Geophysical Research Abstracts, Vol. 7, 06072, 2005 SRef-ID: 1607-7962/gra/EGU05-A-06072 © European Geosciences Union 2005



Kinematics of Central European GPS geodynamic reference network as the result of epoch campaigns during nine years

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Central European Regional Geodynamic Project (CERGOP) realized in 1994-1997 and its follow-up CERGOP-2/Environment realized from 2003 is aimed to geodynamical investigation of the region of Central Europe. Within this project are performed in annual or bi-annual intervals epoch GPS campaigns, which now are covering nineyears period. The crucial products of this activity are site velocity estimates serving as input data for strain rate analyses. In the paper are presented and analysed velocities for more than 30 sites with 8-9 year observation history. This new CERGOP velocity field is compared with older CERGOP velocities, ITRF velocities and velocities obtained from analysis of European GPS Permanent Network. Later on, the combination of epoch CERGOP coordinates with ITRF sub-network comprising all CERGOP/ITRF identical points is performed using full variance-covariance matrices. The discrepancies of different approaches are discussed.