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Basic studies on turbulence in atmospheric and oceanic boundary layers

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This symposium is focused on fundamental advances in understanding the mean dynamical and thermodynamical structure and the turbulence and mixing properties of boundary layers in the atmosphere and ocean. Contributions reporting theoretical, numerical or experimental work are welcome. Topics of particular interest in 2006 include: (i) Turbulence and mixing characterization in convective, neutral and stably stratified boundary layers. (ii) The scale dependent parametrization of turbulence and mixing (ranging from large-eddy simulations of boundary-layer flows with subgrid parametrization, regional models with subgrid boundary-layer flow parametrization, and global climate and weather prediction models). (iii) The mixing height over heterogeneous and complex terrain. (iv) The role of organized vortices and other coherent motions, such as roll vortices in the planetary boundary layer, and Langmuir circulations in the ocean mixed layer. (v) Turbulence in cloudy boundary layers. (vi) The roughness sublayer of the turbulent boundary layer especially over urban areas.

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