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Using (hydro) geological models in the DOV web portal

DATABANK ONDERGROND VLAANDEREN

Database of the soil and subsoil of Flanders

Wiesbaden, 16/06/2016
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GEOSPARC

ENVIRONMENT
NATURE &
ENERGY
DEPARTMENT

Overview

- DOV
  - → Who are we?
  - → Inspire & DOV
- Geology@DOV
  - → Web portal
  - → 3D model
  - → Loam voxel model
- Next steps
  - → Virtual drillings & profiles
  - → 3D & Inspire?

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Who are we?

- URL: http://dov.vlaanderen.be
- DOV is a cooperation in Flanders:
  - → First established in 1996
  - → Open data online since 2002
  - → 3 entities are the core partners:
    - → Mobility and Public Works Department (MOW)
    - → Environment, Nature and Energy Department (LNE)
    - → Flemish Environment Agency (VMM)

MISSION	Structuring and managing all data and information concerning the soil and subsoil of Flanders and make them available
VISION	DOV is a cooperation of partners that mobilizes data and information concerning the soil and subsoil of Flanders, guards and reports on their quality and makes them accessible in an integrated way. DOV works according to Flemish decrees and international agreements, in the most effective, efficient and flexible way.

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Which data in DOV?

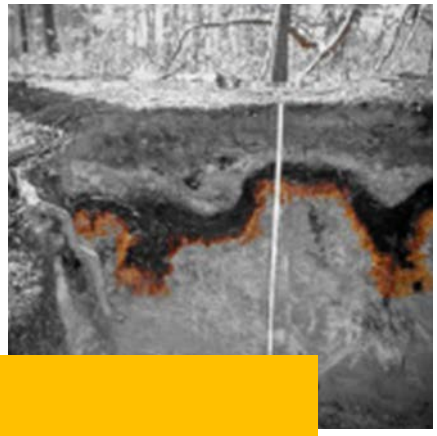
DOV offers data and information on thematic areas related to soil and subsoil:

groundwater

geology

geotechnics

soil



All data is available as **open data**

Reuse is allowed

"gratis open data licentie Vlaanderen V12"

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Architecture for DOV

Open Source!

- PostgreSQL , PostGIS
- Services
  - → Catalog (Geonetwork): CSW
    - × DOV: >100000 metadata files
  - → OGC-services (Geoserver) : WMS, WFS/ WCS, WMTS –
    - × DOV: 800 layers
- Application for publication
  - × “Mercurius”

- Applicationsfor datamanagement and viewing
  - → Java , GWT
  - → Geotools, Geomajas
  - → Verkenner

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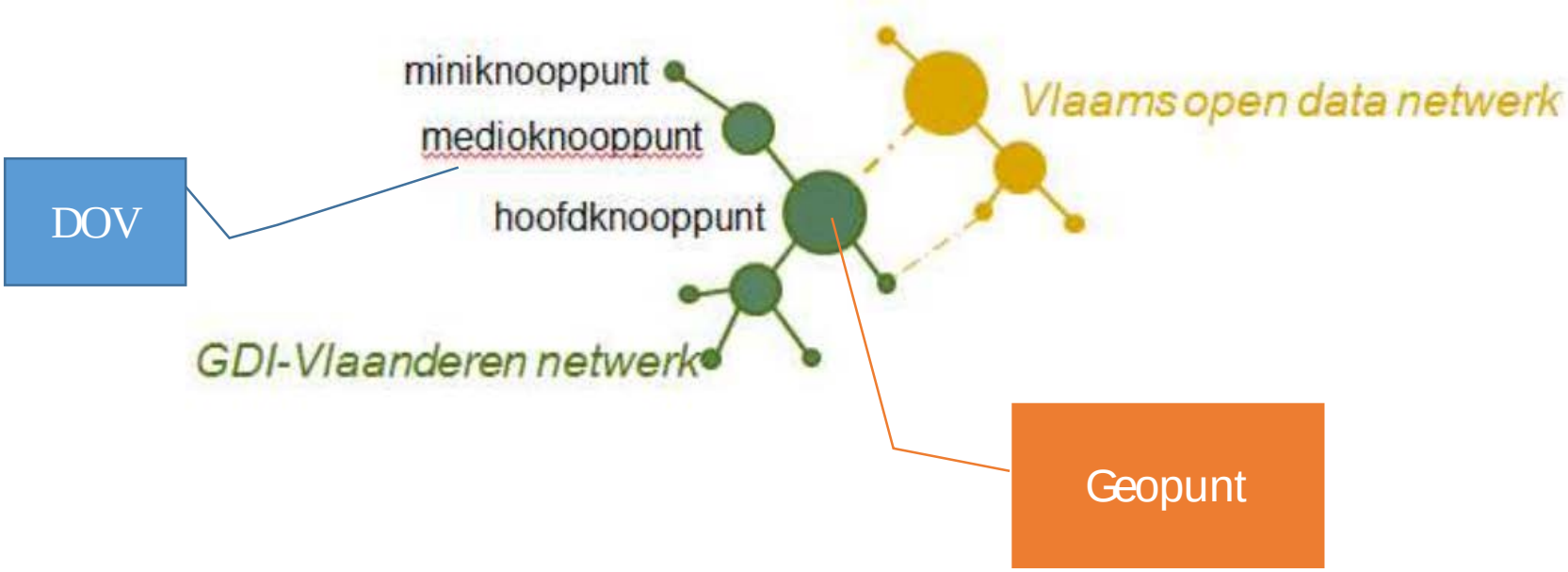
Open data in Flanders versus SDI



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Geology @ DOV

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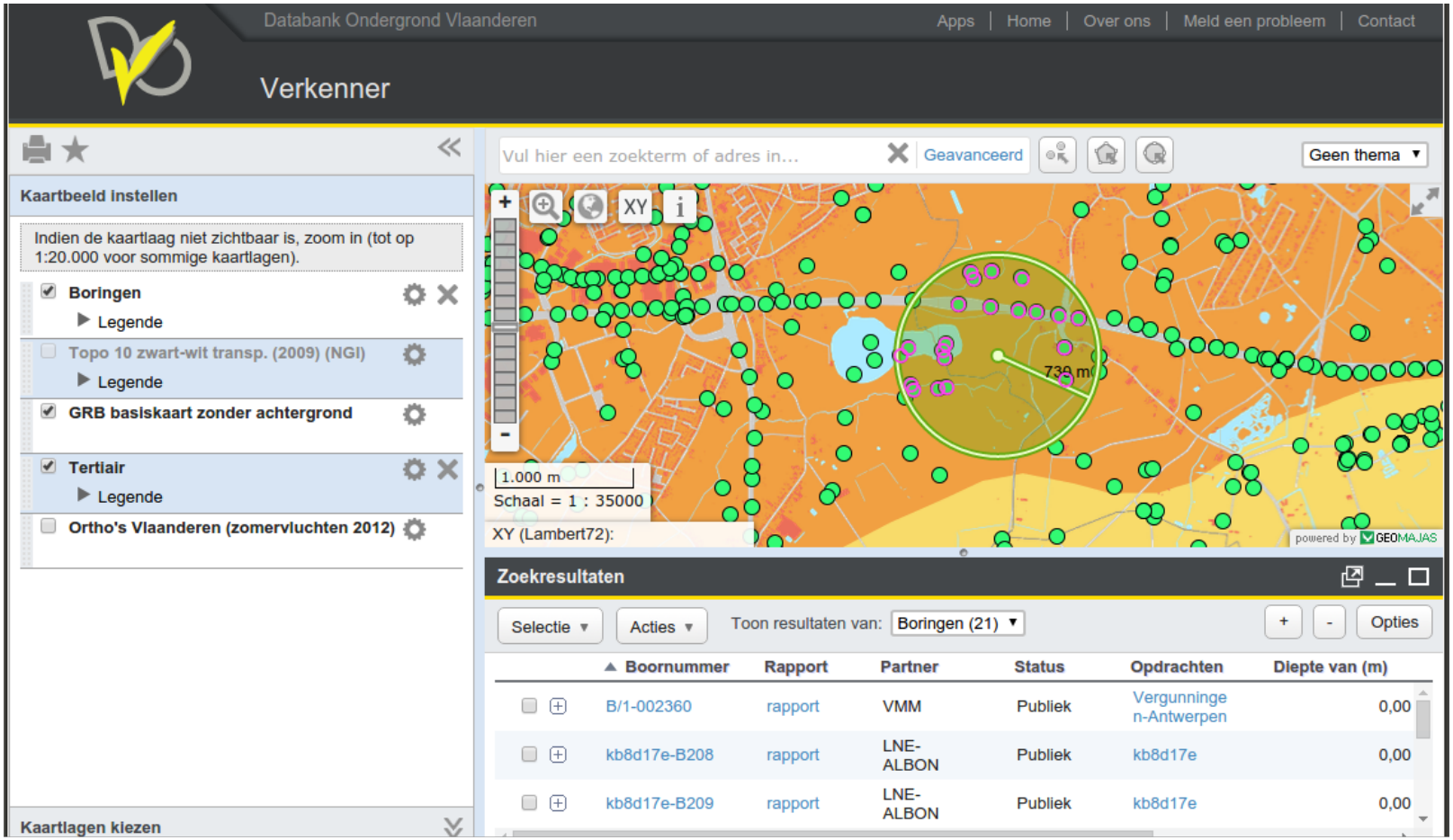
DOV explorer



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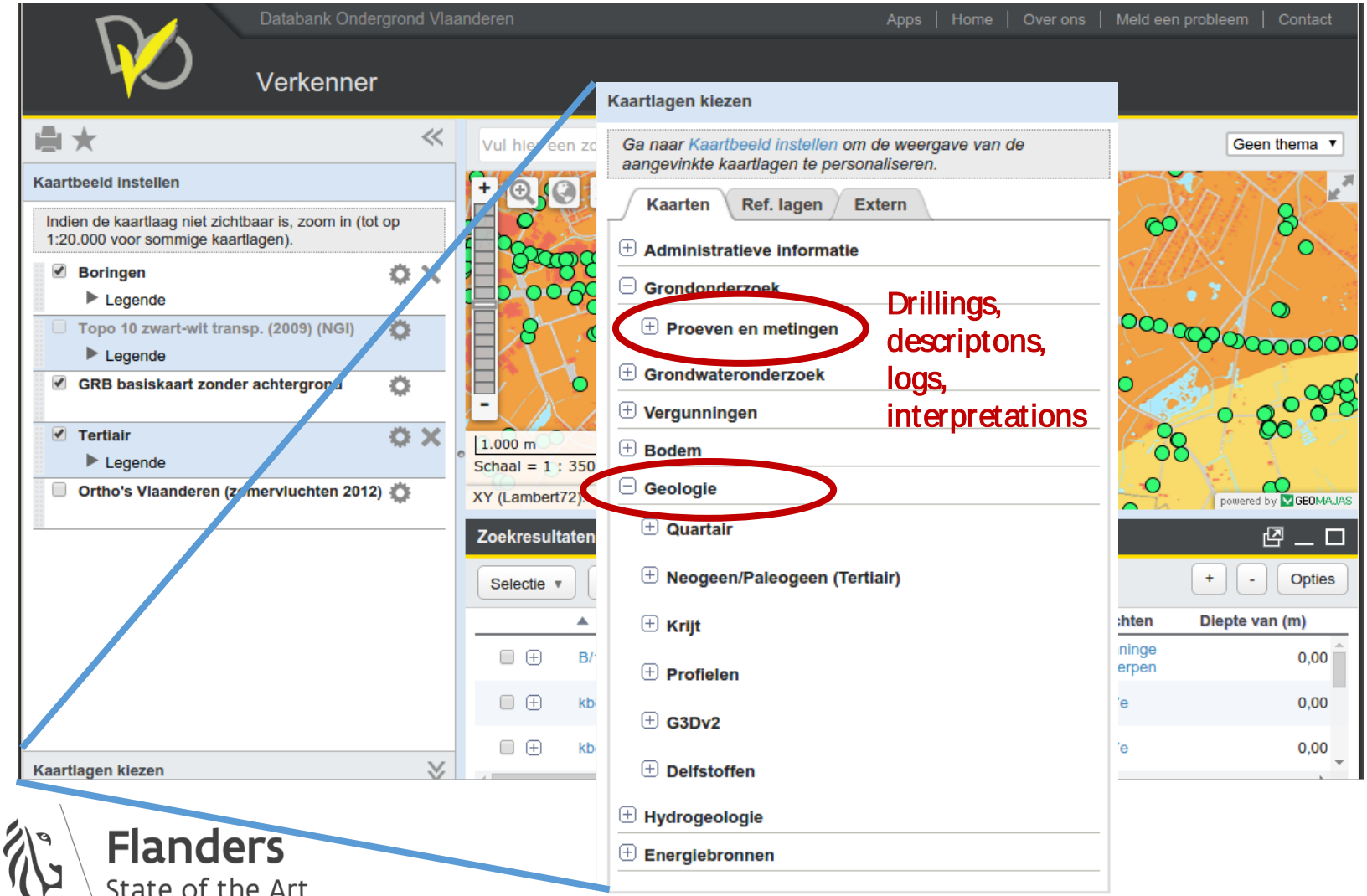
https://www.dov.vlaanderen.be/portaal/?module=verkenner

DOV explorer



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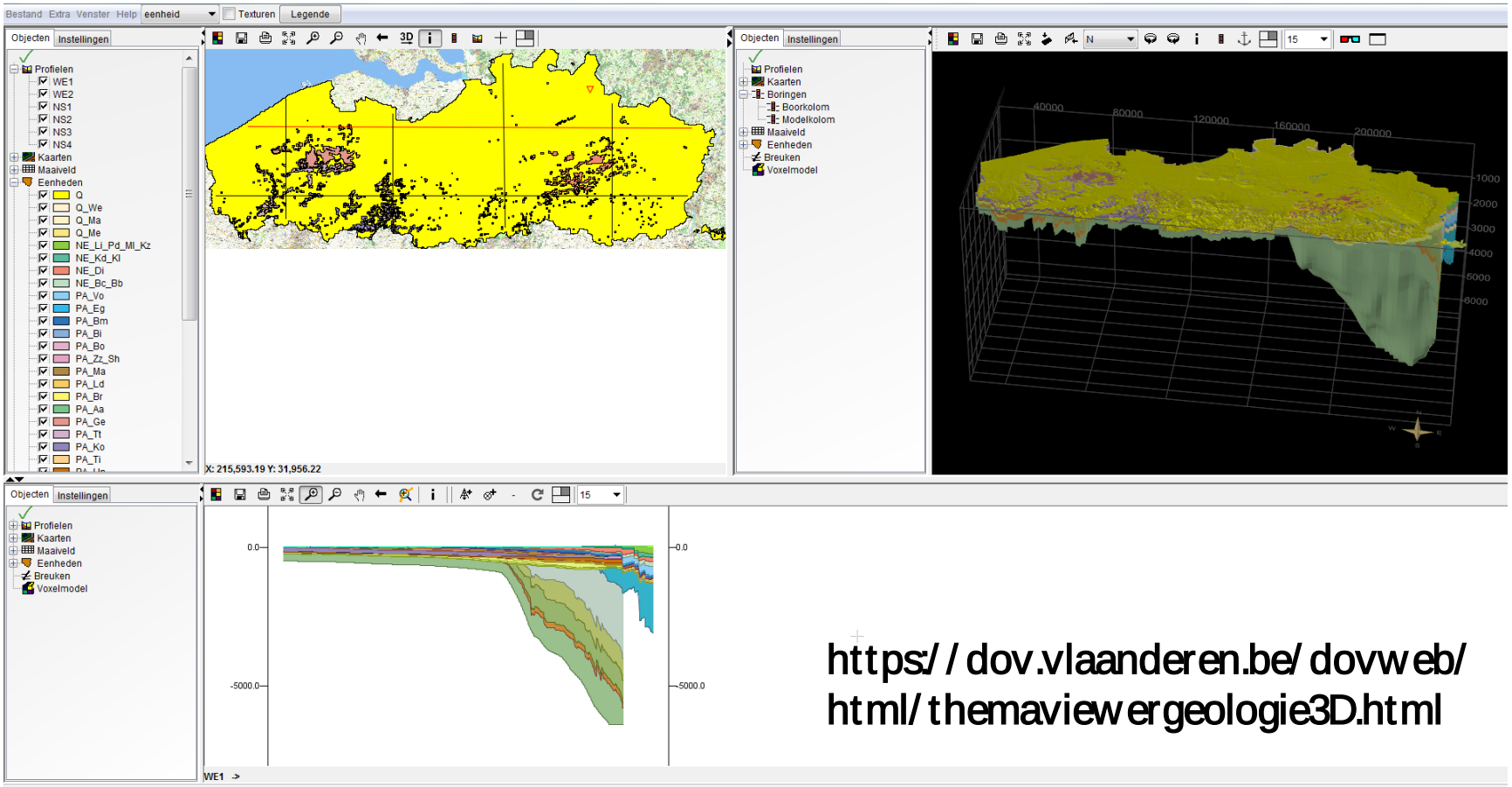
3D Surface Viewer

Visualisation of geological 3D model, G3Dv2 (Matthys et al., 2013)



https://dov.vlaanderen.be/dovweb/html/themaviewergeologie3D.html

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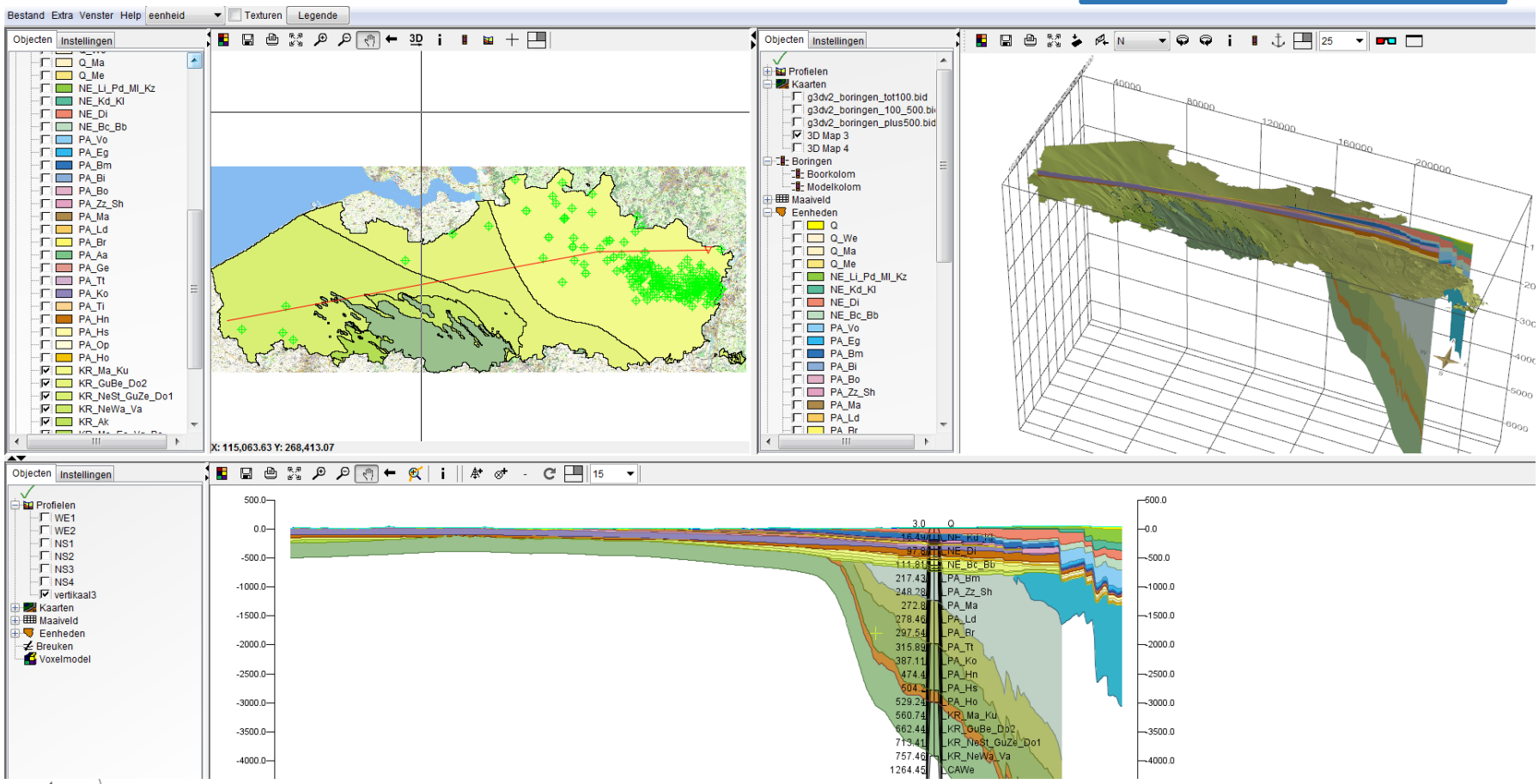
3D Surface Viewer

Make vertical profiles



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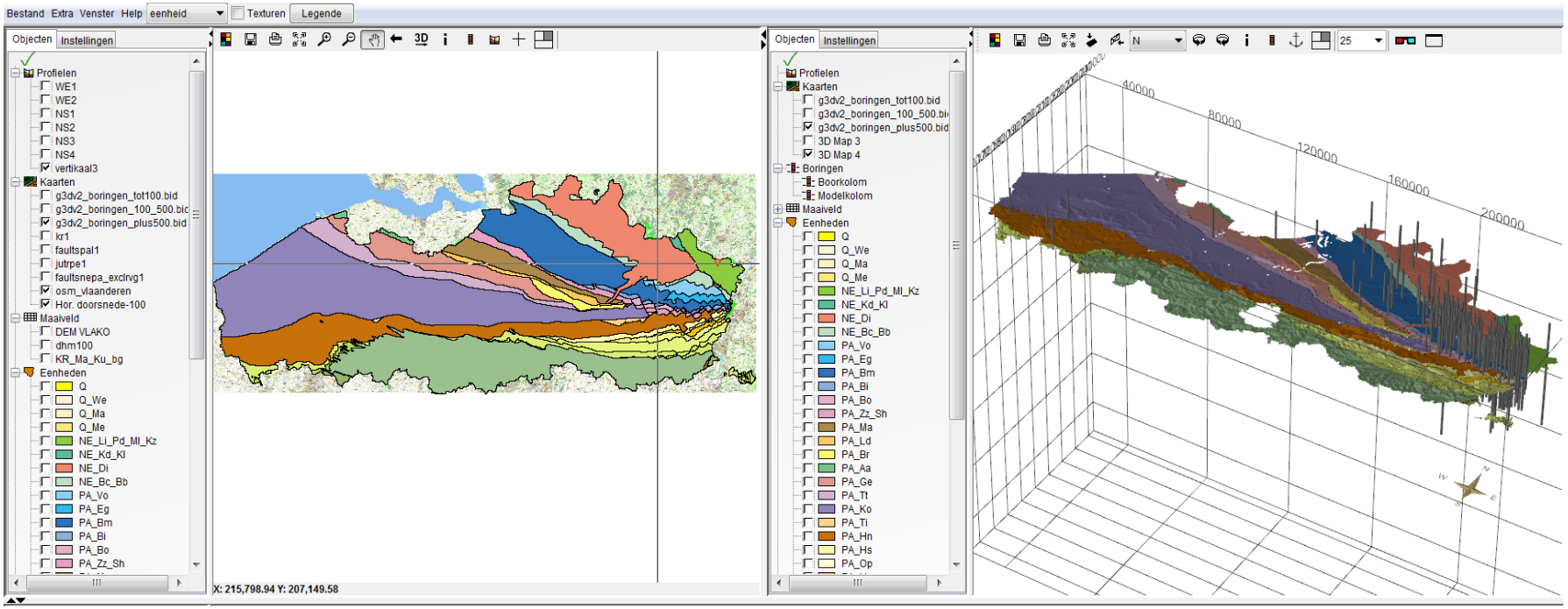
3D Surface Viewer

Make horizontal slizes



…and much more options…

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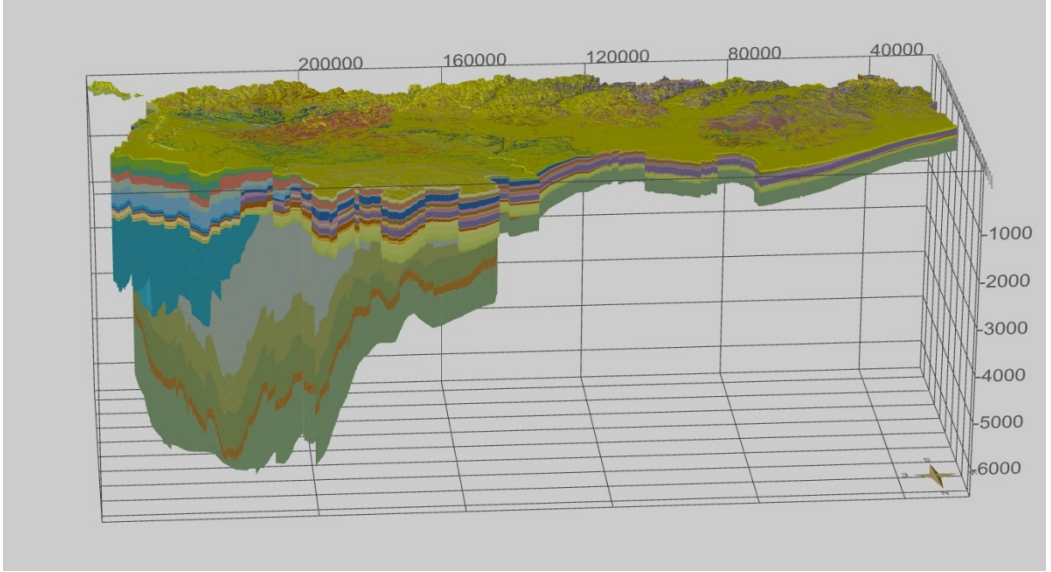
Balmatt project (VITO)



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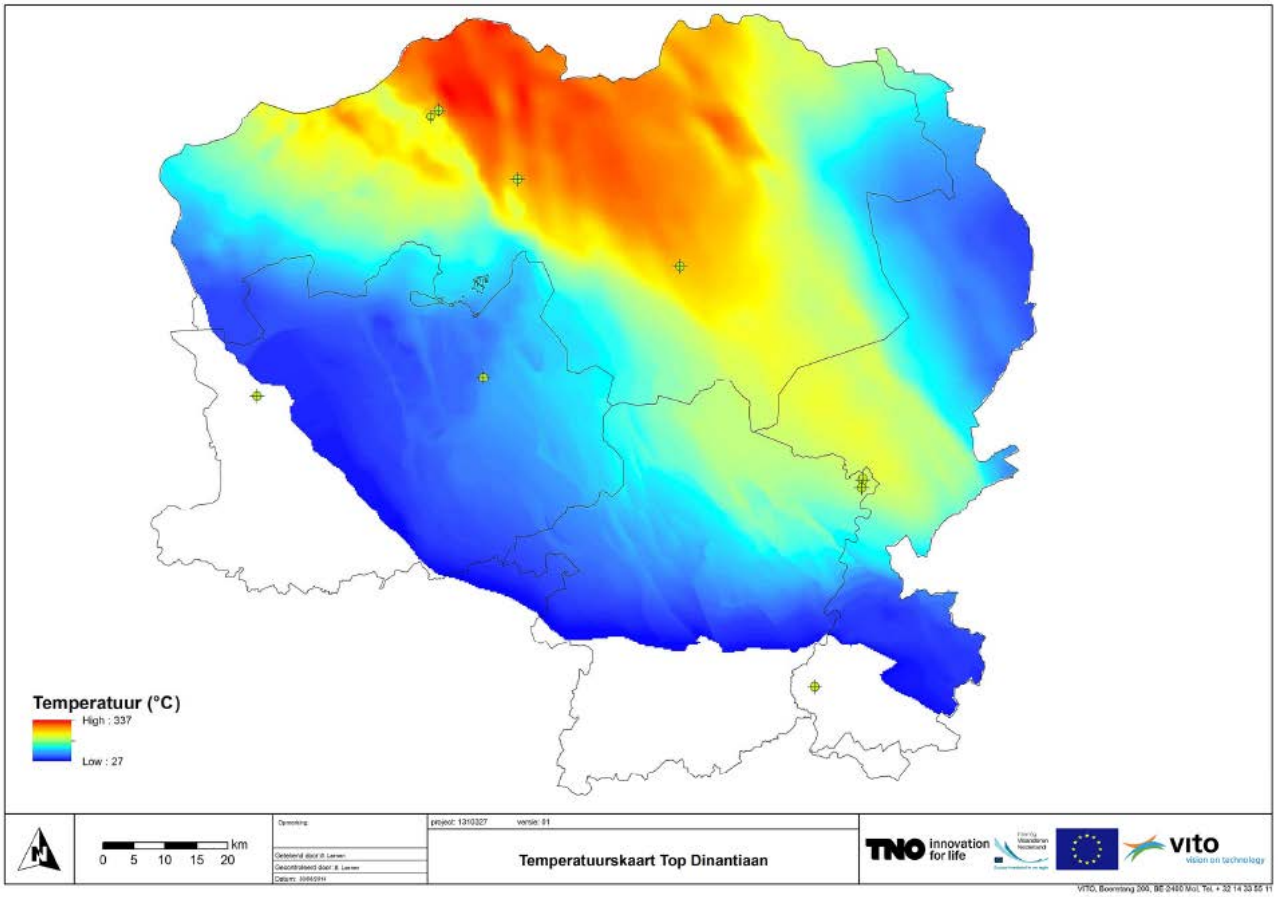
Balmatt project (VITO)



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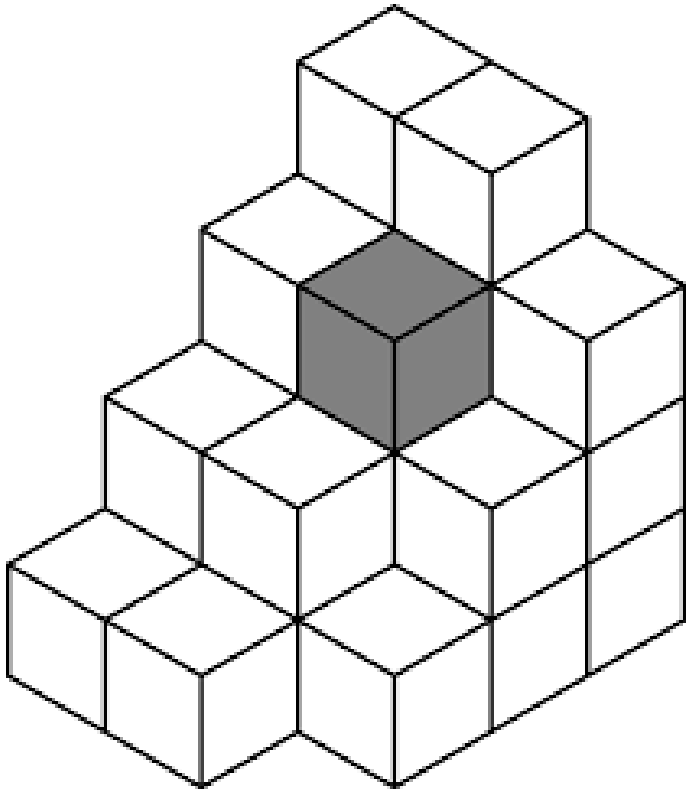
Temperature for the top of the Dinantian carbonates in borderregion BE - NL

Loam voxel model



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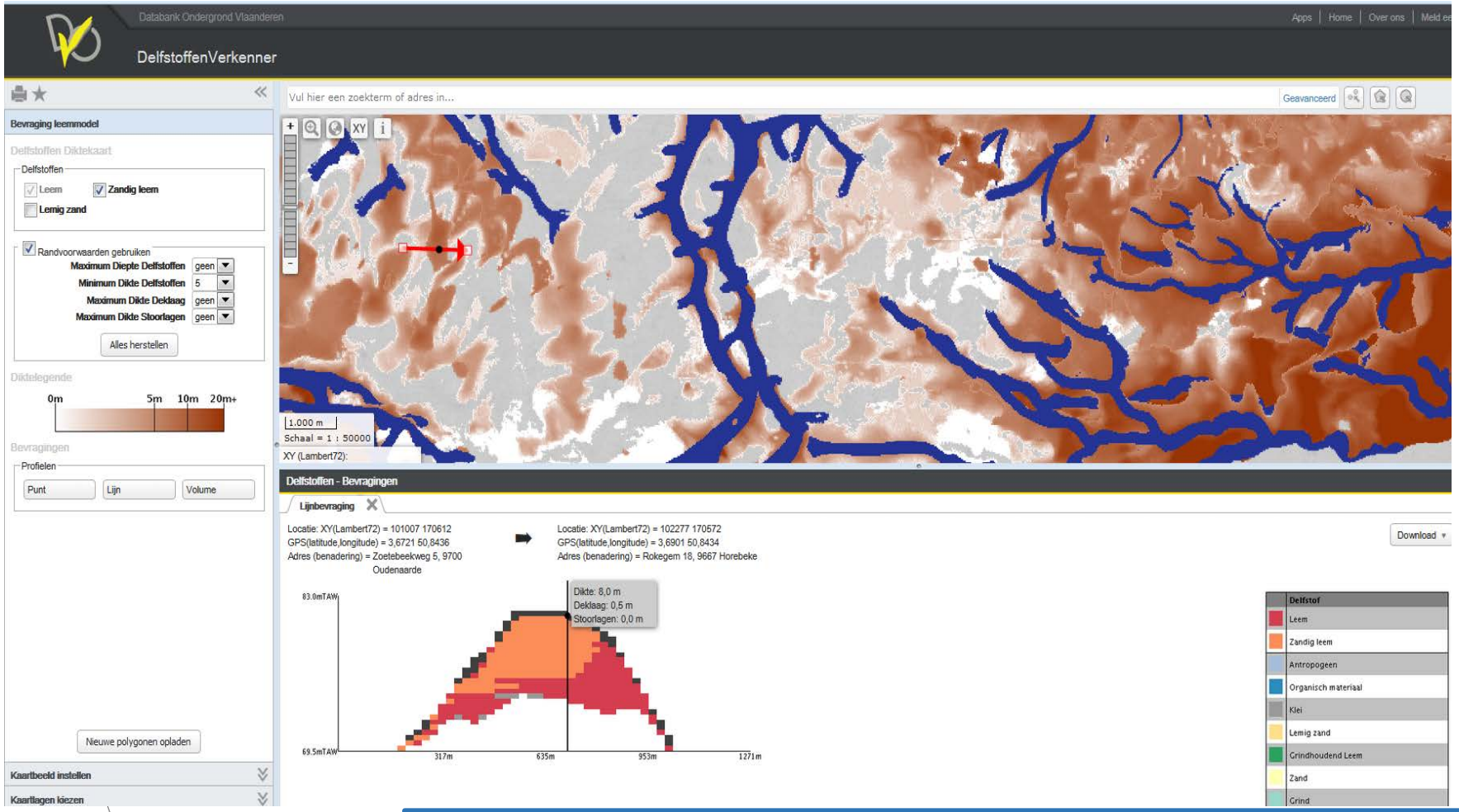
Mineral resources explorer



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Visualisation of Loess Voxel Model (van Haren et al., 2015) – presentation in thematic Session 8


QUESTIONS ?
Contact us at dov@vlaanderen.be
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