



## **Calcareous nannofossil turnover dynamics across the late Campanian-Maastrichtian of the tropical South Atlantic**

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A detailed record of late Campanian–Maastrichtian calcareous nannofossil bio-events is presented for the South Atlantic reference DSDP Site 525A. The combination with magnetostratigraphy, chemostratigraphy and planktic foraminifer biostratigraphy allows for global correlations to other Tethyan and Boreal reference sections for that interval. A new time scale with a tie of Tethyan and Boreal nannofossil zonations is proposed. Cumulative first and last occurrences are used to delineate the turnover dynamics of calcareous nannoplankton which highlights 6 major events. Five of these events are related to major changes in sea-surface temperatures whereas the sixth event appears to be the expression of a global decrease in primary productivity in the late Maastrichtian. Surprisingly, the turnover dynamics in calcareous nannoplankton does not fit observations in planktic foraminiferal assemblages where only 4 major events were demonstrated with timings that differ from the 6 intervals of major change portrayed in the nannofossil assemblage. Regarding turnover, the two groups thus seem to have responded very differently to environmental pressure.