

Putting Your Data on the Map

Geospatial Data Manipulation and
Visualisation for the Humanities

Shawn Day - January 25 2016

Objectives

- To briefly explore the concepts behind creation, manipulation and presentation of scholarly research using spatial visualisation;
- To engage in free and informal discussion about how these might be employed in your own research;
- Most of all : Inspire and Imagine.

Agenda

- What is the **Value** of Geospatial Visualisation?
 - What Do **Great** Geospatial Visualisations Look Like?
 - What **Core Concepts** Underlie Working with Spatial Data?
- How Do I prepare my Data?
 - Where Does the Data Come From?
- A Selection of Tools
 - What Do You Need to Do to Put it On a Map?
- Discussion

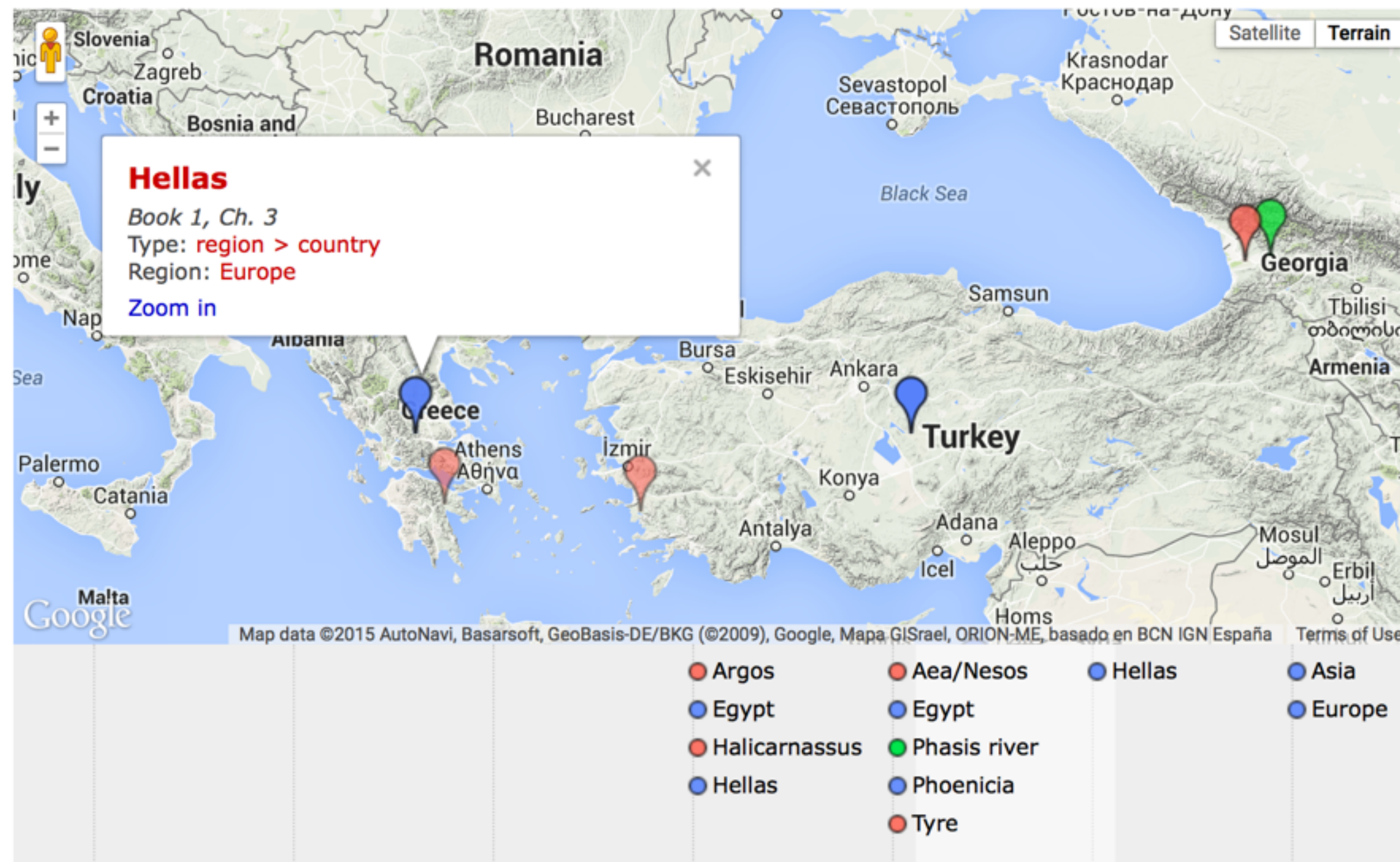
Herodotus Time Map

Herodotus Timemap

Go to book: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)

Jump to: E.g. "2.89"

Show: ☒ Settlements ☒ Regions ☒ Physical features



Book 1, Ch. 3

Then (they say), in the second generation after this, Alexandrus, son of Priam, who had heard this tale, decided to get himself a wife from **Hellas** by capture; for he was confident that he would not suffer punishment. So he carried off Helen. The Greeks first resolved to send messengers demanding that Helen be restored and atonement made for the seizure; but when this proposal was made, the Trojans pleaded the seizure of Medea, and reminded the Greeks that they asked reparation from others, yet made none themselves, nor gave up the booty when asked.

[Switch to Greek](#)

[<< previous](#) [next >>](#)

<http://hestia.open.ac.uk/herodotus/basic.html>

Google Ancient Places Visualisation

GapVis BETA [Home](#) · [About Us](#) · [Blog](#)

The History of Rome, tr. by W.P. Dickson

By Theodor Mommsen

Published 1863 · [View on Google Books](#)

Italia

146 references | [Report a problem with this record](#)

- [Place page on Pleiades](#)
- [References in Pelagios](#)

Book References

[Gibbon's History of the Decline and Fall of the Roman empire, repr. with the omission of all passages of an irreligious or immoral tendency, Volume I \(120\)](#)

[The History of the Decline and Fall of the Roman empire, Volume 5 \(119\)](#)

[Dictionary of Greek and Roman Geography \(110\)](#)

[The History of the Decline and Fall of the Roman Empire, Volume 1 \(110\)](#)

[The History of the Decline and Fall of the Roman Empire, \(108\)](#)

Top Related Places

[Roma](#) (76)

[Asia Minor](#) (34)

[Hellas](#) (16)

[Zella](#) (12)

[Carthago](#) (11)

★ Book Summary Reading View Place Detail

Map data ©2015 Basarsoft, Google, INEGI, ORION-ME [Terms of Use](#) [Report a map error](#)

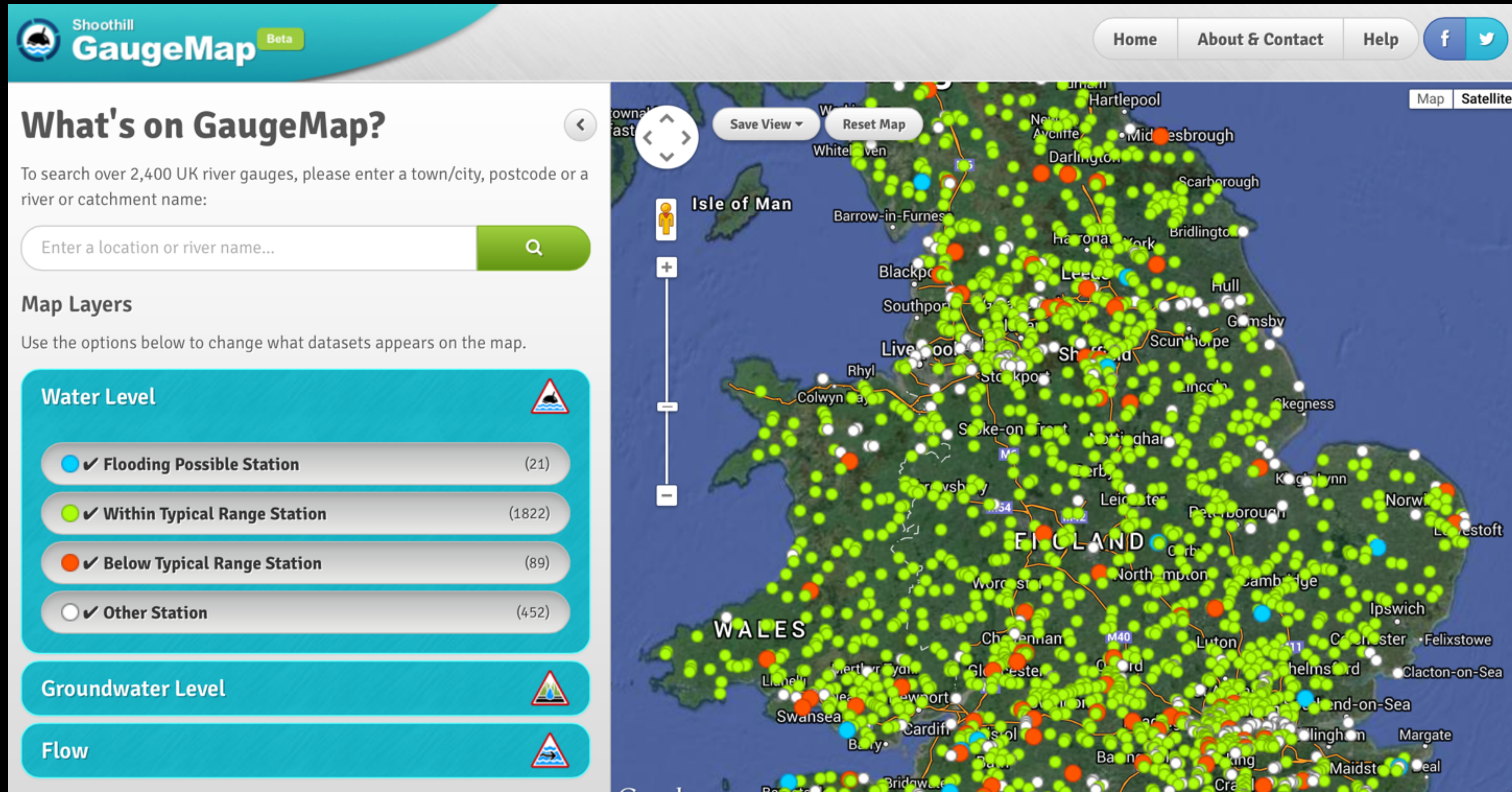
Photos from Flickr

No photos were found.

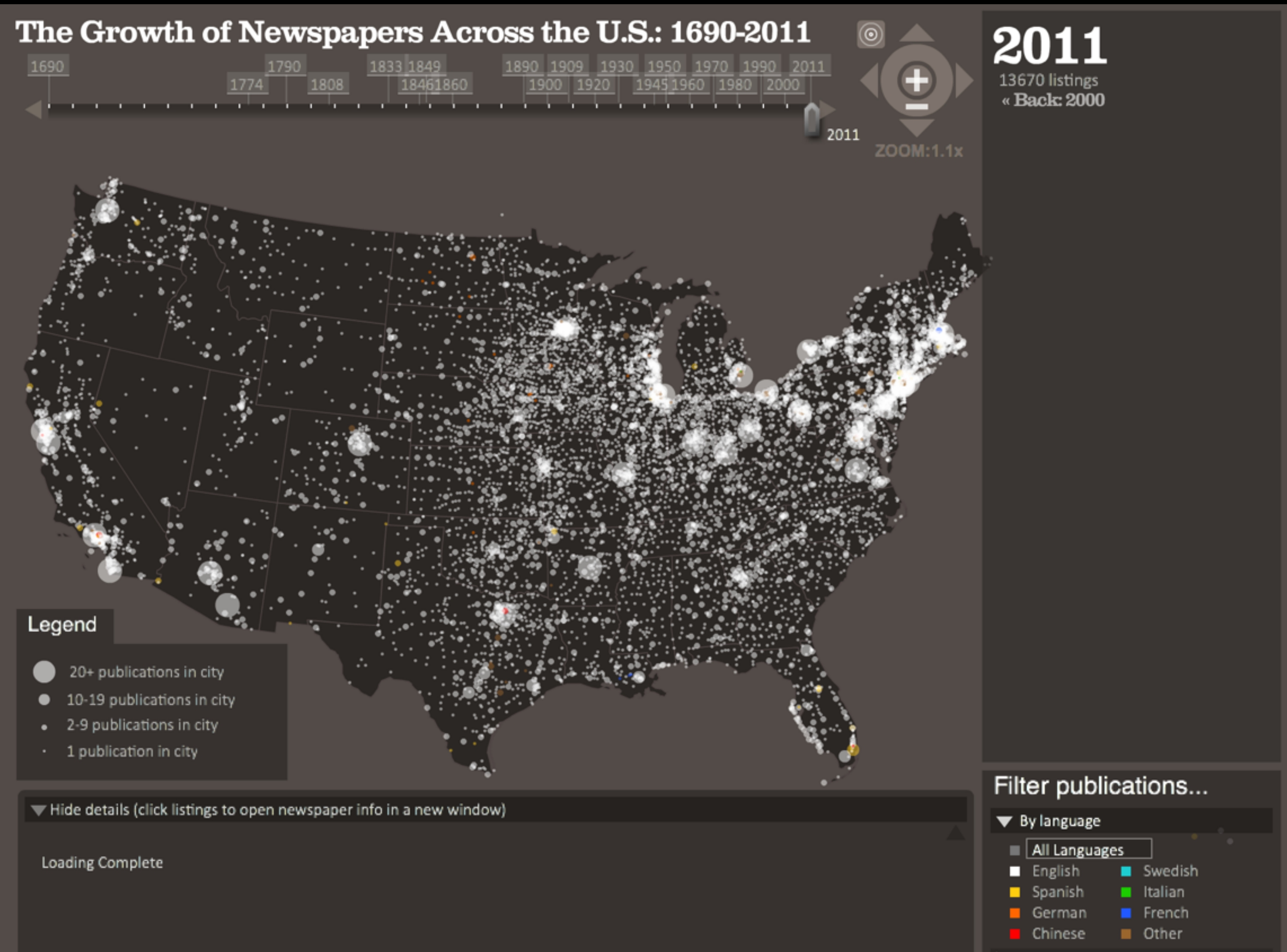
GapVis (c) 2011 Nick Rabinowitz / Google Ancient Places. Hosting by [AlexandriaArchive.org](#). Funding by

<http://gap.alexandriaarchive.org/gapvis>

GaugeMap



Newspapers West



Rural West Initiative Bill Lane Centre for the US West

Smelly Maps



ORBIS

ORBIS The Stanford Geospatial Network Model of the Roman World

About Tutorial Walter Scheidel Elijah Meeks

Route Network Flow

DEPARTING: MONTH SEASON

PRIORITY: Fastest Cheapest Shortest

NETWORK MODES

MODE TRANSFER COST

ROAD Foot (30km/day)

RIVER Civilian

SEA Fast

Calculate Network

According to the Shortest routes from **Roma** to the rest of the Roman world in **April**, sites are this far away.

The most distant major sites are:

- Alexandria (NaN KM)
- Antiochia (NaN KM)
- Carthago (NaN KM)
- Constantinopolis (NaN KM)

Distance from Roma

KM 500.0 1000.0 2000.0 3000.0

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What is Geospatial?

- More than GIS
- Its all about Space *and* Place - Context
- Geovisualisation?
- Geoparsing?

What is Geospatial Not?

- Automatic (although that'll get closer later in the this later ;-)

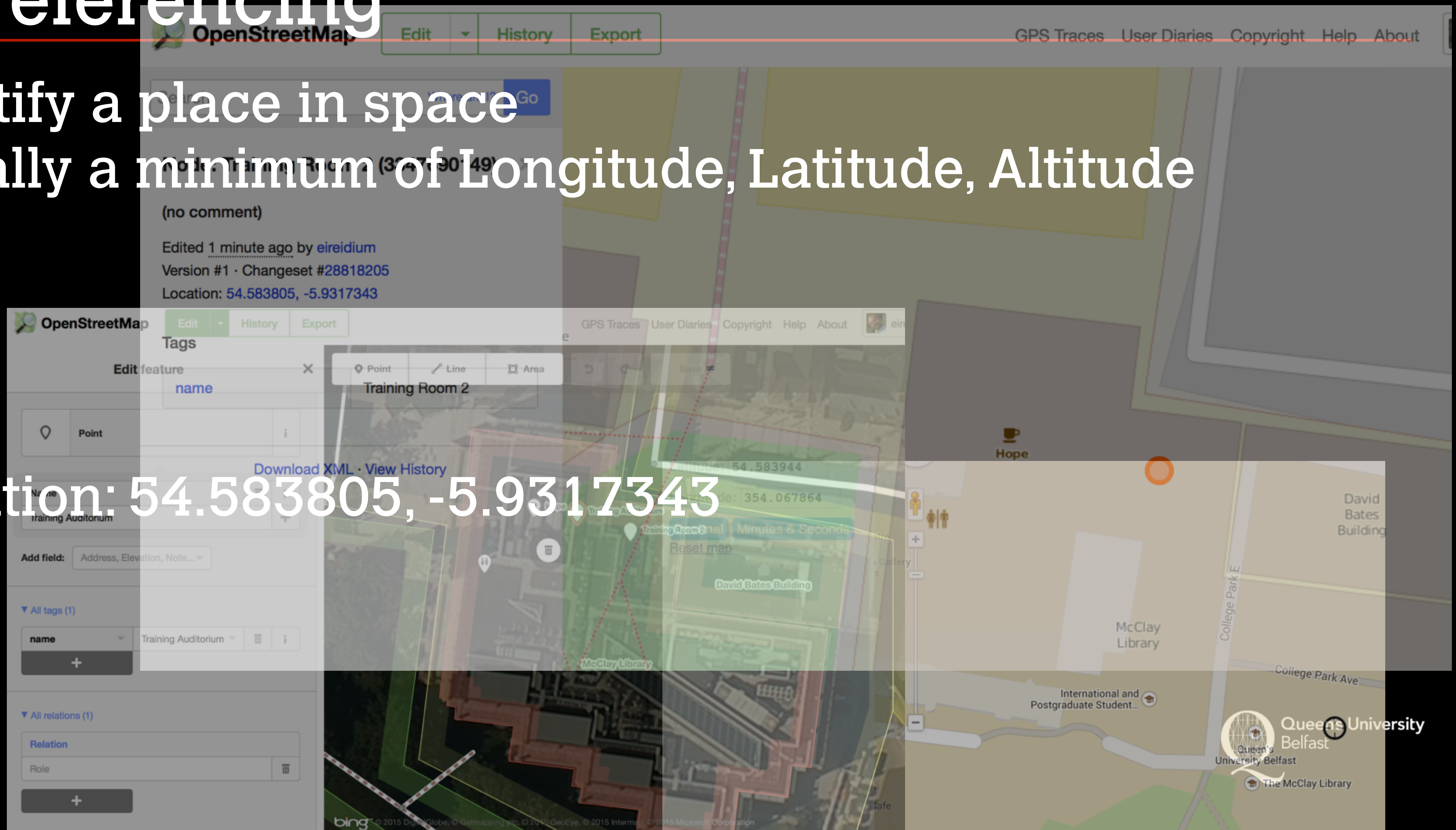
Starting with a Wee Glossary

- Georeference
- Geoparse
- Geotag
- Geocode
- Geolocate
- GPS
- GIS
- Projection
- Geovisualisation
- Geosearch
- Gazateer

Georeferencing

- Identify a place in space
- Usually a minimum of Longitude, Latitude, Altitude

- Location: 54.583805, -5.9317343



Geoparsing

- Identifying as a place as opposed to another type of entity within a body of text
- To assign geographic identifiers to words and phrases in unstructured content
- Useful Services: Metacarta / Calais / CalaisFull
- “Software “reads” documents and web pages in a human-like way to identify geographic terms and references using natural language processing (NLP)”

Geotag

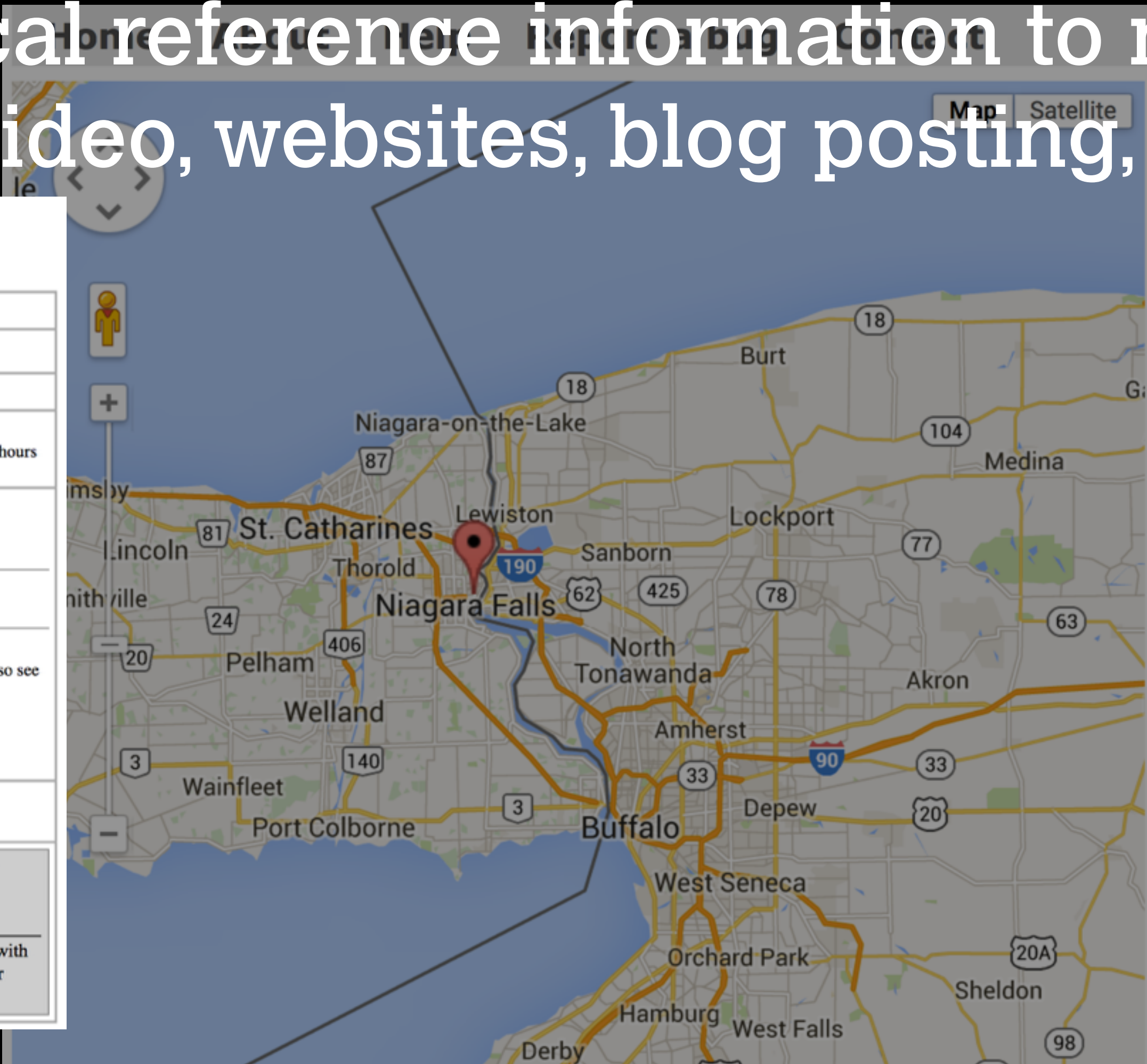
- ▶ Add geographical reference information to media such as photographs, video, websites, blog posting, etc.

Basic Image Information

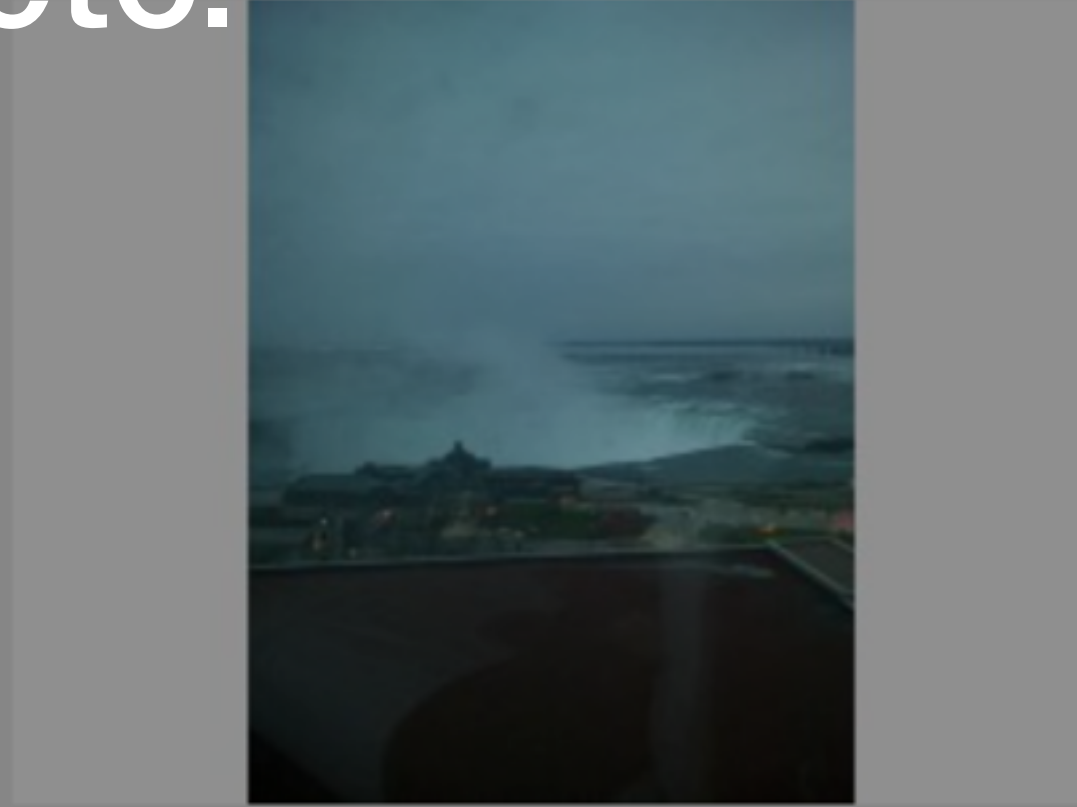
Target file: View of Falls December 2014.jpg

Camera:	Nokia Lumia 930
Exposure:	Auto exposure, 1/17 sec, f/2.4, ISO 800
Flash:	Off, Did not fire
Date:	December 21, 2014 4:50:49PM (timezone not specified) (1 month, 22 days, 13 hours, 59 minutes, 22 seconds ago, assuming image timezone of 5 hours behind GMT)
Location:	Latitude/longitude: 43° 4' 46.1" North, 79° 4' 55.9" West (43.079484, -79.082193) Location guessed from coordinates: <i>6700 Fallsview Boulevard, Niagara Falls, ON L2G, Canada</i> Map via embedded coordinates at: Google , Yahoo , WikiMapia , OpenStreetMap , Bing (also see the Google Maps pane below) Altitude: 225 meters (738 feet) Timezone guess from earthtools.org: 5 hours behind GMT
File:	918 × 1,632 JPEG (1.5 megapixels) 274,338 bytes (268 kilobytes)
Color Encoding:	WARNING: Color space tagged as sRGB, without an embedded color profile. Windows and Mac browsers and apps treat the colors randomly. Images for the web are most widely viewable when in the sRGB color space and with an embedded color profile. See my Introduction to Digital-Image Color Spaces for more information.

Map Satellite




Upload a photo [?]




Choose File no file selected

	Latitude	Longitude
Marker	43.098977424941	-79.07409667968
Photo	43.079484166667	-79.082192777778

 Queen's University
Belfast

Geocoding

- ▶ Forward Geocoding:
 - ▶ The process of finding geographic coordinates from address data
 - ▶ Batching?
- ▶ Reverse Geocoding:
 - ▶ Matching geographic coordinates to augmented information in a human readable form



World Geocoding

Free opensource geocoder and webservice for Geonames and Openstreetmap data.

Gisgraphy needs you, please give us some [feedbacks](#), on the services, things you've appreciated, fonctionnality you wish to have on the next release, problems you've got, bugs you've found, ...

World Geocoding ▾

Address Parser

Zipcodes

Street search ▾

Find nearby ▾

Fulltext ▾

The worldwide geocoding webservice is totally FREE and allow to find GPS coordinate and other informations for a given text (address, street name, city, zip,...) in 243 countries, via a REST webservice. It uses (free) data from [OpenstreetMap](#) that are imported into a local database. Gisgraphy doesn't use Google Maps geocoder, it do it by itself, it only use Google Maps to display the result of the search. You can see an example of use [here](#).
You can also use the [address parser](#) to parse an address into its individual component parts, use the [address parser](#).
If you want to search for other things than an address (adm, hotel, monument,...), use the [address parser](#).
If you want to divide an address into its individual component parts, use the [address parser](#).

Enter an address, a city or a street :

18 university square, belfast

Geocode it !

To use this free utility, simply enter addresses in the box to the left, one per line, and click "Start geocoding" to find their latitude and longitude. If your data is not regular, you can use the "raw list mode" but be aware that everything should at least look like an address, and any non-address data such as names, descriptions, or other fields might confuse things. You can choose from three different sources of coordinates: [Bing Maps](#), [MapQuest Open](#), or [Google](#). Each has their pros and cons, but **none of them is guaranteed to be 100% correct -- use them at your own risk!**

Also note that if you try to geocode thousands of addresses, you will probably end up with blank results after a while, because the provider will decide that you're trying to process too many addresses in a short time. If that happens, it's a sign that you should be looking into commercial geocoding services. (Or at least break your data into smaller batches.)

4 results: 0.774 seconds.

University Square

Belfast

Draw a map

output format: Google Maps

☐ Labels on map

[\[more map options\]](#)

Create a GPX file

clear results box

What this page is for

GPS Visualizer's primary function is mapping and converting GPS data; it was never intended to be a geocoding site. However, over the years many people have found GPS Visualizer to be useful with address-based data as well, so this page was created as a convenient way to bridge the gap between addresses and true coordinates. After you add latitudes and longitudes to your waypoints/addresses/POIs, you should be able to use them with GPS Visualizer's "normal" input forms.

Geolocating

- Assessing the location of a real world object based on IP-address, or mobile connection to the internet



How to find geolocation of an IP Address?

+1896 Recommend this on Google

Your IP Address is **86.47.41.91**.

IP Location **Finder**

IP Address:

Here are the results from a few Geolocation providers. Accuracy of geolocation data may vary from a provider to provider. Test drive yourself, and decide on the provider that you like.


Do you have a problem with IP location lookup?
Report a [problem](#).

Geolocation data from **IP2Location** (Product: DB4 updated on 1/30/2015)

IP Address	Country	Region	City	ISP
86.47.41.91	Ireland	Dublin City	Dublin	Eircom

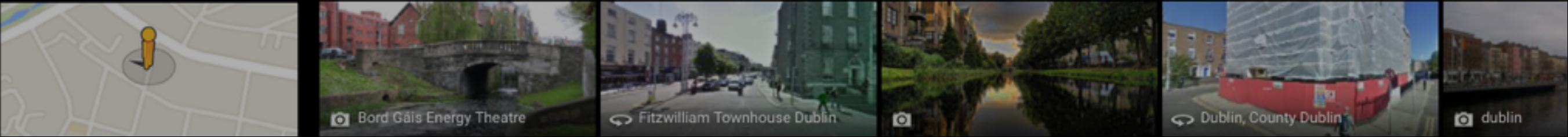
[Google Map for Dublin, Dublin City, Ireland \(New window\)](#)

Geolocation data from **IPligence** (Product: Max updated on 2/7/2015)

IP Address	Country	Region	City	ISP
86.47.41.91	Ireland 		Dublin	Eircom
	Continent	Latitude	Longitude	Time Zone
	Europe	53.33	-6.25	

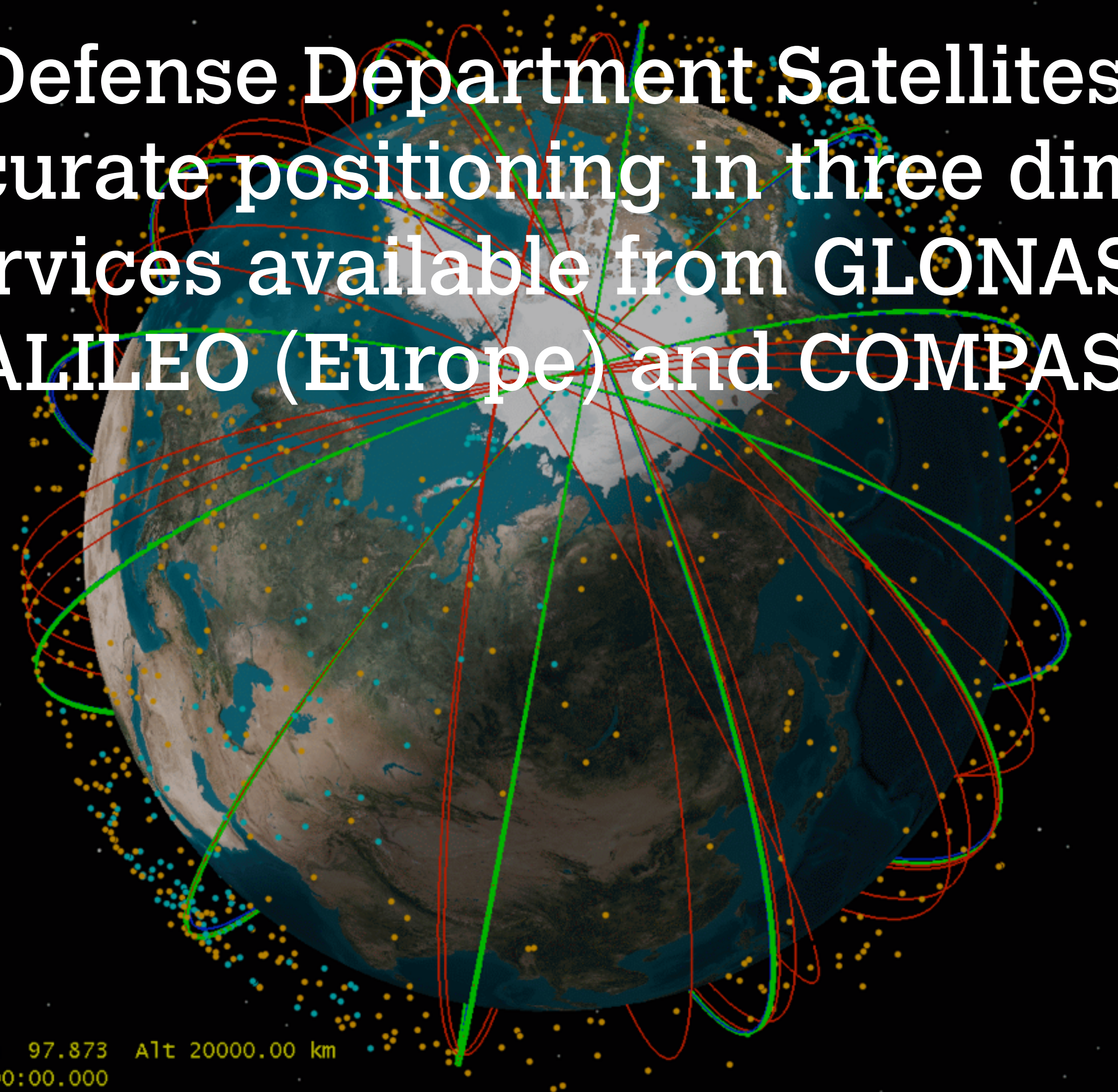
[Google Map for DUBLIN, , IRELAND \(New window\)](#)

Geolocation data from **IP Address Labs** (Product: Pro On-demand API)



Global Positioning Systems

- Series of US Defense Department Satellites in Orbit that allow for accurate positioning in three dimensions
- Additional services available from GLONAS (Russia) and emerging GALILEO (Europe) and COMPASS (China)



Lat 72.215 / Lon 97.873 Alt 20000.00 km
13 May 2011 14:00:00.000

Geographic Information Systems (GIS)

- ▶ GIS can display spatial data hidden in tables and databases
- ▶ Create detailed and intelligent maps
- ▶ Integrate data to reveal trends and relationships that bring new perspectives to previously held beliefs about people and places
- ▶ Research questions in the humanities often involve a spatial component that only GIS can expose
- ▶ HistoricalGIS

Great Britain Historical Geographical Information System (GBHGIS)

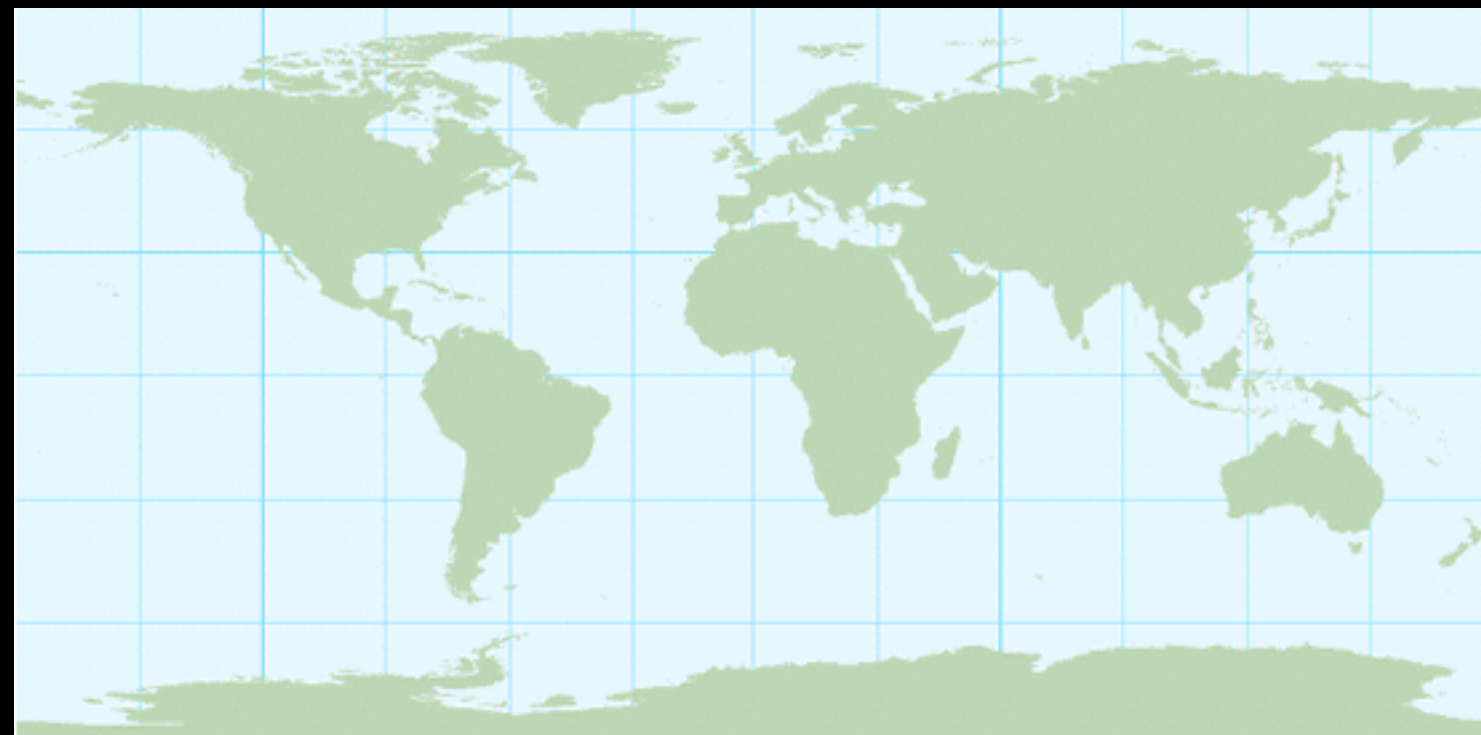
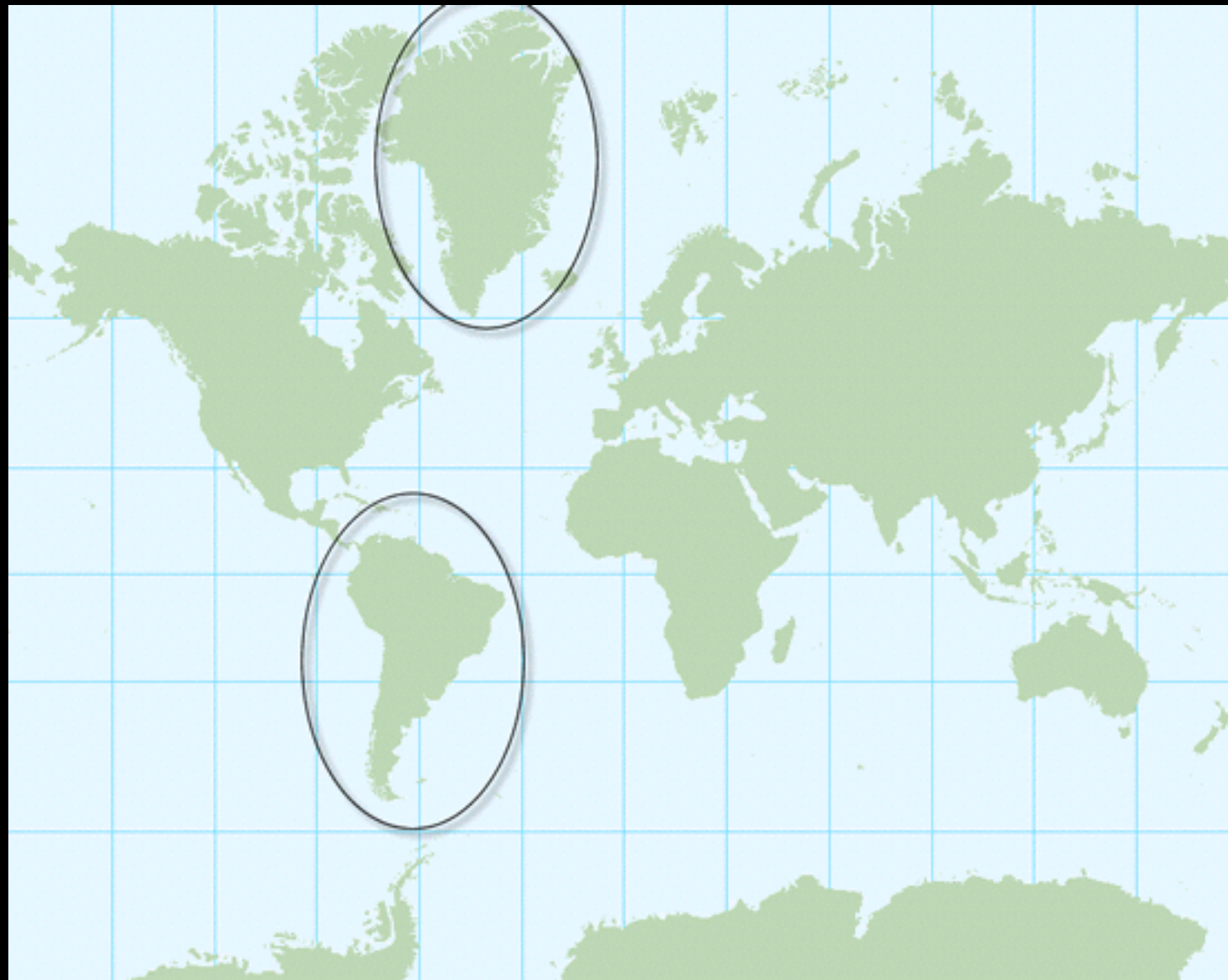
The Great Britain Historical Geographical Information System is a unique digital collection of information about Britain's landscape as they have changed over time. Information comes from census reports, historical gazetteers, travellers' tales and historic maps assembled into a whole that is much more than the sum of its parts. This site tells you more about the project itself and about historical GIS.

A separate website, created by funding from the UK National Lottery and extended and re-launched with funding from the Joint Information Systems Committee, makes this resource available on-line to everyone, presenting our information graphically and cartographically. That site is called *A Vision of Britain through Time* and presents the history of Great Britain through maps. It can be found at www.visionofbritain.org.uk



Projection

- Conformal projection primarily preserves shape;
- Equidistant projection primarily preserves distance;
- Equal-area projection primarily preserves area.

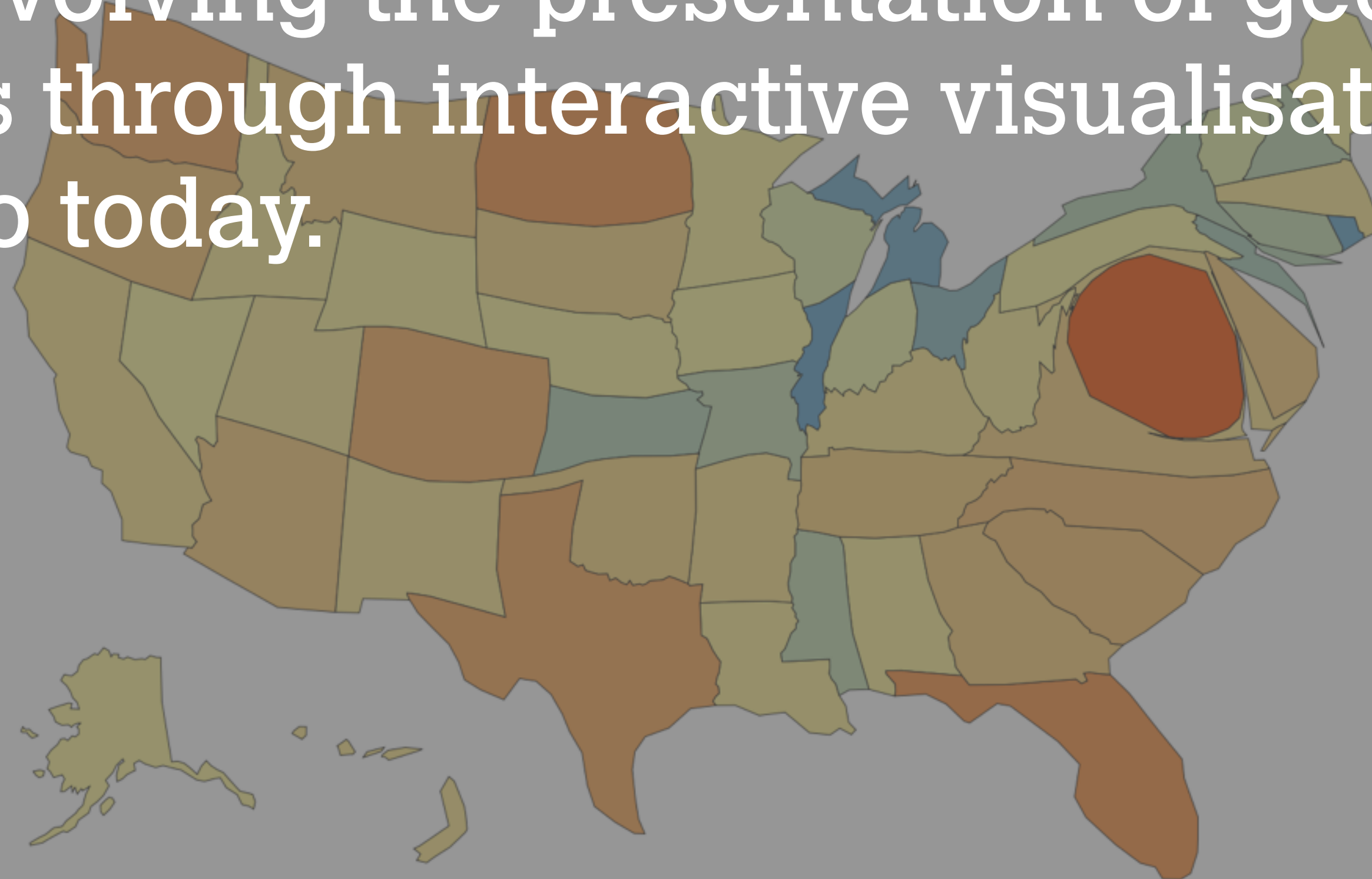


Geovisualisation

- A practice involving the presentation of geographic data and concepts through interactive visualisation.
- It's what we do today.

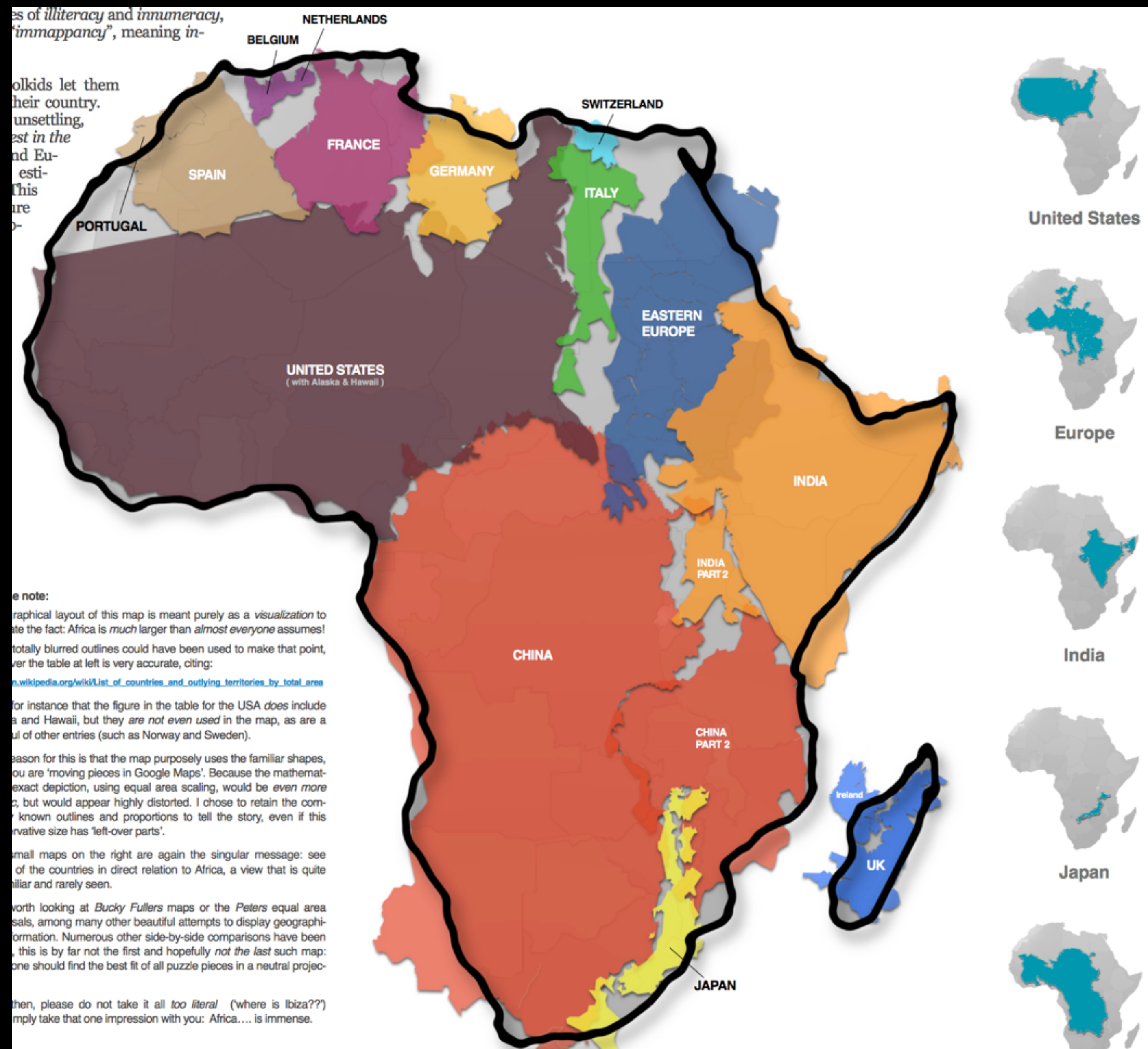
Cartograms with d3 & TopoJSON

Scale 0 in 2011 calculated in 0.1 seconds



About

[cartogram.js](#) is a JavaScript implementation of [an algorithm to construct continuous area cartograms](#), by James A. Dougenik, Nicholas R. Chrisman and Duane R. Niemeyer, ©1985 by the Association of American Geographers. This example combines [TopoJSON](#)-encoded boundaries of the United States from [Natural Earth](#) with [2011 US Census population estimates](#) to size each state proportionally.



