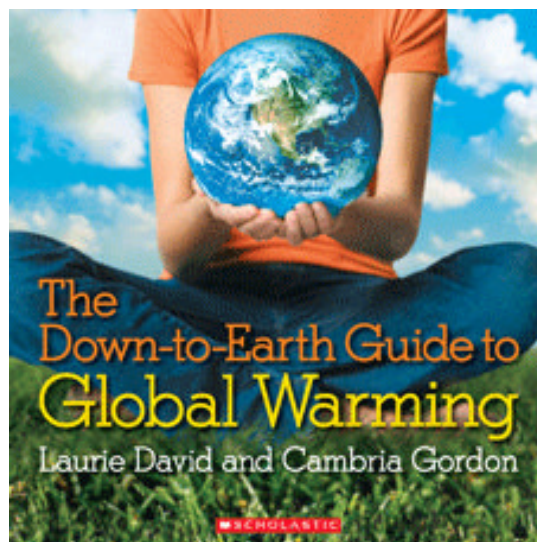


A Fundamental Scientific Error in “global warming” Book for Children

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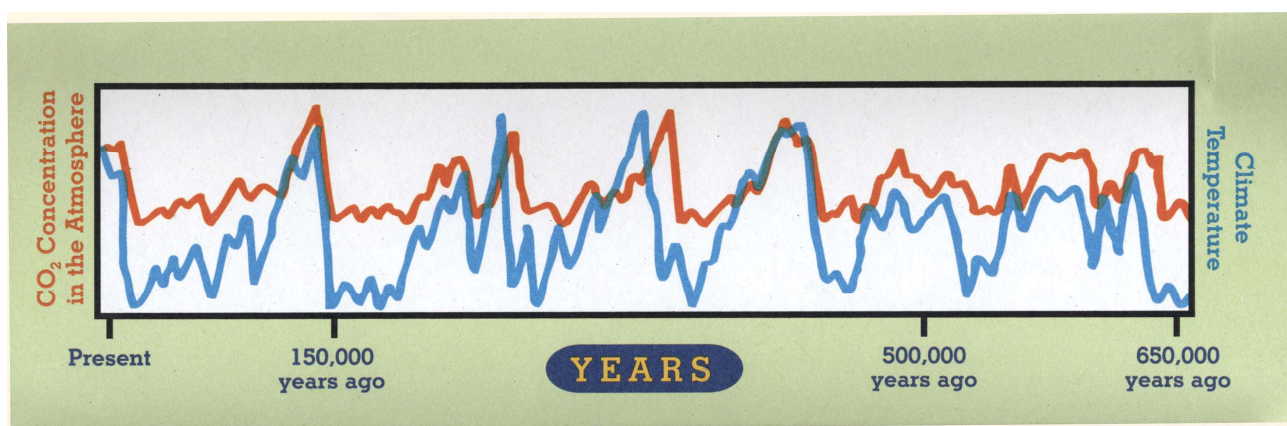
A Fundamental Scientific Error in “global warming” Book for Children

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 CO₂ to rising temperature scientists have discovered the link between greenhouse-gas pollution and global warming.”

What **really** makes their graph “amazing” is that it’s dead wrong. In order to contrive a visual representation for their false central claim that CO₂ controls temperature change, David and co-author Cambria Gordon present unsuspecting children with an altered temperature and CO₂ graph that falsely **reverses** the relationship found in the scientific literature.¹

The actual **temperature** curve in the chart was switched with the actual **CO₂** curve. That is, the authors mislabelled the blue curve as temperature and mislabelled the red curve as CO₂ concentration. The real data show that the red curve represents the temperature changes over geological time, **followed** (lagged) by changes in CO₂ concentrations represented by the blue curve. Thus, children tracing the properly labelled

¹ For a comprehensive review of this literature, see: http://ff.org/centers/csspp/pdf/20070204_idso.pdf

The author of this review paper concluded:

“In considering the findings of the several studies that have broached the question of the relationship between carbon dioxide and temperature over the past half million or so years, it is clear that (1) sometimes the two parameters are totally out of sync with each other, as when one rises and the other falls, (2) sometimes one is in transit to a higher or lower level, while the other is in stasis, and (3) even when both move in harmony, temperature almost always moves first, and by hundreds to thousands of years. Clearly, there is no way these real-world observations can be construed to even hint at the possibility that a significant increase in atmospheric CO₂ will necessarily lead to any global warming, much less the catastrophic type that is predicted to produce the apocalyptic consequences that are driving fear-ridden governments to abandon all sense of rationality in the current hysteria over “what should be done about” the ongoing rise in the air’s CO₂ content... We need to look at real phenomena that have really occurred in the real world. And in spite of all the computer simulations to the contrary, we have got to realize what these real data are really telling us.”

