



GNSS Network Time Series Analysis

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Time series of GNSS station results of both the EUPOS[®]-RIGA and LATPOS networks has been developed at the Institute of Geodesy and Geoinformation (University of Latvia) using Bernese v.5.0 software. The base stations were selected among the EPN and IGS stations in surroundings of Latvia. In various day solutions the base station selection has been miscellaneous. Most frequently 5 – 8 base stations were selected from a set of stations {BOR1, JOEN, JOZE, MDVJ, METS, POLV, PULK, RIGA, TORA, VAAS, VISO, VLNS}. The rejection of “bad base stations” was performed by Bernese software depending on the quality of proper station data in proper day. This caused a reason of miscellaneous base station selection in various days.

The results of time series are analysed. The question aroused on the nature of some outlying situations. The seasonal effect of the behaviour of the network has been identified when distance and elevation changes between stations has been analysed. The dependence from various influences has been recognised.