



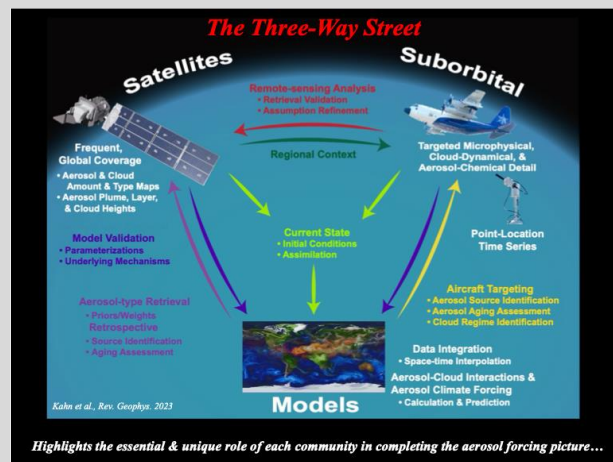
ATOC COLLOQUIUM

Welcome!

Please join us for the next ATOC Colloquium on **Friday, November 15** from **11:00 AM–12:00 PM**, which will be held in **SEEC S228 and simulcast over Zoom**. This week's colloquium features **Dr. Ralph Kahn (LASP)**. Please join us for conversation beginning at 10:45 AM and stay for lunch afterwards.

Steps Toward Realizing the Potential of NASA's Earth Observing System: Reducing Aerosol-Related Climate-Forcing Uncertainty and Overall Uncertainty in Climate Prediction

The EOS Era is drawing to a close, having produced almost 25 years of global aerosol data from instruments such as the Multi-angle Imaging SpectroRadiometer (MISR) and the MODerate resolution Imaging Spectroradiometer (MODIS). Over this time, we have developed the tools, the experience, and the understanding to extract the scientific value from the MISR and associated aerosol data records in service of learning about Earth – the evolution of wildfire smoke, desert dust, and volcano plumes, air quality and particulate pollution mapping, globally. We have demonstrated all these capabilities in published studies, and validated with ground-based-network observations and in situ data from field campaigns wherever possible. These efforts can contribute to advancing climate analysis and prediction, a primary goal for fielding these instruments. But doing so will require greater synthesis of satellite and suborbital measurements with models. Each of these elements has a role to play in addressing societally important questions, from constraining aerosol forcing in climate models to issuing smoke advisories for communities downwind of major wildfires, as illustrated in the figure. This presentation will review the aerosol-related capabilities we have demonstrated with MISR and MODIS, will discuss how the results fit into the larger context of constraining aerosol-climate forcing, and will conclude by pointing to next steps required to meet the promise of the three-way street.



Location: SEEC S228 & Zoom

Zoom:

<https://cuboulder.zoom.us/j/96503809060>

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. Jianghanyang (Ben) Li (Jianghanyang.li@colorado.edu). Please visit www.colorado.edu/atoc/colloquium for further details.