

WHY NOAA AND NASA PROCLAMATIONS SHOULD BE IGNORED

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“The prospect of domination of the nation’s scholars by Federal employment, project allocations, and the power of money is ever present - and is gravely to be regarded.”

— Dwight Eisenhower, 1961 Farwell Address to the Nation

[NOAA](#) and [NASA](#) announced this week that 2010 was tied for the warmest year.

NOAA’s Dr. Lubchenko, when she was president of AAAS in 1999, urged *“Urgent and unprecedented environmental and social changes challenge scientists to define a new social contract ... a commitment on the part of all scientists to devote their energies and talents to the most pressing problems of the day, in proportion to their importance, in exchange for public funding.”*

NOAA and NASA are receiving big dollars \$437M (NOAA) and \$438M (NASA) in climate research funding and are expected to provide the information needed to support environmental, social and political agendas. NOAA and NASA also benefited from funding for climate change research from the Recovery Act of 2009 with up to \$600 million. You can see how quickly the political operatives and the media enablers respond to those press releases (Hill story [here](#)).

The pressure has been mounting. The public doubt about global warming has been increasing in recent years given Climategate, and how promises of warm snowless winters failed. After cold and snowy winters in 2007/08 and 2008/09, the winter of 2009/10 was the coldest ever in parts of the southeast, and in parts of Siberia and the coldest since 1977/78 or 1962/63 in many parts of the United States, Europe and Asia. This past December was the second coldest in the entire Central England Temperature record extending back to 1659. It was the coldest ever December in diverse locations like Ireland, Sweden, and Florida. Reluctantly, alarmists changed their tune and the promise of warm and snowless winters as recent as 4 years ago morphed into global warming means cold and snowy winters.

In Australia they promised major drought and blocked dams and flood mitigation projects, but when devastating floods occurred, they blamed that on global warming and again enviros and government agencies escaped the blame.

In fact environmentalists now attribute all weather to global warming – cold, warm, drought and flood. They call it ‘climate disruption’.

But the climate has not been cooperating in a way that is convincing the public they have to sacrifice even more to stop a problem they don’t sense is real. Just imagine if they knew how much they really would cost and how little these deep sacrifices would change the climate.

In recent years, temperatures stopped warming (even Phil Jones of the UK Climate Research Unit after Climategate admitted there has been no statistically significant warming since 1995 (15 years) and between 2002 and 2009, the global temperatures had declined 0.12C (0.22F). NOAA is [on record](#) declaring that: *“The [computer model] simulations rule out (at the 95% level) zero trends [in global temperatures] for intervals of 15 yr or more, suggesting that an observed absence of warming of this duration is needed to create a discrepancy with the expected present-day warming rate.”*

To try and stop the bleeding, NOAA and NASA took steps to reduce or eliminate the cooling.

This aggravated what already was an already a bad situation. Remember CRU programmer’s Ian ‘Harry’ Harris’s frustrated rants in his log as revealed in Climategate

“[The] hopeless state of their (CRU) data base. No uniform data integrity, it’s just a catalogue of issues that continues to grow as they’re found...I am very sorry to report that the rest of the databases seem to be in nearly as poor a state as Australia was. There are hundreds if not thousands of pairs of dummy stations...and duplicates... Aarrggghhh! There truly is no end in sight. This whole project is SUCH A MESS. No wonder I needed therapy!!”

In an email, CRU’s Director at the time Phil Jones acknowledges that CRU mirrors the NOAA data. *“Almost all the data we have in the CRU archive is exactly the same as in the Global Historical Climatology Network (GHCN) archive used by the NOAA National Climatic Data Center. “And NASA uses NOAA data applying their own adjustments as they note in their documentation here.*

The global surface-station data is seriously compromised. The data suffers significant contamination by urbanization and other local factors such as land-use/land-cover changes.

These factors lead to significant uncertainty and a tendency for over-estimation of century-scale temperature trends. A conclusion from all findings suggest that global data bases are seriously flawed and can no longer be trusted to assess climate trends or rankings or validate model forecasts. And, consequently, such surface data should be ignored for decision making.

“The current analysis uses surface air temperatures measurements from the following data sets: the unadjusted data of the Global Historical Climatology Network (NOAA NCDC GHCN), United States Historical Climatology Network (NOAA NCDC USHCN) data, and SCAR (Scientific Committee on Antarctic Research) data from Antarctic stations.”

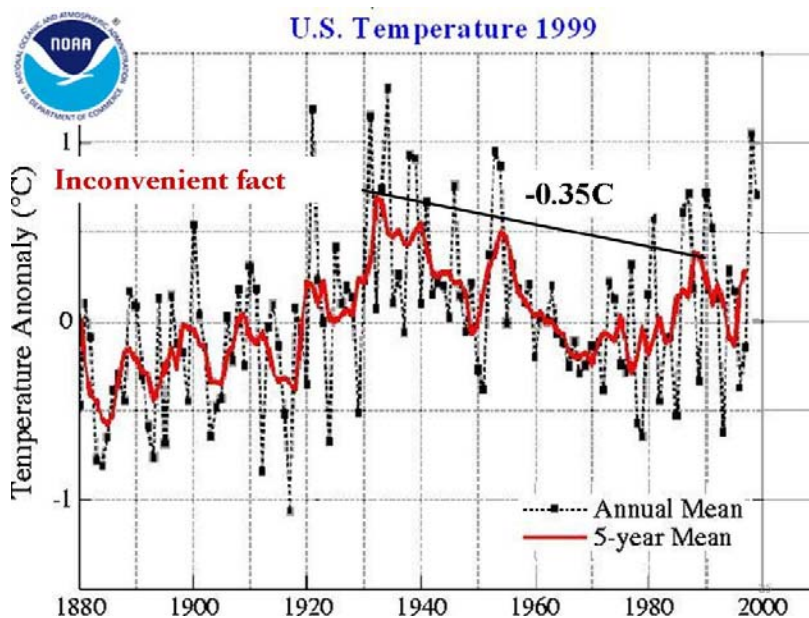
See the [detailed working paper](#) I coauthored with Anthony Watts

and others in which we concluded: *“There has clearly been evidence of some cyclical warming in recent decades, most notably 1979 to 1998. However, the global surface-station data is seriously compromised. The data suffers significant contamination by urbanization and other local factors such as land-use/land-cover changes. There was a major station dropout, which*

occurred suddenly around 1990 and a significant increase in missing monthly data in the stations that remained. (Note: This increases uncertainty – greatest in regions where they claim the warming is the greatest). There are uncertainties in ocean temperatures; no small issue, as oceans cover 71% of the earth's surface. These factors lead to significant uncertainty and a tendency for over-estimation of century-scale temperature trends. A conclusion from all findings suggest that global data bases are seriously flawed and can no longer be trusted to assess climate trends or rankings or validate model forecasts. And, consequently, such surface data should be ignored for decision making”.

Numerous peer-reviewed papers have estimated that these local issues with the observing networks may account for **30%, 50% or more** of the warming shown since 1880.

In the original NOAA US data base, NOAA had an adjustment for urban heat island contamination. The combination of longer term station stability and this adjustment made that data base (1221 climate stations), the best in the world. This is what it showed in 1999.



Note even with the super El Nino of 1997/98, the trend from the 1930s/1940s was down. Indeed James Hansen in 1999 remarked “The U.S. has warmed during the past century, but the warming hardly exceeds year-to-year variability. Indeed, in the U.S. the warmest decade was the 1930s and the warmest year was 1934.”

NOAA and NASA had to constantly explain why their global data sets were showing warming and the US, not so much. NOAA began reducing the UHI around 2000 and then in USHCN version 2 released for the US in 2007 and individual stations in 2009, the urban heat island adjustment was eliminated which resulted in an increase of 0.3F in warming trend since the 1930s. See animating GIF [here](#).

David Easterling, Chief of the Scientific Services Division at NOAA in one of the NASA FOIA emails noted: “One other fly in the ointment, we have a new adjustment scheme for USHCN (V2) that appears to **adjust out** some, if not most, of the “local” trend that includes land use change and urban warming.”

Also, as Anthony Watts’ team of volunteers documented, 90% of the US climate stations were found to not meet government standards. NOAA first denied it was an issue (Menne 2009) but then asked the government for \$100 million to upgrade/correct the siting of 1,000 climate stations.

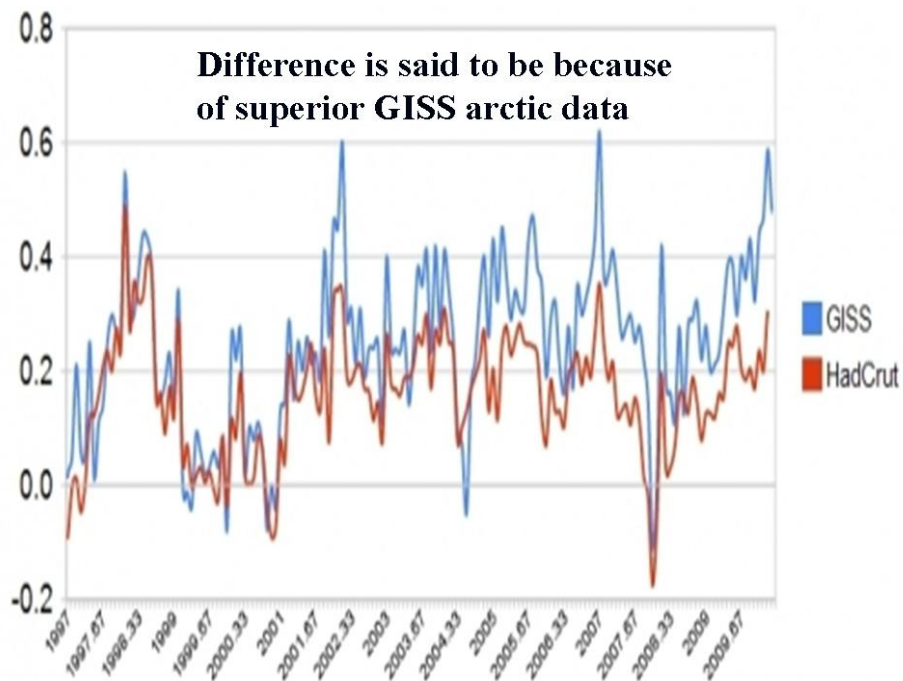
Is NASA better? In a 2007 email obtained under FOIA to Doyle Rice of the USATODAY, NASA's Dr. Reto A. Ruedy replied with an unequivocal no. He admitted that some of their own procedures led to less accurate readings. "My recommendation to you is to continue using NCDC's data for the U.S. means and [East Anglia] data for the global means".

James Hansen authored a FAQ on the GISS website about [The Elusive Absolute Surface Air Temperature](#) (SAT) in which he states "To measure SAT we have to agree on what it is and, as far as I know, no such standard has been suggested or generally adopted."

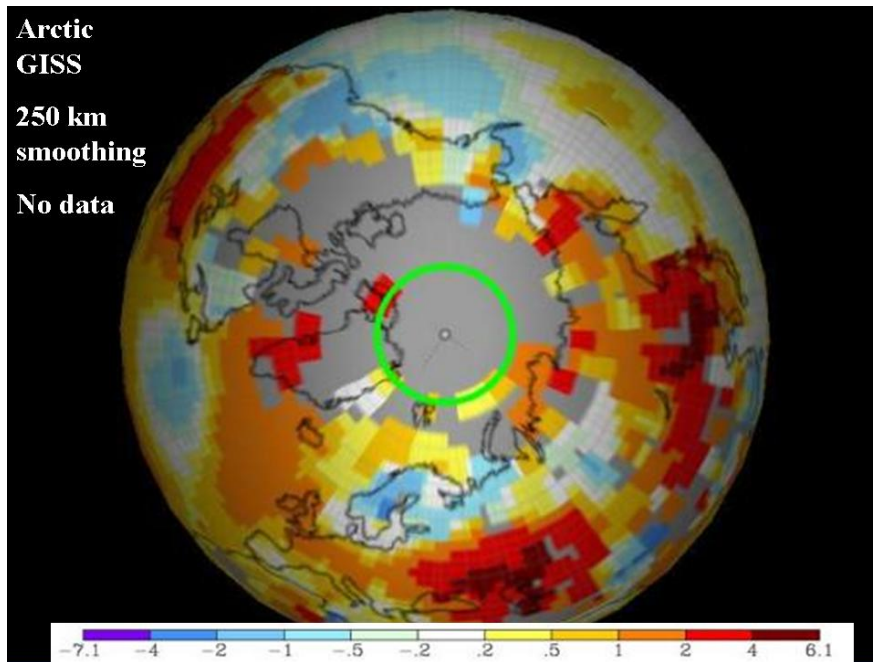
But NASA is now front and center with not only a monthly and annual ranking but one to a precision of hundredths of a degree (even though the data is measured in tenths of degrees C). They have been battling with NOAA to see who could come up with a higher value. Both exceed the Hadley CRU data.

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NASA claimed that they were warmer than the other data bases because they had better coverage in the arctic. You can see how they have diverged from Hadley just since 1997.

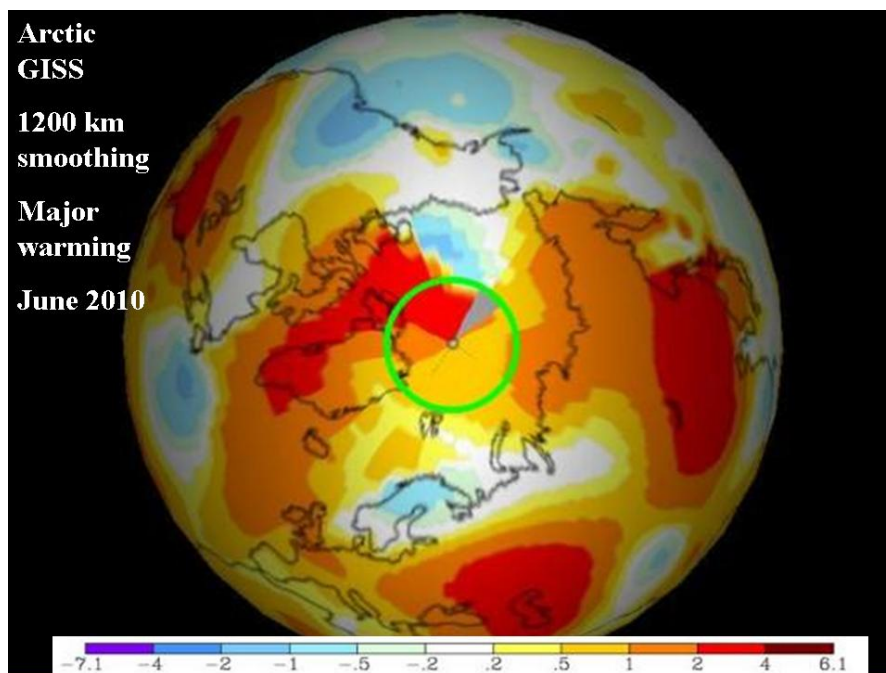


But NASA on its website has a tool which enables one to pick how far to search for data before analysis shows that for 250 km, the arctic has no coverage.

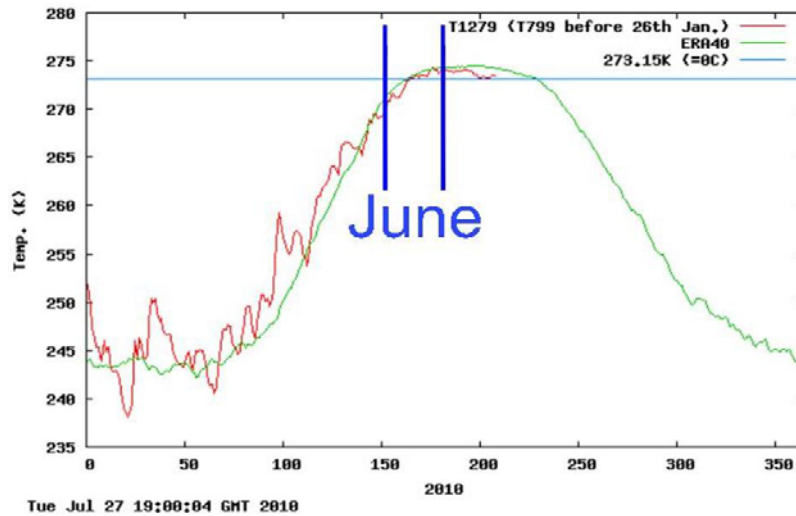


When you expand the search to 1200 km (700 miles or approximately the distance from New York City to Birmingham), you fill in the arctic by extrapolating from land.

This inventing data step is not done by CRU.



The warmth is [not shown](#) in data bases like DMI and GHCN that include actual arctic station data.



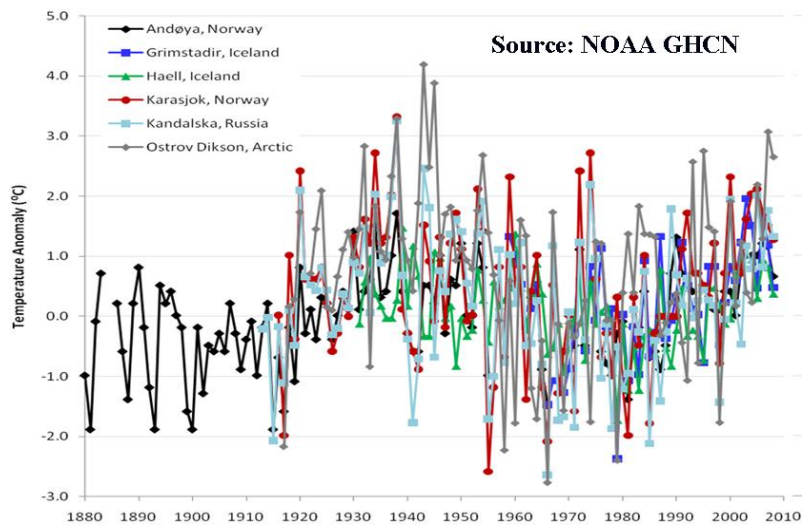
Daily mean temperatures for the Arctic area north of the 80th northern parallel, plotted with daily climate values calculated from the period 1958-2002 - DMI

Over time in the NASA global data, the warming trend has been steadily increasing. This has been accomplished by cooling off prior decades while increasing the warming in recent years.

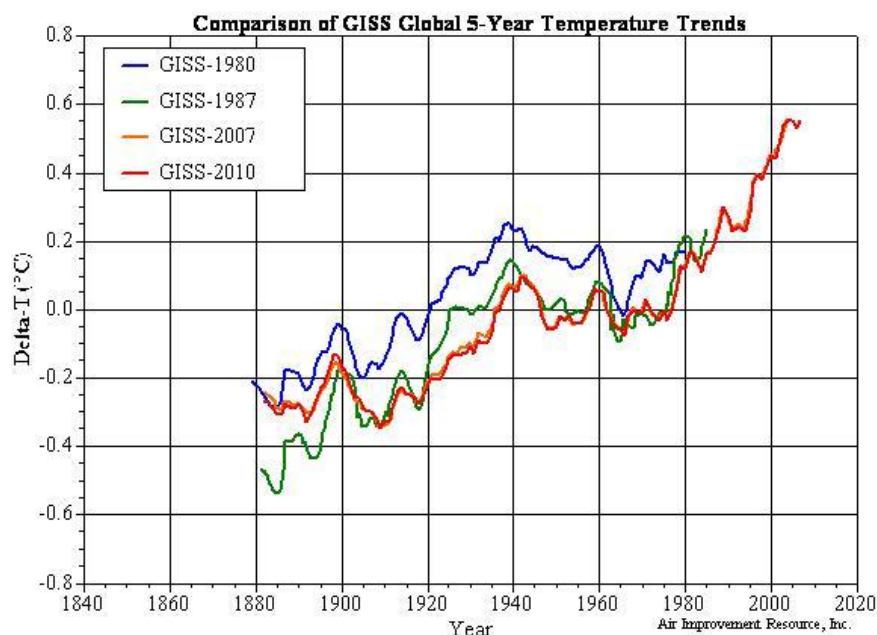
Norway which extends into the arctic had the coldest year since 1941. Yes Greenland was relatively warm, but that was due to the high latitude blocking that prevailed there.

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Arctic Region Temperatures



<http://diggingintheclay.files.wordpress.com/2010/10/arctic-usa.png>

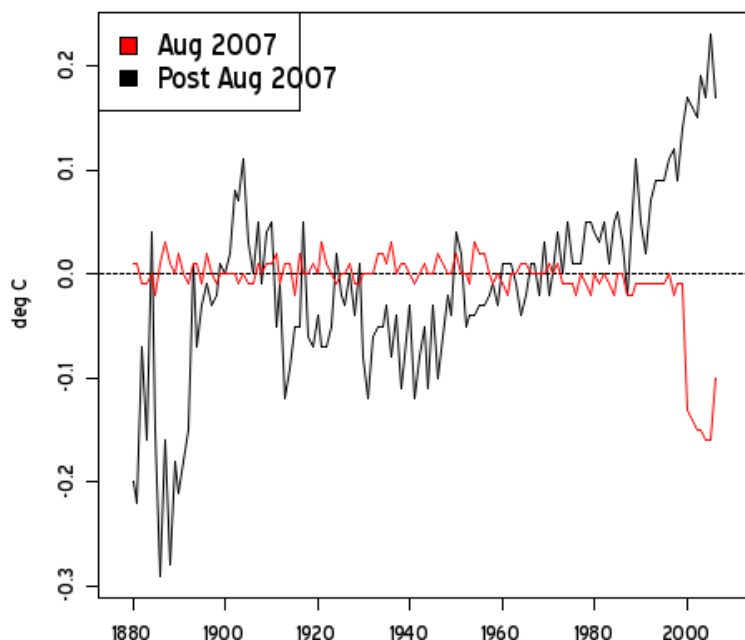


The frequency and direction of NASA US adjustments stepped up in 2007 as temperatures began to cool ([here](#)). This is largely the NOAA shift to USHCNv2 so both data bases are corrupted.

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NASA/NOAA homogenization process has been shown to significantly alter the trends in many stations where the siting and rural nature suggest the data is reliable. In fact, adjustments account for virtually all the trend in the data. Unadjusted data for the best sites/rural shows cyclical multi-decadal variations but no net long term trend as former NASA scientist Dr. Ed Long showed [here](#). He showed however that after adjustment, the rural data trend was made consistent with the urban data set with an artificial warming introduced.

NASA (GISS) US48 Adjustments



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In the graph above [from Climate Audit](#), the difference after versions 2 is dramatic. So in the data sets, urban warming is allowed to remain and the warm bias is artificially introduced into the rural and/or well sited data sets which in their unadjusted

state show no warming.

Though both NOAA and NASA have resisted FOIA requests for release of all the unadjusted data and documentation for all the adjustments made, that may change in the new congress. The Data Quality Act requires that any published data must be able to be replicated by independent audits. That is currently not possible given the resistance posed despite promises of transparency.

Georgia Tech's Dr. Judith Curry's comments on Roger Pielke Jr.'s blog support such an independent effort:

In my opinion, there needs to be a new independent effort to produce a global historical surface temperature dataset that is transparent and that includes expertise in statistics and computational science.

"In my opinion, there needs to be a new independent effort to produce a global historical surface temperature dataset that is transparent and that includes expertise in statistics and computational science...The public has lost confidence in the data sets...Some efforts are underway in the blogosphere to examine the historical land surface data (e.g. such as GHCN), but even the GHCN data base has numerous inadequacies."

So is 2010 the warmest year? ... Don't bet on it!





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