

The one assumption of the  
Anthropogenic Global Warming (AGW) “theory”  
(or, so called Man made climate change)  
modeling you should **understand**.  
The 10 degrees celcius / 280ppm CO<sub>2</sub>,  
and 1 tenth per doubling thereafter assumption.

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### **What this piece is about.**

“We” have been told (and told again, and again, and again..) that “our” carbon dioxide (CO<sub>2</sub>) emissions are helping create a “blanket” that is warming the planet, and that this will inevitably lead to disastrous climate change.

Further we are seemingly constantly employed that Anthropogenic (ie man made) Climate Change is our fault and we should act to stop it now.

These fears are based on computer climate models and their predictions, or rather projections of the planet’s near future climate, and how it will (supposedly) change.

The main assumption of the models regarding how this so called man made warming “is” occurring relies on a positive feedback water vapour heating mechanism (“blanket”). Sound experimental evidence in the form of a repeatable and verifiable experiment shows there is now no trigger mechanism for the assumed water vapour heating mechanism.

Quite simply, there is no observable heating mechanism as assumed by the AGW “theory”, and modeled by computer climate models known as General Circulation Models (GCMs).

In point of fact observations show the exact opposite is actually happening as compared to what has been assumed to be happening in the upper troposphere.

The AGW "theory" (as it is not proven , it is actually a hypothesis) Or as it more frequently referred to now as man made climate change, or climate chaos is, without it's only anthropogenic "caused" heating mechanism, therefore disproven.

The hunch, or idea of man effecting global climate by his burning of fossil fuels is not a new idea, it has been "around" for some considerable time, but in recent decades the "theory" has gained significant political support, this is due in no small measure to the climate model "predictions", now more accurately referred to as projections, of how climate is thought to be going to change, over the next few decades.

Given the importance of the assumed positive feedback water vapour heating mechanism, the "blanket", can it be observed ?

### **Forward** - (disclaimer really..).

Please DO NOT just "accept", "believe", or "take on trust" a single word so far, or that follows. That is NOT the scientific method.

You can also not just "dismiss", or "ignore" anything put forward in a correct or reasoned manner, because that is the reasonable, cautious, and steady approach demanded by any study of our present level of understanding, or rather science. This can be checked by employing the scientific method, so it is of central importance that the scientific method, and how it works, and should be used is understood.

The proper investigation, understanding, hypothesises, assumptions used and conclusions about absolutely anything studied must be done in an open manner. If the raw data, the assumptions, or the methods used / employed are not clearly stated, and understood, how can anything be shown or proved. IT CAN NOT.

The scientific method used properly empowers us all, it is not solely the domain of "scientists".

We can all use the scientific method in our investigations, that is what it is for, and it is it's most powerful attribute, all of us can use it.

We can see, check, question, and verify the data, the methods, the assumptions and the resulting conclusions.

If this is not capable of being done because of the way the data / assumptions / methods, etc, were, or are presented, or released then any results can only be taken on trust (at best).

Science is NOT about trust, it is about openness.

The scientific method in a simple form can be expressed by the following 6 points.

- 1)** Observe (preferably empirical data).
- 2)** Explain the observation and or observations (hypothesis).
- 3)** Test the explanation by an experiment (i.e. evaluate a prediction from the hypothesis).  
It should be noted that an experiment may consist of looking for information which would confirm or deny the hypothesis, and this is usual in subjects such as climatology and cosmology because climates and stars cannot be altered to conduct a test.
- 4)** Analyze the experimental results and draw a conclusion.
- 5)** (a) The hypothesis is supported if the experiment confirms the prediction and it may be on its way to being accepted as a scientific theory if others are able to independently duplicate the experimental results.  
(b) The hypothesis is rejected if the experiment demonstrates that the prediction was incorrect. In this case it is necessary to return to steps 2), 3) and 4), and this loop is repeated until a hypothesis is obtained which is supported by experimental results.
- 6)** Openly publish the experiment's methodology, results and data.

The publication should include discussion and evaluation of all known possible problems and reservations concerning the study it reports.

The reason the scientific method as described above is "empowering" is that it enables non-experts to discern when experts are mistaken. This power was clearly expressed by Thomas Huxley who said;

**"The deepest sin of the human mind is to believe things without evidence"**

He further famously stated,

**"Science is organized common sense where many a beautiful theory was killed by an ugly fact."**

Importantly, it should always be kept in mind that all presented hypotheses could be wrong so an "ugly fact" that defeats one understanding of an issue is not evidence that another understanding is correct.

Frequently when investigating just about anything assumptions are employed, usually to simplify the situation, to make understanding or interpreting data, results, etc, easier.

In this there is nothing wrong at all, but it must be remembered that assumptions can be a great boon or a complete disaster.

As an example of an incorrect assumption creating a complete disaster, then private pensions may well strike a chord with many at present. Back in the late 1980s and early 1990s many people bought into private pensions. Many of those people did not check through the pension and how it worked, but more importantly most were not aware of the 10% growth of the stock market based pension funds per year assumption that the pension plan and it's returns and hence figures were based upon. Recently in the news it has been reported that many of the private pensions are now showing large short falls from the "predictions" that they were originally sold on. Many people are both upset and surprised that their pensions are not what they thought they would be.

When did the stock market last grow by 10% (overall) per year ?

For how many years consecutively did the stock market grow by 10% or more ?

Stock markets can fall as well as rise.

Investing in stock markets is a gamble, there is no guarantee of 10% returns, a more realistic figure would have been nearer 2 to 3 percent growth per annum in the long term.

Is there really any grounds whatsoever for the surprise and indignation so often expressed that, private pensions have not delivered the returns they were supposed to have delivered ?

Assumptions blindly accepted can be very dangerous things. When an assumption is incorrect, everything that is based upon it is also incorrect. Predictions, or more accurately projections based on a wrong or incorrect assumption or assumptions become certain of only one thing, being wrong, or at best right for the wrong reasons in the short term.

In the longer term, wrong assumptions will almost certainly lead to the wrong "projections", excepting the most extraordinary "luck"....

## **THE assumption you should understand (in two parts).**

We have all heard about the "blanket" in the atmosphere, maybe some are not aware that it was an assumed "blanket", that keeps our planet warmer than it would otherwise be. This "blanket" because of our CO2 emissions, we are making "thicker" and hence warming the planet. We are told this is causing global warming, and possibly disastrous run away man made climate change.

What is this assumed "blanket" and where is it. ? Can it be observed ? Does it act as assumed ?

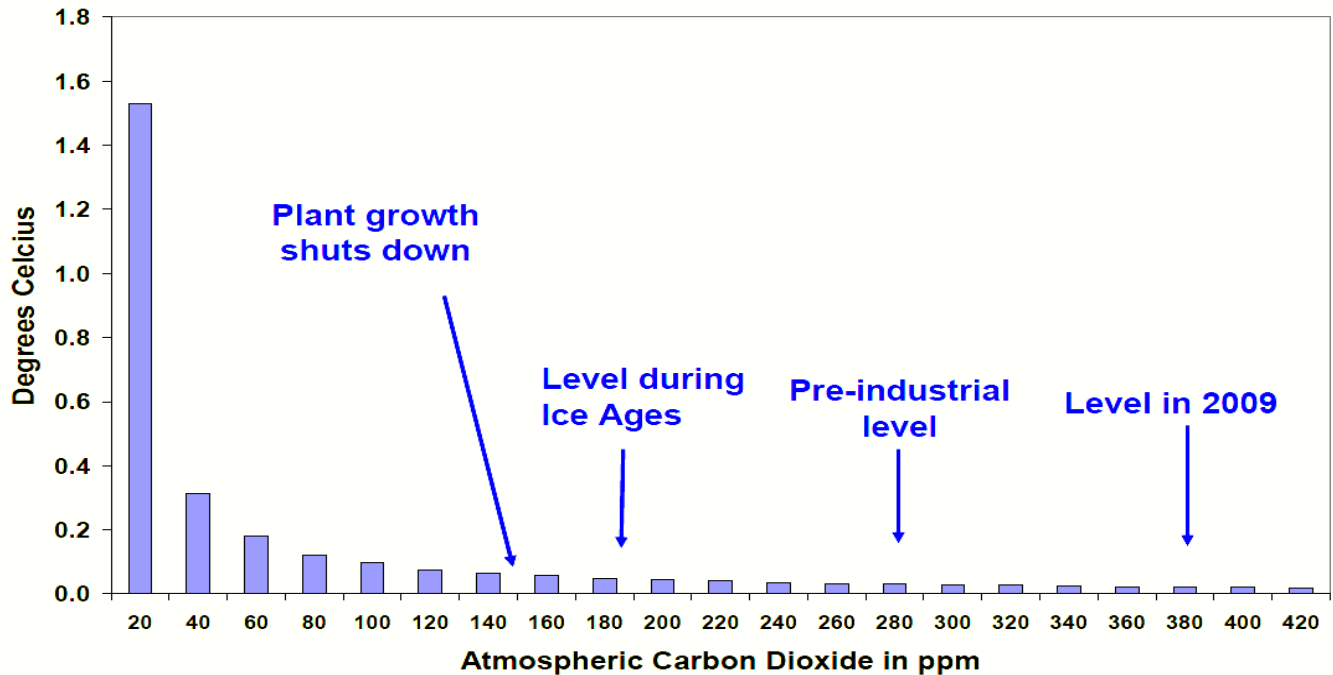
### **1) How strong is the CO2 on it's own effect upon global mean temperature.**

## Is there any “trigger” left in the “system” ?

It has been shown beyond doubt that CO<sub>2</sub> on its own does not have a sufficient effect (temperature wise) to cause any serious problem on its own. The CO<sub>2</sub> effect is logarithmic, in other words it flattens out very quickly. The first 20 parts per million (at sea level) have a considerable effect, but very quickly any further increases of CO<sub>2</sub> have relatively little effect upon the temperature of the planet. (Plants do grow considerably better as CO<sub>2</sub> levels raise though. CO<sub>2</sub> is literally atmospheric plant fertilizer – biological fact.)

David Archibald produced the below plot (Figure 1) from readings taken under laboratory conditions, this is a plot of repeatable, and verifiable experimental data, and as such is accepted as the effect of CO<sub>2</sub> on its own, at sea level.

**Figure 1**



David Archibald’s data for the CO<sub>2</sub> on its own effect was 1.5 degrees celsius for the first 20 parts per million atmospheric concentration of CO<sub>2</sub>. Thereafter a doubling of CO<sub>2</sub> concentration would add a further two tenths of the previous temperature increase. So a doubling of concentration from 20 parts per million (ppm) to 40 ppm would add a further 0.3 degrees celsius, making the temperature increase for a concentration of 40 ppm 1.8 degrees celsius. The next “doubling” is somewhat confusing. The amount of temperature increase is relatively easy to work out, it is 2 tenths of the previous (first doubling) rise, this was 0.3C, so the rise for the second doubling of CO<sub>2</sub> concentration would be 0.06 (2 tenths of 0.3). The next, 0.012, the next 0.0024, and so on. A doubling from 40 ppm would be 80 ppm, but Figure 1 shows a 60 ppm addition. Is the “doubling” a doubling, or adding 20 ppm ?

To see if this makes a large difference I have plotted the temperature increase against CO<sub>2</sub> concentration for both possibly meant versions, there is no discernable difference to within 0.01 of a degree celsius.

As a temperature increase overall please see table 1.

Table 1

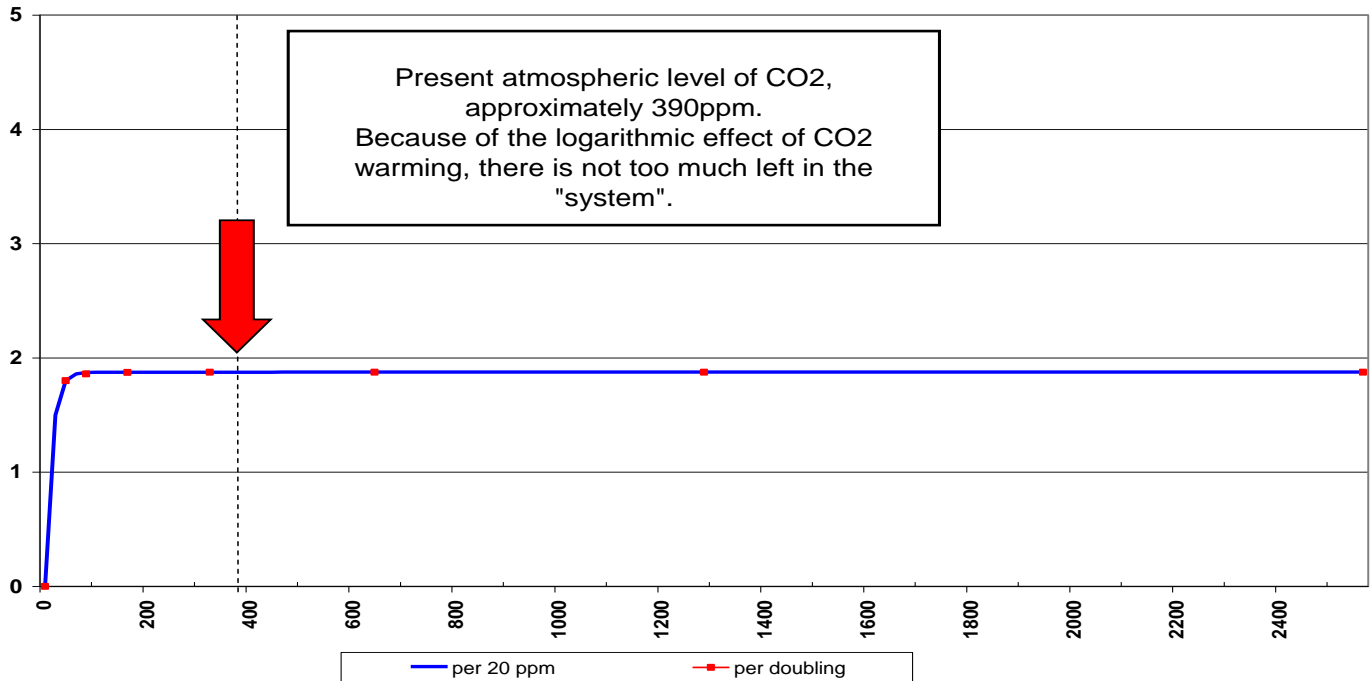
Atmospheric concentration of CO2 in ppm at sea level	20	40	80	160	320	640
Temperature increase per CO2 doubling	1.5	0.3	0.06	0.012	0.0024	0.00048
Temperature rise caused by CO2 to temperature overall in degrees celcius	1.5	1.8	1.86	1.872	1.8744	1.87488

Table 1 has been plotted in Figure 2 to an atmospheric CO2 concentration of 2560 ppm CO2 on it's own at sea level will add a maximum of just about 1.9 degrees celsius to global mean temperatures, most (virtually all) of which has already occurred. This is because of the logarithmic nature of the CO2 effect on it's own.

Figure 2

Global mean temperature rise degrees celcius.

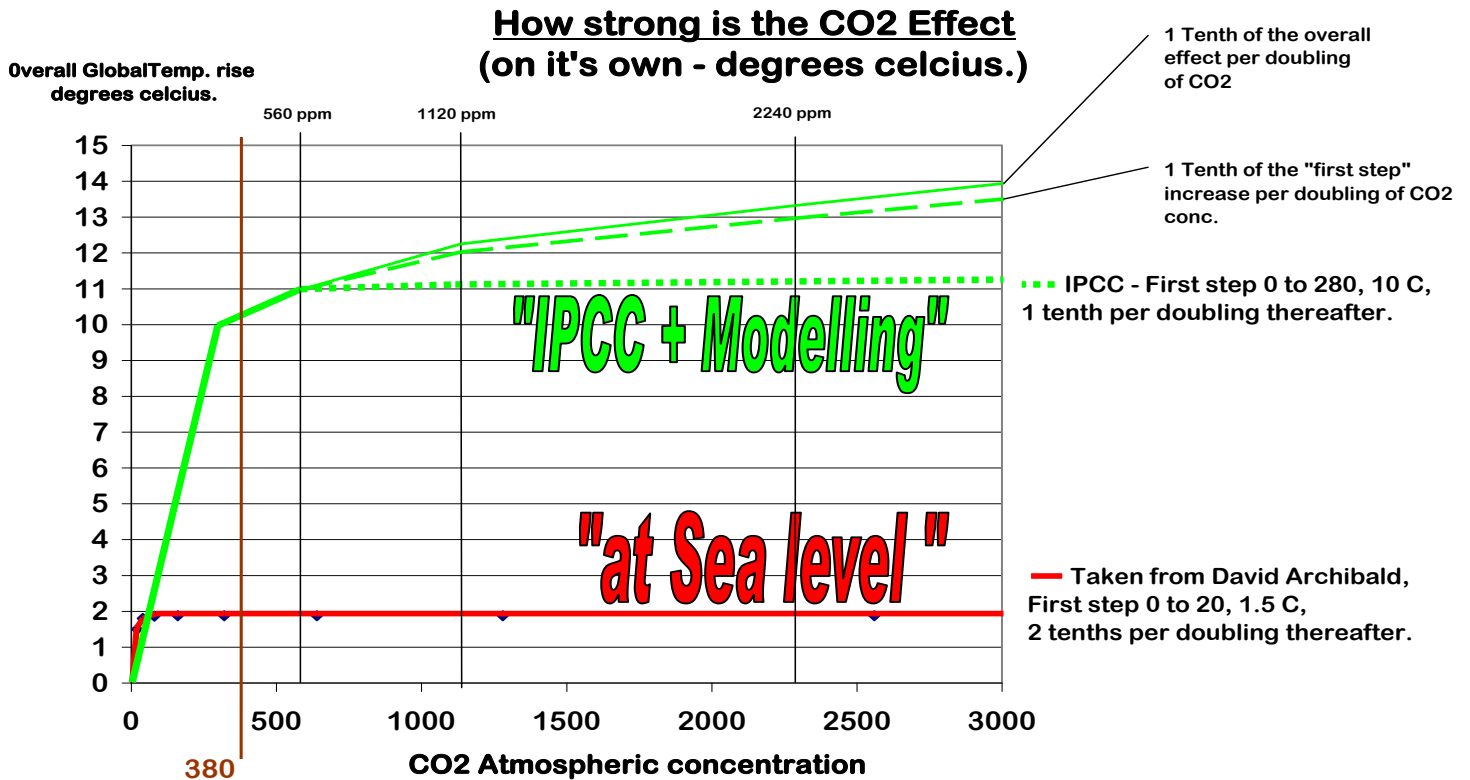
David Archibald - CO2 effect on it's own



The IPCC, the UN, and climate modeling in general state that through the depth of the atmosphere the CO2 effect on it's own is somewhat different to David Archibald's figures so far explained. It is assumed that for the first 280 ppm there is a temperature rise of 10 degrees celsius, and a tenth per doubling of CO2 concentration thereafter. This is significantly different to David Archibald's figures. Furthermore there are

various given explanations by the IPCC et al of how the doubling steps are to be added together. I have plotted some of the various "explanations" in Figure 3.

Figure 3



Somewhat confusingly the IPCC / UN, and climate modeling produce estimates of between just over 11 degrees celcius, upto 14 degrees celcius, just for the CO2 on its own effect upon global mean temperature. I believe that the correct way to describe this assumption is 10 degrees celcius for the first 280ppm CO2, and a further tenth per doubling thereafter. I would suggest the other versions are erroneous. Here I will continue with the 1 tenth per doubling explanation only.

There does not appear to be any experimental evidence, or data (that I am aware of at least) in support of the IPCCs, and GCM climate modeling 10 / 280 / 1 tenth assumption. Given this is so central to the modeling, and therefore climate "projections" this is of considerable concern.

The planet is too large and complicated for direct measurements to be anything other than confusing regarding the effect upon temperature of CO2 on it's own. A lower pressure chamber could be easily used for experiments, but, it would not have the depth of the atmosphere below it, nor none of the known processes (and unknown as of yet processes) going on within it, some possibly, but by no mean all. So this experimental avenue as of yet has not and likely will not give reliable results.

Certainly as pressure reduces with height then there is more "space" between the molecules, so Outgoing Longwave Radiation (OLR) could escape more easily. This may explain the lower figure of 1 tenth per doubling of CO2 used by the IPCC / modeling.

The ten degrees celcius overall, well that is unknown, the method of calculation for this figure is "that's what we are left with, after we have taken everything off we can think of". The earth's climate is a complex natural

system, that is certain, such an approach is unlikely to give reliable results. But here, we will "accept" ten degrees as a reasonable, ball park figure to work with.

The main concern is the 280ppm CO<sub>2</sub> figure for the first step. This figure is obviously "accepting" the evenly mixed gas assumption in the first place, but again here we will just "work" with the "evenly mixed gas" assumption. It is an assumption, and there is much evidence to the contrary, for instance the periodic table and atomic weights. Carbon 12 weighs 12, Oxygen 16, and Hydrogen 1, so CO<sub>2</sub> weighs  $12 + 16 + 16 = 44$ , water vapour (H<sub>2</sub>O) weighs  $1 + 1 + 16 = 18$ , hydrogen weighs 1, oxygen weighs 16. Gravity alone would suggest that CO<sub>2</sub> is not an evenly mixed gas through the depth of the atmosphere. It may also be worth remembering that CO<sub>2</sub> is highly soluble in water, it is well known that rain literally "washes out" CO<sub>2</sub> from the air. Here though the "evenly mixed gas" assumption is not the assumption we are interested in understanding more fully.

The 10 degrees celcius overall, through the depth of the atmosphere, at an assumed evenly mixed CO<sub>2</sub> concentration of 280ppm, and one tenth per doubling thereafter, is the assumption that is of interest to be better understood here. In particular the 2800ppm figure and it's effects, which many seem to have missed.

It would seem reasonable at this point to consult the world of physics to see if it can shed any light on this matter. Many have done so, much effort, explanation, discussion, debate, argument, counter argument, and a lot worse has resulted..

With consulting physics in mind, I like many have visited the blog, real climate, without realizing that the man behind the blog is the same Micheal Mann who was the lead author of the 1999 Hockey Stick. Many other websites and blogs can be found with many and varied views about the climate debate in general and the "physics" in particular. The most "notable" I have come across so far being the physics forum. I particularly like the "only published papers" rule the forum insists upon. The Hockey Stick paper was published, so that's OK then..

The particular thread linked to below is where "Silas" offers to explain to all and sundry the physics behind the Anthropogenic Global Warming (what he refers to as a ) theory. In itself this must be a give away, a theory with so many assumptions?

<http://www.physicsforums.com/showthread.php?t=307685>

### **Estimating the impact of CO<sub>2</sub> on global mean temperature**

Silas and his ilke are very, very clever people, of that there is no doubt, but does clever necessarily mean good, or honest, or kind. This type of people have jumped on the bandwagon in recent times, discussion has descended into debate, at best. Whether someone can convincingly argue black is white, or white is black, and there is no grey, unless they need it to be so, does nothing, not a thing for our understanding of climate. That is the real shame in those types of "discussions".

My wife used to frequently argue black was white, and then white was white or black when it suited her, but she was menopausal.

Silas et al are just protecting their bandwagon (gravy train – paid for with our taxes) careers based on false assumptions, and they know it.

Unfortunately the world of physics does not seem to offer much hope of shedding light upon the subject at present, so let us move on. How should we move on, by employing the basics of the scientific method, which is so easily forgotten in the heat of discussion and / or debate...?

As stated earlier there appears little evidence for the 280ppm assumption, and the IPCC has been known to move the odd decimal point once or twice in the past, as shown conclusively by Lord Monckton. It would seem a reasonable question, what is the effect of the 280ppm assumed figure for the first step?

If we "accept" the 10 degrees celsius figure, and the 1 tenth per doubling then the temperature increases are the same, ie 10, 11, 11.1, 11.11, 11.111, etc, etc, it would just be the CO2 ppm figure at which the first and resulting steps occurred that changed.  
Table 2 illustrates this.

Temperature increase in overall Global mean temperature	10	11	11.1	11.11	11.111	11.1111
First step 20ppm CO2	20	40	80	160	320	640
First step 80ppm CO2	80	160	320	640	1280	2560
First step 140ppm CO2	140	280	560	1120	2240	4480
First step 280ppm CO2	280	560	1120	2240	4480	8960
First step 350ppm CO2	350	700	1400	2800	5600	11200

Figure 4 is Table 2 plotted to illustrate the effect of changing the 280ppm CO2 figure for the first step in the CO2 effect upon temperature on its own.

Figure 4

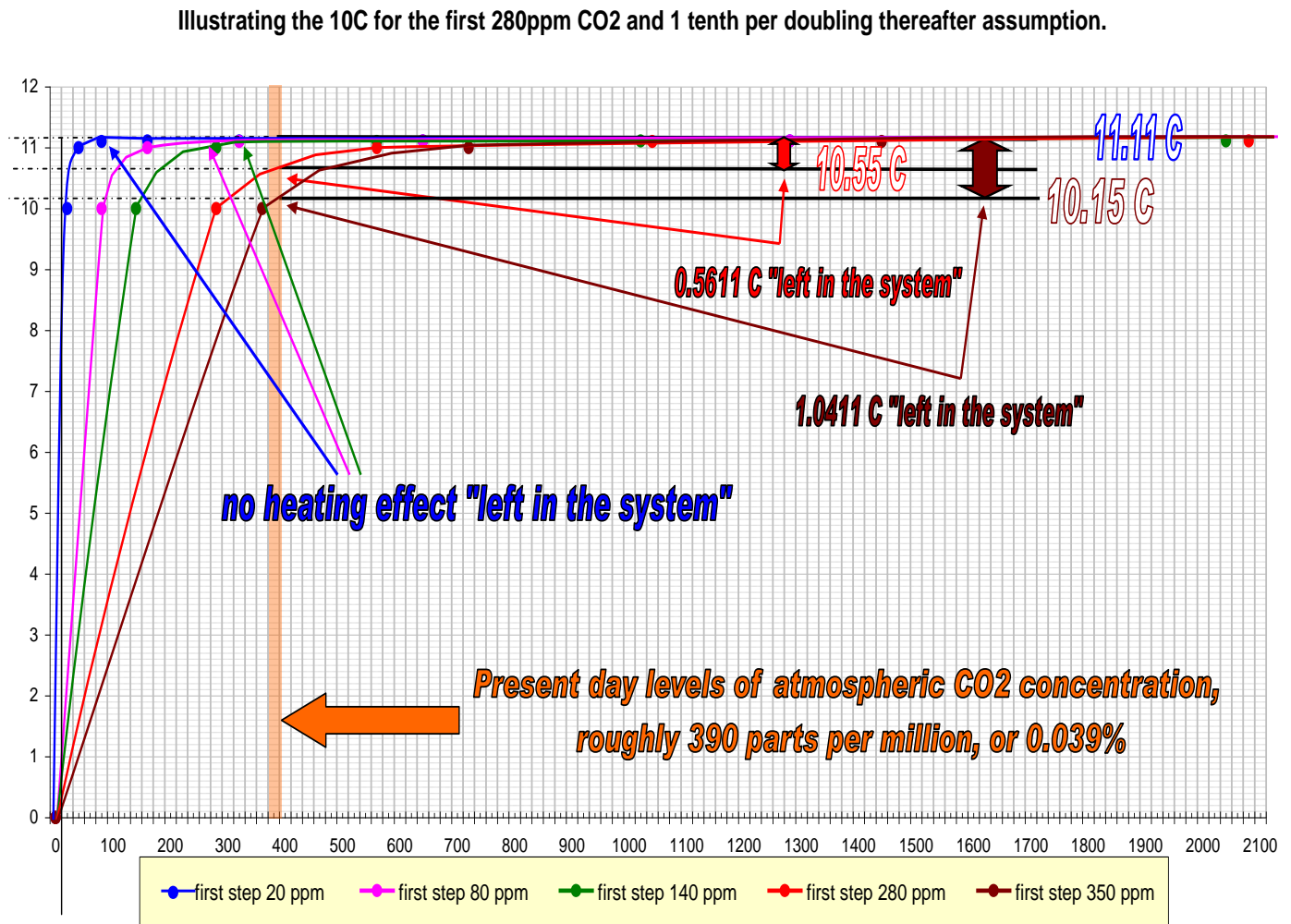
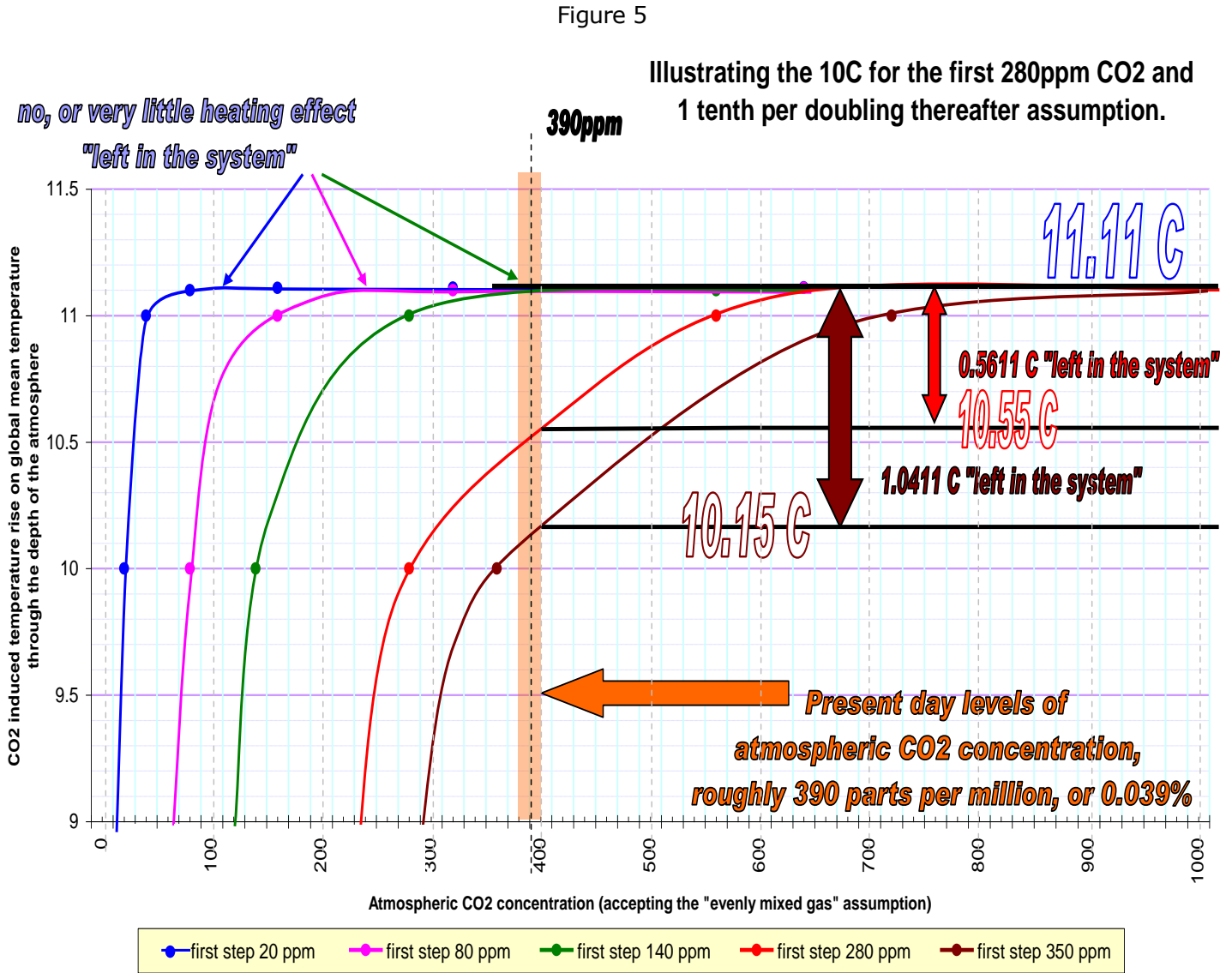


Figure 5 is a reduced scale version of Figure 4, to better illustrate the differences caused by the varying examples given for the possible first step CO2 figures plotted.



