Proposal Identification No.: R1932 Date Received: 2004-Jan-27_15:15:04

Technical Page

Proposal Type: Regular
General Category: Planetary Radar
Observation Category:
Total Time Requested: 15.5 Hours

Proposal Title: Radar observations of 2002 CE26

ABSTRACT:

This is a proposal for radar observations of the Apollo asteroid 2002 CE26. Little is known about this recent discovery. Its absolute magnitude, H = 15.5, suggests an object 2-5 km in size. During this encounter 2002 CE26 approaches to within 0.1 AU, making this the best 2002 CE26 radar opportunity for at least the next century. Signal to noise ratios should be sufficient for 15-75m resolution imaging. Our goals are to: 1. obtain simultaneous OC and SC delay-Doppler images with range resolution of at least 0.5 us (75m) to allow hectometer-scale structural details of the surface to be discerned and the asteroid's shape to be reconstructed. 2. constrain the rotational pole with radar and near simultaneous lightcurve observations, and 3. search for satellites.

Name	Institution	E-mail	Phone	Student
Michael K Shepard	Bloomsburg University	mshepard@bloomu.edu	570-389-4568	no

Service Observing Request

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

Remot e Observing Request

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

Instrument Setup

S-Band radar

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned