

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Galactic
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 Observation Category:
 Total Time Requested: 31 Hours

Proposal Title: |b |>10 degree mimics and OH/IR Stars

ABSTRACT:

75% of |b |>10deg circumstellar shells, color- selected from the IRAS Point Source Catalog, do not exhibit 1612 MHz masers. Many of these "mimics" are associated with normal Mira variables; most are oxygen-rich. A new paradigm suggests that mimics are a consequence of the transient nature of shells, as these change with luminosity after a thermal pulse, which can dramatically alter the expansion velocity, and thus the degree of dust protection afforded molecules against interstellar UV. We seek here to test the incidence of mimics by making more sensitive searches for 1612 MHz masers from objects with known mainline and/or water masers.

Name	Institution	E-mail	Phone	Student
Murray Lewis	NAIC	blewis@naic.edu	787 878 2612	no

I NA want to do remote observing.

Instrument Setup

L-wide

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

not given