

Land Cover changes in region Svitavy

Abstract

The aim of this thesis is to evaluate land cover changes of remote sensing data in region Svitavy after 1990. Landsat data (1994 and 2001) and IRS-P6 data (2006) were used. The literature search concerns the spectral characteristics of surface, the image classification and evaluating land cover changes in the Czech Republic. For image classification was used Maximum Likelihood algorithm of supervised method. The parts of image classification are the training stage, the classification stage, postclassification smoothing and classification accuracy assessment. Land cover changes were evaluated by compare area and share of land cover category and overlap of vector layers for 1994 – 2001 and 2001 – 2006. Two programmes were used: PCI Geomatica and the ArcGIS. In my classification were found some errors based on evaluation error matrix. For the whole time period was confirm relatively assumed tendency as growth of grasslands and forests and spreading built-up area in region Svitavy.

Keywords: land cover, classification, region Svitavy, Maximum Likelihood