

BIOGRAPHICAL NOTE

PRESENTER EWA SURMA / MODERATOR

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Session Nº. | Building one access point to cadastral and
other data that may help the environment

Director of the Department of Strategy, International
Cooperation and Public Information in the Head Office of
Geodesy and Cartography

Master of Science, AGH University of Science and
Technology, postgraduate studies GIS: Jagiellonian
University in Cracow, University of Salzburg.

Working experience with INSPIRE implementing rules
(metadata, interoperability of spatial data sets and services,
data and service sharing).

Expert experience of Geospatial data management and
analysis; Experience of working internationally.

PHOTO





Building one access point to cadastral and other data that may help the environment

Head Office of Geodesy and Cartography 26th of May 2021
Ewa Surma on behalf of Surveyor General of Poland
Lisboa, 26 and 27 May 2021

Catastrophic changes on our planet



| | 1937 | 2020 |
|----------------------------------------|-------------|-------------|
| People in the world | 2,3 billion | 7,8 billion |
| Concentration of carbon dioxide | 280 ppm | 415 ppm |
| Area of wilderness | 66 % | 35 % |

More digitisation— documentation of land registration



The number of technical documentation in electronic form is systematically growing.

In April 2021, 41% was transferred to the resource in electronic form, which is a result of approx. 10% better than in the previous month.

The basic impulse for the increase in the number of electronic documentation was the change in Geodetic and Cartographic Law.

All surveys will be submitted to the resource only in electronic form. The introduction of an electronic survey is a very important task in the computerization of geodesy, because in this way we avoid over a million paper documents in circulation

In 2020 it was submitted in total 1 013 399 documents



The electronic documentation of land surveying works is a benefit for the contractors of surveying works, easy to prepare files, quick transfer.

The electronic document does not transmit the virus (!)

Immediate publication on the internet for other land surveyors

More digitisation— documentation of land registration



According to our regulation only until 31 of December this year it is allowed to produce paper documentation on land surveying works.

The electronic documentation is applicable



Computerization of the service of geodetic works (communication with contractors, electronic survey document).

Computerization of the investment process by introducing a numerical form of a map for design purposes and a numerical form of as-built inventory.



