Turbulent Transport in Atmospheric Boundary Layers

Guest Editor:

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Message from the Guest Editor

The atmospheric boundary layer, the lowermost layer of the atmosphere, is host to a plethora of physical processes that strongly affect life on Earth and the planetary energy balance. The overarching goal of the Special Issue on “Turbulent Transport in Atmospheric Boundary Layers” is to address emerging problems in the understanding and modelling of the multi-physics character of the boundary layer. We aim to understand the links and interactions between classical turbulence dynamics and other processes, such as radiation, cloud microphysics, and land surface interactions.

The scope of this Special Issue is broad and aims to include diverse methodologies and applications, such as energy harvesting and conversion, air quality and atmospheric dispersion. Submissions will encompass theoretical, modelling, and observation-based studies. Observational studies using in situ or remote sensing data and reduced models are particularly encouraged.

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