PROJ4 MET OSGEO-SOFTWARE
20 oktober 2016 – Hilversum

Edward Mac Gillavry

Webmapper

EDWARD MAC GILLAVRY

- Sociale Geografie en Cartografie – Universiteit Utrecht
- Geo-informatics – ITC in Enschede

- Multimap, Zorgatlas (RIVM), TomTom

- Webmapper
- Geo Academie: kwaliteit in geo-webservices, cartografie en GIS
- HAS Den Bosch: Geo Media Design

- Lid van Geo-Informatie Nederland
- Lid van British Cartographic Society

WEBMAPPER: what the map can be

Edward Mac Gillavry

@emacgillavry

Baukje Rienks

@sabeare

Hans Fast

@hpfast

Niene Boeijen

@bniene

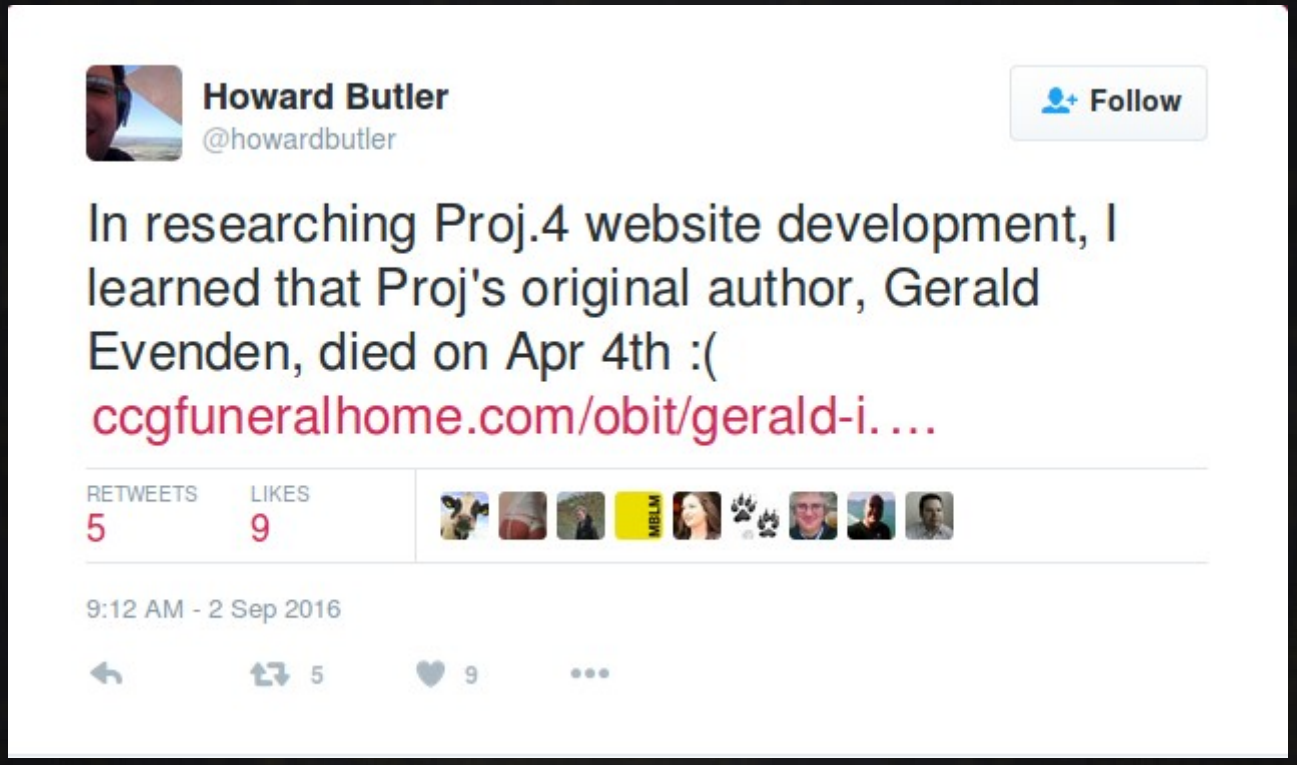
WEBMAPPER: what the map can be

- Utrecht
- Geografische web applicaties
- Web cartografie

- Open geo data: OpenStreetMap, Top10NL, BAG
- Open source geo software: Leaflet, PostGIS
- Open geo standards: OGC specifications

PROJ.4

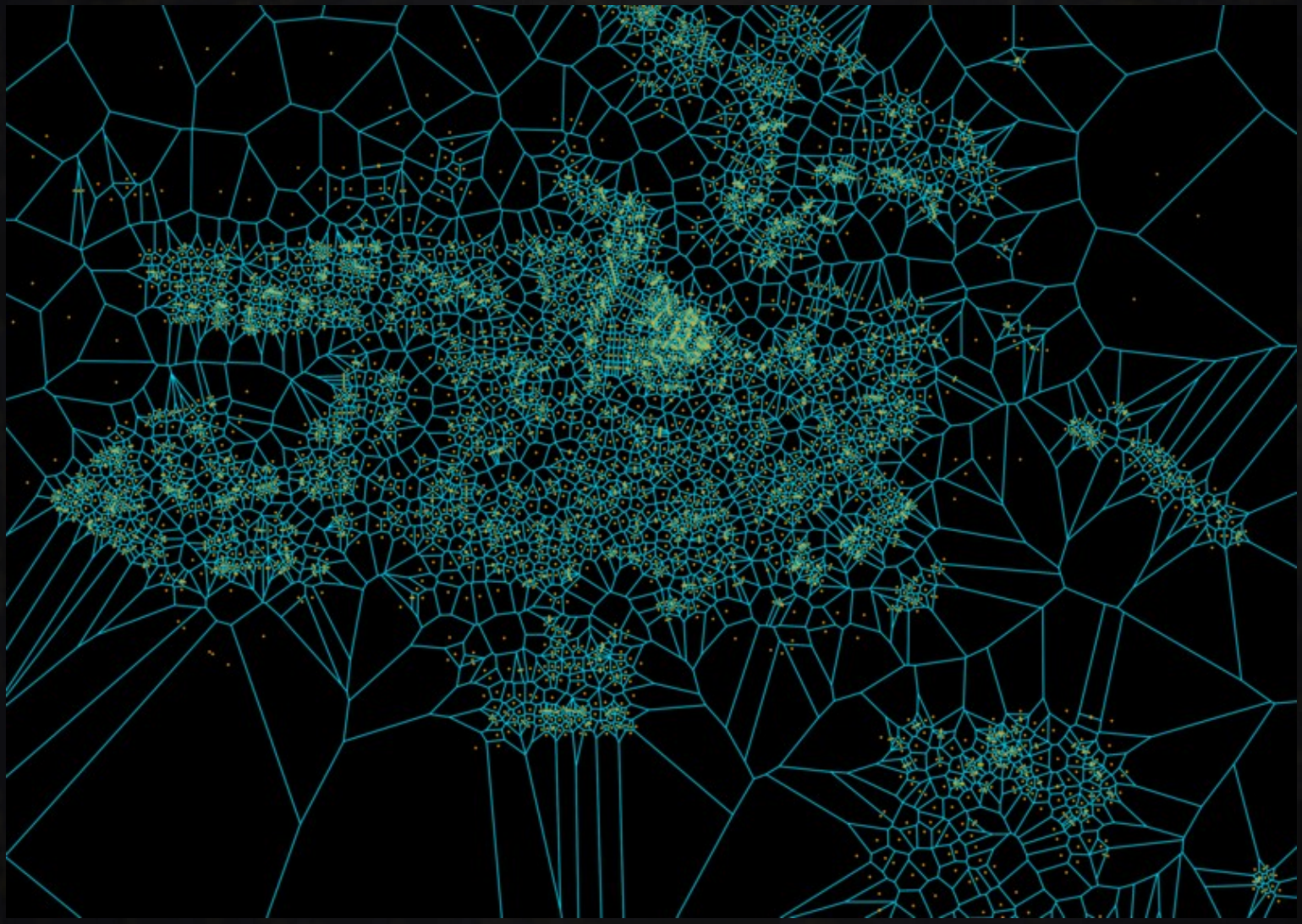
PROJ ontwikkelaar: Gerald Evenden



https://twitter.com/howardbutler/status/771742649577373697

PROJ.4: VANDAAG

VORONOI



VORONOI MAKEN met Python

1. Postgres 9.5/PostGIS 2.2
2. PL/Python
3. Voronoi.sql

```
SELECT
        geom
FROM
        voronoi('table_name','geometry_column');
```

https://gist.github.com/darrell/6056046#file-voronoi-sql

VORONOI MAKEN zonder Python

1. Postgres 9.6 en PostGIS 2.3 zelf compilen
2. GEOS 3.5.0 zelf compilen
3. **PROJ4** 4.9.2 zelf compilen

```
SELECT
        ST_VoronoiPolygons('geometry_column')
FROM
        'table_name';
```

http://postgis.net/**2016/09/26**/postgis-2.3.0/

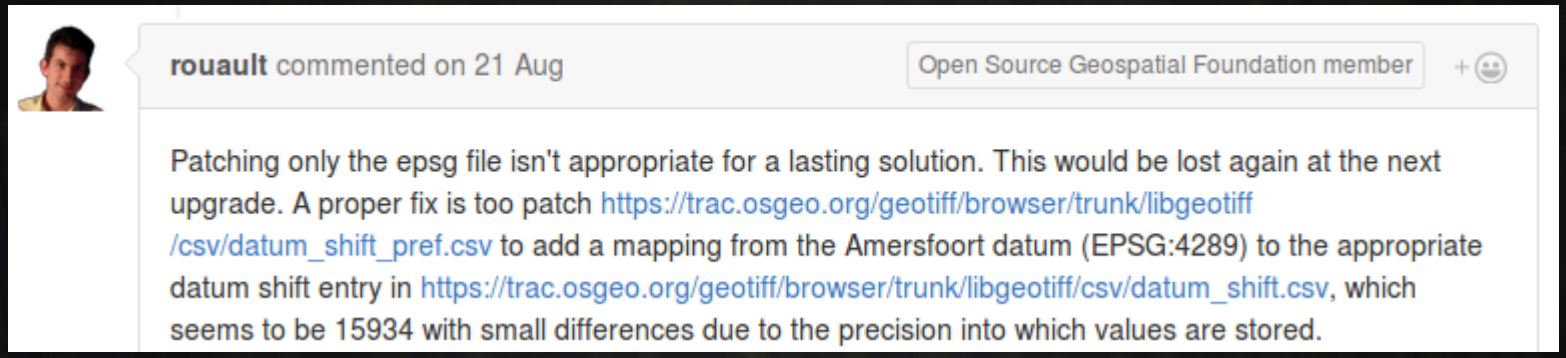
PROJ.4 VAN DAG TOT DAG

IN GEBRUIK IN

- GDAL/OGR
- PostGIS
- MapServer
- Mapnik, Carto en Mapbox Studio Classic

/usr/share/proj/epsg

LibGeoTIFF > PROJ > EPSG



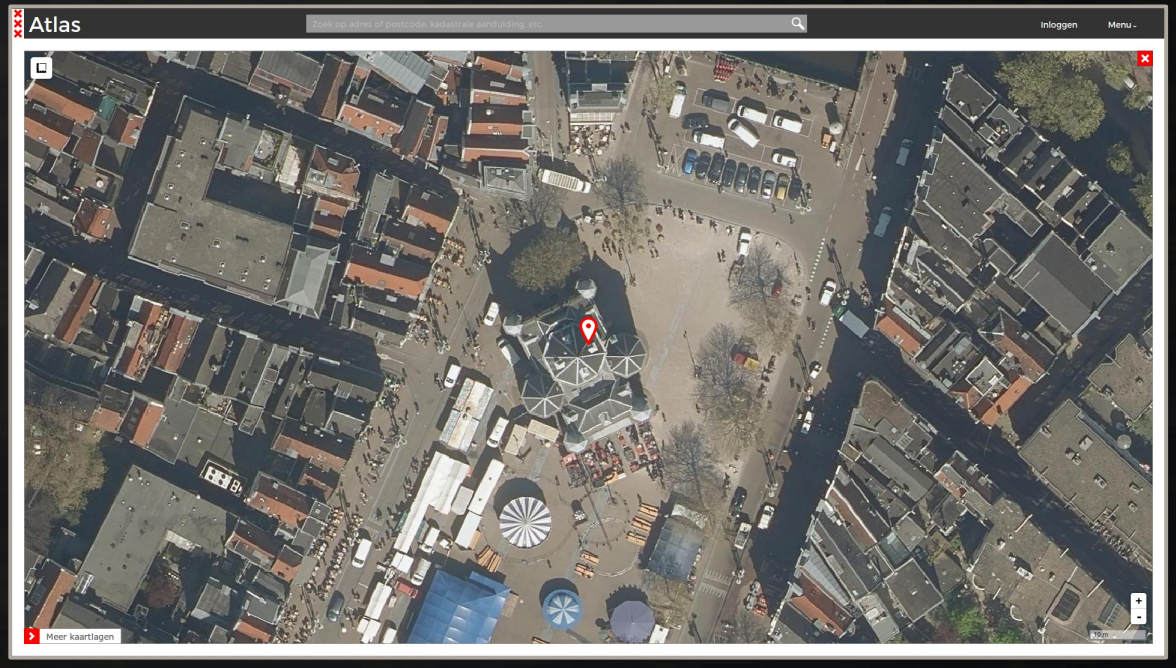
rouault commented on 21 Aug — Open Source Geospatial Foundation member

Patching only the epsg file isn't appropriate for a lasting solution. This would be lost again at the next upgrade. A proper fix is too patch https://trac.osgeo.org/geotiff/browser/trunk/libgeotiff/csv/datum_shift_pref.csv to add a mapping from the Amersfoort datum (EPSG:4289) to the appropriate datum shift entry in https://trac.osgeo.org/geotiff/browser/trunk/libgeotiff/csv/datum_shift.csv, which seems to be 15934 with small differences due to the precision into which values are stored.

