



“Cadastre - Contributions for a low carbon economy and society” Joint PCC and EuroGeographics CLRKEN Webinar



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 bilion	7,8 bilion
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.

Value added - combining different data sets



geoportal.gov.pl

Map contents

- Integration of
- Integration of
- Integration of
- Grids and coordinat

National geoportal

geoportal.gov.pl

Map contents

- 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 acquisition status
- Indexes
- Topographic maps
- Orthophotmap

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 screenshot displays the National Geoportal interface. The main map area shows a 3D perspective view of a terrain with a Digital Terrain Model (DTM) overlaid. The DTM is represented by a grey shaded relief. Overlaid on the DTM are several data layers: a blue vector map showing cadastral boundaries and buildings, and red rectangular markers indicating specific points of interest or data integration. The interface includes a top navigation bar with the logo and menu options (FILE, VIEW, MEASUREMENTS, DTM, SEARCHES). A right-hand panel titled 'Map contents' lists various data layers with checkboxes for selection. The status bar at the bottom provides map coordinate information and scale.

Map coordinate system 1992 (EPSG 2180) X: 219494.62 Y: 607856.86 N: 49°49'59.09" E: 20°30'00.95" Current scale 1:5000

Map contents

- National Register of Boundaries
- Adresses and streets
- Integration of cadastral data
- Integration of utilities networks
- Topographic objects
- Integration of local development plans
- Real estate prices
- Local map portals
- Grids and coordinate systems
- Points of interest
- Data of other organisations
- Landform
- Digital Terrain Model 1m x 1m
 - Digital Terrain Model
 - Relief REST(hillshade)

Environmental data



FILE VIEW MEASUREMENTS DTM SEARCHES

mapy.geoportal.gov.pl/imap/lmgp_2.html?gpmmap=gp0&locale=en

geoportal.gov.pl

FILE VIEW MEASUREMENTS DTM SEARCHES

National geoportal

eng YouTube

Map contents

Map contents Legend

- Land use
- Local map portals
- Grids and coordinate systems
- Points of interest
- Data of other organisations
 - Main Office of Building Supervision
 - Military Property Agency
 - Institute of Geodesy and Cartography
 - Institute of Meteorology and Water Management
- Weather
- Natural risk zones
- Meteorological warnings
- Hydrologic warnings
- Polish Geological Institute
- General Directorate for National Roads and Mot
- National Water Management Authority

Map coordinate system 1992 (EPSG 2180) X: 308949.07 Y: 1200913.99 N: 50°13'46.41" E: 28°50'20.17" Current scale 1:4000000

Map coordinate system 1992 (EPSG 2180) X: 483673.64 Y: 674881.59 N: 52°11'28.90" E: 21°33'33.55" Current scale 1:25000

Monitoring of soil condition



maps.geoportal.gov.pl/imap/lmgp_2.html?gpmap=gp0&locale=en

geoportal.gov.pl

FILE VIEW MEASUREMENTS DTM SEARCHES

National geoportal

map contents

- map contents eng
- YouTube
- Closed areas
- Property+
- Hydrants (OpenStreetMap)
- Monitoring of soil conditions
 - Granice województw
 - Prognoza wilgotności gleby - punkty
 - Prognoza wilgotności gleby 2021-05-27
 - <0.15
 - 0.15 - 0.3
 - 0.3 - 0.5
 - 0.5 - 1.0
 - Prognoza wilgotności gleby 2021-05-26
 - Prognoza wilgotności gleby 2021-05-25
 - Prognoza wilgotności gleby 2021-05-24
 - Prognoza wilgotności gleby 2021-05-23
 - <0.15
 - 0.15 - 0.3

Map coordinate system 1992 (EPSG 2180) X: 563452.29 Y: 925826.15 N: 52°46'05.50" E: 25°19'00.29" Current scale 1:2000000

Exclusion zones around wind turbines



← → ↻ mapy.geoportal.gov.pl/imap/lmgp_2.html?gmap=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

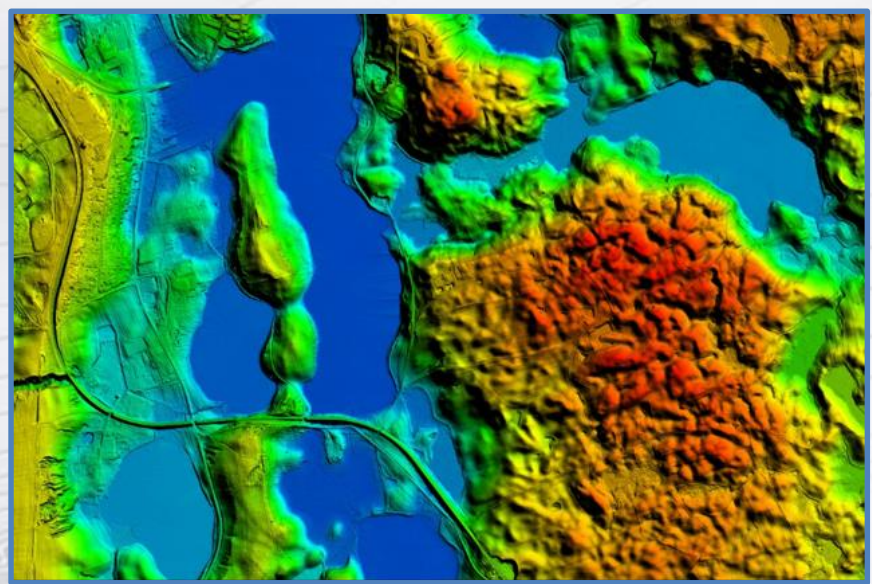
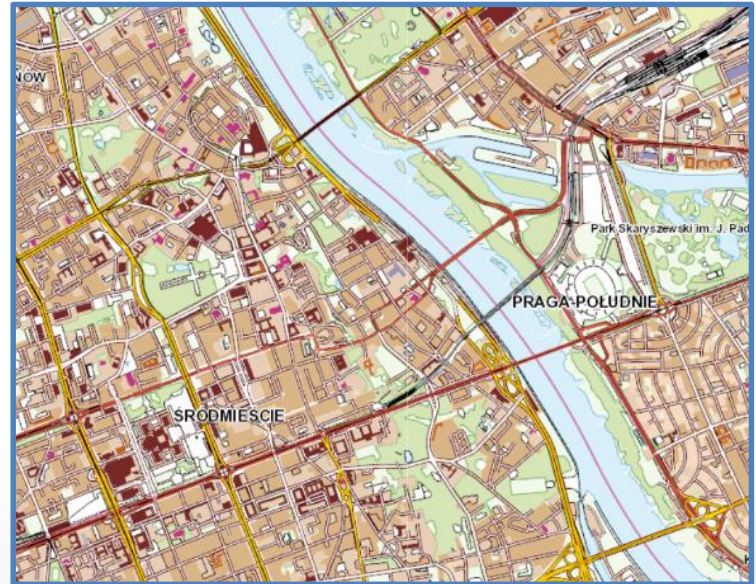
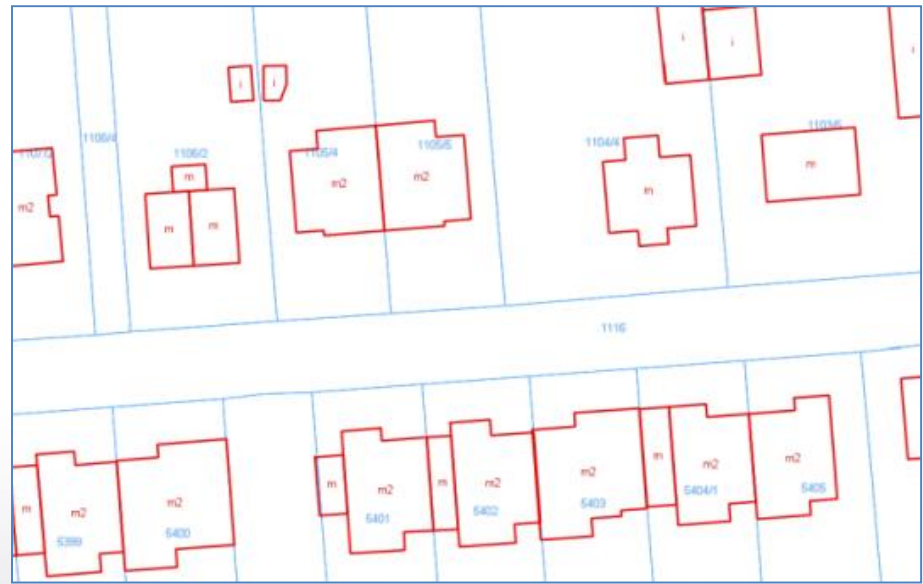
Map coordinate system 1992 (EPSG 2180) X: 602637.16 Y: 454258.33 N: 53°17'12.93" E: 18°18'49.12" Current scale 1:1000000

0.683s National geoportal Loaded

0.674s National geoportal Loaded

0.002s National geoportal Loaded

Open data



Easy access to data



integracja.gugik.gov.pl/eziudp/

Ewidencja zbioru danych

TERYT: Typ jednostki Nazwa jednostki/organu Fraza w nazwie

Lp.	Identyfikator zbioru danych	Organ zgłaszający	Nazwa zbioru danych	TERYT	Dostępne usługi
1	PL.PZGIK.1	Starosta Powiatu Krakowskiego	Ewidencja gruntów i budynków	1206	
2	PL.PZGIK.2	Prezydent Miasta Piekary 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 Zuoromińskiego	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 Cieszyńskiego	Ewidencja gruntów i budynków	2403	wyszukiwania, przeglądania

*Projekt bez nazwy — QGIS

Projekt Edycja Widok Warstwa Ustawienia Wtyczki Wektor Raster Bazy danych W internecie Siatka Processing Pomoc GIS Support

Przeglądarka

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

Warstwy

- ewns:budynki
- ewns:dzialki

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

Easy access to data



geoportal.gov.pl

FILE VIEW MEASUREMENTS DTM SEARCHES

National geoportal

eng YouTube

Map contents

Expand layers info

- 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
- Addresses and streets

Aktualność 2017 i starsze

7.177.25.22 2017 RGB

[Pobierz plik danych dla tej sekcji](#)

Godło
7.177.25.22

Aktualność
2017/07/14

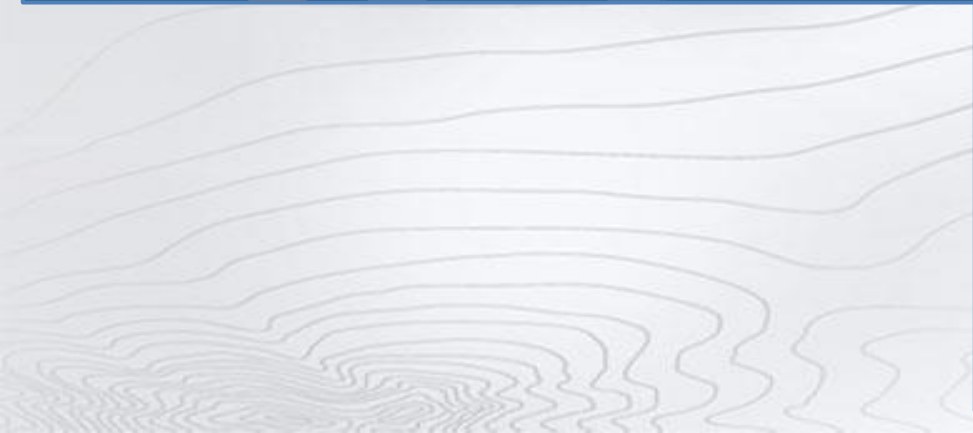
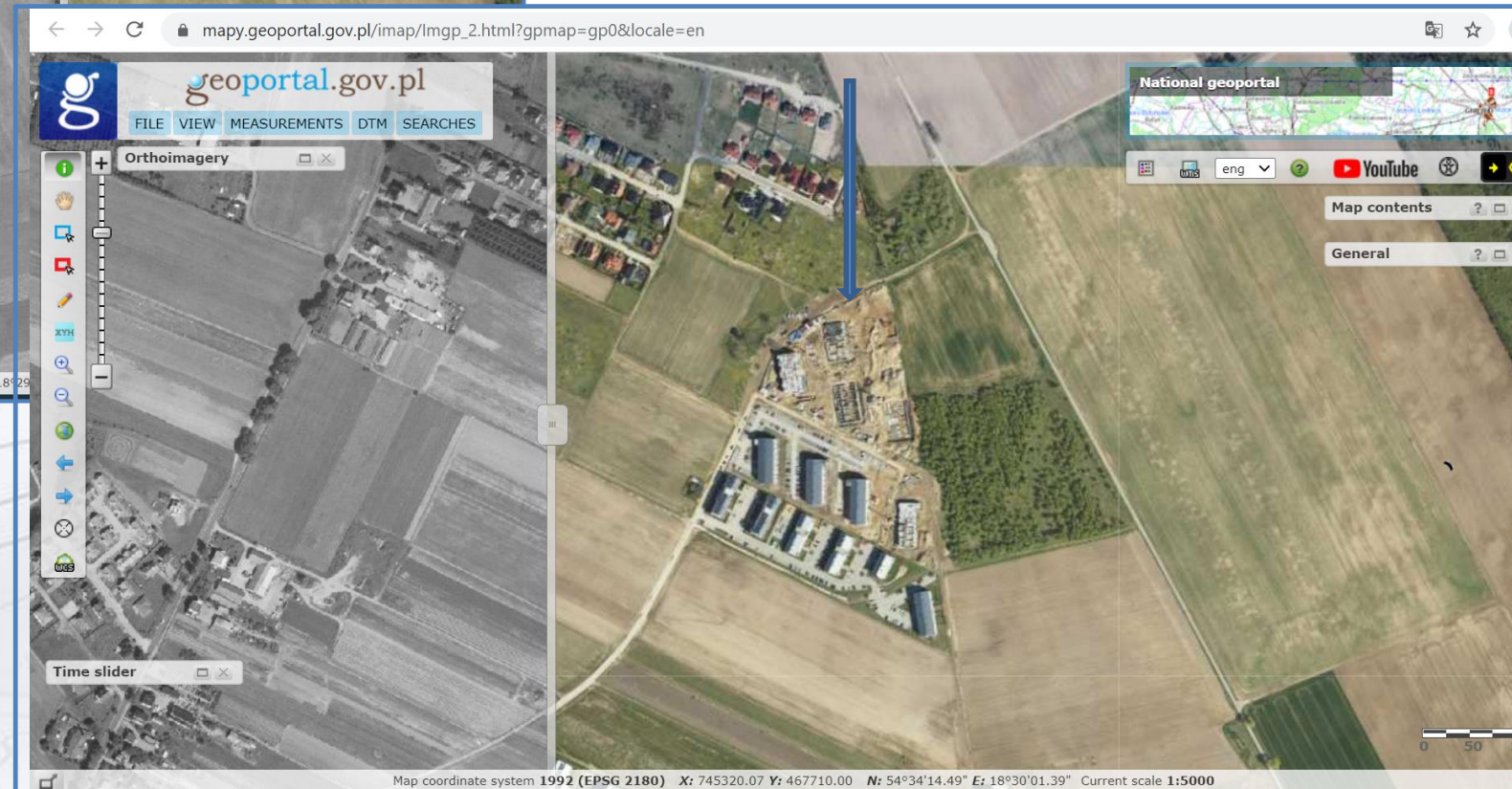
Wielkość piksela
0.25

Układ współrzędnych
PL-2000:S7

Easy access to data – WCS services



Orthoimagery – time slider





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

Stage II: 2020-2021 on-line training GUGiK

Expert SDI Trainings









- 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 !



-  Home
-  Services
-  Traffic
-  Analyses
-  RWeb
-  Data sources
-  API - token
-  Changelog

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

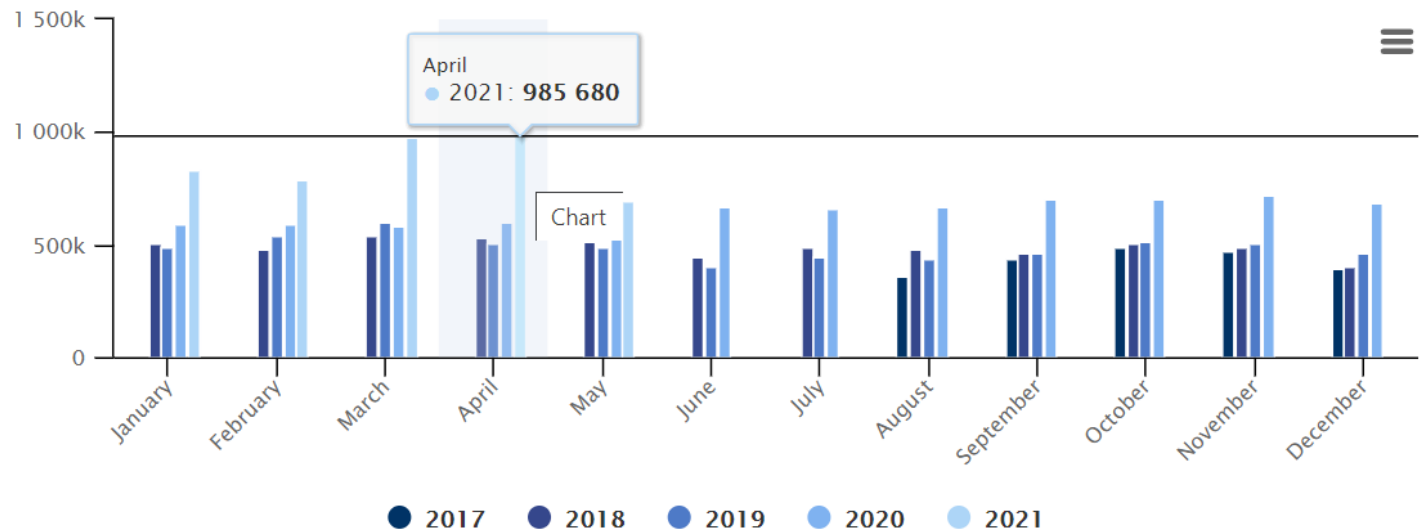


Chart type

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