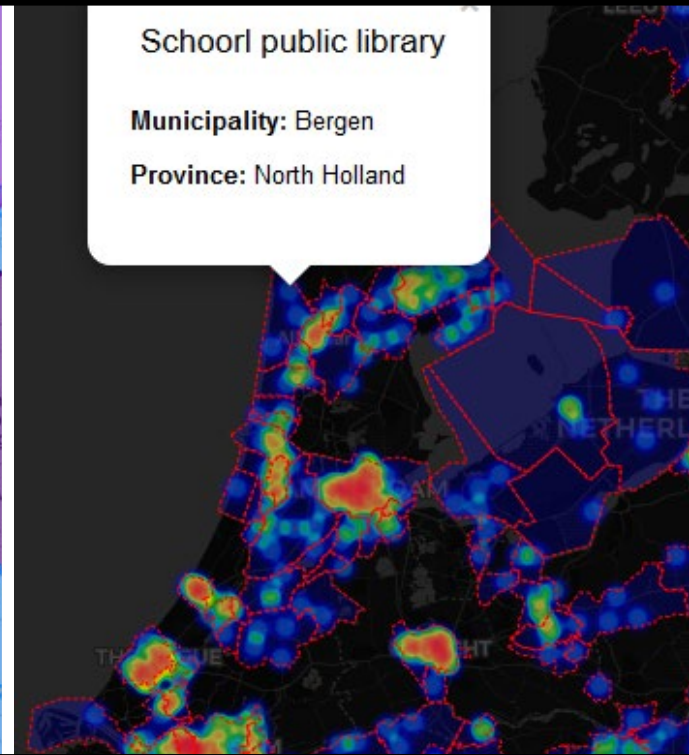
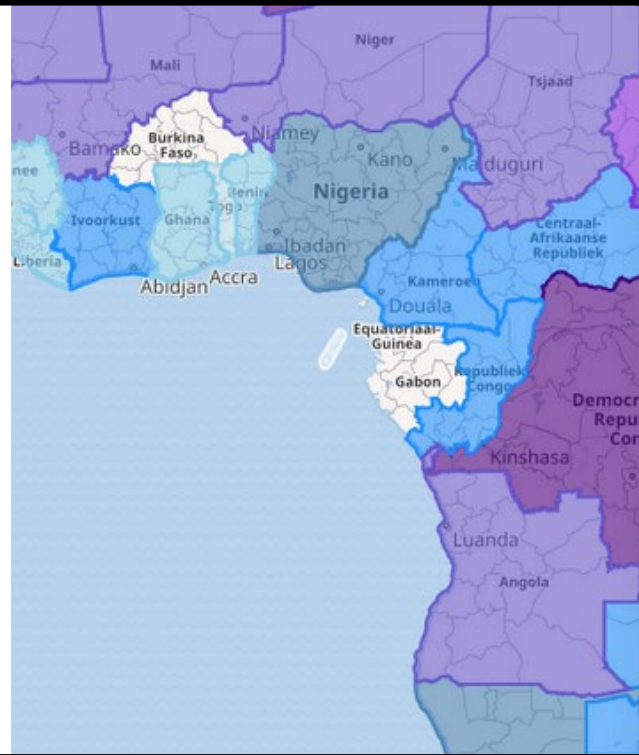


Map making workshop

from Wikidata to interactive off-Wiki maps in three steps



Wiki Techstorm, Amsterdam, Sat 23 November 2019

Olaf Janssen, National Library of the Netherlands

User:OlafJanssen // olaf.janssen@kb.nl // @ookgezellig

KB } nationale
bibliotheek



- <https://phabricator.wikimedia.org/T236041>
- https://www.mediawiki.org/wiki/Wiki_Techstorm/Programme/Creating_maps

! Map making workshop – from Wikidata to interactive off-Wiki maps in three steps (9.00-10.30)

Open, High









Public

Description

See the full explanation & detailed workshop outline on

- <https://github.com/ookgezellig/WikidataMapMakingWorkshop>
- <https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md>

And see https://www.mediawiki.org/wiki/Wiki_Techstorm/Programme/Creating_maps

-  Edit Task
-  Edit Related Tasks...
-  Edit Related Objects...
-  Automatically Subscribed
-  Mute Notifications
-  Protect as security issue
-  Award Token
-  Flag For Later

ookgezellig / WikidataMapMakingWorkshop

Unwatch 2 Star 2 Fork

Code Issues 0 Pull requests 0 Actions Projects 0 Wiki Security Insights Settings

Branch: master WikidataMapMakingWorkshop / README.md Find file

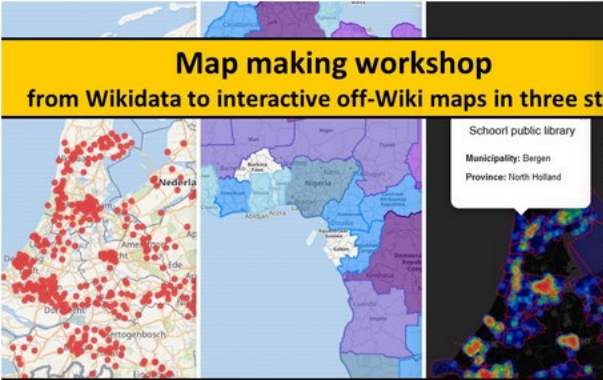
ookgezellig Update README.md 218ad46

1 contributor

74 lines (51 sloc) 7.39 KB Raw Blame History

Map making workshop – from Wiki maps to interactive off-Wiki maps in three steps

Latest update: 21 November 2019



Map making workshop
from Wikidata to interactive off-Wiki maps in three steps

Schoorl public library
Municipality: Bergen
Province: North Holland

Conference, Location, Date
Olaf Janssen, National Library of the Netherlands
User:OlafJanssen // olaf.janssen@kb.nl // @ookgezellig

KB } nationale bibliotheek

Workshop description

In this 90-120 minutes workshop you will learn how to make both flat, clustered, layered, embedded, interactive, on-Wiki and off-Wiki maps from sets of geo-referenced (P625) items in Wikidata.

You will do this in 3 modules of approx. 30-40 minutes each:

- **Module 1:** You will start by making various basic [flat](#) and [clustered maps](#) in Wikidata using SPARQL queries. Next you will make some [layered maps](#), where groups of items can be toggled on/off in the map.
- **Module 2:** After having explored maps in the Wikidata query interface, you are now ready to learn how to embed Wikidata-driven maps in other Wikimedia projects, such as Wikipedia and Commons ([examples](#)). In addition to SPARQL we will look at [OpenStreetMap](#), [GeoJSON](#) and the Mediawiki [Kartographer extension](#).
- **Module 3:** Finally you will learn the steps for creating interactive, layered Wikidata-driven maps that can be used off-Wiki, ie. in regular HTML pages. In addition to the above tools & techniques, we will use some basic Python, [Jupyter Notebooks \(RAW\)](#), [Jupyter Leaflet](#) and [Jupyter widgets](#).

See the [full outline of the workshop](#) for a more detailed description.

Intended audiences

While this workshop is tech-focused and will discuss basic Wikidata, Wikipedia and Wikimedia Commons techniques and programming tools, it is meant to be approachable by beginning Wikidata contributors and programmers. The [workshop leader](#), by no means an advanced Python programmer nor Wikidata nor SPARQL guru himself, is providing examples and code snippets that you can easily adapt yourself with basic SPARQL, Wikidata and Python skills, to make them work for your own datasets.

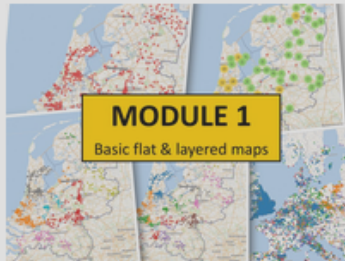
As the workshop is comprised of three 30-40 minute modules, you can decide to skip the modules that you find too advanced (or basic) for your individual knowledge level.

Full workshop outline & notes

Workshop outline and notes

Latest update: 21 November 2019

Module 1: Basic flat & layered maps



Prerequisites for this Module

- [Wikimedia account](#)
- Working knowledge of [Wikidata](#)
- Basic understanding of [SPARQL](#) and the [Wikidata Query Service \(WDQS\)](#)
- A Wikidata set of items with geo coordinates [P625](#)

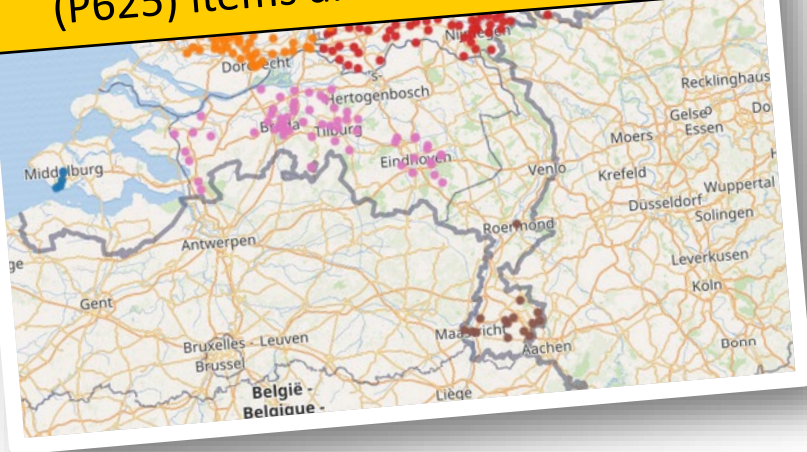
If you do not have, or cannot create such a Wikidata set, you can use one of these:

1. [Public libraries in The Netherlands](#)

<https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md>

Learning objectives

Module 1, basic: Understand steps to make **basic flat and layered maps** in Wikidata, based on geo referenced (P625) items and SPARQL queries

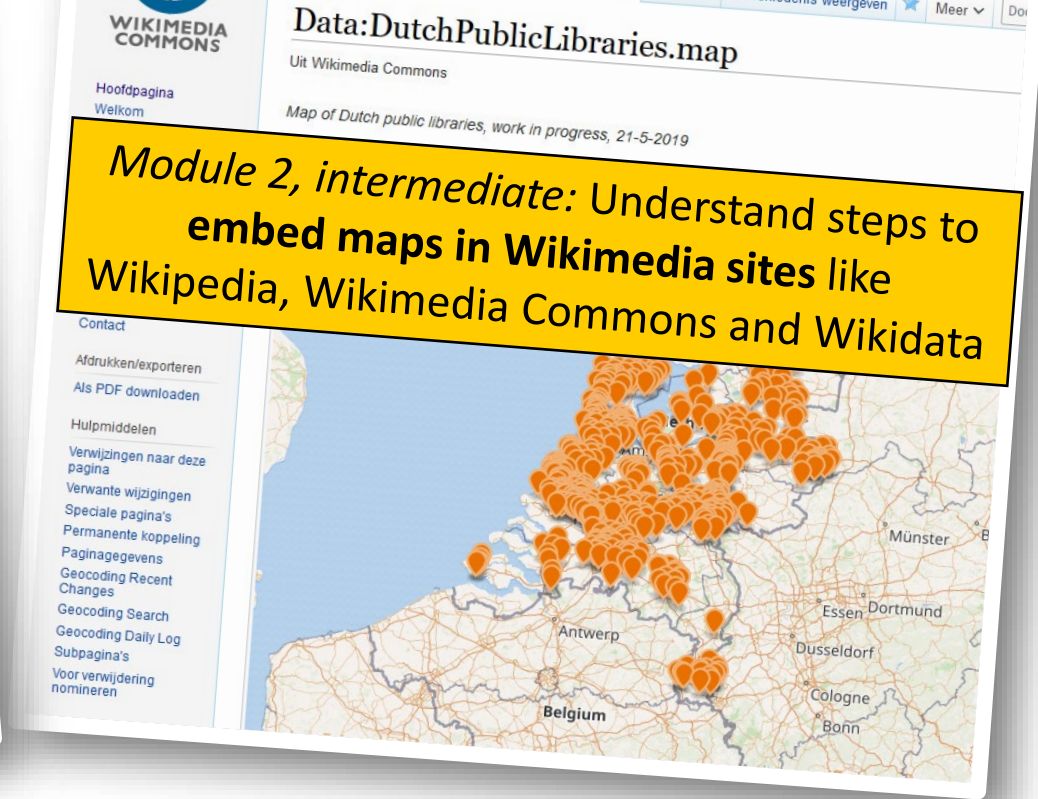


Learning objectives

Module 1, basic: Understand steps to make **basic flat and layered maps** in Wikidata, based on geo referenced (P625) items and SPARQL queries



Module 2, intermediate: Understand steps to **embed maps in Wikimedia sites** like Wikipedia, Wikimedia Commons and Wikidata

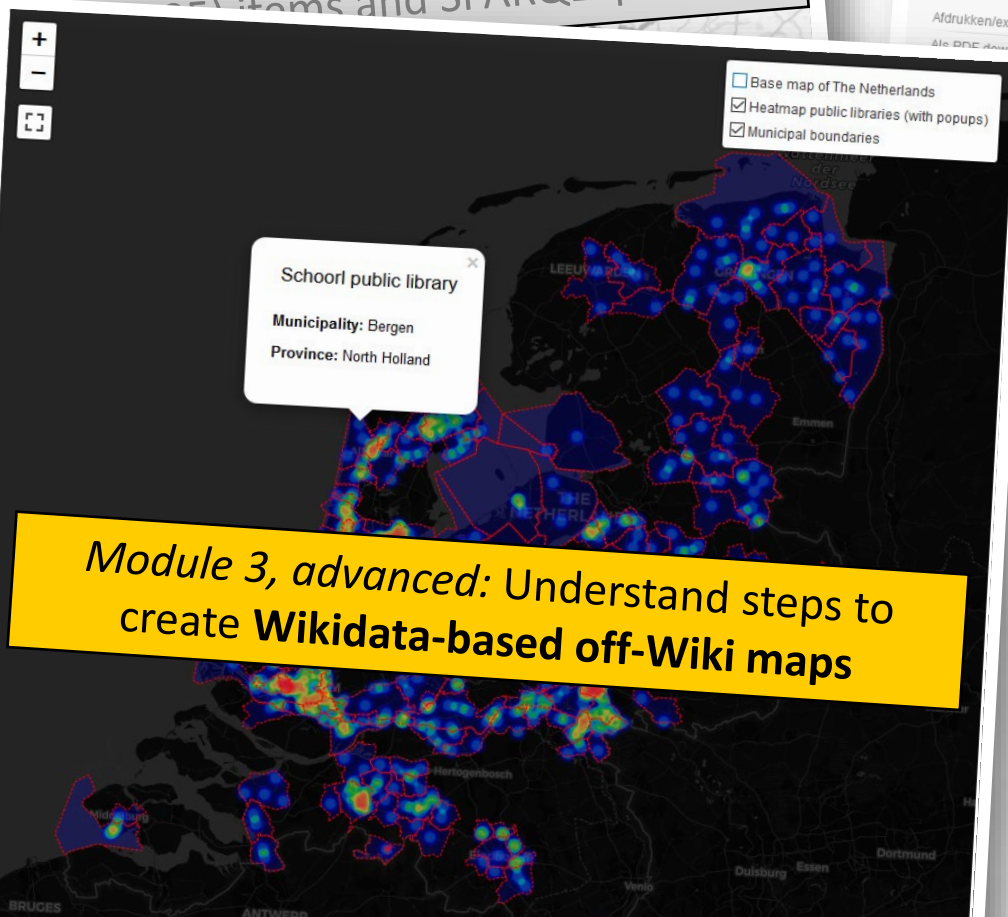


Learning objectives

Module 1, basic: Understand steps to make **basic flat and layered maps** in Wikidata, based on geo referenced items and SPARQL queries

Module 2, intermediate: Understand steps to **embed maps in Wikimedia sites** like Wikipedia, Wikimedia Commons and Wikidata

Module 3, advanced: Understand steps to create **Wikidata-based off-Wiki maps**



Learning objectives

Module 1, basic: Understand steps to make **basic flat and layered maps** in Wikidata, based on geo referenced items and SPARQL queries

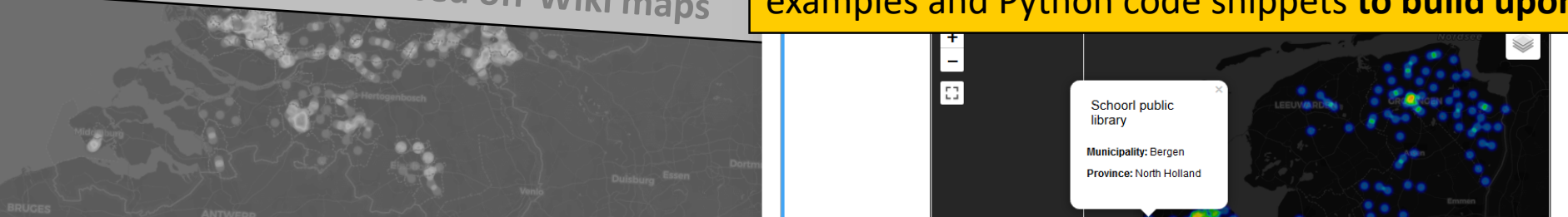
Module 2, intermediate: Understand steps to **embed maps in Wikimedia sites** like Wikipedia, Wikimedia Commons and Wikidata

Module 3, advanced: Understand steps to create **Wikidata-based off-Wiki maps**

Access to map making resources, SPARQL examples and Python code snippets to build upon



```
PAWS WikidataMapMakingWorkshop Last Checkpoint: één uur geleden (autosaved)
File Edit View Insert Cell Kernel Widgets Help
+ - Run Code
2
3 # First, we start with a simple basemap of The Netherlands
4 basemap=basemaps.Esri.WorldTopoMap
5 default_layer = basemap_to_tiles(basemap)
6 default_layer.name='Base map of The Netherlands'
7
8 # Overview of more basemaps: https://leaflet-extras.github.io/leaflet-providers/preview/ +
9 # https://github.com/jupyter-widgets/ipyleaflet/blob/master/ipyleaflet/basemaps.py
10
11 # Set initial center and zoom level of basemap
12 map_center=(52.088889, 5.33) #Utrecht city
13 map_zoom=8
14
15 # Set layout of map
16 map_layout = {
17     'width': '800px',
18     'height': '900px',
19     'border': '1px solid black',
20     'padding': '1px',
21     'margin': '10 auto 0 auto'
```



Tips & tricks welcome!

I'm not a maps / Wikidata / SPARQL
guru....





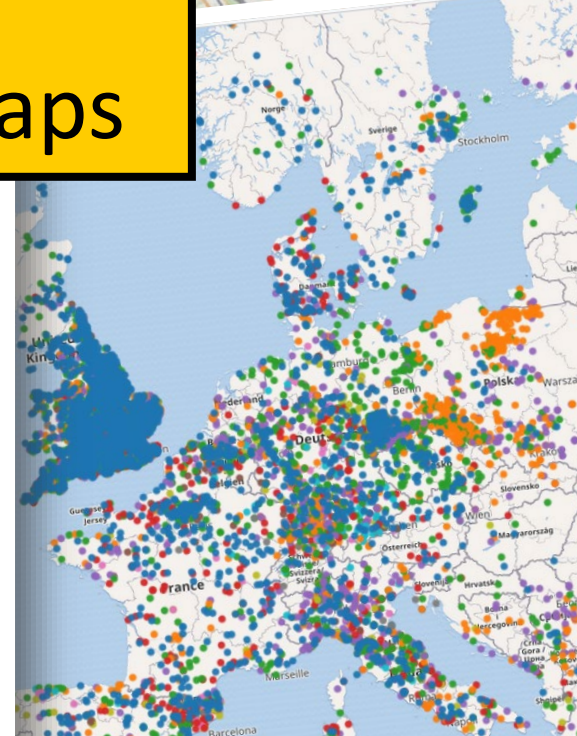
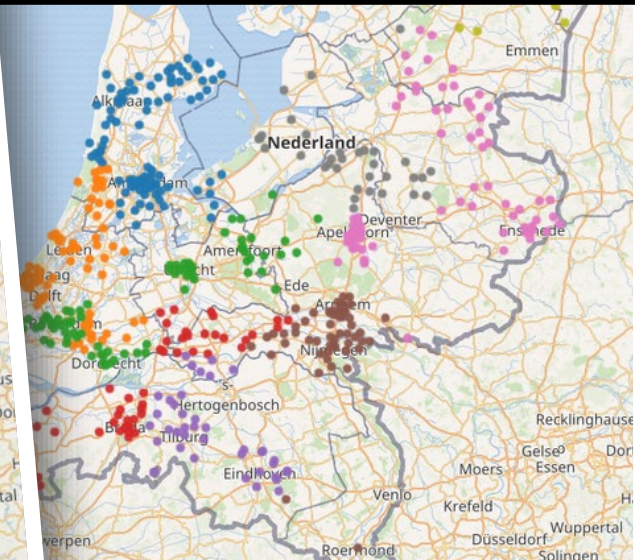
3 MODULES

- 1) Basic flat & layered maps
- 2) Embedded maps in Wikimedia projects
- 3) Interactive, layered off-Wiki maps driven by Wikidata



MODULE 1

Basic flat & layered maps





For this Module, you will need

- Wikimedia account
- Working knowledge of Wikidata...
- ... and SPARQL
- A Wikidata set of items with geo coordinates (**P625**)....



coordinate location (P625)

geocoordinates of the subject. For Earth, please note that only WGS84 coordinating system is supported at the moment

[coordinates](#) | [co-ordinate location](#) | [co-ordinates](#) | [coords](#) | [co-ords](#) | [geographic coordinate](#) | [gps coordinate](#) | [gps co-ordinate](#) | [gps coordinates](#) | [gps co-ordinates](#) | [gps location](#) | [geotag](#) | [wgs 84](#) | [wgs-84](#) | [wgs84](#) | [position](#) | [longitude](#) | [latitude](#) | [gps](#) | [coordinate location](#) | [geographical coordinates](#) | [geo](#) | [location](#) | [point on a map](#) | [point on the globe](#) | [point on earth](#) | [location on earth](#) | [geolocation](#) | [geocoordinates](#) | [Location on map](#)



▼ In more languages

Language	Label	Description	Also known as
English	coordinate location	geocoordinates of the subject. For Earth, please note that only WGS84 coordinating system is supported at the moment	coordinates co-ordinate location co-ordinates coords co-ords geographic coordinate gps coordinate gps co-ordinate gps coordinates gps co-ordinates gps location geotag wgs 84 wgs-84 wgs84 position longitude latitude gps coordinate location geographical coordinates geo location point on a map point on the globe point on earth location on earth geolocation geocoordinates Location on map
German	geographische Koordinaten	Koordinaten eines sich auf der Erde befindlichen Objekts, momentan werden nur WGS84-basierte Koordinaten unterstützt	Koordinate geografische Koordinate Koordinaten

P625

<https://www.wikidata.org/wiki/Property:P625>

Amsterdam

wd:Q9899

+ add value

coordinate location

 edit

P625



52°22'N, 4°53'E

Point(4.883333,52.366667)

+ add value

office held by head of government



Mayor of Amsterdam

 edit

▼ 0 references

+ add reference

+ add value

head of government



Femke Halsema


 edit

start time

12 July 2018

end time

no value



**Time to create
your own P625 dataset**

sapling

If you don't have a Wikidata P625 set

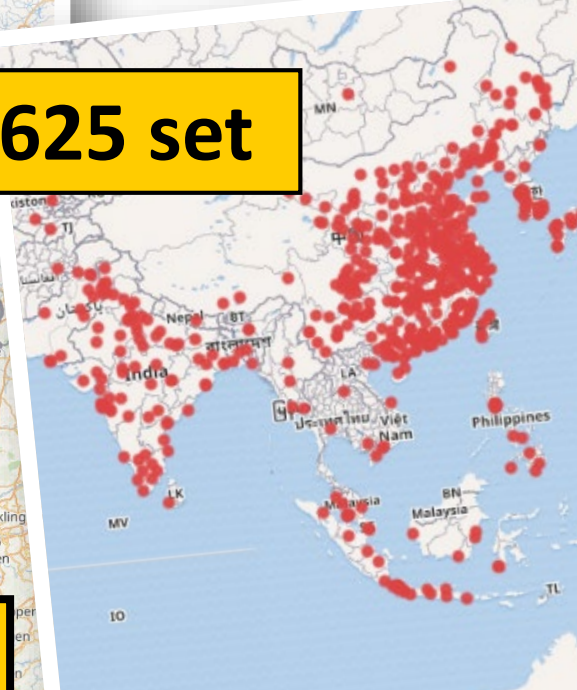


*Public libraries in
The Netherlands*
<https://w.wiki/6dx>

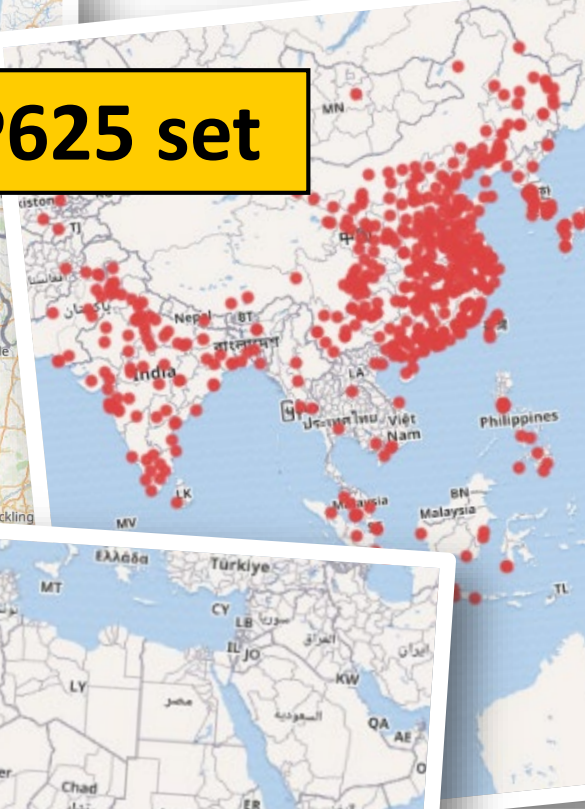
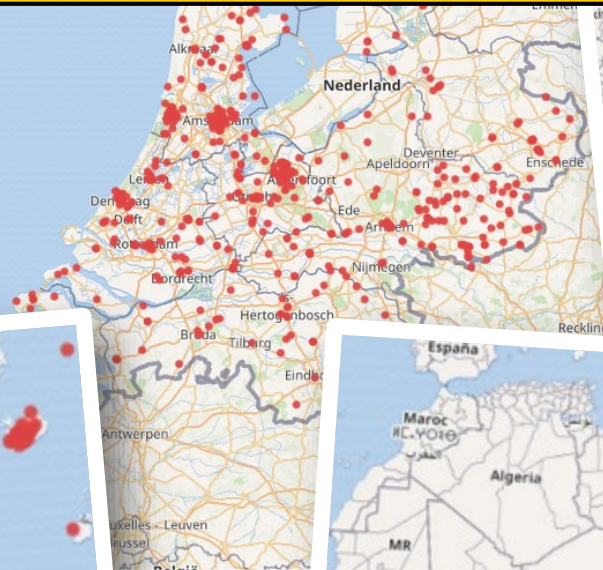
Dutch national heritage sites
<https://w.wiki/6dy>



Big cities
<https://w.wiki/Aa9>



If you don't have a Wikidata P625 set

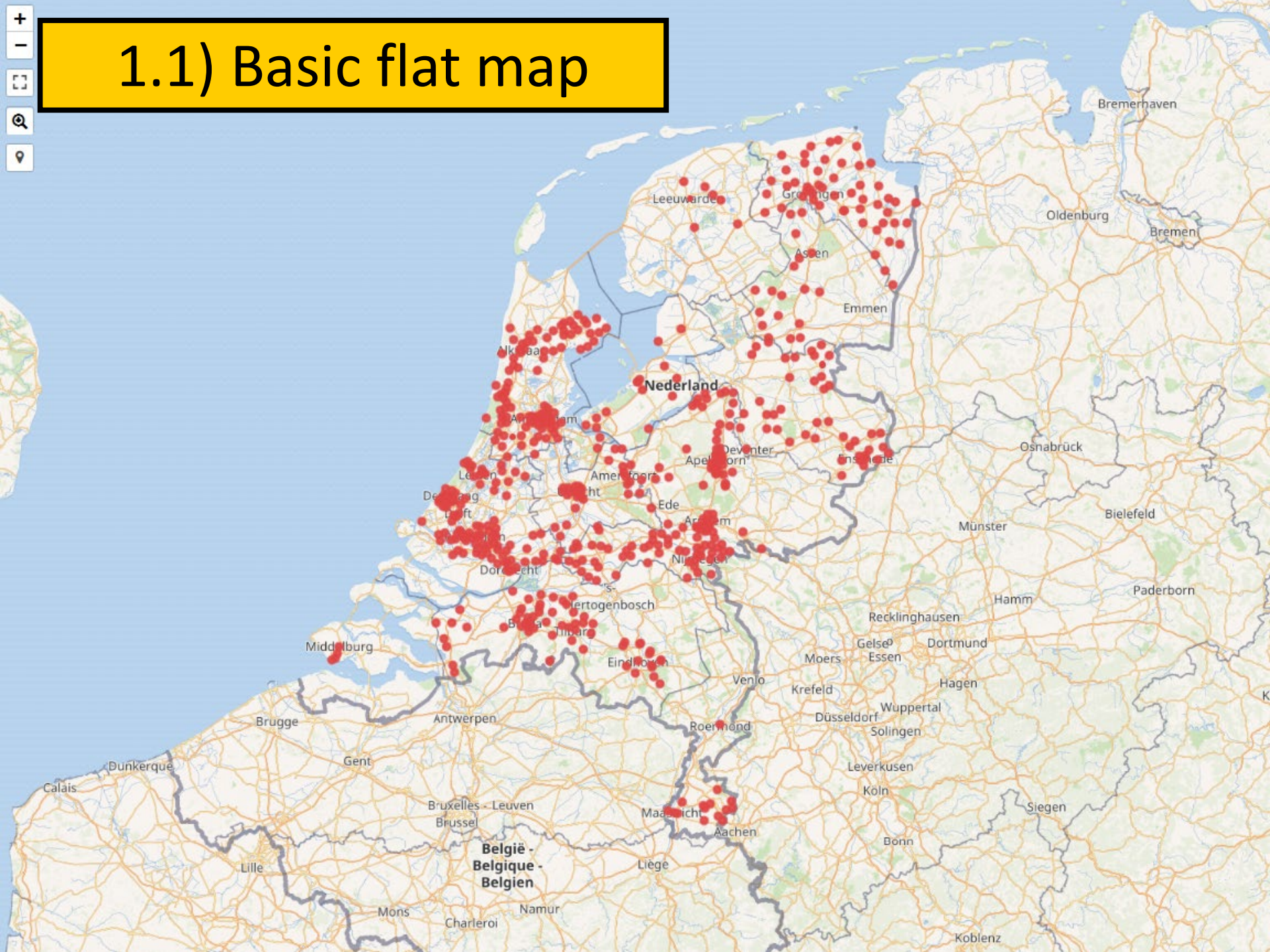


Volcanos of the world
<https://w.wiki/6e9>



Airports around equator
<https://w.wiki/6eB>

1.1) Basic flat map





Wikidata Query Service

Voorbeelden

Hulp

Meer hulpmiddelen



1 #All public library branches of the Netherlands

2



3 **SELECT DISTINCT** ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage **WHERE** {

