

## Technical Page

Proposal Type: Regular  
 General Category: Terrestrial Aeronomy  
 Sub-Category: Radar  
 Observation Category: Ionosphere  
 Total Time Requested: 48 Hours

**Proposal Title:** Horizontal structure of sporadic-E using dual beam

**ABSTRACT:**

We propose to examine the horizontal structure of sporadic-E layers using the new dual beam capability of the 430MHz incoherent scatter radar (ISR). We wish to verify the existence or lack of frontal structures in sporadic-E layers over Arecibo and to see if these structures coincide with the appearance of zonal F-region ion drifts of magnitude 100 m/s or greater. The observation of frontal structures in the presence of large F-region ion drifts will lend credibility to the theory proposed by Tsunoda [1998].

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I do NOT want to do remote observing.

**Instrument Setup**

430 CH radar

**Atmospheric Optical Instruments:**

Ionosonde

**Special Equipment or setup:** none

**RFI Considerations**

**Frequency Ranges Planned**

This proposal requires coordination with AFTWF within the band 425-435 MHz.