2014 Workshop: CEDAR Observations from Ground and Space

Long title
Addressing CEDAR Science goals with Combined Space and Ground-Based Observations
Conveners
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Description

The science goals of new space-based missions are strongly aligned with CEDAR's objectives, including a better understanding of the dynamics of the upper atmosphere and its strong coupling to the lower atmosphere. Flight missions make direct or remote measurements of conditions in the atmosphere and ionosphere that are otherwise unavailable. Even so, space-based observations can benefit from the geographical/temporal continuity provided by ground-based measurements, using either focused optical and radar observations or data from more widespread networks of sensors. This workshop is focused on opening new discussions of how ground and space-based observations can be performed in a coordinated manner that provides the greatest enhancement to the science goals of the respective investigators and of CEDAR. The format supports short 5-slide presentations of the science goals of a particular investigation, the methods and timeline by which those science goals will be achieved, and the possible enhancement in scientific capability envisioned by collaboration with other investigators. Short presentations of previous studies/efforts where the scientific effort benefited from the combined capabilities of diverse observational platforms are also welcome and solicited.

The workshop format is meant to support discussion. Important outcomes of this workshop would be the identification of opportunities for productive future collaborations, and initial conversations regarding the resources, support, and planning that would be necessary for those collaborations to potentially make

discoveries beyond the capability of the individual investigations alone. If you can contribute to this discussion, please contact Thomas Immel and Richard Eastes with a brief description of what you would like to present. Impromptu presentations are welcome but can only be included as time permits.

Justification

The challenge is to define and support efforts that will successfully incorporate the upcoming NASA and NOAA flight missions (for example) into the CEDAR scientific program to make the best use of these resources that are effectively supporting CEDAR\'s scientific pursuits. The justification is that this workshop goes directly to the CEDAR Strategic Thrust #4: Develop Observational and Instrumentation Strategies for Geospace System Studies

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