Using Doppler lidar to evaluate the simulation of the evening transition

June 28, 2019

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Analysis of HI-SCALE data

• Three nights selected from HI-SCALE’s second IOP

• Mixed layer depth determined based on $w$ variance threshold (Berg et al. 2017)
• Simulations
  ▪ LASSO-like
  ▪ WRF (not shown)
  ▪ E3SM
How do observed and simulated transitions compare?

Results from $0.5z/z_{i,sunest}$
How do observed and simulated transitions compare?

- Next steps:
  - Further work needed related to scaling
  - Continue to evaluate model performance
  - Additional days/cases
Thank you