

Technical Page

Proposal Type: Regular
 General Category: Planetary Radar
 Observation Category: Solar System
 Total Time Requested: 18.25 Hours

Proposal Title: Proposal for Radar Observations of Itokawa

ABSTRACT:

We propose delay-Doppler imaging of near-Earth asteroid 25143 Itokawa (1998 SF36), the target of Japan's Hayabusa (formerly MUSES-C) sample-return mission. The goals are to develop an optimally refined physical model of the asteroid in preparation for Hayabusa's 2005 encounter, to use radar ranging to assist detection of Yarkovsky nongravitational (thermal-emission) alteration of the asteroid's orbit, and to help to detect and measure "YORP" thermal-emission alteration of the asteroid's spin state.

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Service Observing Request

Remote Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

- No
- Maybe
- Yes

Instrument Setup

S-Band radar

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned