

NSF Arctic Data Workshop

The workshop goal is to bring together a diverse group of researchers (including faculty and graduate students) that are using or would like to use ice core data available from the Arctic Data Center. The goal is to learn about common research workflows that the community is using and to test the applicability of selected Arctic data sets and software tools to build the next generation of digital paleoclimate data products and reconstructions.

Background Information

In the past decade, the volume and complexity of data available in ice core science has grown rapidly. This increase has several major drivers: First, an increase in sampling frequency and quality has resulted in rapid generation of data. Second, advances in the Web and computer system integration of related technologies have simplified data exchange. Finally, the scientific community and funding agencies are supporting major efforts to increase research transparency by requiring researchers to publicly share project data collected during research in long term data repositories. All of these converging elements hold the potential to significantly boost scientific discovery due to the benefits of sharing data with other disciplines, but new computing approaches are needed.

The 2019 Arctic Data Workshop will focus on evaluation and testing of tools that simplify the use of publicly available Arctic data in a meaningful way. The goal is to increase the ease and transparency of working back from scientific results, for example a table within a publication, to the original datasets from which the summarized data were derived. By actively soliciting community-wide input and experience, the workshop will incorporate and share with the community related best practices from code development, digital curation, and software engineering.