4 #Is Dutch public library branch



5 ?dpl wdt:P31 wd:Q28564. #public library

6 ?dpl wdt:P31 wd:Q11396180. #library branch



7 ?dpl wdt:P17 wd:Q55. #in the Netherlands

8



9 ?dpl wdt:P625 ?dplLoc. #Location of the dpl

10



11 **OPTIONAL**{?dpl wdt:P18 ?dplImage} #Image of the dpl

12



13 **SERVICE** wikibase:label {bd:serviceParam wikibase:language "en" .}

14 }



15

16 **ORDER BY** ?dplLabel



Public libraries in The Netherlands

<https://w.wiki/6dx>



533 resultaten in 512 ms



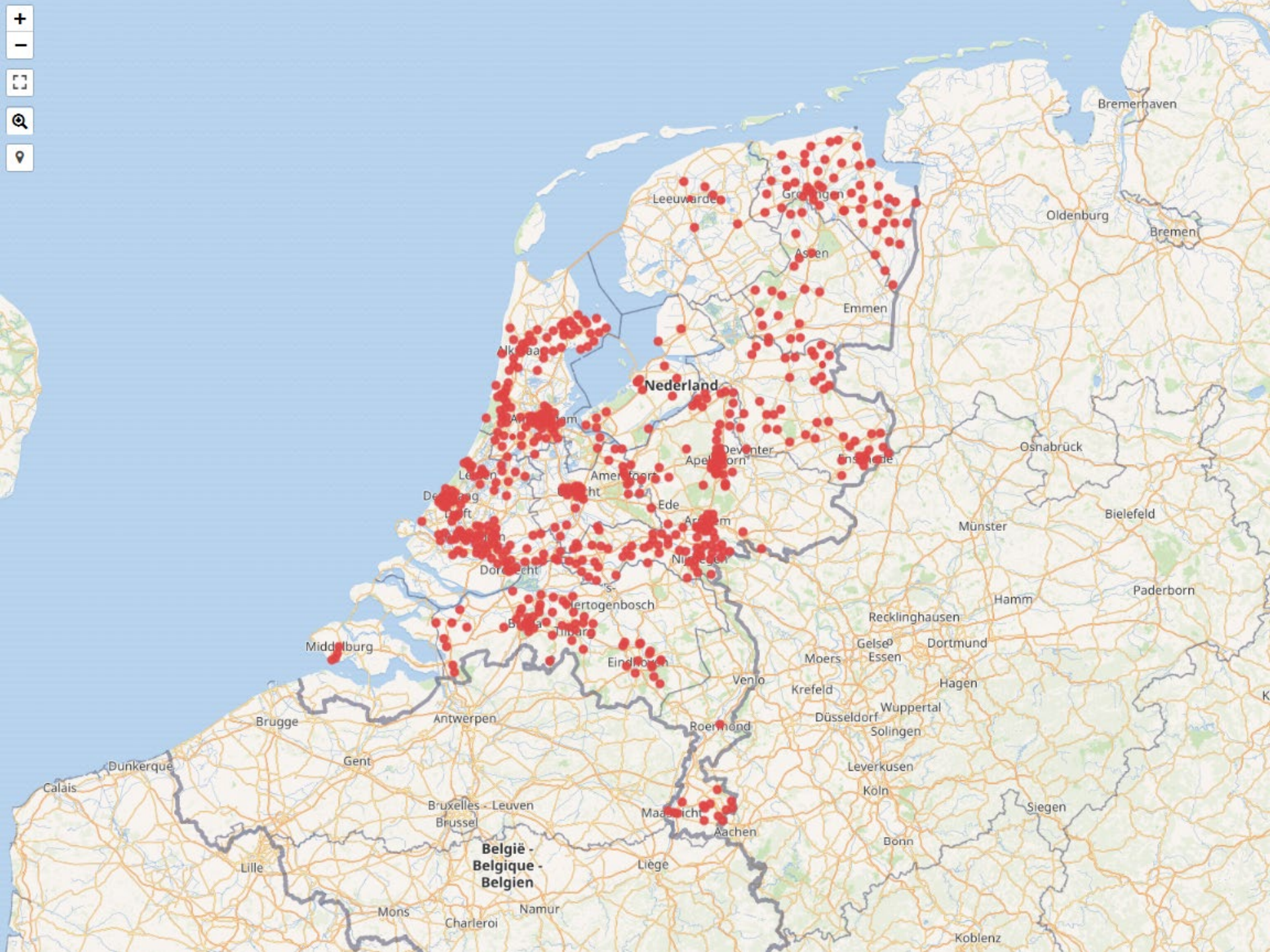
dpl	dplLabel	dplDescription	dplLoc	dplma
wd:Q61785962	's-Heerenberg public library	Public library in s-Heerenberg, municipality of Montferland, The Netherlands	Point(6.2454886 51.8731333)	commons
wd:Q63677419	't Harde public library service point	Public library in the village of 't Harde, The Netherlands	Point(5.877917 52.4172699)	
wd:Q61915721	Aalsmeer public library	Public library in Aalsmeer, The Netherlands	Point(4.7496987 52.2679063)	
wd:Q59772713	Aalst public library	Public library in Aalst, The Netherlands	Point(5.1259789 51.7841643)	
wd:Q60499424	Abbekerk public library	Public library in Abbekerk, municipality of Medemblik, The Netherlands	Point(5.0160659 52.7313345)	
wd:Q63385185	Achternveld public library	Public library in the village of Achternveld, municipality of Leusden, The Netherlands	Point(5.4973655 52.1365067)	
wd:Q60020855	Aduard public library	Public library in Aduard, province of Groningen, The Netherlands	Point(6.4570135 53.2599615)	
wd:Q63890044	Akersloot public library	Public library in Akersloot, The Netherlands	Point(4.7322704 52.5633782)	commons (518264)
wd:Q59871315	Alblasserdam public library	Public library in Alblasserdam, The Netherlands	Point(4.65723 51.86473)	
wd:Q63890048	Alkmaar De Mare public library	Public library in Alkmaar De Mare, The Netherlands	Point(4.7588585 52.6535348)	
wd:Q63890044	Alkmaar Oudorp public library	Public library in the Oudorp neighbourhood in the city of Alkmaar , The Netherlands	Point(4.7657342 52.6340305)	



583 resultaten in 512 ms

- Table
- Image grid
- Graph builder
- Map**
- Line chart
- Bar chart
- Scatter chart
- Area chart
- Bubble chart
- Tree map
- Tree
- Timeline
- Dimensions
- Graph

Label	dplDescription	dplLoc	dplma
s-Heerenberg public library	Public library in s-Heerenberg, municipality of Montferland, The Netherlands	Point(6.2454886 51.8731333)	commons
le public library service point	Public library in the village of 't Harde, The Netherlands	Point(5.877917 52.4172699)	
meer public library	Public library in Aalsmeer, The Netherlands	Point(4.7496987 52.2679063)	
public library	Public library in Aalst, The Netherlands	Point(5.1259789 51.7841643)	
kerk public library	Public library in Abbekerk, municipality of Medemblik, The Netherlands	Point(5.0160659 52.7313345)	
rveld public library	Public library in the village of Achterveld, municipality of Leusden, The Netherlands	Point(5.4973655 52.1365067)	
Aduard public library	Public library in Aduard, province of Groningen, The Netherlands	Point(6.4570135 53.2599615)	
Akersloot public library	Public library in Akersloot, The Netherlands	Point(4.7322704 52.5633782)	commons (518264)
Alblasserdam public library	Public library in Alblasserdam, The Netherlands	Point(4.65723 51.86473)	
Alkmaar De Mare public library	Public library in Alkmaar De Mare, The Netherlands	Point(4.7588585 52.6535348)	
Alkmaar Oudorp public library	Public library in the Oudorp neighbourhood in the city of Alkmaar, The Netherlands	Point(4.7657342 52.6340305)	



Default map view

Wikidata Query Service

Voorbeelden Hulp Meer hulpmiddelen

```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library branch
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
10
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
12
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
14
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
16 }
17
18 ORDER BY ?dplLabel
```

<https://w.wiki/6eq>

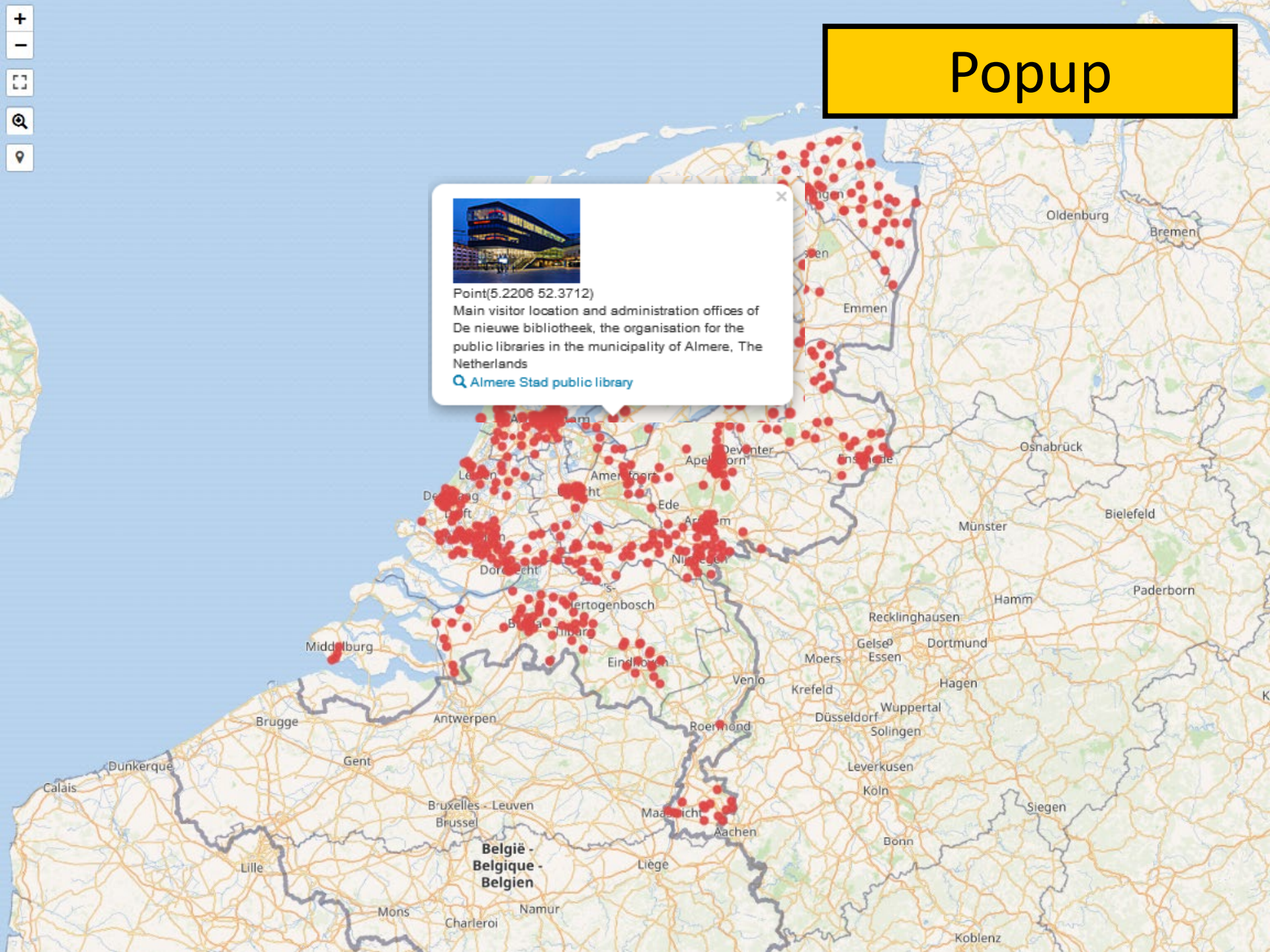
Popup



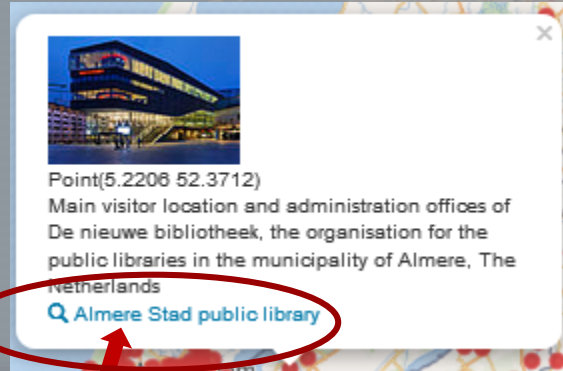
Point(5.2208 52.3712)

Main visitor location and administration offices of De nieuwe bibliotheek, the organisation for the public libraries in the municipality of Almere, The Netherlands

[Almere Stad public library](#)



Relation between query and popup



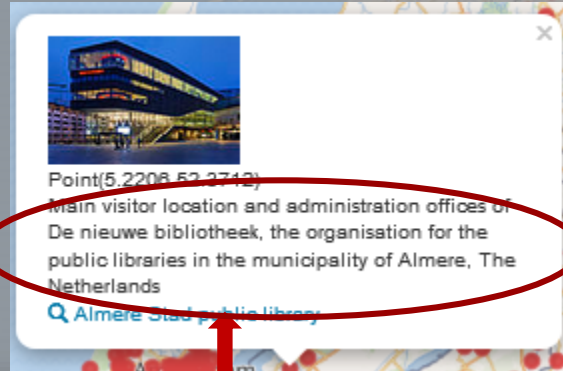
Wikidata Query Service

Volvo beelden Hulp Meer hulpmiddelen

```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library branch
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
10
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
12
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
14
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
16 }
17
18 ORDER BY ?dplLabel
```

<https://w.wiki/6eq>

Relation between query and popup



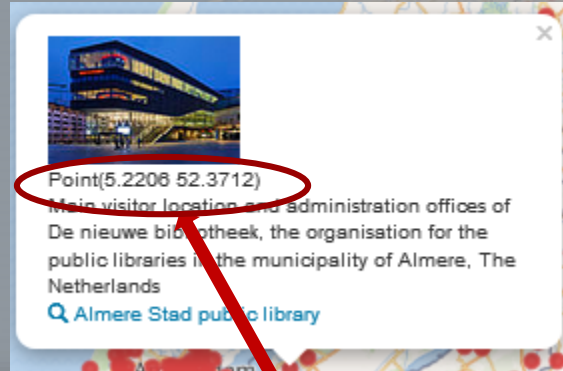
Wikidata Query Service

Voorbeelden Hulp Meer hulpmiddelen

```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library branch
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
10
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
12
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
14
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
16 }
17
18 ORDER BY ?dplLabel
```

<https://w.wiki/6eq>

Relation between query and popup



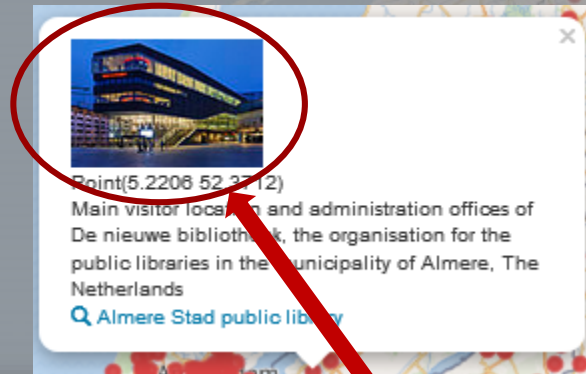
Wikidata Query Service

Voorbeelden Help Meer hulpmiddelen

```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library branch
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
10
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
12
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
14
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
16 }
17
18 ORDER BY ?dplLabel
```

<https://w.wiki/6eq>

Relation between query and popup



Wikidata Query Service

Voorbeelden Hulp Meer hulpmiddelen

```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library branch
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
10
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
12
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
14
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
16 }
17
18 ORDER BY ?dplLabel
```

<https://w.wiki/6eq>

Hiding fields from popup

Hide image and coordinates



Point(5.2208 52.3712)

Main visitor location and administration offices of De nieuwe bibliotheek, the organisation for the public libraries in the municipality of Almere, The Netherlands

[Almere Stad public library](#)



Wikidata Query Service

Voorbeelden

Hulp

Meer hulpmiddelen



```
1 #All public library branches of the Netherlands
```

```
2
```



```
3 #defaultView:Map
```

```
4
```



```
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
```

```
6
```

```
6 #Is Dutch public library branch
```

```
7
```

```
7 ?dpl wdt:P31 wd:Q28564. #public library
```

```
8
```

```
8 ?dpl wdt:P31 wd:Q11396180. #library branch
```

```
9
```

```
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
```

```
10
```



```
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
```

```
12
```



```
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
```

```
14
```



```
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
```

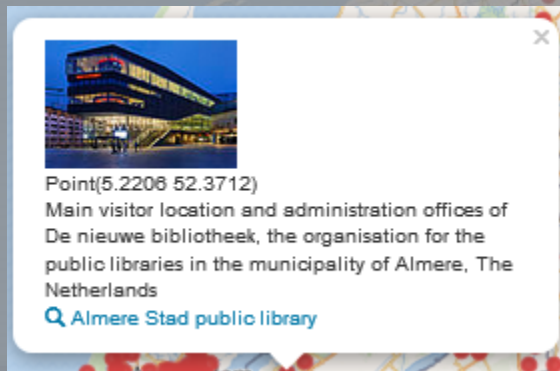
```
16 }
```

```
17
```



```
18 ORDER BY ?dplLabel
```


Hiding fields from popup




Wikidata Query Service

Voorbeelden Hulp Meer hulpmiddelen

```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map{"hide":["?dplLoc", "?dplImage"]}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library branch
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
10
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
12
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
14
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
16 }
17
18 ORDER BY ?dplLabel
```

<https://w.wiki/6mU>

Hiding fields from popup



Main visitor location and administration offices of De nieuwe bibliotheek, the organisation for the public libraries in the municipality of Almere, The Netherlands
[Almere Stad public library](#)

Wikidata Query Service

Voorbeelden

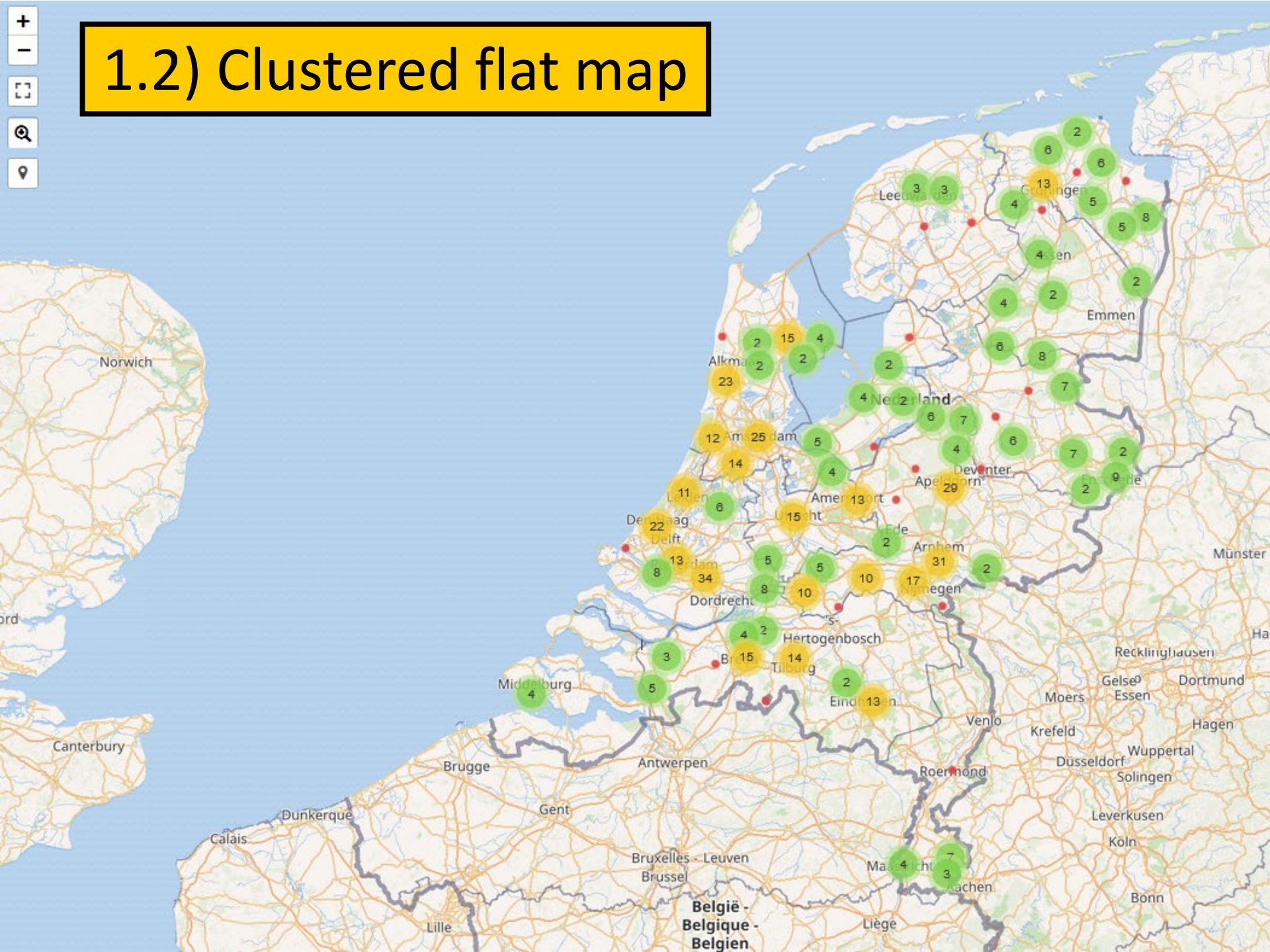
Hulp

Meer hulpmiddelen

```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map{"hide":["?dplLoc", "?dplImage"]}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library branch
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
10
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
12
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
14
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
16 }
17
18 ORDER BY ?dplLabel
```

<https://w.wiki/6mU>

1.2) Clustered flat map





Wikidata Query Service

Voorbeelden

Hulp

Meer hulpmiddelen

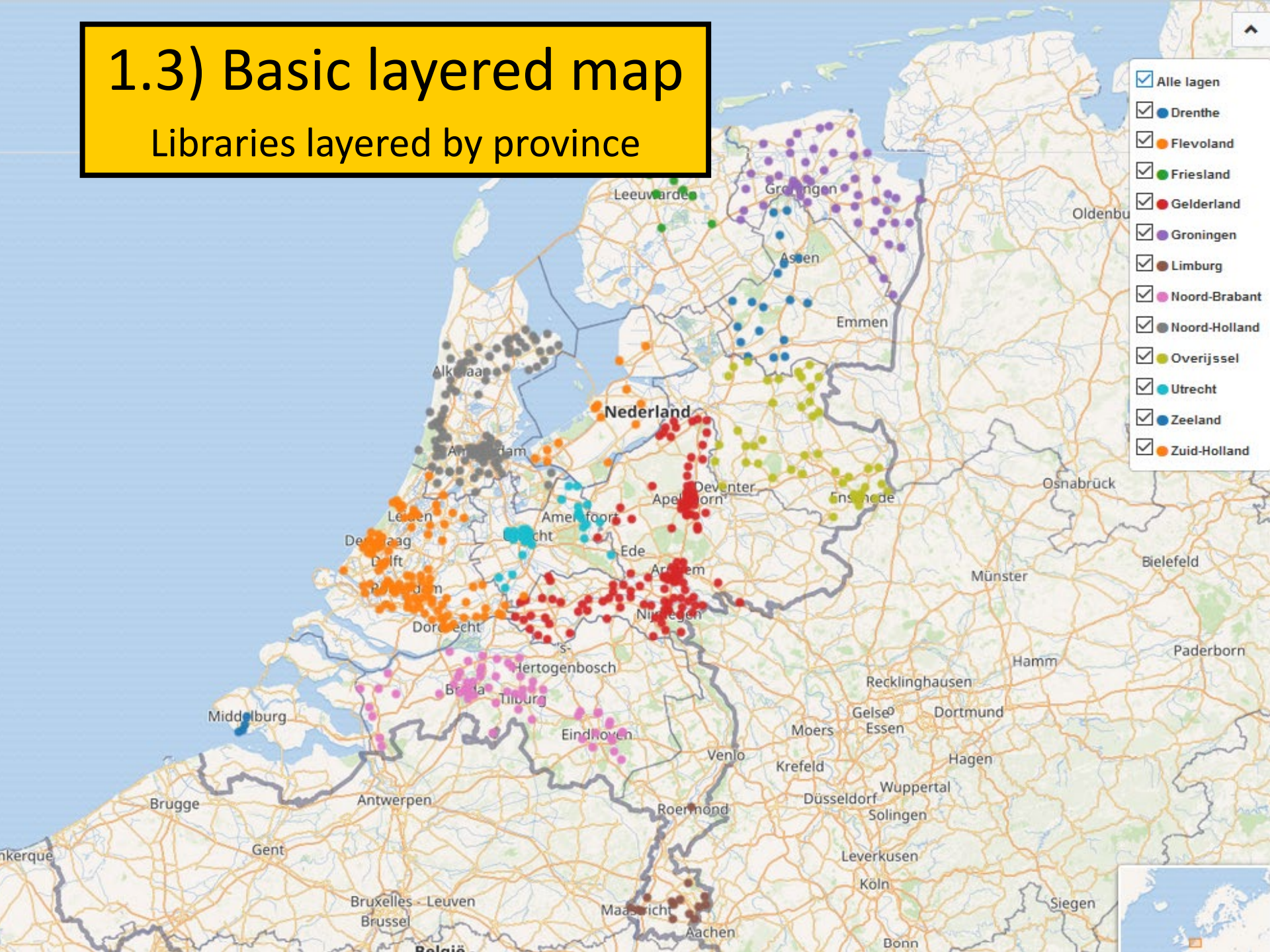


```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map{"markercluster": {"maxClusterRadius": 30}}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library branch
9 ?dpl wdt:P17 wd:Q55. #in the Netherlands
10
11 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
12
13 OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl
14
15 SERVICE wikibase:label {bd:serviceParam wikibase:language "en" .}
16 }
17
18 ORDER BY ?dplLabel
```

<https://w.wiki/6ew>

1.3) Basic layered map

Libraries layered by province



```

1 #All public library branches of the Netherlands, layered by province
2
3 #defaultView:Map{"hide":["?dplLoc"],"layer":"?provLabel"}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?muniLabel ?provLabel WHERE {
6   ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
7   ?dpl wdt:P625 ?dplLoc. #Geo location of the dpl
8   OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl}
9
10 #--- Find the municipality the library is in
11 ?dpl wdt:P131 ?muni. #municipality derived from library item, has one single value
12 ?muni p:P31 [ps:P31 ?muniIsA].
13 VALUES ?muniIsA {wd:Q2039348}
14 #Instead of the the above line, you can also do: FILTER(?muniIsA = wd:Q2039348)
15
16 #-- Find the province the municipality is in
17 ?muni wdt:P131 ?prov. #find the province
18 ?prov p:P31 [ps:P31 ?provIsA].
19 VALUES ?provIsA {wd:Q134390} #Only: province of the Netherlands (Q134390)
20
21 SERVICE wikibase:label {wd:PropertyPageLabel language "[AUTO_LANGUAGE],en".}
22
23 }
24 OR

```

- Alle lagen
- Drenthe
- Flevoland
- Friesland
- Gelderland
- Groningen
- Limburg
- Noord-Brabant
- Noord-Holland
- Overijssel
- Utrecht
- Zeeland
- Zuid-Holland

Expand your query with layering variable
 → Include provinces

<https://w.wiki/6gJ>

A clock face is shown in a light gray, semi-transparent style. The numbers 1 through 12 are visible around the perimeter. A black vertical line points to 12, and a red line points to approximately 1:50. A yellow banner with a black border is centered over the clock face, containing the text "Time to expand your query".

