








Abstract

The Role of Humans Determining Fire Regimes: The AnthroFire Project [†]

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Abstract: Fire regimes can be defined by the extent of the burned area, size and intensity of fires, fire seasonal length, time of burning and/or annual variability. All these properties are not only controlled by the climate, as humans also play a crucial role in the distribution and characteristics of fires at the regional and global scale. The AnthroFire project aims to identify the main human drivers of fire occurrence, and assess how these drivers should be included into fire models and fire risk assessment systems. As part of this task, annual maps of burned area have been generated from time series of Landsat images covering the period 1984–2020 using Google Earth Engine (GEE) over three regions (Bolivia, Spain–Portugal, and Canada) characterized by different fire regimes. For each of these regions, several physical and socio-economic variables such as those related to climate (i.e., temperature, precipitation, drought), vegetation, land use, distance to roads, human settlements, etc., along with the fire characteristics in those areas, were compiled from existing satellite-derived products. These variables are being modelled to analyse the factors that determine and explain fire occurrence.

Keywords: AnthroFire; fire regimes; human drivers



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