

Technical Page

Proposal Type: Regular
 General Category: Planetary Radar
 Observation Category: Solar System
 Total Time Requested: 72 Hours

Proposal Title: S-Band Radar Observations of Titan

ABSTRACT:

Eighteen observing sessions are being requested for S-band radar observations of Titan. CW observations in the fall of 2001 showed that Titan's surface is primarily a diffuse scatterer with the cross section as a function of longitude correlating with the near IR albedo. Most longitudes also gave a specular return implying rms surface slopes as low as 0.5 deg. The observations proposed for late 2002 will utilize these specular returns for ranging measurements, which will provide information about altitude variations on Titan. They will also be used to investigate the properties and extents of the specularly scattering areas. These observations will be done both monostatically and bistatically with the Green Bank Telescope.

Name	Institution	E-mail	Phone	Student
Don Campbell	Cornell/NAIC	campbell@astro.cornell.edu	607-255-9580	no

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 S-band receiver

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