**Time to
expand your query**

sapling

Wikidata Query Service

Voorbeelden Hulp Meer hulpmiddelen

```
1 #All public library branches of the Netherlands, layered by province
2
3 #defaultView:Map{"hide":["?dplLoc {},"layer":"?provLabel"}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?muniLabel ?provLabel WHERE {
6   ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
7   ?dpl wdt:P625 ?dplLoc. #Geo location of the dpl
8   OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl}
9
10 #--- Find the municipality the library is in
11 ?dpl wdt:P131 ?muni. #municipality derived from library item, has one single
12 ?muni p:P31 [ps:P31 ?muniIsA].
13 VALUES ?muniIsA {wd:Q2039348}
14 #Instead of the the above line, you can also do: FILTER(?muniIsA = wd:Q2039348)
15
16 #-- Find the province the municipality is in
17 ?muni wdt:P131 ?prov. #find the province
18 ?prov p:P31 [ps:P31 ?provIsA].
19 VALUES ?provIsA {wd:Q134390} #Only: province of the Netherlands (Q134390)
20
21 SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
22
23 }
24 ORDER BY ?provLabel
```

Non-custom layer names = labels from WD-items

<https://w.wiki/6gJ>

- Alle lagen
- Drenthe
- Flevoland
- Friesland
- Gelderland
- Groningen
- Limburg
- Noord-Brabant
- Noord-Holland
- Overijssel
- Utrecht
- Zeeland
- Zuid-Holland

Wikidata Query Service

Voorbeelden Hulp Meer hulpmiddelen

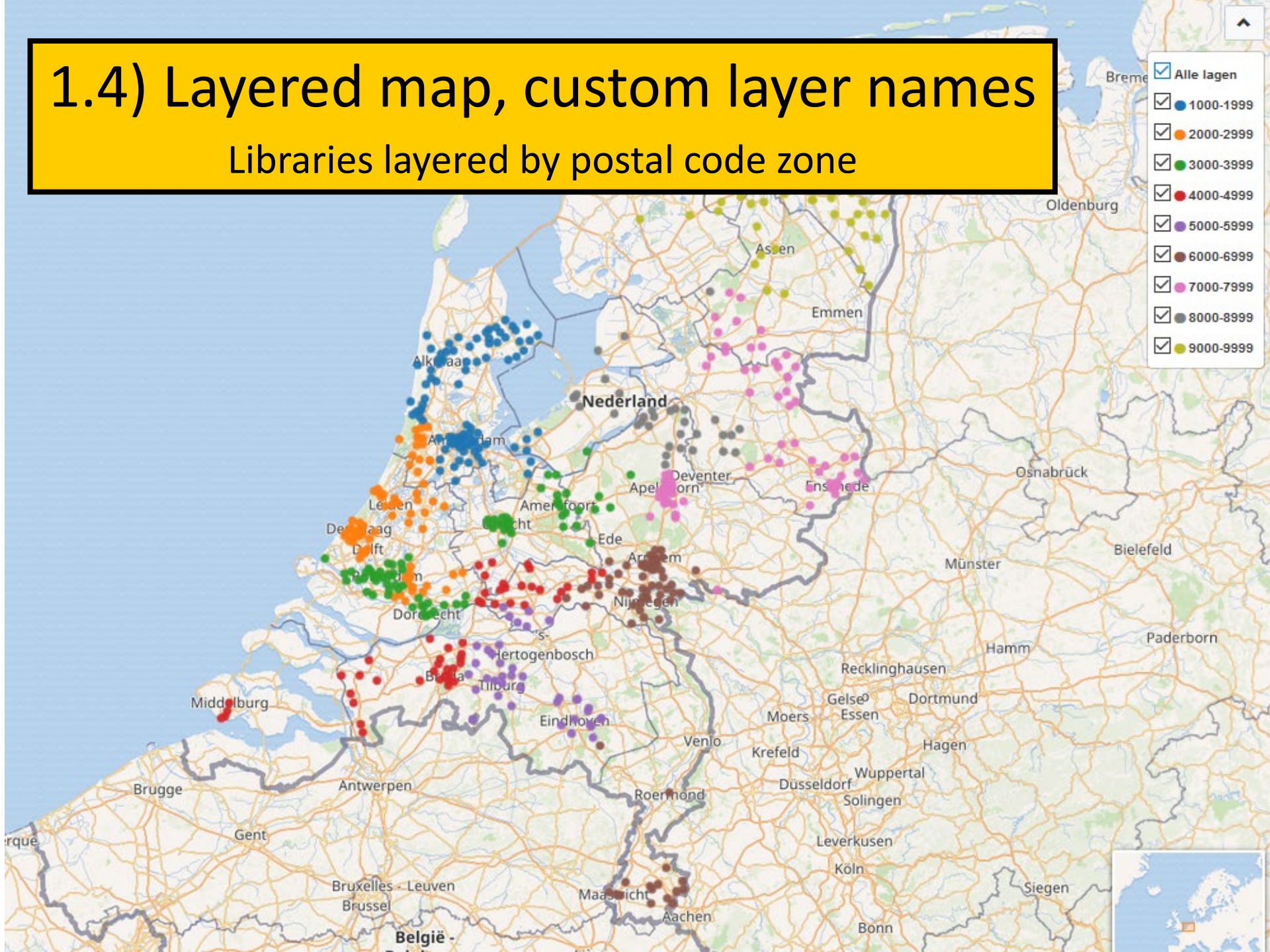
```
1 #All public library branches of the Netherlands, layered by province
2
3 #defaultView:Map{"hide":["?dplLoc"],"layer":"?provLabel"}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?muniLabel ?provLabel WHERE {
6   ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in the Netherlands
7   ?dpl wdt:P625 ?dplLoc. #Geo location of the dpl
8   OPTIONAL{?dpl wdt:P18 ?dplImage} #Image of the dpl}
9
10 #--- Find the municipality the library is in
11 ?dpl wdt:P131 ?muni. #municipality derived from
12 ?muni p:P31 [ps:P31 ?muniIsA].
13 VALUES ?muniIsA {wd:Q2039348}
14 #Instead of the the above line, you can also
15
16 #-- Find the province the municipality is in
17 ?muni wdt:P131 ?prov. #find the province
18 ?prov p:P31 [ps:P31 ?provIsA].
19 VALUES ?provIsA {wd:Q134390} #Only: province of the Netherlands (Q134390)
20
21 SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
22
23 }
24 ORDER BY ?provLabel
```

Layer order

- Alle lagen
- Drenthe
- Flevoland
- Friesland
- Gelderland
- Groningen
- Limburg
- Noord-Brabant
- Noord-Holland
- Overijssel
- Utrecht
- Zeeland
- Zuid-Holland

1.4) Layered map, custom layer names

Libraries layered by postal code zone



Amsterdam Public Library, OBA De Hallen (Q60290390)

Public library in De Hallen building in the Kinkerbuurt neighbourhood of Amsterdam, The Netherlands [edit](#)

[In more languages](#)

Language	Label	Description	Also known as
English	Amsterdam Public Library, OBA De Hallen	Public library in De Hallen building in the Kinkerbuurt neighbourhood of Amsterdam, The Netherlands	
German	No label defined	öffentliche Bibliothek in den Niederlanden	
Spanish	No label defined	No description defined	
French	No label defined	No description defined	
Italian	No label defined	No description defined	
Dutch	OBA De Hallen	Openbare bibliotheek in de Kinkerbuurt	

All entered languages

postal code

1053RT

[edit](#)

[1 reference](#)

[+ add value](#)

P281

phone number

+31-20-616-3275

[edit](#)

[1 reference](#)

[+ add value](#)

e-mail address

mailto:dehallen@oba.nl

[edit](#)

[1 reference](#)

[+ add value](#)

Postal code zone =
1000 - 1999

- Alle lagen
- 1000-1999
- 2000-2999
- 3000-3999
- 4000-4999
- 5000-5999
- 6000-6999
- 7000-7999
- 8000-8999
- 9000-9999

<https://www.wikidata.org/wiki/Q60290390>



Wikidata Query Service

Voorbeelden

Hulp

Meer hulpmiddelen



```
1 #Maps of public library branches The Netherlands, layered by postal codes zones (1000-1999, 2000-2999 etc)
2
3 #defaultView:Map{"layer": "?pczone"}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?postcode ?pcdigits ?pczone
6
7 WHERE {
8   ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
9   ?dpl wdt:P625 ?dplLoc. #Geo location of the library
10
11   ?dpl (p:P281/ps:P281) ?postcode. #postal code of the library, format = 4 digits + 2 letters , e.g. '1073RT'
12
13   BIND(SUBSTR(str(?postcode), 1, 4) as ?pcdigits). #get 4 first digits of postal code
14
15   # Create layer object (= ?pczone) with the postal code zones as layers
16   BIND(
17     IF(?pcdigits > "1000" && ?pcdigits <= "1999", "1000-1999",
18     IF(?pcdigits > "2000" && ?pcdigits <= "2999", "2000-2999",
19     IF(?pcdigits > "3000" && ?pcdigits <= "3999", "3000-3999",
20     IF(?pcdigits > "4000" && ?pcdigits <= "4999", "4000-4999",
21     IF(?pcdigits > "5000" && ?pcdigits <= "5999", "5000-5999",
22     IF(?pcdigits > "6000" && ?pcdigits <= "6999", "6000-6999",
23     IF(?pcdigits > "7000" && ?pcdigits <= "7999", "7000-7999",
24     IF(?pcdigits > "8000" && ?pcdigits <= "8999", "8000-8999",
25     IF(?pcdigits > "9000" && ?pcdigits <= "9999", "9000-9999",
26     "REST")))))))
27   AS ?pczone).
28
29 SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
30 }
31 ORDER BY ?pczone #ascending order by postal code zone
```

Do not click,
copy-paste in browser!

<https://bit.ly/3368DPk>

- Alle lagen
- 1000-1999
- 2000-2999
- 3000-3999
- 4000-4999
- 5000-5999
- 6000-6999
- 7000-7999
- 8000-8999
- 9000-9999



Wikidata Query Service

Voorbeelden

Hulp

Meer hulpmiddelen



```
1 #Maps of public library branches The Netherlands, layered by postal codes zones (1000-1999, 2000-2999 etc)
2
3 #defaultView:Map("layer": "?pczone")
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?postcode ?pcdigits ?pczone
6
7 WHERE {
8   ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
9   ?dpl wdt:P625 ?dplLoc. #Geo location of the library
10
11   ?dpl (p:P281/ps:P281) ?postcode. #postal code of the library, format = 4 digits + 2 letters , e.g. '1073RT'
12
13   BIND(SUBSTR(str(?postcode), 1, 4) as ?pcdigits). #get 4 first digits of postal code
14
15   # Create layer object (= ?pczone) with the postal code zones as layers
16   BIND(
17     IF(?pcdigits > "1000" && ?pcdigits <= "1999", "1000-1999",
18     IF(?pcdigits > "2000" && ?pcdigits <= "2999", "2000-2999",
19     IF(?pcdigits > "3000" && ?pcdigits <= "3999", "3000-3999",
20     IF(?pcdigits > "4000" && ?pcdigits <= "4999", "4000-4999",
21     IF(?pcdigits > "5000" && ?pcdigits <= "5999", "5000-5999",
22     IF(?pcdigits > "6000" && ?pcdigits <= "6999", "6000-6999",
23     IF(?pcdigits > "7000" && ?pcdigits <= "7999", "7000-7999",
24     IF(?pcdigits > "8000" && ?pcdigits <= "8999", "8000-8999",
25     IF(?pcdigits > "9000" && ?pcdigits <= "9999", "9000-9999",
26     "REST")))))))
27   AS ?pczone).
28
29 SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
30 }
31 ORDER BY ?pczone # ascending order by postal code zone
```

- Alle lagen
- 1000-1999
- 2000-2999
- 3000-3999
- 4000-4999
- 5000-5999
- 6000-6999
- 7000-7999
- 8000-8999
- 9000-9999

<https://bit.ly/3368DPk>

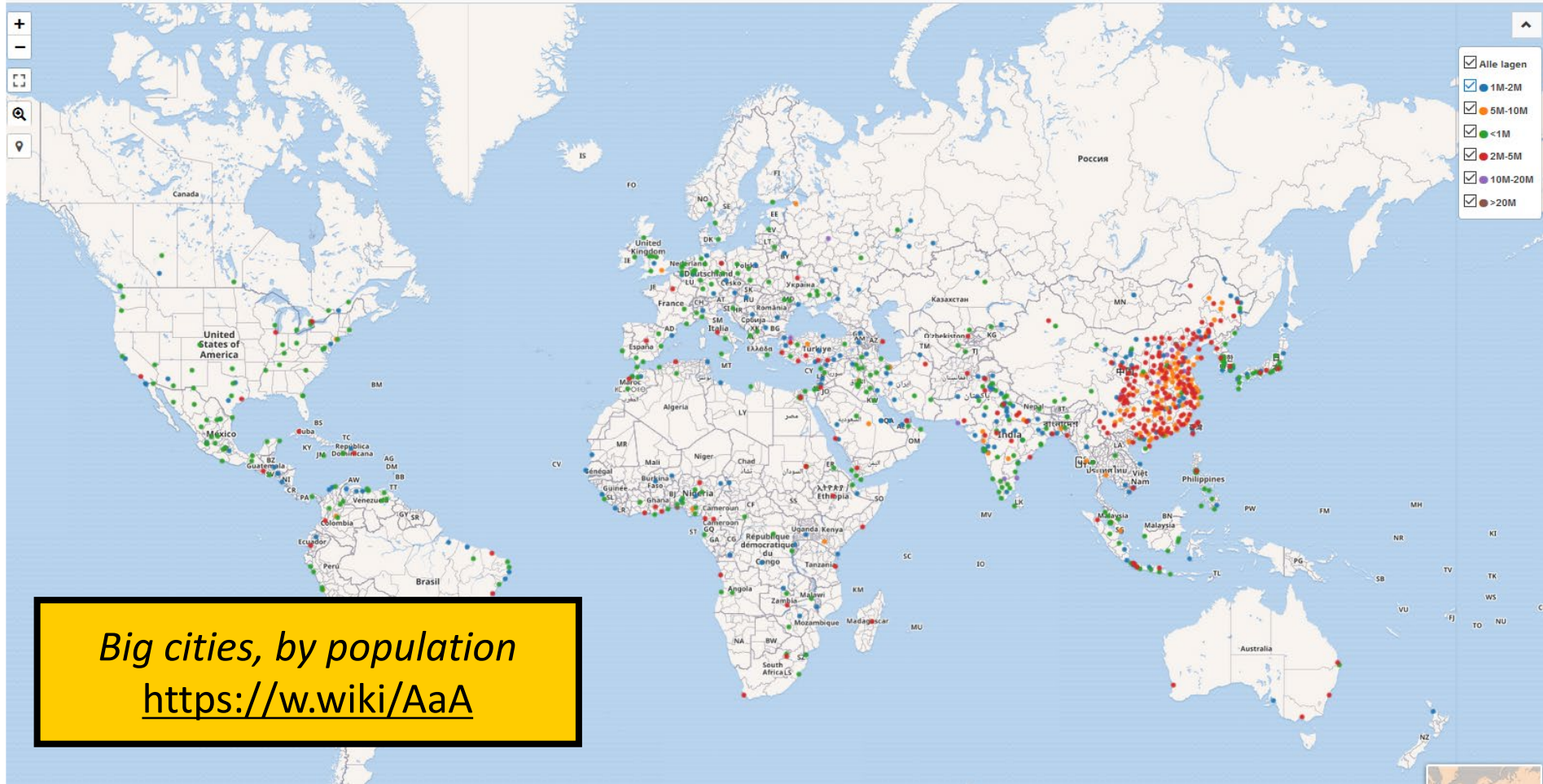


```
1 #Maps of public library branches The Netherlands, layered by postal codes zones (1000-1999, 2000-2999 etc)
2
3 #defaultView:Map{"layer":"?pczone"}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?postcode ?pcdigits ?pczone
6
7 WHERE {
8   ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch in The Netherlands
9   ?dpl wdt:P625 ?dplLoc. #Geo location of the library
10
11   ?dpl (p:P281/ps:P281) ?postcode. #postal code of the library, formatted as a string
12
13   BIND(SUBSTR(str(?postcode), 1, 4) as ?pcdigits). #get 4 first digits of the postal code
14
15   # Create layer object (= ?pczone) with the postal code zones as layers
16   BIND(
17     IF(?pcdigits > "1000" && ?pcdigits <= "1999", "1000-1999",
18     IF(?pcdigits > "2000" && ?pcdigits <= "2999", "2000-2999",
19     IF(?pcdigits > "3000" && ?pcdigits <= "3999", "3000-3999",
20     IF(?pcdigits > "4000" && ?pcdigits <= "4999", "4000-4999",
21     IF(?pcdigits > "5000" && ?pcdigits <= "5999", "5000-5999",
22     IF(?pcdigits > "6000" && ?pcdigits <= "6999", "6000-6999",
23     IF(?pcdigits > "7000" && ?pcdigits <= "7999", "7000-7999",
24     IF(?pcdigits > "8000" && ?pcdigits <= "8999", "8000-8999",
25     IF(?pcdigits > "9000" && ?pcdigits <= "9999", "9000-9999",
26     "REST")))))))
27   AS ?pczone).
28
29 SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en".}
30 }
31 ORDER BY ?pczone #ascending order by postal code zone
```

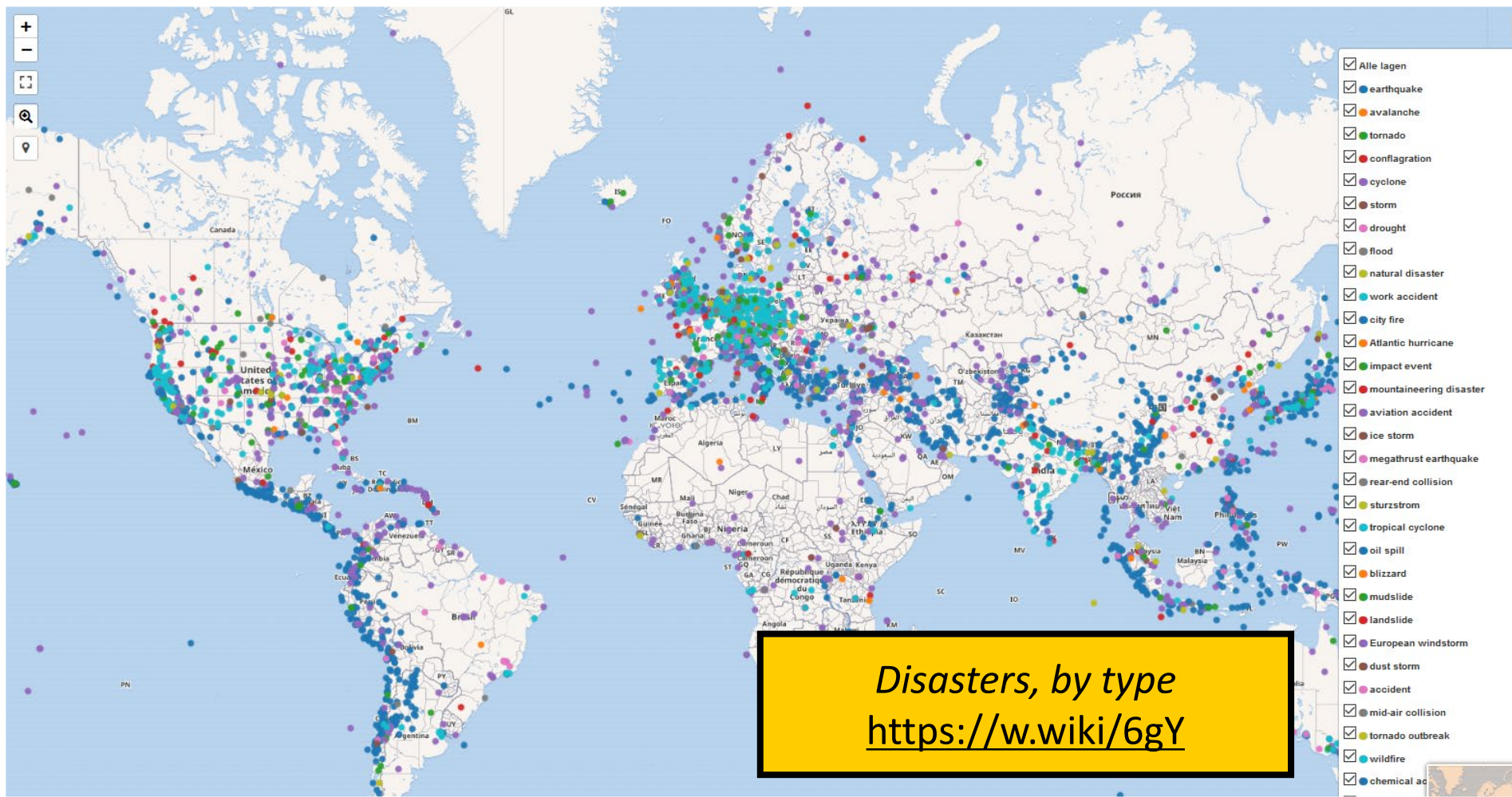
Custom layer names

- Alle lagen
- 1000-1999
- 2000-2999
- 3000-3999
- 4000-4999
- 5000-5999
- 6000-6999
- 7000-7999
- 8000-8999
- 9000-9999

1.5) Other cool layered maps

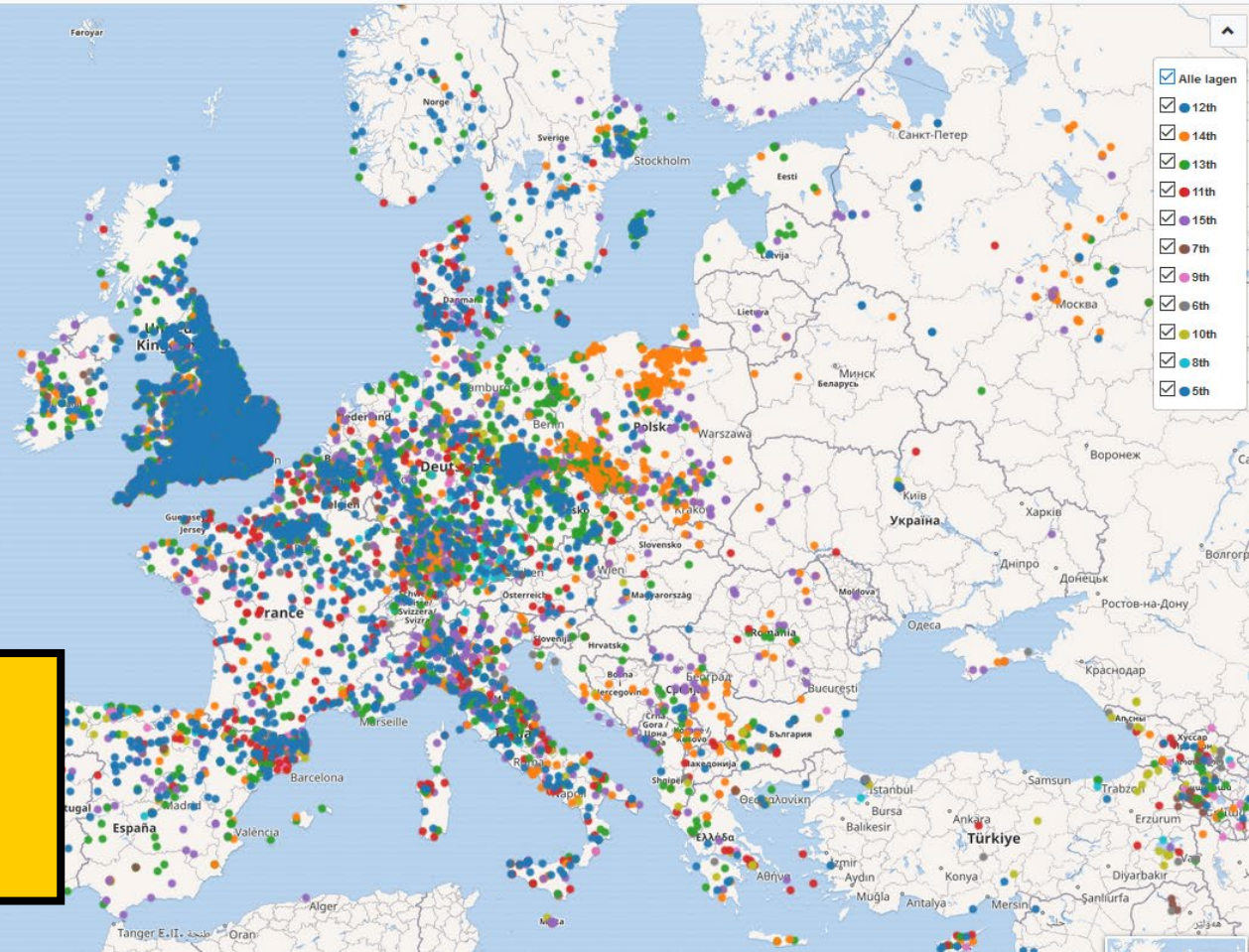


1.5) Other cool layered maps



1.5) Other cool layered maps

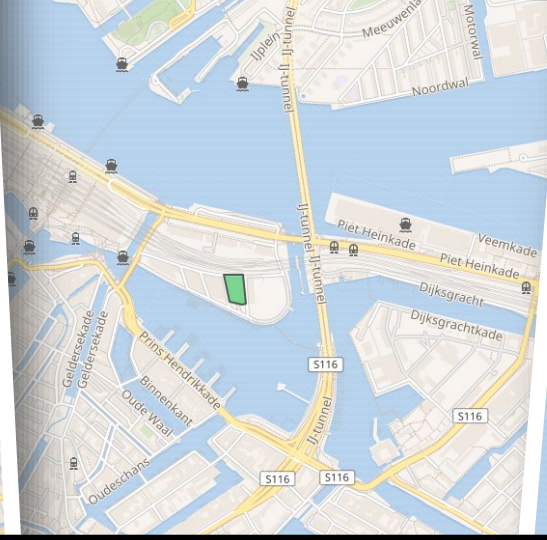
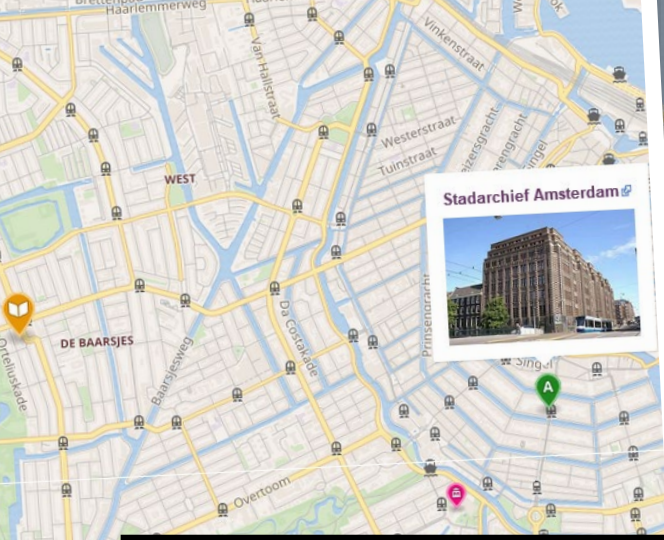
Medieval churches, by century of construction
<https://w.wiki/6ga>



1.5) Other cool layered maps

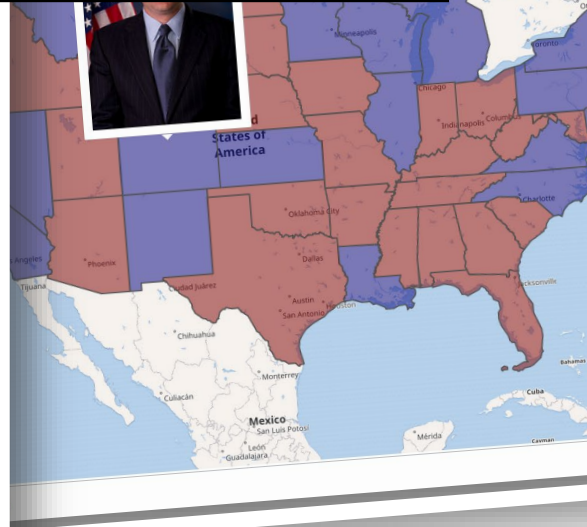
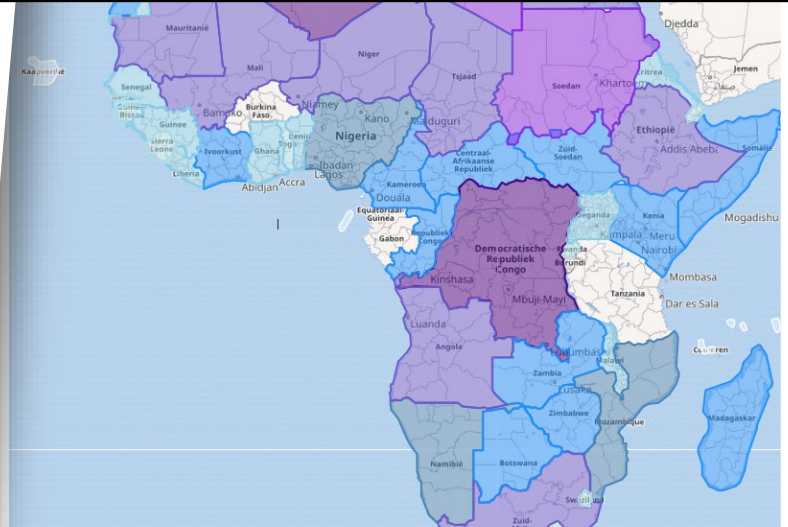
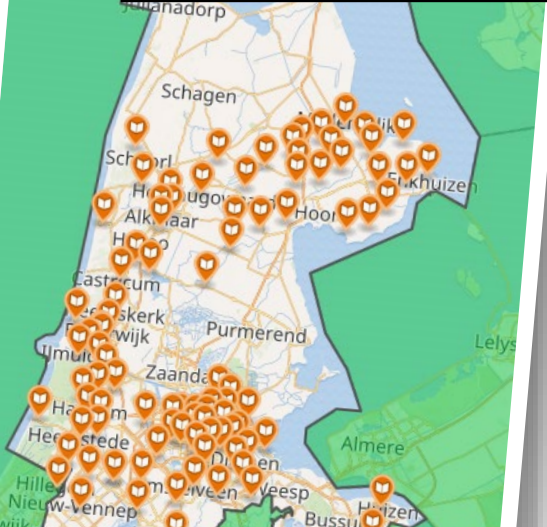
Dutch municipalities, by number of public libraries
<https://w.wiki/6gb>





MODULE 2

Embedded maps in Wikimedia projects





For this Module, you will (also) need

- User page on Wikipedia, Commons, Wikidata
- With Sandbox

Nice to have: some knowledge about

- OpenStreetMap and
- GeoJSON



Extension:Kartographer



- Main page
- Get MediaWiki
- Get extensions
- Tech blog
- Contribute
- Support
- User help
- FAQ
- Technical manual
- Support desk
- Communication
- Development
- Bug tracker
- Code repository
- Code docs
- Statistics
- MediaWiki.org
- Community portal
- Recent changes
- Translate content
- Random page
- Current issues
- Sandbox
- Print/export

Help Discussion

Read Edit View history More

Help:Extension:Kartographer

Translate this page

Other languages: Bahasa Indonesia • Deutsch • **English** • Ripoarisch • Tiếng Việt • asturiano • español • français • galego • italiano • magyar • português do Brasil • suomi • svenska • македонски • русский • עברית • العربية • سنڌي • অসমীয়া • 中文 • 日本語 • 한국어

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[Edit](#) · [Translate](#)

The **Kartographer** extension powers interactive maps on Wikimedia wikis. This page shows techniques for creating dynamic maps by using the Kartographer tags `<mapframe>`, which embeds maps right in wiki pages, and `<maplink>`, which creates links to dynamic maps.

Contents [hide](#)

- Getting started
- `<mapframe>` usage
 - Frames
- `<maplink>`
 - `<maplink>` and auto-counters
- Markers
- Groups
- External data
 - GeoShapes via Wikidata Query
 - Map data from Commons
 - Combining multiple data
- Styling
 - Styling Wikidata ID elements
 - Overlapping elements

<https://www.mediawiki.org/wiki/Help:Extension:Kartographer>



WIKIPEDIA
De vrije encyclopedie

- Hoofdpagina
- Vind een artikel
- Vandaag
- Etalage
- Categorieën
- Recente wijzigingen
- Nieuwe artikelen
- Willekeurige pagina
- Informatie
- Gebruikersportaal
- Snelcursus
- Hulp en contact
- Donaties
- Hulpmiddelen
- Koppelingen vanaf deze pagina
- Links naar deze pagina
- Verwante wijzigingen
- Gebruikersbijdragen
- Logboeken
- Deze gebruiker e-mailen
- Gebruikersgroepen weergeven
- Bestand uploaden
- Speciale pagina's
- Permanente koppeling
- Paginagegevens
- Afdrukken/exporteren
- Boek maken
- Downloaden als PDF
- Printvriendelijke versie
- Talen

Gebruiker Overleg

Gebruiker:OlafJanssen/Klad

< Gebruiker:OlafJanssen

Basic embedded map, no data
(in my Sandbox on Dutch Wikipedia)

Embedded maps in Dutch Wikipedia [bewerken | brontekst bewerken]

Basic embedded map of The Netherlands [bewerken | brontekst bewerken]



<https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019>



WIKIPEDIA
De vrije encyclopedie

- Hoofdpagina
- Vind een artikel
- Vandaag
- Etalage
- Categorieën
- Recente wijzigingen
- Nieuwe artikelen
- Willekeurige pagina

- Informatie
- Gebruikersportaal
- Snelcursus
- Hulp en contact
- Donaties

- Hulpmiddelen
- Koppelingen van pagina
- Links naar deze pagina
- Verwante wijzigingen

- Gebruikersbijdragen
- Logboeken
- Deze gebruiker bewerkt
- Gebruikersgroep toevoegen

- Bestand uploaden
- Speciale pagina's
- Permanente koppelingen
- Paginagegevens

- Afdrukken/exporteren
- Boek maken
- Downloaden als PDF
- Printvriendelijke versie

- Talen

Gebruiker Overleg

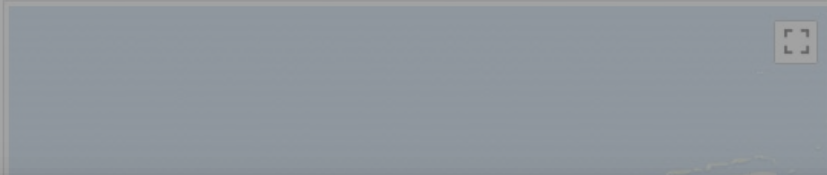
Lezen Bewerken

Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019

< Gebruiker:OlafJanssen

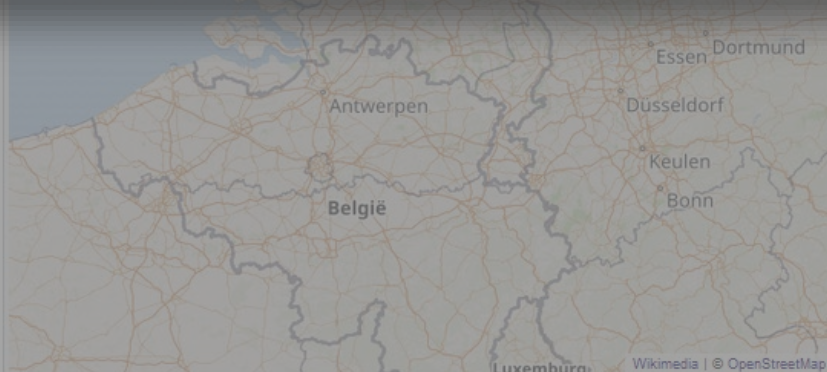
Embedded maps in Dutch Wikipedia [bewerken | brontekst bewerken]

Basic embedded map of The Netherlands [bewerken | brontekst bewerken]



== Basic embedded map of The Netherlands ==

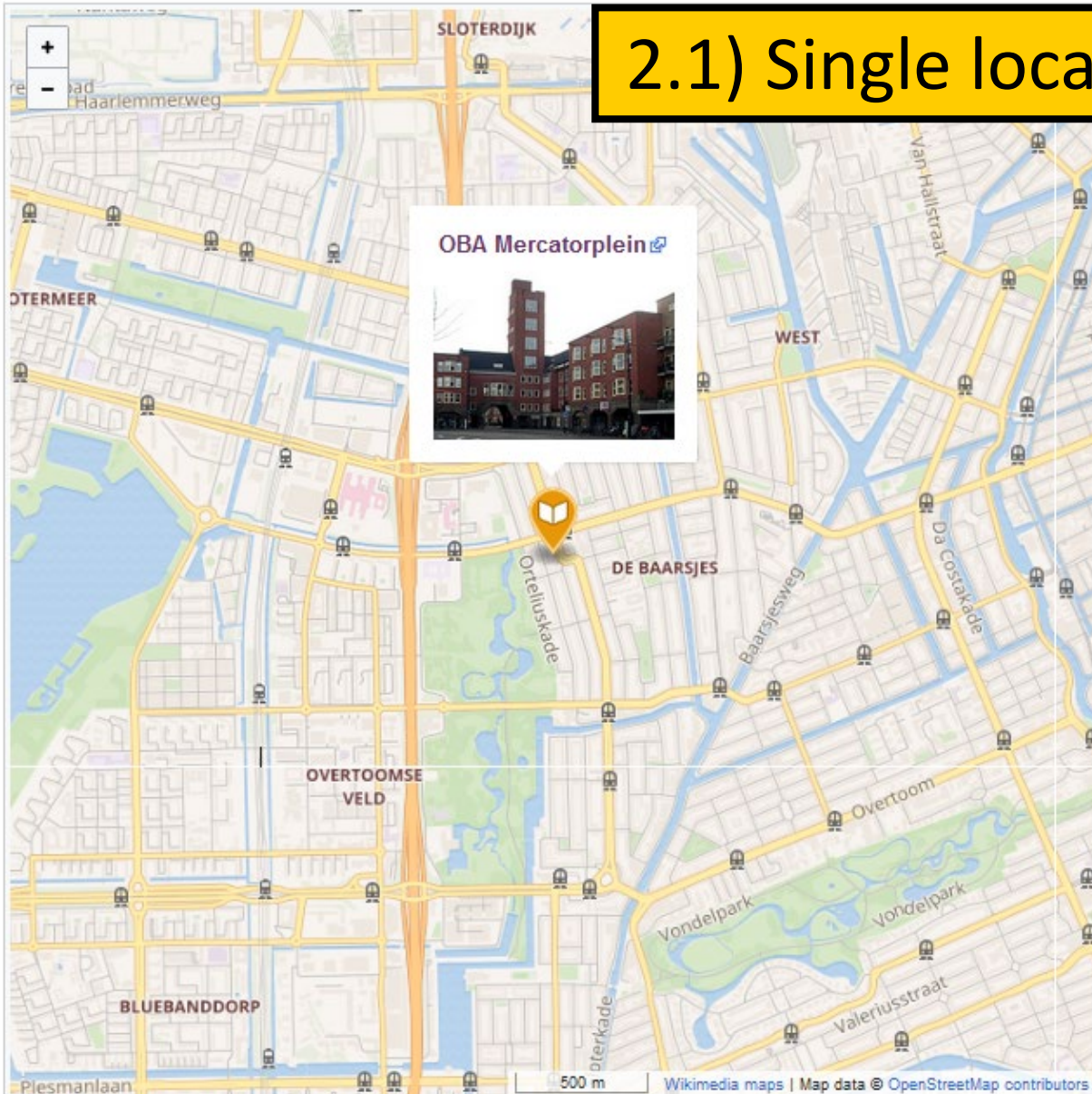
```
<mapframe width=600 height=700 zoom=7 latitude=52.20  
longitude=5.179627565 text="Basic embedded map of  
[[w:The_Netherlands|The Netherlands]]" align=left/>
```



Basic embedded map of The Netherlands

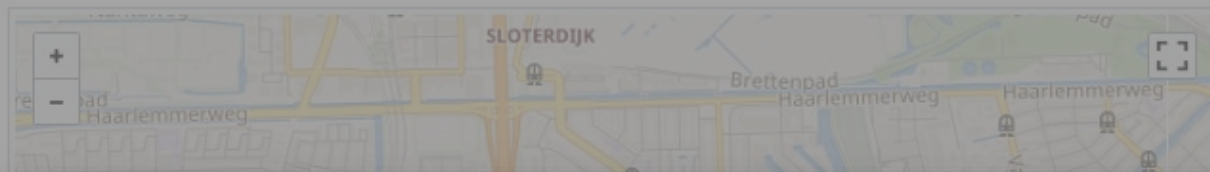
One public library in Amsterdam, geo coordinates hard coded

2.1) Single location, hard-coded



One public library in Amsterdam, geo coordinates hard coded

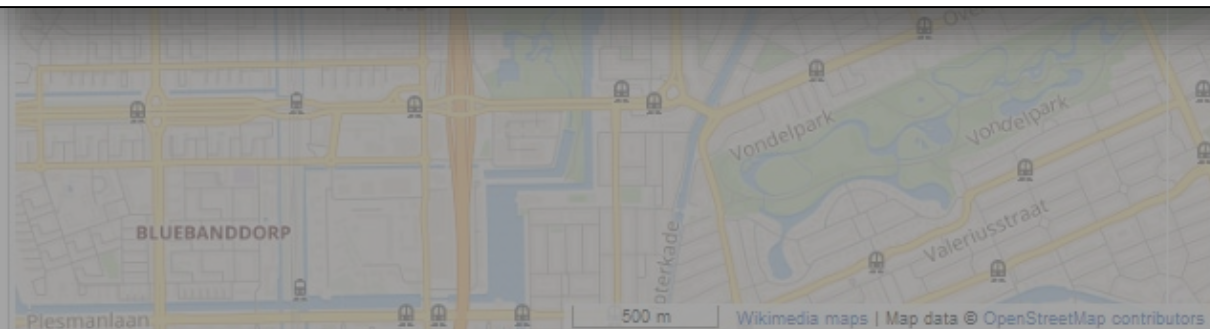
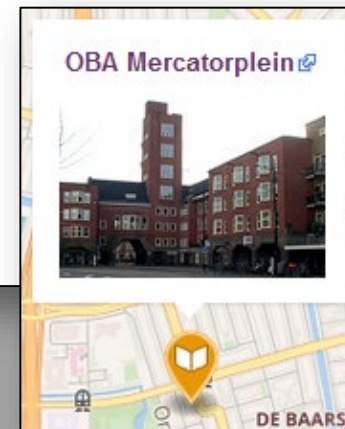
One public library in Amsterdam, geo coordinates hard coded



== One public library in Amsterdam, geo coordinates hard-coded ==

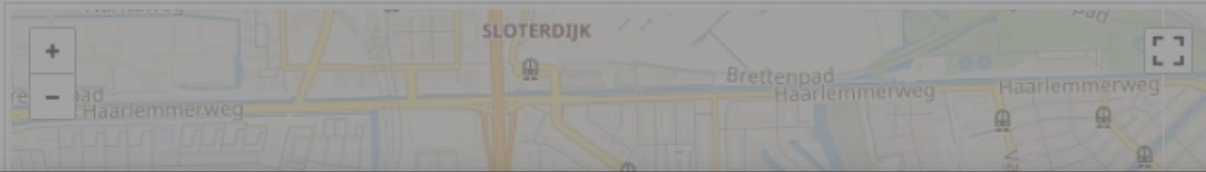
```
<mapframe text="One public library in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14 latitude=52.3693887 longitude=4.8502319 align=left>
```

```
{  
  "type": "Feature",  
  "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },  
  "properties": {  
    "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",  
    "description": "[[File:Mercatorplein west.JPG|300px]]",  
    "marker-symbol": "library",  
    "marker-size": "large",  
    "marker-color": "ea9809"  
  }  
}  
</mapframe>
```



One public library in Amsterdam, geo coordinates hard coded

One public library in Amsterdam, geo coordinates hard coded

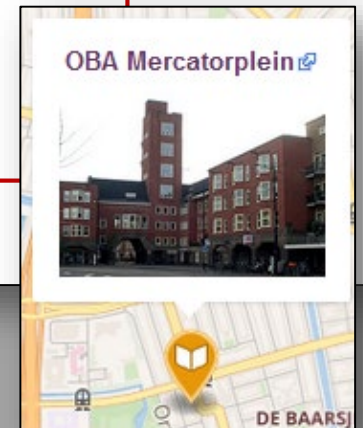


== One public library in Amsterdam, geo coordinates hard-coded ==

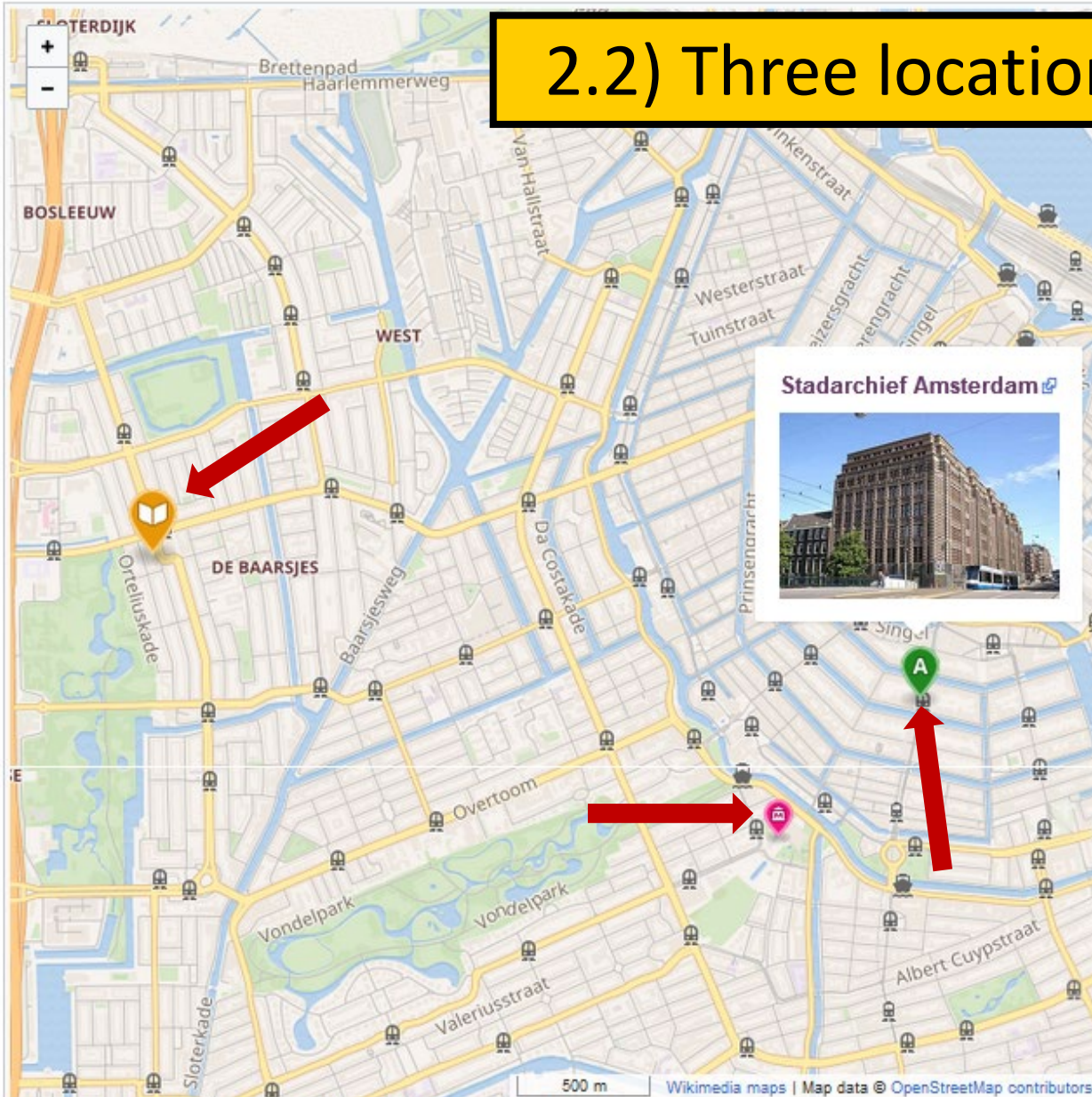
```
<mapframe text="One public library in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14
latitude=52.3693887 longitude=4.8502319 align=left>
{
  "type": "Feature",
  "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
  "properties": {
    "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
    "description": "[[File:Mercatorplein west.JPG|300px]]",
    "marker-symbol": "library",
    "marker-size": "large",
    "marker-color": "ea9809"
  }
}
</mapframe>
```

Styling of markers

- <https://github.com/mapbox/simplestyle-spec/tree/master/1.1.0#3-client-behavior>
- <https://www.mediawiki.org/wiki/Help:Extension:Kartographer>

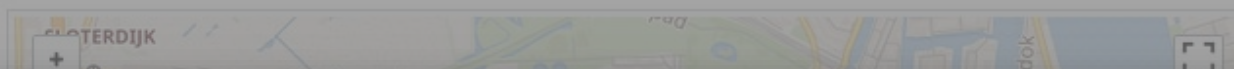


2.2) Three locations, hard-coded



Library, museum and archive in Amsterdam, geo coordinates hard-coded

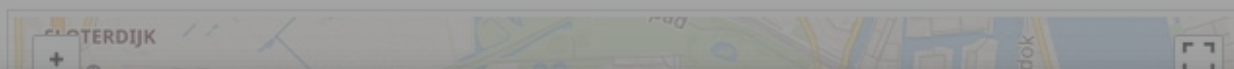
Library, museum and archive in Amsterdam, geo coordinates hard-coded



== Library, museum and archive in Amsterdam, geo coordinates hard-coded ==

```
<mapframe text="Library, museum and archive in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14 latitude=52.3693887 longitude=4.87
{
  "type": "FeatureCollection", "features": ←
  [
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
      "properties": {
        "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
        "description": "[[File:Mercatorplein west.JPG|300px]]",
        "marker-symbol": "library",
        "marker-size": "large",
        "marker-color": "ea9809" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8846644, 52.3598658] },
      "properties": {
        "title": "[https://www.rijksmuseum.nl Rijksmuseum]",
        "description": "[[File:Rijksmuseum.Amsterdam.jpg|300px]]",
        "marker-symbol": "museum",
        "marker-size": "small",
        "marker-color": "f01080" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8923905, 52.3645600] },
      "properties": {
        "title": "[https://www.amsterdam.nl/stadsarchief/ Stadarchief Amsterdam]",
        "description": "[[File:Gebouw de Bazel.jpg|300px]]",
        "marker-symbol": "-letter",
        "marker-size": "medium",
        "marker-color": "228b22" }
    }
  ]
}
</mapframe>
```

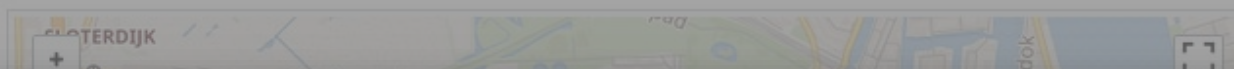

Library, museum and archive in Amsterdam, geo coordinates hard-coded



== Library, museum and archive in Amsterdam, geo coordinates hard-coded ==

```
<mapframe text="Library, museum and archive in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14 latitude=52.3693887 longitude=4.87
{
  "type": "FeatureCollection", "features":
  [
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
      "properties": {
        "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
        "description": "[[File:Mercatorplein west.JPG|300px]]",
        "marker-symbol": "library",
        "marker-size": "large",
        "marker-color": "ea9809" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8846644, 52.3598658] },
      "properties": {
        "title": "[https://www.rijksmuseum.nl Rijksmuseum]",
        "description": "[[File:Rijksmuseum.Amsterdam.jpg|300px]]",
        "marker-symbol": "museum",
        "marker-size": "small",
        "marker-color": "f01080" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8923905, 52.3645600] },
      "properties": {
        "title": "[https://www.amsterdam.nl/stadsarchief/ Stadarchief Amsterdam]",
        "description": "[[File:Gebouw de Bazel.jpg|300px]]",
        "marker-symbol": "-letter",
        "marker-size": "medium",
        "marker-color": "228b22" }
    }
  ]
}
</mapframe>
```

Library, museum and archive in Amsterdam, geo coordinates hard-coded



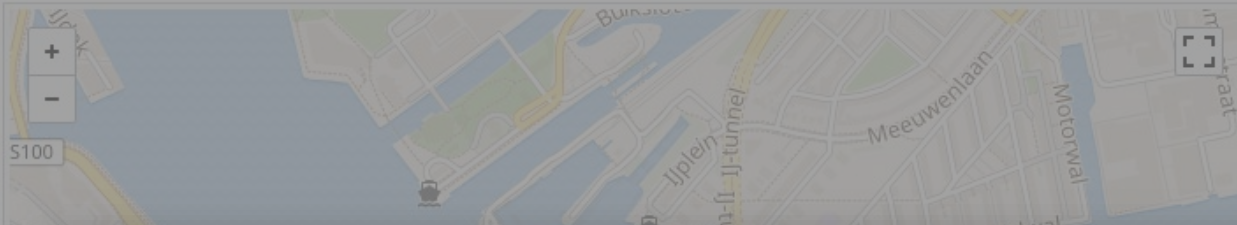
== Library, museum and archive in Amsterdam, geo coordinates hard-coded ==

```
<mapframe text="Library, museum and archive in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14 latitude=52.3693887 longitude=4.87
{
  "type": "FeatureCollection", "features":
  [
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
      "properties": {
        "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html OBA Mercatorplein]",
        "description": "[[File:Mercatorplein west.JPG|300px]]",
        "marker-symbol": "library",
        "marker-size": "large",
        "marker-color": "ea9809" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8846644, 52.3598658] },
      "properties": {
        "title": "[https://www.rijksmuseum.nl Rijksmuseum]",
        "description": "[[File:Rijksmuseum.Amsterdam.jpg|300px]]",
        "marker-symbol": "museum",
        "marker-size": "small",
        "marker-color": "f01080" }
    },
    { "type": "Feature",
      "geometry": { "type": "Point", "coordinates": [4.8923905, 52.3645600] },
      "properties": {
        "title": "[https://www.amsterdam.nl/stadsarchief/ Stadarchief Amsterdam]",
        "description": "[[File:Gebouw de Bazel.jpg|300px]]",
        "marker-symbol": "-letter",
        "marker-size": "medium",
        "marker-color": "228b22" }
    }
  ]
}
</mapframe>
```




2.3) Outline (GeoShape) via Wikidata & OpenStreetMap

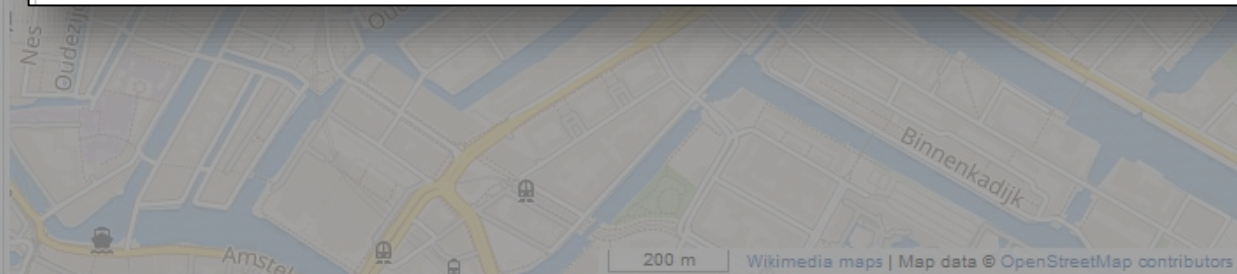
Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map



```
== Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map ==
```

```
<mapframe width=700 height=700 zoom=15 latitude=52.3757964 longitude=4.9079461 text="Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map" align=left>
```

```
{  
  "type": "ExternalData",  
  "service": "geoshape",  
  "ids": "Q50413436",  
  "properties": {  
    "fill": "#07c63e", "title": "Amsterdam public library, main site" }  
}  
</mapframe>
```



Amsterdam Public Library, OBA Oosterdok (Centrale) (Q50413436)

Main visitor location and administration offices of the Amsterdam Public Library, The Netherlands

 [edit](#)

OBA Oosterdok (Centrale)







<https://www.wikidata.org/wiki/Q50413436>

[In more languages](#)

Language	Label	Description	Also known as
English	Amsterdam Public Library, OBA Oosterdok (Centrale)	Main visitor location and administration offices of the Amsterdam Public Library, The Netherlands	OBA Oosterdok (Centrale)
German	No label defined	Bibliothek	
Spanish	No label defined	No description defined	
French	No label defined	bibliothèque	
Italian	No label defined	No description defined	
Dutch	OBA Oosterdok (Centrale)	Hoofdvestiging en administratief hoofdkantoor van de Openbare Bibliotheek Amsterdam	OBA Oosterdok (Centrale) Centrale OBA

[All entered languages](#)

Statements

instance of	 public library  edit
	0 references  add reference
	 library branch  edit
	0 references  add reference

<https://www.openstreetmap.org/way/240467636#map=19/52.37605/4.90853>

Zoeken Waar is dit?

Weg: OBA Oosterdok (240467636)

De oude gegevens verwezen naar de Stichting Openbare Bibliotheken Amsterdam (Q2105660 op Wikidata), de nieuwe verwijzen naar Q50413436, de belangrijkste bezoekerslocatie en het hoofdkantoor van deze organisatie

25 minutes ago geleden bewerkt door OlafJanssen
Versie #12 · Wijzigingset #72901147

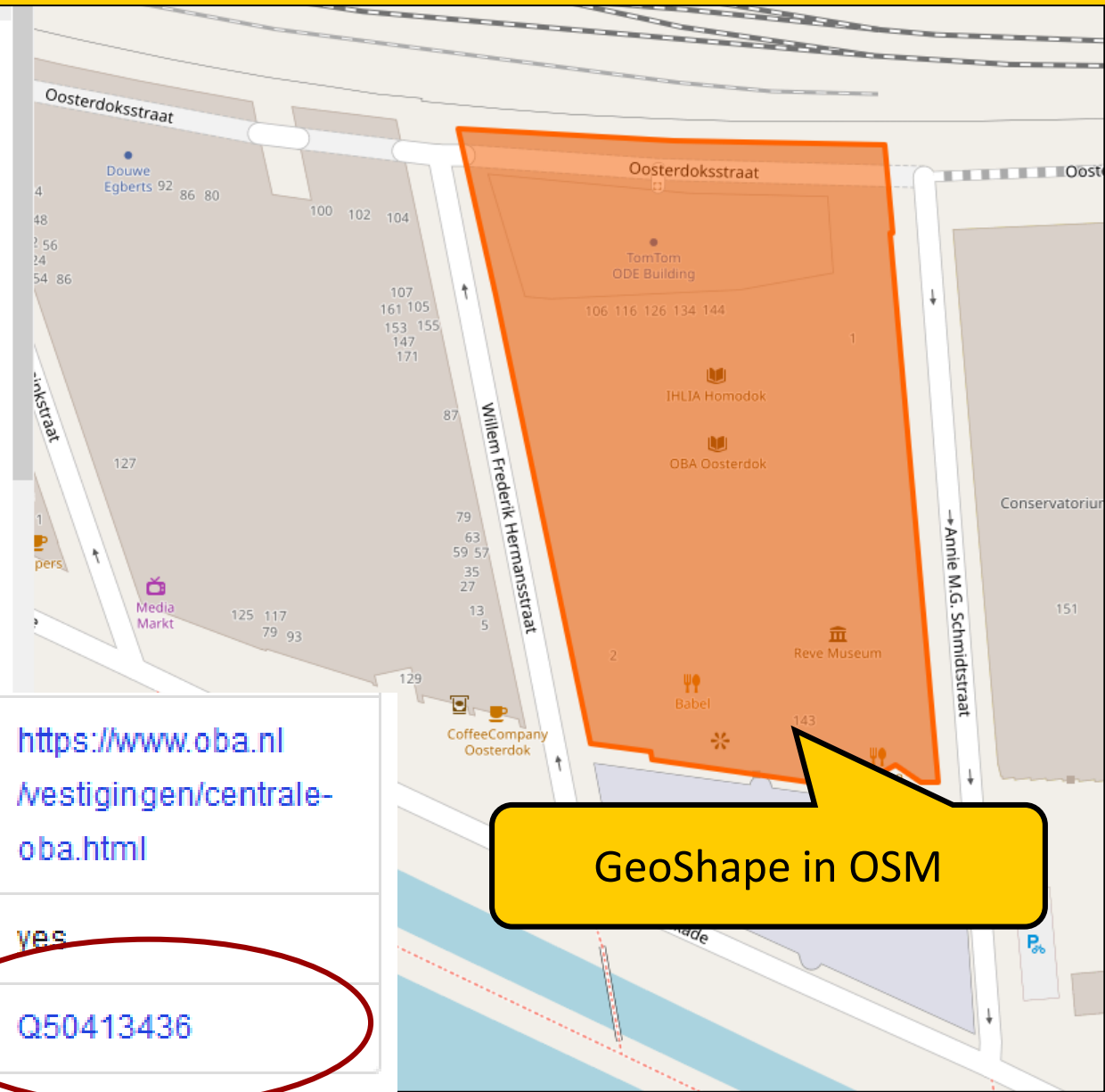
Tags

addr.city	Amsterdam
addr.housenumber	143
addr.postcode	1011 DL
addr.street	Oosterdokskade
alt_name	Openbare Bibliotheek Amsterdam
amenity	library
building	yes

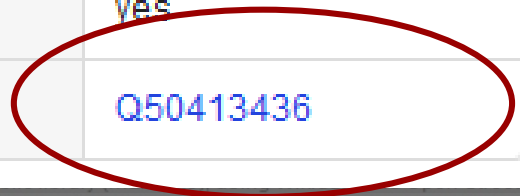
website	https://www.oba.nl/vestigingen/centrale-oba.html
---------	---

wheelchair	yes
------------	-----

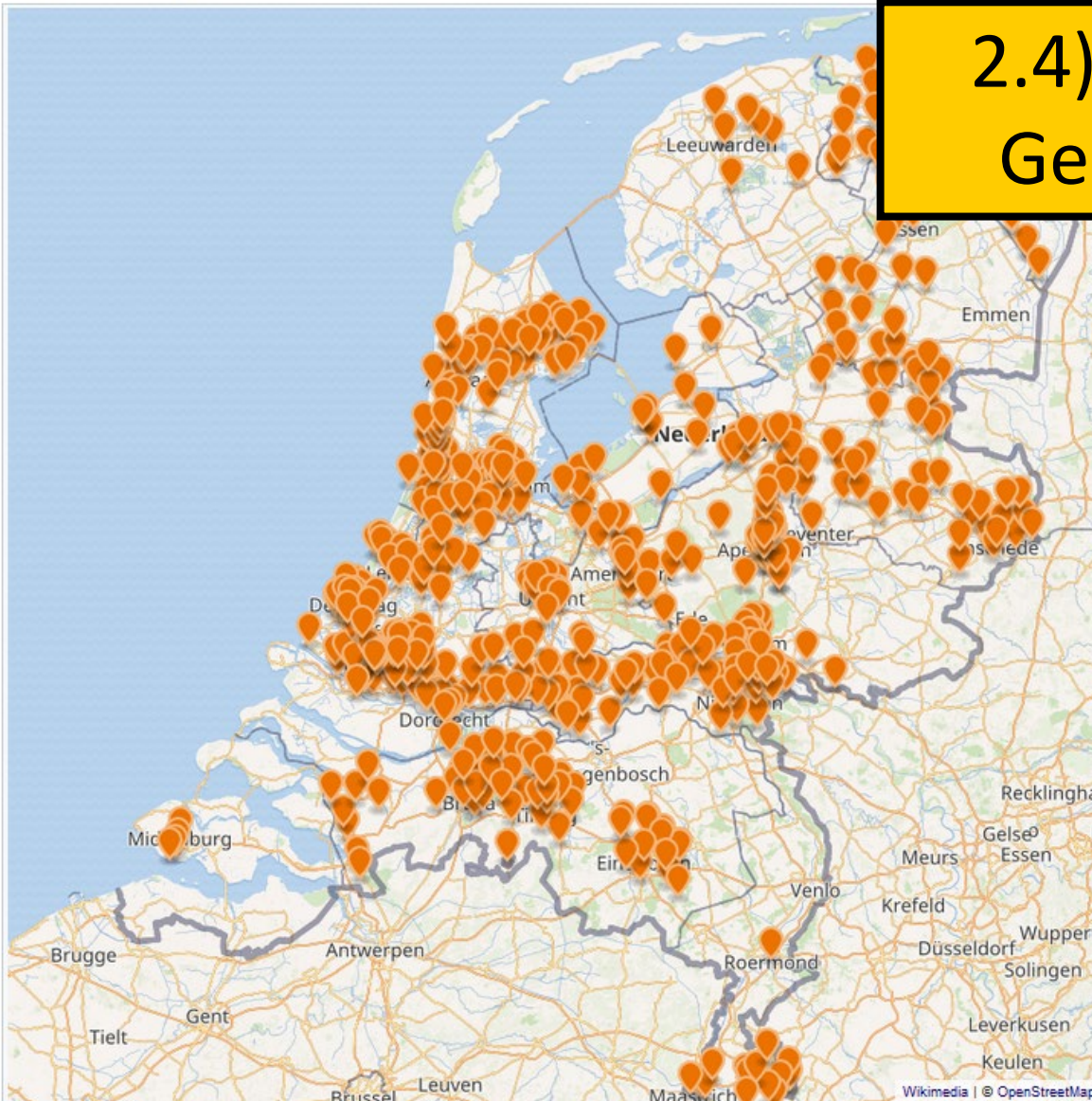
wikidata	Q50413436
----------	---



GeoShape in OSM

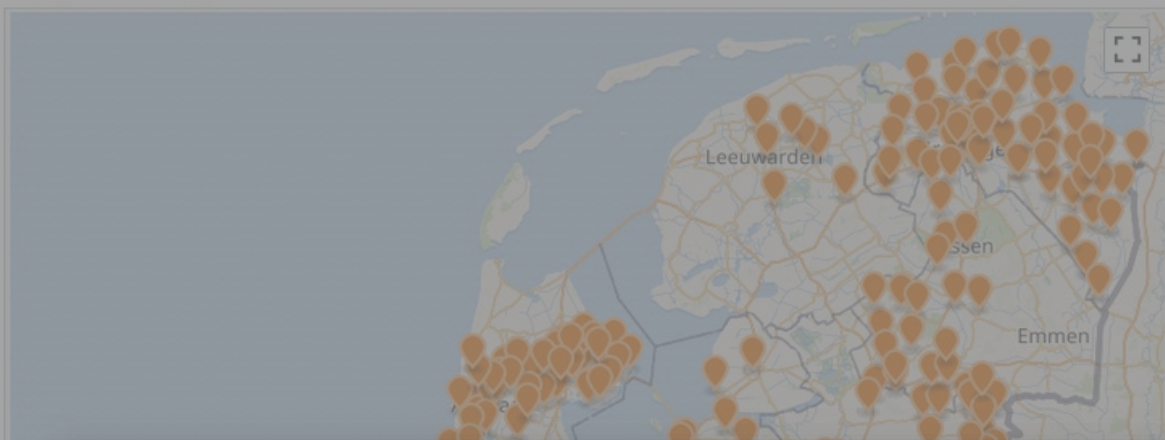


2.4) Many locations, GeoJSON .map file



Map of Dutch public libraries, work in progress, 21-5-2019

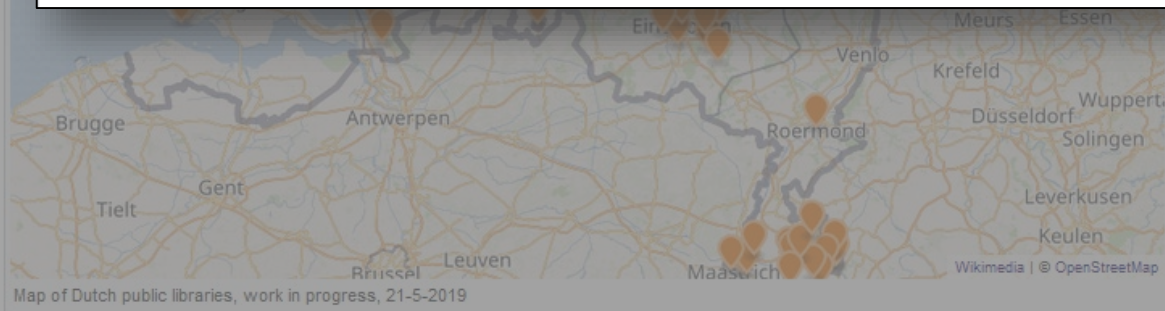
SPARQL-query used to make DutchPublicLibraries.map (further instructions in the query)

