



1 Determination of SLR stations coordinates and velocities on the basis of laser observations of low satellites

P. Lejba

Space Research Center of Polish Academy of Sciences, Poland, plejba@cbk.poznan.pl

Orbits of three low satellites Ajisai, Starlette and Stella have been determined on the basis of the observational data collected in 2001-2005 from the best 14 Satellite Laser Ranging stations. The coordinates and velocities of several SLR stations have been determined in the ITRF2005 coordinates frame and compared with the results calculated for the same stations on the basis of Lageos. Additionally, the obtained results have been compared with the independent method for the geological model NNR-NUVEL1A. All the calculations have been made assuming the model of the Earth gravity field EIGEN-GRACE02S. The results presented in this work show that the data obtained for low satellites such as Ajisai, Starlette or Stella can be successfully applied for determination of the SLR station coordinates and velocities.