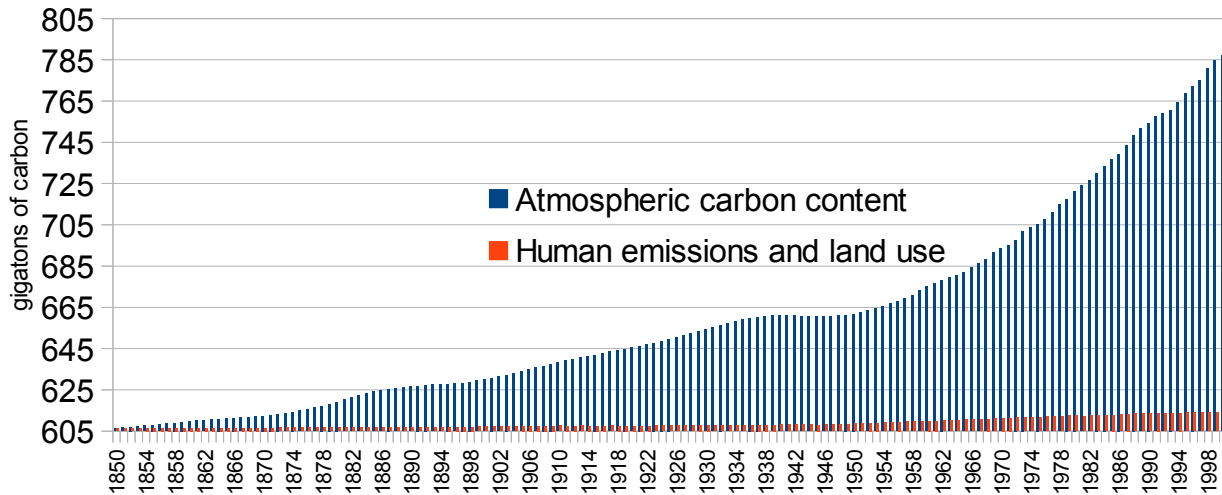
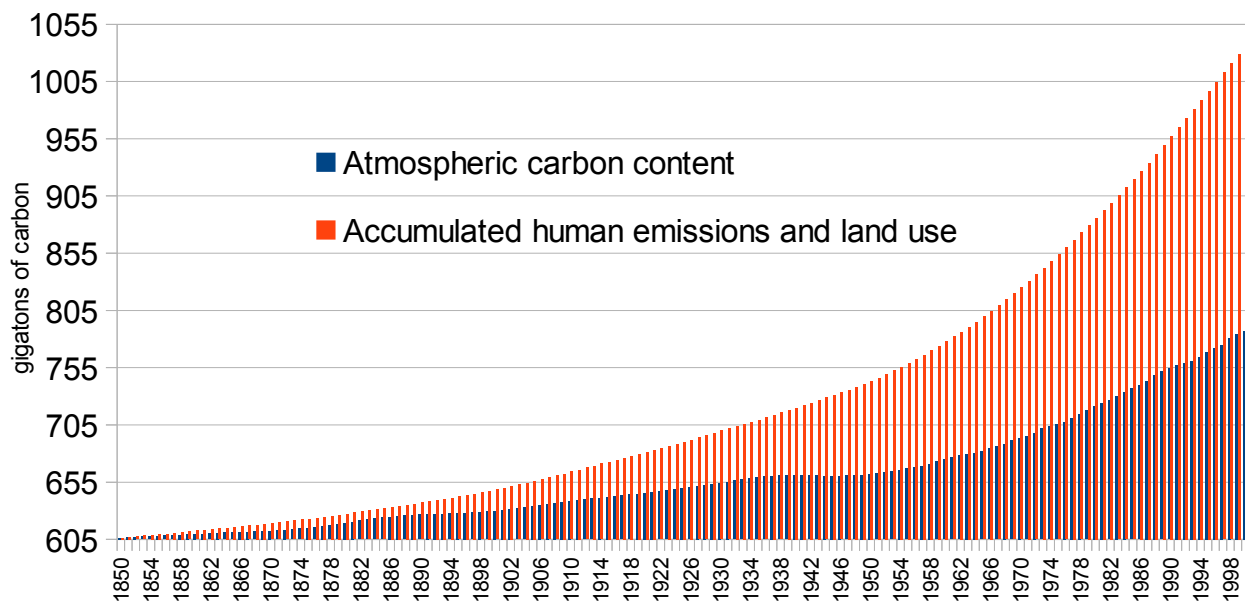


How to Fake an Anthropogenic Accumulate

In an [earlier essay](#) I stated that the United States government's Carbon Dioxide Information Analysis Center (CDIAC) claims that mankind is principally or wholly responsible for the increase of atmospheric carbon dioxide since the year 1850. Taking its data, I showed a year by year chart of atmospheric carbon gains compared to the human carbon emitted and/or not absorbed between 1850 and 2000.



The magnitude at the bottom of the chart (red) is held to be responsible for the magnitude above it (blue) by means of accumulation. Indeed, if we accumulate each annual human quantity we get a chart that looks like this.



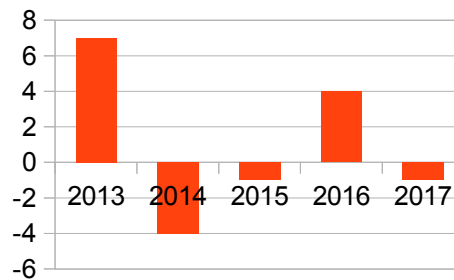
This 1850-2000 chart displays a 42% remainder, meaning that 58% was no longer floating around. Keep the number 0.42 in mind; we'll use it later.

Now I wish to show the way such charts can be generated. Let's look at a simple example first.

Say your company produces widgets and your boss asks for a chart of the sales trend, starting in 2013. Well, the company sold zero in the 2012 startup, but has sold more since. Here's the record.

Year	Record	Difference
2013	7	7
2014	3	-4
2015	2	-1
2016	6	4
2017	5	-1

In terms of annual differences, your company's record doesn't look so hot.



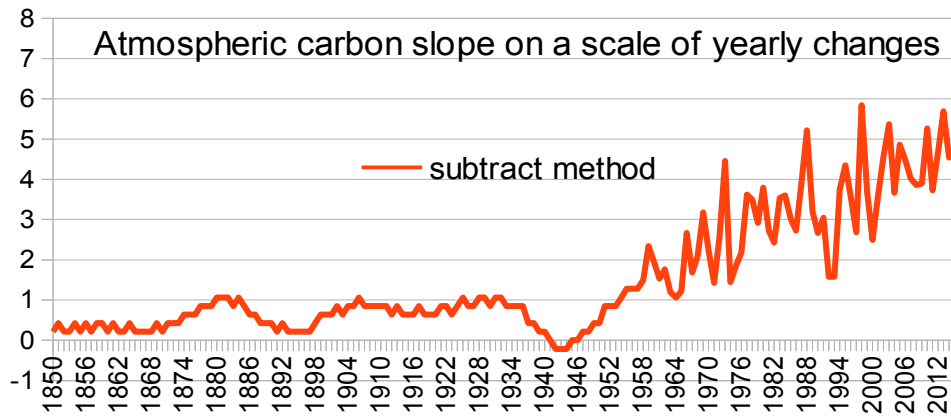
Let's say, though, that you lose the original sales record and have to recreate it for a business meeting. Whereas you subtracted quantities before, now you'll have to add them. This chart shows both methods.

Year	Record	Difference	Difference method	Restored record	Restore method
2013	7	7	7-0	7	7+0
2014	3	-4	3-7	3	-4+7 (= 3)
2015	2	-1	2-3	2	-1-3 (= 2)
2016	6	4	6-2	6	4+2 (= 6)
2017	5	-1	5-6	5	-1+6 (= 5)

You can apply the same methods to estimates of atmospheric carbon, too.

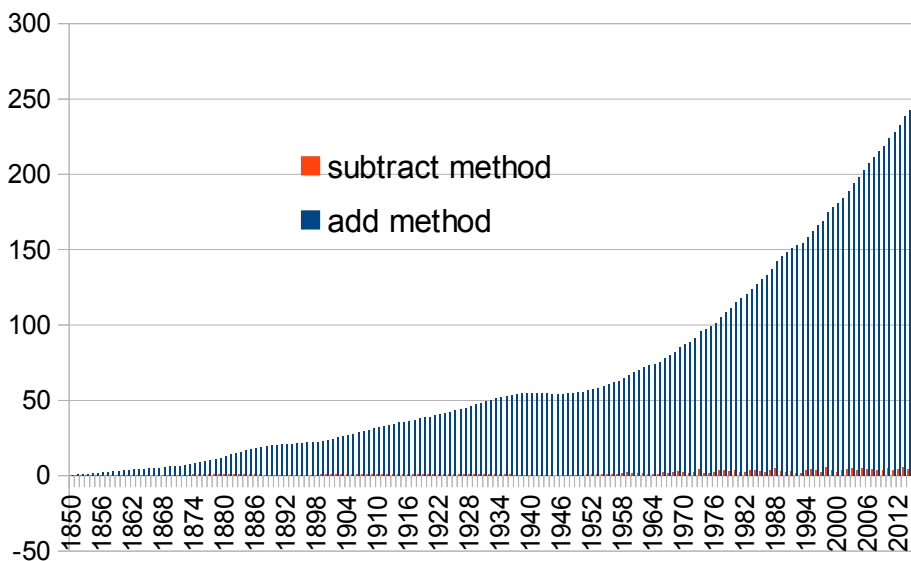
Year	Gt C	Difference	Restored record	Restored plus 645.39
1921	646.242	0.852	0.852	646.242
1922	647.094	0.852	1.704	647.094
1923	647.733	0.639	2.343	647.733
1924	648.585	0.852	3.195	648.585
1925	649.650	1.065	4.260	649.650

From 1850 to 2016, then, the difference (or subtraction) profile amounts to a "deconstruction" of atmospheric carbon quantities.



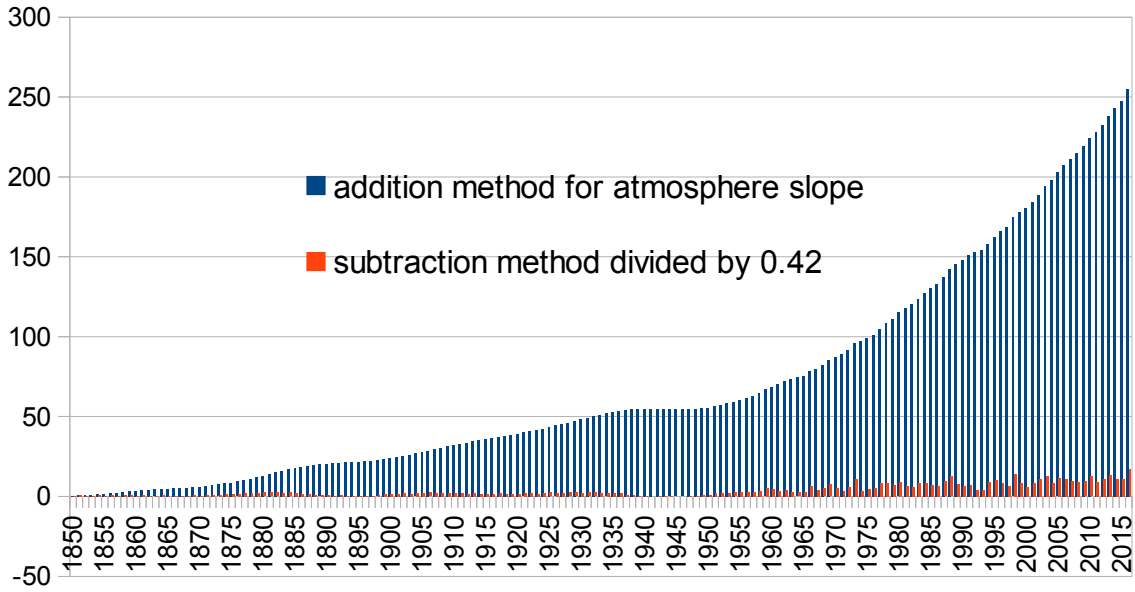
One immediately notices sudden variations when the Mauna Loa measurement system began. Notice also the dip below zero during World War II.

By adding these quantities together, i.e., by accumulating or "reconstructing" them, one obtains the reported atmospheric carbon growth over this time period.

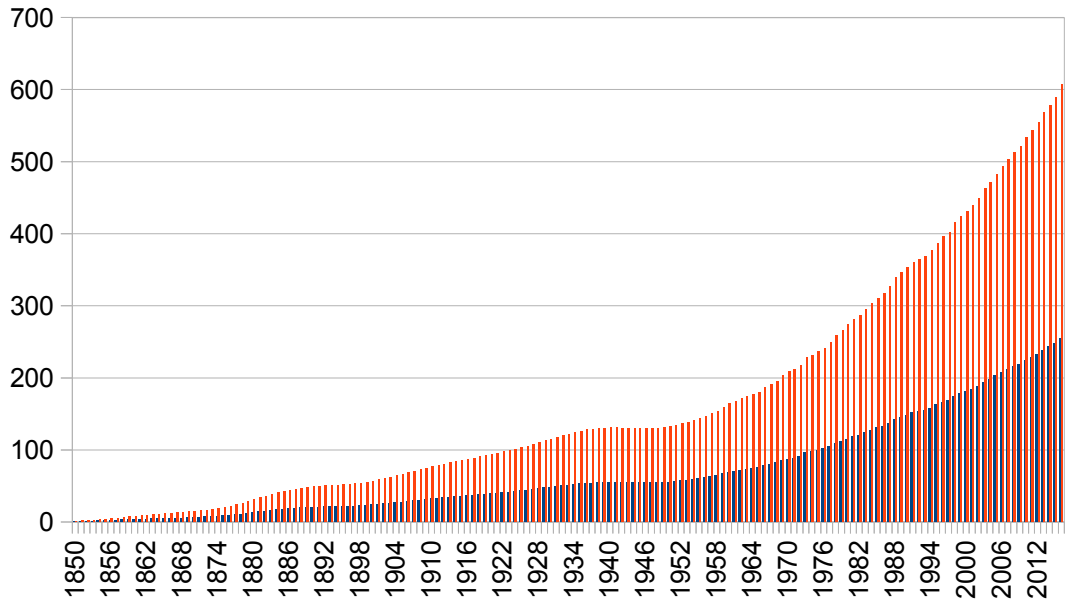


I've converted this chart to bar-format so that you can compare it to the first one I showed. But on the whole it's rather embarrassing. The red bars denote the *exact* quantities needed to generate the blue bars above it when accumulated, yet they're scarcely visible. Moreover, a few of them dip below zero, as confessed by that minus 50 mark. Worse still is that a chart like this implies an atmospheric dwell time for carbon of... eternity, because not a gram of carbon has disappeared since 1850. It just doesn't seem convincing.

