Technical Page

Proposal Type:	Regular
General Category:	Planetary Radar
Observation Category:	Solar System
Total Time Requested:	50 Hours

Proposal Title: Radar Observations of Four Main-Belt Asteroids in August and September 2000

ABSTRACT:

We propose to obtain radar images and spectra of the main-belt asteroids 88 Thisbe, 324 Bamberga, 336 Lacadiera, and 393 Lampetia. We will measure rotationally-resolved surface properties of Thisbe and Lacadiera and obtain delay-Doppler images of Bamberga and Lampetia. These measurements will address the relationship between the objects' collisional history and surface processing, and determine the degree of (in)homogeneity in surface properties. All of these objects have primitive (C or D) taxonomic classes, and have shown signs of possible surface inhomogeneity. Lacadiera in particular is potentially a very primitive object, and its radar properties need to be studied as thoroughly as possible in this unique opportunity.

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Instrument Setup

S-Band radar S-band receiver

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned