

**Expert Consultation and Meeting on Enhancing Geospatial Information
Management Arrangements and Accelerating Implementation of the Sustainable
Development Goals, and the Sub-regional Workshop on the United Nations
Integrated Geospatial Information Framework (UN-IGIF) for Central Asia, South
Asia, and neighboring countries**

Kyrgyzstan's progress and perspectives towards developing UN-IGIF CAP

**Astana, Kazakhstan
15-19 September 2025**



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of the SDGs**

Sub-regional Workshop on UN-IGIF for the Central Asia, South Asia and Neighboring Countries



Kyrgyzstan

STATE AGENCY FOR LAND RESOURCES, CADASTRE, GEODESY AND
CARTOGRAPHY UNDER THE CABINET OF
MINISTERS OF THE KYRGYZ REPUBLIC



Azamat Karypov – Expert on GIS



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Legislative Evolution: Transition from paper maps to digital geospatial data



Law of 2002 – the “Paper Era”



Concept of Digital Transformation of the
Kyrgyz Republic for 2024–2028



Law of the Kyrgyz Republic
“On Geodesy, Cartography, and Spatial
Data”

- 2002: Law on Paper Maps and Geodetic Networks.
- 2022: Establishment of the National Spatial Data Infrastructure (NSDI) program as a national priority.
- 202X: Introduction of a new law providing the legal foundation for digital spatial data, their exchange, and effective use.

Key Changes: Introduction of NSDI concepts, open data principles, and standards; strengthened protection of geodetic infrastructure.



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Benefits of the Modern Legal Framework



**Unified data formats
for all agencies**

*Elimination of data
duplication and
introduction of data
standardization*



**Simplified access to
data**

*Direct online access —
availability 24/7 via
web interface*



**Opportunity to
create geoservices
and geoportals.**

*New products based
on geospatial data*



**Improved accuracy
and reliability of
data**

*A solid foundation for
decision-making*



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<https://www.kyrgyzmap.kg>

International Partnership: From Pilot Projects to Global Standards

- 1997–2003: Kyrgyz–Swiss GIS/Cadastre – pilot of modern technologies
- 2004–2005: With Japan – development of the Master Plan for Issyk-Kul Region
- 2006 – 2009 Sweden project
- 2012–2013: With the EU – border delimitation with Tajikistan
- 2017–2018 Kyrgyz–Norwegian Project – maps and statistics for sustainable development
- CIS: Active participation in the Interstate Council on Geodesy and Cartography
- 2022–2025 Korean project - Maps and Statistics for Sustainable Goals in Kyrgyzstan.

Current Key Project:

Within cooperation with South Korea, a project is being implemented to transition to international geodetic standards and to introduce a modern geospatial data management system.



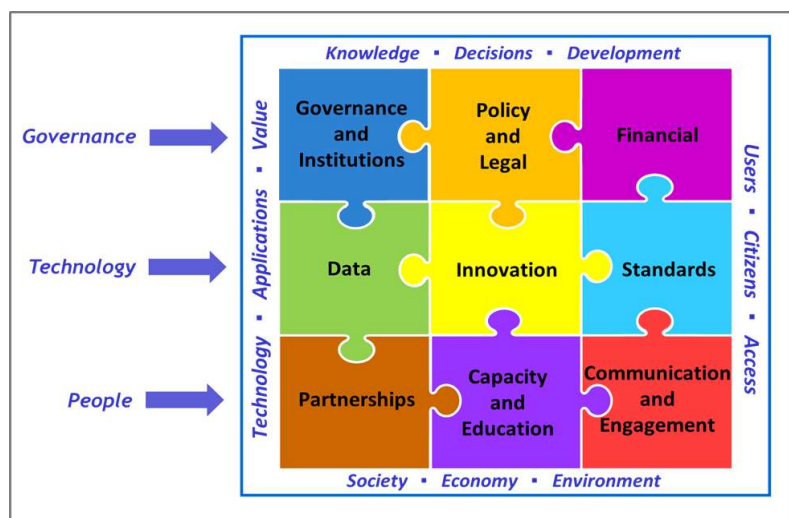
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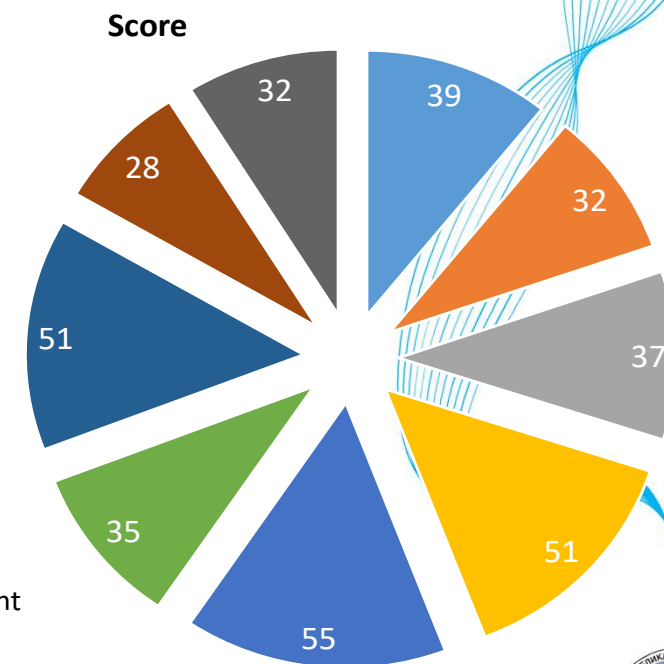
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Scores for the individual Strategic Pathways

Nine strategic pathways



- Governance and Institutions
- Policy and Legal
- Financial
- Data
- Innovation
- Standards
- Partnerships
- Capacity and Education
- Communication and Engagement



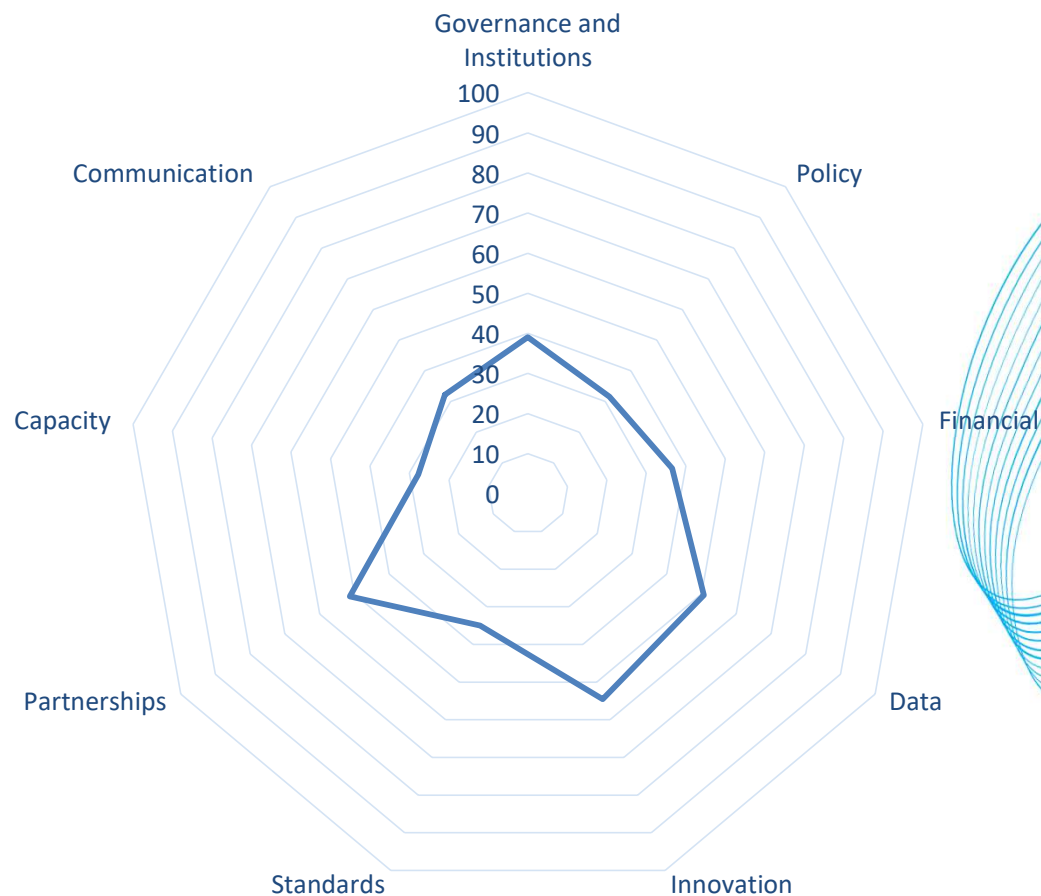
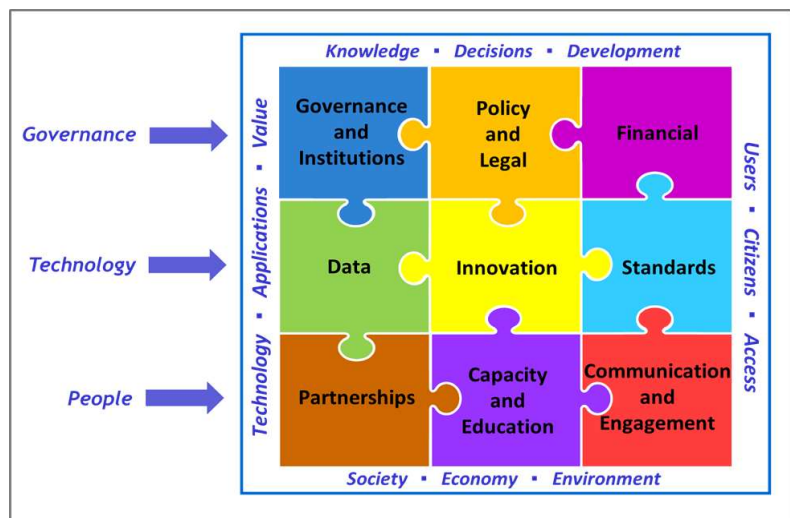
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Results – current status of pathways