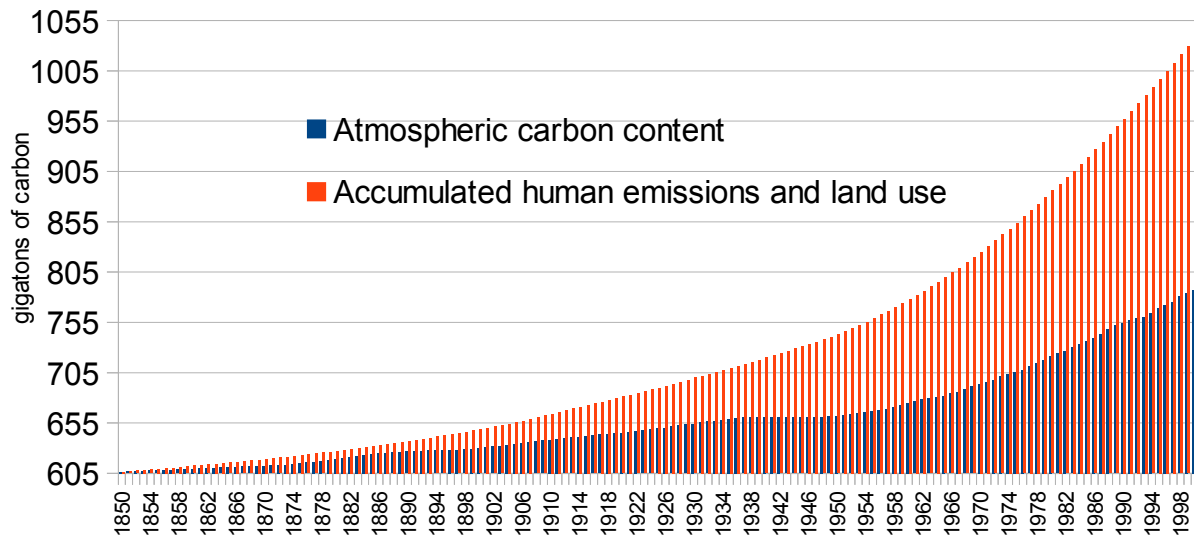
So how about we engage in some fraud? Let us label that red profile from the subtraction method "anthropogenic" and *divide* its figures by the aforesaid 0.42. This step creates a larger "anthropocentric" contribution, one that will *exceed* the atmosphere slope when accumulated rather than matching it.



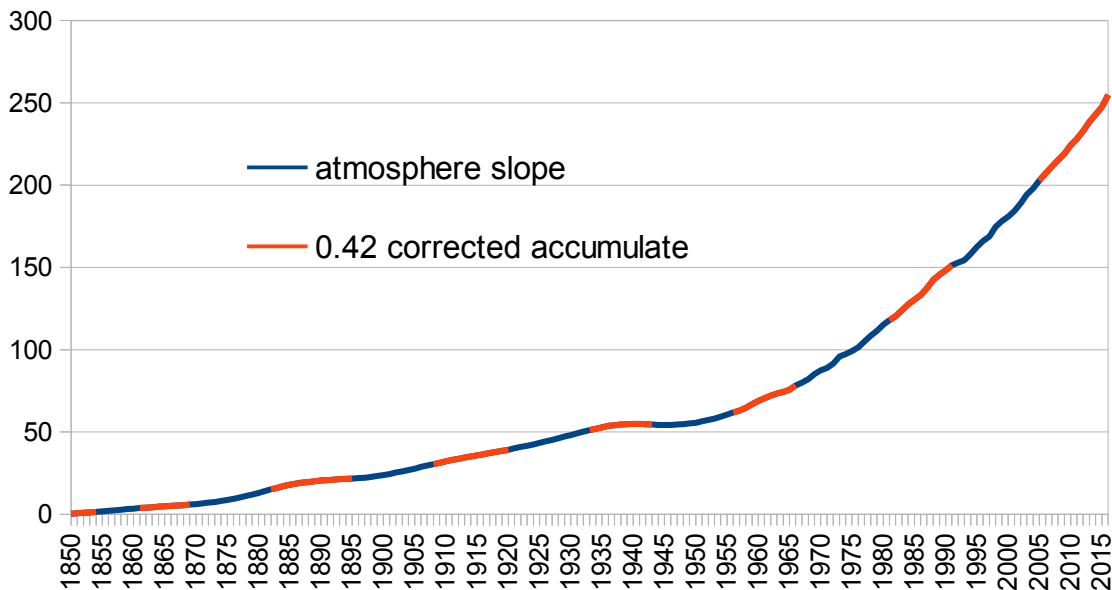
Although the red bars still dip below zero, this revised chart is beginning to look similar to CDIAC's anthropogenic profile. Make the red bars accumulate --



-- and they compare very well with the CDIAC chart below.



We're getting somewhere. But bear in mind that we're only using a single detail of the CDIAC record, namely that 0.42 figure. There are minor differences of course, such as our wider time-frame. Nevertheless, since our chart is inherently *based on a known profile* and since our *imaginary accumulate is uniformly distorted by a 0.42 divisor*, multiplying that "accumulate" by 0.42 reverses the distortion and will thus match the carbon profile exactly.



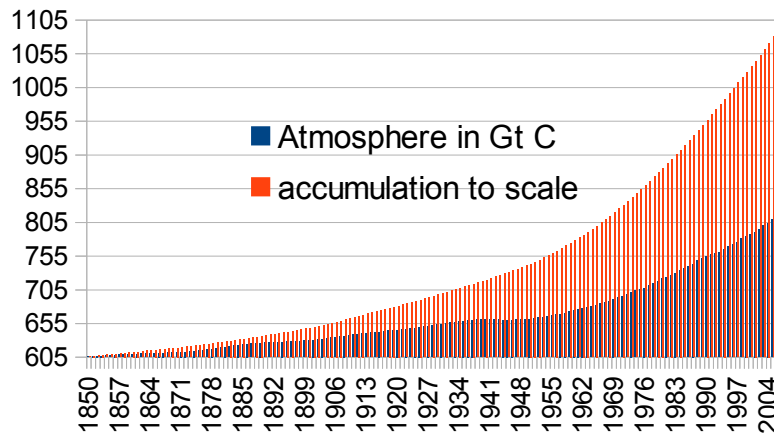
I had to omit a few values for "corrected accumulate" here or else you'd only see a solid red line.

A question to pose is whether the CDIAC might be employing a similar scheme. Let's examine that question, only this time using its updated figures for 1850 to 2005, which includes both human emissions and land-use changes.

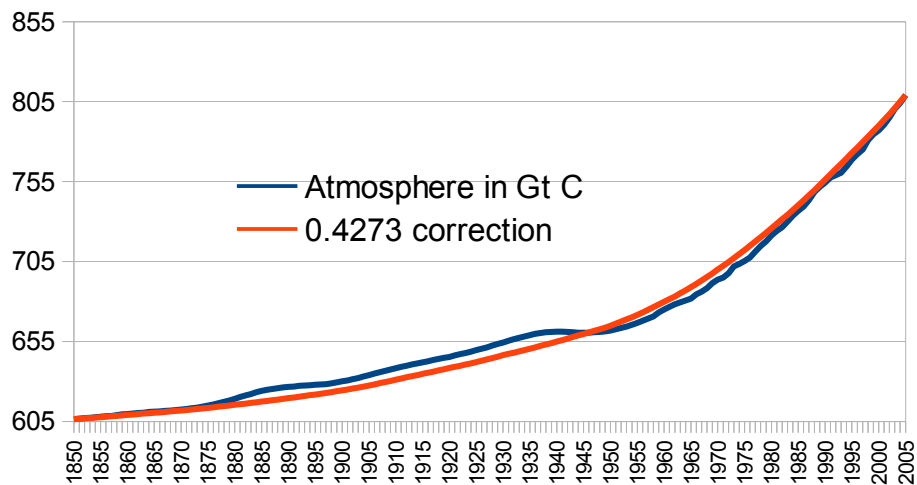
Remember as we proceed, however, that Mauna Loa's job is to sample what's in the atmosphere, which involves volcanic eruptions, oceanic outgassing due to a warming climate, the removal of CO₂ from the air by falling rain, and a host of other factors that contribute to the sample, including

anthropogenic. As an honest broker, Mauna Loa has to call 'em as it sees 'em. So too does the Carbon Dioxide Information Analysis Center, presumably, which every year compiles data from around the world, accounting for deforestation, industrial emissions, oil-heated homes, cement curing and the like.

But onto CDIAC's 1850 to 2005 update. Within that time-frame the atmosphere rose by 202.56 gigatons of carbon, while the total of emissions and land-use changes amounted to 474.04 gigatons. The remaining atmospheric fraction is thus 0.4273 in this case.

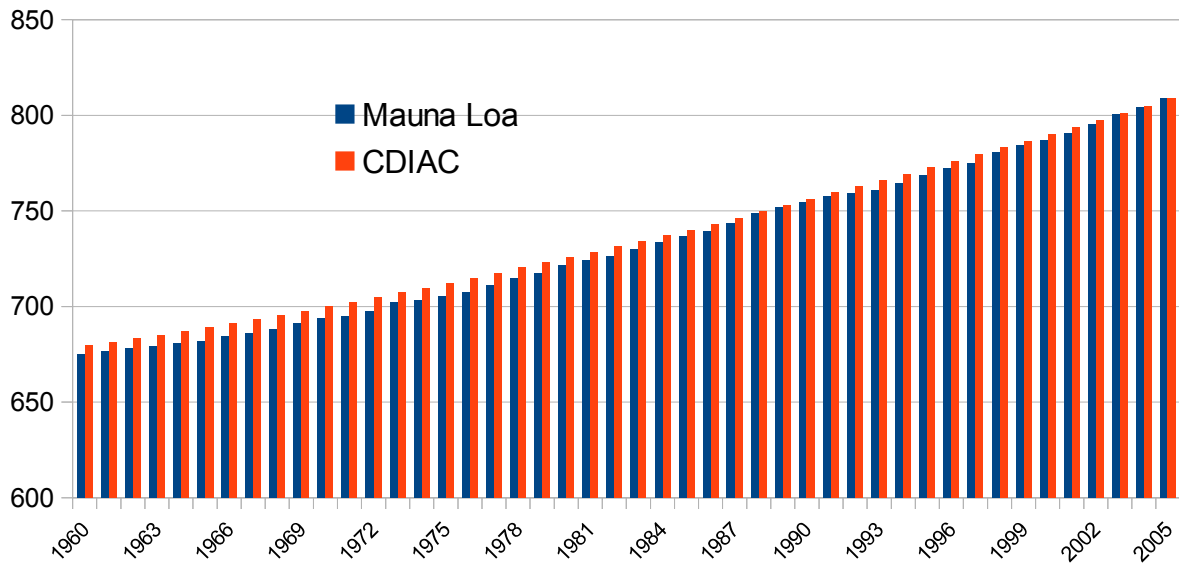


When that accumulation curve is *reduced* by precisely that factor, 0.4273, this is what happens.

