wrap up and revision

adam okulicz-kozaryn

adam.okulicz.kozaryn@gmail.com

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outline

raster

gis career

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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)

nj example

$\diamond$ start with our favorite

$\diamond$ http://people.hmdc.harvard.edu/~akozaryn/myweb/bounds_nj_shp.zip

$\diamond$ load to qgis; and then see our favorite nj data website

$\diamond$ https://njgin.state.nj.us/NJ_NJGINExplorer/DataDownloads.jsp

$\diamond$ at the bottom, it has raster data that links to

$\diamond$ https://njgin.state.nj.us/NJ_NJGINExplorer/IW.jsp

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

◇ check it

◇ and at bottom-right click 'Add Items to Cart'

◇ then click checkout cart; click JPEG (just picture format)

◇ it should save; extract zipped folder

load raster to qgis

$\diamond$ first, 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

$\diamond$ note that when you extracted zipped folder with JPEG,

· there are also other files, like in shapefile case

· these other files tell qgis where to put the picture on a map

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

past matters!

$\diamond$ much of present can be explained with past!

$\diamond$ it's also fun to look back into past

$\cdot$ just like you look at your old pictures, look at the place

$\diamond$ aging `http://twistedsifter.com/2013/10/`
  `animations-show-how-faces-age-over-time/`

$\diamond$ satellite images
  `http://www.wired.com/2012/07/landsat-city-change/`

$\diamond$ landsat website `http://landsat.gsfc.nasa.gov/?cat=4`

actual application

$\diamond$ i think about research all the time

$\diamond$ including on the airplane

$\diamond$ and it struck me that there is so much concrete in TX

$\diamond$ can easily show it with satellite images [p 43]

$\diamond$ http:
  //people.hmdc.harvard.edu/~akozaryn/tmp/city_book.pdf

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

<u>outline</u>

raster

gis career

academia: assisting faculty

◇ most faculty want maps but lack gis skills

◇ this is where you come in

◇ ask faculty around if they need help with data

◇ don't sell yourself cheap

· ask to be a coauthor

· make $

postdoc/research institutes/think tanks etc

⋄ many prestigious universities offer postdocs positions

· often helping prestigious faculty with data

⋄ money is not great

· but you have all of the other benefits of academia

⋄ same with research institutes

· they have a ton of data

· and need people like you to map it

non-academic, real world jobs

$\diamond$ any organization has data

$\cdot$ libraries, gas stations, fire departments, hospitals, etc

$\diamond$ just search for gis jobs

gis jobs

◇ http://www.gjc.org/

◇ http://www.gisjobs.com/

◇ http://www.geographyjobs.com/GIS_Jobs.html

◇ https://www.gislounge.com/job-listing-sites-in-gis/

◇ http://www.mygisjobs.com/

◇ http://www.indeed.com/q-GIS-jobs.html

◇ (there are many more websites)

general data science jobs

◇ http://web.ccsu.edu/datamining/jobs.htm

◇ http://www.kforce.com

◇ http://www.icrunchdata.com/

◇ http://www.cybercoders.com/

◇ (there are many more websites)

class evaluations

◇i very much care about this class

◇and want to develop it further in the future

·possibly have intro and advanced gis

◇comments/suggestions are very welcomed!

let's stay in touch

◇ i am always happy to discuss gis and

· your future gis endavours

◇ let's stay in touch!