Nine strategic pathways



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Kyrgyzstan – Country-level Action Plan (CAP) with UN-IGIF



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Creation of Ortophoto Maps

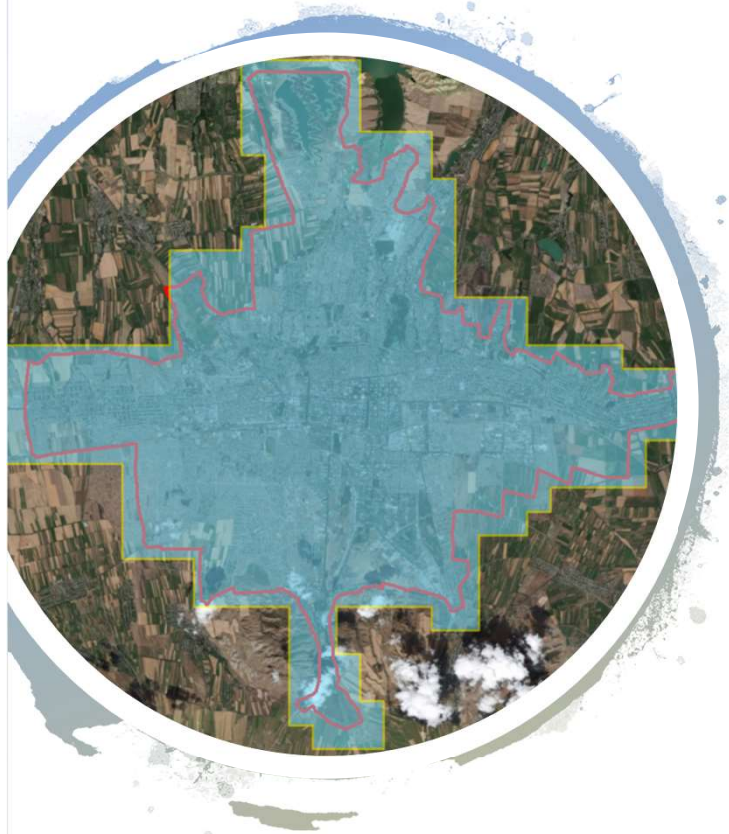


- In 2019 aerial photography has been carried out on 23,000 km², including Bishkek and surrounding areas, settlements around Issyk-Kul Lake and the Ferghana Valley by the Kyrgyz-Norwegian project.
- Developing Geoportal for providing access to orthophotomaps for state and other stakeholders.



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Production of photomaps and DTM

Block 1: Bishkek

Survey area: 196 km².

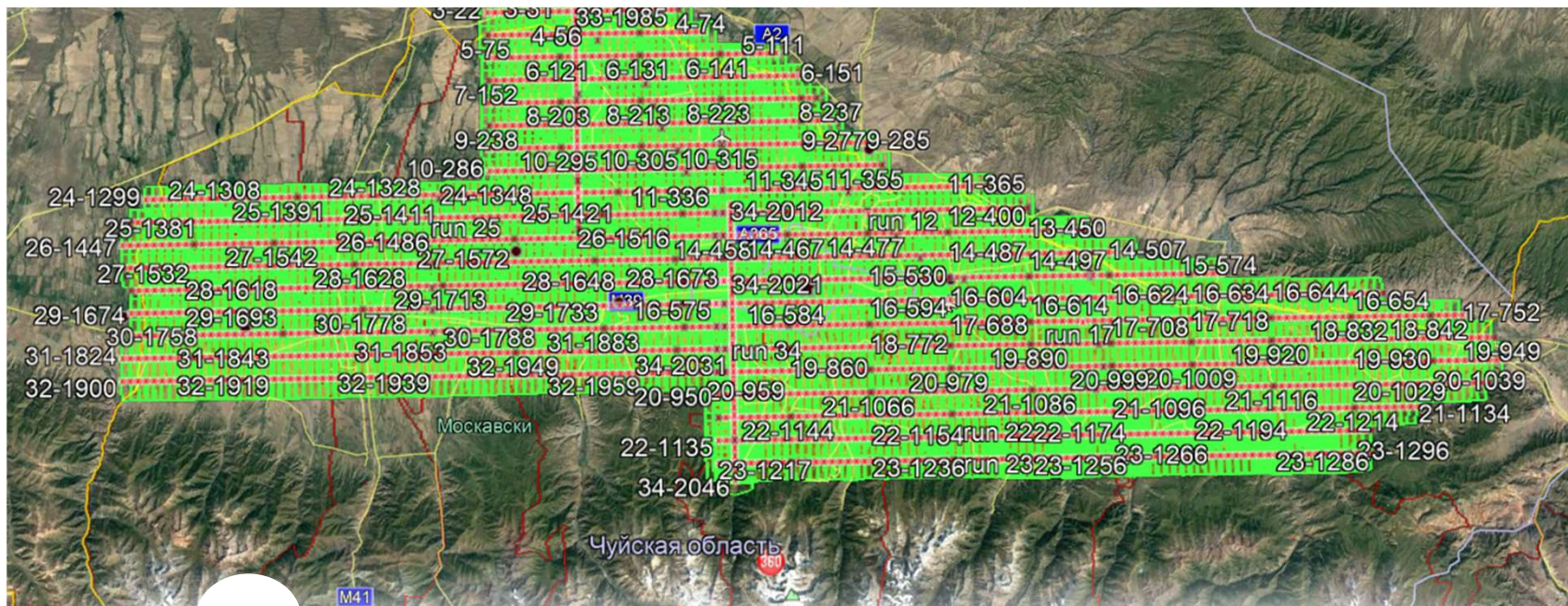
Photo plan resolution: 10 cm.



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Production of photomaps and DTM

Block 2: Chuy valley

Survey area: 4939 km².

Photo plan resolution: 20 cm.



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Production of photomaps and DTM

Block 3: Issyk-Kul Valley

Survey area: 4660 km².

Photo plan resolution: 20 cm.



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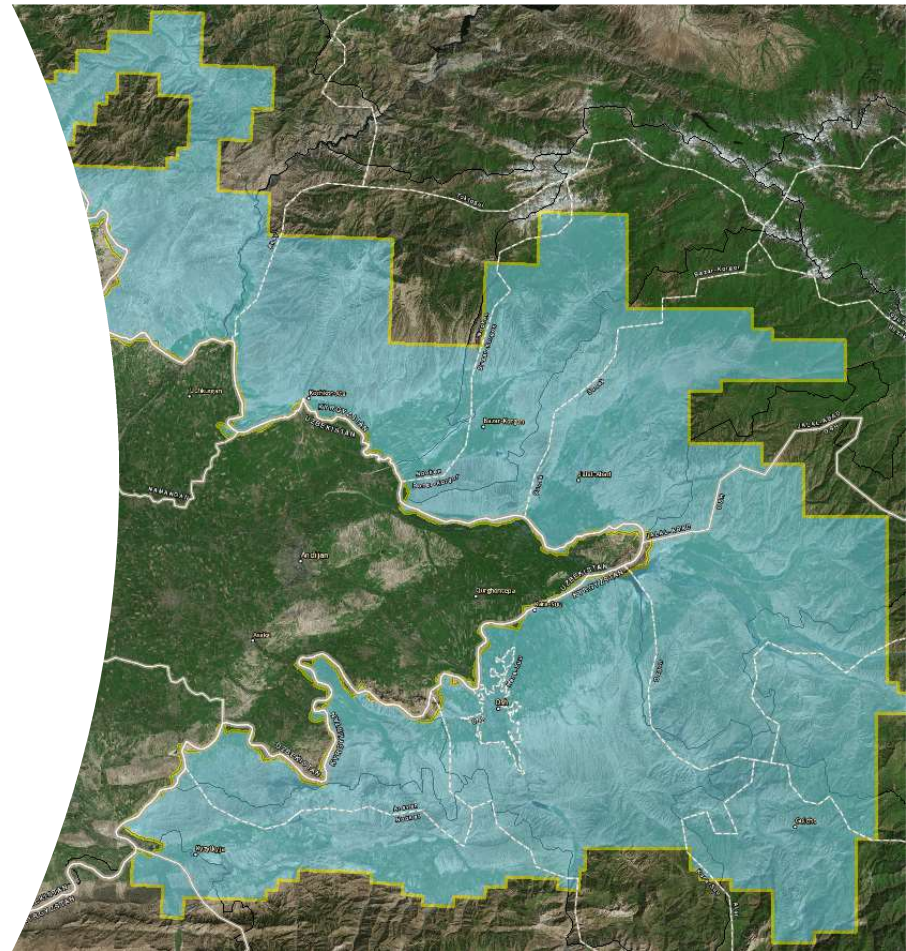
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Production of photomaps and DTM

Block 4: Ferghana Valley

Survey area: 13,447 km².

Photo plan resolution: 20 cm.



