



Concept of Spatial Information System for Pieniny geodynamic polygon

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The poster presents the conception of Spatial Information System (SIS) for geodynamic polygon of Pieniny Klippen Belt (PKB). Geodynamic research of the region, conducted by the staff of Faculty of Geodesy and Cartography of Warsaw University of Technology since the sixties of twentieth century, concern the vertical and horizontal movements and changes of Earth gravity parameters. The collected material all this time, very rich in observations and documentations, as well as further research planned in the region were an inspiration to establish the SIS. The designed system is concerned to be useful basically for collection of the results received so far and planned observation epochs as well. Its target functionality will allow to support the data presentations, analyses of the obtained results and planning process for next research in the future. The proposed conception of the database is described in the poster. The database of the considered SIS contains the following elements: information about geological structures of PKB, localizations of control points of geodynamic polygon and collected observations like: measurements of angles and distances, GNSS, precise and trigonometric levelling, gravimetric. The selected pilot layers of the SIS are based on: DTM, topographic maps, administrative and geologic maps. The data in the project are used to cover and characterize the three tectonic units distinguished in the study area. The ESRI software was used for main part of the work in the project.