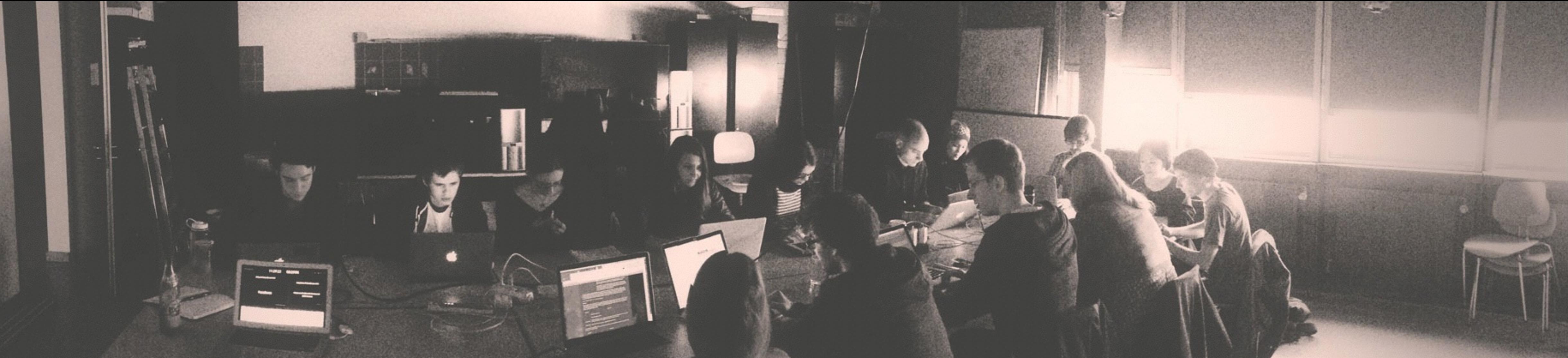


„The map is not the territory.“

Alfred Korzybski



Interface Werkstatt Blockseminar || Day Two

# Day Two

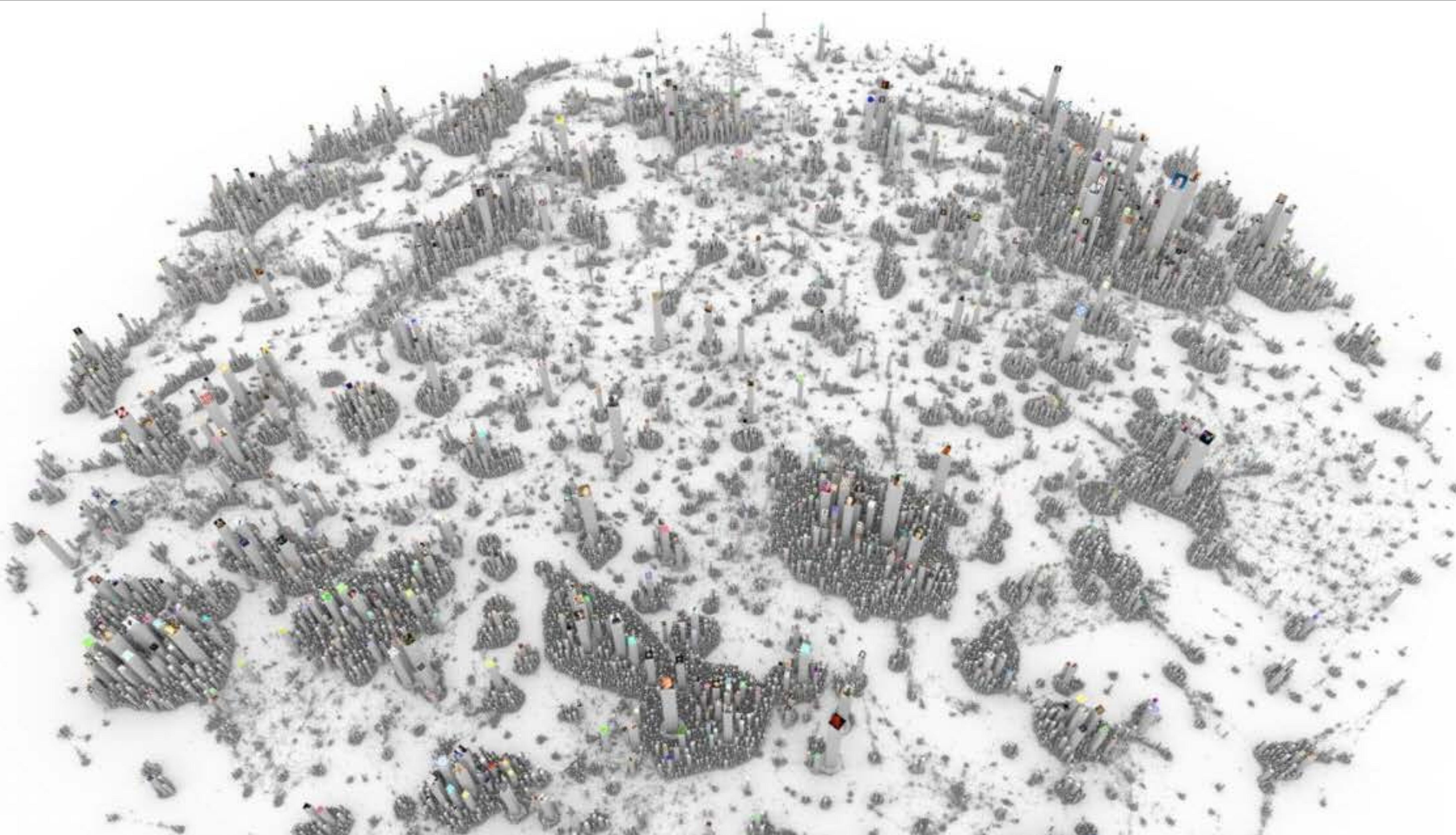
LW126

# data

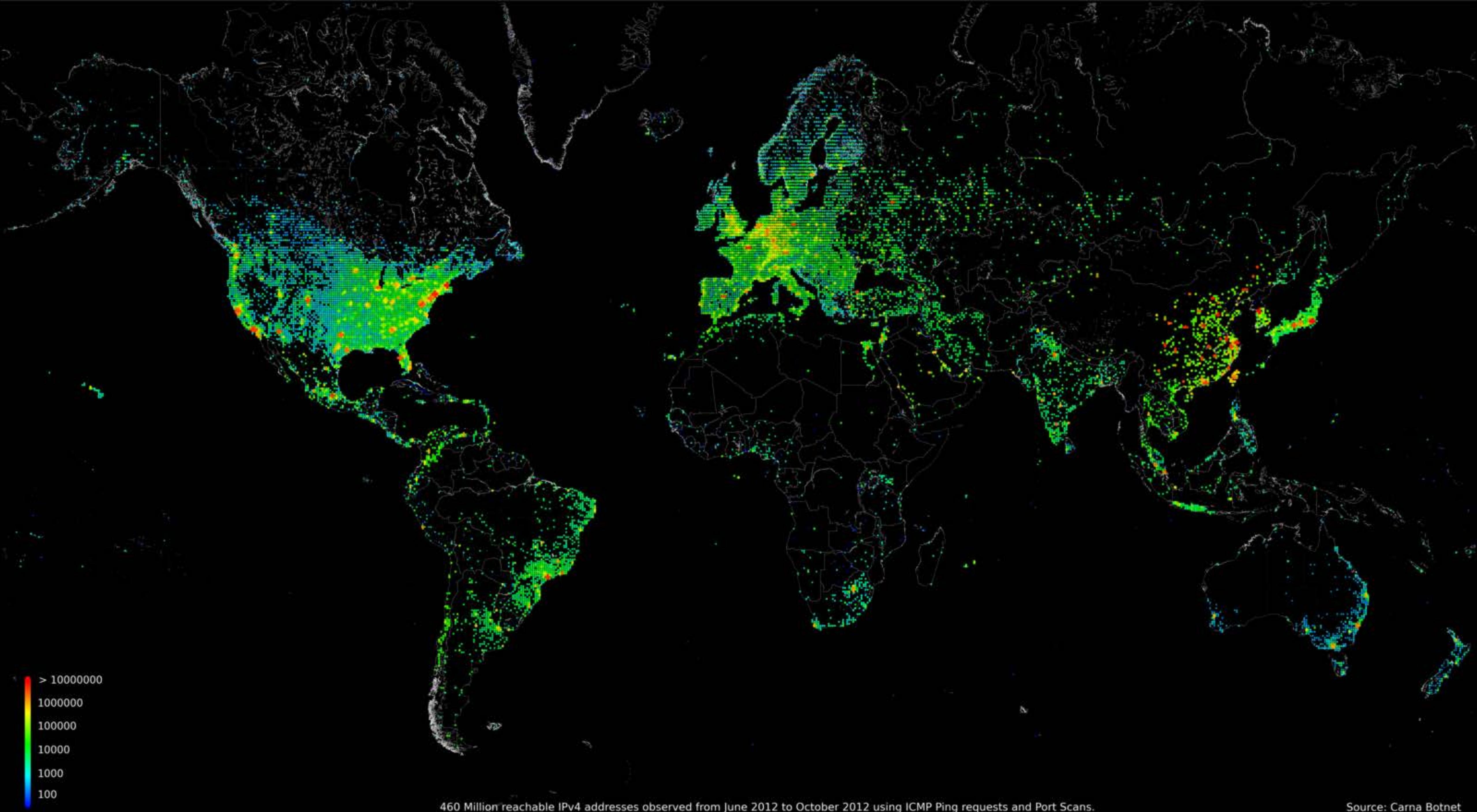
Visualizing the world's Twitter data - Jer Thorp



