

# United States Senate

WASHINGTON, DC 20510

March 31, 2010

The Honorable Charles F. Bolden  
Administrator  
National Aeronautics and Space Administration (NASA)  
300 E Street, SW  
Washington, DC

Dear Administrator Bolden:

In light of recent revelations and scientific reports, we are contacting you regarding our continued concerns with the apparent declining credibility of United States climate data. With almost ten percent unemployment, America cannot afford to base its energy policy on flawed data.

We have expressed serious concerns about the climate data that is contained in the United Nation's Intergovernmental Panel on Climate Change (IPCC) 4<sup>th</sup> Assessment Report for Policy Makers, as well as significant amounts of research done at the Climatic Research Unit (CRU) at the University of East Anglia. We have expressed these concerns because of revelations about how CRU scientists manipulated data and the peer review process to achieve a desired temperature record for the IPCC report. In addition, predictions contained in the IPCC report with regard to melting glaciers, extreme weather events, and disappearing rain forests have proven to be based on grey literature and magazine articles that have no scientific basis. The result has been for policy makers to turn to American data as back up for answers to key climate change questions. Unfortunately, it appears that U.S. data is equally flawed and corrupted by questionable scientific practices.

In a series of e-mails obtained through a Freedom of Information Act request by the Competitive Enterprise Institute, additional doubt has surfaced over NASA's Goddard Institute for Space Studies (GISS)'s temperature data. Senior NASA scientist Dr. Reto Ruedy, in a response to *USA Today* reporter Doyle Rice in 2007, stated that it is clear that NASA GISS temperature data was flawed when he advised the reporter to "*continue using NCDC's (NOAA's National Climatic Data Center) for the U.S. means and Phil Jone's [HADCRU3] data for the global means. . . We are basically a modeling group and were forced into rudimentary analysis of global observed data in the 70s and early 80s. . . Now we happily combine NCDC's and Hadley Center data to ... evaluate our model results.*"

We have serious concerns with what this e-mail exchange demonstrates, which is the use of the University of East Anglia's Climate Research Unit (CRU) data in what was thought to be an independent U.S. data set. Unfortunately, it appears that American data is partially derived from the corrupted data set that has been criticized as too political and unscientific as a result of the Climategate scandal.

Even CRU's Phil Jones stated in a candid admission in a BBC interview that "*his surface temperature data are in such disarray they probably cannot be verified or replicated.*" This echoed the emails of their programmer Ian "Harry" Harris who commented on "*[The] hopeless state of their (CRU) database. No uniform data integrity, it's just a catalogue of issues that continues to grow as they're found*" and "*This whole project is SUCH A MESS.*"

Phil Jones admitted *“Almost all the data we have in the CRU archive is exactly the same as in the GHCN [Global Historical Climate Network] archive used by the NOAA National Climatic Data Center.”* NASA’s website states that NASA uses NOAA’s GHCN. We are not aware of any scientific practices at either NASA or the EPA that would find such a disarray and disappearance of data as acceptable for policy making purposes.

We contacted you on February 2<sup>nd</sup> regarding our concerns about NASA’s climate data. Our letter was based on a report written by veteran Meteorologists and researchers Joseph D’Aleo and Anthony Watts entitled *“Surface Temperature Records: Policy Driven Deception?”* The study highlighted that among many other data integrity issues, the NASA Goddard Institute for Space Studies (GISS) and NOAA have not only reduced the total number of temperature weather stations that they gather climate data from, but have ‘cherry picked’ the ones that remain by choosing sites in relatively warmer places, including more southerly locations, or sites close to airports, cities or the sea – which has a warming effect on the temperature record. The result, according to the report, is a temperature record that is *“warmer-than-truthful.”*

We want to also bring to your attention a recent February 27<sup>th</sup> study that has been released by a former NASA physicist, Dr. Edward Long. Dr. Long headed up NASA’s Advanced Materials Program and was involved in the development of several upper atmospheric research satellites. In his study entitled *“Contiguous U.S. Temperature Trends Using NCDC Raw and Adjusted Data for One-Per-State Rural and Urban Station Sets,”* Dr. Long highlights current concerns with how NASA and NOAA collect and adjust their raw climate data. Dr. Long states in his report that *“Both GISS (NASA’s Goddard Institute for Space Science) and NCDC (NOAA’s National Climatic Data Center) have been criticized for their station selections and the protocols they use for adjusting raw data”* and that *“GISS, over a 10-year period has modified their data by progressively lowering temperature values for far-back dates and raising those in the more recent past.”*

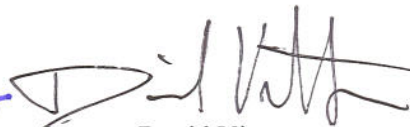
Long also states that NCDC’s *“protocols for adjusting raw data for missing dates, use of urban locations, relocations, etc. has led to an increase in the rate of temperature change for the Contiguous U.S.”* The result of these methods has been to dramatically change the true temperature record of the United States.

We have serious concerns about these recent reports and would appreciate a response to our February 2<sup>nd</sup> letter. Would you be willing to testify before the Senate on the credibility of U.S. data? The American people deserve to know the facts about the science behind our policies.

Sincerely,



Senator John Barrasso, M.D.  
Ranking Member,  
Subcommittee on Oversight  
Senate Environment and  
Public Works Committee



Senator David Vitter  
Ranking Member,  
Subcommittee on Clean Air and Nuclear Safety  
Senate Environment and  
Public Works Committee