Dynamical evolution of some scattered-disc objects

N. Kovalenko¹, R. Guliyev², and K. Churyumov¹

 $^1 \rm Astronomical Observatory of Kiev National Tarasse Shevchenko University, Ukraine<math display="inline">^2 \rm Shemakha$ Astronomical Observatory, Azerbaijan

In this paper we performed the orbital evolution modeling for a set of scattered-disc objects selected by the following orbital criteria: perihelia q greater than 30 au, aphelia Q greater than 50 au, and eccentricities not less than 0.3. 157 such objects are currently known. The integrations were performed for 1 Gyr backward and forward in time, using the integration package SWIFTER. The initial state vectors for test particles and planets were taken from JPL's HORIZONS service. The results of the simulation for selected SDOs are discussed.

Acknowledgements: We acknowledge David E. Kaufmann, the author of the Swifter software package, Hal Levison and Martin Duncan, the authors of the previously created Swift package.