



## Remote Sensing of Clouds

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### Message from the Guest Editor

Remote sensing of clouds is a hot topic of modern atmospheric remote sensing studies. Clouds largely modify the radiation budget, both in the solar and thermal spectral ranges, playing a fundamental role in the Earth's climate state and makes adjustments to climate forcing. Global changes in surface temperature are highly sensitive to cloud amount and type; hence, it is not surprising that the largest uncertainty in model estimates of global warming is due to clouds. Their properties could change with time, leading to planetary energy imbalance on a global scale. Optical and thermal infrared remote sensing of clouds is a mature research field with a long history. Great progress has been achieved using both ground-based and satellite instrumentation in retrieval of microphysical clouds parameters.

This Special Issue is aimed at the presentation of recent results in ground-based and satellite remote sensing of clouds, including validation of retrievals based on independent measurements.





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## 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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