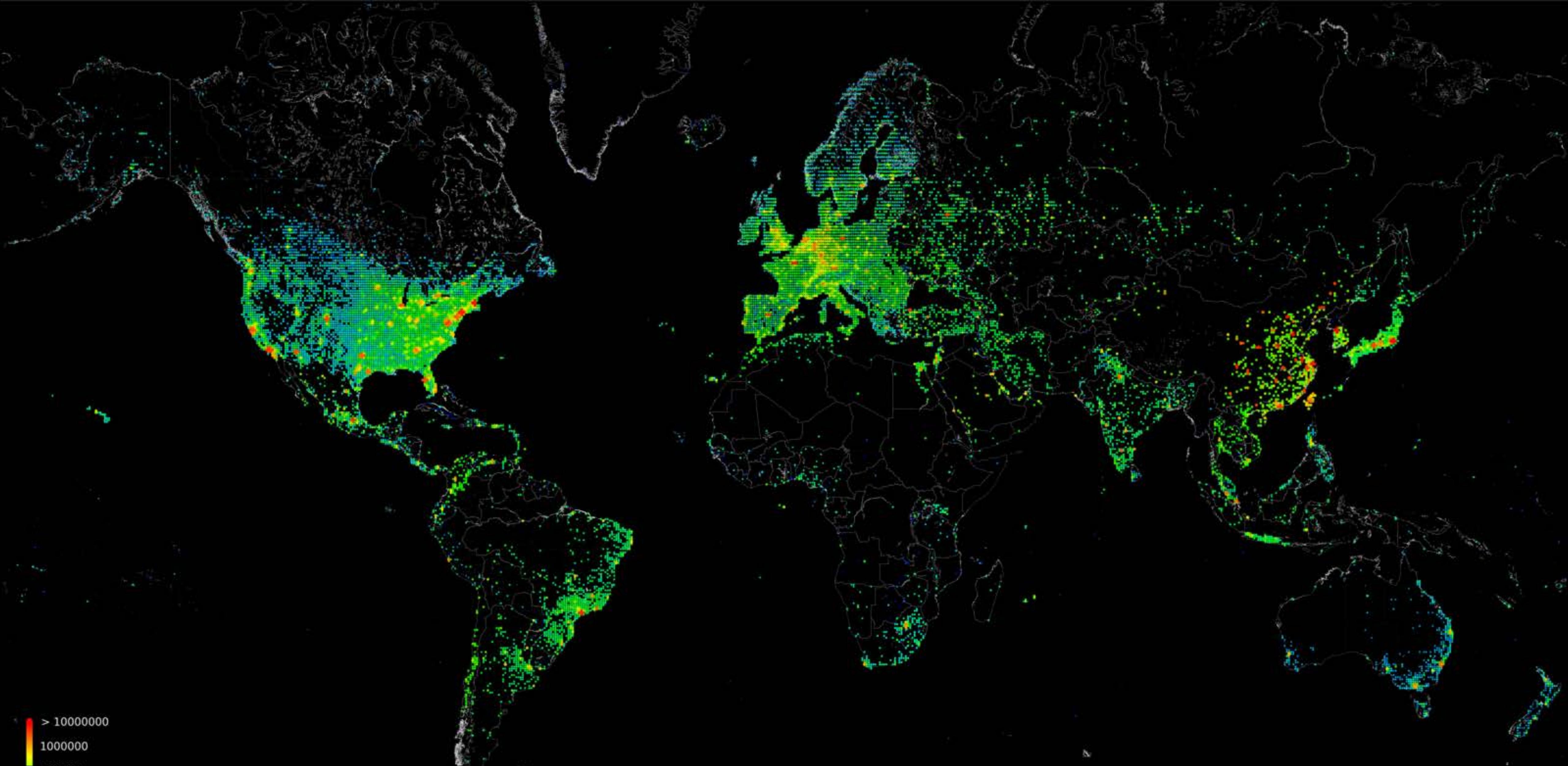
Vizocities



Ekisto



Source: Carna Botnet



Internet Census

# Data Viz

# **Geo Data**

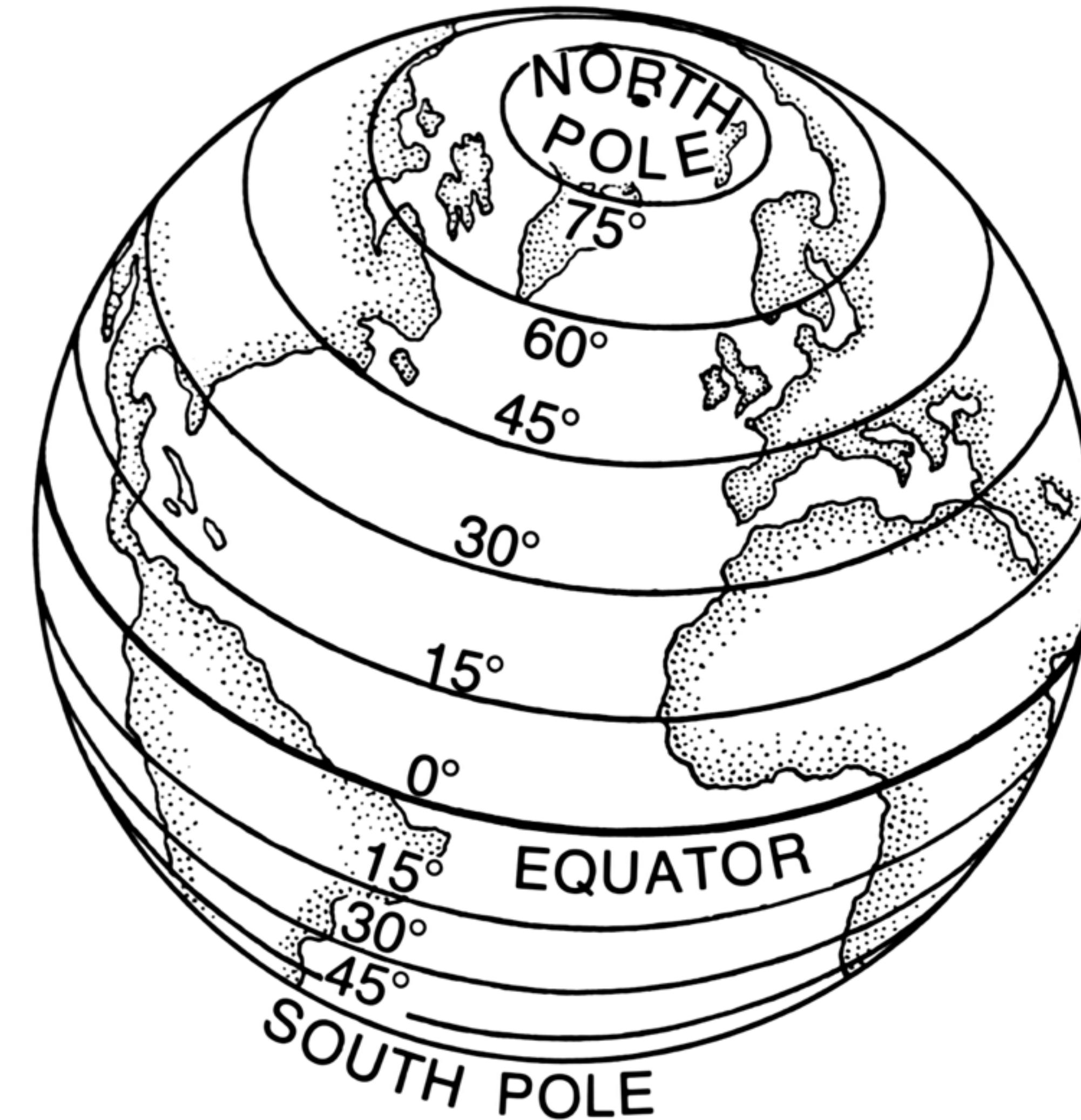


NASA Earth Observatory

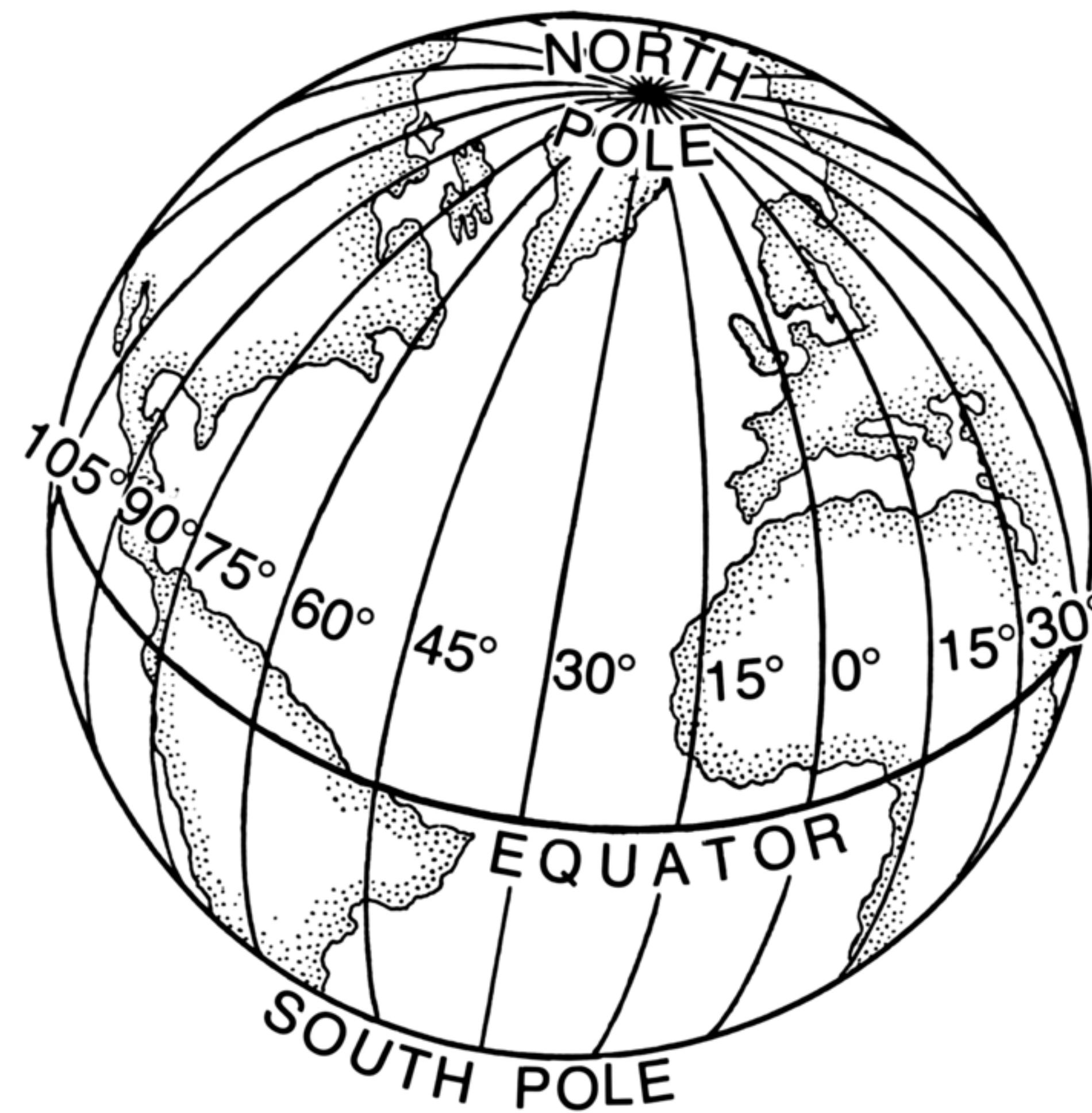


# Latitude & Longitude

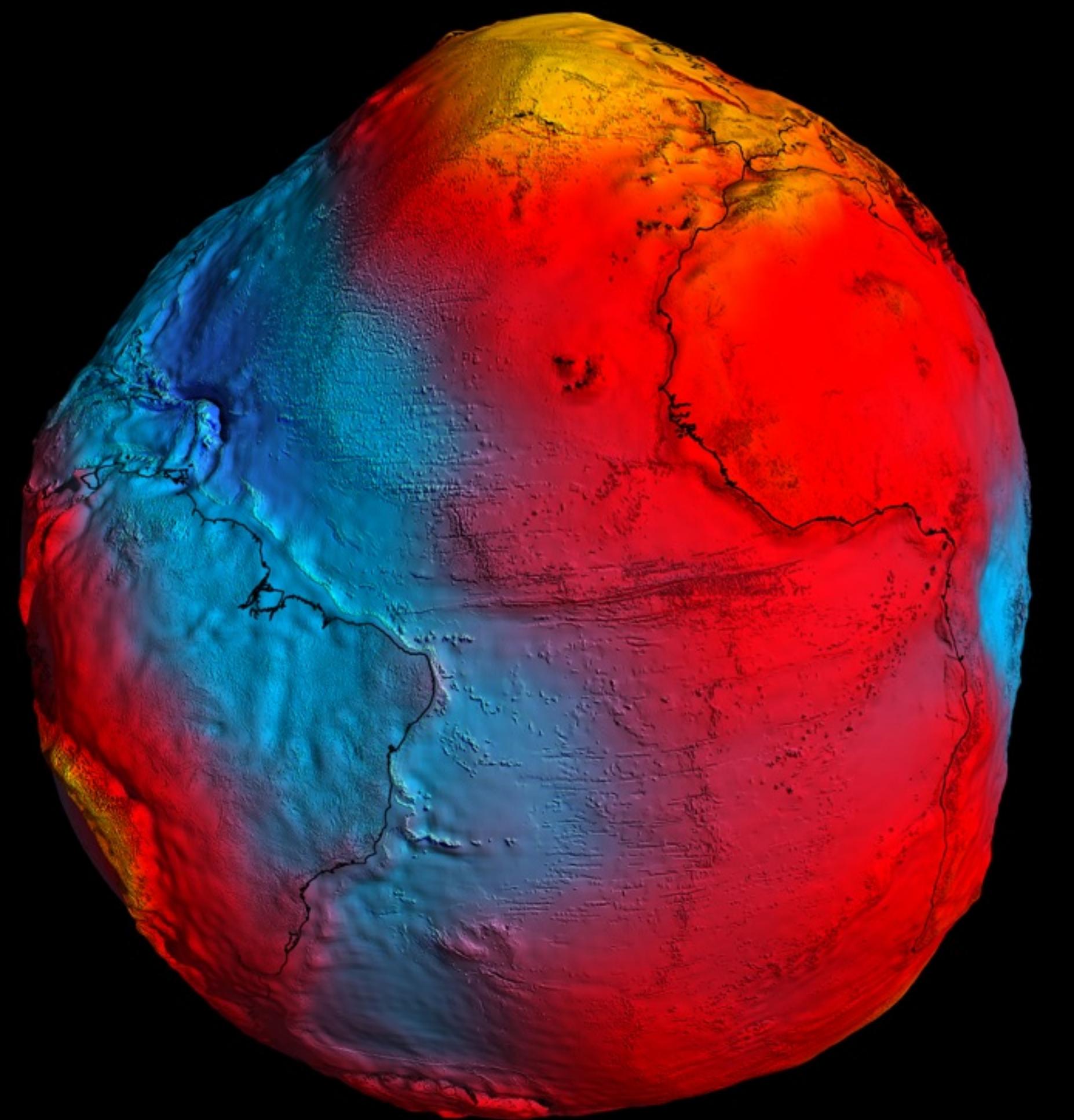
+ Elevation



Latitude



Longitude



Geoid

Nº25



Matthäus Seutter

[github.com/mbostock/d3/wiki/Geo-Projections](https://github.com/mbostock/d3/wiki/Geo-Projections) — Geo Projections · mbostock/d3 Wiki

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**Geo Projections** · Edit Page · Page History · Clone URL

Wiki > API Reference > Geo > Geo Projections

Several common projections are included with default build of D3; these are shown below. Numerous less-common projections are available in the [extended geographic projections plugin](#) and the [polyhedral projection plugin](#).

d3.geo.albersUsa	d3.geo.azimuthalEqualArea	d3.geo.azimuthalEquidistant	d3.geo.conicEqualArea
			
d3.geo.conicConformal	d3.geo.conicEquidistant	d3.geo.equirectangular	d3.geo.gnomonic
			
d3.geo.mercator	d3.geo.orthographic	d3.geo.stereographic	d3.geo.transverseMercator
			

**Standard Abstract Projection**

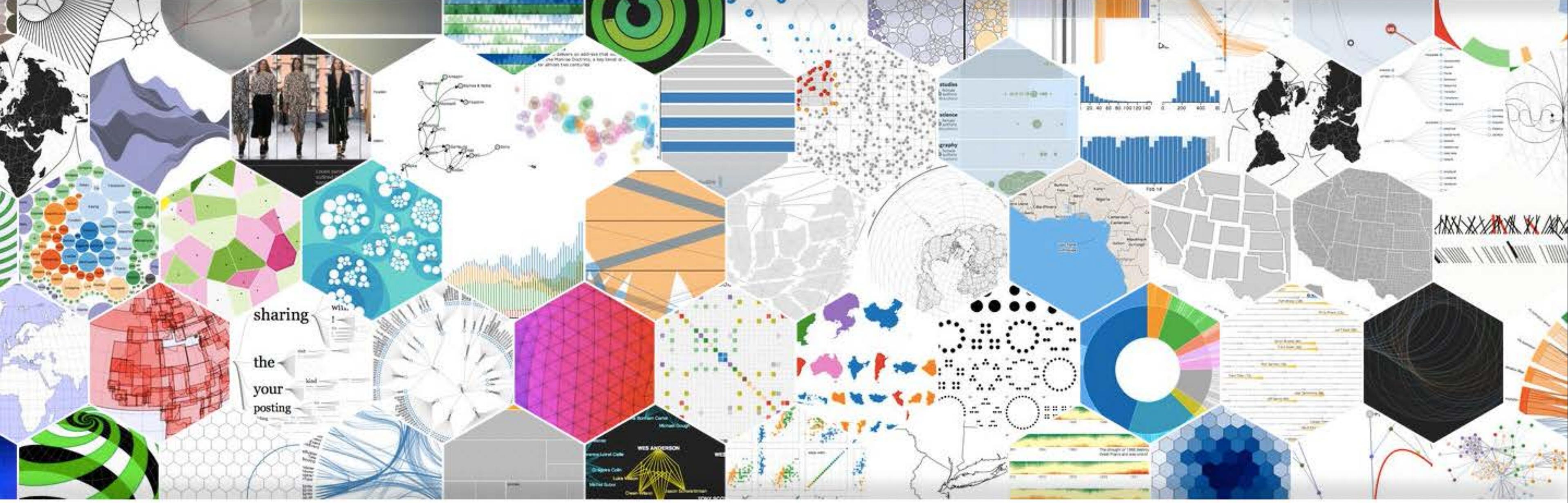
D3 GeoProjections

[d3js.org](https://d3js.org)

Overview Examples Documentation Source

Fork me on GitHub

# D3 Data-Driven Documents

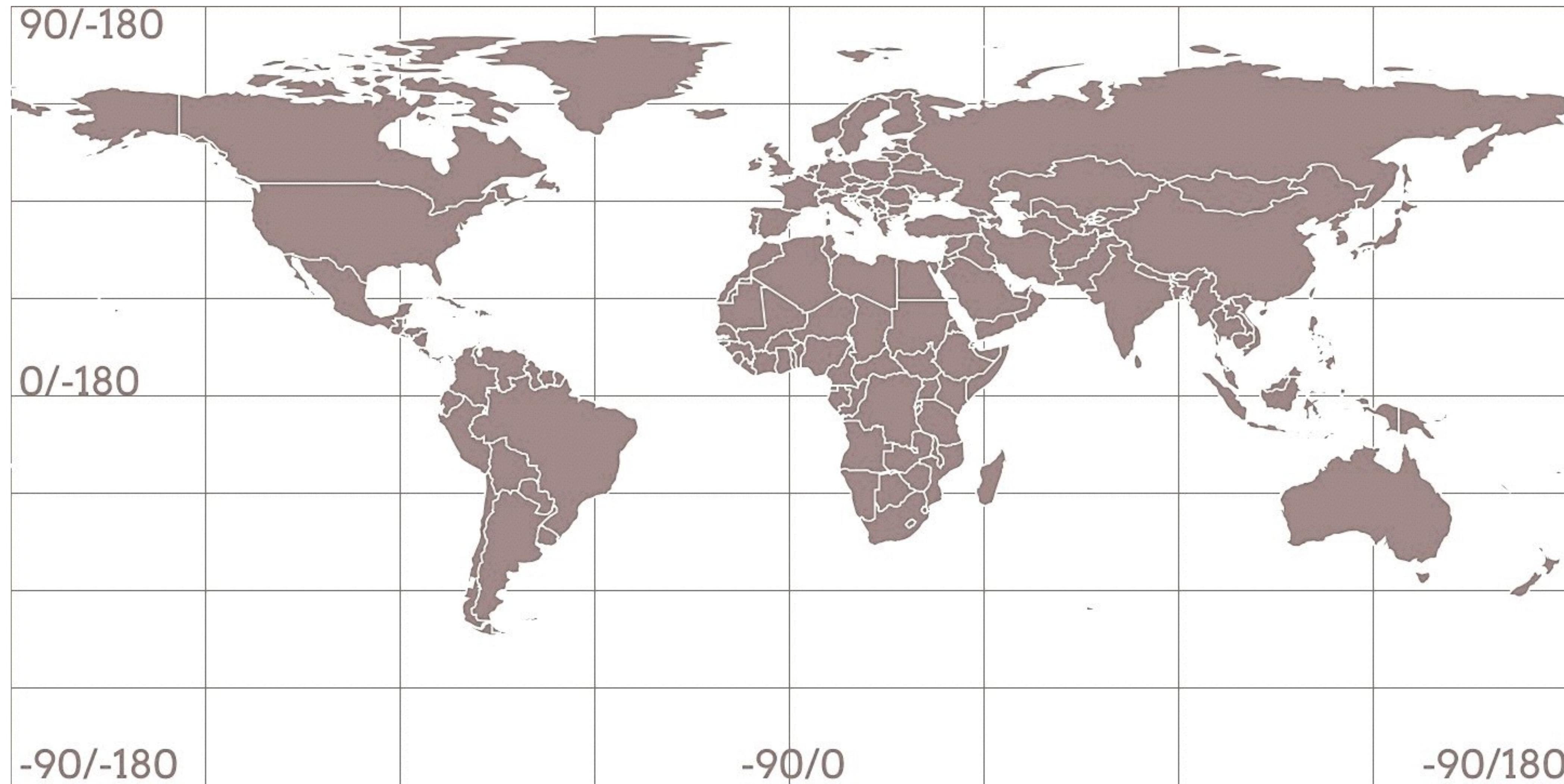


D3.js is a JavaScript library for manipulating documents based on data. D3 helps you bring data to life using HTML, SVG and CSS. D3's emphasis on web standards gives you the full capabilities of modern browsers without tying yourself to a proprietary framework, combining powerful visualization components and a data-driven approach to DOM manipulation.

See more examples.

Download the latest version (3.4.2) here:

- [d3.zip](#)



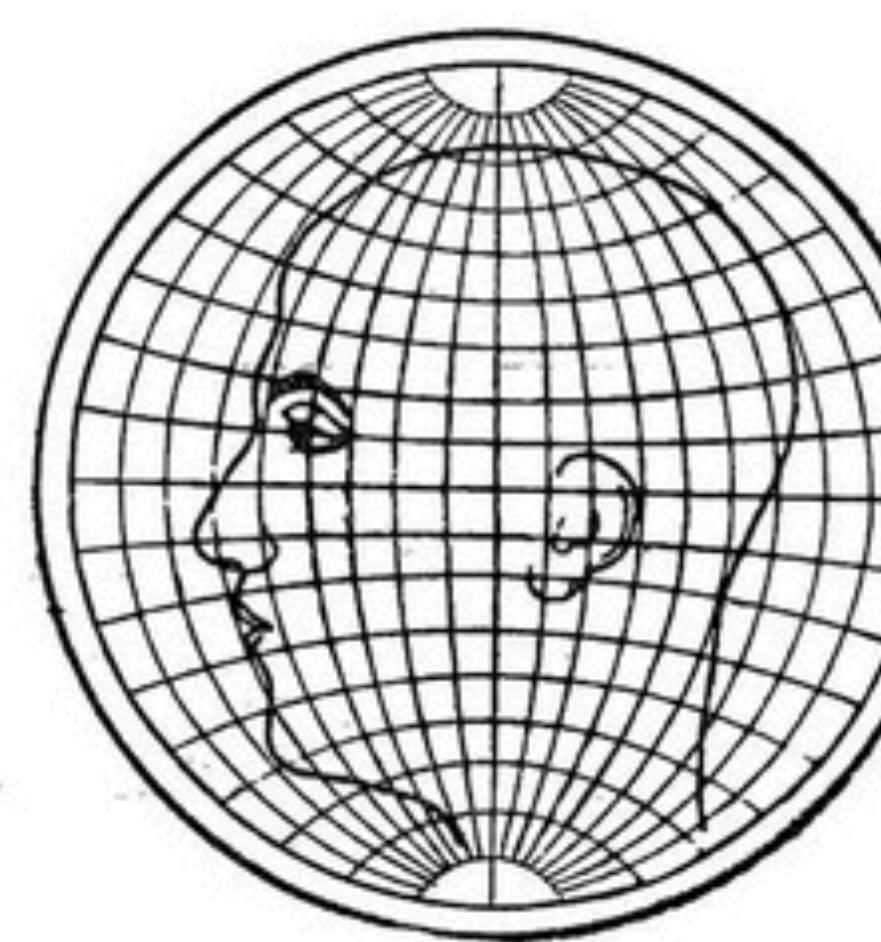


FIG. 42.—Man's head drawn on globular projection.

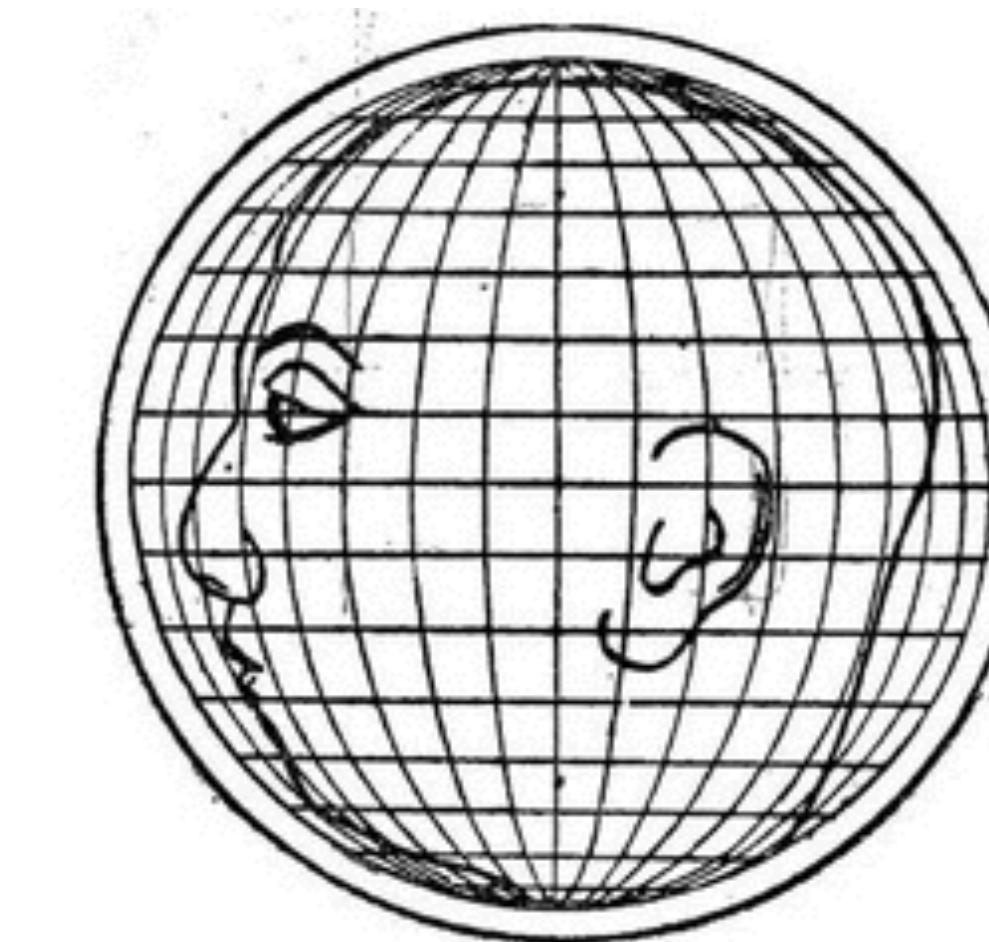


FIG. 43.—Man's head plotted on orthographic projection.

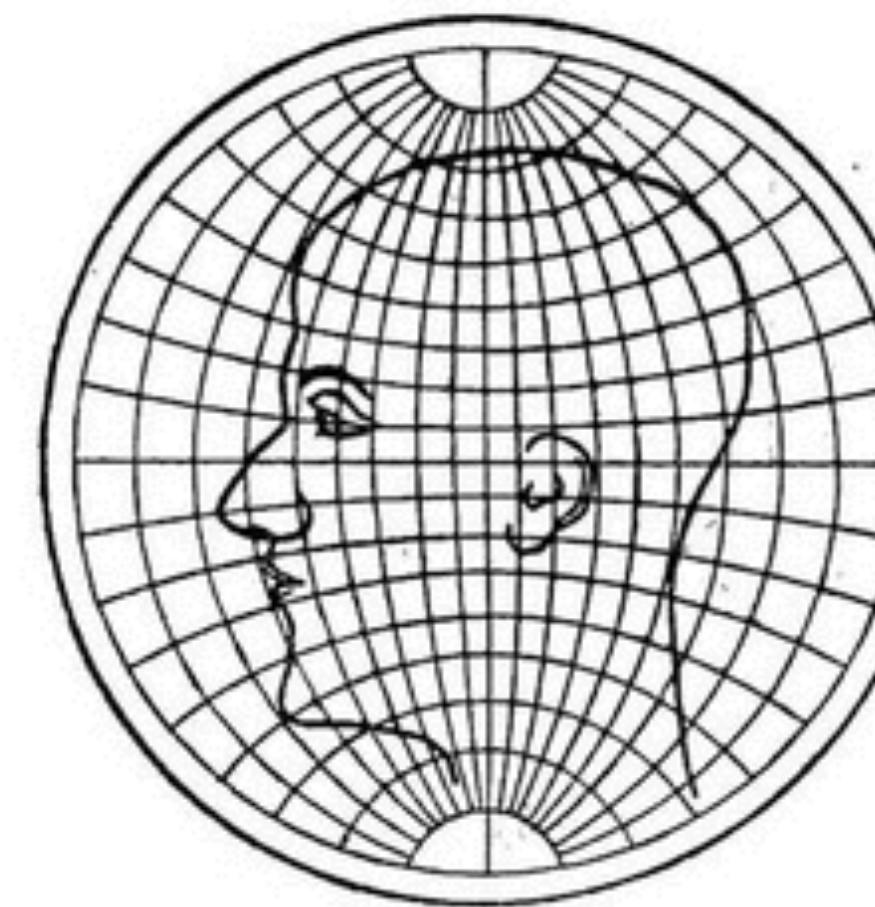


FIG. 44.—Man's head plotted on stereographic projection.

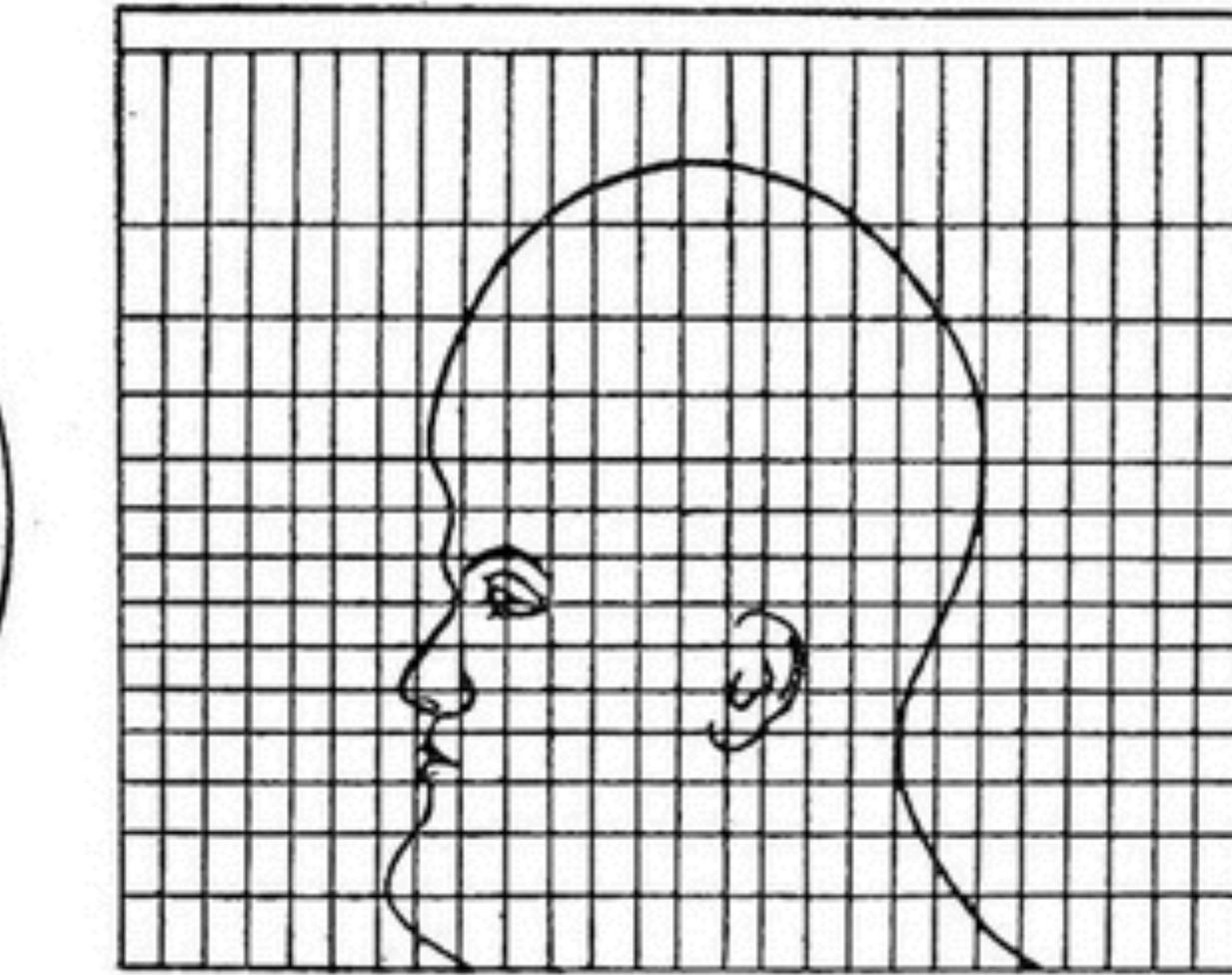
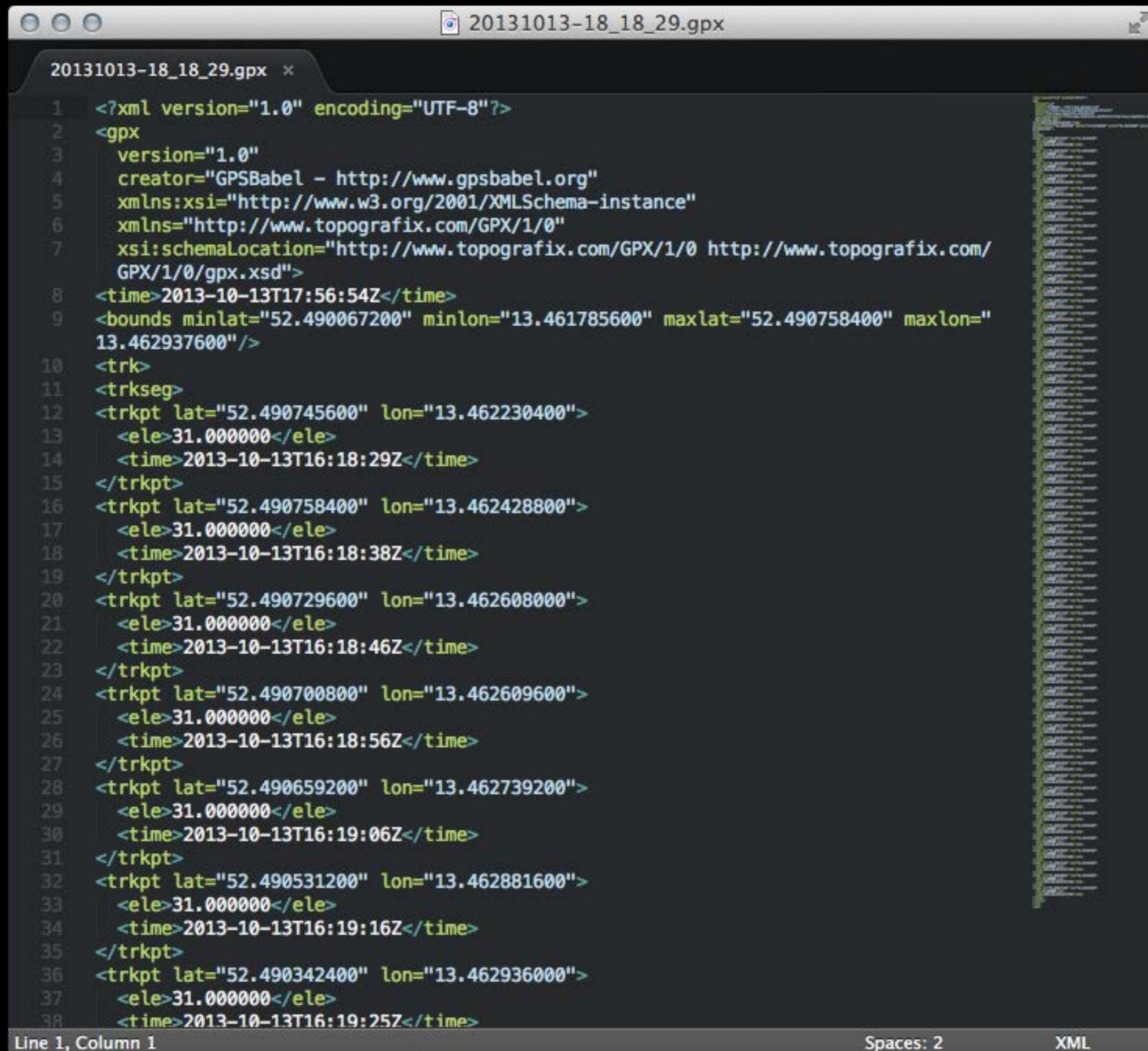


FIG. 45.—Man's head plotted on Mercator projection.

# Collect Data



A screenshot of a terminal window titled "20131013-18\_18\_29.gpx". The window displays a large amount of XML code representing a GPS track. The XML structure includes a root <gpx> element with attributes "version" (1.0), "creator" (GPSBabel - http://www.gpsbabel.org), and namespaces for xsi and topografix. It contains a <time> element for the start time (2013-10-13T17:56:54Z) and a <bounds> element defining the geographic area. The main content is a <trk> element containing multiple <trkseg> elements. Each <trkseg> contains one or more <trkpt> elements, each with latitude, longitude, elevation (<ele>), and timestamp (<time>). The XML is color-coded for syntax highlighting.

```
<?xml version="1.0" encoding="UTF-8"?>
<gpx
  version="1.0"
  creator="GPSBabel - http://www.gpsbabel.org"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://www.topografix.com/GPX/1/0"
  xsi:schemaLocation="http://www.topografix.com/GPX/1/0 http://www.topografix.com/GPX/1/0/gpx.xsd">
  <time>2013-10-13T17:56:54Z</time>
  <bounds minlat="52.490067200" minlon="13.461785600" maxlat="52.490758400" maxlon="13.462937600"/>
  <trk>
    <trkseg>
      <trkpt lat="52.490745600" lon="13.462230400">
        <ele>31.000000</ele>
        <time>2013-10-13T16:18:29Z</time>
      </trkpt>
      <trkpt lat="52.490758400" lon="13.462428800">
        <ele>31.000000</ele>
        <time>2013-10-13T16:18:38Z</time>
      </trkpt>
      <trkpt lat="52.490729600" lon="13.462608000">
        <ele>31.000000</ele>
        <time>2013-10-13T16:18:46Z</time>
      </trkpt>
      <trkpt lat="52.490700800" lon="13.462609600">
        <ele>31.000000</ele>
        <time>2013-10-13T16:18:56Z</time>
      </trkpt>
      <trkpt lat="52.490659200" lon="13.462739200">
        <ele>31.000000</ele>
        <time>2013-10-13T16:19:06Z</time>
      </trkpt>
      <trkpt lat="52.490531200" lon="13.462881600">
        <ele>31.000000</ele>
        <time>2013-10-13T16:19:16Z</time>
      </trkpt>
      <trkpt lat="52.490342400" lon="13.462936000">
        <ele>31.000000</ele>
        <time>2013-10-13T16:19:25Z</time>
      </trkpt>
```

## GPS eXchange Format - Extensible Markup Language (XML)

```
GPX/1/0/gpx.xsd">
8 <time>2013-10-13T17:56:54Z</time>
9 <bounds minlat="52.490067200" minlon="13.461785600" maxlat="52.490758400" maxlon=
13.462937600"/>
10 <trk>
11 <trkseg>
12 <trkpt lat="52.490745600" lon="13.462230400">
13 <ele>31.000000</ele>
14 <time>2013-10-13T16:18:29Z</time>
15 </trkpt>
16 <trkpt lat="52.490758400" lon="13.462428800">
17 <ele>31.000000</ele>
18 <time>2013-10-13T16:18:38Z</time>
19 </trkpt>
20 <trkpt lat="52.490729600" lon="13.462608000">
21 <ele>31.000000</ele>
22 <time>2013-10-13T16:18:46Z</time>
23 </trkpt>
24 <trkpt lat="52.490700800" lon="13.462609600">
25 <ele>31.000000</ele>
26 <time>2013-10-13T16:18:56Z</time>
27 </trkpt>
28 <trkpt lat="52.490659200" lon="13.462739200">
29 <ele>31.000000</ele>
30 <time>2013-10-13T16:19:06Z</time>
31 </trkpt>
32 <trkpt lat="52.490521200" lon="13.462816000">
```



WBT 202

RunKeeper | Get The App | RunKeeper

runkeeper.com

InDesign API Browser defunkt/gist The-Geo-Be... bookmarklet GeoCommonsJSON Exercise 23... 2nd Edition DocHub | Ins... tion Search

Get The App Log In

The image shows a screenshot of the RunKeeper mobile application. On the left, a smartphone displays the app's interface with a map of Boston, Massachusetts. The map highlights several running routes with blue lines and icons. At the top of the phone screen, it says "4:21 PM" and "100%". Below the map, there's a navigation bar with options like "Add route", "Add music", and "Sharing". A green button labeled "Go Running" is prominent at the bottom. On the right, a large banner for RunKeeper features the brand logo (a stylized runner icon) and the text "RunKeeper" in large blue letters. Below that, it says "The best way to get and stay fit" and "We help you bring fitness into your lifestyle by helping you become the healthier, fitter version of yourself." A "Sign Up With Facebook" button is visible, along with fields for "Full Name", "Email", and "Password", and a large green "Get Started" button at the bottom.

runkeeper.com



GSM (Global System for Mobile Communications)

https://openpaths.cc — OpenPaths

Reader

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**Get your data.**  
Access your location data from mobile devices, social services, and more.

**Own your data.**  
Your data is protected with the highest level of security so that you control access to it.

**Sign in**

username

password

Go

**Are you new to OpenPaths?**

**Get Started**

**Use your data.**  
Visualize your location data, build applications and more with the OpenPaths API.

**Contribute your data.**  
Review project proposals and donate your data to a worthy cause.

Where we've been  
See an aggregate map of all OpenPaths



[johnnycashhasbeeneverywhere.com](http://johnnycashhasbeeneverywhere.com) - Iain Mullan

# Geo Coding

# Transform Data

**gpsbabel.org**

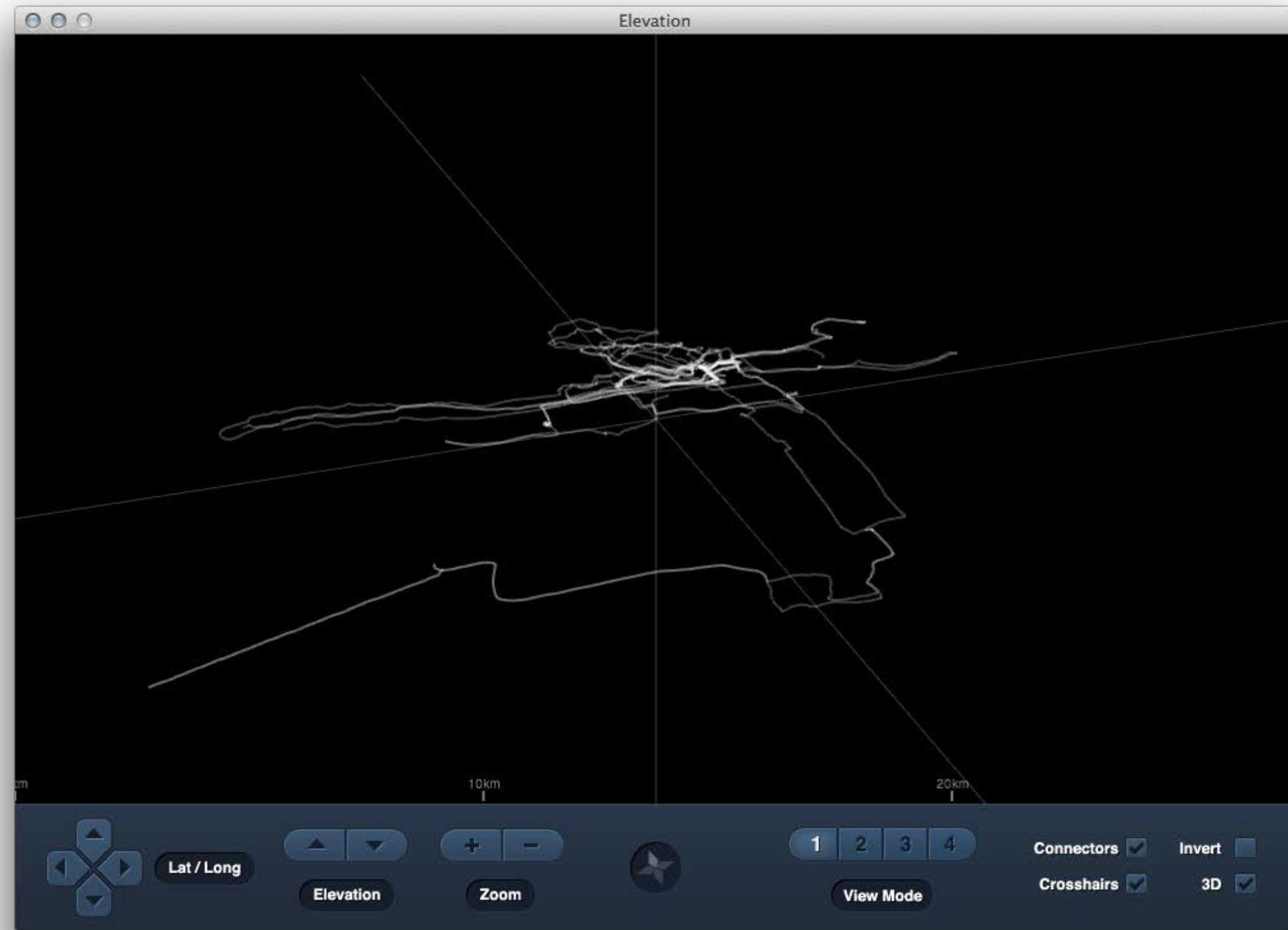
[MAC]: brew install gpsbabel

```
[MAC]: gpsbabel -i kml -f in.kml -o gpx -F out.gpx
```

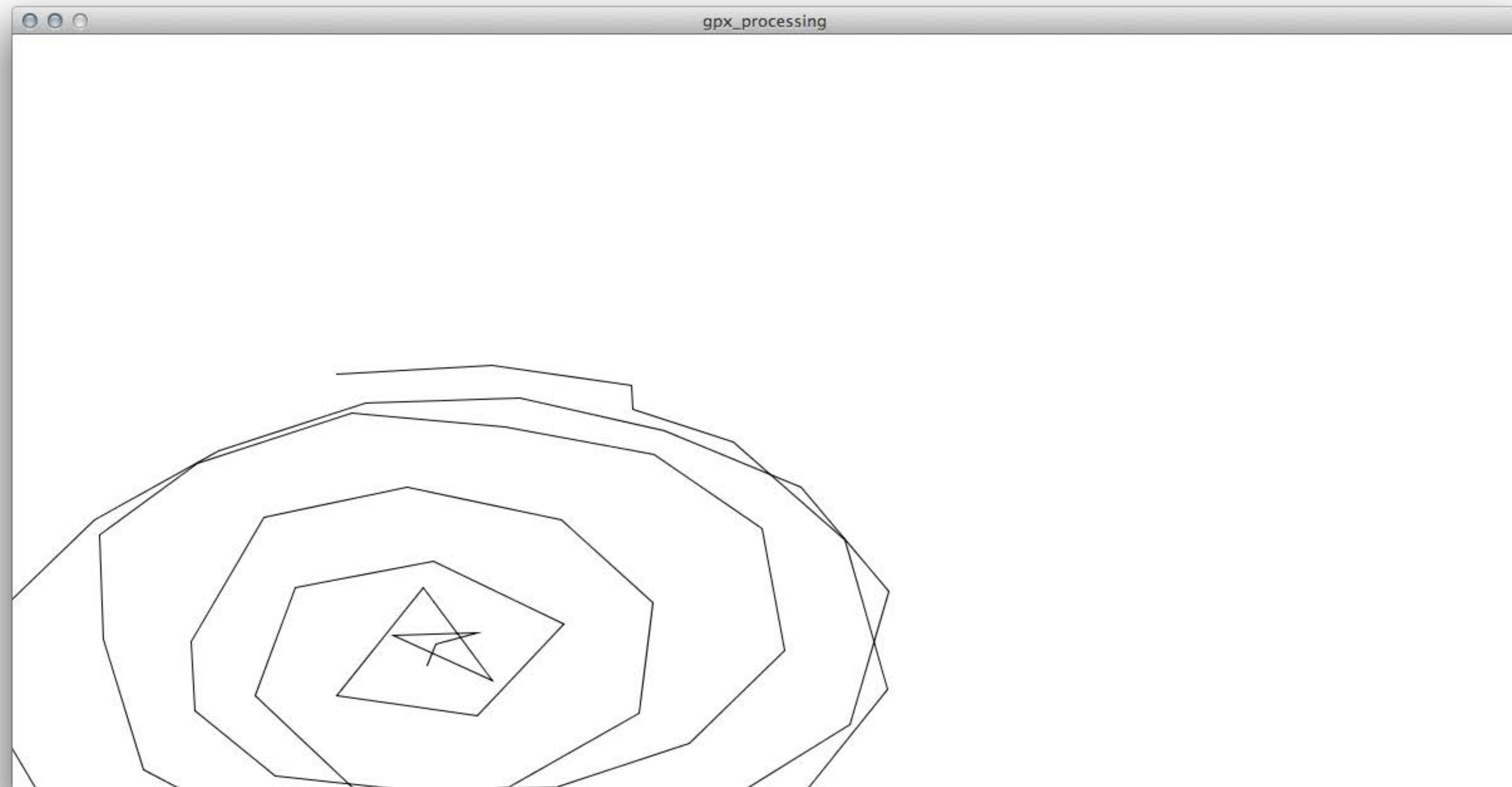


[gist.github.com/fabiantheblind/6949975](https://gist.github.com/fabiantheblind/6949975)

# Evaluate Data

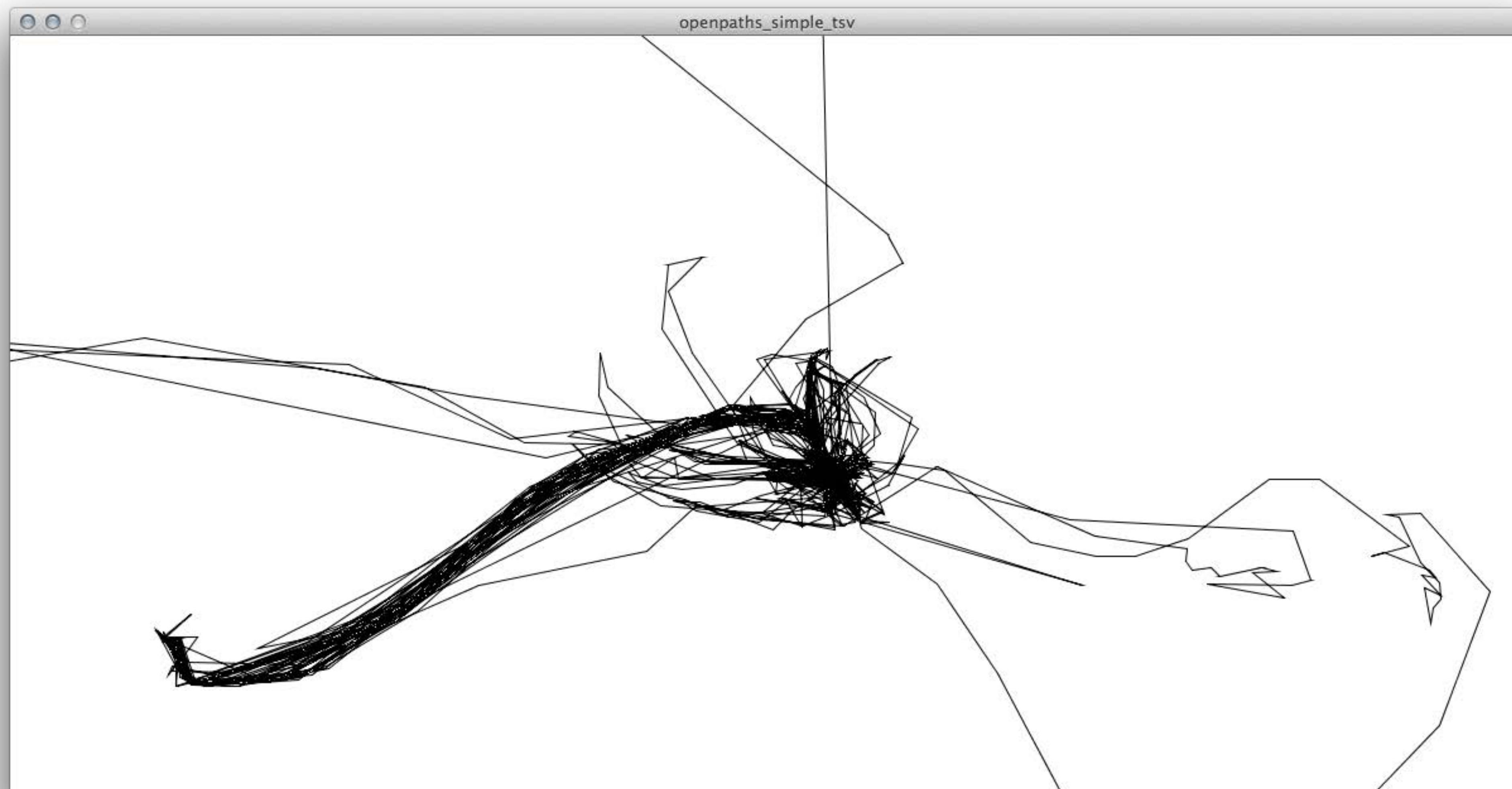


[exnihilo.mezzoblue.com/elevation/](http://exnihilo.mezzoblue.com/elevation/)

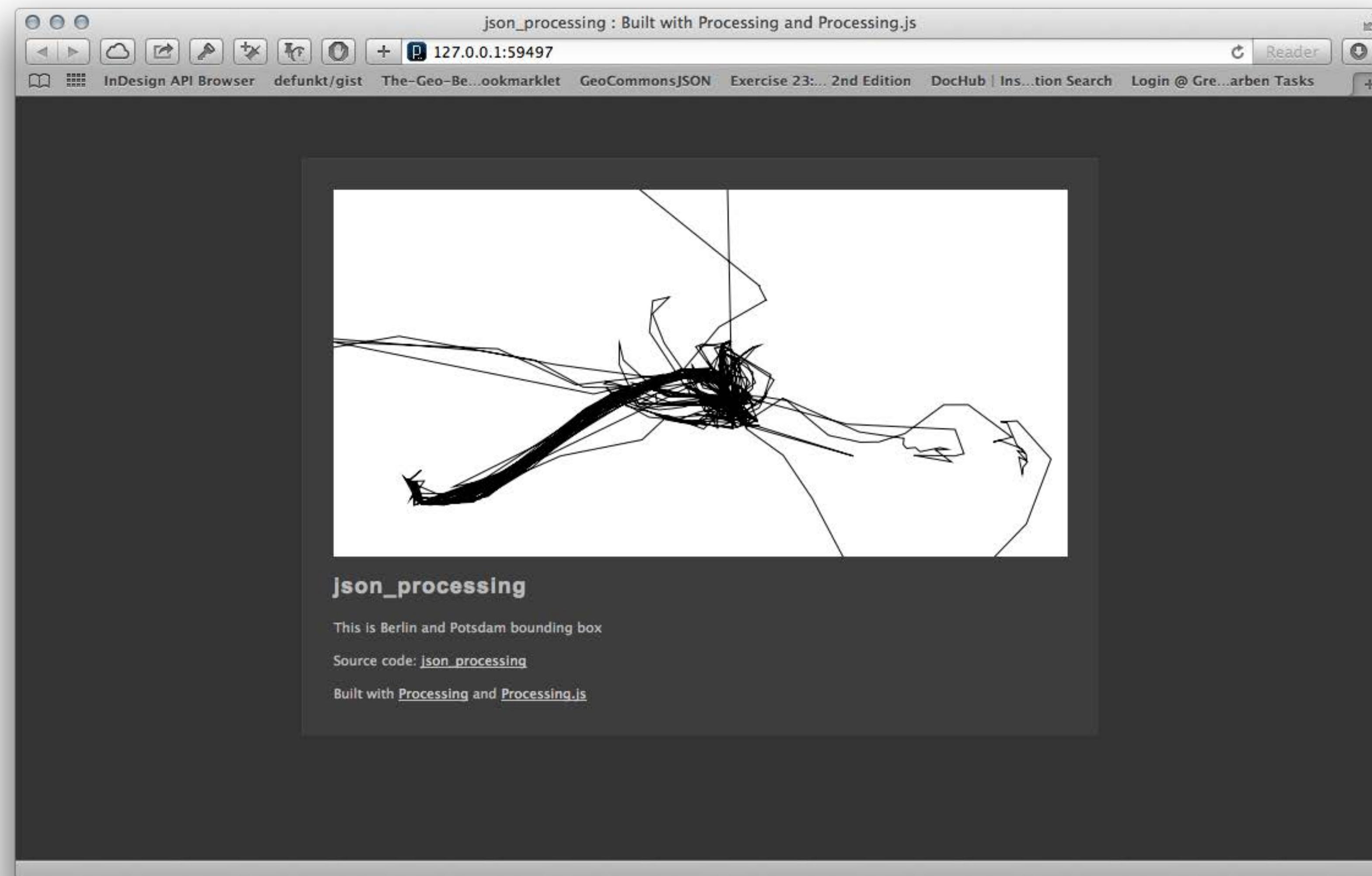


[github.com/fabiantheblind/gpx\\_processing](https://github.com/fabiantheblind/gpx_processing)

# Evaluate Data



[github.com/fabiantheblind/tsv\\_processing](https://github.com/fabiantheblind/tsv_processing)



[github.com/fabiantheblind/json\\_processing](https://github.com/fabiantheblind/json_processing)

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Search

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or Learn More

THE HUFFINGTON POST UNEP GRID ARENDAL THE WORLD BANK InterAction MRS IDB esri A Community Site for Open Data and Maps

Search for Maps and Data

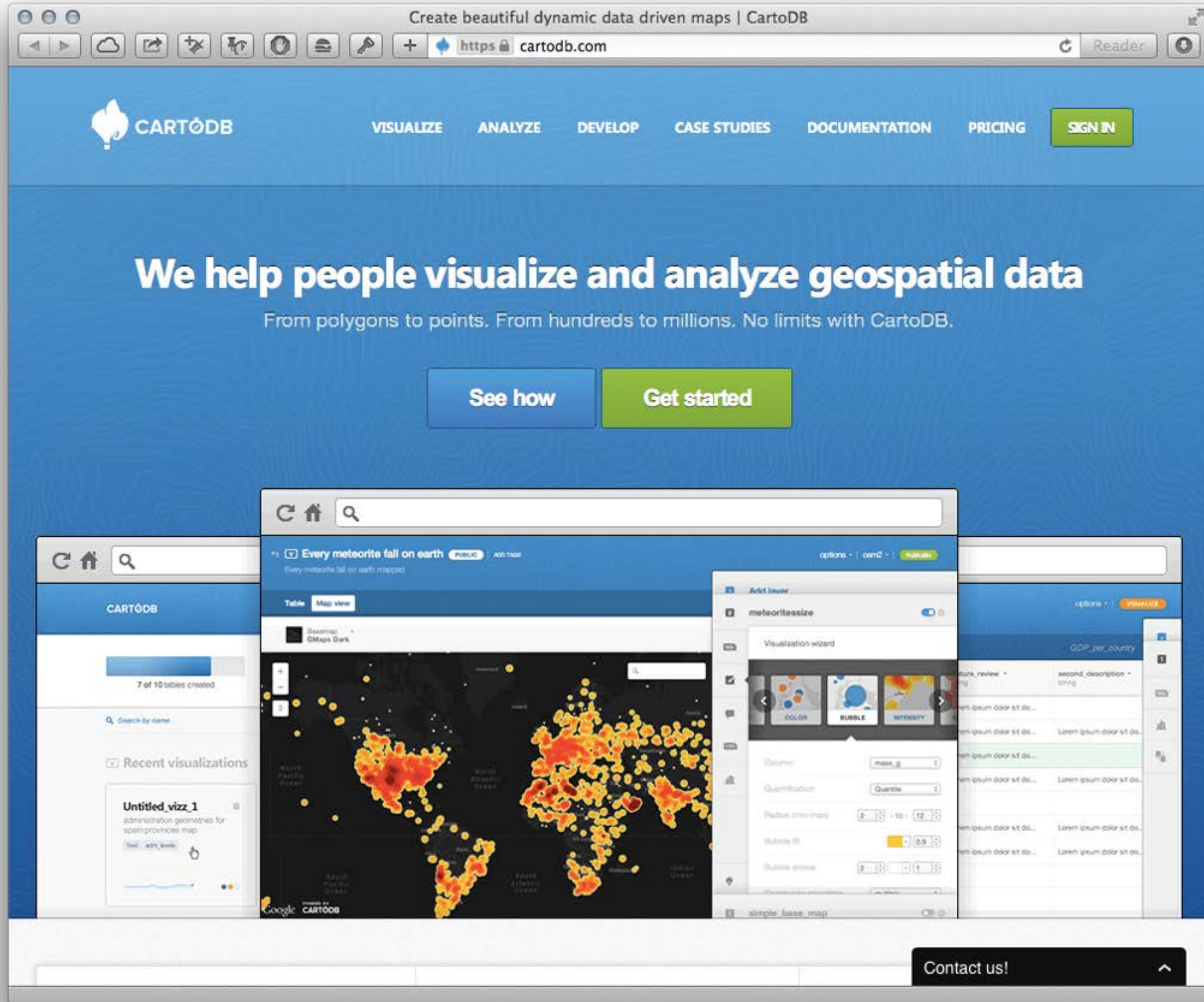
Search

Upload Data to organize, share and map

Make a Map to visualize and explore data

Featured Maps

geocommons.com



[cartodb.com](https://cartodb.com)

**mapschool.io**

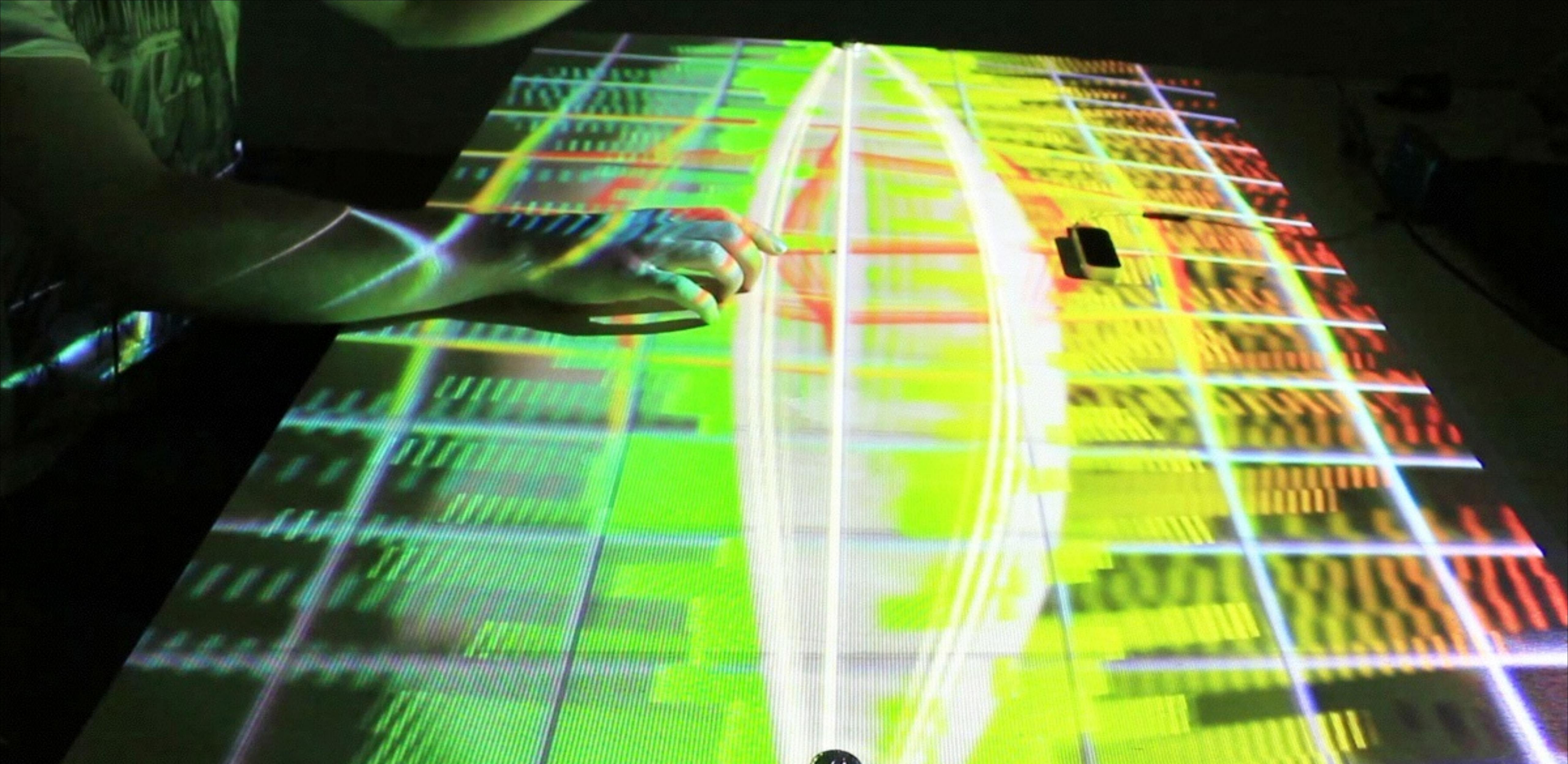
?

# Multitouch

# Mehrfingergestenerkennung



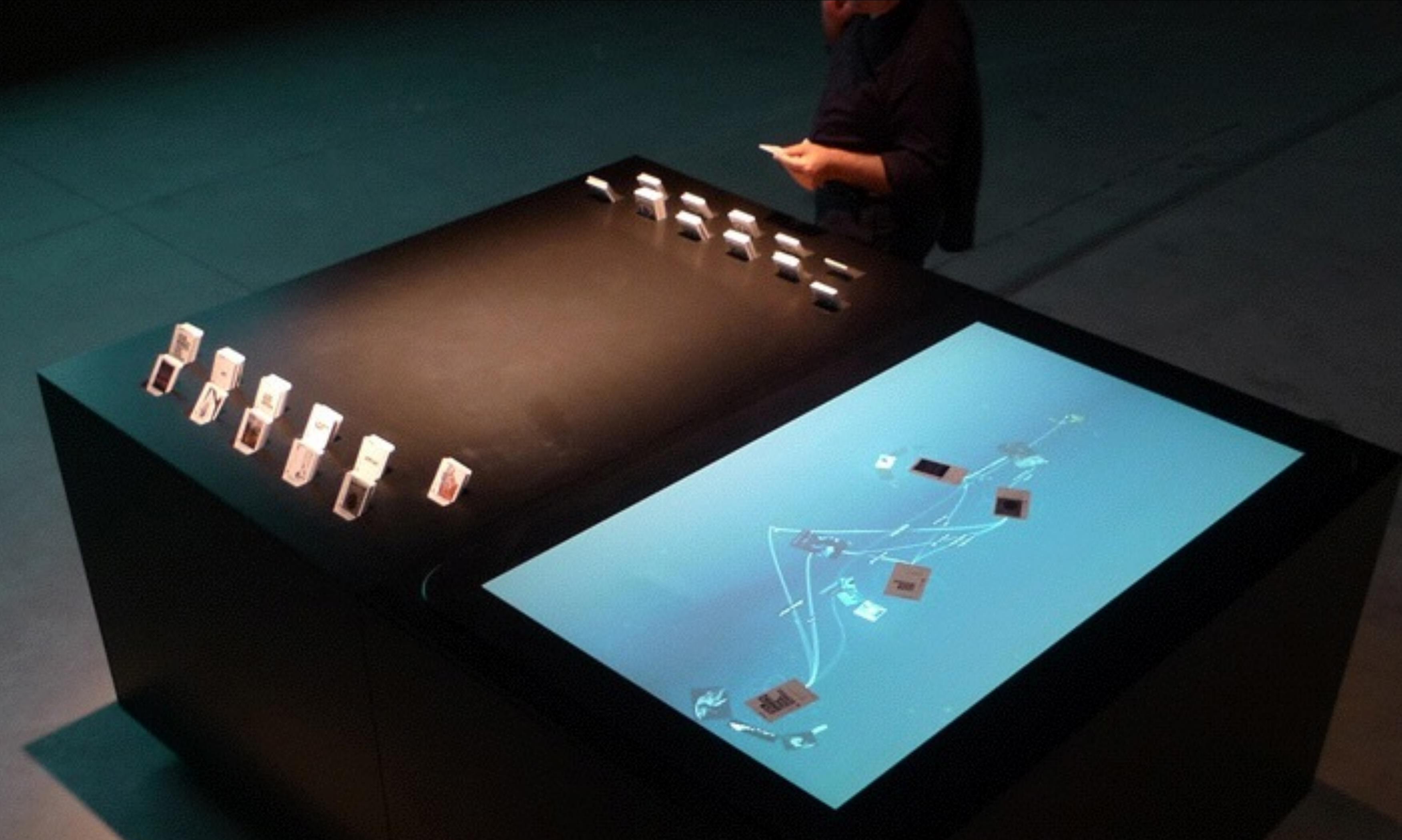
Reactable



Contact - [Felix Faire](#)

# Multitouch @ FHP

# **CityOfFlow.mp4**



Maeve 4 MACE



Angst



Venice Unfolding

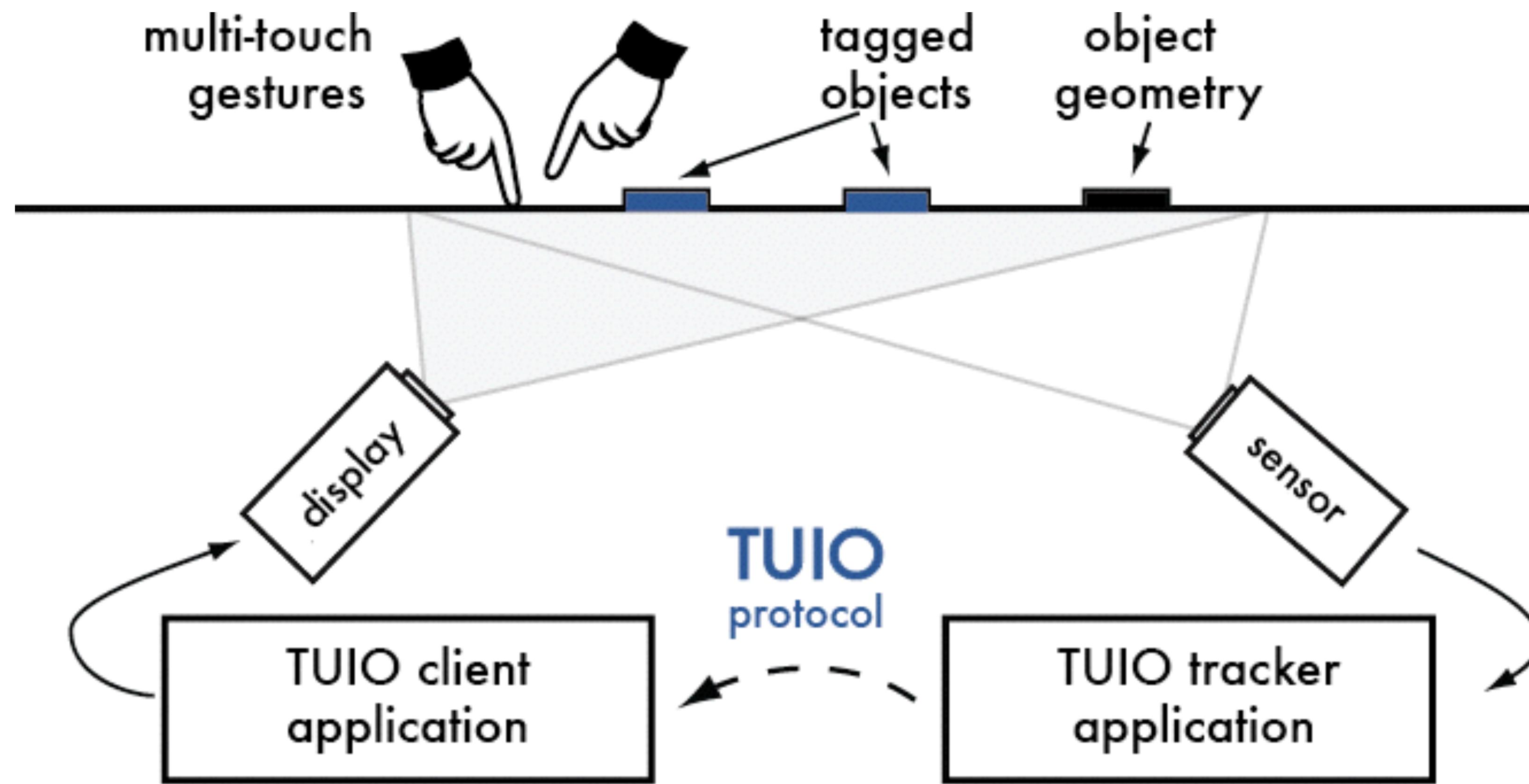


[unfoldingmaps.org](http://unfoldingmaps.org)

# Software

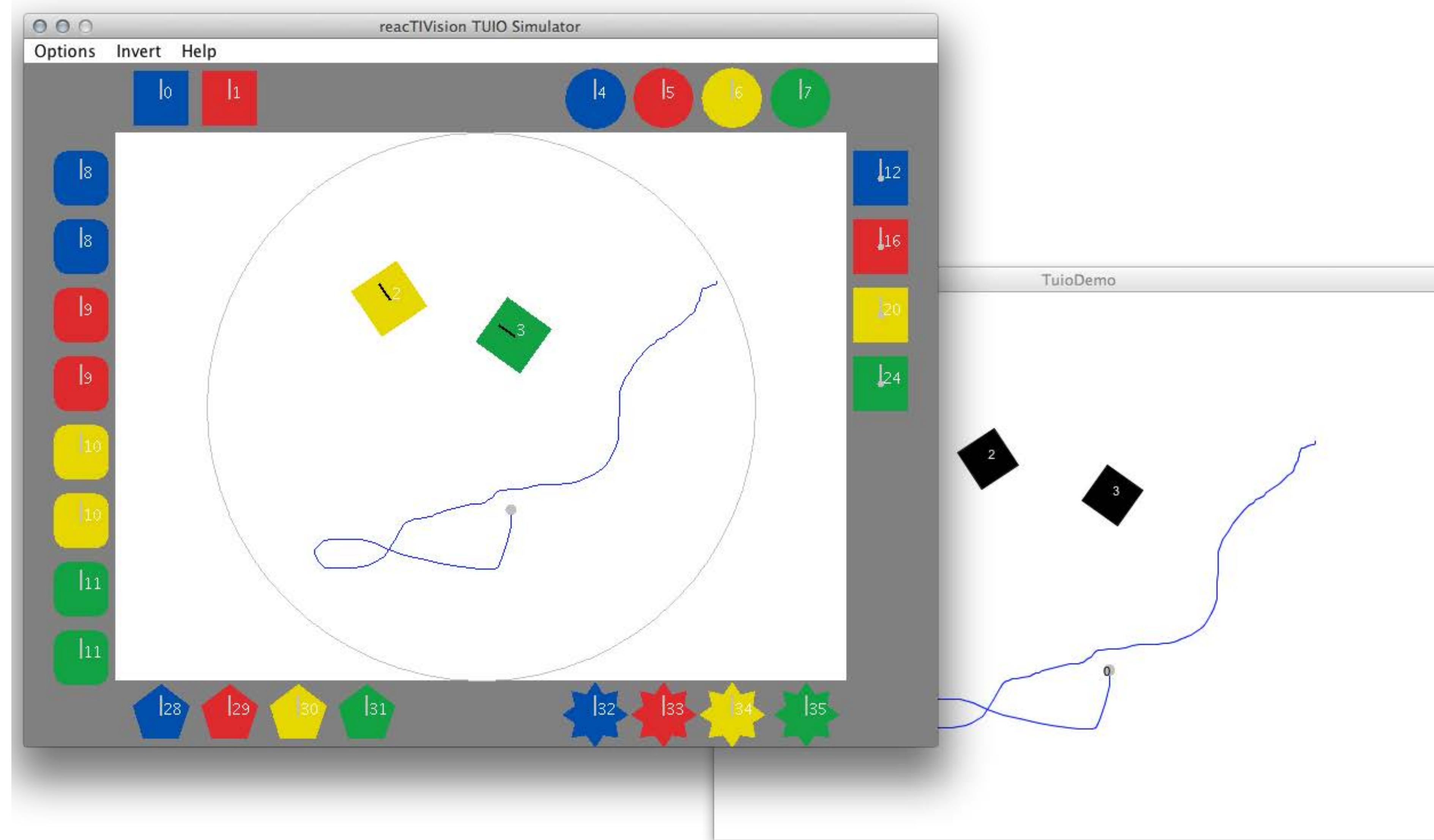
reactIVision

**TUIO**





[MAC]:tongseng



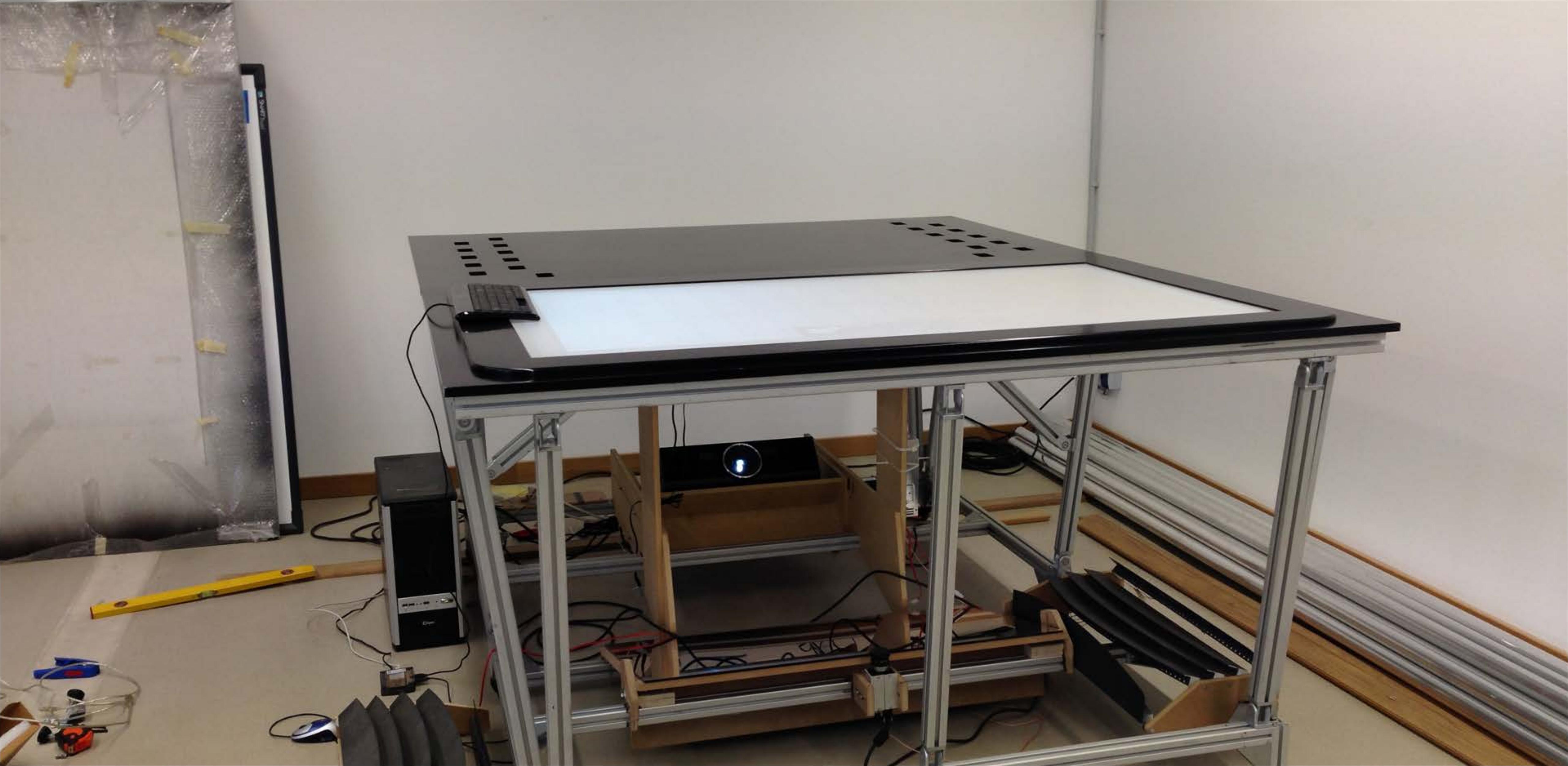
TUIO simulator

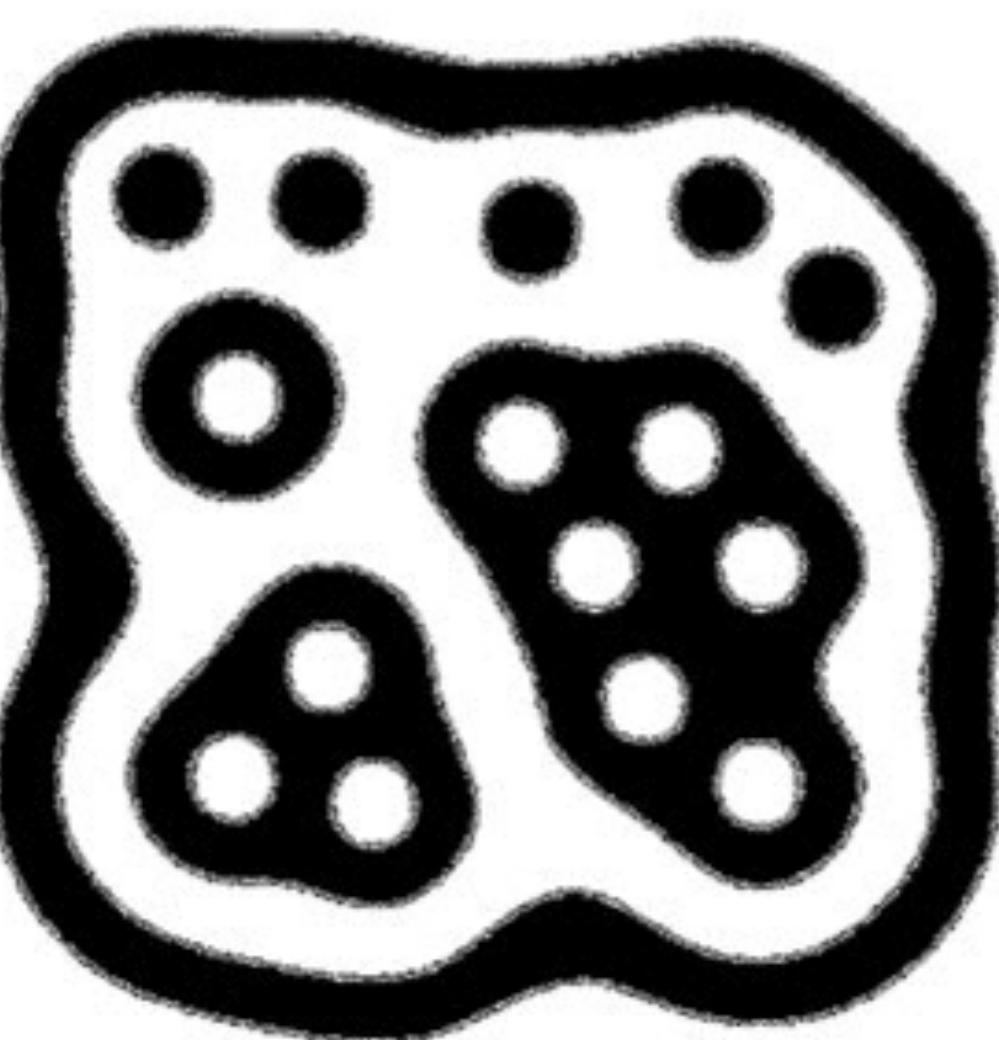
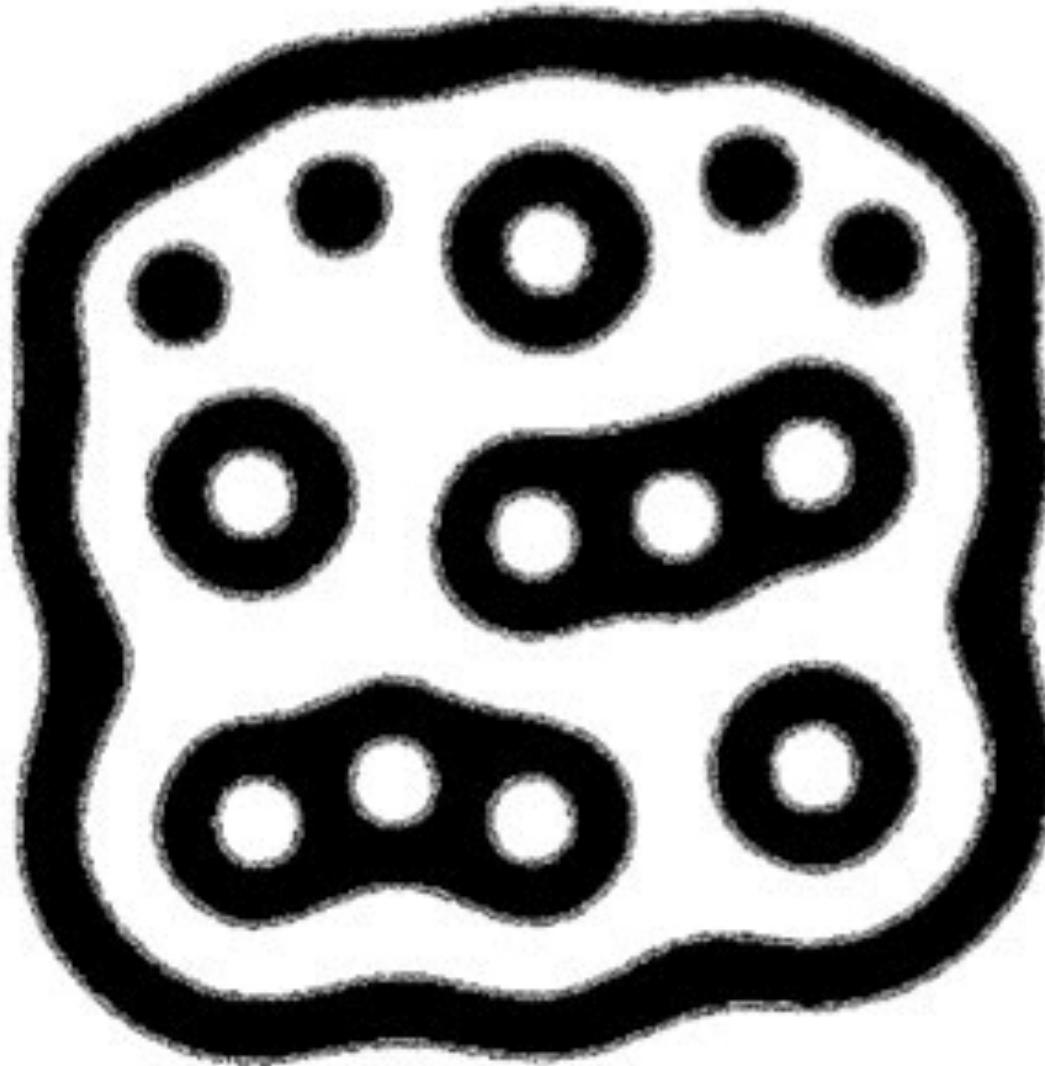
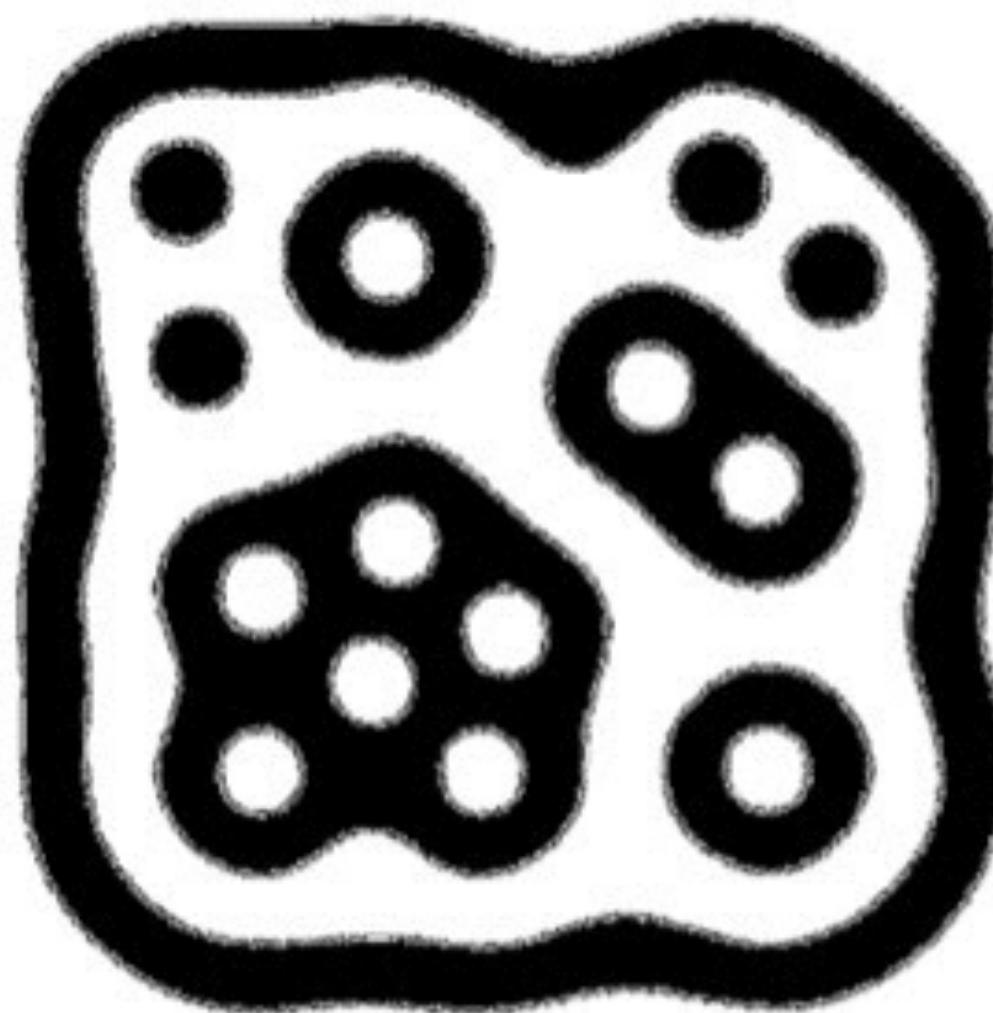


