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Quote of the Week
“The report emphasizes that human society has developed for thousands of years under one climatic state, and now a new set of climatic conditions are taking shape.” NOAA’s State of the Climate in 2009, July 28, 2010 (http://www.noaanews.noaa.gov/stories2010/20100728_stateoftheclimate.html)

Number of the Week: +0.49°C

The Week That Was 2010-08-07 (August 7, 2010)
Brought to you by SEPP (www.SEPP.org)
The Science and Environmental Policy Project

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THIS WEEK:
By Ken Haapala, Executive Vice President, Science and Environmental Policy Project (SEPP)

The quote of the week came from the NOAA report (see http://tiny.cc/nbj5c) released on July 28, the day before EPA’s declaration that it will not reconsider its finding that carbon dioxide emissions are harmful to human health and welfare. Virtually weekly, physical evidence mounts that over the past 10,000 years the earth has experienced periods warmer than today – the last one was the Medieval Warm Period and cold periods such as the Little Ice Age. (Please see the first two references under NIPCC reviews.) Yet, NOAA maintains that the earth’s climate has been virtually stable for thousands of years.

This goes to the crux of the political issue – the systematic disregard by publically funded scientists of contradictory physical evidence. Be it by hockey sticks, use of carefully selected time frames, calculation of past temperatures by computer models with highly speculative assumptions, or any other means, a code of silence infects publicly funded climate science.

The public has a right to know all the science not just selected parts of it, as in the NOAA report. A right ignored by publically funded scientists. (Please see the excerpt of Bob Carter’s article “Closing out dissent” under Articles. Next week’s TWTW Science Editorial will be a short review of the NOAA report by Sherwood, Keith, and Craig Idso.

The Number of the Week is +0.49°C. This is the temperature anomaly for July, 2010 from UAH Globally Averaged Satellite-Based Temperature of the Lower Atmosphere as reported by Roy Spencer. The temperature for July is 0.49°C above the mean for the past 32.5 years. Temperatures continue to be slightly below, but not statistically significantly so, than the record for the satellite measurements set in 1998, which was a strong El Niño year. The 2009 – 2010 El Niño appears to be over. Sea surface temperatures are falling. It remains to be seen if atmospheric temperatures will fall later this year. (http://www.drroyspencer.com/latest-global-temperatures/)

We can all be thankful that Roy Spencer and John Christy adamantly believe that the public should be informed of the results of science – not selected parts of it.

It appears that cap and trade in the US is dead – for now. Senate Majority Leader Harry Reid withdrew a very weak energy bill before the Senate left for summer recess. No doubt something will return with the
The BP well in the Gulf of Mexico has been capped and cemented from the top. The operation will not be complete until a relief well intercepts the existing well far below the floor of the Gulf and seals the well “from below.” The technological advances in directional drilling over the past decade are remarkable.

Government reports state the total amount of oil that gushed out of the well is about 4.9 million barrels. Fortunately, it was light oil and much of it evaporated. NOAA estimates that over 70% of the oil is gone. The size of the spill compares that the estimates of the amount of oil released into the Persian Gulf by retreating Iraqi troops during the first Gulf War (about 4 to 6 million barrels). According to Wikipedia, the Persian Gulf is 251,000 square kilometers while the Gulf of Mexico is 6.4 times as large at 1,600,000 square kilometers. Also the Persian Gulf is more enclosed. Thus the expected long term intensity of the BP spill should be significantly less than that of the Persian Gulf. Some, but few remnants of the Persian Gulf release remain.

It continues to appear that the administration will use the BP spill to punish the entire oil industry, and consequently the American public.

The great advances in directional drilling, combined with the stubbornness of one man, are creating a major revision of the hydrocarbon, geophysical map. With little or no government support, George Mitchell spent almost 20 years and his own money to develop a means of “fracking” shale to extract natural gas. If the method can be successfully applied elsewhere, then many areas of the world with no “recoverable” hydrocarbon reserves will have abundant reserves. The method is proving successful around Fort Worth, Texas and in the Eastern US.

The method uses water and sand mixed with small amounts of chemicals. Already the anti-energy groups are attacking the method because it uses millions of gallons of water per well and some questionable chemicals. Even though the process takes place thousands of feet below the water table and below aquifers for drinking water, these groups are playing on fear of contamination of drinking water. Clearly, proper treatment of surface waste water from the process is needed. But this should be determined by science, not by fear.

Also of concern is the role that the Federal Government, particularly the EPA, may decide to play. Continued success in this privately funded enterprise will render many alternative energy schemes of Federal and state governments even more financially impractical. Will governments allow it? (Please see one of the few articles appearing in the general press on this vital development: “An American Gift ...” article number 5.)
SEPP SCIENCE EDITORIAL #24-2010 (Aug 7, 2010)
By S. Fred Singer, President, Science and Environmental Policy Project

The RES is a hoax, a fraud, and a rip-off
Published by American Thinker, August 5, 2010
[Slightly edited for clarity]

The US Senate’s proposed Renewable Electricity Standard (RES) would force electric utilities to generate a large and increasing percentage of their power from wind and solar – rising to 15% by 2021. These goals resemble those of the Waxman-Markey bill that barely passed the House in June 2009. It’s disturbing that some Republicans on the House Energy and Natural Resources Committee voted for ACLEA (American Clean Energy Leadership Act). If the Senate were to take up an energy bill, it is likely that Sen. Brownback (R-KS) will introduce an amendment for RES.

Now, it is quite clear that wind and solar are not economic -- and probably never will be competitive, even when fuel prices rise significantly. So the RES mandate would mean that all of us taxpayers would support even more the RE rent-seekers and lobbyists, who are already milking the government for subsidies and tax-breaks for the construction of wind farms and solar energy projects.

In addition, electricity users (rate payers) would pay more for electric power to cover the higher cost. The so-called “feed in tariff” would force utilities to buy expensive wind and solar electricity and average the cost into the rest of the power produced. The consumer, meaning all of us, would pay for this boondoggle. It’s just a huge transfer of money, yet another regressive tax on consumers, with the electric utilities forced to become tax collectors.

The hoax part of the RES is that “clean electricity” is being advertised as a way to save the earth from the ‘dreadful fate’ of anthropogenic global warming (AGW). To accept this outlandish proposition, one would have to believe that the carbon dioxide generated in the burning of fossil fuels has a noticeable influence on climate. The data argue against it. The constantly advertised “scientific consensus” is phony; it does not exist. The evidence that the UN climate panel, the IPCC, puts forward in support of AGW is pitifully inadequate—and wrong. It is easy to show that no credible evidence exists; just look at the summary of the NIPCC report “Nature, not human activity, rules the climate.” It is available for free on the Internet. (http://tiny.cc/0cawy)

The fraud relates to the idea that energy produced without CO2 emission is “clean.” This word ‘clean’ is being misused, and that’s a huge part of the problem. Of course, removing genuine pollutants like sulfur oxides and nitrogen oxides and mercury from smokestacks is a real clean up. It is already mandated by the Clean Air Act and being pursued adequately. But CO2 is not a pollutant – in spite of the claims of the EPA in its ‘Endangerment Finding’ – which has yet to be tested in court. CO2 is neither toxic nor irritating nor visible—nor a climate forcer of any significance, so the idea that we have to stop emitting CO2, or capture and sequester it, is a pure fraud.

And finally, the whole scheme is a financial rip-off. We all know that wind and solar energy are intermittent. If their use should rise beyond the present few percent, we would require either on-site storage of electricity or large standby capacity, probably fueled by expensive natural gas, to kick in when the wind kicks out. Either scheme would impose huge additional costs.

The biggest part of the swindle is that the RES is being sold on the basis of creating “green jobs.” But since when does wasting money create productive jobs? Why not leave it with consumers who can save and invest it to create real jobs. A study conducted in Spain, which has gone overboard on renewable
energy, shows that each so-called green job displaces between two and three real jobs. In any case, the manufacture of wind turbines and photovoltaic cells is now in the hands of lower-cost Chinese industry. So the green jobs in the US would consist of sweeping the mirrors clean from dust and dirt and fixing the blades and gearboxes of the turbines when they fail.

In all of this, the proposed legislation ignores nuclear power, which is not only “clean” in the sense of not emitting carbon dioxide, but is also competitive in price with most fossil fuels. Nuclear is most likely to become the major source of electric power once low-cost fossil fuels are depleted. Yet ACELA explicitly says that new nuclear power and updates to existing nuclear facilities and generation from municipal solid waste incineration are not included in the base quantity.

The hypocrisy of the RES advocates is appalling. It’s OK for the taxpayer to subsidize low-carbon energy that doesn’t work (wind, solar) but not low-carbon energy that does work (nuclear).

ARTICLES:  [For the numbered articles below please see the attached pdf.]

1. Closing out dissent
By Bob Carter, Quadrant Online, Aug 1, 2010
[SEPP Comment: Due to its length, we are carrying only the last section and the conclusion. Please use the link above for the full article.]

2. NZCLIMATE TRUTH Newsletter Number 250: Linear Trends
By Vincent Gray, ICECAp, Aug 5, 2010
http://www.icecap.us/

3. Who’s afraid of radiation?
By Wade Allison, New Scientist, Aug 3, 2010

4. The Difference between ‘True Science’ and ‘Cargo Cult Science’
By Frank J. Tipler, Pajamas Media, July 27, 2010, [H/t Marc Morano, Climate Depot]
http://pajamasmedia.com/blog/the-difference-between-true-science-and-cargo-cult-science/?singlepage=true

5. An American Gift: Natural Gas From Shale
By Robert J. Samuelson, IBD, Aug 2, 2010

NEWS YOU CAN USE:

ClimateGate Continues
Himalayan warming – pulling another thread from IPCC’s fragile tapestry
By Marc Hendricks, Watts Up With That, Aug 7, 2010
http://wattsupwiththat.com/

Challenging the Orthodoxy
The Temperature Decline That Dare Not Speak Its Name
By Paul MacRae, Canada Free Press, Aug 5, 2010 [H/t Francois Guillaumat]
The IPCC, Climate Change and Solar Sophistry
By Tim Ball, Canada Free Press, July 28, 2010 [H/t Francois Guillaumat]
http://canadafreepress.com/index.php/article/26228

Recent News from Antarctica
World Climate Report, July 29, 2010
[SEPP Comment: NOAA forgot Antarctica in its latest report. Could it be that it has melted away?]

Defending the Orthodoxy
The truth about global warming
Editorial, Washington Post, August 2, 2010 [H/t David Manuta]
http://www.washingtonpost.com/wp-dyn/content/article/2010/08/01/AR2010080102850.html?referrer=emailarticle
[SEPP Comment: The Washington Post has not published our comments why suppression of contradicting physical evidence by EPA and NOAA make Virginia’s investigation of Michael Mann necessary.]

EPA let to pick up climate change where Congress dropped the debate
By David Fahrenhold and Juliet Eilperin, Washington Post, Aug 4, 2010 [H/t Marc Morano, Climate Depot]
http://www.washingtonpost.com/wp-dyn/content/article/2010/08/03/AR2010080306366_pf.html

UN panel: New taxes needed for climate fund
By Arthur Max AP, Aug 5, 2010 [H/t Marc Morano, Climate Depot]
http://news.yahoo.com/s/ap/20100805/ap_on_sc/climate_change

Pessimism Clouds Climate Meeting
By Elisabeth Rosenthal, NYT Blog Green, Aug 4, 2010

Towards a Common Ground for Climate Science
Hans von Storch Speaks Out On CRU, IPCC And Climate Science
P Gosselin, Aug 3, 2010
[SEPP Comment: Hardly a skeptic, Hans von Storch states some of the weaknesses in the IPCC process.]

The Blacklist Paper violates every ethical standard
By Thomas Fuller, Washington Examiner, Aug 4, 2010

Comments to the InterAcademy IPCC Review: Is It Time to Start Over?
By Chip Knappenberger, Master Resource, Aug 3, 2010
http://www.masterresource.org/2010/08/comments-to-iac-ipcc/
**Heat Wave**

**Moscow heatwave breaks 29-year record**
By Conor Humphries, Reuters, July 22, 2010

**Snow in Brazil, below zero Celsius in the River Plate and tropical fish frozen**
Merco Press, August 5, 2010 [H/t Marc Morano, Climate Depot]

**Peru declares state of emergency amid plunging temperatures**
By Annie Kelly, The Observer, August 1, 2010 [H/t Marc Morano, Climate Depot]
[http://www.guardian.co.uk/world/2010/aug/01/peru-freezing-weather-emergency](http://www.guardian.co.uk/world/2010/aug/01/peru-freezing-weather-emergency)

**1 Million Fish Dead in Bolivian Ecological Disaster**
BoliviaBella.com, Aug 3, 2010 [H/t Brad Veek]

[SEPP Comment: Apparently alligators, turtles, and dolphins are also dying from the cold.]

**Cap and Tax and Similar Schemes**

**Greed and secrecy mark nation’s first, biggest cap-and-trade program**
By Mark Tapscott, Washington Examiner, Aug 2, 2010

**The Global Warming Fleecing of the American Taxpayer**
By Alan Caruba, Aug 4, 2010

**The Ethanol Tax Credit – It’s Worse Than You Think**
By Harry de Gorter and Jerry Taylor, Master Resource, Aug 6, 2010

**Cap and Tax – Aftermath**

**Cap and trade: It’s the cost, stupid**
By Vincent Carroll, Denver Post, Aug 4, 2010 [H/t Real Clear Politics]

**Climate Profiteers**
IBD Editorial, July 30, 2010
[http://www.investors.com/NewsAndAnalysis/Article/542226/201007301901/Climate-Profiteers.aspx](http://www.investors.com/NewsAndAnalysis/Article/542226/201007301901/Climate-Profiteers.aspx)

**Greens defend climate tactics**
By Darren Samuelsohn, Politico, Aug 5, 2010

**Greens turn to small-scale issues**
By Coral Davenport, Politico, Aug 4, 2010 [H/t Marc Morano]
Climate of emissions trading cools
Tom Switzer, The Australian, Aug 5, 2010

BP Spill and Aftermath
As BP plugs leak, report says most of oil is gone

U.S. Finds Most Oil From Spill Poses Little Additional Risk
By Justin Gillis, NYT, Aug 4, 2010

An end not as nigh as we were told
By Wesley Pruden, Washington Times, Aug 2, 2010

BP’s evaporating oil slick leaves America without a villain
By Alex Spillius, Telegraph, UK, July 31, 2010
http://www.telegraph.co.uk/finance/newbysector/energy/oilandgas/7920085/BPs-evaporating-oil-slick-leaves-America-without-a-villain.html

War Vs. Big Oil Goes beyond Drilling Ban
By Bernard Weinstein, IBD, Aug 5, 2010
http://www.investors.com/NewsAndAnalysis/Article/542784/201008051824/War-Vs-Big-Oil-Goes-Beyond-Drilling-Ban.aspx

The Spill Is Gone, So End Drilling Ban
Editorial, IBD, Aug 4, 2010

Obama to Gulf: Drop dead
Moratorium on drilling adds human misery to injure

Energy Issues
Turbines Too Loud? Here, Take $5,000
By William Yardley, NYT, July 31, 2010

Unaffordable at Any Speed
President Obama’s electric car subsidies are snobby and foolish
By Charles Lane, Slate, July 30, 2010 [H/t Real Clear Politics]
Peak Water
An unintended consequence of solar power mandates
Wall Street Journal Editorial, July 31, 2010
http://online.wsj.com/article/SB10001424052748703467304575382942920500142.html#mod=djemEditorialPage_t

Clean-Coal Project Advances With $1 Billion
By Siobhan Hughes and Stephen Power, WSJ, Aug 6, 2010
http://online.wsj.com/article/SB10001424052748704657504575411784292302468.html?mod=WSJ_Energy_leftHeadlines

Fight Gears Up on Biomass
Matthew Wald, NYT Green Blog, July 29, 2010
[SEPP Comment: Until it was superseded by coal in the 1870’s, bio-mass was the principle fuel in the US. The forests of the East were wiped out. Few first growth forests remain. Benjamin Franklin wrote that what drove him to invent the Franklin stove was the desire to use wood more efficiently as the forests around Philadelphia were disappearing for fuel.]

