

## **Upper Cretaceous–Cenozoic calcareous nannofossil biostratigraphy of northwestern Colombian basins**

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After several decades of reliance on palynology and foraminifera as the primary biostratigraphic tools in Colombia, this is the first report on the calcareous nannofossil biostratigraphy through the Upper Cretaceous–Cenozoic sedimentary record from six basins in northwestern Colombia. More than 3000 samples were prepared and analysed from these basins. A discontinuous Upper Mesozoic–Cenozoic sedimentary record was interpreted from the nannofossil biostratigraphy, allowing us to solve some stratigraphic problems in the northwestern Andes. Our micropalaeontological dataset can be grouped into eight biostratigraphic intervals – Campanian–Maastrichtian, Selandian–Thanetian, Ypresian, Bartonian–Priabonian, Rupelian–Chattian, Aquitanian–Burdigalian, Tortonian–Pliocene and Pleistocene. Our results are comparable to the major oceanic pulses previously documented by sedimentological, palynological and foraminiferal studies. This work, which is based on nannofossil biostratigraphy, also reveals episodes of high influxes of reworked microfossils into Upper Miocene and Pliocene formations. This is associated with the erosion of Oligocene and Lower Miocene marine rocks that were uplifted by tectonic readjustment during the most recent northern Andean Orogeny.