



Observing Application

Date: Dec 22, 2006
 Proposal ID: VLA/06C-271
Legacy ID: AP525
 PI: Aina Palau
 Type: Rapid Response
 Exploratory Time
 Category: Galactic
 Total time: 1.1600001 hour

A young star driving a cavity of swept up material in IRAS 20343+4129

Abstract:

IRAS 20343+4129 is a massive star-forming region with two bright infrared sources, IRS 1 and IRS 3, as possible candidates to account for the total IRAS luminosity. One of the sources, IRS-3, seems to be driving a cavity of swept-up material around it. However, its nature is not clear as the previous centimeter observations at 6, 3.6, and 2 cm yield inconsistent flux densities, or the source is variable. Thus, the spectral index of IRS 3 cannot be well determined, making its nature unclear and thus also the nature of IRS 1 is unclear. With this exploratory time proposal, we will be able to make a reliable estimation of the spectral index of IRS 3, by observing during 30 min in the C configuration and 40 min in the D configuration (total times).

Authors:

Name	Institution	Email	Status
Aina Palau	Barcelona, Universidad de	apalau@am.ub.es	
Robert Estalella	Barcelona, Universidad de	robert.estalella@am.ub.es	

Principal Investigator: Aina Palau

Contact author: Aina Palau

Telephone: +34 934 039 234

Email: apalau@am.ub.es

Joint:

Not a Joint Proposal

Observing type(s):

Continuum, *

Resources:

Resource name	Tele. Conf.	Frontend & Backend	Set up
I20343C	VLA C	C Band 6 cm 4500 - 5000 MHz VLA Correlator - Single Channel Continuum	Bandwidth: 50 MHz Rest frequencies: 4885.1,4835.1 MHz
I20343X	VLA C	X Band 3.6 cm 8080 - 8750 MHz VLA Correlator - Single Channel Continuum	Bandwidth: 50 MHz Rest frequencies: 8435.1,8485.1 MHz
I20343K	VLA D	K Band 1.3 cm 21200 - 25200 MHz VLA Correlator - Single Channel Continuum	Bandwidth: 50 MHz Rest frequencies: 22485.1,22435.1 MHz
I20343Q	VLA D	Q Band 0.7 cm 40000 - 50000 MHz VLA Correlator - Single Channel Continuum	Bandwidth: 50 MHz Rest frequencies: 43314.9,43364.9 MHz

Sources:

Source name	RA / RA Range	DEC / DEC Range	System	Velocity/z	Group name
I20343	20:36:07.2 00:00:00.0	+41:39:52 00:00:00	J2000	11.5 km/s	