Updates on the calcareous nannoplankton biostratigraphy of the Lutetian to Lower Priabonian strata in the Jaca Basin (southern Pyrenees, Spain)

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The Lutetian to Priabonian strata of the Jaca Basin record the transition from deep-marine to terrestrial environments, while passing through intermediate deltaic systems. In this work, we summarise the calcareous nannoplankton content from the Jaca town transect. The sedimentary succession starts with the Roncal-Fiscal megaturbidite (Mt-5), continues with the upper Hecho Group turbidites, and ends with the deltaic systems of the Sabiñánigo Sandstone and lower Belsué-Atarés Formation (Sobás Delta). The main biohorizons of the Middle Eocene were recognised on the basis of the global standards and calibrated events of Agnini et al. (2014).

The calcareous nannofossil assemblages in the Lutetian–Bartonian upper Hecho Group were placed in the CNE11–CNE15 or NP15–NP16 biozones, within a time span of ~3.45 Myr, between 43.96 and 40.51 Ma (González-Lanchas et al., 2019/in press). These results were compared with available palaeomagnetic studies. Preliminary results from the Sabiñánigo Sandstone and the distal Sobás Delta placed these sediments in the Bartonian to Priabonian, based on the morphological evolution of *Cribrocentrum erbae*.

The resulting age model improves the existing model for the south-central Pyrenean Basin and also permits a detailed temporal and spatial correlation framework for genetically-related depositional systems at the basin scale.

References