Kai Krause

<http://kai.subblue.com/images/True-Size-of-Africa-kk-v3.pdf>

Gazateer (Digital)

- Topographic Dictionary
- Database
- List
- Concordance

GeoNames Home | Postal Codes | Download / Webservice | About

login

BELFAST

United Kingdom

search

show on map

advanced search

55 records found for "BELFAST"

Name	Country	Feature class	Latitude	Longitude
<div>1</div> <div>Belfast</div> <div><div>A vision of Britain between 1801 and 2001.</div><div>BFS,Beal Feirste,Beal Feirshtey,Belfast,Belfast City,Belfasta,Belfastas,Belfasto,Belfastum,Belfast...</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Belfast</div>	seat of a first-order administrative division population 274,770	N 54° 35' 0"	W 5° 56' 0"
<div>2</div> <div>Belfast</div> <div><div>Help using this website</div><div>Beal Feirste,Beal Feirshtey,Belfast,Belfasta,Belfastas,Belfasto,Belfastum,Belfast,Belfāsta,Belpas,...</div></div>	<div>United Kingdom, Northern Ireland</div>	historical first-order administrative division	N 54° 35' 0"	W 5° 57' 0"
<div>3</div> <div>Belfast</div> <div><div>LEFS,Belfast</div><div>Data access</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Belfast</div>	second-order administrative division population 281,700	N 54° 35' 0"	W 5° 55' 0"
<div>4</div> <div>Belfast International Airport</div> <div><div>Aéroport international de Belfast,Aéroport international de Belfast,BFS,Belfast Aldergrove Airport,B...</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Antrim</div>	airport elevation 81m	N 54° 39' 27"	W 6° 12' 57"
<div>5</div> <div>George Best Belfast City Airport</div> <div><div>BHD,Belfast City Airport,EGAC,George Best Belfast City Airport</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Belfast</div>	airport elevation 4m	N 54° 37' 5"	W 5° 52' 21"
<div>6</div> <div>Belfast City Centre</div> <div><div>of historical British travel writing on the</div></div>	<div>United Kingdom, Northern Ireland</div>	populated place	N 54° 35' 46"	W 5° 55' 48"
<div>7</div> <div>QUB</div> <div><div>web. Each author gives a different perspective on</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Belfast</div>	university	N 54° 35' 3"	W 5° 56' 3"
<div>8</div> <div>Botanic Gardens Park</div> <div><div>the towns and villages they visited.</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Belfast</div>	park	N 54° 34' 57"	W 5° 55' 59"
<div>9</div> <div>Belfast Lough</div> <div><div>John Byng — Torrington Diaries</div><div>Belfast Loch,Belfast aintzira,Belfast-Loh,Belfasts'ka zatoka,Loch Lao,Белфаст-Лох,Белфастська затока...</div><div>Thomas Pennant — Chester to London</div></div>	<div>United Kingdom, Northern Ireland</div>	bay	N 54° 43' 1"	W 5° 40' 39"
<div>10</div> <div>Belfast Central railway station</div> <div><div>Belfast Central railway station,Gare de Belfast Central</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Belfast</div>	railroad station	N 54° 35' 42"	W 5° 55' 1"
<div>11</div> <div>Belfast Castle</div> <div><div>Census reports</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Belfast</div>	castle elevation 130m	N 54° 38' 33"	W 5° 56' 31"
<div>12</div> <div>SAP Research UK</div> <div><div>1801 the Census</div><div>Research Center of SAP (UK) Limited,SAP Research,SAP Research Belfast,SAP Research Center Belfast,SA...</div><div>has created a uniquely detailed record of our</div></div>	<div>United Kingdom, Northern Ireland</div> <div>Belfast</div>	scientific research base population 30	N 54° 36' 54"	W 5° 53' 57"
<div>13</div> <div>Belfast Ferry Port</div> <div><div>communities</div></div>	<div>United Kingdom</div>	port	N 54° 37' 43"	W 5° 53' 28"

Intermission

INTERMISSION

Geospatial Standards

- KML
- GeoJSON
- GML
- GeoRSS
- GPX
- Boundary File (shapefile)

Keyhole Markup Language KML

- A language for the visualisation of geographic information
- Placemarks
- Ground Overlays
- Paths
- Polygons
- Styles
- Google Earth
- Can be embedded in TEI



Sample KML

```
<?xml version="1.0" encoding="UTF-8"?>
  <kml xmlns="http://www.opengis.net/kml/2.2">
    <Document>
      <Placemark>
        <name>New York City</name>
        <description>New York City</description>
        <Point>
          <coordinates>-74.006393,40.714172,0</coordinates>
        </Point>
      </Placemark>
    </Document>
  </kml>
```


GeoJSON

- A format for encoding a variety of geographic data structures;
- Unlike the other standards mentioned, GeoJSON is written and maintained by an Internet working group of developers;
- It's Open;
- <http://geojson.org>.

GeoJSON

- Geometry Objects
 - Positions
 - Point/MultiPoint
 - Line/MultiLineString
 - Polygon/MultiPolygon
 - Geometry Collection
- Feature Objects
- Feature Collection Objects
- Lists of geometries are represented by a GeometryCollection.
- Geometries with additional properties are Feature objects.
- Lists of features are represented by a FeatureCollection.

GeoJSON Example

```
{ "type": "GeometryCollection",  
  "geometries": [  
    { "type": "Point",  
      "coordinates": [100.0, 0.0]  
    },  
    { "type": "LineString",  
      "coordinates": [ [101.0, 0.0], [102.0, 1.0] ]  
    }  
  ]  
}
```


Geography Markup Language GML

- Adopted by the Open Geospatial Consortium (OGC)
- Can be embedded in TEI

GML

- Feature
- Geometry
- Coordinate Reference System
- Topology
- Time
- Dynamic feature Coverage
- Unit of measure
- Directions
- Observations
- Map presentation styling rules

GML Example

```
<PhotoCollection xmlns="http://www.myphotos.org" xmlns:gml="http://www.opengis.net/gml"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.myphotos.org
  MyGoodPhotos.xsd">
  <items>
    <Item>
      <name>Lynn Valley</name>
      <description>A shot of the falls from the suspension bridge</description>
      <where>North Vancouver</where>
      <position>
        <gml:Point srsDimension="2" srsName="http://www.opengis.net/def/crs/EPSG/0/4326">
          <gml:pos>49.40 -123.26</gml:pos>
        </gml:Point>
      </position>
    </Item>
  </items>
</PhotoCollection>
```


What Sort of Packages Use Geo Standards

- [OpenLayers](#);
- [Leaflet](#);
- [MapServer](#);
- [Geoforge](#);
- [GeoServer](#);
- [GeoDjango](#);
- [CartoDB](#)
- UMap;
- Google Maps.

Place and the TEI

- Guidelines found in 13.2.3 Place Names and 13.3.4 Places in P5
- First concerns naming of place (duh!) and the second the locating of the place in space (a little more complex)
- Placename
 - <placeName @type/> or <geogName @type/>
- Place
 - <place><placeName @type><location><geo/></location></place></place>

Place Naming

- **placeName** contains an absolute or relative place name to a geo-political reference.
- **<placeName/ @key>**

▸ eg.

```
<placeName key="FO-01">  
  <settlement type=""town">OFFOY  
  </settlement>  
  <country type="nation">France  
  </country>  
</placeName>
```

<placeName/>

@key

@type

district

settlement

region

country

bloc

Hands On

Steps

1. Collect Data
2. Georeference
3. Geoparse
4. Transform
5. Map
6. Munge
7. Analyse
8. Present
9. Refine

Experiment 1

- Question: Where do you all come from??
- I have a list
- I added cities to it
- Cities Geoparsed in GPS Visualizer
- Export as CSV
- Import to UMap
- Embed in Blog
- Prettify

Step 1 - Acquire Data

	A	B	C	D	E	F	G	H	I	J
1	Event Name	URL	Order ID	Date	First Name	Surname	En	Hometown		
2	How to Put Your Data on the	http://digitalbedouin.com/ICI	395268890	06/02/15	Sally	Gillespie	sg	Belfast, Northern Ireland		
3	How to Put Your Data on the	http://digitalbedouin.com/ICI	394953665	05/02/15	Elodie	Fabre	e.t	Dublin, Ireland		
4	How to Put Your Data on the	http://digitalbedouin.com/ICI	394666344	04/02/15	Aglaia	De Angeli	A.	Londonderry, Northern Ireland		
5	How to Put Your Data on the	http://digitalbedouin.com/ICI	394656084	04/02/15	Tobias	Polzer	t.p	Newry, Northern Ireland		
6	How to Put Your Data on the	http://digitalbedouin.com/ICI	393435306	30/01/15	Ida Milne	Milne	mi	Portadown, Northern Ireland		
7	How to Put Your Data on the	http://digitalbedouin.com/ICI	393434709	30/01/15	Louise	Canavan	lca	Belfast, Northern Ireland		
8	How to Put Your Data on the	http://digitalbedouin.com/ICI	393380676	30/01/15	DOMINIQUE	JEANNEROD	d.j	Tramore, Ireland		
9	How to Put Your Data on the	http://digitalbedouin.com/ICI	393125363	29/01/15	Maryline	David	m	Omagh, Northern Ireland		
10	How to Put Your Data on the	http://digitalbedouin.com/ICI	392479962	27/01/15	Michael	McKenna	m	Tyrone, Northern Ireland		
11	How to Put Your Data on the	http://digitalbedouin.com/ICI	391652952	23/01/15	Andrea	McCartney	an	Dublin, Ireland		
12	How to Put Your Data on the	http://digitalbedouin.com/ICI	390755702	20/01/15	Joanne	Burns	jbi	Cork, Ireland		
13	How to Put Your Data on the	http://digitalbedouin.com/ICI	390754754	20/01/15	Paulina	Wilson	int	Galway, Ireland		
14	How to Put Your Data on the	http://digitalbedouin.com/ICI	389953312	16/01/15	AIDEN	O'Donovan	od	Bangor, Northern Ireland		
15	How to Put Your Data on the	http://digitalbedouin.com/ICI	389156219	13/01/15	Kirsty	McConnell	kir	Belfast, Northern Ireland		
16	How to Put Your Data on the	http://digitalbedouin.com/ICI	388845581	12/01/15	Marcas	Mac Coinnigh	m.	Stranorlar, Ireland		
17										
18										

Step 2: Geoparsing

GPS Visualizer

[MAKE A MAP](#)

- Google Maps
- Google Earth
- JPG/PNG/SVG

[MAKE A PROFILE](#)[CONVERT A FILE](#)[Draw on a map](#)[Calculators](#)

[Geocode addresses](#)[Look up elevations](#)[GPSBabel](#)[Atlas: Share a map](#)

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GPS Visualizer's Address Locator

Convert multiple addresses to GPS coordinates

NOTE: You'll need to get your own free API key to process a large number of addresses using this page. (Get a key: [Bing](#), [MapQuest](#), [Google](#))

Input:

Dublin, Ireland
Cork, Ireland
Galway, Ireland
Bangor, Northern Ireland
Belfast, Northern Ireland
Stranorlar, Ireland

Type of data: raw list, 1 address per line
Source: Bing Maps
Field separator in output: comma (,)
Add a color:
☒ Include source+precision info in output
Your Bing Maps API key (why?): AjGnzbf130ccSXG8dcoHidHtwou5IvZ2tn_IicKG0nWvajdG: [Get a key]

Start geocoding

Results as text: (15 of 15 lines processed)

latitude	longitude	name	desc	color	source	precision
54.5965004	-5.9558802	Belfast	"Belfast, Belfast City, United Kingdom"	„Bing		
52.1602097	-7.1503	Tramore	"Tramore, Ireland"	„Bing Maps	city/town	
54.1885986	-6.3608899	Newry	"Newry, Newry and Mourne, United Kingdom"			
54.4255486	-6.4384699	Portadown	"Portadown, Craigavon, United Kingdom"			
55.0320015	-7.2925701	Londonderry	"Londonderry, Derry City, United Kingdom"			
55.7179108	-131.8591766	Port Stewart	"Port Stewart, AK"	„Bing Maps	Bay	
55.2060013	-6.5250902	Bushmills	"Bushmills, Moyle, United Kingdom"	„Bing		

[Draw a map](#)

output format:
KML (G. Earth)

[\[more map options\]](#)[Create a GPX file](#)

[clear results box](#)


What this page is for

To use this free utility, simply enter addresses in the box to the left, one per line, and click "Start geocoding" to find their latitude and longitude. If your data is in a tabular format with a descriptive header at the top of each column, choose "tabular" for type of data (and make sure the headers make sense!). If you have a raw jumble of address data, that's okay too; choose "raw list mode," but be aware that everything should at least look like an address, and any non-address data such as names, descriptions, or other fields might confuse things.

You can choose from three different sources of coordinates: [Bing Maps](#), [MapQuest Open](#), or [Google](#). Each has their pros and cons, but **none of them is guaranteed to be 100% correct -- use them at your own risk!**

Also note that if you try to geocode thousands of addresses, you will probably end up with blank results after a while, because the provider will decide that you're trying to process too many addresses in a short time. If that happens, it's a sign that you should be looking into commercial geocoding services. (Or at least break your data into smaller batches.)

Step 3: Import to UMap




Log in / Sign inAboutFeedback


Create a map

Search maps


Search



uMap let you create maps with OpenStreetMap layers in a minute and embed them in your site.



- ✓ Choose the layers of your map
- ✓ Add POIs: markers, lines, polygons...
- ✓ Manage POIs colours and icons
- ✓ Manage map options: display a minimap, locate user on load...
- ✓ Batch import geostructured data (geojson, gpx, kml, osm...)
- ✓ Choose the license for your data
- ✓ Embed and share your map





And it's open source!

Create a map

Play with the demo

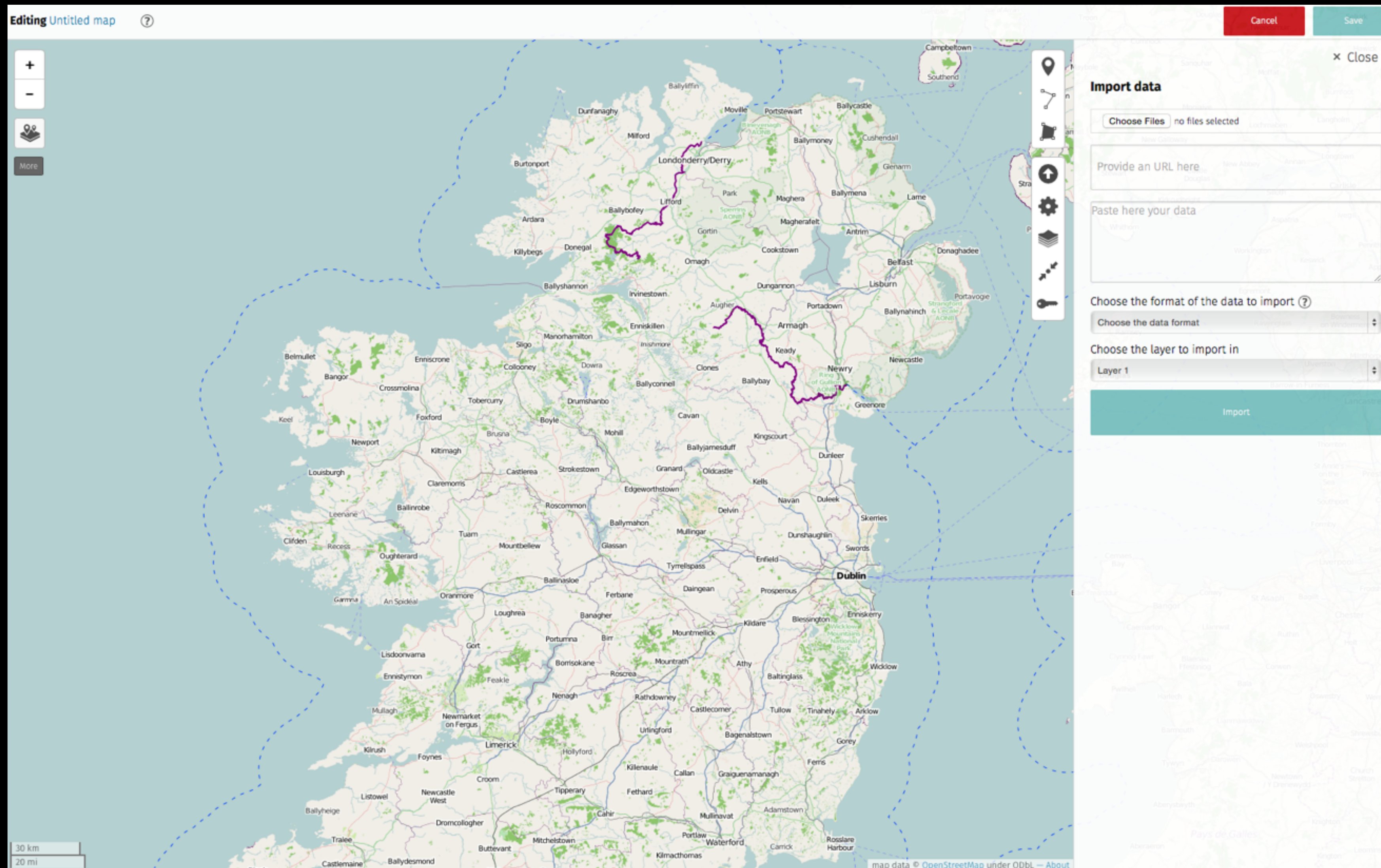
MAP OF THE UMAPS





Queen's University
Belfast

Step 3.1: Create a New Layer



Step 3.2: Add Today's Attendees

Editing Untitled map ?

+

-

More

Cancel

Save

Close

Import data

Choose Files

mapping.csv

Provide an URL here

Paste here your data

Choose the format of the data to import ?

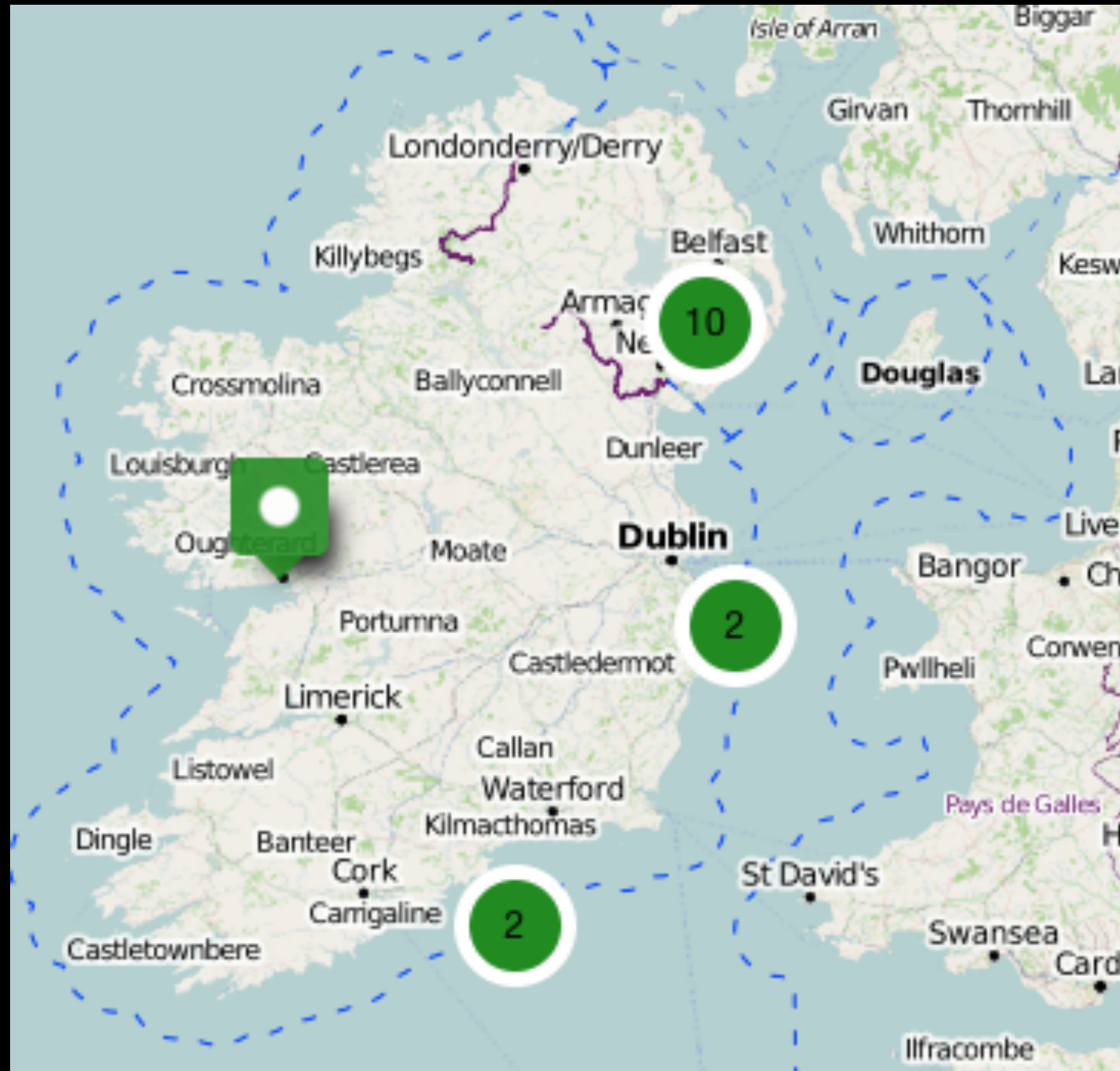
CSV

Choose the layer to import in

Import in a new layer

Import

Step 3.3: Adjust Properties



Step 3.4: Add a Line/Journey

Editing QUBDH Workshops ?

+

-

Layer 1

Mapping Your Data Workshop

Journey to the Workshop

Browse data

Add a layer

Less

Home

Refresh

Search

Layers

Full Screen

Print

30 km

20 mi

map data © OpenStreetMap contributors

© 2019

Close

name

Journey to the Workshop

description ?

