

Global Warming:
Why Evangelicals Should Not Be Alarmed
E. Calvin Beisner

In a documentary aired August 23, 2007, by CNN and titled “God’s Warriors,” Richard Cizik, vice president for governmental affairs of the National Association of Evangelicals, said about evangelicals who disagree with his urgent appeals for action to fight global warming:

Historically, evangelicals have reasoned like this: Scientists believe in evolution. Scientists are telling us climate change is real. Therefore, I won’t believe what scientists are saying.

It’s illogical. It’s an erroneous kind of syllogism. But is that what’s been occurring?

Absolutely.

That kind of statement, frankly, riles a lot of us. It would be interesting to see if Mr. Cizik can offer a single documented instance of a single notable evangelical critic of his views on global warming who has argued in any way remotely like that. As one of his foremost critics and someone in frequent contact with many others, I can testify that I know of not a single such instance.

But painting the critics of catastrophic anthropogenic global warming (CAGW) that way is nothing new in this controversy. We are routinely called “deniers,” the intent being to associate us with Holocaust deniers. We are said to ignore science, to oppose the stewardship of creation, to fly in the face of an overwhelming consensus of scientists from around the world who have studied the issue and come to the firm conclusion that human action (mainly burning fossil fuels and thus adding to atmospheric carbon dioxide) is the primary cause of a recent global warming that is beyond the bounds of natural variability and threatens to become catastrophic, especially for the world’s poor.

In reality, critics of manmade catastrophic global warming include many topic-qualified scientists (climatologists, meteorologists, atmospheric physicists and chemists, oceanographers, geologists, astrophysicists, and solar physicists), plus economists who specialize in environment, development, and energy. Canada’s *National Post* has published a series of articles by Lawrence Solomon, each article profiling one major scientist and explaining why he rejects the “consensus.” A list of the series up through June 15, 2007, is at <http://www.canada.com/nationalpost/news/story.html?id=c6a32614-f906-4597-993d-f181196a6d71>.

Indeed, the “consensus” is fictional. Attempts to demonstrate it have failed. Climate scientists surveyed in 2003 were asked, “To what extent do you agree or disagree that climate change is mostly the result of anthropogenic causes?” Of the 530 valid responses, 9.4 percent strongly agreed, while 9.7 percent strongly disagreed. These results and the mean of 3.62 (out of 7) demonstrate that among climatologists consensus is not strong that climate change is mostly the result of anthropogenic causes.¹

¹Letter from Dennis Bray to *Science* magazine, December 22, 2004, not accepted for publication. Bray is a climatologist with the GKSS Forschungszentrum Geestacht, Germany, and a vocal critic of “global warming skeptics.” His letter was online October 14, 2006 at <http://www.staff.livjm.ac.uk/spsbpeis/Scienceletter.htm>.

The most widely cited support for the claim of scientific consensus on human-induced global warming is a 2004 study by Naomi Oreskes, prominently featured in Al Gore's film *An Inconvenient Truth*, that concluded, "without substantial disagreement, scientists find human activities are heating the earth's surface."² However, an attempt by Benny J. Peiser to replicate Oreskes's study found serious errors in its methods and conclusions. After re-examining the same database, Peiser found that

- only 1 percent of the relevant articles explicitly endorsed what Oreskes called the "consensus view";
- 3 percent "reject[ed] or doubt[ed] the view that human activities are the main drivers of . . . 'the observed warming over the last 50 years'"; and
- 42 percent did "not include any direct or indirect link or reference to human activities, CO₂ or greenhouse gas emissions, let alone anthropogenic forcing of recent climate change."³

Further, more recent surveys of the peer-reviewed literature show even less support for the notion of consensus behind CAGW:

Medical researcher Dr. Klaus-Martin Schulte recently updated [Oreskes's and Peiser's] research. Using the same database [ISI Web of Science] and search terms as Oreskes, he examined all papers published from 2004 to February 2007. The results have been submitted to the journal *Energy and Environment*

Of 528 total papers on climate change, only 38 (7%) gave an explicit endorsement of the consensus. If one considers "implicit" endorsement (accepting the consensus without explicit statement), the figure rises to 45%. However, while only 32 papers (6%) reject the consensus outright, the largest category (48%) are neutral papers, refusing to either accept or reject the hypothesis. This is no "consensus."

