

Department of Geomatics, Geoinformation, Space and Earth Observation; The Civil Faculty, University of Pristina

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The Civil Faculty of the University of Pristina is the oldest and largest institution in the fields of construction in Kosovo. The main activity is focusing on teaching and learning, and all the time the student is in the center of attention. As an assistant teacher, I am responsible for exercises in some subjects.





USE CASE

Assessment of illegal construction in Pristina municipality

Application: Urban planning

Location: Pristina, Kosovo

Products: Pléiades Neo

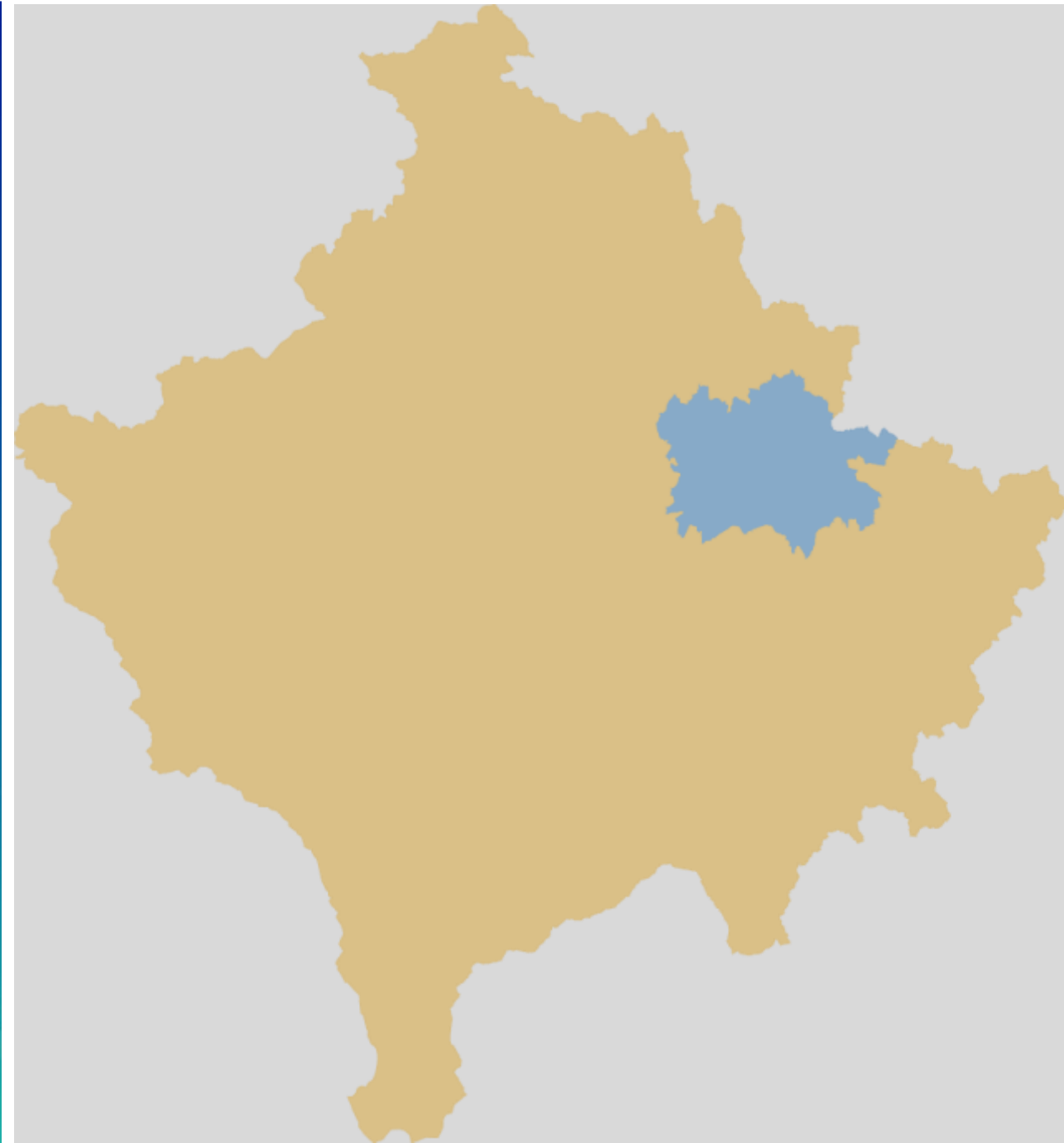
AIRBUS



Challenge

Pristina is the capital, and the largest city in Kosovo. Pristina is also the largest economic, administrative, educational, and cultural center in Kosovo.

- The multifunctional city.
- Numerous constructions without permission.
- Old urban plans.
- Newer images are needed for urban planning.
- One of the key elements is the identification of illegal objects.



