

CLIMATE CHANGE COLLECTION SCORECARD

Date: February 21, 2005

Reviewer: Kirsten Butcher

Name of resource: Statistics of US Historical Climate Network: Excel PC and Mac

Sponsoring Organization: Starting Point: Teaching Entry Level Geoscience

URL: <http://serc.carleton.edu/introgeo/models/statistical/examples/XLstats1.html>

Site Homepage: <http://serc.carleton.edu/introgeo/index.html>

RESOURCE WITHIN A SITE? **Y** / N

FOUND THROUGH DLESE? **Y** / N

IF SO, WHICH COLLECTIONS? Starting Point, Community Review System (CRS)

RECOMMENDATION YES **YES WITH RESERVATIONS** NO

STARS 1 2 **3** **4** 5 (LAME TO STELLAR)

NARRATIVE (USE OTHER SIDE IF NEEDED)

- This is an interesting and realistic activity. It would be useful to combine this activity with lessons on statistical models (what they are, how they are used, what they can tell us about climate change – this info is linked from this site).
- Educators will need to do some legwork to get this activity ready – they need to explore station data near their location and search the data for a set of data that has 80-100 years of observations (this requires the user to explore for missing data). Some of the Excel instructions in the PDF file are a bit confusing and technical – it will take some practice to be sure the educator understands how to interact with the data using Excel.
- Students are using real data in this activity – it will take some work but it seems to provide students with a reasonably authentic exercise in data exploration and analysis.
- Data retrieval was instantaneous and free. No ordering of data or time consuming downloads.
- Some drawbacks in ease of use and clarity, but overall appears to be a useful activity.

INTENDED USE

REFERENCE

COMPUTER ACTIVITY

NON-COMPUTER ACTIVITY

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

Easily Printed? **Y** / N

BUGS & TECHNICAL DIFFICULTIES (PROBLEMATIC TO ROBUST)

1 2 **3** 4

COMMENTS

- I had some trouble with the site listed for data – the state selection from the map didn't work. Took me a little while to figure out that I could scroll down to my state data.

SCIENTIFIC ACCURACY- FACTUAL ERRORS/OMISSIONS (NATIONAL ENQUIRER TO NATIONAL GEOGRAPHIC)

1 2 3 **4**

EVIDENCE IT HAS BEEN REVIEWED FOR ACCURACY? Y / **N**

COMMENTS – Since the activity uses real data and has students explore the data in Excel, the activity is relatively authentic and provides opportunities for teaching about climate change in addition to scientific methods.

PEDAGOGICAL INFORMATION

REFERENCE ONLY

TEACHER GUIDE

MATERIALS LIST

ASSESSMENT STRATEGIES

TIMEFRAME PROVIDED

STANDARDS ALIGNMENT INDICATED

PROMOTES STUDENT LEARNING (WEAK TO STRONG)

1 2 3 **4**

COMMENTS – If students can be effectively guided through the activity, it offers a number of potential avenues for

student learning. Engaging with real data, exploring data and missing values, making sense of data and its visual displays – all these processes have potential for authentic student learning at a conceptual level.

APPROPRIATE/EFFECTIVE MULTIMEDIA DESIGN (WEAK TO STRONG)

1 **2 3** 4

COMMENTS – More visual examples could be used in the PDF file to better support teacher preparation and understanding. Providing example graphs that should be produced by students is useful – would be even more useful if integrated into the printable teaching guide.

VISUAL APPEAL (WEAK TO STRONG)

1 **2 3** 4

COMMENTS – The site itself isn't terribly appealing or unappealing. It is rather brief, but not overloaded with text or graphics. The printable teaching guide, is text-heavy and could greatly benefit from visual organization and visual examples/screen shots.

TEACHING TIPS: ANNOTATION DESCRIBING HOW SITE COULD BE USED OR ADAPTED FOR CLASSROOM

RECOMMENDATION: ANNOTATION DESCRIBING HOW THE DEVELOPER COULD IMPROVE THE SITE.

Revised 12/3/04