



Application of 3D terrestrial laser scanning in geodynamic monitoring

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During last 10 years, geodesists from the Faculty of Geodesy, University of Zagreb, together with geologists and tectonicians established and performed a number of series of GPS-measurements on the Geodynamic Network of the City of Zagreb. The results of these campaigns emphasized the spots with higher level of geodynamic activity, resulting in damages on objects: houses, walls, churches. Therefore, the technology of threedimensional laser scanning has been employed in order to capture much more detailed picture of fast movements. In the first experimental phase of the project, only rapidly sliding areas are observed. The main hypothesis of proposed research is to check if the technology of precise laser scanning is able to produce comparable point clouds showing the movements of objects in the field. As an additional source of information, this research should contribute to the better understanding of the processes below the Earth surface.