Classification of selected vegetation land cover categories in the Krkonoše Mts. Tundra from Sentinel-2A imagery using multitemporal data

Abstract

The aim of this thesis was to evaluate the possibilities of multi-temporal approach to improve classification accuracy of vegetation cover in eastern tundra in the Krkonoše Mts. National Park. Sentinel-2A imagery - 10 spectral bands with spatial resolution 10 and 20 m - was used. The classification legend was created by a botanist of the national park. Maximum likelihood classification for 11 categories of vegetation land cover was executed in software ENVI 5.3. The overall accuracy of the best classification result was 53,4 % which is similar result as in the case of single image classification (overall accuracy was 51,2 %).

Key words: multi-temporal classification, vegetation, spectral features, Sentinel-2A, tundra, The Krkonoše Mts. National Park