



## Remote Sensing of Cloud and Aerosol Properties in a Three-Dimensional Atmosphere

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Deadline for manuscript  
submissions:

**closed (30 June 2021)**

### Message from the Guest Editors

Clouds and aerosols play a vital role in modulating the radiative energy budget of the Earth-atmosphere system. They often co-exist with each other and can have significant 3-D structures and variations at various scales. This Special Issue invites recent theoretical, observational and technological studies that attempt to advance the 3-D remote sensing of clouds and aerosols.

Potential topics include, but are not limited to the following:

- The identification and reduction of the uncertainties and errors caused by 3-D radiative effects and unresolved small-scale horizontal variations in cloud and aerosol remote sensing, and in atmospheric correction for other surface remote sensing.
- Theoretical and/or numerical studies of how 3-D radiative effects of clouds and aerosols influence cloud dynamics, surface energy budget, and land-air interactions.
- Advanced theories and novel techniques (e.g., machine learning) to retrieve the 3-D structure of clouds and aerosols.
- Sub-grid parameterization schemes to account for the impacts of small-scale cloud and aerosol variability on radiation simulations in global climate models.
- Advances in 3-D radiative transfer theory and models.





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## Editor-in-Chief

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## Message from the Editor-in-Chief

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