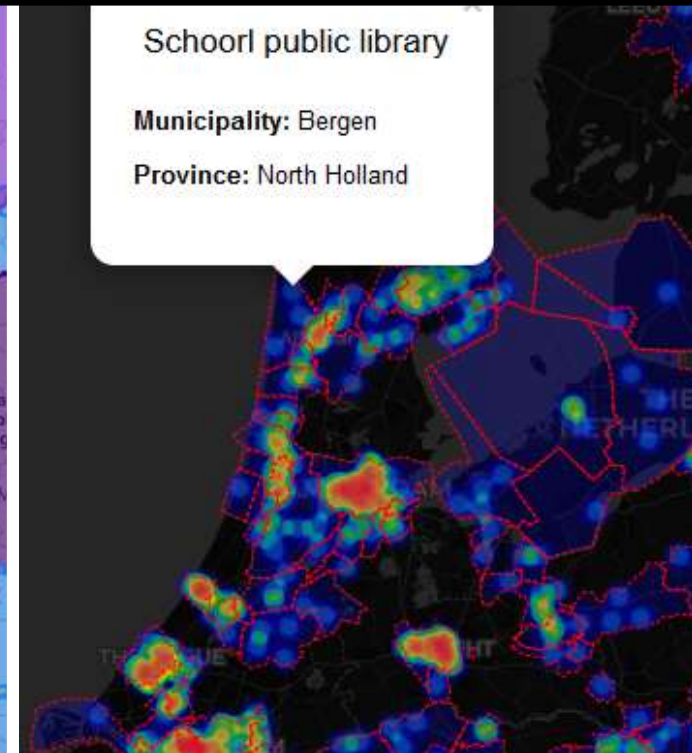
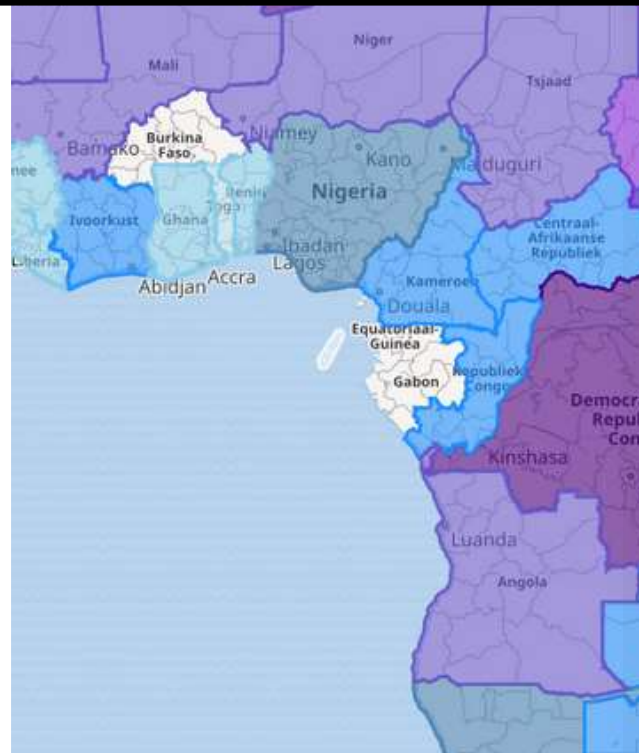


Map making workshop

from Wikidata to interactive off-Wiki maps in three steps



Wikimania 2019, Stockholm, 18-8-2019

Olaf Janssen, National Library of the Netherlands

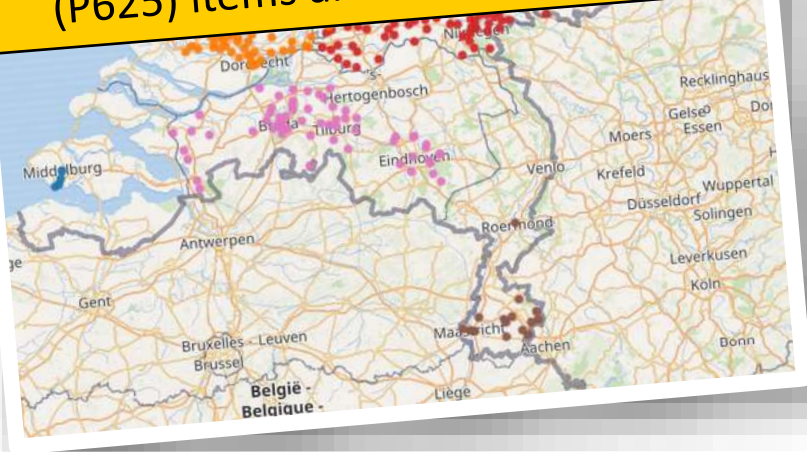
User:OlafJanssen // olaf.janssen@kb.nl // @ookgezellig

KB } nationale
bibliotheek



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

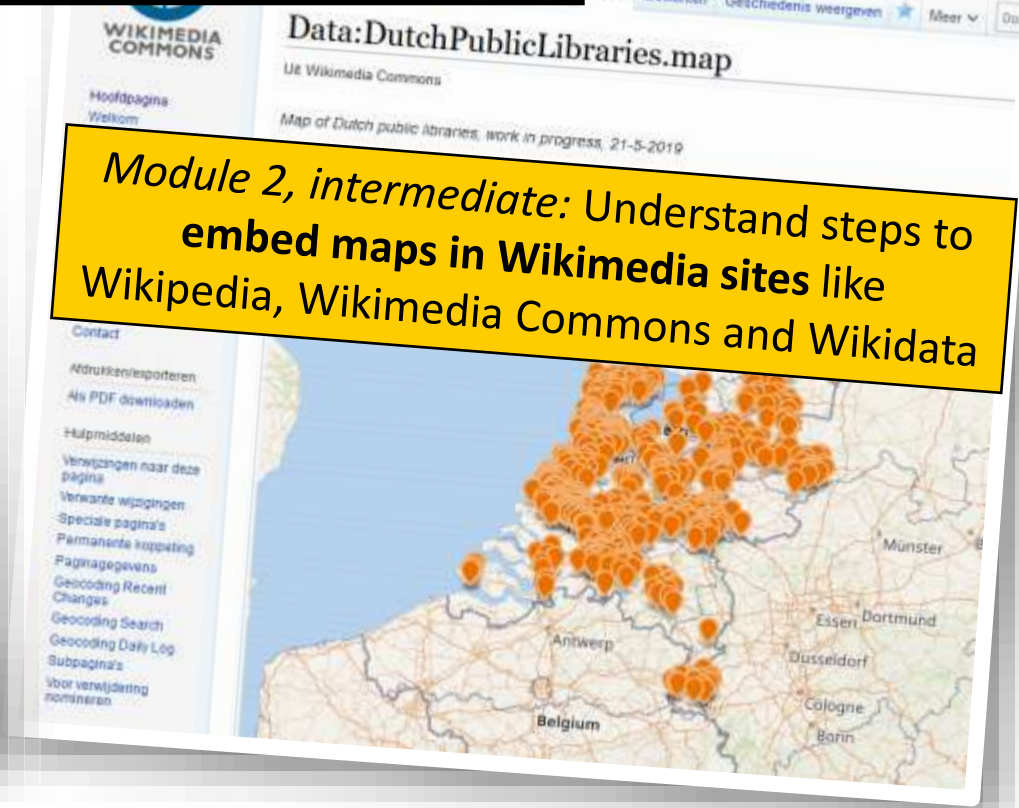


Learning objectives

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

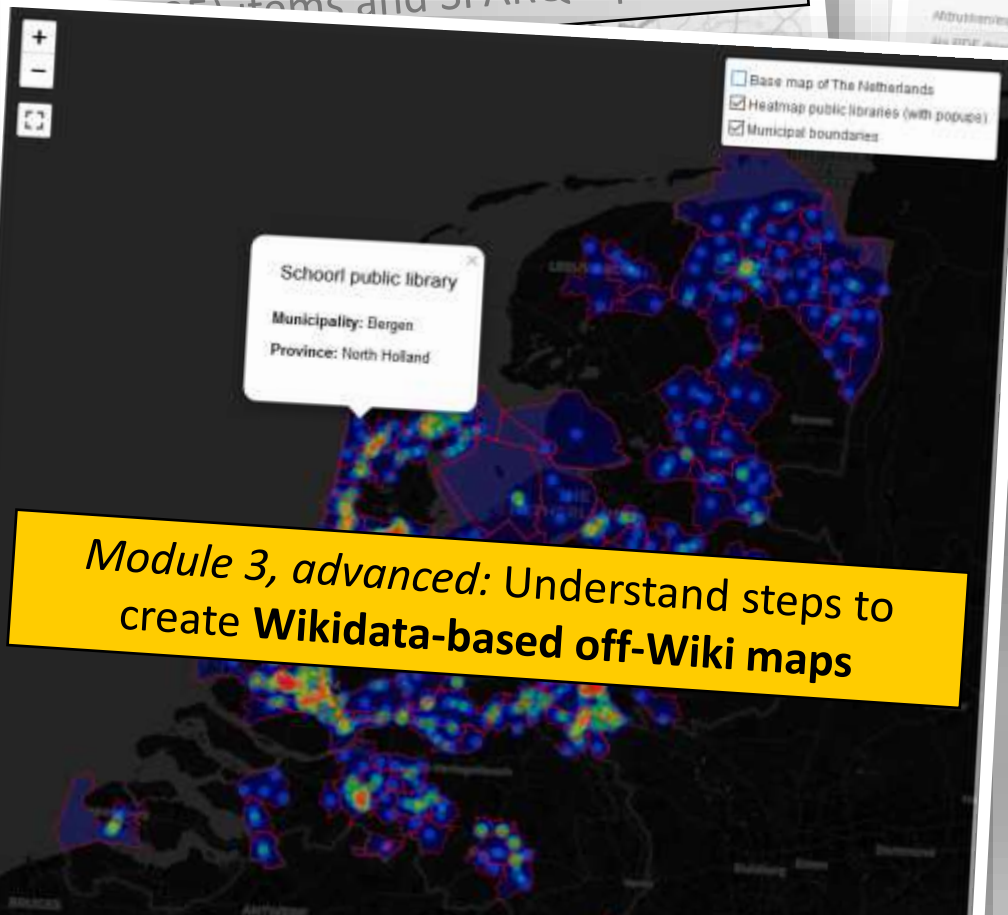


Learning objectives

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**



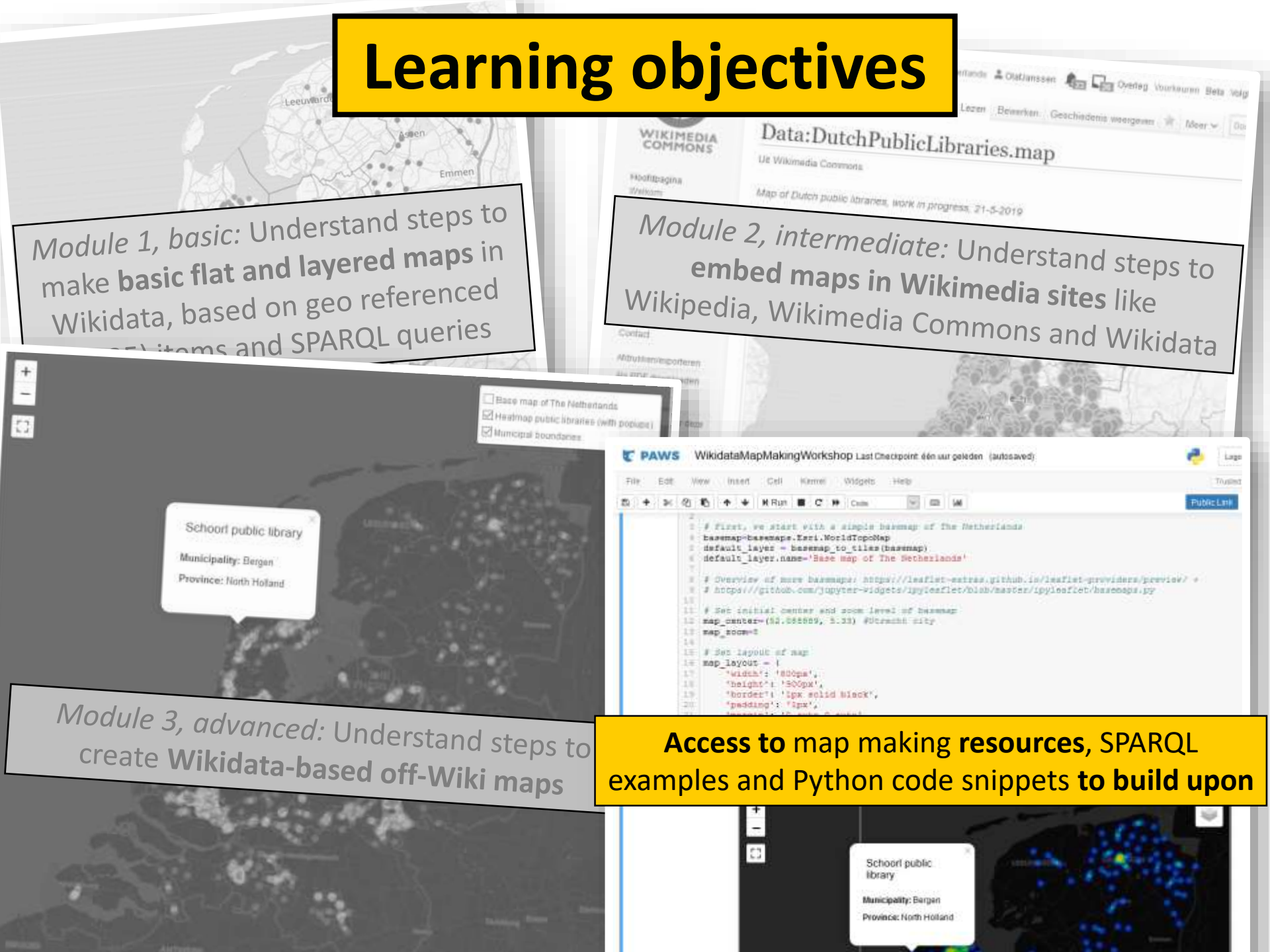
Learning objectives

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



Workshop outline & notes

Workshop outline and notes

Last update: 12th August 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

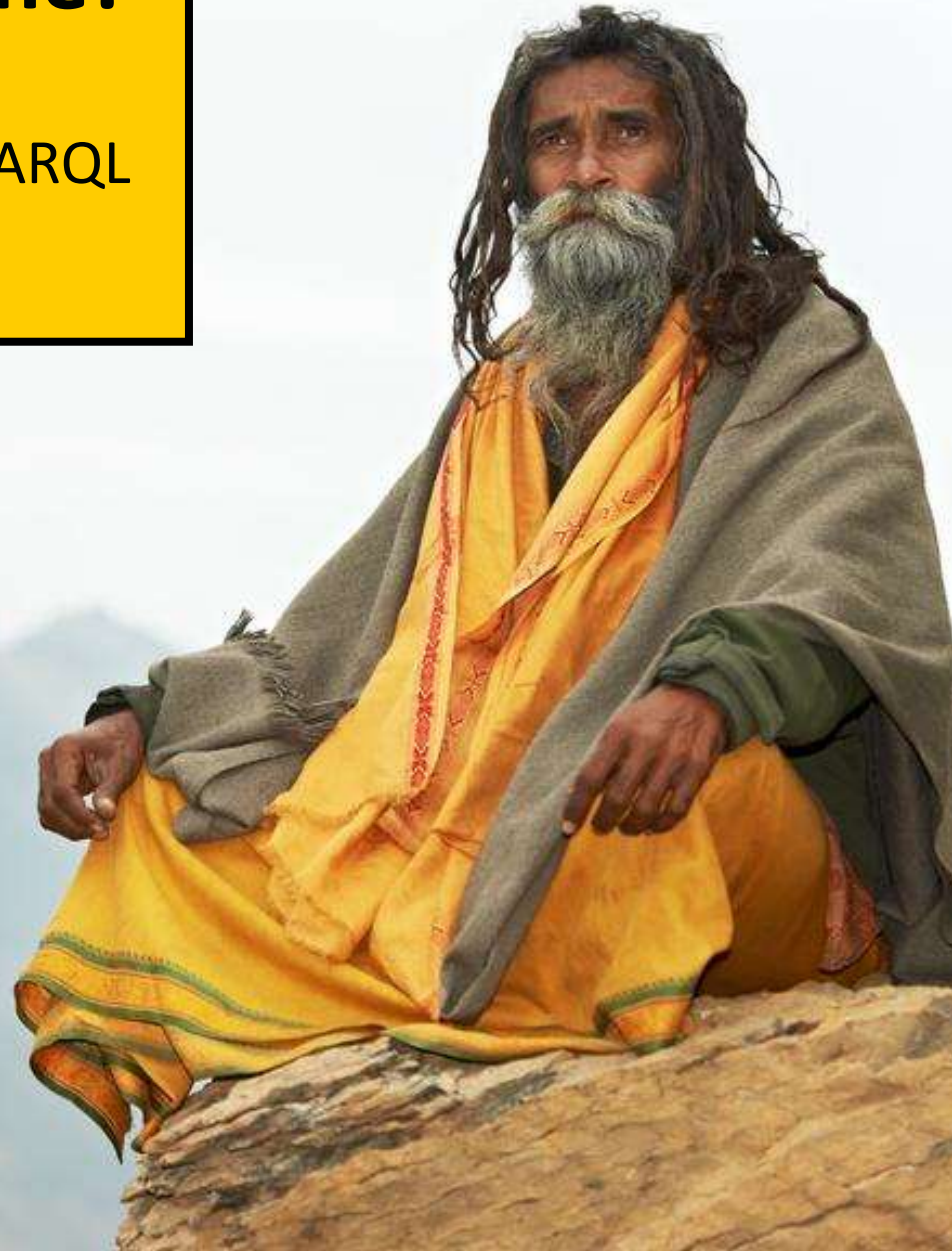
1. [https://github.com/ookgezellig/WikidataMapMa](https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md)
2. [kingWorkshop/blob/master/OutlineAndNotes.md](https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md)
3. [kingWorkshop/blob/master/OutlineAndNotes.md](https://github.com/ookgezellig/WikidataMapMakingWorkshop/blob/master/OutlineAndNotes.md)

4. [Volcanos](#)

5. [Airports around the equator](#) (between -10 and +10 degrees latitude)

Tips & tricks welcome!

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





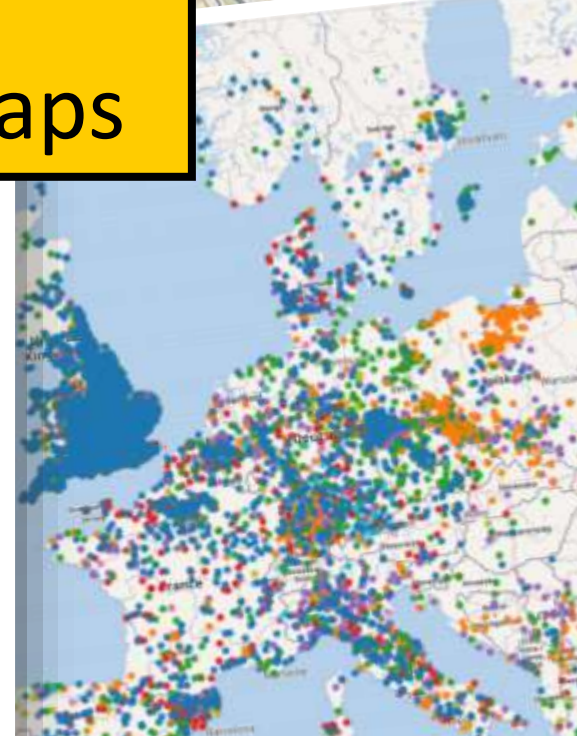
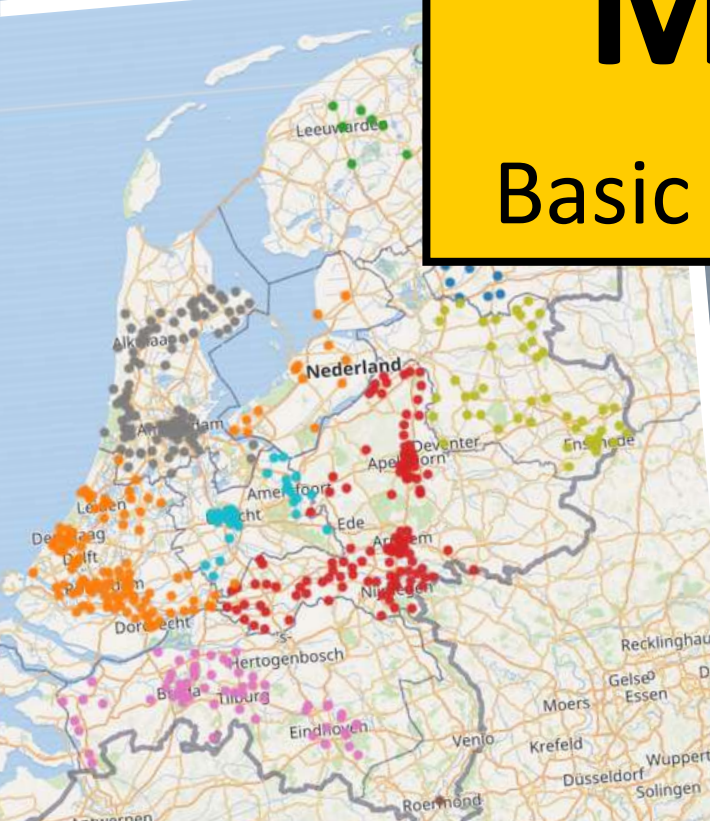
3 MODULES

- 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>

Stockholm

[wd:Q1754](#)

→ 0 references

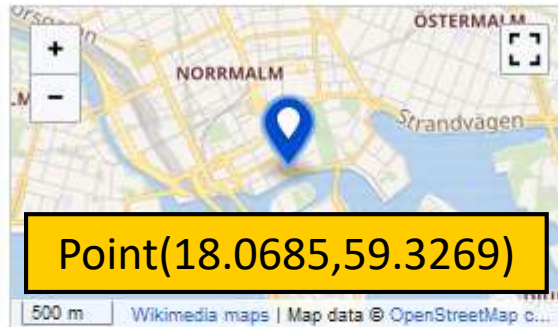
+

+ add value

coordinate location

P625

📍



59°19'46"N, 18°47"E

▶ 1 reference

✎ edit

+ add value

office held by head of government

👤

mayor ⓘ

→ 0 references

✎ edit

+ add reference


+ add value

head of government

👤

Karin Wanngård ⓘ

✎ edit

A clock face is shown in the background, with numbers 1 through 12. A yellow rectangular box with a black border is centered over the clock. Inside the box, the text "Some minutes to create your own P625 dataset" is written in bold black font. The clock's hands are visible, with the hour hand pointing to 12 and the minute hand pointing to 2. The Sapling logo is visible at the bottom center of the clock face.

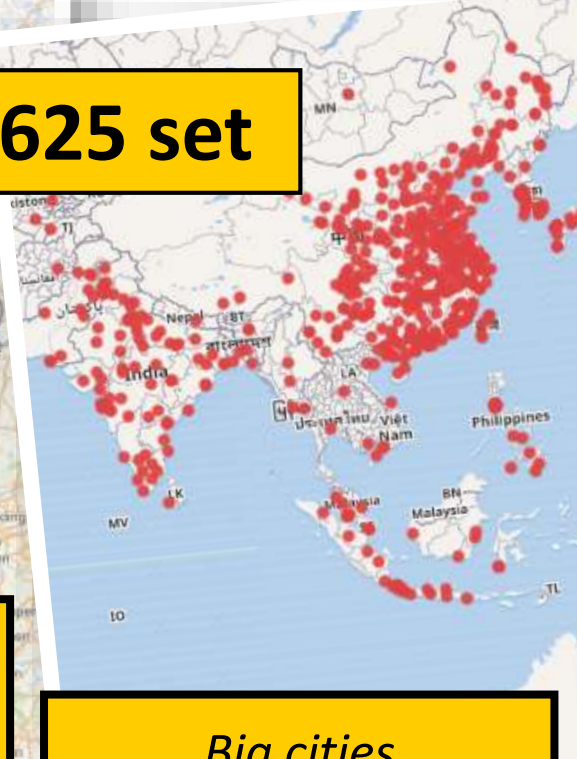
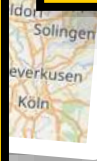
**Some minutes to create
your own P625 dataset**

If you don't have a Wikidata P625 set



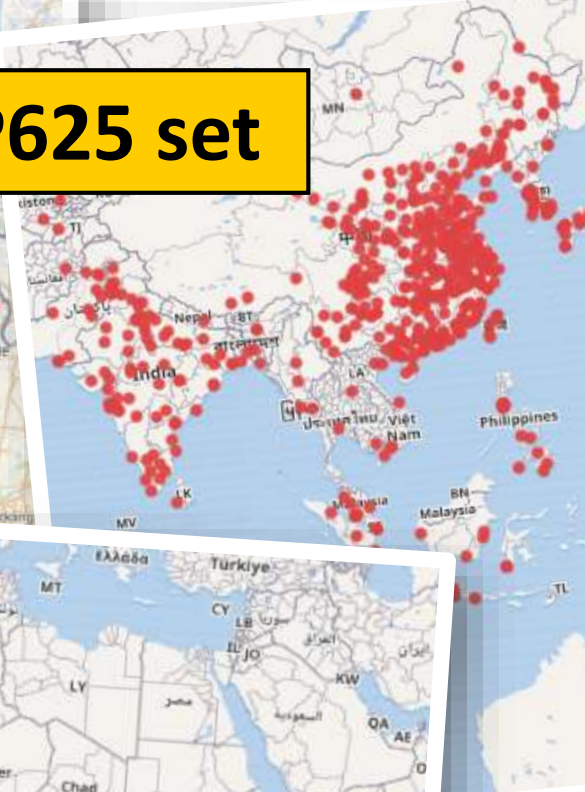
*Public libraries in
The Netherlands*
<https://w.wiki/6dx>

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



Big cities
<https://w.wiki/6e3>

If you don't have a Wikidata P625 set

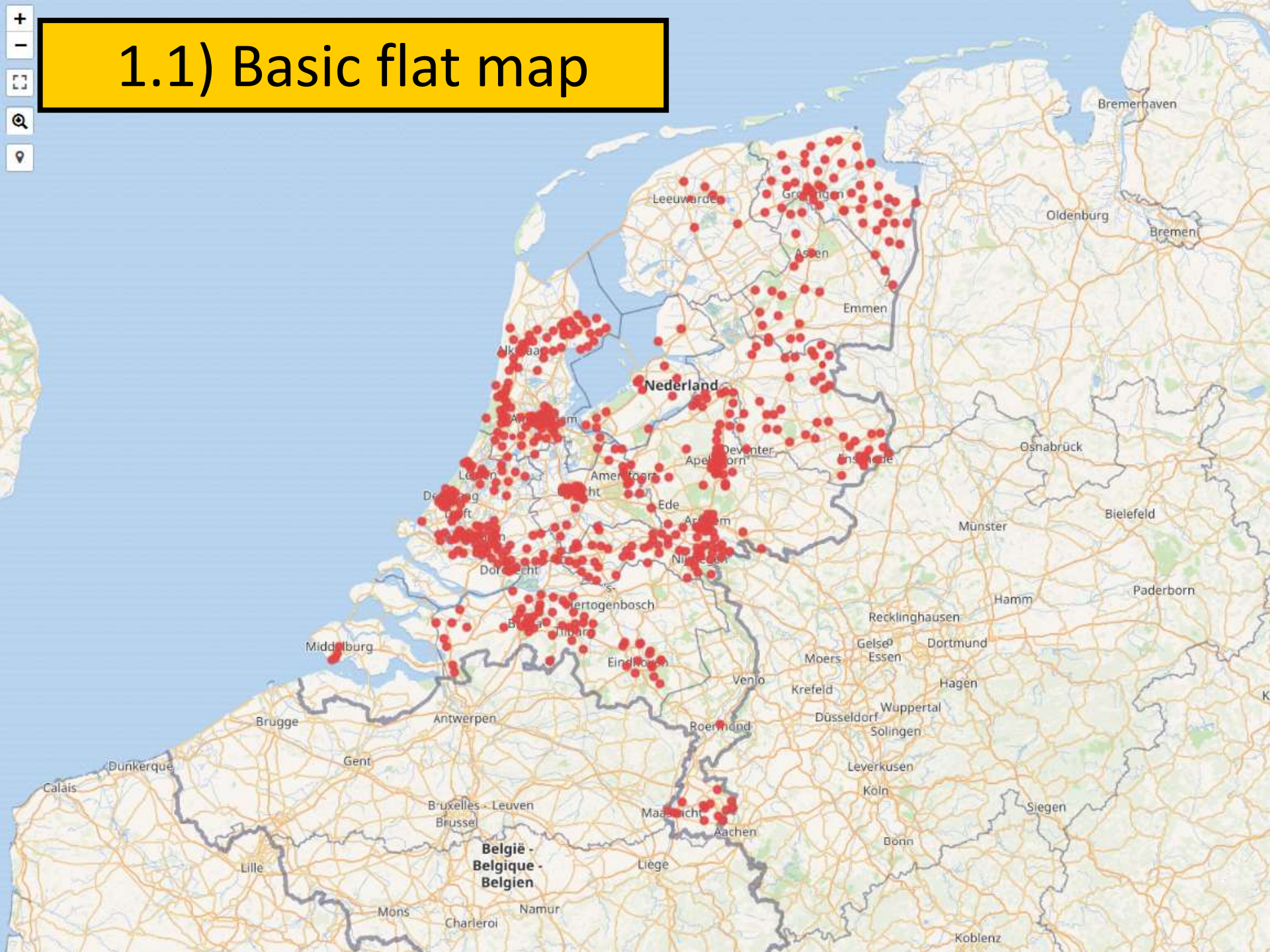


Volcanos of the world
<https://w.wiki/6e9>



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	dpIDescription	dpLoc	dpIIma
s-Heerenberg public library	Public library in s-Heerenberg, municipality of Montferland, The Netherlands	Point(6.2454886 51.8731333)	commons
... public library service point	Public library in the village of 't Harde, The Netherlands	Point(5.877917 52.4172699)	
... 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>

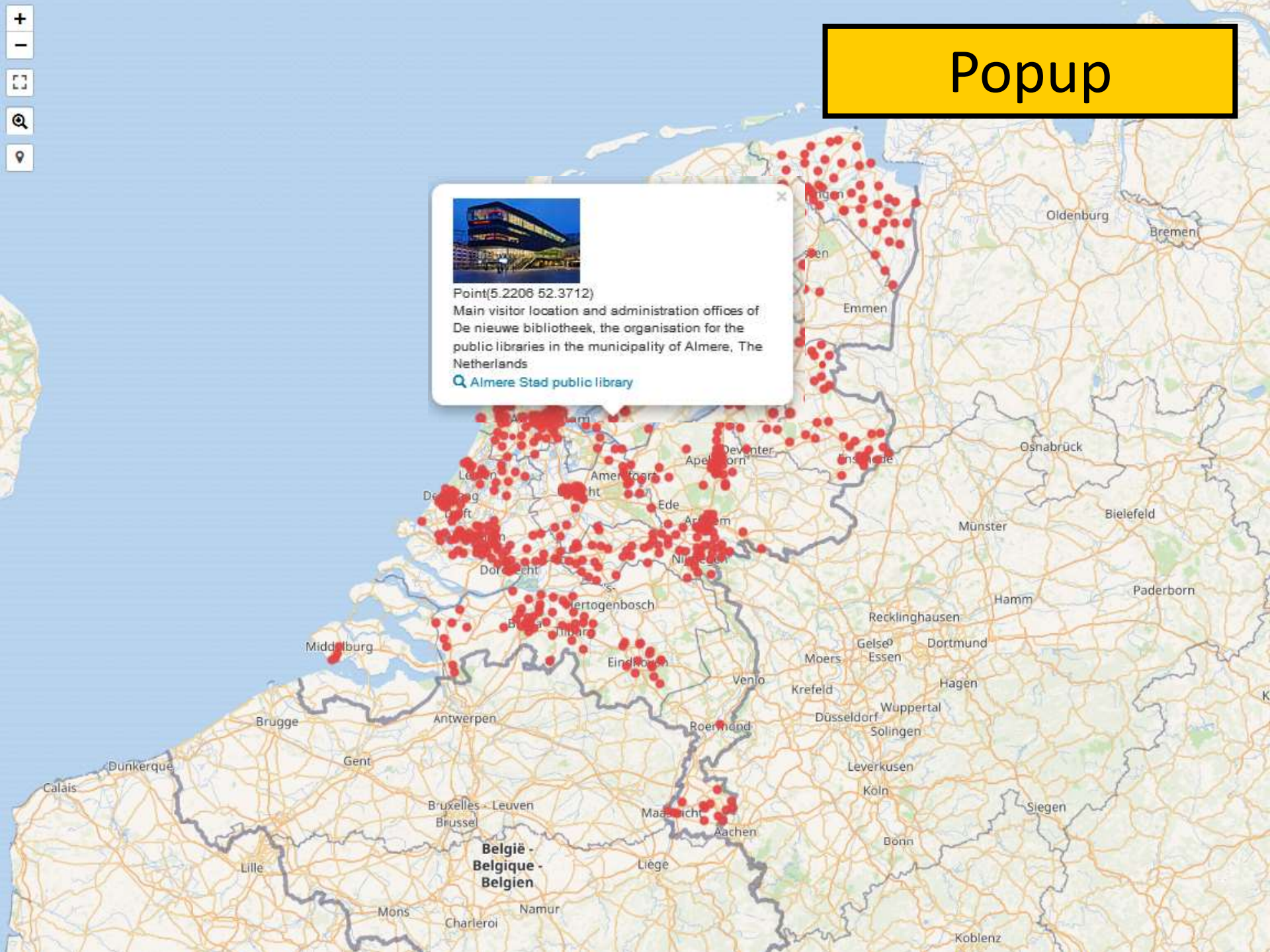
Popup



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

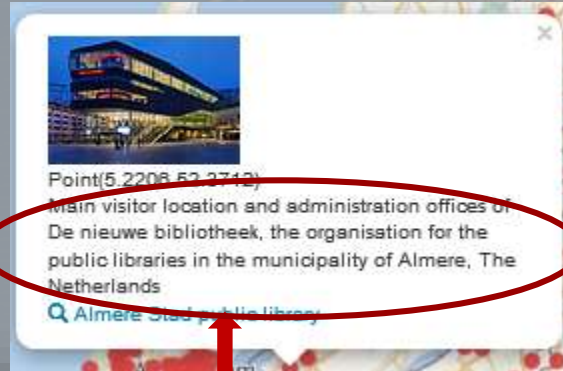


Wikidata Query Service

```
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



```
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
```


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](#)

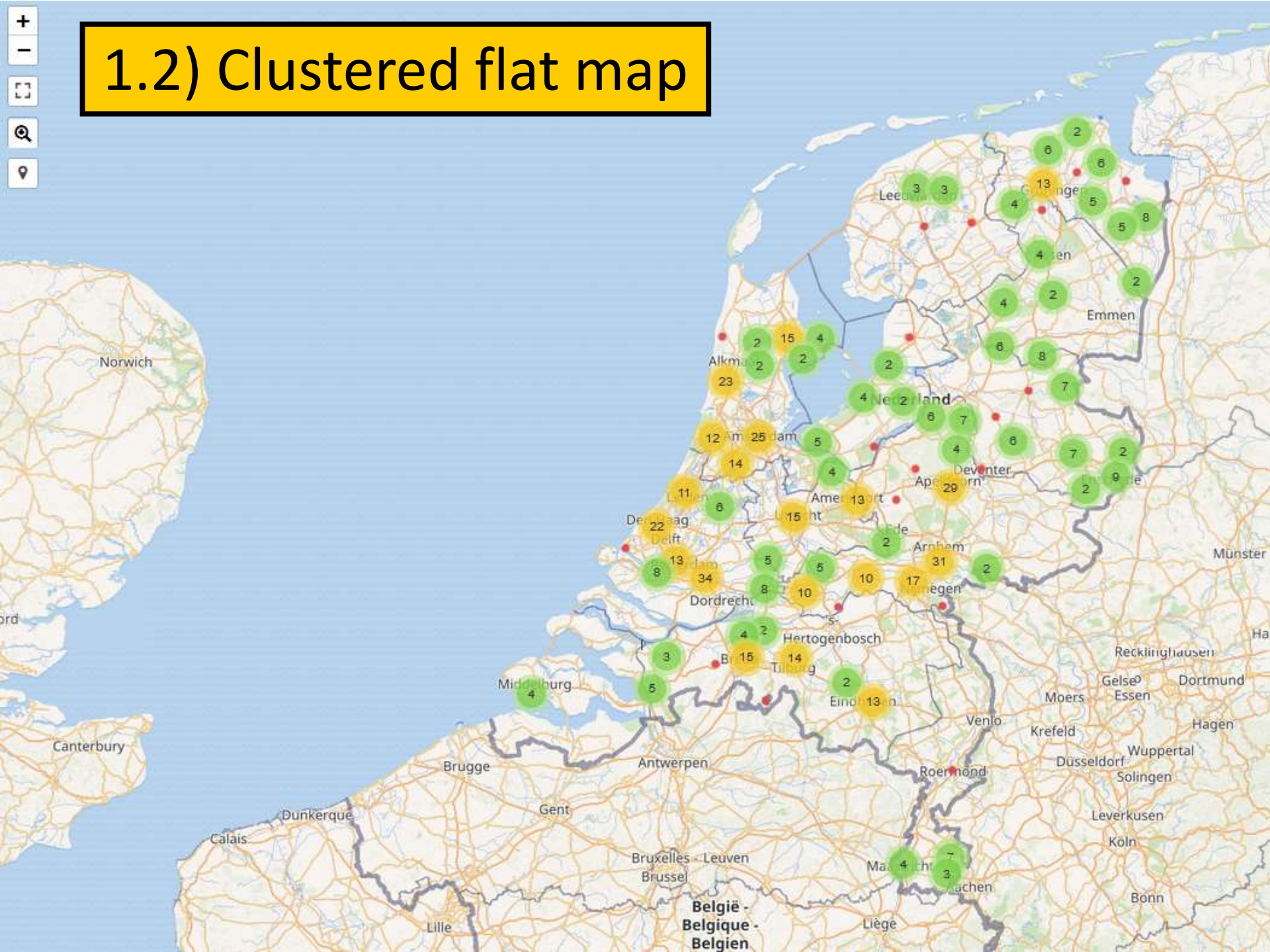
Wikidata Query Service

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



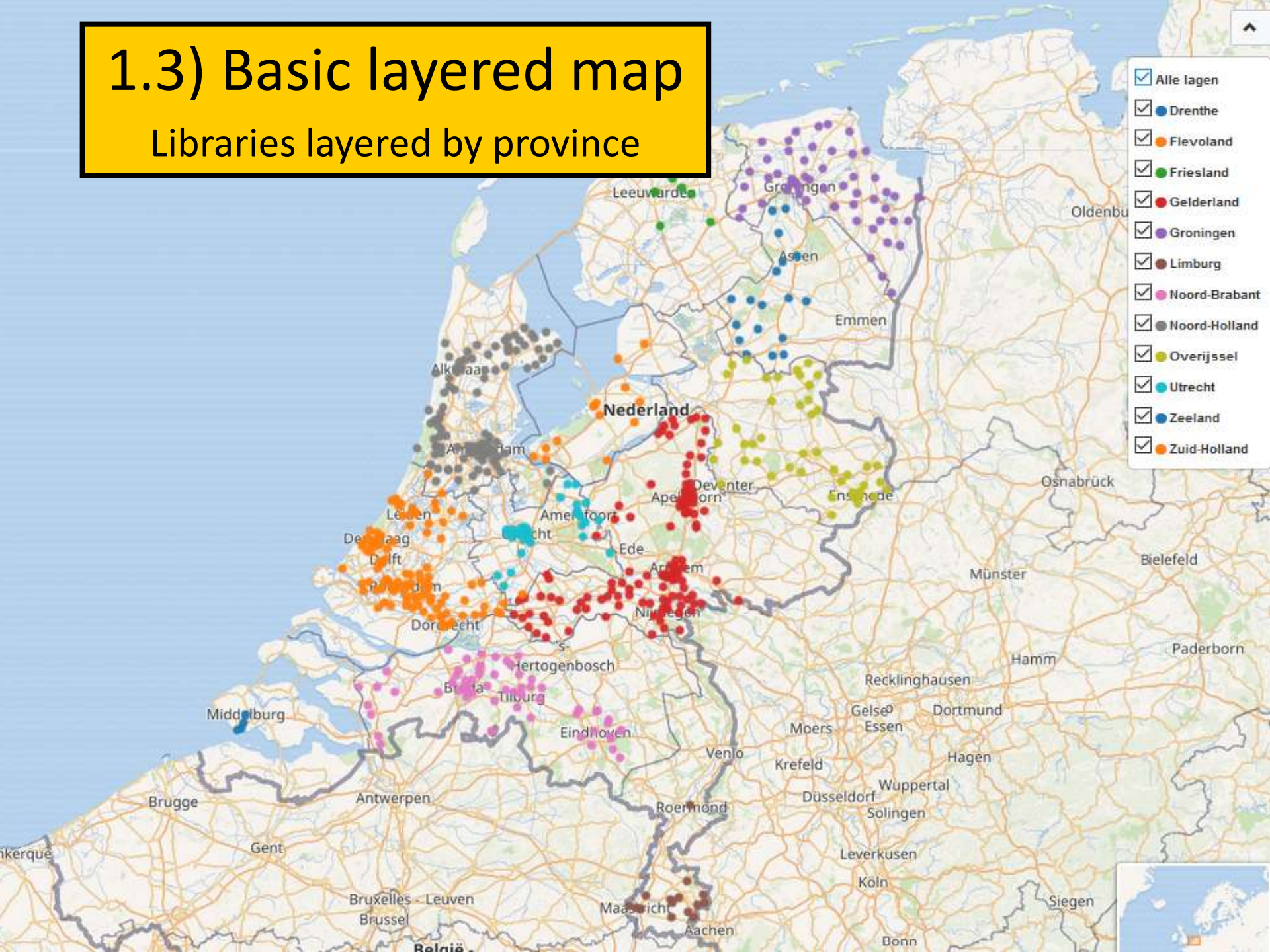
```
1 #All public library branches of the Netherlands
2
3 #defaultView:Map{"markercluster": {"maxClusterRadius": 30}}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplDescription ?dplLoc ?dplImage WHERE {
6 #Is Dutch public library branch
7 ?dpl wdt:P31 wd:Q28564. #public library
8 ?dpl wdt:P31 wd:Q11396180. #library 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:PropertyPage wikibase: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 the background, with numbers 1 through 12. A yellow rectangular box with a black border is centered over the clock. Inside the box, the text "Some minutes to expand your query" is written in bold black font. The clock's hands are visible, with the hour hand pointing to 12 and the minute hand pointing to 2. The word "sapling" is visible at the bottom of the clock face.

**Some minutes to
expand your query**



Wikidata Query Service

Voorbeelden

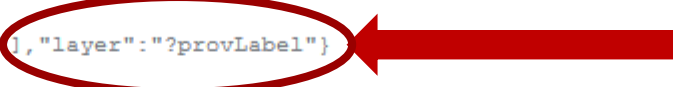
Hulp

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

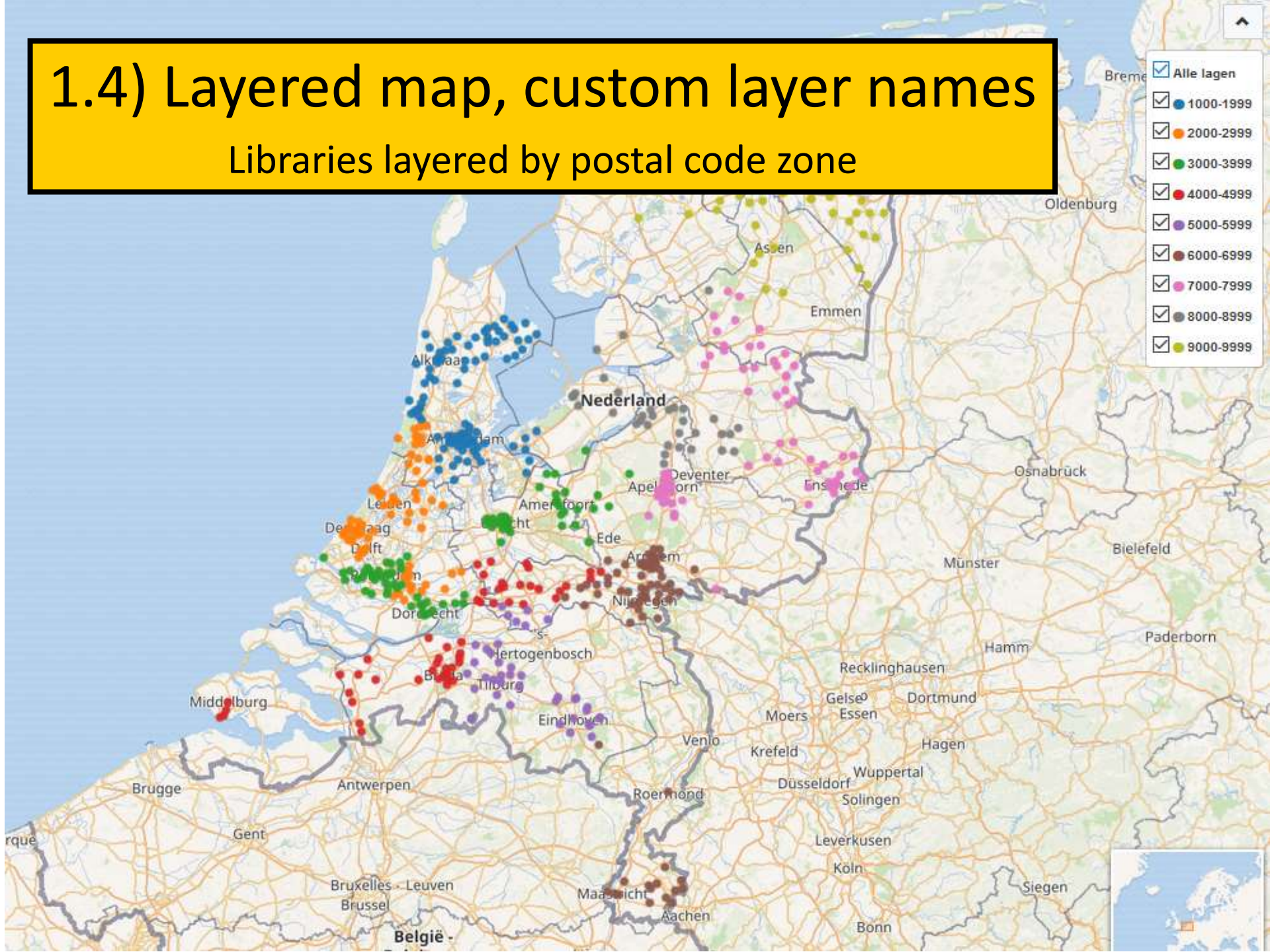
```
1 #All public library branches of the Netherlands, layered by province
2
3 #defaultView:Map{"hide":["?dplLoc"],"layer":"?provLabel"}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?muniLabel ?provLabel WHERE {
6   ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #public library branch 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>

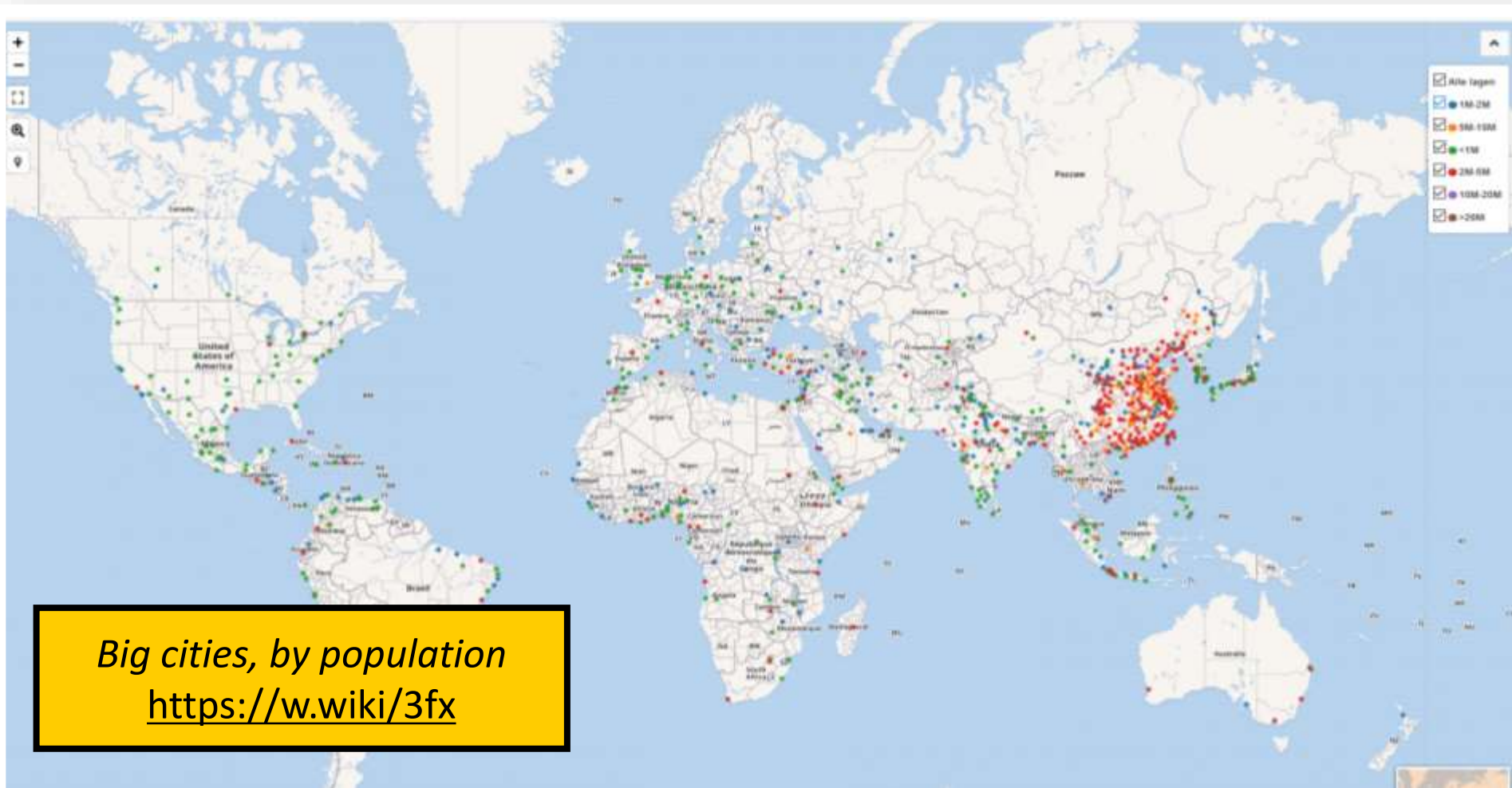


