## Failure evidence for all 21 IPCC positive-feedback climate models

Nige Cook Nigelcook@quantumfieldtheory.org

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NASA incorrectly claims that any cosmic radiation increases deliver energy directly and cause temperature rises. Because this does not happen (the opposite occurs, see Fig. 5), NASA claims that cosmic radiation does not have any effect on climate. However, increases in cosmic radiation increase high altitude cloud cover by the "Wilson cloud chamber" effect (well proved in nuclear physics), and so have a cooling effect on the earth's climate by increasing Earth's albedo. This mechanism is justified by a correlation between temperature and the inverse of the cosmic ray intensity (Fig. 5). The only reason why significant CO2 related temperature rises are predicted by all 21 IPCC climate models is that they all contain the same error: assuming that water vapour absorbs sunlight to amplify the CO2 injection by positive feedback, ignoring the fact that it would gain buoyancy, rise and condense into cloud cover. It is easy to prove that any net positive feedback by water vapour (which all IPCC positive feedback climate models assume) would have boiled the oceans off long ago and would have prevented human life from evolving. Since H2O vapour is a greenhouse gas 26 times more powerful in the atmosphere than CO2, it follows that the atmosphere did not need to wait for human CO2 emissions before H2O kicked in. Water positive feedback would have kicked in and endlessly accelerated of its own accord millions of years ago, if it were positive. Whenever the rate of increase of a variable is proportional to that variable, you get self-feedback, thus an exponential rise in that variable. Positive feedback on temperature T implies the rate of rise of temperature, dT/dt, is proportional to temperature, T. Hence dT/dt = cT, where c is a constant. Thus: (1/T)dT = c dt. Integrating gives  $\ln T = ct$ . Making both sides powers of e (base of natural logs) then gets rid of the natural logarithm, yielding  $T \sim \exp(ct)$ . Thus, net positive feedback leads to an exponential temperature rise. This error in all 21 IPCC climate models is not an opinion, or speculation, but a fact of physics, robustly confirmed by evidence. The temperature, if positive feedback were true, would have boiled off the oceans hundreds of millions of years ago in a runaway greenhouse effect like that on Venus. Water does not have positive feedback.

## INTRODUCTION

"... studying climate change could be a way of satisfying my humanitarian ideals, born out of my Christian beliefs. ... Climate change also provided me with the gateway into my first professional appointment, as a lecturer in geography at the University of Salford in 1984. This was to be the stepping stone to me later securing a post-doctoral research position under the inspiring Professor Tom Wigley at the Climatic Research Unit in the School of Environmental Sciences at the University of East Anglia in Norwich, UK. ... Embedded within this analytical period was another important stage of my journey, in which I came to see climate change in terms of 'Political Ideology' (c. 1984-90). I came to view global climate change caused by greenhouse gas emissions as a manifestation of a free-market, consumption-drive, capitalist economy – an ideology to which I was opposed. I recollect now that this opposition was an explicit ideological frame which I used when teaching my course on contemporary climate change to final-year undergraduate geography students at the University of Salford between 1985 and 1988. This way of relating to climate change was a formative influence on (or reflection of) my political thinking during the decade of Thatcherite conservatism in the UK. I subsequently joined the British Labour Party in 1990."

- Professor of Climate Change Mike Hulme, University of East Anglia, *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity*, Cambridge University Press, 2009, pp. xxx- xxxi.

A January 2012 dated NASA climate change page by James Hansen, Makiko Sato, Pushker Kharecha and Karina von Schuckmann, <a href="http://www.giss.nasa.gov/research/briefs/hansen\_16/">http://www.giss.nasa.gov/research/briefs/hansen\_16/</a> alleges: "The measured positive imbalance in 2005-2010 is particularly important because it occurred during the deepest solar minimum in the period of accurate solar monitoring ... If the Sun were the only climate forcing or the dominant climate forcing, then the planet would gain energy during the solar maxima, but lose energy during solar minima. ... it provides unequivocal refutation of assertions that the Sun is the dominant climate forcing."

This claim that a solar influence on climate predicts that the Earth would "gain energy during the solar maxima" is the opposite of cosmic radiation effects on climate, which provide no significant energy to the Earth, but instead block sunlight delivery by increasing high altitude cloud cover by the Wilson cloud chamber effect (e.g. cirrus at circa 15,000 ft). The evidence it gives supports, rather than rejects, the fact that the Earth warms during solar minima, when reduced cosmic radiation reduces cloud cover.

This explicitly assumes that energy from the sun is the only mechanism by which the sun can affect climate, *ignoring the Wilson cloud chamber mechanism for cirrus cloud cover* that is proved in nuclear physics. In other words, cosmic radiation does *not* contribute directly to earth's energy balance by delivering energy. Instead, cosmic radiation increases cirrus cloud cover through the Wilson cloud chamber mechanism (a key tool of early nuclear and particle physics), which increases earth's albedo, indirectly affecting temperature. This politically popular "error" is a pseudoscientific assertion which may be causing human deaths due to diversion of funding (see <a href="http://youtu.be/cqlYMWIWYt8">http://youtu.be/cqlYMWIWYt8</a> for evidence). It is deplorable that the media obfuscates these facts for dogmatic political ideology.

It is yet another NASA groupthink failure, just like the 1986 Challenger prediction that the rubber Orings would fail (<a href="http://nige.wordpress.com/2011/02/15/holocaust-denial-and-ex-vice-president-algore">http://nige.wordpress.com/2011/02/15/holocaust-denial-and-ex-vice-president-algore</a>) or Dr Bindshafter's NASA deception on the 2011 BBC2 programme "Horizon: Science Under Attack" that humans emit 86% of the annual CO2, or 7 times more than nature, contrary to the 2007 IPCC report which states only 3.6% of the CO2 output is related to human beings and the rest is natural (see <a href="http://vixra.org/abs/1211.0156">http://vixra.org/abs/1211.0156</a> for the inaccurate response of BBC Horizon producer Emma Jay).

The satellite energy balance deception is due to the fact that half the planet is in shadow continuously, half is in sunlight, and over 60% is covered by clouds at various altitudes, preventing any satellite determination of the surface temperature under the cloud cover. The satellites measure the reflection and Planck emission from the warmed upper cloud surfaces, while satellite measurements of microwave emissions from air molecules only gives the mean temperature of the troposphere and doesn't properly distinguish between air above and air below cloud cover. Thus, the NASA energy balance is a fiddle, prejudiced implicitly to produce the results which *exclude negative feedback from shadowing by cloud cover*. Note that satellites can't even assess surface temperatures under cloud cover: they simply measure the temperature at the top of the clouds from the radiation intensity and spectrum. Therefore, the satellite data are not unbiased for assessing the temperature below the cloud. This is something that isn't even included by people like Dr Roy Spencer, who relies on satellite data.

The satellite data therefore is conflates albedo effects from the tops of clouds with temperature. The albedo is the reflected sunlight energy, and most sunlight reflection is by cloud cover. The emission of Planck spectrum thermal radiation into space is *most effective in places where there is no cloud cover* (clear sky at night). The satellite data doesn't distinguish these two features, let alone the altitude of the cloud tops from which sunlight is reflected. It's a defective analysis.

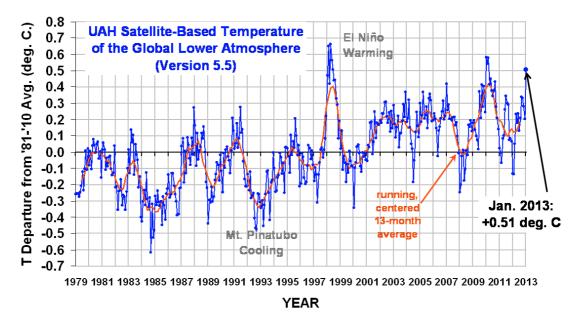


Fig. 1: UAH satellite-based temperature of the global lower atmosphere (from Dr Roy Spencer, <a href="http://www.drroyspencer.com/2013/02/uah-global-temperature-update-for-january-2012-0-51-deg-c/">http://www.drroyspencer.com/2013/02/uah-global-temperature-update-for-january-2012-0-51-deg-c/</a>). The error is in the satellite data: it averages the global lower atmosphere, conflating (joining together) the temperature data from warming air above cloud cover, with the cooling air below clouds. Because

of the law of convection (hot air rises), it is the *only* the air below the clouds which ends up causing effects we experience like rising sea levels, or melting ice. Satellites can only probe temperatures *below* cloud tops by measuring the emission of *microwave radiation by air molecules*, and this *doesn't distinguish the altitude of the air emitting the microwaves*. Almost *all* of the effects from negative feedback caused by cloud cover increases are therefore *implicitly excluded* by these defective "data."

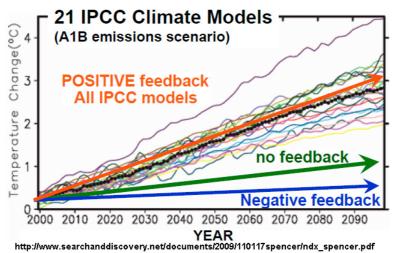


Fig. 2: negative H<sub>2</sub>O feedback negates dire climate change predictions, from Dr Roy W. Spencer's presentation: Satellite Evidence against Global Warming Being Caused by Increasing CO<sub>2</sub>, AAPG Annual Convention, Denver, Colorado, June 7-10, 2009 (<a href="http://www.searchanddiscovery.net/documents/2009/110117spencer/ndx\_spencer.pdf">http://www.searchanddiscovery.net/documents/2009/110117spencer/ndx\_spencer.pdf</a>), based on his peer-reviewed publication, Roy Spencer, et al., "Cloud and Radiation Budget Changes Associated with

Tropical Intraseasonal Oscillations," Geophysical Research Letters, vol. 34, 2007.

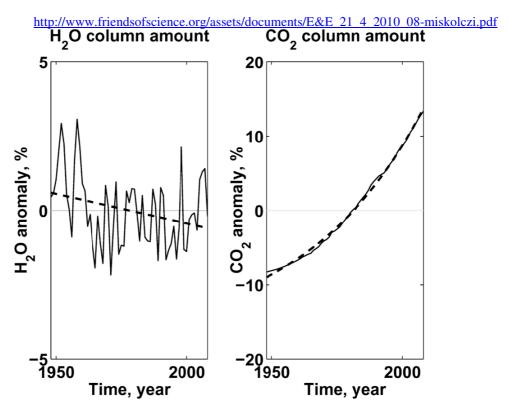
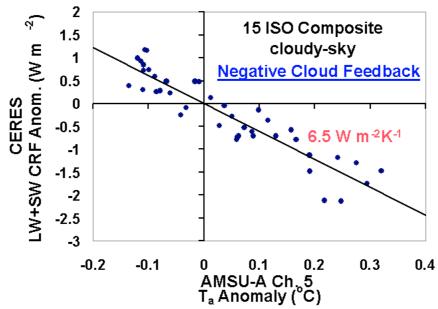


Fig. 3: this graph shows that since 1948 the 1% measured decrease in H2O vapour (i.e. the "negative feedback" conversion of vapour into cloud droplets which reflect sunlight away from Earth), cancels out the 26% rise in CO2 because CO2 as a greenhouse gas is 26 times weaker than H2O. Instead of H2O vapour increasing and absorbing more infrared as IPCC positive feedback models predict, it has instead has cancelled out the greenhouse effect from the rise in CO2. It is because H2O vapour is a

greenhouse gas about 26 times as powerful as CO2. This graph is taken from Fig. 9 in Dr Ferenc Miskolczi's peer-reviewed published paper, "The stable stationary value of the earth's global average atmospheric Planck-weighted greenhouse-gas optical thickness," *Energy and Environment*, vol. 21, No. 4, 2010. The ratio of H2O to CO2 vapour greenhouse gas strength is from James Delingpole, *Watermelons* (2012 edition), page 48. (Water vapour gives 95% of the greenhouse effect, CO2 gives 3.62%.) This evidence that the fall in water vapour since 1948 cancels out the increase in CO2 leaves cosmic rays to vary temperature via the temperature (by the proved nuclear physics tool, the "Wilson cloud chamber" of high altitude cirrus.)

It's the *combination* of the mechanistic need for negative feedback with these facts and data that make the case, not any *single* piece of data. Singling out a particular paper and attacking it, while ignoring the mechanism and other evidence is pseudoscientific. You have to see the big picture. Note that negative feedback loops are not special in regulating Earth's climate but are used in nature all the time, and is generally called "homeostasis." *Homeostasis* is achieved by *negative feedback* mechanisms. E.g., the human body uses a negative feedback loop to regulate parathyroid hormone, which control the level of calcium in the blood. If calcium levels get too high in the blood, the kidneys excrete calcium. If they get too low, parathyroid hormone is released which releases calcium from bone to bloodstream, normalizing the blood calcium level. The scam of the IPCC is to totally omit negative feedback loops in order to fiddle a dramatic false prediction; precisely the same con trick in the computer models of the Club of Rome's "Limits to Growth" propaganda report in the 1970s. They claimed to include negative feedback, but deceived readers and simply omitted the major negative feedback loops (see <a href="http://vixra.org/abs/1211.0156">http://vixra.org/abs/1211.0156</a> page 32 for further details).

