



## Atmospheric Boundary Layer and Free Atmosphere: Dynamics, Physical Processes, and Measuring Methods

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submissions:

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### Message from the Guest Editors

Dear Colleagues,

Atmospheric boundary layer (ABL) has a significant impact on synoptic and meteorology, hydrology, transport of pollutants, weather forecasting as well as the optical turbulence and efficiency of optoelectronic devices. We invite you to publish the results of your research in the Special Issue including the following fields: Physical processes and phenomena in a free atmosphere, interactions with the ABL; The structure of the ABL, meteorological phenomena and processes in the ABL, features of transfer of air temperature, momentum, pollutions and another substances in the atmosphere; General questions of the theory of turbulence, Atmospheric turbulence and parameterization schemes; Study of the structure of small-scale dynamic and optical turbulence; Climate changes, regional climate and physical processes in the ABL. Simulation of the components in climatic system; Methods of remote measurements of atmospheric parameters; Astroclimate studies in the optical and mm/submm ranges; Site testing; Atmospheric optical effects; Adaptive optics systems in large ground-based telescopes.

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*Guest Editors*





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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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