```
1 #Maps of public library branches The Netherlands, layered by postal codes zones (1000-1999, 2000-2999 etc)
2
3 #defaultView:Map{"layer": "?pczone"}
4
5 SELECT DISTINCT ?dpl ?dplLabel ?dplImage ?dplLoc ?postcode ?pcdigits ?pczone
6
7 WHERE {
8   ?dpl p:P31/ps:P31 wd:Q28564,wd:Q11396180;wdt:P17 wd:Q55. #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 postal code
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
```

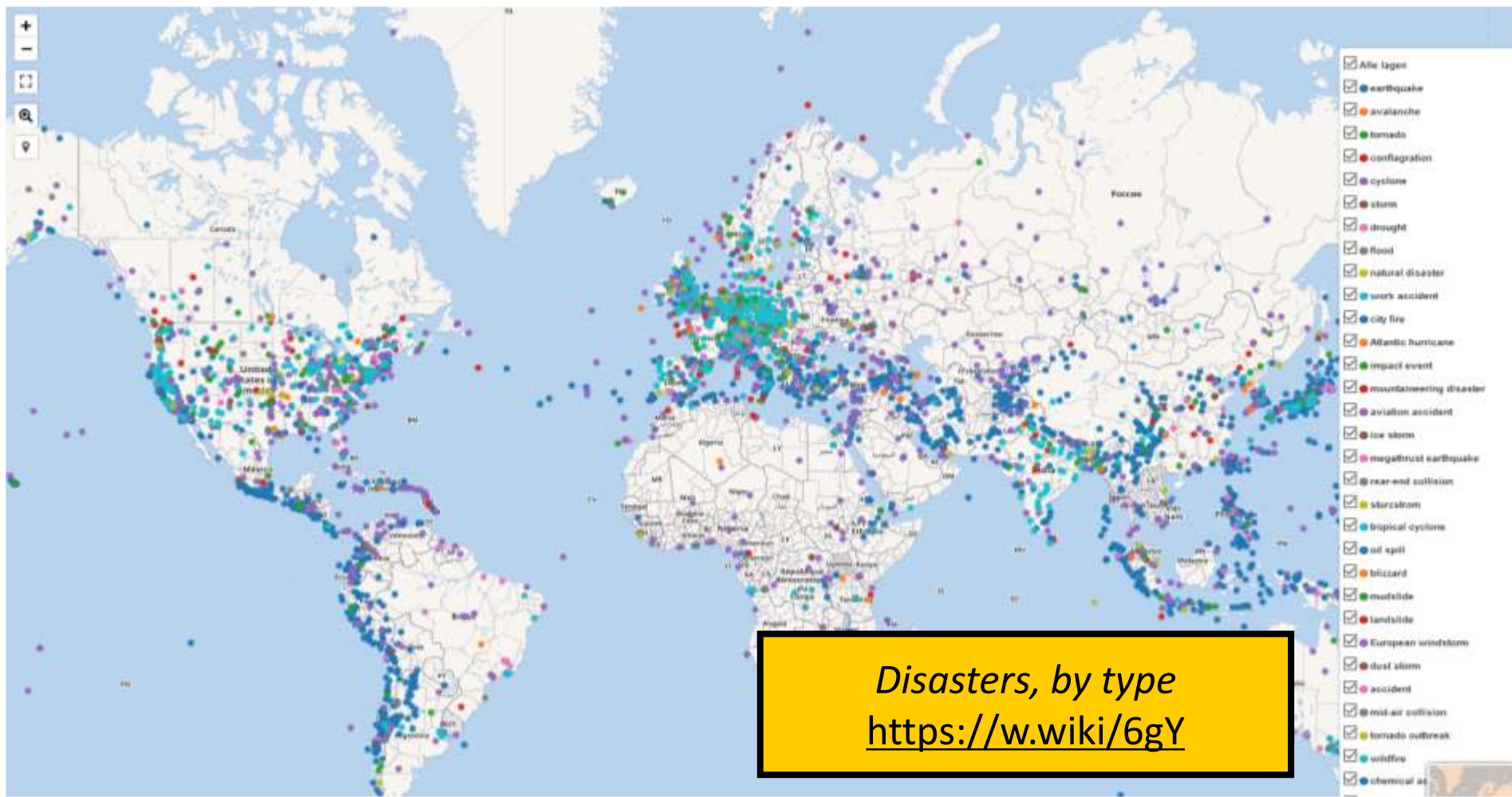
Custom layer names

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

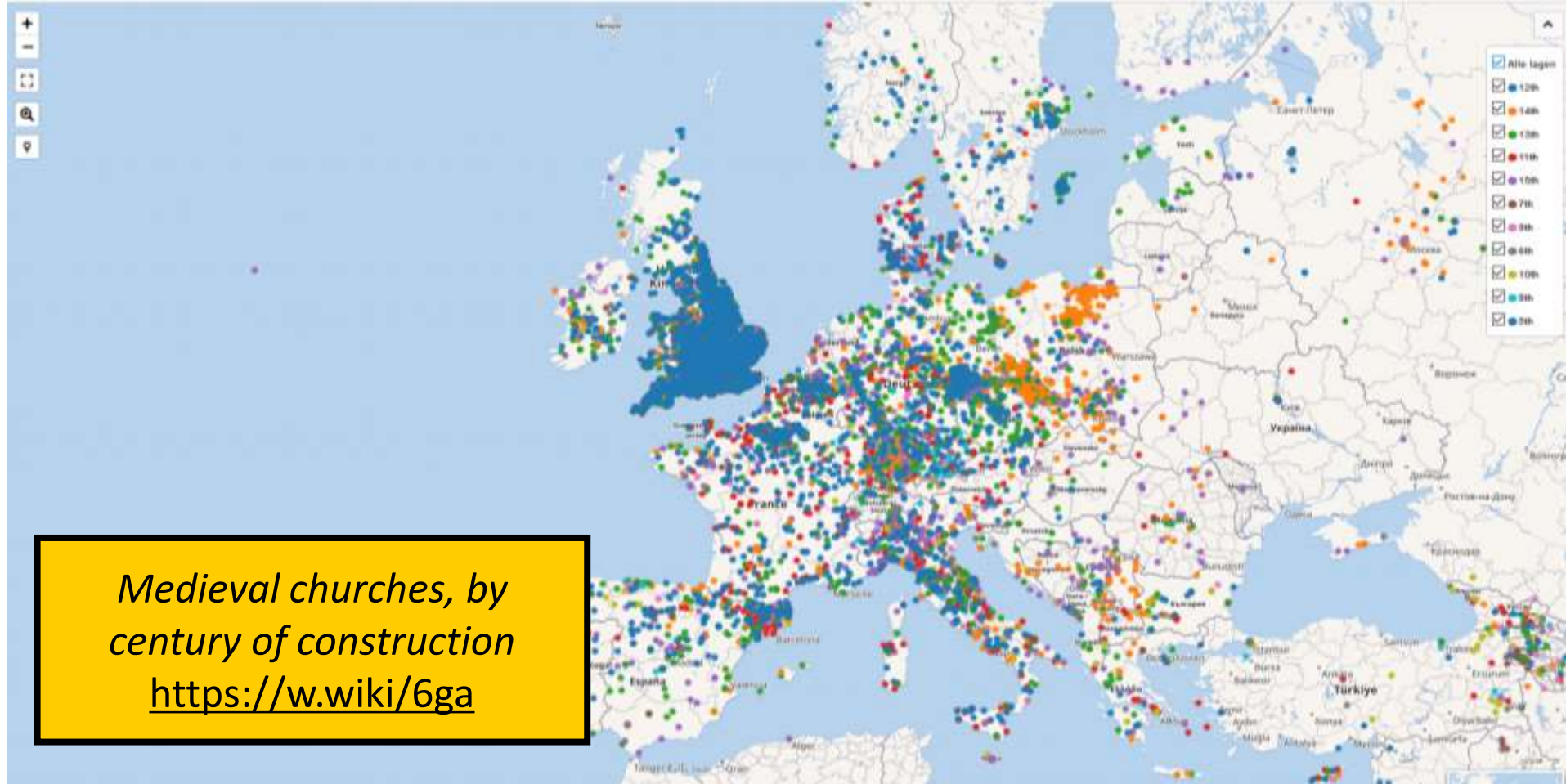
1.5) Other cool layered maps



1.5) Other cool layered maps



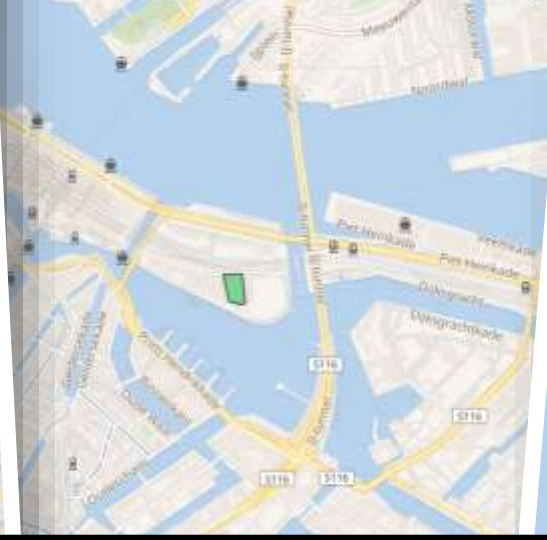
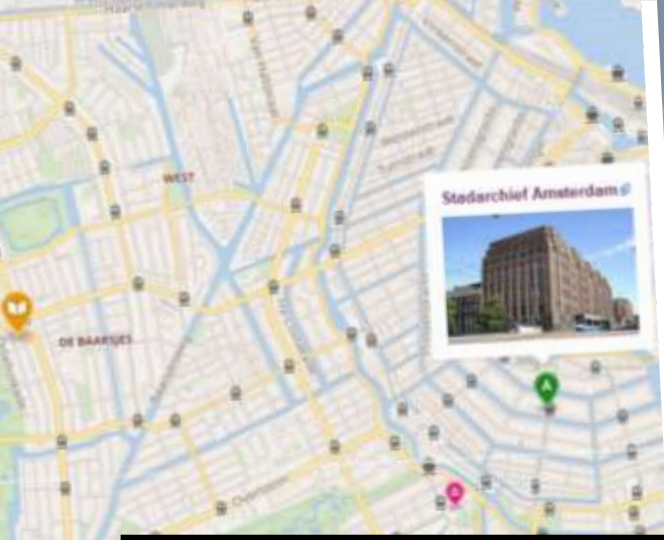
1.5) Other cool layered maps



1.5) Other cool layered maps

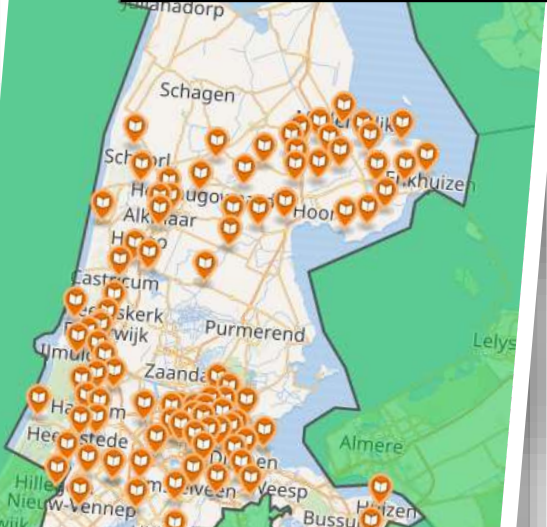
Dutch municipalities, by number of public libraries
<https://w.wiki/6gb>





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

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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](#)

- 1 Getting started
- 2 `<mapframe>` usage
 - 2.1 Frames
- 3 `<maplink>`
 - 3.1 `<maplink>` and auto-counters
- 4 Markers
- 5 Groups
- 6 External data
 - 6.1 GeoShapes via Wikidata Query
 - 6.2 Map data from Commons
 - 6.3 Combining multiple data
- 7 Styling
 - 7.1 Styling Wikidata ID elements
 - 7.2 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>



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- Hoofdpagina
- Vind een artikel
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- Categorieën
- Recente wijzigingen
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- Willekeurige pagina

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

- Hulpmiddelen
- Koppelingen van pagina
- Links naar deze pagina
- Verwante wijzigingen
- Gebruikersbijdragen
- Logboeken
- Deze gebruiker bewerken
- 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

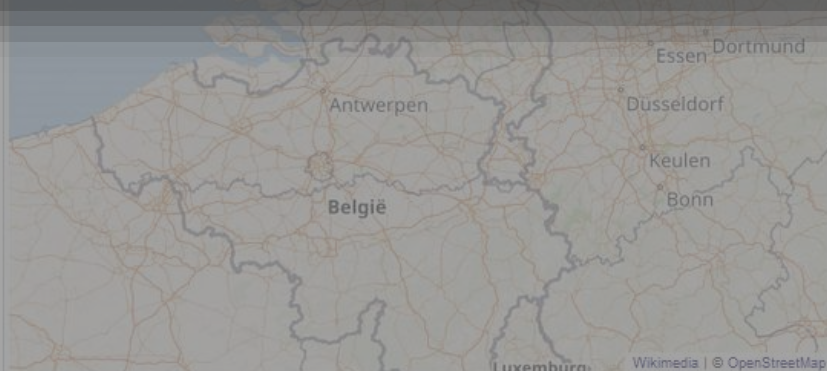
Embedded maps in Dutch Wikipedia [bewerken | brontekst bewerken]

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



== Basic embedded map of The Netherlands ==

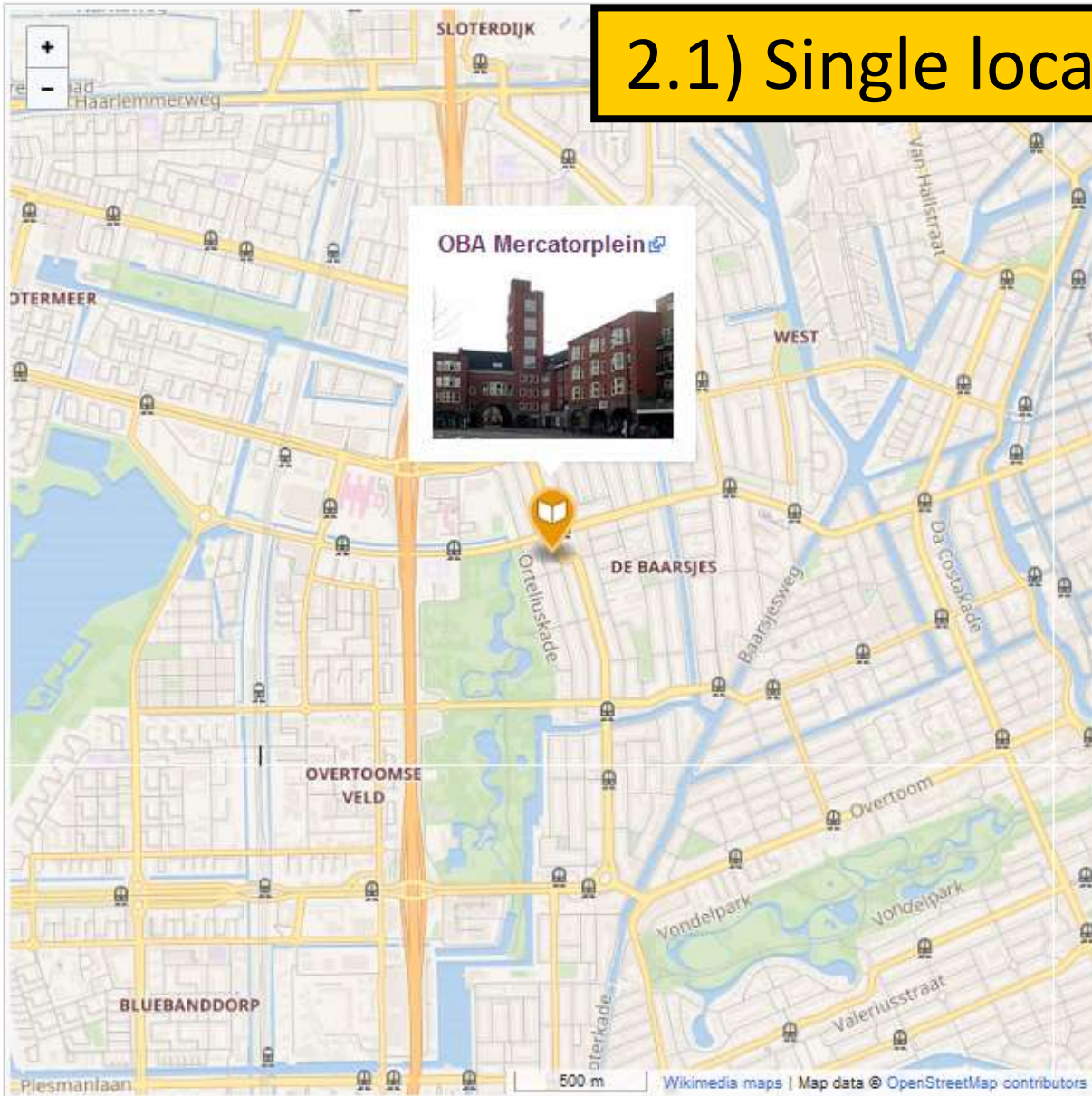
```
<mapframe width=600 height=700 zoom=7 latitude=52.20  
longitude=5.179627565 text="Basic embedded map of  
[[w:The_Netherlands|The Netherlands]]" align=left/>
```



Basic embedded map of The Netherlands

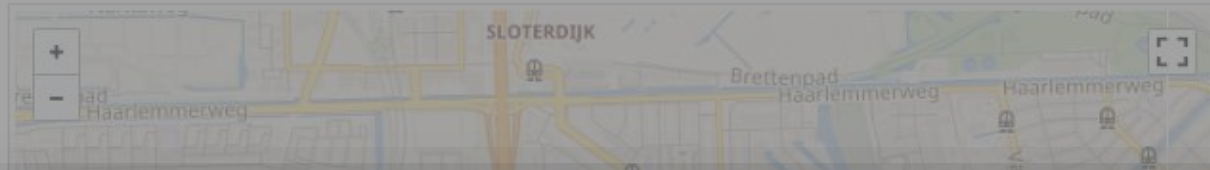
One public library in Amsterdam, geo coordinates hard coded

2.1) Single location, hard-coded



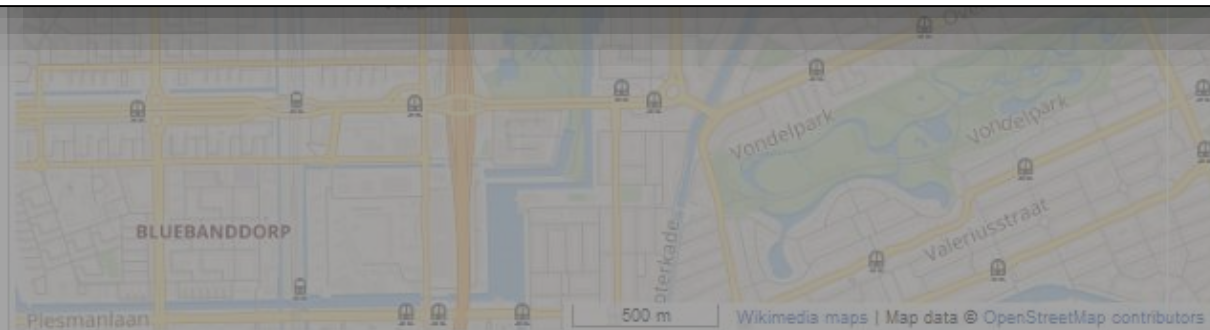
One public library in Amsterdam, geo coordinates hard coded

One public library in Amsterdam, geo coordinates hard coded



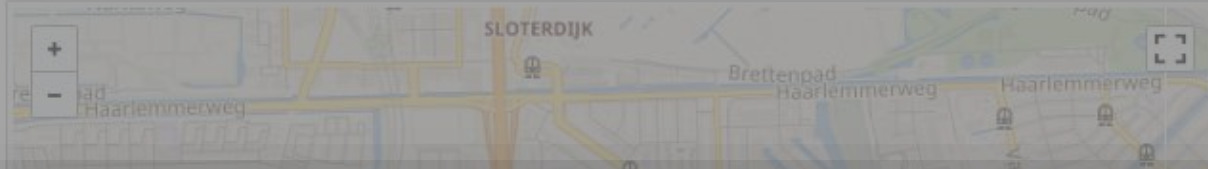
== One public library in Amsterdam, geo coordinates hard-coded ==

```
<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>
```



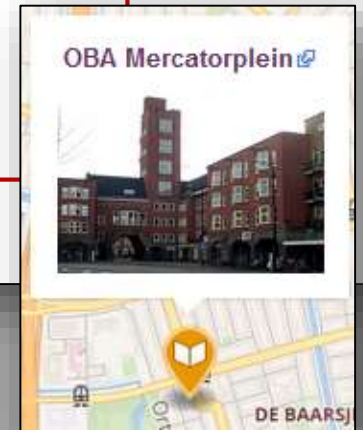
One public library in Amsterdam, geo coordinates hard coded

One public library in Amsterdam, geo coordinates hard coded



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

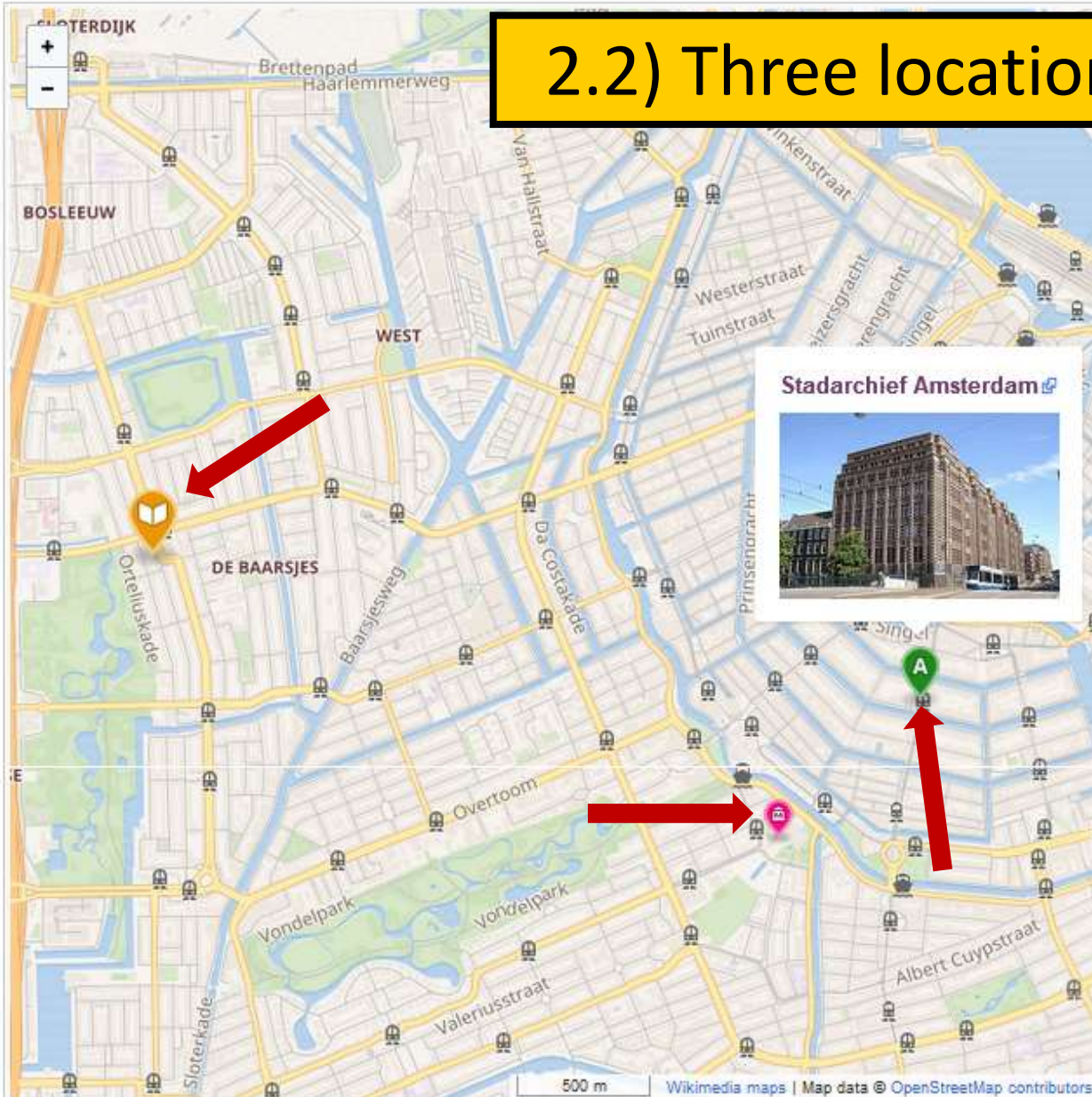
```
<mapframe text="One public library in Amsterdam, geo coordinates hard-coded" width=700 height=700 zoom=14
latitude=52.3693887 longitude=4.8502319 align=left>
{
  "type": "Feature",
  "geometry": { "type": "Point", "coordinates": [4.8502319, 52.3693887] },
  "properties": {
    "title": "[https://www.oba.nl/vestigingen/oba-mercatorplein.html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



Styling of markers

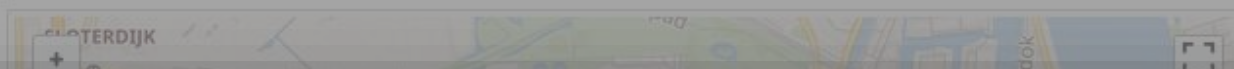
- <https://github.com/mapbox/simplestyle-spec/tree/master/1.1.0#3-client-behavior>
- <https://www.mediawiki.org/wiki/Help:Extension:Kartographer>

2.2) Three locations, hard-coded



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

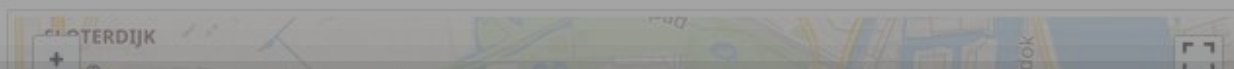
Library, museum and archive in Amsterdam, geo coordinates hard-coded



== 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>
```

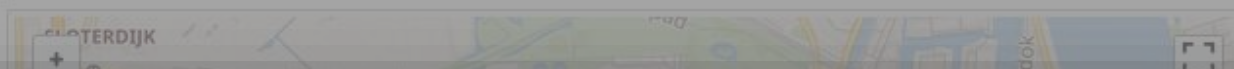
Library, museum and archive in Amsterdam, geo coordinates hard-coded



== 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



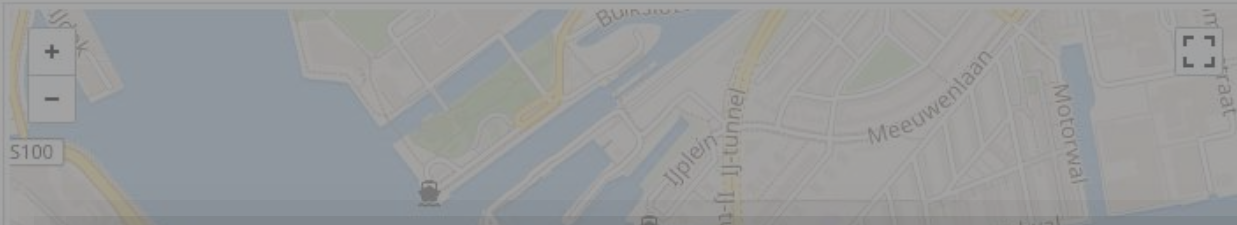
== Library, museum and archive in Amsterdam, geo coordinates hard-coded ==

```
<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

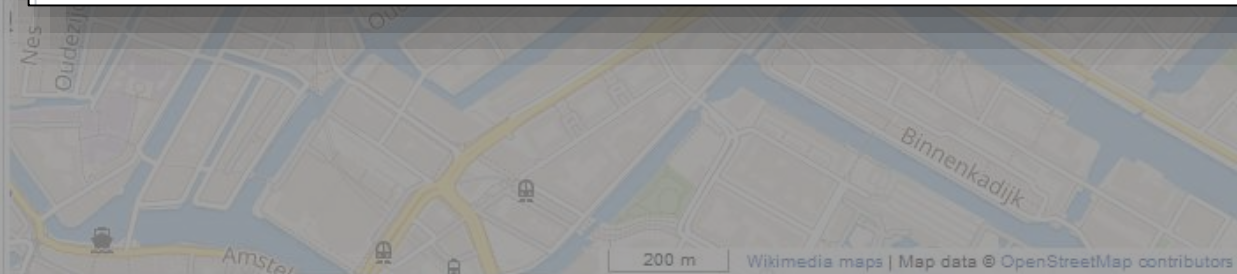
Outline (geoshape) of Amsterdam public library (main site), using Wikidata and Open Street Map



== 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? OK 🏠

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	Oosterdokska
alt_name	Openbare Bibliotheek Amsterdam
amenity	library
building	yes

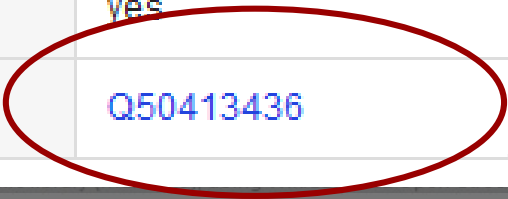
website	https://www.oba.nl/vestigingen/centrale-oba.html
---------	---

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

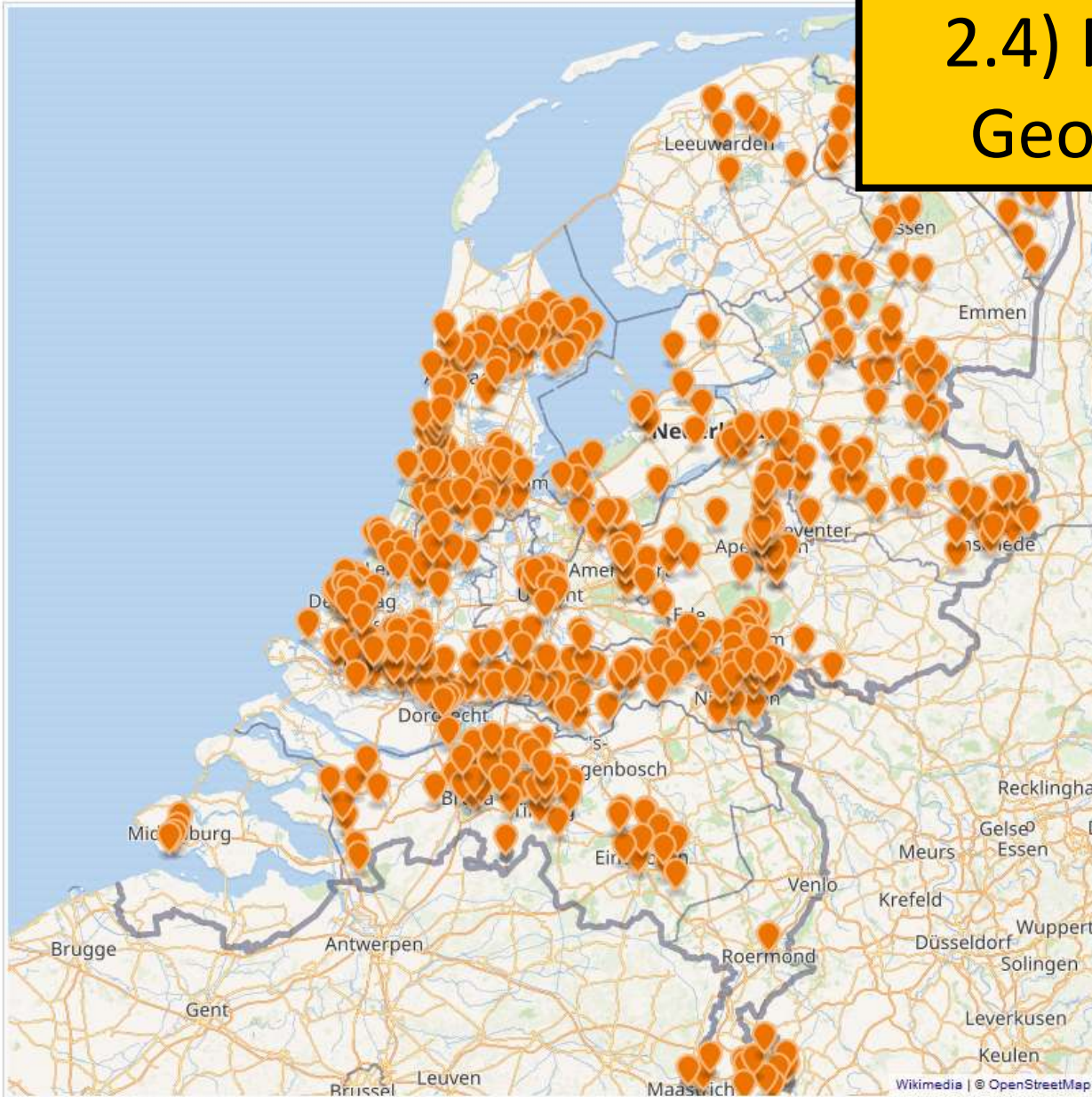
wikidata	Q50413436
----------	---



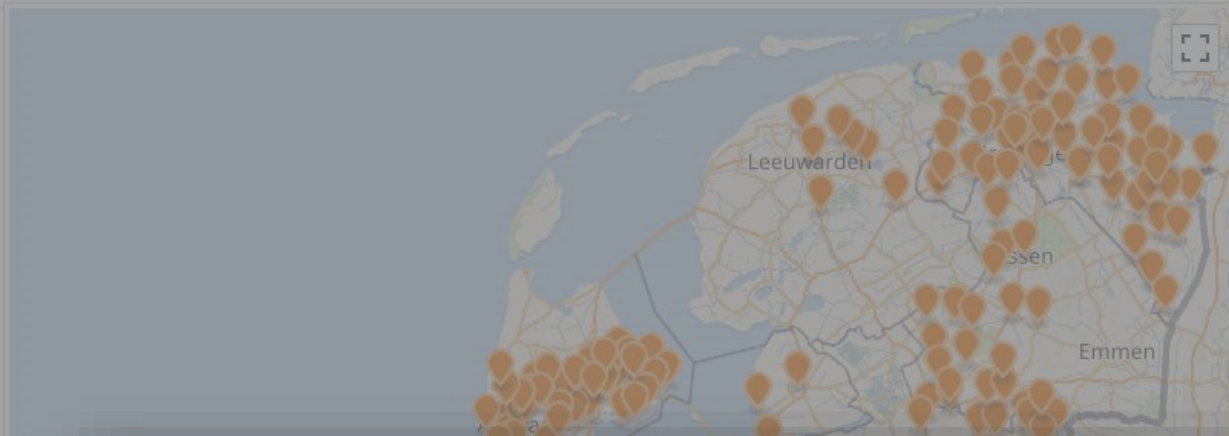
GeoShape in OSM



2.4) Many locations, GeoJSON .map file



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

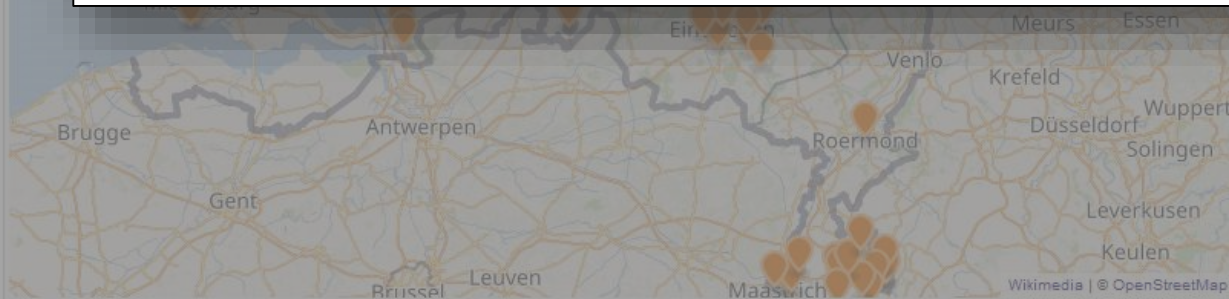


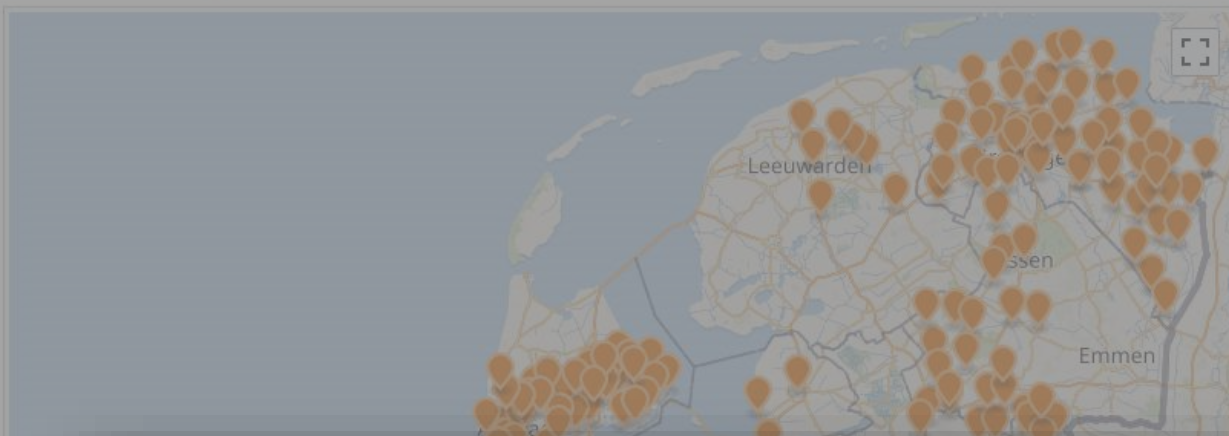
```
== Map of Dutch public libraries, work in progress, 21-5-2019 ==
```

```
<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>
```





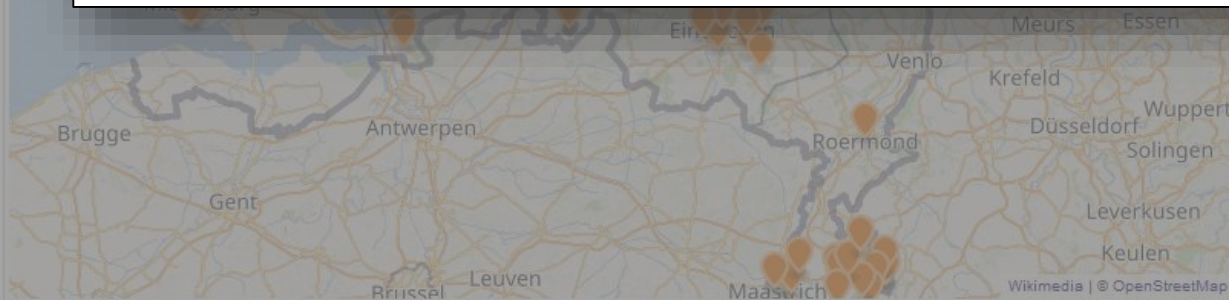
```
== Map of Dutch public libraries, work in progress, 21-5-2019 ==
```

```
<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>
```





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

Data:DutchPublicLibraries.map

Uit Wikimedia Commons

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



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



- 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 progress, 21-5-2019"
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        },
```



0 0 0

Standard [[[| {{ {{{ - - " ' « < „ , . • × ° € ← → § ~~~~~
<pre> [[Category: [[:File: [[Media: {{DEFAULTSORT: {{NAMESPACE}} {{PAGENAME}} #REDIRECT[[<galler
<noinclude> <onlyinclude> <translate> <tvar|> <languages/>



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 description in that language.
- 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": "Title", "nl": "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 weergeven

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
Norwegian Sea
North Atlantic Ocean
South Atlantic Ocean
Indian Ocean
3000 km
2000 mi

</> JSON Table ? Help anon | login

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

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

Geojson.io

The image shows the Geojson.io web application interface. At the top, there is a navigation menu with options: Open, Save, New, Share, Meta, and unsaved. A red arrow points to the 'Open' button. The main area is split into a map on the left and a JSON editor on the right. The JSON editor shows a simple GeoJSON structure:

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

Below the main interface, a Windows file explorer window titled 'Bestand uploaden' is open. 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 file 'LibraryMapInputData.tsv' is selected. The 'Bestandsnaam' field at the bottom contains 'LibraryMapInputData.tsv' and the file type is set to 'Alle bestanden (*.*)'. The 'Openen' button is highlighted.

At the bottom of the map, there are scale indicators for 3000 km and 2000 mi, and a footer with 'Mapbox Satellite OCM OSM' and 'Feedback | About | © Mapbox © OpenStreetMap Improve this map'.

LibraryMapInputData.tsv

| | title | marker-size | marker-color | type | long | lat | | |
|----|--|-------------|--------------|-------|-----------|------------|--|--|
| 1 | | | | | | | | |
| 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 Haafden 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 | | |

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|Aalet 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
```

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

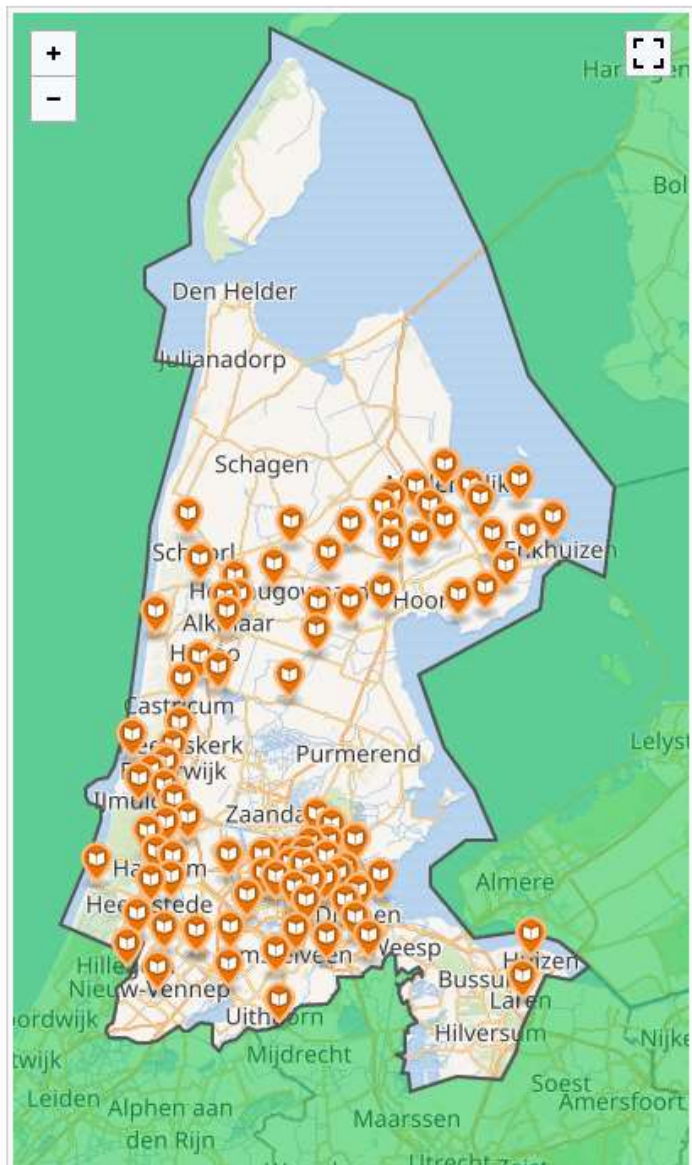
Wikidata Query Service

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

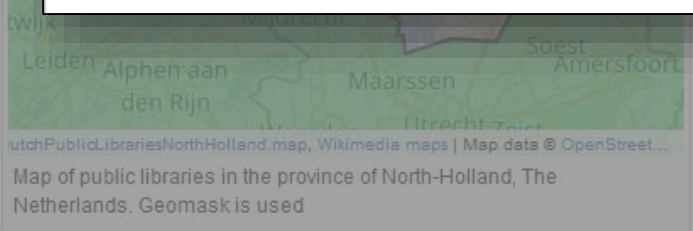
https://www.mediawiki.org/wiki/Help:Extension:Kartographer#Combining_multiple_data_types



```
<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>
```



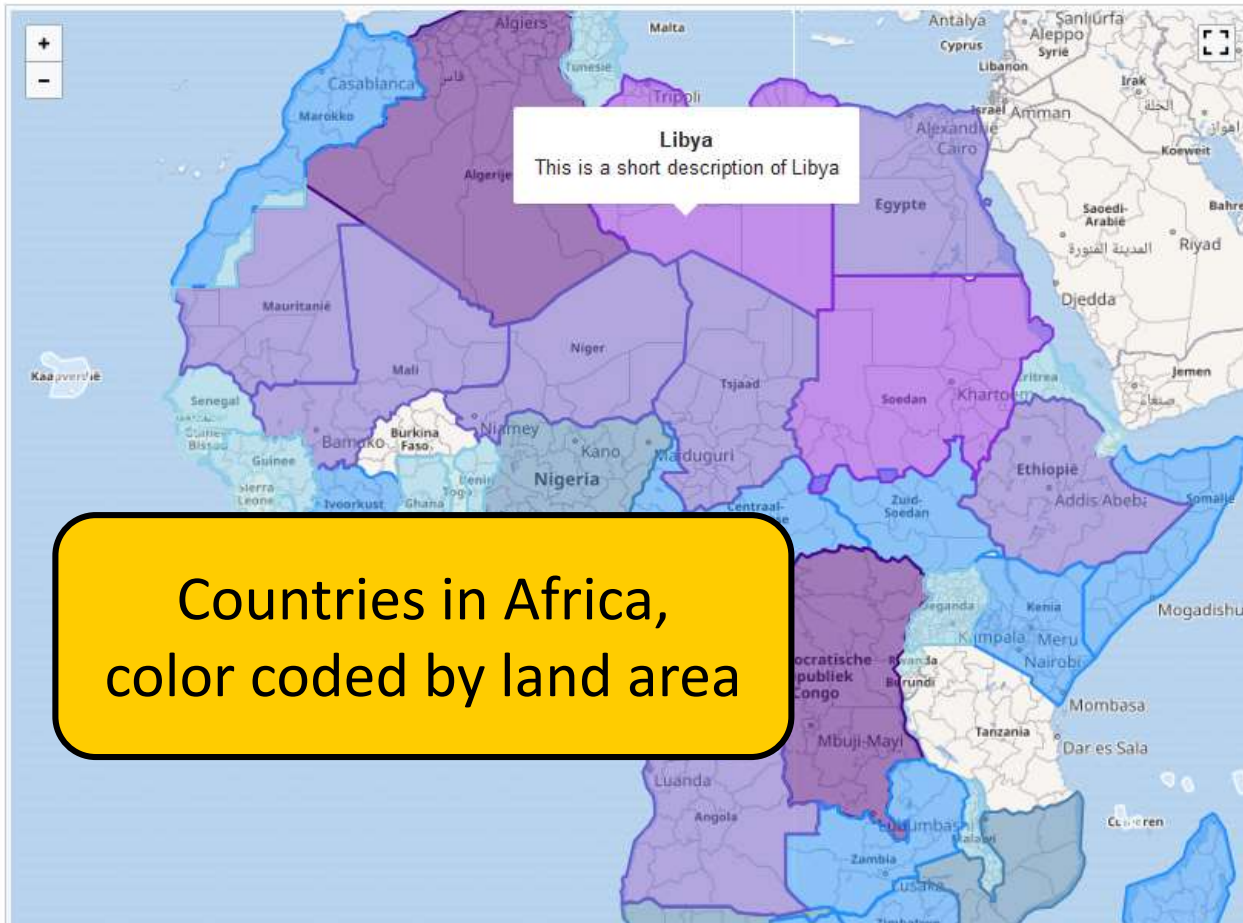
<https://commons.wikimedia.org/wiki/Data:DutchPublicLibrariesNorthHolland.map>



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



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

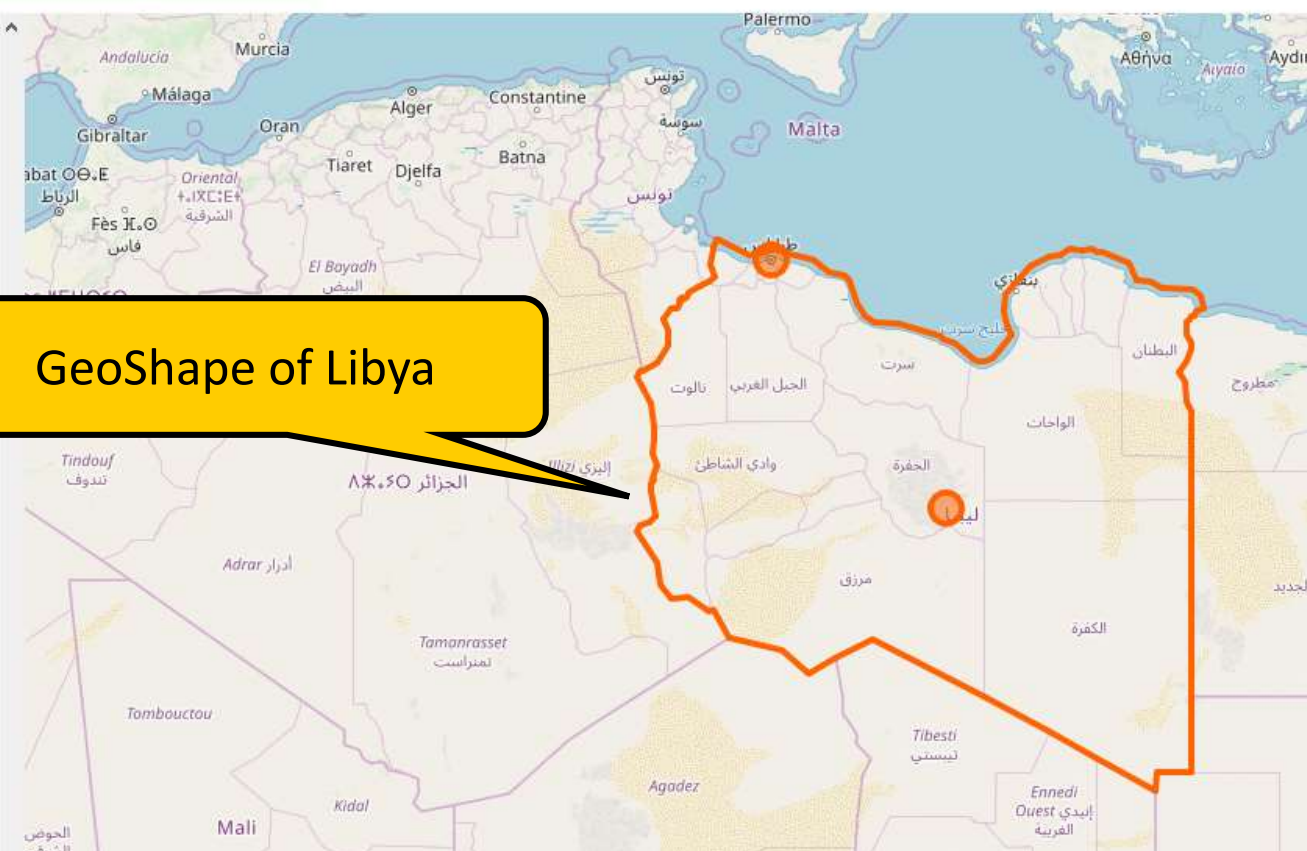
<https://nl.wikipedia.org/wiki/Gebruiker:OlafJanssen/KladblokMapMakingWorkshopWM2019>

