# YOU DON'T NEED A PHD TO SPOT OUTRAGEOUSLY BAD SCIENCE

by Joanne Nova





SPPI ORIGINAL PAPER 🔶 Release 6/29/2011

# YOU DON'T NEED A PHD TO SPOT OUTRAGEOUSLY BAD SCIENCE

by Joanne Nova | release 6/29/11

#### **SUMMARY FOR POLICY MAKERS**

The Utah State Legislature produced HJR 12<sup>1</sup>, calling for the EPA to substantiate its claims about carbon dioxide. It's the most obvious of statements, so mundane it shouldn't even be necessary. How, you wonder, could any scientist complain about that? (What *is* science if its claims are *not* substantiated?) Nonetheless, the Utah Legislature have been criticized (and twice<sup>2, 3</sup>) by a small cadre of PhDs at Brigham Young University (BYU). Disturbingly these scientists don't appear to have examined the empirical evidence themselves, and merely repeat the conclusions of others. Worse, their criticisms are filled with logical errors, baseless assertions and mistaken assumptions.

### So Ca

Disturbingly, these scientists don't appear to have examined the empirical evidence themselves, and merely repeat the conclusions of others. Worse, their criticisms are filled with logical errors, baseless assertions and mistaken assumptions.

### 8003

- ✓ Totalling the errors, the 21 PhD's from BYU score minus 10 for logic and reason a scandalous deficiency in graduates with doctorates. Will BYU distance itself from such unscientific documents and provide better training? Surely the university aims higher than this?
- ✓ They provide no empirical evidence to substantiate the core EPA or IPCC claims that man-made emissions will drive up temperatures by  $2 6^{\circ}$ C by the time CO<sub>2</sub> doubles.
- ✓ Simply repeating the decrees of committees, without analysing the arguments and looking at the evidence is the kind of shortcut we'd expect from high school students. It's a lazy cop-out for a journalist, let alone a scientist. Argument from authority is cheap spin. It's fitting for glossy brochures that sell holiday resorts (*Did you know 84% of travel agents recommend Wrangel Island?*) but it's the antithesis of open scientific inquiry.
- ✓ Team BYU defend the undefendable the scientists who hide data, lose records, and manipulate the peer review process. The BYU team make excuses for scientists who talk about ways to deceive the public and who discuss ways to dodge FOI laws. Why are they still defending a graph that was so inept, the researchers could have used random numbers instead of data and still "found" the same answer? The graph goes against hundreds of other studies, and was categorically dismembered in the peer reviewed literature.
- ✓ The BYU team *assume* that international committees are producing honest unbiased work and would readily promote results which would ultimately render the committee itself unnecessary. Simple common sense.

Team BYU defend the undefendable — the scientists who hide data, lose records, and manipulate the peer review process.

SOUS

S

The good name of science has been exploited by self serving bureaucrats and big bankers who stand to benefit from carbon based legislation and trading mechanisms<sup>4</sup>. Far from serving science, the BYU team break the most basic of science tenets and unwittingly act as foot-soldiers for the bureaucrats and bankers.

To show that HJR 12 is unnecessary, all the BYU scientists have to do is to *substantiate* the EPA's claims. Everything less adds bluster, confusion or distraction to the task, a task that scandalously, damningly, apparently cannot be met.

The crumbling state of university science is laid bare in their letters.

#### THE DEATH OF REASON



**Sock** The only thing the BYU team shows with any certainty is that having a PhD doesn't mean you can reason.

80 G

The first three are stock-standard fallacies acknowledged for twenty-odd centuries. In the end, the BYU scientists are so unscientific, the real question is why BYU does not admonish them and distance itself from such poor reasoning. Their comments seriously call the reputation of BYU science into question — don't they teach logic and reason at BYU and demand it be used correctly? BYU can't get out of the implications just because the letter-writers don't officially speak for BYU, they are either studying or working there. They use their academic titles to bolster their point. If BYU says nothing, it is tacitly acknowledging that this type of sloppy reasoning is du rigueur in their science faculty.

The only thing the BYU team shows with any certainty is that having a PhD doesn't mean you can reason.

Read the BYU letter with a sharp eye for actual evidence instead of secondary claims that the evidence is there "somewhere" vaguely within an IPCC chapter or buried under hundreds of opinions. Opinions are not evidence and the existence of committee reports doesn't scientifically substantiate *anything*.

#### ARGUMENT FROM AUTHORITY - "THE GODS OF SCIENCE HAVE SPOKEN!"

The BYU scientists mistakenly think that opinions *are* evidence. A true scientist doesn't learn about the planet from secondary sources, they go straight to the primary data – the readings from thermometers, weather-balloons, satellites or ice cores. The *opinions* ought to have evidence to back them up. Why not just talk about *the evidence*? Could it be that everyone just *assumes* someone else has THE magic paper that no one can name?

The second letter of the BYU scientists, dated April 2, 2010, is one long argument from authority. They wave the magic elite wand of science-wizardry, as if only the anointed could follow the explanations. It implies the rest of the population is too stupid to be able to make a reasoned decision from listening to both sides of the scientific community. They reel out the right motherhood lines, "let skeptics speak", but then immediately undo it all with the behest to "go with consensus, and ignore the fringe". There's no mention of choosing the side with the *best empirical evidence*, or marking down the team who makes logical errors. In the BYU world of science, practically the only

# So Ca

Wave the magic elite wand of science-wizardry, as if only the anointed could follow the explanations. It implies the rest of the population is too stupid to be able to make a reasoned decision from listening to both sides of the scientific community.

### 80 CS

experiments they refer to are database searches for peer reviewed articles — not that they want to *read* those articles, they just want to count them: The best tally wins.

If only we'd known 100 years ago that the way to understand the climate was to just ask the experts to vote. We could have saved all that money we spent on satellites, and just done a referendum of professors.

If the IPCC has referenced *hundreds of papers*, that could just mean they've created A Big List. Whether the glorified committee in Geneva has managed to correctly weight and analyze those hundreds of papers is an entirely different matter.

In their second letter, the BYU team gives away just how empty their toolbox of logic is:

...we consider it preposterous to claim that over 90% of any large body of scientists would agree on any point that is not backed up by a considerable body of evidence.

So they can't name any peer reviewed papers; can't even name the *kind* of evidence that would apply, all they have left is their assertion about preposterousness. Is this what modern science is reduced to? A large group of experts "could not be wrong"? Heck No. Not like the scientists who thought the <u>continents could not move</u>, that stomach ulcers were caused by stress, that heavier than air flight was impossible (even *after* the Wright brothers had actually done it), and cloning mammals from an adult cell would be impossible (<u>Hello Dolly</u>). Then of course, there were all those thousands of dietary experts who told us

that if we just ate less fat and more carbs, we would be so much slimmer. No, the experts are *never* wrong.

Note that Team BYU assume that the evidence is there. It's analysis by groupthink. It's a dire

**Soca** Note that Team BYU <u>assume</u> that the evidence is there. It's analysis by groupthink. It's a dire failing in a scientist.

80G

failing in a scientist. They talk theoretically about evidence, but in practice only provide "opinions". It's positively, categorically, *unscientific*. Could they even *consider the possibility* that the committees might be wrong? How closed are these minds?

Neither the IPCC, nor any of the science associations that support its catastrophic forecasts can name a single paper with empirical evidence that directly supports their claims of man-made induced warming greater than 1.3 degrees C. The BYU scientists ought to be demanding that these bureaucrats who want *our* money substantiate *their* claims.

A true scientist invites anyone who disagrees to express their doubts in full. It's only by exposing theories to the most brutal of

cross-analysis that a scientist learns if their theory has the one thing that counts — it can't be falsified.

#### THE SCIENCE: POINT BY POINT

# **1. HJR 12** CLAIMS THE **EPA** LEGISLATION IS BASED ON FLAWED DATA AND DECEPTIVE PRACTICES.

The simple answer is "Yes". It is. This is documented (see the <u>ClimateGate Analysis</u>). The BYU scientists dispute this with weak excuses ... a "trick", they say, is just a word scientists use. Sure. But when a scientist says it's a trick to "hide the decline" there is no interpretation other than the *intent to deceive*. It is not a "trick" to get the office printer to work. It is a trick to hide evidence. The deceptive behavior is repeated in email after email. These scientists have engaged in repeated attempts to keep their own exchanges secret.

I hope I don't get a call from Congress! I'm hoping that no-one there realizes I have a United States Department of Energy grant, and have had this (with Tom Wigley) for the last 25 years.

Phil Jones

This is taxpayer-funded communication about taxpayer-funded "intergovernmental work". These researchers show no respect for science, nor sense of public service.

# ഗ്രര

When a scientist says it's a trick to "<u>hide the decline</u>" there is no interpretation other than the <u>intent</u> to <u>deceive</u>. It is not a "trick" to get the office printer to work.

80CS

6

Mike,

Can you delete any emails you may have had with Keith regarding the latest Intergovernmental Panel on Climate Change report? Keith will do likewise.... Can you also email Gene and get him to do the same? ... We will be getting Caspar to do likewise.

#### Phil Jones

Don't any of you three tell anybody that the United Kingdom has a Freedom of Information Act!

Phil Jones

Every graph needs uncertainty bars, and having them is all that matters. It seems irrelevant whether they are right or how they are used

Phil Jones

... please don't pass this along to others without checking with me first. This is the sort of "dirty laundry" one doesn't want to fall into the hands of those who might potentially try to distort things...

Michael Mann

They discuss at least three ways they can avoid FOIs (bear in mind that scientists shouldn't *need* to do FOIs in the first place). They chat about ways they can effectively sabotage their provision of "files" so that the software will be unusable.

# ୧୬୦୧

Yet the world is being asked to "buy" a two trillion dollar trading scheme from experts who hide things from us. Whatever you *can say* about this behaviour, you can't say it's an example of honest, conscientious workers whose main interest is unravelling how our climate works.

These are the same people who have created an unverifiable analysis we are asked to trust. If a used car salesman was caught saying "We just used a *trick* to *hide a decline* in that car's performance..." you don't need to be scientist to know you are being had. Yet the world is being asked to "buy" a two trillion dollar trading scheme from experts who hide things from us.

Damningly, few of the world's other climate scientists have stood up to declare that the East Anglia Unit's behavior is professionally reprehensible. Therefore the majority condone it. Most of the field of climate science has yet to step out from under this cloud.

#### a) CRU work is unverifiable.

Raw data for scientists is like receipts for accountants. No one can reproduce an experiment if they don't have the raw data, the entire methodology, ALL the adjustments and all the reasons for those adjustments. Sometimes the method is so complex that you have to have

the same software that was used to adjust the data. The "Team" give out parts of this information, but never the complete set. No one can check their work. To make it worse, they have a long history of doing their utmost to prevent people from repeating their work.

"We have 25 years or so years invested in this work. Why should I make the data available to you when your aim is to find something wrong with it."

Phil Jones, 2005.

Imagine they were accountants for an entity called East Anglia Corporation and they told the IRS auditor he couldn't have their receipts — they would be jailed. If they were submitting a drug for FDA approval, but refused to hand over all the details of the drug trials — their application would be binned.

There are those who claim the data is publicly available. They refer to *adjusted* data, not *raw* data. The UK Met Office, which relied on the CRU analysis, has said they will <u>have to recreate</u> the full 160 year record of climate data, which will *take three years*. Obviously what is decidedly *not available* is a set of data files with the original *raw* global data. (Three years is one long "download.")

#### b) The real meaning of the hidden decline.

The "decline" is the one where tree rings awkwardly record that the world got colder from the 1960's to the mid-1970's, while the thermometers on the other hand, followed a different path.



For eare those who claim the data is publicly available. They refer to <u>adjusted</u> data, not <u>raw</u> data.

You might think it makes sense to choose thermometer recordings instead of "tree-ringthermometers" but if you want to compare temperatures back to 1400, there just aren't any thermometers to do it with, let alone a global network reporting back to Henry IV. Even in 2010 it's not that simple to measure the world's temperature with thermometers. There aren't many spots in the world where a working thermometer in 1960 is still in exactly the same spot, surrounded by exactly the same things, and being read at the same time of day.

The decision makers need to know about this disparity. It could be the canary in the coal mine – either one, or both of these two data sets is wrong.

- 1. **Maybe we should toss** *all* **the tree-rings out the window?** Isn't it just a bit too rich to believe that tree rings are accurate from 1400–1960, but then go all askew? If tree-rings don't work as thermometers *after* 1960 why trust them as historic thermometers in 1460?
- 2. Alternately, maybe the tree rings are useful and we ought to toss the thermometer aggregates? Maybe the declining tree rings are the beacons pointing at inaccuracies or corruption in our real thermometer data? Back in 1980 the "decline" in temperatures that tree rings recorded was matched by the decline in thermometer readings from 1960 onwards (see below). You might think it's easy to get a good solid result from a big group of thermometers, but even the experts keep finding flaws in their compilations. The US temperature record has some of the best climate data on the planet, yet adjustments have been made to data that is 50 or even 100 years old.





Thermometer records in 1981 clearly showed the rapid decline in temperatures after 1960, which matched the hidden decline in the tree rings set.

Hansen et al. (1981) Hansen, J., Johnson, D., Lacis, A., Lebedeff, S., Lee, P., Rind, D., and Russell, G. 1981: Climate impact of increasing atmospheric carbon dioxide. *Science*, 213, 957-966, doi:10.1126/science.213.4511.957. http://www.giss.nasa.gov/research/features/200711\_temptracker/.

3. You also don't need to have a PhD to appreciate that people who wanted to know the real temperature (and had a \$4 billion budget) would not use thermometers like this (below). They would pay for someone to come shift that thermometer (and hundreds like it) to a better site. Instead they do fancy (black box) calculations and adjustments inside their computers, they average and homogenize data and tell you that they've accounted for the "flaws". Do we trust them? Why would we? Real scientists demand that research is done properly in the first place.



#### c) What is the scientific culture like at BYU?

The BYU team asserts "there is no evidence that Jones did anything unethical with his temperature data", and since the data can't be analyzed because *Jones lost it*, it's hardly a surprise that no one has found such evidence. But there's plenty of evidence of unethical behaviour in the emails. Does Team BYU really think

# So Ca

Does Team BYU really think colluding to hide public data, deleting emails, deceiving the public and manipulating data is <u>ethical</u>?



colluding to hide public data, deleting emails, deceiving the public and manipulating data *is ethical*?

While the team specifically said their letter to the policymakers was theirs and not the words of their employer,

if I were the Chancellor of BYU I'd be very concerned. What university wants 21 of its PhD's to admit they think it's scientifically OK to discuss ways to fiddle the data to get the answer you hope for? If I were a fellow BYU grad I'd be protesting that these scientists are embarrassing the BYU Faculty of Science, and diminishing the reputation of a BYU degree.

# So Ca

What university wants 21 of its PhD's to admit they think it's scientifically OK to discuss ways to fiddle the data to get the answer you hope for?

#### 2. HJR 12 CLAIMS TEMPERATURES HAVE BEEN LEVEL FOR 12 YEARS.

The world hasn't warmed significantly in the last 15 years—even Phil Jones admits that since 1995 there has been no statistically significant warming<sup>5</sup>. So HJR12 gets the scientific tick yet again. It's just one point of many that the legislators make, and as it happens, the temperature trend of the last two decades is far lower than what the IPCC predicted in its first report (FAR).

But the BYU team protests that "climate" is not the same as "weather", and they explain that apparently climate is a lot *easier to assess*. If that's the case, why do the climate models have such a tough time explaining the Medieval Warm Period? They can't explain why the world warmed during medieval times, and they can't explain why it cooled during the Little Ice Age. Indeed the climate models have a tough time explaining the 1940s warm period, or the cooling that followed. Fully 70% of man-made carbon emissions happened *after* 1945, yet as carbon levels rose, temperatures *fell* for the next thirty years. These thirty-year cycles have had the same pattern and slope over the decades even though carbon levels rapidly changed.

The modelers can't explain why the warming trend started over one hundred years before our carbon emissions became significant, and nor can they explain why the long-term trend of the warming since 1800 hasn't changed one iota. As our global electricity grids were created, and our horses-and-buggies became SUVs, RVs and Hummers, apparently it made no difference to the *rate* of global warming.



Global Temperatures from the Hadley database (NH + SH monthly). Trends quoted by Phil Jones in the BBC interview: 1860-1880 0.163 °C /decade; 1910-1940 0.15 °C /decade; 1975-1998 0.166 °C /decade and 1975-2009 0.161 °C/decade.

Climate models don't advertise or generate many graphs of the "outputs" of the last 10,000 years, and that's *because they can't*. Look below at the variations recorded in the Greenland ice cores. It's only data from Greenland, and not a global record, but hundreds of studies from around the world show that the Medieval Warm Period was probably warmer *globally* than the current era. And 6000 boreholes from all over the world show that the overall trend is correct.

The red uptick below shows the change in temperatures from about 1800 to 1900. The graph ends about 100 years ago, so you could add another 0.7 degrees to the red uptick at the end (maybe<sup>6</sup>). It still isn't unprecedented, unusual, or a reason to transform the energy system our civilization was built on.



The climate models are supposed to be useful enough to make predictions of the next 300 years, yet they can't reproduce the last 1000, even with the benefit of hindsight.

Data from R.B. Alley, The Younger Dryas cold interval as viewed from central Greenland. Journal of Quaternary Science Reviews 19:213-226. Graphed by David Lappi.

So climate is *not* easier to predict than weather. Having made an assertion they can't back up, the BYU team try to confuse the issue by analyzing something *other* than the trend. Instead of discussing the trend since 1998 they discuss whether 1998 was a record high in all four global data sets. It's a strawman... since a single record high has little to do with a trend.

Then the team paint themselves into a corner:

"And yet, H.J.R. 12 implies that the CRU researchers have falsified their data set. If we cannot trust the data, it seems odd to draw sweeping conclusions from it."

OK. Do the BYU collective admit the datasets *might* have been falsified? This is a no win situation for them. Either the data sets are *right* (there has been no warming) or the data sets have been *fudged* (the scientists are corrupt). Either way, it doesn't sound like a good reason to tax the masses.

If the BYU protest party keeps up, people will wonder if they're being paid by Big-Oil to help the skeptics.

FOCR If the BYU protest party keeps up, people will wonder if they're being paid by Big-Oil to help the skeptics.

# **3.** HJR **12** CLAIMS THERE IS A STATISTICALLY MORE DIRECT CORRELATION BETWEEN TWENTIETH CENTURY TEMPERATURE RISE AND CHLOROFLUOROCARBONS (CFCs).

The statement is scientifically true in and of itself, so what's the BYU team's problem with it? All of their protests on this point, and their inferences, amount to nothing. The legislation mentions this correlation only as an example of why the repeated arguments about the correlation of temperature with carbon dioxide are i/ meaningless, and ii/ not impressive. Obviously the legislators were not making any significant suggestions about CFC's. The point of HJR 12 is, after all, *about carbon*.

Correlation is not causation. The HJR legislators know that, but sadly, the scientists forget. The BYU crew call the CFC claim illogical or irresponsible, but it's right and in context it's also an appropriate example. How embarrassing: The PhD's in *science* miss the point?

# 4. HJR 12 CLAIMS EARTH'S CLIMATE IS CONSTANTLY CHANGING AND THE RECENT WARMING IS POTENTIALLY JUST A RECOVERY FROM THE COLD SPELL KNOWN AS THE "LITTLE ICE AGE."

There is plenty of evidence that suggests this is the case. Glaciers started melting in 1800 and sea levels started rising around 1850. These don't correlate well with human hydrocarbon emissions.



Glacier shortening <sup>7 8</sup> and sea level rise<sup>9</sup>. Gray area designates simulated range of error in the sea level record. These measurements lag air temperature increases by about 20 years. So, the trends began more than a century before increases in hydrocarbon use. GRAPH from the <u>global warming review</u> by Robinson, Robinson and Soon.

The BYU team apparently fails reading and comprehension as well. They respond to this devastating point by claiming the legislation says something it patently never says:

"After claiming that CFCs (a class of man-made chemicals) are clearly to blame for recent warming,"

Is this a deliberate attempt to muddy the debate, or are they merely sloppy thinkers? Frankly, it doesn't matter much, except to BYU and its reputation. It obviously has nothing to do with the legislation.

#### d) Climate models work?

Climate Models can reproduce most of the past variations pretty well...

Most of the past variations? Most? To back up that claim they suggest reading Chapter 9 of AR4 — except Chapter 8 is the one that relates to models, though if you look in either Chapter you won't find many instances of climate models reproducing anything well on a global scale, except for some parts of the last 200 years (and remember we fed that data into the models to start with). More importantly, the models have outrageous flaws: They are not just "unreliable" or "unverified", they are documentably wrong, and

For the models are meaningless. They can't predict major processes in real time, or even in hindcast, let alone <u>30 years</u> in <u>advance</u>.

obviously so. See these two graphs below. The models predicted a hot spot above the tropics. Hundreds of thousands of radiosondes show it isn't there. This hot spot is

theoretically due to water vapor, the dominant greenhouse gas that is responsible for a large part of the warming. This is not just some esoteric piddling flaw, if there is no amplification of carbon's effect; (via extra humidity and cloud cover changes) there is no disaster. The IPCC models rely on this "feedback" to generate the scary forecasts.

Screw up your eyes, scan these two images below; try to imagine that these graphs look "similar". You don't need to be a scientist to compare them. The models are meaningless. They can't predict major processes in real time, or even in hindcast, let alone *30 years in advance*. Who are we kidding?



A. The Models predict a hot spot over the tropics. B. The weather balloons found nothing like it. Graph References <sup>10 11</sup>.

The real "deniers" are the people who pretend: a/ that these graphs look the same (see Santer  $2008^{12}$ ); b/ that they don't matter; or c/ that wind-shear measurements are better at measuring temperatures than temperature sensors (Allen and Sherwood  $2008^{13}$ ) or d/ that the models are somehow useful even though they can't predict the activities of the most powerful greenhouse gas there is.

Then watch the argument from ignorance slapped front and center by Team BYU:

These models cannot reproduce the recent warming trend, however, without including the effects of increased greenhouse gas concentrations caused by human activities.

So models that are known to be highly flawed can't produce the latest warming without chucking in a fudge factor they call CO<sub>2</sub>. Righto? We are supposed to be convinced? As I said previously, the models can't explain the Medieval Warm Period, the Roman era warming or the Little Ice Age either. So we should believe in the CO<sub>2</sub> theory because faulty models can't

explain the latest bump in the curve *without CO2*. These are the same models that can't explain any other bumps in the last 20,000 years either.

The models were known to be wrong a decade ago (Courtney 1999<sup>14</sup>). According to the Hadley GCM temperatures should have soared during the twentieth century, instead they seesawed up, down and then up. To be able to keep assuming that carbon was an important cause of warming, the models needed to assume aerosols caused the inexplicable cooling that occurred after World War II. But the parts of the planet that cooled the most were *not* the ones with the highest aerosols. The adjustments meant the models sort of fitted the global record, but they didn't work on the regional records. Kiehl 2007<sup>15</sup> repeated a similar investigation and came to similar conclusions. The aerosol fix was a band-aid on a band-aid covering up the holes in human understanding of the climate.

# 5. HJR 12 CLAIMS THAT "THE 'HOCKEY STICK' GLOBAL WARMING ASSERTION HAS BEEN DISCREDITED.

It beggars belief that any scientist would want to be seen on the same page as the Hockey Stick graph. It's the graph that was created with statistical tricks that were so deeply flawed anyone could feed random data in and the statistical tricks would create a hockey stick nearly every time. The Hockey Stick also flies in the face of all the other evidence collected. Hundreds of peer-reviewed studies show that the world was *warmer* in medieval times. Studies from sites on nearly every continent with ocean sediments, lake sediments, ice cores, glacier cores, corals and other empirical measurements almost all agree with this<sup>16</sup>. Over 6000 boreholes dug all over the globe conclusively confirm the Medieval Warm Period.<sup>17</sup>



Studies all over the world from many different proxies show that temperatures were warmer during the Medieval Warm Period. The data and information on the peer reviewed studies is available at the Medieval Warming Project at <u>co2science.org</u>.



Over 6000 boreholes show that the medieval world was either a bit warmer, or a lot warmer.

Scientific peer reviewed papers were published in 2003 that destroyed the graph's credibility<sup>18</sup>. The work of McIntyre and McKitrick was analyzed and backed up by some of the highest ranking statisticians in the USA<sup>19</sup>. Professor Edward Wegman was formerly Chair of the National Academy of Sciences Committee on Theoretical and Applied Statistics; he said [Michael Mann's] decentred methodology is simply incorrect mathematics .... We found [Mann et al<sup>20</sup>] to be somewhat obscure and incomplete and the criticisms of [McIntyre & McKitrick] to be valid and compelling.

# Sous was

It beggars belief that any scientist would want to be seen on the same page as the Hockey Stick graph.





The Hockey Stick Graph was heavily promoted in the IPCC Third Assessment Report. It wiped out the Medieval Warm Period, but was based on poor use of a statistical analysis and unsuitable proxies. It looked dramatically different after it was corrected by McIntyre and McKitrick.

The fact that the Hockey Stick could be made with random data is enough to throw the whole graph out the window, but this was not the only error. The Hockey Stick was made

# Sous was

Worst and most damningly of all, Mann hid the data and censored results from other researchers trying to replicate his work, until he was forced to reveal them by a FOI.

80 G

with the dubious practice of cobbling two different types of measurements together. It's known that Bristlecone pines most probably grow faster in recent times due to the extra CO<sub>2</sub> that is available, not due to changes in temperature.<sup>21</sup> Even Mann admitted that Bristlecone pines are a problematic choice, yet his analysis depends on including them. He was apparently aware that without the Bristlecones there was no hockeystick — he had calculated the curves without those pines — yet he didn't report those awkward results, he hid them in a folder called "censored". Worst and most damningly of all, Mann hid the data and censored results from other researchers trying to replicate his work, until he was forced to reveal them by a FOI.

Why is anyone still defending this graph, years after the Wegman report confirmed it was baseless? Scientifically,

the graph is an embarrassment, one of the most flawed pieces of scientific work ever printed. If peer review was working rigorously, the Hockey Stick graph would never have been published in the first place.

#### 6. BY MANIPULATING PEER-REVIEW, SCIENTISTS WHO ARE SKEPTICAL HAVE BEEN MARGINALIZED IN AN UNPROFESSIONAL CAMPAIGN THAT MANIPULATES THE "PEER REVIEW" PROCESS.

The BYU team simply says "No", and claims the skeptics just have a case of sour grapes. They suggest skeptical papers aren't good enough to pass "peer review", but as usual, they don't name any examples of flaws. It's more baseless bluster.

The fact that the McIntyre and McKitrick papers were knocked back from *Nature*, even though they were eventually published elsewhere and then later vindicated by expert statisticians suggests that even top scientific journals are biased, and will publish deeply flawed work by alarmists, and turn down accurate corrections by skeptics.

Peer review is done on a voluntary "honor" type system, and can hardly be called rigorous, even at the best of times. While reviewers may be expert, they are anonymous (or supposed to be) and unpaid, and if a paper disagrees with their own work, they have a conflict of interest.

# ഗ്രെ

The fact that the McIntyre and McKitrick papers were knocked back from Nature, even though they were eventually published elsewhere and then later vindicated by expert statisticians suggests that even top scientific journals are biased.

RO CS

Proving bad behavior here is very difficult. If you think that Saiers is in the greenhouse skeptics camp, then, if we can find documentary evidence of this, we could go through official American Geophysical Union channels to get him ousted.

#### Tom Wigley

I will be emailing the journal to tell them I'm having nothing more to do with it until they rid themselves of this troublesome editor.

I think that the community should, as Mike Hulme has previously suggested in this eventuality, terminate its involvement with this journal at all levels—reviewing, editing, and submitting, and leave it to wither way into oblivion and disrepute.

Michael Mann

Keith Briffa, a referee of a paper submitted by Ed Cook, writes to Cook: I simply would not like to see you write a paper that puts out a confused message with regard to the global warming debate, leaving ambiguity as to your opinion on the validity of the Mann curve ("hockey stick") ....

I would not like this affair to ruin my Christmas, as it surely will if it is the cause of our falling out.

Keith Briffa

The ClimateGate emails show that behind the scenes the top "A-list" IPCC climate scientists were discussing ways to remove editors who published any skeptical paper (even one!); they

discussed ways to blackball journals and to conduct smear campaigns against researchers and editors who disagreed with them. They expected that journal editors would send papers to them so they could reject them and stop them being published, and they complained when editors got up to five other reviews who thought a paper was acceptable, and then published anyway. They discussed reviewing papers of their friends, even though reviewers are supposed to be anonymous and impartial.

#### **CONCLUSION**

#### THE IMPLICATIONS OF THE BYU TEAM LETTER ARE FAR-REACHING BUT NOTHING TO DO WITH OUR CLIMATE.

The low standard of logic and reason, the fallacious errors, mis-comprehension, and confusion of Team BYU begs the question about higher education: Does having a PhD mean anything anymore?

That so many PhD's would put their names to a public document which violates laws of logic known for 2000 years, draws attention to the collapsing standards of university science courses.

# So CS

The low standard of logic and reason, the fallacious errors, miscomprehension, and confusion of Team BYU begs the question about higher education: <u>Does</u> <u>having a PhD mean</u> anything anymore?

8003

# So Ca

HJR 12 is simply a piece of modest, common sense legislation, and not a moment too soon. The legislators are acting in a more scientific manner than the scientists.

8003

The group made it clear they spoke for themselves and not the university, but they use their positions to add credence to their case. If the university wants to show that it has high standards, it needs to speak against this muddy, ill-informed confounding work. Silence from BYU would be construed as tacit agreement that this poor scientific reasoning is acceptable and condoned. Does the BYU Science Faculty stand by this kind of scientist? Non compos scientia?

The legislators have cut through the blustery repetition that begs us to bow to "authority" and simply accept the word of committees. You don't need to be a scientist to read a graph and understand that the catastrophic claims about

carbon dioxide can't be substantiated. HJR 12 is simply a piece of modest, common sense legislation, and not a moment too soon. The legislators are acting in a more scientific manner than the scientists.



Thanks to Richard Courtney for advice and details, and to Curt, David and Oggi for assistance.

#### REFERENCES

- 1. HJR 12 Legislation http://le.utah.gov/~2010/bills/hbillint/hjr012.pdf.
- 2. Feb 3, 2010, 14 BYU scientists: http://extras.mnginteractive.com/live/media/site297/2010/0204/ 20100204\_024750\_Legislature2.pdf.
- 3. April 2, 2010, 18 BYU Scientists: http://extras.mnginteractive.com/live/media/site297/2009/1128/ 20091128\_102935\_BYU%20climate%20change%20letter.pdf.
- 4. Climate Money, The climate Industry \$79 billion so far trillions to come. Joanne Nova, SPPI. http://scienceandpublicpolicy.org/images/stories/papers/originals/climate\_money.pdf.
- 5. Q & A with Professor Phil Jones on the BBC, Feb 13, 2010. http://news.bbc.co.uk/2/hi/8511670.stm.
- 6. Surface Driven Temperature Records, D'Aleo and Watts. SPPI. http://scienceandpublicpolicy.org/ originals/policy\_driven\_deception.html.
- 7. Oerlemanns, J. (2005) Extracting a Climate Signal from 169 Glacier Records, *Science* 308, 675-677.
- 8. Jevrejeva, S., Grinsted, A., Moore, J. C., and Holgate, S. (2006) *J. Geophysical Res.* 111,2005JC003229. http://www.psmsl.org/products/reconstructions/jevrejevaetal2006.php.
- 9. Leuliette, E. W., Nerem, R. S., and Mitchum, G. T. (2004) *Marine Geodesy* 27, No. 1-2, 79-94. http://sealevel.colorado.edu/.
- 10. CCSP 2006 Report, Chapter 1, 1958-1999. Synthesis and Assessment Report 1.1, 2006, CCSP, Chapter 1, p 25, based on Santer et al. 2000. Predicted Hot Spot.
- 11. CCSP 2006 Report, Chapter 5, Synthesis and Assessment Report 1.1, 2006, part E of Figure 5.7 in section 5.5 on page 116 (Model output).
- B. D. Santer \*, P. W. Thorne , L. Haimberger , K. E. Taylor1, T. M. L. Wigley, J. R. Lanzante , S. Solomon , M. Free , P. J. Gleckler , P. D. Jones , T. R. Karl , S. A. Klein , C. Mears , D. Nychka , G. A. Schmidt , S. C. Sherwood, F. J. Wentz: Consistency of modelled and observed temperature trends in the tropical troposphere, *Intl. J. Climatol.*, Vol. 28, 2008, 1703-1722.
- 13. Allen, R. J. and S. C. Sherwood, Warming maximum in the tropical upper troposphere deduced from thermal wind observations. *Nature Geosci.*, Vol. 65, 2008, 399-403.
- 14. Courtney RS, 'An Assessment of Validation Experiments Conducted on Computer Models of Global climate (GCM) Using the General Circulation Model of the UK Hadley Centre', Energy & Environment, v.10, no.5 (1999).
- 15. Kiehl JT, 'Twentieth century climate response and climate sensitivity', *J Geophysical Research Letters* (2007).
- 16. The Medieval Warm Period Project, Centre for the Study of Carbon Dioxide and Global Change. http://www.co2science.org/data/mwp/mwpp.php.
- 17. Huang, S., H. N. Pollack, and P. Y. Shen (1997), Late Quaternary temperature changes seen in worldwide continental heat flow measurements, *Geophys. Res. Lett.*, 24(15), 1947–1950.
- 18. McIntyre, S., and R. McKitrick, 2003. Corrections to the Mann et. al. (1998) Proxy database and Northern Hemispheric average temperature series. *Energy & Environment*, 14: 751-771.
- 19. Wegman Report, Ad Hoc Committee Report on the 'Hockey Stick' Global Climate Reconstruction. (2006).
- 20. Mann, M.E., Bradley, R.S. and Hughes, M.K. 1998. Global scale temperature patterns and climate forcing over the past six centuries. *Nature* 392: 779-787.
- 21. Graybill, D.A. and Idso, S.B. 1993. Detecting the aerial fertilization effect of atmospheric CO<sub>2</sub> enrichment in tree-ring chronologies. *Global Biogeochemical Cycles* 7: 81-95.



Science & Public Policy Institute "Science-based policy for a better world."

#### Robert Ferguson SPPI President

SPPI President bferguson@sppinstitute.org 202-288-5699

P.O. Box 209 5501Merchants View Square Haymarket, VA 20169

www.scienceandpublicpolicy.org