



Observing Application

Date : Jun, 09 2012
 Proposal ID : VLA/12A-483
 Legacy ID : AC1110
 PI : Laura Chomiuk
 Type : Director's Discretionary
 Time - Target of
 Opportunity
 Category : Energetic Transients and
 Pulsars
 Total Time : 10.0

The E-Nova Project: Searching for the "Classical" in Classical Novae

Abstract:

While the defining characteristics of novae---and their diversity---have been thoroughly understood at optical wavelengths for decades, the study of novae at radio wavelengths is still in relative infancy. The scientific goal of this program is to identify a nova whose dominant radio behavior is consistent with expectations for a normal classical nova (in contrast with our E-Nova Project targets to date). Here, we request exploratory JVLA observations of three young classical novae which are located within ten degrees of one another on the sky. The proximity of our targets to one another will dramatically cut down on slewing and calibration overhead, providing observations of three novae in the time that is usually spent on one transient. Our total time request for the B and BnA configurations is 10 hours.

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Related proposals:

11B-170

Joint:

Not a Joint Proposal

Observing type(s):

Continuum, Polarimetry, Single Pointing(s)

VLA Resources

Name	Conf.	Frontend & Backend	Setup
Kaband	Any	Ka Band 0.9 cm 26500 - 40000 MHz WIDAR OSRO, Full Polarization	Rest frequencies: 28000.0,35000.0 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 OSRO, Full Polarization	Rest frequencies: 4500.0,7250.0 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

Sources:

Name	Position		Velocity		Group
Oph2012 #1	Coordinate System	Equatorial	Convention	Radio	Oph2012 No. 1
	Equinox	J2000			
	Right Ascension	17:26:07.0 00:00:00.0	Ref. Frame	LSRK	
	Declination	-25:51:43.0 00:00:00.0	Velocity	0.00	
Oph2012 #2	Coordinate System	Equatorial	Convention	Radio	Oph2012 No. 2
	Equinox	J2000			
	Right Ascension	17:39:56.0 00:00:00.0	Ref. Frame	LSRK	
	Declination	-24:47:42.0 00:00:00.0	Velocity	0.00	
Sco2012	Coordinate System	Equatorial	Convention	Radio	ScoNova
	Equinox	J2000			
	Right Ascension	17:50:53.9 00:00:00.0	Ref. Frame	LSRK	
	Declination	-32:37:20.0 00:00:00.0	Velocity	0.00	

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
Oph1 C	0.33	4	30 day	00:00:00	0:00:00	0
Oph2 C	0.33	4	30 day	00:00:00	0:00:00	0
Sco C	0.33	4	30 day	00:00:00	0:00:00	0
Oph1 Ka	0.50	4	30 day	00:00:00	0:00:00	0