

2023 Workshop: Equatorial aeronomy and space weather

Long title

Developments in equatorial aeronomy and space weather

Conveners

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Description

This workshop will highlight the latest discoveries in equatorial aeronomy along with new developments in experimental, theoretical, and computational methods making the new discoveries possible. The focus will be on research at the Jicamarca Radio Observatory and closely-related projects including ICON, the regional optical network, and the regional radio/radar network. The session will combine a few review presentations with several brief science highlights.

Agenda

The following speakers are confirmed for the workshop:

- Danny Scipion (20 min)
- Fabiano Rodrigues (20 min)
- Marco Milla (20 min)
- Jorge Chau (8 min)
- Tzu Wei Fang (8 min)
- Cesar Valladares (8 min)
- Luis Navarro (8 min)
- Sevag Derghezarian (8 min)
- Robert Pfaff (20 min)

Justification

Three recent developments prompt this workshop. One is a series of upgrades at Jicamarca that will fundamentally alter its capabilities. Among these are new, medium-power, solid-state transmitters that will allow perpetual incoherent scatter measurements. Also, a new MRI project will see the deployment of two LWA-type radio arrays in Peru to support and augment the capabilities of the observatory. Finally, there is a strong likelihood of a NASA sounding rocket campaign taking place in Peru in the next few years. Preparation should begin immediately for these developments to be fully exploited by the community.

Related to CEDAR Science Thrusts:

Develop observational and instrumentation strategies for geospace system studies

Manage, mine, and manipulate geoscience/geospace data and models

Workshop format

Short Presentations

Keywords

equatorial aeronomy space weather forecasting

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