

Number 2 in a series of emails: **Computer-generated climate scenarios are physically impossible.**

The Royal Society has issued a booklet on Climate Change controversies (www.ilovemycarbon dioxide.com/RS_science.html)

From it I quote (highlight by me):

"This is not intended to provide exhaustive answers to every contentious argument that has been put forward by those who seek to distort and undermine the science of climate change and deny the seriousness of the potential consequences of global warming. Instead, the Society - as the UK's national academy of science - responds here to eight key arguments that are currently in circulation by setting out in simple terms, **where the weight of scientific evidence lies.**"

Due to the extent of misrepresentation of proper science, each RS page will need to be subdivided, lest each email becomes too large.

#1(b): Concept title: The Earth's climate is always changing and this is nothing to do with humans.

So what is causing this increase in average global temperature? The natural greenhouse gas effect keeps the Earth around 30°C warmer than it would otherwise be and, without it, the Earth would be extremely cold.

It works because greenhouse gases such as carbon dioxide, methane, but mostly water vapour, act like a blanket around the Earth. These gases allow the Sun's rays to reach the Earth's surface but hinder the heat they create from escaping back into space. Indeed, the ability of carbon dioxide and other greenhouse gases to trap heat in this way has been understood for nearly 200 years and is regarded as firmly established science.

Any increases in the levels of greenhouse gases in the atmosphere mean that more heat is trapped and global temperatures increase – an effect known as 'global warming'. We know from looking at gases found trapped in cores of polar ice that the levels of carbon dioxide in the atmosphere are now 35 per cent greater than they have been for at least the last 650,000 years.

A: "The natural greenhouse gas effect keeps the earth around 30 °C warmer than it would otherwise be ..."

Firstly, the entire concept of earth being some 30 °C warmer than it would be is calculated via a mathematical mirage, based as it is on the inappropriate use of "averaged global temperatures", amongst others. It is not 30 °C warmer in the Arctic, nor the Antarctic and around the equator it is a lot *cooler* at midday thanks to the atmosphere. The atmosphere acts as an air-cooled engine, *removing* energy from the solar heated earth's liquid and solid surfaces. At night, the heat retained by the myriad of materials that make up our earth continues to be removed from earth's surface by the atmosphere, but the *rate of cooling* is determined by, *amongst many other factors*, atmospheric moisture (water vapour content). At no stage is the maximum daytime temperature dependent upon so-called greenhouse gases or a so-called greenhouse effect, quite the opposite - it would be much warmer during daylight hours in the absence of either an atmosphere or water vapour (viz. the Moon). The means by which night time temperatures are affected also have nothing to do with a greenhouse effect. In marginal Spring or Autumn nights, why else could there be grass frost (aka ground frost) if the atmosphere was adding heat to the ground? Clouds merely reduce the flow of convective currents and radiative losses and thus prevent the ground from losing as much energy as it would on a clear night. Not even clouds make the ground warmer than it would be. Imagine a cloud at only 15°C or less radiating sensible heat *downwards* all the way from 3,000ft up. Observations of "downwelling" that "prove" this phenomenon are misinterpreted, ask for details.

Secondly, the entire mechanisms so loosely referred to as the greenhouse effect (GHE) and greenhouse gases (GHGs) have been scientifically proven to be a physical impossibility in our open-to-space atmosphere. References are easily obtained from my website's carbon dioxide page (link below). Despite satellites and weather balloons looking for many years, no hot-spot has ever been observed yet is predicted by all climate models and even skeptical academics have formulae to prove it "exists" - *despite the lack of any observational evidence.*

B: "It works because greenhouse gases such as carbon dioxide, methane, but mostly water vapour, act like a blanket around the Earth."

Firstly, as per above, the mechanism of GHGs is a mirage and does not exist in reality. See my website for details.

Secondly, does a blanket *make* you warm or merely *keep* you warm? Does a blanket make you *warmer* than your body can make you warm? Does a blanket give you a fever? If yes, then engineers have missed an opportunity of increasing the output of generators by wrapping them in blankets. In a hot and humid climate you could wrap yourself in a blanket and say that the blanket makes you warmer than you would be without it, yes, but that's because you are preventing natural convection around your skin from removing the energy generated by your body, the same idea that makes an actual greenhouse warmer than its surroundings. *Since when can a gaseous atmosphere be regarded in the same light as a blanket?* All gases in our atmosphere are subject to the natural forces of convection whereby warmer molecules will rise above those of lower temperature, thus the process of natural cooling takes place, 24 hours per day. No gas is capable of acting like a blanket unless it is placed within the surrounds of solid matter.