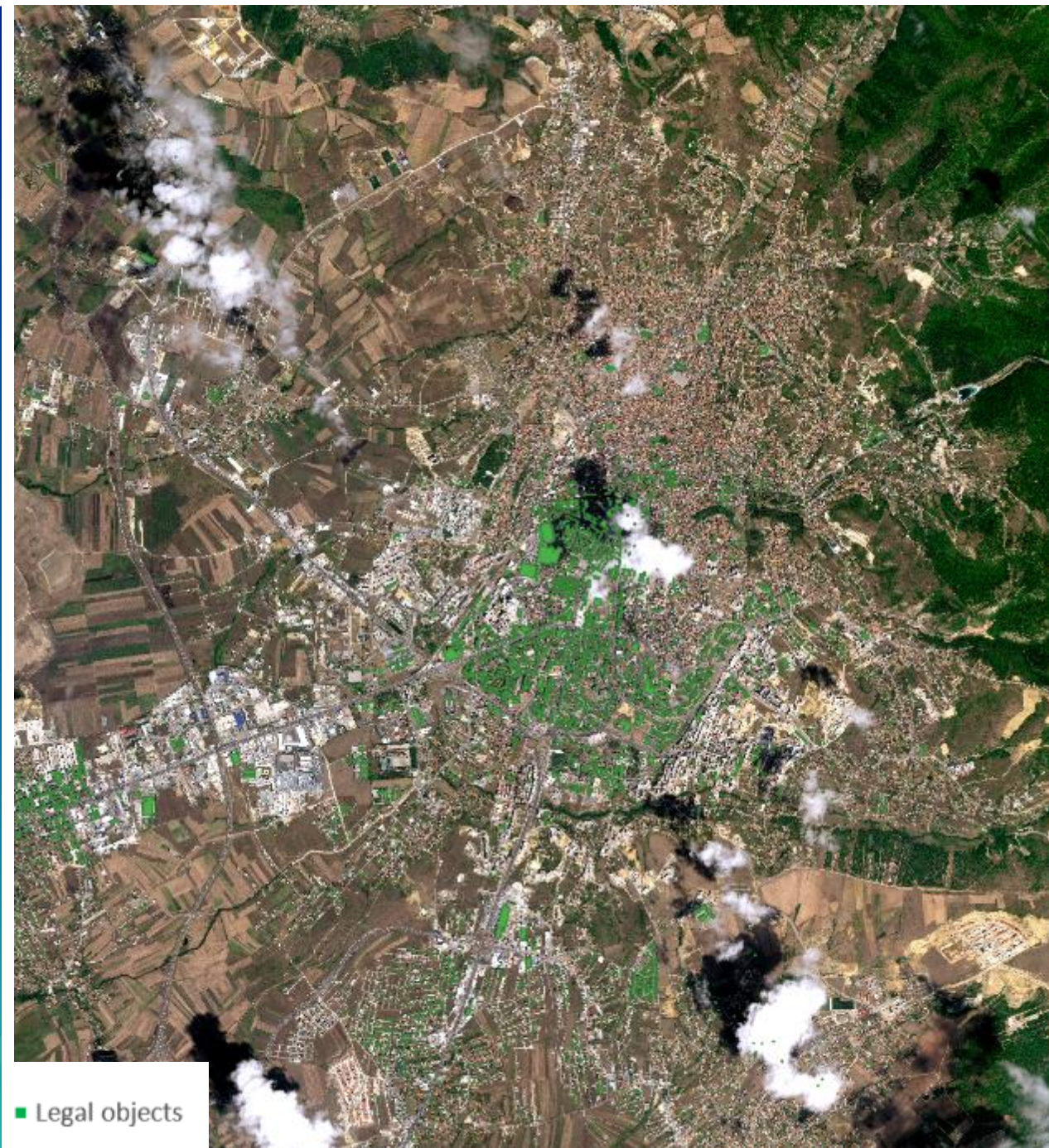


Solution & Results

- The 30 cm VHR and agility of Pléiades Neo enable us to represent a whole city in detail.
- To get a color image with high resolution we used Pansharpening product.
- The digitization methodology enabled us to vectorize illegal buildings.
- We have 4097 legal buildings.
- All other buildings are considered illegal buildings, also those objects that have been equipped with a permit, but are still not registered in the cadastral register since they have not made technical acceptances of the object after construction.

Pléiades Neo Imagery helped to:

- **Identify illegal buildings.**
- **Analysis and assessment of illegal buildings.**
- **Support new urban planning.**



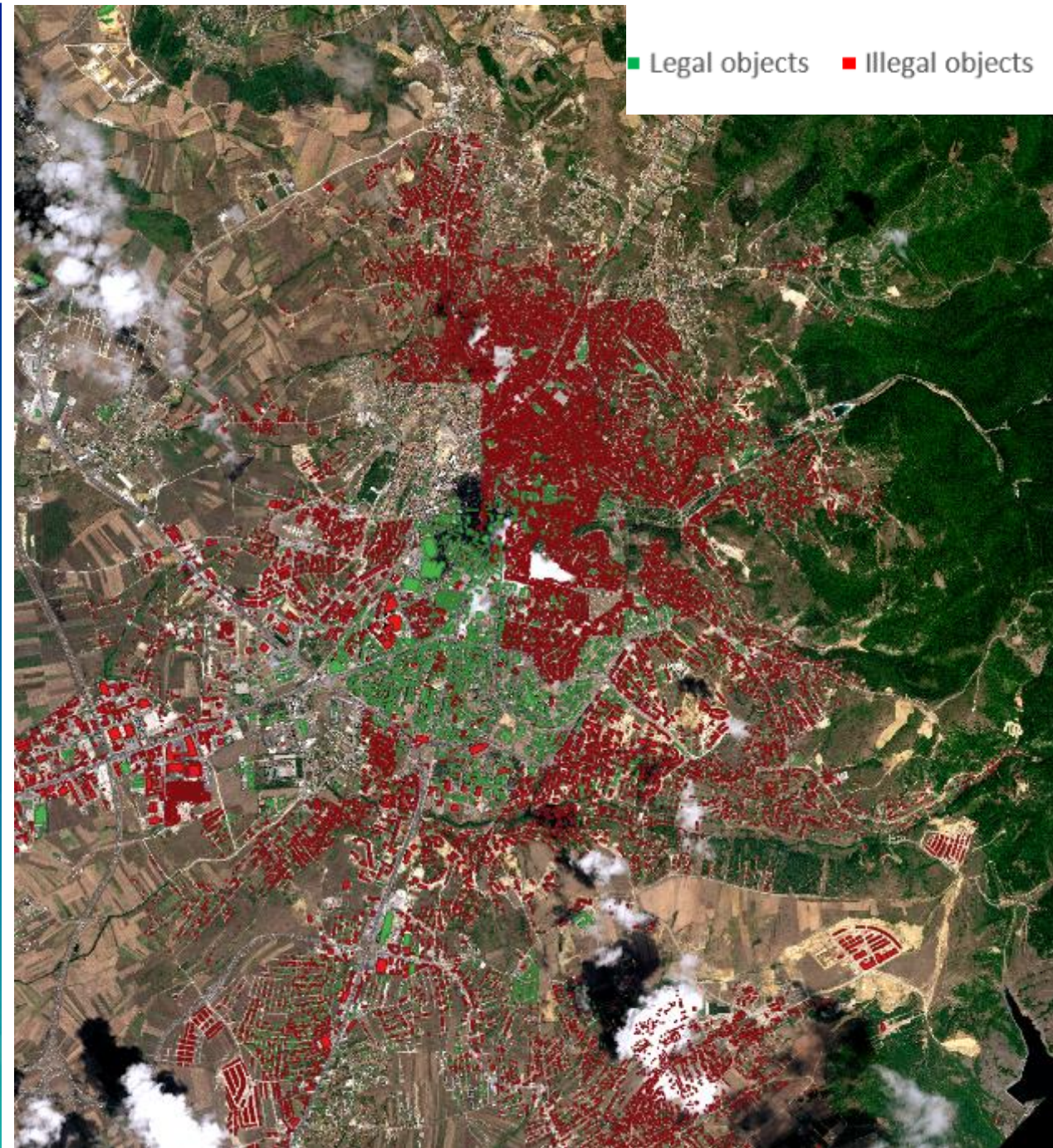
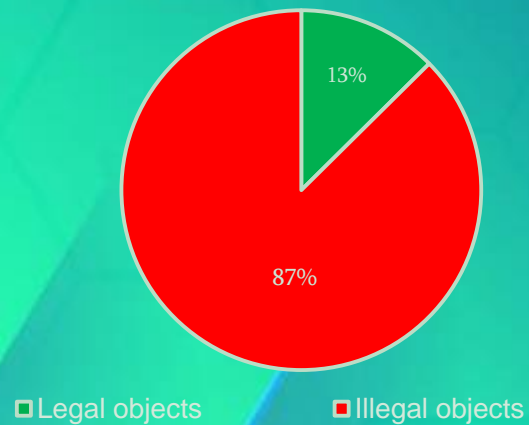


Results

The various data of the municipality of Pristina

Municipality of Pristina	
Area of Pristina (including villages)	523 km ²
Area of Pristina (excluding villages)	60 km ²
Number of parcels (including villages)	98 109
Number of parcels (excluding villages)	15 422
Number of legal objects	4 097
Number of illegal objects	28 450

Percentage of legal and illegal objects in Municipality of Pristina





Benefits

- Panchromatic products gives us a clear picture of the Pristina municipality with 30 cm resolution.
- Detects building changes, especially illegal construction by analyzing satellite images and comparing with official building permit data.
- Creates clearer urban plans, also more efficient measures can be taken in areas of unauthorized constructions.

Organisations Involved:

