



Observing Application

Date : Apr, 05 2012
 Proposal ID : VLA/12A-467
 Legacy ID : AL820
 PI : Tanmoy Laskar
 Type : Director's Discretionary
 Time - Target of Opportunity
 Category : Energetic Transients and Pulsars
 Total Time : 6.0

Monitoring the bright radio afterglow of GRB 120326A

Abstract:

We request 6 hours of EVLA time to follow up Gamma Ray Burst 120326A. This long-duration GRB has a bright X-ray and optical afterglow, mm and submm detections with CARMA and the SMA, and a measured redshift ($z = 1.798$). We observed the burst as part of our EVLA program 12A-394 at two epochs (t+5 days in C and K bands; t+9 days in C, K and Ka bands) and detected a bright radio afterglow in both epochs in all bands. We request multi-band follow-up observations over a period of ~ 3 months to study the energetics and geometry of the burst and the nature of the progenitor environment.

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Related proposals:

AB1323, AK634, AK681, AK706, AK718, AK730, 10C-145, 11B-242, 12A-394

Joint:

Not a Joint Proposal

Observing type(s):

Continuum, Spectroscopy

VLA Resources

Name	Conf.	Frontend & Backend	Setup
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Name	Conf.	Frontend & Backend	Setup
Kband	Any	K Band 1.3 cm 18000 - 26500 MHz WIDAR OSRO, Full Polarization	Rest frequencies: 21500.0,22500.0 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
Cband	Any	C Band 6 cm 4000-8000 MHz WIDAR OSRO, Full Polarization	Rest frequencies: 5000.0,6000.0 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
Kaband	Any	Ka Band 0.9 cm 26500 - 40000 MHz WIDAR OSRO, Full Polarization	Rest frequencies: 32500.0,33500.0 MHz Subband Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 2000.0 kHz Total Bandwidth: 2,048.00 MHz

Sources:

Name	Position		Velocity		Group
GRB120326A	Coordinate System	Equatorial	Convention	Redshift	GRB Afterglows
	Equinox	J2000			
	Right Ascension	18:15:37.14 00:00:00.0	Ref. Frame	LSRK	
	Declination	+69:15:35.38 00:00:00.0	Redshift	1.798	

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
Ka	0.50	4	15 day	13:00:00	01:00:00	30
K	0.50	4	15 day	13:00:00	01:00:00	30
C	0.50	4	15 day	13:00:00	01:00:00	30

Session Constraints:

Name	Constraints	Comments
Ka		C, K and Ka band observations will be in single 1.5 hour blocks, at around t+15, t+25, t+35, and t+70 days.
K		
C		

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
Ka	GRB120326A	Kaband	0.5 hour	0.028 mJy/bm	
K	GRB120326A	Kband	0.5 hour	0.022 mJy/bm	