



Six years analysis of HemusNET permanent GPS network data – impact on geodynamics of the Balkans

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The presentation outlines results for horizontal motion of the crust in the Balkans, mainly Bulgaria and Northern Greece, obtained by processing and analyzing of data from permanent GPS sites during the period 2007 – 2012. Estimates of horizontal velocities of stations in Bulgaria and Northern Greece obtained by GAMIT/GLOBK along with geological and seismotectonic information give the opportunity to draw inferences about the recent tectonic activity in this area and its position within the East Mediterranean geodynamic processes. The GPS velocities in Bulgaria and Northern Greece exhibit a clear tendency to increase from north to south. The obtained results suggest that the transition zone between "stable" Eurasia and the Aegean extensional province is located south from the Balkan (Hemus) Mountain and to the western parts of the North Anatolian Fault – the so-called South Balkan extensional region.