

Technical Page

Proposal Type:
 General Category: Terrestrial Aeronomy
 Sub-Category: Optical
 Observation Category: Ionospheric
 Total Time Requested: 24 Hours

Proposal Title: Arecibo Observations of Gravity Waves Associated with Solar Eclipse Ionospheric Depletion

ABSTRACT:

The observation will determine the strength of gravity waves that may be induced by a solar eclipse. The ionospheric perturbation caused cooling, recombination, and diffusion is expected to leave a wake of the lunar shadow which propagates away in a gravity wave mode. The incoherent scatter radar at Arecibo is ideally located to detect these gravity waves and provide valuable information on the ionospheric response.

Name	Institution	E-mail	Phone	Student
Paul - Rodriguez	Naval Research Laboratory	paul.rodriquez@nrl.navy.mil	202-767-3329	N

Service Observing Request

Remote Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

- No
- Maybe
- Yes

Instrument Setup

Atmospheric Observation Instruments:

Ionosonde

Description of Observer Equipment: Four high speed radar processors to be supplied by F. T.

Djuth

Special Equipment or setup: Special setup: Software needs: Principal observing programs are CLOP (1 microsec baud), POWRD, and MRACF. Media needs:

RFI Considerations

Frequency Ranges Planned

see proposal