

# Experts heat up over Berkeley Lab scientist's quest to 'calm' climate change debate

Lauren Morello, Environment & Energy Publishing, 4-1-11

The scientist heading up a controversial review of land-surface temperature records has a simple goal.

"What I really hope to do is calm the debate" over climate change, said Richard Muller, a physicist at Lawrence Berkeley National Laboratory and the director of the Berkeley Earth Surface Temperature study (BEST).

But that appears to be a tall order, judging by reaction yesterday to the group's preliminary findings, which drew suspicion from climate skeptics and mainstream climate scientists alike.

BEST's preliminary results show a warming trend of 0.7 degrees Celsius since 1957. That result, which Muller called "unexpected," is similar to the findings of independent analyses by NASA, the National Oceanic and Atmospheric Administration and the U.K. Hadley Centre.

"The world temperature data has sufficient integrity to be used to determine temperature trends," Muller told the House Science, Space and Technology Committee.

That contradicts arguments made by climate skeptics -- including blogger Anthony Watts of "Watts Up With That?" -- who allege that many of the weather stations are located in areas that would bias their observations. A station might be placed in a rural area that is eventually enveloped by development, creating a situation where the urban heat island effect could influence the observations it collects, for example.

A study published last year by researchers at NOAA's National Climatic Data Center found evidence that some weather station temperature data are of poor quality -- but it concluded the problematic data would add a slight bias toward cooling in climate analyses.

Watts -- who Muller called "a hero" for his weather station work -- isn't convinced. And he's not happy about the preliminary analysis by Muller's BEST team, judging by comments he posted on his blog. They include a [letter](#) rebutting Muller's testimony, which Watts submitted yesterday to the House Science panel before its hearing had concluded.

## Calming effort doesn't reach science bloggers

"With his testimony, Dr. Muller has totally destroyed any credibility he might have had with me," Watts wrote on his [blog](#) yesterday. "He might be able to rebuild it by explaining his strange numbers. But to give that kind of erroneous testimony, not in a random paper he might written quickly, but to Congress itself, marks him to me as a man driven by a very serious agenda, a man who doesn't check his work and who pays insufficient attention to facts in testimony."

In an interview after the hearing, Muller said Watts' criticism was somewhat perplexing.

"I didn't feel there was a big disagreement there, but he did," Muller said, referring to the Berkeley study's preliminary results and Watts' latest, as-yet-unpublished analysis of weather station data, which he had previously shared with Muller's team.

Meanwhile, climate scientists said they weren't surprised that Muller's group produced a land-surface

temperature reconstruction very similar to the records maintained by NOAA, NASA and the Hadley Centre.

"Muller's conclusions are completely in line with many previous results -- from interested amateurs and professionals alike," NASA climate scientist Gavin Schmidt wrote on a live-blog of the House hearing published by the journal *Science*. "I doubt very much whether this means that people will stop claiming that there are problems."

Kevin Trenberth, who heads the National Center for Atmospheric Research's Climate Analysis Section, said he's also not surprised that the BEST results mimic existing temperature reconstructions.

"What they have come up with so far, in a preliminary fashion, seems to agree with the so called 'HadCRU' record from the U.K.," Trenberth said. "I'm not altogether surprised. I think that record has a lot of integrity. It's a very conservative record."

As to the quality of the analysis by Muller and his team, Trenberth said he's reserving judgment.

### **Koch Foundation and DOE are major funders**

"They have not published anything," he said. "They have not put anything out. Nothing has been peer-reviewed. The way in which they are going about it has not been scrutinized. Until those details are available, it's difficult to judge what's been done."

But yesterday wasn't the first time the BEST effort has come under scrutiny. Joe Romm, a senior fellow at the liberal Center for American Progress, has called into question the study's funders, which include the Charles G. Koch Charitable Foundation -- which has supported efforts opposing mainstream climate change science.

The Berkeley study effort, overseen by the nonprofit Novim Group, has raised \$623,087. Muller said that would be enough fund one and a half years of operations for the study, which started roughly a year ago.

The U.S. Department of Energy's Lawrence Berkeley National Laboratory has contributed the largest chunk of cash, \$188,587. The Koch foundation contributed another \$150,000, and the effort received \$100,000 each from the William K. Bowes Jr. Foundation and the Fund for Innovative Climate and Energy Research (started by Microsoft founder Bill Gates).

The Ann & Gordon Getty Foundation has contributed \$50,000, and private individuals have given a total of \$14,500.

Raising the cash was slow going, according to Muller, who said it took him about seven months to secure the initial funding from Berkeley Lab. At one point, study team member Art Rosenfeld, a physicist and former California Energy Commissioner, floated the project a loan to pay the salary of its only full-time employee, postdoctoral researcher Robert Rohde.

But a year in, Muller said his team hopes to publish some its results in one to two months. The group hopes to release the information publicly at the same time it submits its work for publication by a peer-reviewed journal.

"We're close to being able to do analyses with 100 percent of the data with corrections put in," Muller said.

Now, the BEST team is considering starting a second analysis -- this time, a review of ocean temperature records.