

Modeling of the forest fire area in Djurdjura National Park.

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Abstract

The north of Algeria is very frequented by forest fire, but little studied. We built a fire database using MODIS data (2001-2015) for one of the most fire-affected biosphere reserves (Djurdjura National Park) to decipher the role of environmental control over the current fire regime (frequency). We found that the fire regime in the Djurdjura National Park is almost limited to the summer, as this region is one of the most humid in northern Algeria. First, fire activity is determined by the rainfall regime, which controls fuel dryness (ie ignitions) and improves fuel biomass in the south. Fires are also common in pastures, growing areas, forests and matoral.

Key words: MODIS data; rainfall; fire;