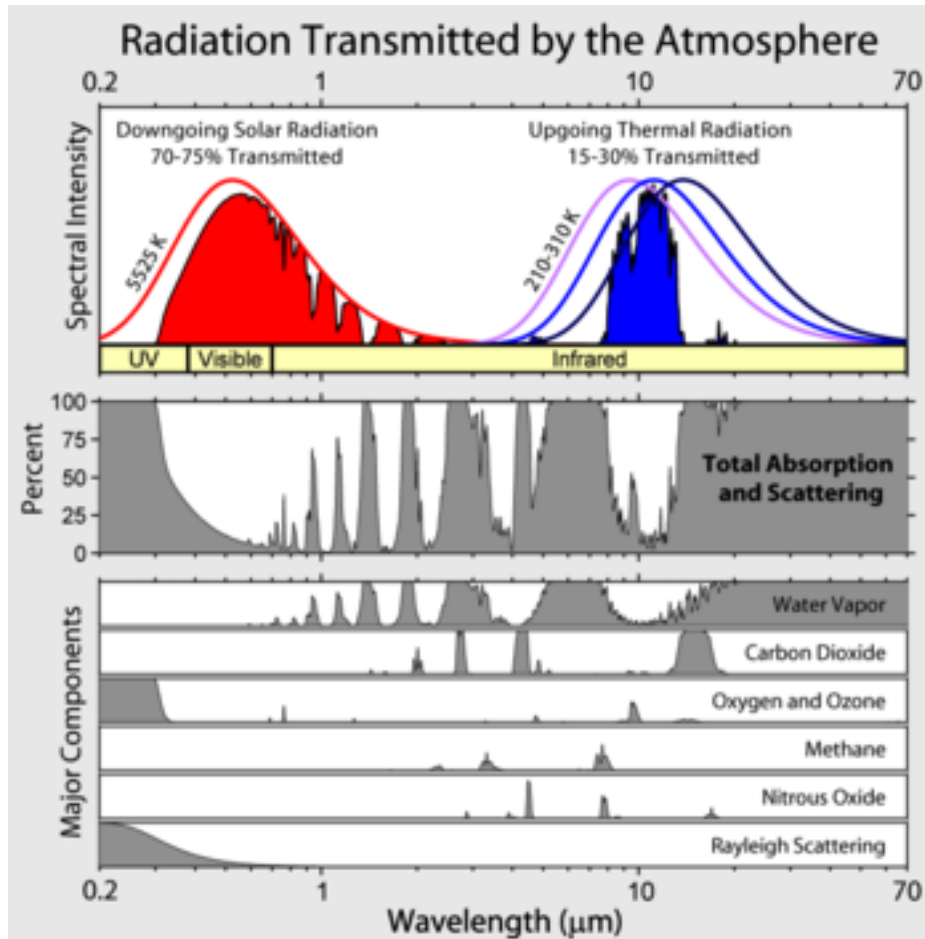
The above described difference between David Archibald and the IPCC / GCM modeling assumption is important, if, as David Archibald has shown there is little likelihood (ie a lower first step figure) of much if any further warming due to increased (for whatever reason – natural or anthropogenic) atmospheric CO2 levels, then there would be no CO2 induced change upon temperature and hence water vapour levels.

**There literally would be no "trigger" left, CO2 on it's own has run out of "puff" to trigger the assumed water vapour heating mechanism. This may explain the difference in the plots of Figure 3, put simply if the IPCC / UN and climate modeling does not assume there is more CO2 on it's own heating left in the "system" (see figures 4 and 5) then there is no temperature rise left to trigger the increase in the water vapour content of the atmosphere. The assumed heating mechanisms cause simply would not be there. This has been shown in a laboratory, and presented for many years now by David Archibald, the IPCC and current GCM modeling assume otherwise.**

## **2) Can we observe the water vapour "blanket" that is modeled as causing Global Warming..**

Water vapour is THE greenhouse gas, responsible for about 90% of the so called greenhouse effect on its own – this is well known, and the fact that water vapour is **THE** greenhouse gas is not disputed. Figure 6 shows the relative amounts of absorption and scattering, immediately it is obvious how strong a GHG water vapour is compared to all other GHGs. It is also noteworthy that in the total absorption and scattering percentage plot there is a large amount of white. The large area of white to the right of the percentage plot shows as many frequently suggest that the IR "window" is in reality permanently open. The corresponding blue plotted area of upgoing thermal radiation is exactly that, the planet's heat escaping out of the permanently open IR "window".

**Figure 6**



The "blanket" that is assumed to be causing the warming is the increased water vapour high in the troposphere, due to a small temperature rise (if it is now occurring..ie, first step 280ppm CO2 assumption) caused by increased levels of CO2. The troposphere is the lower part of the planet's atmosphere, where we live and where almost all the weather happens. The troposphere extends upto a height of approximately 12 kilometers, although the actual height varies with latitude, higher at the tropics (16kms), and lower at the poles (8 to 10 kms). As can be seen in Figure 6 the absorption by water vapour covers a wider range and vastly greater extent than any other so called greenhouse gas (GHG). If CO2 did cause water vapour levels to increase then this would cause the heating, (or rather reduced rate of heat escape) that the "theory" of man made global warming suggests is happening. Water vapour is a strong enough GHG that a small increase in its amount would possibly produce the assumed AGW heating particularly high in the troposphere. Conversely a decrease in water vapour levels high in the tropopause would cause a decrease in temperature, because heat (OLR) would escape at a faster rate. This is why the assumed water vapour positive feedback mechanism is central to AGW, or man made climate change, it is dependent upon there still being some CO2 on it's own temperature rise left "in the system" (see Figures 4 and 5). This assumption is also why AGW, or man made climate change is an unproven hypothesis. If the heating mechanism was proved, it would not be an assumption, it would be a fact, as it is not, AGW must be an unproven hypothesis.

It is worth stating again, **the central assumption of AGW is that,**

- 1) an increase in CO2 in the atmosphere induces a small temperature rise,
- 2) which results in a water vapour increase (the "blanket" gets thicker) that causes a further and larger temperature increase, this is frequently referred to as the water vapour amplification of the CO2 (on it's own) effect.

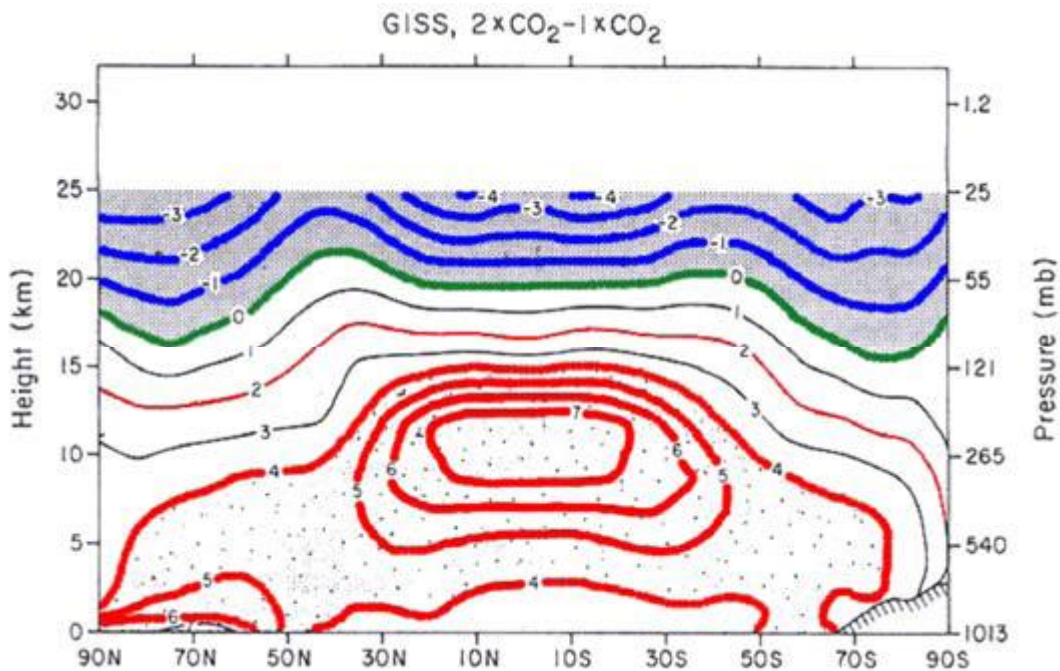
This is the heating mechanism (the "blanket") that AGW, or man made climate change proponents are presently more than strongly asserting man is definitely causing to increase it's effect over the last Century, and increasingly so over the coming Century. Frequently at the present time it is asserted with even more strength, often vehemently that the science is settled, it is not time to question global warming, according to AGW proponents, it is now time to act...

Unsurprisingly many researchers, scientists and commentators have looked for, or evidence of, the AGW assumed "blanket". To date no one has found the "blanket". It can however be seen in climate models. Very early on in the development of the present climate models James Hansen models clearly showed this "blanket", and exactly where it should be found in reality. The models did, and still do produce a very definite and distinctive pattern of how man made global warming is modeled to be occurring. Figure 7 is from William M Gray's 2009 presentation at the second Heartland Climate Change conference in New York 8-10 March 2009, William M Gray gave a presentation titled,

**Climate Change: Driven by the Ocean not Human Activity.**

He is Professor Emeritus, Dept of Atmospheric Science, at Colorado State University. The presentation is available as a paper at <http://tropical.atmos.colostate.edu> (under News).

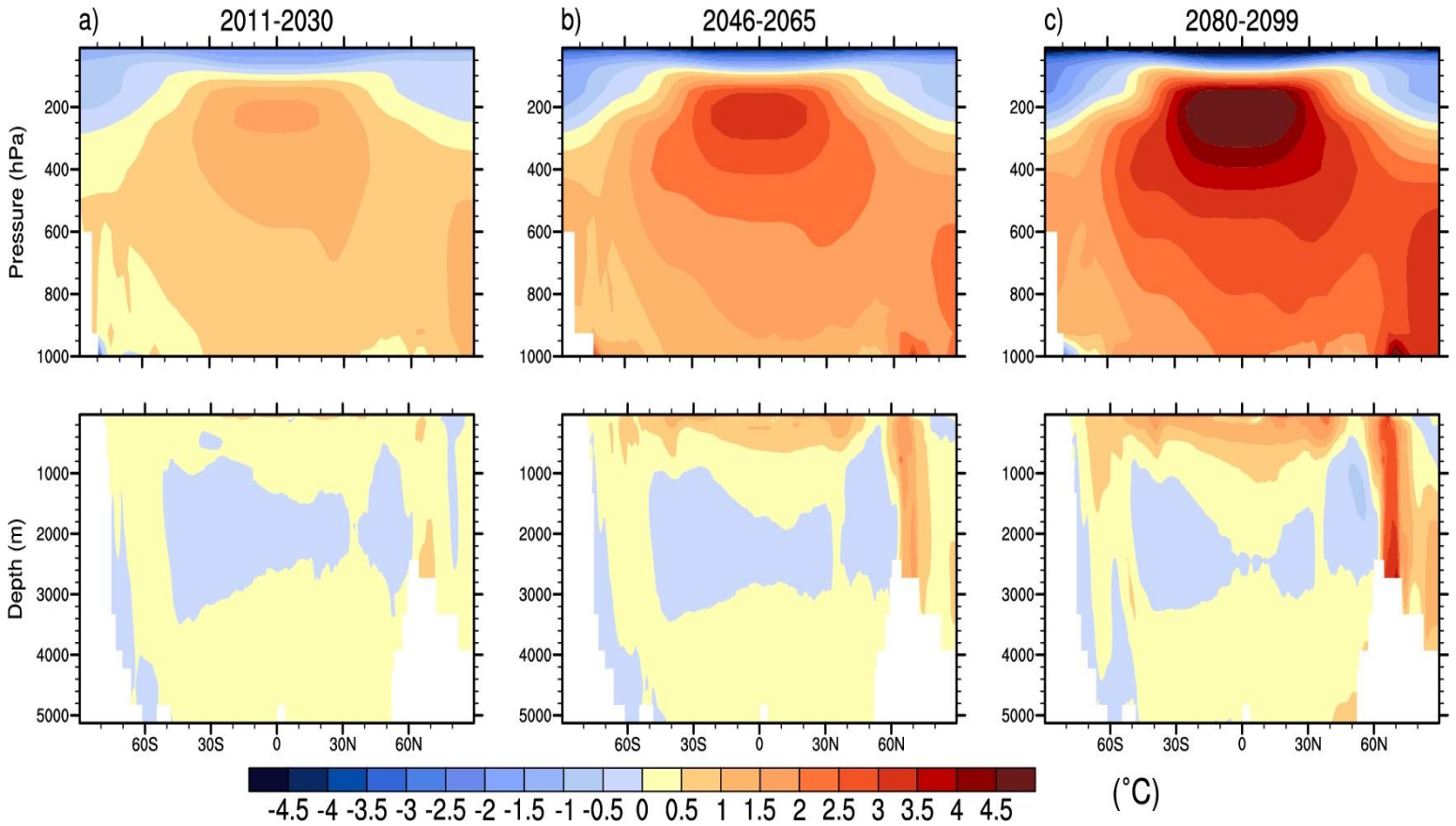
**Figure 7**



**Figure 7.** North-South vertical-cross section showing Hansen's early GCMs model change in temperature (oC) that would accompany a doubling of atmospheric CO<sub>2</sub>. There is no way a doubling of CO<sub>2</sub> and an extra 3.7 W/m<sup>2</sup> blockage of OLR to space could lead to such extreme upper tropospheric temperature rises. These large temperature increases occurred because of Hansen's unrealistic upper level water vapor assumptions.

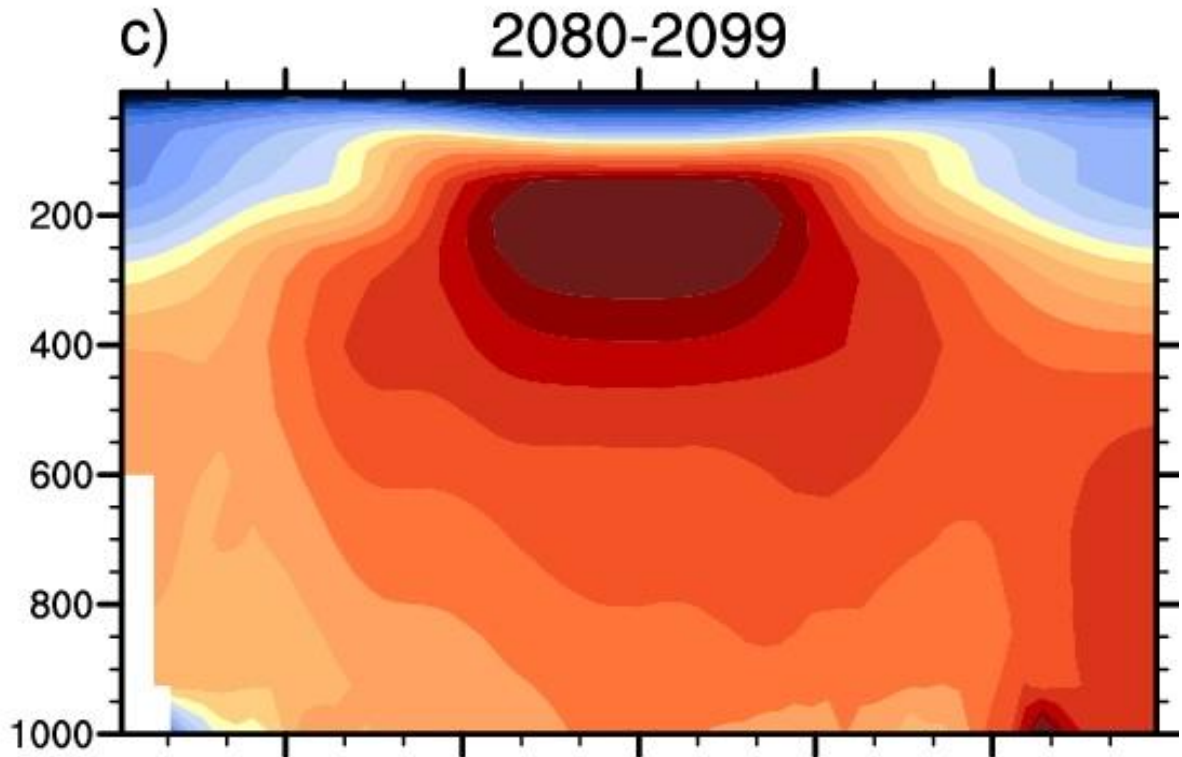
The IPCC / UN and climate modelers have helpfully presented numerous examples of how the GCMs model climate. All show a very similar pattern to the projected pattern of warming, Figure 8 is from the most recent IPCC report on climate change, and is usually referred to as the IPCC AR4 report.

**Figure 8**  
**GISS-EH**



The particular model shown in Figure 8 is from GISS, the Goddard Institute of Space and Science, where James Hansen works. This is one of James Hansen's latest models, and shows a very similar and distinctive pattern of projected warming.