EPA and Other Regulators On the March
Texas declares War on the EPA
WWS, Aug 4, 2010
[SEPP Comment: A letter from the head of the Texas Commission on Environmental Quality and the Texas Attorney General to EPA on EPA’s intensification of regulations on greenhouse gas emissions was other than subdued.]

Habitat designation won’t help polar bears, but will kill Alaska’s jobs
By Sean Parnell, Washington Post, Aug 6, 2010 [H/t David Manuta]
http://www.washingtonpost.com/wp-dyn/content/article/2010/08/05/AR2010080505136.html?referrer=emailarticle
[SEPP Comment: Article from the Governor of Alaska on the spurious finding that polar bears are threatened under the Endangered Species Act.]

EPA to Crack Down on Farm Dust
By Jacqueline Sit, News 9 OKC, Aug 1, 2010 [H/t ICECAP]
http://epw.senate.gov/public/index.cfm?FuseAction=Minority.Blogs&ContentRecord_id=331877d7-802a-23ad-4b5d-d7b6336ae074&Issue_id=
[SEPP Comment: In rural America during the mid 20th Century, one of the advances in reducing dust was paving the roads. Shall we now pave the fields?]
Review of Recent Articles by NIPCC
For full list of articles see www.NIPCCreport.org

Millennial Cycling of Climate in West Africa During Holocene
Reviewed by NIPCC report, Archived: Aug 5, 2010
http://www.nipccreport.org/articles/2010/aug/05aug2010a5.html

The Medieval Warm Period and Little Age Ace in Northern Patagonia
Reviewed by NIPCC report, Archived: Aug 6, 2010
http://www.nipccreport.org/articles/2010/aug/06aug2010a1.html

Deaths Due to Coronary Heart Disease in the Elderly
Reviewed by NIPCC report, Archived: Aug 6, 2010
http://www.nipccreport.org/articles/2010/aug/06aug2010a2.html

The Effects of Increases in Atmospheric CO2 and Soil Nitrogen Concentrations of Grassland Biodiversity
Reviewed by NIPCC report, Archived: Aug 6, 2010

Miscellaneous Topics That May Be of Interest

The Ozone Hole Debacle from an Insider
By Will Happer, ICECAP, Aug 5, 2010
http://www.icecap.us/

BELOW THE BOTTOM LINE:

Bio-Bug: Car run on human waste is launched
A car that runs on methane gas produced by human waste has been launched and its makers claim drivers cannot tell the difference.
By Laura Roberts, Telegraph.UK, Aug 6, 2010
[SEPP Comment: Will the EPA approve the treatment plant?]

A looming oxygen crisis and its impact on world’s oceans
By Carl Zimmer, Yale Environment, Aug 5, 2010
http://e360.yale.edu/content/feature.msp?id=2301
[SEPP Comment: Another fear to promote.]

Disputed chemical bisphenol-A found in paper receipts
http://www.washingtonpost.com/wp-dyn/content/article/2010/07/26/AR2010072605001.html
ARTICLES

1. Closing out dissent
By Bob Carter, Quadrant Online, Aug 1, 2010

[SEPP Comment: Due to its length, we are carrying only the last section and the conclusion. Please use the link above for the full article.]

The brotherhood of silence

In both the examples given above, the brotherhood of silence tactic was invoked by all scientists who were approached to participate in a public discussion at which the IPCC’s science conclusions and climate policy advice would be critically examined. In the first case, that of Engineers Australia, my invitation to speak was nonetheless honoured, despite strenuous efforts being made to derail it; in the second case, that of AMUNC, my invitation to participate was withdrawn.

To my certain knowledge, the brotherhood of silence tactic has been applied routinely for many years against all well known, qualified sceptical scientists, both in Australia and overseas. It is a code that IPCC-related scientists dare not break, for they understand better than most that they will lose any science debate that is allowed to take place on equal terms under a neutral chairperson.

As I have written elsewhere:

It is for this … reason that IPCC scientists are so reluctant to appear in formal debate against other well qualified, independent scientists. As many who have tried have found out, a persistent and intransigent refusal by IPCC scientists to debate their critics in public is the main reason why conferences do not occur at which equal numbers of scientists, and equal time, are allocated to both main sides of the debate. After all, when you hold the high ground of having institutional science, national government and United Nations support, as do the climate alarmists, why would you demean yourself by debating your opponents in public; for you have everything to lose and nothing to gain.

Conclusions

The scientific behaviour described in this article is pathological, for the essence of scientific methodology is the free sharing of data, and the unfettered and unprejudiced discussion of those data. Issuing statements of “consensus” or “authority” is antithetical to good science, and especially so in circumstances where the originating organisations have been established with political intent, have acted to restrict public debate or have a financial conflict of interest. Those familiar with the global warming issue will know that (IPCC) authority rules, despite it being well known that some IPCC practitioners of warming alarmism have flouted correct scientific procedures since the 1990s. And, anyway, a science truth is so not because the IPCC, the Royal Society or the Minister for Science asserts it to be so, but because it is based upon a hypothesis that has survived repeated testing by many independent scientists.

The behaviour is not just pathological. It is also part of a much wider pattern of science degradation that has developed since the 1980s. The change has been caused in part by the insistence of politicians that taxpayers’ money must be used in support of scientific research that is “useful” or “in the national interest”. Such superficial diktats are attractive to bureaucrats and businessmen, but they have proved to be a recipe for turning scientists from experts in problem solution into experts in (insoluble) problem creation. Given the persistence of such attitudes, Australia will never see the Tasmanian forests, the Murray-Darling River or the Great Barrier Reef “saved”, and nor will we ever be free from the ogre of human-caused climate change.
More widely, the degradation of scientific methodology stems materially from the rise of the virus of post-modernist thinking. Though post-modernism developed within university arts and social science faculties, later it also came to infect quasi-science organizations like the IPCC. Now, unhappily, post-modernist thinking, and a development of it that has come to be called Post Normal Science, can be found even within many traditional science departments.

The historical development of these phenomena has been described succinctly by Doug Edmeades, a senior New Zealand agricultural scientist, in the following statement.

*In brief, from the age of enlightenment we have emerged into the philosophy of post-modernism which sets aside evidence as the authority and asserts that the ‘truth’ is what you believe – if you believe it, then it is your ‘truth’. Importantly all opinions are to be given equal authority irrespective of the where the evidence may lie. These ideas have progressed to what is now called ‘Post Normal Science’. This holds that science is subservient to the story that must be told. The role of science is no longer about discovering new ‘truth’ but supporting the ‘story’ which is perceived to be the truth. This gives rise to the notion of “noble-cause science”, which allows scientists to ignore contrary evidence, or worse, manipulate the evidence, if the cause is noble. We have seen evidence of this in the climate change debate.*

It doesn’t have to be so. But nothing much is going to change until we have a science minister with the courage, and the support of his or her government colleagues, to radically restructure the way in which science is performed and funded in Australia, within both government and university research institutions.

The processes by which government supports and uses scientific research should focus on achieving the highest quality outcomes, and that in a way that is strictly quarantined from social mores and political influence. World experience is that such outcomes are best achieved by using arms-length, competitive funding agencies, such as the Australian Research Council.

At least equally important, it is also unwise for governments to rely exclusively on policy advice from organisations, however well pedigreed or custom-designed for the purpose, that are dominantly or significantly supported by public purse funding. For if there is one thing that the global warming imbroglio teaches us, it is that contestability needs to apply to science policy advice every bit as much as it does to science research funding.

*Professor Bob Carter is a stratigrapher and marine geologist. His new book in the Stacey International Independent Thinkers series is Climate: the Counter Consensus, which summarises the scientific and sociological and policy aspects of the global warming debate.*

*2. NZCLIMATE TRUTH Newsletter Number 250: Linear Trends*

By Vincent Gray, ICECAP, Aug 5, 2010

[http://www.icecap.us/](http://www.icecap.us/)

The IPCC and most climate scientists are obsessed with Linear Trends. They are encouraged by the fact that the only regularly available statistical treatment of irregular information on “scientific” calculators and computer spreadsheets is a “linear regression” calculation, using the method of least squares. Most people do not appreciate that its results are unreliable unless the original data are from a representative sample, uniform in time and place, and they approximately fit the Gaussian “bell” curve in every way, including by being symmetrical.

Yet anybody who has attended any lecture on mathematical statistics and even many popular introductions to the subject must know that there are several mathematical models that may be more successful in studying irregular data. For example, extreme observations may follow the binomial distribution, which was traditionally successful in explaining the frequency of deaths from horse kicks in Prussian army corps. There are some people who are prepared to support the exponential distribution,
which predicts escalating change extending to infinity, an impossible outcome for any climate trend except for those projected by the most enthusiastic environmentalists.

There are many reasons why linear trends are not a useful means of studying climate events. Samples are usually not representative. Observations usually take place at different times, using different methods or instruments and often in different places. The distribution curve of observations is often not symmetrical. The calculated “linear trend” may be quite different, depending on the starting and finishing point of the sequence. Ignorance or deliberate disregard of these necessities means that many opinions on the climate which have disregarded them are unsound.

One important consideration which seems to be ignored by most climate scientists is the treatment of irregular changes to an otherwise fairly steady sequence from rare or unforeseeable events.

Some years ago I received an Email from John Christy on the subject of his MSU satellite temperature series to the effect that it has been dominated by two sets of essentially irregular events. These were the volcanic eruptions by El Chichon in 1982 and Pinatubo in 1991 which caused a cooling, and the various manifestations of the El Nino weather pattern which provided unusually high temperatures, particularly in 1998. He commented that if the two earthquakes had taken place later and the 1998 El Nino had been earlier, then the temperature trend would have been negative instead of positive.

Phil Jones at CRU actually took this idea up some years ago (1990s) when he published an extra set of temperature anomaly figures which had been “corrected” for the influence of El Niño. It was withdrawn so they could recruit the 1998 El Niño upwards blip to form part of a “linear trend” which demonstrated the effects of carbon dioxide emissions.

One strange fact is that the calculated projected results of increases in carbon dioxide follow a decreasing, logarithmic path, not a linear one.

Although the Mean Global Surface Temperature Anomaly Record is supposed to be “corrected” for such problems as site change, instrument change, time of observation bias, and for “gaps” in the record, nobody seems to consider that perhaps a more plausible “trend”:might be found by applying “corrections” for changes in the number of stations, and such irregular events as volcanic eruptions and the various ocean oscillations. It may be easily possible to correct for El Niño which disrupts the sequence for a fairly short time but more difficulty with the Pacific Decadal Oscillation which appears to have a periodicity of about 60 years. Then there is the sun, whose influence is currently not well understood, yet undoubtedly underestimated by the IPCC.

The “correction” of the surface record for urban and land change effects now seem to be admitted by CRU from Phil Jones but they continue to issue the biased figures. It seems increasingly likely that if realistic corrections could be implemented for all the uncertainties, natural events, and human effects on the ground, there will not be much evidence left to support claims for effects from greenhouse gas emissions.

The most blatant example of the use of an unusual event to claim an otherwise non-existent “linear trend” is in the reports of the Pacific Island Sea Level and Climate Monitoring Project of the Australian Government. The “Linear Trends” that they report for the 12 Pacific Islands, for instance at their latest Report here depend on the recorded depression of the ocean in all of the islands that took place during the two Tropical Cyclones of 1991 and 1992. Without these two events there are no significant recorded changes in sea level at any of the 12 Pacific Islands since then. They must be praying hard that a similar cyclone does not turn up to ruin their precious “trends”
It is even possible that this recorded depression was an artifact caused by the disturbances in the sea in the vicinity of the instruments during the storms.

All other sea level records have been affected by storms of one sort and another by seismic activity, by building and removal of minerals and ground water, besides the usual geological correction for isostasy. As with the temperature, one wonders how much would be left for the effects of greenhouse gases if all of these were done realistically.

3. Who’s afraid of radiation?
By Wade Allison, New Scientist, Aug 3, 2010

THE word "radiation" frightens people, and little wonder. Ever since the cold war, the prevailing view has been that ionising radiation can do real harm to us without being seen or felt - and should be avoided at all costs. In fact radiation is much less harmful than we feared. Given the availability of carbon-free nuclear power, this makes a sea change in our view of radiation rather urgent.

Fear of radiation grew alongside descriptions of what might happen in the event of a nuclear war. In earlier decades there was genuine scientific uncertainty about radiation's long-term health effects, and scientists were unable to be reassuring. So, driven by universal popular concern, tight regulation was imposed to minimize public exposure.

Since 1950, public dose limits have been tightened by a factor of 150. Currently, the internationally recommended limit is 1 millisievert per year above the natural background level of about 2.5 millisieverts per year. For comparison, a typical CT scan might give you a dose of 5 millisieverts and a simple dental or limb-fracture X-ray 1/100th of that.

Much has been learned over the past half century from clinical medicine, radiobiology and accidents like Chernobyl. There is no doubt that a very high single dose is fatal, as the fate of the initial 237 firefighters at Chernobyl illustrates. Within a few weeks, 28 died, and 27 of those had received doses in excess of 4 sieverts.

However, many people receive much higher doses than this, albeit under very different circumstances. When a cancer patient is treated with radiation in a radiotherapy clinic, the tumour dies after absorbing a dose of more than 40 sieverts. During the treatment, healthy tissue and organs near the tumour get an incidental dose of some 20 sieverts, which is 20,000 times the recommended annual limit and at least five times the dose that proved fatal at Chernobyl.

How can tissue survive this friendly fire? A radiation dose is the same in principle, whether received in a hospital or elsewhere. But the critical point is that the therapeutic dose is spread over four to six weeks, giving cells time to repair the damage. Each day the healthy cells receive about 1 sievert, and just manage to repair themselves. The tumour cells receive a higher dose, and just fail to do so.

So much for acute effects, but what about longer-term ones? Very rarely, the damage is misrepaired, and the resulting error may eventually lead to cancer. To find out how often this happens, we need to compare the lifelong health data of a large number of people, some of whom have received a significant radiation dose and some who have not.

The nuclear bombs dropped on the Japanese cities of Hiroshima and Nagasaki in August 1945 provide us with the data we need. About 66 per cent of the original inhabitants of the two cities survived to 1950, since when their individual health records have been extensively studied.
By 2000, 7.9 per cent of them had died of cancer, compared with 7.5 per cent expected from rates found in similar Japanese cities over the same period (Radiation Research, vol 162, p 377). This shows that the extra risk caused by radiation is very small compared with the background cancer risk, and less than the 0.6 per cent chance of an American citizen dying in a road traffic accident in 50 years.

Not surprisingly, those who received higher doses developed more cancers. But those subjected to doses less than 0.1 sievert showed no significant increase in solid cancers or leukaemias. Nor did they suffer an increase in the incidence of deformities, heart disease or pregnancy abnormalities. So there is a practical threshold of 0.1 sievert for any measurable effect due to a single acute dose.

Given what we now know, from radiotherapy to the legacy of the attacks on Hiroshima and Nagasaki, it is clear that radiation safety limits are far too conservative. Evidently, our bodies have learned through evolution to repair or eliminate damaged cells, with a low failure rate. I suggest the upper limit might be reset at a lifetime total of 5 sieverts, at no more than 0.1 sievert per month. That would be a fraction of a radiotherapy dose, spread over a lifetime.

Given what we now know from Hiroshima and Nagasaki it is clear the safety limits are too low.

Such a revision would relax current regulations by a factor of 1000. This may seem excessively radical to some, especially those in the safety industry who have spent 60 years trying to reassure the public by regulating against all avoidable sources of radiation - which, after all, is what society asked them to do.

But common sense says that extra precautions are most needed when we know least, and in a reasoned approach to any new technology we should start with a cautious limit which may be relaxed later, as instrumentation improves and our appreciation of it grows. The regulation of ionising radiation has resolutely gone in the opposite direction, driven by fear.

Changing the limits would bring practical benefits. Radiation safety is a major contributor to the cost of nuclear power, so any relaxation should lead to big cost reductions. Given that we urgently need to develop carbon-free energy sources, that is hugely beneficial.

It should also lead to a more sensible attitude to nuclear waste. If treated properly, the quantities are small, it become harmless after a few centuries, and it may be buried at moderate cost. In any event, the effect of radioactive waste is a small matter compared with the global influence of carbon dioxide and leaked hydrocarbons. We should re-examine the environmental risks of radiation with the same radical attitude that is required for our own health.

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4. The Difference between ‘True Science’ and ‘Cargo Cult Science’
By Frank J. Tipler, pajamas Media, July 27, 2010, [H/t Marc Morano, Climate Depot]
http://pajamasmedia.com/blog/the-difference-between-true-science-and-cargo-cult-science/?singlepage=true

“Science is the belief in the ignorance of experts” is how the great Nobel Prize-winning physicist Richard Feynman defined science in his article “What is Science?” Feynman emphasized this definition by repeating it in a stand-alone sentence in extra large typeface in his article. (Feynman’s essay is available online, but behind a subscription wall: The Physics Teacher (1969) volume 7, starting page 313.)
Immediately after his definition of science, Feynman wrote: “When someone says, ‘Science teaches such and such,’ he is using the word incorrectly. Science doesn’t teach anything; experience teaches it. If they say to you, ‘Science has shown such and such,’ you should ask, ‘How does science show it? How did the scientists find out? How? What? Where?’ It should not be ‘science has shown.’ And you have as much right as anyone else, upon hearing about the experiments (but be patient and listen to all the evidence) to judge whether a sensible conclusion has been arrived at.”

And I say, Amen. Notice that “you” is the average person. You have the right to hear the evidence, and you have the right to judge whether the evidence supports the conclusion. We now use the phrase “scientific consensus,” or “peer review,” rather than “science has shown.” By whatever name, the idea is balderdash. Feynman was absolutely correct.

When the attorney general of Virginia sued to force Michael Mann of “hockey stick” fame to provide the raw data he used, and the complete computer program used to analyze the data, so that “you” could decide, the Faculty Senate of the University of Virginia (where Mann was a professor at the time he defended the hockey stick) declared this request — Feynman’s request — to be an outrage. You peons, the Faculty Senate decreed, must simply accept the conclusions of any “scientific endeavor that has satisfied peer review standards.” Feynman’s — and the attorney general’s and my own and other scientists’ — request for the raw data, so we can “judge whether a sensible conclusion has been arrived at,” would, according to the Faculty Senate, “send a chilling message to scientists … and indeed scholars in any discipline.”

According the Faculty Senate of the University of Virginia, “science,” and indeed “scholarship” in general, is no longer an attempt to establish truth by replicable experiment, or by looking at evidence that can be checked by anyone. “Truth” is now to be established by the decree of powerful authority, by “peer review.” Wasn’t the whole point of the Enlightenment to avoid exactly this?

Appeal to authority establishes nothing. “Experts” who claim otherwise are thereby showing themselves to be non-experts. The University of Virginia faculty members who supported this anti-science resolution have shown themselves to be unworthy to teach at an American university. They have shown themselves to have no understanding of the meaning of the word “scholarship.”

There are all too many such professors at the leading American universities. Which is why Feynman defined science to be a belief in the ignorance of such people. They are ignorant. Feynman used the expression “cargo-cult science” to describe the “science” done by such people. In the South Pacific during the Second World War, the locals noticed that cargo planes would fly into airports that had been established on their islands, and unload vast amounts of goodies. The natives wanted the wealth too, so they hacked runways out of the jungle, made “radar antennas” out of wood, and sat at “radio sets” they had also fashioned out of wood. To their eyes, it looked like the real thing, but alas, no planes arrived with cargo. The native “cargo-cult” airport had the superficial appearance of an airport, but not the reality. Many areas of “science” today have the superficial appearance of true science, but not the reality. Climate “science” is an example.

