

TNO PRECOVERY SURVEY USING THE KLENOT TELESCOPE ARCHIVE. Miloš Tichý¹, Jana Tichá¹, Michal Kočer¹, Michaela Honková¹, ¹Kleř Observatory, Zátkovo nábreží 4, CZ-370 01 České Budějovice, South Bohemia, Czech Republic (mtichy@klet.cz)

Discovery and orbital determination of Trans-Neptunian objects (TNOs) is one of the most important part of the Solar System inventory. Several tens of newly discovered Trans-Neptunian Objects are brighter than magnitude $m_V = 22$.

The KLENOT TNO Precovery Survey Programme is a project dedicated to the identification of images of Trans-Neptunian Objects in the KLENOT Archive, an activity usually called precovery.

To locate such images results in the acquisition of new orbital elements which allows to perform more accurate studies of the dynamical evolution of Kuiper Belt.

The 1.06-m KLENOT Telescope was put into operation at the Kleř Observatory in March 2002 and the KLENOT Archive contains more than 35 000 images. Majority of the KLENOT Archive images were obtained in the framework of the KLENOT Near-Earth Objects follow-up programme.

Although the field of view of the KLENOT images is not so large (33 x 33 arcminutes), it is an unused archive for the purpose of data mining of Trans-Neptunian Objects up to now.

We present here the system of the KLENOT Archive and we discuss our methods used for this precovery survey.

The first successful attempt of this precovery survey was precovery of the big and bright TNO 2005 FY9.

We present there our future plans of this TNO precovery survey.