## CERES-Measured Changes In [emitted LW+reflected SW] During the Composite Intraseasonal Oscillation (ISO)



6.5 W m-2 SW+LW loss per deg. C warming is MORE than the temperature effect alone (3.3 W m-2), so negative feedback

Fig. 4: peer-reviewed published evidence of negative feedback due to cloud cover, a composite analysis of the 15 strongest tropical intraseasonal oscillations from 2000-2005 in tropospheric temperature using weather satellites NOAA-15 and NOAA-16, showing strong evidence that as the air heats up, H<sub>2</sub>O has a negative cloud cover feedback not the positive feedback assumed in computer models of climate disaster from CO<sub>2</sub>. (Source: Fig. 4 in R. W. Spencer, et al., "Cloud and Radiation Budget Changes Associated with Tropical Intraseasonal Oscillations," Geophysical Research Letters, vol. 34, 2007.)

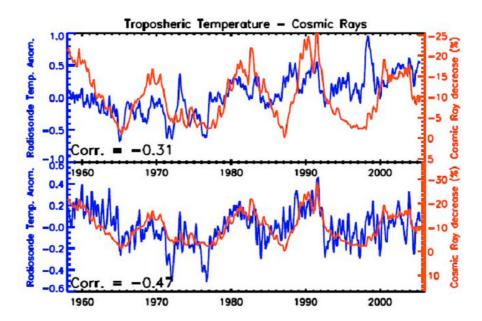


Fig. 5: Henrik Svensmark and Eigil Friis-Christensen's plot of cosmic ray intensity is in **red** and upside down, so that 1991 was a minimum, not a maximum. Fewer cosmic rays mean a warmer world, and the cosmic rays vary with the solar cycle. The **blue** curve shows the global mean temperature of the midtroposphere as measured with balloons and collated by the UK Met Office (HadAT2). The lower the cosmic ray intensity, the greater the temperature. This is precisely what the Wilson cloud chamber mechanism predicts for cloud cover such as cirrus (around 15,000 feet). Cosmic rays boost Wilson cloud cover, increasing Earth's albedo, cooling the planet. Cosmic rays thus have an effect on temperature. (Source: Nigel Calder, via http://vixra.org/pdf/1211.0142v1.pdf.)

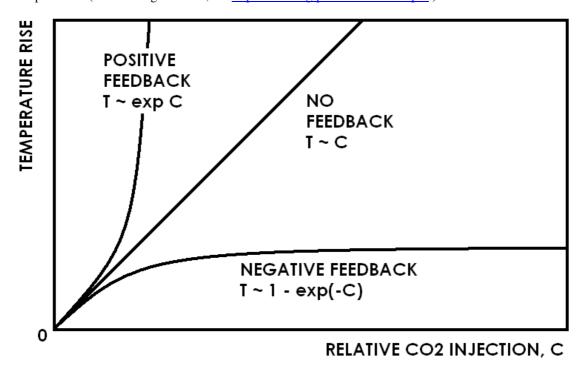


Fig. 6: comparison between effects of positive feedback, no feedback, and negative feedback. Positive feedback causes exponential growth, no feedback may result in an approximately linear response curve, while negative feedback gives a saturation curve where cloud cover starts to increase rapidly as it gets warmed, fogging up the atmosphere and thus keeping the surface from getting too hot. If H2O positive feedback were correct, Earth would have been in a runaway greenhouse effect like Venus for millions of years, with temperatures high enough to boil the oceans and kill all life. Clearly, this is false, which

discredits the assumption in every single IPCC model that positive feedback from H2O is correct! (Note that for *very small* injections of CO2, all three curves approximate to the linear response law.)

It is easy to prove that any net positive feedback by water vapour (which all IPCC positive feedback climate models assume) would have boiled the oceans off long ago and would have prevented human life from evolving. Since H2O vapour is a greenhouse gas 26 times more powerful in the atmosphere than CO2, it follows that the atmosphere did not need to wait for human CO2 emissions before H2O kicked in. It would have kicked in of its own accord millions of years ago. Whenever the rate of increase of a variable is proportional to that variable, you have an exponential rise in that variable. Positive feedback on temperature T implies the rate of rise of temperature, dT/dt, is proportional to temperature, T. Hence dT/dt = cT, where C is a constant. Thus: (1/T)dT = c dt. Integrating gives C In C Making both sides powers of C (base of natural logs) then gets rid of the natural logarithm, yielding the solution:  $T \sim \exp(ct)$ . Thus, net positive feedback leads to an exponential temperature rise. This false prediction from all IPCC climate models is not an opinion, or speculation, but a scientific fact of physics, well confirmed by experiments. The temperature, if positive feedback were true, would have boiled off the oceans millions of years ago in a runaway greenhouse effect like that on Venus, killing all life on Earth.

## REFERENCE

http://vixra.org/abs/1211.0156