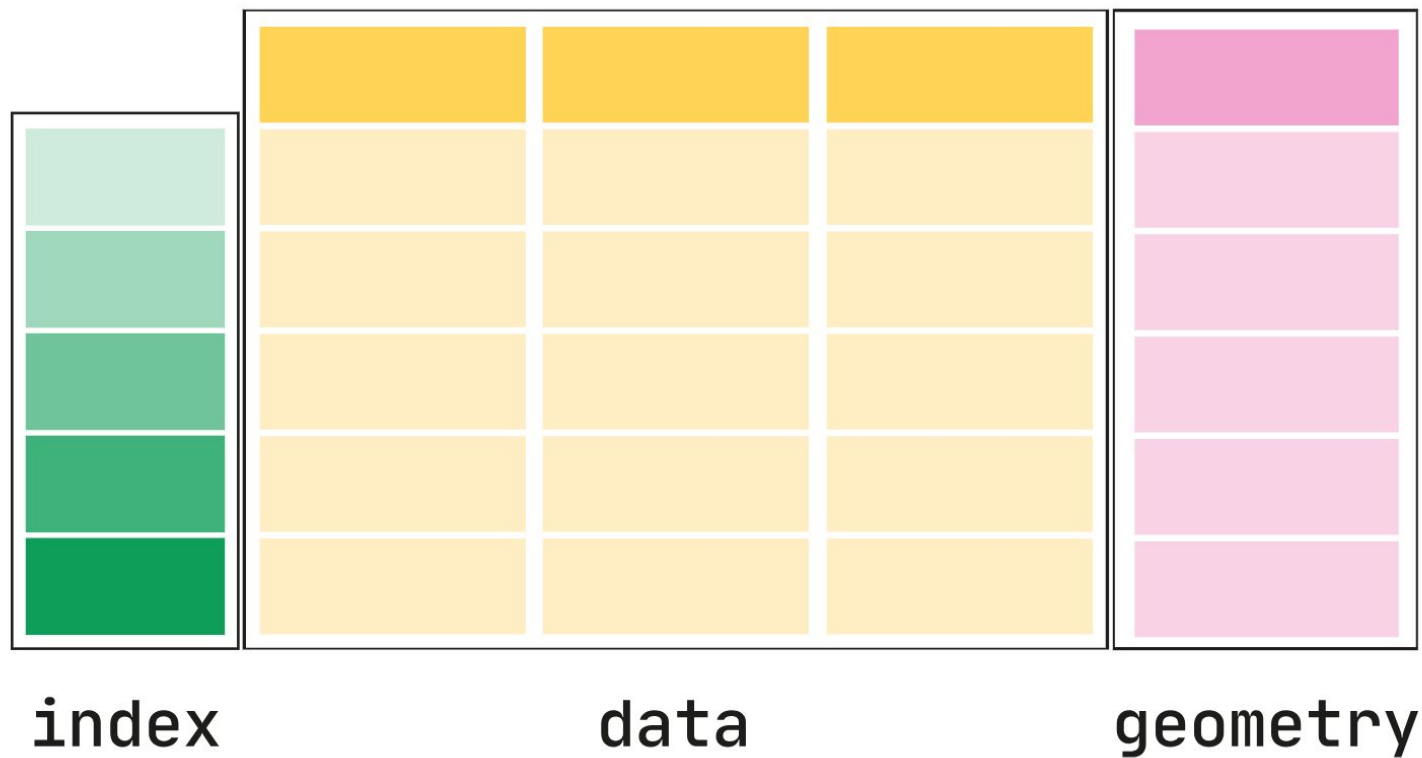


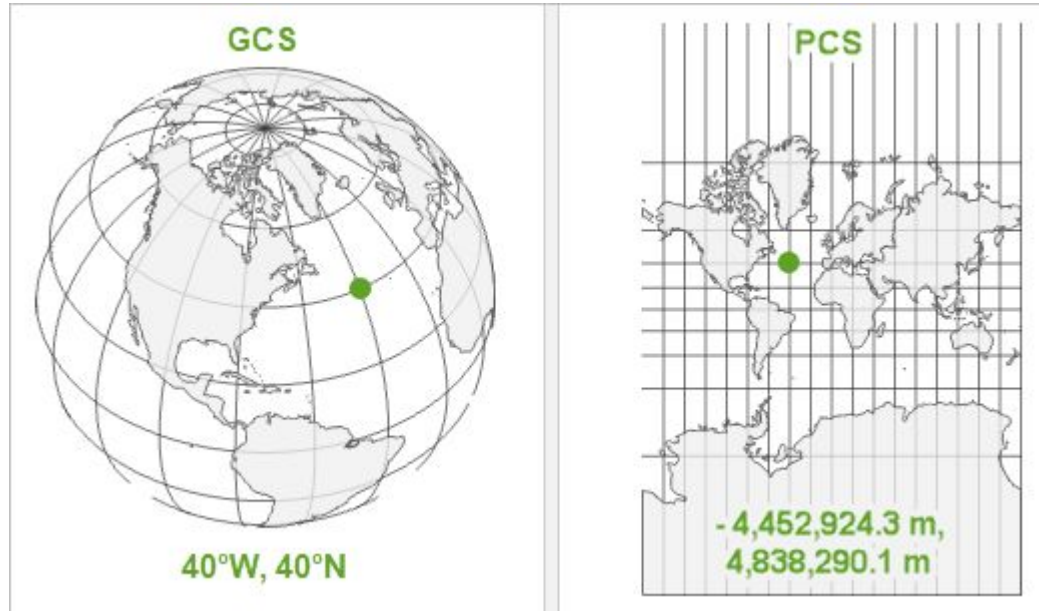
Geospatial data

Geopandas



Projection

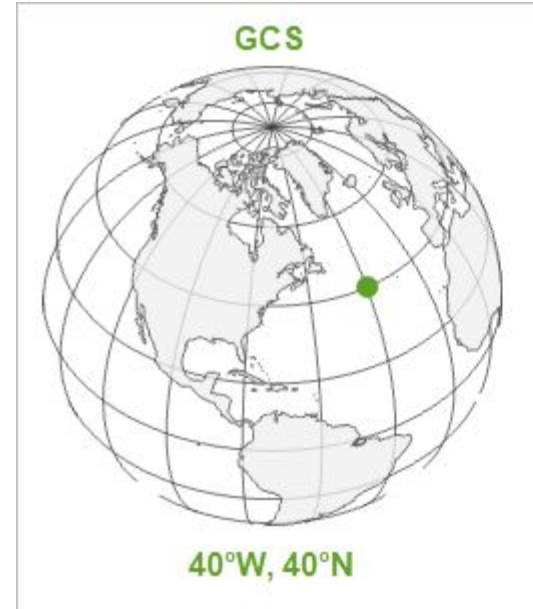
Coordinate reference system: geographic coordinates vs. projected coordinates



Projection

Geographic coordinates:

- Latitude/longitude
- Location on (approximately) spherical earth



Projection

Projected coordinates:

- Planar, orthogonal X/Y coordinates
- Location on a flat surface
- Local projection
- Useful for city-scale geospatial analysis:
 - areas, distances, centroids are accurate in any direction
 - equivalent to what would be measured on the ground



Projection

Coordinate reference system:
geographic coordinates vs.
projected coordinates



Other tools

PySAL

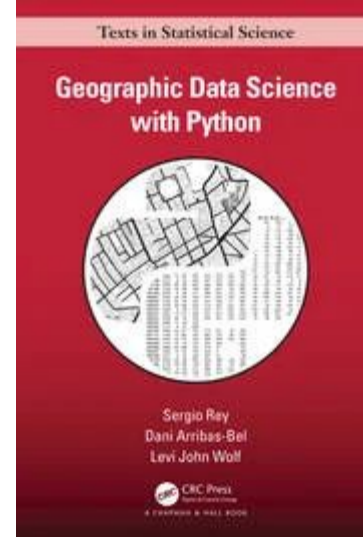


The Python Spatial Analysis Library
for open source, cross platform
Geospatial Data Science

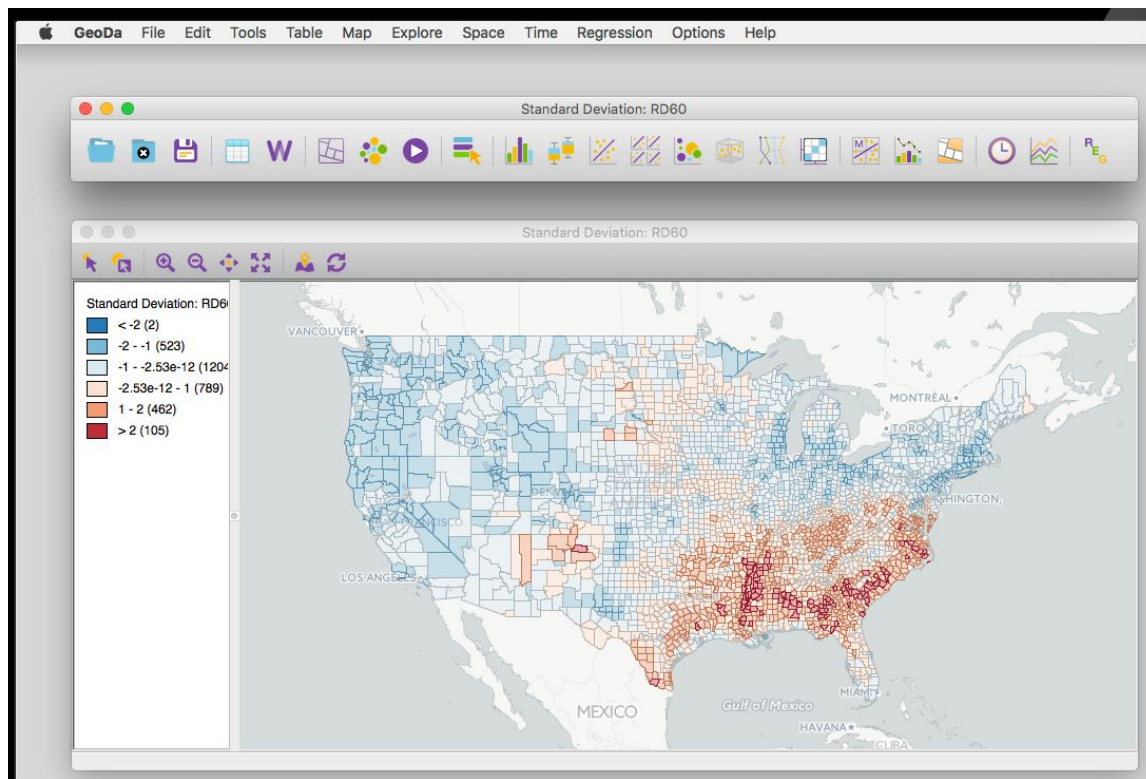
<https://pysal.org/>

Geographic Data Science with Python

<https://geographicdata.science/book>



GeoDa



<https://geodacenter.github.io/>