Open Data on the Web Workshop @ W3C, 23 Apr 2013

Speculative Maps & Open Data – Benedikt Groß

@bndktgrs

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Hi, I am Benedikt

computer science | mathematics, statistics | graphic design | HCI, interaction design

acquire → parse → filter → mine → represent → refine → interact

DATA | UNDERSTANDING

(Ben Fry)

Data Viz Pipeline

Metrography

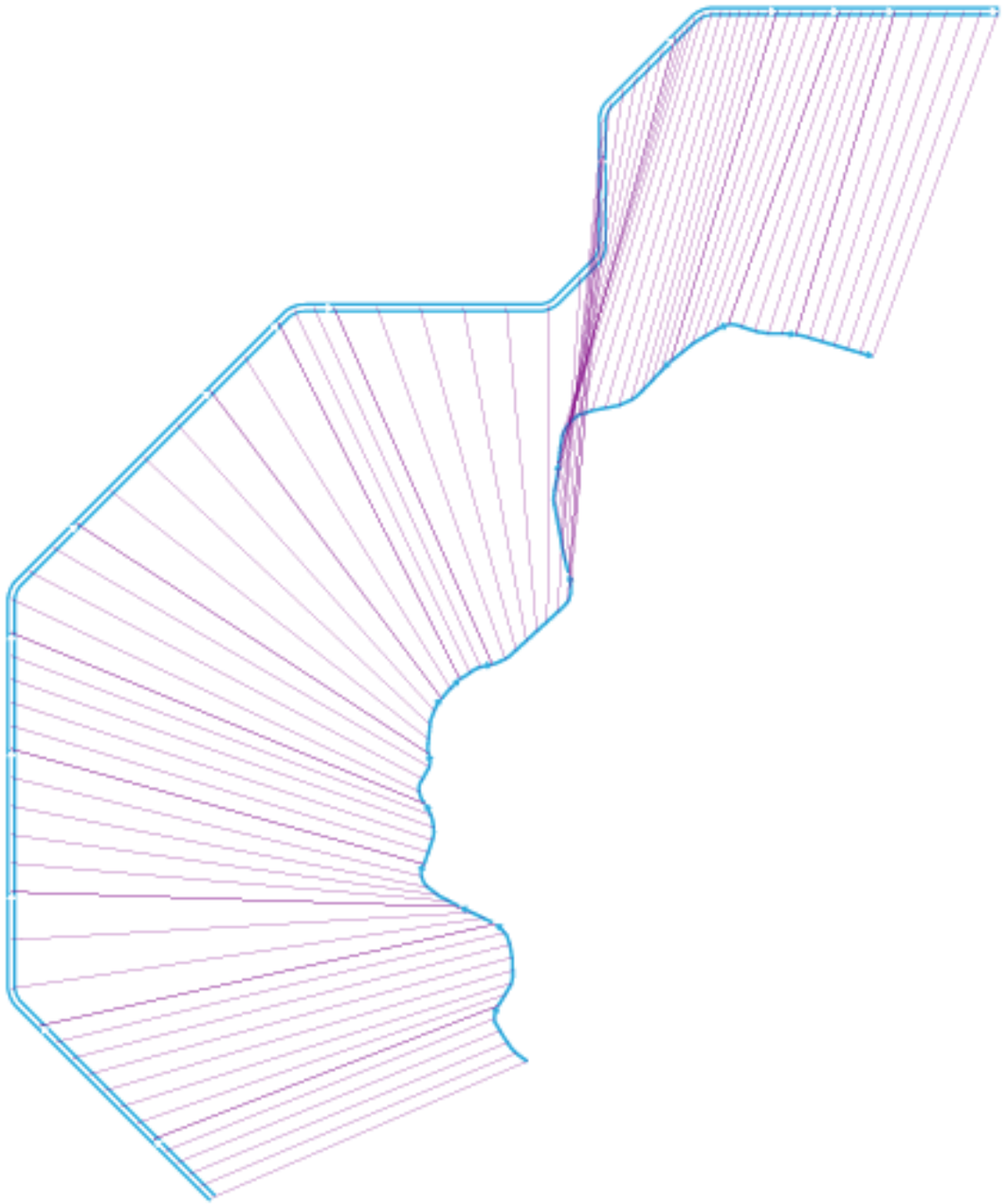
Tube Map = Mental Map?

Illustrator Datei Bearbeiten Objekt Schrift Auswahl Effekt Ansicht Fenster Help 13:30

CS Live

Keine Auswahl | Kontur: 0,2 pt | Gleichm. | Angeschrägt ... | Stil: | Deckk... | Dokument einrichten | Voreinstellungen

metrograpy_19.ai* bei 56



Ebenen | Zeichenflächen

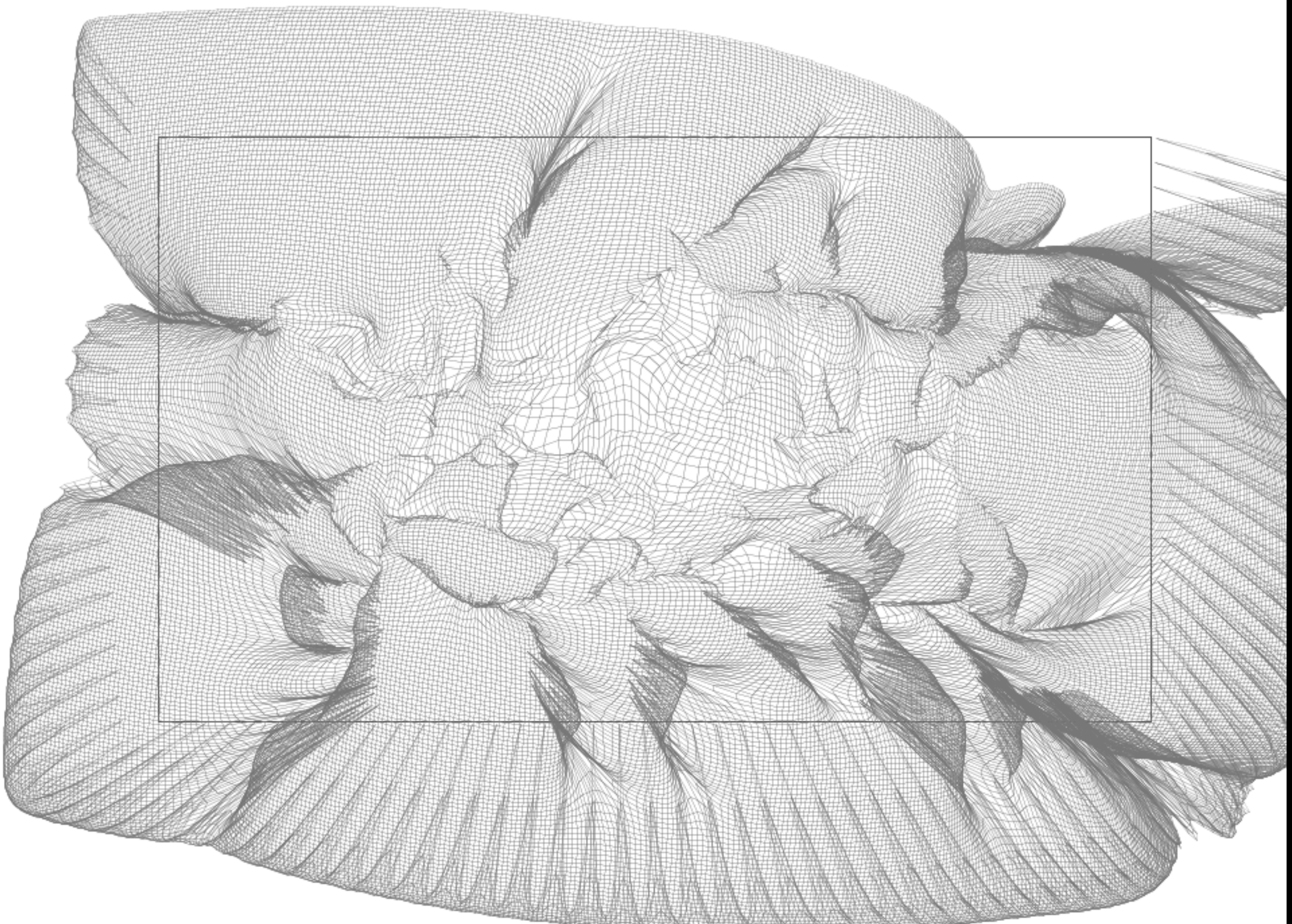
- crop
- transformations
  - 60;edges
  - 3;river2
  - tmp debug
  - VictoriaLine
  - Waterloo & City
  - Jubilee
  - Hammersmith...
  - NorthernLine
  - Metropolitan
  - Piccadilly
  - District Line
  - Circle Line
  - Central Line
  - Bakerloo
  - London Overg...
  - DLR
- stations dest
- stations orig
- tfl map (slightly ...
  - tube station n...
  - other
  - tube lines
  - River
  - Zones
- osm underlay
  - better def
  - everything

Scriptographer

- Examples
- Tutorials
- My Scripts
- Metrography
  - _memory fix
  - _versions
  - Create Tube Network.js
  - Delaunay Tube Network.js
  - Dest Orig Curves Debug.js
  - Echo Name Of Selection.js
  - Echo Name On Space Pressed.js
  - Export Mapping Declaration.js
  - lib
  - Rename Selection.js
  - Reverse Points On Path.js
  - Search And Select.js

Scriptographer Console

56,46% | 1 | Direktauswahl größer/kleiner

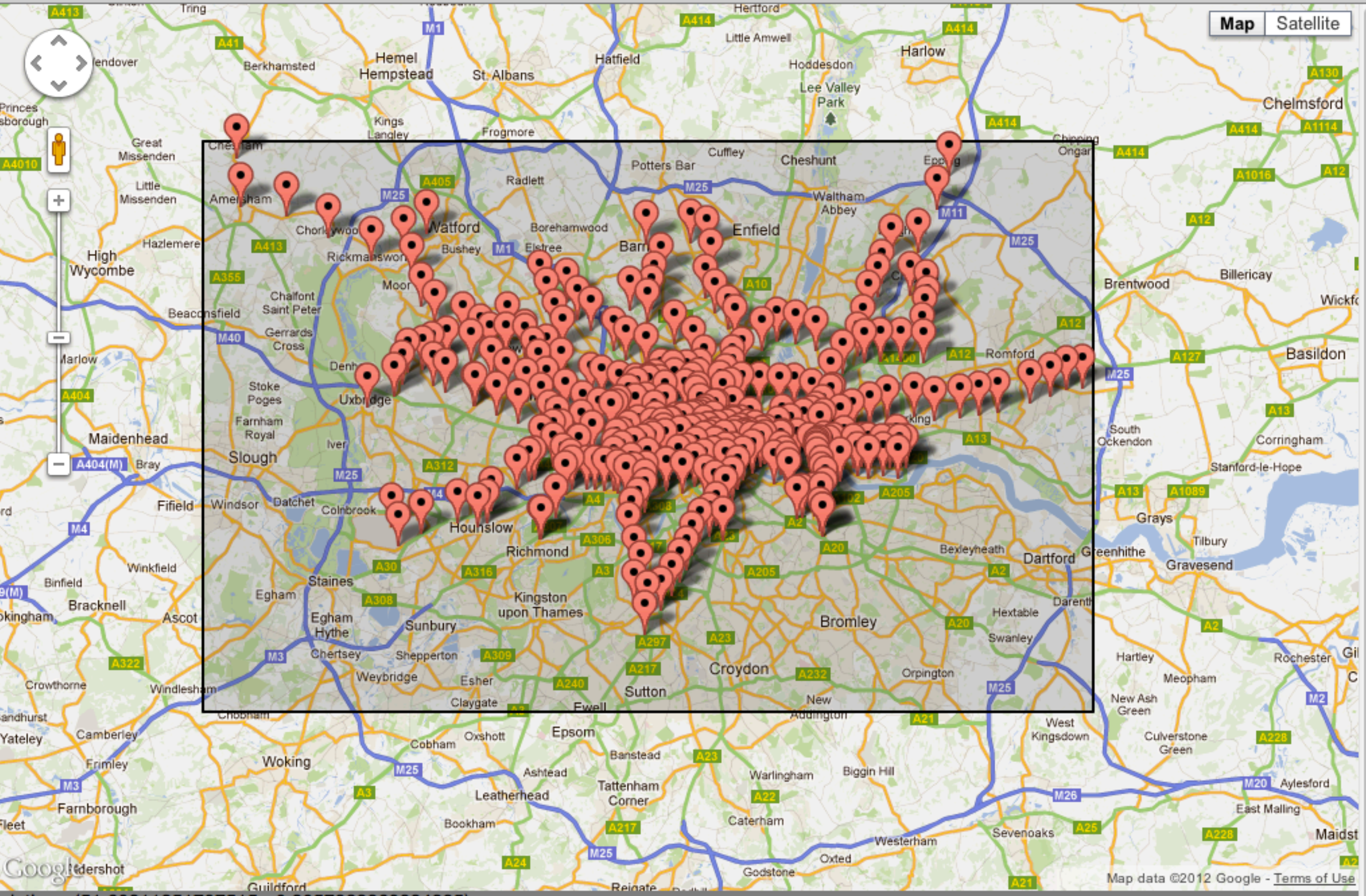


(99% complete) Flickr: Uploa

index.html

file://localhost/Users/bene/Dropbox/Metrography/Bounding%20Box/02/viz/index.html

Read Later | lessless! | dict.leo.org | Google Übersetzer | Stats | Other Bookmarks



latLng: (51.60811351797515, -0.3057323869884385)

```
bzcat england.osm.bz2 I /Applications/
osmosis-0.39/bin/osmosis --read-xml
enableDateParsing=no file=- --bounding-box
top=51.7163880454056 left=-0.644943917397397
bottom=51.3538820555458
right=0.262818743029913 --write-xml file=- I bzip2
> extracted_metrographie2.osm.bz2
```

TransformOSM_Droplet2

TransformOSM_Droplet2 | Processing 2.0a4

Run

STANDARD

TransformOSM_Droplet2 | OsmParser | transform

```
import sojamo.drop.*;
import org.xml.sax.*;
import org.xml.sax.helpers.DefaultHandler;
import javax.xml.parsers.SAXParserFactory;
import javax.xml.parsers.ParserConfigurationException;
import javax.xml.parsers.SAXParser;
import org.apache.commons.lang.StringEscapeUtils;

// bounds underlay
float canvasWidth = -1, canvasHeight = -1;
// bounds osm
float maxlon = -1, minlon = -1; // x
float maxlat = -1, minlat = -1; // y

SDrop drop;
boolean loaded = false;
ArrayList<PVector> anchorsOrig;
ArrayList<PVector> anchorsDest;
ArrayList<PMatrix2D> anchorMatrices;
```

```
sojamo.drop 0.1.4 infos, comments, questions at
http://www.sojamo.de/libraries/drop
```

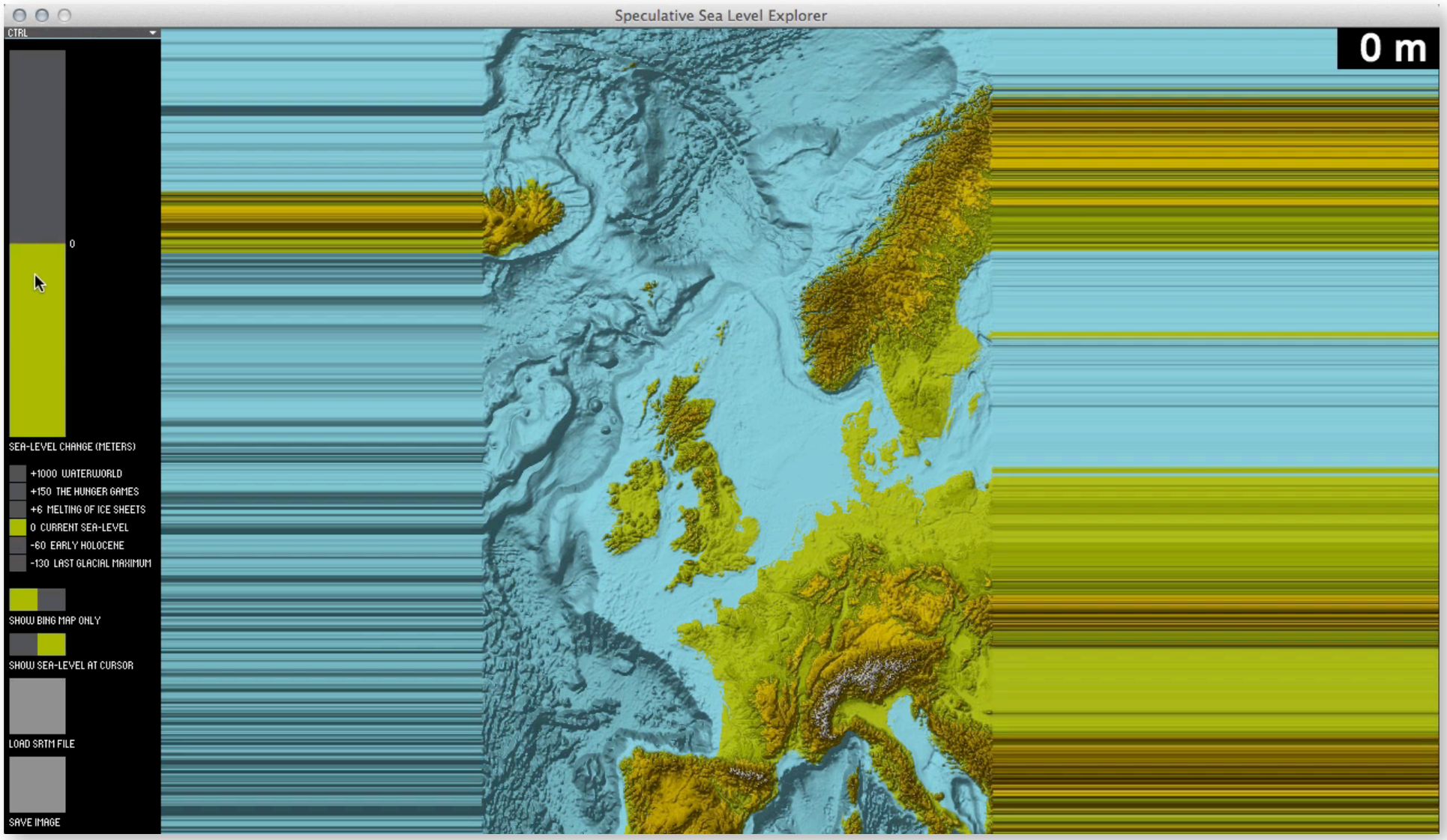
1

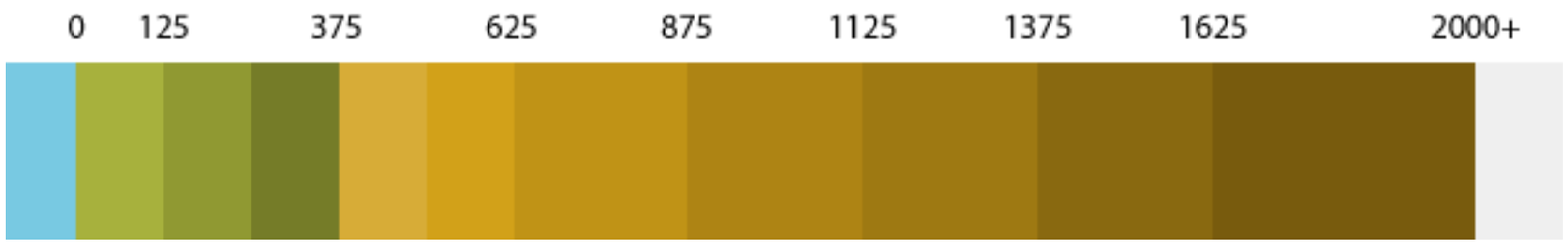
~ 50 min later ...

Speculative Sea Level Explorer

elevation data set “SRTM30 Plus”
by NASA and the Scripps Institution Of Oceanography

Adjust sea-level






London 0 m


Paris 0 m

sneak preview:
m3ta.js

m3ta.js

m3ta renderer

Simpang Rengam
Kota Tinggi
Kulai
Senai
Ulu Tiram
Pekan Nanas
Pontian Kecil
Johor Baharu
Singapore
Strait of Si

s/server_stream

m3ta

m3ta

New Open Save

SocketIOExample
103.59622879559174 (11)
http://{s}.tile.stamen.com/toner/{z}/{x}/{y}.png
0.9431501910556108 (11)
SlippyMap
Change
MercatorCoords
Heatmap
189
Layers
Renderer

the example shows mainly two things:
1) how to create a websocket/streaming connection to a server
2) how use external js libs in a node definition. in this example for instance socket.io.js.
if you put the file in the folder "libs" of the patch folder ... then it is automatically added