Thirdly, our precious earth is already enveloped by the perfect "blanket" - the vacuum of space. Contrary to popular belief, the vacuum of space is not cold in the same way as we understand cold on earth - it actually has no temperature because there is not enough matter in the vacuum of space for there to be a flow of energy such that a temperature can be perceived. Are you aware that NASA's ISS has a major problem ridding itself of excess heat? If space was as cold as popular belief has it, then the ISS would only need a tiny radiator; in reality, it needs over 1,600 square feet of radiators when that same heat could be dissipated in our earth's atmosphere by less than 10 sqft. Radiative cooling is a rather slow process compared with conductive and convective heat losses. Earth's atmosphere does not need a blanket to keep it warm, it has one already - the most effective possible.

C: "Indeed, the ability of carbon dioxide and other greenhouse gases to trap heat in this way has been understood for nearly 200 years ..."

Firstly, the concept has been *mis*-understood for nearly 200 years. Already in 1909 the hypothesis put forward by Arrhenius was disproved by Wood, yet modern science continues to appeal to authority without questioning the first principles of physics, especially the first and second laws of thermodynamics. No heat is created nor trapped and the original amount of energy that earth receives from the sun can not be increased, by any means, not even by carbon dioxide molecules.

Secondly, no gas can trap heat and even if it could, that would be the end of that heat. Once trapped, what can the heat do? Warm the surroundings? Then it's no longer trapped. Trapped heat is just that: trapped.

Thirdly, the ability of carbon dioxide to "trap heat" is based on laboratory experiments that bear no relationship whatever with the open-to-space atmosphere. In the laboratory, the air inside a flask is heated from the outside whilst contained within. In reality, the atmosphere is heated from the inside (it is *earth* that is heated from the outside) and of course there is no glass wall or any other barrier in the open-to-space atmosphere.

D: "Any increase in the levels of greenhouse gases in the atmosphere mean that more heat is trapped [...], an effect known as 'global warming'."

Firstly, as per above, the trapping of heat by a gas in an open-to-space atmosphere is an impossibility and in any case, trapping heat would not make the surroundings any warmer - the heat is now trapped.

Secondly, consider a thermos flask. The purpose of a thermos is to "trap" heat, usually by means of a container made from silvered glass walls, with a vacuum-filled space between the walls of the glass. Do the contents of the flask get any warmer the longer they are inside this container? No, the cooling down process is impaired - a greenhouse effect in reverse - and that is what keeps the contents warmer longer than if there were no silvered glass walls. No such mechanism exists in our open-to-space atmosphere.

Thirdly, as explained above, air acts as a cooling medium, not a warming one and even in high-humidity zones, the process of heat removal takes place 24 hours per day, merely *slowed down* at night by the presence of water vapour and also dependent to a large extent on the direction and strength of any wind, *amongst many other factors*.

Fourthly, the perceived 'global warming' is based on an increase in *globally averaged temperatures* and the manner in which these averages have been derived is subject to many influences. One major influence is the drop-out of weather stations in cold zones (well documented); another is the urban heat island effect (well documented); a third is weather station placements that were once in rural areas but now within urban areas (well documented).

E: "We know from looking at gases found trapped in cores of polar ice that the levels of carbon dioxide are now 35% greater than they have been for the last 650,000 years"

Firstly, the accuracy of ice core trapped gas is by no means beyond dispute. Gaseous dispersion over millennia is not well understood and can not be replicated in laboratories, for obvious reasons.

Secondly, carbon dioxide levels are not evenly distributed across the globe, so comparing questionable levels from Arctic/Antarctic ice cores to levels on the top of a volcano (!) in Hawaii is like comparing bananas with cucumbers.

Thirdly, in your own statement you acknowledge that levels of atmospheric carbon dioxide were higher 650,000 years ago. Do you have an explanation for that?

Fourthly, you do not take into account that there are over 90,000 well documented and accurate direct chemical measurements of atmospheric carbon dioxide that indicate a widespread fluctuation over the 180 years in which these measurements were made. It is all too easy to denigrate the dedicated chemists who made those measurements *just because their readings do not fit with your preconceived ideas*. That's called cherry-picking data to underpin a faulty hypothesis.

Lastly, smart people are no longer deluded by "tackling dangerous climate change" and "catastrophic sea level rises". The smart ones now see that the game is tackling climate fraud - the UN IPCC and the climate cabal comprising misrepresentations of science, documented, open, public falsities by the UN IPCC chairman, academics fomenting unfounded climate alarm to continue feeding at the public trough despite having no measured, scientific real-world data as evidence of global warming caused by humans and offering only failed, faulty computer models for sale. Climate alarm is being replaced by climate clarity. Computer-generated climate scenarios are physically impossible.

Royal Society, defend yourself and your science.

Apply the Scientific Principle to your information and inform the world that you have been wrong.

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