#### raster

adam okulicz-kozaryn
adam.okulicz.kozaryn@gmail.com

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# <u>outline</u>

raster

Later/Explore at home: Semi-Automatic Classification Plugin

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Guess do little more raster!! or much more!

outline

raster

Later/Explore at home: Semi-Automatic Classification Plugin

raster

# got raster?

- we've done only vector data in this class
- · mostly shapefiles and kml
- there's also raster data
- ⋄raster=picture (+ coord to fit it on the map)
- ⋄we've skipped it because you can just use google maps
- · or OpenStreet map, etc (also within qgis)
- but sometimes pictures are better
- · higher resolution and/or over-time (old v new)

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#### nj example

- http://people.hmdc.harvard.edu/~akozaryn/myweb/bounds\_
  nj\_shp.zip
- ♦ load to ggis; and then see our favorite nj data website
- ♦https:
  - //njgin.state.nj.us/NJ\_NJGINExplorer/DataDownloads.jsp
- oat the bottom, it has raster data that links to
- ♦ https://njgin.state.nj.us/NJ\_NJGINExplorer/IW.jsp

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#### nj example

- ♦ 'Select Dataset to Download': NJ 1995 DOQQs
- zoom in to evesham township
- on the left check 'Select by Point'
- ♦ and it should show on the right this picture selected: CLEMENTON NJ NE #1162
- and at bottom-right click 'Add Items to Cart'
- then click checkout cart; click JPEG (just picture format)
- ♦ it should save; extract zipped folder

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### load raster to qgis

- ofirst, make sure counties vector is loaded; then:
- · use a checkerboard icon on the left, below vector squiggle,
- · to load our raster: navigate to unzipped JPEG file
- onote that when you extracted zipped folder with JPEG,
- there are also other files, like in shapefile case
- $\cdot$  these other files tell qgis where to put the picture on a map

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# load google satellite

- ♦ say we want to compare mid 90s to now
- ⋄could get newer (and better resolution) images
- ♦ but can just load goog satellite to get more current image
- (if needed install 'OpenLayers' plugin: Plugins-Manage And Install Plugins)
- and zoom in to evesham township, have raster on top of google
- · and turn on/off raster to see past/present

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#### past matters!

- omuch of present can be explained with past!
- it's also fun to look back into past
- · just like you look at your old pictures, look at the place
- oaging http://twistedsifter.com/2013/10/
  animations-show-how-faces-age-over-time/
- \$\langle\$ satellite images
  http://www.wired.com/2012/07/landsat-city-change/
- http://www.wired.com/2012/07/landsat city change/

  ◇landsat website http://landsat.gsfc.nasa.gov/?cat=4

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### actual application

- think about research all the time
- including on the airplane
- ♦ and it struck me that there is so much concrete in TX
- ♦http:

//people.hmdc.harvard.edu/~akozaryn/tmp/city\_book.pdf

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# often can actually see better!

- with satellite images or from an airplane
- ·can actually see better
- eg: most buildings and roads are build to trick you on the ground
- · nice look, but cheap, etc
- ·it's interesting to see how it actually looks like
- · from a different perspective, on satellite image

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### <u>outline</u>

raster

Later/Explore at home: Semi-Automatic Classification Plugin

### the plugin

- ♦ it has good reviewes
- ogive it a try if you are into raster
- https://plugins.qgis.org/plugins/
  SemiAutomaticClassificationPlugin/

# next week is the last qgis class

- what would you like to cover ?
- ·anything new?
- ·cover anything again?
- maybe use some new data for examples?
- ·I have an impression that we should go to lower level
- ·title of this class is also (cross-listed) "urban mapping"
- maybe do tracts/blocks in Philly or Camden ?
- · maybe zoning or public transportation?
- ·other ideas?