



OpenStreetMap

#27-jmckl

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Why OSM?

- Geodata isn't
 - Free
 - Open
 - Current
- Wiki is obvious next step
- It's just *fun*

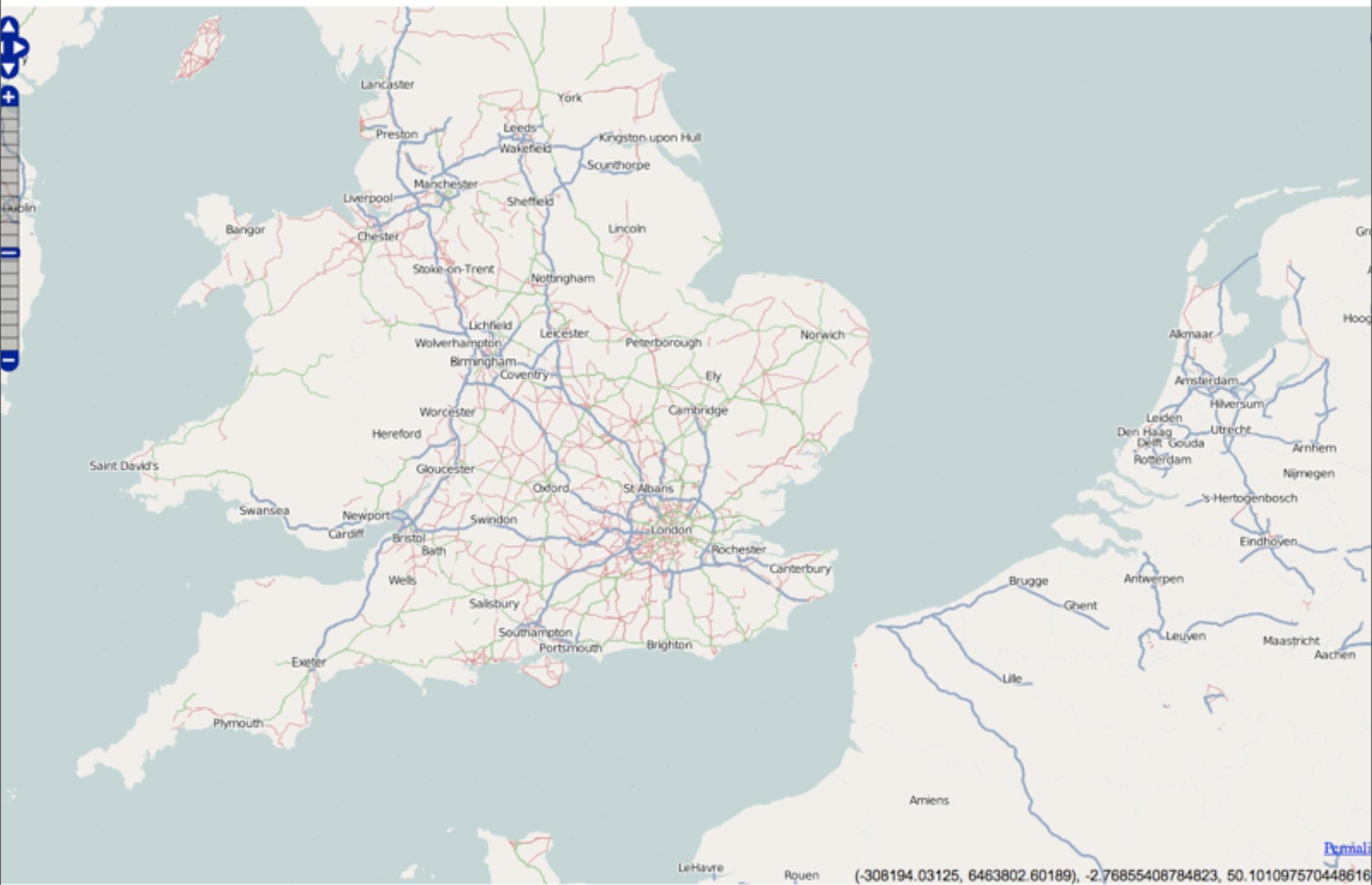


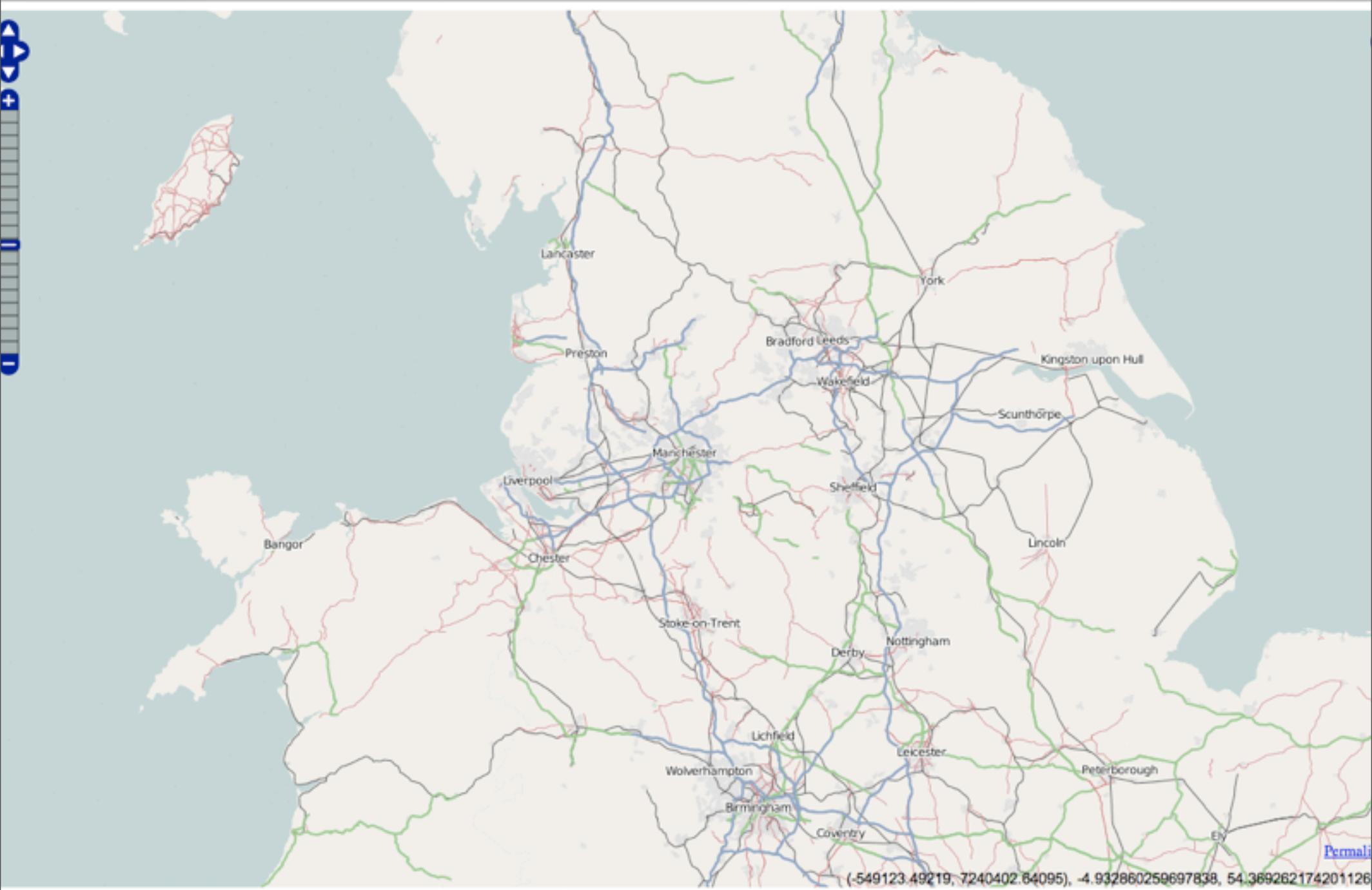
We make beautiful maps

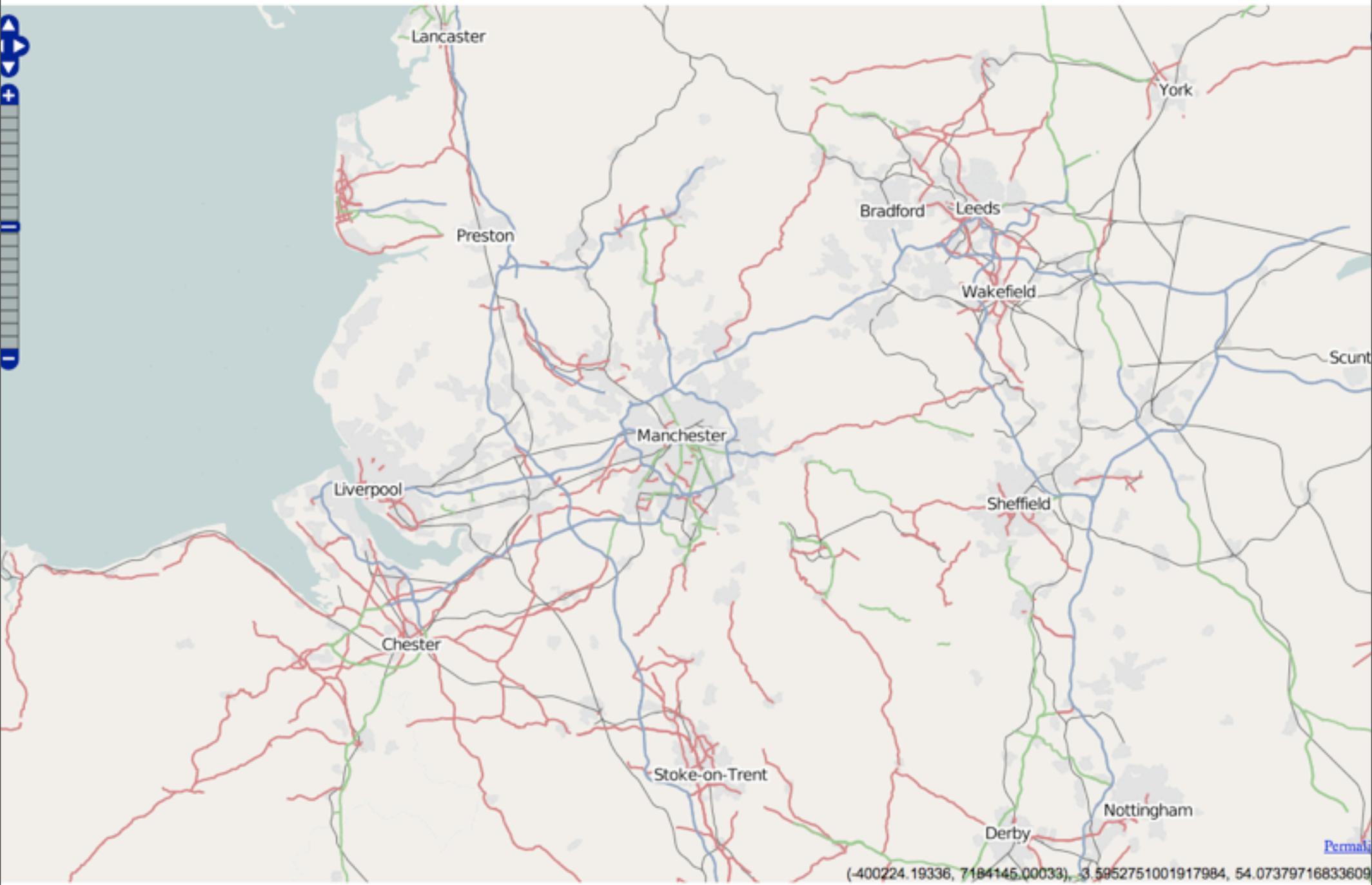


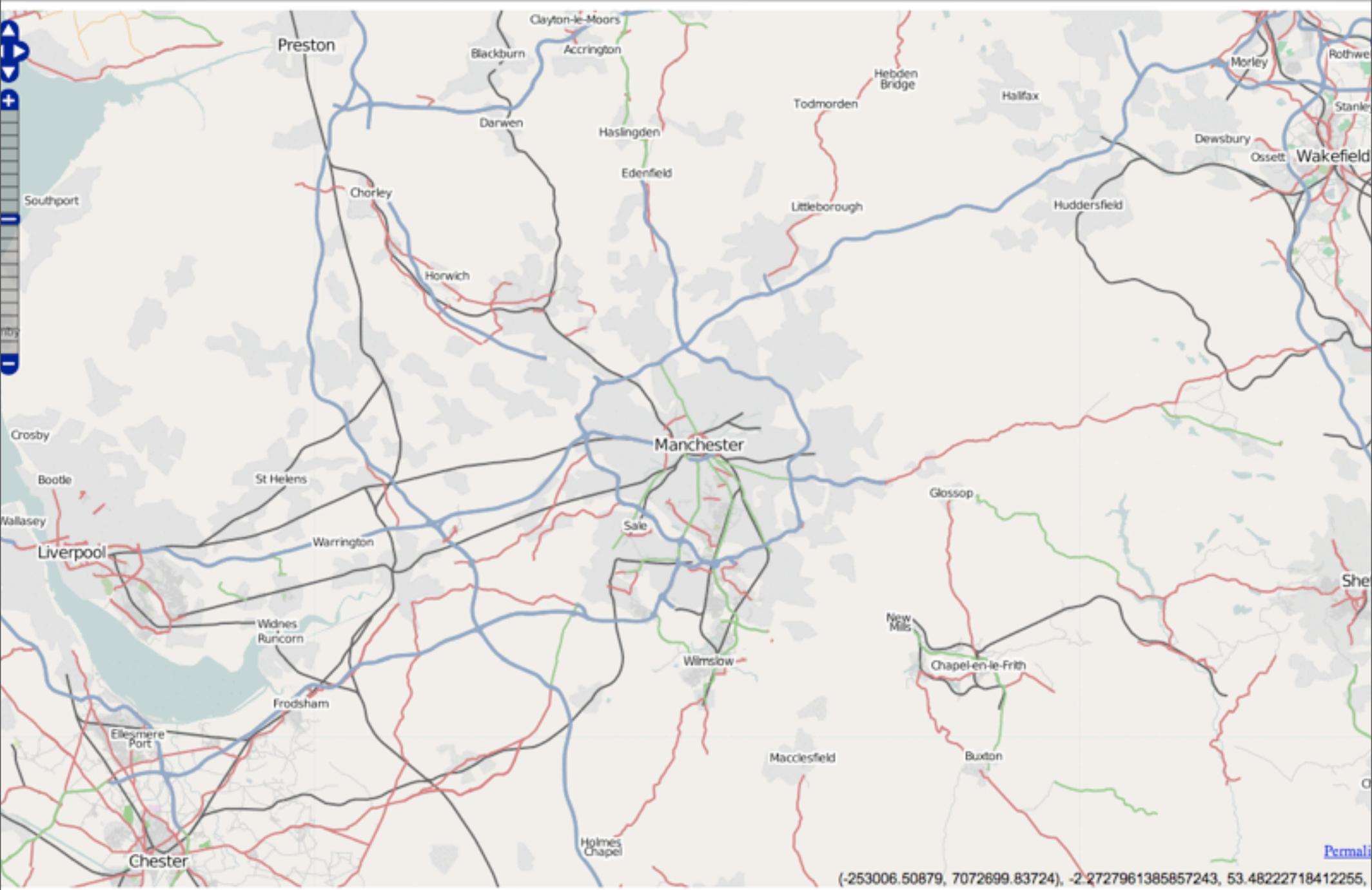
