



Observing Application

Date : Sep, 13 2008
Proposal ID : VLA/08C-236
Legacy ID : AA325
PI : Marc Audard
Type : Rapid Response - Target
of Opportunity
Category : Stellar
Total Time : 4.0

Catching the Young Star V1647 Ori in Outburst

Abstract:

We propose to observe the young star V1647 Ori which has entered a new outburst state in August 2008. We aim to obtain VLA data at 2 different wavelengths, 3.6cm and 1.3cm. The data at 3.6cm will probe non-thermal emission present in the young star (e.g., magnetospheric emission), while the 1.3cm data are targeted toward the detection of the optically thin dust continuum emission.

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Related proposals:

Joint:

Not a Joint Proposal

Observing type(s):

Continuum

VLA Resources

Name	Conf.	Frontend & Backend	Setup
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Name	Conf.	Frontend & Backend	Setup
V1647Ori X-band	Any	X Band 3.6 cm 8080 - 8750 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 8435.1,8485.1 MHz Bandwidth: 50 MHz
V1647Ori K-band	A	K Band 1.3 cm 18000 - 26500 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 22485.1,22435.1 MHz Bandwidth: 50 MHz

Sources:

Name	RA / RA Range	Dec / Dec Range	Epoch	Velocity / z	Group
V1647 Ori	05:46:13.0 00:00:00.0	-00:06:04 00:00:00	J2000	Velocity : 0.00	V1647Ori

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
X-band	1.00	1	0 day	00:00:00	24:00:00	0
K-band	3.00	1	0 day	00:00:00	24:00:00	0

Session Constraints:

Name	Constraints	Comments
X-band	Please schedule it any time in Oct-Dec 2008	
K-band	Please schedule it in winter (Nov-Dec 2008), during the night	

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
X-band	V1647 Ori	V1647Ori X-band	1.0 hour	0.02 mJy/bm	
K-band	V1647 Ori	V1647Ori K-band	3.0 hour	0.03 mJy/bm	

Present for observation: no

Staff support: Consultation

Plan of Dissertation: no