

Technical Page

Proposal Type: Regular
 General Category: Planetary Radar
 Observation Category: Solar System
 Total Time Requested: 17 Hours

Proposal Title: Radar Imaging of Mercury’s South Polar Ice in 2005

ABSTRACT:

This is a proposal to use the Arecibo S-band radar to study Mercury’s putative south polar ice deposits. We will use the long-code delay-Doppler technique to make high-resolution radar images with a surface resolution of 1.5 km. The primary objective is to determine the spatial distribution of the ice in latitude and longitude and the ice distribution within individual host craters. This will be the best opportunity we will have to observe the south pole from Arecibo for several years.

Name	Institution	E-mail	Phone	Student
John K Harmon	Arecibo Observatory	harmon@naic.edu	787-878-2612 x284	no

Service Observing Request

Remote Observing Request

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

- No
- Maybe
- Yes

Instrument Setup

S-Band radar S-band receiver

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

2380