MAKING INTERACTIVE WEB MAPS: FINDING THE RIGHT TOOL FOR YOU


THE UNIVERSITY of EDINBURGH
Centre for Data, Culture & Society
DCS
DATA CULTURE SOCIETY
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Welcome!

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& visualization developer

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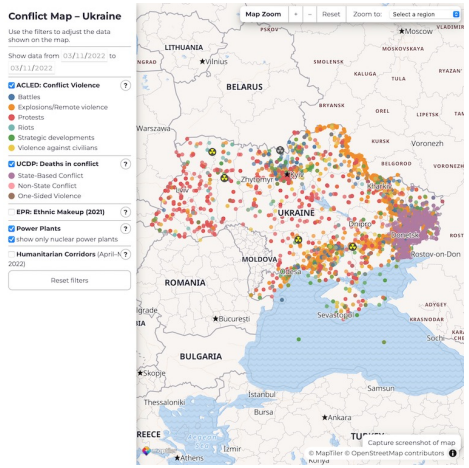

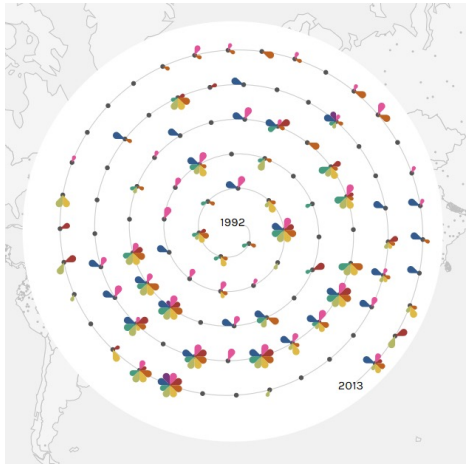

Schedule for Today

Find these slides online:
github.com/DCS-training/interactive-web-maps

10:00	Welcome & Introduction
10:10	Presentation: Understanding your project requirements and constraints
10:20	Discussion: What are you looking to achieve?
10:50	*Break*
11:00	Presentation: Tools and Example Maps
11:15	Time to try out mapping tools, supported by the trainer
12:00	Closing

Part I:
Understanding your requirements and constraints

Requirements

- **What does your data look like?**
  - large or small dataset
  - complex & multi-variate or simple
  - clean or containing errors
  - area or point data, both, or something else (e.g. networks)?
- **How will your map be used?**
  - publicly shared, many users
  - internal, fewer users
- **Do you have specific design requirements?**
  - style guide (colors/fonts) you need to conform to
  - accessibility

Constraints

- **How much time do you have?**
  - short-term
  - long-term
- **Who is involved?**
  - just you?
  - a larger team?
- **What skills do you (+ team) have?**
  - Programming
  - How easily do you usually learn new software?
- **How much funding do you have?**
  - none
  - a little bit – could pay for a software license
  - significant – could hire a developer to create custom maps
  - one-off or ongoing?

Let’s discuss!

Requirements

- **What does your data look like?**
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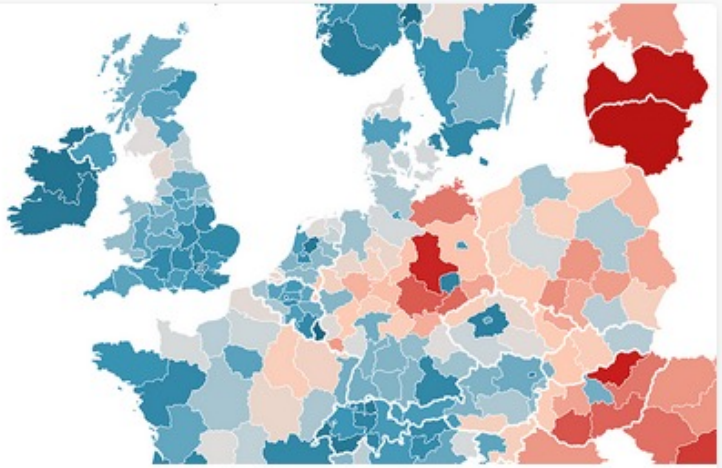
Break

Part II:
Tools & Examples

5 No-code tools

Datawrapper (free)

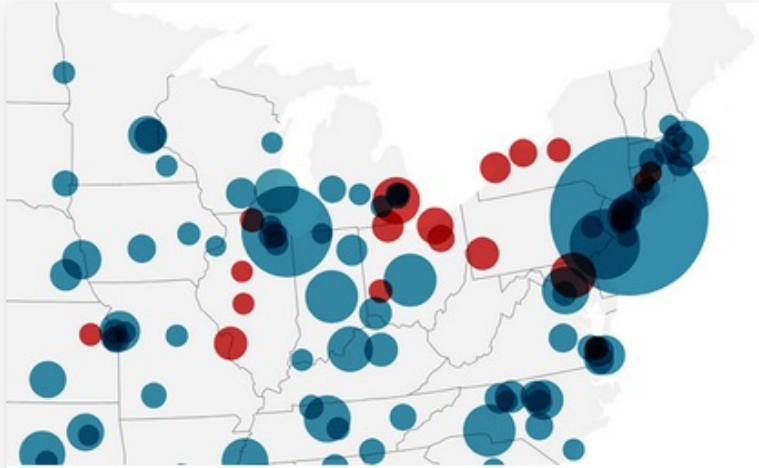
https://app.datawrapper.de/select/map



Choropleth map

Color regions to show data like unemployment rates or election results on a map. Upload your own map or use any of our more than 3000 maps. The resulting map is responsive & interactive.

Learn more about choropleth maps



Symbol map

Create symbols sized and colored according to your data. Works great for specific locations (like cities). Upload your own map or use any of our more than 3000 maps. The resulting map is responsive & interactive.

Learn more about symbol maps

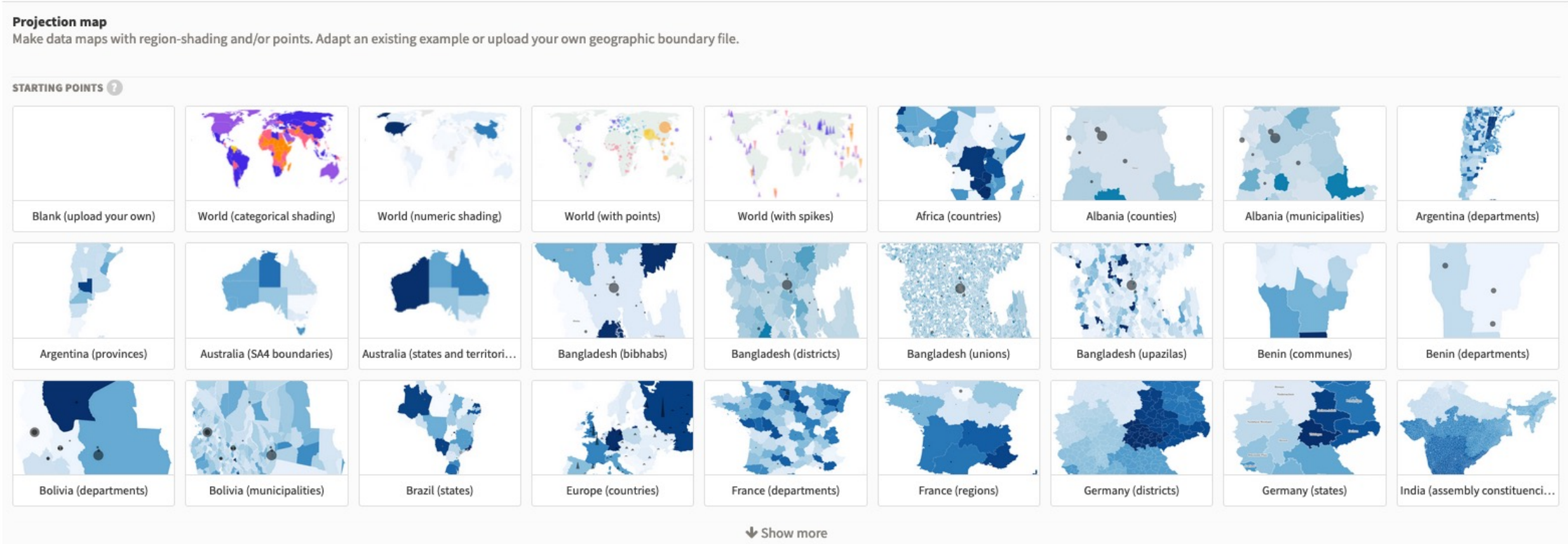
Locator map

Add markers to a map to show where something is located or happened, e.g. events within a city. Perfect for showing readers the places you mention in an article. The resulting map is responsive and static.

Learn more about locator maps

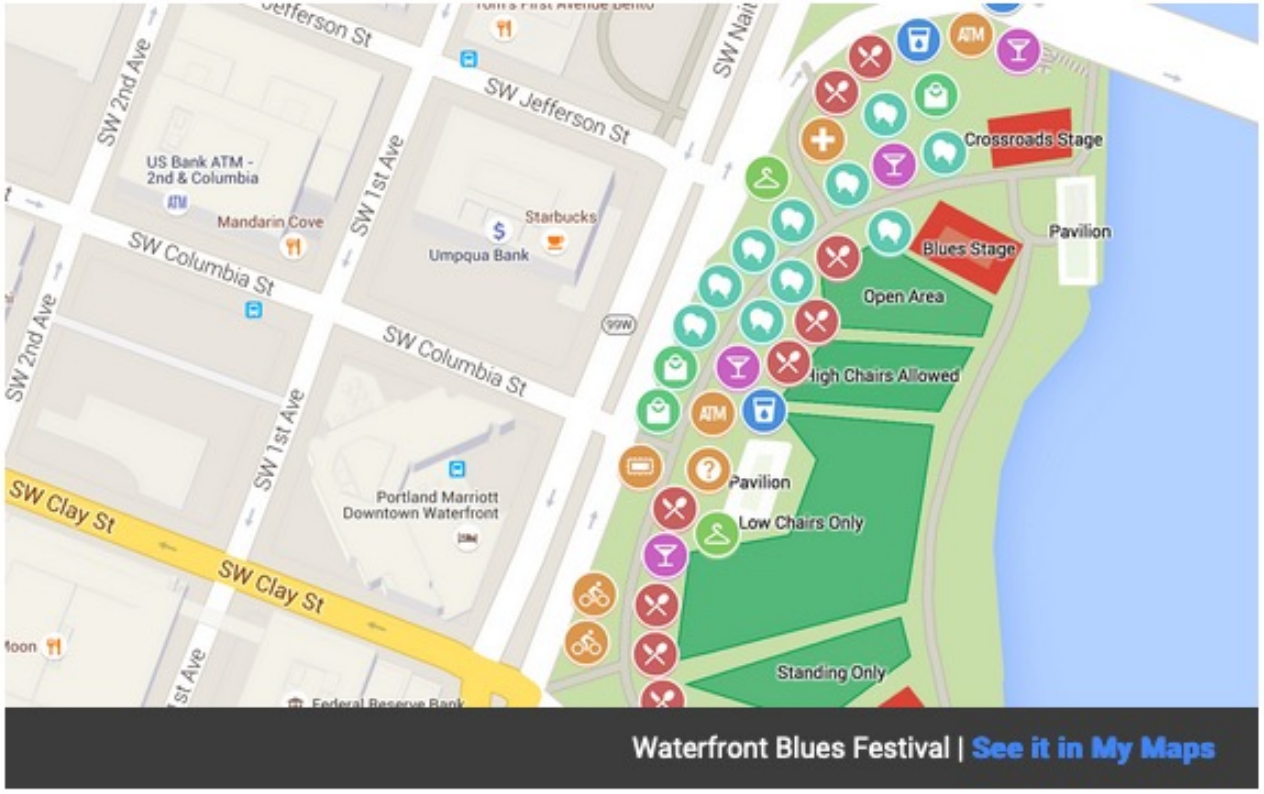
Flourish (free)