The facilitator's journey

Type of layer

Default

Display on load

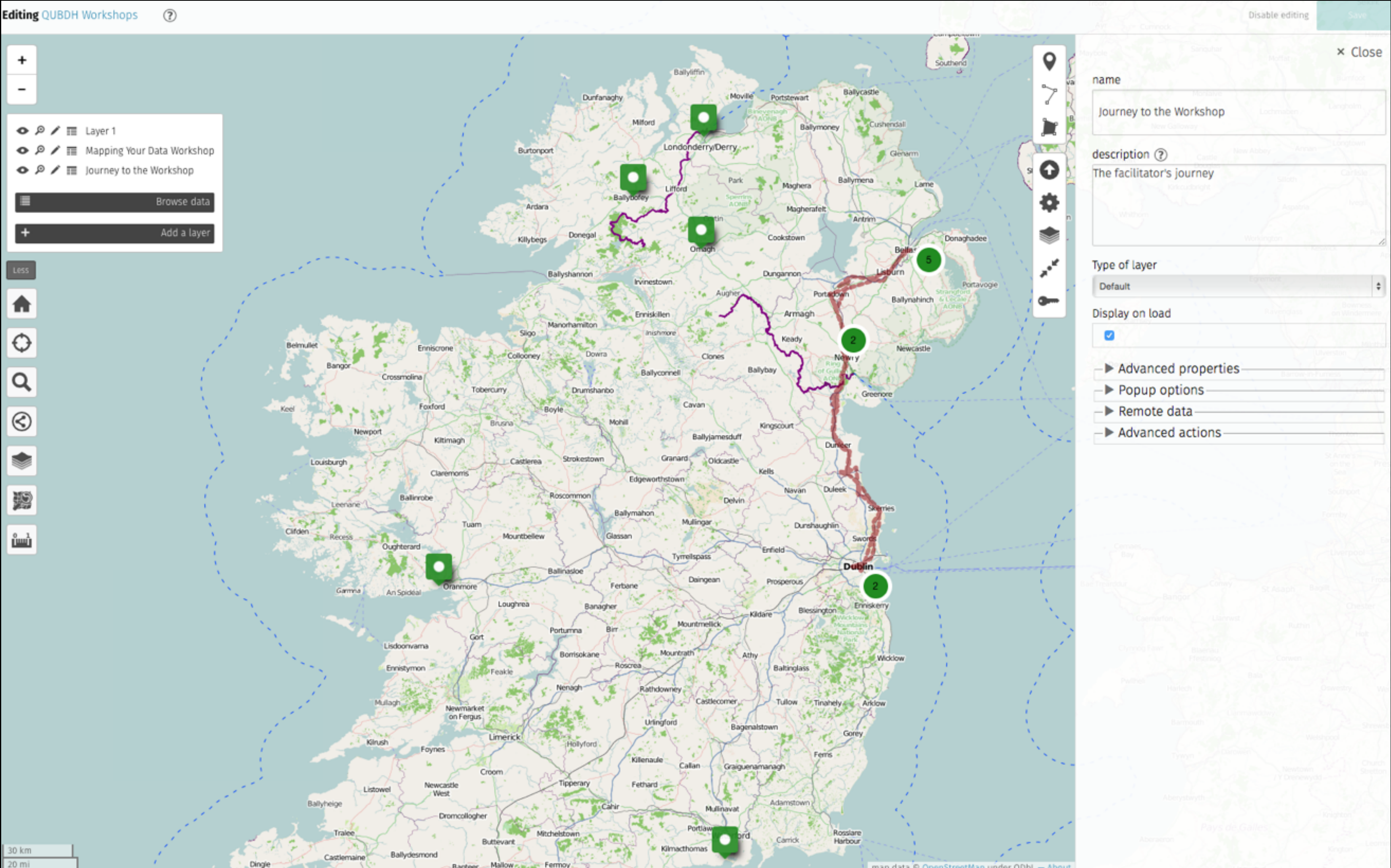
☒


Advanced properties

Popup options

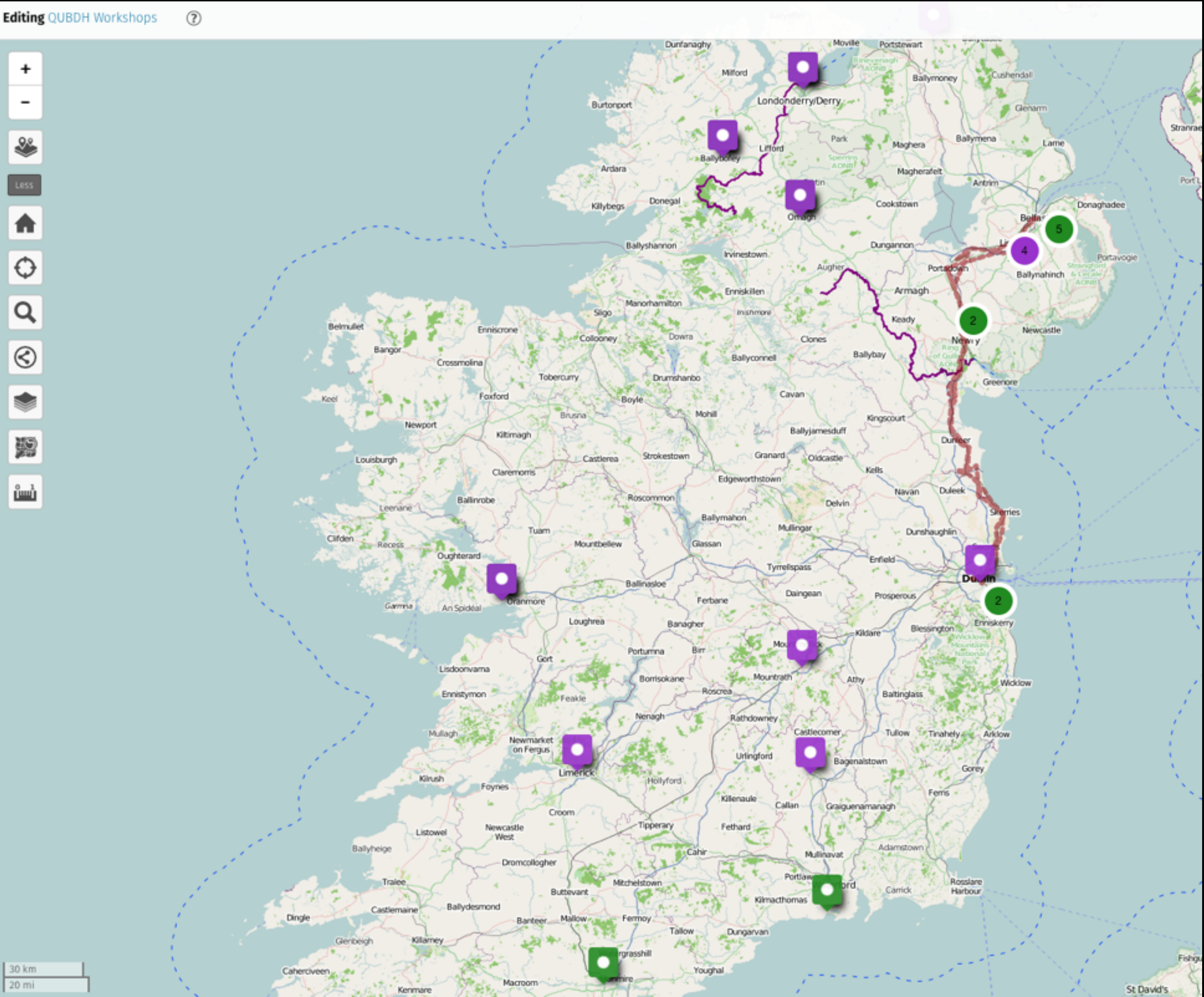
Remote data

Advanced actions

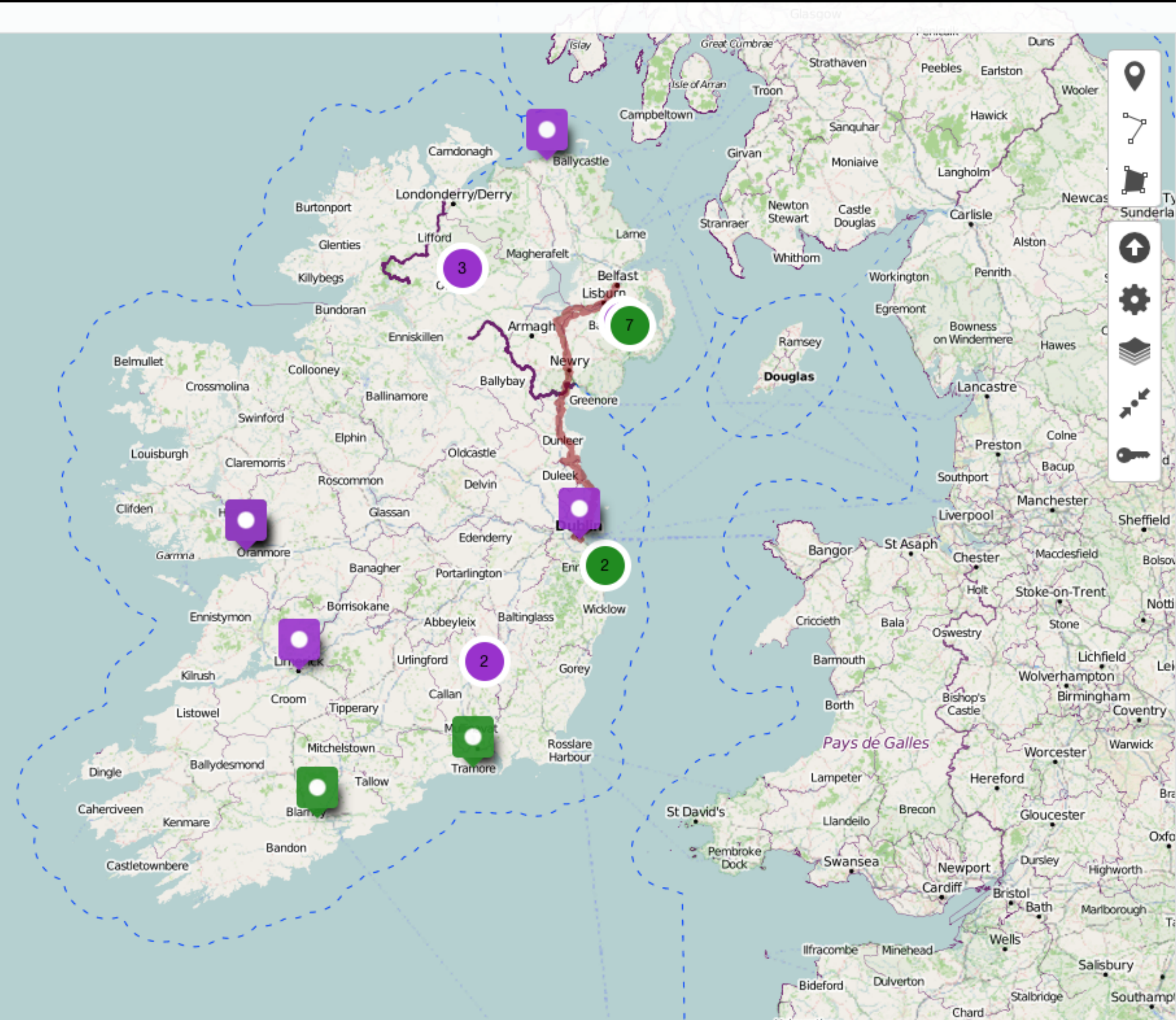


 Queen's University
Belfast

Step 3.5: Who Came to the Last Workshop?



Step 4: Share the Map



×

Close

Embed the map

<iframe width="100%" height="300px" frameborder="0" src="https://umap.openstreetmap.fr/en/map/untitled-map_29048?scaleControl=false&miniMap=false&scrollWheelZoom=false&zoomControl=true&allowEdit=false&moreControl=true" data-bbox="535 320 725 415">

▼ Iframe export options

width

100%

height

300px

☒

Include full screen link?

☐

Current view instead of default map view?

☐

Keep current visible layers

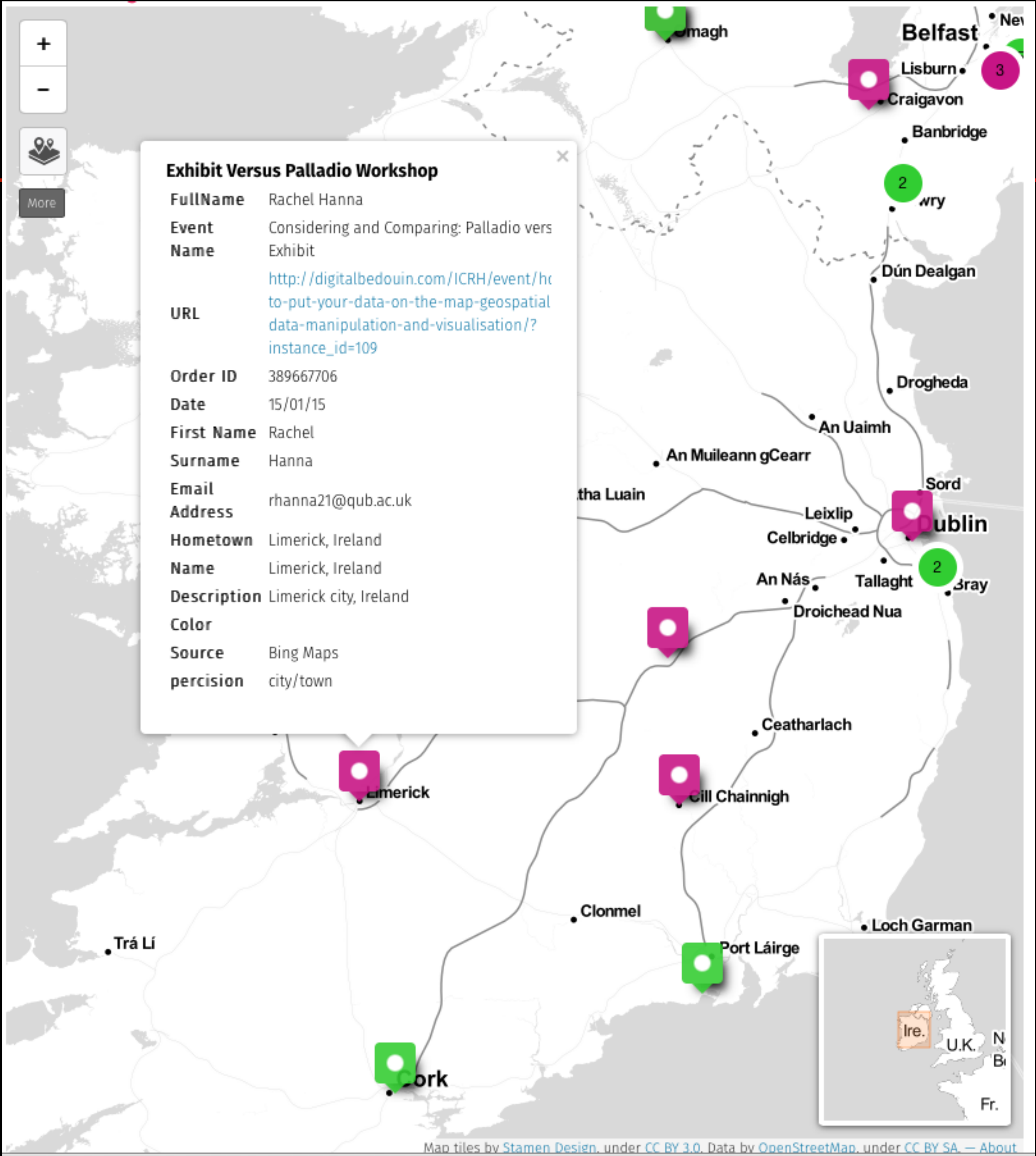
☒

Do you want to display the «more» control?

☒

Do you want to display the data layers control?

Step 5 Prettify



-
- ▶ <http://umap.openstreetmap.fr/en/map/anonymous-edit/28857%3AZ9AgUoghX7FeLbOWS3Ya-mWKcyE>

A Real An Intriguing UMap Example

The image displays a UMap interface. The main map shows a section of Paris with several red location pins. Each pin is accompanied by a label indicating a specific location, such as "09 - Rue Puget - Rue Lepic", "06 - Rue des Martyrs", "13 - Porte du Pré-Saint-Gervais", "03 - Rue d'Aboukir", "11 - Esplanade des Invalides", "07 - Rue du Pas-de-la-Mule", "15 - Rue de Bièvre", "18 - Boulevard Beaumarchais", "19 - Rue du Pot-de-Fer", "04 - Port d'Austerlitz", and "16 - Avenue des Gobelins". The map also shows surrounding areas like Saint-Denis, Bondy, Vanves, and Champigny-sur-Marne.

The sidebar on the right provides detailed information for the selected location, "16 - Avenue des Gobelins". It includes a photo of the cinema's exterior with movie posters, a description of its history, and a list of films shown there. The sidebar also features a "See all" link and a "Close" button.

16 - Avenue des Gobelins

On trouve tout sur le Web, y compris un site spécialisé sur les salles de cinéma.

Il nous explique que ce cinéma sur l'avenue des Gobelins (ex-Pathé, aujourd'hui UGC) a vu le jour vers 1907-1908. On pouvait y voir des films muets dans une salle de 500 places. Au milieu des années 60, le cinéma est devenu « Telstar » avant d'être repris par UGC en 1976, qui l'a morcelé en quatre salles.

A l'affiche en 1918, des films tirés des feuilletons littéraires de l'époque, mais aussi « un grand drame populaire » : du théâtre, donc. « Les Deux Gosses » est une pièce de Pierre Decourcelle, faisant couler « des torrents de larmes » depuis la fin du XIXe siècle dans différentes salles parisiennes. Jacques Tourneur en tirera un film cinq ans plus tard.

