



## **The influence of low latitude forcing on European Ice sheet dynamics**

Stefanie Kaboth (1), André Bahr (2), and Lucas J. Lourens (1)

(1) Aardwetenschappen, Utrecht University, Utrecht, Netherlands (S.Kaboth@uu.nl), (2) Institute of Earth Sciences, Ruprecht-Karls-Universität Heidelberg, Heidelberg, Germany

Distinct mid-glacial  $\delta^{18}\text{O}$  enrichment events found at Site U1386 in the Gulf of Cadiz during Marine Isotope Stages 6 and 8 represent a striking feature absent in most deep-sea benthic  $\delta^{18}\text{O}$  records studied worldwide. These  $\delta^{18}\text{O}$  enrichment events are closely related to periods of maximum precession and aligned with previous findings from the Mediterranean and Red Seas. Here we present paired planktic and benthic stable isotope ( $\delta^{18}\text{O}$  and  $\delta^{13}\text{C}$ ) and Mg/Ca-based temperature records of Site U1386 of the last 300.000 years. Our results show that these  $\delta^{18}\text{O}$  enrichment events are recorded in both subsurface and bottom water masses and pre-date the largest cooling events along the Iberian Margin and associated European sourced meltwater pulses of the Drenthe and Fuhne major ice-sheet advances, suggesting that they instead correspond to periods of maximum ice volume extend in Europe.