



# Observing Application

Date : Sep, 27 2010  
 Proposal ID : VLA/10B-243  
 Legacy ID : AV325  
 PI : Alexander van der Horst  
 Type : Rapid Response - Target of Opportunity  
 Category : Galactic  
 Total Time : 10.0

## EVLA follow-up of the new transient MAXI J1659-152

### Abstract:

Swift BAT discovered a new transient that was first classified as a gamma-ray burst, but later it was re-classified as a new Galactic transient (MAXI J1659-152) because of MAXI observations and the source location close to the Galactic bulge. The nature of the source is still uncertain. Many facilities are observing this object at the moment, from radio to gamma-ray frequencies. A bright source was discovered at 4.8 GHz with the WSRT, and it showed a high degree of polarization. Further follow-up at multiple radio frequencies would provide great insight in the nature of, and the physics behind, this new transient source.

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### Related proposals:

### Joint:

Not a Joint Proposal

### Observing type(s):

Continuum

### VLA Resources

| Name | Conf. | Frontend & Backend | Setup |
|------|-------|--------------------|-------|
|------|-------|--------------------|-------|

| Name | Conf. | Frontend & Backend  | Setup   |
|------|-------|---|---|
| myXX | Any   | X Band 3.6 cm 8080 - 8750 MHz<br>WIDAR OSRO1: 2<br>Subbands/Full polz   | Rest frequencies: 8396.0, 8524.0 MHz<br>Bandwidth: 128.0 MHz<br>No. of Channels: 64<br>Poln. products: 4.0<br>Channel Width: 2000.0 kHz   |
| myKK | Any   | K Band 1.3 cm 18000 - 26500 MHz<br>WIDAR OSRO1: 2<br>Subbands/Full polz | Rest frequencies: 22396.0, 22524.0 MHz<br>Bandwidth: 128.0 MHz<br>No. of Channels: 64<br>Poln. products: 4.0<br>Channel Width: 2000.0 kHz |
| myQQ | Any   | Q Band 0.7 cm 40000 - 50000 MHz<br>WIDAR OSRO1: 2<br>Subbands/Full polz | Rest frequencies: 43216.0, 43344.0 MHz<br>Bandwidth: 128.0 MHz<br>No. of Channels: 64<br>Poln. products: 4.0<br>Channel Width: 2000.0 kHz |
| myCC | Any   | C Band 6 cm 4000-8000 MHz<br>WIDAR OSRO1: 2<br>Subbands/Full polz       | Rest frequencies: 4896.0, 5024.0 MHz<br>Bandwidth: 128.0 MHz<br>No. of Channels: 64<br>Poln. products: 4.0<br>Channel Width: 2000.0 kHz   |

### Sources:

| Name       | Position          |                             | Velocity   |       | Group          |
|------------|-------------------|-----------------------------|------------|-------|----------------|
| J1659-152  | Coordinate System | Equatorial                  | Convention | Radio | MAXI J1659-152 |
|            | Equinox           | J2000                       |            |       |                |
|            | Right Ascension   | 16:59:01.58<br>00:00:00.0   | Ref. Frame | LSRK  |                |
|            | Declination       | -15:15:28.4<br>00:00:00.0   | Velocity   | 0.00  |                |
| J1719+1745 | Coordinate System | Equatorial                  | Convention | Radio | MAXI J1659-152 |
|            | Equinox           | J2000                       |            |       |                |
|            | Right Ascension   | 17:19:13.48<br>00:00:00.0   | Ref. Frame | LSRK  |                |
|            | Declination       | +17:45:06.437<br>00:00:00.0 | Velocity   | 0.00  |                |

### Sessions:

| Name | Session Time (hours) | Repeat | Separation | LST minimum | LST maximum | Elevation Minimum |
|------|----------------------|--------|------------|-------------|-------------|-------------------|
| all  | 2.00                 | 5      | 1 day      | 14:00:00    | 20:00:00    | 15                |

### Session Constraints:

| Name | Constraints   | Comments |
|------|---|----------|
| all  | ideally we would like to observe for 1 hour at intervals of 1, 2, 4, and 7 days |          |