This proposal has not been submitted before.

Proposal Type: Urgent
General Category: Planetary Radar
Observation Category: Solar System
Total Time Requested: 3.5 Hours
Minimum Useful Time: 2.0

Proposal Title: Radar Observations of Small Near-Earth Asteroids 2015 KQ120 and 2015 KM57

ABSTRACT:

We request one 3.5-hour observing track (including transmitter warm-up time) to detect recently discovered near-Earth asteroids 2015 KQ120 and 2015 KM57. Asteroid 2015 KQ120 is an NHATS object of interest to NASA as a possible future robotic or crewed mission target. Both asteroids are very small, expected to have diameters of roughly 10 to 30 meters, a size range poorly sampled by radar. Observations will refine the orbits and provide estimates of the size, spin, and surface characteristics of these small bodies. The requested time, 2015 June 4, 04:00-07:30 AST, is currently occupied by P1693 and X111 time. The transmitter could begin warming up during P2030, but ALFA would then have to be covered at 04:30.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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<tbody>
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</tbody>
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Remote Observing Request

[X] 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