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Estimation of the Impact of Biomass Burning Emission on Climate

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Message from the Guest Editors

Biomass burning emits several gases such as CO2, CO, NH3, and aerosol constituents such as organic carbon (OC), black carbon (BC), sugar compounds, organic acids, and polycyclic aromatic hydrocarbons (PAHs). On a global scale, biomass burning contributes more than 90% of atmospheric OC. Carbonaceous aerosols in fire smoke cause human respiratory diseases. A laboratory study suggests that secondary organic aerosol (SOA) can be produced at considerable rates in the biomass burning plumes via aging processes. Several field observations have also confirmed the SOA formation and its modification.

We invite researchers to contribute original research articles dealing with all aspects of atmospheric aerosols derived from biomass burning. This Special Issue also accepts manuscripts from different disciplines, including the composition of atmospheric particles and their sources and atmospheric reactions, as well as their impact on the regional and global climate. We are also interested in review articles with possible future lines of investigation.



