

Welcome!

Please join us for the next ATOC Colloquium on Friday, March 22 from 11:00 AM–12:00 PM, which will be held in SEEC S228 and simulcast over Zoom. This week's colloquium features Dr. Stephanie Henderson (UW-Madison). Please join us for conversation beginning at 10:45 AM and stay for lunch catered by Illegal Pete's afterwards.

The Role of Radiative Heating in Driving MJO Teleconnections

Anomalous tropical convection associated with Madden-Julian Oscillation (MJO) is known to significantly alter extratropical weather and climate patterns. Tropical latent heat and radiative heating (i.e. diabatic heating) has been long demonstrated as a major component of the atmospheric energy budget. Anomalous radiative heating associated with the MJO may be an effective source of energy in forcing MJO teleconnections; however, it is often assumed that MJO latent heating is the component responsible. This work utilizes vertically-resolved satellite data to investigate the individual components of heating structures associated with the MJO and, in turn, its teleconnections. The resultant observationally-derived data is used in concert with a linear baroclinic model (LBM) to isolate and investigate the role of MJO radiative heating, and the role of individual cloud types, in producing teleconnection patterns.



Location: SEEC S228 & Zoom

Zoom:

https://cuboulder.zoom.us/j/93794324385

Password: ATOC

About the ATOC Colloquium

The Department of Atmospheric and Oceanic Sciences (ATOC) Colloquium is typically held **every other Friday** from **11:00 AM–Noon**. Colloquia alternate between the following formats: (A) Full-length talk by a faculty member or invited speaker, (B) Three conference-length talks by graduate students. If you would like to nominate a speaker (including self), please email the ATOC Colloquium Committee Chair, Prof. Andrew Winters (andrew.c.winters@colorado.edu). Please visit www.colorado.edu/atoc/colloquium for further details.