https://github.com/OSGeo/proj.4/pull/403#issuecomment-241254342

Snelle WMS luchtfoto's A'dam

- GDAL/OGR
  - gdal_retile.py -s_srs “EPSG:28992” + gdaladdo
  - gdaltindex + ogr2ogr -a_srs “EPSG:28992”
- MapServer
  - LAYER
  - ...
  - PROJECTION
  - "init=epsg:28992"
  - END
  - ...
  - END



BGT in Mapbox Studio Classic: 1

- Downloaden GML-Light bij PDOK: RD (EPSG:28992)
- Mapbox Studio Classic: Spherical Mercator en WGS-84

- GDAL/OGR (geen NLExtract)
  - ogr2ogr -f “PostgreSQL” -a_srs “EPSG:28992”
- PostGIS
  - UPDATE

    bgt.”OnbegroeidTerreindeel”

    SET

    geom = ST_Transform(geomrd,4326);

BGT in Mapbox Studio Classic: 2

- PostGIS

```
SELECT
        srtext,proj4text
FROM
        public.spatial_ref_sys
WHERE
        srid = 28992;
```

- UPDATE public.spatial_ref_sys SET srtext = “...”
- UPDATE public.spatial_ref_sys SET proj4text = “...”
-

Nieuwe stijl voor KBKA10/KBKA50

- Esri Shapebestanden: let op de .prj-bestanden
- GDAL/OGR
  - ogr2ogr -a_srs “EPSG:28992”
- Mapbox Studio Classic

  ~/mapbox-studio-linux-x64-v0.3.8/

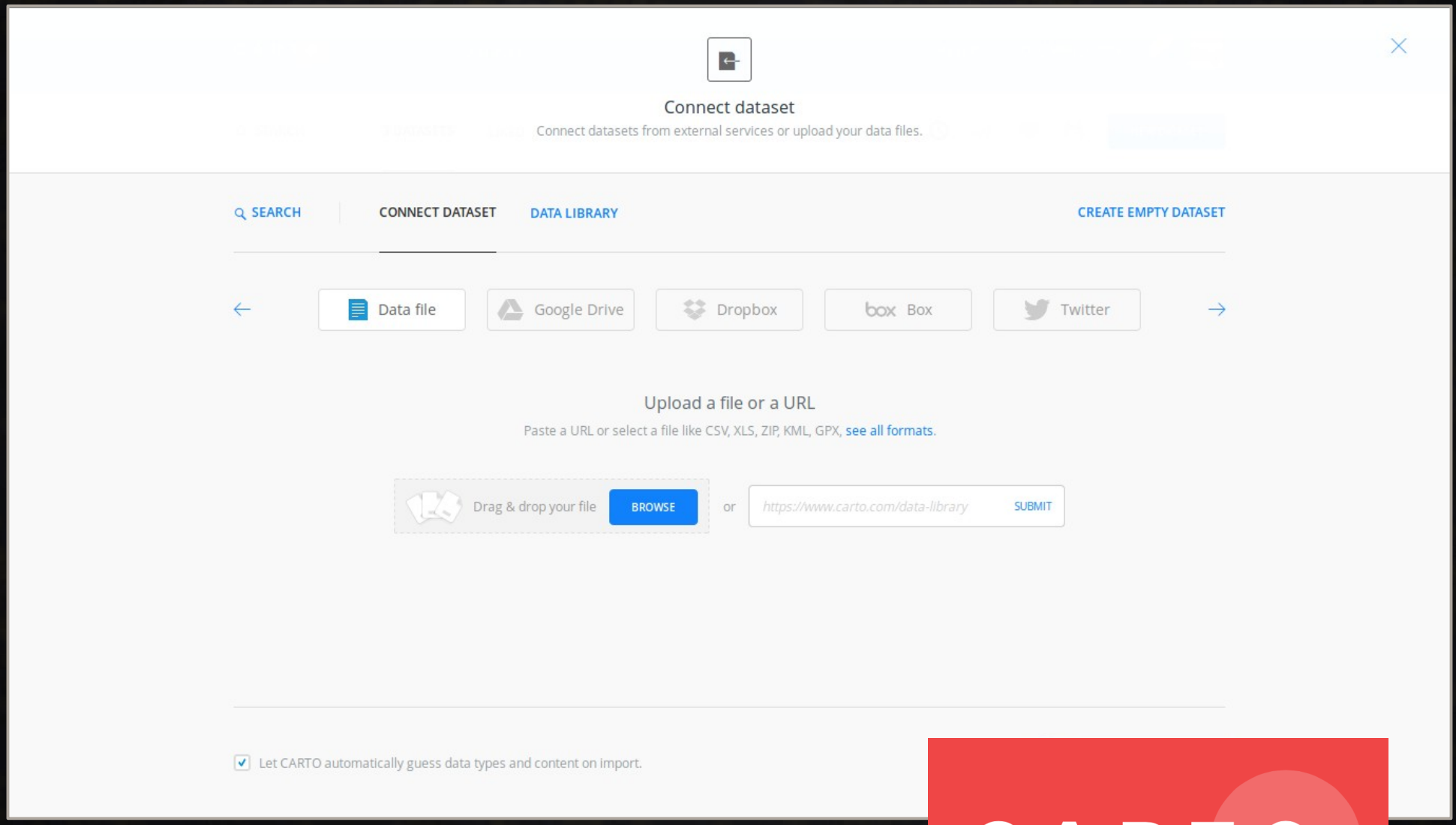
  resources/app/node_modules/mapnik/

  - lib/binding/node-v11-linux-x64/
  - share/mapnik/proj/epsg

  én

  data.yml

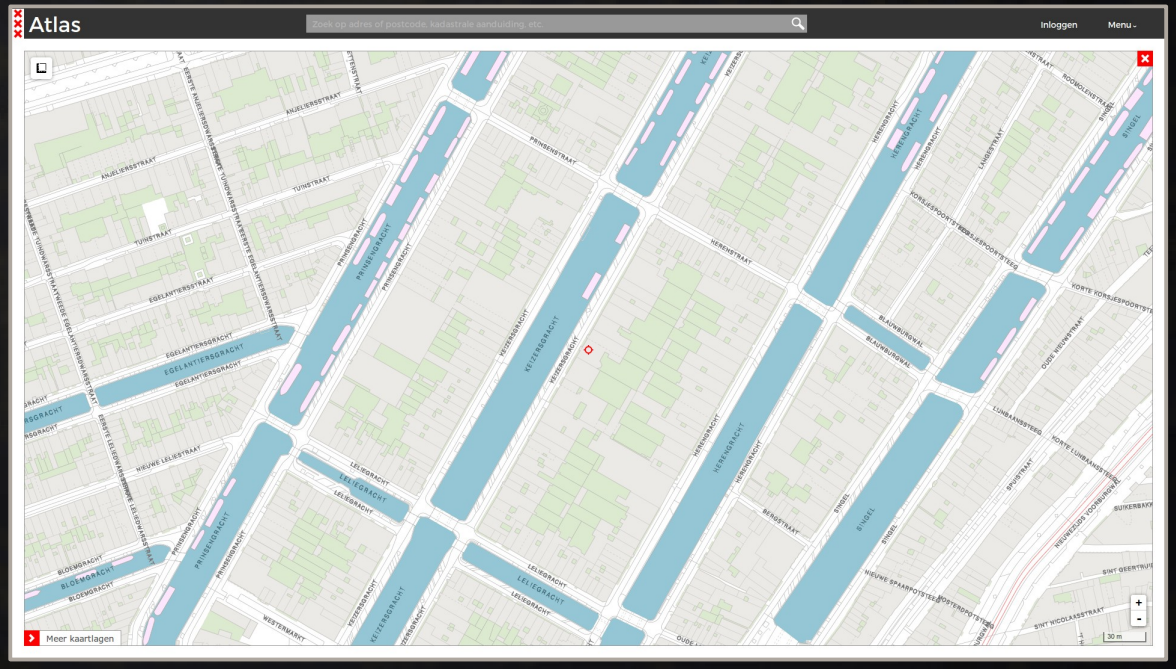
CARTO


Connect dataset
Connect datasets from external services or upload your data files.
SEARCH
CONNECT DATASET
DATA LIBRARY
CREATE EMPTY DATASET
Data file
Google Drive
Dropbox
Box
Twitter
Upload a file or a URL
Paste a URL or select a file like CSV, XLS, ZIP, KML, GPX, see all formats.
Drag & drop your file
BROWSE
or
https://www.carto.com/data-library
SUBMIT
Let CARTO automatically guess data types and content on import.

CARTO

PROJ4.js

- Leaflet.js + Proj4.js + proj4leaflet.js*
- OpenLayers 2.13
- OpenLayers 3



* http://kartena.github.io/Proj4Leaflet/

MEA CULPA, MEA CULPA?

TILING SCHEMA in RD :-(

- 15 (v.1.0) + 2 (v.1.1) zoomniveaus
- Well-Known Scale Set (WKSS): *NLDEPSG28992Scale*
- EPSG: 28992

Zoomniveau	Kaartgrootte (pixels)	Aantal tiles	Resolutie (meters/pixel)	Schaalgetal (bij 96 dpi)
0	256 x 256	1 x 1 = 1	3440,640	12.288.000
1	512 x 512	2 x 2 = 4	1720,320	6.144.000
2	1.024 x 1.024	4 x 4 = 16	860,160	3.072.000
3	2.048 x 2.048	8 x 8 = 64	430,080	1.536.000
4	4.096 x 4.096	16 x 16 = 256	215,040	768.000
5	8.192 x 8.192	32 x 32 = 1.024	107,520	384.000
6	16.384 x 16.384	64 x 64 = 4.096	53,760	192.000
7	32.768 x 32.768	128 x 128 = 16.384	26,880	96.000
8	65.536 * 65.536	256 x 256 = 65.536	13,440	48.000
9	131.072 x 131.072	512 x 512 = 262.144	6,720	24.000
10	262.144 x 262.144	1.024 x 1.024 = 1.048.576	3,360	12.000
11	...	...	...	...

Zoom level 0

Zoom level 1

Zoom level 2

NOG EEN DING...

Geo-Ontbijt

- 27 oktober 2016
- 8.30 – 10.00
- Niasstraat 1, Utrecht

- Open data
- Open source
- Open standaarden

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Dankjewel!

www.webmapper.net