

Greenland Ice Core Project

By Lennart Kiil



An ice core sample is made ready to be shipped home to the laboratory.

[NASA ICE](#), CC BY 2.0

A project with the objective of getting information about past climates by collecting an [ice core](#) from the [Greenland Ice Sheet](#).

Drilling took place between 1990 and 1992 at the highest (thickest) point of the ice. When the drill reached the bottom of the ice sheet in 1992, a 3029 m long ice core had been drilled.

Ice cores can provide scientists with a lot of information about past climates. The ice sheet is formed by accumulation and compression of snow. Within the compressed snow is a range of traces of the [atmosphere](#) at the time the snow fell. This includes dust, volcanic ash and air bubbles containing atmospheric gases. It is also possible to construct a [temperature record](#) by analyzing the composition of the water molecules in

the ice.

A 100,000 years record of the climate has been constructed from the Greenland ice core. This shows that the [interglacial](#) (warm) period, in which we are living, has been remarkably stable, and that rapid [climate changes](#) occurred during the last glacial (cold) period.

The project was organized through the European Science Foundation and funded by 8 countries and the European Union. The core is now stored at the University of Copenhagen, Denmark.

How to cite this entry

Lennart Kiil: "Greenland Ice Core Project". Climate Encyclopedia, climate-encyclopedia.com/greenland-ice-core-project, retrieved 28 October 2026.

Climate Encyclopedia is free and needs no login.