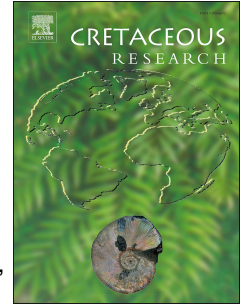


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Chronostratigraphy and new vertebrate sites from the upper Maastrichtian of Huesca (Spain), and their relation with the K/Pg boundary

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Abstract: *The transitional-continental facies of the Tremp Formation within the South-Pyrenean Central Unit (Spain) contain one of the best continental vertebrate records of the Upper Cretaceous in Europe. This Pyrenean area is therefore an exceptional place to study the extinction of continental vertebrates across the Cretaceous/Paleogene (K/Pg) boundary, being one of the few places in Europe that has a relatively continuous record ranging from the upper Campanian to lower Eocene. The Serraduy area, located on the northwest flank of the Tremp syncline, has seen the discovery of abundant vertebrate remains in recent years, highlights being the presence of hadrosaurid dinosaurs and eusuchian crocodylomorphs. Nevertheless, although these deposits have been provisionally assigned a Maastrichtian age, they have not previously been dated with absolute or relative methods. This paper presents a detailed stratigraphic, magnetostratigraphic and biostratigraphic study for the first time in this area, making it possible to assign most vertebrate sites from the Serraduy area a late Maastrichtian age, specifically within polarity chron C29r. These results confirm that the vertebrate sites from Serraduy are among the most modern of the Upper Cretaceous in Europe, being very close to the K/Pg boundary.*

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