Geostatistics Portal

the multi-tool for statistics on maps

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Agenda

- Introduction
- Future developments
GEO.STAT.GOV.PL

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INSPIRE Conference 2013: “Geostatistics Portal – a platform for census data visualization”

What’s it for?

- statistical data geovisualization
- spatial data publishing
- network services (INSPIRE)
Statistical data visualization

Statistical data sources
- census results
- other sources (e.g. Local Data Bank [2009-now])

Aggregation levels
- country > NUTS 1 > NUTS 2 > NUTS 3 > LAU 1 > LAU 2
- country > region > voivodship > subregion > county > municipality

Cartographic presentation methods
- choropleth maps
- diagram maps
Spatial data

Spatial data produced within official statistics
- statistical regions
- census enumeration areas
- street network

INSPIRE services
- Statistical Units [SU]
- Population Distribution (Demography) [PD]
Cartographic presentation methods

• choropleth maps
• diagram maps
  – circle
    • proportional,
    • structural,
    • proportional & structural,
  – bar
    • proportional,
    • structural,
    • proportional & structural,
  – complex
Choropleth map

Classification methods
Number of classes
Colour scale
Transparency
Diagram maps
Spatial data publishing – statistical units
Network services – INSPIRE

Central Statistical Office of Poland is the authority responsible for two annex III spatial data themes:

- **Statistical units (SU)**
- **Population distribution (demography) (PD)**
INSPIRE services in the Geostatistics Portal

• discovery service – running,
• view service:
  – statistical units – running,
  – population distribution (demography) – running,
• download service:
  – statistical units – running, compliant with the data specification (GML),
  – population distribution (demography) – running, published in SHP, will be compliant with the data specification by the end of 2014,
• metadata
  – published for existing data sets and services.
FUTURE DEVELOPMENTS
Future developments

- Advanced spatial analysis on microdata
- Publishing statistical data on grids
- Population map on a level lower than LAU2
- Local Data Bank – full scope
- New cartographic presentation methods
- Tools for analysis of time series
- On-the-fly visualization of user-supplied data
- New INSPIRE services
- Mobile application
Advanced spatial analysis on microdata

All census data collected with reference to an address point.

Spatial analysis possible in any desired area.

Available for users within official statistics.
Advanced spatial analysis on microdata

Official statistics is in possession of enormous amounts of data at a very detailed level (address point).

Data cannot be distributed „as is” due to statistical confidentiality issues.

It is necessary to develop a tool that will allow statisticians to perform advanced spatial analyses and publish results that meet confidentiality requirements.

Official statistics is the only institution capable of creating such products:
- pool of experts with domain knowledge
- statistical data no other institution can process
Publishing statistical data on grids

GEOSTAT project

Merging statistical data and geospatial information
Local Data Bank – full scope

- A huge database with lots of historical statistical data
- Most data available for years 2003-2013
Population map on a level lower than LAU2

- cadastral units
- statistical regions
- census enumeration areas
New cartographic presentation methods

cartograms
Time series analysis

convenient and user-friendly way to analyze time series

• coexistence of territorial division borders for various years
Visualization of user-supplied data
New INSPIRE services

**SU**
- statistical grids

**PD**
- population data on grids

2015
Mobile application

iOS
Android
Windows Phone
Other plans

- a more user-friendly interface for thematic maps
  - on-the-fly modifications
- upgrade of the website’s CMS
  - W3C Web Content Accessibility Guidelines
- upgrade of the usage monitoring system
  - hit counters for specific webpages, modules, services
  - INSPIRE services monitoring
- tools for administrators
  - user management upgrade
  - language version manager
  - test environment
Geostatistics Portal – summary

access to a huge amount of data:
- census results,
- Local Data Bank

a variety of cartography presentation methods

INSPIRE compliant services

ambitious plans for the future
Geostatistics Portal
the multi-tool for statistics on maps

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