

Forest Cover Change in the Ukrainian Carpathian

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Test area: Ukrainian Carpathian



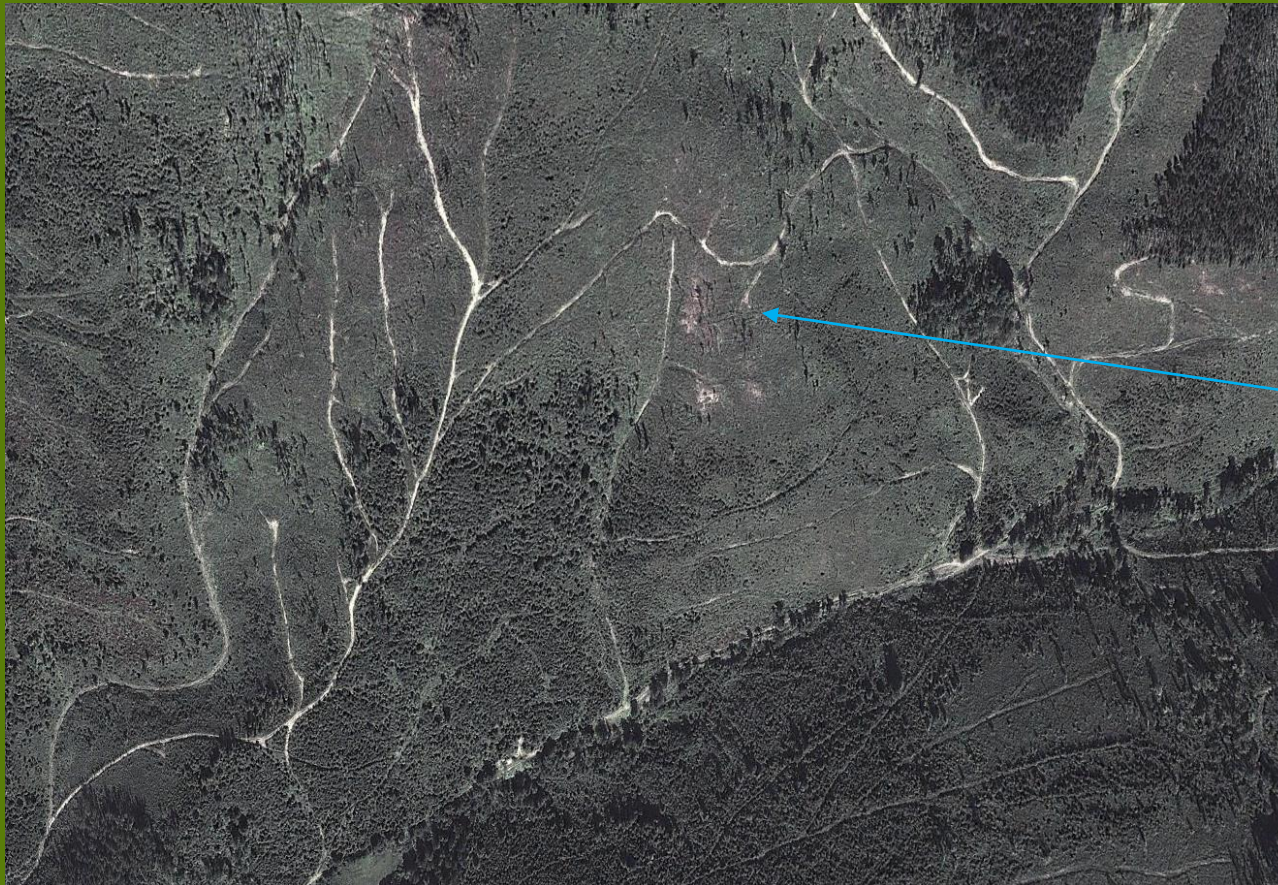
Ukrainian Carpathians - young mountains with cone-shaped peaks, low ridges and a flat slopes, among which valleys are situated. The highest peak of this part of Carpathians is Goverla. It's height is 2061 m. There is no glaciers, but snow is staying very long time. Often it avalanches down the slopes and damages the nature sights and people's livelihoods.



Although the Carpathian Mountains occupy a small area in Ukraine, it house more than half of all animals of the country. Brown bear, wild boar, roe deer, noble and spotted deer, squirrel, marten, hare, wild cat, lynx are found shelter here. Only in the Carpathians live such endemic species as: carpathian squirrel carpathian newt, and a snow vole. The bison are brought from the Bialowieza Forest.

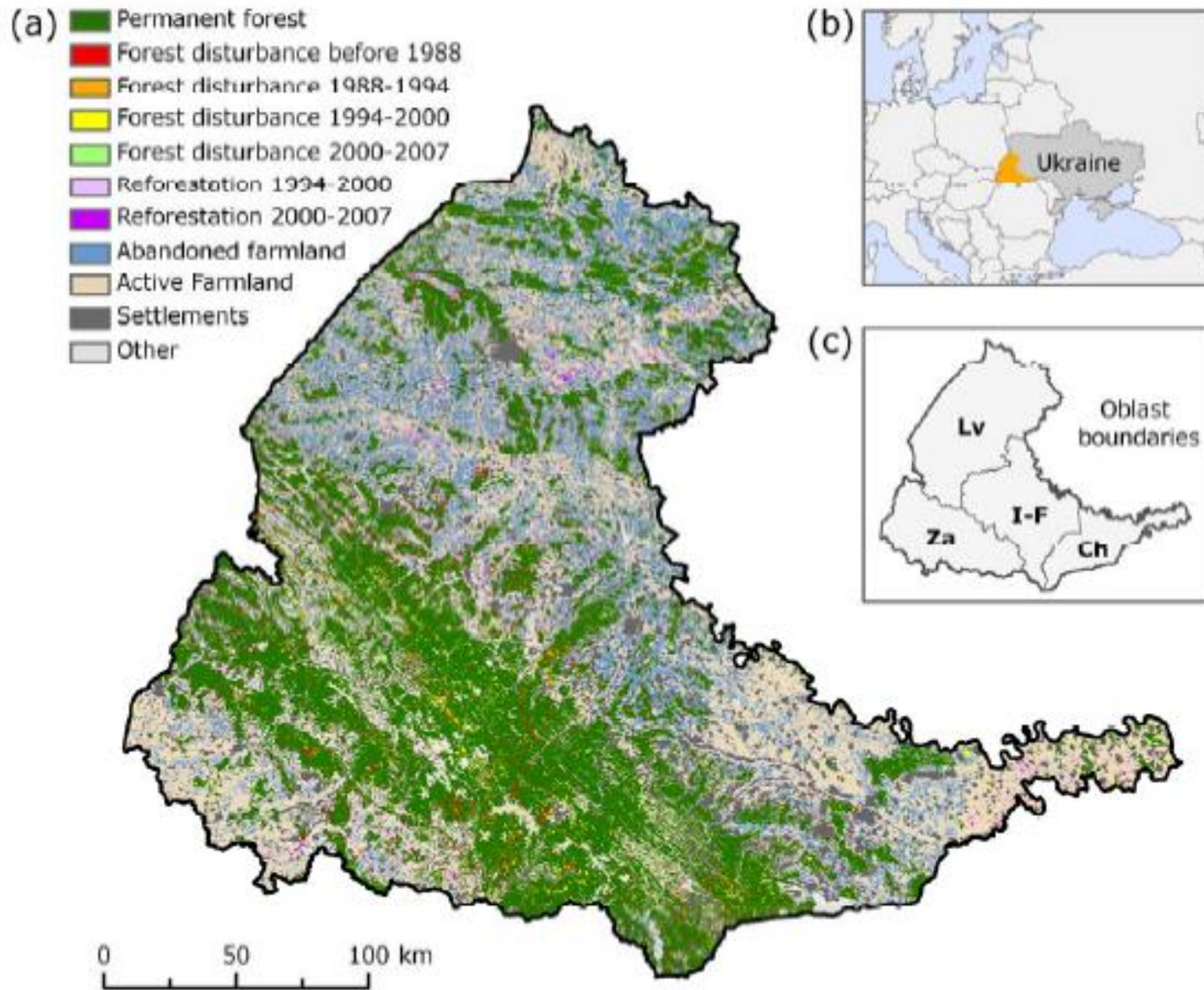
Aims of research

- Change detection on the basis of classified images
- Rapid Change Analysis of forest disturbances

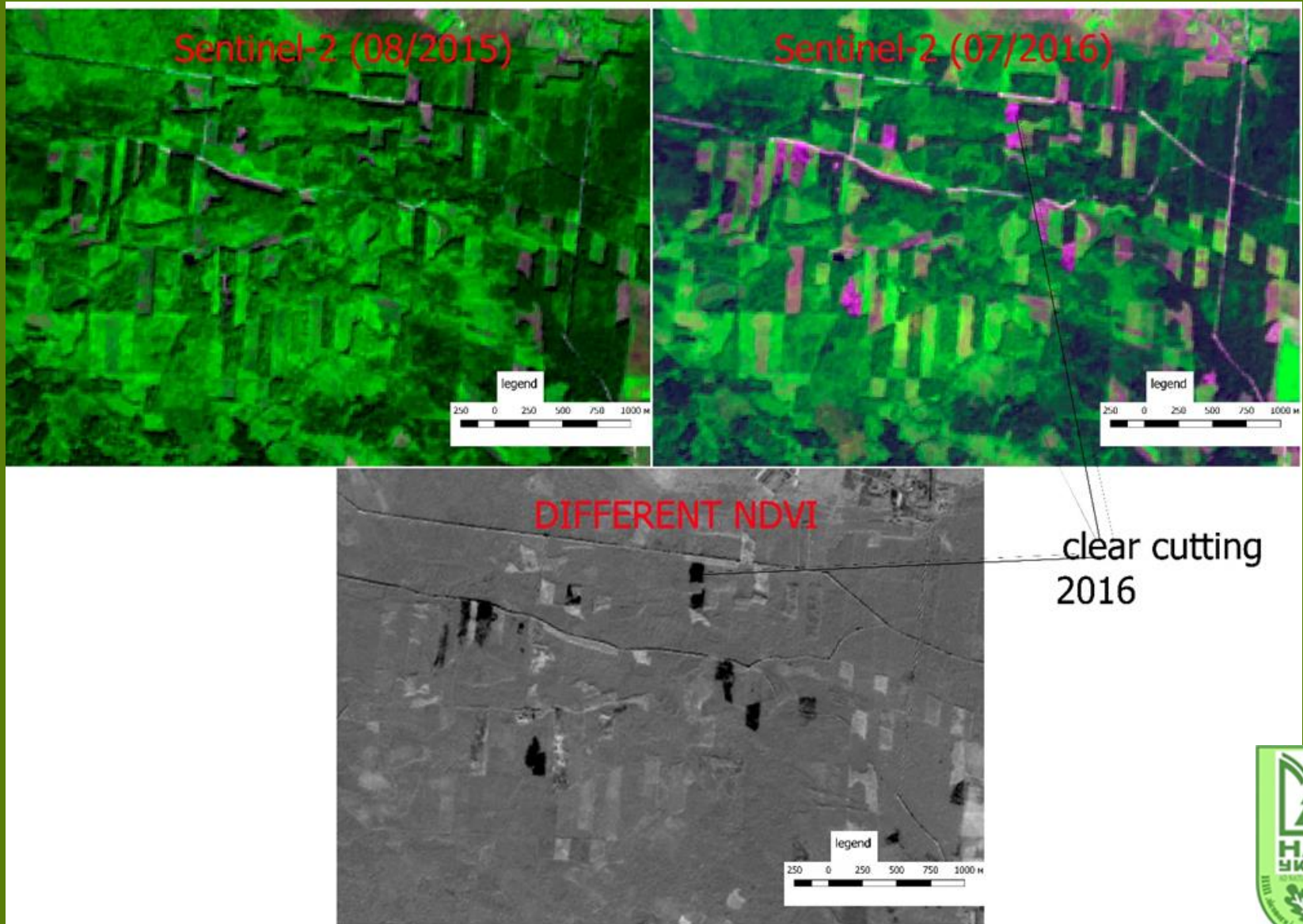


Clear cuts on
the satellite
images

Thematic map (map of changes) for Western Ukraine



The NDVI difference map illustrates the great potential of S2 for this method



For automatic classification of satellite images, we will use the vegetation NDVI indices and their differences for the satellite images before and after disturbances. On the basis of clear cutting set (2015) and forest mask we defined the threshold values for deforestation and reforestation. Based on expert-classificator was made the change map with two classes.

