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Upper Paleocene – Early Eocene isotopic records (d^{13}C, d^{18}O) on Touijine section (Tunisia) and Ouanina section (Morocco). correlation of isotopic signals in the southern Tethyan margin.

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Carbon and oxygen stable isotopic ratios in bulk rocks are used as paleoproxies to evaluate Upper Paleocene and lower Eocene environmental changes and variations in Touijine section (northern Tunisia) and Ouanina section (High Atlas of Marrakech, Morrocco). We will try to compare paleoenvironmental settings between two neighbouring basins, one is more atlantic (morrocco) than the tunisian one wish is more tehysian.

At Touijine section, δ^{13}C data increase in P4 biozone from 1,5 to 2,2 %o. At the P4/P5 boundary, a sharp decrease (2 %o) of the δ^{13}C starts and continues up to 0 %o at the P/E boundary. The δ^{13}C values remain at the lowest level between 32 and 80 m. In the P9 biozone interval, a decrease of δ^{13}C is again observed up to -1,5%o. In ouanina, δ^{13}C values are more negative (-7 to -1%o) than Touijine (-2 to 3%o), it shows a positive excursion in Uppermost Cretaceous (-5 to -2%o), followed by a gradual decrease at the K/T boundary. The P/E interval is marked by an important decrease (4 %o) of carbon isotopic ratios.

The very low δ^{18}O values throughout the touijine (-5%o) and ouanina (-7,5%o) sections reflect diagenetic alteration rather than paleotemperatures.