2018 Workshop: CEDAR Broader Impacts

Long title
CEDAR Broader Impacts
Conveners
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Description

This workshop seeks to bring together different sub-disciplines of CEDAR to raise community awareness and discussion about farther reaching effects of the research within CEDAR, and the overlap with broader science goals within geoscience and other disciplines. Topics of discussion and research presentation will include space weather influences on satellites, anthropogenic climate change, natural hazards detection, terrestrial weather influences on the I-T/M-L-T, and ways that the CEDAR community can contribute to a whole atmosphere understanding of processes. Other discussion and topics are welcome. We encourage presenters to include within their presentation at least one slide discussing the broader influences of research in "layperson's terms," while presentations themselves can be targeted specifically to the CEDAR community. There will also be time for informal discussion.

Agenda

•Stan Solomon – Whole atmosphere simulation of anthropogenic climate change

•Titus Yuan– What the lidar can do in addition to small scale gravity waves

•Xinzhao Chu – Antarctic lidar measurements spanning atmospheric regions

•Pavel Inchin – Lithosphere-Atmosphere-Ionosphere Coupling Following the 2015 Nepal 7.8Mw Earthquake

•Julio Urbina – Redefining the Role of Science/Engineering in our Modern World

•Chaosong Huang – Ionospheric impacts on satellite VHF/UHF communications

•Marcin Pilinski– Satellite Drag

•Susan Nossal – Multi-solar cycle comparisons of hydrogen emissions – broader impacts from astronomy and climate science

Justification

The Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) program includes research which has far reaching impacts and benefits to the greater society. This workshop revisits the CEDAR strategic plan with an emphasis on new research, and associated descriptions of the impacts of research which overlap with the broader research community outside of CEDAR. This workshop will build on the following CEDAR strategic thrusts: Strategic Thrust #1:Encourage and Undertake a Systems Perspective to Geospace Strategic Thrust #2: Explore Exchange Processes at Boundaries and Transitions Strategic Thrust #3: Explore Processes Related to Geospace Evolution Strategic Thrust #5: Fuse the Knowledge Base across Disciplines

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