

CIVIL DEFENSE PERSPECTIVES

GLOBAL WARMING PRIMER

The popular and mainstream scientific press has declared that the scientific debate on human-caused climate catastrophe is over. It's time for skeptics ("deniers") to be silenced—and for a serious global energy rationing regime to be implemented.

California has legislated it, and governors of four other western states have handed down executive orders.

Yet the reality test is available: nondebatable, real-world measurements over an adequate period of time. The catastrophic human-caused global warming theory is decisively disproved by data published in the open, peer-reviewed literature—which is understandable to anyone who is capable of reading a graph.

Yes, there is global warming: see Figure 1. Rising from a minimum during the Little Ice Age, the global temperature is approaching but still below the 3,000-year average. And glaciers have been receding—since about 1800 A.D.: see Figure 2.

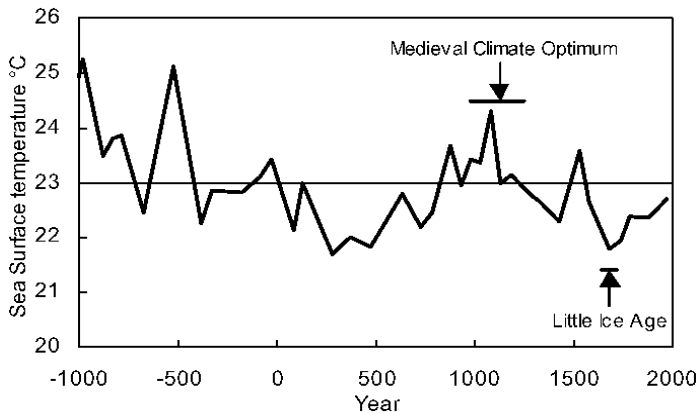


Figure 1. Mean surface temperature of the Sargasso Sea, derived from isotope ratios in marine organism remains in sediment, varied over a range of 4°C during the past 3,000 years. (Kegwin LD, *Science* 1996;274:1504-1508).

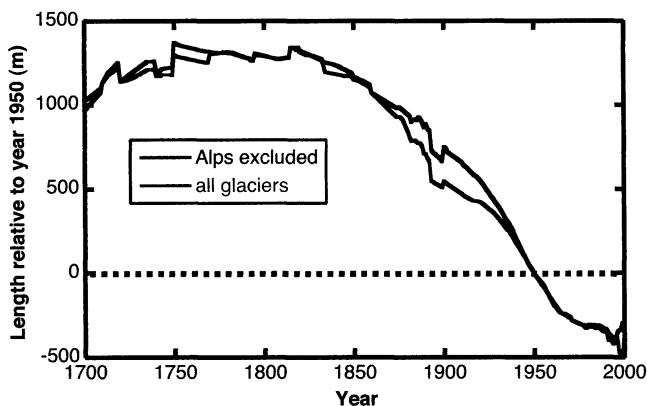


Figure 2. Length reduction in 169 glaciers mostly preceded the increase in CO₂ (Oerlemans J, *Science* 2005;308:675-677).

The Medieval Climate Optimum—now sometimes called the Medieval Warm Period—creates a problem for the climate alarmists. One trick is to make it disappear, as did inventors of the spectacular but erroneous “hockey stick” graph that starred in Al Gore’s movie *An Inconvenient Truth*. Another is to claim that it was restricted to Greenland, Europe, and the eastern U.S. (Strom RG, *Ariz Daily Star* 3/11/07). The Sargasso Sea, however, is a very large area in the mid-Atlantic that includes the Bermuda Triangle. Evidence for the Medieval Climate Optimum has also been found in all but 2 of 103 locations where it was sought, including areas in Asia, Africa, South America, and the western U.S. (Soon W-H et al. *Energy Environ* 2003;14(2,3):233-296).

Atmospheric CO₂ has been rising: Figure 3. This increase from about 290 parts per million to some 360 ppm, whether it resulted from human activities or other factors, cannot have caused the melting of the glaciers shown in Figure 2. The glaciers were at a maximum around the time of the American Revolutionary War. Half of the shortening occurred before Henry Ford perfected the assembly line in 1906. Three-fourths had already occurred before 1950, when atmospheric CO₂ had increased by only 20%. In more recent years, glacier shortening has leveled off, while CO₂ continues to rise.

CO₂ is a very weak greenhouse gas. Increasing its concentration by 100 ppm could not by itself have a significant effect on temperature. It is hypothesized that a small increase in temperature could be amplified by increasing evaporation of a much more important greenhouse gas—water vapor, resulting in a vicious cycle. As the only mechanism by which CO₂, a nonreactive gas, could precipitate this runaway effect is through an initial small increase in temperature, *any* such increase, regardless of cause, should have the same effect. Yet this has not occurred historically, even though temperatures are known to have been much higher than they are now.

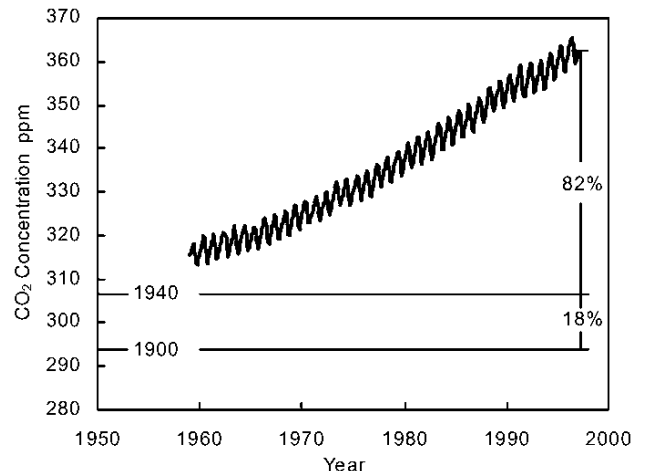


Figure 3. Atmospheric CO₂ concentrations, Mauna Loa, Hawaii, (<http://cdiac.ornl.gov/ftp/maunaloa-co2/>) have risen by about 100 in one million molecules, mostly since 1950.

Unlike CO₂, the solar magnetic cycle closely tracks global temperature: see Figure 4. The effects of solar events would not be restricted to earth. Indeed, there is currently evidence of warming on Mars, Jupiter, Neptune, Neptune's moon Triton, and Pluto (see *Access to Energy*, December 2006, P.O. Box 1250, Cave Junction, OR 97523, for references).

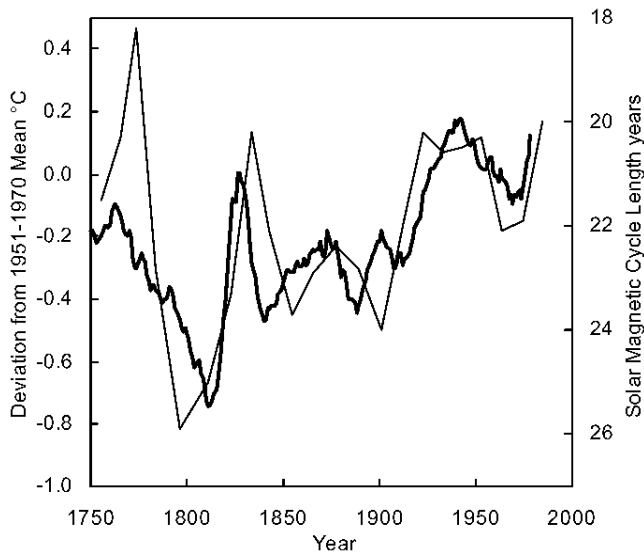


Figure 4. Eleven-year moving average of land-based temperature deviations in °C from 1951-1970 mean [dark line] (Jones PD et al., *J Clim Appl Meterol* 1986; 75:161-179 and Grovesman BS, Landsberg HE, *Geophys Res Lett* 1979;6:767-769) and solar brightness as measured by magnetic cycle length [light line] (Baliunas S, Soon W, *Astrophysical J* 1995;450:896-901 and Friis-Christensen E, Lassen K, *Science* 1991;254:698-700)

In contrast to its minor effect as a greenhouse gas, CO₂ has a major effect on plant growth: Figure 5. This graph displays the “hockey stick” shape, with the “blade” conveying the impression of an alarming, unprecedented, sharp recent temperature increase. In fact, the IPCC hockey stick is a temperature *reconstruction*, based on surrogate measures including tree-ring width.

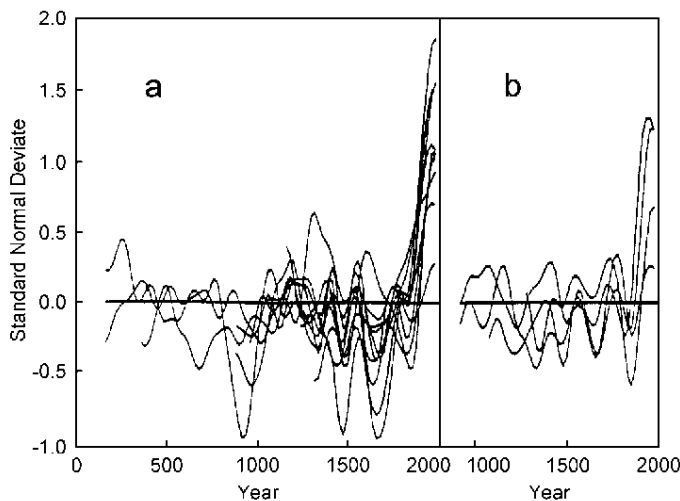


Figure 5. Tree-ring width in long-lived pines in two regions (a, b) of the United States (Graybill DA, Idso SB, *Global Biogeochem Cyc* 1993;7:81-95)

Comparing Figures 3 and 5 shows how increased tree-ring width parallels increasing CO₂. Indeed, hockey-stick originator Michael Mann, citing Graybill and Idso, acknowledges that “any non-climatic influence must first be removed before [tree-ring data] can meaningfully be used in the [temperature] reconstructions (Mann ME et al., *Geophysical Res Lett* 1999;26:759-752). But proper corrections were not made. Although the IPCC has quietly withdrawn the hockey stick, Gore still shamelessly uses the figure as if the fertilizing effect of CO₂ did not exist.

Largely because of increased CO₂, the U.S. had nearly 200 billion cubic feet more of standing timber in 1990 than in 1950. Figure 6 shows the average of 279 published experiments on plant growth as a function of atmospheric CO₂. The extreme possible eventual maximum of 600 molecules of CO₂ per million other molecules would increase plant growth between 50% under normal conditions and 100% under stress such as drought. The currently observed enrichment to nearly 300 ppm has already enhanced plant growth on earth by about 15%.

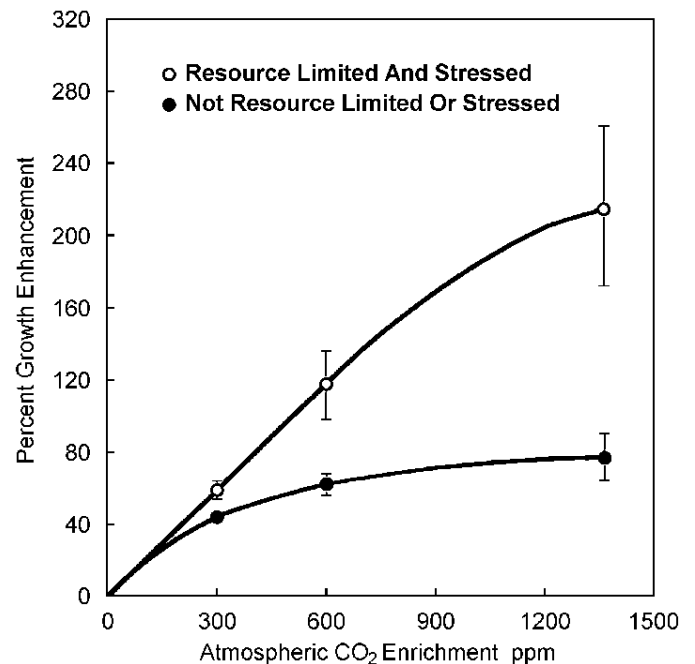


Figure 6. Plant growth as a function of CO₂ enrichment (Idso KE, Idso S, *Agr Forest Meterol* 1974;69:153-203).

But what about the severe storms and rising sea levels? The number and severity of Atlantic storms is basically unchanged since CO₂ levels began increasing in 1940. Sea-level changes have been similarly benign (see *Access to Energy*, January 2007).

Conclusions: Climate catastrophe from rising CO₂ emissions is an implausible hypothesis that has been decisively disproved. In contrast to the trivial greenhouse effect of CO₂, its powerful fertilizing effect has been ignored or denied. The proposed “remedy” for the natural warming trend is to “decarbonize” energy, either by keeping carbon-based fuels in the ground or pumping CO₂ emissions back into the ground at enormous expense. This policy would starve the economy of energy, its lifeblood—and the biosphere of the basic building block of all life. A carbon-limited world is one that limits life itself, as well as freedom and prosperity. The temporary beneficiaries are unprincipled people who seek money and power. The price is poverty, misery, oppression, and death.