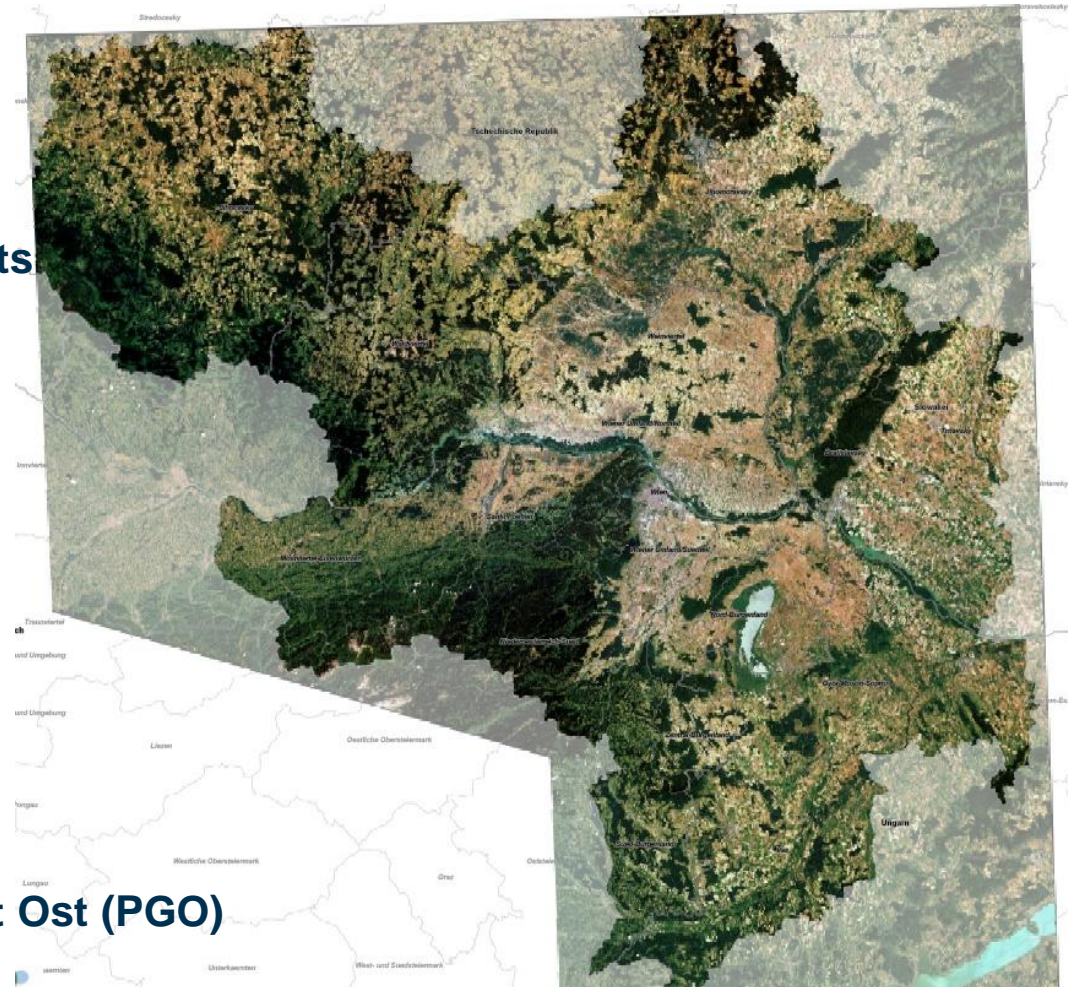


CentropeMAP CentropeSTATISTICS

Interactive Visualisation of Statistical Data with the CentropeSTATISTICS Cross-Border Geoportal

**Manfred Schrenk
Clemens Beyer**

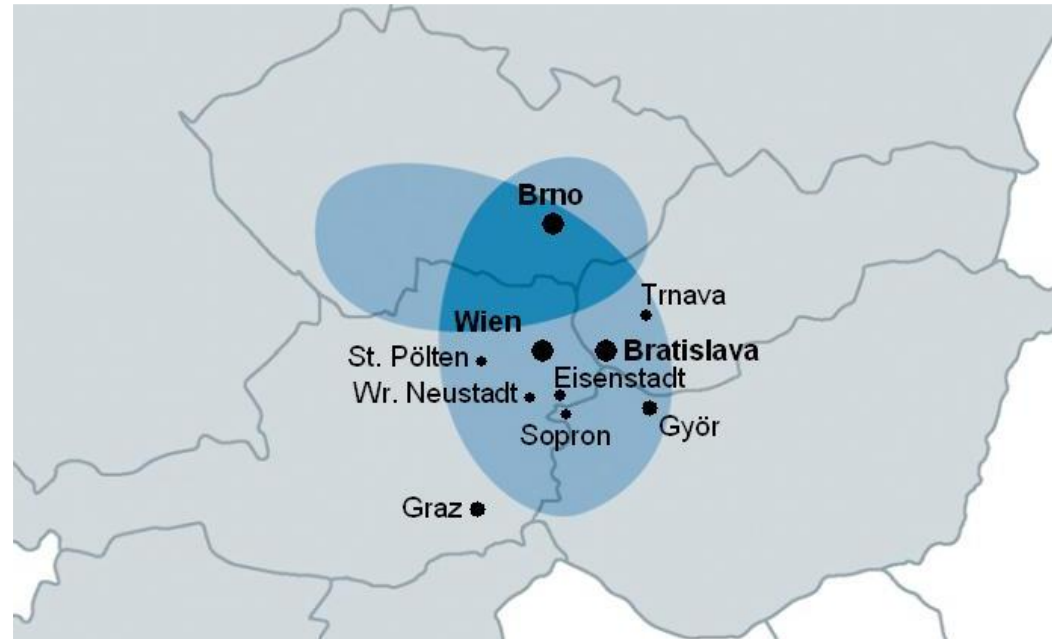
**CORP – Consulting, Research, Projects
Vienna, Austria**



on behalf of the **Planungsgemeinschaft Ost (PGO)**
(Planning Association East)

CENTROPE Partner Regions

- Czech Republic
 - Region: South Moravia
 - City: Brno
- Slovak Republic
 - Region: Bratislava, Trnava
 - Cities: Bratislava, Trnava
- Hungary
 - Region (county): Győr-Moson-Sopron, Vas
 - Cities: Győr, Sopron
- Austria
 - Region (federal states): Burgenland, Lower Austria, Vienna
 - Cities: Eisenstadt, St. Pölten, Vienna
 - *Interested: Wiener Neustadt*



Centrope MAP Challenges

- Legal planning responsibilities on different levels
- Data responsibilities on different levels
- Administrative boundaries = data boundaries
- No “common data infrastructure“ available,
only “isolated applications“

CentropeMAP Website

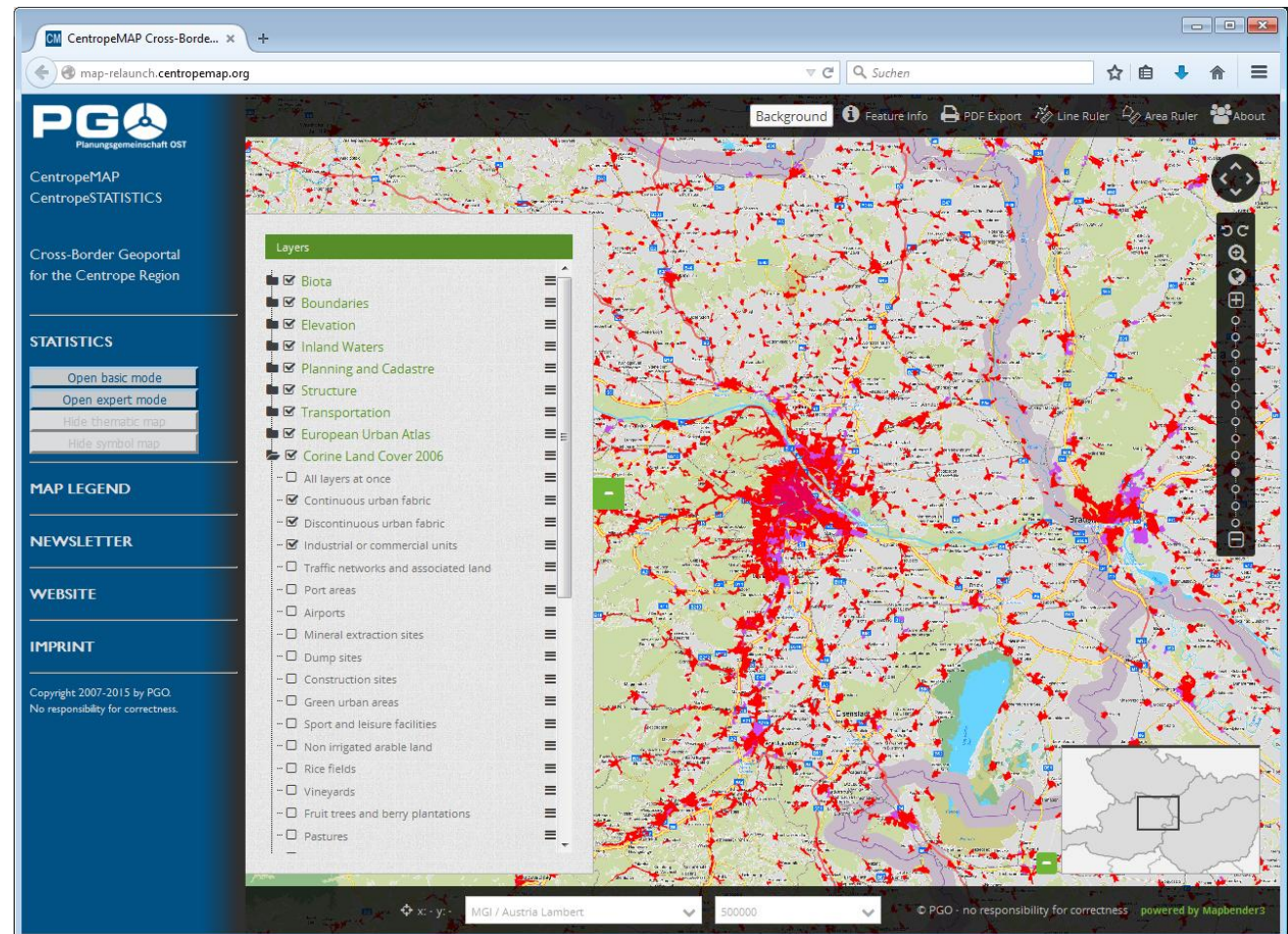
multi-language website:

- German
- English
- Hungarian
- Czech
- Slovak

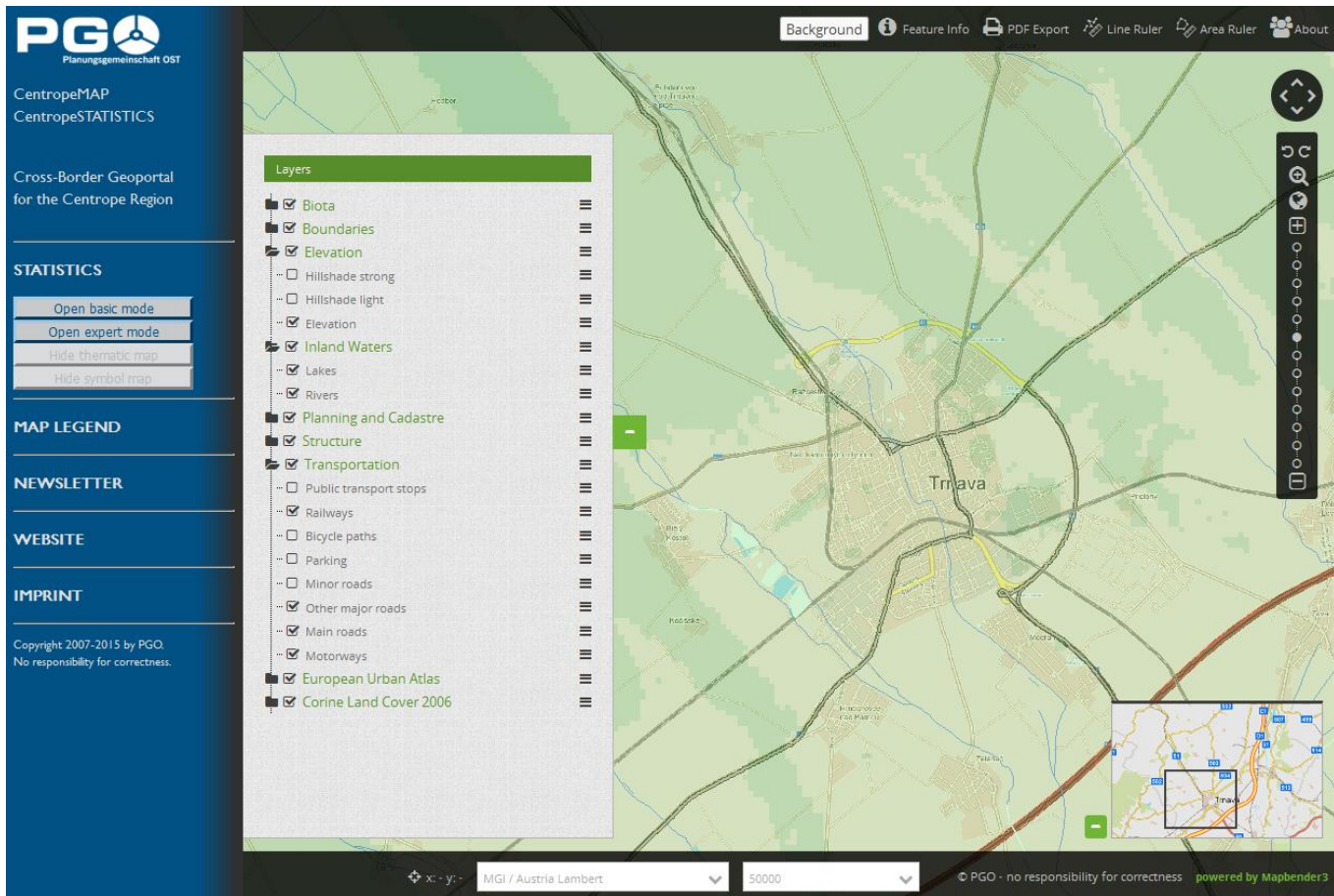
regular newsletter mailings (twice a year)

CentropeMAP Geoportal

- datasets come directly from project partners
→ no redundancy, always up-to-date
- functions: Zoom, Pan, Query, Search, Measurement
- hundreds of layers for the whole region and sub-regions
- background maps from simplified views to high-resolution satellite images and aerial views (ortho-photos)
- map generation on the fly



Examples



elevation, road network, railway network, urban fabric, inland waters

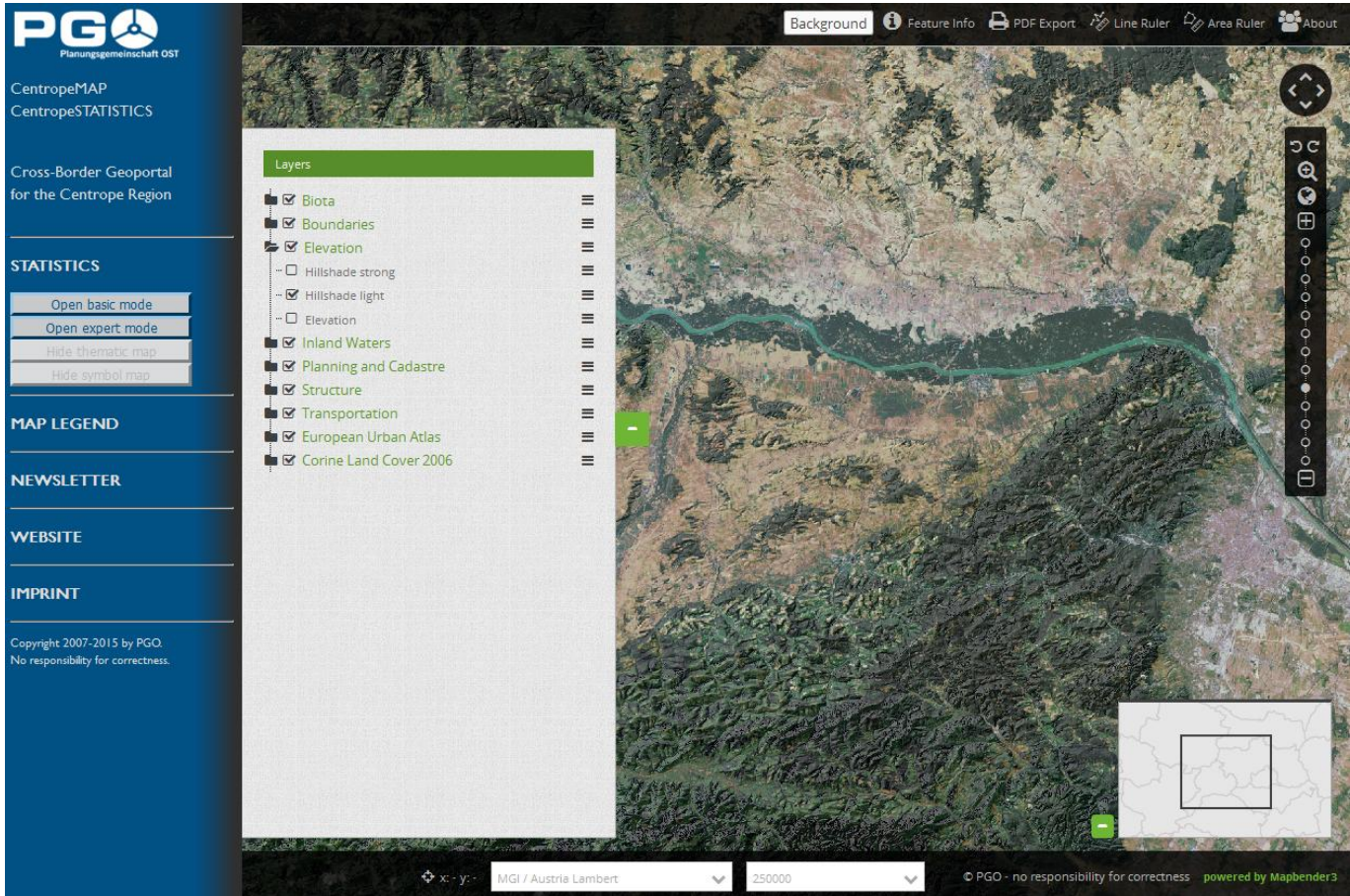
Examples

The screenshot displays the Centropemap web application interface. On the left is a dark blue sidebar with the PGO logo (Planungsgemeinschaft OST) and navigation links for Centropemap and CentropemapSTATISTICS. Below these are sections for 'Cross-Border Geoportal for the Centrope Region', 'STATISTICS' (with buttons for 'Open basic mode', 'Open expert mode', 'Hide thematic map', and 'Hide symbol map'), 'MAP LEGEND', 'NEWSLETTER', 'WEBSITE', and 'IMPRINT' (with copyright information: 'Copyright 2007-2015 by PGO. No responsibility for correctness.').

The main map area shows a satellite image with various planning layers overlaid. A 'Layers' panel on the left lists the following layers with checkboxes: Biota, Boundaries, Elevation, Inland Waters, Planning and Cadastre, Structure, Transportation, and European Urban Atlas. Under 'European Urban Atlas', several sub-layers are listed, including 'Continuous urban fabric', 'Discontinuous dense urban fabric', 'Discontinuous med. dens. urban fabric', 'Discontinuous low density urban fabric', 'Very low density urban fabric', 'Isolated structures', 'Industrial commercial public military private units', 'Fast transit roads and associated land', 'Other roads and associated land', 'Railways and associated land', 'Airports', 'Port areas', 'Mineral extraction and dump sites', 'Construction sites', 'Green urban areas', 'Land without current use', and 'Sports and leisure facilities'. The map also features a top toolbar with 'Background', 'Feature Info', 'PDF Export', 'Line Ruler', 'Area Ruler', and 'About' options. A vertical navigation toolbar on the right includes zoom and pan controls. At the bottom, there are coordinate fields (x: y:), a map projection dropdown (set to 'MGI / Austria Lambert'), a scale dropdown (set to '2500000'), and a footer with '© PGO - no responsibility for correctness powered by Mapbender3'.

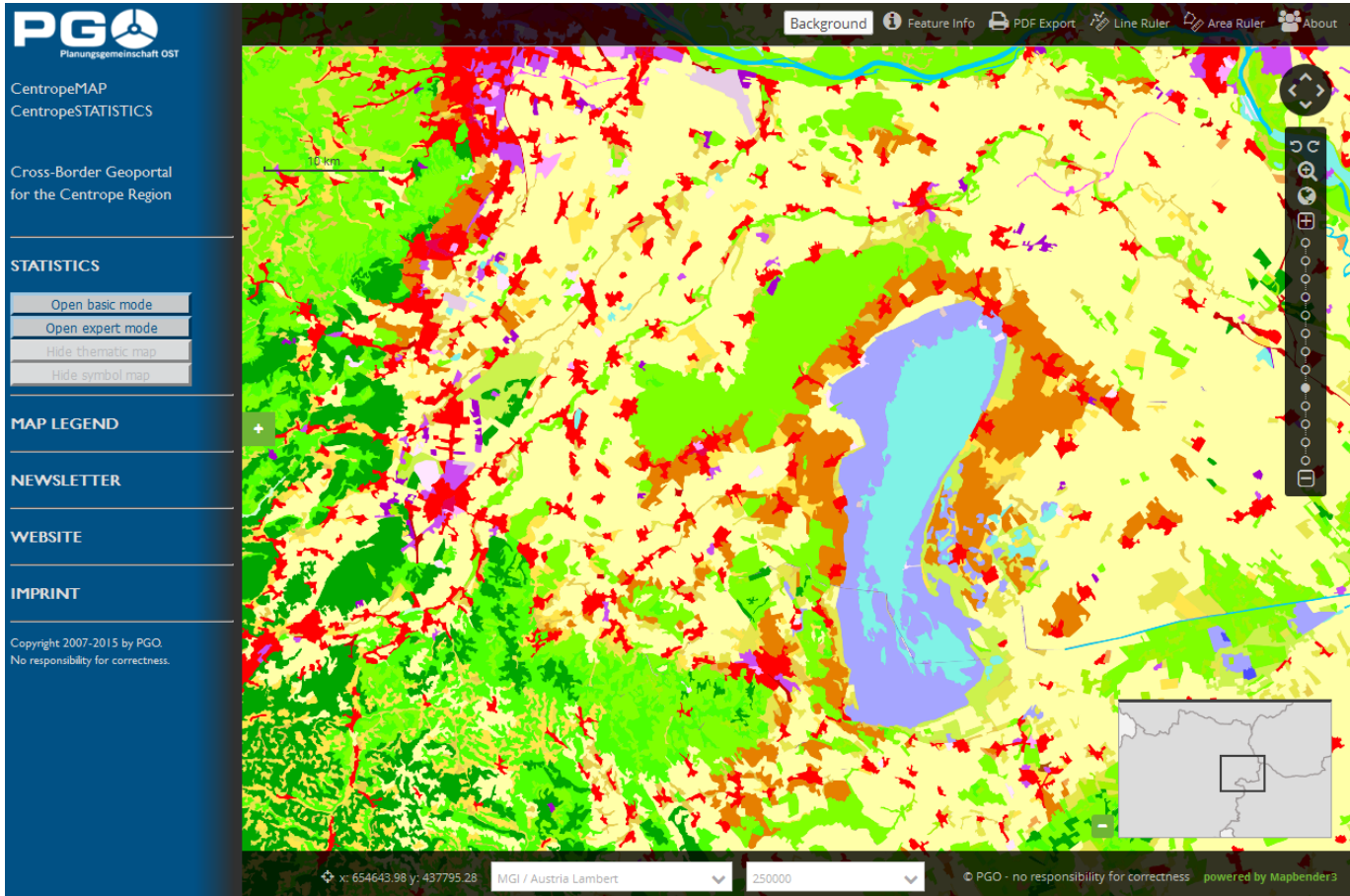
satellite image

Examples



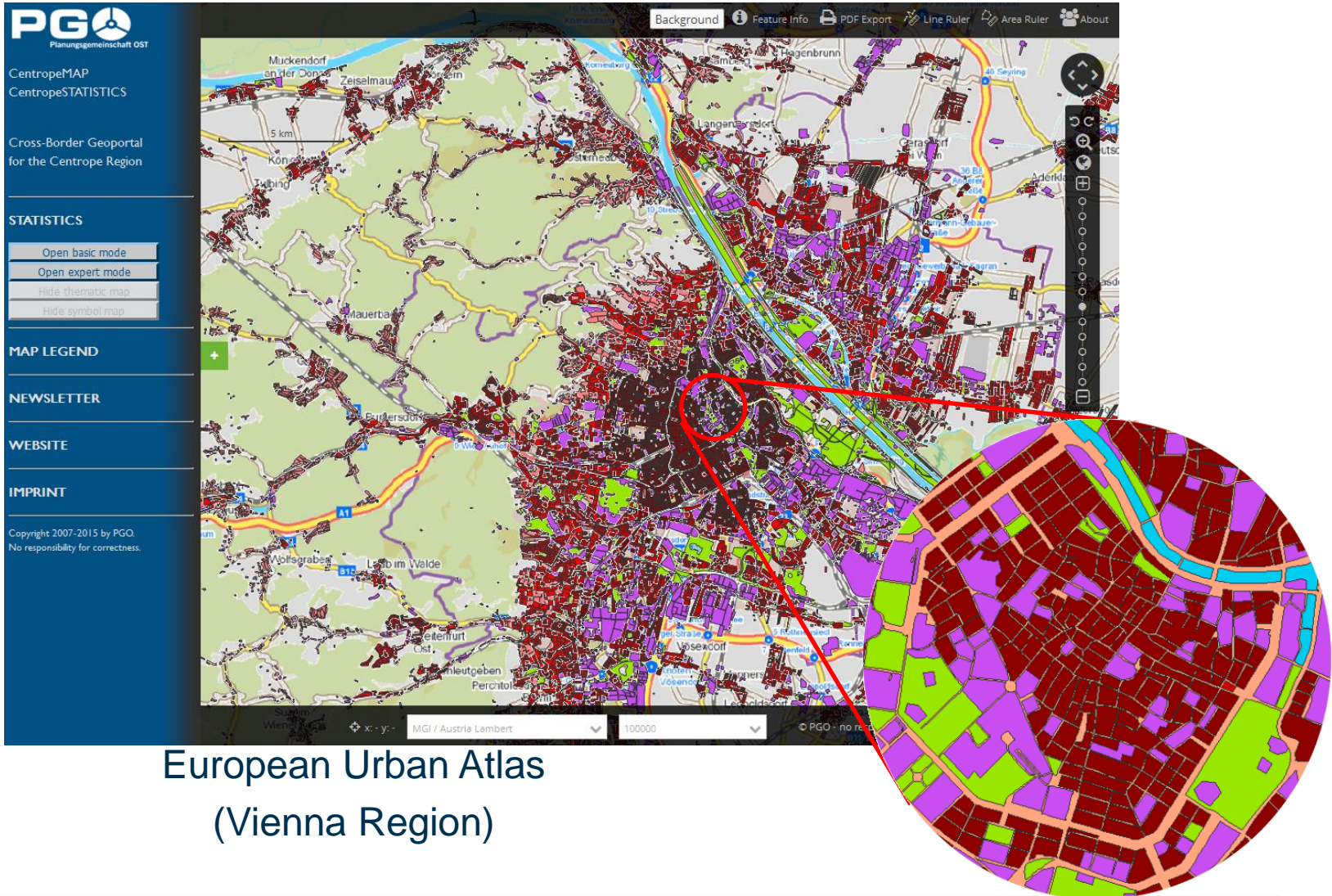
“3D view“ by semi-transparent hillshade over satellite image

Examples



Corine Land Cover Level 2 (Lake Neusiedl area)

Examples



European Urban Atlas
(Vienna Region)

CentropeSTATISTICS: Project Partners

CentropeSTATISTICS is a cross-border database project of these co-operating statistics offices/departments in the Centrope Region

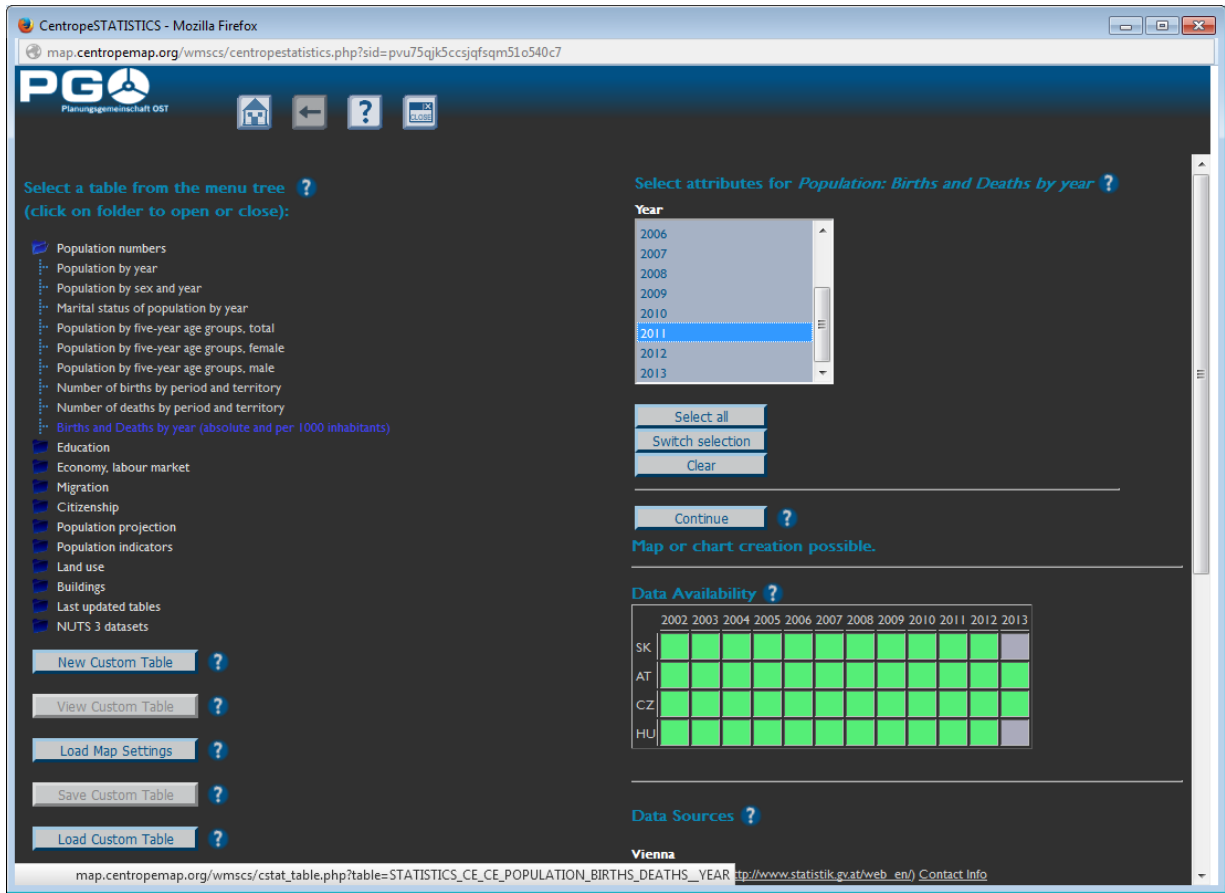
(on behalf of PGO – Planungsgemeinschaft Ost/Eastern Austrian Planning Association, and technically led by CORP – COnsulting Research Projects)

- **Czech Republic:** CZSO – Czech Statistical Office – Český statistický úřad (ČSÚ)
- **Slovak Republic:** Statistical Office of the SR – Štatistický úrad Slovenskej republiky
- **Hungary:** HCSO - Hungarian Central Statistical Office – KSH – Központi Statisztikai Hivatal
- **Austria:** Statistics Departments of the three Austrian federal states Burgenland, Lower Austria and Vienna

Workshops:
national meetings of Austrian statistician group
and international workshops
with partners from all countries (every year)



CentropeSTATISTICS-Funktionen



- Viele Daten in Zeitreihen verfügbar
- Karten- und Diagrammerzeugung
- benutzerdefinierte Steuerung von Inhalt und Layout
- Speicher- und Exportmöglichkeit
- Dynamische Datenbankabfragen

→ Kartenerzeugung on the fly

CentropeSTATISTICS-Benutzerschnittstelle

Centropemaps - Mozilla Firefox
map.centropemap.org/wmcs/centropestatistics.php?sid=pvu75qj5ccsqfsgm51o540c7

PGO
Planungsgemeinschaft OST

NUTS 3 Overview: Population density, dwellings, population by age groups

Statistics for Population density: ?

Count:	77
Minimum:	21
Mean:	222.377
Median:	90
Maximum:	3825
Variance:	365796.598
Std. Dev.:	604.811

Select

Method ?

Classes ?

Outline width ?

Outline colour ?

Colour ramp ?

Invert colour ramp ?

Labels ?

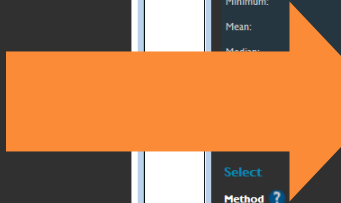
Label content ?

Label colour ?

?

?

Estimated loading time: 1-4 s ?



Centropemaps - Mozilla Firefox
map.centropemap.org/wmcs/centropestatistics.php?sid=pvu75qj5ccsqfsgm51o540c7

PGO
Planungsgemeinschaft OST

NUTS 3 Overview: Population density, dwellings, population by age groups **Preview ?**

Statistics for Population density: ?

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Outline colour ?

Colour ramp ?

Invert colour ramp ?

Labels ?

Label content ?

Label colour ?

?

?

Estimated loading time: 1-4 s ?

?

?

