



## **Marine red beds in Mesozoic and Cenozoic successions of the Northern Caucasus**

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To understand the causes of the red bed (RB) formation in the upper Cretaceous succession of the Caucasus, the data on similar sequences of other stratigraphic intervals should be analyzed. In the central Caucasus (Ossetia, Ingooshetia), red carbonate deposits occur at the bases of the lower (15 m) and upper (2 m) Callovian sequences. Erosion marks (reworked fossils) are presented to a greater or lesser extent in both cases. In the northeastern Azerbaijan, the Tithonian red and pink limestone (25 m) and red clay (75 m) with gypsum interlayers are shown that implies arid climatic conditions. In central Dagestan, the red Zelandian to Ypresian deposits (90 m) with green interlayers in some intervals accumulated under the influence of arid climate intrinsic for Central Asia. Three episodes of the Cretaceous RB accumulation are found in the Dagestan (Shcherbinina, this volume). They are spread over larger distance than Jurassic and Paleogene RB, but nevertheless do not exceed several tens of kilometers and have a discrete color character. Cretaceous RB evidently accumulated during sea-level low stands and display the spatial relation to regional erosion caused by eustatic regression.