



# Observing Application

Date : Mar, 18 2012  
 Proposal ID : VLA/12A-459  
 Legacy ID : AC1106  
 PI : Laura Chomiuk  
 Type : Director's Discretionary  
 Time - Target of Opportunity  
 Category : Energetic Transients and Pulsars  
 Total Time : 12.0

## EVLA Nova Project: Confirming a Massive Delayed Ejection in Recurrent Nova T Pyx

### Abstract:

The recurrent nova T Pyxidis exploded on 2011 April 14, producing its first nova outburst since 1966 and the subject of an international multi-wavelength observing campaign. We have been monitoring T Pyx with the VLA since just one week after outburst. Here, we request an additional 12 hours over the next six months for continued monitoring during a critical time when the radio emission is changing faster than previously expected. These observations will allow us to test our interpretation that the radio light curve is produced by a surprisingly massive, delayed ejection from the nova outburst, with profound implications for our understanding of nova theory and accreting white dwarfs.

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### Related proposals:

11A-263, 11B-230, 12B-270

**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: 128.0 MHz Total Bandwidth: 2,048.00 MHz
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: 128.0 MHz Total Bandwidth: 2,048.00 MHz
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: 128.0 MHz Total Bandwidth: 2,048.00 MHz
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: 128.0 MHz Total Bandwidth: 2,048.00 MHz
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: 128.0 MHz Total Bandwidth: 2,048.00 MHz
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: 128.0 MHz Total Bandwidth: 2,048.00 MHz

Testing Resource Images