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## **Peri-Tethys Programme: Tertiary palaeogeographical maps**

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Altogether 24 palaeogeographical maps have been constructed as part of the 1994 – 2000 Peri-Tethys Project, covering the Late Carboniferous to Pleistocene (DERCOURT et al. 2000). Seven of these maps portray the Tertiary palaeogeographical and environmental settings of the Peri-Tethys domains for the Early Eocene, the early Middle Eocene, the late Early Oligocene, the late Early Miocene, the early Middle Miocene, the mid-Late Miocene and the Middle/Late Pliocene. The Tertiary maps reflect the large-scale inversion which affected the platforms at either side of the African/Apulian – Eurasian convergence zone in response to increasingly effective continent – continent collision. The concurrent tectonic fragmentation caused an increasing palaeoenvironmental and palaeobiogeographical differentiation between various domains of the Tethys and Peri-Tethys realms, which differentiation became particularly pronounced from the Eocene – Oligocene transition onward (origin of the Paratethys). The ensuing history portrays general trends of time-progressive termination of marine as well as terrestrial sedimentation and of regional uplift propagating from the west to the east on the platforms proper and along the Peri - Tethys/Tethys transitional zones. These large-scale developments reflect in part temporal and spatial differences in rates of motion of Africa relative to Eurasia and in the onset of subduction roll-back and slab detachment along the convergent plate boundary. The net-result of the northward motions of the African/Arabian block relative to Eurasia shows that these motions were most pronounced in the east, as expressed by the overall, anti-clockwise rotation of Africa/Arabia, whereas the position of the westernmost part of the northern margin of the African plate relative to Iberia remained fairly stable throughout the Cenozoic. Further interpretations of the time-successive paleogeographical maps also show that episodes of major change in the collision zone proper had clear counterparts on the Peri-Tethys platforms. In the Neogene, such episodes of major

change pertinent to the EEDEN programme occurred, for instance, in the late Early Miocene to early Middle Miocene, in the Late Miocene and around the Early – Middle Pliocene transition. The present-day land – sea distribution patterns and the pronounced differences between highly elevated mountain chains and deep basins in the circum-Mediterranean area originated in the course of the Pliocene.

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