



## **Recent research on geodynamics of the City of Zagreb area**

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The area of the City of Zagreb in north-western Croatia is an active seismotectonic zone. Collision of three different geologic structures is present: Eastern Alps from the north, Pannonian basin from the east and Dinarides from the south. Directions of main faults are coincided with the zones of strongest seismotectonic activity. During last decade a number of geologic and geodetic observations has been collected in the area. Precise GPS-measurements on 40 points of the Geodynamic Network of the City of Zagreb are performed three times: in 1997, 2001 and 2004. This paper gives an interdisciplinary analysis of the results of GPS-measurements. Using the combination of geodetic and geologic data, it can be concluded that the results are compatible. The orientation of geologic stress, showing the direction of movements of subsurface masses is opposing to the directions of geodetic measurements which are related to the surface movements. The results are practically applicable to several areas: civil engineering, hazard prevention planning, seismic zoning, urban planning. It is crucial for future research that the locations for densification of the Geodynamic Network with several additional points can be justified.