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## **New magnetostratigraphy from the Punta Grohmann section (Dolomites, NE Italy): an improvement of the Geomagnetic Polarity Time Scale around the Ladinian/Carnian boundary**

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The Ladinian/Carnian boundary (LCB) is defined at Prati di Stuores (GSSP of the Carnian Stage) with the First Appearance Datum (FAD) of ammonoid *Daxatina canadensis* and approximated by the FAD of conodont *Paragondolella polygnathiformis*. The age of the Carnian is currently estimated at ca. 237 Ma using the composite magnetostratigraphy of the main late Ladinian basinal sequences from literature, calibrated with a U-Pb radiometric age of  $237.77 \pm 0.14$  Ma from the Rio Nigra section in Alpe di Siusi (Dolomites, NE Italy). In the attempt to improve the precision of the Geomagnetic Polarity Time Scale (GPTS) around the LCB we investigated for magnetostratigraphy the Punta Grohmann section in the Dolomites. The Punta Grohmann section is calibrated with ammonoids (the FAD of *Zestoceras cf. lorigae* is considered a proxy of the LCB) and is chronologically constrained by two U-Pb radiometric ages from zircons ( $237.58 \pm 0.04$  Ma;  $237.68 \pm 0.05$  Ma). The magnetostratigraphy of the Punta Grohmann section has been successfully correlated to other Ladinian-Carnian magnetostratigraphic sections (Prati di Stuores, Mayerling, Rio Nigra) and compared to the most recent version of the Triassic Geomagnetic Polarity Time Scale (GPTS). The LCB at Prati di Stuores is calibrated through magnetostratigraphy with the U-Pb radiometric datings of Punta Grohmann, obtaining an age of the LCB of ca. 237.4 Ma. Therefore, the Ladinian should be ca. 4 Myr long and the Carnian ca. 10.4 Myr long.