Technical Page

Proposal Title: Absorption Studies of Molecular Clouds Along the line of Sight to W49 and W51

ABSTRACT:

We propose to search for absorption features from a number of molecular species, in clouds along the line of sight to the distant HII regions W49 and W51. Observations with the SWAS satellite show water vapor in absorption at a number of discrete velocities corresponding to features seen in various mm and cm absorption and emission spectral lines. It is surprising the these same features are also seen in HI and CI, in addition to OH, as it is extremely challenging to define what types of regions these "line of sight clouds" really are. We propose to add some additional key species including H2CO and HC5N to the very high quality data base of mm lines we are obtaining from FCRAO.

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<tr>
<th>Name</th>
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<th>Phone</th>
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I might want to do remote observing.

Instrument Setup

C

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned