

## Technical Page

Proposal Type: Urgent  
 General Category: Planetary Radar  
 Sub-Category: Radar  
 Observation Category: Solar System  
 Total Time Requested: 6 Hours

**Proposal Title:** Radar Observations of Comet C/2004 S1 (VAN NESS)

*ABSTRACT:*

A recently discovered (2004 September 26) comet C/2004 S1 (VAN NESS) will be observable at Arecibo 2004 October 10-20. While the ephemeris is still uncertain, we expect it to be visible during the beginning of, and somewhat before, the R1982, R1980, and R1885 observations in that window. We request time in the currently empty slots before those observations. Opportunities for radar observation of comets are quite rare, of order once a year. Radar provides measures of the nucleus and the size distribution of the grain coma that are very difficult to obtain any other way.

Name	Institution	E-mail	Phone	Student
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**Service Observing Request**

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

**Remote Observing Request**

- No
- Maybe
- Yes

**Instrument Setup**

S-Band radar                                  S-band receiver

**Atmospheric Observation Instruments:**

**Special Equipment or setup:** none

**RFI Considerations**

**Frequency Ranges Planned**