

VEGETATION AND FOREST FIRE REGION CLASSIFICATION IN ATROOS REGION BY USING R.S AND GIS.

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ABSTRACT

This study was conducted on the floor coverings deployed in the Atroosh City in the province of Dohuk which are located in northern Iraq between longitudes 43° 17' 23.207" - 43° 26' 43.598" and latitudes 36° 49' 12.363" - 36° 53' 14.208" and heights ranging from level Searbin637—1404m and an area of 96.58 km². Featuring site Atrush occurrence within the formations of the mountainous region, which has many different plant covers, where in natural broadleaf, needle, mixed, as well as natural pastures and agricultural land, has been part of these forests to fires in different periods. For the purpose of classification of the study area for various blankets and plant areas of forest fires, we have based on the field survey to identify ground control points by using GPS for the purposes of classification, and also used the satellite image of satellite Pleiades captured on 06.02.2013 by resolution 2m for the purpose of classification, where we conduct the classification process is directed classification unsupervised the satellite image, and showed the result of classification we get 10 classes, namely forests burned, forests broad-leaved forests, needle, mixed forests, soil, grass and jungles, pastures, agricultural land, roads, buildings and Mnchaouat and rocks, have been identified and compared with Ground control points and the 135 points, where was calculated classification accuracy of the satellite image and evaluated, based on the standards used for such studies, a matrix of errors Error Matrix to the percentage of each classes and the map as a whole, and the accuracy of the seed 85.18%, the measure was also adopted to calculate the Kappa statistical precision as this scale measures the degree of difference between the ground control points that have been taken and the changes that have been classified in Category stomach map of the site itself and compare, and were 84.56%.

Key words: Vegetation classification, Forest fire, Remote Sensing, GIS.

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