

Technical Page

This proposal has not been submitted before.

Proposal Type: Urgent
 General Category: Planetary Radar
 Observation Category: Solar System
 Total Time Requested: 3.0 Hours
 Minimum Useful Time: 2.0

Proposal Title: Radar Observations of Potentially Hazardous Near-Earth Asteroid 2016 VC1
ABSTRACT:

We request 3 hours of telescope time on November 23 from 12:30 to 15:30 AST (including transmitter warm-up) to observe recently discovered near-Earth asteroid 2016 VC1. Little is known about this asteroid other than its absolute magnitude of 21.5, which corresponds to a diameter within a factor of two of 200 meters. Due to its size and relative proximity to Earth, this asteroid is designated as a potentially hazardous asteroid. This object also falls in the size range where asteroids start to break the cohesionless spin limit, a size range not yet well characterized with radar. We will collect valuable radar astrometry that will improve our knowledge of its future trajectory and impact hazard to Earth and will characterize its spin, size, and shape as signal strength allows.

Name	Institution	E-mail	Phone	Student
Patrick A Taylor	Arecibo Observatory	ptaylor@naic.edu	787-878-2612 x358	no

Remote Observing Request

- Observer will travel to AO
- Remote Observing
- In Absentia (instructions to operator)

Instrument Setup

S-Band radar S-band receiver

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned