

# **Paleoceanographic and paleoclimatic changes during the Quaternary at IODP Site U1586, Iberian margin**

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This study presents calcareous nannoplankton data from the North Atlantic area. Many climate studies currently focus on this region, particularly on the Iberian margin. Due to its high sedimentation rate, sedimentary records offer the possibility to perform high-fidelity and high-resolution climate variability studies along the Iberian margin. Our analyses are centered on Site U1586 (37°37.283'N, 10°42.628'W; 4691 m below sea level), which was drilled during the International Ocean Discovery Program (IODP) Expedition 397 along the SW Iberian margin. The CEX dissolution index was calculated, and it suggests good preservation for the coccolith assemblages. Abundance percentage variability of selected coccoliths is also provided to highlight paleoproductivity and paleotemperature changes. The main results provide information on global climate evolution and changes in paleoceanography and coccolithophore productivity related to upwelling strength fluctuations in surface-water masses and subtropical gyre dynamics.