



## Observations and Measurements of the Martian Atmosphere

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Deadline for manuscript submissions:  
**closed (24 April 2020)**

### Message from the Guest Editors

Dear Colleagues,

Since the Viking missions, over ten missions have visited Mars and made measurements of its atmosphere. These observations have provided new insight into the major processes active in the Mars atmosphere, including the importance of the CO<sub>2</sub>, water, and dust cycles for driving the current climate, and the role of processes in the upper atmosphere for driving long-term atmospheric evolution. It has also become evident that coupling between the lower and upper atmosphere is a major source of day-to-day upper atmospheric variability, as well as the variability of water loss to space over seasonal time scales.

Given the wealth of data collected by past missions and the numerous missions presently at Mars, it is timely to bring together a collection of papers on the latest analyses of Mars atmospheric observations and measurements. We encourage submissions that analyze data from any region of the Mars atmosphere, including the ionosphere. Further, although space-based observations are emphasized, ground-based measurements are also welcome.

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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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