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Evidence of evaporitic episodes in the Albian-Cenomanian Carbonate Sequences of the Campania Apennines (Southern Italy).

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Inside of the study carried out on Southern Apennines Cretaceous carbonate sequences, the detailed analysis of a 400 m thick inner shelf succession, cropping out in the Monte Chianello area (Campania Apennines, Southern Italy), shows interesting features referring to recurrent episodes of evaporitic depositional conditions.

The studied interval is early Albian up to late Cenomanian in age on the base of the presence of the microfossil as *Paracoskinolina tunesiana* Peybernes, *Sellialveolina viallii* Colalongo, in its lower part, and *Cisalveolina fraasi* (Gumbel), *Pseudolituonella reicheli* Marie, in the upper part.

Detailed (bed-to-bed) facies analyses pointed out to a cyclic sedimentary pattern with shallowing upward cycles. In their upper parts many cycles show intervals, from a few centimeters up to few decimeters in thickness, bearing abundant silicified pseudomorphs after anhydrite/gypsum crystals and noduls. These evaporitic levels, along with the following discontinuous marly intervals, bear witness to repeated episodes of salinity shifting into inner platform-restricted lagoon settings, under dry and warm climatic conditions.

Noteworthy, resting over the studied evaporite crystals bearing limestones, a mid-

dle Cenomanian “Platy Dolomite” interval occurs, in which remains of xerophytic megaflora (e.g. *Sapindopsis sp.*, *Frenelopsis* sp.) have been found (Bravi *et alii*, 2004; Bartiromo *et alii*, 2008, in this Symposium). These remains suggest algal marsh coastal environments with almost dry conditions. Symilar climatic evidences derive from fossil xerophytic megaflora recently found in other carbonate sequences of the Campania region (see: Bartiromo, 2008) belonging to the same time span.

Should these evidences of dry and warm climatic episodes be supported by researches in progress in circummediterranean areas (Apennines, Dinarids, Greece), their more detailed time and space constrains will be needed in order to clarify their relationships with the hot and humid climatic conditions causing intensive karst and bauxite development in the Albian-Cenomanian carbonate peri-Thetyan sequences (Carannante *et al*.,1991; Cherchi, 1985, among others).

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