

Technical Page

Proposal Type: Urgent
 General Category: Terrestrial Aeronomy
 Observation Category: Middle-Lower Atmosphere
 Total Time Requested: 36 Hours
 Minimum Useful Time: 6 hours

Proposal Title: Studying the impact of Geminids on Meteor Smoke particle in the D and E region
ABSTRACT:

This proposal aims at obtaining Incoherent Scatter Radar (ISR) observations from Arecibo to complement the rocket campaign ECOMA 2010 from Norway. The current campaign is the 4th and last in a sequence of campaigns with a total of 9 rocket launches. The ECOMA project aims at investigating the existence and charge state of Meteor Smoke Particles (MSP) in the atmosphere. In this campaign, 3 rockets will be launched, all equipped with diagnostics for MSP and their ionospheric and mesospheric environment. It will be supported by ground based measurements with the EISCAT radar in Northern Norway, the MU radar in Japan, as well as with Poker Flat ISR observations. We plan to participate in this campaign to get a good latitudinal and global coverage of the meteor shower effect on MSP properties (number densities and radii) which will be retrieved from the ISR-spectral shape as described in our earlier papers

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Remote Observing Request

- Observer will travel to AO
- Remote Observing
- In Absentia (instructions to operator)

Instrument Setup

430 CH radar

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned