

# About this issue

Ice cores have become one of the golden standards in paleoclimate research. Because of the physical nature of their proxy records, their capacity to record past greenhouse (and non-greenhouse) gas concentrations,

and their high time-resolution, they have become the focus of multiple PAGES working groups. Two early-career research networks, DEEPICE and ICYS, have contributed and edited this *Past Global Changes Magazine*

issue, which contains 26 science highlights on ice cores and new developments in analytical techniques.

## Research and training network on understanding Deep ice core Proxies to Infer past antarctic climate dynamic (DEEPICE)

DEEPICE ([deepice.cnrs.fr](http://deepice.cnrs.fr)) is an innovative training network for a new generation of 15 early-stage researchers in instrumentation,

ice-core analysis, statistic tools and glaciological and climatic modeling. It features 10 research organizations and universities, as well as 11 partner organizations from 11 different countries. The overall objective of DEEPICE is to equip a new generation of scientists with a solid background in ice-core-related climate science with a particular focus on Antarctica,

a high level of technical and communication expertise, and a large collaborative network across the academic and non-academic world. The DEEPICE project will develop the necessary tools for the analysis of the Beyond EPICA Oldest Ice, the extraction of which will be completed in 2025.



**Figure 1:** Entering Little Dome C (Antarctica) precinct on the only road. The camp is visible in the background. Photo credit: Barbante@PNRA/IPEV.

## Ice Core Young Scientists (ICYS)

Ice Core Young Scientists (ICYS) ([pastglobalchanges.org/icys](http://pastglobalchanges.org/icys)) is an informal, international network of early-career scientists dedicated to the study of polar and alpine ice cores and ice-core related sciences. Their purpose is to foster personal connections among young

scientists from around the world, in order to build a supportive ice-core science community and to inspire future collaborations. ICYS was conceived at the International Partnerships in Ice Core Sciences (IPICS) First Open Science Conference, held in Gien, France, in October 2012. Developed

by a small, passionate group of early-career scientists from Europe, Australia and the United States, ICYS exists to foster personal relationships among young ice-core researchers from around the world.



**Figure 2:** The North Greenland Eemian Ice Drilling (NEEM) camp site, located in northwest Greenland. Photo credit: Tim Burton.