

The aim of the project is to perform object based change detection of land cover in specific areas of Czech republic. Landsat 2000 and Spot 2006 satellite images are used as input data. The method used for evaluation of changes is Multivariate Alteration Detection unsupervised method which is based on statistical procedures and is available from e-Cognition software. The results of detection are compared with Corine Land Cover changes database to evaluate degree of parity on detected areas. Different mapping unit is used to be able to detect smaller changes than Corine database. First part of the work is review of literature sources aimed on processing of satellite images, description of the spectral behavior of landscape objects, origins of Corine Land Cover database and principle of change detection using MAD. Second part deals with data adjustment, change detection process and comparison of reached results with Corine.

Keywords: object based change detection, satellite images, Corine Land Cover, mapping unit of changes, Multivariate Alteration Detection, e-Cognition