

## COMPARATIVE STUDY OF LAND COVER USING MULTI-TEMPORAL SATELLITE IMAGES

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### ABSTRACT

The comparative study of land cover and soil status are provided using space images with middle resolution. The Landsat TM+ and SPOT 5 images are included in analysis. The unsupervised and supervised classifications are applied for determination of different types of land cover. The terrain investigations are made by taking and analysing the soil samples for typical soil types presenting in the area of investigation.

The analysed images are taken at different time moments in autumn and spring seasons to avoid the influence of crop stage of vegetation and snow coverage. The influence of used channels and space resolution of images on the reliability and accuracy of classified areas are investigated. The improvement of interpretation is established in the case of applying the combination of unsupervised and supervised classification.

The recommendations are formulated for appropriate properties of utilised space images. The diversity and amount of terrain investigations are suggested for obtaining the reliable and representative results.

**Keywords:** Land cover, Multi-temporal analysis, Supervised classification, Multi-band Images