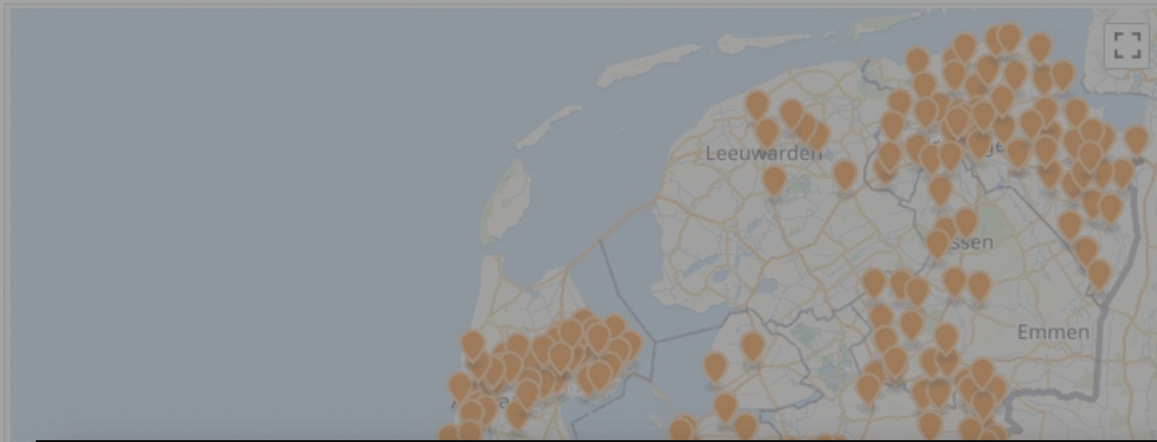


== Map of Dutch public libraries ==

```
<mapframe width=800 height=800 zoom=8 latitude=52.20 longitude=5.119627565 text="Map of Dutch public libraries, work in progress, 21-5-2019" align=left>
```

```
{  
  "type": "ExternalData",  
  "service": "page",  
  "title": "DutchPublicLibraries.map",  
}  
</mapframe>
```

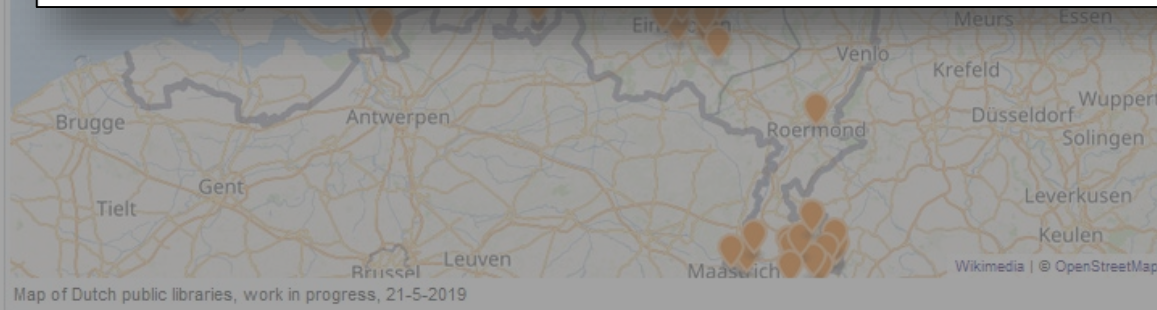




== Map of Dutch public libraries ==

```
<mapframe width=800 height=800 zoom=8 latitude=52.20 longitude=5.119627565 text="Map of Dutch public libraries, work in progress, 21-5-2019" align=left>
```

```
{  
  "type": "ExternalData",  
  "service": "page",  
  "title": "DutchPublicLibraries.map",  
}  
</mapframe>
```





- Main page
- Welcome
- Community portal
- Village pump
- Help center

Taal
English

- Participate
- Upload file
- Recent changes
- Latest files
- Random file
- Contact us

- Print/export
- Download as PDF

- Tools
- What links here
- Related changes
- Special pages
- Permanent link
- Page information
- Subpages
- Nominate for deletion

In Wikipedia
Add links

<https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map>

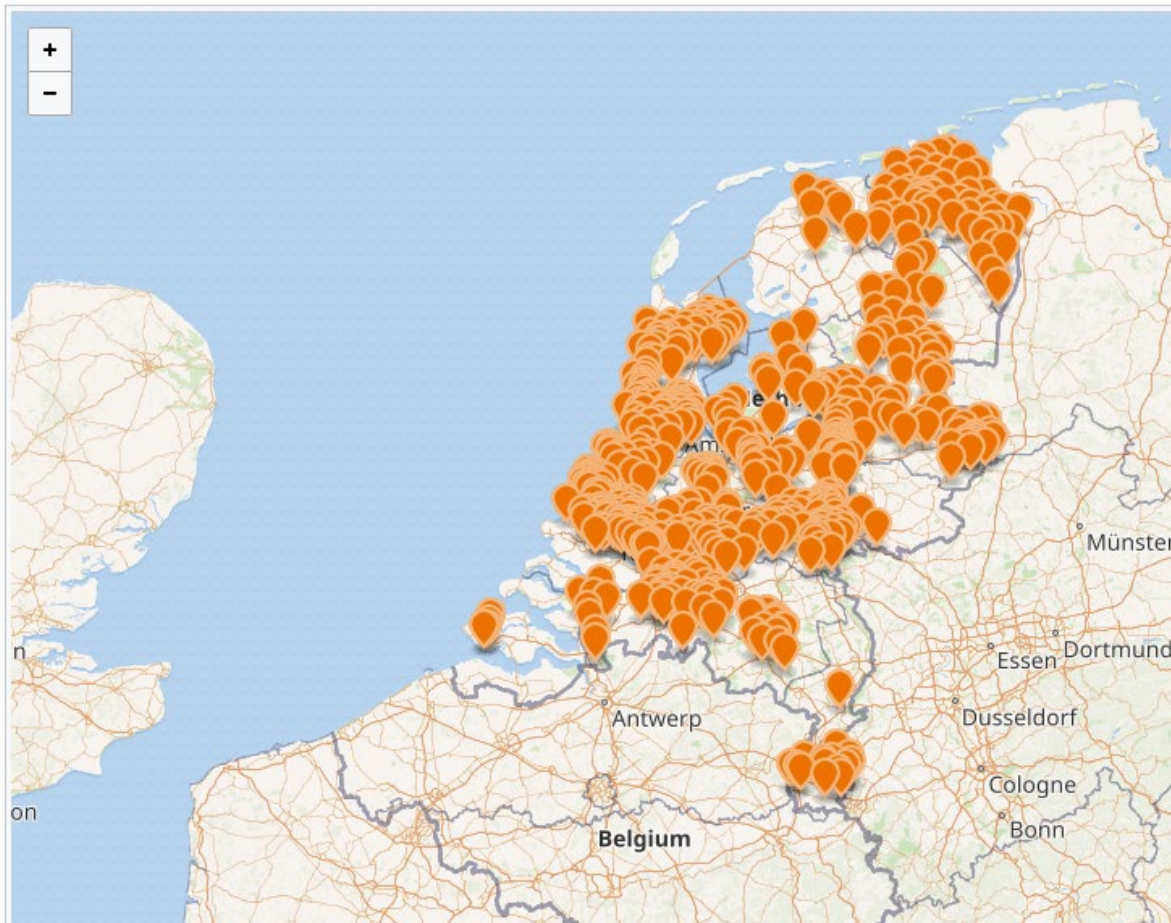
Data

Data:DutchPublicLibraries.map

Wikimedia Commons in het Nederlands

From Wikimedia Commons, the free media repository

Map of Dutch public libraries, incomplete, work in progress, 10-8-2019





Help Discussion

https://www.mediawiki.org/wiki/Help:Map_Data

Help:Map Data



Note: When you edit this page, you agree to release your contribution under the [CC0](#). See [Public Domain Help Pages](#) for more info.

[Edit](#) - [Translate](#)



Map data allows users to store [GeoJSON](#) data on wiki, similar to images. Other wikis may use this data to draw on top of the maps, together with other map customizations.

To create a new map data, go to [Wikimedia Commons](#), and create a new page in the **Data** namespace with the **.map** suffix, such as `Data:Sandbox/Name/Example.map`. For experiment by creating pages with the **Sandbox/<username>/** prefix. For now, page content can only be edited in the raw [JSON format](#). Eventually, we hope there will be a page editor to simplify GeoJSON creation.

Data licensing [\[edit \]](#)

All data in the `Data:` namespace must licensed under one of the following licences:

- [CC0-1.0](#)
- [CC-BY versions](#): [CC-BY-1.0](#), [CC-BY-2.0](#), [CC-BY-2.5](#), [CC-BY-3.0](#), [CC-BY-4.0](#), [CC-BY-4.0+](#)
- [CC-BY-SA versions](#): [CC-BY-SA-1.0](#), [CC-BY-SA-2.0](#), [CC-BY-SA-2.5](#), [CC-BY-SA-3.0](#), [CC-BY-SA-4.0](#), [CC-BY-SA-4.0+](#)
- [ODbL-1.0](#)

The default license is empty string (e.g. invalid license) and when a user tries to save page with invalid license, they will be notified of the allowed licenses.

Top-level fields [\[edit \]](#)

Map data has several required and optional top-level elements:

- The **required** `"license"` field must always be set to one of the allowed string values, e.g. `"CC0-1.0"` (see [#Data licensing](#)).
- The **optional** `"description"` field must be set to a localized string value - an object with at least one key-value, where the key is a language code (e.g. "en"), and the value is the localized description.
- The **optional** `"sources"` field must be a Wiki markup string value that describes the source of the map data.
- The **optional** `"zoom"` field must be an integer between 0 and 18. This value is only used for displaying map on its own page, not when including it in the articles.
- The **optional** `"latitude"` and `"longitude"` fields specify the center of the map when displaying it on its own page, not when including it in the articles.
- The **required** `"data"` field must be set to the valid [GeoJSON](#) content. Per GeoJSON specification, `"properties"` field may be set for every Feature object. The map data may have any number of `"properties"` fields, such as `"title"`, `"description"`, `"fill"` (color), and others. Additionally, the `"title"` and `"description"` fields may be either strings or localized strings (e.g. `"title": { "en": "The title", "nl": "De titel" }`). This allows the same map data to appear differently depending on the user's language.

Main page
Get MediaWiki
Get extensions
Tech blog
Contribute

Support
User help
FAQ
Technical manual
Support desk
Communication

Development
Bug tracker
Code repository
Code docs
Statistics
MediaWiki.org
Community portal
Recent changes
Translate content
Random page
Current issues
Sandbox

Print/export
Create a book
Download as PDF
Printable version

Tools
What links here



- Hoofdpagina
- Welkom
- Gebruikersportaal
- De Kroeg
- Hulp
- Doe mee
- Bestand uploaden
- Recente wijzigingen
- Recente bestanden
- Willekeurig bestand
- Contact
- Hulpmiddelen
- Verwijzingen naar deze pagina
- Verwante wijzigingen
- Speciale pagina's
- Paginagegevens
- Geocoding Recent Changes
- Geocoding Search
- Geocoding Daily Log
- Subpagina's
- Voor verwijdering nomineren

Data Overleg

Lezen

Bewerken

Geschiedenis weerge

Bewerken van Data:DutchPublicLibraries.map

Note: When you edit this page, you agree to release your contribution under the CC0.

Edittools

```
1 {
2   "license": "CC0-1.0",
3   "description": {
4     "en": "Map of Dutch public libraries, work in
5   },
6   "sources": "",
7   "zoom": 7,
8   "latitude": 52.091656341,
9   "longitude": 5.119627565,
10  "data": {
11    "type": "FeatureCollection",
12    "features": [
13      {
14        "type": "Feature",
15        "properties": {
16          "title": "[[d:Q59772713|Aalst public library]]",
17          "marker-size": "small",
18          "marker-color": "#ee7302",
19          "type": "Point"
20        },
```

Data in
GeoJSON format

<https://en.wikipedia.org/wiki/GeoJSON>

0 0 0 0

Standard

<pre>

[[Category:

[[File:

[[Media:

{{DEFAULTSORT:

{{NAMESPACE}}

{{PAGENAME}}

#REDIRECT[[

<galler

<noinclude>

<onlyinclude>

<translate>

<tvar|>

<languages/>

Edittools

```
1 {
2   "license": "CC0-1.0",
3   "description": {
4     "en": "Your English title here"
5   },
6   "sources": "",
7   "zoom": 8,
8   "latitude": 52.091656341,
9   "longitude": 5.119627565,
10  "data":
11
12  INSERT YOUR GEOJSON DATA HERE (output of http://geojson.io)
13
14  }
15
```

Single “}”

Geojson.io

Open Save New Share Meta unsaved

Arctic Ocean
Greenland Sea
Barents Sea
Kara Sea
Laptev Sea
Norwegian Sea
North Atlantic Ocean
South Atlantic Ocean
Indian Ocean
Scotia Sea

Canada
United States
Mexico
Venezuela
Colombia
Peru
Brasil
Bolivia
Argentina
South Africa
Zimbabwe
India
China
Russia
Malaysia
Indonesia
Australia

SE NO FI DK PL BY UA RO HU GR Türkiye SY IQ KW OM AF PK NP BD MM LA TH VN PH

3000 km
2000 mi

Mapbox Satellite OCM OSM Feedback | About | © Mapbox © OpenStreetMap Improve this map

</> JSON Table ? Help anon | login

```
1 {  
2   "type": "FeatureCollection",  
3   "features": []  
4 }
```

Geojson.io

The screenshot shows the Geojson.io web application interface. At the top, there is a navigation bar with menu items: Open, Save, New, Share, Meta, and a status indicator 'unsaved'. The main area is a map of the Arctic region. On the right, a JSON editor shows a simple GeoJSON structure:

```
</code><pre><code></pre></code>
```

A file upload dialog titled 'Bestand uploaden' is open in the foreground. The path is 'KB > LOD-Wikidata > OBWikidataproject > GeoMappingStuff'. The file list contains:

| Naam | Gewijzigd op | Type |
|--------------------------------------|-----------------|-------------|
| GeocodingOSM | 1-5-2019 12:13 | Bestandsmap |
| LibraryMapInputData.tsv | 22-5-2019 12:04 | TSV-bestand |
| LibraryMapInputData_NoordHolland.csv | 22-5-2019 12:59 | CSV-bestand |

The 'Bestandsnaam' field is set to 'LibraryMapInputData.tsv' and the file type is 'Alle bestanden (*.*)'. The 'Openen' button is highlighted. A red arrow points to the 'Open' button in the top navigation bar, and a yellow callout bubble with the text 'Open' points to the 'Openen' button in the dialog.

Mapbox Satellite OCM OSM Feedback | About | © Mapbox © OpenStreetMap Improve this map

LibraryMapInputData.tsv

| | title | marker-size | marker-color | type | long | lat | | |
|----|--|-------------|--------------|-------|-----------|------------|--|--|
| 1 | [[d:Q59772713 Aalst public library]] | small | #ee7302 | Point | 5.1259789 | 51.7841643 | | |
| 2 | [[d:Q59772714 Ammerzoden public library]] | small | #ee7302 | Point | 5.2201121 | 51.7506792 | | |
| 3 | [[d:Q59772716 Asperen public library]] | small | #ee7302 | Point | 5.1045091 | 51.8806175 | | |
| 4 | [[d:Q59772717 Beesd public library]] | small | #ee7302 | Point | 5.1930425 | 51.8868067 | | |
| 5 | [[d:Q59772718 Beneden-Leeuwen public library]] | small | #ee7302 | Point | 5.516266 | 51.8777727 | | |
| 6 | [[d:Q59772719 Culemborg public library]] | small | #ee7302 | Point | 5.223026 | 51.9574438 | | |
| 7 | [[d:Q59772720 Dodewaard public library]] | small | #ee7302 | Point | 5.6607362 | 51.9090619 | | |
| 8 | [[d:Q59772721 Dreumel public library]] | small | #ee7302 | Point | 5.4329593 | 51.846106 | | |
| 9 | [[d:Q59772722 Druten public library]] | small | #ee7302 | Point | 5.6023973 | 51.8864962 | | |
| 10 | [[d:Q59772723 Geldermalsen public library]] | small | #ee7302 | Point | 5.28966 | 51.87324 | | |
| 11 | [[d:Q59772724 Haafden public library]] | small | #ee7302 | Point | 5.209602 | 51.8222877 | | |
| 12 | [[d:Q59772725 Herwijnen public library]] | small | #ee7302 | Point | 5.132461 | 51.8278308 | | |
| 13 | [[d:Q59772726 Heukelum public library]] | small | #ee7302 | Point | 5.075112 | 51.8717037 | | |
| 14 | [[d:Q59772727 Kerkdriel public library]] | small | #ee7302 | Point | 5.3380551 | 51.7712143 | | |
| 15 | [[d:Q59772729 Kesteren public library]] | small | #ee7302 | Point | 5.5680087 | 51.9321838 | | |
| 16 | [[d:Q59772731 Ochten public library]] | small | #ee7302 | Point | 5.5680429 | 51.9084892 | | |
| 17 | [[d:Q59772732 Ophemert public library]] | small | #ee7302 | Point | 5.3849607 | 51.8441046 | | |
| 18 | [[d:Q59772733 Opheusden public library]] | small | #ee7302 | Point | 5.6276707 | 51.9319108 | | |
| 19 | [[d:Q59772735 Zaltbommel public library]] | small | #ee7302 | Point | 5.2321253 | 51.8034576 | | |
| 20 | [[d:Q59772736 Self-service library point Boven-Leeuwen]] | small | #ee7302 | Point | 5.5459884 | 51.8853943 | | |
| 21 | [[d:Q59772737 Self-service library point Brakel]] | small | #ee7302 | Point | 5.0926245 | 51.8141786 | | |
| 22 | [[d:Q59772738 Self-service library point Deest]] | small | #ee7302 | Point | 5.6643959 | 51.8902209 | | |
| 23 | [[d:Q59772739 Self-service library point Deil]] | small | #ee7302 | Point | 5.2459089 | 51.8840328 | | |
| 24 | [[d:Q59772740 Self-service library point Horssen]] | small | #ee7302 | Point | 5.6090658 | 51.8547778 | | |
| 25 | [[d:Q59772741 Self-service library point Lek en Linge]] | small | #ee7302 | Point | 5.2348588 | 51.9457687 | | |
| 26 | [[d:Q59772742 Self-service library point Maasbommel]] | small | #ee7302 | Point | 5.5353727 | 51.8199371 | | |
| 27 | [[d:Q59772743 Self-service library point Nederhemert]] | small | #ee7302 | Point | 5.1667443 | 51.7636824 | | |
| 28 | [[d:Q59772745 Self-service library point Vuren]] | small | #ee7302 | Point | 5.0489027 | 51.8248737 | | |
| 29 | [[d:Q59772808 Tiel public library]] | small | #ee7302 | Point | 5.4366236 | 51.8845787 | | |
| 30 | | | | | | | | |

Geojson.io

Open Save New Share Meta unsaved

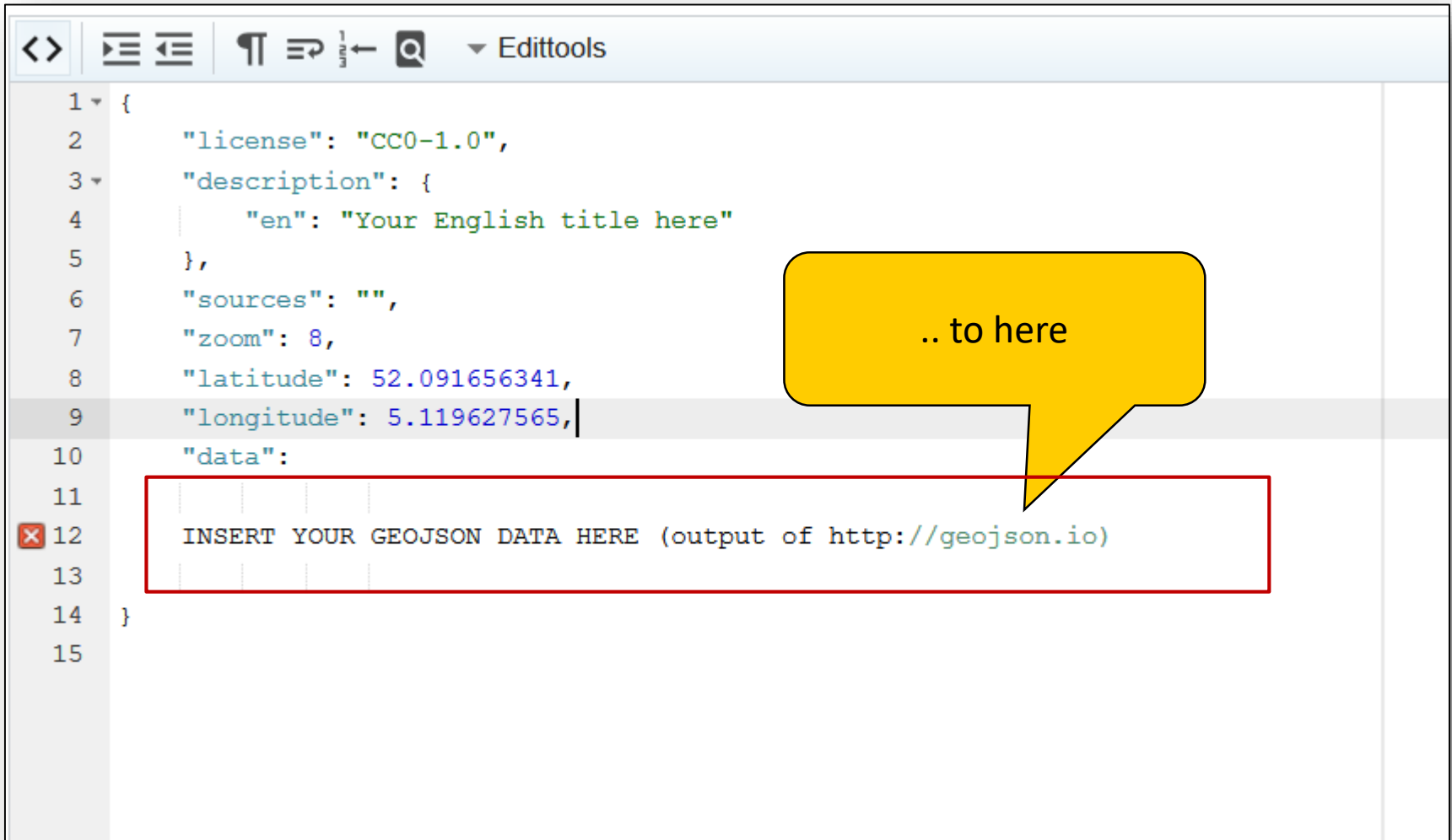


Copy this whole GeoJSON to....

<> JSON Table ? Help anon | login

```
1 {
2   "type": "FeatureCollection",
3   "features": [
4     {
5       "type": "Feature",
6       "properties": {
7         "title": "[[d:Q59772713|Aalst public library]]",
8         "marker-size": "small",
9         "marker-color": "#ee7302",
10        "type": "Point"
11      },
12      "geometry": {
13        "type": "Point",
14        "coordinates": [
15          5.1259789,
16          51.7841643
17        ]
18      }
19    },
20    {
21      "type": "Feature",
22      "properties": {
23        "title": "[[d:Q59772714|Ammerzoden public library]]",
24        "marker-size": "small",
25        "marker-color": "#ee7302",
26        "type": "Point"
27      },
28      "geometry": {
29        "type": "Point",
30        "coordinates": [
31          5.2201121,
32          51.7506792
33        ]
34      }
35    },
36    {
37      "type": "Feature",
```

<https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map>



```
1 {
2   "license": "CC0-1.0",
3   "description": {
4     "en": "Your English title here"
5   },
6   "sources": "",
7   "zoom": 8,
8   "latitude": 52.091656341,
9   "longitude": 5.119627565,
10  "data":
11
12  INSERT YOUR GEOJSON DATA HERE (output of http://geojson.io)
13
14 }
15
```

But how do you make this TSV?

| 1 | title | marker-size | marker-color | type | long | lat | | |
|----|--|-------------|--------------|-------|-----------|------------|--|--|
| 2 | [[d:Q59772713 Aalst public library]] | small | #ee7302 | Point | 5.1259789 | 51.7841643 | | |
| 3 | [[d:Q59772714 Ammerzoden public library]] | small | #ee7302 | Point | 5.2201121 | 51.7506792 | | |
| 4 | [[d:Q59772716 Asperen public library]] | small | #ee7302 | Point | 5.1045091 | 51.8806175 | | |
| 5 | [[d:Q59772717 Beesd public library]] | small | #ee7302 | Point | 5.1930425 | 51.8868067 | | |
| 6 | [[d:Q59772718 Beneden-Leeuwen public library]] | small | #ee7302 | Point | 5.516266 | 51.8777727 | | |
| 7 | [[d:Q59772719 Culemborg public library]] | small | #ee7302 | Point | 5.223026 | 51.9574438 | | |
| 8 | [[d:Q59772720 Dodewaard public library]] | small | #ee7302 | Point | 5.6607362 | 51.9090619 | | |
| 9 | [[d:Q59772721 Dreumel public library]] | small | #ee7302 | Point | 5.4329593 | 51.846106 | | |
| 10 | [[d:Q59772722 Druten public library]] | small | #ee7302 | Point | 5.6023973 | 51.8864962 | | |
| 11 | [[d:Q59772723 Geldermalsen public library]] | small | #ee7302 | Point | 5.28966 | 51.87324 | | |
| 12 | [[d:Q59772724 Haaften public library]] | small | #ee7302 | Point | 5.209602 | 51.8222877 | | |
| 13 | [[d:Q59772725 Herwijnen public library]] | small | #ee7302 | Point | 5.132461 | 51.8278308 | | |
| 14 | [[d:Q59772726 Heukelum public library]] | small | #ee7302 | Point | 5.075112 | 51.8717037 | | |
| 15 | [[d:Q59772727 Kerkdriel public library]] | small | #ee7302 | Point | 5.3380551 | 51.7712143 | | |
| 16 | [[d:Q59772729 Kesteren public library]] | small | #ee7302 | Point | 5.5680087 | 51.9321838 | | |
| 17 | [[d:Q59772731 Ochten public library]] | small | #ee7302 | Point | 5.5680429 | 51.9084892 | | |
| 18 | [[d:Q59772732 Ophemert public library]] | small | #ee7302 | Point | 5.3849607 | 51.8441046 | | |
| 19 | [[d:Q59772733 Opheusden public library]] | small | #ee7302 | Point | 5.6276707 | 51.9319108 | | |
| 20 | [[d:Q59772735 Zaltbommel public library]] | small | #ee7302 | Point | 5.2321253 | 51.8034576 | | |
| 21 | [[d:Q59772736 Self-service library point Boven-Leeuwen]] | small | #ee7302 | Point | 5.5459884 | 51.8853943 | | |
| 22 | [[d:Q59772737 Self-service library point Brakel]] | small | #ee7302 | Point | 5.0926245 | 51.8141786 | | |
| 23 | [[d:Q59772738 Self-service library point Deest]] | small | #ee7302 | Point | 5.6643959 | 51.8902209 | | |
| 24 | [[d:Q59772739 Self-service library point Deil]] | small | #ee7302 | Point | 5.2459089 | 51.8840328 | | |
| 25 | [[d:Q59772740 Self-service library point Horssen]] | small | #ee7302 | Point | 5.6090658 | 51.8547778 | | |
| 26 | [[d:Q59772741 Self-service library point Lek en Linge]] | small | #ee7302 | Point | 5.2348588 | 51.9457687 | | |
| 27 | [[d:Q59772742 Self-service library point Maasbommel]] | small | #ee7302 | Point | 5.5353727 | 51.8199371 | | |
| 28 | [[d:Q59772743 Self-service library point Nederhemert]] | small | #ee7302 | Point | 5.1667443 | 51.7636824 | | |
| 29 | [[d:Q59772745 Self-service library point Vuren]] | small | #ee7302 | Point | 5.0489027 | 51.8248737 | | |
| 30 | [[d:Q59772808 Tiel public library]] | small | #ee7302 | Point | 5.4366236 | 51.8845787 | | |

Adapt this query, save output as .tsv

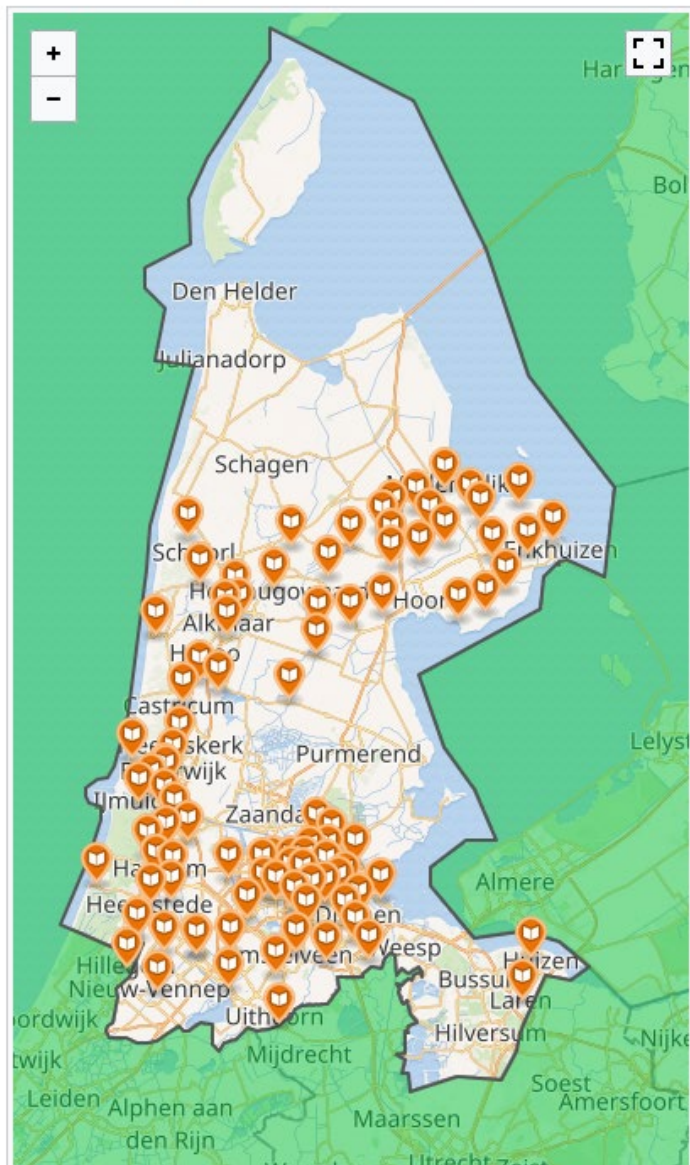
Wikidata Query Service

Voorbeelden Hulp Meer hulpmiddelen

```
1 #Query used to make GeoJSON input for https://commons.wikimedia.org/wiki/Data:DutchPublicLibraries.map
2 #Steps involved
3 #1) Download and save query result as tsv file
4 #2) Rename headers (replace '_' with '-') in this tsv file :
5 #   marker_size --> marker-size
6 #   marker_color --> marker-color
7 #   marker_symbol --> marker-symbol
8 #3) Upload this file to geojson.io (Open --> File)
9 #4) Copy-paste GeoJSON output (right pane) into Data:DutchPublicLibraries.map file (in the "data" field)
10
11 SELECT DISTINCT ?title ?marker_size ?marker_color ?type ?marker_symbol ?long ?lat WHERE {
12 #Is Dutch public library branch
13 ?dpl wdt:P31 wd:Q28564. #public library
14 ?dpl wdt:P31 wd:Q11396180. #library branch
15 ?dpl wdt:P17 wd:Q55. #in the Netherlands
16
17 ?dpl wdt:P625 ?dplLoc. #Location of the dpl
18
19 # Get the English Wikidata label of the dpl
20 ?dpl rdfs:label ?dplLabel.
21 FILTER (lang(?dplLabel) = 'en')
22
23 #Transform from 'http://www.wikidata.org/entity/Q63890044 Akersloot public library' to '[[d:Q63890044|Akersloot public library]]'
24 BIND(CONCAT('[[d:', STRAFTER(STR(?dpl), "http://www.wikidata.org/entity/"), '|', ?dplLabel, '|]]') AS ?title)
25
26 # Set 4 default values
27 BIND("small" AS ?marker_size)
28 BIND("#ee7302" AS ?marker_color)
29 BIND("library" AS ?marker_symbol)
30 BIND("Point" AS ?type)
31
32 #Transform: 'Point(4.7322704 52.5633782)' (in 1 column) to '4.7322704' , '52.5633782' ( i.e. 2 columns longitude + latitude)
33 BIND(STRBEFORE(STRAFTER(STR(?dplLoc), ' '), ' ')) AS ?lat)
34 BIND(STRBEFORE(STRAFTER(STR(?dplLoc), 'Point(', ' ')) AS ?long)
35
36 }
37 ORDER BY ?title
```

<https://bit.ly/2YG48aY>

Copy-paste in browser!



2.5) Combining data types

GeoShape + .map

[NetherlandsPublicLibrariesNorthHolland.map](#), Wikimedia maps | Map data © OpenStreet...

Map of public libraries in the province of North-Holland, The Netherlands. Geomask is used



```
<mapframe width=400 height=700 zoom=9 latitude=52.65 longitude=4.95 text="Map of public libraries in the province of North-Holland, The Netherlands. Geomask is used" align=left>
[
{
  "type": "ExternalData",
  "service": "geoshape",
  "service": "geomask",
  "ids": "Q701",
  "properties": {
    "fill": "#07c63e", "title": "Noord-Holland"
  }
},
{
  "type": "ExternalData",
  "service": "page",
  "title": "DutchPublicLibrariesNorthHolland.map"
}
]
</mapframe>
```

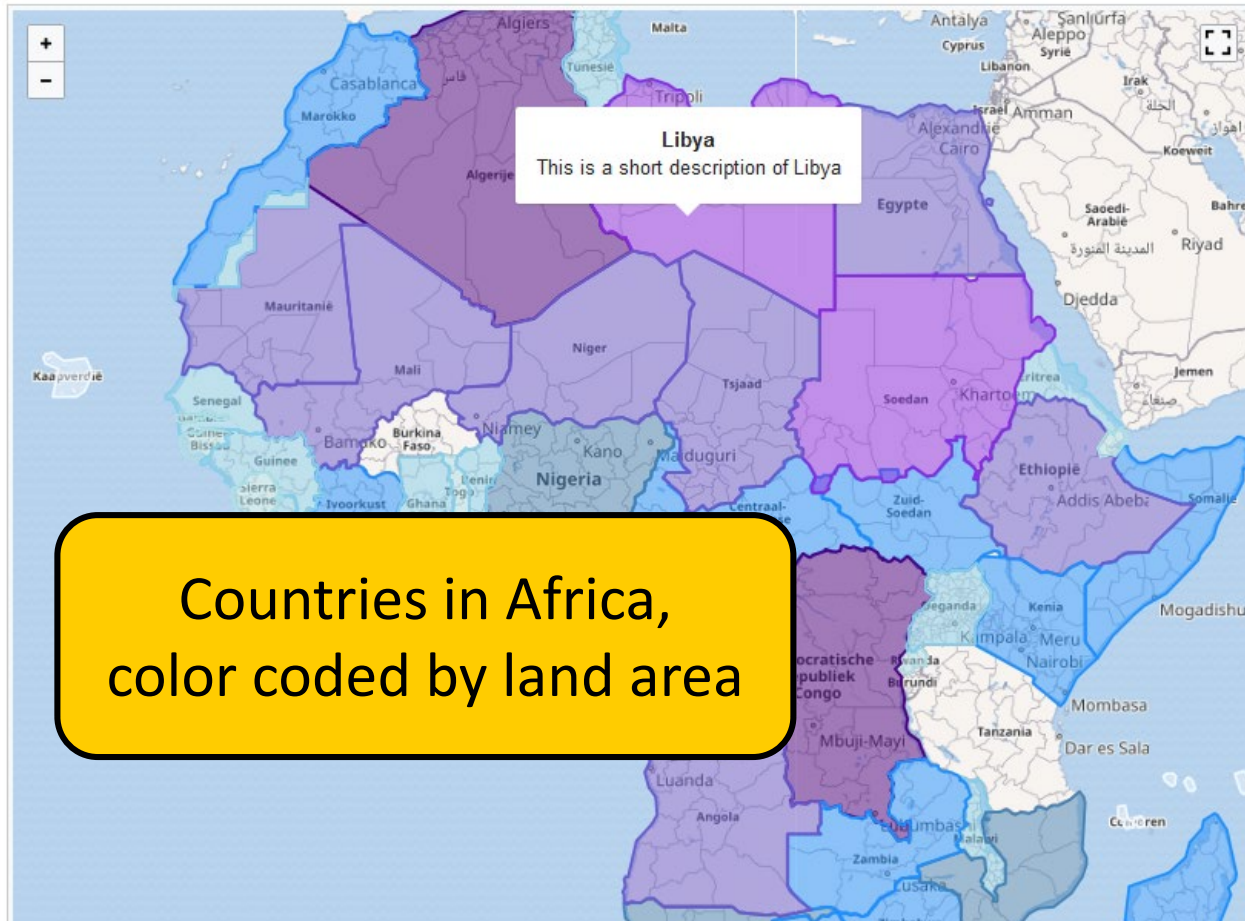


<https://commons.wikimedia.org/wiki/Data:DutchPublicLibrariesNorthHolland.map>

2.6) GeoShapes using SPARQL and OSM

Maps with geoshapes based on SPARQL queries in Wikidata

https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query



Countries in Africa,
color coded by land area

https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query

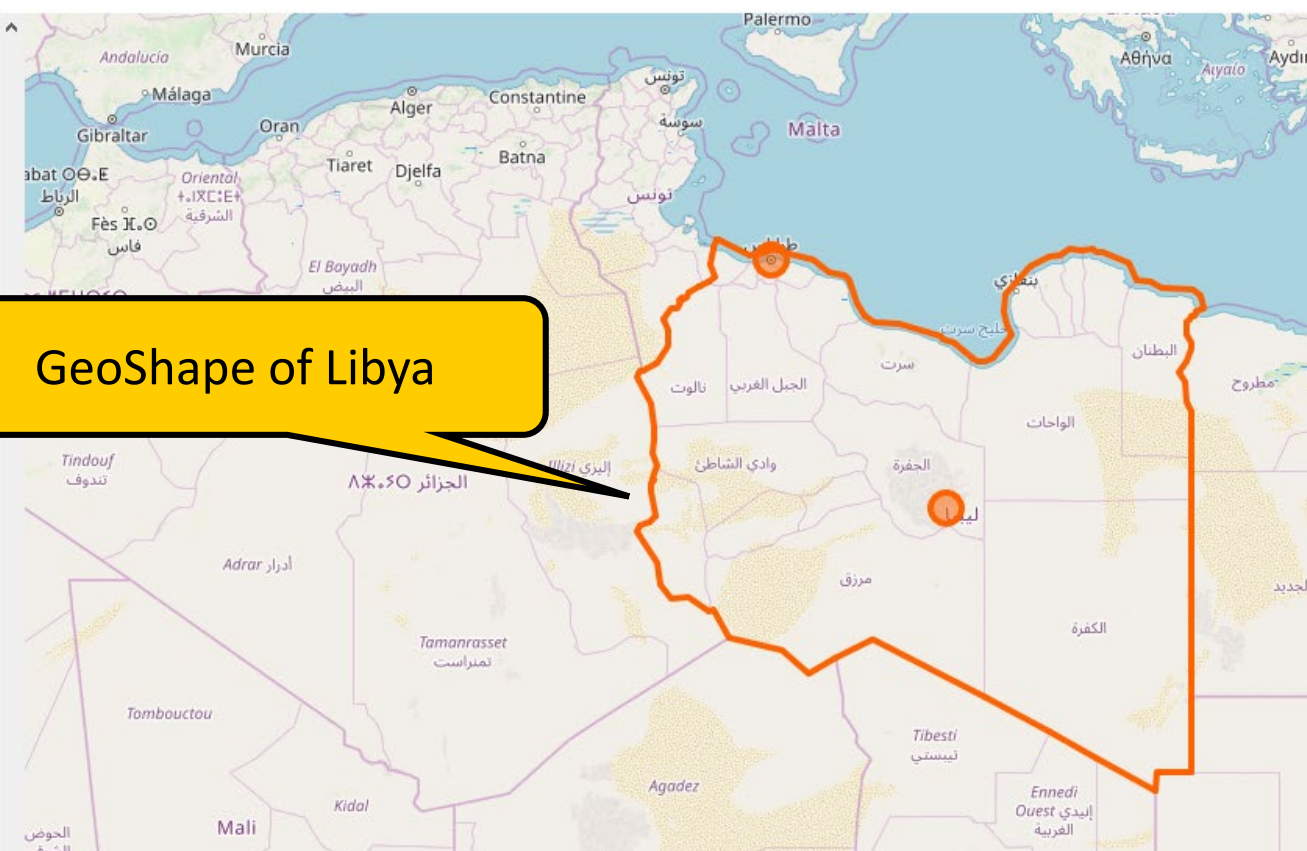
<https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019>

2.6) GeoShapes using SPARQL and OSM

OpenStreetMap Bewerken Geschiedenis Exporteren GPS-traces Gebruikersdagboeke

name:xl	Либудин Аһы Социгализмин Араб Улс Орн
name:xmf	ლიბია
name:yi	ליביע
name:yo	Líbyà
name:yue	利比亞
name:zea	Libië
name:zgh	ⵝⵉⵔⵉⵏ
name:zh	利比亚
name:zu	iLibiya
official_name:cs	Libyjský stát
timezone	Africa/Tripoli
type	boundary
wikidata	Q1016
wikipedia	ar:ليبيا

Onderdeel van



GeoShape of Libya

<https://www.openstreetmap.org/relation/192758#map=5/22.086/20.039>

<https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019>

```
== Maps with geoshapes based on SPARQL queries in Wikidata ==
```

```
https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query
```

```
<mapframe width=900 height=900 zoom=4 latitude=0 longitude=12 text="Countries in Africa, color coded by land area" align=left>
```

```
{  
  "type": "ExternalData",  
  "service": "geoshape",  
  "query": "
```

```
#---- Begin SPARQL query // Make sure you only use single quotes (') in the query, otherwise you get a JSON parse error ---
```

```
SELECT DISTINCT
```

```
?id          #Wikidata Qid matching the geoshape on Open Street Map  
?title       #Popup title when you click on the country  
?description #Description in the popup  
?fill        #Color the geoshape is filled with  
?stroke      #Color of the geoshape outline
```

```
WHERE {
```

```
?id wdt:P31 wd:Q6256; wdt:P30 wd:Q15. #Country in the continent of Africa  
?id wdt:P2046 ?area. # Land area of the country
```

```
?id rdfs:label ?idLabel . FILTER(lang(?idLabel)='en') #only English labels
```

```
BIND(?idLabel as ?title)
```

```
BIND(CONCAT('This is a short description of ',STR(?title)) as ?description)
```

```
# Fill & stroke colors depend on land area of country
```

```
BIND(
```

```
  IF(?area < 5000, '#F0F8FF',  
  IF(?area < 100000, '#B0E0E6',  
  IF(?area < 300000, '#87CEEB',  
  IF(?area < 800000, '#1E90FF',  
  IF(?area < 1000000, '#4682B4',  
  IF(?area < 1500000, '#6A5ACD',  
  IF(?area < 2000000, '#8A2BE2',  
  '#4B0082')))) AS ?color)
```

```
BIND(?color as ?fill)
```

```
BIND(?color as ?stroke)
```

```
}
```

```
#----- End SPARQL query -----
```

```
"}
```

```
</mapframe>
```

<https://bit.ly/2YBxV4t>

== Maps with geoshapes based on SPARQL queries in Wikidata ==

https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query

<mapframe width=900 height=900 zoom=4 latitude=0 longitude=12 text="Countries in Africa, color coded by land area" align=left>

id	title	description	fill	stroke
Q912	Mali	This is a short description of Mali	#6A5ACD	#6A5ACD
Q916	Angola	This is a short description of Angola	#6A5ACD	#6A5ACD
Q79	Egypt	This is a short description of Egypt	#6A5ACD	#6A5ACD
Q114	Kenya	This is a short description of Kenya	#1E90FF	#1E90FF
Q924	Tanzania	This is a short description of Tanzania	#4682B4	#4682B4
Q115	Ethiopia	This is a short description of Ethiopia	#6A5ACD	#6A5ACD
Q117	Ghana	This is a short description of Ghana	#87CEEB	#87CEEB
Q929	Central African Republic	This is a short description of Central African Republic	#1E90FF	#1E90FF
Q948	Tunisia	This is a short description of Tunisia	#87CEEB	#87CEEB
Q262	Algeria	This is a short description of Algeria	#4B0082	#4B0082
Q945	Togo	This is a short description of Togo	#B0E0E6	#B0E0E6
Q953	Zambia	This is a short description of Zambia	#1E90FF	#1E90FF
Q258	South Africa	This is a short description of South Africa	#6A5ACD	#6A5ACD
Q657	Chad	This is a short description of Chad	#6A5ACD	#6A5ACD
Q954	Zimbabwe	This is a short description of Zimbabwe	#87CEEB	#87CEEB
Q958	South Sudan	This is a short description of South Sudan	#87CEEB	#87CEEB
Q962	Benin	This is a short description of Benin	#87CEEB	#87CEEB

<https://bit.ly/2YBxV4t>

"}
</mapframe>

== Maps with geoshapes based on SPARQL queries in Wikidata ==

https://www.mediawiki.org/wiki/Help:Extension:Kartographer#GeoShapes_via_Wikidata_Query

```
<mapframe width=900 height=900 zoom=4 latitude=0 longitude=12 text="Countries in Africa, color coded by land area" align=left>
{
  "type": "ExternalData",
  "service": "geoshape",
  "query": "
```

#----- Begin SPARQL query // Make sure you only use single quotes (') in the query, otherwise you get a JSON parse error ----

```
SELECT DISTINCT
```

```
?id          #Wikidata Qid map
?title       #Popul
?description  #Description in t
?fill        #Color the geosha
?stroke      #Color of the geo
```

Variables must have these
names

```
WHERE {
```

```
?id wdt:P31 wd:Q6256; wdt:P30 wd:Q15. #Country in the continent of Africa
```

```
?id wdt:P2046 ?area. # Land area of the country
```

```
?id rdfs:label ?idLabel . FILTER(lang(?idLabel)='en') #only English labels
```

```
BIND(?idLabel as ?title)
```

```
BIND(CONCAT('This is a short description of ',STR(?idLabel)) as ?description)
```

```
# Fill & stroke colors depend on land area of country
```

```
BIND(
```

```
IF(?area < 5000, '#F0F8FF',
```

```
IF(?area < 100000, '#B0E0E6',
```

```
IF(?area < 300000, '#87CEEB',
```

```
IF(?area < 800000, '#1E90FF',
```

```
IF(?area < 1000000, '#4682B4',
```

```
IF(?area < 1500000, '#6A5ACD',
```

```
IF(?area < 2000000, '#8A2BE2',
```

```
'#4B0082')))))) AS ?color)
```

```
BIND(?color as ?fill)
```

```
BIND(?color as ?stroke)
```

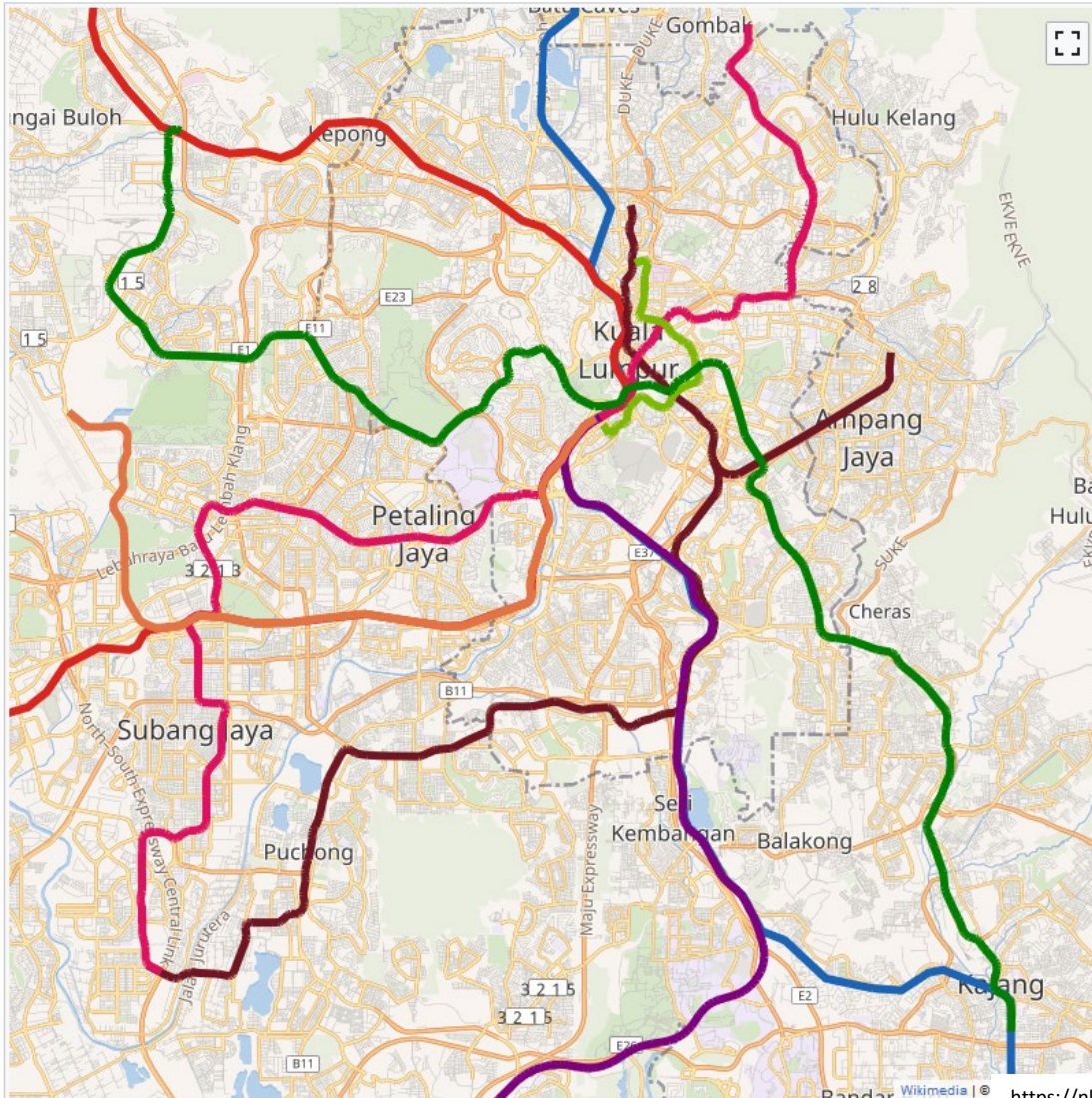
```
}
```

#----- End SPARQL query -----

Only use single quotes,
otherwise you'll get a
JSON parse error

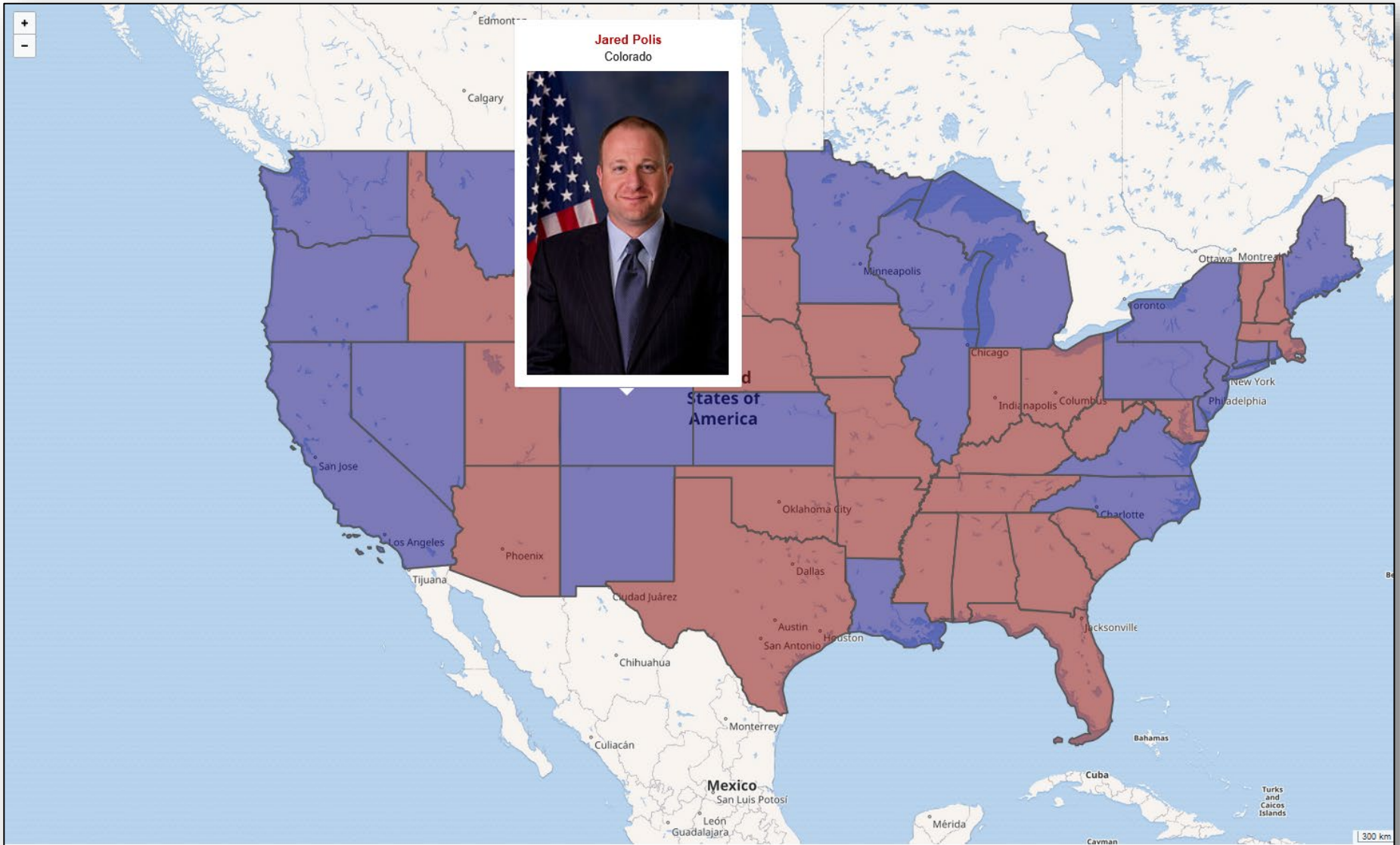
2.7) Other cool embedded maps

Railway lines around Klang Valley, Malaysia [bewerken | brontekst bewerken]



Railway lines around Klang Valley, Malaysia

<https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019>,
from https://en.wikipedia.org/wiki/User:*angys*/sandbox

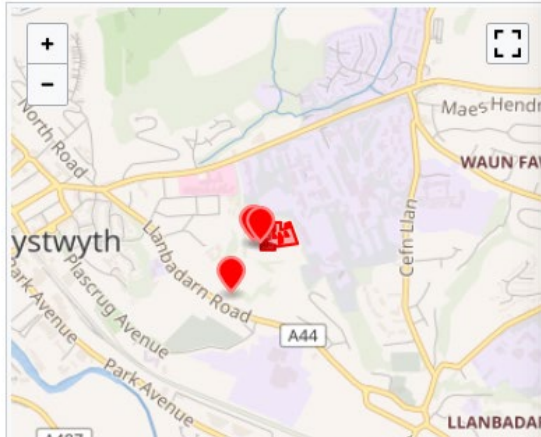


Governors of US states with their party affiliation

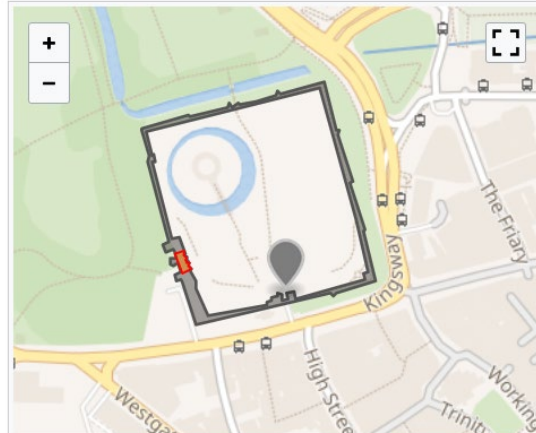
<https://www.r>

<https://www.mediawiki.org/wiki/Help:Extension:Kartographer#/map/4>

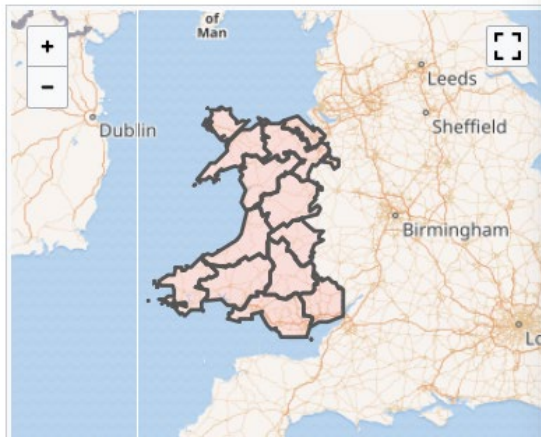
GeoShapes [edit]



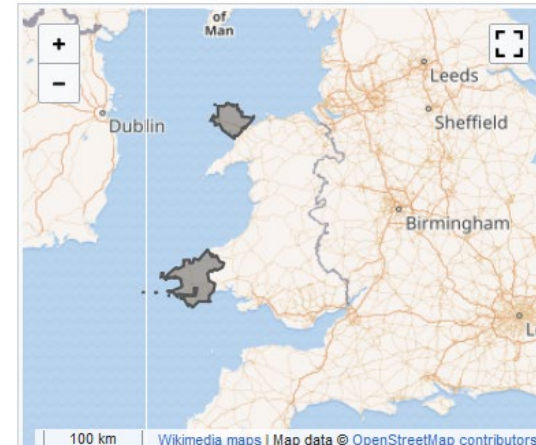
Commons: National Library of Wales.map, Wikimedia maps | Map data © OpenStreetMap contributors
National Library of Wales collections



