Rapid Change Detection of Forest Cover Disturbances in the Ukrainian Carpathian

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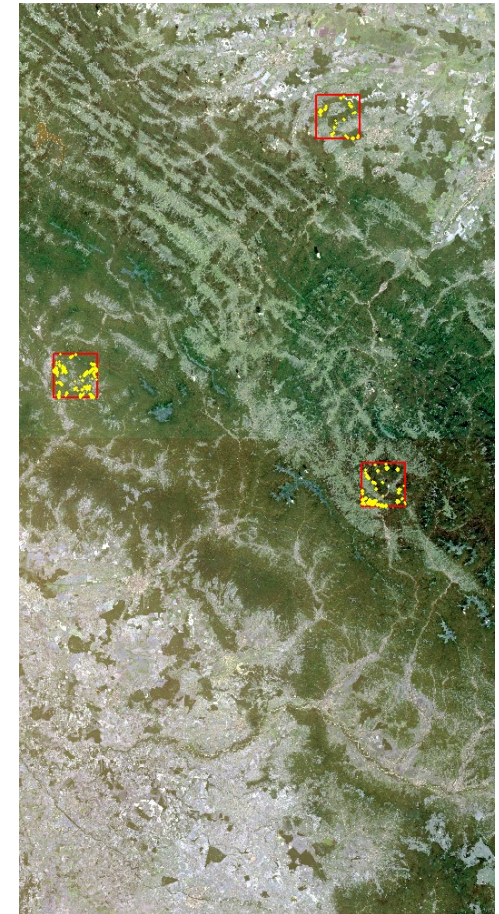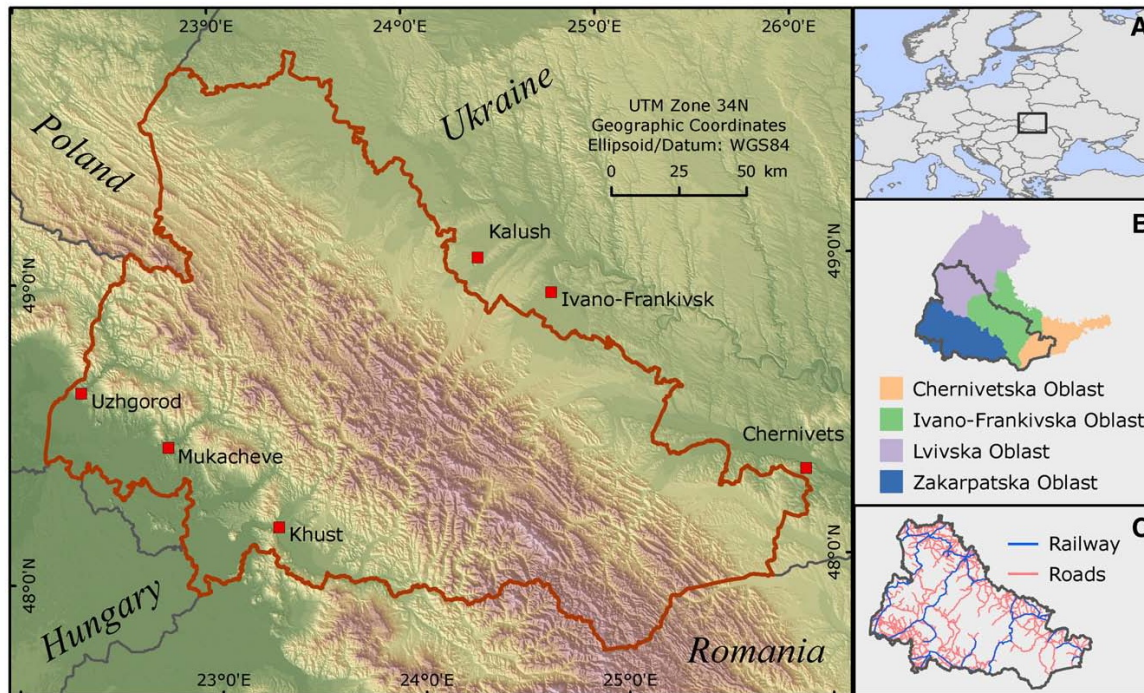
Objective
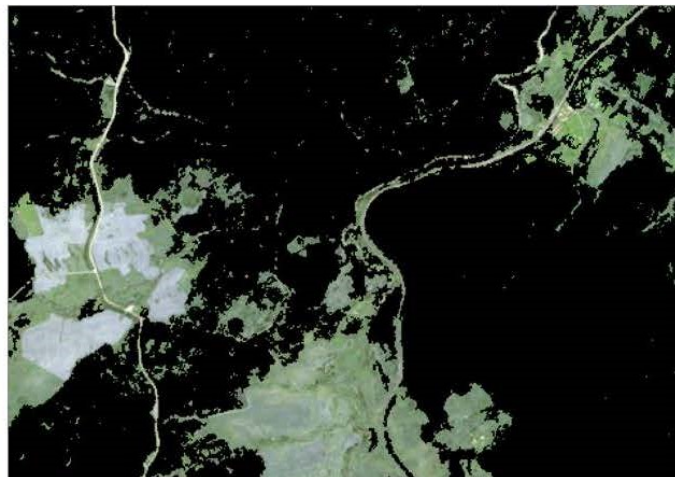
Design, develop a methodology and demonstrate a **European Forest Disturbance Monitoring System**

a.near real time forest disturbance monitoring by providing disturbance indication maps in a user accessible web portal immediately after image acquisition by automated pre-processing, change detection and visualization.
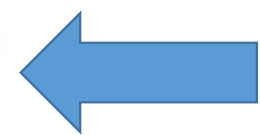
b.annual disturbance maps with thematic parameters

Service primarily focused on Sentinel-2 satellites from the Copernicus programme

Forest

Forest masking based on Random Forest Classification

Based on NDVI approach and time series forest masks, for the quantitative validation of the Annual Forest Disturbance Mapping products, the following categories are assessed:
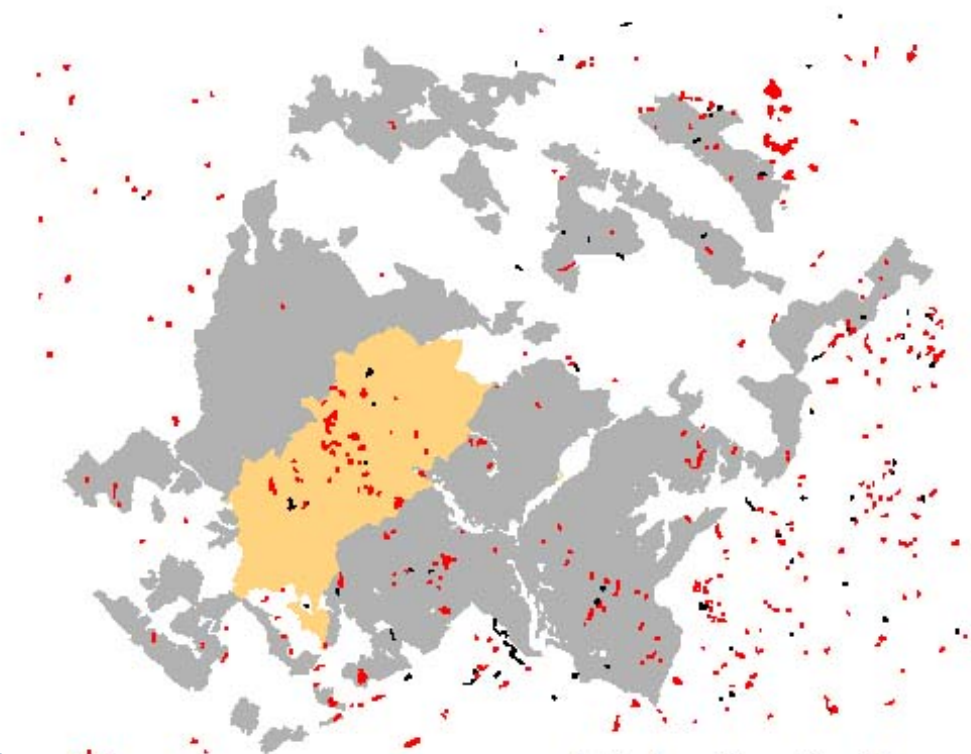
¨ Stocked areas / Forest

¨ Unstocked Areas / Non-Forest

¨ Disturbances

Webtool implemented for validation main window

Image date 31.08.2015

Image date 31.07.2017

Image date 30.08.2018

Detections

Confirmation of Disturbances

Detected Disturbances in region of Skole administrative district

https://diabolo-nrtdm.ign.fr/ - Near Real Time Disturbance Mapping

Legend

Forest Disturbances 2016-2017

Forest Disturbances 2018

National Park & Forest Enterprise

MFE Skole

0 2 4   8   12   16
Kilometers