How does one distinguish between science and pseudoscience, between true science and cargo-cult science? Many believe that Karl Popper’s falsifiability criterion provides it, but Popper’s criterion has numerous difficulties, which philosophers have pointed out. Feynman has provided a much better way to test for true science in his essay “Cargo-Cult Science”:

… there is one feature I notice that is generally missing in cargo cult science. … It’s a kind of scientific integrity, a principle of scientific thought that corresponds to a kind of utter honesty — a kind of leaning over backwards. For example, if you’re doing an experiment, you should report everything that you think might make it invalid — not only what you think is right about it: other causes that could possibly explain
your results; and things you thought of that you’ve eliminated by some other experiment, and how they worked — to make sure the other fellow can tell they have been eliminated.

Compare Feynman’s scientific integrity with the continual attempts by the leaders of climate “science” to prevent skeptics from checking their data. True scientists would be extremely pleased to provide all raw data, and they would make the data available to all on the Internet. A state attorney general would not have to file suit to make them disgorge.

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5. An American Gift: Natural Gas From Shale
By Robert J. Samuelson, IBD, Aug 2, 2010

You probably have never heard of oilman George Mitchell, but more than anyone else, he has changed the global energy outlook.

In 1981, Mitchell's small petroleum company faced dwindling natural gas reserves. He proposed a radical idea — drill deeper in the company's Texas fields to reach gas-bearing shale rock more than a mile down.

Because the gas was tightly packed, most engineers believed it was too costly to extract profitably. But after nearly two decades of trying, Mitchell proved doubters wrong. The result: The world has far more available natural gas than anyone suspected.

The BP oil spill cast a cloud over almost all energy news. Well, shale gas is good news. Here's why.

Until recently, scarce U.S. natural gas reserves suggested increasing dependence on expensive foreign supplies of liquefied natural gas (LNG). No more. Next, natural gas emits about 50% less carbon dioxide — the major greenhouse gas — than coal. Substituting gas for coal in electricity plants could temper emissions.

Finally, shale gas in Europe and Asia has huge geopolitical implications. It could reduce dependence on Russian natural gas and frustrate any gas cartel mimicking OPEC.

How much shale gas exists is unknown, but estimates are huge. The Potential Gas Committee is a group of geologists who regularly estimate future U.S. gas supplies. In 2000, the group's estimate equaled about 54 years of present annual consumption; by 2008, it was almost 90 years.

"This isn't the end," says Colorado School of Mines geologist John Curtis. Globally, one study estimated the recoverable supply at 16,200 trillion cubic feet, more than 150 times today's annual world gas use.

Some standard drilling techniques, applied imaginatively, liberated shale gas. The first was "fracturing" (also called "fracking"): injecting liquids into reservoirs to create openings that allow the gas to flow up the drill pipe.

For years, Mitchell's engineers experimented with different "fracking fluids." All were expensive, and the resulting gas flows weren't profitable. Then in 1997, engineers tried a less costly mix of sand and water. The economics of shale gas improved dramatically, says Dan Steward, a former geologist for Mitchell.
Devon Energy, which bought Mitchell's company in 2002, improved the economics further by emphasizing "horizontal drilling." In conventional wells, the drill goes straight down and collects gas or oil near the well bore. With horizontal drilling, the pipe is turned sideways when it hits the reservoir and collects gas or oil for hundreds or thousands of feet. Gas flows increase. Fewer wells are needed. Costs drop.

Natural gas provides about a quarter of U.S. energy use — for home heating, electricity generation and factories. This will probably increase, but the emerging shale boom faces two problems. The first is hype.

Shale gas has many virtues, but gains will come at the margin. It isn't a panacea for every energy ailment.

Consider the impact on oil imports. In theory, natural gas — compressed or converted into a liquid — could replace oil in some vehicles. But natural gas now fuels only about 120,000 of roughly 250 million U.S. cars, vans, trucks and buses.

At today's prices, natural gas is competitive with oil, but there's a chicken-and-egg problem: Drivers won't use it without filling stations; companies won't build stations without drivers.

So fuel switching will likely focus on heavy-duty trucks with regular routes that require few stations. If 500,000 heavy-duty trucks changed to natural gas, oil consumption would drop almost half a million barrels a day, estimates Michael Eaves of Clean Energy, a builder of natural gas filling stations. That's about 5% of U.S. imports. The impact is large because trucks travel about 100,000 miles a year and get only about five miles to a gallon, Eaves says.

Similar qualifications apply to the substitution of natural gas for coal in electricity generation. On paper, the potential seems enormous, because many gas generating units are underutilized. But practical problems intrude.

Coal is the low-cost fuel; coal-fired and gas-fired plants often serve different markets. On balance, present gas-fired plants might reduce coal-fired electricity by 5% to 9%, a Congressional Research Service study estimated. Future gas plants might expand this.

The second threat to shale gas is over-regulation. Environmentalists are split. Some favor shale gas as a desirable "bridge fuel" until non-carbon energy expands. Others argue that gas drilling will threaten drinking water supplies; that was a theme of "Gasland," a film shown on HBO.

The charges seem overblown. As the BP spill reaffirmed, all drilling requires regulation. There are environmental issues, especially the safe disposal of "fracking fluids." But onshore drilling, including "fracking," has proceeded for decades without polluting water supplies. In shale gas, thousands of feet typically separate shale deposits from water tables.

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