



Observing Application

Date : Oct, 14 2011
 Proposal ID : VLA/11B-230
 Legacy ID : AC1081
 PI : Laura Chomiuk
 Type : Director's Discretionary
 Time - Target of
 Opportunity
 Category : Energetic Transients and
 Pulsars
 Total Time : 18.0

The EVLA Nova Project: Catching the Radio Outburst of T Pyx

Abstract:

The recurrent nova T Pyx exploded on 2011 April 14, the sixth explosion in recorded history and the first in the modern telescope era. This source plays a unique role in our understanding of both novae and the evolution of cataclysmic variables, and is the subject of an international multi-wavelength observing campaign. We have been monitoring it with the EVLA since just one week after outburst, and its radio luminosity has now begun to rise dramatically. We request 18 hours over the next three months in D configuration for continued monitoring of this intriguing source, to measure the mass and energy of the nova ejecta and to search for signs of interaction with the rich circumbinary medium.

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Related proposals:

11A-263

Joint:

Not a Joint Proposal

Observing type(s):

Continuum, Polarimetry, Single Pointing(s), Monitoring

VLA Resources

Name	Conf.	Frontend & Backend	Setup
U Wide	D	Ku Band 2 cm 12000 - 18000 MHz WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 12600.0,16000.0 MHz Subband Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 2000.0 kHz
S wide	Any	S Band 10 cm 2000 - 4000 MHz WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 2500.0,3500.0 MHz Subband Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 2000.0 kHz
Ka wide	Any	Ka Band 0.9 cm 26500 - 40000 MHz WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 29000.0,36000.0 MHz Subband Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 2000.0 kHz
K wide	Any	K Band 1.3 cm 18000 - 26500 MHz WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 23500.0,24500.0 MHz Subband Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 2000.0 kHz
L wide	Any	L Band 20 cm 1000 - 2000 MHz WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 1250.0,1750.0 MHz Subband Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 2000.0 kHz
C wide	Any	C Band 6 cm 4000-8000 MHz WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 5000.0,6750.0 MHz Subband Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 2000.0 kHz

Sources:

Name	Position		Velocity		Group
T Pyx	Coordinate System	Equatorial	Convention	Radio	TPyx
	Equinox	J2000			
	Right Ascension	09:04:41.5	Ref. Frame	LSRK	
		00:00:00.0			
Declination	-32:22:47.4	Velocity	0.00		
	00:00:00.0				