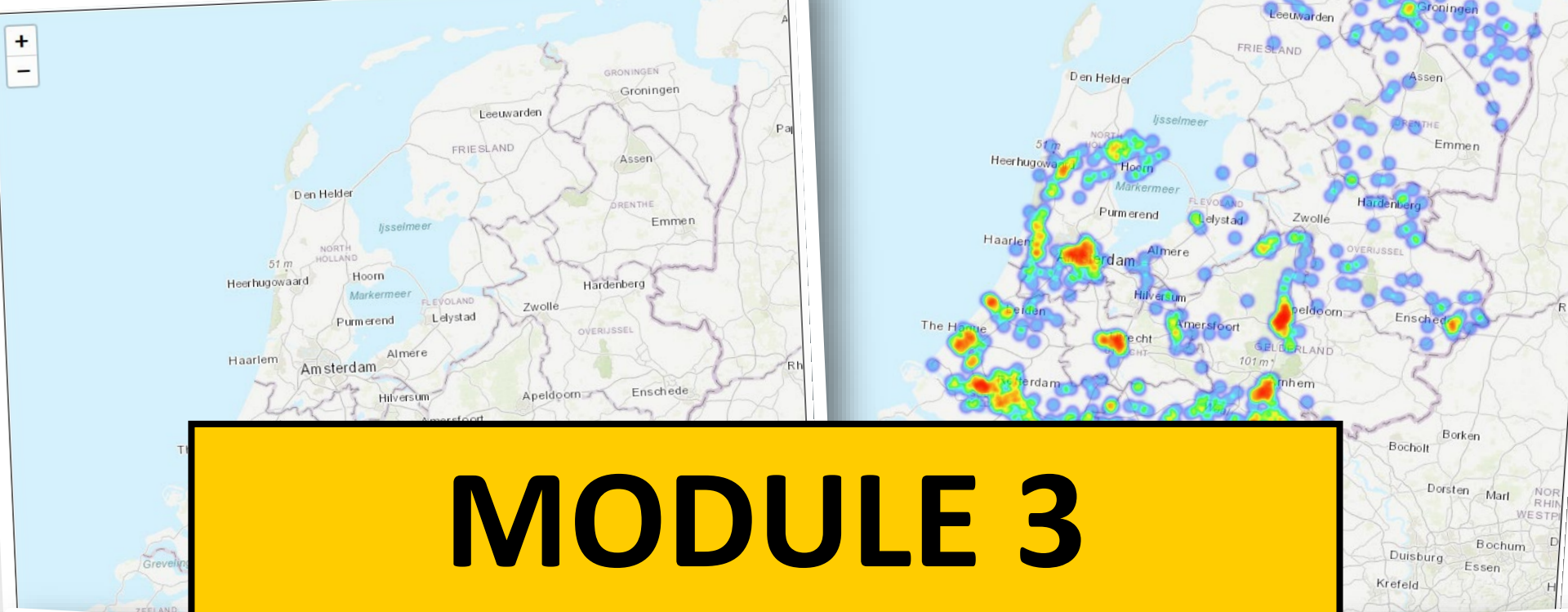
Commons: Cardiff Castle.map, Wikimedia maps | Map data © OpenStreetMap contributors
Cardiff Castle with library



Commons: counties of Wales/Denbighshire.map, Wikimedia maps | Map data © OpenStreetMap contributors
Historic counties of Wales



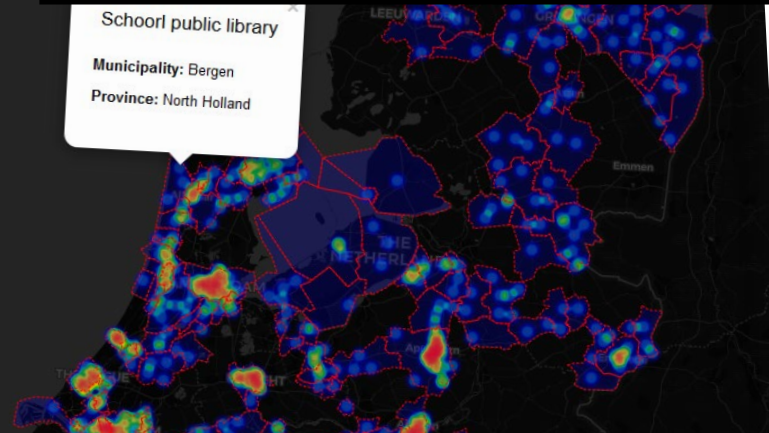
Commons: Anglesey and Pembrokeshire.map, Wikimedia maps | Map data © OpenStreetMap contributors
Anglesey and Pembrokeshire geomask



MODULE 3




Interactive, layered off-Wiki maps driven by Wikidata

School public library
Municipality: Bergen
Province: North Holland







```
7 # Overview of more basemaps: https://leaflet-extras.github.io/leaflet-providers/preview/ +
8 # https://github.com/jupyter-widgets/ipyleaflet/blob/master/ipyleaflet/basemaps.py
9
10 # Set initial center and zoom level of basemap
11
12 map_center=(52.088889, 5.33) #Utrecht city
13 map_zoom=8
14
15 # Set layout of map
16 map_layout = {
17     'width': '900px',
18     'height': '1000px',
19     'border': '1px solid black',
20     'padding': '1px',
21     'margin': '0 auto 0 auto'
22 }
23
24 # Output the map to screen, embedded in notebook
25 # https://ipyleaflet.readthedocs.io/en/latest/api_reference/map.html
26 m = Map(layers=(default_layer,), center=map_center, zoom=map_zoom, layout=map_layout)
27 m
```

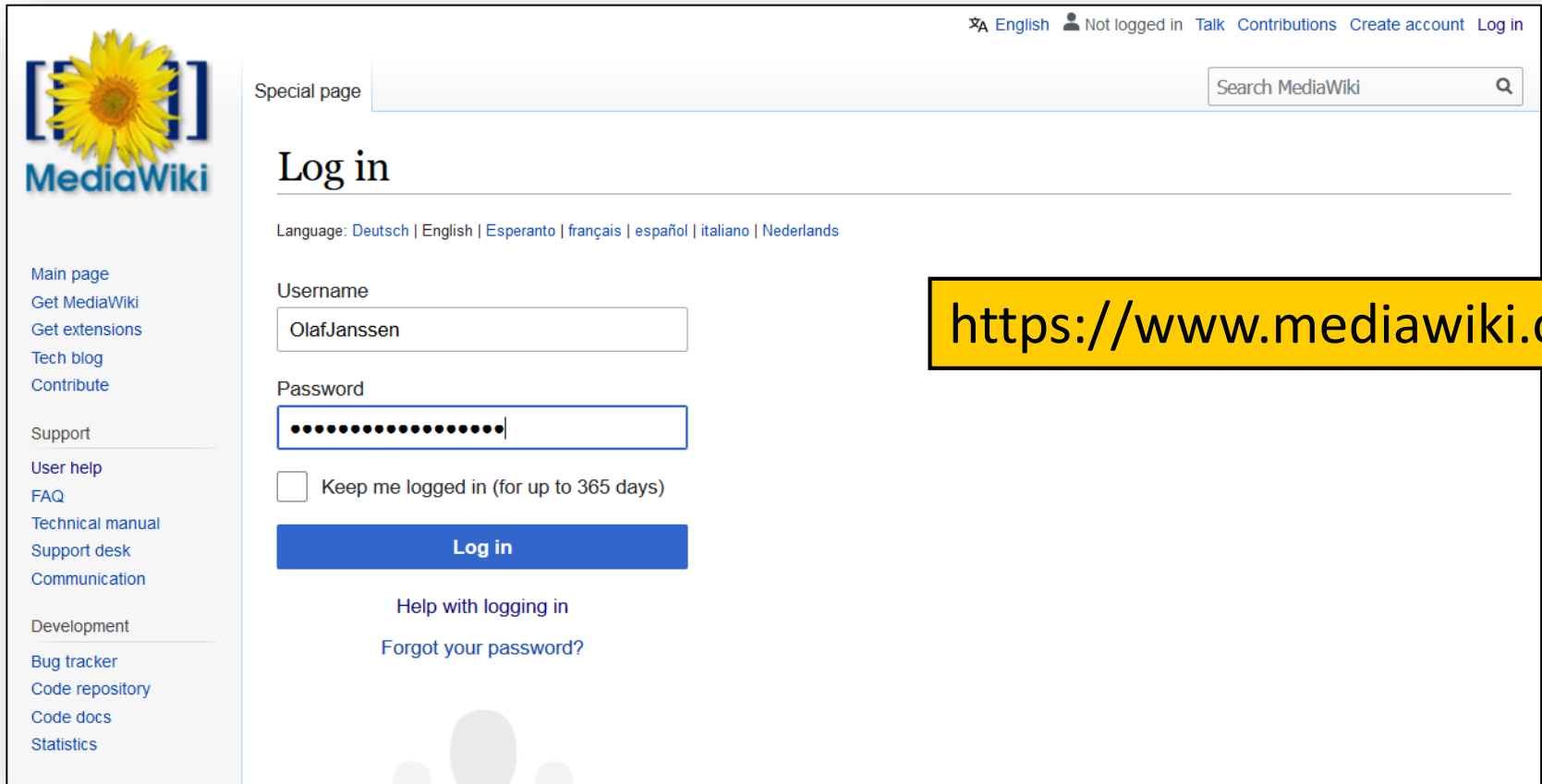




For this Module, it's nice to have basic experience with

- Python
 - PAWS / Jupyter Notebooks
 - (Jupyter-Leaflet & Jupyter-widgets)
- 
- 
- 
- 

MediaWiki account + login



The screenshot shows the MediaWiki login page. On the left is a sidebar with navigation links. The main content area contains the login form with fields for 'Username' (filled with 'OlafJanssen') and 'Password' (filled with dots). There is a 'Keep me logged in' checkbox and a blue 'Log in' button. At the bottom of the form are links for 'Help with logging in' and 'Forgot your password?'. The top right of the page has a search bar and user status information.

Special page

English Not logged in Talk Contributions Create account Log in

Log in

Language: [Deutsch](#) | [English](#) | [Esperanto](#) | [français](#) | [español](#) | [italiano](#) | [Nederlands](#)

Username

Password

Keep me logged in (for up to 365 days)

[Log in](#)

[Help with logging in](#)

[Forgot your password?](#)

<https://www.mediawiki.org>

Main page
Get MediaWiki
Get extensions
Tech blog
Contribute

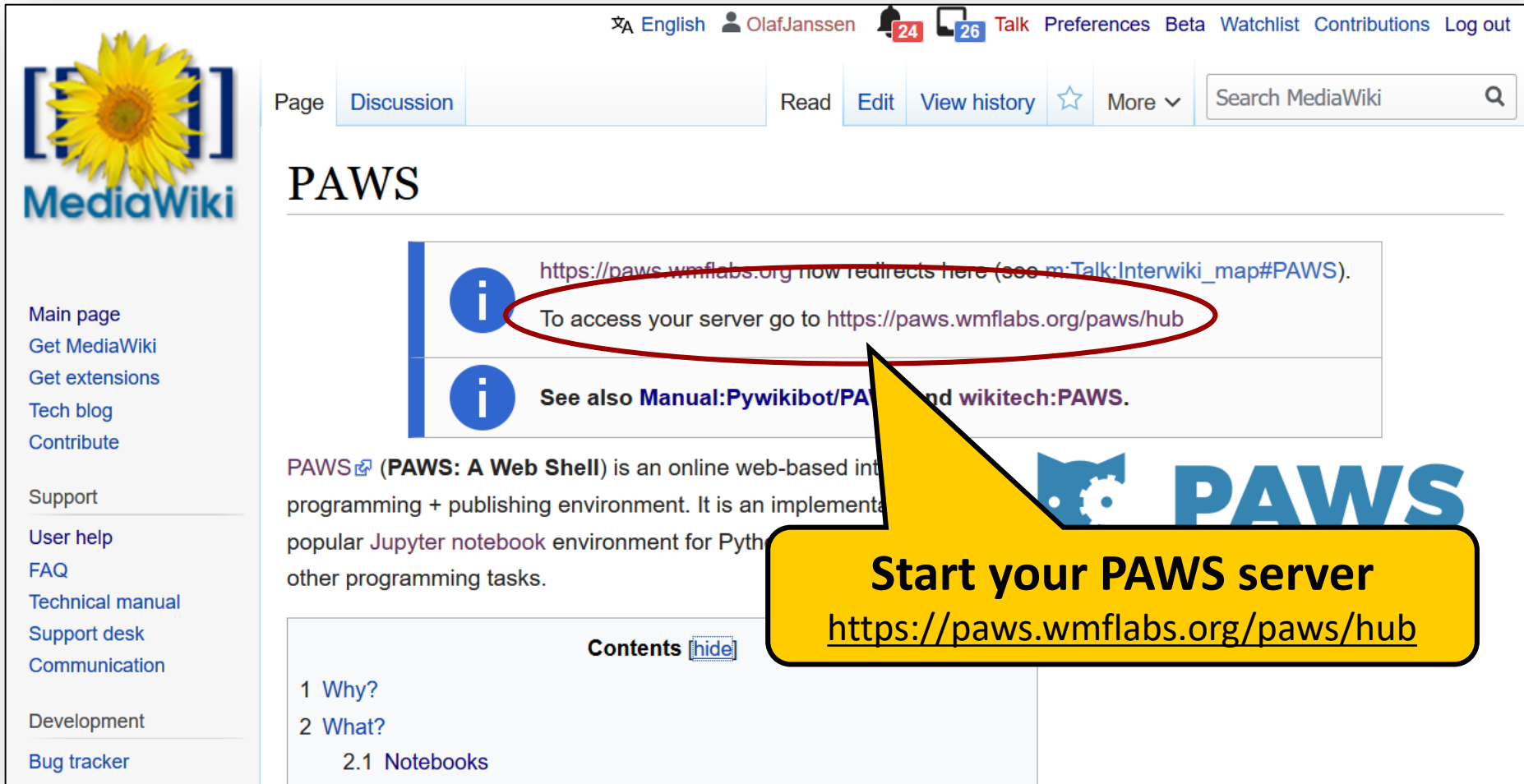
Support

User help
FAQ
Technical manual
Support desk
Communication

Development

Bug tracker
Code repository
Code docs
Statistics

<https://www.mediawiki.org/wiki/PAWS>



The screenshot shows the MediaWiki page for PAWS. The top navigation bar includes language (English), user (OlafJanssen), and notification counts (24, 26). The page title is "PAWS". A red oval highlights the URL <https://paws.wmflabs.org/paws/hub> in the first information box. A yellow callout bubble points to this URL with the text "Start your PAWS server" and the same URL. The second information box mentions "Manual:Pywikibot/PAWS" and "wikitech:PAWS". The main text describes PAWS as an online web-based interactive programming + publishing environment. A table of contents is visible at the bottom left.

English OlafJanssen 24 26 Talk Preferences Beta Watchlist Contributions Log out

Page Discussion Read Edit View history More Search MediaWiki

PAWS

i <https://paws.wmflabs.org> now redirects here (see [m:Talk:Interwiki_map#PAWS](#)).

To access your server go to <https://paws.wmflabs.org/paws/hub>

i See also [Manual:Pywikibot/PAWS](#) and [wikitech:PAWS](#).

PAWS (PAWS: A Web Shell) is an online web-based interactive programming + publishing environment. It is an implementation of a popular Jupyter notebook environment for Python and other programming tasks.

PAWS

Contents [hide](#)

- 1 Why?
- 2 What?
 - 2.1 Notebooks

Main page
Get MediaWiki
Get extensions
Tech blog
Contribute

Support
User help
FAQ
Technical manual
Support desk
Communication

Development
Bug tracker

Starting your PAWS server

You might see this screen...

The screenshot shows a web browser window displaying the Wikimedia OAuth authorization page. The URL in the address bar is https://meta.wikimedia.org/w/index.php?title=Special:OAuth/authenticate&oauth_token=41edf591bf825bd48d3cc83. The page title is "Special page: OAuth" and the subtitle is "Allows usage of OAuth 1.0a for API authorization".

The page content includes a header with the Wikimedia logo and the text "WIKIMEDIA META-WIKI". Below the header is a navigation menu with links such as "Main page", "Wikimedia News", "Translations", "Recent changes", "Random page", "Help", "Babel", "Community", "Wikimedia Resource Center", "Wikimedia Forum", "Mailing lists", "Requests", "Babylon", "Reports", "Research", "Planet Wikimedia", "Beyond the Web", "Meet Wikimedians", "Events", "Movement affiliates", "Donate", "Tools", "Special pages", and "Printable version".

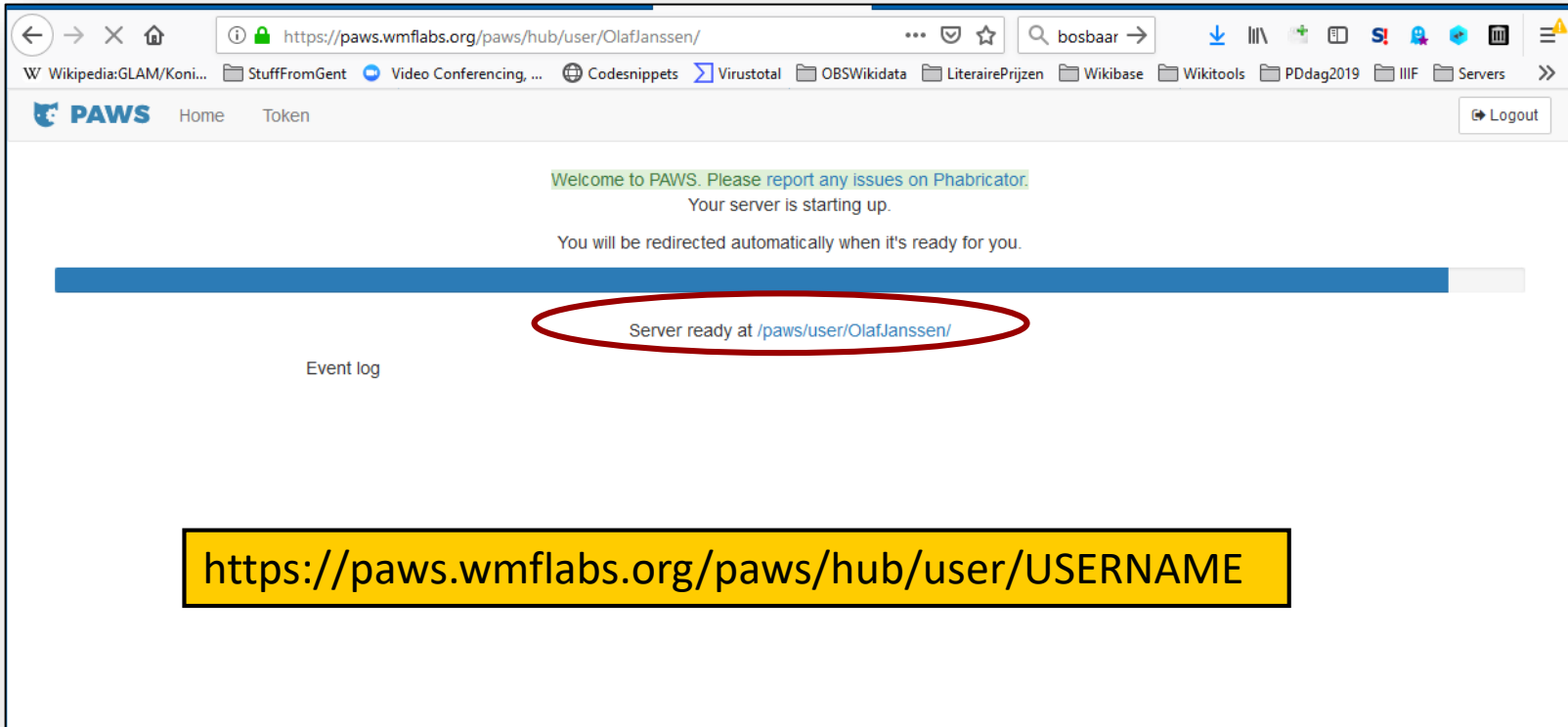
The main content area displays the OAuth authorization request. It starts with a greeting: "Hi OlafJanssen,". The text reads: "In order to complete your request, **PAWS** needs permission to perform the following actions on your behalf on all projects of this site:".

The requested permissions are listed as follows:

- **Perform high volume activity**
High-volume editing
- **Interact with pages**
Edit existing pages; Edit protected pages; Create, edit, and move pages; Patrol changes to pages
- **Interact with media**
Upload new files; Upload, replace, and move files
- **Perform administrative actions**
Rollback changes to pages
- **Interact with your watchlist**
View your watchlist
- **Miscellaneous activity**
Edit your watchlist

At the bottom of the page, there is a "Privacy policy" link and two buttons: "Allow" and "Cancel". The "Allow" button is circled in red, indicating the action to be taken.

Starting your PAWS server



The screenshot shows a web browser window with the URL `https://paws.wmflabs.org/paws/hub/user/OlafJanssen/`. The page displays a progress bar and a message: "Welcome to PAWS. Please report any issues on Phabricator. Your server is starting up. You will be redirected automatically when it's ready for you." Below the progress bar, the text "Server ready at `/paws/user/OlafJanssen/`" is circled in red. The browser's address bar and tabs are visible at the top.

Event log

Server ready at `/paws/user/OlafJanssen/`

`https://paws.wmflabs.org/paws/hub/user/USERNAME`

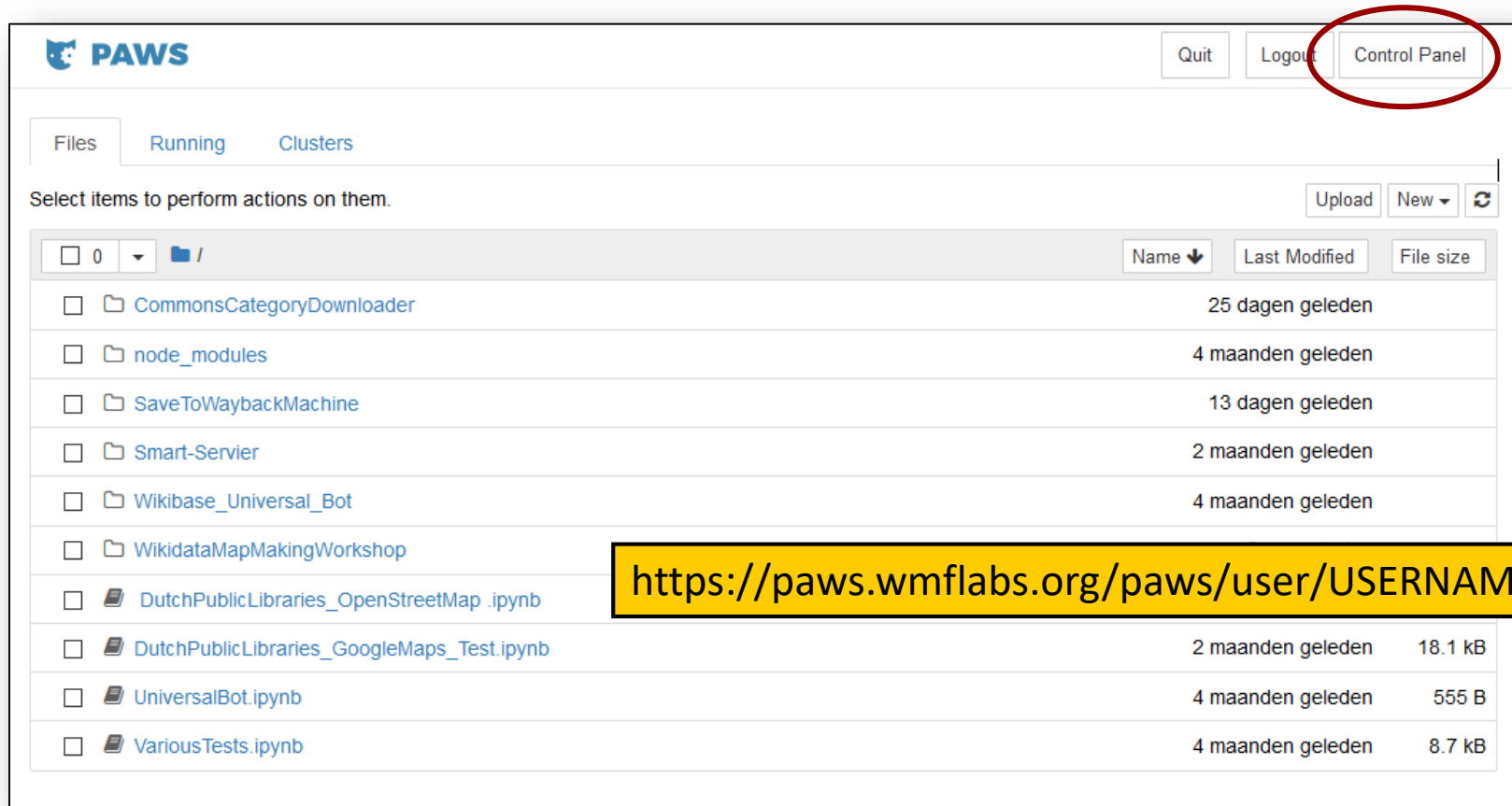
Your PAWS server running

The screenshot shows the PAWS web interface. At the top, there are buttons for 'Quit', 'Logout', and 'Control Panel'. Below that, there are tabs for 'Files', 'Running', and 'Clusters'. A message says 'Select items to perform actions on them.' with buttons for 'Upload', 'New', and a refresh icon. The main area is a file list with columns for 'Name', 'Last Modified', and 'File size'. The file list includes folders like 'CommonsCategoryDownloader', 'node_modules', 'SaveToWaybackMachine', 'Smart-Servier', 'Wikibase_Universal_Bot', and 'WikidataMapMakingWorkshop'. It also lists several .ipynb files: 'DutchPublicLibraries_OpenStreetMap.ipynb', 'DutchPublicLibraries_GoogleMaps_Test.ipynb', 'UniversalBot.ipynb', and 'VariousTests.ipynb'. A red circle highlights the file 'DutchPublicLibraries_GoogleMaps_Test.ipynb'. A yellow callout bubble points to this file with the text: '.ipynb = interactive **python notebook**'. Below the callout, a yellow box contains the URL: 'https://paws.wmflabs.org/paws/user/USERNAME/tree'.

Name	Last Modified	File size
<input type="checkbox"/> CommonsCategoryDownloader		
<input type="checkbox"/> node_modules		
<input type="checkbox"/> SaveToWaybackMachine		
<input type="checkbox"/> Smart-Servier		
<input type="checkbox"/> Wikibase_Universal_Bot		
<input type="checkbox"/> WikidataMapMakingWorkshop		
<input type="checkbox"/> DutchPublicLibraries_OpenStreetMap.ipynb	2 uur geleden	442 kB
<input type="checkbox"/> DutchPublicLibraries_GoogleMaps_Test.ipynb	2 maanden geleden	18.1 kB
<input type="checkbox"/> UniversalBot.ipynb	2 maanden geleden	
<input type="checkbox"/> VariousTests.ipynb	4 maanden geleden	8.7 kB

- https://en.wikipedia.org/wiki/Project_Jupyter#Jupyter_Notebook
- <https://realpython.com/jupyter-notebook-introduction>

Stopping your PAWS server



The screenshot shows the PAWS web interface. At the top right, there are three buttons: 'Quit', 'Logout', and 'Control Panel'. The 'Control Panel' button is circled in red. Below the buttons, there are tabs for 'Files', 'Running', and 'Clusters'. The 'Files' tab is active, showing a file tree. The tree starts with a root directory '/' containing several folders and files. A yellow box at the bottom of the screenshot contains the URL: <https://paws.wmflabs.org/paws/user/USERNAME/tree>

Name	Last Modified	File size
<input type="checkbox"/> CommonsCategoryDownloader	25 dagen geleden	
<input type="checkbox"/> node_modules	4 maanden geleden	
<input type="checkbox"/> SaveToWaybackMachine	13 dagen geleden	
<input type="checkbox"/> Smart-Servier	2 maanden geleden	
<input type="checkbox"/> Wikibase_Universal_Bot	4 maanden geleden	
<input type="checkbox"/> WikidataMapMakingWorkshop		
<input type="checkbox"/> DutchPublicLibraries_OpenStreetMap.ipynb		
<input type="checkbox"/> DutchPublicLibraries_GoogleMaps_Test.ipynb	2 maanden geleden	18.1 kB
<input type="checkbox"/> UniversalBot.ipynb	4 maanden geleden	555 B
<input type="checkbox"/> VariousTests.ipynb	4 maanden geleden	8.7 kB

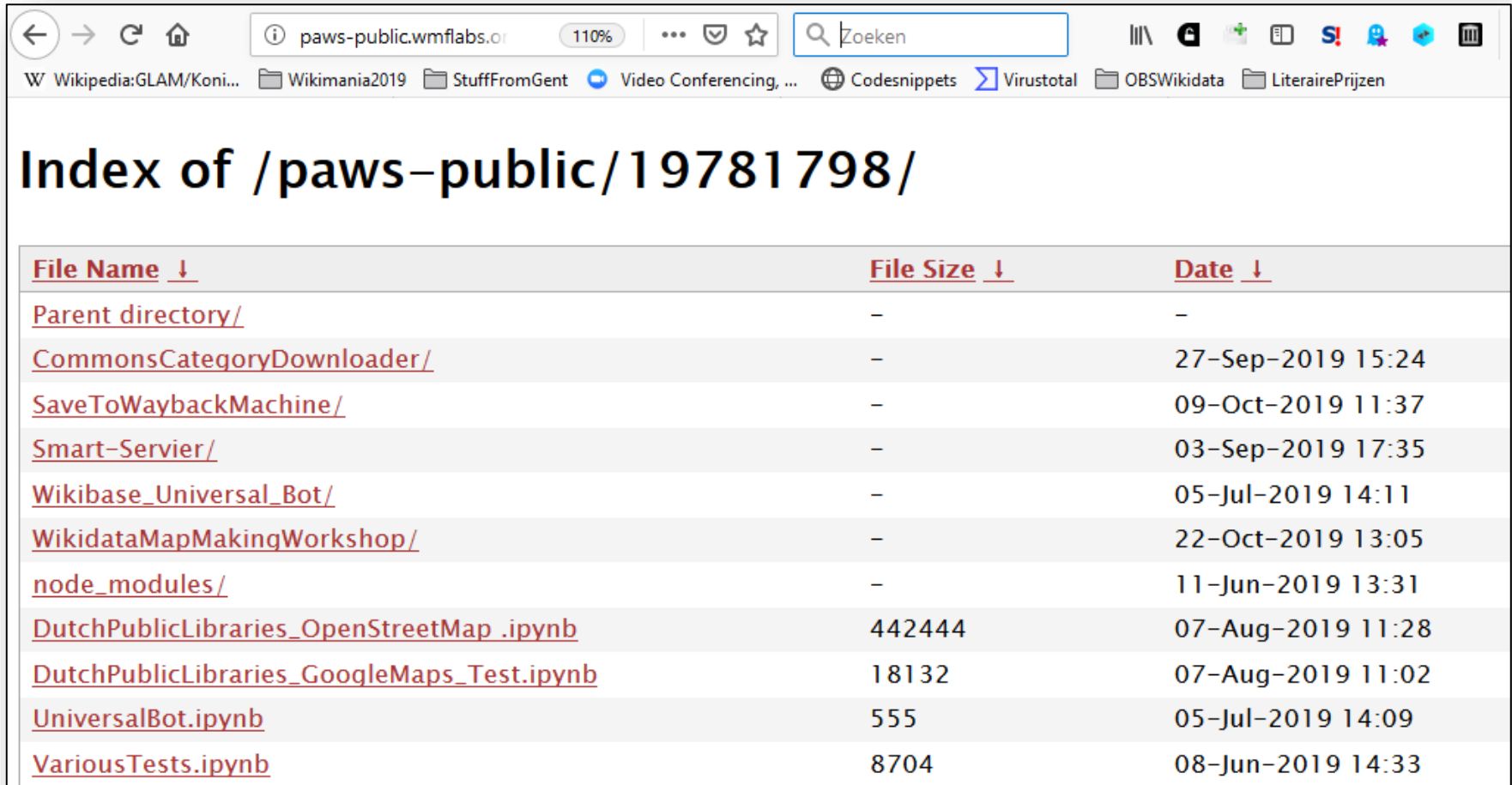
Stopping your PAWS server



The screenshot shows a web browser window with the URL <https://paws.wmflabs.org/paws/hub/home>. The page features the PAWS logo and navigation links for 'Home' and 'Token'. A green message bar reads: "Welcome to PAWS. Please report any issues on Phabricator." Below this, there are two buttons: a red button labeled "Stop My Server" and a blue button labeled "My Server". A red arrow points to the "Stop My Server" button.

