Advances in Meteorology

Special Issue on

Chemical Composition of Atmospheric Aerosol and Its Impacts on Climate Change

CALL FOR PAPERS

Aerosols are of central importance for atmospheric chemistry and physics, climate, and public health. Aerosol particles emitted by a wide range of sources, including coal-fired power plants, vehicles, wildfires, volcanoes, desert dust, and sea spray from the ocean can be transported around the globe in a matter of days or weeks.

Because aerosols are composed of solid and liquid particles of varying chemical complexity, size, and phase, the impact of aerosols on our climate represents not only a scientific grand challenge, but also an international challenge.

Also, we can improve the accuracy of chemical measurement for atmospheric aerosol and understand the impacts of atmospheric aerosols on climate change only through the integration of field, laboratory, and modeling analysis.

This special issue is intended to present the current state of our scientific knowledge in the chemical analysis of atmospheric aerosols and discuss the aerosol impact on climate change according to their chemical and optical properties. For this special issue we solicit high quality, original research articles as well as review articles on aspects of the chemistry of atmospheric aerosols and their impact on climate change. The articles are expected to be applied in the fields of meteorology, environmental science, and other interdisciplinary area.

Potential topics include, but are not limited to:

- Aerosol chemical properties and analysis
- Change of chemical composition of aerosol during transport
- Chemical composition of aerosol and impact on climate change
- Regional aerosol chemistry and their climate impact
- Direct/indirect radiative effects of aerosol physicochemical properties
- Aerosol chemical composition and aerosol-cloud interactions

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/amete/aaie/.

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