

### Technical Page

Proposal Type: Long-term  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: Galactic  
 Total Time Requested: 24 Hours  
 Minimum Useful Time: 45 mins

**Proposal Title:** Are the 1612 MHz masers of IRAS 15060+0947 Modulated?

**ABSTRACT:**

The 1612 MHz masers of the OH/IR star IRAS 15060+0947 exhibit unique behaviour. While its red peak has completely disappeared over 5 years, its blue peak has diminished to 25% of its discovery intensity, and oscillates in magnitude with a pulsation period of 315d. The mainline masers have constantly evolved, however, both in intensity and velocity. They were absent in November 2005, but are strong now, in a pattern suggesting that the star is evolving back through the phylogeny exhibited as the red peak disappeared. This behaviour challenges our ideas for explaining the appearance and disappearance of 1612 MHz masers from stars with an ongoing Mira pulsational period: we had expected the disappearance of the blue peak soon after that of the red. We therefore have lessons to learn, and so seek to continue monitoring this star monthly to follow the evolution in its complement of masers.

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#### Remote Observing Request

- Observer will travel to AO
- Remote Observing
- In Absentia (instructions to operator)

#### Instrument Setup

L-wide

#### Atmospheric Observation Instruments:

**Special Equipment or setup:** none

## RFI Considerations

### Frequency Ranges Planned