

## THE SOLAR SYSTEM BODIES: FROM OPTICS TO GEOLOGY (2008)

**FAST PROCESSING OF CCD ASTEROID OBSERVATIONS.** O. P. Bykov, I. S. Izmailov, V. N. L'vov, S. D. Tsekmejster, Central Astronomical Observatory of Russian Academy of Sciences, 65 Pulkovskoje shosse, 196140 Saint-Petersburg Russia, oleg@OB3876.spb.edu

Modern positional CCD observations assume that any observer is able to obtain spherical coordinates of asteroids and comets immediately after the end of the session. The two software packages have been created at Pulkovo Observatory for fast processing of the CCD frames. The first one is IZMCCD (<http://www.IZMCCD.puldb.ru>), the second is EPOS (<http://www.neopage.nm.ru>). The applications solve various tasks connected with observations of minor bodies of the Solar system: ephemeris calculation, initial processing, control of an accuracy of obtained positions, identification of observed objects and so on. During last decade our applications were tested by observations from the MPC Database and proved to be useful for both professional and amateur astronomers.