https://app.flourish.studio/templates#template-projection-map



Google My Maps (free)

https://www.google.com/maps/about/mymaps/



Draw

Add points or draw shapes anywhere.

Search

Find places and save them to your map.

Import

Instantly make maps from spreadsheets.

Personalize

Show your style with icons and colors.
Add photos and videos to any place.

ArcGIS Online (paid)

https://www.arcgis.com/

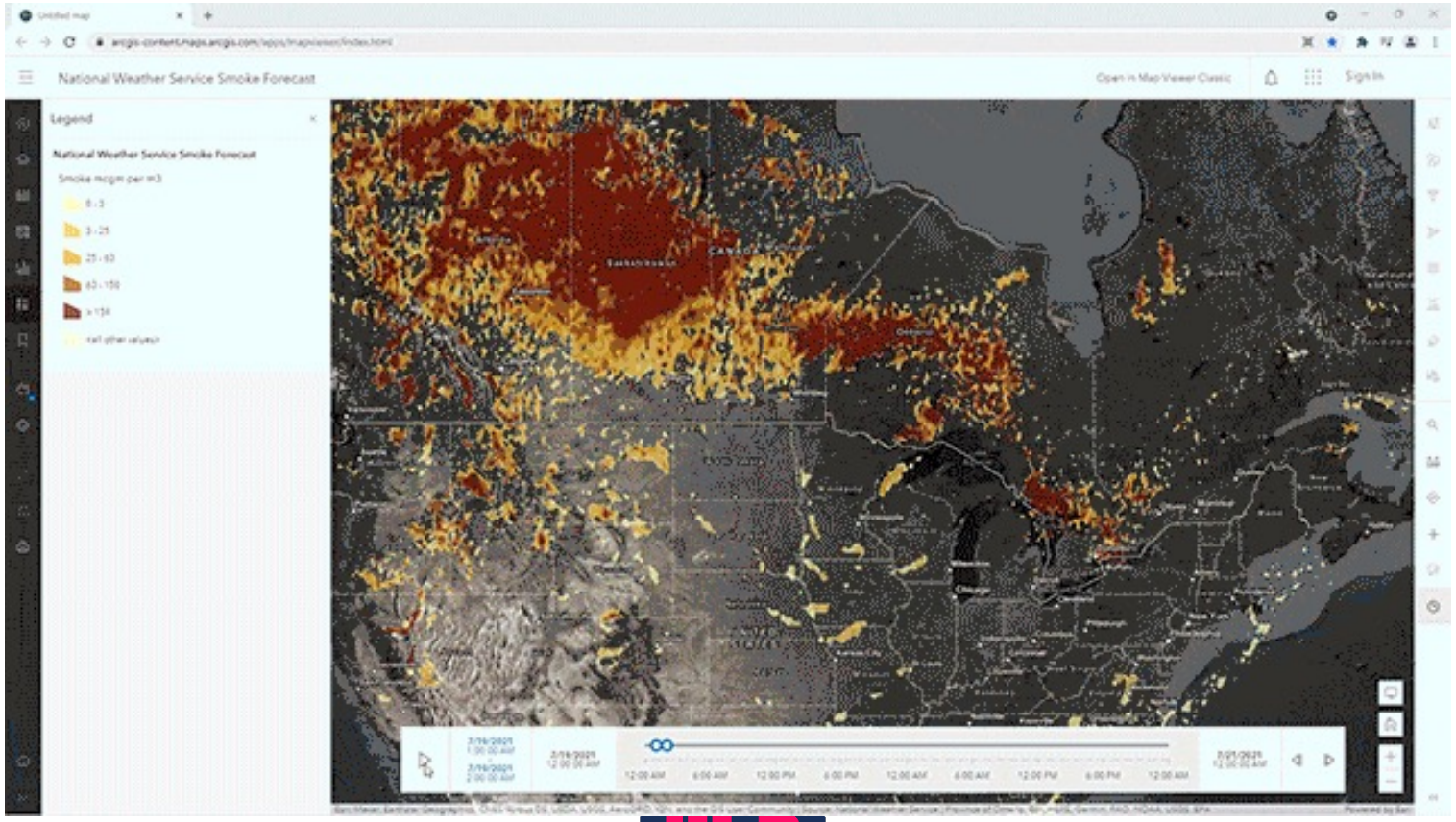
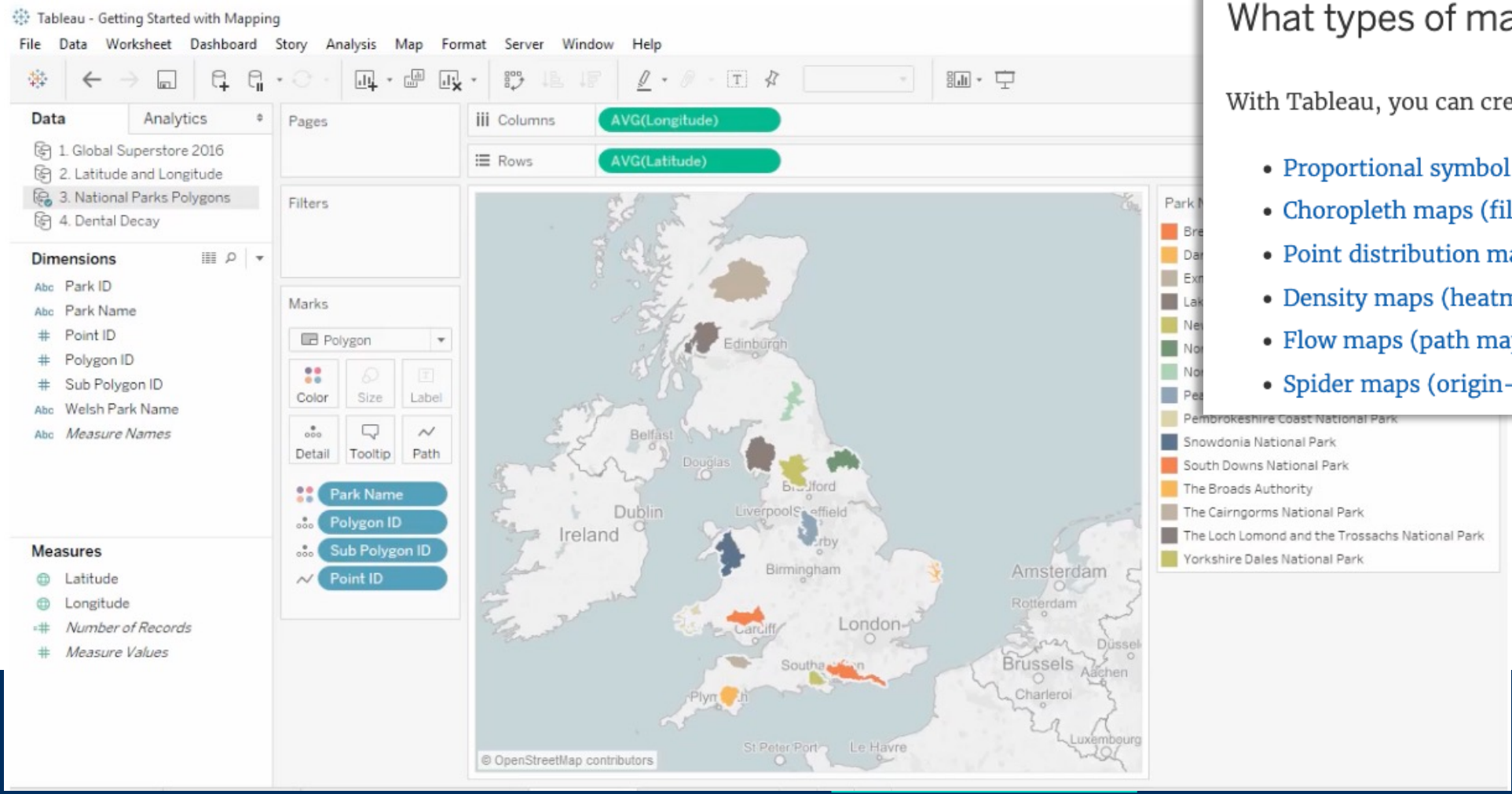


Tableau (paid)

https://www.tableau.com/solutions/maps



What types of maps can you build in Tableau?

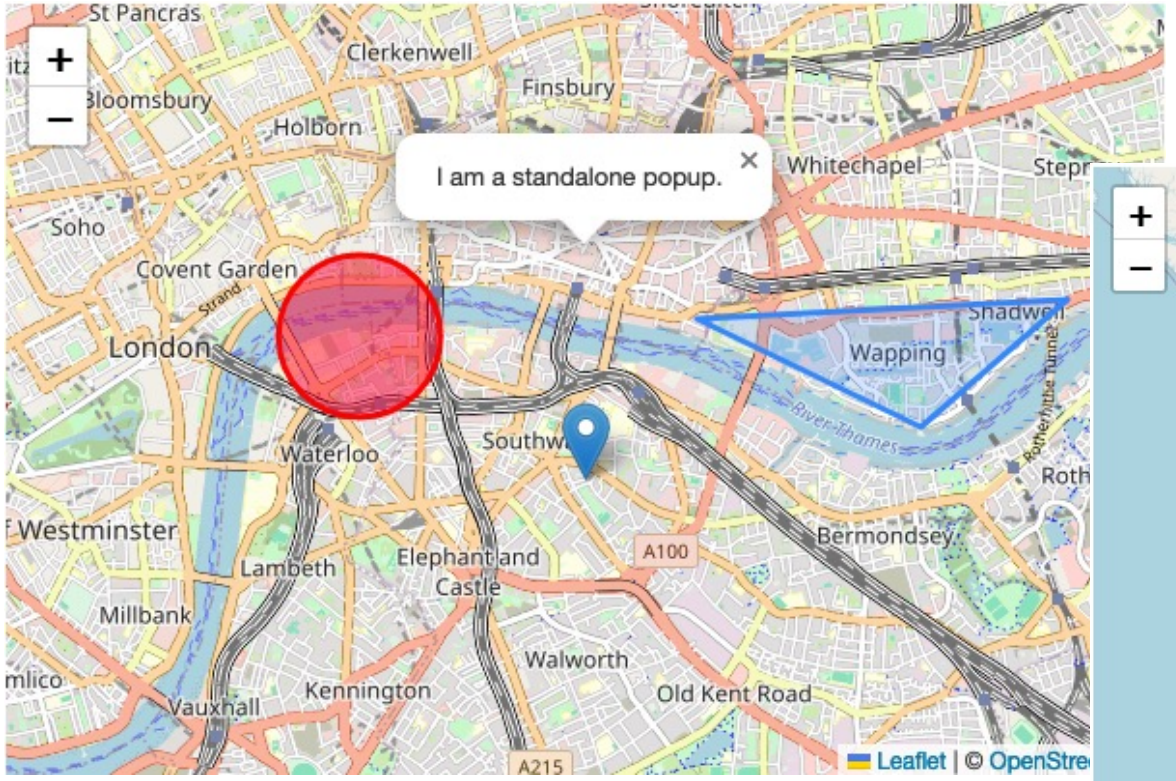
With Tableau, you can create the following common map types:

