



# Observing Application

Date : Jun, 11 2009  
 Proposal ID : VLA/09B-197  
 Legacy ID : AS996  
 PI : Joanna Skilton  
 Type : Rapid Response - Target  
 of Opportunity  
 Category : Stellar  
 Total Time : 4.5

## Spectral properties of the likely new gamma-ray binary HESS J0632+057

### Abstract:

Recent B-configuration VLA observations of the likely new gamma-ray binary system HESS J0632+057 have shown that the variable radio emission associated with this source is now in a high state. One 4.5 hour rapid response VLA observation of this source in the current CnB configuration is requested to accurately measure the spectral index of the source.

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### Related proposals:

AS944, AS967, AS971

### Joint:

Not a Joint Proposal

### Observing type(s):

Continuum

### VLA Resources

Name	Conf.	Frontend & Backend	Setup
5Ghz	CnB	C Band 6 cm 4000-8000 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 4885.1,4835.1 MHz Bandwidth: 50 MHz
8GHz	CnB	X Band 3.6 cm 8080 - 8750 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 8435.1,8485.1 MHz Bandwidth: 50 MHz
1.4GHz	CnB	L Band 20 cm 1000 - 2000 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 1464.9,1385.1 MHz Bandwidth: 50 MHz

### Sources:

Name	RA / RA Range	Dec / Dec Range	Epoch	Velocity / z	Group
HESS J0632+057	06:32:59.3 00:00:00.0	+05:48:01 00:00:00	J2000	Velocity : 0.00	J0632

### Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
HJ5	1.50	1	0 day	03:30:00	09:30:00	40
HJ1	1.50	1	0 day	03:30:00	09:30:00	40
HJ8	1.50	1	0 day	03:30:00	09:30:00	40

### Session Constraints:

Name	Constraints	Comments

### Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
HJ5	HESS J0632+057	5Ghz	1.5 hour	0.03 mJy/bm	
HJ1	HESS J0632+057	1.4GHz	1.5 hour	0.03 mJy/bm	
HJ8	HESS J0632+057	8GHz	1.5 hour	0.03 mJy/bm	

Present for observation: no

Staff support: None

Plan of Dissertation: no