

Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
 General Category: Terrestrial Aeronomy
 Observation Category: Ionosphere
 Total Time Requested: 24 Hours
 Minimum Useful Time: 2 hours

Proposal Title: Active D-region heating experiments using the Arecibo HF heating facility
ABSTRACT:

We propose to perform measurements of D-region electron heating by using the new Arecibo HF heater for ionospheric modification, and the Arecibo incoherent scatter radar for diagnostics of the plasma parameters. The primary science goal is to obtain high quality incoherent scatter spectrum measurements with unprecedented resolution and range extent. The secondary goal is to investigate the response of meteor smoke particles to heating.

Name	Institution	E-mail	Phone	Student
Antti Kero	Sodankyla Geophysical Observatory	antti.kero@sgo.fi		no

Remote Observing Request

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

Instrument Setup

430 G 430 Xmit Heating Facility

Atmospheric Observation Instruments:

Ionosonde

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned