

# MET 6480: Atmospheric Convection



This course will cover shallow and deep atmospheric convection, considering both the local properties of individual clouds or convective systems and the ensemble properties of convection and its global implications. It will explore interactions between convection, the boundary layer, and larger-scale weather systems as well as the role that convection plays in climate. This course is classified as a physical meteorology elective.

## Topics to be covered include:

- Rayleigh-Benard convection
- Dry convective boundary layers
- Radiative-convective equilibrium
- Stratocumulus-trade cumulus transition
- Deep precipitating convection
- Convective organization
- Modeling of convection

Instructor: Prof. Allison Wing

Course Meets Mondays & Wednesdays 1:20-2:35 PM

Hybrid course (mostly over Zoom, some face-to-face)

Prerequisites: Atmospheric Dynamics I, Atmospheric Physics I & II, or permission of instructor