

**Assembly and cumulative association of the "big bivalves with thick tests"  
(Megalodontids) in Liassic carbonates of the external Tell  
(Ouarsenis, Algeria)**

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In external Tell (alpine field) of Ouarsenis (Algeria), the Liassic carbonates are characterized by an assemblage of bivalve thick tests (bivalves à tests épais) enfeoff to proximal platforms. The analysis of this *Megalodontids* allowed highlight several associations largely dominated by *Lithiotis*. Qualitative and quantitative evolution stands *Megalodontids* depends closely on the dislocation of the initial carbonate platform, which, during Carixian period, the Lower and Middle Lias occupy large areas of Tethyan domain. This annoying and same blocking the exchange, and promoting provincialism. These stands provide new elements complementary to previous knowledge on the behavior of foraminifera and their sensitivity to environmental conditions as well as physiographic and ecological changes that control their spatial and temporal distribution (spatio-temporal *continuum*). Although morphological differentiation and teratologic may reflect the isolation of certain groups in various environments of the same platform or gutters difficult communicating with the open areas.

The evolution of marine populations is then connected with differentiation environment, result of extensional tectonics tilted blocks which then affects the initial carbonate platform.

The strategy adopted by stands *Megalodontids* meets the constraints imposed by the complexity of extensional events tilted blocks. This, it has simultaneously conditioning some aspects of Liassic sedimentation and induces a very contrasted paleogeography represented during this period by several environments in which compartmentalize umbilics and high zone during the Lias .

*Megalodontidae* are organized in different geometries (i) they constitute levels in onlap (transgressive phase). Here, the bivalves are stratified and they are represented mainly by a dominance of *Lithiotis* and *Cochlearites* ; (ii) in the higher areas on tilted block, there are only small *Lithiotis* metric filling channels (regressive phase) ; and (iii) biodiversity *Megalodontids*, associated with gastropods (*Nerinae*) are accumulated in disorder forming bioaccumulation in a plurimetric dome.

The limestones of the platform include various associations of these specialized forms: *Lithiotis* and *Lithioperna* (frequent; assembly 1); large *Cochlearites* (rare; assemblage 2), and *Protodicerias*, *Opisoma* (common; assembling 3). Always, these facies characterize deposits of shallow sea, sometimes exposed to tidal conditions (1). They can form either accumulations filling of tidal channels or small bioconstructions (1 and 2) or layers (3). They can also be dispersed and dissociated by tidal current and storms (1).

Key words : *Megalodontids*, Association, Géométrie, Environment, Lias, Ouarsenis, Algeria