

WORLD Climate

Report

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BAIT AND SWITCH? IPCC pares down the consensus

The authors of the much-ballyhooed United Nations report from the Intergovernmental Panel on Climate Change (IPCC)—the one claiming the consensus of scientists across the globe is that human-induced climate change is here—are up to their old tricks. The IPCC has been a frequent target of criticism, in both the *World Climate Report* regarding the lack of proper scientific peer review (WCR, Vol. 1, No. 3) and in Congressional testimony relating to the IPCC's bias toward omitting studies that provide balance to the impending climate disaster viewpoint (testimony before the full House Science Committee, March 6, 1996).

Another concerned group has joined the fray. The Global Climate Coalition (GCC) issued a memorandum May 17 regarding illegal (based on IPCC rules) revisions to the previously-approved and purported *final* version of the IPCC text. This memo focused on revisions made to the critical Chapter 8, "Detection of Climate Change and Attribution of Causes" authored by B. D. Santer, T.M.L. Wigley, T.P. Barnett and E. Anyamba. States the GCC:

The changes include the addition of new material that had not undergone scientific peer-review or been presented to governments for their consideration and the wholesale deletion of previously accepted text. They go beyond mere editorial improvements and actually alter the information and intent of the original document. The overall impact is to increase the appearance of scientific support for attribution of changes in climate to human activities and to eliminate or diminish what had been clearly stated caveats and uncertainties bearing on this issue.

These revisions raise very serious questions about whether the IPCC has compromised, or even lost, its scientific integrity....First, the changes were made *after* [our italics] formal acceptance of the reports by the relevant IPCC bodies. Second, the changes quite clearly have the obvious political purpose of cleansing the underlying scientific report of important information and scientific analysis that would lead policymakers and the public to be very cautious, if

not skeptical, about blaming human activities for climate change over the past century.

Here we provide a few examples of this cleansing.

The "Concluding Summary" of the "accepted" version was removed in the revision. Not surprisingly, this summary contained some of the more cautious statements in the chapter:

- Attribution of an observed climate change to a particular mechanism can be established only by testing competing hypotheses. Thus unique attribution of a 'significant' observed change requires specifying the signals of all likely alternative explanations, and statistical determination that none of these mechanisms is a satisfactory explanation for the observed change. This is a difficult task, and one that detection studies to date have not addressed in a rigorous statistical way.

- While some of the pattern-based studies discussed here have claimed detection of a significant climate change, no study to date has positively attributed all or part of that change to anthropogenic causes. Nor has any study quantified the magnitude of a greenhouse-gas effect or aerosol effect in the observed data—an issue that is of primary relevance to policymakers.

- Any claims of positive detection and attribution of significant climate change are likely to remain controversial until uncertainties in the total natural variability of [the] climate system are reduced.

The obvious net impact of removing all statements of caution in interpreting the IPCC conclusions is to leave the reader with the impression that the so-called "consensus" is confident that human-induced climate change is here.

Similarly, regarding efforts to detect a

EDITORIAL SHENANIGANS

Here is a comparison of approved text from the IPCC report and the subsequent published revision. Compare the two excerpts and decide which is more balanced.

"APPROVED"—Finally, we come to the most difficult question of all: "When will the detection and unambiguous attribution of human-induced climate change occur? In light of the very large...uncertainties...it is not surprising that the best answer to this question is, "We do not know." Some would have claimed...that detection of a significant climate change has already occurred. Few if any would be willing to argue that unambiguous *attribution* [our italics] of this change to anthropogenic effects has already occurred, or was likely to happen in the next several years.

REVISIONIST—Finally, we come to the difficult question of when the detection and attribution of human-induced climate change is likely to occur. The answer to this question must be subjective...Some scientists maintain that these uncertainties currently preclude any answer to the question posed above. Other scientists would and have claimed...that confident detection of a significant anthropogenic climate change has already occurred.

CO₂-only signal in historic temperature records, the statement "None of the studies cited above has shown clear evidence that we can attribute the observed changes to the specific cause of increases in greenhouse gases" was deleted.

The original "approved" report was skeptical of the ability of scientists to attribute any portion of global-mean surface temperature trends to human influences. "While none of these studies has specifically considered the attribution issue, they often draw some attribution-related conclusions, for which there is little justification." This sentence was also deleted.

Furthermore, the original report contained other statements of caution on the attribution question. "While such studies [comparing the ability of models to reproduce observed temperature changes] help to build confidence in the reliability of the model...there are still serious concerns about the [validation of the] longer time scale variability.... Unless paleoclimatic data can help us to 'constrain' the century time scale natural variability estimates obtained from [Coupled General Circulation Models], it will be difficult to make a convincing case for the detection and attribution of an anthropogenic climate change signal." Deleted.

But most important, making this type of change to the text *after* the report was accepted violates not only common-sense principles but the rules under which the IPCC operates. According to the GCC:

When important scientific information is deleted from the underlying report prepared by scientists, and when new material is added, in order to conform that report to the political views of those anxious to attribute climate change to human activities, the resulting document is neither comprehensive, nor balanced, nor objective....[The requirement of a balanced presentation in the IPCC] embodies the simple, ethical concept that scientific certainty should tell both sides of the story in a straightforward manner, rather than obscuring views for the sake of political expediency.

These alterations lend further credence to the contention that, when all is said and done, only a handful of the hundreds of IPCC authors constitute the so-called "consensus" and that these chosen few wield disproportionate editorial control over the final report.

References

The IPCC: Institutionalized "Scientific Cleansing," Global Climate Coalition, Global Climate Coalition memorandum, Donald Rheem, May 17, 1996.

Intergovernmental Panel on Climate Change (1996). *Climate Change 1995: The Science of Climate Change*. Cambridge University Press.

WHO CARES!

The World Health Organization (WHO) released the results of its annual planetary health assessment May 21. The prognosis? Not good. Although the check-up found some favorable news, the report was full of foreboding, mentioning in particular that climate change "may allow some disease to spread." The good news was all in the past; the bad news reflected the future, especially if the patient refused to follow the prescriptions of WHO. Since the devastating impacts of climate change on global health have become the latest clarion call of environmental apocalypsts, this issue requires scrutiny.

In a recent New York City conference, less cautious environmentalists claimed that "global warming and a decline in the quality of the world's ecosystems are increasing illnesses from water-borne organisms and from diseases such as malaria, dengue fever and Lyme disease." Don Melnick, professor of anthropology and biological sciences at Columbia University and organizer of the conference, pointed to an increase in Lyme disease in the northeastern United States, caused by a decrease in the number of predators who stalk deer (he must have been referring to hunters since nonhuman predators of deer have not flourished in the Northeast for over a hundred years) with the result that contact between deer and humans is more common than in the past. The connection between a growth in the deer and human populations in the Northeast and climate change was left unexplained. Perhaps he meant that both thrived under warmer conditions!

In reality, the health of the world's people is improving. Over the last 35 years, the world's death rate has been cut in half. Life expectancy continues to grow to unprecedented levels (Figure 1), and each year infant mortality falls to record lows (Figure 2). Today 86 percent of the world's population lives in a country where newborns enjoy a life expectancy greater than 60 years, compared with six out of 10 in 1980 (Figure 3). If your parents or grandparents were born in America before the early 1930s, they were not expected to make it to their sixth decade, a rarely

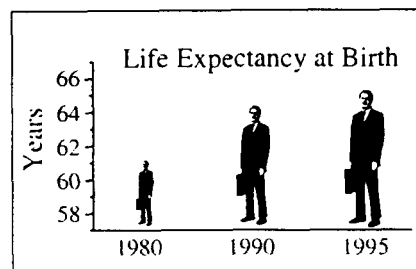


Figure 1. The world's population is living longer than ever. The average life expectancy at birth has increased from 61 years in 1980 to 65 years in 1995.

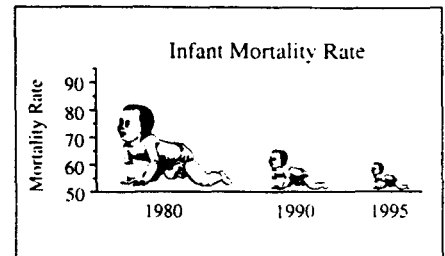


Figure 2. Each year the world's infant mortality rate (deaths per 1000 births) reaches record low levels.

reported fact that President Roosevelt leaned on to insure the solvency of Social Security.

