

# CLIMATE CHANGE COLLECTION SCORECARD

Date: 1/08/05

Reviewer: Carrie Morrill

Name of resource: Analyzing greenhouse gases and global temperature data over time

Sponsoring Organization: NASA

URL: <http://topex-www.jpl.nasa.gov/education/activities/ts1pcac1.pdf>

Site Homepage: <http://topex-www.jpl.nasa.gov/education/activities.html>

RESOURCE WITHIN A SITE? Y / N

FOUND THROUGH DLESE? Y / N

IF SO, WHICH COLLECTIONS? DLESE Community Collection, CRS Annotated Collection

RECOMMENDATION YES YES WITH RESERVATIONS NO

STARS 1 2 3 4 5 (LAME TO STELLAR)

NARRATIVE *In this exercise, students plot the concentrations of several greenhouse gases through time. The exercise is limited in scope, but could be expanded and made more useful based on comments provided below.*

## INTENDED USE

☐ REFERENCE

☐ COMPUTER ACTIVITY

☒ NON-COMPUTER ACTIVITY

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

COMMENTS: *Simple pdf file with no links to outside websites.*

## SCIENTIFIC ACCURACY (NATIONAL ENQUIRER TO NATIONAL GEOGRAPHIC)

1 2 3 4

EVIDENCE IT HAS BEEN REVIEWED FOR ACCURACY? Y / N

COMMENTS: *Some of the background information is out-of-date. In particular, it is stated that scientists are not certain that there is a connection between increased greenhouse gases and rising temperatures. Now, most scientists are certain of this.*

## 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: *The point that humans have caused an increase in greenhouse gases could be made clearer if more data from the pre-industrial period were plotted and the history of human industrialization discussed.*

## APPROPRIATE/EFFECTIVE MULTIMEDIA DESIGN (WEAK TO STRONG)

1 2 3 4

## VISUAL APPEAL (WEAK TO STRONG)

1 2 3 4

TEACHING TIPS: *This exercise could be improved by including longer time-series of greenhouse gas data, expanding back to pre-industrial times. Also, the data from after 1990 could be included. The title of this exercise is misleading, as global temperature data is not considered. It could easily be incorporated, however, to explore the connections between greenhouse gases and global temperature.*

RECOMMENDATIONS FOR DEVELOPER: *Provide more data, including longer time-series of greenhouse gases extending back to pre-industrial times, and global temperature data.*