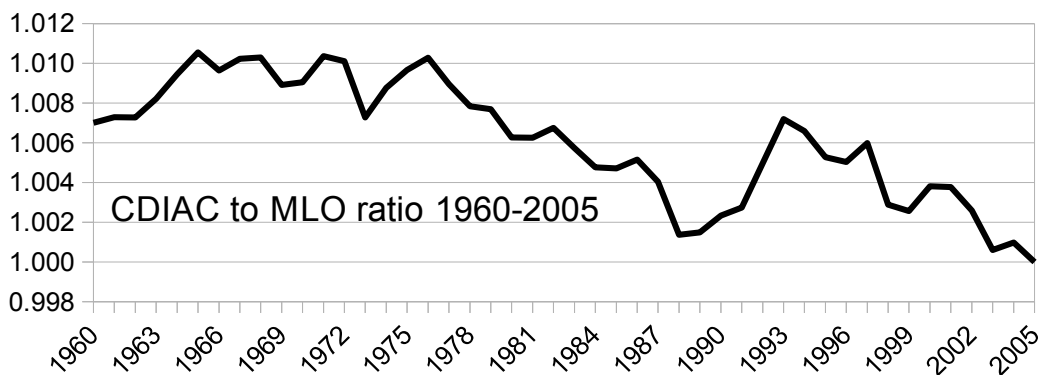


Quite an unusual correspondence, considering that the CDIAC supposedly pays attention only to its anthropogenic inventory. But take a closer look.

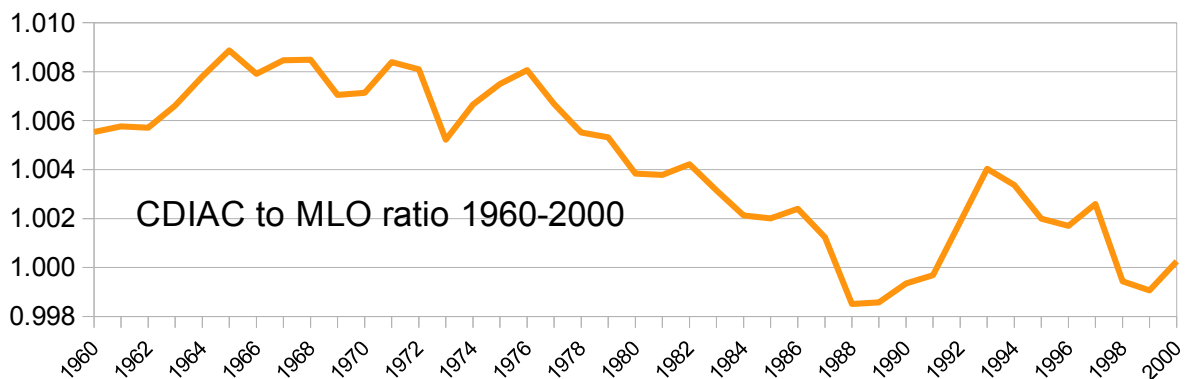
From 1960 to 2005, here is the CDIAC's 0.4273-adjusted anthropogenic accumulate compared to the Mauna Loa record.



No, your eyes are not deceiving you. The CDIAC appears to be tailoring its anthropogenic figures to hit a certain mark. Here's a breakdown of how much the two diverge.



The CDIAC anthropogenic estimate strays from the Mauna Loa record by just over 1.01 to 1 in the earlier years, and gets closer to 1:1 as time advances. In fact its final 2005 figure hits a ratio of 0.999996598 to 1. Notice in the *previous* CDIAC data-set for 1850-2000, however, that the final figure also hits the closest: 1.000249 to 1.



So draw your own conclusions.

In closing, let me [quote](#) the CDIAC again --

"Atmospheric CO₂ concentrations had not changed appreciably over the preceding 850 years, so it may be safely assumed that they would not have changed appreciably in the 150 years from 1850 to 2000 in the absence of human intervention."

-- and ask whether that reads like a sober scientific appraisal or a Mission Statement.

To the question, then, of how much of the atmosphere's carbon dioxide gain since 1850 is attributable to human beings, this government agency is tacitly answering "All of it," and can point to another such agency to prove its point.

I believe that a government organization has indicted mankind by planting misleading evidence. What do you believe?

Alan Siddons

Related reading:

[Carbon Dioxide: The Houdini of Gases](#)

[Show this to your Alarmist Friends](#)

[Does Anthropogenic Accumulation make sense?](#)

August 2017

