

PHOTOMETRIC AND POLARIMETRIC INTERPRETATION OF BLAZAR AO 0235+164 BEHAVIOUR

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Among the great number of controversial issues the most topical one both for theoretical and observational astrophysics presently is a problem of active galactic nuclei investigation. To explain the behaviour of blazar AO 0235+164, which has been being observed at the LX-200 telescope (SPbSU) since 2002, the method of analyzing developed by V.A. Hagen-Thorn and S.G. Marchenko was used. It is based on the assumption that in case of observational data lying on the straight line in the absolute Stokes parameters space $\{I, Q, U\}$ (for polarimetry) and the fluxes space $\{F_1, .. F_n\}$ (for photometry) relative Stokes parameters and relative flux ratios stay unchanging, and, consequently, the only one source is corresponding for the variability of general value of flux. In given paper, the photometric and polarimetric interpretation of blazar behaviour is presented. Furthermore, the flux and lux-flux diagrams are obtained for 3 periods of object monitoring: 2006-2007 and 2008 (outbursts) and 2009-2016 (decline with 2015 outburst). Eventually, according to diagrams analysis the supposition of the single source correspondence was done.