

A Giant's Footprint

Any regular reader of this column knows I am what some refer to as a “skeptic” when it comes to the theory of manmade CO₂ global warming, but, I have also never denied global warming has occurred on and off throughout the planet's history and certainly it has occurred since the last ice age when about a mile of ice covered the Gulf Islands.

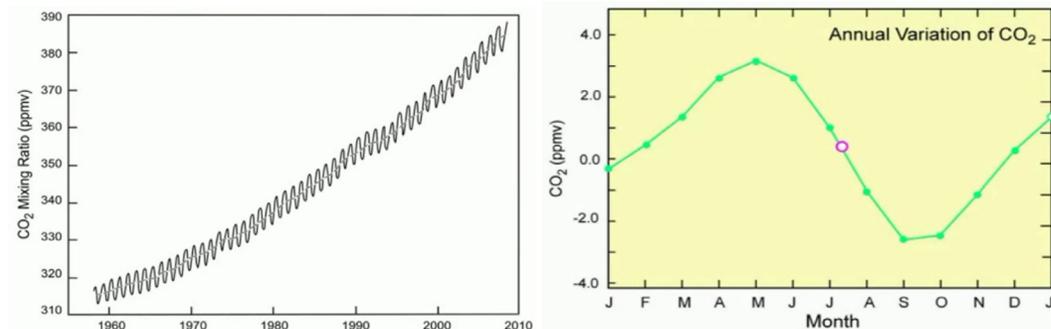
It was therefore with great interest I came across a lecture by a Professor Murry Salby, an atmospheric physicist, whose background includes working at the US National Center for Atmospheric Research and Princeton University. Unlike me, he is a relatively recent convert to skepticism on the subject.

His latest book, *Fundamentals of Atmospheric Physics*, released in January of this year, provides a very rational explanation as to why everyone should pack up their cares and woes over their carbon footprint and realize the temperature and CO₂ increases we have experienced since the Little Ice Age are, for the most part, just part of a naturally occurring phenomenon.

The “smoking gun” Professor Salby has revealed is that the earth's annual production and sequestration of CO₂ is a lot more variable than we have been led to believe.

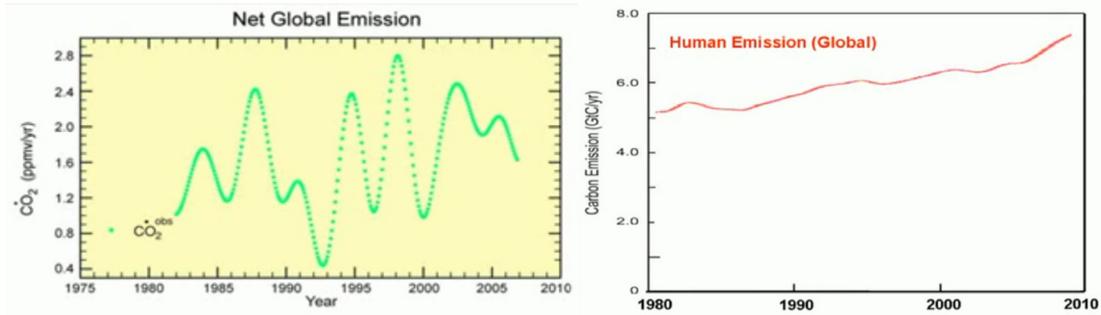
Ready for a little math? The UNIPCC estimates the planet emits about 150 gigatons (GT) of CO₂ each year, and, not surprisingly, sequesters an amount similar in magnitude of around 150 GT. Man is estimated to emit about 5 GT per year. Until now, it has been assumed that additional 5 GT is responsible for the rise in total atmospheric CO₂ from 280 parts per million (ppm) pre-Industrial Age, to its current level of about 390 ppm.

But, that evidently has been one helluva an assumption on the part of some scientists. The following two charts begin to tell the tale. The first is a graph of the Mauna Loa atmospheric CO₂ measurements since 1958. As you can see CO₂ has been rising quite steadily.

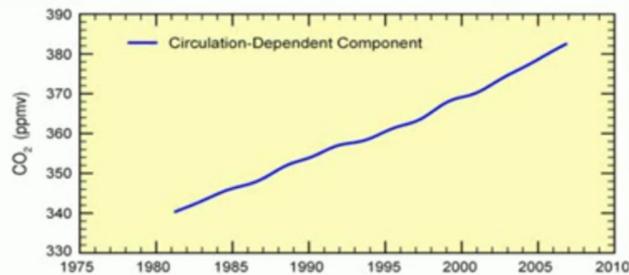


But, look closer and you will see the line is “wiggly” due to the annual variation. You see, atmospheric CO₂ goes up and down every year. The second graph gives an example of one year, and you can see the increase in ppm from just below 0.0 in January to about 1.5 the following January, resulting in a “Net Global Emission” of about 1.5+ ppm CO₂. In other years the variation may be more or less.

And this is where Salby's exciting discovery kicks in. Based on satellite data, he calculated the ppm changes in Net Global Emission of CO₂, and lo and behold this is what he found:



The graph on the left shows the annual Net Global Emission of atmospheric CO₂. The annual variation ranges from 0.5 to 2.8 ppm. The graph on the right shows the increase in Human Emissions of CO₂ globally during the same time. Notice the rather extreme difference between the two charts? That difference, ladies and gentlemen, indicates that nature plays a far greater role in the production and absorption of CO₂ than has been previously thought. In fact, the last chart, shown below, indicates Salby's calculation of the natural, unmanmade, "Circulation Dependent Component" of atmospheric CO₂. Salby proposes "Mother Nature" has been responsible for a 42 ppm increase of CO₂ from 1981 to 2007. In essence, the graph represents her, rather gargantuan, carbon footprint.



Now that I've whetted your appetite, I will leave you with a web address and a challenge. First, listen to Professor Salby's lecture at http://www.youtube.com/watch?feature=player_embedded&v=YrI03ts--9I or go to my website, www.islandstrust.org and click on the link on this article posted there.

Second, I challenge any reader to refute Salby's claims, in an 800 words, or less, article, and I will step aside for a week and allow the rebuttal to take the place of my column. Surely with the number of people running around worried about manmade global warming, someone will take me up on the offer. Just no argumetum ad hominem attacks, OK? Email your articles to me at ericbooth@shaw.ca and I will post them directly below this article on my website, and, forward them to the Editor to pick the best to publish. The ball's in your court.

Eric Booth

(You can hear more from Eric Booth on "The Troublemakers," 3– 4:30 PM, every Thursday on CFSI-FM 107.9 – available live online at www.cfsi-fm.com or, follow his blog at www.islandstrust.org)