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Geodesy, Tectonics and Geodynamics of Dinnarides

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This paper summarizes recent activities on merging the geodetic, geologic and neotectonic evidence of geodynamics in Croatian part of Dinnarides. The area of the City of Zagreb, which is the boundary zone of Eastern Alps, Dinnarides and Pannonian Basin is included as well. It is shown here that the evidence for fractures of Eastern Adriatic differs from the previous hypotheses. This conclusion is derived from the results of various geodetic measurements: satellite positioning (GPS), astro-geodetic measurements of deflections of the vertical. These results are combined with geologic measurements and results of seismic activity studies in order to give more detailed and more accurate picture of the current situation in the tectonically very active region of Dinnarides. Several GPS-campaigns performed in the City of Zagreb area are examined as well. Due to the proximity of Croatian capitol, special attention has been paid to the effects of possible hazard on construction code.