Observing Application

Date :	Nov, 03 2010
Proposal ID :	VLA/10C-229
Legacy ID :	AC1024
PI :	Poonam Chandra
Type :	Rapid Response - Exploratory Time
Category :	Extragalactic
Total Time :	6.0

Follow up observations of the bright radio afterglow of GRB 100418A

Abstract:

We propose to continue monitoring the afterglow of a bright GRB 100418A at a redshift of z = 0.6235 (Antonelli et al. 2010). GRB 100418A radio afterglow was discovered at the EVLA as part of our GRB program AK730. This is one of the brightest radio afterglow in post-Swift era with peak flux densities reaching above 1 mJy. Continued radio monitoring of this GRB at this late stage will allow us to derive physical parameters of the explosion, density of the surrounding medium and geometry independent calorimetry that cannot be obtained any other way.

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Related proposals:

AK730

Joint:

Not a Joint Proposal

Observing type(s):

Continuum, Single Pointing(s), Triggered Transient

VLA Resources

Name	Conf.	Frontend & Backend	Setup
CBand	Any	C Band 6 cm 4000-8000 MHz WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 4896.0, 5024.0 MHz Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 2000.0 kHz

Sources:

Name	Position	Velocity	Group

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GRB100418A	**Coordinate System**	Equatorial	**Convention**	Radio	GRB
	Equinox	J2000			
	Right Ascension	17:05:27.0	**Ref. Frame**	LSRK	
		00:00:00.0			
	Declination	+11:27:40.0	**Velocity**	0.00	
		00:00:00.0			

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
GRB-C	1.00	6	30 day	13:00:00	20:00:00	0

Session Constraints:

Name	Constraints	Comments

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
GRB-C	GRB100418A	CBand	1.0 hour	0.03 mJy/bm	

Present for observation: no Staff support: None Plan of Dissertation: no