

Workshops, 17th of September 2021

List of Topics

9.00-12.00

Workshop 1: Introduction to GIS techniques with QGIS

- 1.1. Downloading, installation and using the QGIS program.
- 1.2. Data import.
- 1.3. Displaying and visualization of data.
- 1.4. Digitization of spatial data.
- 1.5. Interpolation of spatial attributes.
- 1.6. Selection and searching of the data.
- 1.7. Databases' management and the basics of SQL.
- 1.8. Computing basic spatial statistics.
- 1.9. Preparation and export of maps.

13.00- 16.00

Workshop 2: Basics of Satellite Image Analysis in QGIS (soil scientists)

1. How to find and download data.
2. Supervised and unsupervised methods in remote sensing and how to reclassify land use/land cover, classes.
3. Creating land use maps.
4. Detecting land use changes and calculating spatial statistics.
5. Creating and exporting maps.
6. Additionally, calculating indices, such as NDVI (Normalized Difference Vegetation Index), NDWI (Normalized Difference Water Index), SAVI (Soil Adjusted Vegetation Index).

17.00 - 20.00

Workshop 3: Mapping the Species Distribution and Diversity (biologists)

1. Importing vector and raster data.
2. Creating grid of squares.
3. Calculation of Shannon's Diversity Index.
4. Methods of calculating and visualization of species distribution.
5. Creating and exporting maps.