

Technical Page

Proposal Type: Regular
 General Category: Planetary Radar
 Observation Category: Solar System
 Total Time Requested: 63 Hours

Proposal Title: Radar Imaging of Three Large Near-Earth Asteroids in July 2000

ABSTRACT:

We propose delay-Doppler imaging observations of near-Earth asteroids 4486 Mithra, 12711 (1991 BB), and 1997 WU22, whose absolute visual magnitudes (H) suggest diameters between 2 and 6 km, depending on optical albedo. Apart from H, no information is available for these objects. Our strategy is to use radar images and established inversion techniques to determine the targets' shapes, spin states, and surface properties. The next radar opportunities for Mithra, 1991 BB, and 1997 WU22 are in 2059, 2022, and 2016, respectively.

Name	Institution	E-mail	Phone	Student
Steven J. Ostro	Jet Propulsion Laboratory	ostro@reason.jpl.nasa.gov	818-354-3173	no

Instrument Setup

S-Band radar

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned