Paleoenvironmental and Chronological Significance of the Foraminiferal Record in the Pliocene Asilah Basin (NW Morocco)

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In the most representative stratigraphic sections in the Pliocene Basin of Asilah (Morocco), the associations of bentonic and planctonic foraminifera were analyzed. More than 50 taxa of bentonic foraminifers and 17 of planctonic were determined.

The planctonic assemblage leave us to assign all the Neogene of the Basin to the Zancian (biozone PL-2 of Berggren et al. 1995), highlighting the coexistence of Globoratalia margaritae and G. punctulata.

The bentonic assemblages show the spatio-temporal relationships of the basin. The basal levels are of transgressive character, and Elphidium crispum, Lobatula lobatula, Ammonia beccarii and Nonion boueanum are the most abundant. In upper levels, N. boueanum and A. beccarii are the most representative taxa, and the diversity and the planctonic taxa are higher.

The associations of bentonic and planctonic foraminifers confirm a progressive deepening, inside the internal platform, with several episodes of a more restricted marine circulation conditions, marked by peaks of abundance of Buliminidae and Fursenkoina schreibersiana. The malacofauna and ostracofauna record are in agreement with this results.

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