Figure 9 is an enlargement of one of the above plots, simply for clarity.

**Figure 9**

The pattern of warming assumed by the models shows a strong hot spot high up in the tropics, as well as at the Poles, or in Figure 9 case, just at one pole (?).

Given such a distinctive and obvious pattern, it should be easy to find. Lord Monckton has most famously not been able to find the "fingerprint" of AGW, which he has shown is missing. Lord Monckton collated NASA's own balloon gathered temperature data going back over several decades (four decades I believe), this was then plotted.

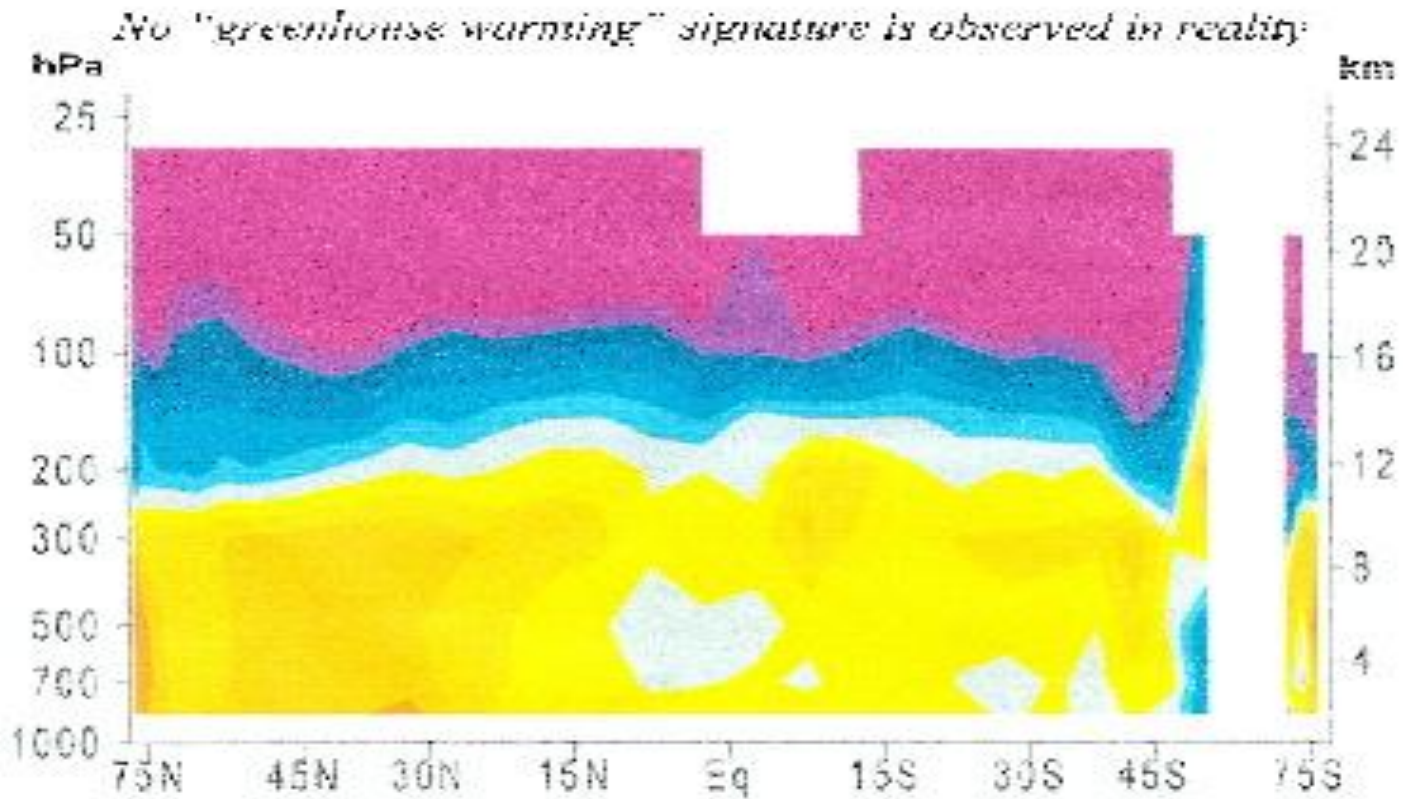
A distinctive pattern is what we would expect to have been plotted, much along the lines of one of the figures within figures 8 and 9 above.

Figure 10 does not seem to show a distinct pattern as modeled, it does show a pattern of general all over warming, but not the distinctive pattern as modeled by GCMs.

Lord Monckton's paper can be viewed or downloaded from,

<http://scienceandpublicpolicy.org/images/stories/papers/monckton/whatgreenhouse/moncktongreenhousewarming.pdf>

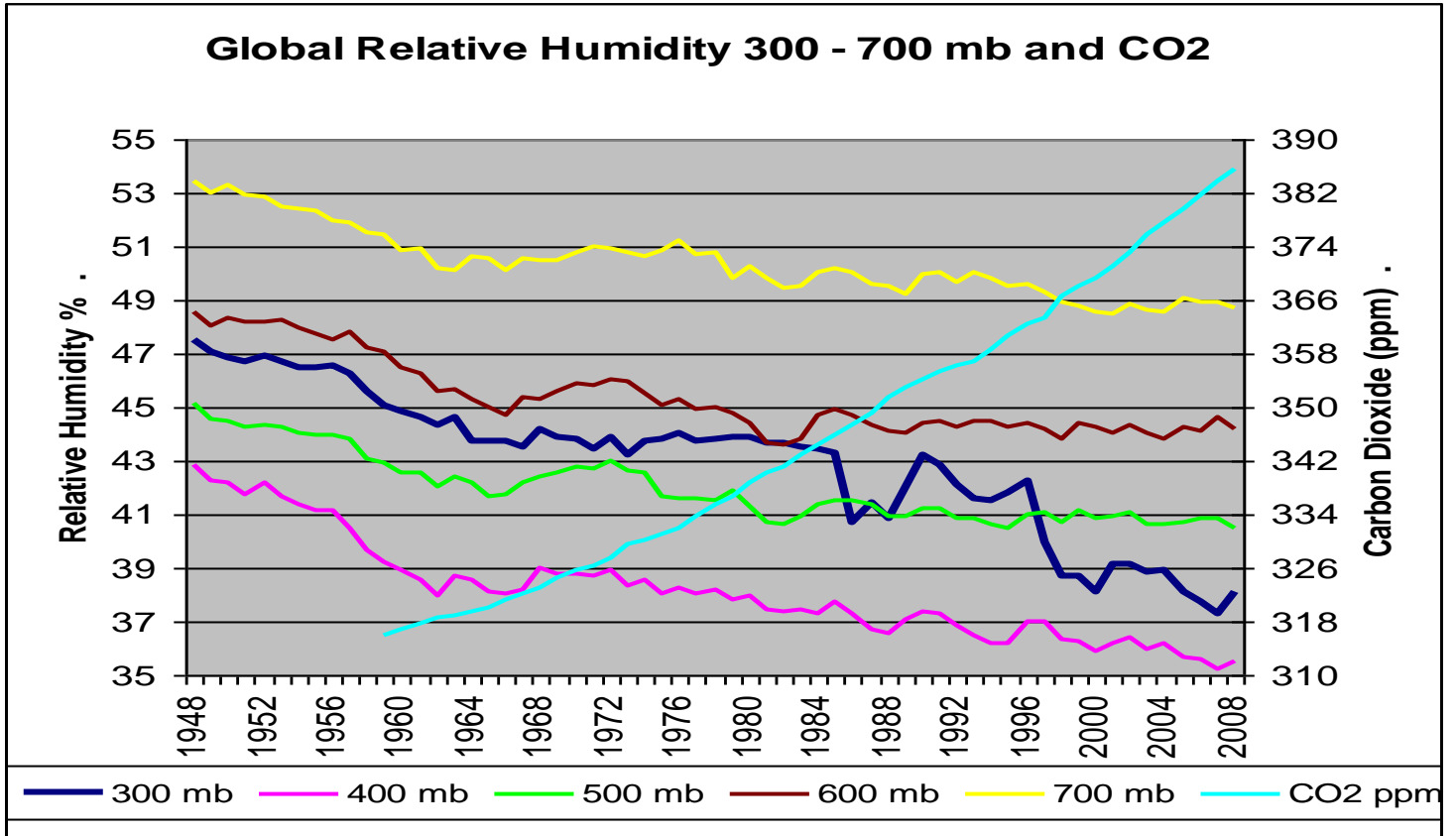
**Figure 10**



Source: Minschwaner *et al.*, *Journal of Climate*, 1994, 7, 116, fig. 1.7B

Other commentators, such as Ken Gregory, have taken a slightly different approach, they have looked the water vapour content of the atmosphere at different heights, and plotted it over time. The assumed heating mechanism obviously states that as the planet warms (for whatever reason) then the amount of CO<sub>2</sub> and water vapour in the atmosphere will rise together. Figure 11 is Ken Gregory's plot of water vapour and altitude over time, with a CO<sub>2</sub> record from MLO overlaid. This investigation also failed to find the distinctive pattern of heating as modeled by GCMs. In point of fact, unlike Lord Monckton's study which "merely" found a different pattern than expected of heating, Ken Gregory found the exact opposite of what had been assumed to be happening.

**Figure 11**



William M Gray also compared specific humidity at the appropriate height, ie a pressure of 400mb, and OLR. If the AGW warming blanket was operating as assumed then as the globe has warmed then the specific humidity should have increased and the escaping OLR should have reduced (the "blanket" got thicker and so less heat escaped). In a period from 1948 to 2006 Gray found that the specific humidity fell and the OLR increased. According to the modeling assumptions the planet should have been cooling, and consistently over the whole period. Again another researcher has found the complete opposite of what AGW "theory" assumes and models is happening in the upper troposphere.

**Figure 12**

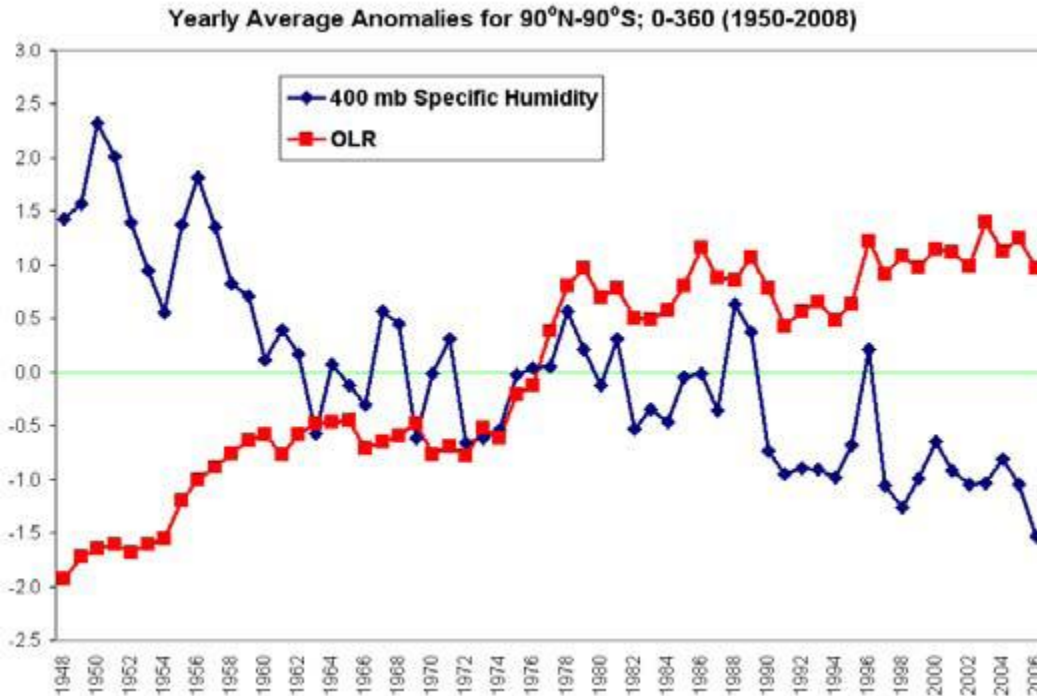


Figure 12. NCEP/NCAR reanalysis of standardized anomalies of 400 mb (~7.5 km altitude) water vapor content (i.e. specific humidity – in blue) and Outgoing Longwave Radiation (OLR) from 1950-2008. Note the downward trend in moisture and the upward trend in OLR.

Whether the assumed water vapour positive feedback “blanket” is looked for in the relevant temperature, or the water vapour data records it seemingly can not be found.

This represents a very large issue for the AGW “theory”, the main heating mechanism can not be observed, whatever the climate models are modeling it is not our planet’s climate. The models may appear similar in some respects, but in the basics of how and what they model the connection to reality of the actual climate appears to be very poor, or infact the actual opposite of what we observe.

If you refer back to the forward section and the description of the scientific method, then it is clearly not yet a settled science. The reason is simple, the assumed heating mechanism, it is worth repeating, if the assumed AGW heating mechanism (“blanket”) is assumed, it is not proven. Therefore the science is not settled.

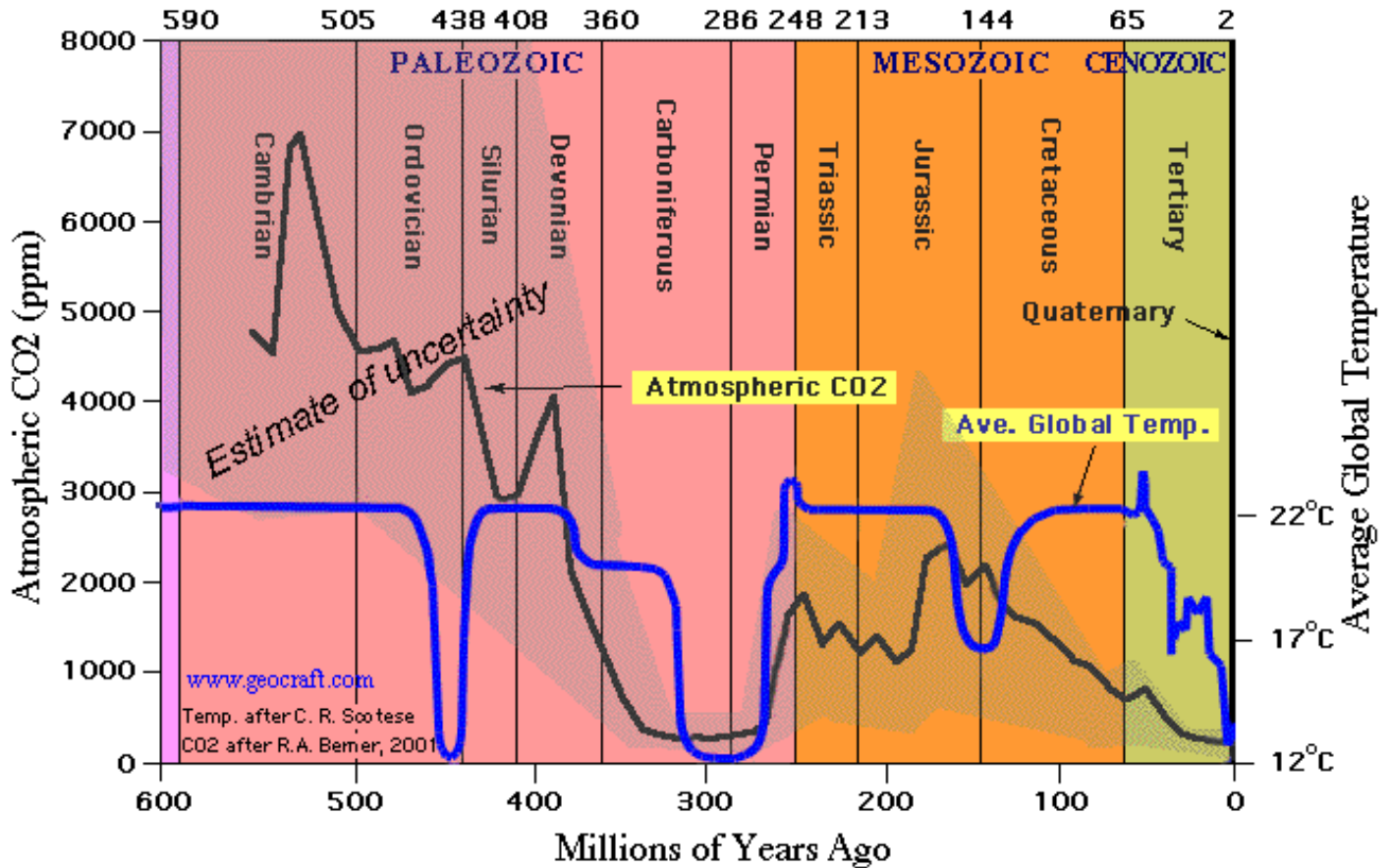
**That the “blanket” can not be observed is what can only be politely described as a crushing blow to the AGW “theory”. In any reasonable respect the “theory” appears to be disproved, by its own assumptions and the reality of what we have actually observed, these being the exact opposite of what AGW “theory” and modeling had assumed.**

**If there is not an observable “blanket” now, has there ever been one ?**

If there is no observable “blanket now that does not necessarily mean there was not a blanket previously. There may well have been a “blanket” when CO2 levels were lower, and an increase in CO2 did actually cause a temperature rise, then there may have been a positive water vapour feedback. The “blanket” would seem to have been a perfectly naturally occurring mechanism, given sufficiently low CO2 levels.

Unfortunately there do not seem to have ever been such low CO2 levels (globally). Maybe CO2 levels were nearly that low in the carboniferous period, between 275 million and 325 millions years ago, but probably not, see Figure 13.

**Figure 13**



What is suggested and has hopefully been shown in points one and two above is that because of the CO2 atmospheric concentration being at its present level, then there is probably no CO2 induced temperature rise, and so no water vapour feedback. David Archibald’s data would seem to suggest a level of 80 ppm for CO2 at which the water vapour feedback as assumed by AGW would stop, and IPCC modeling suggests nearer or above 560 ppm (see Figures 4 and 5). Given the present levels of CO2 are approximately 400 ppm, then David Archibald’s figures seem to agree with the empirical observations of several researchers and commentators, here illustrated earlier with Lord Monckton, Ken Gregory’s and William Gray’s plots shown in figures 10 and 11, and 12.

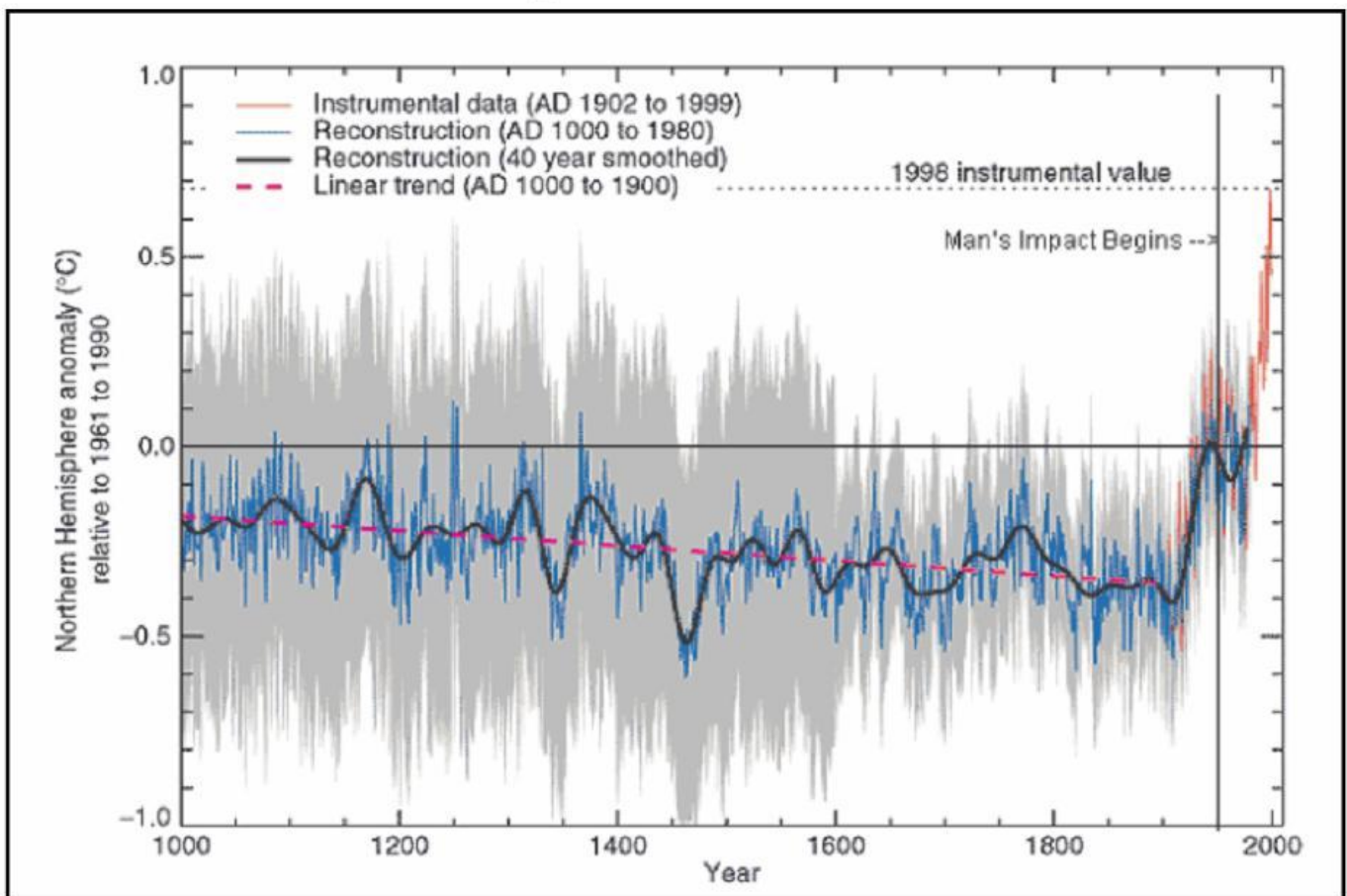
If, as seems to be the case, that there has not been any water vapour feedback increased “blanket” warming the planet in all of human history, then the warming we have experienced throughout human history, on differing time scales, for example, the Roman warm period, the Medieval Warm Period, and shorter periods, such as the 1930s, and 1979 to 1998 (which many readers will hopefully remember, some may even vaguely remember both..), MUST have been caused by some other, or several other different mechanisms, at present not accounted for, or modeled.

## 1999, the blockbusting Climate science papers you did and did not hear about in the news.

Almost everyone will have heard about, or seen the plots from the 1999 Hockey Stick paper whose lead author as previously mentioned was Michael Mann. Figure 14 is arguably the most (in)famous plot from that paper. In short the plot supposedly shows global mean temperature running away “because” of man’s activities, namely CO2 emissions from the burning of fossil fuels (yawn).

Figure 14

# ***THE proof of AGW***



The "Hockey Stick" as it became known because of its shape, together with the Mauna Loa Observatory CO2 record "showed beyond doubt" that man is guilty of effecting climate, not Mann is guilty of scientific fraud mind you. To explain briefly here, Figure 14 was supposed to be the best and largest, most statistically robust proof of climate change to date. The plot was claimed to be of over 400 data sets.

No, it was not, infact it was a plot of 112 data sets, one having been weighted by 396.

I kid not, and it sailed through the peer review process to boot. ?

To this day the "Hockey Stick" is still vehemently defended by "Silas" and his ilke.

If you are interested in the "Hockey Stick" then I have also put together a (admittedly rather long – but hopefully informative) slide show on photobucket.com, linked to below.

Part 1

[http://s53.photobucket.com/albums/g43/DerekJohn\\_photos/Hockey/GHSP%20White%20Part%201/?albumview=slideshow](http://s53.photobucket.com/albums/g43/DerekJohn_photos/Hockey/GHSP%20White%20Part%201/?albumview=slideshow)

Part 2

[http://s53.photobucket.com/albums/g43/DerekJohn\\_photos/Hockey/GHSP%20White%20Part%201/GHSP%20White%20Part%202/?albumview=slideshow](http://s53.photobucket.com/albums/g43/DerekJohn_photos/Hockey/GHSP%20White%20Part%201/GHSP%20White%20Part%202/?albumview=slideshow)

Part 3

[http://s53.photobucket.com/albums/g43/DerekJohn\\_photos/Hockey/GHSP%20White%20Part%201/GHSP%20White%20Part%202/GHSP%20White%20Part%203/?albumview=slideshow](http://s53.photobucket.com/albums/g43/DerekJohn_photos/Hockey/GHSP%20White%20Part%201/GHSP%20White%20Part%202/GHSP%20White%20Part%203/?albumview=slideshow)

What was the 1999 Climate paper you did not hear about and why mention it here? Mostly because if you have an assumed warming mechanism that produces too much heating, then you need a cooling mechanism or mechanisms to be able to alter the end result of the model to match "reality". Does this sound too ridiculous, does this sound like it could never have happened?

As far as global cooling as modeled is concerned in 1999 it certainly did happen. Almost nobody has heard of "it", the paper, and the author in this as far as GCMs are concerned most important respect. Why? The author himself I am lucky enough to have met and talked to on several occasions now, a more decent, upstanding man it is difficult to imagine.

The paper was published in 1999, to date there have been no rebuttals published to any of the papers substantive points. To any points at all raised by the paper in all honesty.

Dr. Richard S Courtney produced this seminal paper back in 1999 concerning the topic of aerosols and associated cooling as modeled by GCMs.

**Courtney RS, 'An assessment of validation experiments conducted on computer models of global climate using the general circulation model of the UK's Hadley Centre', Energy & Environment, Volume 10, Number 5, pp. 491-502, September 1999.**

Richard S Courtney sums up what the paper says briefly with this recent excerpt from a posting at globalwarmingskeptics.info specifically in this thread,

<http://www.politicaldivide.info/globalwarmingskeptics.info/forums/index.php/topic,286.0.html>

Excerpt,

***" My 1999 paper reports that the Hadley Centre GCM showed an unrealistic high warming trend over the twentieth century and a cooling effect was added to overcome this drift.***

***The cooling was assumed to be a result of anthropogenic aerosol.***

***So, cooling was input to the GCM to match the geographical distribution of the aerosol.***

***And the total magnitude of the cooling was input to correct for the model drift:***

***this was reasonable because the actual magnitude of the aerosol cooling effect is not known.***

***This was a reasonable model test. If the drift were a result of aerosol cooling then the geographical pattern of warming over the twentieth century indicated by the model would match observations.***

***However, the output of this model test provided a pattern of geographic variation in the warming that was very different from observations;***

*e.g. the model predicted most cooling where most warming was observed.*

*This proved that the aerosol cooling was not the cause  
– or at least not the major cause – of the model drift.*

*The Hadley Centre overcame this unfortunate result by reporting the agreement of  
the global average temperature rise with observations.  
But THIS AGREEMENT WAS FIXED AS AN INPUT TO THE TEST!  
It was fixed by adjusting the degree of input cooling to make it fit!*

*However, this use of supposed 'aerosol cooling' to compensate for the model drift means  
that any input reduction to anthropogenic aerosol cooling must result in  
the model providing drift which is wrongly indicated as global warming.*

*In any other branch of science this 'aerosol cooling' fix  
would be considered to be incompetence at best and fraud at worst*

*Importantly, this one fact alone proves - beyond any possibility of doubt  
- that the climate models provide incorrect indications of global warming.  
My paper reported this in 1999, and no subsequent dispute of it has been published. "*  
End of excerpt.

It is difficult to reasonably suggest anything other than GCM models produce too much heating because of an assumed heating mechanism, which is "powered" by an assumed first step of 280ppm CO<sub>2</sub> which has no evidence to substantiate it. There are no observations to support this assumption either. Infact what observations we do have seem to be the exact opposite of what the models assume is happening. On the other hand, so to speak, it has been shown that the models alter the "assumed" cooling due to other factors (mainly aerosols) so that the models produce the "right" results, AFTER THE FACT. Whatever the models "projections" are supposed to be, they are NOT realistic, or reliable. As the projections so far have been incorrect, it appears the best that can be said of them is that they are getting the wrong answers, for the wrong reasons. Many are aware of this outside of the climate modeling "fraternity" but within, blinkered belief still seems to rule.

There again, this news story may well change everything..

<http://wattsupwiththat.com/2009/11/19/breaking-news-story-hadley-cru-has-apparently-been-hacked-hundreds-of-files-released/>

## **Very real concerns regarding the influence of climate modeling upon political policy direction.**

GCM modeling in general does not seem to account for cooling processes known and unknown (thought it does "fix" some types), let alone "other" naturally varying heating mechanisms that may well alter, that it does not account for in the first place. There is a very real possibility that cooling, or less heating could well occur or have already started. The present understanding of the AGW "blanket" is blinding us to this very real, and more likely possibility.

It is of great concern that the modeling and projections could be so very, very wrong. At present the political "will" appears to be to plan for global warming, there appears no provision in policies for the possibility of global cooling. Human history shows how hard previous cooler periods have been for humans as individuals, and society as a whole. Prudent and sensible political policies must take into account both possibilities, namely of global warming, and of the far more dangerous global cooling. At present the possibility of global cooling is

seemingly not given a second thought, we may be caught looking the wrong way, because of false or wrong (AGW) assumptions that have misdirected our view and understanding of climate, at a very basic level.

## **Climate science is a young science.**

Man has always been interested in the weather, and by default also therefore climate. We depend upon it obviously. The study of climate though is in all important respects a young science. Overall the planet's climate is the result of a very complex natural system. Many, many facts interact in positive and negative, and changing ways to produce the end result, climate. At present even the metrics we use to "measure" or rather compare various factors are all at a relatively new and developing stage. Advances in technology such as computers and satellites have revolutionized our studies of this and other planet's climate/s. This has created a maze of such proportions and pitfalls that our knowledge is not really progressing as it should.

I would try to describe the situation that climate science is now in with the following simile.

Imagine if you will a dry desert waddi. The bed of this waddi is the path that our understanding of climate will most probably eventually follow. Until recently there was a very small trickle in the base of the waddi. At the head of the waddi a sudden downpour has been released (a myriad of new measurements and techniques have become available to us, not least of which are satellites and computers), the water (our understanding) has suddenly flooded down the waddi, at first merely a randomly wandering trickle, has become a bewildering torrent.. The trickle used to move to and fro, seemingly almost freely, one small rock (observation) deflecting the water (knowledge) one way or another. As the flow of water (knowledge) increased some rocks are moved with the flow, some remain. The water flow changes direction constantly but a main flow begins to develop. As the flow of water increases the rocks or obstacles in its path that could deflect or change its direction become bigger, and bigger. Occasionally a large rock can deflect the whole flow from the main waddi into what will eventually fill and become a "blind alley". The water course can and eventually will cut across the mouth of this "blind alley" and continue down the waddi.

Sometimes the large rocks are just there, sometimes they are put there, sometimes they appear to be "cemented" there, but in the end water will always find its own course.

Is the present CO<sub>2</sub> / AGW paradigm within climate science and environmental concerns a "blind alley", the main so called "proof" for which is offered in GCM climate modeling. Is climate modeling a large rock that has deflected our increasing understanding of climate up the "blind alley" that is the present CO<sub>2</sub> / alarmist fears regarding the planet's climate and the way man is thought to be effecting it.

In my opinion, the answer is simply, yes.

In the near future increasing knowledge regarding climate will "wash away" all the false assumptions of modeling and AGW, then we can get back to the real, proper, open, and honest study of climate science, that is so sadly and obviously missing at the present time.

## **Is AGW a conspiracy, or a "gravity train" for the few?**

"Conspiracy theorists" abound in climate skeptics circles apparently, that is what we are told. I would suggest that the initial observation that most people would draw at just about any climate skeptics meeting is that the average age of the people in attendance is rather, well, old. Retired, actually. Are climate skeptics just several groups of mainly grumpy old men, or is there some other explanation.

It would also be noticeable that any group of AGW proponents also seems to have a typical "make up". There are the very clever scientists and experts, there are the politicians and bureaucrats, and there are also usually the young, concerned for the environment and alarmed about the climate change we are experiencing. All noticeably younger than the average skeptics age. The "age gap" between AGW proponents and skeptics gives a clue to another most important difference between the two groups, careers. The skeptics are mainly retired; the AGW proponents are in the midst or trying to develop their careers.

Skepticism about climate does not appear to be good for one's career. However being an AGW proponent that can argue black is white, or black, and there is grey, or there is not grey, if it so suits, convincingly is a sure fire way at present to a career as a respected AGW scientist. The reason is simple, as a respected AGW scientist you will get political (ie government) funding for your scientific research. Politicians and bureaucrats have to govern, for this they need ways to tax and control, human CO2 emissions and their assumed effect upon climate are simply a political and bureaucratic dream come true.

The advancement of knowledge and understanding is at best, second in line, the politicians and bureaucrats pay for the research to have "proven" what they want proven, so that they can tax and control. Within reason there is some merit to this approach, but has the line been crossed? The answer to this in many people's is best expressed by the question "Do climate models help to improve our scientific understanding of climate". Remembering that the word science is from the latin word for "truth".

Given that present climate modeling is apparently the exact opposite of what we observe, or admitted as made up "fudge" factors, then the answer is simply no. Many suggest the above described line has been well and dishonestly crossed.

The scientists that have taken the path of "proving what is wanted to be proved" have made a deliberate career choice, and have very simply joined the AGW "gravy train".

Is this career choice for the chosen few a "conspiracy", that is difficult to say, depending on what is a "conspiracy", but is it good, open, and honest scientific investigation which welcomes the tests of the scientific method with the intent of hopefully increasing our understanding and knowledge.

The answer regrettably has to be a flat no.

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## **A little relevant history...**

Often the brilliant Swedish scientist Svante Arrhenius is "credited" as being the father of the modern greenhouse theory. Usually his 1897 paper is quoted, or described. In this paper Arrhenius postulated (suggested) that man's burning of fossil fuels would release CO2 and that this would accumulate in the atmosphere and cause a global temperature rise. Arrhenius suggested that if the atmospheric level of CO2 doubled then CO2 on its own would cause a 1.6 degrees celsius rise in global mean temperature. He further suggested that a water vapour positive feedback would amplify this rise to between 4 to 5 degrees celsius. Arrhenius had quantified the water vapour amplification for a doubling of atmospheric CO2. 1.6 degrees celsius, would become 4 to 5 degrees celsius, a water vapour positive feedback amplification factor of 4 or 5 (minus 1,6) divided by 1.6 equaling between 1.5 and 2.125. This amplification is the basis of the global warming "theory", it is often expressed presently as a combined figure, ie, CO2 and water vapour combined produce an increasing factor of between 2.5 and 3.125.

(Some people would suggest that it was about 4 degrees celsius warmer in Roman times, and at many other times in earth's history, with what appeared to be very beneficial effects upon human life and the planet, so is there a problem with a 4 or 5 degrees celsius rise in global mean temperature, even if it did happen ?

According to human history, in past warmer times human beings and society did far, far better than in colder periods.)

Svante Arrhenius later updated, or rather revised his 1897 paper, and in 1906 published another paper. This paper is rarely, if ever referred to today. In this 1906 paper Arrhenius revised his figures to 1.6 degrees celsius due to CO<sub>2</sub>, and 2.1 degrees celsius including water vapour. Arrhenius himself changed the water vapour amplification factor down from possibly as high as 2.125 to nearer (2.1 (minus 1.6) divided by 1.6) equaling 0.3125. The combined figure being 1.3125. This later paper laid many people's concerns to rest regarding the possible future climate problems that his 1897 paper suggested may be in store.

To date I have not found a translation of the 1906 paper, because of this I am not sure of the changes in Arrhenius's reasoning that caused him to revise his figures as he did. It would be very interesting to be able to read a translated version of the 1906 paper.

This early version of the AGW "theory" was not known or considered to be a problem by most people. At the time the mass media did not exist as it does today, neither was there an internet, consequently very few people were aware of or had read either of Arrhenius's papers mentioned here. Within the small scientific community of possible readers of either or both papers the 1906 paper laid to rest any concerns over his earlier suggested hypothesis of man made global warming, and so the "theory" was mostly forgotten about.

In the 1950s Charles Keeling amongst others, such as Revelle (one of Al Gore's teachers incidentally) renewed interest in global CO<sub>2</sub> measurements, and eventually managed to set up the Mauna Loa Observatory in the Eastern Pacific ocean. The chosen location being high up (11,500 feet) on the slopes of an active volcano ! Mauna Loa Observatory (MLO) now has a 60 year record of atmospheric CO<sub>2</sub> levels as measured at the location. The techniques used to collect the measurements has changed little over the years, and what changes there have been are now reasonably well recorded. Consequently the MLO CO<sub>2</sub> record is one of the longest we have, and is the most frequently quoted and used.

Almost immediately records began at MLO a continuing rise in the level of atmospheric CO<sub>2</sub> was shown by the published figures. To this day the rate of increase appears to be continuing unabated.

There have been expressed by many, myself included, distinct concerns over the MLO measurements, but that is not the concern here, for this piece I suggest we take the MLO measurements "as read".

This reservation regarding MLO measurements must however be remembered.

MLO however has undoubtedly rekindled interest, even concerns, over atmospheric levels of CO<sub>2</sub> and if man and his burning of fossil fuels are having a discernable effect. These concerns are because if the assumed "blanket" is correct then the rising levels of CO<sub>2</sub> measured at MLO indicate that warming must be occurring, and will continue to as we emit more and more CO<sub>2</sub>.

Since the very early days of computers many people including scientists have seen the possibility of "modeling" using computers. Computers can work so fast that no human could possibly hope to even match the speed and volume of calculations a computer can complete in any given time period. Modeling suddenly became a new, and very powerful tool, ideas could be expressed mathematically and put into a computer, certain scenarios could be feed in, and the computer could produce an "answer" or "result" depending on the models calculations. Hidden in the calculations is the data, and the assumptions, a computer does not differentiate between the two. A computer merely, and blindly, calculates whatever it is told to calculate, at incredible speed. The computer does not know anything about what it is calculating, it does not know a good answer, from a bad answer, or even a completely ridiculous answer. In the end a computer is extremely fast and incredibly dumb. It is up to the human interpretation and understanding of what is being calculated to realize if the answer is good, bad, or ridiculous.

Extreme care must be taken in constructing any model, for whatever reason the model is designed for, the computer can not check to see if the model makes sense, it can not correct silly mistakes of data or input, nor can a computer correct wrong assumptions. A computer can merely calculate what it is told to calculate at incredible speed.

Modern climatology is reliant upon computer models. The computers are slaves, they merely do as they are told. The climate models are the area of interest. In this piece it is the central assumption of AGW "theory" that is the point of interest.

For a more in depth description of early climate modeling there are numerous websites dedicated to the subject (Spencer Wearte for example, though I doubt he mentions Arrhenius's 1906 paper...), and arising discussions (Niche modeling for example), but, what is the point. If the central, underpinning assumption of the climate models can not be observed as modeled, the discussions are mute. As are the models themselves. If what the models are modeling can not be observed, then the models are not modeling reality. It can not be reality that is wrong, surely....

In the first part of this presentation at the Heartland 2009 conference Professor Gray describes how the Charney Report of 1979 stated that a change of temperature, caused a change of moisture content of the atmosphere, and this caused a change of Outgoing Longwave Radiation (heat).

**Figure 15**

## **FAMOUS NATIONAL ACADEMY OF SCIENCE (1979) STUDY (The Charney Report)**

.....

☛ Doubling CO<sub>2</sub> will lead to global  
ΔT change of 1.5-4.5°C (~3°C)

.....

☛ Due to positive water vapor feedback  
ΔT → Δ moisture → reduced OLR

.....

**Figure 15.** The very influential NAS report of 1979 which deduced that any warming of the globe would occur with near constant relative humidity (RH). Global warming consequently is thought to cause an increase in atmospheric water vapor (q) and a decrease in OLR. This assumption appears valid in the lower troposphere but not for the upper troposphere. Although temperature increase may cause precipitable water to increase in the troposphere, it does not mean that upper tropospheric water vapor will necessarily increase.

In fact the Charney report quantified the effect as follows, a doubling of CO<sub>2</sub> (in the atmosphere) will cause a temperature change of 4.5 degrees celsius, a combined figure of 2.8125. Seemingly in broad agreement with Arrhenius's 1897 paper. Climate modellers, most notably James Hansen of NASA, interpreted from this report

that the “theory” that a change of CO<sub>2</sub> caused a change of temperature, which caused a change of water vapour content of the atmosphere, that caused an increased change in OLR (heat) was generally accepted. These steps were assumed to be a positive feedback mechanism, the “blanket” that we are making thicker and is warming the planet as such. From the very early models as figure 7 (and description taken from Professor Gray’s presentation) shows, the models produce a very specific pattern of heating in the atmosphere, a “fingerprint” of man’s influence upon the global climate, as modelled...

The Charney report and the early climate models have both accepted the assumption that the upper troposphere water vapour content behaves exactly the same as at nearer ground level. There is a large difference between the upper and lower troposphere, namely the depth of atmosphere underneath it, and how much colder it is at the tropopause altitude. At ground level obviously there is no atmosphere below the air, at the tropopause there is approximately 12 kilometers depending upon latitude. Is there really any surprise that the moisture content of the air reacts differently from ground level to the upper troposphere.

James Hansen in particular in constructing his climate model increased the warming factor of water vapour to nearer (and well above originally) 3.5. He produced figures stating what he had done, but nobody challenged them.

A further quote from William M Gray’s 2009 presentation explains Hansen’s and most GCMs mistakes, still present today as Figures 8 and 9 earlier showed, the AGW “theory” distinctive warming pattern still persists in models to this day..

*“Hansen’s early GISS model assumed that a doubling of CO<sub>2</sub> would cause the upper tropospheric RH not just to stay constant but to actually increase. His assumed upper tropospheric increase of water vapour (q) for a doubling of CO<sub>2</sub> led to a water vapour increase ( $\Delta q$ ) in the upper troposphere of as much as an extremely unlikely 50 percent. These large vapor increases caused Hansen to require that his model have a tropical (30oN-30oS) upper tropospheric warming for a doubling of CO<sub>2</sub> of as much as 7oC (Figure 10). A 7oC warming at the upper level emission level is equivalent to a 23 W/m<sup>2</sup> enhancement of OLR for a doubling of CO<sub>2</sub> forcing of only 3.7 W/m<sup>2</sup>. No wonder Hansen got such high values of global warming for a doubling of CO<sub>2</sub>. This logically followed from his extremely high and unrealistic water vapor assumptions.*

*In order to obtain the global balance of incoming and outgoing radiation for his assumed high values of upper tropospheric water vapor it was necessary for Hansen to unrealistically raise his model’s upper tropospheric temperatures to obtain the amounts of OLR (or  $\sigma T^4$ ) to space that would accomplish net radiation balance. It is amazing that Hansen’s high water vapor increase and massively high upper tropospheric temperature rise assumptions for a doubling of CO<sub>2</sub> were not immediately challenged. It was these large amounts of warming resulting from his model’s gross over-estimate of water vapor which Hansen presented to a US Senate Committee hearing at the request of then Senator Al Gore during the hot summer of 1988. The media and much of the general public accepted it all. The environmentalists salivated. Hansen had secured his place in the sun. History will reverse such adulation when his warming predictions are inevitable proven to be wrong.*

*Not only have Hansen’s extreme and unrealistically high values of upper tropospheric moisture and temperature changes (for a doubling of CO<sub>2</sub>) not been challenged, they were instead closely emulated by most of the other prominent early GCM groups of NOAA-GFDL (Figure 11), NCAR (Figure 12) and the British Met Service (Figure 13). They all followed suit and incorporated unrealistically high amounts of upper tropospheric water vapor and, as a result, obtained unrealistically high values of global upper and surface temperature just as Hansen had. The fact that most of the (assumed independent) GCMs produced similar warming results were used as verification of each model’s results. But this was untrue. All the modelers were wrong in the same direction and in the same way.”*

Consequently Hansen's models produced a strong warming response to increasing CO2 levels (regardless of the source of CO2 incidentally, whether it be natural or human emitted). These early models in particular were seen by many as over-simplified, totally unrealistic, run away models. They were. Today's models fair little better, the current vogue appears to be modelers altering aerosols to get the desired results from the models. That is not modeling, that is not projecting, that is simply fixing the result. It will not work in the real world's climate needless to say. The use of aerosol "fudge factors" was shown beyond reasonable doubt by Dr. Richard S. Courtney in his 1999 paper, Courtney RS, 'An assessment of validation experiments conducted on computer models of global climate using the general circulation model of the UK's Hadley Centre', Energy & Environment, Volume 10, Number 5, pp. 491-502, September 1999, as mentioned earlier. From a historical perspective it is worth repeating his own words regarding what the paper shows.

***" My 1999 paper reports that the Hadley Centre GCM showed an unrealistic high warming trend over the twentieth century, and a cooling effect was added to overcome this drift.***

***The cooling was assumed to be a result of anthropogenic aerosol.***

***So, cooling was input to the GCM to match the geographical distribution of the aerosol.***

***And the total magnitude of the cooling was input to correct for the model drift:***

***this was reasonable because the actual magnitude of the aerosol cooling effect is not known.***

***This was a reasonable model test. If the drift were a result of aerosol cooling then the geographical pattern of warming over the twentieth century indicated by the model would match observations.***

***However, the output of this model test provided a pattern of geographic variation in the warming that was very different from observations;***

***e.g. the model predicted most cooling where most warming was observed.***

***This proved that the aerosol cooling was not the cause***

***- or at least not the major cause - of the model drift.***

***The Hadley Centre overcame this unfortunate result by reporting the agreement of the global average temperature rise with observations.***

***But THIS AGREEMENT WAS FIXED AS AN INPUT TO THE TEST!***

***It was fixed by adjusting the degree of input cooling to make it fit!***

***However, this use of supposed 'aerosol cooling' to compensate for the model drift means that any input reduction to anthropogenic aerosol cooling must result in the model providing drift which is wrongly indicated as global warming.***

***In any other branch of science this 'aerosol cooling' fix***

***would be considered to be incompetence at best and fraud at worst***

***Importantly, this one fact alone proves - beyond any possibility of doubt - that the climate models provide incorrect indications of global warming.***

***My paper reported this in 1999, and no subsequent dispute of it has been published. "***

Regardless of the "doubts" already known by as early as 1999, the "science" of AGW continued as before. 1999 was a momentous year in the climate science world, not only was there Dr. Richard S Courtney's paper there was also, as mentioned earlier the "Hockey Stick" whose lead author was Michael Mann. The IPCC and the modeling fraternity welcomed this paper with as much ado as they could possibly muster.

As the Hockey Stick has already been mentioned in this piece, then it will not be gone over again, but 1999 was a momentous year for climate science, both good and well, not so good.

James Hansen and the models he originally created continue to be used. The IPCC, and the climate modeling fraternity taking the position that the Hockey Stick and the modeling projections taken together had in all reasonable respects settled the science of AGW. Many people thought differently, but by this time the AGW "bandwagon" had got so much invested in it that any descent was crushed wherever and whenever it raised its ugly head. Skepticism took to the internet blogs and forums, where to this day it still mostly resides. AGW proponents became arrogant, and possibly this arrogance may have led to what may well become known as one of the biggest mistakes in the future telling of the AGW "theory" story. The employment of Dr. Ferenc M Miskolczi by NASA under James Hansen. NASA continued research into climate and amongst many others employed Dr Ferenc M Miskolczi. Undoubtedly Dr. Miskolczi was and still is one of the worlds leading mathematicians and has studied the planets atmosphere in great detail. Whilst in the employment of NASA Dr. Miskolczi produced many papers, but his paper below, was not published. The paper is,

# IDŐJÁRÁS

*Quarterly Journal of the Hungarian Meteorological Service  
Vol. 108, No. 4, October–December 2004, pp. 209–251*

## **The greenhouse effect and the spectral decomposition of the clear-sky terrestrial radiation**

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*(Manuscript received March 8, 2004; in final form November 1, 2004)*

Dr. Miskolczi looked into the greenhouse "theory" and the equations behind it, he compared and used NASA's own balloon measurements amongst many others and in the end rederived the greenhouse "theory" equation. The paper he produced was not allowed to be published whilst Dr. Miskolczi was still in the employment of NASA.

In the end Dr. Miskolczi resigned, and then his papers were published in a Hungarian Climate Journal. Figure 16 is Dr. Miskolczi's resignation from NASA letter, his frustration is plain to see within it.

**Figure 16**

Barbara Benson  
AS&M Inc.  
107 Research Drive,  
Hampton, VA 23666

October 28, 2005

Dear Barbara Benson,

Letter of Resignation

This letter is to inform you that I wish to terminate my employment with the AS&M Inc., effective from 1<sup>st</sup> of January, 2006.

Unfortunately my working relationship with my NASA supervisors eroded to a level that I am not able to tolerate. My idea of the freedom of science can not coexist with the recent NASA practice of handling new climate change related scientific results. More than three years ago, I presented to NASA a new view of greenhouse theory and pointed out serious errors in the classical approach of assessment of climate sensitivity to greenhouse gas perturbations. Since then my results were not released for publication. Since my new results have far reaching consequences in the general atmospheric radiative transfer, I wish to be no part in withholding the above scientific information from the wider community of scientists and policymakers.

I am very grateful to the AS&M Inc. for the friendly and honest working environment that I enjoyed for many years. I wish to thank for all the help and encouragement that I received from my colleagues and supervisors at AS&M.

Sincerely,

  
Dr. F. Miskolczi

Cc: K. Rutledge, T. Chappell, M. Mlynczak

Dr. Miskolczi's paper is not easy reading, it has to be said, but what did his paper say that NASA would not publish? Firstly he noticed that one of the terms used in the classical derivation of the greenhouse "theory" was for an infinitely thick atmosphere ! The real one and how Dr. Miskolczi altered the term was for an atmosphere 100 kilometres "thick" or deep. This supposedly has been "dealt with" by many people since, but it is surprising that it had not been noticed before.

The main points the paper raised though were more important. The paper describes the atmosphere as having an optical thickness. By this it is meant that OLR in the form of a photon is reradiated back towards the earth's surface an average of 1.87 times, before it escapes to space. Furthermore, the paper shows that this "optical thickness" appears to be a constant. The idea that the "optical thickness" appears to be constant is a dramatic revelation. If correct then the greenhouse "theory" is self regulating, in that if a greenhouse gas (GHG) is added to the atmosphere, increasing the optical thickness, then another GHG reduces within the atmosphere so keeping the optical thickness constant, or at least within certain limits. Using NASA's own measurements, and further measurements taken using NASA's resources the paper further shows that as CO<sub>2</sub> levels have increased in the upper (troposphere) atmosphere water vapour levels appeared to compensate for the increase accordingly, ie water vapour levels fell.

Dr. Miskolczi's paper was the opposite of what James Hansen's early models and all later GCMs assumed, and was based upon observations.

At a paleoclimatic scale the idea of a self regulating greenhouse rederived "theory" matches all the climate reconstructions of periods of ice ages and interglacials. The planet's climate appears to have an upper and lower limit that Dr. Miskolczi's paper explains how it may have happened.

As with many ideas of such magnitude Dr. Miskolczi does not pretend to have all the answers, he has merely made a start on a revised, improved idea of the greenhouse effect "theory". It is a start for further scientific discussion and research.

It would appear that the implications of his works are not palatable to the present paradigm hence his paper was not published whilst he was in the employment of NASA.

As mentioned earlier, being a climate skeptic is apparently not good for your career, regardless of the actual, observable facts.

To date in 2009 the above may well be a very brief overall description of the AGW "theory" and its development over the years, much by necessity has been omitted or glossed over, but in essence I hope I have given the major "incidents".

It would be nice to think that reason and discussion will eventually win the day in the future development of our understanding of climate science, but that does not appear likely. More likely will be the acrimonious downfall of a false dogma due to a whistleblower, with all the messy fallout and associated accusations and counter accusations.

This unfortunate possibility may have already started, as linked to earlier.

<http://wattsupwiththat.com/2009/11/19/breaking-news-story-hadley-cru-has-apparently-been-hacked-hundreds-of-files-released/>

The tangled web that has been weaved in the defense of the 10 degrees celcius, for the first 280ppm CO<sub>2</sub>, and one tenth per doubling thereafter false assumption used in GCM climate modeling, is beginning, as it inevitably will have to, fall apart.

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## **My overview of Climate and some of the possible main factors involved. – This is not an answer, merely a suggested beginning.**

Given what this piece has covered so far, it is reasonably obvious I do not think CO<sub>2</sub> whether natural or human emitted or any possible combinations thereof is a major player in the global climate overall. In simple terms where should climate science be starting from, because the present CO<sub>2</sub> / environmentalist dogma requires a blank sheet of paper approach to what is after all a young science.

### **1) Inputs.**

Fairly obviously the earth gets a large proportion of its heat from the sun. The sun (and I'm no astronomy expert) is apparently a type G variable star. In other words the sun is not a constant. Certainly over the history of this planet the sun has become considerably warmer (approximately 30% warmer) yet the earth's climate system seems to have coped with this or at least adapted to a reasonably steady state now, within the bounds of ice age and interglacial.

The sun is not the only input to the planet's heat budget overall, there is obviously geothermal heat, volcanoes, basically. There are many areas that are still yet to be understood with any level of certainty regarding this. Take for example volcanoes; it seems obvious at first what their contributions are. Look for big plumes, and red hot fluid rock, might seem a good approach, but this would miss underwater volcanic activity of the mid Atlantic ridge for example. What about other such ridges we do not know about, "there aren't any" might be the first response. Given the below linked to discovery in 2008 that might not be such a reasonable approach.

<http://temp.geobio.uib.no/View.aspx?mid=1062&itemid=90&pageid=1093&moduledefid=71>

Then there is the 4<sup>th</sup> class of volcanoes..

<http://www.newscientist.com/article/dn12218>

Geothermal heat does not just potentially heat the air, and / or release huge amounts of cooling aerosols, it could also heat the oceans to a large degree we may not be fully aware of. Hot water in a central heating system is as good a way as we have found of heating our homes, but how much is geothermal heat doing this in the world's oceans. ?

I would also suggest there is a third source of heat for the planet's heat budget, life. Every muscle contraction of every form of life produces a by product of heat, this has to go somewhere. Humans not only produce heat by merely existing, as does all other life (whether warm or cold blooded) but we also produce vast amounts of heat by our normal activities, most obviously the burning of fossil fuels for whatever purpose. Life undoubtedly releases a lot of heat, but is it a significantly large amount to be worth including at a global climate level. ? I do not know, but human villages, towns, and cities are well known for at least at a small regional scale producing measureable "heat islands" most noticeably at night.

All the three inputs mentioned are not known or quantified with any great accuracy, much further research still needs to be done.

### **2) Outputs.**

The earth loses heat to space, that is known, and with the advent of satellites reasonably good figures are now beginning to become available. That said, where the heat came from, in what proportions, by what processes, and how and what alters these processes, is still largely completely unknown.

Some outputs are actually merely reflections before the sun's input ever reached the earth's surface, could these reflections be confused with latent heat releases associated with cloud formation. Very easily.

The only obvious thing to say about the earth's apparent ability to cool itself is that it appears to be far larger than the sun contributes heat to the planet. There also appears to be some sort of variable mechanism of very complex nature that allows

the earth to maintain temperatures within a relatively narrow temperature range. The workings of which completely elude us at present. Much further research needs to be done, although Dr. Ferenc M Miskolczi has made a good start. Cloud cover and how it varies would effect the planet's albedo, so understanding cloud formation and its causes is important at a very basic level to help improve our understanding of climate. The Svensmark effect theory, and the Cloud experiment, whenever it is undertaken are absolutely central to this basic mostly missing building block in climate science at present. There are now being recorded by satellite cloud cover data, which is an excellent step in the right direction, it could be seen as "unfortunate" at best that such data was not being collected right from the start of the satellite era, ie 1979 onwards. A missing opportunity for climate science.

### 3) Movements within.

Movements of heat within the climate system, are massive and extremely complex. The movements can be up, down, and / or sideways within the atmosphere. The movements can be from, or to air from water (rivers, lakes, and mostly importantly oceans), or the other way round. Movements can be up, down, or sideways within water, sometimes removing or adding to the air above. The number of possible paths, let alone processes is plainly bewildering. It is not that we do not understand "them", it is that we still do not know, or have the faintest idea of how many "them" there are, let alone how they work individually. Neither do we know, or understand how they many interact, and change over time, or because another process directly or indirectly related, or maybe not even the slightest bit related have changed. All in all there is still much research to do.

One of the largest probable influencing factors that is not given much consideration, or as much as it should be at present is the lunar effect upon tides, and then hence oceanic currents and phases. David Dilley has proposed that the moon may well form the primary forcing mechanism to the planets climate. In his book *Global Warming–Global Cooling Natural Cause Found Controls Climate Cycles* , linked to below,

<http://www.globalweathercycles.com/GWGCNCF/index.htm>

Dilley describes a lunar mechanism that through effecting the Pacific oceanic currents mainly is he hypothesizes a, or rather the primary forcing mechanism of this planets climate.

I would not go as far as Dilley has, but the moon does orbit around the earth in an ellipse, and the ellipse varies its relative inclination to the earth. The sun also acts with the lunar pull to strengthen and weaken the tides experienced at the planets surface. The cycles are not only plausible, but are well known, no one really can disagree with this part of Dilley's work.. The effect they have upon climate however is a far bigger step. I would of thought that the moon could well effect and "change" oceanic currents and phases, indeed possibly "control" almost all oceanic currents and phases through the pull and slosh effect of tides, and how they vary in strength and location, and cycles. At present this obvious line of thought is not even considered by oceanography. ? Surely any understanding of climate and heat movements within the planets climate system, must be based on, or include a good understanding of oceanic currents and phases, and what controls or effects their phases and strength. I remember listening to Carl Wunsch regarding oceanic currents and phases, he said that we do not understand most currents, or their phases, and some cycles of phases appear to be on scales ranging from less than annual to tens of thousands of years, or longer, but we do not know why.

Is it ludicrous to suggest a good understanding of plate tectonics, underwater topography, and the lunar cycles could help shed much light on the subject. Patently it is not ludicrous. Yet such lines of thought and enquiry seem almost wholly missing from modern oceanography, and climatology.

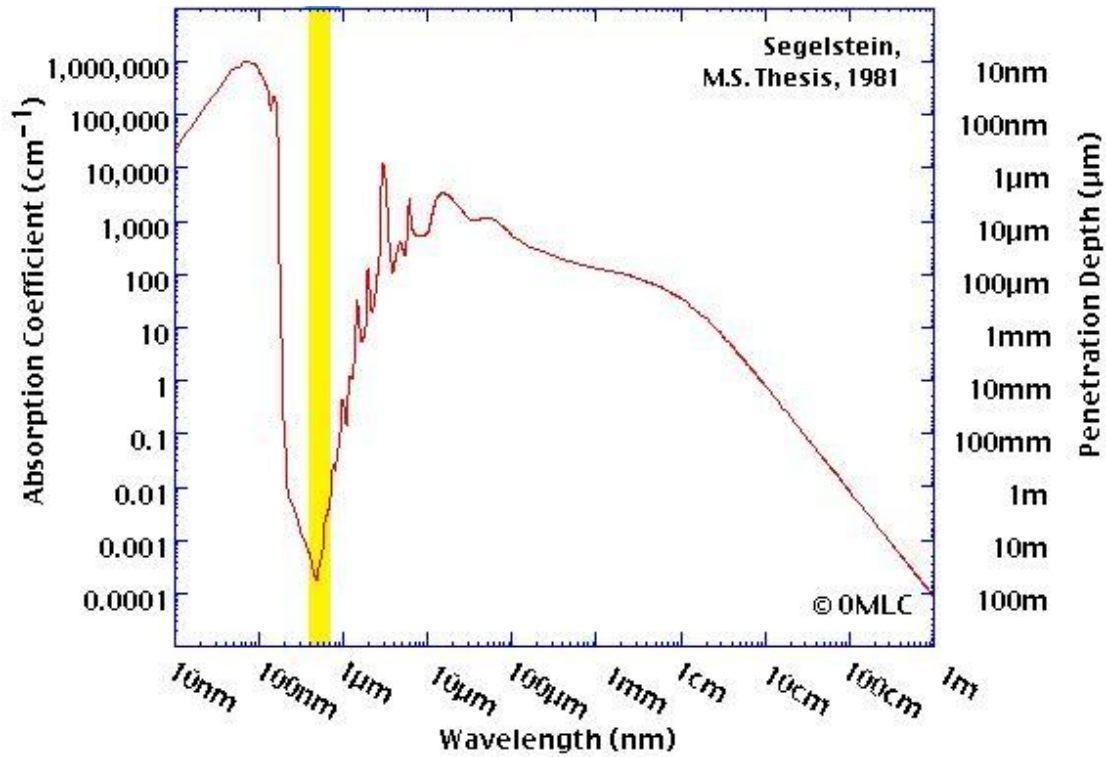
In short the climate system receives heat, moves heat within itself, and releases heat to space as a result of an extremely complex natural system, linear assumptions or thinking will rarely, if ever shed light upon it workings. If it did, it would most probably be wrong.

### 4) The specific heat content difference between water and air.

Fluid water has a specific heat capacity that is approximately 1000 times more air. A cubic metre of water cooling by 1 degrees celcius releases sufficient heat energy to raise 1000 cubic metres of air by the same 1 degrees celcius. Earth is 70 point something percent covered by ocean, on average the oceans are 4 kilometres deep. A depth of water of only 2.8 metres has the same specific heat content as the whole depth of the atmosphere above it. Oceans hold approximately 800 to 900 times the heat content of the whole of the atmosphere.

Sunlight penetrates and warms the oceans to considerable depth, generally accepted as about 100 metres, Figure 17 illustrates this.

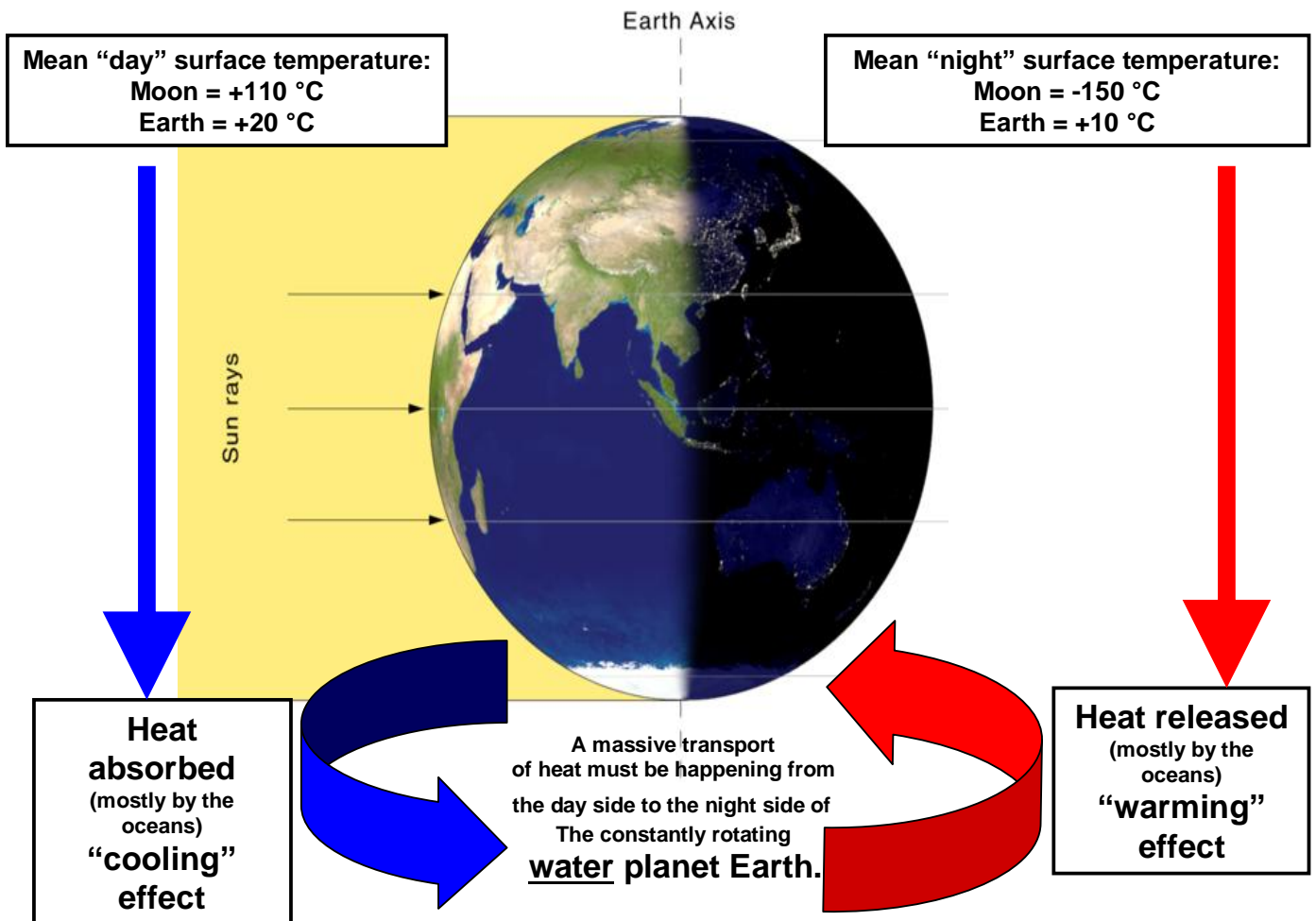
Figure 17



The sun warms the oceans, the earth has a permanent light and dark side, and water has a far greater heat capacity than air. I consider this to be a reasonable point worth considering, its effects are shown in Figure 18

Figure 18

## Why is there so little day to night temperature variation on Earth?



### Brief overall summary

The sun inputs heat to the earth's climate system, the earth releases heat from a (8,000c) core to the surface, and life generates heat in all its forms and activities.

The earth cools by various mechanisms, but **GHGs DO NOT trap heat** they merely slow down the heat's escape, some more effectively than others. But no heat is trapped in the atmosphere by GHGs, the rate of escape is merely slowed a little.

Water as a liquid, (ie rivers, lakes, and mostly oceans) is a vast heat reservoir, absorbing, transporting and releasing heat on many differing time and size scales, most we do not understand even the basics of yet, nor do we seem to be investigating them.

Water as a gas (water vapour) transports vast amounts of (latent) heat, cold (rain) within the atmosphere. Almost all of this is missing from present radiation budgets, which are known to miss about 30 to 40% of the heat movements occurring in the atmosphere.....

Clouds effect albedo, so understanding cloud formation is critical to heat budgets, how much of the suns energy gets in, in the first place, why and how does this vary. ? The Svensmark theory could well be crucial in this respect.

The earth is a planet in space, it bathes in the light of the sun, but it also is in the sun's solar wind. The whole solar system is moving through space, and so the amount of cosmic dust that the earth receives varies as the solar system moves through space. Cosmic dust is not a constant, so it varies for many reasons we simply do not at present, and may never understand. The amount of cosmic dust entering the atmosphere may well effect some climatic processes, most notably cloud formation. Professor Henrik Svensmark has for many years now been suggesting that cosmic dust as it enters the atmosphere, particularly the lower atmosphere may well induce cloud formation. He suggests that when the sun is inactive that the magnetic field and solar wind are weak so that more of the cosmic dust reaches lower into the atmosphere of earth. This increases cloud formation, and more lower level clouds means more cooling. During times of more solar activity, there is a stronger solar wind that literally "blows away" cosmic dust. This has the effect of less cosmic dust reaching the lower atmosphere, and so fewer clouds. The reduced cooling effect of less clouds would mean temperatures rose. In short, a weak sun means less solar wind, and so more cosmic dust reaching the planet's atmosphere. This would result in more cloud formation, so cooling the earth by reflecting more of the sun's input before it reached the earth's surface. Conversely, an active sun would have a stronger solar wind, resulting in less cosmic dust reaching the atmosphere. This would mean less cloud formation, and so because of less reflection, an increase in the surface temperature of earth. The proposed mechanism is to be tested at CERN, but as of yet the experiment has not been conducted for various reasons....

Stephen Wilde has suggested that the oceans and their phases are a major, if not controlling contributor to global mean temperature. This he has called The Hot Water bottle Effect, linked to below.

<http://climaterealists.com/index.php?id=1487>

It is difficult not to agree with the general idea, but I would suggest that the time scale can be as long as an ocean phase, and as short as a day or a night (see Figure 18). Neither idea nor suggestion to myself is mutually exclusive. I would however temper the idea / suggestion of Stephen Wilde somewhat, so that the oceans were a major contributor. Whether they are dominant all the time, or more likely temporarily is nearer to how I would interpret observations to date.

What controls, or influences oceanic currents and their phases. ?

Wind patterns are certainly a major contributor to oceanic currents, but phase changes would be a little more difficult to understand. Is there another possible cause or causes of oceanic current phases and their changes. ? Yes, the moon. David A Dille researcher and CEO at Global Weather Oscillations, Inc. Ocala, Florida USA has plotted the lunar variations to tides and suggests that they do effect global climate considerably.

<http://www.globalweathercycles.com/GWGCNCF/index.htm>

I would suggest that the lunar cycles may well effect or control at least some if not most or all oceanic cycles. If this is the case then there must be a significant effect upon global climate by the moon because of how it effects the tides and therefore global oceanic currents and phases.

The present crop of GCMs have been shown, or rather proved wrong in their most basic of their warming mechanisms assumptions, and as Dr. Richard S Courtney showed beyond doubt way back in 1999, in his paper previously mentioned, they are nothing more than a fraud as far as the aerosol cooling effects (used to correct, after the fact, too much falsely assumed warming) are concerned.

It has been said many many times regarding the current climate models, and it is true,  
GARBAGE IN, GARBAGE OUT.

The present CO2 dogma, and GCMs should be discarded immediately, but what then. ?

Can all the above be incorporated into Dr. Ferenc M Miskolczi's works, I think it could, and I would further suggest it would be a great framework and leap forward for climate science, and our understanding of global climate.

Climate science should now be at the start of a wonderful voyage of discovery. It should discard the present modeled, assumed "reality", and CO2 dogma and replace it with a new higher level of observational based evidence concerning real, and natural forces effecting climate. We simply have no idea at present of how strong, or how these forces vary. Maybe then we could actually begin to determine IF man has had any effect upon the planets climate, because at present there is no evidence that man has effected climate whatsoever.

It gauls me that my taxes are used by the British government through the Act on CO2 website to be presently running a series of television adverts that state we should be driving 5 miles less per day to stop (man made) climate change. There is no way incidentally that I will park two and a half miles from work and walk the rest of the way on a daily basis, all for a proven to be false CO2 dogma, that will not effect climate a single, solitary jot.

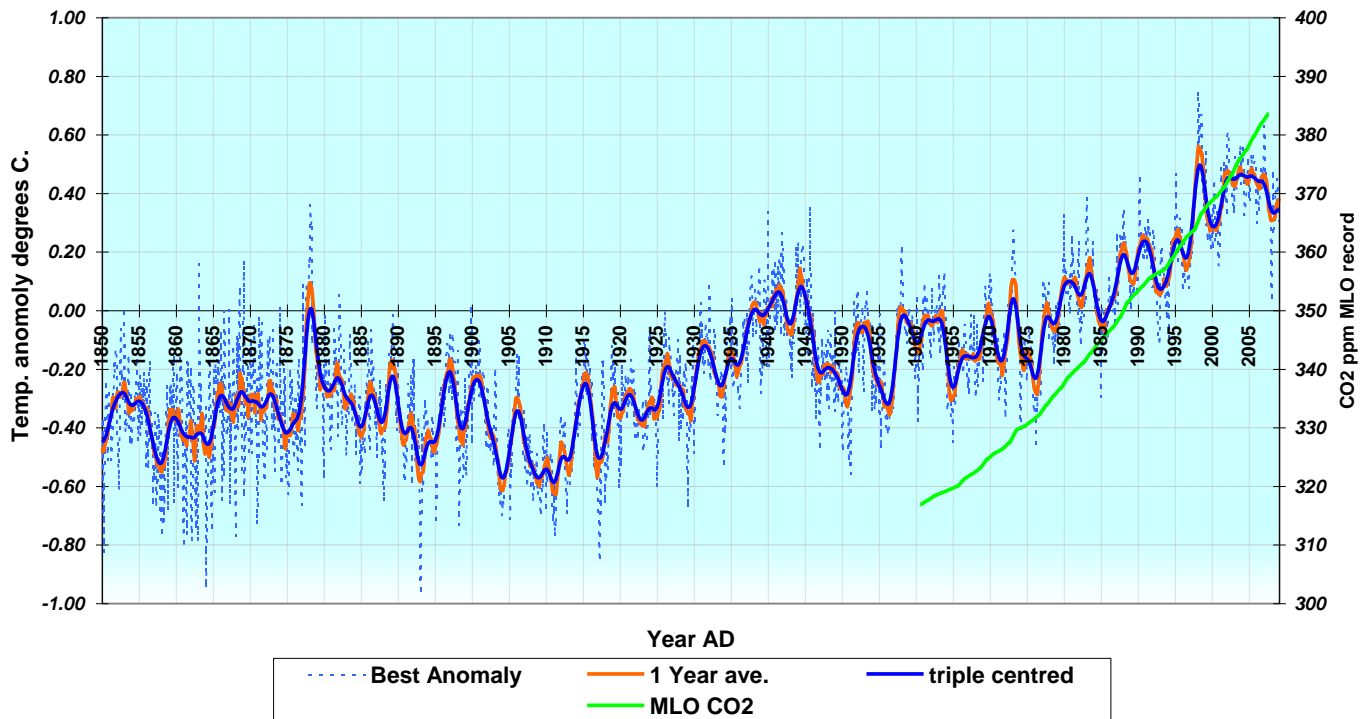
I would humbly suggest that my suggestions above offer a far better avenue of investigation for the advancement of climate science than the present CO2 blinding dogma. A CO2 dogma that has hopefully been shown in this piece to be complete "rollocks".

Derek.

### A final conundrum..

**Figure 19**

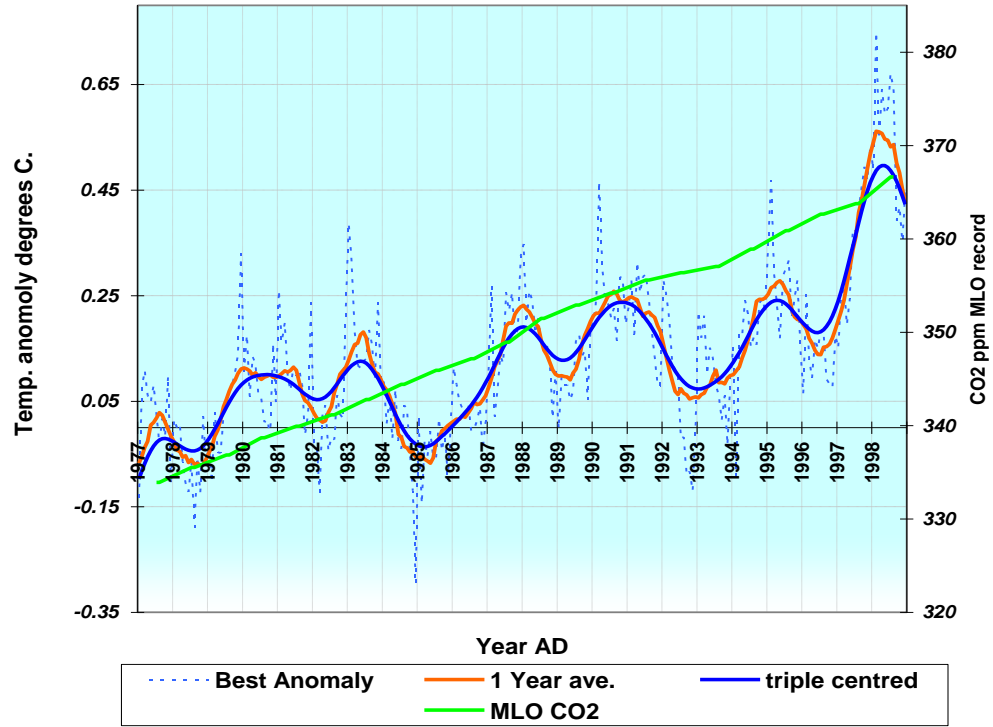
HADcrut Global temperature reconstruction, 1850 to 2007.



CO2 sort of correlates with temperature

**Figure 20**

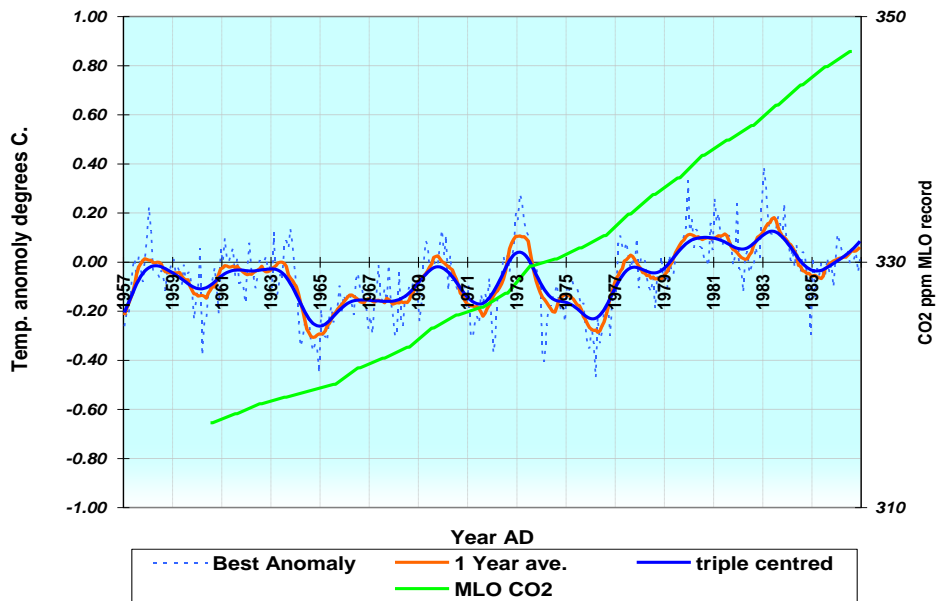
HADcrut Global temperature reconstruction, 1977 to 1998.



CO2 does not correlate with temperature.

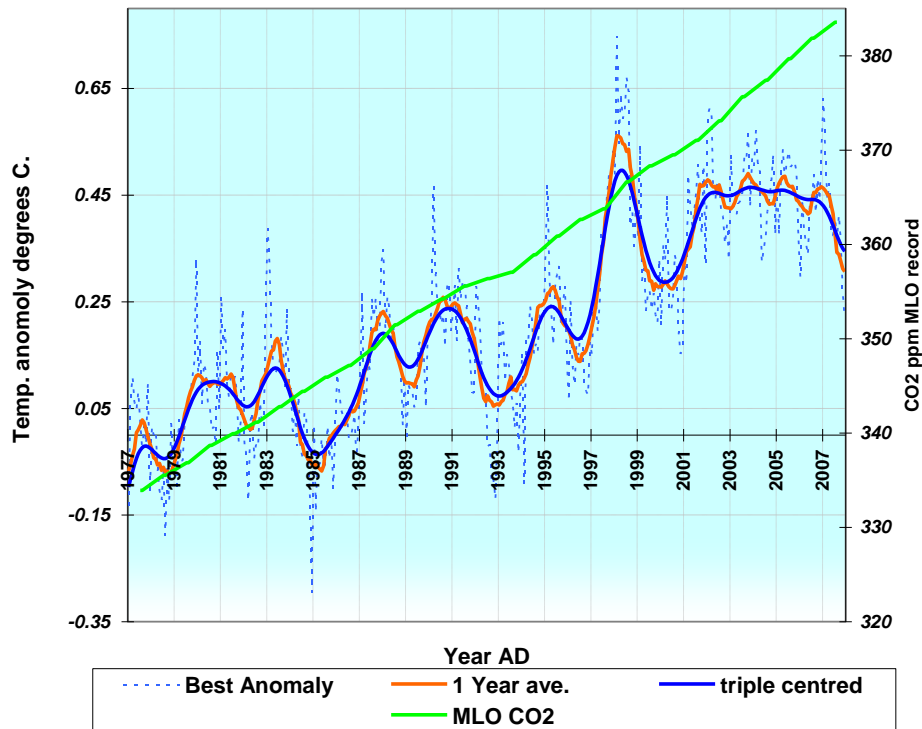
**Figure 21**

HADcrut Global temperature reconstruction, 1957 to 1986.



CO2 sort of does and then certainly does not correlate with temperature.

**Figure 22** HADcrut Global temperature reconstruction, 1977 to 2007.



There is a reason why AGW proponents are getting desperate in their pushing of their falsely assumed, disproven, the science is settled, AGW “theory”.

Perfectly natural variation for reasons as yet unknown.

BTW – HADcrut and MLO have never released the raw data used to produce the processed figures released to the public and plotted here.

Put simply neither can be checked.

A private company could not do this,  
it would be illegal.

**BUT**, publicly funded “research” can and does.....