- Proportional symbol maps
- Choropleth maps (filled maps)
- Point distribution maps
- Density maps (heatmaps)
- Flow maps (path maps)
- Spider maps (origin-destination maps)

5 JavaScript libraries

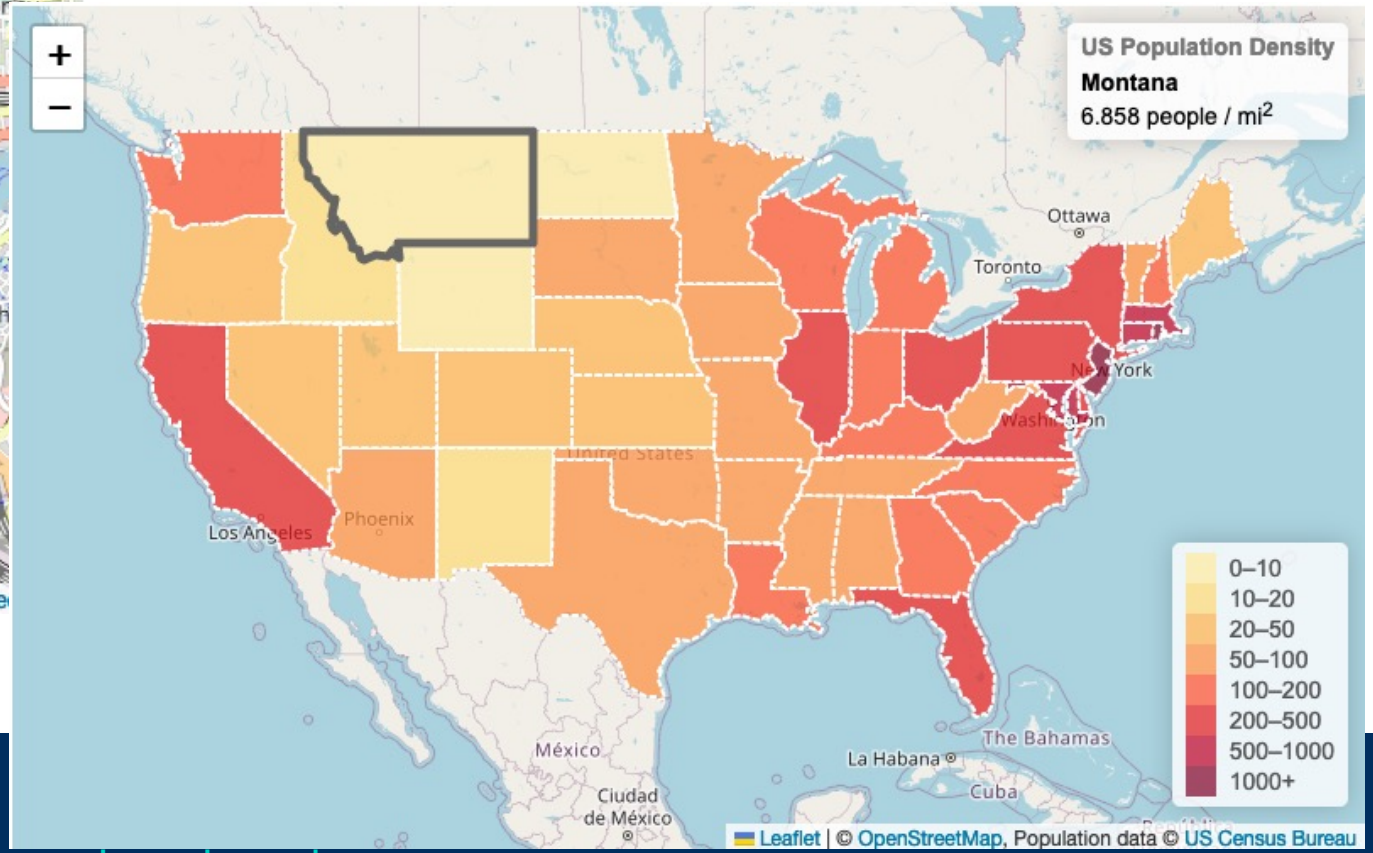
Leaflet (free/open-source)

https://leafletjs.com/



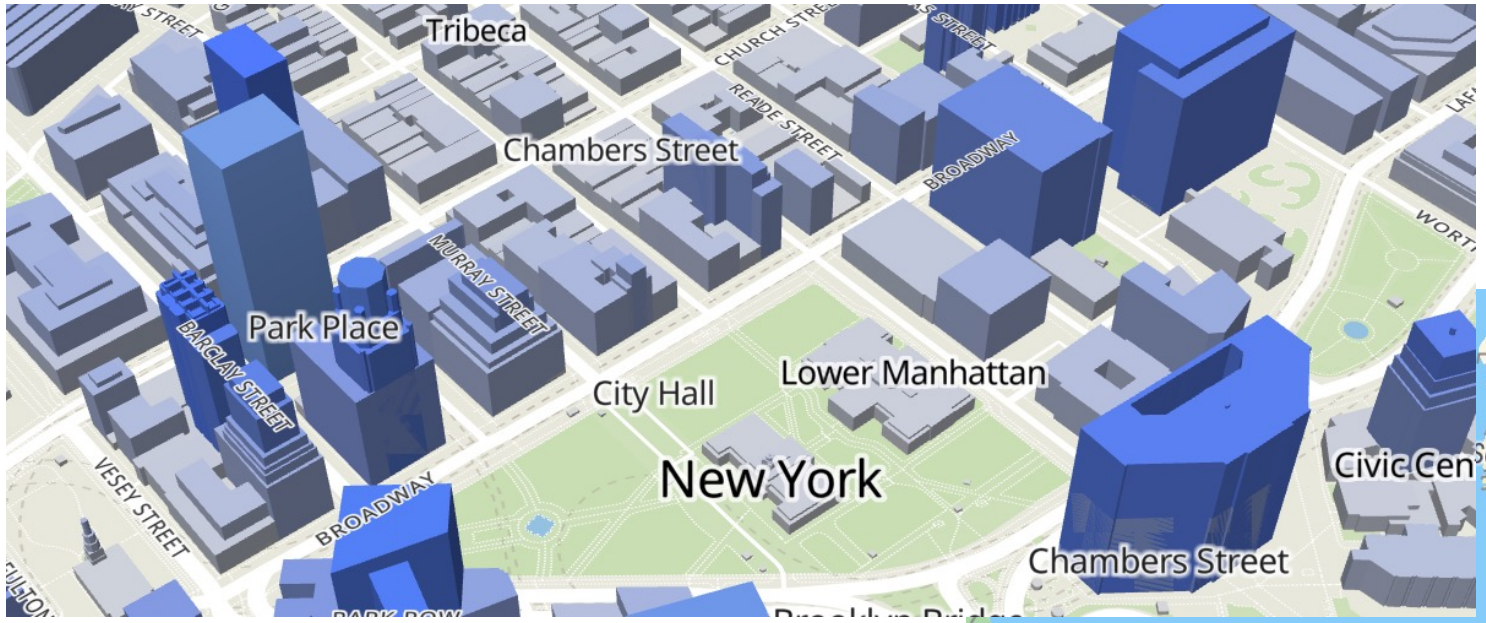
https://leafletjs.com/examples/quick-start/

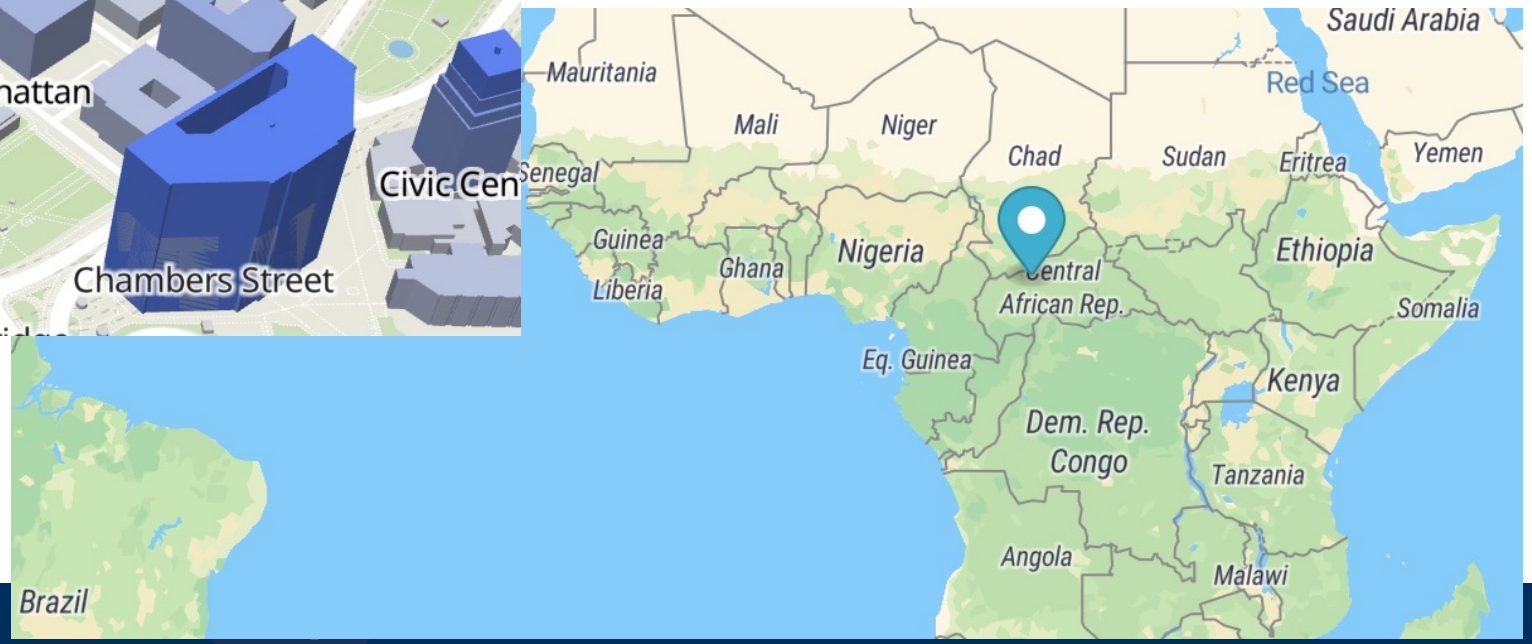
https://leafletjs.com/examples/choropleth/



MapLibre (free/open-source)

https://maplibre.org/maplibre-gl-js/docs/

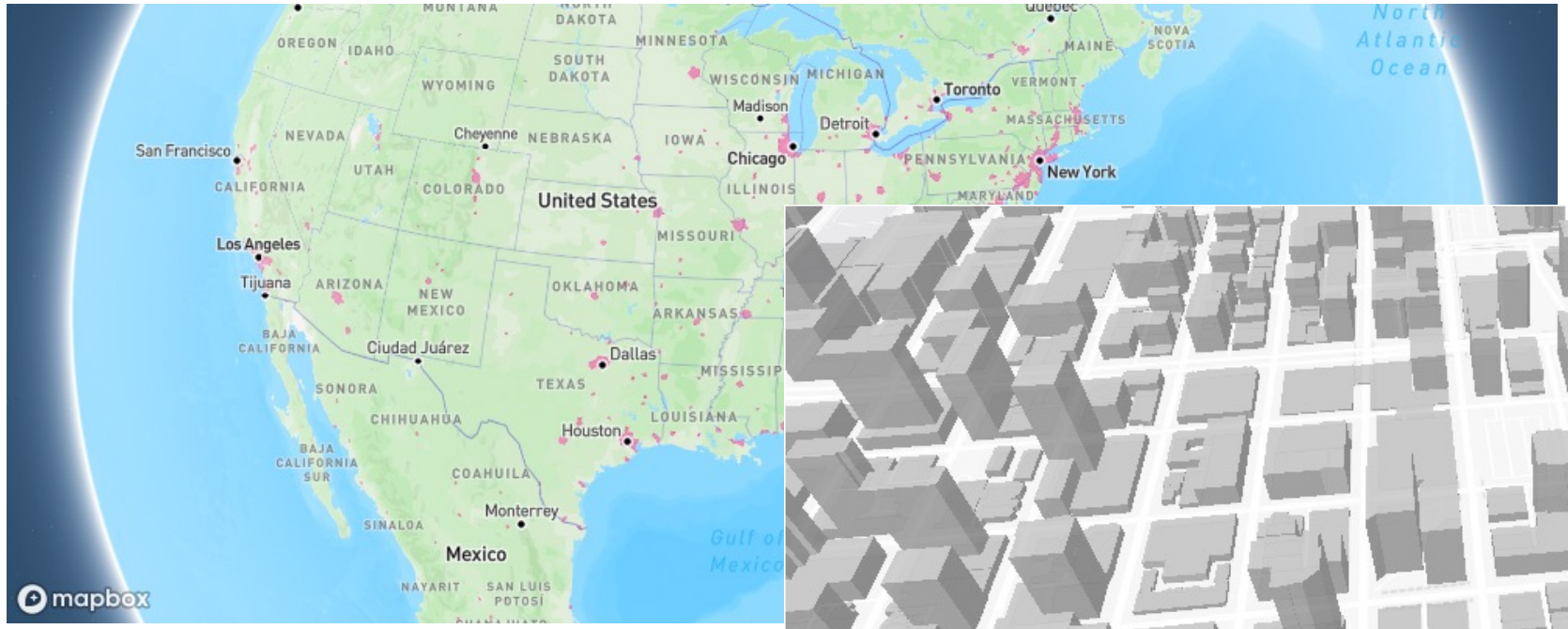




https://maplibre.org/maplibre-gl-js/docs/examples/

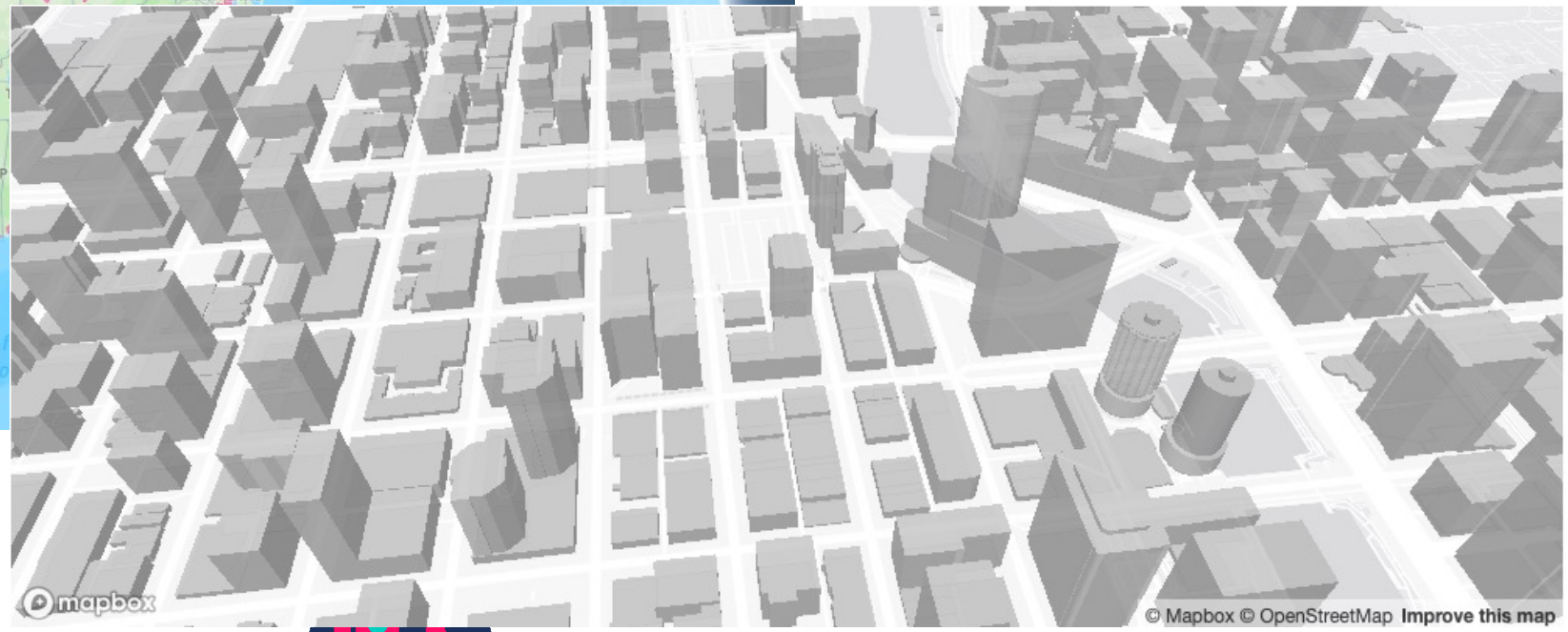
MapBox (free/paid)

https://docs.mapbox.com/mapbox-gl-js/guides/



https://docs.mapbox.com/mapbox-gl-js/example/geojson-layer-in-stack/

https://docs.mapbox.com/mapbox-gl-js/example/animate-camera-around-point/



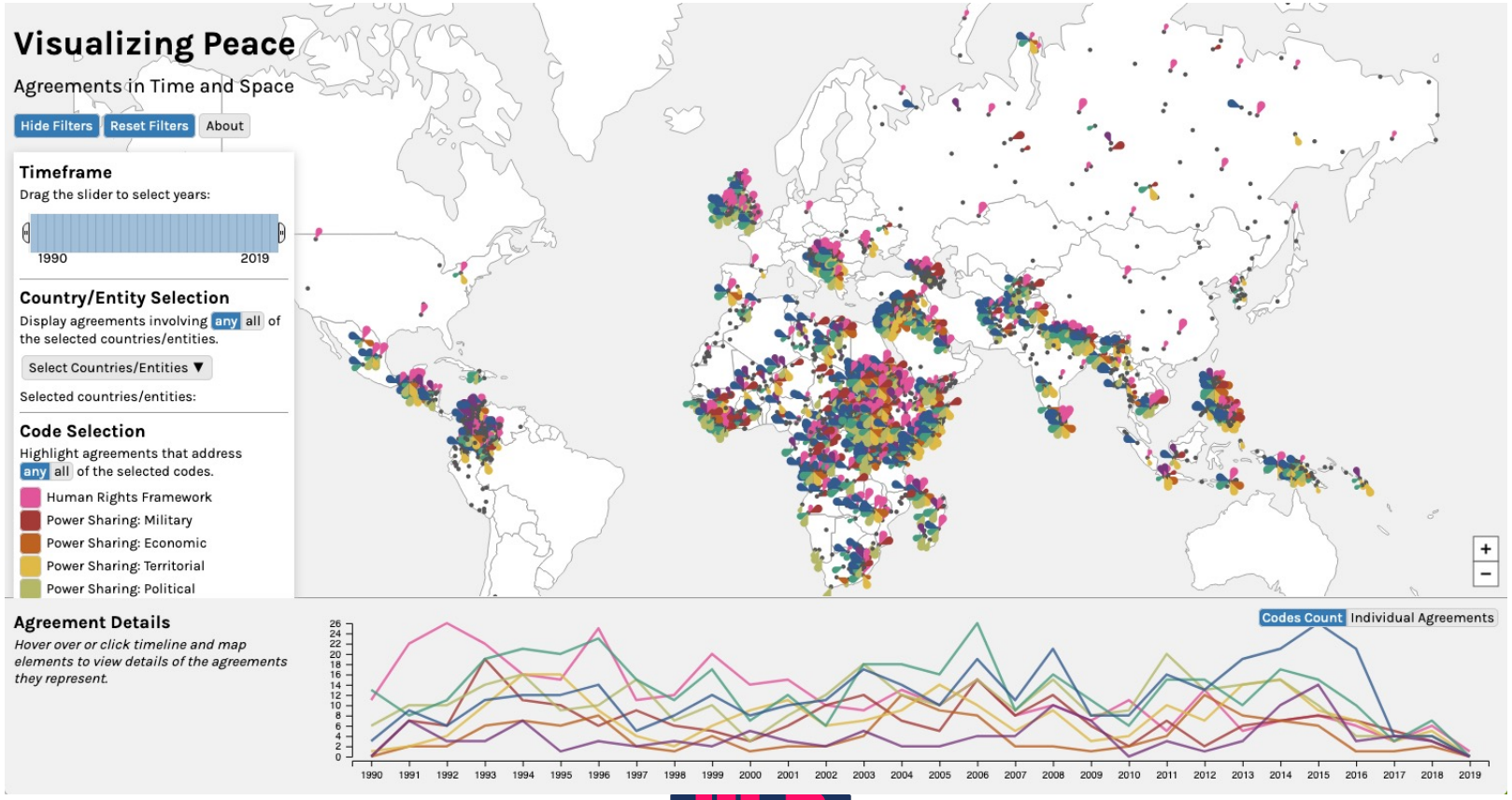
DeckGL (free/open-source)

https://deck.gl/

https://deck.gl/examples

D3 with d3-geo (free/open-source)

https://d3js.org/d3-geo



https://peacerep.github.io/pax-map/

Let’s try out some tools!

- Find links to all tools (and these slides) here: https://github.com/DCS-training/interactive-web-maps

- Try to find other people interested in the same tools and work together
- Ask me if you have any questions, want advice, or need help!

Thank you!

- Feedback form: *see follow-up email*
- Link to these slides and a list of all tools we covered: https://github.com/DCS-training/interactive-web-maps