

The GISP2 Climate Card

The Climate Game is designed for teachers and students who want to learn more about ice core drilling, ice core interpretation, and the Greenland Ice Sheet Program 2. By using the GISP2 Climate Card activity teachers and students will learn about the GISP2 drilling program and how to interpret data obtained from the ice cores. The information and data in the GISP2 Climate Card is based directly on data from the Greenland Ice Sheet Project 2 (GISP2). GISP2 was an ice coring program in Greenland between 1986 and 1992 which obtained and analyzed a very long and complete ice core record. This ice coring program was a collaborative effort of 18 American universities and research facilities, was funded by the national Science Foundation, and coordinated by the GISP2 science management office at the University of New Hampshire. More information on the GISP2 program, and the complete data set can be found at <http://www.gisp2.sr.unh.edu/GISP2/> or on the Greenland Summit Ice cores CD-ROM. The four data sets used on the GISP2 Climate Card include: temperature ($0^{16}/0^{18}$), calcium dust (Ca), methane gas (CH_4), and Insolation.

Materials and resources

1. A computer with web access or a CD that your teacher has copied of the GISP2 activity.
2. Printed copies of the Student Answer Sheet.

Time

1-2 class periods (45 minute class periods)

Level

This activity is designed for middle school students and above.

Recommended Procedures

1. Students should work in pairs on the activity.
2. Students should start on page 1, follow any directions listed on a page, and work through the activity, one page at a time. Students should answer the questions on their Student Answer Sheet.



National Standards

Content 5-8

1. Standard D

Content 9-12

1. Standard D
2. Standard E