



Gravity Waves in the Atmosphere

Guest Editors:

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Deadline for manuscript
submissions:

closed (1 October 2020)

Message from the Guest Editors

Dear Colleagues,

There are many open questions regarding the fundamental dynamics of gravity waves, namely their genesis, maintenance, propagation and breaking, as well as the interaction of gravity waves with boundary layer processes, larger-scale waves and the mean flow. Moreover, observations of gravity waves at all scales are critical for better constraining gravity wave drag parameterizations implemented in numerical weather prediction and climate models. We encourage contributions to topics including but not limited to:

- Gravity wave dynamics;
- Observations of gravity waves by means of remote sensing and in situ instruments;
- Climate effects of gravity waves;
- Gravity waves and severe weather;
- Parameterization of gravity waves;
- Clear air turbulence generation by gravity waves;
- Data assimilation of gravity waves.

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Editor-in-Chief

Dr. Daniele Contini

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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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