



Classification of structures in the stable boundary layer

Danijel Belusic

Monash University, School of Earth, Atmosphere and Environment, Australia (danijel.belusic@monash.edu)

Ubiquitous but generally unknown flow structures populate the stable boundary layer at scales larger than turbulence. They introduce nonstationarity, affect the generation of turbulence and induce fluxes. Classification of the structures into clusters based on a similarity measure could reduce their apparent complexity and lead to better understanding of their characteristics and mechanisms. Here we explore different approaches to detect and classify structures, the usefulness of those approaches, and their potential to provide better understanding of the stable boundary layer.