015160.1630.006.2015162144647.hdf

3. Save the output map as a .png file

Mapping Level 2, 3km Aerosol Data

1. Repeat the steps from the previous section for the 3km data file:

MOD04_3K.A2015160.1630.006.2015162143819.hdf

Mapping Level 3, 1 degree Daily Aerosol Data

1. Repeat the steps from the first section for the Level 3, 1 degree data file:

MOD08_D3.A2015160.006.2015163194610.hdf

Questions

1. What is the maximum AOD value reported in the 10km, 3km, and 1 degree products?

2. What are 2 differences between the 10km and 3km AOD maps obtained from Panoply?
3. How can Panoply be used to address specific air quality applications?