

Technical Page

Proposal Type: Regular
 General Category: Terrestrial Aeronomy
 Observation Category: Middle-Lower Atmosphere
 Total Time Requested: 240 Hours
 Minimum Useful Time: 2 continuous days

Proposal Title: ISR Observation of Distribution of Metallic Ions in the E and F-region

ABSTRACT:

We propose to use the Arecibo incoherent scatter radar to measure the ion composition to study the vertical circulation of metallic ions. We attempt to measure the Fe+ content over 24-hr period. We will also measure the vertical ion velocity in the E and F-region to study the diurnal circulation of metallic ions. We request a total observing time of 10 days in 18 months. This proposal is in support of an NSF grant (Zhou and Morton, 2007).

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Remote Observing Request

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

Instrument Setup

430 G 430 CH receiver 430 CH radar

Atmospheric Observation Instruments:

Ionosonde

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned