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Comparison of velocity field and baseline lenth variations for european stations derived from GPS and VLBI data

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Results of GPS and VLBI observations collected on european stations were analyzed with the goal to investigate variations in observed stations positions and baseline lenth from both techniques. VLBI coordinates were obtained from processing all available observations collected on european and global VLBI networks using OCCAM/GROSS and QUASAR software. Advanced model for antenna thermal deformation was applied for more accurate account for the change in horizontal component of station positions and baselines derived from VLBI observations. Coordinates and velocities of european GPS-stations were obtained from a new combination of the weekly solutions of EPN (European Permanent GPS Network) Analysis Centers. Both linear drift and seasonal effects in variations of station positions and baseline lenth were analyzed. The results were compared to the results obtained within EUREF Special Project "EPN Time Series Monitoring" and to other solutions.