npTuioClient

/Users/[YOU]/Library/Internet Plug-Ins

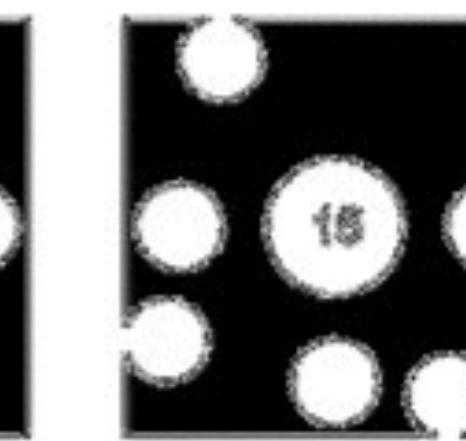
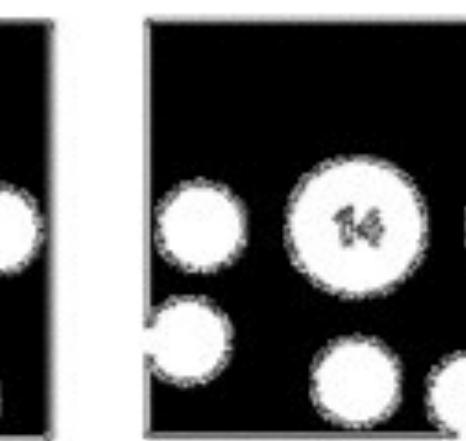
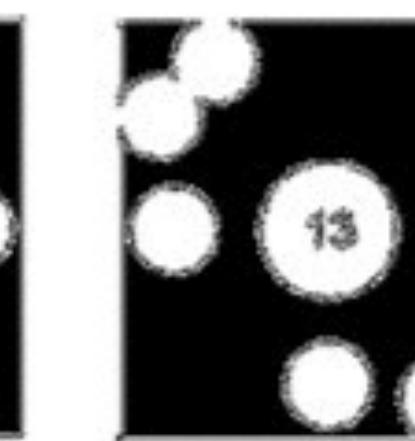
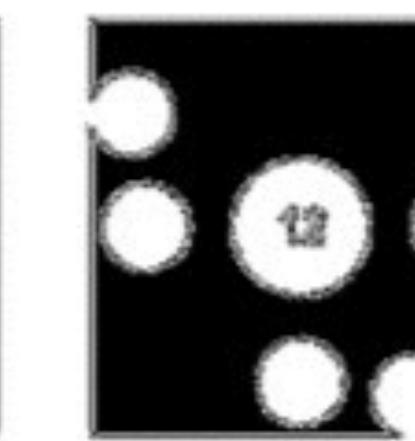
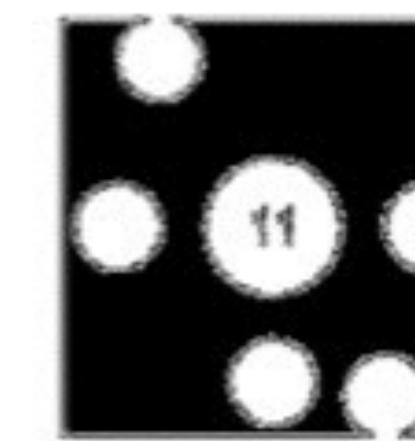
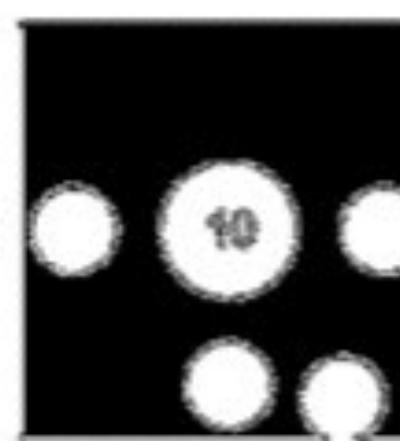
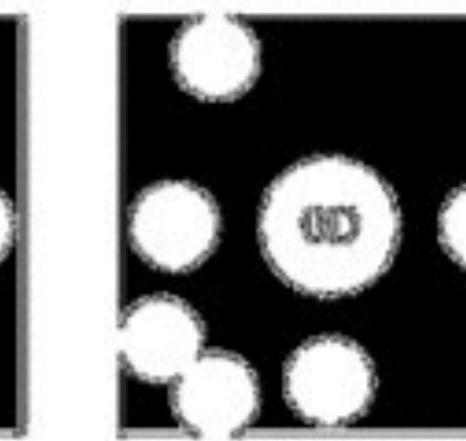
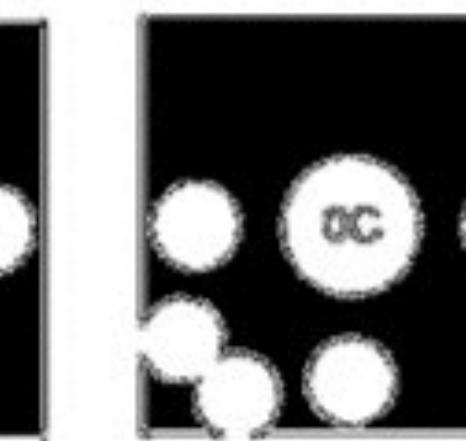
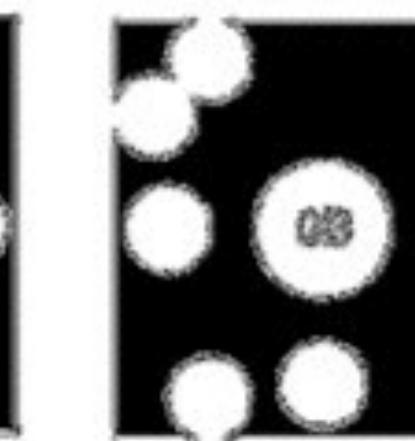
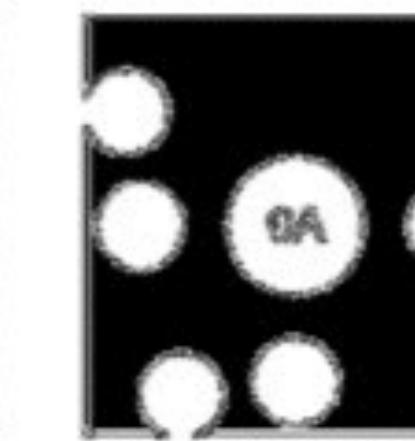
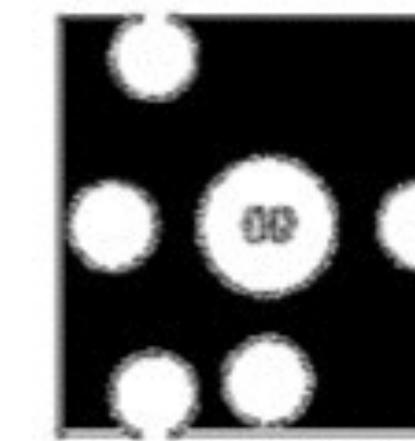
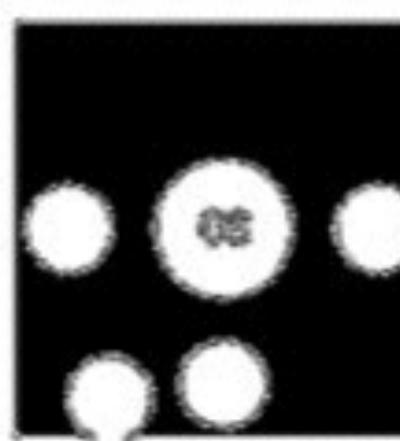
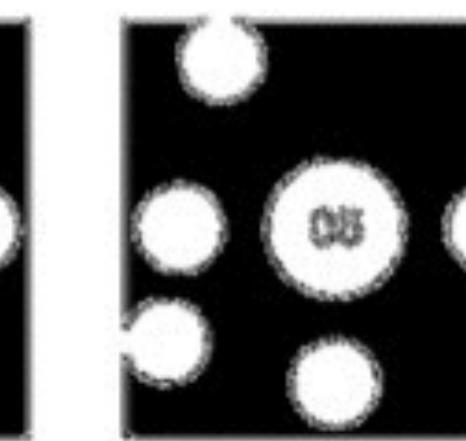
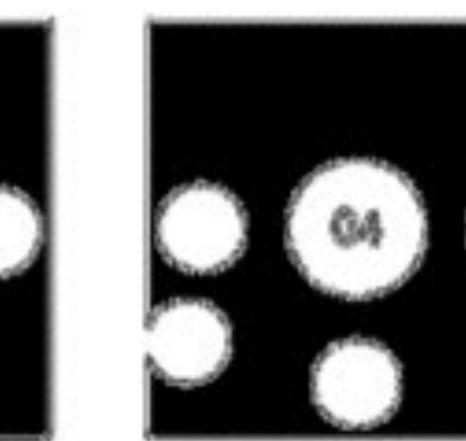
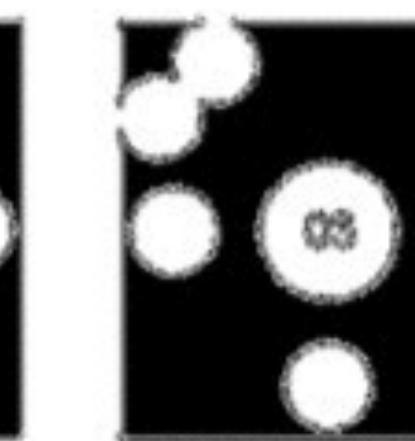
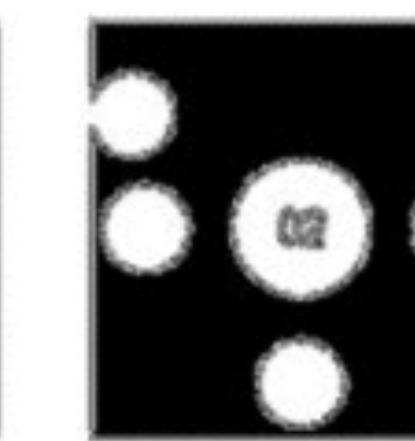
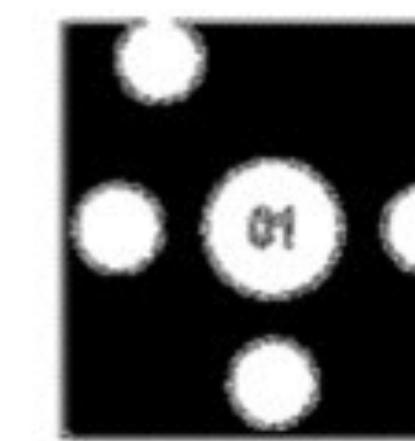
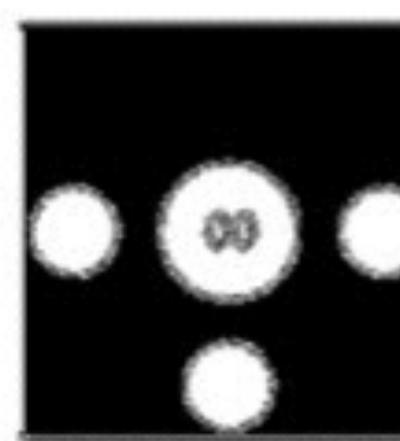
# Hardware





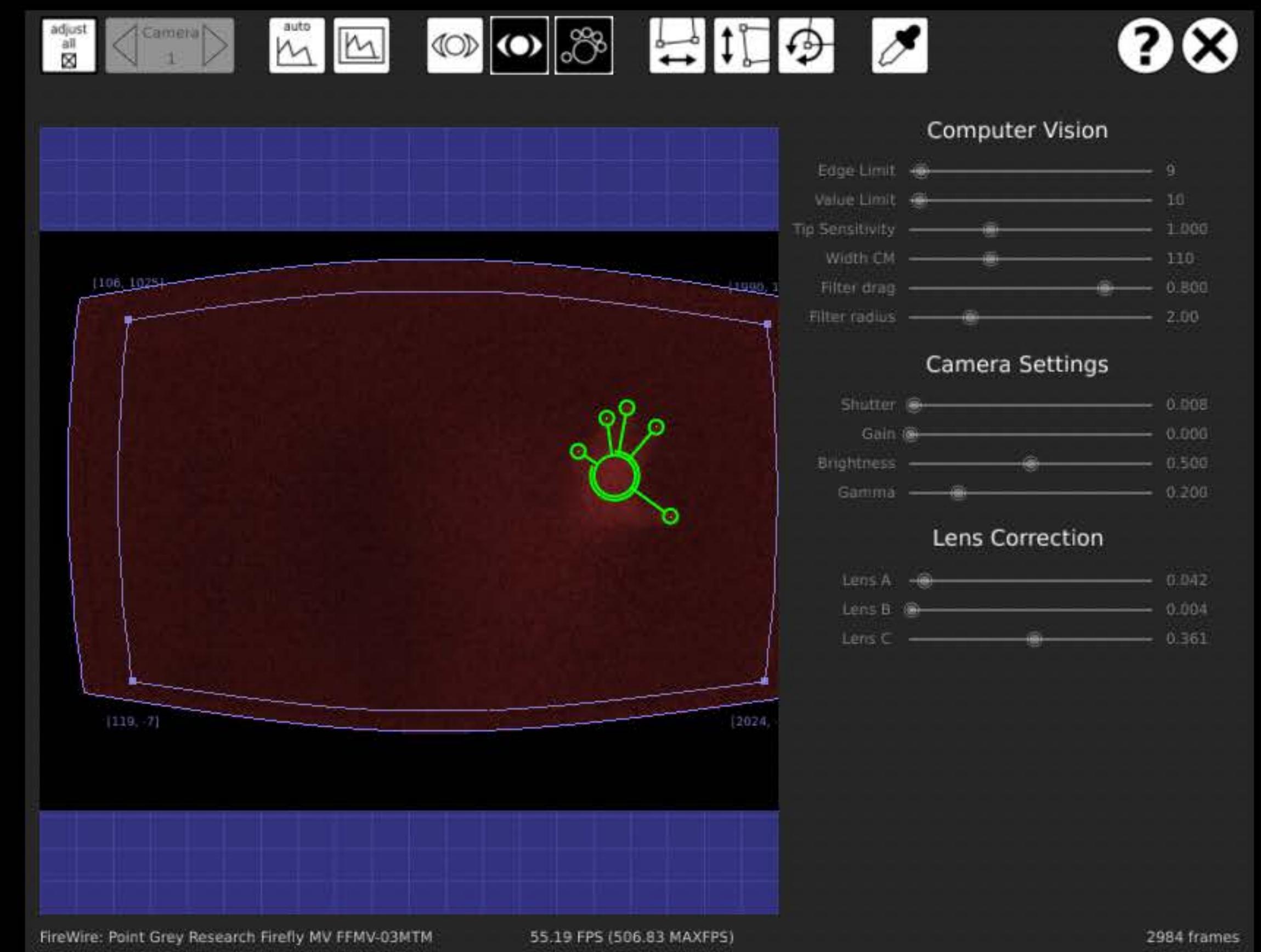


MS Surface 1.0





MultiTouch Cell





Sony Vaio

X



Pythonista

# Processing

Android

# hands on

# Processing Pt. 2

?

# Projekt Ideen?