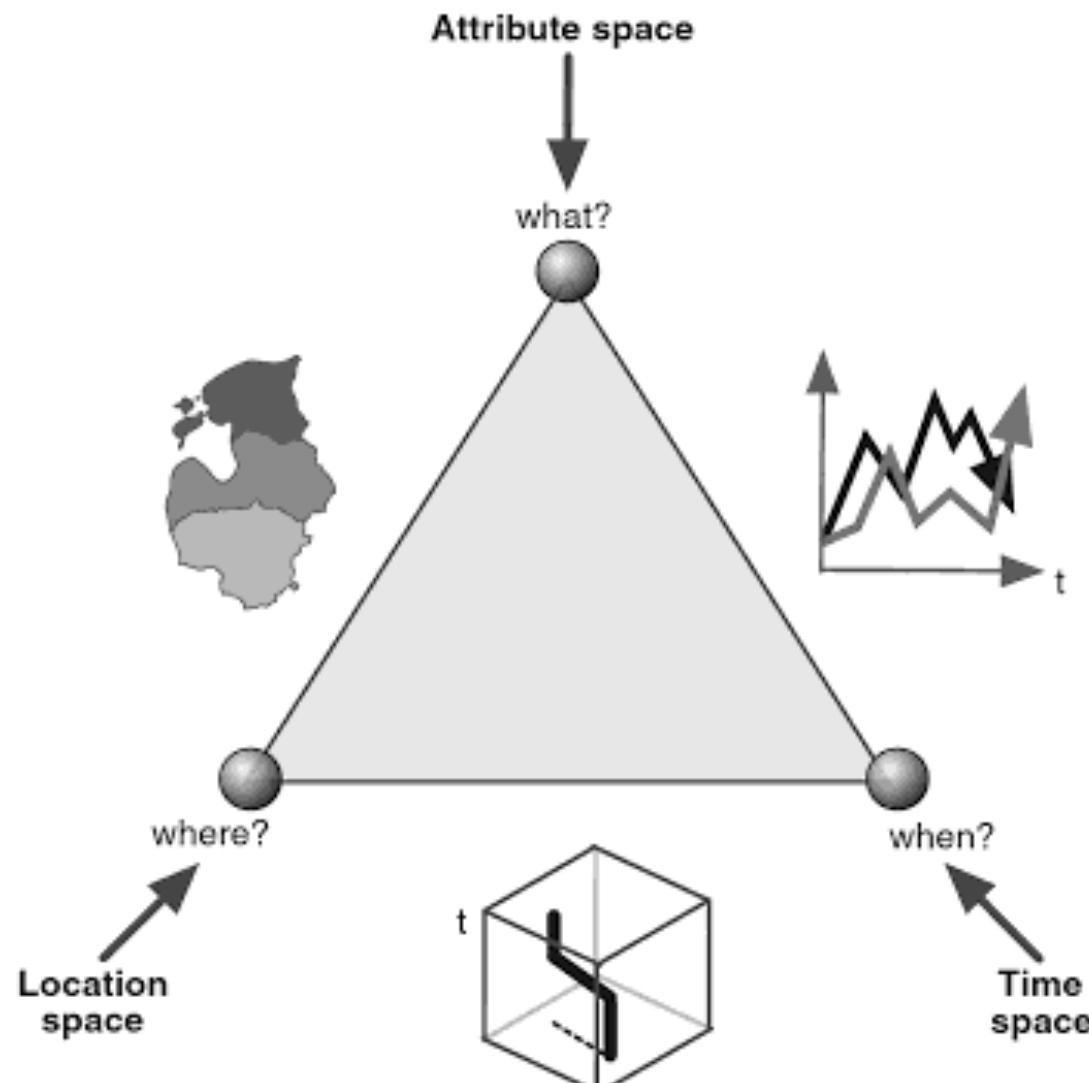


Geospatial Data





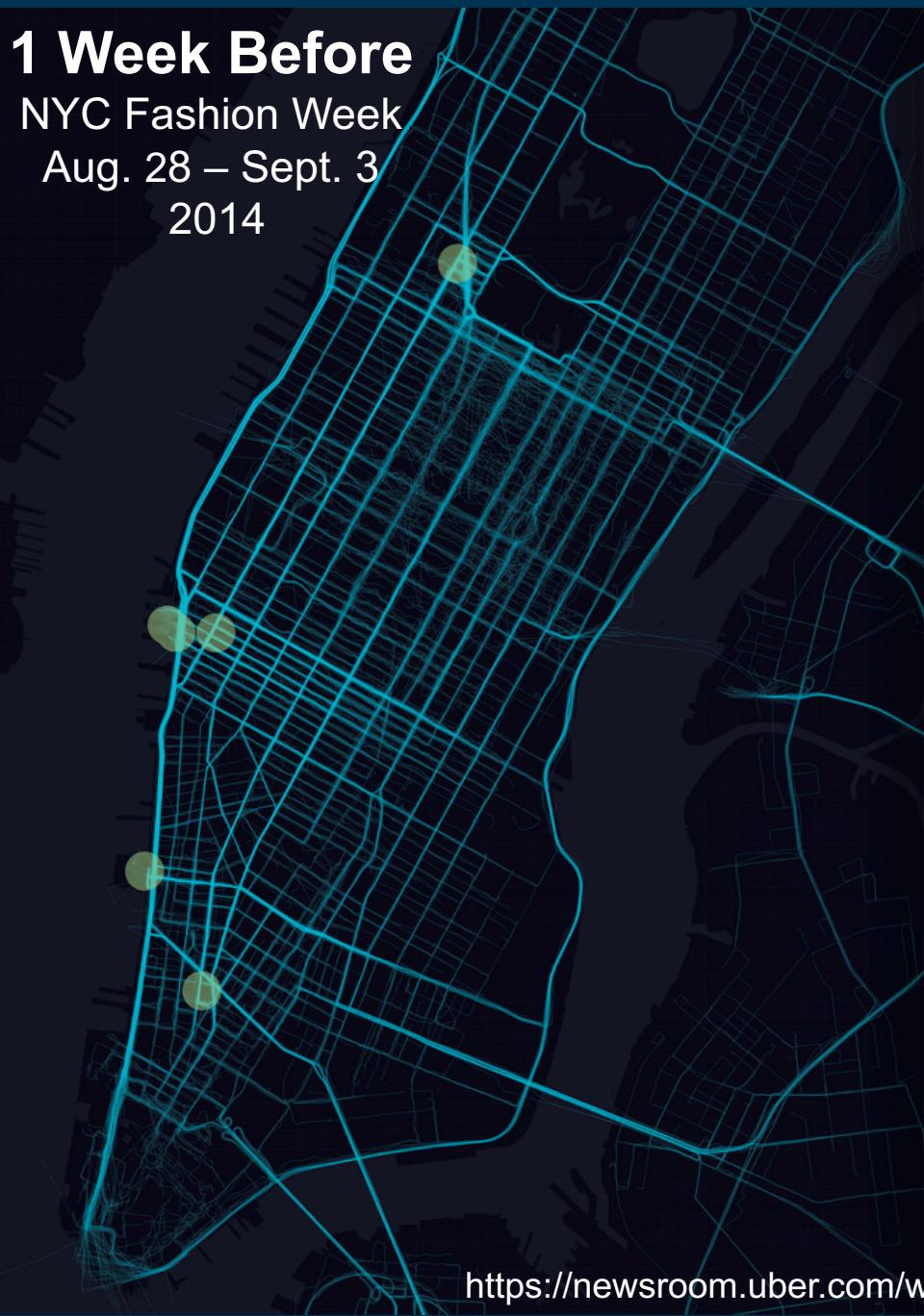
<https://newsroom.uber.com/why-riding-pool-should-be-the-new-fashion-week-trend-2/>

1 Week Before

NYC Fashion Week

Aug. 28 – Sept. 3

2014

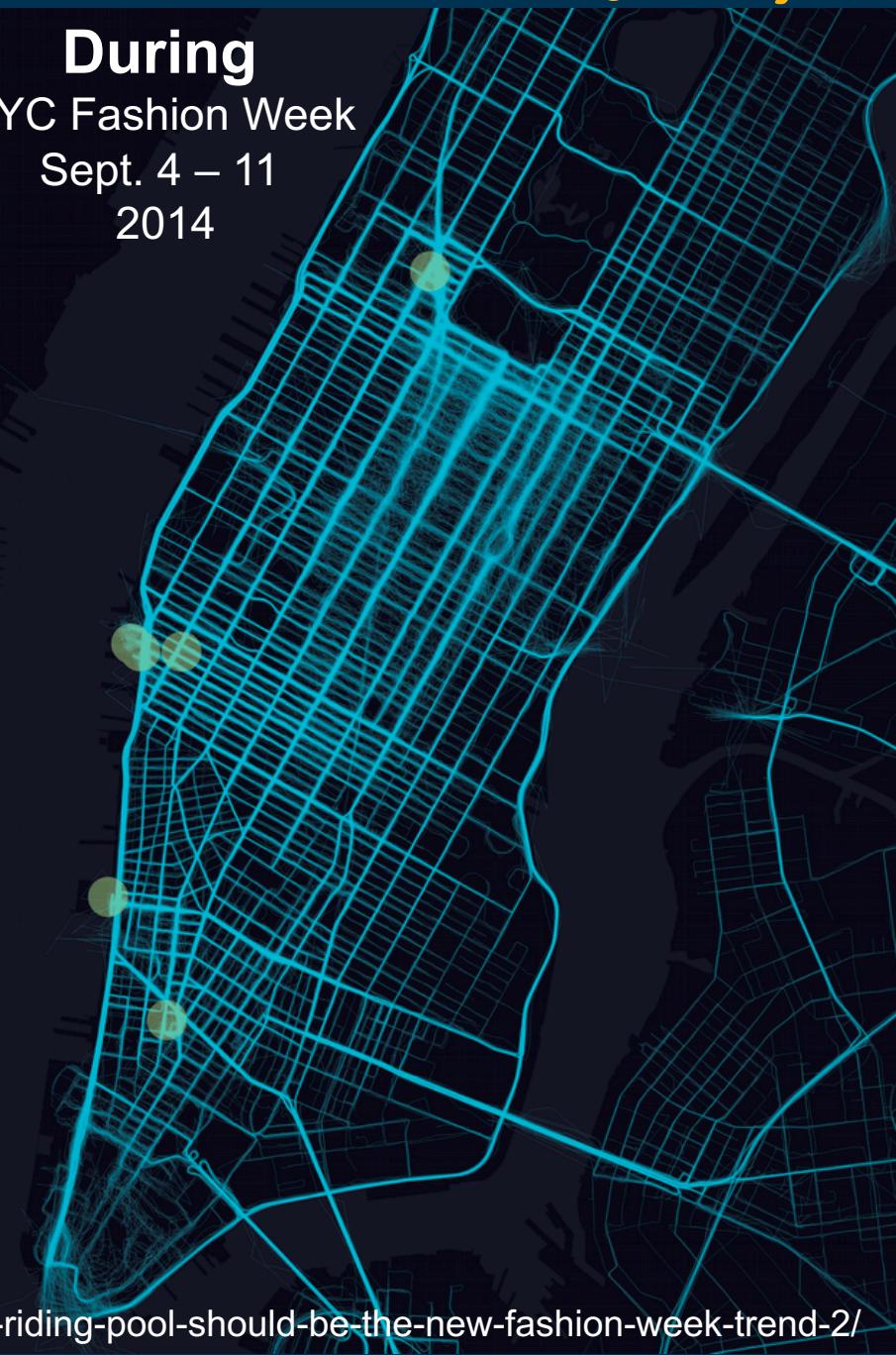


During

NYC Fashion Week

Sept. 4 – 11

2014



Don't Forget Measurement Scales

- Categorical
- Ordinal
- Interval
- Ratio

Discrete vs. Continuous

Discrete (categorical) data: objects bordered on all sides with explicit coordinates for boundary

Examples: buildings, rivers, roads, states, counties

Continuous data: not well defined boundaries, a concentration level or field

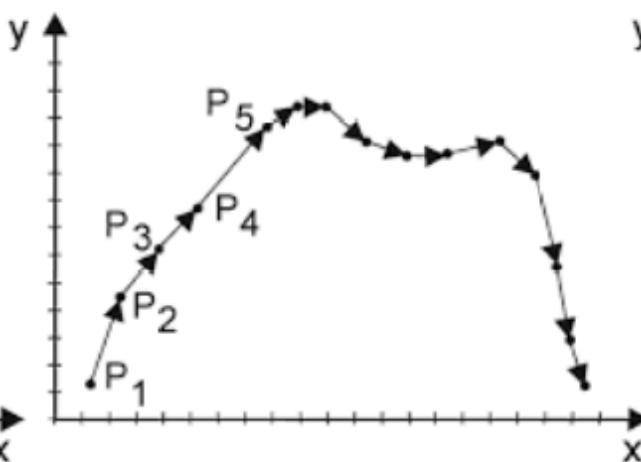
Examples: precipitation, topography, terrain, temperature, gravity field

Vector vs. Raster

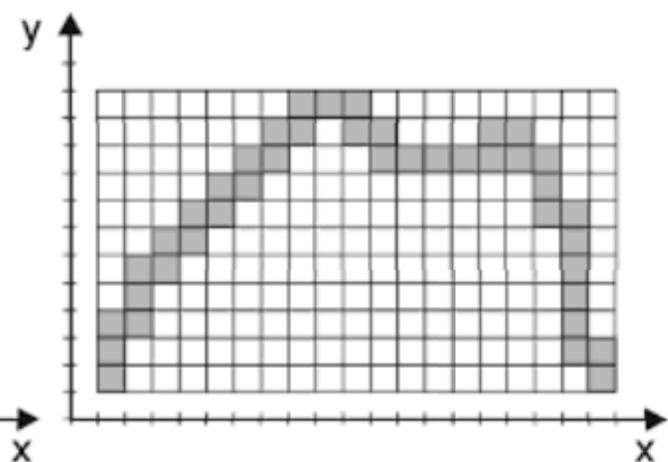
Representation of a line



in **vector** format

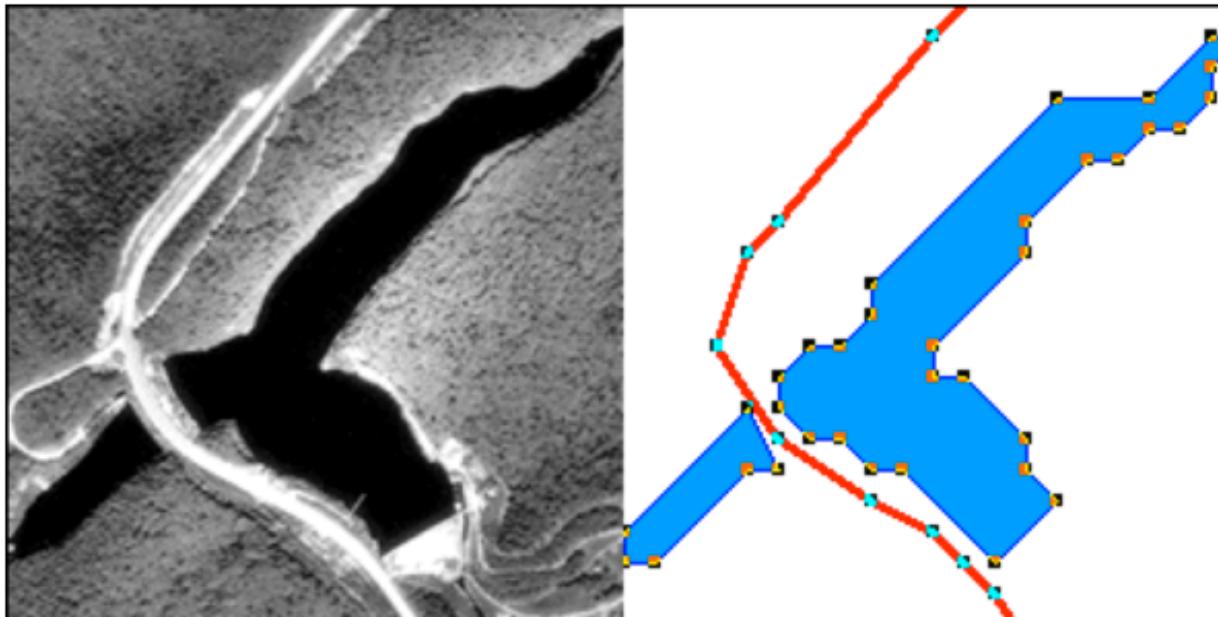


in **raster** format



Vector vs. Raster

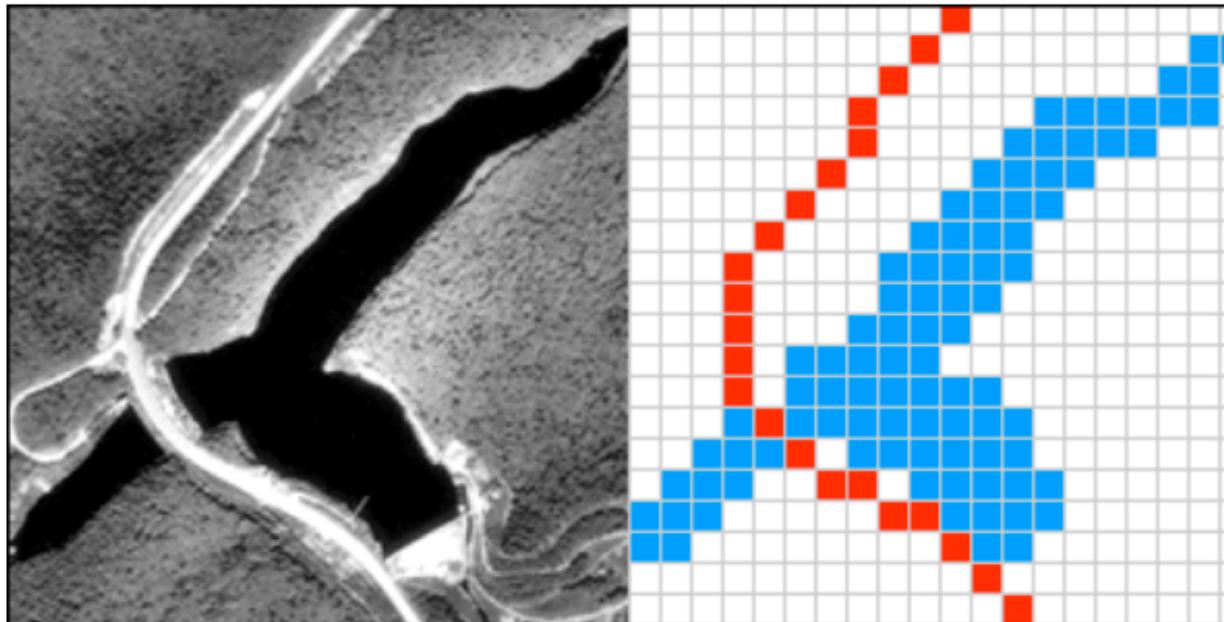
- Objects as points, lines, and areas
- Elements are discrete & homogenous
- Smaller file sizes, high-spatial resolution



Source: https://www.e-education.psu.edu/geog486/l1_p8.html

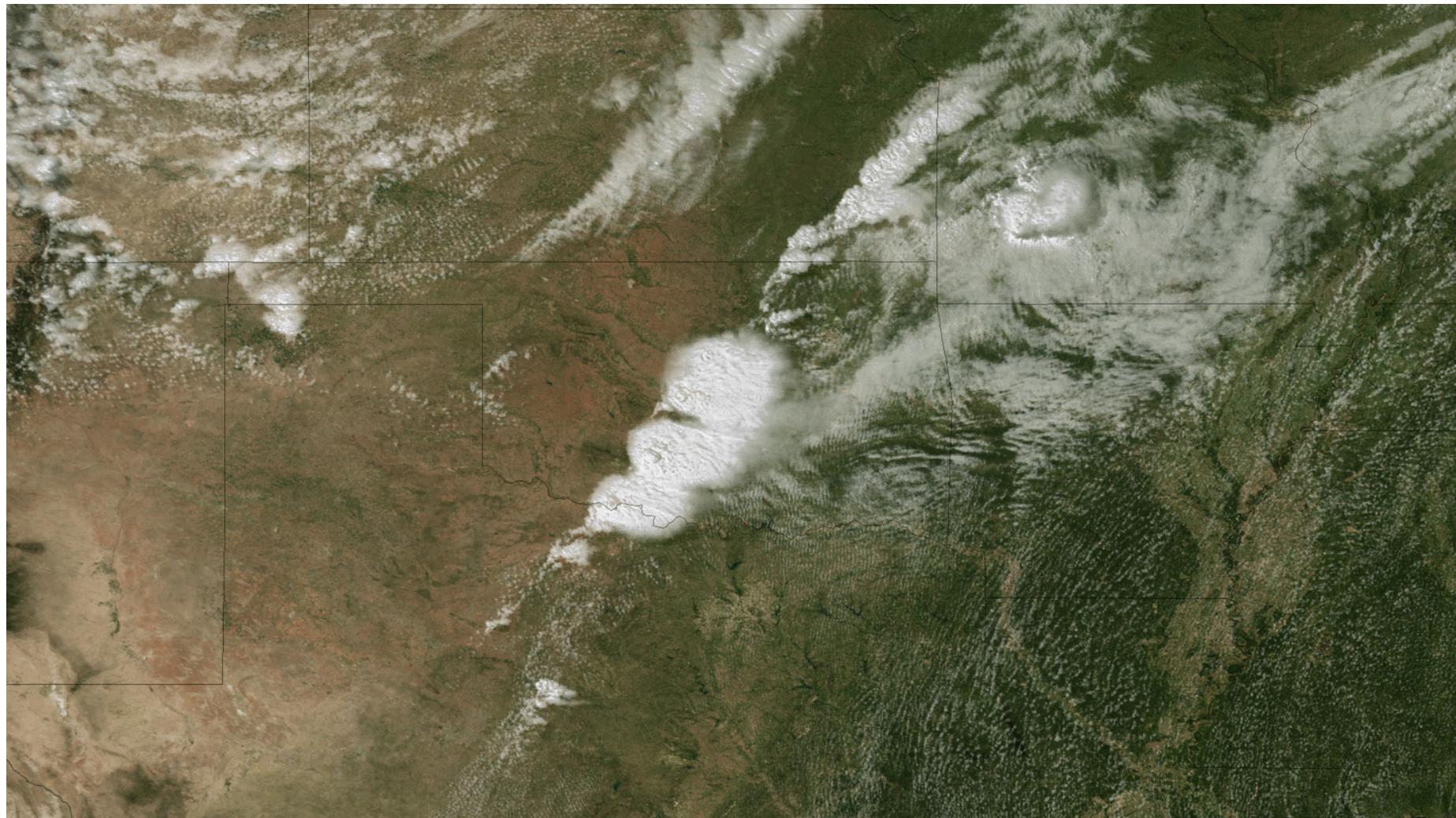
Vector vs. Raster

- Grid / pixels to cover space
- Each location has a value (even if 0)
- Larger file sizes, resolution dependent



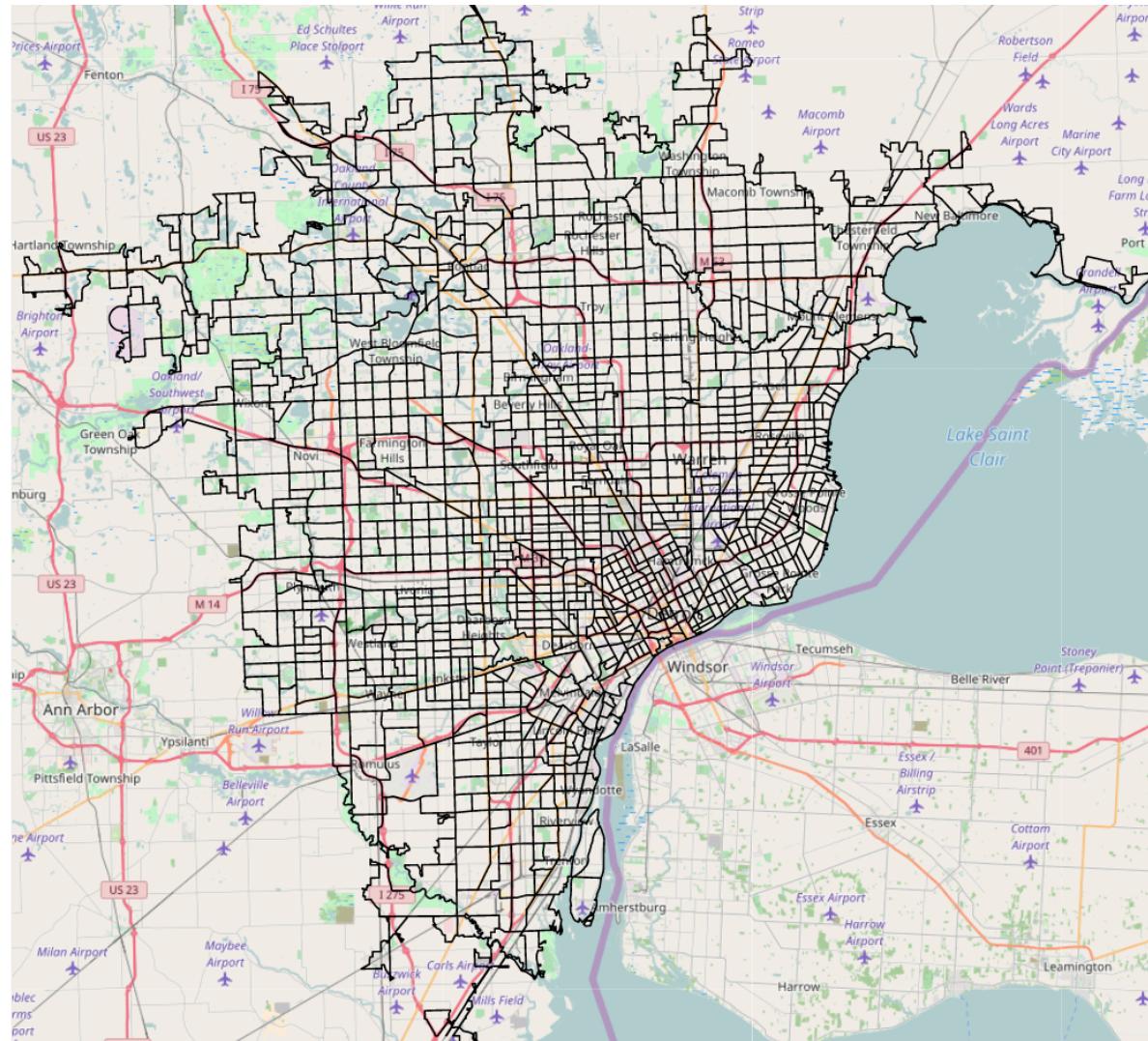
Source: https://www.e-education.psu.edu/geog486/l1_p8.html

Vector vs. Raster



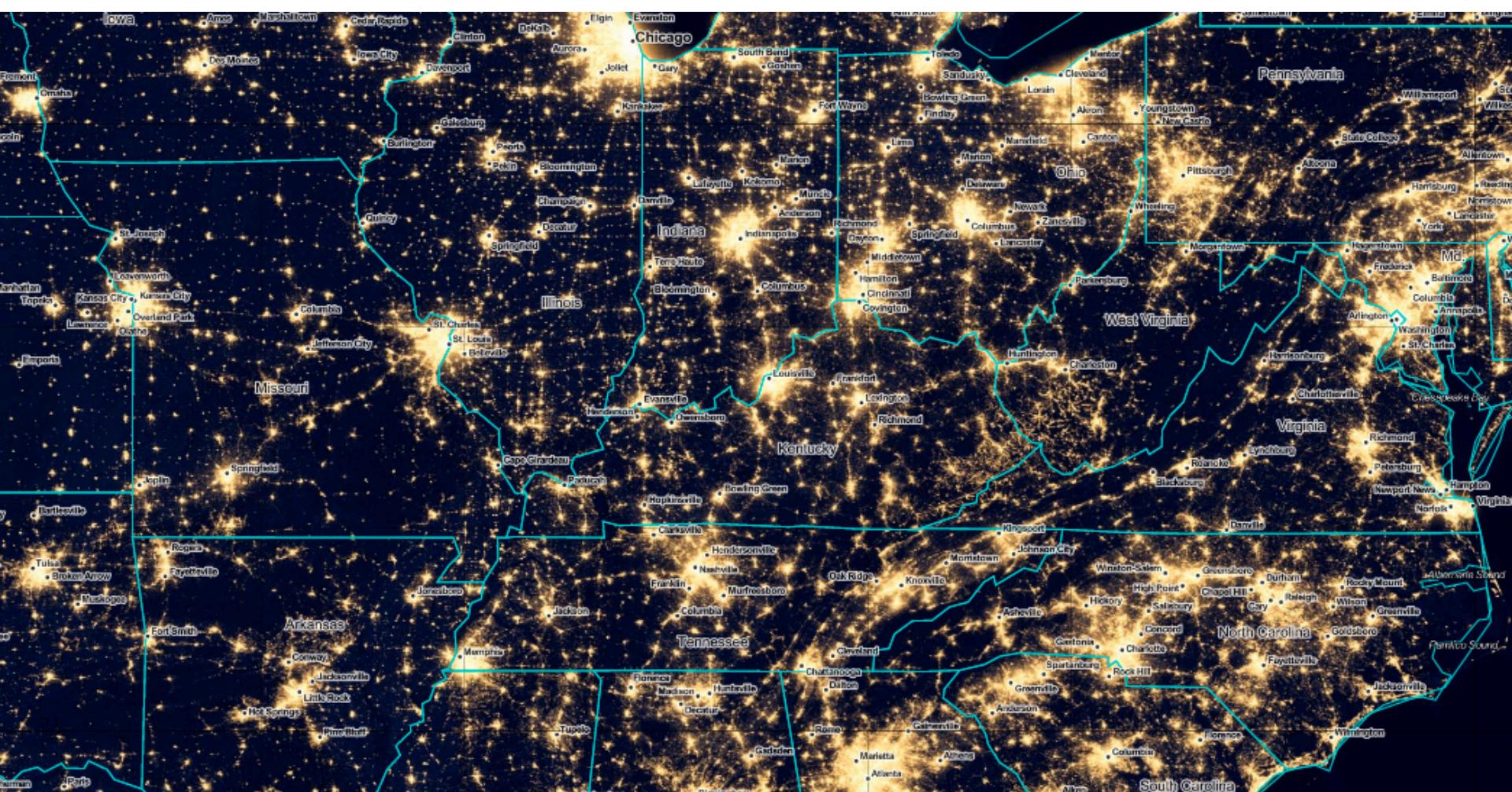
<https://www.weather.gov/>

D3 Raster & Vector



<http://bl.ocks.org/mbostock/94b9fd26e12c586f342d>

D3 Raster & Vector



