Introduction to GEE for geographers: syllabus with the code on github.

curriculum:

<https://developers.google.com/earth-engine/tutorials>

also labs available at.. <https://developers.google.com/earth-engine/edu>

1. What is GEE?
   1. Cloud computing platform with access to massive data archives
   2. Allows anyone to run analyses on data archives without computing capacity, data storage, and minimum internet bandwidth requirements
   3. https://developers.google.com/earth-engine/tutorials#introduction-to-earth-engine-condensed (1.5 hr video)
   4. [signup.earthengine.google.com](https://signup.earthengine.google.com/)
2. What data are on GEE?
   1. Landsat & Sentinel, MODIS, VIIRS, Terra Bella, land cover, weather and climate
   2. <https://developers.google.com/earth-engine/datasets/>
3. How to use Github
   1. How to work off github for entire class
4. What is the framework for analysis in GEE
   1. Single date:
      1. Find single image data
      2. Apply algorithm
   2. Time series
      1. Find data
      2. Filter image collection
      3. Map algorithm over collection
      4. Reduce collection
      5. Compute aggregate statistics
      6. Plot data, export image, export table
5. Data input
   1. Raster & vector
6. Visualization
   1. On screen
   2. And graphs & charts
7. Analysis
   1. Image classification
   2. Validation
   3. Statistical matching (advanced)
8. G