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Mapping LCLU Using Python Scripting

ABSTRACT:- Land cover land use changes constantly with the time at local, regional, and global scales, therefore, remote sensing provides wide, and broad information for quantifying the location, extent, and variability of change; the reason and processes of change; and the responses to and consequences of change. And considering to the importance of mapping of (LCLU). For that reason this study will focus on the problems arising from the traditional classification (LCLU) that based on spatial resolution only which leads to prediction a thematic map with noisy classes, and using a new method that depend on spectral and spatial resolution to produce an acceptable classification and producing a thematic map with an acceptable database by using artificial neural network (ANN) and python in additional to other program. In this study the methods of classification were studied through using two images for the same study area , rapid eye image which has three spectral bands with high spatial resolution(5m) and Landsat 8 image (high spectral resolution with eight bands), also several programs like ENVI version 5.1, Arc GIS version 10.3, Python 3, and GPS. The result for this research was sensuousness as geometrics accuracy accepted in map production.

Keywords:- land use, land cover, artificial neural network, support vector machine

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