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

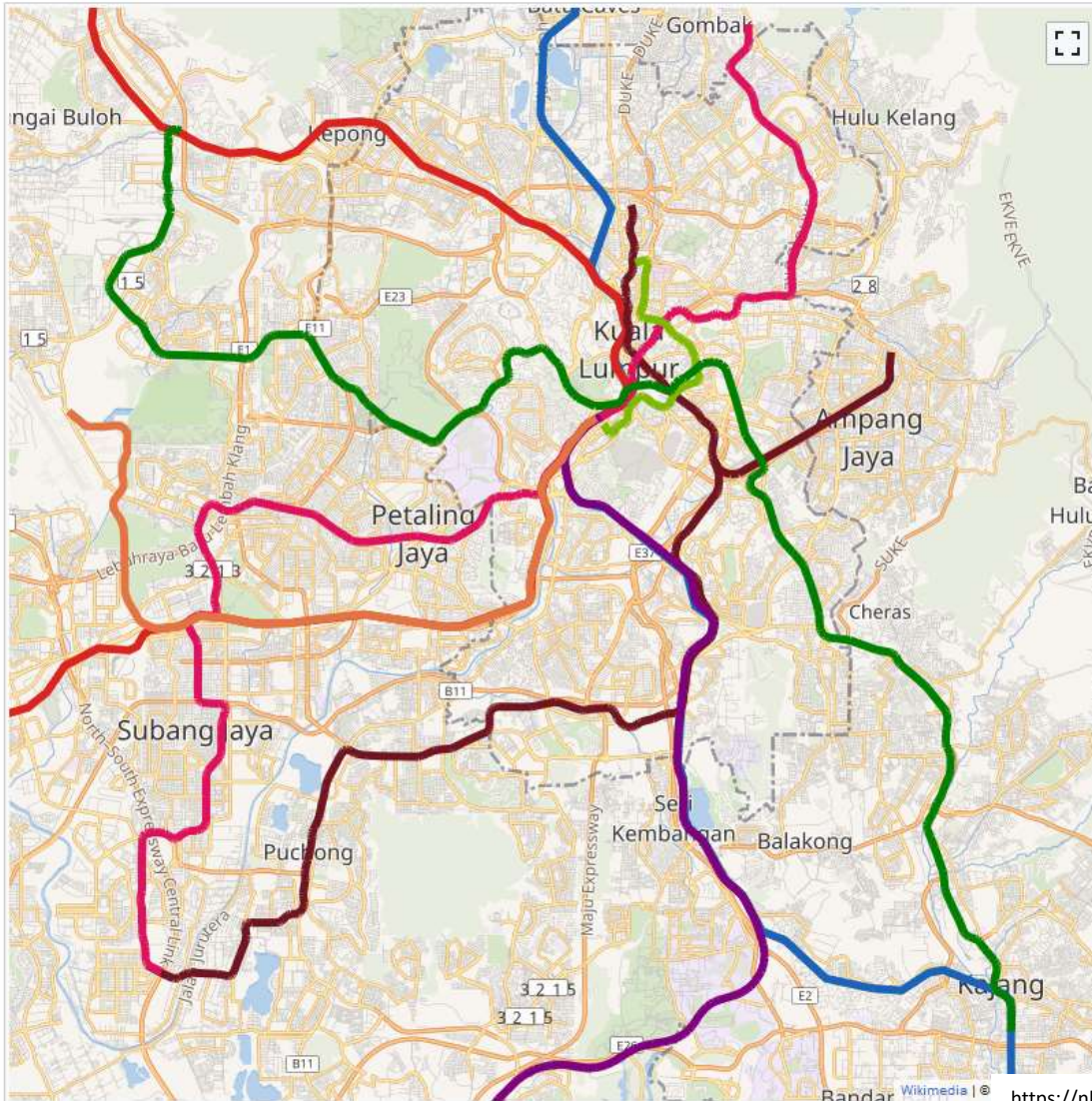
```
}
```

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

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

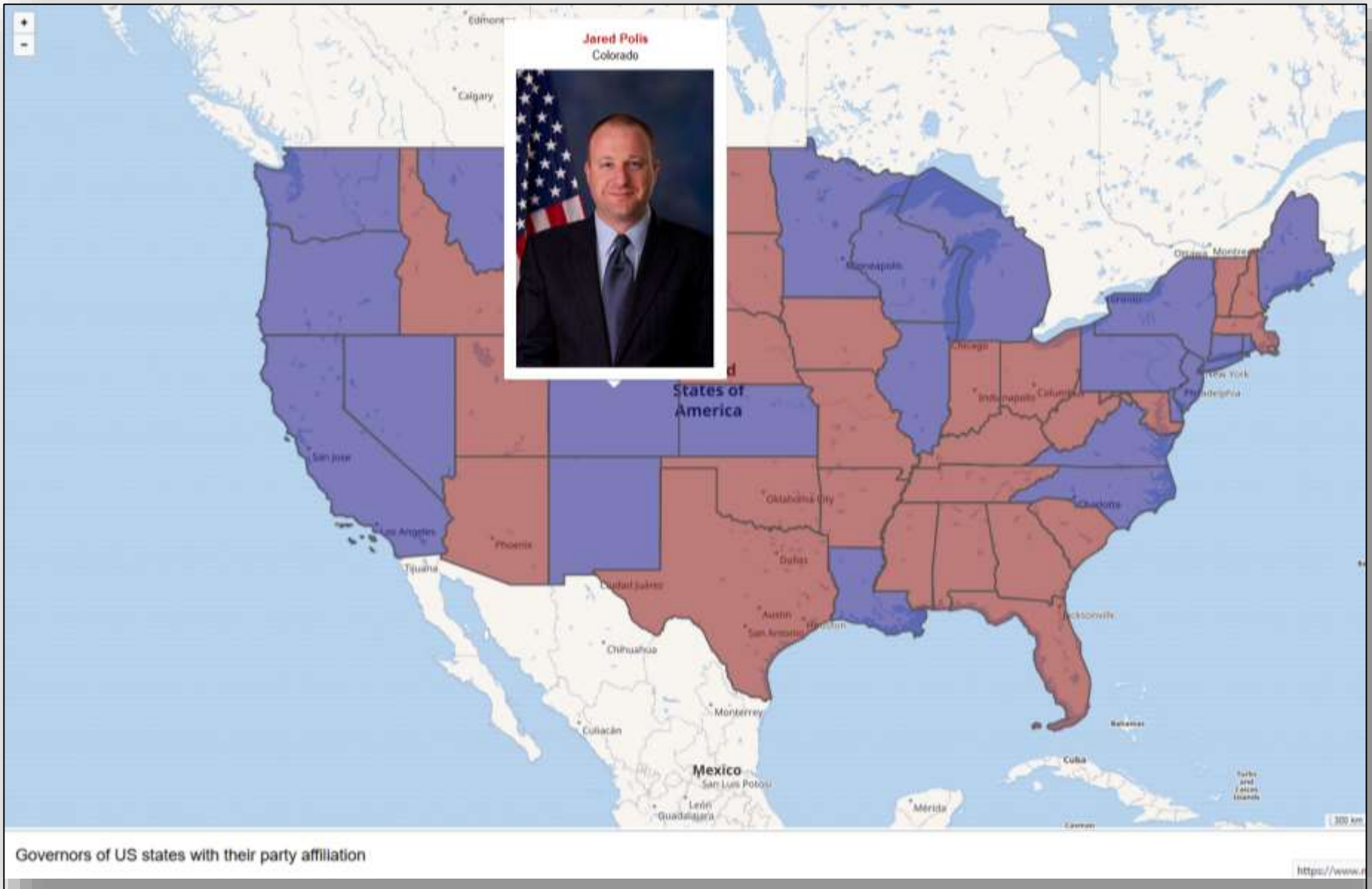
2.7) Other cool embedded maps

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



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

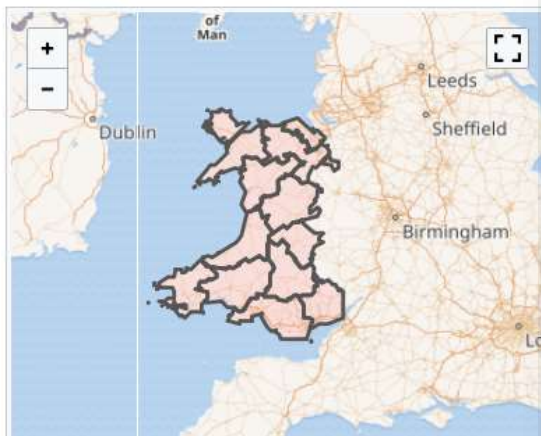
GeoShapes [edit]



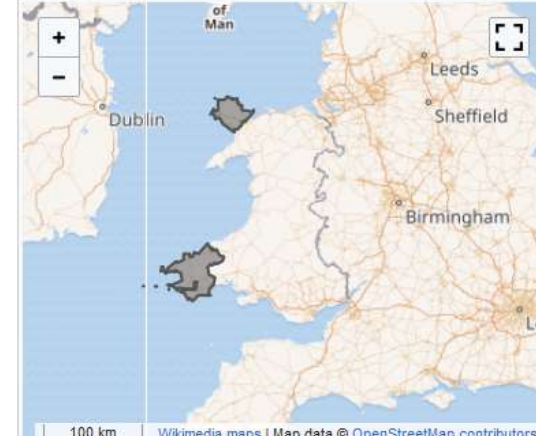
Commons: National Library of Wales.map, Wikimedia maps | Map data © OpenStreetMap contributors
National Library of Wales collections



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



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

Governors of US states with their

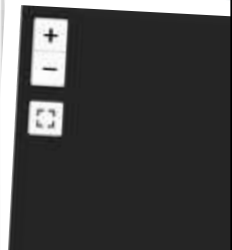
<https://www.wikidata.org/wiki/User:Sic19#GeoShapes>

<https://www.r>

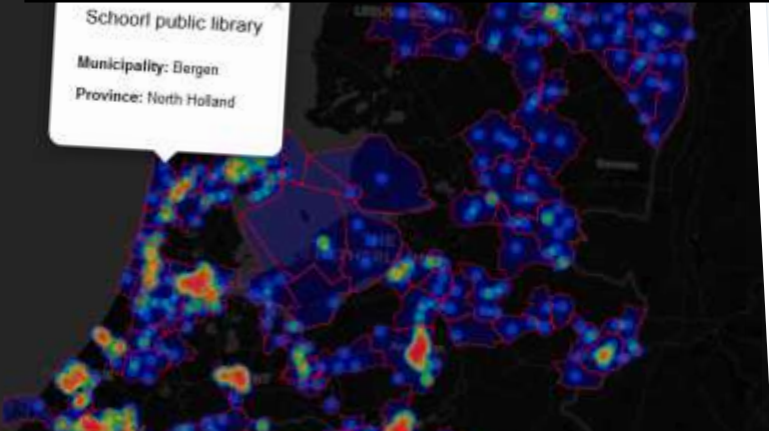


MODULE 3

Interactive, layered off-Wiki maps driven by Wikidata






School public library
Municipality: Bergen
Province: North Holland







```
1 # Overview of more basemaps: https://leaflet-extras.github.io/leaflet-providers/preview/
2 # https://github.com/igutter/wikipedia-application/blob/master/leaflet/basemap.js
3
4 # Get default center and zoom level of basemap
5 map_center=[52.08889, 5.21] # Utrecht city
6 map_zoom=9
7
8 # Get layout of map
9 map_layout = {
10   'width': '900px',
11   'height': '1000px',
12   'border': '1px solid black',
13   'padding': '1px',
14   'margin': '10px auto 0 auto'
15 }
16
17 # Output the map to screen, embedded in a web browser
18 # https://leaflet.readthedocs.io/en/latest/api_reference/map.html
19 m = Map(layers=(Default_layer), center=map_center, zoom=map_zoom, layout=map_layout)
20 m
```

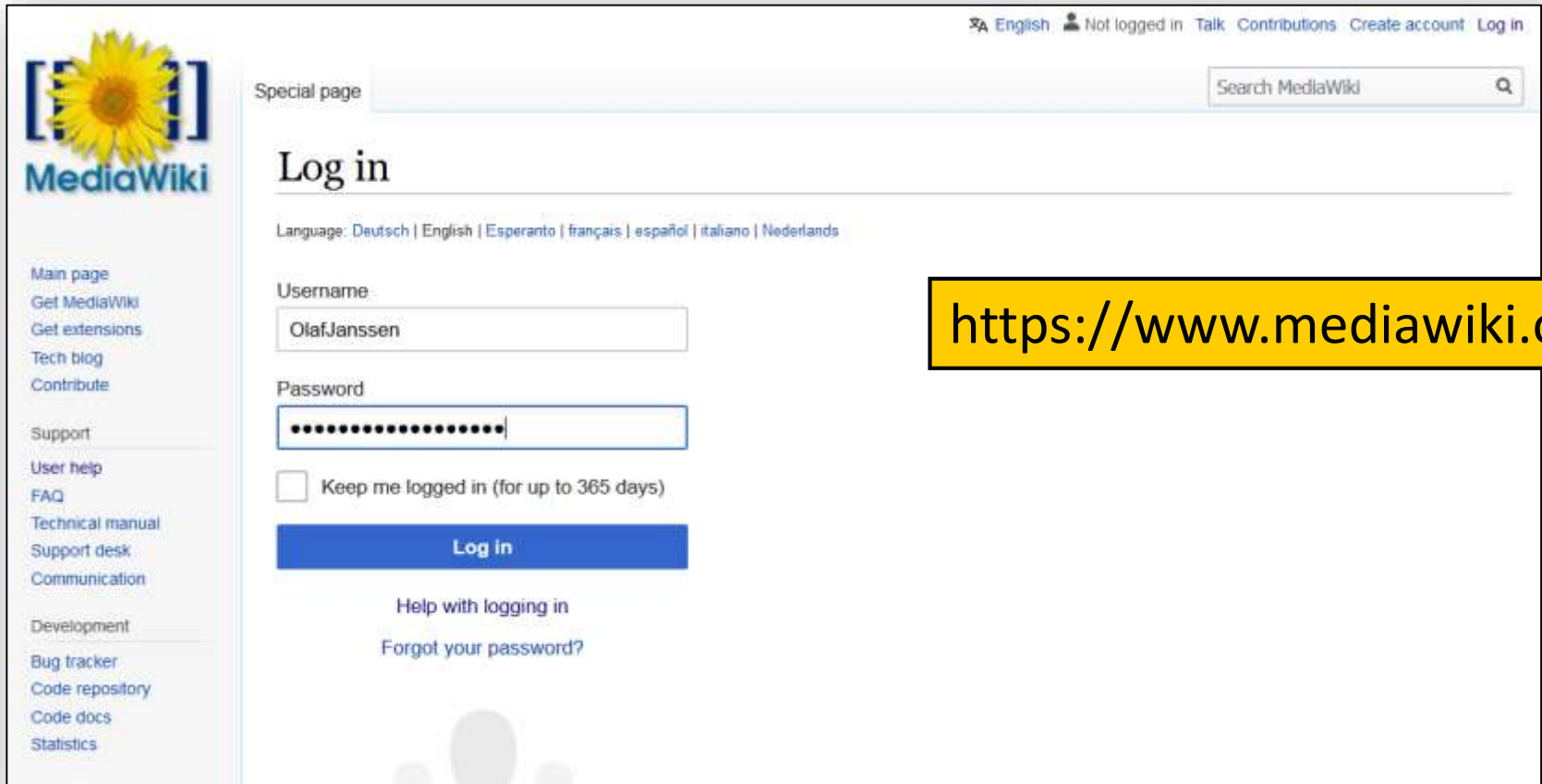




For this Module, it's nice to have basic experience with

- 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 features a search bar, a language selector, and a login form with fields for username and password, a 'Keep me logged in' checkbox, and a 'Log in' button. A yellow callout box on the right contains the URL <https://www.mediawiki.org>.

English Not logged in Talk Contributions Create account Log in

Special page Search MediaWiki

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?](#)

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>

<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 says "See also 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](#)).

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.

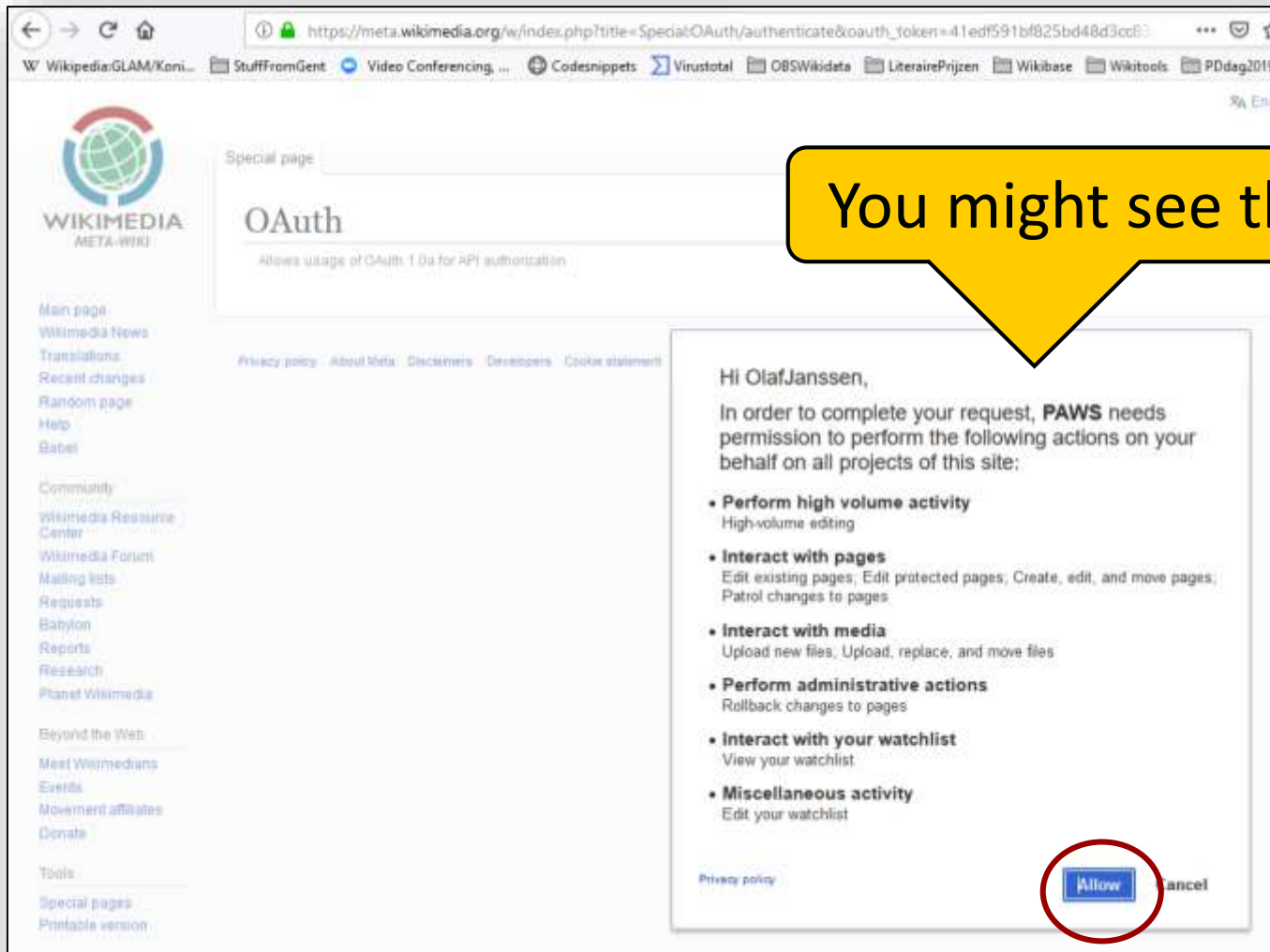
Contents [hide](#)

- 1 Why?
- 2 What?
 - 2.1 Notebooks

Start your PAWS server
<https://paws.wmflabs.org/paws/hub>

Starting your PAWS server

You might see this screen...



