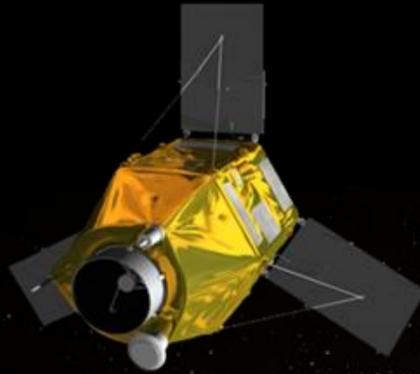




**NATIONAL EARTH REMOTE
SENSING SYSTEM
KAZAKHSTAN**

Kazakhstan's Earth Observation Satellites

KazEOSat-1



Resolution: 1 m
Coverage: 200K km² /day

KazEOSat-2



Resolution: 6.5 m
Coverage: 1 mln. km² /day

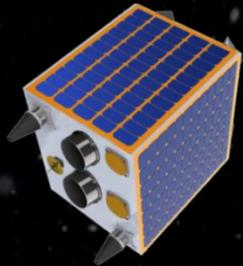
KazSTSat



Resolution: 17 m
Coverage: 3 mln. km² /day

Development of the ERS system (Stage 1)

KazEOSat-MR Project



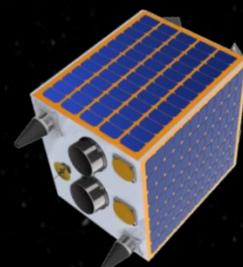
- Resolution: 3 m
- Coverage: 1 380k km² /day
- Launch: **2027** (3), **2028** (1)



Joint Constellation

- Increased productivity
- Access to Joint Constellation data
- 1st partner: **Mongolia**
- 2nd partner: **Republic of Congo**
- 3rd partner: **Federal Republic of Nigeria**

Single Satellite



Revisit – 4 days
Coverage of Kazakhstan – 5 months



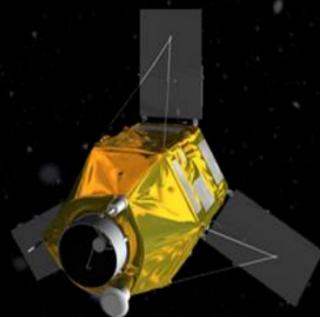
Constellation of Satellites



Revisit – 14 hours
Coverage of Kazakhstan – 1 month

Development of the ERS system (Stage 2)

