# 2013 Workshop: Optical calibration and data analysis

Long title
Calibration and analysis techniques for passive optical and lidar observations
Conveners
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Description

Accurate calibration is important for inter-comparison of observations, data/model comparisons, and long-term investigations. We invite discussion on a broad range of topics relating to passive optical and lidar observations and their analysis, including absolute and relative intensity calibration, wavelength calibration, spatial scale determination, error analysis, correction for scattering within the lower atmosphere, isolation of atmospheric lines of interest, flat field techniques, and data reduction techniques that can be used to extract meaningful information from low signal-to-noise data. In addition to reporting progress on calibration and analysis techniques, this workshop provides an opportunity to discuss challenges and questions in order to gain feedback from other workshop participants. We encourage hands-on demonstrations.

Justification

Accurate calibration, analysis, and error assessment provide the foundation for data that can be used to address a range of CEDAR strategic science topics, including coupling in the interaction region between the Earth’s atmosphere and the near space environment, lower-upper atmospheric coupling, Sun-Earth interactions, investigation of atmospheric dynamics through combination of observations such as wind measurements, and long-timeline observations.

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