Geophysical Research Abstracts,
Vol. 10, EGU2008-A-02183, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-02183
EGU General Assembly 2008

The estimated annual velocities of EUREF-EPN stations located in Central European region

Z. Novotny (1), J. Kostelecky (1,2)

(1) CTU, Faculty of Civil Engineering, CZ - 166 29 Praha 6 (zbynek.novotny@fsv.cvut.cz),
(2) Research Institute of Geodesy, CZ - 251 65 Zdiby 98 (kost@fsv.cvut.cz)

The EUREF Permanent Network GNSS station observations proceed on European continent for more than twelve years. The movement of Eurasian tectonic plate and local station movements and regional deformations can be determined from the coordinate time series analysis of these stations. The contribution concerns about the horizontal and vertical movement of EUREF Permanent Network(undermentioned EPN) stations in central Europe. The movements are determined by the use of station coordinates from EPN weekly-combined solution. These coordinates are provided by GNSS technique. Since 1996 the station coordinates have been known for the selected stations in week intervals. The stations with the longest time series, which are located in the Central Europe, were selected and their network was created. The time series analysis was carried out on the principle of coordinate differences between two neighbour stations in one baseline. The adjustment of determined time changes network was performed in baselines in station coordinate differences. The resulting movements of stations are depicted in the local coordinate system (North, East, Up) and the statistical analysis of results is performed.