



The observations of the local vertical variations with the new CCD zenith tube at Ondřejov Observatory

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The reconstruction of the Photographic Zenith Tube (PZT) at Astronomical Observatory Ondřejov was finished in summer 2007. The main improvement of the instrument consists in the replacement of the photographic plate with the CCD chip, and a completely new electronic control system. The accuracy of the instrument has been improved and also the number of observations has increased substantially. The intensive observations during last 30 months were corrected for the instantaneous Earth orientation parameters from IERS EOC04 series and for the known tidal effect to get the series of non-tidal variations of local vertical. The results and a comparison with the gravimetric observations of absolute and super-conducting gravimeters at the nearby station Pecný (GOPE) will be discussed.