The screenshot shows a web browser window displaying the Wikimedia OAuth authorization page. The browser's address bar shows the URL: https://meta.wikimedia.org/w/index.php?title=Special:OAuth/authorize&oauth_token=41edf591bf825bd48d3cc63. The page title is "Special page: OAuth" and the subtitle is "Allows usage of OAuth 1.0a for API authorization".

The main content area displays the following text:

Hi OlafJanssen,

In order to complete your request, **PAWS** needs permission to perform the following actions on your behalf on all projects of this site:

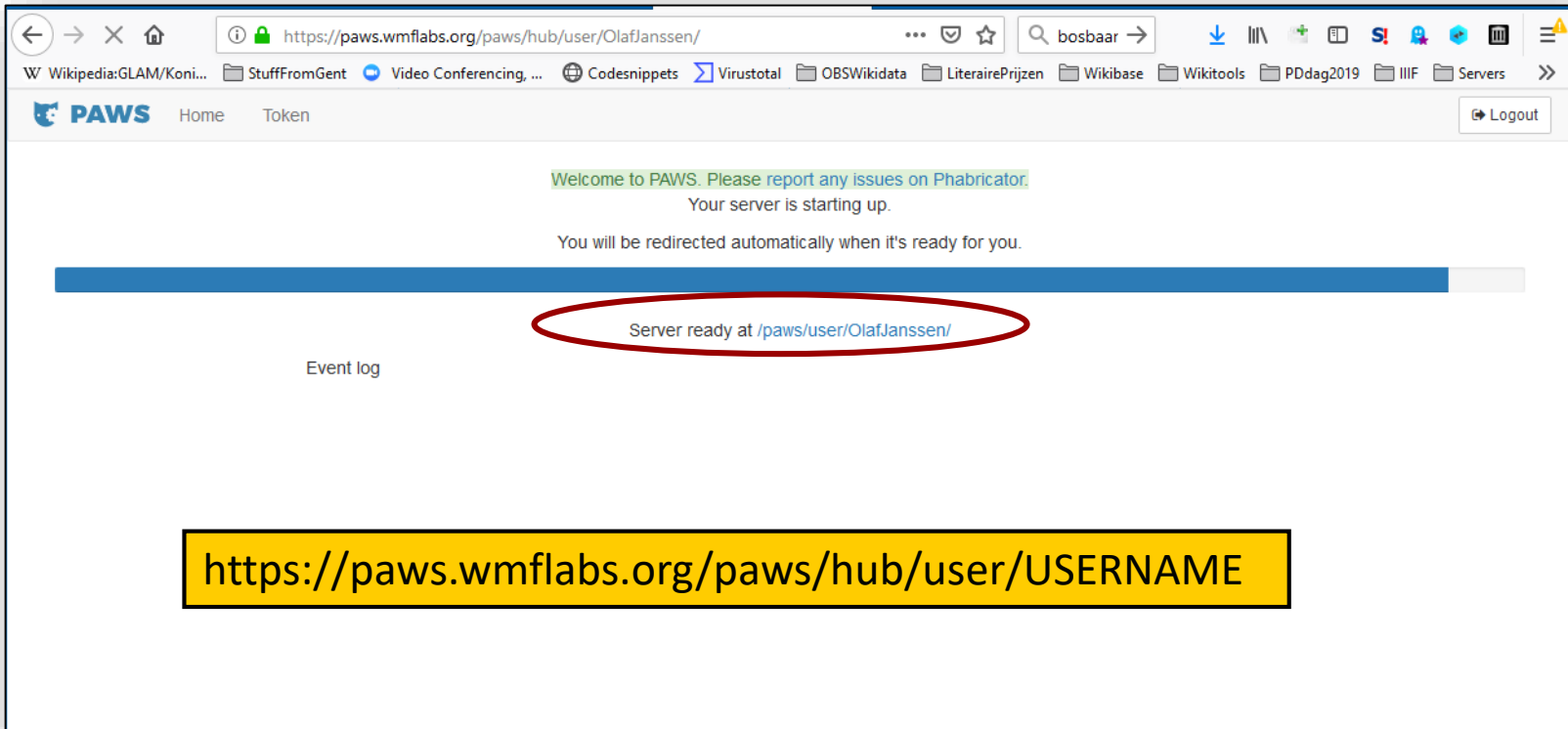
- **Perform high volume activity**
High-volume editing
- **Interact with pages**
Edit existing pages, Edit protected pages, Create, edit, and move pages, Patrol changes to pages
- **Interact with media**
Upload new files, Upload, replace, and move files
- **Perform administrative actions**
Rollback changes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

At the bottom of the dialog, there are two buttons: "Allow" and "Cancel". The "Allow" button is circled in red.

The left sidebar of the page contains the following links:

- 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 Wikimedia
- Events
- Movement affiliates
- Donate
- Tools
- Special pages
- Printable version

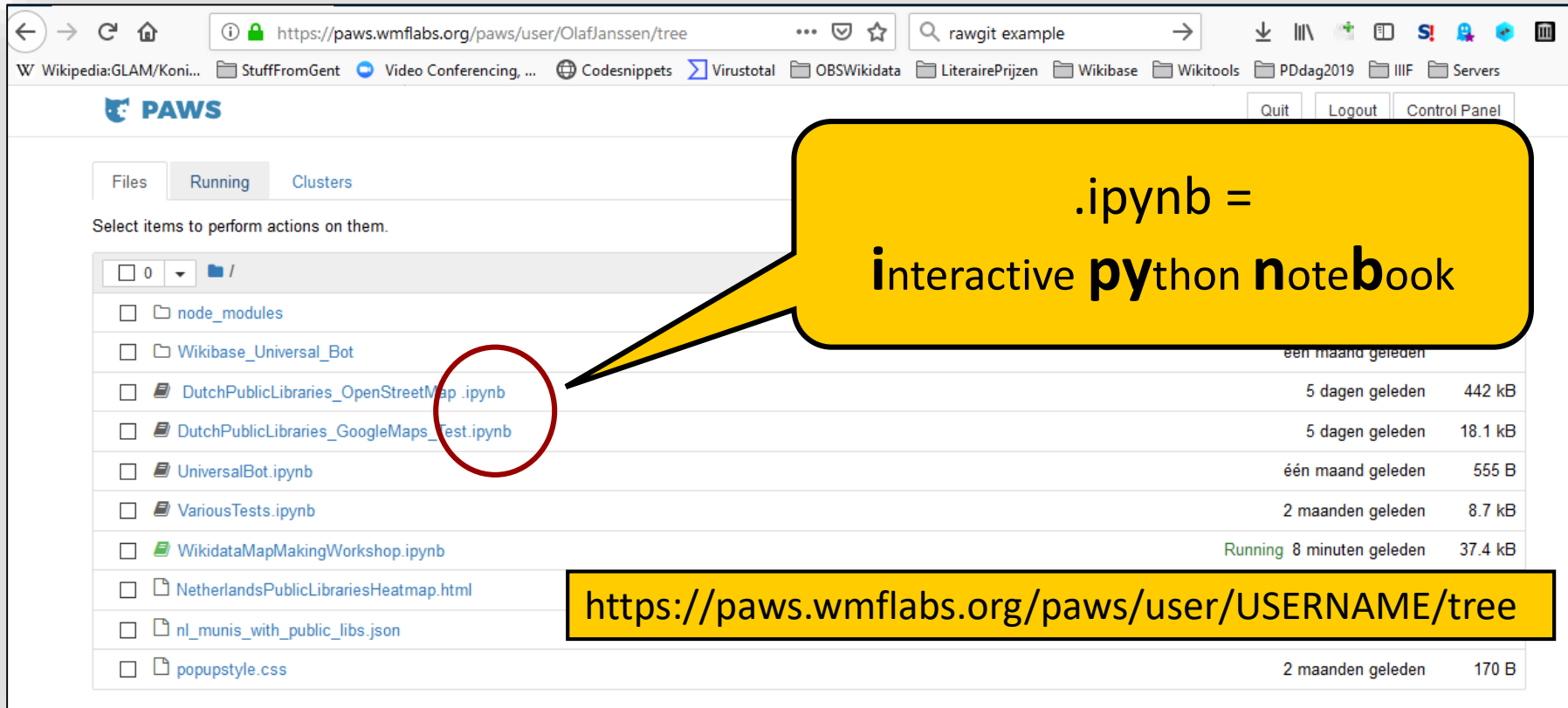
Starting your PAWS server



The screenshot shows a web browser window with the address bar displaying `https://paws.wmflabs.org/paws/hub/user/OlafJanssen/`. The page content includes a PAWS logo, navigation links for 'Home' and 'Token', and a 'Logout' button. A green message states: '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 this is a blue progress bar. A red oval highlights the text 'Server ready at /paws/user/OlafJanssen/'. An 'Event log' link is visible on the left. At the bottom, a yellow box contains the URL `https://paws.wmflabs.org/paws/hub/user/USERNAME`.

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

Your PAWS server running

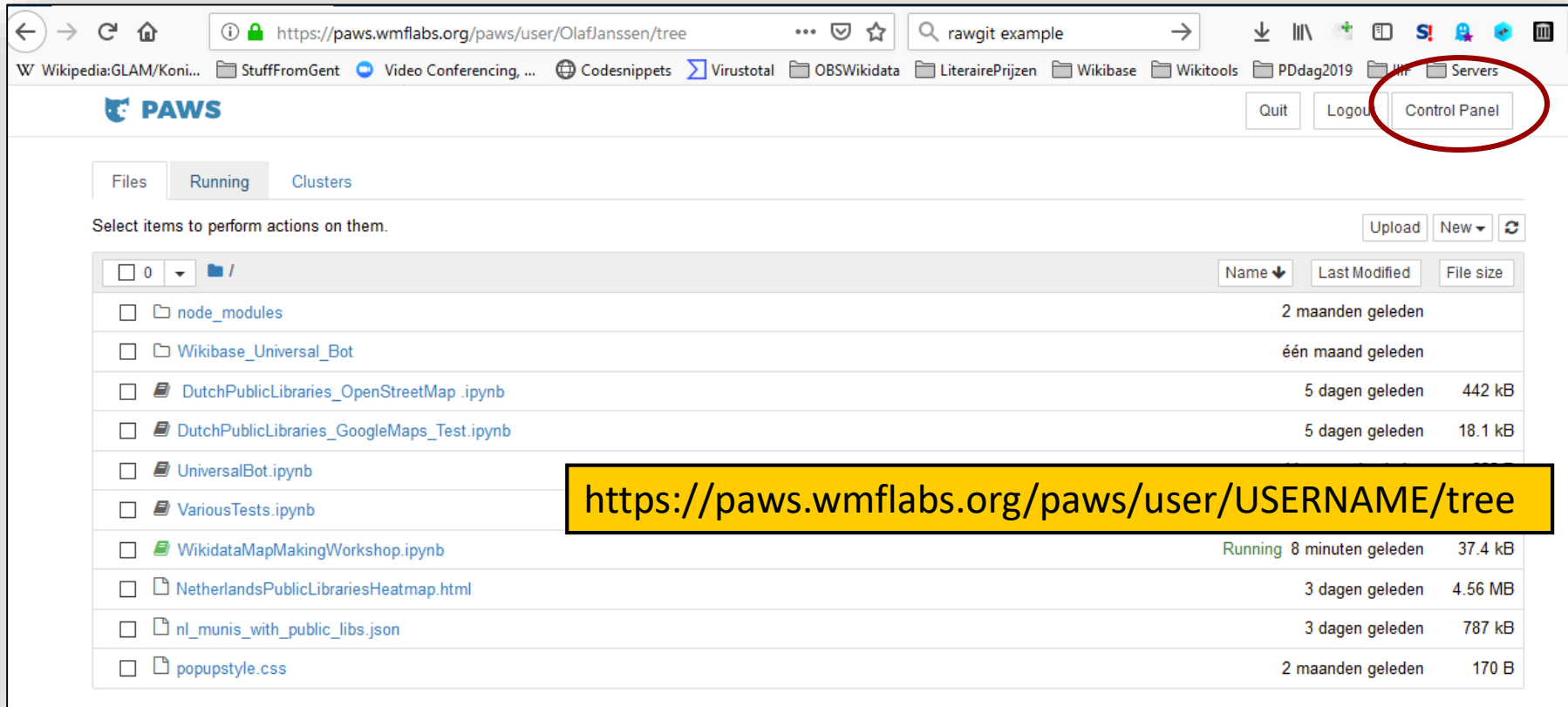


The screenshot shows the PAWS web interface at <https://paws.wmflabs.org/paws/user/OlafJanssen/tree>. The interface includes a navigation bar with 'Files', 'Running', and 'Clusters' tabs. Below the navigation, there is a list of files and folders. A red circle highlights the file 'DutchPublicLibraries_OpenStreetMap.ipynb'. A yellow callout box points to this file with the text: **.ipynb = interactive python notebook**. At the bottom of the screenshot, a yellow box contains the URL: <https://paws.wmflabs.org/paws/user/USERNAME/tree>.

| File Name | Last Modified | Size |
|--|---------------------------|---------|
| node_modules | | |
| Wikibase_Universal_Bot | een maand geleden | |
| DutchPublicLibraries_OpenStreetMap.ipynb | 5 dagen geleden | 442 kB |
| DutchPublicLibraries_GoogleMaps_Test.ipynb | 5 dagen geleden | 18.1 kB |
| UniversalBot.ipynb | één maand geleden | 555 B |
| VariousTests.ipynb | 2 maanden geleden | 8.7 kB |
| WikidataMapMakingWorkshop.ipynb | Running 8 minuten geleden | 37.4 kB |
| NetherlandsPublicLibrariesHeatmap.html | | |
| nl_munis_with_public_libs.json | | |
| popupstyle.css | 2 maanden geleden | 170 B |

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

Stopping your PAWS server



The screenshot shows the PAWS user interface in a web browser. The address bar displays the URL `https://paws.wmflabs.org/paws/user/OlafJanssen/tree`. The browser's tab bar includes several open tabs, with the 'Servers' tab highlighted by a red circle. In the top right corner of the PAWS interface, there are three buttons: 'Quit', 'Logout', and 'Control Panel', with the 'Control Panel' button also circled in red.


Below the navigation bar, there are tabs for 'Files', 'Running', and 'Clusters'. The 'Running' tab is selected. A message says 'Select items to perform actions on them.' To the right of this message are buttons for 'Upload', 'New', and a refresh icon.

The main content area shows a file list with columns for 'Name', 'Last Modified', and 'File size'. The list includes folders like 'node_modules' and 'Wikibase_Universal_Bot', and files such as 'DutchPublicLibraries_OpenStreetMap.ipynb', 'DutchPublicLibraries_GoogleMaps_Test.ipynb', 'UniversalBot.ipynb', 'VariousTests.ipynb', 'WikidataMapMakingWorkshop.ipynb', 'NetherlandsPublicLibrariesHeatmap.html', 'nl_munis_with_public_libs.json', and 'popupstyle.css'. The 'WikidataMapMakingWorkshop.ipynb' file is marked as 'Running'.

A yellow box highlights the URL `https://paws.wmflabs.org/paws/user/USERNAME/tree`.

| Name | Last Modified | File size |
|---|---------------------------|-----------|
| <input type="checkbox"/> / | | |
| <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 | | |
| <input type="checkbox"/> VariousTests.ipynb | | |
| <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 |

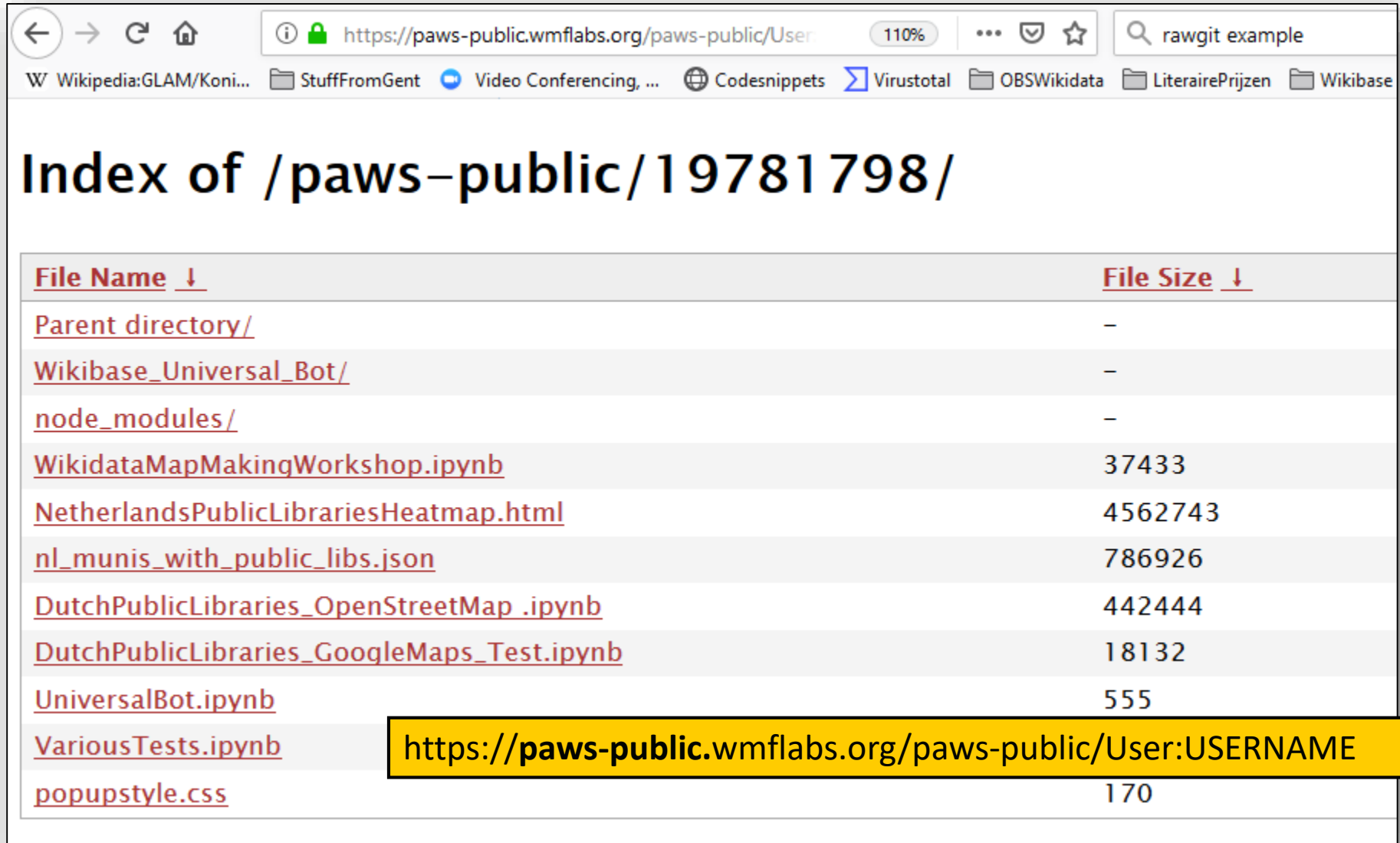
Stopping your PAWS server



The screenshot shows a web browser window with the URL `https://paws.wmflabs.org/paws/hub/home`. The page header includes 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 'Stop My Server' button and a blue 'My Server' button. A red arrow points from the left towards 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 `https://paws-public.wmflabs.org/paws-public/User`. The page title is "Index of /paws-public/19781798/". Below the title is a table listing files and directories. The table has two columns: "File Name" and "File Size". The files listed include "Parent directory/", "Wikibase_Universal_Bot/", "node_modules/", "WikidataMapMakingWorkshop.ipynb", "NetherlandsPublicLibrariesHeatmap.html", "nl_munis_with_public_libs.json", "DutchPublicLibraries_OpenStreetMap .ipynb", "DutchPublicLibraries_GoogleMaps_Test.ipynb", "UniversalBot.ipynb", "VariousTests.ipynb", and "popupstyle.css". A yellow box highlights the URL `https://paws-public.wmflabs.org/paws-public/User:USERNAME` in the bottom right corner of the page.

| <u>File Name</u> ↓ | <u>File Size</u> ↓ |
|--|--------------------|
| Parent directory/ | - |
| Wikibase_Universal_Bot/ | - |
| node_modules/ | - |
| WikidataMapMakingWorkshop.ipynb | 37433 |
| NetherlandsPublicLibrariesHeatmap.html | 4562743 |
| nl_munis_with_public_libs.json | 786926 |
| DutchPublicLibraries_OpenStreetMap .ipynb | 442444 |
| DutchPublicLibraries_GoogleMaps_Test.ipynb | 18132 |
| UniversalBot.ipynb | 555 |
| VariousTests.ipynb | |
| popupstyle.css | 170 |

`https://paws-public.wmflabs.org/paws-public/User:USERNAME`

PAWS alternative: local Notebook installation

The screenshot shows the Anaconda website homepage. At the top, there is a navigation bar with the Anaconda logo on the left and links for Products, Why Anaconda?, Solutions, Resources, Company, and a green Download button. The main header area has a green background with the text "Anaconda Distribution" and "The World's Most Popular Python/R Data Science Platform" followed by another Download button. Below this, a paragraph describes the open-source Anaconda Distribution as the easiest way to perform Python/R data science and machine learning on Linux, Windows, and Mac OS X. To the right of this text is a grid of 15 icons representing various data science libraries and tools. Below the paragraph is a bulleted list of features. At the bottom, a yellow box contains three links for installation and distribution information.

