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Title: Long-term photographic observations for selected objects of Pulkovo program: measurements and results.

Abstract: The selected objects, observed at Pulkovo observatory during long time period have been of intense interest among astronomers, and now they are the most important aims for space investigations. These are the stars which have pointing out a presence of dust disks or invisible satellites of small masses, and also possible existence of planet-like companions, including the Earth-type planets.

The nearest stars such as 61 Cygni, Lalande 21185, STF1321, etc are considered as the most interesting objects. Some of them were selected as prime target stars for NASA's optical Space Interferometry Mission (SIM) and for ESA's infrared DARWIN mission. Data about these objects are in NASA STAR and Exoplanet Database.

Now we believe, that they also are interesting for observation during space mission Gaia. We have processed a materia which has been based on long-term observations within several decades and contains more than 2 000 plates. Plates were remeasured by means of automatic machine "Fantasy " and positions of objects have been reduced to the uniform system.

The estimations of accuracy have been made in accordance with classical scheme. We represent results of comparison of the measurements made on different devices, and also the detected systematic differences and some methodical researches.

Results of comparison are represented from the examination of errors of images up to estimation of accuracy of dynamic and kinematic parameters, orbits and masses determinations.