

Transneptunian objects are a group of bodies outside of the Solar System. The number of these observed bodies is growing. Dynamical structures and physical characteristics provide an evidence for processing the Solar System in the earlier days. Studying and understanding orbits and their origin in Kuiper Belt can help to explain the progress of other objects in Solar System especially Jovian planets. A phase called migration of Jovian planets was a key process for forming structures and orbits. The theoretical part is in the first three chapters. The second part is focused on the description of the observational equipment technique and the observation itself. The CCD chips and computers play an important role in astrometry. The observation and astrometry proceeded on the observatory Ondřejov on 0.65 m telescope with the CCD chip KAF 3200ME in camera G2 3200 made by company Moravské přístroje. The pictures with exposition 120 sec were taken by the camera and after modified, put together and used for the astronomical mensuration. The dates were sent to the MPC database.