

IMAGE ARCHIVE EXERCISE

The purpose of this exercise is to become familiar with some feature of the rapid response image archive sites.

1. Go to <http://earthobservatory.nasa.gov/IOTD/view.php?id=84042>
2. This is an image and story on the wildfires in Canada in mid-July, 2014.
3. If you look under the image you will see the date that the image was acquired. The story tells you which satellite acquired the image. Go to the rapid response site: <https://earthdata.nasa.gov/data/near-real-time-data/rapid-response> and select “MODIS Near Real Time (Orbit Swath) Images.” Navigate to the date the image was acquired using the calendar at the top of the page. Use the orbit track map or simply mouse over the images until you find the image that corresponds to western Canada (there is only one for this satellite for this day). Click on the thumbnail to access the higher quality image.
4. Enter in the field below the name of the granule which is shown below the image in the window that popped open. This information can be found at the bottom of the page showing the granule image. Write down only the first three fields of the granule name up until the collection number. _____
5. Display the highest resolution of the false color image available. Look for an area that shows an evident burn scar. This will look like a reddish-brown area (not a bright red square).
6. Navigate to a date later in the month (July 31, 2014). Find a granule corresponding to the same region. Look for smoke imagery that is still being produced from these fires.
7. Go to the Worldview site: <https://earthdata.nasa.gov/labs/worldview/>

Find the image of the granule from July 31, 2014 you observed from the LANCE rapid response site. Note the general region where the smoke imagery can be seen. Open the additional overlays menu and overlay fires in the region. Overlay MODIS Aqua AOD.
8. Can you observe burn scars from the fires resulting from the fires in Canada in July? What base layer band combination(s) were most useful to observe those burn scars.
9. Continue to toggle through the various functions provided by the Worldview site (date slider, which layers are available for download, snapshots, links to views)

Questions:

1. When would **YOU** prefer to use the Rapid Response site and why?
2. When would **YOU** prefer to use the WorldView site and why?
3. What are some reasons to use the Earth Observatory site?