Technical Page

Proposal Type:	Urgent
General Category:	Planetary Radar
Observation Category:	Solar System
Total Time Requested:	13 Hours
Minimum Useful Time:	2h

Proposal Title: Radar observations of scheduled targets of opportunity

ABSTRACT:

To date, small near-Earth asteroids have been observed as targets of opportunity, due to the (usually) short notice of their discovery. This mode of observing is a very inefficient use of resources, as the radar system must be started for each observation, and is very disruptive to the rest of the observatory operations, which often need to be rearranged at the last minute. We have proposed to begin a regular plan of observations for whole nights near new Moon, when asteroids are usually discovered. Our simulations indicate that there should be newly-discovered targets available at all times in the requested window. We propose here to do a test run of this plan in concert with already-scheduled observations on April 29-May2 in order to maximize productivity and show that the method works in time to propose for funding to persue a significantly increased number of asteroid observations in the future. The project will be carried out by observatory staff, with the assistance of any interested visiting observers. The data are expected to be made public immediately, with no proprietary period.

Name	Institution	E-mail	Phone	Student
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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

2370-2390