Legend

21 - 57
59 - 80
80 - 101
103 - 137
137 - 3825

→ Kartenerzeugung on the fly

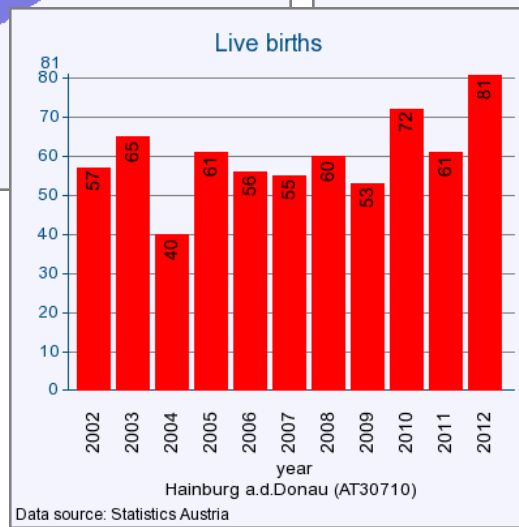
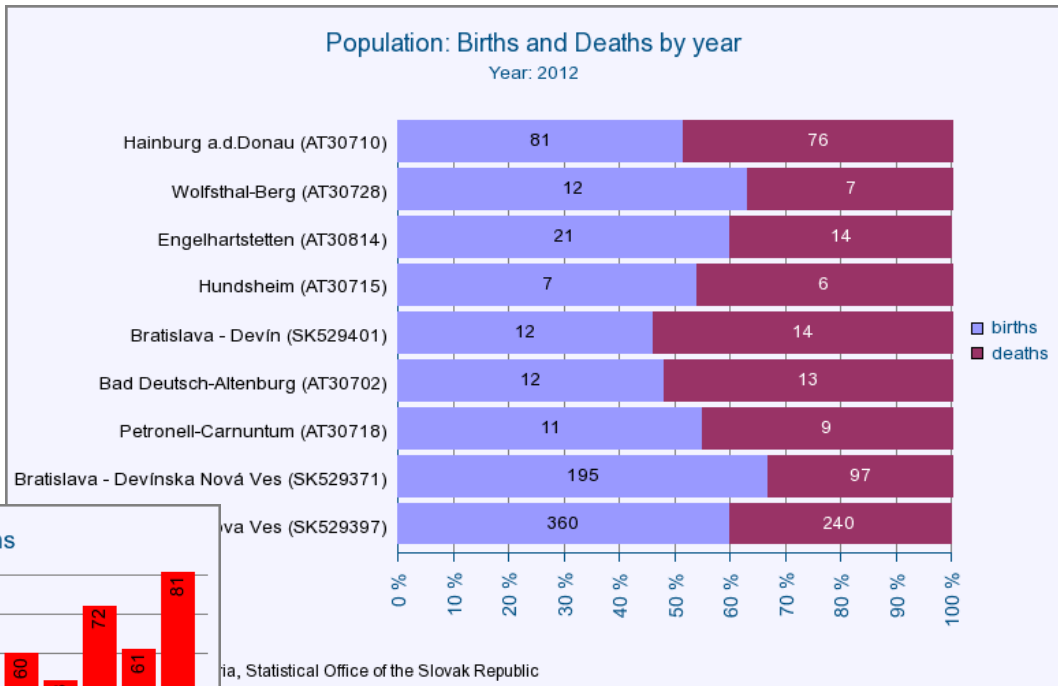
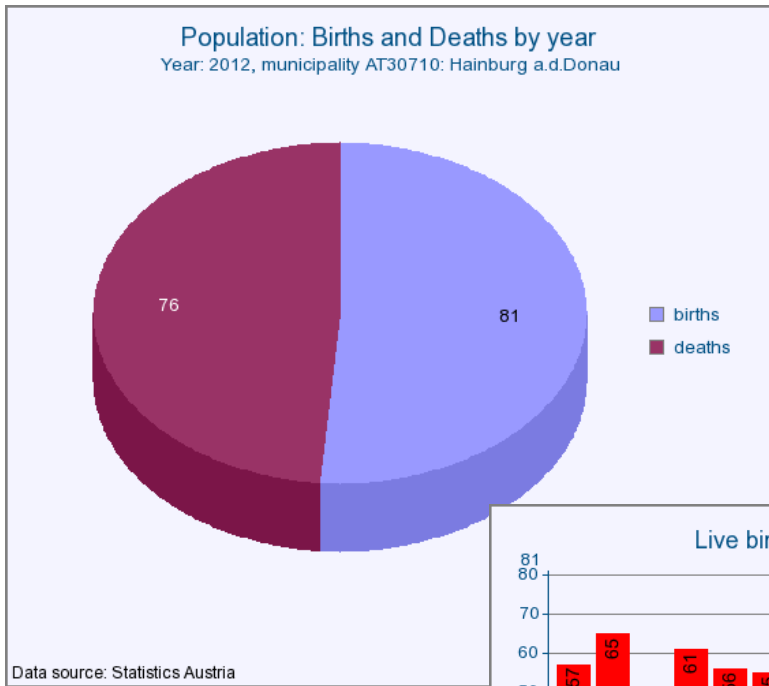
Census Data 2011

- Marital status of population by year
- Education of population by municipality
- Population by economic activity and year
- Breakdown of economically active population by type of activity
- Economically active persons by NACE sector of activity
- Commuters in and out by municipality
- Buildings per municipality by building period
- Population by Citizenship (AT, CZ, HU, SK, EU, other)
- to be continued...

code	name	year	population_total	Chart Pie chart age0_to_4	Chart Pie chart age5_to_9	Chart Pie chart age10_to_14	Chart Pie chart age15_to_19	Chart Pie chart age20_to_24	Chart Pie chart age25_to_29	Chart Pie chart age30_to_34	Chart Pie chart age35_to_39	Chart Pie chart age40_to_44
2159002	Serspöce	2011	769									
2159003	St. Leonhard	2011	769									
2159004	St. Leonhard	2011	769									
2159005	St. Leonhard	2011	769									
2159006	St. Leonhard	2011	769									
2159007	St. Leonhard	2011	769									
2159008	St. Leonhard	2011	769									
2159009	St. Leonhard	2011	769									
2159010	St. Leonhard	2011	769									
2159011	St. Leonhard	2011	769									
2159012	St. Leonhard	2011	769									
2159013	St. Leonhard	2011	769									
2159014	St. Leonhard	2011	769									
2159015	St. Leonhard	2011	769									
2159016	St. Leonhard	2011	769									
2159017	St. Leonhard	2011	769									
2159018	St. Leonhard	2011	769									
2159019	St. Leonhard	2011	769									
2159020	St. Leonhard	2011	769									
2159021	St. Leonhard	2011	769									
2159022	St. Leonhard	2011	769									
2159023	St. Leonhard	2011	769									
2159024	St. Leonhard	2011	769									
2159025	St. Leonhard	2011	769									
2159026	St. Leonhard	2011	769									
2159027	St. Leonhard	2011	769									
2159028	St. Leonhard	2011	769									
2159029	St. Leonhard	2011	769									
2159030	St. Leonhard	2011	769									
2159031	St. Leonhard	2011	769									
2159032	St. Leonhard	2011	769									
2159033	St. Leonhard	2011	769									
2159034	St. Leonhard	2011	769									
2159035	St. Leonhard	2011	769									
2159036	St. Leonhard	2011	769									
2159037	St. Leonhard	2011	769									
2159038	St. Leonhard	2011	769									
2159039	St. Leonhard	2011	769									
2159040	St. Leonhard	2011	769									

→ Harmonised Datasets for 4 Countries

CentropeSTATISTICS Charts



→ Live Chart Creation

- pie charts
- bar charts
- columns charts
- line charts
- point charts

Thank you for your attention!

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Clemens Beyer (beyer@corp.at)

www.centropemap.org