GEOG432: Remote Sensing, Fall 2018
Environmental Change assignment (10%)
Due: Tuesday 9 October

Outline

Goal: to create a pair of Landsat images covering < 35 years of change
Landsat 5 images cover 1984-2011; (Landsat 7 covers only 1999-2002)
Landsat 8 is for 2013-18

This should be in an area of interest to you, both the location and topic / feature
e.g. deforestation, urban expansion, coastal erosion, glacier retreat, mining etc..

Choice of area:

You can use Google Maps / Google Earth Time Lapse to find your area of interest if needed .. or just your worldly knowledge …

Select the optimal before/after matching scenes
Find a suitable pair of images - ideally similar time of year to avoid seasonal differences
Select according to apparent image quality and comparability – a shorter time difference is better than a longer span with different seasons or poorer quality

Download LandsatLook image with **georeferenced** images (NOT the full Level-1 product) from LandsatLook Viewer (https://landsatlook.usgs.gov/) or earthexplorer.usgs.gov (landsat 5-8).

Final area:

Zoom in enough to clearly show area of change, but not so far that one can see individual pixels. Include peripheral features if they give context to the change features e.g. a lake, road or town that provides location information. Clip as needed to match your desired display area.

Output:

Two registered Landsat images with similar enhancements / contrast – submit as .ppt or .pptx (aligned to each other) ; include image dates (day/month/year) on each slide
You should provide a 3rd (or 1st) slide introducing the area / event – perhaps with a ground photo.

The extra slide should describe what we are seeing:
The area /country, approx. lat/long (degrees/minutes)
The changes shown on the images and environment, and the nature of the impact

Each person will briefly describe these slides in class on Tuesday 23 October ~ 2-3 minutes each