The figures are even more shocking when one remembers the watered-down definition of consensus here. Not only does it not require supporting that man is the "primary" cause of warming, but it doesn't require any belief or support for "catastrophic" global warming. In fact of all papers published in this period (2004 to February 2007), only a single one makes any reference to climate change leading to catastrophic results.⁴

Nonetheless, many American and other evangelicals have embraced CAGW. Their most prominent statement to date was "Climate Change: An Evangelical Call to Action," issued by the Evangelical Climate Initiative in February 2006 and signed, at the time, by 86 prominent American evangelical leaders—mostly college presidents, megachurch pastors, and mission leaders. Conspicuously absent from the list of endorsers were experts in the relevant science and economics. Significantly, the document offered conclusions but cited little data and only one significant scientific source and did not even name its authors.

Eight months later, on October 30, 2006, I debated its primary author, Dr. David Gushee, then an ethics professor at Union University in Jackson, TN. (He recently accepted a position at

²Naomi Oreskes, "The scientific consensus on climate change," *Science*, vol. 306, issue 5702 (December 3, 2004), 1686, at www.sciencemag.org/cgi/content/full/306/5702/1686.

³Benny J. Peiser, Letter to *Science*, January 4, 2005, submission ID: 56001, online at www.staff.livjm.ac.uk/spsbpeis/Scienceletter.htm.

⁴Michael Asher, "Survey: Less than Half of All Published Scientists Endorse Global Warming Theory," *DailyTech*, August 29, 2007, online at <http://www.dailytech.com/Survey+Less+Than+Half+of+all+Published+Scientists+Endorse+Global+Warming+The+ory/article8641.htm>.

Mercer University in Macon, GA.) Shortly before we began, Dr. Gushee told me that in preparing for the debate he had found that the science of climate change was “a lot more nuanced” than he had realized when he wrote the paper.⁵ It is sad that he had not done sufficient research before writing the paper to reach that conclusion.

Why was I invited to debate Dr. Gushee? Because I had headed up the production of another paper—“A Call to Truth, Prudence, and Protection of the Poor: An Evangelical Response to Global Warming”—that presented a wide variety of scientific evidence that recent and foreseeable global warming are largely natural in cause; well within the bounds of historic, cyclical variability; not catastrophic but of mixed beneficial and harmful effects; not subject to significant mitigation by any policies we might adopt; and far better responded to by promoting economic development to enable people to adapt to whatever the climate future is, whether warmer or cooler. The “Call to Truth” can be read online at [http://www.cornwallalliance.org/docs/Call to Truth.pdf](http://www.cornwallalliance.org/docs/Call_to_Truth.pdf); an introductory letter containing a list of its endorsers may be read at [http://www.cornwallalliance.org/docs/Open Letter.pdf](http://www.cornwallalliance.org/docs/Open_Letter.pdf).

In contrast to the Evangelical Climate Initiative’s “Call to Action,” the “Call to Truth” cited extensive data from authoritative scientific sources. It was authored by four men with appropriate expertise:

- evangelical Dr. Roy Spencer, climatologist and senior research scientist at the University of Alabama at Huntsville;
- evangelical Dr. Ross McKittrick, an environmental economist at Ontario’s University of Guelph and co-author of the award-winning book *Taken By Storm: The Troubled Science, Policy, and Politics of Global Warming*;
- Jewish energy policy analyst Paul Driessen of the Congress of Racial Equality; and
- I, a evangelical professor of social ethics who has for twenty years specialized in the application of Biblical world view and theology to environmental economics and written three books and edited a fourth in the field.

It was endorsed by many evangelical (and some non-evangelical) scientists and economists with relevant expertise, as well as by evangelical theologians, pastors, ethicists, and other leaders.

Rather than rehearse here the evidence contained in the “Call to Truth,” since it can be read online, let me offer just a few examples of recent scientific developments that have happened in the year since the “Call to Truth” appeared—developments that in every instance call CAGW into question.⁶

1. The United Nations Intergovernmental Panel on Climate Change reduced its estimate of anthropogenic global temperature forcing through greenhouse gas emissions by 25 percent between its 2001 and 2007 Assessment Reports. Other research during 2006 put the most likely effect of doubled CO₂ (from alleged pre-industrial levels) at about 3°C and said no evidence supported upper-end projections of 4.5° or more—levels needed for catastrophic results to ensue.⁷ In June of 2007, however, a new study appeared by atmospheric scientist

⁵A DVD of the debate is available through the Cornwall Alliance for the Stewardship of Creation, www.cornwallalliance.org.

⁶Some of these, plus others, were published in my “Important Developments on Global Warming in 2006,” online at www.interfaithstewardship.org/pdf/GlobalWarmingSummary2006.pdf.

⁷J. D. Annan and J. C. Hargreaves, “Using multiple observationally-based constraints to estimate climate sensitivity,” *Geophysical Research Letters*, vol. 33, L06704, doi:10.1029/2005GL025259, 2006, online at www.agu.org/pubs/crossref/2006/2005GL025259.shtml; prepublication draft at

Dr. Stephen Schwartz of Brookhaven National Laboratory that concludes that doubled CO₂ would only raise global average temperature by about 1.1 °C.⁸ Such a finding calls seriously into question the need to spend hundreds of billions of dollars every year attempting to reduce CO₂ emissions.

2. The IPCC's 2007 Assessment Report reduced its estimate of heat absorption by anthropogenic greenhouse gases by 35 percent from its 2001 report.
3. The IPCC's 2007 report reduced its high-end projection of twenty-first century sea level rise from 2001's 35 inches to 23 inches assuming peak human population of 15 billion and 17 inches assuming peak population of 9 billion. Meanwhile, the UN Population Division forecasts human population peaking well below 9 billion around 2050 to 2065 and then declining, while some demographers forecast a still lower peak around 2035 to 2040.⁹ Although Gore in *An Inconvenient Truth* hypothesizes that *if* Greenland's ice cap were to melt completely, *then* sea level would rise about 20 feet, there is next to zero probability of that happening. Additionally, the Sea Level Commission of the International Union for Quaternary Research, better qualified on the subject than the IPCC, forecasts sea level rise through the end of this century at 0 to 8 inches.¹⁰ More recently, additional studies reduced forecasts of sea level rise to around 1.35 mm per year (or 5.4 inches per century).¹¹
4. The famous "hockey stick" graph of the last 2,000 years of global average temperature (which eliminated both the Medieval Warm Period and the Little Ice Age and made it appear that global average temperatures had shot up in the last hundred years) was discredited¹² and, though it had been featured prominently in the 2001 IPCC report, was absent from the 2007 report.
5. The World Meteorological Organization and other scientists published reports denying any connection between anthropogenic global warming and an increase in either the frequency or the strength of hurricanes.¹³

www.jamstec.go.jp/frcgc/research/d5/jdannan/GRL_sensitivity.pdf.

⁸Stephen E. Schwartz, "Heat Capacity, Time Constant, and Sensitivity of Earth's Climate System," Brookhaven National Laboratory, June 2007, online at www.ecd.bnl.gov/steve/pubs/HeatCapacity.pdf and accepted for publication in *Geophysical Research Letters*.

⁹Ben J. Wattenberg, *Fewer: How the New Demography of Depopulation Will Shape Our Future* (Chicago: Ivan R. Dee, 2005).

¹⁰Nils Axel Morner, "Estimating Future Sea Level Changes from Past Records," *Global and Planetary Change* 40, issues 1-2 (January 2004): 49-54.

¹¹www.co2science.org/scripts/CO2ScienceB2C/articles/V10/N32/C1.jsp; www.tiny.cc/bM52W.

¹²Edward J. Wegman, et al., "Ad Hoc Committee Report on the 'Hockey Stick' Global Climate Reconstruction," report to the U.S. House of Representatives Energy and Commerce Committee, July 14, 2006, online at www.energycommerce.house.gov/108/home/07142006_Wegman_Report.pdf; see also National Academy of Sciences, *Surface Temperature Reconstructions for the Last 2,000 Years*, online at www.nap.edu/catalog/11676.html#toc; Ross McKittrick and Steven McIntyre, "The M&M Critique of the MBH98 Northern Hemisphere Climate Index: Update and Implications," online at www.multi-science.co.uk/mcintyre-mckittrick.pdf; McKittrick and McIntyre, "Hockey Sticks, Principal Components and Spurious Significance," *Geophysical Research Letters* vol. 32, no. 3, February 12, 2005.

¹³Roger Pielke Jr., "WMO Consensus on Tropical Cyclones and Climate Change," *Science Policy*, November 30, 2006, online at www.sciencepolicy.colorado.edu/prometheus/archives/climate_change/001005wmo_consensus_statem.html; World Meteorological Organization, press release, December 11, 2006, online at www.wmo.int/web/Press/PR_766_E.doc;

6. Various studies calmed fears of ill effects of anthropogenic warming and supported predictions of benefits. Studies found little ground for fears that global warming threatens biodiversity.¹⁴ Long-term data showed no correlation between global warming and droughts.¹⁵ Claims that global warming was slowing thermohaline circulation (the “Atlantic conveyor belt” of cold Arctic waters into the tropics and vice versa) and that this could lead to a sudden-onset ice age were disproved.¹⁶ Though challenged, long-recognized studies indicating that enhanced atmospheric CO₂ results in greater crop yields were vindicated.¹⁷
7. Increasing evidence of many sorts pointed to several overlapping cycles of global warming and cooling of entirely natural cause that overshadow anthropogenic warming and explain the warming of the late twentieth century.¹⁸ Russian scientists warn that Earth could soon enter a sixty-year cooling cycle similar in magnitude to that of the Little Ice Age.¹⁹ The publication early this year of *The Chilling Stars: A New Theory of Climate Change*, by Danish solar physicist Henrik Svensmark and Nigel Calder,²⁰ provided strong evidence that the vast majority of recent and longer-term global temperature changes are explained by fluctuations in solar energy and solar magnetic wind output and the latter’s interaction with cosmic ray flux. Svensmark’s research has demonstrated that cosmic rays contribute to low-level cloud formation by breaking larger molecules into smaller ones that recombine to form cloud nuclei. Since low-level clouds have a net cooling effect on surface temperatures, and since cosmic rays vary inversely with solar wind, increasing solar wind means fewer clouds and more warmth, and vice versa.

P. J. Klotzbach and W. M. Gray, “Causes of the Unusually Destructive 2004 Atlantic Basin Hurricane Season,” *Bulletin of the American Meteorological Society* 87 (2006): 1325-1333; C. W. Landsea, et al., “Can We Detect Trends in Extreme Tropical Cyclones?” *Science* 313 (2006): 452-454.

¹⁴ “Global Warming: Will It Cause Multiple Species Extinctions?” *CO₂ Science* 9:48 (November 29, 2006), online at www.co2science.org/scripts/co2scienceB2C/articles/v9/n48/edit.jsp, and sources cited therein.

¹⁵ “Darn Drought Data,” *World Climate Report*, November 14, 2006, online at www.worldclimatereport.com/index.php/2006/11/14/darn-drought-data/.

¹⁶ Friedrich A. Schott, et al., “Variability of the deep western boundary current east of the Grand Banks,” *Geophysical Research Letters* 33 (2006), online at www.agu.org/pubs/crossref/2006/2006GL026563.shtml; Christopher S. Meinen, et al., “Variability in deep western boundary current transports: Preliminary results from 26.5°N in the Atlantic,” *Geophysical Research Letters* 33 (2006), online at www.agu.org/pubs/crossref/2006/2006GL026965.shtml; Richard A. Kerr, “Global Climate Change: False Alarm: Atlantic Conveyor Belt Hasn’t Slowed Down After All,” *Science* 314:5802 (November 17, 2006): 1064.

¹⁷ The challenge was in Stephen P. Long, et al., “Food for thought: lower-than-expected crop yield stimulation with rising CO₂ concentrations,” *Science* 312:5782 (June 20, 2006): 1918-1921, abstract online at www.sciencemag.org/cgi/content/abstract/312/5782/1918. The vindication is in Francesco N. Tubiello, et al., “Crop response to elevated CO₂ and world food supply: A comment on ‘Food for thought...’ by Long et al,” *European Journal of Agronomy*, November 20, 2006, abstract online at www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6T67-4MCWMJH-1&_user=10&_coverDate=11%2F20%2F2006&_alid=501957242&_rdoc=1&_fmt=summary&_orig=browse&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=0be7432cf1e1f6c915de3fd025ca59fc.

¹⁸S. Fred Singer and Dennis Avery, *Unstoppable Global Warming—Every 1,500 Years* (Lanham, MD: Rowman & Littlefield, 2006).

¹⁹“Russian scientist predicts global cooling,” *Physorg.com*, August 26, 2006, online at www.physorg.com/news75818795.html.

²⁰Henrik Svensmark and Nigel Calder, *The Chilling Stars: A New Theory of Climate Change* (Cambridge: Icon Books, 2007).

Most of these developments were known by late 2006. Very recently, however, additional developments have added to the breakdown of the CAGW paradigm:

8. The ubiquitous claim that 1998 was the hottest year on record and the 1990s were the hottest decade on record for United States surface temperatures was debunked. Instead, it turns out that 1934 is the hottest year and the 1930s were the hottest decade. The ten hottest years since 1880 are now, in descending order, 1934, 1998, 1921, 2006, 1931, 1999, 1953, 1990, 1938, 1939, with three of the top ten in the last decade but four in the 1930s. NASA's Goddard Institute of Space Studies has quietly—no press release, no public announcement, no explanation offered on the website—changed its posted graph to show the new data.²¹ The consequence? First, that at least for the U.S., there is no significant upward temperature trend since the 1930s. Second, because the U.S. temperature data had generally been considered the most comprehensive and reliable, the finding that they had been thrown off by a programming error calls into question temperature data worldwide.²²
9. University of Alabama Senior Research Scientist Roy Spencer (a Cornwall Alliance contributing scientist and co-author of our “Call to Truth”) and co-authors published an article in *Geophysical Research Letters* that seriously undermines the credibility of computer climate models. Every model assumes that tropical-region cirrus cloud cover, which has a net warming effect on surface temperatures, increases with increasing surface temperature—making it a positive feedback. But six years' data from three NASA satellites shows precisely the opposite: that the cirrus cloud cover diminishes instead—making it a negative feedback. Consequence? The models don't just get the magnitude of the feedback wrong, they get its sign (+ or -) wrong. Rather than magnifying whatever warming takes place, the response of tropical cirrus cloud cover is to reduce it. This both supports the theory by MIT climatologist Richard Lindzen and co-authors²³ that cloud response to warming acts similarly to the eye's iris, opening to let more heat radiate out to space as temperature rises and closing to hold more heat in as temperature falls, and generally supports the understanding that Earth's climate is self-regulating and therefore not prone to a “tipping point” or a “runaway greenhouse effect” or “catastrophic warming.” How significant is this finding? Says Spencer, “To give an idea of how strong this enhanced cooling mechanism is, if it was operating on global warming, it would reduce estimates of future warming by over 75 percent. The big question that no one can answer right now is whether this enhanced cooling mechanism applies to global warming.”²⁴
10. It was revealed that a paper on which the IPCC heavily relied for its 2007 Fourth

²¹Raw data are at www.data.giss.nasa.gov/gistemp/graphs/fig.D.txt.

²² Readers who want to see extensive discussion of this and related problems should visit the website of Canadian statistician Stephen McIntyre, who discovered NASA's error (and was one of the discoverers of the errors in the “hockey stick” graph mentioned earlier): www.climateaudit.org.

²³See their work at <http://ams.allenpress.com/perlserv/?request=get-abstract&issn=1520-0477&volume=082&issue=03&page=0417©right=1>.

²⁴See abstract of the GRL article at <http://www.agu.org/pubs/crossref/2007/2007GL029698.shtml> and a University of Alabama press release about it at www.uah.edu/news/newsread.php?newsID=875, and www.blogs.usatoday.com/weather/2007/08/cloudy-forecast.html.

Assessment Report's estimate of surface temperature change was "based on fabricated data." The paper²⁵ "is one of the main works cited by the IPCC to support its contention that measurement errors arising from urbanization are tiny, and therefore are not a serious problem." It in turn relied on another paper by one of its own authors.²⁶ The problem at issue is the claim of both papers that they carefully used data only from meteorological stations "with few, if any, changes in instrumentation, location or observation times"—important because changes in any of those result in data that cannot properly be compared over time. Those two papers in turn cite as their source a report resulting from a project done jointly by the U.S. Department of Energy (DOE) and the Chinese Academy of Sciences.²⁷ But that report explicitly said that station histories were not available for 49 (58 percent) out of the 84 Chinese meteorological stations used. "For those 49 stations, then, the above-quoted statements from the two papers are impossible," points out Douglas J. Keenan, who goes on to point out serious discontinuities in the remaining 35 stations as well. Keenan concludes: "The essential point here is that the quoted statements from Jones et al. and Wang et al. cannot be true and could not be in error by accident (emphasis added). The statements are fabricated," adding: "The conclusions are clear. First, there has been a marked lack of integrity in some important work on global warming that is relied upon by the IPCC. Second, the insignificance of urbanization effects on temperature measurements has not been established as reliably as the IPCC assessment report assumes." Keep this in mind the next time you hear of the IPCC as a peer-reviewed process—and indeed the next time you think peer review ensures accuracy.²⁸

11. As if Svensmark's work mentioned above were not enough to set aside manmade greenhouse gases as a primary driver of climate change, other scientists proposed a whole new theory to explain climate shifts. The gist of it is that, as synchronized chaos theory in mathematics explains, a periodic synchronization of known Earth ocean cycles (Pacific Decadal Oscillation, North Atlantic Oscillation, El Nino, and North Pacific Oscillation) can explain the major climate shifts observed thus far without reference to any trends in greenhouse gases.²⁹
12. Finally, additional studies appeared supporting solar variation as the most important climate driver.³⁰

In short, all of these scientific developments—and many more—provide good reason at least to question, if not to reject outright, the popular claim that human action is driving catastrophic

²⁵P.D. Jones, P.Y. Groisman, M. Coughlan, N. Plummer, W.-C. Wang, and T.R. Karl, "Assessment of urbanization effects in time series of surface air temperature over land," *Nature* (1990) 347: 169-172.

²⁶W.-C. Wang, Z. Zeng, and T.R. Karl, "Urban heat islands in China," *Geophysical Research Letters* (1990) 17: 2377-2380.

²⁷<http://cdiac.esd.ornl.gov/ndps/ndp039.html>.

²⁸For the full story on this issue, see www.motls.blogspot.com/2007/08/urban-heat-islands-fabricated-papers.html, <http://www.informath.org/WCWF07a.pdf>, and <http://www.informath.org/apprise/a5620.htm>.

²⁹For more, see www.dailytech.com/Major+New+Theory+Proposed+to+Explain+Global+Warming/article8450.htm and Tsonis, et al., "A new dynamical mechanism for major climate shifts," *Geophysical Research Letters*, Vol. 34, L13705, doi:10.1029/2007GL030288, 2007, at <http://www.volny.cz/lumidek/tsonis-grl.pdf>.

³⁰<http://tinyurl.com/2rxoun>; <http://tinyurl.com/2uwjrs>, <http://tinyurl.com/2tlcfr>, and <http://tinyurl.com/37em4o>.

climate change.³¹

Bible readers should find these developments unsurprising. In at least three ways, Scripture has prepared us for them. First, in Genesis 8:21-22, God promised Himself never to allow the cycles that sustain human (and other) life on Earth to cease so long as the Earth remains. Second, in Psalm 109:6-9 we read that God “set a boundary” that the sea could not pass over. Third, fears of CAGW suppose a fragile biosphere and land/ocean/atmosphere system that is inconsistent with these verses and with the Bible’s teaching that a wise Creator designed the Earth to be a resilient, self-regulating system suitable for human habitation.

So I ask you: Do evangelicals who reject CAGW fears do so, as Rich Cizik says, just because we reject science?

E. Calvin Beisner, Ph.D., is associate professor of historical theology and social ethics at Knox Theological Seminary, Ft. Lauderdale, Florida, and national spokesman of the Cornwall Alliance for the Stewardship of Creation.

³¹Readers who wish to subscribe to the e-newsletter of the Cornwall Alliance for the Stewardship of Creation to keep abreast of such developments can do so by visiting www.cornwallalliance.org and clicking on “Contact Us.”