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ABSTRACTS

UPPER ALBIAN - CENOMANIAN SEQUENCE IN THE BELBEK RIVER BASIN, SW CRIMEA (BIOSTRATIGRAPHY, PALEOENVIRONMENTAL INFERENCES)

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The Belbek River Basin provides one of the most stratigraphically extensive Albian-Cenomanian boundary (ACB) intervals in the SW Crimea. The succession is divided into two units: glauconitic-quartz sandstones from 1,5 to 10 m in thickness and overlying thinly bedded marls. The position of the boundary and consequently the age of the glauconitic sandstones have been discussed for a long time. The present work is focused on lithological and fossil (ammonites, foraminifera and ostracods) analyses of deposits to reevaluate the ACB in the area and to elucidate the paleoenvironments.

The studied glauconitic sandstones contain a few small stratigraphic gaps. The lower part is characterized by accumulation of aucellinid bivalves and ammonites (up to 0,5 m in diameter). Among the ammonites from the sandstones there are Stoliczkaia clavigera, Ostlingoceras puzosianum, Mariella bergeri, Anisoceras perarmatum and others that lead us to attribute these species to the Stoliczkaia dispar Zone. However, the analysis of the planktonic foraminifera distribution documented from the upper 5 m of sandstones in the Sukhoj Log section allows us to establish the upper Albian Rotalipora appenninica Zone and Cenomanian R. reicheli and R. cushmani Zones. The lower Cenomanian R. globotruncanoides Zone is not clearly recognized here probably due to an hiatus across the ACB. The rich planktonic foraminiferal assemblages in the overlying marks indicate a R. cushmani age. Based on these results, we suggest a middle-upper Cenomanian age for the upper 4,8 m of the sandstones that yield reworked Aucellina spp. from the Dispar Zone. Faunal and sedimentary characteristics show that during the latest Albian and early Cenomanian deposition occurred in a shallow epicontinental sea with extensive erosive bottom current activity attributed to periods of local tectonic activity or global sea-level falls. During the R. reicheli and R. cushmani times water depth increased up to 100 - 200 m and then terrigenous clastic deposition was replaced by a carbonate facies.

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