

## Welcome!

Please join us for the first ATOC Colloquium of the spring semester on Friday, January 27 from 11:00 AM–12:00 PM, which will be held in SEEC S228 and simulcast over Zoom. This week's colloquium features Dr. Xinyue Wang (NCAR/ASP/ACOM). Please join us for coffee beginning at 10:45 AM and stay for lunch catered by Illegal Pete's afterwards.

Stratosphere-Troposphere Coupling and its Role in Atmospheric

**Composition and Climate** 

The coupling between the troposphere the stratosphere is an important component of global general circulation of the atmosphere. In this talk, I will focus on the two-way stratosphere-troposphere transport in the context of chemistry-climate coupling. First, I will show that the Hunga Tonga-Hunga Ha'apai volcanic eruption changed stratospheric temperatures and circulation, and caused midlatitude and polar ozone losses. Next, I will show you the fast transport paths connecting Hemisphere surface Northern upper troposphere-lower stratosphere associated with summer monsoons. Last, I will talk about stratosphere-totroposphere transport of ozone and its impact on the surface ozone budget and air quality over the western United States.



Location: SEEC S228 & Zoom

Zoom:

https://cuboulder.zoom.us/j/97845417945

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.