

Date:Aug 9, 2007 Proposal ID:VLA/07C-240

Legacy ID:AS925

PI: Jeno Sokoloski Type:Rapid Response Target of Opportunity Category: Stellar, Galactic

Total time: 6.0 hour

Early Radio Observations of Nova Vul 2007

Abstract:

Nova Vul 2007 was discovered yesterday, Aug. 8, 2007, and it is still rising in the optical. It is situated within a bi-polar nebular shell, and may thus be a new jet-producing recurrent nova. We request VLA ToO observations to be performed at two epochs: once as soon as possible, and then again in a few days. Our total time request is 4 hours.

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Joint:

Not a Joint Proposal

Observing type(s):

Continuum, Single Pointing(s), Polarimetry, *

Resources:

| Resource | Tele. | Frontend & Backend | Set up |
|----------|-------|---|---|
| name | Conf. | | |
| X Band | A | X Band 3.6 cm 8080 - 8750 MHz VLA Correlator - Single Channel Con- tinuum | Bandwidth: 50 MHz |
| | | | Rest frequencies: 8435.1,8485.1 MHz |
| | A | tinuum | Bandwidth: 50 MHz Rest frequencies: 1464.9,1385.1 MHz |

Sources:

| Source name | RA / RA Range | DEC / DEC Range | System | Velocity/z | Group name |
|---------------|---------------|-----------------|--------|------------|------------|
| Nova Vul 2007 | 19:54:24.3 | 20:52:47 | J2000 | 0 km/s | |
| | 00:00:00.0 | 00:00:00 | | | |

Sessions:

| Session Name | Session Time | Repeat | Separation | LST Minimum | LST Maximum | Elevation Minimum |
|--------------|--------------|--------|------------|-------------|-------------|----------------------|
| Epoch 2 | 2.0 hours | 1 | 0 day | 16:00:00 | 24:00:00 | 0 |
| Epoch 1 | 2.0 hours | 1 | 0 day | 14:30:00 | 02:00:00 | 0 |
| Epoch 2 | 2.0 hours | 1 | 0 day | 14:30:00 | 02:00:00 | 0 |

Session Constraints:

| Session Name | Constraint | Comments |
|--------------|------------|----------|
| Epoch 2 | | |
| Epoch 1 | | |
| Epoch 2 | | |

Session Source/Resource Pairs:

| Session Name | Source | Resource | Time | Figure of Merit |
|--------------|----------------|----------|----------|-----------------|
| Epoch 2 | Nova Vul 2007/ | X Band | 1.5 hour | 0.02mJy/bm |
| Epoch 2 | Nova Vul 2007/ | L band | 0.5 hour | 0.04mJy/bm |
| Epoch 1 | Nova Vul 2007/ | X Band | 1.5 hour | 0.02mJy/bm |
| Epoch 1 | Nova Vul 2007/ | L band | 0.5 hour | 0.04mJy/bm |
| Epoch 2 | Nova Vul 2007/ | X Band | 1.5 hour | 0.02mJy/bm |
| Epoch 2 | Nova Vul 2007/ | L band | 0.5 hour | 0.04mJy/bm |

Total Time per Configuration:

| Configuration | Total Time |
|---------------|------------|
| A | 6.0 |