

**The Santonian-Campanian boundary in the NW Tethys;
magneto-, isotope- and biostratigraphy from the pelagic Postalm section
(Northern Calcareous Alps, Austria)**

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The Postalm section in the Austrian Northern Calcareous Alps yields Upper Cretaceous deposits recording an almost complete succession from the latest Santonian to the uppermost Campanian. To address the Santonian – Campanian transition, it is possible to integrate several stratigraphic signals from macro- and microfossils to chemostratigraphy and magnetostratigraphy at the Postalm and adjacent Gosau sections.

The interval spanning the S-C boundary at the Postalm section shows a deepening trend from upper Santonian conglomerates and grey shelf marls to pelagic bathyal red marly limestones of Campanian age. 61 samples for magnetostratigraphy, 27 rock samples for isotopes as well as 50 smear slides prepared for calcareous nannofossil and 43 samples for foraminiferal biostratigraphy were investigated.

The base of the Campanian can be defined by magnetostratigraphy, i.e. the reversal from Chron C34n (the Long Cretaceous Normal Polarity-Chron) to C33r. Two of the main suggested biomarkers for the S-C boundary, i.e. the last occurrence of planktonic foraminifer *Dicarinella asymetrica* and the first occurrence of the calcareous nannofossil *Broinsonia parca parca* are documented in close proximity to the reversal. Strontium isotope stratigraphy indicates a value of 0.707534 (mean of 4 measurements around the boundary interval) for the base of the Campanian at the Postalm section. Furthermore, both carbon and oxygen isotopes show a negative excursion below the S-C boundary. The magnetic susceptibility signature shows a prominent positive excursion at the end of C34n. The well resolved record at the Postalm section illustrates the pace of (bio) events around and during the Santonian/Campanian transition in hemipelagic to pelagic deposits.