



The 2011 Climate B.S.* of the Year Awards

[*B.S. means “Bad Science.” What did you think it meant?]

Peter H. Gleick

The Earth’s climate continued to change during 2011 – a year in which unprecedented combinations of extreme weather events killed people and damaged property around the world. The scientific evidence for the accelerating human influence on climate further strengthened, as it has for decades now. Yet on the policy front, once again, national leaders did little to stem the growing emissions of greenhouse gases or to help societies prepare for increasingly severe consequences of climate changes, including rising temperatures, changing rainfall patterns, rising sea-levels, loss of snowpack and glaciers, disappearance of Arctic sea ice, and much more.

Why the failure to act? In part because climate change is a truly difficult challenge. But in part because of a concerted, well-funded, and aggressive *anti-science* campaign by climate change deniers and contrarians. These are mostly groups focused on protecting narrow financial interests, ideologues fearful of any government regulation, or scientific contrarians who cling to outdated, long-refuted interpretations of science. While much of the opposition to addressing the issue of climate change is political, it often hides behind pseudo-scientific claims, with persistent efforts to intentionally mislead the public and policymakers with **bad science** about climate change. Much of this effort is based on intentional falsehoods, misrepresentations, inflated uncertainties, or pure and utter B.S. – the same tactics that delayed efforts to tackle tobacco's health risks long after the science was understood (as documented in Naomi Oreske and Erik Conway’s book, [Merchants of Doubt](#)).

Last year, [we issued the first ever “Climate B.S.* of the Year Awards.”](#) I am now pleased to present the 2nd Annual (2011) Climate B.S.* of the Year Awards. In preparing the 2011 list of nominees, suggestions were received from around the world and a panel of reviewers -- all climate scientists or climate communicators -- waded through them. We present here the top nominees and the winner of the **2011 Climate B.S.* of the Year Awards**.

The 2011 Winner:

Climate B.S.* from all of the Republican candidates for President of the United States

Is it really necessary to be anti-science in general, and anti-climate science in particular, in order to be nominated to lead the Republican Party in the United States? Apparently, yes, at least in the minds of the Republican presidential candidates or their advisors. These candidates can be split into three groups: those ignorant or uninterested in science and its role in informing policy; those who intentionally distort science because it conflicts with deeply held political or religious ideology; and those who blow with the wind, giving their allegiance to whatever ideology seems most expedient at any given moment. There is some overlap, of course: some candidates, such as Rick Perry, have been in all three groups at various times. The third group includes candidates who have at one time or another held positions more or less consistent with scientific understanding, but who in 2011 adopted anti-scientific positions during their primary campaigns. For example, Gingrich, Romney, and Huntsman, at some point in the past all expressed at least a partial understanding about the reality and seriousness of human-caused climate change. Yet all three have now retreated from the scientific evidence to faulty but ideological safe

positions [demanded](#) by the conservative wing of the Republican Party. In October, Romney [caved in](#) to conservative pressure and changed his stance on the issue. Just days ago, after pressure from anti-climate-science activists, Gingrich [cut a chapter on climate science](#) from a book of environmental essays he had agreed to produce. Ironically, that chapter was to have been written by an atmospheric scientist ([Katharine Hayhoe](#), director of the Climate Science Center at Texas Tech University) who happens to be an evangelical and speaks regularly to conservative groups. She was also targeted by these activists for personal abuse – a tactic often pursued by climate deniers and contrarians. (For a few of the craziest things the top GOP candidates have said on climate change, see [Joe Romm's recent essay at Think Progress](#).)

In short, the choice among the Republican candidates on the issue of climate change is scientific ignorance, disdain for science, blatant misrepresentation of facts, or naked political expediency, any one of which would make the Republican candidates strong contenders for the 2011 Climate B.S. Award. Combined? They win hands down.

[For comparison, while the Obama Administration has made little progress (and some would argue insufficient effort) on climate change, the President's [stated](#) position on [climate change](#) is clear and in line with scientific evidence. And here is his unequivocal comment on scientific integrity:

"Today, more than ever before, science holds the key to our survival as a planet and our security and prosperity as a nation. It's time we once again put science at the top of our agenda and worked to restore America's place as the world's leader in science and technology...the truth is that promoting science isn't just about providing resources. It's about protecting free and open inquiry. It's about ensuring that facts and evidence are never twisted or obscured by politics or ideology. It's about listening to what our scientists have to say, even when it's inconvenient. Especially when it's inconvenient. Because the highest purpose of science is the search for knowledge, truth, and a greater understanding of the world around us..." <http://www.youtube.com/watch?v=kFsB1Jk1OQ0>

Second Place: Disinformation from Fox News and Murdoch's News Corporation

In this year's competition, we award Fox News second place – up from their fifth place finish last year. This year, the award is extended to the entire News Corporation empire of Rupert Murdoch because of its apparent efforts to synchronize anti-climate science reporting among the different Murdoch outlets in the UK, the U.S., and Australia. Among the bad climate science [promoted by Fox News](#) is that snowy weather disproves global warming (while ignoring or inaccurately reporting record high temperatures recorded around the world); biased and misleading reporting about the content of emails stolen from climate scientists; incorrect claims that El Niños are responsible for global warming; and [inaccurate reporting](#) about fundamental scientific principles.

Other Murdoch empire assaults on climate science? The editorial page editors of the *Wall Street Journal* routinely dismiss or ignore all climate change science. Glenn Beck [incorrectly tells viewers](#) that there has been no warming in the past decade – the hottest decade in over a century. Sean Hannity [says](#) "global warming doesn't exist." Fox Washington managing editor Bill Sammon officially [directed](#) his journalists to cast doubt on climate science. Brian Kilmeade, of *Fox & Friends*, [joked](#), "Sorry global warming people, we have too many polar bears." And of course, Bill O'Reilly has [stated incorrectly](#), "For every scientist who says there is [climate change], there's one that says there isn't." [Thanks to MediaMatters for tracking these statements.] As a 2011 [story](#) in *Rolling Stone* noted, "[n]o one does more to spread dangerous disinformation about global warming than Murdoch."

In an [analysis](#) of network news reporting on climate change, Feldman, Maibach, Roser-Renouf, and Leiserowitz concluded that Fox News is consistently the most dismissive about climate change and is highly biased toward choosing climate change doubters to interview. Nearly half of their guests dismiss climate change compared to 9 and 15% at CNN and MSNBC. In the scientific community, [97 to 98% of climate scientists accept human-caused climate change](#). This misinformation has an effect: [a study](#) from Stanford University shows that Fox viewers are far more likely to be fundamentally misinformed about climate change than others. In short, frequent exposure to Murdoch news reporting can be hazardous to your understanding and knowledge of the real world.

Third Place: Spencer, Braswell, and Christy for their lack of climate “sensitivity”

Third place goes to Roy Spencer and William (Danny) Braswell for a research paper on climate sensitivity, and John Christy, for an astounding piece of misleading testimony at a Congressional climate change hearing. Both the paper and the testimony received lavish attention from climate contrarians (including an especially absurd piece from the Heartland Institute, published as a *Forbes* blog post) and both were extensively and surgically debunked by the scientific community. The key scientific issue here is “climate sensitivity” – how much the climate will change in response to natural and human influences. Spencer and Christy have argued for many years that the sensitivity of the climate is low, and [their science has been constantly, regularly, and convincingly disputed](#). In 2011, Spencer and Braswell published a paper in the journal *Remote Sensing* that turned out to contain serious scientific errors according to experts working in this field. What makes a scientific paper ‘bad’? A bad paper makes substantive errors in the analysis, misrepresents or ignores conflicting data or conflicting research, fails to address alternative explanations, or draws conclusions logically inconsistent with the results. Critics argued that this paper suffered from all of these problems (see the [Dessler analysis](#), [a video describing the flaws](#), the Trenberth and Fasullo [assessment](#), and a formal response [published](#) in *Remote Sensing*).

In an astounding event, Wolfgang Wagner, the editor of the journal that published the Spencer and Braswell paper, resigned for having failed to spot the paper’s scientific flaws during peer review. As he [stated in his resignation letter](#):

“After having become aware of the situation, and studying the various pro and contra arguments, I agree with the critics of the paper. Therefore, I would like to take the responsibility for this editorial decision and, as a result, step down as Editor-in-Chief of the journal *Remote Sensing*... With this step I would also like to personally protest against how the authors and like-minded climate sceptics have much exaggerated the paper’s conclusions in public statements.”

Similar flawed scientific arguments about climate sensitivity made in the paper were repeated, along with other incorrect or misleading arguments about climate science, in testimony of John Christy at the March 8, 2011 hearing of the U.S. House Subcommittee on Energy and Power, called by the Republicans to try to prevent the EPA from regulating greenhouse gas pollution. In Christy’s [testimony](#), he repeats arguments that many in the climate science community consider to be myths and errors, including continued reliance on a scientific article that other climate scientists have [argued is flawed](#). Here is a [comprehensive summary](#) of Christy’s errors. Finally, two new studies ([here](#) and upcoming by Po-Chedley and Fu in the *Journal of Atmospheric and Oceanic Technology*) also identify analytical errors in papers and pronouncements by Spencer and Christy – adding to a long line of errors that have required corrections to their work for more than a decade.

Fourth Place: The Koch Brothers for funding the promotion of bad climate science

Fourth place goes to fossil-fuel billionaires Charles and David Koch of Koch Industries, Inc., who provide substantial [funding to groups and politicians](#) who deny the science of climate change. As noted in a [New Yorker story](#), from 2005 to 2008, the Kochs vastly outspent even ExxonMobil in funding a network of

anti-climate science groups. A [partial list](#) of groups funded by the Koch brothers includes a veritable who's who of groups that put out misleading science or tout bad science on climate change. Tim Phillips, president of the super-PAC funded by the Kochs, Americans for Prosperity, [brags outright](#) about their political influence on Republican candidates: "If you look at where the situation was three years ago and where it is today, there's been a dramatic turnaround. Most of these candidates have figured out that the science has become political. We've made great headway." This may be good for their business, but it is bad for America, bad for science, and bad for our climate.

Fifth Place: Anthony Watts for his BEST, and worst, climate hypocrisy

Anthony Watts runs a blog popular with the anti-climate science crowd. He ran into a brick wall this year when he voiced support for an ongoing climate study (the "Berkeley Earth Surface Temperature" or "BEST" study) that he thought would prove his anti-warming beliefs to be right because it was being done by someone he thought was in his camp ("... I'm prepared to accept whatever result they produce, even if it proves my premise wrong."). Unfortunately for him, that study proved his premise wrong and instead reconfirmed what climate scientists have been saying for decades: the Earth's surface is warming and at just the rate that numerous previous studies had shown. Watts then proceeded to [tear down](#) the paper, ostensibly because it hadn't been through peer-review, despite the fact that Watts, his guest posters, and commenters routinely and consistently produce or cite [non-peer-reviewed science](#) (often later shown to be wrong) to support their claims.

Runners Up: Other Noteworthy Climate B.S. of 2011

Some voters felt that the following entries submitted for the 2011 Climate B.S. competition deserve recognition though they win no awards from us.

Harrison Schmitt and the Heartland Institute for "Arcticgate"

As the Arctic ice disappears before our eyes, we must call attention to former Senator Harrison Schmitt's refusal to correct [persistent errors](#) and "[cherry picking](#)" of data in denying the disappearance of Arctic sea ice, and for the Heartland Institute's promulgation of – and refusal to correct – those errors when they were uncovered.

Rush Limbaugh for his consistent falsehoods about climate science

We would acknowledge Rush Limbaugh for his blatant and stunningly high level of climate B.S., but he has already been awarded the "[Climate Change Misinformers of the Year](#)" award at MediaMatters.org.

Steve McIntyre

And finally, the "dishonorable" mention of the year goes to Steve McIntyre for his despicable [smear](#) of climate scientist Dr. Michael Mann of Penn State University (and to Anthony Watts for [amplifying](#) that smear) by drawing a parallel between the Penn State pedophilia investigation and their separate scientific investigation of questions about climate research (in which Professor Mann has been completely and repeatedly [exonerated](#)). Joe Romm discusses this disgusting case [here](#).

The 2011 Climate B.S. of the Year Award was prepared by Peter Gleick with an independent group of climate scientists and communicators serving as nominators, reviewer, and voters. Thanks to all who participated this year. See you next year.

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Update: Ben Webster of the Times of London felt that his inclusion in the original list of bad science purveyors from Fox News and News Corporation was inappropriate. After discussion and review of Mr. Webster's body of work, we agree and have modified the post to remove him.