<http://bl.ocks.org/curran/96823ad84b0415536980b1cbf57b1dc>

Matplotlib Raster & Vector

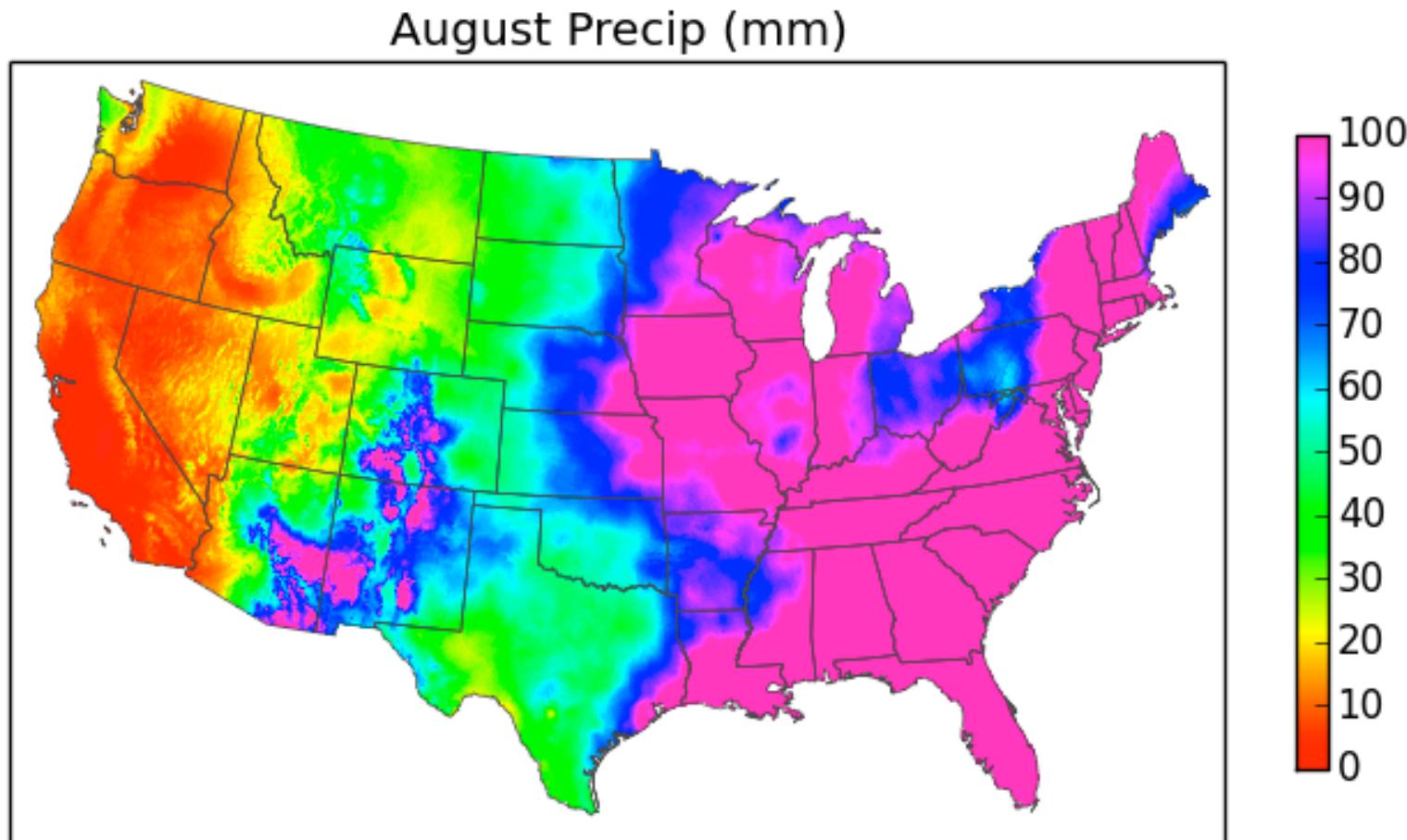
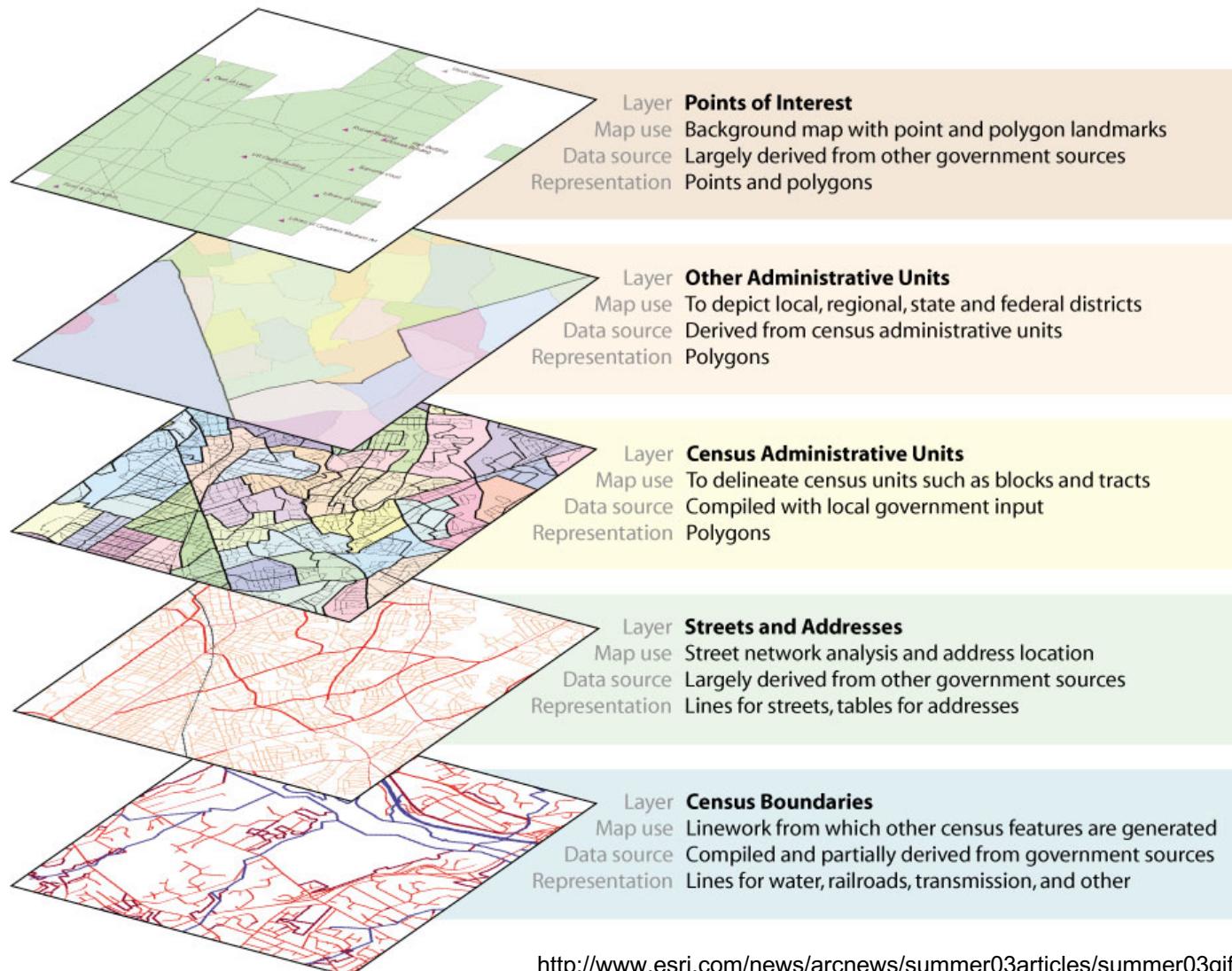
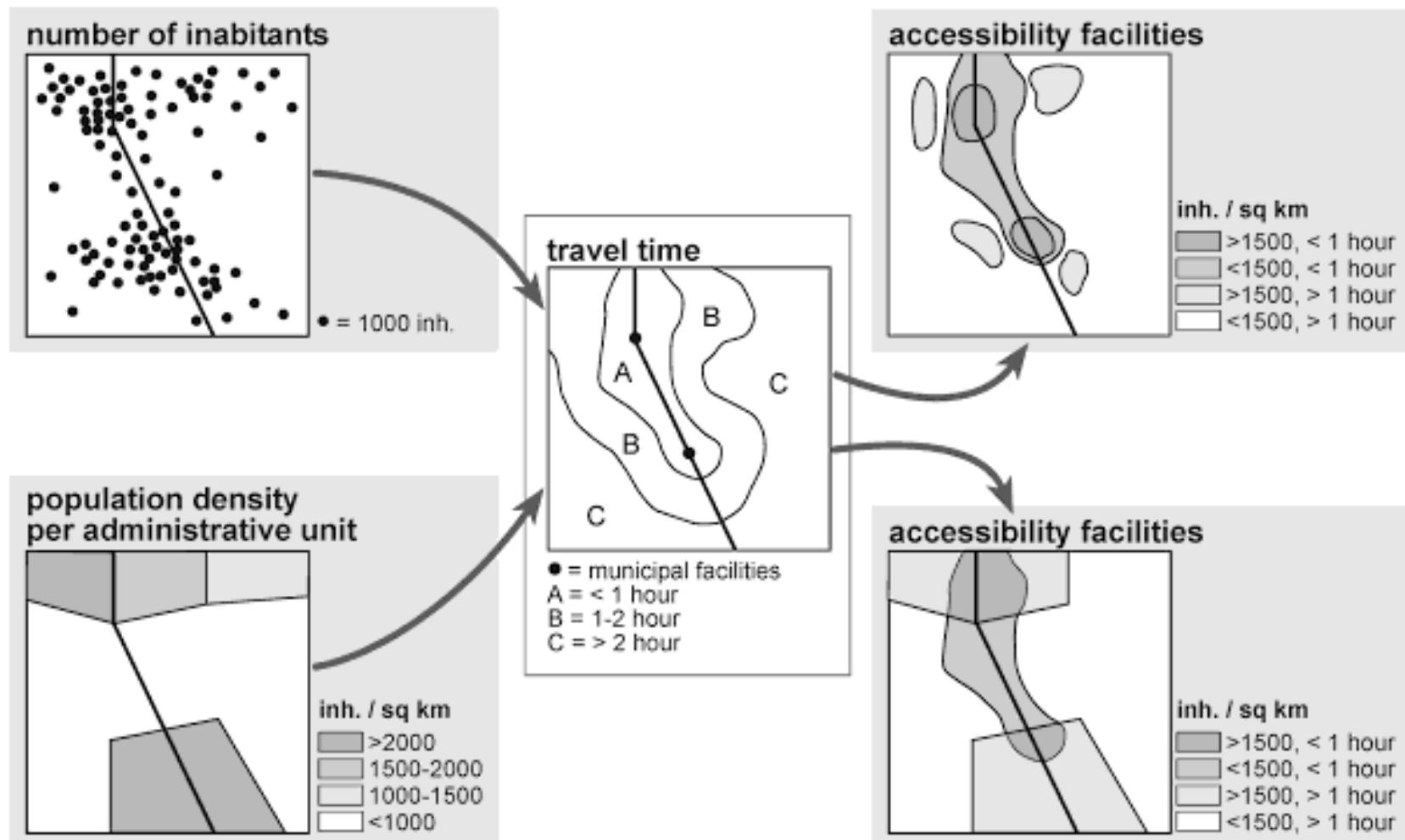


