

## Albian–Cenomanian (Cretaceous) calcareous nannofossils from DSDP Site 364, Bacia de Kwanza, Angola

**Edna J.F. Tungo, Mauro Daniel Rodrigues Bruno, Gerson Fauth**

Unisinos University, Instituto Fossil (Technological Institute of Micropaleontology), São Leopoldo, RS 93020-190, Brazil; ednatungo@gmail.com, dbruno@unisinos.br, gersonf@unisinos.br

The fragmentation of Gondwana resulted in the creation of the Atlantic Ocean through the separation of the South American and African tectonic plates. This palaeogeographic occurrence favoured the diversification and geographic distribution of marine organisms throughout the sedimentary basins of the South Atlantic. Many studies using DSDP/ODP sites have revealed a biostratigraphic unconformity in the Upper Albian–Turonian interval (Bolli et al., 1978). DSDP Site 364 was drilled in the offshore portion of the Kwanza Basin (Angolan coast), where this biostratigraphic unconformity was observed. However, the zonation scheme that was applied to it is out of date when compared to current biozonations. The biostratigraphic zones for calcareous nannofossils in the Albian–Turonian interval that were proposed by Burnett et al. (1998) were likely to be present in the sedimentary section of Site 364. With the aim of identifying these biozones, and analysing the distribution and composition of their nannofossil assemblages, 11 samples from between the depths of 672 and 715 mbsf were prepared using the smear-slide method. The first results show that all studied samples contained diverse and abundant Cretaceous nannofossil assemblages, with distinct degrees of dissolution and recrystallisation in all samples. Species such as *Eiffellithus turrisieffellii*, *Axopodorhabdus biramiculatus*, *Helenea chiastia* and *Rhagodiscus asper* are typical of the Upper Albian–Cenomanian interval. Future studies with more precise nannofossil identifications and designation of biostratigraphic events at Site 364 will confirm this. This study was supported by IODP/CAPES grant 8888.091703/2014-01.

### References

- Bolli, H.M., Ryan, W.B.F., Foresman, J.B., Hottman, W.E., Kagami, H., Longoria, J.F. & Siesser, W.G. 1978. Angola continental margin – Sites 364 and 365. *Initial Reports of the Deep Sea Drilling Project*, **40**: 357–390.
- Burnett, J.A., Gallagher, L.T. & Hampton, M.J. 1998. Upper Cretaceous. In: P.R. Bown (Ed.). *Calcareous Nannofossil Biostratigraphy*. Kluwer Academic Publishers, Dordrecht: 132–199.