Technical Page

Proposal Type: Regular
General Category: Terrestrial Aeronomy
Sub-Category: Radar
Observation Category: Ionosphere
Total Time Requested: 24 Hours

Proposal Title: Meteor Observations Using a Double-Pulse Scheme

ABSTRACT:

We propose to perform meteor observations with the 430 MHz Arecibo dual-beam radar using simultaneously two radar pulse scheme. Past studies at Arecibo and Jicamarca have resulted in significantly different meteor velocity distributions. The Arecibo observing methodology use a 45 microsecond uncoded pulse, transmitted every 1 millisecond and sampled every 1 microsecond, while the Jicamarca experiment use a 13 X 5 msec phase-shift Barker code. The main goal of the proposed observations is to compare both techniques and confirm if the observed differences are real features of the meteor distributions.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
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<td>787-878-2612</td>
<td>no</td>
</tr>
</tbody>
</table>

Service Observing Request

- [X] None
- [ ] All of the observing run.
- [ ] Part of the observing run.
- [ ] Queue Observing

Remote Observing Request

- [X] No
- [ ] Maybe
- [ ] Yes

Instrument Setup

430 G 430 CH receiver 430 CH radar

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned