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"ASG+": project for improving Polish multifunctional precise satellite positioning system

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The aim of the project which started in 2010 is to study the principles of Polish Active Geodetic Network (ASG-EUPOS) improvement. ASG-EUPOS is the multifunctional precise satellite positioning system established by the Head Office of Geodesy and Cartography in 2008. It consists of almost 75 Polish sites with GPS module, 14 Polish sites with GPS/GLONASS module and 20 foreign incorporated sites. The basic assumption of the project is to create the modules related to the system's functionality: module of network adjustment in quasi-real time, module of monitoring of the coordinates of reference sites, module of monitoring of the quality of ASG-EUPOS's services, modules of iono- and troposphere modelling with high time and space resolution, modules of iono- and troposphere's prediction, modules of supplying the system's services with the models of state of iono- and troposphere (the quasi-model and the prognosis), modules of ultrafast GNSS positioning in the postprocessing and kinematic mode, system of positioning using mobile phones and ASG-EUPOS services, integrated modules of vertical and horizontal litosphere's movements using GNSS data. The poster presents the general assumptions of the project and the frame of the ASG+ system as well. This interdisciplinary venture is financed by the Polish Ministry of Science and Higher Education.