

Long-term photometric monitoring of WASP-3b

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Abstract

Long-term and high-precision photometric observations of planet host stars may provide important auxiliary information for exoplanet-atmosphere research because they allow to investigate the intrinsic stellar variability, as well as to determine transit ephemeris more accurately. Here we present results from the photometric follow-up of known transiting close-in giant planets that has been conducted with the CAB robotic telescope over the past two years. In particular, we discuss details of the hot, gas giant exoplanet WASP-3b. An analysis of new transit observations, together with those available in the literature, showed strong evidence of transit duration variations (TDV) in this planetary system and confirmed the presence of transit time variations (TTV). We briefly present an up-to-date review with additional data from the ongoing photometric monitoring campaign and discuss possible scenarios to interpret the data.