

GEOG432 Project outline 2018

This document is subject to updates / improvements ...

1. Project design

- a. Geographic area ? (province / country / region ?
- b. Application area e.g. forestry, habitat (landcover), glaciers, urban development
- c. Image requirements – expected years, could include change but not required
- d. Anticipated processing e.g. classification, ratios, transforms, indices
- e. Expected outcomes e.g. extracted features or classes

Notes: handy if the project helps with other work, but not required; area should be of interest – not limited to BC or Canada. Scene choice may be limited by clouds.

2. Steps

Week 1: Preview and Download imagery, convert to pix file and clip to fit – I recommend a screen size study area to avoid excessive pan and zoom e.g. max. 1800 x1200 pixels (approx.)

Week 2: Image processing: classification, ratios/indices, transform etc., (change detection) feature extraction, vector creation

Week 3: Final images and results – e.g. vectors overlain on optimal image, calculation and presentation of results; possible 3D images using DEM; possible inclusion of Google maps/earth image for context/reference. Write up text.

Further details e.g. how to download and process full scene images will be listed on each week's lab spot. You've downloaded the 'quicklook' 3 band images, but for the project you will want the full scene with 9 bands (OLI), 6-7 bands (TM).

Project Output Summary

A brief one paragraph summary of your project – goals, area and result

Study Area and Data Source

- Study area description
- The data you need for the project (including image dates)
- Comments on image quality (clouds, time of year etc.)

Data methods and analysis

- brief description of methods (could use point form)
- the primary resulting channels from analysis e.g. ratio or classification

Results

- Discussion of results
- Final image display e.g. vectors on image
- Final conclusions of successes or limitation

Images do not need to be super high res. 150 dpi is suggested as enough (.jpg)
You can provide zoom in images if it helps to show detail

Please submit project as word doc (or libre) and pdf
(doc/libre in case of minor edits needed, pdf for final presentation)

Sample projects from previous years: see projects link on the geog432 webpage

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