



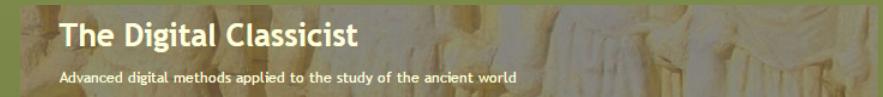
Center of Excellence
in the Humanities "Alma Mater"



Historical Geographic Information System of South-Eastern Europe

Stage: "Thrace"

Assistant Professor Maria Baramova, PhD





Agenda

- H-GIS Project
- Tasks and Activities
- IT & GIS Solutions
- Database and Web Application



OUR TEAM

History

- Dr. Maria Baramova – Concept and Coordination
- Dr. Julia Tzvetkova – Ancient History
- Dr. Lilly Grozdanova – Numismatic
- Dr. Dimitar Iliev – Epigraphy
- Dr. Ivaylo Lozanov – Roman History
- Dr. Ivan Valchev – Late Antiquity
- Dr. Chavdar Kirilov – Medieval History
- Dr. Grigor Boykov – Ottoman History
- Dr. Vladimir Stanev – Modern History

Geography and GIS

- Dr. Biliana Borissova – Physical Geography
- Dr. Stelian Dimitrov – GIS
- Dr. Stephan Petrov – GIS and Databases
- Leonid Todorov – Digital Mapping

IT

- Todor Antonov – Server Administration
- Anastasios Papastopolou

Advisory Board

- Prof. Ivan Parhev – History
- Assoc. Prof. Boian Koulov – Geography
- Assoc. Prof. Dimitar Birov – IT



Historical Geographic Information System of South-Eastern Europe

- ❖ Interdisciplinary Project: Historical Geography, Archeology, Epigraphic, Numismatic, Ottoman Studies, Demography
- ❖ GIS based historical Data
- ❖ Geographic Scope: historic-geographical region of Thrace
- ❖ Chronological Scope: from the Antiquity up to First World War

Data Structure

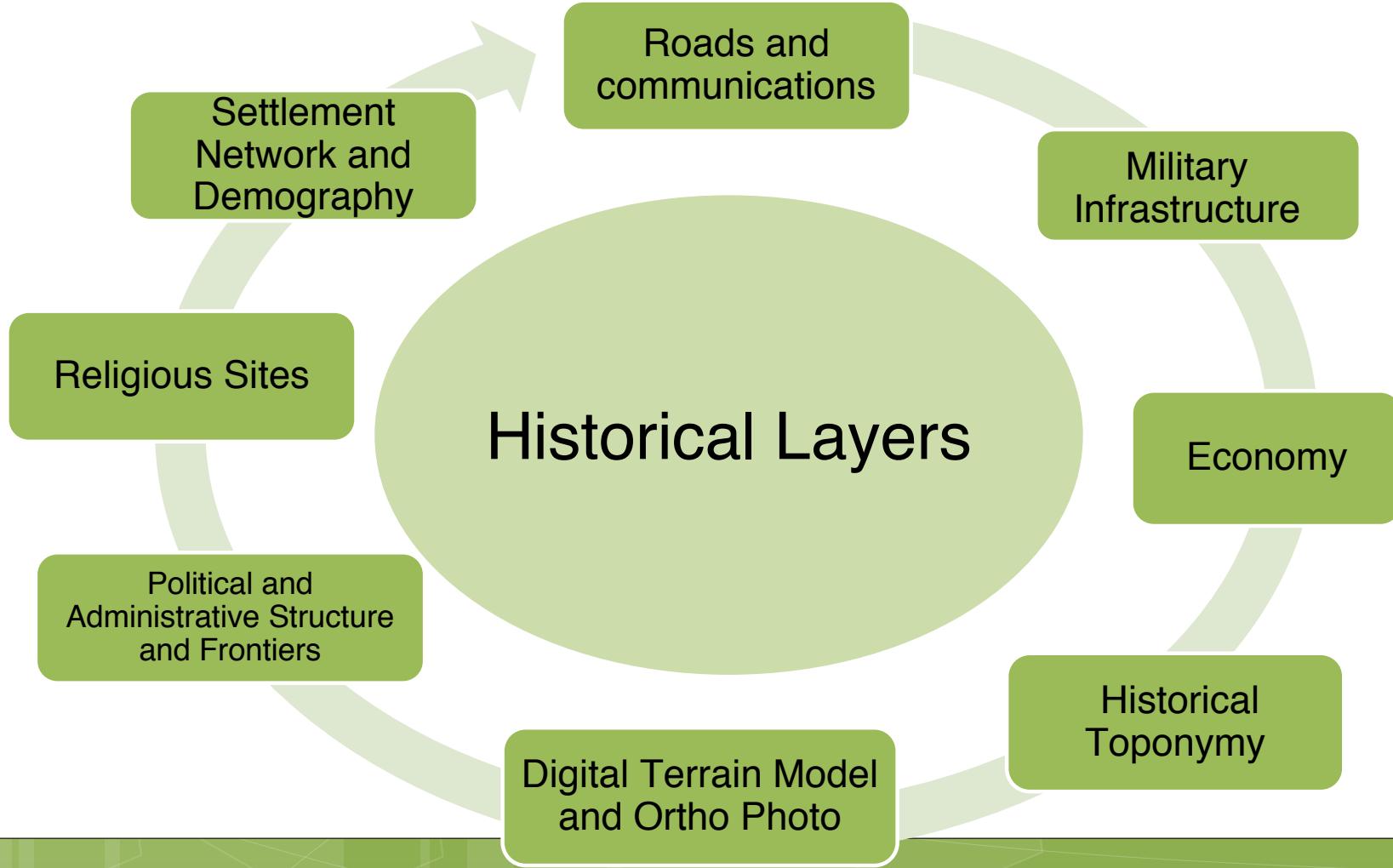
Chronology

- Pre-Roman Period
- Roman Period
- Late Antiquity and Medieval Period
- Ottoman Period
- Modern Period (1878–1910)

Methodology & Sources

- Narrative sources
- Archival documents
- Archaeological data
- Field research
- Historical Maps

Layer Structure



Attribute Table

наименование на колоната (EN)	наименование на колоната (БГ)	описание
Name	Име	Съвременно (или антично - за вече изчезнали обекти), изписано на латиница; възможно е да съвпада с Name_Hist_Lat или Name_Hist_BG, но тъй като това ще е полето, по което ще се допълват другите атрибутивни данни и ще се прави съпоставка между подадените бази данни за различните епохи, е хубаво да се повтори
NameHisLat	Историческо име	Историческо име, транслитерирано на латиница
NameHisBG	Име на български	Историческо име, изписано на български
NameSource	Име според извора	Историческо име, изписано на езика на историческия извор - грц., лат., осм., бълг. и т.н.
TimeStart	Начална дата	Начална година на периода в абсолютни дати
TimeEnd	Крайна дата	Крайна година на периода в абсолютни дати
Admin_U	Административна единица	Административна единица, към която принадлежи принадлежност обектът в съответната епоха
Category	Категория	Категория, към която принадлежи обекта, според краткото име-БГ на съответната категория: вж. Categories_List
Type	Тип	вид на обекта според списъка: вж. Type_List
Coord_N	Координати: север	географски координати на Северна ширина в десimalни градуси
Coord_E	Координати: изток	географски координати на Източна дължина в десimalни градуси
Bib	библиография	основна лит. за обекта
Link	връзки	линк към интернет сайт
Varia	други	допълнителна информация
Author	автор	инициали на съответния автор

Historical Toponymy		
Settlement network	Cities / Towns	baths
	Villages	
	Markets	
	Military divisions	fortresses baracks
	Villa, farms, ciiflik	
	Road stations	
	Railway stations	
Varia		monasteries
		dervish convents
		residences
		auls
Roads and communications	Roads	
	Road stations	
	Railways	
	Ports	bridges
Military infrastructure	Military camps	
	Fortresses	
Population and demography	Residents	
	Religion	
	Sex	
	Ethnicity	
	Education	
Economy	Agriculture	agriculture animal husbandry
	Crafts	
	Trade	
	Industry	factories
Frontiers	Political borders	
	Administrative division	
Religious sites	Sanctuaries	
	Churches	
	Monasteries	
	Mosques	
	Dervish convents	
	Synagogues	
Historical maps		

The specialized historical data is created as a number of tables, including object coordinates. The tables are imported in ArcGIS (ArcMap) and converted to ESRI shapefile format (*.shp). After processing, this data is stored in the following structure:

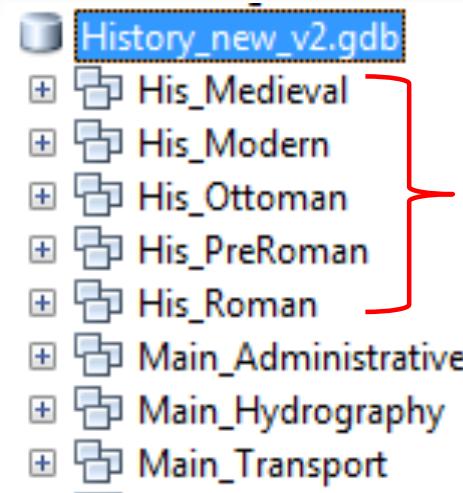


GIS Platform

- Based on ArcGIS на ESRI inc.:
 - Desktop client for data research analysis
 - Data bases – databases and database management systems. Its function is to store all data in a standard relational model.
 - web
- Supported standards:
 - Web Features Service (WFS), Web Coverage Service (WCS) and Web Map Service (WMS).



HGIS Geodatabase: General structure

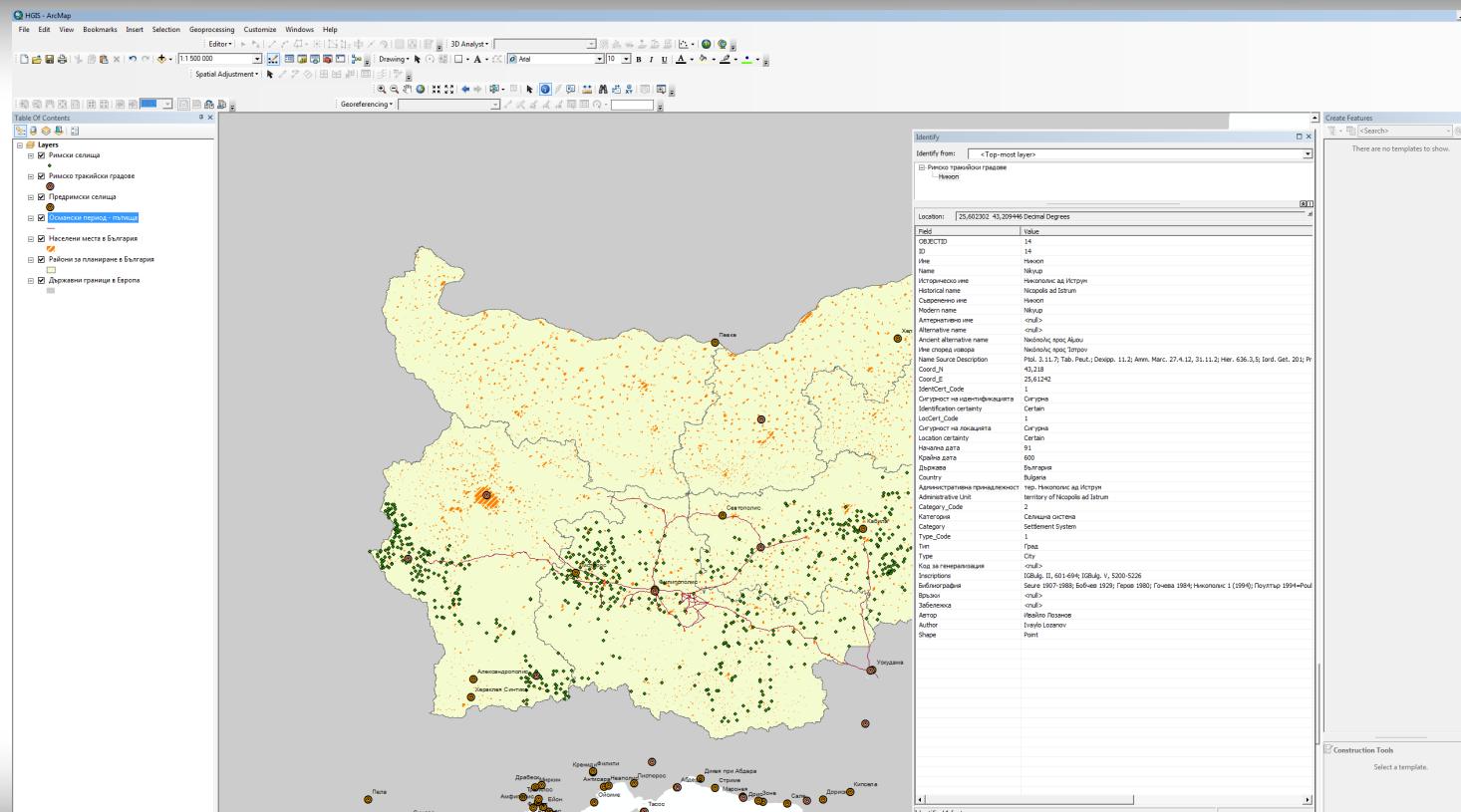


History domain

General
geography domain



Desktop Application





General Geography Domain

The figure shows a QGIS interface with a map of Bulgaria. The map displays various administrative divisions, including municipalities, districts, and NUTS2 regions, each colored differently. Numerous small black dots representing settlements are scattered across the map, particularly concentrated in urban areas. On the left, the QGIS project tree shows several layers under three main categories: Main_Administrative, Main_Hydrography, and Main_Transport. The Main_Administrative category contains layers such as BG_border_L, BG_districts_L, BG_Districts_P, BG_Municipalities_L, BG_Municipalities_P, BG_NUTS2_P, BG_Settlements_Iand_P, BG_Settlements_P, BG_Settlements_Pt, EU_Boundaries_L, EU_Boundaries_P, BG_Roads_P, and BG_Rivers_line. The Main_Hydrography category includes Danube_islands, Danube_poly, GR_Rivers, Lakes, and Rivers_line. The Main_Transport category is currently empty.



History Domain



ArcGIS server



esri.com | Web GIS | Help

ArcGIS Server Manager

Manage Services OGC Services KML Network Links Sharing Site Security Logs

Folders

< Search for services in HGIS_V6 >

Publish Service

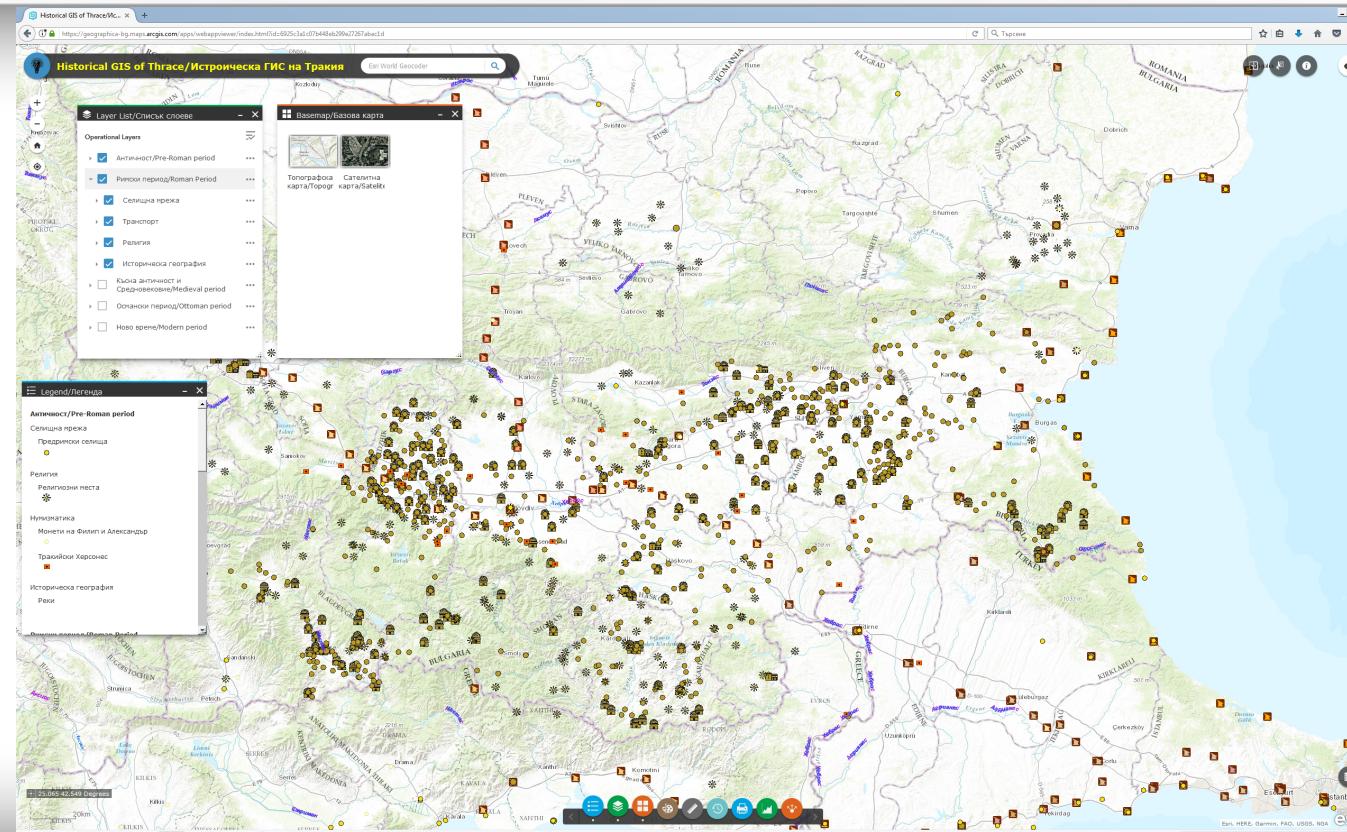
Folder	Status	Instances Running	Instances in Use	Maximum Instances
Site (root)	Started	1	0	25
BG_MAP_VIEW	Started	1	0	25
Ecosystem	Started	1	0	25
EEA	Started	1	0	25
HGIS	Started	1	0	25
HGIS_ALL	Started	1	0	25
HGIS_Integrated	Started	1	0	25
HGIS_V6	Started	1	0	25
HGIS_V7	Started	1	0	25
HGISDATABASE	Started	1	0	25
HISTORY_LAST	Started	1	0	25
Maria	Started	1	0	25
System	Started	1	0	25
Utilities	Started	1	0	25

Publish Service

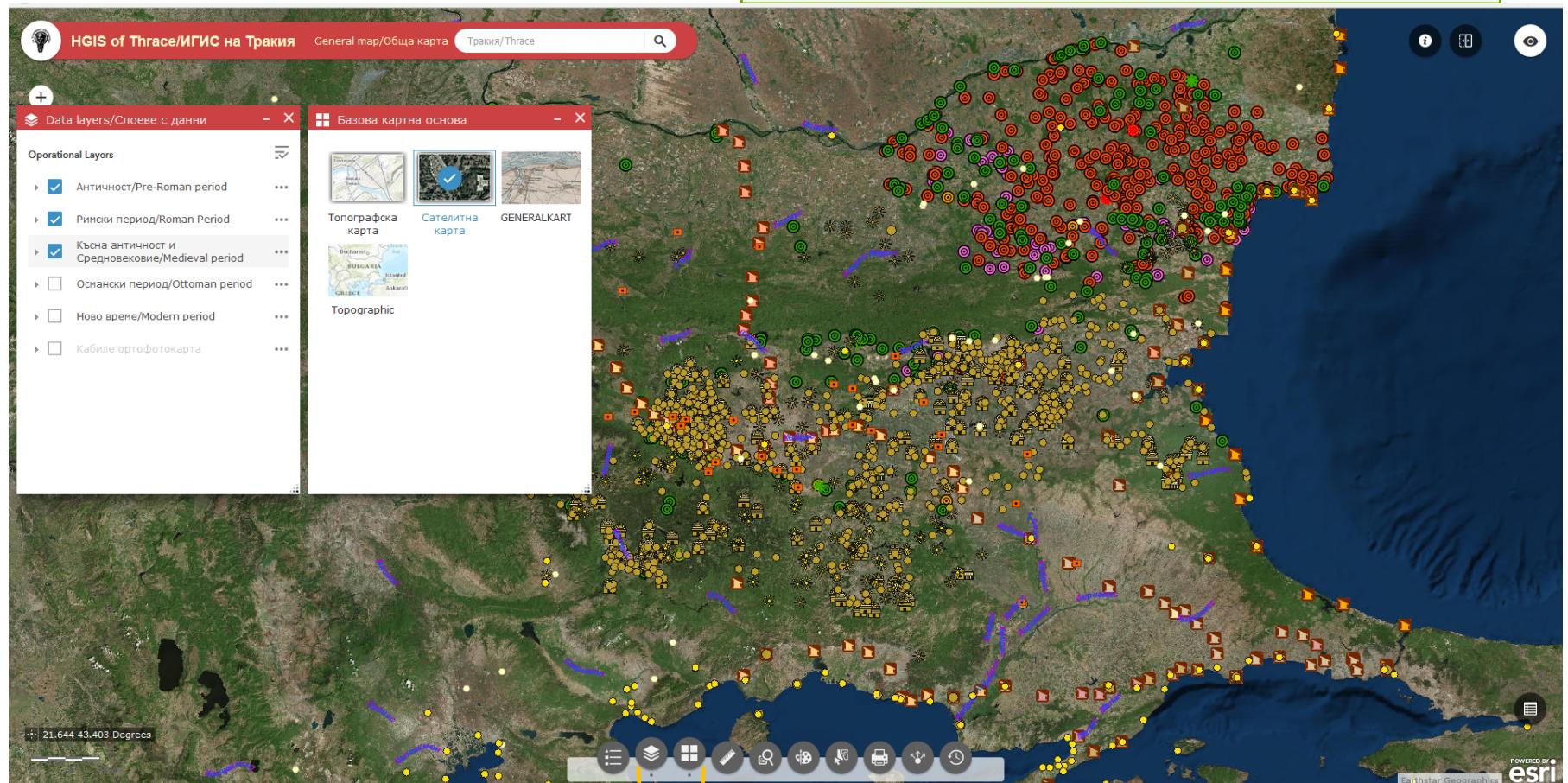
esri.com | Web GIS | Sign Out | Help



Online Application

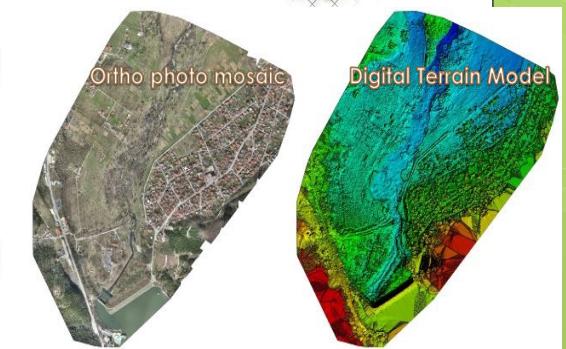


Layers/Base map

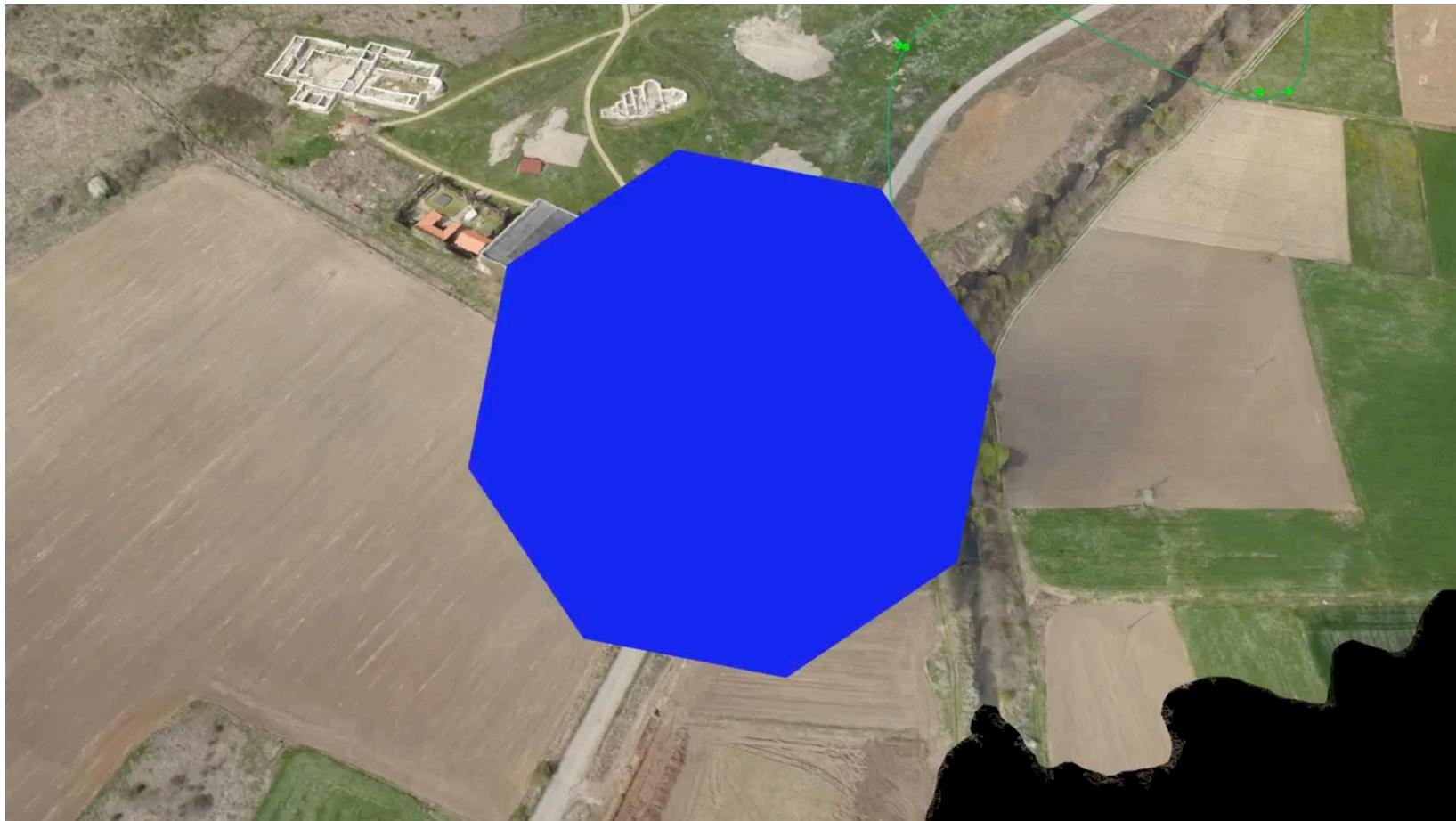


Layer control/Base map options

Digital Terrain Model



Ancient Kabilе



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Thank you for your attention!

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