

Visualising Data

⚠ Changes before 22/23

☐ Add log-scale option, data joins (link to CASA0005)

Overview

! Learning Outcomes

1. You have familiarised yourselves with how to join and group data in Python.
2. You are beginning to think about developing derived variables and proxies from raw data.
3. You have broadened your thinking about the purpose of data visualisation.
4. You are beginning to think about the final project.

Preparation

Lectures

You are *strongly* advised to watch these videos on linking data and spatial data, as well how to group data within pandas; *however*, you will not be asked to present any of these because our attention is now shifting towards the final assessments. You should, by now, be familiar with the concept of how to join data from the GIS module (CASA0005), so this is simply a quick tour of how to *do* this in Python.

Session	Video	Presentation	Notes
Linking Data	Video	Slides	Notes
Linking Spatial Data	Video	Slides	Notes
Grouping Data	Video	Slides	Notes
Data Visualisation	Video	Slides	Notes

Readings

You should *still* come to class prepared to present:

- (D'Ignazio and Klein 2020, chap. 3) Pre-review URL, *On Rational, Scientific, Objective Viewpoints from Mythical, Imaginary, Impossible Standpoints in Data Feminism*.
- (Badger, Bui, and Gebeloff 2019) URL

Activities

- Complete the short Moodle quiz associated with this week's activities.
- Student Dialogue: Mentimeter poll to be completed in-class.

Practical

Connections

The practical focusses on:

- ☐ Linking and grouping data as part of a visualisation process.
- ☐ Automating the production of map outputs in Python to create an 'atlas'.
- ☐ Thinking about proxies; e.g. why would you find ppsqm more/less useful than price? what are you *really* measuring?

Changes before 22/23

- ☐ Add Learning Outcomes for each week
- ☐ Standardise delivery by TAs where practicals are TA-led (e.g. FSDS): clearer guidance on how to take students through each week.
- ☐ Clearer articulation of difficulty levels/targets for components *within* each week's practicals.
- ☐ Make links between lecture and practical content explicit; ideally trace a question through the whole process (*e.g.* "If I wanted to know if and where blue plaques are clustered in London how would I find out?")

The practical can be downloaded from GitHub.

References

- Badger, E., Q. Bui, and R. Gebeloff. 2019. “Neighborhood Is Mostly Black. The Home Buyers Are Mostly White. New York Times.” New York Times. <https://www.nytimes.com/interactive/2019/04/27/upshot/diversity-housing-maps-raleigh-gentrification.html>.
- D’Ignazio, Catherine, and Lauren F. Klein. 2020. *Data Feminism*. MIT Press. <https://bookbook.pubpub.org/data-feminism>.

