Sequence Strartigraphy of the Neogene Sedimentary Basin of Boudinar (Easternal Rif, Morocco)

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The sequential stratigraphy in the Neogene sedimentary basin of Boudinar, supplemented by micopaleontologic determinations and radiochronological datings, made it possible to explain the disturbances in the eustatic evolution and to better include the geodynamic history of the basin. This study allowed us: 1/ to solve the problems of age and lateral correlations of the sequences and sedimentary unconformities; 2/ to propose ages for series up to now poorly dated; 3/ to decipher the architecture of the various sedimentary bodies; 4/ to determine the respective part of the effects related to eustatism and tectonics in the local evolution of the sea level; 5/ to characterize the importance of the sedimentary contribution and the variations of the eustatic sea level recorded.

The sedimentary history of the Boudinar basin does not present evaporitic levels related to the messinian salinity crisis. In Boudinar, the shore of the sea of this time was to be too much low to allow such sedimentation in the basin. The great power of the regressive messinian terms seems to be related to an important detrital contribution and a tectonic subsidence. The emergence of the basin of Boudinar at the end of Messinian is associated the retreat of the marine level and renewals of activity tectonic and volcanic. In the area broken down in the North-West of the basin, the Pliocene sedimentation developed which shows a return to conditions of open sea and a continuity of messinian sedimentation. The absence of the marine sedimentation of upper Pliocene in the Boudinar basin is caused by a tectonic emergence in compression which is continues until the current one.

Key words: sequence stratygraphy, geodynamic, Neogene, Boudinar, Morocco