The application of high temporal satellite image data for designation of the spectral characteristic of vegetation

Abstract

The objektive of this paper is to evaluate possibilities of high temporal satellite data assimilation for continuous monitoring of the spectral characteristic of vegetation. There is also given the suggestion of metodology for processing MERIS data and for continuous monitoring of spectral characteristic of landscape objects. Finally, vegetation cover database for the Czech Republic in the year 2009 is created from sectorial analysis.

In the paper there is used the LSU classification and thresholding of vegetation indicies histograms. The universal decision algorithm for classification of vegetation landscape component are described and particular thresholding values for the year 2009 given.

The finally product of this paper is Czech vegetation cover database for the year 2009 with overall accuracy of 63,35 %. Accuracy for forest is even over 80 %.