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**Not Sea Level but Ecologically Triggered Sequence Stratigraphy: The Cessation of Progradation of Carnian Carbonate Platforms (Dolomites, N-Italy)**

Carbonate platform growth in the Dolomites (Late Triassic) displays seismic-scale steep clinoforms. Adjacent basins were fed by calciturbidites (highstand shedding) and terrigenous mud. Decreased subsidence, sea-level drop, subaerial exposure of the platform combined with palaeoecologic crisis shut down the carbonate production on the platform top and the slope. As a consequence of the cessation of calciturbidite sheddings, the former interplatform basin turned locally into a restricted, oxygen-depleted basin. This isolated basin became subsequently filled by organic-bearing mudrocks, lime mudstones to wackestones, automicrites, and ostracod packstones to grainstones. The suboxic carbonate deposits lapout against the inactive, c. 20° steep carbonate paleo-slope. No suboxic deposits have been found on the platform top indicating that it remained subaerially exposed during deposition in the basin. The sharp lithologic boundary between the carbonate slope and the suboxic deposits is interpreted as type I sequence boundary. Karst solution(s) with sandstone fillings on the platform top support this view. The restricted, suboxic carbonate deposits after the platform demise are interpreted as sea-level lowstand deposits. After the complete filling of the inherited paleo-relief (c. 80-100 m) a mixed succession of carbonates, sandstones and conglomerates spread out over the entire depositional area. The present case study shows that in areas with low subsidence interplatform basins may become cut off from the open ocean even if amplitude of sea level fluctuations are small (e.g. meter-scale). The resulting unconformity is of local significance and may not be used for the interpretation of a major sea-level fall and for regional sequence stratigraphic correlation.