KazEOSat-HR Project

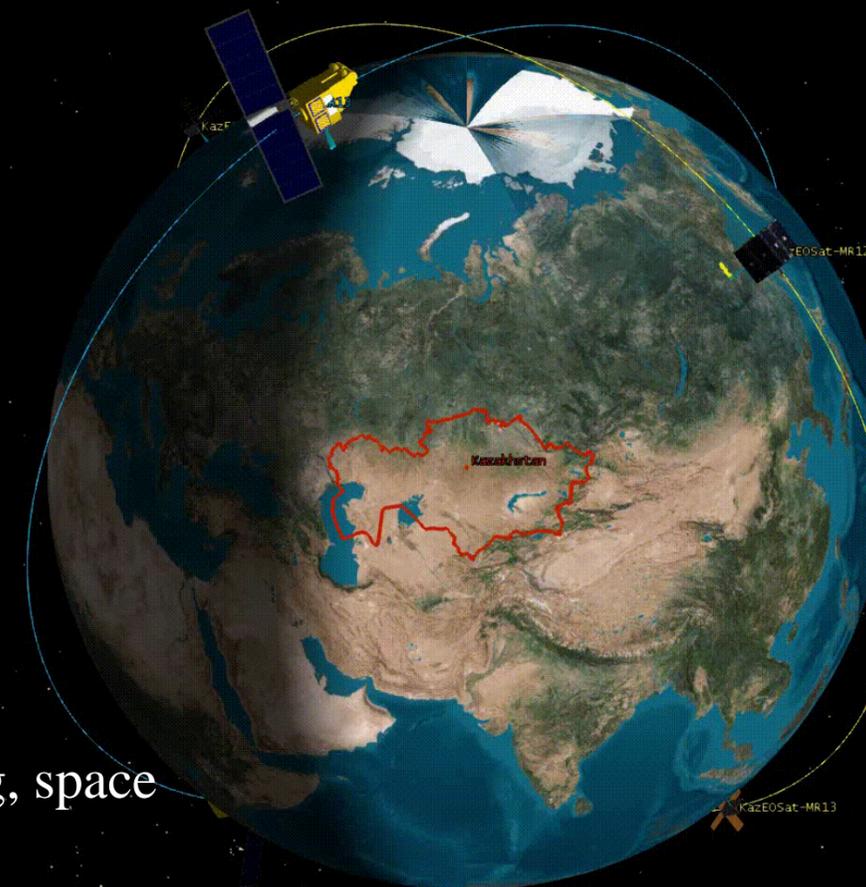


- Resolution: 0,7 m
- Kick off : 2026
- Launch: 2029

SAR Satellite

- Resolution: 1 m
- Kick off : 2025
- Launch: 2029

Joint Constellation of High Resolution Satellite



ERS Joint Constellation



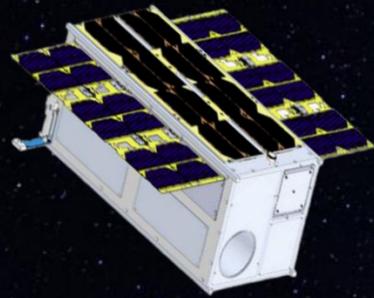
- Transfer of GIS and Digital Platforms technologies (image processing, space monitoring, GIS training, digital platforms)

Kazakhstan Topocentric Axes
23 Apr 2024, 02:30:30.353 Time Step: 30.3529 sec



Collaborative Solutions for the Climate Challenge

KazECOSat

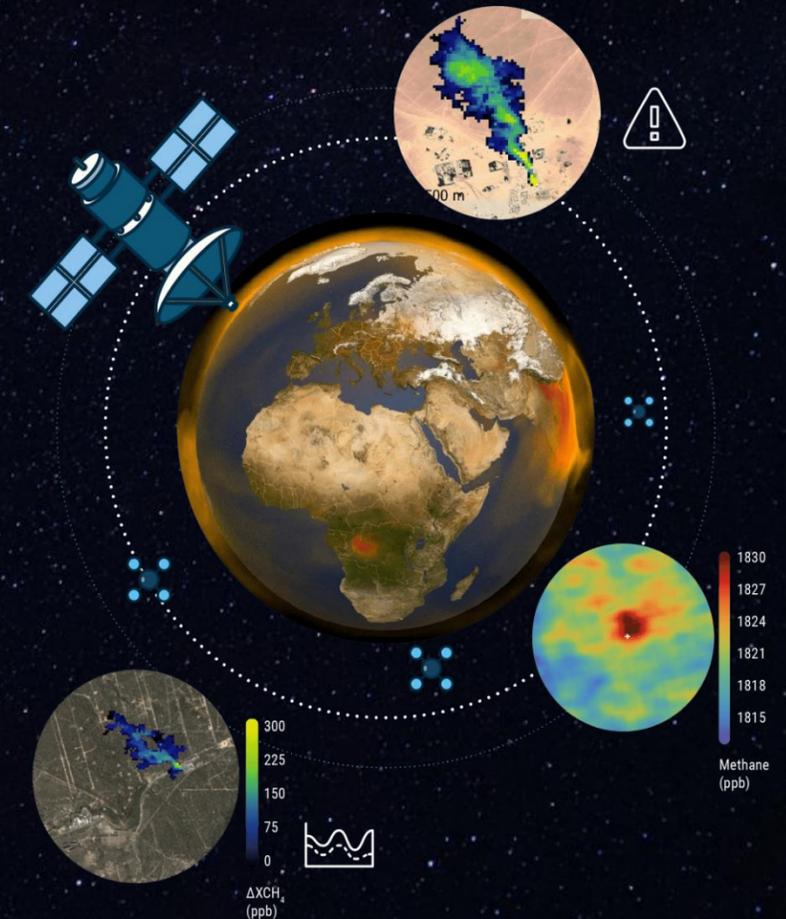
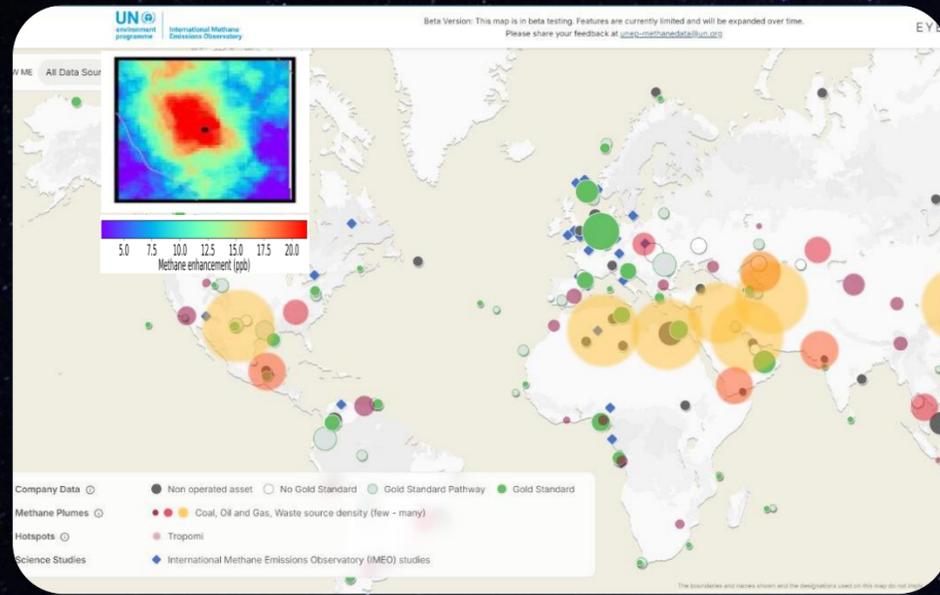


