

2021 EOL/CISL/MMM Joint Seminar (Virtual)

ASSIMILATION OF GROUND-BASED REMOTE SENSING PROFILERS: MOTIVATION, FORECAST BENEFITS, AND CHALLENGES AHEAD

Hristo Chipilski

Doctoral Student, University of Oklahoma

hristo.chipilski@ou.edu

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WEBCAST: operations.ucar.edu/live-eol



ABSTRACT

Ground-based remote sensing profilers fill an important gap in current observing networks by providing continuous, unattended measurements of the planetary boundary layer. Such frequent observations are especially important during the night when thermodynamic and kinematic fields exhibit large spatiotemporal variabilities. In this talk, I will first describe the forecast value of profiling instruments for the specific problem of bore-driven nocturnal convection and then proceed with a critical discussion on some of the outstanding challenges in the assimilation of remotely sensed measurements. Special emphasis will be placed on the need to develop new data assimilation methods which can rigorously account for the non-Gaussian characteristics of moisture variables.

EOL Seminar Series Coordinator: Jacquie Witte: jwitte@ucar.edu

This webcast will be recorded and uploaded to the
[NCAR Earth Observing Laboratory YouTube Channel](#)

For more information, contact Melissa Ward: mward@ucar.edu