

# Confessions of a climate scientist: The global warming hypothesis is an unproven hypothesis

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*“In climate research and modelling, we should recognize that we are dealing with a coupled non-linear chaotic system, and therefore that the long-term prediction of future climate states is not possible”.* (Chapter 14, Section 14.2.2.2, IPCC, Third Report, 2001, emphasis added.)

The temperature forecasting models trying to deal with the intractable complexities of the climate are no better than toys or Mickey Mouse mockeries of the real world.

The global surface mean temperature-change data no longer have any scientific value and are nothing more than a propaganda tool to the public.

Climate models are useful tools for academic studies, however the models just become useless pieces of junk or worse (worse in a sense that they can produce gravely misleading output) when they are used for climate forecasting. These models completely lack some critically important climate processes and feedbacks, and represent some other critically important climate processes and feedbacks in grossly distorted manners to the extent that makes these models totally useless for any meaningful climate prediction.

I myself used to use climate simulation models for scientific studies, not for predictions, and learned about their problems and limitations in the process.

...so I know the workings of these models very well ... For better or worse I have more or less lost interest in the climate science and am not thrilled to spend so much of my time and energy in this kind of writing beyond the point that satisfies my own sense of obligation to the US and Japanese taxpayers who financially supported my higher education and spontaneous and free research activity. So please expect this to be the only writing of this sort coming from me.

I am confident that some honest and courageous, true climate scientists will continue to publicly point out the fraudulent claims made by the mainstream climate science community in English. I regret to say this but I am also confident that docile and/or incompetent Japanese climate researchers will remain silent until the ‘mainstream climate science community’ changes its tone, if ever.

Climate forecasting is simply impossible, if only because future changes in solar energy output are unknowable. As to the impacts of human-caused CO<sub>2</sub>, they can’t be judged with the knowledge and technology we currently possess.

Other gross model simplifications include:

- Ignorance about large and small-scale ocean dynamics
- A complete lack of meaningful representations of aerosol changes that generate clouds.
- Lack of understanding of drivers of ice-albedo (reflectivity) feedbacks: “Without a reasonably accurate representation, it is impossible to make any meaningful predictions of climate variations and changes in the middle and high latitudes and thus the entire planet.”
- Inability to deal with water vapor elements

- Arbitrary “tunings” (fudges) of key parameters that are not understood

I want to point out a simple fact that it is impossible to correctly predict even the sense or direction of a change of a system when the prediction tool lacks and/or grossly distorts important non-linear processes, feedbacks in particular, that are present in the actual system.

The real or realistically-simulated climate system is far more complex than an absurdly simple system simulated by the toys that have been used for climate predictions to date, and will be insurmountably difficult for those naïve climate researchers who have zero or very limited understanding of geophysical fluid dynamics. The dynamics of the atmosphere and oceans are absolutely critical facets of the climate system if one hopes to ever make any meaningful prediction of climate variation.

Solar input, absurdly, is modelled as a “never changing quantity”. It has only been several decades since we acquired an ability to accurately monitor the incoming solar energy. In these several decades only, it has varied by one to two watts per square metre. Is it reasonable to assume that it will not vary any more than that in the next hundred years or longer for forecasting purposes? I would say, No.

Good modelling of oceans is crucial, as the slow ocean currents are transporting vast amounts of heat around the globe, making the minor atmospheric heat storage changes almost irrelevant. For example, the Gulf Stream has kept western Eurasia warm for centuries. On time scales of more than a few years, it plays a far more important role on climate than atmospheric changes. It is absolutely vital for any meaningful climate prediction to be made with a reasonably accurate representation of the state and actions of the oceans. In real oceans rather than modelled ones, just like in the atmosphere, the smaller-scale flows often tend to counteract the effects of the larger-scale flows.

The models result in a grotesque distortion of the mixing and transport of momentum, heat and salt, thereby making the behaviour of the climate simulation models utterly unrealistic.

Proper ocean modelling would require a tenfold improvement in spatial resolution and a vast increase in computing power, probably requiring quantum computers. If or when quantum computers can reproduce the small-scale interactions, the researchers will remain out of their depth because of their traditional simplifying of conditions.

The models are ‘tuned’ by tinkering around with values of various parameters until the best compromise is obtained. I used to do it myself. It is a necessary and unavoidable procedure and not a problem so long as the user is aware of its ramifications and is honest about it. But it is a serious and fatal flaw if it is used for climate forecasting/prediction purposes.

One set of fudges involves clouds.

Ad hoc representation of clouds may be the greatest source of uncertainty in climate prediction. A profound fact is that only a very small change, so small that it cannot be measured accurately...in the global cloud characteristics can completely offset the warming effect of the doubled atmospheric CO<sub>2</sub>.

Two such characteristics are an increase in cloud area and a decrease in the average size of cloud particles.

Accurate simulation of cloud is simply impossible in climate models since it requires calculations of processes at scales smaller than 1mm.” Instead, the modellers put in their own cloud parameters. Anyone studying real cloud formation and then the treatment in climate models would be flabbergasted by the perfunctory treatment of clouds in the models.

In tuning some parameters, other aspects of the model have to become extremely distorted. A large part of the forecast global warming is attributed to water vapor changes, not CO<sub>2</sub> changes. But the fact is this: all climate simulation models perform poorly in reproducing the atmospheric water vapor and its radiative forcing observed in the current climate. They have only a few parameters that can be used to 'tune' the performance of the models and (are) utterly unrealistic. Positive water vapor feedbacks from CO<sub>2</sub> increases are artificially enforced by the modelers. They neglect other reverse feedbacks in the real world, and hence they exaggerate forecast warming.

The supposed measuring of global average temperatures from 1890 has been based on thermometer readouts barely covering 5 per cent of the globe until the satellite era began 40-50 years ago. We do not know how global climate has changed in the past century, all we know is some limited regional climate changes, such as in Europe, North America and parts of Asia. This makes meaningless the Paris targets of 1.5degC or 2degC above pre-industrial levels.

Modellers are merely trying to construct narratives that justify the use of these models for climate predictions.

The take-home message is that all climate simulation models, even those with the best parametric representation scheme for convective motions and clouds, suffer from a very large degree of arbitrariness in the representation of processes that determine the atmospheric water vapor and cloud fields. Since the climate models are tuned arbitrarily ...there is no reason to trust their predictions/forecasts.

With values of parameters that are supposed to represent many complex processes being held constant, many nonlinear processes in the real climate system are absent or grossly distorted in the models. It is a delusion to believe that simulation models that lack important nonlinear processes in the real climate system can predict (even) the sense or direction of the climate change correctly.

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