Technical Page

This proposal has not been submitted before.

Proposal Type: Urgent  
General Category: Planetary Radar  
Observation Category: Solar System  
Total Time Requested: 2.0 Hours  
Minimum Useful Time: 1.0

Proposal Title: Radar Observations of Near-Earth Asteroid 2018 RC

ABSTRACT:
We request 2.0 hours of telescope time (including transmitter warmup) on September 15, 13:00-15:00 AST, to observe newly discovered near-Earth asteroid 2018 RC, which is designated as an NHATS object of interest to NASA. 2018 RC possesses one of the smallest minimum orbit intersection distances (MOIDs) of any known near-Earth asteroid, small enough that a grazing flyby (or worse) could occur in the future. Arecibo radar observations will help better constrain the orbit and the predictability of the future trajectory of 2018 RC with respect to Earth and have been requested, if possible, by the Center for Near-Earth Objects Studies (CNEOS) at the Jet Propulsion Laboratory. The time request currently falls at the end of P1693 and during scheduled X111 time on September 15. The transmitter will have to be shut off and restarted prior to the R3037 track at 17:00 AST.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
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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