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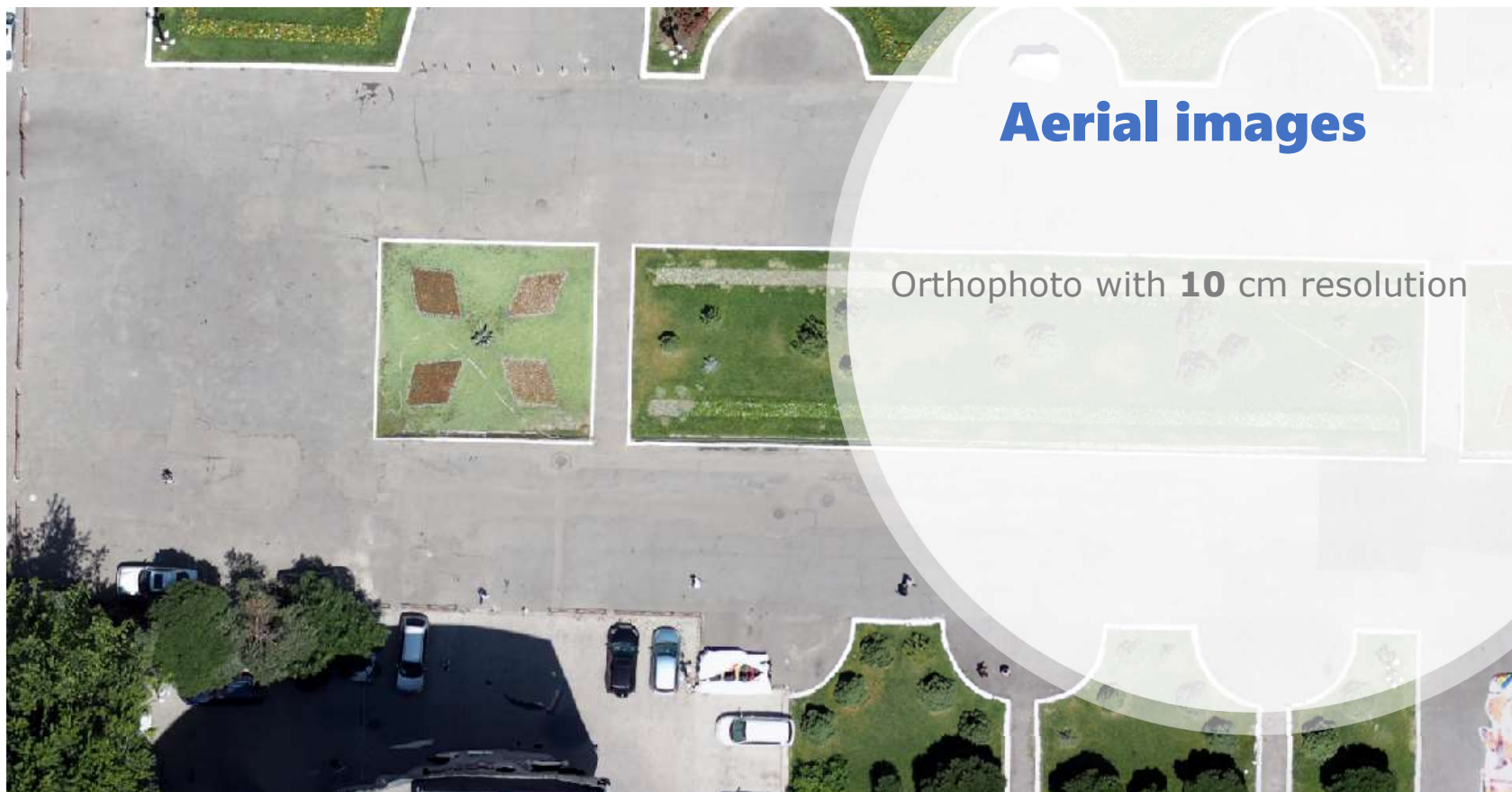
Aerial images

Orthophoto with **20** cm resolution



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Aerial images

Orthophoto with **10** cm resolution

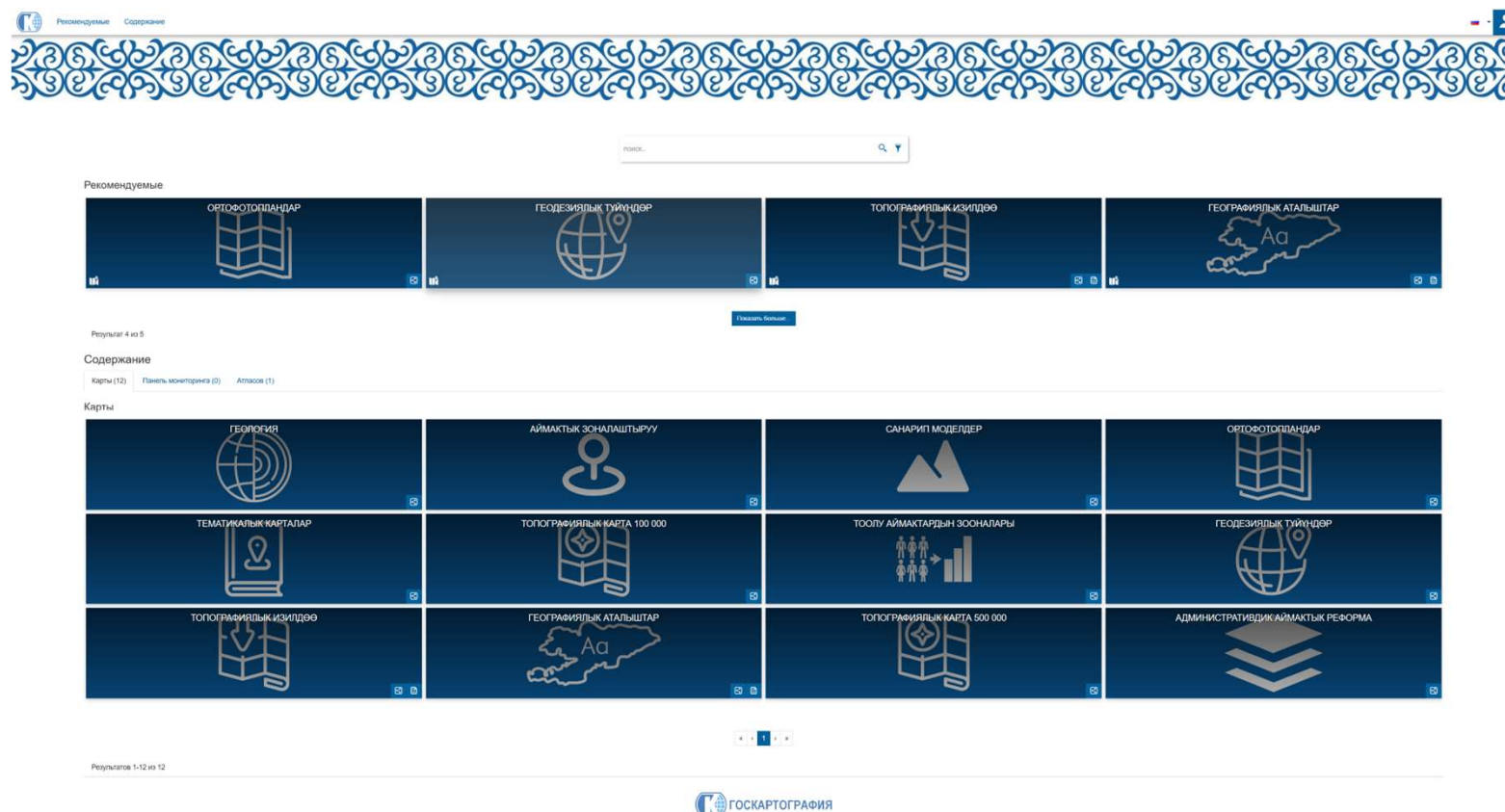


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BaseMap Geoportal



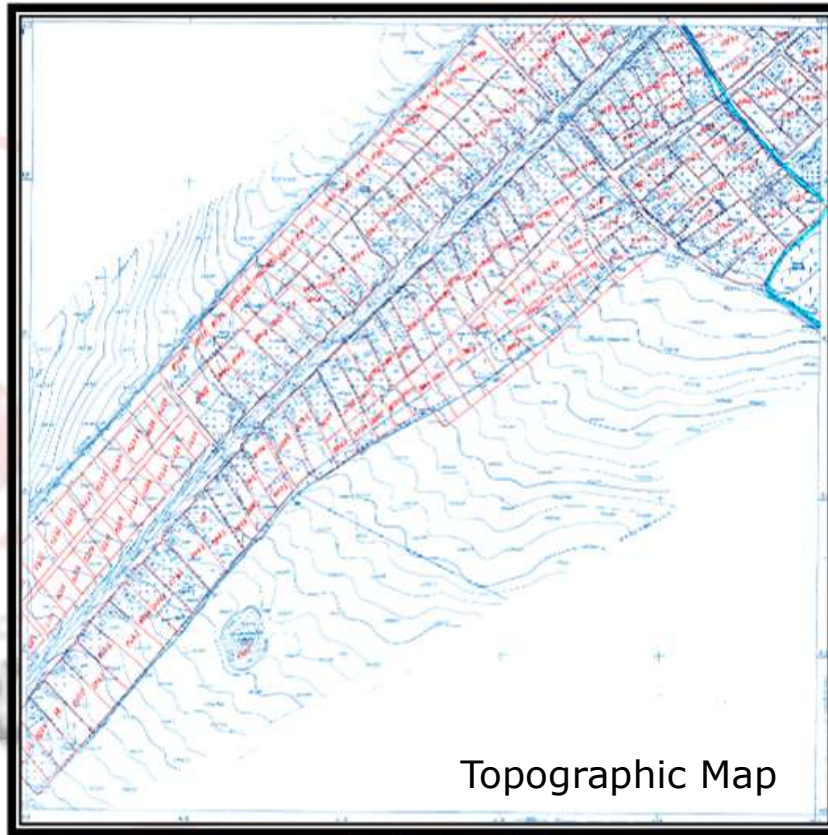
www.kyrgyzmap.kg



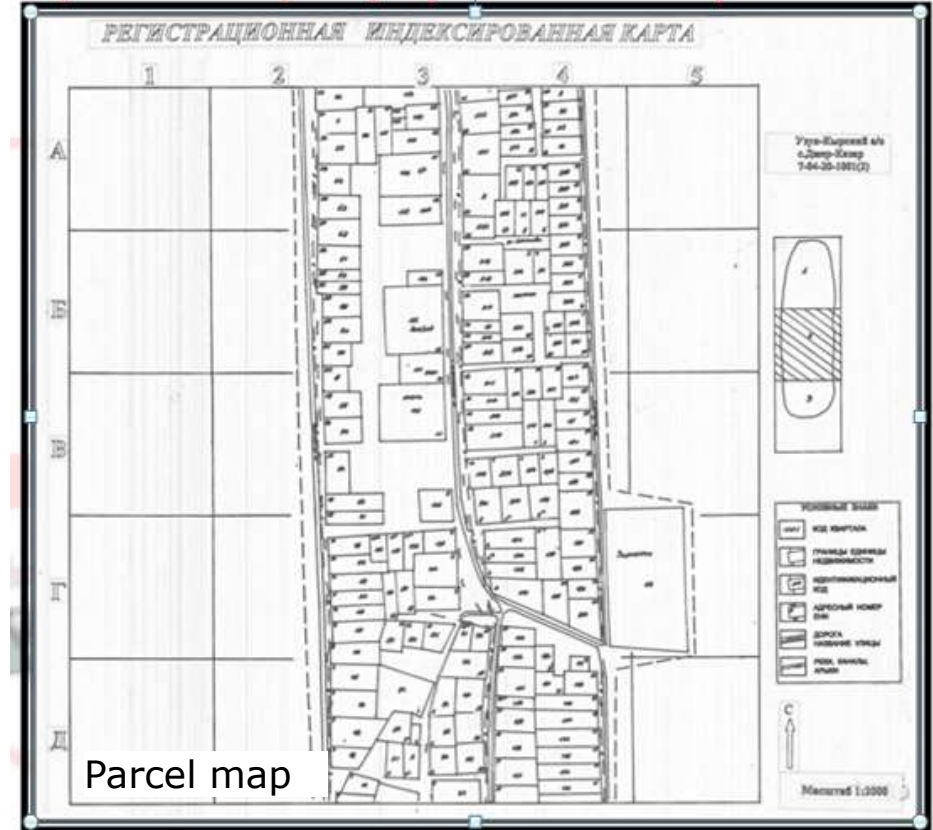
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Paper based Cadastral Map



M 1: 2 000



M 1: 2 000

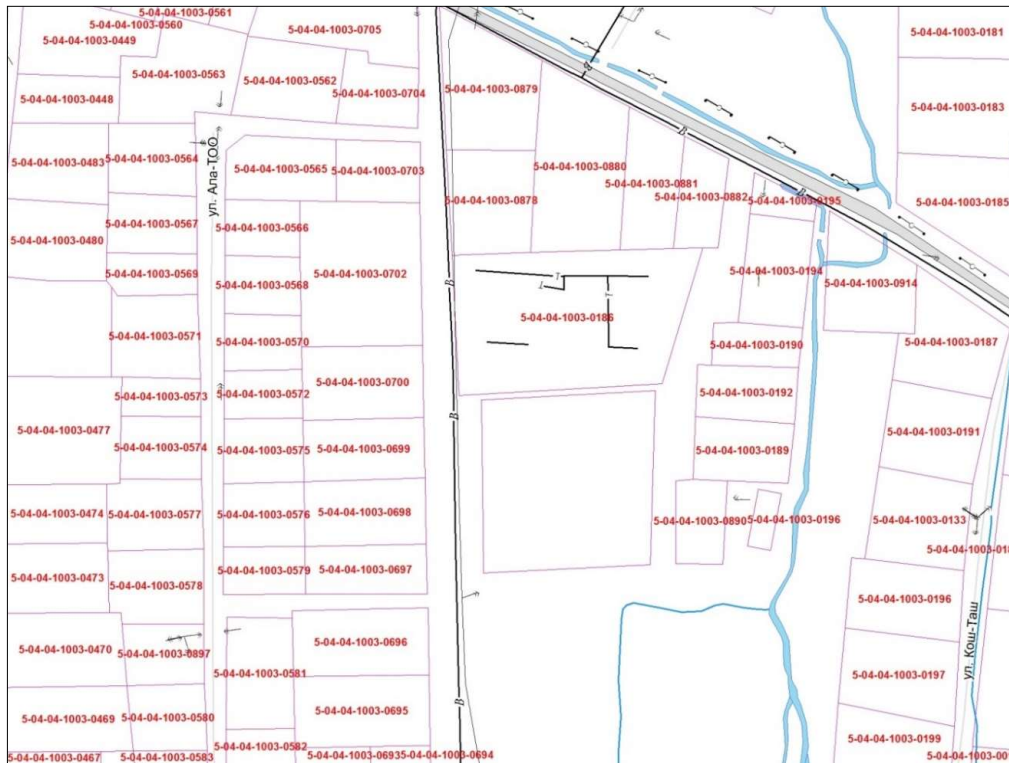


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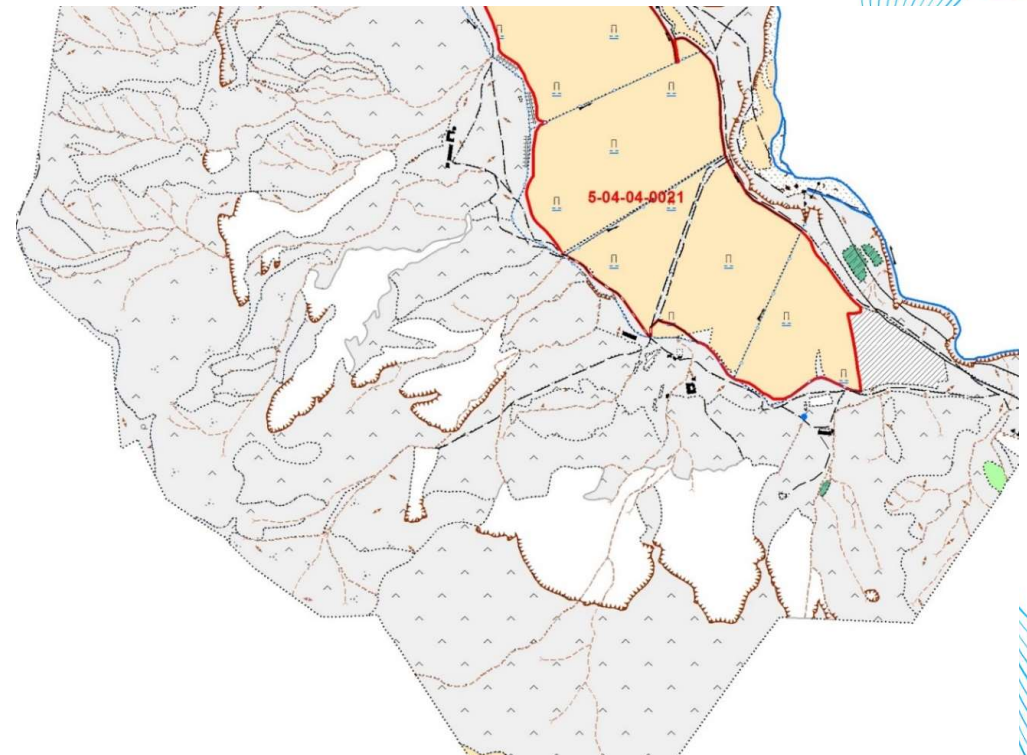
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Digital Cadastral Map

Urban area (settlement land)



Rural areas (agricultural land)



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Combination of Orthophoto with Cadastral map



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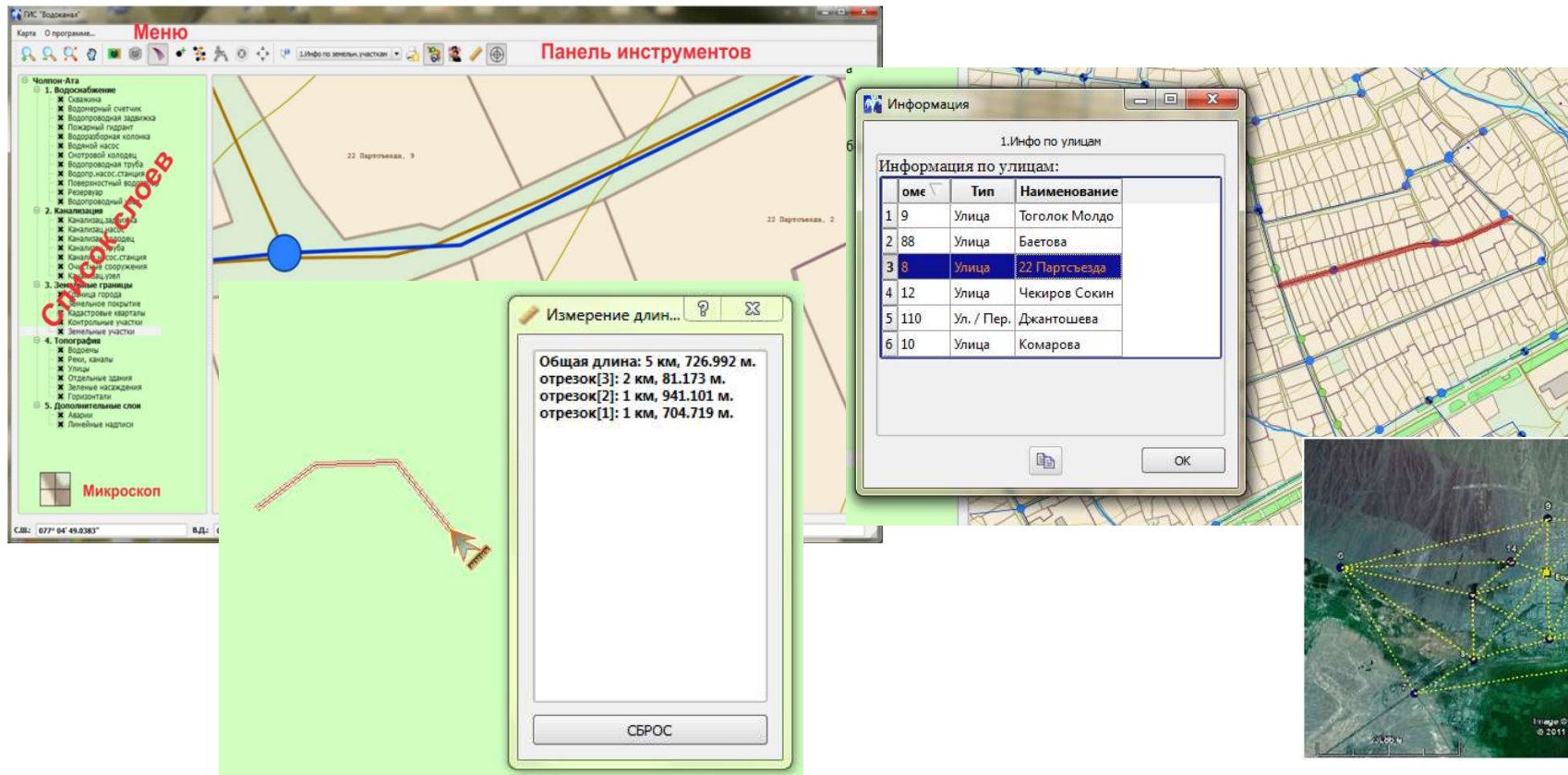
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Combined map



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Associated information



The screenshot displays a GIS application window titled "ГИС 'Водоканал'". It includes a menu bar with "Меню" and "Панель инструментов". A sidebar on the left lists various data layers under "Чолпон-Ата", including "1. Водоснабжение", "2. Канализация", "3. Земельные границы", "4. Топография", and "5. Дополнительные слои". The main map area shows a network of lines representing water and sewer infrastructure. A red line is highlighted, and a blue circle marks a specific point. A red stamp "СР-01-01-01" is visible on the map.

Overlaid on the map are three windows:

- Измерение длин...**: A window showing measurement results for a selected line segment.

Общая длина: 5 км, 726.992 м.
 отрезок[3]: 2 км, 81.173 м.
 отрезок[2]: 1 км, 941.101 м.
 отрезок[1]: 1 км, 704.719 м.
- Информация**: A window titled "1.Инфо по улицам" displaying a table of street information.

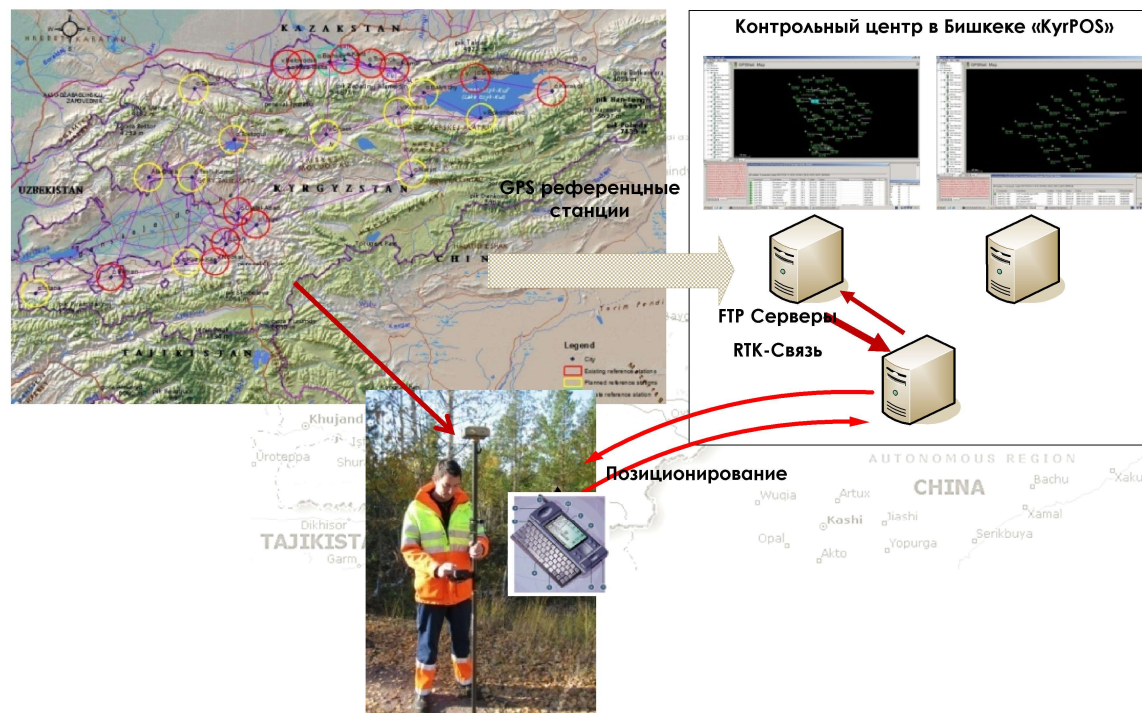
омс	Тип	Наименование
1 9	Улица	Тоголок Молдо
2 88	Улица	Баева
3 8	Улица	22 Партсъезда
4 12	Улица	Чекиров Сокин
5 110	Ул. / Пер.	Джантошева
6 10	Улица	Комарова
- Микроскоп**: A window showing a magnified view of a specific area on the map, with a red line and a blue circle.



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KYRPOS (CORS)

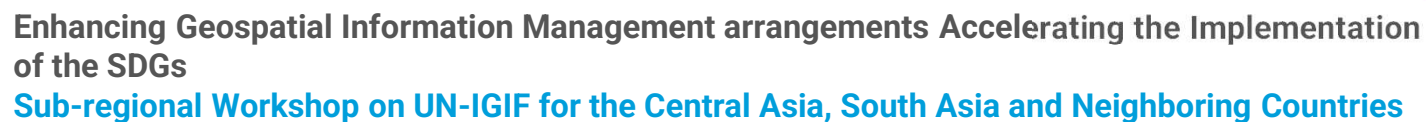


The technology of satellite positioning by using RTK service by the KyrPOS -Control Centre of CORS Network

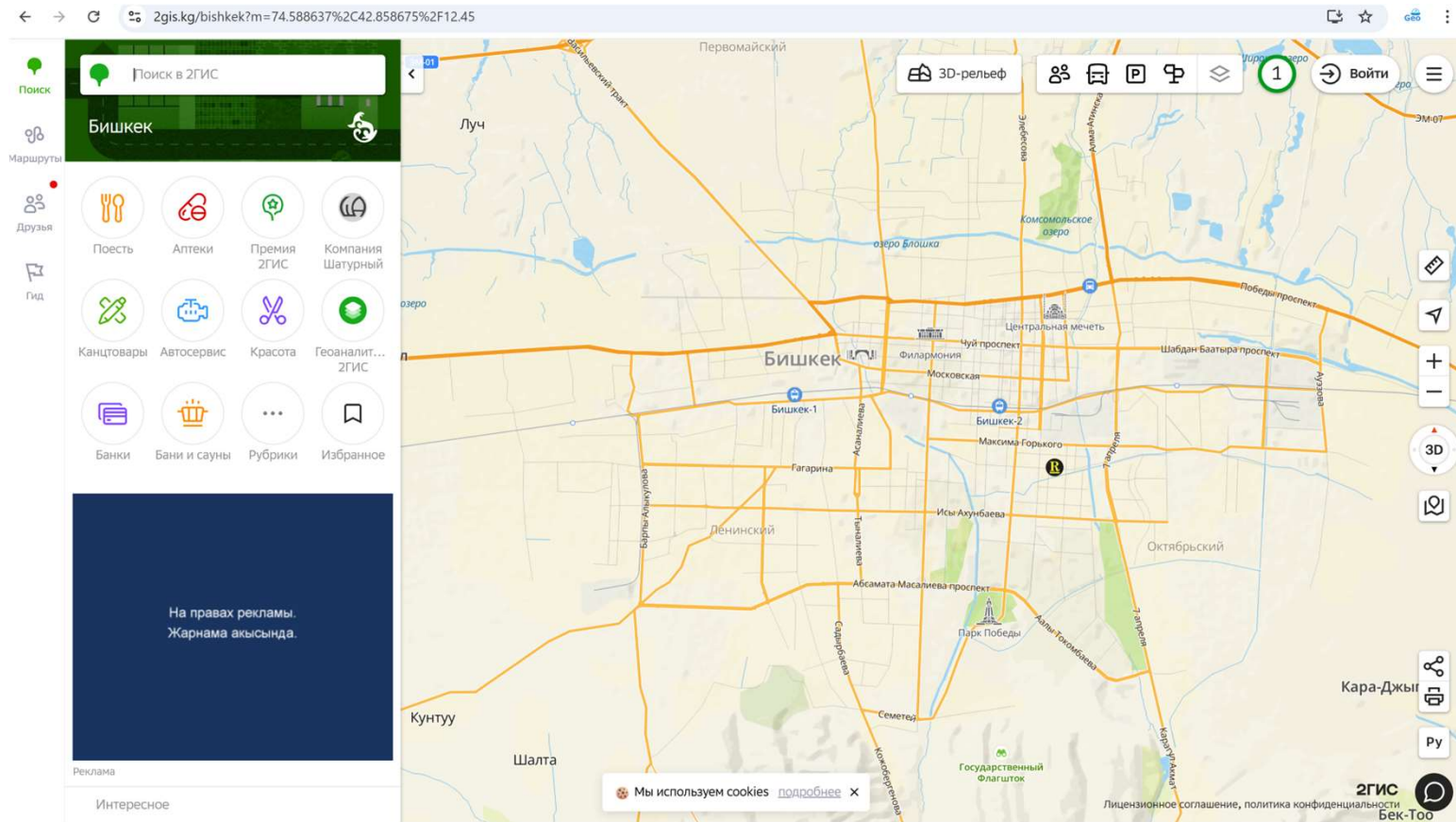


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2GIS - City information service – www.2gis.kg/bishkek



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E-Government portal - www.okmot.kg/

Информационные ресурсы Кыргызской Республики, разработанные ГП "Инфо-Система"

- Портал электронных государственных закупок Кыргызской Республики
zakupki.gov.kg
- Портал Стимулирующих грантов Министерства финансов Кыргызской Республики
stimgrant.okmot.kg
- Портал "Открытый бюджет" Министерства финансов Кыргызской Республики
budget.okmot.kg
- Экономическая карта Министерства финансов Кыргызской Республики
map.okmot.kg
- Портал "Внешняя помощь"
donors.okmot.kg
- Сервис электронной почты
mail.okmot.kg
- Единый реестр государственных услуг
services.okmot.kg
- Каталог сайтов государственных органов Кыргызской Республики
okmot.kg/links.html


ИНФОСИСТЕМА
ИНТЕЛЛЕКТ • ИДЕИ • ИННОВАЦИИ

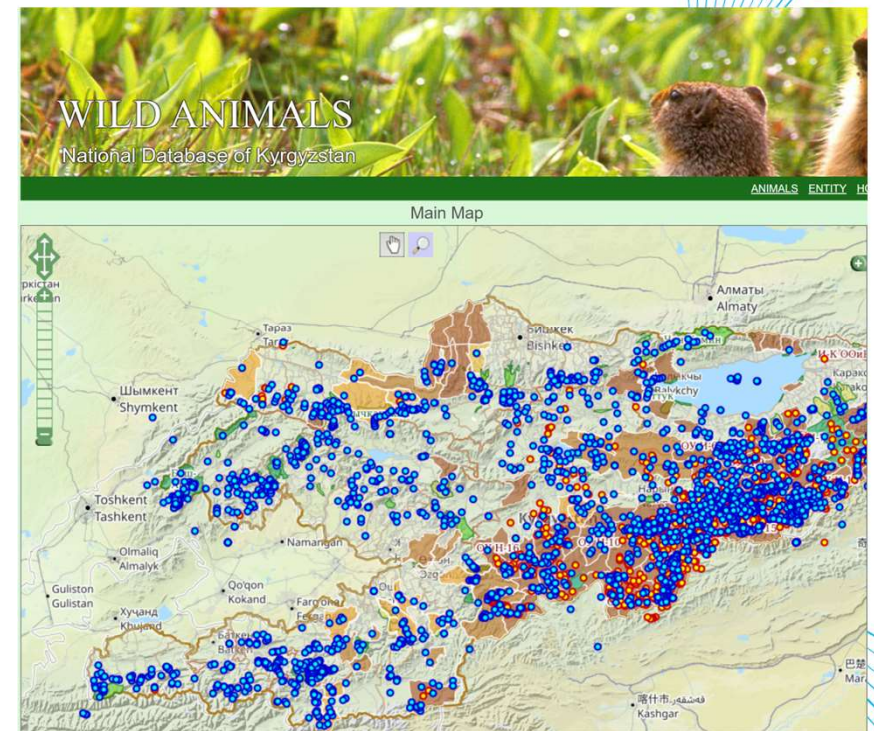
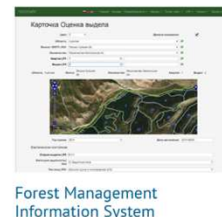
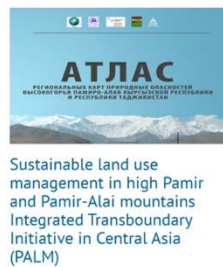
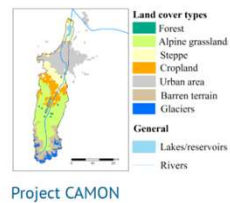
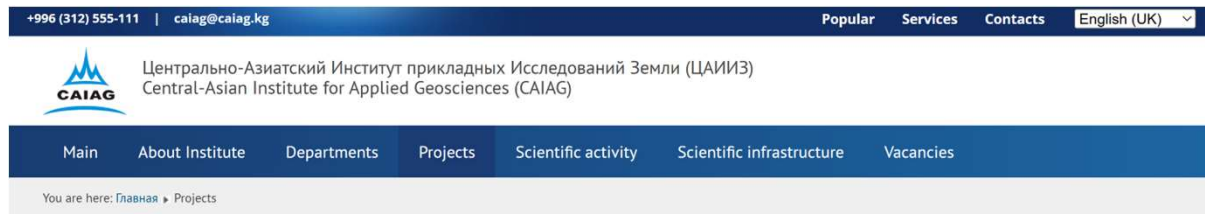


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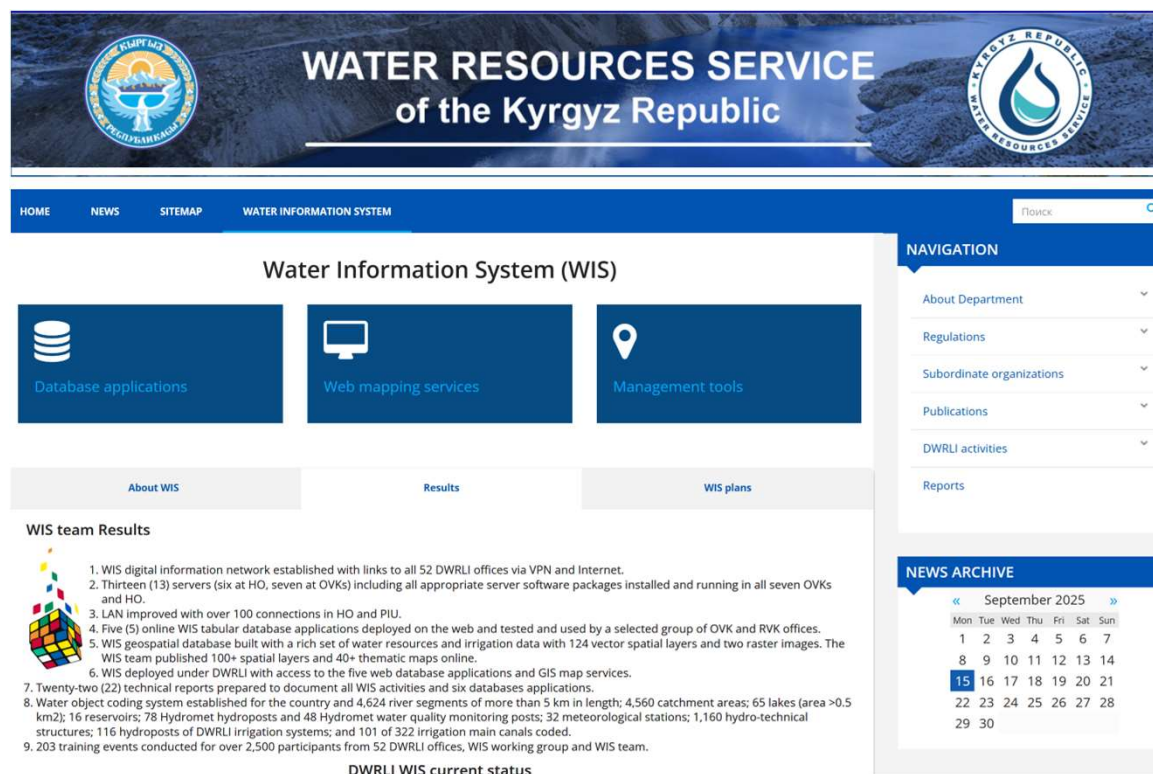
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CAIAG portal - www.caiag.kg, www.wildlife.caiag.kg, <https://surl.li/blrpvg>



National Water Resources- www.water.gov.kg



WATER RESOURCES SERVICE
of the Kyrgyz Republic

HOME NEWS SITEMAP WATER INFORMATION SYSTEM

Water Information System (WIS)

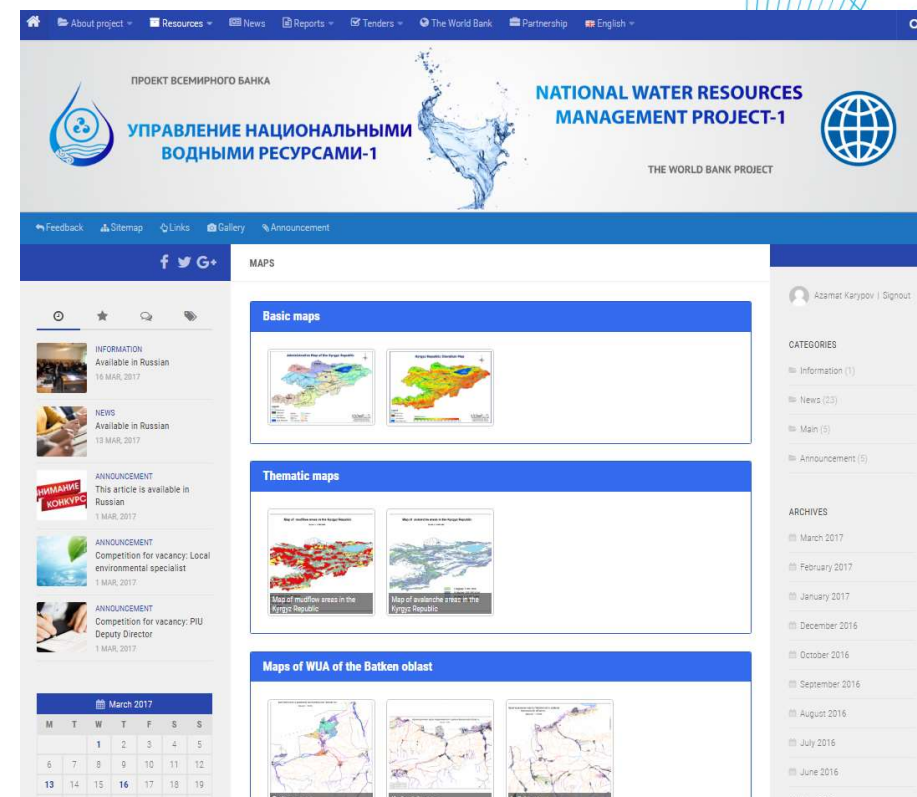
Database applications Web mapping services Management tools

About WIS Results WIS plans

WIS team Results

1. WIS digital information network established with links to all 52 DWRLI offices via VPN and Internet.
2. Thirteen (13) servers (six at HO, seven at OVKS) including all appropriate server software packages installed and running in all seven OVKS and HO.
3. LAN improved with over 100 connections in HO and PIU.
4. Five (5) online WIS tabular database applications deployed on the web and tested and used by a selected group of OVK and RVK offices.
5. WIS geospatial database built with a rich set of water resources and irrigation data with 124 vector spatial layers and two raster images. The WIS team published 100+ spatial layers and 40+ thematic maps online.
6. WIS deployed under DWRLI with access to the five web database applications and GIS map services.
7. Twenty-two (22) technical reports prepared to document all WIS activities and six databases applications.
8. Water object coding system established for the country and 4,624 river segments of more than 5 km in length; 4,560 catchment areas; 65 lakes (area >0.5 km²); 16 reservoirs; 78 Hydromet hydroposts and 48 Hydromet water quality monitoring posts; 32 meteorological stations; 1,160 hydro-technical structures; 116 hydroposts of DWRLI irrigation systems; and 101 of 322 irrigation main canals coded.
9. 203 training events conducted for over 2,500 participants from 52 DWRLI offices, WIS working group and WIS team.

DWRLI WIS current status



ПРОЕКТ ВСЕМИРНОГО БАНКА

УПРАВЛЕНИЕ НАЦИОНАЛЬНЫМИ ВОДНЫМИ РЕСУРСАМИ-1

NATIONAL WATER RESOURCES MANAGEMENT PROJECT-1

THE WORLD BANK PROJECT

Feedback Sitemap Links Gallery Announcement

MAPS

Basic maps

Thematic maps

Maps of WUA of the Batken oblast

NEWS ARCHIVE

September 2025

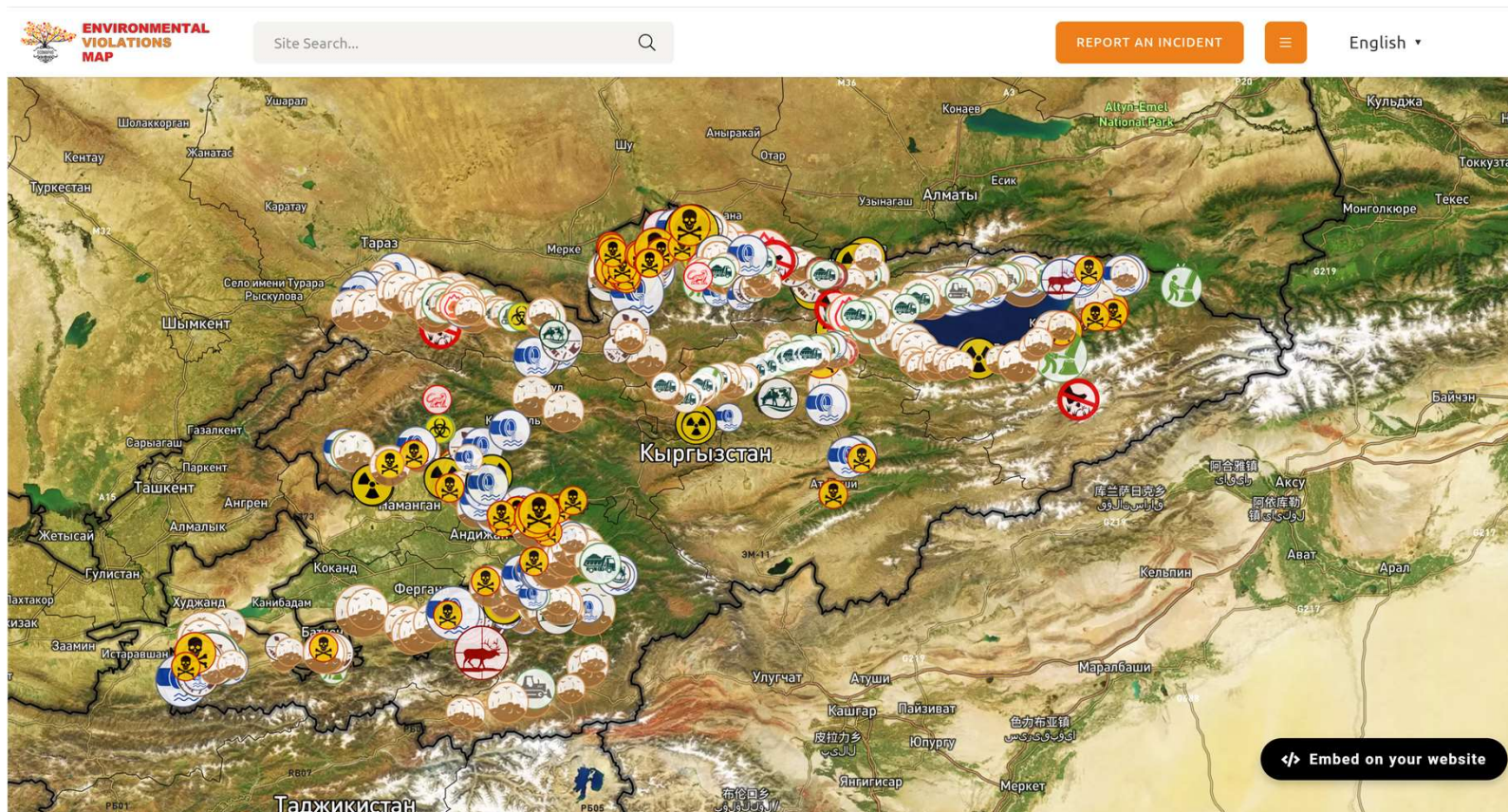
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8	9	10	11	12	13	14
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22	23	24	25	26	27	28
29	30					



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Environment violation maps- www.ecomap.kg/en/

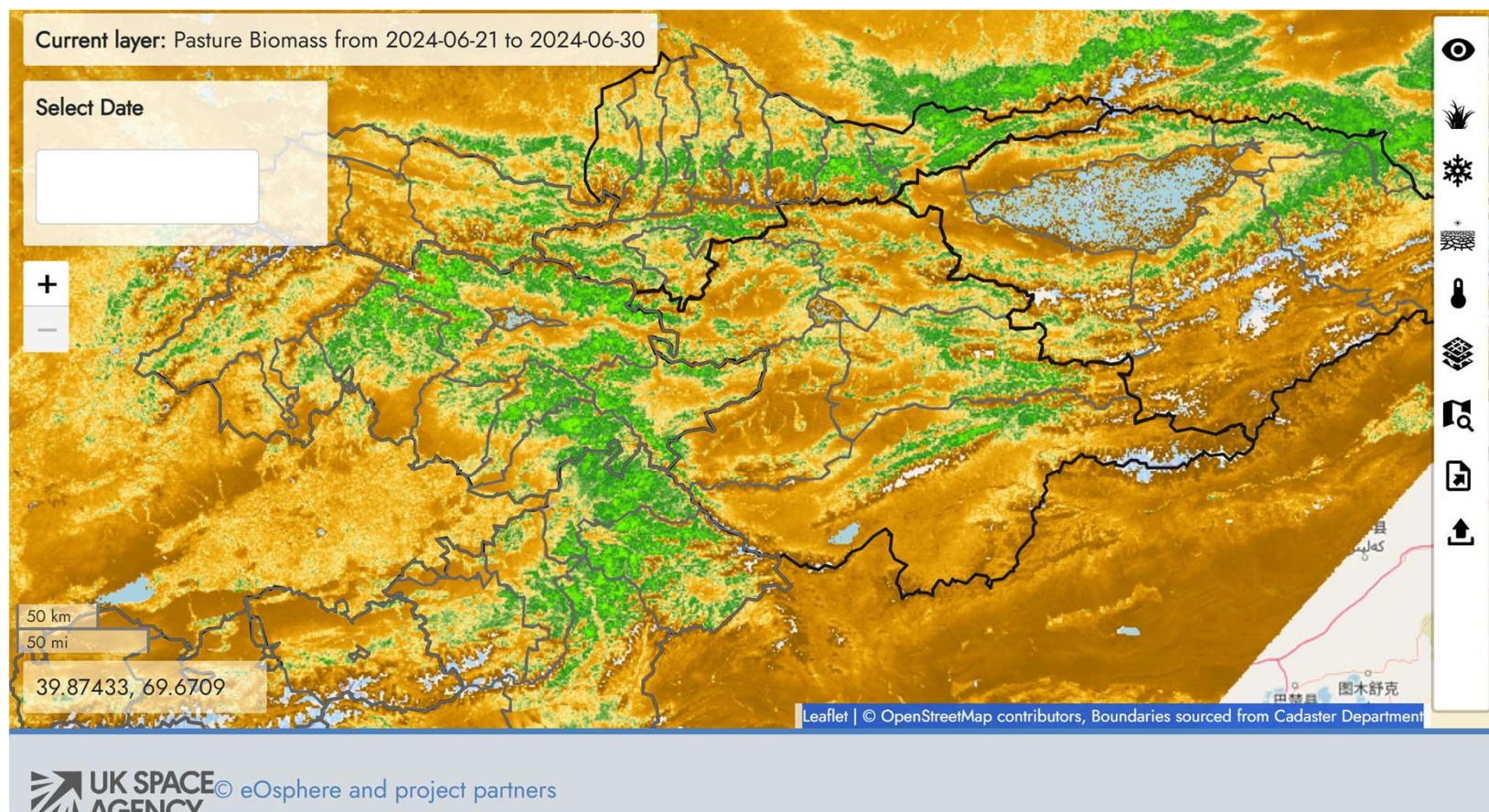


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Open Data Cube - <https://surl.li/blrpvg>

(<https://kyrgyzstan.sibeliussdatacube.org/map/EN>)



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NSDI Portal — www.nsdi.kg

Portal of geoinformation and climate data of the Kyrgyz Republic

Map Catalog of articles Metadata Contacts EN KY RU

Portal of geoinformation and climate data of the Kyrgyz Republic

This portal is a cartographic WEB-interface for accessing up-to-date spatial information on the territory of Kyrgyzstan with the ability to access expanded information from existing databases and document repositories.



Categories

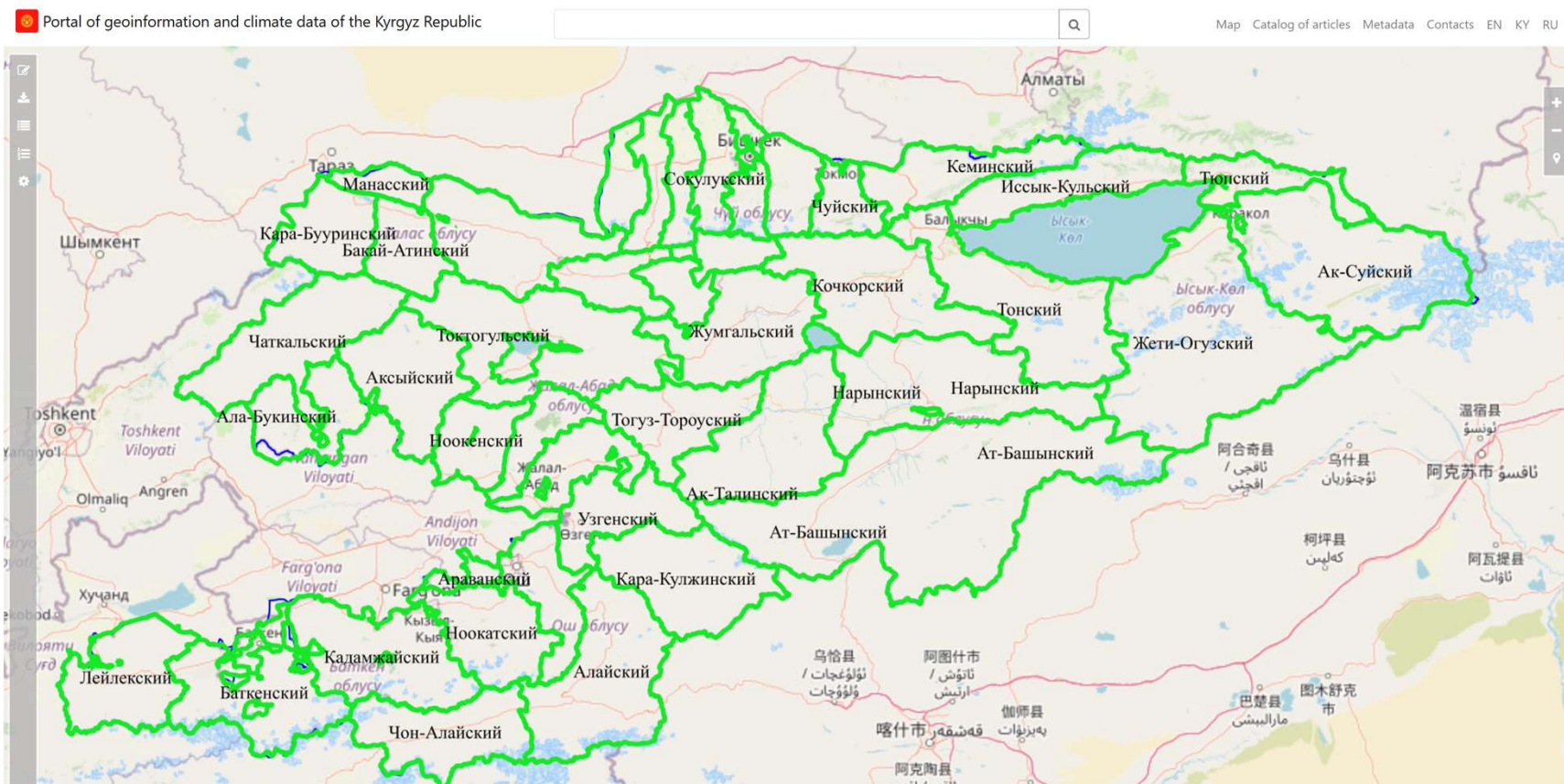
 Farming	 Biota	 Boundaries	 Climatology	 Economy	 Elevation
 Environment	 Geoscientific Information	 Health	 Imagery/Base Maps/Earth Cover	 Inland Waters	 Location



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NSDI Portal — www.nsd.kg



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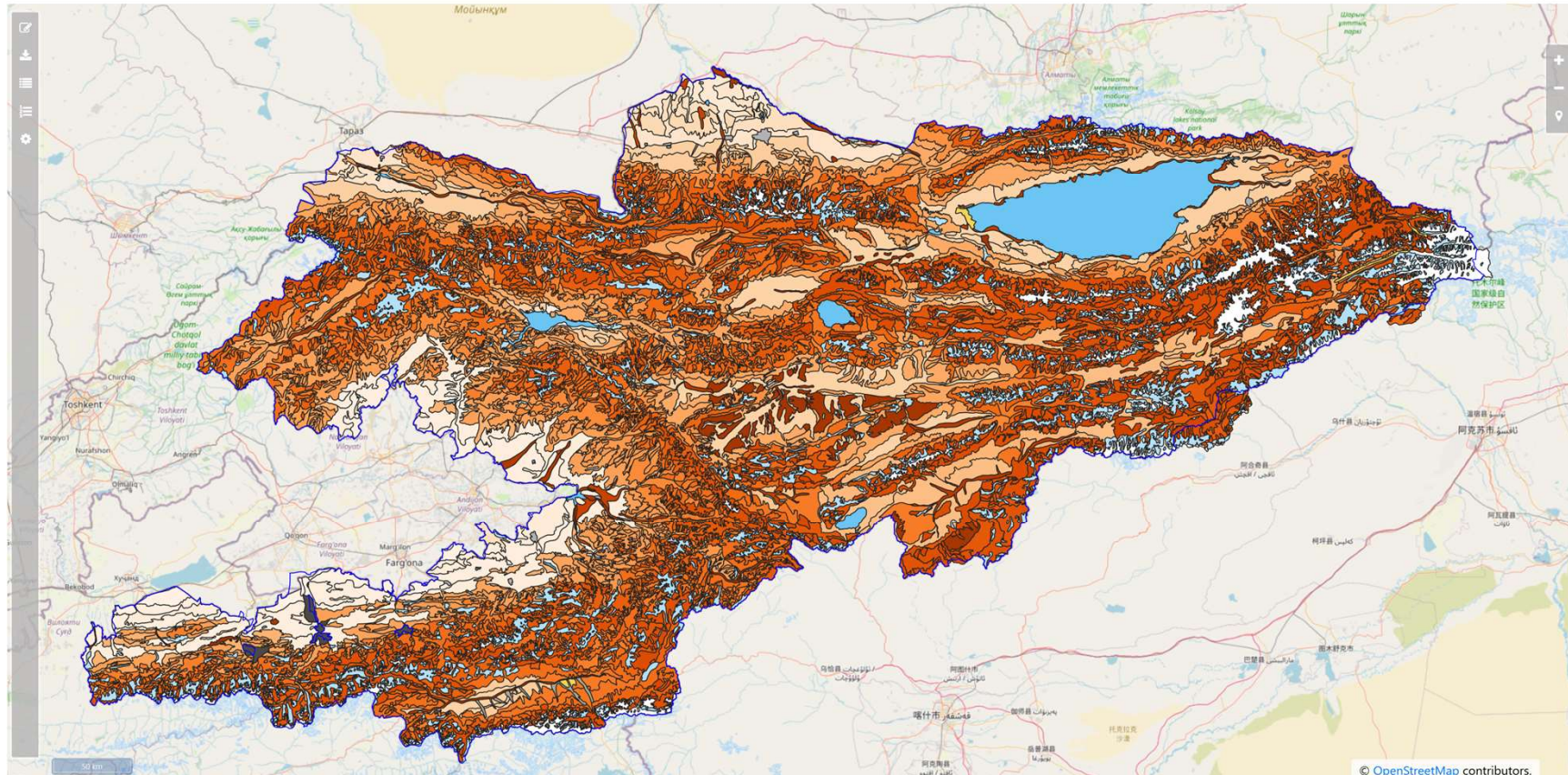
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Thank you for attention!



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