Also see: <http://www.co2science.org/scripts/CO2ScienceB2C/Index.jsp> and Soon (2007) “Implications of the secondary role of carbon dioxide and methane forcing in climate change: Past, present and future”, *Physical Geography*, in press (<http://arxiv.org/abs/0707.1276>)

curves from right to left (from past to present) can easily see the real, science-based relationship (particularly clear in the interval between 500,000 and 150,000 years ago).

The David-Gordon manipulation is critical because the central premise of the book argues that CO₂ drives temperature, yet the ice core data clearly reveal temperature increases generally **precede** increasing CO₂ by several hundred to a few thousand years. This fact may have been too inconvenient for David, who instead presented young readers with an astoundingly irresponsible falsehood. Parents and teachers of these children should be concerned.

Al Gore's movie *An Inconvenient Truth* also got this wrong, saying: "The relationship is very complicated. But there is one relationship that is more powerful than all the others and it is this. When there is more CO₂, the temperature gets warmer, because it traps more heat from the sun ..."

The David book for children, like the Al Gore film, has the relationship entirely wrong. The peer-reviewed literature is **unanimous** in finding that in climate records CO₂ changes have historically *followed* temperature changes and cannot have caused them. The book is mischievous for concluding that this deceptive graph has anything to do with "discovering" a link between additional CO₂ concentrations and "global warming".

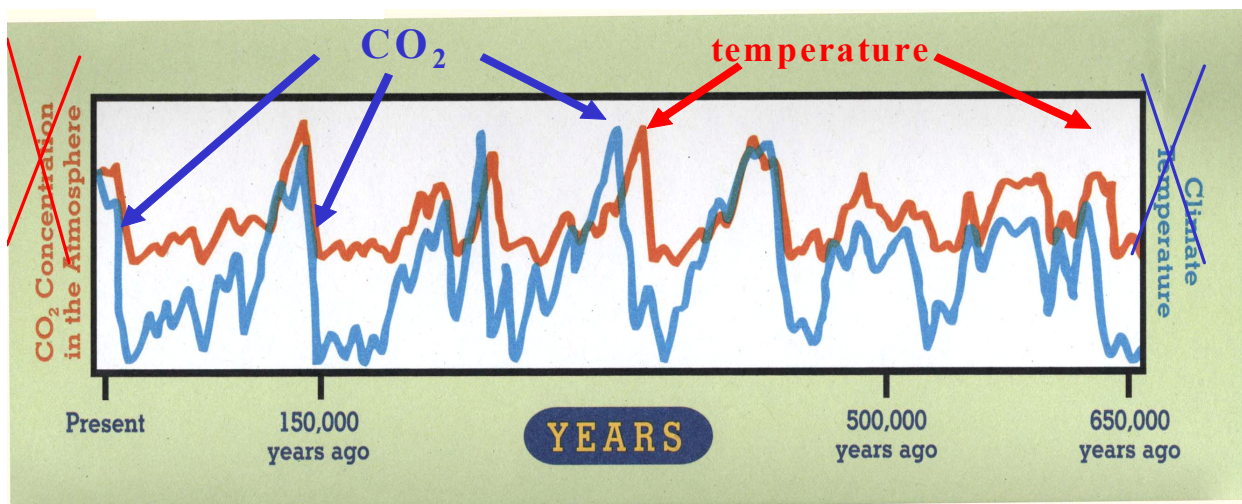
On page 103 of their book, David and Gordon cite the work of Siegenthaler et al. (2005), for their written and graphical contention that temperature lags CO₂. However, Siegenthaler et al. clearly state the opposite:

"The lags of CO₂ with respect to the Antarctic temperature over glacial terminations V to VII are 800, 1600, and 2800 years, respectively, which are consistent with earlier observations during the last four glacial cycles."

(Siegenthaler et al., 2005, Science, vol. 310, 1313-1317)

Clearly, the responsible thing to do now is for Laurie David and publisher Scholastic Books to pulp, correct and reprint *The Down-To-Earth Guide to Global Warming* before a single copy reaches any more innocent school boys and girls.

Corrected chart



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