NASA Air Quality Remote Sensing Training for SESARM & GEPD
Atlanta, Georgia
September 1-3, 2015

Primary Event for This Training
Air Quality June 14, 2011

1. **Go to the Giovanni-4 page** at: http://giovanni.gsfc.nasa.gov/giovanni/

Part I- Time Averaged Maps

2. Under the **Select Plot** section, under Maps, select Time Averaged Map

3. Select your date range
   For this exercise, select June 10 to June 20 2011

4. Select your region either by typing in coordinates, or by clicking the Show Map button and drawing a box around your area of interest
   For this exercise, use the coordinates: -86.8799, 29.3115, -80.2881, 34.9805 (or draw a box around Georgia)

5. Select Variables
   a. *For this exercise, under Measurements, select at least 2 of interest to you:*
      i. *CO, then Carbon Monoxide Total Column (Daytime/Ascending) AIRS*
         (Then deselect CO in the panel on the left)
      ii. *NO2, then NO2 Total Column (30% Cloud Screened) OMI*
         (Then deselect NO2 in the panel on the left)
      iii. *CH4, then Methane Total Column(Daytime/Ascending) AIRS*
         (Then deselect CH4 in the panel on the left)
      iv. *SO2, then SO2 Column Amount (Planetary Boundary Layer) OMI*

6. Click on Plot Data

7. Scroll down to view the various maps. You can change the color scale, max, and min under the Options button on the top right of each map. You can download each image (either as a PNG or a GeoTIFF) under the  button.

8. In the panel on the right, under the Time Averaged Map section, click the Downloads link. Here you can download the maps as PNG or GeoTIFF format, or the data in NetCDF format.

9. Click the Back to Data Selection button in the lower right

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Part II- Time Series Area Averaged

10. Under the **Select Plot** section, under Time Series, select Area-Averaged

11. All of your settings for date, location, and variables should have remained, if they did not then repeat these steps in Part I

12. Click on Plot Data

13. Scroll down to view the various charts. You can download each image (either as a PNG or a GeoTIFF) under the 

button.

14. In the panel on the right, under the Time Series, Area-Averaged section, click the Downloads link. Here you can download the charts as PNG format, or the data in ASCII SCV format.

15. Click the Back to Data Selection button in the lower right

Part III-Time-Averaged Comparison

16. Under the **Select Plot** section, under Maps, select Time Averaged Map

17. Select your date range
    For this section, select June 10 to June 20 2005

18. Your settings for location and variables should have remained, if they did not then repeat these steps in Part I

19. Remove CO and CH4 from your variables list

20. Click on Plot Data

21. Click the Back to Data Selection button in the lower right

22. Change the date range
    For this section, select June 10 to June 20 2013
23. Click on Plot Data

24. Under the History header in the panel on the right, click back and for the between these two Time Averaged maps in order to compare NO2 and SO2 levels in 2005 and 2013. Record your observations.