ASTROMETRIC ACCURACY OF THE KUIPER BELT ASTEROIDS CCD OBSERVATIONS

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About 2500 astrometric positions obtained during 1992-1999 by world observatories for the Kuiper Belt objects were analysed with the help of EPOS software package created at the Pulkovo Astronomical Observatory. Real CCD observations of these objects were taken from the MPCs.

The accuracy of observations was estimated by studing the dispersion of the average (O-C) for each type of observation obtained by each telescope. A representative sample of the considered observations was statistically reliable. The star catalogs GSC and USNO were used by most of the observers for astrometric reduction of their CCD-frames.

The results of Internal and External accuracies of observations are given for each observatory and each telescope. Usually, the Internal accuracy of a single positional CCD observation for the large telescopes is ± -0.10 " (obtained during single night) and External accuracy is ± -0.20 " (obtained by statistical treatment of the CCD positional observations during several successive nights).