Smallpox, a major scourge prior to the 19th century, has been completely eliminated from the world. The last of the virus is slated for execution in 1999. WHO predicts that polio, which killed millions annually before the development of a vaccine and claimed just over 100,000 worldwide in 1990, can be wiped out by the end of the century. The prevalence of leprosy—the AIDS of the Middle Ages—was cut in half in the decade of the 1980s, as was tetanus in infants. River blindness and guinea-worm disease should be eliminated in the next few years. The number of malaria deaths worldwide has dropped since 1990.

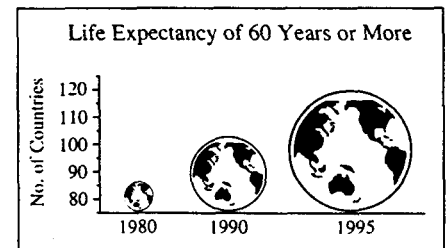


Figure 3. The number of countries that have a population with an average life expectancy of at least 60 years has risen from 86 in 1980 to 120 in 1995.

There is, of course, much scope for improvement. In the poorest countries, well over a hundred of every thousand babies die by the end of their first year, while in the advanced countries, less than 7 per thousand fail to celebrate their first birthday. Nearly one-third of the children under 5 in the developing countries were underweight. Although 80 percent of the world's children have received vaccines for diphtheria, measles, whooping cough, polio, tetanus and tuberculosis, in some African countries less than half have been immunized.

These problems, which are serious, are related not to climate change but to poverty. Blaming global warming for an increase in malaria and dengue fever in Southeast Asia, as Melnick did, is baseless. A warm climate like that enjoyed in Southeast Asia is a necessary condition for the mosquitoes that can carry malaria to flourish; but it is not a sufficient condition for malaria to become endemic. Singapore, which is located just 2 degrees from the Equator,

reported no deaths from malaria in 1994. Malaysia, just next door, suffers from endemic malaria and dengue fever. The difference is not the climate but the wealth of the two areas.

Before 1940, malaria was widespread in the southern portions of the United States. Although sporadic cases are still diagnosed north of the Mexican border, brought mostly by travelers from abroad, the likelihood that malaria will again secure a firm foothold in this country is negligible. For a disease spread by mosquitoes to become endemic, a large number of hosts, that is, humans, must carry the parasite. Simple precautions can prevent the spawning of a resident-affected population. If people protect themselves from mosquitoes by using screens on their windows and doors, wearing long-sleeved clothing when outdoors, and applying insect repellents containing DEET, the virus cannot secure a foothold.

Environmentalists such as Melnick believe the world should take action now to head off further warming of the world's climate, at least partly to slow or stop the spread of these diseases. The cost of attempting to slow the production of greenhouse gases, which is rarely discussed, would be high. Estimates by pro-environmental advocates have ranged from 2.5 to 3.5 percent of world GDP or roughly \$500 billion to \$750 billion annually (Cline, 1992).

Yet, just a fraction of this sum—spent to improve health conditions—would do more to eliminate sickness in poor countries than any amount of industry restriction could. Levying a carbon tax to quell a nonthreatening climate change would stifle global productivity without significantly changing the world's contagious disease picture. For example, the WHO estimates the cost of immunizing children against six major killers at \$14.60 per child—a total cost of around \$400 million annually to treat the 20 percent of the world's children who now go without immunization. This modest expenditure could save millions of children's lives immediately—for less than one-tenth of one percent of the cost of slowing warming.

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HECHO EN MEXICO: POLLUTION CAUSES BLOODSUCKING.

We've read a lot lately that global warming, caused by man's pollution, is spreading dread diseases, but that's nothing compared with what's happening in Mexico. The May 9 *Mexico City Times* headlined that "Goat-Sucker Fever Sweeps the Nation" and that the myriad of dead chickens, cows, and even goats—bloodless and punctured by fangs—may be a result of...industry!

As noted in the May 11 *Washington Post*, Mexico is awash with tales of "a beast standing three feet tall with a huge snout and dark, velvety skin" that campesinos claim is sucking the blood out of large animals. Not so, reports a team of Sinaloa scientists ordered to find the cause. "One explanation for these attacks could be that animals...have been driven mad by the devastating effects of poisonous gases and toxic wastes on nature. Perhaps what is happening now with the goat-sucker is nature's way of making us pay for the constant damage we have inflicted on the environment," said Javier Delgadillo, one of the state scientists.

Reference

Washington Post, May 11, 1996.

TALKING KIWI

The May 15 "Kim Hill Show," broadcast live on New Zealand National Radio, featured a discussion of global warming and the United Nations Intergovernmental Panel on Climate Change (IPCC) between Kevin Trenberth, the head of climate analysis for the U.S. National Center for Atmospheric Research (and, being a Kiwi, a Fellow of the Royal Society of New Zealand), and Patrick Michaels, editor of this *Report*. Verbatim from the transcript:

HILL: Dr. Trenberth, can I ask you, do you regret the IPCC in some way either getting off on the wrong track, exaggerating the situation, or being misrepresented in the media, whatever? Are you unhappy with the way the position has been reported?

TRENBERTH: Ah, well, not so much for the 1995 report. The 1995 report is about to come out—

HILL: Well, let's stop—

TRENBERTH: And I think it is more—

HILL: —Can you give me a preview?

TRENBERTH: —I think it's more honest than the 1990 report. The 1990 report—

MICHAELS: Well, that's a remarkable statement, Kevin.

HILL: It's not a bad statement, actually.

Ten minutes later...

HILL: —Can you imagine a time in the foreseeable future, and preferably in my lifetime, where all the arguing will be over, and we will have a definitive prospect?

TRENBERTH: I expect that...the IPCC process is apparently continuing. I wouldn't be surprised if next time there is, at least according to Pat's interpretation, a further decrease in the numbers that come out, mainly because I think there are some problems in what happens in the models at very high latitudes in the Arctic region.

MICHAELS: Yeah, that's been a problem forever, hasn't it?

TRENBERTH: Well...

THE BIG RUMOR

Since global temperatures through the first several months of 1996 have not been behaving according to classical global warming theory (i.e. have been fairly cool; see "Planet Watch"), environmental apocalypses must surely find a scapegoat. Mount Pinatubo just can't take the blame any longer. It blew its top almost five years ago—which is a long time for stratospheric aerosols to remain in place—and the warming it sidetracked since 1990 has supposedly once again begun ("1995: Warmest Year on Record!").

So, what other household environmental phenomenon could be fingered? The ozone hole would probably have to shrink to cool the earth—and we can't have that. How about El Niño/La Niña? There has been an extended El Niño event—no doubt due to global warming—which is now starting to break down and be replaced by a weak La Niña event. This must be the ticket. The year 1996 has been cool so far. *Cherchez La Niña!*

(Note: if a La Niña event of such diminutive proportions as the current one actually had such a large impact on global temperatures, the world would suffer through wild climatic gyrations.)

EARTH

TEMPERATURE UPDATE

World Climate Report provides monthly updates of satellite-measured temperatures around the globe. These figures are measured by a series of platforms that sense mean temperatures of various layers in the atmosphere. The one we routinely display is the lowest level, which matches perfectly with the mean temperatures measured by weather balloons between 5,000 and 28,000 feet. The measurement is thought to be accurate to within 0.01°C .

