



## **Carbon cycle history through the Middle Jurassic of Hungary**

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A carbonate carbon isotope curve from the Aalenian–Bathonian interval is presented from the Obanya valley, of the Mecsek Mountains, Hungary. This interval is less well constrained and studied than other Jurassic time slices. The Obanya valley lies in the eastern part of the Mecsek Mountains, between Obanya and Kisujbanya and provides excellent exposures of a near continuous Aalenian to Lower Cretaceous sequence. It is not strongly affected by tectonics, as compared to other sections of eastern Mecsek of the same age. In parts, a rich fossil assemblage has been collected; the Bathonian ammonites are especially valuable as this locality. The pelagic Middle Jurassic is represented by thin-bedded limestones (the Obanya Limestone) and is overlain by Upper Jurassic siliceous limestones and radiolarites (the Fonyaszo Limestone). The new data indicates a series of positive anomalies within the late Aalenian and early-middle Bajocian. These data are comparable with carbonate carbon isotope recorded from other Tethyan margin sediments. Our integrated biostratigraphy and carbon isotope stratigraphy enables us to improve stratigraphic correlation and age determination of the examined strata.