Proposal Identification No.: R1814
Date Received: 2003-May-29 14:03:35

Technical Page

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

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

ABSTRACT:

In recent years, a major question for radar investigation has been the possibility of ice at the lunar poles. We propose to carry out 70-cm wavelength, dual-polarization radar mapping of the lunar south pole. These data 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.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruce A Campbell</td>
<td>Smithsonian Institution</td>
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<td>202 633-2472</td>
<td>no</td>
</tr>
</tbody>
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Service Observing Request

Remot e Observing Request

- [X] None
- [ ] All of the observing run.
- [ ] Part of the observing run.
- [ ] Queue Observing

- [X] No
- [ ] Maybe
- [ ] Yes

Instrument Setup

430 CH receiver  430 CH radar

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

This proposal requires coordination with AFTWF within the band 425-435 MHz.