MMM SEMINAR SERIES

Untangling Turbulence–Microphysics Interplay in Shaping Cloud Properties

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Turbulence is woven into cloud interactions at various scales, shaping properties and processes from the individual-particle level to the energy-containing scales of turbulent cloud systems, acting as if it is another topological dimension of a multi-dimensional manifold, not directly perceivable, but reflected in the statistics of cloud properties. Of these, interactions with microphysical processes are particularly interesting and crucial for shaping macroscopic cloud properties, such as precipitation generation and its response to pollution, dynamics/structure, and radiative fluxes. The multiscale nature of these processes makes them challenging to represent in atmospheric models with limited resolution capability. This talk will primarily focus on microphysical interactions in turbulent clouds and their impact on precipitation formation. Investigation of three different aspects of turbulence-microphysical interactions and their representation in large-eddy simulations will be discussed:…**Link to Full Abstract.**

Thursday, 28 May 2026, 2:00PM

Refreshments 1:45PM

Please also join colleagues for refreshments and informal discussion after the seminar until 3:30PM

NCAR-Foothills Laboratory, 3450 Mitchell Lane

FL2-1022, Large Seminar

Seminar will also be live webcast

https://sundog.ucar.edu/public/page/MMM

Participants may ask questions during the seminar via Slido.

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