



## **Tectonic pattern in the Southern Apennines: evidence of major changes in late Pliocene and middle Pleistocene and relationships with plate kinematics and seismotectonic activity**

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A large amount of neotectonic evidence suggests that drastic changes of strain style have occurred in the Southern Apennines around the late Pliocene and middle Pleistocene. In the first of the above phases, the accretion of the belt by E-W crustal shortening was replaced by the development of two major arcs (the Campania-Lucania and Matese-Benevento ones) in the internal carbonate platform belt. Contemporaneously the external belt, formed by pelagic and terrigenous units (e.g. the Lagonegro and Molise-Sannio ones), underwent compressional deformation. Since the middle Pleistocene, the Lucanian Apennines were affected by NW-SE sinistral strike-slip faulting, while a system of extensional features (e.g. the Boiano and Volturno basins) developed at the border between the Matese-Benevento arc and the external pelagic/terrigenous belt. In this note it is argued that the above tectonic reorganizations can plausibly and coherently be explained as effects of major changes of boundary conditions in the central Mediterranean region. The proposed driving mechanism of post-middle Pleistocene tectonic activity can account for the distribution of major earthquakes and associated focal mechanisms.