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Central European intraplate velocities from GEGRN campaigns

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As part of the Central Europe Regional Geodynamic Project the GPS campaigns of Central European GPS Geodynamic Reference Network (GEGRN) provide the basis for investigating tectonic movements in the region of Central Europe. Observations started in 1994, were repeated yearly up to 1997 and afterwards every two years. The current last campaign was observed in summer 2005. Among others the Institute of Physical Geodesy, Darmstadt University of Technology, computed a campaign solution with the Bernese GPS Software 5.0 (BSW 5.0) according to the GEGRN rules. Together with the previous solutions of 1994 to 2003 there are 8 campaigns available for velocity estimation. A preliminary solution was computed with the BSW 5.0 and aligned to given ITRF velocities and coordinates at selected datum sites. As the number of involved stations rose with every campaign, the number of occupations for some sites is poor. Nevertheless the estimation shows in general a good consistency with the NUVEL1-A a-priori field and reveals the regional tectonic anomalies. In this paper the focus is on the velocity estimation with the new BSW version 5.0. It allows a more flexible choice of strategies compared to the previous version which is used up to now for the official CEGRN network solutions.