

Properties of circumstellar matter around RW Aur A deduced from visible light photometry and polarimetry during dimming in 2014-2016

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RW Aur is binary star consisting of two T Tauri stars. Separation of components is relatively small — 1.4 arcsec, which complicates study of individual stars. There is also evidence for interaction between components. Component A underwent recently 2-year long dimming presumably induced by a dust cloud passing in line of sight. We present results of RW Aur resolved UBVRI photometry and VRI polarimetry campaign performed during dim state in 2014-2016 with the 2.5-m telescope of Caucasian Observatory of SAI MSU. In maximum eclipse magnitude dropped by more than 5^m meanwhile polarization increased up to 30% in I band. Our data indicates that in maximum eclipse most of optical radiation from component A is coming from circumstellar disk. Color-magnitude and polarization-magnitude curves allow to make conclusions about obscuring and scattering matter.