

IDENTIFICATION OF HISTORICAL LAND USE BY THE HELP OF AERIAL PHOTOGRAPHY

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ABSTRACT:

Southern Moravia region (Czech Republic) belongs to old development areas settled by a man from of old. A man had influenced it since primeval ages and up to the present days we have been finding here survivals from his activity both out of this time. To recognize a certain place thoroughly, it is necessary to use all accessible resources and to synthesize them in a suitable way. One of the information sources about a local countryside are aerial photographs. Human intervention into the landscape in the past led to overlay of mould and to the change of soil rates of a particular place and thus to a change of the soil plants surroundings. This is one of the reasons why the land cover on this place is different from the one in the surroundings. And just for this diversity, monitoring the aerial photography in spectral channels NIR and RED is very suitable, just for differential reflectivity of green matter in these channels. For information highlighting we can use so called vegetation indexes that declare the relation between reflectivity of NIR and RED channels. Land use in the past was watched on the fields of University agriculture enterprise in Zabcice near the village Prisnotice (ninety kilometres to the north of Vienna). In the monitored area, which is presently agriculturally exploited, five hundred-hectare plot, there was identified and by other surveys designated the region settlement in the past and its destruction, the gas conduit location and the place after sand mining.

TOPIC: Remote sensing applications

ALTERNATIVE TOPIC: Land cover classification