

History



First countrywide application of land classification based on satellite EO in 1970s

Regular updates of general classification

Applications in agriculture, forestry and natural disasters

First activation of The International Charter Space and Major Disasters

Involvement in Copernicus activities

Copernicus Masters winner

Joining the European Space Agency stimulated R&D



Sinergise



75 FTE – Geospatial and Cloud SW

Commercial products – Sentinel Hub



Open-source web applications – EO Browser





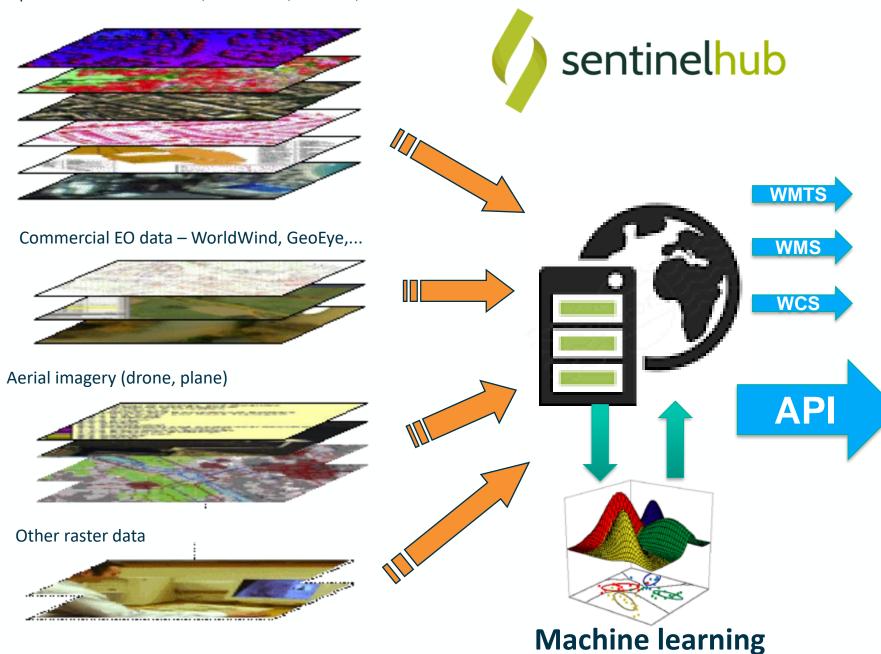


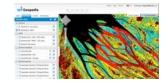






Open EO data - Sentinel-1, Sentinel-2, Landsat, etc.





Cloud GIS



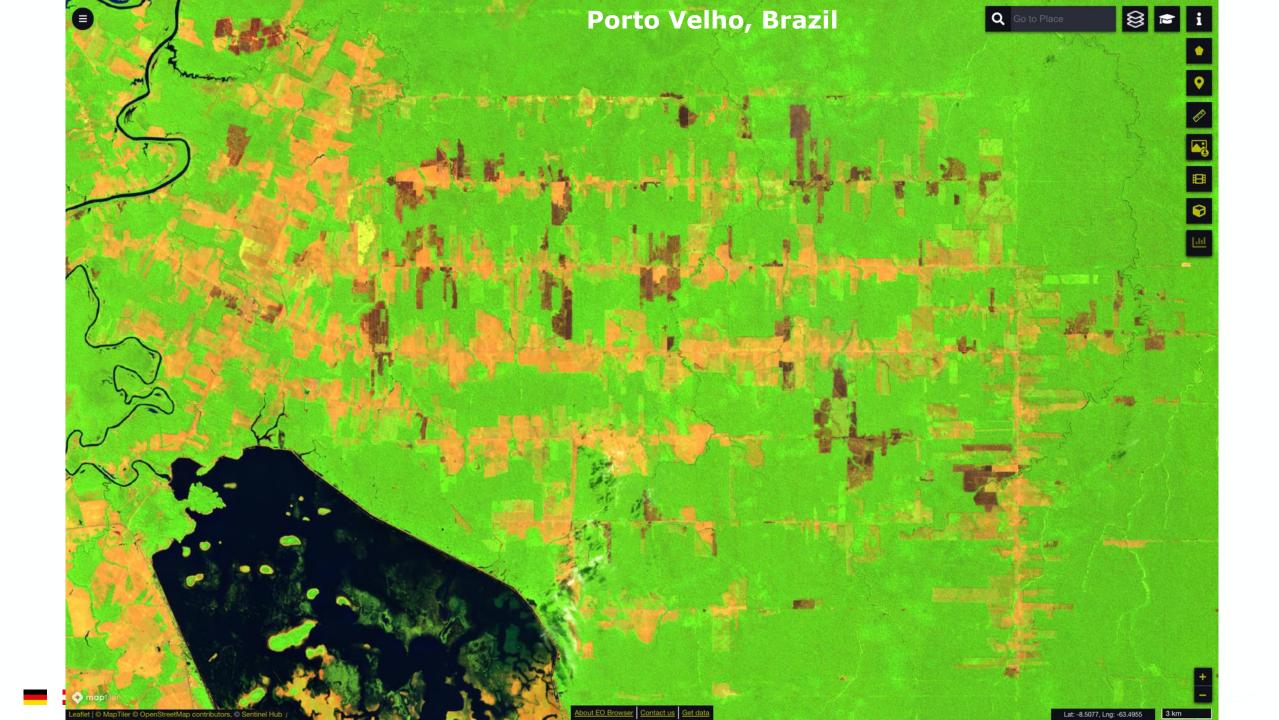
Web / Mobile apps



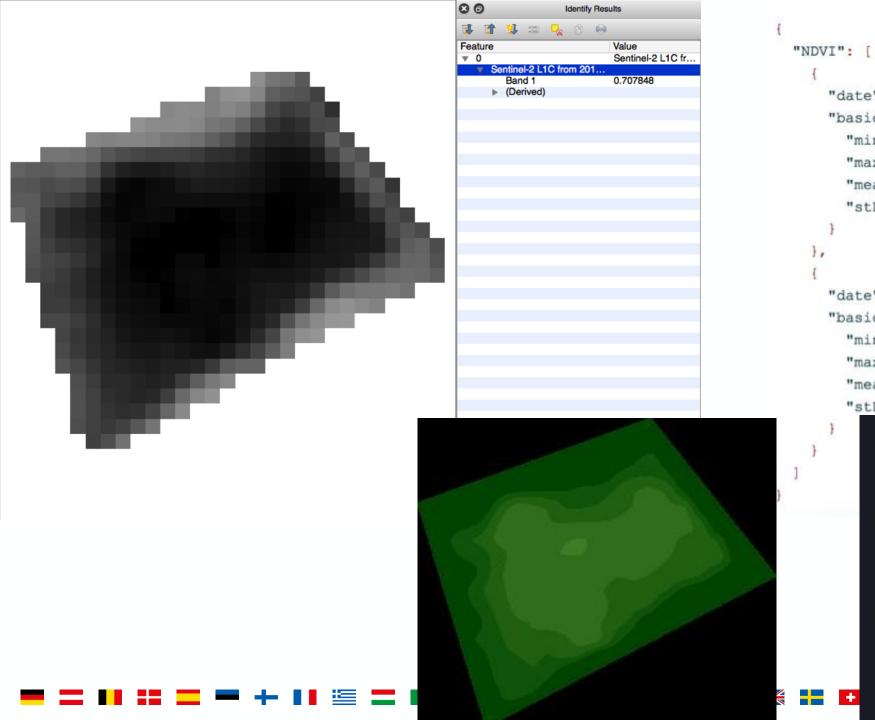
Desktop (QGIS, ArcGIS...)



Scripting (Python, R, ENVI...)

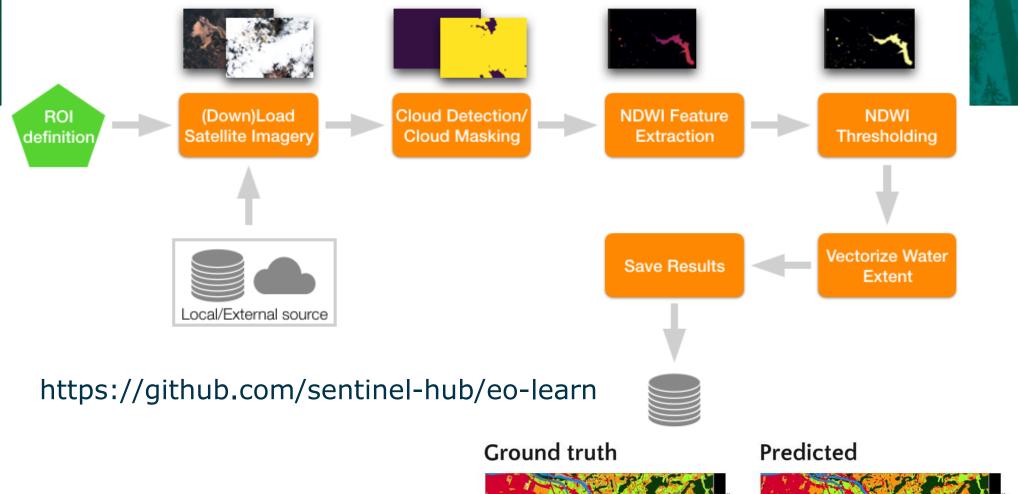






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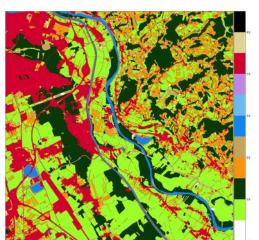


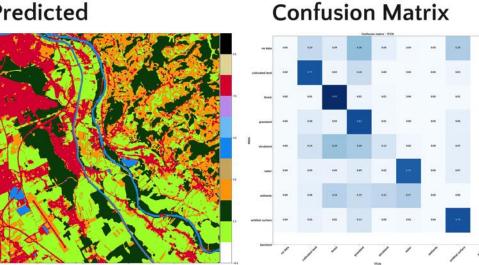


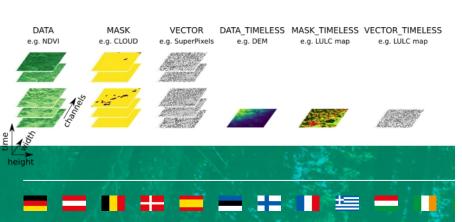












University of Ljubljana, Faculty of Civil and Geodetic Engineering



Research and Education

Offering courses in remote sensing and geoinfromatics

University of Ljubljana

12 FTE

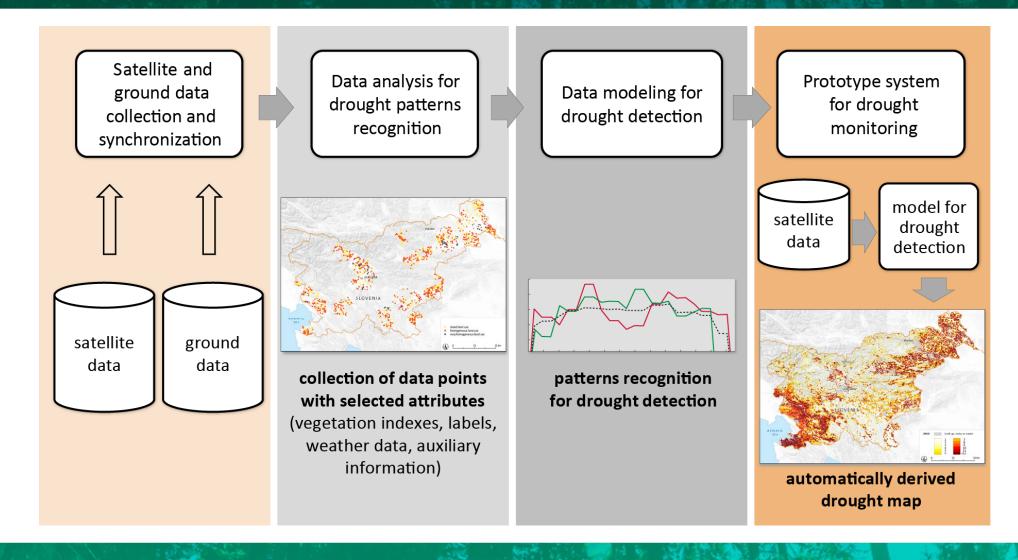
Data integration – from UAV to satellite

Applications – agriculture, forestry, urban, natural disasters



Automatic system for satellite-based drought monitoring





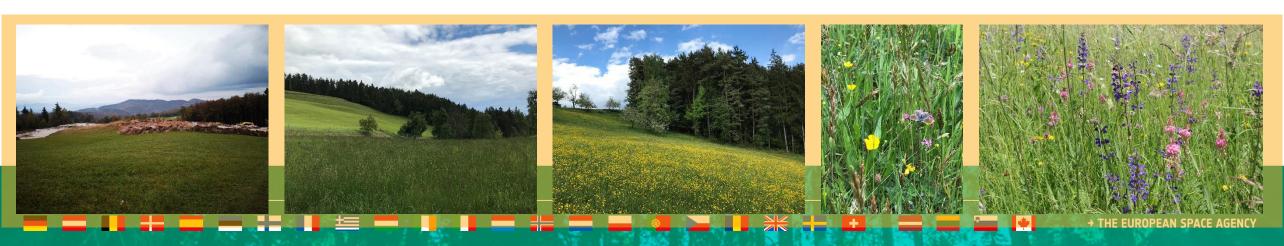
Grassland monitoring



Usefulness of Sentinel-1 and Sentinel-2 data on the separation of intensive and extensive grasslands

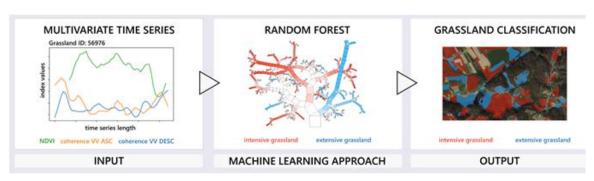
Analysis of time series with machine learning

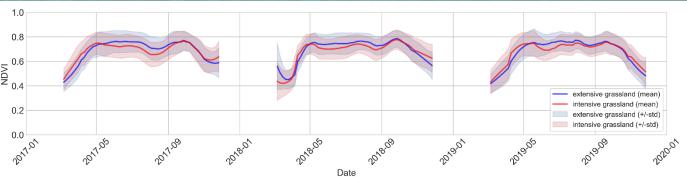
Define the procedure for annual checks (monitoring) of grassland in Slovenia

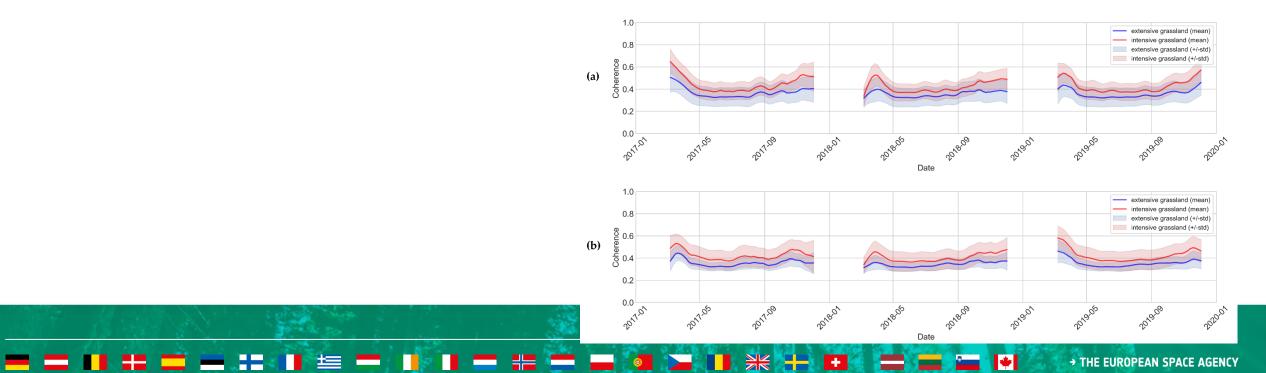


Grassland monitoring



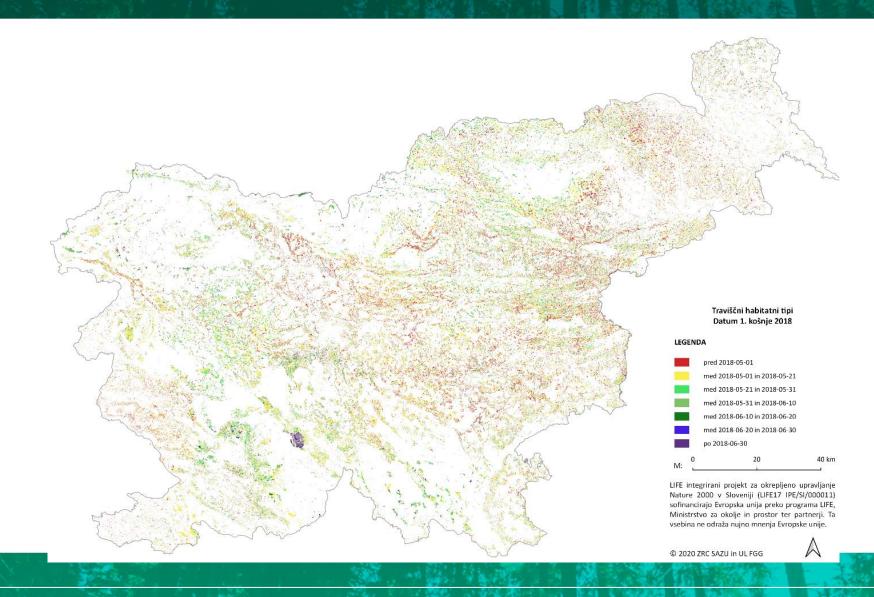






Grassland monitoring





Research Centre of the Slovenian Academy of Sciences and Arts



15 FTE

Basic research and application



Automatic processing, data fusion, deep learning, change detection, spatial analyses and modelling, lidar data processing and visualization

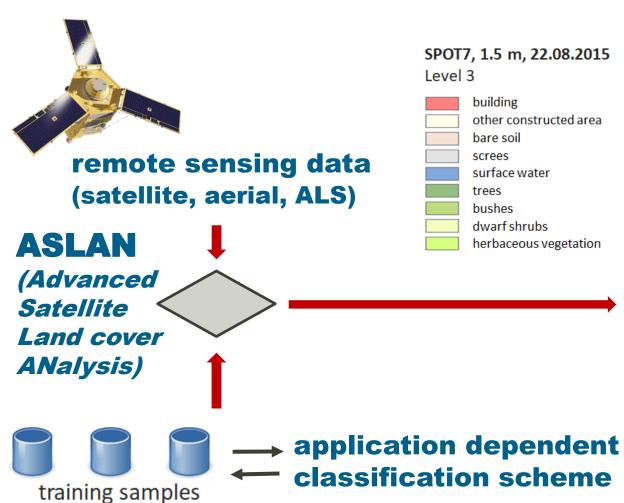


Geometric corrections

automatic and fast processing chain for optical satellite data subpixel accuracy of orthoimages

Fully automatic LC classification with ANN



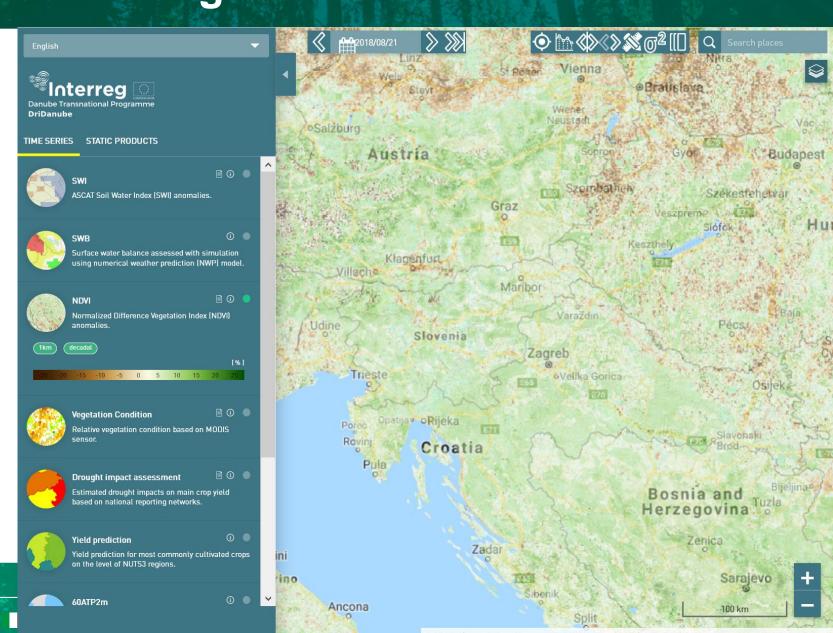




Drought User Service - DroughtWatch



- satellite data
- data from observers
- harmonised methods for the whole region
- more detailed methods for specific countries



NEMO-HD



Multispectral & video

Orbit SSO 535 km

Dimensions 38 x 57 x 57 cm

Mass 60,18 kg

Apperture 155 mm

HR GSD 2,8 m / SWOT 10 km

Main payload operating modes

Secondary payload GSD 40 m

Secondary payload LR video



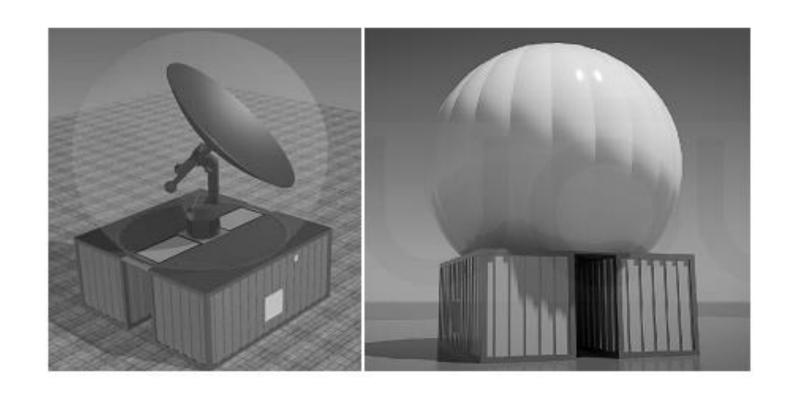














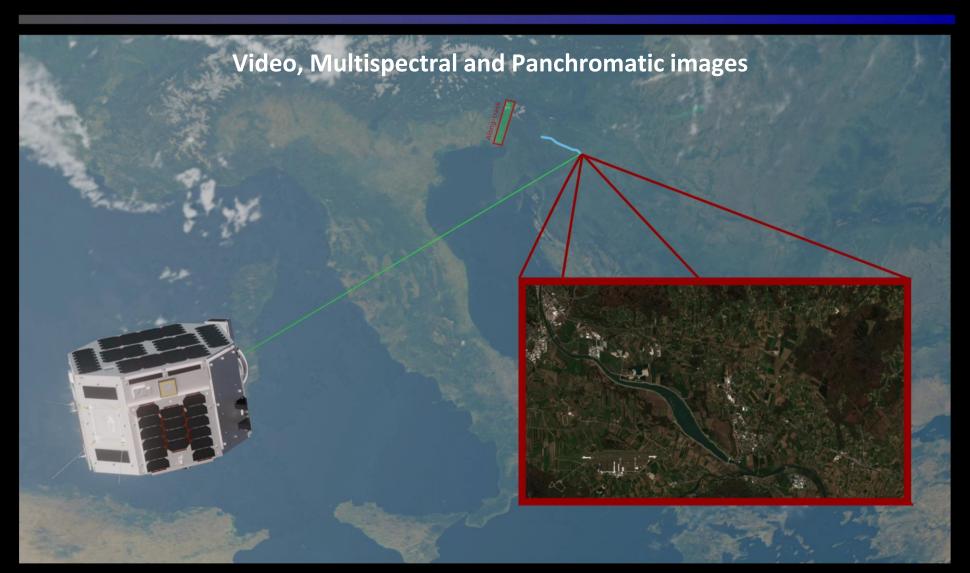








NEMO-HD payloads





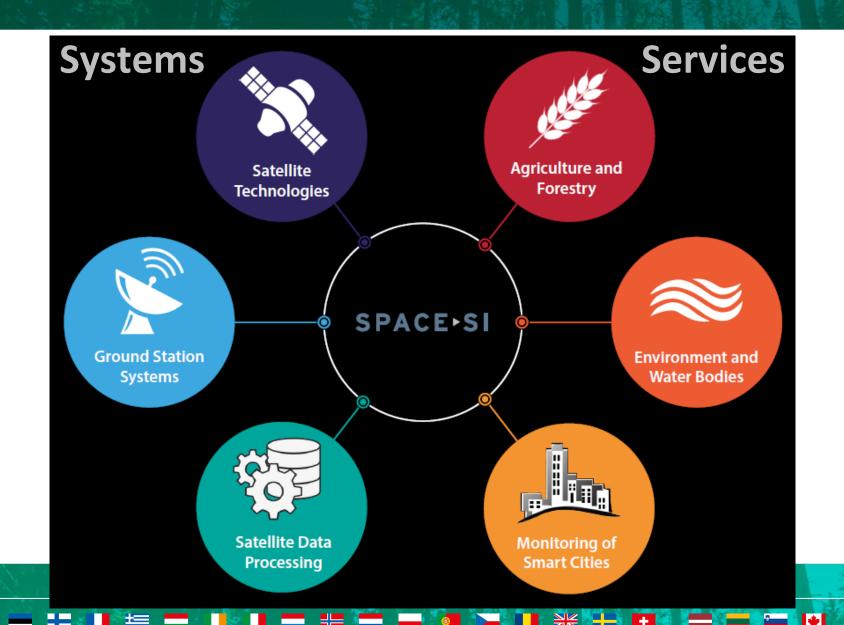




















Nemo-HD is an Agile Multi-payload Satellite for River Basin Scanning











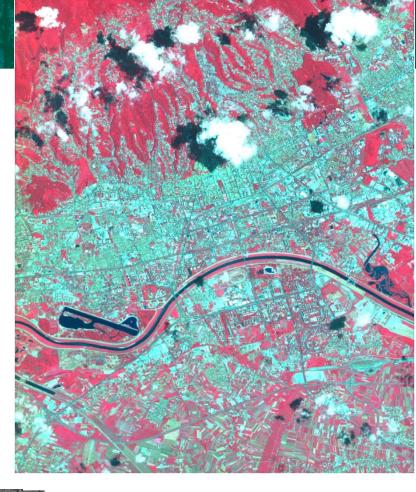
Soča River Discharge

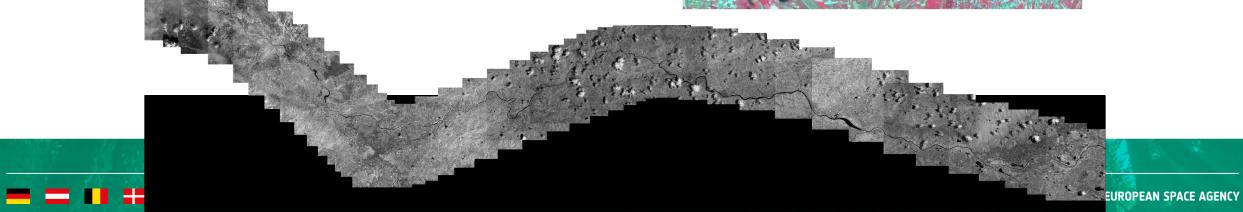




Sava

Bled - Zagreb







Sava - Danube

Sremska Mitrovica to Belgrade

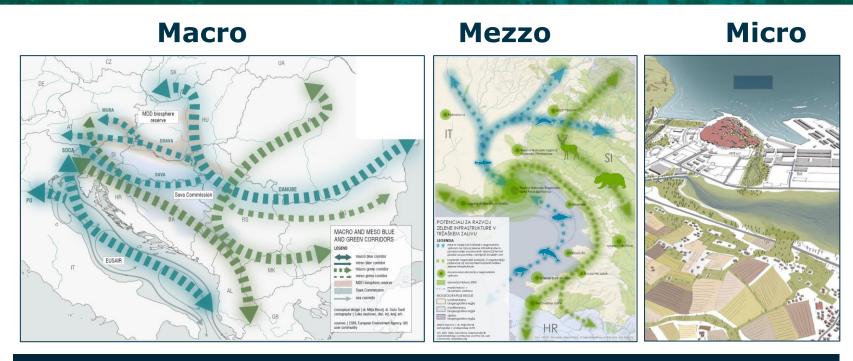


Belgrade -NDVI

Blue & Green



corridors at different levels



SENTINEL satellite data

NEMO-HD satellite data

DOF, drones, on-ground sensors