

ISR Science Highlights

Long title

Incoherent scatter radar science highlights and future applications

Conveners

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Description

The session will consist of a series of short presentations highlighting science enabled with incoherent scatter radars (ISRs), spanning ionospheric dynamics, plasma physics, and space weather applications. Afterwards, future directions and applications of ISRs will be discussed, including opportunities for cross-disciplinary and multi-instrument collaborations.

Justification

This workshop will facilitate ISR science by identifying the state and direction of the ISR community, as well as action items to improve the community and dissemination of ISR associated materials. Furthermore, this workshop will generate research collaborations through research talks (prioritizing students and early-career researchers), discussions on open scientific problems, and by building a cohort of people interested in ISR science.

Having a clearer understanding of ISRs and their role in CEDAR science will further benefit other communities, such as the Geospace Environment Modeling (GEM) community, the American Geophysical Union (AGU), the International Union of Radio Science (URSI), the American Physical Society-Division of Plasma Physics, and many more. Internationally, this workshop is timely and synergistic with the launch of EISCAT_3-D in Europe, which will be online soon.

Related to CEDAR Science Thrusts:

Encourage and undertake a systems perspective of geospace

Develop observational and instrumentation strategies for geospace system studies

Workshop format

Short Presentations

Keywords

ISR, World Day, Institutional Collaboration

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