



## Centre of Applied Geomatics: scientific activities in the frame of EUREF Permanent Network

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The poster presents current activities of the Centre of Applied Geomatics (CAG), Warsaw Military University of Technology in the frame of EPN (EUREF Permanent Network) and other international enterprises. EPN is a science-driven network of continuously operating GNSS reference stations with precisely known coordinates. At the end of November 2009 the EPN Local Analysis Centre in CAG (Centre of Applied Geomatics, Warsaw Military University of Technology), one of the 17 acting presently in Europe was established. The network adjusted by CAG consists of 114 sites distributed all over the Europe. The adjustment strategy is similar for all LACs, the weekly and daily processing is performed on the computer cluster specially designed for these purposes. Besides the Centre is one of the leaders in the EPN re-processing project. It is the venture for computing consistent precise coordinates, velocities and by-products (e.g. troposphere parameters) based on the EPN in support of the ETRS89 (European Terrestrial Reference System) using identical standards for the entire period of time. In 2008 CAG has successfully completed the test re-processing of the full European Permanent Network (EPN), consisting of the historical observation series for the period between 1996-2007 for almost 200 stations. CAG was one of two European research centres (at the same time another test reprocessing with a different strategy was performed at the Royal Observatory of Belgium) which were able to carry out this task. The test reprocessing is a starting point for the elaboration of an optimal processing strategy for the final, official EPN reprocessing. To increase the credibility of GNSS solutions in 2009, the work began on getting alternative software GAMIT/GLOBK. The comparison between processing results from these two software is essential for proper geodynamical and geophysical interpretation of the results. According to the agreement with the Head Office of Geodesy and Cartography the one of the CAG's task is the monitoring of the long and short term stability of the Polish multifunctional precise satellite positioning system ASG-EUPOS. The presentation shows the current activities of the CAG in the frame of EPN, presents the newest results of precise solutions and the strategy used for GNSS (GPS/GLONASS) data processing.