

FIRE RISK MODELING USING ARTIFICIAL NEURAL NETWORKS

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Abstract: Forest fires cause many changes in environment and in climate, becoming a huge concern related with environment, as your prevention and control. The fire risk calculation supports the planning of activities to prevent forest fire, as it determines the probability of fire occurrence in certain place. This article has the aim of mapping fire risk areas of Belo Horizonte city. The proposed modeling is to create an artificial neural network with supervised training. A neural network to do the prediction of most propitious fire areas is expected, where it can be introduced the input variables at any period that desire to be determined. This estimate will provide the outline of priority areas for prevention activities and allocation of brigade teams, seeking to minimize possible damages caused by fires.