

## Technical Page

Proposal Type: Regular  
 General Category: Planetary Radar  
 Observation Category: Solar System  
 Total Time Requested: 12 Hours

**Proposal Title:** 430 MHz Radar Observations of Mercury North Polar Region

*ABSTRACT:*

The proposed observations are aimed at determining the 70cm wavelength scattering properties of Mercury's north polar anomalies. These features are likely due to volatiles cold trapped in permanently shadowed craters, and have been identified by their high cross sections and polarization ratios at 12.6cm and 3.5cm wavelengths. The extent to which these properties persist at 70cm wavelength will constrain models of the scattering layer.

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**Service Observing Request**

**Remote Observing Request**

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

- No
- Maybe
- Yes

**Instrument Setup**

430 MHz CH receiver

**Atmospheric Observation Instruments:**

**Description of Observer Equipment:**

**Special Equipment or setup:** Special setup: 430 MHz transmitter, pulsed Software needs: Radar data acquisition software using radar interface Media needs:

**RFI Considerations**

**Frequency Ranges Planned**

see proposal