KINEMATICS BETWEEN THE ADRIATIC AND THE EURASIAN PLATE INTERIOR: FURTHER CONSTRAINTS FROM CEGRN AND LOCAL SPACE GEODETIC DATA

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Within the EU 4th framework project CERGOP, later with the coordination of the CEGRN (Central European GPS Geodynamic Reference Network Consortium), and now as a EU 5th framework program the geodynamic research in Central Europe has been continued over a decade. The results from the latest space geodetic measurements have now been included in the combined and also in individual velocity solutions. After the 2001 campaign nearly twice as many sites have velocity estimates than before the extension of the network. The Adriatic region, the key player in shaping the tectonics of Central Europe, has several new stations with velocities on both sides of the microplate that further constrain its present motion. Some new permanent and epoch sites also complement the network in the Alpine-Pannonian-Carpathian system. This paper provides a status report on the compilation of the latest velocity field of the region. As a first step in modeling the diffuse deformation in the central part of the continental collision zone of Eurasia and Africa, an interpolated continuous velocity field was compiled and analyzed based on the combination of all available intraplate velocity solutions. The two major transcurrent faults in the Alpine-Pannonian-Carpathian system are also introduced into the model in two different ways according to how strictly the fault acts as a barrier of deformation.