Evaluating The Integrity Of Official Climate Records

Tony Heller DDP July 9, 2016
Who Am I?

- BS Geology - ASU
- Masters Electrical Engineering - Rice University
- 20 Years of Microprocessor Design At Intel, Motorola, ST Micro
- Intel i7 Design Team
- Software Development Of Climate And Weather Models For NCAR
- Research Scientist At Los Alamos And Sandia Labs
- Geothermal Energy Research At Los Alamos
- Safety Analysis Report For DOE’s Nuclear Waste Disposal Site
- Imaging Systems For Defense Department And Commercial Drones
- Engineering Google’s Virtual Reality System
- Engineering Remote Surgical Equipment
Who Am I?

- Lifelong Environmentalist
- Testified At My First Congressional Hearing In Support Of Wilderness In 1972
- Volunteer Wilderness Ranger For The USFS
- Full Time Cyclist - I Hate Driving And Tweet About Cycling Almost Every Day
- Promote Mass Transit - If I Can’t Ride, I Take A Bus Or Train
- No Ties To Any Energy Company
- No Funding Other Than Small Donations On My Blog

- Global Warming True Believer From 1980 To 2003
Methodology

- All Data From Official Sources (NOAA, NASA, IPCC, NCAR)
- 10 Years Of Research Combing Archives
- Historical Records Reported From Newspapers
- Wrote Software To Analyze The NOAA GHCN (Global Historical Climatology Network) Daily And Monthly Temperature Data
The PowerPC 604 RISC Microprocessor
Made Functional by
Tony “Debug God” Heller
Most People Believe That Hot Weather Is Becoming More Common And More Intense In The United States

Is This Belief Valid?
80 Years Ago This Week, The US Was Experiencing The Worst Heat Wave In History

THE BEND BULLETIN
JULY 25, 1936

Heat Wave Toll
Over 12,000 in 86 Cities in Week

Washington, July 25 (UP)—The first official figures on the death toll of last week’s heat wave indicated today that literally thousands of lives were lost in the temperatures of 100 degrees and higher throughout a large part of the nation.

The census bureau released mortality statistics today for the week ending July 18 showing 3,332 more deaths in 86 cities than in the worst heat week of 1934.

For the week ended July 18, the bureau reported 12,183 deaths this year compared with 8,851 deaths in the same 86 cities for the week ended July 28 in 1934. The present drought was blamed for a 65 per cent rise in deaths as compared with the corresponding 1935 week, when 7,439 deaths were reported during that week of normal temperatures.
July 9, 1936 Was One Of The Hottest Days In US History
July 9, 1936 was the hottest day on record in New York City - 106 degrees.
July 9, 1936 Was The Hottest Day On Record In Long Branch, NJ - 106 Degrees

LONG BRANCH OAKHURST, NJ Jan-Dec Hottest Daily Maximum Temperature

11 Point Mean Average: 35.7 Min year 2011=28.9 Max year 1936=41.1

July 9, 1936
This Week In 1936, Temperatures Reached 120 Degrees In South Dakota
This Week In 1936, Temperatures Reached 113 Degrees In Seymour, Indiana
More Than 20% Of US All-Time Temperature Records Were Set In 1936
Omaha Summers Used To Be Hotter

![Graph showing temperature trends from 1896 to 2016]

- ASHLAND NO 2, NE Jul 4 Maximum Temperature
- 11 Point Mean Average: 31.4 Min year 1915=20.6 Max year 1936=45.6
Omaha’s Hottest Days Used To Be Much Hotter

**Graph:**
- **ASHLAND NO 2, NE Jan-Dec Hottest Daily Maximum Temperature**
- **11 Point Mean**
  - Average: 39.5
  - Min year 1992=33.9
  - Max year 1934=46.7
Omaha Used To Have Days Over 110 F
Omaha Used To Have More Days Over 100F
Omaha Used To Have More Days Over 90F
Omaha Used To Have Hotter Summer Afternoons

![Graph showing temperature changes over the years]

- ASHLAND NO 2, NE Jun-Aug Average Maximum Summer Temperature
- 11 Point Mean Average: 30.3 Min year 1915=25.7 Max year 1934=35.9
Hottest July 9 In Omaha Was 105 Degrees In 1930
Hottest Temperatures In Omaha Have Declined About 10 Degrees
The US Used To Have Many More Hot Days

Average Percentage Of Days Over 100F (38C) At All USHCN Stations

Red Is Five Year Mean
Areal Coverage Of US Heat Waves Used To Be Much Larger

Percentage Of USHCN Stations To Reach 100F (38C)

Red is five year mean.
The EPA Website Has A Graph Showing The Unprecedented Heat Of The 1930s
The Trouble Begins:
The Next EPA Graph Contradicts The First One
What Is Going On Here?
Figure 2 Doesn’t Match Figure 1
What Is Going On Here?
Figure 2 Doesn’t Match NOAA Temperature Data
NOAA Graphs Currently Show 2.5 Degrees (F) US Warming Since 1895
NOAA Graphs Show Almost Two Degrees (F) US Warming From 1895-1987
In 1989, NOAA said there was no warming from 1895 to 1987.
In 1999, NASA’s James Hansen Also Said The US Was Not Warming

