

Nederland Ontsloten!

Just van den Broecke
OSGeo.nl Dag - Den Bosch - 25 nov 2014
just@justobjects.nl



DRIE PETTEN

Onafhankelijk Open
Geo-ICT Professional
justobjects.nl

Just Objects

Lid van de
OpenGeoGroep (NL)
www.opengeogroep.nl



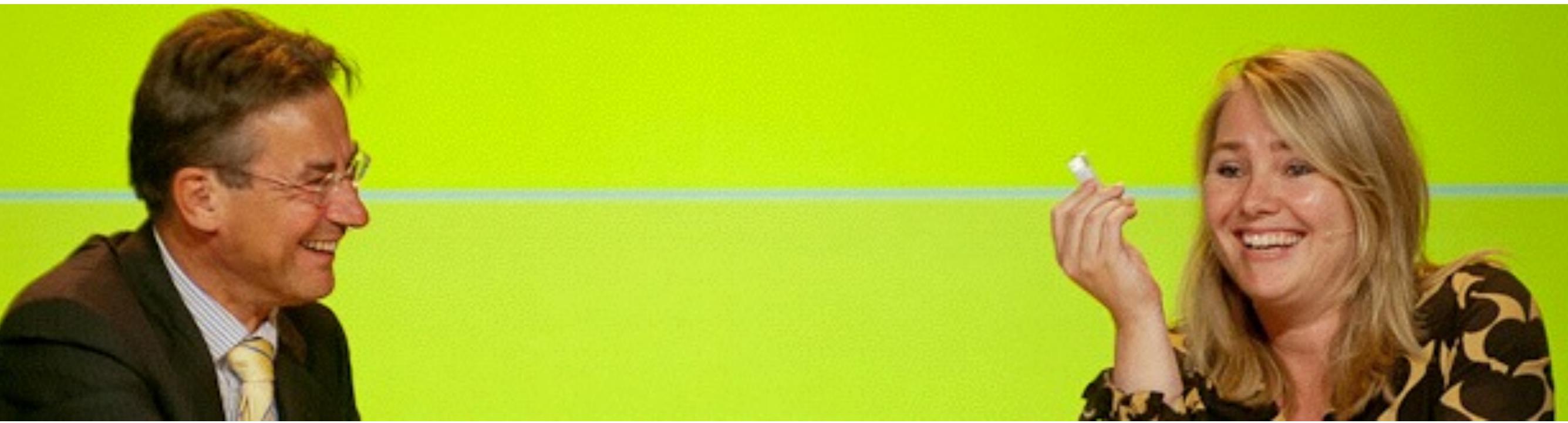
Secretaris
OSGeo.nl

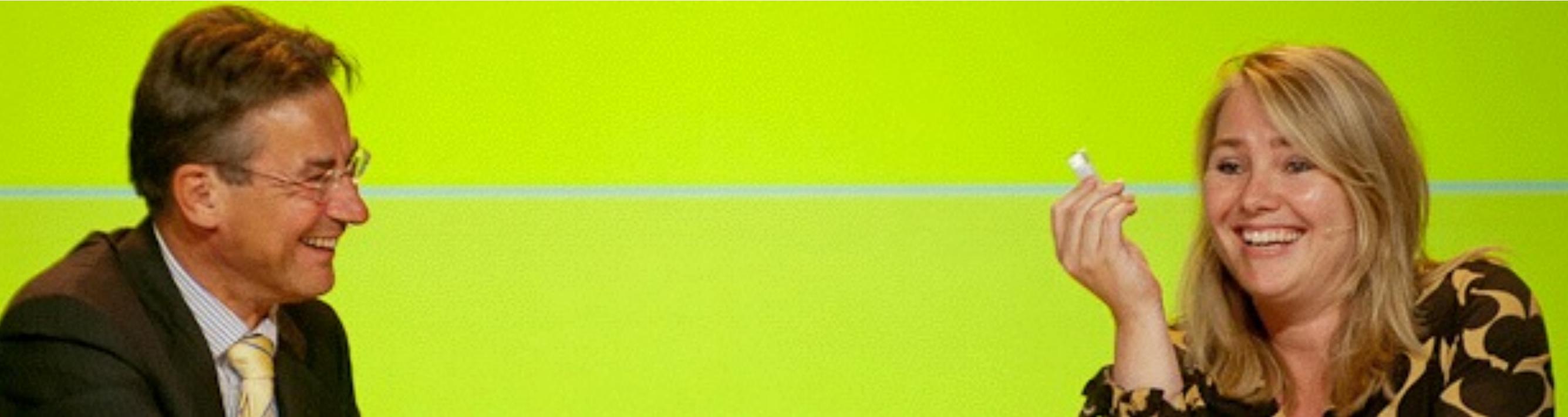


Nederland Ontsloten ?

**Van Bron
Naar Toepassing
met Open Geo Data**

Nuttige Dingen Doen Met Open Geo Data





1 / 1 / 2012

Basisregistraties
Worden Open Data!



Publieke
Dienstverlening
op de Kaart

[Home](#)

[Actueel](#)

[Producten](#)

[Voor Wie](#)

[Hoe](#)

[Over PDOK](#)

[zoeken](#)

BAG Viewer

De BAG Viewer is een demonstratie-toepassing. Dat wil zeggen dat u gegevens uit de Basisregistraties Adressen en Gebouwen (BAG) kunt bekijken met een stratenkaart of luchtfoto als ondergrond. Zo krijgt u een indruk welke gegevens de BAG bevat en wat u ermee zou kunnen

We kunnen
Downloaden bij
PDOK!!

stimuleren. Op deze website leest u alles over het gebruik van PDOK en de beschikbare producten en diensten.

Nationaal Georegister



Zoek

Doorzoek direct de metadata in
het Nationaal Georegister.

PDOK Kaart



Maak direct uw eigen kaart met
de PDOK Kaart Wizard.

Nieuws

- > 12.12.2012 Proud to Present:
PDOK Loket met PDOK Kaart
- > 12.12.2012 PDOK Kaart voor
het maken van webkaartjes
- > 04.12.2012 PDOK verwelkomt
250ste aangesloten
organisatie



[Ik ben manager](#)



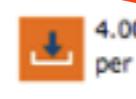
[Ik ben geo-](#)



[Downloads](#)

Meldingen

- > PDOK Update (07.12.2012)
- > PDOK Update (16.11.2012)



4.000.000 kaart-opvragingen
per maand



262 gebruikers PDOK Basis

Agenda

- > 20.12.2012 Bijeenkomst
Dagelijks Bestuur
- > 16.01.2013 PDOK Congres -
Open Geodata in de toekomst

[Print](#) [RSS](#) [Log in](#)[Contact](#) [Sitemap](#) [Help](#) [English](#)[Home](#) [Actueel](#) [Producten](#) [Voor Wie](#) [Hoe](#) [Over PDOK](#) zoeken

- > PDOK Services
- > PDOK Kaart
- > PDOK Software
- ▼ PDOK Downloads
 - ▼ Basis Registratie Topografie
 - ▼ TOPNL

[Home](#) > [Producten](#) > [PDOK Downloads](#) > [Basis Registratie Topografie](#) > [TOPNL](#) > TOP10NL Downloads

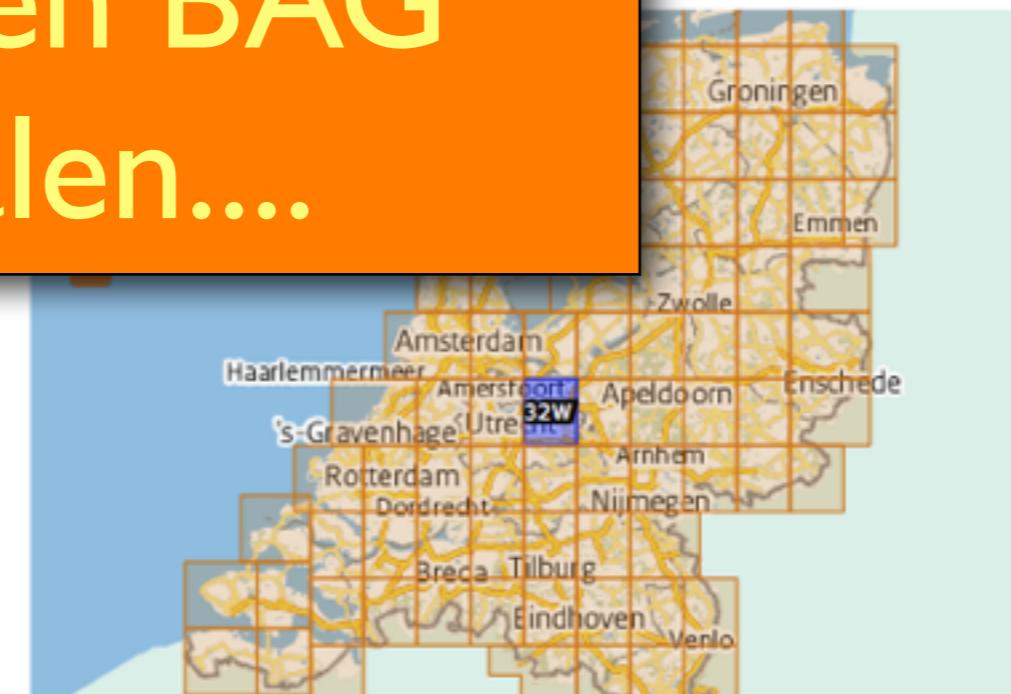
TOP10NL Downloads

TOP10NL is het meest gedetailleerde product binnen de Basisregistratie Topografie (BRT). U kunt dit bestand gebruiken op schaalniveaus tussen 1:5.000 en 1:25.000. TOP10NL kan door middel van de volgende link geladen worden als een zip-bestand voor heel Nederland:

(bestandsgrootte: ca. 2 GB)

TOP10NL laden door op een kaart de bladindeling schaal 1:25.000 onder de kaart een

Bijvoorbeeld Top10 NL en BAG Binnenthalen....

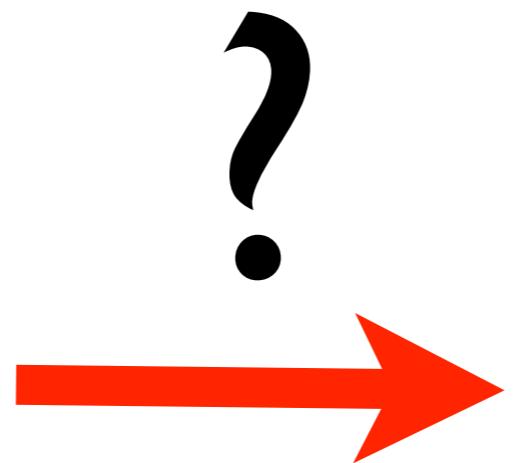


Name	Date Modified	Size	Kind
.DS_Store	Today, 17:50	8 KB	Document
▼ GML_50D_Blokken	9 oktober 2012 11:34	--	Folder
Top10NL_01Oost.gml	6 september 2012 09:58	17,6 MB	GML document
Top10NL_01West.gml	6 september 2012 09:59	27,8 MB	GML document
Top10NL_02Oost.gml	6 september 2012 09:59	35,6 MB	GML document
Top10NL_02West.gml	6 september 2012 09:59	20,8 MB	GML document
Top10NL_03Oost.gml	6 september 2012 10:00	47,3 MB	GML document
Top10NL_03West.gml	6 september 2012 10:00	44,4 MB	GML document
Top10NL_04Oost.gml	6 september 2012 10:00	16,4 MB	GML document
Top10NL_04West.gml	6 september 2012 10:01	4 MB	GML document
Top10NL_05Oost.gml	6 september 2012 10:02	155,6 MB	GML document
Top10NL_05West.gml	6 september 2012 10:02	35,6 MB	GML document
Top10NL_06Oost.gml	6 september 2012 10:05	303,7 MB	GML document
Top10NL_06West.gml	6 september 2012 10:09	344,7 MB	GML document
Top10NL_07Oost.gml	6 september 2012 10:11	241,2 MB	GML document
Top10NL_08Oost.gml	6 september 2012 10:16	395,6 MB	GML document
Top10NL_08West.gml	6 september 2012 11:34	27,8 MB	GML document
▼ Top10NL_GML_Bestandslijst_2012_Landsdekkend	6 september 2012 14:22	--	Folder
Top10NL_GML_Bestandslijst_2012_Landsdekkend.pdf	6 september 2012 14:22	8 KB	Document
Arcmap_informatie.pdf	30 september 2011 10:09	1,3 MB	Portable Do...Format (PDF)
BRT_toelichting_TOP10NL_2012-09-01.pdf	14 september 2012 13:22	33 KB	Portable Do...Format (PDF)
BRT_Actualiteitskaart_TOP10NL_september_2012.pdf	18 september 2012 11:12	6,6 MB	Portable Do...Format (PDF)
BRT_Leveringskalender_...NL_september_2012.pdf	18 september 2012 10:15	4,4 MB	Portable Do...Format (PDF)
catalogusbrt2_0.pdf	14 oktober 2009 15:21	762 KB	Portable Do...Format (PDF)
▼ Handleiding Objecthistorie	14 oktober 2012 14:21	--	Folder
2012-09-10_BRT_Obj...ruikershandleiding.pdf	10 september 2012 12:23	94 KB	Portable Do...Format (PDF)
productspecificaties_BRT_2.0.pdf	10 juli 2009 16:06	524 KB	Portable Do...Format (PDF)
▼ TOP10NL_GML_Bestandswijzer_2012_Landsdekkend	14 oktober 2012 14:21	--	Folder
TOP10NL_GML_Bestandswijzer_2012.pdf	12 december 2011 12:08	3,3 MB	Portable Do...Format (PDF)

Maar Wat Dan?

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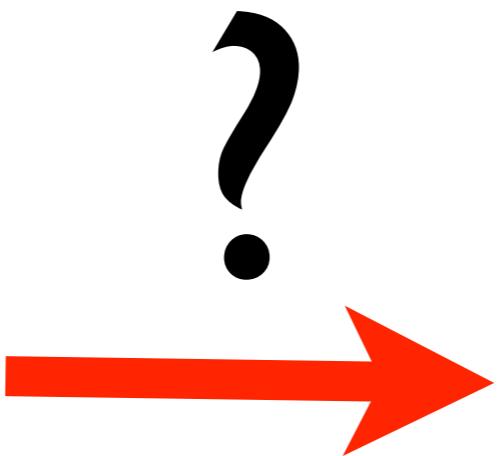
Bakken met XML/
GML.....



?



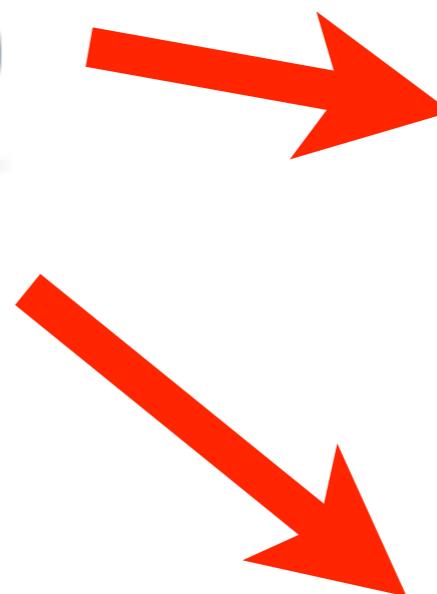
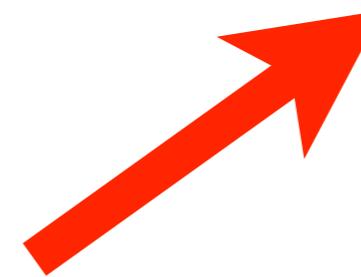
Hoe maken we daar
een kaart mee?



?

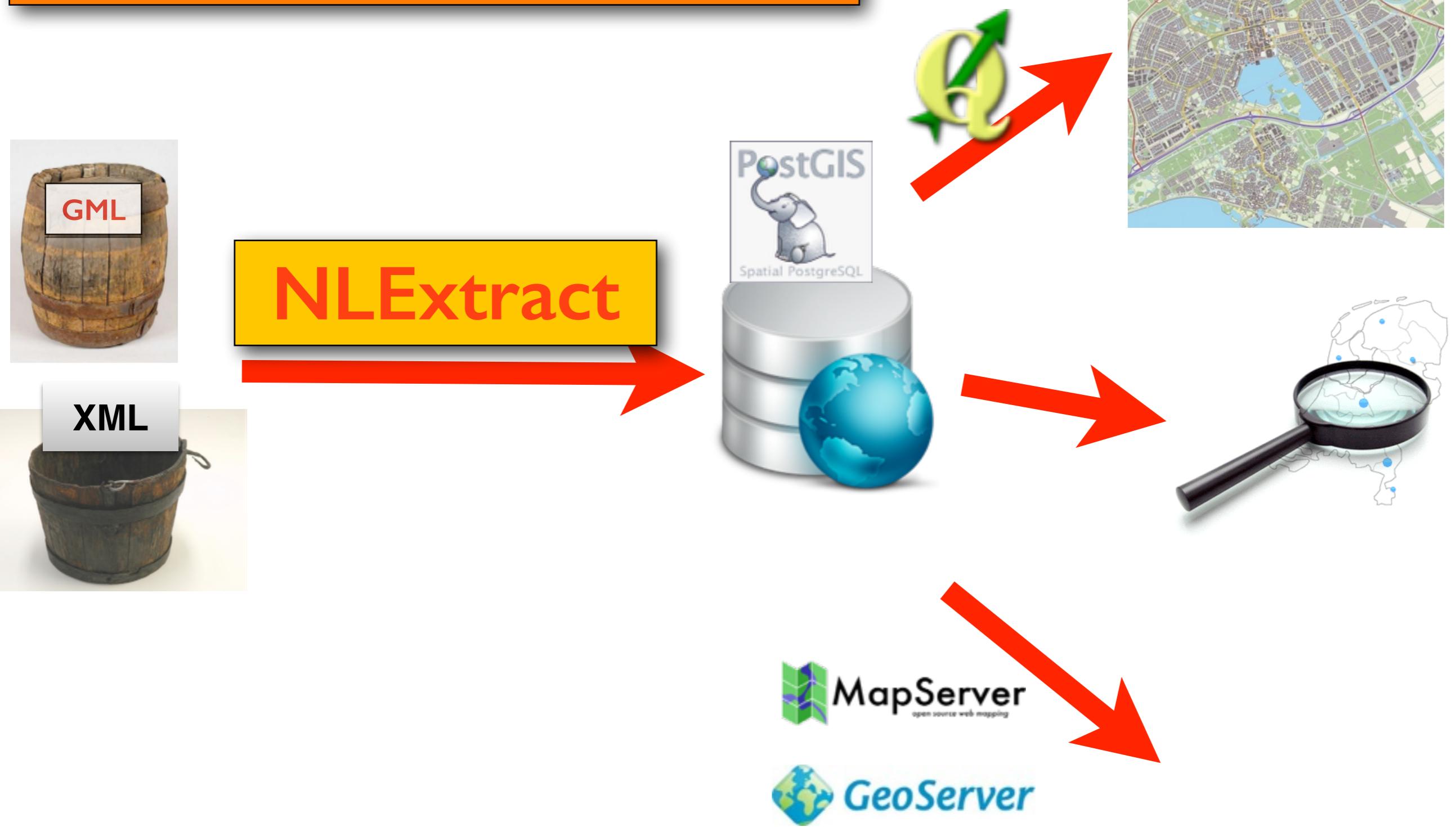


Of bijv een adres-zoeker?



Eerst inlezen in
PostGIS....

Met NLExtract Dus!!



Wat is NLExtract ?

Open Source

Tools om vrije Nederlandse overheids-geodata te converteren en te visualiseren

NLExtract - Welke Datasets ?

BAG - Basis Registratie Adressen en Gebouwen

BRT/Top10NL - Topografische Kaart

BGT - Grootschalige Topografie

AHN - Hoogtebestand

Top10NL 3D !!!

Bonnebladen (historische kaarten)

NLExtract

Praktijk

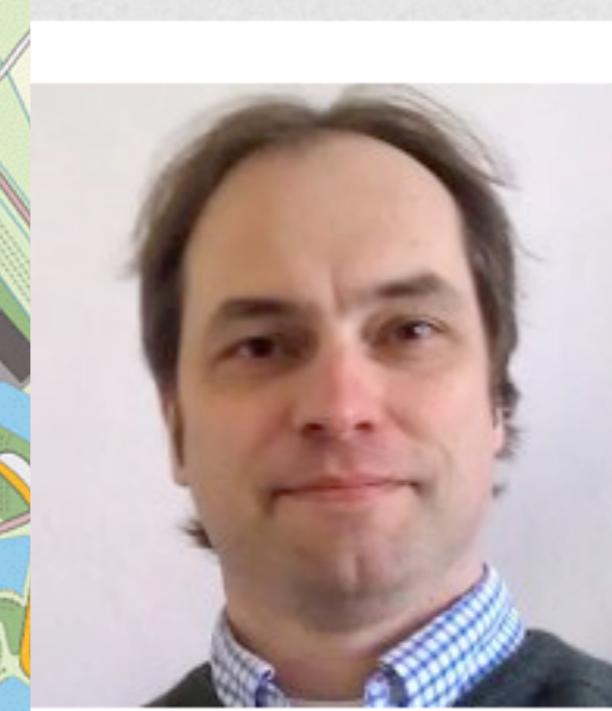
Voorbeelden

OPENTOPO

combineert open geo-data:



OOV POI's
Imergis



Jan-Willem van Aalst

Imergis organisatiebloei

Utrecht Area, Netherlands | Professional Trai

Current

www.imergis.nl

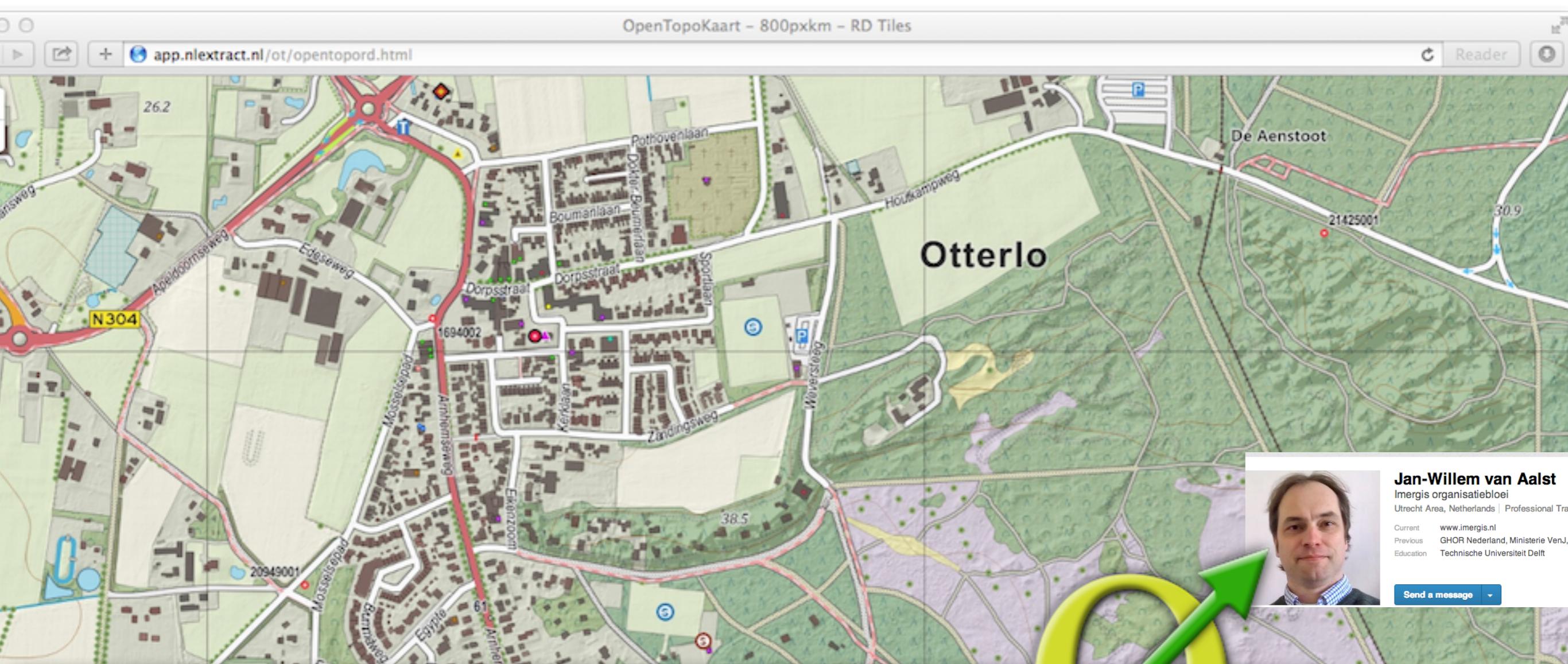
Previous

GHOR Nederland, Ministerie VenJ,

Education

Technische Universiteit Delft

[Send a message](#)



NLExtract:
BAG + TopIONL
+WMS/Tiling + App



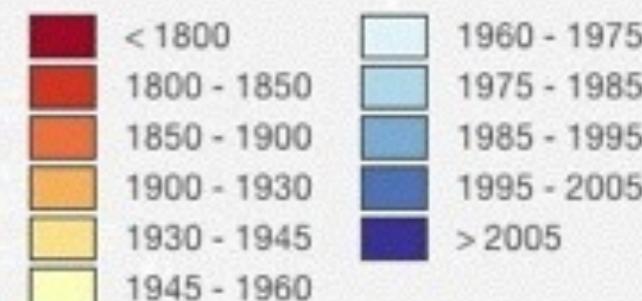
BAG in CitySDK

~ Info ~

All 9,866,539 buildings in the Netherlands, shaded according to year of construction. Data from BAG, via CitySDK. Map made with TileMill by Bert Spaan, Waag Society. Inspired by BKLYNR.

If you encounter incorrect building data, you can always inform the Kadaster!

~ Legend ~



~ Data ~

City (click on building for data)

Name: Amsterdam

Population: 779,810

Area: 219.32 km²

Building

Constructed: 1005

Address: Tweede Weteringdwarsstraat

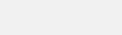
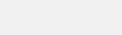
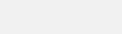
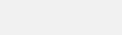
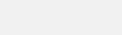
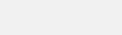
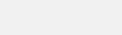
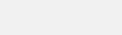
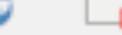
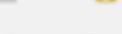
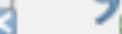
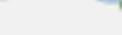
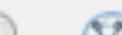
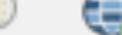
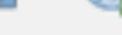
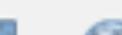
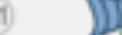
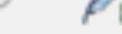
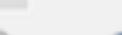
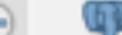
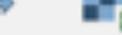
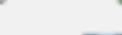
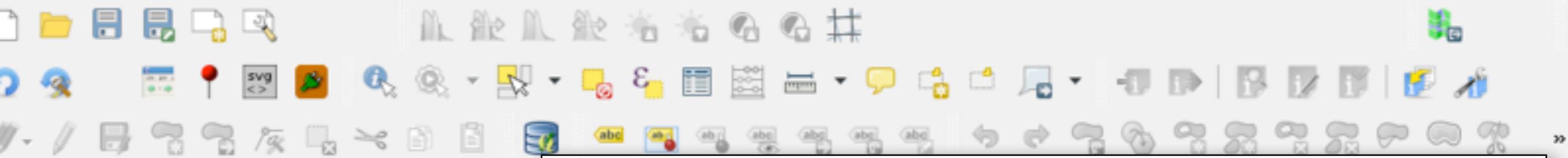
1017SV

Amsterdam

Area: 43 m²

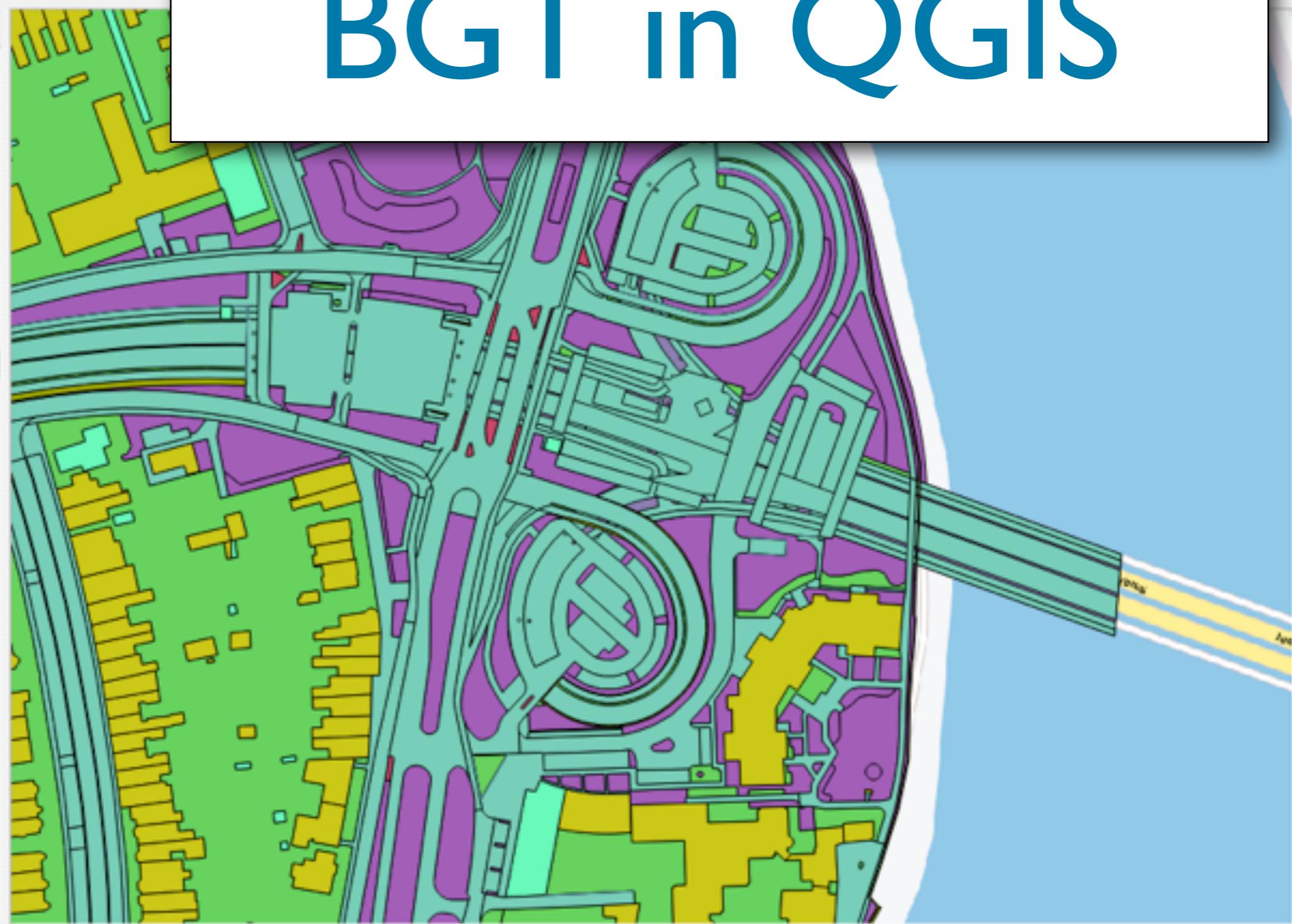
Function: House



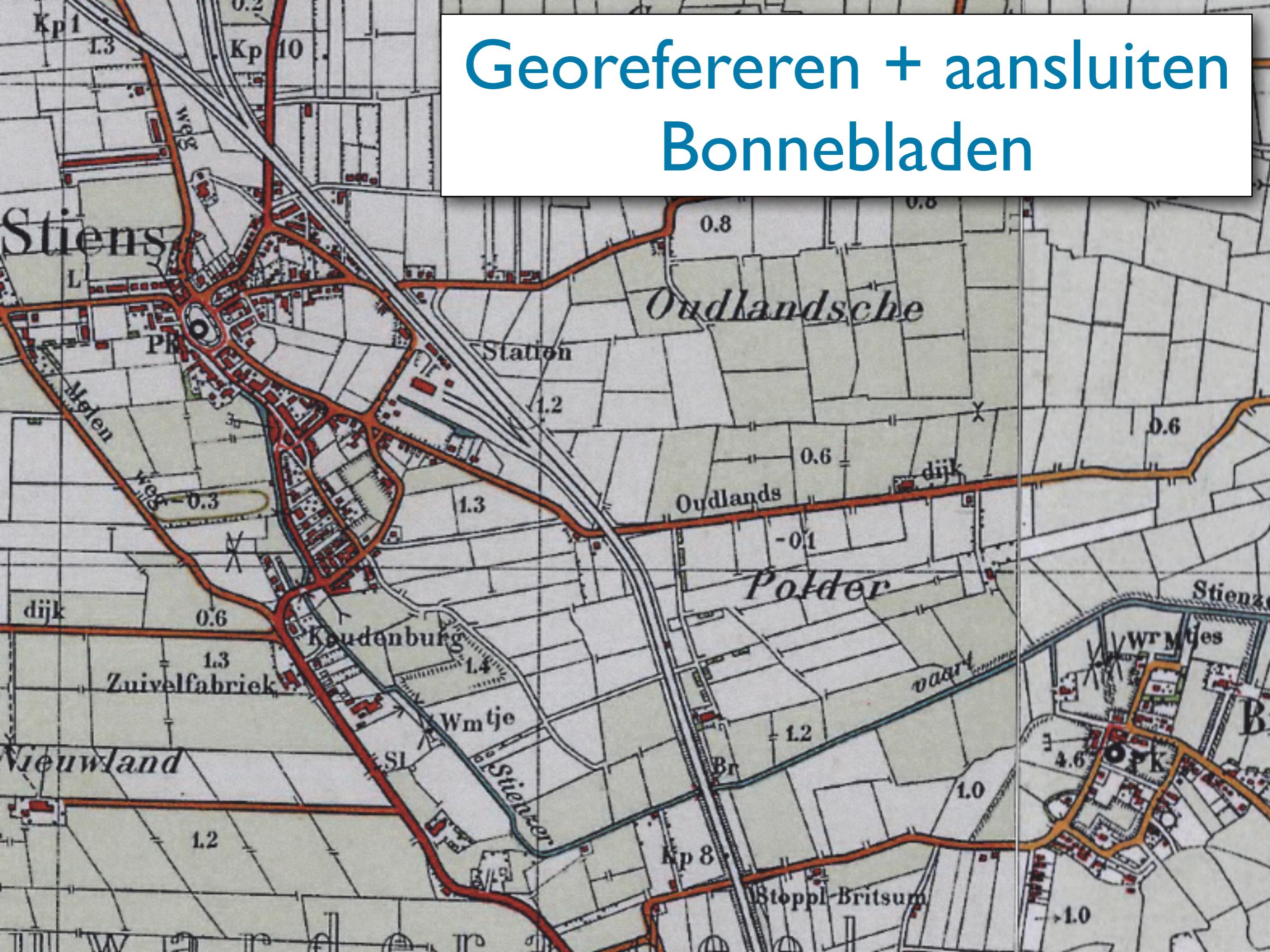


- Layers
- Scheiding Pol...
 - Scheiding Lin...
 - TrafficArea
 - BuildingPart
 - BridgeConstru...
 - OverigBouww...
 - PlantCover
 - Waterdeel
 - AuxiliaryTraffi...
 - OnbegroeidTe...
 - Ondersteunen...
 - Curve
 - WMPS BRT ac...

BGT in QGIS



Georefereren + aansluiten Bonnebladen



NLExtract Technologie



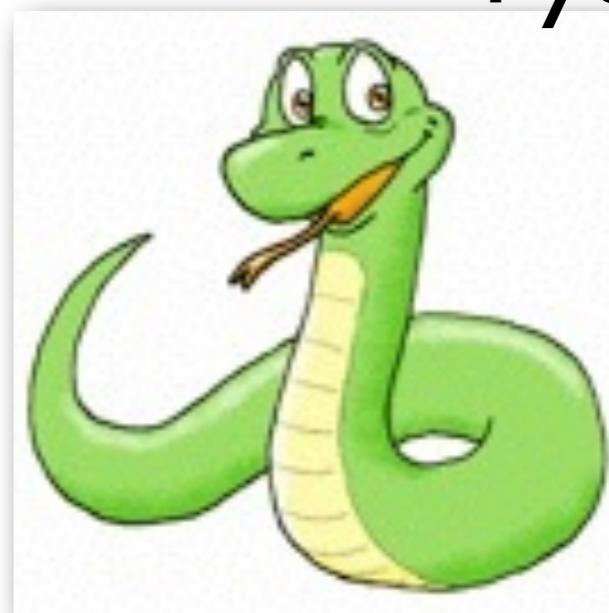
ogr2ogr
www.gdal.org



Stetl



Python



**Meer weten,
meedoen en/of
sponsoren ?**

NLExtract

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Praat mee !

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Recente siteactiviteit

[NLExtract v1.1.3 Released](#)

bewerkt door Just van den Broecke
bijlage van Just van den Broecke

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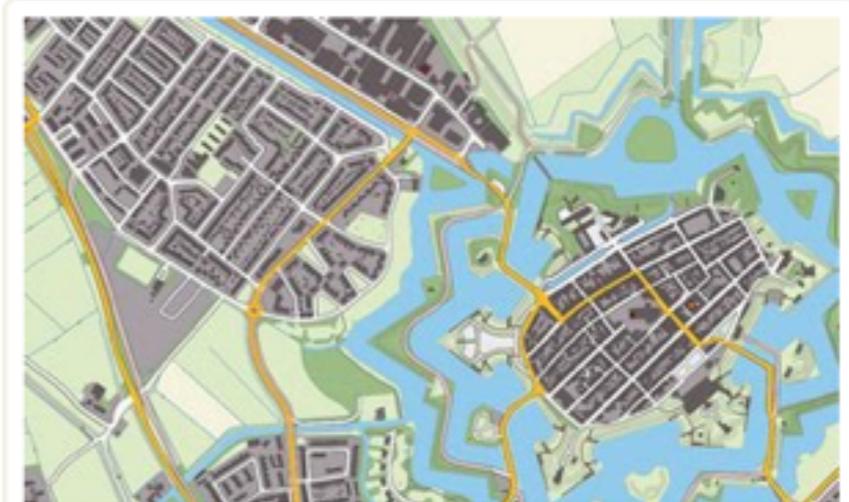
bijlage van Just van den Broecke

[View All](#)

Home

NLExtract levert tools, recepten en voorbeelden om vrije Nederlandse (overheids-) geodata sets zoals [BAG](#) en [Top10NL](#) te converteren en te visualiseren. NLExtract wordt o.a. gebruikt in [PDOK](#).

NLExtract is [Open Source](#) (GPLv3) en gebruikt tools zoals [GDAL/OGR](#). De nadruk ligt op het converteren van vector data (GML/XML) naar de ruimtelijke database [PostgreSQL/PostGIS](#) en het visualiseren met [SLDs](#) en [QGIS](#).

[Lees hier meer over NLExtract >>](#)

Recent NLExtract Nieuws

[Geplaatst 13 dec. 2012 12:53 door Just van den Broecke](#)[NLExtract v1.1.2 Released !](#) Ja het is

Tweets



[emacgillavry](#) Congrats to Jeff from the Low Countries! RT @sevenspatial @osgeo has a new president! Congratulations Jeff McKenna @mapserv #osgeonl



[migrations \(Y\)](#) RT @osgeonl: Just, Steven en Edward op eerste bezoek bij notaris tbv oprichting Stichting OSGeo.nl.

NLExtract Plannen

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3D!**



Index of /

<http://data.nlextract.nl>

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
-------------	----------------------	-------------	--------------------

README	2014-02-24 14:29	312	
bag/	2014-02-24 14:31	-	
bonnebladen/	2014-02-24 14:32	-	Downloads
opentopo/	2014-10-05 15:15	-	Downloads
osm/	2014-10-17 10:58	-	Downloads
site/	2014-02-24 14:34	-	Downloads
top10nl/	2014-05-08 11:24	-	Downloads
top10nl3d/	2014-11-23 17:53	-	Downloads

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<http://app.nlextract.nl>

Otterlo



OpenTopo Tiles (TMS/WMTS) in Leaflet App

NLExtract Plannen

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3D!

<https://www.linkedin.com/groups/3Dkaart-van-Nederland-3DTOP10NL-gelanceerd-4434153.S.55941281542360834050>

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Home Profile Connections Jobs Interests Business Services Try Premium for free

Unfollow Ben

3D-kaart van Nederland (3DTOP10NL) gelanceerd Samen met overheden, bedrijfsleven en wetenschap heeft het Kadaster de afgelopen jaren hard gewerkt om deze mijlpaal te bereiken.

Ben Bruns
Manager Customer Solutions
Top Contributor

<http://www.kadaster.nl/web/Nieuws/Bericht/Minister-Kamp-maakt-kennis-met-3Dkaart-van-Nederland.htm>

Minister Kamp maakt kennis met 3D-kaart van Nederland kadaster.nl

Op het ECP-jaarcongres is de ontwikkeling van de 3D-kaart van Nederland gepresenteerd in aanwezigheid van minister Kamp van Economische Zaken.

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Comments

Jeroen Scholten, Anton Schutte and 30 others like this

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Ben Bruns
Manager Customer Solutions
Top Contributor

Proefdata TOP10NL 3D direct te downloaden via:
<https://www.pdok.nl/nl/producten/pdok-downloads/basis-registratie-topografie/top10nl-3d>
Specifieke gebieden TOP10NL 3D te bestellen via:
<https://www.kadaster.nl/web/formulier/Algemene-formulieren/Contactformulier-3D-kaarten.htm>
Op dit moment is 90% van Nederland gereed

Like • Reply privately • Flag as inappropriate • 3 days ago

Marinus (Marien) De Bakker
Senior Lecturer / Project Manager Geo Media & Design

heel mooi, ik hoop dat jullie dit ook tonen op de GeoBuzz

Like • Reply privately • Flag as inappropriate • 3 days ago

Jeroen Scholten
Preprocessing & Delivery Specialist Geographic Information & Data at Kadaster

Op de stand van PDOK, tijdens de GeoBuzz op 25 en 26 november, is het mogelijk deze 3D TOP10NL data te bekijken Marinus!

Like • Reply privately • Flag as inappropriate • 2 days ago

Just van den Broecke
Open Source Geospatial Professional at Coöperatieve vereniging OpenGeoGroep

Gefeliciteerd! Maar... .gdb bestanden?? Binnenkort hopelijk een niet leveranciersgebonden open formaat?

Delete • 2 days ago

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Ben Bruns
Manager Customer Solutions
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Increase uptime. Stop outages. Get more sleep. Try PagerDuty for free.

Latest Activity

Albert Kiefer likes a discussion in Basis Registratie Topografie (BRT).

Ben Bruns 3D-kaart van Nederland (3DTOP10NL) gelanceerd Samen met overheden, bedrijfsleven en wetenschap heeft het Kadaster de afgelopen jaren hard gewerkt om deze mijlpaal te bereiken.
<http://www.kadaster.nl/web/Nieuws/Bericht/Minister-Kamp-maakt-kennis-met-3Dkaart-van-Nederland.htm>

Suggested discussion

Platform Linked Data Nederland bijeenkomst ...

[zoeken](#)

- > [PDOK Services](#)
- ▽ [PDOK Downloads](#)
 - > [Basis Registratie Kadaster](#)
 - ▽ [Basis Registratie Topografie](#)
 - > [TOPNL](#)
 - > [TOPraster](#)
 - > [TOP10NL 3D](#)
 - > [Basisregistratie Grootchalige Topografie](#)
 - > [Atomfeeds op alfabet](#)
- > [PDOK Viewer](#)
- > [PDOK Kaart](#)
- > [PDOK Software](#)
- > [Nationale Georegister](#)

[Home](#) > [Producten](#) > [PDOK Downloads](#) > [Basis Registratie Topografie](#) > [TOP10NL 3D](#)

TOP10NL 3D

Hieronder vindt u de eerste **TOP10NL 3D dataset die aangeboden wordt. Het betreft hier de omgeving Valkenburg (L.).**

 [Download TOP10NL 3D](#) (bestandsgrööte: ca. 7 MB)

Bovenstaande zip-bestand kan worden geopend met behulp van het programma: [WinZip](#).

Binnenkort zal ook de landelijke set via [PDOK](#) beschikbaar worden gesteld. Bijhouding van [TOP10NL 3D](#) is nog niet geregeld omdat er geen regelmatige bijhouding van [AHN](#) beschikbaar is. Er wordt gezocht naar andere mogelijkheden om [TOP10NL 3D](#) te actualiseren. Meer informatie vindt u op de website van het [Kadaster](#).

Toegangs- en gebruiksbeperkingen

Deze dataset is open data en mag onder de [CC-BY-3.0](#) licentie gebruikt worden. De inhoud van de data is gebaseerd op een pilot waardoor er aan de inhoud geen rechten ontleend kunnen worden.



What the...FGDB?

ESRI File Geodatabase (OpenFileGDB)

(Available in GDAL >= 1.11)

The OpenFileGDB driver provides read access to File Geodatabases (.gdb directories) created by ArcGIS 9 and above.

It can also read directly zipped .gdb directories (.gdb.zip)

A specific .gdbtable file (including "system" tables) can also be opened directly.

Spatial filtering

The driver cannot use the .spx files (when they are present) for spatial filtering. However, it will use the minimum bounding rectangle included in the .gdbtable files to speed up spatial filtering. By default, it will also build on the fly a in-memory spatial index during the first sequential read of a layer. Following layers will then benefit from that spatial index. The building of this in-memory spatial index can be disabled by setting the OPENFILEGDB_INMEMORYINDEXING environment variable to 0.

SQL support

SQL statements are run through the OGR SQL engine. When attribute indexes (.atx files) exist, the driver will use them to speed up WHERE clauses.

Special SQL requests

"GetLayerDefinition a_layer_name" and "GetLayerMetadata a_layer_name" can be used as special SQL requests to get respectively the definition and metadata of a layer as XML content (only available in Geodatabases created with ArcGIS 10 or above)

Comparison with the FileGDB driver

(Comparison done with a FileGDB driver using FileGDB API SDK 1.3)

FGDB naar GeoJSON en GML met ogr2ogr

▼	geodata
▼	top10nl3d
 .DS_Store	
▶	archief
▼	geojson
 .DS_Store	
▼	rd
 valkenburg-brugWater-rd.json	
 valkenburg-brugWeg-rd.json	
 valkenburg-TerreinOnder-rd.json	
 valkenburg-gebouw_3D_LOD1-rd.json	
 valkenburg-waterdeelVlak_3D_LOD0-rd.json	
 valkenburg-gebouw_3D_LOD0-rd.json	
 valkenburg-terreinVlak_3D_LOD0-rd.json	
 valkenburg-wegdeelVlak_3D_LOD0-rd.json	
 valkenburg-terreinpunten-rd.json	
▶	wgs84
 README.txt	
 valkenburg3D.gml	
 Valkenburg3D.xsd	
▼	Valkenburg.gdb
 timestamps	
 a00000001.freelist	
 a00000001.gdbtable	
 a00000001.gdbtablx	
 a00000001.TablesByName.atx	
 a00000004.CatItemsByPhysicalName.atx	
 a00000004.CatItemsByType.atx	
 a00000004.FDO_LIUID.atx	



Downloads

Demos

Features ▾

Documentation ▾

Forum

Blog

About



Fork me on GitHub

Visualiseren met CesiumJS



590



Tweet

115



Like

195



8+1

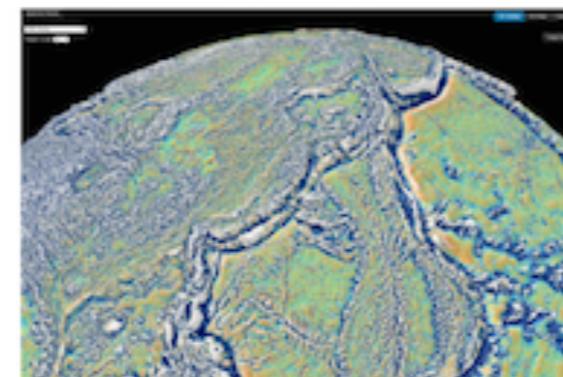
66

Cesium is a JavaScript library for creating 3D globes and 2D maps in a web browser without a plugin. It uses WebGL for hardware-accelerated graphics, and is cross-platform, cross-browser, and tuned for dynamic-data visualization. Cesium is open source under the Apache 2.0 license. It is free for commercial and non-commercial use.

[Get Started](#)[View Demos](#)

Cesium is developed and supported by an active open-source [community](#), started by [Analytical Graphics, Inc. \(AGI\)](#).

More Great Demos



GPlates Portal

GPlates Portal is an interactive visualization of cutting-edge geoscience datasets.



youbeQ

youbeQ is a free multiplayer driving and flight simulator.



French Maps

The French national mapping agency (IGN) displays its geographical and topographical maps with Cesium.



ATO Visualizer

ATO Visualizer is an online application which uses Cesium for interactive visualization of Air Traffic Orders (ATOs).



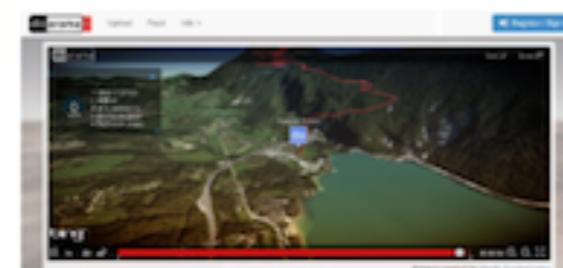
SUNSHINE

SUNSHINE - "Smart UrbaN Services for Higher eNergy Efficiency" delivers innovative digital services interoperable with existing geographic information infrastructures, supporting energy efficiency at the urban and regional level.



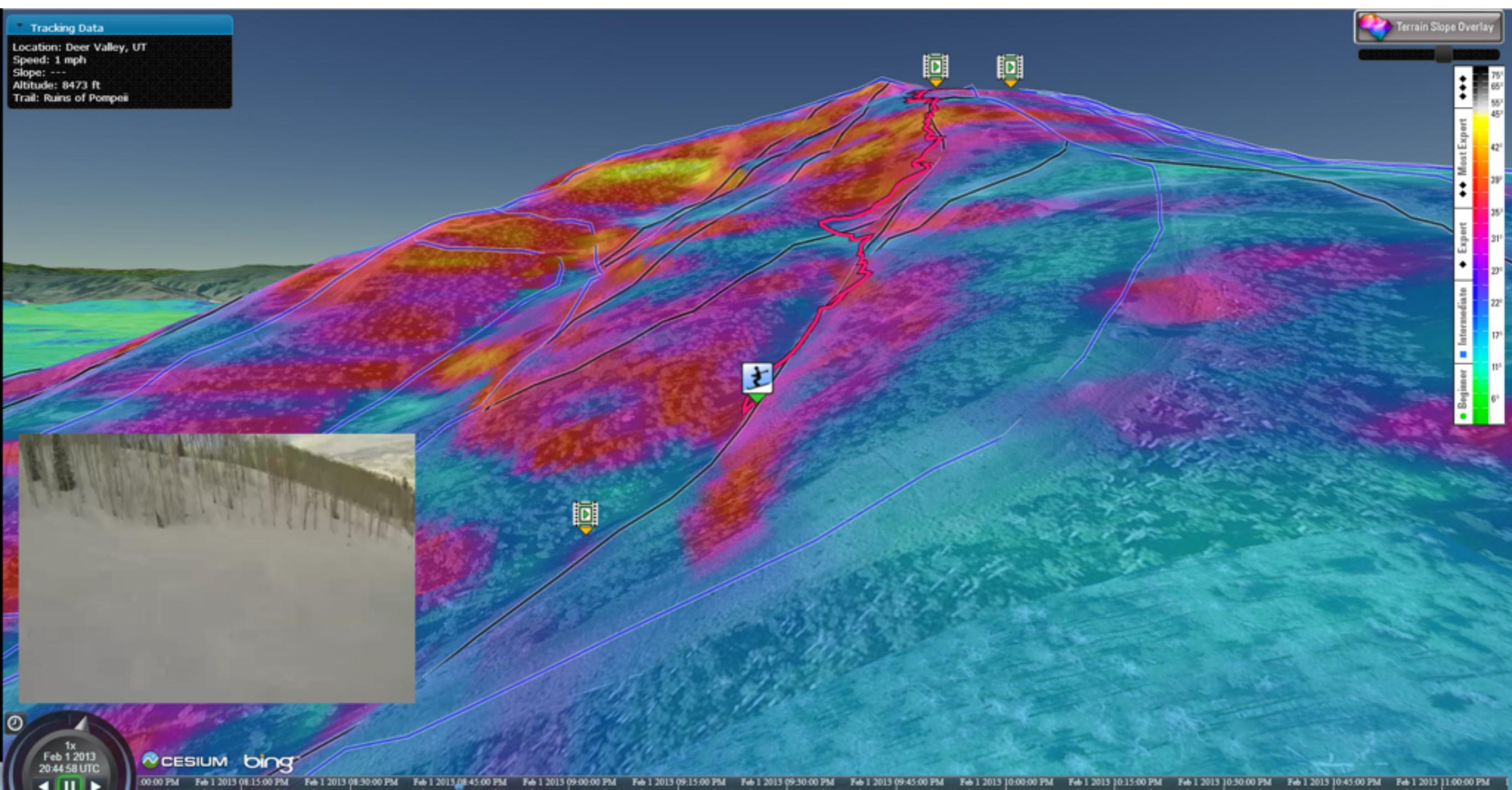
NORAD Tracks Santa

AGI used Cesium to develop the Santa tracker for NORAD Tracks Santa.



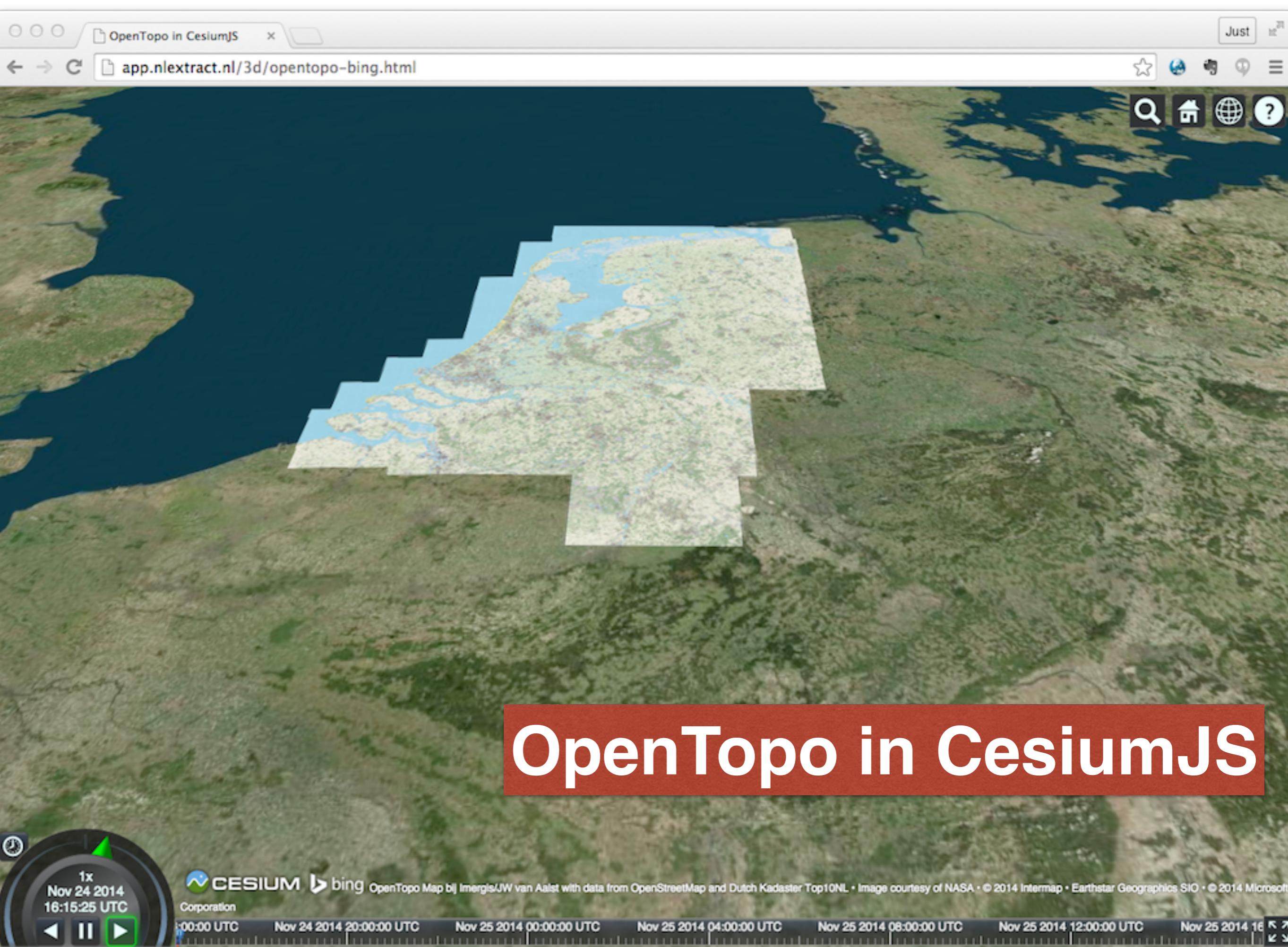
Cesium is Cool!

Cesium is Cool (hier letterlijk) !



CesiumJS - SantaTracker





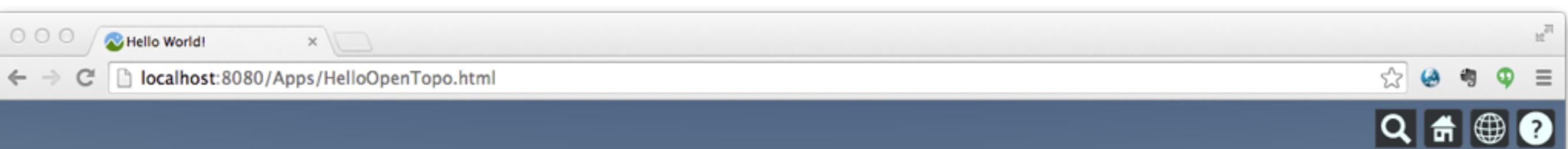
OpenTopo in CesiumJS



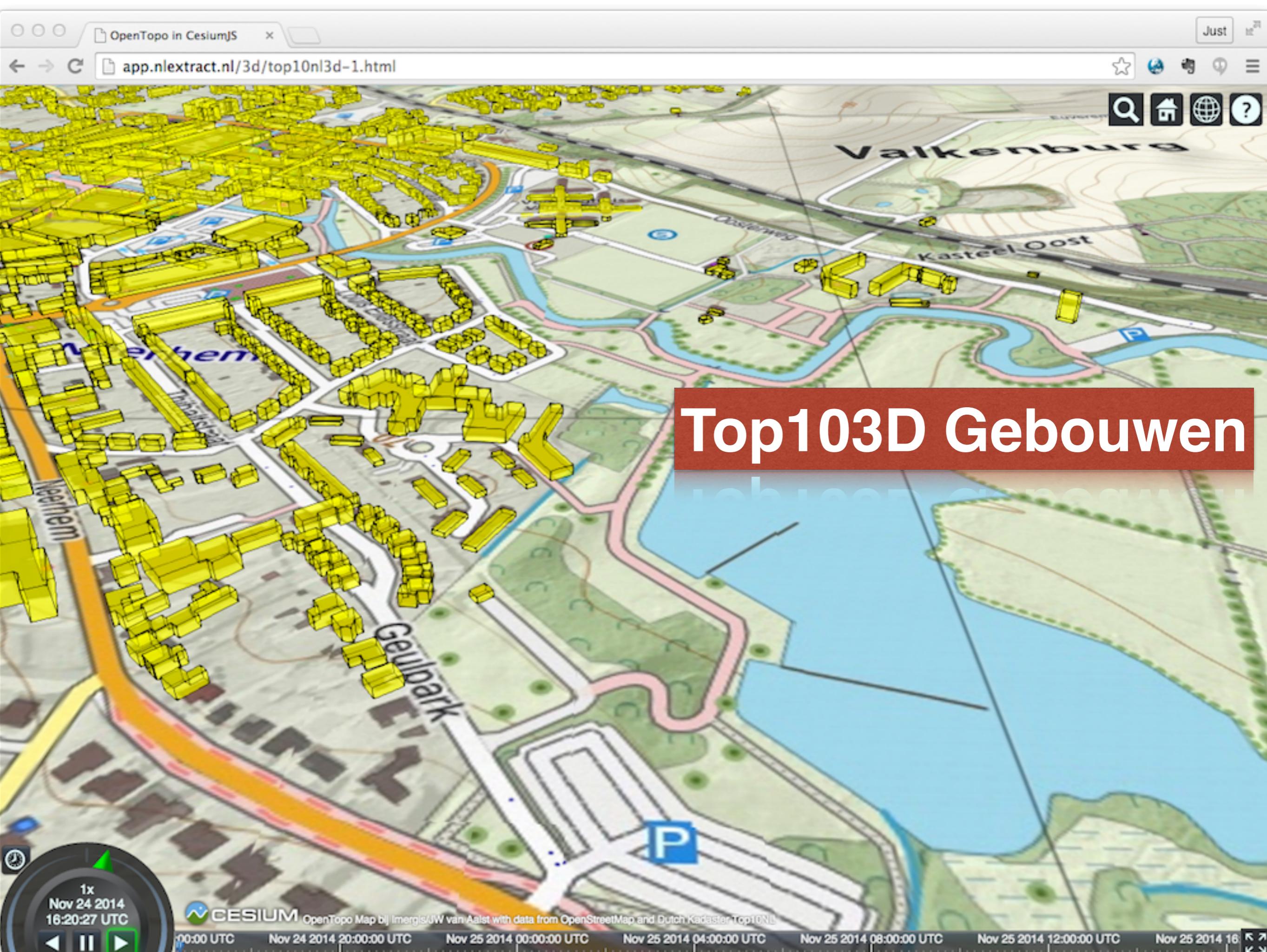
 CESIUM  bing

Corporation

OpenTopo Map bij Imergis/JW van Aalst with data from OpenStreetMap and Dutch Kadaster Top10NL • Image courtesy of NASA • © 2014 Intermap • Earthstar Geographics SIO • © 2014 Microsoft



