G-Chaser Science Summit

Team Name:
PSU PAWSS Payload

Team PI('s):
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Student Representative(s):
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Science Team:
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Mission Statement:
Measure electron density and neutral density to better understand Polar Mesospheric Winter Echo’s (PMWE’s) in the lower mesosphere. Secondary mission will be to provide measurements for atmospheric models of the D-Region

Instruments/Deck:
Lidar, Total Electron Count (TEC), Langmuir Probe; Full Deck

Desired Launch conditions:
- Daytime
- During PMWE Event
- No Aurora
- Live feed from ground radar to detect PMWE’s (52 and 224 MHz)
- Estimate charge buildup on rocket

In-Flight Conditions:
- Shell and nose cone release at 50 km
- Maximize time in the D-region (60 to 100 km)