



New Insights into Atmospheric Chemistry and Climate

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Message from the Guest Editors

Atmospheric gases and aerosols affect air quality and play an important role in the Earth's climate system. Aerosol particles can affect the climate directly, by scattering or absorption of solar radiation and altering the reflectivity of the planet, and indirectly by acting as cloud condensation (CCN) and ice nuclei (IN), i.e., due to aerosol–cloud interactions. Black carbon (BC), absorbs radiation readily, warming the atmosphere but also shading the surface. Organic carbon (OC), sometimes called brown carbon or organic matter, has a warming influence on the atmosphere depending on the brightness of the underlying ground. Mineral dust aerosol affects climate through direct and indirect effects. Primary biological aerosol and humic-like substances (HULIS) can affect atmospheric processes.

This Special Issue is to disseminate the results of new insights into aerosols composition and physicochemical properties that are related to climate effects.

- aerosol composition
- secondary aerosol
- carbonaceous aerosol
- aerosol-cloud interaction
- optical properties
- numerical models



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Special Issue