

## New UV-type Variable Star in Lacerta

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|                             |   |
|-----------------------------|---|
| <b>Star Name:</b>           | USNO A2 1350-17596001                       |
| <b>Coordinates (J2000):</b> | 22 56 58.49, +50 16 01.62                   |
| <b>Variability type:</b>    | UV; <b>Limits, System:</b> 15.28-16.30 (R); |
| <b>Period:</b>              | <b>Epoch(max):</b> JD 2455795.1709          |

### Remarks:

On 21 August 2011, we obtained unfiltered observations of a field in Lacerta and discovered a transient event. It is a UV-type variable star. Our observations were performed in the city of Krasnoyarsk (at the Observatory of Siberian State Aerospace University) with a Hamilton telescope (D = 400 mm, F = 915 mm) equipped with an FLI ML9000 CCD chip (3056x3056 pixels, pixel size 12  $\mu\text{m}$ ). All images were obtained with 30-second exposure times. MaxImDL software was used for photometry and for basic reductions for dark current, flat fields and bias. The magnitudes were referred to red magnitudes of comparison stars from the USNO-A2.0 catalog (Monet et al. 1998).

The comparison stars were:

USNO-A2.0 1350-17590812: 22<sup>h</sup> 56<sup>m</sup> 46<sup>s</sup>.55, +50° 15' 38".4 (J2000); 15<sup>m</sup>.151 (R)

USNO-A2.0 1350-17588369: 22<sup>h</sup> 56<sup>m</sup> 40<sup>s</sup>.99, +50° 17' 32".5 (J2000); 15<sup>m</sup>.357 (R)

USNO-A2.0 1350-17595910: 22<sup>h</sup> 56<sup>m</sup> 58<sup>s</sup>.27, +50° 17' 35".0 (J2000); 15<sup>m</sup>.254 (R)

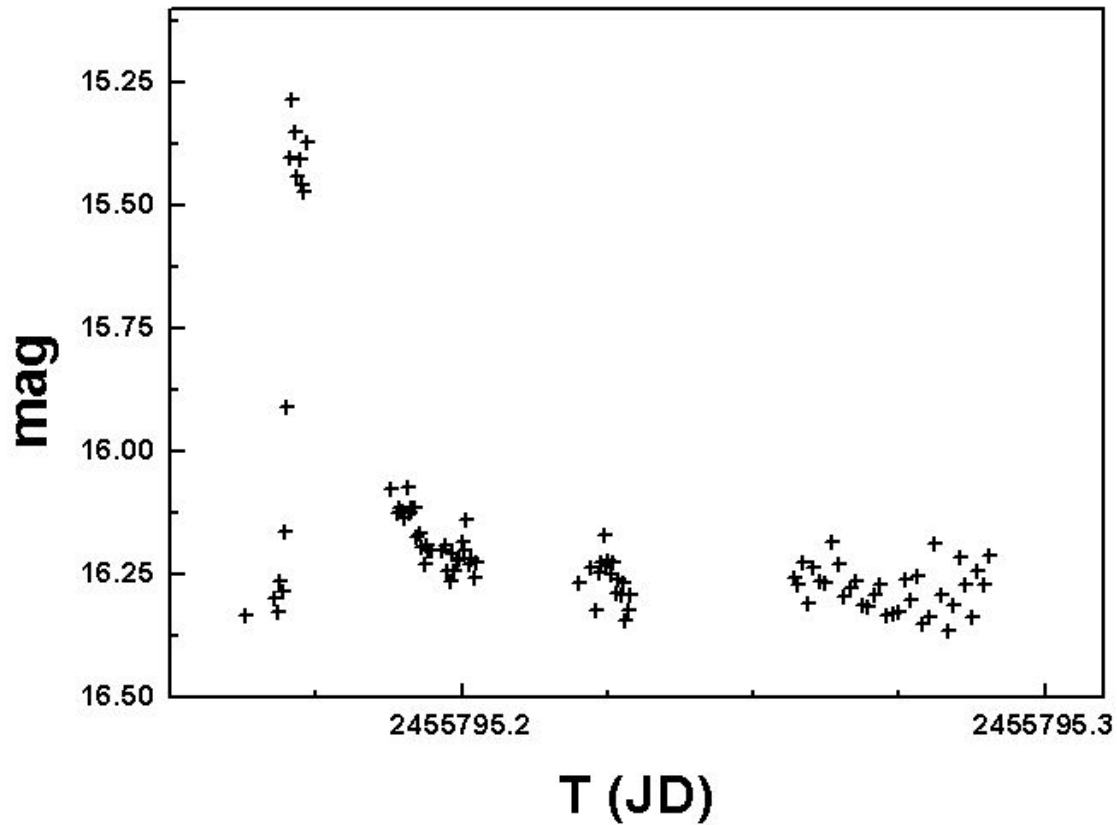
### References:

Monet, D., Bird, A., Canzian, B., et al., 1998, USNO-A2.0, A Catalog of Astrometric Standards (U.S. Naval Observatory, Washington, DC), Centre de Donnees Astronomiques de Strasbourg, I/252

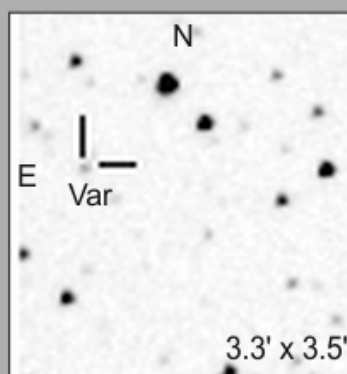
### Light Curve

# Light curve of new UV variable star in Lacerta

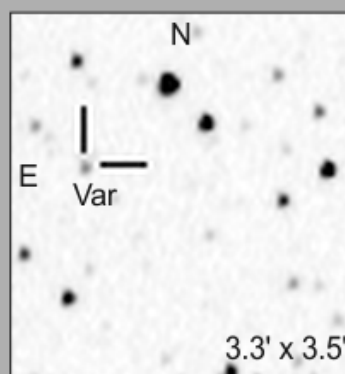
## USNO A2 1350-17596001



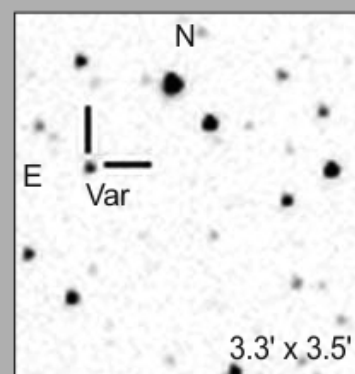
## Images of increasing brightness 2011.08.21 UTC



16:04:00



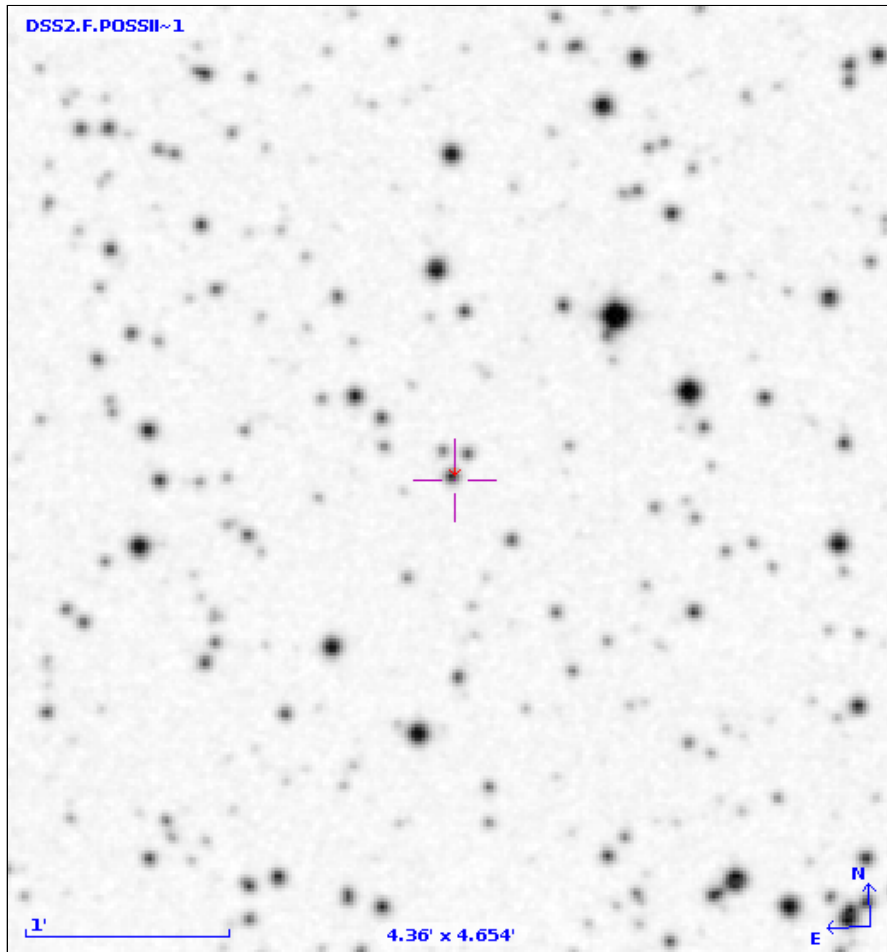
16:04:36



16:05:12

The light curve of the transient and three images of the region, showing the star increasing its brightness. Left: the star is near minimum; middle: between minimum and maximum; right: the star is at maximum.

### Finding Chart



### Data Source

1. [uv\\_dat.txt](#)