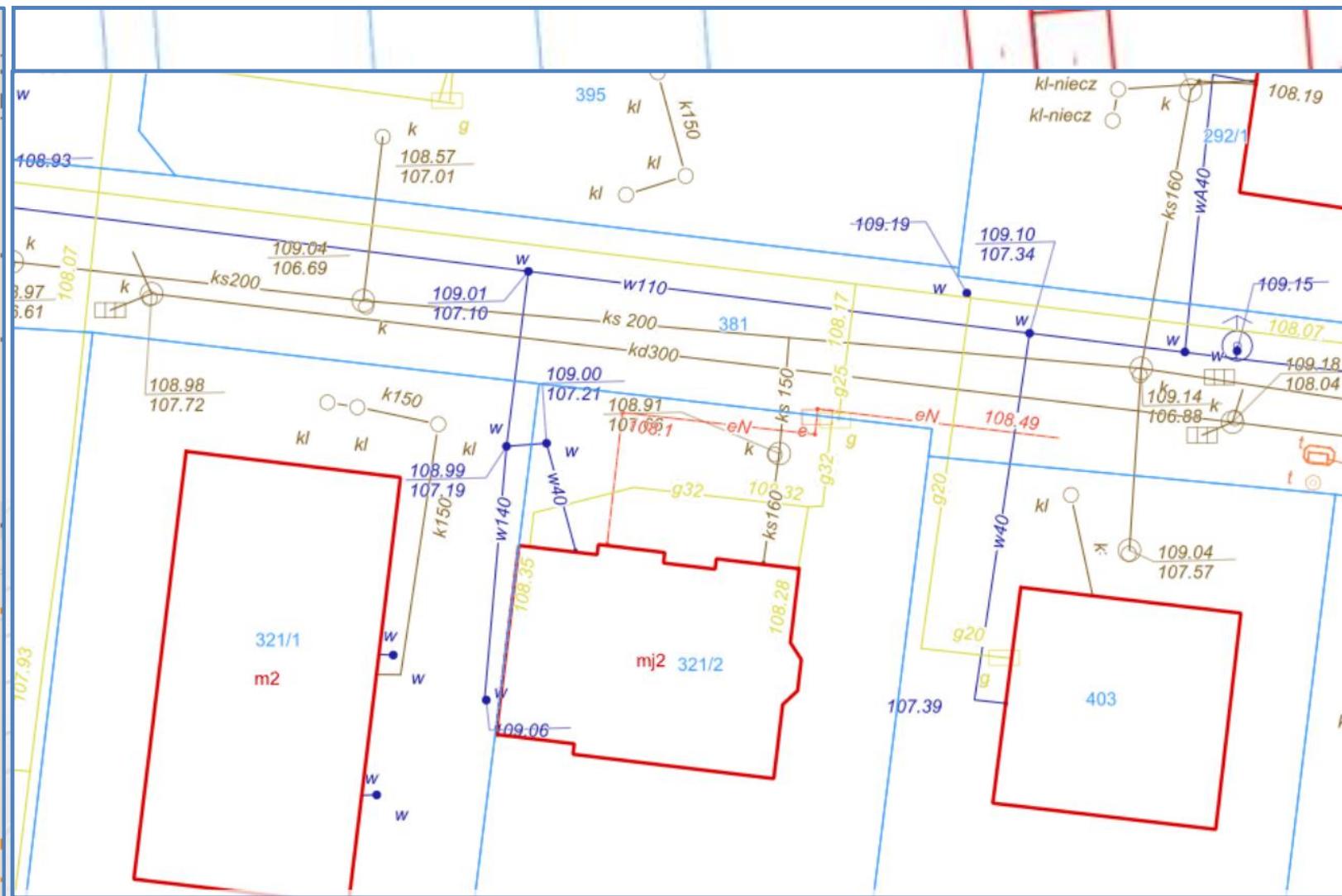
Integrated services



Map contents **Legend**

Expand information on all layers

- +    National Register of Boundaries
- +    National Register of Boundaries - Adresses
- +    Integration of cadastral data
- +    Integration of utilities networks
- +   Integration of local development plans
- +    Districts
- +   Grids and coordinate systems
- +   Points of interest
- +   Data of other organisations
- +   Landform
- +   Data for download
- +   Data aquisition status
- +   Indexes
- +   Topographic maps
- +    Orthophotomaps



Complete spatial information about any place in Poland



Value added - combining different data sets



Three screenshots of the geoportal.gov.pl interface showing the integration of various data sets:

- Top Left:** A map view showing a network of blue lines (likely roads or boundaries) and red dashed rectangles representing flood threat zones. The map is overlaid with a grid.
- Top Right:** A map view showing a large blue area representing flood threat zones. The map is overlaid with a grid.
- Bottom Center:** A detailed map view showing a large blue area representing flood threat zones. The map is overlaid with a grid. The interface includes a legend on the right and a status bar at the bottom.

Legend (Visible in Bottom Center Screenshot):

- Grids and coordinate systems
- Points of interest
- Data of other organisations
 - Institute of Meteorology and Water Management
 - Polish Geological Institute
 - General Directorate for National Roads and
 - National Water Management Authority
 - Plain parts of water
 - Initial flood danger
 - Flood threat map
- Statistics Poland
- National Heritage Board of Poland
- Ministry of Health
- Office of Rail Transport
- Polish Railways S.A.
- Agency for Restructuring and Modernisation
- General Directorate for Environmental
- General Directorate of State Forests
- The Polish Social Insurance Institution
- Landform
- Data for download
- Data aquisition status
- Indexes
- Topographic maps
- Orthophotomap

Status Bar (Bottom Center Screenshot):

- 1.075s National geoportal Loaded
- 0.242s National geoportal Loaded
- 1.023s National geoportal Loaded

Map Coordinate System and Scale:

Map coordinate system 1992 (EPSG 2180) X: 419265.10 Y: 678908.10 N: 51°36'41" E: 21°35'5.04" Current scale 1:5000

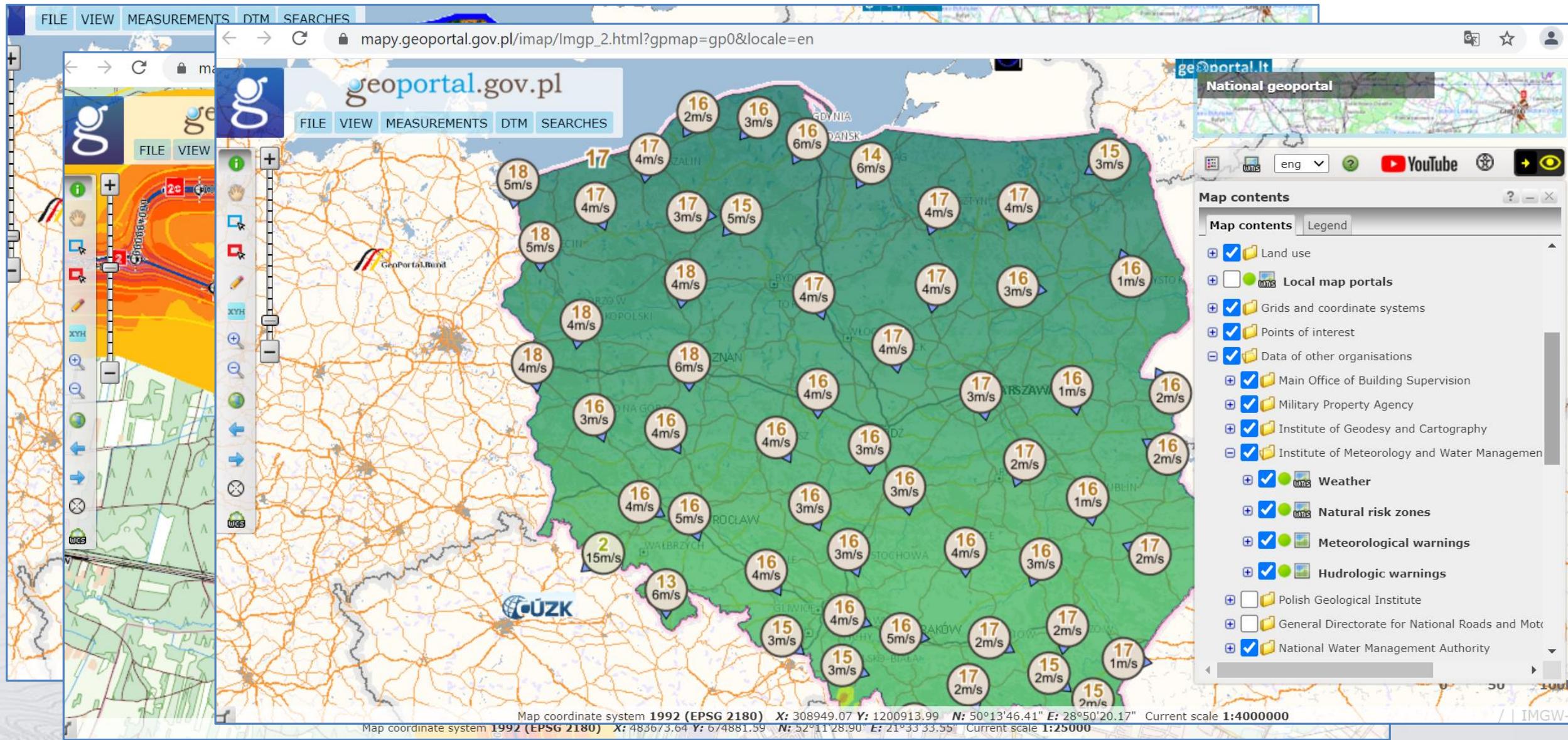
Value added – combining different data sets



The figure shows a screenshot of the geoportal.gov.pl website, specifically the 'Integration of cadastral data' and 'Integration of utilities networks' layers. The main view displays a 3D terrain model with a blue network overlay, likely representing roads or utility lines. Red square markers are scattered across the network, indicating specific points of interest. The left side of the interface shows a vertical toolbar with various icons for file operations, measurements, and coordinate entry. The top navigation bar includes the geoportal.gov.pl logo, a search bar, and a 'National geoportal' button. On the right, there is a 'Map contents' panel listing various data layers, many of which are checked (e.g., 'Integration of cadastral data', 'Integration of utilities networks', 'Landform', 'Digital Terrain Model'). The bottom of the screen shows a status bar with map coordinates (X: 219494.62, Y: 607856.86, N: 49°49'59.09", E: 20°30'00.95") and a current scale (1:5000).



Environmental data

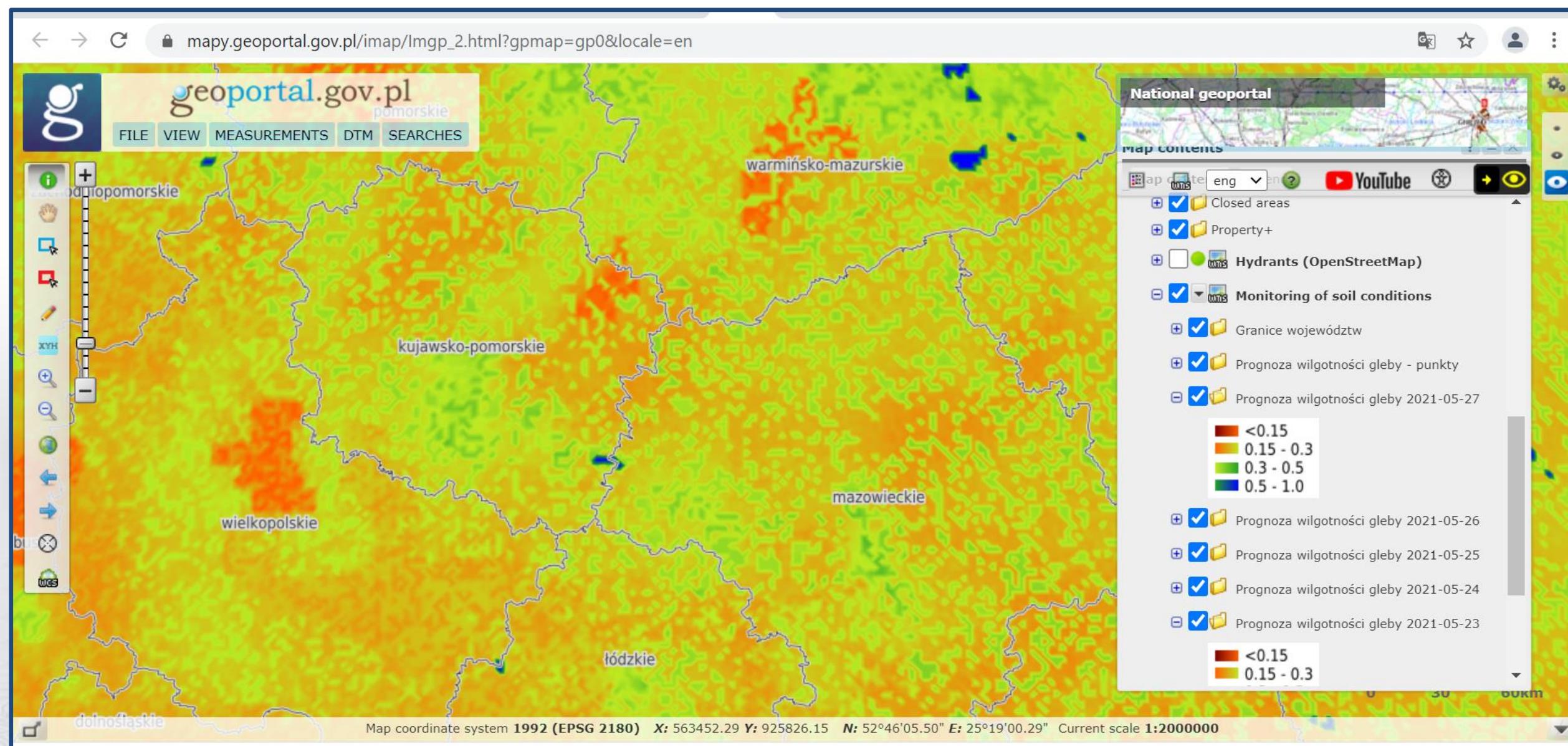




Monitoring of soil condition



mapy.geoportal.gov.pl/imap/Imgp_2.html?gpmap=gp0&locale=en





Exclusion zones around wind turbines



mapy.geoportal.gov.pl/imap/Imgp_2.html?gpmap=gp0&locale=en

geoportal.gov.pl

FILE VIEW MEASUREMENTS DTM SEARCHES

Map contents

- Integration of cadastral data
- Integration of utilities networks
- Topographic objects
- Land use
- Integration of local development plans
- Study of land use
- Exclusion zones around wind turbines
- Turbiny wiatrowe
- Turbiny wiatrowe - strefy wyłączone
- Local map portals
- Grids and coordinate systems
- Points of interest
- Data of other organisations
- Main Office of Building Supervision

0.683s National geoportal Loaded
0.674s National geoportal Loaded
0.002s National geoportal Loaded

Map coordinate system 1992 (EPSG 2180) X: 602637.16 Y: 454258.33 N: 53°17'12.93" E: 18°18'49.12" Current scale 1:1000000

Integration of local development plans



← → C 🔍 mapy.geoportal.gov.pl/imap/Imgp_2.html?gpmap=gp0&locale=en



geoportal.gov.pl

FILE VIEW MEASUREMENTS DTM SEARCHES

National geoportal

WMS eng ? YouTube

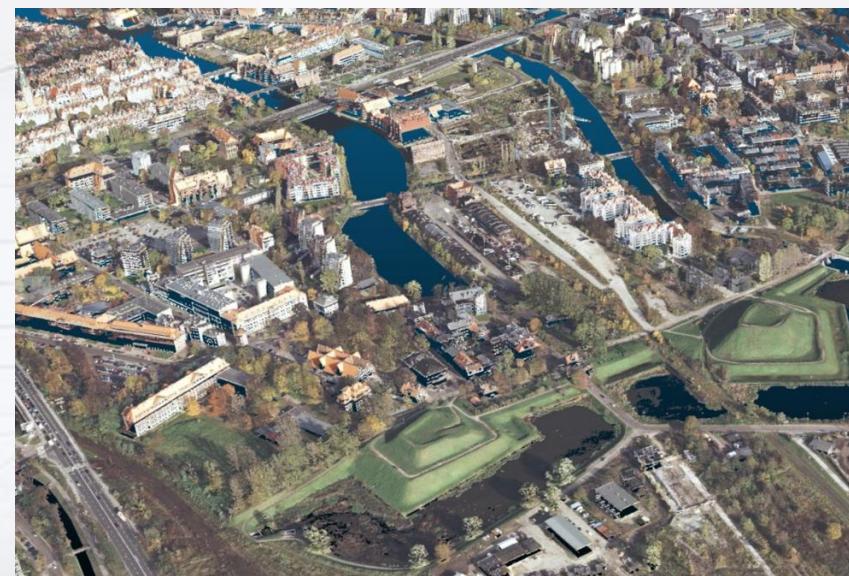
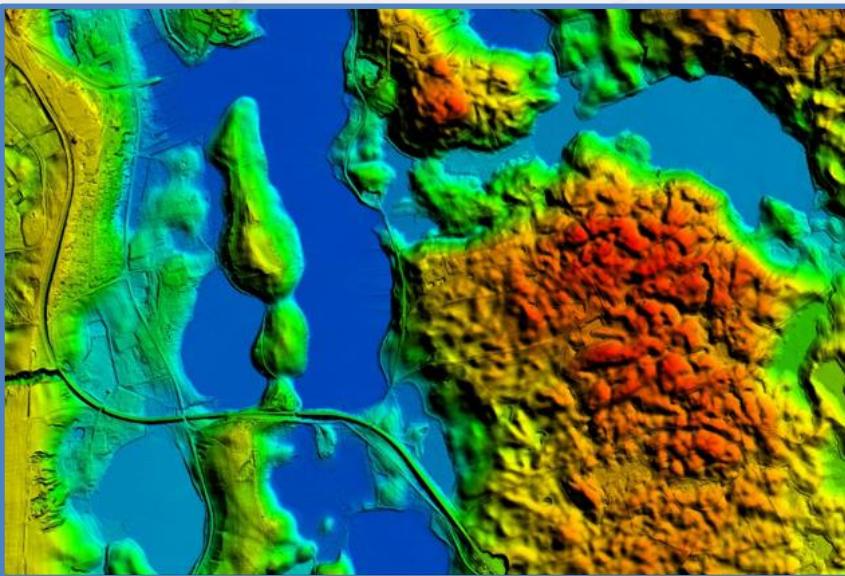
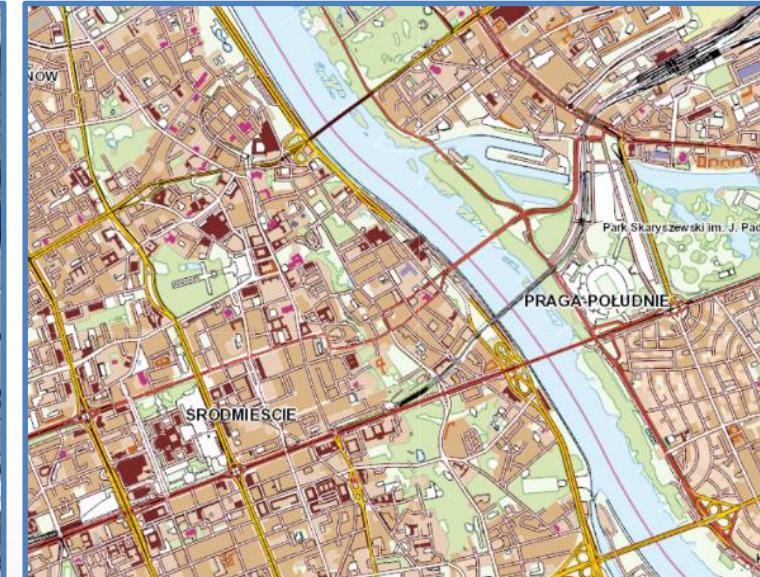
Map contents

Map contents Legend

- Adresses and streets
- Real estate prices
- Integration of cadastral data
- Integration of utilities networks
- Topographic objects
- Land use
- Integration of local development plans
 - Granice planów
 - Plany wektorowe-Obiekty punktowe
 - Plany wektorowe-Obiekty liniowe
 - Plany wektorowe-Obiekty powierzchniowe
 - Plany wektorowe-Linie zabudowy
 - Plany wektorowe-Strefy
 - Plany rasterowe



Open data





Easy access to data



integracja.gugik.gov.pl/ezidup/

Ewidencja zbiorów danych

TERYT: Typ jednostki Nazwa jednostki/organu Fraza w nazwie

| Lp. | Identyfikator zbioru danych | Organ zgłoszający | Nazwa zbioru danych | TERYT | Dostępne usługi |
|-----|-----------------------------|---------------------------------------|------------------------------|-------|----------------------------------------|
| 1 | PL.PZGiK.1 | Starosta Powiatu Krakowskiego | Ewidencja gruntów i budynków | 1206 | |
| 2 | PL.PZGiK.2 | Prezydent Miasta Piekar Śląskie | Ewidencja gruntów i budynków | 2471 | wyszukiwania, przeglądania |
| 3 | PL.PZGiK.3 | Prezydent Miasta Białegostoku | Ewidencja gruntów i budynków | 2061 | |
| 4 | PL.PZGiK.4 | Starosta Powiatu Milickiego | Ewidencja gruntów i budynków | 0213 | wyszukiwania |
| 5 | PL.PZGiK.5 | Starosta Bielski | Ewidencja gruntów i budynków | 2402 | przeglądania |
| 6 | PL.PZGiK.6 | Starosta Powiatu Trzebnickiego | Ewidencja gruntów i budynków | 0220 | wyszukiwania, przeglądania, pobierania |
| 7 | PL.PZGiK.7 | Starosta Powiatu Mieleckiego | Ewidencja gruntów i budynków | 1811 | wyszukiwania, przeglądania, pobierania |
| 8 | PL.PZGiK.8 | Starosta Powiatu Gnieźnieńskiego | Ewidencja gruntów i budynków | 3003 | przeglądania, pobierania |
| 9 | PL.PZGiK.9 | Starosta Powiatu Wrzesińskiego | Ewidencja gruntów i budynków | 3030 | wyszukiwania, przeglądania, pobierania |
| 10 | PL.PZGiK.10 | Prezydent Miasta Stołecznego Warszawy | Ewidencja gruntów i budynków | 1465 | przeglądania, pobierania |
| 11 | PL.PZGiK.11 | Starosta Zielonogórski | Ewidencja gruntów i budynków | 0809 | przeglądania, pobierania |
| 12 | PL.PZGiK.12 | Starosta Powiatu Żuromińskiego | Ewidencja gruntów i budynków | 1437 | wyszukiwania, przeglądania |
| 13 | PL.PZGiK.13 | Starosta Powiatu Namysłowskiego | Ewidencja gruntów i budynków | 1606 | wyszukiwania, przeglądania, pobierania |
| 14 | PL.PZGiK.14 | Starosta Powiatu Gierałtowskiego | Ewidencja gruntów i budynków | 2403 | wyszukiwania, przeglądania |

Przeglądarka

- Ulubione
- Zakładki przestrzenne
 - Zakładki użytkownika
 - Zakładki w projekcie
- Home
 - .matplotlib
 - 3D Objects
 - Contacts
 - Desktop
 - Documents
 - Downloads
 - ezdpuw
 - Favorites
 - ...

Warstwy

ewns:budynki

ewns:dzialki

Szukana fraza (Ctrl+K)

Współrzędne 665433.7,282852.2 Skala 1:4804 Powiększenie 100% Obrót 0,0°



Easy access to data



https://mapy.geoportal.gov.pl/imap/Imgp_2.html?gpmap=gp0&locale=en

FILE VIEW MEASUREMENTS DTM SEARCHES

7.177.24.11 7.177.25.11

7.177.24.12 7.177.25.12 N-34-128-C-c-1-1 7.177.25.13

7.177.24.20 7.177.25.16 7.177.25.17 7.177.25.18

Stasinów Jazwie 7.177.25.22 7.177.25.23

N-34-127-D-d-2-3 7.177.24.25 7.177.25.21 7.177.25.24

Franciszków 7.177.25.22 2017 RGB

Pobierz plik danych dla tej sekcji

Godło 7.177.25.22

Aktualność 2017/07/14

Wielkość piksela 0.25

Układ współrzędnych PL-2000:S7

N-34-127-D-d-4-1 7.176.24.05 7.176.25.03

Miedzypole 7.176.25.02 7.176.25.08

N-34-128-C-c-3-1 7.176.25.09

7.177.24.10

National geoportal

Map contents

Coronavirus

Data for download

Orthoimagery

Based on data acquisition data

Based on pixel size

Digital Elevation Model

Digital Terrain Model

LIDAR measurements

Basic Geodetic Network

State Boundary Register

Data BDOO

Topographical database

3D Models of buildings

National Register of Boundaries

Adresses and streets



Easy access to data – WCS services



mapy.geoportal.gov.pl/imap/lmpg_2.html?gpmap=gp0&locale=en

geoportal.gov.pl

FILE VIEW MEASUREMENTS DTM SEARCHES

HighResolution (3) - Przeglądarka fotografii systemu Windows

Plik Drukuj Poczta e-mail Nagraj Otwórz

mapy.geoportal.gov.pl

FILE VIEW MEASUREMENT

i XYH WCS

Pobierz dane z usługi WCS

Map coordinate system 1992 (EPSG 2180) X: 243299.66 Y: 567016.91 N: 50°03'11.46" E: 19°56'11.17" Current scale 1:2000

Orthoimagery – time slider



mapy.geoportal.gov.pl/imap/lmpg_2.html?gpmap=gp0&locale=en

geoportal.gov.pl

FILE VIEW MEASUREMENTS DTM SEARCHES

Orthoimagery

Time slider

Map coordinate system 1992 (EPSG 2180) X: 745288.32 Y: 467280.05 N: 54°34'13.37" E: 18°02'29"

National geoportal

YouTube

Map contents

General

Map coordinate system 1992 (EPSG 2180) X: 745320.07 Y: 467710.00 N: 54°34'14.49" E: 18°30'01.39" Current scale 1:5000

Orthoimagery

Time slider

Map coordinate system 1992 (EPSG 2180) X: 745288.32 Y: 467280.05 N: 54°34'13.37" E: 18°02'29"

National geoportal

YouTube

Map contents

General

Map coordinate system 1992 (EPSG 2180) X: 745320.07 Y: 467710.00 N: 54°34'14.49" E: 18°30'01.39" Current scale 1:5000

Map coordinate system 1992 (EPSG 2180) X: 745320.07 Y: 467710.00 N: 54°34'14.49" E: 18°30'01.39" Current scale 1:5000



Many online meeting and trainings sessions

Expert SDI Trainings

Stage I: 2017 - 2018 => GUGiK in partnership

- 654 participants from regional public administration
- 182 public institutions
- 50 trainings – 3 days/22 h
- 2/3 of time for computer based workshops
- 10 locations

Expert SDI Trainings

Stage II: 2020-2021 on-line training GUGiK

- 1100 participants
- On-line training (5days/4h)
- Voivodship Marshal officers
- County officers
- Commune office workers

Basic INSPIRE Trainings

- 70 participants
- Central administration officers
- INSPIRE administration officers

The key is to teach the society to use SDI !

Geoportal.gov.pl – visits



← → C  widok.gov.pl/statistics/geoportal-krajowy/



Home



Services



Traffic



Analyses



RWeb



Data sources



API - token



Changelog

 widok.gov.pl 

POLSKI



Traffic: Geoportal Krajowy (<http://mapy.geoportal.gov.pl/imap/>)

Pageviews

Annual



| Year | Pageviews |
|------|-----------|
| 2017 | 1.64M |
| 2018 | 3.87M |
| 2019 | 3.98M |
| 2020 | 5.48M |
| 2021 | 3.24M |

Monthly

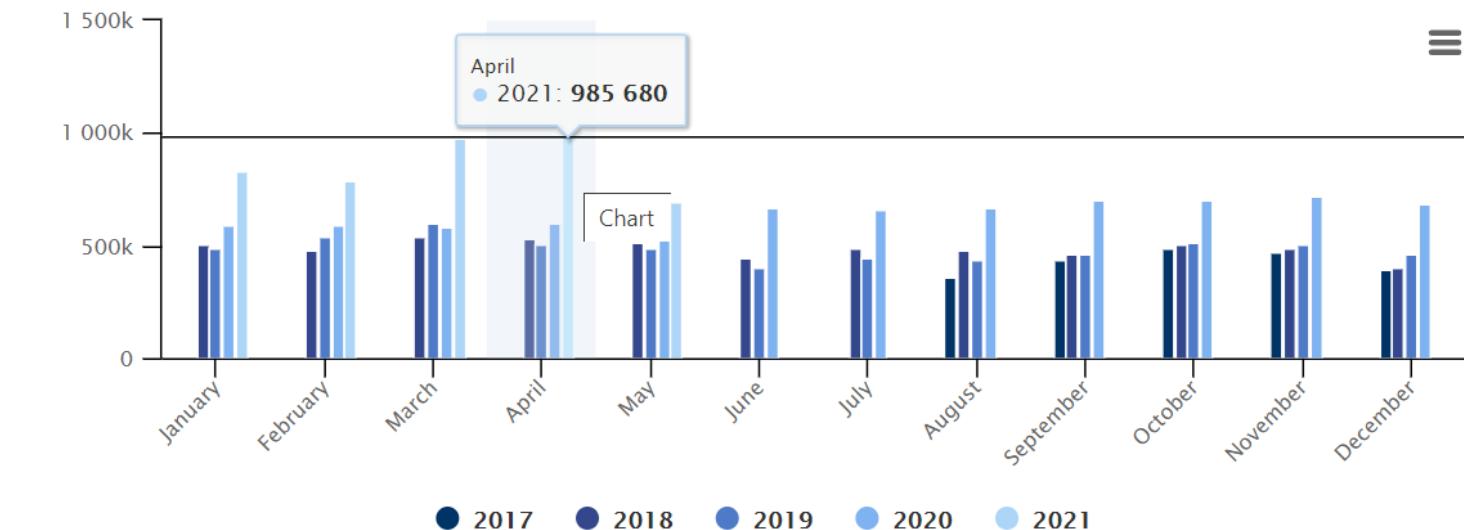


Chart type

Doughnut

Summary



- 1. In our field we create many solutions that may help to raise the awareness on the environment.**
- 2. The spatial data infrastructure is a very important element of the state information infrastructure, as it significantly facilitates management and at the same time supports the development of an information society.**
- 3. Release all relevant geodetic data resources from voivodship and central level, such as topographic data BDOT10k, Digital Terrain Model, LIDAR data, orthophotomap. (no paper applications needed any more...)**
- 4. Integrated services for cadastre with easy access for downloading other data**



Thank you for your attention !

geoportal.gov.pl