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“The Geology of the Northern Apennines: an introduction”

The Northern Apennines (NA) are the result of the Neogene subduction of the Adria continental crust below the former Eocene-Oligocene age intra-oceanic accretionary wedge. The remnants of these latter now represented by the so-called Ligurian and sub-Ligurian units may be observed superimposed to the Tuscan and Romagna–Umbria continental-derived cover and basement, formerly parts of the distal to proximal Adria margin.

After a presentation of the well constrained kinematic and tectonic history of the continental units in northern sector of the mountain belt (Alpi Apuane and surroundings) I will discuss the overall NA geodynamic evolution focusing on some major tectonic issue such as: (i) the styles and mode of deformation of the continental units in space and time; (ii) the tectonic frame of the early and final exhumation of the continental Tuscan metamorphic units; (iv) tectonics, sedimentation and magmatism of the Southern Tuscany; (iv) the relationships between orogen-growth and orogen-collapse and the kinematics of Adria and finally (v) the orogen scale along- and across-strike morphostructural and architectural variations and relationships with the recent to active tectonics.