



High resolution isotopic and trace element record of the last interglacial from a flowstone from the Villars cave (SW France)

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A 114 cm long core made in a flowstone of the Villars cave (SW France) dated by the U-Th method (TIMS and ICPM) displays a continuous growth from 190 ka to the Holocene. We present here the isotopic results of a high resolution sampling (0.5 to 3 mm \sim 25 to 150 years) made on the part of the core that grew during the last interglacial. In this record, Terminaison II is characterised by a loss of -5‰ in $\delta^{18}\text{O}$ and the last interglacial is very similar in shape and in amplitude to the composite record of the Soreq cave (Israel). Between \sim 127 and 125 ka the $\delta^{18}\text{O}$ profile shows centennial oscillations of nearly 1‰ in amplitude. Parallel trace element analyses obtained by ICPAES show large changes in their concentration during the same period. We will discuss their different behaviour during the inception of the deglaciation and during the entire warm period.