

Gravity Wave Interactions and Instabilities Accompanying Multi-scale Superpositions in the Stable Boundary Layer

Dave Fritts
GATS, Inc.

This talk will examine the role of gravity wave and fine structure superpositions in driving spectral evolution, instabilities, turbulence events, and fine structure. Such superpositions, and the interactions that arise, lead to turbulence in several ways that have interesting implications for spectral energy transfers, turbulence energetics, and dissipation statistics, and mixing. In particular, fine structure orientations and instability pathways play major roles in defining the evolution of the motion field.