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ARECIBO OBSERVATORY  
 NATIONAL ASTRONOMY AND  
 IONOSPHERE CENTER  
 OBSERVING TIME REQUEST  
 COVER SHEET

We are indebted to our  
 user community for their  
 continued support of  
 the Arecibo Observatory,  
 Puerto Rico.

**Section I - General Information**

Submitted for Oct 1 2003.

This proposal has not been submitted before.

Proposal Type: Regular  
 General Category: Astronomy  
 Observation Category: Galactic  
 Total Time Requested: 40 hours Hours

**Proposal Title:** A Pilot Study for the GALFA Continuum Transit Survey

*ABSTRACT:*

This proposal requests time to carry out a pilot study for the GALFA Continuum Transit Survey (GALFACTS). It is submitted on behalf of the GALFA Continuum science subconsortium. The scientific motivation for GALFACTS focuses heavily on exploiting polarimetric observations and measurements of Faraday Rotation to probe the magneto-ionic medium in the disk and halo of the Galaxy. This proposal will test the observing plan for GALFACTS. The observations and the data will be used to assess the success of the observing strategy, measure the effects of instrumental systematics on the scientific results and to develop processing and analysis algorithms. The region chosen for observations contains polarized signals from both a background point source and the distributed Faraday Screen, and will provide not only a rigorous test of these aspects of GALFACTS, but also a scientific investigation of filamentary structures in the Faraday screen.

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I will not need financial support.

This work is part of a MS thesis.

### Service Observing Request

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

### Remote Observing Request

- No
- Maybe
- Yes

## Section II - Time Request

The following times are in LST.

Begin – End Interval–Interval	Days Needed at This Interval
6:38 – 7:38	40
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–	
–	

### Time Constraints (Must Be Justified in the Proposal Text)

Prefer nighttime observations to protect against interference from the Sun. We also wish a time range that allows coordination for protection against Iridium.

## Section III - Instruments Needed

L-wide

**Atmospheric Observation Instruments:**

**Special Equipment or setup:** none

## Section IV - RFI Considerations

### Frequency Ranges Planned

1120 - 1700

This proposal requires Iridium RFI protection at 1612 MHz between 10pm and 6am EST.

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

This proposal requires coordination with GPS L3 at 1381 MHz.

## **Section V - Observing List**

### **Target List**

10x1 deg region centred at RA=07h 08m, DEC=11D 30'