- Payload: sensor
- Revisit: 3-4 days
- Launch: 2027

GIS Platform «Methane»

- Detection and attributes
- Analysis and notification of the parties
- Taking action
- Tracking and improvement

MONITORING OF METHANE EMISSIONS



Assembly Integration and Testing Complex



Astana, Kazakhstan

Technical specifications and features

- Qualified staff of more than 40 engineers
- The assembly capacity of 4 satellites
- 7 specialized design and production facilities
- Certified by Airbus DS

Space Monitoring Applications

Monitoring of unauthorized land grabbing



Monitoring of forest resources



Monitoring of agricultural crops



Monitoring of water resources



Cooperation of JSC "NC "Kazakhstan Gharysh Sapary" with Sentinel Asia

From May 7, 2025, KGS became a member of Sentinel Asia as Joint Project Team (JPT) as well as Data Provider Node (DPN) and Data Analysis Nodes (DAN) member.

In 2025, in response to emergency situations under the Sentinel Asia program, KGS conducted satellite imaging using KazEOSat-1 and provided 288 images covering a total area of 115 200 sq. km for the following events: the Earthquake in the Philippines, the Flood in Vietnam, and the Flood in Nepal, the Flood in Sri Lanka, the Volcano in the Indonesia and etc.

【SA_00619】 Overview of KazEOSat-1 Images for Philippines-Landslide-Earthquake-Tsunami









【LEFT】
 (Green) KazEOSat-1(L2) MS(4m res.) image on October,14.
 (Yellow) KazEOSat-1(L2) MS(4m res.) image on October,19.
 (Blue) KazEOSat-1(L2) MS(4m res.) image on October,23.

【RIGHT】
 Natural Color Image(B:Band1, G:Band2, R:Band3) of a part of Davao City using KazEOSat-1(L2) MS(4m res.) image on October,19.

THANK YOU FOR ATTENTION

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