Image Source: <https://waterprogramming.wordpress.com/2014/10/03/python-clip-raster-data-with-a-shapefile/>
Using <http://matplotlib.org/basemap/>

Map Layers of Detail



Aggregating Data

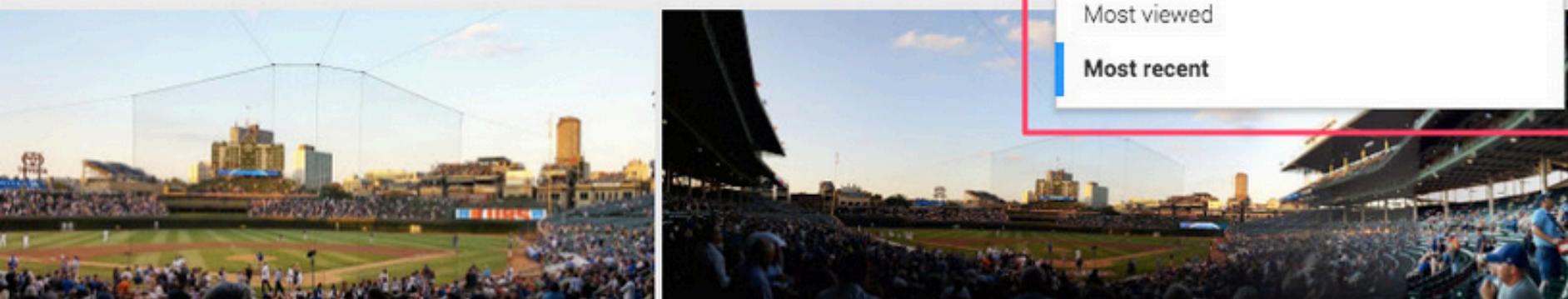
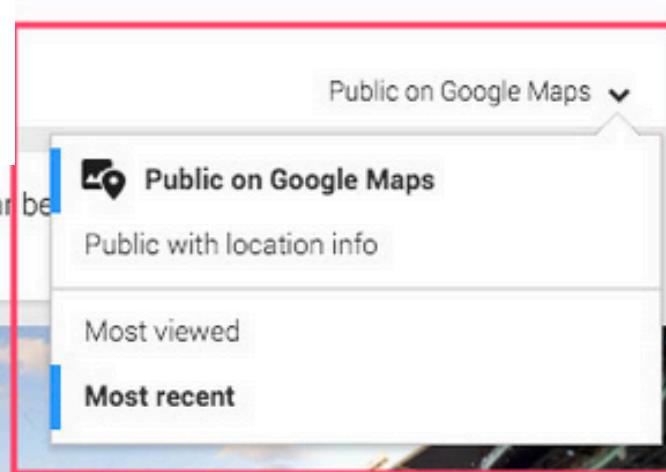


Kraak & Ormeling, 2010. *Cartography, third edition, visualization of spatial data.*

Public vs. Private

Photos with location info that you made public on Views, Google Maps, or Google+ appear here.

 Learn more



Source: <http://www.androidcentral.com/your-public-google-images-might-now-show-google-maps>

Berkeley

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