عنوان مقاله:

Computing of the Burnt Forest Regions Area Using Digital Image Processing

نویسندگان:

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خلاصه مقاله:

At present, there is no conventional scientific method to evaluate the area of theburnt regions of forests and in this field, the related organizations use differentmethods and variables. Also, the speed in performing the processes of areacomputing and damage evaluation, especially in the extensive damaged forestregions is very slow; consequently, the expression of results takes more time. Now,one of the most important parameters to evaluate the forests fire damages iscomputing the area of the burnt forest regions. In this research, an aerial digitalimage from a forest region after fire occurrence is used and the primary area of theburnt region is calculated in two methods of; integration and interconnectedcomponents extraction, by using image processing techniques. Also, in order toestimate the real area, a coefficient m is calculated to obtain real area based anmeasuring the forest land surface by exerting the imaging scale on the primary area.The methods which are introduced to calculate real area of the burnt regions, aredependent on some secondary tools such as aerial camera and special plane, but inthe extensive forest regions damaged by fire, they cause to decrease in theevaluation costs and faster notification of the results.

کلمات کلیدی:

Forest Fire, Image Processing, Real Area, the Burnt Regions

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