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](#)

| | | | | |
|--|--|---------------------|------------|-------|
| | | NumPy | | |
| | | | | |
| | | H ₂ O.ai | TensorFlow | CONDA |

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

Index of /paws-public/19781798/

| <u>File Name</u> ↓ | <u>File Size</u> ↓ |
|--|--------------------|
| Parent directory/ | |
| Wikibase_Universal_Bot/ | |
| node_modules/ | |
| WikidataMapMakingWorkshop.ipynb | 57455 |
| NetherlandsPublicLibrariesHeatmap.html | 4562743 |
| nl_munis_with_public_libs.json | 786926 |
| DutchPublicLibraries_OpenStreetMap.ipynb | 442444 |
| DutchPublicLibraries_GoogleMaps_Test.ipynb | 18132 |
| UniversalBot.i | |
| VariousTests.i | |
| popupstyle.css | 170 |

Example notebook we will use

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

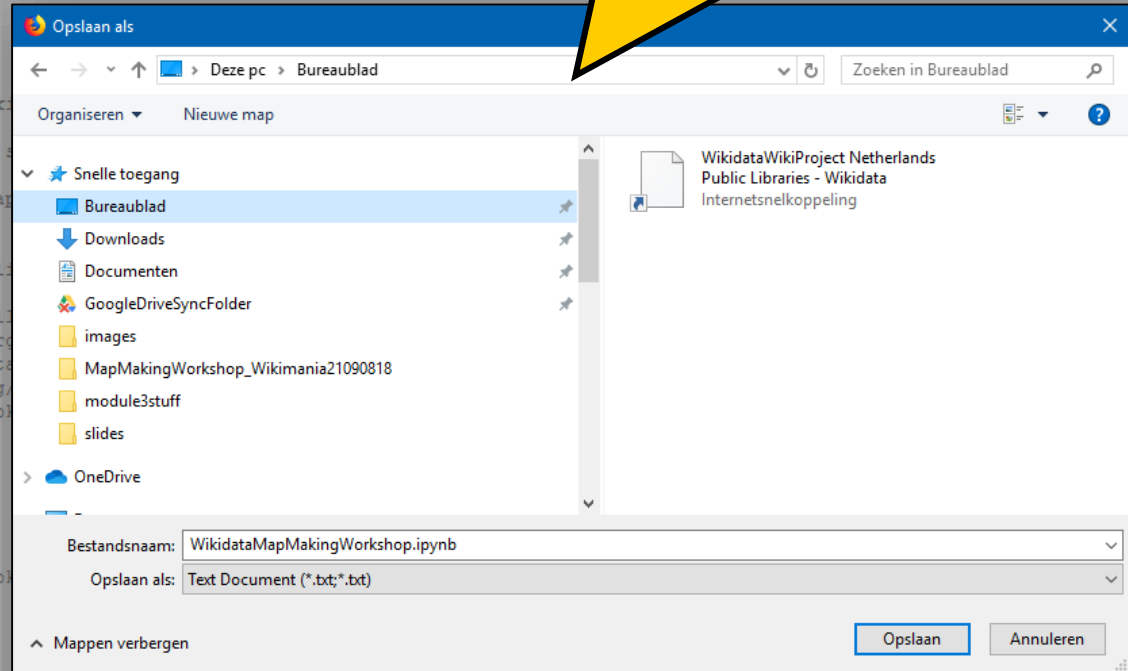
This notebook in raw format (json)

```
{
  "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": [
            "## Start of t
          ]
        },
        {
          "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",
          ]
        }
      ]
    }
  ]
}
```

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

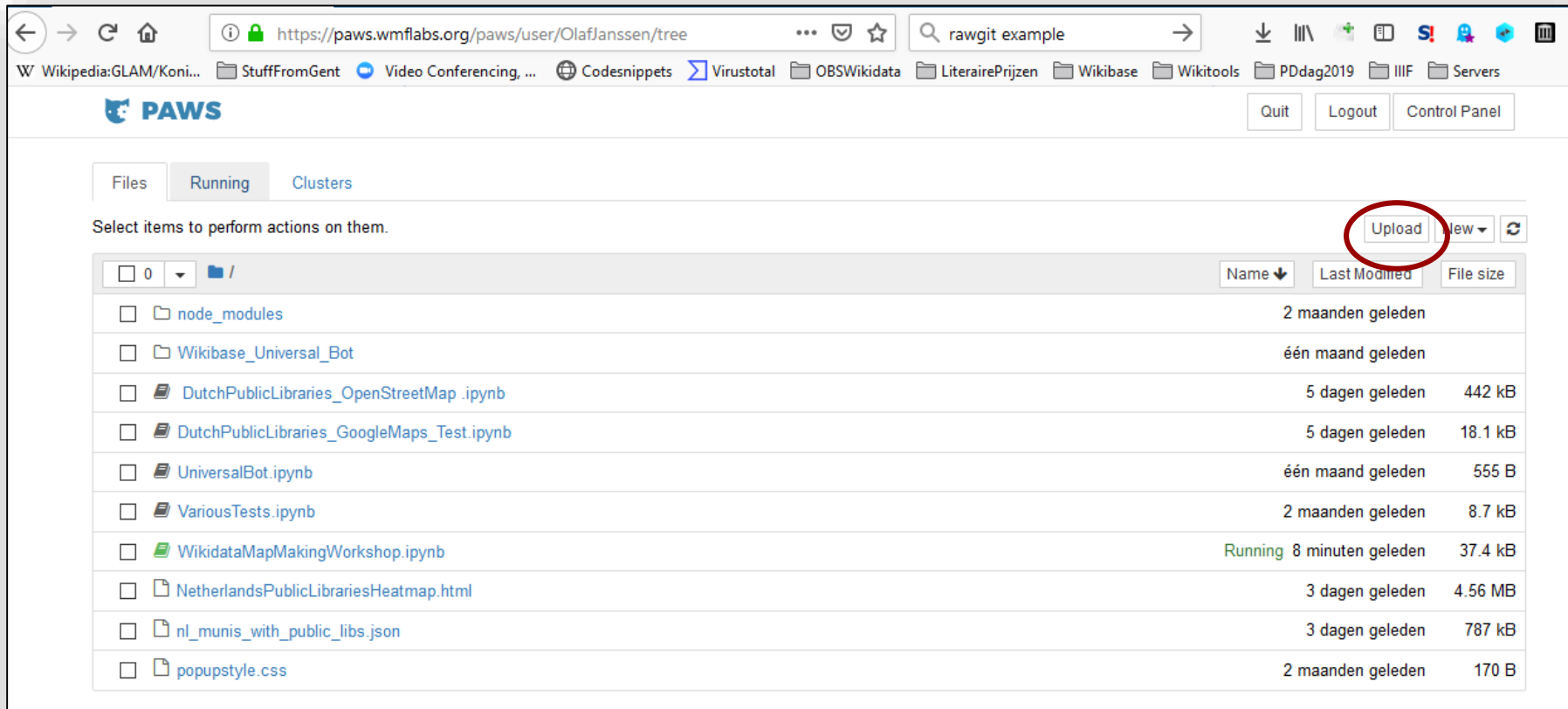
Save this raw file to your PC

```
{
  "cells": [
    {
      "cell_type": "markdown",
      "metadata": {},
      "source": [
        "# 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",
        ]\n",
      ],
      "cell_type": "markdown",
      "metadata": {},
      "source": [
        "For questions about this notebook\n",
        "https://twitter.com/ookgezellig\n",
        "\n",
        "*****\n",
        ]\n",
    },\n    {\n      "cell_type": "m\n",
      "metadata": {},\n      "source": [
        "## Start of t\n",
        ]\n",
    },\n    {\n      "cell_type": "markdown",\n      "metadata": {},\n      "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",
      ]\n",
    }\n  ]\n}
```



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

... and upload it to your PAWS server

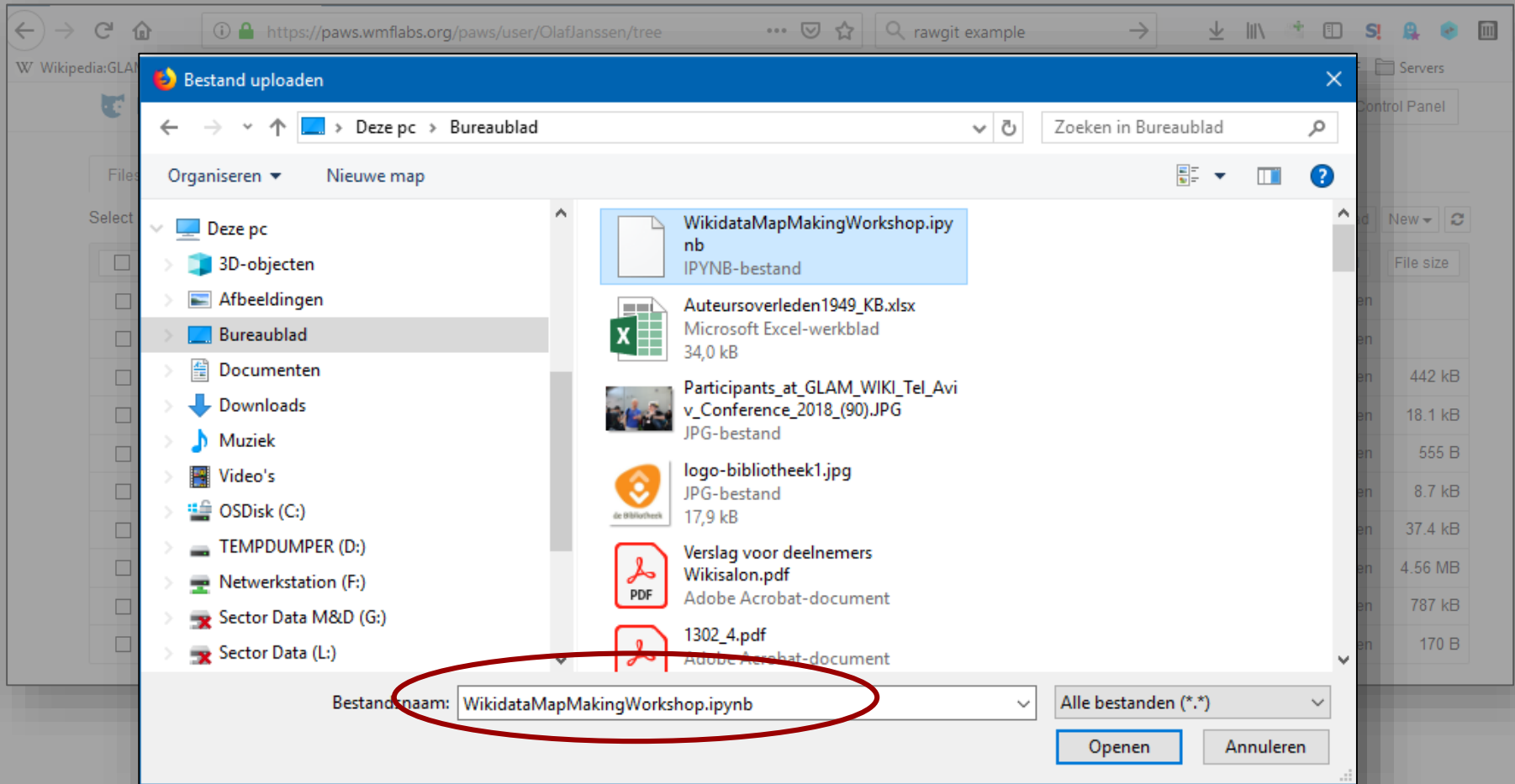


The screenshot shows the PAWS web interface in a browser. The address bar displays <https://paws.wmflabs.org/paws/user/OlafJanssen/tree>. The interface includes a navigation bar with 'Files', 'Running', and 'Clusters' tabs. Below the navigation, there are buttons for 'Quit', 'Logout', and 'Control Panel'. 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. Below this is a table listing files and folders with columns for 'Name', 'Last Modified', and 'File size'.

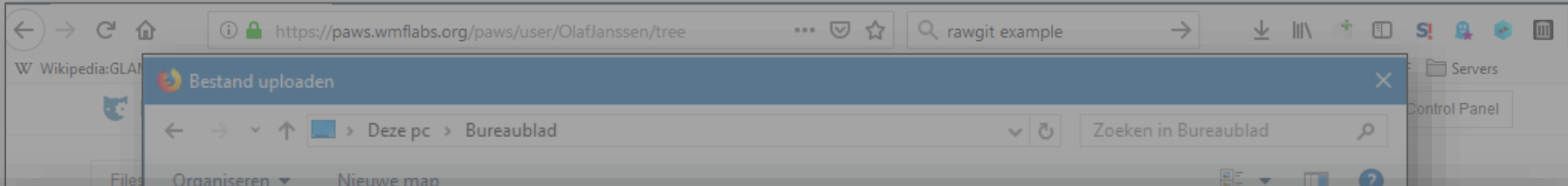
| | Name | Last Modified | File size |
|--------------------------|--|---------------------------|-----------|
| <input type="checkbox"/> | 0 | | |
| <input type="checkbox"/> | node_modules | 2 maanden geleden | |
| <input type="checkbox"/> | Wikibase_Universal_Bot | één maand geleden | |
| <input type="checkbox"/> | 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



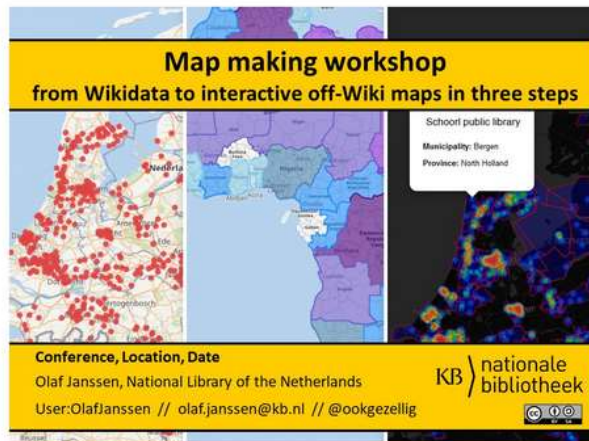
Public Link

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

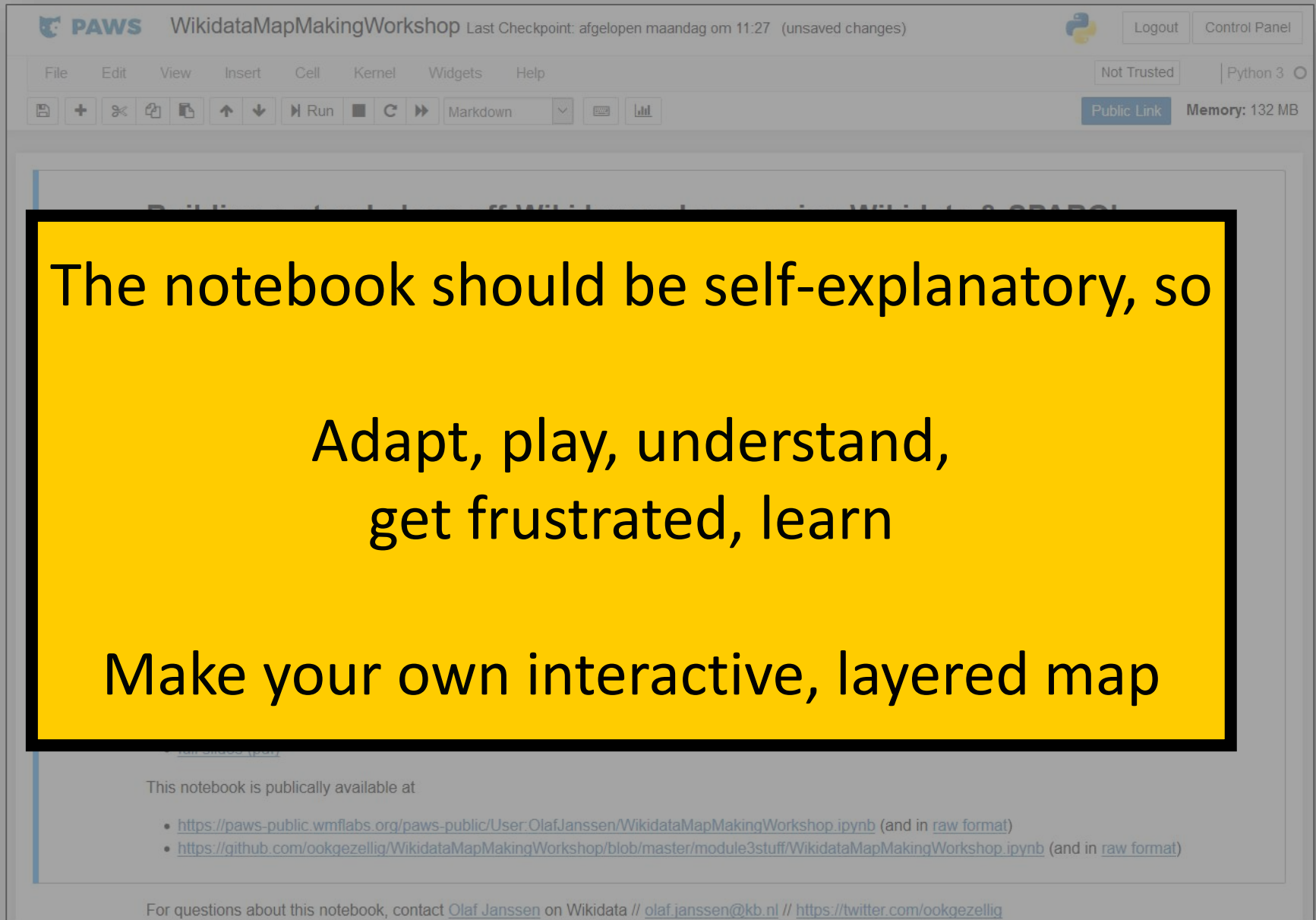
- [full layout](#), and
- [full slides \(pdf\)](#)

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 a PAWS server. 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". A large yellow text box is overlaid on the notebook content, containing the following text:

The notebook should be self-explanatory, so

Adapt, play, understand,
get frustrated, learn

Make your own interactive, layered map

Below the text box, the notebook content is partially visible, showing the text "This notebook is publically available at" followed by two bullet points:

- <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](#))

At the bottom of the notebook, there is a footer with contact information: "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 (Public Access 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 displays a file list 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 is currently in a 'Running' state.

| | Name ↓ | Last Modified | File size |
|-------------------------------------|--|----------------------------|-----------|
| <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 34 minuten geleden | 37.4 kB |
| <input checked="" 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 |

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
 - Map content: A heatmap of Dutch public libraries with blue dots. A popup for "Schermer public library support point" is visible, showing:
 - 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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