...which we give away

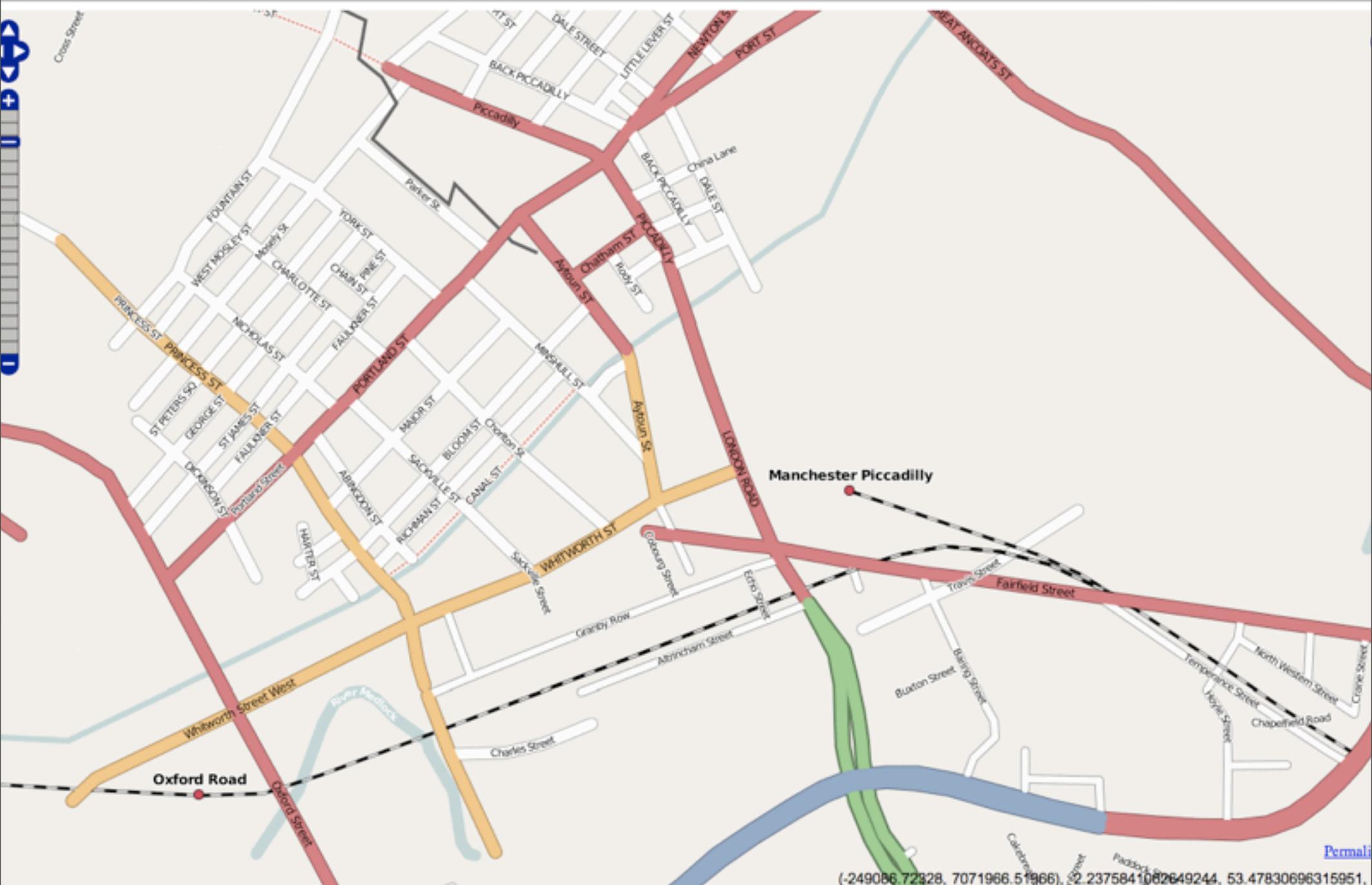


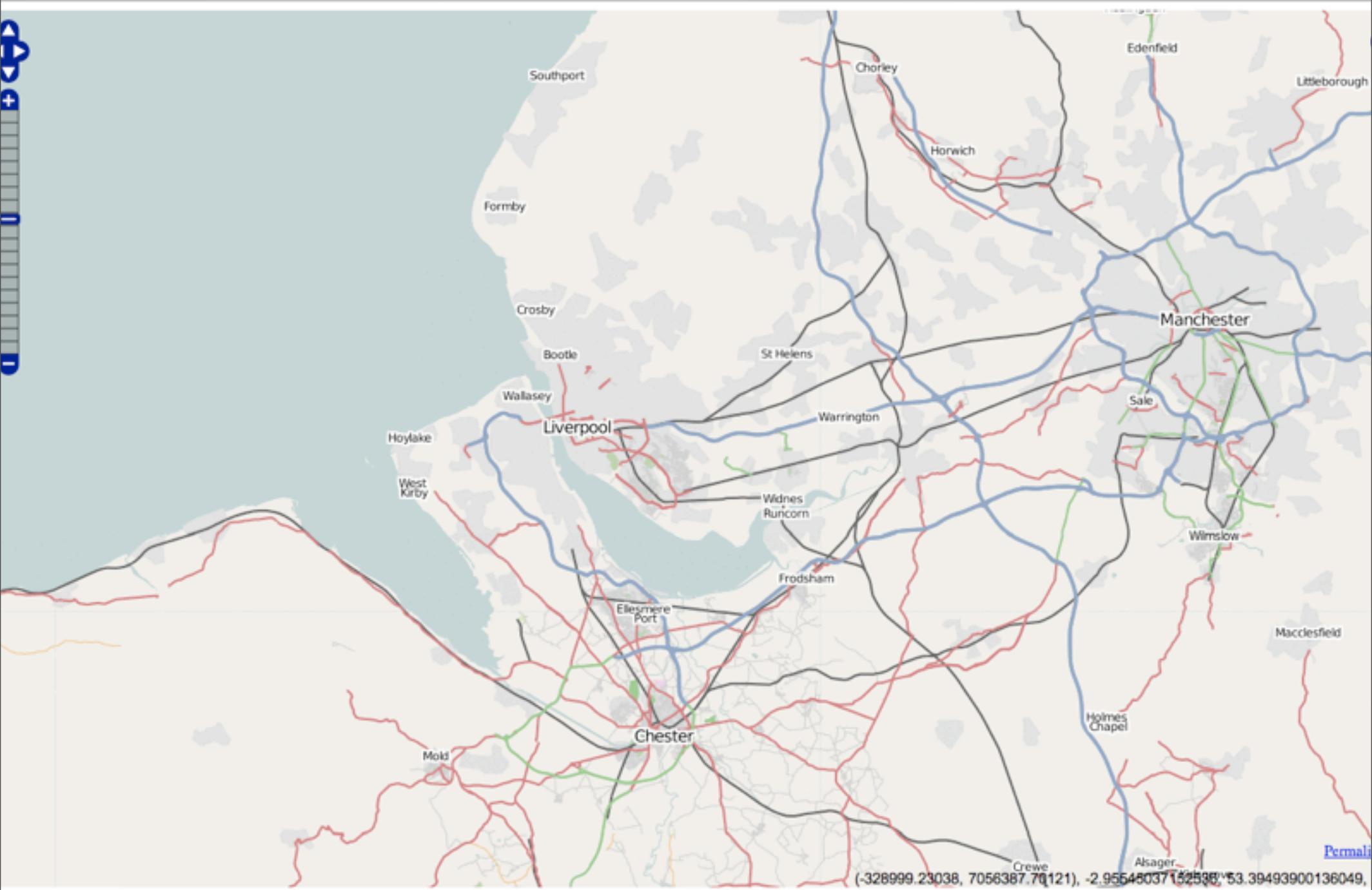








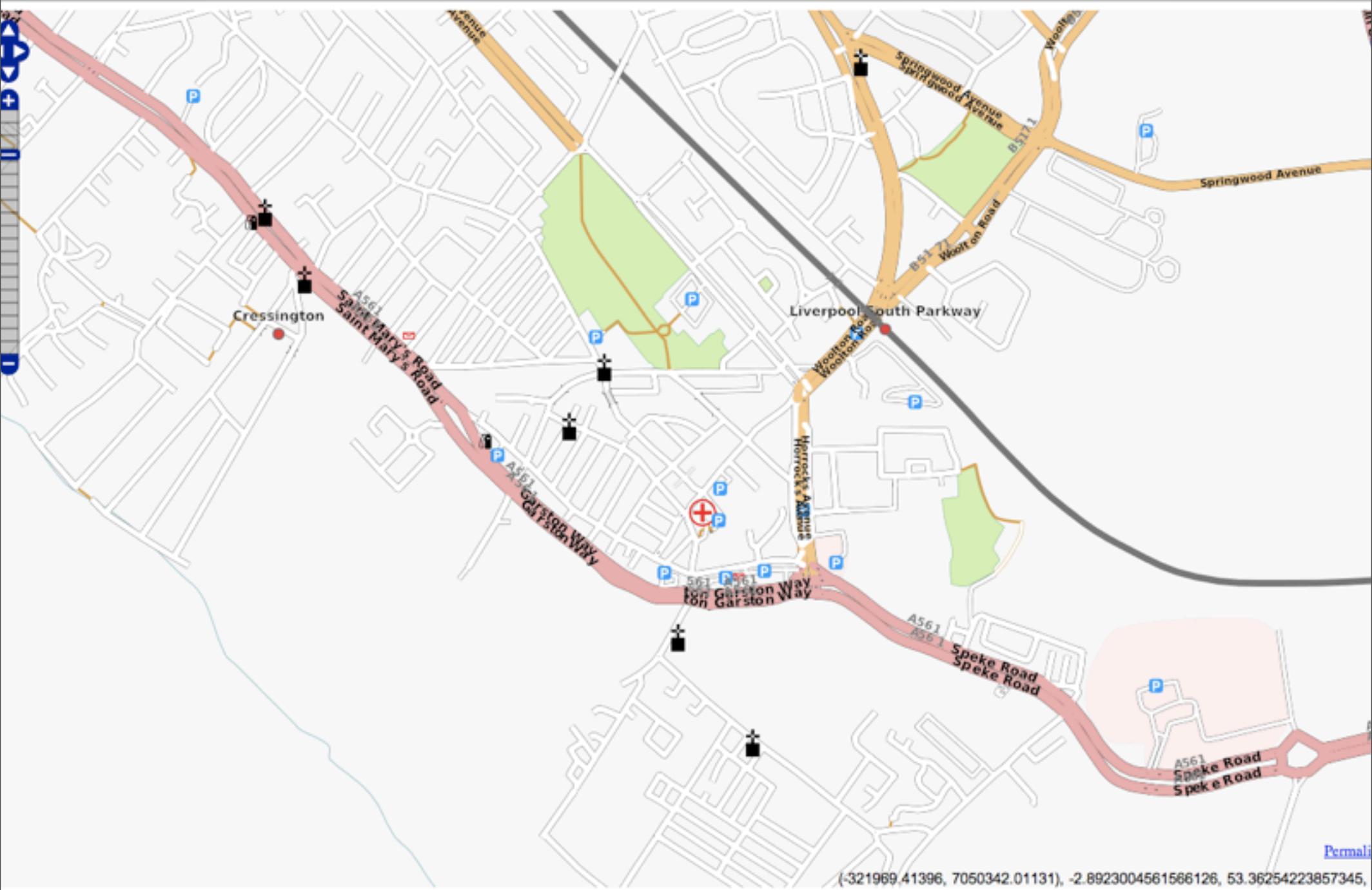




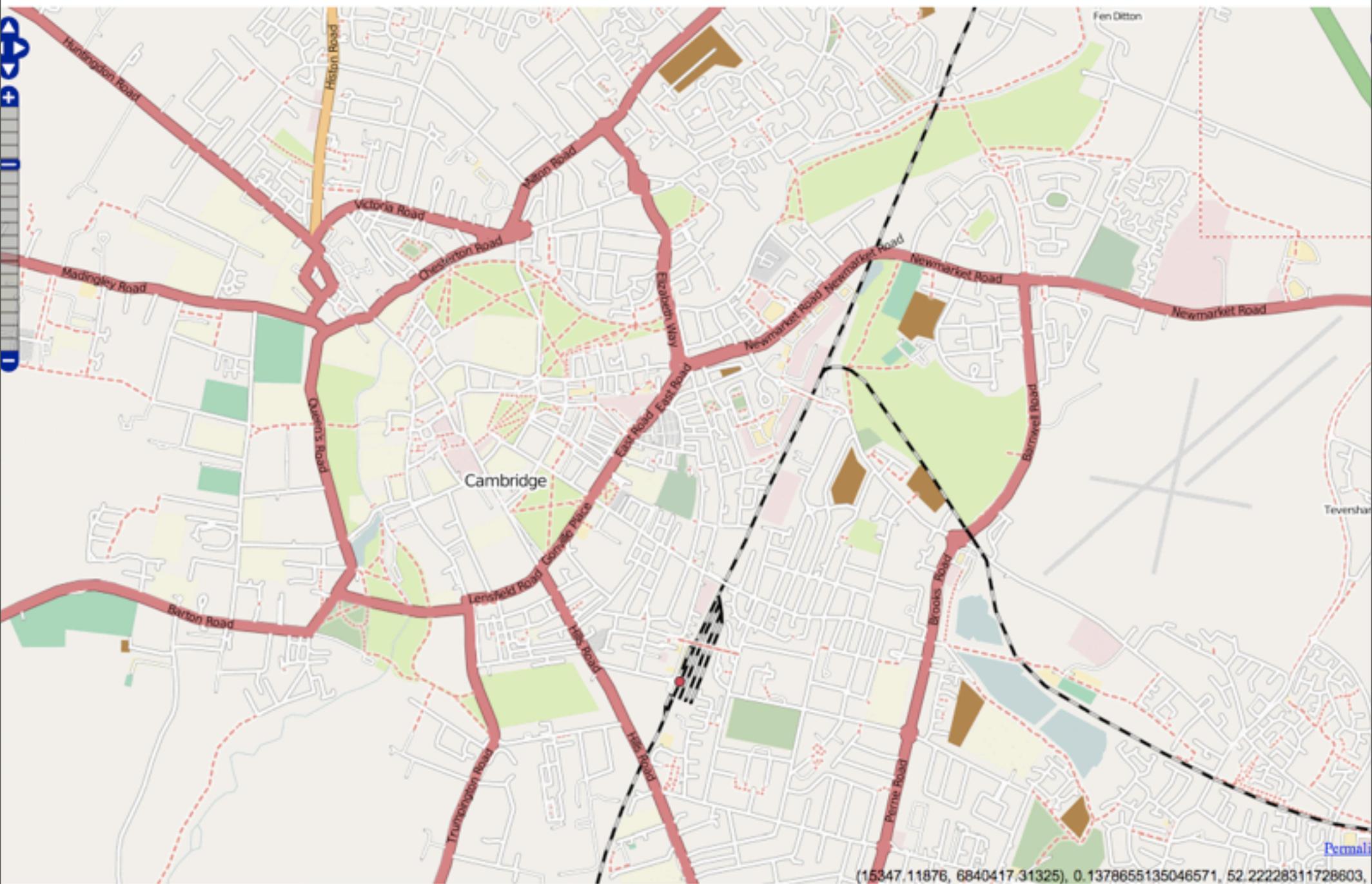


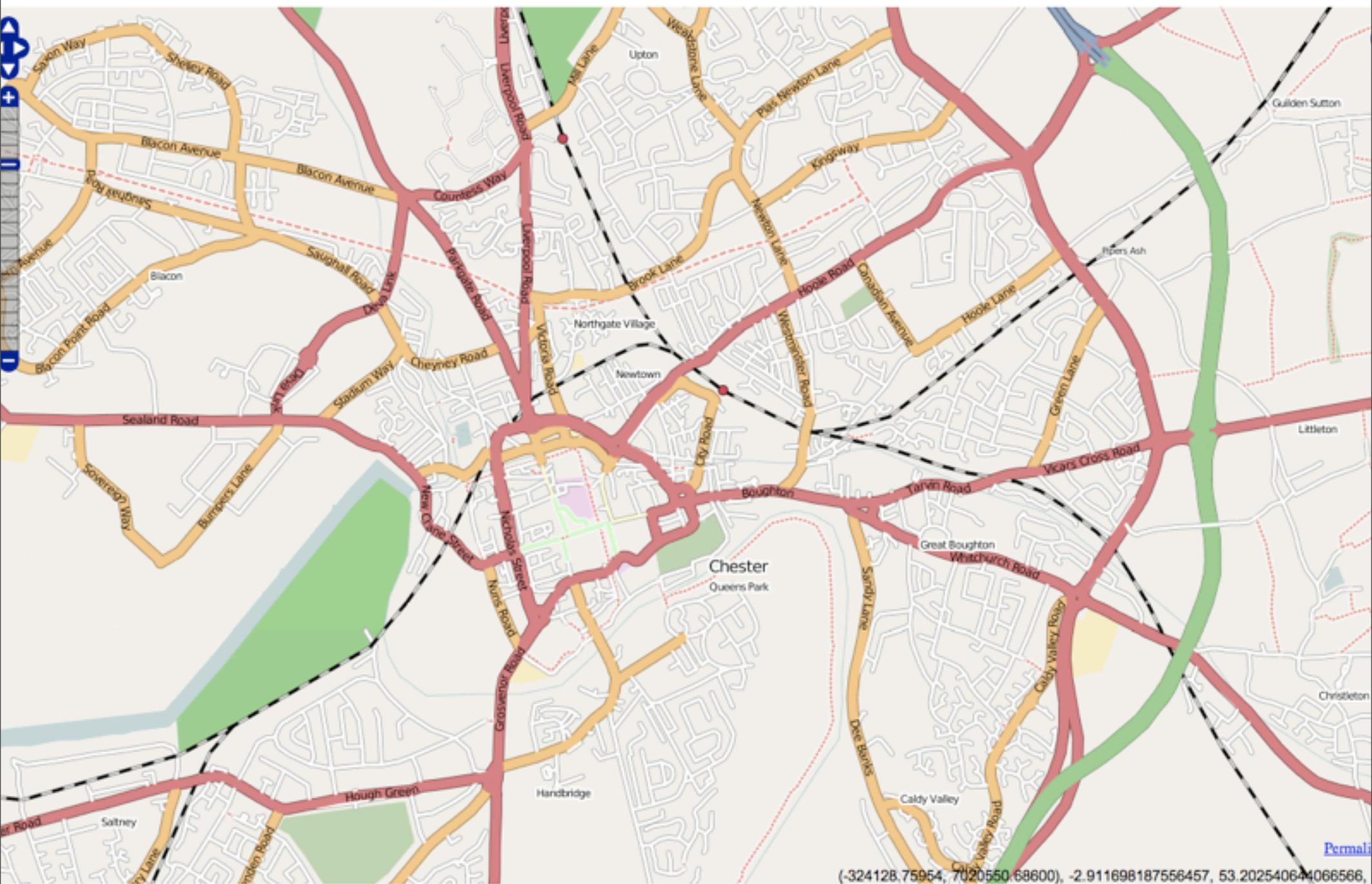














Some Quotes



Quote 1

“It’s absolutely possible for a bunch of smart guys with the technology we have today to capture street networks, and potentially the major roads of the UK and minor roads”

Ed Parsons, ex-CTO Ordnance Survey



Quote 2

“If you don’t make [lower-resolution mapping data] publicly available, there will be people with their cars and GPS devices, driving around with their laptops .. They will be cataloguing every lane, and enjoying it, driving 4×4s behind your farm at the dead of night. There will, if necessary, be a grass-roots remapping.”

Tim Berners-Lee



Quote 3

“You could have a community capability where you took the GPS data of people driving around and started to see, oh, there’s a new road that we don’t have, a new route .. And so that data eventually should just come from the community with the right software infrastructure.”

Bill Gates



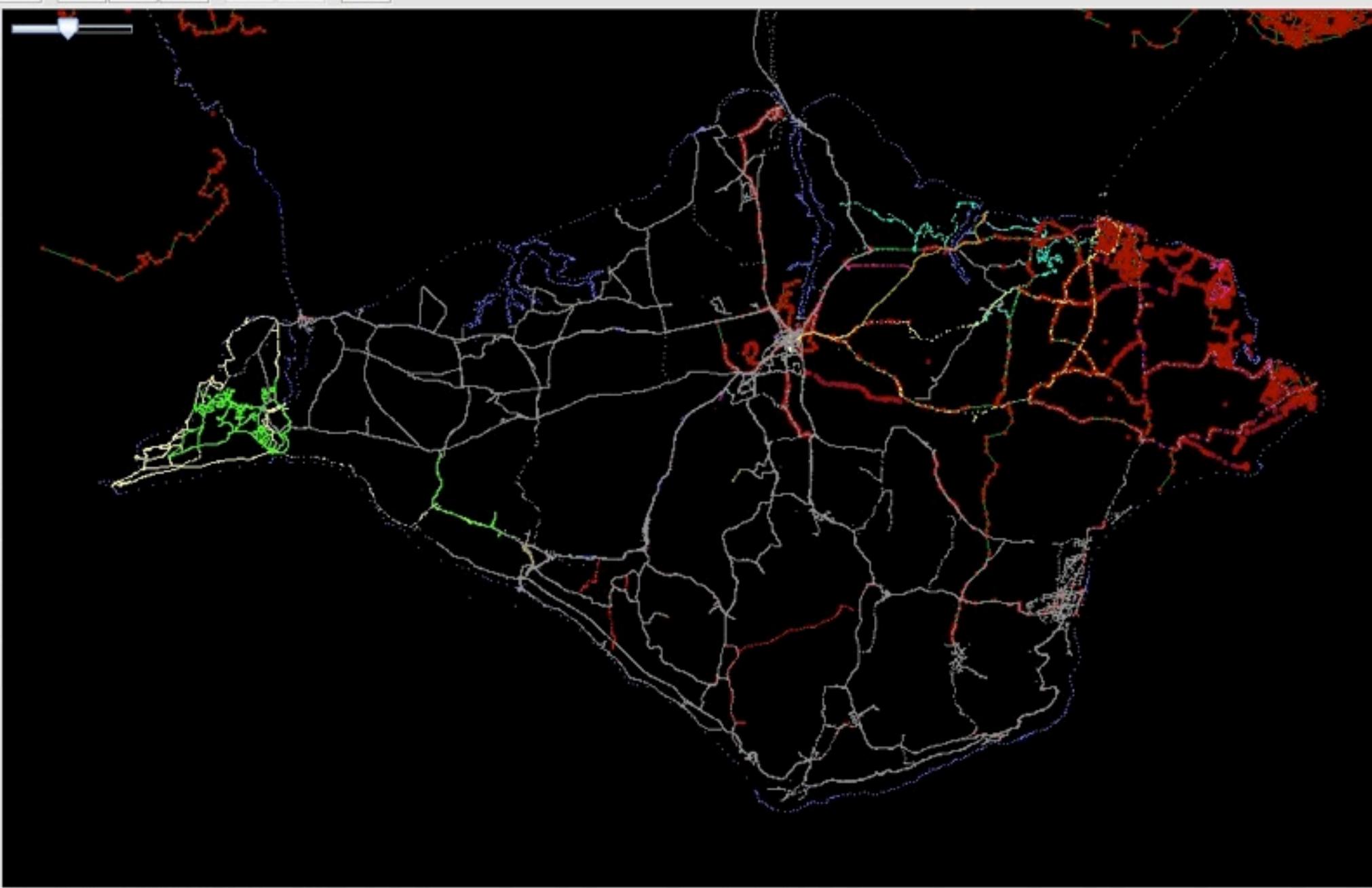
Workshops

Or, Map as Party



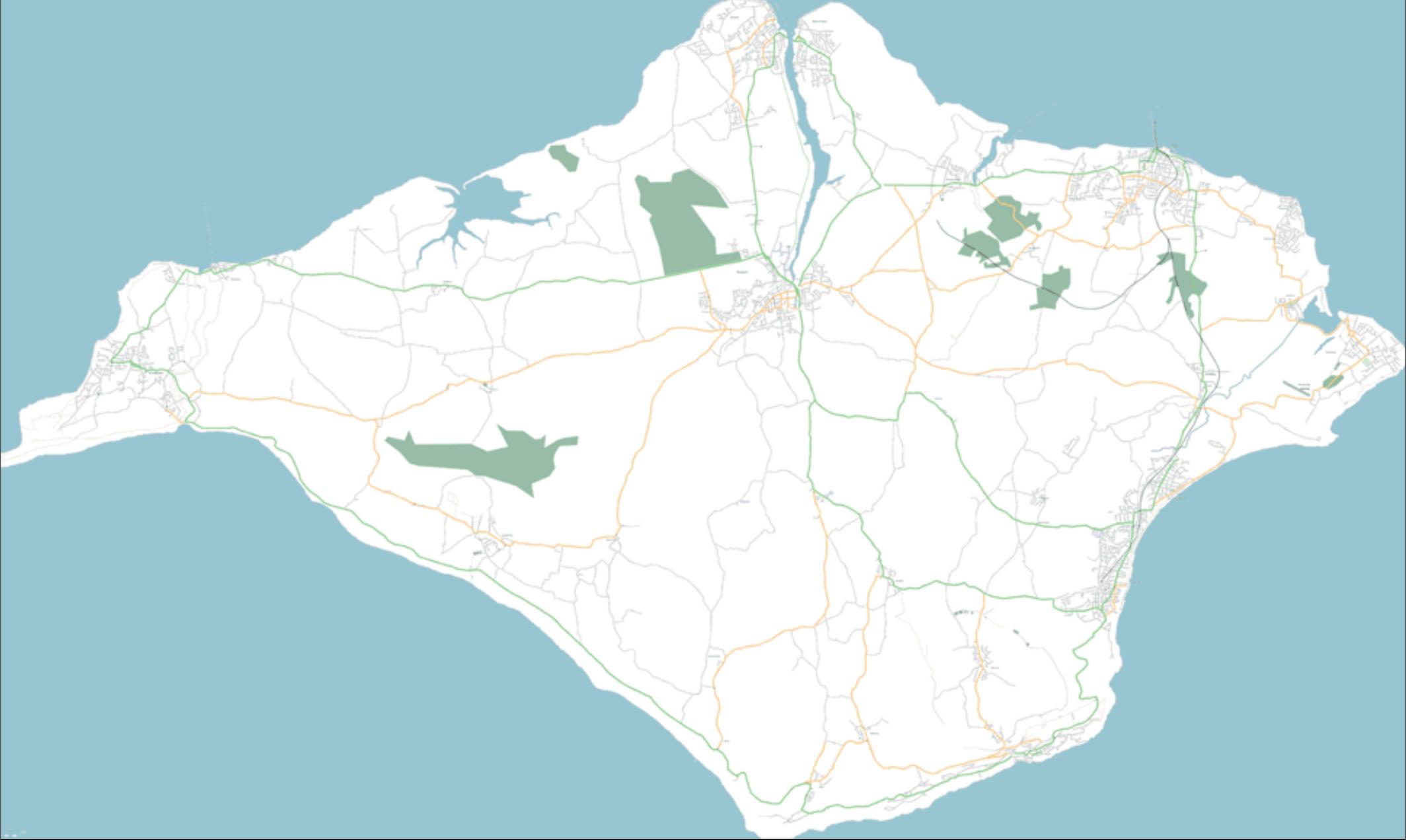






Lat/Lon 50.60508257203862 -1.1324111275132578

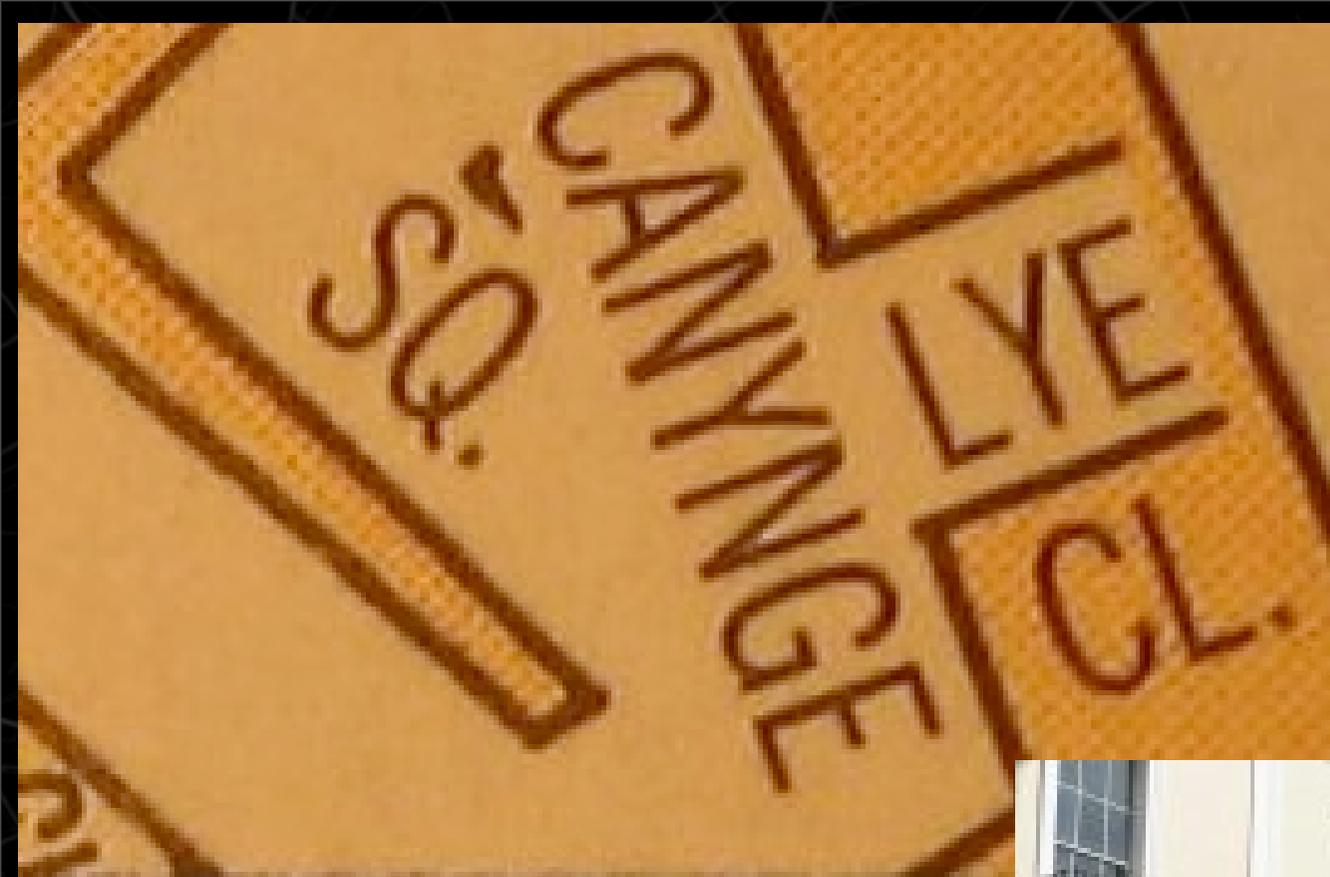
Object





Fallout





A-Z

Norman Dennison, director of Geographers' A-Z Map Company, confirms that Lye Close is a lie, which will now be removed. "The idea is to put something on the map to protect copyright," he says. "We try to put it in an area or a part of a road which would not be misleading to the ordinary person in the street. They have been put in out-of-the-way places."



Using OSM



OpenStreetMap



The Free Wiki World Map

Your GPS Traces

[see traces from all users](#)

Editing the trace mc-steve-4.gpx

Help & Wiki
News blog
Shop

User

display name:



filename: mc-steve-4.gpx
uploaded: 2006-05-13 16:24:51
description:
tags:

OpenStreetMap



The Free Wiki World Map

Help & Wiki
News blog
Shop

tags

mapchester
manchester
uk
loW
isleofwight
isle_of_wight
workshop1
Isleofwight
lewisham
wandsworth
bloomsbury
london
M25
M1
M40
horsham
guildford
A248
A25
A2003
A281
test
littlehaven

[View](#) [Edit](#) [GPS traces](#)

Your GPS Traces

[see traces from all users](#)

upload GPX file: no file selected

description:

tags:

public?

| [help](#)

Showing page 0 (1 - 20 of 33) | [next page](#)

		Public?	Delete?
	mc-steve-12.gpx ... (2,099 points) ... on 14-May more / map <i>ava taking two trams in manchester</i> by SteveC in: mapchester manchester uk	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mc-steve-11.gpx ... (2,783 points) ... on 14-May more / map <i>conor & anne walking mapchester sunday</i> by SteveC in: mapchester manchester uk	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mc-steve-10.gpx ... (2,307 points) ... on 14-May more / map <i>chris & ben sunday mapschester</i> by SteveC in: mapchester manchester uk	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mc-steve-9.gpx ... (3,435 points) ... on 14-May more / map <i>mapchester chris and lesley sunday afternoon</i> by SteveC in: mapchester manchester uk	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mc-steve-8.gpx ... (3,196 points) ... on 14-May more / map <i>drew & karen saturday eve sunday morn</i> by SteveC in: mapchester manchester uk	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	mc-steve-7.gpx ... (5,175 points) ... on 14-May more / map <i>chris sunday morning</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Data Model

- Nodes
 - Single point on the earth - Latitude and Longitude
- Segments
 - Pair of nodes connected to make a single line
- Way
 - Ordered list of segments which together make up a long line or an enclosed area



Data Model

- Tags
 - Nodes/Segments/Ways can have key=value pairs attached to describe their properties.
 - Example node tags:
 - amenity=place_of_worship, religion=buddhist
 - amenity=post_box
 - Example way tags:
 - highway=primary
 - oneway=yes



View Edit GPS traces

Search



The Free Wiki World Map

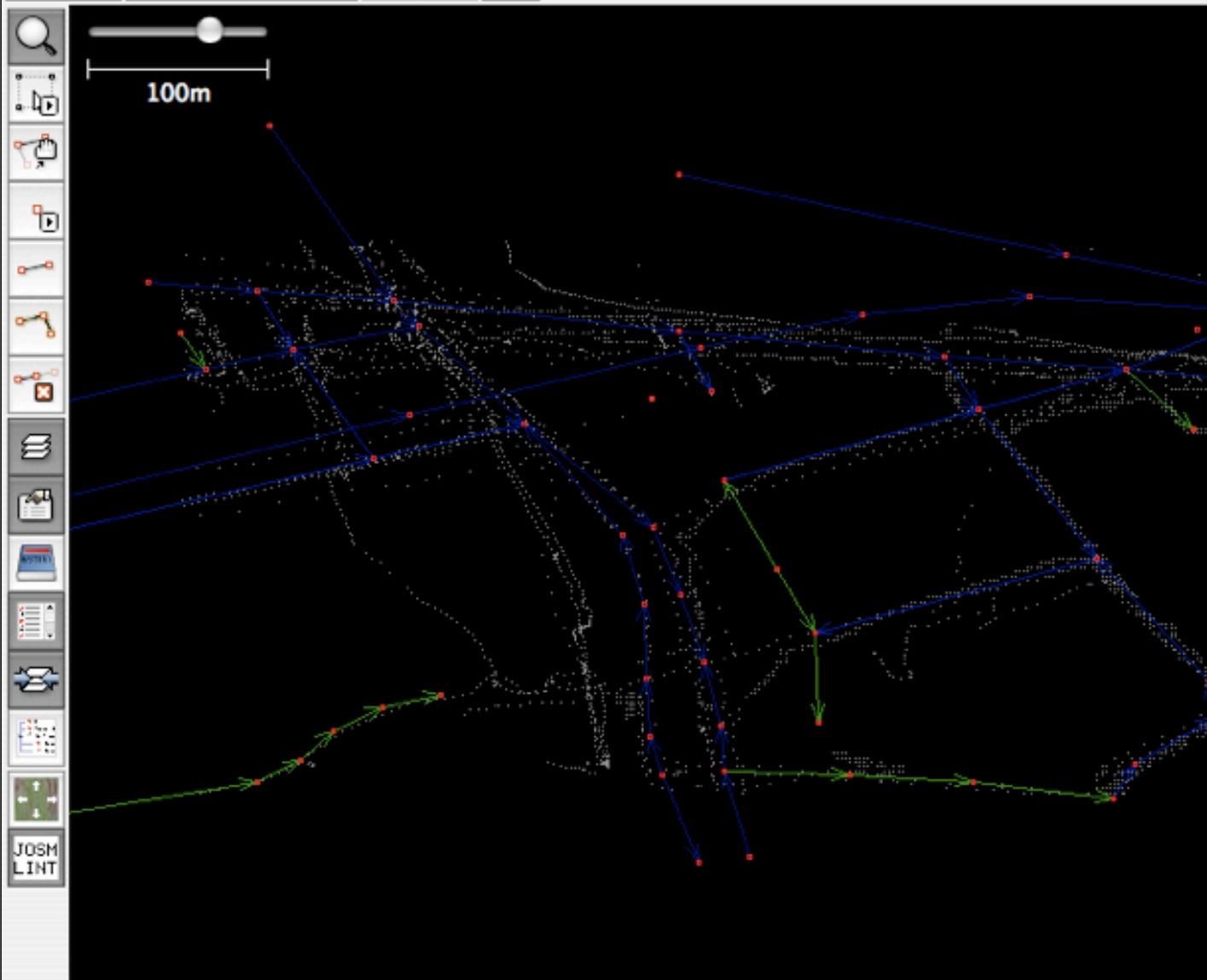
Help & Wiki
News blog
shop

User

display name:
mcknut

Make a Donation





Layers

↑ ↓ [visibility icon] [layer icon] [stack icon]

Properties

Key	Value

+ Add [I] Edit [trash] Delete

Current Selection

[select icon] Select [refresh icon] Reload [search icon] Search

Conflict

[resolve icon] Resolve [select icon] Select

JosmLint

Discontinuous way: Way 796679

Lat/Lon 53.47504176489326 -2.226231592071782

Object

View Edit GPS traces

Welcome john@mckerrell.net Logout

OpenStreetMap



The Free Wiki World Map

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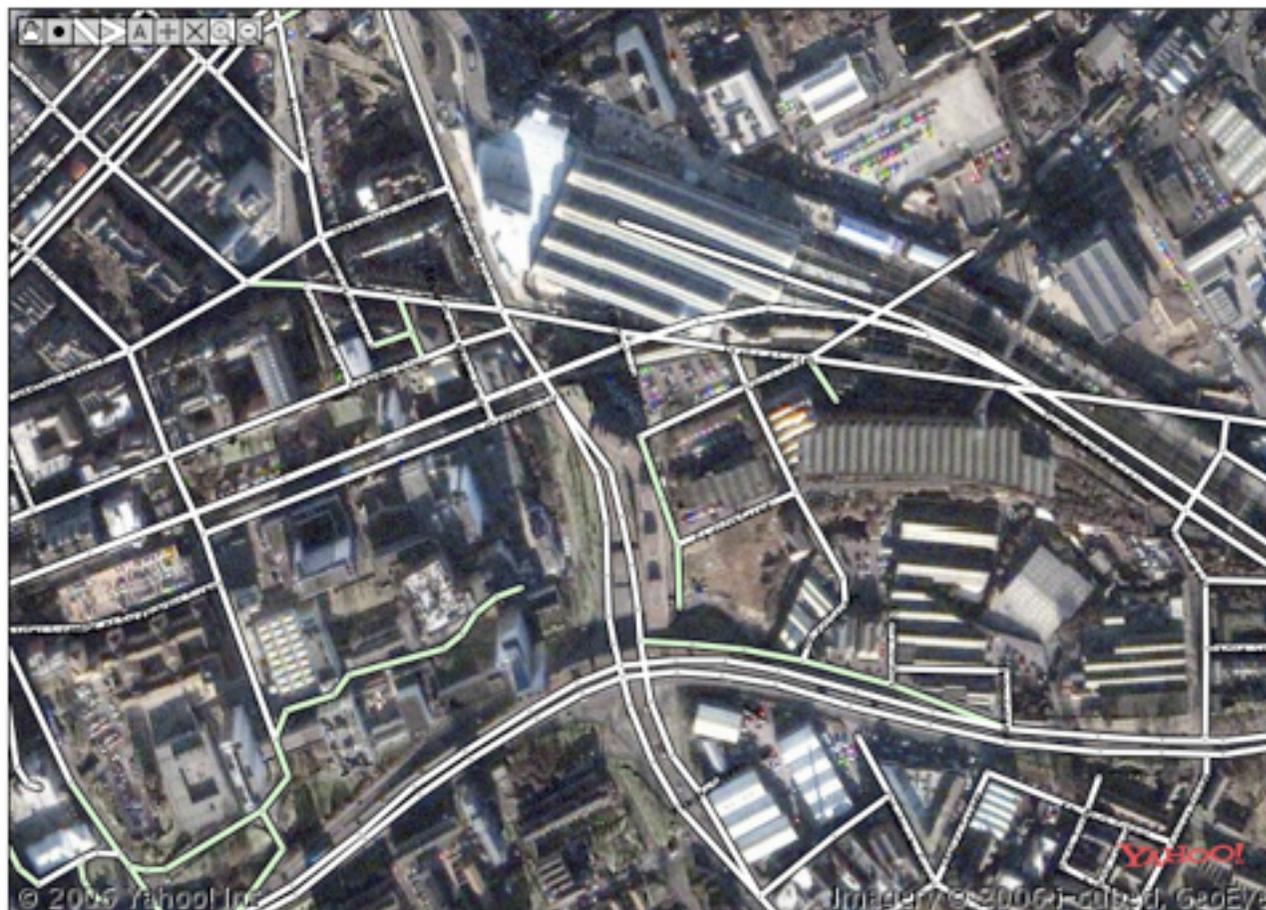
User

Display name:

mcknut

save

Make a Donation



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Getting Involved

- Sign up for API account:
 - <http://www.openstreetmap.org/create-account.html>
- Submit traces:
 - <http://www.openstreetmap.org/traces/mine>
- Edit via the Applet:
 - <http://www.openstreetmap.org/index.html>
 - (Find area to edit, then click “Edit” at the top)
- Or download and edit with JOSM:
 - <http://wiki.openstreetmap.org/index.php/JOSM>
- Find more tags in the WIKI:
 - http://wiki.openstreetmap.org/index.php/Map_Features



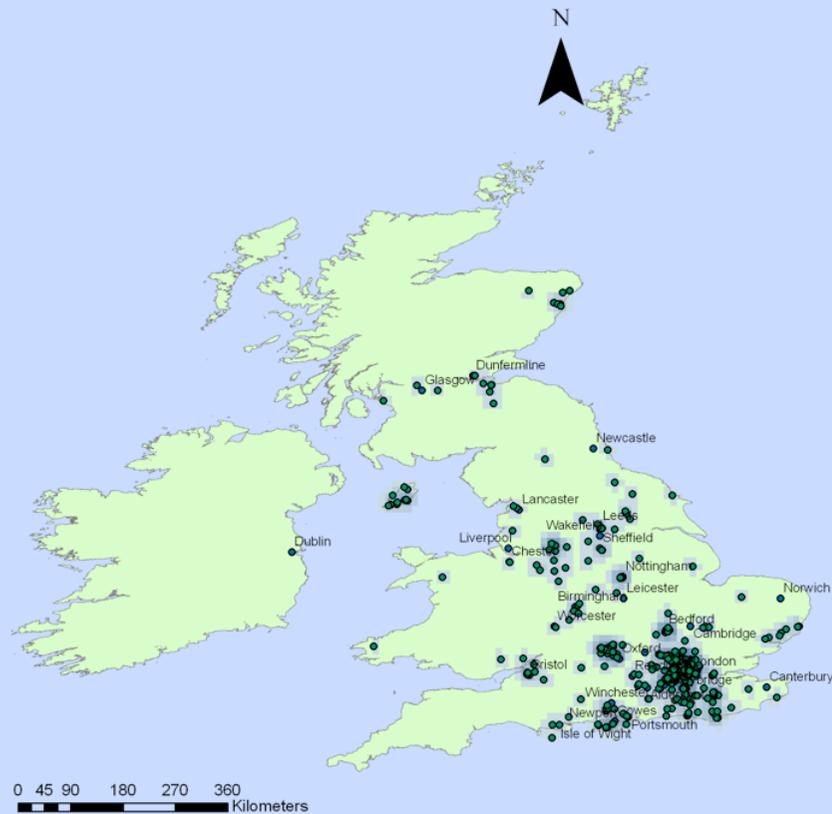
Postcodes!?



3650 -2.148780 AB25 3SQ
9970 -2.104150 AB25 8JU
54300 -1.965510 AB41 9JB
390770 -2.071200 AB41 6UY
365080 -2.596490 AB52 1DS
.390010 -0.317316 AL1 2QL
1.730907 -0.346262 AL1 1GR
51.733203 -0.293305 AL2 2LA
51.721616 -0.331070 AL2 2LE
51.710522 -0.333903 AL2 2PA
51.714127 -0.340726 AL2 2SE
51.724834 -0.258973 AL4 9AH
51.746314 -0.296870 AL4 9NH
51.770150 -0.321020 AL4 5RU
51.770430 -0.337272 AL5 9HT
51.815879 -0.214148 AL6 7TG
51.821930 -1.901901 B14 1JU
52.434691 -1.817927 B72 2AA
52.551040 -1.827760 B90 4NF
52.404420 -1.969556 B97 3BH
52.300354 -2.367850 BA2 5QA
51.378340 -1.767370 BD17 4PF
53.847590 -2.123162 BH20 6EP
50.682699 -2.231780 BH21 1HJ
670071 -0.77160 BH21 3DA

Preliminary Kernel Density Values of FreeThePostcode data distribution.

Based on the distribution of FreeThePostcode point data on 12th August 2006.



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Coase's Penguin

(Yochai Benkler)

Commons-based Peer Production:

- Non-monetary motivation
- Discrete multi-size pieces
- Low-cost integration



Coase's Penguin

(Yochai Benkler)

Commons-based Peer Production:

- Fun
- Takes 5 minutes
- Easy



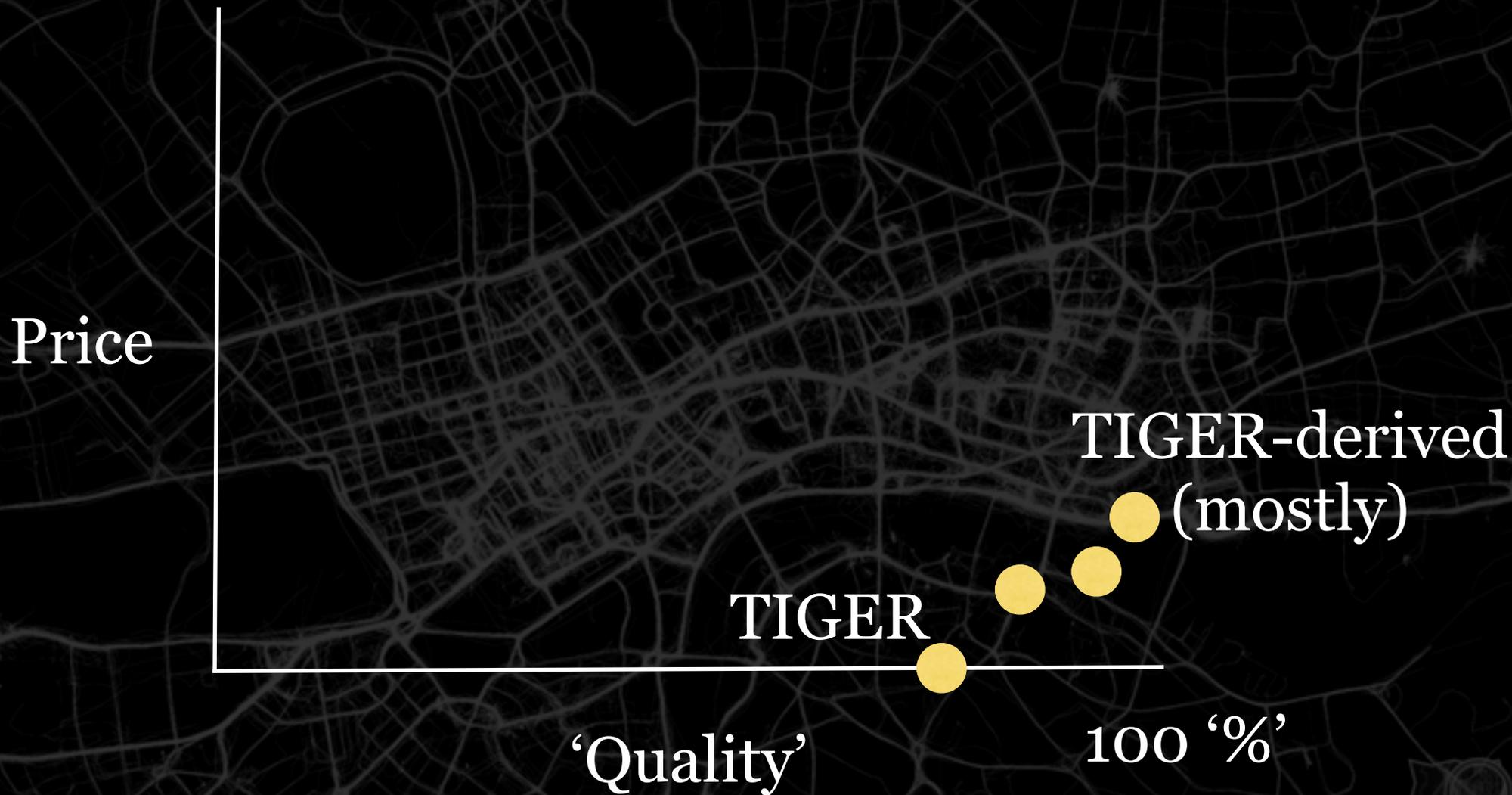
Data: UK-US comparison



US GeoData Market



US GeoData Market



UK GeoData Market

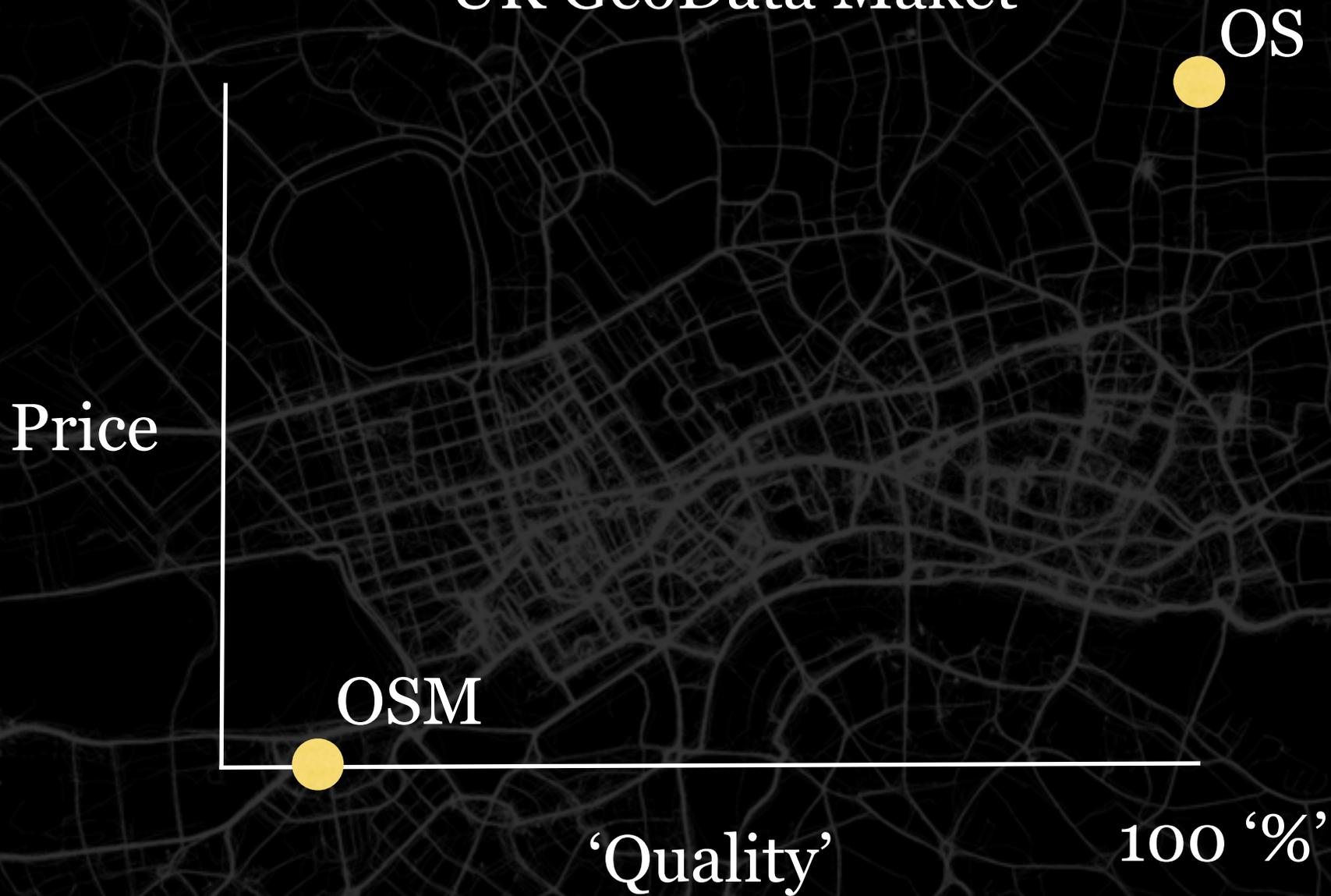
Price



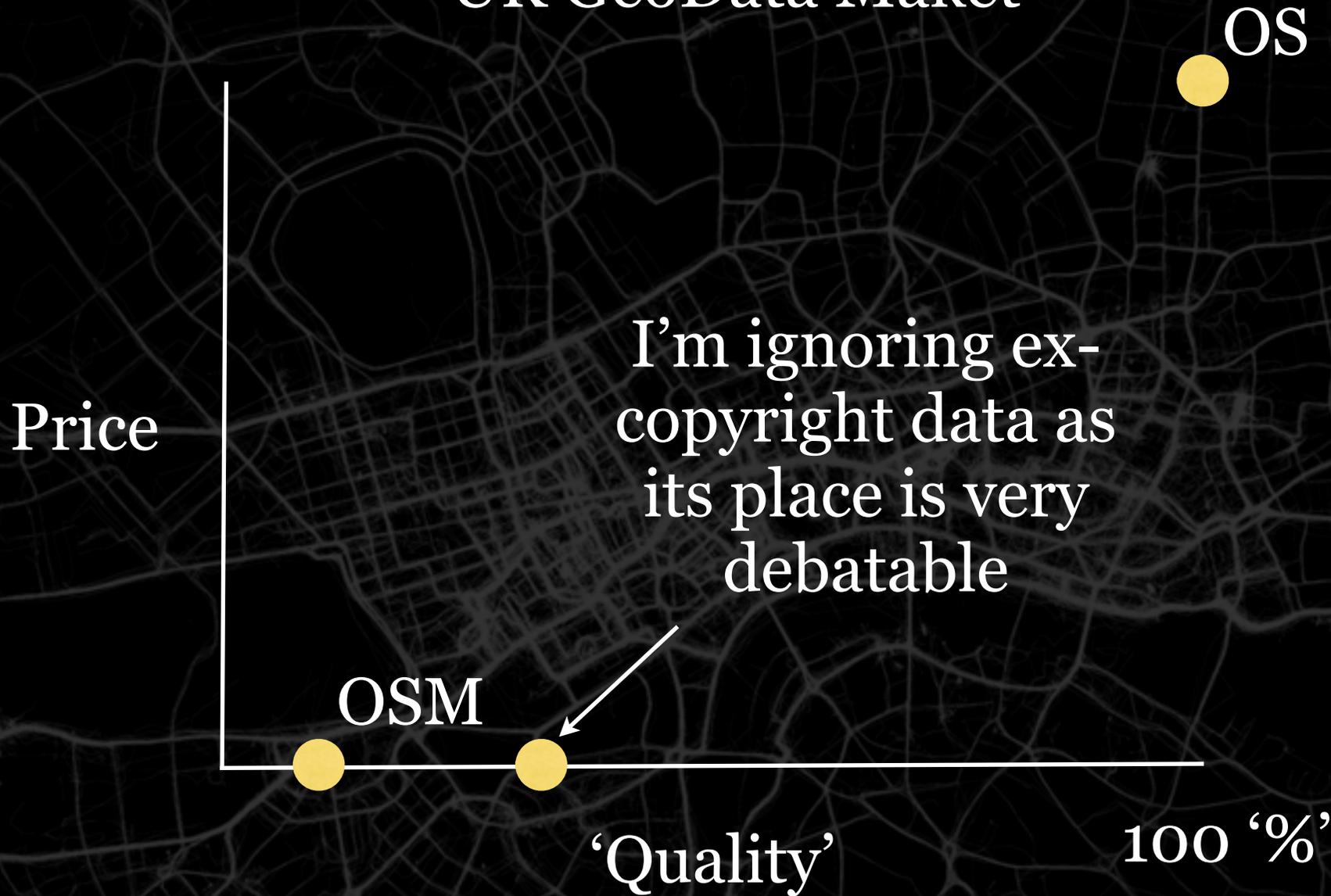
'Quality'

100 %

UK GeoData Market



UK GeoData Market



UK GeoData Market



UK GeoData Market



UK GeoData Market



We've seen this before



OS Market

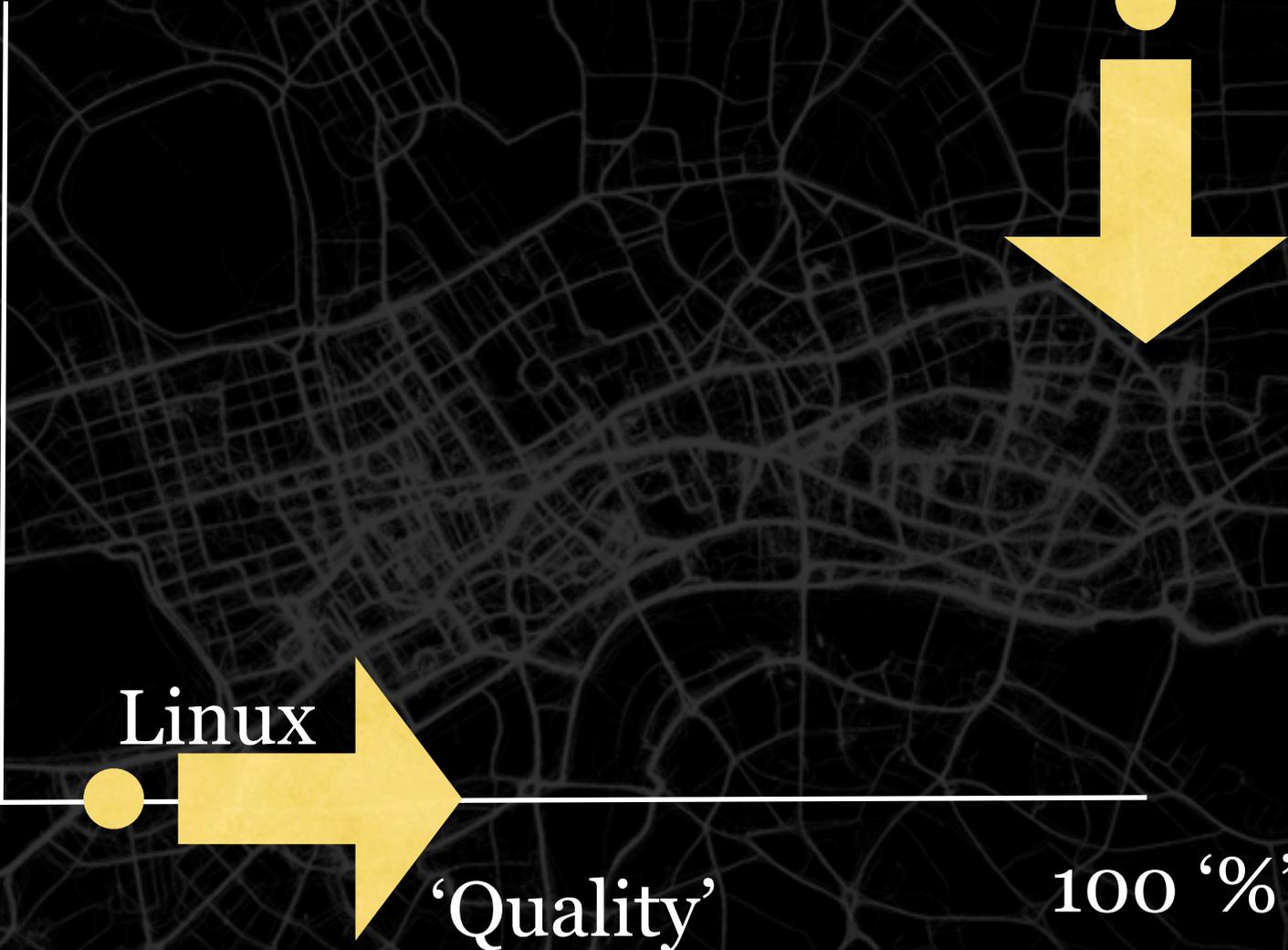
Windows

Price

Linux

'Quality'

100 %



OS Market

Windows

Price

(Think price per feature)

Linux

'Quality'

100 %



Thanks for listening

John McKerrell

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with thanks to Steve Coast -
steve@asklater.com for original slides

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