

**CURRENT STATE OF OBSERVATIONS OF  
STELLAR OCCULTATIONS BY SMALL SOLAR SYSTEM  
BODIES IN UKRAINE**

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This paper presents a description of problems that can be solved using observations of stellar occultations by small Solar System bodies. In order to observe stellar occultations, a hardware and software complex system for operating long focal length telescopes has been created in the MAO of NASU in cooperation with Taras Shevchenko National University of Kyiv. This system employs a high performance cooled CCD camera Apogee Alta U47 in precision time delayed charge-integration (TDI) mode with provides high sensitivity. The system also includes a focus reducer with a colour filter kit. The system can be used in telescopes AZT-12 of the MAO of NASU and AZT-14 at the Lisnyky observing station. A mobile observation unit based on a Newtonian telescope ( $D = 203$  mm,  $F = 1.200$  mm) with a fully computerised assembly Sky-Watcher EQ-5.

The value of stellar occultation observations is enhanced greatly when multiple observation sites are involved. To this end, a new stellar occultation observers' group has been launched in Ukraine. This group includes observers from Odesa Astronomical Observatory, which use the Ritchey-Chrétien telescope OMT-800 ( $D = 800$  mm,  $F = 2,134$  mm) with a CCD camera QHY174M-GPS and a Schmidt telescope ( $D = 271.25$  mm,  $F = 440$  m) with a camera «Videoscan-415-2001» at the Mayaki and Kryzhanivka observing stations, respectively.

The group also includes several amateur observatories, such as the observing station.

We provide a comprehensive description of all instruments and equipment employed at the afore-mentioned observing stations and also several examples of successful observations of stellar occultations performed by this group.