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Visiting ATS from the University of Arizona

Interface Processes in the Earth System

Hosted by Jeff Collett

Friday, Dec. 7, 2018

ATS room 101

Discussion will begin at 11 a.m.

Refreshments will be served at 10:30 a.m. in the weather lab

The Earth system includes the atmosphere, ocean, land, and ice. These components interact with each other through interface fluxes. Here I will highlight some of my group's work on interface processes along with future directions:

- Solution of a problem in land-atmosphere interaction that has accelerated the satellite data assimilation and improved weather forecasting over arid and semi-arid regions at NCEP
- Development of a prognostic ocean surface skin temperature parameterization that has improved weather forecasting and climate modeling at ECMWF and many other centers
- An innovative method for snowpack data assimilation to develop the first daily 4 km snow water equivalent and snow depth dataset from 1981 to present over conterminous U.S. This dataset can be used to evaluate technologies for future snowpack satellite measurements (and snowfall estimates) and model evaluations
- An observational data-driven model for decadal and long-term global warming projections and for CMIP model evaluations

Link to colloquia page: <https://www.atmos.colostate.edu/colloquia/>