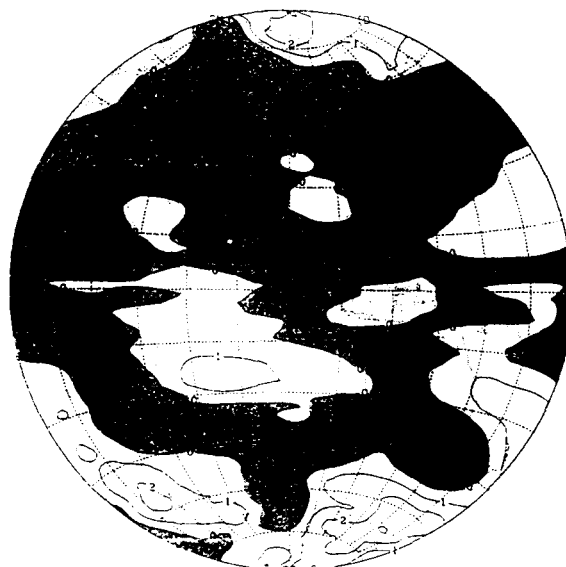
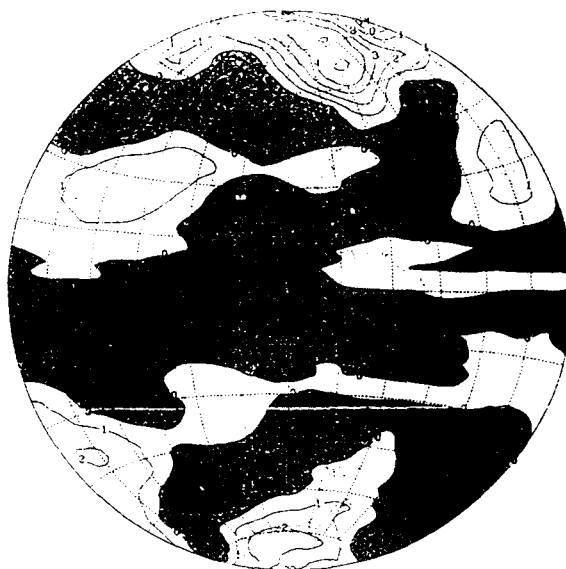
We compare these temperatures with surface values projected by the climate models that based the 1992 Framework Convention on Climate Change (the "Rio Treaty"). Although it is difficult to strictly compare surface projections and mean layer temperatures, the satellite provides great improvement over the surface record by supplying data over the entire planet.

April 1996: The global temperature departure from average is up about 0.08°C from last month, although it still remains below the long-term normal by 0.11°C . April marks the 5th month in a row that the global temperature has been below normal. The year 1996 still looks like it is going to be a particularly cool year, a fact that will keep global warmers scrambling for an excuse.

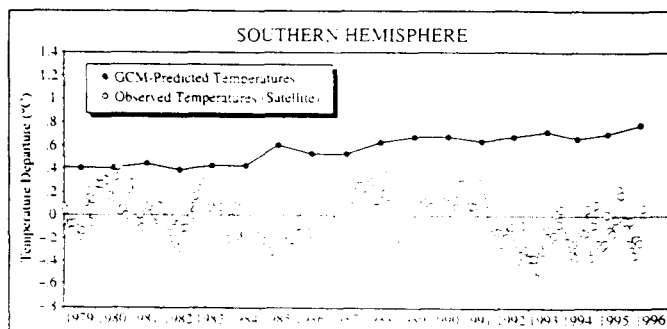
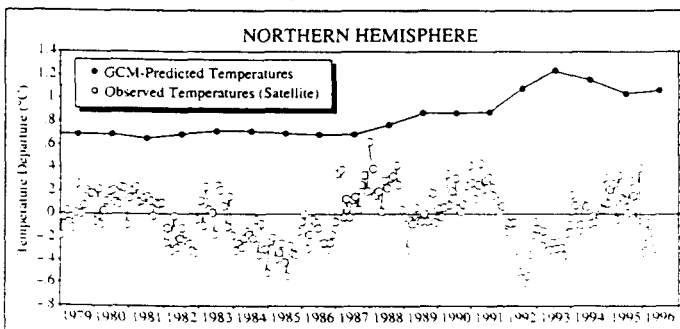
The slight increase over last month was caused primarily by a 0.31°C jump in the temperature departure of the Southern Hemisphere, which more than offset a rather chilly month in the Northern Hemisphere. The greatest positive temperature anomalies are found in the Southern high latitudes, with temperature departures of more than $+2^{\circ}\text{C}$ found across Antarctica and off the southern tip of Africa.

In the Northern Hemisphere, several extensive areas of large negative temperature anomalies are present. The former Soviet Union experienced an unusually cold month with temperature anomalies exceeding -5°C in some locations. Departures of more than -3°C were not uncommon over many portions of the North Pacific as well. One rather large warm anomaly is found over Greenland, where temperatures were as much as $+5^{\circ}\text{C}$ warmer than normal. This pattern of warmth over Greenland and coolness over North America and Asia is a continuation of the jet stream pattern we described last month (see Planet Watch, Vol. 1, No. 17) and is largely responsible for the rather active weather that has been occurring this spring.

Right: Satellite-sensed temperatures for the Western Hemisphere (above) and Eastern Hemisphere (below). Areas of below-normal temperature are shaded.



Below: Satellite (open circles) and predicted temperatures (closed circles) by the model that based the United Nations' Treaty on Climate Change.



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