



Unmanned Aerial Systems for Investigating the Troposphere: Developments and Applications

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Message from the Guest Editors

We are pleased to announce this Special Issue which aims at presenting the state-of-the-art developments of unmanned aerial systems (UAS) and their applications for investigating atmospheric processes between the Earth's surface and the tropopause.

Your submissions introducing innovative designed platforms and scientific sensors, performed field experiments and acquired atmospheric data are welcome. In particular, we invite you to present your platforms, sensors and concepts to be deployed in the near future and data sets which are validated with numerical weather simulations on small-scale or large-scale. Further, we encourage all authors to share their experiences with UAS in challenging field applications, for instance, in polar areas, high altitude, complex terrain, sub-/urban and critical areas, i.e., those that are influenced by complex terrain, clouds and high wind speeds. In particular, those studies and direct comparisons with in situ data, such as those based on weather masts, Eddy-covariance stations, and remote-sensing, that are performed at the same time or in parallel with other airborne platforms or in swarms, will be given priority.





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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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