## **OPPS-5** Computer Models - Reliability COVID-19 has shown that pandemics can be an existential threat to humanity, AGW is not)

Amid the anxiety and tragedy playing out with the COVID-19 pandemic (both medically and economically), there is a microcosm playing out that mirrors the whole "Climate Change" discussion. The time scale on COVID-19 is much shorter than "Climate Change", but the parallels are still important.

Both have become very political in nature. Both have relied on computer models to drive Policy. Both rely on data and data analysis to produce their conclusions. Both are co-opted by the mainstream media and political narratives to focus on worst case scenarios and gloss over or outright ignore data that doesn't fit with the "NARRATIVE".

I'll focus on the computer modeling and relevant data needed for those models.

Are Computer Models Reliable?

More detail? Search "Ronald Davison climate"

## **Basic Premise of Computer Modelling - Garbage In, Garbage Out (GIGO)**

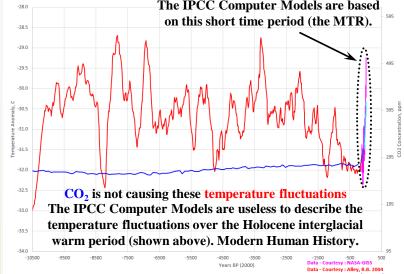
Let's look at the modeling done on the COVID-19 pandemic (and remember the modelling includes social distancing, etc.).

- Initial modelling (US) suggested a range of 100,000 to 2,200,000 people would die (the policy/media reaction was to focus on the worst-case scenario).
- That upper end rate was quickly reduced to 200,000, then 100,000, then 80,000 and is now in the 60,000 range.

To be fair to the medical community, we must acknowledge that data specific to COVID-19 was limited and subject to China's transparency issues in the early stages of the pandemic. But that underscores the importance of the data (GIGO). Pandemic issues have been studied extensively over the last century or two. So the general mechanisms (programmed into the computer models) are generally understood (but not fully).

Computer Models are only as good as the data that's provided and the mechanisms (theories (assumptions), proven equations, etc.) that are programmed in (GIGO). The COVID-19 model limitations are very apparent (even in the hands of experts). The same limitations are present in the "Climate Change" modelling. A big difference between COVID-19 and "Climate Change" models is the time scale. The medical community is reacting to new data on time scales measured in weeks and months. Mistakes/misinterpretations, etc. are to be expected. The "Climate Scientists" don't have that luxury. The models are decades old and have failed to accurately model the Lower Tropospheric Temperature (LTT). The LTT should have been the layer of the atmosphere that was the most responsive to "Green House Gas" (GHG) emissions. That response did not happen (based on many satellite and radiosonde (weather balloon) data sets). The IPCC (or other alarmist) climate modelers have been able to model the surface temperature relatively well over the Modern Temperature Record (MTR). However, there are a couple of significant problems with that "match". Firstly, the surface data temperatures are subject to a lot of data manipulation (an opaque process called "homogenization"). Homogenization manipulates the measured temperatures resulting in an "official" temperature (that conveniently matches the models). Data manipulation is covered very well by Tony Heller and What's Up With That (WUWT), I don't need to go into that detail. To be compliant with scientific practice, the climate modelers should be adjusting their models to match the measured temperatures (not the other way around). Secondly, the match over the MTR does not reflect the reality of Holocene temperature fluctuations. More detail is provided in my One Page Summaries (OPS-26a – 26f) and my Climate Short Story (CSS-1). Essentially if you can't match the historical Holocene data, you can't forecast the future. The IPCC modelers have literally programmed their computers to virtually ignore the natural radiative forcings (as shown below) that have been active throughout the Holocene

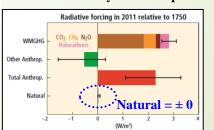
and are still active. The IPCC Computer Models are based on this short time period (the MTR).



The IPCC virtual reality world has historically ignored most solar radiative forcings (GIGO). The CMIP5 protocol includes only the Total Solar Irradiance (TSI, a good proxy for solar forcings, but a small part of the overall solar influence). CMIP6 is the new protocol being used and has introduced high energy solar particles and cosmic ray variation (not all the solar forcings, but a good start). CMIP6 Beta testing has shown that the MTR can now be modeled without CO<sub>2</sub> contribution. CO<sub>2</sub> still needs to be included in the models, but its warming impact is going to be small/beneficial (and most

certainly not dangerous).

## **IPCC 2014 AR5 Synthesis Report**



**Pushing Catastrophic Anthropogenic Global** Warming (CAGW) is quickly becoming criminal in nature. Politicians/news media, etc. could historically default back to the opinion of their "experts". That paradigm is passing. The reliability of computer models is being openly questioned (and rightfully so). The modelling is being updated to reflect all the available data (making them more reliable).

Justin, your unscientific, ideological approach to "Climate Change" is coming to an end.