<https://paws.wmflabs.org/paws/hub/home>

Your PAWS public folder (even when server is offline)



The screenshot shows a web browser window with the address bar displaying 'paws-public.wmflabs.org'. The page title is 'Index of /paws-public/19781798/'. Below the title is a table listing files and directories. The table has three columns: 'File Name', 'File Size', and 'Date'. The files listed are 'Parent directory/', 'CommonsCategoryDownloader/', 'SaveToWaybackMachine/', 'Smart-Servier/', 'Wikibase_Universal_Bot/', 'WikidataMapMakingWorkshop/', 'node_modules/', 'DutchPublicLibraries_OpenStreetMap.ipynb', 'DutchPublicLibraries_GoogleMaps_Test.ipynb', 'UniversalBot.ipynb', and 'VariousTests.ipynb'. The file sizes and dates are also listed for each file.

File Name ↓	File Size ↓	Date ↓
Parent directory/	-	-
CommonsCategoryDownloader/	-	27-Sep-2019 15:24
SaveToWaybackMachine/	-	09-Oct-2019 11:37
Smart-Servier/	-	03-Sep-2019 17:35
Wikibase_Universal_Bot/	-	05-Jul-2019 14:11
WikidataMapMakingWorkshop/	-	22-Oct-2019 13:05
node_modules/	-	11-Jun-2019 13:31
DutchPublicLibraries_OpenStreetMap.ipynb	442444	07-Aug-2019 11:28
DutchPublicLibraries_GoogleMaps_Test.ipynb	18132	07-Aug-2019 11:02
UniversalBot.ipynb	555	05-Jul-2019 14:09
VariousTests.ipynb	8704	08-Jun-2019 14:33

<https://paws-public.wmflabs.org/paws-public/User:USERNAME>

PAWS alternative: local Notebook installation



Products

Why Anaconda?

Solutions

Resources

Company

Download

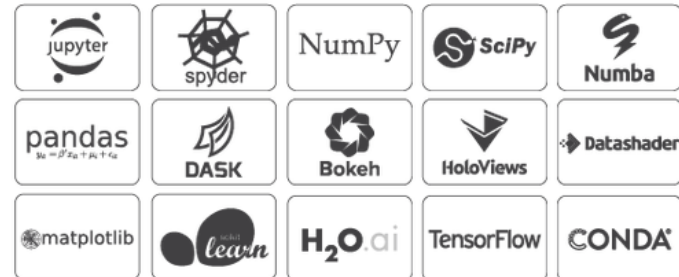
Anaconda Distribution

The World's Most Popular Python/R Data Science Platform

Download

The open-source Anaconda Distribution is the easiest way to perform Python/R data science and machine learning on Linux, Windows, and Mac OS X. With over 15 million users worldwide, it is the industry standard for developing, testing, and training on a single machine, enabling *individual data scientists* to:

- Quickly download 1,500+ Python/R data science packages
- Manage libraries, dependencies, and environments with Conda
- Develop and train machine learning and deep learning models with [scikit-learn](#), [TensorFlow](#), and [Theano](#)
- Analyze data with scalability and performance with [Dask](#), [NumPy](#), [pandas](#), and [Numba](#)
- Visualize results with [Matplotlib](#), [Bokeh](#), [Datashader](#), and [Holoviews](#)



- <https://jupyter.org/install>
- <https://www.anaconda.com/distribution/>
- <https://dataiseasy.com/2019/03/how-to-install-anaconda-and-jupyter-notebook>

Go to public PAWS folder of User:OlafJanssen



Browser address bar: paws-public.wmflabs.org

Index of /paws-public/19781798/

<u>File Name</u> ↓	<u>File Size</u> ↓	<u>Date</u> ↓
Parent directory/	-	-
CommonsCategoryDownloader/	-	14
SaveToWaybackMachine/	-	7
Smart-Servier/	-	5
Wikibase Universal Bot/	-	
WikidataMapMakingWorkshop/	-	22-Oct-2019 13:05
node_modules/	-	11-Jun-2019 13:31
DutchPublicLibraries_OpenStreetMap.ipynb	442444	07-Aug-2019 11:28
DutchPublicLibraries_GoogleMaps_Test.ipynb	18132	07-Aug-2019 11:02
UniversalBot.ipynb	555	05-Jul-2019 14:09
VariousTests.ipynb	8704	08-Jun-2019 14:33

Go to this folder

<https://paws-public.wmflabs.org/paws-public/User:OlafJanssen>

In folder 'WikidataMapMakingWorkshop'

Index of /paws-public/19781798 /WikidataMapMakingWorkshop/

<u>File Name</u> ↓	<u>File Size</u> ↓	<u>Date</u> ↓
Parent directory/	-	-
NetherlandsPublicLibrariesHeatmap.html	4562743	09-Aug-2019 11:17
WikidataMapMakingWorkshop.ipynb	38900	25-Sep-2019 16:29
nl_munis_with_public_libs.json		09 11:12
popupstyle.css		13:21

Example notebook
we will use

<https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop/WikidataMapMakingWorkshop.ipynb>

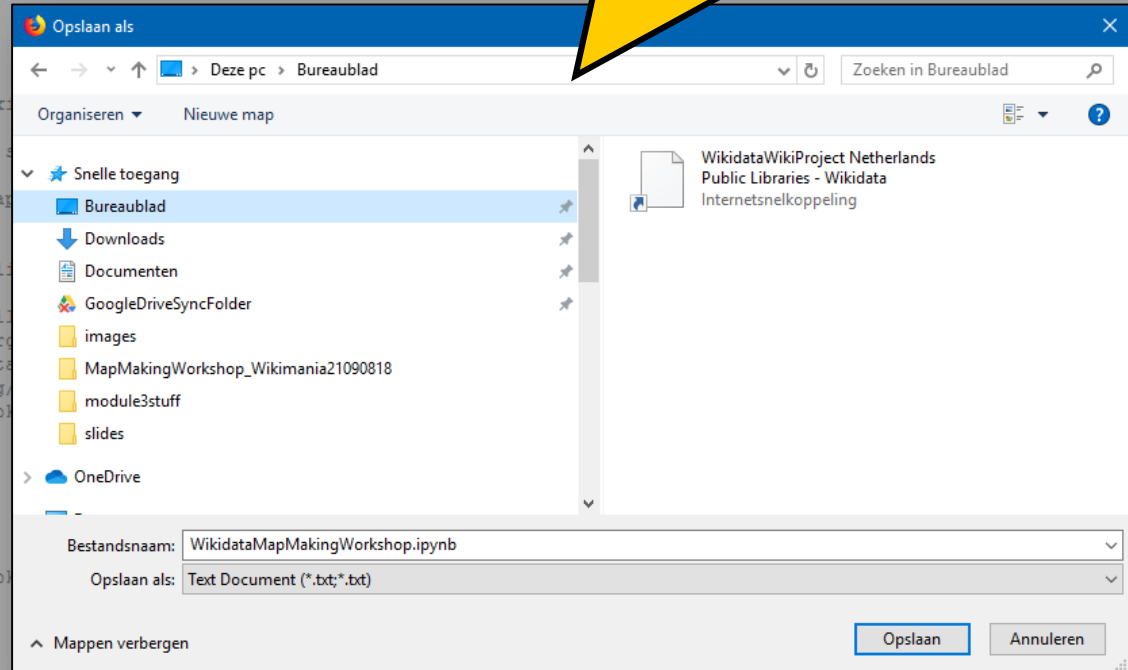
This notebook in raw format (json)

```
{
  "cells": [
    {
      "cell_type": "markdown",
      "metadata": {},
      "source": [
        "# Building a stand-alone off-Wiki layered map using Wikidata & SPARQL\n",
        "\n",
        "This Jupyter notebook shows you step by step **how to make a Wikidata-driven layered map that can be used off-Wiki**.\n",
        "\n",
        "It is part of Module 3 of the map making workshop [From Wikidata to interactive off-Wiki maps in three steps](https://github.com/ookgezellig/WikidataMapMakingWorkshop)\n",
        "\n",
        "See https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md for the full layout of this workshop\n",
        "\n",
        "This notebook is publically available at\n",
        "** https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb (and in [raw format](https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb?format=raw))\n",
        "** https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/module3stuff/WikidataMapMakingWorkshop.ipynb (and in [raw format](https://raw.githubusercontent.com/ookgezellig/WikidataMapMakingWorkshop/master/module3stuff/WikidataMapMakingWorkshop.ipynb)) \n",
        ]
      },
      {
        "cell_type": "markdown",
        "metadata": {},
        "source": [
          "For questions about this notebook, contact [Olaf Janssen](https://www.wikidata.org/wiki/User:OlafJanssen) on Wikidata // olaf.janssen@kb.nl\n",
          https://twitter.com/ookgezellig\n",
          "\n",
          "*****\n",
        ]
      },
      {
        "cell_type": "markdown",
        "metadata": {},
        "source": [
          "To make the map we will use\n",
          "1. **PAWS** (Jupyter Notebooks as a cloud service) - https://www.mediawiki.org/wiki/PAWS\n",
          "2. **SPARQL queries** from Wikidata - https://www.wikidata.org + https://query.wikidata.org\n",
        ]
      }
    ]
  }
}
```

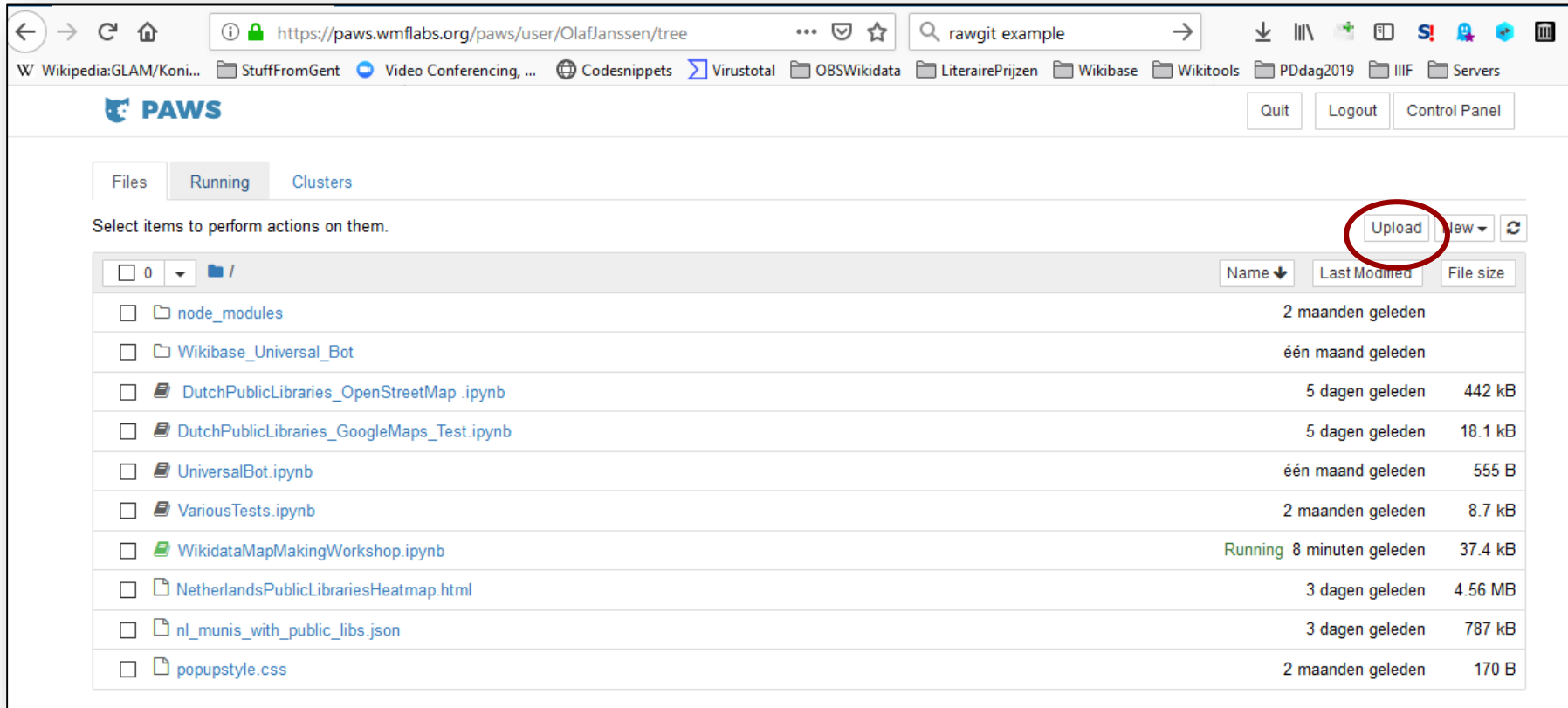
<https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop/WikidataMapMakingWorkshop.ipynb?format=raw>

Save this raw file to your PC

```
{
  "cells": [
    {
      "cell_type": "markdown",
      "metadata": {},
      "source": [
        "\n",
        "# Building a stand-alone off-Wiki\n",
        "\n",
        "This Jupyter notebook shows you\n",
        "\n",
        "It is part of Module 3 of the map\n",
        "/WikidataMapMakingWorkshop)\n",
        "\n",
        "See https://github.com/ookgezellig\n",
        "\n",
        "This notebook is publically avail\n",
        "** https://paws-public.wmflabs.org\n",
        "/paws-public/User:OlafJanssen/Wikidata\n",
        "** https://github.com/ookgezellig\n",
        "(https://raw.githubusercontent.com/ook\n",
        ]
      ],
      "cell_type": "markdown",
      "metadata": {},
      "source": [
        "For questions about this notebook\n",
        "https://twitter.com/ookgezellig\n",
        "\n",
        "*****\n",
        ]
      ],
      "cell_type": "markdown",
      "metadata": {},
      "source": [
        "## Start of the workshop\n",
        ]
      ],
      "cell_type": "markdown",
      "metadata": {},
      "source": [
        "To make the map we will use\n",
        "1. **PAWS** (Jupyter Notebooks as a cloud service) - https://www.mediawiki.org/wiki/PAWS\n",
        "2. **SPAROL queries** from Wikidata - https://www.wikidata.org + https://query.wikidata.org\n",
        ]
    }
  ]
}
```



... and upload it to *your* PAWS server

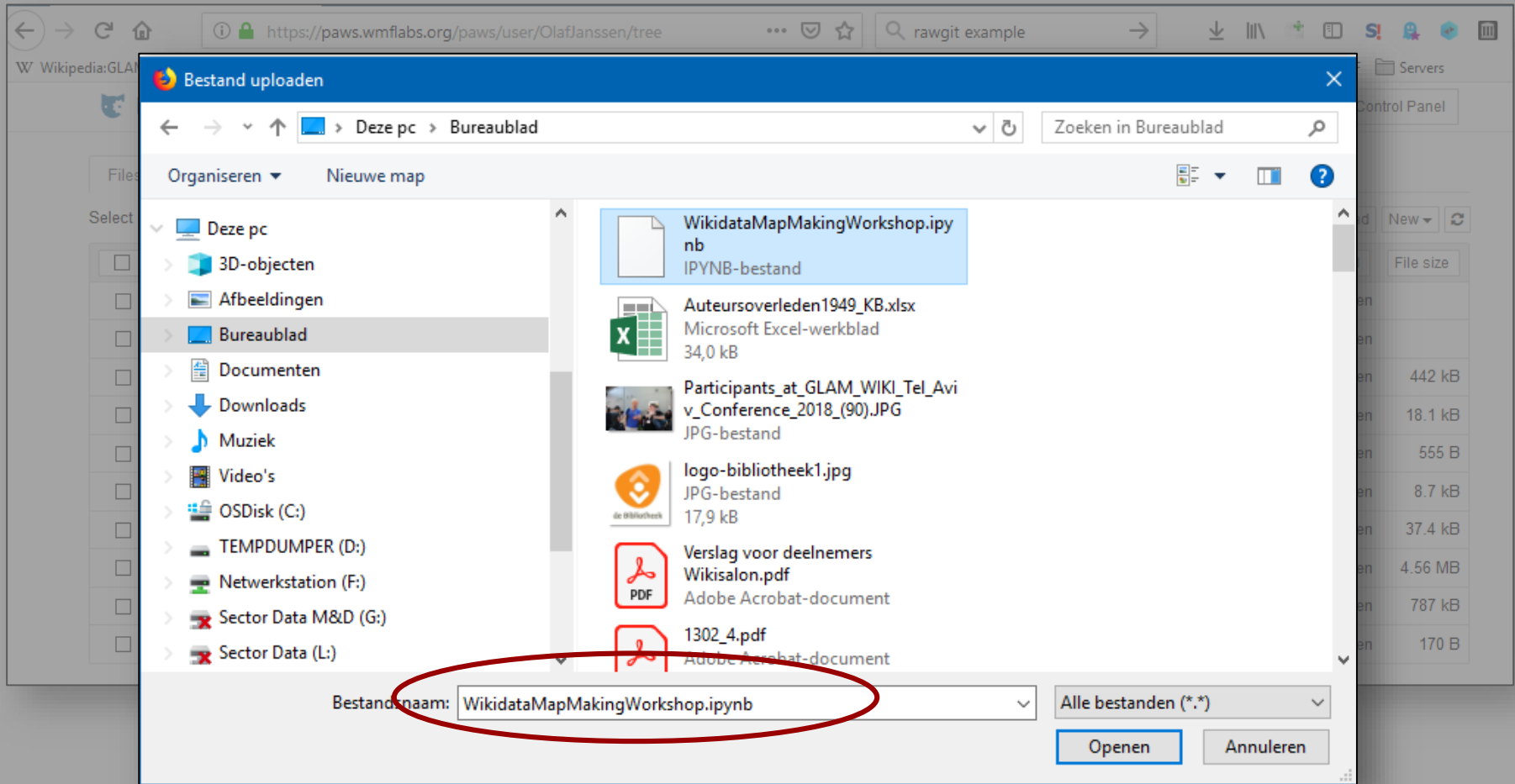


The screenshot shows the PAWS web interface in a browser. The address bar displays <https://paws.wmflabs.org/paws/user/OlafJanssen/tree>. The interface includes a navigation bar with 'Files', 'Running', and 'Clusters' tabs. Below the navigation, there are buttons for 'Quit', 'Logout', and 'Control Panel'. A section titled 'Select items to perform actions on them.' contains an 'Upload' button circled in red, along with a 'New' dropdown and a refresh icon. The main area displays a table of files and folders.

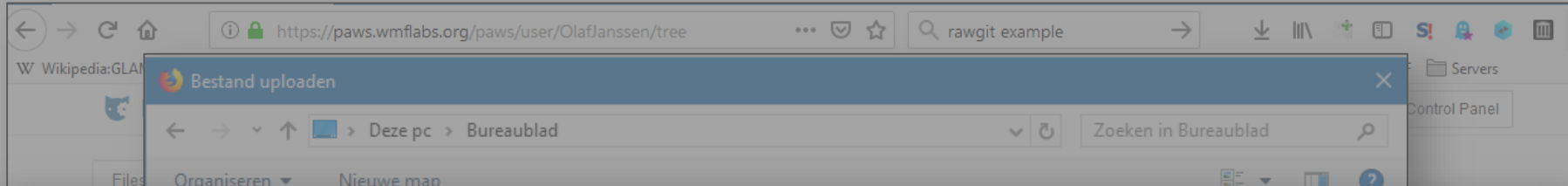
<input type="checkbox"/>	Name	Last Modified	File size
<input type="checkbox"/>	0		
<input type="checkbox"/>	node_modules	2 maanden geleden	
<input type="checkbox"/>	Wikibase_Universal_Bot	één maand geleden	
<input type="checkbox"/>	DutchPublicLibraries_OpenStreetMap .ipynb	5 dagen geleden	442 kB
<input type="checkbox"/>	DutchPublicLibraries_GoogleMaps_Test.ipynb	5 dagen geleden	18.1 kB
<input type="checkbox"/>	UniversalBot.ipynb	één maand geleden	555 B
<input type="checkbox"/>	VariousTests.ipynb	2 maanden geleden	8.7 kB
<input type="checkbox"/>	WikidataMapMakingWorkshop.ipynb	Running 8 minuten geleden	37.4 kB
<input type="checkbox"/>	NetherlandsPublicLibrariesHeatmap.html	3 dagen geleden	4.56 MB
<input type="checkbox"/>	nl_munis_with_public_libs.json	3 dagen geleden	787 kB
<input type="checkbox"/>	popupstyle.css	2 maanden geleden	170 B

<https://paws.wmflabs.org/paws/user/USERNAME/tree>

... and upload it to your PAWS server



... and upload it to your PAWS server



PAWS Quit Logout Control Panel

Files Running Clusters

Select items to perform actions on them. Upload New Refresh

0 /

	Name	Last Modified	File size
<input type="checkbox"/>	WikidataMapMakingWorkshop.ipynb		
<input type="checkbox"/>	node_modules	2 maanden geleden	
<input type="checkbox"/>	Wikibase_Universal_Bot	één maand geleden	
<input type="checkbox"/>	DutchPublicLibraries_OpenStreetMap.ipynb	5 dagen geleden	442 kB
<input type="checkbox"/>	DutchPublicLibraries_GoogleMaps_Test.ipynb	5 dagen geleden	18.1 kB
<input type="checkbox"/>	UniversalBot.ipynb	één maand geleden	555 B
<input type="checkbox"/>	VariousTests.ipynb	2 maanden geleden	8.7 kB
<input type="checkbox"/>	WikidataMapMakingWorkshop.ipynb	Running 28 minuten geleden	37.4 kB
<input type="checkbox"/>	NetherlandsPublicLibrariesHeatmap.html	3 dagen geleden	4.56 MB
<input type="checkbox"/>	nl_munis_with_public_libs.json	3 dagen geleden	787 kB
<input type="checkbox"/>	popupstyle.css	2 maanden geleden	170 B

Upload Cancel

Notebook on your own PAWS server to play with



WikidataMapMakingWorkshop Last Checkpoint: afgelopen maandag om 11:27 (unsaved changes)



Logout

Control Panel

File Edit View Insert Cell Kernel Widgets Help

Not Trusted

Python 3



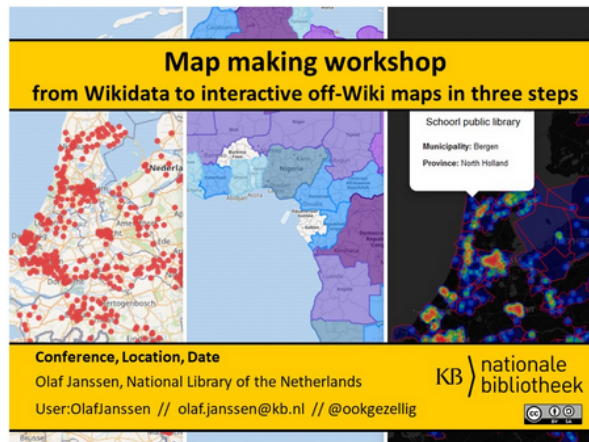
Public Link

Memory: 132 MB

Building a stand-alone off-Wiki layered map using Wikidata & SPARQL

This Jupyter notebook shows you step by step **how to make a Wikidata-driven layered map that can be used off-Wiki**.

It is part of Module 3 of the map making workshop [From Wikidata to interactive off-Wiki maps in three steps](#)



For more context to this workshop you can check the

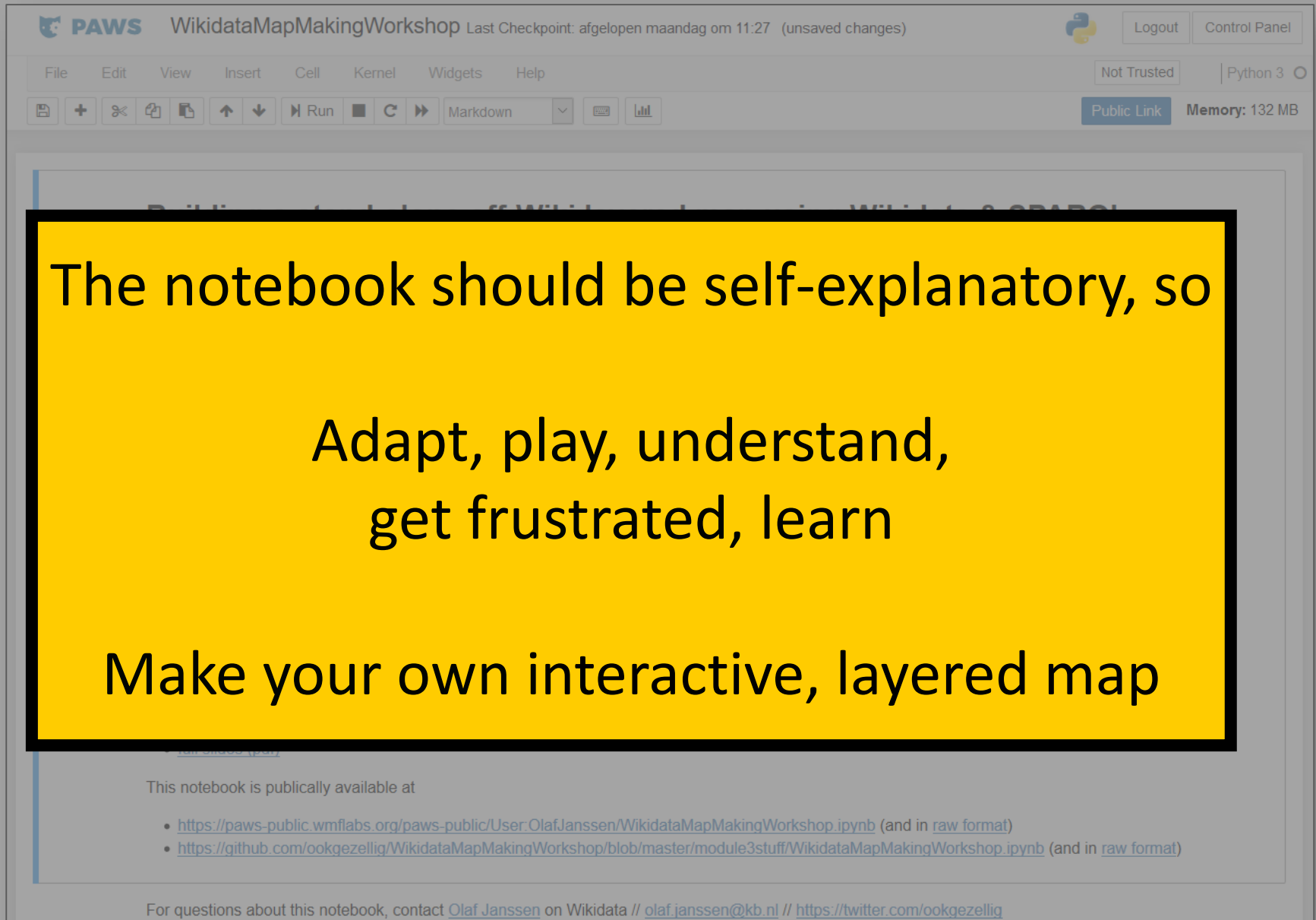
- [full layout](#), and
- [full slides \(pdf\)](#)

This notebook is publically available at

<https://paws.wmflabs.org/paws/user/USERNAME/notebooks/WikidataMapMakingWorkshop.ipynb>

For questions about this notebook, contact [Olaf Janssen](#) on Wikidata // olaf.janssen@kb.nl // <https://twitter.com/ookgezellig>

Notebook on your own PAWS server to play with



The screenshot shows a Jupyter Notebook interface on the PAWS platform. The notebook title is "WikidataMapMakingWorkshop". The interface includes a menu bar (File, Edit, View, Insert, Cell, Kernel, Widgets, Help), a toolbar with icons for file operations and execution, and a status bar showing "Not Trusted", "Python 3", "Public Link", and "Memory: 132 MB". The notebook content is partially obscured by a large yellow text box.

The notebook should be self-explanatory, so

**Adapt, play, understand,
get frustrated, learn**

Make your own interactive, layered map

This notebook is publically available at

- <https://paws-public.wmflabs.org/paws-public/User:OlafJanssen/WikidataMapMakingWorkshop.ipynb> (and in [raw format](#))
- <https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/module3stuff/WikidataMapMakingWorkshop.ipynb> (and in [raw format](#))

For questions about this notebook, contact [Olaf Janssen](#) on Wikidata // olaf.janssen@kb.nl // <https://twitter.com/ookgezellig>

Exporting your map to stand-alone, off-Wiki HTML page

As a final step for this workshop, we want to export the map to a (stand-alone, off-Wiki) HTML page that can be viewed in a browser.

<https://ipywidgets.readthedocs.io/en/latest/embedding.html#python-interface>

The map above is available at <http://ookgezellig.github.io/WikidataMapMakingWorkshop/NetherlandsPublicLibrariesHeatmap.html>

In []:

```
1 # Export the map to html file
2 # https://ipywidgets.readthedocs.io/en/latest/embedding.html#python-interface
3 # The addition of 'state=dependency_state([m])' keeps the html file growing too large
4
5 embed_minimal_html('NetherlandsPublicLibrariesHeatmap.html', views=[m], state=dependency_state([m]))
6
7 # This map is available at http://ookgezellig.github.io/WikidataMapMakingWorkshop/NetherlandsPublicLibrariesHeatmap.html
```

This is the end of the workshop

Exporting your map to stand-alone, off-Wiki HTML page

The screenshot shows the PAWS (Python API Web Service) interface. At the top left is the PAWS logo. On the top right are buttons for 'Quit', 'Logout', and 'Control Panel'. Below the logo are tabs for 'Files', 'Running', and 'Clusters'. A toolbar contains buttons for 'Duplicate', 'Rename', 'Move', 'Download', 'View', 'Edit', and a trash icon. The 'Download' button is circled in red. To the right of the toolbar are 'Upload', 'New', and a refresh icon. The main area shows a file browser for the directory '/ WikidataMapMakingWorkshop'. A table lists files with columns for 'Name', 'Last Modified', and 'File size'. The file 'NetherlandsPublicLibrariesHeatmap.html' is selected, indicated by a checked checkbox and a red oval around the row. The file size is 4.56 MB and it was last modified 2 months ago.

	Name ↓	Last Modified	File size
<input type="checkbox"/>	..	een paar seconden geleden	
<input type="checkbox"/>	WikidataMapMakingWorkshop.ipynb	één maand geleden	38.9 kB
<input checked="" type="checkbox"/>	NetherlandsPublicLibrariesHeatmap.html	2 maanden geleden	4.56 MB
<input type="checkbox"/>	nl_munis_with_public_libs.json	2 maanden geleden	787 kB
<input type="checkbox"/>	popupstyle.css	5 maanden geleden	170 B

Exporting your map to stand-alone, off-Wiki HTML page

The screenshot shows a web browser window with the following elements:

- Address bar: `file:///C:/Users/oja010/AppData/Local/Temp/NetherlandsPublicLibrariesHeatmap.html` (circled in red)
- Map interface:
 - Legend:
 - Base map of The Netherlands
 - CartoDB.DarkMatter
 - Heatmap Dutch public libraries
 - Heatmap public libraries (with popups)
 - Municipal boundaries
 - Popup for "Schermer public library support point":
 - Municipality: Alkmaar
 - Province: North Holland

`file:///C:/Users/oja010/AppData/Local/Temp/NetherlandsPublicLibrariesHeatmap.html`



THANKS!!!

Let me know your
feedback on this workshop

In person // User:OlafJanssen // olaf.janssen@kb.nl // @ookgezellig

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[Creative Commons Attribution-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-sa/4.0/)

