Technical Page

Proposal Type: Regular
General Category: Terrestrial Aeronomy
Observation Category: topside
Total Time Requested: 36 Hours

Proposal Title: Comparison of temperatures and composition of the lower topside ionosphere as determined by satellite and radar measurements

ABSTRACT:

We propose to expand our knowledge of the topside ionospheric dynamics, composition and temperature by using unique observations made from two incoherent scatter radars and two Defense Meteorological Satellites. The ability to combine altitude and local time profiles at specific latitude and longitude locations, with latitude and longitude profiles at specific local times and altitudes provides the opportunity to identify and quantify the influences of F-region neutral winds, and $E \times B$ drifts and the topside ionosphere composition, temperature, and velocity.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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<tbody>
<tr>
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<td>x252</td>
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Instrument Setup

430 CH radar

Atmospheric Optical Instruments:

Ionosonde

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned