ON THE SOLAR SYSTEM BODIES OBSERVATIONS IN THE AIST-PROJECT

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ABSTRACT. In accordance with the scanning law in the AIST space project every celestial object brighter $V \approx 18^m$ can be observed ≈ 160 *times* during three years. Two mosaics from 28 CCDs 800×800 with pixel size $16 \times 16 \mu m^2$ (or $1.32'' \times 1.32''$) in focal planes of two telescopes are planned to be used. We assess that accuracy of the astrometric position vector σ_r from the *Time Delay and Integration (TDI)* mode single transit through one CCD-array for nonstellar shape object in the range of magnitudes from $V = 6^m$ to $V = 16^m$ can be acquired on the level of 0.02 of the pixel size.

Preliminary the astrometric and photometric limits of values from this modelling can be summarized as:

$$\sigma_r \leq 0.03'', \quad \sigma_v \leq 0.02^m.$$

We use the realistic signal acquisition model and discuss the problem of detecting of the Solar system bodies images in *TDI* mode.