Technical Page

Proposal Type: Regular
General Category: Terrestrial Aeronomy
Sub-Category: Radar
Observation Category: Middle-Lower Atmosphere
Total Time Requested: 120 Hours

Proposal Title: D-region studies using the Arecibo UHF and VHF radars

ABSTRACT:

We propose an extensive D-region research program using the Arecibo UHF and VHF radars to study: (1) the interaction/relation of turbulence layers with gravity waves; (2) heat transport due to gravity waves; (3) negative and metallic ion composition; (4) characterizations of gravity waves; (5) momentum flux. We request a total of 120 hours to accomplish these objectives.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qihou H Zhou</td>
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<td>878-2612 ext 256</td>
<td>no</td>
</tr>
</tbody>
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Instrument Setup

430 G  47 CH receiver  47 radar  430 CH receiver  430 CH radar

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned