Open marine Carnian succession from the Apuseni Mountains (Codru-Moma Nappe System, Romania)

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Triassic sequences in the Northern Backa–Upper Codru zone, the southernmost tectonic units of the Apuseni Mountains (Tisza unit), were over 100 years compared with facies sequences known from the Northern Calcareous Alps (NCA), especially with those of the Dachstein carbonate platform (Bleahu *et al*., 1994).

Based on lithostratigraphic correlations, open-marine Middle to early Late Triassic sedimentary rocks of the Codru-Moma nappe system are subsumed to the Rosia Formation. The age of the Rosia Formation at the type-section Coupe de Strimtura near the village Sohodol is defined as Late Anisian to Early Carnian (Patrulius *et al*., 1976). Unfortunately, other Carnian to Early Norian grey deep-water limestones around Sohodol are also added to this formation. The overlying sedimentary rocks of the Rosia Formation can be either Carnian shallow-water carbonates (Strimtura Limestone equivalent to the Wetterstein Carbonate Platform), or siliciclastic Middle Norian sedimentary rocks (Codru beds). The so far in spotlights dated sections originate from various palaeogeographic provenances and belong most probably to different tectonic units, respectively. First detailed microfacies analyses and high-resolution biostratigraphy on the hemipelagic sediments figured out the need for a re-evaluation of the Rosia Formation. In this frame we investigated in Sohodol (Finis nappe) a ca. 70-m thick part of the 270-m thick type-section. Our succession consists of Carnian open-marine limestones with stratified intercalations of turbidites: The basal 50 m of the succession yielded near the base earliest Carnian conodonts: *P. polygnathiformis* and *G. malayensis*. Upsection, *P. tadpole* and *P.* cf. *palata* point to the higher Julian 1. This part of the section consists of grey thin-bedded radiolarian-, filament-, and crinoid-bearing wackestones with intercalated turbidites, consisting predominately of recycled clasts from the Wetterstein Carbonate Platform. The depositional environment is comparable with those of the distal Raming-Formation (NCA) or the Trnava Formation (Inner Dinarides). A clastic interval or turbidites are missing in the Middle and Late Carnian wacke- to packstones. Higher Tuvalian 2 is proven by the co-occurrence of *P. polygnathiformis* and transitional forms between *P. carpathica* and *P. nodosa*. Around the Carnian/Norian boundary, a diverse conodont fauna from the latest Carnian conodont radiation zone *sensu* Orchard is proven, including *M. parvus*.

This Carnian succession resembles the facies evolution of the outer continental shelf in the NCA. Our first proof of a Carnian open-marine shelf provenance in the south-eastern Tisza Unit with clear Neotethyan affinity evidenced a re-evaluation of the complex Codru-Moma nappe system. Clear definitions of formations based on stratigraphic data combined with microfacies analysis will unravel the Triassic shelf configuration of Southern Tisza and their mode of emplacement.

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