

Heartland Institute Invited Talk

Seventh International Conference on Climate Change  
Chicago Hilton, MA  
May 21-23, 2012

## **"Global Warming/Climate Change"**

### **Issues for Education and for Scientific Societies**

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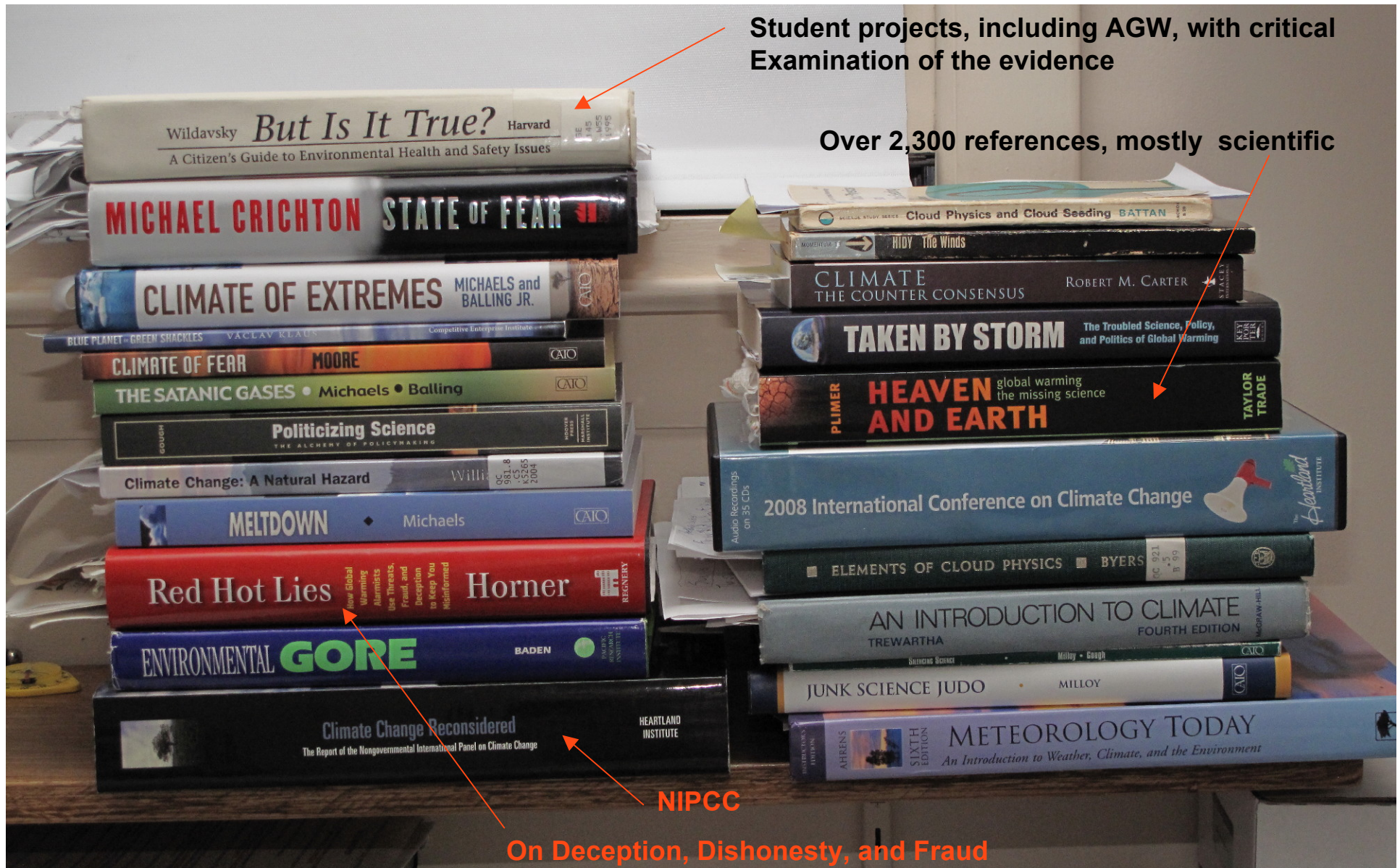
<http://uhaweb.hartford.edu/LGOULD>

Not many science educators appear to know about the contradictory evidence and careful reasoning which refute the claim that human-produced carbon dioxide is causing dangerous "global warming/climate change" (AGW). This talk will explain some of the problems created by educational institutions and scientific societies in not taking an objective approach toward the science of AGW. Such problems continue to impair the healthy functioning of both educational institutions and scientific societies.\*

\*Handouts at talk.

Education: Nonsense from U\_Mass Amherst **NES APS/AAPT** meeting (19Nov2011): speaker and person who introduced him claimed almost no material in peer-reviewed literature being critical of AGW. Really?! Below is what I have, mostly from my own library.

A tiny sampling of Items Critical of “Global Warming/Climate Change” alarmism

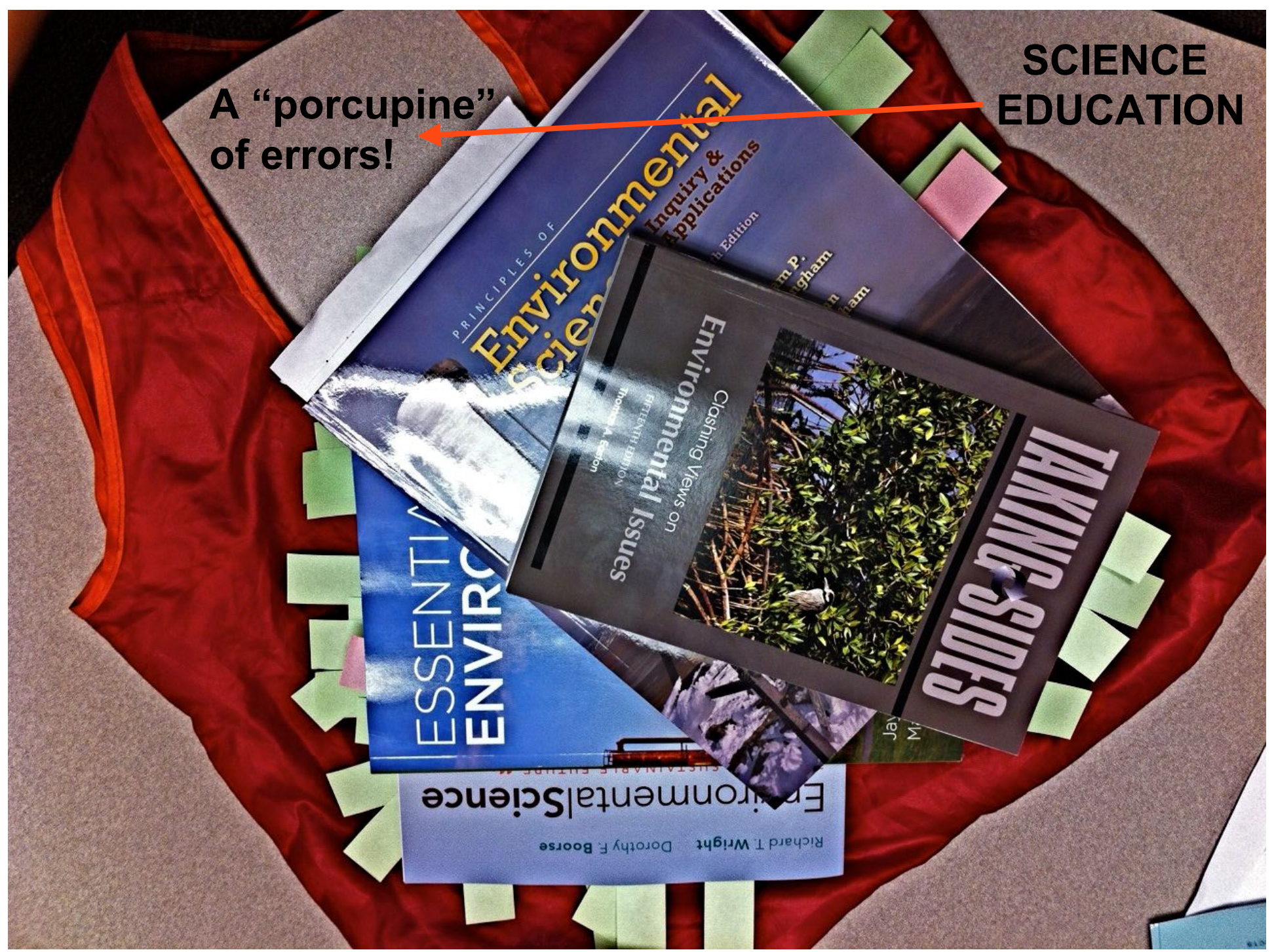


# **AGW in Education**



SCIENCE  
EDUCATION

A “porcupine”  
of errors!





• **TAKING SIDES: Clashing Views on Environmental Issues**, selected, Edited, and with Introductions by Thomas A. Easton (McGraw-Hill, NY, 2013); he's at Thomas College, Maine. "Members of the Academic Advisory Board are instrumental in the final selection of articles for each edition of TAKING SIDES.", p. v [I ordered this for possible use in an AGW course (if I ever get another one approved!)]

### FIFTEENTH EDITION

His **Introduction** is titled **Environmental Issues: The Never-Ending Debate** where he explains past, present, and possible future environmental disasters caused by humans [e.g., "perhaps worst of all those on low-lying South Pacific islands, which are expecting to be wholly inundated by rising seas", p. xxxii]. No mention of any evidence [such as by Nils-Axel Möner\*] which contradicts his beliefs.

cf., <http://www.mitosyfraudes.org/Calen7/MornerEng.html> or *Evidence-Based Climate Science: Data Opposing CO<sub>2</sub> Emissions as the Primary Source of Global Warming* (Elsevier, NY, 2011), p. 197 ff

• Easton (from his web site\*) belongs to the Voluntary Human Extinction Movement (VHEMT): "Phasing out the human race by voluntarily ceasing to breed will allow Earth's biosphere to return to good health\*\* . . . As VHEMT Volunteers know, the hopeful alternative to the extinction of millions of species of plants and animals is the voluntary extinction of one species: Homo sapiens... us." [my stress]

**\*\*Is Earth an  
intrinsic  
value?!**

\* <http://www.vhemt.org/aboutvhemt.htm#vhemt>

# *Confirmation Bias*

X believes that Y is true

Only a small amount of weak evidence is necessary to maintain that belief.

No amount of strong evidence is sufficient to change it.

Contradictions will be tolerated.

Claims by some colleagues who want “balance” so that my references come from neither Right nor Left --- a political determination! How do you “balance”, in the classroom: Alchemy with Chemistry, or Astronomy with Astrology, or Evolution with Special Creation?! Should the instructor give equal time to each?! If so, what happens when students (now professionals) try, e.g., to turn “base metals” into gold? If they haven’t succeeded should they keep trying? Or should they “balance” doing Alchemy with Chemistry? Does it matter that Chemistry teaches that getting gold requires a nuclear transformation (not the electron transfers in chemical reactions)?!



• ***Environmental Science: TOWARD A SUSTAINABLE FUTURE*** by Richard T. Wright and Dorothy F. Boorse (Benjamin Cummings, Boston & 24 other cities around the globe, 2011); they are at Gordon College. [The book was loaned to me by a colleague who used it for his course.]

### **ELEVENTH EDITION**

- “The Intergovernmental Panel on Climate Change has presented clear evidence of the changes in Earth’s climate and has assigned its cause to human agency.” (p. 449)
- “Several research groups have recently published studies that suggest a link between hurricanes and global warming.” (p. 450).
- “The global use of fossil fuel is rising every year, and if nothing is done to reduce it, the 21st century is likely to see climate changes that are dangerous, possibly catastrophic. Sea levels will keep rising...” (p. 453)
- Other pages promulgating errors: 454, 456, 462, 463, 465, 466, 467, 469, 470, 472, 480.

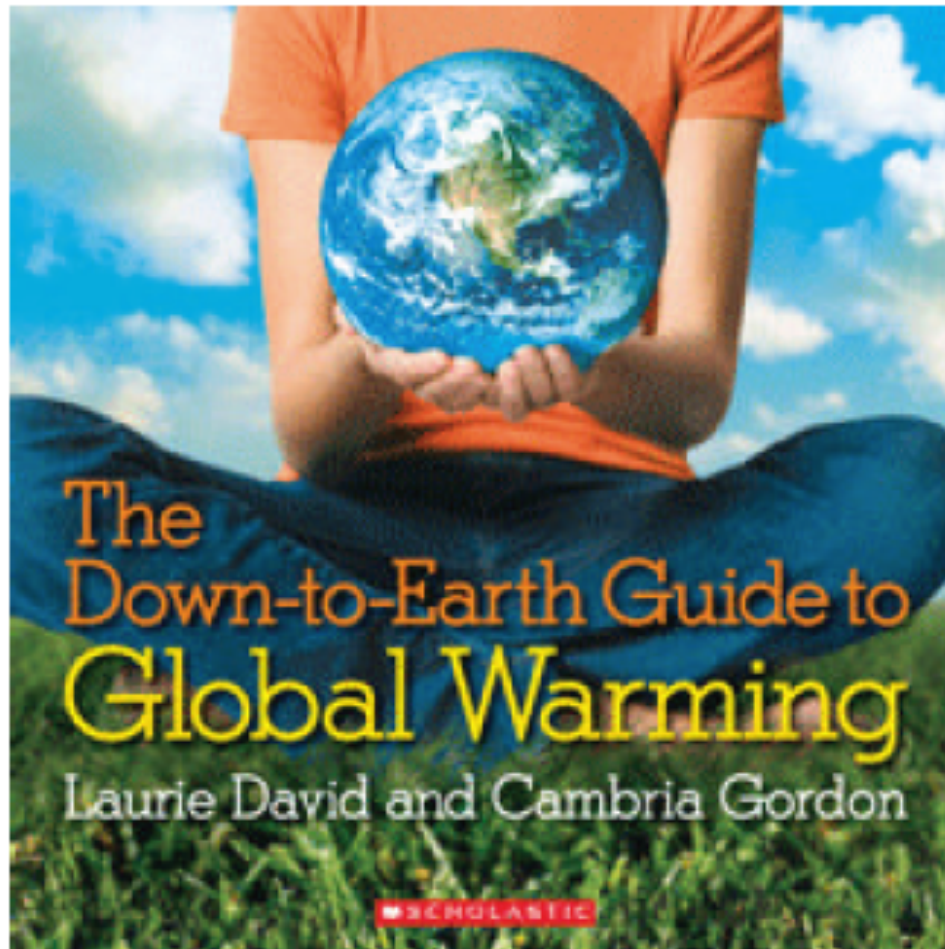
• ***Environmental Science: Inquiry & Applications*** by William P. Cunningham (U. of Minnesota) and Mary Ann Cunningham (Vassar College), (McGraw-Hill, NY, 2011) [book was sent to me by the publisher for possible use in a course]

### **SIXTH EDITION**

“The American Geophysical Union, one of the nation’s largest and most respected scientific organizations, has stated that, “As best as can be determined, the world is now warmer than it has been at any point in the last two millennia, and, if current trends continue, by the end of the century it will likely be hotter than at any point in the last two million years.”, p. 218 [my stress]

**And so it goes...**





Spreading  
False Ideas  
To  
Children

Reviewed by:



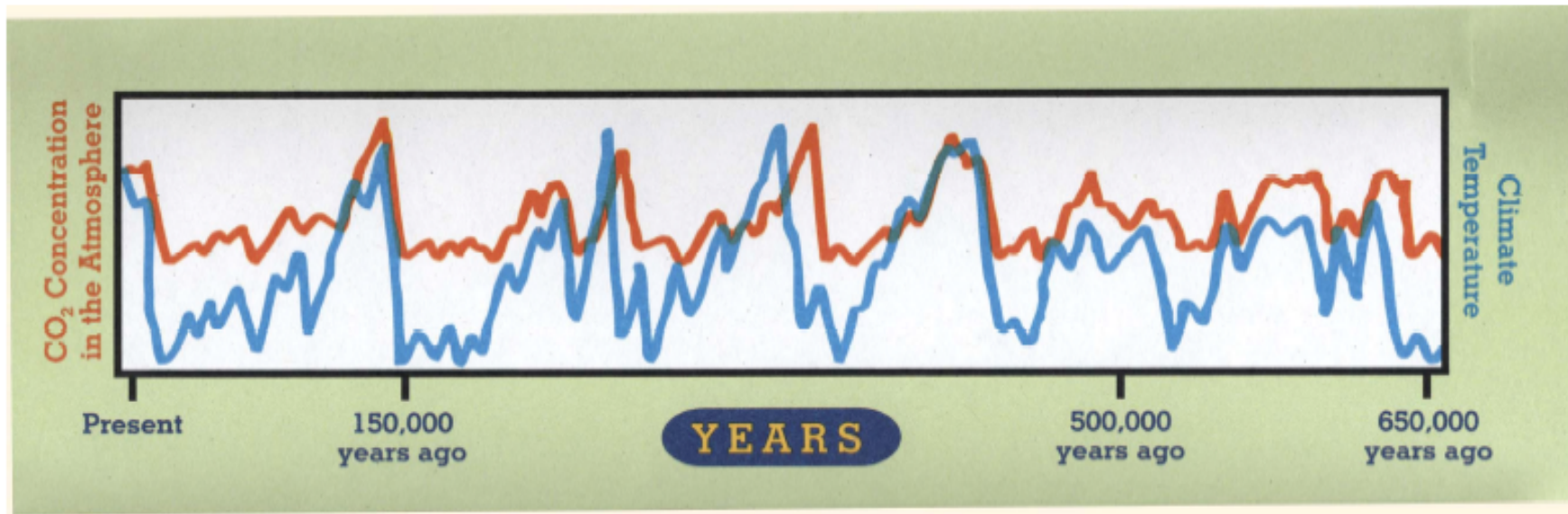
[www.scienceandpublicpolicy.org](http://www.scienceandpublicpolicy.org)

On page 18 of Laurie David's new children's global warming book, there is a glaring scientific error.

David tells children:

*Deep down in the Antarctic ice are atmosphere samples from the past, trapped in tiny air bubbles. These bubbles, formed when snowflakes fell on the ice, are the key to figuring out two things about climate history: what temperatures were in the past and which greenhouse gases were present in the atmosphere at that time.*

*The more the carbon dioxide in the atmosphere, the higher the temperature climbed. The less carbon dioxide, the more the temperature fell. You can see this relationship for yourself by looking at the graph:*

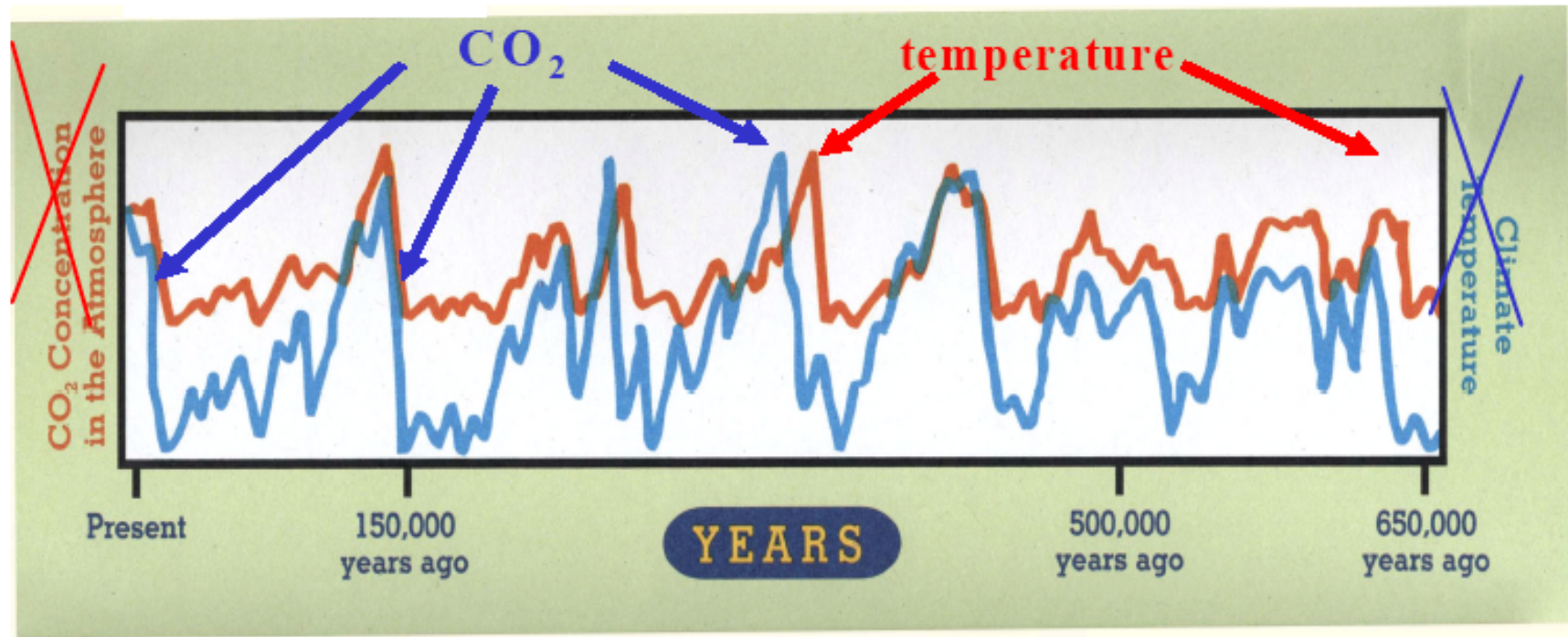


*What makes this graph so amazing is that by connecting rising CO<sub>2</sub> to rising temperature scientists have discovered the link between greenhouse-gas pollution and global warming."*

In "An Inconvenient Truth"(pp. 66-67 of the book; also film) similar curves are presented, but with the one for CO<sub>2</sub> above the one for Temperature. Gore, commenting on how they "fit together" says: **"the most important part of it is this: When there is more CO<sub>2</sub> in the atmosphere, the temperature increases because more heat from the Sun is trapped inside."** [Last sentence false: (1) no correlation and (2) convection not considered; cf., Lindzen E&E]



Corrected chart



# My AGW Course (Fall 2009): Typical Freshman Student Belief as seen from the First In-Class Writing Assignment

## Question: What is global warming?

*Anthropogenic global warming refers to the theory that mankind is releasing greenhouse gases in to the atmosphere, by means of driving cars, producing energy through the burning of fossil fuels, and many other ways. **According to the theory, these greenhouse gases are ripping a hole in the ozone layer of the atmosphere, consequently allowing harmful rays of the sun to reach the surface and trapping them.** This has caused a rise in temperatures across the globe and is causing climates to alter, thus disrupting the flow of nature.*

*[One of my very best of the 15 students in the Seminar]*



I am a physics teacher.

Over the past year the [UK Department for Education](#) and the [AQA board](#) changed the subject.

**Calculations — the very soul of physics — are absent**

**...now everything must be described in words.**

**pupils debate topics like global warming and nuclear power.**

**without any real understanding of how they work or what radiation is.**

**This is the death of physics.**

# AGW in Scientific Societies

- AMS talk cancellation by Administrator in Northwest was re-scheduled
- RS (*Nullius in Verba*) becomes more of an advocacy org
- NAS member R Lindzen has paper rejected by his org
- NES APS Exec Comm cancels but does not re-schedule skeptic member presentation
- ACS member has Administrative blocks to conducting invited skeptic session (which finally went ahead)

**the American Institute of  
Physics' primary periodical**

***Physics Today***

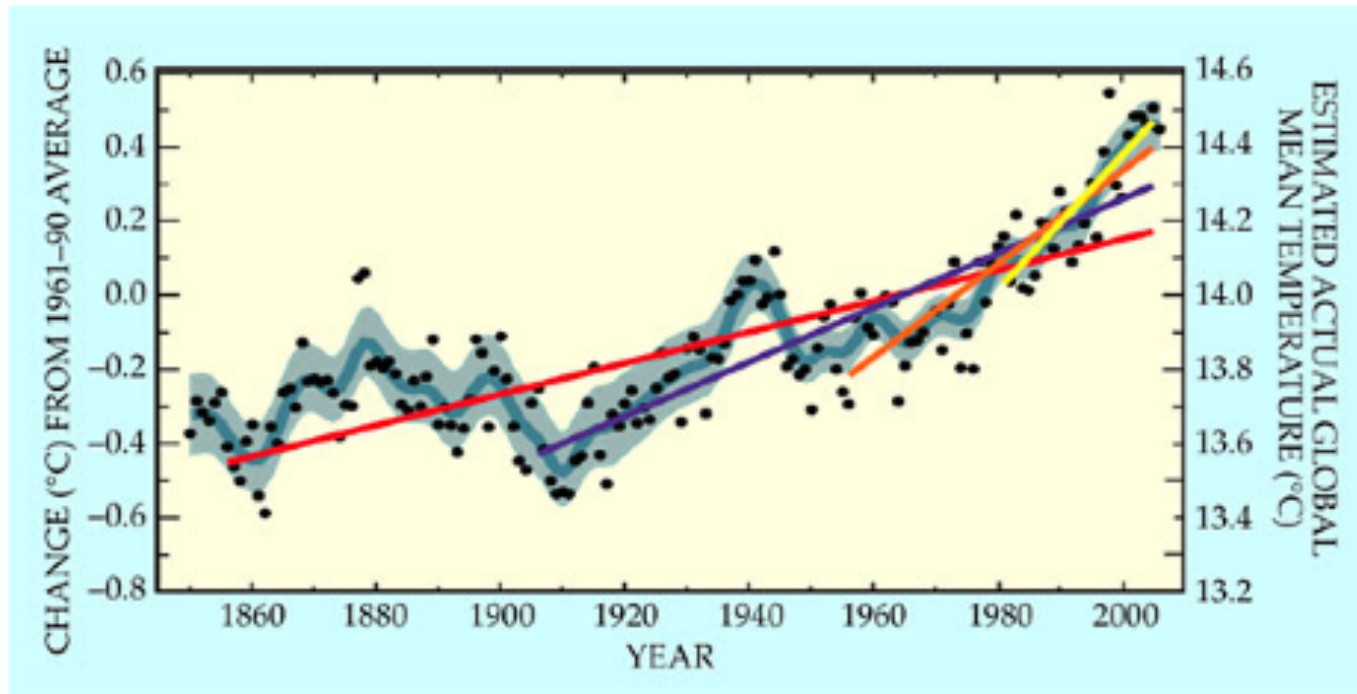
**trumpets AGW**



**“So I’d like to emphasize the fact that we’re at a stage where warming is taking place at a much faster rate. And, clearly, if we don’t bring about some changes, we would have much faster changes in the future.”**

— R.K. Pachauri, Chairman of the Intergovernmental Panel on Climate Change (IPCC)

2008 Wallace Wurth Memorial Lecture; 23 October 2008; University of New South Wales (Sydney, Australia). Title: Our Vulnerable Earth: Climate Change, the IPCC and the role of Generation Green



**The IPCC's fourth assessment report** contains details of the global mean observed temperatures (black dots) along with simple fits to the data based on the last 25 (yellow), 50 (orange), 100 (purple) and 150 years (red). The left axis shows anomalies relative to the 1961 to 1990 average and the right axis shows the estimated actual temperature.

Credit: IPCC

**Issues and Events Climate changes for peace prize winners** The award of the 2007 Nobel Peace Prize delighted scientists and the public but underscored the US government's lack of action to reduce global warming. *Physics Today* December 2007, page 22

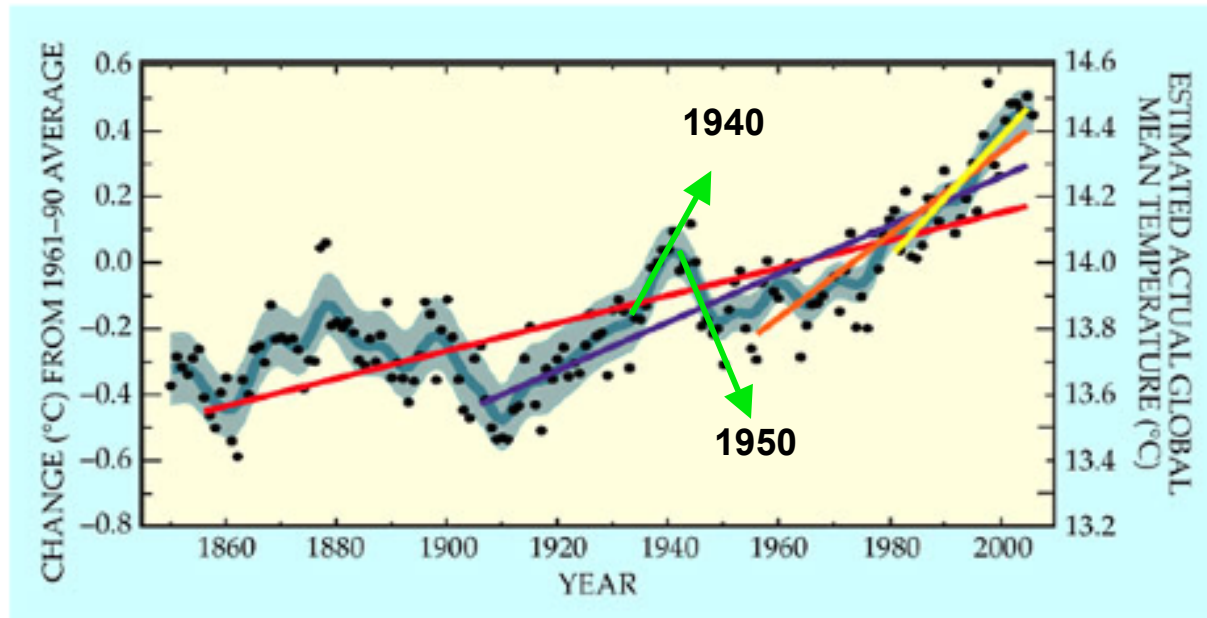
WHAT IF YOU LIVED IN 1940?

GLOBAL WARMING?!

WHAT IF YOU LIVED IN 1950?

GLOBAL COOLING?!

NOTE  
the  
Vertical  
Scale



The IPCC's fourth assessment report contains details of the global mean observed temperatures (black dots) along with simple fits to the data based on the last 25 (yellow), 50 (orange), 100 (purple) and 150 years (red). The left axis shows anomalies relative to the 1961 to 1990 average and the right axis shows the estimated actual temperature.

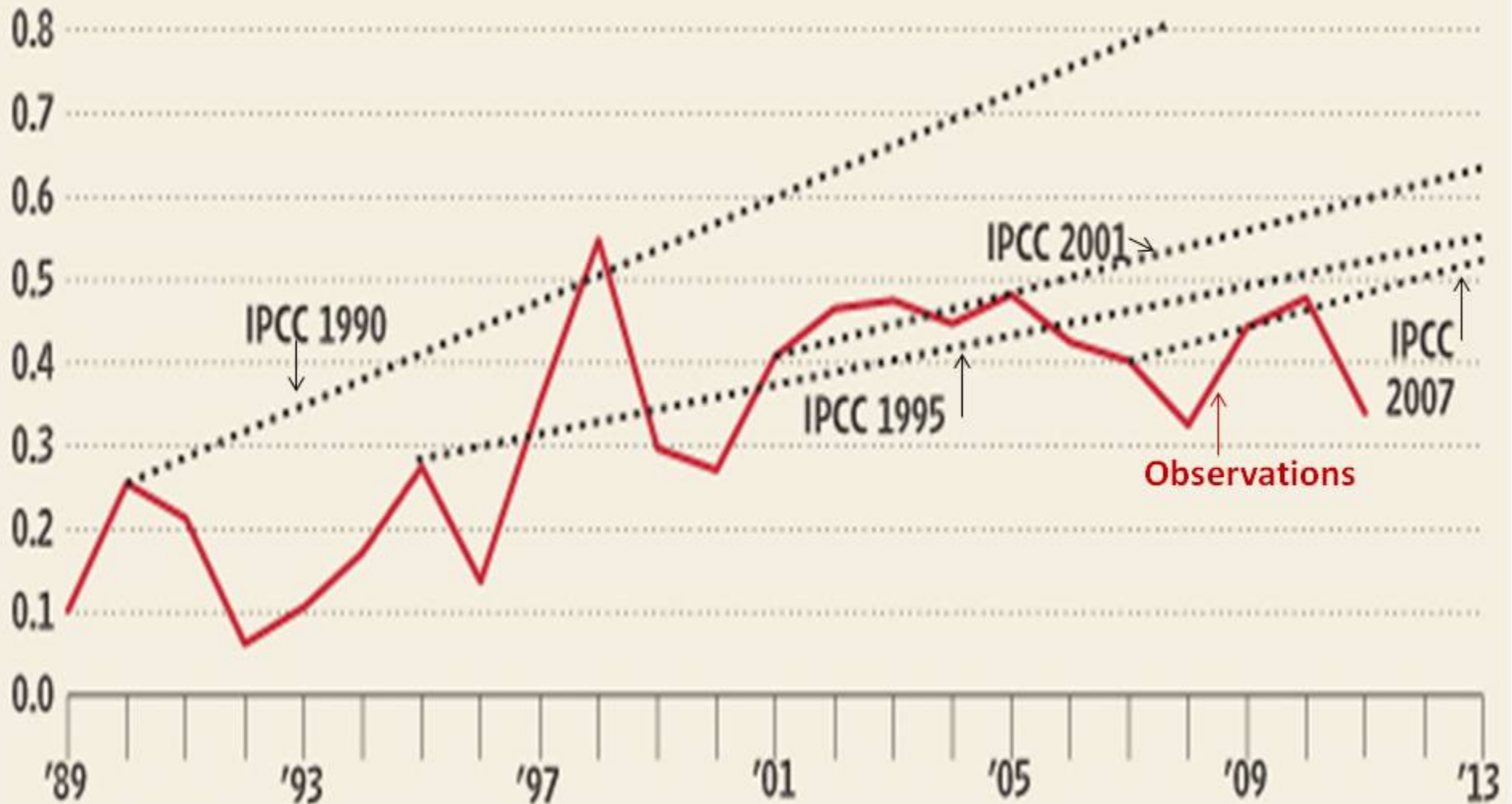
Credit: IPCC

Pick your points!

Two green arrows with their years added by me.

# Reality Versus Alarm

Surface global temperature shift, in degrees Celsius, vs IPCC projections, 1989-2011

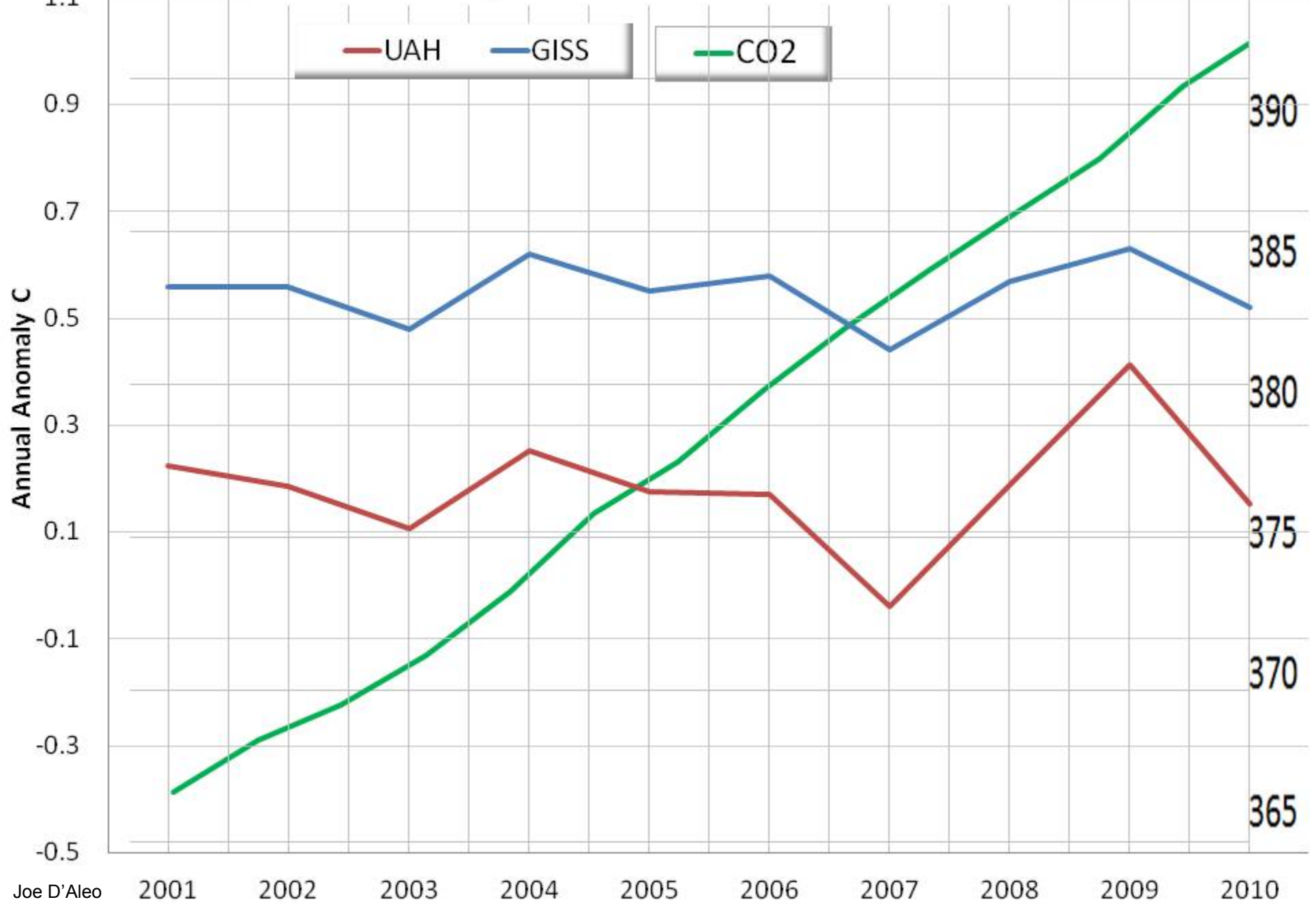


Source: HadCRUT3

Joe D'Aleo



# Global Temperature Anomalies vs CO2



**1. Reduction of Mean Global Temperature if all  
Kyoto signatories had reduced emissions?**

**0.07 degrees Centigrade !!!**

**2. U.S. SUPREME COURT AMICI BRIEF  
SUBMITTED BY SOUTHEASTERN LEGAL FOUNDATION  
American Electric Power Company, Inc., et al. v. State of Connecticut, et  
al. (No. 10-174)**

The defendant power companies' carbon emissions make such a de minimis contribution to the global temperature that they cannot possibly be traced or redressed as required by definitive case law. From the SLF brief:

**“The ‘relief’ plaintiffs seek would accomplish a temperature reduction of 0.00071 degrees Celsius, or 7.1 ten-thousandths of a degree, 70 times smaller than the smallest change that can be detected.” (p. 9)**

**“... the annual emissions reductions prayed for by plaintiffs in the first year would be replaced by growth in China alone in 13 days.” (p. 16)**

Though it is assumed by many that there is no meaningful scientific controversy surrounding human-caused global warming, the UN Intergovernmental Panel on Climate Change (IPCC) reports on which the plaintiffs rely plainly disclose substantial scientific uncertainty about multiple climate processes, raising serious doubts about the extent to which global warming can be attributed to human emissions. Therefore, the Court should proceed with caution about the plaintiffs' “every little bit counts” argument. [Ruling favorable: [http://www.epalawsuit.com/storage/SLF Amici US Supreme Court AEP 2-8-11.pdf](http://www.epalawsuit.com/storage/SLF%20Amici%20US%20Supreme%20Court%20AEP%202-8-11.pdf)[http://www.epalawsuit.com/storage/SLF Amici US Supreme Court AEP 2-8-11.pdf](http://www.epalawsuit.com/storage/SLF%20Amici%20US%20Supreme%20Court%20AEP%202-8-11.pdf)]

# The prevailing “Authorities”

**“In my opinion the Nobel prize in global warming and such has already been given last year by Gore; who got the Nobel Prize for global warming and what not. And I hate to say something bad about Norway, but in this case I *sharply* [his stress, based on his study of the AGW claims] disagree with that prize.”**

**— Ivar Giaever  
(Nobel Laureate, Physics)**

58th Meeting of Nobel Laureates  
Panel Discussion on "Climate Changes  
and Energy Challenges"  
(Lindau; 1 July 2008)

**Ivar Giaever** resigned from the APS in October 2011 over the APS “incontrovertible” stand.



## Climate changes for peace prize winners

**The award of the 2007 Nobel Peace Prize delighted scientists and the public but underscored the US government's lack of action to reduce global warming.**

**Rajendra Pachauri**, an Indian economist and chair of the Intergovernmental Panel on Climate Change, first got an inkling that something special was about to happen when a large group of journalists turned up outside his office but wouldn't tell him why they were there.

A few minutes later, the Nobel Prize committee announced that the IPCC and former US vice president Al Gore would share this year's peace prize “for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change.” A delighted Pachauri paid tribute to the scientific community that won the award: “The experts and scientists are the backbone of the IPCC, and they provide the knowledge, which has contributed to our success.” In an interview with *PHYSICS TODAY*, he expanded on what the award means to the IPCC and to him: “I hope we can use it for informing the public on the major findings of the fourth assessment report [which came out in 2007], and also for encouraging researchers to work in the area of climate change in general. We really have a very short window of time to reduce emissions of greenhouse gases and therefore the risk of significant climate change.”

### A scientific prize

The IPCC was set up in 1988 by the World Meteorological Organization and the United Nations Environment Programme to assess climate change. More than 2500 researchers from some 130 nations contribute toward writing the IPCC reports. “This must be the most maligned institution on Earth, in that it's a very conservative scientific panel which chooses only the science which is rock solid,” says George Monbiot, an environmental policy analyst at Oxford Brookes University in the UK. “Yet it's often portrayed as an insane radical organization trying to overthrow civilization as we know it.”

Jerry Mahlman of the National Center for Atmospheric Research in Boulder, Colorado, helped set up the IPCC and says that the organization has had

“conspicuous success in internationalizing the scientific commitment that is needed for getting to the bottom of the human-caused global climate warming.” (An interview with Mahlman on the science of climate change is available on the *PHYSICS TODAY* website.) In its most recent report, issued this past February, the IPCC put the likelihood that human activity has been a key contributor to global warming in recent decades at 90%, up from its 2001 estimate of 66%.

“Correct [long-term] climate forecasts will be an important factor for preserv-



ing the peace in the future,” says Peter Lemke, an IPCC scientist at the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, Germany. “That is why it is gratifying to hear that climate scientists have been awarded the peace prize. It shows how important this research is for world politics.”

“What may be missed by the public in the announcement of this award,” says Spencer Weart of the American Institute of Physics and author of *The Discovery of Global Warming* (Harvard University Press, 2003), is that “the IPCC reports are formed through consensus, not just by scientists but also by the representatives of nearly every government in the world. All these groups, including countries such as China, have agreed that there are economical steps that can be taken to avoid the risk of extreme climate events by 2100.”

### Gore's campaign

While the IPCC is recognized as having provided the science to document and support climate change and the roles of human activity, Gore has raised public

awareness about the issue. “He has pursued the climate issue doggedly for 30 years,” says Michael Oppenheimer, director of the science, technology, and environmental policy program at Princeton University and a longtime IPCC participant.

During his tenure in Congress from 1979 to 1993, Gore frequently held hearings and gave talks on environmental issues. As vice president, he was the most senior US politician to attend the Kyoto Protocol discussions and is credited with breaking the stalemate that nearly caused negotiations to fail, though the treaty was never ratified by the US government due to a lack of support in Congress.

After his bid for the presidency failed in 2000, Gore updated his global warming presentation and started speaking to packed crowds at university campuses. The lecture eventually turned into the 2006 movie *An Inconvenient Truth*, which won an Academy Award for best documentary. “Unlike almost any other politician,” says Oppenheimer, “he educated himself in depth on a key public issue, calibrated his public statements closely to the science of the issue, and then found an unusual and unusually effective way to reach the public. There is not a doubt in my mind that he merits the prize.” The movie has been seen by millions of people and is credited with reviving interest in combating climate change. Even so, some scientists are miffed: “It is perhaps a little deflating that one man and his PowerPoint show has as much influence as the decades of dedicated work by so many scientists,” says Piers Forster of the University of Leeds School of Earth and Environment.

Gore said at a press conference in October, “This award is even more meaningful because I have the honor of sharing it with the IPCC. The climate crisis is not a political issue, it is a moral and spiritual challenge to all of humanity.”

### Too hot to handle?

But Oppenheimer is unconvinced that politics can be so readily disentangled from the climate-change issue. “Without the IPCC reports, I doubt the UN



*If it disagrees with experiment [scientific evidence] it is wrong. In that simple statement is the key to science.*

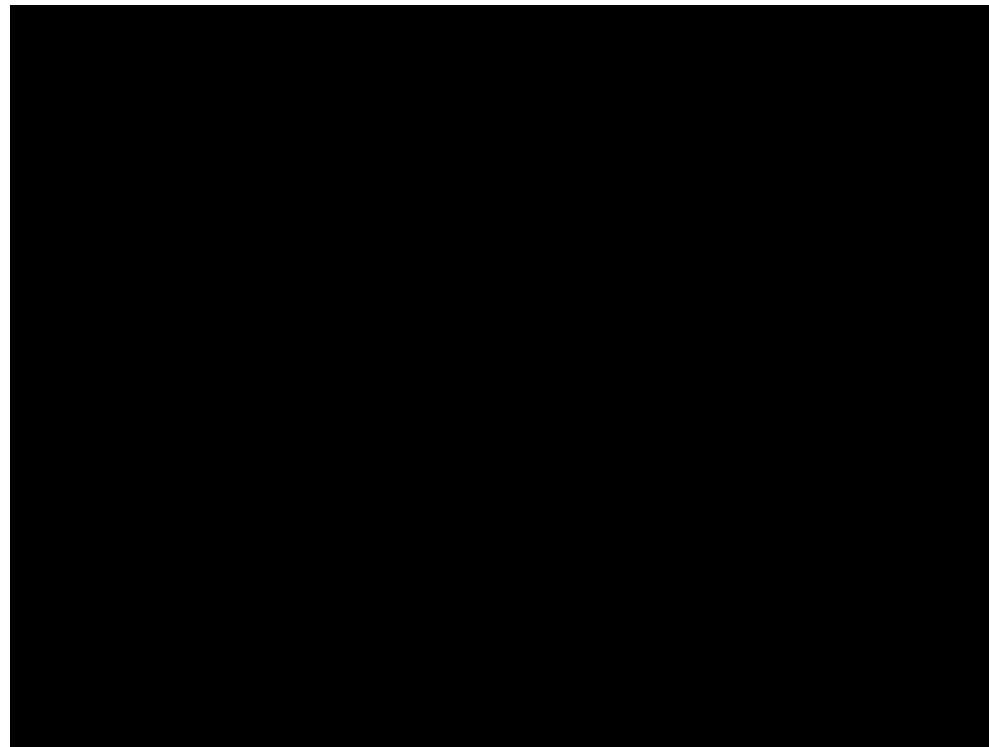
*It does not make any difference how beautiful your guess is. It does not make any difference how smart you are, who made the guess, or what his name is — if it disagrees with experiment it is wrong.*

— Richard Feynman

*The Character of Physical Law, The MIT Press, 1965, p. 156.*

Richard Feynman's  
Messenger Lectures  
(Cornell University, 1964)

Lecture #7, Section 6:  
Seeking New Laws\*



[http://www.youtube.com/watch?feature=player\\_embedded&v=b240PGCMwV0](http://www.youtube.com/watch?feature=player_embedded&v=b240PGCMwV0)

\* <http://research.microsoft.com/apps/tools/tuva/index.html#data=4%7C4dbfe549-e795-47a0-bda2-9597fe5bb344%7C%7C>

Congressional Working Paper



# Al Gore's Science Fiction



A Skeptic's Guide  
to *An Inconvenient Truth*  
by Marlo Lewis, Jr.

A point-by-point  
refutation of  
almost every  
claim made by  
Gore in his  
film/book.

Detailed references.

Competitive Enterprise Institute

(URL is on my Website)

**APS**  
**sticks to its guns...**

**and shoots itself in the foot!**



# Statement of the APS Council, adopted on November 18, 2007\*

***The evidence is incontrovertible: Global warming is occurring.***

APS News; January 2008 (Volume 17, Number 1)

**\*“The APS statement does not claim that AGW evidence is ‘incontrovertible’. It does say that the global temperature rise is incontrovertible but not AGW.”\*\***

## Statement of the APS Council, adopted on November 18, 2007\*

*Emissions of greenhouse gases from human activities are changing the atmosphere in ways that affect the Earth's climate. Greenhouse gases include carbon dioxide as well as methane, nitrous oxide and other gases. They are emitted from fossil fuel combustion and a range of industrial and agricultural processes.*

**Even that is False!**



***The evidence is incontrovertible: Global warming is occurring. If no mitigating actions are taken, significant disruptions in the Earth's physical and ecological systems, social systems, security and human health are likely to occur. We must reduce emissions of greenhouse gases beginning now.***

*Because the complexity of the climate makes accurate prediction difficult, the APS urges an enhanced effort to understand the effects of human activity on the Earth's climate, and to provide the technological options for meeting the climate challenge in the near and longer terms. The APS also urges governments, universities, national laboratories and its membership to support policies and actions that will reduce the emission of greenhouse gases.*

APS News; January 2008 (Volume 17, Number 1)

**\*“The APS statement does not claim that AGW evidence in ‘incontrovertible’. It does say that the global temperature rise is incontrovertible but not AGW.”\*\*** Readers may judge for themselves as the full Statement can be found at

[http://www.openletter-globalwarming.info/Site/2009\\_open\\_letter.html](http://www.openletter-globalwarming.info/Site/2009_open_letter.html)

\*\*Peter Parker (2011 Chair of the NES APS), NES APS Newsletter, Fall 2011

Red and boldface added for emphasis.

Additional Background & Crit: [http://www.openletter-globalwarming.info/Site/2009\\_open\\_letter.html](http://www.openletter-globalwarming.info/Site/2009_open_letter.html)

**APS Members Rebel against their Society's**  
**Non-Objective Assessment of Climate Change**

[http://www.openletter-globalwarming.info/Site/2009\\_open\\_letter.html](http://www.openletter-globalwarming.info/Site/2009_open_letter.html)

**Regarding the National Policy Statement on Climate Change of the APS Council\*: An Open Letter to the Council of the American Physical Society**

As physicists who are familiar with the science issues, and as current and past members of the American Physical Society, we the undersigned urge the Council to revise its current statement\* on climate change as follows, so as to more accurately represent the current state of the science:

*Greenhouse gas emissions, such as carbon dioxide, methane, and nitrous oxide, accompany human industrial and agricultural activity. While substantial concern has been expressed that emissions may cause significant climate change, measured or reconstructed temperature records indicate that 20th 21st century changes are neither exceptional nor persistent, and the historical and geological records show many periods warmer than today. In addition, there is an extensive scientific literature that examines beneficial effects of increased levels of carbon dioxide for both plants and animals.*

*Studies of a variety of natural processes, including ocean cycles and solar variability, indicate that they can account for variations in the Earth's climate on the time scale of decades and centuries. Current climate models appear insufficiently reliable to properly account for natural and anthropogenic contributions to past climate change, much less project future climate.*

*The APS supports an objective scientific effort to understand the effects of all processes — natural and human — on the Earth's climate and the biosphere's response to climate change, and promotes technological options for meeting challenges of future climate changes, regardless of cause. [names and affiliations of signatories can be Found at [http://www.openletter-globalwarming.info/Site/Signatures\\_\\_APS\\_Council\\_Study.html](http://www.openletter-globalwarming.info/Site/Signatures__APS_Council_Study.html)]*

\* APS News; January 2008 (Volume 17, Number 1)

Physicists are, like Feynman, "curious characters".

So let's ask some elementary questions:

Is there **A temperature** of the Earth that (as often communicated to the public) is rising so that it's reasonable to put forth the metaphor (as Al Gore did) that "The Earth has a fever!" ?

What does it mean for a human to have a fever?

Consider placement of thermometer in human and in Earth.

**AVERAGE temperature:** How does an average temperature (nonlocal result) affect a particular region (local effect), to yield rising sea levels at a given place, melting of specific glaciers, and causing droughts in a particular region?!

## Playing with an Average

Example: Drowning in water with average depth of one inch.

How? Person takes 1000 steps, each in 0.001" water.

Next step: Person falls into a well having a water depth of 1,000"... and drowns.

$[(0.001" \times 1,000 \text{ steps} + 1,000" \times 1 \text{ step}) / 1,001 \text{ steps} = 1"]$



**Significant Behind-the-scenes  
causes for the corruption  
of  
Science Societies  
and  
Science Education**

- For APS distortions of science — see the website:

<http://www.openletter-globalwarming.info/Site/HOME.html>

It contains an OPEN LETTER to the COUNCIL of the AMERICAN PHYSICAL SOCIETY regarding their National Policy Statement on Climate Change [Please see links at top of page]

- For NAS distortions of science — see the article by Richard Lindzen:  
**Climate Science: Is it currently designed to answer questions?**

<http://arxiv.org/abs/0809.3762v3>

- For The Royal Society and its corruption of science — see the document by Andrew Montford:

***Nullius in Verba***

On the Word of No One

**The Royal Society and Climate Change**

[http://thegwpmf.org/images/stories/gwpmf-reports/montford-royal\\_society.pdf](http://thegwpmf.org/images/stories/gwpmf-reports/montford-royal_society.pdf)

# ClimateGate

- On November 17, 2009 @6:20 am EST, FOIA.zip from UK Climatic Research Unit at the University of East Anglia (CRU) appeared on internet- 61 MB of zipped files, over 1000 e-mails and over 100 documents and files
- ClimateGate provided **insights** into the **behavior** of key scientists who shaped the scientific opinion of the climate science community, policymakers, the mainstream media and the public.

# the rules of the game

Evidence base for the Climate Change  
Communications Strategy

The game is communicating climate change;  
the rules will help us win it.

Using normal cues  
to deceive. How-to  
use pseudo-reason  
in an Age of Un-  
Reason...



From the  
CRU  
“ClimateGate”  
folder

**futerra**

Recommendations to the Climate Change Communications Working Group:





## — Quotations —

### 2. Forget the climate change detractors

Those who deny climate change science are irritating, but unimportant. The argument is not about *if* we should deal with climate change, but *how* we should deal with climate change.

Details: See [www.defra.gov.uk](http://www.defra.gov.uk) The Department for Environment, Food and Rural Affairs (Defra) is a Government Department in the UK.

**Charlie Rose's show** [20June2006]. Asked by Rose "Do you know any credible scientist who says 'wait a minute – this hasn't been proven,' is there still a debate?" Gore replied, "The debate's over. The people who dispute the international consensus on global warming are in the same category now with the people who think the moon landing was staged on a movie lot in Arizona."



Banquet speaker, Harrison Schmitt -- B.S., Caltech, 1957  
Ph.D. in Geology, Harvard, 1964 --Moonwalker, Apollo 17  
(banquet picture courtesy of Nick Nicastro, NES-AAPT; 4 April 2008)  
NASA photo S71-52260 is Jack's Official Mission Portrait

<http://archive.newsmax.com/archives/ic/2006/6/20/134405.shtml?s=ic%20>

# Game-Changer

- *“The release of the emails was a turning point, a game-changer,”* said Mike Hulme, professor of climate change at the University of East Anglia.
- Dr. Patrick J. Michaels, a professor of environmental sciences of the University of Virginia from 1980-2007, characterized (WSJ July 12, 2010) the emails as *“suggesting some of the world’s leading climate scientists engaged in professional misconduct, data manipulation and jiggering of both the scientific literature and climatic data to paint what scientist Ken Briffa called ‘a nice, tidy story’ of climate history.”*

# Hiding the Decline

- Tim Osborn discusses how tree ring data was truncated to stop an apparent cooling trend post 1960 showing up in the results ([0939154709](#)).
- Phil Jones says he has use Mann's "Nature trick of adding in the instrumental temps to each series"...to hide the decline".([0942777075](#))
- Tom Wigley say that Keith Briffa has got himself into a mess over the Yamal chronology (although also says it's insignificant. Says data withholding issue is hot potato, since many "good" scientists condemn it. ([1254756944](#)))



## Visualizing the CRU Leaked Email Network

In addition to the CRU and UKMET, we find US government agencies, US universities and research labs funded by the US Government


*“Oh what a tangled web we weave,  
when first we practice to deceive”*

Sir Walter Scott

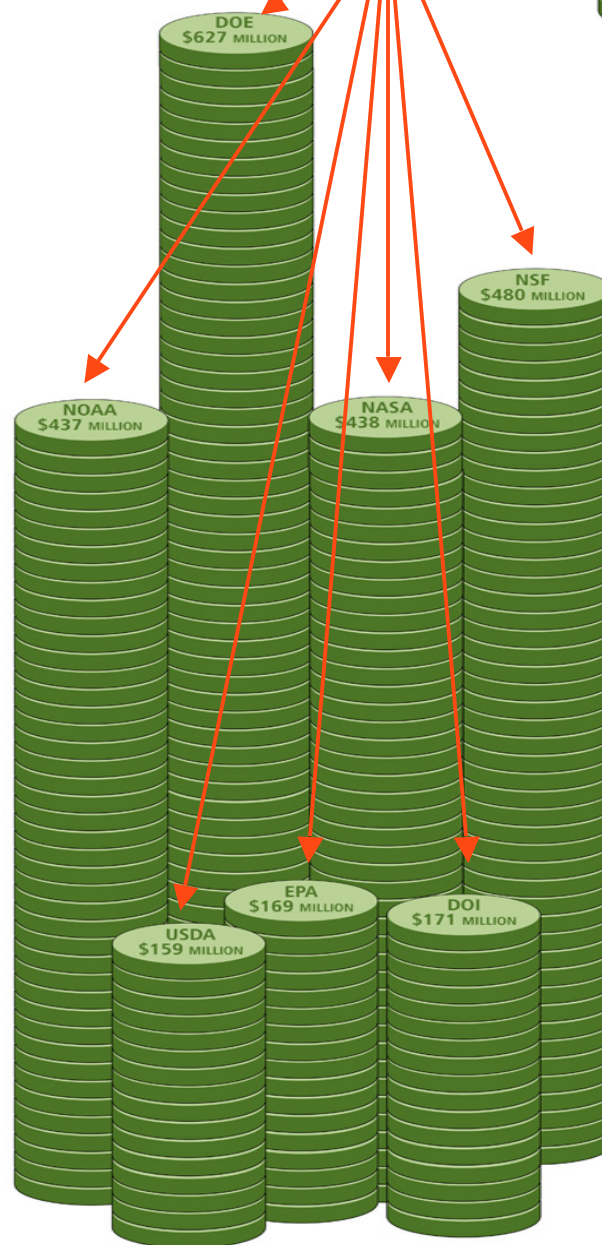
<http://seadragon.com/view/h0i>



# 2011 US GOVERNMENT SPENDING ON CLIMATE CHANGE RESEARCH VS HEARTLAND INSTITUTE

 = \$10 MILLION

Over  
\$2 billion  
**\$2,000,000,000**



NGO inputs?

**Paid by “Big Oil”?!**

About  
\$7 million  
**\$7,000,000**

“Our concern about the environment, going back some 40 years, has taught us important lessons. It is one thing to impose drastic measures and harsh economic penalties when an environmental problem is clear-cut and severe. It is foolish to do so when the problem is largely hypothetical and not substantiated by observations. *As NIPCC shows* by offering an independent, non-governmental ‘second opinion’ on the ‘global warming’ issue, *we do not currently have any convincing evidence or observations of significant climate change from other than natural causes.*” [my stress]

## Frederick Seitz

President Emeritus, Rockefeller University

Past President, National Academy of Sciences

Past President, American Physical Society

Chairman, Science and Environmental Policy Project

## Scientific and Other Types of Imagination

**Scientific imagination:**

**“... that whatever we imagine has to be consistent with everything we know.”**

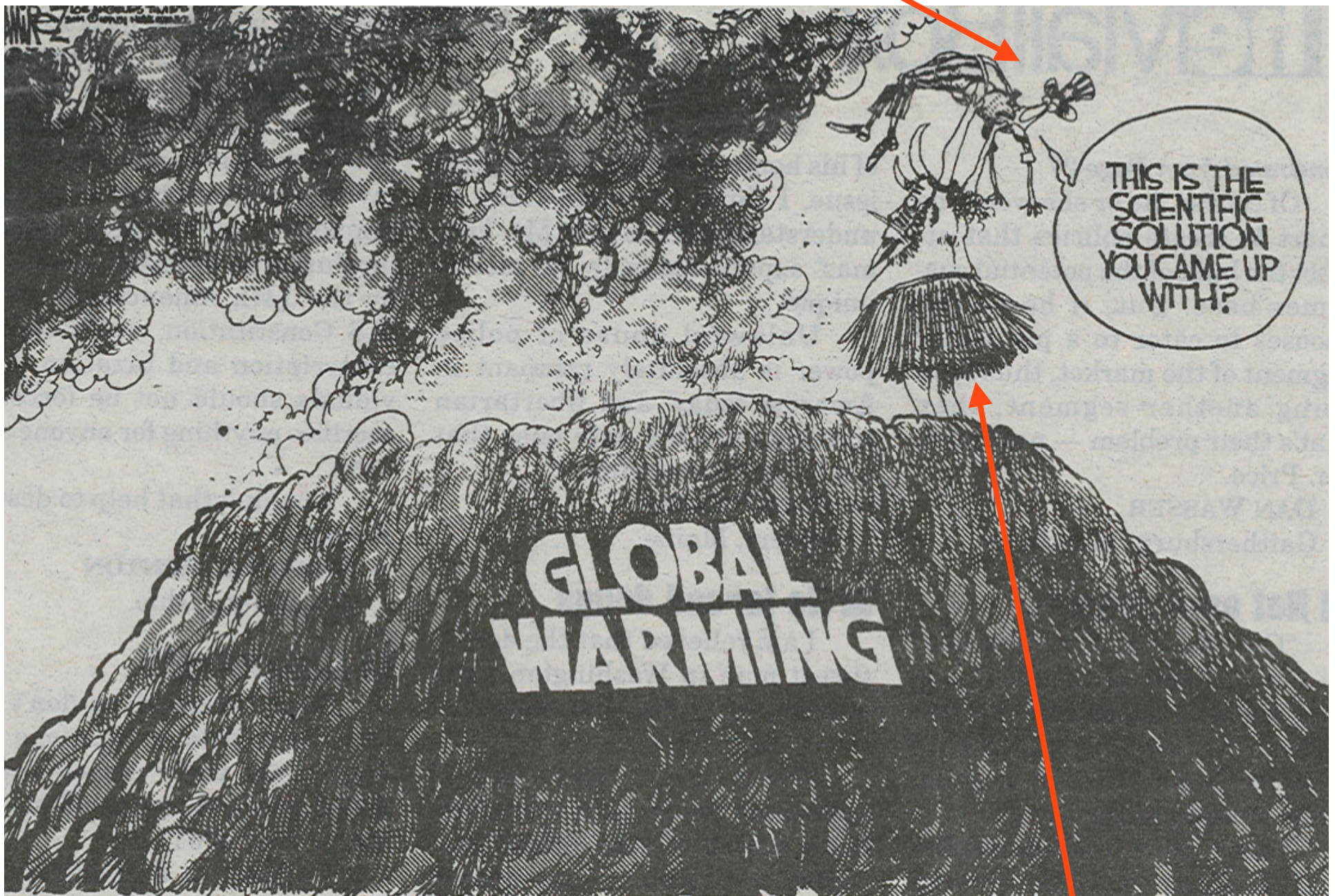
(from the audio of The Feynman Lectures on Physics, Vol. 16, Disc 05, Volume 2, Chapter 20, 20.3, Scientific Imagination).

If you don't do *that*...

... then you can get *this*...



## Science and Science Education



"Science" Advisors & Policy Makers



Please keep in mind the difference between

WHAT A SCIENTIFIC SOCIETY STANDS FOR

and

WHO STANDS FOR THAT SOCIETY

Many critiques of anthropogenic global warming (AGW) are not known to the public. But they can be accessed in recent publications of the *New England Section of the APS Newsletter* (Fall 2007 through Spring 2012 issues). These can be obtained from the NES APS website —

<http://www.aps.org/units/nes/newsletters/>

— Thanks for your attention. —