

## Émilie Capron

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Émilie Capron is currently a paleoclimatologist in the Physics of Ice, Climate and Earth Group at the Niels Bohr Institute, University of Copenhagen. In 2010, she completed her PhD in isotopic geochemistry on polar ice cores and paleoclimatology at the French Laboratoire des Sciences du Climat et de l'Environnement (LSCE). Between 2010 and 2018, she had a research scientist position in the Ice Core Group at the British Antarctic Survey (UK). She was detached from the British Antarctic Survey in 2016-2017 as she obtained a DFF-MOBILEX funding from the Danish Research Council to lead a research project at the Niels Bohr Institute.

Émilie's research aims to contribute to the understanding of decadal- to orbital-scale climate dynamics and cryosphere-climate interactions during the past 150,000 years. Her approach relies on polar ice core climate proxies linked to marine and terrestrial archive records to create spatio-temporal climate syntheses, and to climate modeling exercises. Such a multi-archive approach requires defining robust and coherent age models amongst the different archives. Hence, establishing reliable chronologies for paleorecords is also an important focus of her research.

Émilie's work is mainly guided by three key research questions in the context of Climate Change and its future impacts on socio-economic and natural systems:

- What is the response of the components of the Earth System (i.e. ice sheets, ocean circulation) to a ~10 kyr-long warmer-than-preindustrial climate?
- What are the processes responsible for abrupt climate changes occurring at a human lifespan-scale in Greenland?
- What is the sensitivity of polar ice sheets to major multi-millennial-scale climatic transitions?

Émilie is very active in service to the scientific community, including acting as a Guest Editor in 2013 and 2015 of the magazine of the international Past Global Changes (PAGES) organization, being part of the leadership team of the international PAGES-PMIP working group on Quaternary Interglacials (QUIGS) since 2015, and serving on the PAGES Steering Committee since 2018. She was an Early-Career Ambassador of the European Association of Geochemistry in 2016. She received a European Geosciences Union Young Scientist Travel Award in 2013. She is also strongly involved in outreach activities and for this, she got the French Award Le Monde de la Recherche Universitaire in 2010.