



Evolution of the Eastern Greater Caucasus: Proxy for the South Caspian Basin?

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In this presentation will discuss the evolution of the Greater Caucasus since early Jurassic to the north of the active Lesser Caucasus supra-subduction volcanic arc. Its paleogeographic position is the southern margin of the Scythian plate. The evolution of the margin shows a passive margin type geometry and is related to the back-arc rift processes resulting from the northward subduction of the oceanic domains beneath the Lesser Caucasus arc. The evolution of the margin – its successive extensional and inversion events - is related to the geodynamics of the subduction zone. The sedimentation is influenced by carbonate environment linked to the platform to the north and volcanic derived sediments coming from the south. Following a series of rifting events, a number of Jurassic to Cretaceous inversion are characteristic of the Greater Caucasus basin/margin. During the first part of the Tertiary important thicknesses of series are deposited together with the first inversions that will lead subsequently to the development of the orogen as we see it today start. The climax of the mountain building process starts in Miocene and culminates in the Plio-Pleistocene. Relations with the evolution of the northern edge of the South Caspian Basin will be discussed