Technical Page

Proposal Identification No.: T1564

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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<thead>
<tr>
<th>Name</th>
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<th>Student</th>
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<tbody>
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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.