



Interactions of Aerosols, Clouds, Radiation, Precipitation, and Climate on Regional Scale

Guest Editors:

Dr. Bin Zhao

Pacific Northwest National
Laboratory, Richland, WA 99352,
USA

Dr. Yu Gu

University of California, Los
Angeles, CA, 90095, USA

Dr. Kyle G. Pressel

Pacific Northwest National
Laboratory, Richland, WA 99352,
USA

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Message from the Guest Editors

Dear Colleagues,

In this Special Issue, we welcome all theoretical, observational, experimental, and modeling studies that present new knowledge of aerosol-cloud-radiation-precipitation-climate interactions on regional scale. Relevant topics include but are not limited to: (1) Sources and formation mechanisms of aerosols, including inorganic and organic aerosols. (2) Aerosol physical and chemical processes that affect climate, including new particle formation and growth, cloud condensation and ice nucleation activities, heterogeneous/multiphase chemistry, mixing state/phase state variations, etc. (3) Interactions among aerosols, radiation, clouds (including liquid-, mixed-, and ice-phase clouds) and precipitation. (4) Roles of these interactions in boundary layer dynamics and thermodynamics, weather and climate change, and air pollution. (5) influence of meteorology and past/future climate change on aerosols and air quality.

Dr. Bin Zhao

Dr. Yu Gu

Dr. Kyle G. Pressel

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Editor-in-Chief

Dr. Daniele Contini

Institute of Atmospheric Sciences
and Climate (ISAC), National
Research Council (CNR), Str. Prv.
Lecce-Monteroni km 1.2, 73100
Lecce, Italy

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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Contact Us

Atmosphere Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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