

Technical Page

Proposal Type: Regular
 General Category: Planetary Radar
 Sub-Category: Radar
 Observation Category: Solar System
 Total Time Requested: 16 Hours

Proposal Title: High-Resolution 70-cm Radar Imaging of the Lunar South Pole: Searching for Evidence of Ice

ABSTRACT:

The presence of ice at the lunar poles remains a topic of considerable interest. We propose to carry out 70-cm wavelength radar mapping of the lunar south pole, using the Arecibo and Greenbank telescopes to obtain dual circular-polarization data. These measurements will permit deeper probing of portions of the permanently-shadowed crater floors than was possible with either the Clementine 13.2-cm or Arecibo 12.6-cm observations. Our results should provide much better constraints on the physical nature of possible ice deposits within these shadowed regions.

Name	Institution	E-mail	Phone	Student
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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 CH receiver 430 CH radar

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned