JPSS VIIRS Satellites Virtual Science Fair Project Ideas (but all ideas work!)

Fire and Smoke

1) Pick a fire from recent years that affected you or made an impression on you.
   - Collect VIIRS imagery before, during and after the fire. (via VIIRS Today)
     a. Along with True Color imagery, check the Day Night Band to see if the flames could be seen at night.
     b. Compare False Color before and after the fire to check for a burn scar.
     c. Explore and expound upon air quality impacts.
   - Discuss how VIIRS imagery can be helpful to firefighters and other safety officials.
   - Research possible connections to drought, land management or climate change.

Hurricanes and Tropical Storms

1) Pick a hurricane that made landfall in the United States during the last decade.
   - Collect VIIRS imagery before, during and after landfall. (Via VIIRS Today)
     Along with True Color, check Day Night Band images to see if the hurricane could be seen at night – discuss why or why not.
   - Search the CIMSS Satellite Blog for more information on the hurricane you chose. Share what you learned from the blog in your own words.

Oceans and Coasts

1) Pick a community along a coast – this includes the Great Lakes!
   - Research whether that town or city has water issues, then find VIIRS imagery that scientist may be using to address that issue.

River Ice and Flooding

1) Pick a large river like the Mississippi and identify a recent flooding event, then get the VIIRS imagery for those dates. What does False Color imagery reveal?
   - Check the CIMSS Satellite Blog to see if there is a blog post on this event. Convey what you learned in your own words.

Day Night Band and Aurora Borealis

1) Collect Day Night Band Images during several phases of the moon. Discuss the differences in what you can see and why. Research different applications for Day Night Band imagery and elaborate upon an application that is interesting to you.
2) Compare several case studies comparing the Aurora Forecast from NOAA Space Weather with VIIRS Day Night Band images of the Aurora Borealis (via VIIRS Imagery Viewer) during the forecast period. Discuss the accuracy of the forecast.