

## عنوان مقاله:

Determining Effective Factors on Forest Fire Using Geographically Weighted Regression, a Case Study: Golestan, Iran

## محل انتشار:

کنفرانس بین المللی توسعه پایدار، راهکارها و چالش ها با محوریت کشاورزی، منابع طبیعی، محیط زیست و گردشگری (سال: 1393)

تعداد صفحات اصل مقاله: 14

## نویسندگان:

Amin Raei - M.Sc. student, GIS Division, Dept. of Surveying and Geomatics Eng., University of Tehran, Tehran, Iran

Parham Pahlavani - Assistant Professor, Center of Excellence in Geomatics Eng. in Disaster Management, Dept. of Surveying and Geomatics Eng., University of Tehran, Tehran, Iran

Mahdi Hasanlou - Assistant Professor, Center of Excellence in Geomatics Eng. in Disaster Management, Dept. of Surveying and Geomatics Eng., University of Tehran, Tehran, Iran

## خلاصه مقاله:

Determining the effective factors on fire is so important, because it helps us to identify most dangerous locations and times in forest fire. Hence, we can prepare the necessary facilities and equipments near those locations and we can prevent many of ignitions with more attention, education to people, and law enforcement. In the current study, we tried identifying some impressive factors on the fire in Golestan forest using Geographically Weighted Regression (GWR) method that is suitable for the spatial regression problem, because of its autocorrelation and non-stationarity properties. This research shows that both of the biophysical and anthropogenic factors have significant effects on forest fire in our study area. In biophysical factors, the aspect with  $R^2=0.939$  and in anthropogenic factors, the road distance with  $R^2=0.866$  were most important factors and combination of these two factors had significant effect, too with  $R^2=0.893$ .

## کلمات کلیدی:

Geographically Weighted Regression, Forest Fire, Human-caused fires, Golestan Forest

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/354505>

