



Observing Application

Date: Oct 18, 2006
Proposal ID: VLA/06C-265
Legacy ID: AE160
PI: Stewart Eyres
Type: Rapid Response
Exploratory Time
Category: Stellar, Galactic
Total time: 51.0 hour

Monitoring observations of RS Oph in decline

Abstract:

RS Oph is a recurrent nova, with previous outbursts occurring in 1898, 1933, 1958, 1967 and 1985. Following identification of a sixth outburst (2006~Feb~12) we have begun VLA, MERLIN, VLBA, EVN, Swift, Chandra, XMM and complimentary visual and infrared spectroscopic monitoring observations on this object. 30 VLA A and B~array observations to date have proved invaluable in understanding the radio light curve and spectral development, and relating it to VLBI and x-ray observations. This proposal seeks to extend observations to the end of February~2007 (one year after outburst).

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Related proposals:

AE156 AE157

Joint:

Not a Joint Proposal

Observing type(s):

Continuum, Monitoring, *

Resources:

Resource name	Tele. Conf.	Frontend & Backend	Set up
L band	VLA B	L Band 20 cm 1240 - 1700 MHz VLA Correlator - Single Channel Continuum	Bandwidth: 50 MHz Rest frequencies: 1385.1,1464.9 GHz
C band	VLA B	C Band 6 cm 4500 - 5000 MHz VLA Correlator - Single Channel Continuum	Bandwidth: 50 MHz Rest frequencies: 4835.1,4885.1 GHz
U band	VLA B	U Band 2 cm 14650 - 15325 MHz VLA Correlator - Single Channel Continuum	Bandwidth: 50 MHz Rest frequencies: 14964.9,14914.9 GHz
K band	VLA B	K Band 1.3 cm 21200 - 25200 MHz VLA Correlator - Single Channel Continuum	Bandwidth: 50 MHz Rest frequencies: 22435.1,22485.1 GHz

Sources:

Source name	RA / RA Range	DEC / DEC Range	System	Velocity/z	Group name
RS Oph	17:50:13.2 00:00:00.0	-6:42:28 00:00:00	J2000	z = 0.0	

Sessions:

Session Name	Session Time	Repeat	Separation	LST Minimum	LST Maximum	Elevation Minimum
RS Oph 4 band observation	3.0 hours	17	7 days	15:30:00	21:30:00	10.0

Session Constraints:

Session Name	Constraint	Comments
RS Oph 4 band observation		

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit
RS Oph 4 band observation	RS Oph/	C band	0.4 hour	0.1mJy/bm
RS Oph 4 band observation	RS Oph/	K band	1.5 hour	0.1mJy/bm
RS Oph 4 band observation	RS Oph/	L band	0.5 hour	0.1mJy/bm
RS Oph 4 band observation	RS Oph/	U band	0.6 hour	0.1mJy/bm

Total Time per Configuration:

Configuration	Total Time
B	51.0

Present for observation: no Staff support: None