Assessing air quality variation from a Himalayan forest fire event using space based observations

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Forest fires in the Western Himalaya region pose significant environmental and health challenges. The present communication examines the impact of these fires on air quality, focusing on elevated levels of carbon monoxide, formaldehyde and aerosols. Utilizing satellite inputs and chemistry transport models such as Hybrid Single Particle Lagrangian Integrated Trajectory (HYSPLIT), the study traces pollutant dispersion and concentration. The findings highlight high concentration and extended lifetime of trace gases, with implications for public health and long-term environmental effects.

Keywords: Aerosol, carbon monoxide, forest fire, formaldehyde, trace gases.