Science Briefs
Whither U.S. Climate? By James Hansen
— August 1999

Empirical evidence does not lend much support to the notion that climate is headed precipitately toward more extreme heat and drought.

in the U.S. there has been little temperature change in the past 50 years, the time of rapidly increasing greenhouse gases — in fact, there was a slight cooling throughout much of the country
In 1986, NASA’s James Hansen Predicted
The US Would Warm 4-6 Degrees From
1958 To 2020
Hansen’s Own Data Didn’t Support His Claim Of 1-2 Degrees Warming From 1958-1986

The Milwaukee Journal - Jun 11, 1986

Hansen said the average US temperature had risen 1 to 2 degrees since 1958, and was predicted to increase 3 or 4 more degrees by 2020.
James Hansen Also Predicted The Arctic Would Be Ice-Free By Now


Hansen, echoing work by other scientists, said that in five to 10 years, the Arctic will be free of sea ice in the summer.

Longtime global warming skeptic Sen. James Inhofe, R-Okla, citing a recent poll, said in a statement, “Hansen, (former Vice President) Gore and the media have been trumpeting man-made climate doom since the 1980s. But Americans are not buying it.”

But Rep. Ed Markey, D-Mass., committee chairman, said, “Dr. Hansen was right. Twenty years later, we recognize him as a climate prophet.”
Al Gore Predicted The Arctic Would Be Ice-Free By Now
Satellites Show That The Arctic Is Full Of Ice
Al Gore Also Said The Interior Of The Earth Is Hotter Than The Sun

Al Gore: Earth's Interior 'Extremely Hot, Several Million Degrees'

By Noel Sheppard | November 18, 2009 | 10:27 AM EST
NASA’s James Hansen Predicted That Much Of Lower Manhattan Would Underwater By 2008

Extreme weather means more terrifying hurricanes and tornadoes and fires than we usually see. But what can we expect such conditions to do to our daily life?

While doing research 12 or 13 years ago, I met Jim Hansen, the scientist who in 1988 predicted the greenhouse effect before Congress. I went over to the window with him and looked out on Broadway in New York City and said, “If what you’re saying about the greenhouse effect is true, is anything going to look different down there in 20 years?” He looked for a while and was quiet and didn’t say anything for a couple seconds. Then he said, “Well, there will be more traffic.” I, of course, didn’t think he heard the question right. Then he explained, “The West Side Highway [which runs along the Hudson River] will be under water. And there will be tape across the windows across the street because of high winds. And the same birds won’t be there. The trees in the median strip will change.” Then he said, “There will be more police cars.” Why? “Well, you know what happens to crime when the heat goes up.”
NOAA Is Now Altering The Data
Blue Shows Measured  Red Shows Reported

USHCN Average Temperature At All Stations
Final Vs. Raw

Degrees F

Year

1880 1900 1920 1940 1960 1980 2000 2020
Data Is Being Altered About 1.5 F
Almost The Entire Trend Is Due To Adjustments
Most Of The Recent Alterations Are Due To Station Data Loss And Fabrication
Measured Data Shows Cooling Since 1990
Fabricated Data Shows Warming

USHCN Temperature Since 1990
Measured Vs Fabricated

Year
Temperature (°F)
51 52 53 54 55 56 57

- Measured
- Linear (Measured)
- Fabricated
- Linear (Fabricated)

f(x) = 0.026x + 2.469
f(x) = -0.011x + 74.524
Missing Rural Stations Are Being Homogenized With Warmer Urban Temperatures
NOAA Data Adjustments Correlate Almost Perfectly With Atmospheric CO2
The Ultimate Example Of Confirmation Bias
145 Years Of Imaginary Climate Change

every season is sure to be "extraordinary," almost every month one of the driest or wettest, or windiest, coldest or hottest, ever known. Much observation, which ought to correct a tendency to exaggerate, seems in some minds to have rather a tendency to increase it.
What About Global Temperatures? Current NASA Graphs Show A Steady Increase Since 1880
In 1974, NCAR showed no temperature increase from 1870 to 1970.
1975 National Academy Of Sciences Graph Showed No 1900-1970 Warming

Annual mean temperature of the Northern Hemisphere.

March 1, 1975
During the last 20 to 30 years, world temperature has fallen, irregularly at first but more sharply over the last decade.

U.S. NATIONAL SCIENCE BOARD, 1974

1976 National Geographic Graph Showed No 1880-1975 Warming
Everyone Recognized The 1940-1970 Cooling

International Team of Specialists Finds No End in Sight to 30-Year Cooling Trend in Northern Hemisphere

An international team of specialists has concluded from eight indexes of climate that there is no end in sight to the cooling trend of the last 30 years, at least in the Northern Hemisphere.
NASA No Longer Shows This 1940-1970 Cooling
Overlay Of The Current NASA Graph On The 1974 NCAR Graph
In 1939, Scientists Reported Rapid Greenland Melting And Glaciers Nearing “Catastrophic Collapse”
In 1958, Scientists Said The Arctic Was Melting Rapidly, And Might Be Ice-Free Within A Generation.
NASA Has Repeatedly Altered Their Own Data, Making Pre-1980 Temperatures Cooler Doubling 1880-1980 Warming By Altering Data
Since The 1990 IPCC Report, NASA Has Greatly Increased Recent Temperatures
The Emergence Of The Hockey Stick

[Graph showing temperature changes over time, with labels for Little Ice Age and Medieval Warm Period.]
The Emergence Of The Hockey Stick

1990 IPCC Report Showed Long-Term Cooling

Figure 7.1: Schematic diagrams of global temperature variations since the Pleistocene on three time scales: (a) the last million years, (b) the last ten thousand years, and (c) the last thousand years. The dotted line nominally represents conditions near the beginning of the twentieth century.
NASA Also Showed Long-Term Cooling

James E. Hansen, Andrew A. Lacis, David H. Rind, and Gary L. Russell

(b) is based on temperatures in central England, the tree limit in the White Mountains of California, and oxygen isotope measurements in the Greenland ice (W. Dansgaard of the Geophysical Isotope Laboratory, University of Copenhagen, pers. comm.), with the temperature scale set by the variations in the last 100 years.
The IPCC Erased The Cooling In Their 2001 Report

Data from thermometers (red) and from tree rings, corals, ice cores and historical records (blue).
Climategate:
Michael Mann “Hid The Decline” In Tree-Ring Data
Both NASA And Michael Mann “Hid The Decline”
Climategate E-Mails Show That Experts Wanted To Get Rid Of The 1940’s Warmth

From: Tom Wigley <wigley@ucar.edu>
To: Phil Jones <p.jones@uea.ac.uk>
Subject: 1940s
Date: Sun, 27 Sep 2009 23:25:38 -0600
Cc: Ben Santer <santer1@llnl.gov>

So, if we could reduce the ocean blip by, say, 0.15 degC, then this would be significant for the global mean — but we’d still have to explain the land blip.

It would be good to remove at least part of the 1940s blip, but we are still left with “why the blip”.

NASA’s Top Climatologist Reported “Significant” Antarctic Cooling In 2004

Shindell and Schmidt 2004


While most of the Earth warmed rapidly during recent decades, surface temperatures decreased significantly over most of Antarctica. This cooling is consistent with circulation changes associated with a shift in the Southern Annular Mode (SAM). It has been suggested that both Antarctic ozone depletion and increasing greenhouse gases have contributed to these trends. We show that a climate model including the stratosphere and both composition changes reproduces the vertical structure and seasonality of observed trends. We find that the two factors have had comparable surface impacts over recent decades, though ozone dominates above the middle troposphere. Projected impacts of the two factors on circulation over the next fifty years oppose one another, resulting in minimal trends. In contrast, their effects on surface climate reinforce one another, causing a departure from the SAM pattern and a turnaround in Antarctic temperatures, which rise more rapidly than elsewhere in the Southern Hemisphere.
This Cooling Was Shown In NASA’s 2005 Map
Between 2005 And 2007, NASA Changed Antarctica From Cooling To Warming
In 2004, Britain’s Chief Scientist Predicted We Would All Have To Move To Antarctica

Why Antarctica will soon be the only place to live - literally

By Geoffrey Lean, Environment Editor

Sunday, 2 May 2004

Antarctica is likely to be the world’s only habitable continent by the end of this century if global warming remains unchecked, the Government’s chief scientist, Professor Sir David King, said last week.
In 2004, Scientists Predicted That Refugees Would Be Fleeing To Antarctica
NASA Has Done The Same Thing With Sea Level
NASA Has Done The Same Thing With Sea Level
NOAA Says: "the absolute global sea level rise is believed to be 1.7-1.8 millimeters/year."

NASA Claims Sea Level Is Rising Twice That Fast, at 3.4 mm/year

In 1982, NASA said 1 mm/year
The 1990 IPCC Report Said There Was No Acceleration In Sea Level Rise

9.3.3 Accelerations in Sea Level Rise
Is there evidence of any "accelerations" (or departures from long-term linear trends) in the rate of sea level rise? From examinations of both composite regional and global curves and individual tide gauge records, there is no convincing evidence of an acceleration in global sea level rise during the twentieth century. For longer periods, however, there is weak evidence for an acceleration over the last 2-3 centuries.
Tide Gauges Like This One At Manhattan Show No Acceleration In Sea Level Rise
Conclusion:

Climate Data Is Being Manipulated To Increase Climate Alarm, Using Techniques That Are Unsupportable And Would Not Be Tolerated In The Private Sector.
Dedicated To Dr. Bill Gray
A True Scientist