

The new edition of the geological map of Oullad Maallah region, biostratigraphic implication

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The geological map of Oullad Maallah belongs to the region of Dahra and includes all the southern slope to the Chélif plain, from the Razzaz River in the east to the Tarhia River in the west. The study area consists of a massive Cretaceous formation, and Mio-Plio-Quaternary terrains covering most of the sheet, extending along a parallel northwest series.

Cross-sections in the region of Oullad Maallah illustrate perfectly the arrangement of Mio-Pliocene sedimentation. This sedimentation is marked by a brittle and folding tectonics (anticline and syncline folds) oriented West-East, visible from the mouth of the Chélif to Ténès (Meghraoui et al., 2002; Derder et al., 2011). The sector offers transgressive and discordant marine marl series on a massive expanses of gypsum (Messinian). These structures have acquired important features, which must constitute various morphologies during the Pliocene transgression of the blue marls (Brives, 1857; Perrodon, 1957).

The preliminary data were obtained from the field prospection using two biostratigraphic methods, focusing on a marine deposit: planktonic foraminifera observed with a binocular, and calcareous nannofossils observed with an optical microscope.

The Pliocene samples have revealed, from bottom to top, a complete succession of planktonic foraminifera's markers (Belkebir, 1996). The same samples were subjected to the analysis of calcareous nannofossils recorded, from the very beginning, the presence of a rare species.

References

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