

Observing Application

Date : Dec, 19 2011 Proposal ID : VLA/11B-242 Legacy ID : AB1423 PI : Edo Berger Type : Director's Discretionary Time - Target of Opportunity Category : Energetic Transients and Pulsars Total Time : 9.0

Monitoring the Afterglow of GRB 111215A: High-redshift of Heavily Obscured

Abstract:

We request nine hours of telescope time to further monitor the afterglow properties of GRB 111215A. This is an interesting burst worth followup because it is bright at X-ray, but is a dark burst, with no optical or IR afterglow. We detected this source at K-band with a flux of ~1.7 mJy as part of our program 10C-145, but more extensive followup observations are required to trace both the reverse shock and forward emission if this is a GRB. This source is very similar to GRB 110709B (paper in prep), with initial gamma-ray emission of order 1000 s. We have complementary CARMA (90 GHz) and SMA (230 GHz) data at early times

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Related proposals:

AB1323, AK634, AK681, AK706, AK718, AK730, 10C-145

Joint:

Not a Joint Proposal

Observing type(s):

Continuum, Spectroscopy

VLA Resources

Name	Conf.	Frontend & Backend	Setup
Kband	Any	K Band 1.3 cm 18000 - 26500 MHz WIDAR RSRO	Comments: null

Name	Conf.	Frontend & Backend	Setup
Cband	Any	C Band 6 cm 4000-8000 MHz WIDAR RSRO	Comments: null

Sources:

Name	Position		Velocity		Group
GRB111215A	Coordinate System	Equatorial	Convention	Radio	- BrightGRB
	Equinox	J2000			
	Right Ascension	23:18:13.3	Ref. Frame	LSRK	
		00:00:00.0			
	Declination	+32:29:39.2	Velocity	0.00	
		00:00:00.0			

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
Klook	2.00	3	6 day	18:30:00	04:00:00	30
Clook	1.00	3	6 day	18:30:00	4:00:00	30

Session Constraints:

Name	Constraints	Comments	
Klook		K and C band observations can be in one large 3 hour block or separate observations within a day of each other.	
Clook		K and C band observations can be in one large 3 hour block or separate observations within a day of each other.	

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
Klook	GRB111215A	Kband	2.0 hour	0.01 mJy/bm	
Clook	GRB111215A	Cband	1.0 hour	0.015 mJy/bm	

Present for observation: yes

Staff support: None

Plan of Dissertation: no