



## **Simulating deglacial $\delta^{18}\text{O}_c$ evolution in multiple planktonic foraminifer species**

Didier M. Roche (1,2) and Claire Waelbroeck (1)

(1) Laboratoire des Sciences du Climat et de l'Environnement, LSCE/IPSL, CEA-CNRS-UVSQ, Université Paris-Saclay, F-91191 Gif-sur-Yvette, France (didier.roche@lsce.ipsl.fr), (2) Vrije Universiteit Amsterdam, Faculty of Sciences, Cluster Earth and Climate, de Boelelaan 1085, 1081HV Amsterdam, The Netherlands

Different planktonic foraminifer species exhibit different sensitivities and evolution to climate change due to their distinct habitat preferences both in the oceanic water column and throughout the year. Hence, calcite  $\delta^{18}\text{O}$  record of deglacial oceanic evolution recorded in shells from multiple species of planktonic foraminifer present the potential to access more information by disentangling the different factors that are contributing to each specific recorded evolution.

Using the recently developed simplified FAME (Foraminifers As Modeled Entities) module (v1.0), we compare the simulated  $\delta^{18}\text{O}_c$  evolution for the last termination (21 to 7 ka B.P.) obtained using the transient climate evolution simulated with the iLOVECLIM Earth System model as an input, with North Atlantic planktonic  $\delta^{18}\text{O}_c$  records from several different foraminifer species over the same interval.