

## Technical Page

This proposal has not been submitted before.

Proposal Type:                Urgent  
 General Category:        Terrestrial Aeronomy  
 Sub-Category:             Radar  
 Observation Category:    Ionosphere  
 Total Time Requested:    22 Hours  
 Minimum Useful Time:    5 hours

**Proposal Title:** Observations of ULF waves and Gyro-lines at Arecibo

*ABSTRACT:*

We will observe the full ISR spectrum with Arecibo. There are three-fold goals 1) Observe ULF wave signatures in up/down shifted plasma line power and hence field aligned superthermal flux, 2) Observe weak gyro-lines, 3) Apply 2d deconvolution method for deconvolving range-Doppler convolved observations.

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### Remote Observing Request

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

### Instrument Setup

430 CH receiver

### Atmospheric Observation Instruments:

**Special Equipment or setup:** USRP 25 MHz, carriage house

### RFI Considerations

### Frequency Ranges Planned