

TITOLO: “Cenozoic sedimentary basin development of the Tajik depression: implications for paleoenvironmental reconstructions of central Asia”

Description: The project aims at investigating the relationships between tectonics, sea-level change and climate and their roles on paleoenvironmental changes in Central Asia through a multidisciplinary investigation of the sedimentary record preserved in the basins flanking the Pamir and particularly in the Tajik depression (Fig. 1). The micropaleontological data (mainly based on foraminifera, calcareous nannofossil and ostracod assemblages), integrated by radiometric measurements and field data, are utilized for temporally constraining the stratigraphic successions cropping out in the Tajikistan area and for providing the paleoenvironmental reconstructions useful to unravel the sedimentary history of the Tajik basin in response to the Pamir uplift.

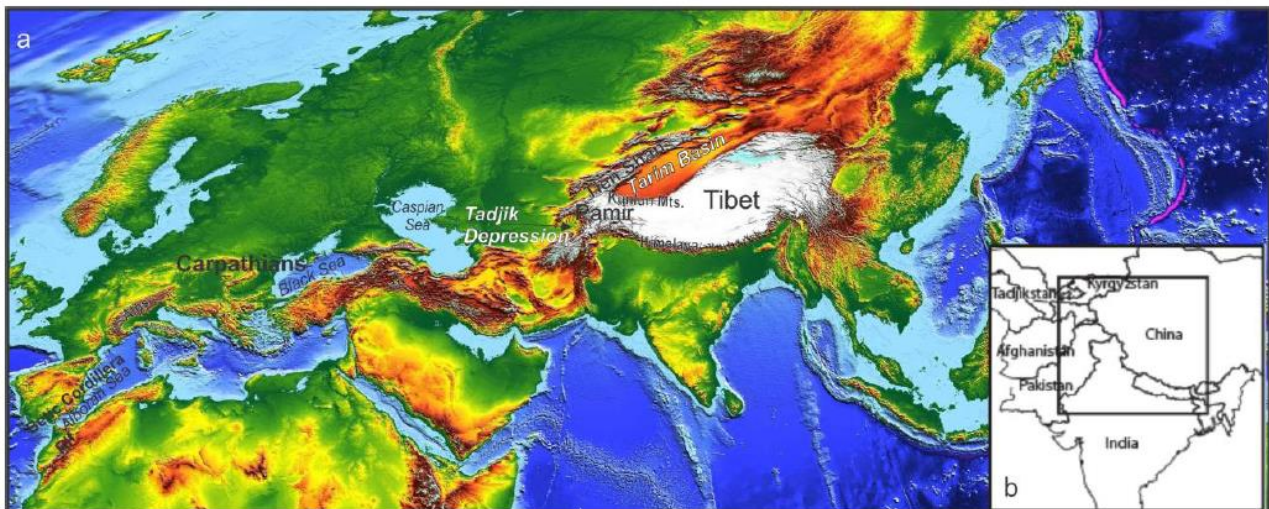


Figure 1. a) Digital elevation model with indication of the main tectonic–geographic features mentioned in the text. b) Inset map indicates country borders.

Methods: samples are from three complete Cretaceous-Paleogene stratigraphic successions (Subashi, Dashtijumb and Dushanbe sections) cropping out in the Tajik depression and are mostly collected for sandstone petrographic and micropaleontological analyses, and for geochronology. Methods follow Carrapa et al. 2015 (EPSL, v. 424, p. 168-178).

Working group and collaborations: The project is developed by the Department of Earth and Environment of the University of Pavia (N. Mancin and M. Cobianchi) in collaboration with the University of Arizona of Tucson, USA (B. Carrapa-project manager; P. deCelles), the University of Bucharest (M. Stoica) and the Research School of Arid Environment and Climate Change, Lanzhou University, Gansu, China (X. Wang).