

Technical Page

This proposal has not been submitted before.

Proposal Type: Urgent
 General Category: Astronomy
 Sub-Category: Radar
 Observation Category: Heating
 Total Time Requested: 19 Hours
 Minimum Useful Time:

Proposal Title: Study of horizontal and vertical electron heating during ionospheric modification experiments

ABSTRACT:

Electron temperature observations during Arecibo Heating Experiments. The main goal of this experiment is to observe the variation of electron temperatures with height and horizontal distance from the center of the interaction between the Heating-beam and the ionospheric plasma. The secondary goal is to make high-resolution measurements of up and down-shifted plasma-line power, and estimate up and down-ward fluxes of supra-thermal electron accelerated by the HF-pump-wave.

Name	Institution	E-mail	Phone	Student
Bjorn Gustavsson	UIT, the Arctic University of Norway	bgu001@uit.no		no

Remote Observing Request

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

Instrument Setup

430 G 430 CH receiver 430 Xmit

Atmospheric Observation Instruments:

Tilt-Photometer Spectrophotometer Fabry-Perot Ionosonde Lidar

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned