



## Spatiotemporal pattern analysis of forest fire in Chhattisgarh, India, using MODIS-based active fire data

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### Abstract:

The impact of fires on forest ecosystem can have adverse effects. Accurate information of the seasonal and annual variability of forest burning is needed a proper strategies to control forest fires and pollutants released to the environment through the forest burning. In this study, we used 15-year (2005-2019) forest fire counts datasets derived from the Moderate Resolution Imaging Spectroradiometer (MODIS) active fire data for characterize the spatial and temporal patterns of forest fire in the Chhattisgarh state, India. In this study, I found that there was an increasing trend of forest fire occurrence, which increased from 1487 in 2005 to 1720 in 2019. The highest number of fire points were recorded in 2017 (4025) followed by 2009 (3756), 2012 (3417). Most of these fires were in Deciduous Broadleaf Forests (14700) followed by the Savannas (6498). The forest fire points were highest in the month of March (16273) followed by the April (10895). This study indicates an increased fire points between 2005 and 2019 in Chhattisgarh, therefore need immediate attention for the fire management at the local level to control forest fire. **KEYWORD:** Forest Fire, MODIS, Remote Sensing, Chhattisgarh.



### Biography:

Tapas Ray graduated in B.Sc. from from Bilaspur Vishwavidyalaya, Bilaspur, (C.G). He then completed his M.Sc. in 2016 from the Department of Botany, Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar, India. He had done his Research work in forest fire ecology. His Career Concentration is on Forest fire Ecology . He has attended a number of conferences & workshops. He Done his Ph.D at the Department of Botany, Dr. Harisingh Gour Vishwavidyalaya (A Central University), Sagar, India.

### Publication of speakers:

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