

## Paleoecological and paleoclimatic aspects of the late Quaternary in the Equatorial Atlantic Ocean (preliminary results)

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The knowledge on the distribution and abundance of foraminifera benthic assemblages has a great relevance in paleoenvironmental, paleogeographic and paleoecological interpretations. The objective of this work was to assess through benthic foraminifera the paleoecology and paleoclimate from the upper Quaternary of the Icaraí sub-basin, Ceará Basin, northeastern Brazil. The distribution of benthic foraminifera was analyzed using the core ANP 1011, collected by the ship Fugro Odissey, at 39°23'22"O/2°13'03"S, 106.3 km from the coast of the state of Ceará, at a depth of 2125 m. 15 sediment samples were selected in each 10 cm of the core. The preparation procedures followed the standard methodology for studies of recent foraminifera. The sediments analyzed include the Pleistocene superior and the Holocene, where zones Y and Z were identified based on the distribution of the plexuses *Globorotalia menardii*, *Globorotalia truncatulinoides*, *Pulleniatina obliquiloculata* and *Globoconella inflata*. 32 benthic foraminifera taxon have been identified, they were represented mainly by *Uvigerina auberiana*, *Globocassidulina* sp., *Pyrgo* sp., *Cancris nuttalli* and *Quinqueloculina* sp. The observed benthic foraminifera showed the predominance of morpho groups of infaunal way of life, indicated sediments with relatively high concentrations of organic carbon and a predominance of high concentrations of nutrients. The constant presence in the Pleistocene-Holocene transition of *Uvigerina auberiana*, adapted to warm waters, indicates the establishment of a drier climate in the study area towards the top of the core. In addition, the vertical distribution patterns for foraminifera species in the analyzed area were quite variable, as a consequence of the organisms' ability to adapt in local conditions.