

## Special Issue

# Impact of Biomass Burning on Earth's Radiation Budget, Air Quality and Human Health

### Message from the Guest Editors

Biomass burning emissions greatly impact the atmospheric composition of trace gases and aerosols, cloud formation and precipitation, severe weather, climate, vegetated and urban ecosystems, air quality, and human health. Both the severity and frequency of biomass burning events are expected to increase in the future due to global warming and climate change. This increasing tendency might limit the effectiveness of future mitigation strategies focused on the prevention of and reduction in negative wildfire consequences. The key component of these strategies is an improved understanding of the interactions of biomass burning emissions with climate, weather, and ecosystems. We invite original research and review articles that span laboratory and in situ measurements, ground-based and satellite retrievals, and modeling studies to understand the many biomass burning impacts mentioned above. Integrated analyses and multi-modelling frameworks with an emphasis on the wildland–urban interface, such as the effects of wildland biomass burning events on human health in urban areas, are particularly encouraged.

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### Guest Editors

Dr. Evgueni Kassianov

Dr. Manish Shrivastava

Prof. Manvendra Dubey

Dr. Arthur J. Sedlacek

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### Deadline for manuscript submissions

closed (31 March 2025)



## Atmosphere

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## About the Journal

### Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

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### Editor-in-Chief

Dr. Daniele Contini

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