



CEGRN 2003 solution and its relation to CEGRN 1994 - 2001 campaigns results

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Starting from 1994 seven epoch GPS observing campaigns were performed within the Central European Regional Geodynamic Project (CERGOP). The last one was realized in June 2003 as the activity of CERGOP-2/Environment when measurements comprising of six 24-hour sessions were performed at 68 CEGRN (Central European GPS Reference Network) sites. Raw GPS observed data were checked, homogenized, transferred to RINEX format and prepared for further processing by FOMS Austria, Graz. The campaign from 2003 was processed independently at four institutes: FOMS, WUT Warsaw, Poland, RIGTC Prague, Czech Republic and SUT Bratislava, Slovakia. Processing strategy at all institutes was unified except the baseline geometry and ambiguity fixing method. Final combination based on four sets of coordinates and covariance matrices leads to consistency 0-3 mm in horizontal position and 0-6 mm in height for majority of evaluated sites. However some systematic shifts concerning individual sites or clusters of sites due to differences in processing strategy were noticed. Finally, the combined 2003 CEGRN solution is compared with coordinates from previous 1994-2001 CEGRN solutions. For 25 sites with 6-9 year observation history the time evolution of observed horizontal position and height is visualized and possible intraplate motions are indicated.