Zon in de Zee zien zakken in ...



Top103D Gebouwen

1x
Nov 24 2014
16:20:27 UTC



Cesium OpenTopo Map bij Imergis/JW van Aalst with data from OpenStreetMap and Dutch Kadaster Top10NL

00:00 UTC Nov 24 2014 20:00 UTC Nov 24 2014 00:00:00 UTC Nov 25 2014 04:00:00 UTC Nov 25 2014 08:00:00 UTC Nov 25 2014 12:00:00 UTC Nov 25 2014 16:00:00 UTC

OL3-Cesium

OpenLayers - Cesium integration library



Download
Release



Browse
Examples



View
API Docs



Download
.zip file



Download
.tar.gz file

/ OL3-Cesium

OpenLayers - Cesium integration library. Create your map using [OpenLayers 3](#), and visualize it on a globe with [Cesium](#).

Is maintained by [openlayers](#).

// Features

Switch smoothly between 2D and 3D and synchronize:

- Map context (bounding box and zoom level);
- Raster data sources;
- Vector data sources in 2D and 3D;
- Map sele

This page was generated by [GitHub Pages](#) using the Architect theme by Jason Long.

Stay tuned for synchronization

Cesium - OpenLayers3 Integratie

// Getting started

To obtain OL3-Cesium, either download a release from <https://github.com/openlayers/ol3-cesium>

Doorbraak 3D?

Er kan nog veel meer met
3D Open Source en
NL Open Geo-Data

Vector3D Tiles?

AHN2 Terrain Server?

Samengevat

- Ruwe data verwerking met NLExtract (en Stetl)
- Opslaan in PostGIS (vector) en GeoTIFF (raster)
- Serveren met GeoServer/MapServer/Tiling etc
- Visualiseren: QGIS, Leaflet, OpenLayers, CesiumJS etc
- **3D mogelijkheden te over!**

Dank U

Stetl
Indien tijd over ;-)

Programma per Dataset?

```
    n = 0; i = 0; j = 0; k = 0;
    i = n;
    while( n < (document.
    {
        n++;
        calc = eval("x" + i);
        i++;
        j++;
        k++;
    }
    document.write("n = " + n + " i = " + i + " j = " + j + " k = " + k + " calc = " + calc);
    i = 0;
```

Inlezen



Omzetten



Wegschrijven

Extract



Transform



Load

ETL

FOSS ETL - High Level



FOSS ETL - Lower Level



ogr2ogr

Individueel krachtig maar
kan vaak slechts deel van ETL uitvoeren

FOSS ETL - Hoe Combineren?



+



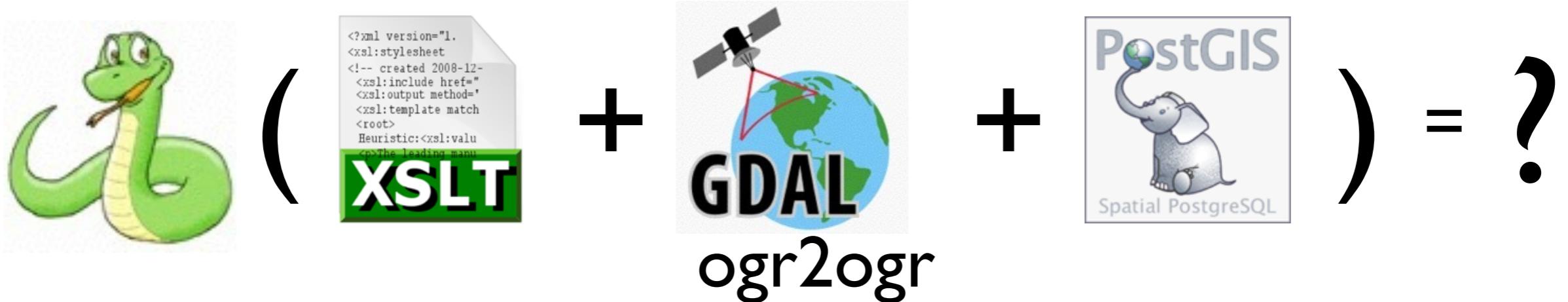
ogr2ogr

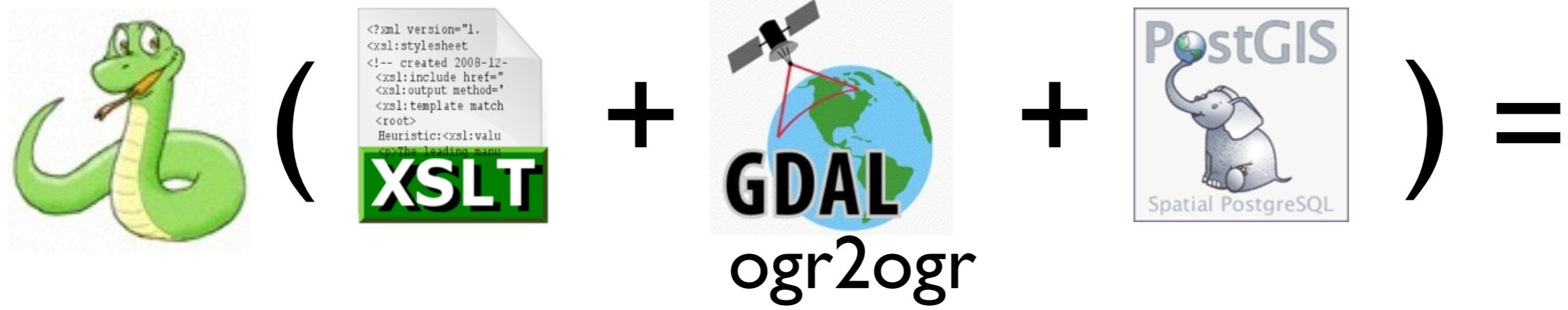
+



= ?

FOSS ETL - Add Python to Equation





Stetl

Stetl

=

Simple

Streaming

Spatial

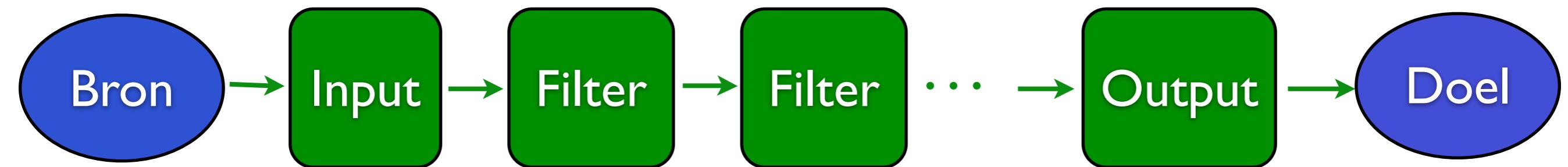
Speedy

ETL

<http://www.stetl.org>

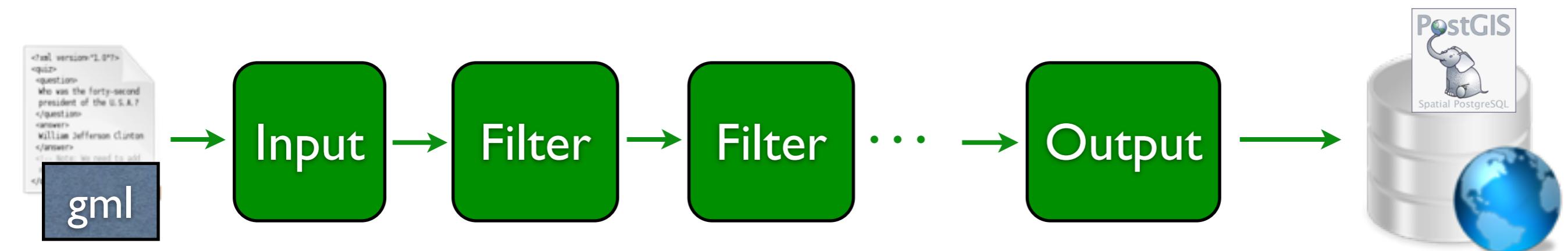
Stetl Concepten

Processing Keten



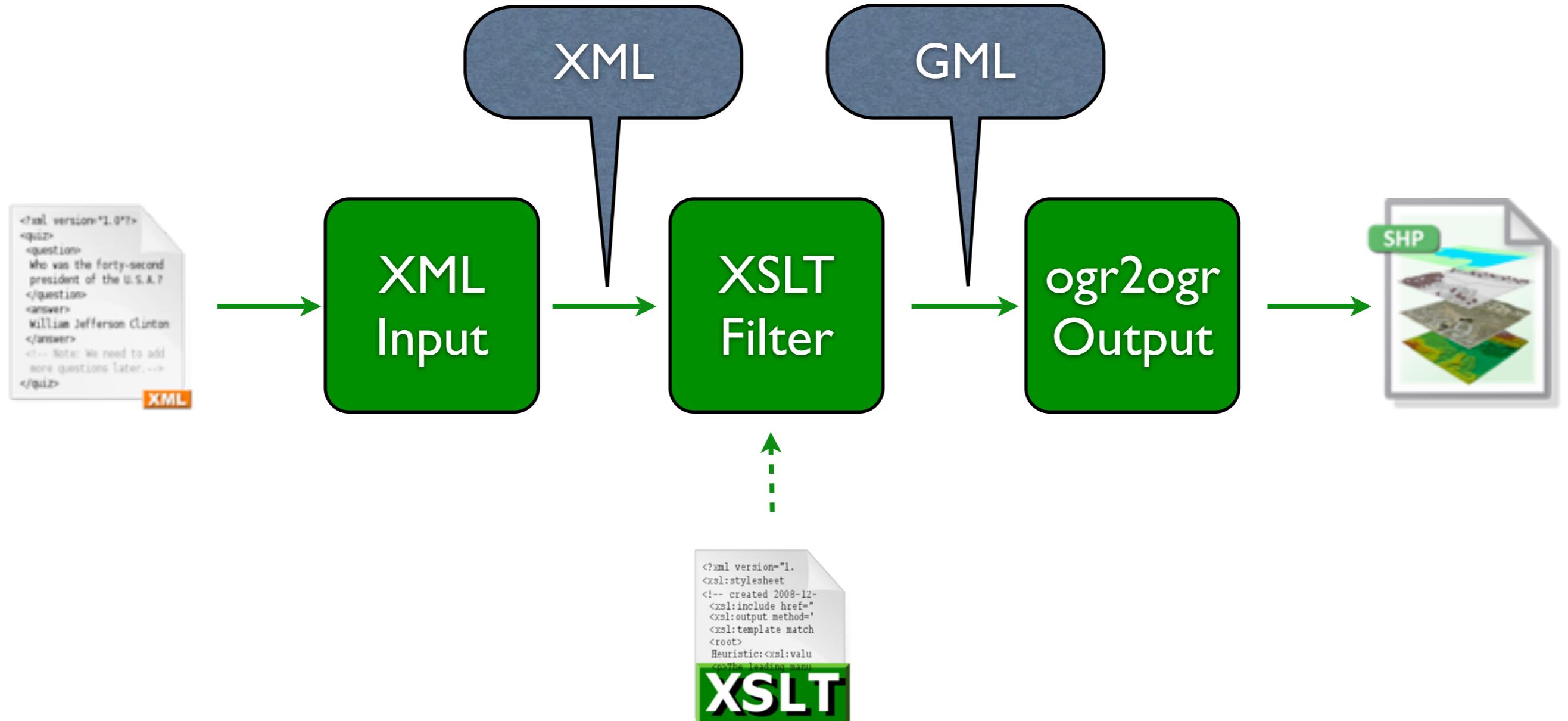
Stetl concepten

Processing Keten



Stetl concepten

Voorbeeld - XML naar Shapefile



Voorbeeld - Eigen Component



Voorbeeld - XML naar Shapefile

Process
Chain

```
# Transform input xml to valid GML file and then to Shape.

[etl]
chains = input_xml_file | transformer_xslt | output_ogr_shape

[input_xml_file]
class = inputs.fileinput.XmlFileInput
file_path = input/cities.xml

[transformer_xslt]
class = filters.xsltfilter.XsltFilter
script = cities2gml.xsl

# The ogr2ogr command-line.
[output_ogr_shape]
class = outputs.ogroutput.Ogr2OgrOutput
temp_file = temp/gmlcities.gml
ogr2ogr_cmd = ogr2ogr \
    -overwrite \
    -f "ESRI Shapefile" \
    -a_srs epsg:4326 \
    output/gmlcities.shp \
    temp/gmlcities.gml
```

XSLT
Filter

XML
Input

ogr2ogr
Output

Stetl Configuratie File

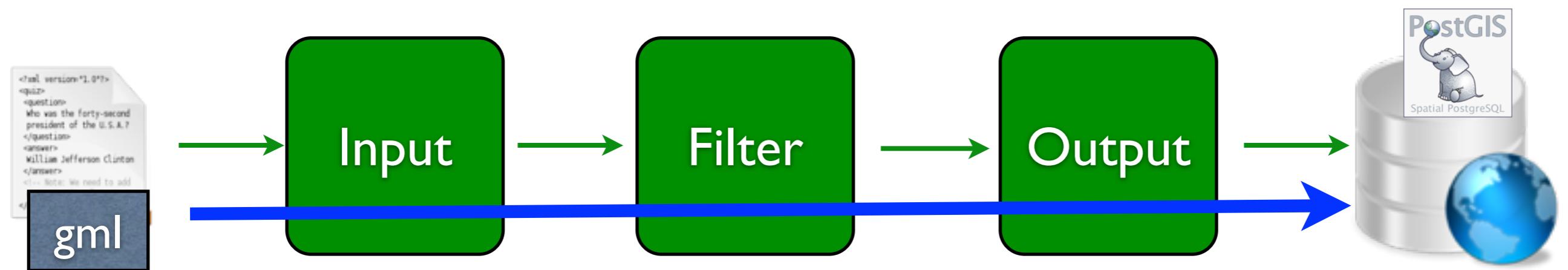
Example Components



File (XML, GML, CSV)	XSLT	(Multi)File (GML, GeoJSON,..)
GDAL/OGR	XMLAssembler	GDAL/OGR
LineStream	XMLValidator	WFS-T
SQLite	FormatConverter	HTTP
WFS	FeatureExtractor	SOS-T
PostGIS	Jinja2Filter	PostGIS
<i>YourInput</i>	<i>YourFilter</i>	<i>YourOutput</i>

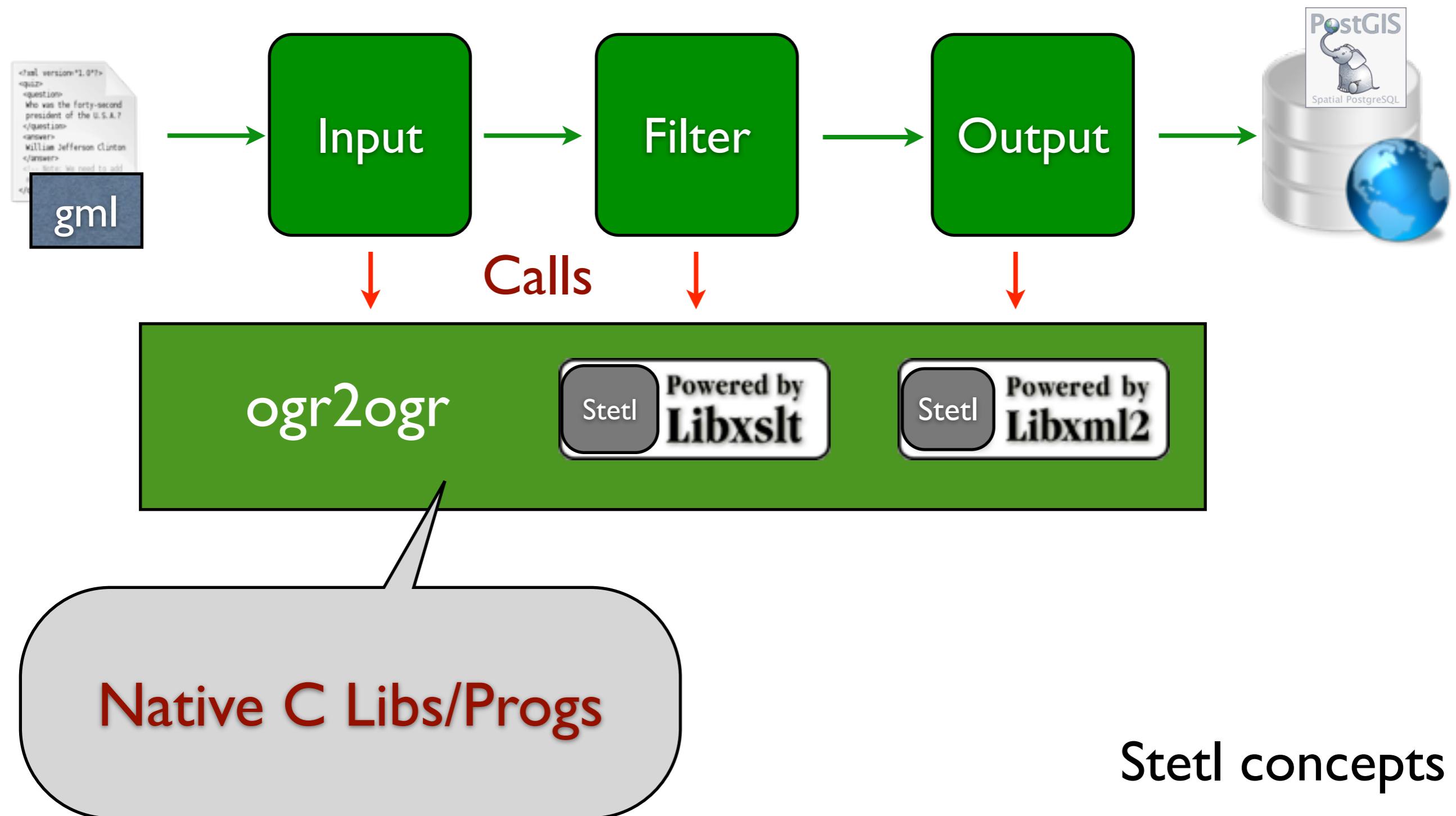
Stetl concepten

Speed: Streaming



Stetl concepts

Speed: Going Native



Stetl Uitvoeren

```
stetl -c etl.cfg
```

Stetl Installeren

via PyPi

```
sudo pip install stetl
```

Deps

- GDAL+Python bindings
- lxml (xml proc)
- psycopg2 (Postgres)

Stetl - Praktijk

- Basisregistraties
GML to PostGIS: Top10NL, BGT
- INSPIRE
transformatie BAG naar Addresses
- RIVM Luchtmetingen
naar WMS-Time en SOS
EU Air Quality/INSPIRE Reporting
- UK Ordnance Survey Mastermap

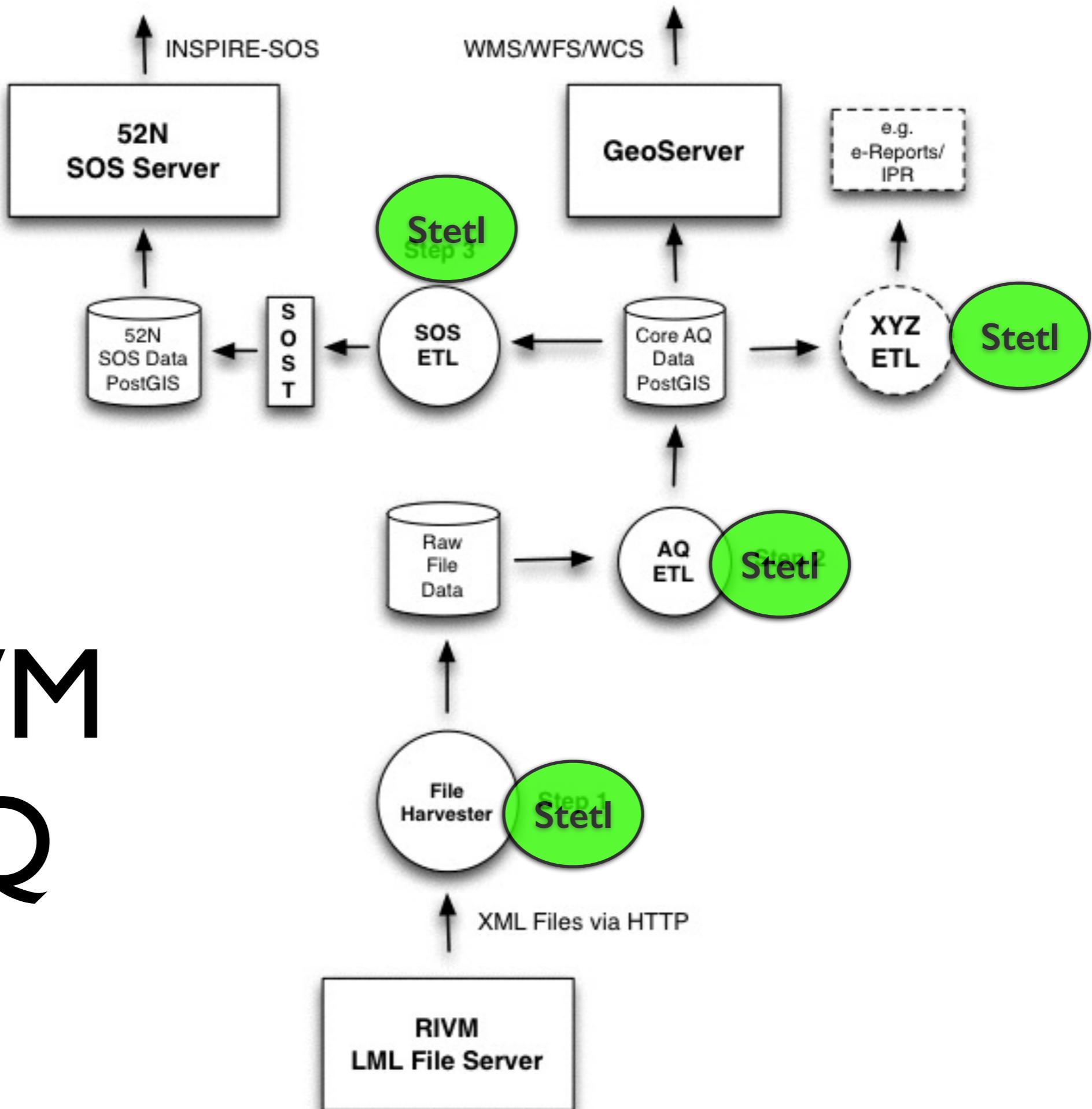


BGT - Dutch Large Scale Topo

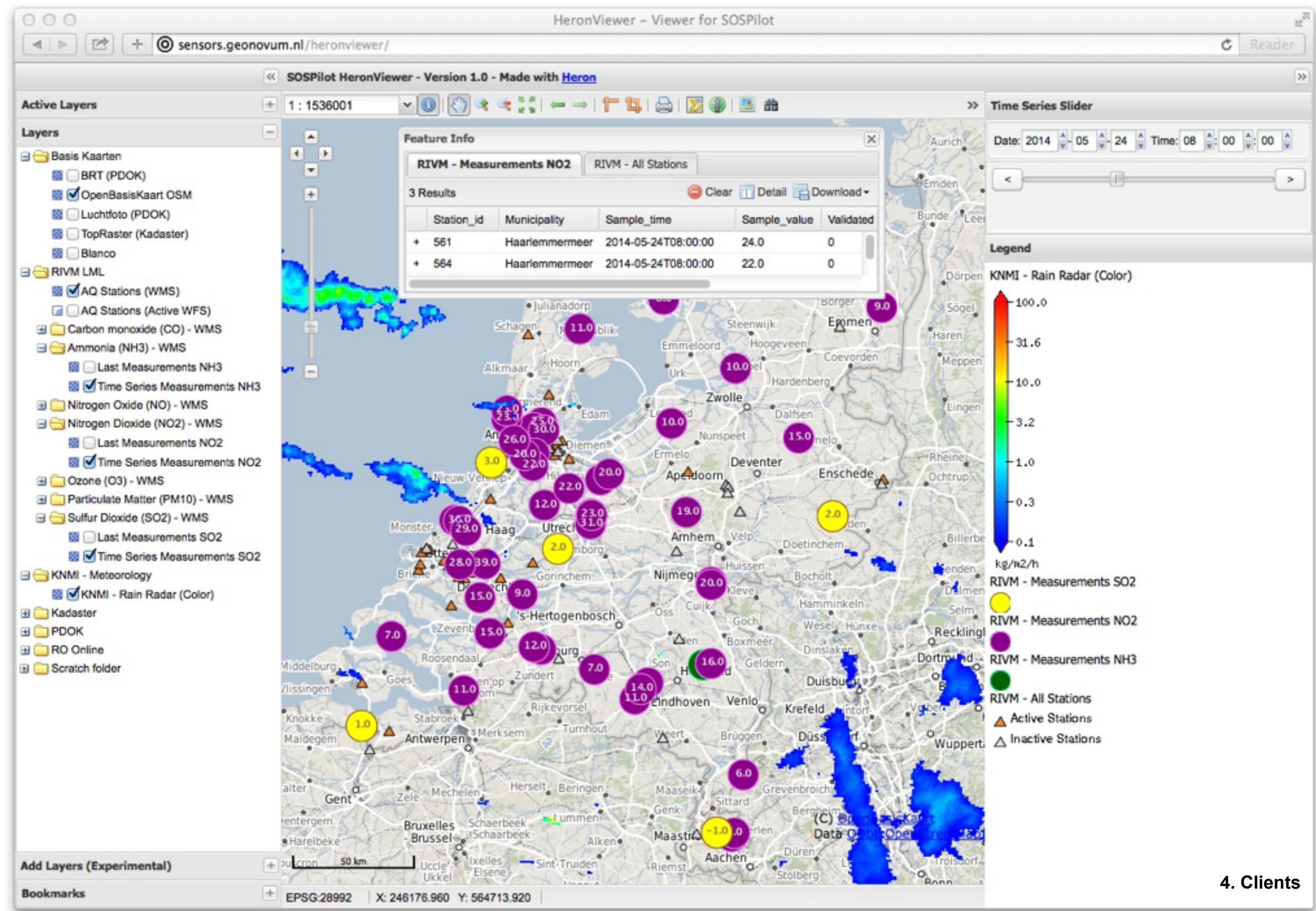
- Layers
- Scheiding Pol...
 - Scheiding Lin...
 - TrafficArea
 - BuildingPart
 - BridgeConstru...
 - OverigBouww...
 - PlantCover
 - Waterdeel
 - AuxiliaryTraffi...
 - OnbegroeidTe...
 - Ondersteunen...
 - Curve
 - WMTS BRT ac...



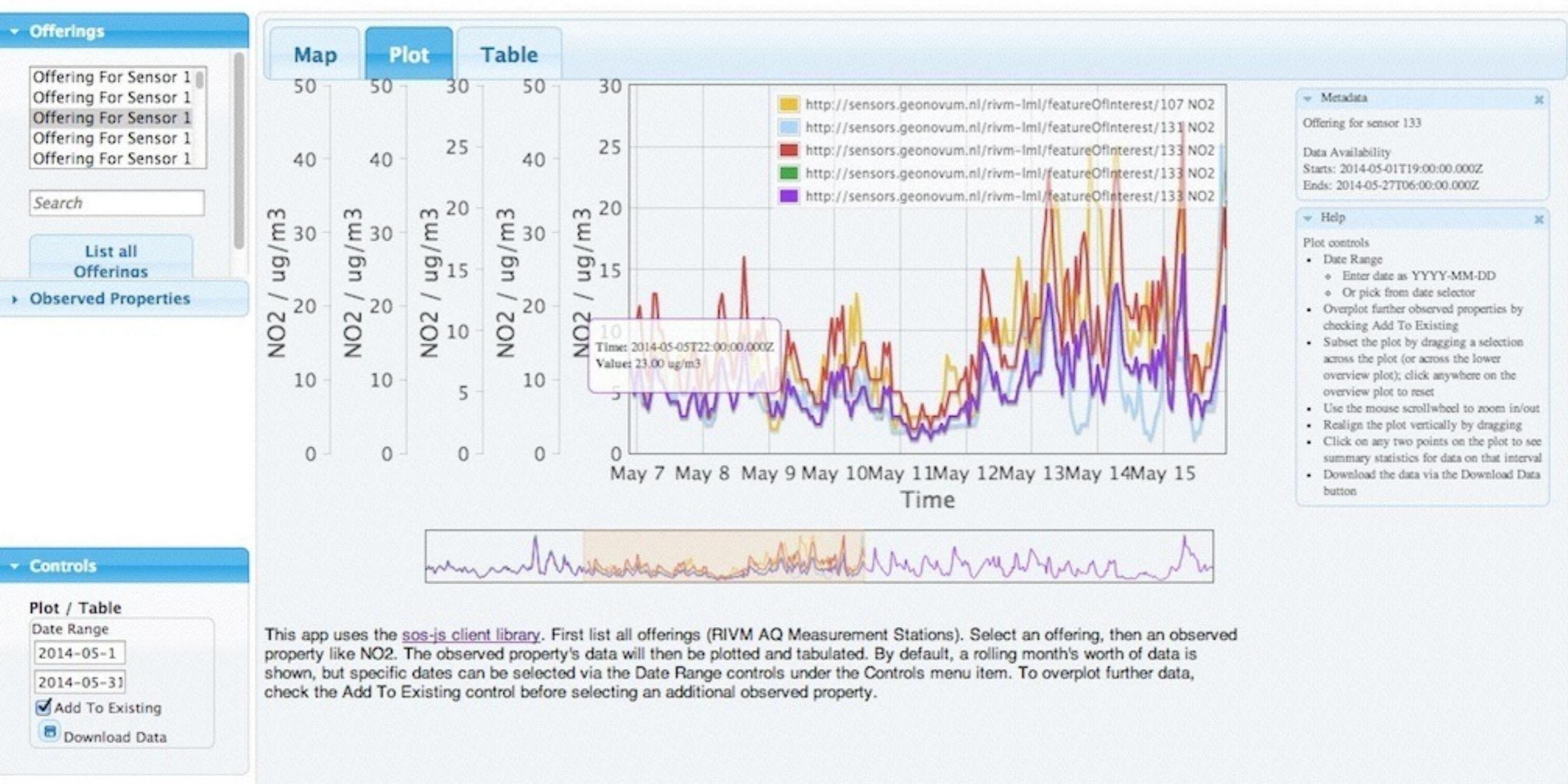
RIVM AQ



RIVM Luchtkwaliteit via WMS-Time



Clients - SOS - SOS.js - 52N

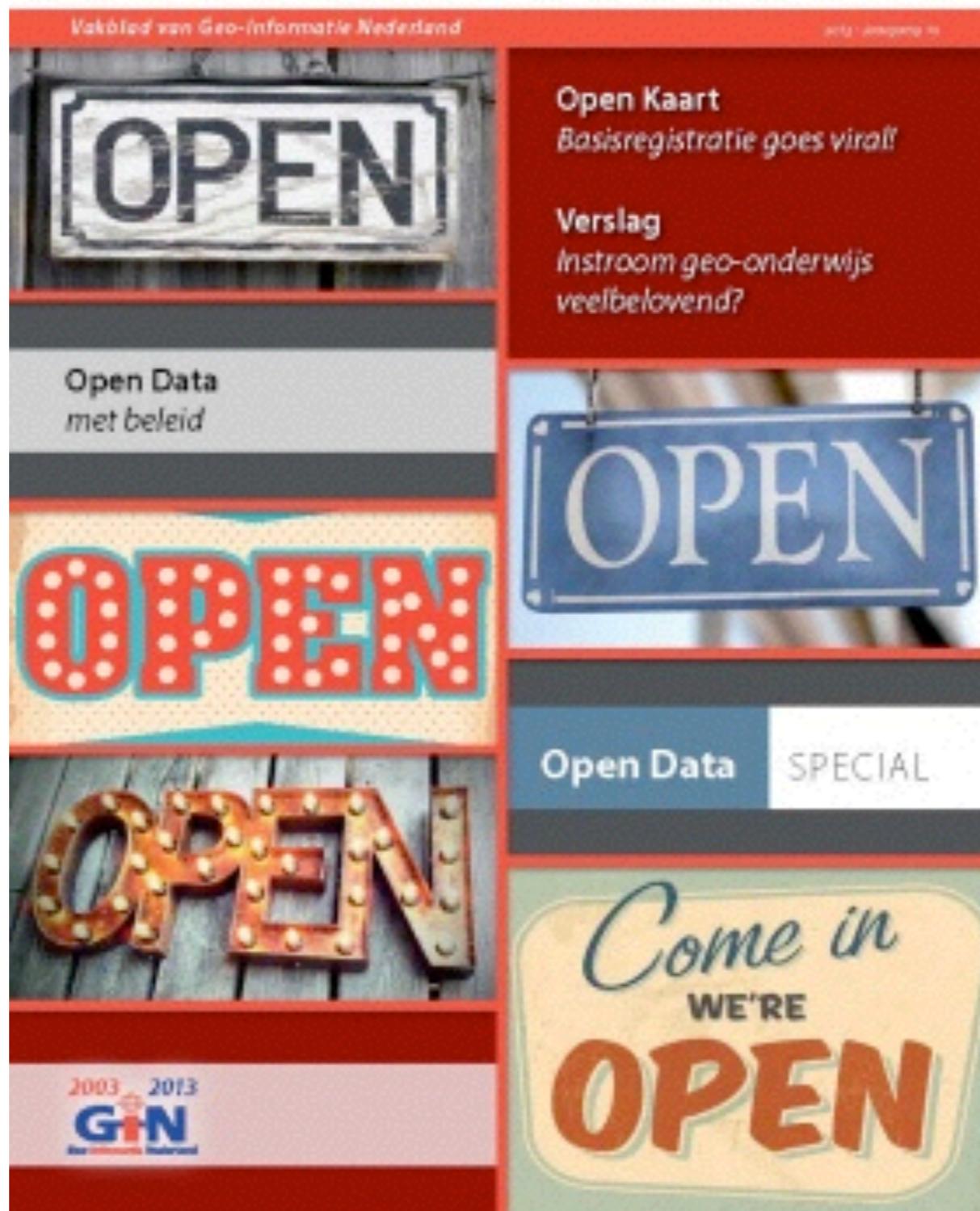


Samengevat

- Ruwe data verwerking met NLExtract en Stetl
- Opslaan in PostGIS (vector) en GeoTIFF (raster)
- Serveren met GeoServer/MapServer/Tiling etc
- Visualiseren met QGIS en Heron

Dank U

GEO-INFO 8/9



NLExtract Artikel Geo-info 2013 - 8/9

www.nlextract.nl

bezoek ook de
OpenGeoGroep Stand

**OPEN GEO
GROEP**



Stetl

<http://www.stetl.org>