



ATOC COLLOQUIUM

Welcome!

Please join us for the next ATOC Colloquium on **Friday, March 4** from **11:00 AM–12:00 PM**, which will be held in **SEEC S228 and simulcast over Zoom**. This week's colloquium features **Jeremy Klavans (ATOC)** and **Devon Dunmire (ATOC)**. Please join us for coffee beginning at 10:45 AM and stay for lunch from Illegal Pete's afterwards. **In CU Buildings, please wear a mask if not actively eating/drinking.**

Jeremy Klavans ▶ Is the Pacific Decadal Oscillation Externally Forced?

Predicting the Pacific Decadal Oscillation (PDO) -- the leading mode of sea-surface temperature (SST) variability in the North Pacific -- is key to anticipating long-term changes in fish stocks, sea level, and U.S. hydroclimate. Regrettably, this mode of variability appears to be unpredictable at lead times longer than two years in current dynamical and statistical forecast systems. This limit of predictability arises because these systems generate a PDO that is largely driven by stochastic atmospheric variability. Using multi-model large ensembles of climate models, we find that a meaningful portion of the phasing of the PDO index is explained by external radiative forcing. The forced component of the PDO appears to be a response to aerosols. Thus far, this new source of predictability can only be recovered by very large ensembles of climate models because the amplitude of the simulated forced signal is too weak, relative to the noise produced by the model.



Devon Dunmire ▶ The Juneau Icefield Research Program Experience

This summer I spent two months on the Juneau Icefield, traversing across the glacier system and teaching a group of 32 undergraduate students about glaciology. In this presentation I will talk about my experience, some of the cool field work we did on glaciers, and a few of the many things I learned throughout the summer.



Zoom: <https://cuboulder.zoom.us/j/96170011873>

Passcode: ATOC

About the ATOC Colloquium

The Department of Atmospheric and Oceanic Sciences (ATOC) Colloquium is typically held **every other Friday** from **11:00 AM–12:00 PM**. 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 or postdocs. If you would like to nominate a speaker (including self), please email the ATOC Colloquium Committee Chair, Prof. Jan Lenaerts (jan.lenaerts@colorado.edu). Please visit www.colorado.edu/atoc/colloquium for further details.