

Technical Page

Proposal Type: Urgent
 General Category: Astronomy
 Sub-Category: Continuum
 Observation Category: Extragalactic
 Total Time Requested: 11 hours Hours
 Minimum Useful Time: 2.2 hours

Proposal Title: Repeat Observations of Portions of A2174 Commensal ALFA Observations
ABSTRACT:

Recently, the GALFACTS team carried our commensal observations with project A2174. The GALFACTS observations were designed both to implement and test commensal observing procedures with GALFA HI experiments and to complement the scientific goals of A2174. The GALFA HI observations of A2174 were to secure HI imaging of the Perseus Molecular Cloud complex, and are part of a multiwavelength campaign to study all stages of star formation. This includes a Spitzer Legacy Survey and the COMPLETE project. In addition to designing and developing our commensal strategy for GALFACTS and TOGS2, the GALFACTS data adds spectro-polarimetric information to the campaign, thereby providing information on the relationship between magnetic fields and the molecular gas in an active star formation region. During the A2174 observations, five days were rendered unusable by a combination of RFI (four days) and signal drop-outs on a data stream (one day). We have investigated the RFI problem and can now mitigate this via post-Dewar filters. These observations use the meridian scanning technique that will be used for GALFACTS. In order to create the images of the A2174 region, a complete, good quality, scan set is required. Here, we request time to re-observe the poor quality scans of five days in order to complete the polarimetric database.

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Remote Observing Request

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

Instrument Setup

ALFA

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1395 - 1495

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz..

This proposal requires coordination with GPS L3 at 1381 MHz.