

CLIMATE CHANGE COLLECTION SCORECARD

Date: 2/18/05

Reviewer: Carrie Morrill

Name of resource: Greenland Ice Sheet Project 2: A record of climate change

Sponsoring Organization: Wright Center for Science Education, Tufts University

URL: http://www.tufts.edu/as/wright_center/iecws/materials/online_activities/climate_card/pages/page01a.htm

Site Homepage: http://www.tufts.edu/as/wright_center/

RESOURCE WITHIN A SITE? Y / N

FOUND THROUGH DLESE? Y / N

IF SO, WHICH COLLECTIONS? DLESE Community Collection

RECOMMENDATION YES YES WITH RESERVATIONS NO

STARS 1 2 3 4 5 (LAME TO STELLAR)

NARRATIVE Site contains exercise using data from the GISP2 ice core to answer questions about past climate changes, their magnitude and speed, and what could have caused them. Students answer a series of questions based on graphs of GISP2 data. Answer key is wrong for several questions.

INTENDED USE

REFERENCE

COMPUTER ACTIVITY

NON-COMPUTER ACTIVITY (Could be made into non-computer activity by printing out pages)

EDUCATOR OR LEARNER OR BOTH IF FOR LEARNER, EVIDENCE ITS BEEN TESTED? Y / N
BEGINNER OR ADVANCED OR BOTH

Easily Printed? Y / N

BUGS & TECHNICAL DIFFICULTIES (PROBLEMATIC TO ROBUST)

1 2 3 4

SCIENTIFIC ACCURACY (NATIONAL ENQUIRER TO NATIONAL GEOGRAPHIC)

1 2 3 4

EVIDENCE IT HAS BEEN REVIEWED FOR ACCURACY? Y / N

COMMENTS: Wording of question #14 needs be changed so that cause-effect relationship between dust and temperature not implied. Answers to questions #8,19,12 on page 9 are incorrect. For #7, temperature change around 12ka was 8° C in one decade and 15° C in several centuries. For #9, the lowest (highest) methane concentration was at 19ka (today) and was 350 ppbv (1600 ppbv). For #12, the lowest (highest) dust concentration was at 9ka (24ka) and was ~1 ppb (~1000 ppb).

PEDAGOGICAL INFORMATION

REFERENCE ONLY

TEACHER GUIDE

MATERIALS LIST

ASSESSMENT STRATEGIES

TIMEFRAME PROVIDED

STANDARDS ALIGNMENT

PROMOTES STUDENT LEARNING (WEAK TO STRONG)

1 2 3 4

COMMENTS: Interactive exercise based on an outstanding paleoclimate dataset.

APPROPRIATE/EFFECTIVE MULTIMEDIA DESIGN (WEAK TO STRONG)

1 2 3 4

COMMENTS: The overlay of plots is really well done.

VISUAL APPEAL (WEAK TO STRONG)

1 2 3 4

TEACHING TIPS: Watch out for the errors noted above and be sure that students understand that a correlation does not mean a cause-effect relationship must exist.

RECOMMENDATIONS FOR DEVELOPER: Some more editorial changes are necessary: typos present throughout,

second sentence on page 7 makes no sense, are insolation values shown on page 7 annual?, questions #1 and #4 on page 8 are the same, question #5 on page 8 implies that Milankovitch cycles have not been clearly related to temperature records, on page 8 make it clearer what "variables" you are referring to, "distribute" is not an accurate verb to use for question #6 on page 8, the answer to question #10 on page 5 is shown.