UMap


- Help and More Info
 - <http://umap.openstreetmap.fr>
 - http://wiki.openstreetmap.org/wiki/UMap#Feedback_and_help

Digital Objects on the Map

SIR ROBERT HART

1835 - 1911

赫德



Queens University Belfast

We are exceptional

Search

Ireland and the Colonies

Display Case

Sir Robert Hart Exhibition

Contact

Sir Robert Hart 1835 - 1911

Introduction

Early Life in Ireland

Career

Family Life

Hart through Time

Lifestyle

Rebellion in Peking

Retirement


Associated Collections

Samples from the Hart Collection

About the Hart Collection MS15

Map

MAP




Map Satellite

Map data ©2015 Google, INEGI Terms of Use

[← About the Hart Collection MS15](#)

Map




Queen's University
Belfast

Experiment 2

- Where Do I Find Belfast and Dublin?
- Use Edina UnLock to query Gazateers
- Generate a Datafile
- Inspect
- Place onto UMap
- Break into Layers
- Adjust Properties
- Capture for Sharing

Step 1: Using a Digital Gazetteer



Questions?Project BlogContact Us

HomeUnlock PlacesUnlock Text

Home > Unlock Places > Getting Started

Introduction

Getting Started

API Documentation

Example Queries

Code Samples

Data Sources

Users

Getting Started

Searching

Use the web service link, or [Unlock Places API](#), to search for a placename like this:

```
http://unlock.edina.ac.uk/ws/search?name=London&format=json
```

This shows results for places named (or containing) "London". By default, up to 20 results are shown. You can get more by adding, for example, `&maxRows=100` to the end of the link.

You can see the results in different formats with the `format` parameter; use:

- `format=kml` to see KML for import into Google Earth,
- `format=json` for the Javascript Object Notation useful in web apps,
- `format=txt` for a comma-separated values file,
- `format=xml`, which is the default option.

A sample feature from the results of a search for "London" in JSON format look like this:

```
{  "type": "Feature",  "id": "4568139",  "bbox": [-0.08855726569890976, 51.51305389404297,    -0.08945558220148087, 51.51361846923828],  "properties": {    "name": "City of London",    "country": "United Kingdom",    "featuretype": "third-order administrative division",    "custodian": "GeoNames",    "gazetteer": "GeoNames",    "footprint": "http://unlock.edina.ac.uk/ws/footprintLookup?format=json&identifier=4568139"  },}
```

The `bbox` is the *bounding box*, a rough location for the place.

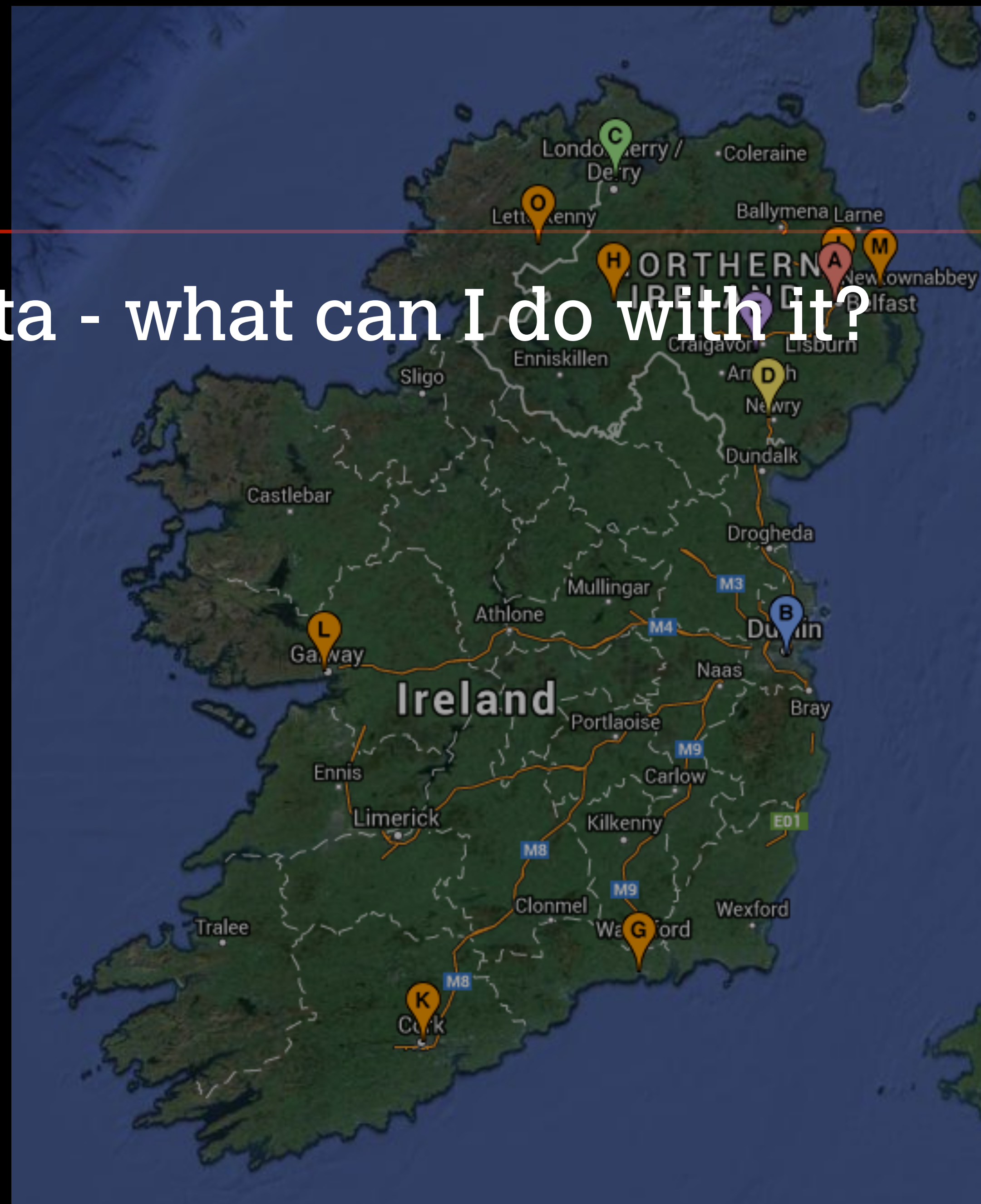
The `footprint` link may give a more detailed shape for the place-name. Some of our data sources only have points for places (like geonames.org); others have (*generalised*, or smoothed out) shapes for places (countries, regions in Natural Earth).

You can put a *bounding box* round your search and only show things that are *inside* it, or overlap with it. This is a search for places named London but only *within* an area around London, England:

```
{  "type": "FeatureCollection",  "features": [    {      "type": "Feature",      "id": "4568138",      "bbox": [-0.12883, 51.50051, -0.12883, 51.50051],      "properties": {        "name": "London",        "sourceid": "2643743",        "country": "United Kingdom",        "countrycode": "GB",        "adminlevel1": "England",        "adminlevel2": "Greater London",        "adminlevel3": "",        "adminlevel4": "",        "featuretype": "Capital of a Political Entity",        "unlockFeatureCode": "GN.PPPLC",        "custodian": "GeoNames",        "gazetteer": "GeoNames",        "scale": "unknown",        "centroid": "-0.12883, 51.50051",        "population": "7556900",        "altidentifiers": [9654368, 9679],        "footprint": "http://unlock.edina.ac.uk/ws/footprintLookup?format=json&identifier=4568138"      }    },    {      "type": "Feature",      "id": "4753",      "bbox": [0.34303968256350553, 51.27823964309304, -0.5145139108357116, 51.697124957394415],      "properties": {        "name": "London Euro Region",        "sourceid": "41428",        "country": "United Kingdom",        "countrycode": "GB",
```



Experiment 3

- I already have data - what can I do with it?
- batchgeo.com?



Just One More ... Experiment 4

DH@The Library



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You are here: [Home](#) > [Resources](#) > [Visualisation](#) > Irish Health Centres

UPCOMING EVENTS

JAN

25

Mon

11:00 How to Put Your Data on the Map:... @ Training Room 2

FEB

12

Fri

10:30 Requirements Engineering for Hum... @ Training Room 2

MAR

4

Fri

10:00 Constructing Digital Exhibitions... @ Training Room 2

APR

18

Mon

11:00 Relationship Mapping: Visual Net... @ Training Auditorium

APR

29

Fri

11:00 Using Google Tools for Digital S... @ Training Room 2


[Add](#)

[View Calendar](#)

ABOUT

Shawn Day is the Queen's University Digital Humanities Coordinator. He offers workshops and consultations on behalf of Special Collections, the Library and in support of the Institute for Collaborative Research in the Humanities.

Tweets



QUB DH
@QUBDH

Research Impact Through Social Media
[digitalbedouin.com/ICRH/research-...](#)

53m

[Follow](#)

SHAWNDAY

25 NOVEMBER 2015

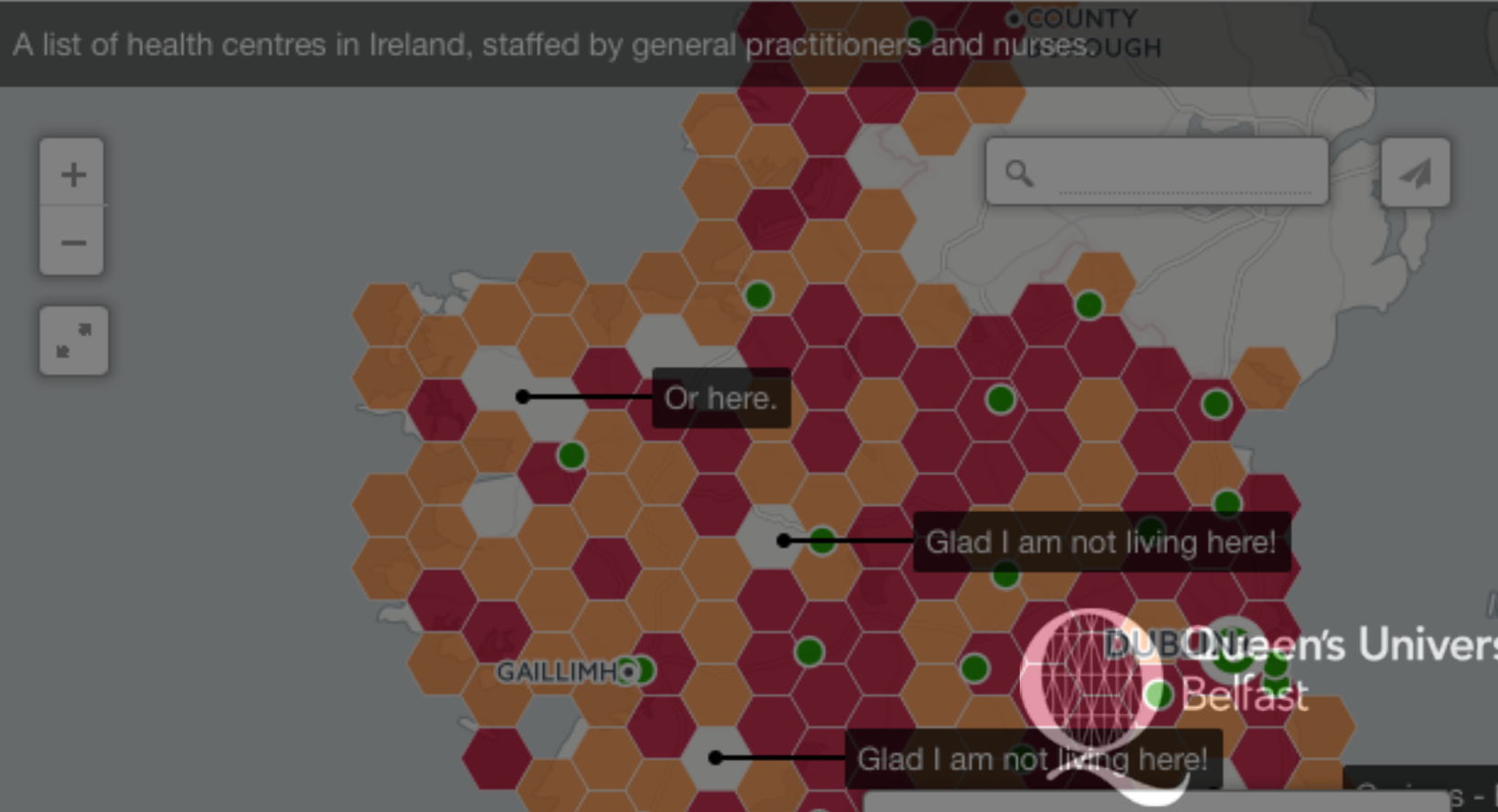
Irish Health Centres

The HSE posted two new datasets to Open Data Ireland and I wanted to determine how quickly and effectively these might be visualised. In this case I used CartoDB and created a hexagonal data map. Interesting. A few immediate findings. Why Hexagons? ... It all goes back to the most recent UK general election – I tweeted that it seemed to be the election where the hexagon became de riguer – where all the mainstream media outlets were suddenly seized with the novelty pf the hexagon. In seriousness, it raised an interest in exploring the usefulness of the hexagon as a datavis tool. What does it afford? Seemingly a unique middle ground between pure cartesian spatiality and useful tesseract chart. It may well be rather subjective, but this exercise did yield some substantiation.

The process for this one is simple: download the CSV file from [data.gov.ie](#), do a wee bit of kludging and send the resulting dataset to [CartoDB](#). CDB requires a little twerking, but it is nicely GUI driven wizardry and the result can be inserted into your sharing venue of choice. In this case, a quick burn on the [QUBDH](#) blog.

Are hexagons a useful visualisation tool for you?

A list of health centres in Ireland, staffed by general practitioners and nurses



Summarising

- Hopefully it seems easier now than it may have at the outset
- It's not automatic
- Tools works together
- Data Sharing
- Sustainability
- Ease of Use
- Extensibility
- Applicability

Upcoming Seminars

- 12 February - Requirements Engineering for Humanities/
Social Science Scholars
- 4 March - Digital Narratives Using Omeka
- 18 April - Visual Network Analysis for Humanities
Scholarship
- 29 April - Using Google Tools for Digital Humanities
Scholarship

Thanks

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<http://qubdh.co.uk>