Biostratigraphy and sedimentary discontinuities of the Lower and Middle Jurassic carbonate platform of Ouarsenis massive (Tell, West Algeria): causes and effects

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The Jurassic history of the Great Peak of Ouarsenis is marked by local tectonics which has caused the differentiation of an irregular paleogeography, an inheritance of the early phases of tethysian rifting. For this purpose, important interruptions have been recognized in the Jurassic. Two intra-Carixian discontinuities were recorded; one within the internal platform, the second ends a small cycle transgression-regression. The pre-domerian discontinuity precedes the generalization of the external platform conditions. Finite-Domerian discontinuity evolves from the lagoon subtidal to the outer platform. The discontinuity of the late Middle Toarcian undergoes a slowing down of sedimentation and results in a gap in the Upper Toarcian at the beginning of the Bajocian. The pre-Humphriesianum discontinuity marks the resumption of sedimentation with the "pink entroquites". The particular silico-clastic sedimentation of terrigenous origin is deposited in the submarine cone and testifies to the reactivation of the tectonic rift liasique. The pre-Niortense discontinuity records a stage of deepening with the appearance of "Silex limestones" and "Zoophycos limestones". The post-Garantiana discontinuity affects "filament limestones". The general deepening leads to erase the barrier role played by the shoals. The deepening and the new eustatic rise of the Bajocian heals and erases the previous structure.

Keywords: platform, discontinuities, Jurassic, synsedimentary tectonic, Ouarsenis.