

The creation and development of an international observational project on a search for extrasolar planets, based on Transit Timing Variations (TTVs). The first results of WASP-4b, TrES-5b and other exoplanets investigations.

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To obtain the most reliable and quality data used for further search and analysis of TTV signals since 2012 international observation campaign centered at Pulkovo Observatory (St. Petersburg, Russia) had been starting. For today the international campaign-project has more than 30 professional and amateur observatories, located in different places of the world (Russia, Finland, Italy, Spain, France, UK, Czech Republic, Slovakia, Cyprus, Greece, Turkey, Armenia, Uzbekistan, USA, Canada, Argentina, Cook Islands). The campaign participants carry out observations with the use telescopes from 20 cm to 2.6 meters.

Based on carefully selected observational data for several exoplanets frequency analysis were carried out and periodograms of data were constructed.

For WASP-4b, TrES-5b TTVs were found and estimated periods and amplitudes of the variations. Such estimates enable us to predict existence of new exoplanet candidates in known planetary systems with the using N-body modeling.